

# BEARINGS & POWER TRANSMISSION



**Ball & Roller Bearings**

**873 - 884**



**Ball Joints & Rod Ends**

**892 - 894**



**Belts, Pulleys & Accessories**

**902 - 905**



**Bushing Bearings & Shafts**

**848 - 855**



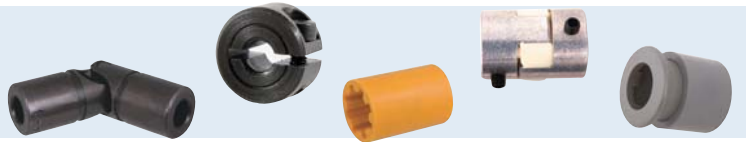
**Cam Followers**

**907 - 911**



**Collars & Couplings**

**886 - 887, 889 - 891**



**Gas Springs, Shocks & Dampers**

**914 - 921**



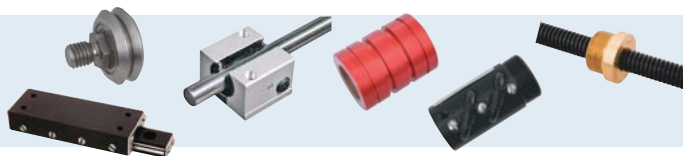
**Gears, Racks & Keyed Shafts**

**888 - 889, 891**



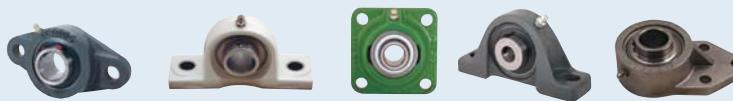
**Linear Motion Components**

**834 - 847, 856 - 861, 896 - 899**



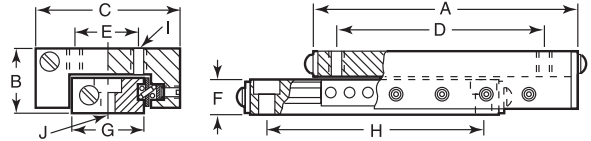
**Mounted Bearings**

**862 - 872**





Cross Roller Slide Assemblies



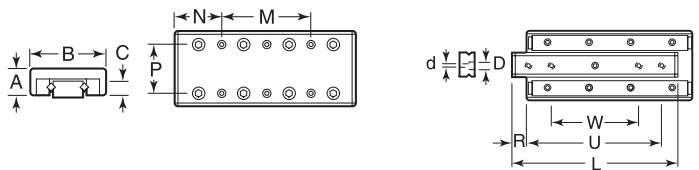
For higher load carrying capacity than precision ball slide assemblies and when operating at high cycling rates or with shock and overhanging loads, cross roller slides are used for improved performance. Cross roller slides provide accuracy of .0001" of travel, repeatability .0001" exceeding precision ball slides. Cross roller slides are not as naturally cleaning as ball slides. In operating environments with little or no protection against dust and when heavy loads are not a consideration, consider ball slides.

- Positive stops prevent over-travel
- Rollers improve load capacity 8-10 times that of balls
- Alternately crossed rollers handle force in any direction
- Lightweight aluminum carriage and base
- Interchangeable with many types of ball slides
- Four tapped and threaded carriage holes and two counter bored base holes simplify installation and component mounting

Item No.	Travel	Load Capacity (Lbs.)	Carriage Hole Spacing					Base Dimension Hole Spacing				Base and Carriage Holes I and J	Pack Qty.
			A	B	C	D	E	F	G	H			
DT-71	.50	30	1.06	.32	.56	.625	.218	.187	.250	.750	2-56	1	
DT-72	1	55	2.06	.32	.56	1.625	.218	.187	.250	1.375	2-56	1	
DT-73	2	66	3.06	.32	.56	2.625	.218	.187	.250	2.375	2-56	1	
DT-81	.50	48	1.06	.40	.75	.625	.375	.250	.375	.750	4-40	1	
DT-82	1	78	2.06	.40	.75	1.625	.375	.250	.375	1.375	4-40	1	
DT-83	2	94	3.06	.40	.75	2.625	.375	.250	.375	2.375	4-40	1	
DT-92	1.5	132	2.56	.53	1.06	2.250	.437	.312	.500	2.125	6-32	1	
DT-93	2	220	3.56	.53	1.06	3.250	.437	.312	.500	3.125	6-32	1	
DT-94	3	264	4.56	.53	1.06	4.000	.437	.312	.500	3.250	6-32	1	
DT-121	1	132	2.00	.62	1.50	1.375	.625	.340	.750	1.500	6-32	1	
DT-122	2	176	3.00	.62	1.50	2.375	.625	.340	.750	2.500	6-32	1	
DT-123	3	176	4.00	.62	1.50	3.375	.625	.340	.750	3.500	6-32	1	
DT-124	4	308	6.00	.62	1.50	5.375	.625	.340	.750	4.000	6-32	1	
DT-131	1	132	2.00	.75	1.75	1.375	.875	.400	.875	1.625	6-32	1	
DT-132	2	176	3.25	.75	1.75	2.625	.875	.400	.875	2.750	6-32	1	
DT-133	3	176	4.00	.75	1.75	3.375	.875	.400	.875	3.500	6-32	1	
DT-141	1.5	264	2.62	1.00	2.62	1.625	1.250	.625	1.500	1.875	10-32	1	
DT-142	2	352	4.00	1.00	2.62	3.000	1.250	.625	1.500	3.375	10-32	1	
DT-143	3	440	5.00	1.00	2.62	4.000	1.250	.625	1.500	4.375	10-32	1	
DT-144	4	440	6.00	1.00	2.62	5.000	1.250	.625	1.500	5.375	10-32	1	
DT-146*	6	704	9.00	1.00	2.62	3.000	1.250	.625	1.500	7.000	10-32	1	

\*Has 6 carriage holes. D Carriage Hole Spacing value is minimum centered around mean position.

Low Profile Crossed Roller Slide Tables



Crossed roller slide tables are factory assembled and ready to install. They use crossed roller bearings to provide very precise linear motion with low friction and high support stiffness for the load. A large selection is available for applications including precision instruments, office and communications equipment, surface grinders, tool grinders, assembly fixtures, and anywhere precise linear positioning is required. Precision ground "V" grooved ways and rollers provide high accuracy and load capacity. Withstands forces in any direction from alternately crossed rollers at 45 degree angle. Contain UNC threaded mounting holes in standard pattern for easy installation. Interchangeable with other manufacturers slides. Straight line accuracy .0001" inch of travel. .0001" position repeatability. All have light weight aluminum carriage. Steel type has hardened steel crossed roller rail set with double V grooved inner rail. Stainless steel type (DT-432 and 445) has stainless steel rollers, cages and fasteners.

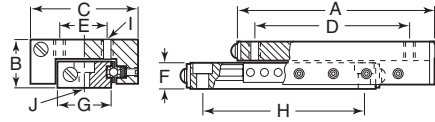
Item No.	Travel	Load Capacity (Lbs.)	Length L	Base Mounting Holes Spacing and Dimensions (Counterbored)							Carriage Holes Spacing and Dimensions (Threaded)							Pack Qty.	
				A	B	C	No. of Holes	U	W	R	D	d	No. of Holes	M	N	P	Thread		Depth
DT-401	.473	50	.984	.315	.788	.158	2	.709	—	.138	.155	—	4	.709	.138	.551	2-56	.138	1
DT-432*	.709	70	1.378	.315	.788	.158	2	.984	—	.197	—	2-56	4	1 x 1.102	.138	.551	2-56	.138	1
DT-408	.709	88	1.378	.472	1.181	.236	2	.984	—	.197	.241	—	4	1 x 1.102	.138	.866	6-32	.217	1
DT-409	1.181	138	1.969	.472	1.181	.236	2	1.378	—	.295	—	6-32	4	1 x 1.693	.138	.866	6-32	.217	1
DT-411	1.969	209	3.150	.472	1.181	.236	4	2.756	1.575	.197	—	6-32	4	1 x 1.772	.689	.866	6-32	.217	1
DT-412	2.363	231	3.740	.472	1.181	.236	4	3.347	1.772	.197	—	6-32	6	2 x 1.181	.689	.866	6-32	.217	1
DT-415	1.181	277	2.165	.630	1.575	.315	2	1.575	—	.295	.327	—	4	1 x 1.575	.295	1.181	10-32	.295	1
DT-445*	1.181	277	2.165	.630	1.575	.315	2	1.575	—	.295	.327	—	4	1 x 1.575	.295	1.181	10-32	.295	1
DT-416	1.772	404	3.150	.630	1.575	.315	4	2.677	1.693	.236	—	10-32	4	1 x 2.560	.295	1.181	10-32	.295	1
DT-418	2.953	605	5.118	.630	1.575	.315	4	4.528	2.559	.295	—	10-32	4	1 x 2.953	1.083	1.181	10-32	.295	1
DT-419	3.543	682	6.102	.630	1.575	.315	4	5.512	3.740	.295	—	10-32	6	2 x 1.969	1.083	1.181	10-32	.295	1
DT-421	5.118	825	8.070	.630	1.575	.315	4	7.480	3.543	.295	—	10-32	6	2 x 2.953	1.083	1.181	10-32	.295	1

\*Stainless steel

**LINEAR MOTION SLIDES**



**Precision Ball Slide Assemblies**



These precision linear ball slides have a typical coefficient of friction of .003 and provide straight line accuracy of .0005" per inch of travel. At load capacity, a life of 10 million inches of travel can be expected. The expected life at 1/2 the rated load is 100 million inches.

- Factory preload adjustment prevents sideplay and backlash
- Lightweight aluminum carriage and base with high load capacity
- Four tapped and threaded carriage holes and counter bored base holes simplify installation and component mounting
- Long life, self-cleaning ball bearing needs no lubrication
- Positional repeatability .0002 inch
- Clear anodized finish

Item No.	Travel	Load Capacity (Lbs.)	Carriage Hole Spacing				Base Hole Dimensions				Carriage Hole I	Base Hole J	Pack Qty.
			A	B	C	D	E	F	G	Hole Spacing H			
DT-11*	.50	1.5	.75	.23	.38	.375	.156	.135	.156	.375	2-56	2-56	1
DT-12*	1	1.5	1.25	.23	.38	.875	.156	.135	.156	.875	2-56	2-56	1
DT-13*	1.5	1.5	1.75	.23	.38	1.375	.156	.135	.156	1.375	2-56	2-56	1
DT-21	.50	4	1.06	.32	.56	.625	.218	.187	.250	.750	2-56	2-56	1
DT-22	1.00	8	2.06	.32	.56	1.625	.218	.187	.250	1.375	2-56	2-56	1
DT-23	2.00	12	3.06	.32	.56	2.625	.218	.187	.250	2.375	2-56	2-56	1
DT-24	3.00	14	4.06	.32	.56	3.625	.218	.187	.250	3.375	2-56	2-56	1
DT-25	4.00	16	5.06	.32	.56	4.625	.218	.187	.250	3.500	2-56	2-56	1
DT-26	5.00	18	6.06	.32	.56	5.625	.218	.187	.250	4.500	2-56	2-56	1
DT-31	.50	8	1.06	.41	.75	.625	.375	.250	.375	.750	4-40	4-40	1
DT-32	1.00	10	2.06	.41	.75	1.625	.375	.250	.375	1.375	4-40	4-40	1
DT-33	2.00	12	3.06	.41	.75	2.625	.375	.250	.375	2.375	4-40	4-40	1
DT-34	3.00	14	4.06	.41	.75	3.625	.375	.250	.375	3.375	4-40	4-40	1
DT-35	4.00	16	5.06	.41	.75	4.625	.375	.250	.375	3.500	4-40	4-40	1
DT-36	5.00	18	6.06	.41	.75	5.625	.375	.250	.375	4.500	4-40	4-40	1
DT-101	.50	10	1.56	.50	1.00	1.250	.437	.250	.500	1.250	6-32	4-40	1
DT-102	1.00	12	2.56	.50	1.00	2.250	.437	.250	.500	2.250	6-32	4-40	1
DT-1025	1.50	13	3.06	.50	1.00	2.750	.437	.250	.500	2.750	6-32	4-40	1
DT-103	2.00	15	3.56	.50	1.00	3.250	.437	.250	.500	3.250	6-32	4-40	1
DT-104	3.00	18	4.56	.50	1.00	4.250	.437	.250	.500	4.250	6-32	4-40	1
DT-41	.75	15	1.56	.53	1.06	1.250	.437	.312	.500	1.125	6-32	6-32	1
DT-42	1.50	18	2.56	.53	1.06	2.250	.437	.312	.500	2.125	6-32	6-32	1
DT-43	2.00	20	3.56	.53	1.06	3.250	.437	.312	.500	3.125	6-32	6-32	1
DT-44	3.00	25	4.56	.53	1.06	4.000	.437	.312	.500	3.250	6-32	6-32	1
DT-46	4.00	30	6.00	.53	1.06	5.500	.437	.312	.500	4.000	6-32	6-32	1
DT-48	6.00	35	8.00	.53	1.06	7.500	.437	.312	.500	5.000	6-32	6-32	1
DT-111	1.00	15	2.00	.62	1.50	1.375	.625	.340	.750	1.500	6-32	6-32	1
DT-112	2.00	20	3.00	.62	1.50	2.375	.625	.340	.750	2.500	6-32	6-32	1
DT-113	3.00	25	4.00	.62	1.50	3.375	.625	.340	.750	3.500	6-32	6-32	1
DT-1135	3.50	30	5.00	.62	1.50	4.375	.625	.340	.750	3.500	6-32	6-32	1
DT-114	4.00	35	6.00	.62	1.50	5.375	.625	.340	.750	4.000	6-32	6-32	1
DT-116	6.00	45	8.00	.62	1.50	7.375	.625	.340	.750	5.000	6-32	6-32	1
DT-118	8.00	55	10.00	.62	1.50	9.375	.625	.340	.750	7.000	6-32	6-32	1
DT-51	1.00	20	2.00	.75	1.75	1.375	.875	.400	.875	1.625	6-32	6-32	1
DT-515	1.50	30	2.75	.75	1.75	2.125	.875	.400	.875	2.250	6-32	6-32	1
DT-52	2.00	42	3.25	.75	1.75	2.625	.875	.400	.875	2.750	6-32	6-32	1
DT-53	3.00	52	4.00	.75	1.75	3.375	.875	.400	.875	3.500	6-32	6-32	1
DT-54	4.00	60	6.00	.75	1.75	5.500	.875	.400	.875	4.000	6-32	6-32	1
DT-55	6.00	75	8.00	.75	1.75	7.500	.875	.400	.875	5.000	6-32	6-32	1
DT-56	8.00	90	10.00	.75	1.75	9.500	.875	.400	.875	7.000	6-32	6-32	1
DT-61	1.00	30	2.62	1.00	2.62	2.125	1.250	.625	1.500	2.125	10-32	10-32	1
DT-615	1.50	35	2.62	1.00	2.62	1.625	1.250	.625	1.500	1.875	10-32	10-32	1
DT-62	2.00	62	4.00	1.00	2.62	3.000	1.250	.625	1.500	3.375	10-32	10-32	1
DT-63	3.00	88	5.00	1.00	2.62	4.000	1.250	.625	1.500	4.375	10-32	10-32	1
DT-64	4.00	118	6.00	1.00	2.62	5.000	1.250	.625	1.500	5.375	10-32	10-32	1
DT-65	5.00	135	8.00	1.00	2.62	7.000	1.250	.625	1.500	7.375	10-32	10-32	1
DT-66**	6.00	150	9.00	1.00	2.62	3.000	1.250	.625	1.500	7.000	10-32	10-32	1
DT-69**	9.00	185	12.00	1.00	2.62	3.000	1.250	.625	1.500	10.000	10-32	10-32	1
DT-612**	12.00	205	15.00	1.00	2.62	3.000	1.250	.625	1.500	13.000	10-32	10-32	1

\*Base holes are tapped and threaded and not counterbored  
 \*\*D Dimension is minimum centered around mean position.

Note: DT-66 has six carriage holes, DT-69 has eight and DT-612 has ten.

# REGIONAL STOCK!



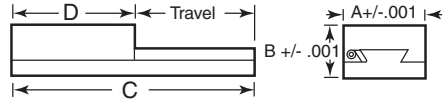
SAME-DAY SHIPPING

ESSENTRA gives you the convenience of regional stock for fast delivery and freight savings!





Dovetail Slides



Dovetail slides are used for work feeders for production milling, positioning fixtures, work holding devices, checking fixtures, shuttle devices, assembly equipment, etc. They are made of continuous cast G2 40,000 psi pearlitic grey iron. This material may be milled, drilled, tapped, etc., for altering or mounting purposes. Tapered gibs are adjusted with a single screw that moves the gib on the taper. This type of gib remains parallel and wear is less as it occurs over the entire surface. Accuracy is .001" in 12" of travel. Lubrication is provided with ball detent oilers.

Item No.	A	B	C	D	Travel	Pack Qty.
DV-110	1.5	1.00	3	2	1	1
DV-130	1.5	1.00	5	2	3	1
DV-140	1.5	1.00	6	2	4	1
DV-100	1.5	1.00	12	2	10	1
DV-210	2.0	1.25	4	3	1	1
DV-220	2.0	1.25	5	3	2	1
DV-230	2.0	1.25	6	3	3	1
DV-250	2.0	1.25	8	3	5	1
DV-212	2.0	1.25	15	3	12	1
DV-310	3.0	1.50	5	4	1	1
DV-330	3.0	1.50	7	4	3	1
DV-360	3.0	1.50	10	4	6	1
DV-390	3.0	1.50	13	4	9	1
DV-312	3.0	1.50	16	4	12	1
DV-420	4.0	1.75	7	5	2	1
DV-430	4.0	1.75	8	5	3	1
DV-440	4.0	1.75	9	5	4	1
DV-450	4.0	1.75	10	5	5	1
DV-490	4.0	1.75	14	5	9	1

# SOCKET HEAD CAP SCREWS & HEX TOOLS

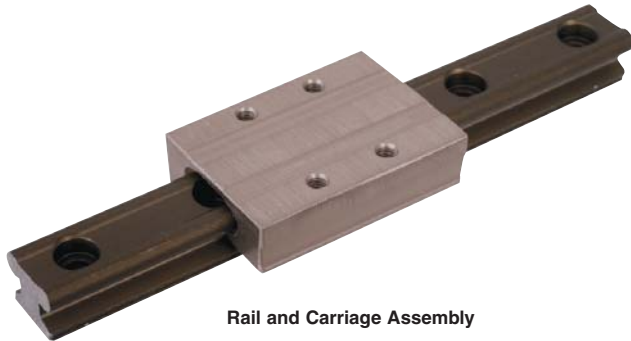
Socket Head Cap Screws  
**Pages 766 - 769**

Hex Tools  
**Pages 556 - 558**





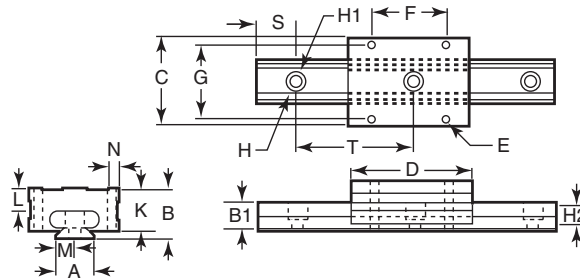
Mini Rail Self-Lubricating Miniature Systems



Rail and Carriage Assembly



Carriage



Low profile, self-lubricating linear guide system with one piece carriage design. Excellent alternative to linear ball bearing systems. Precision series made from a RC70 ceramic coated rail with self-lubricating FrelonGOLD®. Commercial series made from a clear anodized rail with FrelonJ. Dampens vibration and tolerates shock loads. Will not rust. No metal-to-metal contact. No balls or rolling elements to trap contamination, skid or damage the rail. Operation is consistent, smooth and quiet. Maintenance free. Used in packaging machines, medical equipment, wash-down and harsh environments, etc. Carriage and rail sold together. Dimensions are in millimeters. Carriages also sold separately below.

Rails - Carriages Included



Item No.	Pacific	Running Clearance	A	B	B1	C	D	E	F	G	H	H1	H2	K	L	M	N	S	T	Rail Length	Max. Static Load Lbs.	Pack Qty.
PBC-1151	MR7-70	.025 - .051	7	8	6.2	17	24	M2	8	12	4.2	2.4	2.3	6.2	1.7	3.5	2.3	5	15	70	165	1
PBC-1152	MR7-85	.025 - .051	7	8	6.2	17	24	M2	8	12	4.2	2.4	2.3	6.2	1.7	3.5	2.3	5	15	85	165	1
PBC-1153	MR7-100	.025 - .051	7	8	6.2	17	24	M2	8	12	4.2	2.4	2.3	6.2	1.7	3.5	2.3	5	15	100	165	1
PBC-1154	MR7-130	.025 - .051	7	8	6.2	17	24	M2	8	12	4.2	2.4	2.3	6.2	1.7	3.5	2.3	5	15	130	165	1
PBC-1155	MR9-55	.025 - .051	9	10	7.3	20	30	M3	13	15	4.5	2.6	3.0	8.0	2.4	3.5	2.3	7.5	20	55	350	1
PBC-1157	MR9-95	.025 - .051	9	10	7.3	20	30	M3	13	15	4.5	2.6	3.0	8.0	2.4	3.5	2.3	7.5	20	95	350	1
PBC-1159	MR9-155	.025 - .051	9	10	7.3	20	30	M3	13	15	4.5	2.6	3.0	8.0	2.4	3.5	2.3	7.5	20	155	350	1
PBC-1161	MR9-275	.025 - .051	9	10	7.3	20	30	M3	13	15	4.5	2.6	3.0	8.0	2.4	3.5	2.3	7.5	20	275	350	1
PBC-1162	MR12-120	.025 - .051	12	13	8.0	27	34	M3	15	20	6.0	3.5	3.5	10.7	4.6	10	3.5	6.0	25	120	440	1
PBC-1164	MR12-220	.025 - .051	12	13	8.0	27	34	M3	15	20	6.0	3.5	3.5	10.7	4.6	10	3.5	6.0	25	220	440	1
PBC-1171	MR15-0310	.025 - .051	15	16	9.3	32	42	M3	20	25	6.0	3.5	4.5	14.1	6.3	15	3.5	7.5	40	310	700	1
PBC-1173	MR15-470	.025 - .051	15	16	9.3	32	42	M3	20	25	6.0	3.5	4.5	14.1	6.3	15	3.5	7.5	40	470	700	1
PBC-1174	MR15-670	.025 - .051	15	16	9.3	32	42	M3	20	25	6.0	3.5	4.5	14.1	6.3	15	3.5	7.5	40	670	700	1
PBC-1175	MR20-220	.025 - .051	20	25	13.5	46	62	M4	38	38	9.5	6.0	8.5	21.2	11.2	10	4.0	20	60	220	1,350	1
PBC-1177	MR20-340	.025 - .051	20	25	13.5	46	62	M4	38	38	9.5	6.0	8.5	21.2	11.2	10	4.0	20	60	340	1,350	1
PBC-1178	MR20-460	.025 - .051	20	25	13.5	46	62	M4	38	38	9.5	6.0	8.5	21.2	11.2	10	4.0	20	60	460	1,350	1
PBC-1166	MR12-320-1	.025 - .051	12	13	8.0	27	34	M3	15	20	6.0	3.5	3.5	10.7	4.6	10	3.5	6.0	25	320	440	1
PBC-1168	MR12-470	.025 - .051	12	13	8.0	27	34	M3	15	20	6.0	3.5	3.5	10.7	4.6	10	3.5	6.0	25	470	440	1
PBC-1169	MR15-150	.025 - .051	15	16	9.3	32	42	M3	20	25	6.0	3.5	4.5	14.1	6.3	15	3.5	7.5	40	150	700	1
PBC-1180	MR20-880	.025 - .051	20	25	13.5	46	62	M4	38	38	9.5	6.0	8.5	21.2	11.2	10	4.0	20	60	880	1,350	1

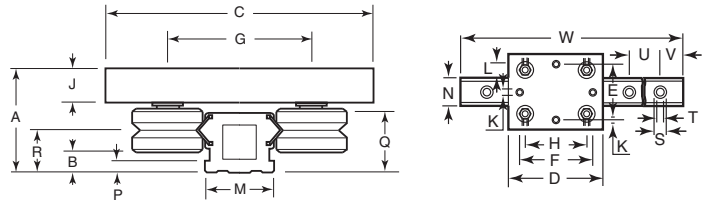
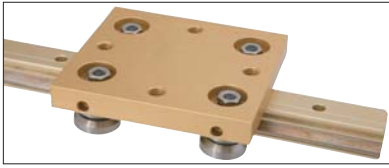
Carriages Only



Item No.	Pacific	Description	Pack Qty.
PBC-1212	MR7C	Carriage - to run on 7mm W Base	1
PBC-1213	MR9C	Carriage - to run on 9mm W Base	1
PBC-1214	MR12C	Carriage - to run on 12mm W Base	1
PBC-1215	MR15C	Carriage - to run on 15mm W Base	1
PBC-1216	MR20C	Carriage - to run on 20mm W Base	1



**Speedi-Roll Linear Rail Systems**



Speedi-Roll was developed giving high priority to lightweight construction and ease of installation. Speedi-Roll is a linear guide system with high load carrying capacity, rigidity and torque resistance, consisting of a guide rail and carriage with either four or six rollers. Rollers are lubricated for life, greatly reducing the need for service. The rail is composed of a drawn and anodized aluminum body with hardened steel angle raceways fitted on each side. Base plate is also anodized aluminum with factory-fitted rollers. Elastic elements around the threaded bolts adjust and fix the rollers in the base plate avoiding the risk of mounting error. The units are supplied with a light pre-load to cover a wide variety of applications. Dimensions in millimeters. Carriages and rails are sold separately.

**Carriages**



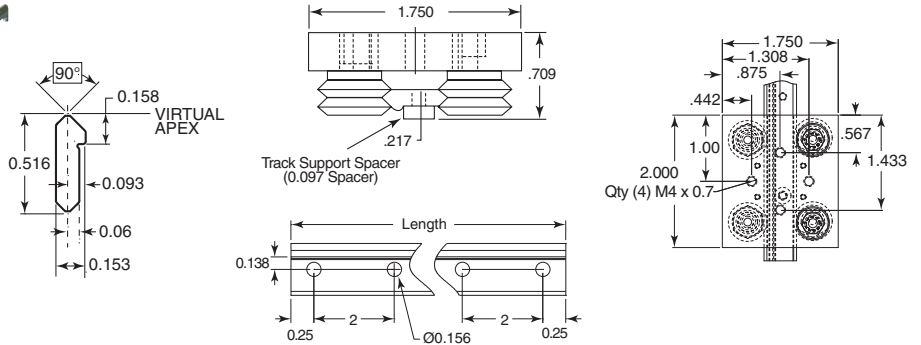
Item No.	A	C	D	E	F	G	H	J	K	L	Permissible Load Lbs.		Pack Qty.
											Top	Side	
SKF-115	25.0	65	70	50	60	39.3	45	6.05	M5	14	157	148	1
SKF-125	35.5	80	90	59	70	45.8	60	12.10	M8	17	225	315	1
SKF-135	54.3	120	100	90	70	61.3	65	19.40	M10	21	562	562	1

**Rails**



Item No.	B	M	N	P	Q	R	S	T	U	V	W	Use with Carriage No.	Pack Qty.
SKF-158	3.75	18	24.9	2	17	10.8	9.5	5.5	62.5	31.25	1,000	SKF-115	1
SKF-159	3.75	18	24.9	2	17	10.8	9.5	5.5	62.5	31.25	2,000	SKF-115	1
SKF-257	7.70	23	29.9	4	21	14.7	11.0	6.5	125.0	62.50	1,000	SKF-125	1
SKF-258	7.70	23	29.9	4	21	14.7	11.0	6.5	125.0	62.50	2,000	SKF-125	1
SKF-259	7.70	23	29.9	4	21	14.7	11.0	6.5	125.0	62.50	3,000	SKF-125	1
SKF-357	12.35	36	42.9	7	29	22.8	20.0	11.0	250.0	125.00	1,000	SKF-135	1
SKF-358	12.35	36	42.9	7	29	22.8	20.0	11.0	250.0	125.00	2,000	SKF-135	1
SKF-359	12.35	36	42.9	7	29	22.8	20.0	11.0	250.0	125.00	3,000	SKF-135	1

**MinVee® Miniature Slide System**



MinVee® is a low profile, miniature linear slide system ideal for semi-conductor, laboratory, medical and packaging applications. The non-actuated MinVee® linear slide consists of one or more 6061-T6 anodized aluminum wheel carriage with your choice of DualVee® integral studded wheels (steel/shielded, steel/sealed or polymer/shielded), and double edge track from 6.5 to 36.5 inches. The steel wheel carriage supports loads to 121 pounds while the polymer carriage is capable of up to 15 pounds. MinVee® features stainless steel lubricators, and a patented self-aligning mounting shoulder, reducing installation time and cost. Parts are sold separately. Please specify wheel carriage model and quantity, track (lengths), and number of track support spacers (one per mounting hole).

**Carriages**



Item No.	Description	Radial Load LR	Axial Load LA	Pitch Movement MP	Yaw Moment MY	Roll Moment MR	Pack Qty.
WZ-444	Aluminum Carriage, Steel Wheels, Shielded	490N/110.2 lbf	540N/121.4 lbf	7.9Nms/69.9 lbf	8.6Nm/76.1 lbf	6.2N/54.9 lbf	1
WZ-445	Aluminum Carriage, Steel Wheels, Sealed	490N/110.2 lbf	540N/121.4 lbf	7.9Nms/69.9 lbf	8.6Nm/76.1 lbf	6.2N/54.9 lbf	1
WZ-446	Aluminum Carriage, Polymer Wheels, Shielded	65N/14.6 lbf	66.7N/15 lbf	1.4Nms/12.4 lbf	4.5Nm/39.8 lbf	1N/8.8 lbf	1

**Tracks**



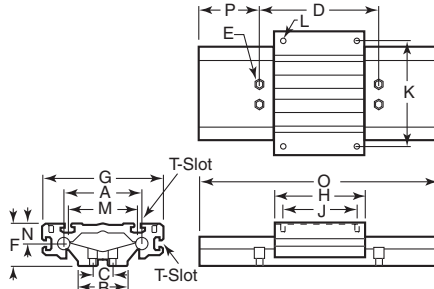
Item No.	Length (Inch)	No. of Holes	Pack Qty.
<b>Track, Steel, Unhardened</b>			
WZ-448	6.5	4	1
WZ-449	12.5	7	1
WZ-450	18.5	10	1
WZ-451	24.5	13	1
WZ-452	30.5	16	1
WZ-453	36.5	19	1

Item No.	Length (Inch)	No. of Holes	Pack Qty.
<b>Track, Steel, Hardened</b>			
WZ-454	6.5	4	1
WZ-455	12.5	7	1
WZ-456	18.5	10	1
WZ-457	24.5	13	1
WZ-459	36.5	19	1





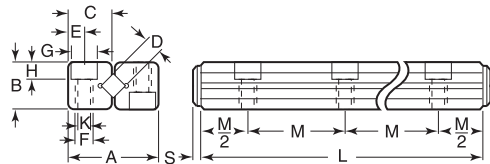
Two Piece Linear Guide Systems



Two piece linear rail systems use Pacific Bearing's FrelonGold® plain bearing technology. Rail and carriage are made from 6063-T6 aluminum. Rails are ceramic coated to resist corrosion, repel weld spatter and contaminants. Smooth running and dampens vibrations. Guide has slots for T-nuts or bolts. Two component system allows for easier installation than traditional rail systems. Guide and rail are sold together.

Item No.	Pacific	A	B	C	D	Bolt Size E	F	G	H	J	K	Bolt Size L	M	N	O	P	Static Load Max. Lbs.	Pack Qty.
PBC-750	D75-12	2.95	2.0	.75	4	¼	1.625	4.6	3.5	3.00	4.00	10-32	2.60	.810	12	2	500	1
PBC-755	D75-24	2.95	2.0	.75	4	¼	1.625	4.6	3.5	3.00	4.00	10-32	2.60	.810	24	2	500	1
PBC-760	D100-12	3.94	2.6	1.00	6	5/16	2.125	6.1	4.5	3.75	5.25	¼-20	3.50	1.024	12	3	750	1
PBC-765	D100-24	3.94	2.6	1.00	6	5/16	2.125	6.1	4.5	3.75	5.25	¼-20	3.50	1.024	24	3	750	1
PBC-770	D125-12	4.92	3.3	1.25	6	3/8	2.625	7.6	6.0	5.25	6.75	5/16-18	4.33	1.300	12	4	1,000	1

Crossed Roller Rail Sets

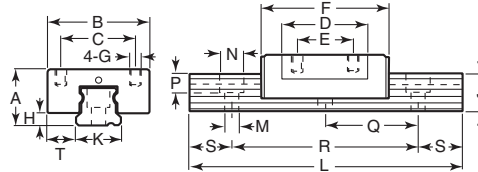


Crossed roller linear rail sets are compact, precision bearings that can support and guide high loads with high accuracy and repeatability, low friction, and low starting force. A complete range of sizes is supplied for use in precision machine tools, measuring instruments and anywhere reciprocating motion with high reliability and long life is required. Each bearing consists of a pair of hardened steel ways containing 90 degree "V" grooves and a row of alternately crossed cylindrical rollers. The hardened steel rollers are captive in a stainless steel cage for easy handling, assembly and permanent alignment. The ways are installed face to face on smooth flat and accurately parallel, coplanar, or perpendicular surfaces. Lubrication required depends on the application ranging from light grease for low speeds less than 50 inches per minute to continuous oil bath or mist at 1,200 inches per minute. Temperature of bearings must not exceed 212 degree Fahrenheit even for short periods, as this will reduce hardness and performance. All are steel. Each set consists of two complete bearings (4 way bars, 2 roller cages, and end stops).

Item No.	No. of Roller	Lgth. L	Travel	Number Holes	Load Lbs.	F										Pack Qty.		
						A	B	C	D	E	Thread	Cap Screw	G	H	K		M	S
DT-1011	5	1.181	.709	2	66	.473	.236	.217	.079	.0984	M3	#2	.173	.079	.100	.5910	.079	1
DT-1012	8	1.772	.945	3	105	.473	.236	.217	.079	.0984	M3	#2	.173	.079	.100	.5910	.079	1
DT-1013	11	2.362	1.181	4	145	.473	.236	.217	.079	.0984	M3	#2	.173	.079	.100	.5910	.079	1
DT-1015	16	3.544	1.969	6	211	.473	.236	.217	.079	.0984	M3	#2	.173	.079	.100	.5910	.079	1
DT-1051	7	3.150	2.283	2	308	.866	.433	.402	.158	.1772	M5	#8	.315	.165	.169	1.5748	.079	1
DT-1071	8	3.937	2.165	2	704	1.221	.591	.559	.236	.2360	M6	#10	.374	.205	.205	1.9685	.118	1
DT-1072	12	5.906	3.346	3	1,056	1.221	.591	.559	.236	.2360	M6	#10	.374	.205	.205	1.9685	.118	1
DT-1074	20	9.843	5.906	5	1,760	1.221	.591	.559	.236	.2360	M6	#10	.374	.205	.205	1.9685	.118	1



Miniature Profile Rail Guides




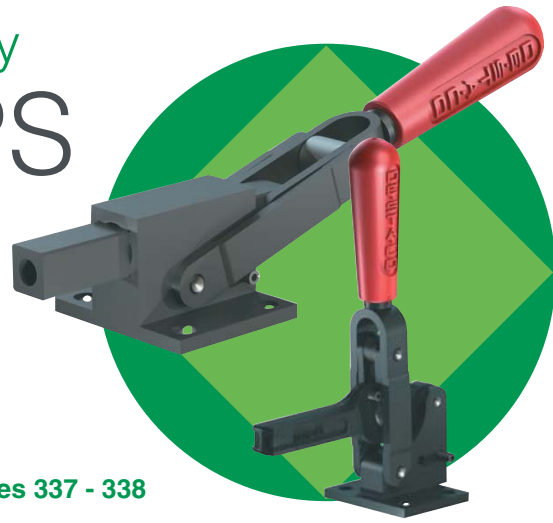
Ideal for precision applications where mounting space is limited. Small and lightweight with high load carrying capacity and high speed linear motion up to 3m/second. Gothic arch grooves at the raceway contacts enable the slide to sustain loads and movements from any direction. Height tolerance is +/- .020 mm. Width tolerance is +/- .025 mm. Free of clearance, no preload for applications with constant load and low friction. All parts are stainless steel or plastic for corrosion resistance. End caps have oil holes for easy relubrication. All dimensions are in millimeters.

Item No.	Number of Carriages	L	A	B	C	D	E	F	G	H	J	K	M	N	P	Q	R	S	T	Basic Load Rating (Lbs.)	Pack Qty.
SKF-0	1	80	10	20	15	21.5	10	32	M3 x 3	2	6.5	9	3.5	6	3.5	20	60	10	5.5	416	1
SKF-1	1	110	10	20	15	21.5	10	32	M3 x 3	2	6.5	9	3.5	6	3.5	20	80	15	5.5	416	1
SKF-2	2	110	10	20	15	21.5	10	32	M3 x 3	2	6.5	9	3.5	6	3.5	20	80	15	5.5	416	1
SKF-3	1	140	10	20	15	21.5	10	32	M3 x 3	2	6.5	9	3.5	6	3.5	20	120	10	5.5	416	1
SKF-4	2	140	10	20	15	21.5	10	32	M3 x 3	2	6.5	9	3.5	6	3.5	20	120	10	5.5	416	1
SKF-5	1	170	10	20	15	21.5	10	32	M3 x 3	2	6.5	9	3.5	6	3.5	20	140	15	5.5	416	1
SKF-6	2	170	10	20	15	21.5	10	32	M3 x 3	2	6.5	9	3.5	6	3.5	20	140	15	5.5	416	1
SKF-7	2	200	10	20	15	21.5	10	32	M3 x 3	2	6.5	9	3.5	6	3.5	20	180	10	5.5	416	1
SKF-8	2	260	10	20	15	21.5	10	32	M3 x 3	2	6.5	9	3.5	6	3.5	20	240	10	5.5	416	1
SKF-9	2	290	10	20	15	21.5	10	32	M3 x 3	2	6.5	9	3.5	6	3.5	20	260	15	5.5	416	1
SKF-10	1	110	13	27	20	23	15	36	M3 x 3.5	3	8.8	12	3.5	6	4.5	25	75	17.5	7.5	573	1
SKF-11	1	150	13	27	20	23	15	36	M3 x 3.5	3	8.8	12	3.5	6	4.5	25	125	12.5	7.5	573	1
SKF-12	2	150	13	27	20	23	15	36	M3 x 3.5	3	8.8	12	3.5	6	4.5	25	125	12.5	7.5	573	1
SKF-13	1	190	13	27	20	23	15	36	M3 x 3.5	3	8.8	12	3.5	6	4.5	25	150	20	7.5	573	1
SKF-14	2	190	13	27	20	23	15	36	M3 x 3.5	3	8.8	12	3.5	6	4.5	25	150	20	7.5	573	1
SKF-15	1	230	13	27	20	23	15	36	M3 x 3.5	3	8.8	12	3.5	6	4.5	25	200	15	7.5	573	1
SKF-16	2	230	13	27	20	23	15	36	M3 x 3.5	3	8.8	12	3.5	6	4.5	25	200	15	7.5	573	1
SKF-17	2	310	13	27	20	23	15	36	M3 x 3.5	3	8.8	12	3.5	6	4.5	25	275	17.5	7.5	573	1
SKF-18	2	390	13	27	20	23	15	36	M3 x 3.5	3	8.8	12	3.5	6	4.5	25	350	20	7.5	573	1
SKF-19	2	470	13	27	20	23	15	36	M3 x 3.5	3	8.8	12	3.5	6	4.5	25	450	10	7.5	573	1
SKF-20	1	110	14	40	28	32.5	15	45.5	M3 x 3.5	3	8.8	24	4.5	8	4.8	40	80	15	8	742	1
SKF-21	1	150	14	40	28	32.5	15	45.5	M3 x 3.5	3	8.8	24	4.5	8	4.5	40	120	15	8	742	1
SKF-222	2	150	14	40	28	32.5	15	45.5	M3 x 3.5	3	8.8	24	4.5	8	4.5	40	120	15	8	742	1
SKF-23	1	190	14	40	28	32.5	15	45.5	M3 x 3.5	3	8.8	24	4.5	8	4.5	40	160	15	8	742	1
SKF-24	2	190	14	40	28	32.5	15	45.5	M3 x 3.5	3	8.8	24	4.5	8	4.5	40	160	15	8	742	1
SKF-25	1	230	14	40	28	32.5	15	45.5	M3 x 3.5	3	8.8	24	4.5	8	4.5	40	200	15	8	742	1
SKF-26	2	230	14	40	28	32.5	15	45.5	M3 x 3.5	3	8.8	24	4.5	8	4.5	40	200	15	8	742	1
SKF-27	2	310	14	40	28	32.5	15	45.5	M3 x 3.5	3	8.8	24	4.5	8	4.5	40	280	15	8	742	1
SKF-28	2	390	14	40	28	32.5	15	45.5	M3 x 3.5	3	8.8	24	4.5	8	4.5	40	340	15	8	742	1
SKF-29	2	470	14	40	28	32.5	15	45.5	M3 x 3.5	3	8.8	24	4.5	8	4.5	40	440	15	8	742	1

**Note:** Basic load rating is the constant load which a system can theoretically accept for a nominal life of 100,000 m of travel with 90% reliability

# High Holding Capacity

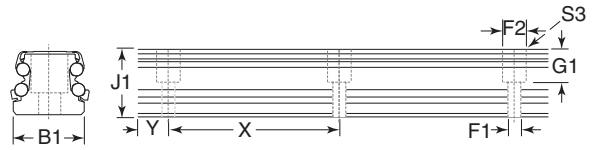
# CLAMPS

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Rails



Item No.	Thomson	Use with Carriage No.	Size	B1	J1	F1	F2	G1	S3	S3	X	Y	Length	Pack Qty.
<b>Carbon Steel</b>														
TLM-3109	521H15A+280	TLM-3085, TLM-3091	15	15	15.7	4.5	8	4.5	M4	M4	60	20	280	1
TLM-3107	521H15A+160	TLM-3085, TLM-3091	15	15	15.7	4.5	8	4.5	M4	M4	60	20	160	1
TLM-3108	521H15A+220	TLM-3085, TLM-3091	15	15	15.7	4.5	8	4.5	M4	M4	60	20	220	1
TLM-3111	521H15A+820	TLM-3085, TLM-3091	15	15	15.7	4.5	8	4.5	M4	M4	60	20	820	1
TLM-3110	521H15A+460	TLM-3085, TLM-3091	15	15	15.7	4.5	8	4.5	M4	M4	60	20	460	1
TLM-3112	521H20A+160	TLM-3086, TLM-3092	20	20	19	5.8	10	6.5	M5	M5	60	20	160	1
TLM-3114	521H20A+280	TLM-3086, TLM-3092	20	20	19	5.8	10	6.5	M5	M5	60	20	280	1
TLM-3113	521H20A+220	TLM-3086, TLM-3092	20	20	19	5.8	10	6.5	M5	M5	60	20	220	1
TLM-3116	521H20A+820	TLM-3086, TLM-3092	20	20	19	5.8	10	6.5	M5	M5	60	20	820	1
TLM-3115	521H20A+460	TLM-3086, TLM-3092	20	20	19	5.8	10	6.5	M5	M5	60	20	460	1
TLM-3117	521H20A+1240	TLM-3086, TLM-3092	20	20	19	5.8	10	6.5	M5	M5	60	20	1,240	1
TLM-3120	521H25A+280	TLM-3087, TLM-3093	25	23	22.7	7	11	8	M6	M6	60	20	280	1
TLM-3125	521H25A+1600	TLM-3087, TLM-3093	25	23	22.7	7	11	8	M6	M6	60	20	1,600	1
TLM-3121	521H25A+460	TLM-3087, TLM-3093	25	23	22.7	7	11	8	M6	M6	60	20	460	1
TLM-3119	521H25A+220	TLM-3087, TLM-3093	25	23	22.7	7	11	8	M6	M6	60	20	220	1
TLM-3118	521H25A+160	TLM-3087, TLM-3093	25	23	22.7	7	11	8	M6	M6	60	20	160	1
TLM-3123	521H25A+820	TLM-3087, TLM-3093	25	23	22.7	7	11	8	M6	M6	60	20	820	1
TLM-3124	521H25A+1240	TLM-3087, TLM-3093	25	23	22.7	7	11	8	M6	M6	60	20	1,240	1
TLM-3122	521H25A+660	TLM-3087, TLM-3093	25	23	22.7	7	11	8	M6	M6	60	20	660	1
TLM-3126	521H30A+280	TLM-3088, TLM-3094	30	28	26	9	15	10	M7	M7	80	20	280	1
TLM-3131	521H30A+1640	TLM-3088, TLM-3094	30	28	26	9	15	10	M7	M7	80	20	1,640	1
TLM-3129	521H30A+840	TLM-3088, TLM-3094	30	28	26	9	15	10	M7	M7	80	20	840	1
TLM-3130	521H30A+1240	TLM-3088, TLM-3094	30	28	26	9	15	10	M7	M7	80	20	1,240	1
TLM-3132	521H30A+2040	TLM-3088, TLM-3094	30	28	26	9	15	10	M7	M7	80	20	2,040	1
TLM-3128	521H30A+680	TLM-3088, TLM-3094	30	28	26	9	15	10	M7	M7	80	20	680	1
TLM-3127	521H30A+440	TLM-3088, TLM-3094	30	28	26	9	15	10	M7	M7	80	20	440	1
TLM-3137	521H35A+1240	TLM-3190, TLM-3191	35	34	29.5	9	15	12	M8	M8	80	20	1,240	1
TLM-3134	521H35A+440	TLM-3190, TLM-3191	35	34	29.5	9	15	12	M8	M8	80	20	440	1
TLM-3135	521H35A+680	TLM-3190, TLM-3191	35	34	29.5	9	15	12	M8	M8	80	20	680	1
TLM-3138	521H35A+1640	TLM-3190, TLM-3191	35	34	29.5	9	15	12	M8	M8	80	20	1,640	1
TLM-3136	521H35A+840	TLM-3190, TLM-3191	35	34	29.5	9	15	12	M8	M8	80	20	840	1
TLM-3139	521H35A+2040	TLM-3190, TLM-3191	35	34	29.5	9	15	12	M8	M8	80	20	2,040	1
TLM-3140	521H35A+2520	TLM-3190, TLM-3191	35	34	29.5	9	15	12	M8	M8	80	20	2,520	1
TLM-3133	521H35A+280	TLM-3190, TLM-3191	35	34	29.5	9	15	12	M8	M8	80	20	280	1
TLM-3141	521H45A+360	TLM-3089	45	45	37	14	20	15	M12	M12	105	22.5	360	1
TLM-3142	521H45A+570	TLM-3089	45	45	37	14	20	15	M12	M12	105	22.5	570	1
TLM-3144	521H45A+1200	TLM-3089	45	45	37	14	20	15	M12	M12	105	22.5	1,200	1
TLM-3146	521H45A+2040	TLM-3089	45	45	37	14	20	15	M12	M12	105	22.5	2,040	1
TLM-3147	521H45A+2460	TLM-3089	45	45	37	14	20	15	M12	M12	105	22.5	2,460	1
TLM-3143	521H45A+885	TLM-3089	45	45	37	14	20	15	M12	M12	105	22.5	885	1
TLM-3145	521H45A+1620	TLM-3089	45	45	37	14	20	15	M12	M12	105	22.5	1,620	1
<b>Thin Dense Chrome</b>														
TLM-3150	521H15AD+280	TLM-3096, TLM-3102	15	15	15.7	4.5	8	4.5	M4	M4	60	20	280	1
TLM-3148	521H15AD+160	TLM-3096, TLM-3102	15	15	15.7	4.5	8	4.5	M4	M4	60	20	160	1
TLM-3152	521H15AD+820	TLM-3096, TLM-3102	15	15	15.7	4.5	8	4.5	M4	M4	60	20	820	1
TLM-3149	521H15AD+220	TLM-3096, TLM-3102	15	15	15.7	4.5	8	4.5	M4	M4	60	20	220	1
TLM-3151	521H15AD+460	TLM-3096, TLM-3102	15	15	15.7	4.5	8	4.5	M4	M4	60	20	460	1
TLM-3156	521H20AD+460	TLM-3079, TLM-3103	20	20	19	5.8	10	6.5	M5	M5	60	20	460	1
TLM-3158	521H20AD+1240	TLM-3079, TLM-3103	20	20	19	5.8	10	6.5	M5	M5	60	20	1,240	1
TLM-3154	521H20AD+220	TLM-3079, TLM-3103	20	20	19	5.8	10	6.5	M5	M5	60	20	220	1
TLM-3157	521H20AD+820	TLM-3079, TLM-3103	20	20	19	5.8	10	6.5	M5	M5	60	20	820	1
TLM-3155	521H20AD+280	TLM-3079, TLM-3103	20	20	19	5.8	10	6.5	M5	M5	60	20	280	1
TLM-3153	521H20AD+160	TLM-3079, TLM-3103	20	20	19	5.8	10	6.5	M5	M5	60	20	160	1
TLM-3159	521H25AD+160	TLM-3098, TLM-3104	25	23	22.7	7	11	8	M6	M6	60	20	160	1
TLM-3162	521H25AD+460	TLM-3098, TLM-3104	25	23	22.7	7	11	8	M6	M6	60	20	460	1
TLM-3163	521H25AD+660	TLM-3098, TLM-3104	25	23	22.7	7	11	8	M6	M6	60	20	660	1
TLM-3165	521H25AD+1240	TLM-3098, TLM-3104	25	23	22.7	7	11	8	M6	M6	60	20	1,240	1
TLM-3166	521H25AD+1600	TLM-3098, TLM-3104	25	23	22.7	7	11	8	M6	M6	60	20	1,600	1
TLM-3161	521H25AD+280	TLM-3098, TLM-3104	25	23	22.7	7	11	8	M6	M6	60	20	280	1
TLM-3164	521H25AD+820	TLM-3098, TLM-3104	25	23	22.7	7	11	8	M6	M6	60	20	820	1
TLM-3160	521H25AD+220	TLM-3098, TLM-3104	25	23	22.7	7	11	8	M6	M6	60	20	220	1
TLM-3167	521H30AD+280	TLM-3099, TLM-3105	30	28	26	9	15	10	M7	M7	80	20	280	1
TLM-3171	521H30AD+1240	TLM-3099, TLM-3105	30	28	26	9	15	10	M7	M7	80	20	1,240	1
TLM-3168	521H30AD+440	TLM-3099, TLM-3105	30	28	26	9	15	10	M7	M7	80	20	440	1
TLM-3172	521H30AD+1640	TLM-3099, TLM-3105	30	28	26	9	15	10	M7	M7	80	20	1,640	1
TLM-3169	521H30AD+680	TLM-3099, TLM-3105	30	28	26	9	15	10	M7	M7	80	20	680	1
TLM-3170	521H30AD+840	TLM-3099, TLM-3105	30	28	26	9	15	10	M7	M7	80	20	840	1
TLM-3173	521H30AD+2040	TLM-3099, TLM-3105	30	28	26	9	15	10	M7	M7	80	20	2,040	1
TLM-3179	521H35AD+1640	TLM-3192, TLM-3193	35	34	29.5	9	15	12	M8	M8	80	20	1,640	1
TLM-3176	521H35AD+680	TLM-3192, TLM-3193	35	34	29.5	9	15	12	M8	M8	80	20	680	1
TLM-3178	521H35AD+1240	TLM-3192, TLM-3193	35	34	29.5	9	15	12	M8	M8	80	20	1,240	1
TLM-3181	521H35AD+2520	TLM-3192, TLM-3193	35	34	29.5	9	15	12	M8	M8	80	20	2,520	1
TLM-3180	521H35AD+2040	TLM-3192, TLM-3193	35	34	29.5	9	15	12	M8	M8	80	20	2,040	1
TLM-3177	521H35AD+840	TLM-3192, TLM-3193	35	34	29.5	9	15	12	M8	M8	80	20	840	1
TLM-3174	521H35AD+280	TLM-3192, TLM-3193	35	34	29.5	9	15	12	M8	M8	80	20	280	1
TLM-3175	521H35AD+440	TLM-3192, TLM-3193	35	34	29.5	9	15	12	M8	M8	80	20	440	1
TLM-3182	521H45AD+360	TLM-3100	45	45	37	14	20	15	M12	M12	105	22.5	360	1
TLM-3185	521H45AD+1200	TLM-3100	45	45	37	14	20	15	M12	M12	105	22.5	1,200	1
TLM-3186	521H45AD+1620	TLM-3100	45	45	37	14	20	15	M12	M12	105	22.5	1,620	1
TLM-3184	521H45AD+885	TLM-3100	45	45	37	14	20	15	M12	M12	105	22.5	885	1
TLM-3187	521H45AD+2040	TLM-3100	45	45	37	14	20	15	M12	M12	105	22.5	2,040	1
TLM-3183	521H45AD+570	TLM-3100	45	45	37	14	20	15	M12	M12	105	22.5	570	1
TLM-3188	521H45AD+2460	TLM-3100	45	45	37	14	20	15	M12	M12	105	22.5	2,460	1

Note: All dimensions in mm unless otherwise specified

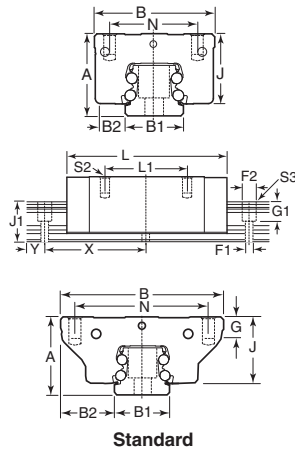


The Thomson 500 Series Ball Profile Rail Linear Guides provides long life, exceptional rigidity, high dynamic and static load capacities in all direction; accommodates high moment loads; and maintains a high running accuracy. These properties result in improved machine accuracies and rigidity resulting in reduced vibration extending machine and tool life. This has a direct effect on operational efficiency resulting in cost savings for the user. These units are a drop-in replacement for existing linear ball guide systems. The rails are subjected to multiple straightening processes during and after grinding of the ball paths to ensure straight accurate rails. A patented, custom insert molded recirculation path that has an optimized geometric shape and minimal transitions ensures smooth and quiet operation in both low and high-speed operation. Built-in undercarriage, low-drag longitudinal seals protect the balls and ball path from contamination. These longitudinal seals are an added protection to increase the life and overall performance. A special trapezoidal profile maximizes the carriage cross section, resulting in the highest possible rigidity. All ball bearing raceways are hardened to a minimum of 60 Rockwell C.

The carriages are available in standard and narrow profiles, as "clearance" units, which are the most commonly specified type in the market today.

Carriages and rails are available in carbon steel or thin dense, chrome-coated carbon steel and are sold separately.

Carriages



Item No.	Thomson	Size	A	B	B1	B2	N	J	G	L	L1	S2	Load Rating (N)		Pack Qty.
													Dynamic	Static	
<b>Carbon Steel - Standard</b>															
TLM-3085	511H15A0	15	24	47	15	16	38	20.2	7	59.8	30	M5	9,000	19,600	1
TLM-3086	511H20A0	20	30	63	20	21.5	53	25.5	8	75.5	40	M6	14,400	31,400	1
TLM-3087	511H25A0	25	36	70	25	23.5	57	30.5	9	89.3	45	M8	21,100	46,100	1
TLM-3088	511H30A0	30	42	90	30	31	72	35.9	12	103	52	M10	29,200	63,700	1
TLM-3190	511H35A0	35	48	100	35	33	82	41	12	118	62	M10	38,700	84,400	1
TLM-3089	511H45A0	45	60	120	45	37.5	100	50.8	15	145	80	M12	61,900	134,800	1
<b>Carbon Steel - Narrow</b>															
TLM-3091	511H15C0	15	24	34	15	9.5	26	20.2	5	59.8	26	M4	9,000	19,600	1
TLM-3092	511H20C0	20	30	44	20	12	32	25.5	7	75.5	36	M5	14,400	31,400	1
TLM-3093	511H25C0	25	36	48	25	12.5	45	30.5	9	89.3	45	M6	21,100	46,100	1
TLM-3094	511H30C0	30	42	60	30	16	40	35.9	11	103	40	M8	29,200	63,700	1
TLM-3191	511H35C0	35	48	70	35	18	50	41	12	118	50	M8	38,700	84,400	1
<b>Thin Dense Chrome - Standard</b>															
TLM-3096	511H15A0D	15	24	47	15	16	38	20.2	7	59.8	30	M5	9,000	19,600	1
TLM-3097	511H20A0D	20	30	63	20	21.5	53	25.5	8	75.5	40	M6	14,400	31,400	1
TLM-3098	511H25A0D	25	36	70	25	23.5	57	30.5	9	89.3	45	M8	21,100	46,100	1
TLM-3099	511H30A0D	30	42	90	30	31	72	35.9	12	103	52	M10	29,200	63,700	1
TLM-3192	511H35A0D	35	48	100	35	33	82	41	12	118	62	M10	38,700	84,400	1
TLM-3100	511H45A0D	45	60	120	45	37.5	100	50.8	15	145	80	M12	61,900	134,800	1
<b>Thin Dense Chrome - Narrow</b>															
TLM-3102	511H15C0D	15	24	34	15	9.5	26	20.2	5	59.8	26	M4	9,000	19,600	1
TLM-3103	511H20C0D	20	30	44	20	12	32	25.5	7	75.5	36	M5	14,400	31,400	1
TLM-3104	511H25C0D	25	36	48	25	12.5	45	30.5	9	89.3	45	M6	21,100	46,100	1
TLM-3105	511H30C0D	30	42	60	30	16	40	35.9	11	103	40	M8	29,200	63,700	1
TLM-3193	511H35C0D	35	48	70	35	18	50	41	12	118	50	M8	38,700	84,400	1

Note: Dynamic load ratings are based on 100km of travel to compare to manufactures using 50km divide value for 50km by 1.26

Note: All dimensions in mm unless otherwise specified

# CLAMPING SYSTEMS

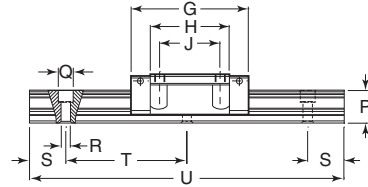
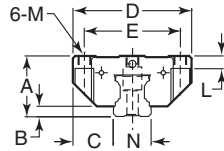


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Profile rail guides are used in the production of linear guidance systems with unlimited travel. They consist of a profile rail with four precision ground raceways and a slide unit with four ball circulation paths. The square configuration of the raceways results in a guidance system with good rigidity, capable of withstanding moment loads in all directions. The load carrying capacity is equal in all four directions. Grease nipples are provided. Low vibration and low noise. The units are supplied with a light pre-load to cover a wide variety of applications. Case hardened steel. Lubricated with a lithium based grease. Dimensions are in millimeters. Carriages and rails are sold separately.

**Carriages**



**Flanged with Lube Reservoir**

Item No.	A	C	D	E	G	H	J	L	M	Load Rating (Lbs.)		Pack Qty.
										Dynamic	Static	
SKF-361T	24	16.0	47	38	62.0	40.0	30	8.0	M5 x 0.8	1,752	3,034	1
SKF-362T	30	21.5	63	53	72.0	50.0	40	9.0	M6 x 1	4,225	5,483	1
SKF-363T	36	23.5	70	57	82.0	57.0	45	12.0	M8 x 1.25	5,124	6,831	1
SKF-364T	42	31.0	90	72	100.4	67.4	52	11.5	M10 x 1.5	7,124	9,281	1
SKF-365T	48	33.0	100	82	114.0	77.0	62	13.0	M10 x 1.5	9,415	12,135	1

**Flanged Long with Lube Reservoir**

Item No.	A	C	D	E	G	H	J	L	M	Load Rating (Lbs.)		Pack Qty.
										Dynamic	Static	
SKF-502T	30	21.5	63	53	88.2	66.2	40	9.0	M6 x 1	5,483	7,910	1
SKF-503T	36	23.5	70	57	104.1	79.1	45	12	M8 x 1.25	6,832	10,225	1
SKF-504T	42	31.0	90	72	125.4	92.4	52	11.5	M10 x 1.5	8,989	12,989	1
SKF-505T	48	33.0	100	82	142.5	105.5	62	13.0	M10 x 1.5	12,494	18,202	1
SKF-506T	60	37.5	120	100	167.0	128.0	80	15.0	M12 x 1.75	20,315	28,876	1

**Narrow with Lube Reservoir**

Item No.	A	C	D	E	G	H	J	L	M	Load Rating (Lbs.)		Pack Qty.
										Dynamic	Static	
SKF-507T	28	9.5	34	26	62.0	40.0	26	7.5	M4 x 0.7	1,753	3,034	1
SKF-508T	30	12.0	44	32	72.0	50.0	36	6.5	M5 x 0.8	4,225	5,483	1
SKF-509T	40	12.5	48	35	82.0	57.0	35	10.0	M6 x 1	5,124	6,831	1
SKF-510T	45	16.0	60	40	100.4	67.4	40	11.2	M8 x 1	7,124	9,281	1
SKF-511T	55	18.0	70	50	114.0	77.0	50	17.0	M8 x 1.25	9,415	12,135	1
SKF-512T	70	20.5	86	60	135.0	96.0	60	20.5	M10 x 1.5	15,303	19,258	1

**Narrow Long with Lube Reservoir**

Item No.	A	C	D	E	G	H	J	L	M	Load Rating (Lbs.)		Pack Qty.
										Dynamic	Static	
SKF-513T	40	12.5	48	35	104.1	79.1	50	10.0	M6 x 1	6,832	10,225	1
SKF-514T	45	16.0	60	40	125.4	92.4	60	11.2	M8 x 1.25	8,989	12,989	1
SKF-515T	55	18.0	70	50	142.5	105.5	72	17.0	M8 x 1.25	12,494	18,202	1
SKF-516T	70	20.5	86	60	167.0	128.0	80	20.5	M10 x 1.5	20,315	28,876	1

**Rails**

Item No.	Use with Carriage No.	B	N	P	Q	R	S	T	U	Pack Qty.
SKF-367T	SKF-361T, SKF-507T	4.6	15	14	7.5	4.5	20	60	460	1
SKF-368T	SKF-361T, SKF-507T	4.6	15	14	7.5	4.5	20	60	820	1
SKF-369T	SKF-362T, SKF-502T, SKF-508T	5.0	20	18	9.5	6.0	20	60	280	1
SKF-370T	SKF-362T, SKF-502T, SKF-508T	5.0	20	18	9.5	6.0	20	60	640	1
SKF-371T	SKF-362T, SKF-502T, SKF-508T	5.0	20	18	9.5	6.0	20	60	1,000	1
SKF-372T	SKF-363T, SKF-503T, SKF-509T, SKF-513T	7.0	23	22	11.0	7.0	20	60	340	1
SKF-374T	SKF-363T, SKF-503T, SKF-509T, SKF-513T	7.0	23	22	11.0	7.0	20	60	1,240	1
SKF-375T	SKF-363T, SKF-503T, SKF-509T, SKF-513T	7.0	23	22	11.0	7.0	20	60	1,600	1
SKF-376T	SKF-364T, SKF-504T, SKF-510T, SKF-514T	9.0	28	26	14.0	9.0	20	80	440	1
SKF-377T	SKF-364T, SKF-504T, SKF-510T, SKF-514T	9.0	28	26	14.0	9.0	20	80	760	1
SKF-378T	SKF-364T, SKF-504T, SKF-510T, SKF-514T	9.0	28	26	14.0	9.0	20	80	1,240	1
SKF-379T	SKF-364T, SKF-504T, SKF-510T, SKF-514T	9.0	28	26	14.0	9.0	20	80	1,640	1
SKF-380T	SKF-364T, SKF-504T, SKF-510T, SKF-514T	9.0	28	26	14.0	9.0	20	80	2,040	1
SKF-381T	SKF-364T, SKF-504T, SKF-510T, SKF-514T	9.0	28	26	14.0	9.0	20	80	2,520	1
SKF-382T	SKF-365T, SKF-505T, SKF-511T, SKF-515T	9.5	34	29	14.0	9.0	20	80	440	1
SKF-383T	SKF-365T, SKF-505T, SKF-511T, SKF-515T	9.5	34	29	14.0	9.0	20	80	760	1
SKF-384T	SKF-365T, SKF-505T, SKF-511T, SKF-515T	9.5	34	29	14.0	9.0	20	80	1,240	1
SKF-385T	SKF-365T, SKF-505T, SKF-511T, SKF-515T	9.5	34	29	14.0	9.0	20	80	1,640	1
SKF-386T	SKF-365T, SKF-505T, SKF-511T, SKF-515T	9.5	34	29	14.0	9.0	20	80	2,040	1
SKF-387T	SKF-365T, SKF-505T, SKF-511T, SKF-515T	9.5	34	29	14.0	9.0	20	80	2,520	1

# REDI-RAIL™ LINEAR GUIDE SYSTEMS



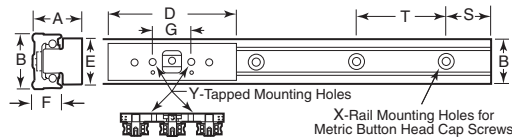
These easy-to-use systems can be installed into many applications including packaging, material handling, automation and assembly equipment. They consist of a roller guide and rail. The roller guide is made from 6061-T6 aluminum base with three rollers. The rollers are made from 52100 hardened steel and are lubricated and sealed. The pre-load is easily adjusted to meet your requirements. The rail is made from 6061-T6 aluminum with hardened and ground steel raceways inserted for the rollers to run on. Guides and rails are sold separately. Metric dimensions are in millimeters. The metric roller guides have a felt seal to keep contamination clear of rollers.



Roller Guides



Rails



## Roller Guides

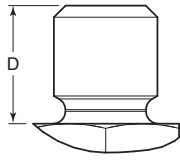
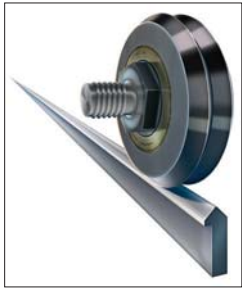


Item No.	Pacific	Fits Rail Width B	A	D	E	G	Y	Pack Qty.
<b>Inch</b>								
PBC-605	RRS14	1.32	.918	3.25	1.25	1.250	¼-28	1
PBC-610	RRS18	1.91	1.125	4.50	1.50	1.625	⅜-24	1
<b>Metric</b>								
PBC-625	RRS30	30	28	86	25.4	26	M5 x .80	1
PBC-630	RRS45	45	33	116	38.1	36	M8 x 1.25	1
PBC-635	RRS65	65	42	161	50.8	52	M8 x 1.25	1

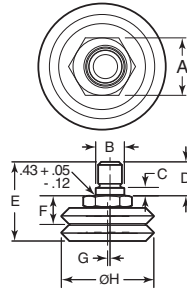
## Rails



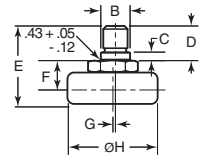
Item No.	Pacific	Width B	Lgth.	F	S	T	X	No. of Holes	Pack Qty.
<b>Inch</b>									
PBC-650	RR14-12	1.32	12	.60	.75	3.50	#10	4	1
PBC-655	RR14-24	1.32	24	.60	1.50	3.50	#10	7	1
PBC-660	RR14-36	1.32	36	.60	.50	3.50	#10	11	1
PBC-665	RR18-12	1.91	12	.75	.75	3.50	¼	4	1
PBC-670	RR18-24	1.91	24	.75	1.50	3.50	¼	7	1
PBC-675	RR18-36	1.91	36	.75	.50	3.50	¼	11	1
<b>Metric</b>									
PBC-700	RR30-480	30	480	16.00	30	60	M5	8	1
PBC-705	RR30-720	30	720	16.00	30	60	M5	12	1
PBC-710	RR30-960	30	960	16.00	30	60	M5	16	1
PBC-715	RR45-480	45	480	20.50	30	60	M6	8	1
PBC-720	RR45-720	45	720	20.50	30	60	M6	12	1
PBC-725	RR45-960	45	960	20.50	30	60	M6	16	1
PBC-730	RR65-480	65	480	27.00	40	80	M6	6	1
PBC-735	RR65-720	65	720	27.00	40	80	M6	9	1
PBC-740	RR65-960	65	960	27.00	40	80	M6	12	1



Concentric Stud



Eccentric Stud



Eccentric Stud MadeWell Crown Roller

DualVee® integral guide wheels feature a one-piece bushing or stud shaft with a machined inner bearing race in lieu of a two-piece assembly, providing a lower procurement and installation cost. The unique one-piece design provides a lower profile and increased rigidity (up to 84% less deflection), less tolerance stack up, greater torque capability, and external adjustment. Integral wheels are available in 52100 carbon steel and polymer overmoulded. Like original DualVee® wheels, integral wheels are ideal for a wide array of applications from the clean room to the saw mill. These rugged, yet economical, guide wheels provide smooth, quiet motion at speeds up to 5.5 m/s and acceleration to 5 g's. The recirculating elements are self-contained and isolated from the environment; rolling contact between the wheel and track sweeps debris aside, making it ideal for use in contaminated environments. Track is easily joined for long length systems.

Integral Studded DualVee® Wheels

Steel



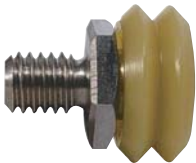
BISHOPWISECARVER

See facing page for track.

Concentric				Eccentric				Size	A	B	C	D	E	F	G	H	Radial Load (lbf)	Pack Qty.
Shielded		Sealed		Shielded		Sealed												
Item No.	Stud Thread	Item No.	Stud Thread	Item No.	Stud Thread	Item No.	Stud Thread											
WZ-400	M6 x 1.0	WZ-405	M6 x 1.0	WZ-410	M5 x .8	WZ-415	M5 x .8	0	11	5.56	2.16	7.62	16.95	6.15	.46	14.83	146	1
WZ-401	M8 x 1.25	WZ-406	M8 x 1.25	WZ-411	M6 x 1.0	WZ-416	M6 x 1.0	1	12	6.30	2.16	8.10	19.33	7.30	.61	19.58	274	1
WZ-402	M10 x 1.5	WZ-407	M10 x 1.5	WZ-412	M8 x 1.25	WZ-417	M8 x 1.25	2	14	9.53	2.79	11.38	26.57	9.63	.76	30.73	596	1
WZ-403	M12 x 1.75	WZ-408	M12 x 1.75	WZ-413	M10 x 1.5	WZ-418	M10 x 1.5	3	19	10.72	4.32	15.11	36.68	13.63	1.50	45.80	1,326	1
WZ-404	M14 x 2.0	WZ-409	M14 x 2.0	WZ-414	M12 x 1.75	WZ-419	M12 x 1.75	4	22	12.70	4.50	19.00	44.89	16.36	2.01	59.94	2,181	1

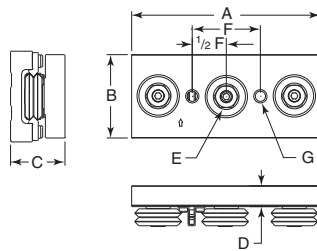
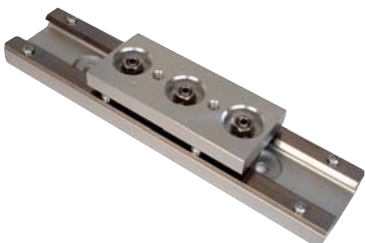
Polymer

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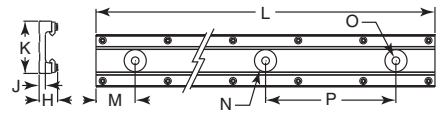


Concentric				Eccentric				Size	A	B	C	D	E	F	G	H	Radial Load (lbf)	Pack Qty.
Shielded		Sealed		Shielded		Sealed												
Item No.	Stud Thread	Item No.	Stud Thread	Item No.	Stud Thread	Item No.	Stud Thread											
WZ-420	M6 x 1.0	WZ-423	M5 x .8	0	11	5.56	2.16	7.62	16.95	6.15	.81	14.83	6	1				
WZ-421	M8 x 1.25	WZ-424	M6 x 1.0	1	12	6.30	2.16	8.10	19.33	7.30	.84	19.58	12	1				
WZ-422	M10 x 1.5	WZ-425	M8 x 1.25	2	14	9.53	2.79	11.38	26.57	9.63	.97	30.73	16	1				

CR Series



Carriage Assembly



Channel

CR Series (composite stainless steel) features heat treated stainless steel track mounted to an extruded aluminum base, and stainless steel wheels with sealed bearings in sizes 1, 2 and 3. CR Series offers corrosion resistance for load requirements up to 5,739N, speeds to 5.5 m/s and acceleration to 5 g's. Vee style only.

Carriage Assemblies

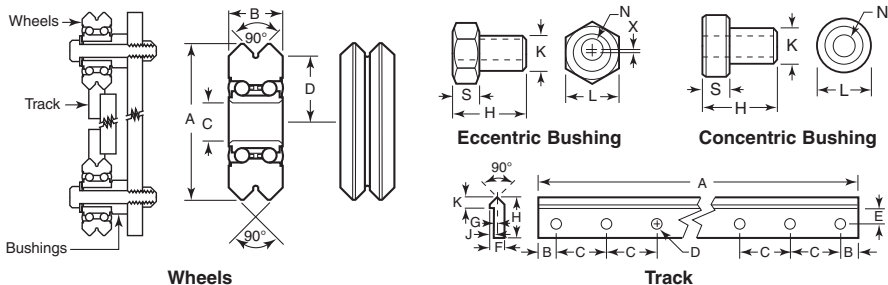
BISHOPWISECARVER

Item No.	For use with Channel Sizes	A	B	C	D	E (Socket Size)	F	G	Radial Load (N)	Pack Qty.
WZ-490	1	100	38	28.0	10.1	7	40	M6 x 1.0	1,111	1
WZ-491	2	125	55	36.0	13.7	13	45	M8 x 1.25	2,671	1
WZ-492	3	170	80	50.0	19.6	17	60	M10 x 1.5	5,739	1

Composite Channels

BISHOPWISECARVER

Item No.	Channel Size	H	J	K	L	M	N	O	P	Pack Qty.
WZ-493	1	17.7	5.9	40	290	45.0	18.8 x 2	6.9	100	1
WZ-494	1	17.7	5.9	40	690	45.0	18.8 x 2	6.9	100	1
WZ-495	1	17.7	5.9	40	390	45.0	18.8 x 2	6.9	100	1
WZ-496	2	21.5	7.3	60	240	45.0	25.4 x 3	8.8	150	1
WZ-497	2	21.5	7.3	60	690	45.0	25.4 x 3	8.8	150	1
WZ-498	2	21.5	7.3	60	3,390	45.0	25.4 x 3	8.8	150	1
WZ-499	2	21.5	7.3	60	1,140	45.0	25.4 x 3	8.8	150	1
WZ-500	3	29.5	9.0	85	1,415	82.5	28.6 x 5	10.5	250	1
WZ-501	3	29.5	9.0	85	3,415	82.5	28.6 x 5	10.5	250	1



The DualVee® product line offers customers easy to use and easy to install guide wheel components and assemblies. DualVee® components are ideal for a wide array of applications, from the clean room to the saw mill. These rugged, yet economical, guide wheels provide smooth, quiet motion at speeds up to 5.5 m/s and acceleration to 5 g's. The recirculating elements are self-contained and isolated from the environment; rolling contact between the wheel and track, sweeps debris aside making it ideal for use in contaminated environments. Track is easily joined for long length systems. Standard wheels are available in 52100 carbon steel or 440C stainless steel. Eccentric or concentric bushings are 303 stainless or nickel plated carbon steel. Alternatively, integral one-piece wheels can be selected for lower cost and ease of installation. Matching track is cold formed and hardened and polished on the running surfaces. Track is available in AISI 1045 steel hardened to 53 Rc or AISI 420 stainless hardened to 40 Rc. All parts are sold separately.

**Wheels**



**BISHOPWISECARVER**

Steel Shielded	Steel Sealed	Stainless Sealed	Size	A	B	C	D	Static Radial Capacity Lbs.	Pack Qty.
WZ-11	WZ-21	WZ-31	1	.77	.310	.1875	.313	274	1
WZ-12	WZ-22	WZ-32	2	1.21	.437	.3750	.500	596	1
WZ-13	WZ-23	WZ-33	3	1.80	.625	.4724	.750	1,326	1
WZ-14	WZ-24	WZ-34	4	2.36	.750	.5906	1.000	2,191	1
WZ-90	—	WZ-99	4XL	2.97	1.000	.8661	1.250	3,215	1

**Bushings**



Eccentric		Concentric		Size	H	K	L	Screw Size N	S	Pack Qty.
Item No.	X	Item No.								
WZ-51	.012	WZ-95	1	.550	.1873	7/16	#6	.250	1	
WZ-52	.024	WZ-96	2	.706	.3748	9/16	1/4	.281	1	
WZ-53	.042	WZ-97	3	.990	.4722	3/4	5/16	.375	1	
WZ-54	.060	WZ-98	4	1.177	.5904	7/8	3/8	.437	1	

**Note:** Mounting information assumes a central position for bushing allowing an adjustment from +X to -X.

**Track**



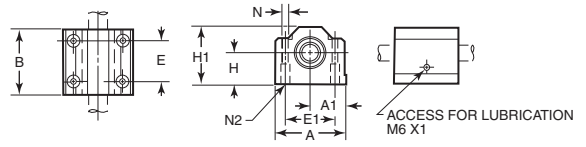
**BISHOPWISECARVER**

Steel	Stainless	Item No.	Item No.	Size	No. of Holes	+/- .005 A	B	C	+/- .005 D	E	F	G	H	J	K	Pack Qty.
WZ-10	WZ-20	1	7	12.50	250	2	.156	.156	.187	.031	.437	.062	.125	1		
WZ-15	WZ-25	1	13	24.50	250	2	.156	.156	.187	.031	.437	.062	.125	1		
WZ-16	WZ-26	1	19	36.50	250	2	.156	.156	.187	.031	.437	.062	.125	1		
WZ-17	WZ-27	1	25	48.50	250	2	.156	.156	.187	.031	.437	.062	.125	1		
WZ-18	WZ-28	1	31	60.50	250	2	.156	.156	.187	.031	.437	.062	.125	1		
WZ-19	WZ-29	1	37	72.50	250	2	.156	.156	.187	.031	.437	.062	.125	1		
WZ-30	—	2	5	12.63	.315	3	.203	.219	.250	.031	.625	.093	.187	1		
WZ-35	WZ-45	2	9	24.63	.315	3	.203	.219	.250	.031	.625	.093	.187	1		
WZ-36	WZ-46	2	13	36.63	.315	3	.203	.219	.250	.031	.625	.093	.187	1		
WZ-37	WZ-47	2	17	48.63	.315	3	.203	.219	.250	.031	.625	.093	.187	1		
WZ-38	WZ-48	2	21	60.63	.315	3	.203	.219	.250	.031	.625	.093	.187	1		
WZ-39	WZ-49	2	25	72.63	.315	3	.203	.219	.250	.031	.625	.093	.187	1		
WZ-50	WZ-60	3	5	12.75	.375	3	.281	.313	.343	.062	.875	.109	.250	1		
WZ-55	WZ-65	3	9	24.75	.375	3	.281	.313	.343	.062	.875	.109	.250	1		
WZ-56	WZ-66	3	13	36.75	.375	3	.281	.313	.343	.062	.875	.109	.250	1		
WZ-57	WZ-67	3	17	48.75	.375	3	.281	.313	.343	.062	.875	.109	.250	1		
WZ-58	WZ-68	3	21	60.75	.375	3	.281	.313	.343	.062	.875	.109	.250	1		
WZ-59	WZ-69	3	25	72.75	.375	3	.281	.313	.343	.062	.875	.109	.250	1		
WZ-70	WZ-80	4	4	13.00	.500	4	.344	.375	.437	.093	1.062	.125	.312	1		
WZ-75	WZ-85	4	7	25.00	.500	4	.344	.375	.437	.093	1.062	.125	.312	1		
WZ-76	WZ-86	4	10	37.00	.500	4	.344	.375	.437	.093	1.062	.125	.312	1		
WZ-77	WZ-87	4	13	49.00	.500	4	.344	.375	.437	.093	1.062	.125	.312	1		
WZ-78	WZ-88	4	16	61.00	.500	4	.344	.375	.437	.093	1.062	.125	.312	1		
WZ-79	—	4	19	73.00	.500	4	.344	.375	.437	.093	1.062	.125	.312	1		



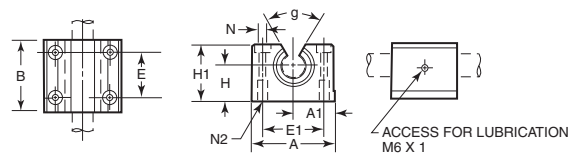


**Closed Pillow Blocks**  
Single - Twin  
Metric



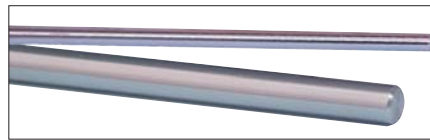
Item No.	Dia.	A	B	+/-0.020 A1	+/-1 E	+/-1 E1	N	N2	+/-0.020 H	H1	Dynamic Load (lbf)	Pack Qty.
<b>Metric - Single Closed Type Pillow Block</b>												
TLM-3013	8	35	32	17.5	20	25	3.3	M4	15	28	310	1
TLM-3014	12	43	39	21.5	23	32	4.3	M5	18	35	650	1
TLM-3015	16	53	43	26.5	26	40	5.3	M6	22	42	2,200	1
TLM-3016	20	60	54	30	32	45	6.6	M8	25	50	4,000	1
TLM-3017	25	78	67	39	40	60	8.4	M10	30	60	6,700	1
TLM-3018	30	87	79	43.5	45	68	8.4	M10	35	71	8,300	1
TLM-3019	40	108	91	54	58	86	10.5	M12	45	91	13,700	1
<b>Metric - Twin Closed Type Pillow Block</b>												
TLM-3194	8	35	62	17.5	50	25	3.3	M4	15	28	500	1
TLM-3020	12	43	76	21.5	56	32	4.3	M5	18	35	1,060	1
TLM-3021	16	53	84	26.5	64	40	5.3	M6	22	42	4,400	1
TLM-3022	20	60	104	30	76	45	6.6	M8	25	50	8,000	1
TLM-3023	25	78	130	39	94	60	8.4	M10	30	60	13,400	1
TLM-3024	30	87	152	43.5	106	68	8.4	M10	35	71	16,600	1
TLM-3025	40	108	176	54	124	86	10.5	M12	45	91	27,400	1

**Open Pillow Blocks**  
Single - Twin  
Metric



Item No.	Dia.	A	B	+/-0.020 A1	+/-1 E	+/-1 E1	N	N2	+/-0.020 H	H1	Angle Degree g	Dynamic Load (lbf)	Pack Qty.
<b>Metric - Single Closed Type Pillow Block</b>													
TLM-3027	12	43	39	21.5	23	32	4.3	M5	18	28	70	750	1
TLM-3028	16	53	43	26.5	26	40	5.3	M6	22	35	70	2,200	1
TLM-3029	20	60	54	30	32	45	6.6	M8	25	42	50	4,000	1
TLM-3030	25	78	67	39	40	60	8.4	M10	30	51	60	6,700	1
TLM-3031	30	87	79	43.5	45	68	8.4	M10	35	60	55	8,300	1
TLM-3032	40	108	91	54	58	86	10.5	M12	45	77	54	13,700	1
<b>Metric - Twin Closed Type Pillow Block</b>													
TLM-3033	12	43	76	21.5	56	32	4.3	M5	18	28	70	1,220	1
TLM-3034	16	53	84	26.5	64	40	5.3	M6	22	35	70	4,400	1
TLM-3035	20	60	104	30	76	45	6.6	M8	25	41	50	8,000	1
TLM-3036	25	78	130	39	94	60	8.4	M10	30	50	60	13,400	1
TLM-3038	40	108	176	54	124	86	10.5	M12	45	77	54	27,400	1
TLM-3037	30	87	152	43.5	106	68	8.4	M10	35	60	55	16,600	1

**60 Case® LinearRace®**  
Steel  
Metric

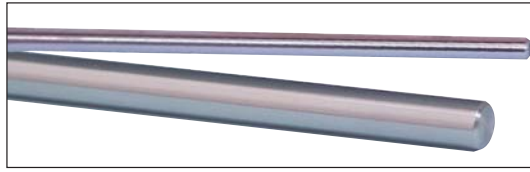


Thomson's 60 Case® LinearRace® shafts are precision ground to exacting standards for superior linear bearing performance and life. Case hardened to 60-65C. Roundness is 80 millionth of an inch. Surface finish 12 Ra micro inch.

Item No.	Nom. Dia.	Actual Dia.	Length (mm)	Pack Qty.	Item No.	Nom. Dia.	Actual Dia.	Length (mm)	Pack Qty.
TLM-3039	12	12.00/11.99	250	1	TLM-3056	20	20.00/19.99	2,000	1
TLM-3040	12	12.00/11.99	500	1	TLM-3057	25	25.00/24.99	500	1
TLM-3041	12	12.00/11.99	750	1	TLM-3058	25	25.00/24.99	750	1
TLM-3042	12	12.00/11.99	1,000	1	TLM-3059	25	25.00/24.99	1,000	1
TLM-3043	12	12.00/11.99	1,500	1	TLM-3060	25	25.00/24.99	1,500	1
TLM-3044	12	12.00/11.99	2,000	1	TLM-3061	25	25.00/24.99	2,000	1
TLM-3045	16	16.00/15.99	250	1	TLM-3062	30	30.00/29.99	500	1
TLM-3046	16	16.00/15.99	500	1	TLM-3063	30	30.00/29.99	750	1
TLM-3047	16	16.00/15.99	750	1	TLM-3064	30	30.00/29.99	1,000	1
TLM-3048	16	16.00/15.99	1,000	1	TLM-3065	30	30.00/29.99	1,500	1
TLM-3049	16	16.00/15.99	1,500	1	TLM-3066	30	30.00/29.99	2,000	1
TLM-3050	16	16.00/15.99	2,000	1	TLM-3067	40	40.00/39.99	500	1
TLM-3051	20	20.00/19.99	250	1	TLM-3068	40	40.00/39.99	750	1
TLM-3052	20	20.00/19.99	500	1	TLM-3069	40	40.00/39.99	1,000	1
TLM-3053	20	20.00/19.99	750	1	TLM-3070	40	40.00/39.99	1,500	1
TLM-3054	20	20.00/19.99	1,000	1	TLM-3071	40	40.00/39.99	2,000	1
TLM-3055	20	20.00/19.99	1,500	1					



60 CASE® LINEARRACE® SHAFTS



Thomson's 60 Case® LinearRace® shafts are precision ground to exacting standards for superior linear bearing performance and life. Case hardened to 60-65C. Stainless steel for corrosion resistance, is 440C with a hardness of 50-55C. Chrome plated steel for corrosion resistance. The ends are not plated. Roundness is 80 millionth of an inch. Surface finish 12 Ra micro inch.

Steel



Item No.	Thomson	Nom. Dia.	Actual Dia.	Lgth.	Pack Qty.	Item No.	Thomson	Nom. Dia.	Actual Dia.	Lgth.	Pack Qty.
TLM-1505	QS 1/4L X 6	¼	.2495/.2490	6	1	TLM-1546	QS 5/8LX48	¾	.6245/.6240	48	1
TLM-1506	QS 1/4 L X 9	¼	.2495/.2490	9	1	TLM-1547	QS 5/8LX60	¾	.6245/.6240	60	1
TLM-1507	QS 1/4LX12	¼	.2495/.2490	12	1	TLM-1548	QS 5/8LX72	¾	.6245/.6240	72	1
TLM-1508	QS 1/4LX15	¼	.2495/.2490	15	1	TLM-1549	QS 3/4LX6	¾	.7495/.7490	6	1
TLM-1509	QS 1/4LX18	¼	.2495/.2490	18	1	TLM-1550	QS 3/4LX9	¾	.7495/.7490	9	1
TLM-1510	QS 1/4LX24	¼	.2495/.2490	24	1	TLM-1551	QS 3/4LX12	¾	.7495/.7490	12	1
TLM-1511	QS 1/4LX30	¼	.2495/.2490	30	1	TLM-1552	QS 3/4LX15	¾	.7495/.7490	15	1
TLM-1512	QS 1/4LX36	¼	.2495/.2490	36	1	TLM-1553	QS 3/4LX18	¾	.7495/.7490	18	1
TLM-1513	QS 1/4LX42	¼	.2495/.2490	42	1	TLM-1554	QS 3/4LX24	¾	.7495/.7490	24	1
TLM-1514	QS 1/4LX48	¼	.2495/.2490	48	1	TLM-1555	QS 3/4LX30	¾	.7495/.7490	30	1
TLM-1515	QS 3/8LX6	¾	.3745/.3740	6	1	TLM-1556	QS 3/4LX36	¾	.7495/.7490	36	1
TLM-1516	QS 3/8LX9	¾	.3745/.3740	9	1	TLM-1557	QS 3/4LX42	¾	.7495/.7490	42	1
TLM-1517	QS 3/8LX12	¾	.3745/.3740	12	1	TLM-1558	QS 3/4LX48	¾	.7495/.7490	48	1
TLM-1518	QS 3/8LX15	¾	.3745/.3740	15	1	TLM-1559	QS 3/4LX60	¾	.7495/.7490	60	1
TLM-1519	QS 3/8LX18	¾	.3745/.3740	18	1	TLM-1561	QS 1LX12	1	.9995/.9990	12	1
TLM-1520	QS 3/8LX24	¾	.3745/.3740	24	1	TLM-1562	QS 1LX18	1	.9995/.9990	18	1
TLM-1522	QS 3/8LX36	¾	.3745/.3740	36	1	TLM-1563	QS 1LX24	1	.9995/.9990	24	1
TLM-1523	QS 3/8LX42	¾	.3745/.3740	42	1	TLM-1564	QS 1LX30	1	.9995/.9990	30	1
TLM-1524	QS 3/8LX48	¾	.3745/.3740	48	1	TLM-1565	QS 1LX36	1	.9995/.9990	36	1
TLM-1525	QS 1/2LX6	½	.4995/.4990	6	1	TLM-1566	QS 1LX42	1	.9995/.9990	42	1
TLM-1526	QS 1/2LX9	½	.4995/.4990	9	1	TLM-1567	QS 1LX48	1	.9995/.9990	48	1
TLM-1527	QS 1/2LX12	½	.4995/.4990	12	1	TLM-1568	QS 1LX60	1	.9995/.9990	60	1
TLM-1528	QS 1/2LX15	½	.4995/.4990	15	1	TLM-1570	QS 1-1/4LX12	1¼	1.2495/1.2490	12	1
TLM-1529	QS 1/2LX18	½	.4995/.4990	18	1	TLM-1571	QS 1-1/4LX18	1¼	1.2495/1.2490	18	1
TLM-1530	QS 1/2LX24	½	.4995/.4990	24	1	TLM-1572	QS 1-1/4LX24	1¼	1.2495/1.2490	24	1
TLM-1531	QS 1/2LX30	½	.4995/.4990	30	1	TLM-1573	QS 1-1/4LX30	1¼	1.2495/1.2490	30	1
TLM-1532	QS 1/2LX36	½	.4995/.4990	36	1	TLM-1574	QS 1-1/4LX36	1¼	1.2495/1.2490	36	1
TLM-1533	QS 1/2LX42	½	.4995/.4990	42	1	TLM-1575	QS 1-1/4LX42	1¼	1.2495/1.2490	42	1
TLM-1534	QS 1/2LX48	½	.4995/.4990	48	1	TLM-1576	QS 1-1/4LX48	1¼	1.2495/1.2490	48	1
TLM-1535	QS 1/2LX60	½	.4995/.4990	60	1	TLM-1577	QS 1-1/4LX60	1¼	1.2495/1.2490	60	1
TLM-1536	QS 1/2LX72	½	.4995/.4990	72	1	TLM-1578	QS 1-1/4LX72	1¼	1.2495/1.2490	72	1
TLM-1537	QS 5/8LX6	¾	.6245/.6240	6	1	TLM-1579	QS 1-1/2LX12	1½	1.4994/1.4989	12	1
TLM-1538	QS 5/8LX9	¾	.6245/.6240	9	1	TLM-1580	QS 1-1/2LX18	1½	1.4994/1.4989	18	1
TLM-1539	QS 5/8LX12	¾	.6245/.6240	12	1	TLM-1581	QS 1-1/2LX24	1½	1.4994/1.4989	24	1
TLM-1540	QS 5/8LX15	¾	.6245/.6240	15	1	TLM-1582	QS 1-1/2LX30	1½	1.4994/1.4989	30	1
TLM-1541	QS 5/8LX18	¾	.6245/.6240	18	1	TLM-1583	QS 1-1/2LX36	1½	1.4994/1.4989	36	1
TLM-1542	QS 5/8LX24	¾	.6245/.6240	24	1	TLM-1584	QS 1-1/2LX42	1½	1.4994/1.4989	42	1
TLM-1543	QS 5/8LX30	¾	.6245/.6240	30	1	TLM-1585	QS 1-1/2LX48	1½	1.4994/1.4989	48	1
TLM-1544	QS 5/8LX36	¾	.6245/.6240	36	1	TLM-1586	QS 1-1/2LX60	1½	1.4994/1.4989	60	1
TLM-1545	QS 5/8LX42	¾	.6245/.6240	42	1	TLM-1587	QS 1-1/2LX72	1½	1.4994/1.4989	72	1

Chrome Plated Steel



Item No.	Thomson	Nom. Dia.	Actual Dia.	Lgth.	Pack Qty.	Item No.	Thomson	Nom. Dia.	Actual Dia.	Lgth.	Pack Qty.
TLM-1701	QS 1/2LCPX6	½	.4995/.4990	6	1	TLM-1707	QS 3/4LCPX12	¾	.7495/.7490	12	1
TLM-1702	QS 1/2LCPX12	½	.4995/.4990	12	1	TLM-1708	QS 3/4LCPX18	¾	.7495/.7490	18	1
TLM-1703	QS 1/2LCPX18	½	.4995/.4990	18	1	TLM-1709	QS 3/4LCPX24	¾	.7495/.7490	24	1
TLM-1704	QS 1/2LCPX24	½	.4995/.4990	24	1	TLM-1712	QS 1LCPX12	1	.9995/.9990	12	1
TLM-1705	QS 1/2LCPX36	½	.4995/.4990	36	1	TLM-1713	QS 1LCPX18	1	.9995/.9990	18	1
TLM-1706	QS 3/4LCPX6	¾	.7495/.7490	6	1	TLM-1714	QS 1LCPX24	1	.9995/.9990	24	1

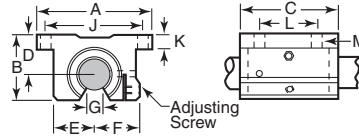
Stainless Steel



Item No.	Thomson	Nom. Dia.	Actual Dia.	Lgth.	Pack Qty.	Item No.	Thomson	Nom. Dia.	Actual Dia.	Lgth.	Pack Qty.
TLM-1601	QS 1/4LSSX6	¼	.2495/.2490	6	1	TLM-1620	QS 5/8LSSX12	¾	.6245/.6240	12	1
TLM-1602	QS 1/4LSSX12	¼	.2495/.2490	12	1	TLM-1621	QS 5/8LSSX18	¾	.6245/.6240	18	1
TLM-1603	QS 1/4LSSX18	¼	.2495/.2490	18	1	TLM-1622	QS 5/8LSSX24	¾	.6245/.6240	24	1
TLM-1604	QS 1/4LSSX24	¼	.2495/.2490	24	1	TLM-1623	QS 5/8LSSX36	¾	.6245/.6240	36	1
TLM-1605	QS 1/4LSSX36	¼	.2495/.2490	36	1	TLM-1624	QS 5/8LSSX48	¾	.6245/.6240	48	1
TLM-1606	QS 1/4LSSX48	¼	.2495/.2490	48	1	TLM-1625	QS 3/4LSSX6	¾	.7495/.7490	6	1
TLM-1607	QS 3/8LSSX6	¾	.3745/.3740	6	1	TLM-1626	QS 3/4LSSX12	¾	.7495/.7490	12	1
TLM-1608	QS 3/8LSSX12	¾	.3745/.3740	12	1	TLM-1627	QS 3/4LSSX18	¾	.7495/.7490	18	1
TLM-1609	QS 3/8LSSX18	¾	.3745/.3740	18	1	TLM-1628	QS 3/4LSSX24	¾	.7495/.7490	24	1
TLM-1611	QS 3/8LSSX36	¾	.3745/.3740	36	1	TLM-1629	QS 3/4LSSX36	¾	.7495/.7490	36	1
TLM-1613	QS 1/2LSSX6	½	.4995/.4990	6	1	TLM-1630	QS 3/4LSSX48	¾	.7495/.7490	48	1
TLM-1614	QS 1/2LSSX12	½	.4995/.4990	12	1	TLM-1631	QS 1LSSX12	1	.9995/.9990	12	1
TLM-1615	QS 1/2LSSX18	½	.4995/.4990	18	1	TLM-1632	QS 1LSSX18	1	.9995/.9990	18	1
TLM-1616	QS 1/2LSSX24	½	.4995/.4990	24	1	TLM-1633	QS 1LSSX24	1	.9995/.9990	24	1
TLM-1617	QS 1/2LSSX36	½	.4995/.4990	36	1	TLM-1634	QS 1LSSX36	1	.9995/.9990	36	1
TLM-1618	QS 1/2LSSX48	½	.4995/.4990	48	1	TLM-1635	QS 1LSSX48	1	.9995/.9990	48	1
TLM-1619	QS 5/8LSSX6	¾	.6245/.6240	6	1						



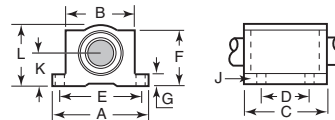
**Pillow Blocks**  
Open Type For Continuously Supported Applications  
Single and Twin



- Double acting seals retain lubrication and keep contamination out
- Easily mounted with four mounting bolts
- Built-in lubrication wick for continuous lubrication
- Travel speeds up to 10 ft/s
- ½ has lubrication fitting, larger sizes have ¼-28 access for lubrication

Item No.	Thomson	Dia.	A	B	C	+/- .003 D	E	F	Min. G	+/- .010 J	K	+/- .010 L	M		Dynamic Load (Lbs.)	Pack Qty.
													Hole	Bolt		
<b>Single</b>																
TLM-750	SPB-8-OPN	.500	2.00	1.13	1.50	.687	.69	.75	.31	1.688	.25	1.000	.16	#6	180	1
TLM-755	SPB-10-OPN	.625	2.50	1.44	1.75	.875	.88	.94	.37	2.125	.28	1.125	.19	#8	320	1
TLM-760	SPB-12-OPN	.750	2.75	1.56	1.88	.937	.94	1.00	.43	2.375	.31	1.250	.19	#8	470	1
TLM-765	SPB-16-OPN	1.000	3.25	2.00	2.63	1.187	1.19	1.25	.56	2.875	.38	1.750	.22	#10	780	1
TLM-775	SPB-24-OPN	1.500	4.75	2.500	3.75	1.750	1.75	1.88	.75	4.125	.50	2.94	.28	¼	1,560	1
<b>Twin</b>																
TLM-905	TWN-8-OPN	.500	2.00	1.13	3.50	.687	.69	.75	.31	1.688	.25	2.500	.16	#6	360	1
TLM-910	TWN-10-OPN	.625	2.50	1.44	4.00	.875	.88	.94	.37	2.125	.28	3.000	.19	#8	640	1
TLM-915	TWN-12-OPN	.750	2.75	1.56	4.50	.937	.94	1.00	.43	2.375	.31	3.500	.19	#8	940	1
TLM-920	TWN-16-OPN	1.000	3.25	2.00	6.00	1.187	1.19	1.25	.56	2.875	.38	4.500	.22	#10	1,560	1
TLM-930	TWN-24-OPN	1.500	4.75	2.94	9.00	1.750	1.75	1.88	.75	4.125	.50	6.500	.28	¼	3,120	1

**Pillow Blocks**  
Closed Type For End Supported Applications  
Single and Twin



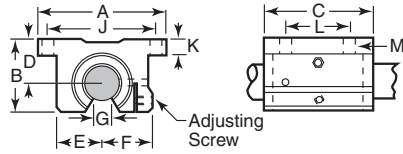
- Double acting seal retain lubrication and keep contamination out
- Easily mounted with four mounting bolts
- Travel speed up to 10 ft/s

Item No.	Thomson	Dia.	A	B	C	+/- .010 D	+/- .010 E	F	G	J		+/- .003 K	L	Dynamic Load (Lbs.)	Pack Qty.
										Hole	Bolt				
<b>Single</b>															
TLM-705	SPB-4	.250	1.63	1.00	1.19	.750	1.313	.75	.19	.16	#6	.437	.81	60	1
TLM-710	SPB-6	.375	1.75	1.13	1.31	.875	1.438	.88	.19	.16	#6	.500	.94	100	1
TLM-715	SPB-8	.500	2.00	1.38	1.69	1.000	1.688	1.13	.25	.16	#6	.687	1.25	255	1
TLM-720	SPB-10	.625	2.50	1.75	1.94	1.125	2.125	1.44	.28	.19	#8	.875	1.63	450	1
TLM-725	SPB-12	.750	2.75	1.88	2.06	1.250	2.375	1.56	.31	.19	#8	.937	1.75	600	1
TLM-730	SPB-16	1.000	3.25	2.38	2.81	1.750	2.875	1.94	.38	.22	#10	1.187	2.19	1,050	1
TLM-735	SPB-20	1.250	4.00	3.00	3.63	2.000	3.500	2.50	.44	.22	#10	1.500	2.81	1,500	1
TLM-740	SPB-24	1.500	4.75	3.50	4.00	2.500	4.125	2.88	.50	.28	¼	1.750	3.25	2,000	1
<b>Twin</b>															
TLM-850	TWN-4	.250	1.63	1.00	2.50	2.000	1.313	.75	.19	.16	#6	.437	.81	120	1
TLM-855	TWN-6	.375	1.75	1.13	2.75	2.250	1.438	.88	.19	.16	#6	.500	.94	200	1
TLM-860	TWN-8	.500	2.00	1.38	3.50	2.500	1.688	1.13	.25	.16	#6	.687	1.25	510	1
TLM-865	TWN-10	.625	2.50	1.75	4.00	3.000	2.125	1.44	.28	.19	#8	.875	1.63	900	1
TLM-870	TWN-12	.750	2.75	1.88	4.50	3.500	2.375	1.56	.31	.19	#8	.937	1.75	1,200	1
TLM-875	TWN-16	1.000	3.25	2.38	6.00	4.500	2.875	1.94	.38	.22	#10	1.187	2.19	2,100	1
TLM-880	TWN-20	1.250	4.00	3.00	7.50	5.500	3.500	2.50	.44	.22	#10	1.500	2.81	3,000	1
TLM-885	TWN-24	1.500	4.75	3.50	9.00	6.500	4.125	2.88	.50	.28	¼	1.750	3.25	4,000	1



# SUPER SMART BALL BUSHING® BEARINGS

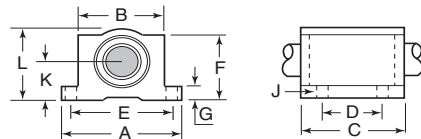
## Pillow Blocks Open Type For Continuously Supported Applications Single and Twin



- Increased travel life over conventional bearings
- Allows for heavier loads in less space than other bushings
- Interchangeable with Super Ball Bushing pillow blocks
- Travel speeds up to 10 ft/s
- Easily mounted with four mounting bolts

Item No.	Thomson	Dia.	A	B	C	+/- .003 D	E	F	Min. G	+/- .010 J	K	+/- .010 L	M		Dynamic Load (Lbs.)	Pack Qty.
													Hole	Bolt		
<b>Single</b>																
TLM-1105	SSUPBO-8	.500	2.00	1.13	1.50	.687	.69	.75	.31	1.688	.25	1.000	.16	#6	360	1
TLM-1110	SSUPBO-10	.625	2.50	1.44	1.75	.875	.88	.94	.34	2.125	.28	1.125	.19	#8	620	1
TLM-1115	SSUPBO-12	.750	2.75	1.56	1.88	.937	.94	1.00	.41	2.375	.31	1.250	.19	#8	1,130	1
TLM-1120	SSUPBO-16	1.000	3.25	2.00	2.63	1.187	1.19	1.25	.53	2.875	.38	1.750	.22	#10	1,900	1
TLM-1130	SSUPBO-24	1.500	4.75	2.94	3.75	1.750	1.75	1.88	.74	4.125	.50	2.500	.28	1/4	3,880	1
<b>Twin</b>																
TLM-1140	SSUTWNO-8	.500	2.00	1.13	3.50	.687	.69	.75	.31	1.688	.25	2.500	.16	#6	720	1
TLM-1145	SSUTWNO-10	.625	2.50	1.44	4.00	.875	.88	.94	.34	2.125	.28	3.000	.19	#8	1,240	1
TLM-1150	SSUTWNO-12	.750	2.75	1.56	4.50	.937	.94	1.00	.41	2.375	.31	3.500	.19	#8	2,260	1
TLM-1155	SSUTWNO-16	1.000	3.25	2.00	6.00	1.187	1.19	1.25	.53	2.875	.38	4.500	.22	#10	3,800	1
TLM-1165	SSUTWNO-24	1.500	4.75	2.94	9.00	1.750	1.75	1.88	.74	4.125	.50	6.500	.28	1/4	7,760	1

## Pillow Blocks Closed Type For End Supported Applications Single and Twin

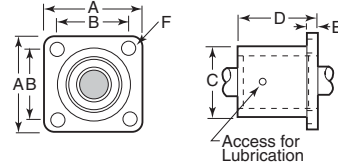


- Increased travel life over conventional bearings
- Allows for heavier loads in less space than other bushings
- Interchangeable with Super Ball Bushing pillow blocks
- Travel speeds up to 10 ft/s
- Easily mounted with four mounting bolts

Item No.	Thomson	Dia.	A	B	C	+/- .010 D	+/- .010 E	F	G	J		+/- .003 K	L	Dynamic Load (Lbs.)	Pack Qty.
										Hole	Bolt				
<b>Single</b>															
TLM-950	SS6UPB-8	.500	2.00	1.38	1.69	1.000	1.688	1.13	.25	.16	#6	.687	1.25	265	1
TLM-955	SSUPB-10	.625	2.50	1.75	1.94	1.125	2.125	1.44	.28	.19	#8	.875	1.63	620	1
TLM-960	SSUPB-12	.750	2.75	1.88	2.06	1.250	2.375	1.56	.31	.19	#8	.937	1.75	1,130	1
TLM-965	SSUPB-16	1.000	3.25	2.38	2.81	1.750	2.875	1.94	.38	.22	#10	1.187	2.19	1,900	1
TLM-970	SSUPB-20	1.250	4.00	3.00	3.63	2.000	3.500	2.50	.44	.22	#10	1.500	2.81	2,350	1
TLM-975	SSUPB-24	1.500	4.75	3.50	4.00	2.500	4.125	2.88	.50	.28	.25	1.750	3.25	3,880	1
<b>Twin</b>															
TLM-1010	SSUTWN-10	.625	2.50	1.75	4.00	3.000	2.125	1.44	.28	.19	#8	.875	1.63	1,240	1
TLM-1015	SSUTWN-12	.750	2.75	1.88	4.50	3.500	2.375	1.56	.31	.19	#8	.937	1.75	2,260	1
TLM-1020	SSUTWN-16	1.000	3.25	2.38	6.00	4.500	2.875	1.94	.38	.22	#10	1.187	2.19	3,800	1



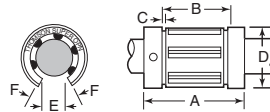
**Super Ball Bushing® Flanged Pillow Blocks For End Supported Applications Single and Twin**



- Easily mounted and secured with four mounting bolts
- Can be mounted perpendicular to table surface
- These pillow blocks are interchangeable with the Super Smart Ball Bushing flanged pillow blocks
- Allows for travel speeds up to 10 ft/s

Item No.	Thomson	Dia.	A	+/-0.010 B	C	D	E	F	Dynamic Load (Lbs.)	Pack Qty.
<b>Single</b>										
TLM-805	SFB8	.500	1.63	1.250	1.25	1.69	.25	.19	255	1
TLM-810	SFB12	.750	2.38	1.750	1.75	2.06	.38	.21	600	1
TLM-815	SFB-16	1.000	2.75	2.125	2.25	2.81	.50	.28	1,050	1
<b>Twin</b>										
TLM-820	TSFB-8	.500	1.63	1.250	1.25	3.20	.90	¼-20	510	1
TLM-825	TSFB12	.750	2.38	1.750	1.75	3.95	.90	¼-20	1,200	1
TLM-830	TSFB16	1.000	2.75	2.125	2.25	5.33	.90	¾-18	2,100	1

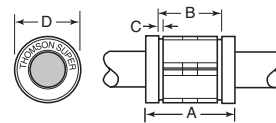
**Bearings Open Type For Continuously Supported Applications**



- Can be mounted in a customized open style pillow block
- Travel speeds up to 10 ft/s
- Self-aligning in all directions

Item No.	Thomson	Dia.	A	B	C	D	E	Ang. Deg. F	No. of Ball Circuits	Dynamic Load (Lbs.)	Pack Qty.
TLM-450	SUPER 8-OPN	.500	1.250/1.230	1.032/1.012	.050	.8755/.8750	.31	15	3	180	1
TLM-455	SUPER 10-OPN	.625	1.500/1.480	1.105/1.095	.056	1.1255/1.1250	.37	15	4	320	1
TLM-460	SUPER 12-OPN	.750	1.625/1.605	1.270/1.250	.056	1.2505/1.2500	.43	15	5	470	1
TLM-465	SUPER 16-OPN	1.000	2.250/2.230	1.884/1.864	.070	1.5630/1.5625	.56	15	5	780	1
TLM-470	SUPER 20-OPN	1.250	2.625/2.600	2.004/1.984	.068	2.0008/2.0000	.62	15	5	1,170	1
TLM-475	SUPER 24-OPN	1.500	3.000/2.970	2.410/2.390	.086	2.3760/2.3750	.75	15	5	1,560	1

**Bearings Closed Type For End Supported Applications**

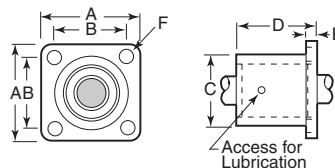


- Can be mounted in a customized housing
- Travel speeds up to 10 ft/s
- Self-aligning in all directions

Item No.	Thomson	Dia.	A	B	C	D	No. of Ball Circuits	Dynamic Load (Lbs.)	Pack Qty.
TLM-405	SUPER 3	.188	.562/.547	—	—	.3755/.3750	4	35	1
TLM-410	SUPER 4	.250	.750/.735	.511/.501	.039	5.0055/5.0000	4	60	1
TLM-415	SUPER 6	.375	.875/.860	.699/.689	.039	6.2555/6.2500	4	100	1
TLM-420	SUPER 8	.500	1.250/1.230	1.032/1.012	.050	8.7555/8.7500	4	255	1
TLM-425	SUPER 10	.625	1.500/1.480	1.105/1.095	.056	1.1255/1.1250	5	450	1
TLM-430	SUPER 12	.750	1.625/1.605	1.270/1.250	.056	1.2505/1.2500	6	600	1
TLM-435	SUPER 16	1.000	2.250/2.230	1.884/1.864	.070	1.5630/1.5625	6	1,050	1
TLM-440	SUPER 20	1.250	2.625/2.600	2.004/1.984	.068	2.0008/2.0000	6	1,500	1
TLM-445	SUPER 24	1.500	3.000/2.970	2.410/2.390	.086	2.3760/2.3750	6	2,000	1



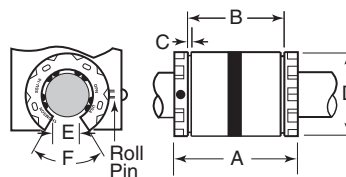
**Super Smart Ball Bushing® Flanged Pillow Blocks For End Supported Applications Single and Twin**



- Easily mounted and secured with four mounting bolts
- Can be mounted perpendicular to table surface
- These pillow blocks are interchangeable with the Super Ball Bushing flanged pillow blocks
- Allows for travel speeds up to 10 ft/s

Item No.	Thomson	Dia.	A	+/-0.10 B	C	D	E	F	Dynamic Load (Lbs.)	Pack Qty.
<b>Single</b>										
TLM-1210	SSUFB-12	.750	2.38	1.750	1.75	2.06	.38	.22	1,130	1
TLM-1215	SSUFB-16	1.000	2.75	2.125	2.25	2.81	.50	.28	1,900	1
TLM-1220	SSUFB-20	1.250	3.50	2.750	3.00	3.63	.63	.35	2,350	1
TLM-1225	SSUFB-24	1.500	4.00	3.125	3.62	4.00	.75	.41	3,880	1
<b>Twin</b>										
TLM-1235	SS6UTFB-8	.500	1.63	1.250	1.25	3.20	.90	1/4-20	530	1
TLM-1240	SSUTFB-12	.750	2.38	1.750	1.75	3.95	.90	1/4-20	2,260	1
TLM-1245	SSUTFB-16	1.000	2.75	2.125	2.25	5.33	.90	3/16-18	3,800	1
TLM-1250	SSUTFB-20	1.250	3.50	2.750	3.00	6.70	.90	3/16-18	4,700	1

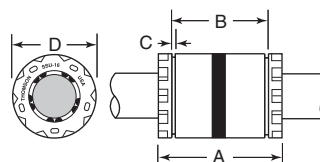
**Bearings Open Type For Continuously Supported Applications With Wipers**



- Increased travel life over conventional bearings
- Allows for heavier loads in less space than other bushings
- Interchangeable with Super Ball Bushing bearings
- Travel speeds up to 10 ft/s

Item No.	Thomson	Dia.	A	B	C	D	E	Ang. Deg. F	No. of Ball Circuits	Dynamic Load (Lbs.)	Pack Qty.
TLM-640	SSU8-OPNWW	.500	1.250/1.230	1.032/1.012	.050	.8755/.8750	.31	40	6	360	1
TLM-645	SSU10-OPNWW	.625	1.500/1.480	1.125/1.095	.055	1.2550/1.1250	.34	30	8	620	1
TLM-650	SSU12-OPNWW	.750	1.625/1.605	1.285/1.255	.055	1.2505/1.2500	.41	30	8	1,130	1
TLM-655	SSU16-OPNWW	1.000	2.250/2.230	1.901/1.871	.068	1.5603/1.5625	.53	30	8	1,190	1

**Bearings Closed Type For End Supported Applications With or Without Wipers**



- Increased travel life over conventional bearings
- Allows for heavier loads in less space than other bushings
- Interchangeable with Super Ball Bushing bearings
- Travel speeds up to 10 ft/s
- Can be mounted in a customized housing

w/ No Wipers		w/ Two Wipers		Dia.	A	B	C	D	No. of Ball Circuits	Dynamic Load (Lbs.)	Pack Qty.
Item No.	Thomson	Item No.	Thomson								
TLM-505	SS6U-8	TLM-535	SS6U-8WW	.500	1.250/1.230	1.032/1.012	.050	.8755/.8750	6	265	1
—	—	TLM-540	SSU-10WW	.625	1.500/1.480	1.125/1.095	.055	1.255/1.1250	10	620	1
TLM-515	SSU-12	TLM-545	SSU-12WW	.750	1.625/1.605	1.285/1.255	.055	1.2505/1.2500	10	1,130	1
TLM-520	SSU-16	TLM-550	SSU-16WW	1.000	2.250/2.230	1.901/1.871	.068	1.5630/1.5625	10	1,900	1
—	—	TLM-555	SSU-20WW	1.250	2.625/2.600	2.031/1.991	.068	2.0008/2.0000	10	2,350	1
—	—	TLM-560	SSU-24WW	1.500	3.000/2.970	2.442/2.402	.086	2.3760/2.3750	10	3,880	1



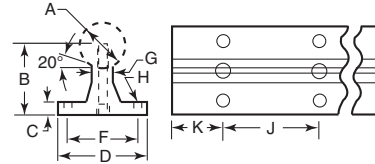
Steel Shaft Rail Assemblies



Pre-drilled shafting mounts easily to pre-drilled support rails. For use with open style bearings and pillow blocks. All holes are drilled and tapped to the center of the shaft. Rails provide support over the entire length of the shaft. All supporting rails are made from aluminum alloy. 24 inch lengths. The assemblies include the shaft already mounted on the rail for easy installation.

Item No.	Shaft Dia.	Pack Qty.
<b>24" Lgth.</b>		
TLM-1950	1/2	1
TLM-1951	5/8	1
TLM-1952	3/4	1
TLM-1953	1	1
<b>48" Lgth.</b>		
TLM-1956	1/2	1
TLM-1957	5/8	1
TLM-1958	3/4	1
TLM-1959	1	1

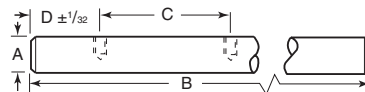
Pre-Drilled Shaft Support Rails



Pre-drilled shafting mounts easily to pre-drilled support rails. For use with open style bearings and pillow blocks. All holes are drilled and tapped to the center of the shaft. Rails provide support over the entire length of the shaft. All supporting rails are made from aluminum alloy. The assemblies include the shaft already mounted on the rail for easy installation.

Item No.	A	+/- .002 B	C	D	F	G	H		Length	Linear Race Mounting Bolt	J	K	Pack Qty.
							Hole	Bolt					
TLM-1901	1/2	1.125	.19	1.50	1.00	.25	.17	#6	24	6-32 x .88	4	2	1
TLM-1902	5/8	1.125	.25	1.63	1.13	.31	.19	#8	24	8-32 x .88	4	2	1
TLM-1903	3/4	1.500	.25	1.75	1.25	.38	.22	#10	24	10-32 x 1.25	6	3	1
TLM-1904	1	1.750	.25	2.13	1.50	.50	.28	1/4	24	1/4-20 x 1.50	6	3	1
TLM-1905	1 1/4	2.125	.31	2.50	1.88	.56	.34	5/16	24	5/16-18 x 1.75	6	3	1
TLM-1906	1 1/2	2.500	.38	3.00	2.25	.69	.34	3/8	24	3/8-16 x 2.00	8	4	1

Pre-Drilled 60 Case® LinearRace® Shafting  
Steel and Stainless Steel

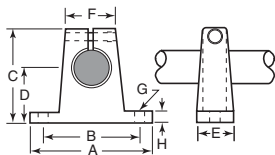


Pre-drilled shafting for support rails. For use with open style bearings and pillow blocks. All holes are drilled and tapped to the center of the shaft. Made of either steel or stainless steel.

Steel Item No.	Stainless Item No.	A	B	C	D	Thread	Pack Qty.
TLM-1801	TLM-1831	1/2	24	4	2	6-32	1
TLM-1802	—	1/2	48	4	2	6-32	1
TLM-1803	—	1/2	72	4	2	6-32	1
TLM-1804	TLM-1834	5/8	24	4	2	8-32	1
TLM-1805	—	5/8	48	4	2	8-32	1
TLM-1806	TLM-1836	5/8	72	4	2	8-32	1
TLM-1807	TLM-1837	3/4	24	6	3	10-32	1
TLM-1808	TLM-1838	3/4	48	6	3	10-32	1
TLM-1809	TLM-1839	3/4	72	6	3	10-32	1
TLM-1810	TLM-1840	1	24	6	3	1/4-20	1
TLM-1811	TLM-1841	1	48	6	3	1/4-20	1
TLM-1812	TLM-1842	1	72	6	3	1/4-20	1
TLM-1814	—	1 1/4	72	6	3	5/16-18	1
TLM-1816	—	1 1/2	48	8	4	3/8-16	1
TLM-1817	—	1 1/2	72	8	4	3/8-16	1



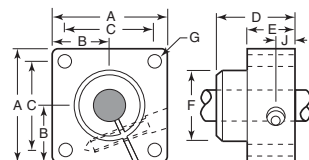
Shaft Support Blocks



For end supported applications. Easily secured with two mounting bolts. Made from malleable iron alloy with corrosion resistant coating. Block can be reamed to accommodate larger shafts.

Item No.	Thomson	Dia.	A	+/- .010		+/- .002		G			Pack Qty.	
				B	C	D	E	F	Hole	Bolt		H
TLM-2003	SB 8	1/2	2	1.500	1.63	1.000	.63	.75	.19	#8	.25	1
TLM-2004	SB 10	5/8	2 1/2	1.875	1.75	1.000	.69	.88	.22	#10	.31	1
TLM-2005	SB 12	3/4	2 3/4	2.000	2.13	1.250	.75	1.00	.22	#10	.31	1
TLM-2006	SB 16	1	3 1/4	2.500	2.56	1.500	1.00	1.38	.28	#10	.38	1
TLM-2007	SB 20	1 1/4	4	3.000	3.00	1.750	1.13	1.75	.34	#10	.44	1
TLM-2008	SB 24	1 1/2	4 3/4	3.500	3.50	2.000	1.25	2.00	.34	#10	.50	1

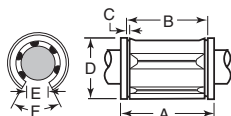
Flanged Support Blocks



Flanged mounting surface for easy assembly. Secured with four mounting bolts. Made of high strength aluminum alloy. Block can be reamed to accommodate larger shafts.

Item No.	Thomson	Dia.	A	B	+/- .010		G			Pack Qty.		
					C	D	E	F	Hole		Bolt	J
TLM-2020	FSB 8	1/2	1.63	.81	1.250	.88	.50	1.00	.18	#8	.25	1
TLM-2021	FSB 12	3/4	2.38	1.19	1.750	1.00	.63	1.25	.21	#10	.31	1
TLM-2022	FSB 16	1	2.75	1.38	2.125	1.25	.63	1.50	.27	1/4	.31	1
TLM-2023	FSB 20	1 1/4	3.13	1.56	2.375	1.38	.75	1.75	.27	1/4	.38	1

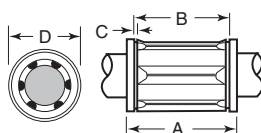
Open Type for Continuously Supported Applications  
Steel Balls



- Coefficient of friction as low as 0.001
- All steel construction for maximum rigidity
- Travel speeds up to 10 ft/s
- High temperature capability
- Can be mounted in a customized open style pillow block

Item No.	Thomson	Dia.	A		B	C	D	E	Angle Degree F	No. of Ball Circuits	Dynamic Load (Lbs.)	Pack Qty.
			1	2								
TLM-105	OPN81420	.500	1.250/1.235	.987/951	.046	.8760/.8740	.31	50	3	60	1	
TLM-110	OPN101824	.625	1.500/1.485	1.108/1.092	.056	1.2600/1.1240	.38	60	3	105	1	
TLM-115	OPN122026	.750	1.625/1.610	1.170/1.154	.056	1.2510/1.2490	.44	60	4	140	1	
TLM-120	OPN162536	1.000	2.250/2.235	1.759/1.741	.068	1.5635/1.5615	.56	60	4	240	1	

Closed Type for End Supported Applications  
Steel and Stainless Steel Balls



- Coefficient of friction as low as 0.001
- All steel construction for maximum rigidity
- Travel speeds up to 10 ft/s
- High temperature capability
- Can be mounted in customized housing

Steel		Stainless		Dia.	A	B	C	D	No. of Ball Circuits	Dynamic Load (Lbs.)	Pack Qty.
Item No.	Thomson	Item No.	Thomson								
TLM-10	A-4812	TLM-50	A-4812SS	.250	.750/.735	.515/.499	.039	.5000/.4996	3	19	1
TLM-15	A-61014	TLM-55	A-61014SS	.375	.875/.860	.640/.624	.039	.6250/.6246	4	37	1
TLM-20	A-81420	TLM-60	A-81420SS	.500	1.250/1.235	.967/951	.046	.8750/.8746	4	85	1
TLM-25	A-101824	—	—	.625	1.500/1.485	1.108/1.092	.056	1.1250/1.1246	4	150	1
TLM-30	A-122026	TLM-65	A-122026SS	.750	1.625/1.610	1.170/1.154	.056	1.2500/1.2496	5	200	1
TLM-35	A-162536	—	—	1.000	2.250/2.235	1.759/1.741	.068	1.5625/1.5621	5	350	1
TLM-40	A-203242	—	—	1.250	2.625/2.605	2.009/1.991	.068	2.0000/1.9995	6	520	1
TLM-45	A-243848	—	—	1.500	3.000/2.980	2.415/2.397	.086	2.3750/2.3745	6	770	1

Note: 60 Case® LinearRace® shafts are not recommended for these bearings. S style shafting is recommended.





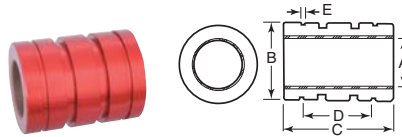
**Smooth Plane Bearings Inch & Metric**

Pacific Bearing's plane bearing technology offers many design advantages over roller ball bearings. Some of these advantages include:

- Self-lubricating which requires no external lubricant
- Embeddability of hard particulate eliminates galling and shaft damage
- Dampens vibration for quiet and smooth operation - no metal to metal contact
- High load capacity allows for more compact design
- Shock loads are absorbed without damage to components
- Maintenance free with a reliable, predictable life that will not catastrophically fail
- High temperature range (-400 to +500 degrees Fahrenheit and chemically inert)

The plane bearing liner is made of FrelonGOLD®, a compound PTFE. The interaction of the FrelonGOLD® material and the shafting creates a natural, microscopic transfer process of the FrelonGOLD to the running surfaces. The valleys in the surface finish are filled in with FrelonGOLD® during the initial break-in period. This creates the self-lubricating condition. A minimum of initial lubrication is recommended to aid in cleaning the shaft for a proper transfer process. Chrome plated shafting is not recommended. The compensated styles below, offer additional running clearance. The bearing shell is 6061-T6 aluminum with anodized finish.

**Closed Style - Inch**

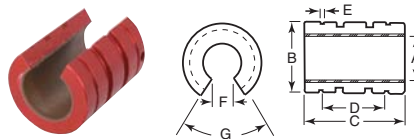


Closed Style



Item No.	Pacific	Nominal Dia.	A	B	C	D	E	Effective Surface Area (Sq. In.)	Max. Static Load (Lbs.)	Max. Speed Ft./Min.		Pack Qty.
										Dry	Lubricated	
<b>Precision Style</b>												
PBC-05	FL03	3/16	.1880/.1890	.3740/.3750	.547/.562	.375	.030	.110	110	140	400	1
PBC-06	FL04	1/4	.2500/.2510	.4990/.5000	.735/.750	.437	.041	.200	300	140	400	1
PBC-07	FL06	3/8	.3750/.3760	.6240/.6250	.860/.875	.562	.041	.340	510	140	400	1
PBC-08	FL08	1/2	.5000/.5010	.8740/.8750	1.235/1.250	.875	.048	.650	975	140	400	1
PBC-09	FL10	5/8	.6250/.6260	1.1240/1.1250	1.485/1.500	1.000	.058	.980	1,470	140	400	1
PBC-10	FL12	3/4	.7500/.7510	1.2490/1.2500	1.610/1.625	1.062	.058	1.270	1,905	140	400	1
PBC-11	FL16	1	1.0000/1.0010	1.5613/1.5625	2.235/2.250	1.625	.070	2.350	3,525	140	400	1
PBC-12	FL20	1 1/4	1.2500/1.2510	1.9988/2.0000	2.605/2.625	1.875	.070	3.430	5,145	140	400	1
PBC-13	FL24	1 1/2	1.500/1.5012	2.3738/2.3750	2.980/3.000	2.250	.089	4.700	7,050	140	400	1
PBC-14	FL32	2	2.000/2.0014	2.9986/3.0000	3.980/4.000	3.000	.105	8.350	12525	140	400	1
<b>Compensated Style</b>												
PBC-25	FLC03	3/16	.1890/.1900	.3740/.3750	.547/.562	.375	.030	.110	110	140	400	1
PBC-26	FLC04	1/4	.2520/.2530	.4990/.5000	.735/.750	.437	.041	.200	300	140	400	1
PBC-27	FLC06	3/8	.3770/.3780	.6240/.6250	.860/.875	.562	.041	.340	510	140	400	1
PBC-28	FLC08	1/2	.5020/.5030	.8740/.8750	1.235/1.250	.875	.048	.650	975	140	400	1
PBC-29	FLC10	5/8	.6270/.6280	1.1240/1.1250	1.485/1.500	1.000	.058	.980	1,470	140	400	1
PBC-30	FLC12	3/4	.7530/.7540	1.2490/1.2500	1.610/1.625	1.062	.058	1.270	1,905	140	400	1
PBC-31	FLC16	1	1.0030/1.0040	1.5613/1.5625	2.235/2.250	1.625	.070	2.350	3,525	140	400	1
PBC-32	FLC20	1 1/4	1.2540/1.2550	1.9988/2.0000	2.605/2.625	1.875	.070	3.430	5,145	140	400	1
PBC-33	FLC24	1 1/2	1.5040/1.5052	2.3738/2.3750	2.980/3.000	2.250	.089	4.700	7,050	140	400	1

**Open Style - Inch**

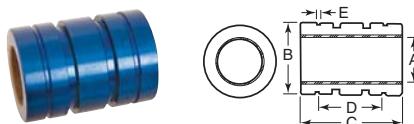


Open Style



Item No.	Pacific	Nominal Dia.	A	B	C	D	E	F	G (degrees)	Retaining Hole Dia.	Effective Surface Area (Sq. In.)	Max. Static Load (Lbs.)	Max. Speed Ft./Min.		Pack Qty.
													Dry	Lubricated	
<b>Precision Style</b>															
PBC-40	FLN08	1/2	.5000/.5010	.8740/.8750	1.235/1.250	.875	.048	.313	60	.136	.650	975	140	400	1
PBC-41	FLN10	3/4	.6250/.6260	1.1240/1.1250	1.485/1.500	1.000	.058	.375	60	.136	.980	1,470	140	400	1
PBC-42	FLN12	3/4	.7500/.7510	1.2490/1.2500	1.610/1.625	1.062	.058	.438	60	.136	1.270	1,905	140	400	1
PBC-43	FLN16	1	1.0000/1.0010	1.5613/1.5625	2.235/2.250	1.625	.070	.563	60	.136	2.350	3,525	140	400	1
PBC-44	FLN20	1 1/4	1.2500/1.2510	1.9988/2.0000	2.605/2.625	1.875	.070	.625	60	.201	3.430	5,145	140	400	1
<b>Compensated Style</b>															
PBC-50	FLCN08	1/2	.5020/.5030	.8740/.8750	1.235/1.250	.875	.048	.313	60	.136	.650	975	140	400	1
PBC-52	FLCN12	3/4	.7530/.7540	1.2490/1.2500	1.610/1.625	1.062	.058	.438	60	.136	1.270	1,905	140	400	1
PBC-53	FLCN16	1	1.0030/1.0040	1.5613/1.5625	2.235/2.250	1.625	.070	.563	60	.136	2.350	3,525	140	400	1
PBC-54	FLCN20	1 1/4	1.2540/1.2550	1.9988/2.0000	2.605/2.625	1.875	.070	.625	60	.201	3.430	5,145	140	400	1
PBC-55	FLCN24	1 1/2	1.5040/1.5052	2.3738/2.3750	2.980/3.000	2.250	.089	.750	60	.201	4.700	7,050	140	400	1

**Closed Style - Metric**



Similar to the linear bearings shown above except in standard European metric. Dimensions are in millimeters.



Item No.	Pacific	Nominal Dia.	A	B	C	D	E	Effective Surface Area (Sq. cm.)	Max. Static Load (kg)	Max. Speed Ft./Min.		Pack Qty.
										Dry	Lubricated	
<b>Precision Style</b>												
PBC-907	FM10	10	10.013/10.035	18.974/19.000	28.746/29.000	19.4	1.32	2.9	305	42.6	122	1
PBC-908	FM12	12	12.016/12.043	21.979/22.000	31.746/32.000	20.0	1.32	3.8	403	42.6	122	1
PBC-909	FM16	16	16.016/16.043	25.979/26.000	35.746/36.000	22.0	1.32	5.8	605	42.6	122	1
PBC-910	FM20	20	20.020/20.053	31.975/32.000	44.746/45.000	28.0	1.32	9.0	945	42.6	122	1
PBC-911	FM25	25	25.020/25.053	39.975/40.000	57.746/58.000	40.0	1.32	14.5	1,523	42.6	122	1



LINEAR SHAFTS

Economical weight saving alternative to traditional steel shafting. Made from 6061-T6 aluminum with a ceramic-coated finish that has a Rockwell hardness of 70C. Surface is non-magnetic and vibration resistant. Weld splatter, paints and contaminants will not stick. Shafting is designed to be used with the Simplicity FrelonGOLD® lined linear bearings. **Note:** Do not use with ball bearings. Pre-drilled and tapped shafting is interchangeable with standard pre-drilled shafting. Ends of shafting are not coated.

Solid, Pre-drilled, and Tapped Shafts



Solid

See facing page for Simplicity FrelonGold® lined linear bearings.

Solid



Item No.	Nominal OD	Lgth.	Dia. Tolerance	Weight Per Inch	Pack Qty.	Item No.	Nominal OD	Lgth.	Dia. Tolerance	Weight Per Inch	Pack Qty.
PBC-1030	3/16	6	.1863/.1871	.003	1	PBC-1060	3/4	6	.7488/.7496	.043	1
PBC-1031	3/16	9	.1863/.1871	.003	1	PBC-1061	3/4	9	.7488/.7496	.043	1
PBC-1032	3/16	12	.1863/.1871	.003	1	PBC-1062	3/4	12	.7488/.7496	.043	1
PBC-1033	3/16	15	.1863/.1871	.003	1	PBC-1063	3/4	15	.7488/.7496	.043	1
PBC-1034	3/16	18	.1863/.1871	.003	1	PBC-1064	3/4	18	.7488/.7496	.043	1
PBC-1035	3/16	24	.1863/.1871	.003	1	PBC-1065	3/4	24	.7488/.7496	.043	1
PBC-1036	1/4	6	.2488/.2496	.005	1	PBC-1066	1	6	.9988/.9996	.077	1
PBC-1037	1/4	9	.2488/.2496	.005	1	PBC-1067	1	9	.9988/.9996	.077	1
PBC-1038	1/4	12	.2488/.2496	.005	1	PBC-1068	1	12	.9988/.9996	.077	1
PBC-1039	1/4	15	.2488/.2496	.005	1	PBC-1069	1	15	.9988/.9996	.077	1
PBC-1040	1/4	18	.2488/.2496	.005	1	PBC-1070	1	18	.9988/.9996	.077	1
PBC-1041	1/4	24	.2488/.2496	.005	1	PBC-1071	1	24	.9988/.9996	.077	1
PBC-1042	3/8	6	.3738/.3746	.010	1	PBC-1072	1/4	6	1.2488/1.2496	.120	1
PBC-1043	3/8	9	.3738/.3746	.010	1	PBC-1073	1/4	9	1.2488/1.2496	.120	1
PBC-1044	3/8	12	.3738/.3746	.010	1	PBC-1074	1/4	12	1.2488/1.2496	.120	1
PBC-1045	3/8	15	.3738/.3746	.010	1	PBC-1075	1/4	15	1.2488/1.2496	.120	1
PBC-1046	3/8	18	.3738/.3746	.010	1	PBC-1076	1/4	18	1.2488/1.2496	.120	1
PBC-1047	3/8	24	.3738/.3746	.010	1	PBC-1077	1/4	24	1.2488/1.2496	.120	1
PBC-1048	1/2	6	.4988/.4996	.019	1	PBC-1078	1/2	6	1.4987/1.4995	.173	1
PBC-1049	1/2	9	.4988/.4996	.019	1	PBC-1079	1/2	9	1.4987/1.4995	.173	1
PBC-1050	1/2	12	.4988/.4996	.019	1	PBC-1080	1/2	12	1.4987/1.4995	.173	1
PBC-1051	1/2	15	.4988/.4996	.019	1	PBC-1081	1/2	15	1.4987/1.4995	.173	1
PBC-1052	1/2	18	.4988/.4996	.019	1	PBC-1082	1/2	18	1.4987/1.4995	.173	1
PBC-1053	1/2	24	.4988/.4996	.019	1	PBC-1083	1/2	24	1.4987/1.4995	.173	1
PBC-1054	5/8	6	.6238/.6246	.030	1	PBC-1084	2	6	1.9985/1.9995	.308	1
PBC-1055	5/8	9	.6238/.6246	.030	1	PBC-1085	2	9	1.9985/1.9995	.308	1
PBC-1056	5/8	12	.6238/.6246	.030	1	PBC-1086	2	12	1.9985/1.9995	.308	1
PBC-1057	5/8	15	.6238/.6246	.030	1	PBC-1087	2	15	1.9985/1.9995	.308	1
PBC-1058	5/8	18	.6238/.6246	.030	1	PBC-1088	2	18	1.9985/1.9995	.308	1
PBC-1059	5/8	24	.6238/.6246	.030	1	PBC-1089	2	24	1.9985/1.9995	.308	1

Ceramic-Coated Aluminum Shafting Feather Shafting

Pre-drilled and Tapped



Pre-drilled and Tapped

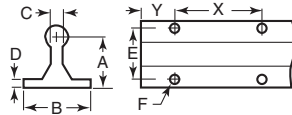


Item No.	Nominal OD	Lgth.	Dia. Tolerance	Hole Spacing			Thread	Weight Per Inch	Pack Qty.
				A	B				
PBC-1090	1/2	6	.4988/.4996	2	4		6-32	.019	1
PBC-1091	1/2	9	.4988/.4996	2	4		6-32	.019	1
PBC-1092	1/2	12	.4988/.4996	2	4		6-32	.019	1
PBC-1093	1/2	15	.4988/.4996	2	4		6-32	.019	1
PBC-1094	1/2	18	.4988/.4996	2	4		6-32	.019	1
PBC-1095	1/2	24	.4988/.4996	2	4		6-32	.019	1
PBC-1096	5/8	6	.6238/.6246	2	4		8-32	.030	1
PBC-1097	5/8	9	.6238/.6246	2	4		8-32	.030	1
PBC-1098	5/8	12	.6238/.6246	2	4		8-32	.030	1
PBC-1099	5/8	15	.6238/.6246	2	4		8-32	.030	1
PBC-1100	5/8	18	.6238/.6246	2	4		8-32	.030	1
PBC-1101	5/8	24	.6238/.6246	2	4		8-32	.030	1
PBC-1102	3/4	6	.7488/.7496	3	6		10-32	.043	1
PBC-1103	3/4	9	.7488/.7496	3	6		10-32	.043	1
PBC-1104	3/4	12	.7488/.7496	3	6		10-32	.043	1
PBC-1105	3/4	15	.7488/.7496	3	6		10-32	.043	1
PBC-1106	3/4	18	.7488/.7496	3	6		10-32	.043	1
PBC-1107	3/4	24	.7488/.7496	3	6		10-32	.043	1
PBC-1108	1	6	.9988/.9996	3	6		1/4-20	.077	1
PBC-1109	1	9	.9988/.9996	3	6		1/4-20	.077	1
PBC-1110	1	12	.9988/.9996	3	6		1/4-20	.077	1
PBC-1111	1	15	.9988/.9996	3	6		1/4-20	.077	1
PBC-1112	1	18	.9988/.9996	3	6		1/4-20	.077	1
PBC-1113	1	24	.9988/.9996	3	6		1/4-20	.077	1
PBC-1114	1 1/4	6	1.2488/1.2496	3	6		3/4-18	.120	1
PBC-1115	1 1/4	9	1.2488/1.2496	3	6		3/4-18	.120	1
PBC-1116	1 1/4	12	1.2488/1.2496	3	6		3/4-18	.120	1
PBC-1117	1 1/4	15	1.2488/1.2496	3	6		3/4-18	.120	1
PBC-1118	1 1/4	18	1.2488/1.2496	3	6		3/4-18	.120	1
PBC-1119	1 1/4	24	1.2488/1.2496	3	6		3/4-18	.120	1
PBC-1120	1 1/2	6	1.4987/1.4995	4	8		3/4-16	.173	1
PBC-1121	1 1/2	9	1.4987/1.4995	4	8		3/4-16	.173	1
PBC-1122	1 1/2	12	1.4987/1.4995	4	8		3/4-16	.173	1
PBC-1123	1 1/2	15	1.4987/1.4995	4	8		3/4-16	.173	1
PBC-1124	1 1/2	18	1.4987/1.4995	4	8		3/4-16	.173	1
PBC-1125	1 1/2	24	1.4987/1.4995	4	8		3/4-16	.173	1
PBC-1126	2	6	1.9985/1.9995	4	8		1/2-13	.308	1
PBC-1127	2	9	1.9985/1.9995	4	8		1/2-13	.308	1
PBC-1128	2	12	1.9985/1.9995	4	8		1/2-13	.308	1
PBC-1129	2	15	1.9985/1.9995	4	8		1/2-13	.308	1
PBC-1130	2	18	1.9985/1.9995	4	8		1/2-13	.308	1
PBC-1131	2	24	1.9985/1.9995	4	8		1/2-13	.308	1

Note: B dimension is centered on all lengths



**Linear Shaft Assemblies  
Aluminum - Ceramic Coated**



Made from 6061-T6 aluminum with a ceramic coating to MIL-8625. The one piece integrated design eliminates assembly time. Weld spatter, paints and other contaminants will not stick to the shaft. Vibration resistant and non-magnetic. This shafting should not be used in harsh wash down environments or with ball bearings. Class "L" tolerance.

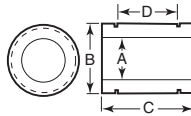
12"		24"		Nom. Dia.	Actual Dia.	+/- .002 A	B	C	D	E	F Bolt	F Hole	X Hole Spacing	Y Hole Spacing	Pack Qty.
Item No.	Item No.														
PBL-305	PBL-310	1/2	.4990/.4995	1.125	1.500	.250	.188	1.00	#6	.169	4	2	1		
PBL-315	PBL-320	3/4	.7490/.7495	1.500	1.750	.375	.250	1.25	#10	.221	6	3	1		
PBL-325	PBL-330	1	.9990/.9995	1.750	2.125	.500	.250	1.50	1/4	.281	6	3	1		

Features a high load capacity. Approved for direct food contact in applications where animal fat or food approved lubricants are present. Bearing requires lubrication, but offers a middle ground coefficient of friction between ball bushing, composite/self-lubricating bearings and injection molded plastics. Coefficient of friction is .04 to .08. Dampens vibration for quiet and smooth operation - no metal to metal contact. Pillow blocks allow 360° misalignment of 1° from shaft centerline and 2° total misalignment of applications where proper alignment is difficult or self-alignment desirable. Bearing is able to withstand rapid oscillation, contamination, shock/vibration, wash downs, submersion and shaft brinelling. Works in less than ideal conditions such as granite polishing/cutting, glass cutting and abrasive polishing machinery. Minimum shaft hardness is RC35. Temperature range is -200°F to +440°F. The max. static psi is 5,000. The max. PV is 40,000.

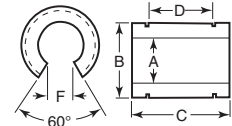
**Linear Bearings  
Stainless Steel  
FDA/USDA Compliant**



Closed Style



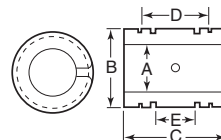
Open Style



Stainless steel shell features FDA/USDA compliant, self-lubricating PTFE composite liner. Bearings are direct drop-in replacements for inch size linear ball bushings. Designed to run on soft 300 series shafting. Minimum shaft hardness is RB25. Ideal for drug/food processing equipment and packaging equipment where direct contact would be a factor. Bearing is unaffected by wash downs, contamination or submersion. Coefficient of friction is .12 to .20. Temperature range is -400 to +375 degree Fahrenheit. The max. static psi is 1,000. Max. SFM without any load is 400. PV max. is 10,000.

Closed Style		Open Style		F	A	B	C	D	Max. Static Load (Lbs.)	Pack Qty.
Item No.	Item No.									
LMB-5	LMB-25	.156	.3755	.6250	.875	.562	1,643	1		
LMB-10	LMB-30	.312	.5005	.8750	1.250	.875	3,128	1		
LMB-15	LMB-35	.438	.7508	1.2500	1.625	1.062	6,100	1		
LMB-20	LMB-40	.563	1.0008	1.5625	2.250	1.625	11,259	1		

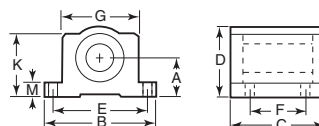
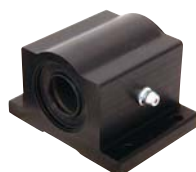
**Linear Bearing  
Closed Style  
Ceramic Coated**



Item No.	A	B	C	D	E	Max. Static Load (Lbs.)	Pack Qty.
LMB-100	.2505	.5000	.750	.437	.018	939	1
LMB-105	.3755	.6250	.875	.562	.260	1,643	1
LMB-110	.5005	.8750	1.250	.875	.490	3,128	1
LMB-115	.7508	1.2500	1.625	1.062	.612	6,100	1
LMB-120	1.0008	1.5625	2.250	1.625	1.180	11,259	1
LMB-125	1.2508	2.0000	2.625	1.875	1.425	16,417	1
LMB-130	1.5008	2.3750	3.000	2.250	1.670	22,512	1

Note: Do not use WD-40 or silicon based spray lubricants.

**Self-Aligning Pillow Blocks  
Closed Style  
Ceramic Coated**

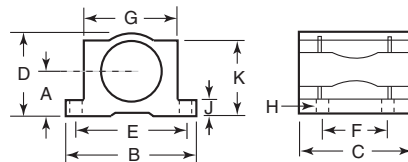
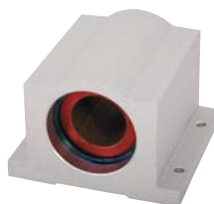


Item No.	Shaft Dia.		+/- .003 A	B	C	D	+/- .010 E	+/- .010 F	G	Size			Min. M	Max. Static Load	Pack Qty.
	Nom.	Max.								Bolt	Hole	K			
LMB-300	1/4	.2495	.437	1 1/8	1 3/16	1 3/16	1.312	.750	1	#6	5/32	3/4	3/16	939	1
LMB-305	3/8	.3745	.500	1 3/4	1 5/16	1 5/16	1.437	.875	1 1/8	#6	5/32	7/8	3/16	1,643	1
LMB-310	1/2	.4995	.687	2	1 11/16	1 1/4	1.688	1.000	1 3/8	#6	5/32	1 1/8	1/4	3,128	1
LMB-315	3/4	.7495	.937	2 3/4	2 1/16	1 3/4	2.375	1.250	1 7/8	#8	3/16	1 5/16	5/16	6,100	1
LMB-320	1	.9995	1.187	3 1/4	2 13/16	2 3/16	2.875	1.750	2 3/8	#10	7/32	2	3/8	11,259	1
LMB-325	1 1/4	1.2495	1.500	4	3 5/8	2 13/16	3.500	2.000	3	#10	7/32	2 1/2	7/16	16,417	1
LMB-330	1 1/2	1.4994	1.750	4 3/4	4	3 1/4	4.125	2.500	3 1/2	1/4	9/32	2 7/8	1/2	22,512	1

Note: Do not use WD-40 or silicon based spray lubricants.



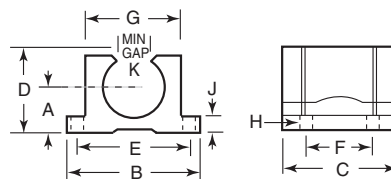
**Simplicity Pillow Blocks**  
**Closed Style - Single and Twin**  
**Precision and Compensated Styles**



These pillow blocks contain closed style bearings.

Item No.	Pacific	Nominal ID	Actual ID	+/- .001 A	B	C	D	+/- .010 E	+/- .010 F	G	H			Max. Load (Lbs.)	Pack Qty.	
											Bolt	Hole	J			K
<b>Precision Style - Single</b>																
PBC-60	P06	3/8	.3750/.3760	.500	1.75	1.313	.938	1.437	.875	1.125	#6	5/32	.188	.875	510	1
PBC-61	P08	1/2	.5000/.5010	.687	2.00	1.688	1.250	1.688	1.000	1.375	#6	5/32	.250	1.125	975	1
PBC-62	P10	3/4	.6250/.6260	.875	2.50	1.938	1.625	2.125	1.125	1.750	#8	3/16	.281	1.438	1,470	1
PBC-63	P12	3/4	.7500/.7510	.937	2.75	2.063	1.750	2.375	1.250	1.875	#8	3/16	.313	1.563	1,905	1
PBC-64	P16	1	1.0000/1.0010	1.187	3.25	2.813	2.188	2.875	1.750	2.375	#10	7/32	.375	1.938	3,525	1
PBC-65	P20	1 1/4	1.2500/1.2510	1.500	4.00	3.625	2.813	3.500	2.000	3.000	#10	7/32	.438	2.500	5,145	1
PBC-66	P24	1 1/2	1.5000/1.5012	1.750	4.75	4.000	3.250	4.125	2.500	3.500	1/4	5/32	.500	2.875	7,050	1
PBC-67	P32	2	2.0000/2.0014	2.125	6.00	5.000	4.063	5.250	3.250	4.500	3/8	13/32	.625	3.625	12,525	1
<b>Compensated Style - Single</b>																
PBC-70	P06C	3/8	.3770/.3780	.500	1.75	1.313	.938	1.437	.875	1.125	#6	5/32	.188	.875	510	1
PBC-71	P08C	1/2	.5020/.5030	.687	2.00	1.688	1.250	1.688	1.000	1.375	#6	5/32	.250	1.125	975	1
PBC-72	P10C	3/4	.6270/.6280	.875	2.50	1.938	1.625	2.125	1.125	1.750	#8	3/16	.281	1.438	1,470	1
PBC-73	P12C	3/4	.7530/.7540	.937	2.75	2.063	1.750	2.375	1.250	1.875	#8	3/16	.313	1.563	1,905	1
PBC-74	P16C	1	1.0030/1.0040	1.187	3.25	2.813	2.188	2.875	1.750	2.375	#10	7/32	.375	1.938	3,525	1
PBC-75	P20C	1 1/4	1.2540/1.2550	1.500	4.00	3.625	2.813	3.500	2.000	3.000	#10	7/32	.438	2.500	5,145	1
PBC-76	P24C	1 1/2	1.5040/1.5052	1.750	4.75	4.000	3.250	4.125	2.500	3.500	1/4	5/32	.500	2.875	7,050	1
<b>Precision Style - Twin</b>																
PBC-100	PW06	3/8	.3750/.3760	.500	1.75	2.75	.938	1.437	2.250	1.125	#6	5/32	.188	.875	1,020	1
PBC-101	PW08	1/2	.5000/.5010	.687	2.00	3.50	1.250	1.688	2.500	1.375	#6	5/32	.250	1.125	1,950	1
PBC-102	PW10	3/4	.6250/.6260	.875	2.50	4.00	1.625	2.125	3.000	1.750	#8	3/16	.281	1.438	2,940	1
PBC-103	PW12	3/4	.7500/.7510	.937	2.75	4.50	1.750	2.375	3.500	1.875	#8	3/16	.313	1.563	3,810	1
PBC-104	PW16	1	1.0000/1.0010	1.187	3.25	6.00	2.188	2.875	4.500	2.375	#10	7/32	.375	1.938	7,050	1

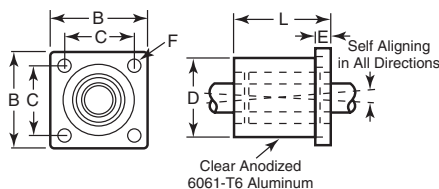
**Simplicity Pillow Blocks**  
**Open Style - Single and Twin**  
**Precision and Compensated Styles**



These pillow blocks contain open style bearings.

Item No.	Pacific	Nominal ID	Actual ID	+/- .001 A	B	C	D	+/- .010 E	+/- .010 F	G	H			Max. Load (Lbs.)	Pack Qty.	
											Bolt	Hole	J			K
PBC-80	PN08	1/2	.5000/.5010	.687	2.00	1.688	1.125	1.688	1.000	1.375	#6	5/32	.250	.313	975	1
PBC-81	PN10	3/4	.6250/.6260	.875	2.50	1.938	1.438	2.125	1.125	1.750	#8	3/16	.281	.375	1,470	1
PBC-82	PN12	3/4	.7500/.7510	.937	2.75	2.063	1.563	2.375	1.250	1.875	#8	3/16	.313	.438	1,905	1
PBC-83	PN16	1	1.0000/1.0010	1.187	3.25	2.813	1.938	2.875	1.750	2.375	#10	7/32	.375	.563	3,525	1
PBC-85	PN24	1 1/2	1.5000/1.5012	1.750	4.75	4.000	2.875	4.125	2.500	3.500	1/4	5/32	.500	.750	7,050	1
PBC-90	PN08C	1/2	.5020/.5030	.687	2.00	1.688	1.125	1.688	1.000	1.375	#6	5/32	.250	.313	975	1
PBC-91	PN10C	3/4	.6270/.6280	.875	2.50	1.938	1.438	2.125	1.125	1.750	#8	3/16	.281	.375	1,470	1
PBC-92	PN12C	3/4	.7530/.7540	.937	2.75	2.063	1.563	2.375	1.250	1.875	#8	3/16	.313	.438	1,905	1
PBC-93	PN16C	1	1.0030/1.0040	1.187	3.25	2.813	1.938	2.875	1.750	2.375	#10	7/32	.375	.563	3,525	1
PBC-95	PN24C	1 1/2	1.5040/1.5052	1.750	4.75	4.000	2.875	4.125	2.500	3.500	1/4	5/32	.500	.750	7,050	1
PBC-110	PWN08	1/2	.5000/.5010	.687	2.00	3.500	1.125	1.688	2.500	1.375	#6	5/32	.250	.313	1,950	1
PBC-111	PWN10	3/4	.6250/.6260	.875	2.50	4.000	1.438	2.125	3.000	1.750	#8	3/16	.281	.375	2,940	1
PBC-112	PWN12	3/4	.7500/.7510	.937	2.75	4.500	1.563	2.375	3.500	1.875	#8	3/16	.313	.438	3,810	1
PBC-113	PWN16	1	1.0000/1.0010	1.187	3.25	6.000	1.938	2.875	4.500	2.375	#10	7/32	.375	.563	7,050	1

**Simplicity Flange Mounted Self-Aligning Bearings**



These Simplicity flange mounted bearings with FrelonGOLD provide all the same self lubrication features as the pillow block mounted bearings. Bearing is FrelonGOLD enclosed in a flange housing made of 6061-T6 aluminum. Double length has two internal mounted bearings.

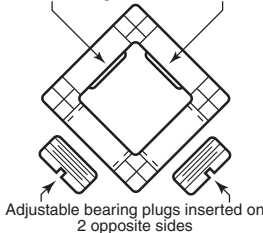
Item No.	Pacific	Nominal Diameter	B	C	D	E	F	L	Max. Static Load (Lbs.)	Pack Qty.
PBC-305	SFP-08	1/2	1.63	1.250	1.25	.250	#8	1.687	975	1
PBC-310	SFP-12	3/4	2.38	1.750	1.75	.375	#10	2.067	1,470	1
PBC-315	SFP-16	1	2.75	2.125	2.25	.500	1/4	2.812	1,905	1
<b>Twin Length</b>										
PBC-320	DFP-08	1/2	1.63	1.250	1.25	.250	#8	3.375	1,950	1
PBC-325	DFP-12	3/4	2.38	1.750	1.75	.375	#10	4.188	2,940	1
PBC-330	DFP-16	1	2.75	2.125	2.25	.500	1/4	5.625	3,810	1



**Square Linear Bearings**



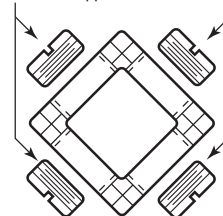
Frelon bearing liner fixed on 2 sides



**Two Sided Adjustable**



Adjustable bearing plugs inserted on 4 opposite sides



**Four Sided Adjustable**

These square bearings maintain radial integrity and can eliminate the need for parallel shafting. The bearings are made from 6061-T6 aluminum with anodized finish. Equipped with bearing plugs that run on a single square shaft, eliminating costly components. The threaded adjustable bearing plugs are made from 316 stainless steel with self-lubricating Frelon® wear pads and are designed to run on the stainless shafting shown below.

Two Sided Adjustable		Four Sided Adjustable		ID Sq.	OD Sq.	Lgth.	Load Capacity (Lbs.)	Pack Qty.
Item No.	Item No.	Item No.	Item No.					
PBC-405		PBC-410		1	1 3/4	2 1/4	920	1
PBC-415		PBC-420		1	1 3/4	4	920	1
PBC-425		PBC-430		1 1/2	2 5/16	3 1/8	1,840	1
PBC-435		PBC-440		1 1/2	2 5/16	6	1,840	1
PBC-450		—		Replacement Frelon Bearing Plug				1

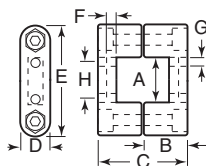
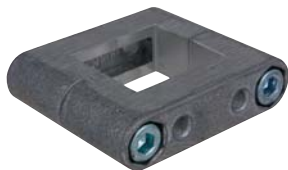
**Square Shafting**



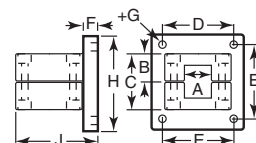
Made from 304 stainless for high corrosion resistance. Buffed and polished to provide an excellent running surface for the above bearings.

1" x 1"		1 1/2" x 1 1/2"		Lgth. (Feet)	Pack Qty.
Item No.	Item No.	Item No.	Item No.		
PBC-460	PBC-475			2	1
PBC-465	PBC-480			3	1
PBC-470	PBC-485			4	1

**Square Clamps and Flange Bases**



**Square Clamps**



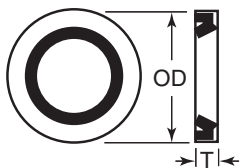
**Flange Bases**

Made from cast 356-T6 aluminum for good strength and corrosion resistance.

Item No.	A	B	C	D	E	F	G	H	J	Pack Qty.
<b>Square Clamps</b>										
PBC-490	1.00	.984	1.968	.630	2.362	.197	.200	.787	—	1
PBC-495	1.50	1.338	2.677	.630	2.362	.197	.200	2.953	—	1
<b>Flange Bases</b>										
PBC-500	1.00	1	1.890	2.362	2.520	.472	.256	3.228	2.874	1
PBC-505	1.50	1.25	2.440	2.756	2.992	.551	.256	3.740	3.347	1



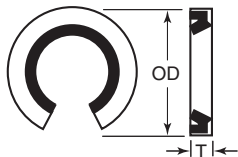
**Seals for Closed Type Bearings**



Double acting seals for Super Smart, Super and Precision closed type ball bushing bearings.

Item No.	Thomson	For Use With Thomson Bearing No.	Race Dia.	T	OD	Pack Qty.
TLM-250	S-250	Super-4 or 4812	.250	.125	.504	1
TLM-255	S-375	Super-6 or 61014	.375	.125	.629	1
TLM-260	S-500	Super-8 or 81420	.500	.125	.879	1
TLM-265	S-625	SSU-10 or Super-10 or 101824	.625	.125	1.129	1
TLM-270	S-750	SSU-12 or Super-12 or 122026	.750	.125	1.254	1
TLM-275	S-1000	SSU-16 or Super-16 or 162536	1.000	.187	1.567	1
TLM-280	S-1250	SSU-20 or Super-20 or 203242	1.250	.375	2.004	1
TLM-285	S-1500	SSU-24 or Super-24 or 243848	1.500	.375	2.379	1

**Seals For Open Type Bearings**



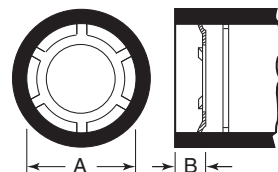
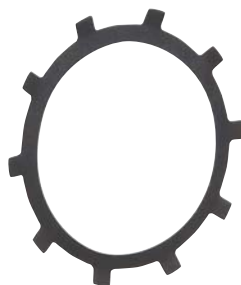
Double acting seals for Super Smart, Super and Precision open type ball bushing bearings.

Item No.	Thomson	For Use With Thomson Bearing No.	Race Dia.	T	OD	Pack Qty.
TLM-305	OPN-S-500	Super-8 or 81420	.500	.125	.879	1
TLM-310	OPN-S-625	SSU-10 or Super-10 or 101824	.625	.125	1.129	1
TLM-315	OPN-S-750	SSU-12 or Super-12 or 122026	.750	.125	1.254	1
TLM-320	OPN-S-1000	SSU-16 or Super-16 or 162536	1.000	.187	1.567	1
TLM-325	OPN-S-1250	SSU-20 or Super-20 or 203242	1.250	.375	2.004	1
TLM-330	OPN-S-1500	SSU-24 or Super-24 or 243848	1.500	.375	2.379	1

**Bearing Grease**



**Internal Retaining Rings (Type PR)**

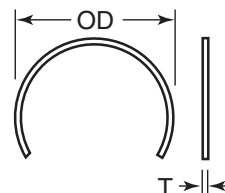


Push in retaining rings are for use with Super Smart, Super and Precision ball bushing bearings, closed type. Each retaining ring is installed inside the housing bore at each end of the bearing.

Item No.	Thomson	For Use With Thomson Bearing No.	A	B	Pack Qty.
TLM-150	PR250	Super-4 or 4812	.500	.060	1
TLM-155	PR375	Super-6 or 61014	.625	.060	1
TLM-160	PR500	Super-8 or 81420	.875	.080	1
TLM-165	PR625	SSU-10 or Super-10 or 101824	1.125	.080	1
TLM-170	PR750	SSU-12 or Super-12 or 122026	1.250	.080	1
TLM-175	PR1000	SSU-16 or Super-16 or 162536	1.563	.080	1
TLM-180	PR1250	SSU-20 or Super-20 or 203242	2.000	.080	1
TLM-185	PR1500	SSU-24 or Super-24 or 243848	2.375	.100	1

**Note:** Dimension B minimum end space required.

**External Retaining Rings (Type C)**



Fits into the retaining ring grooves on the outside diameter of Super Smart, Super and Precision ball bushing bearings to provide external mounting retention.

Item No.	Thomson	For Use With Thomson Bearing No.	T	OD	Pack Qty.
TLM-205	C250	Super-4 or 4812	.035	.550	1
TLM-210	C375	Super-6 or 61014	.035	.673	1
TLM-215	C500	Super-8 or 81420	.042	.923	1
TLM-220	C625	SSU-10 or Super-10 or 101824	.050	1.180	1
TLM-225	C750	SSU-12 or Super-12 or 122026	.050	1.301	1
TLM-230	C1000	SSU-16 or Super-16 or 162536	.062	1.620	1
TLM-235	C1250	SSU-20 or Super-20 or 203242	.062	2.040	1
TLM-240	C1500	SSU-24 or Super-24 or 243848	.078	2.429	1

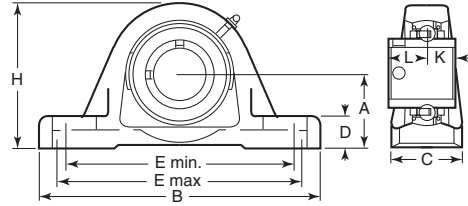
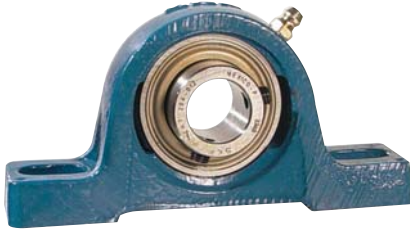


LinearLube is designed for use in bearing applications. It is 100% synthetic grease with concentrated PTFE particles. It will not volatilize or oxidize at high operating temperatures or form corrosive deposits. Contains no petroleum products. It is non-toxic (FDA listed and USDA rated H1), suitable for incidental contact with food or potable water) and non-polluting. No adverse effects on plastics. Operates effectively from -65 degree Fahrenheit to +450 degree Fahrenheit. 1 1/2 oz. tube.

Item No.	Description	Pack Qty.
LL-1	Linear Lube Bearing Grease	1



These mounted bearings are used extensively in fabricating equipment because they are easy to fit, maintain and replace. Made of cast iron housings with a grease fitting for easy lubrication. Pillow block style comes in two types, standard height and low center height.



**Pillow Block  
Standard Duty  
Standard Center Height  
Set Screw Locking - Narrow Inner Ring - M-Seal**



Item No.	Bore	Load Rating	A	B	C	D	E Min.	E Max.	H	K	L	Pack Qty.
SKF-402	3/4	2,860	1 1/16	5	1 1/4	9/16	3 15/32	4 3/16	2 17/32	9/32	2 3/32	1
SKF-404	1 1/16	3,150	1 1/16	5 1/8	1 13/32	5/8	3 11/16	4 1 1/2	2 3/4	5/16	2 5/32	1
SKF-407	1 1/8	4,390	1 11/16	6	1 1/16	2 1/2	4 1/4	5	3 3/32	2 5/16	7/8	1
SKF-408	1 1/4	4,390	1 11/16	6	1 1/16	2 1/2	4 1/4	5	3 3/32	2 5/16	7/8	1
SKF-409	1 1/4	5,740	1 7/8	6 1/16	1 25/32	3/4	4 1 1/16	5 1/4	3 3/32	3/8	1	1
SKF-411	1 1/16	5,740	1 7/8	6 1/16	1 25/32	3/4	4 1 1/16	5 1/4	3 3/32	3/8	1	1
SKF-412	1 1/2	6,910	2 1/8	7 3/8	1 7/8	1 1/2	5 1/16	6	4 7/32	7/16	1 1/32	1
SKF-414	1 1/4	7,470	2 1/8	7 3/8	1 7/8	1 1/2	5 1/16	6	4 7/32	7/16	1 1/32	1
SKF-415	1 15/16	7,900	2 1/4	8	2 1/8	1 1/2	5 7/8	6 1/2	4 1/2	7/16	1 1/64	1
SKF-416	2	7,900	2 1/2	8 3/8	2 1/8	1 1/2	6 1/8	7 1/8	5	1/2	1 1/32	1
SKF-410	1 1/8	5,740	1 7/8	6 1/16	1 25/32	3/4	4 1 1/16	5 1/4	3 3/32	3/8	1	1
SKF-405	1	3,150	1 1/16	5 1/8	1 13/32	5/8	3 11/16	4 1 1/2	2 3/4	5/16	2 5/32	1
SKF-413	1 11/16	7,470	2 1/8	7 3/8	1 7/8	1 1/2	5 1/16	6	4 7/32	7/16	1 1/32	1

**Pillow Block  
Standard Duty  
Low Center Height  
Wide Width - ConCentra Lock  
Air Handling Unit**



Item No.	Bore	Load Rating	A	B	C	D	E Min.	E Max.	H	K	L	Pack Qty.
SKF-8790	1	3,150	1 1/16	5 1/8	1 1/16	5/8	3 1 1/16	4 3/16	2 3/4	1 1/8	1 1/8	1
SKF-8800	1 1/4	5,700	1 19/16	6 3/16	1 3/4	3/4	4 1 1/16	5 1/4	3 1 1/16	1 1/4	1 1/8	1
SKF-8805	1 3/8	5,700	1 19/16	6 3/16	1 3/4	3/4	4 1 1/16	5 1/4	3 1 1/16	1 1/4	1 1/8	1
SKF-8810	1 1/2	5,700	1 19/16	6 3/16	1 3/4	3/4	4 1 1/16	5 1/4	3 1 1/16	1 1/4	1 1/8	1
SKF-8815	1 1/2	6,900	1 19/16	6 3/8	1 1/8	3/4	4 1 1/16	5 1/4	3 3/8	1 1/16	2 1/16	1
SKF-8820	1 11/16	7,470	2 1/16	7 3/8	1 1/8	1 3/16	5 1/16	6	4 1/4	1 3/8	2	1
SKF-8825	2 3/16	9,800	2 1/16	8 3/8	2 3/8	1 5/16	6 3/8	7 1/8	5	1 1/16	2 1/4	1
SKF-8830	2 1/16	11,800	2 1/16	9 1/2	2 3/8	1	7 1/16	7 1 1/16	5 1/2	1 1/2	2 3/16	1

**Pillow Block  
Standard Duty  
Standard Center Height  
Eccentric Locking - Narrow Inner Ring - M-Seal**



Item No.	Bore	Load Rating	A	B	C	D	E Min.	E Max.	H	K	L	Pack Qty.
SKF-8610	3/4	2,860	1 1/16	5	1 1/4	9/16	3 15/32	4 3/16	2 17/32	9/32	1 5/16	1
SKF-8615	7/8	3,150	1 1/16	5 1/8	1 13/32	5/8	3 1 1/16	4 1 1/2	2 3/4	9/32	1 5/16	1
SKF-8620	1 1/16	3,150	1 1/16	5 1/8	1 13/32	5/8	3 1 1/16	4 1 1/2	2 3/4	9/32	1 5/16	1
SKF-8625	1	3,150	1 1/16	5 1/8	1 13/32	5/8	3 1 1/16	4 1 1/2	2 3/4	9/32	1 5/16	1
SKF-8630	1 1/16	4,390	1 1/16	6	1 1/16	2 1/2	4 1/4	5	3 3/32	1 1/32	1 1/16	1
SKF-8635	1 1/4	4,390	1 11/16	6	1 1/16	2 1/2	4 1/4	5	3 3/32	1 1/32	1 1/16	1
SKF-8640	1 1/4	5,740	1 7/8	6 1/16	1 25/32	3/4	4 1 1/16	5 1/4	3 3/32	3/8	1 1/32	1
SKF-8645	1 3/8	5,740	1 7/8	6 1/16	1 25/32	3/4	4 1 1/16	5 1/4	3 3/32	3/8	1 1/32	1
SKF-8650	1 1/2	5,740	1 7/8	6 1/16	1 25/32	3/4	4 1 1/16	5 1/4	3 3/32	3/8	1 1/32	1
SKF-8655	1 1/2	6,910	1 19/16	6 3/8	1 29/32	3/4	4 1 1/16	5 1/4	3 3/32	7/16	1 1/32	1
SKF-8670	2	9,810	2 1/8	8 3/8	2 3/8	1 5/16	6 3/8	7 1/8	5	1 5/32	1 1/16	1
SKF-8675	2 3/16	9,810	2 1/8	8 3/8	2 3/8	1 5/16	6 3/8	7 1/8	5	1 5/32	1 1/16	1
SKF-8660	1 11/16	7,470	2 1/8	7 3/8	1 7/8	1 3/16	5 1/16	6	4 7/32	7/16	1 1/32	1
SKF-8665	1 15/16	7,900	2 1/4	8	2 1/8	7/8	5 7/8	6 1/2	4 1/2	7/16	1 1/32	1

**Pillow Block  
Medium Duty  
Standard Center Height  
Wide Width - ConCentra Lock  
Air Handling Unit**

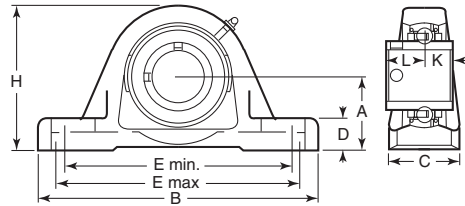


Item No.	Bore	Load Rating	A	B	C	D	E Min.	E Max.	H	K	L	Pack Qty.
SKF-8835	1 1/16	6,910	2 1/8	7 3/8	1 3/4	1 3/16	5 1/16	6	4 7/32	3/4	1 3/16	1
SKF-8840	1 11/16	7,900	2 1/4	8	2 1/8	7/8	5 7/8	6 1/2	4 1/2	3/4	1 9/32	1
SKF-8845	1 15/16	9,810	2 1/2	8 3/8	2 3/16	1 5/16	6 3/8	7 1/8	5	7/8	1 3/16	1
SKF-8850	2 3/16	11,900	2 3/4	9 1/2	2 1/2	1 1/16	7 1/16	7 1 1/16	5 1/2	1	1 3/16	1
SKF-8855	2 1/16	14,000	3	10 1/8	2 5/8	1 1/2	7 1/2	8 1/2	6	1 3/16	1 3/16	1
SKF-8860	2 15/16	16,400	3 1/2	12	3	1 7/8	8 1/2	9 1/2	6 3/32	1 3/16	1 3/8	1

# MOUNTED BEARINGS



These mounted bearings are used extensively in fabricating equipment because they are easy to fit, maintain and replace. Made of cast iron housings with a grease fitting for easy lubrication. Pillow block style comes in two types, standard height and low center height.



**Pillow Block  
Standard Duty  
Standard Center Height  
Set Screw Locking - Wide Inner Bearing - M-Seal and Flingers**



Item No.	Bore	Load Rating	A	B	C	D	E Min.	E Max.	H	K	L	Pack Qty.
SKF-8520	1/2	2,150	1 1/16	5	1 1/4	9/16	3 1/32	4 3/16	2 1/32	1 5/32	5/8	1
SKF-8525	5/8	2,150	1 1/16	5	1 1/4	9/16	3 1/32	4 3/16	2 1/32	1 5/32	5/8	1
SKF-8530	3/4	2,860	1 1/16	5	1 1/4	9/16	3 1/32	4 3/16	2 17/32	1 1/2	2 3/32	1
SKF-8535	7/8	3,150	1 1/16	5 1/8	1 19/32	5/8	3 11/16	4 11/32	2 3/4	9/16	2 5/32	1
SKF-8540	1 1/16	3,150	1 1/16	5 1/8	1 19/32	5/8	3 11/16	4 11/32	2 3/4	9/16	2 5/32	1
SKF-8545	1	3,150	1 1/16	5 1/8	1 19/32	5/8	3 11/16	4 11/32	2 3/4	9/16	2 5/32	1
SKF-8550	1 1/8	4,390	1 11/16	6	1 19/16	2 1/32	4 1/4	5	3 3/32	5/8	7/8	1
SKF-8555	1 1/8	4,390	1 11/16	6	1 19/16	2 1/32	4 1/4	5	3 3/32	5/8	7/8	1
SKF-8560	1 1/4	4,390	1 11/16	6	1 19/16	2 1/32	4 1/4	5	3 3/32	5/8	7/8	1
SKF-8565	1 1/4	5,740	1 7/8	6 1/16	1 29/32	3/4	4 1 1/16	5 1/4	3 21/32	1 1/16	1	1
SKF-8570	1 3/8	5,740	1 7/8	6 1/16	1 29/32	3/4	4 1 1/16	5 1/4	3 21/32	1 1/16	1	1
SKF-8575	1 1/2	5,740	1 7/8	6 1/16	1 29/32	3/4	4 1 1/16	5 1/4	3 21/32	1 1/16	1	1
SKF-8580	1 1/2	6,910	1 15/16	6 29/32	1 29/32	3/4	4 1 5/16	5 3/4	3 29/32	3/4	1 19/16	1
SKF-8585	1 11/16	7,470	2 1/8	7 3/8	1 7/8	1 19/16	5 5/16	6	4 7/32	3/4	1 19/16	1
SKF-8590	1 15/16	7,900	2 1/4	8	2 1/8	7/8	5 7/8	6 1/2	4 1/2	3/4	1 19/32	1
SKF-8595	2	9,810	2 1/2	8 5/8	2 1/8	1 19/16	6 3/8	7 1/8	5	7/8	1 19/16	1
SKF-8600	2 1/8	9,810	2 1/2	8 5/8	2 1/8	1 19/16	6 3/8	7 1/8	5	7/8	1 19/16	1
SKF-8605	2 1/8	11,900	2 11/16	9 1/2	2 1/2	1	7 1/16	7 1/16	5 1/16	1	1 19/16	1

**Pillow Block  
Standard Duty  
Standard Center Height  
Wide Width - ConCentra Lock  
Air Handling Unit**



Item No.	Bore	Load Rating	A	B	C	D	E Min.	E Max.	H	K	L	Pack Qty.
SKF-8735	1	3,150	1 1/16	5 1/8	1 19/32	5/8	3 11/16	4 5/16	2 3/4	1 1/8	1 1/8	1
SKF-8740	1 1/8	4,350	1 11/16	6	1 19/16	2 1/32	4 1/4	5	3 3/32	1 1/16	1 3/4	1
SKF-8745	1 1/4	5,700	1 7/8	6 1/16	1 29/32	3/4	4 1 1/16	5 1/4	3 21/32	1 1/4	1 7/8	1
SKF-8750	1 1/2	5,700	1 7/8	6 1/16	1 29/32	3/4	4 1 1/16	5 1/4	3 21/32	1 1/4	1 7/8	1
SKF-8755	1 1/2	6,900	1 15/16	6 29/32	1 29/32	3/4	4 1 5/16	5 3/4	3 29/32	1 1/16	2 1/16	1
SKF-8760	1 11/16	7,470	2 1/8	7 3/8	1 7/8	1 19/16	5 5/16	6	4 7/32	3/4	2	1
SKF-8765	1 15/16	7,900	2 1/4	8	2 1/8	7/8	5 7/8	6 1/2	4 1/2	3/4	2 1/8	1
SKF-8770	2 1/8	9,800	2 1/2	8 5/8	2 1/8	1 19/16	6 3/8	7 1/8	5	7/8	2 1/4	1
SKF-8775	2 1/4	11,800	2 3/4	9 1/16	2 29/64	1 1/32	7 1/16	7 1/16	5 1/2	1 1/2	2 1/16	1
SKF-8780	2 1/4	14,000	3	10 19/64	2 1/8	1 1/8	7 1/2	8 1/2	5 1/2	1 1/2	2 3/8	1
SKF-8785	2 1/4	14,800	3 1/4	10 3/64	2 1/16	1 1/32	8	9	6 17/32	1 1/8	2 1/2	1

**Pillow Block  
Standard Duty  
Standard Center Height  
Set Screw Lock - Wide Width - M-Seal and Flinger  
Air Handling Unit**



Item No.	Bore	Load Rating	A	B	C	D	E Min.	E Max.	H	K	L	Pack Qty.
SKF-8680	3/4	2,860	1 1/16	5	1 1/4	9/16	3 1/32	4 3/16	2 17/32	1 1/2	2 3/32	1
SKF-8685	1	3,150	1 1/16	5 1/8	1 19/32	5/8	3 11/16	4 11/32	2 3/4	9/16	2 3/32	1
SKF-8690	1 1/8	4,390	1 11/16	6	1 19/16	2 1/32	4 1/4	5	3 3/32	5/8	7/8	1
SKF-8695	1 1/8	5,740	1 7/8	6 1/16	1 29/32	3/4	4 1 1/16	5 1/4	3 21/32	1 1/16	1	1
SKF-8700	1 1/2	6,910	1 15/16	6 29/32	1 29/32	3/4	4 1 5/16	5 3/4	3 29/32	3/4	1 19/16	1
SKF-8705	1 11/16	7,470	2 1/8	7 3/8	1 7/8	1 19/16	5 5/16	6	4 7/32	3/4	1 19/16	1
SKF-8710	1 15/16	7,900	2 1/4	8	2 1/8	7/8	5 7/8	6 1/2	4 1/2	3/4	1 19/32	1
SKF-8715	2	9,810	2 1/2	8 5/8	2 1/8	1 19/16	6 3/8	7 1/8	5	7/8	1 19/16	1
SKF-8720	2 1/8	9,810	2 1/2	8 5/8	2 1/8	1 19/16	6 3/8	7 1/8	5	7/8	1 19/16	1
SKF-8725	2 1/8	11,900	2 11/16	9 1/2	2 1/2	1	7 1/16	7 1/16	5 1/16	1	1 19/16	1
SKF-8730	2 1/8	14,900	3 1/4	10 3/4	2 5/32	1 1/4	8	9	6 1/2	1 1/8	1 19/16	1

**Pillow Block  
Standard Duty  
Low Center Height  
Set Screw Locking - Narrow Inner Ring - M-Seal**



Item No.	Bore	Load Rating	A	B	C	D	E Min.	E Max.	H	K	L	Pack Qty.
SKF-421	3/4	2,860	1 1/4	5	1 1/4	1/2	3 1/32	4 3/16	2 1/32	9/32	2 3/32	1
SKF-422	7/8	3,150	1 9/16	5 1/8	1 19/32	1/2	3 11/16	4 11/32	2 5/8	9/16	2 5/32	1
SKF-423	1 1/16	3,150	1 9/16	5 1/8	1 19/32	1/2	3 11/16	4 11/32	2 5/8	9/16	2 5/32	1
SKF-424	1	3,150	1 9/16	5 1/8	1 19/32	1/2	3 11/16	4 11/32	2 5/8	9/16	2 5/32	1
SKF-426	1 1/8	4,390	1 9/16	6	1 19/16	17/32	4 1/4	5	3 3/32	2 3/64	7/8	1
SKF-428	1 1/4	5,740	1 9/16	6 1/16	1 29/32	1 1/16	4 1 1/16	5 1/4	3 19/32	3/8	1	1

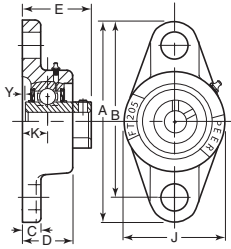




Standard duty, high-grade cast iron. Solid foot housing design. Wide inner ring bearing. Relubricatable unit with anti-rotation pin.

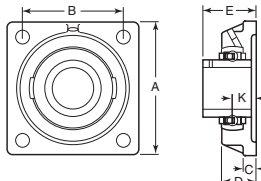
These mounted bearings are used extensively in fabricated equipment because they are easy to fit, maintain and replace. They are sealed and pre-greased, and under normal conditions require no further lubrications (grease fitting is supplied for additional lubrication under adverse conditions.) Housing is made from cast iron. All bearings below have set screw shaft locking.

**Flange Units - Standard Two Bolt**



Item No.	Bearing No.	Bore Size	Load Rate	A	B	C	D	E	J	K	Y	Pack Qty.
PRB-118	UCFT201-8	1/2	2,900	3 3/8	3	7/16	1	1.32	2 1/8	.594	.094	1
PRB-119	UCFT202-10	5/8	2,900	3 3/8	3	7/16	1	1.32	2 1/8	.594	.094	1
PRB-120	UCFT204-12	3/4	2,900	4 7/16	3 1/2	7/16	1 1/2	1.31	2 3/8	.591	.091	1
PRB-185	UCFT205-14	7/8	3,150	5 1/8	3 3/4	1/2	1 1/4	1.41	2 11/16	.630	.067	1
PRB-186	UCFT205-15	15/16	3,150	5 1/8	3 3/4	1/2	1 1/4	1.41	2 11/16	.630	.067	1
PRB-121	UCFT205-16	1	3,150	5 1/8	3 3/4	1/2	1 1/4	1.41	2 11/16	.630	.067	1
PRB-122	UCFT206-17	1 1/16	4,390	5 13/16	4 1/2	1/2	1 1/2	1.58	3 3/32	.709	.083	1
PRB-188	UCFT206-19	1 3/16	4,390	5 13/16	4 1/2	1/2	1 1/2	1.58	3 3/32	.709	.083	1
PRB-123	UCFT206-20	1 1/4	4,390	5 13/16	4 1/2	1/2	1 1/2	1.58	3 3/32	.709	.083	1
PRB-190	UCFT207-20	1 1/4	5,740	6 1 1/2	5 1/8	3/4	1 3/4	1.75	3 17/32	.748	.059	1
PRB-191	UCFT207-22	1 3/8	5,740	6 1 1/2	5 1/8	3/4	1 3/4	1.75	3 17/32	.748	.059	1
PRB-192	UCFT207-23	1 7/16	5,740	6 1 1/2	5 1/8	3/4	1 3/4	1.75	3 17/32	.748	.059	1
PRB-124	UCFT208-24	1 1/2	7,340	6 7/8	5 1/2	3/4	1 3/4	2.02	3 15/16	.828	.080	1
PRB-194	UCFT209-27	1 11/16	7,470	7 1 1/2	5 7/8	3/4	1 3/4	2.06	4 1/4	.866	.118	1
PRB-125	UCFT210-30	1 7/8	7,900	7 3/4	2 1/2	1 1/2	1 11/32	2.15	4 17/32	.866	.118	1

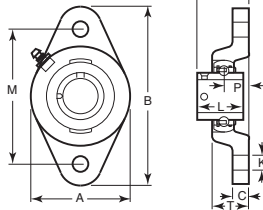
**Flange Units - Standard Four Bolt**



Flange Unit  
Standard Four Bolt

Item No.	Bearing No.	Bore Size	Load Rate	A	B	C	D	E	K	Pack Qty.
PRB-126	UCF201-8	1/2	2,900	3	2 1/8	3/8	1	1.31	.592	1
PRB-127	UCF202-10	5/8	2,900	3	2 1/8	3/8	1	1.31	.592	1
PRB-128	UCF204-12	3/4	2,900	3 3/4	2 1/2	7/16	1	1.31	.592	1
PRB-129	UCF205-14	7/8	3,150	3 3/4	2 3/4	1/2	1 1/16	1.41	.631	1
PRB-168	UCF205-15	15/16	3,150	3 3/4	2 3/4	1/2	1 1/16	1.41	.631	1
PRB-130	UCF205-16	1	3,150	3 3/4	2 3/4	1/2	1 1/16	1.41	.631	1
PRB-170	UCF206-18	1 1/8	4,390	4 1/4	3 1/4	1/2	1 1/2	1.58	.709	1
PRB-171	UCF206-19	1 3/16	4,390	4 1/4	3 1/4	1/2	1 1/2	1.58	.709	1
PRB-131	UCF206-20	1 1/4	4,390	4 1/4	3 1/4	1/2	1 1/2	1.58	.709	1
PRB-132	UCF207-20	1 1/4	5,740	4 1 1/2	3 3/4	3/4	1 3/4	1.75	.750	1
PRB-133	UCF207-22	1 3/8	5,740	4 1 1/2	3 3/4	3/4	1 3/4	1.75	.750	1
PRB-134	UCF207-23	1 7/16	5,740	4 1 1/2	3 3/4	3/4	1 3/4	1.75	.750	1
PRB-135	UCF208-24	1 1/2	7,340	5 1/8	4	3/4	1 3/4	2.02	.834	1
PRB-177	UCF209-27	1 11/16	7,470	5 3/4	4 1/8	3/4	1 3/4	2.06	.866	1
PRB-178	UCF209-28	1 3/4	7,470	5 3/4	4 1/8	3/4	1 3/4	2.06	.866	1
PRB-136	UCF210-30	1 7/8	7,900	5 3/4	4 3/8	3/4	1 3/4	2.031	.873	1
PRB-179	UCF210-31	1 5/8	7,900	5 3/4	4 3/8	3/4	1 3/4	2.031	.873	1
PRB-137	UCF210-32	2	7,900	5 3/4	4 3/8	3/4	1 3/4	2.031	.873	1
PRB-181	UCF211-35	2 3/16	9,810	6 3/8	5 1/8	3/4	1 3/4	2.15	.866	1

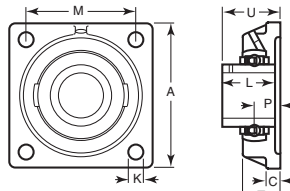
**Two Bolt Flange**



Two Bolt Flange

Item No.	Bore	A	B	C	K	L	M	P	T	U	Pack Qty.	Item No.	Bore	A	B	C	K	L	M	P	T	U	Pack Qty.
INA-110	1/2	2 1/4	3 23/32	1 1/2	1 5/32	1 3/32	3	2 1/32	1 1/16	1 1/32	1	INA-140	1 1/8	3 3/8	5 1 1/2	1 1/2	1 1/2	4 1 1/2	2 3/32	1 3/8	1 2 1/2	1	
INA-115	5/8	2 1/4	3 29/32	1 1/2	1 5/32	1 3/32	3	2 1/32	1 1/16	1 1/32	1	INA-150	1 1/4	3 2 1/2	6 3/2	9/16	1 1 1/16	5 1/8	2 7/32	1 3/8	1 2 1/2	1	
INA-135	1	2 27/32	5 1/8	1 1/2	1 5/32	1 1 1/32	3 29/32	3/4	1 1/2	1 1 1/32	1	INA-185	1 15/16	4 1 1/2	7 1 1/2	5/8	2 1/2	6 9/16	1 3/8	1 1 1/16	2 1/8	1	

**Four Bolt Flange**



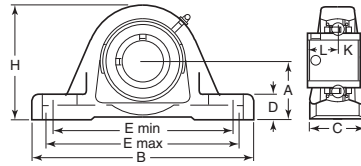
Four Bolt Flange

Item No.	Bore	A	C	K	L	M	P	T	U	Pack Qty.	Item No.	Bore	A	C	K	L	M	P	T	U	Pack Qty.
INA-210	1/2	3	1 1/2	1 1/2	1 3/32	2 1/8	2 1/32	1 1/16	1 1/32	1	INA-250	1 1/4	4 2 1/2	1 1/2	9/16	1 1 1/16	3 3/8	2 1/2	1 3/8	1 2 1/2	1
INA-215	5/8	3	1 1/2	1 1/2	1 3/32	2 1/8	2 1/32	1 1/16	1 1/32	1	INA-255	1 3/8	4 2 1/2	1 1/2	9/16	1 1 1/16	3 3/8	2 1/2	1 3/8	1 2 1/2	1
INA-220	3/4	3 3/8	1 1/2	1 1/2	1 1/32	2 1/2	3/4	1 1/2	1 1/32	1	INA-260	1 1/2	4 2 1/2	1 1/2	9/16	1 1 1/16	3 3/8	2 1/2	1 3/8	1 2 1/2	1
INA-225	7/8	3 3/4	1 1/2	1 1/2	1 1 1/32	2 3/4	3/4	1 1/2	1 1 1/32	1	INA-265	1 1/8	5 1/8	1 1/2	9/16	1 1 1/16	4	1 1/2	1 1/2	2 1/8	1
INA-235	1	3 3/4	1 1/2	1 1/2	1 1 1/32	2 3/4	3/4	1 1/2	1 1 1/32	1	INA-285	1 15/16	5 1/8	1 1/2	1 1/2	1 1 1/16	4 1/8	1 1/2	1 1 1/2	2 3/8	1
INA-240	1 1/8	4 3/8	1 1/2	1 1/2	1 1/2	3 1/4	2 1/8	1 1/4	1 1 1/2	1	INA-290	2	6 1 1/2	2 1/2	1 1/2	2 1/8	5 1/8	1 1/2	1 1 1/2	2 1 1/2	1



Standard duty, high-grade cast iron. Solid foot housing design. Wide inner ring bearing. Relubricatable unit with anti-rotation pin.

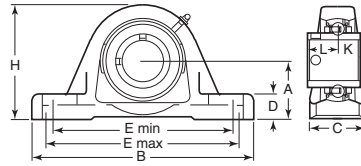
**Pillow Block - Standard Shaft Height**



**Pillow Block**

Item No.	Bearing No.	Bore Size	Load Rate	A	B	C	D	E Min.	E Max.	H	K	L	Pack Qty.
PRB-107	UCP201-8	1/2	2,900	13/16	5 15/32	1 17/64	1 5/32	3	4 1/2	2 7/32	.394	.72	1
PRB-108	UCP202-10	5/8	2,900	1 1/16	5 15/32	1 17/64	1 5/32	3	4 1/2	2 7/32	.394	.72	1
PRB-109	UCP204-12	3/4	2,900	1 1/16	5	1 11/32	1 7/32	3	4 1/2	2 17/32	.5	.72	1
PRB-110	UCP205-14	7/8	3,150	1 1/16	5 1/2	1 1/2	5/8	3 3/8	4 5/8	2 25/32	.563	.776	1
PRB-140	UCP205-15	1 1/16	3,150	1 1/16	5 1/2	1 1/2	5/8	3 11/16	4 11/32	2 25/32	.563	.776	1
PRB-111	UCP205-16	1	3,150	1 1/16	5 1/2	1 1/2	5/8	3 3/8	4 5/8	2 25/32	.563	.776	1
PRB-112	UCP206-18	1 1/8	4,390	1 11/16	6 1/2	1 3/4	2 1/32	3 15/16	5 1/16	3 3/32	.625	.874	1
PRB-143	UCP206-19	1 1/8	4,390	1 11/16	6 1/2	1 3/4	2 1/32	3 15/16	5 1/16	3 3/32	.625	.874	1
PRB-113	UCP206-20	1 1/4	4,390	1 11/16	6 1/2	1 3/4	2 1/32	3 15/16	5 1/16	3 3/32	.625	.874	1
PRB-145	UCP207-20	1 1/4	5,740	1 7/8	6 3/16	1 13/16	2 3/32	4 1/16	5 1/4	3 11/16	.748	1.189	1
PRB-114	UCP207-22	1 3/8	5,740	1 7/8	6 3/16	1 13/16	2 3/32	4 1/16	5 1/4	3 11/16	.748	1.189	1
PRB-147	UCP207-23	1 7/16	5,740	1 7/8	6 3/16	1 13/16	2 3/32	4 1/16	5 1/4	3 11/16	.748	1.189	1
PRB-115	UCP208-24	1 1/2	7,340	1 15/16	7 1/4	1 59/64	1 15/16	4 15/32	6 3/32	4	.748	1.189	1
PRB-149	UCP209-27	1 11/16	7,470	1 15/16	7 15/32	2 1/64	3/4	4 15/16	5 3/4	4 1/4	.748	1.189	1
PRB-116	UCP209-28	1 3/4	7,470	2 1/8	7 15/32	2 1/64	3/4	4 15/16	6 1/4	4 1/4	.748	1.189	1
PRB-151	UCP210-31	1 15/16	7,900	2 1/4	8 1/8	2 1/64	3/4	5 1/8	6 1/2	4 9/16	.748	1.189	1
PRB-117	UCP211-32	2	9,810	2 1/2	8 3/8	2 1/64	7/8	5 7/8	7 1/32	4 31/32	.874	1.315	1
PRB-153	UCP211-35	2 1/16	9,810	2 1/2	8 3/8	2 1/64	7/8	6 3/8	7 1/8	4 31/32	.874	1.315	1

**Pillow Block - Low Shaft Height**

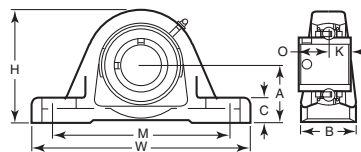


**Pillow Block**

Item No.	Bearing No.	Bore Size	Load Rate	A	B	C	D	E Min.	E Max.	H	K	L	Pack Qty.
PRB-154	UCLP201-8	1/2	2,150	1 1/4	5	1 11/32	1 5/32	3 15/32	4 3/16	2 15/32	1/4	5/8	1
PRB-155	UCLP202-10	5/8	2,150	1 1/4	5	1 11/32	1 5/32	3 15/32	4 3/16	2 15/32	1/4	5/8	1
PRB-156	UCLP204-12	3/4	2,860	1 1/4	5	1 11/32	1/2	3 15/32	4 3/16	2 15/32	9/32	23/32	1
PRB-157	UCLP205-14	7/8	3,150	1 3/16	5 1/2	1 1/2	1/2	3 11/16	4 11/32	2 21/32	5/16	25/32	1
PRB-158	UCLP205-15	1 1/16	3,150	1 3/16	5 1/2	1 1/2	1/2	3 11/16	4 11/32	2 21/32	5/16	25/32	1
PRB-159	UCLP205-16	1	3,150	1 3/16	5 1/2	1 1/2	1/2	3 11/16	4 11/32	2 21/32	5/16	25/32	1
PRB-160	UCLP206-18	1 1/8	4,390	1 3/8	6 1/2	1 3/4	1 1/32	4 1/4	5	3 3/32	23/64	7/8	1
PRB-161	UCLP206-19	1 1/8	4,390	1 3/8	6 1/2	1 3/4	1 1/32	4 1/4	5	3 3/32	23/64	7/8	1
PRB-163	UCLP207-20	1 1/4	5,740	1 13/16	6 3/16	1 15/16	2 1/32	4 1/16	5 1/4	3 3/8	3/8	1	1

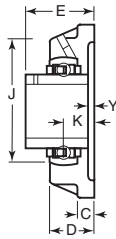
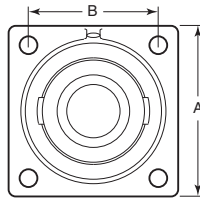
These mounted bearings are used extensively in fabricated equipment because they are easy to fit, maintain and replace. They are sealed and pre-greased, and under normal conditions require no further lubrications (grease fitting is supplied for additional lubrication under adverse conditions.) Housing is made from cast iron. All bearings below have set screw shaft locking.

**Pillow Block**



**Pillow Block**

Item No.	Bore	A	B	C	H	K	M	O	W	Pack Qty.	Item No.	Bore	A	B	C	H	K	M	O	W	Pack Qty.
INA-10	1/2	1 3/16	1 1/4	9/16	2 25/32	7/16	4 1/16	5/8	4 15/16	1	INA-50	1 1/4	1 7/8	1 27/32	3/4	3 11/16	1 19/32	5 1/16	1	6 25/32	1
INA-15	5/8	1 3/16	1 1/4	9/16	2 25/32	7/16	4 1/16	5/8	4 15/16	1	INA-55	1 3/8	1 7/8	1 27/32	3/4	3 11/16	1 19/32	5 1/16	1	6 25/32	1
INA-20	3/4	1 3/16	1 1/4	9/16	2 17/32	7/16	4 1/8	23/32	5 1/2	1	INA-65	1 1/2	1 15/16	1 31/32	.787	3 15/16	1 19/32	5.787	1 3/8	7 3/32	1
INA-25	7/8	1 7/16	1 1/2	1 15/32	2 15/32	1 15/32	4 1/2	25/32	5 1/2	1	INA-80	1 3/4	2 1/8	2 1/2	7/8	4 7/32	9/16	6 1/16	1 3/8	7 11/16	1
INA-35	1	1 7/16	1 15/16	1 15/32	2 15/16	1 15/32	4 1/2	25/32	5 1/2	1	INA-90	2	2 1/2	2 15/32	1	4 31/32	2 25/32	7 3/8	1 3/8	8 7/8	1
INA-40	1 1/8	1 11/16	1 11/16	2 25/32	3 3/32	1 15/32	5	7/8	6 3/16	1											



These mounted bearings are used extensively in fabricating equipment because they are easy to fit, maintain and replace. Made of cast iron housings with a grease fitting for easy lubrication. Pillow block style comes in two types, standard height and low center height.



**Four Bolt Flange  
Standard Duty  
Set Screw Locking - Wide Inner Ring - M-Seal and Flingers**

Item No.	Bore	Load Rating	A	B	C	D	E	J	K	Y	Pack Qty.
SKF-8100	1/2	2,150	3	2 1/8	1 3/32	1 5/16	1 7/32	2 1/8	1 9/32	1/8	1
SKF-8105	5/8	2,150	3	2 1/8	1 3/32	1 5/16	1 7/32	2 1/8	1 9/32	1/8	1
SKF-8110	3/4	2,860	3 3/8	2 1/2	5/8	1 1/8	1 15/32	2 3/8	3/4	1/4	1
SKF-8115	7/8	3,150	3 3/4	2 3/4	5/8	1 3/16	1 17/32	2 3/4	3/4	3/16	1
SKF-8120	1 1/16	3,150	3 3/4	2 3/4	5/8	1 3/16	1 17/32	2 3/4	3/4	3/16	1
SKF-8125	1	3,150	3 3/4	2 3/4	5/8	1 3/16	1 17/32	2 3/4	3/4	3/16	1
SKF-8130	1 1/8	4,390	4 1/4	3 1/4	1 19/32	1 3/8	1 21/32	3 1/4	2 5/32	5/32	1
SKF-8135	1 1/16	4,390	4 1/4	3 3/4	1 19/32	1 3/8	1 21/32	3 1/4	2 5/32	5/32	1
SKF-8140	1 1/4	4,390	4 1/4	3 3/4	1 19/32	1 3/8	1 21/32	3 1/4	2 5/32	5/32	1
SKF-8145	1 1/4	5,740	4 7/8	3 3/8	5/8	1 3/8	1 13/16	3 3/8	1 13/16	1/8	1
SKF-8150	1 1/8	5,740	4 7/8	3 3/8	5/8	1 3/8	1 13/16	3 3/8	1 13/16	1/8	1
SKF-8155	1 1/16	5,740	4 7/8	3 3/8	5/8	1 3/8	1 13/16	3 3/8	1 13/16	1/8	1
SKF-8160	1 1/2	6,910	5 1/2	4	2 1/32	1 17/32	2 3/32	4	2 5/32	5/32	1
SKF-8165	1 11/16	7,470	5 5/8	4 1/8	1 11/16	1 19/32	2 3/32	4 1/4	2 5/32	5/32	1
SKF-8170	1 13/16	7,900	5 5/8	4 3/8	2 5/32	1 3/4	2 1/16	4 3/8	1 1/32	5/32	1
SKF-8175	2	9,810	6 1/8	5 1/8	2 7/32	1 7/8	2 19/32	5	1 1/32	1 1/32	1
SKF-8180	2 1/16	9,810	6 1/8	5 1/8	2 7/32	1 7/8	2 19/32	5	1 1/32	1 1/32	1
SKF-8185	2 1/16	11,900	6 3/8	5 5/8	2 7/32	1 7/8	2 27/32	5 1/2	1 1/32	5/32	1

**Four Bolt Flange  
Standard Duty  
Set Screw Locking - Narrow Inner Ring - M-Seal**



Item No.	Bore	Load Rating	A	B	C	D	E	J	K	Y	Pack Qty.
SKF-437	1/2	2,150	3	2 1/8	1 3/32	1 5/16	1 7/32	2 1/8	1 9/32	2 1/64	1
SKF-438	5/8	2,150	3	2 1/8	1 3/32	1 5/16	1 7/32	2 1/8	1 9/32	2 1/64	1
SKF-439	3/4	2,860	3 3/8	2 1/2	5/8	1 1/8	1 15/32	2 3/8	3/4	1 5/64	1
SKF-440	7/8	3,150	3 3/4	2 3/4	5/8	1 3/16	1 17/32	2 3/4	3/4	2 5/64	1
SKF-442	1	3,150	3 3/4	2 3/4	5/8	1 3/16	1 17/32	2 3/4	3/4	2 5/64	1
SKF-444	1 1/16	4,390	4 1/4	3 3/4	1 19/32	1 3/8	1 21/32	3 1/4	2 5/32	2 5/64	1
SKF-445	1 1/4	4,390	4 1/4	3 3/4	1 19/32	1 3/8	1 21/32	3 1/4	2 5/32	2 5/64	1
SKF-446	1 1/4	5,740	4 7/8	3 3/8	5/8	1 3/8	1 13/16	3 3/8	1 13/16	7/16	1
SKF-447	1 1/8	5,740	4 7/8	3 3/8	5/8	1 3/8	1 13/16	3 3/8	1 13/16	7/16	1
SKF-448	1 1/16	5,740	4 7/8	3 3/8	5/8	1 3/8	1 13/16	3 3/8	1 13/16	7/16	1
SKF-449	1 1/2	6,910	5 1/2	4	2 1/32	1 17/32	2 3/32	4	2 5/32	2 5/64	1
SKF-450	1 11/16	7,470	5 5/8	4 1/8	1 11/16	1 19/32	2 3/32	4 1/4	2 5/32	1 5/32	1
SKF-451	1 3/4	7,470	5 5/8	4 3/8	1 11/16	1 19/32	2 3/32	4 1/4	2 5/32	1 5/32	1
SKF-452	1 15/16	7,900	5 5/8	4 3/8	2 5/32	1 3/4	2 19/64	4 3/8	1 1/32	2 5/64	1
SKF-453	2	9,810	6 1/8	5 1/8	2 7/32	1 7/8	2 1/16	5	1 1/32	4 5/64	1
SKF-454	2 1/16	9,810	6 1/8	5 1/8	2 7/32	1 7/8	2 1/16	5	1 1/32	4 5/64	1

**Four Bolt Flange  
Standard Duty  
Eccentric Locking - Narrow Inner Ring - M-Seal**

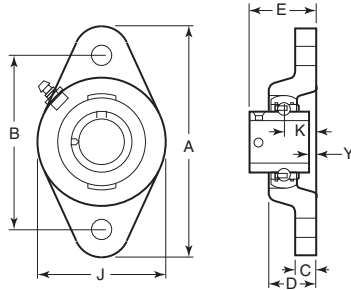


Item No.	Bore	Load Rating	A	B	C	D	E	J	K	Y	Pack Qty.
SKF-8195	3/4	2,860	3 3/8	2 1/2	1 3/32	1 1/8	1 11/16	2 3/8	3/4	2 5/64	1
SKF-8200	7/8	3,150	3 3/4	2 3/4	5/8	1 3/16	1 11/16	2 3/4	3/4	1 5/32	1
SKF-8210	1	3,150	3 3/4	2 3/4	5/8	1 3/16	1 11/16	2 3/4	3/4	1 5/32	1
SKF-8215	1 1/8	4,390	4 1/4	3 3/4	1 19/32	1 3/8	1 27/32	3 3/4	2 5/32	7/16	1
SKF-8220	1 1/16	4,390	4 1/4	3 3/4	1 19/32	1 3/8	1 27/32	3 3/4	2 5/32	7/16	1
SKF-8225	1 1/4	4,390	4 1/4	3 3/4	1 19/32	1 3/8	1 27/32	3 3/4	2 5/32	7/16	1
SKF-8230	1 1/4	5,740	4 7/8	3 3/8	5/8	1 3/8	1 31/32	3 3/8	1 13/16	7/16	1
SKF-8235	1 1/8	5,740	4 7/8	3 3/8	5/8	1 3/8	1 31/32	3 3/8	1 13/16	7/16	1
SKF-8240	1 1/16	5,740	4 7/8	3 3/8	5/8	1 3/8	1 31/32	3 3/8	1 13/16	7/16	1
SKF-8245	1 1/2	6,910	5 1/2	4	2 1/32	1 17/32	2 3/32	4	2 5/32	1 5/32	1
SKF-8250	1 11/16	7,470	5 5/8	4 1/8	1 11/16	1 19/32	2 3/32	4 1/4	2 5/32	1 5/32	1
SKF-8255	1 13/16	7,900	5 5/8	4 3/8	2 5/32	1 3/4	2 1/16	4 3/8	1 1/32	1 5/32	1
SKF-8260	2	9,810	6 1/8	5 1/8	2 7/32	1 7/8	2 19/32	5	1 1/32	1 1/16	1
SKF-8265	2 1/16	9,810	6 1/8	5 1/8	2 7/32	1 7/8	2 19/32	5	1 1/32	1 1/16	1

**Four Bolt Flange  
Standard Duty  
Wide Width - ConCentra Lock  
Air Handling Unit**



Item No.	Bore	Load Rating	A	B	C	D	E	J	K	Y	Pack Qty.
SKF-8300	1	2,150	3	2 1/8	2 5/64	5 9/64	1 1/32	2 1/8	3 7/64	1/8	1
SKF-8290	1 1/16	4,390	4 1/4	3 3/4	3 3/64	1 1/32	1 21/32	3 13/64	2 5/32	5/32	1
SKF-8275	1 1/4	4,390	4 1/4	3 3/4	3 3/64	1 1/32	1 21/32	3 13/64	2 5/32	5/32	1
SKF-8295	1 1/16	5,740	4 11/64	3 3/8	3 3/64	1 29/64	1 5 1/64	3 7/64	5 3/64	9/64	1
SKF-8270	1 1/2	6,910	5 1/8	4	3 5/64	1 39/64	2 9/64	4 11/64	1 5/16	1 3/64	1
SKF-8280	1 11/16	7,470	5 25/64	4 1/8	3 5/64	1 17/32	2 9/64	4 13/64	1 5/16	1 3/64	1
SKF-8285	1 13/16	7,900	5 5/8	4 3/8	1 11/16	1 19/32	2 25/64	4 11/64	1 5/16	2 3/64	1
SKF-8315	2 3/16	9,810	6 3/8	5 1/8	5/8	1 7/8	2 35/64	5 9/32	1 1/32	1 1/32	1
SKF-8320	2 1/16	11,900	6 1/8	5 1/8	4 3/64	2 3/64	2 29/32	5 5/8	1 11/32	1 1/32	1
SKF-8305	2 11/16	12,900	7 3/8	5 5/8	2 1/32	2 1/16	2 55/64	6 1/16	1 1/32	5/32	1
SKF-8310	2 13/16	14,800	7 3/4	6	3/4	2 1/8	3	6 3/8	1 1/16	1/8	1



These mounted bearings are used extensively in fabricating equipment because they are easy to fit, maintain and replace. Made of cast iron housings with a grease fitting for easy lubrication. Pillow block style comes in two types, standard height and low center height.

**Two Bolt Flange  
Standard Duty  
Set Screw Locking - Wide Inner Ring - M-Seal and Flingers**



Item No.	Bore	Load Rating	A	B	C	D	E	J	K	Y	Pack Qty.
SKF-8325	1/2	2,150	3 7/8	3	1 5/32	1 9/16	1 7/32	2 1/8	1 9/32	1 1/8	1
SKF-8330	5/8	2,150	3 7/8	3	1 5/32	1 9/16	1 7/32	2 1/8	1 9/32	1 1/8	1
SKF-8335	3/4	2,860	4 1 3/32	3 1 3/32	7 1/16	3 1/32	1 7/32	2 3/8	9 1/16	5 1/16	1
SKF-8340	1 1/16	3,150	4 7/8	3 2 3/32	5 9/16	1 9/16	1 1 1/32	2 3/4	3 1/4	5 1/16	1
SKF-8345	1	3,150	4 7/8	3 2 3/32	5 9/16	1 9/16	1 1 1/32	2 3/4	3 1/4	5 1/16	1
SKF-8350	1 1/8	4,390	5 1/16	4 1 9/32	1 17/32	1 9/32	1 2 1/32	3 1/8	2 25/32	5 3/32	1
SKF-8355	1 1/16	4,390	5 1/16	4 1 9/32	1 17/32	1 9/32	1 2 1/32	3 1/8	2 25/32	5 3/32	1
SKF-8360	1 1/4	4,390	5 1/16	4 1 9/32	1 17/32	1 9/32	1 2 1/32	3 1/8	2 25/32	5 3/32	1
SKF-8365	1 1/4	5,740	6 1/8	5 1/8	9 1/16	1 1 1/2	1 1 9/16	3 3/8	1 13/16	7 1/8	1
SKF-8370	1 3/8	5,740	6 1/8	5 1/8	9 1/16	1 1 1/2	1 1 9/16	3 3/8	1 13/16	7 1/8	1
SKF-8375	1 1/16	5,740	6 1/8	5 1/8	9 1/16	1 1 1/2	1 1 9/16	3 3/8	1 13/16	7 1/8	1
SKF-8380	1 1/2	6,910	6 3/4	5 2 1/32	9 1/16	1 1 1/2	2 3/32	4	2 29/32	5 3/32	1
SKF-8385	1 1 1/16	7,900	7 1/16	6 3 1/16	2 25/32	1 2 3/32	2 3/32	4 3 1/16	1	1 1/4	1
SKF-8390	2	9,810	8 1/4	7 1/4	1 13/16	1 1/8	2 1 1/32	5	1 1 1/2	9 1/32	1
SKF-8395	2 3/16	9,810	8 1/4	7 1/4	1 13/16	1 1/8	2 1 1/32	5	1 1 1/2	9 1/32	1

**Two Bolt Flange  
Standard Duty  
Set Screw Locking - Narrow Inner Ring - M-Seal**



Item No.	Bore	Load Rating	A	B	C	D	E	J	K	Y	Pack Qty.
SKF-455	1/2	2,150	3 7/8	3	1 5/32	1 9/16	1 1/32	2 1/8	1 9/32	2 1/64	1
SKF-456	5/8	2,150	3 7/8	3	1 5/32	1 9/16	1 1/32	2 1/8	1 9/32	2 1/64	1
SKF-457	3/4	2,860	4 1 3/32	3 1 3/32	7 1/16	3 1/32	1 1/32	2 3/8	9 1/16	9 3/32	1
SKF-458	7/8	3,150	4 7/8	3 2 3/32	5 9/16	1 9/16	1 1 3/32	2 3/4	3 1/4	2 29/64	1
SKF-459	1 1/16	3,150	4 7/8	3 2 3/32	5 9/16	1 9/16	1 1 3/32	2 3/4	3 1/4	2 29/64	1
SKF-460	1	3,150	4 7/8	3 2 3/32	5 9/16	1 9/16	1 1 3/32	2 3/4	3 1/4	2 29/64	1
SKF-462	1 1/16	4,390	5 1/16	4 1 9/32	1 17/32	1 9/32	1 2 1/32	3 1/8	2 25/32	2 27/64	1
SKF-463	1 1/4	4,390	5 1/16	4 1 9/32	1 17/32	1 9/32	1 2 1/32	3 1/8	2 25/32	2 27/64	1
SKF-464	1 1/4	5,740	6 1/8	5 1/8	9 1/16	1 1 1/2	1 1 9/16	3 3/8	1 13/16	7 1/16	1
SKF-465	1 3/8	5,740	6 1/8	5 1/8	9 1/16	1 1 1/2	1 1 9/16	3 3/8	1 13/16	7 1/16	1
SKF-466	1 1/16	5,740	6 1/8	5 1/8	9 1/16	1 1 1/2	1 1 9/16	3 3/8	1 13/16	7 1/16	1
SKF-467	1 1/2	6,910	6 3/4	5 2 1/32	9 1/16	1 1 1/2	2 3/32	4	2 29/32	2 29/64	1
SKF-468	1 1 1/16	7,470	7 1/16	5 2 1/32	5 9/16	1 1 1/2	2 3/32	4 1/4	2 29/32	1 15/32	1

**Two Bolt Flange  
Standard Duty  
Eccentric Locking - Narrow Inner Ring - M-Seal**



Item No.	Bore	Load Rating	A	B	C	D	E	J	K	Y	Pack Qty.
SKF-8400	1/2	2,150	3 7/8	3	1 5/32	1 9/16	1 7/16	2 1/8	1 9/32	2 1/64	1
SKF-8405	5/8	2,150	3 7/8	3	1 5/32	1 9/16	1 7/16	2 1/8	1 9/32	2 1/64	1
SKF-8410	3/4	2,860	4 1 3/32	3 1 3/32	7 1/16	3 1/32	1 1/2	2 3/8	9 1/16	2 29/64	1
SKF-8415	7/8	3,150	4 7/8	3 2 3/32	5 9/16	1 9/16	1 1 1/16	2 3/4	3 1/4	2 29/64	1
SKF-8420	1 1/16	3,150	4 7/8	3 2 3/32	5 9/16	1 9/16	1 1 1/16	2 3/4	3 1/4	2 29/64	1
SKF-8425	1	3,150	4 7/8	3 2 3/32	5 9/16	1 9/16	1 1 1/16	2 3/4	3 1/4	2 29/64	1
SKF-8430	1 1/8	4,390	5 1/16	4 1 9/32	1 17/32	1 9/32	1 2 1/32	3 1/8	2 25/32	2 27/64	1
SKF-8435	1 1/16	4,390	5 1/16	4 1 9/32	1 17/32	1 9/32	1 2 1/32	3 1/8	2 25/32	2 27/64	1
SKF-8440	1 1/4	4,390	5 1/16	4 1 9/32	1 17/32	1 9/32	1 2 1/32	3 1/8	2 25/32	2 27/64	1
SKF-8445	1 1/4	5,740	6 1/8	5 1/8	9 1/16	1 1 1/2	1 3 1/32	3 3/8	1 13/16	7 1/16	1
SKF-8450	1 3/8	5,740	6 1/8	5 1/8	9 1/16	1 1 1/2	1 3 1/32	3 3/8	1 13/16	7 1/16	1
SKF-8455	1 1/16	5,740	6 1/8	5 1/8	9 1/16	1 1 1/2	1 3 1/32	3 3/8	1 13/16	7 1/16	1
SKF-8460	1 1/2	6,910	6 3/4	5 2 1/32	9 1/16	1 1 1/2	2 3 1/16	4	2 29/32	1 15/32	1
SKF-8465	1 1 1/16	7,900	7 1/16	6 3 1/16	2 25/32	1 2 3/32	2 3/32	4 3 1/16	1	9 1/16	1
SKF-8470	2	9,810	8 1/2	7 1/4	1 13/16	1 1/8	2 1 1/32	5	1 1 1/2	1 11/16	1

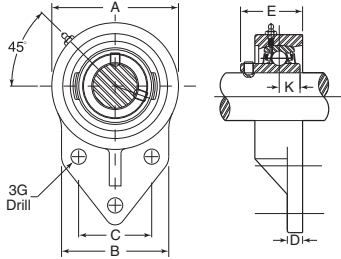


Full stainless bearing units are the most common solution for hostile chemical wash down applications. All metal bearing insert components are 302, 304, or 440 stainless steel, have silicone rubber seals, utilize H-1 food grade grease and have an operating temperature range of -10 degrees Fahrenheit to 250 degrees Fahrenheit.

The solid 304 stainless housings have a fully machined base and an extremely smooth surface finish, essential for demanding wash down installations. These housings do not experience flaking, cracking, deformation or discoloration and are virtually unaffected by scrapes.

**3-Bolt Flange Bracket Units  
All Stainless Steel  
B-Type Seals  
Set Screw Locking**

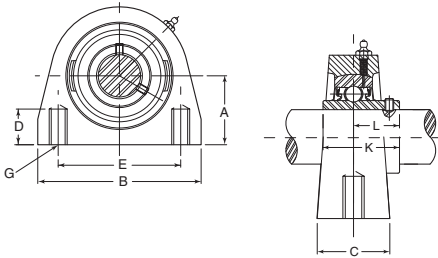
**Food Grade**



Item No.	Bore Diameter	A	B	C	D	E	G	K	Pack Qty.
<b>Inch</b>									
IP-81	1/2	2 1/2	2 3/8	1 1/2	5/16	1 23/64	25/64	0.5000	1
IP-82	5/8	2 1/2	2 3/8	1 1/2	5/16	1 23/64	25/64	0.5000	1
IP-83	3/4	2 1/2	2 3/8	1 1/2	5/16	1 23/64	25/64	0.5000	1
IP-85	7/8	2 3/4	2 1/2	1 5/8	3/8	1 39/64	25/64	0.5630	1
IP-87	1	2 3/4	2 1/2	1 5/8	3/8	1 39/64	25/64	0.5630	1
IP-88	1 1/8	3 1/4	2 3/4	1 7/8	3/8	1 37/64	25/64	0.6260	1
IP-90	1 1/16	3 1/4	2 3/4	1 7/8	3/8	1 37/64	25/64	0.6260	1
IP-91	1 1/4	3 3/4	2 3/4	1 7/8	3/8	1 37/64	25/64	0.6260	1
IP-92	1 1/4	3 3/4	3 1/4	2	1/2	1 53/64	34/64	0.6890	1
IP-93	1 1/16	3 3/4	3 1/4	2	1/2	1 53/64	34/64	0.6890	1
IP-94	1 3/8	3 3/4	3 1/4	2	1/2	1 53/64	34/64	0.6890	1
IP-96	1 7/16	3 3/4	3 1/4	2	1/2	1 53/64	34/64	0.6890	1
IP-97	1 15/16	4 3/8	4	2 3/4	1/2	2 25/32	35/64	0.7480	1
IP-99	2	4 3/8	4	2 3/4	1/2	2 25/32	35/64	0.7480	1
<b>Metric</b>									
IP-84	20	64	60	38.1	8	34.3	9.9	12.7	1
IP-86	25	70	64	28.6	9.5	41.0	9.9	14.3	1
IP-89	30	83	70	47.6	9.5	40.2	9.9	15.9	1
IP-95	35	95	83	50.8	13	46.4	13.1	17.5	1
IP-98	50	118	102	69.9	13	54.6	13.1	19.0	1

**Tapped Base Units  
All Stainless Steel  
B-Type Seals  
Set Screw Locking**

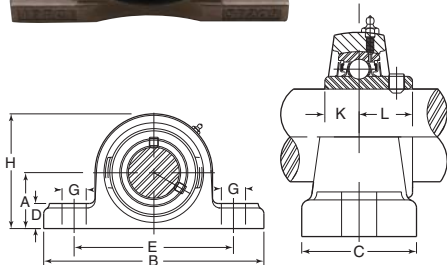
**Food Grade**



Item No.	Bore Diameter	A	B	C	D	E	G	K	L	Pack Qty.
<b>Inch</b>										
IP-100	1/2	1 1/16	2 7/8	1 1/2	1/2	2	3/8-16	1.2205	.7205	1
IP-101	5/8	1 1/16	2 7/8	1 1/2	1/2	2	3/8-16	1.2205	.7205	1
IP-102	3/4	1 1/16	2 7/8	1 1/2	1/2	2	3/8-16	1.2205	.7205	1
IP-104	7/8	1 1/16	3	1 1/2	1/2	2	3/8-16	1.3386	.7756	1
IP-106	1	1 1/16	3	1 1/2	1/2	2	3/8-16	1.3386	.7756	1
IP-107	1 1/8	1 11/16	4	1 1/2	5/8	2	7/16-14	1.5000	.8740	1
IP-109	1 3/16	1 11/16	4	1 1/2	5/8	3	7/16-14	1.5000	.8740	1
IP-110	1 1/4	1 11/16	4	1 1/2	5/8	3	7/16-14	1.5000	.8740	1
IP-111	1 1/4	1 7/8	4 1/4	1 7/8	3/4	3 1/4	1/2-13	1.6890	1.0000	1
IP-112	1 3/8	1 7/8	4 1/4	1 7/8	3/4	3 1/4	1/2-13	1.6890	1.0000	1
IP-113	1 3/8	1 7/8	4 1/4	1 7/8	3/4	3 1/4	1/2-13	1.6890	1.0000	1
IP-115	1 7/16	1 7/8	4 1/4	1 7/8	3/4	3 1/4	1/2-13	1.6890	1.0000	1
IP-116	1 1/2	1 15/16	4 5/8	1 7/8	3/4	3 1/2	1/2-13	1.9370	1.1890	1
IP-118	1 11/16	2 1/8	5	2	3/4	3 3/4	1/2-13	1.9370	1.1890	1
IP-119	1 3/4	2 1/8	5	2	3/4	3 3/4	1/2-13	1.9370	1.1890	1
IP-121	1 15/16	2 1/4	5 1/2	2	7/8	4	5/8-11	2.0315	1.2835	1
IP-123	2	2 1/4	5 1/2	2	7/8	4	5/8-11	2.0315	1.2835	1
<b>Metric</b>										
IP-103	20	33.3	73	38	13	50.8	UNC	31.0	18.3	1
IP-105	25	36.5	76	38	13	50.8	UNC	34.0	19.7	1
IP-108	30	42.9	102	38	16	76.2	UNC	38.1	22.2	1
IP-114	35	47.6	108	48	19	82.6	UNC	42.9	25.4	1
IP-117	40	49.2	117	48	19	88.9	UNC	49.2	30.2	1
IP-120	45	54.0	127	50.8	19	95.3	UNC	49.2	30.2	1
IP-122	50	57.2	140	101.6	22	50.8	UNC	51.6	32.6	1

**Pillow Blocks  
All Stainless Steel  
B-Type Seals  
Set Screw Locking**

**Food Grade**



Item No.	Bore Diameter	A	B	C	D	E	G	H	K	L	Pack Qty.
<b>Inch</b>											
IP-1	1/2	1 1/16	5	1 1/2	1 9/32	3 3/4	1 1/16	2 7/16	0.5000	0.7205	1
IP-2	5/8	1 1/16	5	1 1/2	1 9/32	3 3/4	1 1/16	2 7/16	0.5000	0.7205	1
IP-3	3/4	1 1/16	5	1 1/2	1 9/32	3 3/4	1 1/16	2 7/16	0.5000	0.7205	1
IP-5	7/8	1 1/16	5 19/32	1 1/2	5/8	4 1/8	1 1/16	2 3/4	0.5630	0.7756	1
IP-7	1	1 1/16	5 19/32	1 1/2	5/8	4 1/8	1 1/16	2 3/4	0.5630	0.7756	1
IP-8	1 1/8	1 11/16	6 17/32	1 1/2	5/8	4 1/8	1 3/16	3 19/64	0.6260	0.8740	1
IP-10	1 3/16	1 11/16	6 17/32	1 1/2	5/8	4 1/8	1 3/16	3 19/64	0.6260	0.8740	1
IP-11	1 1/4	1 11/16	6 17/32	1 1/2	5/8	4 1/8	1 3/16	3 19/64	0.6260	0.8740	1
IP-12	1 1/4	1 7/8	6 17/32	1 1/2	5/8	4 1/8	1 3/16	3 19/64	0.6890	1.0000	1
IP-13	1 3/8	1 7/8	6 17/32	1 1/2	5/8	4 1/8	1 3/16	3 19/64	0.6890	1.0000	1
IP-14	1 3/8	1 7/8	6 17/32	1 1/2	5/8	4 1/8	1 3/16	3 19/64	0.6890	1.0000	1
IP-16	1 7/8	1 7/8	6 17/32	1 1/2	5/8	4 1/8	1 3/16	3 19/64	0.6890	1.0000	1
IP-17	1 1/2	1 15/16	7 1/4	2	25/32	5 3/8	7/8	3 11/16	0.7480	1.1890	1
IP-19	1 11/16	2 1/8	7 1/4	2 1/16	25/32	5 3/8	13/16	4 7/32	0.7480	1.1890	1
IP-20	1 3/4	2 1/8	7 1/4	2 1/16	25/32	5 3/8	13/16	4 7/32	0.7480	1.1890	1
IP-22	1 15/16	2 1/4	8	2 9/16	7/8	6 1/4	1 5/16	4 1/2	0.7480	1.2835	1
IP-24	2	2 1/4	8	2 9/16	7/8	6 1/4	1 5/16	4 1/2	0.7480	1.2835	1
IP-25	2	2 1/2	8 17/32	2 3/8	7/8	6 7/8	1 5/16	4 9/16	0.8740	1.3150	1
IP-26	2 3/16	2 1/2	8 17/32	2 3/8	7/8	6 7/8	1 5/16	4 9/16	0.8740	1.3150	1
IP-27	2 1/4	2 3/4	9 15/32	2 1/2	1	7 11/32	1	5	1.0000	1.5630	1
IP-28	2 1/16	2 3/4	9 15/32	2 1/2	1	7 11/32	1	5	1.0000	1.5630	1
<b>Metric</b>											
IP-4	20	33.3	127	38	15	127	17	65	12.7	18.3	1
IP-6	25	36.5	139	38	16	105	17	70	14.3	19.7	1
IP-9	30	42.9	163	47	18	121	21	84	15.9	22.2	1
IP-15	35	47.6	166	48	19	127	22	94	25.4	17.5	1
IP-18	40	49.2	184	51	20	136	22	100	19.0	30.2	1
IP-21	45	54	190	52	49.2	146	21	107	19.0	30.2	1
IP-23	50	57.2	203	59	22	159	24	114	19.0	32.6	1

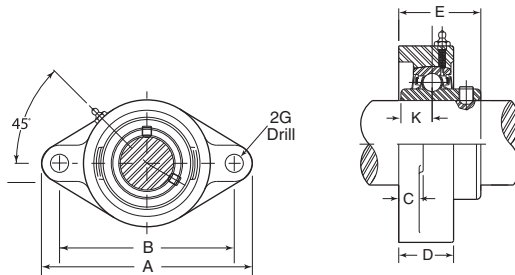


Full stainless bearing units are the most common solution for hostile chemical wash down applications. All metal bearing insert components are 302, 304, or 440 stainless steel, have silicone rubber seals, utilize H-1 food grade grease and have an operating temperature range of -10° F to 250° F.

The solid 304 stainless housings have a fully machined base and an extremely smooth surface finish, essential for demanding wash down installations. These housings do not experience flaking, cracking, deformation or discoloration and are virtually unaffected by scrapes.

**2-Bolt Flange Units**  
**All Stainless Steel**  
**B-Type Seals**  
**Set Screw Locking**

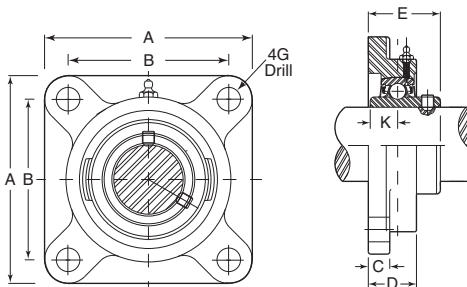
**Food Grade**



Item No.	Bore Diameter	A	B	C	D	E	G	K	Pack Qty.
<b>Inch</b>									
IP-57	1/2	4 19/32	3 17/32	7/16	1	1 1/16	25/64	0.5000	1
IP-58	5/8	4 19/32	3 17/32	7/16	1	1 1/16	25/64	0.5000	1
IP-59	3/4	4 19/32	3 17/32	7/16	1	1 1/16	25/64	0.5000	1
IP-61	7/8	4 7/8	3 57/64	1/2	1 1/16	1 13/32	15/32	0.5630	1
IP-63	1	4 7/8	3 57/64	1/2	1 1/16	1 13/32	15/32	0.5630	1
IP-64	1 1/8	5 1/16	4 19/32	1/2	1 7/32	1 13/32	15/32	0.6260	1
IP-66	1 1/16	5 1/16	4 19/32	1/2	1 7/32	1 13/32	15/32	0.6260	1
IP-67	1 1/4	5 1/16	4 19/32	1/2	1 7/32	1 13/32	15/32	0.6260	1
IP-68	1 1/4	6 1/8	5 1/8	3/16	1 11/32	1 3/4	33/64	0.6890	1
IP-69	1 3/16	6 1/8	5 1/8	3/16	1 11/32	1 3/4	33/64	0.6890	1
IP-70	1 3/8	6 1/8	5 1/8	3/16	1 11/32	1 3/4	33/64	0.6890	1
IP-72	1 7/16	6 1/8	5 1/8	3/16	1 11/32	1 3/4	33/64	0.6890	1
IP-73	1 1/2	6 3/4	5 7/32	3/16	1 19/32	2	33/64	0.7480	1
IP-75	1 13/16	7 1/16	5 7/32	19/32	1 1/2	2 1/16	19/32	0.7480	1
IP-76	1 3/4	7 1/16	5 7/32	19/32	1 1/2	2 1/16	19/32	0.7480	1
IP-78	1 15/16	7 1/16	6 1/16	19/32	1 15/16	2 3/32	19/32	0.7480	1
IP-80	2	7 1/16	6 1/16	19/32	1 15/16	2 5/32	19/32	0.7480	1
<b>Metric</b>									
IP-60	20	114	89.7	11	25	33.3	10	12.7	1
IP-62	25	124	98.8	13	27	35.7	11.9	14.3	1
IP-65	30	141	116.7	13	31	40.5	11.9	15.9	1
IP-71	35	155	130.2	14	34	44.5	13	17.5	1
IP-74	40	171	143.7	14	36	50.8	13	19.0	1
IP-77	45	179	148.4	15	38	52.4	15	19.0	1
IP-79	50	189	157	15	40	54.8	15	19.0	1

**4-Bolt Flange Units**  
**All Stainless Steel**  
**B-Type Seals**  
**Set Screw Locking**

**Food Grade**



Item No.	Bore Diameter	A	B	C	D	E	G	K	Pack Qty.
<b>Inch</b>									
IP-29	1/2	3 3/8	2 1/2	7/16	1	1 1/16	7/16	0.5	1
IP-30	5/8	3 3/8	2 1/2	7/16	1	1 1/16	7/16	0.5	1
IP-31	3/4	3 3/8	2 1/2	7/16	1	1 1/16	7/16	0.5	1
IP-33	7/8	3 3/4	2 3/4	1/2	1 1/16	1 13/32	29/64	0.5630	1
IP-35	1	3 3/4	2 3/4	1/2	1 1/16	1 13/32	29/64	0.5630	1
IP-36	1 1/8	4 1/4	3 1/4	1/2	1 7/32	1 19/32	33/64	0.6260	1
IP-38	1 1/16	4 1/4	3 1/4	1/2	1 7/32	1 19/32	33/64	0.6260	1
IP-39	1 1/4	4 1/4	3 1/4	1/2	1 7/32	1 19/32	33/64	0.6260	1
IP-40	1 1/4	4 19/32	3 3/8	19/32	1 11/32	1 3/4	33/64	0.6890	1
IP-41	1 3/16	4 19/32	3 3/8	19/32	1 11/32	1 3/4	33/64	0.6890	1
IP-42	1 3/8	4 19/32	3 3/8	19/32	1 11/32	1 3/4	33/64	0.6890	1
IP-44	1 7/16	4 19/32	3 3/8	19/32	1 11/32	1 3/4	33/64	0.6890	1
IP-45	1 1/2	5 1/8	4	19/32	1 19/32	2 1/32	35/64	0.7480	1
IP-47	1 13/16	5 13/32	4 1/8	5/8	1 1/2	2 1/16	5/8	0.7480	1
IP-48	1 3/4	5 13/32	4 1/8	5/8	1 1/2	2 1/16	5/8	0.7480	1
IP-50	1 15/16	5 5/8	4 3/8	5/8	1 19/16	2 5/32	5/8	0.7480	1
IP-52	2	5 5/8	4 3/8	5/8	1 19/16	2 5/32	5/8	0.7480	1
IP-53	2	6 3/8	5 1/8	23/32	1 11/16	2 5/16	43/64	0.8740	1
IP-54	2 3/16	6 3/8	5 1/8	23/32	1 11/16	2 5/16	43/64	0.8740	1
IP-55	2 1/4	6 7/8	5 3/8	23/32	1 7/8	2 23/32	43/64	1.0000	1
IP-56	2 1/16	6 7/8	5 3/8	23/32	1 7/8	2 23/32	43/64	1.0000	1
<b>Metric</b>									
IP-32	20	86	64	11	25.4	33.3	11	12.7	1
IP-34	25	95	70	13	27	35.7	11.5	14.3	1
IP-37	30	108	83	13	31	40.2	13	15.9	1
IP-43	35	117	92	15	34	44.4	13	17.5	1
IP-46	40	130	102	15	36	51.2	14	19.0	1
IP-49	45	137	105	16	38	52.2	16	19.0	1
IP-51	50	143	111	16	40	54.6	16	19.0	1

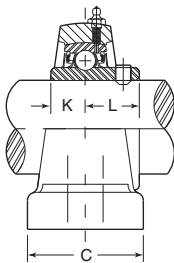
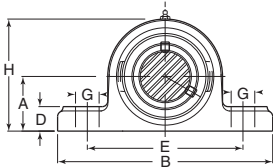


Thermoplastic housed units offer a more favorable economic choice. Available with either stainless inserts, for a higher level of corrosion resistance, or hard chrome coated inserts, where intermediate level corrosion resistance, balanced with further savings, is desired.

Thermoplastic housings are off-white in color and are made from glass reinforced PBT resin. These units offer favorable chemical resistance, are very resistant to moisture absorption and have excellent mechanical, thermal and electrical properties. Operating ranges for thermoplastic housed units are from -10 degrees Fahrenheit to 210 degrees Fahrenheit.

All thermoplastic housings are made with extremely smooth surfaces, have solid bases and all sleeves, bushings and grease fittings are made from 300 series stainless steel.

**Pillow Blocks  
Thermoplastic  
B-Type Seals  
Set Screw Locking**

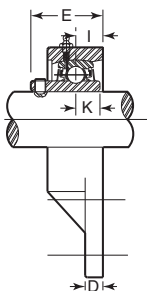
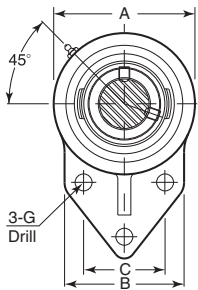


**Food Grade**

Item No.	Bore Diameter	A	B	C	D	E	G	H	K	L	Pack Qty.
<b>Stainless Steel Bearing Inserts - Inch</b>											
IP-124	1/2	1 1/16	5	1 1/2	9/16	3 3/4	9/16	2 1/32	0.5000	0.7205	1
IP-125	5/8	1 1/16	5	1 1/2	9/16	3 3/4	9/16	2 1/32	0.5000	0.7205	1
IP-126	3/4	1 1/16	5	1 1/2	9/16	3 3/4	9/16	2 1/32	0.5000	0.7205	1
IP-128	7/8	1 7/16	5 1/2	1 1/2	9/16	4 1/8	9/16	2 1/16	0.5630	0.7756	1
IP-130	1	1 7/16	5 1/2	1 1/2	9/16	4 1/8	9/16	2 1/16	0.5630	0.7756	1
IP-131	1 1/8	1 11/16	6 1/32	1 13/16	1 1/16	4 11/16	23/32	3 1/64	0.626	0.8740	1
IP-133	1 1/8	1 11/16	6 1/32	1 13/16	1 1/16	4 11/16	23/32	3 1/64	0.626	0.8740	1
IP-134	1 1/4	1 11/16	6 1/32	1 13/16	1 1/16	4 11/16	23/32	3 1/64	0.626	0.8740	1
IP-135	1 1/4	1 7/8	6 5/8	1 29/32	1 1/16	5	23/32	3 1/16	0.6890	1.0000	1
IP-136	1 3/8	1 7/8	6 5/8	1 29/32	1 1/16	5	23/32	3 1/16	0.6890	1.0000	1
IP-137	1 3/8	1 7/8	6 5/8	1 29/32	1 1/16	5	23/32	3 1/16	0.6890	1.0000	1
IP-139	1 7/8	1 7/8	6 5/8	1 29/32	1 1/16	5	23/32	3 1/16	0.6890	1.0000	1
IP-140	1 1/2	1 15/16	7 1/4	2 1/8	29/32	5 7/16	23/32	3 29/32	0.7480	1.1890	1
<b>Hard Chrome Coated Bearing Inserts - Inch</b>											
IP-212	3/4	1 1/16	5	1 1/2	9/16	3 3/4	9/16	2 1/32	0.5000	0.7205	1
IP-214	7/8	1 7/16	5 1/2	1 1/2	9/16	4 1/8	9/16	2 1/16	0.5630	0.7756	1
IP-216	1	1 7/16	5 1/2	1 1/2	9/16	4 1/8	9/16	2 1/16	0.5630	0.7756	1
IP-217	1 1/8	1 11/16	6 1/32	1 13/16	1 1/16	4 11/16	23/32	3 1/64	0.626	0.8740	1
IP-219	1 1/8	1 11/16	6 1/32	1 13/16	1 1/16	4 11/16	23/32	3 1/64	0.626	0.8740	1
IP-220	1 1/4	1 11/16	6 1/32	1 13/16	1 1/16	4 11/16	23/32	3 1/64	0.626	0.8740	1
IP-221	1 1/4	1 7/8	6 5/8	1 29/32	1 1/16	5	23/32	3 1/16	0.6890	1.0000	1
IP-222	1 3/8	1 7/8	6 5/8	1 29/32	1 1/16	5	23/32	3 1/16	0.6890	1.0000	1
IP-224	1 7/8	1 7/8	6 5/8	1 29/32	1 1/16	5	23/32	3 1/16	0.6890	1.0000	1
IP-225	1 1/2	1 15/16	7 1/4	2 1/8	29/32	5 7/16	23/32	3 29/32	0.7480	1.1890	1
<b>Stainless Steel Bearing Inserts - Metric</b>											
IP-127	20	33.3	127	38	14	95	14	14	12.7	18.3	1
IP-129	25	36.5	140	38	14	105	14	71	14.3	19.7	1
IP-132	30	42.9	163	46	18	119	18	84	15.9	22.2	1
IP-138	35	47.6	168	48	18	127	18	94	17.5	25.4	1
IP-141	40	49.2	184	54	20	137	18	99	19.0	30.2	1
<b>Hard Chrome Coated Bearing Inserts - Metric</b>											
IP-213	20	33.3	127	38	14	95	14	14	12.7	18.3	1
IP-215	25	36.5	140	38	14	105	14	71	14.3	19.7	1
IP-218	30	42.9	163	46	18	119	18	84	15.9	22.2	1
IP-223	35	47.6	168	48	18	127	18	94	17.5	25.4	1
IP-226	40	49.2	184	54	20	137	18	99	19.0	30.2	1

**3-Bolt Flange Bracket Units  
Thermoplastic  
B-Type Seal  
Set Screw Locking**

**Food Grade**



Item No.	Bore Diameter	A	B	C	D	E	G	K	Pack Qty.
<b>Stainless Steel Bearing Inserts - Inch</b>									
IP-196	1/2	2 1/2	2 7/16	1 1/2	7/16	1 5/16	25/64	0.5000	1
IP-197	5/8	2 1/2	2 7/16	1 1/2	7/16	1 5/16	25/64	0.5000	1
IP-198	3/4	2 1/2	2 7/16	1 1/2	7/16	1 5/16	25/64	0.5000	1
IP-200	7/8	2 3/4	2 1/2	1 5/8	7/16	1 15/32	25/64	0.5630	1
IP-202	1	2 3/4	2 1/2	1 5/8	7/16	1 15/32	25/64	0.5630	1
IP-203	1 1/8	3 1/4	3	1 7/8	7/16	1 15/32	25/64	0.6260	1
IP-205	1 3/8	3 1/4	3	1 7/8	7/16	1 15/32	25/64	0.6260	1
IP-206	1 1/4	3 1/4	3	1 7/8	7/16	1 15/32	25/64	0.6260	1
IP-207	1 1/4	3 3/4	3 1/2	2	4 1/64	1 49/64	33/64	0.6890	1
IP-208	1 3/8	3 3/4	3 1/2	2	4 1/64	1 49/64	33/64	0.6890	1
IP-209	1 3/8	3 3/4	3 1/2	2	4 1/64	1 49/64	33/64	0.6890	1
IP-211	1 7/8	3 3/4	3 1/2	2	4 1/64	1 49/64	33/64	0.6890	1
<b>Hard Chrome Coated Bearing Inserts - Inch</b>									
IP-272	3/4	2 1/2	2 7/16	1 1/2	7/16	1 5/16	25/64	0.5000	1
IP-274	7/8	2 3/4	2 1/2	1 5/8	7/16	1 15/32	25/64	0.5630	1
IP-276	1	2 3/4	2 1/2	1 5/8	7/16	1 15/32	25/64	0.5630	1
IP-277	1 1/8	3 1/4	3	1 7/8	7/16	1 15/32	25/64	0.6260	1
IP-279	1 3/8	3 1/4	3	1 7/8	7/16	1 15/32	25/64	0.6260	1
IP-280	1 1/4	3 1/4	3	1 7/8	7/16	1 15/32	25/64	0.6260	1
IP-281	1 1/4	3 3/4	3 1/2	2	4 1/64	1 49/64	33/64	0.6890	1
IP-282	1 3/8	3 3/4	3 1/2	2	4 1/64	1 49/64	33/64	0.6890	1
IP-284	1 7/8	3 3/4	3 1/2	2	4 1/64	1 49/64	33/64	0.6890	1
<b>Stainless Steel Bearing Inserts - Metric</b>									
IP-199	20	64	62	38.1	11	33.3	9.9	12.7	1
IP-201	25	70	64	41.3	11	37.1	9.9	14.3	1
IP-204	30	83	76	47.6	13	40.6	9.9	15.9	1
IP-210	35	95	89	50.8	16	45.0	13.1	17.5	1
<b>Hard Chrome Coated Bearing Inserts - Metric</b>									
IP-273	20	64	62	38.1	11	33.3	9.9	12.7	1
IP-275	25	70	64	41.3	11	37.1	9.9	14.3	1
IP-278	30	83	76	47.6	13	40.6	9.9	15.9	1
IP-283	35	95	89	50.8	16	45.0	13.1	17.5	1



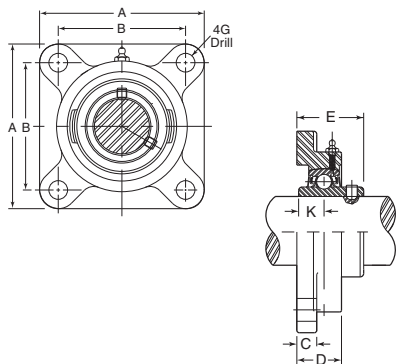
Thermoplastic housed units offer a more favorable economic choice. Available with either stainless inserts, for a higher level of corrosion resistance, or hard chrome coated inserts, where intermediate level corrosion resistance, balanced with further savings, is desired.

Thermoplastic housings are off-white in color and are made from glass reinforced PBT resin. These units offer favorable chemical resistance, are very resistant to moisture absorption and have excellent mechanical, thermal and electrical properties. Operating ranges for thermoplastic housed units are from -10 degrees Fahrenheit to 210 degrees Fahrenheit.

All thermoplastic housings are made with extremely smooth surfaces, have solid bases and all sleeves, bushings and grease fittings are made from 300 series stainless steel.

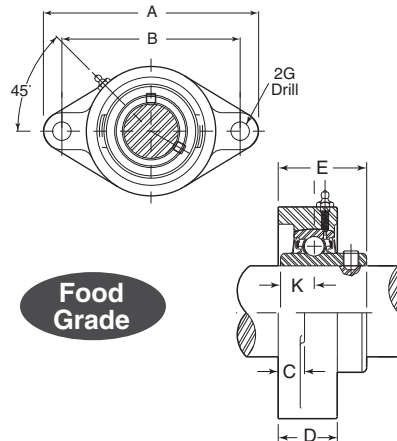
**4-Bolt Flanges  
Thermoplastic  
B-Type Seals  
Set Screw Locking**

**Food Grade**



Item No.	Bore Diameter	A	B	C	D	E	G	K	Pack Qty.
<b>Stainless Steel Bearing Inserts - Inch</b>									
IP-142	1/2	3 3/8	2 1/2	1 7/32	1 3/32	1 1/16	7/16	.5000	1
IP-143	5/8	3 3/8	2 1/2	1 7/32	1 3/32	1 1/16	7/16	.5000	1
IP-144	3/4	3 3/8	2 1/2	1 7/32	1 3/32	1 1/16	7/16	.5000	1
IP-146	7/8	3 3/4	2 3/4	9/16	1 3/32	1 1/16	7/16	.5630	1
IP-148	1	3 3/4	2 3/4	9/16	1 3/32	1 1/16	7/16	.5630	1
IP-149	1 1/8	4 1/4	3 1/4	9/16	1 1/4	1 5/8	7/16	.6260	1
IP-151	1 1/16	4 1/4	3 1/4	9/16	1 1/4	1 5/8	7/16	.6260	1
IP-152	1 1/4	4 1/4	3 1/4	9/16	1 1/4	1 5/8	7/16	.6260	1
IP-153	1 1/4	4 21/32	3 3/8	5/8	1 3/8	1 27/32	33/64	.6890	1
IP-154	1 3/16	4 21/32	3 3/8	5/8	1 3/8	1 27/32	33/64	.6890	1
IP-155	1 3/8	4 21/32	3 3/8	5/8	1 3/8	1 27/32	33/64	.6890	1
IP-157	1 1/16	4 21/32	3 3/8	5/8	1 3/8	1 27/32	33/64	.6890	1
IP-158	1 1/2	5 1/8	4	2 1/32	1 15/32	2 3/32	35/64	.7480	1
<b>Hard Chrome Coated Bearing Inserts - Inch</b>									
IP-227	3/4	3 3/8	2 1/2	1 7/32	1 3/32	1 1/16	7/16	.5000	1
IP-229	7/8	3 3/4	2 3/4	9/16	1 3/32	1 1/16	7/16	.5630	1
IP-231	1	3 3/4	2 3/4	9/16	1 3/32	1 1/16	7/16	.5630	1
IP-232	1 1/8	4 1/4	3 3/4	9/16	1 1/4	1 5/8	7/16	.6260	1
IP-234	1 1/16	4 1/4	3 3/4	9/16	1 1/4	1 5/8	7/16	.6260	1
IP-235	1 1/4	4 1/4	3 3/4	9/16	1 1/4	1 5/8	7/16	.6260	1
IP-236	1 1/4	4 21/32	3 3/8	5/8	1 3/8	1 27/32	33/64	.6890	1
IP-237	1 3/8	4 21/32	3 3/8	5/8	1 3/8	1 27/32	33/64	.6890	1
IP-239	1 1/16	4 21/32	3 3/8	5/8	1 3/8	1 27/32	33/64	.6890	1
IP-240	1 1/2	5 1/8	4	2 1/32	1 15/32	2 3/32	35/64	.7480	1
<b>Stainless Steel Bearing Inserts - Metric</b>									
IP-145	20	86	64	13	28	36.5	11	12.7	1
IP-147	25	95	70	14	28	36.5	11	14.3	1
IP-150	30	108	83	14	32	41.3	11	15.9	1
IP-156	35	118	92	16	35	46.8	13	17.5	1
IP-159	40	130	102	17	37	53.2	14	19.0	1
<b>Hard Chrome Coated Bearing Inserts - Metric</b>									
IP-228	20	86	64	13	28	36.5	11	12.7	1
IP-230	25	95	70	14	28	36.5	11	14.3	1
IP-233	30	108	83	14	32	41.3	11	15.9	1
IP-238	35	118	92	16	35	46.8	13	17.5	1
IP-241	40	130	102	17	37	53.2	14	19.0	1

**2-Bolt Flange  
Thermoplastic  
B-Type Seal  
Set Screw Locking**



**Food Grade**

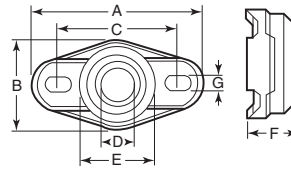
Item No.	Bore Diameter	A	B	C	D	E	G	K	Pack Qty.
<b>Stainless Steel Bearing Inserts - Inch</b>									
IP-160	1/2	4 7/16	3 17/32	7/16	1 1/32	1 21/64	7/16	.5000	1
IP-161	5/8	4 7/16	3 17/32	7/16	1 1/32	1 21/64	7/16	.5000	1
IP-162	3/4	4 7/16	3 17/32	7/16	1 1/32	1 21/64	7/16	.5000	1
IP-164	7/8	5 1/8	3 57/64	1 7/32	1 3/32	1 7/16	7/16	.5630	1
IP-166	1	5 1/8	3 57/64	1 7/32	1 3/32	1 7/16	7/16	.5630	1
IP-167	1 1/8	5 13/16	4 19/32	1 7/32	1 3/32	1 39/64	7/16	.6260	1
IP-169	1 3/16	5 13/16	4 19/32	1 7/32	1 3/32	1 39/64	7/16	.6260	1
IP-170	1 1/4	5 13/16	4 19/32	1 7/32	1 3/32	1 39/64	7/16	.6260	1
IP-171	1 1/4	6 13/32	5 1/8	5/8	1 9/32	1 23/32	33/64	.6890	1
IP-172	1 1/16	6 13/32	5 1/8	5/8	1 9/32	1 23/32	33/64	.6890	1
IP-173	1 3/8	6 13/32	5 1/8	5/8	1 9/32	1 23/32	33/64	.6890	1
IP-175	1 1/16	6 13/32	5 1/8	5/8	1 9/32	1 23/32	33/64	.6890	1
IP-176	1 1/2	6 7/8	5 21/32	25/32	1 15/32	2 3/64	35/64	.7480	1
<b>Hard Chrome Coated Bearing Inserts - Inch</b>									
IP-242	3/4	4 7/16	3 17/32	7/16	1 1/32	1 21/64	7/16	.5000	1
IP-244	7/8	5 1/8	3 57/64	1 7/32	1 3/32	1 7/16	7/16	.5630	1
IP-246	1	5 1/8	3 57/64	1 7/32	1 3/32	1 7/16	7/16	.5630	1
IP-247	1 1/8	5 13/16	4 19/32	1 7/32	1 3/32	1 39/64	7/16	.6260	1
IP-249	1 3/16	5 13/16	4 19/32	1 7/32	1 3/32	1 39/64	7/16	.6260	1
IP-250	1 1/4	5 13/16	4 19/32	1 7/32	1 3/32	1 39/64	7/16	.6260	1
IP-251	1 1/4	6 13/32	5 1/8	5/8	1 9/32	1 23/32	33/64	.6890	1
IP-252	1 3/8	6 13/32	5 1/8	5/8	1 9/32	1 23/32	33/64	.6890	1
IP-254	1 1/16	6 13/32	5 1/8	5/8	1 9/32	1 23/32	33/64	.6890	1
IP-255	1 1/2	6 7/8	5 21/32	25/32	1 15/32	2 3/64	35/64	.7480	1
<b>Stainless Steel Bearing Inserts - Metric</b>									
IP-163	20	113	89.7	11	26	33.7	11	12.7	1
IP-165	25	130	98.8	13	29	36.5	11	14.3	1
IP-168	30	148	116.7	13	31	40.9	11	15.9	1
IP-174	35	164	130.2	16	33	43.7	13	17.5	1
IP-177	40	175	143.7	20	37	52.0	14	19.0	1
<b>Hard Chrome Coated Bearing Inserts - Metric</b>									
IP-243	20	113	89.7	11	26	33.7	11	12.7	1
IP-245	25	130	98.8	13	29	36.5	11	14.3	1
IP-248	30	148	116.7	13	31	40.9	11	15.9	1
IP-253	35	164	130.2	16	33	43.7	13	17.5	1
IP-256	40	175	143.7	20	37	52.0	14	19.0	1





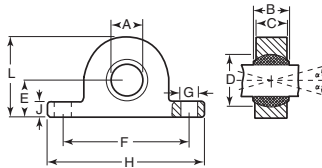
These bearings are self-aligning, maintenance free and made of high performance polymer. Dust, dirt, corrosion and chemical resistant. Vibration dampening capacity. Compensate for misalignment and edge loads. Lightweight and easy to install. Self-lubricating oil-free operation. Operates in temperatures from -40 degrees Fahrenheit to +275 degrees Fahrenheit. Dimensions are in millimeters.

**Flange Bearings**



Item No.	Shaft		Angle of Pivot		A	B	C	D	E	F	G	Max. Static Load	Max. Torque Lbs.	Pack Qty.
	Max.	Min.	Maximum	Recommended										
I-703	8.00	7.964	24	10	44.2	22.3	31	8	18.0	10.5	4.3 x 6.5	247	2.21	1
I-704	10.00	9.964	24	8	52	26	36	10	22.0	12.0	5.3 x 8.0	286	3.31	1
I-705	12.00	11.957	21	7	56.7	31	41	12	25.0	13.0	5.3 x 8.0	337	4.42	1
I-706	16.00	15.957	24	10	72.6	38	53	16	32.0	17.5	6.4 x 10.0	562	6.63	1
I-707	20.00	19.948	17	7	89	47	65	20	40.0	20.0	8.4 x 12.5	675	12.53	1
I-708	25.00	24.948	14	6	101	58.5	75	25	48.5	25.0	8.4 x 12.5	900	14.75	1
I-709	30.00	29.948	12	5	118	65	87.5	30	55.0	26.0	10.5 x 16.0	1,350	16.22	1

**Spherical Pillow Blocks**



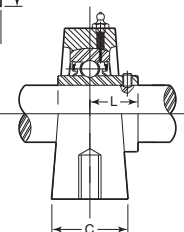
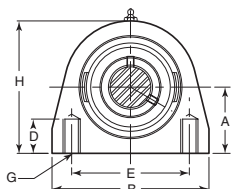
Item No.	A	B	C	D	E	F	G	H	J	L	Pack Qty.
I-591	5	8	6	11.1	7	25	4.5	36	3	14	1
I-592	6	9	7	12.7	10	33	4.5	44	4	20	1
I-594	10	14	10.5	19.0	14	35	5.5	60	6	28	1
I-595	12	16	12	22.2	14	35	5.5	60	6	28	1
I-597	16	21	15	28.5	18	60	6.5	80	6	36	1

Thermoplastic housed units offer a more favorable economic choice. Available with either stainless inserts, for a higher level of corrosion resistance, or hard chrome coated inserts, where intermediate level corrosion resistance, balanced with further savings, is desired.

Thermoplastic housings are off-white in color and are made from glass reinforced PBT resin. These units offer favorable chemical resistance, are very resistant to moisture absorption and have excellent mechanical, thermal and electrical properties. Operating ranges for thermoplastic housed units are from -10 degrees Fahrenheit to 210 degrees Fahrenheit.

All thermoplastic housings are made with extremely smooth surfaces, have solid bases and all sleeves, bushings and grease fittings are made from 300 series stainless steel.

**Tapped Base Pillow Blocks**  
**Thermoplastic**  
**B-Type Seal**  
**Set Screw Locking**



Item No.	Bore Diameter	A	B	C	D	E	G	H	L	Pack Qty.
<b>Stainless Steel Bearing Inserts - Inch</b>										
IP-178	1/2	1 1/16	2 7/8	1 3/8	1/2	2	3/8-16	2 19/32	.7205	1
IP-179	5/8	1 5/16	2 7/8	1 3/8	1/2	2	3/8-16	2 19/32	.7205	1
IP-180	3/4	1 5/16	2 7/8	1 3/8	1/2	2	3/8-16	2 19/32	.7205	1
IP-182	7/8	1 7/16	3	1 9/16	1/2	2	3/8-16	2 29/32	.7756	1
IP-184	1	1 7/16	3	1 9/16	1/2	2	3/8-16	2 29/32	.7756	1
IP-185	1 1/8	1 11/16	4	1 11/16	1/2	3	7/16-14	3 5/16	.8740	1
IP-187	1 1/8	1 11/16	4	1 11/16	1/2	3	7/16-14	3 5/16	.8740	1
IP-188	1 1/4	1 11/16	4	1 11/16	1/2	3	7/16-14	3 5/16	.8740	1
IP-189	1 1/4	1 7/8	4 5/16	1 7/8	4 5/16	3 3/4	1/2-13	3 3/4	1.0000	1
IP-190	1 3/8	1 7/8	4 5/16	1 7/8	4 5/16	3 3/4	1/2-13	3 3/4	1.0000	1
IP-191	1 3/8	1 7/8	4 5/16	1 7/8	4 5/16	3 3/4	1/2-13	3 3/4	1.0000	1
IP-193	1 7/8	1 7/8	4 5/16	1 7/8	4 5/16	3 3/4	1/2-13	3 3/4	1.0000	1
IP-194	1 1/2	1 5/16	4 3/4	1 7/8	4 5/16	3 1/2	1/2-13	4	1.1890	1
<b>Hard Chrome Coated Bearing Inserts - Inch</b>										
IP-257	3/4	1 5/16	2 7/8	1 3/8	1/2	2	3/8-16	2 19/32	.7205	1
IP-259	7/8	1 1/16	3	1 9/16	1/2	2	3/8-16	2 29/32	.7756	1
IP-261	1	1 1/16	3	1 9/16	1/2	2	3/8-16	2 29/32	.7756	1
IP-262	1 1/8	1 11/16	4	1 11/16	1/2	3	7/16-14	3 5/16	.8740	1
IP-264	1 3/8	1 11/16	4	1 11/16	1/2	3	7/16-14	3 5/16	.8740	1
IP-265	1 1/4	1 11/16	4	1 11/16	1/2	3	7/16-14	3 5/16	.8740	1
IP-266	1 1/4	1 7/8	4 5/16	1 7/8	4 5/16	3 3/4	1/2-13	3 3/4	1.0000	1
IP-267	1 3/8	1 7/8	4 5/16	1 7/8	4 5/16	3 3/4	1/2-13	3 3/4	1.0000	1
IP-269	1 1/16	1 7/8	4 5/16	1 7/8	4 5/16	3 3/4	1/2-13	3 3/4	1.0000	1
IP-270	1 1/2	1 5/16	4 3/4	1 7/8	4 5/16	3 1/2	1/2-13	4	1.1890	1
<b>Stainless Steel Bearing Inserts - Metric</b>										
IP-181	20	33.3	73	35	13	50.8	—	66	18.3	1
IP-183	25	36.5	76	40	13	50.8	—	74	19.7	1
IP-186	30	42.9	102	43	13	76.2	—	84	22.2	1
IP-192	35	47.6	110	48	16	82.6	—	95	25.4	1
IP-195	40	49.2	120	48	16	88.9	—	101	30.2	1
<b>Hard Chrome Coated Bearing Inserts - Metric</b>										
IP-258	20	33.3	73	35	13	50.8	—	66	18.3	1
IP-260	25	36.5	76	40	13	50.8	—	74	19.7	1
IP-263	30	42.9	102	43	13	76.2	—	84	22.2	1
IP-268	35	47.6	110	48	16	82.6	—	95	25.4	1
IP-271	40	49.2	120	48	16	88.9	—	101	30.2	1



### Shell Type

Shell type needle roller bearings are lightweight with the lowest sectional height among needle roller bearings with outer ring, because they employ a shell type outer ring made from a thin special-steel plate which is accurately drawn, carburized and quenched.

#### Series BHA Inch



Bearing



Inner Ring

Series BHA are inch heavy duty series of shell type needle roller bearings with caged rollers.

Bearing Item No.	Inner Ring Item No.	Inside Diameter	Outside Diameter	Width	Basic Load Rating (Lbs.)		Pack Qty.
					Dynamic	Static	
IKO-BHA57ZOH	—	5/16	9/16	7/16	4,150	3,730	1
IKO-BHA68ZOH	—	3/8	5/8	1/2	4,880	4,740	1
IKO-BHA78ZOH	—	7/16	11/16	1/2	5,680	5,970	1
IKO-BHA87ZOH	—	1/2	3/4	7/16	5,670	6,120	1
IKO-BHA98ZOH	IKO-IRB68	9/16	13/16	1/2	6,380	7,330	1
IKO-BHA108ZOH	IKO-IRB681	5/8	7/8	1/2	6,680	8,020	1
IKO-BHA1212ZOH	IKO-IRB121	3/4	1 1/16	3/4	16,600	22,600	1
IKO-BHA1410ZOH	—	7/8	1 3/16	5/8	14,300	19,500	1
IKO-BHA168ZOH	IKO-IRB128	1	1 1/16	1/2	10,200	13,100	1
IKO-BHA1812ZOH	IKO-IRB1412	1 1/8	1 1/2	3/4	22,500	32,200	1
IKO-BHA2824ZOH	IKO-IRB2424	1 3/4	2 1/4	1 1/2	72,200	135,000	1

#### Series BA Inch



Bearing



Inner Ring

Series BA are inch standard series of shell type needle roller bearings with caged rollers.

Bearing Item No.	Inner Ring Item No.	Inside Diameter	Outside Diameter	Width	Basic Load Rating (Lbs.)		Pack Qty.
					Dynamic	Static	
IKO-BA44ZOH	—	1/4	7/16	1/4	1,770	1,390	1
IKO-BA55ZOH	—	5/16	1/2	5/16	1,880	1,560	1
IKO-BA65ZOH	—	3/8	9/16	3/8	2,220	2,010	1
IKO-BA76ZOH	—	7/16	5/8	3/8	3,290	3,470	1
IKO-BA85ZOH	—	1/2	11/16	5/16	2,490	2,510	1
IKO-BA95ZOH	—	9/16	3/4	5/16	2,760	2,970	1
IKO-BA108ZOH	IKO-IRB681	5/8	13/16	1/2	5,420	7,310	1
IKO-BA116ZOH	IKO-IRB86	11/16	1	3/8	4,530	5,980	1
IKO-BA126ZOH	—	3/4	7/8	3/8	5,040	5,850	1
IKO-BA136ZOH	—	13/16	1 1/16	3/8	5,230	6,300	1
IKO-BA146ZOH	—	7/8	1 1/8	3/8	5,430	6,740	1
IKO-BA158ZOH	—	15/16	1 3/16	1/2	8,000	11,400	1
IKO-BA166ZOH	—	1	1 1/4	3/8	6,010	8,020	1
IKO-BA1710ZOH	—	1 1/16	1 3/16	5/8	11,600	19,200	1
IKO-BA186ZOH	—	1 1/8	1 1/8	3/8	6,330	8,910	1
IKO-BA1910ZOH	—	1 3/16	1 1/2	5/8	15,000	22,500	1
IKO-BA218ZOH	IKO-IRB1681	1 1/16	1 1/8	1/2	11,100	15,800	1
IKO-BA228ZOH	IKO-IRB188	1 3/8	1 1/8	1/2	9,770	16,600	1
IKO-BA248ZOH	—	1 1/2	1 1/8	1/2	12,900	17,900	1
IKO-BA268ZOH	—	1 5/8	2	3/4	13,700	19,800	1
IKO-BA2812ZOH	—	1 3/4	2 1/8	3/4	25,200	44,500	1
IKO-BA308ZOH	IKO-IRB2481	1 7/8	2 1/4	1/2	14,700	22,800	1
IKO-BA328ZOH	—	2	2 3/8	1/2	15,400	24,700	1
IKO-BA348ZOH	—	2 1/8	2 1/2	1/2	16,100	26,600	1
IKO-BA3612ZOH	—	2 1/4	2 5/8	3/4	28,500	56,700	1
IKO-BA4216ZOH	IKO-IRB3616	2 5/8	3	1	42,000	97,900	1
IKO-BA4410ZOH	—	2 3/4	3 1/8	5/8	25,000	50,800	1

#### Series TLA Metric



Bearing



Inner Ring

Series TLA are metric standard series of shell type needle roller bearings with caged rollers.

Bearing Item No.	Inner Ring Item No.	Inside Diameter mm	Outside Diameter mm	Width mm	Basic Load Rating (Lbs.)		Pack Qty.
					Dynamic	Static	
IKO-TLA910Z	—	9	13	10	3,500	4,040	1
IKO-TLA1010Z	IKO-IRT710	10	14	10	3,870	4,740	1
IKO-TLA1210Z	IKO-IRT810	12	16	10	4,350	5,810	1
IKO-TLA1312Z	IKO-IRT1012	13	19	12	6,760	8,170	1
IKO-TLA1412Z	IKO-IRT10122	14	20	12	7,080	8,840	1
IKO-TLA1512Z	IKO-IRT1212	15	21	12	7,380	9,520	1
IKO-TLA1612Z	IKO-IRT12121	16	22	12	7,670	10,200	1
IKO-TLA1712Z	—	17	23	12	7,960	10,900	1
IKO-TLA1812Z	IKO-IRT1512	18	24	12	8,230	11,500	1
IKO-TLA2012Z	—	20	26	12	8,740	12,900	1
IKO-TLA2212Z	—	22	28	12	9,230	14,300	1
IKO-TLA2512Z	—	25	32	12	9,440	13,900	1
IKO-TLA2816Z	—	28	35	16	13,800	23,500	1
IKO-TLA3012Z	—	30	37	12	10,400	16,600	1
IKO-TLA3512Z	IKO-IRT3012	35	42	12	11,600	20,000	1
IKO-TLA4012Z	—	40	47	12	12,400	22,800	1
IKO-TLA4516Z	—	45	52	16	17,800	37,800	1
IKO-TLA5020Z	IKO-IRT4520	50	58	20	28,800	64,100	1
IKO-TLA5520Z	IKO-IRT50201	55	63	20	29,800	69,400	1



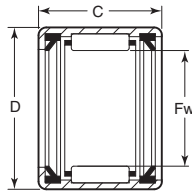
**Shell Type**

Shell type needle roller bearings are lightweight with the lowest sectional height among needle roller bearings with outer ring, because they employ a shell type outer ring made from a thin special-steel plate which is accurately drawn, carburized and quenched.

**Series TLA UU Metric**



Bearing



Series TLA UU are metric standard series of shell type needle roller bearings with cages, rollers and double seals.

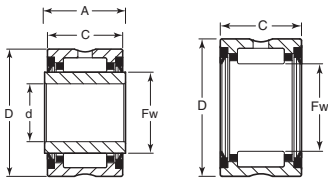
Item No.	Inside Diameter Fw	Outside Diameter D	Width C	Basic Load Rating (Lbs.)		Pack Qty.
				Dynamic	Static	
IKO-TLA1216UU	12	18	16	6,420	7,490	1
IKO-TLA1416UU	14	20	16	7,080	8,840	1
IKO-TLA2516UU	25	32	16	9,440	13,900	1

**Machined Type**

Machined type needle roller bearings have an outer ring made by machining, heat treatment, and grinding. The outer ring has stable high rigidity and can be easily used even for light alloy housings. Series BR are inch standard series of machined type needle roller bearings with caged rollers.

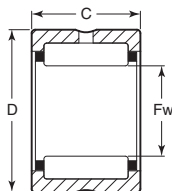
**Series (R)NA UU Metric**

Series (R)NA UU are metric dimension 49 series of machine type needle roller bearings with caged rollers and double seals.



Item No.	w/o Inner Ring		w/ Inner Ring		Width C	Width A	Dynamic Basic Load Rating (Lbs.)	Static Basic Load Rating (Lbs.)	Pack Qty.
	Inside Diameter Fw	Item No.	Inside Diameter d	Outside Diameter D					
IKO-RNA4900UU	14	IKO-NA4900UU	10	22	13	14	8,080	8,490	1
IKO-RNA4901UU	16	IKO-NA4901UU	12	24	13	14	8,470	9,320	1
IKO-RNA4902UU	20	IKO-NA4902UU	15	28	13	14	9,570	11,600	1
IKO-RNA4903UU	22	IKO-NA4903UU	17	30	13	14	10,300	13,100	1
IKO-RNA4904UU	25	IKO-NA4904UU	20	37	17	18	18,000	20,500	1
IKO-RNA4922UU	28	IKO-NA4922UU	22	39	17	18	18,300	23,700	1
IKO-RNA4905UU	30	IKO-NA4905UU	25	42	17	18	20,300	25,100	1
IKO-RNA4928UU	32	IKO-NA4928UU	28	45	17	18	21,000	26,800	1
IKO-RNA4906UU	35	IKO-NA4906UU	30	47	17	18	21,500	28,400	1
IKO-RNA4932UU	40	IKO-NA4932UU	32	52	20	21	29,400	44,200	1
IKO-RNA4907UU	42	IKO-NA4907UU	35	55	20	21	30,100	46,300	1
IKO-RNA4908UU	48	IKO-NA4908UU	40	62	22	23	37,200	58,400	1
IKO-RNA4909UU	52	IKO-NA4909UU	45	68	22	23	38,900	63,400	1
IKO-RNA4910UU	58	IKO-NA4910UU	50	72	22	23	41,300	71,100	1
IKO-RNA4911UU	63	IKO-NA4911UU	55	80	25	26	52,200	85,700	1
IKO-RNA4912UU	68	IKO-NA4912UU	60	85	25	26	54,500	92,800	1
IKO-RNA4913UU	72	IKO-NA4913UU	65	90	25	26	56,800	99,800	1
IKO-RNA4914UU	80	IKO-NA4914UU	70	100	30	31	76,900	143,000	1
IKO-RNA4915UU	85	IKO-NA4915UU	75	105	30	31	79,600	153,000	1
IKO-RNA4916UU	90	IKO-NA4916UU	80	110	30	31	80,700	158,000	1
IKO-RNA4917UU	100	IKO-NA4917UU	85	120	35	36	103,000	225,000	1

**Series BR Inch**



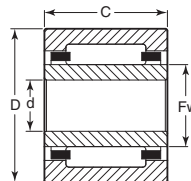
Bearing Item No.	Inner Ring Item No.	Inside Diameter Fw	Outside Diameter D	Width C	Basic Load Rating (Lbs.)		Pack Qty.
					Dynamic	Static	
IKO-BR101812	IKO-LRB61012	5/8	1 1/8	3/4	18,900	19,700	1
IKO-BR122012	IKO-LRB81212	3/4	1 1/4	3/4	21,700	24,400	1
IKO-BR122016	IKO-LRB81216	3/4	1 1/4	1	27,600	33,100	1
IKO-BR142212	IKO-LRB101412	7/8	1 3/8	3/4	23,000	27,100	1
IKO-BR142216	IKO-LRB101416	7/8	1 3/8	1	29,100	36,800	1
IKO-BR162416	—	1	1 1/2	1	32,100	42,300	1
IKO-BR182616	IKO-LRB141816	1 1/8	1 7/8	1	34,900	49,900	1
IKO-BR182620	IKO-LRB141820	1 1/8	1 7/8	1 1/4	43,200	65,600	1
IKO-BR202816	IKO-LRB162016	1 1/4	1 3/4	1	36,000	53,500	1
IKO-BR202820	IKO-LRB162020	1 1/4	1 3/4	1 1/4	44,600	70,300	1
IKO-BR223016	IKO-LRB182216	1 3/8	1 7/8	1	38,500	60,000	1
IKO-BR223020	IKO-LRB182220	1 3/8	1 7/8	1 1/4	47,700	78,900	1
IKO-BR243316	IKO-LRB202416	1 1/2	2 1/8	1	43,700	66,900	1
IKO-BR243320	IKO-LRB202420	1 1/2	2 1/8	1 1/4	54,200	88,200	1
IKO-BR263516	IKO-LRB222616	1 3/4	2 3/8	1	44,800	70,900	1
IKO-BR263520	IKO-LRB222620	1 3/4	2 3/8	1 1/4	55,600	93,400	1
IKO-BR283716	—	1 3/4	2 3/8	1	47,500	78,200	1
IKO-BR283720	—	1 3/4	2 3/8	1 1/4	58,900	103,000	1
IKO-BR283820	—	1 3/4	2 3/8	1 1/4	58,900	103,000	1
IKO-BR303920	IKO-LRB243020	1 7/8	2 7/8	1 1/4	60,100	108,000	1
IKO-BR324116	IKO-LRB263216	2	2 3/4	1	51,000	89,400	1
IKO-BR324120	IKO-LRB263220	2	2 3/4	1 1/4	63,200	118,000	1
IKO-BR364824	IKO-LRB283624	2 1/4	3	1 1/2	90,300	158,000	1
IKO-BR364828	IKO-LRB283628	2 1/4	3	1 3/4	10,500	191,000	1
IKO-BR405224	IKO-LRB324024	2 1/2	3 1/4	1 1/2	94,600	174,000	1
IKO-BR405228	IKO-LRB324028	2 1/2	3 1/4	1 3/4	110,000	210,000	1
IKO-BR445624	IKO-LRB364424	2 3/4	3 1/2	1 1/2	98,700	189,000	1
IKO-BR445628	IKO-LRB364428	2 3/4	3 1/2	1 3/4	114,000	228,000	1
IKO-BR486024	IKO-LRB404824	3	3 3/4	1 1/2	10,500	211,000	1
IKO-BR486028	IKO-LRB404828	3	3 3/4	1 3/4	122,000	255,000	1
IKO-BR526828	IKO-LRB445228	3 1/4	4 1/4	1 3/4	141,000	259,000	1
IKO-BR526832	IKO-LRB445232	3 1/4	4 1/4	2	154,000	290,000	1
IKO-BR567232	IKO-LRB485632	3 1/2	4 1/2	2	162,000	316,000	1
IKO-BR607632	IKO-LRB526032	3 3/4	4 3/4	2	169,000	342,000	1
IKO-BR648032	IKO-LRB566432	4	5	2	176,000	368,000	1



### Machined Type

Machined type needle roller bearings have an outer ring made by machining, heat treatment, and grinding. The outer ring has stable high rigidity and can be easily used even for light alloy housings. Series BR are inch standard series of machined type needle roller bearings with caged rollers.

#### Series TAF(I) Metric

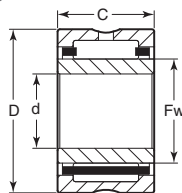


Series TAF(I) are metric light duty series of machined type needle roller bearings with caged rollers.

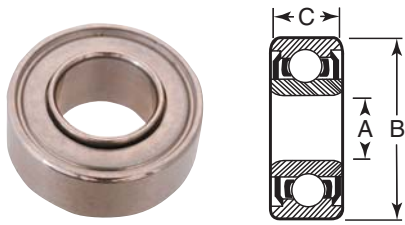
w/ Inner Ring		w/o Inner Ring		Outside Diameter mm D	Width mm C	Dynamic Basic Load Rating (Lbs.)	Static Basic Load Rating (Lbs.)	Pack Qty.
Item No.	Inside Diameter mm d	Item No.	Inside Diameter mm Fw					
IKO-TAF151512	5	IKO-TAF81512	8	15	12	5,060	4,690	1
IKO-TAF151516	5	IKO-TAF81516	8	15	16	7,080	7,220	1
IKO-TAF161612	6	IKO-TAF91612	9	16	12	5,490	5,330	1
IKO-TAF161616	6	IKO-TAF91616	9	16	16	7,680	8,210	1
IKO-TAF171712	7	IKO-TAF101712	10	17	12	5,880	5,970	1
IKO-TAF171716	7	IKO-TAF101716	10	17	16	8,230	9,190	1
IKO-TAF191912	9	IKO-TAF121912	12	19	12	6,610	7,260	1
IKO-TAF191916	9	IKO-TAF121916	12	19	16	9,250	11,200	1
IKO-TAF1102216	10	IKO-TAF142216	14	22	16	11,700	13,700	1
IKO-TAF1102220	10	IKO-TAF142220	14	22	20	14,800	18,600	1
—	—	IKO-TAF152316	15	23	16	12,300	14,900	1
—	—	IKO-TAF152320	15	23	20	15,600	20,200	1
IKO-TAF1122416	12	IKO-TAF162416	16	24	16	12,300	15,100	1
IKO-TAF1122420	12	IKO-TAF162420	16	24	20	15,500	20,400	1
—	—	IKO-TAF172516	17	25	16	12,900	16,300	1
—	—	IKO-TAF172520	17	25	20	16,300	22,000	1
—	—	IKO-TAF182616	18	26	16	13,400	17,500	1
—	—	IKO-TAF182620	18	26	20	17,000	23,600	1
IKO-TAF1152716	15	IKO-TAF192716	19	27	16	14,000	18,700	1
IKO-TAF1152720	15	IKO-TAF192720	19	27	20	17,700	25,300	1
—	—	IKO-TAF202816	20	28	16	13,900	18,800	1
—	—	IKO-TAF202820	20	28	20	17,600	25,400	1
IKO-TAF1172916	17	IKO-TAF212916	21	29	16	14,400	20,000	1
IKO-TAF1172920	17	IKO-TAF212920	21	29	20	18,200	27,100	1
—	—	IKO-TAF223016	22	30	16	14,900	21,200	1
—	—	IKO-TAF223020	22	30	20	18,900	28,700	1
IKO-TAF1203216	20	IKO-TAF243216	24	32	16	15,300	22,500	1
IKO-TAF1203220	20	IKO-TAF243220	24	32	20	19,400	30,500	1
—	—	IKO-TAF253316	25	33	16	15,800	23,700	1
—	—	IKO-TAF253320	25	33	20	20,000	32,100	1
IKO-TAF1223416	22	IKO-TAF263416	26	34	16	16,300	24,900	1
IKO-TAF1223420	22	IKO-TAF263420	26	34	20	20,600	33,800	1
—	—	IKO-TAF283720	28	37	20	21,700	37,100	1
—	—	IKO-TAF283730	28	37	30	31,100	58,900	1
IKO-TAF1253820	25	IKO-TAF293820	29	38	20	21,600	37,200	1
IKO-TAF1253830	25	IKO-TAF293830	29	38	30	30,900	59,100	1
—	—	IKO-TAF304020	30	40	20	25,100	40,100	1
—	—	IKO-TAF304030	30	40	30	36,000	63,900	1
IKO-TAF1284220	28	IKO-TAF324220	32	42	20	25,700	42,200	1
IKO-TAF1284230	28	IKO-TAF324230	32	42	30	36,800	67,200	1
IKO-TAF1304520	30	IKO-TAF354520	35	45	20	26,900	46,200	1
IKO-TAF1304530	30	IKO-TAF354530	35	45	30	38,600	73,600	1
IKO-TAF1324720	32	IKO-TAF374720	37	47	20	28,200	50,100	1
IKO-TAF1324730	32	IKO-TAF374730	37	47	30	40,500	79,800	1
—	—	IKO-TAF384820	38	48	20	28,100	50,200	1
—	—	IKO-TAF384830	38	48	30	40,300	80,000	1
IKO-TAF1355020	35	IKO-TAF405020	40	50	20	29,400	54,100	1
IKO-TAF1355030	35	IKO-TAF405030	40	50	30	42,300	86,200	1
—	—	IKO-TAF425220	42	52	20	29,900	56,200	1
—	—	IKO-TAF425230	42	52	30	43,000	89,400	1
IKO-TAF1385320	38	IKO-TAF435320	43	53	20	30,500	58,200	1
IKO-TAF1385330	38	IKO-TAF435330	43	53	30	43,800	92,600	1
IKO-TAF1405520	40	IKO-TAF455520	45	55	20	31,000	60,200	1
IKO-TAF1405530	40	IKO-TAF455530	45	55	30	44,600	95,800	1
IKO-TAF1425720	42	IKO-TAF475720	47	57	20	31,500	62,200	1
IKO-TAF1425730	42	IKO-TAF475730	47	57	30	45,200	99,100	1
IKO-TAF1456225	45	IKO-TAF506225	50	62	25	43,000	85,300	1
IKO-TAF1456235	45	IKO-TAF506235	50	62	35	58,000	125,000	1
IKO-TAF1506825	50	IKO-TAF556825	55	68	25	45,400	94,000	1
IKO-TAF1506835	50	IKO-TAF556835	55	68	35	61,200	138,000	1

#### Series (R)NA Metric

Series (R)NA are metric standard duty series of machined type needle roller bearings with caged rollers.



w/ Inner Ring		w/o Inner Ring		Outside Diameter mm D	Width mm C	Dynamic Basic Load Rating (Lbs.)	Static Basic Load Rating (Lbs.)	Pack Qty.
Item No.	Inside Diameter mm d	Item No.	Inside Diameter mm Fw					
IKO-NA498	8	IKO-RNA498	10	19	11	6,180	5,030	1
IKO-NA499	9	IKO-RNA499	12	20	11	6,600	6,310	1
IKO-NA4900	10	IKO-RNA4900	14	22	13	9,230	10,100	1
IKO-NA4901	12	IKO-RNA4901	16	24	13	9,660	11,100	1
IKO-NA4902	15	IKO-RNA4902	20	28	13	10,900	13,800	1
IKO-NA4903	17	IKO-RNA4903	22	30	13	11,700	15,600	1
IKO-NA4904	20	IKO-RNA4904	25	37	17	21,000	25,000	1
IKO-NA4922	22	IKO-RNA4922	28	39	17	21,400	28,900	1
IKO-NA4905	25	IKO-RNA4905	30	42	17	23,700	30,700	1
IKO-NA4928	28	IKO-RNA4928	32	45	17	24,500	32,700	1
IKO-NA4906	30	IKO-RNA4906	35	47	17	25,200	34,700	1
IKO-NA4932	32	IKO-RNA4932	40	52	20	31,200	47,800	1
IKO-NA4907	35	IKO-RNA4907	42	55	20	32,000	50,100	1
IKO-NA4908	40	IKO-RNA4908	48	62	22	41,600	67,400	1
IKO-NA4909	45	IKO-RNA4909	52	68	22	43,500	73,300	1
IKO-NA4910	50	IKO-RNA4910	58	72	22	46,200	82,100	1



Bearings are made of 440C stainless steel and are corrosion, fatigue and wear resistant. Temperature range is -70 degrees Fahrenheit to 350 degrees Fahrenheit. Bearings have steel shields. Applications include idler pulleys, small gear trains, pumps tape guides, synchros and servos. These bearings meet or exceed ABEC 5 tolerances. Radial clearance is .0002/.0005". All extended inner ring bearings are .031" wider than C dimension on inner ring.

Standard and Standard Extended Inner Rings Inch



Standard Item No.	Standard Extended Item No.	A	B	C	Dynamic Load Rating Lbs.	Max. rpm	Pack Qty.
DMB-1	—	.0469	.1562	.0937	31	120,000	1
DMB-2	—	.0550	.1875	.1094	52	110,000	1
DMB-3	DMB-36	.0781	.2500	.1406	70	80,000	1
DMB-4	DMB-37	.0937	.1875	.0937	43	95,000	1
DMB-5	DMB-38	.0937	.3125	.1406	124	71,000	1
DMB-6	DMB-39	.1250	.2500	.1094	64	80,000	1
DMB-7	DMB-40	.1250	.3125	.1406	124	71,000	1
DMB-8	DMB-41	.1250	.3750	.1406	144	63,000	1
DMB-9	DMB-42	.1250	.3750	.1562	144	63,000	1
DMB-10	—	.1250	.5000	.1719	144	63,000	1
DMB-11	DMB-43	.1562	.3125	.1250	81	63,000	1
DMB-12	DMB-44	.1875	.3125	.1250	81	63,000	1
DMB-13	DMB-45	.1875	.3750	.1250	160	60,000	1
DMB-14	DMB-46	.1875	.5000	.1960	293	50,000	1
DMB-15	DMB-47	.2500	.3750	.1250	84	56,000	1
DMB-16	DMB-48	.2500	.5000	.1875	243	50,000	1
DMB-17	DMB-49	.2500	.6250	.1960	335	45,000	1
DMB-18	DMB-50	.3125	.5000	.1562	122	48,000	1
DMB-98	—	.2500	.7500	.2812	524	43,000	1
DMB-99	—	.3750	.8750	.2812	748	38,000	1
DMB-100	—	.5000	1.1250	.3125	880	20,000	1

Note: Extended inner ring bearings are .031" wider than C dimension on inner ring.

Standard Extra Thin Inch



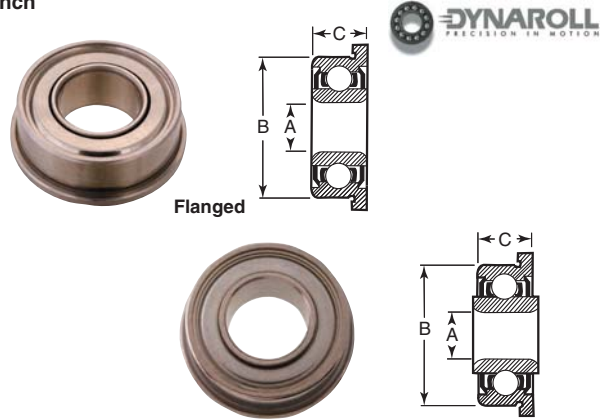
Item No.	A	B	C	Dynamic Load Rating Lbs.	Max rpm	Pack Qty.
DMB-101	.3750	.6250	.1562	93	30,000	1
DMB-102	.5000	.7500	.1562	108	24,000	1
DMB-103	.6250	.8750	.1562	112	20,000	1
DMB-104	.7500	1.0000	.1562	123	16,000	1

Standard Metric



Item No.	A	B	C	Dynamic Load Rating Lbs.	Max rpm	Pack Qty.
DMB-62	4	10	4.0	60	56,000	1
DMB-63	4	11	4.0	98	53,000	1
DMB-64	4	12	4.0	98	53,000	1
DMB-65	4	13	5.0	133	48,000	1
DMB-66	5	8	2.5	31	63,000	1
DMB-67	5	9	3.0	44	60,000	1
DMB-68	5	10	4.0	44	60,000	1
DMB-69	5	11	4.0	73	53,000	1
DMB-70	5	13	4.0	110	50,000	1
DMB-71	5	14	5.0	135	48,000	1
DMB-72	6	10	3.0	51	53,000	1
DMB-73	6	12	4.0	73	50,000	1
DMB-74	6	13	5.0	110	48,000	1
DMB-75	7	14	5.0	120	45,000	1
DMB-76	8	12	3.5	56	48,000	1
DMB-77	8	14	4.0	83	45,000	1
DMB-78	8	16	5.0	128	43,000	1
DMB-79	9	17	5.0	136	43,000	1

Flanged and Flanged Extended Inner Rings Inch

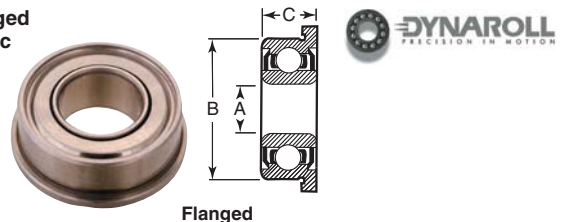


Bearings are made of 440C stainless steel and are corrosion, fatigue and wear resistant. Temperature range is -70 degrees Fahrenheit to 350 degrees Fahrenheit. Bearings have steel shields. Applications include idler pulleys, small gear trains, pumps tape guides, synchros and servos. These bearings meet or exceed ABEC 5 tolerances. Radial clearance is .0002/.0005". All extended inner ring bearings are .031" wider than C dimension on inner ring.

Flanged Item No.	Flanged Extended Item No.	Flange OD	Flange Thickness	A	B	C	Dynamic Load Rating Lbs.	Max rpm	Pack Qty.
DMB-20	—	.234	.031	.0550	.1875	.1094	52	110,000	1
DMB-21	—	.296	.031	.0781	.2500	.1406	70	80,000	1
DMB-22	DMB-51	.294	.031	.0937	.1875	.0937	43	95,000	1
DMB-24	DMB-52	.296	.031	.1250	.2500	.1094	64	80,000	1
DMB-26	DMB-54	.422	.031	.1250	.3750	.1406	144	63,000	1
DMB-25	DMB-53	.359	.031	.1250	.3125	.1406	124	71,000	1
DMB-27	DMB-55	.440	.030	.1250	.3750	.1562	144	63,000	1
DMB-29	DMB-57	.359	.036	.1875	.3125	.1250	81	63,000	1
DMB-30	DMB-58	.422	.031	.1875	.3750	.1250	160	60,000	1
DMB-31	—	.565	.042	.1875	.5000	.1960	293	50,000	1
DMB-32	DMB-59	.422	.036	.2500	.3750	.1250	84	56,000	1
DMB-33	DMB-60	.547	.045	.2500	.5000	.1875	243	50,000	1
DMB-34	—	.690	.042	.2500	.6250	.1960	335	45,000	1
DMB-35	DMB-61	.547	.031	.3125	.5000	.1562	122	48,000	1

Note: Extended inner ring bearings are .031" wider than C dimension on inner ring.

Flanged Metric

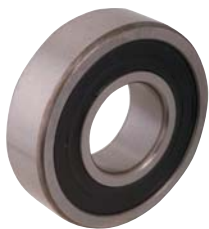


Bearings are made of 440C stainless steel and are corrosion, fatigue and wear resistant. Temperature range is -70 degrees Fahrenheit to 350 degrees Fahrenheit. Bearings have steel shields. Applications include idler pulleys, small gear trains, pumps tape guides, synchros and servos. These bearings meet or exceed P5 (ISO) for metric bearings.

Item No.	A	B	C	Flange OD	Flange Thickness	Dynamic Load Rating Lbs.	Max. rpm	Pack Qty.
DMB-80	4	10	4.0	11.6	.8	60	56,000	1
DMB-81	4	11	4.0	12.5	1.0	98	53,000	1
DMB-82	4	12	4.0	13.5	1.0	98	53,000	1
DMB-83	4	13	5.0	15.0	1.0	133	48,000	1
DMB-84	5	8	2.5	9.2	.6	31	63,000	1
DMB-85	5	9	3.0	10.2	.6	44	60,000	1
DMB-86	5	10	4.0	11.6	.8	44	60,000	1
DMB-87	5	11	4.0	12.6	.8	73	53,000	1
DMB-88	5	13	4.0	15.0	1.0	110	50,000	1
DMB-89	5	14	5.0	16.0	1.0	135	48,000	1
DMB-90	6	10	3.0	11.2	.6	51	53,000	1
DMB-91	6	12	4.0	13.6	.8	73	50,000	1
DMB-92	6	13	5.0	15.0	1.1	110	48,000	1
DMB-93	7	14	5.0	16.0	1.1	120	45,000	1
DMB-94	8	12	3.5	13.6	.8	56	48,000	1
DMB-95	8	14	4.0	15.6	.8	83	45,000	1
DMB-96	8	16	5.0	18.0	1.1	128	43,000	1
DMB-97	9	17	5.0	19.0	1.1	136	43,000	1



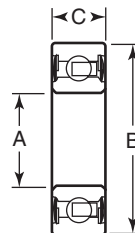
**Nice® Ball Bearings**



**Double Sealed**



**Double Shield**



Precision ground on all contact surfaces. Careful heat treatment provides a uniform and exact degree of hardness for maximum life. A ball retainer is used to increase the range of allowable speeds by reducing ball-to-ball contact friction. Bearings are supplied grease packed. Recommended for medium loads and for maximum speeds in the range of 5,000 rpm. ID and OD tolerances are  $\pm .0000/- .0005$ ". Width tolerance is  $\pm .0000/- .005$ ".

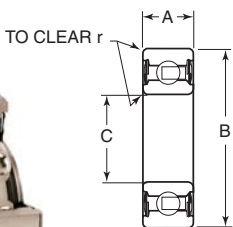
Double Sealed		Double Shielded			Dynamic Load Capacity	Static Load Capacity	Pack Qty.
Item No.	Item No.	A	B	C			
SKF-1603DC*	SKF-1603DS	.3125	.8750	.2813	644	255	1
SKF-1604DC*	—	.3750	.8750	.3438	644	255	1
SKF-1605DC	SKF-1605DS	.3125	.9063	.3125	698	300	1
SKF-1606DC	SKF-1606DS	.3750	.9063	.3125	698	300	1
SKF-1607DC	SKF-1607DS	.4375	.9063	.3125	698	300	1
SKF-1614DC	SKF-1614DS	.3750	1.1250	.3750	1,200	475	1
SKF-1615DC	SKF-1615DS	.4375	1.1250	.3750	1,200	475	1
SKF-1616DC	SKF-1616DS	.5000	1.1250	.3750	1,200	475	1
SKF-1621DC	SKF-1621DS	.5000	1.3750	.4375	1,878	850	1
SKF-1623DC	SKF-1623DS	.6250	1.3750	.4375	1,878	850	1
SKF-1628DC	SKF-1628DS	.6250	1.6250	.5000	2,600	1,010	1
SKF-1630DC	SKF-1630DS	.7500	1.6250	.5000	2,600	1,010	1
SKF-1633DC	SKF-1633DS	.6250	1.7500	.5000	2,600	1,025	1
SKF-1635DC	SKF-1635DS	.7500	1.7500	.5000	2,600	1,025	1
SKF-1638DC**	SKF-1638DS	.7500	2.0000	.5625	2,967	1,350	1
SKF-1640DC**	SKF-1640DS	.8750	2.0000	.5625	2,967	1,350	1
SKF-1641DC**	SKF-1641DS	1.0000	2.0000	.5625	2,967	1,350	1
SKF-1652DC***	SKF-1652DS	1.1250	2.5000	.6250	3,864	2,120	1
SKF-1654DC***	SKF-1654DS	1.2500	2.5000	.6250	3,864	2,120	1
SKF-1657DC***	SKF-1657DS	1.2500	2.5625	.6875	5,360	2,620	1
—	SKF-1604DS	.3750	.8750	.2813	644	255	1

\*Width is .3438"

\*\*OD Tolerance  $\pm .0000/- .0006$

\*\*\*Multi-part seals. OD Tolerance  $\pm .0000/- .0006$

**Semi-ground Radial Bearings**



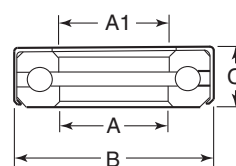
Precision ground on all contact surfaces except bore. A ball retainer, or separator, is employed to increase the range of allowable speeds by reducing ball contact friction. This series of radial bearing is available open, double shielded or double sealed. The double shielded and double sealed bearings are grease packed as standard. Recommended for lighter loads and maximum speeds in the range of 3,000 rpm. ID tolerance is  $\pm .005/- .000$ , OD tolerance is  $\pm .0000/- .0005$  and width tolerance is  $\pm .0000/- .005$ ".

Double Sealed		Double Shielded			Dynamic Load Capacity	Static Load Capacity	Pack Qty.	
Item No.	Item No.	A	B	C				
SKF-9215*	SKF-9270	.2500	.6875	.2500	.035	255	170	1
SKF-9220	SKF-9280	.3750	1.1250	.3750	.035	600	475	1
SKF-9225	SKF-9285	.3750	1.1250	.5000	.035	600	475	1
SKF-9230	SKF-9290	.4375	1.3750	.5000	.035	940	850	1
SKF-9235	SKF-9295	.4375	1.3750	.6250	.035	940	850	1
SKF-9240	SKF-9300	.5000	1.6250	.6250	.035	1,300	1,010	1
SKF-9245	SKF-9305	.5000	1.6250	.7500	.035	1,300	1,010	1
SKF-9250**	SKF-9310	.5000	1.7500	.7500	.035	1,300	1,025	1
SKF-9255**	SKF-9315	.5625	2.0000	.7500	.035	1,480	1,350	1
SKF-9265**	SKF-9320	.5625	2.0000	1.0000	.035	1,480	1,350	1
—	SKF-9275	.2813	.8750	.3750	.035	325	255	1

\*Multi-part seal; Width is 0.3125"

\*\*OD tolerance  $\pm .0000/- .0006$

**Unground Thrust Bearings**

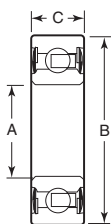


Unground thrust bearings are designed for moderate speeds and medium thrust loads. These bearings utilize a full ball complement. The upper ring is free to rotate in the band and has a close fit in the bore for the shaft. The lower ring is fixed in the band and has a shaft clearance in the bore. Recommended for maximum speeds in the range of 1,200 rpm.

Item No.	A	A1	B	C	Balls		Speed Limit (rpm)	Pack Qty.
					No.	Size		
SKF-9035	.250	.275	.844	.333	10	.156	1,000	1
SKF-9040	.375	.400	1.047	.359	14	.156	1,000	1
SKF-9045	.453	.478	.859	.281	15	.125	1,000	1
SKF-9050	.500	.525	1.266	.437	10	.250	1,000	1
SKF-9055	.500	.525	1.000	.344	12	.188	1,000	1
SKF-9060	.625	.656	1.125	.344	16	.156	1,000	1
SKF-9065	.625	.656	1.422	.453	12	.250	1,000	1
SKF-9070	.750	.775	1.656	.545	15	.250	1,000	1
SKF-9075	.875	.900	1.891	.594	17	.250	1,000	1
SKF-9080	.9843	1.031	1.750	.625	16	.250	1,000	1
SKF-9085	1.000	1.075	2.000	.630	12	.375	1,000	1
SKF-9090	1.000	1.031	1.969	.625	18	.250	1,000	1
SKF-9095	1.016	1.031	1.750	.625	16	.250	1,000	1
SKF-9100	1.063	1.094	1.969	.625	18	.250	1,000	1
SKF-9105	1.125	1.150	2.094	.625	19	.250	1,000	1
SKF-9110	1.250	1.275	2.344	.625	23	.250	1,000	1
SKF-9115	1.437	1.462	2.469	.625	23	.250	1,000	1
SKF-9120	1.500	1.525	2.594	.625	25	.250	1,000	1



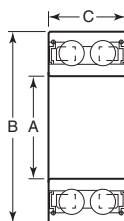
**1600 Series Inch**



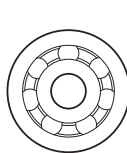
Designed to be dimensionally interchangeable with standard domestic inch series bearings. By using 52100 steel and holding dimensions to ABEC 1 tolerances, this series offers economy with electric motor quality. Close tolerance and improved ball complement allow an increased load capacity. This series is available with shields and seals. Metric dimensions are in millimeters.

Double Sealed		Double Shielded		A	B	C	Dynamic Load Capacity	Static Load Capacity	Pack Qty.
Item No.	Item No.								
PRB-267	PRB-287	.3125	.8750	.3437	644	255	1		
PRB-268	PRB-288	.3750	.8750	.3437	644	255	1		
PRB-269	PRB-289	.3125	.9063	.3125	698	300	1		
PRB-270	PRB-290	.3750	.9063	.3125	698	300	1		
PRB-271	PRB-291	.4375	.9063	.3125	698	300	1		
PRB-272	PRB-292	.3750	1.1250	.3750	1,200	475	1		
PRB-273	PRB-293	.4375	1.1250	.3750	1,200	475	1		
PRB-274	PRB-294	.5000	1.1250	.3750	1,200	475	1		
PRB-275	PRB-295	.5000	1.3750	.4375	1,878	850	1		
PRB-276	PRB-296	.6250	1.3750	.4375	1,878	850	1		
PRB-277	PRB-297	.6250	1.6250	.5000	2,600	1,010	1		
PRB-278	PRB-298	.7500	1.6250	.5000	2,600	1,010	1		
PRB-279	—	.6250	1.7500	.5000	2,600	1,025	1		
PRB-280	PRB-300	.7500	1.7500	.5000	2,600	1,025	1		
PRB-281	—	.7500	2.0000	.5625	2,967	1,350	1		
PRB-282	PRB-302	.8750	2.0000	.5625	2,967	1,350	1		
PRB-283	PRB-303	1.0000	2.0000	.5625	2,967	1,350	1		
PRB-284	—	1.1250	2.5000	.6250	3,864	2,120	1		
PRB-285	PRB-305	1.2500	2.5000	.6250	3,864	2,120	1		
—	PRB-299	.7500	1.6250	.5000	2,600	1,010	1		
—	PRB-301	.7500	2.0000	.5625	2,967	1,350	1		
—	PRB-304	1.1250	2.5000	.8250	3,864	2,120	1		

**Sealed Double Row Ball Bearing Metric**



Item No.	A	B	C	Load Rating Lbs.		Bearing No.	Pack Qty.
				Dynamic	Static		
PRB-100	10	30	14.3	1,810	1,030	5200-2RS	1
PRB-101	12	32	15.9	2,390	1,320	5201-2RS	1
PRB-102	15	35	15.9	2,650	1,590	5202-2RS	1
PRB-103	17	30	17.5	3,350	2,040	5203-2RS	1
PRB-104	20	47	20.6	4,450	2,850	5204-2RS	1
PRB-105	25	52	20.6	4,850	3,350	5205-2RS	1
PRB-106	30	62	23.8	6,700	4,800	5206-2RS	1



Specifically designed for applications where space limitations are a primary consideration and shafts are relatively large. Available with metal shields or Buna N seals. The 6000 series is capable of withstanding radial and thrust loads within the limitations of their ball complement. The conrad construction of the R series enables these bearings to take a thrust load as well as a radial load. The well designed ball complement and selection of retainers permit use of this series in high speed motor applications. This series is produced open, shielded or sealed. Shield and sealed bearings are made slightly wider as shown in the dimension table. Metric dimensions are in millimeters.

**Open Metric**



Item No.	A	B	C	Bearing Designation	Pack Qty.
PRB-37	8	22	7	608	1
PRB-38	10	26	8	6000	1
PRB-39	12	28	8	6001	1
PRB-40	15	32	9	6002	1
PRB-41	17	35	10	6003	1
PRB-42	20	42	12	6004	1
PRB-43	25	47	12	6005	1
PRB-44	30	55	13	6006	1
PRB-52	10	35	11	6300	1
PRB-53	12	37	12	6301	1
PRB-54	15	42	13	6302	1
PRB-56	20	52	15	6304	1
PRB-55	17	47	14	6303	1
PRB-57	25	62	17	6305	1

**Shield Metric Series Double Sealed Metric**



Item No.	A	B	C	Bearing Designation	Pack Qty.
PRB-79	8	22	7	608	1
PRB-80	10	26	8	6000	1
PRB-81	12	28	8	6001	1
PRB-82	15	32	9	6002	1
PRB-83	17	35	10	6003	1
PRB-84	20	42	12	6004	1
PRB-85	25	47	12	6005	1
PRB-86	30	55	13	6006	1
PRB-94	10	35	11	6300	1
PRB-95	12	37	12	6301	1
PRB-96	15	42	13	6302	1
PRB-97	17	7	14	6303	1
PRB-98	20	52	15	6304	1
PRB-99	25	62	17	6305	1

**Shield Metric Series Double Shielded Metric**

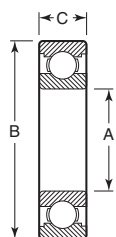


Item No.	A	B	C	Bearing Designation	Pack Qty.
PRB-58	8	22	7	608	1
PRB-59	10	26	8	6000	1
PRB-60	12	28	8	6001	1
PRB-61	15	32	9	6002	1
PRB-62	17	35	10	6003	1
PRB-63	20	42	12	6004	1
PRB-64	25	47	12	6005	1
PRB-65	30	55	13	6006	1
PRB-73	25	52	15	6300	1
PRB-74	12	37	12	6301	1
PRB-75	15	42	13	6302	1
PRB-76	17	47	14	6303	1
PRB-77	20	52	15	6304	1
PRB-78	25	62	17	6305	1



**Deep Groove Ball Bearings  
Single Row  
For Electric Motors**

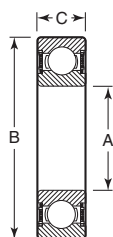
Single row deep groove ball bearings have deep uninterrupted raceways and a high degree of conformity between balls and raceways. This enables them to carry axial loads in both directions, in addition to radial loads, even at high speeds. Bearings with shields or seals at both sides are filled with a grease which has good rust inhibiting properties suitable of operating temperatures of -22 to +230 degrees Fahrenheit. All bearings have a pressed cage of sheet steel and are available either plain, shields on both sides (2 Z), or two rubber seals on both sides (2 RS). All dimensions are in millimeters.



Open



Two Shields



Two Seals

Open



Item No.	SKF	A	B	C	Basic Load Rating Lbs.		Speed Rating RPM		Pack Qty.
					Dynamic	Static	Grease	Oil	
SKF-01	6200JEM	10	30	9	1,140	531	24,000	30,000	1
SKF-02	6201JEM	12	32	10	1,550	697	22,000	28,000	1
SKF-03	6202JEM	15	35	11	1,750	843	19,000	24,000	1
SKF-04	6203JEM	17	40	12	2,150	1,070	17,000	20,000	1
SKF-05	6204-JEM	20	47	14	2,860	1,470	15,000	18,000	1
SKF-06	6205JEM	25	52	15	3,150	1,750	12,000	15,000	1
SKF-07	6206JEM	30	62	16	4,380	2,520	10,000	13,000	1
SKF-08	6207JEM	35	72	17	5,730	3,440	9,000	11,000	1
SKF-09	6208JEM	40	80	18	6,900	4,270	8,500	10,000	1
SKF-10	6209JEM	45	85	19	7,460	4,860	7,500	9,000	1
SKF-11	6210JEM	50	90	20	7,890	5,220	7,000	8,500	1

Two Shields



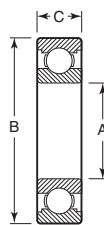
Item No.	SKF	A	B	C	Basic Load Rating Lbs.		Speed Rating RPM		Pack Qty.
					Dynamic	Static	Grease	Oil	
SKF-012	6200-2ZJEM	10	30	9	1,140	531	24,000	30,000	1
SKF-013	6201-2ZJEM	12	32	10	1,550	697	22,000	28,000	1
SKF-014	6202-2ZJEM	15	35	11	1,750	843	19,000	24,000	1
SKF-015	6203-2ZJEM	17	40	12	2,150	1,070	17,000	20,000	1
SKF-016	6204-2ZJEM	20	47	14	2,860	1,470	15,000	18,000	1
SKF-017	6205-2ZJEM	25	52	15	3,150	1,750	12,000	15,000	1
SKF-018	6206-2ZJEM	30	62	16	4,380	2,520	10,000	13,000	1
SKF-019	6207-2ZJEM	35	72	17	5,730	3,440	9,000	11,000	1
SKF-020	6208-2ZJEM	40	80	18	6,900	4,270	8,500	10,000	1
SKF-021	6209-2ZJEM	45	85	19	7,460	4,860	7,500	9,000	1
SKF-022	6210-2ZJEM	50	90	20	7,890	5,220	7,000	8,500	1

Two Seals



Item No.	SKF	A	B	C	Basic Load Rating Lbs.		Speed Rating RPM		Pack Qty.
					Dynamic	Static	Grease	Oil	
SKF-023	6200-2RSJEM	10	30	9	1,140	531	17,000	—	1
SKF-024	6201-2RSJEM	12	32	10	1,550	697	15,000	—	1
SKF-025	6202-2RSJEM	15	35	11	1,750	843	13,000	—	1
SKF-026	6203-2RSJEM	17	40	12	2,150	1,070	12,000	—	1
SKF-027	6204-2RSJEM	20	47	14	2,860	1,470	10,000	—	1
SKF-028	6205-2RSJEM	25	52	15	3,150	1,750	8,500	—	1
SKF-029	6206-2RSJEM	30	62	16	4,380	2,520	7,500	—	1
SKF-030	6207-2RSJEM	35	72	17	5,730	3,440	6,300	—	1
SKF-031	6208-2RSJEM	40	80	18	6,900	4,270	5,600	—	1
SKF-032	6209-2RSJEM	45	85	19	7,460	4,860	5,000	—	1
SKF-033	6210-2RSJEM	50	90	20	7,890	5,220	4,000	—	1

**Deep Groove 6200 Series Metric**



This deep groove, conrad construction is specifically designed to provide maximum performance by means of precise ball complement selection. The honed raceways offer a perfectly balanced bearing capable of operating under straight radial, thrust or combination loads. This series is available with shields. Buna N seals, or locating rings. Sealed bearings may be obtained with either low or high starting torques. Radial clearance is selected in accordance to applications ranging from C2 - C0 - C3 - C4 fits. Metric dimensions are in millimeters.

Double Sealed Metric



Item No.	A	B	C	Basic Load Rating lbs.		Speed Rating rpm		Bearing No.	Pack Qty.
				Dynamic	Static	Grease	Oil		
PRB-256	10	30	9	1,140	531	17,000	—	6200-2RS-C3	1
PRB-257	12	32	10	1,550	697	15,000	—	6201-2RS-C3	1
PRB-258	15	35	11	1,750	843	13,000	—	6202-2RS-C3	1
PRB-259	17	40	12	2,150	1,070	12,000	—	6203-2RS-C3	1
PRB-260	20	47	14	2,860	1,470	10,000	—	6204-2RS-C3	1
PRB-261	25	52	15	3,150	1,750	8,500	—	6205-2RS-C3	1
PRB-262	30	62	16	4,380	2,520	7,500	—	6206-2RS-C3	1
PRB-263	35	72	17	5,730	3,440	6,300	—	6207-2RS-C3	1
PRB-264	40	80	18	6,900	4,270	5,600	—	6208-2RS-C3	1
PRB-265	45	85	19	7,460	4,860	5,000	—	6209-2RS-C3	1
PRB-266	50	90	20	7,890	5,220	4,000	—	6210-2RS-C3	1

Double Shielded Metric



Item No.	A	B	C	Basic Load Rating lbs.		Speed Rating rpm		Bearing No.	Pack Qty.
				Dynamic	Static	Grease	Oil		
PRB-245	10	30	9	1,140	531	24,000	30,000	6200-ZZ-C3	1
PRB-246	12	32	10	1,550	697	22,000	28,000	6201-ZZ-C3	1
PRB-247	15	35	11	1,750	843	19,000	24,000	6202-ZZ-C3	1
PRB-248	17	40	12	2,150	1,070	17,000	20,000	6203-ZZ-C3	1
PRB-249	20	47	14	2,860	1,470	15,000	18,000	6204-ZZ-C3	1
PRB-250	25	52	15	3,150	1,750	12,000	15,000	6205-ZZ-C3	1
PRB-251	30	62	16	4,380	2,520	10,000	13,000	6206-ZZ-C3	1
PRB-252	35	72	17	5,730	3,440	9,000	11,000	6207-ZZ-C3	1
PRB-253	40	80	18	6,900	4,270	8,500	10,000	6208-ZZ-C3	1
PRB-254	45	85	19	7,460	4,860	7,500	9,000	6209-ZZ-C3	1
PRB-255	50	90	20	7,890	5,220	7,000	8,500	6210-ZZ-C3	1

Open Metric



Item No.	A	B	C	Basic Load Rating lbs.		Speed Rating rpm		Bearing No.	Pack Qty.
				Dynamic	Static	Grease	Oil		
PRB-234	10	30	9	1,140	531	24,000	30,000	6200-C3	1
PRB-235	12	32	10	1,550	697	22,000	28,000	6201-C3	1
PRB-236	15	35	11	1,750	843	19,000	24,000	6202-C3	1
PRB-237	17	40	12	2,150	1,070	17,000	20,000	6203-C3	1
PRB-238	20	47	14	2,860	1,470	15,000	18,000	6204-C3	1
PRB-239	25	52	15	3,150	1,750	12,000	15,000	6205-C3	1
PRB-240	30	62	16	4,380	2,520	10,000	13,000	6206-C3	1
PRB-241	35	72	17	5,730	3,440	9,000	11,000	6207-C3	1
PRB-242	40	80	18	6,900	4,270	8,500	10,000	6208-C3	1
PRB-243	45	85	19	7,460	4,860	7,500	9,000	6209-C3	1
PRB-244	50	90	20	7,890	5,220	7,000	8,500	6210-C3	1

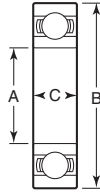




# BALL BEARINGS

Buy One or Buy Bulk & SAVE

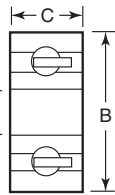
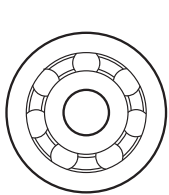
## Single Row Radial Inch and Metric



These popular bearings are used in a wide range of applications such as motors, pumps, etc. Designed to carry both radial and axial loads. Double shielded bearings have metal shields on the sides. Double sealed have two contact seals made out of synthetic rubber. Metric dimensions are shown in millimeters.

Plain		Double Shielded		Double Sealed			Bearing Designation	Pack Qty.	
Item No.	C	Item No.	C	Item No.	C	A			B
<b>Metric</b>									
—	—	INA-2125	7	—	—	8	22	608	1
—	—	INA-2130	8	INA-2255	8	10	26	6000	1
INA-2015	8	INA-2135	8	INA-2260	8	12	28	6001	1
—	—	INA-2140	9	INA-2265	9	15	32	6002	1
—	—	INA-2145	10	INA-2270	10	17	35	6003	1
—	—	INA-2150	12	INA-2275	12	20	42	6004	1
—	—	INA-2155	12	INA-2280	12	25	47	6005	1
INA-2040	13	INA-2160	13	INA-2285	13	30	55	6006	1
—	—	INA-2165	9	INA-2290	9	10	30	6200	1
—	—	INA-2170	10	INA-2295	10	12	32	6201	1
INA-2055	11	INA-2175	11	INA-2300	11	15	35	6202	1
—	—	INA-2180	12	INA-2305	12	17	40	6203	1
INA-2065	14	INA-2185	14	INA-2310	14	20	47	6204	1
—	—	INA-2190	15	INA-2315	15	25	52	6205	1
INA-2075	16	—	—	INA-2320	16	30	62	6206	1
—	—	—	—	INA-2325	11	10	35	6300	1
—	—	—	—	INA-2330	12	12	37	6301	1
—	—	—	—	INA-2335	13	15	42	6302	1
—	—	—	—	INA-2340	14	17	47	6303	1
—	—	—	—	INA-2345	15	20	52	6304	1
—	—	—	—	INA-2350	17	25	62	6305	1

Plain		Double Shielded		Double Sealed			Bearing Designation	Pack Qty.	
Item No.	C	Item No.	C	Item No.	C	A			B
<b>Inch</b>									
NB-1010	5/32	NB-1020	5/32	NB-1015	5/32	1/8	3/8	R2	1
NB-1025	5/32	NB-1035	.196	NB-1030	.196	3/16	1/2	R3	1
NB-1040	7/32	NB-1050	9/32	NB-1045	9/32	1/4	3/4	R4A	1
NB-1055	7/32	NB-1065	9/32	NB-1060	9/32	3/8	7/8	R6	1
NB-1070	1/4	NB-1080	5/16	NB-1075	5/16	1/2	1 1/8	R8	1
NB-1085	9/32	NB-1095	11/32	NB-1090	11/32	5/8	1 3/8	R10	1
NB-1100	5/16	NB-1105	7/16	—	—	3/4	1 5/8	R12	1
—	—	NB-1115	1/2	—	—	7/8	1 7/8	R14	1
NB-1120	3/8	NB-1130	1/2	NB-1125	1/2	1	2	R16	1



Specifically designed for applications where space limitations are a primary consideration and shafts are relatively large. Available with metal shields or Buna N seals. The 6000 series is capable of withstanding radial and thrust loads within the limitations of their ball complement. The conrad construction of the R series enables these bearings to take a thrust load as well as a radial load. The well designed ball complement and selection of retainers permit use of this series in high speed motor applications. This series is produced open, shielded or sealed. Shield and sealed bearings are made slightly wider as shown in the dimension table. Metric dimensions are in millimeters.

## Plain Inch



Item No.	A	B	C	Bearing No.	Pack Qty.
PRB-11	1/8	3/8	5/32	R2	1
PRB-12	3/16	1/2	5/32	R3	1
PRB-13	1/4	3/4	9/32	R4A	1
PRB-14	3/8	7/8	9/32	R6	1
PRB-15	1/2	1 1/8	1/4	R8	1
PRB-16	5/8	1 3/8	9/32	R10	1
PRB-17	3/4	1 5/8	5/16	R12	1
PRB-18	1	2	3/8	R16	1

## Select "R" Series Double Sealed Inch



Item No.	A	B	C	Bearing No.	Pack Qty.
PRB-28	1/8	3/8	5/32	99R2	1
PRB-29	3/16	1/2	.196	99R3	1
PRB-30	1/4	3/4	9/32	99R4A	1
PRB-31	3/8	7/8	9/32	99R6	1
PRB-32	1/2	1 1/8	5/16	99R8	1
PRB-33	5/8	1 3/8	11/32	99R10	1
PRB-34	3/4	1 5/8	7/16	99R12	1
PRB-35	7/8	1 7/8	1/2	99R14	1
PRB-36	1	2	1/2	99R16	1

## Select "R" Series Double Shielded Inch



Item No.	A	B	C	Bearing No.	Pack Qty.
PRB-19	1/8	3/8	5/32	77R2	1
PRB-20	3/16	1/2	.196	77R3	1
PRB-21	1/4	3/4	9/32	77R4A	1
PRB-22	3/8	7/8	9/32	77R6	1
PRB-23	1/2	1 1/8	5/16	77R8	1
PRB-24	5/8	1 3/8	11/32	77R10	1
PRB-25	3/4	1 5/8	7/16	77R12	1
PRB-26	7/8	1 7/8	1/2	77R14	1
PRB-27	1	2	1/2	77R16	1

## Stainless Steel Inch and Metric

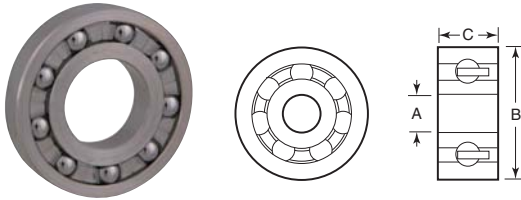


Item No.	A	B	C	Max. rpm No Load	Load Capacity Lbs.		Bearing No.	Pack Qty.
					Dynamic	Static		
<b>Inch</b>								
PRB-2	3/8	7/8	7/32	1,600	126	99	SS77R6	1
PRB-3	1/2	1 1/8	1/4	1,142	165	129	SS77R8	1
PRB-6	1	2	1/2	729	276	183	SS77R16	1
<b>Metric</b>								
PRB-7	8	22	7	1,600	126	99	SS608	1
PRB-8	15	32	9	1,142	165	128	SS6002	1
PRB-9	17	35	10	1,069	207	138	SS6003	1
PRB-10	17	40	12	1,069	207	138	SS6203	1

# BALL & TAPERED ROLLER BEARINGS



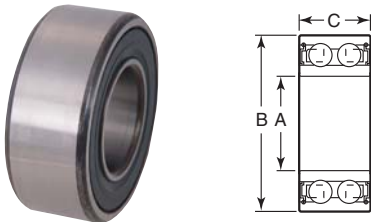
## Stainless Steel Bearings Inch and Metric



These stainless steel bearings are semi-precision unground type. The 316 type stainless bearings are ideal for hostile environments and wash down applications where the load is too heavy for plastic bearings. Type 316 stainless is non-magnetic and can be run without lubrication at slow speeds. Type 316 stainless provides greater corrosion resistance over 440 type stainless. Cage is made of a polymer. Metric dimensions are in millimeters.

Item No.	A	B	C	Load Capacity Lbs.			Bearing Number	Pack Qty.
				Max. rpm No Load	Dynamic	Static		
<b>Inch</b>								
NNB-60	1/4	5/8	.196	2,352	89	51	R4	1
NNB-62	3/8	7/8	1/32	1,600	126	99	R6	1
NNB-63	3/8	7/8	3/32	1,600	126	99	R6A	1
NNB-64	1/2	1 1/8	1/4	1,142	165	129	R8	1
NNB-66	1/2	1 1/8	7/16	1,069	207	138	R10B	1
NNB-67	5/8	1 3/8	7/16	1,069	207	138	R10B	1
NNB-68	3/4	1 3/8	7/16	840	234	156	R12	1
NNB-69	1	2	1/2	729	276	183	R16	1
<b>Metric</b>								
NNB-92	8	22	7	1,600	126	99	608	1
NNB-95	15	32	9	1,142	165	129	6002	1
NNB-96	17	35	10	1,069	207	138	6003	1
NNB-102	17	40	12	1,069	207	138	6203	1

## Double Sealed Double Row - Angular Contact Metric



Double row ball bearings are suitable for taking axial loads in both directions. Designed for use in pumps, motors, etc. All bearings are double sealed to keep dirt and other contaminants out.

Item No.	A mm	B mm	C mm	Load Capacity Lbs.		Bearing Number	Pack Qty.
				Dynamic	Static		
INA-1155	12	32	15.9	2,390	1,320	32012RS	1

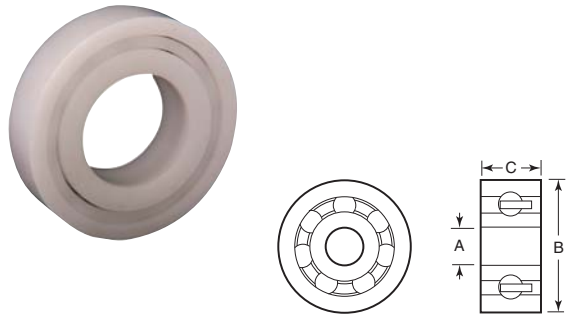
## Tapered Roller Bearings Cup and Cone Sets



Set

Item No.	Basic Load Rating (Lbs.)		Speed Rating (rpm)		Pack Qty.
	Dynamic	Static	Grease		
			Oil	Oil	
SKF-1S	4,770	4,680	9,000	13,000	1
SKF-2S	6,180	6,300	8,500	12,000	1
SKF-3S	8,600	8,540	8,000	11,000	1
SKF-4S	5,850	6,740	7,500	10,000	1
SKF-5S	10,300	12,400	5,600	7,500	1
SKF-6S	7,550	8,990	6,300	8,500	1
SKF-8S	5,850	7,310	7,000	9,500	1
SKF-11S	6,300	7,350	8,000	11,000	1
SKF-12S	6,180	6,970	8,000	11,000	1
SKF-13S	7,420	9,670	6,000	8,000	1
SKF-14S	5,850	6,740	7,500	10,000	1
SKF-16S	6,180	6,970	8,000	11,000	1
SKF-17S	7,420	9,670	6,000	8,000	1

## Plastic Bearings Inch and Metric



These plastic bearings are corrosion resistant, lightweight and offer a great deal of design flexibility. The rings are delrin, ball retainer is chemical resistant polymer, and the balls are 316 stainless, providing a lube free operation where other bearings wouldn't hold up.

Item No.	A	B	C	Load Capacity Lbs.			Bearing Number	Pack Qty.
				Max. rpm No Load	Dynamic	Static		
<b>Inch</b>								
NNB-01	3/16	1/2	5/32	3,167	17	11	R3	1
NNB-02	3/16	5/8	.196	2,352	26	17	R3A	1
NNB-03	1/4	5/8	.196	2,352	26	17	R4	1
NNB-04	1/4	3/4	3/32	2,352	26	17	R4A	1
NNB-05	1/4	3/4	5/32	2,352	26	17	R4AW	1
NNB-06	3/8	7/8	7/32	1,600	42	33	R6	1
NNB-07	3/8	7/8	5/32	1,600	42	33	R6A	1
NNB-08	1/2	1 1/8	1/4	1,142	55	43	R8	1
NNB-09	5/8	1 1/8	1/4	1,142	55	43	R8	1
NNB-11	1/2	1 1/8	3/8	1,142	55	43	R8A	1
NNB-13	3/8	1 3/8	7/16	1,069	69	46	R10B	1
NNB-14	1/2	1 3/8	7/16	1,069	69	46	R10B	1
NNB-15	3/4	1 3/8	7/16	1,069	69	46	R10B	1
NNB-16	3/4	1 5/8	5/16	840	78	52	R12	1
NNB-17	1	2	1/2	729	92	61	R16	1
<b>Metric</b>								
NNB-42	8	22	7	1,600	42	33	608	1
NNB-43	10	26	8	1,600	42	33	6000	1
NNB-49	10	30	9	1,142	55	43	6200	1
NNB-52	17	40	12	840	78	52	6203	1

## Tapered Roller Bearings Cup and Cone Sets

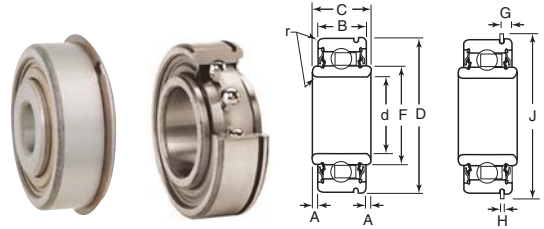


Item No.	Basic Load Rating (Lbs.)		Speed Rating (rpm)		Pack Qty.
	Dynamic	Static	Grease		
			Oil	Oil	
PRB-221	4,770	4,680	9,000	13,000	1
PRB-222	6,180	6,300	8,500	12,000	1
PRB-223	8,600	8,540	8,000	11,000	1
PRB-224	5,850	6,740	7,500	10,000	1
PRB-225	10,300	11,400	5,600	7,500	1
PRB-226	7,550	8,990	6,300	8,500	1
PRB-227	5,850	7,310	7,000	9,500	1
PRB-228	6,300	7,350	8,000	11,000	1
PRB-229	6,180	6,970	8,000	11,000	1
PRB-230	7,420	9,670	6,000	8,000	1
PRB-231	5,850	6,740	7,500	10,000	1
PRB-232	6,180	6,970	8,000	11,000	1
PRB-233	7,420	9,670	6,000	8,000	1



Precision ground on all contact surfaces. Recommended for applications requiring the accuracy of rotation and quiet performance of close tolerance precision grab bearings, and where superior seal is required to retain lubricant and keep the bearing free from dust and dirt. Double sealed bearings are greased packed as standard. Nylon cage design. Use for medium loads and for maximum speeds in the range of 6,000 rpm. ID and OD tolerance area is +.0000/-.0005". Width tolerance is +.000/-0.005".

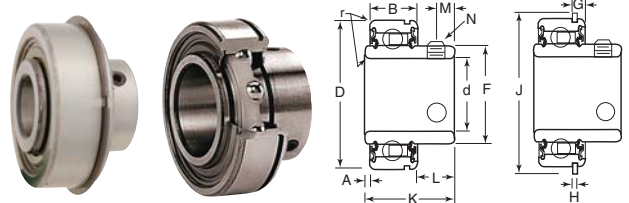
Heavy Duty Precision Ground Radial Bearings



Item No.	Principal Dimensions										Basic Load Ratings			Abutment and Fillet Dimensions			
	+0.000 -0.0005 Bore d (In.)	+0.000 -0.0005 OD D (In.)	+0.000 -0.0005 Outer Width B (In.)	A (In.)	+0.000 -0.0005 Inner Width C (In.)	F (In.)	H (In.)	J (In.)	Radius (In.)	Weight (Lbs.)	Dynamic (Lbs.)	Static (Lbs.)	min (In.)	Max. (In.)	r Max. (In.)	Pack Qty.	
SKF-9125*	.500	1.7500	.625	.0625	.750	1.009	.136	.042	1.9219	.035	.330	2,595	1,010	.750	1,500	.035	1
SKF-9130	.500	1.7500	.625	.0625	.750	1.009	.136	.042	1.9219	.035	.330	2,595	1,010	.750	1,500	.035	1
SKF-9135*	.625	1.7500	.625	.0625	.750	1.009	.136	.042	1.9219	.035	.290	2,595	1,010	.875	1,500	.035	1
SKF-9140	.625	1.7500	.625	.0625	.750	1.009	.136	.042	1.9219	.035	.290	2,595	1,010	.875	1,500	.035	1
SKF-9145*	.750	1.7500	.625	.0625	.750	1.009	.136	.042	1.9219	.035	.310	2,595	1,010	1,000	1,500	.035	1
SKF-9150	.750	1.7500	.625	.0625	.750	1.009	.136	.042	1.9219	.035	.310	2,595	1,010	1,000	1,500	.035	1
SKF-9155***	1.000	2.0000	.625	.0625	.750	1.306	.136	.042	2.1563	.035	.330	2,970	1,350	1,250	1,750	.035	1
SKF-9160***	1.000	2.0000	.625	.0625	.750	1.306	.136	.042	2.1563	.035	.330	2,970	1,350	1,250	1,750	.035	1
SKF-9165***	1.250	2.5625	.750	.0625	.875	1.675	.190	.065	2.7656	.035	.565	5,360	2,620	1,500	2,312	.035	1
SKF-9170**	1.250	2.5625	.750	.0625	.875	1.675	.190	.065	2.7656	.035	.565	5,360	2,620	1,500	2,312	.035	1

\*Snap ring in the groove  
 \*\*OD tolerance is +.0000/-.0006  
 \*\*\*Snap ring in the groove and OD tolerance is +.0000/-.0006

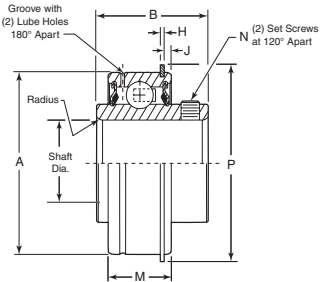
Heavy Duty Precision Ground Radial Bearings with Extended Inner Ring



Item No.	Principal Dimensions										Basic Load Ratings						
	+0.000 -0.0005 Bore d (In.)	+0.000 -0.0005 OD D (In.)	+0.000 -0.0005 Outer Width B (In.)	A (In.)	F (In.)	+0.000 -0.0005 Inner Width C (In.)	H (In.)	J (In.)	L (In.)	M (In.)	N (2 set screws)	Radius (In.)	Dynamic (Lbs.)	Static (Lbs.)	Weight (Lbs.)	Pack Qty.	
SKF-9175*	.6250	1.7500	.625	.0625	1.009	.136	.042	1.9219	1.092	.405	.233	10-32	.035	2,595	1,010	.36	1
SKF-9180	.6250	1.7500	.625	.0625	1.009	.136	.042	1.9219	1.092	.405	.233	10-32	.035	2,595	1,010	.36	1
SKF-9185*	.7500	1.7500	.625	.0625	1.009	.136	.042	1.9219	1.092	.405	.233	10-32	.035	2,595	1,010	.28	1
SKF-9190	.7500	1.7500	.625	.0625	1.009	.136	.042	1.9219	1.092	.405	.233	10-32	.035	2,595	1,010	.28	1
SKF-9195**	1.0000	2.0000	.625	.0625	1.306	.136	.042	2.1563	1.179	.492	.261	10-32	.035	2,970	1,350	.36	1
SKF-9200**	1.0000	2.0000	.625	.0625	1.306	.136	.042	2.1563	1.179	.492	.261	10-32	.035	2,970	1,350	.36	1
SKF-9205***	1.2500	2.5625	.750	.0625	1.672	.190	.065	2.7656	1.417	.605	.261	1/4-28	.035	5,360	2,620	.71	1
SKF-9210**	1.2500	2.5625	.750	.0625	1.672	.190	.065	2.7656	1.417	.605	.261	1/4-28	.035	5,360	2,620	.71	1

\*Snap ring in the groove  
 \*\*OD tolerance is +.0000/-.0006  
 \*\*\*Snap ring in the groove and OD tolerance is +.0000/-.0006

ER Bearings

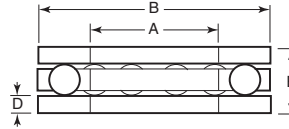


ER Series ball bearings, an industry standard, are used in demanding applications such as: cardboard/packing machinery, paper/printing machinery, carpet tufting machinery, general conveying equipment, pumps, blowers. These bearings feature exclusive heavy duty "DL" seals which are permanently sealed and prelubricated for long life. "DL" seals feature a steel trash guard combined with the inner ring labyrinth groove provide superior protection in wet/moist environments. These bearings come with two lubrication holes for regreasing, two knurled cup point set screws set 120 degrees apart offer excellent resistance to loosening under vibratory conditions. They are made of fully ground, SAE 52100 chrome alloy steel races featuring a black oxide finish for added corrosion resistance and are available with low-torque seals (SFR).

Item No.	Shaft Diameter	Snap Ring			Basic Load Rating (Lbs.)							
		+0.000 -0.0005 OD	Inner Width	Outer Width	Location	Width	Diameter	N (2 set screws)	Radius	Dynamic	Static	Pack Qty.
RBC-330	5/8	1.8504	1 7/32	5/8	3/32	3/64	2 1/16	10-32	0.04	2,860	1,480	1
RBC-340	5/8	1.8504	1 7/32	5/8	3/32	3/64	2 1/16	10-32	0.04	2,860	1,480	1
RBC-350	3/4	1.8504	1 7/32	5/8	3/32	3/64	2 1/16	10-32	0.04	2,860	1,480	1
RBC-360	3/4	1.8504	1 7/32	5/8	3/32	3/64	2 1/16	10-32	0.04	2,860	1,480	1
RBC-370	1	2.0472	1 3/8	3/4	3/32	3/64	2 17/64	1/4-28	0.04	3,145	1,770	1
RBC-380	1	2.0472	1 3/8	3/4	3/32	3/64	2 17/64	1/4-28	0.04	3,145	1,770	1
RBC-390	1 1/16	2.4409	1 1/2	7/8	1/8	1/16	2 21/32	1/4-28	0.04	4,360	2,535	1
RBC-400	1 1/16	2.4409	1 1/2	7/8	1/8	1/16	2 21/32	1/4-28	0.04	4,360	2,535	1
RBC-410	1 1/4	2.8346	1 11/16	1 5/16	1/8	1/16	3 5/64	1/4-28	0.04	5,755	3,450	1
RBC-420	1 1/4	2.8346	1 11/16	1 5/16	1/8	1/16	3 5/64	1/4-28	0.04	5,755	3,450	1
RBC-430	1 1/2	2.8346	1 11/16	1 5/16	1/8	1/16	3 5/64	1/4-28	0.04	5,755	3,450	1
RBC-440	1 1/2	2.8346	1 11/16	1 5/16	1/8	1/16	3 5/64	1/4-28	0.04	5,755	3,450	1
RBC-450	1 1/2	3.1496	1 15/16	1 3/2	1/8	1/16	3 13/32	5/16-24	0.062	6,535	4,025	1
RBC-460	1 1/2	3.1496	1 15/16	1 3/2	1/8	1/16	3 13/32	5/16-24	0.062	6,535	4,025	1
RBC-470	1 15/16	3.5433	2 1/32	1 1/8	1/8	3/32	3 25/32	3/8-24	0.062	7,900	5,250	1
RBC-480	1 15/16	3.5433	2 1/32	1 1/8	1/8	3/32	3 25/32	3/8-24	0.062	7,900	5,250	1



Nylon Ball Retainers



This new concept in thrust bearings provides superior performance and economical characteristics. The unique design of the molded nylon retainer captures the balls in precision molded pockets assuring smooth free turning and quiet operation. The nylon retainer is lightweight, provides natural lubricity and is corrosion resistant. Balls are precision grade 100 tolerance +/- .0001, +/- .0025mm. The thrust washers are hardened steel providing high strength to wear ratio for long life. Available with steel or stainless steel balls. Washers are included with bearing.

Item No.	Steel		Stainless		Nominal ID A	Actual ID A	Nominal OD B	Actual OD B	No. of Balls	Ball Size	D	E	Pack Qty.	
	Load Rating (Lbs.) @ 15 rpm	Load Rating (Lbs.) @ 5000 rpm	Item No.	Load Rating (Lbs.) @ 15 rpm										Load Rating (Lbs.) @ 5000 rpm
TQ-012	120	17	TQS-012	84	12	1/8	.128/.133	7/16	.430/.437	6	.0938	.050	.190/.196	1
TQ-018	126	18	TQS-018	88	12	9/16	.191/.195	1/2	.492/.499	7	.0938	.050	.190/.196	1
TQ-025	131	18	TQS-025	92	12	1/4	.253/.258	9/16	.55/.562	8	.0938	.050	.190/.196	1
TQ-031	136	19	TQS-031	95	13	9/16	.316/.321	5/8	.617/.624	9	.0938	.050	.190/.196	1
TQ-037	175	25	TQS-037	123	17	3/8	.378/.383	13/16	.805/.812	6	.1250	.062	.245/.253	1
TQ-043	190	27	TQS-043	133	19	7/16	.441/.446	7/8	.867/.874	7	.1250	.062	.245/.253	1
TQ-050	201	29	TQS-050	140	20	1/2	.503/.508	15/16	.930/.937	8	.1250	.062	.245/.253	1
TQ-056	213	30	TQS-056	149	21	9/16	.566/.571	1	.992/.999	9	.1250	.062	.245/.253	1
TQ-062	251	36	TQS-062	175	25	5/8	.628/.635	1 1/8	1.115/1.124	6	.1563	.093	.336/.348	1
TQ-068	273	39	TQS-068	191	27	1 1/16	.691/.698	1 1/16	1.178/1.187	7	.1563	.093	.336/.348	1
TQ-075	293	42	TQS-075	205	29	3/4	.753/.760	1 1/4	1.240/1.249	8	.1563	.093	.336/.348	1
TQ-081	314	45	TQS-081	220	31	13/16	.816/.823	1 1/16	1.303/1.312	9	.1563	.093	.336/.348	1
TQ-087	328	47	TQS-087	196	33	7/8	.878/.885	1 3/8	1.365/1.374	10	.1563	.093	.336/.348	1
TQ-093	384	55	TQS-093	268	38	15/16	.941/.950	1 1/16	1.551/1.562	9	.1875	.125	.427/.447	1
TQ-100	459	66	TQS-100	321	46	1	1.003/1.012	1 5/8	1.613/1.624	10	.1875	.125	.427/.447	1
TQ-112	504	72	TQS-112	352	50	1 1/8	1.128/1.137	1 3/4	1.738/1.749	12	.1875	.125	.427/.447	1
TQ-125	545	78	TQS-125	381	54	1 1/4	1.253/1.262	1 7/8	1.863/1.874	14	.1875	.125	.427/.447	1
TQ-150	522	75	TQS-150	365	52	1 1/2	1.503/1.512	2 1/8	2.113/2.124	14	.1875	.125	.427/.447	1

Note: Dimension D tolerance for .050 and .062 is +/- .003, .125 is +/- .005.

Cylindrical Rollers



Cylindrical roller thrust bearings have a comparatively large contact area between the roller and raceway. They can support greater loads and accommodate much more shock than ball thrust bearings of a similar size. Cylindrical roller thrust bearings are suitable for medium to heavy-duty applications with high thrust loads and low operating coefficient of friction requirements. The .032" thrust washer is punched from steel, through hardened and polished. These washers should be fully supported on their entire abutment surface. The .126" thrust washers are made from bearing steel. The raceways are ground while the bore and outside diameter are machined. Washers sold separately from bearings.

Item No.	INA	A	B	C	Load Ratings Lbs.		Speed Limit (rpm)	.032" Washer		Pack Qty.
					Static	Dynamic		Item No.	Item No.	
INA-500	TC815	1/2	1 1/16	5/64	5,300	1,920	13,000	INA-560	—	1
INA-505	TC1018	5/8	1 1/8	5/64	6,600	2,170	11,000	INA-565	—	1
INA-510	TC1220	3/4	1 1/4	5/64	8,000	2,410	9,500	INA-570	INA-625	1
INA-515	TC1423	7/8	1 1/2	5/64	10,500	2,900	8,500	INA-575	INA-630	1
INA-520	TC1427	7/8	1 11/16	5/64	18,600	4,400	7,500	INA-580	INA-635	1
INA-525	TC1625	1	1 1/8	5/64	12,100	3,150	7,500	INA-585	INA-640	1
INA-530	TC1828	1 1/8	1 3/4	5/64	16,300	3,850	6,500	INA-590	—	1
INA-535	TC2031	1 1/4	1 15/16	5/64	20,500	4,500	6,000	INA-595	INA-650	1
INA-540	TC2435	1 1/2	2 3/16	5/64	23,700	4,850	5,000	INA-600	INA-655	1
INA-545	TC2840	1 3/4	2 1/2	5/64	30,000	5,600	4,500	INA-605	INA-660	1
INA-550	TC3244	2	2 3/4	5/64	32,500	5,800	4,000	INA-610	INA-665	1

Note: For oil lubrication use 25 percent of value with grease lubrication.



**Silverthin™ Bearings**  
**Type X Four Point Contact**  
**Brass Snapover Separator Standard**



The Silverthin™ series are manufactured to industry standard sizes. The bearing widths and sections (distance from bore to outside diameter) in each series remain constant regardless of the change in bore diameter.

Item No.	Bore	OD	Width	Dynamic Load Capacity			Static Load Capacity			Maximum rpm Radial, Thrust or Combined Load	Pack Qty.
				Radial Lbs.	Thrust Lbs.	Moment Lbs.-In.	Radial Lbs.	Thrust Lbs.	Moment Lbs.-In.		
CCF-1100	2	2½	¼	323	794	367	682	1,711	772	1,500	1
CCF-1105	2	2½	⅜	458	1,135	521	930	2,344	1,083	1,500	1
CCF-1110	2½	3	¼	363	912	506	830	2,097	1,154	1,200	1
CCF-1115	2½	3½	⅜	521	1,297	730	1,149	2,840	1,603	1,200	1
CCF-1120	3	3½	¼	413	1,014	667	994	2,475	1,603	833	1
CCF-1125	3	3½	⅜	589	1,442	963	1,343	3,355	2,221	1,000	1
CCF-1130	3½	4	¼	453	1,118	846	1,144	2,856	2,139	714	1
CCF-1135	3½	4½	⅜	634	1,598	1,217	1,546	3,862	2,946	714	1
CCF-1140	4	4½	¼	486	1,213	1,035	1,293	3,227	2,748	625	1
CCF-1145	4	4½	⅜	690	1,721	1,495	1,751	4,379	3,770	625	1
CCF-1150	5	5½	¼	569	1,403	1,462	1,597	3,988	4,186	500	1
CCF-1155	5	5½	⅜	794	1,981	2,103	2,158	5,386	5,729	500	1
CCF-1160	6	6½	¼	634	1,572	1,968	1,906	4,740	5,936	333	1
CCF-1165	6	6½	⅜	899	2,220	2,804	2,567	6,404	8,082	416	1
CCF-1170	7	7½	¼	693	1,735	2,515	2,204	5,507	7,988	285	1
CCF-1175	8	8½	⅜	1,071	2,670	4,441	3,370	8,434	14,025	250	1

**Note:** For bearings with ¼ inch widths, the maximum shaft or housing fillet radius that the bearing corners will clear is .025 inch. Bearings with ⅜ inch widths will clear .040 inch.

**Turntable Bearings**  
**Lazy Susan**

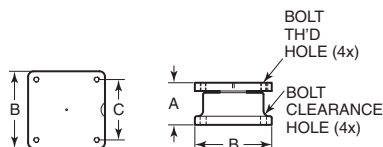


Used for turntables and fixtures of all kinds. 5/16" thick. Has a full race of precision ground ball bearings for smooth gliding rotation. Pre-assembled. Bearing is interlocked for life time of unit. Zinc coated steel. 9" and 12" round bearings are available greased.

Item No.	Size	Shape	Center Hole Dia.	Nominal Load Capacity (Lbs.)	Use With Turntables Approx. Dia.	Pack Qty.
LS-3	3	Square	1¼	200	Up to 18	1
LS-4	4	Square	2½	300	12 to 25	1
LS-6	6	Square	4½	500	15 to 30	1
LS-9	9	Round	4½	750	17 to 35	1
LS-9G*	9	Round	4½	750	17 to 35	1
LS-12	12	Round	6½	1,000	Over 20	1
LS-12G*	12	Round	6½	1,000	Over 20	1

\*Greased

**Lockable or Non-Lockable**



Heavy duty turntables are ideal for swivel displays, welding tables, industrial assemblies and many other turntable applications. May be mounted using the recommended bolts or welded directly to the fixture. All sizes can be purchased as lockable or non-lockable units.

Non-Locking		Locking		A Height	B Lgth.	C Center/Center	Mtg. Bolt Size	Pack Qty.
Item No.	Item No.	Load Cap. Lbs.						
<b>Cast Iron</b>								
SKF-80	SKF-85	1,000	1.77	3.25	2.5	¼-20		1
SKF-81	SKF-86	2,500	1.92	3.5	2.75	¼-20		1
SKF-82	SKF-87	5,000	2.43	5	4	⅝-16		1
SKF-83	SKF-88	10000	2.72	6.5	5.5	⅝-16		1



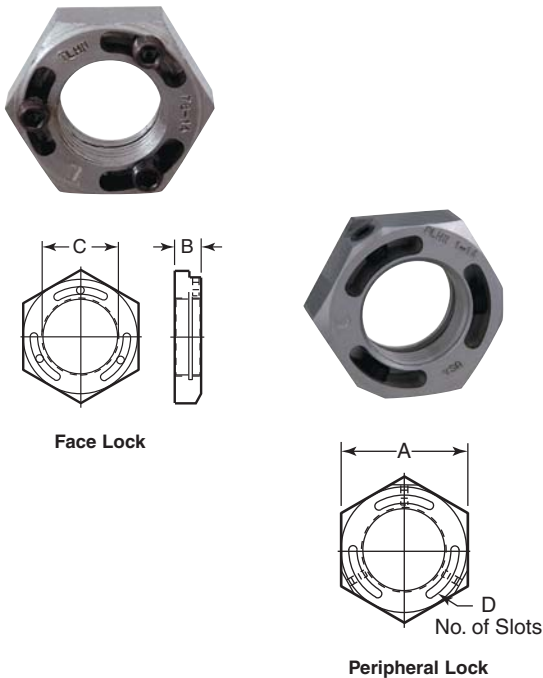
**Bearing Locknuts**  
Steel  
Inch



By applying torque to the locking screw, a pressfit or wave spring effect is created locking the female threads of the locknut to the male threads of the shaft. This deflection produces a strong mechanical metal to metal lock, but does not effect the squareness of the bearing face. The locking set screws do not protrude through the face or the threads of the locknut eliminating damage to the shaft or bearing. Locknuts are furnished with both spanner slots and holes. Made of low carbon steel.

Face Lock		Peripheral Lock			Major Dia. F	Pitch Dia. G	Thread Pitch Dia. H	Pack Qty.
Item No.	Item No.	A	B	C				
BLN-03	—	1.125	.343	.938	.664	.6437/ .6467	32	1
BLN-04	BLN-04-PH	1.375	.375	1.125	.781	.7607/ .7641	32	1
BLN-05	BLN-05-PH	1.562	.406	1.281	.969	.9487/ .9521	32	1
BLN-06	BLN-06-PH	1.750	.406	1.500	1.173	1.1369/ 1.1409	18	1
BLN-07	—	2.062	.438	1.812	1.376	1.3399/ 1.3439	18	1
BLN-08	BLN-08-PH	2.250	.438	2.000	1.563	1.5269/ 1.5314	18	1
BLN-09	BLN-09-PH	2.531	.438	2.281	1.767	1.7309/ 1.7354	18	1
BLN-10	—	2.688	.500	2.438	1.967	1.9309/ 1.9354	18	1
—	BLN-11-PH	2.968	.500	2.656	2.157	2.1209/ 2.1260	18	1
BLN-12	—	3.156	.531	2.844	2.360	2.3239/ 2.3290	18	1

**Locking Hexnuts**  
Face and Peripheral Lock  
Inch

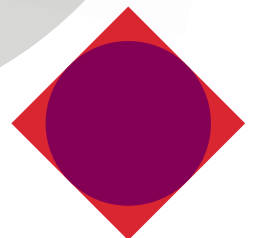


By applying torque to the locking screw, a press fit or wave spring effect is created locking the female threads of the locknut to the male threads of the shaft. Produces a strong metal to metal lock. The locking set screws do not protrude through the face of the threads of the locknut, eliminating damage to the shaft or other surface.

Face Lock		Peripheral Lock			Pack Qty.
Item No.	Item No.	A	B	C	
—	BLN-160	1 <sup>5</sup> / <sub>16</sub>	.340	7 <sup>1</sup> / <sub>16</sub> -20	2
—	BLN-165	1	.359	1 <sup>1</sup> / <sub>2</sub> -20	2
—	BLN-170	1 <sup>1</sup> / <sub>8</sub>	.359	3 <sup>1</sup> / <sub>8</sub> -18	2
—	BLN-175	1 <sup>1</sup> / <sub>4</sub>	.422	3 <sup>1</sup> / <sub>4</sub> -16	3
BLN-105	—	1 <sup>1</sup> / <sub>16</sub>	.484	7 <sup>1</sup> / <sub>8</sub> -14	3
BLN-110	BLN-185	1 <sup>1</sup> / <sub>8</sub>	.547	1-14	3
BLN-115	—	1 <sup>1</sup> / <sub>8</sub>	.719	1 <sup>1</sup> / <sub>4</sub> -12	3
BLN-120	BLN-195	2 <sup>1</sup> / <sub>4</sub>	.844	1 <sup>1</sup> / <sub>2</sub> -12	3

# ADHESIVES, SEALANTS & TAPE

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**Grip Fast™ Self-Locking Collars**  
ABS and Stainless Steel  
Inch



Slide collar on



Automatically locks in position

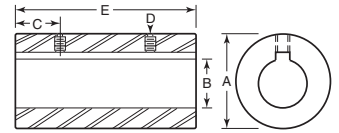


Releases by pulling on outer ring and slide off

Great for quick change over and quick adjustments, these self locking collars slide on in one direction and lock automatically. No tools are necessary for installation or removal. The ball bearings jam themselves between the inner metal ring and the shaft allowing up to 500 lbs. of axial holding power (based on cold rolled drawn steel). The outer body of the steel self locking collars is made of tough ABS plastic. The all stainless are made from Type 304 stainless steel. All collars are designed to fit shaft tolerances of +/- .020".

Item No.	Bore Size	OD	Lgth. (Max.)	Pack Qty.
<b>Steel w/ ABS Plastic Outer</b>				
SMI-187	3/16	.558	.94	1
SMI-250	1/4	.743	1.010	1
SMI-312	5/16	.743	1.010	1
SMI-375	3/8	1.107	1.045	1
SMI-500	1/2	1.107	1.045	1
SMI-562	9/16	1.400	1.460	1
SMI-620	5/8	1.400	1.460	1
SMI-750	3/4	1.400	1.460	1
SMI-875	7/8	1.860	2.000	1
SMI-1000	1	1.860	2.000	1
SMI-1062	1 1/16	1.860	2.000	1
SMI-1250	1 1/4	2.165	1.825	1
SMI-1500	1 1/2	2.165	1.825	1
SMI-2000	2	2.725	2.070	1
SMI-3000	3	3.775	1.980	1
<b>All Stainless Steel</b>				
SMI-250SS	1/4	.750	1.00	1
SMI-312SS	5/16	.750	1.00	1
SMI-375SS	3/8	1.125	1.10	1
SMI-500SS	1/2	1.125	1.10	1
SMI-750SS	3/4	1.400	1.50	1

**Rigid Sleeve Couplings**



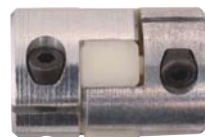
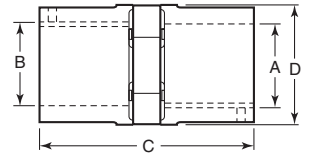
These steel couplings provide a fixed union between two shafts which are precisely aligned.

Item No.	+0.000 -0.010 A	+0.001 -0.000 B	+/-0.010 C	D	+/-0.015 E	Keyway Size	Pack Qty.
SC-250	.50	.250	.19	8-32 x 1/8	.75	None	1
SC-312	.63	.312	.25	8-32 x 1/8	1.00	None	1
SC-375	.75	.375	.25	10-24 x 1/8	1.00	None	1
SC-500	1.00	.500	.38	1/4-20 x 1/4	1.50	1/8 x 1/16	1
SC-625	1.25	.625	.50	3/16-18 x 3/16	2.00	3/16 x 3/32	1
SC-750	1.50	.750	.50	3/16-18 x 3/8	2.00	3/16 x 3/32	1
SC-875	1.75	.875	.50	3/16-18 x 3/8	2.00	3/16 x 3/32	1
SC-1000	2.00	1.000	.75	3/16-16 x 1/2	3.00	1/4 x 1/8	1
SC-1125	2.13	1.125	.75	3/16-16 x 1/2	3.00	1/4 x 1/8	1
SC-1250	2.25	1.250	1.00	3/16-16 x 1/2	4.00	1/4 x 1/8	1
SC-1375	2.50	1.375	1.00	3/16-16 x 1/2	4.50	3/16 x 3/32	1

**Shaft Couplings**  
**Miniature Flexible**  
**Zero Backlash Jaw**



Regular



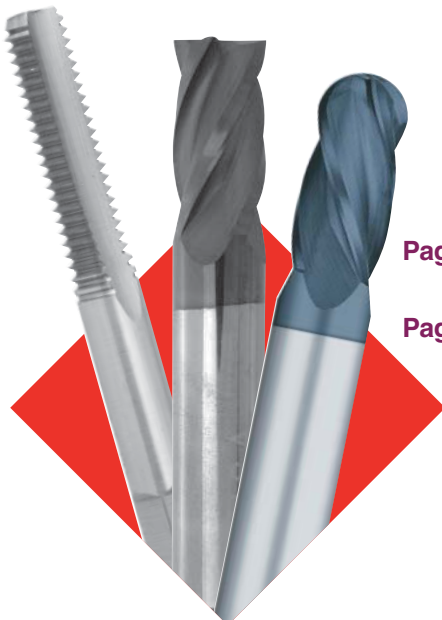
Clamp Style

Item No.	C	D	Set Screws	Cap Screws for Clamp Type	Inertia (In # Sec <sup>2</sup> )	Stiffness	Torque
GU-3004, GU-3013, GU-4001, GU-4013	0.866	0.551	6-32	4-40	1.7 x 10 <sup>-6</sup>	127	20
GU-3101 - 3110, GU-4101-4110	1.18	0.787	8-32	5-40	8.8 x 10 <sup>-6</sup>	279	54
GU-3214 - 3219, GT-4212 - 4219	1.33	1.18	8-32	6-32	5.3 x 10 <sup>-5</sup>	1,014	130
GU-3318 - 3321, GU04317 - 4321	2.6	1.57	10-24	8-32	3.5 x 10 <sup>-4</sup>	3,042	174

Machined aluminum hubs with 92 durometer "spiders". Designed for fractional and sub-fractional motors. Absorbs parallel and angular misalignment. Excellent shock dampening and vibration isolation. Cross clamping available for positive shaft lock. Stiffness is in pounds per inch radian. All bores larger than 1/2" have a 3/16" x 3/32" keyway.

Regular Item No.	Clamp Style Item No.	Bore Size A	Bore Size B	Pack Qty.
—	GU-4001	1/8	1/8	1
GU-3004	—	3/8	1/4	1
GU-3101	GU-4101	3/16	3/16	1
GU-3105	GU-4102	3/16	1/4	1
GU-3013	GU-4013	1/4	1/4	1
GU-3107	GU-4107	1/4	3/8	1
GU-3108	GU-4108	3/16	3/16	1
GU-3109	GU-4109	3/16	3/8	1
GU-3110	GU-4110	3/8	3/8	1
—	GU-4212	3/8	3/8	1
GU-3214	GU-4214	3/8	1/2	1
GU-3219	GU-4219	1/2	1/2	1
—	GU-4317	1/2	3/8	1
GU-3318	GU-4318	1/2	3/4	1
GU-3319	GU-4319	3/8	3/8	1
GU-3320	—	3/8	3/4	1
GU-3321	GU-4321	3/4	3/4	1

**TAPS & END MILLS**



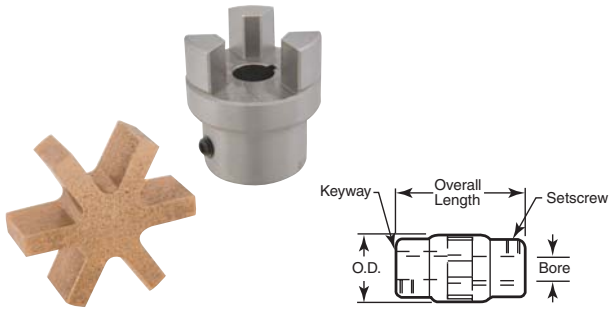
Taps  
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End Mills  
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# SHAFT COUPLINGS

## Shaft Couplings Three Jaw Type



Complete with keyway and set screw. No lubrication needed. Bored to  $+.001/-0.000$ " tolerances. **Must order two coupling halves and one insert of same outside diameter for complete coupling.** Insert types include: Bost-Bronz inserts for high torque loads, particularly at slower speeds, rubber for quietness particularly at motor speeds, polyurethane for moderate to heavy shock loads.

### Coupling Inserts



Item No.	Rubber	Polyurethane	Outside Dia.	Pack Qty.
GE-217	GE-218	GE-219	1.25	1
GE-227	GE-228	GE-229	1.50	1
GE-237	GE-238	GE-239	2.00	1
GE-247	GE-248	GE-249	2.50	1

### Coupling Halves



Item No.	Boston	Bore	Overall Length		Pack Qty.
			Assembled	Unassembled	
<b>1.25" Outside Diameter</b>					
GE-211	FC12 3/8	3/8	2.32	3.19	1
GE-213	FC12 1/2	1/2	2.32	3.19	1
<b>1.50" Outside Diameter</b>					
GE-221	FC15 1/2	1/2	2.76	3.75	1
GE-223	FC15 5/8	5/8	2.76	3.75	1
GE-224	FC15 3/4	3/4	2.76	3.75	1
GE-225	FC15 7/8	7/8	2.76	3.75	1
<b>2.00" Outside Diameter</b>					
GE-230	FC20 1/2	1/2	3.69	4.81	1
GE-232	FC20 5/8	5/8	3.69	4.81	1
GE-233	FC20 3/4	3/4	3.69	4.81	1
GE-234	FC20 7/8	7/8	3.69	4.81	1
GE-236	FC20-1	1	3.69	4.81	1
<b>2.50" Outside Diameter</b>					
GE-241	FC25 3/4	3/4	4.13	5.38	1
GE-242	FC25 7/8	7/8	4.13	5.38	1
GE-244	FC25 1 1/8	1 1/8	4.13	5.38	1
GE-246	FC25 1 1/4	1 1/4	4.13	5.38	1

Note: Unassembled overall length is the dimension for assembly clearance.

### Machinable Couplings Single Split Black Oxide



Machinable couplings provide an affordable alternative to expensive set-up costs and special machining. The single split style couplings come with a variety of standard bore sizes on one end, and a pilot hole on the other that can be re bored to any diameter less than the opposing bore.

Item No.	Bore 1	Bore 2	OD	Length	Screw Size	Pack Qty.
CC-150	.500	.235	1.250	1.875	8-32 x 3/8	1
CC-151	.625	.235	1.500	2.250	10-32 x 1/2	1
CC-152	.750	.235	1.750	2.625	1/4-28 x 3/8	1
CC-153	.875	.235	1.875	2.875	1/4-28 x 3/8	1
CC-155	1.125	.360	2.125	3.250	1/4-28 x 3/8	1
CC-156	1.250	.360	2.250	3.375	1/4-28 x 3/8	1
CC-157	1.375	.360	2.375	3.625	1/4-28 x 3/8	1
CC-158	1.500	.485	2.500	3.750	1/4-28 x 3/8	1
CC-159	1.750	.485	3.000	4.500	3/16-24 x 7/8	1

## Shaft Couplings Rigid Clamp Style



Made of carbon steel. Available with or without a keyway. Clamp screws are forged and treated with an antivibration coating to keep them from loosening.

### w/Keyway

One Piece		Two Piece		Bore A	Keyway A	Bore B	Keyway B	Length	OD	Pack Qty.
Item No.	Item No.	Bore A	Keyway A							
CC-103	CC-403	.375	3/32	.375	3/32	1 1/8	7/8	1		
—	CC-404	.500	1/8	.375	3/32	1 3/4	1 1/8	1		
CC-105	CC-405	.500	1/8	.500	1/8	1 3/4	1 1/8	1		
—	CC-406	.625	3/16	.500	1/8	2	1 1/8	1		
CC-107	CC-407	.625	3/16	.625	3/16	2	1 1/8	1		
—	CC-409	.750	3/16	.625	3/16	2 1/4	1 1/2	1		
CC-110	CC-410	.750	3/16	.750	3/16	2 1/4	1 1/2	1		
CC-112	CC-412	.875	3/16	.875	3/16	2 1/2	1 5/8	1		
CC-115	CC-415	1.000	1/4	1.000	1/4	3	1 3/4	1		
CC-116	CC-416	1.125	1/4	1.125	1/4	3 1/8	1 7/8	1		
CC-119	CC-419	1.250	1/4	1.250	1/4	3 1/4	2 1/16	1		
CC-123	CC-423	1.500	3/8	1.500	3/8	3 3/8	2 5/8	1		

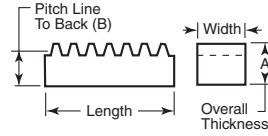
### w/o Keyway

One Piece		Two Piece		Bore A	Bore B	Length	OD	Pack Qty.
Item No.	Item No.	Bore A	Bore B					
CC-301	—	.250	.250	1	5/8	1		
CC-302	—	.375	.250	1 1/8	7/8	1		
CC-303	CC-503	.375	.375	1 1/8	7/8	1		
CC-304	CC-504	.500	.375	1 3/4	1 1/8	1		
CC-305	CC-505	.500	.500	1 3/4	1 1/8	1		
CC-306	—	.625	.500	2	1 1/8	1		
CC-307	CC-507	.625	.625	2	1 1/8	1		
CC-309	—	.750	.625	2 1/4	1 1/2	1		
CC-310	CC-510	.750	.750	2 1/4	1 1/2	1		
CC-312	—	.875	.875	2 1/2	1 5/8	1		
CC-313	—	1.000	.500	3	1 3/4	1		
CC-315	CC-515	1.000	1.000	3	1 3/4	1		
CC-319	CC-519	1.250	1.250	3 1/4	2 1/16	1		
CC-323	CC-523	1.500	1.500	3 3/8	2 5/8	1		





**Spur Gear Racks**



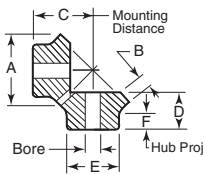
Face Width	Tolerances
1/8 - 3/4	+ .000/- .002
3/4 - 1 1/2	+ .000/- .003
1 3/4 - 2	+ .000/- .004

Used with gears below.

Item No.	Boston	Pitch	Width	Lgth. Feet	A	B	Pack Qty.	Item No.	Boston	Pitch	Width	Lgth. Feet	A	B	Pack Qty.
GE-3200	L503-4	32	.188	4	.188	.156	1	GE-1203	L515-6	12	.750	6	.750	.667	1
GE-2400	L505-4	24	.250	4	.250	.208	1	GE-1000	L516-4	10	1.000	4	.625	.525	1
GE-2000	L509-4	20	.375	4	.375	.325	1	GE-1001	L516-6	10	1.000	6	.625	.525	1
GE-2001	L509-6	20	.375	6	.375	.325	1	GE-1002	L517-4	10	1.000	4	1.000	.900	1
GE-1600	L512-4	16	.500	4	.500	.438	1	GE-0800	L518-4	8	1.250	4	.750	.625	1
GE-1601	L512-6	16	.500	6	.500	.438	1	GE-0802	L519-4	8	1.250	4	1.250	1.125	1
GE-1200	L514-4	12	.750	4	.500	.417	1	GE-0600	L520-4	6	1.500	4	1.000	.833	1
GE-1202	L515-4	12	.750	4	.750	.667	1								

14 1/2 degree pressure angle gearing racks. All are steel. Ends are not machined. Length tolerances are +1.000/- .000" to allow for cutting and matching.

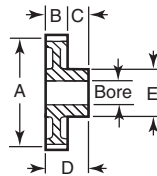
**Miter Gears**



20 degree pressure angle for transmitting motion and power between intersecting shafts at right angles. All are unhardened steel. 1:1 ratio applications. Coniflex tooth form allows for minor adjustments and increases gear life. Bore tolerance is +/- .0005".

Item No.	Boston	Pitch	No. of Teeth	Pitch Dia.	A	Bore	B	C	D	E	F	Pack Qty.	Item No.	Boston	Pitch	No. of Teeth	Pitch Dia.	A	Bore	B	C	D	E	F	Pack Qty.
GE-110	L110Y	16	16	1.00	.3750	.23	1.062	.755	.75	.44	.44	1	GE-113	L113Y	12	24	2.00	.5000	.44	1.875	1.224	1.31	.69	.69	1
GE-111	L111Y	16	20	1.25	.4375	.28	1.250	.849	1.00	.50	.50	1	GE-128	L128Y	10	20	2.00	.5000	.45	2.000	1.364	1.62	.81	.81	1
GE-112	L112Y	16	24	1.50	.5000	.32	1.375	.880	1.00	.50	.50	1	GE-129	L129Y	10	20	2.00	.6250	.45	2.000	1.364	1.62	.81	.81	1
GE-125	L125Y	12	15	1.25	.3750	.29	1.250	.864	1.00	.50	.50	1	GE-103	L103Y	10	20	2.00	.7500	.45	2.000	1.364	1.62	.81	.81	1
GE-101	L101Y	12	15	1.25	.5000	.29	1.250	.864	1.00	.50	.50	1	GE-130	L130Y	10	25	2.50	.7500	.56	2.438	1.630	2.00	.94	.94	1
GE-127	L127Y	12	18	1.50	.5000	.33	1.500	1.021	1.25	.63	.63	1	GE-131	L131Y	10	25	2.50	1.0000	.56	2.438	1.630	2.00	.94	.94	1
GE-102	L102Y	12	18	1.50	.6250	.33	1.500	1.021	1.25	.63	.63	1	GE-115	L115Y	8	24	3.00	.7500	.66	2.562	1.583	1.75	.81	.81	1
GE-119	L119Y	12	21	1.75	.5000	.40	1.750	1.192	1.38	.69	.69	1	GE-105	L105Y-A	8	24	3.00	1.0000	.68	2.750	1.786	2.50	1.00	1.00	1

**Spur Gears**



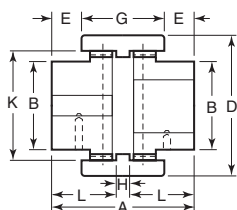
Used with gear racks above.

14 1/2 degree pressure angle gearing for transmitting motion and power between parallel shafts. All are steel except GE-1040, 1048 and 1248 which are cast iron. 32 and 24 pitch spur gears include a set screw. None include key ways. Bore tolerance is +/- .0005". Diameter tolerance is +/- 1/32".

Item No.	Boston	Pitch	No. of Teeth	Pitch Dia.	A	Bore	B	C	D	E	OD	Pack Qty.	Item No.	Boston	Pitch	No. of Teeth	Pitch Dia.	A	Bore	B	C	D	E	OD	Pack Qty.
GE-3216	H3216	32	16	.500	.1875	.188	.31	.498	.39	.562	.562	1	GE-1648	NB48A	16	48	3.000	.5000	.500	.50	1.000	2.19	3.125	3.125	1
GE-3218	H3218	32	18	.562	.1875	.188	.31	.498	.45	.624	.624	1	GE-1212	ND12	12	12	1.000	.5000	.750	.50	1.250	.75	1.167	1.167	1
GE-3220	H3220	32	20	.625	.2500	.188	.31	.498	.52	.687	.687	1	GE-1216	ND16	12	16	1.333	.6250	.750	.50	1.250	.99	1.500	1.500	1
GE-3224	H3224	32	24	.750	.3125	.188	.31	.500	.64	.812	.812	1	GE-1218	ND18	12	18	1.500	.6250	.750	.50	1.250	1.15	1.667	1.667	1
GE-3240	H3240	32	40	1.250	.3750	.188	.38	.568	.88	1.312	1.312	1	GE-1224	ND24	12	24	2.000	.6250	.750	.50	1.250	1.65	2.167	2.167	1
GE-2412	H2412	24	12	.500	.2500	.250	.31	.560	.36	.583	.583	1	GE-1230	ND30	12	30	2.500	.6250	.750	.62	1.370	2.15	2.667	2.667	1
GE-2416	H2416	24	16	.667	.3125	.250	.31	.560	.54	.750	.750	1	GE-1232	ND32A	12	32	2.667	.6250	.750	.62	1.370	1.92	2.834	2.834	1
GE-2420	H2420	24	20	.833	.3125	.250	.31	.562	.70	.916	.916	1	GE-1248	ND48	12	48	4.000	.7500	.750	.75	1.500	1.75	4.167	4.167	1
GE-2424	H2424	24	24	1.000	.3750	.250	.38	.630	.87	1.083	1.083	1	GE-1012	NF12	10	12	1.200	.6250	1.000	.62	1.620	.92	1.400	1.400	1
GE-2012	NA12B	20	12	.600	.3125	.375	.38	.755	.46	.700	.700	1	GE-1018	NF18	10	18	1.800	.7500	1.000	.62	1.620	1.42	2.000	2.000	1
GE-2016	NA16B	20	16	.800	.3750	.375	.38	.755	.66	.900	.900	1	GE-1020	NF20	10	20	2.000	.7500	1.000	.62	1.620	1.62	2.200	2.200	1
GE-2020	NA20B	20	20	1.000	.3750	.375	.38	.755	.84	1.100	1.100	1	GE-1024	NF24	10	24	2.400	.7500	1.000	.62	1.620	2.02	2.600	2.600	1
GE-2024	NA24	20	24	1.200	.3750	.375	.38	.755	.92	1.300	1.300	1	GE-1030	NF30A	10	30	3.000	.7500	1.000	.88	1.880	2.02	3.200	3.200	1
GE-2032	NA32	20	32	1.600	.3750	.375	.50	.875	1.32	1.700	1.700	1	GE-1040	NF40	10	40	4.000	.8750	1.000	.88	1.880	2.12	4.200	4.200	1
GE-2048	NA48A	20	48	2.400	.3750	.375	.50	.875	1.33	2.500	2.500	1	GE-1048	NF48	10	48	4.800	.8750	1.000	.88	1.880	2.12	5.000	5.000	1
GE-1612	NB12	16	12	.750	.3750	.500	.44	.940	.56	.875	.875	1	GE-0812	NH12	8	12	1.500	.7500	1.250	.75	2.000	1.12	1.750	1.750	1
GE-1614	NB14B	16	14	.875	.3750	.500	.44	.940	.69	1.000	1.000	1	GE-0816	NH16	8	16	2.000	.8750	1.250	.75	2.000	1.56	2.250	2.250	1
GE-1616	NB16B	16	16	1.000	.5000	.500	.44	.940	.81	1.125	1.125	1	GE-0820	NH20	8	20	2.500	.8750	1.250	.75	2.000	2.06	2.750	2.750	1
GE-1620	NB20B	16	20	1.250	.5000	.500	.44	.940	.96	1.375	1.375	1	GE-0824	NH24A	8	24	3.000	.8750	1.250	.88	2.130	2.06	3.250	3.250	1
GE-1624	NB24B	16	24	1.500	.5000	.500	.44	.940	1.20	1.625	1.625	1	GE-0612	NJ12	6	12	2.000	1.0000	1.500	.88	2.380	1.46	2.333	2.333	1
GE-1632	NB32	16	32	2.000	.5000	.500	.50	1.000	1.70	2.125	2.125	1	GE-0624	NJ24A	6	24	4.000	1.1250	1.500	.88	2.380	3.00	4.333	4.333	1
GE-1640	NB40A	16	40	2.500	.5000	.500	.50	1.000	1.69	2.625	2.625	1													



**M-Style**



Type	Nominal Torque	Maximum Torque	Nominal HP			Bore In. Min/Max.
			@ 1750 RPM	@ 1140 RPM	Max. RPM	
M-14	86	173	2.5	1.5	14,000	.187/.551
M-24	86	347	4.5	3.2	10,600	.375/.945
M-28	390	781	10.5	7	8,500	.250/1.125
M-32	520	1,041	14.5	9.5	7,500	.437/1.26
M-38	694	1,388	22.1	12.5	6,700	.437/1.50

Nylon sleeve and steel hubs allow high ambient temperature operation without lubrication, or maintenance. Continuous operating ambient of 180 degrees Fahrenheit with peak temperatures to 250 degrees Fahrenheit. Nylon sleeves resistant to dirt, moisture, most chemicals and petroleum products. Double crowned tooth design provides free axial movement. Low friction and minimum stress during misalignment. No bolts, pins, flanges or protrusions to affect balance or safety. Blind assembly with slip together components for easy inspection and adjustment without disassembly. Available with no bore (except centering pilot hole), bores and bores with keyways.

**For complete coupling, order two hubs and one nylon sleeve of the same type.**

**Nylon Sleeves**



See pages 886-887 for other shaft couplings.

Item No.	Type	No. of Teeth	Pack Qty.
GU-400	M-14	20	1
GU-401	M-19	24	1
GU-402	M-24	28	1
GU-403	M-28	34	1
GU-404	M-32	40	1
GU-405	M-38	44	1

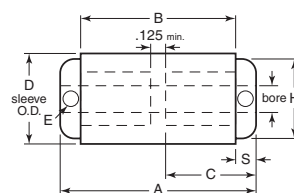
**Note:** Torque in inch pounds. Nominal torque allows for 180 degrees F ambient, full misalignment and/or maximum RPM.

**Hubs**



Item No.	Type	A	B	D	E	G	H	K	L	Set Screws	Bore	Keyseat	Pack Qty.
<b>Hubs with No Bore</b>													
GU-100	M-14	1.77	1.00	1.57	.14	1.45	.19	1.30	.78	—	—	—	1
GU-101	M-19	1.96	1.25	1.90	.25	1.45	.28	1.53	.86	—	—	—	1
GU-105	M-38	3.15	2.30	3.25	.65	1.90	.35	2.70	1.40	—	—	—	1
<b>Hubs with Bore &amp; Keyway</b>													
GU-201	M-14	1.77	1.00	1.57	.14	1.45	.19	1.30	.78	10-24	1/2	1/8 x 1/16	1
GU-202	M-14	1.77	1.00	1.57	.14	1.45	.19	1.30	.78	10-24	3/8	3/16 x 3/32	1
GU-204	M-19	1.96	1.25	1.90	.25	1.45	.28	1.53	.86	1/4-20	3/4	3/16 x 3/32	1
GU-205	M-19	1.96	1.25	1.90	.25	1.45	.28	1.53	.86	1/4-20	3/4	3/16 x 3/32	1
GU-206	M-24	2.07	1.42	2.05	.25	1.60	.39	1.76	.84	1/4-20	1/2	1/8 x 1/16	1
GU-207	M-24	2.07	1.42	2.05	.25	1.60	.39	1.76	.84	1/4-20	3/4	3/16 x 3/32	1
GU-208	M-24	2.07	1.42	2.05	.25	1.60	.39	1.76	.84	1/4-20	3/4	3/16 x 3/32	1
GU-211	M-28	3.17	1.75	2.58	.69	1.80	.37	2.12	1.40	1/4-20	3/4	3/16 x 3/32	1
GU-212	M-28	3.17	1.75	2.58	.69	1.80	.37	2.12	1.40	1/4-20	3/4	3/16 x 3/32	1
GU-213	M-28	3.17	1.75	2.58	.69	1.80	.37	2.12	1.40	1/4-20	1 1/8	3/16 x 3/32	1
GU-214	M-28	3.17	1.75	2.58	.69	1.80	.37	2.12	1.40	1/4-20	1 1/8	1/4 x 1/8	1

**Gear Grip**



Neoprene and urethane rubber sleeve compounds provide excellent torsional vibration dampening, absorb load pulsations and minimize drive line shock. The load is distributed evenly over a wide splined contact area. Gear grip couplings handle shock, minimize assembly time, require no special tools and allow for "blind" assembly. Not affected by moisture, dirt and abrasives. No lubrication, adjustments or maintenance is required. Provides protection to the expensive drive train during extreme overload, jamming or high shock. Electrical isolation. No possibility of metal-to-metal contact under severe overload, wear or coupling failure. Parallel misalignment to .040 inches, except Type A, which is .016 inches. Angular misalignment to 7.5 degree maximum.

**For complete coupling, order two hubs and one sleeve of the same size.**

**Sleeves**



Urethane



Neoprene

Item No.	Material	Size	B	D	Nominal Torque Inch/Lbs.	Max. Torque Inch/Lbs.	HP @ 1750 rpm	Max. Speed rpm	Stiffness in # (Rad)	Pack Qty.
GU-1000	Neoprene	A	.56	.78	4	18	.11	25,000	28	1
GU-1001	Urethane	A	.56	.80	13	55	.36	25,000	57	1
GU-1002	Neoprene	B	.85	1.20	16	65	.44	16,800	124	1
GU-1003	Urethane	B	.85	1.14	40	160	1.10	16,800	183	1
GU-1004	Neoprene	C	1.59	1.20	30	110	.83	16,500	107	1
GU-1005	Urethane	C	1.59	1.14	50	200	1.30	16,500	115	1
GU-1006	Neoprene	D	1.59	1.40	60	250	1.70	15,500	270	1
GU-1007*	Neoprene	D	1.59	1.56	72	400	2.00	15,500	225	1
GU-1008	Neoprene	E	1.59	1.84	108	440	3.00	15,000	630	1
GU-1009	Urethane	E	1.59	1.82	185	738	5.00	15,000	423	1
GU-1011	Urethane	F	1.59	2.37	200	800	5.50	10,000	1,530	1

\*Reinforced

**Note:** One angular degree of twist = .01745 radians.

**Hubs**



Item No.	Size	A	C	H	S	No. of Teeth	E Set Screws	Bore	Keyseat	Pack Qty.
<b>Hubs with Bore</b>										
GU-2101	A	1.00	.50	.70	.22	8	8-32	1/8	—	1
GU-2102	A	1.00	.50	.70	.22	8	8-32	3/16	—	1
GU-2103	A	1.00	.50	.70	.22	8	8-32	1/4	—	1
GU-2104	A	1.00	.50	.70	.22	8	8-32	3/8	—	1
GU-2105	A	1.00	.50	.70	.22	8	8-32	1/2	—	1
GU-2201	B	1.50	.72	1.15	.33	8	3/4-20	1/4	—	1
GU-2202	B	1.50	.72	1.15	.33	8	3/4-20	3/8	—	1
GU-2203	B	1.50	.72	1.15	.33	8	3/4-20	1/2	—	1
GU-2205	B	1.50	.72	1.15	.33	8	3/4-20	3/4	—	1
GU-2302	C	2.25	1.09	1.15	.33	8	3/4-20	1/2	—	1
GU-2304	C	2.25	1.09	1.15	.33	8	3/4-20	3/4	—	1
GU-2401	D	2.38	1.14	1.45	.38	10	1/4-20	3/8	1/8 x 1/16	1
GU-2403	D	2.38	1.14	1.45	.38	10	1/4-20	1/2	1/8 x 1/16	1
GU-2404	D	2.38	1.14	1.45	.38	10	1/4-20	3/4	3/16 x 3/32	1
GU-2501	E	2.38	1.14	1.63	.38	12	1/4-20	3/8	1/8 x 1/16	1
GU-2503	E	2.38	1.14	1.63	.38	12	1/4-20	1/2	1/8 x 1/16	1
GU-2504	E	2.38	1.14	1.63	.38	12	1/4-20	3/4	3/16 x 3/32	1
GU-2505	E	2.38	1.14	1.63	.38	12	1/4-20	1 1/8	3/16 x 3/32	1
GU-2602	F	2.50	1.19	2.06	.43	12	3/16-18	3/4	3/16 x 3/32	1
GU-2603	F	2.50	1.19	2.06	.43	12	3/16-18	1	3/16 x 3/32	1
GU-2605	F	2.50	1.19	2.06	.43	12	3/16-18	1 1/8	1/4 x 1/8	1



# SHAFT COLLARS

Buy One or Buy Bulk & SAVE

These collars offer full radial holding power without marring the shaft. Two piece design allows for installation without disassembling equipment. Metric dimensions are shown in millimeters.

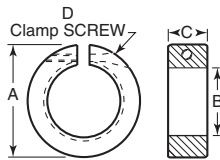
**Shaft Collars**  
**One and Two Piece**  
**Inch**  
**Steel - Stainless Steel - Aluminum**



One Piece



Two Piece



One-Piece		Two-Piece				One-Piece		Two-Piece					
Item No.	Item No.	A	B	C	Clamp Screw D	Pack Qty.	Item No.	Item No.	A	B	C	Clamp Screw D	Pack Qty.
<b>Steel</b>													
CTC-2	—	1/2	3/8	1/4	4-40	1	CTC-2SS	—	1/2	3/8	1/4	4-40	1
CTC-4	CTC-104	5/8	3/4	5/16	4-40	1	CTC-4SS	—	5/8	3/4	5/16	4-40	1
CTC-6	CTC-106	11/16	3/4	5/16	4-40	1	CTC-6SS	CTC-106SS	11/16	3/4	5/16	4-40	1
CTC-8	CTC-108	13/16	5/8	5/16	4-40	1	CTC-8SS	—	13/16	5/8	5/16	4-40	1
CTC-10	CTC-110	7/8	3/4	11/32	6-32	1	CTC-10SS	CTC-110SS	7/8	3/4	11/32	6-32	1
CTC-12	CTC-112	15/16	7/8	3/8	6-32	1	CTC-12SS	CTC-112SS	15/16	7/8	3/8	6-32	1
CTC-14	CTC-114	1 1/8	1/2	13/32	8-32	1	—	CTC-114SS	1 1/8	1/2	13/32	8-32	1
CTC-16	CTC-116	1 1/4	9/16	7/16	10-32	1	—	CTC-116SS	1 1/4	9/16	7/16	10-32	1
CTC-18	CTC-118	1 3/8	5/8	7/16	10-32	1	—	CTC-118SS	1 3/8	5/8	7/16	10-32	1
CTC-20	CTC-120	1 5/8	11/16	7/16	10-32	1	CTC-19SS	—	1 5/8	11/16	7/16	10-32	1
CTC-22	CTC-122	1 1/2	3/4	1/2	1/4-28	1	CTC-22SS	CTC-122SS	1 1/2	3/4	1/2	1/4-28	1
CTC-24	CTC-124	1 5/8	13/16	1/2	1/4-28	1	CTC-26SS	CTC-126SS	1 5/8	7/8	1/2	1/4-28	1
CTC-26	CTC-126	1 3/4	7/8	1/2	1/4-28	1	—	CTC-127SS	1 3/4	15/16	1/2	1/4-28	1
CTC-28	CTC-128	1 3/4	15/16	1/2	1/4-28	1	CTC-30SS	CTC-130SS	1 3/4	1	1/2	1/4-28	1
CTC-30	CTC-130	1 3/4	1	1/2	1/4-28	1	—	CTC-131SS	1 3/4	1 1/16	1/2	1/4-28	1
CTC-32	CTC-132	1 7/8	1 1/16	1/2	1/4-28	1	CTC-34SS	CTC-134SS	1 7/8	1 1/16	1/2	1/4-28	1
CTC-34	CTC-134	1 7/8	1 1/8	1/2	1/4-28	1	CTC-38SS	CTC-138SS	2 1/16	1 1/4	1/2	1/4-28	1
CTC-36	CTC-136	2 1/16	1 3/8	1/2	1/4-28	1	—	CTC-139SS	2 1/16	1 3/8	1/2	1/4-28	1
CTC-38	CTC-138	2 1/8	1 1/2	1/2	1/4-28	1	—	CTC-142SS	2 1/8	1 3/8	1/2	1/4-28	1
CTC-40	CTC-140	2 1/8	1 3/4	1/2	1/4-28	1	CTC-46SS	CTC-146SS	2 3/8	1 1/2	1/2	1/4-28	1
CTC-42	CTC-142	2 1/4	1 3/8	9/16	1/4-28	1	CTC-62SS	CTC-162SS	3	2	1 1/16	5/16-24	1
CTC-44	CTC-144	2 1/4	1 7/16	9/16	1/4-28	1	<b>Aluminum</b>						
CTC-46	CTC-146	2 3/8	1 1/2	9/16	1/4-28	1	CTC-6A	—	1 1/16	1/4	5/16	4-40	1
CTC-48	CTC-148	2 3/8	1 3/8	9/16	1/4-28	1	CTC-10A	CTC-110A	7/8	3/8	11/32	6-32	1
CTC-50	CTC-150	2 5/8	1 3/8	1 1/16	5/16-24	1	CTC-12A	—	15/16	7/16	3/8	6-32	1
CTC-52	CTC-152	2 3/4	1 1/4	1 1/16	5/16-24	1	CTC-14A	CTC-114A	1 1/8	1/2	13/32	8-32	1
CTC-54	CTC-154	2 3/4	1 3/4	1 1/16	5/16-24	1	CTC-18A	CTC-118A	1 7/16	5/8	7/16	10-32	1
—	CTC-155	2 7/8	1 3/8	1 1/16	5/16-24	1	CTC-22A	CTC-122A	1 1/2	3/4	1/2	1/4-28	1
CTC-58	CTC-158	2 7/8	1 7/8	1 1/16	5/16-24	1	CTC-26A	CTC-126A	1 5/8	7/8	1/2	1/4-28	1
CTC-60	CTC-160	3	1 13/16	1 1/16	5/16-24	1	CTC-30A	CTC-130A	1 3/4	1	1/2	1/4-28	1
CTC-62	CTC-162	3	2	1 1/16	5/16-24	1	—	CTC-131A	1 7/8	1 1/16	1/2	1/4-28	1
CTC-64	CTC-164	3 1/4	2 1/8	3/4	5/16-24	1	CTC-32A	CTC-132A	1 7/8	1 1/8	1/2	1/4-28	1
CTC-66	CTC-166	3 1/4	2 3/16	3/4	5/16-24	1	CTC-33A	—	2 1/16	1 3/16	1/2	1/4-28	1
CTC-68	CTC-168	3 3/4	2 1/4	3/4	5/16-24	1	CTC-38A	CTC-138A	2 1/16	1 1/4	1/2	1/4-28	1
CTC-70	CTC-170	3 1/2	2 3/8	3/4	5/16-24	1	CTC-39A	—	2 1/8	1 1/16	1/2	1/4-28	1
CTC-72	CTC-172	3 1/2	2 1/2	3/4	5/16-24	1	CTC-40A	—	2 1/4	1 3/8	1/2	1/4-28	1
CTC-74	CTC-174	3 3/4	2 5/8	7/8	3/8-24	1	CTC-46A	CTC-146A	2 3/8	1 1/2	1/2	1/4-28	1
—	CTC-176	3 3/8	2 3/8	7/8	3/8-24	1	CTC-48A	—	2 3/8	1 3/8	1 1/16	5/16-24	1
—	CTC-177	4	2 11/16	7/8	3/8-24	1	CTC-48A	CTC-154A	2 3/4	1 3/4	1 1/16	5/16-24	1
CTC-78	CTC-178	4	2 3/4	7/8	3/8-24	1	CTC-62A	CTC-162A	3	2	1 1/16	5/16-24	1
—	CTC-179	4 1/4	2 13/16	7/8	3/8-24	1							
CTC-80	CTC-180	4 1/4	2 3/8	7/8	3/8-24	1							
CTC-82	CTC-182	4 1/4	2 13/16	7/8	3/8-24	1							
CTC-84	CTC-184	4 1/4	3	7/8	3/8-24	1							
—	CTC-185	4 1/2	3 3/16	7/8	3/8-24	1							
CTC-88	CTC-188	4 3/4	3 7/8	7/8	3/8-24	1							

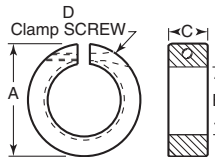
**One and Two Piece**  
**Metric**  
**Steel**



One Piece



Two Piece



One-Piece		Two-Piece				One-Piece		Two-Piece					
Item No.	Item No.	A	B	C	Clamp Screw D	Pack Qty.	Item No.	Item No.	A	B	C	Clamp Screw D	Pack Qty.
CTC-701	CTC-801	16	5	9	M3 x 8	1	CTC-713	CTC-813	54	30	15	M6 x 18	1
CTC-702	CTC-802	16	6	9	M3 x 8	1	CTC-714	CTC-814	57	35	15	M6 x 18	1
CTC-703	CTC-803	18	8	9	M3 x 8	1	CTC-715	CTC-815	60	40	15	M6 x 18	1
CTC-704	CTC-804	24	9	9	M3 x 10	1	CTC-716	CTC-816	73	45	19	M8 x 25	1
CTC-705	CTC-805	24	10	9	M3 x 10	1	CTC-717	CTC-817	78	50	19	M8 x 25	1
CTC-706	CTC-806	28	12	11	M4 x 12	1	CTC-718	CTC-818	82	55	19	M8 x 25	1
CTC-707	CTC-807	34	15	13	M5 x 16	1	CTC-719	CTC-819	88	60	19	M8 x 25	1
CTC-708	CTC-808	34	16	13	M5 x 16	1	CTC-720	CTC-820	93	65	19	M8 x 25	1
CTC-710	CTC-810	36	18	13	M5 x 16	1	CTC-721	CTC-821	98	70	19	M8 x 25	1
CTC-709	CTC-809	38	17	13	M5 x 16	1	CTC-722	CTC-822	103	75	19	M8 x 25	1
CTC-711	CTC-811	40	20	15	M6 x 16	1	CTC-723	CTC-823	108	80	19	M8 x 25	1
CTC-712	CTC-812	45	25	15	M6 x 16	1							

**Hinged Shaft Collars**  
**Steel**



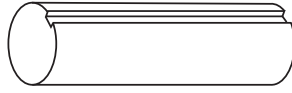
Hinged construction and a captive clamp screw to simplify assembly. These fully split collars eliminate lost screws and downtime. Hinged collars provide the same axial load handling capabilities as our two piece collars. Both halves are machined from the same stock and then joined together by a heat-treated triple-link hinge. These collars have a smooth ID, OD, and sides with no protruding pins or screws. All steel shaft collars are made of 12L14 or mild steel with black finish.

Item No.	Bore Size	OD	Width	Screw	Pack Qty.
CTC-401	.500	1.250	.375	8-32	1
CTC-402	.625	1.500	.438	10-32	1
CTC-403	.750	1.750	.500	1/4-28	1
CTC-404	.875	1.875	.500	1/4-28	1
CTC-405	1.000	2.000	.500	1/4-28	1
CTC-406	1.125	2.125	.500	1/4-28	1
CTC-408	1.250	2.250	.500	1/4-28	1
CTC-409	1.375	2.375	.500	1/4-28	1
CTC-410	1.500	2.500	.500	1/4-28	1
CTC-411	1.625	2.750	.625	5/16-24	1
CTC-412	1.750	3.000	.625	5/16-24	1
CTC-413	2.000	3.250	.625	5/16-24	1
CTC-415	2.500	4.000	.750	5/16-24	1
CTC-416	3.000	4.500	.750	5/16-24	1

# SHAFTING, COLLARS & ACCESSORIES



## Keyed Shafting Three and Six Foot Lengths Cold Drawn Steel



Available in three foot and six foot lengths. C1018 cold drawn steel. Outside diameters are +.000/-.002". Keyways are +.016/-.000" on depth and +.002/-.000" on width. Keyways are cut full length of each bar and are in accordance with ANSI B17.1-1967, R1989.

Three Foot		Six Foot		Dia.	Keyway	Pack Qty.
Item No.	Item No.	Item No.	Item No.			
GLH-3005	GLH-6005	1/2	1/2	1/2	1/4 x 1/16	1
GLH-3010	GLH-6010	5/8	5/8	5/8	3/16 x 3/32	1
GLH-3015	GLH-6015	3/4	3/4	3/4	1/4 x 3/32	1
GLH-3025	GLH-6025	1	1	1	1/4 x 1/8	1
GLH-3035	GLH-6035	1 1/4	1 1/4	1 1/4	1/4 x 1/8	1
GLH-3040	GLH-6040	1 1/2	1 1/2	1 1/2	1/4 x 1/8	1
GLH-3042	GLH-6042	1 3/4	1 3/4	1 3/4	5/16 x 3/32	1
GLH-3045	GLH-6045	1 7/8	1 7/8	1 7/8	3/8 x 3/16	1
GLH-3050	GLH-6050	1 1/2	1 1/2	1 1/2	3/8 x 3/16	1

## Universal Joint Boots



One Hump

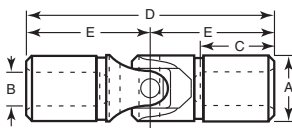


Multiple Hump

Extends universal joint life by keeping dirt out and retaining lubrication. Installation is fast and easy. Includes two boots and four plastic ties.

Item No.	Use for Joint OD	Pack Qty.
<b>One Hump</b>		
UJ-215	1/2	1
UJ-225	3/4	1
UJ-235	1	1
<b>Multiple Hump</b>		
UJ-240	1 1/4	1
UJ-245	1 1/2	1

## Universal Joints

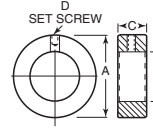


Standard industrial type universal joint with pin and block design. The special tapered shape of the yokes provide exceptional strength for long life while allowing full free movement of the joint. Boot retainer grooves are standard. Ideal for angles, degrees and speeds up to 1,750 rpm.

Bored		Bored w/ Keyway		Solid		A	D	E	Keyway	Static Breaking Torque	Pack Qty.
Item No.	Bore Depth	Item No.	Bore Depth	Item No.	Item No.						
UJ-10	3/16	3/16	—	—	UJ-110	3/8	1 3/4	7/8	—	110	1
UJ-15	1/4	1/4	—	—	UJ-115	1/2	2	1	—	378	1
UJ-20	5/16	1/4	—	—	UJ-120	3/4	2 1/4	1 1/8	—	540	1
UJ-25	3/8	7/16	—	—	UJ-125	3/4	2 1/16	1 1/32	1/8 x 1/16	768	1
UJ-30	7/16	7/8	—	—	UJ-130	7/8	3	1 1/2	—	1176	1
UJ-35	1/2	1	—	—	UJ-135	1	3 3/8	1 1/16	1/8 x 1/16	1560	1
UJ-40	5/8	1 1/16	—	—	UJ-140	1 1/4	3 3/4	1 1/8	3/16 x 3/32	5220	1
UJ-45	3/4	1 3/16	—	—	UJ-145	1 1/2	4 1/4	2 1/8	3/16 x 3/32	7920	1
UJ-55	1	1 1/2	—	—	UJ-155	2	5 1/4	2 3/32	1/4 x 1/8	15,600	1

Note: Static breaking torque is in inch lbs

## Shaft Collars One Piece Inch Steel and Stainless Steel

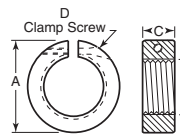


Stamped style are stamped, galvanized. Tolerance on ID for LSC-2E and LSC-3E is +.004/-000".

Steel Item No.	A	B	C	Set Screw D	Pack Qty.
<b>Stamped</b>					
LSC-2E	1 1/4	.7500	3/8	1/4-20	1
LSC-3E	1 1/2	1.0000	3/8	1/4-20	1

Zinc Plated Steel		Stainless		A	B	C	Set Screw D	Pack Qty.
Item No.	Item No.	Item No.	Item No.					
<b>Machined</b>								
LSC-04	LSC-04SS	1/2	.2510	5/16	10-32	1		
LSC-05	LSC-05SS	5/8	.3135	5/16	10-32	1		
LSC-06	LSC-06SS	3/4	.3760	3/8	1/4-20	1		
LSC-08	LSC-08SS	1	.5010	7/16	1/4-20	1		
LSC-09	—	1	.5635	7/16	1/4-20	1		
LSC-10	LSC-10SS	1 1/8	.6260	1/2	5/16-18	1		
LSC-12	LSC-12SS	1 1/4	.7510	9/16	5/16-18	1		
LSC-13	LSC-13SS	1 1/2	.8135	9/16	5/16-18	1		
LSC-14	—	1 1/2	.8760	9/16	5/16-18	1		
LSC-16	LSC-16SS	1 3/4	1.001	5/8	5/16-18	1		
LSC-18	—	1 3/4	1.126	5/8	5/16-18	1		
LSC-20	LSC-20SS	2	1.251	1 1/16	3/8-16	1		
LSC-24	LSC-24SS	2 1/4	1.501	3/4	3/8-16	1		
LSC-28	—	2 3/4	1.751	7/8	1/2-13	1		

## Shaft Collars, Threaded One Piece Inch Steel or Stainless Steel



Steel Item No.	Stainless Item No.	A	B	C	Clamp Screw D	Pack Qty.
CTC-200	—	5/8	10-32	5/16	4-40	1
CTC-202	CTC-202SS	1 1/16	1/4-20	5/16	4-40	1
CTC-204	—	1 1/16	1/4-28	5/16	4-40	1
CTC-206	CTC-206SS	1 1/16	5/16-18	5/32	4-40	1
CTC-208	—	1 1/16	5/16-24	5/32	4-40	1
CTC-210	CTC-210SS	7/8	3/8-16	1 1/32	6-32	1
CTC-212	CTC-212SS	7/8	3/8-24	1 1/32	6-32	1
CTC-250	CTC-250SS	1 1/16	7/16-14	1 1/32	6-32	1
CTC-255	CTC-255SS	1 1/16	7/16-20	1 1/32	6-32	1
CTC-214	CTC-214SS	1 1/8	1/2-13	1 1/32	8-32	1
CTC-216	CTC-216SS	1 1/8	1/2-20	1 1/32	8-32	1
CTC-218	CTC-218SS	1 1/8	5/8-11	7/16	10-32	1
CTC-220	CTC-220SS	1 1/8	5/8-18	7/16	10-32	1
CTC-224	CTC-224SS	1 1/2	3/4-10	1/2	1/4-28	1
CTC-226	—	1 1/2	3/4-16	1/2	1/4-28	1
CTC-228	—	1 1/2	7/8-9	1/2	1/4-28	1
CTC-232	—	1 3/4	1-14	1/2	1/4-28	1
CTC-230	—	1 3/4	1-8	1/2	1/4-28	1
CTC-231	—	1 3/4	1-12	1/2	1/4-28	1
CTC-234	—	1 7/8	1 1/4-12	1/2	1/4-28	1
CTC-238	—	2 1/16	1 1/4-12	1/2	1/4-28	1
CTC-236	—	2 1/16	1 1/4-7	1/2	1/4-28	1
CTC-242	—	2 3/8	1 1/2-12	5/8	1/4-28	1
CTC-244	—	3	2-12	1 1/16	5/16-24	1

These threaded collars offer full radial holding power without marring the shaft.

## Hexagon Bore Clamp Type Collars One-Piece or Two-Piece Inch Steel or Stainless Steel

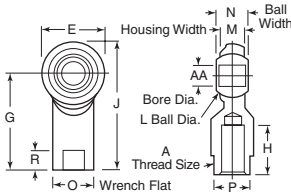


One-Piece

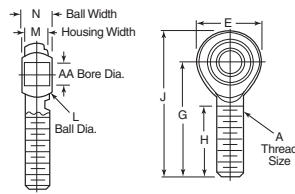
Two-Piece

Clamp-type shaft collars to fit hexagon shafts. One-piece and two-piece made of steel and stainless steel. They can be modified (drilled, tapped, welded, etc.) to act as a mount for other components. They are non-marring and have high holding power.

One-Piece		Two-Piece		Hex Bore	ID	OD	Width	Screw	Pack Qty.
Item No.	Item No.	Item No.	Item No.						
<b>Steel</b>									
CTC-502	—	3/8	.375	1.063	.313	6-32	1		
CTC-503	CTC-553	1/2	.500	1.250	.375	8-32	1		
—	CTC-554	5/8	.625	1.500	.406	10-32	1		
CTC-505	CTC-555	3/4	.750	1.875	.500	1/4-28	1		
CTC-506	CTC-556	7/8	.875	2.000	.500	1/4-28	1		
CTC-507	CTC-557	1	1.000	2.125	.500	1/4-28	1		
<b>Stainless</b>									
—	CTC-650	1/4	.250	.813	.250	4-40	1		
CTC-601	—	5/16	.313	.813	.250	4-40	1		
CTC-602	—	3/8	.375	1.063	.313	6-32	1		
CTC-603	CTC-653	1/2	.500	1.250	.375	8-32	1		
CTC-604	CTC-654	5/8	.625	1.500	.406	10-32	1		
CTC-605	CTC-655	3/4	.750	1.875	.500	1/4-28	1		
CTC-607	CTC-657	1	1.000	2.125	.500	1/4-28	1		



Female Thread - Plain Ball End



Male Thread - Plain Ball End

Available with steel or stainless steel housing and ball. The steel rod ends are available with reinforced nylon raceway or PTFE liner to eliminate the need for lubrication. The steel housing and ball are made from low carbon steel. The ball is case hardened and plated. The steel housing is plated and dichromate treated. The stud is permanently affixed and is made from heat treated alloy steel, zinc plated. The stainless rod end housing and ball are made from 303 stainless. Operating temperature from -30 degrees to 220 degrees Fahrenheit. Maximum misalignment is 55 degrees.

**Female Thread - Plain Ball End Steel, Nylon Raceway**



Item No.	Thread Size A	AA	E	G	H	J	L	M	N	O	P	R	Pack Qty.
<b>Standard Threads</b>													
SPF-3	10-32	.190/.192	.625	1.062	.562	1.375	.438	.250	.312	.406	.312	.406	1
SPF-4	1/4-28	.250/.252	.750	1.312	.750	1.687	.516	.281	.375	.469	.375	.281	1
SPF-5	5/16-24	.3125/.3145	.875	1.375	.750	1.812	.625	.344	.437	.500	.437	.281	1
SPF-6	3/8-24	.375/.377	1.000	1.625	.937	2.125	.719	.406	.500	.687	.562	.312	1
SPF-7	7/16-20	.4375/.4395	1.125	1.812	1.031	2.375	.812	.437	.562	.750	.625	.625	1
SPF-8	1/2-20	.500/.502	1.312	2.125	1.187	2.781	.938	.500	.625	.875	.750	.375	1
SPF-10	5/8-18	.625/.627	1.500	2.500	1.500	3.250	1.125	.562	.750	1.000	.875	.500	1
SPF-12	3/4-16	.750/.752	1.750	2.875	1.562	3.750	1.312	.687	.875	1.125	1.000	1.000	1
<b>Left Hand Threads</b>													
SPFL-4	1/4-28	.250/.252	.750	1.312	.750	1.687	.516	.281	.375	.469	.375	.281	1
SPFL-5	5/16-24	.3125/.3145	.875	1.375	.750	1.812	.625	.344	.437	.500	.437	.281	1
SPFL-6	3/8-24	.375/.377	1.000	1.625	.937	2.125	.719	.406	.500	.687	.562	.312	1
SPFL-8	1/2-20	.500/.502	1.312	2.125	1.187	2.781	.938	.500	.625	.875	.750	.375	1
SPFL-10	5/8-18	.625/.627	1.500	2.500	1.500	3.250	1.125	.562	.750	1.000	.875	.500	1
SPFL-12	3/4-16	.750/.752	1.750	2.875	1.562	3.750	1.312	.687	.875	1.125	1.000	1.000	1

**Female Thread - Plain Ball End Steel with PTFE Liner**



Item No.	Thread Size A	AA	E	G	H	L	M	N	O	P	R	Pack Qty.
EF-4T	1/4-28	.2500	.750	1.312	.687	.516	.281	.375	.469	.375	.250	1
EF-5T	5/16-24	.3125	.875	1.375	.687	.625	.344	.437	.500	.437	.281	1
EF-6T	3/8-24	.3750	1.000	1.625	.812	.719	.406	.500	.687	.562	.312	1
EF-8T	1/2-20	.5000	1.312	2.125	1.187	.938	.500	.625	.875	.750	.375	1
EF-10T	5/8-18	.6250	1.500	2.500	1.406	1.125	.562	.750	1.000	.875	.500	1

**Female Thread - Plain Ball End Stainless Steel, Molded Nylon Raceway**



Item No.	Thread Size A	AA	E	G	H	L	M	N	O	P	R	Pack Qty.
SSPF-3	10-32	.1900	.625	1.062	.562	.438	.250	.312	.406	.312	.406	1
SSPF-4	1/4-28	.2500	.750	1.312	.750	.516	.281	.375	.469	.375	.281	1
SSPF-5	5/16-24	.3125	.875	1.375	.750	.625	.344	.437	.500	.437	.281	1
SSPF-6	3/8-24	.3750	1.000	1.625	.937	.719	.406	.500	.687	.562	.312	1
SSPF-7	7/16-20	.4375	1.125	1.812	1.031	.812	.437	.562	.750	.625	.625	1
SSPF-8	1/2-20	.5000	1.312	2.125	1.187	.938	.500	.625	.875	.750	.375	1
SSPF-10	5/8-18	.6250	1.500	2.500	1.500	1.125	.562	.750	1.000	.875	.500	1
SSPF-12	3/4-16	.7500	1.750	2.875	1.562	1.312	.687	.875	1.125	1.000	1.000	1

**Male Thread - Plain Ball End Steel with PTFE Liner**



Item No.	Thread Size A	AA	E	G	H	L	M	N	Pack Qty.
EM-4T	1/4-28	.2500	.750	1.562	1.000	.516	.281	.375	1
EM-5T	5/16-24	.3125	.875	1.875	1.250	.625	.344	.437	1
EM-6T	3/8-24	.3750	1.000	1.937	1.250	.719	.406	.500	1
EM-8T	1/2-20	.5000	1.312	2.437	1.500	.938	.500	.625	1
EM-10T	5/8-18	.6250	1.500	2.625	1.625	1.125	.562	.750	1

**Male Thread - Plain Ball End Stainless Steel, Molded Nylon Raceway**



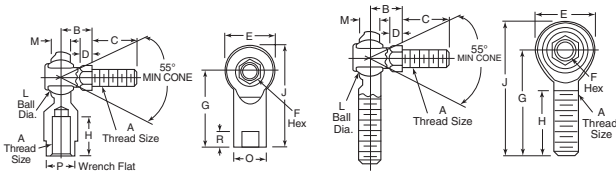
Item No.	Thread Size A	AA	E	G	H	L	M	N	Pack Qty.
SSPM-3	10-32	.1900	.625	1.250	.750	.438	.250	.312	1
SSPM-4	1/4-28	.2500	.750	1.562	1.000	.516	.281	.375	1
SSPM-5	5/16-24	.3125	.875	1.875	1.250	.625	.344	.437	1
SSPM-6	3/8-24	.3750	1.000	1.937	1.250	.719	.406	.500	1
SSPM-7	7/16-20	.4375	1.125	2.125	1.312	.812	.437	.562	1
SSPM-8	1/2-20	.5000	1.312	2.437	1.500	.938	.500	.625	1
SSPM-10	5/8-18	.6250	1.500	2.625	1.625	1.125	.562	.750	1
SSPM-12	3/4-16	.7500	1.750	2.875	1.750	1.312	.687	.875	1

**Male Thread - Plain Ball End Steel, Nylon Raceway**



Item No.	Thread Size A	AA	E	G	H	J	L	M	N	Pack Qty.
<b>Standard Threads</b>										
SPM-3	10-32	.190/.192	.625	1.250	.750	1.562	.438	.250	.312	1
SPM-4	1/4-28	.250/.252	.750	1.562	1.000	1.937	.516	.281	.375	1
SPM-5	5/16-24	.3125/.3145	.875	1.875	1.250	2.312	.625	.344	.437	1
SPM-6	3/8-24	.375/.377	1.000	1.937	1.250	2.437	.719	.406	.500	1
SPM-7	7/16-20	.4375/.4395	1.125	2.125	1.312	2.687	.812	.437	.562	1
SPM-8	1/2-20	.500/.502	1.312	2.437	1.500	3.094	.938	.500	.625	1
SPM-10	5/8-18	.625/.627	1.500	2.625	1.625	3.375	1.125	.562	.750	1
SPM-12	3/4-16	.750/.752	1.750	2.875	1.750	3.750	1.312	.687	.875	1
<b>Left Hand Threads</b>										
SPML-3	10-32	.190/.192	.625	1.250	.750	1.562	.438	.250	.312	1
SPML-4	1/4-28	.250/.252	.750	1.562	1.000	1.937	.516	.281	.375	1
SPML-5	5/16-24	.3125/.3145	.875	1.875	1.250	2.312	.625	.344	.437	1
SPML-6	3/8-24	.375/.377	1.000	1.937	1.250	2.437	.719	.406	.500	1
SPML-7	7/16-20	.4375/.4395	1.125	2.125	1.312	2.687	.812	.437	.562	1
SPML-8	1/2-20	.500/.502	1.312	2.437	1.500	3.094	.938	.500	.625	1
SPML-10	5/8-18	.625/.627	1.500	2.625	1.625	3.375	1.125	.562	.750	1
SPML-12	3/4-16	.750/.752	1.750	2.875	1.750	3.750	1.312	.687	.875	1

# BALL JOINTS & ROD ENDS



Female Thread - Ball End with Stud

Male Thread - Ball End with Stud

Low carbon steel housing and ball with reinforced nylon raceway or PTFE liner to eliminate the need for lubrication. The ball is case hardened and plated. The housing is plated and dichromate treated. The stud is permanently affixed and is made from heat treated alloy steel, zinc plated. Operating temperature from -30 degrees to 220 degrees Fahrenheit. Maximum misalignment is 55 degrees.

## Female Thread - Ball End with Stud Steel, Nylon Raceway



Item No.	Thread Size		B	C	D	E	F	G	H	J	K	L	M	N	O	P	R	Pack Qty.
	A	A																
<b>Standard Threads</b>																		
SPF-3S	10-32		.437	.437	.156	.625	.312	1.062	.562	1.375	.187	.438	.250	.312	.406	.312	.406	1
SPF-4S	1/4-28		.469	.562	.156	.750	.375	1.312	.750	1.687	.248	.516	.281	.375	.469	.375	.406	1
SPF-5S	5/16-24		.531	.687	.187	.875	.437	1.375	.750	1.812	.310	.625	.344	.437	.500	.437	.500	1
SPF-6S	3/8-24		.625	.875	.218	1.000	.500	1.625	.937	2.125	.372	.719	.406	.500	.687	.562	.562	1
SPF-7S	7/16-20		.844	1.062	.312	1.125	.625	1.812	1.031	2.375	.435	.812	.437	.562	.750	.625	.625	1
SPF-8S	1/2-20		.875	1.125	.312	1.312	.625	2.125	1.187	2.781	.497	.938	.500	.625	.875	.750	.687	1
SPF-10S	5/8-18		1.000	1.125	.375	1.500	.750	2.500	1.500	3.250	.622	1.125	.562	.750	1.000	.875	.875	1
SPF-12S	3/4-16		1.187	1.812	.375	1.750	1.000	2.875	1.562	3.750	.747	1.312	.687	.875	1.125	1.000	1.000	1

## Female Thread - Plain Ball End Stamped Style



The economy stamped style combines high strength with low cost. Made from low carbon steel and plated for corrosion resistance. The ball is case hardened.

Item No.	Thread Size		AA	E	G	H	J	L	M	N	O	P	Pack Qty.
	A	A											
<b>Standard Threads</b>													
ARE-10	10-32		.1900	.750	1.062	.500	1.437	.430	.250	.312	.450	.312	1
ARE-20	1/4-28		.2500	.850	1.312	.687	1.737	.510	.287	.375	.515	.375	1
ARE-30	3/8-24		.3125	1.015	1.375	.687	1.882	.618	.305	.437	.590	.437	1
ARE-40	1/2-20		.3750	1.125	1.625	.875	2.187	.713	.400	.500	.725	.500	1
ARE-50	5/8-18		.5000	1.470	2.125	1.125	2.860	.931	.500	.625	1.010	.625	1
<b>Left Hand Threads</b>													
ARE-240	3/8-24		.3750	1.125	1.625	.875	2.187	.713	.400	.500	.725	.500	1

## Female Thread - Ball End with Stud Steel with PTFE Liner



Item No.	Thread Size		B	C	D	E	F	G	H	J	K	L	M	N	O	P	R	Pack Qty.
	A	A																
<b>Note: K = Stud Neck Dia., L = Ball Dia., N = Ball Width</b>																		
EFT-3S	10-32		.437	.437	.156	.625	.312	1.062	.500	1.375	.187	.438	.250	.312	.406	.312	.406	1
EFT-4S	1/4-28		.469	.562	.156	.750	.375	1.312	.687	1.687	.248	.516	.281	.375	.469	.375	.406	1
EFT-5S	5/16-24		.531	.687	.187	.875	.437	1.375	.687	1.812	.310	.625	.344	.437	.500	.437	.500	1
EFT-6S	3/8-24		.625	.875	.218	1.000	.500	1.625	.937	2.125	.372	.719	.406	.500	.687	.562	.562	1

## Male Thread - Ball End with Stud Steel, Nylon Raceway



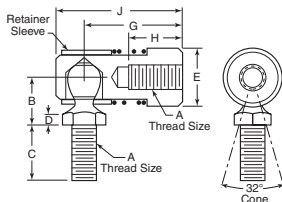
Item No.	Thread Size		B	C	D	E	F	G	H	J	K	L	M	N	Pack Qty.
	A	A													
<b>Standard Threads</b>															
SPM-3S	10-32		.437	.437	.156	.625	.312	1.250	.750	1.562	.187	.438	.250	.312	1
SPM-4S	1/4-28		.469	.562	.156	.750	.375	1.562	1.000	1.937	.248	.516	.281	.375	1
SPM-5S	5/16-24		.531	.687	.187	.875	.437	1.875	1.250	2.312	.310	.625	.344	.437	1
SPM-6S	3/8-24		.625	.875	.218	1.000	.500	1.937	1.250	2.437	.372	.719	.406	.500	1
SPM-7S	7/16-20		.844	1.062	.312	1.125	.625	2.125	1.312	2.687	.435	.812	.437	.562	1
SPM-8S	1/2-20		.875	1.125	.312	1.312	.625	2.437	1.500	3.094	.497	.938	.500	.625	1
SPM-10S	5/8-18		1.000	1.125	.375	1.500	.750	2.625	1.625	3.375	.622	1.125	.562	.750	1
SPM-12S	3/4-16		1.187	1.812	.375	1.750	1.000	2.875	1.750	3.750	.747	1.312	.687	.875	1

## Male Thread - Ball End with Stud Steel with PTFE Liner



Item No.	Thread Size		B	C	D	E	F	G	H	J	K	L	M	N	Pack Qty.
	A	A													
<b>Note: K = Stud Neck Dia., L = Ball Dia., N = Ball Width</b>															
EMT-3S	10-32		.437	.437	.156	.625	.312	1.250	.750	1.562	.187	.438	.250	.312	1
EMT-5S	5/16-24		.531	.687	.187	.875	.437	1.875	1.250	2.312	.310	.625	.344	.437	1
EMT-6S	3/8-24		.625	.875	.218	1.000	.500	1.937	1.250	2.437	.372	.719	.406	.500	1

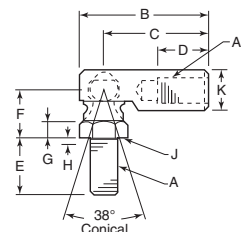
## Quick Disconnect Type



These ball joints are high strength, quick disconnect assemblies with good wear characteristics. The retaining sleeve insures the assembly can only be put together with the sleeve positively aligned with the ball cavity. When spring is released, alignment is automatic thereby eliminating any possibility of partial closure. Body and ball stud are made of low carbon steel. Ball studs are surface hardened. All parts are plated and dichromate treated.

Item No.	Thread A	B	C	D	E	G	H	J	Pack Qty.
STQ-10	1/4-28	.469	.562	.125	.562	.969	.531	1.25	1
STQ-20	3/8-24	.687	.875	.187	.750	1.375	.812	1.75	1

## Swaged Construction



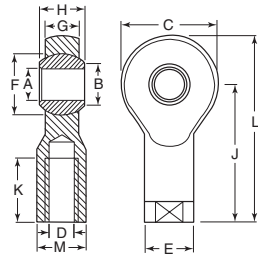
Unique assembly swages metal to retain the ball in the cavity resulting in increased pull out and wear resistance. Designed for heavy duty service, they come with a dirt shield to provide protection against contaminants. Made of low carbon steel, plated and dichromate treated. Ball studs are surface hardened.

Item No.	Thread Size A	B	C	D	E	F	G	H	J	K	Pack Qty.
STQ-30	10-32	1 1/16	7/8	7/16	7/16	7/16	1/8	1/16	5/16	3/8	1
STQ-40	1/4-28	1 1/2	3/2	1/2	1 5/32	3/16	1/8	3/32	3/8	7/16	1
STQ-50	3/8-24	1 11/16	1 3/8	3/4	1 1/16	7/8	3/16	3/32	1/2	3/4	1



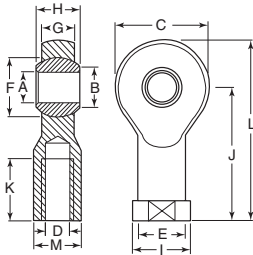
These bearings are self-aligning, maintenance free and made of high performance polymer. Dust, dirt, corrosion and chemical resistant. Vibration dampening capacity. Suitable for rotary, oscillating and linear motions. Compensates for misalignment and edge loads. Lightweight and easy to install. Self-lubricating oil free operation Operates in temperatures from -40 degrees Fahrenheit to +275 degrees Fahrenheit. Metric dimensions are in millimeters. All are right hand threads.

**Female Thread Inch**



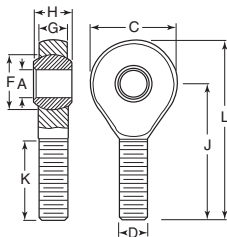
Item No.	A	B	C	D	E	F	G	H	J	K	L	M	Pack Qty.
I-500	.190	.307	.625	10-32	.406	.438	.246	.312	1.062	.500	1.374	.312	1
I-502	.250	.354	.750	1/4-28	.469	.516	.272	.375	1.312	.687	1.687	.375	1
I-504	.312	.447	.875	5/16-24	.500	.625	.340	.437	1.375	.687	1.813	.437	1
I-506	.375	.504	1.000	3/8-24	.687	.718	.394	.500	1.625	.812	2.125	.562	1
I-508	.437	.600	1.125	7/16-20	.750	.828	.456	.562	1.812	.937	2.374	.625	1
I-510	.500	.700	1.312	1/2-20	.875	.938	.487	.625	2.125	1.062	2.781	.750	1
I-512	.625	.838	1.500	5/8-18	1.000	1.125	.545	.750	2.500	1.375	3.250	.875	1
I-514	.750	.976	1.750	3/4-16	1.125	1.312	.676	.875	2.875	1.562	3.750	1.000	1

**Female Thread Metric**



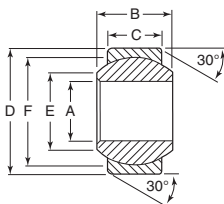
Item No.	A	B	C	D	E	F	G	H	F	J	K	L	M	Pack Qty.
I-530	5	7.7	18	M5 x .8	9.0	11	6.0	8	11	27	10	36	SW9	1
I-532	6	8.9	20	M6 x 1.0	10.0	13	7.0	9	13	30	12	40	SW11	1
I-534	8	10.3	24	M8 x 1.25	12.5	16	9.0	12	16	36	16	48	SW14	1
I-536	10	12.9	30	M10 x 1.5	15.0	19	10.5	14	19	43	20	58	SW17	1
I-538	12	15.4	34	M12 x 1.75	17.5	22	12.0	16	22	50	22	67	SW19	1
I-540	14	16.8	38	M14 x 2.0	20.0	25	13.5	19	25	57	25	76	SW22	1
I-542	16	19.3	42	M16 x 2.0	22.0	29	15.0	21	29	64	28	85	SW22	1

**Male Thread Inch and Metric**



Item No.	A	C	D	F	G	H	J	K	L	Pack Qty.
<b>Inch</b>										
I-516	.190	.625	10-32	.438	.234	.312	1.250	.750	1.563	1
I-518	.250	.750	1/4-28	.516	.250	.375	1.562	1.000	1.937	1
I-520	.312	.875	5/16-24	.625	.312	.437	1.875	1.250	2.312	1
I-522	.375	1.000	3/8-24	.718	.359	.500	1.938	1.250	2.438	1
I-524	.500	1.312	1/2-20	.938	.453	.625	2.438	1.500	3.094	1
<b>Metric</b>										
I-550	6	20	M6 x 1.0	12.7	7.0	9	36	21	46	1
I-552	8	24	M8 x 1.25	15.8	9.0	12	42	25	54	1
I-554	10	30	M10 x 1.5	19.0	10.5	14	48	28	63	1
I-558	14	38	M14 x 2.0	25.4	13.5	19	60	36	79	1

**Spherical Bearings Inch and Metric**

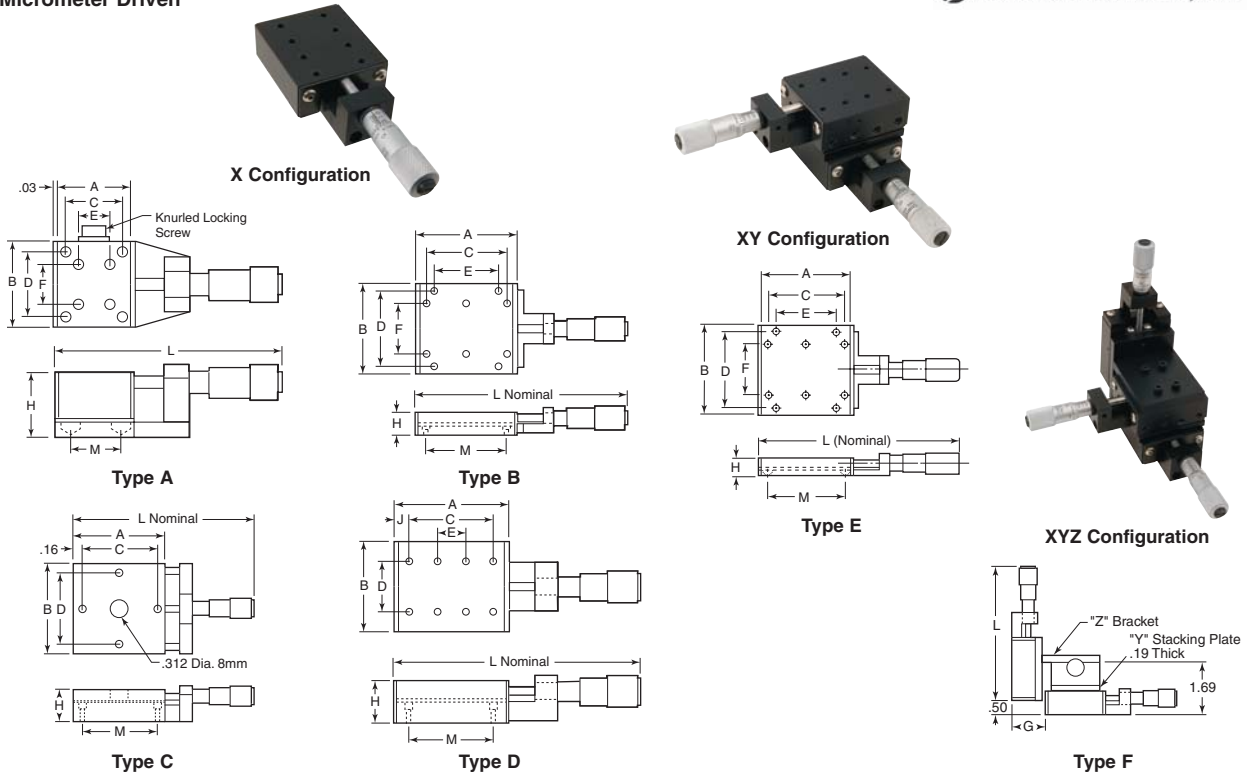


Item No.	A	B	C	D	E	F	Pack Qty.
<b>Inch</b>							
I-570	.1900	.312	.218	.5625	.3070	.438	1
I-571	.2500	.375	.250	.6562	.3540	.516	1
I-572	.3125	.437	.281	.7500	.4470	.625	1
I-573	.3750	.500	.312	.8125	.5040	.718	1
I-575	.5000	.625	.390	1.0625	.7000	.938	1
I-576	.6250	.750	.500	1.1875	.8381	1.125	1
I-577	.7500	.875	.593	1.4375	.9781	1.312	1
<b>Metric</b>							
I-580	5	8	6.0	13	7.7	11.1	1
I-582	8	12	9.0	19	10.3	15.8	1
I-583	10	14	10.5	22	12.9	19.0	1
I-588	20	25	18.0	40	24.3	34.8	1
I-590	25	31	22.0	47	29.5	42.8	1



# POSITIONING STAGES & LINEAR POSITION UNITS

## Ball Slide and Crossed Roller Positioning Stages Micrometer Driven

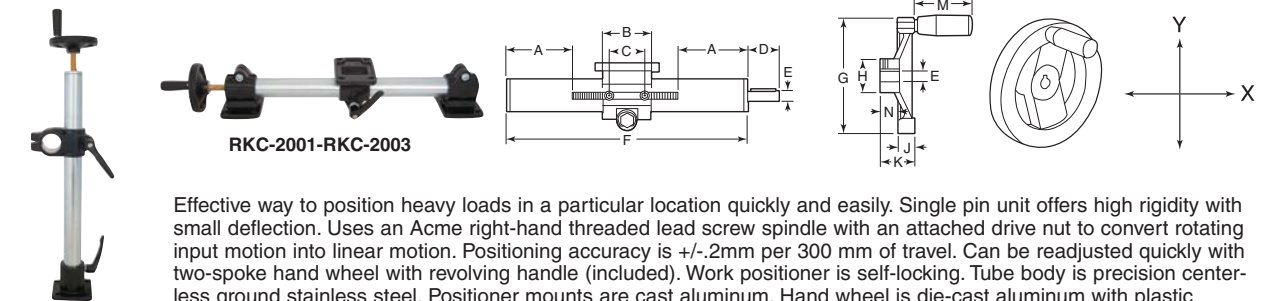


Positioning Stages - used for gauging and positioning light and medium loads. Applications include measuring instruments and optical assemblies. Spring loaded micrometer drives allow precise repeatable adjustments with low friction and zero backlash. Slides provide repeatability of .0001 inch. Ball slides provide accuracy to .0005/inch of travel, crossed roller slides .0001/inch of travel. Positioning slides can be stacked for multi axis applications. Preloaded positioning slides fully assembled and arrive ready to use. Black anodized finish.

Item No.	Type	Travel	Config.	A	B	C	D	E	F	G	J	M	C'Bore For	Carriage # Holes	Base # Holes	L	H	Load Capacity Lbs.			Pack Qty.
																		X	Y	Z	
<b>Ball Slide</b>																					
DT-501	A	.25	X	.75	.75	.562	.531	.312	.312	—	—	.531	2-56	8	4	2.28	.53	5	1.25	1	
DT-601	B	.50	X	1.25	1.25	1.000	1.000	.690	.500	—	—	1.000	2-56	10	4	3.25	.38	4	1.25	1	
DT-604	B	.50	X	1.75	1.75	1.500	1.500	1.190	1.000	—	—	1.500	2-56	10	4	3.75	.38	4	1.25	1	
DT-605	E	.50	XY	1.75	1.75	1.500	1.500	1.190	1.000	—	—	1.500	2-56	10	4	3.75	.38	4	1.25	1	
DT-701	C	.50	X	1.50	1.50	1.187	1.187	—	—	—	—	1.187	#4-M3	4	2	3.50	.62	12	2.00	1	
DT-801	D	.50	X	2.00	1.75	.500	.875	.250	—	—	.250	1.620	6-32-M4	8	2	4.62	.75	20	20.00	1	
DT-802	E	.50	XY	2.00	1.75	.500	.875	.250	—	—	.250	1.620	6-32-M4	8	2	4.62	.75	20	20.00	1	
DT-803	F	.50	XYZ	2.00	1.75	.500	.875	.250	—	1.12	—	1.620	6-32-M4	8	2	4.62	.75	20	20.00	1	
DT-901	D	.50	X	3.25	1.75	.550	.875	.250	—	—	.250	2.750	6-32-M4	12	2	5.86	.75	42	20.00	1	
DT-902	E	.50	XY	3.25	1.75	.550	.875	.250	—	—	.250	2.750	6-32-M4	12	2	5.86	.75	42	20.00	1	
<b>Crossed Roller</b>																					
DT-651	B	.50	X	1.25	1.25	1.000	1.000	.690	.500	—	—	1.000	2-56	10	4	3.25	.38	23	1.25	1	
DT-951	D	.50	X	3.25	1.75	.550	.875	.250	—	—	.250	2.750	6-32-M4	12	2	5.86	.75	80	20.00	1	

Note: Column "J" is the distance from the carriage end to the center of the closest hole.

## Linear Positioning Units



Effective way to position heavy loads in a particular location quickly and easily. Single pin unit offers high rigidity with small deflection. Uses an Acme right-hand threaded lead screw spindle with an attached drive nut to convert rotating input motion into linear motion. Positioning accuracy is +/- .2mm per 300 mm of travel. Can be readjusted quickly with two-spoke hand wheel with revolving handle (included). Work positioner is self-locking. Tube body is precision centerless ground stainless steel. Positioner mounts are cast aluminum. Hand wheel is die-cast aluminum with plastic coating and held in place by keyway lock. Hub is machined aluminum. Quick release handle included with each unit. Dimensions are in millimeters. Note: Hand wheel is unable to be removed from spindle after being installed.

Item No.	Tube Dia.	A	B	C	D	E	F	Travel	Load Capacity (Nm)							Pack Qty.	
									X	Y	G	H	J	K	M		N
RKC-2000	40	85	60	44	38	12	500	270	950	1000	100	28	14	30	52	17	1
RKC-2001	40	85	60	44	38	12	500	270	950	1000	100	28	14	30	52	17	1
RKC-2002	50	85	60	44	38	12	500	267	1500	1500	100	28	14	30	52	17	1
RKC-2003	50	85	60	44	38	12	500	267	1500	1500	100	28	14	30	52	17	1

Note: Load capacity is based on ends being supported and positioner being stationary.





Precision Acme lead screws are specifically designed for translating rotary motion into linear travel with accuracy and smoothness that are superior to general purpose Acme screws. Precision Acme lead screws are made from 4140 series alloy steel. Threads are rolled 2-C centralizing design. This thread form prevents wedging between nut and screw if subjected to radical loading. Screws have a minimum hardness of 200 Brinell. Tensile strength is rated at 95,000 psi and lead accuracy is maintained at +/- .003 in./ft. Screw ends are deburred and ready for end machining. Each screw is roller burnished and black oxide to a smooth finish, thereby maximizing travel efficiency. The matching travel nuts are engineered with the same 2-C centralizing thread form. Bronze nuts have ultimate tensile of 65,000 psi and a hardness of RB 75. A lubricated bronze nut has a dynamic COF of .125. The plastic nuts are quieter, more efficient and will equal or exceed the life of conventional travel nut materials. Tensile strength at 70 degree Fahrenheit is 8,000 psi. COF for a lubricated plastic nut is .075 (.160 unlubricated). Loads can be mounted to the travel nut or assembly with steel flanges. These flanges thread directly onto the travel nut. Nut and flange must be secured with a set screw or other pinning device. Application loads can be mounted to the flange via four pre-drilled, equally spaced holes. Mounting holes are .266" in diameter and spaced on the bolt center diameter (BCD) listed below.

**Acme Threaded Rod**



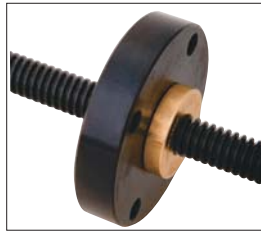
3 Foot Length		6 Foot Length		Thread Size Diameter	Thread Size TPI	Pack Qty.
Right Hand	Left Hand	Right Hand	Right Hand			
Item No.	Item No.	Item No.	Item No.			
AR-2	AR-12	—	—	3/8	12	1
AR-3	AR-13	AR-23	—	1/2	10	1
AR-4	AR-14	AR-24	—	5/8	8	1
AR-5	AR-15	AR-25	—	3/4	6	1
AR-6	—	AR-26	—	7/8	6	1

**Acme Nuts**



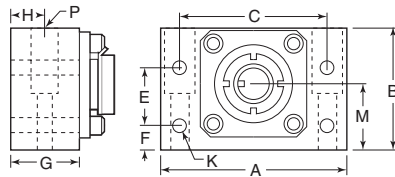
Bronze		Plastic		Thread Size Diameter	Thread Size TPI	External Thread Size	Pack Qty.
Right Hand	Left Hand	Right Hand	Right Hand				
Item No.	Item No.	Item No.	Item No.				
AR-201	—	—	—	1/4	16	9/16-18	1
AR-202	AR-212	AR-222	—	3/8	12	9/16-18	1
AR-203	AR-213	AR-223	—	1/2	10	1 1/16-16	1
AR-204	AR-214	AR-224	—	5/8	8	1 1/16-16	1
AR-205	AR-215	AR-225	—	3/4	6	1-18	1
AR-206	—	—	—	7/8	6	1 1/8-16	1
—	AR-216	AR-226	—	7/8	6	1 1/8-18	1

**Steel Flanges**



Item No.	For Acme Nuts with Thread Size	Internal Thread Size	Flange Dia.	Flange Thickness	Hole Spacing Bolt Circle Diameter	Pack Qty.
AR-101	1/4-16 and 3/8-12	9/16-18	1.60	.410	1.125	1
AR-102	1/2-10 and 5/8-8	1 1/16-16	2.60	.530	2.090	1
AR-103	3/4-6	1-18	2.60	.530	2.090	1
AR-104	7/8-6	1 1/8-16	2.76	.520	2.260	1

**Universal Mounts for Acme and Ball Screws**



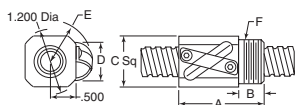
Use socket head cap screws for mounting. Pages 766-769.

Item No.	Fits Across Screw Dia.	Fits Ball Screw Dia.	Lead	A	B	C	E	F	G	H	K	M	P		Pack Qty.
													Thru	Countersink	
AR-402	1/2	—	—	2.75	2.00	2.00	1.38	.310	1.19	.56	.28	1.000	.34	.5 x .56	1
AR-403	5/8	—	—	2.75	2.00	2.00	1.38	.310	1.18	.56	.28	1.000	.34	.5 x .56	1
AR-404	3/4	.631	.200	3.50	2.22	2.75	1.25	.500	1.38	.69	.28	1.187	.41	.62 x 1	1
AR-405	7/8	.750	.200	3.50	2.52	2.75	1.25	.800	1.38	.69	.28	1.438	.41	.52 x 1	1
AR-406	—	1.000	.25 and 1.0	5.00	3.03	3.75	1.50	.750	1.72	.86	.47	1.625	.66	1 x 1.5	1

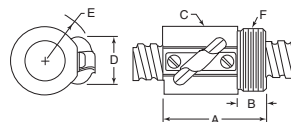
Note: Dimension P screw length based on 1.5 x . dia. extension beyond housing



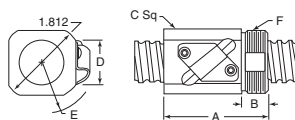
**Ball Nuts - Right Hand Thread**



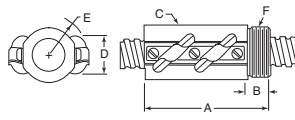
**AR-314**



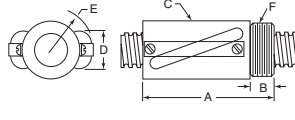
**AR-315**



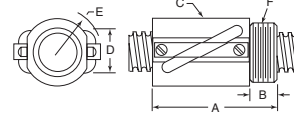
**AR-316**



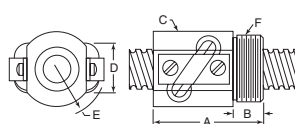
**AR-344**



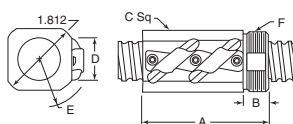
**AR-345**



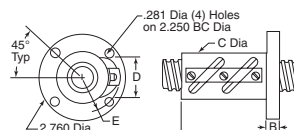
**AR-346**



**AR-347**



**AR-350**

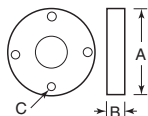


**AR-351**

Ball screws are convenient and efficient devices for converting rotary to linear motion. Because of their reliability and high efficiency they are utilized in replacing conventional methods of power transmission. Their high efficiency is developed by using bearing balls to limit friction between the nut and the screw. Unlimited travel is achieved by recirculating the bearing balls through return guides. All ball screws are right hand thread. Made of high quality alloy steel, induction hardened to RC 56-60. Flanges and nut are made of carburized steel with ball tracks heat treated to RC 58-60. Both ball screws and nuts have protective black oxide finish. Ball screws will not deviate from nominal lead by more than .004 inch per foot. Straight within .010 inch per foot. Do not exceed .030" in any 6' section.

Item No.	Ball Circle Dia.	Lead	A	B	C	D	E	F	Load Lbs.		Pack Qty.	Wiper Kit Item No.
									Dynamic	Static		
<b>Single Circuit</b>												
AR-314	.631	.200	1.710	.500	1.000	.822	.796	.9375-16	815	6,384	1	—
AR-315	.750	.200	1.875	.500	1.312	.863	.886	1.173-18	1,100	8,569	1	AR-371
AR-316	1.000	.250	2.347	.600	1.500	1.104	1.152	1.563-18	1,612	13,913	1	AR-374
<b>Double Circuit</b>												
AR-344	.750	.200	2.875	.500	1.312	.863	.886	1.173-18	2,200	17,138	1	AR-371
AR-345	.750	.500	2.927	.500	1.312	.863	.937	1.173-18	2,723	17,425	1	AR-371
AR-350	1.000	.250	3.000	.600	1.500	1.104	1.152	1.563-18	3,224	27,826	1	AR-376
AR-351	1.000	.250	3.000	.375	1.625	1.150	1.107	—	3,224	27,826	1	AR-374
AR-346	1.000	.500	3.130	.625	1.687	1.080	1.109	1.563-18	3,440	25,250	1	AR-375
AR-347	1.500	1.000	3.628	1.000	2.625	1.718	1.720	2.250-20	7,560	34,662	1	AR-377

**Flanges**



Item No.	For Nuts With Ball Circle dia.	C				Pack Qty.
		A	B	Hole Dia.	BCD	
AR-323	.631	2.60	.53	.266	2.09	1
AR-325	.750	2.59	.53	.281	2.09	1
AR-326	1.000	3.25	.64	.266	2.75	1
AR-417	1.500	4.937	1.020	.531	4.125	1

\*Flange also works with nuts with .500 ball circle diameter.

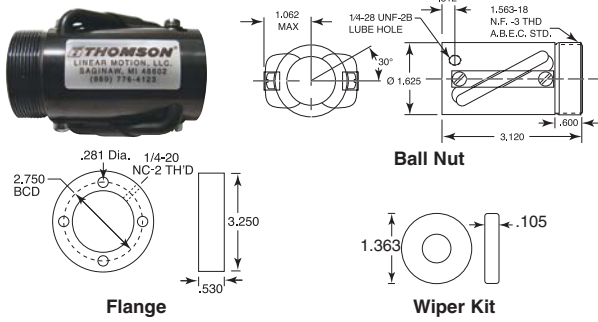
**Ball Screws**



Item No.	Ball Circle Dia.	Lead	Lgth. Ft.	Pack Qty.	Item No.	Ball Circle Dia.	Lead	Lgth. Ft.	Pack Qty.
AR-302	.631	.200	2	1	AR-320	1.000	.250	16	1
AR-303	.500	.500	4	1	AR-327	1.000	.500	12	1
AR-304	.631	.200	4	1	AR-328	1.000	.500	16	1
AR-305	.750	.200	4	1	AR-331	1.000	1.000	12	1
AR-306	1.000	.250	4	1	AR-332	1.000	1.000	16	1
AR-307	.631	.200	6	1	AR-334	1.500	1.000	8	1
AR-308	.750	.200	8	1	AR-335	1.500	1.000	12	1
AR-309	.750	.200	12	1	AR-336	1.500	1.000	16	1
AR-310	.750	.500	4	1	AR-337	1.500	1.000	20	1
AR-312	.750	.500	8	1	AR-340	1.500	1.875	12	1
AR-317	.750	.500	12	1	AR-341	1.500	1.875	16	1
AR-318	1.000	.250	8	1	AR-342	1.500	1.875	20	1
AR-319	1.000	.250	12	1					



1.000 x .500 Non-Preload Right Hand

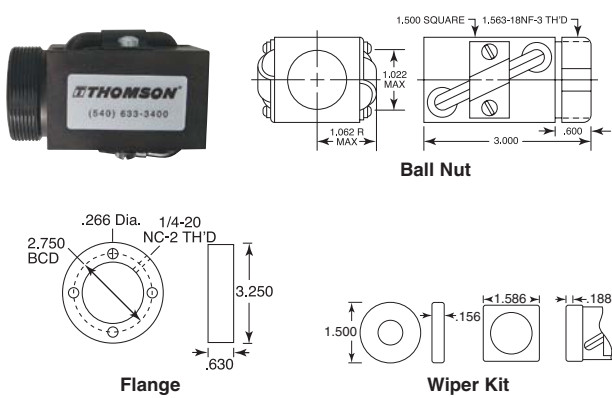


Ball-Nut Item No.	Thomson	Ball Circle Dia.	Lead	Dynamic Load	Static Load	Pack Qty.
TBS-433	7824286	1.000	.500	3,890	18,400	1

Flange Item No.	Thomson	Pack Qty.	Wiper Kit Item No.	Thomson	Pack Qty.
TBS-168	7824293	1	TBS-205	7824292	1

1.000 x 1.000 Non-Preload Right Hand - Square

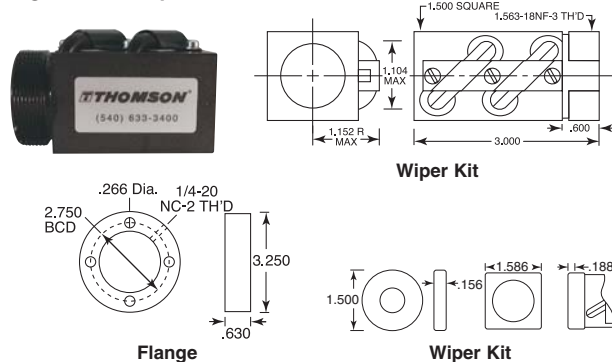


Ball-Nut Item No.	Thomson	Ball Circle Dia.	Lead	Dynamic Load	Static Load	Pack Qty.
TBS-436	5707509	1.000	1.000	2,142	11,925	1

Flange Item No.	Thomson	Pack Qty.	Wiper Kit Item No.	Thomson	Pack Qty.
TBS-165	5707571	1	TBS-208	5702650	1

1.000 x .250 Non-Preload Right Hand - Square



Ball-Nut Item No.	Thomson	Ball Circle Dia.	Lead	Dynamic Load	Static Load	Pack Qty.
TBS-424	5700348	1.000	.250	3,224	27,826	1

Flange Item No.	Thomson	Pack Qty.	Wiper Kit Item No.	Thomson	Pack Qty.
TBS-165	5707571	1	TBS-208	5702650	1

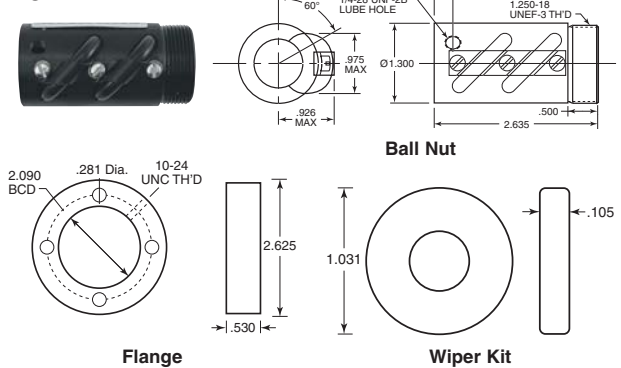
Ball Screws



These ball screws offer over 90% efficiency converting rotary motion to linear motion with low coefficient of friction. When replacing screws, hydraulics or pneumatics, they allow the use of smaller, less expensive drive motors and reduce the need for auxiliary equipment. They also offer dependable accuracy and repeatability at an economical price. Made of high-quality alloy steel hardened to rockwell 56-60C. Lead accuracy of .004 in./ft. Straight within .010 in/ft. and do not exceed .030" in any 6 foot section.

Item No.	Ball Circle Dia.	Lead	Lgth.	Pack Qty.	Item No.	Ball Circle Dia.	Lead	Lgth.	Pack Qty.
TBS-17	.631	.200	2	1	TBS-65	1.000	.250	3	1
TBS-20	.631	.200	3	1	TBS-68	1.000	.250	4	1
TBS-23	.631	.200	4	1	TBS-71	1.000	.250	5	1
TBS-26	.631	.200	5	1	TBS-80	1.000	.500	3	1
TBS-29	.631	.200	6	1	TBS-83	1.000	.500	4	1
TBS-32	.750	.200	2	1	TBS-86	1.000	.500	5	1
TBS-35	.750	.200	3	1	TBS-89	1.000	.500	6	1
TBS-38	.750	.200	4	1	TBS-95	1.000	1.000	3	1
TBS-47	.750	.500	2	1	TBS-107	1.500	.250	2	1
TBS-62	1.000	.250	2	1	TBS-110	1.500	.250	3	1

Precision Ball Nuts .750 x .200 Non-Preload Right Hand

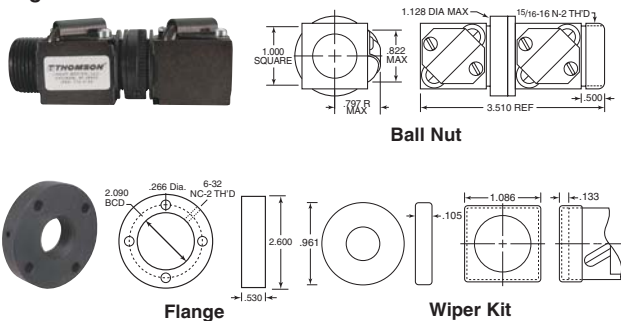


Ball-Nut Item No.	Thomson	Ball Circle Dia.	Lead	Dynamic Load	Static Load	Pack Qty.
TBS-418	7824297	.750	.200	2,082	11,750	1

Flange Item No.	Thomson	Pack Qty.	Wiper Kit Item No.	Thomson	Pack Qty.
TBS-159	7823336	1	TBS-193	7824337	1

Precision Ball Nuts .631 x .200 Preloaded Right Hand



Ball-Nut Item No.	Thomson	Ball Circle Dia.	Lead	Dynamic Load	Static Load	Pack Qty.
TBS-415	7820955	.631	.200	778	6,384	1

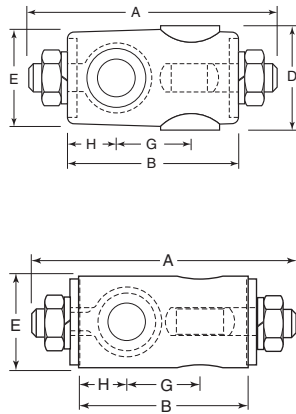
Flange Item No.	Thomson	Pack Qty.	Wiper Kit Item No.	Thomson	Pack Qty.
TBS-156	5707570	1	TBS-190	5702647	1



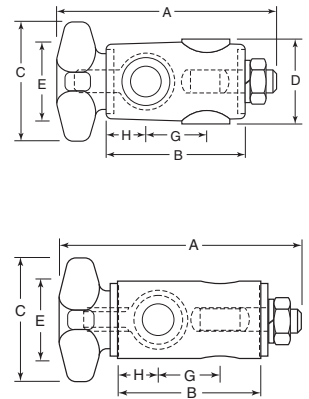
# CROSS BLOCKS & PRECISION BALL NUTS

Used for connecting two round rods at 90 degrees. Adjustment can be made by loosening the hand knob. Plastic knobs function independently for precise adjustment. Knobs have a brass insert for easy turning and to prevent galling. Stainless steel eye bolt firmly clamps around the adjusting rod for superior holding strength. Eyelet does not mar the rod when tightened, resulting in a smooth rod surface that easily slides through the cross block. No set screws are used. Plastic or stainless steel bodies accept 1/2" or 5/8" rods. Several variations available with two knobs, nut and knob and two nuts. Stainless steel parts are made of Type 304 stainless steel.

## Heavy Duty Cross Blocks w/Two Nuts



## Heavy Duty Cross Blocks w/One Nut and One Knob



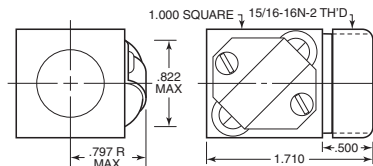
Available with black plastic or stainless steel body, with stainless steel lock washers and nuts. Used when less frequent adjustments are necessary.

Item No.	Rod Sizes	A	B	D	E	G	H	Pack Qty.
<b>Plastic Body</b>								
VG-13	1/2 x 1/2	3.4	2.31	1.41	1.31	1	0.66	1
VG-15	5/8 x 5/8	3.4	2.31	1.41	1.31	1	0.66	1
<b>Stainless Steel Body</b>								
VG-16	1/2 x 1/2	3.4	2.31	—	1.25	1	0.66	1
VG-17	1/2 x 5/8	3.4	2.31	—	1.25	1	0.66	1
VG-18	5/8 x 5/8	3.4	2.31	—	1.25	1	0.66	1

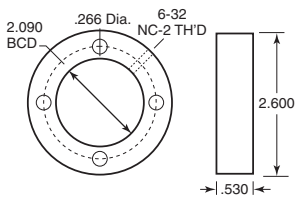
Available with black plastic or stainless steel body and plastic knob. Stainless steel washer and nut. Use hand knob for frequent adjustments. Use lock washer and nut for more permanent positioning.

Item No.	Rod Sizes	A	B	C	D	E	G	H	Pack Qty.
<b>Plastic Body</b>									
VG-7	1/2 x 1/2	3.7	2.31	2	1.41	1.31	1	0.66	1
VG-9	5/8 x 5/8	3.7	2.31	2	1.41	1.31	1	0.66	1
<b>Stainless Steel Body</b>									
VG-10	1/2 x 1/2	3.8	2.31	2	—	1.25	1	0.66	1
VG-11	1/2 x 5/8	3.8	2.31	2	—	1.25	1	0.66	1
VG-12	5/8 x 5/8	3.8	2.31	2	—	1.25	1	0.66	1

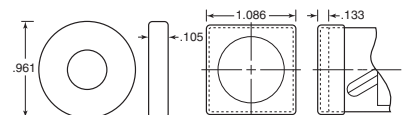
## Precision Ball Nuts .631 x .200 Non-Preload Right Hand



Ball Nut



Flange



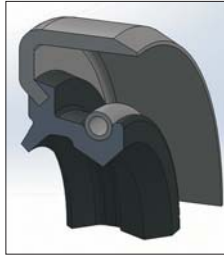
Wiper Kit

Ball-Nut Item No.	Thomson	Ball Circle Dia.	Lead	Dynamic Load	Static Load	Pack Qty.
TBS-412	7820827	.631	.200	778	6,384	1

Flange Item No.	Thomson	Pack Qty.	Wiper Kit Item No.	Thomson	Pack Qty.
TBS-156	5707570	1	TBS-190	5702647	1



Oil and Grease Seals  
Inch



Oil seals are used to seal around a rotating shaft and keep an oil-based lubricant inside an axle or housing. Grease seals are used to seal more viscous grease lubricants in a variety of rotary shaft applications. Styles with double lips, enhanced lip compound materials, and/or a spring on one of the lips increase the effectiveness of the oil or grease seal in extreme environments - keeping contaminants out and lubrication in.

Item No.	Shaft	Bore	Width	Case Profile	Lip Material	Pack Qty.	Item No.	Shaft	Bore	Width	Case Profile	Lip Material	Pack Qty.	Item No.	Shaft	Bore	Width	Case Profile	Lip Material	Pack Qty.	
<b>Inch - Oil</b>																					
DNA-10	0.375	0.875	0.250	TB	Nitrile	1	DNA-345	1.375	2.875	0.468	TB	Nitrile	1	DNA-665	3.375	4.999	0.438	TA	Nitrile	1	
DNA-20	0.500	0.999	0.250	TB	Viton	1	DNA-350	1.438	2.250	0.313	TB	Nitrile	1	DNA-670	3.438	4.626	0.438	TA	Nitrile	1	
DNA-25	0.500	0.999	0.250	TB	Nitrile	1	DNA-360	1.500	2.000	0.375	TB	Nitrile	1	DNA-675	3.500	4.376	0.375	TB	Nitrile	1	
DNA-30	0.500	1.124	0.250	TB	Nitrile	1	DNA-365	1.500	2.250	0.313	TB	Viton	1	DNA-680	3.500	4.501	0.438	TA	Nitrile	1	
DNA-35	0.500	1.375	0.250	TB	Nitrile	1	DNA-370	1.500	2.250	0.313	TB	Nitrile	1	DNA-685	3.500	4.625	0.500	TA	Nitrile	1	
DNA-40	0.563	1.124	0.250	TB	Nitrile	1	DNA-375	1.500	2.374	0.313	TB	Nitrile	1	DNA-690	3.500	4.875	0.500	TA	Nitrile	1	
DNA-45	0.625	0.875	0.125	TZ	Nitrile	1	DNA-380	1.500	2.750	0.312	TB	Nitrile	1	DNA-695	3.500	4.999	0.468	TA	Nitrile	1	
DNA-55	0.625	0.999	0.250	TB	Nitrile	1	DNA-385	1.500	3.000	0.375	TB	Nitrile	1	DNA-700	3.500	5.126	0.438	TA	Nitrile	1	
DNA-60	0.625	1.124	0.250	TB	Viton	1	DNA-390	1.563	2.374	0.313	TB	Nitrile	1	DNA-705	3.500	5.500	0.500	TA	Nitrile	1	
DNA-65	0.625	1.124	0.250	TB	Nitrile	1	DNA-395	1.625	2.000	0.250	TB	Nitrile	1	DNA-710	3.625	4.376	0.375	TA	Nitrile	1	
DNA-70	0.625	1.375	0.250	TB	Viton	1	DNA-400	1.625	2.250	0.313	TB	Nitrile	1	DNA-715	3.625	4.626	0.438	TA	Nitrile	1	
DNA-75	0.625	1.375	0.250	TB	Nitrile	1	DNA-405	1.625	2.374	0.313	TB	Nitrile	1	DNA-720	3.625	4.999	0.375	TB	Nitrile	1	
DNA-80	0.625	1.624	0.312	TB	Nitrile	1	DNA-410	1.625	2.437	0.313	TB	Nitrile	1	DNA-725	3.688	4.501	0.438	TA	Nitrile	1	
DNA-85	0.750	1.125	0.250	TB	Nitrile	1	DNA-415	1.625	2.750	0.312	TB	Nitrile	1	DNA-730	3.750	4.751	0.375	TB	Nitrile	1	
DNA-90	0.750	1.250	0.250	TB	Viton	1	DNA-420	1.625	3.000	0.312	TA	Nitrile	1	DNA-735	3.750	4.999	0.438	TA	Nitrile	1	
DNA-95	0.750	1.250	0.250	TB	Nitrile	1	DNA-425	1.750	2.374	0.313	TB	Nitrile	1	DNA-740	3.875	5.251	0.438	TA	Nitrile	1	
DNA-100	0.750	1.312	0.250	TB	Nitrile	1	DNA-430	1.750	2.437	0.313	TB	Nitrile	1	DNA-745	4.000	4.999	0.375	TB	Viton	1	
DNA-105	0.750	1.375	0.250	TB	Viton	1	DNA-435	1.750	2.686	0.375	TB	Nitrile	1	DNA-750	4.000	4.999	0.438	TA	Nitrile	1	
DNA-110	0.750	1.375	0.250	TB	Nitrile	1	DNA-440	1.750	2.750	0.313	TB	Nitrile	1	DNA-755	4.000	5.125	0.500	TA	Nitrile	1	
DNA-115	0.750	1.499	0.250	TB	Nitrile	1	DNA-445	1.750	3.000	0.375	TB	Nitrile	1	DNA-760	4.000	5.250	0.500	TA	Nitrile	1	
DNA-120	0.750	1.624	0.250	TB	Nitrile	1	DNA-450	1.875	2.686	0.375	TB	Nitrile	1	DNA-765	4.000	5.376	0.500	TA	Nitrile	1	
DNA-125	0.813	1.624	0.250	TB	Nitrile	1	DNA-455	1.875	2.875	0.313	TB	Nitrile	1	DNA-770	4.000	5.501	0.562	TA	Nitrile	1	
DNA-135	0.875	1.250	0.188	TB	Nitrile	1	DNA-460	1.938	2.686	0.313	TL	Nitrile	1	DNA-775	4.000	5.751	0.562	TA	Nitrile	1	
DNA-140	0.875	1.375	0.250	TB	Viton	1	DNA-465	1.938	3.000	0.313	TB	Viton	1	DNA-780	4.000	5.999	0.500	TA	Nitrile	1	
DNA-145	0.875	1.375	0.312	TA	Nitrile	1	DNA-470	2.000	2.686	0.375	TB	Nitrile	1	DNA-785	4.125	5.251	0.468	TA	Nitrile	1	
DNA-150	0.875	1.499	0.250	TB	Nitrile	1	DNA-475	2.000	2.750	0.313	TB	Nitrile	1	DNA-790	4.250	5.251	0.375	TB	Nitrile	1	
DNA-155	0.938	1.375	0.250	TB	Nitrile	1	DNA-480	2.000	2.875	0.313	TA	Nitrile	1	DNA-795	4.250	5.376	0.500	TA	Nitrile	1	
DNA-165	1.000	1.375	0.250	TZ	Nitrile	1	DNA-485	2.000	3.000	0.313	TB	Nitrile	1	DNA-800	4.250	5.500	0.500	TA	Nitrile	1	
DNA-170	1.000	1.437	0.250	TB	Nitrile	1	DNA-490	2.000	3.062	0.375	TB	Nitrile	1	DNA-805	4.250	5.626	0.500	TA	Nitrile	1	
DNA-175	1.000	1.437	0.250	TB	Viton	1	DNA-495	2.125	2.750	0.375	TB	Nitrile	1	DNA-810	4.375	5.376	0.500	TA	Nitrile	1	
DNA-185	1.000	1.499	0.250	TB	Viton	1	DNA-500	2.125	2.875	0.438	TB	Nitrile	1	DNA-815	4.375	5.500	0.500	TA	Nitrile	1	
DNA-190	1.000	1.499	0.250	TB	Nitrile	1	DNA-505	2.125	3.000	0.375	TA	Nitrile	1	DNA-820	4.500	5.750	0.500	TA	Nitrile	1	
DNA-195	1.000	1.874	0.250	TB	Nitrile	1	DNA-510	2.188	3.000	0.375	TB	Nitrile	1	DNA-825	4.500	5.999	0.500	TA	Nitrile	1	
DNA-200	1.000	2.000	0.250	TB	Viton	1	DNA-515	2.250	3.000	0.375	TB	Viton	1	DNA-830	4.625	5.625	0.500	TA	Nitrile	1	
DNA-205	1.000	2.000	0.250	TB	Nitrile	1	DNA-520	2.250	3.061	0.375	TB	Nitrile	1	DNA-835	4.750	5.751	0.500	TA	Nitrile	1	
DNA-210	1.125	1.624	0.250	TB	Nitrile	1	DNA-525	2.250	3.125	0.375	TB	Nitrile	1	DNA-840	4.750	6.001	0.500	TA	Nitrile	1	
DNA-215	1.125	1.874	0.250	TB	Viton	1	DNA-530	2.250	3.500	0.438	TA	Nitrile	1	DNA-845	4.875	5.999	0.500	TA	Nitrile	1	
DNA-220	1.125	1.874	0.250	TB	Nitrile	1	DNA-535	2.250	3.623	0.468	TA	Nitrile	1	DNA-850	4.875	6.250	0.500	TA	Nitrile	1	
DNA-225	1.125	2.000	0.250	TB	Nitrile	1	DNA-540	2.375	3.000	0.375	TB	Nitrile	1	DNA-855	5.000	6.001	0.500	TA	Nitrile	1	
DNA-230	1.125	2.000	0.250	TB	Viton	1	DNA-545	2.375	3.125	0.375	TB	Nitrile	1	DNA-860	5.000	6.250	0.563	TA	Nitrile	1	
DNA-235	1.125	2.062	0.250	TB	Nitrile	1	DNA-550	2.500	3.500	0.375	TA	Nitrile	1	DNA-865	5.000	6.499	0.500	TA	Nitrile	1	
DNA-240	1.188	2.000	0.250	TB	Nitrile	1	DNA-555	2.500	3.623	0.375	TB	Nitrile	1	DNA-870	5.000	7.000	0.500	TA	Nitrile	1	
DNA-245	1.250	1.687	0.313	TB	Nitrile	1	DNA-560	2.500	3.876	0.468	TA	Nitrile	1	DNA-875	5.000	7.500	0.500	TA	Nitrile	1	
DNA-250	1.250	1.750	0.250	TL	Nitrile	1	DNA-565	2.625	3.623	0.375	TA	Nitrile	1	DNA-880	5.250	6.250	0.500	TA	Nitrile	1	
DNA-255	1.250	2.000	0.250	TB	Viton	1	DNA-570	2.625	3.750	0.375	TB	Nitrile	1	DNA-885	5.250	6.500	0.562	TA	Nitrile	1	
DNA-260	1.250	2.000	0.250	TB	Nitrile	1	DNA-575	2.750	3.500	0.375	TA	Nitrile	1	DNA-890	5.500	6.500	0.562	TA	Nitrile	1	
DNA-265	1.250	2.062	0.250	TB	Nitrile	1	DNA-580	2.750	3.751	0.375	TA	Nitrile	1	DNA-895	5.500	6.750	0.500	TA	Nitrile	1	
DNA-270	1.250	2.124	0.250	TB	Nitrile	1	DNA-585	2.875	3.623	0.375	TB	Nitrile	1	DNA-900	5.750	6.751	0.500	TA	Nitrile	1	
DNA-275	1.250	2.374	0.313	TB	Nitrile	1	DNA-590	2.875	3.751	0.375	TA	Nitrile	1	DNA-905	5.750	7.500	0.562	TA	Nitrile	1	
DNA-280	1.250	2.437	0.375	TB	Nitrile	1	DNA-595	2.938	3.751	0.375	TB	Nitrile	1	DNA-910	6.000	7.000	0.500	TA	Nitrile	1	
DNA-285	1.313	2.062	0.313	TB	Nitrile	1	DNA-600	2.938	3.876	0.375	TA	Nitrile	1	DNA-915	6.000	7.500	0.500	TA	Nitrile	1	
DNA-290	1.375	1.750	0.219	TB	Nitrile	1	DNA-605	2.938	4.000	0.438	TA	Nitrile	1	DNA-920	6.500	8.000	0.625	TA	Nitrile	1	
DNA-295	1.375	1.874	0.250	TB	Nitrile	1	DNA-610	3.000	4.125	0.437	TA	Nitrile	1	DNA-925	7.000	8.500	0.625	TA	Nitrile	1	
DNA-300	1.375	1.938	0.250	TB	Nitrile	1	DNA-615	3.000	4.249	0.437	TA	Nitrile	1	DNA-930	8.000	9.500	0.625	TA	Nitrile	1	
DNA-305	1.375	2.000	0.312	TB	Viton	1	DNA-620	3.000	4.999	0.438	TA	Nitrile	1	DNA-935	9.000	11.000	0.750	TA	Nitrile	1	
DNA-310	1.375	2.000	0.313	TB	Nitrile	1	DNA-625	3.125	4.125	0.375	TA	Nitrile	1	<b>Inch - Grease</b>							
DNA-315	1.375	2.063	0.313	TB	Viton	1	DNA-630	3.125	4.249	0.438	TA	Nitrile	1	DNA-5	0.375	0.687	0.156	VM	Nitrile	1	
DNA-320	1.375	2.125	0.313	TB	Nitrile	1	DNA-635	3.125	4.999	0.468	TA	Nitrile	1	DNA-15	0.500	0.750	0.125	VM	Nitrile	1	
DNA-325	1.375	2.250	0.312	TB	Nitrile	1	DNA-640	3.250	4.249	0.375	TA	Nitrile	1	DNA-50	0.625	0.938	0.188	VB	Nitrile	1	
DNA-330	1.375	2.374	0.312	TB	Nitrile	1	DNA-645	3.250	4.501	0.438	TA	Nitrile	1	DNA-130	0.875	1.250	0.182	VB	Nitrile	1	
DNA-335	1.375	2.562	0.375	TB	Nitrile	1	DNA-650	3.375	4.125	0.375	TA	Nitrile	1	DNA-160	1.000	1.250	0.125	KM	Nitrile	1	
DNA-340	1.375	2.562	0.375	TB	Viton	1	DNA-655	3.375	4.376	0.375	TA	Nitrile	1	DNA-180	1.000	1.499	0.188	VB	Nitrile	1	
							DNA-660	3.375	4.501	0.438	TA	Nitrile	1	DNA-355	1.500	1.874	0.250	VB	Nitrile	1	

Note: Synthetic rubber O.D.



Oil and Grease Seals  
Metric



Oil seals are used to seal around a rotating shaft and keep an oil-based lubricant inside an axle or housing. Grease seals are used to seal more viscous grease lubricants in a variety of rotary shaft applications. Styles with double lips, enhanced lip compound materials, and/or a spring on one of the lips increase the effectiveness of the oil or grease seal in extreme environments - keeping contaminants out and lubrication in.

Item No.	Shaft	Bore	Width	Case Profile	Lip Material	Pack Qty.
<b>Metric - Oil</b>						
DNA-955	8	16	7	TC	Nitrile	1
DNA-965	10	19	7	TC	Nitrile	1
DNA-970	10	20	7	TC	Nitrile	1
DNA-975	10	22	7	TC	Nitrile	1
DNA-980	10	24	7	TC	Nitrile	1
DNA-985	10	25	7	TC	Nitrile	1
DNA-990	11	17	4	TC	Nitrile	1
DNA-1000	12	18	4	TC	Nitrile	1
DNA-1005	12	19	5	TC	Nitrile	1
DNA-1010	12	20	4	TC	Nitrile	1
DNA-1015	12	22	7	TC	Nitrile	1
DNA-1020	12	24	7	TC	Nitrile	1
DNA-1025	12	25	7	TC	Nitrile	1
DNA-1030	12	28	7	TC	Nitrile	1
DNA-1035	14	20	3	TC	Nitrile	1
DNA-1040	14	22	4	TC	Nitrile	1
DNA-1045	14	24	7	TC	Nitrile	1
DNA-1050	15	24	7	TC	Nitrile	1
DNA-1055	15	25	4	TC	Nitrile	1
DNA-1060	15	26	7	TC	Nitrile	1
DNA-1065	15	27	7	TC	Nitrile	1
DNA-1070	15	28	7	TC	Nitrile	1
DNA-1075	15	30	7	TC	Nitrile	1
DNA-1080	15	32	7	TC	Nitrile	1
DNA-1085	15	35	7	TC	Nitrile	1
DNA-1090	16	24	7	TC	Nitrile	1
DNA-1095	16	28	7	TC	Nitrile	1
DNA-1100	16	30	7	TC	Nitrile	1
DNA-1105	16	32	7	TC	Nitrile	1
DNA-1110	16	35	7	TC	Nitrile	1
DNA-1120	17	28	7	TC	Nitrile	1
DNA-1125	17	29	5	TC	Nitrile	1
DNA-1130	17	30	6	TC	Nitrile	1
DNA-1135	17	32	7	TC	Nitrile	1
DNA-1140	17	35	8	TC	Nitrile	1
DNA-1145	17	40	5	TC	Nitrile	1
DNA-1155	18	28	7	TC	Nitrile	1
DNA-1160	18	30	7	TC	Nitrile	1
DNA-1165	18	32	7	TC	Nitrile	1
DNA-1170	18	47	10	TC	Nitrile	1
DNA-1175	19	32	8	TC	Nitrile	1
DNA-1180	19	35	7	TC	Nitrile	1
DNA-1185	19	47	7	TC	Nitrile	1
DNA-1190	20	26	4	TC	Nitrile	1
DNA-1200	20	30	7	TC	Nitrile	1
DNA-1205	20	32	7	TC	Nitrile	1
DNA-1210	20	35	7	TC	Nitrile	1
DNA-1215	20	36	7	TC	Nitrile	1
DNA-1225	20	40	7	TC	Nitrile	1
DNA-1230	20	42	7	TC	Nitrile	1
DNA-1235	20	45	7	TC	Nitrile	1
DNA-1240	20	47	7	TC	Nitrile	1
DNA-1245	20	52	10	TC	Nitrile	1
DNA-1255	22	32	7	TC	Nitrile	1
DNA-1260	22	35	7	TC	Nitrile	1
DNA-1265	22	38	7	TC	Nitrile	1
DNA-1270	22	40	7	TC	Nitrile	1
DNA-1275	22	42	7	TC	Nitrile	1
DNA-1280	22	47	7	TC	Nitrile	1
DNA-1285	22	50	10	TC	Nitrile	1
DNA-1290	23	34	8	TC	Nitrile	1
DNA-1295	24	35	6	TC	Nitrile	1
DNA-1300	24	40	7	TC	Nitrile	1
DNA-1305	25	35	7	TC	Nitrile	1
DNA-1310	25	37	7	TC	Nitrile	1
DNA-1315	25	38	7	TC	Nitrile	1
DNA-1320	25	40	5	TC	Nitrile	1
DNA-1325	25	42	7	TC	Nitrile	1
DNA-1330	25	44	7	TC	Nitrile	1
DNA-1335	25	45	8	TC	Nitrile	1
DNA-1340	25	46	7	TC	Nitrile	1
DNA-1345	25	47	8	TC	Nitrile	1
DNA-1350	25	52	10	TC	Nitrile	1
DNA-1355	25	62	7	TC	Nitrile	1
DNA-1360	26	37	7	TC	Nitrile	1
DNA-1365	26	40	7	TC	Nitrile	1
DNA-1370	26	47	7	TC	Nitrile	1
DNA-1375	27	37	7	TC	Nitrile	1
DNA-1380	27	43	8	TC	Nitrile	1
DNA-1385	28	38	7	TC	Nitrile	1
DNA-1390	28	40	7	TC	Nitrile	1

Item No.	Shaft	Bore	Width	Case Profile	Lip Material	Pack Qty.
DNA-1395	28	42	7	TC	Nitrile	1
DNA-1400	28	47	7	TC	Nitrile	1
DNA-1405	28	52	6	TC	Nitrile	1
DNA-1410	30	37	4	TC	Nitrile	1
DNA-1415	30	40	7	TC	Nitrile	1
DNA-1420	30	42	8	TC	Nitrile	1
DNA-1425	30	44	7	TC	Nitrile	1
DNA-1430	30	45	8	TC	Nitrile	1
DNA-1435	30	46	8	TC	Nitrile	1
DNA-1440	30	47	7	TC	Nitrile	1
DNA-1445	30	48	8	TC	Nitrile	1
DNA-1450	30	50	7	TC	Nitrile	1
DNA-1455	30	52	8	TC	Nitrile	1
DNA-1460	30	55	10	TC	Nitrile	1
DNA-1465	30	62	8	TC	Nitrile	1
DNA-1470	30	72	10	TC	Nitrile	1
DNA-1475	32	45	7	TC	Nitrile	1
DNA-1480	32	46	8	TC	Nitrile	1
DNA-1485	32	47	7	TC	Nitrile	1
DNA-1490	32	52	8	TC	Nitrile	1
DNA-1495	32	72	10	TC	Nitrile	1
DNA-1500	34	47	10	TC	Nitrile	1
DNA-1505	34	48	7	TC	Nitrile	1
DNA-1510	34	52	8	TC	Nitrile	1
DNA-1515	35	45	7	TC	Nitrile	1
DNA-1520	35	47	7	TC	Nitrile	1
DNA-1525	35	48	8	TC	Nitrile	1
DNA-1530	35	50	8	TC	Nitrile	1
DNA-1535	35	52	7	TC	Nitrile	1
DNA-1540	35	54	8	TC	Nitrile	1
DNA-1545	35	55	8	TC	Nitrile	1
DNA-1550	35	62	10	TC	Nitrile	1
DNA-1555	35	72	10	TC	Nitrile	1
DNA-1560	35	80	10	TC	Nitrile	1
DNA-1565	36	47	7	TC	Nitrile	1
DNA-1570	36	52	7	TC	Nitrile	1
DNA-1575	38	50	7	TC	Nitrile	1
DNA-1580	38	52	8	TC	Nitrile	1
DNA-1585	38	55	8	TC	Nitrile	1
DNA-1590	38	58	10	TC	Nitrile	1
DNA-1595	38	60	10	TC	Nitrile	1
DNA-1600	38	72	8	TC	Nitrile	1
DNA-1605	40	50	8	TC	Nitrile	1
DNA-1610	40	52	7	TC	Nitrile	1
DNA-1615	40	54	7	TC	Nitrile	1
DNA-1620	40	55	8	TC	Nitrile	1
DNA-1625	40	56	7	TC	Nitrile	1
DNA-1630	40	58	8	TC	Nitrile	1
DNA-1635	40	60	10	TC	Nitrile	1
DNA-1640	40	62	10	TC	Nitrile	1
DNA-1645	40	64	12	TC	Nitrile	1
DNA-1650	40	68	7	TC	Nitrile	1
DNA-1655	40	70	10	TC	Nitrile	1
DNA-1660	40	72	10	TC	Nitrile	1
DNA-1665	40	80	10	TC	Nitrile	1
DNA-1670	42	55	7	TC	Nitrile	1
DNA-1675	42	60	9	TC	Nitrile	1
DNA-1680	42	62	8	TC	Nitrile	1
DNA-1685	42	72	10	TC	Nitrile	1
DNA-1690	43	62	8	TC	Nitrile	1
DNA-1695	44	60	10	TC	Nitrile	1
DNA-1700	44	62	8	TC	Nitrile	1
DNA-1705	45	55	7	TC	Nitrile	1
DNA-1710	45	58	7	TC	Nitrile	1
DNA-1715	45	60	7	TC	Nitrile	1
DNA-1720	45	62	8	TC	Nitrile	1
DNA-1725	45	65	8	TC	Nitrile	1
DNA-1730	45	72	10	TC	Nitrile	1
DNA-1735	45	75	8	TC	Nitrile	1
DNA-1740	45	80	10	TC	Nitrile	1
DNA-1745	45	85	10	TC	Nitrile	1
DNA-1750	48	62	8	TC	Nitrile	1
DNA-1755	48	65	10	TC	Nitrile	1
DNA-1760	48	68	10	TC	Nitrile	1
DNA-1765	48	72	10	TC	Nitrile	1
DNA-1770	50	60	8	TC	Nitrile	1
DNA-1775	50	62	7	TC	Nitrile	1
DNA-1780	50	65	8	TC	Nitrile	1
DNA-1785	50	68	8	TC	Nitrile	1
DNA-1790	50	70	10	TC	Nitrile	1
DNA-1795	50	72	8	TC	Nitrile	1
DNA-1800	50	80	8	TC	Nitrile	1

Item No.	Shaft	Bore	Width	Case Profile	Lip Material	Pack Qty.
DNA-1805	50	90	10	TC	Nitrile	1
DNA-1810	52	62	8	TC	Nitrile	1
DNA-1815	52	68	8	TC	Nitrile	1
DNA-1820	52	72	8	TC	Nitrile	1
DNA-1825	55	68	8	TC	Nitrile	1
DNA-1830	55	70	8	TC	Nitrile	1
DNA-1835	55	72	10	TC	Nitrile	1
DNA-1840	55	78	12	TC	Nitrile	1
DNA-1845	55	80	10	TC	Nitrile	1
DNA-1850	55	85	10	TC	Nitrile	1
DNA-1855	55	90	10	TC	Nitrile	1
DNA-1860	55	100	10	TC	Nitrile	1
DNA-1865	56	72	8	TC	Nitrile	1
DNA-1870	58	72	8	TC	Nitrile	1
DNA-1875	58	80	12	TC	Nitrile	1
DNA-1880	60	75	8	TC	Nitrile	1
DNA-1885	60	78	9	TC	Nitrile	1
DNA-1890	60	80	10	TC	Nitrile	1
DNA-1895	60	82	12	TC	Nitrile	1
DNA-1900	60	85	10	TC	Nitrile	1
DNA-1905	60	90	10	TC	Nitrile	1
DNA-1910	60	95	10	TC	Nitrile	1
DNA-1915	60	110	10	TC	Nitrile	1
DNA-1920	62	80	10	TC	Nitrile	1
DNA-1925	62	85	8	TC	Nitrile	1
DNA-1930	65	80	8	TC	Nitrile	1
DNA-1935	65	85	10	TC	Nitrile	1
DNA-1940	65	88	12	TC	Nitrile	1
DNA-1945	65	90	10	TC	Nitrile	1
DNA-1950	65	100	10	TC	Nitrile	1
DNA-1955	68	90	10	TC	Nitrile	1
DNA-1960	70	80	10	TC	Nitrile	1
DNA-1965	70	85	8	TC	Nitrile	1
DNA-1970	70	90	12	TC	Nitrile	1
DNA-1975	70	92	12	TC	Nitrile	1
DNA-1980	70	95	13	TC	Nitrile	1
DNA-1985	70	100	10	TC	Nitrile	1
DNA-1990	75	95	10	TC	Nitrile	1
DNA-1995	75	100	10	TC	Nitrile	1
DNA-2000	75	105	13	TC	Nitrile	1
DNA-2005	75	110	10	TC	Nitrile	1
DNA-2010	75	115	9	TC	Nitrile	1
DNA-2015	80	100	10	TC	Nitrile	1
DNA-2020	80	105	10	TC	Nitrile	1
DNA-2025	80	110	10	TC	Nitrile	1
DNA-2030	85	110	13	TC	Nitrile	1
DNA-2035	85	110	12	TC	Nitrile	1
DNA-2040						



**Single Wedge Premium Notched**



Single wedge V-belts, 3VX and 5VX in raw edge notched construction give premium belt performance. The belts are constructed of highly engineered, high performance, oil and heat resistant components. The components are made using the latest in belt technology available on a global basis. The "X" in the part number refers to higher load ratings than standard wedge V-belts.

The belts exceed USA RMA published ratings levels. They are designed to perform at the identical or higher level than all other major USA manufacturer's belts of the same type. All 3VX and 5VX belts are manufactured to meet RMA standards for length, dimensions and matching. All belts of a given size are manufactured to run interchangeably in a matched set.

Item No.	Belt Lgth. (Inch)	Top Width	Thickness	Pack Qty.	Item No.	Belt Lgth. (Inch)	Top Width	Thickness	Pack Qty.	Item No.	Belt Lgth. (Inch)	Top Width	Thickness	Pack Qty.	Item No.	Belt Lgth. (Inch)	Top Width	Thickness	Pack Qty.
<b>3VX Type</b>					<b>3VX Type</b>					<b>5VX Type</b>					<b>5VX Type</b>				
BTQ-3VX240	24	3/4	5/16	1	BTQ-3VX710	71	3/4	5/16	1	BTQ-5VX550	55	3/4	17/32	1	BTQ-5VX850	85	3/4	17/32	1
BTQ-3VX250	25	3/4	5/16	1	BTQ-3VX750	75	3/4	5/16	1	BTQ-5VX560	56	3/4	17/32	1	BTQ-5VX860	86	3/4	17/32	1
BTQ-3VX255	25.5	3/4	5/16	1	BTQ-3VX800	80	3/4	5/16	1	BTQ-5VX570	57	3/4	17/32	1	BTQ-5VX880	88	3/4	17/32	1
BTQ-3VX265	26.5	3/4	5/16	1	BTQ-3VX850	85	3/4	5/16	1	BTQ-5VX580	58	3/4	17/32	1	BTQ-5VX900	90	3/4	17/32	1
BTQ-3VX280	28	3/4	5/16	1	BTQ-3VX900	90	3/4	5/16	1	BTQ-5VX590	59	3/4	17/32	1	BTQ-5VX930	93	3/4	17/32	1
BTQ-3VX300	30	3/4	5/16	1	BTQ-3VX950	95	3/4	5/16	1	BTQ-5VX600	60	3/4	17/32	1	BTQ-5VX950	95	3/4	17/32	1
BTQ-3VX315	31.5	3/4	5/16	1	BTQ-3VX1000	100	3/4	5/16	1	BTQ-5VX610	61	3/4	17/32	1	BTQ-5VX960	96	3/4	17/32	1
BTQ-3VX335	33.5	3/4	5/16	1	BTQ-3VX1060	106	3/4	5/16	1	BTQ-5VX630	63	3/4	17/32	1	BTQ-5VX1000	100	3/4	17/32	1
BTQ-3VX340	34	3/4	5/16	1	BTQ-3VX1120	112	3/4	5/16	1	BTQ-5VX650	65	3/4	17/32	1	BTQ-5VX1030	103	3/4	17/32	1
BTQ-3VX355	35.5	3/4	5/16	1	BTQ-3VX1180	118	3/4	5/16	1	BTQ-5VX660	66	3/4	17/32	1	BTQ-5VX1060	106	3/4	17/32	1
BTQ-3VX360	36	3/4	5/16	1	BTQ-3VX1250	125	3/4	5/16	1	BTQ-5VX670	67	3/4	17/32	1	BTQ-5VX1080	108	3/4	17/32	1
BTQ-3VX375	37.5	3/4	5/16	1	BTQ-3VX1320	132	3/4	5/16	1	BTQ-5VX680	68	3/4	17/32	1	BTQ-5VX1120	112	3/4	17/32	1
BTQ-3VX400	40	3/4	5/16	1	BTQ-3VX1400	140	3/4	5/16	1	BTQ-5VX690	69	3/4	17/32	1	BTQ-5VX1150	115	3/4	17/32	1
BTQ-3VX425	42.5	3/4	5/16	1	<b>5VX Type</b>					BTQ-5VX710	71	3/4	17/32	1	BTQ-5VX1180	118	3/4	17/32	1
BTQ-3VX450	45	3/4	5/16	1	BTQ-5VX400	40	3/4	17/32	1	BTQ-5VX730	73	3/4	17/32	1	BTQ-5VX1250	125	3/4	17/32	1
BTQ-3VX475	47.5	3/4	5/16	1	BTQ-5VX425	42.5	3/4	17/32	1	BTQ-5VX740	74	3/4	17/32	1	BTQ-5VX1320	132	3/4	17/32	1
BTQ-3VX500	50	3/4	5/16	1	BTQ-5VX450	45	3/4	17/32	1	BTQ-5VX750	75	3/4	17/32	1	BTQ-5VX1400	140	3/4	17/32	1
BTQ-3VX530	53	3/4	5/16	1	BTQ-5VX475	47.5	3/4	17/32	1	BTQ-5VX780	78	3/4	17/32	1	BTQ-5VX1500	150	3/4	17/32	1
BTQ-3VX560	56	3/4	5/16	1	BTQ-5VX500	50	3/4	17/32	1	BTQ-5VX800	80	3/4	17/32	1	BTQ-5VX1600	160	3/4	17/32	1
BTQ-3VX600	60	3/4	5/16	1	BTQ-5VX510	51	3/4	17/32	1	BTQ-5VX810	80	3/4	17/32	1	BTQ-5VX1700	170	3/4	17/32	1
BTQ-3VX630	63	3/4	5/16	1	BTQ-5VX530	53	3/4	17/32	1	BTQ-5VX830	83	3/4	17/32	1	BTQ-5VX1800	180	3/4	17/32	1
BTQ-3VX670	67	3/4	5/16	1	BTQ-5VX540	54	3/4	17/32	1	BTQ-5VX840	84	3/4	17/32	1	BTQ-5VX1900	190	3/4	17/32	1

**Single Classical Premium Notched**



Single classical V-belts, AX, BX and CX in raw edge notched construction give premium belt performance. The belts are constructed of highly engineered, high performance, oil and heat resistant components. The components are made using the latest in belt technology available on a global basis. The "X" in the part number refers to higher load ratings than standard classical wrapped belts.

The belts exceed USA RMA published ratings levels. They are designed to perform at the identical or higher level than all other major USA manufacturer's belts of the same type. All AX, BX and CX belts are manufactured to meet RMA standards for length, dimensions and matching. All belts of a given size are manufactured to run interchangeably in a matched set.

Item No.	Belt Lgth. (Inch)	Top Width	Thickness	Pack Qty.	Item No.	Belt Lgth. (Inch)	Top Width	Thickness	Pack Qty.	Item No.	Belt Lgth. (Inch)	Top Width	Thickness	Pack Qty.	Item No.	Belt Lgth. (Inch)	Top Width	Thickness	Pack Qty.
<b>AX Type</b>					<b>AX Type</b>					<b>BX Type</b>					<b>BX Type</b>				
BTQ-AX20	22	1/2	5/16	1	BTQ-AX65	67	1/2	5/16	1	BTQ-BX45	48	5/8	13/32	1	BTQ-BX90	93	5/8	13/32	1
BTQ-AX21	23	1/2	5/16	1	BTQ-AX66	68	1/2	5/16	1	BTQ-BX46	49	5/8	13/32	1	BTQ-BX91	94	5/8	13/32	1
BTQ-AX22	24	1/2	5/16	1	BTQ-AX67	69	1/2	5/16	1	BTQ-BX47	50	5/8	13/32	1	BTQ-BX92	95	5/8	13/32	1
BTQ-AX23	25	1/2	5/16	1	BTQ-AX68	70	1/2	5/16	1	BTQ-BX48	51	5/8	13/32	1	BTQ-BX93	96	5/8	13/32	1
BTQ-AX24	26	1/2	5/16	1	BTQ-AX69	71	1/2	5/16	1	BTQ-BX49	52	5/8	13/32	1	BTQ-BX94	97	5/8	13/32	1
BTQ-AX25	27	1/2	5/16	1	BTQ-AX70	72	1/2	5/16	1	BTQ-BX50	53	5/8	13/32	1	BTQ-BX95	98	5/8	13/32	1
BTQ-AX26	28	1/2	5/16	1	BTQ-AX71	73	1/2	5/16	1	BTQ-BX51	54	5/8	13/32	1	BTQ-BX96	99	5/8	13/32	1
BTQ-AX27	29	1/2	5/16	1	BTQ-AX72	74	1/2	5/16	1	BTQ-BX52	55	5/8	13/32	1	BTQ-BX97	100	5/8	13/32	1
BTQ-AX28	30	1/2	5/16	1	BTQ-AX73	75	1/2	5/16	1	BTQ-BX53	56	5/8	13/32	1	BTQ-BX99	101	5/8	13/32	1
BTQ-AX29	31	1/2	5/16	1	BTQ-AX74	76	1/2	5/16	1	BTQ-BX54	57	5/8	13/32	1	BTQ-BX100	103	5/8	13/32	1
BTQ-AX30	32	1/2	5/16	1	BTQ-AX75	77	1/2	5/16	1	BTQ-BX55	58	5/8	13/32	1	BTQ-BX103	106	5/8	13/32	1
BTQ-AX31	33	1/2	5/16	1	BTQ-AX76	78	1/2	5/16	1	BTQ-BX56	59	5/8	13/32	1	BTQ-BX105	108	5/8	13/32	1
BTQ-AX32	34	1/2	5/16	1	BTQ-AX77	79	1/2	5/16	1	BTQ-BX57	60	5/8	13/32	1	BTQ-BX108	111	5/8	13/32	1
BTQ-AX33	35	1/2	5/16	1	BTQ-AX78	80	1/2	5/16	1	BTQ-BX58	61	5/8	13/32	1	BTQ-BX112	115	5/8	13/32	1
BTQ-AX34	36	1/2	5/16	1	BTQ-AX79	81	1/2	5/16	1	BTQ-BX59	62	5/8	13/32	1	BTQ-BX113	116	5/8	13/32	1
BTQ-AX35	37	1/2	5/16	1	BTQ-AX80	82	1/2	5/16	1	BTQ-BX60	63	5/8	13/32	1	BTQ-BX115	118	5/8	13/32	1
BTQ-AX36	38	1/2	5/16	1	BTQ-AX81	83	1/2	5/16	1	BTQ-BX61	64	5/8	13/32	1	BTQ-BX116	119	5/8	13/32	1
BTQ-AX37	39	1/2	5/16	1	BTQ-AX82	84	1/2	5/16	1	BTQ-BX62	65	5/8	13/32	1	BTQ-BX120	123	5/8	13/32	1
BTQ-AX38	40	1/2	5/16	1	BTQ-AX83	85	1/2	5/16	1	BTQ-BX63	66	5/8	13/32	1	BTQ-BX124	127	5/8	13/32	1
BTQ-AX39	41	1/2	5/16	1	BTQ-AX84	86	1/2	5/16	1	BTQ-BX64	67	5/8	13/32	1	BTQ-BX128	131	5/8	13/32	1
BTQ-AX40	42	1/2	5/16	1	BTQ-AX85	87	1/2	5/16	1	BTQ-BX65	68	5/8	13/32	1	BTQ-BX133	136	5/8	13/32	1
BTQ-AX41	43	1/2	5/16	1	BTQ-AX86	88	1/2	5/16	1	BTQ-BX66	69	5/8	13/32	1	BTQ-BX136	139	5/8	13/32	1
BTQ-AX42	44	1/2	5/16	1	BTQ-AX87	89	1/2	5/16	1	BTQ-BX67	70	5/8	13/32	1	BTQ-BX144	147	5/8	13/32	1
BTQ-AX43	45	1/2	5/16	1	BTQ-AX88	90	1/2	5/16	1	BTQ-BX68	71	5/8	13/32	1	<b>CX Type</b>				
BTQ-AX44	46	1/2	5/16	1	BTQ-AX89	91	1/2	5/16	1	BTQ-BX69	72	5/8	13/32	1	BTQ-CX51	55	7/8	17/32	1
BTQ-AX45	47	1/2	5/16	1	BTQ-AX90	92	1/2	5/16	1	BTQ-BX70	73	5/8	13/32	1	BTQ-CX55	59	7/8	17/32	1
BTQ-AX46	48	1/2	5/16	1	BTQ-AX91	93	1/2	5/16	1	BTQ-BX71	74	5/8	13/32	1	BTQ-CX60	64	7/8	17/32	1
BTQ-AX47	49	1/2	5/16	1	BTQ-AX92	94	1/2	5/16	1	BTQ-BX72	75	5/8	13/32	1	BTQ-CX68	72	7/8	17/32	1
BTQ-AX48	50	1/2	5/16	1	BTQ-AX93	95	1/2	5/16	1	BTQ-BX73	76	5/8	13/32	1	BTQ-CX72	76	7/8	17/32	1
BTQ-AX49	51	1/2	5/16	1	<b>BX Type</b>					BTQ-BX74	77	5/8	13/32	1	BTQ-CX75	79	7/8	17/32	1
BTQ-AX50	52	1/2	5/16	1	BTQ-BX30	33	5/8	13/32	1	BTQ-BX75	78	5/8	13/32	1	BTQ-CX78	82	7/8	17/32	1
BTQ-AX51	53	1/2	5/16	1	BTQ-BX31	34	5/8	13/32	1	BTQ-BX76	79	5/8	13/32	1	BTQ-CX81	85	7/8	17/32	1
BTQ-AX52	54	1/2	5/16	1	BTQ-BX32	35	5/8	13/32	1	BTQ-BX77	80	5/8	13/32	1	BTQ-CX85	89	7/8	17/32	1
BTQ-AX53	55	1/2	5/16	1	BTQ-BX33	36	5/8	13/32	1	BTQ-BX78	81	5/8	13/32	1	BTQ-CX90	94	7/8	17/32	1
BTQ-AX54	56	1/2	5/16	1	BTQ-BX34	37	5/8	13/32	1	BTQ-BX79	82	5/8	13/32	1	BTQ-CX96	100	7/8	17/32	1
BTQ-AX55	57	1/2	5/16	1	BTQ-BX35	38	5/8	13/32	1	BTQ-BX80	83	5/8	13/32	1	BTQ-CX105	109	7/8	17/32	1
BTQ-AX56	58	1/2	5/16	1	BTQ-BX36	39	5/8	13/32	1	BTQ-BX81	84	5/8	13/32	1	BTQ-CX112	116	7/8	17/32	1
BTQ-AX57	59	1/2	5/16	1	BTQ-BX37	40	5/8	13/32	1	BTQ-BX82	85	5/8	13/32	1	BTQ-CX120	124	7/8	17/32	1
BTQ-AX58	60	1/2	5/16																



# INDUSTRIAL V-BELTS

## Single Classical



Single classical V-belts, A, B, C and D in fabric wrapped construction give premium belt performance. The belts are constructed of highly engineered, high performance and heat resistant materials. The outer fabric wrap is treated with oil and heat resistant, engineered synthetic rubber coated compound, specifically compounded for excellent wear resistance, proven through thousands of hours of testing. The components are made using the latest in belt technology available on a global basis.

The belts exceed USA RMA published ratings levels. They are designed to perform at the identical or higher level than all other major USA manufacturer's belts of the same type. All A, B, C and D V-belts are manufactured to meet RMA standards for length, dimensions and matching. All belts of a given size are manufactured to run interchangeably in a matched set.

Item No.	Belt Lgth. (Inch)	Top Width	Thickness	Pack Qty.	Item No.	Belt Lgth. (Inch)	Top Width	Thickness	Pack Qty.	Item No.	Belt Lgth. (Inch)	Top Width	Thickness	Pack Qty.	Item No.	Belt Lgth. (Inch)	Top Width	Thickness	Pack Qty.																																																																																																																																																																																																																																																																																																																																																																																																																																																													
<b>A Type</b>					<b>A Type</b>					<b>B Type</b>					<b>B Type</b>					<b>C Type</b>																																																																																																																																																																																																																																																																																																																																																																																																																																																												
BTQ-A14	16	1/2	3/16	1	BTQ-A105	107	1/2	5/16	1	BTQ-B90	93	5/8	13/32	1	BTQ-B225	226.4	5/8	13/32	1	BTQ-C138	142	7/8	17/32	1	BTQ-C139	143	7/8	17/32	1	BTQ-C140	144	7/8	17/32	1	BTQ-C141	145	7/8	17/32	1	BTQ-C142	146	7/8	17/32	1	BTQ-C144	148	7/8	17/32	1	BTQ-C147	151	7/8	17/32	1	BTQ-C148	152	7/8	17/32	1	BTQ-C150	153	7/8	17/32	1	BTQ-C151	155	7/8	17/32	1	BTQ-C152	156	7/8	17/32	1	BTQ-C153	157	7/8	17/32	1	BTQ-C154	158	7/8	17/32	1	BTQ-C155	159	7/8	17/32	1	BTQ-C156	160	7/8	17/32	1	BTQ-C158	162	7/8	17/32	1	BTQ-C160	164	7/8	17/32	1	BTQ-C162	166	7/8	17/32	1	BTQ-C164	168	7/8	17/32	1	BTQ-C165	169	7/8	17/32	1	BTQ-C166	170	7/8	17/32	1	BTQ-C167	171	7/8	17/32	1	BTQ-C169	173	7/8	17/32	1	BTQ-C170	174	7/8	17/32	1	BTQ-C171	175	7/8	17/32	1	BTQ-C173	177	7/8	17/32	1	BTQ-C175	179	7/8	17/32	1	BTQ-C177	181	7/8	17/32	1	BTQ-C180	184	7/8	17/32	1	BTQ-C183	187	7/8	17/32	1	BTQ-C184	188	7/8	17/32	1	BTQ-C185	189	7/8	17/32	1	BTQ-C188	192	7/8	17/32	1	BTQ-C190	194	7/8	17/32	1	BTQ-C195	199	7/8	17/32	1	BTQ-C196	200	7/8	17/32	1	BTQ-C197	201	7/8	17/32	1	BTQ-C202	206	7/8	17/32	1	BTQ-C206	210	7/8	17/32	1	BTQ-C207	211	7/8	17/32	1	BTQ-C210	214	7/8	17/32	1	BTQ-C212	214.2	7/8	17/32	1	BTQ-C218	220.2	7/8	17/32	1	BTQ-C225	227.2	7/8	17/32	1	BTQ-C235	237.2	7/8	17/32	1	BTQ-C240	242.2	7/8	17/32	1	BTQ-C246	248.2	7/8	17/32	1	BTQ-C250	252.2	7/8	17/32	1	BTQ-C255	257.2	7/8	17/32	1	BTQ-C270	272.2	7/8	17/32	1	BTQ-C280	282.2	7/8	17/32	1	BTQ-C285	287.2	7/8	17/32	1	BTQ-C300	302.2	7/8	17/32	1	BTQ-C315	317.2	7/8	17/32	1	BTQ-C330	332.2	7/8	17/32	1	BTQ-C345	345.2	7/8	17/32	1	BTQ-C360	362.2	7/8	17/32	1	BTQ-C390	392.2	7/8	17/32	1	BTQ-C420	422.2	7/8	17/32	1	<b>D Type</b>					BTQ-D105	110.2	1 1/4	3/4	1	BTQ-D112	117.2	1 1/4	3/4	1	BTQ-D120	125.2	1 1/4	3/4	1	BTQ-D128	133.2	1 1/4	3/4	1	BTQ-D144	149.2	1 1/4	3/4	1	BTQ-D147	152.2	1 1/4	3/4	1	BTQ-D158	163.2	1 1/4	3/4	1	BTQ-D162	167.2	1 1/4	3/4	1	BTQ-D171	176.2	1 1/4	3/4	1	BTQ-D173	178.2	1 1/4	3/4	1	BTQ-D178	183.2	1 1/4	3/4	1	BTQ-D180	185.2	1 1/4	3/4	1	BTQ-D195	200.2	1 1/4	3/4	1	BTQ-D210	215.2	1 1/4	3/4	1	BTQ-D225	227.2	1 1/4	3/4	1	BTQ-D240	242.2	1 1/4	3/4	1	BTQ-D255	257.2	1 1/4	3/4	1	BTQ-D270	272.2	1 1/4	3/4	1	BTQ-D285	287.2	1 1/4	3/4	1	BTQ-D300	302.2	1 1/4	3/4	1	BTQ-D315	317.2	1 1/4	3/4	1	BTQ-D330	332.2	1 1/4	3/4	1	BTQ-D345	347.2	1 1/4	3/4	1	BTQ-D360	362.2	1 1/4	3/4	1	BTQ-D390	392.2	1 1/4	3/4	1	BTQ-D420	422.2	1 1/4	3/4	1	BTQ-D450	452.2	1 1/4	3/4	1	BTQ-D480	482.2	1 1/4	3/4	1	BTQ-D540	542.2	1 1/4	3/4	1





**Single Wedge**

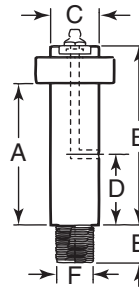


Single wedge V-belts, 3V, 5V and 8V in fabric wrapped construction give premium belt performance. The belts are constructed of highly engineered, high performance and heat resistant materials. The outer fabric wrap is treated with oil and heat resistant, engineered synthetic rubber coated compound, specifically compounded for excellent wear resistance, proven through thousands of hours of testing. The components are made using the latest in belt technology available on a global basis.

The belts exceed USA RMA published ratings levels. They are designed to perform at the identical or higher level than all other major USA manufacturer's belts of the same type. All 3V, 5V and 8V V-belts are manufactured to meet RMA standards for length, dimensions and matching. All belts of a given size are manufactured to run interchangeably in a matched set.

Item No.	Belt Lgth. (Inch)	Top Width	Thickness	Pack Qty.	Item No.	Belt Lgth. (Inch)	Top Width	Thickness	Pack Qty.	Item No.	Belt Lgth. (Inch)	Top Width	Thickness	Pack Qty.	Item No.	Belt Lgth. (Inch)	Top Width	Thickness	Pack Qty.																																																																																																																																																																																																								
<b>3V Type</b>					<b>3V Type</b>					<b>5V Type</b>					<b>8V Type</b>																																																																																																																																																																																																												
BTQ-3V250	25	3/8	5/16	1	BTQ-3V1060	106	3/8	5/16	1	BTQ-5V1400	140	5/8	17/32	1	BTQ-8V1500	150	1 1/2	29/32	1	BTQ-3V265	26.5	3/8	5/16	1	BTQ-3V1120	112	3/8	5/16	1	BTQ-5V1500	150	5/8	17/32	1	BTQ-8V1600	160	1 1/2	29/32	1	BTQ-3V280	28	3/8	5/16	1	BTQ-3V1180	118	3/8	5/16	1	BTQ-5V1600	160	5/8	17/32	1	BTQ-8V1700	170	1 1/2	29/32	1	BTQ-3V300	30	3/8	5/16	1	BTQ-3V1250	125	3/8	5/16	1	BTQ-5V1700	170	5/8	17/32	1	BTQ-8V1800	180	1 1/2	29/32	1	BTQ-3V315	31.5	3/8	5/16	1	BTQ-3V1320	132	3/8	5/16	1	BTQ-5V1800	180	5/8	17/32	1	BTQ-8V1900	190	1 1/2	29/32	1	BTQ-3V335	33.5	3/8	5/16	1	BTQ-3V1400	140	3/8	5/16	1	BTQ-5V1900	190	5/8	17/32	1	BTQ-8V2000	200	1 1/2	29/32	1	BTQ-3V355	35.5	3/8	5/16	1	<b>5V Type</b>					BTQ-8V2100	210	1 1/2	29/32	1																																																																																					
BTQ-3V375	37.5	3/8	5/16	1	BTQ-5V500	50	5/8	17/32	1	BTQ-5V2120	212	5/8	17/32	1	BTQ-8V2240	224	1 1/2	29/32	1	BTQ-3V400	40	3/8	5/16	1	BTQ-5V530	53	5/8	17/32	1	BTQ-5V2240	224	5/8	17/32	1	BTQ-8V2360	236	1 1/2	29/32	1	BTQ-3V425	42.5	3/8	5/16	1	BTQ-5V560	56	5/8	17/32	1	BTQ-5V2360	236	5/8	17/32	1	BTQ-8V2500	250	1 1/2	29/32	1	BTQ-3V450	45	3/8	5/16	1	BTQ-5V600	60	5/8	17/32	1	BTQ-5V2500	250	5/8	17/32	1	BTQ-8V2650	265	1 1/2	29/32	1	BTQ-3V475	47.5	3/8	5/16	1	BTQ-5V630	63	5/8	17/32	1	BTQ-5V2650	265	5/8	17/32	1	BTQ-8V2800	280	1 1/2	29/32	1	BTQ-3V500	50	3/8	5/16	1	BTQ-5V670	67	5/8	17/32	1	BTQ-5V2800	280	5/8	17/32	1	BTQ-8V3000	300	1 1/2	29/32	1	BTQ-3V530	53	3/8	5/16	1	BTQ-5V710	71	5/8	17/32	1	BTQ-5V3000	300	5/8	17/32	1	BTQ-8V3150	315	1 1/2	29/32	1	BTQ-3V560	56	3/8	5/16	1	BTQ-5V750	75	5/8	17/32	1	BTQ-5V3150	315	5/8	17/32	1	BTQ-8V3350	335	1 1/2	29/32	1	BTQ-3V600	60	3/8	5/16	1	BTQ-5V800	80	5/8	17/32	1	BTQ-5V3350	335	5/8	17/32	1	BTQ-8V3550	355	1 1/2	29/32	1	BTQ-3V630	63	3/8	5/16	1	BTQ-5V850	85	5/8	17/32	1	BTQ-5V3550	355	5/8	17/32	1	BTQ-8V3750	375	1 1/2	29/32	1	BTQ-3V670	67	3/8	5/16	1	BTQ-5V900	90	5/8	17/32	1	<b>8V Type</b>					BTQ-8V4000	400	1 1/2	29/32	1
BTQ-3V710	71	3/8	5/16	1	BTQ-5V950	95	5/8	17/32	1	BTQ-8V1000	100	1 1/2	29/32	1	BTQ-8V4250	425	1 1/2	29/32	1	BTQ-3V750	75	3/8	5/16	1	BTQ-5V1000	100	5/8	17/32	1	BTQ-8V1060	106	1 1/2	29/32	1	BTQ-8V4500	450	1 1/2	29/32	1	BTQ-3V800	80	3/8	5/16	1	BTQ-5V1060	106	5/8	17/32	1	BTQ-8V1120	112	1 1/2	29/32	1	BTQ-8V4750	475	1 1/2	29/32	1	BTQ-3V850	85	3/8	5/16	1	BTQ-5V1120	112	5/8	17/32	1	BTQ-8V1180	118	1 1/2	29/32	1	BTQ-8V5000	500	1 1/2	29/32	1	BTQ-3V900	90	3/8	5/16	1	BTQ-5V1180	118	5/8	17/32	1	BTQ-8V1250	125	1 1/2	29/32	1	BTQ-8V5600	560	1 1/2	29/32	1	BTQ-3V950	95	3/8	5/16	1	BTQ-5V1250	125	5/8	17/32	1	BTQ-8V1320	132	1 1/2	29/32	1						BTQ-3V1000	100	3/8	5/16	1	BTQ-5V1320	132	5/8	17/32	1	BTQ-8V1400	140	1 1/2	29/32	1																																																																																					

**Precision Ground Idler Shafts**



**Idler Shafts - Coarse Thread**

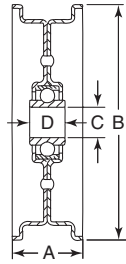
Item No.	A	B	C	D	E	F	Approx. Weight (Lbs.)	Pack Qty.
IDC-161	1 1/16	1 1/2	1/2	3/8	7/16	3/8-16 THD	.16	1
IDC-162	1 1/2	2 1/8	1	5/8	7/8	3/4-10 THD	.75	1
IDC-163	2 1/2	3 3/8	1	1 1/2	7/8	3/4-10 THD	.95	1
IDC-164	3 1/2	4 3/8	1	1 5/8	7/8	3/4-10 THD	1.16	1
IDC-165	3 3/4	4	1 1/2	1 3/4	1 5/16	1-8 THD	2.61	1
IDC-166	5 1/4	6	1 1/2	2 1/2	1 5/16	1-8 THD	3.64	1
IDC-167	1 1/16	1 1/2	1/2	3/8	7/16	3/8-16 THD	.16	1

**Idler Shafts - Fine Thread**

Item No.	A	B	C	D	E	F	Approx. Weight (Lbs.)	Pack Qty.
IDC-168	1 1/2	2 1/8	1	5/8	7/8	3/4-16 THD	.75	1
IDC-169	2 1/2	3 3/8	1	1 1/2	7/8	3/4-16 THD	.95	1
IDC-170	3 1/2	4 3/8	1	1 5/8	7/8	3/4-16 THD	1.16	1
IDC-171	3 3/4	4	1 1/2	1 3/4	1 5/16	1-14 THD	2.61	1
IDC-172	5 1/4	6	1 1/2	2 1/2	1 5/16	1-14 THD	3.64	1

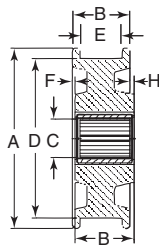


**V-Belt Idler Pulley**



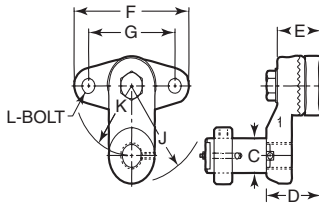
Item No.	Belt Type	A	B	C	D	Pack Qty.
IDC-118	A	.86	3 1/2	3/8	23/32	1
IDC-119	A	.86	3 1/2	1/2	23/32	1
IDC-121	B, C	1.31	5 1/16	1/2	23/32	1
IDC-122	B, C	1.31	5 1/16	5/8	23/32	1
IDC-123	B, C	1.31	7 3/16	1/2	23/32	1
IDC-124	B, C	1.31	7 3/16	5/8	23/32	1

**Flat Faced Idler Pulleys - Needle Bearing**



Item No.	A	B	C	D	E	F	G	H	Approx. Weight (Lbs.)	Pack Qty.
IDC-127	4 1/2	1 7/16	1	4	1 1/16	1/16	1 1/2	1/8	3.00	1
IDC-128	4 1/2	2 7/16	1	4	2 1/16	1/16	3 1/2	1/8	4.60	1
IDC-129	4 1/2	3 7/16	1	4	3 1/16	1/16	3 1/2	1/8	5.80	1
IDC-130	7	5	1	6	4 1/2	1 1/8	5 1/8	1/8	13.20	1

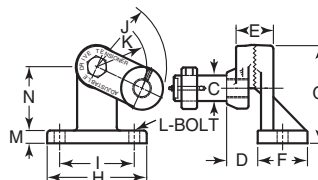
**Adjustable Flange Tensioners**



The adjustable flange tensioner has a flanged base that can be mounted in a tight area where space is limited. The rotating arm gives the operator 360 degree controlled tensioning and can be easily adjusted to the proper tension increasing the life of the drive. The adjustable flange tensioner has serrated teeth to prevent slippage. Idler shaft must be ordered separately.

Item No.	C	D	E	F	G	J	K	L	Approx. Weight (Lbs.)	Pack Qty.
IDC-62	1	1 7/8	1 1/2	4	3	3	2	3/8	2.82	1
IDC-63	1	1 7/8	1 1/2	4	3	3	2	3/8	2.82	1

**Adjustable Angle Tensioners**

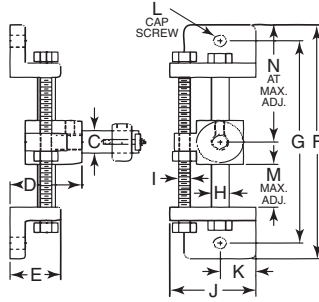


The adjustable angle tensioner has an angled base that can be mounted on the top of a frame member. The angled base provides parallel tensioning with the drive. This tensioner has serrated teeth to prevent slippage. Idler shaft must be ordered separately.

Item No.	C	D	E	F	G	H	I	J	K	L	M	N	Approx. Weight (Lbs.)	Pack Qty.
IDC-67	1	1 1/4	1 1/2	2	4	4	3	3	2	3/4-16 x 3/8	1/2	2 1/2	3.15	1
IDC-69	1 1/2	1 3/4	2 3/8	3 1/2	7 3/8	7 1/2	6	6 1/2	5	1-14 x 3/8	3/4	5 1/8	14.20	1



Adjustable Screw Tensioners



The adjustable screw tensioner uses screw adjustment for positive precise tensioning. Can be easily mounted to any flat surface and a favorite for operators that need to make very fine adjustments. **Idler shaft must be ordered separately.**

Item No.	C	D	E	F	G	H	I	J	K	L	M	N	Approx. Weight (Lbs.)	Pack Qty.
IDC-82	1	2 1/2	1 1/2	9 3/8	8 3/8	3/4	1/2	2 3/8	1	3/4-16 x 3/8	4	2 3/16	4.29	1
IDC-83	1 1/2	3 3/8	2 3/8	16	14 1/2	1 1/4	3/4	4 3/8	1 1/4	1-14 x 3/8	8	3 3/4	15.91	1

Polyurethane Bellows



Round



Rectangular

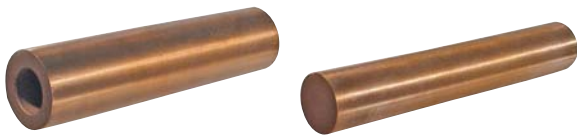
Strong, lightweight bellows are heat sealed to keep out moisture and contaminants. There are no stitches or glue that could fail. Color is black. They have high resistance to ozone, chemicals, gasoline, kerosene and most other aliphatic petroleum products, plus excellent resistance to ultraviolet and gamma rays. The bellows have high abrasion resistance and tensile strength. Temperature range is -60 to +225 degree Fahrenheit. Round bellows have 1/2" cuffs that may be secured with standard hose clamps. Available in 12" and 24" extended lengths that compress to 1" and 2" respectively. Square/rectangular thickness is .020". Square bellows have square ends without cuffs and are available in 12" and 24" extended length that compresses to 1- 1/2" and 3" respectively.

12"	24"			Pack Qty.
Item No.	Item No.	ID	OD	
<b>Round</b>				
BW-101	—	1/2	2 1/2	1
BW-102	BW-112	3/4	2 3/4	1
BW-103	—	1	3	1
BW-104	BW-114	1 1/4	3 3/4	1
BW-105	BW-115	1 1/2	3 1/2	1
BW-107	—	2	4	1
BW-108	BW-118	2 1/2	4 1/2	1
—	BW-119	3	5	1

12"	24"			Pack Qty.
Item No.	Item No.	ID	OD	
<b>Square/Rectangular</b>				
—	BW-131	1 x 1	3 x 3	1
—	BW-132	2 1/2 x 2 1/2	4 1/2 x 4 1/2	1
—	BW-136*	7 x 5	9 x 7	1

\*Rectangular

SAE 841 6 1/2" Lengths



These oil-filled, powdered metal, bronze bars are produced to ASTM standards for consistent precision, quality and uniformity. Bars are vacuum impregnated with non-detergent SAE 30 oil to provide excellent lubrication while being corrosion resistant. The O.D. is oversized and the I.D. is undersized to allow for finishing to listed dimensions. Application temperature range is 10 to 220 degree Fahrenheit.

Item No.	ID	OD	Pack Qty.
<b>Cored</b>			
BNT-1000	1/2	1	1
BNT-1001	1/2	1 1/8	1
BNT-1002	1/2	1 1/4	1
BNT-1003	1/2	1 1/2	1
BNT-1004	5/8	1	1
BNT-1005	3/4	1 1/4	1
BNT-1006	3/4	1 1/2	1
BNT-1007	3/4	1 3/4	1
BNT-1008	1	1 1/2	1
BNT-1009	1	1 5/8	1
BNT-1010	1	1 3/4	1
BNT-1011	1	2	1
BNT-1012	1	3	1
BNT-1013	1 1/4	1 3/4	1
BNT-1014	1 1/4	2	1
BNT-1015	1 1/2	2	1
BNT-1016	1 1/2	2 1/2	1
BNT-1017	2	2 3/4	1
BNT-1018	2 1/2	3 1/2	1
BNT-1019	3	4	1

Item No.	ID	OD	Pack Qty.
<b>Solid</b>			
BNT-1020*	—	1/4	1
BNT-1021**	—	3/8	1
BNT-1022	—	1/2	1
BNT-1023	—	5/8	1
BNT-1024	—	3/4	1
BNT-1025	—	7/8	1
BNT-1026	—	1	1
BNT-1027	—	1 1/8	1
BNT-1028	—	1 1/4	1
BNT-1029	—	1 1/2	1
BNT-1030	—	1 1/2	1
BNT-1031	—	1 5/8	1
BNT-1032	—	1 3/4	1
BNT-1033	—	2	1
BNT-1034	—	2 1/4	1
BNT-1035	—	2 1/2	1
BNT-1036	—	3	1
BNT-1037	—	4	1

\*2 inch lengths  
\*\*3 inch lengths



# CAM FOLLOWERS, BEARINGS & THRUST WASHERS

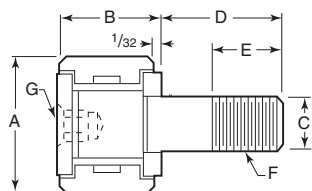
Self-lubricating cam follower provides continuous, dependable lubrication for the life of the unit. heat-treated steel roller with machined lubrication reservoirs are pre-filled with specially developed lube mixtures. Lubrication penetrates through a porous inner sintered bronze bushing by capillary action. Particularly well suited for applications with light to moderate loads operating at medium to higher speeds. Frequently used in food processing, farm and construction, machine tools, metal-working and packaging. Can be used in high humidity applications, or where equipment is subject to frequent "wash downs".

- Bronze bushing bearing
- Reduces maintenance costs due to simplified design
- Interchangeable with standard types of needle roller bearings
- Ambient temperature of +40 degrees Fahrenheit to +150 degrees Fahrenheit

Load Factor Information	
rpm	Unit Load psi
Slow and intermittent	4,000 Lbs.
150 to 300 rpm	2,000 Lbs.
300 to 600 rpm	600 Lbs.
600 to 900 rpm	400 Lbs.
900 to 1,200 rpm	300 Lbs.

**Example:**  
NCF-40 Cam Follower at 800 rpm=  
.391 (load factor) x 400 Lbs. = 156.4 Lbs. Capacity

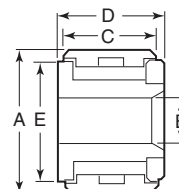
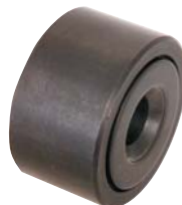
## Stud Type



Item No.	Size	+0.000 -0.001	+0.000 -0.005	+0.001 -0.000	+0.010 -0.010	+0.030 -0.030	Thread	Hex Key Across Flats	Load Factor	Pack Qty.
NCF-5	1/2	.500	.375	.190	.625	.250	10-32	1/8	.070	1
NCF-10	5/8	.625	.4375	.250	.750	.312	1/4-28	1/8	.097	1
NCF-15	1 1/16	.6875	.4375	.250	.750	.312	1/4-28	1/8	.097	1
NCF-20	3/4	.750	.500	.375	.875	.375	3/8-24	3/16	.164	1
NCF-25	7/8	.875	.500	.375	.875	.375	3/8-24	3/16	.164	1
NCF-30	1	1.00	.625	.4375	1.000	.500	7/8-20	1/4	.250	1
NCF-35	1 1/8	1.125	.625	.4375	1.000	.500	7/8-20	1/4	.250	1
NCF-40	1 1/4	1.250	.750	.500	1.250	.625	1 1/2-20	3/8	.391	1
NCF-45	1 3/8	1.375	.750	.500	1.250	.625	1 1/2-20	3/8	.391	1
NCF-50	1 1/2	1.500	.875	.625	1.500	.750	5/8-18	3/8	.544	1
NCF-55	1 5/8	1.625	.875	.625	1.500	.750	5/8-18	3/8	.544	1
NCF-60	1 3/4	1.750	1.000	.750	1.750	.875	3/4-16	3/8	.700	1
NCF-65	1 7/8	1.875	1.000	.750	1.750	.875	3/4-16	3/8	.700	1
NCF-70	2	2.000	1.125	.875	2.000	1.000	7/8-14	3/8	.984	1

Note: Load factor information available in above table

## Yoke Type



Item No.	Size	+0.000 -0.001	+0.002 -0.004	+0.000 -0.005	+0.005 -0.010	E	Shaft Dia.	Load Factor	Pack Qty.
NCF-105	3/4	.750	.250	.500	.5625	5/8	.2497	.190	1
NCF-110	7/8	.875	.250	.500	.5625	5/8	.2497	.190	1
NCF-115	1	1.000	.3125	.625	.6875	1 1/16	.3122	.250	1
NCF-120	1 1/8	1.125	.3125	.625	.6875	1 1/16	.3122	.250	1
NCF-125	1 1/4	1.250	.375	.750	.8125	7/8	.3747	.390	1
NCF-130	1 3/8	1.375	.375	.750	.8125	7/8	.3747	.390	1
NCF-135	1 1/2	1.500	.4375	.875	.9375	1	.4372	.510	1
NCF-140	1 5/8	1.625	.4375	.875	.9375	1	.4372	.510	1
NCF-145	1 3/4	1.750	.500	1.000	1.0625	1 1/16	.4997	.650	1
NCF-150	1 7/8	1.875	.500	1.000	1.0625	1 1/16	.4997	.650	1
NCF-155	2	2.000	.625	1.125	1.3125	1 3/8	.6247	.928	1

Note: Load factor information available in above table

## Self-Lubricating Metal Backed Bearings



Fiberglide® bearings are designed to carry higher loads with improved wear life. Fiberglide® bearings are unique in their ability to resist cold flow under extremely high load because the monofilament fibers have a tensile strength approximately 25 times greater than straight PTFE resins. Fiberglide® bearings are completely self-lubricating and normally run dry. Operating Fiberglide® bearings are recommended where low surface speeds are combined with high loads.

Item No.	Max. Shaft Diameter	Housing Bore		Bearing Length	Pack Qty.
		Min.	Max.		
RBC-490	0.375	0.468	0.469	3/8	1
RBC-500	0.375	0.468	0.469	1/2	1
RBC-510	0.5	0.593	0.594	1/2	1
RBC-520	0.5	0.593	0.594	3/4	1
RBC-530	0.5	0.593	0.594	3/4	1
RBC-540	0.625	0.718	0.719	3/4	1
RBC-550	0.625	0.718	0.719	1	1
RBC-560	0.625	0.718	0.719	1	1
RBC-570	0.75	0.8745	0.8755	1/2	1
RBC-580	0.75	0.8745	0.8755	3/4	1
RBC-590	0.75	0.8745	0.8755	1	1
RBC-600	0.875	0.9995	1.0005	1	1
RBC-610	1	1.1245	1.1255	1/2	1
RBC-620	1	1.1245	1.1255	3/4	1
RBC-630	1	1.1245	1.1255	1	1
RBC-640	1	1.1245	1.1255	1 1/4	1
RBC-650	1.25	1.4055	1.4065	3/4	1
RBC-660	1.25	1.4055	1.4065	1	1
RBC-670	1.25	1.4055	1.4065	1 1/4	1
RBC-680	1.5	1.6555	1.6565	1 1/2	1
RBC-690	2	2.1875	2.1885	2	1
RBC-700	12	14	14.018	12	1
RBC-720	16	18	18.018	12	1
RBC-750	22	25	25.021	15	1

## Self-Lubricating Metal Backed Thrust Washers

Item No.	Max. Shaft Diameter	Outside Diameter	Thickness	Pack Qty.
RBC-760	0.375	0.75	0.058	1
RBC-770	0.5	1	0.058	1
RBC-780	0.625	1.25	0.058	1
RBC-790	0.75	1.5	0.058	1
RBC-800	0.875	1.75	0.058	1
RBC-810	1	2	0.058	1
RBC-820	1.25	2.25	0.058	1
RBC-830	1.5	2.625	0.058	1
RBC-840	2	3.25	0.058	1

Fiberglide® series thrust bearings offer an economical approach to obtaining self-lubrication where high loads are encountered. They are comprised of zinc-plated mild steel with Fiberglide laminated to one face. These bearings are recommended for use where metal backing is preferred. These bearings are self-lubricating and tolerate a compressive strength of 38,000 psi with operating temperature range of -320 degrees Fahrenheit to 300 degrees Fahrenheit. Coefficient of friction can be obtained as low as 0.03 with no added lubricants.

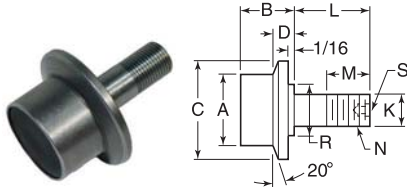




# RADIAL - THRUST CAM FOLLOWERS

These radial/thrust bearings are capable of handling combined radial and thrust loads. They are tightly sealed for use in high moisture or dusty environments. They also run at much higher speeds than needle bearings. Made of steel.

## Flanged Stud Type

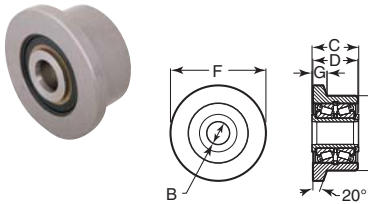


Guidance in two planes for thrust loads.

Item No.	A	B	C	D	K	L	M	N	R	S	Dynamic Load		Pack Qty.
											Radial	Thrust	
CCF-260	1.50	1.188	2.188	.344	.625	1.50	.750	5/8-18	.750	5/16	2,750	1,700	1
CCF-265	1.75	1.188	2.438	.344	.750	1.75	.875	3/4-16	1.000	5/16	2,750	1,700	1
CCF-270	2.00	1.688	2.688	.594	.875	2.00	1.125	7/8-14	1.000	5/16	3,820	2,380	1
CCF-275	2.25	1.688	2.938	.594	.875	2.00	1.125	7/8-14	1.000	5/16	3,820	2,380	1
CCF-280	2.50	1.688	3.188	.594	1.000	2.25	1.500	1-14	1.250	—	5,180	3,185	1
CCF-285	3.00	2.000	3.938	.594	1.250	2.50	1.750	1 1/4-12	1.750	1/2	14,300	5,790	1

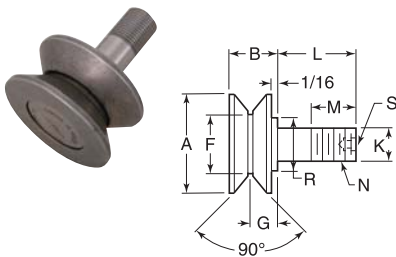
Note: Dynamic load rating based on 500 hours L10 life at 33 1/3 rpm

## Flanged Roller



Item No.	A	B	C	D	F	G	Dynamic Load		Pack Qty.
							Radial	Thrust	
CCF-945	2.500	.750	1.562	1.500	3.187	.500	7,630	4,570	1
CCF-950	3.000	1.000	1.812	1.750	3.937	.594	20,000	12,000	1

## V-Groove Stud Type

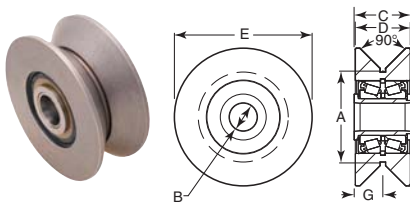


For V-track applications.

Item No.	A	B	F	G	K	L	M	N	R	S	Dynamic Load		Pack Qty.
											Radial	Thrust	
CCF-305	2.50	1.313	1.50	.688	.750	1.75	.875	3/4-16	1.00	5/16	2,750	1,700	1
CCF-310	3.50	1.688	2.25	.875	.875	2.00	1.125	7/8-14	1.00	5/16	5,180	3,185	1

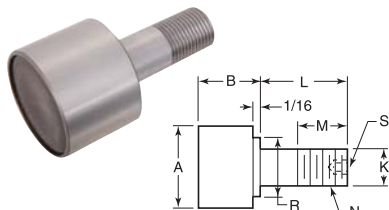
Note: Dynamic load rating based on 500 hours L10 life at 33 1/3 rpm

## V-Groove Roller



Item No.	A	B	C	D	E	G	Dynamic Load		Pack Qty.
							Radial	Thrust	
CCF-955	2.5	.750	1.562	1.50	3.750	.625	7,630	4,570	1
CCF-960	3.0	1.000	1.612	1.75	4.500	.750	12,660	12,000	1

## Plain Stud Type

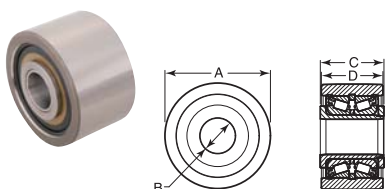


Ideal for simple radial loads or to handle side loads.

Item No.	A	B	C	L	M	N	R	S	Dynamic Load		Pack Qty.
									Radial	Thrust	
CCF-205	1.50	1.188	.625	1.50	.750	5/8-18	.750	5/16	2,750	1,700	1
CCF-210	1.75	1.188	.750	1.75	.875	3/4-16	1.000	5/16	2,750	1,700	1
CCF-215	2.00	1.688	.875	2.00	1.125	7/8-14	1.000	5/16	3,820	2,380	1
CCF-225	2.50	1.688	1.000	2.25	1.500	1-14	1.250	1/2	5,180	3,185	1
CCF-230	3.00	2.000	1.250	2.50	1.750	1 1/4-12	1.750	1/2	14,300	5,790	1
CCF-240	4.00	2.000	1.250	2.75	1.750	1 1/4-12	1.750	1/2	14,300	5,790	1

Note: Dynamic load rating based on 500 hours L10 life at 33 1/3 rpm

## Plain Roller



Item No.	A	B	C	D	Dynamic Load		Pack Qty.
					Radial	Thrust	
CCF-935	2.500	.750	1.562	1.50	7,630	4,570	1
CCF-940	3.000	1.000	1.812	1.75	20,000	12,000	1



**Regular Duty Steel** - The inner and outer race are made of high carbon chrome bearing steel through hardened and ground. The studs are low carbon steel. The steel type are slotted.

**Regular Duty Stainless Steel** - Made of 440C stainless steel. Extends your bearing life and reduces maintenance cost. They use food grade lubricant. The stainless type have a hex socket.

**Heavy Duty Steel** - Similar to the regular duty but the studs are thicker. The heavy duty steel type have a hex socket.

**Heavy Duty Stainless Steel** - Made of 440C stainless steel. Similar to the regular duty stainless steel. The stainless type have a hex socket.

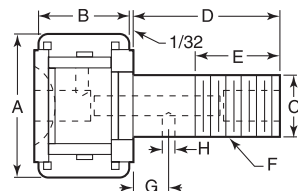
**Stud Type Followers  
Steel or Stainless Steel**



Regular Duty

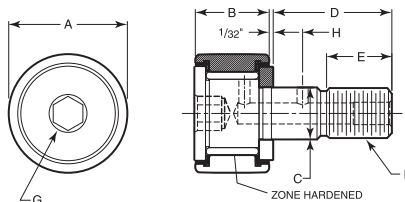


Heavy Duty



Item No.	Steel		Stainless		Size	+0.000 -0.001 A	+0.000 -0.005 B	+0.001 -0.000 C	+0.010 -0.010 D	E	F	G	H	Pack Qty.	
	Static Rating Lbs.	Dynamic Rating Lbs.	Item No.	Static Rating Lbs.											Dynamic Rating Lbs.
<b>Regular Duty</b>															
CCF-5	790	680	CCF-350	300	610	1/2	.500	.375	.190	.625	.250	10-32	—	—	1
CCF-10	1,215	995	CCF-355	600	860	5/8	.625	.438	.250	.750	.312	1/4-28	—	—	1
CCF-15	2,065	1,660	CCF-360	1,500	1,490	3/4	.750	.500	.375	.875	.375	3/8-24	1/4	3/32	1
CCF-20	2,065	1,660	—	—	—	7/8	.875	.500	.375	.875	.375	3/8-24	1/4	3/32	1
CCF-25	2,065	2,225	CCF-370	1,800	2,000	1	1.000	.625	.438	1.000	.500	7/16-20	1/4	3/32	1
CCF-30	3,060	2,225	—	—	—	1 1/8	1.125	.625	.438	1.000	.500	7/16-20	1/4	3/32	1
CCF-35	4,250	3,930	CCF-380	2,300	3,530	1 1/4	1.250	.750	.500	1.250	.625	1/2-20	5/16	3/32	1
CCF-40	4,250	3,930	—	—	—	1 1/2	1.375	.750	.500	1.250	.625	1/2-20	5/16	3/32	1
CCF-45	5,640	4,840	CCF-390	4,000	4,350	1 1/2	1.500	.875	.625	1.500	.750	5/8-18	3/8	3/32	1
CCF-50	5,640	4,840	—	—	—	1 3/4	1.625	.875	.625	1.500	.750	5/8-18	3/8	3/32	1
CCF-55	7,920	6,385	CCF-400	6,000	5,730	1 3/4	1.750	1.000	.750	1.750	.875	3/4-16	7/16	3/32	1
CCF-60	7,920	6,385	—	—	—	2	1.875	1.000	.750	1.750	.875	3/4-16	7/16	3/32	1
CCF-65	10,570	8,090	CCF-410	8,200	7,270	2	2.000	1.250	.875	2.000	1.000	7/8-14	1/2	1/8	1
CCF-70	10,570	8,090	—	—	—	2 1/4	2.250	1.250	.875	2.000	1.000	7/8-14	1/2	1/8	1
CCF-75	16,450	11,720	—	—	—	2 1/2	2.500	1.500	1.000	2.250	1.125	1-14	5/16	1/8	1
CCF-80	24,910	15,720	—	—	—	3	3.000	1.750	1.250	2.500	1.250	1 1/4-12	5/8	1/8	1
<b>Heavy Duty</b>															
CCF-500	1,580	680	CCF-965	1,106	544	1/2	.500	.375	.250	.625	.250	1/4-28	—	—	1
CCF-505	2,480	955	CCF-970	1,736	796	5/8	.625	.438	.313	.750	.312	3/8-24	—	—	1
CCF-510	4,130	1,660	CCF-975	2,891	1,328	3/4	.750	.500	.438	.875	.375	7/16-20	1/4	3/32	1
CCF-515	4,130	1,660	—	—	—	7/8	.875	.500	.438	.875	.375	7/16-20	1/4	3/32	1
CCF-520	6,120	2,225	CCF-980	4,284	1,780	1	1.000	.625	.625	1.000	.500	5/8-18	1/4	3/32	1
CCF-525	8,500	3,930	CCF-985	5,950	3,144	1 1/4	1.250	.750	.750	1.250	.625	3/4-16	5/16	3/32	1
CCF-530	8,500	3,930	—	—	—	1 1/2	1.375	.750	.750	1.250	.625	3/4-16	5/16	3/32	1
CCF-535	11,280	4,840	CCF-990	7,896	3,872	1 1/2	1.500	.875	.875	1.500	.750	7/8-14	3/8	3/32	1
CCF-540	15,840	6,385	CCF-995	11,088	5,108	1 3/4	1.750	1.000	1.000	1.750	.875	1-14	7/16	3/32	1
CCF-545	21,140	8,090	CCF-1000	16,200	7,270	2	2.000	1.250	1.125	2.000	1.000	1 1/8-12	1/2	1/8	1
CCF-550	21,140	8,090	—	—	—	2 1/4	2.250	1.250	1.125	2.000	1.000	1 1/8-12	1/2	1/8	1
CCF-555	32,900	11,720	—	—	—	2 1/2	2.500	1.500	1.250	2.250	1.125	1 1/4-12	5/16	1/8	1

**Stud Type Followers - Crown Steel**



Recommended where variations in dimensions of alignment of the tracks or cam might cause excessive angular loading. It reduces thrust on the rollers and wear and aids reliability.

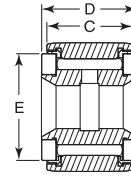
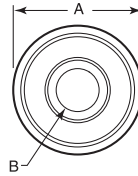
Item No.	Crown Radius	A	B	C	D	E	F	G	H	Load Rating		Pack Qty.
										Dynamic	Static	
CCF-805	7	.500	.375	.190	.625	.250	10-32	—	—	680	790	1
CCF-810	8	.625	.438	.250	.625	.312	1/4-28	—	—	995	1,215	1
CCF-815	10	.750	.500	.375	.750	.375	3/8-24	1/4	3/32	1,660	2,065	1
CCF-820	10	.875	.500	.375	.750	.375	3/8-24	1/4	3/32	1,660	2,065	1
CCF-825	12	1.000	.625	.438	1.000	.500	7/16-20	1/4	3/32	2,225	3,060	1
CCF-830	12	1.125	.625	.438	1.000	.500	7/16-20	1/4	3/32	2,225	3,060	1
CCF-835	14	1.250	.750	.500	1.250	.625	1/2-20	5/16	3/32	3,930	4,250	1
CCF-840	14	1.375	.750	.500	1.250	.625	1/2-20	5/16	3/32	3,930	4,250	1
CCF-845	20	1.500	.875	.625	1.500	.750	5/8-18	3/8	3/32	4,840	5,640	1
CCF-850	20	1.625	.875	.625	1.500	.750	5/8-18	3/8	3/32	4,840	5,640	1
CCF-855	20	1.750	1.000	.750	1.750	.875	3/4-16	7/16	3/32	6,385	7,920	1
CCF-860	20	1.875	1.000	.750	1.750	.875	3/4-16	7/16	3/32	6,385	7,920	1
CCF-865	24	2.000	1.250	.875	2.000	1.000	7/8-14	1/2	1/8	8,090	10,570	1
CCF-870	24	2.250	1.250	.875	2.000	1.000	7/8-14	1/2	1/8	8,090	10,570	1



# CAM FOLLOWERS

Buy One or Buy Bulk & SAVE

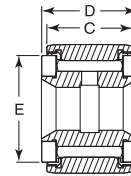
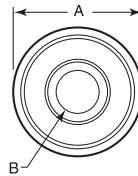
## Yoke Type Rollers Steel or Stainless Steel



Can support heavier loads because stud deflection is not a factor. Bearings are sealed.

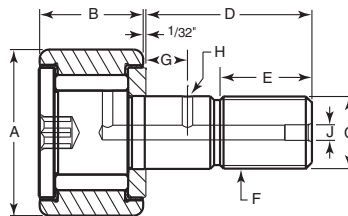
Steel			Stainless			Size	+0.00 -0.01 A	+0.002 -0.004 B	+0.00 -0.005 C	+0.005 -0.010 D	E	Oil Hole Dia.	Pack Qty.
Item No.	Static Rating Lbs.	Dynamic Rating Lbs.	Item No.	Static Rating Lbs.	Dynamic Rating Lbs.								
CCF-105	4,130	1,660	CCF-430	2,100	1,490	3/4	.750	.2500	.500	.5625	5/8	3/32	1
CCF-110	4,130	1,660	—	—	—	7/8	.875	.2500	.500	.5625	5/8	3/32	1
CCF-115	6,120	2,225	CCF-440	5,000	2,000	1	1.000	.3125	.625	.6875	25/32	3/32	1
CCF-120	6,120	2,225	—	—	—	1 1/8	1.1250	.3125	.625	.6875	25/32	3/32	1
CCF-125	8,500	3,930	CCF-450	7,700	3,903	1 1/4	1.250	.3750	.750	.8125	1	3/32	1
CCF-130	8,500	3,930	—	—	—	1 1/2	1.375	.3750	.750	.8125	1	3/32	1
CCF-135	11,280	4,840	CCF-460	11,200	4,350	1 1/2	1.500	.4375	.875	.9375	1 1/8	3/32	1
CCF-145	15,840	6,385	CCF-470	14,800	5,730	1 3/4	1.750	.5000	1.000	1.0625	1 1/4	3/32	1
CCF-150	15,840	6,385	—	—	—	1 7/8	1.875	.5000	1.000	1.0625	1 1/4	3/32	1
CCF-155	21,140	8,090	—	—	—	2	2.000	.6250	1.250	1.3125	1 1/2	3/32	1
CCF-160	21,140	8,090	—	—	—	2 1/4	2.250	.6250	1.250	1.3125	1 1/2	3/32	1
CCF-165	32,900	11,720	—	—	—	2 1/2	2.500	.7500	1.500	1.5625	1 3/4	1/8	1
CCF-170	49,820	15,720	—	—	—	3	3.000	1.0000	1.750	1.8125	2 1/4	1/8	1

## Yoke Type Rollers - Crown Steel



Item No.	Crown Radius	A	B	C	D	E	Oil Hole Diameter	Load Rating		Pack Qty.
								Dynamic	Static	
CCF-875	10	.750	.2500	.500	.562	5/8	3/32	1,660	4,130	1
CCF-880	10	.875	.2500	.500	.562	5/8	3/32	1,660	4,130	1
CCF-885	12	1.000	.3125	.625	.687	23/32	3/32	2,225	6,120	1
CCF-890	12	1.125	.3125	.625	.687	23/32	3/32	2,225	6,120	1
CCF-895	14	1.250	.3750	.750	.812	1	3/32	3,930	8,500	1
CCF-900	14	1.375	.3750	.750	.812	1	3/32	3,930	8,500	1
CCF-905	20	1.500	.4375	.875	.937	1 1/8	3/32	4,840	11,280	1
CCF-910	20	1.625	.4375	.875	.937	1 1/8	3/32	4,840	11,280	1
CCF-915	20	1.750	.5000	1.000	1.062	1 1/4	3/32	6,385	15,840	1
CCF-920	20	1.875	.5000	1.000	1.062	1 1/4	3/32	6,385	15,840	1
CCF-925	24	2.000	.6250	1.250	1.312	1 1/2	3/32	8,090	21,140	1
CCF-930	24	2.250	.6250	1.250	1.312	1 1/2	3/32	8,090	21,140	1

## Needle Bearing Cam Follower Sealed Chrome Plated

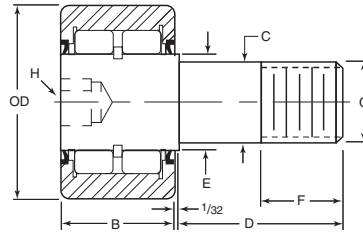


Item No.	+0.00 -0.01 A	+0.00 -0.005 B	+0.01 -0.000 C	+0.010 -0.010 D	E	F	G	H	Dynamic Ratings Lbs.	Static Ratings Lbs.	Pack Qty.
CCF-1245	.500	.375	.190	.625	.250	10-32	—	—	680	790	1
CCF-1250	.625	.438	.250	.750	.312	1/4-28	—	—	955	1,215	1
CCF-1255	.750	.500	.375	.875	.375	5/8-24	1/4	3/32	1,660	2,065	1
CCF-1260	1.000	.625	.438	1.000	.500	7/16-20	1/4	3/32	2,225	3,060	1
CCF-1265	1.250	.750	.500	1.250	.625	1/2-20	5/16	3/32	3,930	4,250	1
CCF-1270	1.500	.875	.625	1.500	.750	5/8-18	3/8	3/32	4,840	5,640	1
CCF-1275	1.750	1.000	.750	1.750	.875	3/4-16	7/16	3/32	6,385	7,920	1
CCF-1280	2.000	1.250	.875	2.000	1.000	7/8-14	1/2	1/8	8,090	10,570	1



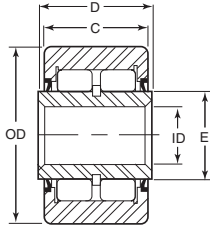
The RBC Roller® was developed for customers needing a high degree of assurance of long cam follower life. The design incorporates two paths of cylindrical rollers that offer stable outer ring support. With the increased size of the rollers, the RBC Roller® has increased dynamic capacity and fatigue life offering at least twice, and up to five times the fatigue life of the conventional needle roller bearing cam followers. Contacting lip seals are a standard feature of the RBC Roller®. These seals provide positive exclusion of solid and liquid contaminants, and excellent lubricant retention. With large grease storage and the contacting lip seals the RBC Roller® is a true maintenance free cam follower. The RBC Roller® also offers higher speed capacity than the needle roller bearing cam follower and is interchangeable.

**Long Life Cam Followers**



Item No.	+0.00/-0.01 OD	+0.00/-0.005 B	+0.001/-0.000 C	D	E	F	G	H	Dynamic Ratings Lbs.	Static Ratings Lbs.	Max. Load	Speed Limit	Pack Qty.
RBC-10	1.000	.625	.4375	1.000	.500	.500	7/16-20	1/4	3,000	3,200	1,400	9,400	1
RBC-20	1.125	.625	.4375	1.000	.500	.500	7/16-20	1/4	3,000	3,200	1,700	9,400	1
RBC-30	1.250	.750	.5000	1.25	.625	.625	1/2-20	1/4	4,100	4,300	1,500	7,500	1
RBC-40	1.375	.750	.5000	1.25	.625	.625	1/2-20	1/4	4,100	4,300	1,850	7,500	1
RBC-50	1.500	.875	.6250	1.500	.750	.750	5/8-18	5/16	6,200	7,000	2,400	6,200	1
RBC-60	1.625	.875	.6250	1.500	.750	.750	5/8-18	5/16	6,200	7,000	2,800	6,200	1
RBC-70	1.750	1.000	.7500	1.750	1.000	.875	3/4-16	5/16	8,200	10,500	3,150	4,700	1
RBC-80	1.875	1.000	.7500	1.750	1.000	.875	3/4-16	5/16	8,200	10,500	3,800	4,700	1
RBC-90	2.000	1.250	.8750	2.000	1.125	1.000	7/8-14	7/16	12,400	17,200	5,500	4,100	1
RBC-100	2.250	1.250	.8750	2.000	1.125	1.000	7/8-14	7/16	12,400	17,200	7,000	4,100	1
RBC-110	2.500	1.500	1.0000	2.250	1.250	1.125	1 1/4	1/2	16,800	22,800	9,100	3,700	1
RBC-120	2.750	1.500	1.0000	2.250	1.500	1.125	1 1/4-12	1/2	16,800	22,800	10,900	3,700	1
RBC-130	3.000	1.750	1.2500	2.500	1.500	1.250	1 1/4-12	5/8	28,900	39,100	15,000	3,100	1
RBC-140	3.250	1.750	1.2500	2.500	1.500	1.250	1 1/4-12	5/8	28,900	39,100	17,800	3,100	1
RBC-150	3.500	2.000	1.3750	2.750	1.625	1.375	1 1/2-12	5/8	36,100	53,000	21,200	2,900	1
RBC-160	4	2.250	1.5000	3.500	1.750	1.500	1 1/2-12	3/4	45,600	68,000	23,700	2,600	1

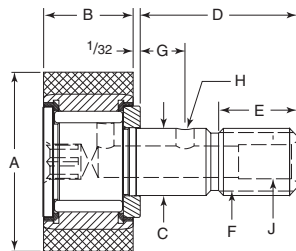
**Long Life Yoke Rollers**



Item No.	+0.00/-0.001 OD	ID (Min.)	ID (Max.)	+0.00/-0.005 C	+0.005/-0.010 D	E	Dynamic Ratings Lbs.	Static Ratings Lbs.	Max. Load	Speed Limit	Pack Qty.
RBC-170	1.000	.3121	.3127	.625	.6925	.500	3,000	3,200	1,400	9,400	1
RBC-180	1.125	.3121	.3127	.625	.6925	.500	3,000	3,200	1,700	9,400	1
RBC-190	1.250	.3746	.3752	.750	.8125	.625	4,100	4,300	1,500	7,500	1
RBC-200	1.375	.3746	.3752	.750	.8125	.625	4,100	4,300	1,850	7,500	1
RBC-210	1.500	.4371	.4377	.875	.9375	.750	6,200	7,000	2,400	6,200	1
RBC-220	1.625	.4371	.4377	.875	.9375	.750	6,200	7,000	2,800	6,200	1
RBC-230	1.750	.4996	.5002	1.000	1.0625	1.000	8,200	10,500	3,150	4,700	1
RBC-240	1.875	.4996	.5002	1.000	1.0625	1.000	8,200	10,500	3,800	4,700	1
RBC-250	2.000	.6246	.6252	1.250	1.3125	1.125	12,400	17,200	5,500	4,100	1
RBC-260	2.250	.6246	.6252	1.250	1.3125	1.125	12,400	17,200	7,000	4,100	1
RBC-270	2.500	.7496	.7502	1.500	1.5625	1.250	16,800	22,800	9,100	3,700	1
RBC-280	2.750	.7496	.7502	1.500	1.5625	1.250	16,800	22,800	10,900	3,700	1
RBC-290	3.000	.9995	1.0001	1.750	1.8125	1.500	28,900	39,100	15,000	3,100	1
RBC-300	3.250	.9995	1.0001	1.750	1.8125	1.500	28,900	39,100	17,800	3,100	1
RBC-310	3.500	1.1245	1.1251	2.000	2.0625	1.625	36,100	53,000	21,200	2,900	1
RBC-320	4.000	1.2495	1.2501	2.250	2.3125	1.750	45,600	68,000	23,700	2,600	1

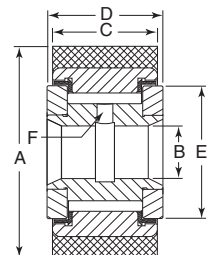
Polyc coated bearings can be used for standard and specialized applications where noise reduction, reduced wear and non-marking are important factors in operations.

**Needle Bearing Cam Followers Sealed With Cast Urethane Cover Shore 80 A**



Item No.	Size	+0.005/-0.005 A	+0.005/-0.000 B	+0.001/-0.000 C	+0.010/-0.010 D	E	F	G	H	J	Pack Qty.
CCF-1180	3/4	.750	.375	.190	.625	.250	10-32	—	—	—	1
CCF-1185	1	1.000	.500	.375	.875	.375	3/8-24	1/4	3/32	3/16	1
CCF-1190	1 1/4	1.250	.625	.4375	1.000	.500	7/16-20	1/4	3/32	3/16	1
CCF-1195	1 1/2	1.500	.750	.500	1.250	.625	7/2-20	5/16	3/32	3/16	1
CCF-1200	1 3/4	1.750	.875	.625	1.500	.750	5/8-18	3/8	3/32	3/16	1
CCF-1205	2	2.000	1.000	.750	1.750	.875	3/4-16	7/16	3/32	3/16	1
CCF-1210	2 1/4	2.250	1.250	.875	2.000	1.000	7/8-14	1/2	1/8	3/16	1

**Cam Yoke Rollers Sealed With Cast Urethane Cover Shore 80 A**

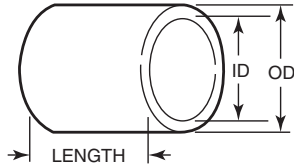


Item No.	Size	+0.005/-0.005 A	+0.002/-0.004 B	+0.005/-0.005 C	+0.005/-0.010 D	Flange OD Ref. E	Oil Hole Dia. F	Pack Qty.
CCF-1215	1	1.000	.250	.500	.5625	5/8	3/32	1
CCF-1220	1 1/4	1.250	.3125	.625	.6875	23/32	3/32	1
CCF-1225	1 1/2	1.500	.375	.750	.8125	1	3/32	1
CCF-1230	1 3/4	1.750	.4375	.875	.9375	1 1/8	3/32	1
CCF-1235	2	2.000	.500	1.000	1.0625	1 1/4	3/32	1
CCF-1240	2 1/4	2.250	.625	1.250	1.3125	1 1/2	3/32	1





**SAE 841 Bronze - Oil Impregnated**



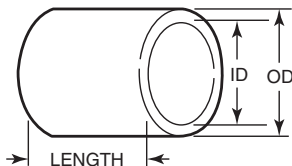
These "Oilite type" self lubricating sintered bronze stock bearings have long conformed to ASTM chemical and physical properties, and are the first to include all ASTM standard sizes to all ASTM recommended dimensions and tolerances. After forming, sintering and sizing, the bearings are vacuum impregnated with SAE30 oil that provides lubricant which is metered from the bearing to the shaft during rotation. They will function satisfactorily in **temperature ranges of 10 to 220 degrees Fahrenheit. Max P = 2,000, Max V=1,200 and Max PV = 50,000.** Ideal for all applications where repeat lubrication is difficult, including all agricultural and industrial machinery and equipment.

ID or OD Size	Tolerance	Length Size	Tolerance
to 1.510	-0.001	to 1.495	±.005
1.511 to 2.510	-0.0015	1.496 to 2.990	±.0075
2.511 to 3.010	-0.002	2.991 to 4.895	±.010
3.011 to 4.010	-0.003		
4.011 to 5.010	-0.004		

Item No.	ID	OD	Lgth.	Pack Qty.	Item No.	ID	OD	Lgth.	Pack Qty.
<b>1/8" ID x 1/4" ID Nominal</b>					<b>1/2" ID x 3/4" ID Nominal</b>				
BNT-100	.1270	.2530	1/8	1	BNT-151	.5020	.7530	3/8	1
BNT-101	.1270	.2530	1/4	1	BNT-152	.5020	.7530	1/2	1
BNT-102	.1270	.2530	3/8	1	BNT-153	.5020	.7530	5/8	1
<b>3/16" ID x 1/4" ID Nominal</b>					<b>BNT-154</b>				
BNT-103	.1895	.2530	1/4	1	BNT-155	.5020	.7530	3/4	1
BNT-104	.1895	.2530	3/8	1	BNT-156	.5020	.7530	1	1
BNT-105	.1895	.2530	1/2	1	BNT-156	.5020	.7530	1 1/4	1
<b>3/16" ID x 5/16" ID Nominal</b>					<b>3/8" ID x 1/2" ID Nominal</b>				
BNT-106	.1895	.3155	1/4	1	BNT-157	.6270	.7530	3/4	1
BNT-107	.1895	.3155	3/8	1	BNT-158	.6270	.7530	1 1/4	1
BNT-108	.1895	.3155	1/2	1	<b>5/8" ID x 3/4" ID Nominal</b>				
<b>1/4" ID x 5/16" ID Nominal</b>					<b>BNT-159</b>				
BNT-109	.2520	.3155	1/4	1	BNT-160	.6270	.7530	1/2	1
BNT-110	.2520	.3155	1/2	1	BNT-161	.6270	.7530	3/4	1
BNT-111	.2520	.3155	3/4	1	BNT-162	.6270	.7530	7/8	1
<b>1/4" ID x 3/8" ID Nominal</b>					<b>BNT-163</b>				
BNT-112	.2520	.3780	1/4	1	BNT-164	.6270	.7530	1	1
BNT-113	.2520	.3780	3/8	1	<b>5/8" ID x 13/16" ID Nominal</b>				
BNT-114	.2520	.3780	1/2	1	BNT-165	.6270	.8165	1/2	1
BNT-115	.2520	.3780	5/8	1	BNT-166	.6270	.8165	3/4	1
BNT-116	.2520	.3780	3/4	1	BNT-167	.6270	.8165	1	1
BNT-117	.2520	.3780	7/8	1	<b>5/8" ID x 7/8" ID Nominal</b>				
BNT-118	.2520	.3780	1	1	BNT-168	.6270	.8790	1/2	1
<b>1/4" ID x 1/2" ID Nominal</b>					<b>BNT-169</b>				
BNT-119	.2500	.5030	1/2	1	BNT-170	.6270	.8790	3/4	1
BNT-120	.2500	.5030	3/4	1	BNT-171	.6270	.8790	1	1
BNT-121	.2500	.5030	1	1	<b>3/4" ID x 7/8" ID Nominal</b>				
<b>5/16" ID x 3/8" ID Nominal</b>					<b>BNT-172</b>				
BNT-122	.3145	.3780	1/4	1	BNT-173	.7520	.8790	1/2	1
BNT-123	.3145	.3780	3/8	1	BNT-174	.7520	.8790	3/4	1
BNT-124	.3145	.3780	1/2	1	BNT-175	.7520	.8790	1	1
BNT-125	.3145	.3780	5/8	1	BNT-176	.7520	.8790	1 1/4	1
BNT-126	.3145	.3780	3/4	1	<b>3/4" ID x 1" ID Nominal</b>				
<b>5/16" ID x 1/2" ID Nominal</b>					<b>BNT-177</b>				
BNT-305	.3125	.4400	1/4	1	BNT-178	.7520	1.0040	1/2	1
BNT-306	.3125	.4400	3/8	1	BNT-179	.7520	1.0040	3/4	1
BNT-307	.3125	.4400	1/2	1	BNT-180	.7520	1.0040	1	1
BNT-308	.3125	.4400	3/4	1	BNT-181	.7520	1.0040	1 1/4	1
<b>3/8" ID x 1/2" ID Nominal</b>					<b>BNT-182</b>				
BNT-127	.3770	.5030	1/4	1	BNT-183	.7520	1.0040	1 1/2	1
BNT-128	.3770	.5030	3/8	1	BNT-184	.7520	1.0040	2 1/2	1
BNT-129	.3770	.5030	1/2	1	<b>3/4" ID x 1 1/8" ID Nominal</b>				
BNT-130	.3770	.5030	5/8	1	BNT-185	.7520	1.1290	1	1
BNT-131	.3770	.5030	3/4	1	<b>7/8" ID x 1" ID Nominal</b>				
BNT-132	.3770	.5030	7/8	1	BNT-186	.8770	1.0040	1	1
BNT-133	.3770	.5030	1	1	<b>7/8" ID x 1 1/8" ID Nominal</b>				
BNT-134	.3770	.5030	1 1/4	1	BNT-187	.8770	1.1290	3/4	1
<b>3/8" ID x 5/16" ID Nominal</b>					<b>BNT-188</b>				
BNT-135	.3770	.5655	1/2	1	BNT-189	.8770	1.1290	1 1/4	1
BNT-136	.3770	.5655	3/4	1	<b>1" ID x 1 1/4" ID Nominal</b>				
BNT-137	.3770	.5655	1	1	BNT-190	1.0030	1.2540	1/2	1
BNT-138	.3770	.5655	1 1/4	1	BNT-191	1.0030	1.2540	3/4	1
<b>5/16" ID x 3/8" ID Nominal</b>					<b>BNT-192</b>				
BNT-139	.3770	.6280	3/8	1	BNT-193	1.0030	1.2540	1 1/4	1
BNT-140	.3770	.6280	1/2	1	BNT-194	1.0030	1.2540	1 1/2	1
BNT-141	.3770	.6280	3/4	1	<b>1 1/8" ID x 1 3/8" ID Nominal</b>				
<b>7/16" ID x 5/8" ID Nominal</b>					<b>BNT-195</b>				
BNT-142	.4395	.6280	1/2	1	BNT-195	1.1280	1.3790	1	1
BNT-143	.4395	.6280	3/4	1	<b>1 1/4" ID x 1 1/2" ID Nominal</b>				
BNT-144	.4395	.6280	1	1	BNT-196	1.2535	1.5040	3/4	1
<b>1/2" ID x 5/8" ID Nominal</b>					<b>BNT-197</b>				
BNT-145	.5020	.6280	3/8	1	BNT-197	1.2535	1.5040	1	1
BNT-146	.5020	.6280	1/2	1	BNT-198	1.2535	1.5040	1 1/2	1
BNT-147	.5020	.6280	5/8	1	<b>1 1/2" ID x 1 3/4" ID Nominal</b>				
BNT-148	.5020	.6280	3/4	1	BNT-199	1.5040	1.7550	1	1
BNT-149	.5020	.6280	1	1	BNT-200	1.5040	1.7550	1 1/2	1
BNT-150	.5020	.6280	1 1/4	1	BNT-201	1.5040	1.7550	2	1
<b>2" ID x 2 1/4" ID Nominal</b>					<b>BNT-202</b>				
<b>BNT-202</b>					<b>BNT-203</b>				
<b>BNT-203</b>					<b>BNT-204</b>				
<b>BNT-204</b>					<b>2" ID x 2 3/8" ID Nominal</b>				
<b>BNT-205</b>					<b>BNT-205</b>				
<b>BNT-206</b>					<b>BNT-206</b>				



**Cast Bronze Sleeve Bearings**



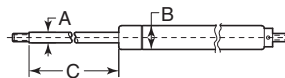
These cast bronze bearings are machined from continuous cast C93200 (SAE660) bronze for superior quality and performance. The continuous casting process assures a uniform bronze structure throughout the bearing, free from porosity and hard particle inclusions commonly found in other cast processes. These solid bearings are ideal in heavy load applications. **Max P = 4,000, Max V = 750 with a Max PV = 75,000.** Commonly used in all kinds of agricultural and industrial machinery and equipment.

Tolerances					
ID		OD		Lgth.	Concentricity
3" or Less	Over 3"	3" or Less	Over 3"		
±.0010"	±.0015"	+.002" to .003"	+.003" to .005"	±.005"	.003" T.I.R

Item No.	ID	OD	Lgth.	Pack Qty.	Item No.	ID	OD	Lgth.	Pack Qty.
<b>1/4" ID x 3/8" ID Nominal</b>					<b>3/4" ID x 1 1/8" ID Nominal</b>				
BNT-207	.2500	.3750	3/8"	1	BNT-260	.7500	1.1250	1 1/2"	1
BNT-208	.2500	.3750	1/2"	1	<b>7/8" ID x 1" ID Nominal</b>				
BNT-209	.2500	.3750	3/4"	1	BNT-261	.8750	1	1	1
BNT-210	.2500	.3750	1"	1	BNT-262	.8750	1	2	1
BNT-211	.2500	.3750	1 1/4"	1	<b>1" ID x 1 1/8" ID Nominal</b>				
<b>5/16" ID x 1/2" ID Nominal</b>					BNT-263	1	1.1250	1	1
BNT-212	.3125	.5000	3/4"	1	BNT-264	1	1.1250	1 1/2"	1
BNT-213	.3125	.5000	1"	1	<b>1" ID x 1 1/4" ID Nominal</b>				
BNT-214	.3125	.5000	1 1/4"	1	BNT-265	1	1.2500	3/4"	1
<b>3/8" ID x 1/2" ID Nominal</b>					BNT-266	1	1.2500	1"	1
BNT-215	.3750	.5000	1/2"	1	BNT-267	1	1.2500	1 1/4"	1
BNT-216	.3750	.5000	3/4"	1	BNT-268	1	1.2500	1 1/2"	1
BNT-217	.3750	.5000	1"	1	BNT-269	1	1.2500	1 3/4"	1
BNT-218	.3750	.5000	1 1/4"	1	BNT-270	1	1.2500	2"	1
BNT-219	.3750	.5000	1 1/2"	1	BNT-271	1	1.2500	2 1/2"	1
<b>5/16" ID x 9/16" ID Nominal</b>					BNT-272	1	1.2500	3"	1
BNT-220	.3750	.5625	1"	1	<b>1" ID x 1 3/8" ID Nominal</b>				
<b>3/8" ID x 5/8" ID Nominal</b>					BNT-273	1	1.3750	1"	1
BNT-221	.3750	.6250	3/4"	1	BNT-274	1	1.3750	1 1/2"	1
BNT-222	.3750	.6250	1"	1	<b>1" ID x 1 1/2" ID Nominal</b>				
<b>7/16" ID x 3/4" ID Nominal</b>					BNT-275	1	1.5000	1 1/2"	1
BNT-223	.4375	.5625	1"	1	BNT-276	1	1.5000	2"	1
<b>1/2" ID x 5/8" ID Nominal</b>					BNT-277	1	1.5000	3"	1
BNT-224	.5000	.6250	5/8"	1	BNT-278	1	1.5000	4"	1
BNT-225	.5000	.6250	3/4"	1	<b>1 1/8" ID x 1 3/8" ID Nominal</b>				
BNT-226	.5000	.6250	1"	1	BNT-279	1.1250	1.3750	1"	1
BNT-227	.5000	.6250	1 1/4"	1	BNT-280	1.1250	1.3750	1 1/4"	1
BNT-228	.5000	.6250	1 1/2"	1	BNT-281	1.1250	1.3750	2"	1
BNT-229	.5000	.6250	2"	1	BNT-282	1.1250	1.3750	4"	1
<b>1/2" ID x 3/4" ID Nominal</b>					<b>1 1/4" ID x 1 1/2" ID Nominal</b>				
BNT-230	.5000	.7500	3/4"	1	BNT-283	1.2500	1.5000	1 1/2"	1
BNT-231	.5000	.7500	1"	1	BNT-284	1.2500	1.5000	2"	1
BNT-232	.5000	.7500	1 1/4"	1	BNT-285	1.2500	1.5000	3"	1
BNT-233	.5000	.7500	1 1/2"	1	BNT-286	1.2500	1.5000	4"	1
BNT-234	.5000	.7500	2"	1	<b>1 1/8" ID x 1 5/8" ID Nominal</b>				
<b>5/16" ID x 3/4" ID Nominal</b>					BNT-287	1.3125	1.6250	2 1/2"	1
BNT-235	.5625	.7500	1 1/4"	1	<b>1 5/8" ID x 1 7/8" ID Nominal</b>				
<b>5/8" ID x 3/4" ID Nominal</b>					BNT-288	1.3750	1.6250	3"	1
BNT-236	.6250	.7500	1/2"	1	<b>1 1/2" ID x 1 3/4" ID Nominal</b>				
BNT-237	.6250	.7500	3/4"	1	BNT-289	1.5000	1.7500	1"	1
BNT-238	.6250	.7500	1"	1	BNT-290	1.5000	1.7500	1 1/4"	1
BNT-239	.6250	.7500	1 1/4"	1	BNT-291	1.5000	1.7500	3"	1
BNT-240	.6250	.7500	1 1/2"	1	<b>1 1/2" ID x 1 7/8" ID Nominal</b>				
BNT-241	.6250	.7500	1 3/4"	1	BNT-292	1.5000	1.8750	2"	1
BNT-242	.6250	.7500	2"	1	<b>1 1/2" ID x 2" ID Nominal</b>				
<b>5/8" ID x 1 1/16" ID Nominal</b>					BNT-293	1.5000	2	2 1/2"	1
BNT-243	.6250	.8125	1"	1	BNT-294	1.5000	2	3"	1
<b>5/8" ID x 7/8" ID Nominal</b>					BNT-295	1.5000	2	4"	1
BNT-244	.6250	.8750	3/4"	1	<b>1 1/2" ID x 2 1/4" ID Nominal</b>				
BNT-245	.6250	.8750	1"	1	BNT-296	1.5000	2.2500	3"	1
<b>3/4" ID x 1" ID Nominal</b>					<b>1 3/4" ID x 2" ID Nominal</b>				
BNT-246	.6250	1	1"	1	BNT-297	1.7500	2	3"	1
BNT-247	.6250	1	2"	1	<b>1 3/4" ID x 2 1/4" ID Nominal</b>				
<b>5/8" ID x 1 1/8" ID Nominal</b>					BNT-298	1.7500	2.2500	1 3/4"	1
BNT-248	.6250	1.1250	1 1/2"	1	<b>2" ID x 2 1/4" ID Nominal</b>				
<b>3/4" ID x 7/8" ID Nominal</b>					BNT-299	2	2.2500	2"	1
BNT-249	.7500	.8750	3/4"	1	<b>2" ID x 2 3/8" ID Nominal</b>				
BNT-250	.7500	.8750	1"	1	BNT-300	2	2.3750	3"	1
BNT-251	.7500	.875	1 1/4"	1	<b>2" ID x 2 1/2" ID Nominal</b>				
BNT-252	.7500	.8750	1 1/2"	1	BNT-301	2	2.5000	2"	1
<b>3/4" ID x 1" ID Nominal</b>					BNT-302	2	2.5000	3"	1
BNT-253	.7500	1	3/4"	1	<b>2 1/2" ID x 3" ID Nominal</b>				
BNT-254	.7500	1	1"	1	BNT-303	2.5000	3	5"	1
BNT-255	.7500	1	1 1/8"	1	<b>3" ID x 3 1/2" ID Nominal</b>				
BNT-256	.7500	1	1 1/4"	1	BNT-304	3	3.5000	4"	1
BNT-257	.7500	1	1 1/2"	1					
BNT-258	.7500	1	2"	1					
BNT-259	.7500	1	2 1/4"	1					



**Fixed Force Gas Springs**



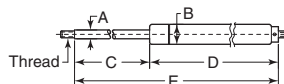
Patented multi-lobe seal significantly reduces gas leakage, tolerates shaft imperfections, vibrations and wide temperature variations. Body is made of heavy gauge steel and shaft is chromium plated steel. All have M6 x 1.0 threads. Three styles of end fittings are available below to fit these gas springs. Must be ordered separately.

Item No.	A	B	C	Compressed Size	Extended Size	P1 Force	Pack Qty.
GAS-151	.24	.59	2.00	5.50	7.50	20	1
GAS-152	.24	.59	2.00	5.50	7.50	40	1
GAS-153	.24	.59	2.00	5.50	7.50	60	1
GAS-154	.24	.59	2.00	5.50	7.50	80	1
GAS-155	.24	.59	2.00	5.50	7.50	100	1
GAS-161	.24	.59	3.15	6.45	9.60	20	1
GAS-162	.24	.59	3.15	6.45	9.60	40	1
GAS-163	.24	.59	3.15	6.45	9.60	60	1
GAS-165	.24	.59	3.15	6.45	9.60	100	1
GAS-171	.24	.59	3.50	8.50	12.00	20	1
GAS-172	.24	.59	3.50	8.50	12.00	40	1
GAS-173	.24	.59	3.50	8.50	12.00	60	1
GAS-175	.24	.59	3.50	8.50	12.00	100	1
GAS-101	.32	.75	3.50	8.40	11.90	20	1
GAS-102	.32	.75	3.50	8.40	11.90	30	1
GAS-103	.32	.75	3.50	8.40	11.90	60	1
GAS-104	.32	.75	3.50	8.40	11.90	90	1
GAS-105	.32	.75	3.50	8.40	11.90	120	1
GAS-111	.32	.75	5.00	10.25	15.25	20	1

Item No.	A	B	C	Compressed Size	Extended Size	P1 Force	Pack Qty.
GAS-112	.32	.75	5.00	10.25	15.25	30	1
GAS-113	.32	.75	5.00	10.25	15.25	60	1
GAS-114	.32	.75	5.00	10.25	15.25	90	1
GAS-115	.32	.75	5.00	10.25	15.25	120	1
GAS-121	.32	.75	6.00	11.00	17.00	20	1
GAS-122	.32	.75	6.00	11.00	17.00	30	1
GAS-123	.32	.75	6.00	11.00	17.00	60	1
GAS-124	.32	.75	6.00	11.00	17.00	90	1
GAS-125	.32	.75	6.00	11.00	17.00	120	1
GAS-131	.32	.75	7.00	12.63	19.63	20	1
GAS-132	.32	.75	7.00	12.63	19.63	30	1
GAS-133	.32	.75	7.00	12.63	19.63	60	1
GAS-134	.32	.75	7.00	12.63	19.63	90	1
GAS-135	.32	.75	7.00	12.63	19.63	120	1
GAS-141	.39	.87	10.00	17.80	27.80	100	1
GAS-142	.39	.87	10.00	17.80	27.80	120	1
GAS-143	.39	.87	10.00	17.80	27.80	150	1
GAS-144	.39	.87	10.00	17.80	27.80	200	1

**Note:** P1 force is extended force  
Length including end fittings (center to center)

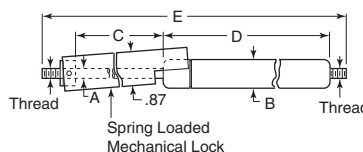
**Adjustable Force Gas Springs**



These adjustable gas springs are the perfect solution for small volume design or replacement applications, as the need to calculate the exact force required is eliminated. Each gas spring is charged at the factory to its maximum force value. Once installed in an application, a simple allen key (included) adjustment can be made to reduce the gas spring force, until the desired application function is reached. Manufactured from specially designed seals, nitrotec finished rods and powder epoxy paint finished tubes for maximum life and service. To order a complete gas spring, select a spring from the table below, then specify which end fittings you need. (Two end fittings per gas spring.)

Item No.	A	Cyl. Dia. B	Stroke C	D	E	Supplied Force Lbs.	Thread Size	Pack Qty.
GAS-1	.23	.59	2.36	3.94	6.30	90	M5 x .8	1
GAS-2	.23	.59	3.94	5.51	9.45	90	M5 x .8	1
GAS-3	.31	.71	3.94	6.46	10.39	146	M6 x 1.0	1
GAS-4	.31	.71	5.91	8.43	14.33	146	M6 x 1.0	1
GAS-5	.31	.71	7.87	10.39	18.27	146	M6 x 1.0	1
GAS-7	.39	.91	11.81	13.39	25.20	270	M8 x 1.25	1

**Econoloc Gas Springs**

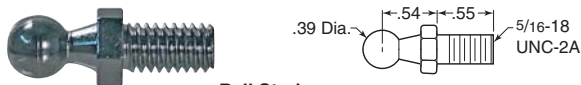


Econoloc gas springs eliminate the need for separate safety rods in critical lift-assist applications. They automatically lock when fully extended, protecting the operator from potential injury in the unlikely event of gas spring failure through overload or misuse. The Econoloc is manually released by applying thumb pressure to the designated area of the locking shroud, allowing the gas spring to compress in a controlled manner. A single Econoloc gas spring can be used in conjunction with GAS-3, 4, and 5 listed above.

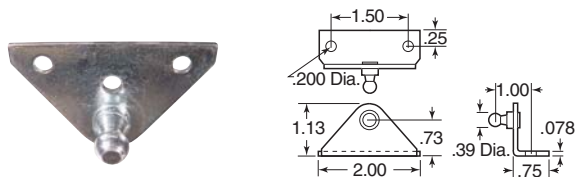
Item No.	A	Cyl. Dia. B	Stroke C	D	E	Supplied Force Lbs.	Thread Size	Pack Qty.
GAS-43	.31	.71	3.94	5.47	10.39	146	M6 x 1.0	1
GAS-44	.31	.71	5.91	7.44	14.33	146	M6 x 1.0	1
GAS-45	.31	.71	7.87	9.41	18.27	146	M6 x 1.0	1



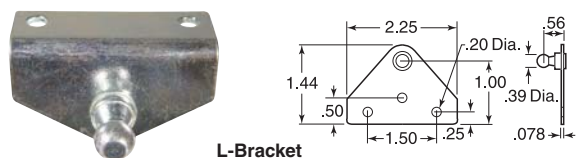
**Gas Springs Mounting Brackets**



**Ball Stud**



**Flat Bracket**



**L-Bracket**

All are zinc plated steel designed for gas springs.

Item No.	Description	Pack Qty.	Item No.	Description	Pack Qty.	Item No.	Description	Pack Qty.
GAS-301	Ball Stud	1	GAS-302	Flat Bracket	1	GAS-303	L-Bracket	1

**Gas Springs Fat Blade End Fittings**



Die cast zinc.

Item No.	A	Pack Qty.
GAS-211	.205 - .210	1
GAS-212	.260 - .265	1
GAS-213	.325 - .330	1
GAS-214	.405 - .410	1

**Metal End Fitting**



Item No.	Description	Max. P1 (Lbs.)	Pack Qty.
GAS-202	Metal End Fitting	200	1

**Air Springs Single Convolute Bellows Type**

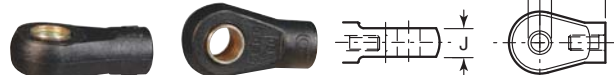


Air springs are used in many applications from scissor lifts to presses, compressors and electronic equipment. As an actuator, air springs provide either linear or angular motion. These air springs offer a favorable stroke-to-compressed height ratio when compared to air cylinders, and can accept a wider variety of actuation media, such as

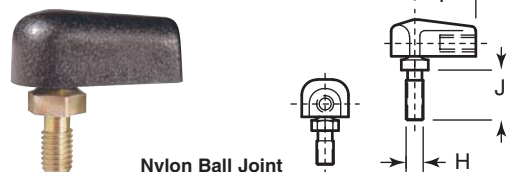
air, water, nitrogen or anti-freeze. Air springs can simultaneously isolate harmful vibrations while regulating load height, as well as allow constant vibration isolation under varying loads. These springs are constructed of fabric-reinforced Wingprene or natural rubber, with corrosion-protected end retainers. Complete installation and operating instructions are enclosed with each air spring. Do not use air springs where load torsion may occur. Springs do not have internal bumpers—do not exceed rated maximum load range. Listed stroke distances are measured from the compressed height of the spring to the overall height at maximum inflation

**Note:** Isolator Load Range is based on 100 psi. To obtain a lower limit (i.e. minimum load at 20 psi) divide the smaller value by 5.

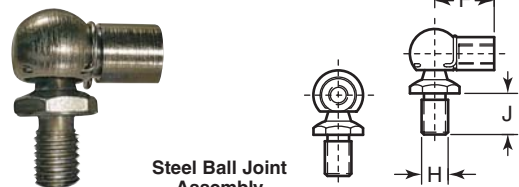
**Gas Springs End Fittings**



**Nylon Eyelet End Fitting**



**Nylon Ball Joint Assembly**



**Steel Ball Joint Assembly**

Item No.	Fits Cyl. Dia.	E mm	F mm	H	J mm	Internal Thread Size	Pack Qty.
<b>Nylon Eyelet End Fitting</b>							
GAS-10	.59	6	17	—	8	M5 x .8	1
GAS-12	.71	8	21	—	10	M6 x 1.0	1
<b>Steel Eyelet End Fitting</b>							
GAS-14	.91	8	21	—	10	M8 x 1.25	1
<b>Nylon Ball Joint Assembly</b>							
GAS-20	.59	—	17	M5 x .8	10	M5 x .8	1
GAS-23	.71	—	17.5	M8 x 1.25	12.5	M6 x 1.0	1
<b>Steel Ball Joint Assembly</b>							
GAS-30	.71	—	18	M8 x 1.25	12	M6 x 1.0	1
GAS-32	.91	—	30	M8 x 1.25	16	M8 x 1.25	1

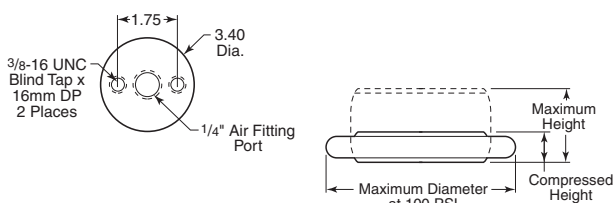
\*GAS-14 is steel

**Gas Spring Plastic End Fitting**



End fittings for gas springs. All are M6 x 1.0 thread.

Item No.	Description	Max. P1 (Lbs.)	Pack Qty.
GAS-201	Plastic End Fitting	150	1

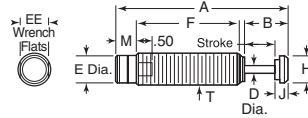


Compressed height of 1.8". Bottom retainer is the same as upper retainer illustrated minus the 1/4" air fitting port.

Item No.	Max. Stroke	Force Lbs. at a Stroke of:			Isolator Load Range	Design Height Range (In.)	Max. Dia. @ 100 psi	Max. Height	Pack Qty.
		1"	2"	Max. Stroke					
AS-100	2.0	1,250	550	550	1,100 - 1,370	2.5 - 3	5.7	3.8	1
AS-101	3.0	1,500	1,200	500	975 - 1,560	2.5 - 4	6.0	4.8	1

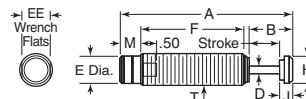


**Adjustable Shock Absorbers**



Item No.	Ace	Stroke	A	B	D	E	F	H	J	M	T	EE	Effective Weight Lbs.	Energy/ Cycle In. Lbs.	Energy/Hr. In. Lbs./ Hr.	Pack Qty.
<b>Inch</b>																
ACE-0035	MA35	.40	3.31	.71	.13	.42	2.41	.30	.32	.18	1/2-20	—	13 - 125	35	53,000	1
ACE-0150	MA150B	.50	3.59	.87	.19	.46	2.44	.47	.43	.28	9/16-18	.49	2 - 240	200	300,000	1
ACE-0225	MA225	.75	4.67	1.18	.19	.66	2.94	.66	.43	.55	3/4-16	1 1/16	5 - 500	300	400,000	1
ACE-0600	MA600	1.00	5.62	1.43	.25	.88	3.54	.90	.43	.65	1-12	7/8	20 - 3,000	600	600,000	1
ACE-0900	MA900	1.58	7.44	2.01	.25	.88	4.78	.90	.43	.65	1-12	7/8	30 - 4,500	900	800,000	1
<b>Metric</b>																
ACE-0035M	MA35M	10.1	84.1	18.3	3.3	10.6	61.2	7.6	8.0	4.6	M12 x 1	—	13 - 125	35	53,000	1
ACE-0150M	MA150M	12.7	93.2	24.1	4.8	11.6	62.0	11.9	11.0	7.1	M14 x 1.5	12.7	2 - 240	200	300,000	1
ACE-0225M	MA225M	19.1	118.6	30.0	4.8	16.8	74.7	16.8	11.0	14.0	M20 x 1.5	18.0	5 - 500	300	400,000	1
ACE-0600M	MA600M	25.4	142.7	36.3	6.3	22.4	90.0	22.9	11.0	16.5	M25 x 1.5	23.0	20 - 3,000	600	600,000	1

**Soft Contact/Self-Compensating**



Soft contact is suggested when a low initial reaction force is required at impact. Self-compensating is utilized to obtain maximum energy absorption capacity. Both are recommended when a range of loads and impact velocities are encountered in the same application. Temperature range 32 to 150 degree Fahrenheit. Oil type ACE #5.

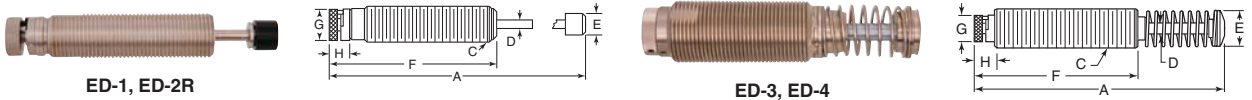
Item No.	Ace	Stroke	A	B	D	E	F	H	J	M	T	EE	Effective Weight Lbs.		Energy/ Cycle In. Lbs.	Energy/Hr. In. Lbs./ Hr.	Pack Qty.
													Soft Contact	Self-Compensating			
<b>Inch</b>																	
ACE-1901	SC-190-1	.63	4.50	1.06	.16	.46	3.00	.47	.43	.28	9/16-18	1/2	5 - 13	3 - 15	225	300,000	1
ACE-1902	SC-190-2	.63	4.50	1.06	.16	.46	3.00	.47	.43	.28	9/16-18	1/2	12 - 36	8 - 40	225	300,000	1
ACE-1903	SC-190-3	.63	4.50	1.06	.16	.46	3.00	.47	.43	.28	9/16-18	1/2	30 - 90	20 - 100	225	300,000	1
ACE-1904	SC-190-4	.63	4.50	1.06	.16	.46	3.00	.47	.43	.28	9/16-18	1/2	75 - 200	50 - 225	225	300,000	1
ACE-3001	SC-300-1	.75	4.62	1.18	.19	.66	3.09	.66	.43	.28	3/4-16	1 1/16	5 - 15	3 - 18	300	400,000	1
ACE-3002	SC-300-2	.75	4.62	1.18	.19	.66	3.09	.66	.43	.28	3/4-16	1 1/16	15 - 50	10 - 60	300	400,000	1
ACE-3003	SC-300-3	.75	4.62	1.18	.19	.66	3.09	.66	.43	.28	3/4-16	1 1/16	50 - 150	30 - 180	300	400,000	1
ACE-3004	SC-300-4	.75	4.62	1.18	.19	.66	3.09	.66	.43	.28	3/4-16	1 1/16	150 - 400	70 - 450	300	400,000	1
ACE-3005	SC-300-5	.59	4.15	1.02	.25	.66	2.78	.66	.43	.28	3/4-16	1 1/16	38 - 90	25 - 100	650	400,000	1
ACE-3006	SC-300-6	.59	4.15	1.02	.25	.66	2.78	.66	.43	.28	3/4-16	1 1/16	115 - 270	75 - 300	650	400,000	1
ACE-3007	SC-300-7	.59	4.15	1.02	.25	.66	2.78	.66	.43	.28	3/4-16	1 1/16	300 - 360	200 - 400	650	400,000	1
ACE-3008	SC-300-8	.59	4.15	1.02	.25	.66	2.78	.66	.43	.28	3/4-16	1 1/16	450 - 1,350	300 - 1,500	650 in	400,000	1
ACE-3009	SC-300-9	.59	4.15	1.02	.25	.66	2.78	.66	.43	.28	3/4-16	1 1/16	1,050 - 3,900	700 - 4,300	650 in	400,000	1
ACE-6501	SC-650-1	1.00	5.62	1.43	.25	.87	3.83	.90	.43	.28	1-12	7/8	24 - 80	17 - 100	650	600,000	1
ACE-6502	SC-650-2	1.00	5.62	1.43	.25	.87	3.83	.90	.43	.28	1-12	7/8	75 - 250	50 - 300	650	600,000	1
ACE-6503	SC-650-3	1.00	5.62	1.43	.25	.87	3.83	.90	.43	.28	1-12	7/8	240 - 800	150 - 900	650	600,000	1
ACE-6504	SC-650-4	1.00	5.62	1.43	.25	.87	3.83	.90	.43	.28	1-12	7/8	800 - 2,400	450 - 2,600	650	600,000	1
ACE-6505	SC-650-5	1.91	5.51	1.33	.38	.87	3.80	.90	.43	.28	1-12	7/8	75 - 225	50 - 250	1,860	600,000	1
ACE-6506	SC-650-6	1.91	5.51	1.33	.38	.87	3.80	.90	.43	.28	1-12	7/8	300 - 720	200 - 800	1,860	600,000	1
ACE-6507	SC-650-7	1.91	5.51	1.33	.38	.87	3.80	.90	.43	.28	1-12	7/8	1,050 - 2,150	700 - 2,400	1,860	600,000	1
ACE-6508	SC-650-8	1.91	5.51	1.33	.38	.87	3.80	.90	.43	.28	1-12	7/8	2,500 - 5,200	1,700 - 5,800	1,860	600,000	1
ACE-6509	SC-650-9	1.91	5.51	1.33	.38	.87	3.80	.90	.43	.28	1-12	7/8	6,000 - 12,500	4,000 - 14,000	1,860	600,000	1
ACE-9251	SC-925-1	1.58	7.44	2.01	.25	.87	5.10	.90	.43	.28	1-12	7/8	50 - 160	30 - 200	975	800,000	1
ACE-9252	SC-925HD-2	1.58	7.44	2.01	.25	.87	5.10	.90	.43	.28	1-12	7/8	130 - 460	90 - 600	975	800,000	1
ACE-9253	SC-925HD-3	1.58	7.44	2.01	.25	.87	5.10	.90	.43	.28	1-12	7/8	400 - 1,350	250 - 1,600	975	800,000	1
ACE-9254	SC-925HD-4	1.58	7.44	2.01	.25	.87	5.10	.90	.43	.28	1-12	7/8	1,200 - 4,300	750 - 4,600	975	800,000	1
<b>Inch (Metric Thread)</b>																	
ACE-1905	SC-190M-5	.47	3.70	1.67	.19	.46	2.83	—	—	.20	M14 x 1.5	.39	—	4.4 - 35.2	274	443,000	1
ACE-1906	SC-190M-6	.47	3.70	1.67	.19	.46	2.83	—	—	.20	M14 x 1.5	.39	—	29 - 309	274	443,000	1
ACE-1907	SC-190M-7	.47	3.70	1.67	.19	.46	2.83	—	—	.20	M14 x 1.5	.39	—	300 - 3,400	274	443,000	1

# SHOCK ABSORBERS & ACCESSORIES



Determine load weight, impact velocity (in./sec.), propelling force (if any), cycles per hour, and stroke (in.) required. Calculate total energy (in.-lbs.) and total energy per hour (In.-lbs./hr.) to select proper shock.

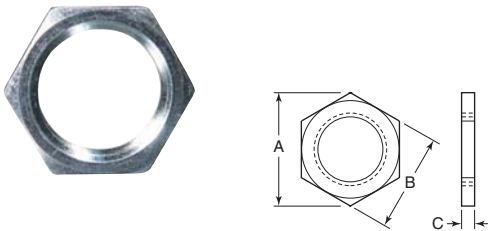
### Small Adjustable Hydraulic Series



Use with pallet stops, air cylinders, rolling doors, and other various manufacturing applications. Standard corrosion resistant nickel plating. Adjustments are made by turning the 180 degree adjustment knob. Adjustments are locked with a setscrew. One hex jam nut supplied with each shock. Additional mounting accessories are available below.

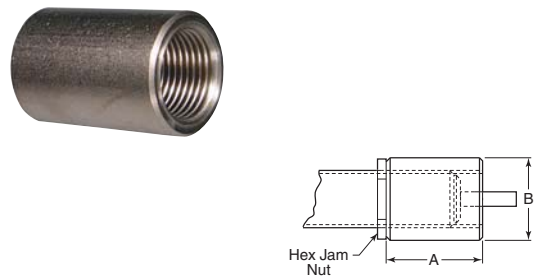
Item No.	Bore Size In.	Stroke inches	Max. In.-Lbs. Per Cycle	Max. In.-Lbs. Per Hour	Max. Shock Force Lbs.	Nominal Coil Spring Force			Max. Propelling Force Lbs.	A	UNF C	D	E	F	G	H	Pack Qty.
						Extension Lbs.	Compression Lbs.										
ED-1	.28	.5	250	284,000	775	1.25	2.75	150	4.35	3/4-16	.190	.50	3.31	.63	.67	1	
ED-2R	.50	1.0	650	622,000	1,000	3.00	6.00	300	5.62	1-12	.250	.62	4.09	.88	.56	1	
ED-3	.63	1.0	1700	808,000	2,500	9.00	13.00	500	6.12	1 1/8-12	.375	1.13	3.81	1.10	.55	1	
ED-4	.63	2.0	3400	986,000	2,500	5.00	13.00	500	8.74	1 1/8-12	.375	1.13	5.43	1.10	.55	1	

### Hex Jam Nuts for Self-Compensating Hydraulic Series



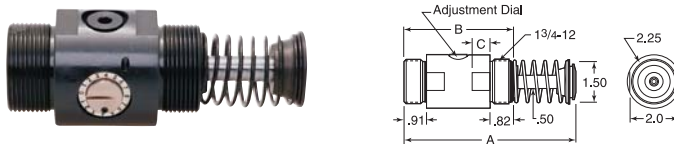
Item No.	A	B	C	Shock Absorber	Pack Qty.
ED-100	1.08	.94	.18	ED-1	1
ED-200	1.30	1.13	.18	ED-2R	1
ED-700	.58	.50	.09	ED-7	1
ED-800	.72	.63	.12	ED-8	1
ED-900	1.01	.88	.31	ED-9	1

### Stop Collars



Item No.	A	B	Shock Absorber	Pack Qty.
ED-101	1.50	1.00	ED-10	1
ED-202	1.75	1.50	ED-11	1
ED-303	2.50	1.69	ED-3, ED-4	1

### Low Profile Adjustable Hydraulic Series



Larger capacity for use in automotive robotics, glass forming equipment, foundry conveyor lines, manufacturing rail carts, and numerous other applications. Recessed 360 degree adjustment setting knob on side of shock absorber for ease of mounting. Mounting accessories available below.

Item No.	Bore Size In.	Stroke inches	Max. In.-Lbs. Per Cycle	Max. In.-Lbs. Per Hour	Max. Shock Force Lbs.	Nominal Coil Spring Force			Max. Propelling Force Lbs.	A	B	C	Pack Qty.
						Extension Lbs.	Compression Lbs.						
ED-5	.75	1	2300	1,120,000	3,000	11.00	15	650	5.69	3.63	.42	1	
ED-6	.75	2	4600	1,475,000	3,000	7.00	15	650	7.69	4.63	.50	1	

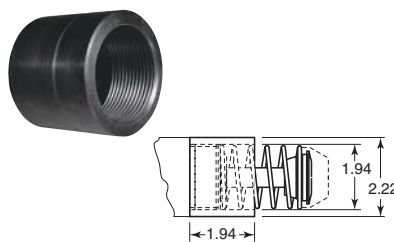
### Lock Ring



For use with shock absorbers shown above.

Item No.	Shock Absorber	Pack Qty.
ED-500	ED-5, ED-6	1

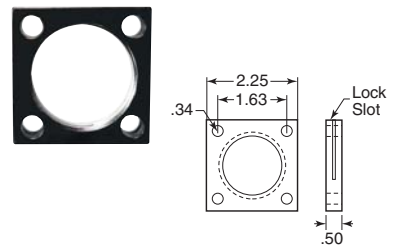
### Stop Collar



For use with shock absorbers shown above.

Item No.	Pack Qty.
ED-505	1

### Square Flange

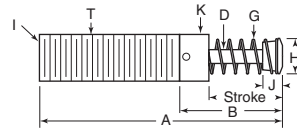


For use with shock absorbers shown above. Use 3/16" bolt.

Item No.	Shock Absorber	Pack Qty.
ED-600	ED-5, ED-6	1



These shock absorbers are fully threaded for ease of installation. Outer body made of steel with black oxide finish. Piston rod is made of high tensile steel, hardened and chrome plated. Rod end button is made of hardened steel with black oxide finish. Return spring is zinc plated. For maximum heat dissipation, do not paint shock absorber. Operating temperature is 10 degrees to 158 degrees Fahrenheit. Oil type is ATF. Lock nut included with each shock absorber.



**Self-Compensating**

Used to obtain maximum energy absorption capacity. Impact velocity range is 0.5 to 16.5 ft./sec.

**Adjustable**

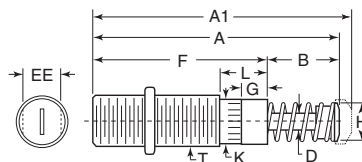
Adjustable from either front or rear. Impact velocity range is 0.5 to 16.5 ft./sec.

**Low Velocity Adjustable**

Adjustable from either front or rear. Impact velocity range is 0.6 to 1.5 ft./sec.

Item No.	Ace	Stroke	A	B	D	G	H	I	J	K	T	Effective Weight Lbs.	Energy/Cycle In. Lbs.	Energy/Hr. In. Lbs./Hr.	Pack Qty.	
<b>Self-Compensating / Soft Contact</b>																
ACE-3325-1	MC3325-1	.91	5.44	2.19	.375	.99	1.00	1/8	.75	1.15	1 1/4-12	20 - 80	1,350	670,000	1	
ACE-3325-2	MC-3325-2	.91	5.44	2.19	.375	.99	1.00	1/8	.75	1.15	1 1/4-12	68 - 272	1,350	670,000	1	
ACE-3325-3	MC3325-3	.91	5.44	2.19	.375	.99	1.00	1/8	.75	1.15	1 1/4-12	230 - 920	1,350	670,000	1	
ACE-3325-4	MC3325-4	.91	5.44	2.19	.375	.99	1.00	1/8	.75	1.15	1 1/4-12	780 - 3,120	1,350	670,000	1	
ACE-3350-1	MC3350-1	1.91	7.44	3.19	.375	.99	1.00	1/8	.75	1.15	1 1/4-12	40 - 160	2,700	760,000	1	
ACE-3350-2	MC3350-2	1.91	7.44	3.19	.375	.99	1.00	1/8	.75	1.15	1 1/4-12	136 - 544	2,700	760,000	1	
ACE-3350-3	MC3350-3	1.91	7.44	3.19	.375	.99	1.00	1/8	.75	1.15	1 1/4-12	460 - 1,840	2,700	760,000	1	
ACE-3350-4	MC3350-4	1.91	7.44	3.19	.375	.99	1.00	1/8	.75	1.15	1 1/4-12	1,560 - 6,240	2,700	760,000	1	
ACE-4525-1	MC-4525-1	.91	5.69	1.97	.500	1.36	1.38	1/8	.87	1.65	1 3/4-12	50 - 200	3,000	950,000	1	
ACE-4525-2	MC4525-2	.91	5.69	1.97	.500	1.36	1.38	1/8	.87	1.65	1 3/4-12	170 - 680	3,000	950,000	1	
ACE-4525-4	MC4525-4	.91	5.69	1.97	.500	1.36	1.38	1/8	.87	1.65	1 3/4-12	1,950 - 7,800	3,000	950,000	1	
ACE-4550-1	MC4550-1	1.91	7.69	2.97	.500	1.36	1.38	1/8	.87	1.65	1 3/4-12	100 - 400	6,000	1,000,000	1	
ACE-4550-2	MC4550-2	1.91	7.69	2.97	.500	1.36	1.38	1/8	.87	1.65	1 3/4-12	340 - 1,360	6,000	1,000,000	1	
ACE-4575-2	MC4575-2	2.91	9.69	3.97	.500	1.36	1.38	1/8	.87	1.65	1 3/4-12	510 - 2,040	9,000	1,300,000	1	
ACE-4575-3	MC-4575-3	2.91	9.69	3.97	.500	1.36	1.38	1/8	.87	1.65	1 3/4-12	1,730 - 6,920	9,000	1,300,000	1	
ACE-4525-3	MC4525-3	.91	5.69	1.97	.500	1.36	1.38	1/8	.87	1.65	1 3/4-12	575 - 2,300	3,000	950,000	1	
ACE-6450-2	MC6450-2	1.91	8.85	3.35	.750	1.86	1.90	1/4	1.06	2.37	2 1/2-12	1,020 - 4,080	15,000	1,300,000	1	
<b>Adjustable</b>																
ACE-105	MA3325	.91	5.44	2.19	.375	.99	1.00	1/8	.75	1.15	1 1/4-12	20 - 3,800	1,500	670,000	1	
ACE-106	MA3625	.91	5.44	2.19	.375	.99	1.00	1/8	.75	1.15	1 3/8-12	20 - 3,800	1,500	670,000	1	
ACE-107	MA4525	.91	5.69	1.97	.500	1.36	1.38	1/8	.87	1.65	1 3/4-12	95 - 22,000	3,450	950,000	1	
ACE-108	MA4550	1.91	7.69	2.97	.500	1.36	1.38	1/8	.87	1.65	1 3/4-12	150 - 32,000	6,900	1,000,000	1	
ACE-109	MA3350	1.91	7.44	3.19	.375	.99	1.00	1/8	.75	1.15	1 1/4-12	28 - 5,400	3,000	760,000	1	
ACE-110	MA3650	1.91	7.44	3.19	.375	.99	1.00	1/8	.75	1.15	1 3/8-12	28 - 5,400	3,000	760,000	1	
ACE-111	MA4575	2.91	9.69	3.97	.500	1.36	1.38	1/8	.87	1.65	1 3/4-12	155 - 33,000	10,350	1,300,000	1	
ACE-112	MA6450	1.91	8.85	3.35	.750	1.86	1.90	1/4	1.06	2.37	2 1/2-12	600 - 115,000	36,000	1,700,000	1	
ACE-113	MA64100	3.91	12.85	5.35	.750	1.86	1.90	1/4	1.06	2.37	2 1/2-12	600 - 115,000	36,000	1,700,000	1	
<b>Low Velocity Adjustable</b>																
ACE-115	ML3325	.91	5.44	2.19	.375	.99	1.00	1/8	.75	1.15	1 1/4-12	—	1,500	670,000	1	
ACE-116	ML3625	.91	5.44	2.19	.375	.99	1.00	1/8	.75	1.15	1 3/8-12	—	1,500	670,000	1	
ACE-118	ML3650	1.91	7.44	3.19	.375	.99	1.00	1/8	.75	1.15	1 3/8-12	—	3,000	760,000	1	
ACE-119	ML4525	.91	5.69	1.97	.500	1.36	1.38	1/8	.87	1.65	1 3/4-12	—	3,450	950,000	1	
ACE-120	ML4550	1.91	7.69	2.97	.500	1.36	1.38	1/8	.87	1.65	1 3/4-12	—	6,900	1,000,000	1	
ACE-121	ML6425	.91	6.85	2.35	.750	1.86	1.90	1/4	1.06	2.37	2 1/2-12	—	9,000	1,100,000	1	

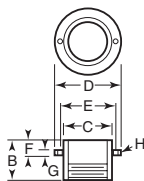
**Adjustable Miniature Shock Absorber**



Item No.	Ace	Stroke	A	A1	B	D	F	H	K	L	Q	T	EE	Effective Weight Lbs.	Energy/Cycle	Energy/Hr. In. Lbs./Hr.	Pack Qty.
ACE-AS381	AS3/8X1	1	4.75	5	1.38	0.31	3.37	0.75	0.87	0.93	0.5	1-12	0.88	10 - 1,250	600	600,000	1

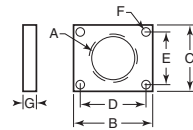
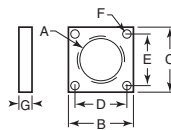
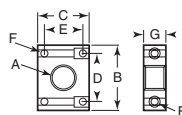
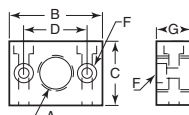


Flanged Stop Collars



Item No.	Ace	Thread Size	B	C	D	F	G	H	Used With	Pack Qty.
ACE-45	250-0642	1 1/4-12	1.63	1.50	2.50	.88	.25	.282	ACE-3325-1 thru 3350-4, 115	1
ACE-46	250-0072	1 1/4-12	1.50	2.25	3.25	.88	.25	.282	ACE-4525-1 thru 4575-3, 119, 120	1

Mounting Blocks



ACE-1, 2

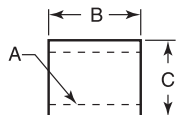
ACE-3, 4, 5

ACE-7, 8

ACE-6, 9, 10

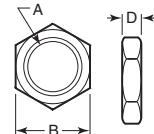
Item No.	Ace	A	B	C	D	E	F	G	Used With	Pack Qty.
ACE-1	250-0306	3/8-32	1.50	1.00	1.00	—	#8-32 Soc. Hd. Screw	.56	ACE-1024, 1025, 1026	1
ACE-2	250-0308	1/2-20	1.50	1.00	1.00	—	#8-32 Soc. Hd. Screw	.56	ACE-0035, 1075	1
ACE-3	250-0318	9/16-18	1.81	1.37	1.38	1.00	#10-32 Soc. Hd. Screw	.62	ACE-1150, 1151, 1152, 1901, 1902, 1903, 1904	1
ACE-4	250-0401	3/4-16	2.00	1.50	1.50	1.12	#10-32 Soc. Hd. Screw	.62	ACE-0225, 2225, 1225, 1226, 1227, 3001, 3002, 3003, 3004	1
ACE-5	250-0402	1-12	2.00	1.50	1.50	1.12	#10-32 Soc. Hd. Screw	.62	ACE-1600, 1601, 1602, 0600, 0900, 2600, 2900, 6501, 6502, 6503, 6504, 9251, 9252, 9253, 9254	1
ACE-6	250-0016	1 1/4-12	2.00	1.50	1.62	1.12	.219	.38	ACE-3325-1 thru 3350-4, 105, 107, 115	1
ACE-7	250-0023	1 3/4-12	2.25	2.25	1.62	1.62	.340	.50	ACE-4525-1 thru 4575-3, 109, 110, 111, 119, 120	1
ACE-8	250-0028	2 1/2-12	3.50	3.50	2.75	2.75	.410	.62	ACE-6450-2, 112, 113, 121	1
ACE-9	250-0633	1 3/8-12	2.00	1.75	1.62	1.12	.219	.38	ACE-106, 108, 116, 118	1
ACE-10	250-0024	1 3/4-12	3.00	2.25	2.38	1.62	.340	.50	ACE-4525-1 thru 4575-3, 107, 108, 111, 115	1

Stop Collars

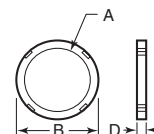


Item No.	Ace	A	B	C	Used With	Pack Qty.
ACE-11	250-0406	3/8-32	.81	.56	ACE-1024, 1025, 1026	1
ACE-12	250-0407	1/2-20	.81	.62	ACE-0035, 1075	1
ACE-13	250-0271	9/16-18	.75	.69	ACE-1150, 1151, 1152, 1901, 1902, 1903, 1904	1
ACE-14	250-0403	3/4-16	1.25	1.00	ACE-0225, 2225, 1225, 1226, 1227, 3001, 3002, 3003, 3004	1
ACE-15	250-0275	1-12	1.75	1.25	ACE-1600, 1601, 1602, 0600, 0900, 2600, 2900, 6501, 6502, 6503, 6504, 9251, 9252, 9253, 9254	1

Lock Nuts



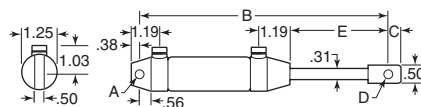
ACE-21-25



ACE-28-29

Item No.	Ace	A	B	D	Used With	Pack Qty.
ACE-21	250-0404	3/8-32	.50	.09	ACE-1024, 1025, 1026	1
ACE-22	250-0405	1/2-20	.62	.13	ACE-0035, 1075	1
ACE-23	250-0231	9/16-18	.88	.31	ACE-1150, 1151, 1152, 1901, 1902, 1903, 1904	1
ACE-24	250-0399	3/4-16	1.00	.25	ACE-0225, 2225, 1225, 1226, 1227, 3001, 3002, 3003, 3004	1
ACE-25	250-0400	1-12	1.25	.25	ACE-1600, 1601, 1602, 0600, 0900, 2600, 2900, 6501, 6502, 6503, 6504, 9251, 9252, 9253, 9254	1
ACE-28	250-0631	1 3/8-12	—	.25	ACE-116, 118	1
ACE-29	250-0042	2 1/2-12	—	.37	ACE-121	1

Hydraulic Speed/Feed Controllers



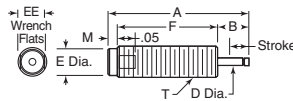
Item No.	Ace	Stroke	A	B	C	D	E	Tension		Compression		Pack Qty.
								Maximum Propelling Force Lbs.	Minimum Force to Operate Through Full Stroke Lbs.	Maximum Propelling Force Lbs.	Minimum Force to Operate Through Full Stroke Lbs.	
ACE-3200	DVC-2	2.00	.25	9.81	.25	.25	2.93	450	9.5	450	9.5	1
ACE-3400*	DVC-4	4.00	.25	13.81	.25	.25	4.93	450	—	375	—	1
ACE-3600*	DVC-6	6.00	.25	17.81	.25	.25	6.93	450	—	300	—	1

\*External mechanical stops required

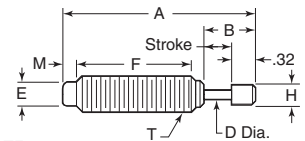




Self-Compensating



ACE-1150 - 1602, 1010, 1011, 1005M - 1601M



ACE-1024 - 1075

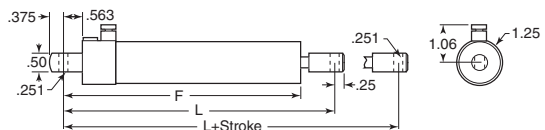
Small size allows for high energy absorption in confined spaces. The self-compensating design accommodates a variety of load conditions. Threaded outer bodies. Temperature range 32-150 degree Fahrenheit. Not compatible with petroleum based fluids. Silicone type oil.

Item No.	Ace	Stroke	A	B	D	E	F	H	M	EE	T	Effective Weight Lbs.	Energy/Cycle In. Lbs.	Energy/Hr. In. Lbs./Hr.	Pack Qty.	
<b>Inch</b>																
ACE-1024*	MC25L	.26	2.27	.57	.13	.33	1.30	.30	.20	—	3/32	1.5 - 5.0	20	200,000	1	
ACE-1025*	MC25	.26	2.27	.57	.13	.33	1.30	.30	.20	—	3/32	4 - 12	20	200,000	1	
ACE-1026*	MC25H	.26	2.27	.57	.13	.33	1.30	.30	.20	—	3/32	10 - 30	20	200,000	1	
ACE-1075*	MC75-3	.40	2.76	.72	.13	.41	1.74	.30	.218	—	1/2-20	6 - 80	75	250,000	1	
ACE-1150	MC150	.50	3.41	.69	.19	.46	2.44	—	.28	525	3/16-18	2 - 22	175	300,000	1	
ACE-1151	MC150H	.50	3.41	.69	.19	.46	2.44	—	.28	525	3/16-18	20 - 200	175	300,000	1	
ACE-1152	MC150H2	.50	3.41	.69	.19	.46	2.44	—	.28	525	3/16-18	150 - 450	175	300,000	1	
ACE-1225	MC225	.50	3.81	.69	.25	.66	2.84	—	.28	632	3/4-16	5 - 55	360	400,000	1	
ACE-1226	MC-225H	.50	3.81	.69	.25	.66	2.84	—	.28	632	3/4-16	50 - 500	360	400,000	1	
ACE-1227	MC225H2	.50	3.81	.69	.25	.66	2.84	—	.28	632	3/4-16	400 - 2,000	360	400,000	1	
ACE-1600	MC600	1.00	5.58	1.24	.31	.89	4.06	—	.28	838	1-12	20 - 300	1200	600,000	1	
ACE-1601	MC600H	1.00	5.58	1.24	.31	.89	4.06	—	.28	838	1-12	250 - 2,500	1200	600,000	1	
ACE-1602	MC600H2	1.00	5.58	1.24	.31	.89	4.06	—	.28	838	1-12	880 - 5,000	1200	600,000	1	
<b>Metric</b>																
ACE-1005M	MC5M1-B	4.1	34.0	8.2	1.5	4.1	21.1	3.3	2.5	—	M5 x 0.5	.22 - 2.0	6	18,000	1	
ACE-1009M1	MC9M1	5.0	36.0	10.0	2.0	5.0	21.1	4.7	2.5	—	M6 x 0.5	1.35 - 7.0	9	18,000	1	
ACE-1009M2	MC9M2	5.0	36.0	10.0	2.0	5.0	21.1	4.7	2.5	—	M6 x 0.5	1.75 - 9.0	9	18,000	1	
ACE-1010	MC10EL	5.0	38.6	10.0	2.0	6.4	21.1	—	4.8	—	M8 x 0.75	.75 - 6.0	11	35,000	1	
ACE-1011	MC-10EH	5.0	38.6	10.0	2.0	6.4	21.1	—	4.8	—	M8 x 0.75	1.5 - 11	11	35,000	1	
ACE-1025M	MC25M	6.6	57.7	14.5	3.3	8.4	33.0	7.6	5.0	—	M10 x 1	1.5 - 5.0	20	200,000	1	
ACE-1026M	MC25MH	6.6	57.7	14.5	3.3	8.4	33.0	7.6	5.0	—	M10 x 1	4 - 12	20	200,000	1	
ACE-1027M	MC25MH-NB	6.6	57.3	14.5	3.3	8.4	33.0	7.6	5.0	—	M10 x 1	10 - 30	20	200,000	1	
ACE-1030M1	MC30M1	8.1	54.0	13.2	2.5	6.5	34.3	6.5	4.1	—	M8 x 1	1.0 - 4.3	31	50,000	1	
ACE-1030M2	MC30M2	8.1	54.0	13.2	2.5	6.5	34.3	6.5	4.1	—	M8 x 1	3.97 - 11.9	31	50,000	1	
ACE-1030M3	MC30M3	8.1	54.0	13.2	2.5	6.5	34.3	6.5	4.1	—	M8 x 1	11.02 - 33.0	31	50,000	1	
ACE-1075M**	MC75M3-880	10.2	67.7	—	3.3	10.4	44.2	—	4.6	—	M12 x 1	6 - 80	75	250,000	1	
ACE-1150M	MC150M	12.7	86.6	17.4	4.8	11.6	62.0	11.9	7.1	6.4	M14 x 1.5	2 - 22	175	300,000	1	
ACE-1150ME	MC150ME	12.7	86.6	17.4	4.8	11.6	62.0	11.9	7.1	6.4	M14 x 1.5	2 - 22	175	300,000	1	
ACE-1151M	MC150MH	12.7	86.6	17.4	4.8	11.6	62.0	11.9	7.1	6.4	M14 x 1.5	20 - 200	175	300,000	1	
ACE-1152M	MC150MH2	12.7	86.6	17.4	4.8	11.6	62.0	11.9	7.1	6.4	M14 x 1.5	150 - 450	175	300,000	1	
ACE-1225M	MC225M	12.7	96.8	17.6	6.3	16.7	72.1	16.7	7.1	8.0	M20 x 1.5	5 - 55	360	400,000	1	
ACE-1227M	MC225MH2	12.7	96.8	17.6	6.3	16.7	72.1	16.7	7.1	8.0	M20 x 1.5	400 - 2,000	360	400,000	1	
ACE-1600M	MC600M	25.4	141.8	30.9	7.9	22.7	103.1	23.0	7.1	9.6	M25 x 1.5	20 - 300	1,200	600,000	1	
ACE-1601M	MC600MLH	25.4	141.8	30.9	7.9	22.7	103.1	23.0	7.1	9.6	M25 x 1.5	250 - 2,500	1,200	600,000	1	

\*Includes button

\*\*880-No button, standard rod

Adjustable Double Acting Hydraulic Series



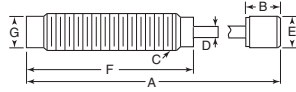
Used in food processing, refrigeration cases, material handling, air cylinders and various other manufacturing applications. Determine required stroke (in.) control direction desired (compression, tension or both) and maximum propelling force in the desired direction to select appropriate shock absorber. Dampening force adjustments are made by rotating adjustment knob 180 degrees. Bore size is .625".

Item No.	Item No.	Stroke Max. Inches	In.-Lbs. Per Cycle	Max. In.-Lbs. Per Hour	Max. Propelling Force Extension Lbs.	Max. Propelling Force Compression Lbs.	F	L	Pack Qty.
—	ED-120	2	1800	650,000	450	450	6.87	7.81	1
ED-13*	ED-130	4	3300	850,000	450	375	8.87	9.81	1
ED-14	ED-140	6	4500	1,050,000	450	300	10.87	11.81	1
ED-150*	ED-15	8	5200	1,250,000	450	200	12.87	13.81	1
—	ED-16	10	6250	1,450,000	450	125	14.87	15.8	1

\*Free flow in tension mode, adjustable in compression mode



**Self-Compensating Hydraulic Series**

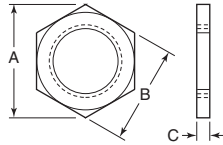
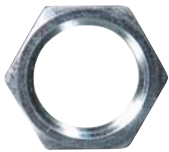


Used with medical equipment, packaging machinery, air cylinders, turnstiles, and various other manufacturing applications. Standard corrosion resistant nickel plating. One hex jam nut included. Additional mounting accessories are available below. All have hydraulic stop at full stroke, therefore it is important to position the shock absorber such that full stroke is used to prevent undesirable bottoming against the positive stop.

Item No.	Bore Size In.	Stroke inches	Max. In.-Lbs. Per Cycle	Max. In.-Lbs. Per Hour	Max. Shock Force Lbs.	Nominal Coil Spring Force		Impact Velocity In./Sec.	Total Energy In./Lbs.	Max. Propelling Force Lbs.	UNF						Pack Qty.	
						Extension Lbs.	Compression Lbs.				A	B	C	D	E	F		G
ED-7A*	.18	.25	25	50,000	200	0.60	1.25	60-125	5-25	45	2.25	.38	3/8-32	.10	.27	1.61	.26	1
ED-7B*	.18	.25	25	50,000	200	0.60	1.25	25-110	5-25	45	2.25	.38	3/8-32	.10	.27	1.61	.26	1
ED-7C*	.18	.25	25	50,000	200	0.60	1.25	10-60	5-25	45	2.25	.38	3/8-32	.10	.27	1.61	.26	1
ED-8A	.28	.62	235	300,000	625	1.00	2.50	20-145	10-190	200	4.22	.47	1/2-20	.16	.44	3.20	.43	1
ED-8B	.28	.62	235	300,000	625	1.00	2.50	10-70	10-160	200	4.22	.47	1/2-20	.16	.44	3.20	.43	1
ED-9A	.28	.62	235	300,000	625	1.00	2.50	20-145	10-190	200	4.22	.47	3/16-18	.16	.44	3.20	.43	1
ED-9B	.28	.62	235	300,000	625	1.00	2.50	10-70	10-160	200	4.22	.47	3/16-18	.16	.44	3.20	.43	1
ED-10A	.44	.87	485	475,000	850	2.00	6.80	20-145	25-400	360	5.13	.47	3/4-16	.19	.50	3.76	.64	1
ED-10B	.44	.87	485	475,000	850	2.00	6.80	5-50	25-350	360	5.13	.47	3/4-16	.19	.50	3.76	.64	1
ED-11A	.50	1	800	622,000	1,250	3.00	6.00	10-145	20-140	500	5.57	.47	1-12	.25	.62	4.04	.89	1
ED-11B	.50	1	800	622,000	1,250	3.00lbs	6.00	10-35	5-40	500	5.57	.47	1-12	.25	.62	4.04	.89	1

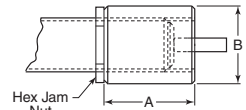
\*Not nickel plated

**Hex Jam Nuts for Self-Compensating Hydraulic Series**



Item No.	A	B	C	Shock Absorber	Pack Qty.
ED-100	1.08	.94	.18	ED-1	1
ED-200	1.30	1.13	.18	ED-2R	1
ED-700	.58	.50	.09	ED-7	1
ED-800	.72	.63	.12	ED-8	1
ED-900	1.01	.88	.31	ED-9	1

**Stop Collars for Self-Compensating Hydraulic Series**

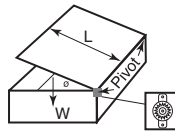


Item No.	A	B	Shock Absorber	Pack Qty.
ED-707*	.75	.58	ED-7	1
ED-808	1.00	.75	ED-8	1
ED-909	1.00	.69	ED-9	1
ED-101	1.50	1.00	ED-10	1
ED-202	1.75	1.50	ED-11	1

\*Hex shape .50 across flats

**Rotary Dampers**

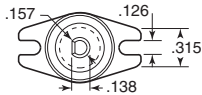
For smooth mechanical motions. Used in VCR loading mechanisms, glovebox doors, window shades, copy machine lids or anywhere controlled rotary motion is needed. Two way damping controls the movement in both directions. Maximum cycle rate is 10 cycles per minute. Nominal torque ratings are measured at 20 RPM and 73 degrees Fahrenheit. Torque is affected by temperature. Calculate nominal torque using the formula shown.



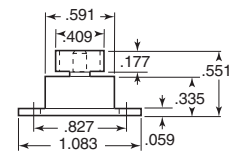
$T = (L/2) \times (W) \times (\cos \varnothing)$   
 Where: T=Nominal Torque  
 L=Length from pivot to the end of the lid  
 Ø=The angle between the panel and horizontal  
 W=The free weight of the lid



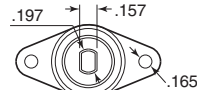
ACE-RD301



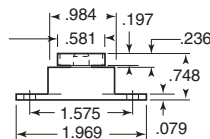
ACE-RD302



ACE-RD501



ACE-RD502

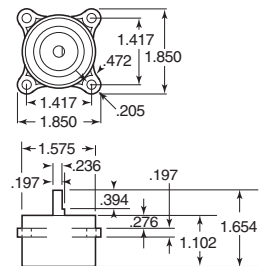


Nominal torque in oz. 4.17  
 Standard spur gear option  
 Gear has 11 involute (full) teeth  
 Module .031  
 Pitch circle diameter .346

Nominal torque in oz. 6.94  
 Gear has 12 involute (full) teeth  
 Module .039  
 Pitch circle diameter .472



ACE-RD203



Nominal torque in lbs. 17.36  
 No gear option

Item No.	Ace	Gear	Pack Qty.	Item No.	Ace	Gear	Pack Qty.	Item No.	Ace	Gear	Pack Qty.
ACE-RD301	RT-C2-301	w/o Gear	1	ACE-RD501	RT-D2-501	w/o Gear	1	ACE-RD203	RT-F2-203	w/o Gear	1
ACE-RD302	RT-C2-301-G1	w/ Gear	1	ACE-RD502	RT-D2-501-G1	w/ Gear	1				