

OSBORN[®]

INTERNATIONAL
LOAD RUNNERS[®]
CAM RUNNER[®]

**Idler-Rollers,
Cam Followers
and Track Systems**

**Click Here
for Table of
Contents**



Ready to Roll...
Anywhere![™]

800-720-5248
www.loadrunners.com

Load Runners®

Load Runners Load Guidance Systems for Precision Handling of Heavy Loads in Tough Environments

Combine the high capacity of Load Runners idler-rollers with high-strength-steel Load Rails, cut to length and configured to your specifications. Eliminate design time and sourcing costs for heavy-duty material handling systems.

Every Piece is Designed to Perform

Idler-roller treads are machined from high-alloy steel, then case hardened (Rc 55-60) for a wear-resistant outer shell and tough inner core.

Precision tapered roller bearings (larger sizes) and deep-groove ball bearings withstand heavy radial and thrust loads, as well as high speeds.

Idler-rollers are tightly sealed and lubricated for life to withstand high temperature, dirt, sand, and moisture.

High-shear-strength studs (stud style) with hex socket for easy installation. Thru-shafts (yoke style) eliminate the need for customer fabrication.

Load Rails are straight and twist-free, with hardened contact surfaces.



CAM RUNNER® Idler-Rollers/Cam Followers

CAM RUNNER® idler-rollers give designers a new way to control linear motion and support the lighter loads that don't require the heavy-duty performance of Osborn's **Load Runners**® idler-rollers. Although they're dimensionally interchangeable with conventional needle-bearing cam followers, they provide important performance features no needle-bearing can deliver.

- No lubrication, no contamination
- No needles, no noise
- Will tolerate thrust loads
- Non-sparking performance
- Submersion or washdown solution

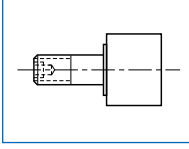
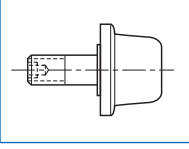
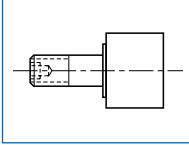
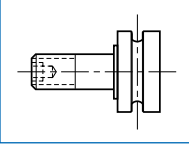
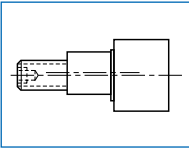
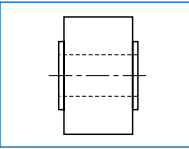
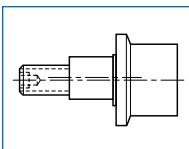
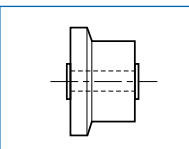
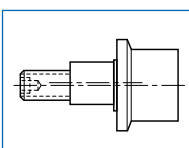
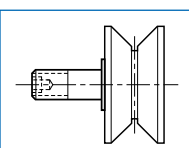
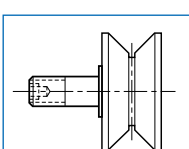
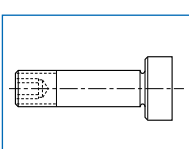
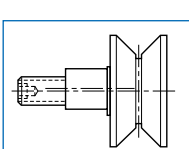




New Load Runners for Special Applications:

- Urethane Tread
- Nylon Tread
- Stainless Steel
- High Temperature



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	<p>Plain Eccentric Stud Style Inch, page 6, 7 Metric, page 26, 27</p> <ul style="list-style-type: none"> • pure radial loads • easy to install • vertical adjustment 		<p>Plain Yoke Style Inch, page 18 Metric, page 35</p>
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CAM RUNNER®



Osborn Cam Runners are significantly different from conventional needle bearing style cam followers. This product is protected by U.S. patent and other patents pending

General Characteristics

Cam Runners are manufactured with a composite synthetic tread and stainless steel stud. The composite tread consists of two different synthetic materials chosen to provide optimal characteristics for the outer wear surface and the inner bearing surface. The two synthetic parts are molded together to form a single mechanically bonded assembly that is mounted on the stud, eliminating the need for conventional seals and lubricants. The outer tread material offers high mechanical strength while the inner bearing material provides high lubricity.

The stud provides optimum life and corrosion resistance. Tread bearing wear is critically dependent on the hardness of the mating surface. When

this assembly is used as a direct replacement for a conventional cam follower, the life will be optimized if the cam or other mating surface is within the range of 55 - 60 Rc. Softer or harder materials may result in decreased life, particularly under high loads. The mating surface must be free of grease, oil and abrasive contaminants.

This assembly is dimensionally interchangeable with conventional steel cam followers. Because of its unique construction, comparable load ratings are not applicable. In order to guide you in choosing applications, extensive testing has been utilized to develop life expectancies based upon continuous duty testing at various speeds and loads. In continuous duty operation under identical loads and speeds, the Cam Runner has been found to outlast conventional steel cam followers by an average of 10 times!

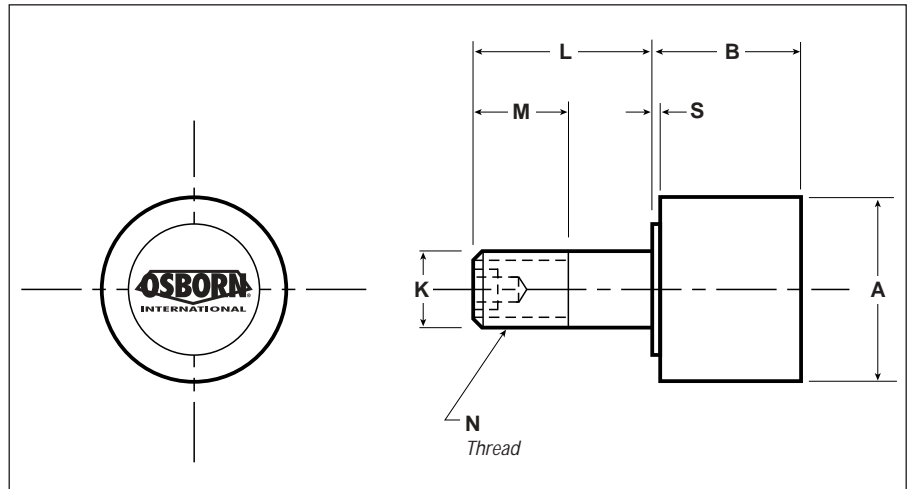
Bearing to stud clearance is greater than for needle bearing designs and will increase during early use and will stabilize after "wearing in".

Advantages

- No lubrication required – ever!
- Non sparking and low electrical conductivity
- Thrust load tolerant
- Extended life, ideal for difficult-to-service operations
- No lubricant leakage to contaminate your process
- Quiet operation resulting from no internal moving parts
- Wide range of operating temperatures
- Manufactured under ISO 9001 certified quality system

Not recommended for ambient temperatures above 250° F, highly abrasive applications or repeated heavy shock loads.

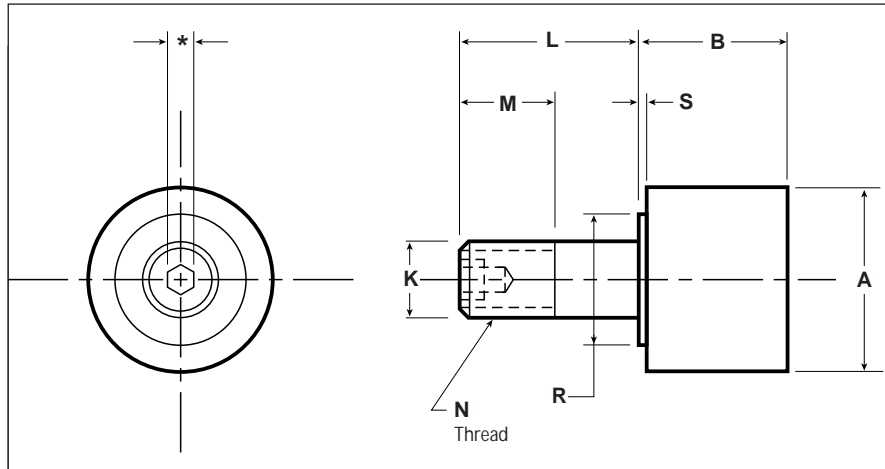
Plain - Concentric Stud Style Inch Sizes



Part No.	EDP No.	A	B	K	L	N	M	S	Static Capacity
		Roller Dia.	Roller Width	Stud Dia.	Stud Length	Fine Thread	Thread Length	Shoulder Length	
PCR-1/2	96959	1/2"	3/8"	3/16"	5/8"	10-32	1/4"	1/32"	110
PCR-9/16	96960	9/16"	3/8"	3/16"	5/8"	10-32	1/4"	1/32"	110
PCR-5/8	96961	5/8"	7/16"	1/4"	3/4"	1/4-28	5/16"	1/32"	230
PCR-11/16	96962	11/16"	7/16"	1/4"	3/4"	1/4-28	5/16"	1/32"	230
PCR-3/4	96963	3/4"	1/2"	3/8"	7/8"	3/8-24	3/8"	1/16"	700
PCR-7/8	96964	7/8"	1/2"	3/8"	7/8"	3/8-24	3/8"	1/16"	700
PCR-1	96965	1"	5/8"	7/16"	1"	7/16-20	1/2"	1/16"	870
PCR-1-1/8	96966	1-1/8"	5/8"	7/16"	1"	7/16-20	1/2"	1/16"	870
PCR-1-1/4	96967	1-1/4"	3/4"	1/2"	1-1/4"	1/2-20	5/8"	1/16"	1100
PCR-1-3/8	96968	1-3/8"	3/4"	1/2"	1-1/4"	1/2-20	5/8"	1/16"	1100
PCR-1-1/2	96969	1-1/2"	7/8"	5/8"	1-1/2"	5/8-18	3/4"	1/16"	1800
PCR-1-5/8	96970	1-5/8"	7/8"	5/8"	1-1/2"	5/8-18	3/4"	1/16"	1800

Load Runners®

Plain - Concentric Stud Style Inch Sizes



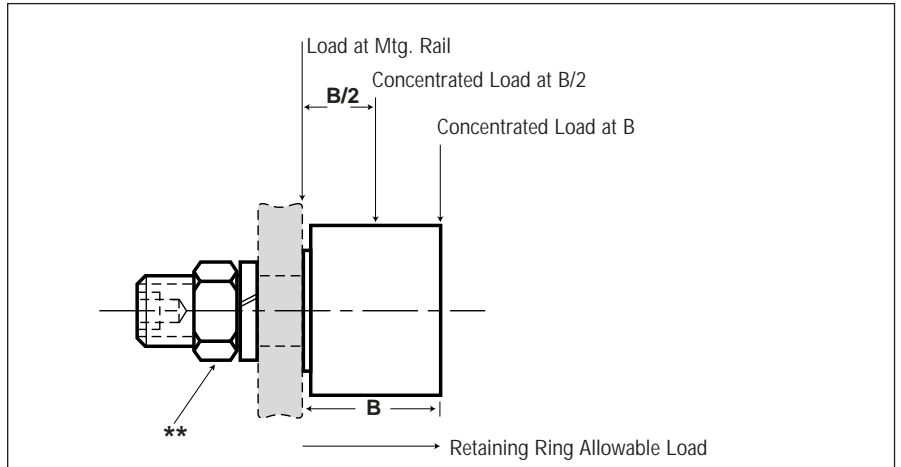
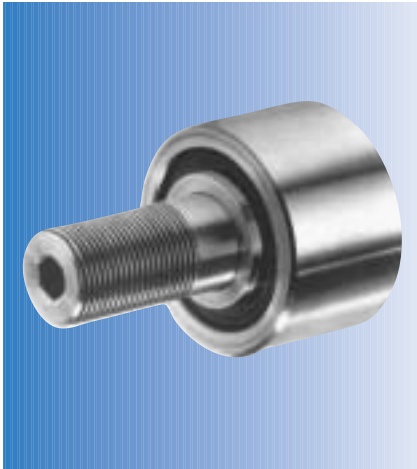
Part No.	EDP No.	A	B	K	L	M	N	R	S	Rec. Mtg. Hole Size	Mounting Member Thickness		Approx. Weight (Lbs)
		Roller Dia.	Roller Width	Stud Dia.	Stud Length	Thread Length	Fine Thread	Shldr. Dia.	Shldr. Length		Max.	Min.	
		+0.000 -0.001		+0.000 -0.001									
PLR 1	97318	1.000	0.781	0.437	1.000	0.500	7/16-20	0.500	0.031	0.438	0.625	0.500	0.2
PLR 1-1/8	97319	1.125	0.781	0.437	1.000	0.500	7/16-20	0.500	0.031	0.438	0.625	0.500	0.3
PLR 1-1/4	97320	1.250	0.844	0.500	1.250	0.625	1/2-20	0.625	0.031	0.501	0.750	0.625	0.3
PLR 1-3/8	97321	1.375	0.844	0.500	1.250	0.625	1/2-20	0.625	0.031	0.501	0.750	0.625	0.4
PLR 1-1/2	95086	1.500	1.187	0.625	1.500	0.750	5/8-18	0.750	0.062	0.626	1.000	0.750	0.5
PLR-1-3/4	95112	1.750	1.187	0.750	1.750	0.875	3/4-16	1.000	0.062	0.751	1.125	0.875	0.8
PLR-1-3/4-5	95115	1.750	1.437	0.500	0.875	0.750	1/2-13NC	0.625	0.312	0.501	N/A	N/A	0.6
PLR-2	95125	2.000	1.687	0.875	2.000	1.125	7/8-14	1.000	0.062	0.876	1.250	0.875	1.3
PLR-2-3	95126	2.000	1.375	0.875	2.000	1.125	7/8-14	1.000	0.062	0.876	1.250	0.875	1.2
PLR-2-1/4	95152	2.250	1.687	0.875	2.000	1.125	7/8-14	1.000	0.062	0.876	1.250	0.875	1.8
PLR-2-1/2	95160	2.500	1.687	1.000	2.250	1.500	1-14	1.250	0.062	1.001	1.250	0.750	2.3
PLR-2-1/2-10	95164	2.500	1.812	1.000	2.250	1.500	1-14	1.250	0.187	1.001	1.250	0.750	2.3
PLR-2-1/2-16	95165	2.500	1.812	1.000	2.250	1.500	1-14	1.250	0.062	1.001	1.250	0.750	2.3
PLR-2-3/4	95190	2.750	1.687	1.000	2.250	1.500	1-14	1.250	0.062	1.001	1.250	0.750	2.8
PLR-3	95200	3.000	2.000	1.250	2.500	1.750	1-1/4-12	1.750	0.062	1.251	1.250	1.000	4.0
PLR-3-1/4	95245	3.250	2.000	1.250	2.500	1.750	1-1/4-12	1.750	0.062	1.251	1.250	1.000	4.8
PLR-3-1/2	95248	3.500	2.000	1.250	2.750	1.750	1-1/4-12	1.750	0.062	1.251	1.500	1.250	5.5
PLR-4	95268	4.000	2.000	1.250	2.750	1.750	1-1/4-12	1.750	0.062	1.251	1.500	1.250	7.1
PLR-4-1/2	95304	4.500	2.000	1.250	2.750	1.750	1-1/4-12	1.750	0.062	1.251	1.500	1.250	9.0
PLR-5	95323	5.000	3.000	2.000	4.500	2.500	2-12	3.250	0.062	2.001	2.750	2.000	19.0
PLR-6	95353	6.000	3.000	2.500	5.500	3.250	2-1/2-12	3.250	0.062	2.501	3.250	2.000	28.0
PLR-7	95374	7.000	3.000	2.500	5.500	3.250	2-1/2-12	3.250	0.062	2.501	3.250	2.000	36.0
PLR-8	95386	8.000	3.000	2.500	5.500	3.250	2-1/2-12	3.250	0.062	2.501	3.250	2.000	49.0
PLR-10	95398	10.000	3.000	2.500	5.500	3.250	2-1/2-12	3.250	0.062	2.501	3.250	2.000	72.0
PLR-10-1	95399	10.000	5.000	4.250	9.000	4.000	3-1/2-4NC	5.000	0.125	4.252	5.750	5.125	130.0

Other sizes available on request.

* For stud hex socket size, see page 52.

For special features and custom design considerations, see page 53.

Plain - Concentric Stud Style Inch Sizes



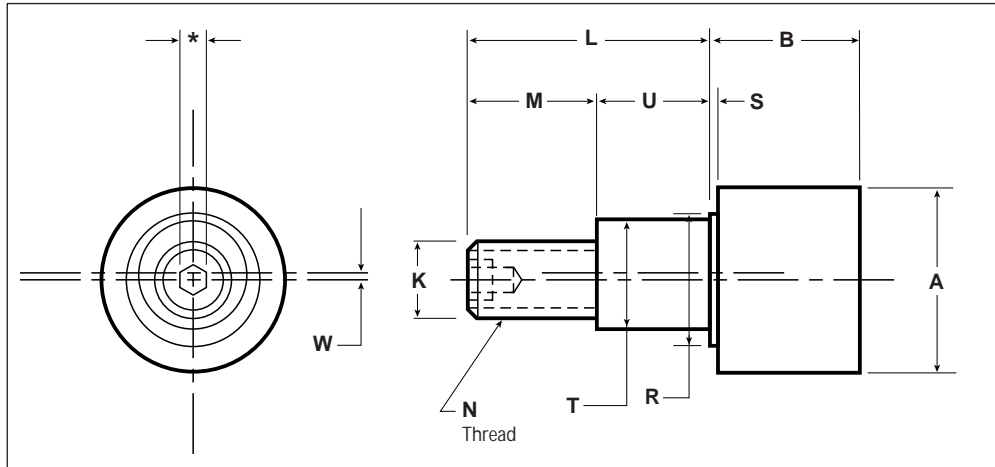
Part No.	Ball or Tapered Roller Bearings	Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)			Stud Capacity (Lbs)			Ret. Ring Allow. Load (Lbs)
		3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Static Limit (Radial)	3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Static Limit (Thrust)	Bending = .75 S _y		Shear = .75 x .5 x S _y	
								Concent. Load at B/2	Concent. Load at B	Load at Mtg. Rail	
PLR 1	BB	235	625	225	145	385	300	450	200	1970	470
PLR 1-1/8	BB	235	625	225	145	385	300	450	200	1970	470
PLR 1-1/4	BB	515	1350	600	315	830	440	870	390	3250	470
PLR 1-3/8	BB	515	1350	600	315	830	440	870	390	3250	470
PLR 1-1/2	BB	1050	2750	1100	650	1700	595	1570	690	6230	470
PLR 1-3/4	BB	1050	2750	1100	650	1700	595	1570	690	6230	470
PLR 1-3/4-5	BB	1050	2750	1100	650	1700	595	1570	690	4480	470
PLR 2	BB	1450	3820	1620	905	2380	685	3530	1610	12500	910
PLR 2-3	BB	1450	3820	1620	905	2380	685	4620	1630	12500	910
PLR 2-1/4	BB	1450	3820	1620	905	2380	685	3530	1610	12500	910
PLR 2-1/2	BB	1980	5180	2270	1215	3185	1540	4170	1900	15700	1340
PLR 2-1/2-10	BB	1980	5180	2270	1215	3185	1540	4570	1900	15700	1340
PLR 2-1/2-16	TRB	4570	10880	7630	1690	4010	4570	7050	3610	29920	N/A
PLR 2-3/4	BB	1980	5180	2270	1215	3185	1540	4170	1900	15700	1340
PLR 3	TRB	6000	14300	20000	2430	5700	12000	13600	6800	43700	N/A
PLR 3-1/4	TRB	6000	14300	20000	2430	5700	12000	13600	6800	43700	N/A
PLR 3-1/2	TRB	6000	14300	20000	2430	5700	12000	13600	6800	43700	N/A
PLR 4	TRB	6000	14300	20000	2430	5700	12000	13600	6800	43700	N/A
PLR 4-1/2	TRB	6000	14300	20000	2430	5700	12000	13600	6800	43700	N/A
PLR 5	TRB	13990	33290	51900	5530	13160	32500	34100	18830	107670	N/A
PLR 6	TRB	15100	35800	56400	5950	14200	33100	72700	36300	175000	N/A
PLR 7	TRB	15100	35800	56400	5950	14200	33100	72700	36300	175000	N/A
PLR 8	TRB	15100	35800	56400	5950	14200	33100	72700	36300	175000	N/A
PLR 10	TRB	15100	35800	56400	5950	14200	33100	72700	36300	175000	N/A
PLR 10-1	TRB	34500	82200	159800	16900	40100	116000	214400	107200	505400	N/A

** Lock washer and jam nut available at additional cost.
For size see "N" dimension.

Specifications are for reference only and are subject to change without notice.

Load Runners®

Plain - Eccentric Stud Style Inch Sizes

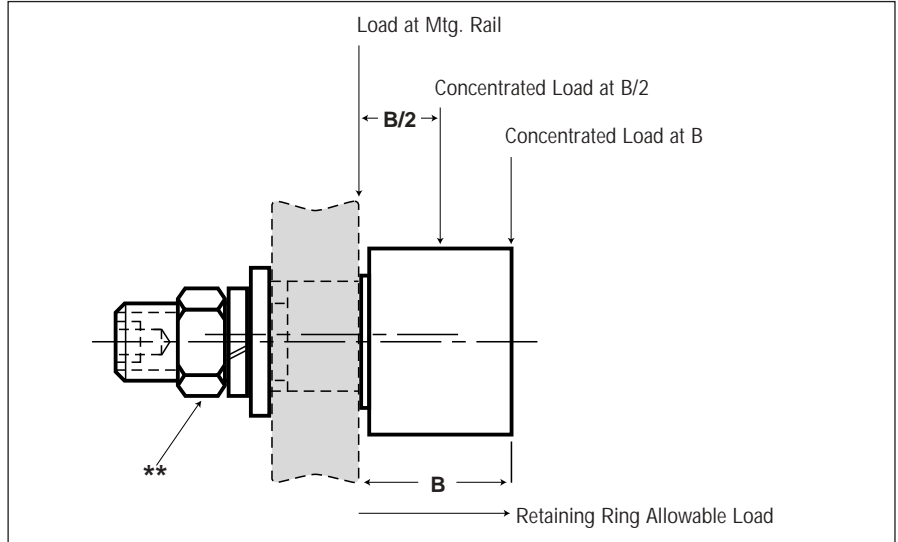


Part No.	EDP No.	A	B	K	L	M	N	R	S	T	U	W	Rec. Mtg. Hole Size	Recommended Roller Mounting Member Thickness		Approx. Weight (Lbs)
		Roller Dia. +0.000 -0.001	Roller Width	Stud Dia.	Stud Length	Thread Length	Thread	Shldr. Dia.	Shldr. Length	Eccent. Dia.	Eccent. Length	Eccent.		+0.001 -0.000	Max.	
PLRE-1	97322	1.000	0.781	0.437	1.000	0.500	7/16-20	0.750	0.031	0.625	0.500	0.030	0.627	0.625	0.500	0.3
PLRE-1 1/8	97323	1.125	0.781	0.437	1.000	0.500	7/16-20	0.750	0.031	0.625	0.500	0.030	0.627	0.625	0.500	0.3
PLRE-1 1/4	97324	1.250	0.844	0.500	1.250	0.625	1/2-20	0.812	0.031	0.687	0.625	0.030	0.689	0.750	0.625	0.4
PLRE-1 3/8	97325	1.375	0.844	0.500	1.250	0.625	1/2-20	0.812	0.031	0.687	0.625	0.030	0.689	0.750	0.625	0.4
PLRE-1 1/2	95849	1.500	1.188	0.625	1.500	0.770	5/8-18	1.125	0.062	0.875	0.730	0.030	0.877	0.875	0.750	0.6
PLRE-1 3/4	95853	1.750	1.188	0.750	1.750	0.895	3/4-16	1.240	0.062	1.000	0.855	0.030	1.002	1.000	0.875	0.9
PLRE-2	95857	2.000	1.688	0.875	2.000	1.020	7/8-14	1.500	0.062	1.187	0.980	0.030	1.189	1.125	1.000	1.6
PLRE-2 1/4	95863	2.250	1.688	0.875	2.000	1.020	7/8-14	1.500	0.062	1.187	0.980	0.030	1.189	1.125	1.000	2.0
PLRE-2 1/2	95869	2.500	1.688	1.000	2.250	1.145	1-14	1.687	0.062	1.375	1.105	0.030	1.377	1.250	1.125	2.5
PLRE-2 3/4	95875	2.750	1.688	1.000	2.250	1.145	1-14	1.687	0.062	1.375	1.105	0.030	1.377	1.250	1.125	3.4
PLRE-3	95876	3.000	2.000	1.250	2.500	1.270	1 1/4-12	2.312	0.062	1.750	1.230	0.060	1.752	1.375	1.250	4.5
PLRE-3 1/4	95887	3.250	2.000	1.250	2.500	1.270	1 1/4-12	2.312	0.062	1.750	1.230	0.060	1.752	1.375	1.250	5.4
PLRE-3 1/2	95888	3.500	2.000	1.250	2.750	1.395	1 1/4-12	2.312	0.062	1.812	1.355	0.060	1.814	1.500	1.375	6.5
PLRE-4	95892	4.000	2.000	1.250	2.750	1.395	1 1/4-12	2.312	0.062	1.812	1.355	0.060	1.814	1.500	1.375	8.3
PLRE-5	95900	5.000	3.000	2.000	4.500	2.375	2-12	3.250	0.062	2.625	2.125	0.060	2.627	2.500	2.250	21.0
PLRE-6	95903	6.000	3.000	2.500	5.500	2.625	2 1/2-12	3.625	0.062	3.125	2.875	0.060	3.127	3.250	3.000	30.5

Other sizes available on request.

* For stud hex socket size, see page 52.

Plain - Eccentric Stud Style Inch Sizes



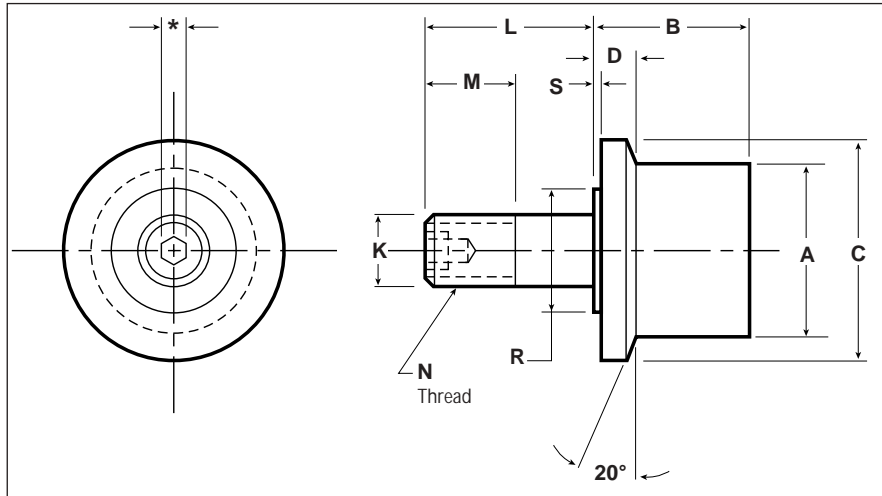
Part No.	Ball or Tapered Roller Bearings	Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)			Stud Capacity (Lbs)			Ret. Ring Allow. Load (Lbs)
		3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Radial Static Limit	3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Limiting Static Thrust	Bending = .75 S _y		Shear = .75 x .5 x S _y	
								Concent. Load at B/2	Concent. Load at B	Load at Mtg. Rail	
PLRE-1	BB	235	625	225	145	385	300	450	200	1970	470
PLRE-1 1/8	BB	235	625	225	145	385	300	450	200	1970	470
PLRE-1 1/4	BB	515	1350	600	315	830	440	870	390	3250	470
PLRE-1 3/8	BB	515	1350	600	315	830	440	870	390	3250	470
PLRE-1 1/2	BB	1050	2750	1100	650	1700	595	1570	690	6230	470
PLRE-1 3/4	BB	1050	2750	1100	650	1700	595	1570	690	6230	470
PLRE-2	BB	1450	3820	1620	905	2380	685	4620	1610	12500	910
PLRE-2 1/4	BB	1450	3820	1620	905	2380	685	4620	1610	12500	910
PLRE-2 1/2	BB	1980	5180	2270	1215	3185	1540	4170	1900	15700	1340
PLRE-2 3/4	BB	1980	5180	2270	1215	3185	1540	4170	1900	15700	1340
PLRE-3	TRB	6000	14300	20000	2430	5790	12000	13600	6800	43700	N/A
PLRE-3 1/4	TRB	6000	14300	20000	2430	5790	12000	13600	6800	43700	N/A
PLRE-3 1/2	TRB	6000	14300	20000	2430	5790	12000	13600	6800	43700	N/A
PLRE-4	TRB	6000	14300	20000	2430	5790	12000	13600	6800	43700	N/A
PLRE-5	TRB	13990	33290	51900	5530	13160	32500	34100	18830	107670	N/A
PLRE-6	TRB	15100	35800	56400	5950	14200	33100	72700	36300	175000	N/A

Specifications are for reference only and are subject to change without notice.

** Flat washer, lock washer and jam nut available at additional cost.
For size see "N" dimension.

Load Runners®

Flanged - Concentric Stud Style Inch Sizes

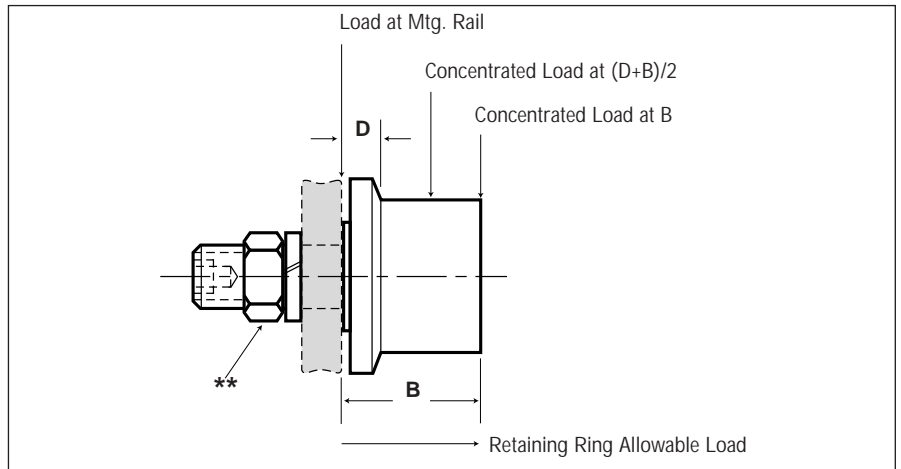


Part No.	EDP No.	A	B	C	D	K	L	M	N	R	S	Rec. Mtg. Hole Size	Roller Mounting Member Thickness		Approx. Weight (Lbs)
		Roller Dia.	Roller Width	Flange Dia.	Flange Thickness								Stud Dia.	Stud Length	
FLR-1	97326	1.000	0.781	1.375	0.219	0.437	1.000	0.500	7/16-20	0.500	0.031	0.438	0.625	0.500	0.3
FLR-1 1/8	97327	1.125	0.781	1.500	0.219	0.437	1.000	0.500	7/16-20	0.500	0.031	0.438	0.625	0.500	0.3
FLR-1 1/4	97328	1.250	0.844	1.563	0.219	0.500	1.250	0.625	1/2-20	0.625	0.031	0.501	0.750	0.625	0.4
FLR-1 3/8	97329	1.375	0.844	1.688	0.219	0.500	1.250	0.625	1/2-20	0.625	0.031	0.501	0.750	0.625	0.4
FLR-1 1/2	95445	1.500	1.188	2.188	0.343	0.625	1.500	0.750	5/8-18	0.750	0.062	0.626	1.000	0.750	0.6
FLR-1 1/2-2	95446	1.500	1.063	2.000	0.343	0.500	1.375	0.750	1/2-20	0.625	0.125	0.501	1.000	0.750	0.5
FLR-1 3/4	95472	1.750	1.188	2.438	0.343	0.750	1.750	0.875	3/4-16	1.000	0.062	0.751	1.125	0.875	1.0
FLR-2	95482	2.000	1.688	2.688	0.593	0.875	2.000	1.125	7/8-14	1.000	0.062	0.876	1.250	0.875	1.8
FLR-2 1/4	95498	2.250	1.688	2.938	0.593	0.875	2.000	1.125	7/8-14	1.000	0.062	0.876	1.250	0.875	2.1
FLR-2 1/2	95502	2.500	1.688	3.188	0.593	1.000	2.250	1.500	1-14	1.250	0.062	1.001	1.250	0.750	2.8
FLR-2 1/2-1	95503	2.500	1.812	3.188	0.593	1.000	2.250	1.500	1-14	1.250	0.062	1.001	1.250	0.750	2.8
FLR-2 3/4	95515	2.750	1.688	3.438	0.593	1.000	2.250	1.500	1-14	1.250	0.062	1.001	1.250	0.750	3.2
FLR-3	95520	3.000	2.000	3.938	0.593	1.250	2.500	1.750	1 1/4-12	1.750	0.062	1.251	1.250	1.000	4.7
FLR-3 1/4	95555	3.250	2.000	4.188	0.593	1.250	2.500	1.750	1 1/4-12	1.750	0.062	1.251	1.250	1.000	5.3
FLR-3 1/2	95558	3.500	2.000	4.438	0.593	1.250	2.750	1.750	1 1/4-12	1.750	0.062	1.251	1.250	1.000	6.2
FLR-4	95562	4.000	2.000	4.938	0.593	1.250	2.750	1.750	1 1/4-12	1.750	0.062	1.251	1.250	1.000	7.9
FLR-4M	95567	4.000	2.000	4.938	1.000	1.250	2.750	1.750	1 1/4-12	1.750	0.062	1.251	1.250	1.000	8.1
FLR-4 1/2	95591	4.500	2.000	5.438	0.593	1.250	2.750	1.750	1 1/4-12	1.750	0.062	1.251	1.250	1.000	9.9
FLR-5	95601	5.000	3.000	5.938	0.718	2.000	4.500	2.500	2-12	3.250	0.062	2.001	2.750	2.000	18.5
FLR-6	95625	6.000	3.000	6.938	0.718	2.500	5.500	3.250	2 1/2-12	3.250	0.062	2.501	3.250	2.000	29.5
FLR-7	95640	7.000	3.000	7.938	0.718	2.500	5.500	3.250	2 1/2-12	3.250	0.062	2.501	3.250	2.000	38.0
FLR-8	95641	8.000	3.000	8.938	0.718	2.500	5.500	3.250	2 1/2-12	3.250	0.062	2.501	3.250	2.000	46.0

Other sizes available on request.

* For stud hex socket size, see page 52.

Flanged - Concentric Stud Style Inch Sizes



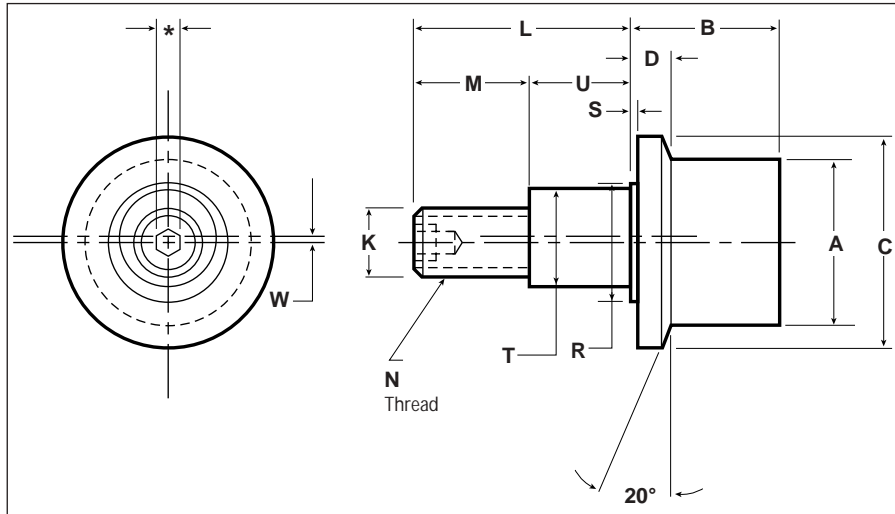
Part No.	Ball or Tapered Roller Bearings	Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)			Stud Capacity (Lbs)			Ret. Ring Allow. Load (Lbs)
		3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Radial Static Limit	3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Limiting Static Thrust	Bending = .75 S _y		Shear = .75 x .5 x S _y	
								Concent. Load at (D+B)/2	Concent. Load at B	Load at Mtg. Rail	
FLR-1	BB	235	625	225	145	385	300	350	200	1970	470
FLR-1 1/8	BB	235	625	225	145	385	300	350	200	1970	470
FLR-1 1/4	BB	515	1350	600	315	830	440	680	390	3250	470
FLR-1 3/8	BB	515	1350	600	315	830	440	680	390	3250	470
FLR-1 1/2	BB	1050	2750	1100	650	1700	595	1150	690	6230	470
FLR-1 1/2-2	BB	925	2400	970	570	1485	330	675	455	4300	335
FLR-1 3/4	BB	1050	2750	1100	650	1700	595	1150	690	6230	470
FLR-2	BB	1450	3820	1620	905	2380	685	2790	1615	12500	910
FLR-2 1/4	BB	1450	3820	1620	905	2380	685	2790	1615	12500	910
FLR-2 1/2	BB	1980	5180	2270	1215	3185	1540	2935	2590	15700	1340
FLR-2 1/2-1	TRB	4750	10880	7630	1690	4010	4570	7050	3610	29920	N/A
FLR-2 3/4	BB	1980	5180	2270	1215	3185	1540	2935	2590	15700	1340
FLR-3	TRB	6000	14300	20000	2430	5790	12000	10500	6800	43700	N/A
FLR-3 1/4	TRB	6000	14300	20000	2430	5790	12000	10500	6800	43700	N/A
FLR-3 1/2	TRB	6000	14300	20000	2430	5790	12000	10500	6800	43700	N/A
FLR-4	TRB	6000	14300	20000	2430	5790	12000	10500	6800	43700	N/A
FLR-4M	TRB	6000	14300	20000	2430	5790	12000	9100	6800	43700	N/A
FLR-4 1/2	TRB	6000	14300	20000	2430	5790	12000	10500	6800	43700	N/A
FLR-5	TRB	13990	33290	51900	5530	13160	32500	30100	18700	111900	N/A
FLR-6	TRB	15100	35800	56400	5950	14200	33100	58800	36400	175000	N/A
FLR-7	TRB	15100	35800	56400	5950	14200	33100	58800	36400	175000	N/A
FLR-8	TRB	15100	35800	56400	5950	14200	33100	58800	36400	175000	N/A

Specifications are for reference only and are subject to change without notice.

** Lock washer and jam nut available at additional cost. For size see "N" dimension.

Load Runners®

Flanged - Eccentric Stud Style Inch Sizes

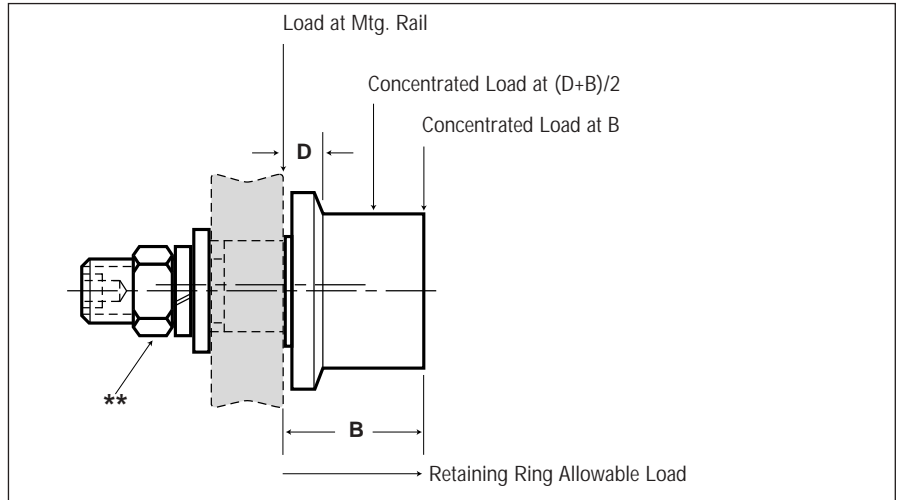


Part No.	EDP No.	A	B	C	D	K	L	M	N	R	S	T	U	W	Rec. Mtg. Hole Size	Roller Mounting Member Thickness		Approx. Weight (Lbs)
		Roller Dia.	Roller Width	Flange Dia.	Flange Thickness	Stud Dia.	Stud Length	Thread Length	Fine Thread	Shldr. Dia.	Shldr. Length	Eccent. Dia.	Eccent. Length	Eccent.		+0.001 -0.001	+0.000 -0.010	
FLRE-1	97330	1.000	0.781	1.375	0.219	0.437	1.000	0.500	7/16-20	0.750	0.031	0.625	0.500	0.030	.627	.625	0.500	0.3
FLRE-1 1/8	97331	1.125	0.781	1.500	0.219	0.437	1.000	0.500	7/16-20	0.750	0.031	0.625	0.500	0.030	.627	.625	0.500	0.4
FLRE-1 1/4	97332	1.250	0.844	1.563	0.219	0.500	1.250	0.625	1/2-20	0.812	0.031	0.687	0.625	0.030	.689	.750	0.625	0.4
FLRE-1 3/8	97333	1.375	0.844	1.688	0.219	0.500	1.250	0.625	1/2-20	0.812	0.031	0.687	0.625	0.030	.689	.750	0.625	0.5
FLRE-1 1/2	95917	1.500	1.187	2.187	0.343	0.625	1.500	0.770	5/8-18	1.125	0.062	0.875	0.730	0.030	.877	.875	0.750	0.8
FLRE-1 3/4	95922	1.750	1.187	2.437	0.343	0.750	1.750	0.895	3/4-16	1.240	0.062	1.000	0.855	0.030	1.002	1.000	0.875	1.1
FLRE-2	95924	2.000	1.688	2.687	0.593	0.875	2.000	1.020	7/8-14	1.500	0.062	1.187	0.980	0.030	1.189	1.125	1.000	2.1
FLRE-2 1/4	95927	2.250	1.688	2.937	0.593	0.875	2.000	1.020	7/8-14	1.500	0.062	1.187	0.980	0.030	1.189	1.125	1.000	2.5
FLRE-2 1/2	95928	2.500	1.688	3.187	0.593	1.000	2.250	1.145	1-14	1.687	0.062	1.375	1.105	0.030	1.377	1.250	1.125	3.0
FLRE-2 3/4	95931	2.750	1.688	3.437	0.593	1.000	2.250	1.145	1-14	1.687	0.062	1.375	1.105	0.030	1.377	1.250	1.125	3.5
FLRE-3	95932	3.000	2.000	3.937	0.593	1.250	2.500	1.270	1 1/4-12	2.312	0.062	1.750	1.230	0.060	1.752	1.375	1.250	5.1
FLRE-3 1/4	95939	3.250	2.000	4.187	0.593	1.250	2.500	1.270	1 1/4-12	2.312	0.062	1.750	1.230	0.060	1.752	1.375	1.250	5.8
FLRE-3 1/2	95940	3.500	2.000	4.437	0.593	1.250	2.750	1.395	1 1/4-12	2.312	0.062	1.812	1.355	0.060	1.814	1.500	1.375	6.8
FLRE-4	95941	4.000	2.000	4.937	0.593	1.250	2.750	1.395	1 1/4-12	2.312	0.062	1.812	1.355	0.060	1.814	1.500	1.375	8.5
FLRE-5	95948	5.000	3.000	5.938	0.718	2.000	4.500	2.375	2-12	3.250	0.062	2.625	2.125	0.060	2.627	2.500	2.250	19.5
FLRE-6	95949	6.000	3.000	6.938	0.718	2.500	5.500	2.625	2 1/2-12	3.625	0.062	3.125	2.875	0.060	3.127	3.250	3.000	32.0

Other sizes available on request.

* For stud hex socket size, see page 52.

Flanged - Eccentric Stud Style Inch Sizes



Part No.	Ball or Tapered Roller Bearings	Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)			Stud Capacity (Lbs)			Ret. Ring Allow. Load (Lbs)
		3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Radial Static Limit	3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Limiting Static Thrust	Bending = .75 S _y		Shear = .75 x .5 x S _y	
								Concent. Load at (D+B)/2	Concent. Load at B	Load at Mtg. Rail	
FLRE-1	BB	235	625	225	145	385	300	350	200	1970	470
FLRE-1 1/8	BB	235	625	225	145	385	300	350	200	1970	470
FLRE-1 1/4	BB	515	1350	600	315	830	440	680	390	3250	470
FLRE-1 3/8	BB	515	1350	600	315	830	440	680	390	3250	470
FLRE-1 1/2	BB	1050	2750	1100	650	1700	595	1150	690	6230	470
FLRE-1 3/4	BB	1050	2750	1100	650	1700	595	1150	690	6230	470
FLRE-2	BB	1450	3820	1620	905	2380	685	2790	1615	12500	910
FLRE-2 1/4	BB	1450	3820	1620	905	2380	685	2790	1615	12500	910
FLRE-2 1/2	BB	1980	5180	2270	1215	3185	1540	2935	2590	15700	1340
FLRE-2 3/4	BB	1980	5180	2270	1215	3185	1540	2935	2590	15700	1340
FLRE-3	TRB	6000	14300	20000	2430	5790	12000	10500	6800	43700	N/A
FLRE-3 1/4	TRB	6000	14300	20000	2430	5790	12000	10500	6800	43700	N/A
FLRE-3 1/2	TRB	6000	14300	20000	2430	5790	12000	10500	6800	43700	N/A
FLRE-4	TRB	6000	14300	20000	2430	5790	12000	10500	6800	43700	N/A
FLRE-5	TRB	13990	33290	51900	5530	13160	32500	26300	18830	107670	N/A
FLRE-6	TRB	15100	35800	56400	5950	14200	33100	56100	36300	175000	N/A

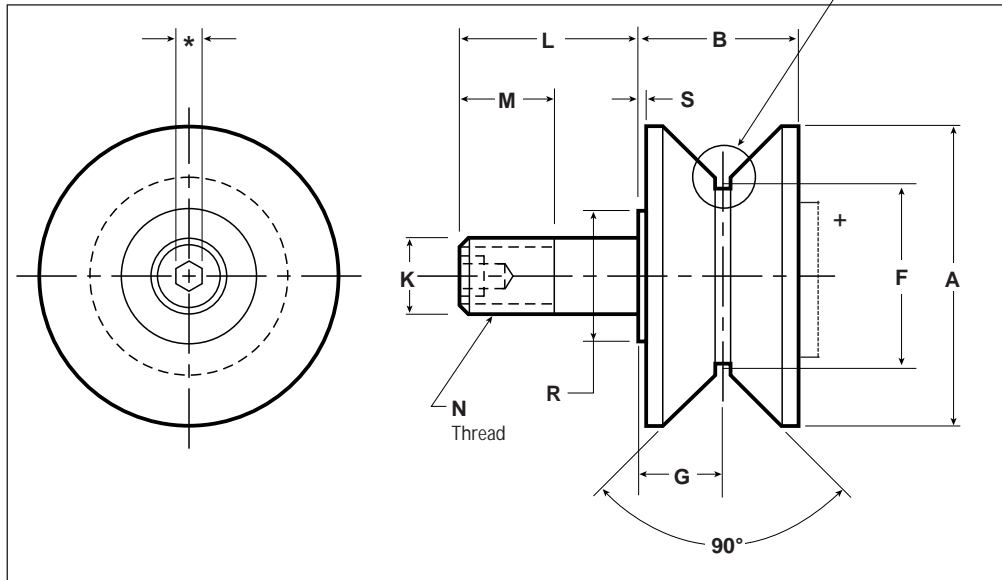
Specifications are for reference only and are subject to change without notice.

** Flat washer, lock washer and jam nut available at additional cost. For size see "N" dimension.

Load Runners®

V-Grooved - Concentric Stud Style Inch Sizes

See page 45 for details of design recommendations for roller on rail.



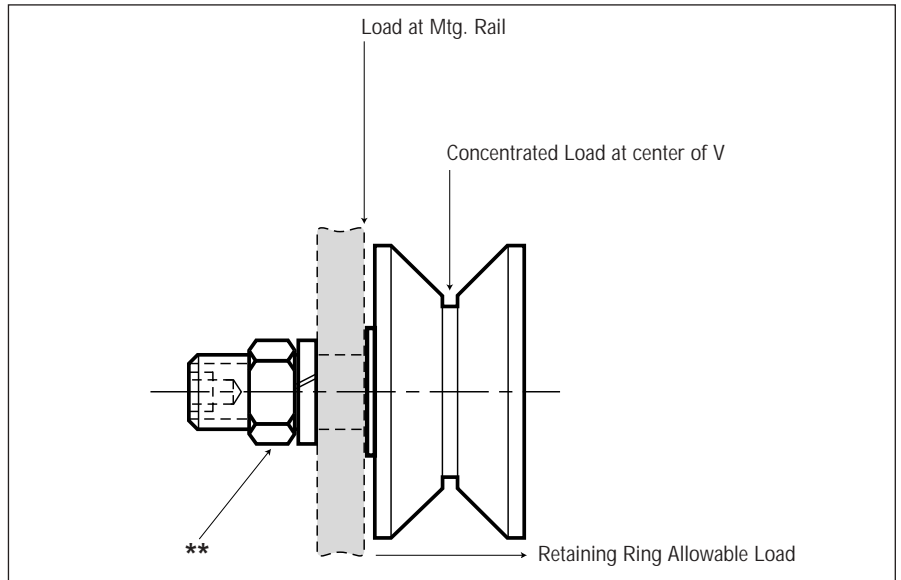
Part No.	EDP No.	A	B	F	G	K	L	M	N	R	S	Rec. Mtg. Hole Size	Roller Mounting Member Thickness		Approx. Weight (Lbs)
		Roller Dia.	Roller Width	Point Dia.	Groove Location	Stud Dia.	Stud Length	Thread Length	Thread	Shldr. Dia.	Shldr. Length		Max.	Min.	
VLR-1 ¹ / ₂	97334	1.500	0.781	1.125	0.391	0.437	1.000	0.500	7/16-20	0.500	.031	0.438	0.750	0.625	0.5
VLR-2	97335	2.000	0.844	1.375	0.422	0.500	1.250	0.625	1/2-20	0.625	.031	0.500	0.875	0.750	0.6
VLR-2 ¹ / ₂	95660	2.500	1.312	1.500	0.687	0.750	1.750	0.875	3/4-16	1.000	.062	0.751	1.250	1.000	1.3
VLR-3 ¹ / ₂	95678	3.500	1.687	2.250	0.875	0.875	2.000	1.125	7/8-14	1.000	.062	0.876	1.250	1.000	3.4
+ VLR-3 ¹ / ₂ -16	95685	3.500	1.890	2.250	0.875	0.750	2.000	1.125	3/4-16	1.250	.125	0.751	1.250	1.000	3.4
VLR-4 ¹ / ₂	95729	4.500	2.000	3.000	1.000	1.250	2.500	1.750	1 1/4-12	1.750	.062	1.251	1.250	1.000	7.0
VLR-5 ¹ / ₂	95760	5.500	2.000	4.000	1.000	1.250	2.750	1.750	1 1/4-12	1.750	.062	1.251	1.500	1.250	10.5
VLR-6 ¹ / ₂	95770	6.500	3.000	5.000	1.500	2.000	4.500	2.500	2-12	3.250	.062	2.001	3.000	2.000	25.5
VLR-7 ¹ / ₂	95777	7.500	3.000	6.000	1.500	2.500	5.500	3.250	2 1/2-12	3.250	.062	2.501	3.250	2.250	37.0
VLR-8 ¹ / ₂	95782	8.500	3.000	7.000	1.500	2.500	5.500	3.250	2 1/2-12	3.250	.062	2.501	3.250	2.250	46.0

+ On Part No. VLR-31/2-16, stud extends 7/64" beyond outer end of roller.

Other sizes available on request.

* For stud hex socket size, see page 52.

V-Grooved - Concentric Stud Style Inch Sizes



Part No.	Ball or Tapered Roller Bearings	Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)			Stud Capacity (Lbs)		Ret. Ring Allow. Load (Lbs)
		3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Radial Static Limit	3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Limiting Static Thrust	Bending = .75 S _y	Shear = .75 x .5 x S _y	
								Concent. Load at V	Load at Mtg. Rail	
VLR-1 1/2	BB	235	625	225	145	385	300	470	1970	470
VLR-2	BB	515	1350	600	315	830	440	920	3250	470
VLR-2 1/2	BB	1050	2750	1100	650	1700	595	1310	6230	470
VLR-3 1/2	BB	1980	5180	2270	1215	3185	1540	3990	15700	1340
VLR-3 1/2-16	TRB	5030	12000	7200	1340	3190	3150	3370	43700	N/A
VLR-4 1/2	TRB	6000	14300	20000	2430	5790	12000	13700	43700	N/A
VLR-5 1/2	TRB	6000	14300	20000	2430	5790	12000	13700	43700	N/A
VLR-6 1/2	TRB	15100	35800	56400	5380	12800	33100	37300	43700	N/A
VLR-7 1/2	TRB	15100	35800	56400	5380	12800	33100	72900	175000	N/A
VLR-8 1/2	TRB	15100	35800	56400	5380	12800	33100	72900	175000	N/A

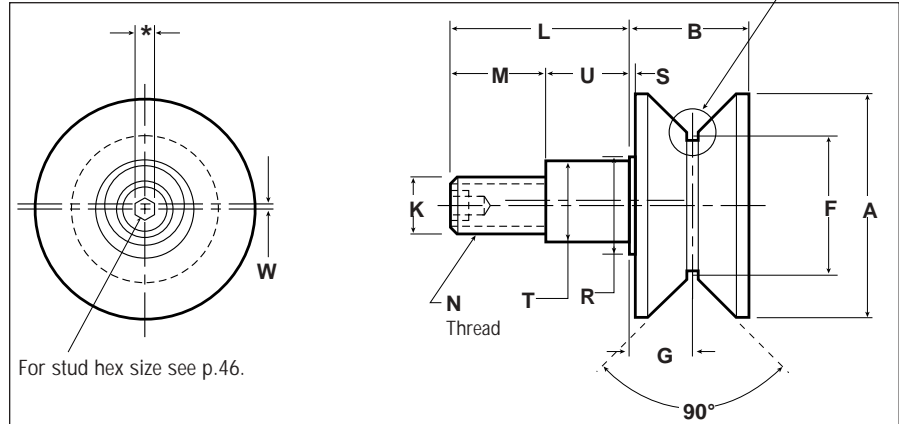
Specifications are for reference only and are subject to change without notice.

** Lock washer and jam nut available at additional cost. For size see "N" dimension.

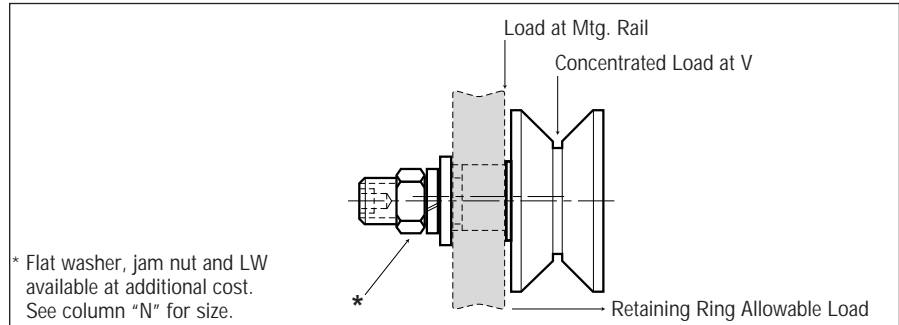
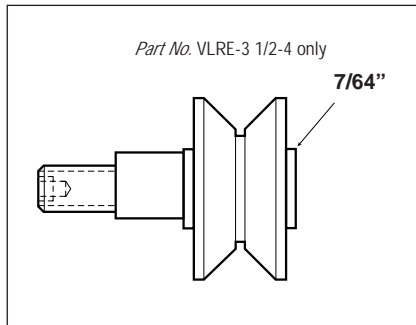
Load Runners®

V-Grooved - Eccentric Stud Style Inch Sizes

See page 45 for details of design recommendations for roller on rail.



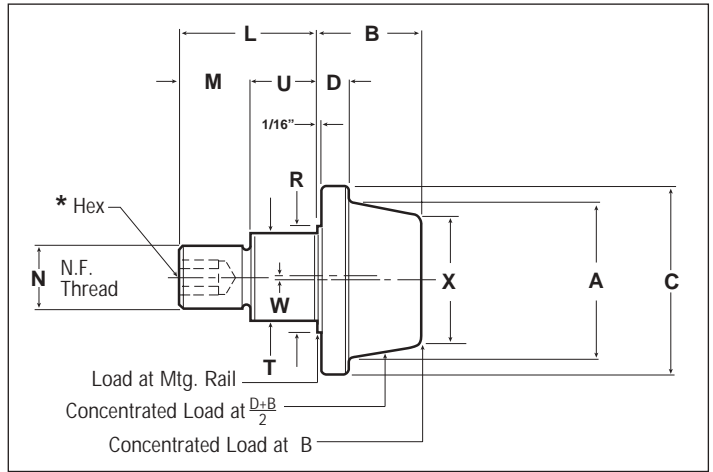
Part No.	EDP No.	A	B	F	G	K	L	M	N	R	S	T	U	W	Rec. Mtg. Hole Size +0.001 -0.000	Recommended Roller Mounting Member Thickness	
		Roller Dia.	Roller Width	Point Dia.	Groove Location	Stud Dia.	Stud Length	Thread Length	Thread	Shldr. Dia.	Shldr. Length	Eccent. Dia.	Eccent. Length	Eccent.		Max.	Min.
VLRE-1 ¹ / ₂	97336	1.500	0.731	1.125	0.391	0.437	1.000	0.500	7/16-20	0.750	.031	0.625	0.500	0.030	0.627	0.625	0.500
VLRE-2	97337	2.000	0.844	1.375	0.422	0.500	1.250	0.625	1/2-20	0.812	.031	0.687	0.625	0.030	0.689	0.750	0.625
VLRE-2 ¹ / ₂	95958	2.500	1.312	1.500	0.687	0.750	1.750	0.895	3/4-16	1.375	.062	1.000	0.855	0.030	1.002	1.000	0.875
VLRE-3 ¹ / ₂	95970	3.500	1.687	2.250	0.875	0.875	2.000	1.020	7/8-14	1.500	.062	1.187	0.980	0.030	1.189	1.125	1.000
VLRE-3 ¹ / ₂ -4	95973	3.500	1.890	2.250	0.875	0.750	2.000	1.020	3/4-16	1.500	.125	1.187	0.980	0.030	1.189	1.125	1.000
VLRE-4 ¹ / ₂	95986	4.500	2.000	3.000	1.000	1.250	2.500	1.270	1 1/4-12	2.310	.062	1.750	1.230	0.060	1.752	1.375	1.250



Part No.	Ball or Tapered Roller Bearings	Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)			Stud Capacity (Lbs)		Ret. Ring Allow. Load (Lbs)	Approx. Weight (Lbs)
		3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Radial Static Limit	3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Limiting Static Thrust	Bending = .75 S _y	Shear = .75 x .5 x S _y		
								Concent. Load at V	Load at Mtg. Rail		
VLRE-1 ¹ / ₂	BB	235	625	225	145	385	300	470	1970	470	0.5
VLRE-2	BB	515	1350	600	315	830	440	920	3250	470	0.6
VLRE-2 ¹ / ₂	BB	1050	2750	1100	650	1700	595	1310	6230	470	1.4
VLRE-3 ¹ / ₂	BB	1980	5180	2270	1215	3185	1540	3990	15700	1340	3.4
VLRE-3 ¹ / ₂ -4	TRB	5030	12000	7200	1490	3540	3150	4160	15700	N/A	3.6
VLRE-4 ¹ / ₂	TRB	6000	14300	20000	3430	5790	12000	16800	43700	N/A	7.3

Specifications are for reference only and are subject to change without notice.

Flanged Crown Style Inch Sizes - Concentric and Eccentric Studs



Part No.	EDP No.	A	B	C	D	K	L	M	N	R	T	U	W	X	Rec. Mtg. Hole Size	Recommended Roller Mounting Member Thickness	
		Roller Dia.	Roller Width	Flange Diameter	Flange Thickness	Stud Dia.	Stud Length	Thread Length	Thread	Shldr. Dia.	Eccent. Dia.	Eccent. Length	Eccent.	Minor Diameter		+0.001 -0.001	Max.
FLRC-2 1/2	97531	2.500	1.688	3.000	0.500	1.000	2.250	1.500	1-14	1.250	N/A	N/A	N/A	2.062	1.001	1.250	0.750
FLRCE-2 1/2	96100	2.500	1.688	3.000	0.500	1.000	2.250	1.145	1-14	1.687	1.375	1.105	0.030	2.062	1.377	1.250	1.125
FLRC-3	97533	3.000	1.812	3.938	0.593	1.000	2.250	1.500	1-14	1.250	N/A	N/A	N/A	2.562	1.001	1.250	0.750
FLRCE-3	97534	3.000	1.812	3.938	0.593	1.000	2.250	1.145	1-14	1.687	1.375	1.105	0.030	2.562	1.377	1.250	1.125
FLRC-4	96057	4.000	2.000	4.938	0.593	1.250	2.750	1.750	1-1/4-12	1.750	N/A	N/A	N/A	3.312	1.251	1.250	1.000
FLRCE-4	97535	4.000	2.000	4.938	0.593	1.250	2.750	1.395	1-1/4-12	2.312	1.812	1.355	0.060	3.312	1.814	1.500	1.375

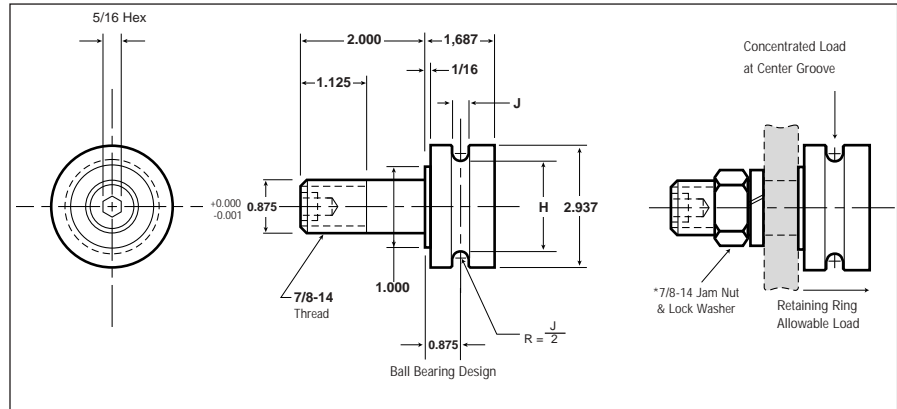
Part No.	Ball or Tapered Roller Bearings	Bearing Capacity, Radial Load (Lbs)		Radial Static Limit	Bearing Capacity, Thrust Load (Lbs)		Limiting Static Thrust	Stud Capacity (Lbs)			Ret. Ring Allow. Load (Lbs)	Approx. Weight (Lbs)
		3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM		3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM		Bending = .75 S _y		Shear = .75 x .5 x S _y		
					Concent. Load at (D+B) / 2	Concent. Load at B		Load at Mtg. Rail				
FLRC-2 1/2	BB	1,980	5,180	2,270	1,215	3,185	1,540	2,935	2,590	15,700	1,340	2.8
FLRCE-2 1/2	BB	1,980	5,180	2,270	1,215	3,185	1,540	2,935	2,590	15,700	1,340	3.0
FLRC-3	TRB	4,570	10,880	7,630	1,690	4,010	4,570	7,050	3,610	29,920	N/A	4.7
FLRCE-3	TRB	4,570	10,880	7,630	1,690	4,010	4,570	7,050	3,610	29,920	N/A	5.1
FLRC-4	TRB	6,000	14,300	20,000	2,430	5,790	12,000	10,500	6,800	43,700	N/A	7.9
FLRCE-4	TRB	6,000	14,300	20,000	2,430	5,790	12,000	10,500	6,800	43,700	N/A	8.5

Specifications are for reference only and are subject to change without notice.

Other sizes available on request.
* For stud hex socket size, see page 52.

Load Runners®

U-Grooved - Concentric Stud Style Inch Sizes



Part No.	EDP No.	H	J	Rec. Mtg. Hole Size	Recommended Roller Mounting Member Thickness		Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)			Stud Capacity (Lbs)	Ret. Ring Allow. Load (Lbs)	Approx. Weight (Lbs)	
		Groove Dia.	Groove Width				3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Radial Static Limit	3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Limiting Static Thrust				Concent. Load at Center of Groove
ULR-2 ¹⁵ / ₁₆ -A	95789	2.312	0.263	0.876	1.250	0.875	1980	5180	2270	1.215	3185	1540	3990	1340	3.0	
ULR-2 ¹⁵ / ₁₆ -B	95790	2.312	0.242	0.876	1.250	0.875	1980	5180	2270	1.215	3185	1540	3990	1340	3.0	
ULR-2 ¹⁵ / ₁₆ -C	95791	2.375	0.224	0.876	1.250	0.875	1980	5180	2270	1.215	3185	1540	3990	1340	3.0	
ULR-2 ¹⁵ / ₁₆ -D	95792	2.375	0.207	0.876	1.250	0.875	1980	5180	2270	1.215	3185	1540	3990	1340	3.0	
ULR-2 ¹⁵ / ₁₆ -E	95793	2.437	0.184	0.876	1.250	0.875	1980	5180	2270	1.215	3185	1540	3990	1340	3.0	
ULR-2 ¹⁵ / ₁₆ -F	95794	2.500	0.169	0.876	1.250	0.875	1980	5180	2270	1.215	3185	1540	3990	1340	3.0	
ULR-2 ¹⁵ / ₁₆ -G	95795	2.500	0.152	0.876	1.250	0.875	1980	5180	2270	1.215	3185	1540	3990	1340	3.0	
ULR-2 ¹⁵ / ₁₆ -H	95796	2.562	0.138	0.876	1.250	0.875	1980	5180	2270	1.215	3185	1540	3990	1340	3.0	
ULR-2 ¹⁵ / ₁₆ -I	95797	2.625	0.124	0.876	1.250	0.875	1980	5180	2270	1.215	3185	1540	3990	1340	3.0	
ULR-2 ¹⁵ / ₁₆ -J	95798	2.625	0.113	0.876	1.250	0.875	1980	5180	2270	1.215	3185	1540	3990	1340	3.0	

Other sizes available on request.

* Lock washer and jam nut available at additional cost.

New Load Runners® For Special Applications

Idler Rollers from Osborn International

Each of the new styles of Load Runners® was originally developed as a "special" to satisfy the requirements of extraordinary loads and severe environments. And each has been proven in thousands of hours of customer applications.



Nylon Tread Load Runners

pg.19

Cost-effective performance in applications requiring a non-metallic outer face.

- **Seals out contamination**
- **Non-sparking**
- **Non-marking**

Typical Applications:

- **Racking & Storage Retrieval Systems**
- **Food Processing (Non-FDA)**
- **Postal Systems**
- **Medical Equipment**



Urethane Tread Load Runners

pg.18

Proven in special applications calling for a wear-resistant, non-metallic rolling surface.

- **Impact resistant**
- **Reduced track wear**
- **Outdoor durability**

Typical Applications:

- **Shipyards**
- **Construction Sites**
- **Marine Equipment**
- **Amusement Parks**



Stainless Steel Load Runners

pg.20

Use where corrosive or other conditions make standard steel rollers unsuitable.

- **All-stainless construction**
- **Corrosion resistant**
- **Rust resistant**

Typical Applications:

- **Chemical Treatment**
- **Tank Building**
- **Food Processing (Non-FDA)**
- **Aerospace**
- **Marine**
- **Waste Treatment**
- **Pharmaceutical**



High-Temp Load Runners

pg.22

For ovens, galvanizing lines, heat treat furnaces and industrial dryers.

- **Resists 360°F (continuous)**
- **Resists 500°F (intermittent)**
- **High-temp seals and lubricant**

Typical Applications:

- **Paper Mills**
- **Steel Mills**
- **Aluminum Mills**
- **Foundries**
- **Food Processing (Non-FDA)**
- **Aerospace**



Load Runners®

Urethane Tread Load Runners Inch Sizes



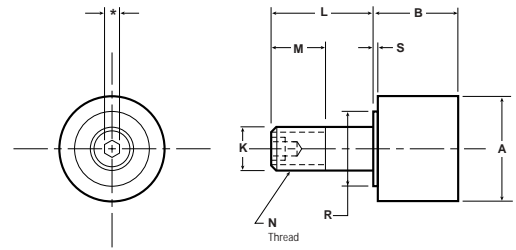
Proven in special applications calling for a wear-resistant, non-metallic rolling surface.

- **Impact resistant**
- **Reduced track wear**
- **Outdoor durability**

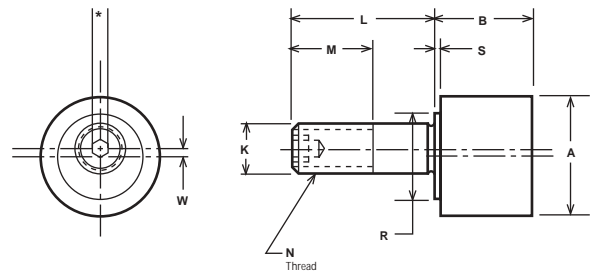
Typical Applications:

- **Shipyards**
- **Construction Sites**
- **Marine Equipment**
- **Amusement Parks**

Plain - Concentric Stud



Plain - Eccentric Stud



Plain - Concentric Stud

Part No.	Item No.	A	B	K	L	M	N	R	S	Rec. Mtg. Hole Size	Mounting Member Thickness		Bearing Capacity, Radial Load (Lbs) 3000 Hrs. L(10) Life @ 100 RPM	Tread Capacity (Lbs)	Tread Speed Limit (RPM)
		Roller Dia.	Roller Width	Stud Dia.	Stud Length	Thread Length	Fine Thread	Shldr. Dia.	Shldr. Length		Max.	Min.			
		+0.0005 -0.0005		+0.000 -0.001											
PLRU 1	97744	1.000	0.781	0.437	1.000	0.500	7/16"-20	0.500	0.031	0.438	0.625	0.500	230	80	300
PLRU 1-1/8	97824	1.125	0.781	0.437	1.000	0.500	7/16"-20	0.500	0.031	0.438	0.625	0.500	230	80	260
PLRU 1-1/4	97745	1.250	0.843	0.500	1.250	0.625	1/2"-20	0.625	0.031	0.501	0.750	0.625	240	110	320
PLRU 1-3/8	97825	1.375	0.843	0.500	1.250	0.625	1/2"-20	0.625	0.031	0.501	0.750	0.625	240	140	310
PLRU 1-1/2	97746	1.500	1.187	0.625	1.500	0.750	5/8"-18	0.750	0.062	0.626	1.000	0.750	520	170	310
PLRU 1-3/4	97826	1.750	1.187	0.750	1.750	0.875	3/4"-16	0.875	0.062	0.751	1.125	0.875	520	250	360
PLRU 2	97747	2.000	1.687	0.875	2.000	1.125	7/8"-14	1.000	0.062	0.876	1.250	0.875	1050	340	360
PLRU 2-1/4	97827	2.250	1.687	0.875	2.000	1.125	7/8"-14	1.000	0.062	0.876	1.250	0.875	1050	430	370
PLRU 2-1/2	97748	2.500	1.687	1.000	2.250	1.500	1"-14	1.250	0.062	1.001	1.250	0.750	1980	410	400
PLRU 2-3/4	97828	2.750	1.687	1.000	2.250	1.500	1"-14	1.250	0.062	1.001	1.250	0.750	1980	420	850

Plain - Eccentric Stud

Part No.	Item No.	A	B	K	L	M	N	R	S	W	Rec. Mtg. Hole Size	Mounting Member Thickness		Bearing Capacity, Radial Load (Lbs) 3000 Hrs. L(10) Life @ 100 RPM	Tread Capacity (Lbs)	Tread Speed Limit (RPM)
		Roller Dia.	Roller Width	Stud Dia.	Stud Length	Thread Length	Thread	Shldr. Dia.	Shldr. Length	Eccent.		Max.	Min.			
		+0.0005 -0.0005								+0.001 -0.005						
PLRUE 1	97881	1.000	0.781	0.437	1.000	0.500	7/16"-20	0.500	0.031	0.030	0.439	0.625	0.500	230	80	300
PLRUE 1-1/8	97882	1.125	0.781	0.437	1.000	0.500	7/16"-20	0.500	0.031	0.030	0.439	0.625	0.500	230	80	260
PLRUE 1-1/4	97883	1.250	0.843	0.500	1.250	0.625	1/2"-20	0.625	0.031	0.030	0.502	0.750	0.625	240	110	320
PLRUE 1-3/8	97884	1.375	0.843	0.500	1.250	0.625	1/2"-20	0.625	0.031	0.030	0.502	0.750	0.625	240	140	310
PLRUE 1-1/2	97885	1.500	1.187	0.625	1.500	0.750	5/8"-18	0.750	0.062	0.030	0.627	1.000	0.750	520	170	310
PLRUE 1-3/4	97886	1.750	1.187	0.750	1.750	0.750	3/4"-16	0.875	0.062	0.030	0.752	1.125	0.875	520	250	360
PLRUE 2	97887	2.000	1.687	0.875	2.000	1.125	7/8"-14	1.000	0.062	0.030	0.877	1.250	0.875	1050	340	360
PLRUE 2-1/4	97888	2.250	1.687	0.875	2.000	1.125	7/8"-14	1.000	0.062	0.030	0.877	1.250	0.875	1050	430	370
PLRUE 2-1/2	97889	2.500	1.687	1.000	2.250	1.500	1"-14	1.250	0.062	0.030	1.002	1.250	0.750	1980	410	400
PLRUE 2-3/4	97890	2.750	1.687	1.000	2.250	1.500	1"-14	1.250	0.062	0.030	1.002	1.250	0.750	1980	420	850

Nylon Tread Load Runners Inch Sizes



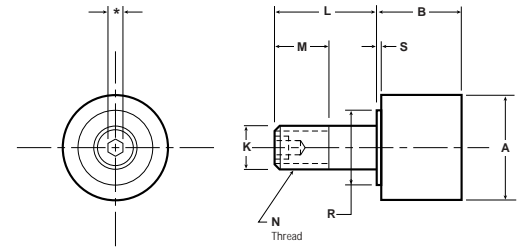
Cost-effective performance in applications requiring a non-metallic outer face.

- Seals out contamination
- Non-sparking
- Non-marking

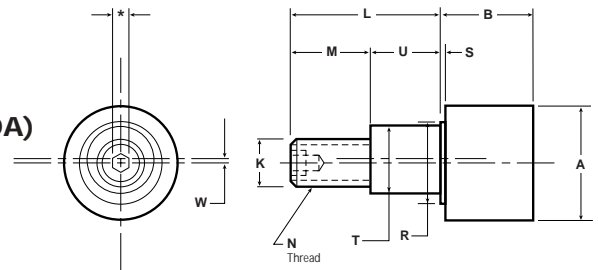
Typical Applications:

- Racking & Storage Retrieval Systems
- Food Processing (Non-FDA)
- Postal Systems
- Medical Equipment

Plain - Concentric Stud



Plain - Eccentric Stud



Plain - Concentric Stud

Part No.	Item No.	A	B	K	L	M	N	R	S	Rec. Mtg. Hole Size	Mounting Member Thickness		Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)	Stud Capacity (Lbs)			Ret. Ring Allow. Load (Lbs)	Tread Capacity (Lbs)
		Roller Dia.	Roller Width	Stud Dia.	Stud Length	Thread Length	Thread	Fine Thread	Shldr. Dia.		Shldr. Length	Max.	Min.	3000 Hrs. L(10) Life @ 100 RPM	500 Hrs. L(10) Life @ 33 1/3 RPM		Static Limit (Radial)	Bending = 0.75 Sy	Shear = 0.75 x 0.5 x Sy		
		+0.000 -0.001		+0.000 -0.001								+0.001 -0.001					Static Limit (Thrust)	Concent. Load at B/2	Concent. Load at B		
PLRN 1	97749	1.000	0.781	0.437	1.000	0.500	7/16"-20	0.500	0.031	0.438	0.625	0.500	240	630	230	140	480	210	1970	280	410
PLRN 1-1/4	97750	1.250	0.844	0.500	1.250	0.625	1/2"-20	0.625	0.031	0.501	0.750	0.625	520	1350	600	370	880	390	3250	470	620
PLRN 1-1/2	97751	1.500	1.187	0.625	1.500	0.750	5/8"-18	0.750	0.062	0.626	1.000	0.750	1050	2760	1100	680	1390	650	5780	470	510
PLRN 2	97752	2.000	1.687	0.875	2.000	1.125	7/8"-14	1.000	0.062	0.876	1.250	0.875	1460	3830	1620	1000	4010	1500	11610	910	1330
PLRN 2-1/2	97753	2.500	1.687	1.000	2.250	1.500	1"-14	1.250	0.062	1.001	1.250	0.750	1980	5190	2270	1400	3728	1770	14600	1340	3090

Plain - Eccentric Stud

Part No.	Item No.	A	B	K	L	M	N	R	S	T	U	W	Rec. Mtg. Hole Size	Mounting Member Thickness		Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)	Stud Capacity (Lbs)			Ret. Ring Allow. Load (Lbs)	Tread Capacity (Lbs)
		Roller Dia.	Roller Width	Stud Dia.	Stud Length	Thread Length	Thread	Shldr. Dia.	Shldr. Length	Eccent. Dia.	Eccent. Length	Eccent.		3000 Hrs. L(10) Life @ 100 RPM	500 Hrs. L(10) Life @ 33 1/3 RPM	Radial Static Limit	Bending = 0.75 Sy	Shear = 0.75 x 0.5 x Sy						
		+0.000 -0.001								+0.001 -0.001	+0.000 -0.010			+0.001 -0.001	Max.	Min.		Limiting Static Thrust		Concent. Load at B/2	Concent. Load at B	Load at Mtg. Rail		
PLRNE 1	97891	1.000	0.781	0.437	1.000	0.500	7/16"-20	0.750	0.031	0.625	0.500	0.030	0.627	0.625	0.500	240	630	230	140	480	210	1970	280	410
PLRNE 1-1/4	97892	1.250	0.844	0.500	1.250	0.625	1/2"-20	0.812	0.031	0.687	0.625	0.030	0.689	0.750	0.625	520	1350	600	370	880	390	3250	470	620
PLRNE 1-1/2	97893	1.500	1.188	0.625	1.500	0.770	5/8"-18	1.125	0.062	0.875	0.730	0.030	0.877	0.875	0.750	1050	2760	1100	680	1390	650	5780	470	510
PLRNE 2	97894	2.000	1.688	0.875	2.000	1.020	7/8"-14	1.500	0.062	1.187	0.980	0.030	1.189	1.125	1.000	1460	3830	1620	1000	4010	1500	11610	910	1330
PLRNE 2-1/2	97895	2.500	1.688	1.000	2.250	1.145	1"-14	1.687	0.062	1.375	1.105	0.030	1.377	1.250	1.125	1980	5190	2270	1400	3728	1770	14600	1340	3090

Load Runners®

Stainless Steel Load Runners Inch Sizes



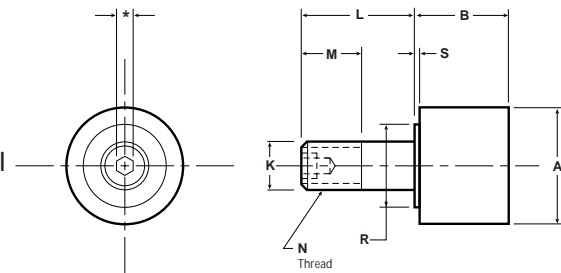
Use where corrosive or other conditions make standard steel rollers unsuitable.

- All-stainless construction
- Corrosion resistant
- Rust resistant

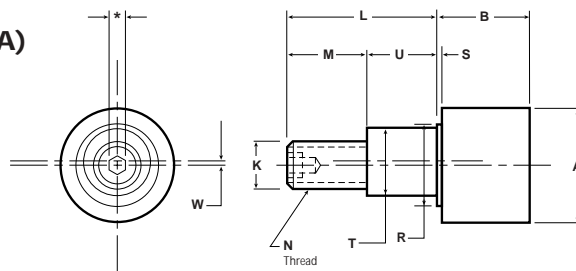
Typical Applications:

- Chemical Treatment
- Tank Building
- Food Processing (Non-FDA)
- Aerospace
- Marine
- Waste Treatment
- Pharmaceutical

Plain - Concentric Stud



Plain - Eccentric Stud



Plain - Concentric Stud

Part No.	Item No.	A	B	K	L	M	N	R	S	Rec. Mtg. Hole Size	Mounting Member Thickness		Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)	Stud Capacity (Lbs)			Ret. Ring Allow. Load (Lbs)
		Roller Dia.	Roller Width	Stud Dia.	Stud Length	Thread Length	Fine Thread	Shldr. Dia.	Shldr. Length		3000 Hrs. L(10) Life @ 100 RPM	500 Hrs. L(10) Life @ 33 1/3 RPM	Static Limit (Radial)	Bending = 0.75 Sy			Shear = 0.75 x 0.5 x Sy			
		+0.000 -0.001		+0.000 -0.001							+0.001 -0.000	Max.	Min.		Static Limit (Thrust)		Concent. Load at B/2	Concent. Load at B	Mtg. Rail	
PLRS 1	97734	1.000	0.781	0.437	1.000	0.500	7/16"-20	0.500	0.031	0.438	0.625	0.500	350	920	390	240	190	80	780	150
PLRS 1-1/4	97735	1.250	0.844	0.500	1.250	0.625	1/2"-20	0.625	0.031	0.501	0.750	0.625	480	1250	520	320	350	160	1290	230
PLRS 1-1/2	97736	1.500	1.187	0.625	1.500	0.750	5/8"-18	0.750	0.062	0.626	1.000	0.750	940	2470	1110	690	550	260	2300	350
PLRS 2	97737	2.000	1.687	0.875	2.000	1.125	7/8"-14	1.000	0.062	0.876	1.250	0.875	1330	3480	1750	1080	1590	600	4620	740
PLRS 2-1/2	97738	2.500	1.687	1.000	2.250	1.500	1"-14	1.250	0.062	1.001	1.250	0.750	1330	3480	1750	1080	1590	600	4620	740

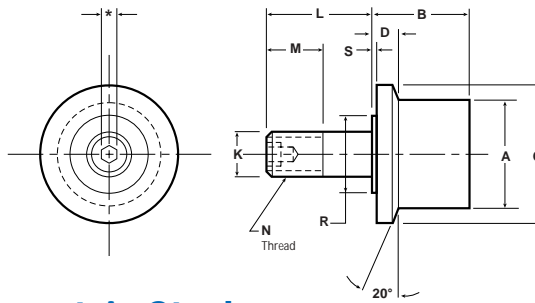
Plain - Eccentric Stud

Part No.	Item No.	A	B	K	L	M	N	R	S	T	U	W	Rec. Mtg. Hole Size	Mounting Member Thickness		Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)	Stud Capacity (Lbs)			Ret. Ring Allow. Load (Lbs)
		Roller Dia.	Roller Width	Stud Dia.	Stud Length	Thread Length	Thread	Shldr. Dia.	Shldr. Length	Eccent. Dia.	Eccent. Length	Eccent.		3000 Hrs. L(10) Life @ 100 RPM	500 Hrs. L(10) Life @ 33 1/3 RPM	Radial Static Limit	Bending = 0.75 Sy			Shear = 0.75 x 0.5 x Sy			
		+0.000 -0.001								+0.001 -0.001	+0.000 -0.010			+0.001 -0.000	Max.	Min.		Limiting Static Thrust		Concent. Load at B/2	Concent. Load at B	Mtg. Rail	
PLRSE 1	97896	1.000	0.781	0.437	1.000	0.500	7/16"-20	0.750	0.031	0.625	0.500	0.030	0.627	0.625	0.500	350	920	390	240	190	80	780	150
PLRSE 1-1/4	97897	1.250	0.844	0.500	1.250	0.625	1/2"-20	0.812	0.031	0.687	0.625	0.030	0.689	0.750	0.625	480	1250	520	320	350	160	1290	230
PLRSE 1-1/2	97898	1.500	1.188	0.625	1.500	0.770	5/8"-18	1.125	0.062	0.875	0.730	0.030	0.877	0.875	0.750	940	2470	1110	690	550	260	2300	350
PLRSE 2	97899	2.000	1.688	0.875	2.000	1.020	7/8"-14	1.500	0.062	1.187	0.980	0.030	1.189	1.125	1.000	1330	3480	1750	1080	1590	600	4620	740
PLRSE 2-1/2	97900	2.500	1.688	1.000	2.250	1.145	1"-14	1.687	0.062	1.375	1.105	0.030	1.377	1.250	1.125	1330	3480	1750	1080	1590	600	4620	740

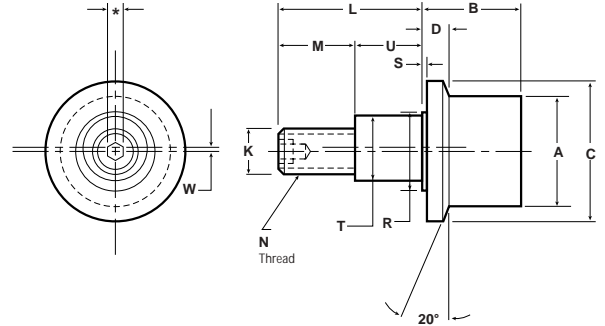
Stainless Steel Load Runners

Inch Sizes

Flanged - Concentric Stud



Flanged - Eccentric Stud



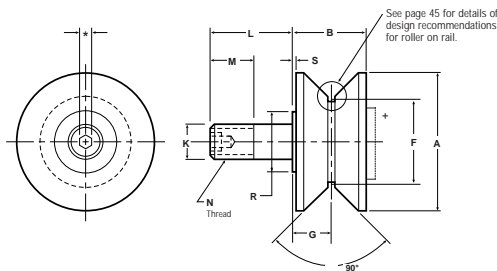
Flanged - Concentric Stud

Part No.	Item No.	A	B	C	D	K	L	M	N	R	S	Rec. Mtg. Hole Size	Mounting Member Thickness		Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)	Stud Capacity (Lbs)		Ret. Ring Allow. Load (Lbs)	
		Roller Dia.	Roller Width	Flange Dia.	Flange Thickness	Stud Dia.	Stud Length	Thread Length	Thread	Fine Thread	Shldr. Dia.		Shldr. Length	3000 Hrs. L(10) Life @ 100 RPM	500 Hrs. L(10) Life @ 33 1/3 RPM	Radial Static Limit	Limiting Static Thrust		Bending = 0.75 Sy	Shear = 0.75 x 0.5 x Sy		
FLRS 1	97739	1.000	0.781	1.375	0.219	0.437	1.000	0.500	7/16"-20	0.500	0.031	0.438	0.625	0.500	350	920	390	240	150	80	780	150
FLRS 1-1/4	97740	1.250	0.844	1.563	0.219	0.500	1.250	0.625	1/2"-20	0.625	0.031	0.501	0.750	0.625	480	1250	520	320	280	160	1290	230
FLRS 1-1/2	97741	1.500	1.188	2.188	0.343	0.625	1.500	0.750	5/8"-18	0.750	0.062	0.626	1.000	0.750	940	2470	1110	690	440	260	2300	350
FLRS 2	97742	2.000	1.688	2.688	0.593	0.875	2.000	1.125	7/8"-14	1.000	0.062	0.876	1.250	0.875	1330	3480	1750	1080	1050	600	4620	740
FLRS 2-1/2	97743	2.500	1.688	3.188	0.593	1.000	2.250	1.500	1"-14	1.250	0.062	1.001	1.250	0.750	1330	3480	1750	1080	1050	600	4620	740

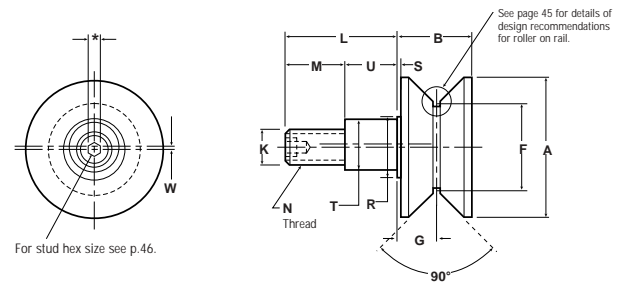
Flanged - Eccentric Stud

Part No.	Item No.	A	B	C	D	K	L	M	N	R	S	T	U	W	Rec. Mtg. Hole Size	Mounting Member Thickness		Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)	Stud Capacity (Lbs)		Ret. Ring Allow. Load (Lbs)	
		Roller Dia.	Roller Width	Flange Dia.	Flange Thickness	Stud Dia.	Stud Length	Thread Length	Thread	Shldr. Dia.	Shldr. Length	Eccent. Dia.	Eccent. Length	Eccent.		3000 Hrs. L(10) Life @ 100 RPM	500 Hrs. L(10) Life @ 33 1/3 RPM	Radial Static Limit	Limiting Static Thrust	Bending = 0.75 Sy		Shear = 0.75 x 0.5 x Sy			
FLRSE 1	97965	1.000	0.781	1.375	0.219	0.437	1.000	0.500	7/16"-20	0.750	0.031	0.625	0.500	0.030	0.627	0.625	0.500	350	920	390	240	150	80	780	150
FLRSE 1-1/4	97966	1.250	0.844	1.563	0.219	0.500	1.250	0.625	1/2"-20	0.812	0.031	0.687	0.625	0.030	0.689	0.750	0.625	480	1250	520	320	280	160	1290	230
FLRSE 1-1/2	97967	1.500	1.188	2.188	0.343	0.625	1.500	0.770	5/8"-18	1.125	0.062	0.875	0.730	0.030	0.877	0.875	0.750	940	2470	1110	690	440	260	2300	350
FLRSE 2	97968	2.000	1.688	2.688	0.593	0.875	2.000	1.020	7/8"-14	1.500	0.062	1.187	0.980	0.030	1.189	1.125	1.000	1330	3480	1750	1080	1050	600	4620	740
FLRSE 2-1/2	97969	2.500	1.688	3.188	0.593	1.000	2.250	1.145	1"-14	1.687	0.062	1.375	1.105	0.030	1.377	1.250	1.125	1330	3480	1750	1080	1050	600	4620	740

V-Grooved - Concentric Stud



V-Grooved - Eccentric Stud



V-Groove - Concentric Stud

Part No.	Item No.	A	B	F	G	K	L	M	N	R	S	Rec. Mtg. Hole Size	Mounting Member Thickness		Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)	Stud Capacity (Lbs)		Ret. Ring Allow. Load (Lbs)	
		Roller Dia.	Roller Width	Point Dia.	Groove Location	Stud Dia.	Stud Length	Thread Length	Thread	Fine Thread	Shldr. Dia.		Shldr. Length	3000 Hrs. L(10) Life @ 100 RPM	500 Hrs. L(10) Life @ 33 1/3 RPM	Static Limit (Radial)	Limiting Static Thrust		Bending = 0.75 Sy	Shear = 0.75 x 0.5 x Sy		
VLRS 1-1/2	97994	1.500	0.781	1.125	0.391	0.437	1.000	0.500	7/16"-20	0.500	0.031	0.438	0.627	0.625	350	920	390	240	150	80	780	150
VLRS 2	97995	2.000	0.844	1.375	0.422	0.500	1.250	0.625	1/2"-20	0.625	0.031	0.500	0.875	0.750	480	1250	520	320	280	160	1290	230
VLRS 2-1/2	97996	2.500	1.312	1.5	0.687	0.750	1.750	0.875	3/4"-16	1.000	0.062	0.751	1.250	1.000	940	2470	1110	690	440	260	2260	350

V-Groove - Eccentric Stud

Part No.	Item No.	A	B	F	G	K	L	M	N	R	S	T	U	W	Rec. Mtg. Hole Size	Mounting Member Thickness		Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)	Stud Capacity (Lbs)		Ret. Ring Allow. Load (Lbs)	
		Roller Dia.	Roller Width	Point Dia.	Groove Location	Stud Dia.	Stud Length	Thread Length	Thread	Fine Thread	Shldr. Dia.	Shldr. Length	Eccent. Dia.	Eccent. Length		Eccent.	3000 Hrs. L(10) Life @ 100 RPM	500 Hrs. L(10) Life @ 33 1/3 RPM	Static Limit (Radial)	Limiting Static Thrust		Bending = 0.75 Sy	Shear = 0.75 x 0.5 x Sy		
VLRSE 1-1/2	97997	1.500	0.781	1.125	0.391	0.437	1.000	0.500	7/16"-20	0.500	0.031	0.625	0.500	0.030	0.627	0.625	0.500	350	920	390	240	150	80	780	150
VLRSE 2	97998	2.000	0.844	1.375	0.422	0.500	1.250	0.625	1/2"-20	0.625	0.031	0.687	0.625	0.030	0.689	0.750	0.625	480	1250	520	320	280	160	1290	230
VLRSE 2-1/2	97999	2.500	1.312	1.5	0.687	0.750	1.750	0.875	3/4"-16	1.000	0.062	1.000	0.855	0.030	1.002	1.000	0.875	940	2470	1110	690	440	260	2260	350

Load Runners®

High-Temp Load Runners Inch Sizes



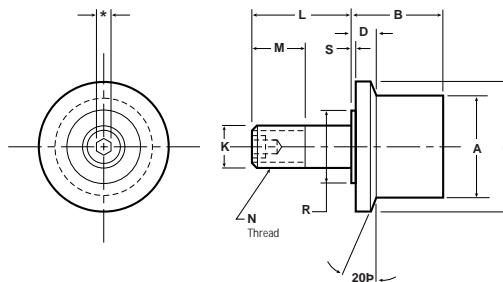
For ovens, galvanizing lines, heat treat furnaces and industrial dryers.

- Resists 360°F (continuous)
- High-temp seals and lubricant

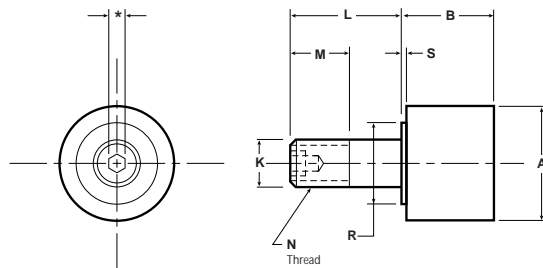
Typical Applications:

- Paper Mills
- Steel Mills
- Aluminum Mills
- Foundries
- Food Processing (Non-FDA)
- Aerospace

Plain - Concentric Stud



Flanged - Concentric Stud



Plain - Concentric Stud

Part No.	Item No.	A		K	L	M	N	R	S	Rec. Mtg. Hole Size	Mounting Member Thickness		Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)		Stud Capacity (Lbs)			Ret. Ring Allow. Load (Lbs)
		Roller Dia.	Roller Width								Stud Dia.	Stud Length	Thread	Fine Thread	Shldr. Dia.	Shldr. Length	3000 Hrs. L(10) Life @ 100 RPM	500 Hrs. L(10) Life @ 33 1/3 RPM	Radial Static Limit	Limiting Static Thrust	
		+0.000 -0.001		+0.000 -0.001								+0.001 -0.000	Max.	Min.							
PLRH 1	97724	1.000	0.781	0.437	1.000	0.500	7/16"-20	0.500	0.031	0.438	0.625	0.500	350	920	390	240	480	210	1970	380	
PLRH 1-1/4	97725	1.250	0.844	0.500	1.250	0.625	1/2"-20	0.625	0.031	0.501	0.750	0.625	480	1250	520	320	880	390	3250	470	
PLRH 1-1/2	97726	1.500	1.187	0.625	1.500	0.750	5/8"-18	0.750	0.062	0.626	1.000	0.750	940	2470	1110	690	1390	650	5780	470	
PLRH 2	97727	2.000	1.687	0.875	2.000	1.125	7/8"-14	1.000	0.062	0.876	1.250	0.875	1330	3480	1750	1080	4010	1500	11610	910	
PLRH 2-1/2	97728	2.500	1.687	1.000	2.250	1.500	1"-14	1.250	0.062	1.001	1.250	0.750	1330	3480	1750	1080	4010	1500	11610	910	

Flanged - Concentric Stud

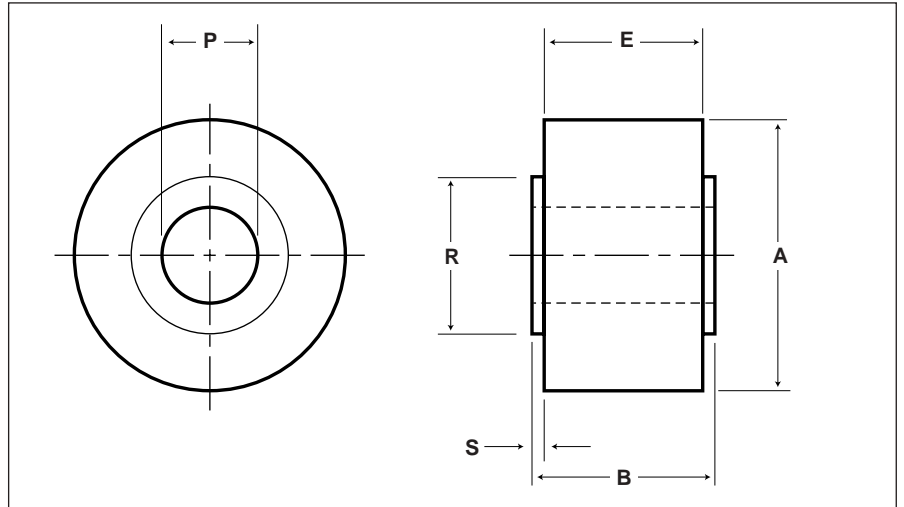
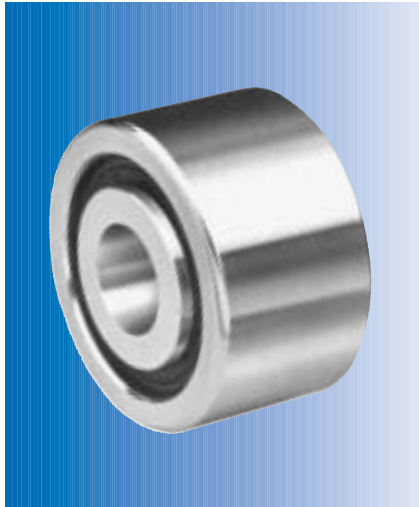
Part No.	Item No.	A		C	D	K	L	M	N	R	S	Rec. Mtg. Hole Size	Mounting Member Thickness		Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)		Stud Capacity (Lbs)			Ret. Ring Allow. Load (Lbs)
		Roller Dia.	Roller Width										Flange Dia.	Flange Thickness	Stud Dia.	Stud Length	Thread	Fine Thread	Shldr. Dia.	Shldr. Length	3000 Hrs. L(10) Life @ 100 RPM	500 Hrs. L(10) Life @ 33 1/3 RPM	
		+0.000 -0.001				+0.000 -0.001								+0.001 -0.000	Max.	Min.							
FLRH 1	97729	1.000	0.781	1.375	0.219	0.437	1.000	0.500	7/16"-20	0.500	0.031	0.438	0.625	0.500	350	920	390	240	370	210	1970	380	
FLRH 1-1/4	97730	1.250	0.844	1.563	0.219	0.500	1.250	0.625	1/2"-20	0.625	0.031	0.501	0.750	0.625	480	1250	520	320	710	390	3250	470	
FLRH 1-1/2	97731	1.500	1.188	2.188	0.343	0.625	1.500	0.750	5/8"-18	0.750	0.062	0.626	1.000	0.750	940	2470	1110	690	1100	810	5780	470	
FLRH 2	97732	2.000	1.688	2.688	0.593	0.875	2.000	1.125	7/8"-14	1.000	0.062	0.876	1.250	0.875	1330	3480	1750	1080	2640	1500	11610	910	
FLRH 2-1/2	97733	2.500	1.688	3.188	0.593	1.000	2.250	1.500	1"-14	1.250	0.062	1.001	1.250	0.750	1330	3480	1750	1080	2650	1500	11610	910	

**Osborn Yoke Style Inch
and Metric Load Runners[®]
for greater load capacity.**



Load Runners®

Plain - Yoke Style Inch Sizes

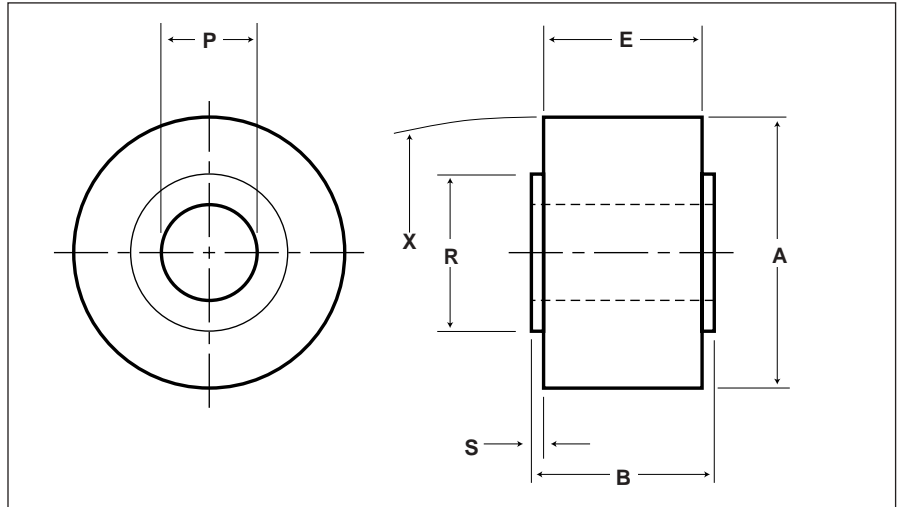
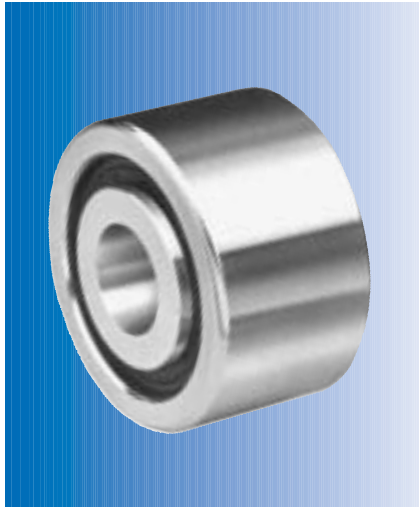


Part No.	EDP No.	A	B	E	P		R	S	Ball or Tapered Roller Bearings	Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)			Approx. Weight (Lbs)
		Roller Dia.	Roller Width	Tread Width	Bore	Shldr. Dia.	Shldr. Length	3000 Hrs. L ₁₀ Life @ 100 RPM		500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Radial Static Limit	3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Limiting Static Thrust		
															Nom.	
PLRY-2 1/2	96117	2.500	1.562	1.500	0.750		1.250	0.031	TRB	4570	10880	7630	1690	4010	4570	2.0
PLRY-3	96118	3.000	1.812	1.750	1.000		1.750	0.031	TRB	6000	14300	20000	2430	5790	12000	2.6
PLRY-3 1/4	96133	3.250	1.812	1.750	1.000	+0.005	1.750	0.031	TRB	6000	14300	20000	2430	5790	12000	3.4
PLRY-3 1/2	96138	3.500	2.062	2.000	1.125	-0.000	2.000	0.031	TRB	7390	17600	27200	2420	5750	13100	4.2
PLRY-4	96144	4.000	2.312	2.250	1.250		2.250	0.031	TRB	7390	17600	27200	2420	5750	13100	6.6
PLRY-5	96154	5.000	2.875	2.750	1.750		3.500	0.062	TRB	13990	33290	51900	5530	13160	32500	11.3
PLRY-6	96165	6.000	3.375	3.250	2.250		3.500	0.062	TRB	15100	35800	56400	5950	14200	33100	19.4
PLRY-7	96177	7.000	3.875	3.750	2.750		4.250	0.062	TRB	17800	42400	79800	7290	17400	48400	29.3
PLRY-8	96184	8.000	4.500	4.250	3.255	+0.001	4.750	0.125	TRB	35200	83700	159800	16400	39000	110000	43.9
PLRY-9	96194	9.000	5.000	4.750	3.755	-0.000	5.500	0.125	TRB	56600	135000	250000	22500	53600	147000	51.6
PLRY-10	96197	10.000	5.500	5.250	4.255		6.500	0.125	TRB	58200	138000	276000	27900	66400	196000	80.0

Other sizes available on request.

For special features and custom design considerations, see page 53.
Heavy-duty shafts see pages 28 & 29.

Crowned - Yoke Style Inch Sizes



Part No.	EDP No.	A	B	E	P		R	S	X	Ball or Tapered Roller Bearings	Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)			Approx. Weight (Lbs)
		Roller Dia.	Roller Width	Tread Width	Bore	Shldr. Dia.	Shldr. Length	Crown Radius	3000 Hrs. L ₁₀ Life @ 100 RPM		500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Radial Static Limit	3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Limiting Static Thrust		
																Nom.	
CLRY-3	96307	3.000	1.812	1.750	1.000		1.750	0.031	30	TRB	6000	14300	20000	2430	5790	12000	2.6
CLRY-3 1/4	97204	3.250	1.812	1.750	1.000	+0.0005	1.750	0.031	30	TRB	6000	14300	20000	2430	5790	12000	3.4
CLRY-3 1/2	97568	3.500	2.062	2.000	1.125	-0.0000	2.000	0.031	30	TRB	7390	17600	27200	2420	5750	13100	4.2
CLRY-4	96312	4.000	2.312	2.250	1.250		2.250	0.031	30	TRB	7390	17600	27200	2420	5750	13100	6.6
CLRY-5	97569	5.000	2.875	2.750	1.750		3.500	0.062	48	TRB	13990	33290	51900	5530	13160	32500	11.3
CLRY-6	96320	6.000	3.375	3.250	2.250		3.500	0.062	56	TRB	15100	35800	56400	5950	14200	33100	19.4
CLRY-7	97570	7.000	3.875	3.750	2.750		4.250	0.062	60	TRB	17800	42400	79800	7290	17400	48400	29.3
CLRY-8	96327	8.000	4.500	4.250	3.255	+0.001	4.750	0.125	40	TRB	35200	83700	159800	16400	39000	110000	43.9
CLRY-9	97571	9.000	5.000	4.750	3.755	-0.000	5.500	0.125	40	TRB	56600	135000	250000	22500	53600	147000	51.6
CLRY-10	97572	10.000	5.500	5.250	4.255		6.500	0.125	40	TRB	58200	138000	276000	27900	66400	196000	80.0

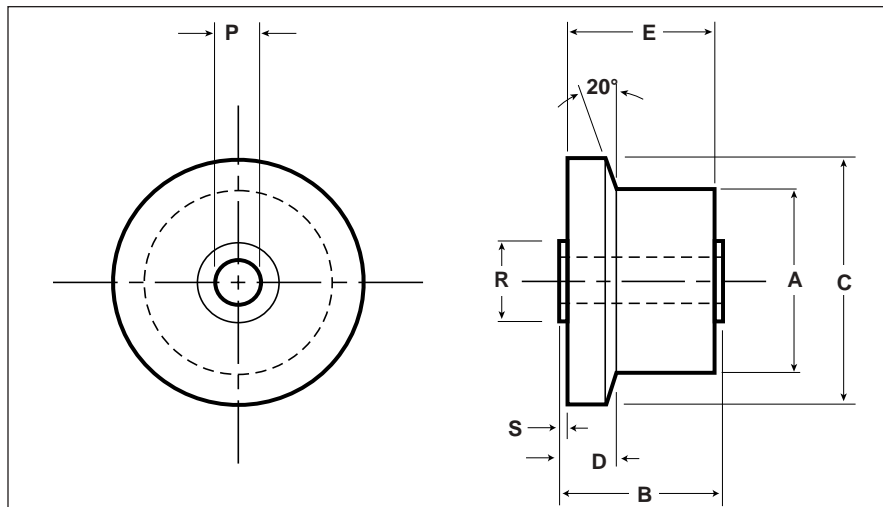
Other sizes available on request.

For special features and custom design considerations, see page 53.

Heavy-duty shafts see page 28 & 29.

Load Runners®

Flanged - Yoke Style Inch Sizes



Part No.	EDP No.	Roller Dia.	Tread Width	Flange Dia	Flange Thickness	Roller Width	Bore		Shldr. Dia.	Shldr. Length	Ball or Tapered Roller Bearings	Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)			Approx. Weight (Lbs)
							Nom.	Tol.				3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Radial Static Limit	3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Limiting Static Thrust	
FLRY-2 1/2	96652	2.500	1.562	3.187	0.500	1.500	0.750		1.250	0.031	TRB	4570	10880	7630	1690	4010	4570	2.4
FLRY-3	96220	3.000	1.812	3.937	0.590	1.750	1.000		1.750	0.031	TRB	6000	14300	20000	2430	5790	12000	3.5
FLRY-3 1/4	96225	3.250	1.812	4.187	0.590	1.750	1.000	+0.0005	1.750	0.031	TRB	6000	14300	20000	2430	5790	12000	4.3
FLRY-3 1/2	96227	3.500	2.062	4.437	0.590	2.000	1.125	-0.0000	2.000	0.031	TRB	7390	17600	27200	2420	5750	13100	5.2
FLRY-4	96229	4.000	2.312	4.937	0.590	2.250	1.250		2.250	0.031	TRB	7390	17600	27200	2420	5750	13100	7.7
FLRY-5	96231	5.000	2.875	5.937	0.720	2.750	1.750		3.500	0.062	TRB	13990	33290	51900	5530	13160	32500	12.9
FLRY-6	96237	6.000	3.375	6.937	0.720	3.250	2.250		3.500	0.062	TRB	15100	35800	56400	5950	14200	33100	21.4
FLRY-7	96241	7.000	3.875	7.937	0.720	3.750	2.750		4.250	0.062	TRB	17800	42400	79800	7290	17400	48400	31.7
FLRY-8	96243	8.000	4.500	8.937	0.720	4.250	3.255	+0.001	4.750	0.125	TRB	35200	83700	159800	16400	39000	110000	46.6
FLRY-9	96246	9.000	5.000	9.937	0.720	4.750	3.755	-0.001	5.500	0.125	TRB	56600	135000	250000	22500	53600	147000	54.6
FLRY-10	96250	10.000	5.500	10.937	0.720	5.250	4.255		6.500	0.125	TRB	58200	138000	276000	27900	66400	196000	83.4

Specifications are for reference only and are subject to change without notice.

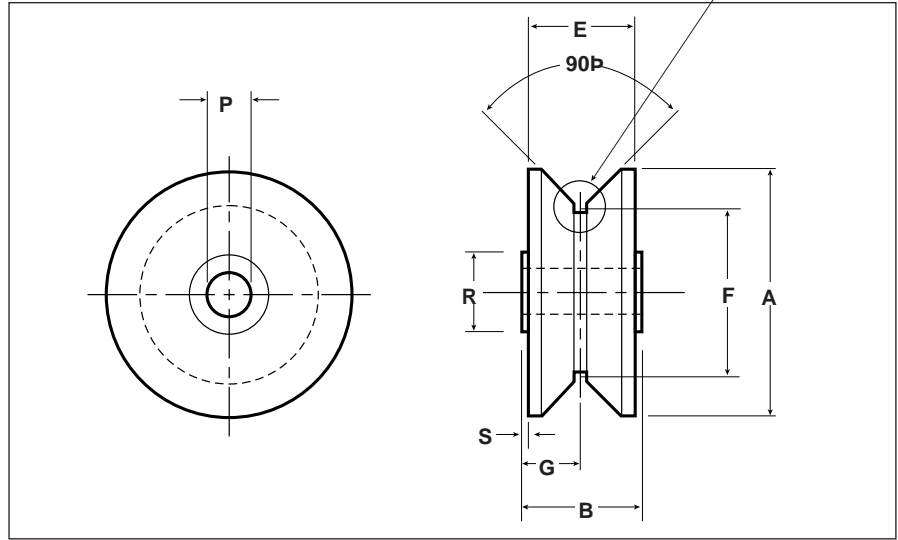
Other sizes available on request.

For special features and custom design considerations, see page 53.

Heavy-duty shafts see pages 28 & 29.

V-Grooved - Yoke Style Inch Sizes

See page 45 for details of design recommendations for roller on rail.



Part No.	EDP No.	A	B	E	F	G	P		R	S	Ball or Tapered Roller Bearings	Bearing Capacity, Radial Load (Lbs)			Bearing Capacity, Thrust Load (Lbs)			Approx. Weight (Lbs)
		Roller Dia.	Roller Width	Tread Width	Point Dia	Groove Location	Bore	Shldr. Dia.	Shldr. Length	3000 Hrs. L ₁₀ Life @ 100 RPM		500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Radial Static Limit	3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Limiting Static Thrust		
																	Nom.	
VLRY-3 3/4	96655	3.750	1.562	1.500	2.500	0.781	0.750		1.250	0.031	TRB	4570	10880	7630	1690	4010	4570	3.1
VLRY-4 1/2	96266	4.500	1.812	1.750	3.000	0.906	1.000		1.750	0.031	TRB	6000	14300	20000	2430	5790	12000	5.0
VLRY-5	96279	5.000	2.062	2.000	3.500	1.030	1.125		2.000	0.031	TRB	7390	17600	27200	2430	5790	13100	7.6
VLRY-5 1/2	96283	5.500	2.312	2.250	4.000	1.156	1.250	+0.0005 -0.0000	2.250	0.031	TRB	7890	17600	27200	2420	5750	13100	11.2
VLRY-6 1/2	96287	6.500	2.875	2.750	5.000	1.437	1.750		3.500	0.062	TRB	15100	35800	44600	5950	14200	22300	18.8
VLRY-7 1/2	96291	7.500	3.375	3.250	6.000	1.687	2.250		3.500	0.062	TRB	15100	35800	52600	5950	14200	26300	30.5
VLRY-8 1/2	96292	8.500	3.875	3.750	7.000	1.937	2.750		4.250	0.062	TRB	17800	42400	60300	7290	17400	30100	44.7
VLRY-9 1/2	96297	9.500	4.500	4.250	8.000	2.250	3.255		4.750	0.125	TRB	35200	*	68000	16400	*	34000	64.2
VLRY-10 1/2	96300	10.500	5.000	4.750	9.000	2.500	3.755		5.500	0.125	TRB	56600	*	75700	22500	*	37800	77.5
VLRY-11 1/2	96302	11.500	5.500	5.250	10.000	2.750	4.255	+0.001 -0.000	6.500	0.125	TRB	58200	*	83600	27900	*	41800	112.2

Specifications are for reference only and are subject to change without notice.

* Exceeds static capacity

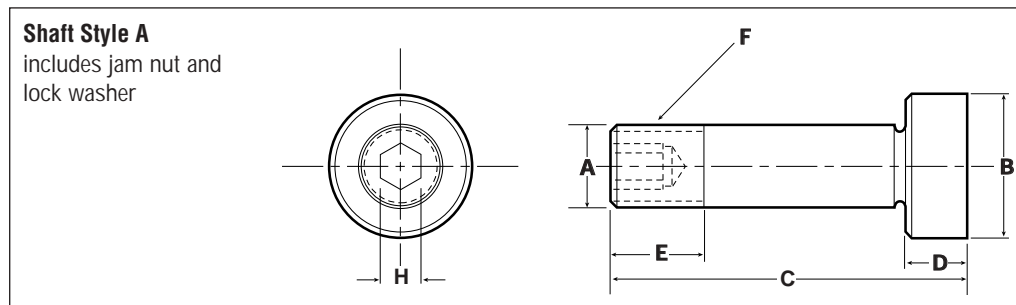
Other sizes available on request.

For special features and custom design considerations, see **page 53**.

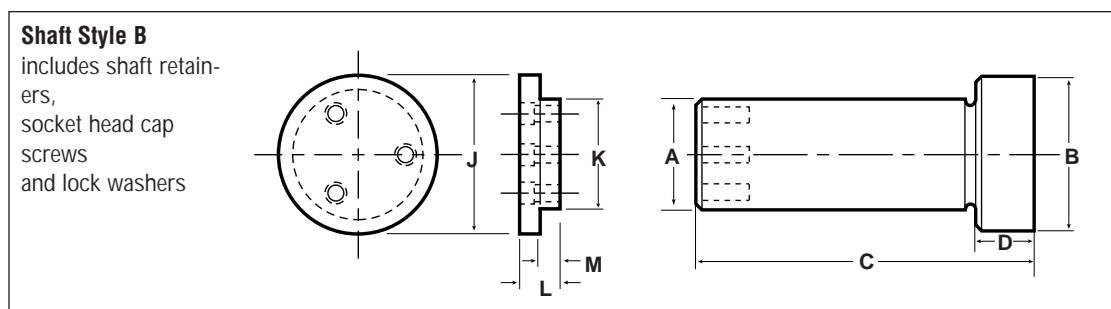
Heavy-duty shafts see **page 28 & 29**.

Load Runners®

Heavy-Duty Shafts for Yoke Style Idler-Rollers Inch Sizes



Shaft Part No.	EDP No.	Roller Part No.			A	B	C	D	E	F	H	Approx. Weight (Lbs)
		PLRY	FLRY	VLRY	Shaft Dia.	Head Dia.						
					-0.0002 -0.0012	-0.0002 -0.0012						
SHA-750	95006	2 1/2	2 1/2	3 3/4	0.750	1.250	3.687	0.625	1.000	3/4"-16	0.312	1.2
SHA-1000	95008	3 & 3/4	3 & 3/4	4 1/2	1.000	1.750	4.312	0.750	1.125	1"-14	0.500	1.5
SHA-1125	95020	3 1/2	3 1/2	5	1.125	2.000	4.875	0.875	1.187	1 1/8"-12	0.500	2.1
SHA-1250	95023	4	4	5 1/2	1.250	2.250	5.250	0.875	1.312	1 1/4"-12	0.500	2.7
SHA-1750	95028	5	5	6 1/2	1.750	3.500	7.000	1.250	1.875	1 3/4"-12	0.500	8.3
SHA-2250	95036	6	6	7 1/2	2.250	3.500	7.750	1.250	2.125	2 1/4"-12	0.625	12.6
SHA-2750	95042	7	7	8 1/2	2.750	4.250	9.000	1.375	2.625	2 3/4"-12	0.625	22.3



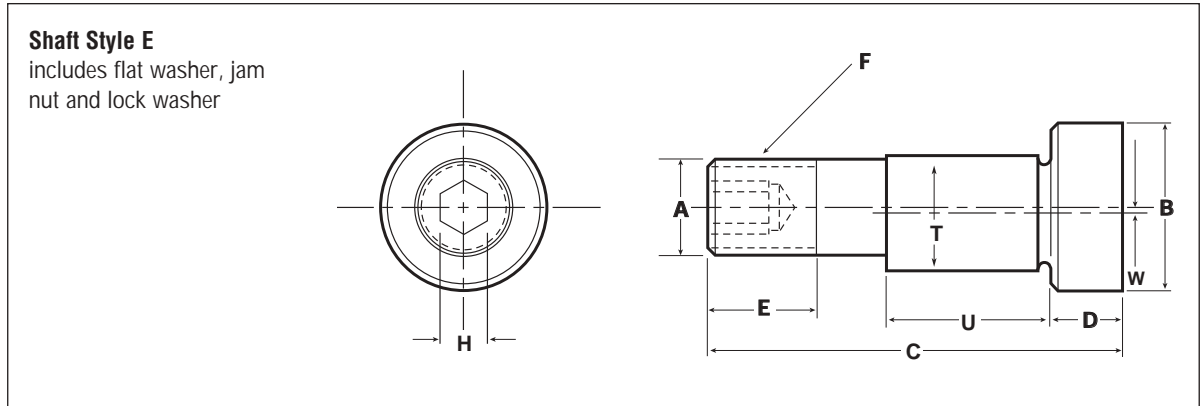
Shaft Part No.	EDP No.	Roller Part No.			A	B	C	D	J	K	L	M	Approx. Weight (Lbs)
		PLRY	FLRY	VLRY	Shaft Dia.	Head Dia.							
					-0.0002 -0.0012	-0.0002 -0.0012							
SHB-3250	95045	8	8	9 1/2	3.254	4.750	7.625	1.875	4.000	3.250	1.000	0.500	25.3
SHB-3750	95049	9	9	10 1/2	3.754	5.500	8.625	2.125	4.500	3.750	1.125	0.500	38.3
SHB-4250	95050	10	10	11 1/2	4.254	6.500	9.375	2.250	5.000	4.250	1.125	0.500	54.6

Specifications are for reference only and are subject to change without notice.

Other sizes available on request.

For special features and custom design considerations, see page 53.

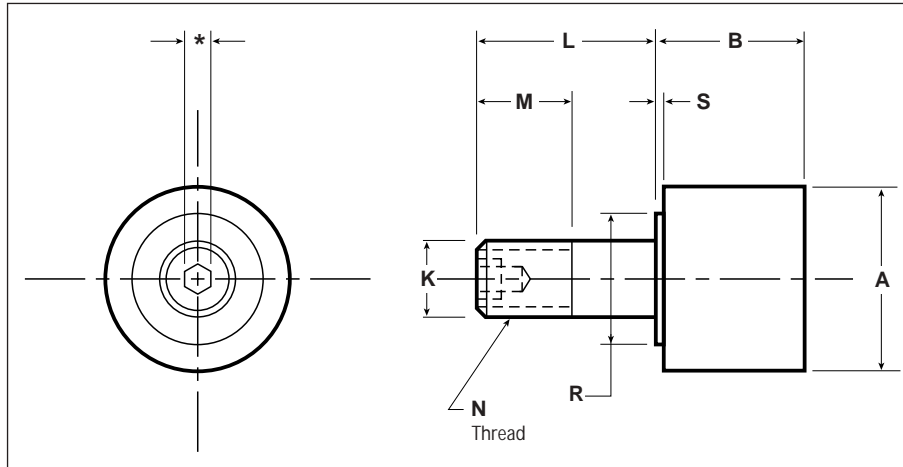
Heavy-Duty Eccentric Shafts for Yoke Style Idler-Rollers Inch Sizes



Shaft Part No.	EDP No.	Roller Part No.			A	B	C	D	E	F	H	T	U	W
		PLRY	FLRY	VLRY	Shaft Dia.	Head Dia.	Shaft Length	Head Length	Thread Length	Thread	Hex Size	Eccentric Diameter	Eccentric Length	Eccentricity
					-0.0002 -0.0012	-0.0002 -0.0012						+0.001 -0.001	+0.000 -0.010	
SHE-750	97507	2 1/2	2 1/2	3 3/4	0.625	1.250	3.687	0.625	0.750	5/8-18	0.312	0.750	1.375	0.030
SHE-1000	95056	3 & 3/4	3 & 3/4	4 1/2	0.875	1.750	4.312	0.750	0.750	7/8-14	0.500	1.000	1.635	0.030
SHE-1125	95058	3 1/2	3 1/2	5	1.000	2.000	4.875	0.875	0.875	1-14	0.500	1.125	1.875	0.030
SHE-1250	95059	4	4	5 1/2	1.000	2.250	5.250	0.875	0.875	1-14	0.500	1.250	2.135	0.060
SHE-1750	96848	5	5	6 1/2	1.500	3.500	7.000	1.250	1.250	1-1/2-12	0.500	1.750	2.713	0.060
SHE-2250	97508	6	6	7 1/2	2.000	3.500	7.750	1.250	1.250	2-12	0.625	2.250	3.156	0.060
SHE-2750	97509	7	7	8 1/2	2.500	4.250	9.000	1.375	2.336	2-1/2-12	0.625	2.750	4.437	0.060

Load Runners®

Plain - Concentric Stud Style Metric Sizes (mm)

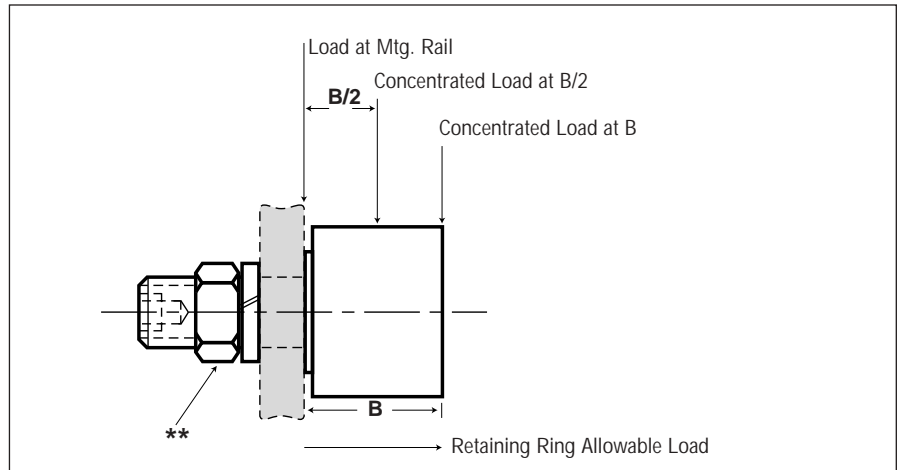
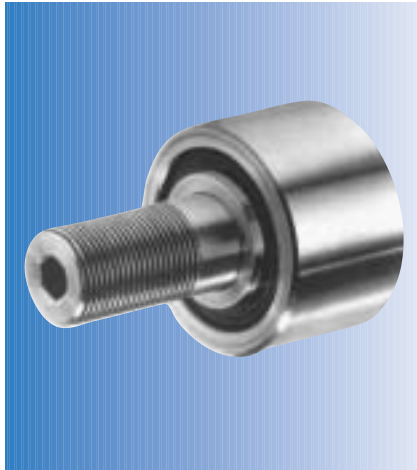


Part No.	EDP No.	A	B	K	L	M	N	R	S	Rec. Mtg. Hole Size	Approx. Weight (Kg)
		Roller Dia. +0.00 -0.02	Roller Width	Stud Dia. +0.00 -0.02	Stud Length	Thread Length	Thread	Shldr. Dia.	Shldr. Length		
HPC-26	97374	26	20	10	23	13	M10X1	13.1	0.8	10.02	0.09
HPC-30	97375	30	20	12	25	14	M12X1.5	15.9	0.8	12.02	0.11
HPC-32	97376	32	22	12	25	14	M12X1.5	15.9	0.8	12.02	0.14
HPC-35	97377	35	22	16	32.5	18	M16X1.5	19.1	0.8	16.02	0.17
HPC-40	95064	40	30	14	40	26	M14X2	18	1.6	14.02	0.27
HPC-40-1	95063	40	27.6	18	36.5	19	M18X1.5	22	1.6	18.02	0.24
HPC-47	95065	47	27.6	20	40.5	21	M20X1.5	25.5	1.6	20.02	0.42
HPC-50	95068	50	40	16	50	35	M16X2	23	1.6	16.02	0.54
HPC-52	95066	52	33.6	20	40.5	21	M20X1.5	25.5	1.6	20.02	0.54
HPC-62	95070	62	44	24	58	35	M24X3	32	1.6	24.02	1.04
HPC-62-1	95069	62	44	24	49.5	25	M24X1.5	32	1.6	24.02	1.04
HPC-72	95072	72	44	24	49.5	25	M24X1.5	32	1.6	24.02	1.40
HPC-76	95074	76	52	30	69.5	40	M30X3.5	44.5	1.6	30.02	1.91
HPC-80	95075	80	52	30	69.5	40	M30X3.5	44.5	1.6	30.02	2.07
HPC-85	95076	85	52	30	69.5	40	M30X3.5	44.5	1.6	30.02	2.37
HPC-90	95077	90	52	30	69.5	40	M30X3.5	44.5	1.6	30.02	2.65
HPC-100	95079	100	52	30	80	50	M30X3.5	44.5	1.6	30.02	3.33
HPC-100-1	95078	100	52	30	69.5	40	M30X3.5	44.5	1.6	30.02	3.15
HPC-125	95080	125	76	48	105	60	M48X5	82.5	1.6	48.02	8.48
HPC-150	95081	150	76	64	140	82	M64X6	82.5	1.6	64.02	12.50
HPC-200	95082	200	76	64	140	82	M64X6	82.5	1.6	64.02	21.87

Other sizes available on request.

* For stud hex socket size, see page 52.

Plain - Concentric Stud Style Metric Sizes (mm)



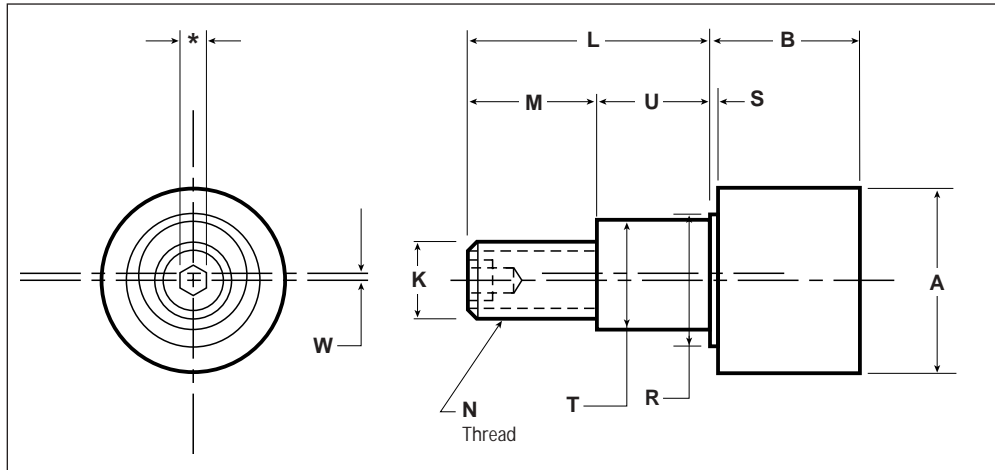
Part No.	Ball or Tapered Roller Bearings	Bearing Capacity, Radial Load [N]			Bearing Capacity, Thrust Load [N]			Stud Capacity [N]			Ret. Ring Allow. Load [N]
		3000 Hrs.. L ₁₀ Life @ 100 RPM	500 Hrs.. L ₁₀ Life @ 33 1/3 RPM	Radial Static Limit	3000 Hrs.. L ₁₀ Life @ 100 RPM	500 Hrs.. L ₁₀ Life @ 33 1/3 RPM	Limiting Static Thrust	Bending = .75 S _y		Shear = .75x,5xS _y	
								Concent. Load at B/2	Concent. Load at B		
HPC-26	BB	1060	2790	1000	650	1720	1350	1990	900	8700	2090
HPC-30	BB	1060	2790	1000	650	1720	1350	1990	900	8700	2090
HPC-32	BB	2290	6000	2680	1410	3700	1950	3750	1670	14400	2090
HPC-35	BB	2290	6000	2680	1410	3700	1950	3750	1670	14400	2090
HPC-40	BB	4670	12200	4900	2890	7560	2650	6110	3250	25470	2090
HPC-40-1	BB	4670	12200	4900	2890	7560	2650	6230	3560	25470	2090
HPC-47	BB	4670	12200	4900	2890	7560	2650	6230	3560	25470	2090
HPC-50	BB	6450	17000	7200	4030	10600	3050	8790	5080	45760	4050
HPC-52	BB	6450	17000	7200	4030	10600	3050	13810	7670	50220	4050
HPC-62	BB	8800	23100	10100	5400	14200	6850	16000	8750	64850	5960
HPC-62-1	BB	8800	23100	10100	5400	14200	6850	16000	8750	64850	5960
HPC-72	TRB	20330	48400	33900	7520	17840	20330	26860	15740	104040	N/A
HPC-76	TRB	26700	63600	89000	10800	25700	53400	44670	25880	160520	N/A
HPC-80	TRB	26700	63600	89000	10800	25700	53400	44670	25880	160520	N/A
HPC-85	TRB	26700	63600	89 000	10800	25700	53400	44670	25880	160520	N/A
HPC-90	TRB	26700	63600	89000	10800	25700	53400	44670	25880	160520	N/A
HPC-100	TRB	26700	63600	89000	10800	25700	53400	44670	25880	160520	N/A
HPC-100-1	TRB	26700	63600	89000	10800	25700	53400	44670	25880	160520	N/A
HPC-125	TRB	62200	148100	230800	24600	58500	144600	128010	70500	411800	N/A
HPC-150	TRB	67000	159000	251000	26500	63000	147000	303430	163550	732100	N/A
HPC-200	TRB	67000	159000	251000	26500	63000	147000	303430	163550	732100	N/A

Specifications are for reference only and are subject to change without notice.

** Lock washer and jam nut available at additional cost.
For size see "N" dimension.

Load Runners®

Plain - Eccentric Stud Style Metric Sizes (mm)

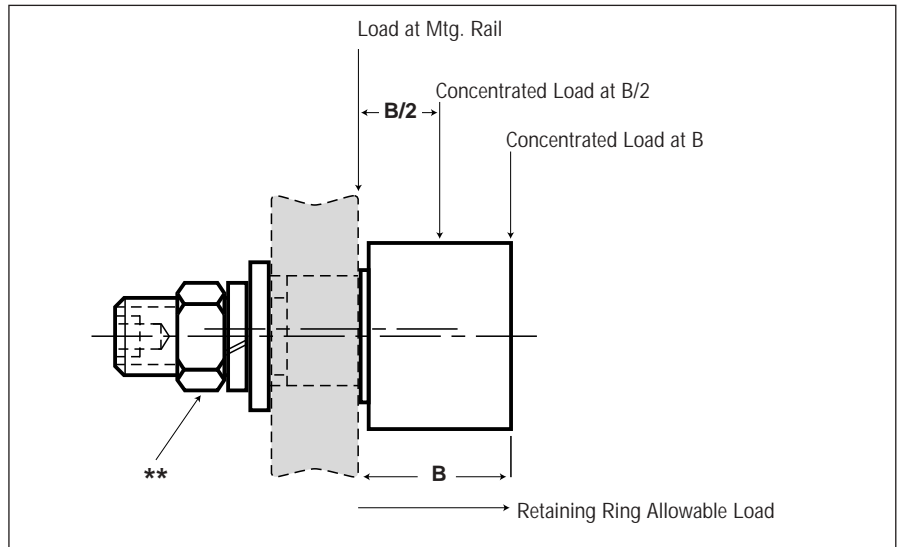


Part No.	EDP No.	A	B	K	L	M	N	R	S	T	U	W	Rec. Mtg. Hole Size	Approx. Weight (Kg)
		Roller Dia.	Roller Width	Stud Dia.	Stud Length	Thread Length	Thread	Shldr. Dia.	Shldr. Length	Eccent. Dia.	Eccent. Length	Eccentricity		
HPCE-26	97378	26	20	10	23	13	M10X1	17.1	.8	13.00	10	.5	13.02	0.11
HPCE-30	97379	30	20	12	25	14	M12X1.5	17.5	.8	15.00	11	.5	15.02	0.14
HPCE-32	97380	32	22	12	25	14	M12X1.5	17.5	.8	15.00	11	.5	15.02	0.17
HPCE-35	97381	35	22	16	32.5	18	M16X1.5	23.8	.8	20.00	14.5	1	20.02	0.20
HPCE-40-1	95833	40	27.6	18	36.5	20.5	M18X1.5	28.5	1.6	22.00	16	1	22.02	0.29
HPCE-47	95835	47	27.6	20	40.5	22.5	M20X1.5	32	1.6	24.00	18	1	24.02	0.45
HPCE-50	95837	50	40	16	50	32	M16X2	32	1.6	24.00	18	1	24.02	0.69
HPCE-52	95836	52	33.6	20	40.5	22.5	M20X1.5	32	1.6	24.00	18	1	24.02	0.72
HPCE-62	95839	62	44	24	58	38	M24X3	43	1.6	28.00	20	1.5	28.02	1.10
HPCE-62-1	95838	62	44	24	49.5	27.5	M24X1.5	43	1.6	28.00	22	1	28.02	1.08
HPCE-72	95840	72	44	20	49.5	27.5	M20X1.5	38	1.6	28.00	22	1	24.02	1.60
HPCE-76-1	95841	76	52	24	70	41	M24X1.5	50	1.6	35.00	29	1.5	35.02	1.99
HPCE-80	95843	80	52	24	70	41	M24X1.5	50	1.6	35.00	29	1.5	35.02	2.39
HPCE-85	95844	85	52	24	70	41	M24X1.5	50	1.6	35.00	29	1.5	35.02	2.54
HPCE-90	95845	90	52	24	70	41	M24X1.5	50	1.6	35.00	29	1.5	35.02	2.98
HPCE-100	95846	100	52	24	70	41	M24X1.5	50	1.6	35.00	29	1.5	35.02	3.29
HPCE-125	95847	125	76	48	105	55	M48X5	82.5	1.6	64.00	50	1.5	64.02	4.63
HPCE-150	95848	150	76	64	140	75	M64X6	82.5	1.6	80.00	65	1.5	80.02	5.56

Other sizes available on request.

* For stud hex socket size, see page 52.

Plain - Eccentric Stud Style Metric Sizes (mm)



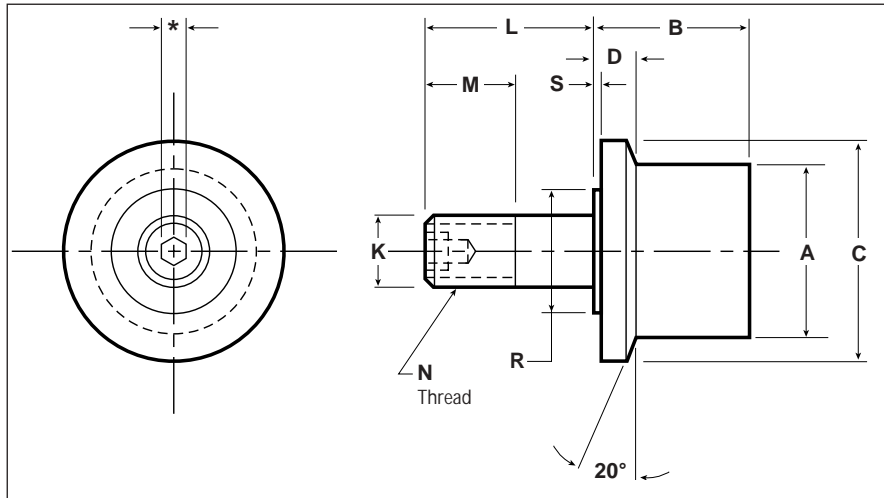
Part No.	Ball or Tapered Roller Bearings	Bearing Capacity, Radial Load [N]			Bearing Capacity, Thrust Load [N]			Stud Capacity [N]			Ret. Ring Allow. Load [N]
		3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Radial Static Limit	3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Limiting Static Thrust	Bending = .75 S _y		Shear = .75 x .5 x S _y	
								Concent. Load at B/2	Concent. Load at B		
HPCE-26	BB	1060	2790	1000	650	1720	1350	1990	900	8700	2090
HPCE-30	BB	1060	2790	1000	650	1720	1350	1990	900	8700	2090
HPCE-32	BB	2290	6000	2680	1410	3700	1950	3750	1670	14400	2090
HPCE-35	BB	2290	6000	2680	1410	3700	1950	3750	1670	14400	2090
HPCE-40-1	BB	4670	12200	4900	2890	7560	2650	6230	3250	25470	2090
HPCE-47	BB	4670	12200	4900	2890	7560	2650	6230	3250	25470	2090
HPCE-50	BB	6450	17700	7200	4030	10600	3050	14450	7740	51750	4050
HPCE-52	BB	6450	17700	7200	4030	10600	3050	14450	7740	51750	4050
HPCE-62	BB	8800	23100	10100	5400	14200	6850	16000	8680	64850	5960
HPCE-62-1	BB	8800	23100	10100	5400	14200	6850	16000	8680	64850	5960
HPCE-72	TRB	20330	48400	33950	7520	17840	20330	17990	9870	71950	N/A
HPCE-76-1	TRB	26700	63600	89000	10800	25700	53400	27840	14690	101870	N/A
HPCE-80	TRB	26700	63600	89000	10800	25700	53400	27840	14690	101870	N/A
HPCE-85	TRB	26700	63600	89000	10800	25700	53400	27840	14690	101870	N/A
HPCE-90	TRB	26700	63600	89000	10800	25700	53400	27840	14690	101870	N/A
HPCE-100	TRB	26700	63600	89000	10800	25700	53400	27840	14690	101870	N/A
HPCE-125	TRB	62200	148100	230800	24600	58500	144600	143070	74830	411800	N/A
HPCE-150	TRB	67000	159000	251000	26500	63100	147000	330120	173200	720500	N/A

Specifications are for reference only and are subject to change without notice.

** Flat washer, lock washer and jam nut available at additional cost. For size see "N" dimension.

Load Runners®

Flanged - Concentric Stud Style Metric Sizes (mm)

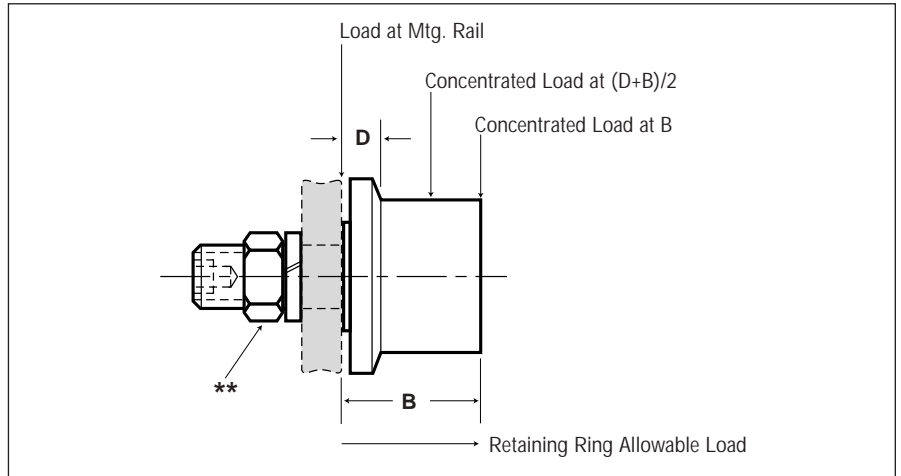


Part No.	EDP No.	A	B	C	D	K	L	M	N	R	S	Rec. Mtg. Hole Size	Approx. Weight (Kg)
		Roller Dia.	Roller Width	Flange Dia.	Flange Thickness							Stud Dia.	
HPJ-26	97382	26	20	35	5	10	23	13	M10X1	13.1	.8	10.02	0.11
HPJ-30	97383	30	20	40	5	12	25	14	M12X1.5	15.9	.8	12.02	0.14
HPJ-32	97384	32	22	42	5	12	25	14	M12X1.5	15.9	.8	12.02	0.17
HPJ-35	97385	35	22	46	5	16	32.5	18	M16X1.5	19.1	.8	16.02	0.20
HPJ-40	95410	40	30	54	8.8	14	40	26	M14X2	18	1.6	14.02	0.33
HPJ-40-1	95409	40	27.6	54	7.8	18	36.5	19	M18X1.5	22	1.6	18.02	0.24
HPJ-47	95411	47	27.6	61	7.8	20	40.5	21	M20X1.5	25.5	1.6	20.02	0.47
HPJ-50	95415	50	40	68	14.0	16	50	35	M16X2	23	1.6	16.02	0.70
HPJ-52	95413	52	33.6	66	10.8	20	40.5	21	M20X1.5	25.5	1.6	20.02	0.83
HPJ-62	95420	62	44	78	14.0	24	58	35	M24X3	32	1.6	24.02	1.21
HPJ-62-2	95418	62	44	78	14.0	24	49.5	25	M24X1.5	32	1.6	24.02	1.21
HPJ-72	95422	72	44	90	14.0	24	49.5	25	M24X1.5	32	1.6	24.02	1.28
HPJ-76	95427	76	52	98	14.0	30	69.5	40	M30X3.5	44.5	1.6	30.02	2.17
HPJ-80	95429	80	52	102	14.0	30	69.5	40	M30X3.5	44.5	1.6	30.02	2.41
HPJ-85	95430	85	52	107	14.0	30	69.5	40	M30X3.5	44.5	1.6	30.02	2.75
HPJ-90	95431	90	52	112	14.0	30	69.5	40	M30X3.5	44.5	1.6	30.02	2.98
HPJ-100	95435	100	52	125	14.0	30	80	50	M30X3.5	44.5	1.6	30.02	3.70
HPJ-100-1	95434	100	52	125	14.0	30	69.5	40	M30X3.5	44.5	1.6	30.02	3.52
HPJ-125	95440	125	76	148	18.0	48	105	60	M48X5	82.5	1.6	48.02	8.86
HPJ-150	95441	150	76	173	18.3	64	140	82	M64X6	82.5	1.6	64.02	13.07
HPJ-200	95443	200	76	223	18.3	64	140	82	M64X6	82.5	1.6	64.02	20.37

Other sizes available on request.

* For stud hex socket size. see page 52.

Flanged - Concentric Stud Style Metric Sizes (mm)



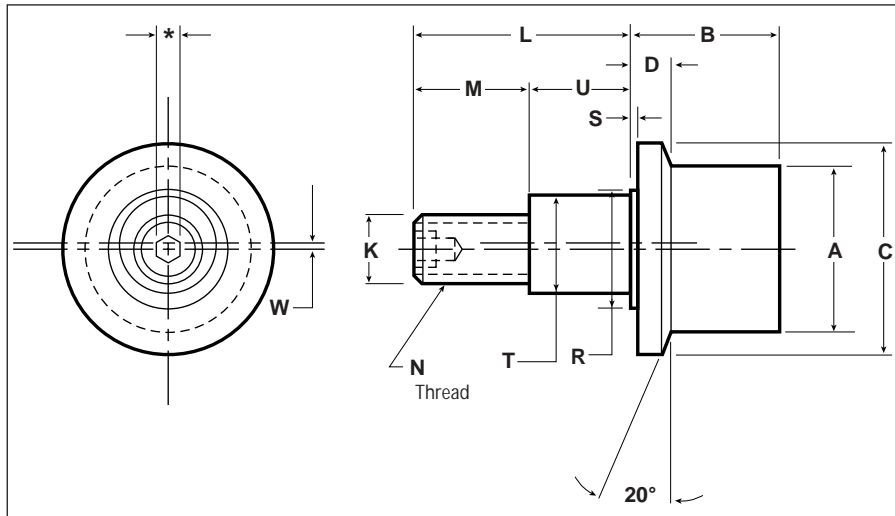
Part No.	Ball or Tapered Roller Bearings	Bearing Capacity, Radial Load [N]			Bearing Capacity, Thrust Load [N]			Stud Capacity [N]			Ret. Ring Allow. Load [N]
		3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Radial Static Limit	3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Limiting Static Thrust	Bending = .75 S _y		Shear .75 x .5 x S _y	
								Concent. Load at (D+B)/2	Concent. Load at B	Load at Mtg. Rail	
HPJ-26	BB	1060	2790	1000	650	1720	1350	1560	900	8700	2090
HPJ-30	BB	1060	2790	1000	650	1720	1350	1560	900	8700	2090
HPJ-32	BB	2290	6000	2680	1410	3700	1950	2950	1670	14400	2090
HPJ-35	BB	2290	6000	2680	1410	3700	1950	2950	1670	14400	2090
HPJ-40	BB	4670	12200	4900	2890	7560	2650	5000	3320	25470	2090
HPJ-40-1	BB	4670	12200	4900	2890	7560	2650	5000	3320	25470	2090
HPJ-47	BB	4670	12200	4900	2890	7560	2650	5000	3320	25470	2090
HPJ-50	BB	6450	17000	7200	4030	10600	3050	6860	5000	45760	4050
HPJ-52	BB	6450	17000	7200	4030	10600	3050	11110	7810	51750	4050
HPJ-62	BB	8800	23100	10100	5400	14200	6850	12280	8740	64850	5960
HPJ-62-2	BB	8800	23100	10100	5400	14200	6850	12280	8740	64850	5960
HPJ-72	TRB	20330	48400	33950	7520	17840	20330	20820	15250	101860	N/A
HPJ-76	TRB	26700	63600	89000	10800	25700	53400	37000	25880	160520	N/A
HPJ-80	TRB	26700	63600	89000	10800	25700	53400	37000	25880	160520	N/A
HPJ-85	TRB	26700	63600	89000	10800	25700	53400	37000	25880	160520	N/A
HPJ-90	TRB	26700	63600	89000	10800	25700	53400	37000	25880	160520	N/A
HPJ-100	TRB	26700	63600	89000	10800	25700	53400	37000	25880	160520	N/A
HPJ-100-1	TRB	26700	63600	89000	10800	25700	53400	37000	25880	160520	N/A
HPJ-125	TRB	62200	148100	230800	24600	58500	144600	105750	69000	411800	N/A
HPJ-150	TRB	67000	159000	251000	26500	63000	147000	247430	160830	720500	N/A
HPJ-200	TRB	67000	159000	251000	26500	63000	147000	247430	160830	720500	N/A

Specifications are for reference only and are subject to change without notice.

** Lock washer and jam nut available at additional cost.
For size see "N" dimension.

Load Runners®

Flanged - Eccentric Stud Style Metric Sizes (mm)

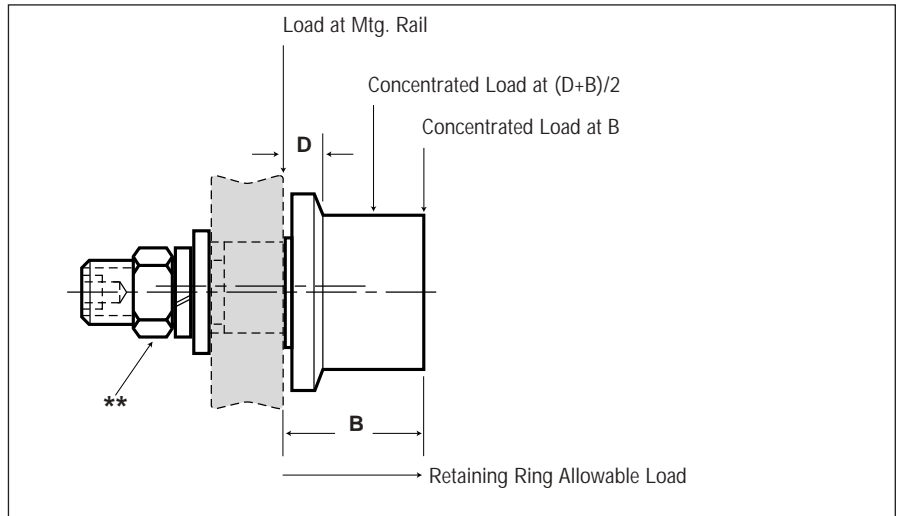


Part No.	EDP No.	A	B	C	D	K	L	M	N	R	S	T	U	W	Rec. Mtg. Hole Size	Approx. Weight (Kg)
		Roller Dia.	Roller Width	Flange Dia.	Flange Thickness	Stud Dia.	Stud Length	Thread Length	Thread	Shldr. Dia.	Shldr. Length	Eccent. Dia.	Eccent. Length	Eccent.		
HPJE-26	97386	26	20	35	5	10	23	13	M10X1	17.1	.8	13.00	10	.5	13.02	0.14
HPJE-30	97387	30	20	40	5	12	25	14	M12X1.5	17.5	.8	15.00	11	.5	15.02	0.17
HPJE-32	97388	32	22	42	5	12	25	14	M12X1.5	17.5	.8	15.00	11	.5	15.02	0.20
HPJE-35	97389	35	22	46	5	16	32.5	18	M16X1.5	23.8	.8	20.00	14.5	1	20.02	0.23
HPJE-40-1	95907	40	27.6	54	7.8	18	36.5	20.5	M18X1.5	28.5	1.6	22.00	16	1	22.02	0.35
HPJE-50	95909	50	40	68	14.0	16	50	32	M16X2	32	1.6	24.00	18	1	24.02	0.94
HPJE-62-1	95910	62	44	78	14.0	24	49.5	27.5	M24X1.5	43	1.6	28.00	22	1	28.02	1.13
HPJE-76	95912	76	52	98	14.0	24	70	41	M24X1.5	50	1.6	35.00	29	1.5	35.02	2.31
HPJE-90	95913	90	52	112	14.0	24	70	41	M24X1.5	50	1.6	35.00	29	1.5	35.02	3.09
HPJE-100	95914	100	52	125	14.0	24	70	41	M24X1.5	50	1.6	35.00	29	1.5	35.02	3.79
HPJE-125	95515	125	76	148	18.0	48	105	55	M48X5	82.5	1.6	64.00	50	1.5	64.02	4.74
HPJE-150	95916	150	76	173	18.3	64	140	75	M64X6	92	1.6	80.00	65	1.5	80.02	5.69

Other sizes available on request.

* For stud hex socket size. see page 52.

Flanged - Eccentric Stud Style Metric Sizes (mm)



Part No.	Ball or Tapered Roller Bearings	Bearing Capacity. Radial Load [N]			Bearing Capacity. Thrust Load [N]			Stud Capacity [N]			Ret. Ring Allow. Load [N]
		3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Radial Static Limit	3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Limiting Static Thrust	Bending = .75 S _y		Shear = .75 x .5 x S _y	
								Concent. Load at (D+B)/2	Concent. Load at B	Load at Mtg. Rail	
HPJE-26	BB	1060	2790	1000	650	1720	1350	1560	900	8700	2090
HPJE-30	BB	1060	2790	1000	650	1720	1350	1560	900	8700	2090
HPJE-32	BB	2290	6000	2680	1410	3700	1950	2950	1670	14400	2090
HPJE-35	BB	2290	6000	2680	1410	3700	1950	2950	1670	14400	2090
HPJE-40-1	BB	4670	12200	4900	2890	7560	2650	4990	3560	25470	2090
HPJE-50	BB	6450	17000	7200	4030	10600	3050	12040	7740	51750	4050
HPJE-62-1	BB	8800	23100	10100	5400	14200	6850	12160	8750	64850	5960
HPJE-76	TRB	26700	63600	89000	10800	25700	53400	22670	15160	104040	N/A
HPJE-90	TRB	26700	63600	89000	10800	25700	53400	22670	15160	104040	N/A
HPJE-100	TRB	26700	63600	89000	10800	25700	53400	22670	15160	104040	N/A
HPJE-125	TRB	62200	148100	230800	24600	58500	144600	117220	75420	411800	N/A
HPJE-150	TRB	67000	159000	251000	26500	63000	147000	270280	171880	720520	N/A

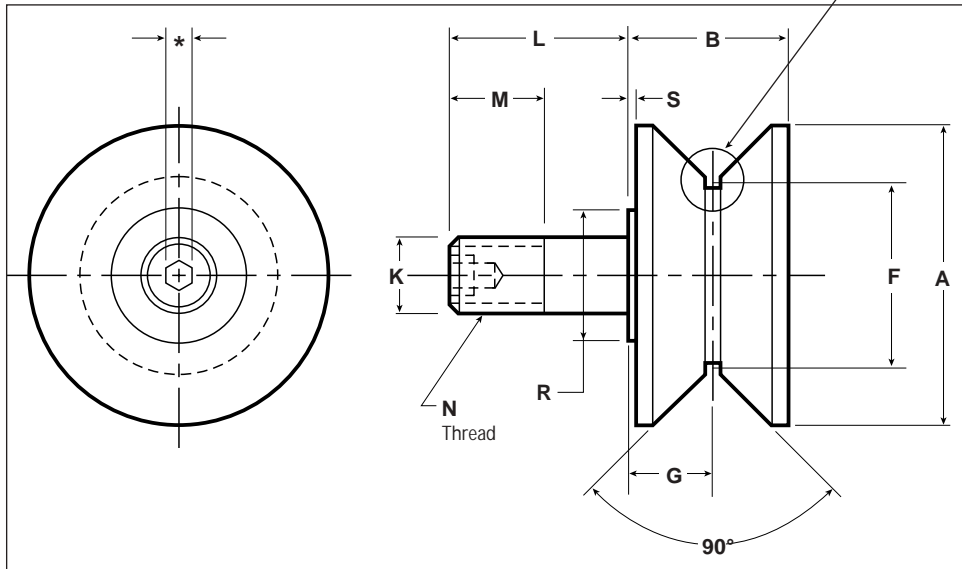
Specifications are for reference only and are subject to change without notice.

** Flat washer, lock washer and jam nut available at additional cost. For size see "N" dimension.

Load Runners®

V-Grooved - Concentric Stud Style Metric Sizes (mm)

See page 45 for details of design recommendations for roller on rail.

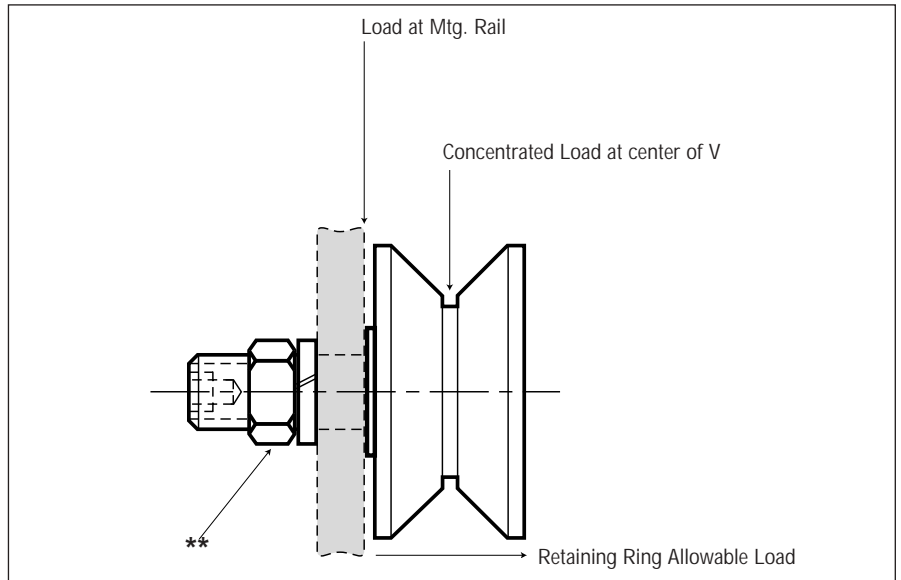


Part No.	EDP No.	A	B	F	G	K	L	M	N	R	S	Rec. Mtg. Hole Size	Approx. Weight (Kg)
		Roller Dia.	Roller Width	Point Dia.	Groove Location	Stud Dia.	Stud Length	Thread Length	Thread	Shldr. Dia.	Shldr. Length		
HPV-26	97390	40	20	26	10	10	23	13	M10X1	13.1	.8	10.02	0.23
HPV-32	97391	50	22	32	11	12	25	14	M12X1.5	15.9	.8	12.02	0.26
HPV-40	95648	60	33	40	17	14	40	26	M14X2	18	1.6	14.02	0.53
HPV-62	95652	90	44.5	62	23	24	57.9	34.9	M24X3	32	1.6	24.02	1.79
HPV-62-1	95651	90	44.5	62	23	24	49.5	25	M24X1.5	32	1.6	24.02	1.90
HPV-76	95654	120	50.5	76	26	30	70	40	M30X3.5	44.5	1.6	30.02	3.27
HPV-100	95656	140	50.5	100	26	30	80	50	M30X3.5	44.5	1.6	30.02	4.77
HPV-100-1	95655	140	50.5	100	26	30	69.5	40	M30X3.5	44.5	1.6	30.02	4.77
HPV-125	95657	165	76	125	37.8	48	105	60	M48X5	82.5	1.6	48.02	11.56

Other sizes available on request.

* For stud hex socket size, see page 52.

V-Grooved - Concentric Stud Style Metric Sizes (mm)



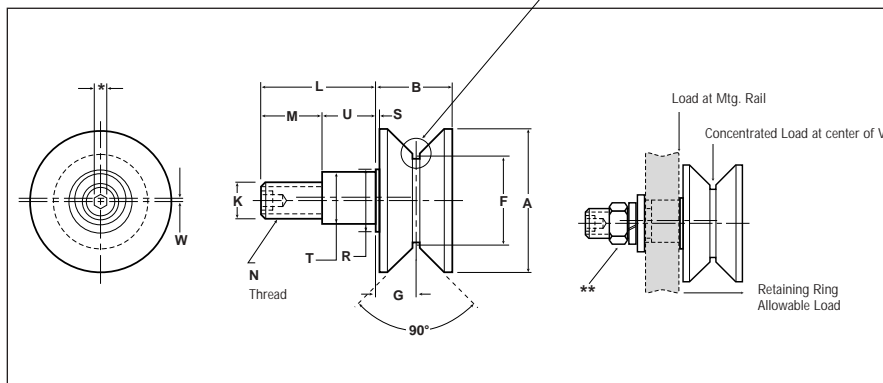
Part No.	Ball or Tapered Roller Bearings	Bearing Capacity. Radial Load [N]			Bearing Capacity. Thrust Load [N]			Stud Capacity [N]		Ret. Ring Allow. Load [N]
		3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Radial Static Limit	3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Limiting Static Thrust	Bending = .75 S _y	Shear = .75 x .5 x S _y	
								Concent. Load at V	Load at Mtg. Rail	
HPV-26	BB	1060	2790	1000	650	1720	1350	2020	8700	2090
HPV-32	BB	2290	6000	2680	1410	3700	1950	3950	14400	2090
HPV-40	BB	4670	12200	4900	2890	7560	2650	7030	34870	2090
HPV-62	BB	8800	23100	10100	5400	14200	6850	17130	64850	5960
HPV-62-1	BB	8800	23100	10100	5400	14200	6850	17130	64850	5960
HPV-76	TRB	26700	63500	89000	10800	25700	53400	45930	160520	N/A
HPV-100	TRB	26700	63500	89000	10800	25700	53400	45930	160520	N/A
HPV-100-1	TRB	26700	63500	89000	10800	25700	53400	45930	160520	N/A
HPV-125	TRB	62200	148100	168800	24600	58500	144600	130590	291230	N/A

Specifications are for reference only and are subject to change without notice.

** Lock washer and jam nut available at additional cost. For size see "N" dimension.

Load Runners®

V-Grooved - Eccentric Stud Style Metric Sizes (mm)



Part No.	EDP No.	A	B	F	G	K	L	M	N	R	S	T		U	W	Rec. Mtg. Hole Size	Approx. Weight (Kg)
		Roller Dia.	Roller Width	Point Dia.	Groove Loc.	Stud Dia.	Stud Length	Thread Length	Thread	Shldr. Dia.	Shldr. Length	Eccent. Dia.	Eccent. Length	Eccent.			
HPVE-26	97392	40	20	26	10	10	23	13	M10X1	17.1	.8	13.00	+0.00 -0.05	10	.5	13.02	0.26
HPVE-32	97393	50	22	32	11	12	25	14	M12X1.5	17.5	.8	15.00	+0.00 -0.25	11	.5	15.02	0.30
HPVE-40	95951	60	33	40	17	14	40	24	M14X2	28.5	1.6	22.00	+0.00 -0.25	16	1	22.02	0.64
HPVE-62	95953	90	44.5	62	23	24	58	38	M24X3	43	1.6	28.00	+0.00 -0.25	20	1.5	28.02	1.57
HPVE-62-1	95952	90	44.5	62	23	24	49.5	27.5	M24X1.5	43	1.6	28.00	+0.00 -0.25	22	1	28.02	1.57
HPVE-76	95955	120	50.5	76	26	24	70	41	M24X1.5	50	1.6	35.00	+0.00 -0.25	29	1.5	35.02	3.43
HPVE-100	95956	140	50.5	100	26	24	70	41	M24X1.5	50	1.6	35.00	+0.00 -0.25	29	1.5	35.02	4.00
HPVE-125	95957	165	76	125	37.8	48	105	55	M48X5	82.5	1.6	64.00	+0.00 -0.25	50	1.5	64.02	4.72

Part No.	Ball or Tapered Roller Bearings	Bearing Capacity. Radial Load [N]			Bearing Capacity. Thrust Load [N]			Stud Capacity [N]		Ret. Ring Allow. Load [N]
		3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Radial Static Limit	3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Limiting Static Thrust	Bending = .75 S _y	Shear = .75 x .5 x S _y	
								Concent. Load at V	Load at Mtg. Rail	
HPVE-26	BB	1060	2790	1000	650	1720	1350	2020	8700	2090
HPVE-32	BB	2290	6000	2680	1410	3700	1950	3950	14400	2090
HPVE-40	BB	4670	12200	4900	2890	7560	2650	5440	25470	2090
HPVE-62	BB	8800	23100	10100	5400	14200	6850	15790	64850	5960
HPVE-62-1	BB	8800	23100	10100	5400	14200	6850	15790	64850	5960
HPVE-76	TRB	26700	63500	89000	10800	25700	53400	28840	101860	N/A
HPVE-100	TRB	26700	63500	89000	10800	25700	53400	28840	101860	N/A
HPVE-125	TRB	62200	148100	168800	24600	58500	144600	147400	291230	N/A

Other sizes available on request.

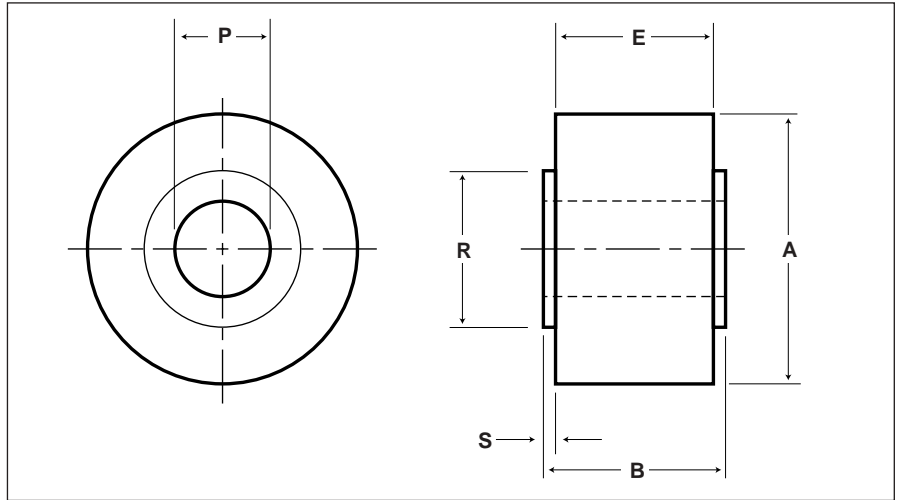
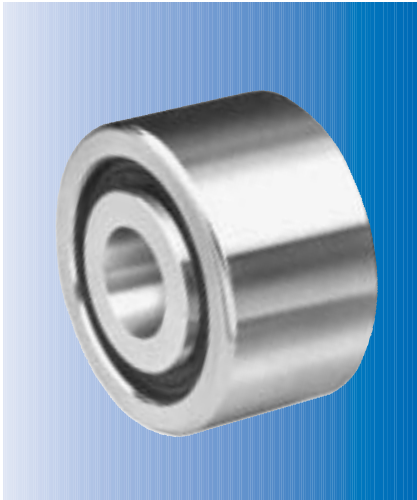
For stud hex socket size. see page 52.

* Flat washer, lock washer and jam nut available at additional cost.

** For size see "N" dimension.

For special features and custom design considerations. see page 53.

Plain - Yoke Style Metric Sizes (mm)



Part No.	EDP No.	A	B	E	P	R	S	Ball or Tapered Roller Bearings	Bearing Capacity, Radial Load [N]			Bearing Capacity, Thrust Load [N]			Approx. Weight (Kg)
		Roller Dia.	Roller Width	Tread Width	Bore	Shldr. Dia.	Shldr. Length		3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Radial Static Limit	3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Limiting Static Thrust	
HPCA-62	97297	62	40	38	20	32	1.0	TRB	20300	48400	33900	7500	17800	20300	1.40
HPCA-76	96105	76	46	44	25	44.5	1.0	TRB	26700	63500	89000	10800	25700	53400	1.24
HPCA-80	96107	80	46	44	25	44.5	1.0	TRB	26700	63500	89000	10800	25700	53400	1.41
HPCA-85	96108	85	46	44	25	44.5	1.0	TRB	26700	63500	89000	10800	25700	53400	1.60
HPCA-90	96109	90	56	54	30	57.2	1.0	TRB	32900	78200	121000	10700	25600	58300	1.92
HPCA-100	96110	100	56	54	30	57.2	1.0	TRB	32900	78200	121000	10700	25600	58300	2.93
HPCA-125	96111	125	71	68	45	82.6	1.5	TRB	62200	148100	230800	24600	58500	144600	5.01
HPCA-150	96112	150	73	70	55	88.9	1.5	TRB	67000	159000	251000	26500	63000	147000	8.65
HPCA-200	96114	200	79	76	70	108	1.5	TRB	79200	188600	355000	32400	77400	215000	19.58
HPCA-250	96116	250	79	76	70	108	1.5	TRB	79200	188600	355000	32400	77400	215000	35.74

Specifications are for reference only and are subject to change without notice.

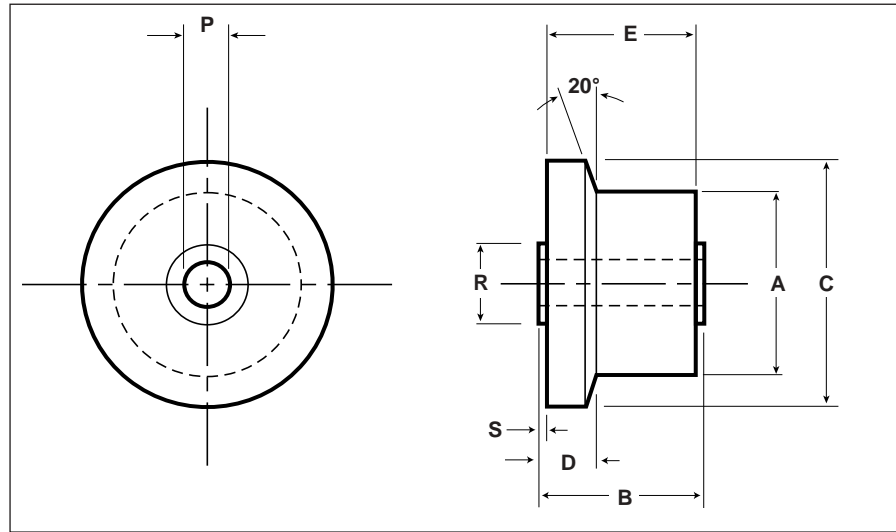
Other sizes available on request.

For special features and custom design considerations, see page 53.

Heavy-duty shafts see page 46.

Load Runners®

Flanged - Yoke Style Metric Sizes (mm)



Part No.	EDP No.	A	B	C	D	E	P	R	S	Ball or Tapered Roller Bearings	Bearing Capacity. Radial Load [N]			Bearing Capacity. Thrust Load [N]			Approx. Weight (Kg)
		Roller Dia.	Tread Width	Flange Dia.	Flange Thickness	Roller Width	Bore	Shldr. Dia.	Shldr. Length		3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Radial Static Limit	3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Limiting Static Thrust	
HPJA-62	97298	62	40	78	14	38	20	32	1.0	TRB	20300	48400	33900	7500	17800	20300	1.40
HPJA-76	96209	76	46	98	13.5	44	25	44.5	1.0	TRB	26700	63500	89000	10800	25700	53400	1.24
HPJA-80	96210	80	46	102	13.5	44	25	44.5	1.0	TRB	26700	63500	89000	10800	25700	53400	1.71
HPJA-85	96211	85	46	107	13.5	44	25	44.5	1.0	TRB	26700	63500	89000	10800	25700	53400	1.95
HPJA-90	96212	90	56	112	13.5	54	30	57.2	1.0	TRB	32900	78200	121000	10700	25600	58300	2.37
HPJA-100	96213	100	56	122	13.5	54	30	57.2	1.0	TRB	32900	78200	121000	10700	25600	58300	3.43
HPJA-125	96214	125	71	148	18.2	68	45	82.6	1.5	TRB	62200	148100	230800	24600	58500	144600	5.72
HPJA-150	96215	150	73	173	18.2	70	55	88.9	1.5	TRB	67000	159000	251000	26500	63000	147000	9.56
HPJA-200	96217	200	79	223	18.2	76	70	108	1.5	TRB	79200	188600	355000	32400	77400	215000	20.78
HPJA-250	96219	250	79	273	18.2	76	70	108	1.5	TRB	79200	188600	355000	32400	77400	215000	37.25

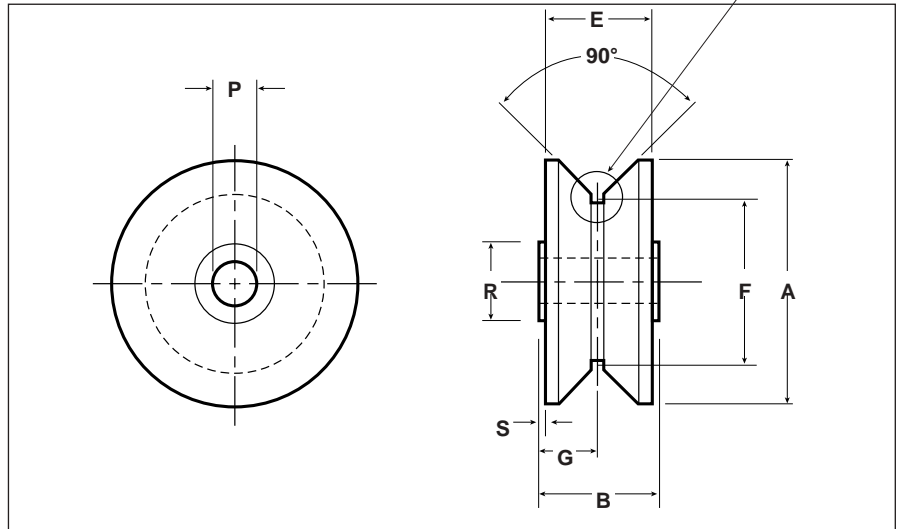
Other sizes available on request.

For special features and custom design considerations, see page 53.

Heavy-duty shafts see page 44.

V-Grooved - Yoke Style Metric Sizes (mm)

See page 45 for details of design recommendations for roller on rail.



Part No.	EDP No.	A	B	E	F	G	P	R	S	Ball or Tapered Roller Bearings	Bearing Capacity. Radial Load [N]			Bearing Capacity. Thrust Load [N]			Approx. Weight (Kg)
		Roller Dia.	Roller Width	Tread Width	Point Dia.	Groove Location	Bore	Shldr. Dia.	Shldr. Length		3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Radial Static Limit	3000 Hrs. L ₁₀ Life @ 100 RPM	500 Hrs. L ₁₀ Life @ 33 1/3 RPM	Limiting Static Thrust	
HPVA-62	97299	90	40	38	62	22	20	32	1.0	TRB	20300	48400	33900	7500	17800	20300	1.4
HPVA-76	96255	110	46	44	76	23	25	44.5	1.0	TRB	26700	63600	89000	10800	25700	53400	2.21
HPVA-100	96256	140	56	54	100	28	30	57.2	1.0	TRB	32900	78200	121000	10700	25600	58300	5.08
HPVA-125	96257	165	71	68	125	35.5	45	82.6	1.5	TRB	62200	148100	168880	24600	58500	97500	8.52
HPVA-150	96259	190	73	70	150	36.5	55	88.9	1.5	TRB	67000	159200	198400	26500	63000	99200	13.79
HPVA-200	96261	240	79	76	200	39.5	70	108	1.5	TRB	79200	188600	268200	32400	77400	133900	29.60
HPVA-250	96263	290	79	76	250	39.5	70	108	1.5	TRB	79200	188600	268200	32400	77400	133900	56.52

Specifications are for reference only and are subject to change without notice.

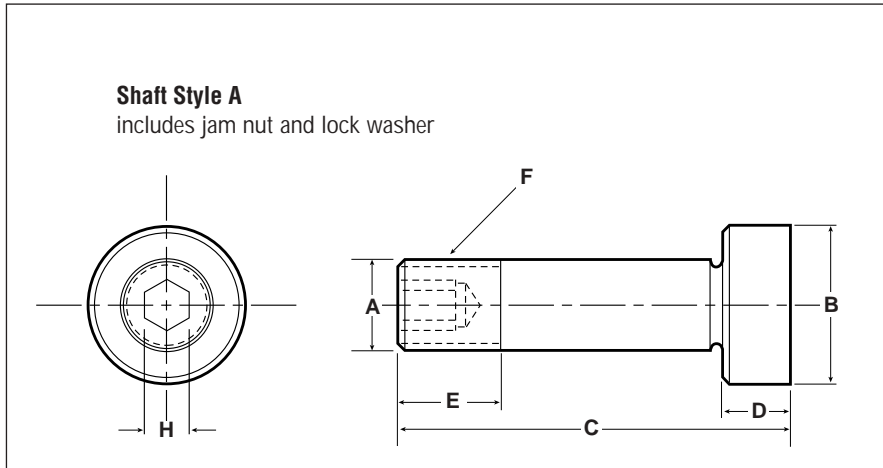
Other sizes available on request.

For special features and custom design considerations. see page 53.

Heavy-duty shafts see page 44.

Load Runners®

Heavy-Duty Shafts for Yoke Style Idler-Rollers Metric Sizes (mm)



Heavy Duty Shafts for Metric Yoke-Style Load Runners®

Shaft Part No.	EDP No.	Roller Part No.			A	B	C	D	E	F	H	Approx. Weight (Kg)
		HPCA	HPJA	HPVA	Shaft Dia.	Head Dia.	Shaft Length	Head Length	Thread Length	Thread	Hex Size	
					-0.025 -0.050	-0.025 -0.050						
MSHA-20	97300	62	62	62	20	31.75	94	16	25	M20X1.5	8.0	0.70
MSHA-25	95001	76	76	76	25	44.5	110	19	29	M24X1.5	8.0	0.75
		80	80	76								
		85	85									
MSHA-30	95002	90	90	100	30	57.2	135	22	31	M30X3.5	12.2	0.95
		100	100									
MSHA-45	95003	125	125	125	45	82.6	185	32	54	M45X4.5	12.2	1.50
MSHA-55	95004	150	150	150	55	88.9	195	32	62	M52X5	12.2	5.70
MSHA-70	95005	200	200	200	70	108.0	220	35	74	M70X6	12.2	10.00
		250	250	250								

Other sizes available on request.

For special features and custom design considerations, see [page 53](#).

**Osborn Load Rails
for maximum
design flexibility.**



Load Runners®

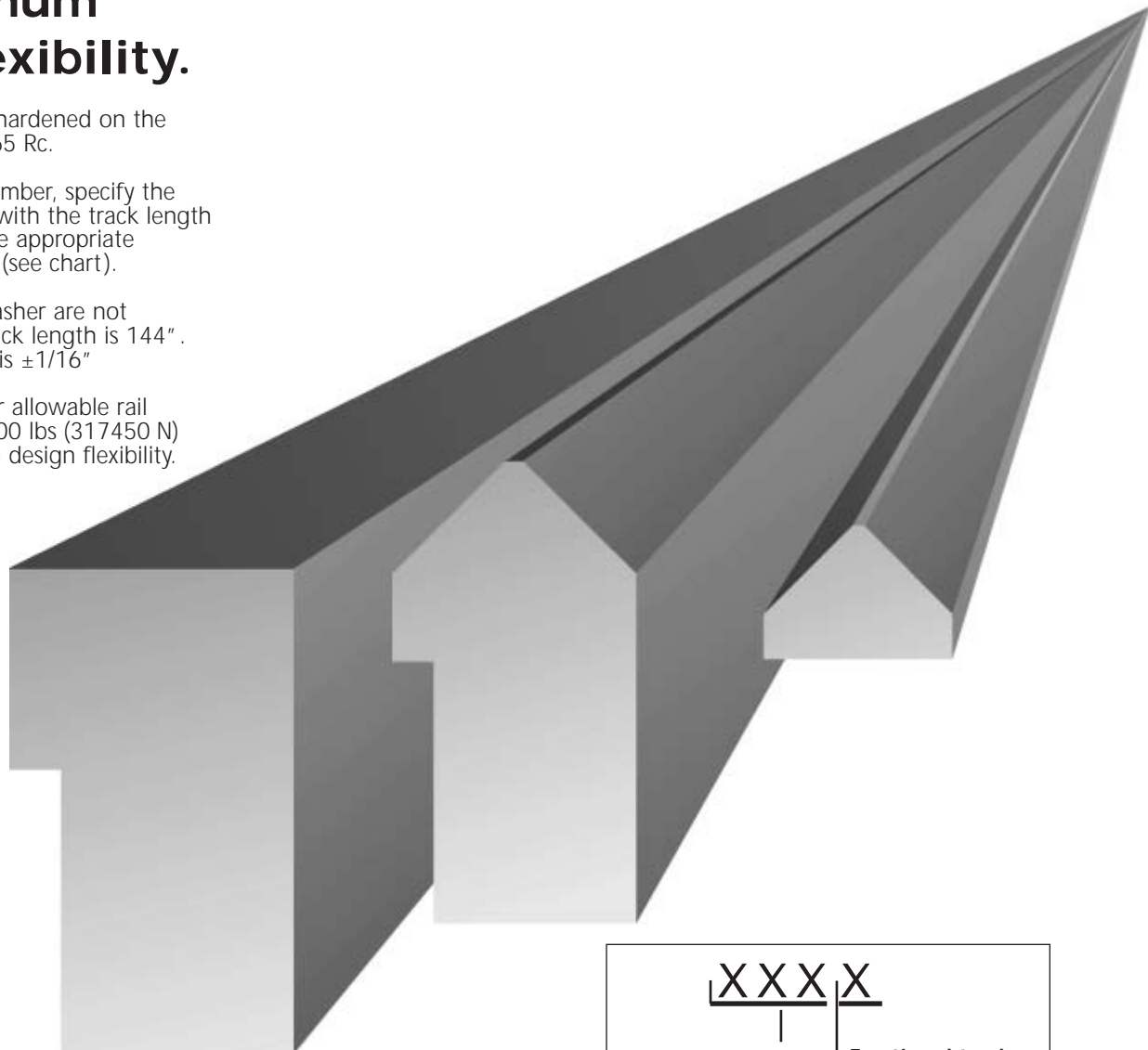
Osborn Load Rails for maximum design flexibility.

Osborn Load Rails are hardened on the rolling surface to 60 - 65 Rc.

To determine a part number, specify the type, replace "XXXX" with the track length dimension, and add the appropriate mounting option code (see chart).

Cap screw and lock washer are not supplied. Maximum track length is 144". Track length tolerance is $\pm 1/16"$

Osborn Load Rails offer allowable rail loadings of up to 71,500 lbs (317,450 N) per roller for maximum design flexibility.



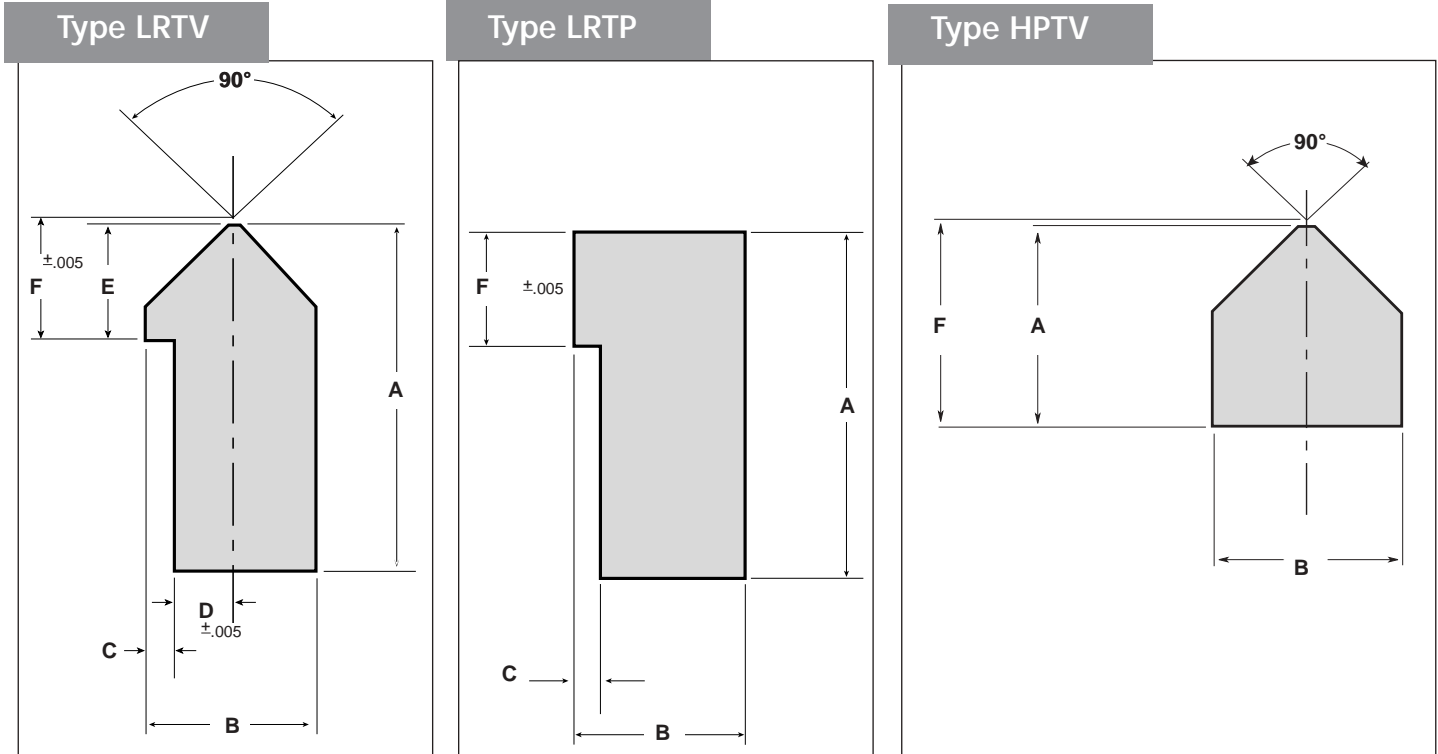
To complete part number, replace "XXXX" with track length dimension and mounting option.

For example - to specify a 4" high V-track 28-1/2" long with a clearance hole for a cap screw, the part number is: LRTV-20284-1.

XXXXX	
Track length in whole inches	Fractional track length
001 = 1"	0 = 0
002 = 2"	1 = 1/8"
003 = 3"	2 = 1/4"
004 = 4"	3 = 3/8"
005 = 5"	4 = 1/2"
006 = 6"	5 = 5/8"
etc.	6 = 3/4"
2	7 = 7/8"
144 = 144"	(Maximum track length)

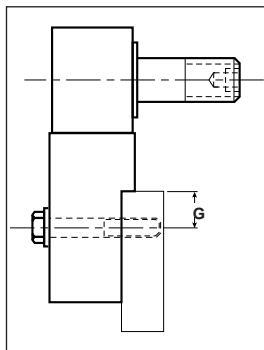
Load Rail Specifications

Inch Sizes

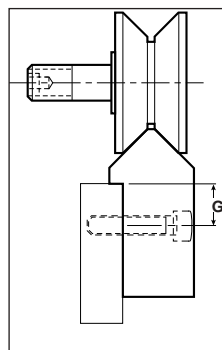


Osborn Part No.	A	B	C	D	E	F	G	Mounting		
								Option #1	Option #2	Option #3
LRTV-1 XXXX	3.000	1.500	0.250	0.500	1.000	1.047	0.750	3/8 Cap Screw	3/8 Soc.Hd.Cap Screw	3/8-16 UNC Cap Screw
LRTV-2 XXXX	4.000	2.000	0.250	0.750	1.500	1.562	1.000	1/2 Cap Screw	1/2 Soc.Hd.Cap Screw	1/2-13 UNC Cap Screw
LRTP-1 XXXX	3.000	1.500	0.250	-	-	1.047	0.750	3/8 Cap Screw	3/8 Soc.Hd.Cap Screw	3/8-16 UNC Cap Screw
LRTP-2 XXXX	4.000	2.000	0.250	-	-	1.562	1.000	1/2 Cap Screw	1/2 Soc.Hd.Cap Screw	1/2-13 UNC Cap Screw
HPTV-1 XXXX	1.500	1.500	-	-	-	1.547	-	3/8 - 16 UNC Cap Screw		
HPTV-2 XXXX	2.000	2.000	-	-	-	2.062	-	1/2 - 13 UNC Cap Screw		

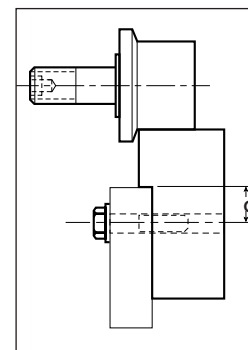
Mounting holes equally spaced from rail ends on each option.



Mounting Option # 1
Clearance hole for cap screw. Holes spaced 12" apart. To order, add "-1" to end of part number.



Mounting Option # 2
Clearance hole and counterbore for socket head cap screw and hi-collar lock washer. Holes spaced 12" apart. To order, add "-2" to part number.



Mounting Option # 3
Tapped thru hole for cap screw. Holes spaced 12" apart. To order, add "-3" to end of part number.

Load Runners®

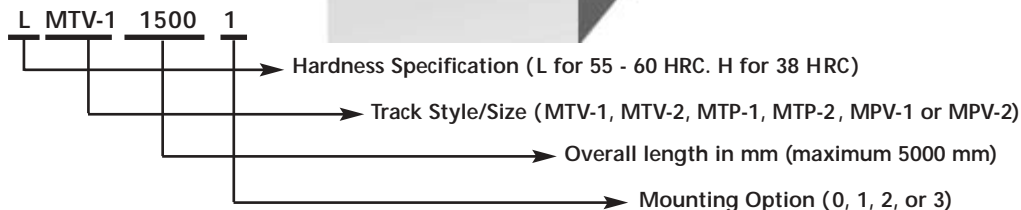
Osborn Load Rails for maximum design flexibility.

Osborn Load Rails offer allowable rail loadings of up to 317450 N per roller for maximum design flexibility. They are available in carbon steel in two separate hardness ranges and also available in stainless steel (as a special item). Please contact Osborn International for information on stainless steel rail.

To specify Osborn Load Rails, choose the hardness option (letter "L" for 55-60 HRC; letter "H" for 38 HRC), choose the style and size (MTV-1, MTV-2, MTP-1, MTP-2, MPV-1, MPV-2), add the overall length in millimeters - XXXX below -, and add the hole mounting option after a dash. For length less than 1,000 mm use a leading zero.

(L/H)-MT-(V/P)-(1/2)-XXXX-(0/1/2/3)

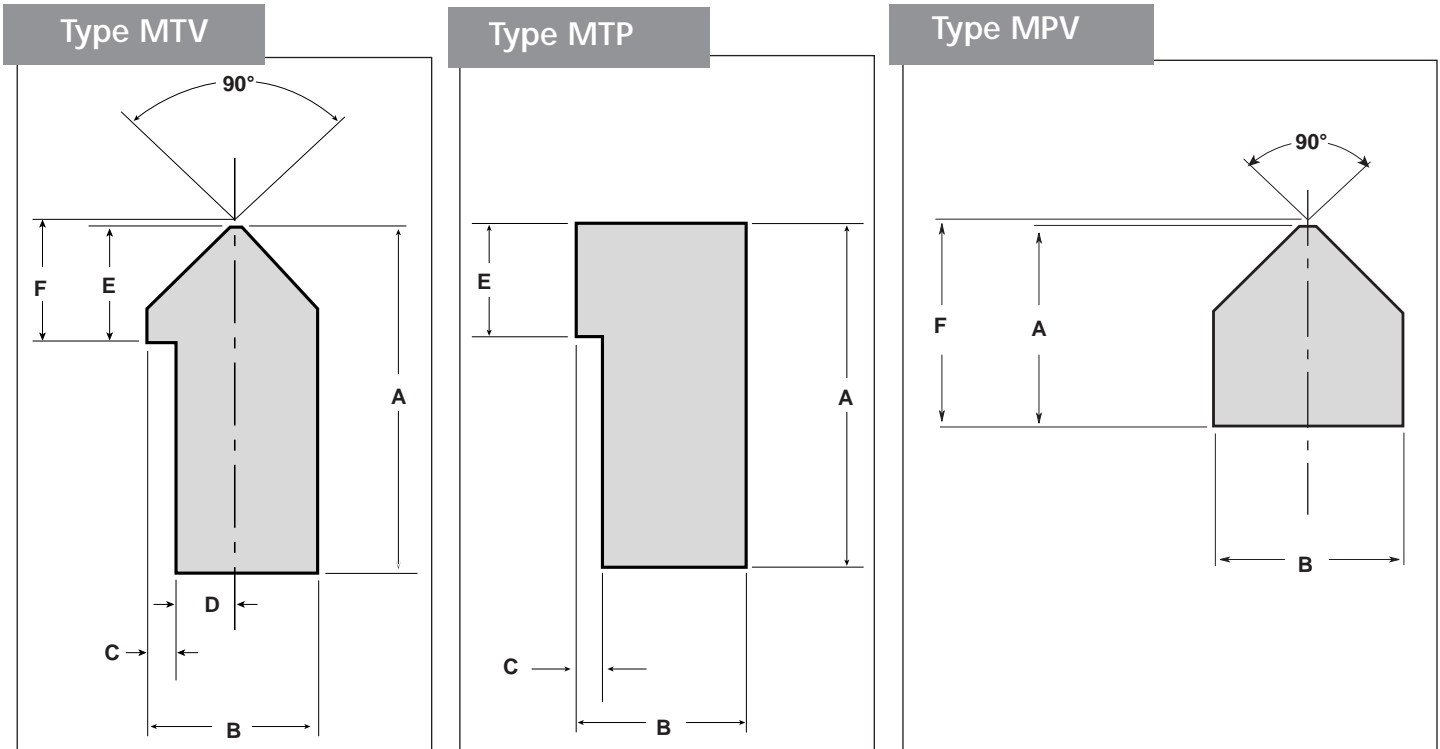
Example: For rail in carbon steel 55-60 HRC, 1,500 mm length of V track, 75 mm high (MTV-1) and with hole mounting option # 1, the part number would read:



Mounting: Holes are equally spaced 250 mm apart except for track length = 500 mm. which has 3 holes, equally spaced 150 mm apart. For track length less than 500 mm. holes are spaced 100 mm apart. All holes are spaced evenly from end. Customer specified hole patterns are possible. Please contact Osborn with special requirements.

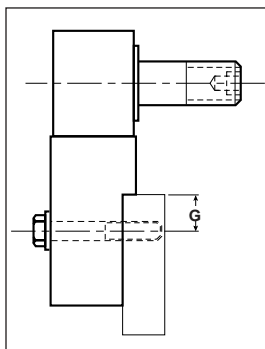
Load Rail Specifications

Metric Sizes (mm)

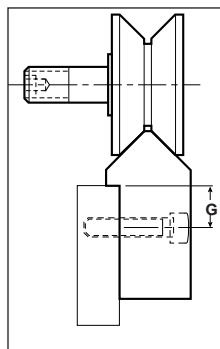


Osborn Part No.	A	B	C	D	E	F	G	Mounting		
								Option #1	Option #2	Option #3
L/H-MTV-1 XXXX	75	40	6	14	25.8	27	20	11 Cap Screw	10 Soc.Hd.Cap Screw	10x1.5 Cap Screw
L/H-MTV-2 XXXX	100	50	6	19	37.2	39	25	13Cap Screw	12 Soc.Hd.Cap Screw	12x1.75Cap Screw
L/H-MTP-1 XXXX	75	40	6	-	27	-	20	11 Cap Screw	10 Soc.Hd.Cap Screw	10x1.5 Cap Screw
L/H-MTP-2 XXXX	100	50	6	-	39	-	25	13 Cap Screw	12 Soc.Hd.Cap Screw	12x1.75 Cap Screw
L/H-MPV-1 XXXX	38.2	40	-	-	-	40	-	M10 x 1.5 x L.15 Cap Screw		
L/H-MPV-2 XXXX	48.2	50	-	-	-	50	-	M12 x 1.75 x L.20 Cap Screw		

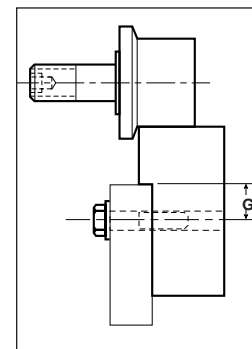
Maximum length is 5000 mm. Overall length can be cut to customer specifications.



Mounting Option # 1
Clearance hole for cap screw



Mounting Option # 2
Clearance hole and c'bore for socket head cap screw and hi-collar lock washer.



Mounting Option # 3
Tapped thru hole for cap screw

Load Runners®

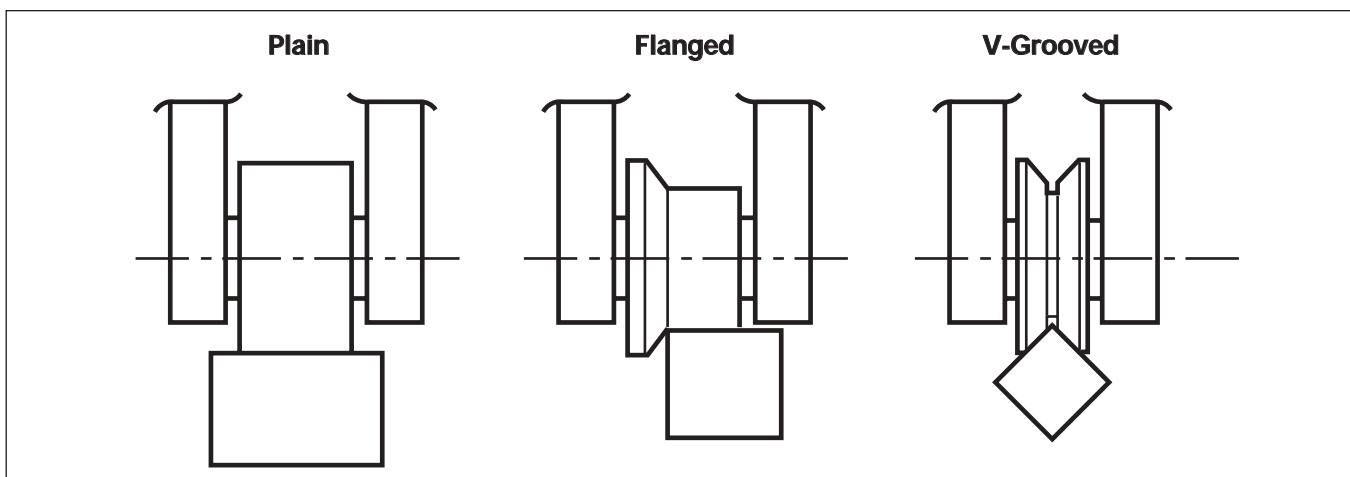
Customer Designed Track Requirements

Track Alignment

The track and roller should be aligned so that the roller tread lies flat on the track surface.

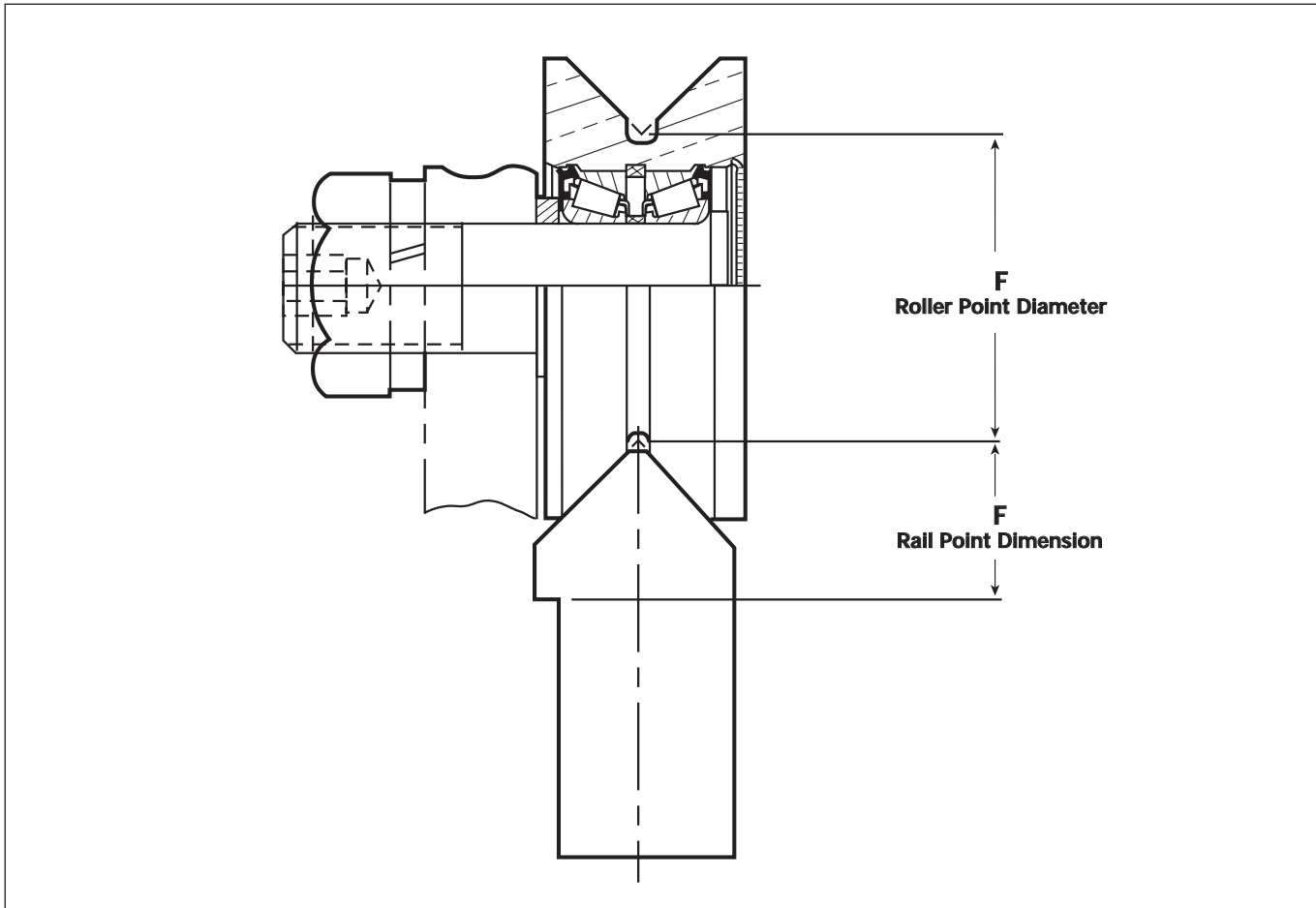
Track Capacity

For steel track of 180,000 PSI tensile strength (Rc=40), refer to the track capacity chart to find the track load capacity for the style and size of roller to be used. For steel track other than 180,000 PSI tensile strength, first refer to the track capacity factor chart for the type of steel to be used. Then multiply the track capacity for the roller being used by the track capacity factor for the steel to be used.



TRACK CAPACITY									TRACK CAPACITY FACTOR			
Radial Load Only												
For Tracks Made of 180,000 PSI Steel (Hardness Rc = 40)												
PLR & PLRY			FLR & FLRY			VLR & VLRY			Track Hardness Rc	Tensile Strength	Capacity Factor	
Roller Size	Capacity		Roller Size	Capacity		Roller Size	Capacity Square Track Only					
3	14,760	LBS.	3	10,500	LBS.	3-1/2	8,100	LBS.	26	120,000	PSI	0.369
	65,680	N		44,720	N		36,000	N		8,437	Kg/Cm ²	
3-1/4	16,000	LBS.	3-1/4	10,900	LBS.	4-1/2	13,200	LBS.	32	140,000	PSI	0.552
	71,200	N		48,500	N		58,800	N		9,843	Kg/Cm ²	
3-1/2	17,225	LBS.	3-1/2	14,200	LBS.	5	15,000	LBS.	36	160,000	PSI	0.755
	76,650	N		63,190	N		66,600	N		11,249	Kg/Cm ²	
4	25,300	LBS.	4	19,000	LBS.	5-1/2	16,700	LBS.	40	180,000	PSI	1.000
	112,580	N		84,550	N		74,400	N		12,655	Kg/Cm ²	
5	38,650	LBS.	5	29,400	LBS.	6-1/2	20,200	LBS.	44	200,000	PSI	1.235
	172,000	N		130,830	N		90,100	N		14,061	Kg/Cm ²	
6	54,830	LBS.	6	47,730	LBS.	7-1/2	23,800	LBS.	47	220,000	PSI	1.494
	244,000	N		212,400	N		106,000	N		15,467	Kg/Cm ²	
7	73,810	LBS.	7	60,860	LBS.	8-1/2	27,300	LBS.	50	240,000	PSI	1.777
	328,450	N		270,830	N		121,000	N		16,874	Kg/Cm ²	
8	95,600	LBS.	8	82,220	LBS.	9-1/2	30,800	LBS.	53	260,000	PSI	1.995
	425,400	N		365,880	N		137,000	N		18,280	Kg/Cm ²	
9	120,200	LBS.	9	105,160	LBS.	10-1/2	34,300	LBS.	56	280,000	PSI	2.209
	534,900	N		467,960	N		153,000	N		19,686	Kg/Cm ²	
10	147,600	LBS.	10	130,900	LBS.	11-1/2	37,900	LBS.	58	300,000	PSI	2.306
	656,800	N		582,500	N		168,000	N		21,092	Kg/Cm ²	

Load Runner on Load Rail Design Recommendations



Roller and rail design recommendations.

Mounting locations are determined by matching the roller point diameter with the rail point dimension. ("F" dimensions on roller and rail pages.)

See pages 12, 14, 21, 32, 34, 37 for Roller selection.
See pages 40 & 42 for Load Rail selection.

Load Runners®

Installation Notes

Yoke Style

General Considerations

Load Runners yoke-style idler-rollers offer considerable mounting flexibility. They can be installed on a bolt or thru-shaft between yoke brackets ("ears") which are fabricated as an integral part of the equipment, or in individual yoke brackets which can be bolted into position wherever needed.

It is important that the members which support the mounting bolt or thru-shaft are rigid enough to resist bending (which could cause uneven loading on the rollers) and strong enough to withstand the operational radial and thrust loads.

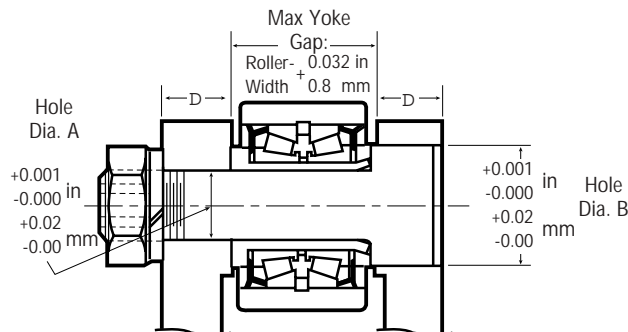
Osborn offers an exclusive line of heavy-duty thru-shafts designed specifically for use with yoke-style Load Runners idler-rollers. See Pages 22, 23 and 38.

Axial clamping of yoke-style rollers (through the bore) is required to prevent the bearing components from separating, causing loss of bearing adjustment and premature failure. The outboard end of the mounting bolt or thru-shaft should be allowed to float in the yoke ear to avoid "pinching" and restricting the idler-roller tread when the roller is clamped. (See drawings below).

Shaft Style A

See pages 22 & 38 for actual shaft dimensions.

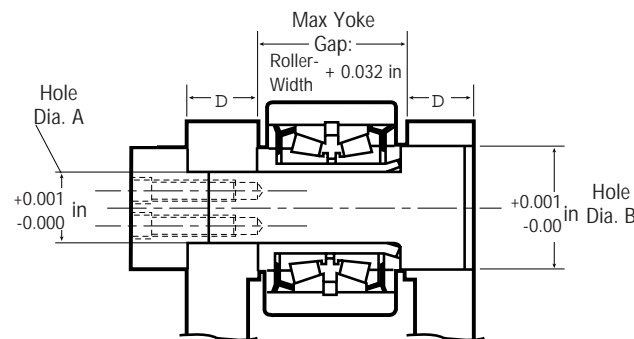
For Roller Sizes: *PLRY + FLRY 2 1/2" Thru 7",
VLRV 3 3/4" Thru 8 1/2"*
and all metrics



Shaft Style B

See page 22 for actual shaft dimensions.

For Roller Sizes: *PLRY + FLRY 8" Thru 10",
VLRV 9 1/2" Thru 11 1/2"*

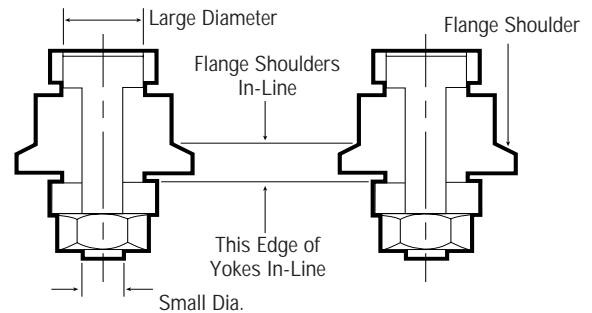


Flange Alignment

The shoulder on the flange end of a flanged yoke-style idler-roller serves as the dimensional reference point for accurate positioning of the roller flange with respect to the supported structure.

Orient each roller so that the flange is closest to the fixed (small diameter) end of the bolt or thru-shaft. (See Drawing.) When the bolt or thru-shaft is clamped, the reference shoulder will be pulled up tightly against the structure reference surface.

By mounting a string of flanged yoke-style rollers in this manner, all flanges will be properly aligned.

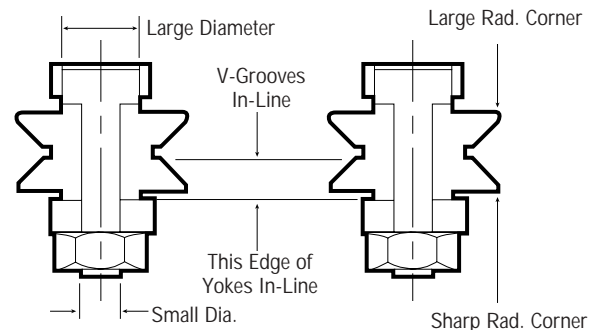


V-Groove Alignment

The sharp-radius corner of a V-grooved, yoke-style idler-roller indicates which shoulder should be used as a dimensional reference point for accurate alignment of a V-grooved roller with respect to the supported structure.

Orient each roller so that the sharp-radius corner is closest to the fixed (small diameter) end of the bolt or thru-shaft. (See Drawing.) When the bolt or thru-shaft is clamped, the reference shoulder will be pulled up tightly against the structure reference surface.

By mounting a string of V-grooved yoke-style rollers in this manner, all V-grooves will be properly aligned.



Stud Style

Hex Socket Size

Inch		Metric	
Stud Diameter	Hex Socket Size	Stud Diameter	Hex Socket Size
1/2"	3/16"	12 mm	4 mm
5/8" - 7/8"	5/16"	16 - 30 mm	8 mm
1" - 1 1/4"	1/2"	> 30 mm	12 mm
> 2"	5/8"		

Custom Designs and Special Features

In addition to the standard Load Runners idler-rollers listed on the previous page, custom tread profiles, studs and special features are available. A few examples include:

1. Crowned profiles
2. Solid lubricants
3. Double-flange rollers
4. Stainless steel treads, studs
5. Special plating (zinc, chrome etc.)
6. Non-metallic tread materials (urethane etc.)
7. Special seals
8. Special lubricants
9. Provision for re-lubrication

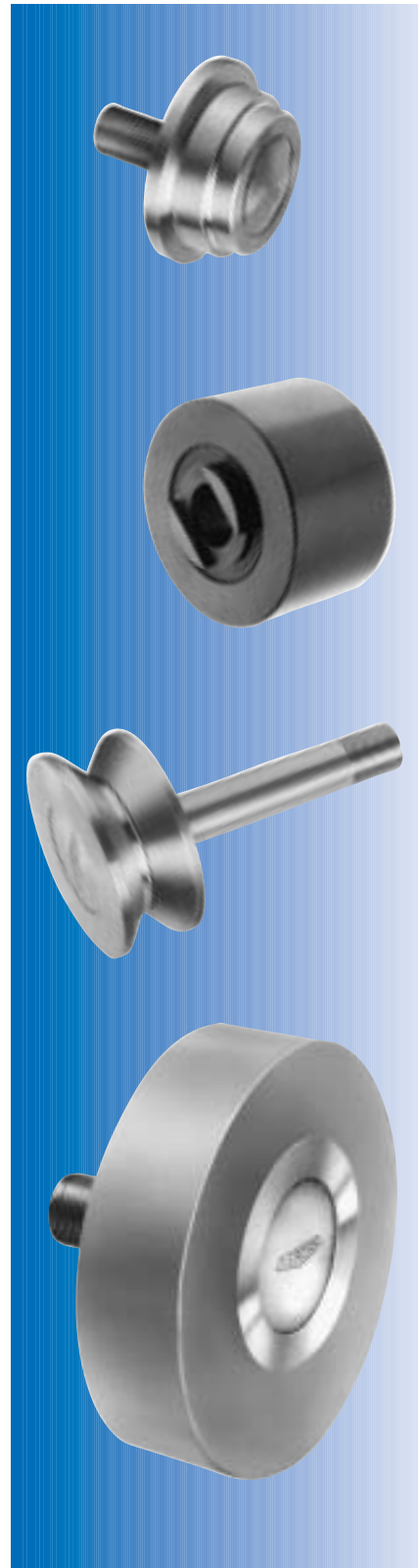
Consult Osborn International with special features or requirements not listed here.

Operation in Severe Environments

Temperature Extremes

Standard Load Runners idler-rollers are designed to operate in temperatures ranging from -30° F to +225° F (-34° C to +107° C).

Operation in extreme temperature environments as low as -40° F (-40° C) and as high as +400° F (+240° C) requires special seals and / or lubrication provisions.



Moisture Extremes

Operation in wash-down or similar extreme-moisture environments may also require special lubrication provisions.

Consult Osborn International for application assistance.

Bearing Disassembly (If Required)

Tapered-roller-bearing assemblies used in Load Runners idler-rollers are pre-set with custom-ground spacers for the correct running clearance. If for some reason, a bearing assembly is removed and then reassembled, the same cups, cones and spacers must be used.

Bearing assembly components cannot be mixed and matched. Even new cups or cones cannot be substituted in an existing assembly.

Osborn does not recommend disassembly and does not provide component parts.



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