LOAD RUNNERS

Installation Notes / Quotation Form

Polígono Industrial O Rebullón s/n. 36416 - Mos - España - rodavigo@rodavigo.com

LOAD RUNNERS
Information

Load Runners
PART NUMBERING

Part Number	Description
PLR	Plain Load Runners (Inch)
FLR	Flanged Load Runners (Inch)
VLR	V-Grooved Load Runners (Inch)
CLRY	Crowned Load Runners Yoke (Inch)
SHA/SHB	Heavy-Duty concentric Shaft (Inch)
SHE	Heavy-Duty Eccentric Shaft (Inch)
PCR	Plain Cam Runners (Inch)
HPC	**Metric** Plain Stud
HPJ	**Metric** Flanged Stud
HPV	**Metric** V-Groove Stud
HPCA	**Metric** Plain Yoke
HPJA	**Metric** Flanged Yoke
HPVA	**Metric** V-Grooved Yoke
MSHA	**Metric** Heavy-Duty concentric Shaft

Extensions	Description
PLR**(E)**	Eccentric Stud
FLR**(C)**	Crown Tread
(F)FLR	Double Flange
VLR**(S)**	Stainless Steel
PLR **(H)**	High Temp
PLR**(N)**	Nylon
PLR **(U)**	Urethane
FLR**(Y)**	Yoke
(H)PJ	**Metric**

Roll With The Best. Buy All Of Your Rail And Idler-Rollers From Osborn.

Contact us today and find out how Load Runners rail and idler rollers will remedy your unique material handling challenges. Our web site features in-depth information, **CAD-drawings download**, full catalog, installation instructions, and more.

Let the Osborn team help you determine the best solution for your needs.

Load Runners INSTALLATION NOTES

Tightening Torque

STUD DIAMETER	DRY THREADS	LUBRICATED THREADS
Less than 5/8" / 16mm	15 ft. lb. / 20 Nm	8 ft lb. / 10 Nm
5/8"/16 mm to 1"/24 mm	50 ft. lb. / 68 Nm	25 ft. lb. / 34 Nm
Over 1" / 24 mm	100 ft. lb. / 136 Nm	50 ft. lb. / 68 Nm

Osborn Load Runners Recommended Installation Procedure:

WARNING: High voltage and rotating parts may cause serious or fatal injury. Be sure to turn off power to machinery. Read and follow all instructions. Be sure to properly apply pressure when press-fitting your Load Runners. Hammering directly on the bearing could result in bearing damage or personal injury.

While lack of lubrication causes shorter operating life and product damage, Load Runners are designed and lubricated for life. In some instances, there is a convention to re-lubricate your Load Runners. Use the torque chart to install nuts properly. Do NOT over- or under-torque nuts.

Stud-Style Installation Considerations

1. Inspect the housing
    a. Remove all burrs/sharp edges and clean.
    b. Confirm housing bore diameter, insuring a snug fit with stud.
2. Install stud into housing
    a. Do NOT hammer Load Runners at any time.
3. Install lock washer and jam nut
    a. Do not tighten jam nut beyond torque specifications or damage may occur.
    b. Use hexagonal hole (broach) with hex key to prevent the stud from rotating when the nut is tightened.

Blind Hole Mounting

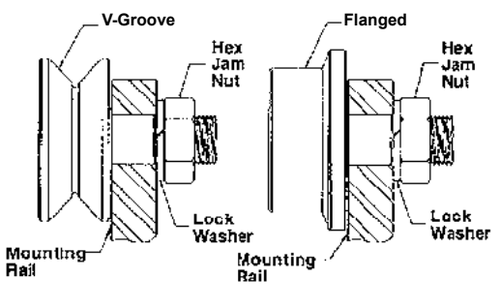
Certain applications require blind hole mounting into tapped threads. Use the hex key to ensure adequate torque is applied.

Mounting Considerations

Mounting holes should be machined to the nominal stud size within +.001/-.000 (+.025 mm/-.000 mm) tolerance.

When properly aligned, the roller stud should slip into the mounting member. Do not force the stud into the mounting member as damage to the roller may occur.

When mounting rollers, do not torque the jam nuts beyond what is recommended or damage may occur. Be sure that the mounting member is of sufficient thickness to support the applied loads.



INSTALLATION

Notes

Yoke-Style Installation 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.

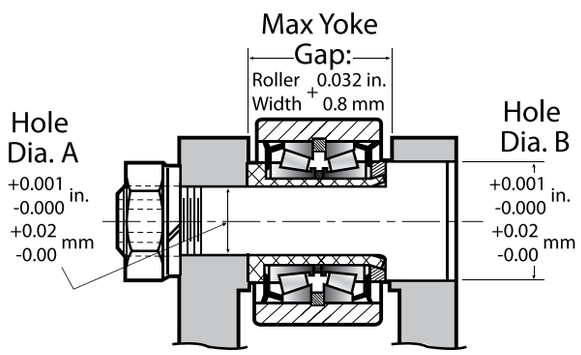
It is important that the members which support the mounting bolt or thru-shaft are rigid enough to resist bending (which could cause uneven loading on the rollers) and strong enough to withstand the operational radial and thrust loads.

Osborn offers an exclusive line of heavy-duty thru-shafts designed specifically for use with yoke-style Load Runners idler-rollers. See pages 43, and 74-75.

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).

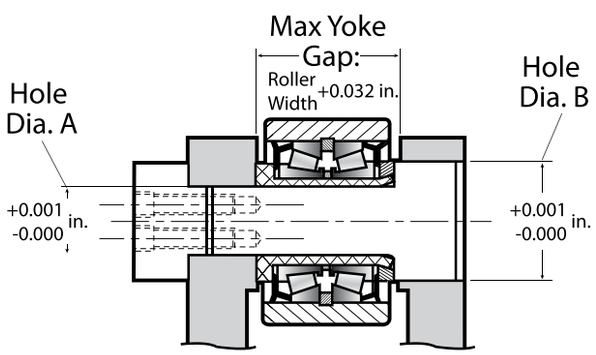
Shaft Style A
See pages 43 & 74 for actual shaft dimensions.

For Roller Sizes: PLRY + FLRY 1 1/2" Thru 7", VLRY 2 1/2" Thru 8 1/2" and all metrics



Shaft Style B
See page 43 for actual shaft dimensions.

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

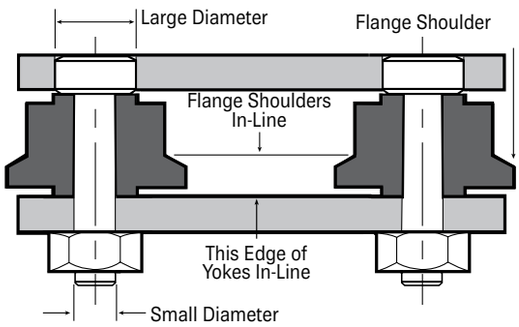


Flange Alignment

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.



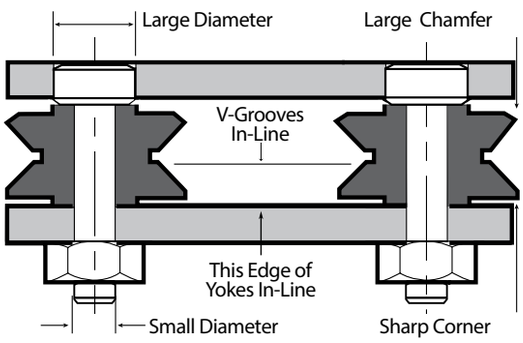
V-Grooved Alignment

The Chamfer Side (**Metric** rollers) resp. the sharp-radius corner (**Inch** rollers) indicate which shoulder should be used as a dimensional reference point for accurate alignment of a V-Grooved roller with respect to the supported structure.

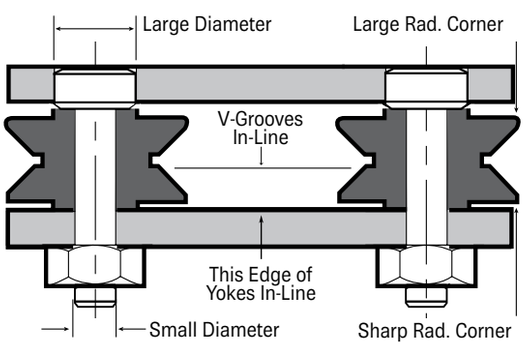
Orient each roller so that the Chamfer Side (**Metric**) resp. sharp-radius corner (**Inch**) is closest to the fixed (small diameter) end of the bolt or thru-shaft. (See Drawing.) When the bolt or thru-shaft is clamped, the reference shoulder will be pulled up tightly against the structure reference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

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

Reference for Metric V-Groove-Yoke



Reference for Inch V-Groove-Yoke



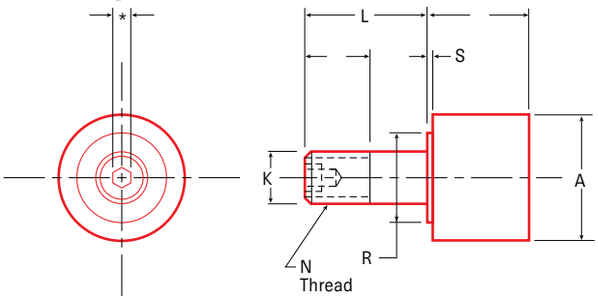
Hex Socket Sizes

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"	14 mm	6 mm
1" – 1 1/4"	1/2"	16 - 30 mm	8 mm
≥ 2"	5/8"	≥ 30 mm	12 mm

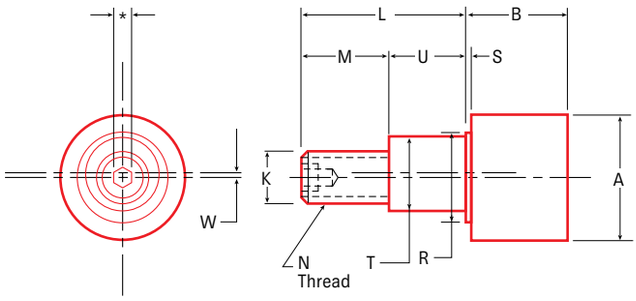
LOAD RUNNERS

Fax/Email Quotation Form

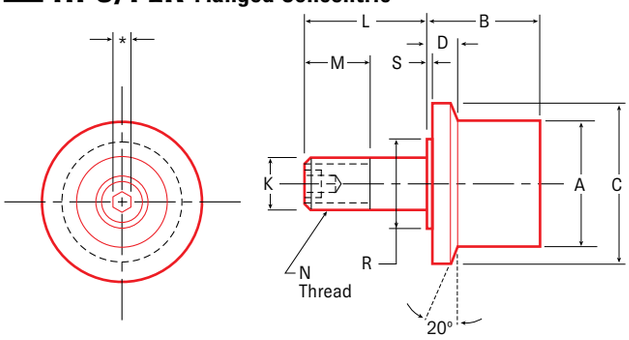
☐ HPC/PLR Plain Concentric



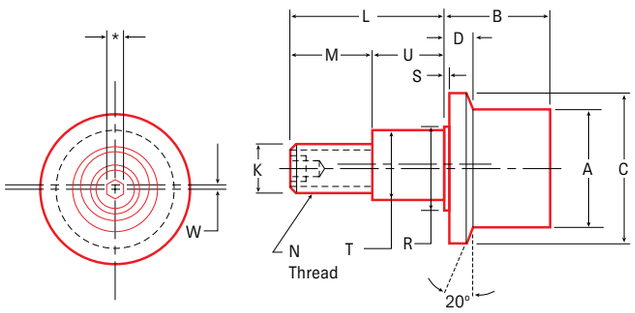
☐ HPCE/PLRE Plain Eccentric



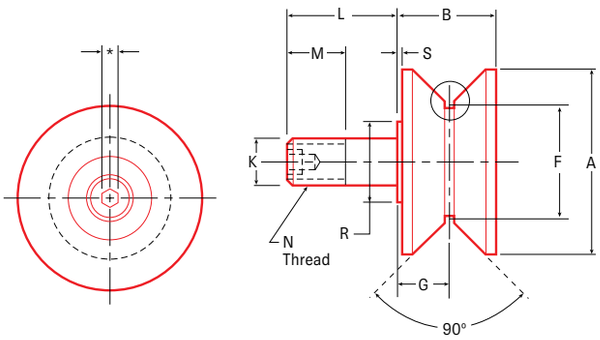
☐ HPJ/FLR Flanged Concentric



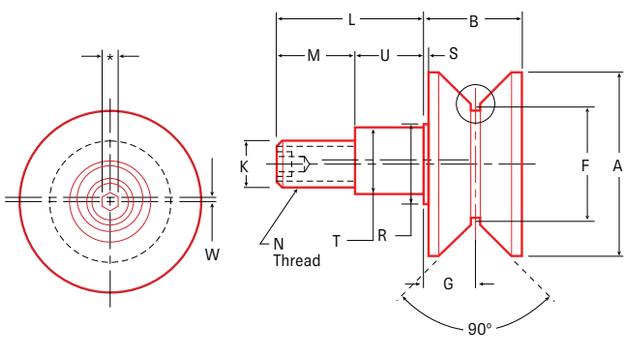
☐ HPJE/FLRE Flanged Eccentric



☐ HPV/VLR V-Grooved Concentric



☐ HPVE/VLRE V-Grooved Eccentric



Name: _____

Company: _____

Address: _____

Phone: _____

Application: _____

_____

_____

_____

Send to contact details on page 2

Operating Temperature: _____

Loads: _____

Speeds: _____

Desired L-10 Life: _____

Lubrication:
[ ] Sealed [ ] Manual

Material:
[ ] Steel [ ] Stainless [ ] Other _____

Critical Dimensions: _____

_____

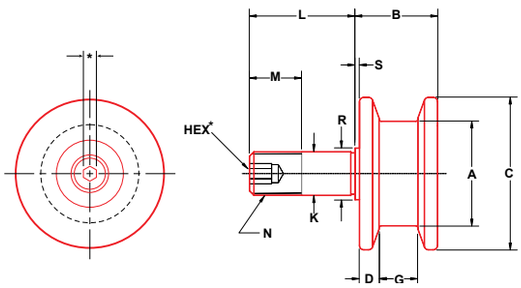
A Roller Dia.
B Roller Width
C Flange Dia.
D Flange Width
F Point Dia.
G Groove Loc.
K Stud Dia.
L Stud Length
M Thread Len.
N Thread
R Shoulder Dia.
S Shoulder Len.
T Eccent. Dia.
U Eccent. Len.
W Eccentricity

Load Runners®

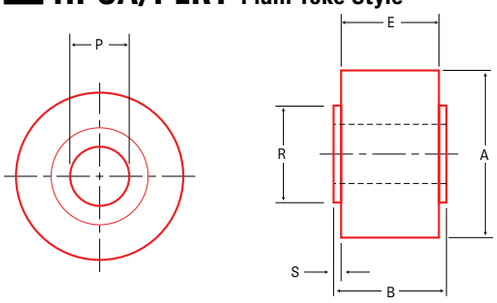
LOAD RUNNERS

Fax/Email Quotation Form

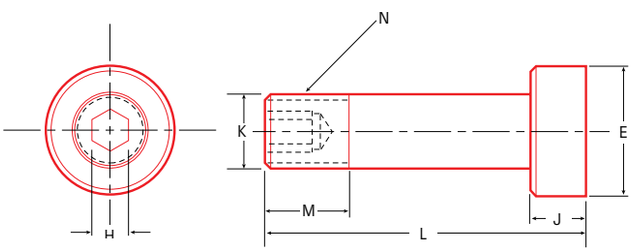
☐ FFLR Double Flanged Concentric



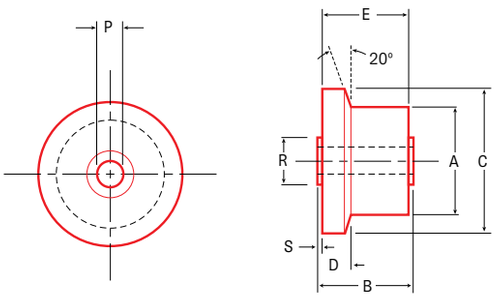
☐ HPCA/PLRY Plain Yoke Style



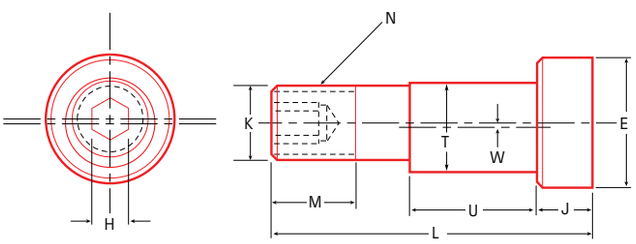
☐ MSHA/SHA Concentric Yoke Shaft



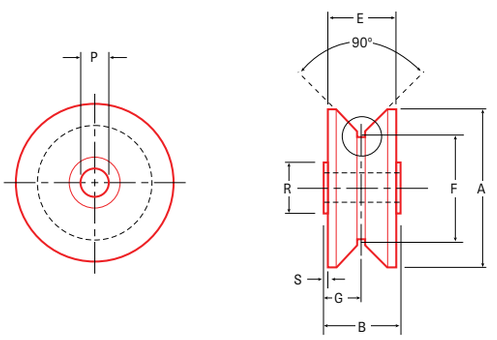
☐ HPJA/FLRY Flanged Yoke Style



☐ SHE Eccentric Yoke Shaft



☐ HPVA/VLRY V-Grooved Yoke Style



Idler Rollers are not recommended for repetitive and/or impact loads.
Shock and impact loads will reduce the life of the roller.

Name: _____

Company: _____

Address: _____

Phone: _____

Application: _____

_____

_____

_____

Send to contact details on page 2

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Material:
[ ] Steel [ ] Stainless [ ] Other _____

Critical Dimensions: _____

_____

A Roller Dia.
B Roller Width
C Flange Dia.
D Flange Width
F Point Dia.
G Groove Loc.
K Stud Dia.
L Stud Length
M Thread Len.
N Thread
R Shoulder Dia.
S Shoulder Len.
T Eccent. Dia.
U Eccent. Len.
W Eccentricity

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Osborn International GmbH
Ringstraße 10 • 35099 Burgwald/Germany • Tel.: +49 (64 51) 5 88-0 • Fax: +49 (64 51) 5 88-206 • info@osborn.de • www.osborn.com