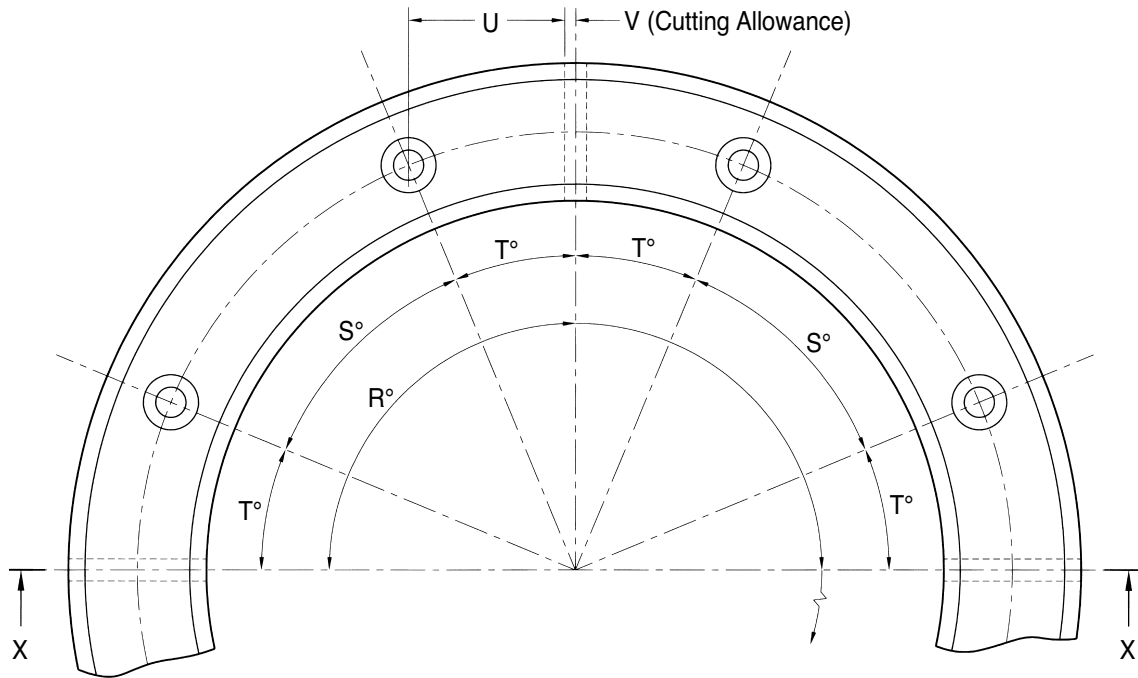


PRECISION GEARS

Ring Slides Slide Rings and Segments



Notes:

⁽¹⁾ Full 360° ring slides are standard.

⁽²⁾ Socket head cap screws ISO 4762 will protrude 1mm above the surface of the R12 section slide rings. Customers requiring screws to be flush should use low head type DIN 7984, available from Ondrives upon request.

The 'R' series slide rings are manufactured from high quality steel, zone hardened on the V edges and precision ground all over with datum register faces provided both internally and externally for ease of location.

Gear drive options are available with teeth machined into either the internal or external register face.

The number of teeth on the standard external option is divisible by 12 in order to provide maximum choice of pinion size for exact ratio requirements.

Customers may also choose the tapped hole option 'N' which enables the slide ring to be bolted from below (see previous page).

The 'R' series ring segments are cut from complete 360° slide rings and available in nominal 90° and 180° sections.

Any length segment can be cut to customer's special order and additional holes drilled as required.

Although suitable for most applications, slight out of roundness and flatness may be experienced with slide rings and segments in their free unmounted condition.

This may be overcome by installing against a register and bolting to a flat surface.

Prices shown are for full 360° ring slides as standard.

Ordering

R1293360 = Full 360° ring slide (standard).

If you require 90° or 180° segments only, please substitute the '360' at the end of the part number for '90' or '180' respectively.

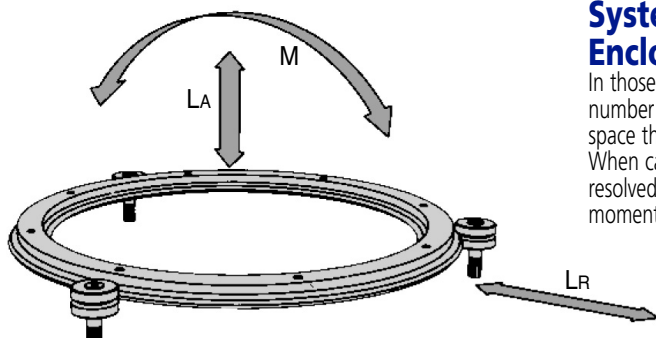
Similarly, if you require either of the options 'Q' or 'N', please add this to the end of the part number.

Please contact sales for prices and further information on the above non-standard options.

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PRECISION GEARS

Ring Slide Bearing Assemblies



Systems with Rings Rotating Within Enclosing Bearing Assemblies

In those duties having a complete ring which rotates in a number of encircling bearing assemblies, it is usual to equally space the bearing assemblies around the ring⁽¹⁾. When calculating the life, the loading on the system should be resolved into the direct load components LA and LR and the moment load component M (see adjacent diagram).

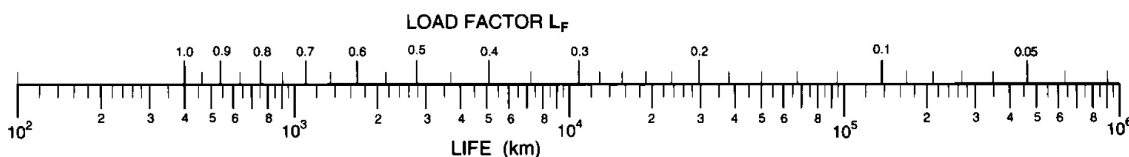
Bearing Assembly	Used with Ring Type	Number Of Bearing Assemblies Equally Spaced	Maximum Lubricated Load Capacity			Maximum Lubricated Load Capacity		
			LA (N)	LR (N)	M (Nm) ⁽⁴⁾	LA (N)	LR (N)	M (Nm) ⁽⁴⁾
RSJ-13	R12-93	3	90	52	18xØc	60	34	13xØc
	R12-127	4	113	60	22.5xØc	75	40	16xØc
	Each Additional 1	23	15	4.5xØc	5	3	1.2xØc	
RSJ-25	R25-159	3	600	350	150xØc	230	125	55xØc
	R25-255	4	750	400	187xØc	285	150	69xØc
	R25-351	Each Additional 1	150	100	37xØc	18	12	5xØc
RSJ-34	R44-468	3	1200	700	300xØc	460	255	110xØc
	R44-612	4	1500	800	375xØc	575	300	138xØc
	Each Additional 1	300	100	75xØc	38	24	27xØc	
RSJ-54	R76-799	3	2850	1650	750xØc	1050	600	260xØc
	R76-1033	4	3600	1900	875xØc	1300	700	325xØc
	Each Additional 1	700	470	175xØc	75	50	18xØc	

To calculate the life of this type of system, first obtain a value for the load factor LF by entering the values for LA, LR and M in respect of the proposed duty, into the equation below, together with the maximum load capacities from the table above.

$$LF = \frac{M}{M(\max)} + \frac{LA}{LA(\max)} + \frac{LR}{LR(\max)}$$

The life for the system can be read from the nomogram below (for lubricated systems) or consult sales (for systems running dry) by taking the life figure on the lower scale opposite the appropriate value for LF on the upper scale.

Load/Life Nomogram for Lubricated Systems



Notes:

- ¹⁾ In certain applications in which the bearing assemblies rotate with the load, and this has large LR or M components, it may be beneficial to space the bearing assemblies unequally around the ring. Consult sales for details.
- ²⁾ **Speed of Operation:** Ring, segment and track systems are rated for speeds of 1m/s without lubrication or 1.5m/s when lubricated. Greater speeds may be tolerated at reduced loads. Consult sales for details.
- ³⁾ **Short Stroke Operation:** The life of ring, segment and track systems will be reduced when the length of the path traversed in each cycle is very short.
For path lengths below 0.2m, the life will reduce pro-rata with the path length, e.g., a system with a 0.08m stroke will have its life reduced by a factor of $0.08m \div 0.2 = 0.4$ compared to that calculated from the appropriate nomogram.
- ⁴⁾ Øc is the contact diameter, i.e. the diameter of the circle which passes through the points of contact between bearing assemblies and the ring.
This will be equal to the P.C.D. of the ring \pm 9, 20, 37 & 64mm for the 12, 25, 44 & 76 sections respectively (depending on whether the bearing assemblies are running on the outside or inside of the ring).