

This data sheet
interacts with

PRT2 Catalogue



30 - 31

HepcoMotion®

No.13 PRT2 Timing Belt Ring Slides, Pulleys and Belts

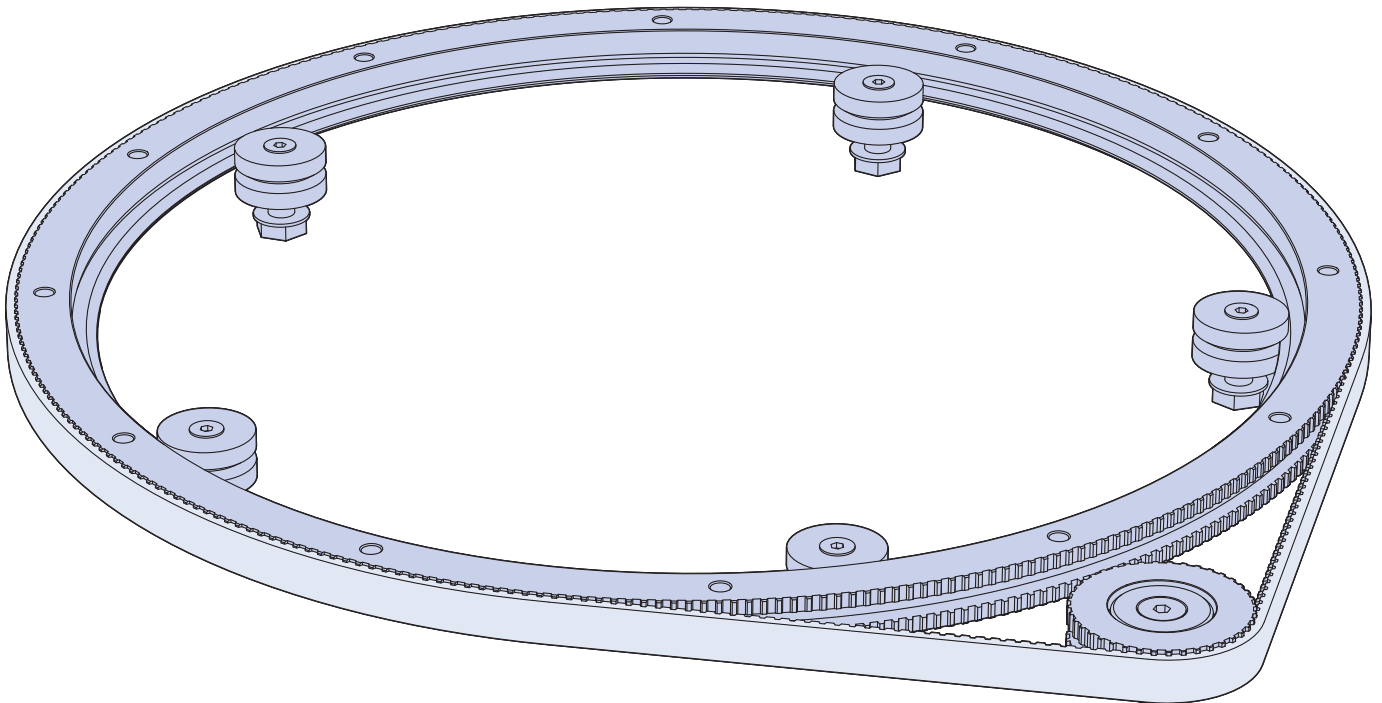
HepcoMotion's popular PRT2 ring slide range provides the standard solution for many rotary motion requirements, and offers rings with internal and external gears as well as plain versions in steel and stainless steel.

Toothed timing belts are also widely specified for driving rotary motion, and so Hepco has introduced a range of ring slides which are modified with a timing pulley profile.

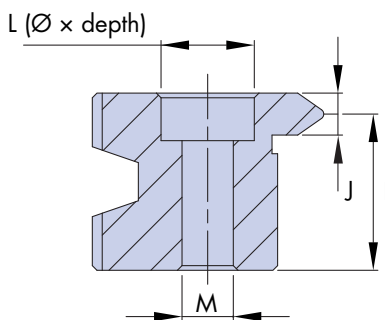
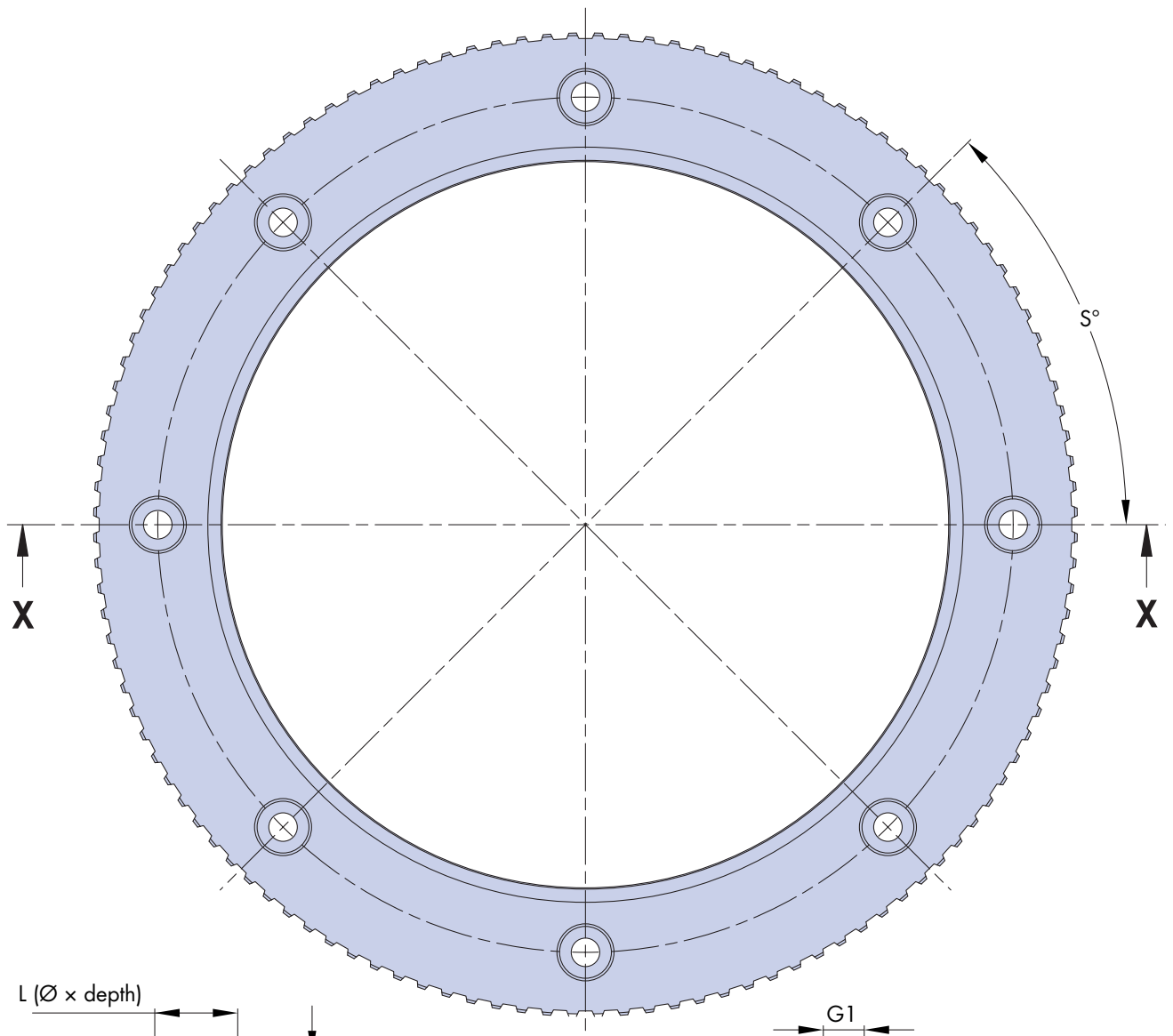
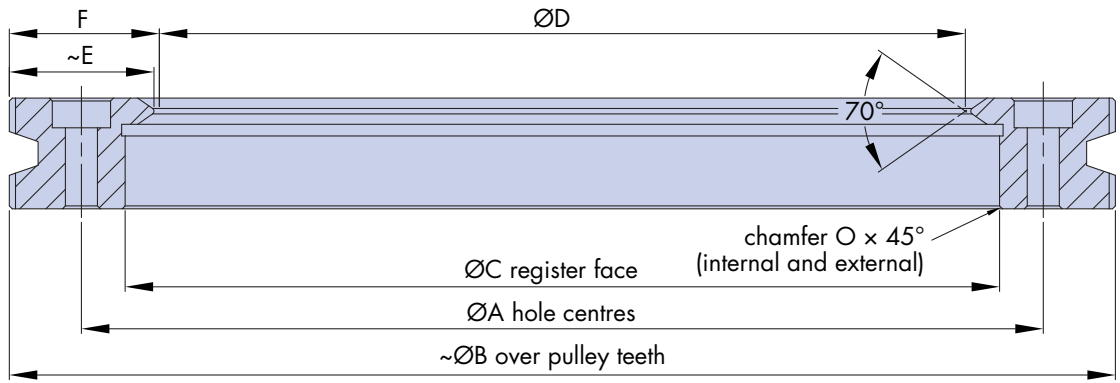
The Hepco design has a self aligning V groove in the pulley which eliminates the need for flanges. The combination of timing belts with Hepco ring slides offers important features and benefits:

- High driving force & speed - up to 5m/s peripheral speed
- Accurate / low backlash
- Quiet
- Clean
- Maintenance free - do not require lubrication or re-tensioning

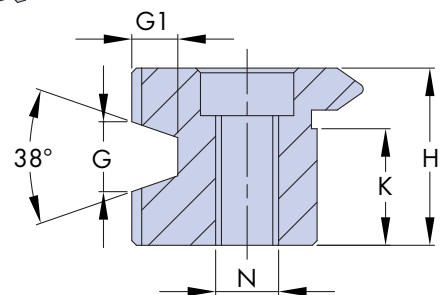
The standard range of timing belt rings includes 6 sizes from 190 to 826mm in diameter, with larger versions available to special order. To complement this range of rings, Hepco will supply compatible timing pulleys and timing belts made to the exact length requirements of your application.



Data & Dimensions



Standard Counterbored Hole



Tapped Hole Option N

Data & Dimensions

HepcoMotion timing belt ring slides are manufactured from high quality steel, zone hardened on the V edge and precision ground on all faces except the teeth. A datum register face is provided internally for ease of location. Customers may also choose the tapped hole option 'N' which enables the ring slide to be bolted from below. Stainless steel ring slides are available for customers requiring corrosion resistance.

HepcoMotion timing belt ring slides have a similar design and are interchangeable with the popular PRT2 range of internal single edge ring slides as shown in the PRT2 catalogue 30-31. Please visit www.HepcoMotion.com/PRT2datauk to download a copy, or contact Hepco for a printed version.

The design of each timing belt ring is identical to the PRT2 equivalent except the timing belt versions are wider (to suit available timing belts) and the outside diameters are larger to accommodate numbers of teeth which facilitate whole number gearing.

Dimensions A, C, D, J, L, M, N & O are the same for both ranges.

For applications requiring bigger or stronger components, timing belt versions of the rings in the HDRT (Heavy Duty Ring) range are available on request. Please visit www.HepcoMotion.com/HDRTdatauk to download a copy of the HDRT catalogue, and contact Hepco to request the timing belt variant.

Part Number	For use with bearing (2)	A ±0.2	B	C Register Ø	D	E ~	F	G	G1	H	I ±0.025	J	K	L
RIS 190 TB	... J25 ...	165	189.8	150 ±0.039	139.26	24.7	25.25	7	5	19	16.75	4.5	12.5	10 x 5.2
RIS 285 TB	... J25 ...	261	285.3	246 ±0.041	235.26	24.4	25.00	7	5	19	16.75	4.5	12.5	10 x 5.2
RIS 381 TB	... J25 ...	357	380.8	342 ±0.044	331.26	24.2	24.75	7	5	19	16.75	4.5	12.5	10 x 5.2
RIM 483 TB	... J34 ...	461.5	482.6	442.5 ±0.046	423.76	28.9	29.43	7	5	19	16	6	10.5	11 x 6.2
RIM 635 TB	... J34 ...	606.5	635.4	587.5 ±0.048	568.76	32.8	33.32	7	5	19	16	6	10.5	11 x 6.2
RIL 826 TB	... J54 ...	788	825.7	760 ±0.051	733.26	45.7	46.24	14	7.5	28	23.5	9	16	18 x 10.3

M	DIN912 (not supplied)	N	O	Timing Pulley Details			Compatible Timing Belt*	Number of holes (R=360°)	Holes within ±0.2 of true position	kg~ (R=360°)	Part Number
				Tooth Form	Pitch (mm)	No of teeth			S°		
5.5	M5	M8	0.5	AT5V	5	120	16AT5VK6 XXXX	8	45	1.42	RIS 190 TB
5.5	M5	M8	0.5	AT5V	5	180	16AT5VK6 XXXX	8	45	2.22	RIS 285 TB
5.5	M5	M8	0.5	AT5V	5	240	16AT5VK6 XXXX	12	30	2.98	RIS 381 TB
6.8	M6	M8	0.5	AT5V	5	304	16AT5VK6 XXXX	12	30	4.24	RIM 483 TB
6.8	M6	M8	0.5	AT5V	5	400	16AT5VK6 XXXX	16	22.5	6.72	RIM 635 TB
11	M10	M16	1.0	AT10V	10	260	25AT10VK13 XXXX	16	22.5	17.4	RIL 826 TB

*XXXX is the length. See next page.

Ordering details:

(SS) RIS 381 TB (N)

SS = Stainless Steel option
Leave blank for steel version

N = Tapped hole option
Leave blank for plain holes

Part number

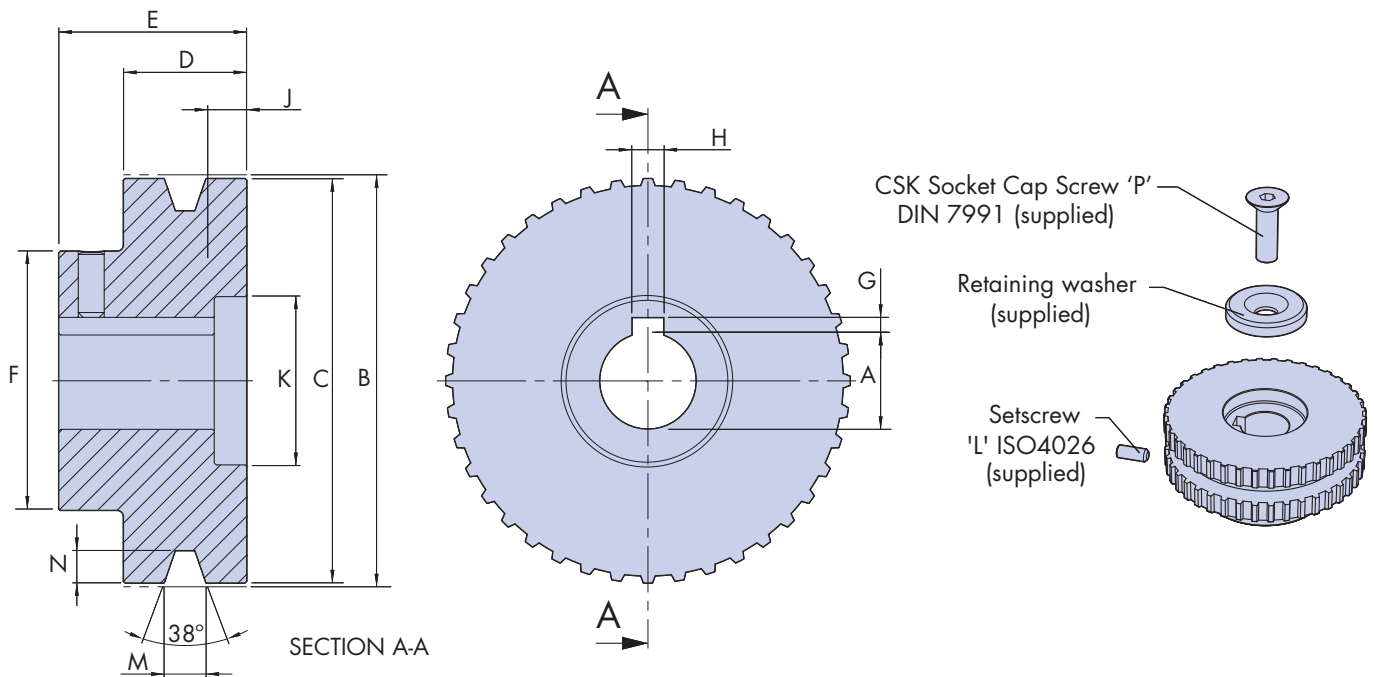
TB = Timing Belt version

Timing Pulleys & Belts

HepcoMotion timing pulleys are compatible with timing belt rings, and are available in 3 sizes to provide a whole number ratio for most ring and pulley combinations.

Timing pulleys are made from stainless steel as standard, with a precision bore and keyway, and come complete with retaining washer, countersunk socket cap screw, and set screw, to secure the pulley to a drive shaft.

Timing belts have a polyurethane construction with high tensile steel tension cords. They have a the high strength AT tooth profile and a self aligning V guide. Belts will be made up to the exact length which is required, with a welded joint. Joint less belts which take higher loads, are available to special order.



Part Number	Tooth Form	Tooth Pitch	No of Teeth	A H7	B	C	D	E	F	G	H	J	K	L	M	N	P	kg~
TPAT5VK6T30	AT5VK6	5	30	15	47.75	46.53	19	29	30	2.3	5	5	26	M4	6.5	5	M6x20	0.22
TPAT5VK6T40	AT5VK6	5	40	15	63.66	62.44	19	29	40	2.3	5	5	26	M4	6.5	5	M6x20	0.46
TPAT10VK13T20	AT10V13	10	20	20	63.66	61.84	28	38	40	2.8	6	6	35	M5	13.5	7.5	M8x20	0.53

Ordering details: Pulley

TP = Timing Pulley
AT5VK6 = Tooth Form
T30 = Number of teeth

Ordering details: Belt

16 = Timing belt width in mm: 16 for AT5 belts and 25 for AT10
AT5VK6 = Tooth Form
L1320 = Belt Length in mm - multiple of tooth pitch

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