Twin piston semi-rotary drive DRRD

Power package!

Highlights

- Top performance for a low price
- With higher load capacity and higher maximum mass moment of inertia, even in small sizes
- Precise end positions, even with long lever arm

The new twin-piston semi-rotary drive DRRD combines a high load capacity and accuracy with great economy. Available in several sizes, it delivers the required torque of 0.2 to 112 Nm with comparatively compact dimensions, which makes it significantly less expensive.

Flexibility for economy
The DRRD is available in sizes 8 to 63. Common features of all sizes are high maximum mass moments of inertia and bearing loads. These allow a drive one size smaller than usual to be selected for a given performance level, thus saving money and installation space – in handling and assembly applications or in general machine construction and machine tools.

Reliable and powerful
This semi-rotary drive provides precise positioning, even with a long lever arm. It beats its competitors in the accuracy it offers in its end positions.

Higher load capacity than ever before
Thanks to an optimised housing and piston design, the DRRD is well able to handle the demands of a tough industrial environment. From size 16 onwards, it also offers the option of end-position locking as a mechanical interlock for end or intermediate positions and a completely sealed variant for wet environments.

Optimal cushioning
With two types of internal cushioning – elastic or hydraulic and external hydraulic cushioning. From size 12 onwards, either a soft or hard internal shock absorber can be used.

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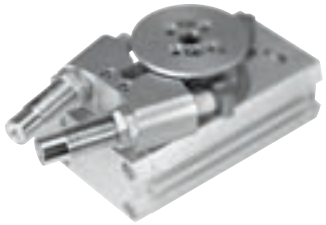
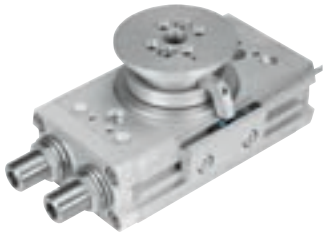
Cushioning
Choice of different types of cushioning for different loads and swivel motions:
- Elastic cushioning, with metal end position
- Shock absorber

External cushioning
Full torque to handle maximum mass moments of inertia can be achieved in combination with external cushioning in the end positions.

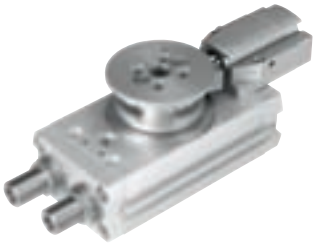


Position sensing
Internal position sensing with proximity sensors in T-slot – flush-mounting to fit into the smallest installation space

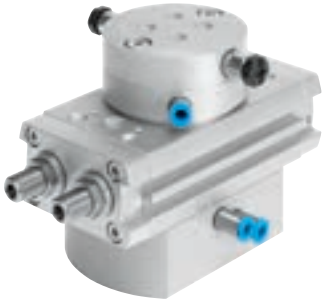
External position sensing (sensor mounting)
- Position sensing possible directly at the flanged shaft
- Inductive sensors SIES can be used in combination with external position sensing



End-position locking
Mechanical lock in the end positions to prevent unwanted movement in unpressurised condition



Energy through-feed
- Size 16 ... 63
- Simple transmission of electrical signals and compressed air via the hollow shaft
- Fast supply of the parts connected to the flange (e.g. gripper)



Technical data

Size*	8	10	12	16	20	25	32	35	40	50	63
Torques [Nm]	0.2	0.4	0.8	1.6	2.4	5.1	10.1	15.8	24.1	53	112
Pneumatic connection	M3			M6			G1/8			G1/4	G3/8
Swivel angle [°]	Max. 200 freely adjustable (nominal angle ex-works: 180)										
Repetition accuracy [°]	≤ 0.03			‹ 0.05						≤ 0.03	
Axial eccentricity [mm]	≤ 0.02			‹ 0.05							
Mass moment of inertia [kgcm²]	15 ... 420.000 (depending on cushioning, external cushioning)										
*Further sizes 8 ... 63 for torques up to 112 Nm on request											

PSI 117.2 2014/11