LOCKED PRK

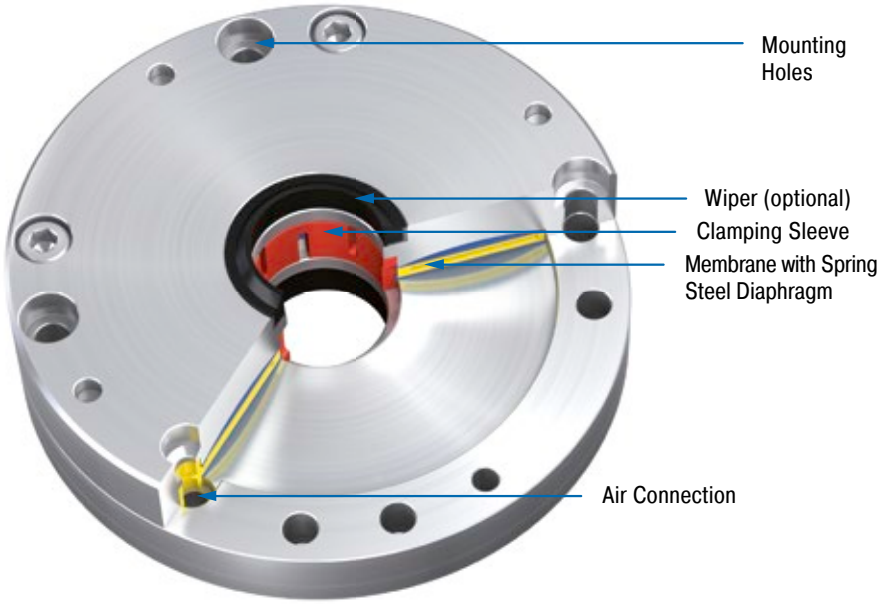
Rod clamping with maximum clamping force in a compact size

Pneumatic Rod Clamping, Compact
Holding forces 700 N to 5,000 N
Holding torques 7 Nm to 100 Nm

Compact and safe: when space becomes restricted, the compact LOCKED PRK clamping elements come into their own. As pneumatic rod clamping with low heights of 28 to 34 mm, they provide clamping forces of up to 5,000 N.

Clamping is carried out by a diaphragm spring-plate system and is released when compressed air is applied. Clamping elements from the LOCKED PRK product family absorb the forces on rods with diameters between 20 and 40 mm both axially and rotationally. The function makes them suitable for use as static clamping without pressure, because the failure or drop of pneumatic pressure triggers immediate clamping. High clamping forces with low system costs compared with hydraulic and electric solutions make these clamping elements particularly interesting.

LOCKED PRK models are used in mechanical engineering and customised machine tools.



Technical Data

Holding torques: 7 Nm to 100 Nm
Holding forces: 700 N to 5,000 N
Rod diameter: Ø 20 mm to Ø 40 mm
Clamping cycles: 1,000,000
Mounting: In any position
Operating pressure: 4 bar (automotive) or 6 bar
Material: Outer body: Tool steel
Pneumatic medium: Dried, filtered air
Operating temperature range: 10 °C to 45 °C

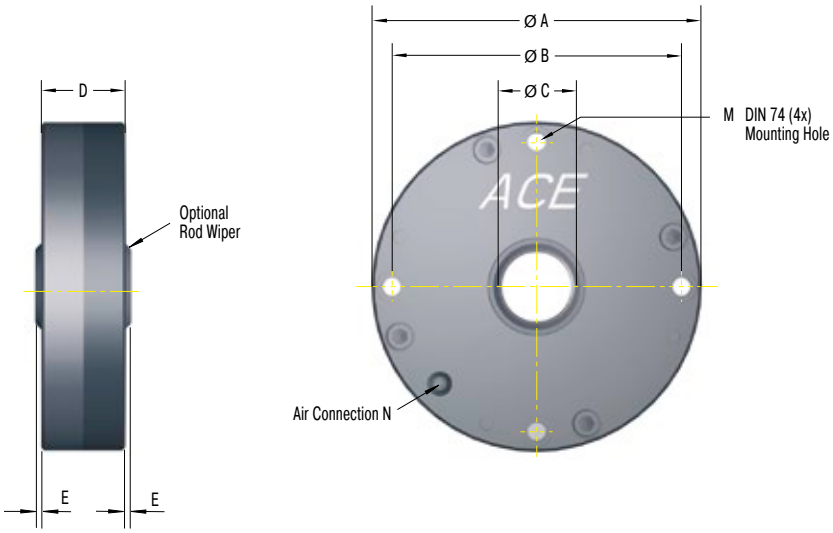
Application field: Jacking systems, Light presses, Punching/stamping machines, Stacking units

Note: When mounting, use hardened piston rod.

On request: Special designs as for example special diameters and accessories available on request. Versions matching to ISO pneumatic cylinders including base plates coordinated to the dimensions of the flange sizes of standard cylinders according to ISO 15552 are also available.

Issue 07.2017 – Specifications subject to change

PRK



The calculation and selection of the most suitable clamping element should be carried out or be approved by ACE.

Complete details required when ordering

Operating pressure: 4 bar or 6 bar

Ordering Example **PRK80-25-6B**

Rod Clamping Compact
ISO Cylinder Nominal Diameter 80 mm
Rod Diameter 25 mm
6B = 6 bar Type
4B = 4 bar Type

Performance and Dimensions

TYPES	[1] Holding force N	Holding torque Nm	Operating pressure bar	A mm	B mm	C mm	D mm	E mm	M	N	Weight kg
PRK63-20-4B	700	7	4	92	80	20	28	2.1	M5	G1/8	1.15
PRK63-20-6B	1,000	10	6	92	80	20	28	2.1	M5	G1/8	1.15
PRK80-25-4B	1,050	12	4	118	104	25	30	2.14	M6	G1/8	2.10
PRK80-25-6B	1,500	17	6	118	104	25	30	2.14	M6	G1/8	2.10
PRK125-40-4B	3,500	70	4	168	152	40	34	3	M6	G1/8	4.90
PRK125-40-6B	5,000	100	6	168	152	40	34	3	M6	G1/8	4.90

[1] The listed holding forces are reached under optimum conditions. We recommend a safety factor of > 10 %. Please note that surface, material and cleanliness of the rod as well as wear and tear and the use of rod wipers lead to different holding forces. Test the clamping needed for series production or safety applications in its specific application environment and measure the actual values.