

LOCKED PN

Rod clamping with maximum clamping force

Pneumatic Rod Clamping

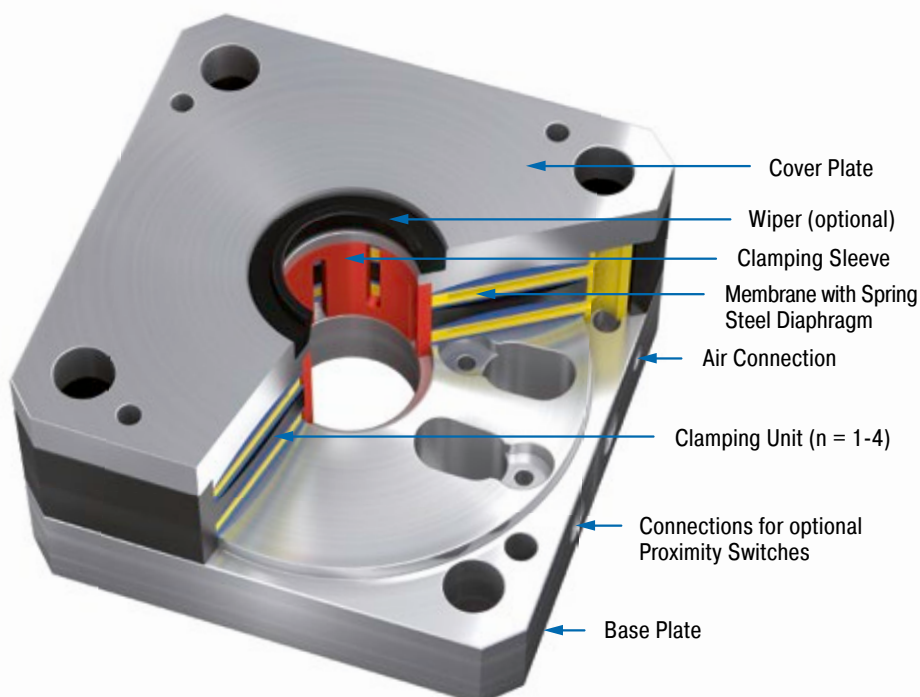
Holding forces 1,400 N to 36,000 N

Holding torques 15 Nm to 720 Nm

Immediate clamping in case of loss of pneumatics: Suitable for rods with diameters of 20 to 40 mm, the clamping elements LOCKED PN absorb the forces axially and rotationally. With holding forces of up to 36,000 N, they reach or exceed the levels of hydraulic clamps. The system costs are however lower.

Alongside clamping in both directions of motion, the LOCKED-PN also surprises with its compact design. They need less installation space and enable short rod lengths. Many users appreciate the modular system. It allows several segments to be stacked so that the necessary clamping force can be attained for every application.

The areas of application for the ACE product family LOCKED PN are mechanical engineering and machine tools.



Technical Data

Holding torques: 15 Nm to 720 Nm

Holding forces: 1,400 N to 36,000 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

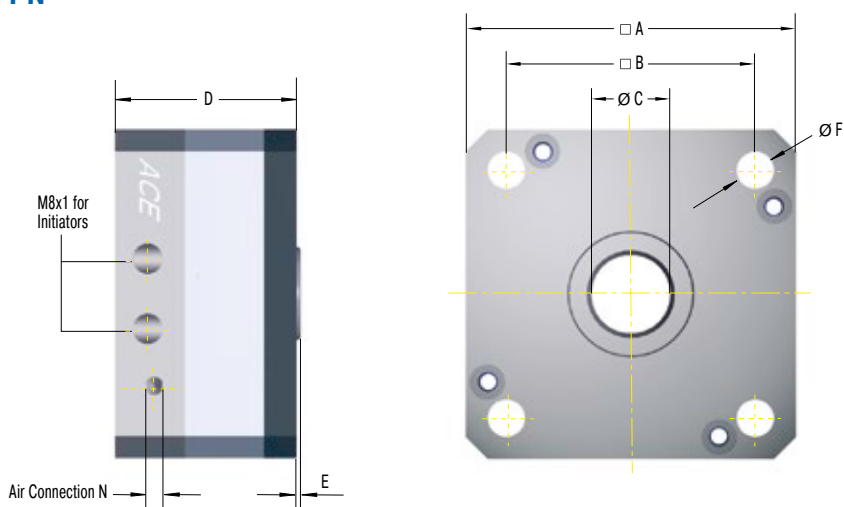
Operating temperature range: 10 °C to 45 °C

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.

PN



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

Ordering Example

PN80-25-3-4B

Rod Clamping Standard Model _____
ISO Cylinder Nominal Diameter 80 mm _____
Rod Diameter 25 mm _____
Number of Clamping Units 3 _____
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	F mm	N	Weight kg
PN63-20-1-4B	1,400	15	4	75	56.5	20	41.5	2.1	8.5	M5	0.70
PN63-20-1-6B	2,000	20	6	75	56.5	20	41.5	2.1	8.5	M5	0.70
PN63-20-2-4B	2,520	25	4	75	56.5	20	59.5	2.1	8.5	M5	1.13
PN63-20-2-6B	3,600	35	6	75	56.5	20	59.5	2.1	8.5	M5	1.13
PN63-20-3-4B	3,780	35	4	75	56.5	20	77.5	2.1	8.5	M5	1.56
PN63-20-3-6B	5,400	50	6	75	56.5	20	77.5	2.1	8.5	M5	1.56
PN80-25-1-4B	2,100	25	4	96	72	25	43.5	2.14	10.5	G1/8	1.30
PN80-25-1-6B	3,000	35	6	96	72	25	43.5	2.14	10.5	G1/8	1.30
PN80-25-2-4B	3,780	40	4	96	72	25	63.5	2.14	10.5	G1/8	2.20
PN80-25-2-6B	5,400	60	6	96	72	25	63.5	2.14	10.5	G1/8	2.20
PN80-25-3-4B	5,670	65	4	96	72	25	83.5	2.14	10.5	G1/8	3.10
PN80-25-3-6B	8,100	95	6	96	72	25	83.5	2.14	10.5	G1/8	3.10
PN125-40-1-4B	7,000	140	4	145	110	40	51.6	3	13	G1/8	3.65
PN125-40-1-6B	10,000	200	6	145	110	40	51.6	3	13	G1/8	3.65
PN125-40-2-4B	12,600	250	4	145	110	40	75.2	3	13	G1/8	5.85
PN125-40-2-6B	18,000	360	6	145	110	40	75.2	3	13	G1/8	5.85
PN125-40-3-4B	18,900	375	4	145	110	40	98.8	3	13	G1/8	8.05
PN125-40-3-6B	27,000	540	6	145	110	40	98.8	3	13	G1/8	8.05
PN125-40-4-4B	25,200	500	4	145	110	40	122.4	3	13	G1/8	10.25
PN125-40-4-6B	36,000	720	6	145	110	40	122.4	3	13	G1/8	10.25

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.