






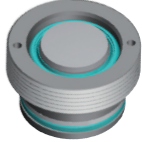

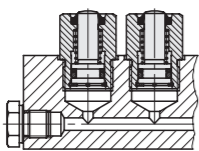
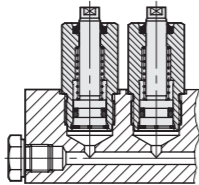
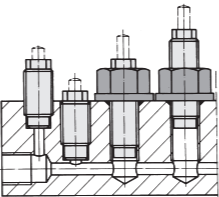
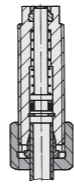
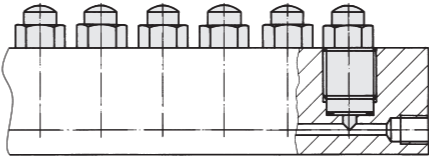
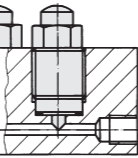
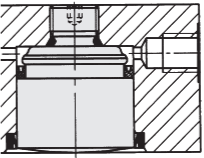
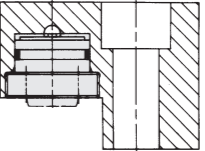
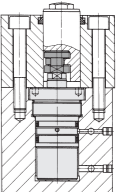




Designation	Threaded-body cylinders	Threaded-body cylinders	Threaded-body cylinders	Threaded-body cylinders with pipe thread	Threaded-body cylinders	Threaded-body cylinders	Built-in pistons	Threaded-body cylinders short stroke	Threaded-body cylinders double acting
<b>Max. operating pressure</b>	500 bar	500 bar	160 / 500 bar	160 / 500 bar	500 bar	500 bar	250 bar	500 bar	500 bar
<b>Data sheet</b>	 B 1.4301	 B 1.450	 B 1.458	 B 1.459	 B 1.460	 B 1.461	 B 1.462	 B 1.464	 B 1.470
<b>Hydraulic connection</b>	drilled channels	drilled channels	drilled channels	pipe thread	drilled channels	drilled channels	drilled channels	drilled channels	drilled channels
<b>Sealing type</b>	 cutting edge	 cutting edge	 sealing ring	 cutting ring	 sealing ring	 sealing ring	 O-ring	 O-ring / back-up ring	 O-ring / back-up ring
<b>Functioning</b>	single acting	single acting	single acting	single acting	single acting	single acting	single acting	single acting	double acting
<b>Force to push at max. pressure</b>	2.5 ... 40 kN	5.6 ... 40 kN	2.5 kN	2.5 kN	5.7 ... 40 kN	5.7 ... 40 kN	12.25 ... 48.75 kN	15.7 ... 40.2 kN	10 ... 62.8 kN
<b>Admissible piston side load*</b>	3 %	3 %	3 %	3 %	5 %	5 %	5 %	5 %	3 %
<b>Piston Ø</b>	8 ... 32 mm	12 ... 32 mm	8 mm	8 mm	12 ... 32 mm	12 ... 32 mm	25 ... 50 mm	20 ... 32 mm	16 ... 40 mm
<b>Piston stroke</b>	4 ... 16 mm	8 ... 16 mm	5 ... 10 mm	10 mm	10 ... 20 mm	10 ... 20 mm	8 ... 12 mm	4 ... 8 mm	16 ... 40 mm
<b>Screw-in thread</b>	<b>min.</b> M16 x 1.5	<b>min.</b> M20 x 1.5	<b>min.</b> M12 x 1.5	<b>min.</b> M16 x 1.5	<b>min.</b> M20 x 1.5	<b>min.</b> M20 x 1.5	<b>min.</b> G 1/8	<b>min.</b> M38 x 1.5	<b>min.</b> M26 x 1.5
	<b>max.</b> M42 x 1.5	<b>max.</b> M42 x 1.5			<b>max.</b> M48x1.5	<b>max.</b> M48x1.5	<b>max.</b> G 1/2	<b>max.</b> M56 x 1.5	<b>max.</b> M60 x 1.5
<b>Seals and max. operating temperature</b>	NBR + 80 °C	NBR + 80 °C	NBR + 80 °C	NBR + 80 °C	NBR + 80 °C	NBR + 80 °C PTFE	NBR + 80 °C PTFE	NBR + 80 °C PTFE	NBR + 100 °C FKM + 150 °C
<b>Dirt wiper</b>	●	●	-	●	-	●	○	●	●
<b>Recommended min. pressure</b>	5 bar	5 bar	5 bar	5 bar	10 bar	10 bar	10 bar	10 bar	5 bar
<b>Special features</b>	short version	can only be used with contact bolts	optional pipe thread possible	optional screw-in possible	plunger piston	plunger piston	plunger piston fully recessible	plunger piston fully recessible	cylinder body fully recessible
<b>Piston rod</b>	dome head	with internal thread	dome head	dome head	dome head or internal thread or swivel contact bolt	dome head or internal thread or swivel contact bolt	dome head	dome head	with internal thread
<b>Accessories</b>	-	various contact bolts	sealing nut for screw-in thread mounting body for pipe thread	sealing nut for screw-in thread	various contact bolts mounting body for pipe thread	various contact bolts	wiper	-	various contact bolts coupling pin for push and pull forces

**Legend:** ● Series ○ Option \* % of the push force at max. operating pressure - not available