

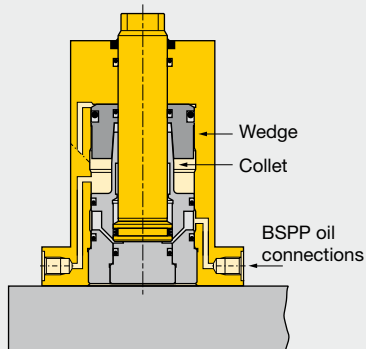
Push cylinders - Collet-Lok® design

Shown: MPTC-110, MPFC-210



MP series

Collet-Lok® positive locking push cylinders are designed to mechanically hold the workpiece after hydraulic pressure is removed. Push capacities range from 11,1 kN to 22,2 kN.



Hydraulic pressure pushes the collet up a wedge, locking the plunger in the clamping position.

■ Lower flange Collet-Lok® push cylinder used for positioning a motorcycle frame.

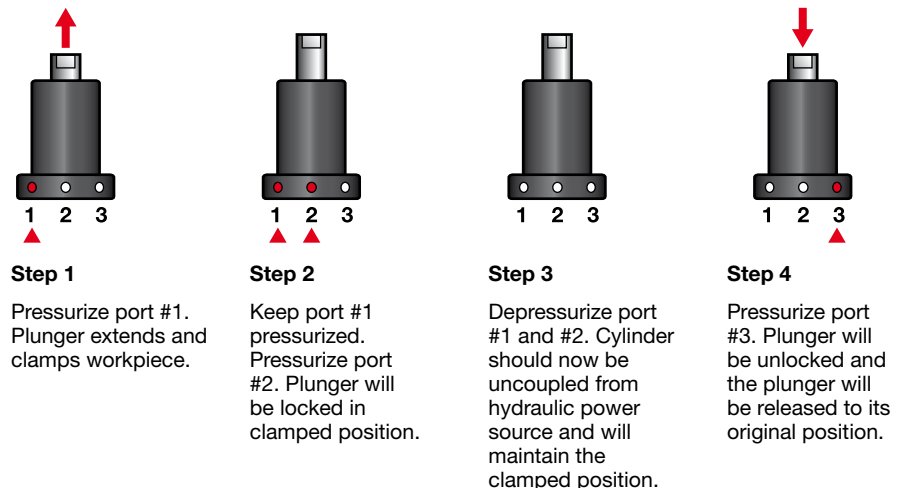


Ideal when live hydraulics are not available

...clamping is sustained mechanically so live hydraulics are not required during the machining cycle

- Double-acting Collet-Lok® action allows fully automated operation
- Additional level of safety since live hydraulics are not required
- Collet-Lok® push cylinders can either be mounted by the flange, or threaded into the fixture
- The Collet-Lok® design is an industry exclusive
- Capacities up to 39,9 kN available on request.

Collet-Lok® sequence



Product selection

Max. push force	Hydr. plunger stroke	Lower flange	Threaded body	Operating pressure		Hydraulic effective area		Oil capacity		Max. oil flow
				bar min.	bar max.	cm ² adv.	cm ² adv.	cm ³ unlock	cm ³ retr.	
11,1	15,3	MPFC-110V	MPTC-110V	50	350	3,23	4,92	6,06	3,93	2,0
22,2	15,2	MPFC-210V	MPTC-210V	50	350	6,39	10,00	10,00	6,06	4,0

Maximum cycle rate: 8 cycles/min.

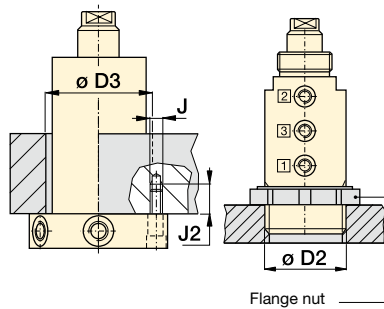
Note: Call Enerpac to order models with UNF thread and SAE port connections. Capacities up to 39,9 kN available on request.

Dimensions in mm [\varnothing]

Model number	A	B	C	C1	D	D1	D2	E	E1	F
						\varnothing		\varnothing	\varnothing	\varnothing
▼ Lower flange										
MPFC-110V	155,8	140,5	131	-	\varnothing 70,0	100	-	15,8	15	-
MPFC-210V	176,7	161,5	149	-	\varnothing 78,0	110	-	22,2	20	-
▼ Threaded body										
MPTC-110V	154,8	139,5	130	18,5	M60 x 2	60	M36 x 1,5	15,8	15	46
MPTC-210V	175,7	160,5	148	18	M70 x 2	70	M48 x 1,5	22,2	20	55

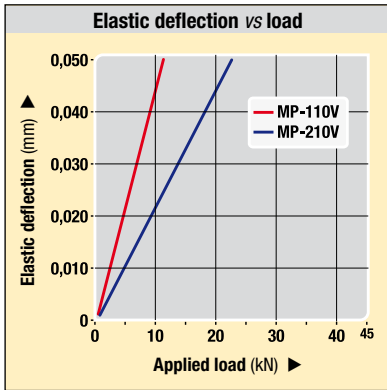
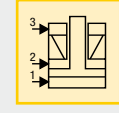
Installation dimensions in mm

Push force kN	Fixture hole ø D3	Mounting thread J	Minimum depth J2
▼ Lower flange			
11,1	71	M6 x 1,0	17
22,2	79	M8 x 1,0	18
▼ Threaded body			
11,1	M60 x 2	-	-
22,2	M70 x 2	-	-



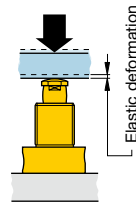
Force: 11,1 - 22,2 kN
Stroke: 15,0 mm
Pressure: 50 - 350 bar

- E** Cilindros de empuje
- F** Vérins pousseurs
- D** Gesicherter Druckzylinder

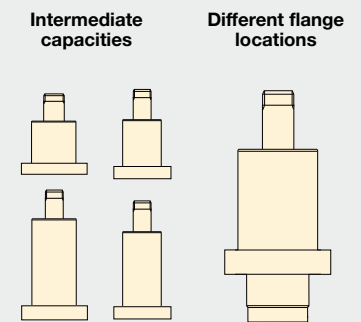


Deflection chart:

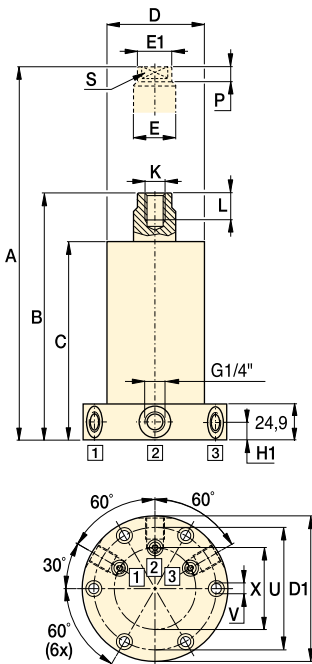
Elastic deformation of the plunger resulting from the application of load.



Custom Options Available



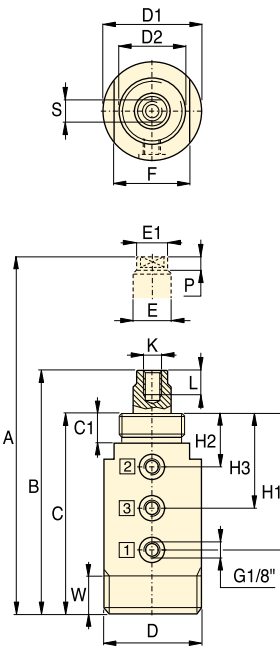
MPFC



Oil port functions

- 1** Clamp
- 2** Lock
- 3** Unlock/Retract

MPTC



H1	H2	H3	K	L	P	S*	U	V	W	X	kg	Model number
Lower flange ▼												
12,5	-	-	M8 x 1,25	15	7,0	12,0	84,1	7	-	56,1	4,0	MPFC-110V
12,5	-	-	M10 x 1,5	20	8,7	16,0	94,0	9	-	70,0	5,0	MPFC-210V
Threaded body ▼												
96,0	33,0	64,5	M8 x 1,25	15	7,0	12,0	-	-	19	-	3,0	MPTC-110V
111,0	32,5	72,0	M10 x 1,5	20	8,7	16,0	-	-	20	-	3,4	MPTC-210V

* Spanner holes (x 2)

Options

- Auto couplers** 174 ▶
- Sequence valves** 152 ▶
- Accessories** 86 ▶
- Collet-Lok® swing cylinders** 12 ▶

Important

For proper application, clamp force, pressures and timing, consult Enerpac for support.

Collet-Lok® Products
Swing Clamps
Work Supports
Linear Cylinders
Power Sources
Valves
Pallet Components
System Components
Yellow Pages