

# Work supports - Collet-Lok® design

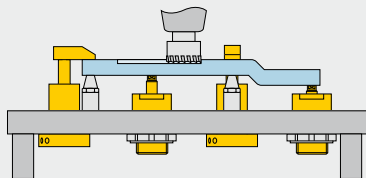
Shown: MPFS-100, MPTS-100



Collet-Lok® products

## MP series

Enerpac work supports provide either additional non-fixed location points to the clamps, or support to larger or thin section workpiece components, always in order to minimize workpiece deflection during machining. The *Collet-Lok®* design does not require hydraulic system pressure to maintain support position.



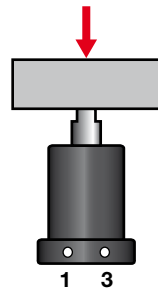
While pallet No. 1 is in the machine, a new work piece is loaded on to pallet No. 2.



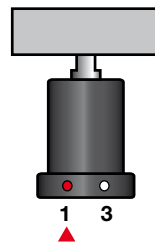
## Hydraulically locked, mechanically maintained work support

- *Collet-Lok®* design allows the work support to maintain support position after the hydraulic pressure is removed
- *Collet-Lok®* maintains a higher level of safety, as it is not dependent on hydraulic supply pressure
- Low deflection: lowest deflection of any work support available
- Threaded or flanged body increases mounting flexibility
- Capacities up to 44,5 kN available.

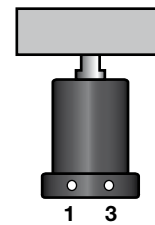
## Collet-Lok® sequence



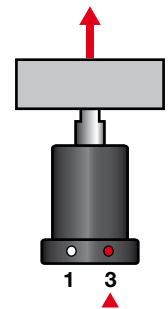
**Step 1**  
Install the workpiece on the support cylinder. The plunger position will adjust to the contour of the workpiece.



**Step 2**  
Pressurize oil port #1. The plunger will be locked in the supporting position.



**Step 3**  
Depressurize oil port #1. Cylinder can be uncoupled from hydraulics and still support the workpiece.

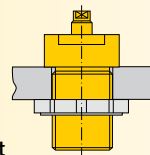


**Step 4**  
Pressurize oil port #3. The plunger will be unlocked. When the workpiece is removed, plunger will extend into its original position.

## Mounting style

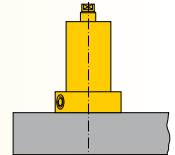
### MPT series, Threaded mount

Threaded body can be used with a threaded hole in fixture plate or a jam nut with a bored hole. Ports are located in top collar block.



### MPF series, Flange models

Mounts directly to fixture plate. Offers the flexibility of side ports or manifold ports on the underside of the flange.



## Product selection

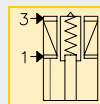
Max. support force	Support plunger stroke	Flange models	Threaded models	Operating pressure		Locking system displacement		Plunger contact spring force	Max. oil flow
				min.	max.	lock	unlock		
8,9	10	MPFS-100V	-	100	350	3,93	3,93	20,0	0,5
17,8	10	MPFS-200V	-	100	350	6,06	6,06	35,2	1,0
44,5	19,6	MPFS-450V	-	100	350	18,03	18,03	300,4	4,0
8,9	10	-	MPTS-100V	100	350	3,93	3,93	15,0	0,5
17,8	10	-	MPTS-200V	100	350	6,06	6,06	30,0	1,0

Force: 8,9 - 44,5 kN

Stroke: 10 - 19,6 mm

Pressure: 100 - 350 bar

- E** Cilindros de soporte
- F** Vérin anti-vibreur
- D** Abstützylinder



**Options**

Collet-Lok® swing cylinders

12



Auto couplers

174



Positive clamping cylinders

80



Sequence valves

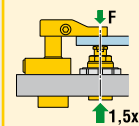
152



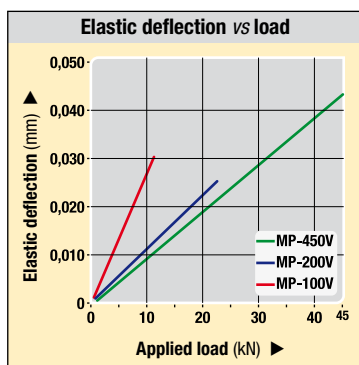
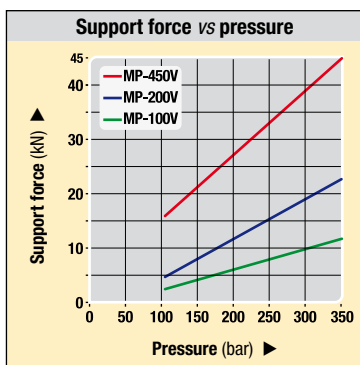
**Important**

**WARNING!**

Support force and clamping force must be matched. Support force should be at least 150% of clamping force.

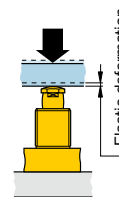


For proper application, clamp force, pressures and timing, consult Enerpac for support.



**Deflection chart:**

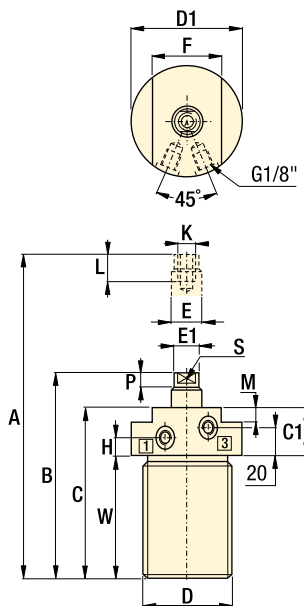
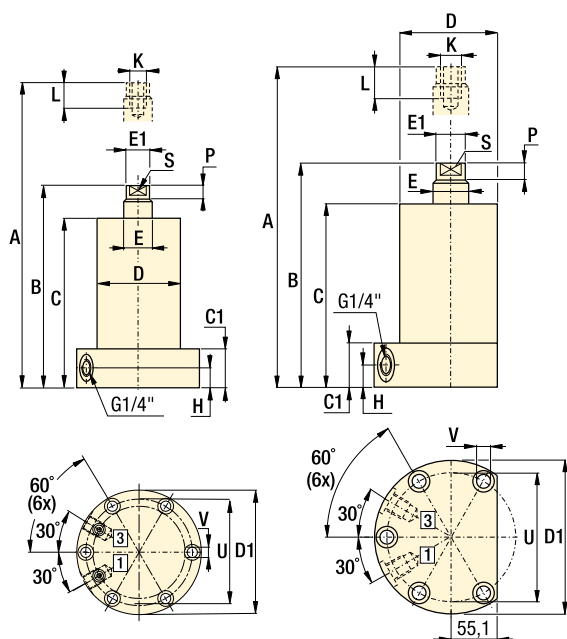
Elastic deformation of the work support resulting from the application of load.



**MPFS-100V, -200V**

**MPFS-450V**

**MPTS-100V, -200V**



**Product dimensions** in mm [  $\pm$  ]

Model number	A	B	C	C1	D	D1	E	E1	F	H	K	L	M	P	S*	U	V	W	X	kg
						∅	∅	∅								∅	∅		∅	
<b>▼ Flange models</b>																				
<b>MPFS-100V</b>	126	116	106	25	∅ 76	110	15,9	14	-	12,5	M8 x 1,25	15	-	7	2,8	94,1	9	-	81,5	4,0
<b>MPFS-200V</b>	130	120	106	25	∅ 92	130	25	24	-	12,5	M12 x 1,75	20	-	9	2,8	112,1	9	-	97,1	6,0
<b>MPFS-450V</b>	193,4	173,8	161	25	∅ 130	165	50	48	-	12,5	M20 x 2	30	-	10	30 **	147	11	-	125	16,0
<b>▼ Threaded models</b>																				
<b>MPTS-100V</b>	125	115	105	38	M60 x 2	69	15,9	14	55	15,5	M8 x 1,25	15	20	7	2,8	-	-	67	-	3,0
<b>MPTS-200V</b>	129	119	105	38	M80 x 2	89	25	24	70	15,5	M12 x 1,75	20	20	9	2,8	-	-	67	-	4,0

\* 2x spanner holes ∅ 2,8 mm for MPFS-100 and 200 models.

\*\* Wrench Flats for MPFS-450.