Swing Cylinders and Clamp Arms



Swing Cylinders and Work Supports

Enerpac's complete line of clamping and support cylinders provides maximum force in the smallest possible package. Our variety of mounting and operation styles was designed with our customers' broad range of needs in mind.

The four different mounting styles of swing clamping cylinders turn 90° to ensure unobstructed unloading of parts. Enerpac offers clamping cylinders in a wide variety of styles, mounting options and shapes. They can be used not only for clamping, but for positioning, punching, pressing... just about any operation you can think of.

Support cylinders, which are typically placed underneath the part, not only support the workpiece but also absorb unwanted vibrations. Serving as a variable datum point on the fixture, allowing for part irregularities, these flexible cylinders are designed to accommodate great variety in fixture design.

■ In order to load the workpiece sideways over the work supports hydraulic advanced worksupports are being used in combination with swing cylinders.



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13,0 - 47,5 mm

Force:	1,3 - 37,8 kN

35 - 350 bar Pressure:

Stroke:

Compact and full featured design

- · Compact design allows for efficient fixture layout
- · Variety of mounting styles to meet design
- Double and single-acting cylinders to suit a variety of hydraulic requirements
- · All cylinders are available as left and right turning models
- Large ball and cam design on 11, 22, 52 and 121 models, allows swing rotation to be changed easily
- Kick-out mechanism on 92, 202, and 352 models prevents damage to cylinder from high flow rates or misapplication
- Enerpac Collet-Lok® positive locking cylinders are designed to maintain clamping force after hydraulic pressure is removed

Patented clamp arm design

• Innovative clamp arm design allows quick and precise clamp arm positioning while swing cylinder is mounted in fixture

T-arms

• T-arms are used to clamp two workpieces

Clamping Stroke force		Upper flange	Lower flange	Threaded body	Cartridge Style	Standard arm ¹⁾	Long arm ¹⁾		
kN	clamping	total							
▼ Sing	gle-acting			Model number 2)					
2,1	8,1	16,5	SURS-22	SLRS-22	STRS-22	SCRS-22	CAS-22	CAL-22	
4,9	9,9	22,6	SURS-52	SLRS-52	STRS-52	SCRS-52	CAS-52	CAL-52	
8,0	11,9	22,1	SURS-92	SLRS-92	STRS-92	-	CAS-92	CAL-92	
10,7	7 12,7	28,4	SURS-121	SLRS-121	STRS-121	SCRS-122	CAS-121	CAL-122	
17,4	4 14,0	27,9	SURS-202	SLRS-202	STRS-202	-	CAS-202	CAL-202	
33,	1 16,0	30,0	SURS-352	SLRS-352	STRS-352	-	CAS-352	CAL-352	
▼ Dou	ıble-acting			Model number 2)					
1,3	6,6	13,0	SURD-11	SLRD-11	STRD-11	-	CAS-11	CAL-11	
2,2	8,1	16,5	SURD-22	SLRD-22	STRD-22	SCRD-22	CAS-22	CAL-22	
5,6	9,9	22,6	SURD-52	SLRD-52	STRD-52	SCRD-52	CAS-52	CAL-52	
9,0	11,9	22,1	SURD-92	SLRD-92	STRD-92	-	CAS-92	CAL-92	
9,0	32,0	41,9	SURDL-92	-	-	-	CAS-92	CAL-92	
11,6	3 12,7	28,4	SURD-121	SLRD-121	STRD-121	SCRD-122	CAS-121	CAL-122	
11,6	31,8	47,5	SURDL-121	-	-	-	CAS-121	CAL-122	
18,7	7 14,0	27,9	SURD-202	SLRD-202	STRD-202	-	CAS-202	CAL-202	
33,8	3 16,0	30,0	SURD-352	SLRD-352	STRD-352	-	CAS-352	CAL-352	
33,8	31,8	46,5	SURDL-352	-	-	-	CAS-352	CAL-352	
▼ Positive locking <i>Collet-Lok</i> ® Model number ²⁾									
4,4	8,1	23,9	-	MPFR-50	-	-	MA-540	-	
8,9	11,9	27,9	-	MPFR-100	MPTR-100	-	MA-1050	-	
37,8	9,9	41,9	-	MPFR-300	MPTR-300	-	MA-3070	-	

¹⁾ Clamp arms are sold separately.

²⁾ For left turning swing cylinders replace the R in the model number for an L. Note: Call Enerpac to order models with imperial thread and SAE port connections.