

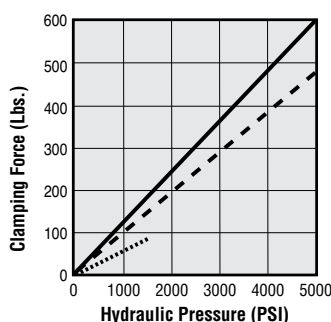
## Series 030 Hydraulic Swing/Pull Clamps – 475 lb.

The DE-STA-CO Threaded Body Swing/Pull Clamps are available in both single-acting and double-acting versions. They incorporate the latest hydraulic swing clamp technology. The top port design allows easy access for plumbing connections.

They are available with 90° left or right hand rotation, or with guided straight pull. The breather port on single-acting models may be replaced with tubing for remote venting. The optional arms clamp securely to the piston rod to reduce fatigue and deflection. Arms may be easily modified or custom arms may be substituted.

### Features:

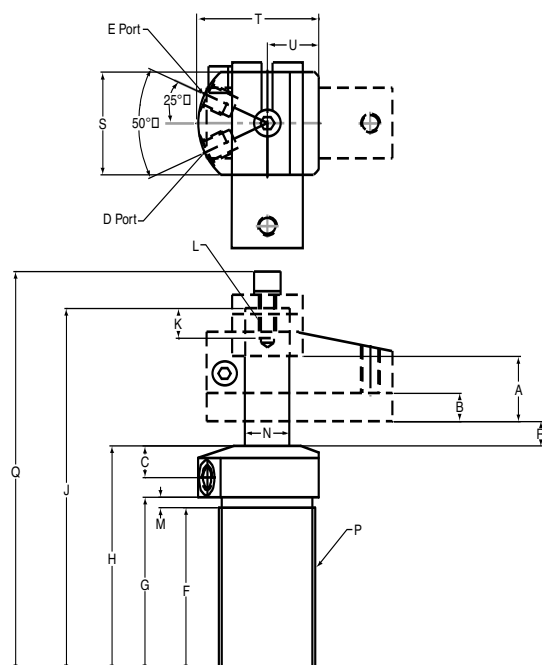
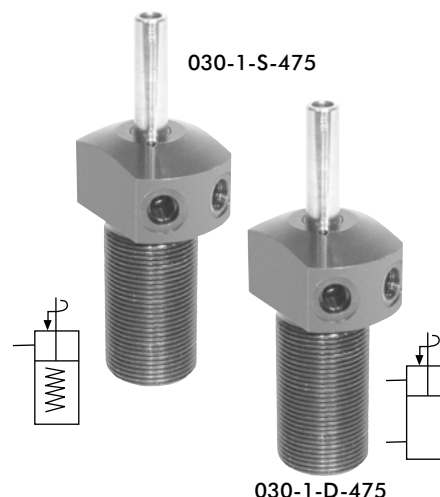
- Advanced seals and wipers utilize a special, highly wear-resistant construction for long cycle life and 5,000 PSI operation
- Triple track piston rod design for field adjustable swing direction
- Hardened and hard chrome plated piston rod for increased strength and wear resistance
- Advanced metal treated body for superior wear and corrosion resistance
- MRO interchange design
- Straight pull capacity 600 lbs. at 5,000 PSI max



### Performance

- ..... With 031-L-475 Arm (3.25' long)
- - - With 0-31-S-475 Arm (1.22' long)
- Straight Pull

For 475 lb.  
Swing/Pull Clamp Arms  
see Page 19.10



Cat. no.	Specifications							Max Oil Flow in <sup>3</sup> /m in
	Oper.	Swing Direction	*Force (lbs.)	Eff. Area (sq. In.) Clamp	Unclamp	Oil Cap. (cu. In.) Clamp	Unclamp	
030-1-S-475 (-X)	Single-Acting	Left Hand (Counter Clockwise)	475	0.12	—	0.08	—	12
030-1-D-475 (-X) <sup>①</sup>	Double-acting	Right Hand (Clockwise) Straight Pull			0.24		0.15	

### Ordering Notes:

- Left hand swing (ccw) is standard—no suffix
- Add -R suffix for right hand swing
- Add -S suffix for straight guided pull

Cat. no.	Specifications																		
	A Total Stroke	B Clamping Stroke	C	D Clamp Port	E Unclamp Port	F	G	H	J	K	L	M	N	P	Q	R	S	T	U
030-1-S-475	0.65	0.210	0.59	SAE-2	SAE-2	1.929	2.086	3.07	4.429	0.8	M6x1	0.157	0.393	1-1/8-16UN	4.96	0.495	1.3	1.55	0.61
030-1-D-475 <sup>①</sup>	0.65	0.32	0.59																

<sup>①</sup> This item is available upon request

NOTE: \*With 1.22" long arm at 5,000 PSI maximum operating pressure.

<sup>†</sup> Do not pressurize – single-acting only

<sup>†</sup> See page 19.10 for arms, accessories and custom arm mounting

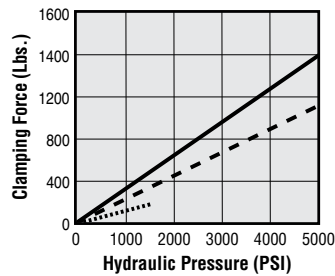
## Series 030 Hydraulic Swing/Pull Clamps – 1,100lb.

The DE-STA-CO Threaded Body Swing/Pull Clamps are available in both single-acting and double-acting versions. They incorporate the latest hydraulic swing clamp technology. The top port design allows easy access for plumbing connections.

They are available with 90° left or right hand rotation, or with guided straight pull. The breather port on single-acting models may be replaced with tubing for remote venting. The optional arms clamp securely to the piston rod to reduce fatigue and deflection. Arms may be easily modified or custom arms may be substituted.

### Features:

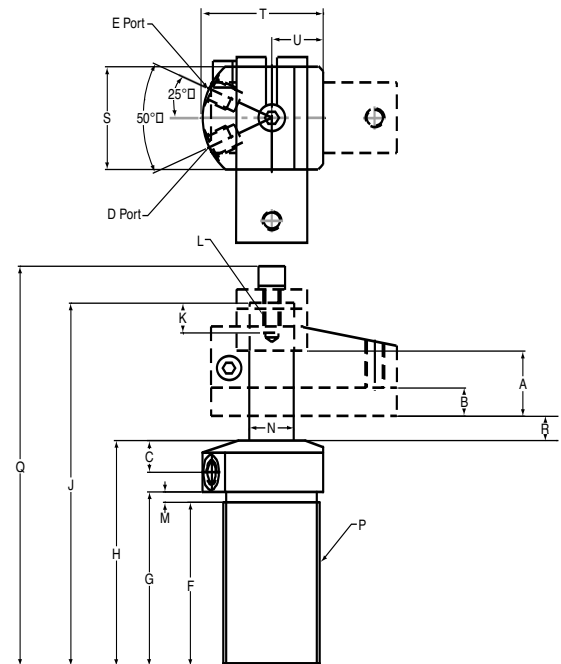
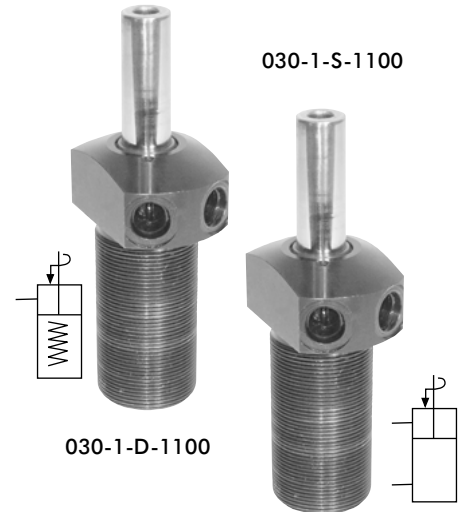
- Advanced seals and wipers utilize a special, highly wear-resistant construction for long cycle life and 5,000 PSI operation
- Triple track piston rod design for field adjustable swing direction
- Hardened and hard chrome plated piston rod for increased strength and wear resistance
- Advanced metal treated body for superior wear and corrosion resistance
- MRO interchange design
- Straight pull capacity 1,400 lbs. at 5,000 PSI max



### Performance

- ..... With 031-L-1100 Arm (5.31" long)
- - - With 031-S-1100 Arm (1.89" long)
- Straight Pull

For 1,100 lb.  
Swing/Pull Clamp Arms  
see Page 19.10



Cat. no.	Specifications							Max Oil Flow in <sup>3</sup> /m in
	Oper.	Swing Direction	*Force (lbs.)	Eff. Area (sq. In.) Clamp	Unclamp	Oil Cap. (cu. In.) Clamp	Unclamp	
030-1-S-1000 (-X)	Single-Acting	Left Hand (Counter Clockwise)	1100	0.28	—	0.25	—	25
030-1-D-1000 (-X)	Double-acting	Right Hand (Clockwise) Straight Pull			0.59		0.52	

### Ordering Notes:

- Left hand swing (ccw) is standard—no suffix
- Add -R suffix for right hand swing
- Add -S suffix for straight guided pull

Cat. no.	Specifications																		
	A Total Stroke	B Clamping Stroke	C	D Clamp Port	E Unclamp Port	F	G	H	J	K	L	M	N	P	Q	R	S	T	U
030-1-S-1100	0.89	0.39	0.6	SAE-4	SAE-4	2.4	2.6	3.58	5.305	0.94	M8 x 1.25	0.196	0.629	1-3/8- 18UN	5.965	0.400	1.5	1.87	0.75
030-1-D-1100																			

NOTE: \*With 1.89" long arm at 5,000 PSI maximum operating pressure.

† Do not pressurize – single-acting only

† See page 19.10 for arms, accessories and custom arm mounting

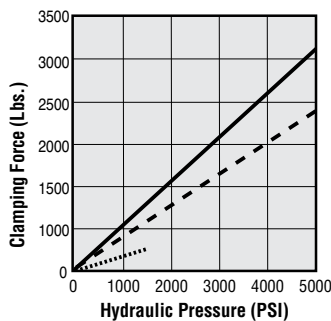
## Series 030 Hydraulic Swing/Pull Clamps – 2,400 lb.

The DE-STA-CO Threaded Body Swing/Pull Clamps are available in both single-acting and double-acting versions. They incorporate the latest hydraulic swing clamp technology. The top port design allows easy access for plumbing connections.

They are available with 90° left or right hand rotation, or with guided straight pull. The breather port on single-acting models may be replaced with tubing for remote venting. The optional arms clamp securely to the piston rod to reduce fatigue and deflection. Arms may be easily modified or custom arms may be substituted.

### Features:

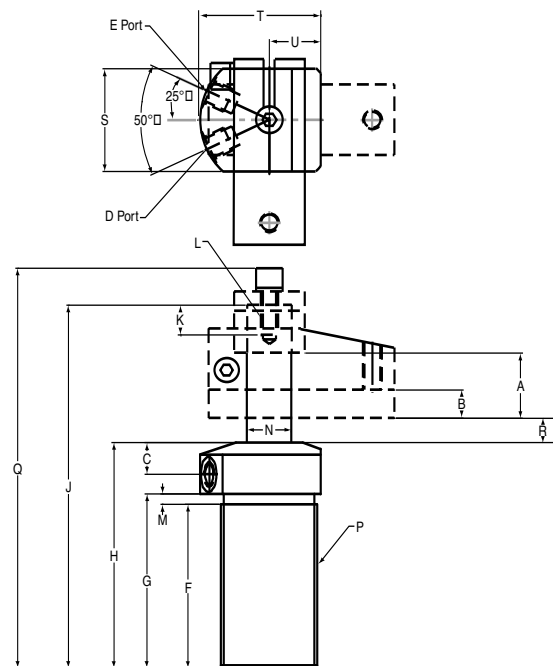
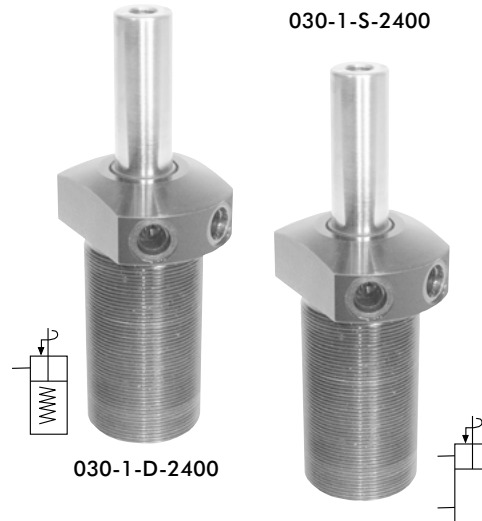
- Advanced seals and wipers utilize a special, highly wear-resistant construction for long cycle life and 5,000 PSI operation
- Triple track piston rod design for field adjustable swing direction
- Hardened and hard chrome plated piston rod for increased strength and wear resistance
- Advanced metal treated body for superior wear and corrosion resistance
- MRO interchange design
- Straight pull capacity 3,150 lbs. at 5,000 PSI max



Performance

- ..... With 031-L-2400 Arm (6.36" long)
- - - With 031-S-2400 Arm (2.43" long)
- Straight Pull

For 2,400 lb.  
Swing/Pull Clamp Arms  
see Page 19.10



Cat. no.	Specifications							Max Oil Flow in <sup>3</sup> /m in
	Oper.	Swing Direction	*Force (lbs.)	Eff. Area (sq. In.) Clamp	Unclamp	Oil Cap. (cu. In.) Clamp	Unclamp	
030-1-S-2400 (-X)	Single- Acting	Left Hand (Counter Clockwise)	2400	0.63	—	0.07	0.14	100
030-1-D-2400 (-X)	Double- acting	Right Hand (Clockwise) Straight Pull			1.23			

### Ordering Notes:

- Left hand swing (ccw) is standard—no suffix
- Add -R suffix for right hand swing
- Add -S suffix for straight guided pull

Cat. no.	Specifications																		
	A Total Stroke	B Clamping Stroke	C	D Clamp Port	E Unclamp Port	F	G	H	J	K	L	M	N	P	Q	R	S	T	U
030-1-S-2400	1.12	0.5	0.62	SAE-4	SAE-4	t	3.38	4.38	6.8	1.28	M10x 1.5	0.196	0.87	1-7/8- 16UN	7.543	0.517	2.0	2.38	1.0
030-1-D-2400																			

NOTE: \*With 2.43" long arm at 5,000 PSI maximum operating pressure.

† Do not pressurize – single-acting only

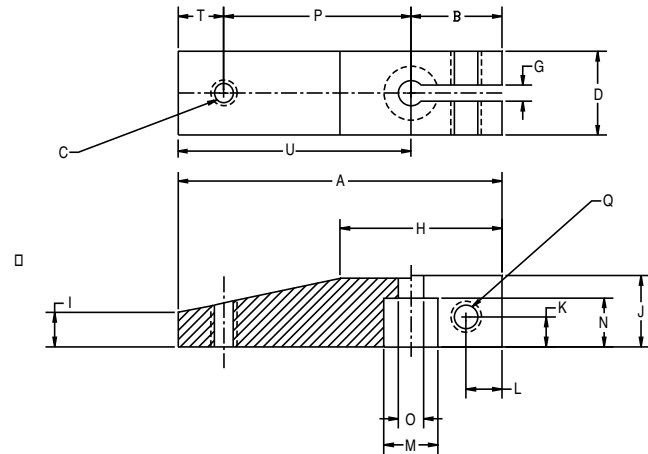
‡ See page 19.10 for arms, accessories and custom arm mounting



## Series 030 Hydraulic Swing/Pull Clamps 475-2,400 lb. Arms

Custom built arms of any length must clamp to the swing/pull clamp's piston rod in a manner similar to the DE-STA-CO arms or some derating of the clamp will be necessary.

The design feature "K," in the chart and drawing at the bottom of this page, is recommended for all applications of custom, single arms. See the accompanying chart for design details. In applications where there is no bending stress being transferred into the piston rod (like push/pull linkages and equalizing double arms), this design detail may be eliminated. In these applications, the clamp's full capacity (referred to as "straight pull" capacity) is available.



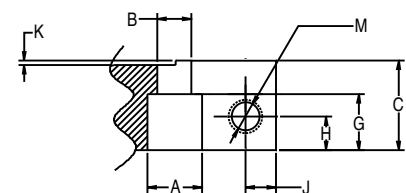
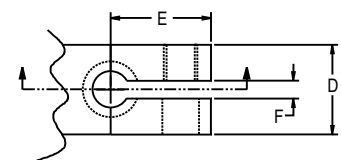
Cat. no.	Specifications																	Weight (lbs.)
	A	B	C	D	G	H	I	J	K	L	M	N	O	P	Q	T	U	
031-S-475	1.929	0.709	M6	0.63	0.126	1.139	0.394	0.630	0.236	0.217	0.394	0.394	0.256	0.984	M6	0.236	1.220	0.159
031-L-475	3.959	0.709	-	0.63		1.166	0.394	0.630			0.394	0.394	0.256	-	M6	-	3.250	0.348
031-S-1100	2.598	0.709	M8	0.748		1.294	0.433	0.748			0.630	0.472	0.33	1.575	M6	0.315	1.889	0.286
031-L-1100	6.019	0.709	-	0.748		1.412	0.433	0.748			0.630	0.472	0.335	-	M6	-	5.310	0.721
031-S-2400	3.268	0.866	M10	1.125		1.459	0.633	1.00			0.866	0.709	0.413	1.969	M8	0.433	2.402	0.634
031-L-2400	7.226	0.866	-	1.125		1.696	0.633	1.00			0.866	0.709	0.413	-	M8	-	6.360	1.564

**IMPORTANT:** Any clamp using a modified or custom arm that is longer or heavier than DE-STA-CO's standard arms must be derated to prevent internal damage.

Do not exceed the maximum speed and pressure ratings for DE-STA-CO's standard arms.  
For maximum hydraulic pressure and speed ratings, see the accompanying charts  
Do not use meter-out circuitry for controlling double-acting clamp speeds  
Contact DE-STA-CO if further design assistance is required

## Custom Arm Mounting Dimensions for Swing/Pull Clamps

Shaft Dia.	Specifications										
	A	B	C	D	E	F	G	H	J	K	M
10 MM	0.394	0.256	0.63	0.63	0.709		0.394	0.236	0.217		M6 x 1.0
16MM	0.630	0.335	0.748	0.748	0.709	1.26	0.472	0.236	0.217	0.30	M6 x 1.0
22 MM	0.866	0.413	1.00	1.00	0.866		0.709	0.236	0.217		M8 x 1.25



## Chart Legend

- Maximum Length / Pressure
- Operating Range

Clamps must operate at or below maximum/arm length/pressure curve:

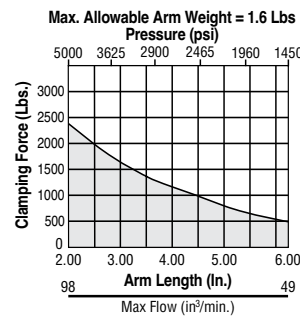
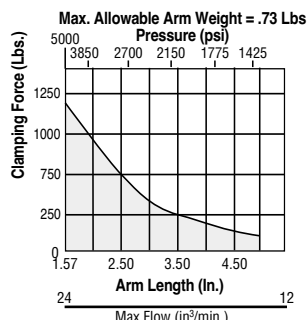
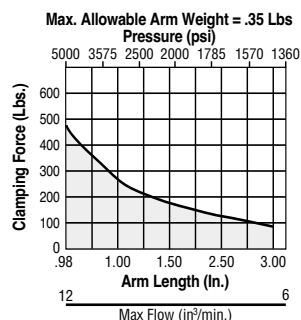
To approximate clamping force with any arm at less than maximum pressure:

$$\text{FORCE} = P \times A \times [1 - (P/M \times .23)]$$

P = Hyd. system operating pressure (PSI)

A = Clamp effective area (sq. in.)

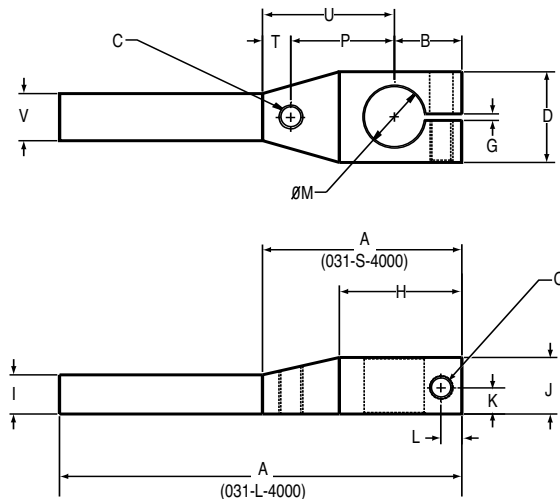
M = Max. rated pressure of chosen arm length (PSI)



## Series 030 Hydraulic Swing/Pull Clamps – 4,000 lb. Arms

Custom built arms of any length must clamp to the swing/pull clamp's piston rod in a manner similar to the DE-STA-CO arms or some derating of the clamp will be necessary.

The design feature "K," in the chart and drawing at the bottom of this page, is recommended for all applications of custom, single arms. See the accompanying chart for design details. In applications where there is no bending stress being transferred into the piston rod (like push/pull linkages and equalizing double arms), this design detail may be eliminated. In these applications, the clamp's full capacity (referred to as "straight pull" capacity) is available.

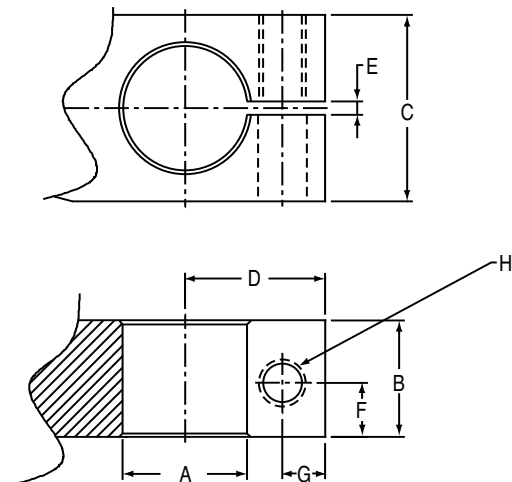


Cat no.	Specifications																Weight (lbs.)
	A	B	C	D	G	H	I	J	K	L	M	P	Q	T	U	V	
031-S-4000	4.17	1.42	1/2-13	1.89	0.138	2.56	0.83	1.18	0.55	0.43	1.26	2.17	M12	0.58	2.75	0.98	1.80
031-L-4000	8.43	1.42	1/2-13	1.89	0.138	2.56	0.83	1.18	0.55	0.43	1.26	–	M12	–	7.01	0.98	2.80

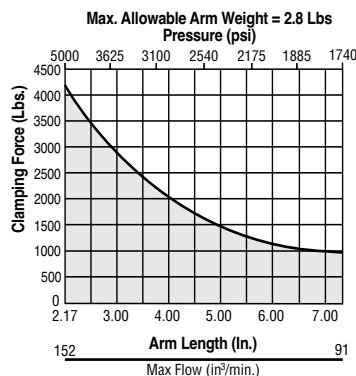
**IMPORTANT:** Any clamp using a modified or custom arm that is longer or heavier than DE-STA-CO's standard arms must be derated to prevent internal damage.  
Do not exceed the maximum speed and pressure ratings for DE-STA-CO's standard arms.  
For maximum hydraulic pressure and speed ratings, see the accompanying charts  
Do not use meter-out circuitry for controlling double-acting clamp speeds  
Contact DE-STA-CO if further design assistance is required

## Custom Arm Mounting Dimensions for 4,000 lb. Swing/Pull Clamps

Cat no.	Specifications							
	A	B	C	D	E	F	G	H
32MM	1.26	1.18	1.89	1.42	0.138	0.55	0.43	M12 x 1.75



### 031-S-4000 • 031-L-4000



### Chart Legend

- Maximum Length / Pressure
- Operating Range

Clamps must operate at or below maximum/arm length/pressure curve:

To approximate clamping force with any arm at less than maximum pressure:

$$FORCE = P \times A \times [1 - (P/M \times .23)]$$

P = Hyd. system operating pressure (PSI)

A = Clamp effective area (sq. in.)

M = Max. rated pressure of chosen arm length (PSI)