Hydraulic Power Clamps | Hydraulic Swing Clamps - 475 lb.

The DESTACO Threaded Body Swing 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. 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



With 0-31-S-475 Arm (1.22" long)
 Straight Pull



			Specific	ations				Max
Cat. no.	Oper.	Swing Direction	*Force (Ibs.)		a (sq. In.) Unclamp		o. (cu. In.) Unclamp	Oil Flow in ³ /m in
030-1-S-475 (-X) (i)	Single- Acting	Left Hand	475	0.12	-	0.08	-	12
030-1-D-475 (-X)	Double- acting	(Counter Clockwise) Right Hand (Clockwise)	475	0.12	0.24	0.08	0.15	12

Ordering Notes: • Left hand swing (ccw) is standardno suffix

• Add –R suffix for right hand swing

								Spe	cificati	ons									
Cat. no.	A Total Stroke	B Clamping Stroke	С	D Clamp Port	E Unclamp Port	F	G	н	J	K	L	Μ	N	Р	Q	R	S	т	U
030-1-S-475(i)	0.65	0.210	0.59		6 A F Q	1 0 2 0	2 094	2.07	4 420	0.0	A441	0.157	0 202	1-1/8-	4.04	0.405	1.2	1 55	0.41
030-1-D-475(i)	0.65	0.32	0.59	SAE-2	SAE-2	1.929	2.086	3.07	4.429	0.8	MoxI	0.157	0.393	1-1/8- 16UN	4.90	0.495	1.3	1.55	0.61

(i) This item is available upon request

NOTE: *With 1.22" long arm at 5,000 PSI maximum operating pressure. ^{(ADD} not pressurize – single-acting only

⁴Do not pressurize – single-acting only † See page MC-HYD-11 for arms, accessories and custom arm mounting



Hydraulic Power Clamps | Hydraulic Swing Clamps - 1,100lb.

The DESTACO Threaded Body Swing 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. 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

1600

1400

1200

800

400

0

Performance

1000 2000 3000 4000 5000

Hydraulic Pressure (PSI)

 With 031-L-1100 Arm (5.31" long)

 - - With 031-S-1100 Arm (1.89" long)

 Straight Pull

Clamping Force (Lbs.)





Ordering Notes: • Left hand swing (ccw) is standardno suffix

• Add –R suffix for right hand swing

			Specific	ations				Max Oil Elaur
Cat. no.		Swing	*Force	Eff. Are	a (sq. In.)	Oil Cap	o. (cu. In.)	Oil Flow in ³ /m
	Oper.	Direction	(lbs.)	Clamp	Unclamp	Clamp	Unclamp	in
030-1-S-1000 (-X)	Single- Acting	Left Hand	1100	0.28	-	0.25	-	25
030-1-D-1000 (-X)	Double- acting	(Counter Clockwise) Right Hand (Clockwise)	1100	0.28	0.59	0.25	0.52	25

								Spe	cificat	ions									
Cat. no.	A	B		D	E														
	Stroke	Clamping Stroke	С	Port	Unclamp Port	F	G	н	J	К	L	Μ	И	Р	Q	R	S	Т	U
030-1-S-1100	0.89	0.39	0.6	SAE-4	SAE-4	2.4	24	2 5 9	5.305	0.04	M8 x	0.104	0 4 2 0	1-3/8-	5 0 4 5	0.400	1.5	1.87	0.75
030-1-D-1100(i)	0.89	0.39	0.0	SAE-4	SAE-4	2.4	2.6	3.56	5.305	0.94	1.25	0.190	0.629	18UN	5.965	0.400	1.5	1.67	0.75

(i) This item is available upon request

⁴Do not pressurize – single-acting only

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

Hydraulic Power Clamps | Hydraulic Swing Clamps - 2,400 lb.

The DESTACO Threaded Body Swing 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. 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



 With 031-L-2400 Arm (6.36" long)

 - - With 031-S-2400 Arm (2.43" long)

 Straight Pull

For 2,400 lb. Swing Clamp Arms see Page MC-HYD-11



			Specific	ations				Max	•
Cat. no.	Oper.	Swing Direction	*Force (lbs.)		a (sq. In.) Unclamp		o. (cu. In.) Unclamp	Oil Flow in3/m in	• /
030-1-S-2400 (-X)	Single- Acting	Left Hand	2.400	0.63	-	0.7	-	100	
030-1-D-2400 (-X)	Double- acting	(Counter Clockwise) Right Hand (Clockwise)	2400	0.63	1.23	0.7	1.10	100	

Ordering Notes: • Left hand swing (ccw) is standardno suffix • Add –R suffix for right hand swing

								Spee	cificati	ons									
Cat. no.	A Total	B Clamping		D Clamp	E Unclamp														
	Stroke		С	Port	Port	F	G	Н	J	К	L	Μ	Ν	Р	Q	R	S	Т	U
030-1-5-2400 ()	1.12	0.5	0.62	SAE-4	SAE-4 🛛		3.38	4.38	6.8	1.28	M10x	0.196	0.97	1-7/8- 16UN	7 5 4 2	0.517	2.0	2.38	1.0
030-1-D-2400(i)	1.12	0.5	0.02	JAE-4	JAC-4 A	ſ	3.38	4.30	0.0	1.20	1.5	0.190	0.87	16UN	7.543	0.517	2.0	2.30	1.0

(i) This item is available upon request

NOTE: *With 2.43" long arm at 5,000 PSI maximum operating pressure. ^bDo not pressurize – single-acting only

+ See page MC-HYD-11 for arms, accessories and custom arm mounting



Hydraulic Power Clamps | Hydraulic Swing Clamps – 4,000 lb.

The DESTACO Threaded Body Swing 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. 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
- 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

Performance





 With 031-L-4000 Arm (X.XX" long)

 - - With 031-S-4000 Arm (X.XX" long)

 Straight Pull

see Page MC-HYD-11

For 4,000 lb.

Swing Clamp Arms



Ordering Notes:

- Left hand swing (ccw) is standard-
- no suffix
 Add –R suffix for right hand swing

				Specific	ations				Max	•
	Cat. no.		Swing	*Force	Eff. Are	a (sq. In.)	Oil Cap	b. (cu. ln.)	Oil Flow in ³ /m	•
		Oper.	Direction	(lbs.)	Clamp	Unclamp	Clamp	Unclamp	in	
()30-1-S-4000 (-X)(i)	Single- Acting	Left Hand	4000	1.10	-	1 00	-	140	
()30-1-D-4000 (-X)(i)	Double- acting	(Counter Clockwise) Right Hand (Clockwise)	4000	1.10	2.35	1.22	2.60	140	

This item is available upon request

								Spec	ificatio	ons									
Cat. no.	A Total	B Clamping	C		E Unclamp	E	6	Ц		K			ы	D	0	р	c	Ŧ	
	Stroke	Stroke	C	Port	Port	F	G	Н	J	K		Μ	Ν	P	Q	ĸ	3		U
030-1-S-4000	1.07	0.45	0.75	SAE#4	SAE#4	2.70	2.83	4.09	6.67	0.64	1.61	0.14	1.24	2- 1/2-16	7 20	0.33	2.56	2.99	1.28
030-1-D-4000	1.07	0.45	0.75	3AE#4	3AE#4	2.70	2.03	4.09	0.07	0.04	1.01	0.14	1.20	UN	7.30	0.33	2.50	2.77	1.20
This item is an	منامهام ب			NOTE:	*With 2.75	″ long a	rm at 5	,000 PS	maxim	um ope	rating p	ressure.							

This item is available upon request

: *With 2.75" long arm at 5,000 PSI maximum operating pressure. ^bDo not pressurize – single-acting only

† See page MC-HYD-11 for arms, accessories and custom arm mounting



Hydraulic Power Clamps | Hydraulic Swing Clamps 475-2,400 lb. Arms

Custom built arms of any length must clamp to the swing clamp's piston rod in a manner similar to the DESTACO 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.



									Specif	ications	5							
Cat. no.	A	В	C	D	G	н	1		К		м	И	0	Р	Q	т	U	Weight (lbs.)
031-S-475	1.929	0.709	M6	0.63		1.139	0.394	0.630			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	0.126	1.412	0.433	0.748	0.236	0.217	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 DESTACO's standard arms must be derated to prevent internal damage

Do not exceed the maximum speed and pressure ratings for DESTACO'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 DESTACO if further design assistance is required

Custom Arm Mounting Dimensions for Swing Clamps

Shaft					S	pecificat	ions				
Dia.	А	В	С	D	E	F	G	н	J	Κ	Μ
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





12 Max Flow (in Amin.)

Max. Allowable Arm Weight = 1.6 Lbs Pressure (psi) 5 2900 2465 5000 3625 1960 1450 300 Clamping Force (Lbs.) 2500 2000 1500 1000 500

0 2.00 3.00 4 00 5.00 Arm Length (In.) Max Flow (in³/min.)

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6.00

49





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 x A x [1-(P/M x .23)]

- P = Hyd. system operating pressure (PSI)
- A = Clamp effective area (sq. in.)
- M = Max. rated pressure of chosen arm length (PSI)



Hydraulic Power Clamps | Hydraulic Swing Clamps - 4,000 lb. Arms

Custom built arms of any length must clamp to the swing clamp's piston rod in a manner similar to the DESTACO 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.



									Specif	ications							
Cat no.	A	В	С	D	G	н	I	J	К	L	Μ	Р	Q	т	U	۷	Weight (Ibs.)
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 DESTACO's

standard arms must be derated to prevent internal damage.

Do not exceed the maximum speed and pressure ratings for DESTACO'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 DESTACO if further design assistance is required

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

Cat no.				Specif	ications			
cai no.	А	В	С	D	E	F	G	н
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 x A x [1-(P/M x .23)]

- **P** = Hyd. system operating pressure (PSI)
- A = Clamp effective area (sq. in.)

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

