

# PNEUMATIC CLAMPS

## Heavy-Duty Toggle-Lock



### SERIES **840, 860, 890, 1000**

Designed for high production applications, these toggle action pneumatic clamps offer exceptional clamping forces and holding capacities – far greater than other clamps of similar size. And unlike most pneumatic toggle clamps, they do not require greater pressure to open than to close.

Of special importance in the design of the Series 840 is the oval cylinder. Because of the extremely narrow profile of these clamps, they can be used in cramped quarters or can be ganged closer together in multiple installations.

The even numbered models in this series feature a 180° clamping arm which travels to an over-center locked position parallel (180°) to the clamp centerline. The corresponding odd numbered models have a 90° arm. The angular locked position of both versions is precisely controlled by the hardened steel insert. Clamp arms can be machined, drilled, cut off or welded to suit the application requirements.

Models 840 and 841 are tongue-mount clamps.

**58400**  
Model 840



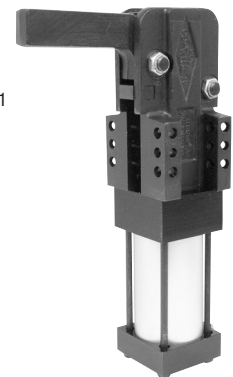
**58410**  
Model 841



**58900**  
Model 890



**58910**  
Model 891



ALSO AVAILABLE	
With Magnetic Ring	Models 840-MR, 841-MR, 860-MR Models 861-MR, 890-MR, 891-MR Models 1000-MR, 1001-MR
Switch Options	Page 12.8
Accessories	Page 12.1-12.8

Design Xtra	Model No.	Formula to Calculate Exerting Force
	840 841	Max. Clamp Arm Exerting Force (lbs.) = $\frac{12 \times \text{Line Pressure (psi)}}{\text{Distance from Pivot Point to Clamping Point (in.)}}$
	860 861	Max. Clamp Arm Exerting Force (lbs.) = $\frac{31.25 \times \text{Line Pressure (psi)}}{\text{Distance from Pivot Point to Clamping Point (in.)}}$
	890 891	Max. Clamp Arm Exerting Force (lbs.) = $\frac{67.5 \times \text{Line Pressure (psi)}}{\text{Distance from Pivot Point to Clamping Point (in.)}}$
	1000 1001	Max. Clamp Arm Exerting Force (lbs.) = $\frac{150 \times \text{Line Pressure (psi)}}{\text{Distance from Pivot Point to Clamping Point (in.)}}$

Model No.	Maximum Holding Capacity*	Weight	Cylinder Bore	Arm Position
840	1500 lbs.	3.90 lbs.	1.50" Equiv.	180°
841	1500 lbs.	4.25 lbs.	1.50" Equiv.	90°
860	3000 lbs.	8.75 lbs.	2.00"	180°
861	3000 lbs.	9.00 lbs.	2.00"	90°
890	5000 lbs.	13.00 lbs.	2.50"	180°
891	5000 lbs.	13.50 lbs.	2.50"	90°
1000	10000 lbs.	32.00 lbs.	3.25"	180°
1001	10000 lbs.	33.00 lbs.	3.25"	90°

\*Holding Capacity 3" from pivot to load point. Maximum Inlet Pressure: 150 psig

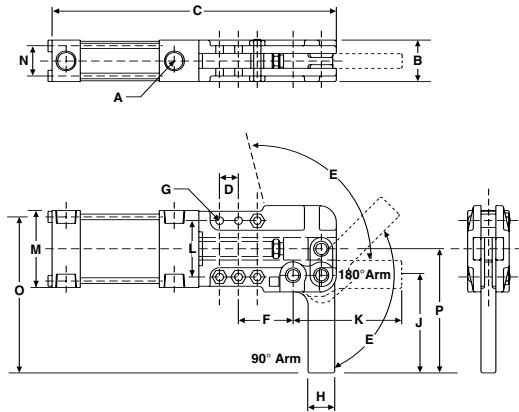
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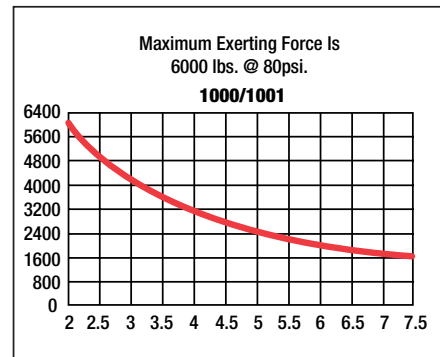
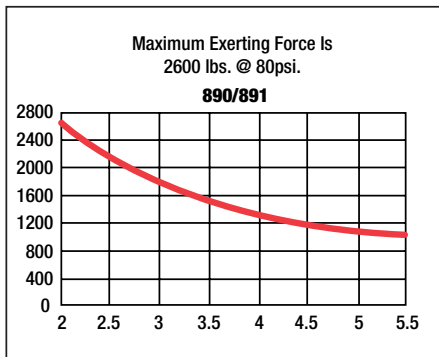
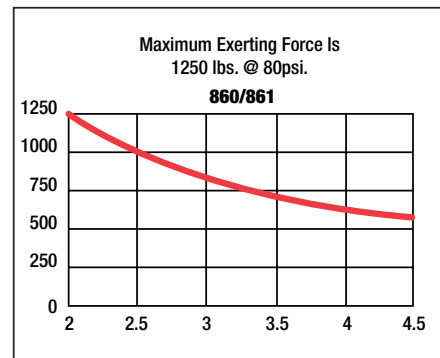
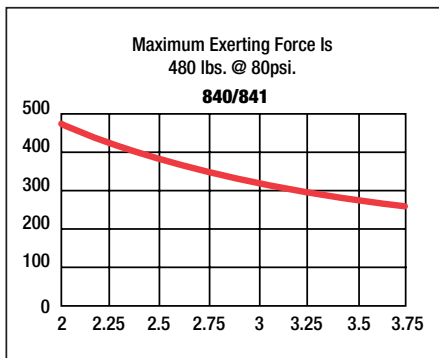
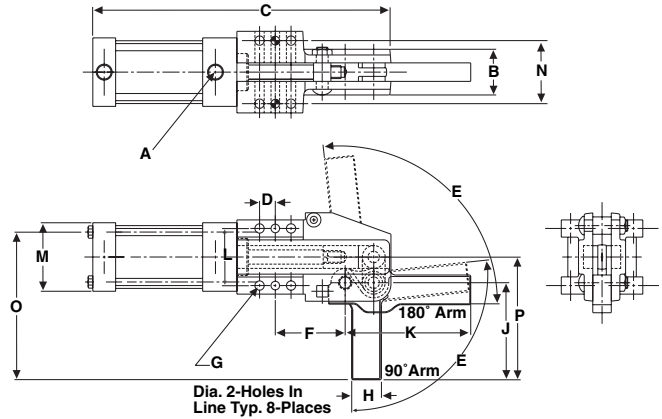


### SERIES 840, 860, 890, 1000 continued

Models 840, 841



Models 860, 861, 890, 891, 1000, 1001



Model No.	EDP No.	Dimensions														
		A	B	C	D	E	F	G	H	J	K	L	M	N	O	P
840	58400	3/8	1.38	10.00	.625	100°	1.812	.25	.88	-	3.69	1.875	2.563	1.000	-	-
841	58410	3/8	1.38	10.00	.625	100°	1.812	.25	.88	3.25	-	1.875	2.563	1.000	5.47	4.13
860	58600	3/8	1.75	11.63	.625	96°	2.50	.34	1.13	-	4.50	2.188	2.50	2.313	-	-
861	58610	3/8	1.75	12.25	.625	110°	2.50	.34	1.13	4.00	-	2.188	2.50	2.313	5.92	5.00
890	58900	3/8	2.00	13.00	.690	96°	3.063	.41	1.25	-	5.50	2.500	3.560	2.760	-	-
891	58910	3/8	2.00	13.63	.690	119°	3.063	.41	1.25	5.00	-	2.500	3.560	2.760	8.06	6.13
1000	51000	1/2	2.63	17.13	1.000	98°	3.750	.53	1.75	-	7.50	3.500	3.750	3.500	-	-
1001	51001	1/2	2.63	17.88	1.000	122°	3.750	.53	1.75	7.00	-	3.500	3.750	3.500	11.31	8.63