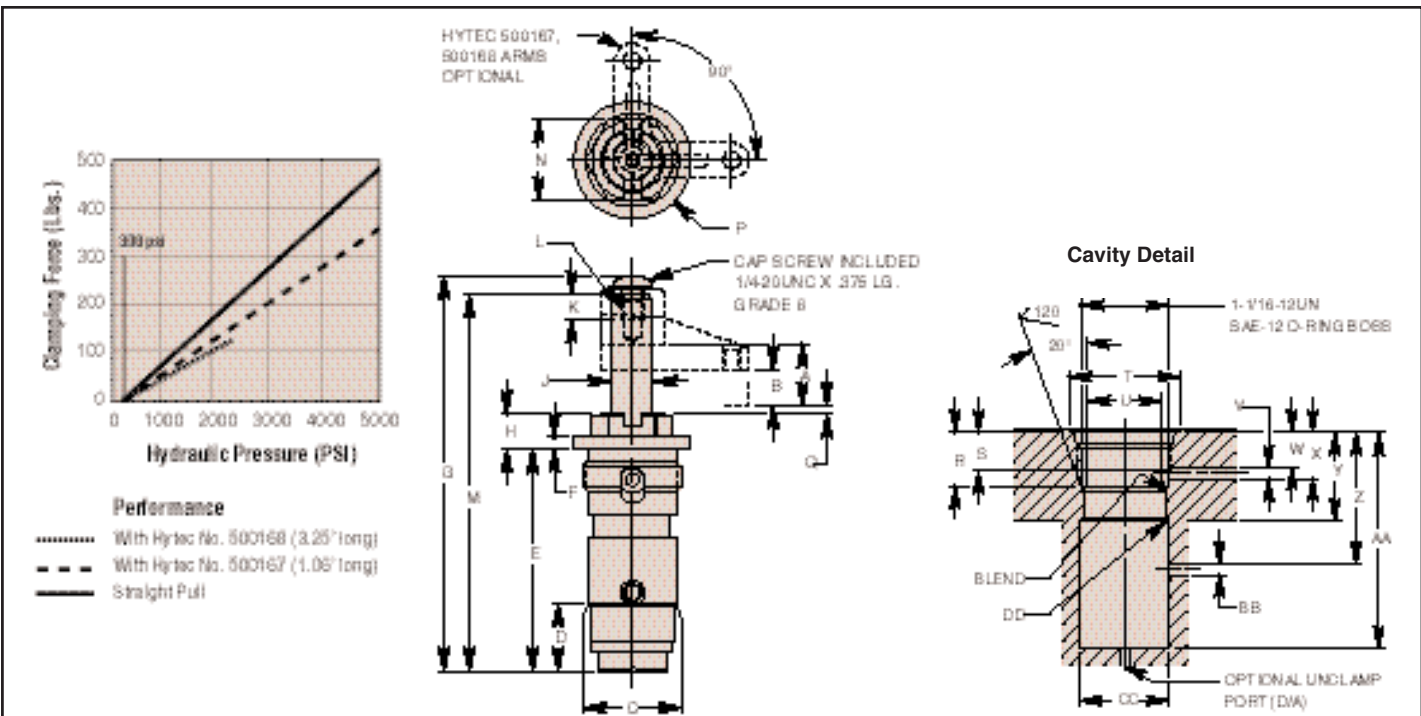




Features

- Small footprint minimizes acreage on fixture
- Low profile reduces overall fixture height
- Manifold mounting eliminates exposed plumbing, reducing chip build-up on fixture
- "Live Roller" design provides industry's most reliable swing/pull mechanism
 - o Piston/Cam combination provides solid path for clamping action
 - o Typical ball and groove mechanism has higher potential for clogging and for damage from mis-aligned work pieces
- Simple cavity design enables faster fixture building
- Available in single and double acting versions

- Special rod wiper seal protects internal clamp components
- Unique drainage system channels contaminants away from clamp
- Corrosion resistant construction
- Heat treated, chrome plated piston rod
- Manifold mountable
- Unique "Live Roller" swing mechanism for increased service life
- Power-Tech™ heat treated body and hardened cam for long wear and corrosion resistance
- Single-acting and double-acting models
- Straight pull capacity 480 lbs. at 5,000 psi max.



Cat. No.	Oper.	Specifications				Dimensions (In Inches)											
		Swing Direction	*Force (Lbs.)	Eff. Area (Sq. In.)		Oil Cap. (Cu. In.)		A Total Stroke	B Clamping Stroke	C Dia.	D	E	F	G	H	††J Dia.	K Min. Thd.
110013	Single-Acting	LH (Counter Clockwise)	365	.098	—	.065	.638	.320	.935	.723	2.379	.125	4.229	.371	.435	.275	1/20 UNC
110014		RH (Clockwise)															
110015		Straight Pull															
110016	Double-Acting	LH (Counter Clockwise)	365	.248	.163	.638	.320	.935	.723	2.379	.125	4.229	.371	.435	.275	1/20 UNC	
110017		RH (Clockwise)															
110018		Straight Pull															

Cat. No.	Dimensions (In Inches)				Mounting Dimensions (In Inches)												
	M	N Hex	P Dia.	Q	R	S Min. Thd.	T Dia. Min.	U Dia.	V Clamp Port Dia. Min.	W Min.	X Max.	Y Min.	Z Min.	AA Min.	BB Unclamp Port Dia. Min.	CC Dia. Min.	DD Chamfer Max.
110013	4.032	.875	1.250	.096	.596	.440	1.255	.937	.125	.400	.596	1.000	—	2.431	.125	1.000	.020
110014																	
110015																	
110016																	
110017																	
110018																	

Note: * With 1.00" arm at 5,000 psi max. operating pressure.
 † Do not pressurize - single acting only. Cavity must be vented.
 †† See page 59 for custom arm mounting. See page 58 for maximum operating speeds and rotation options.
 Internal cam may be removed for an unguided straight pull. See operating instructions for additional port details.