

# CYL SERIES MEDIUM-DUTY CUSTOM WELDED HYDRAULIC CYLINDERS

Bore Diameters: 1" to 7" (2.54 cm to 17.8 cm)

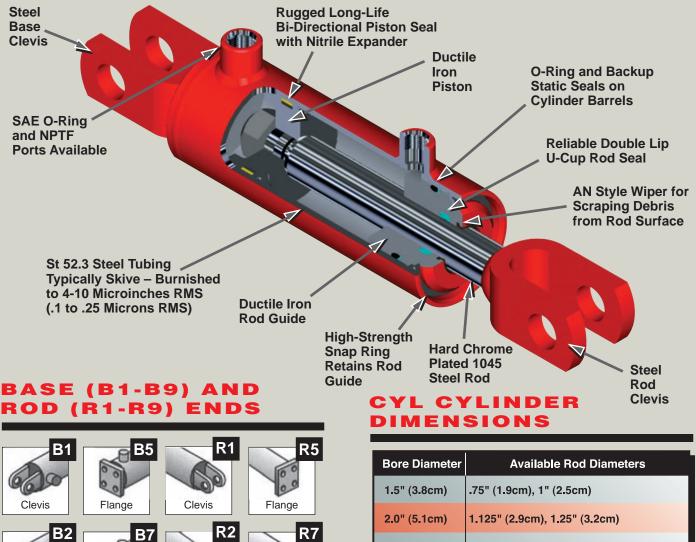
> Stroke Lengths: to 15' (4.57 m)

For Working Pressures to 3000 PSIG (207BAR)

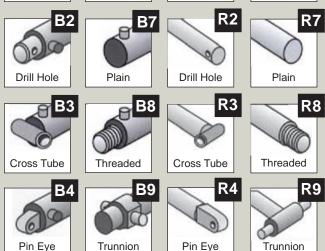
## CYL HYDRAULIC CYLINDER DESIGN

## CYL WELDED CONSTRUCTION

### Energy<sup>®</sup>'s CYL Series Welded Cylinders Feature:



B1	B5	R1	
600	col	60	



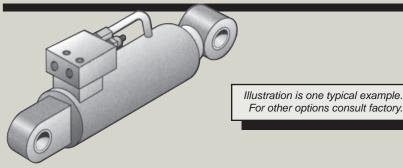
1.125" (2.9cm), 1.25" (3.2cm), 1.5" (3.8cm) 2.5" (6.4cm) 1.125" (2.9cm), 1.25" (3.2cm), 3.0" (7.6cm) 1.5" (3.8cm), 1.75" (4.4cm), 2" (5.1cm) 3.5" (8.9cm) 1.5" (3.8cm), 1.75" (4.4cm), 2" (5.1cm) 1.5" (3.8cm), 1.75" (4.4cm), 4.0" (10.2cm) 2" (5.1cm), 2.5" (6.4cm) 1.75" (4.4cm), 2" (5.1cm), 2.5" (6.4cm) 4.5" (11.4cm) 2" (5.1cm), 2.25" (5.7cm), 5.0" (12.7cm) 2.5" (6.4cm), 3" (7.6cm) 6.0" (15.2cm) 3" (7.6cm), 4" (10.2cm) 3" (7.6cm), 4" (10.2cm) 7.0" (17.8cm)

Please contact factory if the bore/rod combination you desire is not shown above.

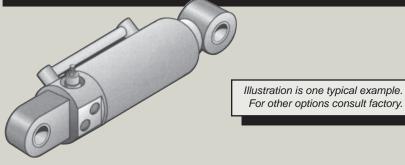
NOTE: Custom base and rod ends, as well as other custom cylinder features, may be available upon request. Please contact our factory for additional information.

# GYL DESIGN OPTIONS & SPECIAL PORT BLOCKS

#### SPECIAL VALVE BLOCK (BOLTED ON)



## SPECIAL VALVE BLOCK In base end



#### PORT OPTIONS Available

- **Standard SAE O-Ring Ports:** Available in straight, 90° elbow, and several other configurations
- **NPTF Ports:** Available in straight, 90° elbow, and several other configurations
- **4-Bolt Flange Ports:** Please consult factory for availability

#### ADDITIONAL Available Features:

- Single-acting cylinders
- · Ram-type cylinders
- Custom end mechanisms
- Custom fluid lines
- Hydraulic cushioning
- Integral stop tubes
- Custom valve blocks and valves
- Position sensing cylinders
- Re-phasing cylinders

## ENERGY MANUFACTURING CUSTOM WELDED CYLINDER EXAMPLES



#### UOTATIORI 山(で) C= U $\circ$ (R)

#### All Energy<sup>®</sup> welded cylinders are custom-made.

Please complete and return the following sheet so that we can provide you with the best cylinder for your application.

#### **ENERGY**<sup>°</sup> Custom Quotation Request Form

This form must be filled out in its entirety before a welded cylinder quotation can be prepared. Unless noted otherwise by the customer, Energy® Manufacturing will use the following parameters with respect to the processing of this request:

- 1. The oil temperature in the cylinder will be 170° Fahrenheit (77° Celsius) or less.
- 2. The rod speed will be 50 feet per minute (15.2 meters per minute) or less.
- 3. System filtration will be 20 micron or better.
- 4. The fluid used is SAE 20 (ISO VG68) or less-viscous petroleum-based fluid and is non-foaming type for hydraulic use.
- 5. Mount center-to-center and stroke dimensions are +/- 1/8" (+/-3.2 mm).
- 6. The cylinder is not used in a corrosive environment.

PURPOSE OF QUOTE:	QUOTE DEADLINE DATE:
CUSTOMER DATA	
Customer name:	Customer part number:
Address:	
City, State or Province, Zip or Postal Code, Country:	
Telephone number:	_ Purchasing contact:
Fax number:	Engineering contact:
F-mail <sup>.</sup>	

#### **CYLINDER DATA**

All welded cylinder quotation requests should be accompanied by a blueprint or sketch and the following data should be completed. Cushioned cylinder requests must include pump flow to cylinder, weight of load, and details of the linkage between cylinder and load.

Bore size:	Mountings:	
Stroke length:	Base:	
Rod diameter:	Rod:	
Retracted pin center-to-center length:	Finish:	
Port type(s) (examples: NPT, NPTF, SAE O-Ring,	Acrylic Water-Based Primer Paint	
4-Bolt Flange, etc.)	(please specify color):	
Port size(s):	Acrylic Water-Based Finish Paint	
Mounting pin diameter(s):	(please specify color):	
Test requirements:	Other Painting (please specify type and color):	
() Standard 100% air test () 100% Hydraulic test	Clear Rust-Preventative Coating:	
	None:	
QUOTATION DATA		
Annual Usage:	Release Quantity:	
Target Price:		
APPLICATION DATA		
Type of machine (crane, combine, etc.):	Primary cylinder effort will be to ( ) push load	
Will cylinder be used to lift people?		
Type of function (hoist, swing, steering, etc.):	Cylinder is mounted ( ) vertically ( ) horizontally	
	( ) swings through arc with mechanism	
Estimated cycles per year:		
Does cylinder always reach full extend or retract	Pressure values:	
position?	Operating:	
Is cylinder subjected to high overrunning loads?	Peak:	
Is cylinder subjected to side loading?		
Is cylinder barrel braced to restrict buckling?	Operating flow range:	



Energy<sup>®</sup> is a member of: NFPA (National Fluid Power Association)



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