



Stretch Rod Cylinders for Bottle Blow Molding

PHD Series CSR Cylinders

*Provides Significantly Longer Life -
Reduces Maintenance and Downtime*

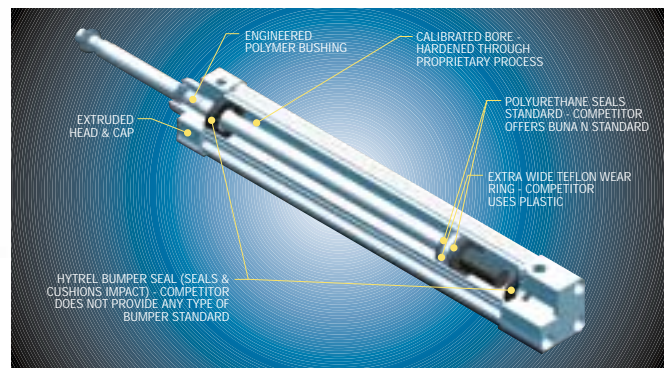
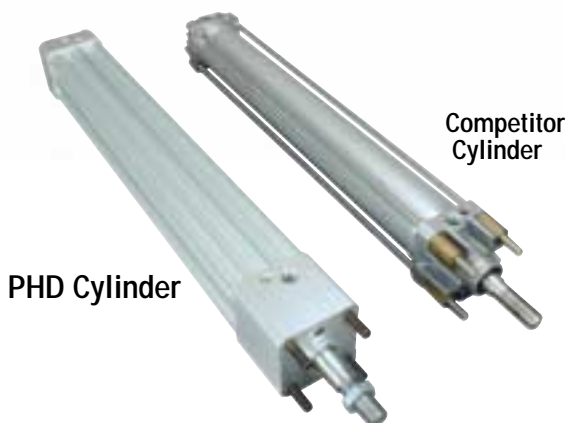
BENEFITS

- Direct replacement for Sidel® Model, SBO ISBM Series1 Machines.
- PHD Cylinder mounts into the same space and bolt patterns. Provides significantly longer life and reduces maintenance and downtime.
- Designed and manufactured by PHD, Inc. USA - Over 45 years of automation solutions experience.
- Local/Worldwide Sales, Service, and Support
- Standard delivery is 5 days for quantities of up to 10 units. Consult PHD for delivery of higher quantities.
- Other standard and custom products are available for your automation requirements.
- Also available - Drop-in replacement Stretch Rod Cylinders on Sidel® Series2 machines and most other manufacturers of injection stretch blow mold machines.



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FEATURES

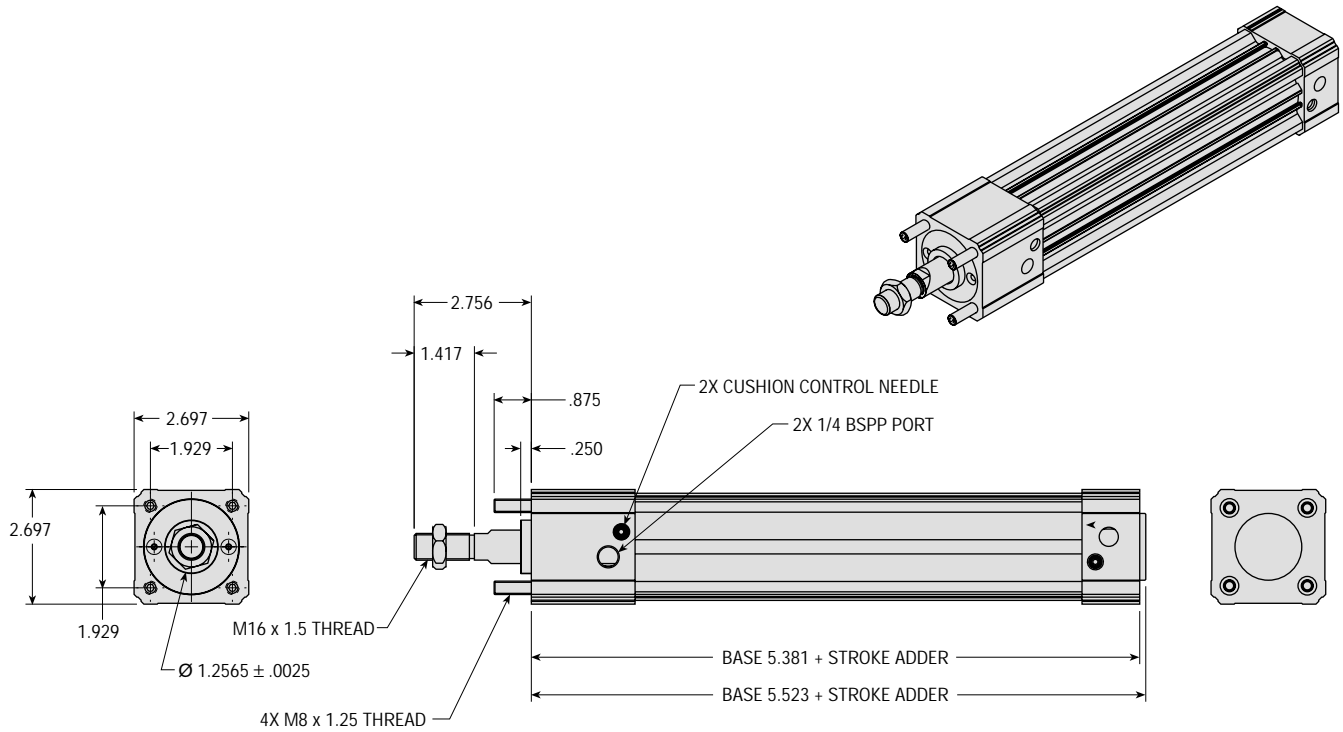


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DIMENSIONS: *SERIES CSR CYLINDERS*



SPECIFICATIONS	IMPERIAL	METRIC
TYPE	Pneumatic Cylinder	
SERIES	CSR, Stretch Rod Cylinder	
BORE SIZE	1.969 in	50 mm
BORE AREA	3.04 in ²	19.61 cm ²
THEORETICAL OUTPUT	264.8 lb @ 87 psi	1177.8 N @ 6 bar
OPERATION	Double Acting	
OPERATING PRESSURE RANGE	7.5 - 150 psi	0.5 - 10 bar
AMBIENT TEMPERATURE	-20° to 180° F	-29° to 82° C
MAX. OPERATING PISTON SPEED	80 in/sec	2.03 m/sec
ADJUSTABLE CUSHION	Standard	
LUBRICATION; FOOD GRADE	FDA Regulation 21 CFR 1789.3570	
PORT SIZE	BSPP 1/4	
MAXIMUM STROKE RANGE	39.37 in	1000 mm
STROKE TOLERANCE	+.079/- .000 in	+2.0/-0.0 mm
BASE WEIGHT	3.28 lb	1.49 kg
STROKE ADDER WEIGHT PER 1 in (25 mm)	0.32 lb	0.15 kg
ALLOWABLE KINETIC ENERGY WITH CUSHION	55.41 in-lb	6.26 Nm
WITHOUT CUSHION	8.7 in-lb	0.98 Nm
BUMPER	Hytrel	
HEADS & CAPS	Anodized Aluminum	
CYLINDER TUBE	Anodized Aluminum with Calibrated Bore	
PISTON ROD	Hard Chrome Plated Steel	
ROD BEARING	Internally Lubricated Engineering Polymer	
PISTON & ROD SEALS	Long-life Urethane Material	

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