



Cylinders

Cartridge Mount Mini-Cylinders Specifications

Single Acting

- Easy to use, basic hydraulic cylinders in four capacities of cartridge mount style.
- A force ranging from "minimal" to maximum cylinder capacity is adjusted by tuning the input pressure.
- Reduce or eliminate part distortion by providing accurate clamping force.
- Cartridge mounting eliminates exposed tubing for clean, compact, clutter-free fixtures.

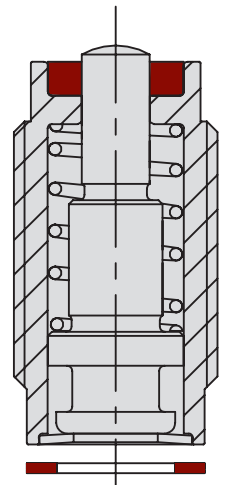
Special tough wipers help keep chips and contaminants out of all cylinders.

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Positive piston stop shoulder keeps the spring from "bottoming out", guarding against premature spring failure which can plague other cylinder brands.

BHC™ (Black Hard Coating) on the cylinder bodies helps prevent scoring and scratching. After years of use, cylinder removal is easier because of BHC's corrosion resistance.

Cartridge models use a gasket to seal against the cavity bottom.



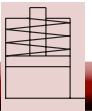
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Specifications

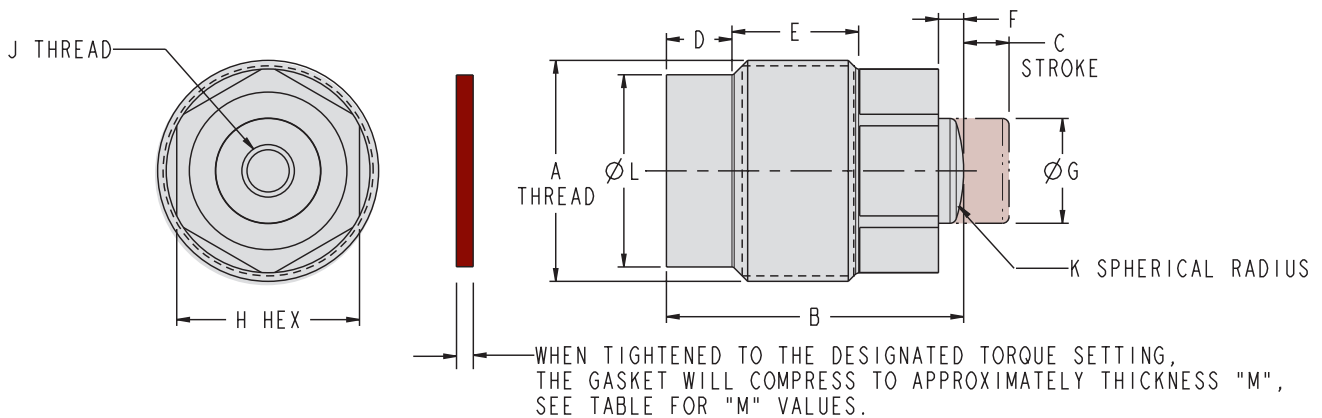
Model No.	Cylinder Capacity (kN)*	Stroke (mm)	Body Thread	Minimum Length (mm)	Piston Area (cm ²) Extend	Oil Capacity (cm ³) Extend
Single Acting (S/A) Cylinders, actuated hydraulically and spring returned.						
42-1010-00	2.4	5.2	M16 x 1.5	28	0.7	0.3
42-1010-01	4.4	7	M20 x 1.5	38	1.3	0.8
42-1010-02	10.1	9.5	M28 x 1.5	35	2.9	2.7
42-1010-03		19		62		5.5
42-1010-04	17.5	8	M35 x 1.5	37.5	5.1	4.0

** Cylinder capacities are listed at 350 bar (35 MPa) maximum operating pressure. The output force is adjustable by varying the hydraulic system pressure. To determine approximate output force for your application, multiply the Piston Area times Your System Operating Pressure. Actual force may vary slightly due to friction loss, seal and wiper drag and/or return spring forces.





Cartridge Mount Mini-Cylinders Dimensions



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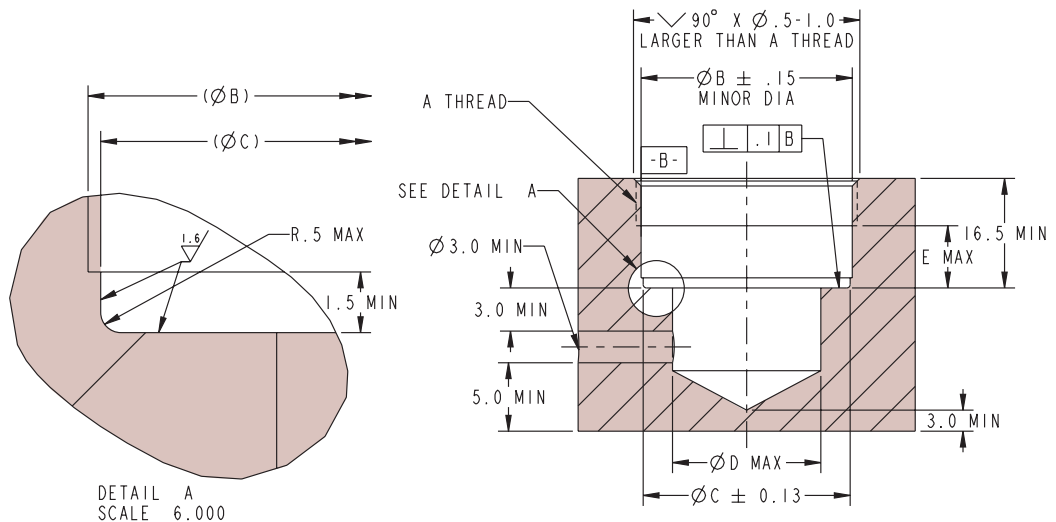
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Dimensions

Model No.	A	B	C	D	E	F	G	H	J	K	L	M	
												Copper	Composite
Single Acting (S/A) Cylinders, actuated hydraulically and spring returned.													
42-1010-00	M16 x 1.5	28	5.2	5	17.5	0.6	4.5	13	N/A	6.5	13.5	.89	1.0
42-1010-01	M20 x 1.5	37	6.5	5	25	1.5	6.5	16	N/A	6.5	16.5	.89	
42-1010-02	M28 x 1.5	34.5	9.5	8	15.5	1.5	12.5	22	M6 x 1.0 x 11	19	23	.89	
42-1010-03		61.5	19	42.5	22					N/A			
42-1010-04	M35 x 1.5	37.5	8	8	19	2.5	16	27	M6 x 1.0 x 12.5	N/A	31	N/A	

All dimensions are in mm.

When both metal and composite gaskets are supplied, choose only one gasket.



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Cavity Dimensions for Manifold Mount Threaded Mini-Cylinders

Model No.	A	Copper Gasket Torque*	Composite Gasket Torque*	B	C	D	E
		(Nm)	(Nm)				
Single Acting (S/A) Cylinders, actuated hydraulically and spring returned.							
42-1010-00	M16 x 1.5	40	20	14.52	13.84	8	4.0
42-1010-01	M20 x 1.5	54	30	18.52	16.81	9.5	4.0
42-1010-02	M28 x 1.5	68	35	26.52	23.44	16	7.0
42-1010-03							
42-1010-04	M35 x 1.5	N/A	50	33.52	31.19	22	7.0

- The metal gasket is recommended when the cavity seal surface has a very smooth finish and is flat and perpendicular to the minor diameter. The metal gasket must be torqued to a higher value, which is more resilient to machine vibrations providing long term sealing.
- The composite gasket is recommended when the cavity seal surface has a rough surface finish or is not flat.