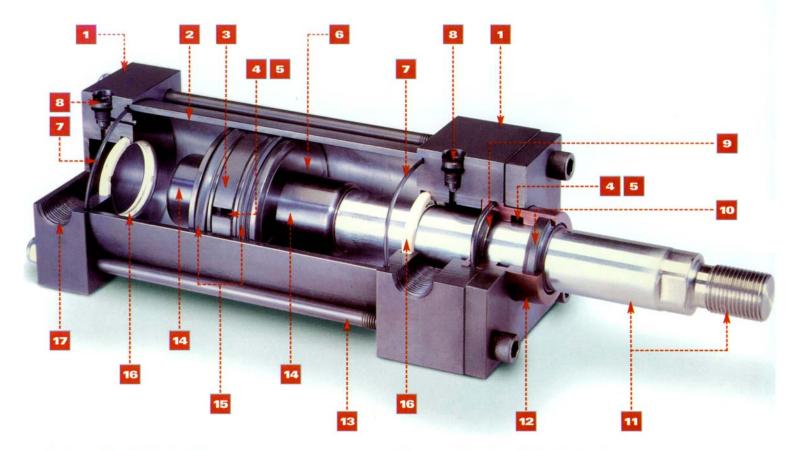
MH Series steel air cylinders

Pre-Lubricated, 250 psi, Heavy Duty Service

Feature for feature,

Peninsular Cylinders are exceptional!



Peninsular Cylinder Company

For over 50 years Peninsular has been manufacturing pneumatic and hydraulic cylinders for OEM and MRO applications that require top performance and extended service in destructive manufacturing environments.

Engineered and Built for Endurance

Peninsular Air Cylinders incorporate state-of-the-art design features that are fabricated to very strict tolerance specifications from the highest quality of materials available. The result is reliable and trouble-free operation under the most demanding conditions.

Choose From a Wide Selection

MH Cylinders are available in all NFPA mounting styles and rod diameters with bore sizes ranging from 1-1/2" to 24". In addition, MH Series Cylinders may also be custom designed to suit specific customer applications. "Viton" and other type seal materials are available to meet your specific needs. These cylinders are also available with metric dimensions. When ordering our Metric Air Cylinders use

the prefix letter "I" for model designation; e.g. (IMH).

ISO 9001 Registered

MH Series Cylinders are manufactured to world class quality standards with a proven track record of superior performance and endurance. Consult the factory for more information.

	Feature	Advantage	Benefit
	Heads and Caps	Square, precision-machined steel.	Assures concentricity of tube, bearing, cushion and piston rod. Ca be made proximity switch ready to accept same probe-lengt switches at each end without spacers.
_	Cylinder Tube	D.O.M. seamless 1020 to 1026 steel; precision honed to 12/15 micro inch finish; hard chrome plated .0003/.0005" thick on ID.	Resists wear, corrosion and dents; reduces wear on piston seals.
-	Wear Band	Delrin™ material.	Creates low friction, long lasting wear surface which prevent scoring of cylinder tube inner wall.
-	Lubrication Reservoirs	Located underneath wear band inside piston and also inside the bearing cartridge.	Provides effective way of metering maximum amount of lubricant to all areas over long time period. Not subject to air turbulence and contamination.
-	Lubricant (not shown)	Teflon™ based grease.	Long lasting lubrication of piston seals, inner cylinder wall surface and rod bearing cartridge seals and ID.
_	Piston	One-piece steel, black oxided with uniform cushion hubs on both sides, threaded onto piston rod, staked and secured with Loc-Tite TM .	Prevents rusting and air leakage; anchored onto piston rod with minimum undercut providing maximum strength. Additional pinning onto rod optional.
-	Tube Seals	Buna-N Nitrile axial placed O-Rings.	When combined with accurately torqued tie rods, prevents extrusion of seal and air leaks under pressure.
-	Cushion Adjustment Screw	Steel needle valve with Buna-N O-ring sealed screw, held captive with locking snap ring.	Accurate fine adjustment of cushioning speed; no air leakage and safe for all users due to internal captive screw.
-	Rod Seal	80 durometer, rounded lip, pre-lubricated, carboxylated nitrile cup style.	Smears grease through ID of rod cartridge extending seal life within Resists abrasion; significantly increases life and prevents leakage around piston rod.
0.	Rod Wiper	80 durometer, sharp double lip, pre-lubricated, carboxylated nitrile seal. Provides additional sealing benefit beyond the rod seal.	Inside edge always lubricated extends life significantly, prevents dir and grit from entering bearing and cylinder.
1.	Piston Rod	High yield strength steel, case hardened OD to 50-55 RC. Core hardness to 28-34 RC. Hard chrome plated .0003/.0005" thick and polished to 12/15 micro inch finish. Rolled threads.	Resists wear. All NFPA rod and thread sizes, including female and studded male ends available, plus metric threads. Provides positive connections to existing machine components.
2.	Bearing Cartridge	Floating, self-aligning in either ductile iron or SAE 660 bronze with internal lubrication reservoir. Special "Slip Tuff" coated cartridge is also available for heavy side loaded applications. Retained by plate with cap screws; strong and shock resistant. A Buna-N O-ring located around the cartridge OD prevents leakage.	Float condition minimizes piston rod misalignment by reducing side loading. ID of bearing cartridge, rod seal and rod wiper lubricated or each stroke, reducing wear. Easily removed for maintenance without special tools to disassemble cylinder. Optional "Slip Tuff" bearing provides lubristic wear surface with hardness characteristics that significantly reduce galling and bearing cartridge failure undesevere side loaded operating conditions.
3.	Tie Rods	Made from 100,000 psi minimum yield, stress-proof, medium carbon steel with rolled threads at each end.	Provides maximum strength for connecting cylinder mounts and used with lock nuts to prevent loosening in service. Accurate torquing prevents leaks at tube seals.
4.	Cushion Hubs	Steel with 8/12 micro inch finish RMS. Black oxided to prevent rusting.	Uniform on each side of piston to eliminate different size seals and reduce parts inventory. Smooth finish stops seal wear and provides air-tight, accurate operation. Ideal for proximity switch application.
5.	Piston Seals	80 durometer, rounded lip, pre-lubricated, carboxylated nitrile U cups.	Resists abrasion; when used with Peninsular's internal lubrication system, provides considerably less wear and increases operating life
6.	Cushion Seals	90 durometer floating check type Urethane seals eliminate ball checks and related parts.	Low friction breakaway and 100% air-tight cushioning assures smooth maximum effectiveness. Metal to metal cushions are eliminated and same size seals at each end reduce parts inventory.
7.	Ports	NPT standard, SAE 0-ring optional. Metric and other thread size options.	Universally adaptable to any hose or fitting.
8.	Optional Proximity Switch Capability (not shown)	Allows for non-contact piston position sensing at near end of stroke. Precision machined cylinder heads and piston cushion hubs allow for in-port mounting of "RF inductive" proximity switches using the same switch probe length at each cylinder end without shims or spacers underneath the switch.	Self-contained switch probe not subject to contamination. Thi patented design creates the same air gap between the sensin probe and target (cushion hubs), thus providing consistent, reliabl and repeatable stroke-to-go. Eliminates the design and constructio of brackets necessary to mount mechanical limit switches. US Pat No. 4,726,282 & D 295,753

Field Service and Engineering Support

We understand the importance of technical assistance and the availability of products and repair parts. That's why we have a distributor network and technical representatives throughout the country. You can also reach our Customer Service Department for help.

Complete Repair Facility

Peninsular repairs all air and hydraulic cylinder makes and models. All cylinders are performance tested before shipment. Estimates are provided prior to repair activity.

Easy Order Procedure

For your convenience, please refer to the "How to Order and Specify Section". Just follow steps A thru J in

the example and forward to us for price and delivery information or contact our Customer Service Department or your Authorized Peninsular Distributor.



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