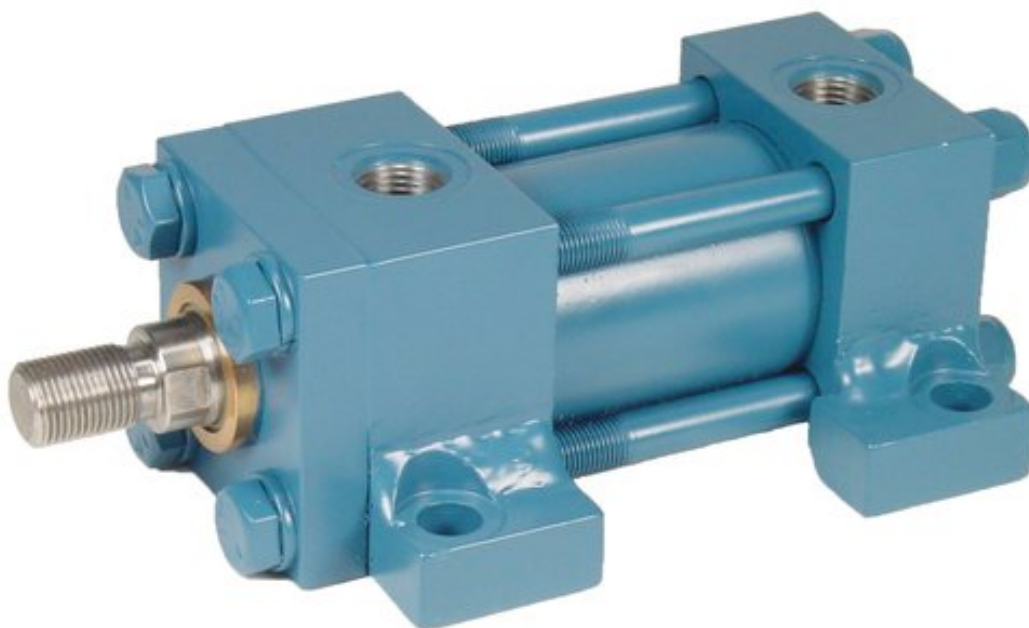


## Series PressureMaster®

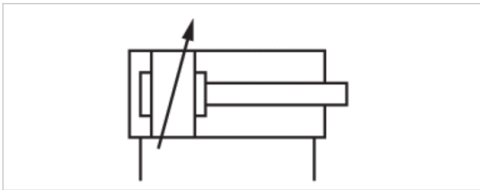


AVENTICS™ Series PressureMaster®



# NFPA, PressureMaster® Hydraulic (HHT)

- Steel version
- Ø 38.1-355.6 mm
- double-acting
- Cushioning adjustable (optional)



## Standards

Compressed air connection  
 Working pressure min./max.  
 Ambient temperature min./max.  
 Medium temperature min./max.  
 Medium

## NFPA

SAE (standard) / NPT optional  
 206.89 bar  
 -20 ... 93.33 °C  
 -20 ... 93.33 °C  
 Hydraulic oil

## Technical information

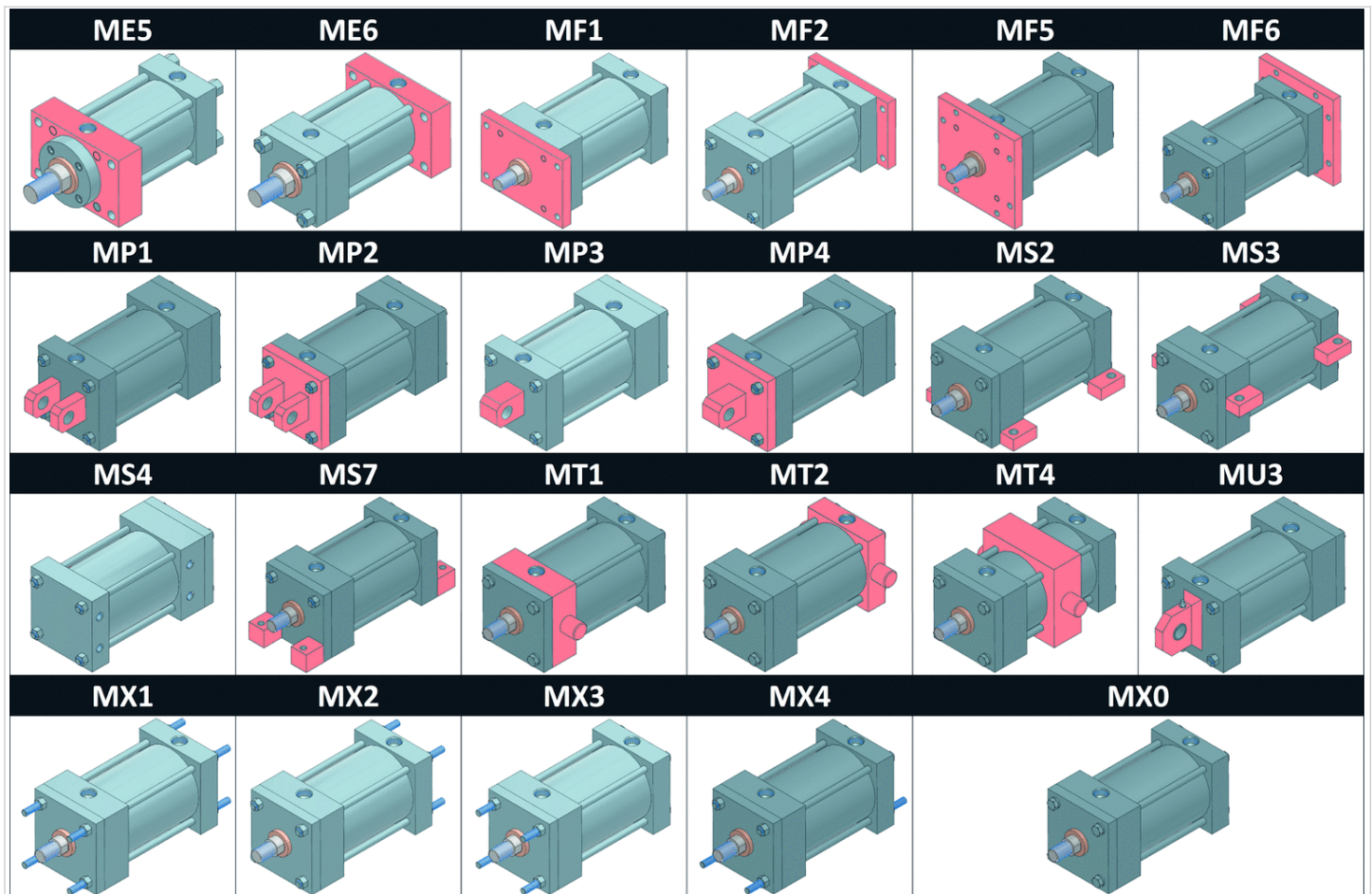
AVENTICS hydraulic cylinders are designed for operation with clean, petroleum-based hydraulic fluid. Operation using fire-resistant or other special types of fluids may require special sealing. Please consult the factory for details.

Pressure ratings vary based on the cylinder mounting style and bore/rod combination. Please refer to the NFPA online catalog (SC-200) or consult the factory.

## Technical information

Material	
Cylinder tube	Steel, Honed to 12 micro-inches or better
Piston rod	Carbon steel, Case hardened, chrome-plated (5/8" version not case hardened)
Piston	Ductile iron
Front cover	Steel
End cover	Steel
Seal	Buna-N
Scraper	Polyurethane
Tie-rods	Stress proof steel, high tensile

## Accessories overview



### Flange mounts

Flange mounting is one of the strongest, most rigid methods of mounting. With this mounting type, there is little allowance for misalignment, so when long strokes are required, the free end opposite the mounting should be supported to prevent sagging and possible binding of the cylinder. Blind or cap end mountings are best for thrust load applications, and rod or head end mountings are best in tension applications. If less rigid mounting can be used and the cylinder can be attached to a panel or bulkhead, tie rod extension mounting could be considered.

### Fixed, Detachable and Universal Clevis Mounts

Clevis mounting is one of the most widely used mounting types. For short strokes, medium, or small cylinder applications, clevis mounting is recommended. If stroke requirements lead to an excessive overall length, cap trunnion mounting can be used. Pivot mounting must always be used with a pivot-type rod end attachment.

### Trunnion Mounts

All cylinders with trunnion mounting need to provide for pivoting on both ends. These types of cylinders are designed to carry shear loads, and the trunnion and pivot pins should be supported by bearings that rigidly hold and closely fit across the entire length of the pin. Head or rod end trunnions should be carefully applied to either short strokes or to applications where the weight of the cylinder falls vertically below the pin.

### Side and Centerline Lug Mounts

Cylinders with side or lug mounting provide fairly rigid mounting. These mounting types can tolerate a slight amount of misalignment when the cylinder is at full stroke, but as the piston moves toward the blind end, the tolerance for misalignment decreases. It is important to note that, if the cylinder is used properly, the mounting bolts are either in simple shear or tension without any compound stresses.

#### Side End and Angle Mounts

Side end mounting lends itself to easy mounting and replacement. It also permits side-by-side mounting in confined areas. As with side lug mounting, proper use will place the bolts in simple shear or tension without any compound stresses. Proper alignment is critical to maximum service life. When specifying the mounting type, carefully check the distance between the rod and lug or angle to determine if there is enough clearance for the rod end attachment. It may be necessary to add a plain piston rod extension to move the threaded rod end out beyond the lug.

#### Extended Tie Rod Mounts

Tie rod and flange mounting are basically the same, except that the tie rods are extended and used to mount the cylinder. To prevent misalignment, sagging, or binding of the cylinder when long strokes are required, the free end of the cylinder should be supported. For thrust load applications, blind or cap end tie rod extensions are best. For tension load applications, rod or head end extensions are best. Tie rod mounting is suitable for many applications, however, it should be noted that it is not as rigid as flange mounting.

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