

General Specifications - Single Acting Hydraulic Cylinders

Scope: The hydraulic power cylinders shall be of the heavy duty single acting type, specifically designed for industrial service. The ram shall be machined and polished to an extremely smooth finish and shall be equipped with a permanent stop to positively prevent it from leaving the casing. The cylinder casing shall be equipped with close fitting bronze bearings which are spaced at least 2 1/2 times the ram diameter. The cylinder assembly shall be equipped with an adjustable packing gland, suitable seals to ensure against leaks, and an effective wiper. In addition, the cylinder assembly shall be constructed to automatically bleed entrapped air with each operation of the ram. A manual bleed may be provided, but not as a substitute for the automatic bleed device. The assembled cylinder shall be factory tested at not less than 600 PSI. No cast iron or other brittle material shall be used in the cylinder construction.

Type: Single Acting, Ram Type, Double Bearing, Ram Sealed

Working Pressure: To suit application, 300 PSI minimum

Test Pressure: Working pressure x 2, 600 PSI minimum

Bearings: Bronze SAE-660, spaced at a minimum of 2 ½ times ram diameter

Seals: Non-metallic, multi – ‘V’ type supported with machined metal top and bottom adapters and with ‘O’-type pressure ring. Seal material may vary to suit hydraulic fluid.

Wiper Ring: Non-metallic with metal retainer ring

Packing Gland: Steel with machined groove for seal support. High strength screws permit adjustment

Ram: Ram is fabricated of ASTM A-106 or A-53 seamless steel grade B black pipe and is complete with a heavy welded steel top head with (8) drilled and tapped holes for attachment of load. A heavy steel head and stop are welded to the bottom. The ram is lathe machined to close tolerances and polished to a fine finish over entire length. Plating or special materials available as required.

Cylinder: Fabricated of ASTM A-106 or A-53 seamless steel grade B black pipe. Two heavy steel bearings housings each fitted with 2” wide SAE 660 bronze bearings spaced at a minimum of 2 ½ times the diameter of the ram and machined to close diametric tolerances provide guides for the ram. The bottom bearings housing is provided with a steel stop to protect the bronze bearings and prevent the ram from leaving the casing. The oil inlet is located near the top to provide automatic air elimination from the cylinder. The bottom bearing housing is provided with orifices for oil flow control within the cylinder. A heavy steel head is sealed at the bottom.

Painting and Finishing: Slate Gray Industrial Enamel paint, outside finish can vary depending upon environment.

Special Features: Internal non-rotating devices or guides available