



CUSTOM TELESCOPIC CYLINDERS



OEM HYDRAULIC CYLINDER SPECIALISTS



CUSTOM TELESCOPIC

RAM Custom Telescopic cylinders give you the flexibility to work with our engineering experts to determine the cylinder design requirements that perfectly fit your equipment performance requirements. We have the expertise working with OEM customers to either modify a standard design or create a new prototype for their equipment.

SINGLE ACTING

Single Acting Telescopic cylinders are the simplest telescopic design. A Single Acting cylinder is extended using hydraulic pressure but is retracted using external forces (usually gravity), once the hydraulic pressure is removed.

SINGLE/DOUBLE COMBINATION

Single/Double Combination Telescopic cylinders are a Single Acting Telescopic cylinder where one or more of the smaller stages are Double Acting. A typical application is a mast raising design on a drilling rig where the load must be pulled over center until gravity can take over to retract the cylinder.

DOUBLE ACTING

Double Acting Telescopic cylinder designs are extended and retracted using hydraulic pressure. A Double Acting Telescopic cylinder is a more complex design and involves additional sealing within the internal body of the cylinder to seal off the different stages. Passageways are machined into the internal components of the cylinder to allow for proper staging. This type of design is usually utilized when gravity is not available to retract the cylinder.

Telescopic cylinders provide a long stroke from a very compact retracted length. RAM has experience designing telescopic cylinders for a number of industries and applications and can work with you to design a single acting, a single acting/double acting combination, or a double acting design.



BUILT TO YOUR SPECIFICATIONS

Rated Pressure: Up to 5000 PSI

Stages: 2 to 5 working sections

Rod Material: High tensile SAE C1045, ground and polished hard chrome plated

Barrel Size: Up to 20" diameter

Barrel Material: High tensile SAE C1026/St52.3 cold drawn tube precision honed for extended seal life

Gland Material: Ductile iron 65-45-12 (ASTM A536) or Steel (AISI 1026) internally threaded

Piston Material: Integrated machined piston design option

Valves: Optional integrated valves

Ports: Custom arrangements for size, type and location options

Seal Options: Urethane wiper seals, modern urethane lipped shaft seal, modern urethane one piece static seals, glass filled nylon gland bearing rings, glass filled nylon piston bearing rings, cast iron piston rings, interlocking step-cut reinforced heat stabilized thermoplastic zero leak piston rings, and custom sealing arrangements for high or low temperature, high cycle or continuous duty

Paint Finish: 2 part urethane black or custom colors

CUSTOM TELESCOPIC MOUNTS

RAM can design and/or manufacture custom mounts in a wide array of styles and materials.

We can also offer unique mounting locations, mid barrel or on each stage, for additional support.

Contact the RAM Engineering team today and let them help select the best option for your application.



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