

Series RDH

Heavy Duty Hydraulic Roundline Cylinder

Basic Presentation



ENGINEERING YOUR SUCCESS.

Series RDH – Quick List

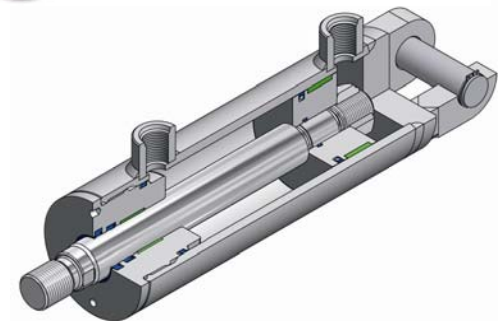
General Specifications:

- 1½” to 8” bore diameters
- 5⁄8” to 5½” rod diameters
- Standard strokes to 120”
- Threaded head, welded cap
 - Repairable
- 9 standard mounts
 - Many standard cylinder accessories
- 3,000 psi hydraulic service
- All popular seal compounds
 - Standard temperature -10°F to +165°F
- Many model code options and common modifications
- Manufactured in the U.S.A.



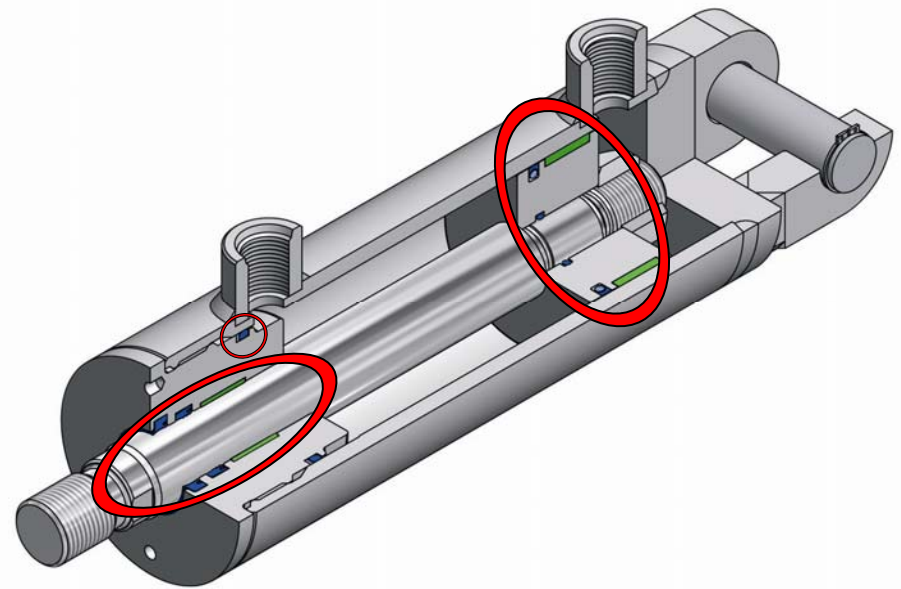
New Value from a Standard Platform

- **Superior Performance** – Resulting from Advanced Sealing Technology, Composite Wear Rings and Proven Exterior Toughness
- **Easy Installation** – Standard mounts and rod ends accommodate commercially-available NFPA accessories
- **Switch-Ready (magnetic piston)** is a standard option. The **ALS Switch** is the lowest-cost point feedback solution for carbon steel cylinders
- **Safe Products** – True industrial-grade design factors
- **Environmentally Friendly** – RoHS Directive compliant materials
- **2-D and 3-D CAD Files** – Available upon qualified request



Advanced Sealing Technology

- **Tri-lip rod seal** (3 sealing edges!) and bi-directional piston seal feature proven leak-free performance
- **Durable polyurethane** material is used to maximize seal life
- **Nitrile end seals** and backup rings on a smooth bore of the cylinder body for optimal sealing and elimination of extrusion problems
- **Composite rod and piston wear rings** are internally lubricated for reduced friction and formulated for heavy-duty, load-bearing applications
- **Standard rod material is case-hardened, hard chrome plated** and polished to an optimum finish
- And since we make our own seals, **all seals have immediate availability** in other popular compounds



Proven Exterior Toughness

- **Steel cap, cylinder body and ports** for high strength in rough environments
- **Case hardened, hard chrome plated** and polished carbon steel piston rod for damage resistance, long seal life and low friction
- **Outboard urethane wiper seal** to remove external debris and adherents from the piston rod
- **High quality paint coating** for interior or exterior applications
 - **Standard enamel paint has an ASTM B117 Salt Spray Rating of 100 hours minimum**



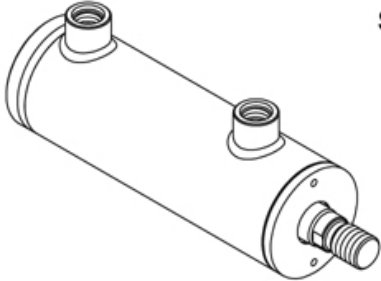
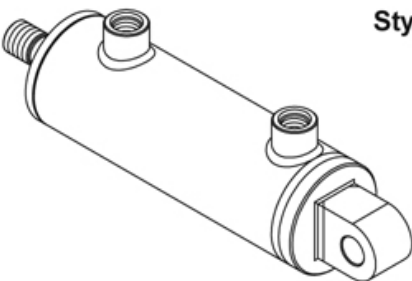
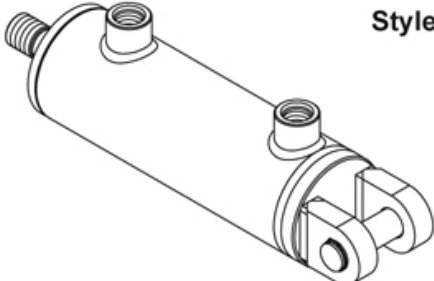
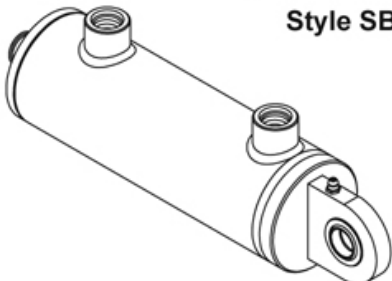
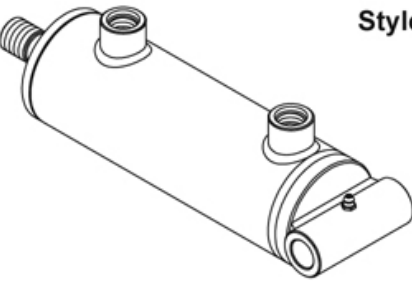
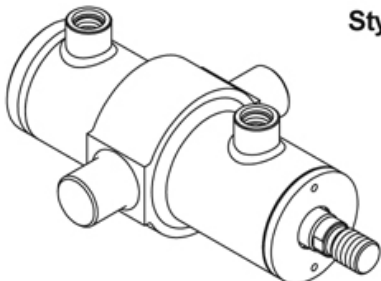
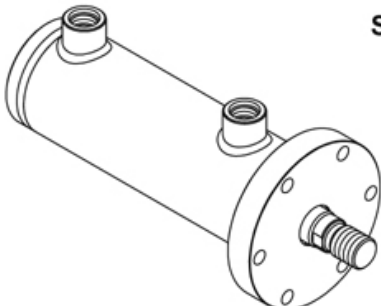
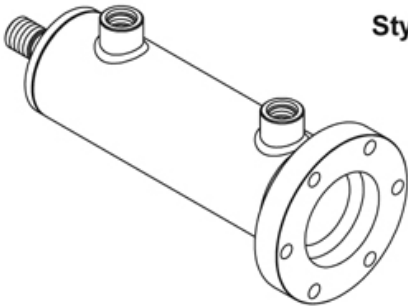
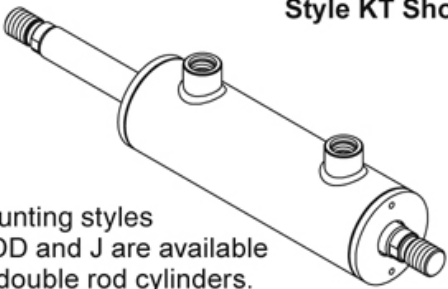
Easy Installation with Standard Mounts

- **9 Standard Mounts** cover all common industrial roundline applications
 - **T** – Basic, No Mount
- **6 Pivot Mounts**
 - **B** – Cap Fixed Eye
 - **BB** – Cap Fixed Clevis
 - **SB** – Spherical Bearing Cap End (Inch)
 - **SBM** – Spherical Bearing Cap End (Metric)
 - **TT** – Crosstube Cap End
 - **DD** – Intermediate Fixed Trunnion
- **2 Flange Mounts – Rated to 3,000 psi**
 - **J** – Round Head Flange
 - **H** – Round Cap Flange
- B, BB and SB mounts and standard rod ends **accommodate commercially-available NFPA accessories**
 - Rod clevis, knuckle, spherical rod eye, clevis bracket, eye bracket, etc.



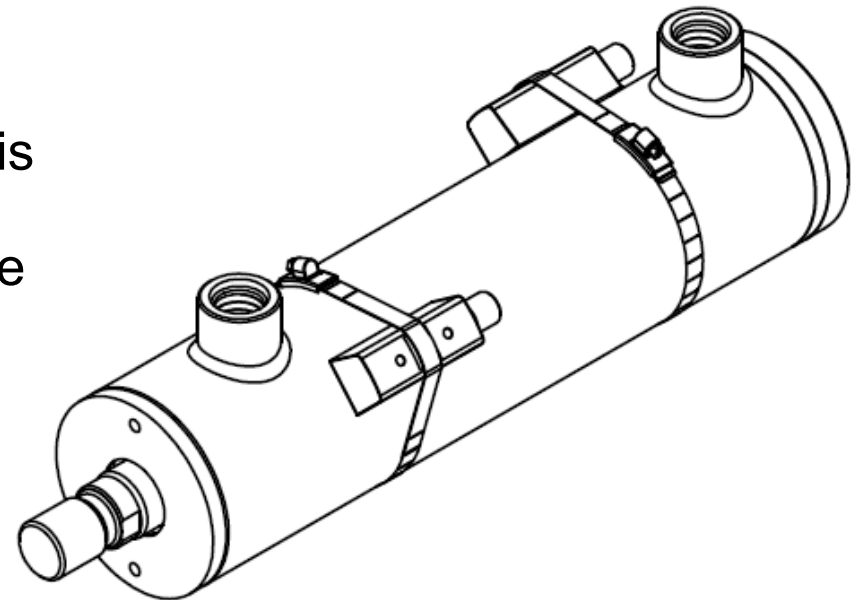
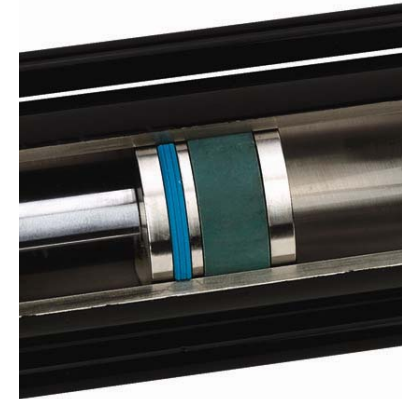
Easy Installation with Standard Mounts

Available Mounting Styles

<p>Basic, No Mount Style T</p> 	<p>Cap Fixed Eye Style B</p> 	<p>Cap Fixed Clevis Style BB</p> 
<p>Spherical Bearing Cap End Style SB/SBM</p> 	<p>Crosstube Cap End Style TT</p> 	<p>Intermediate Fixed Trunnion Style DD</p> 
<p>Round Head Flange Style J</p> 	<p>Round Cap Flange Style H</p> 	<p>Double Rod Cylinders Style KT Shown</p>  <p>Mounting styles T, DD and J are available as double rod cylinders.</p>

Switch-Ready

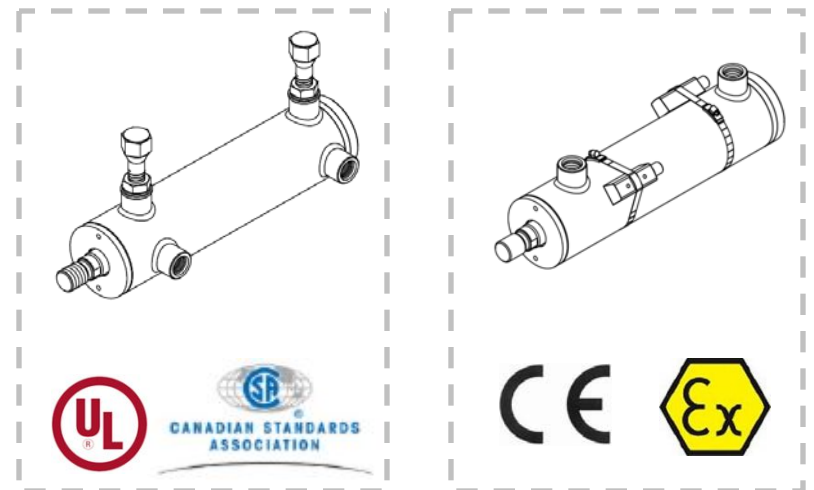
- The **ALS Switch** is the **lowest-cost point feedback solution** for carbon steel cylinders
- **Switches can be installed anywhere along the stroke** and in any orientation
- **Unique round body brackets** minimize installation time
- **Switch-Ready (magnetic piston)** is used for the **ALS Switch** and available as a standard option in the model code



Safe and Environmentally-Friendly Products

The Series RDH is designed with **goals beyond performance**. Driving these efforts are requirements, regulations and other activities that attempt to make the world a better, safer place in which to live and work. Here are some of the results:

- **Industrial-Grade Design Factors** for rod buckling, burst pressure and calm nerves
- **Recycle** – all solid material content is 100% recyclable
- **RoHS Directive compliant**
- **CLS-2 End-Of-Stroke Limit Switch - UL Listed**
(CSA Approved available)
- **ALS Mid-Stroke Switch - CE Approved**
(ATEX version available)



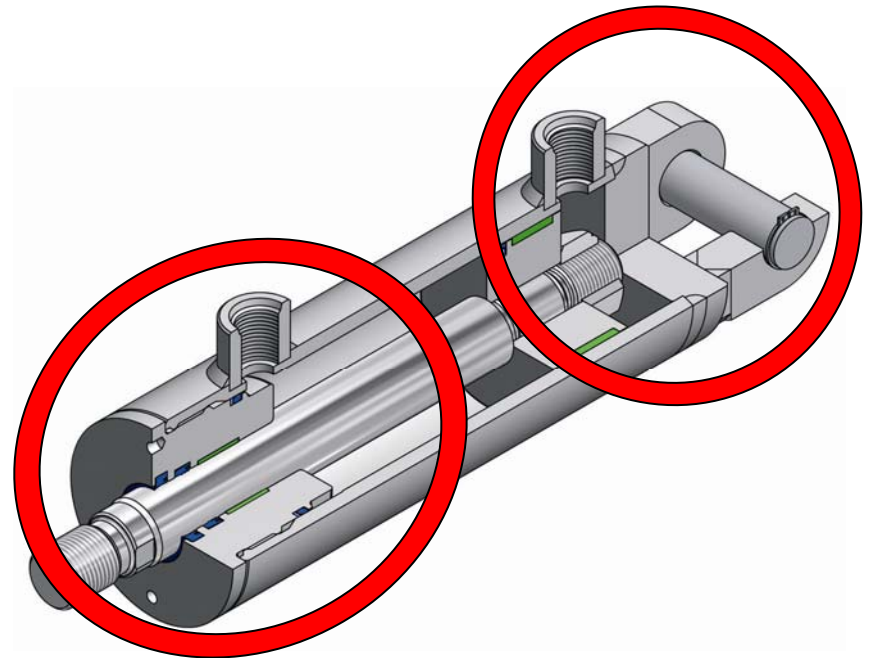
Made in U.S.A.

- **Location** – Series RDH cylinders are **made in the U.S.A.**
- **Quick Delivery** – standard lead time is 2-4 weeks, with the capability of shipping some cylinder configurations within 48 hours. We deliver to your request.
- **Non-Standard Designs** – since 50% of applications require cylinders that are not catalog-standard, we organized our entire culture for flexibility.
- **Risk Management** – the absence of international risks from dealing with non-domestic cylinder suppliers will allow you to relax. Our goal is to offer you the best product, on time, with your financial concerns in mind.



Reduced Weight Design

- Compared to an equivalent tie rod cylinder, welded construction has **reduced the average weight by 36%.**



Reduced Space Design

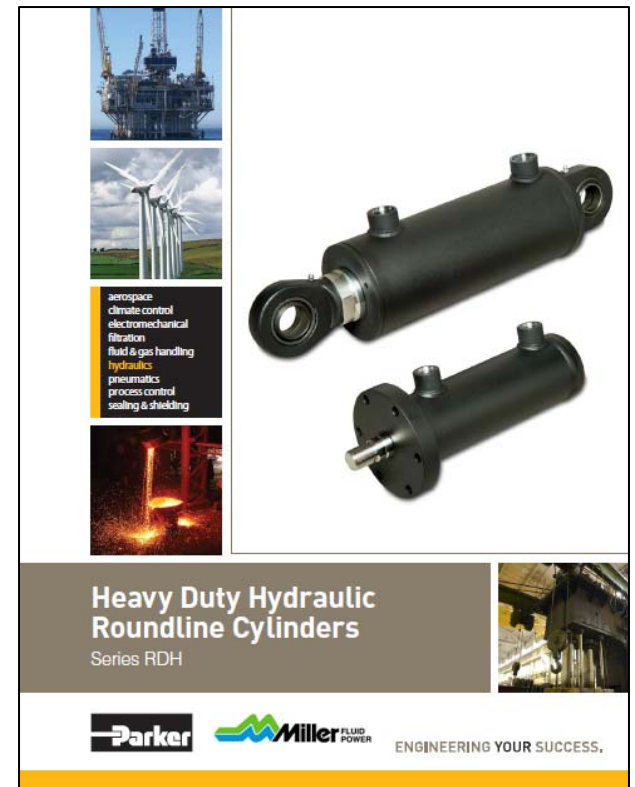
- Compared to an equivalent tie rod cylinder, welded construction has **reduced the average required space by 21%**.
 - Some OAL savings as well (varies per bore)



Series RDH Catalog HY08-M1320-1/NA

Comprehensive catalog includes:

- Product line introduction with discussions on:
 - New Value from a Common Platform
 - Made in the U.S.A.
 - Lean and Advanced Manufacturing
- All cylinder and accessory information
- Common modifications, switches, application engineering & service kits
- 64 pages total
- PDF posted at Miller Fluid Power website



Common Options

- Double rod end
- Hi Load, Magnetic and Mixed Media pistons
- Low friction seals
- NPTF, BSPT and BSPP (ISO 228) ports
- Seal classes for all temperatures and fluid compatibilities
- Fluorocarbon rod seal and wiper only
- Metallic rod wiper
- Oversize piston rods
- Special rod ends
- Stainless steel piston rod (17-4 PH H1150)

**Series
RDH
model
code
options**

- Special heads, caps, pistons and mounts
- Cartridge valves/counterbalance valves
- Flow tubing to either end
- Linear position feedback
- Water-submersible design
- Rod coatings/nanoplating
- Application-specific paint, etc.

The catalog includes a comprehensive list of common and custom modification options



Thank You!

- For more information, please contact **Miller Fluid Power Industrial Cylinder Division** at (847) 298-2400 or cylproductinfo@parker.com

