## Water Submersible Option for Series 2H and 3H Hydraulic Cylinders

## Optional Polypak Inner and Outer Rod Seals resist internal and external pressure. Required for depths over 25 ft and up to 5000 ft .



Optional Dual Cylinder Body Seals resist external pressure. Required for depths over 25 ft and up to 5000 ft .
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Optional 17-4 stainless steel tie rods and Bumax 88 stainless steel nuts resist corrosion.

Bronze Rod Bushing

Standard 17-4 Heat-Treated, Chrome-Plated, High Tensile Stainless Steel Piston Rod Material resists corrosion.

## Specifications:

- Submersion Depth: up to 5000 ft
- Heavy Duty Service - ANSI (NFPA) T3.6.7R2 - 1996 Specifications and Mounting Dimension Standards
- Nominal Pressure - 3000 psi
- Operating Temperature $--10^{\circ} \mathrm{F}$ to $+165^{\circ} \mathrm{F}$
- 17-4 PH chrome plated stainless steel piston rod
- Stainless steel name tag affixed with stainless steel wire around tie rod


## Cylinder Seal Construction:

- Up to 25 ft - Standard rod seal and body seals
- Over 25 ft to 5000 ft
- Subsea rod seal package that includes a Polypak oil seal and an outward facing Polypak wiper to seal against water intrusion.
- Subsea body seal package with ID oil seal and body-end o-ring to seal against water intrusion.
- Not available with $0.625 \varnothing$ piston rod


## Standard Options for Water Submersible Cylinders:

Material

- 17-4 PH stainless steel tie rods and Bumax 88 stainless steel tie rod nuts
- Chrome plated body ID

Surface Treatments for Corrosion Protection

- Electroless nickel plated exterior (head, cap, body and retainer)
- Inorganic zinc primer (zinc primer only - without bond coating)
- Inorganic zinc primer with epoxy undercoat and anacrylic topcoat
- Epoxy undercoat and topcoat


## Custom Options available for Special Order:

- End-of-Stroke Switches
- All stainless steel construction


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## How to order:

1. Specify the complete Parker Cylinder Model Number.
2. Put an " S " in the model number to indicate a special cylinder.
3. Include the 3 digit Submersible Code.
4. For custom options, such as switches, provide a complete description or drawing of your requirements.

## Submersible Code

When selecting the submersible option, an S must be placed in the Model Number. Select Submersible Code values for the required Submersion Depth, Cylinder Body, and Corrosion Protection. See the example Model Number below:

| Feature | Code | Specification | For |
| :---: | :---: | :---: | :---: |
| Submersion Depth | 1 | Conventional rod gland and body seal design | Depths to 25 ft |
|  | 2 | Submersible rod gland \& dual cylinder body seals | Depths to 5000 ft |
|  | 3 | Other | Specify depth / requirements |
| Cylinder Body | P | Plain ID |  |
|  | C | Chrome plated ID |  |
| Corrosion Protection | 1 | Inorganic zinc primer | Splash \& short term immersion service where equipment is top coated by the customer |
|  | 2 | Inorganic zinc primer with stainless steel tie rods, nuts, \& fasteners |  |
|  | 3 | Electroless nickel plated exterior with stainless steel tie rods, nuts, \& fasteners |  |
|  | 4 | Inorganic zinc primer, epoxy undercoat, \& anacrylic topcoat. | Splash \& short term immersion service |
|  | 5 | Inorganic zinc primer, epoxy undercoat, \& anacrylic topcoat with stainless steel tie rods, nuts, \& fasteners |  |
|  | 6 | Epoxy base \& top coat. | Long term immersion service |
|  | 7 | Epoxy base \& top coat. with stainless steel tie rods, nuts, \& fasteners |  |
|  | 9 | Other | Specify requirements |

## Example:

### 4.00 BB 2HK T S 14 X 24.00

S=Submersible Code: 2P1
(describes a 4" x 24" cylinder for submersion up to 5000 ft , with a plain cylinder body ID and Inorganic Zinc Primer corrosion protection.)

## Water Submersible Codes and Features Supplied

Depths to $5000 \mathbf{f t}^{1}$

| Submersible Cylinder Feature | Water Submersible Code ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2P1 | 2P2 | 2P3 | 2P4 | 2P5 | 2P6 | 2P7 | 2C1 | 2C2 | 2C3 | 2C4 | 2 C 5 | 2C6 | 2 C 7 |
| 17-4 PH piston rod | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Stainless steel tag | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Submersible rod gland | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Dual cylinder body seals | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Chrome plated cylinder ID |  |  |  |  |  |  |  | X | X | X | X | X | X | X |
| SS tie rods, nuts, \& fasteners |  | X | X |  | X |  | X |  | X | X |  | X |  | X |
| Electroless nickel plated exterior |  |  | X |  |  |  |  |  |  | X |  |  |  |  |
| Inorganic zinc primer | X | X |  |  |  |  |  | X | X |  |  |  |  |  |
| Inorganic zinc primer with topcoats |  |  |  | X | X |  |  |  |  |  | X | X |  |  |
| Epoxy base \& topcoat |  |  |  |  |  | X | X |  |  |  |  |  | X | X |

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[^0]:    ${ }^{1}$ Corresponding submersible codes for depths to 25 ft begin with 1 (e.g. 1P1, 1P2, etc.) and include all of the features marked for 5000 ft depth except Submersible Rod Gland and Dual Cylinder Body Seals.

