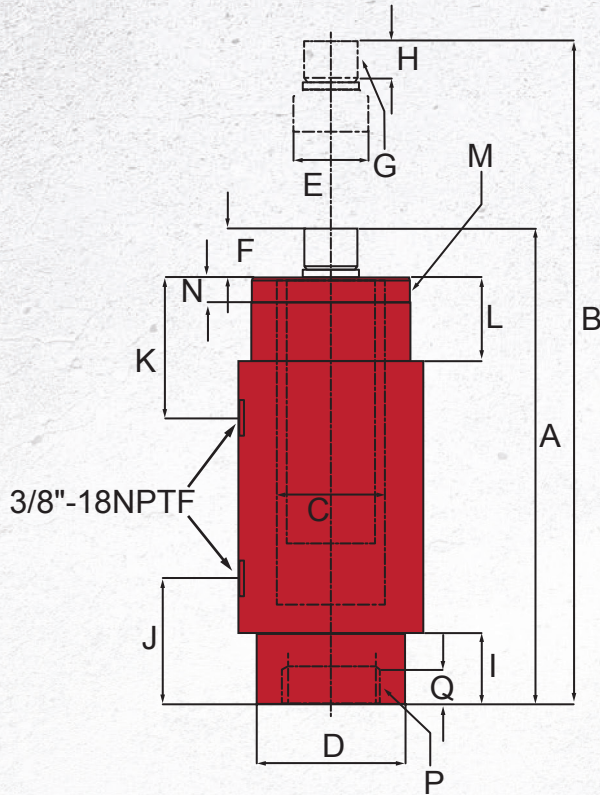


## PRECISION DOUBLE ACTING CYLINDERS

- Provides hydraulic power on both advance and retract
- Designed for high cycling in production applications
- High strength steel construction from gun drilled solid bar
- Rod wiper seals keep dirt and contamination out
- Clevis eye attachments are available
- Maximum working pressure : 10,000 psi / 700 bar



**\* Note: Precision double acting cylinders do not come with couplers.**

| Cylinder Capacity (tons) | Model Number | Push Effective Area (in <sup>2</sup> ) | Pull Effective Area (in <sup>2</sup> ) | Collapsed Height A (in) | Extended Height B (in) | Cylinder Bore Dia. C (in) | Outside Dia. D (in) |
|--------------------------|--------------|----------------------------------------|----------------------------------------|-------------------------|------------------------|---------------------------|---------------------|
| 9                        | HPD0906      | 1.77                                   | 1.01                                   | 13.78                   | 19.88                  | 1.50                      | 2.52                |
|                          | HPD0910      | 1.77                                   | 1.01                                   | 17.80                   | 27.91                  | 1.50                      | 2.52                |
| 16                       | HPD1606      | 3.14                                   | 1.56                                   | 15.31                   | 21.57                  | 2.00                      | 2.99                |
|                          | HPD1610      | 3.14                                   | 1.56                                   | 19.29                   | 29.53                  | 2.00                      | 2.99                |



| Model Number | Rod         |                   |               |                      | Base to Adv. Port J (in) | Top to Return Port K (in) | Collar        |               |                      |                         |                                | Weight (lbs) |
|--------------|-------------|-------------------|---------------|----------------------|--------------------------|---------------------------|---------------|---------------|----------------------|-------------------------|--------------------------------|--------------|
|              | Dia. E (in) | Protrusion F (in) | Thread G (in) | Thread Length H (in) |                          |                           | Length L (in) | Thread M (in) | Thread Length N (in) | Int. Base Thread P (in) | Int. Base Thread Length Q (in) |              |
| HPD0906      | 0.98        | 0.98              | 3/4"-16       | 0.75                 | 1.50                     | 2.20                      | 1.50          | 2"-12         | 0.60                 | 1-11/16"-18             | 1.37                           | 14.6         |
| HPD0910      | 0.98        | 0.98              | 3/4"-16       | 0.75                 | 1.50                     | 2.20                      | 1.50          | 2"-12         | 0.60                 | 1-11/16"-18             | 1.37                           | 18.5         |
| HPD1606      | 1.42        | 1.16              | 1 1/8"-12     | 0.98                 | 2.12                     | 2.87                      | 2.12          | 2 5/8"-16     | 0.98                 | 2-3/16"-16              | 1.61                           | 22.0         |
| HPD1610      | 1.42        | 1.16              | 1 1/8"-12     | 0.98                 | 2.12                     | 2.87                      | 2.12          | 2 5/8"-16     | 0.98                 | 2-3/16"-16              | 1.61                           | 28.2         |