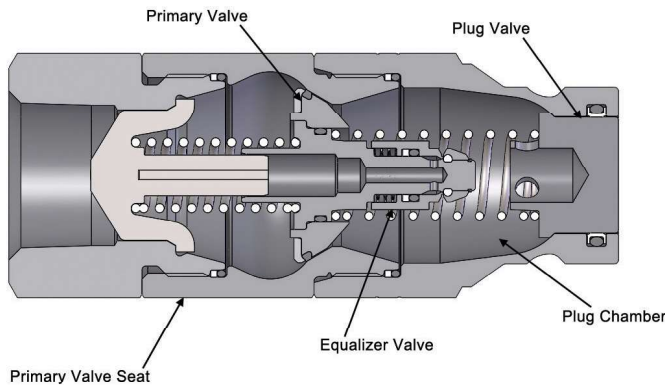
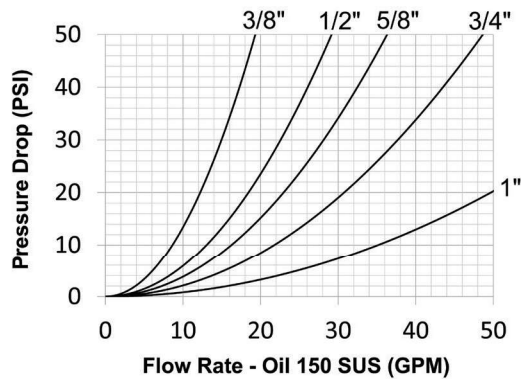


# Hydraulic Couplings: HTE-Series

## Interchange Data

- Parker FEC-Series, Stucchi APM-Series, Faster 3FFH-Series



## Materials

- Machined components are manufactured using solid steel bar stock
- Steel componentry is plated using a ROHS compliant zinc-nickel process providing corrosion resistance
- Stainless steel retaining rings and springs maximize corrosion resistance and extend service life
- Plugs are hardened to provide resistance to brinelling during impulse service

## Seal Components

- 3/8", 1/2", 3/4", and 1" plugs have molded polyurethane valve seals, with a temperature range of -65°F to 212°F (-54°C to 100°C)
- 5/8" plugs have nitrile-energized PTFE valve seals, with a temperature range of -40°F to 250°F (-40°C to 121°C)
- Ancillary plug seals are nitrile (buna-N), with a temperature range of -40°F to 250°F (-40°C to 121°C)
- Backup rings for all sizes are PTFE

## Component Terminology

- Non-linear connection force at many pressures
- No maximum connection-pressure restrictions
- Head pressure or valve bleed-by has minimal effect on connection force
- Less susceptible to system contamination
- Design is scalable performing similarly in many sizes
- Smooth connection action

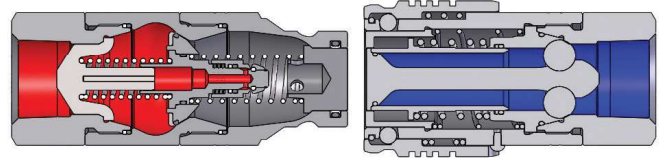
## Rated Pressure Chart

| Body Size | HTE-Series ISO16028 Connect Under Pressure Flushface Plug |     |        |       |                    |     |        |       |               |            |                   |                       |
|-----------|---|-----|--------|-------|--------------------|-----|--------|-------|---------------|------------|-------------------|-----------------------|
|           | Steel HT Coupler/<br>HTE-Plug Coupled                     |     |        |       | HTE-Plug Uncoupled |     |        |       | Air Inclusion | Fluid Loss | Vacuum<br>inch HG | Flow<br>ΔP = 14.5 PSI |
|           | Max. Working  |     | Burst  |       | Max. Working       |     | Burst  |       |               |            |                   |                       |
|           | PSI   | Bar | PSI    | Bar   | PSI                | Bar | PSI    | Bar   |               |            |                   |                       |
| 3/8"      | 5,000   | 345 | 20,000 | 1,380 | 5,000              | 345 | 20,000 | 1,380 | n/a           | 0.010cc    | N/R               | 9.5 GPM               |
| 1/2"      | 5,000   | 345 | 20,000 | 1,380 | 5,000              | 345 | 20,000 | 1,380 | n/a           | 0.010cc    | N/R               | 15.0 GPM              |
| 5/8"      | 5,000   | 345 | 20,000 | 1,380 | 5,000              | 345 | 20,000 | 1,380 | n/a           | 0.020cc    | N/R               | 18.0 GPM              |
| 3/4"      | 5,000   | 345 | 20,000 | 1,380 | 5,000              | 345 | 20,000 | 1,380 | n/a           | 0.030cc    | N/R               | 24.0 GPM              |
| 1"        | 5,000   | 345 | 20,000 | 1,380 | 5,000              | 345 | 20,000 | 1,380 | n/a           | 0.030cc    | N/R               | 44.0 GPM              |

## The Connection Process

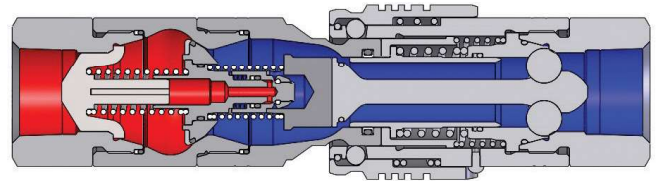
### Stage 1: The Disconnected State

The plug has residual pressure trapped behind the primary valve, while the coupler has no trapped pressure.



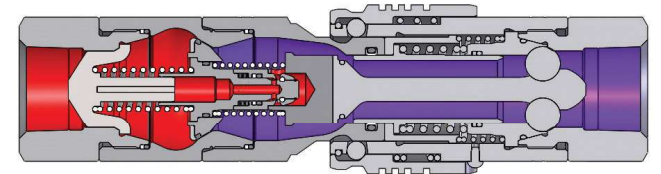
### Stage 2: Plug Chamber Evacuated

The plug valve is opened, then the socket valve opens, evacuating the plug chamber to the unpressurized socket.



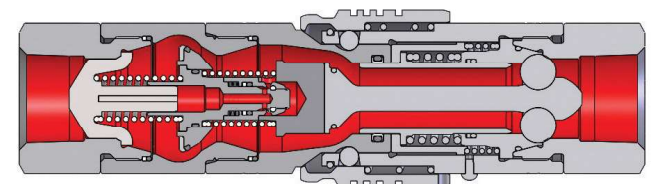
### Stage 3: Release Pressure

The connection continues, with the valve being activated, releasing the trapped pressure into the plug chamber, then to the unpressurized socket.

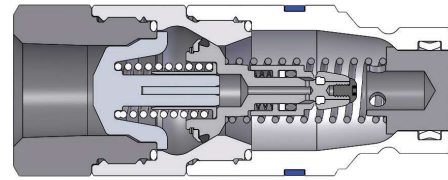


### Stage 4: Complete the Connection

The primary valve can now open easily, since there is no longer any pressure trapped behind it, allowing the socket to fully engage the plug.



## Hydraulic Couplings: HTE-Series



- For use with HT-Series couplers

| Body Size | HTE-Series ISO 16028 Connect Under Pressure Flushface Plug (Female Threads) |                      |          |        |       |            |      |          |
|-----------|---|----------------------|----------|--------|-------|------------|------|----------|
|           | Part Detail   |                      |          | Length |       | Maximum OD |      | Hex inch |
|           | Part #  | Threads              | Material | inch   | mm    | inch       | mm   |          |
| 3/8"      | HTE3F3  | 3/8" - 18 NPTF       | steel    | 3.21   | 81.4  | 1.31       | 33.3 | 1-3/16"  |
|           | HTE3F4  | 1/2" - 14 NPTF       | steel    | 3.25   | 82.6  | 1.30       | 33.0 | 1-1/8"   |
|           | HTE3BF4   | 1/2" - 14 BSPP       | steel    | 3.25   | 82.6  | 1.30       | 33.0 | 1-1/8"   |
|           | HTE3OF4   | 3/4" - 16 ORB        | steel    | 3.25   | 82.6  | 1.30       | 33.0 | 1-1/8"   |
| 1/2"      | HTE4F4  | 1/2" - 14 NPTF       | steel    | 3.40   | 86.4  | 1.30       | 33.0 | 1-3/16"  |
|           | HTE4BF4   | 1/2" - 14 BSPP       | steel    | 3.40   | 86.4  | 1.30       | 33.0 | 1-3/16"  |
|           | HTE4OF4   | 3/4" - 16 ORB        | steel    | 3.40   | 86.4  | 1.30       | 33.0 | 1-3/16"  |
|           | HTE4OF5   | 7/8" - 14 ORB        | steel    | 3.40   | 86.4  | 1.30       | 33.0 | 1-1/2"   |
|           | HTE4F6  | 3/4" - 14 NPTF       | steel    | 3.60   | 91.4  | 1.65       | 41.9 | 1-1/2"   |
|           | HTE4BF6   | 3/4" - 14 BSPP       | steel    | 3.60   | 91.4  | 1.65       | 41.9 | 1-1/2"   |
| 5/8"      | HTE4OF6   | 1-1/16" - 12 ORB     | steel    | 3.60   | 91.4  | 1.65       | 41.9 | 1-1/2"   |
|           | HTE5OF5   | 7/8" - 14 ORB        | steel    | 3.75   | 95.3  | 1.65       | 41.9 | 1-1/2"   |
|           | HTE5F6  | 3/4" - 14 NPTF       | steel    | 3.75   | 95.3  | 1.65       | 41.9 | 1-1/2"   |
|           | HTE5BF6   | 3/4" - 14 BSPP       | steel    | 3.75   | 95.3  | 1.65       | 41.9 | 1-1/2"   |
| 3/4"      | HTE5OF6   | 1-1/16" - 12 ORB     | steel    | 3.75   | 95.3  | 1.65       | 41.9 | 1-1/2"   |
|           | HTE6F6  | 3/4" - 14 NPTF       | steel    | 4.25   | 108.0 | 1.96       | 49.8 | 1-1/2"   |
|           | HTE6BF6   | 3/4" - 14 BSPP       | steel    | 4.25   | 108.0 | 1.96       | 49.8 | 1-1/2"   |
|           | HTE6OF6   | 1-1/16" - 12 ORB     | steel    | 4.25   | 108.0 | 1.96       | 49.8 | 1-1/2"   |
|           | HTE6F8  | 1" - 11-1/2 NPTF     | steel    | 4.40   | 111.8 | 1.96       | 49.8 | 1-3/4"   |
|           | HTE6BF8   | 1" - 11 BSPP         | steel    | 4.40   | 111.8 | 1.96       | 49.8 | 1-3/4"   |
| 1"        | HTE6OF8   | 1-5/16" - 12 ORB     | steel    | 4.40   | 111.8 | 1.96       | 49.8 | 1-3/4"   |
|           | HTE8F8  | 1" - 11-1/2 NPTF     | steel    | 4.88   | 124.0 | 1.96       | 49.8 | 1-3/4"   |
|           | HTE8BF8   | 1" - 11 BSPP         | steel    | 4.88   | 124.0 | 1.96       | 49.8 | 1-3/4"   |
|           | HTE8OF8   | 1-5/16" - 12 ORB     | steel    | 4.88   | 124.0 | 1.96       | 49.8 | 1-3/4"   |
|           | HTE8F10   | 1-1/4" - 11-1/2 NPTF | steel    | 5.00   | 127.0 | 2.47       | 62.7 | 2-3/16"  |
|           | HTE8BF10  | 1-1/4" - 11 BSPP     | steel    | 5.00   | 127.0 | 2.47       | 62.7 | 2-3/16"  |
|           | HTE8OF10  | 1-5/8" - 12 ORB      | steel    | 5.00   | 127.0 | 2.47       | 62.7 | 2-3/16"  |