

# Hydraulic Quick Couplings

Connect Under Pressure

# 75 Series Threaded Connection

Poppet Valves, High Pressure



The rugged 75 Series is an original Snap-tite design, constructed for high pressure hydraulic service. Although these couplings are used in a broad variety of heavy duty applications, a primary usage is in oil fields and offshore drilling. Available in sizes 3/4" through 4", in steel or stainless steel construction.



### Features:

- Connect under residual pressure
- Thread-to-connect
- Up to 5,000 psi (345 bar) rated pressures
- Rugged steel construction with Zinc Trivalent Chromate plating
- Stainless steel construction also available
- Wide range of sizes
- Nitrile is standard seal material, other options available
- DBP version is "Fire Safe" rated to API 16D (limited sizes)

### Applications include:

- Cranes
- Power tongs
- Horizontal boring and dewatering

### 75 Series Specification

| Body Size          | 3/4 | 1  | 1-1/4 | 1-1/2 | 2   | 2-1/2 | 3   | 4   |
|--------------------|-----|----|-------|-------|-----|-------|-----|-----|
| Spillage (cc)      | 8   | 16 | 31    | 64    | 141 | 204   | 320 | 400 |
| Air Inclusion (cc) | 12  | 25 | 48    | 98    | 205 | 368   | 480 | 610 |

### 75 Series Pressure Ratings

| Body Size | Maximum Working Pressure (psi)<br>Steel Only | Minimum Burst Pressure (psi)<br>Steel Only | Maximum Working Pressure (psi)<br>316 Stainless (Connected Only) |
|-----------|--|--|--|
| 3/4       | 5000   | 20000                                      | 3000   |
| 1         | 5000   | 20000                                      | 3000   |
| 1-1/4     | 5000   | 15000                                      | 3000   |
| 1-1/2     | 5000   | 15000                                      | 3000   |
| 2         | 5000   | 15000                                      | 3000   |
| 2-1/2     | 3000   | 6000                                       | -  |
| 3         | 3000   | 6000                                       | -  |
| 4         | 400  | 1000                                       | -  |

Burst pressures listed were taken at the point at which failure rendered the quick-disconnect inoperative. (Proof pressure equals 1-1/2 times the operating pressure).

**NOTE:** Pressure Ratings were established under static pressure conditions.

For impulse applications, multiply the above pressure ratings by .6 for approximate pressure ratings.

- Contact QCD

### Optional Materials and Features:

(add code to part number)

Contact QCD for availability and additional options.

To select proper seal materials, see Fluid Compatibility Chart or contact QCD.

| Code              | Description  | Part Number Example     |
|-------------------|--|-------------------------|
| suffix <b>V</b>   | Fluorocarbon seal material   | 75C12-12 <b>FV</b>      |
| suffix <b>E</b>   | Ethylene Propylene seal material (EPR)                                 | 75C12-12 <b>FE</b>      |
| suffix <b>W</b>   | Wrench flats on body (standard on 2-1/2" and larger, no code required) | 75C12-12 <b>FW</b>      |
| suffix <b>DBP</b> | "Fire Safe" BOP version (limited sizes, no alternate seal options)     | SB-75C12-12 <b>FDBP</b> |

# Hydraulic Quick Couplings

Connect Under Pressure

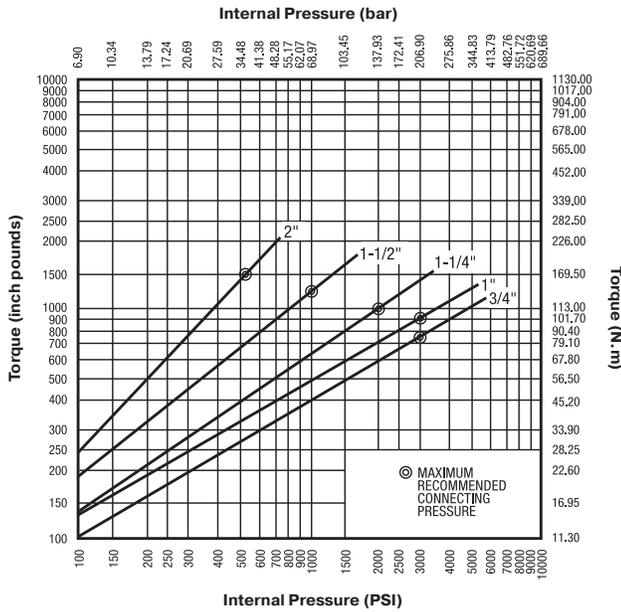
# 75 Series Threaded Connection

Poppet Valves, High Pressure

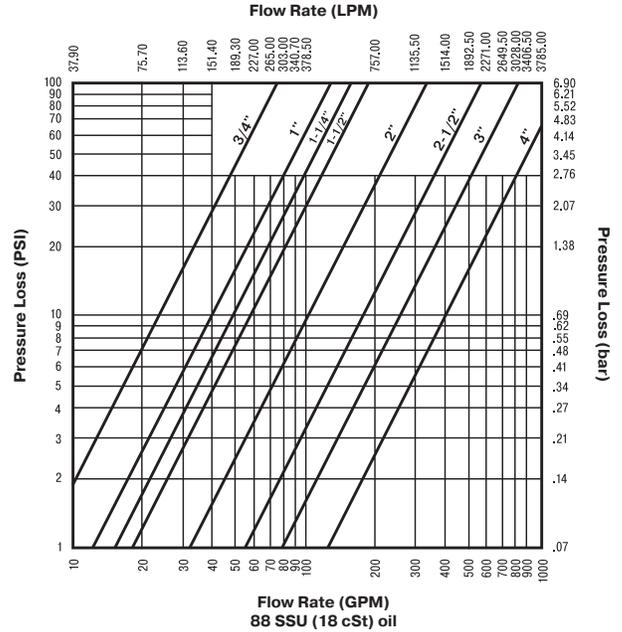


## Performance

Torque Values for Connecting Under Pressure



Flow Chart



## 75 Series Dust Caps and Plugs



| Body Size | Dust Plug - Coupler | Dust Cap - Nipple |
|-----------|---------------------|-------------------|
| 3/4       | 75MDP-12            | 75MDC-12          |
| 1         | 75MDP-16            | 75MDC-16          |
| 1-1/4     | 75MDP-20            | 75MDC-20          |
| 1-1/2     | 75MDP-24            | 75MDC-24          |
| 2         | 75MDP-32            | 75MDC-32          |
| 2-1/2     | 75MDP-40            | 75MDC-40          |
| 4         | 75MDP-64            | 75MDC-64          |

## 75 Series Repair Kits

| Body Size | Coupler Kit | Nipple Kit |
|-----------|-------------|------------|
| 3/4       | 75C12-SPK   | 75N12-SPK  |
| 1         | 75C16-SPK   | 75N16-SPK  |
| 1-1/4     | 75C20-SPK   | 75N20-SPK  |
| 1-1/2     | 75C24-SPK   | 75N24-SPK  |
| 2         | 75C32-SPK   | 75N32-SPK  |
| 2-1/2     | 75C40-SPK   | 75N40-SPK  |
| 4         | 75C64-SPK   | 75N64-SPK  |

Each kit contains a valve assembly, spring and guide stop. Consult QCD for "DBP" option seals.

## Ordering Guide

**Material:**  
Blank = Steel plated  
S = 316 Stainless Steel

**Series:**  
75

**Coupling Half:**  
C = Coupler  
N = Nipple

**Coupling Body Size:**  
12 = 3/4"      32 = 2"  
16 = 1"        40 = 2-1/2"  
20 = 1-1/4"   48 = 3"  
24 = 1-1/2"   64 = 4"

**End Fitting Size:**  
12 = 3/4"      32 = 2"  
16 = 1"        40 = 2-1/2"  
20 = 1-1/4"   48 = 3"  
24 = 1-1/2"   64 = 4"

**Options:**  
DBP\*\*\* = "Fire Safe" BOP version 3/4" thru 2" steel, 1" and 1-1/4" stainless steel

**Options:**  
W\*\* = Wrench Flats on body

**Seals:**  
Blank = Nitrile  
V = Fluorocarbon  
E = Ethylene Propylene Rubber

**End Fitting Type:**  
F\* = Female Pipe NPTF for Steel - NPT for 316 SST  
EF = Female SAEa  
RP = Female British Parallel BS2779

\*For sizes up to 3", NPTF threads. For sizes over 3", NPT threads.

\*\*Not available on 2" EF coupler. Standard on 2-1/2" and larger sizes (code not needed).

\*\*\*DBP available in 3/4" through 2" sizes steel material, 1" and 1-1/4" stainless steel.

†Seal material code not applicable with DBP option-leave blank.

**Note:** Not all configurations are standard product offering. Contact QCD for price and delivery.

# Hydraulic Quick Couplings

Connect Under Pressure

# 75 Series Threaded Connection

Poppet Valves, High Pressure



## 75 Series Couplers



| Body Size (in.) | Part Number Steel | Port End          | Part Number 316 Stainless Steel | Port End         | Length (in.) | Largest Diameter | Wrench Flats |
|-----------------|-------------------|-------------------|---------------------------------|------------------|--------------|------------------|--------------|
| 3/4             | 75C12-12F         | 3/4-14 NPSF       | S75C12-12F                      | 3/4-14 NPSF      | 2.84         | 2.06             | 1.31         |
| 3/4             | 75C12-12F-DBP     | 3/4-14 NPSF       | -                               | -                | 2.84         | 2.06             | N/A          |
| 1               | 75C16-16F         | 1-11-1/2 NPSF     | S75C16-16F                      | 1-11-1/2 NPSF    | 3.45         | 4.25             | 1.69         |
| 1               | 75C16-16F-DBP     | 1-11-1/2 NPSF     | S75C16-16F-DBP                  | 1-11-1/2 NPSF    | 3.45         | 4.25             | N/A          |
| 1-1/4           | 75C20-20F         | 1-1/4-11-1/2 NPTF | S75C20-20F                      | 1-1/4-11-1/2 NPT | 4.40         | 4.75             | 2.00         |
| 1-1/4           | 75C20-20F-DBP     | 1-1/4-11-1/2 NPTF | S75C20-20F-DBP                  | 1-1/4-11-1/2 NPT | 4.40         | 4.75             | N/A          |
| 1-1/2           | 75C24-24F         | 1-1/2-11-1/2 NPTF | S75C24-24F                      | 1-1/2-11-1/2 NPT | 5.04         | 5.75             | 2.25         |
| 1-1/2           | 75C24-24F-DBP     | 1-1/2-11-1/2 NPTF | -                               | -                | 5.04         | 5.75             | N/A          |
| 2               | 75C32-32F         | 2-11-1/2 NPT      | S75C32-32F                      | 2-11-1/2 NPT     | 6.07         | 6.75             | 3.00         |
| 2               | 75C32-32F-DBP     | 2-11-1/2 NPT      | -                               | -                | 6.07         | 6.75             | 3.00         |
| 2-1/2           | 75C40-40F         | 2-1/2-8 NPTF      | S75C40-40F                      | 2-1/2-8 NPTF     | 5.29         | 8.00             | 3.50         |
| 3               | 75C48-48F         | 3-8 NPTF          | S75C48-48F                      | 3-8 NPTF         | 5.84         | 8.50             | 4.25         |

## 75 Series Nipples



| Body Size (in.) | Part Number Steel | Port End          | Part Number 316 Stainless Steel | Port End         | Length (in.) | Largest Diameter | Wrench Flats |
|-----------------|-------------------|-------------------|---------------------------------|------------------|--------------|------------------|--------------|
| 3/4             | 75N12-12F         | 3/4-14 NPSF       | S75N12-12F                      | 3/4-14 NPSF      | 3.27         | 1.75             | 1.56         |
| 3/4             | 75N12-12F-DBP     | 3/4-14 NPSF       | -                               | -                | 3.27         | 1.75             | N/A          |
| 1               | 75N16-16F         | 1-11-1/2 NPSF     | S75N16-16F                      | 1-11-1/2 NPSF    | 4.17         | 2.25             | 2.00         |
| 1               | 75N16-16F-DBP     | 1-11-1/2 NPSF     | S75N16-16F-DBP                  | 1-11-1/2 NPSF    | 4.17         | 2.25             | N/A          |
| 1-1/4           | 75N20-20F         | 1-1/4-11-1/2 NPTF | S75N20-20F                      | 1-1/4-11-1/2 NPT | 5.36         | 2.62             | 2.38         |
| 1-1/4           | 75N20-20F-DBP     | 1-1/4-11-1/2 NPTF | S75N20-20F-DBP                  | 1-1/4-11-1/2 NPT | 5.36         | 2.62             | N/A          |
| 1-1/2           | 75N24-24F         | 1-1/2-11-1/2 NPTF | S75N24-24F                      | 1-1/2-11-1/2 NPT | 5.97         | 3.25             | 2.88         |
| 1-1/2           | 75N24-24F-DBP     | 1-1/2-11-1/2 NPTF | -                               | -                | 5.97         | 3.25             | N/A          |
| 2               | 75N32-32F         | 2-11-1/2 NPT      | S75N32-32F                      | 2-11-1/2 NPT     | 7.05         | 4.00             | 3.50         |
| 2               | 75N32-32F-DBP     | 2-11-1/2 NPT      | -                               | -                | 7.05         | 4.00             | N/A          |
| 2-1/2           | 75N40-40F         | 2-1/2-8 NPTF      | S75N40-40F                      | 2-1/2-8 NPTF     | 7.46         | 5.00             | 3.50         |
| 3               | 75N48-48F         | 3-8 NPTF          | S75N48-48F                      | 3-8 NPTF         | 8.26         | 6.00             | 4.25         |

Contact QCD for additional sizes and end configurations.

### WARNING

This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)