

# Hydraulic Quick Couplings

## Connect Under Pressure

# Snap-tite 75 Series

## Threaded Connection

Poppet valves, high pressure



The rugged 75 Series is designed and 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

### Applications include:

- Cranes
- Power tongs
- Horizontal boring and dewatering

75 Series Pressure Ratings			
Body Size	Maximum Working Pressure (psi) Steel Only	Minimum Burst Pressure (psi) Steel Only	Maximum Working Pressure (psi) 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.

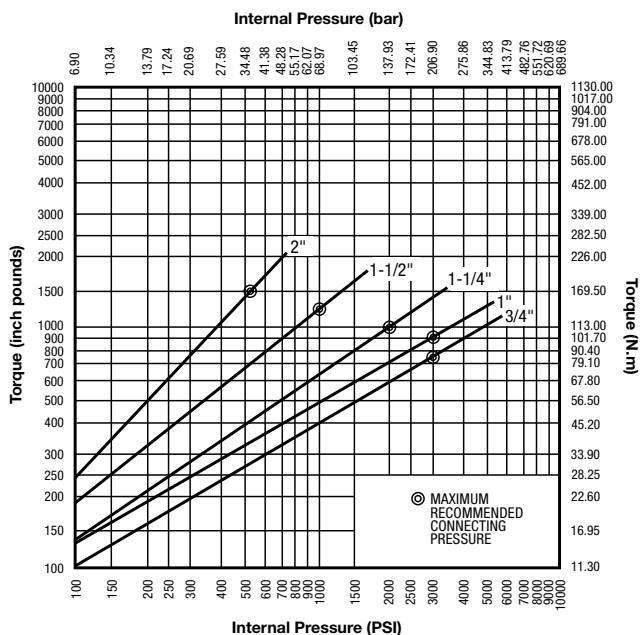
-Contact QCD

75 Series Specifications								
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

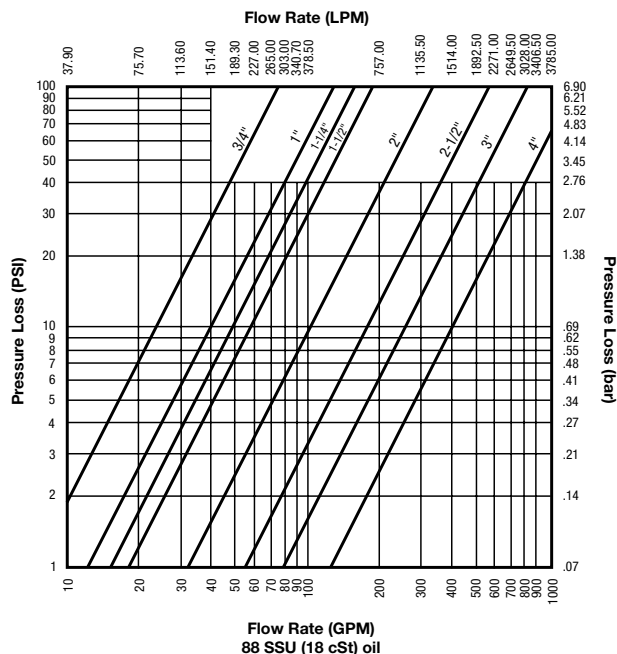


### Performance

Torque Values for Connecting Under Pressure



Flow Chart



### 75 Series Dust Plugs and Caps

Body Size	3/4	1	1-1/4	1-1/2	2	2-1/2	4
Dust Plugs (Coupler)	75MDP-12	75MDP-16	75MDP-20	75MDP-24	75MDP-32	75MDP-40	75MDP-64
Dust Caps (Nipple)	75MDC-12	75MDC-16	75MDC-20	75MDC-24	75MDC-32	75MDC-40	75MDC-64

### 75 Series Repair Kits

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

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



### 75 Series Couplers



Body Size	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	-	-	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	-	-	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	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	-	-	4.17	2.25	N/A
1-1/4	75N20-20F	1-1/4-11-1/2 NPTF	S75NC20-20F	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	-	-	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.

#### Optional Seal Materials and Features for Couplers and Nipples (add code to part number)

Code	Description	Part Number Example
suffix <b>V</b>	Fluorocarbon seal material	75C12-12F <b>V</b>
suffix <b>E</b>	Ethylene Propylene seal material (EPR)	75C12-12F <b>E</b>
suffix <b>W</b>	Wrench flats on body (standard on 2-1/2" and larger, no code required)	75C12-12F <b>W</b>
suffix <b>DBP</b>	"Fire Safe" BOP version (3/4" - 2" steel only, no alternate seal options)	SB-75C12-12F- <b>DBP</b>

Contact QCD for availability and additional options.

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