



Snap-tite H Series couplings have been proven by years of use on hydraulic applications.

H Series is best suited for general purpose fluid applications where either single or double shut-off valving is desired. A wide range of sizes, materials and end configurations are available.

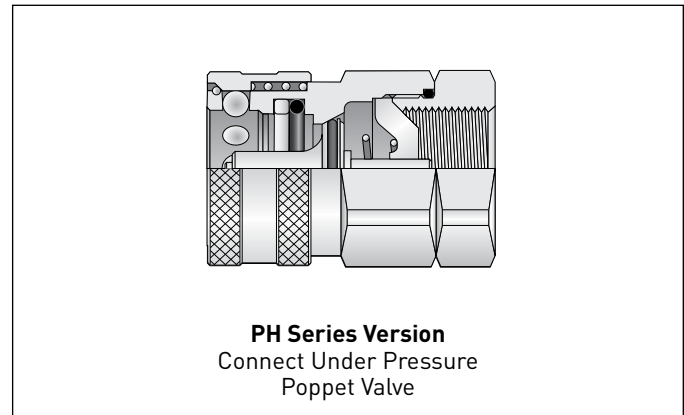
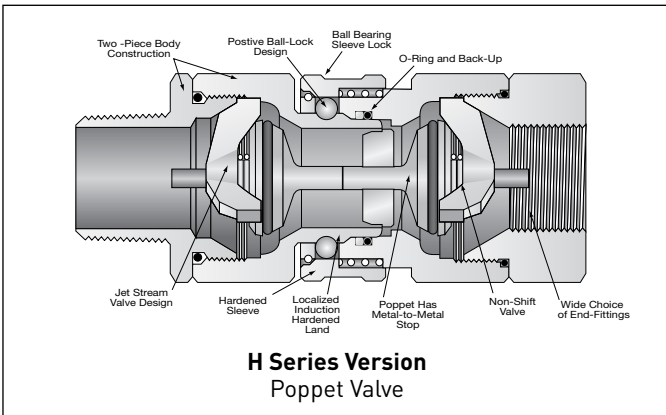
PH version couplers and nipples are valved with a connect-under-pressure feature. These steel couplers and nipples allow connection with H Series valved couplers and nipples when there is a residual pressure on the PH coupler/nipple side. It is recommended that only one half of the connection (coupler or nipple) be PH version, not both.

**Features:**

- Sizes 1/4" - 4"
- Available in steel, brass, aluminum and 316 stainless steel
- Standard seal material is nitrile with other options available
- Optional sleeve lock helps to prevent accidental disconnection
- Double-shut-off version has low pressure drop
- Manually operated sleeve provides secure connection

**Applications include:**

- Industrial hydraulic lines
- Water and coolant lines
- Mobile equipment



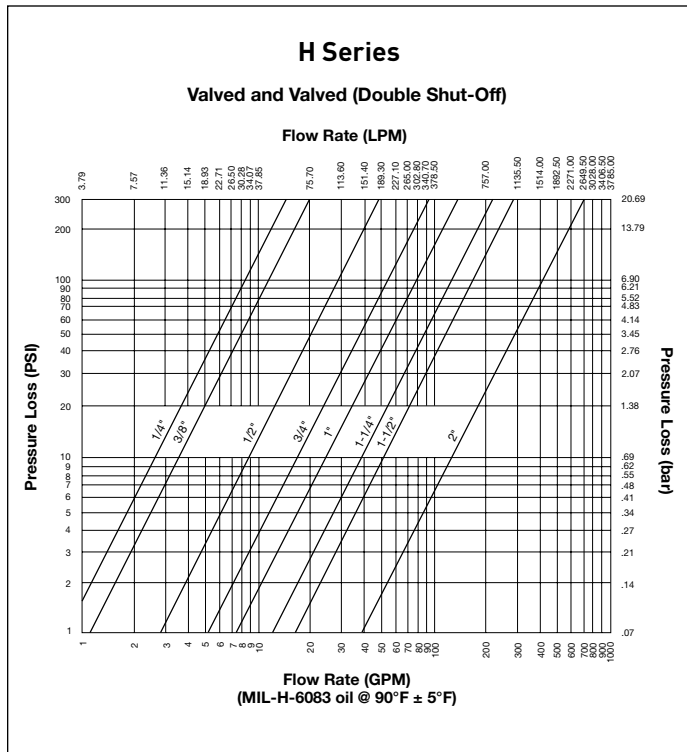
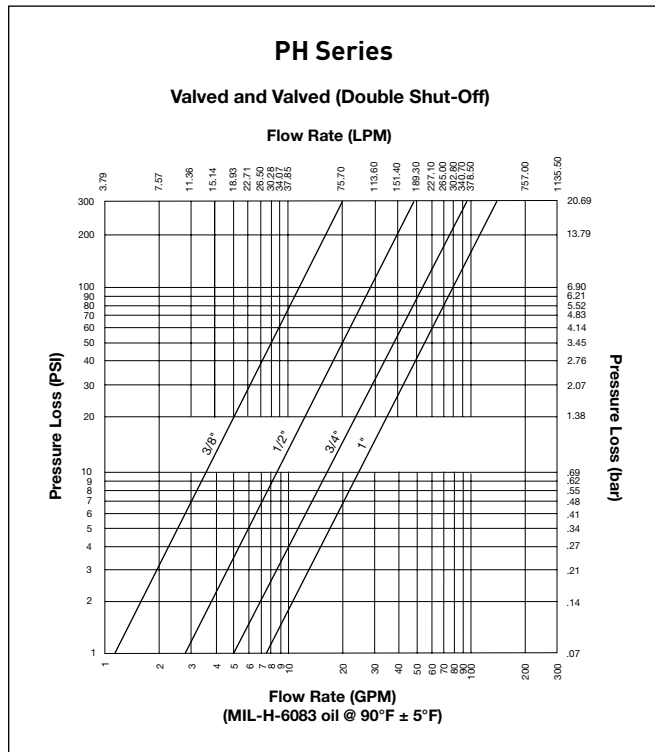
**H & PH Series Working Pressures (psi)**

Valved on both coupler and nipple (Double Shut-off)											
Valved on one half and Unvalved/Plain on other half (Single Shut-off)											
Body Size	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
<b>Steel</b>	6500	4500	4000	3500	2000	1750	1500	1500	1000	750	500
<b>Aluminum</b>	2250	2250	1750	1750	1500	375	375	300	300	200	150
<b>Brass</b>	2250	2250	2000	2000	1750	350	350	400	400	200	150
<b>Stainless Steel</b>	5000	4000	3750	2000	2000	1500	1500	500	400	400	300
Unvalved/Plain on both coupler and nipple (Straight Through)											
<b>Steel</b>	11000	11000	11000	9000	6000	5000	5000	4000	1000	750	500
<b>Aluminum</b>	4000	4000	4000	3500	3000	1000	1000	750	300	200	150
<b>Brass</b>	4000	4000	4000	3500	3000	1000	1000	750	300	200	150
<b>Stainless Steel</b>	10000	8000	8000	7000	4000	3000	3000	1000	400	400	300

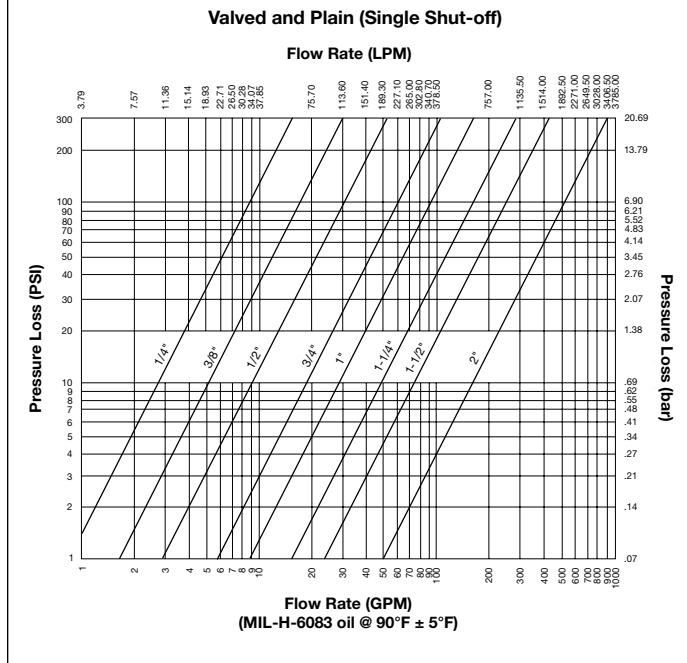
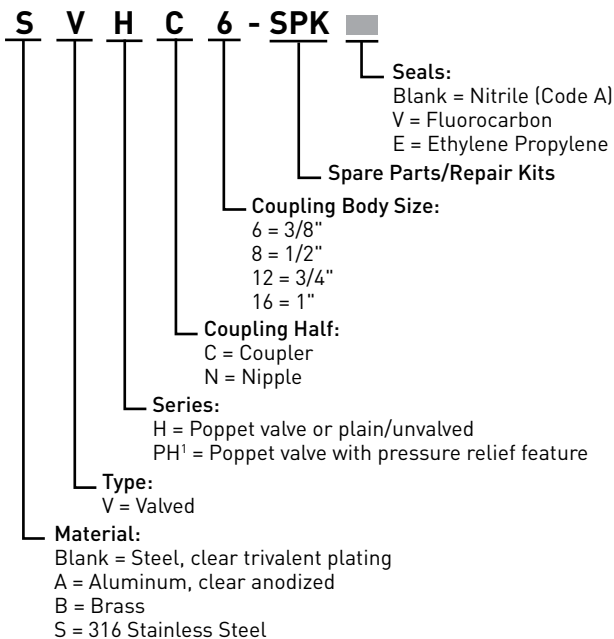
**NOTE:** Pressure ratings were established under static pressure conditions. Therefore, pressure ratings for any given flow, pressure surge and/or vibration may vary from these ratings. Burst pressures listed were taken at the point at which failure rendered the quick disconnect inoperative. (Proof pressure equals 1-1/2 times the working pressure; burst pressure equals 2 times working pressure.)



**Performance**



**Repair Kits**



Repair kits include valve spring, valve stop and valve.  
 O-ring installed on 3/8" to 1". 1/4" unit is non-field repairable.

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



# Hydraulic Quick Couplings

## General Purpose

Snap-tite H & PH Series  
Snap-tite Design

Manual Sleeve, Valved or Unvalved



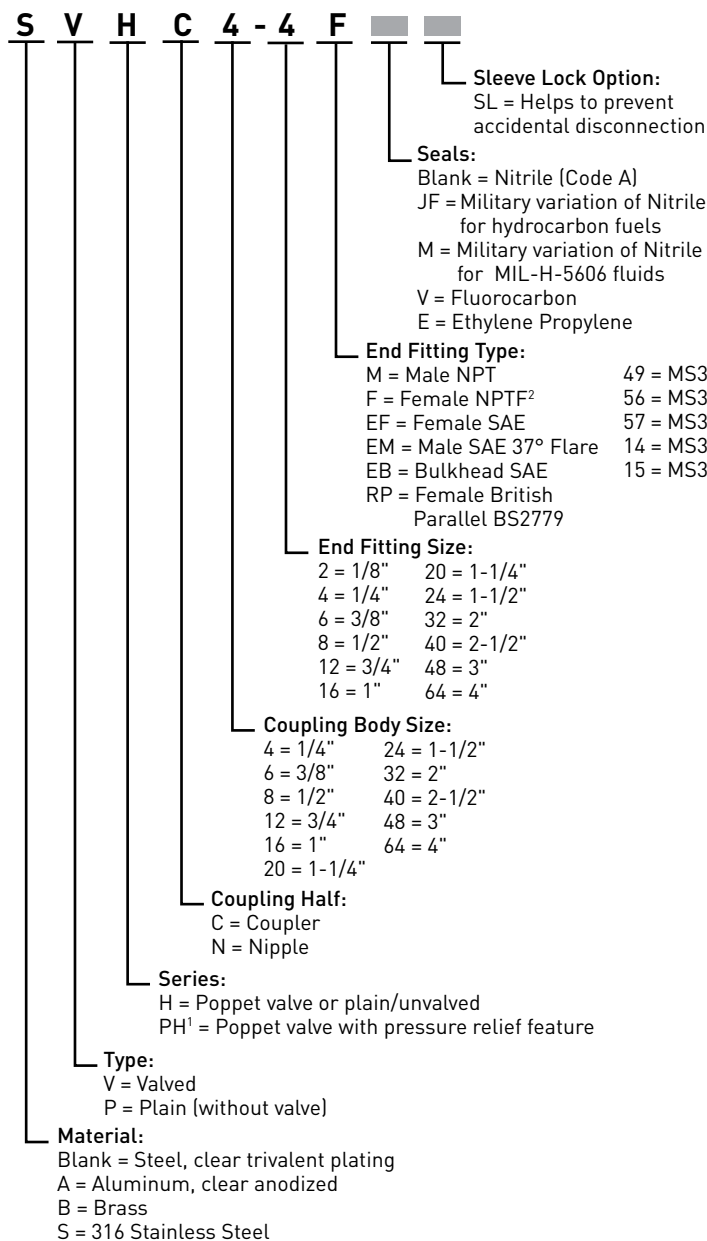
B Hydraulics

Valve Options		
	H Series Hydraulic Coupler/Nipple	PH Series Hydraulic Coupler/Nipple
<b>Valve Styles:</b>	<ul style="list-style-type: none"> <li>• Poppet Valve</li> <li>• Unvalved/Plain</li> </ul>	<ul style="list-style-type: none"> <li>• Connect-Under-Pressure Poppet Valve</li> </ul>
<b>Connection Types:</b>	<ul style="list-style-type: none"> <li>• Double Shut-off</li> <li>• Single Shut-off</li> <li>• Straight Through/Unvalved</li> </ul>	<ul style="list-style-type: none"> <li>• Double Shut-off (connects with valved H Series Coupler or Nipple)</li> </ul>
<b>Body Sizes:</b>	1/8" - 4"	3/8" - 1"
<b>Materials:</b>	<ul style="list-style-type: none"> <li>• Steel</li> <li>• 316 Stainless Steel</li> <li>• Aluminum</li> <li>• Brass</li> </ul>	<ul style="list-style-type: none"> <li>• Steel</li> </ul>

Replacement Coupler Interface Seals		
Body Size	Nitrile	Fluorocarbon
1/4	H4-56-9	H4-56-9V
3/8	H6-56-9	H6-56-9V
1/2	H8-56-9	H8-56-9V
3/4	H12-56-9	H12-56-9V
1	H16-56-9	H16-56-9V
1-1/4	H20-56-9	H20-56-9V

Replacement Valve Seals			
Body Size	Nitrile	Fluorocarbon	Ethylene Propylene
1-1/4	H20-55A	H20-55V	H20-55E
1-1/2	H24-55A	H24-55V	H24-55E
2	H32-55A	H32-55V	H32-55E

### Ordering Guide



<sup>1</sup>PH Valve option recommended on one side, not both. Available in steel only.  
<sup>2</sup>For sizes up to 1" NPTF threads in steel. For sizes up to 1" NPSF threads in stainless steel. For sizes over 1" NPT threads.

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



# Hydraulic Quick Couplings

## General Purpose

### Snap-tite H & PH Series

#### Snap-tite Design

Manual Sleeve, Valved or Unvalved



### H Series Couplers (Aluminum, Brass, Steel) - Female Thread



Body Size	Part Number Aluminum	Part Number Brass	Part Number Steel	Valved or Non-Valved (Plain)	Port End	Length (in)	Largest Diameter	Wrench Flats
1/4	-	-	VHC4-2F	Valved	1/8-27 NPTF	1.65	1.00	0.88
1/4	APHC4-4F	BPHC4-4F	PHC4-4F	Non-Valved	1/4-18 NPTF	1.34	1.02	0.88
1/4	AVHC4-4F	BVHC4-4F	VHC4-4F	Valved	1/4-18 NPTF	1.65	1.19	1.00
1/4	-	-	VHC4-4EF	Valved	7/16-20 UNF	1.80	1.02	0.88
3/8	APHC6-6F	BPHC6-6F	PHC6-6F	Non-Valved	3/8-18 NPTF	1.50	1.19	1.00
3/8	AVHC6-6F	BVHC6-6F	VHC6-6F	Valved	3/8-18 NPTF	1.90	1.19	1.00
3/8	-	-	VHC6-6EF	Valved	9/16-18 UNF	2.20	1.19	1.00
1/2	-	BPHC8-8F	PHC8-8F	Non-Valved	1/2-14 NPTF	1.62	1.39	1.19
1/2	AVHC8-8F	BVHC8-8F	VHC8-8F	Valved	1/2-14 NPTF	2.09	1.39	1.19
1/2	-	-	VHC8-8EF	Valved	3/4-16 UNF	2.19	1.39	1.19
3/4	-	BPHC12-12F	PHC12-12F	Non-Valved	3/4-14 NPTF	1.91	1.73	1.50
3/4	-	BVHC12-12F	VHC12-12F	Valved	3/4-14 NPTF	2.42	1.73	1.50
3/4	-	-	VHC12-12EFV	Valved	1-1/16 - 12 UNF	2.92	1.73	1.50
1	-	BPHC16-16F	PHC16-16F	Non-Valved	1 - 11-1/2 NPTF	2.07	2.17	1.88
1	-	BVHC16-16F	VHC16-16F	Valved	1 - 11-1/2 NPTF	2.67	2.17	1.88
1	-	-	VHC16-16EF	Valved	1-5/16 - 12 UNF	2.94	2.17	1.88
1-1/4	-	BPHC20-20F	PHC20-20F	Non-Valved	1-1/4 - 11-1/2 NPT	2.28	2.31	2.00
1-1/4	-	BVHC20-20F	VHC20-20F	Valved	1-1/4 - 11-1/2 NPT	3.54	2.31	2.00
1-1/2	-	BPHC24-24F	PHC24-24F	Non-Valved	1-1/2 - 11-1/2 NPT	2.57	2.89	2.50
1-1/2	-	BVHC24-24F	VHC24-24F	Valved	1-1/2 - 11-1/2 NPT	3.27	3.18	2.75
2	-	BPHC32-32F	PHC32-32F	Non-Valved	2 - 11-1/2 NPT	2.48	3.75	3.25
2	-	BVHC32-32F	VHC32-32F	Valved	2 - 11-1/2 NPT	3.92	4.33	3.75

B Hydraulics

# Hydraulic Quick Couplings

## General Purpose

Snap-tite H & PH Series  
Snap-tite Design

Manual Sleeve, Valved or Unvalved



B Hydraulics

### H Series Couplers (316 Stainless Steel) - Female Thread



Body Size	Part Number Stainless Steel	Valved or Non-Valved (Plain)	Port End	Length (in)	Largest Diameter	Wrench Flats
1/4	SVHC4-2F	Valved	1/8-27 NPSF*	1.65	1.00	0.88
1/4	SPHC4-4F	Non-Valved	1/4-18 NPSF*	1.34	1.02	0.88
1/4	SVHC4-4F	Valved	1/4-18 NPSF*	1.65	1.19	1.00
3/8	SPHC6-6F	Non-Valved	3/8-18 NPSF*	1.50	1.19	1.00
3/8	SVHC6-6F	Valved	3/8-18 NPSF*	1.90	1.19	1.00
1/2	SPHC8-8F	Non-Valved	1/2-14 NPSF*	1.62	1.39	1.19
1/2	SVHC8-8F	Valved	1/2-14 NPSF*	2.09	1.39	2.09
3/4	SPHC12-12F	Non-Valved	3/4-14 NPSF*	1.91	1.73	1.50
3/4	SVHC12-12F	Valved	3/4-14 NPSF*	2.42	1.73	1.50
1	SPHC16-16F	Non-Valved	1 - 11-1/2 NPSF*	2.07	2.17	1.88
1	SVHC16-16F	Valved	1 - 11-1/2 NPSF*	2.67	2.17	1.88
1-1/4	SPHC20-20F	Non-Valved	1-1/4 - 11-1/2 NPT	2.28	2.31	2.00
1-1/4	SVHC20-20F	Valved	1-1/4 - 11-1/2 NPT	3.54	2.31	2.00
1-1/2	SPHC24-24F	Non-Valved	1-1/4 - 11-1/2 NPT	2.57	2.89	2.50
1-1/2	SVHC24-24F	Valved	1-1/2 - 11-1/2 NPT	3.27	3.18	2.75
2	SPHC32-32F	Non-Valved	2 - 11-1/2 NPT	2.48	3.75	3.25
2	SVHC32-32F	Valved	2 - 11-1/2 NPT	3.92	4.33	3.75

\*NPSF thread may be substituted with equivalent NPT thread

### H Series Couplers (Aluminum, Brass, Steel) - Male Thread



Body Size	Part Number Aluminum	Part Number Brass	Part Number Steel	Valved or Non-Valved (Plain)	Port End	Length (in)	Largest Diameter	Wrench Flats
1/4	-	-	VHC4-2M	Valved	1/8-27 NPT	1.90	1.00	0.88
1/4	AVHC4-4M	BVHC4-4M	VHC4-4M	Valved	1/4-18 NPT	2.09	1.02	0.88
3/8	AVHC6-6M	-	VHC6-6M	Valved	3/8-18 NPT	2.19	1.19	1.00
3/8	-	BVHC6-6M	-	Valved	3/8-18 NPT	1.90	1.19	1.00
1/2	-	BVHC8-8M	-	Valved	1/2-14 NPT	2.57	1.39	1.19
1/2	-	-	VHC8-8M	Valved	1/2-14 NPT	2.46	1.39	1.19
3/4	-	BVHC12-12M	VHC12-12M	Valved	3/4-14 NPT	2.88	1.73	1.50
1	-	BVHC16-16M	VHC16-16M	Valved	1-11-1/2 NPT	3.21	2.17	1.88
2	-	-	VHC32-32M	Valved	2-11-1/2 NPT	4.54	4.33	3.75

# Hydraulic Quick Couplings

## General Purpose

Snap-tite H & PH Series  
Snap-tite Design

Manual Sleeve, Valved or Unvalved



B Hydraulics

### H Series Couplers (316 Stainless Steel) - Male Thread



Body Size	Part Number	Valved or Non-Valved (Plain)	Port End	Length (in)	Largest Diameter	Wrench Flats
1/4	SVHC4-4M	Valved	1/4-18 NPT	2.09	1.02	0.88
3/8	SVHC6-6M	Valved	3/8-18 NPT	2.19	1.19	1.00
1/2	SVHC8-8M	Valved	1/2-14 NPT	2.57	1.39	1.19
3/4	SVHC12-12M	Valved	3/4-14 NPT	2.88	1.73	1.50
1	SVHC16-16M	Valved	1 - 11-1/2 NPT	3.21	2.17	1.88

### H Series Couplers (Steel) - Male SAE 37 Degree Flare



Body Size	Part Number	Valved or Non-Valved (Plain)	Port End	Length (in)	Largest Diameter	Wrench Flats
1/4	VHC4-4EM	Valved	7/16-20 UNF	2.80	1.02	0.88
3/8	VHC6-6EM	Valved	9/16-18 UNF	2.24	1.19	1.00
1/2	VHC8-8EM	Valved	3/4-16 UNF	2.46	1.39	1.19
3/4	VHC12-12EM	Valved	1-1/6 - 12 UNF	3.05	1.73	1.50

### PH Series Connect-Under-Pressure Couplers (Steel) - Female Thread



Body Size	Part Number	Valved or Non-Valved (Plain)	Port End	Length (in)	Largest Diameter	Wrench Flats
3/8	VPHC6-6F	Valved	3/8-18 NPTF	1.90	1.19	1.00
1/2	VPHC8-8F	Valved	1/2-14 NPTF	2.09	1.39	1.19
3/4	VPHC12-12EF	Valved	1-1/16 - 12 UNF	2.92	1.73	1.50
3/4	VPHC12-12F	Valved	3/4-14 NPTF	2.42	1.73	1.50

**Hydraulic Quick Couplings**  
General Purpose

**Snap-tite H & PH Series**  
**Snap-tite Design**

Manual Sleeve, Valved or Unvalved



B Hydraulics

**H Series Nipples (Aluminum, Brass, Steel) - Female Thread**



Body Size	Part Number Aluminum	Part Number Brass	Part Number Steel	Valved or Non-Valved (Plain)	Port End	Length (in)	Largest Diameter	Wrench Flats
1/4	-	BPHN4-2F	PHN4-2F	Non-Valved	1/8-27 NPTF	1.11	0.62	0.56
1/4	-	-	VHN4-2F	Valved	1/8-27 NPTF	1.59	1.00	0.88
1/4	APHN4-4F	BPHN4-4F	-	Non-Valved	1/4-18 NPTF	1.32	0.73	0.88
1/4	AVHN4-4F	BVHN4-4F	-	Valved	1/4-18 NPTF	1.59	1.02	0.88
1/4	-	-	PHN4-4F	Valved	1/4-18 NPTF	1.32	0.73	0.63
1/4	-	-	VHN4-4F	Valved	1/4-18 NPTF	1.65	1.19	1.00
3/8	APHN6-6F	BPHN6-6	-	Non-Valved	3/8-18 NPTF	1.52	0.94	1.00
3/8	-	-	PHN6-6F	Non-Valved	3/8-18 NPTF	1.52	0.94	0.81
3/8	AVHN6-6F	BVHN6-6F	VHN6-6F	Valved	3/8-18 NPTF	1.84	1.19	1.00
1/2	AVHN8-8F	-	-	Valved	1/2-14 NPTF	1.98	1.19	1.00
1/2	-	BPHN8-8F	PHN8-8F	Non-Valved	1/2-14 NPTF	1.72	1.15	1.00
1/2	-	BVHN8-8F	VHN8-8F	Valved	1/2-14 NPTF	1.98	1.39	1.19
1/2	-	-	VHN8-8EF	Valved	3/4-16 UNF	2.08	1.39	1.19
3/4	-	BPHN12-12F	PHN12-12F	Non-Valved	3/4-14 NPTF	1.92	1.37	1.19
3/4	-	BVHN12-12F	VHN12-12F	Valved	3/4-14 NPTF	2.29	1.73	1.50
3/4	-	-	VHN12-12EF	Valved	1-1/16 - 12 UNF	2.79	1.73	1.50
1	-	BPHN16-16F	PHN16-16F	Non-Valved	1 - 11-1/2 NPTF	2.10	1.73	1.50
1	-	BVHN16-16F	VHN16-16F	Valved	1 - 11-1/2 NPTF	2.55	2.17	1.88
1	-	-	VHN16-16EF	Valved	1-5/16 - 12 UNF	2.82	2.17	1.88
1-1/4	-	BPHN20-20F	PHN20-20F	Non-Valved	1-1/4 - 11-1/2 NPTF	2.22	2.17	1.88
1-1/4	-	BVHN20-20F	VHN20-20F	Valved	1-1/4 - 11-1/2 NPTF	3.41	2.31	2.00
1-1/2	-	BPHN24-24F	PHN24-24F	Non-Valved	1-1/2 - 11-1/2 NPTF	2.44	2.46	2.13
1-1/2	-	BVHN24-24F	VHN24-24F	Valved	1-1/2 - 11-1/2 NPTF	3.11	3.18	2.75
2	-	BPHN32-32F	PHN32-32F	Non-Valved	2 - 11-1/2 NPTF	2.60	3.18	2.75
2	-	BVHN32-32F	VHN32-32F	Valved	2 - 11-1/2 NPTF	3.72	4.33	3.75



**H Series Nipples (316 Stainless Steel) - Female Thread**



Body Size	Part Number	Valved or Non-Valved (Plain)	Port End	Length (in)	Largest Diameter	Wrench Flats
1/4	SPHN4-2F	Non-Valved	1/8-27 NPSF*	1.11	0.62	0.56
1/4	SVHN4-2F	Valved	1/8-27 NPSF*	1.59	1.00	0.56
1/4	SPHN4-4F	Non-Valved	1/4-18 NPSF*	1.32	0.73	0.63
1/4	SVHN4-4F	Valved	1/4-18 NPSF*	1.59	1.02	0.88
3/8	SPHN6-6F	Non-Valved	3/8-18 NPSF*	1.52	0.94	0.81
3/8	SVHN6-6F	Valved	3/8-18 NPSF*	1.84	1.19	1.00
1/2	SPHN8-8F	Non-Valved	1/2-14 NPSF*	1.72	1.15	2.00
1/2	SVHN8-8F	Valved	1/2-14 NPSF*	1.98	1.39	1.19
3/4	SPHN12-12F	Non-Valved	3/4-14 NPSF*	1.92	1.37	1.19
3/4	SVHN12-12F	Valved	3/4-14 NPSF*	2.29	1.73	1.50
1	SPHN16-16F	Non-Valved	1 - 11-1/2 NPSF*	2.10	1.73	1.50
1	SVHN16-16F	Valved	1 - 11-1/2 NPSF*	2.55	2.17	1.88
1-1/4	SPHN20-20F	Non-Valved	1-1/4 - 11-1/2 NPTF	2.22	2.17	1.88
1-1/4	SVHN20-20F	Valved	1-1/4 - 11-1/2 NPTF	3.41	2.31	1.88
1-1/2	SPHN24-24F	Non-Valved	1-1/2 - 11-1/2 NPTF	2.44	2.46	2.13
1-1/2	SVHN24-24F	Valved	1-1/2 - 11-1/2 NPTF	3.11	3.18	3.75
2	SPHN32-32F	Non-Valved	2 - 11-1/2 NPTF	2.60	3.18	2.75
2	SVHN32-32F	Valved	2 - 11-1/2 NPTF	3.72	4.33	3.75

\*NPSF thread may be substituted with equivalent NPT thread



# Hydraulic Quick Couplings

## General Purpose

Snap-tite H & PH Series  
Snap-tite Design

Manual Sleeve, Valved or Unvalved



B Hydraulics

### H Series Nipples (Aluminum, Brass, Steel) - Male Thread



Body Size	Part Number Aluminum	Part Number Brass	Part Number Steel	Valved or Non-Valved (Plain)	Port End	Length (in)	Largest Diameter	Wrench Flats
1/4	-	BPHN4-2M	-	Non-Valved	1/8-27 NPT	1.22	0.64	0.56
1/4	-	-	PHN4-2M	Non-Valved	1/8-27 NPT	1.11	0.62	0.56
1/4	-	-	VHN4-2M	Valved	1/8-27 NPT	1.85	1.00	0.88
1/4	APHN4-4M	BPHN4-4M	PHN4-4M	Non-Valved	1/4-18 NPT	0.78	0.65	0.56
1/4	AVHN4-4M	BVHN4-4M	VHN4-4M	Valved	1/4-18 NPT	2.03	1.02	0.88
3/8	-	BPHN6-6M	PHN6-6M	Non-Valved	3/8-18 NPT	0.98	0.80	0.69
3/8	AVHN6-6M	BVHN6-6M	VHN6-6M	Valved	3/8-18 NPT	2.13	1.19	1.00
1/2	-	BPHN8-8M	PHN8-8M	Non-Valved	1/2-14 NPT	1.01	1.02	0.88
1/2	-	BVHN8-8M	VHN8-8M	Valved	1/2-14 NPT	2.46	1.39	1.19
3/4	-	BPHN12-12M	PHN12-12M	Non-Valved	3/4-14 NPT	1.14	1.22	1.06
3/4	-	BVHN12-12M	VHN12-12M	Valved	3/4-14 NPT	2.75	1.73	1.50
1	-	BPHN16-16M	-	Non-Valved	1 - 11-1/2 NPT	1.16	1.59	1.38
1	-	-	PHN16-16M	Non-Valved	1-11-1/2 NPT	1.16	1.73	1.88
1	-	BVHN16-16M	VHN16-16M	Valved	1 - 11-1/2 NPT	3.09	2.17	1.88
1-1/4	-	-	VHN20-20M	Valved	1-1/4 - 11-1/2 NPT	3.46	2.31	2.00
2	-	-	PHN32-32M	Non-Valved	2 - 11-1/2 NPT	2.03	2.89	2.50

### H Series Nipples (316 Stainless Steel) - Male Thread



Body Size	Part Number	Valved or Non-Valved (Plain)	Port End	Length (in)	Largest Diameter	Wrench Flats
1/4	SPHN4-2M	Non-Valved	1/8-27 NPT	1.22	0.64	0.56
1/4	SPHN4-4M	Non-Valved	1/4-18 NPT	0.78	0.65	0.56
1/4	SVHN4-4M	Valved	1/4-18 NPT	2.03	1.02	0.88
3/8	SPHN6-6M	Non-Valved	3/8-18 NPT	0.98	0.80	0.69
3/8	SVHN6-6M	Valved	3/8-18 NPT	2.13	1.19	1.00
1/2	SPHN8-8M	Non-Valved	1/2-14 NPT	1.01	1.02	0.88
1/2	SVHN8-8M	Valved	1/2-14 NPT	2.46	1.39	1.19
3/4	SVHN12-12M	Valved	3/4-14 NPT	2.75	1.73	1.50
1	SVHN16-16M	Valved	1 - 11-1/2 NPT	3.09	2.17	1.80
1-1/4	SVHN20-20M	Valved	1-1/4 - 11-1/2 NPT	3.46	2.31	2.00

# Hydraulic Quick Couplings

## General Purpose

Snap-tite H & PH Series  
Snap-tite Design

Manual Sleeve, Valved or Unvalved



B Hydraulics

### H Series Nipples (Steel) - Male SAE 37 Degree Flare



Body Size	Part Number	Valved or Non-Valved (Plain)	Port End	Length (in)	Largest Diameter	Wrench Flats
1/4	VHN4-4EM	Valved	7/16-20 UNF	2.02	1.02	0.88
3/8	VHN6-6EM	Valved	9/16-18 UNF	2.24	1.19	1.00
1/2	VHN8-8EM	Valved	3/4-16 UNF	2.35	1.39	1.19
3/4	VHN12-12EM	Valved	1-1/6 - 12 UNF	2.92	1.73	1.50

### PH Series Connect-Under-Pressure Nipples (Steel)



Body Size	Part Number	Valved or Non-Valved (Plain)	Port End	Length (in)	Largest Diameter	Wrench Flats
1/2	VPHN8-8F	Valved	1/2-14 NPTF (Female)	1.98	1.39	1.19
1/2	VPHN8-8EM	Valved	3/4-16 UNF (Male)	2.35	1.39	1.19

### H Series Dust Plugs and Caps



Body Size	Coupler Dust Plug Plastic	Coupler Dust Plug Aluminum	Nipple Dust Cap Plastic	Nipple Dust Cap Aluminum	Nipple Pressure Cap
1/4	PDP-4	AMPH-4	PDC-4	ADCH-4	MCH-4
3/8	PDP-6	AMPH-6	PDC-6	ADCH-6	MCH-6
1/2	PDP-8	AMPH-8	PDC-8	ADCH-8	MCH-8
3/4	PDP-12	AMPH-12	PDC-12	ADCH-12	MCH-12
1	PDP-16	AMPH-16	PDC-16	ADCH-16	MCH-16
1-1/4	-	AMPH-20	-	ADCH-20	MCH-20
1-1/2	-	AMPH-24	-	ADCH-24	MCH-24
2	-	AMPH-32	-	ADCH-32	MCH-32
2-1/2	-	AMPH-40	-	ADCH-40	MCH-40
3	-	AMPH-48	-	ADCH-48	MCH-48