

Medium and High Pressure Hoses HHP Series



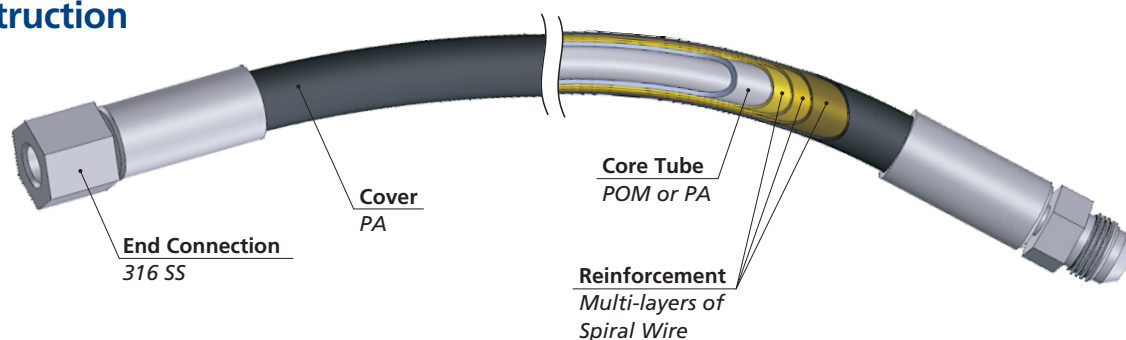
Introduction

HHP Series Medium and High Pressure Hoses offer a small bend radius, high pressure capacity, and long service life, along with excellent resistance to weather, aging, and wear. They are widely used in applications such as high pressure water jetting, oil drilling, chemical transportation, shipbuilding, construction machinery, rubber compounding, and more.

Features

- Core tube materials: Polyoxymethylene (POM) or Polyamide (PA)
- Reinforcement: Multi-layer spiral wire
- Cover materials: Polyamide (PA)
- Nominal hose sizes: DN4 ~ DN12
- Working pressure up to: 26100 psig (1800 bar)
- Working temperature: -22 °F ~ 176 °F (-30 °C ~ 80 °C)
- Liquid and gas application products optional
- Custom lengths and wide range of end connections available

Construction

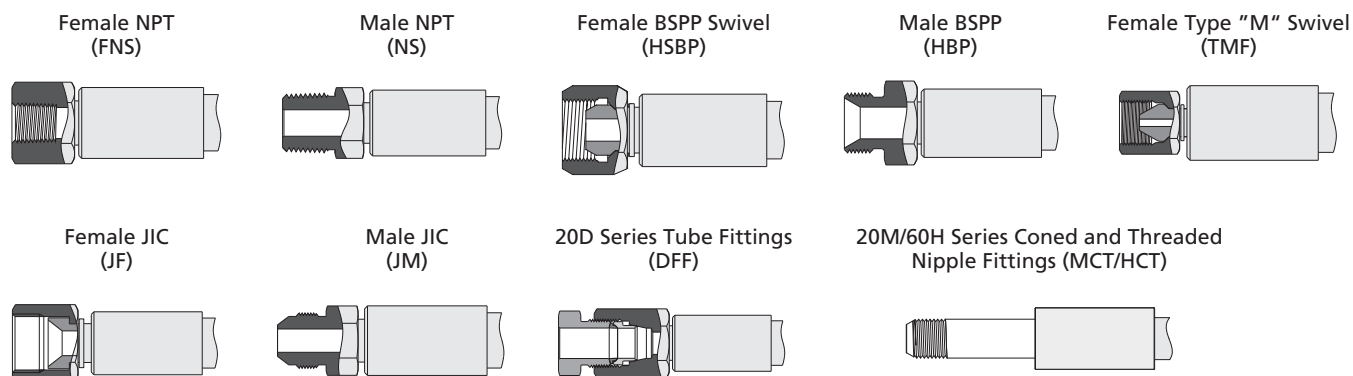


Technical Data of Hoses

Nominal Hose Size (DN)	Inside Diameter in. (mm)	Outside Diameter in. (mm)	Core Tube Material	Reinforcement (layers of spiral wire)	Cover Material	Max. Working Pressure psig (bar)		Burst Pressure psig (bar)	Min. Inside Bend Radius in. (mm)	Weight lbs/ft (kg/m)	Color
						Liquid Application	Gas Application				
4	0.16 (4.15)	0.39 (9.8)	POM	2	PA	17400 (1200)	10880 (750)	43500 (3000)	2.95 (75)	0.141 (0.21)	Yellow
	0.16 (4.15)	0.48 (12.1)	POM	4	PA	26100 (1800)	16300 (1125)	65300 (4500)	5.12 (130)	0.276 (0.41)	Red
5	0.21 (5.25)	0.43 (11.0)	POM	2	PA	15100 (1040)	9430 (650)	37700 (2600)	2.76 (70)	0.188 (0.28)	Black
	0.2 (5.0)	0.5 (12.7)	POM	4	PA	26100 (1800)	16330 (1130)	65300 (4500)	3.74 (95)	0.235 (0.35)	Red
6	0.24 (6.1)	0.46 (11.6)	POM	2	PA	15100 (1040)	9430 (650)	37700 (2600)	4.33 (110)	0.168 (0.25)	Black
	0.24 (6.0)	0.55 (13.9)	POM	4	PA	23800 (1640)	14880 (1030)	59500 (4100)	6.1 (155)	0.47 (0.7)	Yellow
8	0.32 (8.1)	0.56 (14.3)	POM	2	PA	15100 (1040)	9430 (650)	37700 (2600)	3.94 (100)	0.282 (0.42)	Black
	0.32 (8.1)	0.65 (16.6)	POM	4	PA	21750 (1500)	13600 (940)	54400 (3750)	4.13 (105)	0.45 (0.67)	Yellow
10	0.39 (10.0)	0.66 (16.7)	PA	2	PA	10000 (690)	6250 (430)	25000 (1725)	6.3 (160)	0.343 (0.51)	Black
	0.39 (9.85)	0.72 (18.4)	PA	4	PA	16000 (1100)	10000 (690)	39900 (2750)	7.87 (200)	0.417 (0.62)	Yellow
12	0.52 (13.2)	0.85 (21.5)	PA	2	PA	10000 (690)	6250 (430)	25000 (1725)	7.87 (200)	0.464 (0.69)	Black
	0.51 (13.0)	0.93 (23.5)	PA	4	PA	16000 (1100)	10000 (690)	39900 (2750)	7.87 (200)	0.578 (0.86)	Yellow

Note: The safety factor is 2.5:1 for liquid applications and 4:1 for gas applications, in compliance with ISO 7751 standards.

End Connections



Accessories

The accessories will be assembled onto the finished product for supply.



PVC Sleeves

Transparent PVC sleeve provides effective protection for the hose against surface abrasion or scratches. PVC sleeve is not a hose anti-burst layer thus can not be used as burst protection device for the operator.



Bend Restrictors

Bend restrictors can avoid connection kinking or bending between hoses and hose connectors in harsh working conditions.



Whip Socks

Whip Socks effectively limit hose whipping in the event of an accidental high pressure hose failure, helping protect operators and nearby equipment.

Hose O.D. Range, mm	Breaking Force, N	Total Length, mm	Eye Length, mm
8-14	12454.4	501.6	101.6
14-20	18681.6	627	127
20-30	27577.6	650	150

Testing

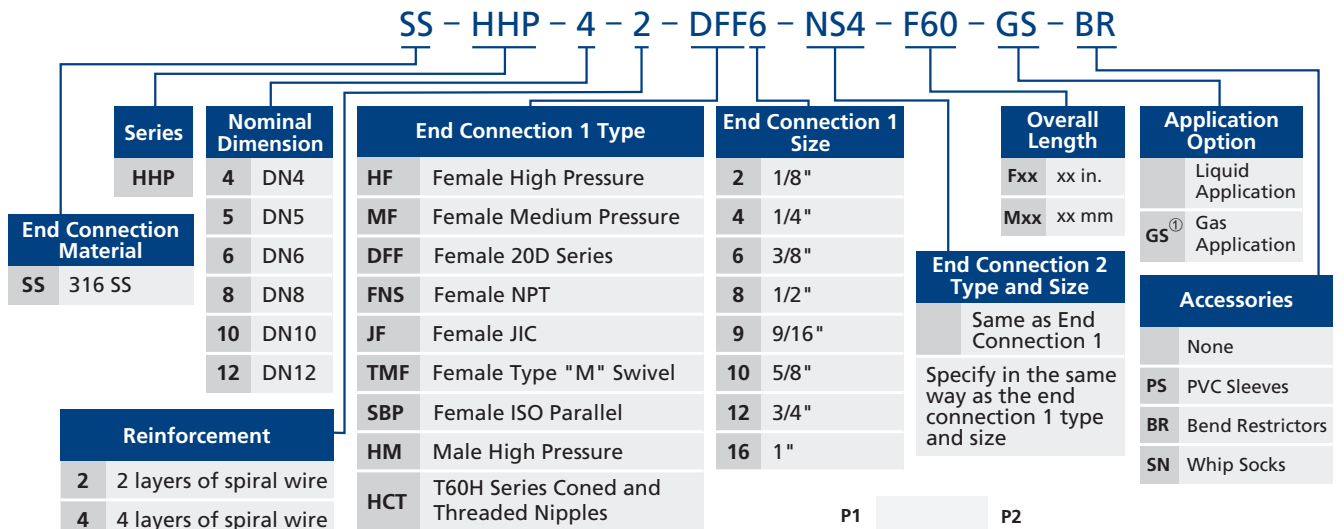
- For liquid applications hose assembly (without -GS suffix in the ordering number), each product is tested with clean water at 1.5 times the maximum working pressure.
- For gas applications hose assembly (with -GS suffix in the ordering number), in addition to testing with clean water at 1.5 times the maximum working pressure, each product will also be tested with compressed air or nitrogen at the maximum working pressure.

Hose Assembly Ordering Information

Basic Ordering Number	Hose Information		End Connection Type and Size	Insert I.D. mm	Pressure at 100 °F (38 °C), psig (bar)	
	Specification	Reinforcement (layers of spiral wire)			Liquid Application	Gas Application
-HHP-4-2-DFF2-	DN4	2	1/8" 20D Series Tube Fittings	1.6	15000 (1034)	10900 (750)
-HHP-4-4-TMF9-		4	9/16 Female Type "M" Swivel	1.7	26100 (1800)	16300 (1125)
-HHP-5-2-FNS4-	DN5	2	1/4 Female NPT	2.4	15000 (1034)	9430 (650)
-HHP-5-2-HSBP4-			1/4 Female BSPP	2.4	15100 (1040)	9430 (650)
-HHP-5-4-TMF9-		4	9/16 Female Type "M" Swivel	2.4	26100 (1800)	16300 (1125)
-HHP-6-2-DFF4-	DN6	2	1/4" 20D Series Tube Fittings	3.4	15100 (1040)	9430 (650)
-HHP-6-2-HSBP6-			3/8 Female BSPP	3.4	15100 (1040)	9430 (650)
-HHP-6-2-MCT4-			1/4" 20M Series Coned and Threaded Nipple Fittings	2.8	15100 (1040)	9430 (650)
-HHP-6-4-HCT4-		4	1/4" 60H Series Coned and Threaded Nipple Fittings	2.1	23800 (1640)	14900 (1025)
-HHP-8-2-DFF6-	DN8	2	3/8" 20D Series Tube Fittings	5.5	15100 (1040)	9430 (650)
-HHP-8-4-TMF12-		4	3/4 Female Type "M" Swivel	5.5	21750 (1500)	13600 (938)
-HHP-8-4-JF8-			1/2 Female JIC	5.5	21750 (1500)	13600 (938)
-HHP-10-2-NS6-	DN10	2	3/8 Male NPT	7.4	10000 (690)	6250 (431)
-HHP-10-4-DFF8-		4	1/2" 20D Series Tube Fittings	5.5	16000 (1100)	9970 (688)
-HHP-10-4-HSBP12-			3/4 Female BSPP Swivel	5.5	16000 (1100)	9970 (688)
-HHP-12-2-FNS8-	DN12	2	1/2 Female NPT	8.5	10000 (690)	6250 (431)
-HHP-12-4-DFF8-		4	1/2" 20D Series Tube Fittings	8.5	16000 (1100)	9970 (688)
-HHP-12-4-HSBP16-			1 Female BSPP Swivel	8.5	16000 (1100)	9970 (688)

Note: The working pressure is determined by the lower value between the end connection rating and the hose pressure rating.

Ordering Number Description



Notes:

- ① Different from hoses used for liquid applications, for gas application hoses, the cover is factory-pin-pricked to vent permeated gas and prevent accumulation. The system designer shall assess permeation-related hazards during hose selection.
- ② "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.

P1 and P2 shall be described in the following orders:

- ⊙ Describe the female end first if there is any
- ⊙ For female connections: HF□ - MF□ - DFF□ - FNS□ - JF□ - TMF□ - SBP□
- ⊙ For male connections: HM□ - HCT□ - MM□ - MCT□ - DFM□ - DFT□ - NS□ - JM□ - TM□ - HBP□
- ⊙ Describe in descending order according to sizes if the end connection types are the same
- ⊙ Describe the end of P1 if all end connections are the same