Medium and High Pressure Hoses HHP Series

Introduction

HHP series medium and high pressure hoses are designed with core tubes made of polymer material, Multi-layers of spiral wire reinforcement, and a cover coating structure, featuring small bend radius, high pressure, long service life, weather resistance, aging resistance and wear resistance. They are widely used in high-pressure water jetting, oil drilling, chemical transportation, shipbuilding, engineering machinery, rubber compound, and other fields.

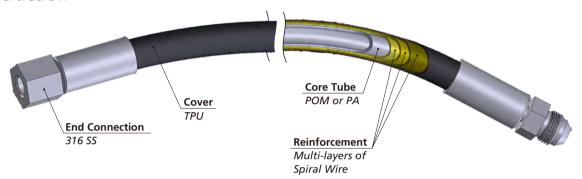
When used in gas media, the cover needs to be pin-pricked. Not recommended for use in gas service requiring low permeation rates or quick pressure relief. For more details, please contact FITOK Group.



Features

- Ocore tube materials: Polyoxymethylene(POM) or Polyamide(PA)
- O Reinforcement: Multi-layers of spiral wire
- O Cover materials: Polyurethane(TPU)
- O Nominal hose sizes: DN4 ~ DN12
- O Working pressure up to: 31900 psig (2200 bar)
- Working temperature: -22 °F ~ 176 °F (-30 °C ~ 80 °C)
- O 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	Reinfor- cement (layers of spiral wire)	Cover Material	Max. Working Pressure psig (bar)	Burst Pressure psig (bar)	Min. Inside Bend Radius in. (mm)	Weight Ibs/ft (kg/m)	Color
4	0.16 (4.1)	0.39 (9.8)	POM	2	TPU	17400 (1200)	43500 (3000)	2.95 (75)	0.141 (0.21)	Yellow
	0.17 (4.4)	0.48 (12.1)	POM	4	TPU	31900 (2200)	79750 (5500)	2.56 (65)	0.276 (0.41)	Red
5	0.2 (5.2)	0.43 (10.8)	POM	2	TPU	15100 (1040)	37700 (2600)	2.76 (70)	0.188 (0.28)	Black
	0.2 (5.0)	0.5 (12.7)	POM	4	TPU	26100 (1800)	65300 (4500)	3.74 (95)	0.235 (0.35)	Red
6	0.24 (6.1)	0.45 (11.5)	POM	2	TPU	15100 (1040)	37700 (2600)	4.33 (110)	0.168 (0.25)	Black
	0.24 (6.0)	0.55 (13.9)	POM	4	TPU	23800 (1640)	59500 (4100)	6.1 (155)	0.47 (0.7)	Yellow
	0.31 (7.9)	0.53 (13.4)	POM	2	TPU	15100 (1040)	37700 (2600)	3.94 (100)	0.282 (0.42)	Black
8	0.32 (8.1)	0.65 (16.6)	POM	4	TPU	21750 (1500)	54400 (3750)	4.13 (105)	0.45 (0.67)	Yellow
10	0.39 (10.0)	0.65 (16.4)	POM	2	TPU	10000 (690)	25000 (1725)	6.3 (160)	0.343 (0.51)	Black
	0.39 (10.0)	0.72 (18.2)	POM	4	TPU	16000 (1100)	39900 (2750)	4.92 (125)	0.417 (0.62)	Yellow
12	0.5 (12.8)	0.8 (20.4)	PA	2	TPU	10000 (690)	25000 (1725)	7.87 (200)	0.464 (0.69)	Black
	0.51 (13.0)	0.87 (22.1)	PA	4	TPU	16000 (1100)	39900 (2750)	3.94 (100)	0.578 (0.86)	Yellow

Notes: 1. Hose colors are in correspondence with maximum working pressure (MWP).

Black 10000 psig (690 bar)≤MWP≤15100 psig (1040 bar)

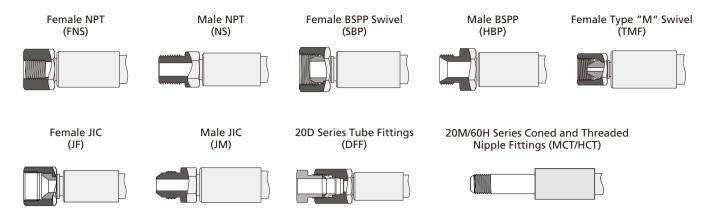
— Yellow 15100 psig (1040 bar) < MWP ≤ 23800 psig (1640 bar)

— Red 23800 psig (1640 bar) < MWP ≤ 31900 psig (2200 bar)

2. When used in gas media, the ratio of working pressure to burst pressure is up to 1:4.



End Connections



Options



PVC Sleeves

Transparent PVC sleeve provides effective protection for the hose to prevent 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 twisting or bending between hoses and hose connectors in harsh working conditions.



Safety Cables

Safety cables help protect operators and nearby equipment by limiting hose whipping as much as possible in the event of a high pressure hose burst.

Note: The optional parts will be assembled onto the finished product for supply.

Testing

Each hose assembly is pressure tested with pure water at 1.5 times the maximum working pressure.

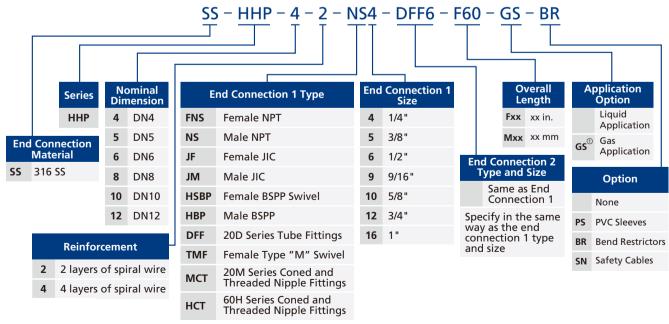


Hose Assembly Ordering Information

	Hose Inf	ormation	0	Pressure at 100 °F (38 °C) ^② psig (bar)	
Basic Ordering Number	Specification	Reinforcement (layers of spiral wire)	End Connection Type and Size ^①		
-HHP-4-2-DFF2-	DN4	2	1/8" 20D Series Tube Fittings	15000 (1034)	
-HHP-4-4-TMF9-	DIN4	4	9/16 Female Type "M" Swivel	31900 (2200)	
-HHP-5-2-FNS4-		2	1/4 Female NPT	15000 (1034)	
-HHP-5-2-HSBP4-	DN5	2	1/4 Female BSPP	15100 (1040)	
-HHP-5-4-TMF9-		4	9/16 Female Type "M" Swivel	26100 (1800)	
-HHP-6-2-DFF4-		2	1/4" 20D Series Tube Fittings	15100 (1040)	
-HHP-6-2-HSBP6-	DN6		3/8 Female BSPP	15100 (1040)	
-HHP-6-2-MCT4-			1/4" 20M Series Coned and Threaded Nipple Fittings	15100 (1040)	
-HHP-6-4-HCT4-		4	1/4" 60H Series Coned and Threaded Nipple Fittings	23800 (1640)	
-HHP-8-2-DFF6-		2	3/8" 20D Series Tube Fittings	15100 (1040)	
-HHP-8-4-TMF12-	DN8	4	3/4 Female Type "M" Swivel	21800 (1500)	
-HHP-8-4-JF8-		4	1/2 Female JIC	21800 (1500)	
-HHP-10-2-NS6-		2	3/8 Male NPT	10000 (690)	
-HHP-10-4-DFF8-	DN10	4	1/2" 20D Series Tube Fittings	16000 (1100)	
-HHP-10-4-HSBP8-			1/2 Female BSPP Swivel	16000 (1100)	
-HHP-12-2-FNS8-		2	1/2 Female NPT	10000 (690)	
-HHP-12-4-DFF8-	DN12	4	1/2" 20D Series Tube Fittings	16000 (1100)	
-HHP-12-4-HSBP12-			3/4 Female BSPP Swivel	16000 (1100)	

① For other available end connections not listed, please contact FITOK.

Ordering Number Description



Note: "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.

① Not recommended for use in gas service requiring low permeation rates or quick pressure relief.

For use in gas applications requiring low permeation rates and quick pressure relief, please contact FITOK Group.



② Pressure depends on the lower one of the maximum working pressures of the end connection and the hose.