

OK DN10 TYPE 814 MNP 21750 psig (1500 bat)

FITOK DIVI2 TYPE 12/2 MN/P

814 MNP 15100 psig (1040 bar) 65823

## **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.

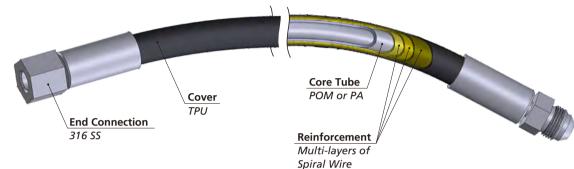


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#### **Features**

- O Core tube materials: Polyoxymethylene(POM) or Polyamide(PA)
- $\bigcirc$  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)
- $\bigcirc$  Working temperature: -22 °F ~ 176 °F (-30 °C ~ 80 °C)
- $\bigcirc$  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	
4	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	
2	0.2 (5.0)	0.5 (12.7)	POM	4	TPU	26100 (1800)	65300 (4500)	3.74 (95)	0.235 (0.35)	Red	
	0.24 (6.1)	0.45 (11.5)	POM	2	TPU	15100 (1040)	37700 (2600)	4.33 (110)	0.168 (0.25)	Black	
6	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	
10	0.39 (10.0)	0.72 (18.2)	POM	4	TPU	16000 (1100)	39900 (2750)	4.92 (125)	0.417 (0.62)	Yellow	
	0.5 (12.8)	0.8 (20.4)	PA	2	TPU	10000 (690)	25000 (1725)	7.87 (200)	0.464 (0.69)	Black	
12	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)

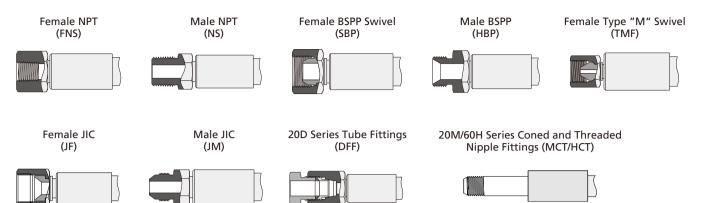
Yellow 15100 psig (1040 bar)<MWP≤23800 psig (1640 bar)

■ 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.

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#### **Hose Assembly Ordering Information**

	Hose Inf	ormation					
Basic Ordering Number	Specification	Reinforcement (layers of spiral wire)	End Connection Type and Size $^{ extsf{D}}$	Pressure at 100 °F (38 °C) <sup>©</sup> psig (bar)			
-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-			1/4" 20D Series Tube Fittings	15100 (1040)			
-HHP-6-2-HSBP6-		2	3/8 Female BSPP	15100 (1040)			
-HHP-6-2-MCT4-	DN6		1/4" 20M Series Coned and Threaded Nipple Fittings	15100 (1040)			
-ННР-6-4-НСТ4-		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-		4	1/2 Female BSPP Swivel	16000 (1100)			
-HHP-12-2-FNS8-		2	1/2 Female NPT	10000 (690)			
-HHP-12-4-DFF8-	DN12		1/2" 20D Series Tube Fittings	16000 (1100)			
-HHP-12-4-HSBP12-		4	3/4 Female BSPP Swivel	16000 (1100)			

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

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

#### **Ordering Number Description**

	SS - HHP - 4 - 2 - NS4 - DFF6 - F60 - GS - BR											
	Series Nominal Dimension		End Connection 1 Type		End Connection 1 Size		Overall Length		Application Option			
		HHP	4	DN4	FNS	Female NPT	2	1/8"	Fxx xx in.		Liquid Application	
Enc	d Conne	Connection Material	5 DN5 6 DN6	DN5	NS	Male NPT	4	1/4"	M>	x xx mm	GS	Gas
				JF	Female JIC	6	3/8"	End Connection 2		<b>G3</b> Application		
SS	316	SS	8	DN8	JM	Male JIC	8	1/2 "	Type and Size	Option		
				DN10	HSBP	Female BSPP Swivel	9	9/16"	Same as End Connection 1			None
			12	DN12	HBP	Male BSPP	10	5/8"	Specify in the same		PS	PVC Sleeves
						20D Series Tube Fittings	12	3/4"	way as the connection	end n 1 type	BR	Bend Restrictors
		Reinforcement			TMF	Female Type "M" Swivel	16	1"	and size			Safety Cables
	2	2 2 layers of spiral wire		мст	20M Series Coned and					314		
	4	4 layers of spiral wire			Threaded Nipple Fittings 60H Series Coned and							
					НСТ	Threaded Nipple Fittings						

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

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 presure relief, please contact FITOK Group.