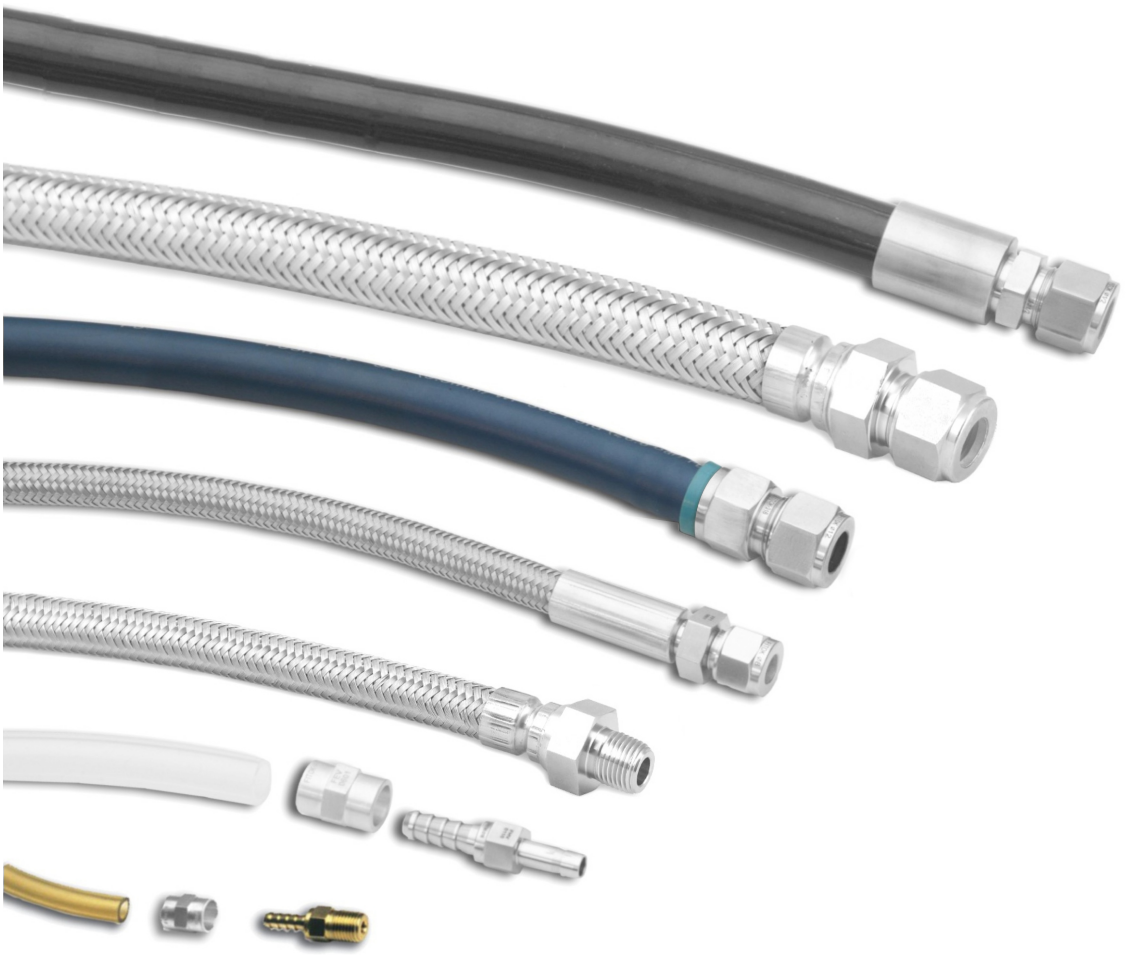
Hoses and Connectors

MH, MM, MX, HMF, PS, MP, TH, HCH and HC Series



Contents

Terms and Definitions

Hose

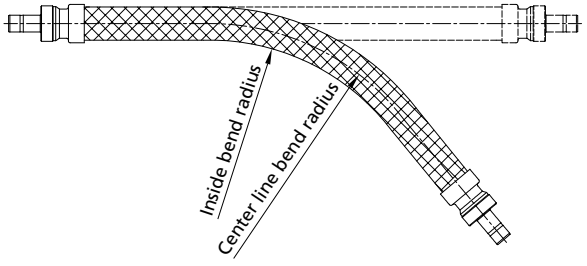
A multiple-layered flexible conduit through which fluid is conveyed from one point to another.

Nominal Hose Size

An approximation of the hose inside diameter.

Bend Radius

The radius of the bent section of a hose, measured to the center line or inside of the curved section.



End Connection

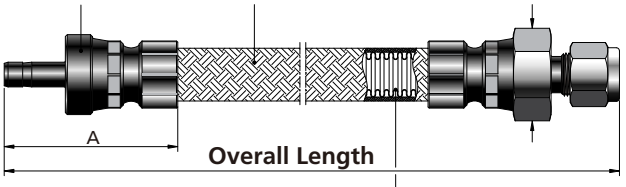
The fitting that is assembled onto each end of the hose to provide a means of installation into a fluid system.

Overbraid

A flexible, woven reinforcement.

Maximum Outside Dimension

The largest nominal outside dimension of the hose assembly.



Spring Guard

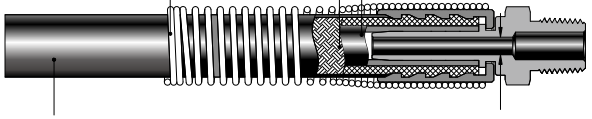
A helical metal spring used to protect the hose from abrasion overbending, and kinking.

Reinforcement

Material used to reinforce the core and increase its pressure-containing capacity.

Core

The hose's innermost material that comes into contact with the system media, often referred to as the wetted surface.



Cover

The hose's outermost material, used to protect the reinforcement and core from environmental conditions and wear.

Minimum Inside Diameter

The smallest inside diameter of inner flow path of the hose assembly.

Minimum Dynamic Bend Radius

The smallest bend radius that a hose is allowed to perform in applications where the hose undergoes dynamic bending and position changes.

Minimum Static Bend Radius

The smallest bend radius that a hose is allowed to perform in applications where the hose is stationary without any movement in any plane.

Flexibility

The relative ease or difficulty of bending a non-pressurized hose assembly.

Burst Pressure

The pressure at which leakage occurs in a laboratory burst test.

Permeation

The movement of a liquid, gas, or vapor through a solid. All materials are permeable to a certain degree and must be tested for application compatibility before installation.

Static Dissipative

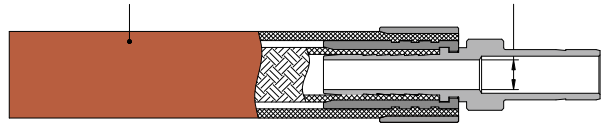
Static dissipative hoses are primarily used to reduce static charge generated by media flow through the hose. FITOK offers hoses with carbon black–filled polymer cores to provide static dissipation.

Fire Jacket

Woven fiberglass coated with specially compounded silicone rubber to provide insulation from internal system fluid temperature extremes.

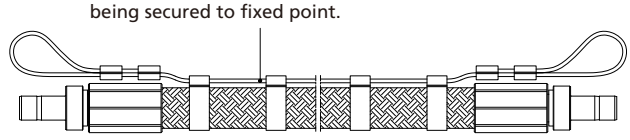
Minimum Inside Diameter

The smallest inside diameter of inner flow path of the hose assembly.



Safety Cable

Prevent hoses from whipping around and causing serious injuries in the event of fitting blow-off or hose burst. The knot at each end of cable can be adjusted before being secured to fixed point.



Considerations for Selecting a Hose Assembly Solution

Temperature

Identify the minimum and maximum temperatures the hose assembly will be exposed to in the system media and environment.

Pressure

Identify the minimum and maximum pressures (or vacuum) within and outside the hose assembly.

Material

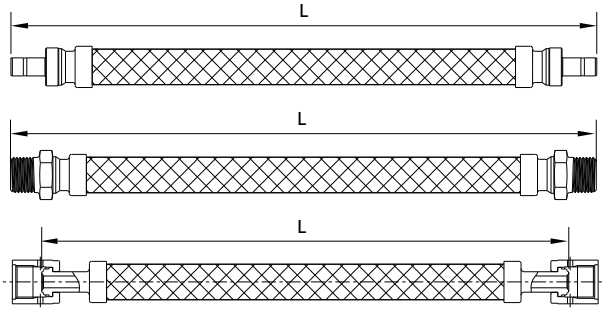
Identify the system media and the environment that the hose assembly will be exposed to. This will help determine the materials best suited to the application demands.

Movement

Confirm whether the hose assembly will be installed in dynamic applications as this will require differentconsiderations than a static application.

Length

Determine the most likely route for installation of the hose, use this to identify required length.
Note: Different types of hoses vary in measuring position. For hoses with pipe fittings, length loss due to threading into the mating fitting should be taken into account.



Cleanliness

Identify the cleanliness need.

End Connection

Identify the type of end connections that are most compatible with the system requirements. End connections differ in materials of construction and pressure ratings.

Orientation

Address space constraint concerns. Hose assemblies with elbows and union ball joints may help resolve space constraint issues.

Desired Flow

Consider desired flow. Hose connection size, core tube construction, and installation route may impact flow.

Additional Protection

Identify whether additional protection is necessary for the hose assemblies or surrounding systems.

Permeability

Nylon, PFA, polyethylene, PTFE, and rubber are permeable materials. Gases and vapors may migrate through cores of these materials. The permeation rate is affected by many factor variables.

Installation and Use Guide

⚠ Warning

Product failure or improper use may pose a threat to your personal safety and property.

Inspection

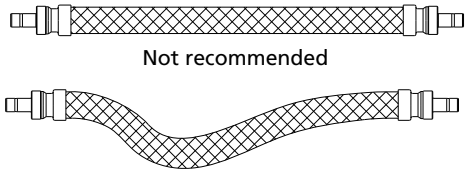
Inspect whether the hose length and layout are reasonable, and whether hose surface is free of defects and damage prior to installation. Establish an inspection schedule based on system application and replacement history.

Vibration

Evaluate the amount of system vibration when selecting a hose. Metal hose may not be appropriate for systems with constant or severe vibration.

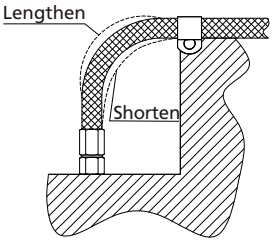
Length

Consider hose movement, system pressurization, and thermal expansion when identifying hose length. Installing hose that is not long enough to accommodate these factors may shorten hose life.



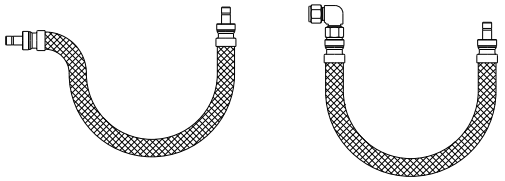
System Pressure Changes

Use sufficient hose length to accommodate system pressure changes. Do not connect high pressure hoses and low pressure hoses together.



Hose Strain

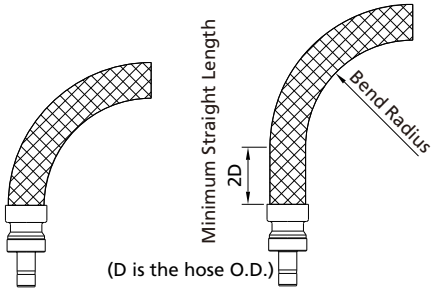
Elbows and adapters can be used to relieve hose strain.



Not recommended Recommended

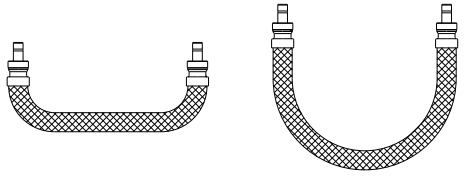
Minimum Bend Radius & Minimum Straight Length

Follow minimum bend radius requirements for your hose. Installing hose with smaller bends may kink hose and shorten hose life.



Not recommended Recommended

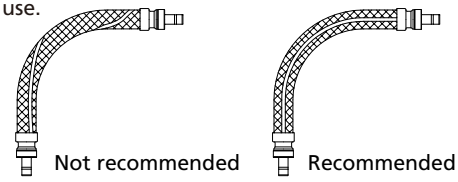
Maintain the minimum straight length for bent section, otherwise, hose rupture or leakage may result from bending too close to the hose/fitting connection.



Not recommended Recommended

Twist Avoidance

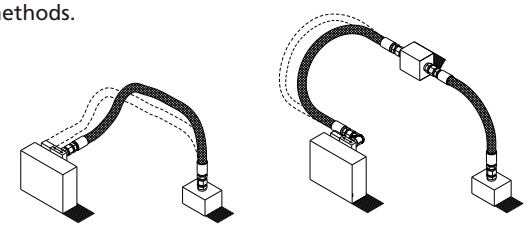
Avoid twisting the hose assembly and causing stress that may affect its use.



Not recommended Recommended

Bending in One Plane

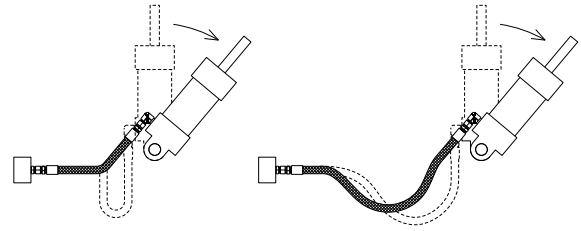
Bend the hose in one plane only so as to avoid twisting. For a compound bend, use multiple hose pieces or other isolation methods.



Not recommended Recommended

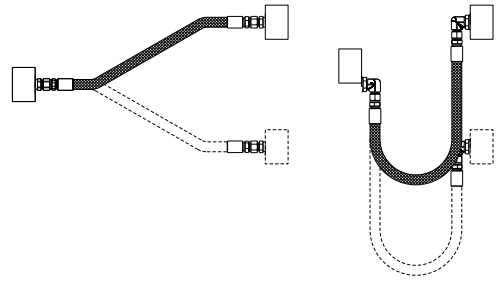
Motion Absorption

Distribute movement and prevent bends smaller than the hose's minimum bend radius by ensuring sufficient hose length.



Not recommended Recommended

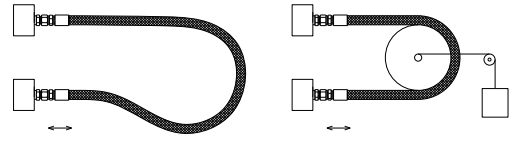
Elbow-connected hoses are better suited for vertical movement than hoses connected with straight fittings.



Not recommended Recommended

Necessary Limits and Protection Devices

Install necessary limits and protection devices to facilitate hose movement and avoid twisting.



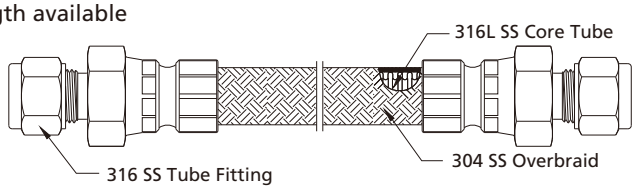
Not recommended Recommended

Metal Flexible Hoses

MH, MM, MX Series

Features

- Core tube material: 316L stainless steel
  Fitting material: 316 stainless steel
- Overbraid material: 304, 316L stainless steel available (316L SS not applicable to MM series annular hoses)
- Nominal hose size: 1/4" to 2"
- End connection sizes: 1/4" to 2" and 6 mm to 50 mm
- Working pressure up to: 6000 psig (414 bar)
- Working temperature: -325°F to 800°F (-200°C to 426°C)
- Vacuum and positive pressure applications
- Welded fitting-to-hose construction to ensure reliable seal
- Standard and custom length available



Hose Technical Parameters (MH Series)

Nominal Hose Size	Inside Diameter	Min. Bend Radius Helical Convoluted Core		Temperature Range	Working Pressure at 70°F (20°C)	Min. Burst Pressure at 70°F (20°C)
		Static	Dynamic			
in. (mm)	in. (mm)	in. (mm)	in. (mm)	°F (°C)	psig (bar)	psig (bar)
1/4 (6.4)	0.28 (7.1)	2.25 (57.2)	10.0 (254)	-325 to 800 (-200 to 426)	3100 (213)	12400 (854)
3/8 (9.7)	0.42 (10.6)	3.00 (76.2)	12.0 (305)		2000 (137)	8000 (551)
1/2 (12.7)	0.53 (13.5)	4.50 (114)	16.0 (406)		1800 (124)	7200 (496)
3/4 (19.0)	0.80 (20.3)	6.00 (152)	17.0 (432)		1500 (103)	6000 (413)
1 (25.4)	1.03 (26.0)	6.75 (171)	20.0 (508)		1200 (82.6)	4800 (330)
1 1/4 (31.8)	1.30 (33.0)	8.86 (225)	23.0 (584)		950 (65.4)	3800 (261)
1 1/2 (38.1)	1.53 (38.9)	11.0 (280)	26.0 (660)		900 (62.0)	3600 (248)
2 (50.8)	2.05 (52.1)	13.8 (350)	32.0 (813)		500 (34.4)	2000 (137)

Hose Technical Parameters (MM Series)

Nominal Hose Size	Inside Diameter	Min. Bend Radius Helical Convoluted Core		Min. Bend Radius Annular Convoluted Core		Temperature Range	Working Pressure at 70°F (20°C)	Min. Burst Pressure at 70°F (20°C)
		Static	Dynamic	Static	Dynamic			
in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	°F (°C)	psig (bar)	psig (bar)
1/4 (6.4)	0.25 (6.4)	1.38 (35)	8.66 (220)	0.79 (20)	4.33 (110)	-325 to 800 (-200 to 426)	1600 (110)	6400 (440)
3/8 (9.7)	0.38 (9.5)	2.36 (60)	10.40 (264)	0.98 (25)	5.91 (150)		1470 (101)	6000 (413)
1/2 (12.7)	0.50 (12.7)	2.95 (75)	11.89 (302)	1.18 (30)	4.88 (124)		1110 (76.4)	4500 (310)
3/4 (19.0)	0.75 (19.0)	3.54 (90)	13.58 (345)	1.50 (38)	6.65 (169)		860 (59.2)	3500 (241)
1 (25.4)	1.00 (25.4)	4.13 (105)	15.00 (381)	1.77 (45)	7.68 (195)		680 (46.8)	2680 (184)
1 1/4 (31.8)	1.25 (31.8)	4.72 (120)	16.22 (412)				680 (46.8)	2600 (179)
1 1/2 (38.1)	1.50 (38.1)	5.51 (140)	16.89 (429)				520 (35.8)	2200 (151)
2 (50.8)	2.00 (50.8)	6.30 (160)	18.43 (468)				450 (31.0)	1800 (124)

Hose Technical Parameters (MX Series)

Nominal Hose Size	Inside Diameter	Min. Bend Radius Annular Convoluted Core		Temperature Range	Working Pressure at 70°F (20°C)	Min. Burst Pressure at 70°F (20°C)
		Static	Dynamic			
in. (mm)	in. (mm)	in. (mm)	in. (mm)	°F (°C)	psig (bar)	psig (bar)
1/4 (6.4)	0.25 (6.4)	1.50 (38.1)	5.50 (140.0)	-325 to 800 (-200 to 426)	6000 (414)	24000 (1655)
3/8 (9.7)	0.38 (9.5)	2.50 (64.0)	7.00 (178.0)		5000 (345)	20000 (1378)
1/2 (12.7)	0.51 (13.0)	3.00 (76.2)	8.00 (203.0)		4500 (310)	18000 (1240)

Testing

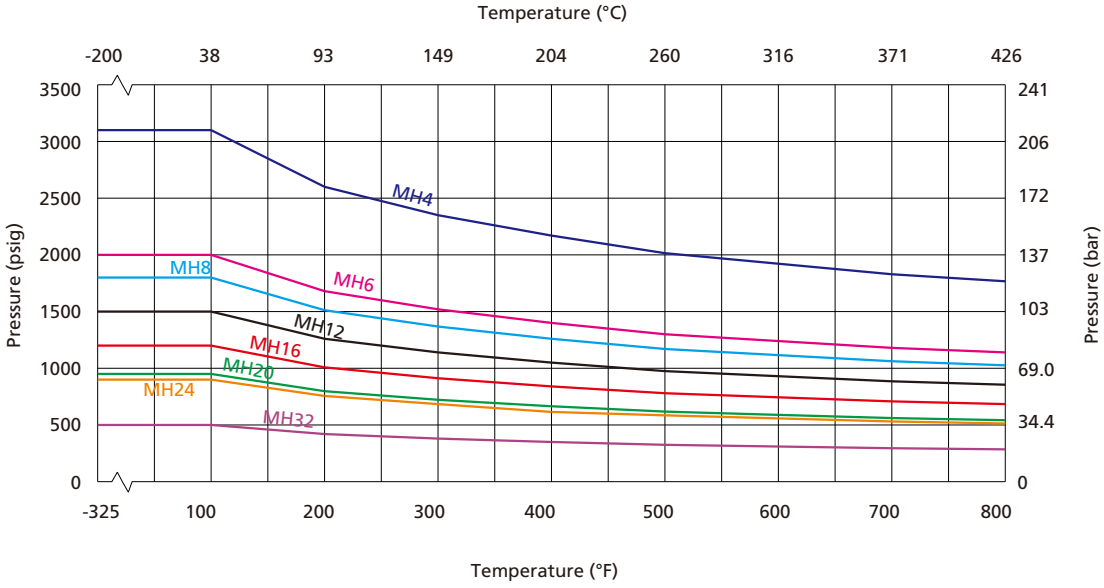
Every FITOK metal flexible hose is factory-tested with nitrogen or air at maximum working pressure and is subject to sampling test with helium to a maximum leak rate of 1×10^{-5} std cm^3/s before shipment . For other requirements, please contact FITOK Group or our authorized distributors.

Cleaning and Packaging

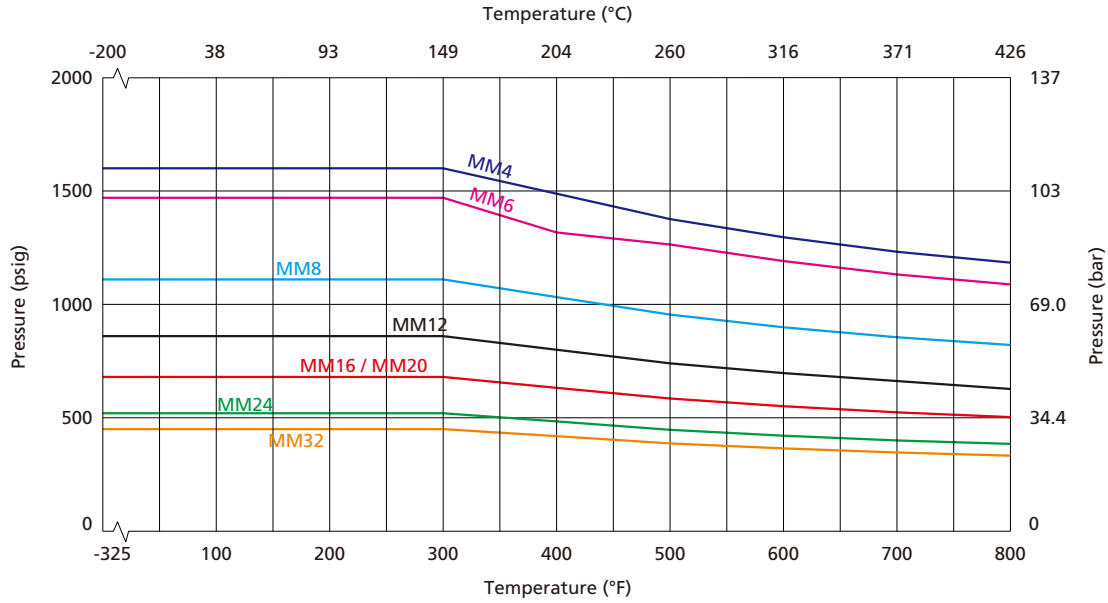
FITOK metal flexible hose components are cleaned in accordance with FITOK *Standard Cleaning and Packaging Process (FC-01)* for general industrial procedures.
Shorter hoses are packed in cartons with suitable protective material, longer hoses are coiled, bagged and boxed or crated.

Pressure vs. Temperature

MH series

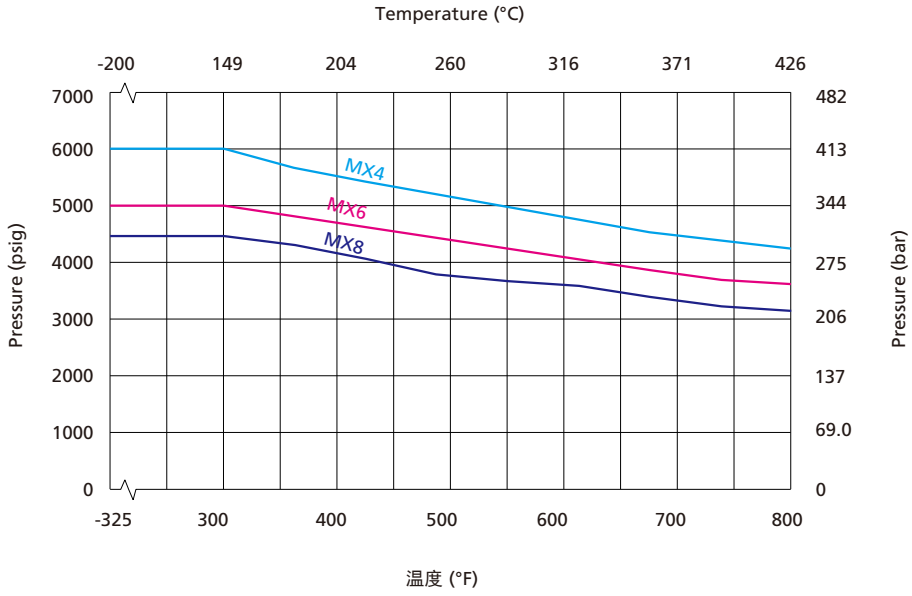


MM series



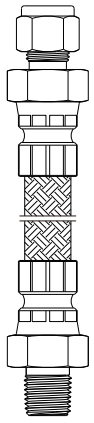
The peak value of pressure surge, shock or pulsations in the system should not exceed 50% of the rated working pressure of the hose.

MX series



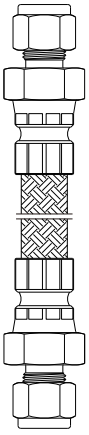
Standard Assemblies

Tube Fitting to Male NPT End



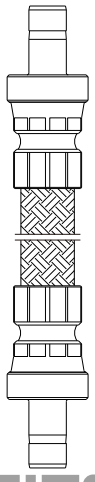
Nominal Hose Size	Tube Fitting Size	NPT Size	Hose Series	Overall Length	Ordering Number	Minimum Inside Diameter	Maximum Outside Dimension
in.	in.	in.		in. (mm)		in. (mm)	in. (mm)
1/4	1/4	1/4	MX4	12 (305)	SS-MX4-FL4-NS4-F12	0.19 (4.8)	0.94 (23.8)
			MH4	12 (305)	SS-MH4-FL4-NS4-F12	0.19 (4.8)	0.94 (23.8)
			MM4	36 (914)	SS-MM4-FL4-NS4-F36	0.19 (4.8)	0.87 (22.0)
3/8	3/8	3/8	MX6	18 (457)	SS-MX6-FL6-NS6-F18	0.28 (7.1)	1.15 (29.3)
			MH6	18 (457)	SS-MH6-FL6-NS6-F18	0.28 (7.1)	1.15 (29.3)
			MM6	36 (914)	SS-MM6-FL6-NS6-F36	0.28 (7.1)	1.01 (25.7)
1/2	1/2	1/2	MX8	18 (457)	SS-MX8-FL8-NS8-F18	0.41 (10.4)	1.30 (33.0)
			MH8	18 (457)	SS-MH8-FL8-NS8-F18	0.41 (10.4)	1.30 (33.0)
			MM8	48 (1220)	SS-MM8-FL8-NS8-F48	0.41 (10.4)	1.15 (29.3)
3/4	3/4	3/4	MH12	18 (457)	SS-MH12-FL12-NS12-F18	0.66 (16.0)	1.74 (44.2)
			MM12	48 (1220)	SS-MM12-FL12-NS12-F48	0.66 (16.0)	1.59 (40.5)
1	1	1	MH16	24 (610)	SS-MH16-FL16-NS16-F24	0.88 (22.4)	2.02 (51.3)

Tube Fitting End



Nominal Hose Size	Tube Fitting Size	Hose Series	Overall Length	Ordering Number	Minimum Inside Diameter	Maximum Outside Dimension
in.	in.		in. (mm)		in. (mm)	in. (mm)
1/4	1/4	MX4	12 (305)	SS-MX4-FL4-F12	0.19 (4.8)	0.94 (23.8)
		MH4	12 (305)	SS-MH4-FL4-F12	0.19 (4.8)	0.94 (23.8)
		MM4	36 (914)	SS-MM4-FL4-F36	0.19 (4.8)	0.87 (22.0)
3/8	3/8	MX6	18 (457)	SS-MX6-FL6-F18	0.28 (7.1)	1.15 (29.3)
		MH6	18 (457)	SS-MH6-FL6-F18	0.28 (7.1)	1.15 (29.3)
		MM6	36 (914)	SS-MM6-FL6-F36	0.28 (7.1)	1.01 (25.7)
1/2	1/2	MX8	18 (457)	SS-MX8-FL8-F18	0.41 (10.4)	1.30 (33.0)
		MH8	18 (457)	SS-MH8-FL8-F18	0.41 (10.4)	1.30 (33.0)
		MM8	48 (1220)	SS-MM8-FL8-F48	0.41 (10.4)	1.15 (29.3)
3/4	3/4	MH12	18 (457)	SS-MH12-FL12-F18	0.66 (16.0)	1.74 (44.2)
		MM12	48 (1220)	SS-MM12-FL12-F48	0.66 (16.0)	1.59 (40.5)
1	1	MH16	24 (610)	SS-MH16-FL16-F24	0.88 (22.4)	2.02 (51.3)

Tube Adapter End

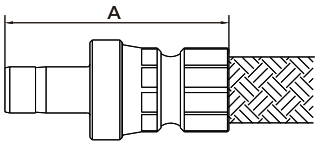


Nominal Hose Size	Tube Adapter Size	Hose Series	Overall Length	Ordering Number	Minimum Inside Diameter	Maximum Outside Dimension
in.	in.		in. (mm)		in. (mm)	in. (mm)
1/4	1/4	MX4	12 (305)	SS-MX4-FT4-F12	0.17 (4.3)	0.81 (20.6)
		MH4	12 (305)	SS-MH4-FT4-F12	0.16 (4.1)	0.81 (20.6)
		MM4	36 (914)	SS-MM4-FT4-F36	0.16 (4.1)	0.76 (19.2)
3/8	3/8	MX6	18 (457)	SS-MX6-FT6-F18	0.27 (6.9)	1.02 (26.0)
		MH6	12 (305)	SS-MH6-FT6-F12	0.27 (6.9)	1.01 (25.6)
		MM6	36 (914)	SS-MM6-FT6-F36	0.27 (6.9)	0.91 (23.1)
1/2	1/2	MX8	18 (457)	SS-MX8-FT8-F18	0.37 (9.4)	1.14 (29.0)

1. All dimensions are for reference only and are subject to change. For dimensions not shown above, please contact FITOK Group or our authorized distributors.
2. Types listed are standard. Other types are available upon request.

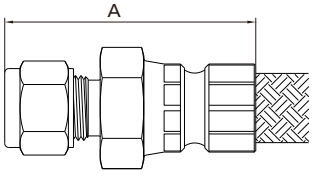
End Connections

Tube Adapters



Nominal Hose Size	Tube Adapter Size	End Connection Designator	Dimensions		
			A	Maximum Outside Dimension	Minimum Inside Diameter
in.	in.		in. (mm)		
1/4	1/4	FT4	1.76 (44.7)	0.81 (20.6)	0.16 (4.1)
3/8	3/8	FT6	1.82 (46.2)	1.02 (26.0)	0.27 (6.9)
1/2	1/2	FT8	2.22 (56.4)	1.14 (29.0)	0.37 (9.4)
3/4	3/4	FT12	2.35 (59.7)	1.54 (39.1)	0.58 (14.7)
1	1	FT16	2.69 (68.3)	1.82 (46.3)	0.80 (20.3)
in.	mm	——	mm (in.)		
1/4	6	MT6	44.4 (1.75)	20.6 (0.81)	4.1 (0.16)
3/8	10	MT10	47.0 (1.85)	26.0 (1.02)	7.1 (0.28)
1/2	12	MT12	57.2 (2.25)	29.0 (1.14)	8.9 (0.35)

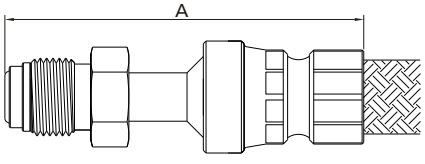
Tube Fittings



Automatic Weld Style-1 in. and Under

Nominal Hose Size	Tube Fitting Size	End Connection Designator	Dimensions		
			A	Maximum Outside Dimension	Minimum Inside Diameter
in.	in.		in. (mm)		
1/4	1/4	FL4	1.94 (49.3)	0.94 (23.8)	0.19 (4.8)
1/4	3/8	FL6	2.00 (50.8)	0.94 (23.8)	0.28 (7.1)
3/8	3/8	FL6	2.02 (51.3)	1.15 (29.3)	0.28 (7.1)
1/2	1/2	FL8	2.24 (56.9)	1.30 (33.0)	0.41 (10.4)
1/2	5/8	FL10	2.27 (57.7)	1.30 (33.0)	0.50 (12.7)
3/4	3/4	FL12	2.35 (59.7)	1.74 (44.2)	0.63 (16.0)
1	1	FL16	2.64 (67.1)	2.02 (51.3)	0.88 (22.4)
1 1/4	1 1/4	FL20	4.04 (103)	2.23 (58.9)	1.09 (27.7)
1 1/2	1 1/2	FL24	4.75 (121)	2.61 (66.3)	1.34 (34.0)
2	2	FL32	5.72 (145)	3.48 (88.4)	1.88 (47.8)
in.	mm	——	mm (in.)		
1/4	6	ML6	62.2 (2.45)	23.8 (0.94)	4.8 (0.19)
1/4	8	ML8	63.2 (2.49)	23.8 (0.94)	6.4 (0.25)
3/8	10	ML10	51.6 (2.03)	29.3 (1.15)	7.9 (0.31)
1/2	12	ML12	56.9 (2.24)	33.0 (1.30)	9.7 (0.38)

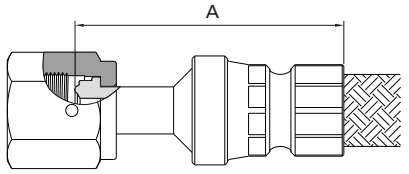
Male FR Metal Gasket Face Seal Fittings Swivel



FR Size	Nominal Hose Size	End Connection Designator	Dimensions		
			A	Minimum Inside Diameter	Maximum Outside Dimension
in.	in.		in. (mm)		
1/4	1/4	SFR4	2.60 (66.0)	0.18 (4.6)	0.81 (20.6)
1/2	1/2	SFR8	2.83 (71.9)	0.40 (10.2)	1.14 (29.0)
3/4	3/4	SFR12	4.19 (106)	0.65 (16.5)	1.54 (39.1)
1	1	SFR16	4.80 (122)	0.87 (22.1)	1.88 (47.7)

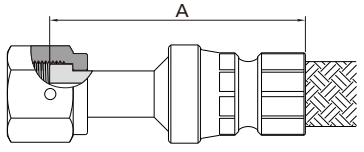
End Connections

Female FR Metal Gasket Face Seal Fittings Swivel



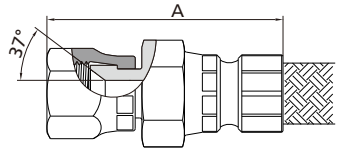
FR Size	Nominal Hose Size	End Connection Designator	Dimensions		
			A	Minimum Inside Diameter	Maximum Outside Dimension
in.	in.		in. (mm)		
1/4	1/4	SFFR4	2.00 (50.8)	0.18 (4.6)	0.87 (22.1)
1/2	1/2	SFFR8	2.16 (54.9)	0.40 (10.2)	1.23 (31.3)
3/4	3/4	SFFR12	4.19 (106)	0.65 (16.5)	1.74 (44.2)
1	1	SFFR16	4.80 (122)	0.87 (22.1)	2.03 (51.6)

Female FO O-Ring Face Seal Fittings Swivel



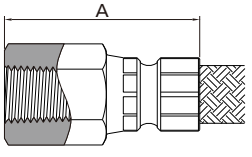
FO Size	Nominal Hose Size	End Connection Designator	Dimensions		
			A	Minimum Inside Diameter	Maximum Outside Dimension
in.	in.		in. (mm)		
1/4	1/4	SFFO4	2.11 (53.6)	0.18 (4.6)	0.81 (20.6)
1/2	1/2	SFFO8	2.14 (54.4)	0.40 (10.2)	1.23 (31.3)

SAE 37° (JIC) Female Swivel



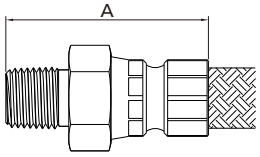
Swivel Size	Nominal Hose Size	End Connection Designator	Dimensions		
			A	Minimum Inside Diameter	Maximum Outside Dimension
in.	in.		in. (mm)		
1/4	1/4	SAN4	1.87 (47.5)	0.17 (4.3)	0.81 (20.6)
3/8	3/8	SAN6	1.98 (50.3)	0.28 (7.1)	1.05 (26.6)
1/2	1/2	SAN8	2.25 (57.2)	0.42 (10.7)	1.23 (31.3)

Female Pipe Threads, NPT

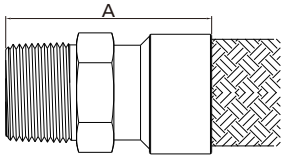


NPT Size	Nominal Hose Size	End Connection Designator	Dimensions		
			A	Minimum Inside Diameter	Maximum Outside Dimension
in.	in.		in. (mm)		
1/4	1/4	FNS4	1.81 (46.0)	0.28 (7.1)	0.94 (23.8)
3/8	3/8	FNS6	1.87 (47.5)	0.38 (9.7)	1.15 (29.3)
1/2	1/2	FNS8	2.18 (55.4)	0.47 (11.9)	1.30 (33.0)
3/4	3/4	FNS12	2.21 (56.1)	0.72 (18.3)	1.74 (44.2)

Male Pipe Threads, NPT



Automatic Weld Style-1 in. and Under



Manual Weld Style-Over 1 in.

NPT Size	Nominal Hose Size	End Connection Designator	Dimensions		
			A	Minimum Inside Diameter	Maximum Outside Dimension
in.	in.		in. (mm)		
1/4	1/4	NS4	1.80 (45.7)	0.28 (7.1)	0.94 (23.8)
1/4	3/8	NS4	1.81 (46.0)	0.28 (7.1)	1.15 (29.3)
3/8	3/8	NS6	1.81 (46.0)	0.38 (9.7)	1.15 (29.3)
1/2	1/4	NS8	1.99 (50.6)	0.47 (11.9)	1.02 (25.8)
1/2	1/2	NS8	2.15 (54.6)	0.47 (11.9)	1.30 (33.0)
3/4	3/4	NS12	2.22 (56.4)	0.63 (16.0)	1.74 (44.2)
1	1	NS16	2.54 (64.5)	0.88 (22.4)	2.02 (51.3)
1 1/4	1 1/4	NS20	3.06 (77.7)	1.09 (27.7)	2.31 (58.7)
1 1/2	1 1/2	NS24	3.72 (94.5)	1.34 (34.0)	2.31 (58.7)
2	2	NS32	4.19 (106)	1.81 (46.0)	3.19 (81.0)

Options

Anti-whip Cable

- 304 stainless steel cable
- Available on hoses without changing the technical parameters of hoses
- Prevent hoses from whipping around and causing serious injuries in the event of fitting blow-off or hose burst

Ordering Number Description

SS - MH4 - FL6 - NS6 - F36 - R - Z - SK

End Connection Material	
SS	316 SS
904L	904L SS

Hose	
MH	MH Metal Hose
MM	MM Metal Hose
MX	MX Metal Hose

Nominal Hose Size	
4	1/4"
6	3/8"
8	1/2"
12	3/4"
16	1"
20	1 1/4"
24	1 1/2"
32	2"

End Connection 1 Type	
ML	Metric Tube Fitting
FL	Fractional Tube Fitting
MT	Metric Tube Adapter
FT	Fractional Tube Adapter
FNS	Female NPT
NS	Male NPT
FRT	Female BSPT
RT	Male BSPT
FMS	Female Metric Thread (for RG-M)
MS	Male Metric Thread (for RG-M)
SAN	Female JIC 37° Flare Swivel
AN	Male JIC 37° Flare
SFFR	Female FR Fitting Swivel
SFR	Male FR Fitting Swivel
OTB	Tube Butt Weld Fitting

End Connection 1 Size	
3	3/16"
4	1/4"
6	3/8" or 6 mm
8	1/2" or 8 mm
10	5/8" or 10 mm
12	3/4" or 12 mm
14	M14 x 1.5
16	1" or 16 mm
18	M18 x 1.5
20	M20 x 1.5

End Connection 2 Type and Size	
	Same as End 1
Specified in the same way as the end connection 1 type and size	

Overall Length	
F10	10 in.
F12	12 in.
F14	14 in.
F18	18 in.
F24	24 in.
F36	36 in.
F48	48 in.
F60	60 in.
F72	72 in.
F96	96 in.
F120	120 in.
FXX	XX in. (XX is a multiple of 0.1)
MXX	XX mm (XX is a multiple of 10)

Convolution	
	MX Annular Convoluted
	MH, MM Helical Convoluted
R	Annular (for MM series only)

Overbraid	
	304
Z	316L (Not applicable to MM series annular hoses)

Option①	
	None
SK	Anti-whip Cable
AR2	Helium Leak Testing (1×10^{-9} std cm^3/s)

Example: SS-MH4-FT6-M710

SS: End connection material is 316 stainless steel.
MH4: MH series, nominal hose size is 1/4".
FT6: End connection 1 is 3/8" tube adapter.
End connection 2 is 3/8" tube adapter.
M710: Overall length is 710 mm.

To select multiple optional accessories, add their designators in top-to-bottom order, separated by hyphens.
Example: SS-MH4-FL6-NS6-F36-SK-AR2

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

Connections are described based on the following rules:
1. Metric Tube Fitting - Fractional Tube Fitting - Metric Tube Adapters - Fractional Tube Adapters - NPT Threads - BSPT Threads - BSPP Threads - SAE/MS Parallel Threads - 37° Flare - FR Fitting - OTB Tube Butt Weld Fitting - Others
2. Put the sizes from the biggest down to the smallest if they are of the same type.
3. Put the female before male if they are of the same type and size.

Formable Metal Flexible Hoses

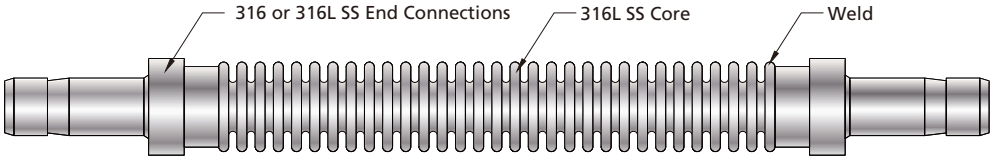
HMF Series

Introduction

HMF Series Formable Metal Flexible Hoses feature an all-metal construction that prevents media permeation, making them ideal for static applications with stringent sealing requirements. These hoses can be manually formed to the desired shape and will retain their form to compensate for pipeline misalignment and vibration under vacuum or low-pressure conditions, thereby improving installation efficiency and overall system reliability.

Features

◎ Core material: 316L stainless steel
End connection material: 316 or 316L stainless steel
◎ Nominal hose sizes: 1/4" to 1/2"
◎ Working pressure range: Vacuum to 135 psig (9.3 bar)
◎ All-metal construction suitable for applications with strict media permeation requirements
◎ Optional additional helium leak test with a leak rate ≤ 1×10^{-9} std·cm^3/s
◎ Custom lengths available



Technical Parameters

Nominal Hose Size	Inside Diameter	Outside Diameter	Min. Center Line Bend Radius		Temperature Range	Working Pressure 10^{-9} torr to ...	Working Pressure at 70 °F (20 °C)
			Annular Convoluted Core				
			Static	Dynamic ①			
in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	°F (°C)	psig (bar)	psig (bar)
1/4 (6.4)	0.25 (6.4)	0.38 (9.7)	1.00 (25.4)	–	-325 to 1000 (-200 to 537)	100 (6.9)	135 (9.3)
3/8 (9.7)	0.39 (10.0)	0.59 (15.0)	1.20 (30.5)			25 (1.7)	70 (4.8)
1/2 (12.7)	0.48 (12.1)	0.73 (18.6)	1.50 (38.1)				70 (4.8)

① Not suitable for dynamic applications

Testing

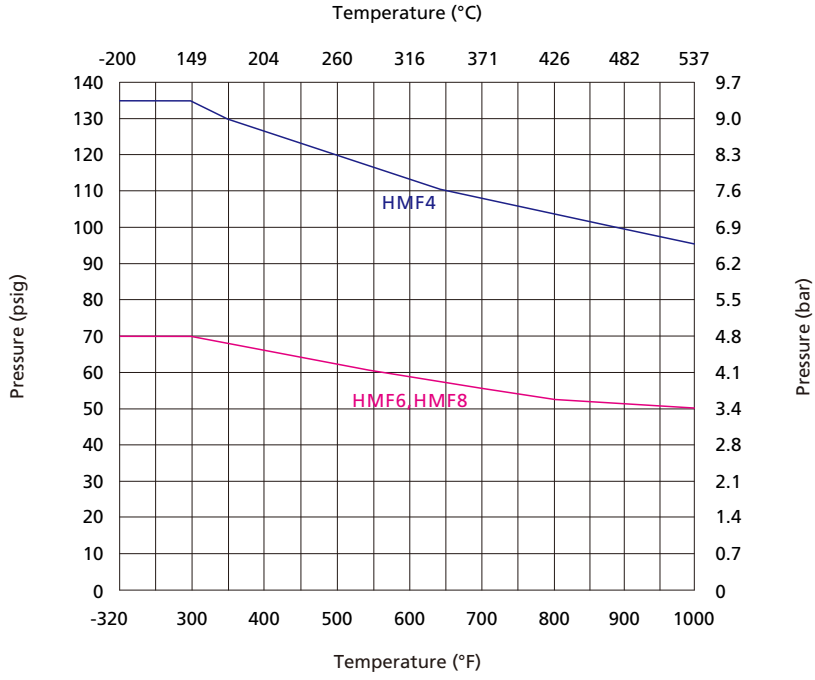
Every FITOK metal flexible hose is factory leak-tested with helium to a maximum leak rate of 1×10^{-7} std·cm^3/s.
For additional requirements, please contact FITOK Group or our authorized distributors.

Cleaning and Packaging

FITOK metal flexible hoses are cleaned in accordance with the FITOK Standard Cleaning and Packaging Process (FC-01) by default. Products cleaned per the Special Cleaning and Packaging Process (FC-02) are available upon request. Each metal flexible hose is packed in a PC transparent tube or bagged and boxed/crated. Longer hoses are coiled, then bagged and boxed or crated.

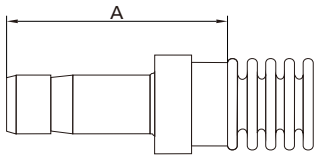
Pressure vs. Temperature

The peak value of pressure fluctuations, vibrations, or pulses in the system must not exceed 50% of the selected flexible hose's rated working pressure.



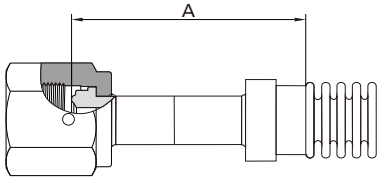
End Connections

Tube Adapters



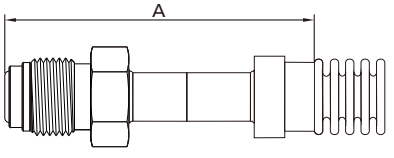
Tube Adapter Size	Nominal Hose Size	End Connection Designator	Dimensions		
			Minimum Inside Diameter	Maximum Outside Dimension	A
in.	in.		in. (mm)		
1/4	1/4	FT4	0.17 (4.3)	0.41 (10.4)	0.96 (24.5)
3/8	3/8	FT6	0.27 (6.8)	0.63 (16.0)	1.03 (26.2)
1/2	1/2	FT8	0.37 (9.4)	0.83 (21.0)	1.30 (33.1)
mm	in.	——	mm (in.)		
6	1/4	MT6	4.1 (0.16)	10.4 (0.41)	24.4 (0.96)
10	3/8	MT10	7.1 (0.28)	16.0 (0.63)	26.2 (1.03)
12	1/2	MT12	8.8 (0.35)	21.0 (0.83)	31.8 (1.25)

Rotatable Female FR Fittings



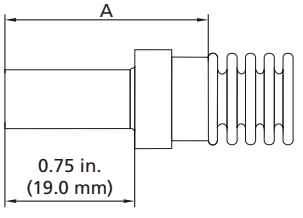
FR Fitting Size	Nominal Hose Size	End Connection Designator	Dimensions		
			Minimum Inside Diameter	Maximum Outside Dimension	A
in.	in.		in. (mm)		
1/4	1/4	SFFR4	0.18 (4.6)	0.87 (22.0)	1.32 (33.5)
1/2	1/2	SFFR8	0.41 (10.4)	1.23 (31.2)	1.38 (35.0)

Rotatable Male FR Fittings



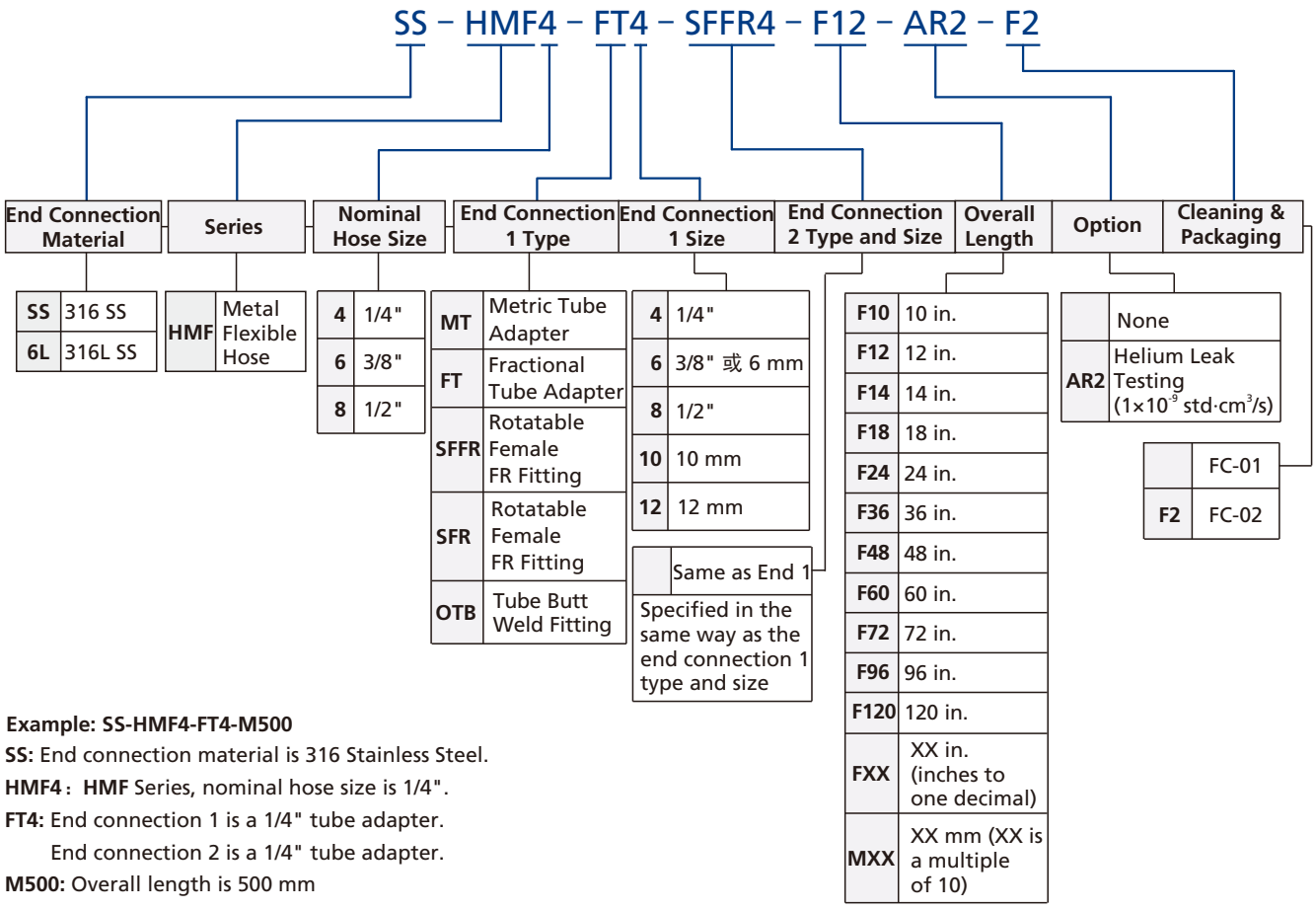
FR Fitting Size	Nominal Hose Size	End Connection Designator	Dimensions		
			Minimum Inside Diameter	Maximum Outside Dimension	A
in.	in.		in. (mm)		
1/4	1/4	SFR4	0.18 (4.6)	0.72 (18.4)	2.04 (51.8)
1/2	1/2	SFR8	0.41 (10.4)	1.08 (27.5)	1.99 (50.5)

Tube Butt Welds



Tube Butt Weld Size	Nominal Hose Size	End Connection Designator	Dimensions		
			Minimum Inside Diameter	Maximum Outside Dimension	A
in.	in.		in. (mm)		
1/4	1/4	OTB4	0.18 (4.6)	0.41 (10.4)	1.09 (27.8)
3/8	3/8	OTB6	0.30 (7.7)	0.63 (16.0)	1.09 (27.8)
1/2	1/2	OTB8	0.40 (10.2)	0.83 (21.0)	1.09 (27.8)

Ordering Number Description



Example: SS-HMF4-FT4-M500

SS: End connection material is 316 Stainless Steel.

HMF4：HMF Series, nominal hose size is 1/4".

FT4: End connection 1 is a 1/4" tube adapter.
End connection 2 is a 1/4" tube adapter.

M500: Overall length is 500 mm

Connections are described based on the following rules:

1. Metric Tube Adapter - Fractional Tube Adapter - FR Fitting - OTB Tube Butt Weld Fitting - Others
2. For connections of the same type, list sizes from largest to smallest.
3. For the same type and size, list female before male.

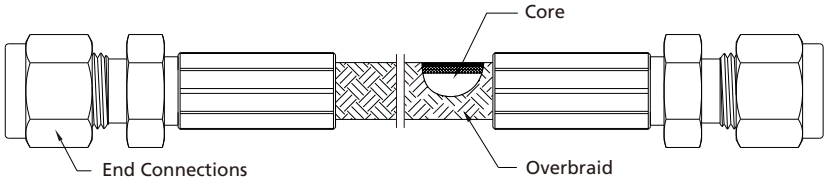
Note: "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.

Stainless Steel Braided Fluoropolymer Hoses

PS Series

Features

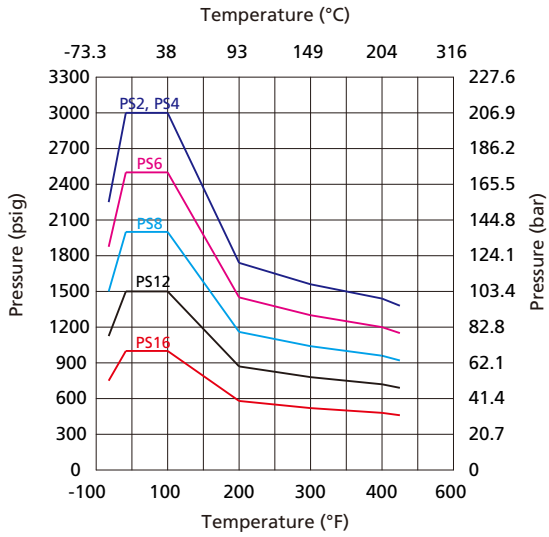
- Three inner tube materials are available:
  PTFE: Suitable for applications requiring chemical compatibility.
  Carbon-filled PTFE: Suitable for applications requiring static dissipation.
  PFA: Suitable for applications requiring high permeation resistance and higher purity.
- Overbraid material: 304 stainless steel or 316L stainless steel
- Nominal hose size: 1/8" to 1"
- Working pressure up to: 3000 psig (207 bar)
- Working temperature: -65°F to 400°F (-53°C to 204°C)
- Lightweight construction for easy handling and installation
- Standard and custom length available



Hose Technical Parameters

Nominal Hose Size	Inside Diameter	Min. Inside Bend Radius		Temperature Range	Working Pressure at 70°F (20°C)	Min. Burst Pressure at 70°F (20°C)
		Static	Dynamic			
in. (mm)	in. (mm)	in. (mm)	in. (mm)	°F (°C)	psig (bar)	psig (bar)
1/8 (3.2)	0.13 (3.2)	1.5 (38.1)	3.75 (95.2)	-65 to 400 (-53 to 204)	3000 (206)	12000 (826)
1/4 (6.4)	0.19 (4.8)	1.5 (38.1)	2.0 (50.8)		3000 (206)	12000 (826)
3/8 (9.5)	0.31 (7.9)	3.5 (88.9)	5.0 (127)		2500 (172)	10000 (690)
1/2 (12.7)	0.41 (10.3)	4.5 (114)	6.0 (152)		2000 (137)	8000 (551)
3/4 (19.0)	0.63 (15.9)	6.0 (152)	7.5 (190)		1500 (103)	6000 (413)
1 (25.4)	0.88 (22.2)	9.0 (229)	11.3 (287)		1000 (68)	4000 (275)

Pressure vs. Temperature



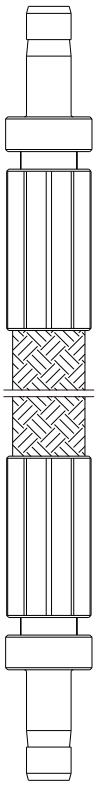
Testing

Fluoropolymer Lined Hoses undergoes hydrostatic testing at 1.5 times its working pressure and pneumatic testing at 1000 psig.

Cleaning and Packaging

FITOK Fluoropolymer Lined Hoses components are cleaned in accordance with FITOK *Standard Cleaning and Packaging Process (FC-01)* for general industrial procedures.
Shorter hoses are packed in cartons with suitable protective material, longer hoses are coiled, bagged and boxed or crated.

Fluoropolymer Lined Hoses Standard Assemblies



Nominal Hose Size	Tube Adapter Size	Overall Length	Ordering Number	Minimum Inside Diameter	Maximum Outside Dimension
in.	in.	in. (mm)		in. (mm)	in. (mm)
1/8	1/8	6.0 (153)	SS-PS2-FT2-F6-	0.08 (2.0)	0.46 (11.6)
		12.0 (305)	SS-PS2-FT2-F12-		
		18.0 (458)	SS-PS2-FT2-F18-		
		24.0 (610)	SS-PS2-FT2-F24-		
		36.0 (915)	SS-PS2-FT2-F36-		
1/4	1/4	6.0 (153)	SS-PS4-FT4-F6-	0.13 (3.3)	0.49 (12.4)
		12.0 (305)	SS-PS4-FT4-F12-		
		18.0 (458)	SS-PS4-FT4-F18-		
		24.0 (610)	SS-PS4-FT4-F24-		
		36.0 (915)	SS-PS4-FT4-F36-		
		48.0 (1220)	SS-PS4-FT4-F48-		
		60.0 (1530)	SS-PS4-FT4-F60-		
		72.0 (1829)	SS-PS4-FT4-F72-		
		120.0 (3050)	SS-PS4-FT4-F120-		
3/8	3/8	12.0 (305)	SS-PS6-FT6-F12-	0.27 (6.9)	0.73 (18.5)
		18.0 (458)	SS-PS6-FT6-F18-		
		24.0 (610)	SS-PS6-FT6-F24-		
		36.0 (915)	SS-PS6-FT6-F36-		
		48.0 (1220)	SS-PS6-FT6-F48-		
		60.0 (1530)	SS-PS6-FT6-F60-		
		72.0 (1829)	SS-PS6-FT6-F72-		
		96.0 (2439)	SS-PS6-FT6-F96-		
		120.0 (3050)	SS-PS6-FT6-F120-		
1/2	1/2	12.0 (305)	SS-PS8-FT8-F12-	0.36 (9.1)	0.86 (21.8)
		24.0 (610)	SS-PS8-FT8-F24-		
		36.0 (915)	SS-PS8-FT8-F36-		
		48.0 (1220)	SS-PS8-FT8-F48-		
		60.0 (1530)	SS-PS8-FT8-F60-		
		72.0 (1829)	SS-PS8-FT8-F72-		
3/4	3/4	24.0 (610)	SS-PS12-FT12-F24-	0.53 (13.5)	1.04 (26.4)
		36.0 (915)	SS-PS12-FT12-F36-		
1	1	36.0 (915)	SS-PS16-FT16-F36-	0.80 (20.3)	1.36 (34.5)
		48.0 (1220)	SS-PS16-FT16-F48-		
in.	mm	in. (mm)	——	in. (mm)	in. (mm)
1/4	6	12.0 (305)	SS-PS4-MT6-F12-	0.16 (4.1)	0.54 (13.7)
		24.0 (610)	SS-PS4-MT6-F24-		
		36.0 (915)	SS-PS4-MT6-F36-		
1/2	12	24.0 (610)	SS-PS8-MT12-F24-	0.33 (8.4)	0.86 (21.8)
		36.0 (915)	SS-PS8-MT12-F36-		

1. All dimensions are for reference only and are subject to change. For dimensions not shown above, please contact FITOK Group or our authorized distributors.

2. Sizes and types listed are standard. Other sizes and types are available on request.

Options

Anti-whip Cable

- 304 stainless steel cable
- Available on hoses without changing the technical parameters of hoses
- Prevent hoses from whipping around and causing serious injuries in the event of fitting blow-off or hose burst

Spring Guard

- 302 stainless steel material
- Available on hoses without changing the technical parameters of hoses
- Protect the hose from abrasion, overbending, and kinking

Fire Jacket

- Braided fiberglass coated with organic, high-temperature-resistant iron oxide red silicone rubber
- Offers excellent flame and fire protection and has good thermal and electrical insulation with resistance to acid & alkili
- Operating temperature from -65 to 500°F (-53 to 260°C) with max. short-term exposure temperature to 3002°F (1650°C).

Ordering Number Description

SS – PS4 – FL6 – FT6 – M1000 – Z – SPF2

End Connection Material	
SS	316 SS
6L	316L SS
S4	304 SS
INC	Alloy 600
A20	Alloy 20
HC	Alloy C-276
TI	Titanium
904L	904L SS

Hose	
PS	Stainless Steel Braided Fluoropolymer Hoses

Nominal Hose Size	
2	1/8"
4	1/4"
6	3/8"
8	1/2"
12	3/4"
16	1"

End Connection 1 Type	
FNS	Female NPT
NS	Male NPT
FRT	Female BSPT
RT	Male BSPT
FMS	Female Metric Thread (for RG)
MS	Male Metric Thread (for RG)
FL	Fractional Tube Fitting
ML	Metric Tube Fitting
FT	Fractional Tube Adapter
MT	Metric Tube Adapter
AN	Male JIC 37° Flare
SAN	Female JIC 37° Flare Swivel
SMS	Female Metric Thread Swivel (for RG)
SNS	Male NPT Swivel
SRT	Male BSPT Swivel
SRG	Female BSPP Swivel (for RG)

End Connection 1 Size	
2	1/8"
4	1/4"
6	3/8" or 6 mm
8	1/2" or 8 mm
10	5/8" or 10 mm
12	3/4" or 12 mm
14	M14 x 1.5
16	1" or 16 mm
18	M18 x 1.5
20	M20 x 1.5

End Connection 2 Type and Size	
	Same as End 1
Specified in the same way as the end connection 1 type and size	

Overall Length	
F10	10 in.
F12	12 in.
F14	14 in.
F18	18 in.
F24	24 in.
F36	36 in.
F48	48 in.
F60	60 in.
F72	72 in.
F96	96 in.
F120	120 in.
FXX	XX in. (XX is a multiple of 0.1)
MXX	XX mm (XX is a multiple of 10)

Core and Overbraid	
	PTFE Core, 304 SS Overbraid
Z	PTFE Core, 316L SS Overbraid
A	PFA Core, 304 SS Overbraid
AZ	PFA Core, 316L SS Overbraid
CB	Carbon Black–filled PTFE Core, 304 SS Overbraid

Option	
	None
SP	Spring Guard
SK	Anti-whip Cable
F	Fire Jacket

Cleaning and Packaging	
	FC-01
F2	FC-02

Example: **SS-PS4-SAN4-M500**

SS: End connection material is 316 stainless steel.

PS4: PS series, hose inside diameter is 3/16".

SAN4: End connection 1 is 1/4" female JIC 37° flare swivel.
End connection 2 is 1/4" female JIC 37° flare swivel.

M500: Overall length is 500 mm.

Notes: 1. Designers should take into account the permeability of Fluoropolymer Lined hoses. For applications with stringent permeability requirements, the use of metal hoses is recommended, or consult FITOK
2. "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.

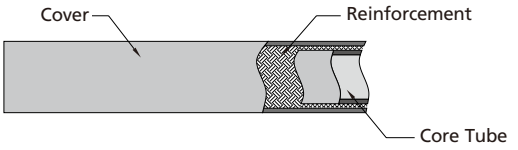
Connections are described based on the following rules:
1. Metric Tube Fitting - Fractional Tube Fitting - Metric Tube Adapters - Fractional Tube Adapters - NPT Threads - BSPT Threads - BSPP Threads - SAE/MS Parallel Threads - 37° Flare - Others
2. Put the sizes from the biggest down to the smallest if they are of the same type.
3. Put the female before male if they are of the same type and size.

Multipurpose Push-on Hoses

MP Series

Features

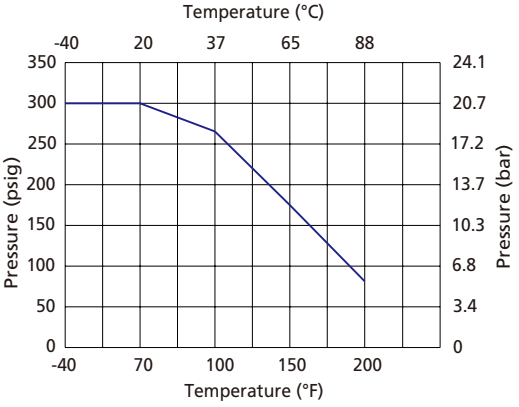
- Cover: weatherproof, abrasion withstanding and oil-resistant synthetic rubber
- Reinforcement: High-tensile fibre braid
- Core tube: Nitrile (NBR)
- End connection materials: stainless steel and brass
- Hose colors: blue, black, green, gray, red and yellow
- Nominal hose size: 1/4" to 1"
- Working pressure up to: 300 psig (20.7 bar)
- Working temperature: -40°F to 200°F (-40°C to 93°C)
- End connections reusable
- Custom length available



Hose Technical Parameters

Nominal Hose Size	Inside Diameter	Min. Inside Bend Radius	Temperature Range	Working Pressure at -40 to 70°F (-40 to 20°C)	Min. Burst Pressure at 70°F (20°C)
in. (mm)	in. (mm)	in. (mm)	°F (°C)	psig (bar)	psig (bar)
1/4 (6.4)	0.26 (6.6)	2.50 (63.5)	-40 to 200 (-40 to 93)	300 (20.6)	1200 (82.7)
3/8 (9.5)	0.39 (9.9)	3.00 (76.2)			
1/2 (12.7)	0.50 (12.7)	5.00 (127)			
3/4 (19.0)	0.76 (19.3)	7.00 (178)			
1 (25.4)	1 (25.4)	8.00 (203)			

Pressure vs. Temperature



Testing

Every FITOK multipurpose push-on hose assembly is factory tested with pure water at 1.5 times the maximum working pressure.

Cleaning and Packaging

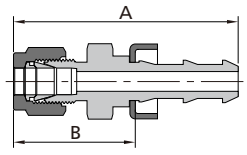
FITOK multipurpose push-on hose components are cleaned in accordance with FITOK *Standard Cleaning and Packaging Process (FC-01)* for general industrial procedures.
Shorter hoses are packed in cartons with suitable protective material, longer hoses are coiled, bagged and boxed or crated.

Caution

- Do not reuse the hose.

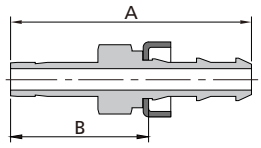
Multipurpose Push-on Hose End Connections

Tube Fittings



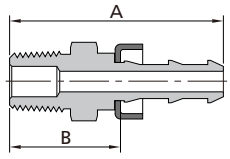
Nominal Hose Size	Tube Fitting Size	Basic Ordering Number	Dimensions, in. (mm)			
			A	B	Minimum Inside Diameter	Maximum Outside Dimension
in.	in.					
1/4	1/4	-MP4-FL4	1.97 (50.0)	1.15 (29.2)	0.16 (4.0)	0.65 (16.5)
3/8	3/8	-MP6-FL6	2.11 (53.6)	1.18 (30.0)	0.27 (6.8)	0.87 (22.0)
1/2	1/2	-MP8-FL8	2.48 (63.0)	1.37 (34.9)	0.37 (9.5)	1.01 (25.7)

Tube Adapters



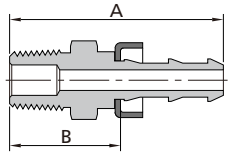
Nominal Hose Size	Tube Adapter Size	Basic Ordering Number	Dimensions, in. (mm)			
			A	B	Minimum Inside Diameter	Maximum Outside Dimension
in.	in.					
1/4	1/4	-MP4-FT4	1.93 (49.0)	1.11 (28.2)	0.16 (4.0)	0.65 (16.5)
3/8	3/8	-MP6-FT6	2.03 (51.6)	1.10 (28.0)	0.27 (6.8)	0.87 (22.0)
1/2	1/2	-MP8-FT8	2.47 (62.7)	1.36 (34.6)	0.37 (9.4)	1.01 (25.7)
3/4	3/4	-MP12-FT12	3.14 (79.8)	1.43 (36.2)	0.58 (14.7)	1.30 (33.0)
in.	mm	——	mm (in.)			
1/4	6	-MP4-MT6	49.0 (1.93)	28.2 (1.11)	4.0 (0.16)	16.5 (0.65)
1/4	8	-MP4-MT8	48.8 (1.92)	28.0 (1.10)	4.0 (0.16)	16.5 (0.65)
3/8	8	-MP6-MT8	52.1 (2.05)	28.5 (1.12)	5.6 (0.22)	22.0 (0.87)
3/8	10	-MP6-MT10	51.6 (2.03)	28.0 (1.10)	6.8 (0.27)	20.2 (0.80)
1/2	12	-MP8-MT12	62.7 (2.47)	34.6 (1.36)	8.8 (0.35)	25.7 (1.01)
3/4	18	-MP12-MT18	79.8 (3.14)	36.2 (1.43)	13.9 (0.55)	31.2 (1.23)

Male NPT Connectors



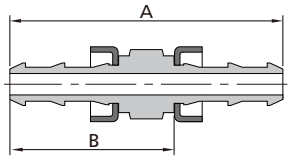
Nominal Hose Size	NPT Tapered Thread Size	Basic Ordering Number	Dimensions, in. (mm)			
			A	B	Minimum Inside Diameter	Maximum Outside Dimension
in.	in.					
1/4	1/4	-MP4-NS4	1.72 (43.7)	0.90 (22.9)	0.16 (4.0)	0.65 (16.5)
3/8	1/4	-MP6-NS4	1.80 (45.7)	0.87 (22.1)	0.27 (6.8)	0.80 (20.2)
3/8	3/8	-MP6-NS6	1.91 (48.6)	0.98 (25.0)	0.27 (6.8)	0.94 (23.8)
1/2	1/2	-MP8-NS8	2.19 (55.6)	1.08 (27.5)	0.37 (9.5)	1.01 (25.7)
3/4	3/4	-MP12-NS12	2.96 (75.1)	1.24 (31.5)	0.61 (15.5)	1.30 (33.0)

Male BSPT Connectors



Nominal Hose Size	BSPT Tapered Thread Size	Basic Ordering Number	Dimensions, in. (mm)			
			A	B	Minimum Inside Diameter	Maximum Outside Dimension
in.	in.					
1/4	1/4	-MP4-RT4	1.72 (43.7)	0.90 (22.9)	0.16 (4.0)	0.65 (16.5)
3/8	1/4	-MP6-RT4	1.80 (45.7)	0.87 (22.1)	0.27 (6.8)	0.80 (20.2)
3/8	3/8	-MP6-RT6	1.84 (46.7)	0.91 (23.1)	0.27 (6.8)	0.87 (22.0)
1/2	1/2	-MP8-RT8	2.19 (55.6)	1.08 (27.5)	0.38 (9.7)	1.01 (25.7)
3/4	3/4	-MP12-RT12	2.96 (75.1)	1.24 (31.5)	0.61 (15.5)	1.30 (33.0)

Unions



Nominal Hose Size	Basic Ordering Number	Dimensions, in. (mm)			
		A	B	Minimum Inside Diameter	Maximum Outside Dimension
in.					
1/4	-MP4-4	2.19 (55.6)	1.37 (34.8)	0.16 (4.0)	0.58 (14.7)
3/8	-MP6-6	2.38 (60.4)	1.45 (36.8)	0.27 (6.8)	0.72 (18.3)
1/2	-MP8-8	2.75 (69.8)	1.64 (41.7)	0.37 (9.5)	0.87 (22.0)
3/4	-MP12-12	3.96 (100.5)	2.24 (56.9)	0.61 (15.5)	1.23 (31.2)

Hose Ordering Number Description

MP – 4 – F36 – BK

Series

MP	

Nominal Hose Size

4	1/4"
6	3/8"
8	1/2"
12	3/4"
16	1"

Overall Length

F10	10 in.
F12	12 in.
F14	14 in.
F18	18 in.
F24	24 in.
F36	36 in.
F48	48 in.
F60	60 in.
F72	72 in.
F96	96 in.
F120	120 in.
FXX	XX in. (XX is a multiple of 0.1)
MXX	XX mm (XX is a multiple of 10)

Hose Color

	Blue
BK	Black
RD	Red
GR	Green
GY	Gray
YW	Yellow

Example: **MP-8-F60-BK**
MP: Hose series
8: Nominal hose size is 1/2".
F60: Overall length is 60".
BK: Hose color is black.
Note: "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.

Multipurpose Push-On Hose Assemblies

Ordering Number Description

SS – MP4 – FL4 – FT4 – F36 – BK

End Connection Material	
SS	316 SS
B	Brass
S4	304 SS
904L	904L SS

Series	
MP	

Nominal Hose Size	
4	1/4"
6	3/8"
8	1/2"
12	3/4"
16	1"

End Connection 1 Type	
ML	Metric Tube Fitting
FL	Fractional Tube Fitting
MT	Metric Tube Adapter
FT	Fractional Tube Adapter
NS	Male NPT
RT	Male BSPT

End Connection 1 Size	
2	1/8"
4	1/4"
6	3/8" or 6 mm
8	1/2" or 8 mm
10	10 mm
12	3/4" or 12 mm
18	18 mm

End Connection 2 Type and Size	
	Same as End 1
Specified in the same way as the end connection 1 type and size	

Overall Length	
F10	10 in.
F12	12 in.
F14	14 in.
F18	18 in.
F24	24 in.
F36	36 in.
F48	48 in.
F60	60 in.
F72	72 in.
F96	96 in.
F120	120 in.
FXX	XX in. (XX is a multiple of 0.1)
MXX	XX mm (XX is a multiple of 10)

Hose Color	
	Blue
BK	Black
RD	Red
GR	Green
GY	Gray
YW	Yellow

Example: **SS-MP4-FT4-F28-BK**

SS: End connection material is 316 stainless steel.
MP4: MP series, nominal hose size is 1/4" .
FT4: End connection 1 is 1/4" tube adapter.
End connection 2 is 1/4" tube adapter.
F28: Overall length is 28".
BK : Hose color is black.

Connections are described based on the following rules:
1. Metric Tube Fitting - Fractional Tube Fitting - Metric Tube Adapters - Fractional Tube Adapters - NPT Threads - BSPT Threads - BSPP Threads - SAE/MS Parallel Threads - 37° Flare - Others
2. Put the sizes from the biggest down to the smallest if they are of the same type.
3. Put the female before male if they are of the same type and size.

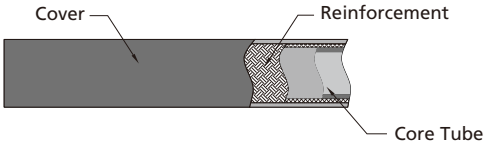
Note: "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.

Thermoplastic Hoses

TH Series

Features

- Cover: Polyurethane, resists oil, weather and abrasion
- Reinforcement: double-braid high-strength synthetic fiber
- Core tube: nylon
- End connection materials: stainless steel
- Nominal hose size: 3/16" to 1"
- End connection sizes: 1/4" to 1" and 6 mm to 25 mm
- Working pressure up to: 5000 psig (345 bar)
- Working temperature: -40°F to 200°F (-40°C to 93°C)
- Custom length available



Technical Parameters

Thermoplastic Hydraulic Hose (SAE 100R7)

Nominal Hose Size	Min. Inside Bend Radius	Inside Diameter	Temperature Range	Working Pressure at 70°F (20°C)	Min. Burst Pressure at 70°F (20°C)	Specification
in. (mm)	in. (mm)	in. (mm)	°F (°C)	psig (bar)	psig (bar)	
3/16 (4.8)	1.58 (40)	0.19 (4.8)	-40 to 200 (-40 to 93)	3000 (207)	12000 (828)	SAE J517 100R7
1/4 (6.4)	1.97 (50)	0.25 (6.4)		2750 (189)	11000 (758)	
5/16 (8.0)	2.36 (60)	0.31 (7.9)		2500 (173)	10000 (690)	
3/8 (9.6)	2.95 (75)	0.38 (9.8)		2250 (155)	9000 (620)	
1/2 (12.7)	3.74 (95)	0.50 (12.7)		2000 (137)	8000 (551)	

Thermoplastic Hydraulic Hose (SAE 100R8)

Nominal Hose Size	Min. Inside Bend Radius	Inside Diameter	Temperature Range	Working Pressure at 70°F (20°C)	Min. Burst Pressure at 70°F (20°C)	Specification
in. (mm)	in. (mm)	in. (mm)	°F (°C)	psig (bar)	psig (bar)	
3/16 (4.8)	2.00 (50.8)	0.19 (4.8)	-40 to 200 (-40 to 93)	5000 (344)	20000 (1378)	SAE J517 100R8
1/4 (6.4)	2.00 (50.8)	0.25 (6.4)		5000 (344)	20000 (1378)	
3/8 (9.6)	2.50 (63.5)	0.38 (9.8)		4000 (275)	16000 (1102)	
1/2 (12.7)	4.00 (102)	0.50 (12.7)		3500 (241)	14000 (964)	
3/4 (19.0)	6.50 (165)	0.75 (19.0)		2250 (155)	9000 (620)	
1 (25.4)	10.0 (254)	1.00 (25.4)		2000 (137)	8000 (551)	

Testing

Every FITOK thermoplastic hose assembly is factory tested with pure water at 1.5 times the maximum working pressure.

Cleaning and Packaging

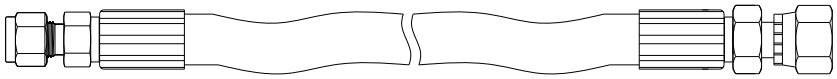
FITOK thermoplastic hose components are cleaned in accordance with FITOK *Standard Cleaning and Packaging Process (FC-01)* for general industrial procedures.
Shorter hoses are packed in cartons with suitable protective material, longer hoses are coiled, bagged and boxed or crated.

Options

Anti-whip Cable

- ◎ 304 stainless steel cable
- ◎ Available on hoses without changing the technical parameters of hoses
- ◎ Prevent hoses from whipping around and causing serious injuries in the event of fitting blow-off or hose burst

Thermoplastic Hose Assemblies



Ordering Number Description

SS – TH4 – FL4 – SAN4 – M1000 – R7 – SK

End Connection Material		Series	Nominal Hose Size		End Connection 1 Type		End Connection 1 Size		End Connection 2 Type and Size		Overall Length		Hose Code		Option	
SS	316 SS	TH	3	3/16"	ML	Metric Tube Fitting	4	1/4"		Same as End 1	F10	10 in.		None	SK	Anti-whip Cable
S4	304 SS		4	1/4"	FL	Fractional Tube Fitting	6	3/8" or 6 mm	Specified in the same way as the end connection 1 type and size		F12	12 in.	R7	100R7		
904L	904L SS		5	5/16"	MT	Metric Tube Adapter	8	1/2" or 8 mm			F14	14 in.	R8	100R8		
			6	3/8"	FT	Fractional Tube Adapter	10	5/8" or 10 mm			F18	18 in.				
			8	1/2"	NS	Male NPT	12	3/4" or 12 mm			F24	24 in.				
			16	1"	RT	Male BSPT	16	1" or 16 mm			F36	36 in.				
					SRG	Female BSPP Swivel (for RG)	25	25 mm			F48	48 in.				
					FMS	Female Metric Thread (for RG-M)					F60	60 in.				
					MS	Male Metric Thread (for RG-M)					F72	72 in.				
					SMS	Female Metric Thread Swivel (for RG)					F96	96 in.				
					SAN	Female JIC 37° Flare Swivel					F120	120 in.				
											FXX	XX in. (XX is a multiple of 0.1)				
											MXX	XX mm (XX is a multiple of 10)				

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

Connections are described based on the following rules:

1. Metric Tube Fitting - Fractional Tube Fitting - Metric Tube Adapters - Fractional Tube Adapters - NPT Threads - BSPT Threads - BSPP Threads - SAE/MS Parallel Threads - 37° Flare - Others
2. Put the sizes from the biggest down to the smallest if they are of the same type.
3. Put the female before male if they are of the same type and size.

Example: **SS-TH4-FL4-NS4-F36-R7**

SS: End connection material is 316 stainless steel.

TH4: TH series, nominal hose size is 1/4"

FL4: End connection 1 is 1/4" tube fitting.

NS4 : End connection 2 is 1/4 male NPT.

F36 : Overall length is 36"

R7 : SAE J517 100R7.

Compact Steel Wire Braided Hydraulic Hoses

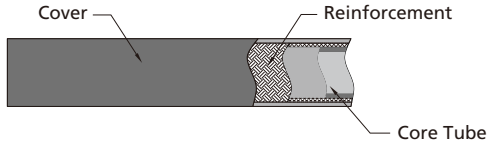
HCH Series

Introduction

HCH Series Compact Steel Wire Braided Hydraulic Hoses are designed with a synthetic rubber core for oil based or water based fluids. They feature multiple layers of high-tensile steel wire braiding for reinforcement, along with a weather-resistant, oil-resistant synthetic rubber cover. This construction provides excellent high-pressure resistance and a minimal bend radius. These hoses are primarily used with oil-based liquids such as hydraulic oil, gasoline, diesel, lubricating oil, as well as biodegradable hydraulic fluids, fire-resistant synthetic polyol esters, and other similar media.

Features

- Cover: Weatherproof, oil-resistant synthetic rubber
- Reinforcement: Double-layer of high-tensile steel wire braid
- Core tube: Synthetic rubber for oil based or water based fluids
- End connection material: Stainless steel
- Nominal hose size: 1/4" to 1/2"
- End connection sizes: 1/4" to 1" and 6 mm to 25 mm
- Working pressure up to 5800 psig (400 bar)
- Working temperature: -40°F to 212°F (-40°C to 100°C)



Hose Technical Parameters

Nominal Hose Size	Inside Diameter	Min. Bend Radius	Working Pressure at 70°F (20°C)	Min. Burst Pressure at 70°F (20°C)	Standard
in. (mm)	in. (mm)	in. (mm)	psig (bar)	psig (bar)	
1/4 (6.4)	0.26 (6.6)	2.95 (75)	5800 (400)	23200 (1600)	IS0 11237 2SC EN 857 2SC
1/2 (12.7)	0.51 (13.0)	5.12 (130)	3990 (275)	15950 (1100)	

Testing

Every FITOK hydraulic hose assembly is factory tested with pure water at 2 times the maximum working pressure.

Cleaning and Packaging

FITOK hydraulic hose components are cleaned in accordance with FITOK Standard Cleaning and Packaging Process (FC-01). Shorter hoses are packed in cartons with suitable protective material, longer hoses are coiled, bagged and boxed or crated.

Ordering Number Description

SS – HCH4 – FL4 – NS4 – M1000

End Connection Material	
SS	316 SS
S4	304 SS

Series	
HCH	

Nominal Hose Size	
4	1/4"
8	1/2"

End Connection 1 Type	
ML	Metric Tube Fitting
FL	Fractional Tube Fitting
MT	Metric Tube Adapter
FT	Fractional Tube Adapter
NS	Male NPT
RT	Male BSPT
SRG	Female BSPP Swivel (for RG)
FMS	Female Metric Thread (for RG-M)
MS	Male Metric Thread (for RG-M)
SMS	Female Metric Thread Swivel (for RG)
SAN	Female JIC 37° Flare Swivel

End Connection 1 Size	
4	1/4"
6	3/8" or 6 mm
8	1/2" or 8 mm
10	5/8" or 10 mm
12	3/4" or 12 mm
16	1" or 16 mm
25	25 mm

End Connection 2 Type and Size	
	Same as End Connection 1
Specified in the same way as End Connection 1	

Overall Length	
F10	10 in.
F12	12 in.
F14	14 in.
F18	18 in.
F24	24 in.
F36	36 in.
F48	48 in.
F60	60 in.
F72	72 in.
F96	96 in.
F120	120 in.
FXX	XX in. (inches to one decimal)
MXX	XX mm (XX is a multiple of 10)

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

Example: **SS-HCH4-FL4-NS4-F36**

SS: End connection material is 316 stainless steel

HCH4: HCH series, nominal hose size is 6.4 mm

FL4: End connection 1 is 1/4" tube fitting

NS4: End connection 2 is 1/4" male NPT

F36: Overall length is 36"

Connections are described based on the following rules:

1. Metric Tube Fitting - Fractional Tube Fitting - Metric Tube Adapters - Fractional Tube Adapters - NPT Threads - BSPT Threads - BSPP Threads - SAE/MS Parallel Threads - 37° Flare - Others
2. Put the sizes from the biggest down to the smallest if they are of the same type.
3. Put the female before male if they are of the same type and size.

Hose Connectors and Sleeves

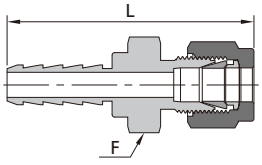
HC Series

Features

- Used to connect soft plastic or rubber tubing
- Working pressures and working temperatures are wider than those of the connected hoses
- Stainless steel or brass is available
- Shank design holds tubing inside diameter securely
- Hose connectors are reusable

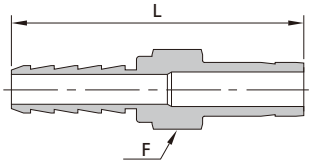
Hose Connectors

Tube Fittings



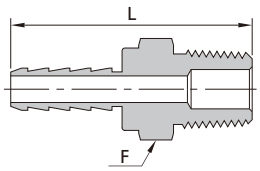
Hose ID	Tube Size	Basic Ordering Number	Dimensions		
			Minimum Inside Diameter	F	L
in.	in.		in. (mm)	in.	in. (mm)
1/8	1/8	-HC-F2-FL2	0.08 (2.0)	7/16	1.42 (36.1)
1/4	1/8	-HC-F4-FL2	0.09 (2.3)	7/16	1.81 (46.0)
	1/4	-HC-F4-FL4	0.19 (4.8)	9/16	1.92 (48.8)
3/8	1/4	-HC-F6-FL4	0.19 (4.8)	9/16	1.99 (50.6)
	3/8	-HC-F6-FL6	0.28 (7.1)	3/4	2.06 (52.3)
1/2	1/2	-HC-F8-FL8	0.38 (9.7)	7/8	2.24 (56.9)
mm	mm	——	mm (in.)	mm	mm (in.)
6	6	-HC-M6-ML6	4.8 (0.19)	14	49.5 (1.95)
8	8	-HC-M8-ML8	6.4 (0.25)	16	49.8 (1.96)
	10	-HC-M8-ML10	6.4 (0.25)	18	51.6 (2.03)
10	10	-HC-M10-ML10	7.9 (0.31)	19	52.3 (2.06)
12	12	-HC-M12-ML12	9.7 (0.38)	22	57.4 (2.26)

Tube Adapters



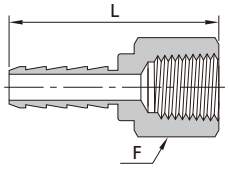
Hose ID	Tube Size	Basic Ordering Number	Dimensions		
			Minimum Inside Diameter	F	L
in.	in.		in. (mm)	in.	in. (mm)
1/8	1/8	-HC-F2-FT2	0.08 (2.0)	5/16	1.37 (34.8)
	1/4	-HC-F2-FT4	0.09 (2.3)	3/8	1.47 (37.3)
1/4	1/4	-HC-F4-FT4	0.19 (4.8)	7/16	1.86 (47.2)
	3/8	-HC-F4-FT6	0.19 (4.8)	7/16	1.92 (48.8)
5/16	1/4	-HC-F5-FT4	0.19 (4.8)	7/16	1.94 (49.3)
3/8	1/4	-HC-F6-FT4	0.19 (4.8)	9/16	1.94 (49.3)
	3/8	-HC-F6-FT6	0.28 (7.1)	9/16	2.00 (50.8)
	1/2	-HC-F6-FT8	0.30 (7.6)	5/8	2.26 (57.4)
1/2	3/8	-HC-F8-FT6	0.28 (7.1)	11/16	2.07 (52.6)
	1/2	-HC-F8-FT8	0.38 (9.7)	11/16	2.33 (59.2)
3/4	3/4	-HC-F12-FT12	0.63 (16.0)	13/16	2.50 (63.5)
1	1	-HC-F16-FT16	0.80 (20.3)	1 3/8	3.03 (77.0)

Male NPT Connectors



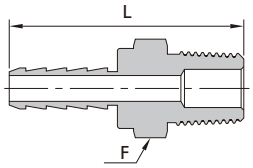
Hose ID	NPT Tapered Thread Size	Basic Ordering Number	Dimensions		
			Minimum Inside Diameter	F	L
in.	in.		in. (mm)	in.	in. (mm)
1/8	1/8	-HC-F2-NS2	0.08 (2.0)	7/16	1.08 (27.4)
	1/4	-HC-F2-NS4	0.08 (2.0)	9/16	1.26 (32.0)
3/16	1/8	-HC-F3-NS2	0.13 (3.3)	7/16	1.27 (32.2)
	1/4	-HC-F3-NS4	0.13 (3.3)	9/16	1.45 (36.8)
1/4	1/8	-HC-F4-NS2	0.19 (4.8)	7/16	1.47 (37.3)
	1/4	-HC-F4-NS4	0.19 (4.8)	9/16	1.65 (41.9)
	3/8	-HC-F4-NS6	0.19 (4.8)	11/16	1.66 (42.2)
	1/2	-HC-F4-NS8	0.19 (4.8)	7/8	1.85 (47.0)
5/16	1/8	-HC-F5-NS2	0.19 (4.8)	7/16	1.55 (39.4)
	1/4	-HC-F5-NS4	0.19 (4.8)	9/16	1.73 (43.9)
	3/8	-HC-F5-NS6	0.19 (4.8)	11/16	1.74 (44.2)
	1/2	-HC-F5-NS8	0.19 (4.8)	7/8	1.96 (49.8)
3/8	1/4	-HC-F6-NS4	0.30 (7.6)	9/16	1.73 (43.9)
	3/8	-HC-F6-NS6	0.30 (7.6)	11/16	1.74 (44.2)
	1/2	-HC-F6-NS8	0.30 (7.6)	7/8	1.96 (49.8)
1/2	1/4	-HC-F8-NS4	0.30 (7.6)	11/16	1.80 (45.7)
	3/8	-HC-F8-NS6	0.38 (9.7)	11/16	1.81 (46.0)
	1/2	-HC-F8-NS8	0.38 (9.7)	7/8	2.03 (51.6)
5/8	3/8	-HC-F10-NS6	0.38 (9.7)	1 1/16	1.88 (47.8)
	1/2	-HC-F10-NS8	0.47 (11.9)	1 1/16	2.07 (52.6)
	3/4	-HC-F10-NS12	0.50 (12.7)	1 1/16	2.07 (52.6)
3/4	1/2	-HC-F12-NS8	0.47 (11.9)	1 1/16	2.14 (54.4)
	3/4	-HC-F12-NS12	0.63 (16.0)	1 1/16	2.14 (54.4)
	1	-HC-F12-NS16	0.63 (16.0)	1 3/8	2.43 (61.7)
1	3/4	-HC-F16-NS12	0.63 (16.0)	1 3/8	2.38 (60.5)
	1	-HC-F16-NS16	0.88 (22.4)	1 3/8	2.57 (65.3)

Female NPT Connectors



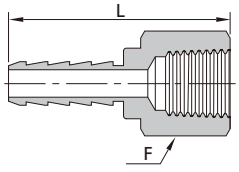
Hose ID	NPT Size	Basic Ordering Number	Dimensions		
			Minimum Inside Diameter	F	L
in.	in.		in. (mm)	in.	in. (mm)
1/8	1/8	-HC-F2-FNS2	0.08 (2.0)	9/16	1.11 (28.2)
	1/4	-HC-F2-FNS4	0.08 (2.0)	3/4	1.26 (32.0)
3/16	1/8	-HC-F3-FNS2	0.13 (3.3)	9/16	1.29 (32.8)
	1/4	-HC-F3-FNS4	0.13 (3.3)	3/4	1.44 (36.6)
1/4	1/8	-HC-F4-FNS2	0.19 (4.8)	9/16	1.47 (37.3)
	1/4	-HC-F4-FNS4	0.19 (4.8)	3/4	1.64 (41.7)
	3/8	-HC-F4-FNS6	0.19 (4.8)	7/8	1.71 (43.4)
5/16	1/4	-HC-F5-FNS4	0.19 (4.8)	3/4	1.73 (43.9)
	3/8	-HC-F5-FNS6	0.19 (4.8)	7/8	1.82 (46.2)
3/8	1/4	-HC-F6-FNS4	0.30 (7.6)	3/4	1.69 (42.9)
	3/8	-HC-F6-FNS6	0.30 (7.6)	7/8	1.78 (45.2)
	1/2	-HC-F6-FNS8	0.30 (7.6)	1 1/16	2.03 (51.6)
1/2	1/2	-HC-F8-FNS8	0.38 (9.7)	1 1/16	2.13 (54.1)

Male BSPT Connectors



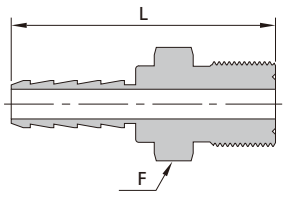
Hose ID	BSPT Tapered Thread Size	Basic Ordering Number	Dimensions		
			Minimum Inside Diameter	F	L
in.	in.		in. (mm)	in.	in. (mm)
1/8	1/8	-HC-F2-RT2	0.08 (2.0)	7/16	1.28 (32.5)
	1/4	-HC-F2-RT4	0.08 (2.0)	9/16	1.40 (35.5)
3/16	1/8	-HC-F3-RT2	0.13 (3.3)	7/16	1.40 (35.5)
	1/4	-HC-F3-RT4	0.13 (3.3)	9/16	1.58 (40.1)
1/4	1/8	-HC-F4-RT2	0.19 (4.8)	716	1.47 (37.3)
	1/4	-HC-F4-RT4	0.19 (4.8)	9/16	1.65 (41.9)
	3/8	-HC-F4-RT6	0.19 (4.8)	11/16	1.66 (42.2)
	1/2	-HC-F4-RT8	0.19 (4.8)	7/8	1.90 (48.3)
5/16	1/8	-HC-F5-RT2	0.19 (4.8)	7/16	1.67 (42.4)
	1/4	-HC-F5-RT4	0.19 (4.8)	9/16	1.86 (47.2)
	3/8	-HC-F5-RT6	0.19 (4.8)	11/16	1.87 (47.5)
	1/2	-HC-F5-RT8	0.19 (4.8)	7/8	2.10 (53.3)
3/8	1/4	-HC-F6-RT4	0.30 (7.6)	9/16	1.73 (43.9)
	3/8	-HC-F6-RT6	0.30 (7.6)	11/16	1.74 (44.2)
	1/2	-HC-F6-RT8	0.30 (7.6)	7/8	1.96 (49.8)
1/2	1/4	-HC-F8-RT4	0.30 (7.6)	11/16	1.80 (45.7)
	3/8	-HC-F8-RT6	0.38 (9.7)	11/16	1.81 (46.0)
	1/2	-HC-F8-RT8	0.38 (9.7)	7/8	2.03 (51.6)
5/8	3/8	-HC-F10-RT6	0.38 (9.7)	1 1/16	1.88 (47.8)
	1/2	-HC-F10-RT8	0.47 (11.9)	1 1/16	2.07 (52.6)
	3/4	-HC-F10-RT12	0.50 (12.7)	1 1/16	2.07 (52.6)
3/4	1/2	-HC-F12-RT8	0.47 (11.9)	1 1/16	2.14 (54.4)
	3/4	-HC-F12-RT12	0.63 (16.0)	1 1/16	2.14 (54.4)
	1	-HC-F12-RT16	0.63 (16.0)	1 3/8	2.43 (61.7)
1	3/4	-HC-F16-RT12	0.63 (16.0)	1 3/8	2.38 (60.5)
	1	-HC-F16-RT16	0.88 (22.4)	1 3/8	2.57 (65.3)

Female BSPT Connectors



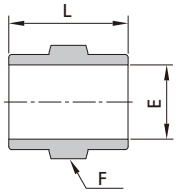
Hose ID	BSPT Size	Basic Ordering Number	Dimensions		
			Minimum Inside Diameter	F	L
in.	in.		in. (mm)	in.	in. (mm)
1/8	1/8	-HC-F2-FRT2	0.08 (2.0)	9/16	1.11 (28.2)
	1/4	-HC-F2-FRT4	0.08 (2.0)	3/4	1.26 (32.0)
3/16	1/8	-HC-F3-FRT2	0.13 (3.3)	9/16	1.29 (32.8)
	1/4	-HC-F3-FRT4	0.13 (3.3)	3/4	1.44 (36.6)
1/4	1/8	-HC-F4-FRT2	0.19 (4.8)	9/16	1.47 (37.3)
	1/4	-HC-F4-FRT4	0.19 (4.8)	3/4	1.64 (41.7)
	3/8	-HC-F4-FRT6	0.19 (4.8)	7/8	1.71 (43.4)
5/16	1/4	-HC-F5-FRT4	0.19 (4.8)	3/4	1.73 (43.9)
	3/8	-HC-F5-FRT6	0.19 (4.8)	7/8	1.82 (46.2)
3/8	1/4	-HC-F6-FRT4	0.30 (7.6)	3/4	1.69 (42.9)
	3/8	-HC-F6-FRT6	0.30 (7.6)	7/8	1.78 (45.2)
	1/2	-HC-F6-FRT8	0.30 (7.6)	1 1/16	2.03 (51.6)
1/2	1/2	-HC-F8-FRT8	0.38 (9.7)	1 1/16	2.13 (54.1)

Metric Thread Connectors



Hose I.D.	Thread Size	Basic Ordering Number	Dimensions		
			Minimum Inside Diameter	F	L
mm	in.		in. (mm)	mm	in. (mm)
6	M10 x 1	-HC-M6-MS10	0.18 (4.6)	12	1.54 (39.6)
	M12 x 1.5	-HC-M6-MS12	0.18 (4.6)	14	1.59 (40.4)
	M14 x 1.5	-HC-M6-MS14	0.18 (4.6)	15	1.66 (42.2)
8	M14 x 1.5	-HC-M8-MS14	0.19 (4.8)	15	1.74 (44.2)
	M16 x 1.5	-HC-M8-MS16	0.19 (4.8)	18	1.82 (46.2)
10	M16 x 1.5	-HC-M10-MS16	0.31 (7.9)	18	1.82 (46.2)
	M18 x 1.5	-HC-M10-MS18	0.31 (7.9)	19	1.86 (47.2)
12	M20 x 1.5	-HC-M12-MS20	0.35 (8.9)	22	1.98 (50.3)
	M22 x 1.5	-HC-M12-MS22	0.35 (8.9)	24	2.08 (52.8)

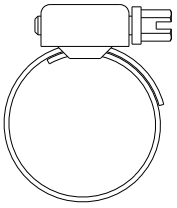
Hose Connector Sleeves



- Material: Aluminum
- Reusable

Hose I.D.	Hose O.D.	Ordering Number	Dimensions, in. (mm)		
			E	F	L
in.	in.				
1/8	1/4	AL-HC-F2-F4	0.26 (6.6)	3/8	0.40 (10.2)
1/4	3/8	AL-HC-F4-F6	0.41 (10.4)	9/16	0.79 (20.1)
1/4	7/16	AL-HC-F4-F7	0.46 (11.7)	5/8	0.79 (20.1)
1/4	1/2	AL-HC-F4-F8	0.52 (13.2)	11/16	0.79 (20.1)
5/16	7/16	AL-HC-F5-F7	0.48 (12.2)	5/8	0.87 (22.1)
3/8	1/2	AL-HC-F6-F8	0.55 (14.0)	11/16	0.87 (22.1)
3/8	9/16	AL-HC-F6-F9	0.61 (15.5)	3/4	0.87 (22.1)
7/16	5/8	AL-HC-F7-F10	0.69 (17.5)	13/16	0.94 (23.9)
1/2	11/16	AL-HC-F8-F11	0.76 (19.3)	7/8	0.94 (23.9)
3/4	1	AL-HC-F12-F16	1.10 (27.9)	1 1/4	1.07 (27.2)

Hose Clamps



- Material: 304 SS
- Reusable

Min. Hose O.D.	Max. Hose O.D.	Ordering Number
mm	mm	
8	12	S4-CP8-12
10	16	S4-CP10-16
12	20	S4-CP12-20
16	25	S4-CP16-25
20	32	S4-CP20-32
25	40	S4-CP25-40

1. Sizes and types listed are standard. Other sizes and types are available upon request.
2. All dimensions are for reference only and are subject to change. For dimensions not shown above, please contact FITOK Group or our authorized distributors.

Ordering Number Description

SS – HC – F4 – NS4

End Connection Material		Series	End Connection 1 Type		End Connection 1 Size		End Connection 2 Type		End 2 Connection Size	
SS	316 SS	HC	F	Fractional	4	1/4" or 4 mm	ML	Metric Tube Fitting	4	1/4"
S4	304 SS		M	Metric	6	3/8" or 6 mm	FL	Fractional Tube Fitting	6	3/8" or 6 mm
A20	Alloy 20				8	1/2" or 8 mm	MT	Metric Tube Adapter	8	1/2" or 8 mm
INC	Alloy 600				10	5/8" or 10 mm	FT	Fractional Tube Adapter	10	5/8" or 10 mm
HC	Alloy C-276				12	3/4" or 12 mm	FNS	Female NPT	12	3/4" or 12 mm
TI	Titanium				16	1" or 16 mm	NS	Male NPT	16	1" or 16 mm
AL	Aluminum						FRT	Female BSPT	18	M18 x 1.5
904L	904L SS						RT	Male BSPT	20	M20 x 1.5
							FMS	Female Metric Thread (for RG-M)		
							MS	Male Metric Thread (for RG-M)		

Example: SS-HC-F4-FT6

SS: End connection material is 316 stainless steel.
HC: HC series.
F4: Hose ID is 1/4".
FT6: 3/8" tube adapter.

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