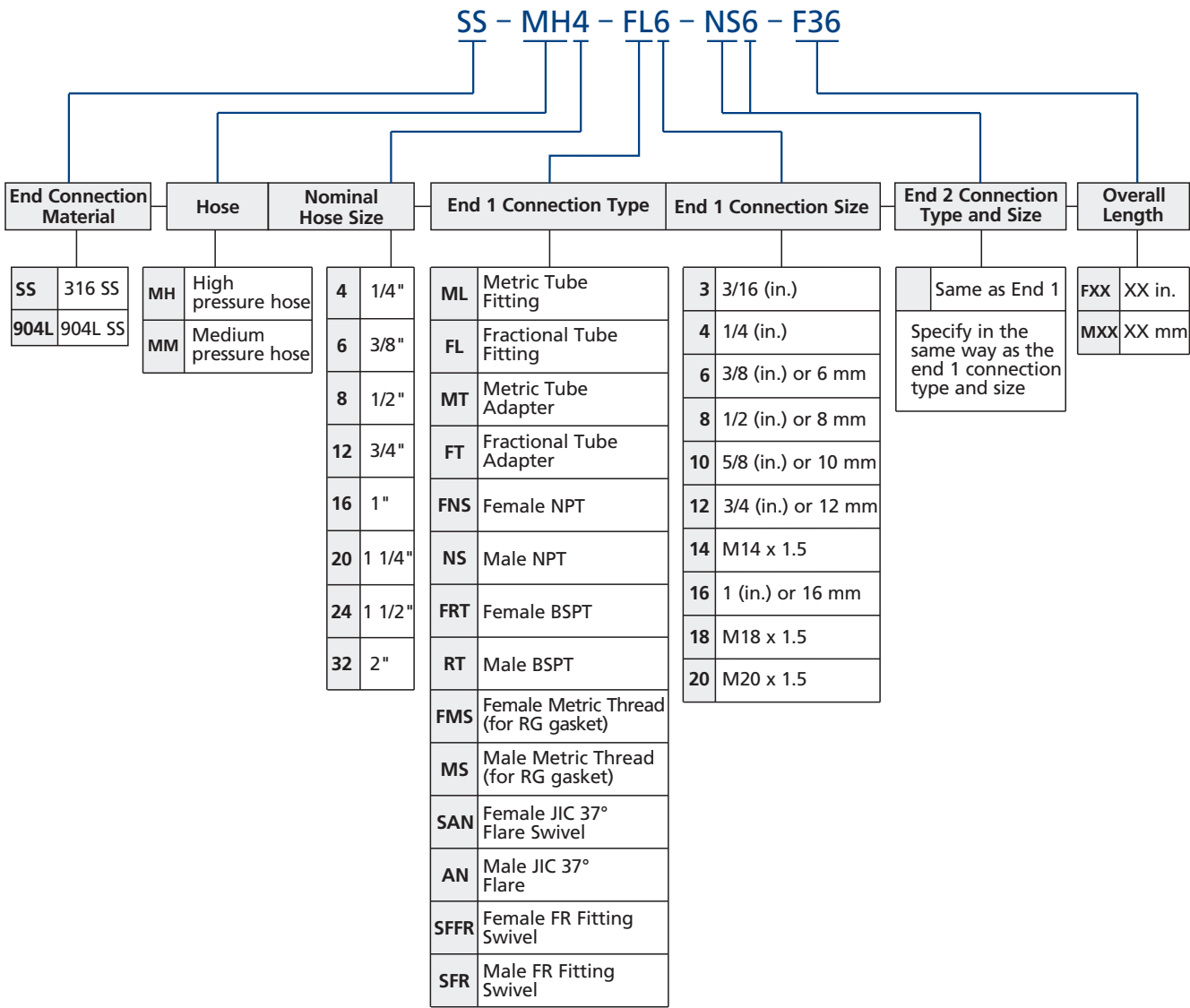


Part Number Description



Example: SS-MH4-FT6-M710

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

End 1 and end 2 follow the orders and regulations below:

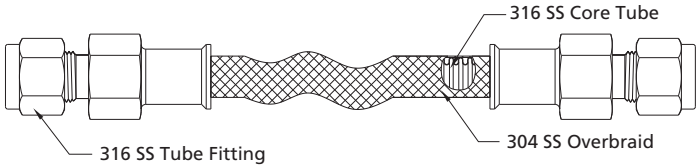
- Metric Double Ferrules - Fractional Double Ferrules - Metric Tube Adapters - Fractional Tube Adapters - NPT Threads - BSPT Threads - BSPP Threads -SAE/MS Parallel Threads - 37° Flare - Others
- Put the sizes from the biggest down to the smallest if they are of the same type.
- Put the female before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

Note: "Part Number Description" is used for composition rules of FITOK product model, Not suitable for specific product part number selection, not random combinations. If in doubt, please contact FITOK company or authorized agents.

Metal Flexible Hoses
MH, MM Series

Features

- Core tube and fitting material: 316 stainless steel
- Overbraid material: 304 stainless steel
- Vacuum and positive pressure applications
- Maximum working pressure: 3100 psig (213 bar)
- Hose size: 3/16" to 1"
- Working temperature: -325°F to 800°F (-200°C to 426°C)
- End connections:
 - 1/8 to 1 thread
 - 3/16" to 1" and 6 mm to 22 mm tube fitting
- Welded fitting-to-hose construction to ensure reliable seal
- Standard and custom-length available



Hose Technical Data (MH Series)

Nominal Hose Size	Inside Diameter	Min. Bend Radius		Temperature Range	Working Pressure at 70°F (20°C)	Burst Pressure at 70°F (20°C)	Hose Series
		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)	MH4
3/8 (9.7)	0.42 (10.6)	3.00 (76.2)	12.0 (305)		2000 (137)	8000 (551)	MH6
1/2 (12.7)	0.53 (13.5)	4.50 (114)	16.0 (406)		1800 (124)	7200 (496)	MH8
3/4 (19.0)	0.80 (20.3)	6.00 (152)	17.0 (432)		1500 (103)	6000 (413)	MH12
1 (25.4)	1.03 (26.0)	6.75 (171)	20.0 (508)		1200 (82.6)	4800 (330)	MH16
1 1/4 (31.8)	1.30 (33.0)	8.86 (225)	23.0 (584)		950 (65.4)	3800 (261)	MH20
1 1/2 (38.1)	1.53 (38.9)	11.0 (280)	26.0 (660)		900 (62.0)	3600 (248)	MH24
2 (50.8)	2.05 (52.1)	13.8 (350)	32.0 (813)		500 (34.4)	2000 (137)	MH32

Hose Technical Data (MM Series)

Nominal Hose Size	Inside Diameter	Min. Bend Radius		Temperature Range	Working Pressure at 70°F (20°C)	Burst Pressure at 70°F (20°C)	Hose Series
		Static	Dynamic				
in. (mm)	in. (mm)	in. (mm)	in. (mm)	°F (°C)	psig (bar)	psig (bar)	
1/4 (6.4)	0.25 (6.4)	0.75 (19.0)	4.33 (110)	-325 to 800 (-200 to 426)	1600 (110)	6400 (440)	MM4
3/8 (9.7)	0.38 (9.5)	0.87 (22.1)	5.91 (150)		1470 (101)	6000 (413)	MM6
1/2 (12.7)	0.50 (12.7)	1.04 (26.4)	6.50 (165)		1110 (76.4)	4500 (310)	MM8
3/4 (19.0)	0.75 (19.0)	1.61 (40.9)	8.86 (225)		860 (59.2)	3500 (241)	MM12
1 (25.4)	1.00 (25.4)	1.89 (48.0)	10.2 (259)		680 (46.8)	2680 (184)	MM16
1 1/4 (31.8)	1.25 (31.8)	2.16 (54.9)	11.8 (300)		680 (46.8)	2600 (179)	MM20
1 1/2 (38.1)	1.50 (38.1)	2.33 (59.2)	13.4 (340)		520 (35.8)	2200 (151)	MM24
2 (50.8)	2.00 (50.8)	3.10 (78.7)	15.4 (391)		450 (31.0)	1800 (124)	MM32

Testing

Every FITOK metal flexible hose assembly is factory tested with helium to a maximum leak rate of 1 x 10⁻⁵ std cm³/s.

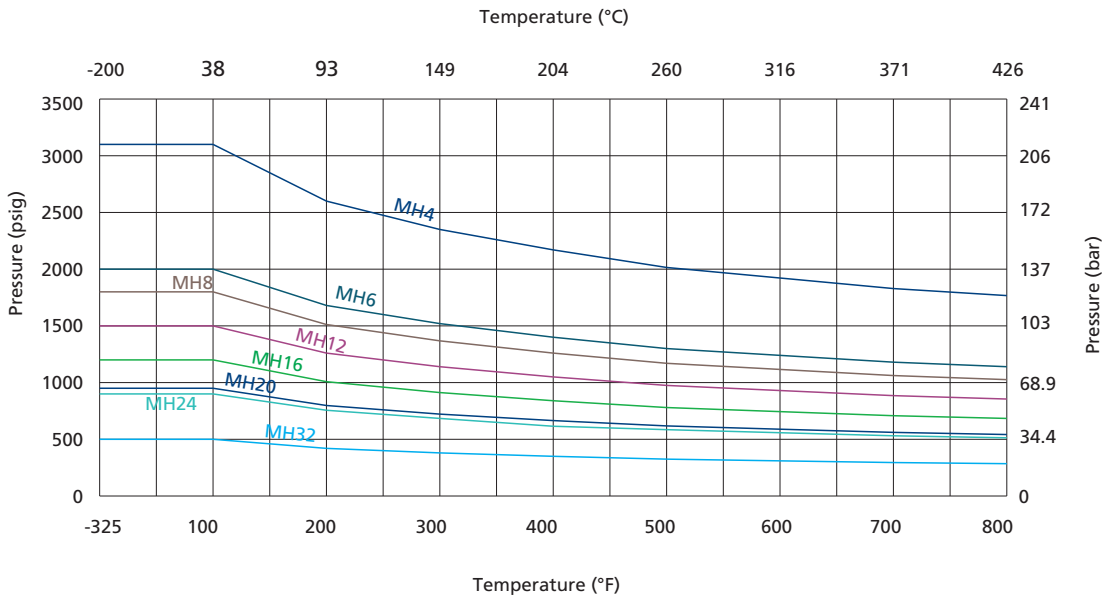
Cleaning and Packaging

FITOK metal flexible hose components are cleaned in accordance with FITOK standard cleaning (FC-01) for general industrial procedures.

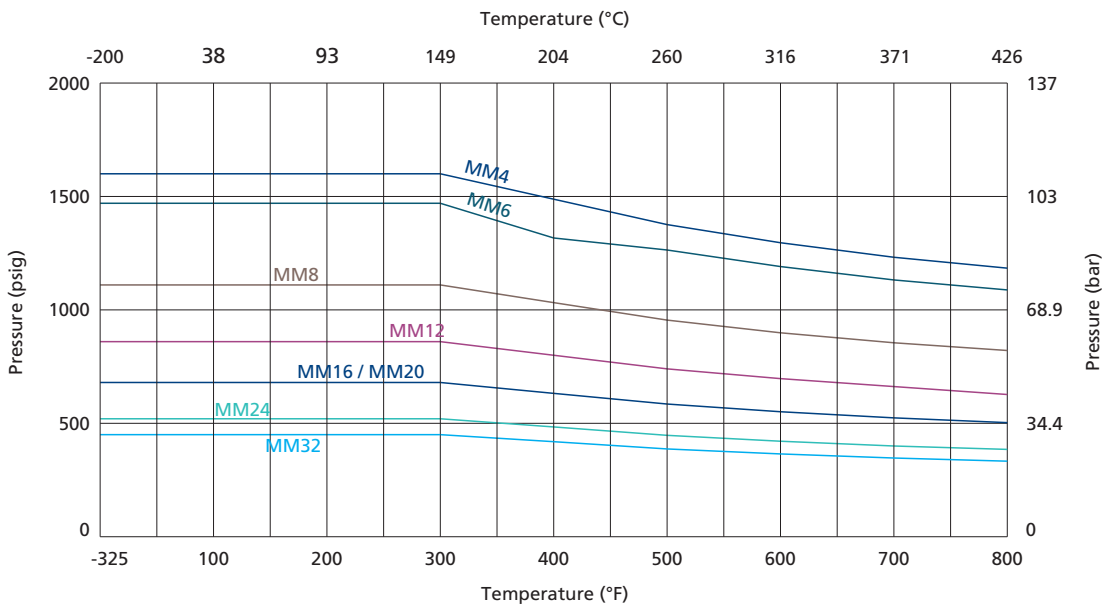
Shorter hoses are packed in cartons with suitable protective material, longer hoses are coiled, bagged and boxed or crated.

Pressure vs. Temperature

MH series

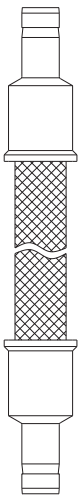
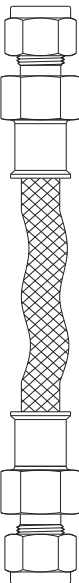
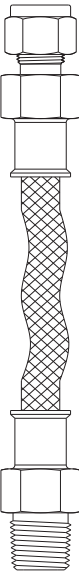


MM series



The working pressure of the hose selected must not exceed the maximum pressure, including any pressure spikes of the system. To determine actual working pressure ratings in accordance with pulsation, shock factors multiply by 0.5.

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	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	MH6	18 (457)	SS-MH6-FL6-NS6-F18	0.28 (7.1)	1.09 (27.7)
			MM6	36 (914)	SS-MM6-FL6-NS6-F36	0.28 (7.1)	1.01 (25.7)
1/2	1/2	1/2	MH8	18 (457)	SS-MH8-FL8-NS8-F18	0.41 (10.4)	1.23 (31.3)
			MM8	48 (1220)	SS-MM8-FL8-NS8-F48	0.41 (10.4)	1.23 (31.3)
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)	1.82 (46.3)

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	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	MH6	18 (457)	SS-MH6-FL6-F18	0.28 (7.1)	1.09 (27.7)
		MM6	36 (914)	SS-MM6-FL6-F36	0.28 (7.1)	1.01 (25.7)
1/2	1/2	MH8	18 (457)	SS-MH8-FL8-F18	0.41 (10.4)	1.23 (31.3)
		MM8	48 (1220)	SS-MM8-FL8-F48	0.41 (10.4)	1.23 (31.3)
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)	1.82 (46.3)

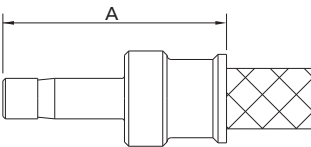
Tube Adapter End

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	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	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. All dimensions are for reference only and are subject to change. For dimensions not shown above, please contact the authorized representative or FITOK Group.
2. Types listed are standard. Other types are available upon request, refer to the ordering information.

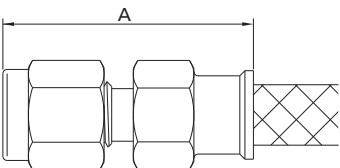
End Connections

Tube Adapters



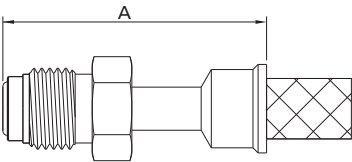
Tube Adapter Size	Nominal Hose Size	End Connection Designator	Dimensions		
			A	Minimum Inside Diameter	Maximum Outside Diameter
in.	in.		in. (mm)		
1/4	1/4	FT4	1.76 (44.7)	0.16 (4.1)	0.81 (20.6)
3/8	3/8	FT6	1.82 (46.2)	0.27 (6.9)	1.01 (25.6)
1/2	1/2	FT8	2.22 (56.4)	0.37 (9.4)	1.23 (31.3)
3/4	3/4	FT12	2.35 (59.7)	0.58 (14.7)	1.53 (38.8)
1	1	FT16	2.69 (68.3)	0.80 (20.3)	1.82 (46.3)
mm	in.	—	mm (in.)		
6	1/4	MT6	44.4 (1.75)	4.1 (0.16)	20.6 (0.81)
10	3/8	MT10	47.0 (1.85)	7.1 (0.28)	25.6 (1.01)
12	1/2	MT12	57.2 (2.25)	8.9 (0.35)	31.3 (1.23)

Tube Fittings



Tube Fitting Size	Nominal Hose Size	End Connection Designator	Dimensions		
			A	Minimum Inside Diameter	Maximum Outside Diameter
in.	in.		in. (mm)		
1/4	1/4	FL4	1.94 (49.3)	0.19 (4.8)	0.94 (23.8)
3/8	1/4	FL6	2.00 (50.8)	0.28 (7.1)	0.94 (23.8)
3/8	3/8	FL6	2.02 (51.3)	0.28 (7.1)	1.09 (27.7)
1/2	1/2	FL8	2.24 (56.9)	0.41 (10.4)	1.23 (31.3)
5/8	1/2	FL10	2.27 (57.7)	0.50 (12.7)	1.23 (31.3)
3/4	3/4	FL12	2.35 (59.7)	0.63 (16.0)	1.74 (44.2)
1	1	FL16	2.64 (67.1)	0.88 (22.4)	1.82 (46.3)
1 1/4	1 1/4	FL20	4.04 (103)	1.09 (27.7)	2.23 (58.9)
1 1/2	1 1/2	FL24	4.75 (121)	1.34 (34.0)	2.61 (66.3)
2	2	FL32	5.72 (145)	1.88 (47.8)	3.48 (88.4)
mm	in.	—	mm (in.)		
6	1/4	ML6	62.2 (2.45)	4.8 (0.19)	20.6 (0.81)
8	1/4	ML8	63.2 (2.49)	6.4 (0.25)	20.6 (0.81)
10	3/8	ML10	51.6 (2.03)	7.9 (0.31)	31.3 (1.23)
12	1/2	ML12	56.9 (2.24)	9.7 (0.38)	38.8 (1.53)

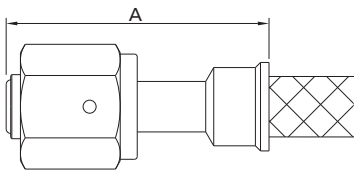
Male FR Metal Gasket Face Seal Fittings Swivel



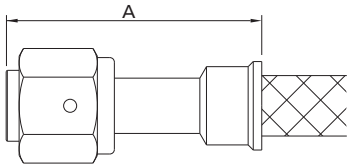
FR Size	Nominal Hose Size	End Connection Designator	Dimensions		
			A	Minimum Inside Diameter	Maximum Outside Diameter
in.	in.		in. (mm)		
1/4	1/4	SFR4	2.60 (66.0)	0.18 (4.6)	0.81 (20.6)
1/2	1/2	SFR8	2.83 (71.9)	0.40 (10.2)	1.23 (31.3)
3/4	3/4	SFR12	4.19 (106)	0.65 (16.5)	1.52 (38.7)
1	1	SFR16	4.80 (122)	0.87 (22.1)	1.53 (38.8)

End Connections

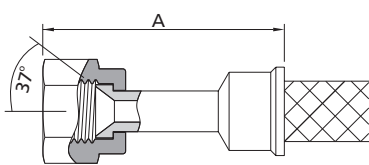
Female FR Metal Gasket Face Seal Fittings Swivel



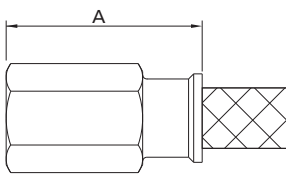
Female FO O-Ring Face Seal Fittings Swivel



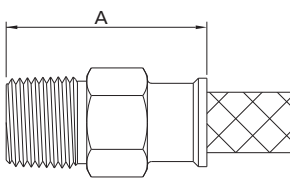
SAE 37° (JIC) Female Swivel



Female Pipe Threads, NPT



Male Pipe Threads, NPT



FR Size	Nominal Hose Size	End Connection Designator	Dimensions		
			A	Minimum Inside Diameter	Maximum Outside Diameter
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)

FO Size	Nominal Hose Size	End Connection Designator	Dimensions		
			A	Minimum Inside Diameter	Maximum Outside Diameter
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)

Swivel Size	Nominal Hose Size	End Connection Designator	Dimensions		
			A	Minimum Inside Diameter	Maximum Outside Diameter
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)	1.01 (25.6)
1/2	1/2	SAN8	2.25 (57.2)	0.42 (10.7)	1.23 (31.3)

NPT Size	Nominal Hose Size	End Connection Designator	Dimensions		
			A	Minimum Inside Diameter	Maximum Outside Diameter
in.	in.		in. (mm)		
1/4	1/4	FNS4	1.81 (46.0)	0.28 (7.1)	0.94 (23.9)
3/8	3/8	FNS6	1.87 (47.5)	0.38 (9.7)	1.09 (27.7)
1/2	1/2	FNS8	2.18 (55.4)	0.47 (11.9)	1.23 (31.3)
3/4	3/4	FNS12	2.21 (56.1)	0.72 (18.3)	1.74 (44.2)

NPT Size	Nominal Hose Size	End Connection Designator	Dimensions		
			A	Minimum Inside Diameter	Maximum Outside Diameter
in.	in.		in. (mm)		
1/4	1/4	NS4	1.80 (45.7)	0.28 (7.1)	0.94 (23.9)
1/4	3/8	NS4	1.81 (46.0)	0.28 (7.1)	1.09 (27.7)
3/8	3/8	NS6	1.81 (46.0)	0.38 (9.7)	1.09 (27.7)
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)	1.23 (31.3)
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)	1.82 (46.3)
1 1/4	1 1/4	NS20	3.06 (77.7)	1.09 (27.7)	2.03 (51.6)
1 1/2	1 1/2	NS24	3.72 (94.5)	1.34 (34.0)	2.47 (62.6)
2	2	NS32	4.19 (106)	1.81 (46.0)	3.19 (81.0)