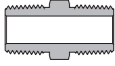

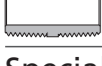







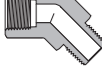

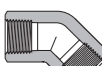

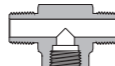

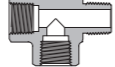
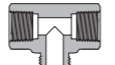

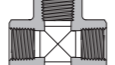
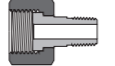






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Features

- The hardened threads with smooth surface finishing avoid galling and help to extend the fitting service life.
- Radius junction design with elbows provides smooth flow path.
- Every fitting is stamped with size, material, and heat code.

Technical Data

- Sizes range from 1/16 to 2
- Thread Specifications:

Thread Type	Specification
NPT	ASME B1.20.1, SAE AS71051
ISO Tapered	ISO 7-1, BS 21, JIS B0203
ISO Parallel	ISO 228, JIS B0202
SAE/MS	ASME B1.1, SAE J475
Metric	ISO 261

- Working Temperature:

For the working temperatures of FITOK pipe fittings, refer to the FITOK 6 series Tube Fittings catalog.

- Working Pressure:

1. Catalog working pressures shown are based on ANSI/ASME B31.3 at ambient temperature, to determine working pressures in accordance with ANSI/ASME B31.1 multiply catalog working pressures shown by the factor from the below table.

Material	Factor
Stainless steel	0.94
Carbon steel	0.85
Brass	1.0

2. Use the allowable working pressure at ambient temperature to multiply the elevated temperature factors to get the working pressure at elevated temperature. To locate the elevated temperature factor, please refer to the related information of FITOK Tubes and Pipes in page D-14.
3. To get the installation torque for NPT thread and ISO tapered thread, refer to FITOK 6 Series Tube Fittings in page A-6.

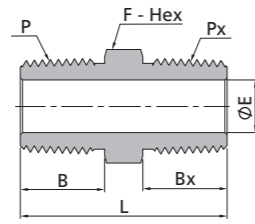
Materials

Material	Bar Stock	Forging	Designator
316 stainless steel	ASTM A276, ASME SA479, EN 1.4401	ASTM A182, ASME SA182, EN 1.4401	SS
304 stainless steel	ASTM A276, ASME SA479, EN 1.4301	ASTM A182, ASME SA182, EN 1.4301	S4
Alloy 400	ASTM B164, ASME SB164	ASTM B564, ASME SB564	M
Alloy 600	ASTM B166, ASME SB166	ASTM B564, ASME SB564	INC
Alloy C-276	ASTM B574	ASTM B564,	HC
Brass	ASME B16/ASTM B453	ASTM B283	B
Carbon steel	ASTM A108	ASTM A105	CS
904L stainless steel	ASTM B649	ASTM A182	904L

Cautions:

- Do not loosen or tighten fittings when system is pressurized.
- Always use proper thread sealants on tapered pipe threads.
- Confirm the sealing type when choosing the straight threads, make sure the construction of the matching threads comply with the sealing type.

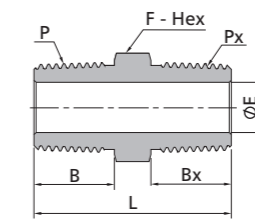
Hex Nipples



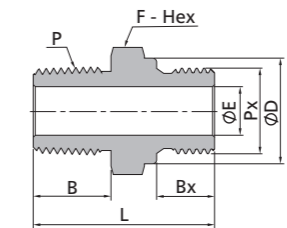
Male NPT Threads									
P-NPT Size	Px-NPT Size	Basic Ordering Number	Dimension, in. (mm)					Working Pressure psig (bar)	
			L	F	B	Bx	E	316 SS, Steel	Brass
1/16	1/16	-PHN-NS1	1.01 (25.6)	0.31 (7.9)	0.38 (9.7)	0.38 (9.7)	0.12 (3.0)	11000 (757)	5500 (378)
1/8	1/16	-PHN-NS2-NS1	1.01 (25.6)	0.44 (11.1)	0.38 (9.7)	0.38 (9.7)	0.12 (3.0)	11000 (757)	5500 (378)
1/8	1/8	-PHN-NS2	1.01 (25.6)	0.44 (11.1)	0.38 (9.7)	0.38 (9.7)	0.19 (4.8)	10000 (690)	5000 (344)
1/4	1/16	-PHN-NS4-NS1	1.22 (31.0)	0.56 (14.3)	0.56 (14.2)	0.38 (9.7)	0.12 (3.0)	11000 (757)	5500 (378)
1/4	1/8	-PHN-NS4-NS2	1.22 (31.0)	0.56 (14.3)	0.56 (14.2)	0.38 (9.7)	0.19 (4.8)	10000 (690)	5000 (344)
1/4	1/4	-PHN-NS4	1.40 (35.6)	0.56 (14.3)	0.56 (14.2)	0.56 (14.2)	0.28 (7.1)	8000 (551)	4000 (275)
3/8	1/16	-PHN-NS6-NS1	1.25 (31.8)	0.69 (17.5)	0.56 (14.2)	0.38 (9.7)	0.12 (3.0)	11000 (757)	5500 (378)
3/8	1/8	-PHN-NS6-NS2	1.25 (31.8)	0.69 (17.5)	0.56 (14.2)	0.38 (9.7)	0.19 (4.8)	10000 (690)	5000 (344)
3/8	1/4	-PHN-NS6-NS4	1.43 (36.3)	0.69 (17.5)	0.56 (14.2)	0.56 (14.2)	0.28 (7.1)	8000 (551)	4000 (275)
3/8	3/8	-PHN-NS6	1.43 (36.3)	0.69 (17.5)	0.56 (14.2)	0.56 (14.2)	0.38 (9.7)	7800 (537)	3900 (268)
1/2	1/8	-PHN-NS8-NS2	1.47 (37.3)	0.87 (22.2)	0.75 (19.1)	0.38 (9.7)	0.19 (4.8)	7700 (530)	3800 (261)
1/2	1/4	-PHN-NS8-NS4	1.65 (41.9)	0.87 (22.2)	0.75 (19.1)	0.56 (14.2)	0.28 (7.1)	8000 (551)	4000 (275)
1/2	3/8	-PHN-NS8-NS6	1.65 (41.9)	0.87 (22.2)	0.75 (19.1)	0.56 (14.2)	0.38 (9.7)	7800 (537)	3900 (268)
1/2	1/2	-PHN-NS8	1.84 (46.7)	0.87 (22.2)	0.75 (19.1)	0.75 (19.1)	0.47 (11.9)	7700 (530)	3800 (261)
3/4	1/8	-PHN-NS12-NS2	1.59 (40.4)	1.06 (27.0)	0.75 (19.1)	0.38 (9.7)	0.19 (4.8)	10000 (690)	5000 (344)
3/4	1/4	-PHN-NS12-NS4	1.65 (41.9)	1.06 (27.0)	0.75 (19.1)	0.56 (14.2)	0.28 (7.1)	8000 (551)	4000 (275)
3/4	3/8	-PHN-NS12-NS6	1.78 (45.2)	1.06 (27.0)	0.75 (19.1)	0.56 (14.2)	0.38 (9.7)	7800 (537)	3900 (268)
3/4	1/2	-PHN-NS12-NS8	1.84 (46.7)	1.06 (27.0)	0.75 (19.1)	0.75 (19.1)	0.47 (11.9)	7700 (530)	3800 (261)
3/4	3/4	-PHN-NS12	1.84 (46.7)	1.06 (27.0)	0.75 (19.1)	0.75 (19.1)	0.62 (15.7)	7300 (502)	3600 (248)
1	1/8	-PHN-NS16-NS2	1.78 (45.2)	1.37 (34.9)	0.94 (23.9)	0.38 (9.7)	0.19 (4.8)	10000 (690)	5000 (344)
1	1/4	-PHN-NS16-NS4	1.94 (49.3)	1.37 (34.9)	0.94 (23.9)	0.56 (14.2)	0.28 (7.1)	5300 (365)	2600 (179)
1	3/8	-PHN-NS16-NS6	1.97 (50.0)	1.37 (34.9)	0.94 (23.9)	0.56 (14.2)	0.38 (9.7)	7800 (537)	3900 (268)
1	1/2	-PHN-NS16-NS8	2.13 (54.1)	1.37 (34.9)	0.94 (23.9)	0.75 (19.1)	0.47 (11.9)	7700 (530)	3800 (261)
1	3/4	-PHN-NS16-NS12	2.13 (54.1)	1.37 (34.9)	0.94 (23.9)	0.75 (19.1)	0.62 (15.7)	7300 (502)	3600 (248)
1	1	-PHN-NS16	2.32 (58.9)	1.37 (34.9)	0.94 (23.9)	0.94 (23.9)	0.88 (22.4)	5300 (365)	2600 (179)
1 1/4	1	-PHN-NS20-NS16	2.45 (62.2)	1.75 (44.5)	0.94 (23.9)	0.94 (23.9)	0.88 (22.4)	5300 (365)	2600 (179)
1 1/4	1 1/4	-PHN-NS20	2.48 (62.9)	1.75 (44.5)	0.94 (23.9)	0.94 (23.9)	1.13 (28.6)	6000 (410)	3000 (200)
1 1/2	1 1/2	-PHN-NS24	2.61 (66.3)	2.00 (50.8)	1.03 (26.2)	1.03 (26.2)	1.34 (34.0)	5000 (344)	2500 (172)
2	2	-PHN-NS32	3.06 (77.7)	2.75 (69.9)	1.03 (26.2)	1.03 (26.2)	1.77 (45.0)	3900 (268)	1900 (130)
Heavy-Wall Male NPT Threads									
P-NPT Size	Px-NPT Size	Basic Ordering Number	L	F	B	Bx	E	316 SS, Steel	Brass
1/4	1/4	-PHN-NS4-10K	1.40 (35.6)	0.56 (14.3)	0.56 (14.2)	0.56 (14.2)	0.23 (5.8)	10000 (690)	/
1/2	1/4	-PHN-NS8-NS4-10K	1.65 (41.9)	0.87 (22.2)	0.75 (19.1)	0.56 (14.2)	0.23 (5.8)	10000 (690)	/
1/2	1/2	-PHN-NS8-10K	1.84 (46.7)	0.87 (22.2)	0.75 (19.1)	0.75 (19.1)	0.39 (9.9)	10000 (690)	/

Male ISO Tapered Threads									
P-RT Size	Px-RT Size	Basic Ordering Number	Dimension, in. (mm)					Working Pressure psig (bar)	
			L	F	B	Bx	E	316 SS, Steel	Brass
1/8	1/8	-PHN-RT2	1.01 (25.6)	0.44 (11.1)	0.38 (9.7)	0.38 (9.7)	0.19 (4.8)	10000 (690)	5000 (344)
1/4	1/4	-PHN-RT4	1.40 (35.6)	0.56 (14.3)	0.56 (14.2)	0.56 (14.2)	0.28 (7.1)	8000 (551)	4000 (275)
3/8	3/8	-PHN-RT6	1.43 (36.3)	0.69 (17.5)	0.56 (14.2)	0.56 (14.2)	0.38 (9.7)	7800 (537)	3900 (268)
1/2	1/2	-PHN-RT8	1.84 (46.7)	0.87 (22.2)	0.75 (19.1)	0.75 (19.1)	0.47 (11.9)	7700 (530)	3800 (261)
3/4	3/4	-PHN-RT12	1.84 (46.7)	1.06 (27.0)	0.75 (19.1)	0.75 (19.1)	0.62 (15.7)	7300 (502)	3600 (248)
1	1	-PHN-RT16	2.32 (58.9)	1.37 (34.9)	0.94 (23.9)	0.94 (23.9)	0.88 (22.4)	5300 (365)	2600 (179)

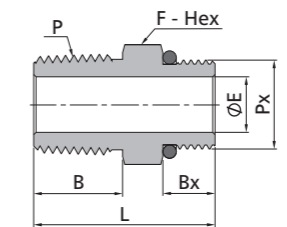
Hex Nipples



Male NPT Threads						Male ISO Tapered Threads			
P-NPT Size	Px-RT Size	Basic Ordering Number	Dimension, in. (mm)					Working Pressure psig (bar)	
			L	F	B	Bx	E	316 SS, Steel	Brass
1/8	1/8	-PHN-NS2-RT2	1.01 (25.6)	0.44 (11.1)	0.38 (9.7)	0.38 (9.7)	0.19 (4.8)	10000 (690)	5000 (344)
1/4	1/4	-PHN-NS4-RT4	1.40 (35.6)	0.56 (14.3)	0.56 (14.2)	0.56 (14.2)	0.28 (7.1)	8000 (551)	4000 (275)
3/8	3/8	-PHN-NS6-RT6	1.43 (36.3)	0.69 (17.5)	0.56 (14.2)	0.56 (14.2)	0.38 (9.7)	7800 (537)	3900 (268)
1/2	1/2	-PHN-NS8-RT8	1.84 (46.7)	0.87 (22.2)	0.75 (19.1)	0.75 (19.1)	0.47 (11.9)	7700 (530)	3800 (261)
3/4	3/4	-PHN-NS12-RT12	1.84 (46.7)	1.06 (27.0)	0.75 (19.1)	0.75 (19.1)	0.62 (15.7)	7300 (502)	3600 (248)
1	1	-PHN-NS16-RT16	2.32 (58.9)	1.37 (34.9)	0.94 (23.9)	0.94 (23.9)	0.88 (22.4)	5300 (365)	2600 (179)



Male NPT Threads						Male ISO parallel Threads				
P-NPT Size	Px-RS Size	Basic Ordering Number	Dimension, in. (mm)					Working Pressure psig (bar)		
			L	F	B	Bx	E	D	316 SS, Steel	Brass
1/8	1/8	-PHN-NS2-RS2	1.09 (27.7)	0.56 (14.3)	0.38 (9.7)	0.28 (7.1)	0.16 (4.1)	0.54 (13.7)	11400 (785)	5700 (392)
1/4	1/4	-PHN-NS4-RS4	1.45 (36.8)	0.75 (19.1)	0.56 (14.2)	0.44 (11.2)	0.23 (5.8)	0.71 (18.0)	10300 (709)	5100 (351)
3/8	3/8	-PHN-NS6-RS6	1.48 (37.6)	0.87 (22.2)	0.56 (14.2)	0.44 (11.2)	0.31 (7.9)	0.85 (21.6)	10300 (709)	5100 (351)
1/2	1/2	-PHN-NS8-RS8	1.75 (44.4)	1.06 (27.0)	0.75 (19.1)	0.56 (14.2)	0.47 (11.9)	1.02 (25.9)	7600 (523)	3800 (261)
3/4	3/4	-PHN-NS12-RS12	1.93 (49.0)	1.31 (33.3)	0.75 (19.1)	0.62 (15.7)	0.62 (15.7)	1.26 (32.0)	7300 (502)	3600 (248)
1	1	-PHN-NS16-RS16	2.23 (56.6)	1.63 (41.3)	0.94 (23.9)	0.72 (18.3)	0.78 (19.8)	1.53 (38.9)	7400 (509)	3700 (254)



Male NPT Threads			Male SAE/MS Straight Threads					
P-NPT Size	Px-SAE/MS Thread Size	Basic Ordering Number	Dimension, in. (mm)					Working Pressure psig (bar)
			L	F	B	Bx	E	316 SS, Steel
1/4	7/16-20	-PHN-NS4-ST7	1.20 (30.5)	0.56 (14.3)	0.56 (14.2)	0.36 (9.1)	0.20 (5.1)	4500 (310)
3/8	9/16-18	-PHN-NS6-ST9	1.26 (32.0)	0.69 (17.5)	0.56 (14.2)	0.36 (9.1)	0.28 (7.1)	4500 (310)
1/2	3/4-16	-PHN-NS8-ST12	1.53 (38.9)	0.87 (22.2)	0.75 (19.1)	0.44 (11.2)	0.42 (10.7)	4500 (310)
3/4	1 1/16-12	-PHN-NS12-ST17	1.75 (44.4)	1.25 (31.8)	0.75 (19.1)	0.59 (15.0)	0.62 (15.7)	3600 (248)
1	1 5/16-12	-PHN-NS16-ST21	2.00 (50.8)	1.50 (38.1)	0.94 (23.9)	0.59 (15.0)	0.88 (22.4)	2900 (199)