

Green Thread Fittings®



Catalog No. 03-7
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Green Instrument thread Fittings have been developed based on ASME B31.3 for instrumentation and process control in sizes 1/8" to 2". Green Thread & weld fittings have a wrench flat allowing standard Hex wrench assembly. This is one of the Green Pipe fitting benefits.

Features

- Attractive finishes to suit precision equipment
- Space-saving therefore less-weight design
- Each fitting is cleaned to remove particles, oil and grease.
- Fine NPT pipe thread construction equals or exceeds the requirement of ASME B1.20.1 to ensure maximum thread engagement.
- Service at greater pressure levels than the traditional class 3000 pipe fitting to ASME B16.11
- Male pipe threads are capped to be protected from damages
- Fitting material available in SS316, Brass and Carbon Steel

Pipe End Pressure Rating

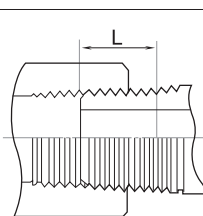
Size Designator	ISO/NPT Pipe Size	Stainless Steel 316				Brass				Carbon Steel			
		Male		Female		Male		Female		Male		Female	
		bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig
1	1/16	723	10,500	455	6,600	372	5,400	227	3,300	723	10,500	455	6,600
2	1/8	689	10,000	420	6,100	337	4,900	207	3,000	689	10,000	420	6,100
4	1/4	558	8,100	434	6,300	275	4,000	214	3,200	558	8,100	434	6,300
6	3/8	524	7,600	345	5,000	262	3,800	172	2,500	524	7,600	345	5,000
8	1/2	517	7,500	324	4,700	255	3,700	158	2,300	517	7,500	324	4,700
12	3/4	496	7,200	303	4,400	248	3,600	152	2,200	496	7,200	303	4,400
16	1	365	5,300	296	4,300	172	2,500	145	2,100	365	5,300	296	4,300
20	1-1/4	427	6,200	345	5,000	214	3,100	172	2,500	427	6,200	345	5,000
24	1-1/2	351	5,100	310	4,500	172	2,500	152	2,200	351	5,100	310	4,500
32	2	276	4,000	269	3,900	138	2,000	131	1,900	276	4,000	269	3,900

- Pressure ratings listed are for temperature up to 37.8° C (100° F)
- Based on Pressure Piping Code ASME B31.3 pressure rating is calculated with an allowable stress value of 20,000psi for SS316, 10,000psi for Brass, and 20,000psi for Carbon Steel.
- To determine the working pressure in accordance with Power Piping Code ASME B31.1, multiply psig by 0.94. Brass pressure ratings remain the same.
- Reducing Hex Bushing (GHB) pressure rating is not covered in this table. See the pressure rating in the dimensional table.

Assembly Instructions

Pipe thread sealant is essential to ensure a leak-tight seal. Since Teflon tape is commonly used, we provide information of recommended tape width and numbers of threads to be wrapped.

Nominal Pipe Size	Recommended Tape Width	Effective Thread Length(External)L*	Number of Thread
1/8	1/8-1/4	0.2639	7
1/4	1/4	0.4018	7-1/4
3/8	1/4	0.4075	7-1/3
1/2	1/4-1/2	0.5337	7-1/2
3/4	1/4-1/2	0.5457	7-2/3
1	1/4-1/2	0.6828	8



UNIT: Inches

* ASME/ANSI B1.20.1-NPT threads

* Note : Wrap Teflon™ tape clockwise from first thread. Do not over hang the first thread, as the tape may get into the fluid system.

How to order

Select the desired fitting basic part number, and add a material designator.
Example: GL-2N-S

Fitting Material designator

Material	S.Steel 316 / 316L Dual Grade	Carbon Steel	Brass
Designator	S	C	B

10 000 psig fittings are available only in stainless steel 316.
The basic part numbers of these fittings include the material designator.

Material Standards and Temperature Ratings

Fitting Materials	Bar Stock	Forgings	Temperature Ratings
Stainless Steel 316	ASTM A479 ASTM A276	ASTM A182 JIS G3214	537° C (998° F)
Brass	ASTM B16 ASTM B453 JIS H3250	ASTM B124, ASTM B283 JIS H3250	204° C (399° F)
Carbon Steel	ASTM A675 JIS G4051	ASTM A181 JIS G4051	190° C (374° F)

O-ring, Gasket and Thread Sealant Temperature Ratings

Component	Material	Temperature Ratings
O-ring	Buna N	-25 to 110° C (-13 to 230° F)
	FKM (Viton®)	-28 to 204° C (-18.4 to 399° F)
DGC-	Copper	-196 to 204° C (-320 to 399° F)
DGB-	Buna N	-40 to 121° C (-40 to 250° F)
	FKM (Viton®)	-28 to 204° C (-20 to 400° F)

Pipe Thread Symbol & Designator

Pipe Size	Designator	NPT	ISO Thread	
			Tapered (7/1)	Parallel (228/1)
1/8	2	2N	2R	2G
1/4	4	4N	4R	4G
3/8	6	6N	6R	6G
1/2	8	8N	8R	8G
3/4	12	12N	12R	12G
1	16	16N	16R	16G