

Green Thread Fittings®



Catalog No. 03-7
April, 2008

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

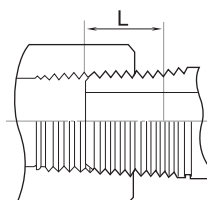
| Size Designator | ISO/NPT Pipe Size | Stainless Steel 316 | | | | Brass | | | | Carbon Steel | | | |
|-----------------|-------------------|---------------------|--------|--------|-------|-------|-------|--------|-------|--------------|--------|--------|-------|
| | | Male | | Female | | Male | | Female | | Male | | Female | |
| | | bar | psig | bar | psig | bar | psig | bar | psig | bar | psig | bar | psig |
| 1 | 1/16 | 965 | 14,000 | 455 | 6,600 | 510 | 7,400 | 227 | 3,300 | 965 | 14,000 | 455 | 6,600 |
| 2 | 1/8 | 689 | 10,000 | 420 | 6,100 | 345 | 5,000 | 207 | 3,000 | 689 | 10,000 | 420 | 6,100 |
| 4 | 1/4 | 682 | 9,900 | 434 | 6,300 | 338 | 4,900 | 214 | 3,200 | 682 | 9,900 | 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 | 537 | 7,800 | 324 | 4,700 | 269 | 3,900 | 158 | 2,300 | 537 | 7,800 | 324 | 4,700 |
| 12 | 3/4 | 517 | 7,500 | 303 | 4,400 | 255 | 3,700 | 152 | 2,200 | 517 | 7,500 | 303 | 4,400 |
| 16 | 1 | 372 | 5,400 | 296 | 4,300 | 186 | 2,700 | 145 | 2,100 | 372 | 5,400 | 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 | S.Steel 316L | Carbon Steel | Brass |
|------------|-------------|--------------|--------------|-------|
| Designator | S | L | 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) |

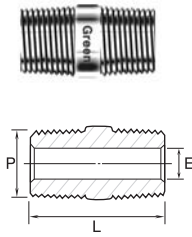
Pipe Thread Symbol & Designator

| 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 |

Green Thread Fittings

CLOSE NIPPLE - GNC

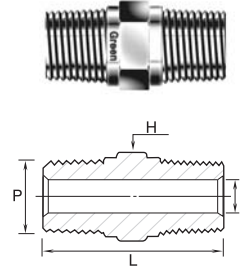
Male NPT both ends



| Basic Part Number | P Pipe Size | L | E |
|-------------------|-------------|-------|------|
| GNC- 2N | 1/8 | 19.05 | 4.8 |
| GNC- 4N | 1/4 | 28.4 | 7.1 |
| GNC- 6N | 3/8 | 28.4 | 9.6 |
| GNC- 8N | 1/2 | 38.1 | 11.9 |
| GNC-12N | 3/4 | 38.1 | 15.7 |
| GNC-16N | 1 | 47.8 | 22.4 |

HEX NIPPLE - GNH

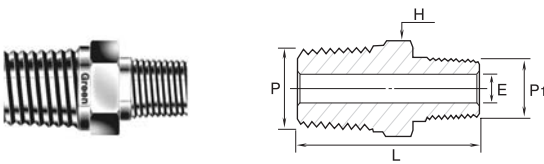
Male NPT both ends



| Basic Part Number | P Pipe Size | L | E | H Hex |
|-------------------------------|-------------|-------|------|-------|
| GNH- 2N | 1/8 | 25.65 | 4.8 | 11.1 |
| GNH- 4N | 1/4 | 35.56 | 7.1 | 14.2 |
| GNH- 6N | 3/8 | 36.32 | 9.6 | 17.4 |
| GNH- 8N | 1/2 | 46.73 | 11.9 | 22.2 |
| GNH-12N | 3/4 | 46.73 | 15.7 | 26.9 |
| GNH-16N | 1 | 58.92 | 22.3 | 34.9 |
| 10 000 psig HEX NIPPLE | | | | |
| GNH-4N-10K-S | 1/4 | 35.56 | 5.8 | 14.28 |

HEX REDUCING NIPPLE - GNR

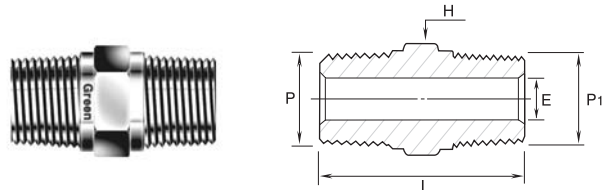
Male NPT to reduced male NPT



| Basic Part Number | P Pipe Size | P1 Reduced Pipe Size | L | E | H Hex |
|--|-------------|----------------------|------|------|-------|
| GNR 4-2N | 1/4 | 1/8 | 30.7 | 4.8 | 14.2 |
| GNR 6-2N | 3/8 | 1/8 | 32.0 | 4.8 | 17.4 |
| GNR 6-4N | 3/8 | 1/4 | 36.1 | 7.1 | 17.4 |
| GNR 8-2N | 1/2 | 1/8 | 37.2 | 4.8 | 22.2 |
| GNR 8-4N | 1/2 | 1/4 | 41.7 | 7.1 | 22.2 |
| GNR 8-6N | 1/2 | 3/8 | 41.7 | 9.6 | 22.2 |
| GNR 12-4N | 3/4 | 1/4 | 41.7 | 7.1 | 26.9 |
| GNR 12-8N | 3/4 | 1/2 | 46.7 | 11.9 | 26.9 |
| GNR 16-4N | 1 | 1/4 | 49.3 | 7.1 | 34.9 |
| GNR 16-8N | 1 | 1/2 | 54.1 | 11.9 | 34.9 |
| 10 000 psig HEX REDUCING NIPPLE | | | | | |
| GNR8-4N-10K-S | 1/2 | 1/4 | 41.7 | 5.8 | 22.2 |

HEX NIPPLE - GNH

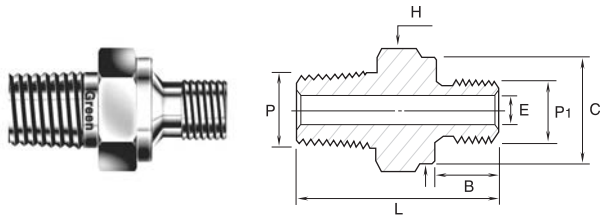
Male NPT to ISO tapered



| Basic Part Number | P NPT Thread Size | P1 BSP/ISO Thread Size | L | E | H Hex |
|-------------------|-------------------|------------------------|------|------|-------|
| GNH- 2NR | 1/8 | 1/8-28 7/1 | 24.6 | 4.1 | 11.1 |
| GNH- 4NR | 1/4 | 1/4-19 7/1 | 35.6 | 6.4 | 14.2 |
| GNH- 6NR | 3/8 | 3/8-19 7/1 | 36.3 | 9.7 | 17.4 |
| GNH- 8NR | 1/2 | 1/2-14 7/1 | 46.7 | 11.9 | 22.2 |
| GNH-12NR | 3/4 | 3/4-14 7/1 | 46.7 | 15.7 | 26.9 |
| GNH-16NR | 1 | 1-11 7/1 | 58.9 | 22.4 | 34.9 |

HEX NIPPLE - GNH

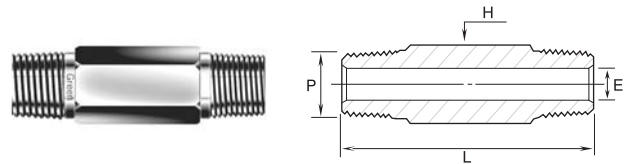
Male NPT to male ISO parallel



| Basic Part Number | P NPT Thread Size | P1 BSP/ISO Thread Size | L | B | C | E | H Hex |
|-------------------|-------------------|------------------------|------|------|------|------|-------|
| GNH- 2NG | 1/8 | 1/8-28 (228/1) | 27.4 | 7.1 | 13.7 | 4.1 | 14.2 |
| GNH- 4NG | 1/4 | 1/4-19 (228/1) | 36.8 | 11.2 | 17.8 | 5.8 | 19.05 |
| GNH- 6NG | 3/8 | 3/8-19 (228/1) | 37.6 | 11.2 | 21.8 | 7.9 | 22.2 |
| GNH- 8NG | 1/2 | 1/2-14 (228/1) | 45.0 | 14.2 | 26.1 | 11.9 | 26.9 |
| GNH-12NG | 3/4 | 3/4-14 (228/1) | 49.0 | 15.7 | 31.5 | 15.7 | 33.3 |
| GNH-16NG | 1 | 1-11 (228/1) | 56.9 | 18.3 | 38.9 | 19.8 | 41 |

HEX LONG NIPPLE - GNL

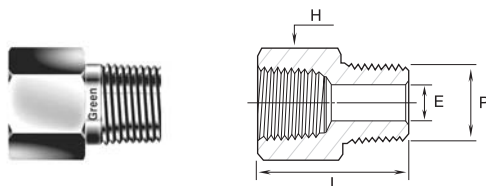
Male NPT both ends



| Basic Part Number | P Pipe Size | L | E | H Hex |
|-------------------|-------------|---|------|-------|
| GNL- 2N | 1/8 | ★ | 4.8 | 11.1 |
| GNL- 4N | 1/4 | ★ | 7.1 | 14.2 |
| GNL- 6N | 3/8 | ★ | 9.7 | 17.4 |
| GNL- 8N | 1/2 | ★ | 11.9 | 22.2 |
| GNL-12N | 3/4 | ★ | 15.7 | 26.9 |
| GNL-16N | 1 | ★ | 22.4 | 34.9 |

ADAPTER - GAAMF

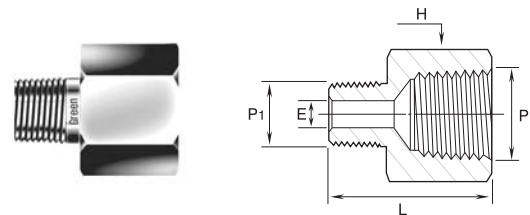
Female NPT to male NPT



| Basic Part Number | P Pipe Size | L | E | H Hex |
|-------------------|-------------|-------|------|-------|
| GAAMF- 2N | 1/8 | 27.94 | 4.8 | 14.2 |
| GAAMF- 4N | 1/4 | 35.56 | 7.1 | 19.05 |
| GAAMF- 6N | 3/8 | 38.35 | 9.6 | 22.2 |
| GAAMF- 8N | 1/2 | 49.27 | 11.9 | 26.9 |
| GAAMF-12N | 3/4 | 51.3 | 15.7 | 33.3 |
| GAAMF-16N | 1 | 57.91 | 22.3 | 41.2 |

REDUCING ADAPTER - GABMF

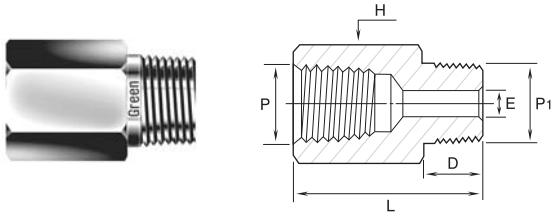
Female NPT to reduced male NPT



| Basic Part Number | P1 Male Pipe Size | P Female Pipe Size | L | E | H Hex |
|-------------------------------------|-------------------|--------------------|------|------|-------|
| GABMF 2- 4N | 1/8 | 1/4 | 31.5 | 4.8 | 19.05 |
| GABMF 2- 6N | 1/8 | 3/8 | 33.5 | 4.8 | 22.2 |
| GABMF 4- 6N | 1/4 | 3/8 | 37.8 | 7.1 | 22.2 |
| GABMF 2- 8N | 1/8 | 1/2 | 40.0 | 4.8 | 26.9 |
| GABMF 4- 8N | 1/4 | 1/2 | 44.5 | 7.1 | 26.9 |
| GABMF 6- 8N | 3/8 | 1/2 | 44.5 | 9.6 | 26.9 |
| GABMF 4-12N | 1/4 | 3/4 | 45.7 | 7.1 | 33.3 |
| GABMF 6-12N | 3/8 | 3/4 | 45.7 | 9.6 | 33.3 |
| GABMF 8-12N | 1/2 | 3/4 | 51.1 | 11.9 | 33.3 |
| GABMF 4-16N | 1/4 | 1 | 50.8 | 7.1 | 41.2 |
| GABMF 8-16N | 1/2 | 1 | 54.9 | 11.9 | 41.2 |
| GABMF 12-16N | 3/4 | 1 | 55.1 | 15.7 | 41.2 |
| 10 000 psig REDUCING ADAPTER | | | | | |
| GABMF2-4N-10K-S | 1/8 | 1/4 | 32.2 | 3.2 | 25.4 |
| GABMF2-6N-10K-S | 1/8 | 3/8 | 34.2 | 3.2 | 31.75 |
| GABMF4-6N-10K-S | 1/4 | 3/8 | 38.5 | 5.8 | 31.75 |
| GABMF6-8N-10K-S | 3/8 | 1/2 | 46.0 | 7.1 | 38.1 |

ADAPTER - GACMF

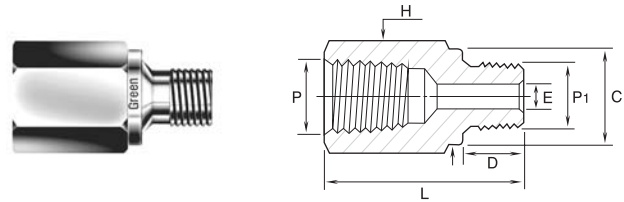
Female NPT to male ISO tapered



| Basic Part Number | P NPT Thread Size | P1 BSP/ISO Thread Size | L | D | E | H Hex |
|-------------------|----------------------------|---------------------------------|------|------|------|----------|
| GACMF- 2RN | 1/8 | 1/8-28(7/1) | 27.4 | 9.7 | 4.8 | 14.2 |
| GACMF- 4RN | 1/4 | 1/4-19(7/1) | 35.8 | 14.2 | 7.1 | 19.05 |
| GACMF- 6RN | 3/8 | 3/8-19(7/1) | 37.6 | 14.2 | 9.7 | 22.2 |
| GACMF- 8RN | 1/2 | 1/2-14(7/1) | 49.0 | 19.1 | 11.9 | 26.9 |
| GACMF-12RN | 3/4 | 3/4-14(7/1) | 50.3 | 19.1 | 15.7 | 33.3 |
| GACMF-16RN | 1 | 1-11(7/1) | 58.0 | 23.9 | 22.3 | 41.2 |

ADAPTER - GADMF

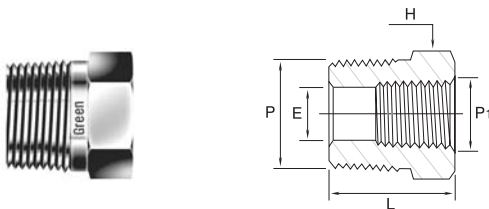
Female NPT to male ISO parallel



| Basic Part Number | P NPT Thread Size | P1 BSP/ISO Thread Size | L | B | C | E | H Hex |
|-------------------|----------------------------|---------------------------------|------|------|------|------|----------|
| GADMF- 2GN | 1/8 | 1/8-28 (228/1) | 24.9 | 7.1 | 13.7 | 4.1 | 14.2 |
| GADMF- 4GN | 1/4 | 1/4-19 (228/1) | 33.3 | 11.2 | 17.8 | 5.8 | 19.05 |
| GADMF- 6GN | 3/8 | 3/8-19 (228/1) | 37.8 | 11.2 | 21.8 | 7.9 | 22.2 |
| GADMF- 8GN | 1/2 | 1/2-14 (228/1) | 43.9 | 14.2 | 26.1 | 11.9 | 26.9 |
| GADMF-12GN | 3/4 | 3/4-14 (228/1) | 50.8 | 15.7 | 31.5 | 15.7 | 33.3 |
| GADMF-16GN | 1 | 1-11 (228/1) | 53.1 | 18.3 | 38.9 | 19.8 | 41.2 |

REDUCING HEX BUSHING - GHB

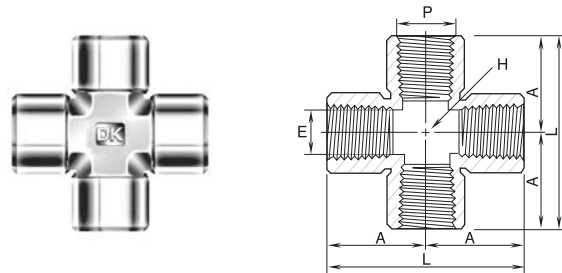
Male NPT to reduced female NPT



| Basic Part Number | P Male Pipe Size | P1 Female Pipe Size | L | E | H Hex | Working Pressure bar (psig) | |
|-------------------|------------------------|---------------------------|------|------|----------|-----------------------------|-----------|
| | SS316,C.Steel | Brass | | | | | |
| GHB 4- 2N | 1/4 | 1/8 | 26.7 | 7.1 | 14.2 | 447 (6400) | 227(3200) |
| GHB 6- 2N | 3/8 | 1/8 | 21.8 | 8.5 | 17.4 | 633(9100) | 323(4600) |
| GHB 6- 4N | 3/8 | 1/4 | 30.0 | 9.6 | 19.05 | 454(6500) | 227(3200) |
| GHB 8- 2N | 1/2 | 1/8 | 27.4 | 8.5 | 22.2 | 840(12100) | 427(6100) |
| GHB 8- 4N | 1/2 | 1/4 | 27.4 | 11.7 | 22.2 | 571(8200) | 303(4300) |
| GHB 8- 6N | 1/2 | 3/8 | 35.6 | 11.9 | 22.2 | 365(5200) | 179(2500) |
| GHB12- 4N | 3/4 | 1/4 | 27.4 | 11.4 | 26.9 | 826(11900) | 413(5900) |
| GHB12- 6N | 3/4 | 3/8 | 27.4 | 15.0 | 26.9 | 564(8100) | 296(4200) |
| GHB12- 8N | 3/4 | 1/2 | 41.4 | 15.7 | 26.9 | 337(4800) | 165(2300) |
| GHB16- 4N | 1 | 1/4 | 34.8 | 11.4 | 34.9 | 999(14400) | 509(7300) |
| GHB16- 8N | 1 | 1/2 | 34.8 | 18.5 | 34.9 | 592(8500) | 296(4200) |
| GHB16-12N | 1 | 3/4 | 34.8 | 22.4 | 34.9 | 365(5200) | 179(2500) |

CROSS - GX

Female NPT

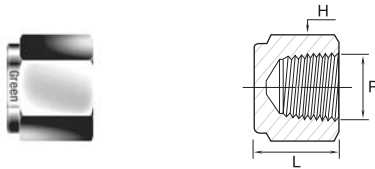


| Basic Part Number | P Thread Size | L | A | E | H Wrench Flat |
|-------------------|---------------------|------|------|------|---------------------|
| GX- 2N | 1/8 | 48.2 | 24.1 | 8.6 | 12.7 |
| GX- 4N | 1/4 | 58.0 | 29.0 | 11.4 | 17.5 |
| GX- 6N | 3/8 | 69.0 | 34.5 | 15.0 | 20.6 |
| GX- 8N | 1/2 | 74.0 | 37.0 | 18.5 | 25.4 |
| GX-12N | 3/4 | 93.0 | 46.5 | 23.9 | 31.8 |
| GX-16N | 1 | 97.6 | 48.8 | 29.7 | 42.9 |

Green Thread Fittings

PIPE CAP - GC

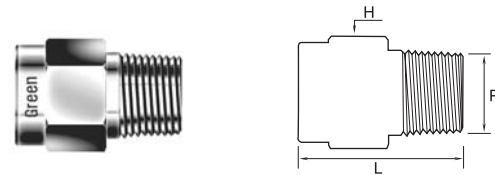
Female NPT



| Basic Part Number | P Pipe Size | L | H Hex |
|-------------------|----------------|------|----------|
| GC- 2N | 1/8 | 19.1 | 14.2 |
| GC- 4N | 1/4 | 22.9 | 19.05 |
| GC- 6N | 3/8 | 26.2 | 22.2 |
| GC- 8N | 1/2 | 34.0 | 26.9 |
| GC-12N | 3/4 | 36.6 | 33.3 |
| GC-16N | 1 | 41.1 | 41.2 |

PIPE PLUG - GP

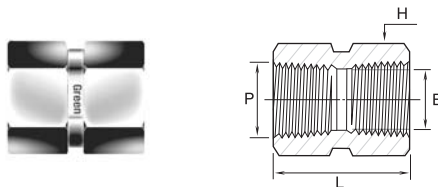
Male NPT



| Basic Part Number | P Pipe Size | L | H Hex |
|-------------------|----------------|-------|----------|
| GP- 2N | 1/8 | 19.05 | 11.1 |
| GP- 4N | 1/4 | 24.1 | 14.2 |
| GP- 6N | 3/8 | 25 | 17.4 |
| GP- 8N | 1/2 | 30.5 | 22.2 |
| GP-12N | 3/4 | 30.5 | 26.9 |
| GP-16N | 1 | 38.1 | 34.9 |

HEX COUPLING - GCG

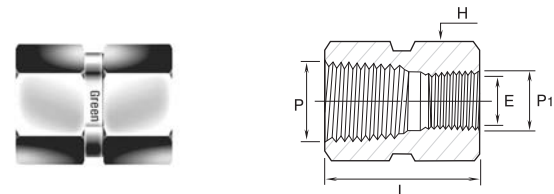
Female NPT both ends



| Basic Part Number | P Pipe Size | L | E | H Hex |
|---------------------------------|----------------|-------|-------|----------|
| GCG- 2N | 1/8 | 20.57 | 8.9 | 14.2 |
| GCG- 4N | 1/4 | 30.22 | 11.7 | 19.05 |
| GCG- 6N | 3/8 | 33.27 | 15.0 | 22.2 |
| GCG- 8N | 1/2 | 39.62 | 18.7 | 26.9 |
| GCG-12N | 3/4 | 41.14 | 23.5 | 33.3 |
| GCG-16N | 1 | 50.8 | 29.7 | 41.2 |
| 10 000 psig HEX COUPLING | | | | |
| GCG-2N-10K-S | 1/8 | 20.57 | 8.74 | 20.64 |
| GCG-4N-10K-S | 1/4 | 30.22 | 11.47 | 25.40 |

HEX REDUCING COUPLING - GCGR

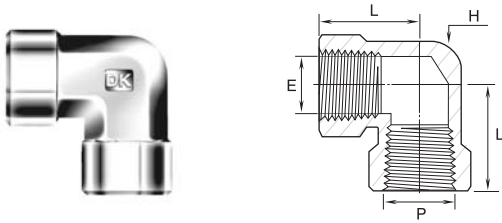
Female NPT to reduced female NPT



| Basic Part Number | P Pipe Size | P1 Reduced Pipe Size | L | E | H Hex |
|-------------------|----------------|-------------------------|------|------|----------|
| GCGR 4- 2N | 1/4 | 1/8 | 31.2 | 8.9 | 19.05 |
| GCGR 6- 4N | 3/8 | 1/4 | 34.8 | 11.7 | 22.2 |
| GCGR 8- 2N | 1/2 | 1/8 | 39.4 | 8.7 | 26.9 |
| GCGR 8- 4N | 1/2 | 1/4 | 44.2 | 11.7 | 26.9 |
| GCGR 8- 6N | 1/2 | 3/8 | 45.0 | 15.0 | 26.9 |
| GCGR 12- 4N | 3/4 | 1/4 | 45.7 | 11.7 | 33.3 |
| GCGR 12- 8N | 3/4 | 1/2 | 52.0 | 18.7 | 33.3 |
| GCGR 16- 4N | 1 | 1/4 | 50.8 | 11.7 | 41.2 |
| GCGR 16- 8N | 1 | 1/2 | 55.4 | 18.7 | 41.2 |
| GCGR 16-12N | 1 | 3/4 | 57.0 | 23.5 | 41.2 |

ELBOW - GL

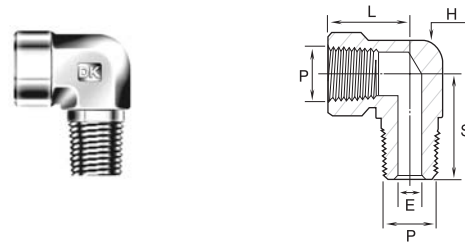
Female NPT both ends



| Basic Part Number | P Pipe Size | L | E | H Wrench Flat |
|-------------------|----------------|------|------|------------------|
| GL- 2N | 1/8 | 24.1 | 8.9 | 12.7 |
| GL- 4N | 1/4 | 29.0 | 11.7 | 17.5 |
| GL- 6N | 3/8 | 34.5 | 15.0 | 20.6 |
| GL- 8N | 1/2 | 37.0 | 18.7 | 25.4 |
| GL-12N | 3/4 | 46.5 | 23.5 | 31.8 |
| GL-16N | 1 | 48.8 | 29.7 | 42.9 |

STREET ELBOW - GLS

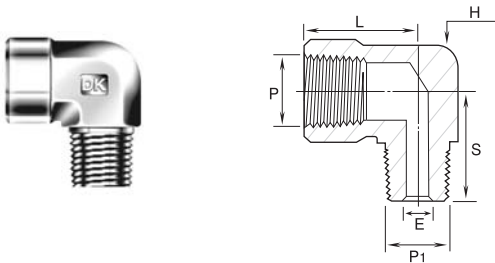
Female to male NPT



| Basic Part Number | P Pipe Size | L | S | E | H Wrench Flat |
|-------------------|----------------|------|------|------|------------------|
| GLS- 2N | 1/8 | 24.1 | 19.6 | 4.8 | 12.7 |
| GLS- 4N | 1/4 | 29.0 | 26.5 | 7.1 | 17.5 |
| GLS- 6N | 3/8 | 34.5 | 28.2 | 9.6 | 20.6 |
| GLS- 8N | 1/2 | 37.0 | 35.3 | 11.9 | 25.4 |
| GLS-12N | 3/4 | 46.5 | 39.6 | 15.7 | 31.8 |
| GLS-16N | 1 | 48.8 | 49.2 | 22.3 | 42.9 |

REDUCING STREET ELBOW - GLSR

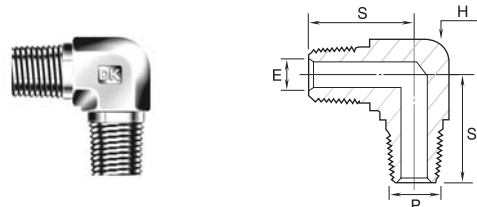
Female to male NPT



| Basic Part Number | P Pipe Size | P1 Male Pipe Size | L | S | E | H Wrench Flat |
|-------------------|----------------|----------------------|------|------|------|------------------|
| GLSR 4-2N | 1/4 | 1/8 | 29.0 | 22.4 | 4.8 | 17.5 |
| GLSR 6-4N | 3/8 | 1/4 | 34.5 | 28.2 | 7.1 | 20.6 |
| GLSR 8-4N | 1/2 | 1/4 | 37.0 | 30.5 | 7.1 | 25.4 |
| GLSR 8-6N | 1/2 | 3/8 | 37.0 | 30.5 | 9.6 | 25.4 |
| GLSR12-8N | 3/4 | 1/2 | 46.5 | 41.6 | 11.9 | 31.8 |
| GLSR16-8N | 1 | 1/2 | 48.8 | 45.5 | 11.9 | 42.9 |

MALE ELBOW - GLM

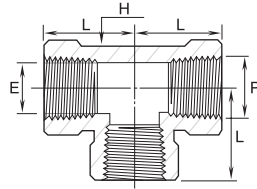
Male NPT both ends



| Basic Part Number | P Pipe Size | S | E | H Wrench Flat |
|-------------------|----------------|-------|------|------------------|
| GLM - 2N | 1/8 | 19.05 | 4.8 | 12.7 |
| GLM - 4N | 1/4 | 24.5 | 7.1 | 12.7 |
| GLM - 6N | 3/8 | 26.9 | 9.6 | 17.5 |
| GLM - 8N | 1/2 | 33.2 | 11.9 | 20.6 |
| GLM - 12N | 3/4 | 35.3 | 15.7 | 25.4 |
| GLM - 16N | 1 | 44.5 | 22.3 | 31.8 |

TEE - GT

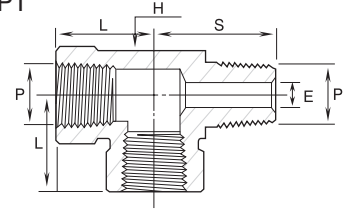
Female NPT



| Basic Part Number | P Pipe Size | L | E | H Wrench Flat |
|------------------------|----------------|------|-------|------------------|
| GT- 2N | 1/8 | 24.1 | 8.9 | 12.7 |
| GT- 4N | 1/4 | 29.0 | 11.7 | 17.5 |
| GT- 6N | 3/8 | 34.5 | 15.0 | 20.6 |
| GT- 8N | 1/2 | 37.0 | 18.7 | 25.4 |
| GT-12N | 3/4 | 46.5 | 23.5 | 31.8 |
| GT-16N | 1 | 48.8 | 29.7 | 42.9 |
| 10 000 psig TEE | | | | |
| GT-4N-10K-S | 1/4 | 37.0 | 11.47 | 25.4 |

RUN TEE - GTR

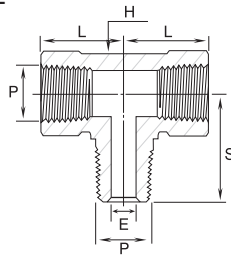
Female to male to female NPT



| Basic Part Number | P Pipe Size | L | S | E | H Wrench Flat |
|-------------------|----------------|------|------|------|------------------|
| GTR- 2N | 1/8 | 24.1 | 19.6 | 4.8 | 12.7 |
| GTR- 4N | 1/4 | 29.0 | 26.5 | 7.1 | 17.5 |
| GTR- 6N | 3/8 | 34.5 | 28.2 | 9.6 | 20.6 |
| GTR- 8N | 1/2 | 37.0 | 35.3 | 11.9 | 25.4 |
| GTR-12N | 3/4 | 46.5 | 39.6 | 15.7 | 31.8 |
| GTR-16N | 1 | 48.8 | 49.2 | 22.3 | 42.9 |

BRANCH TEE - GTB

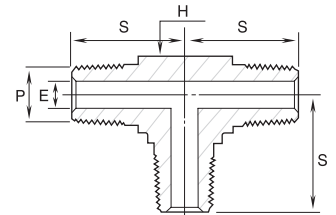
Female to female to male NPT



| Basic Part Number | P Pipe Size | L | S | E | H Wrench Flat |
|-------------------|----------------|------|------|------|------------------|
| GTB- 2N | 1/8 | 24.1 | 19.6 | 4.8 | 12.7 |
| GTB- 4N | 1/4 | 29.0 | 26.5 | 7.1 | 17.5 |
| GTB- 6N | 3/8 | 34.5 | 28.2 | 9.6 | 20.6 |
| GTB- 8N | 1/2 | 37.0 | 35.3 | 11.9 | 25.4 |
| GTB-12N | 3/4 | 46.5 | 39.6 | 15.7 | 31.8 |
| GTB-16N | 1 | 48.8 | 49.2 | 22.3 | 42.9 |

MALE TEE - GTM

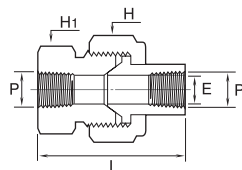
Male NPT



| Basic Part Number | P Pipe Size | S | E | H Wrench Flat |
|-------------------|----------------|-------|------|------------------|
| GTM- 2N | 1/8 | 19.05 | 4.8 | 12.7 |
| GTM- 4N | 1/4 | 24.5 | 7.1 | 12.7 |
| GTM- 6N | 3/8 | 26.9 | 9.6 | 17.5 |
| GTM- 8N | 1/2 | 33.2 | 11.9 | 20.6 |
| GTM-12N | 3/4 | 35.3 | 15.7 | 25.4 |
| GTM-16N | 1 | 44.5 | 22.3 | 31.8 |

UNION BALL JOINT - GJU

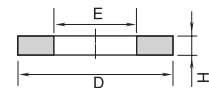
Female NPT both ends



| Basic Part Number | P Pipe Size | L | S | H Hex | H1 Wrench Flat |
|-------------------|----------------|------|------|----------|-------------------|
| GJU- 2N | 1/8 | 45.7 | 6.9 | 28.6 | 23.8 |
| GJU- 4N | 1/4 | 59.4 | 9.1 | 34.9 | 30.2 |
| GJU- 6N | 3/8 | 63.5 | 13.2 | 38.1 | 33.3 |
| GJU- 8N | 1/2 | 68.6 | 15.7 | 44.5 | 41.3 |
| GJU-12N | 3/4 | 79.2 | 22.4 | 50.8 | 47.6 |
| GJU-16N | 1 | 90.4 | 26.2 | 63.5 | 60.3 |

ISO PARALLEL COPPER GASKET - DGC

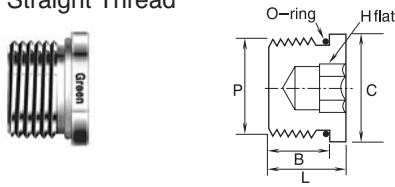
Male NPT



| Basic Part Number | P Pipe Size | E | H | D |
|-------------------|----------------|------|-----|------|
| DGC- 2 | 1/8 | 10.0 | 2.0 | 18.0 |
| DGC- 4 | 1/4 | 14.0 | 2.0 | 22.0 |
| DGC- 6 | 3/8 | 17.0 | 2.0 | 26.0 |
| DGC- 8 | 1/2 | 22.0 | 2.0 | 32.0 |
| DGC-12 | 3/4 | 27.0 | 2.0 | 38.0 |
| DGC-16 | 1 | 34.0 | 2.0 | 42.0 |

HOLLOW HEX PLUG - GPA

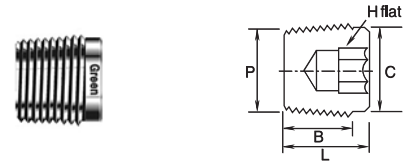
Male SAE/MS Straight Thread



| Basic Part Number | P SAE/MS Thread Size | L | B | C | H | Uniform O-ring Size |
|-------------------|----------------------------|------|------|------|-------|---------------------------|
| GPA- 4U | 7/16-20 | 11.4 | 9.1 | 14.2 | 4.76 | -904 |
| GPA- 6U | 9/16-18 | 12.2 | 9.9 | 17.5 | 6.35 | -906 |
| GPA- 8U | 3/4-16 | 14.2 | 11.2 | 22.4 | 7.93 | -908 |
| GPA-12U | 1 1/16-12 | 19.1 | 15.0 | 31.8 | 14.28 | -912 |
| GPA-16U | 1 5/16-12 | 19.1 | 15.0 | 38.1 | 15.87 | -916 |

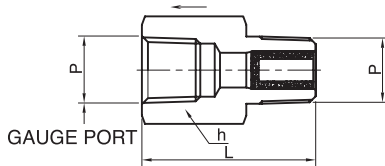
HOLLOW HEX PLUG - GPB

Male NPT



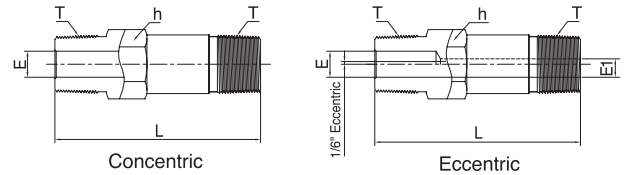
| Basic Part Number | P NPT Thread Size | L | B | C | H |
|-------------------|-------------------------|------|------|------|------|
| GPB - 2N | 1/8 | 10.4 | 7.4 | 9.4 | 4.76 |
| GPB - 4N | 1/4 | 15.5 | 12.4 | 12.1 | 6.35 |
| GPB - 6N | 3/8 | 15.0 | 11.9 | 15.7 | 7.93 |
| GPB - 8N | 1/2 | 19.3 | 16.2 | 19.3 | 9.52 |

SNUBBER FITTING - GS



| Basic Part Number | P NPT Thread Size | L | h | Working Pressure at 20°C (70°F) bar(psig) | |
|---------------------|-------------------------|------------------|-----------|--|-----------|
| | | | | SS316 | Brass |
| GS-MF-4N-05* | 1/4 | 35.6 | 3/4 | 303(4400) | 151(2200) |
| GS-MF-8N-05* | 1/2 | 49.3 | 1 1/16 | 337 (4900) | 165(2400) |
| Element Designator* | Pore Size Range, μm | Element Porosity | CV Factor | | |
| 05 | 0.5 - 2 | 17% | 0.046 | | |
| 2 | 1 - 4 | 22% | 0.056 | | |
| 7 | 5 - 10 | 27% | 0.12 | | |
| 15 | 11 - 25 | 36% | 0.13 | | |
| 60 | 50 - 75 | 44% | 0.38 | | |
| 90 | 75 - 110 | 45% | 0.50 | | |

PIPE NIPPLE G56 (For Manifold Oval Flange)



| Basic Part Number | TYPE | T NPT Thread Size | E | E1 | h | L |
|-------------------|------------|-------------------------|------|-----|------------------|---------------|
| G56NC-8N-S | Concentric | 1/2 | 9.65 | - | 15/16 (23.81) | 76.2 (3.0) |
| G56NE-8N-S | Eccentric | 1/2 | 9.65 | 8.4 | 7/8 (22.22) | 76.2 (3.0) |

Green Weld Fittings®



Green weld fittings are designed in accordance with ASME B16.11 and provide tube socket welding, pipe socket welding, tube butt welding, and pipe butt welding connections.

Features

All green weld tube socket ports have a tapered sizing angle at the end that holds tubing properly and provides approx. 1.5mm(0.08") welding gap recommended by ASME B16.11. This feature allows consistent welding assembly as well as pre-assembly of many tubing runs before welding.

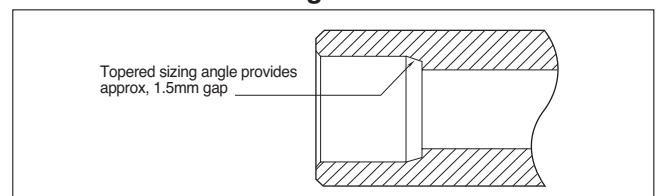
Technical information

Use like tubing and fitting material. This will ensure the same coefficient of expansion & reduction in the thermal cycle and the same corrosion resistance.

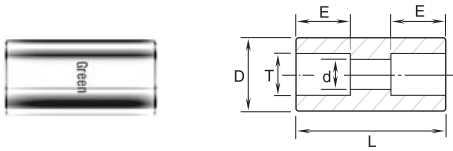
Standard fitting material is Stainless steel ASTM A276 type 316 or JIS G4303 or equivalent made from bar stock and ASTM A182 F316 or JIS G3214 or equivalent from forging.

Pressure ratings shown in the dimensional data chart are calculated in accordance with ASME B31.1 with safety factor = 4 for Stainless steel 316.

Tube socket weld fitting

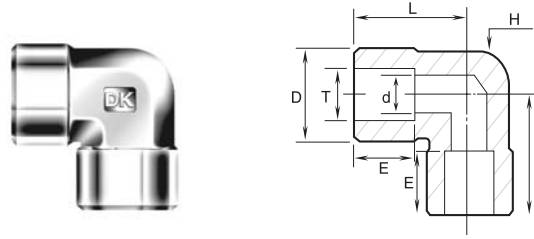


UNION - GUSW



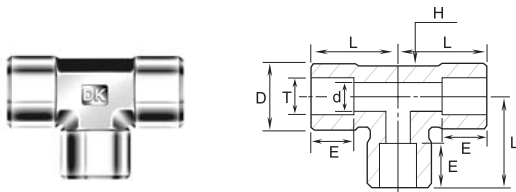
| Basic Part Number | T Tube O.D. | d | D | E | L | Working Pressure psig | bar |
|-------------------|----------------|------|------|------|------|--------------------------|-----|
| GUSW- 4T | 1/4 | 4.6 | 13.0 | 7.1 | 19.0 | 10,000 | 689 |
| GUSW- 6T | 3/8 | 7.1 | 15.8 | 7.9 | 22.4 | 7,600 | 523 |
| GUSW- 8T | 1/2 | 10.2 | 19.0 | 9.7 | 26.9 | 6,200 | 427 |
| GUSW-10T | 5/8 | 12.7 | 24.0 | 10.4 | 30.2 | 6,400 | 440 |
| GUSW-12T | 3/4 | 15.7 | 26.9 | 11.2 | 33.3 | 5,500 | 378 |
| GUSW-16T | 1 | 22.1 | 35.0 | 15.7 | 36.6 | 5,200 | 358 |

UNION ELBOW - GLSW



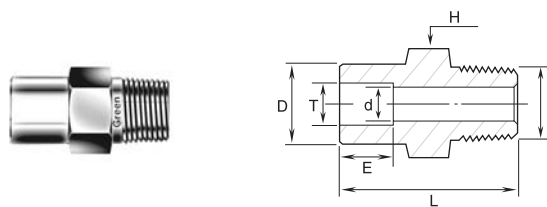
| Basic Part Number | T Tube O.D. | d | D | E | H Wrench Flat | L | Working Pressure psig | bar |
|-------------------|----------------|------|------|------|------------------|------|--------------------------|-----|
| GLSW- 4T | 1/4 | 4.6 | 13.4 | 7.1 | 12.7 | 21.8 | 11,300 | 778 |
| GLSW- 6T | 3/8 | 7.1 | 15.8 | 7.9 | 12.7 | 24.5 | 8,400 | 578 |
| GLSW- 8T | 1/2 | 10.2 | 20.6 | 9.7 | 17.4 | 29.0 | 7,800 | 537 |
| GLSW-10T | 5/8 | 12.7 | 23.8 | 10.4 | 20.6 | 34.5 | 6,700 | 461 |
| GLSW-12T | 3/4 | 15.7 | 28.6 | 11.2 | 25.4 | 37.0 | 6,700 | 461 |
| GLSW-16T | 1 | 22.1 | 35.0 | 15.7 | 31.8 | 46.5 | 6,100 | 420 |

UNION TEE - GTSW



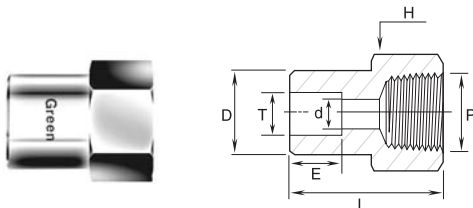
| Basic Part Number | T Tube O.D. | d | D | E | H Wrench Flat | L | Working Pressure psig | bar |
|-------------------|----------------|------|------|------|------------------|------|--------------------------|-----|
| GTSW- 2T | 1/8 | 2.3 | 13.4 | 2.5 | 12.7 | 15.0 | 11,800 | 813 |
| GTSW- 4T | 1/4 | 4.6 | 13.4 | 7.1 | 12.7 | 21.8 | 11,300 | 778 |
| GTSW- 6T | 3/8 | 7.1 | 15.8 | 7.9 | 12.7 | 24.0 | 8,400 | 578 |
| GTSW- 8T | 1/2 | 10.2 | 20.6 | 9.7 | 17.4 | 29.0 | 7,800 | 537 |
| GTSW-10T | 5/8 | 12.7 | 23.8 | 10.4 | 20.6 | 34.5 | 6,700 | 461 |
| GTSW-12T | 3/4 | 15.7 | 28.6 | 11.2 | 25.4 | 37.0 | 6,700 | 461 |
| GTSW-16T | 1 | 22.1 | 35.0 | 15.7 | 31.8 | 46.5 | 6,100 | 420 |

MALE CONNECTOR - GCMSW



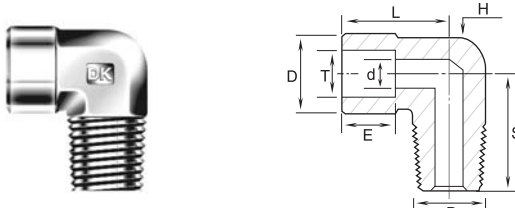
| Basic Part Number | T Tube O.D. | P-NPT Male Pipe Size | d | D | E | H Hex | L | Working Pressure psig | bar |
|-------------------|----------------|----------------------------|------|------|-----|----------|------|--------------------------|-----|
| GCMSW4T-4N | 1/4 | 1/4 | 4.6 | 12.2 | 7.1 | 14.2 | 29.2 | 7,500 | 516 |
| GCMSW6T-4N | 3/8 | 1/4 | 7.1 | 15.3 | 7.9 | 15.8 | 31.8 | 7,500 | 516 |
| GCMSW6T-6N | 3/8 | 3/8 | 7.1 | 15.3 | 7.9 | 17.4 | 31.8 | 7,300 | 502 |
| GCMSW6T-8N | 3/8 | 1/2 | 7.1 | 15.3 | 7.9 | 22.2 | 37.8 | 7,200 | 496 |
| GCMSW8T-4N | 1/2 | 1/4 | 7.1 | 18.5 | 9.7 | 19.05 | 33.3 | 6,200 | 427 |
| GCMSW8T-6N | 1/2 | 3/8 | 9.4 | 18.5 | 9.7 | 19.05 | 33.3 | 6,200 | 427 |
| GCMSW8T-8N | 1/2 | 1/2 | 10.2 | 18.5 | 9.7 | 22.2 | 38.9 | 6,200 | 427 |

FEMALE CONNECTOR - GCFSW



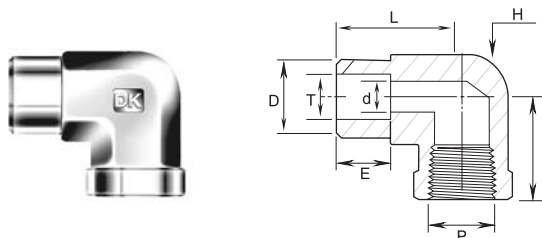
| Basic Part Number | T Tube O.D. | P-NPT Female Pipe Size | d | D | E | H Hex | L | Working Pressure psig | bar |
|-------------------|----------------|------------------------------|------|------|------|----------|------|--------------------------|-----|
| GCFSW 2T- 2N | 1/8 | 1/8 | 2.3 | 7.4 | 2.5 | 14.2 | 21.1 | 6,100 | 420 |
| GCFSW 4T- 2N | 1/4 | 1/8 | 4.6 | 12.2 | 7.1 | 14.2 | 26.7 | 6,100 | 420 |
| GCFSW 4T- 4N | 1/4 | 1/4 | 4.6 | 12.2 | 7.1 | 19.05 | 30.0 | 6,200 | 427 |
| GCFSW 6T- 4N | 3/8 | 1/4 | 7.1 | 15.3 | 7.9 | 19.05 | 31.5 | 6,200 | 427 |
| GCFSW 8T- 6N | 1/2 | 3/8 | 10.2 | 18.5 | 9.7 | 22.2 | 34.5 | 5,000 | 344 |
| GCFSW 8T- 8N | 1/2 | 1/2 | 10.2 | 18.5 | 9.7 | 26.9 | 40.4 | 4,600 | 316 |
| GCFSW10T- 8N | 5/8 | 1/2 | 12.7 | 23.4 | 10.4 | 24.9 | 41.9 | 4,600 | 316 |
| GCFSW12T-12N | 3/4 | 3/4 | 15.7 | 26.7 | 11.2 | 33.3 | 43.9 | 4,300 | 296 |

MALE ELBOW - GLMSW



| Basic Part Number | T Tube O.D. | P-NPT Male Pipe Size | d | D | E | H Wrench Flat | L | S | Working Pressure psig | bar |
|-------------------|----------------|----------------------------|------|------|------|------------------|------|------|--------------------------|-----|
| GLMSW 4T- 4N | 1/4 | 1/4 | 4.6 | 15.8 | 7.1 | 12.7 | 20.1 | 24.5 | 7,500 | 516 |
| GLMSW 6T- 4N | 3/8 | 1/4 | 7.1 | 15.8 | 7.9 | 12.7 | 24.1 | 24.5 | 7,500 | 516 |
| GLMSW 6T- 6N | 3/8 | 3/8 | 7.1 | 20.6 | 7.9 | 17.4 | 24.6 | 29.0 | 7,300 | 502 |
| GLMSW 6T- 8N | 3/8 | 1/2 | 7.1 | 23.8 | 7.9 | 20.6 | 25.9 | 34.5 | 7,200 | 496 |
| GLMSW 8T- 8N | 1/2 | 1/2 | 10.2 | 23.8 | 9.7 | 20.6 | 27.4 | 34.5 | 6,200 | 427 |
| GLMSW12T-12N | 3/4 | 3/4 | 15.7 | 28.6 | 11.2 | 25.4 | 37.0 | 37.0 | 6,700 | 461 |

FEMALE ELBOW - GLFSW



| Basic Part Number | T Tube O.D | P-NPT Female Pipe Size | d | D | E | T Wrench Flat | L | L1 | Working Pressure psig | bar |
|-------------------|---------------|------------------------------|---|---|---|---------------------|---|----|--------------------------|-----|
|-------------------|---------------|------------------------------|---|---|---|---------------------|---|----|--------------------------|-----|

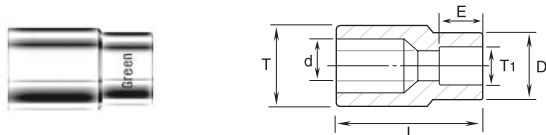
GLFSW4T-4N 1/4 1/4 4.6 12.2 7.1 17.4 22.9 29.7 6,200 427

GLFSW6T-4N 3/8 1/4 7.1 15.3 7.9 17.4 25.1 29.7 7,000 482

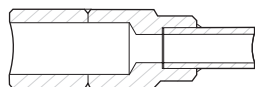
GLFSW6T-8N 3/8 1/2 7.1 15.3 7.9 25.4 28.7 37.0 5,400 372

GLFSW8T-8N 1/2 1/2 10.2 18.5 9.7 25.4 30.2 37.0 5,400 372

TUBE TO TUBE SOCKET WELD - GUTWSW



Tube to Tube



| Basic Part Number | T Tube O.D | T1 Tube Socket O.D | d | D | E | L | Working Pressure psig | bar |
|-------------------|------------------|-----------------------------|---|---|---|---|--------------------------|-----|
|-------------------|------------------|-----------------------------|---|---|---|---|--------------------------|-----|

GUTWSW 4T-2T 1/4 1/8 2.3 7.4 2.5 14.2 11,800 813

GUTWSW 6T-4T 3/8 1/4 4.6 12.2 7.1 19.1 7,700 530

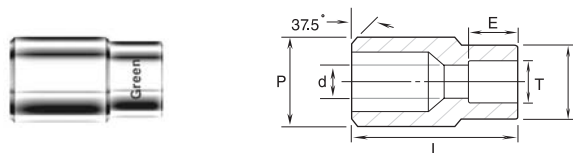
GUTWSW 8T-4T 1/2 1/4 4.6 18.2 7.1 22.4 7,000 482

GUTWSW 8T-6T 1/2 3/8 8.1 15.7 7.9 22.4 7,000 482

GUTWSW 12T-8T 3/4 1/2 10.2 18.5 9.7 28.4 5,900 406

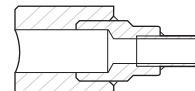
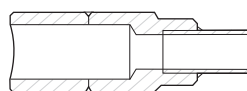
GUTWSW 16T-8T 1 1/2 10.2 18.5 9.7 35.1 5,600 344

PIPE TO TUBE SOCKET WELD - GUWSW



Pipe to Tube

Pipe to Tube



| Basic Part Number | P Pipe Size | T Tube Socket O.D | d | D | E | L | Working Pressure psig | bar |
|-------------------|-------------------|----------------------------|---|---|---|---|--------------------------|-----|
|-------------------|-------------------|----------------------------|---|---|---|---|--------------------------|-----|

GUWSW4P-4T 1/4 1/4 4.6 13.7 7.1 22.4 9,600 661

GUWSW6P-6T 3/8 3/8 7.1 15.3 7.9 26.2 7,600 523

GUWSW6P-8T 3/8 1/2 10.2 18.5 9.7 27.9 6,200 427

GUWSW8P-4T 1/2 1/4 4.6 12.2 7.1 28.4 7,300 502

GUWSW8P-6T 1/2 3/8 7.1 15.3 7.9 28.4 7,300 502

GUWSW8P-8T 1/2 1/2 10.2 18.5 9.7 30.2 6,200 427

GUWSW12P-6T 3/4 3/8 7.1 15.3 7.9 38.1 6,200 427

GUWSW12P-8T 3/4 1/2 10.2 18.5 9.7 38.1 6,200 427

SAFE COMPONENT SELECTION

The selection of component for any applications or system design must be considered to ensure safe performance. Component function, material compatibility, component ratings, proper installation, operation and maintenance remain the sole responsibility of the system designer and the user.

DK Tech accepts no liability for any improper selection, installation, operation or maintenance.

NOTE :

All the dimensions shown in this catalog are not for design purpose, but for reference only and the accuracy of information here is not the liability of our company.

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