

# SG-LOK

## 37° Flare Fittings (SAE J514)



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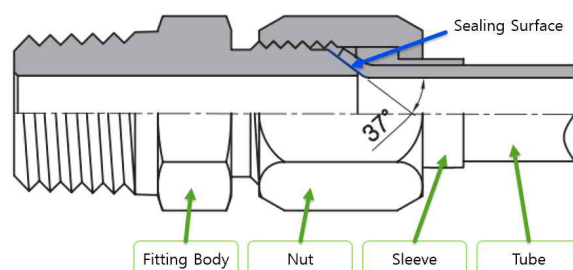
## Design Standards

SG-LOK 37° Flare Fittings consists of body, sleeve and nut and meets the requirements of SAE J514 and ISO 8434-2 standards.

Tapered threads meet the requirements of ASME B 1.20.1 (NPT), ISO 7/1, BS 21 (BSPT), JIS B 0203 (PT).

Parallel threads meet the requirements of ASME B 1.1 (UN/UNF), ISO 228/1, BS 2799 (BSPP), JIS B 0202 (PF).

## Construction



SG-LOK 37° Flare Fittings are composed of body, nut, sleeve and tube.

The male end has a straight thread and a 37° cone taper. The female end has a straight thread and a nut captured on tubing with a mating 37° flare or a 37° tapered gland. The seal takes place between the male taper and the inside diameter of the tapered gland or flared tubing

## A Material Standards

| Materials /<br>Material designator | Body                            |                         | Nut & Sleeve                    | Applicable Tubing<br>Spec. |
|------------------------------------|---------------------------------|-------------------------|---------------------------------|----------------------------|
|                                    | Bar Stock                       | Forging                 |                                 |                            |
| Stainless Steel<br>316, 316L / S6  | ASTM A276/A479<br>Type 316/316L | ASTM A182<br>F316/F316L | ASTM A276/A479<br>Type 316/316L | ASTM A269/A213             |

## A Working Pressure Ratings

| SAE<br>Dash<br>Size | Tube O.D |        | SAE<br>Thread | Union & Bulkhead |     | Fitting with<br>Female Swivel |     | Fitting with Pipe<br>Thread |     |
|---------------------|----------|--------|---------------|------------------|-----|-------------------------------|-----|-----------------------------|-----|
|                     | inch     | mm     |               | psi              | bar | psi                           | bar | psi                         | bar |
| 2                   | 1/8      | 3      | 5/16-24       | 5000             | 345 | 5000                          | 345 | 5000                        | 345 |
| 3                   | 3/16     | 4      | 3/8 - 24      | 5000             | 345 | 5000                          | 345 | 5000                        | 345 |
| 4                   | 1/4      | 6      | 7/16-20       | 5000             | 345 | 4500                          | 310 | 5000                        | 345 |
| 5                   | 5/16     | 8      | 1/2-20        | 5000             | 345 | 4000                          | 275 | 5000                        | 345 |
| 6                   | 3/8      | 10     | 9/16-18       | 5000             | 345 | 4000                          | 275 | 4000                        | 275 |
| 8                   | 1/2      | 12     | 3/4-16        | 4500             | 310 | 4000                          | 275 | 3000                        | 210 |
| 10                  | 5/8      | 16     | 7/8-14        | 3500             | 240 | 3000                          | 210 | 3000                        | 210 |
| 12                  | 3/4      | 18, 20 | 1 1/16-12     | 3500             | 240 | 3000                          | 210 | 2500                        | 170 |
| 14                  | 7/8      | 22     | 1 3/16-12     | 3000             | 210 | 2500                          | 170 | 2500                        | 170 |
| 16                  | 1        | 25     | 1 5/16-12     | 3000             | 210 | 2500                          | 170 | 2000                        | 140 |
| 20                  | 1-1/4    | 32     | 1 5/8 -12     | 2500             | 170 | 2000                          | 140 | 1150                        | 80  |
| 24                  | 1-1/2    | 38     | 1 7/8 -12     | 2000             | 140 | 1500                          | 105 | 1000                        | 70  |
| 32                  | 2        | 50     | 2 1/2-12      | 1500             | 105 | 1125                          | 80  | 1000                        | 70  |

## How To order

SG-LOK 37° Flare Fittings are ordered by part number as shown below.

|                             |           |           |                     |                |           |
|-----------------------------|-----------|-----------|---------------------|----------------|-----------|
| GF                          | MC        | 04T       | 08                  | N              | A         |
| SG-LOK<br>37° Flare Fitting | Part Type | Tube O.D. | Pipe<br>Thread Size | Thread<br>Type | Accessory |

| Fractional (inch) Tube O.D. Designation |      |      |     |      |     |      |     |     |     |     |     |     |       |       |       |    |
|-----------------------------------------|------|------|-----|------|-----|------|-----|-----|-----|-----|-----|-----|-------|-------|-------|----|
| Tube O.D.                               | inch | 1/16 | 1/8 | 3/16 | 1/4 | 5/16 | 3/8 | 1/2 | 5/8 | 3/4 | 7/8 | 1   | 1-1/8 | 1-1/4 | 1-1/2 | 2  |
| Designator                              |      | 01T  | 02T | 03T  | 04T | 05T  | 06T | 08T | 10T | 12T | 14T | 16T | 18T   | 20T   | 24T   | 32 |

| Metric Tube O.D. Designation |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|------------------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Tube O.D.                    | mm | 2   | 3   | 4   | 6   | 8   | 10  | 12  | 14  | 15  | 16  | 18  | 20  | 22  | 25  | 28  | 32  | 38  |
| Designator                   |    | 02M | 03M | 04M | 06M | 08M | 10M | 12M | 14M | 15M | 16M | 18M | 20M | 22M | 25M | 28M | 32M | 38M |

| Pipe Thread Size Designation |     |     |     |     |     |    |       |       |    |  |
|------------------------------|-----|-----|-----|-----|-----|----|-------|-------|----|--|
| Thread Size                  | 1/8 | 1/4 | 3/8 | 1/2 | 3/4 | 1  | 1-1/4 | 1-1/2 | 2  |  |
| Designator                   | 02  | 04  | 06  | 08  | 12  | 16 | 20    | 24    | 32 |  |

| Pipe Thread Type Designation |               |                               |
|------------------------------|---------------|-------------------------------|
| Designator                   | Thread Type   |                               |
| N                            | NPT           | National Standard Pipe Thread |
| R                            | PT, ISO 7/1   | Taper Pipe Thread             |
| G                            | PF, ISO 228/1 | Parallel Pipe Thread          |

| Unified Thread Size Designation |         |        |         |        |         |        |        |           |           |           |          |          |          |
|---------------------------------|---------|--------|---------|--------|---------|--------|--------|-----------|-----------|-----------|----------|----------|----------|
| Thread Size                     | 5/16-24 | 3/8-24 | 7/16-20 | 1/2-20 | 9/16-18 | 3/4-16 | 7/8-14 | 1-1/16-12 | 1-3/16-12 | 1-5/16-12 | 1-5/8-12 | 1-7/8-12 | 2-1/2-12 |
| Designator                      | 02U     | 03U    | 04U     | 05U    | 06U     | 08U    | 10U    | 12U       | 14U       | 16U       | 20U      | 24U      | 32U      |

| Accessory  |                      |                   |
|------------|----------------------|-------------------|
| Designator | None                 | A                 |
| Type       | Without Nut & Sleeve | With Nut & Sleeve |

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### **[ Tube to Male Pipe ]**

|               |                 |     |
|---------------|-----------------|-----|
| <b>GFMC</b>   | Male Connector  | 140 |
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|              |                           |     |
|--------------|---------------------------|-----|
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|                  |                             |     |
|------------------|-----------------------------|-----|
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|                |                               |     |
|----------------|-------------------------------|-----|
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### **[ Spare Parts ]**

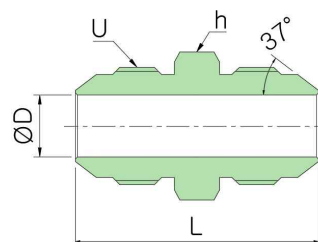
|             |                      |     |
|-------------|----------------------|-----|
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## Ordering Information & Dimension

### [ Tube to Tube Union ]

#### GFU

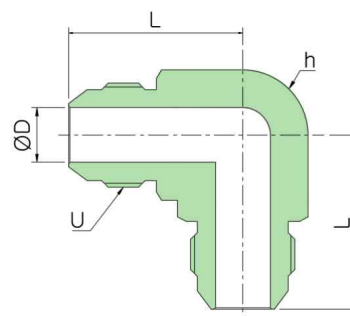
Union (37° Flare Fitting)



| Part No. | Tube O.D |        | U<br>(UN/UNF) | D    | L    | h<br>(HEX) |
|----------|----------|--------|---------------|------|------|------------|
|          | inch     | mm     |               |      |      |            |
| GFU-2T   | 1/8      | 3      | 5/16-24       | 1.6  | 29.7 | 11.1       |
| GFU-3T   | 3/16     | 4      | 3/8-24        | 3.2  | 31.2 | 11.1       |
| GFU-4T   | 1/4      | 6      | 7/16-20       | 4.4  | 34.8 | 12.7       |
| GFU-5T   | 5/16     | 8      | 1/2-20        | 6.0  | 34.8 | 14.3       |
| GFU-6T   | 3/8      | 10     | 9/16-18       | 7.5  | 35.8 | 15.8       |
| GFU-8T   | 1/2      | 12     | 3/4-16        | 9.9  | 41.1 | 20.6       |
| GFU-10T  | 5/8      | 16     | 7/8-14        | 12.3 | 47.8 | 23.8       |
| GFU-12T  | 3/4      | 18, 20 | 1 1/16-12     | 15.5 | 54.9 | 28.5       |
| GFU-14T  | 7/8      | 22     | 1 3/16-12     | 18.3 | 56.1 | 31.7       |
| GFU-16T  | 1        | 25     | 1 5/16-12     | 21.4 | 57.2 | 34.9       |
| GFU-20T  | 1-1/4    | 32     | 1 5/8-12      | 27.4 | 61.7 | 46.0       |
| GFU-24T  | 1-1/2    | 38     | 1 7/8-12      | 33.3 | 69.8 | 50.8       |
| GFU-32T  | 2        | 50     | 2 1/2-12      | 45.2 | 86.4 | 70.0       |

#### GFUE

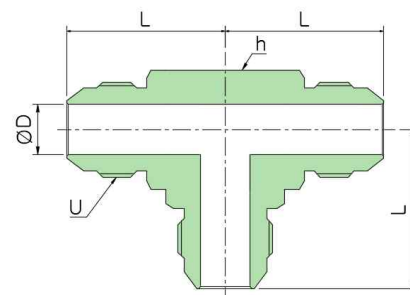
Union Elbow (37° Flare Fitting)



| Part No. | Tube O.D |        | U<br>(UN/UNF) | D    | L    | h<br>(HEX) |
|----------|----------|--------|---------------|------|------|------------|
|          | inch     | mm     |               |      |      |            |
| GFUE-2T  | 1/8      | 3      | 5/16-24       | 1.6  | 19.6 | 11.1       |
| GFUE-3T  | 3/16     | 4      | 3/8-24        | 3.2  | 21.1 | 11.1       |
| GFUE-4T  | 1/4      | 6      | 7/16-20       | 4.4  | 22.6 | 11.1       |
| GFUE-5T  | 5/16     | 8      | 1/2-20        | 6.0  | 24.1 | 14.3       |
| GFUE-6T  | 3/8      | 10     | 9/16-18       | 7.5  | 26.9 | 14.3       |
| GFUE-8T  | 1/2      | 12     | 3/4-16        | 9.9  | 31.8 | 19.0       |
| GFUE-10T | 5/8      | 16     | 7/8-14        | 12.3 | 36.8 | 22.2       |
| GFUE-12T | 3/4      | 18, 20 | 1 1/16-12     | 15.5 | 42.2 | 27.0       |
| GFUE-14T | 7/8      | 22     | 1 3/16-12     | 18.3 | 45.7 | 33.3       |
| GFUE-16T | 1        | 25     | 1 5/16-12     | 21.4 | 46.0 | 33.3       |
| GFUE-20T | 1-1/4    | 32     | 1 5/8-12      | 27.4 | 52.3 | 41.3       |
| GFUE-24T | 1-1/2    | 38     | 1 7/8-12      | 33.3 | 59.2 | 47.6       |
| GFUE-32T | 2        | 50     | 2 1/2-12      | 45.2 | 77.7 | 63.5       |

## GFUT

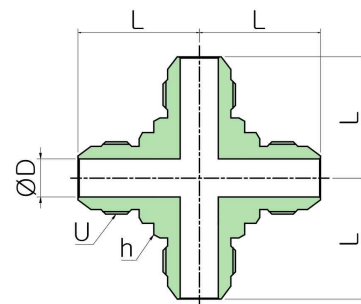
Union Tee (37° Flare Fitting)



| Part No. | Tube O.D |        | U<br>(UN/UNF) | D    | L    | h (HEX) |
|----------|----------|--------|---------------|------|------|---------|
|          | inch     | mm     |               |      |      |         |
| GFUT-2T  | 1/8      | 3      | 5/16-24       | 1.6  | 19.6 | 11.1    |
| GFUT-3T  | 3/16     | 4      | 3/8-24        | 3.2  | 21.1 | 11.1    |
| GFUT-4T  | 1/4      | 6      | 7/16-20       | 4.4  | 22.6 | 11.1    |
| GFUT-5T  | 5/16     | 8      | 1/2-20        | 6.0  | 24.1 | 14.3    |
| GFUT-6T  | 3/8      | 10     | 9/16-18       | 7.5  | 26.9 | 14.3    |
| GFUT-8T  | 1/2      | 12     | 3/4-16        | 9.9  | 31.8 | 19.0    |
| GFUT-10T | 5/8      | 16     | 7/8-14        | 12.3 | 36.8 | 22.2    |
| GFUT-12T | 3/4      | 18, 20 | 1 1/16-12     | 15.5 | 42.2 | 27.0    |
| GFUT-14T | 7/8      | 22     | 1 3/16-12     | 18.3 | 45.7 | 33.3    |
| GFUT-16T | 1        | 25     | 1 5/16-12     | 21.4 | 46.0 | 33.3    |
| GFUT-20T | 1-1/4    | 32     | 1 5/8-12      | 27.4 | 52.3 | 41.3    |
| GFUT-24T | 1-1/2    | 38     | 1 7/8-12      | 33.3 | 59.2 | 47.6    |
| GFUT-32T | 2        | 50     | 2 1/2-12      | 45.2 | 77.7 | 63.5    |

## GFUC

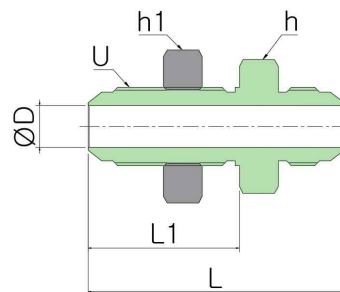
Union Cross (37° Flare Fitting)



| Part No. | Tube O.D |        | U<br>(UN/UNF) | D    | L    | h (HEX) |
|----------|----------|--------|---------------|------|------|---------|
|          | inch     | mm     |               |      |      |         |
| GFUC-2T  | 1/8      | 3      | 5/16-24       | 1.6  | 19.6 | 11.1    |
| GFUC-3T  | 3/16     | 4      | 3/8-24        | 3.2  | 21.1 | 11.1    |
| GFUC-4T  | 1/4      | 6      | 7/16-20       | 4.4  | 22.6 | 11.1    |
| GFUC-5T  | 5/16     | 8      | 1/2-20        | 6.0  | 24.1 | 14.3    |
| GFUC-6T  | 3/8      | 10     | 9/16-18       | 7.5  | 26.9 | 14.3    |
| GFUC-8T  | 1/2      | 12     | 3/4-16        | 9.9  | 31.8 | 19.0    |
| GFUC-10T | 5/8      | 16     | 7/8-14        | 12.3 | 36.8 | 22.2    |
| GFUC-12T | 3/4      | 18, 20 | 1 1/16-12     | 15.5 | 42.2 | 27.0    |
| GFUC-14T | 7/8      | 22     | 1 3/16-12     | 18.3 | 45.7 | 33.3    |
| GFUC-16T | 1        | 25     | 1 5/16-12     | 21.4 | 46.0 | 33.3    |
| GFUC-20T | 1-1/4    | 32     | 1 5/8-12      | 27.4 | 52.3 | 41.3    |
| GFUC-24T | 1-1/2    | 38     | 1 7/8-12      | 33.3 | 59.2 | 47.6    |
| GFUC-32T | 2        | 50     | 2 1/2-12      | 45.2 | 77.7 | 63.5    |

## GFBU

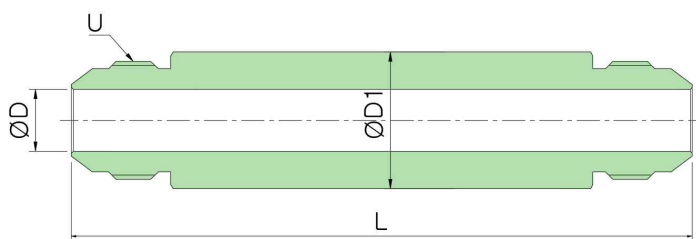
Bulkhead Union (37° Flare Fitting)



| Part No. | Tube O.D |        | U (UN/UNF) | D    | L     | L1   | h (HEX) | h1 (HEX) |
|----------|----------|--------|------------|------|-------|------|---------|----------|
|          | inch     | mm     |            |      |       |      |         |          |
| GFBU-2T  | 1/8      | 3      | 5/16-24    | 1.6  | 47.5  | 28.2 | 11.1    | 14.3     |
| GFBU-3T  | 3/16     | 4      | 3/8-24     | 3.2  | 48.3  | 28.2 | 11.1    | 15.8     |
| GFBU-4T  | 1/4      | 6      | 7/16-20    | 4.4  | 52.6  | 30.5 | 12.7    | 17.4     |
| GFBU-5T  | 5/16     | 8      | 1/2-20     | 6.0  | 52.6  | 30.5 | 14.3    | 19.0     |
| GFBU-6T  | 3/8      | 10     | 9/16-18    | 7.5  | 55.4  | 32.5 | 15.8    | 20.6     |
| GFBU-8T  | 1/2      | 12     | 3/4-16     | 9.9  | 62.0  | 36.6 | 20.6    | 25.4     |
| GFBU-10T | 5/8      | 16     | 7/8-14     | 12.3 | 69.6  | 40.1 | 23.8    | 28.5     |
| GFBU-12T | 3/4      | 18, 20 | 1 1/16-12  | 15.5 | 78.5  | 44.4 | 28.5    | 34.9     |
| GFBU-14T | 7/8      | 22     | 1 3/16-12  | 18.3 | 79.2  | 44.4 | 31.7    | 38.1     |
| GFBU-16T | 1        | 25     | 1 5/16-12  | 21.4 | 79.8  | 44.4 | 34.9    | 41.2     |
| GFBU-20T | 1-1/4    | 32     | 1 5/8-12   | 27.4 | 84.1  | 45.7 | 46.0    | 47.6     |
| GFBU-24T | 1-1/2    | 38     | 1 7/8-12   | 33.3 | 89.4  | 46.0 | 53.9    | 53.9     |
| GFBU-32T | 2        | 50     | 2 1/2-12   | 45.2 | 106.7 | 53.1 | 70.0    | 69.8     |

## GFWBU

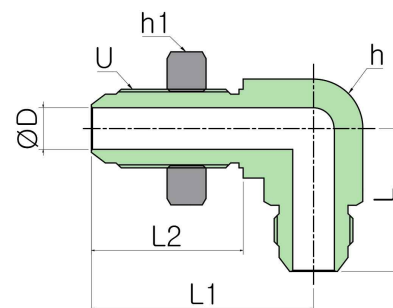
Weld Bulkhead Union (37° Flare Fitting)



| Part No.  | Tube O.D |        | U (UN/UNF) | D    | D1   | L     |
|-----------|----------|--------|------------|------|------|-------|
|           | inch     | mm     |            |      |      |       |
| GFWBU-2T  | 1/8      | 3      | 5/16-24    | 1.6  | 11.0 | 70.0  |
| GFWBU-3T  | 3/16     | 4      | 3/8-24     | 3.2  | 11.0 | 70.0  |
| GFWBU-4T  | 1/4      | 6      | 7/16-20    | 4.4  | 14.0 | 80.0  |
| GFWBU-5T  | 5/16     | 8      | 1/2-20     | 6.0  | 16.0 | 100.0 |
| GFWBU-6T  | 3/8      | 10     | 9/16-18    | 7.5  | 17.0 | 100.0 |
| GFWBU-8T  | 1/2      | 12     | 3/4-16     | 9.9  | 22.0 | 100.0 |
| GFWBU-10T | 5/8      | 16     | 7/8-14     | 12.3 | 25.0 | 110.0 |
| GFWBU-12T | 3/4      | 18, 20 | 1 1/16-12  | 15.5 | 30.0 | 120.0 |
| GFWBU-14T | 7/8      | 22     | 1 3/16-12  | 18.3 | 32.0 | 130.0 |
| GFWBU-16T | 1        | 25     | 1 5/16-12  | 21.4 | 40.0 | 130.0 |
| GFWBU-20T | 1-1/4    | 32     | 1 5/8-12   | 27.4 | 46.0 | 140.0 |
| GFWBU-24T | 1-1/2    | 38     | 1 7/8-12   | 33.3 | 50.0 | 140.0 |
| GFWBU-32T | 2        | 50     | 2 1/2-12   | 45.2 | 70.0 | 150.0 |

# GFBUE

Bulkhead Union Elbow (37° Flare Fitting)

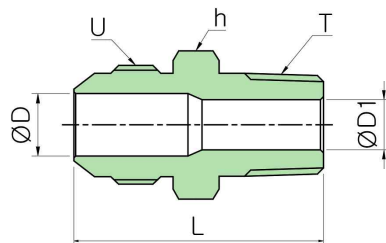


| Part No.  | Tube O.D |        | U<br>(UN/UNF) | D    | L    | L1    | L2   | h<br>(HEX) | h1<br>(HEX) |
|-----------|----------|--------|---------------|------|------|-------|------|------------|-------------|
|           | inch     | mm     |               |      |      |       |      |            |             |
| GFBUE-2T  | 1/8      | 3      | 5/16-24       | 1.6  | 22.4 | 38.1  | 23.4 | 11.1       | 14.3        |
| GFBUE-3T  | 3/16     | 4      | 3/8-24        | 3.2  | 23.9 | 38.1  | 23.4 | 11.1       | 15.8        |
| GFBUE-4T  | 1/4      | 6      | 7/16-20       | 4.4  | 24.6 | 40.4  | 25.9 | 11.1       | 17.4        |
| GFBUE-5T  | 5/16     | 8      | 1/2-20        | 6.0  | 26.9 | 43.7  | 25.9 | 14.3       | 19.0        |
| GFBUE-6T  | 3/8      | 10     | 9/16-18       | 7.5  | 27.7 | 46.0  | 27.7 | 14.3       | 20.6        |
| GFBUE-8T  | 1/2      | 12     | 3/4-16        | 9.9  | 34.5 | 53.6  | 31.8 | 19.0       | 25.4        |
| GFBUE-10T | 5/8      | 16     | 7/8-14        | 12.3 | 39.6 | 60.7  | 35.3 | 22.2       | 28.5        |
| GFBUE-12T | 3/4      | 18, 20 | 1 1/16-12     | 15.5 | 45.2 | 67.8  | 39.6 | 27.0       | 34.9        |
| GFBUE-14T | 7/8      | 22     | 1 3/16-12     | 18.3 | 48.8 | 71.1  | 39.6 | 33.3       | 38.1        |
| GFBUE-16T | 1        | 25     | 1 5/16-12     | 21.4 | 49.3 | 71.1  | 39.6 | 33.3       | 41.2        |
| GFBUE-20T | 1-1/4    | 32     | 1 5/8-12      | 27.4 | 55.1 | 79.2  | 40.9 | 41.3       | 47.6        |
| GFBUE-24T | 1-1/2    | 38     | 1 7/8-12      | 33.3 | 59.4 | 86.9  | 41.1 | 47.6       | 53.9        |
| GFBUE-32T | 2        | 50     | 2 1/2-12      | 45.2 | 73.4 | 104.4 | 48.5 | 63.5       | 69.8        |

## [ Tube to Male Pipe ]

### GFMC

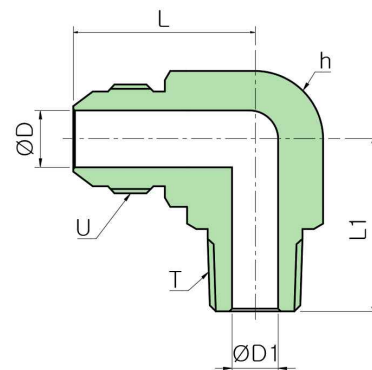
Male Connector (37° Flare Fitting)



| Part No.     | Tube O.D |        | U<br>(UN/UNF) | T<br>(NPT) | D    | D1   | L    | h<br>(HEX) |
|--------------|----------|--------|---------------|------------|------|------|------|------------|
|              | inch     | mm     |               |            |      |      |      |            |
| GFMC-2T-01N  | 1/8      | 3      | 5/16-24       | 1/8        | 1.6  | 4.8  | 28.2 | 11.1       |
| GFMC-3T-01N  | 3/16     | 4      | 3/8-24        | 1/8        | 3.2  | 4.8  | 29.0 | 11.1       |
| GFMC-4T-01N  | 1/4      | 6      | 7/16-20       | 1/8        | 4.4  | 4.8  | 31.0 | 12.7       |
| GFMC-5T-01N  | 5/16     | 8      | 1/2-20        | 1/8        | 6.0  | 4.8  | 31.0 | 14.3       |
| GFMC-6T-02N  | 3/8      | 10     | 9/16-18       | 1/4        | 7.5  | 7.0  | 36.3 | 15.8       |
| GFMC-8T-03N  | 1/2      | 12     | 3/4-16        | 3/8        | 9.9  | 10.3 | 38.9 | 20.6       |
| GFMC-10T-04N | 5/8      | 16     | 7/8-14        | 1/2        | 12.3 | 13.5 | 48.0 | 23.8       |
| GFMC-12T-06N | 3/4      | 18, 20 | 1 1/16-12     | 3/4        | 15.5 | 18.3 | 52.3 | 28.5       |
| GFMC-14T-06N | 7/8      | 22     | 1 3/16-12     | 3/4        | 18.3 | 18.3 | 53.1 | 31.7       |
| GFMC-16T-08N | 1        | 25     | 1 5/16-12     | 1          | 21.4 | 23.8 | 58.4 | 34.9       |
| GFMC-20T-10N | 1-1/4    | 32     | 1 5/8-12      | 1-1/4      | 27.4 | 31.7 | 62.2 | 46.0       |
| GFMC-24T-12N | 1-1/2    | 38     | 1 7/8-12      | 1-1/2      | 33.3 | 38.0 | 68.1 | 50.8       |
| GFMC-32T-16N | 2        | 50     | 2 1/2-12      | 2          | 45.2 | 49.0 | 79.0 | 70.0       |

### GFME

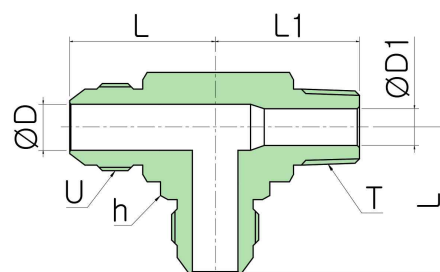
Male Elbow (37° Flare Fitting)



| Part No.     | Tube O.D |        | U<br>(UN/UNF) | T<br>(NPT) | D    | D1   | L    | L1   | h<br>(HEX) |
|--------------|----------|--------|---------------|------------|------|------|------|------|------------|
|              | inch     | mm     |               |            |      |      |      |      |            |
| GFME-2T-01N  | 1/8      | 3      | 5/16-24       | 1/8        | 1.6  | 4.8  | 19.6 | 18.3 | 11.1       |
| GFME-3T-01N  | 3/16     | 4      | 3/8-24        | 1/8        | 3.2  | 4.8  | 21.1 | 18.3 | 11.1       |
| GFME-4T-01N  | 1/4      | 6      | 7/16-20       | 1/8        | 4.4  | 4.8  | 22.6 | 19.8 | 11.1       |
| GFME-5T-01N  | 5/16     | 8      | 1/2-20        | 1/8        | 6.0  | 4.8  | 24.1 | 19.8 | 14.3       |
| GFME-6T-02N  | 3/8      | 10     | 9/16-18       | 1/4        | 7.5  | 7.0  | 26.9 | 27.7 | 14.3       |
| GFME-8T-03N  | 1/2      | 12     | 3/4-16        | 3/8        | 9.9  | 10.3 | 31.8 | 31.0 | 19.0       |
| GFME-10T-04N | 5/8      | 16     | 7/8-14        | 1/2        | 12.3 | 13.5 | 36.8 | 37.3 | 22.2       |
| GFME-12T-06N | 3/4      | 18, 20 | 1 1/16-12     | 3/4        | 15.5 | 18.3 | 42.2 | 40.4 | 27.0       |
| GFME-14T-06N | 7/8      | 22     | 1 3/16-12     | 3/4        | 18.3 | 18.3 | 45.7 | 42.9 | 33.3       |
| GFME-16T-08N | 1        | 25     | 1 5/16-12     | 1          | 21.4 | 23.8 | 46.0 | 50.0 | 33.3       |
| GFME-20T-10N | 1-1/4    | 32     | 1 5/8-12      | 1-1/4      | 27.4 | 31.7 | 52.3 | 60.5 | 41.3       |
| GFME-24T-12N | 1-1/2    | 38     | 1 7/8-12      | 1-1/2      | 33.3 | 38.0 | 59.2 | 67.1 | 47.6       |
| GFME-32T-16N | 2        | 50     | 2 1/2-12      | 2          | 45.2 | 49.0 | 77.7 | 76.2 | 63.5       |

## GFMRT

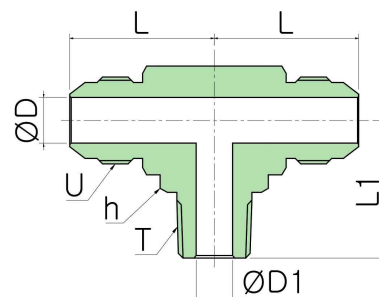
Male Run Tee (37° Flare Fitting)



| Part No.      | Tube O.D |        | U<br>(UN/UNF) | T<br>(NPT) | D    | D1   | L    | L1   | h<br>(HEX) |
|---------------|----------|--------|---------------|------------|------|------|------|------|------------|
|               | inch     | mm     |               |            |      |      |      |      |            |
| GFMRT-2T-01N  | 1/8      | 3      | 5/16-24       | 1/8        | 1.6  | 4.8  | 19.6 | 18.3 | 11.1       |
| GFMRT-3T-01N  | 3/16     | 4      | 3/8-24        | 1/8        | 3.2  | 4.8  | 21.1 | 18.3 | 11.1       |
| GFMRT-4T-01N  | 1/4      | 6      | 7/16-20       | 1/8        | 4.4  | 4.8  | 22.6 | 19.8 | 11.1       |
| GFMRT-5T-01N  | 5/16     | 8      | 1/2-20        | 1/8        | 6.0  | 4.8  | 24.1 | 19.8 | 14.3       |
| GFMRT-6T-02N  | 3/8      | 10     | 9/16-18       | 1/4        | 7.5  | 7.0  | 26.9 | 27.7 | 14.3       |
| GFMRT-8T-03N  | 1/2      | 12     | 3/4-16        | 3/8        | 9.9  | 10.3 | 31.8 | 31.0 | 19.0       |
| GFMRT-10T-04N | 5/8      | 16     | 7/8-14        | 1/2        | 12.3 | 13.5 | 36.8 | 37.3 | 22.2       |
| GFMRT-12T-06N | 3/4      | 18, 20 | 1 1/16-12     | 3/4        | 15.5 | 18.3 | 42.2 | 40.4 | 27.0       |
| GFMRT-14T-06N | 7/8      | 22     | 1 3/16-12     | 3/4        | 18.3 | 18.3 | 45.7 | 42.9 | 33.3       |
| GFMRT-16T-08N | 1        | 25     | 1 5/16-12     | 1          | 21.4 | 23.8 | 46.0 | 50.0 | 33.3       |
| GFMRT-20T-10N | 1-1/4    | 32     | 1 5/8-12      | 1-1/4      | 27.4 | 31.7 | 52.3 | 60.5 | 41.3       |
| GFMRT-24T-12N | 1-1/2    | 38     | 1 7/8-12      | 1-1/2      | 33.3 | 38.0 | 59.2 | 67.1 | 47.6       |
| GFMRT-32T-16N | 2        | 50     | 2 1/2-12      | 2          | 45.2 | 49.0 | 77.7 | 76.2 | 63.5       |

## GFMBT

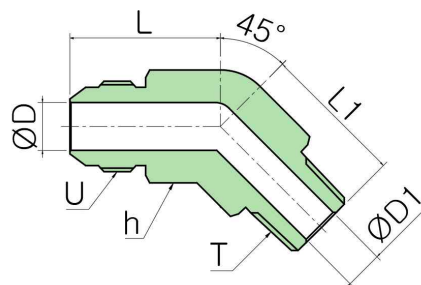
Male Branch Tee (37° Flare Fitting)



| Part No.      | Tube O.D |        | U<br>(UN/UNF) | T<br>(NPT) | D    | D1   | L    | L1   | h<br>(HEX) |
|---------------|----------|--------|---------------|------------|------|------|------|------|------------|
|               | inch     | mm     |               |            |      |      |      |      |            |
| GFMBT-2T-01N  | 1/8      | 3      | 5/16-24       | 1/8        | 1.6  | 4.8  | 19.6 | 18.3 | 11.1       |
| GFMBT-3T-01N  | 3/16     | 4      | 3/8-24        | 1/8        | 3.2  | 4.8  | 21.1 | 18.3 | 11.1       |
| GFMBT-4T-01N  | 1/4      | 6      | 7/16-20       | 1/8        | 4.4  | 4.8  | 22.6 | 19.8 | 11.1       |
| GFMBT-5T-01N  | 5/16     | 8      | 1/2-20        | 1/8        | 6.0  | 4.8  | 24.1 | 19.8 | 14.3       |
| GFMBT-6T-02N  | 3/8      | 10     | 9/16-18       | 1/4        | 7.5  | 7.0  | 26.9 | 27.7 | 14.3       |
| GFMBT-8T-03N  | 1/2      | 12     | 3/4-16        | 3/8        | 9.9  | 10.3 | 31.8 | 31.0 | 19.0       |
| GFMBT-10T-04N | 5/8      | 16     | 7/8-14        | 1/2        | 12.3 | 13.5 | 36.8 | 37.3 | 22.2       |
| GFMBT-12T-06N | 3/4      | 18, 20 | 1 1/16-12     | 3/4        | 15.5 | 18.3 | 42.2 | 40.4 | 27.0       |
| GFMBT-14T-06N | 7/8      | 22     | 1 3/16-12     | 3/4        | 18.3 | 18.3 | 45.7 | 42.9 | 33.3       |
| GFMBT-16T-08N | 1        | 25     | 1 5/16-12     | 1          | 21.4 | 23.8 | 46.0 | 50.0 | 33.3       |
| GFMBT-20T-10N | 1-1/4    | 32     | 1 5/8-12      | 1-1/4      | 27.4 | 31.7 | 52.3 | 60.5 | 41.3       |
| GFMBT-24T-12N | 1-1/2    | 38     | 1 7/8-12      | 1-1/2      | 33.3 | 38.0 | 59.2 | 67.1 | 47.6       |
| GFMBT-32T-16N | 2        | 50     | 2 1/2-12      | 2          | 45.2 | 49.0 | 77.7 | 76.2 | 63.5       |

## GF45ME

45° Male Elbow (37° Flare Fitting)

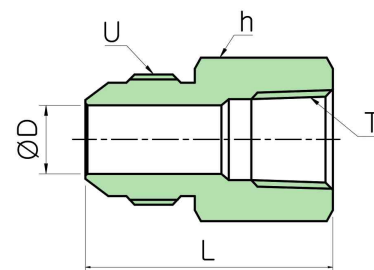


| Part No.       | Tube O.D |        | U<br>(UN/UNF) | T<br>(NPT) | D    | D1   | L    | L1   | h<br>(HEX) |
|----------------|----------|--------|---------------|------------|------|------|------|------|------------|
|                | inch     | mm     |               |            |      |      |      |      |            |
| GF45ME-2T-01N  | 1/8      | 3      | 5/16-24       | 1/8        | 1.6  | 4.8  | 17.5 | 13.2 | 11.1       |
| GF45ME-3T-01N  | 3/16     | 4      | 3/8-24        | 1/8        | 3.2  | 4.8  | 17.5 | 13.2 | 11.1       |
| GF45ME-4T-01N  | 1/4      | 6      | 7/16-20       | 1/8        | 4.4  | 4.8  | 18.3 | 16.3 | 11.1       |
| GF45ME-5T-01N  | 5/16     | 8      | 1/2-20        | 1/8        | 6.0  | 4.8  | 19.6 | 16.3 | 14.3       |
| GF45ME-6T-02N  | 3/8      | 10     | 9/16-18       | 1/4        | 7.5  | 7.0  | 21.1 | 21.8 | 14.3       |
| GF45ME-8T-03N  | 1/2      | 12     | 3/4-16        | 3/8        | 9.9  | 10.3 | 24.9 | 24.1 | 19.0       |
| GF45ME-10T-04N | 5/8      | 16     | 7/8-14        | 1/2        | 12.3 | 13.5 | 28.2 | 29.7 | 22.2       |
| GF45ME-12T-06N | 3/4      | 18, 20 | 1 1/16-12     | 3/4        | 15.5 | 18.3 | 32.5 | 30.5 | 27.0       |
| GF45ME-14T-06N | 7/8      | 22     | 1 3/16-12     | 3/4        | 18.3 | 18.3 | 36.8 | 33.0 | 33.3       |
| GF45ME-16T-08N | 1        | 25     | 1 5/16-12     | 1          | 21.4 | 23.8 | 37.3 | 37.6 | 33.3       |
| GF45ME-20T-10N | 1-1/4    | 32     | 1 5/8-12      | 1-1/4      | 27.4 | 31.7 | 40.4 | 42.4 | 41.3       |
| GF45ME-24T-12N | 1-1/2    | 38     | 1 7/8-12      | 1-1/2      | 33.3 | 38.0 | 45.2 | 45.0 | 47.6       |
| GF45ME-32T-16N | 2        | 50     | 2 1/2-12      | 2          | 45.2 | 49.0 | 56.4 | 53.6 | 63.5       |

## [ Tube to Female Pipe ]

### GFFC

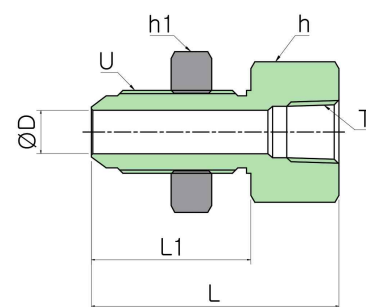
Female Connector (37° Flare Fitting)



| Part No.     | Tube O.D |       | U<br>(UN/UNF) | T<br>(NPT) | D    | L    | h<br>(HEX) |
|--------------|----------|-------|---------------|------------|------|------|------------|
|              | inch     | mm    |               |            |      |      |            |
| GFFC-2T-01N  | 1/8      | 3     | 5/16-24       | 1/8        | 1.6  | 28.4 | 14.3       |
| GFFC-3T-01N  | 3/16     | 4     | 3/8-24        | 1/8        | 3.2  | 28.7 | 14.3       |
| GFFC-4T-01N  | 1/4      | 6     | 7/16-20       | 1/8        | 4.4  | 30.2 | 14.3       |
| GFFC-5T-01N  | 5/16     | 8     | 1/2-20        | 1/8        | 6.0  | 29.7 | 14.3       |
| GFFC-6T-02N  | 3/8      | 10    | 9/16-18       | 1/4        | 7.5  | 35.6 | 19.0       |
| GFFC-8T-03N  | 1/2      | 12    | 3/4-16        | 3/8        | 9.9  | 39.6 | 22.2       |
| GFFC-10T-04N | 5/8      | 16    | 7/8-14        | 1/2        | 12.3 | 48.0 | 28.5       |
| GFFC-12T-06N | 3/4      | 18,20 | 1 1/16-12     | 3/4        | 15.5 | 52.3 | 34.9       |
| GFFC-14T-06N | 7/8      | 22    | 1 3/16-12     | 3/4        | 18.3 | 52.3 | 34.9       |
| GFFC-16T-08N | 1        | 25    | 1 5/16-12     | 1          | 21.4 | 59.7 | 41.2       |
| GFFC-20T-10N | 1-1/4    | 32    | 1 5/8-12      | 1-1/4      | 27.4 | 63.2 | 50.8       |
| GFFC-24T-12N | 1-1/2    | 38    | 1 7/8-12      | 1-1/2      | 33.3 | 66.5 | 60.3       |
| GFFC-32T-16N | 2        | 50    | 2 1/2-12      | 2          | 45.2 | 75.4 | 73.0       |

### GFBFC

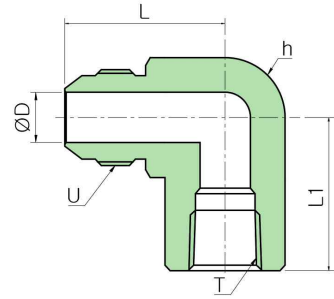
Bulkhead Female Connector (37° Flare Fitting)



| Part No.      | Tube O.D |        | U<br>(UN/UNF) | T<br>(NPT) | D    | L    | L1   | h<br>(HEX) | h1<br>(HEX) |
|---------------|----------|--------|---------------|------------|------|------|------|------------|-------------|
|               | inch     | mm     |               |            |      |      |      |            |             |
| GFBFC-2T-01N  | 1/8      | 3      | 5/16-24       | 1/8        | 1.6  | 41.2 | 28.2 | 14.3       | 14.3        |
| GFBFC-3T-01N  | 3/16     | 4      | 3/8-24        | 1/8        | 3.2  | 41.2 | 28.2 | 14.3       | 15.8        |
| GFBFC-4T-01N  | 1/4      | 6      | 7/16-20       | 1/8        | 4.4  | 46.7 | 30.5 | 14.3       | 17.4        |
| GFBFC-5T-01N  | 5/16     | 8      | 1/2-20        | 1/8        | 6.0  | 43.5 | 30.5 | 14.3       | 19.0        |
| GFBFC-6T-02N  | 3/8      | 10     | 9/16-18       | 1/4        | 7.5  | 52.3 | 32.5 | 19.0       | 20.6        |
| GFBFC-8T-03N  | 1/2      | 12     | 3/4-16        | 3/8        | 9.9  | 54.4 | 36.6 | 22.2       | 25.4        |
| GFBFC-10T-04N | 5/8      | 16     | 7/8-14        | 1/2        | 12.3 | 67.5 | 40.1 | 28.5       | 28.5        |
| GFBFC-12T-06N | 3/4      | 18, 20 | 1 1/16-12     | 3/4        | 15.5 | 73.9 | 44.4 | 34.9       | 34.9        |
| GFBFC-14T-06N | 7/8      | 22     | 1 3/16-12     | 3/4        | 18.3 | 73.4 | 44.4 | 34.9       | 38.1        |
| GFBFC-16T-08N | 1        | 25     | 1 5/16-12     | 1          | 21.4 | 78.5 | 44.4 | 41.2       | 41.2        |
| GFBFC-20T-10N | 1-1/4    | 32     | 1 5/8-12      | 1-1/4      | 27.4 | 80.7 | 45.7 | 50.8       | 47.6        |
| GFBFC-24T-12N | 1-1/2    | 38     | 1 7/8-12      | 1-1/2      | 33.3 | 85.1 | 46.0 | 60.3       | 53.9        |
| GFBFC-32T-16N | 2        | 50     | 2 1/2-12      | 2          | 45.2 | 93.1 | 53.1 | 73.0       | 69.8        |

## GFFE

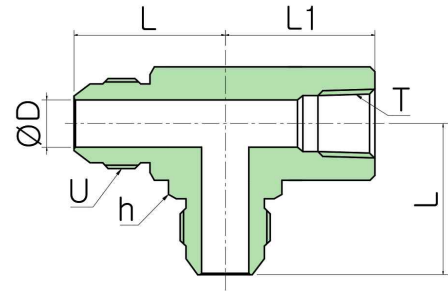
Female Elbow (37° Flare Fitting)



| Part No.     | Tube O.D |        | U<br>(UN/UNF) | T<br>(NPT) | D    | L    | L1   | h<br>(HEX) |
|--------------|----------|--------|---------------|------------|------|------|------|------------|
|              | inch     | mm     |               |            |      |      |      |            |
| GFFE-2T-01N  | 1/8      | 3      | 5/16-24       | 1/8        | 1.6  | 25.4 | 16.8 | 14.3       |
| GFFE-3T-01N  | 3/16     | 4      | 3/8-24        | 1/8        | 3.2  | 26.2 | 16.8 | 14.3       |
| GFFE-4T-01N  | 1/4      | 6      | 7/16-20       | 1/8        | 4.4  | 27.4 | 16.8 | 14.3       |
| GFFE-5T-01N  | 5/16     | 8      | 1/2-20        | 1/8        | 6.0  | 27.4 | 16.8 | 14.3       |
| GFFE-6T-02N  | 3/8      | 10     | 9/16-18       | 1/4        | 7.5  | 31.2 | 22.4 | 19.0       |
| GFFE-8T-03N  | 1/2      | 12     | 3/4-16        | 3/8        | 9.9  | 36.1 | 25.9 | 22.2       |
| GFFE-10T-04N | 5/8      | 16     | 7/8-14        | 1/2        | 12.3 | 41.7 | 31.2 | 27.0       |
| GFFE-12T-06N | 3/4      | 18, 20 | 1 1/16-12     | 3/4        | 15.5 | 48.0 | 34.5 | 33.3       |
| GFFE-14T-06N | 7/8      | 22     | 1 3/16-12     | 3/4        | 18.3 | 47.2 | 36.1 | 33.3       |
| GFFE-16T-08N | 1        | 25     | 1 5/16-12     | 1          | 21.4 | 55.1 | 41.1 | 41.3       |
| GFFE-20T-10N | 1-1/4    | 32     | 1 5/8-12      | 1-1/4      | 27.4 | 59.2 | 43.2 | 47.6       |
| GFFE-24T-12N | 1-1/2    | 38     | 1 7/8-12      | 1-1/2      | 33.3 | 73.4 | 52.8 | 65.1       |
| GFFE-32T-16N | 2        | 50     | 2 1/2-12      | 2          | 45.2 | 83.8 | 60.7 | 71.4       |

## GFFRT

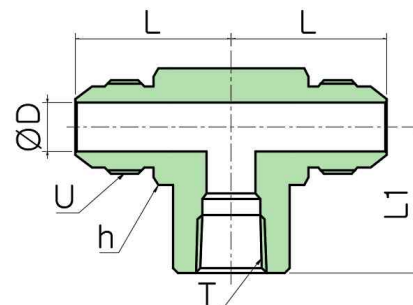
Female Run Tee (37° Flare Fitting)



| Part No.      | Tube O.D |        | U<br>(UN/UNF) | T<br>(NPT) | D    | L    | L1   | h<br>(HEX) |
|---------------|----------|--------|---------------|------------|------|------|------|------------|
|               | inch     | mm     |               |            |      |      |      |            |
| GFFRT-2T-01N  | 1/8      | 3      | 5/16-24       | 1/8        | 1.6  | 25.4 | 16.8 | 14.3       |
| GFFRT-3T-01N  | 3/16     | 4      | 3/8-24        | 1/8        | 3.2  | 26.2 | 16.8 | 14.3       |
| GFFRT-4T-01N  | 1/4      | 6      | 7/16-20       | 1/8        | 4.4  | 27.4 | 16.8 | 14.3       |
| GFFRT-5T-01N  | 5/16     | 8      | 1/2-20        | 1/8        | 6.0  | 27.4 | 16.8 | 14.3       |
| GFFRT-6T-02N  | 3/8      | 10     | 9/16-18       | 1/4        | 7.5  | 31.2 | 22.4 | 19.0       |
| GFFRT-8T-03N  | 1/2      | 12     | 3/4-16        | 3/8        | 9.9  | 36.1 | 25.9 | 22.2       |
| GFFRT-10T-04N | 5/8      | 16     | 7/8-14        | 1/2        | 12.3 | 41.7 | 31.2 | 27.0       |
| GFFRT-12T-06N | 3/4      | 18, 20 | 1 1/16-12     | 3/4        | 15.5 | 48.0 | 34.5 | 33.3       |
| GFFRT-14T-06N | 7/8      | 22     | 1 3/16-12     | 3/4        | 18.3 | 47.2 | 36.1 | 33.3       |
| GFFRT-16T-08N | 1        | 25     | 1 5/16-12     | 1          | 21.4 | 55.1 | 41.1 | 41.3       |
| GFFRT-20T-10N | 1-1/4    | 32     | 1 5/8-12      | 1-1/4      | 27.4 | 59.2 | 43.2 | 47.6       |
| GFFRT-24T-12N | 1-1/2    | 38     | 1 7/8-12      | 1-1/2      | 33.3 | 73.4 | 52.8 | 65.1       |
| GFFRT-32T-16N | 2        | 50     | 2 1/2-12      | 2          | 45.2 | 83.8 | 60.7 | 71.4       |

## GFFBT

Female Branch Tee (37° Flare Fitting)

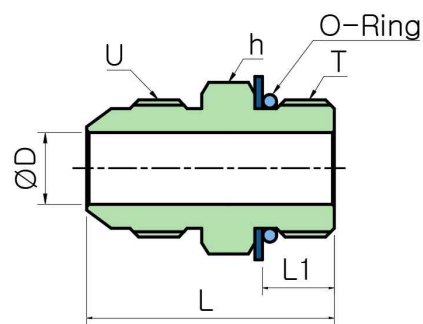


| Part No.      | Tube O.D |        | U<br>(UN/UNF) | T<br>(NPT) | D    | L    | L1   | h<br>(HEX) |
|---------------|----------|--------|---------------|------------|------|------|------|------------|
|               | inch     | mm     |               |            |      |      |      |            |
| GFFBT-2T-01N  | 1/8      | 3      | 5/16-24       | 1/8        | 1.6  | 25.4 | 16.8 | 14.3       |
| GFFBT-3T-01N  | 3/16     | 4      | 3/8-24        | 1/8        | 3.2  | 26.2 | 16.8 | 14.3       |
| GFFBT-4T-01N  | 1/4      | 6      | 7/16-20       | 1/8        | 4.4  | 27.4 | 16.8 | 14.3       |
| GFFBT-5T-01N  | 5/16     | 8      | 1/2-20        | 1/8        | 6.0  | 27.4 | 16.8 | 14.3       |
| GFFBT-6T-02N  | 3/8      | 10     | 9/16-18       | 1/4        | 7.5  | 31.2 | 22.4 | 19.0       |
| GFFBT-8T-03N  | 1/2      | 12     | 3/4-16        | 3/8        | 9.9  | 36.1 | 25.9 | 22.2       |
| GFFBT-10T-04N | 5/8      | 16     | 7/8-14        | 1/2        | 12.3 | 41.7 | 31.2 | 27.0       |
| GFFBT-12T-06N | 3/4      | 18, 20 | 1 1/16-12     | 3/4        | 15.5 | 48.0 | 34.5 | 33.3       |
| GFFBT-14T-06N | 7/8      | 22     | 1 3/16-12     | 3/4        | 18.3 | 47.2 | 36.1 | 33.3       |
| GFFBT-16T-08N | 1        | 25     | 1 5/16-12     | 1          | 21.4 | 55.1 | 41.1 | 41.3       |
| GFFBT-20T-10N | 1-1/4    | 32     | 1 5/8-12      | 1-1/4      | 27.4 | 59.2 | 43.2 | 47.6       |
| GFFBT-24T-12N | 1-1/2    | 38     | 1 7/8-12      | 1-1/2      | 33.3 | 73.4 | 52.8 | 65.1       |
| GFFBT-32T-16N | 2        | 50     | 2 1/2-12      | 2          | 45.2 | 83.8 | 60.7 | 71.4       |

## [ Tube to Straight Thread ]

### GFOMC-G

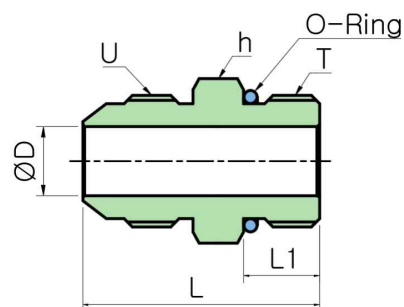
O-Seal Male Connector (PF) (37° Flare Fitting)



| Part No.      | Tube O.D |        | U<br>(UN/UNF) | T<br>(PF) | D    | L    | L1   | h<br>(HEX) |
|---------------|----------|--------|---------------|-----------|------|------|------|------------|
|               | inch     | mm     |               |           |      |      |      |            |
| GFOMC-4T-01G  | 1/4      | 6      | 7/16-20       | 1/8       | 4.4  | 28.7 | 6.2  | 17.0       |
| GFOMC-5T-01G  | 5/16     | 8      | 1/2-20        | 1/8       | 6.0  | 28.7 | 6.2  | 17.0       |
| GFOMC-6T-02G  | 3/8      | 10     | 9/16-18       | 1/4       | 7.5  | 32.0 | 9.3  | 19.1       |
| GFOMC-8T-03G  | 1/2      | 12     | 3/4-16        | 3/8       | 9.9  | 36.0 | 9.3  | 22.2       |
| GFOMC-10T-04G | 5/8      | 16     | 7/8-14        | 1/2       | 12.3 | 43.9 | 12.6 | 30.0       |
| GFOMC-12T-06G | 3/4      | 18, 20 | 1 1/16-12     | 3/4       | 15.5 | 47.5 | 12.6 | 36.0       |
| GFOMC-16T-08G | 1        | 25     | 1 5/16-12     | 1         | 21.4 | 53.6 | 15.9 | 46.0       |
| GFOMC-20T-10G | 1-1/4    | 32     | 1 5/8-12      | 1-1/4     | 27.4 | 56.4 | 15.9 | 50.0       |
| GFOMC-24T-12G | 1-1/2    | 38     | 1 7/8-12      | 1-1/2     | 33.3 | 61.0 | 15.9 | 55.0       |
| GFOMC-32T-16G | 2        | 50     | 2 1/2-12      | 2         | 45.2 | 80.5 | 25.0 | 70.0       |

### GFOMC-U

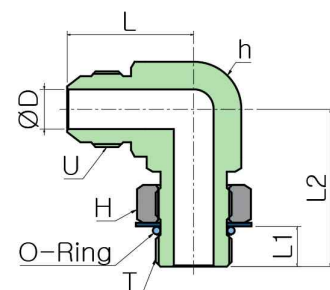
O-Seal Male Connector (UNF) (37° Flare Fitting)



| Part No.      | Tube O.D |        | U<br>(UN/UNF) | T<br>(UN/UNF) | D    | L    | L1   | h<br>(HEX) |
|---------------|----------|--------|---------------|---------------|------|------|------|------------|
|               | inch     | mm     |               |               |      |      |      |            |
| GFOMC-2T-02U  | 1/8      | 3      | 5/16-24       | 5/16-24       | 1.6  | 26.9 | 7.5  | 11.1       |
| GFOMC-3T-03U  | 3/16     | 4      | 3/8-24        | 3/8 - 24      | 3.2  | 27.9 | 7.5  | 12.7       |
| GFOMC-4T-04U  | 1/4      | 6      | 7/16-20       | 7/16-20       | 4.4  | 31.2 | 9.1  | 14.3       |
| GFOMC-5T-05U  | 5/16     | 8      | 1/2-20        | 1/2-20        | 6.0  | 31.2 | 9.1  | 15.8       |
| GFOMC-6T-06U  | 3/8      | 10     | 9/16-18       | 9/16-18       | 7.5  | 33.0 | 9.9  | 17.4       |
| GFOMC-8T-08U  | 1/2      | 12     | 3/4-16        | 3/4-16        | 9.9  | 37.6 | 11.1 | 22.2       |
| GFOMC-10T-10U | 5/8      | 16     | 7/8-14        | 7/8-14        | 12.3 | 43.2 | 12.7 | 25.4       |
| GFOMC-12T-12U | 3/4      | 18, 20 | 1 1/16-12     | 1 1/16-12     | 15.5 | 50.0 | 15.1 | 31.7       |
| GFOMC-14T-14U | 7/8      | 22     | 1 3/16-12     | 1 3/16-12     | 18.3 | 50.5 | 15.1 | 34.9       |
| GFOMC-16T-16U | 1        | 25     | 1 5/16-12     | 1 5/16-12     | 21.4 | 51.8 | 15.1 | 38.1       |
| GFOMC-20T-20U | 1-1/4    | 32     | 1 5/8-12      | 1 5/8-12      | 27.4 | 55.1 | 15.1 | 47.6       |
| GFOMC-24T-24U | 1-1/2    | 38     | 1 7/8-12      | 1 7/8-12      | 33.3 | 60.2 | 15.1 | 53.9       |
| GFOMC-32T-32U | 2        | 50     | 2 1/2-12      | 2 1/2-12      | 45.2 | 70.6 | 15.1 | 69.8       |

## GFOME-U

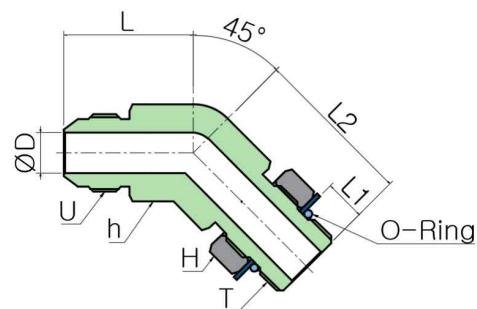
O-Seal Male Elbow (UNF) (37° Flare Fitting)



| Part No.      | Tube O.D |        | U<br>(UN/UNF) | T<br>(UN/UNF) | D    | L    | L1   | L2   | h<br>(HEX) | H<br>(HEX) |
|---------------|----------|--------|---------------|---------------|------|------|------|------|------------|------------|
|               | inch     | mm     |               |               |      |      |      |      |            |            |
| GFOME-2T-02U  | 1/8      | 3      | 5/16-24       | 5/16-24       | 1.6  | 19.6 | 8.4  | 23.9 | 11.1       | 14.3       |
| GFOME-3T-03U  | 3/16     | 4      | 3/8-24        | 3/8-24        | 3.2  | 21.1 | 8.5  | 23.9 | 11.1       | 15.8       |
| GFOME-4T-04U  | 1/4      | 6      | 7/16-20       | 7/16-20       | 4.4  | 22.6 | 9.8  | 26.2 | 11.1       | 17.4       |
| GFOME-5T-05U  | 5/16     | 8      | 1/2-20        | 1/2-20        | 6.0  | 24.1 | 9.8  | 28.7 | 14.3       | 19.0       |
| GFOME-6T-06U  | 3/8      | 10     | 9/16-18       | 9/16-18       | 7.5  | 26.9 | 11.0 | 31.8 | 14.3       | 20.6       |
| GFOME-8T-08U  | 1/2      | 12     | 3/4-16        | 3/4-16        | 9.9  | 31.8 | 12.5 | 36.8 | 19.0       | 25.4       |
| GFOME-10T-10U | 5/8      | 16     | 7/8-14        | 7/8-14        | 12.3 | 36.8 | 14.3 | 43.2 | 22.2       | 28.5       |
| GFOME-12T-12U | 3/4      | 18, 20 | 1 1/16-12     | 1 1/16-12     | 15.5 | 42.2 | 16.5 | 49.3 | 27.0       | 34.9       |
| GFOME-14T-14U | 7/8      | 22     | 1 3/16-12     | 1 3/16-12     | 18.3 | 45.7 | 16.5 | 50.8 | 33.3       | 38.1       |
| GFOME-16T-16U | 1        | 25     | 1 5/16-12     | 1 5/16-12     | 21.4 | 46.0 | 16.5 | 52.1 | 33.3       | 41.2       |
| GFOME-20T-20U | 1-1/4    | 32     | 1 5/8-12      | 1 5/8-12      | 27.4 | 52.3 | 16.5 | 57.2 | 41.3       | 47.6       |
| GFOME-24T-24U | 1-1/2    | 38     | 1 7/8-12      | 1 7/8-12      | 33.3 | 59.2 | 16.5 | 60.7 | 47.6       | 53.9       |
| GFOME-32T-32U | 2        | 50     | 2 1/2-12      | 2 1/2-12      | 45.2 | 77.7 | 16.5 | 73.4 | 63.5       | 69.8       |

## GFO45ME-U

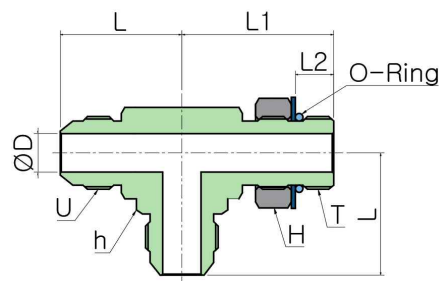
O-Seal 45° Male Elbow (UNF) (37° Flare Fitting)



| Part No.        | Tube O.D |        | U<br>(UN/UNF) | T<br>(UN/UNF) | D    | L    | L1   | L2   | h<br>(HEX) | H<br>(HEX) |
|-----------------|----------|--------|---------------|---------------|------|------|------|------|------------|------------|
|                 | inch     | mm     |               |               |      |      |      |      |            |            |
| GFO45ME-2T-02U  | 1/8      | 3      | 5/16-24       | 5/16-24       | 1.6  | 17.5 | 8.4  | 22.4 | 11.1       | 14.3       |
| GFO45ME-3T-03U  | 3/16     | 4      | 3/8-24        | 3/8-24        | 3.2  | 17.5 | 9.5  | 22.4 | 11.1       | 15.8       |
| GFO45ME-4T-04U  | 1/4      | 6      | 7/16-20       | 7/16-20       | 4.4  | 18.3 | 9.8  | 26.7 | 11.1       | 17.4       |
| GFO45ME-5T-05U  | 5/16     | 8      | 1/2-20        | 1/2-20        | 6.0  | 19.6 | 9.8  | 26.7 | 14.3       | 19.0       |
| GFO45ME-6T-06U  | 3/8      | 10     | 9/16-18       | 9/16-18       | 7.5  | 21.1 | 11.0 | 29.0 | 14.3       | 20.6       |
| GFO45ME-8T-08U  | 1/2      | 12     | 3/4-16        | 3/4-16        | 9.9  | 24.9 | 12.5 | 33.0 | 19.0       | 25.4       |
| GFO45ME-10T-10U | 5/8      | 16     | 7/8-14        | 7/8-14        | 12.3 | 28.2 | 14.3 | 38.6 | 22.2       | 28.5       |
| GFO45ME-12T-12U | 3/4      | 18, 20 | 1 1/16-12     | 1 1/16-12     | 15.5 | 32.5 | 16.5 | 43.9 | 27.0       | 34.9       |
| GFO45ME-14T-14U | 7/8      | 22     | 1 3/16-12     | 1 3/16-12     | 18.3 | 36.8 | 16.5 | 47.2 | 33.3       | 38.1       |
| GFO45ME-16T-16U | 1        | 25     | 1 5/16-12     | 1 5/16-12     | 21.4 | 37.3 | 16.5 | 47.2 | 33.3       | 41.2       |
| GFO45ME-20T-20U | 1-1/4    | 32     | 1 5/8-12      | 1 5/8-12      | 27.4 | 40.4 | 16.5 | 48.5 | 41.3       | 47.6       |
| GFO45ME-24T-24U | 1-1/2    | 38     | 1 7/8-12      | 1 7/8-12      | 33.3 | 45.2 | 16.5 | 48.5 | 47.6       | 53.9       |
| GFO45ME-32T-32U | 2W       | 50     | 2 1/2-12      | 2 1/2-12      | 45.2 | 56.4 | 16.5 | 47.2 | 63.5       | 69.8       |

## GFORT-U

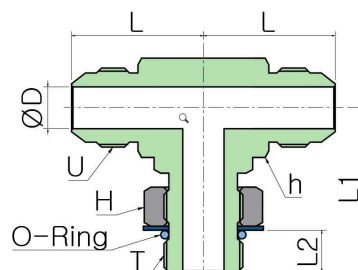
O-Seal Run Tee (UNF) (37° Flare Fitting)



| Part No.      | Tube O.D |        | U<br>(UN/UNF) | T<br>(UN/UNF) | D    | L    | L1   | L2   | h<br>(HEX) | H<br>(HEX) |
|---------------|----------|--------|---------------|---------------|------|------|------|------|------------|------------|
|               | inch     | mm     |               |               |      |      |      |      |            |            |
| GFORT-2T-02U  | 1/8      | 3      | 5/16-24       | 5/16-24       | 1.6  | 19.6 | 23.9 | 8.4  | 11.1       | 14.3       |
| GFORT-3T-03U  | 3/16     | 4      | 3/8-24        | 3/8-24        | 3.2  | 21.1 | 23.9 | 8.5  | 11.1       | 15.8       |
| GFORT-4T-04U  | 1/4      | 6      | 7/16-20       | 7/16-20       | 4.4  | 22.6 | 26.2 | 9.8  | 11.1       | 17.4       |
| GFORT-5T-05U  | 5/16     | 8      | 1/2-20        | 1/2-20        | 6.0  | 24.1 | 28.7 | 9.8  | 14.3       | 19.0       |
| GFORT-6T-06U  | 3/8      | 10     | 9/16-18       | 9/16-18       | 7.5  | 26.9 | 31.8 | 11.0 | 14.3       | 20.6       |
| GFORT-8T-08U  | 1/2      | 12     | 3/4-16        | 3/4-16        | 9.9  | 31.8 | 36.8 | 12.5 | 19.0       | 25.4       |
| GFORT-10T-10U | 5/8      | 16     | 7/8-14        | 7/8-14        | 12.3 | 36.8 | 43.2 | 14.3 | 22.2       | 28.5       |
| GFORT-12T-12U | 3/4      | 18, 20 | 1 1/16-12     | 1 1/16-12     | 15.5 | 42.2 | 49.3 | 16.5 | 27.0       | 34.9       |
| GFORT-14T-14U | 7/8      | 22     | 1 3/16-12     | 1 3/16-12     | 18.3 | 45.7 | 50.8 | 16.5 | 33.3       | 38.1       |
| GFORT-16T-16U | 1        | 25     | 1 5/16-12     | 1 5/16-12     | 21.4 | 46.0 | 52.1 | 16.5 | 33.3       | 41.2       |
| GFORT-20T-20U | 1-1/4    | 32     | 1 5/8-12      | 1 5/8-12      | 27.4 | 52.3 | 57.2 | 16.5 | 41.3       | 47.6       |
| GFORT-24T-24U | 1-1/2    | 38     | 1 7/8-12      | 1 7/8-12      | 33.3 | 59.2 | 60.7 | 16.5 | 47.6       | 53.9       |
| GFORT-32T-32U | 2        | 50     | 2 1/2-12      | 2 1/2-12      | 45.2 | 77.7 | 73.4 | 16.5 | 63.5       | 69.8       |

## GFOBT-U

O-Seal Branch Tee (UNF) (37° Flare Fitting)

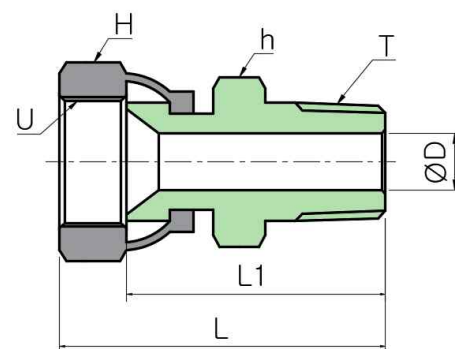


| Part No.      | Tube O.D |       | U<br>(UN/UNF) | T<br>(UN/UNF) | D    | L    | L1   | L2   | h<br>(HEX) | H<br>(HEX) |
|---------------|----------|-------|---------------|---------------|------|------|------|------|------------|------------|
|               | inch     | mm    |               |               |      |      |      |      |            |            |
| GFOBT-2T-02U  | 1/8      | 3     | 5/16-24       | 5/16-24       | 1.6  | 19.6 | 23.9 | 8.4  | 11.1       | 14.3       |
| GFOBT-3T-03U  | 3/16     | 4     | 3/8-24        | 3/8-24        | 3.2  | 21.1 | 23.9 | 8.5  | 11.1       | 15.8       |
| GFOBT-4T-04U  | 1/4      | 6     | 7/16-20       | 7/16-20       | 4.4  | 22.6 | 26.2 | 9.8  | 11.1       | 17.4       |
| GFOBT-5T-05U  | 5/16     | 8     | 1/2-20        | 1/2-20        | 6.0  | 24.1 | 28.7 | 9.8  | 14.3       | 19.0       |
| GFOBT-6T-06U  | 3/8      | 10    | 9/16-18       | 9/16-18       | 7.5  | 26.9 | 31.8 | 11.0 | 14.3       | 20.6       |
| GFOBT-8T-08U  | 1/2      | 12    | 3/4-16        | 3/4-16        | 9.9  | 31.8 | 36.8 | 12.5 | 19.0       | 25.4       |
| GFOBT-10T-10U | 5/8      | 16    | 7/8-14        | 7/8-14        | 12.3 | 36.8 | 43.2 | 14.3 | 22.2       | 28.5       |
| GFOBT-12T-12U | 3/4      | 18,20 | 1 1/16-12     | 1 1/16-12     | 15.5 | 42.2 | 49.3 | 16.5 | 27.0       | 34.9       |
| GFOBT-14T-14U | 7/8      | 22    | 1 3/16-12     | 1 3/16-12     | 18.3 | 45.7 | 50.8 | 16.5 | 33.3       | 38.1       |
| GFOBT-16T-16U | 1        | 25    | 1 5/16-12     | 1 5/16-12     | 21.4 | 46.0 | 52.1 | 16.5 | 33.3       | 41.2       |
| GFOBT-20T-20U | 1-1/4    | 32    | 1 5/8-12      | 1 5/8-12      | 27.4 | 52.3 | 57.2 | 16.5 | 41.3       | 47.6       |
| GFOBT-24T-24U | 1-1/2    | 38    | 1 7/8-12      | 1 7/8-12      | 33.3 | 59.2 | 60.7 | 16.5 | 47.6       | 53.9       |
| GFOBT-32T-32U | 2        | 50    | 2 1/2-12      | 2 1/2-12      | 45.2 | 77.7 | 73.4 | 16.5 | 63.5       | 69.8       |

## [ Swivel Fittings ]

### GFSC

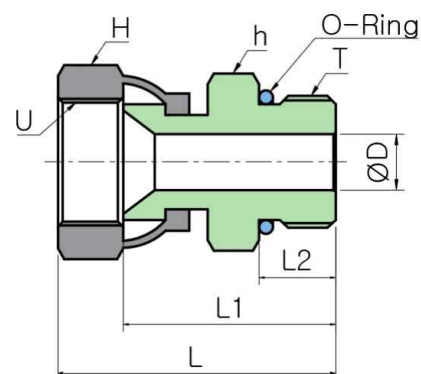
Swivel Connector (37° Flare Fitting)



| Part No.     | Tube O.D |        | U<br>(UN/UNF) | T<br>(NPT) | D    | L    | L1   | h<br>(HEX) | H<br>(HEX) |
|--------------|----------|--------|---------------|------------|------|------|------|------------|------------|
|              | inch     | mm     |               |            |      |      |      |            |            |
| GFSC-4T-01N  | 1/4      | 6      | 7/16-20       | 1/8        | 4.4  | 28.7 | 20.0 | 12.7       | 14.3       |
| GFSC-6T-02N  | 3/8      | 10     | 9/16-18       | 1/4        | 7.5  | 40.4 | 30.9 | 15.8       | 17.4       |
| GFSC-8T-03N  | 1/2      | 12     | 3/4-16        | 3/8        | 9.9  | 41.9 | 32.2 | 20.6       | 22.2       |
| GFSC-10T-04N | 5/8      | 16     | 7/8-14        | 1/2        | 12.3 | 52.1 | 39.4 | 20.6       | 25.4       |
| GFSC-12T-06N | 3/4      | 18, 20 | 1 1/16-12     | 3/4        | 15.5 | 54.6 | 40.3 | 28.5       | 31.7       |
| GFSC-16T-08N | 1        | 25     | 1 5/16-12     | 1          | 21.4 | 63.5 | 48.4 | 34.9       | 38.1       |
| GFSC-20T-10N | 1-1/4    | 32     | 1 5/8-12      | 1-1/4      | 27.4 | 70.1 | 54.2 | 42.8       | 50.8       |
| GFSC-24T-12N | 1-1/2    | 38     | 1 7/8-12      | 1-1/2      | 33.3 | 77.5 | 58.9 | 50.8       | 57.1       |
| GFSC-32T-16N | 2        | 50     | 2 1/2-12      | 2          | 45.2 | 85.9 | 62.1 | 66.6       | 69.8       |

### GFOSC-U

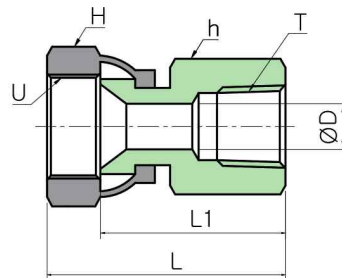
O-Seal Swivel Connector (UNF) (37° Flare Fitting)



| Part No.      | Tube O.D |        | U<br>(UN/UNF) | T<br>(UN/UNF) | D    | L    | L1   | L2   | h<br>(HEX) | H<br>(HEX) |
|---------------|----------|--------|---------------|---------------|------|------|------|------|------------|------------|
|               | inch     | mm     |               |               |      |      |      |      |            |            |
| GFOSC-4T-04U  | 1/4      | 6      | 7/16-20       | 7/16-20       | 4.4  | 33.3 | 24.6 | 9.1  | 14.3       | 14.3       |
| GFOSC-5T-05U  | 5/16     | 8      | 1/2-20        | 1/2-20        | 6.0  | 34.3 | 24.8 | 9.1  | 15.8       | 15.8       |
| GFOSC-6T-06U  | 3/8      | 10     | 9/16-18       | 9/16-18       | 7.5  | 36.3 | 26.8 | 9.9  | 17.4       | 17.4       |
| GFOSC-8T-08U  | 1/2      | 12     | 3/4-16        | 3/4-16        | 9.9  | 40.9 | 30.2 | 11.1 | 22.2       | 22.2       |
| GFOSC-10T-10U | 5/8      | 16     | 7/8-14        | 7/8-14        | 12.3 | 46.7 | 34.0 | 12.7 | 25.4       | 25.4       |
| GFOSC-12T-12U | 3/4      | 18, 20 | 1 1/16-12     | 1 1/16-12     | 15.5 | 52.6 | 38.3 | 15.1 | 31.7       | 31.7       |
| GFOSC-16T-16U | 1        | 25     | 1 5/16-12     | 1 5/16-12     | 21.4 | 57.9 | 42.8 | 15.1 | 38.1       | 38.1       |
| GFOSC-20T-20U | 1-1/4    | 32     | 1 5/8-12      | 1 5/8-12      | 27.4 | 63.2 | 47.4 | 15.1 | 50.8       | 50.8       |

## GFSFC

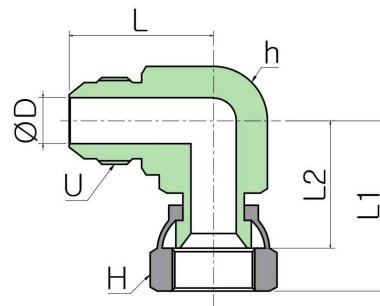
Swivel Female Connector (37° Flare Fitting)



| Part No.      | Tube O.D |        | U<br>(UN/UNF) | T<br>(NPT) | D    | L    | L1   | h<br>(HEX) | H<br>(HEX) |
|---------------|----------|--------|---------------|------------|------|------|------|------------|------------|
|               | inch     | mm     |               |            |      |      |      |            |            |
| GFSFC-4T-01N  | 1/4      | 6      | 7/16-20       | 1/8        | 4.4  | 32.1 | 23.4 | 14.3       | 14.3       |
| GFSFC-6T-02N  | 3/8      | 10     | 9/16-18       | 1/4        | 7.5  | 36.4 | 26.9 | 19.0       | 17.4       |
| GFSFC-8T-03N  | 1/2      | 12     | 3/4-16        | 3/8        | 9.9  | 40.7 | 31.2 | 22.2       | 22.2       |
| GFSFC-10T-04N | 5/8      | 16     | 7/8-14        | 1/2        | 12.3 | 48.0 | 37.3 | 28.5       | 25.4       |
| GFSFC-12T-06N | 3/4      | 18, 20 | 1 1/16-12     | 3/4        | 15.5 | 51.1 | 38.4 | 34.9       | 31.7       |
| GFSFC-16T-08N | 1        | 25     | 1 5/16-12     | 1          | 21.4 | 62.1 | 47.0 | 41.2       | 38.1       |
| GFSFC-20T-10N | 1-1/4    | 32     | 1 5/8-12      | 1-1/4      | 27.4 | 71.0 | 55.1 | 50.8       | 50.8       |
| GFSFC-24T-12N | 1-1/2    | 38     | 1 7/8-12      | 1-1/2      | 33.3 | 76.0 | 57.4 | 60.3       | 57.1       |
| GFSFC-32T-16N | 2        | 50     | 2 1/2-12      | 2          | 45.2 | 86.0 | 62.2 | 73.0       | 69.8       |

## GFSE

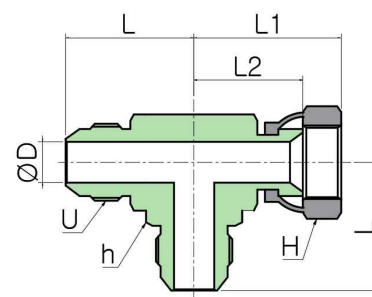
Swivel Elbow (37° Flare Fitting)



| Part No. | Tube O.D |        | U<br>(UN/UNF) | D    | L    | L1   | L2   | h<br>(HEX) | H<br>(HEX) |
|----------|----------|--------|---------------|------|------|------|------|------------|------------|
|          | inch     | mm     |               |      |      |      |      |            |            |
| GFSE-2T  | 1/8      | 3      | 5/16-24       | 1.6  | 19.6 | 24.6 | 16.7 | 11.1       | 11.1       |
| GFSE-3T  | 3/16     | 4      | 3/8-24        | 3.2  | 21.1 | 25.4 | 17.1 | 11.1       | 12.7       |
| GFSE-4T  | 1/4      | 6      | 7/16-20       | 4.4  | 22.6 | 25.4 | 16.7 | 11.1       | 14.2       |
| GFSE-5T  | 5/16     | 8      | 1/2-20        | 6.0  | 24.1 | 26.9 | 17.4 | 14.3       | 15.8       |
| GFSE-6T  | 3/8      | 10     | 9/16-18       | 7.5  | 26.9 | 31.8 | 22.3 | 14.3       | 17.4       |
| GFSE-8T  | 1/2      | 12     | 3/4-16        | 9.9  | 31.8 | 35.1 | 24.4 | 19.0       | 22.2       |
| GFSE-10T | 5/8      | 16     | 7/8-14        | 12.3 | 36.8 | 41.1 | 28.4 | 22.2       | 25.4       |
| GFSE-12T | 3/4      | 18, 20 | 1 1/16-12     | 15.5 | 42.2 | 44.4 | 30.1 | 27.0       | 31.7       |
| GFSE-14T | 7/8      | 22     | 1 3/16-12     | 18.3 | 45.7 | 45.2 | 30.5 | 33.3       | 34.9       |
| GFSE-16T | 1        | 25     | 1 5/16-12     | 21.4 | 46.0 | 50.8 | 35.7 | 33.3       | 38.1       |
| GFSE-20T | 1-1/4    | 32     | 1 5/8-12      | 27.4 | 52.3 | 58.7 | 42.8 | 41.3       | 50.8       |
| GFSE-24T | 1-1/2    | 38     | 1 7/8-12      | 33.3 | 59.2 | 65.8 | 47.2 | 47.6       | 57.1       |
| GFSE-32T | 2        | 50     | 2 1/2-12      | 45.2 | 77.7 | 85.9 | 62.1 | 63.5       | 69.8       |

## GFSRT

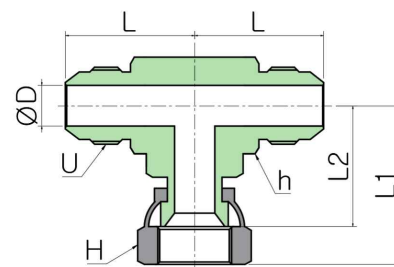
Swivel Run Tee (37° Flare Fitting)



| Part No.  | Tube O.D |        | U<br>(UN/UNF) | D    | L    | L1   | L2   | h<br>(HEX) | H<br>(HEX) |
|-----------|----------|--------|---------------|------|------|------|------|------------|------------|
|           | inch     | mm     |               |      |      |      |      |            |            |
| GFSRT-2T  | 1/8      | 3      | 5/16-24       | 1.6  | 19.6 | 24.6 | 16.7 | 11.1       | 11.1       |
| GFSRT-3T  | 3/16     | 4      | 3/8-24        | 3.2  | 21.1 | 25.4 | 17.1 | 11.1       | 12.7       |
| GFSRT-4T  | 1/4      | 6      | 7/16-20       | 4.4  | 22.6 | 25.4 | 16.7 | 11.1       | 14.2       |
| GFSRT-5T  | 5/16     | 8      | 1/2-20        | 6.0  | 24.1 | 26.9 | 17.4 | 14.3       | 15.8       |
| GFSRT-6T  | 3/8      | 10     | 9/16-18       | 7.5  | 26.9 | 31.8 | 22.3 | 14.3       | 17.4       |
| GFSRT-8T  | 1/2      | 12     | 3/4-16        | 9.9  | 31.8 | 35.1 | 24.4 | 19.0       | 22.2       |
| GFSRT-10T | 5/8      | 16     | 7/8-14        | 12.3 | 36.8 | 41.1 | 28.4 | 22.2       | 25.4       |
| GFSRT-12T | 3/4      | 18, 20 | 1 1/16-12     | 15.5 | 42.2 | 44.4 | 30.1 | 27.0       | 31.7       |
| GFSRT-14T | 7/8      | 22     | 1 3/16-12     | 18.3 | 45.7 | 45.2 | 30.5 | 33.3       | 34.9       |
| GFSRT-16T | 1        | 25     | 1 5/16-12     | 21.4 | 46.0 | 50.8 | 35.7 | 33.3       | 38.1       |
| GFSRT-20T | 1-1/4    | 32     | 1 5/8-12      | 27.4 | 52.3 | 58.7 | 42.8 | 41.3       | 50.8       |
| GFSRT-24T | 1-1/2    | 38     | 1 7/8-12      | 33.3 | 59.2 | 65.8 | 47.2 | 47.6       | 57.1       |
| GFSRT-32T | 2        | 50     | 2 1/2-12      | 45.2 | 77.7 | 85.9 | 62.1 | 63.5       | 69.8       |

## GFSBT

Swivel Branch Tee (37° Flare Fitting)

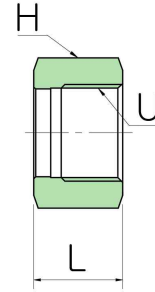


| Part No.  | Tube O.D |        | U<br>(UN/UNF) | D    | L    | L1   | L2   | h<br>(HEX) | H<br>(HEX) |
|-----------|----------|--------|---------------|------|------|------|------|------------|------------|
|           | inch     | mm     |               |      |      |      |      |            |            |
| GFSBT-2T  | 1/8      | 3      | 5/16-24       | 1.6  | 19.6 | 24.6 | 16.7 | 11.1       | 11.1       |
| GFSBT-3T  | 3/16     | 4      | 3/8-24        | 3.2  | 21.1 | 25.4 | 17.1 | 11.1       | 12.7       |
| GFSBT-4T  | 1/4      | 6      | 7/16-20       | 4.4  | 22.6 | 25.4 | 16.7 | 11.1       | 14.2       |
| GFSBT-5T  | 5/16     | 8      | 1/2-20        | 6.0  | 24.1 | 26.9 | 17.4 | 14.3       | 15.8       |
| GFSBT-6T  | 3/8      | 10     | 9/16-18       | 7.5  | 26.9 | 31.8 | 22.3 | 14.3       | 17.4       |
| GFSBT-8T  | 1/2      | 12     | 3/4-16        | 9.9  | 31.8 | 35.1 | 24.4 | 19.0       | 22.2       |
| GFSBT-10T | 5/8      | 16     | 7/8-14        | 12.3 | 36.8 | 41.1 | 28.4 | 22.2       | 25.4       |
| GFSBT-12T | 3/4      | 18, 20 | 1 1/16-12     | 15.5 | 42.2 | 44.4 | 30.1 | 27.0       | 31.7       |
| GFSBT-14T | 7/8      | 22     | 1 3/16-12     | 18.3 | 45.7 | 45.2 | 30.5 | 33.3       | 34.9       |
| GFSBT-16T | 1        | 25     | 1 5/16-12     | 21.4 | 46.0 | 50.8 | 35.7 | 33.3       | 38.1       |
| GFSBT-20T | 1-1/4    | 32     | 1 5/8-12      | 27.4 | 52.3 | 58.7 | 42.8 | 41.3       | 50.8       |
| GFSBT-24T | 1-1/2    | 38     | 1 7/8-12      | 33.3 | 59.2 | 65.8 | 47.2 | 47.6       | 57.1       |
| GFSBT-32T | 2        | 50     | 2 1/2-12      | 45.2 | 77.7 | 85.9 | 62.1 | 63.5       | 69.8       |

## [ Spare Parts ]

### GFN

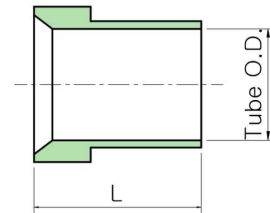
Nut (37° Flare Fitting)



| Part No. | Tube O.D |    | U<br>(UN/UNF) | L    | H<br>(HEX) |
|----------|----------|----|---------------|------|------------|
|          | inch     | mm |               |      |            |
| GFN-2T   | 1/8      | -  | 5/16-24       | 14.0 | 9.5        |
| GFN-3T   | 3/16     | -  | 3/8-24        | 15.5 | 11.0       |
| GFN-4T   | 1/4      | 6  | 7/16-20       | 15.8 | 14.3       |
| GFN-5T   | 5/16     | 8  | 1/2-20        | 17.3 | 15.8       |
| GFN-6T   | 3/8      | 10 | 9/16-18       | 18.5 | 17.4       |
| GFN-8T   | 1/2      | 12 | 3/4-16        | 21.6 | 22.2       |
| GFN-10T  | 5/8      | 16 | 7/8-14        | 24.9 | 25.4       |
| GFN-12T  | 3/4      | 18 | 1 1/16-12     | 26.2 | 31.7       |
| GFN-20M  | -        | 20 | 1 1/16-12     | 26.2 | 31.7       |
| GFN-14T  | 7/8      | 22 | 1 3/16-12     | 27.7 | 34.9       |
| GFN-16T  | 1        | 25 | 1 5/16-12     | 28.7 | 38.1       |
| GFN-20T  | 1-1/4    | 32 | 1 5/8-12      | 31.2 | 50.8       |
| GFN-24T  | 1-1/2    | 38 | 1 7/8-12      | 36.1 | 57.1       |
| GFN-32T  | 2        | 50 | 2 1/2-12      | 44.5 | 73.0       |

### GFS

Sleeve (37° Flare Fitting)

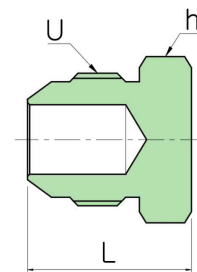


| Part No. | Tube O.D | L    |
|----------|----------|------|
|          | inch     |      |
| GFS-2T   | 1/8      | 8.6  |
| GFS-3T   | 3/16     | 8.6  |
| GFS-4T   | 1/4      | 10.4 |
| GFS-5T   | 5/16     | 11.2 |
| GFS-6T   | 3/8      | 12.7 |
| GFS-8T   | 1/2      | 14.2 |
| GFS-10T  | 5/8      | 16.8 |
| GFS-12T  | 3/4      | 17.3 |
| GFS-14T  | 7/8      | 19.3 |
| GFS-16T  | 1        | 19.8 |
| GFS-20T  | 1-1/4    | 23.1 |
| GFS-24T  | 1-1/2    | 28.4 |
| GFS-32T  | 2        | 30.2 |

| Part No. | Tube O.D | L    |
|----------|----------|------|
|          | mm       |      |
| GFS-3M   | 3        | 8.6  |
| GFS-4M   | 4        | 8.6  |
| GFS-6M   | 6        | 10.4 |
| GFS-8M   | 8        | 11.2 |
| GFS-10M  | 10       | 12.7 |
| GFS-12M  | 12       | 14.2 |
| GFS-16M  | 16       | 16.8 |
| GFS-18M  | 18       | 17.3 |
| GFS-20M  | 20       | 17.3 |
| GFS-22M  | 22       | 19.3 |
| GFS-25M  | 25       | 19.8 |
| GFS-32M  | 32       | 23.1 |
| GFS-38M  | 38       | 28.4 |

## GFP

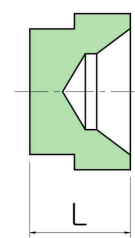
Plug (37° Flare Fitting)



| Part No. | Tube O.D |        | U<br>(UN/UNF) | L    | H<br>(HEX) |
|----------|----------|--------|---------------|------|------------|
|          | inch     | mm     |               |      |            |
| GFP-2T   | 1/8      | 3      | 5/16-24       | 17.8 | 11.1       |
| GFP-3T   | 3/16     | 4      | 3/8-24        | 18.5 | 11.1       |
| GFP-4T   | 1/4      | 6      | 7/16-20       | 20.3 | 12.7       |
| GFP-5T   | 5/16     | 8      | 1/2-20        | 20.3 | 14.2       |
| GFP-6T   | 3/8      | 10     | 9/16-18       | 21.3 | 15.8       |
| GFP-8T   | 1/2      | 12     | 3/4-16        | 23.9 | 20.6       |
| GFP-10T  | 5/8      | 16     | 7/8-14        | 27.9 | 20.6       |
| GFP-12T  | 3/4      | 18, 20 | 1 1/16-12     | 32.5 | 28.5       |
| GFP-14T  | 7/8      | 22     | 1 3/16-12     | 33.3 | 31.7       |
| GFP-16T  | 1        | 25     | 1 5/16-12     | 33.8 | 34.9       |
| GFP-20T  | 1-1/4    | 32     | 1 5/8-12      | 36.8 | 46.0       |
| GFP-24T  | 1-1/2    | 38     | 1 7/8-12      | 41.9 | 50.8       |
| GFP-32T  | 2        | 50     | 2 1/2-12      | 52.1 | 70.0       |

## GFCP

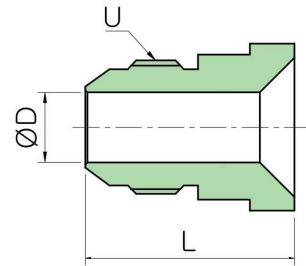
Cap (37° Flare Fitting)



| Part No. | Tube O.D |        | L    |
|----------|----------|--------|------|
|          | inch     | mm     |      |
| GFCP-2T  | 1/8      | 3      | 9.5  |
| GFCP-3T  | 3/16     | 4      | 9.5  |
| GFCP-4T  | 1/4      | 6      | 8.7  |
| GFCP-5T  | 5/16     | 8      | 10.3 |
| GFCP-6T  | 3/8      | 10     | 11.9 |
| GFCP-8T  | 1/2      | 12     | 13.5 |
| GFCP-10T | 5/8      | 16     | 13.5 |
| GFCP-12T | 3/4      | 18, 20 | 16.7 |
| GFCP-14T | 7/8      | 22     | 15.9 |
| GFCP-16T | 1        | 25     | 15.9 |
| GFCP-20T | 1-1/4    | 32     | 19.1 |
| GFCP-24T | 1-1/2    | 38     | 23.8 |
| GFCP-32T | 2        | 50     | 30.1 |

## GFPR

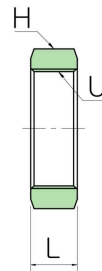
Fitting Port Reducer (37° Flare Fitting)



| Part No.     | Tube O.D      |  | U<br>(UN/UNF) | D    | L    |
|--------------|---------------|--|---------------|------|------|
|              | inch          |  |               |      |      |
| GFPR-6T-4T   | 3/8 x 1/4     |  | 7/16-20       | 4.4  | 24.6 |
| GFPR-8T-4T   | 1/2 x 1/4     |  | 7/16-20       | 4.4  | 25.4 |
| GFPR-8T-6T   | 1/2 x 3/8     |  | 9/16-18       | 7.5  | 25.4 |
| GFPR-10T-4T  | 5/8 x 1/4     |  | 7/16-20       | 4.4  | 26.2 |
| GFPR-10T-6T  | 5/8 x 3/8     |  | 9/16-18       | 7.5  | 26.2 |
| GFPR-12T-4T  | 3/4 x 1/4     |  | 7/16-20       | 4.4  | 27.7 |
| GFPR-12T-6T  | 3/4 x 3/8     |  | 9/16-18       | 7.5  | 27.7 |
| GFPR-12T-8T  | 3/4 x 1/2     |  | 3/4-16        | 10.0 | 30.2 |
| GFPR-16T-12T | 1 x 3/4       |  | 1 1/16-12     | 15.5 | 37.3 |
| GFPR-20T-12T | 1-1/4 x 3/4   |  | 1 1/16-12     | 15.5 | 38.3 |
| GFPR-20T-16T | 1-1/4 x 1     |  | 1 5/16-12     | 21.4 | 40.3 |
| GFPR-24T-20T | 1-1/2 x 1-1/4 |  | 1 5/8-12      | 27.4 | 42.9 |

## GFLN

Bulkhead Lock Nut (37° Flare Fitting)



| Part No. | Tube O.D |        | U<br>(UN/UNF) | L    | H<br>(HEX) |
|----------|----------|--------|---------------|------|------------|
|          | inch     | mm     |               |      |            |
| GFLN-2T  | 1/8      | 3      | 5/16-24       | 5.6  | 14.3       |
| GFLN-3T  | 3/16     | 4      | 3/8-24        | 5.6  | 15.8       |
| GFLN-4T  | 1/4      | 6      | 7/16-20       | 7.1  | 17.4       |
| GFLN-5T  | 5/16     | 8      | 1/2-20        | 7.1  | 19.0       |
| GFLN-6T  | 3/8      | 10     | 9/16-18       | 6.9  | 20.6       |
| GFLN-8T  | 1/2      | 12     | 3/4-16        | 7.9  | 25.4       |
| GFLN-10T | 5/8      | 16     | 7/8-14        | 9.1  | 28.5       |
| GFLN-12T | 3/4      | 18, 20 | 1 1/16-12     | 10.4 | 34.9       |
| GFLN-14T | 7/8      | 22     | 1 3/16-12     | 10.4 | 38.1       |
| GFLN-16T | 1        | 25     | 1 5/16-12     | 10.4 | 41.2       |
| GFLN-20T | 1-1/4    | 32     | 1 5/8-12      | 10.4 | 47.6       |
| GFLN-24T | 1-1/2    | 38     | 1 7/8-12      | 10.4 | 53.9       |
| GFLN-32T | 2        | 50     | 2 1/2-12      | 10.4 | 69.8       |