Precision Pipe Fittings







- 1/8" to 1" sizes
- 316 stainless steel, brass, and exotic materials
- NPT threads

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on pipe fittings

HOKE®

For Your Safety

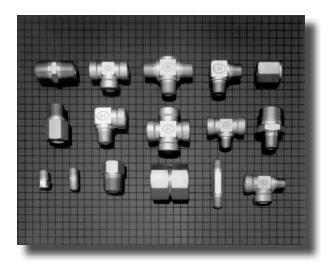
It is solely the responsibility of the system designer and user to select products suitable for their specific application requirements and to ensure proper installation, operation, and maintenance of these products. When selecting products, the total system design must be considered to ensure safe, trouble-free performance. Material compatibility, product ratings and application details should be considered in the selection. Improper selection or use of products described herein can cause personal injury or property damage.

Contact your authorized HOKE® sales and service representative for information about additional sizes and special alloys.

SAFETY WARNING:

HOKE® products are designed for installation only by professional suitably qualified licensed system installers experienced in the applications and environments for which the products are intended. These products are intended for integration into a system. Where these products are to be used with flammable or hazardous media, precautions must be taken by the system designer and installer to ensure the safety of persons and property. Flammable or hazardous media pose risks associated with fire or explosion, as well as burning, poisoning or other injury or death to persons and/or destruction of property. The system designer and installer must provide for the capture and control of such substances from any vents in the product(s). The system installer must not permit any leakage or uncontrolled escape of hazardous or flammable substances. The system operator must be trained to follow appropriate precautions and must inspect and maintain the system and its components including the product(s) and at regular intervals in accordance with timescales recommended by the supplier to prevent unacceptable wear or failure. We recommend that the regulators will be serviced every 5 Years after first installation.

HOKE® Precision Instrument Pipe Fittings are manufactured with high quality NPT tapered threads in a wide variety of configurations to provide broad application capabilities.



Threads

Threads utilized on HOKE® Precision Instrument Pipe fittings are National Pipe Taper (NPT) which exceed the requirements of ANSI B1.20.1.

Pressure Ratings

Pressure ratings for temperatures up to 100° F are identified for each individual pipe fitting in the dimensional data charts.

Temperature*

Temperatures noted below apply to basic fitting capabilities. In all cases consideration must also be given to the type of thread sealant used. For example, PTFE tape has a maximum temperature rating of 450° F.

316 stainless steel: -325° F to +1200° F

 $(-198^{\circ} \text{ C to } +648^{\circ} \text{ C})$

Brass: -325° F to $+400^{\circ}$ F

 $(-198^{\circ} \text{ C to } +204^{\circ} \text{ C})$

Materials

HOKE® Precision Pipe Fittings are available as standard in Brass and 316 Stainless Steel. HOKE® pipe fittings can also be supplied in other materials including, MONEL®, HASTELLOY® C, Inconel and Titanium and in special shapes. Specifications for standard materials are:

316 Stainless Steel Forgings
316 Stainless Steel Bar Stock
Brass Forgings, Alloy 377
Brass Bar Stock, Alloy 353
Brass Bar Stock, Alloy 360

ASTM A-182
ASTM A-479
QQ-B-626
ASTM B-453
QQ-B-626

Heat Traceability

HOKE®'s 316 Stainless Steel Precision Instrument Pipe Fittings are heat code traceable. To obtain certified material test reports (CMTR'S) for these components, place separate orders for such items and specify "CMTR'S required".

^{*} Prolonged exposure to temperature over 800° F is not recommended.

HOKE® Pipe Fitting Part Numbering

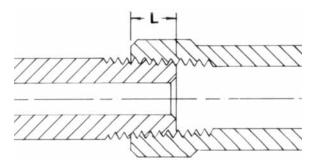
The part numbering system for HOKE® Precision Instrument Pipe Fittings is completely descriptive and easily understood.

Example:

| PIPE SIZE IN SIXTEENTHS OF AN INCH | PIPE FITTING TYPE | PIPE SIZE (IF DIFFERENT) In Sixteenths of an Inch | MATERIAL Brass – Br 316 SS – 316 Example: 4rap2316 |
|--|-------------------|---|---|
| 4 | RAP | 2 | 316 |
| ¼ NPT | Reducing Adapter | 1/8 NPT | 316 Stainless Steel |

Assembly Instructions

To ensure a leak-tight seal, the use of a pipe thread sealant is recommended. One commonly utilized technique is PTFE Tape. The chart below provides information regarding the recommended tape width and the approximate number of threads which should be wrapped

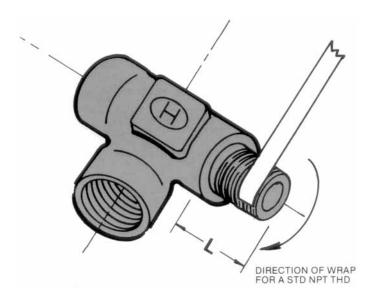


| NOMINAL PIPE SIZE | RECOMMENDED TAPE WIDTH | EFFECTIVE THREAD LENGTH (EXTERNAL) L* | APPROX. # OF THREADS |
|-------------------|------------------------|---------------------------------------|----------------------|
| 1/8 | 1/8-1/4 | 1/4 | 7 |
| 1/4 | 1/4 | 3/8 | 7 ½ |
| 3/8 | 1/4 | 3/8 | 7½ |
| 1/2 | 1/4-1/2 | 1/2 | 7½ |
| 3/4 | 1/4-1/2 | %16 | 7 % |
| 1 | 1/4-1/2 | 11/16 | 8 |

^{*} ISA Handbook of Control Valves. Note: Dimensions are in inches. The Pipe Thread Sealants may have lower temperature capabilities than the basic fitting.

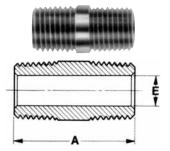
Example: For a $\frac{1}{4}$ NPT, "L" = $\frac{3}{8}$ "

Approximate number of threads which should be wrapped = $7\frac{1}{3}$



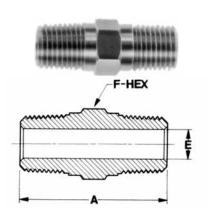
CNP Close Nipple (male NPT both ends)

| | PIPE SIZE | DII | MENSIONS | WORKING PRESSURE (PSIG) | | | |
|----------------------|-----------|------|---------------------|-------------------------|-------|--|--|
| ORDER BY PART NUMBER | MALE | A | E (MIN. Opening) | BRASS | 31688 | | |
| 4CNP - [] | 1/4 | 1.13 | .28 | 6600 | 8600 | | |
| 6CNP - [] | 3/8 | 1.13 | .37 | 6100 | 8000 | | |
| 8CNP - [] | 1/2 | 1.50 | .42 | 7100 | 9300 | | |
| 12CNP - [] | 3/4 | 1.50 | .62 | 5500 | 7300 | | |



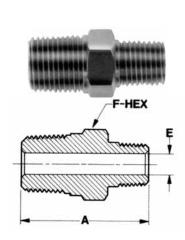
NP Hex Nipple (male NPT both ends)

| | PIPE SIZE | D | IMENSION | S | WORKING PRESSURE (PSIG) | | |
|----------------------|-----------|------|----------|-------|-------------------------|--------|--|
| ORDER BY PART NUMBER | MALE | Α | E MIN | F HEX | BRASS | 316SS | |
| 1NP – [] | 1/16 | 1.20 | .09 | 5/16 | 10,900 | 14,200 | |
| 2NP – [] | 1/8 | 1.20 | .18 | 7/16 | 7900 | 10,300 | |
| 4NP – [] | 1/4 | 1.58 | .28 | 9/16 | 6600 | 8600 | |
| 6NP – [] | 3/8 | 1.61 | .37 | 11/16 | 6100 | 8000 | |
| 8NP – [] | 1/2 | 1.98 | .46 | 7/8 | 6100 | 7900 | |
| 12NP - [] | 3/4 | 2.01 | .62 | 11/16 | 5500 | 7300 | |
| 16NP – [] | 1 | 2.28 | .87 | 13//8 | 4200 | 5500 | |



RNP Hex Reducing Nipple (male NPT to reduced male NPT)

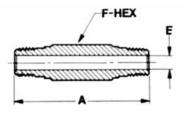
| | PIPE | SIZE | D | DIMENSIONS | | | WORKING PRESSURE (PSIG) | | |
|-------------------------|------|-----------------|------|------------|-------|--------|-------------------------|--|--|
| ORDER BY PART Number | MALE | REDUCED Male | A | E MIN | F HEX | BRASS | 31688 | | |
| 2RNP1 – [] | 1/8 | 1/16 | 1.11 | .09 | 7/16 | 10,900 | 14,200 | | |
| 4RNP2 – [] | 1/4 | 1/8 | 1.32 | .18 | 9/16 | 7900 | 10,300 | | |
| 6RNP4 – [] | 3/8 | 1/4 | 1.50 | .28 | 11/16 | 6600 | 8600 | | |
| 8RNP4 – [] | 1/2 | 1/4 | 1.69 | .28 | 7/8 | 6600 | 8600 | | |
| 8RNP6 – [] | 1/2 | 3/8 | 1.69 | .37 | 7/8 | 6100 | 8000 | | |
| 12RNP6 – [] | 3/4 | 3/8 | 1.72 | .37 | 11/16 | 6100 | 8000 | | |
| 12RNP8 – [] | 3/4 | 1/2 | 1.90 | .43 | 11/16 | 6800 | 8900 | | |
| 16RNP8 – [] | 1 | 1/2 | 2.17 | .43 | 1% | 6800 | 8900 | | |
| 16RNP12 - [] | 1 | 3/4 | 2.27 | .62 | 13/8 | 5500 | 7300 | | |

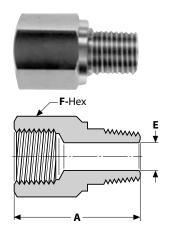


INP Hex Long Nipple (male NPT both ends)

| LNP Hex Long Nipple (male NPT both ends) | | | | | | | | | |
|--|-----------|-----|------------|-------|-------|--------------|--|--|--|
| | PIPE SIZE | ı | DIMENSIONS | | | SSURE (PSIG) | | | |
| ORDER BY PART NUMBER | MALE | A | E MIN | F HEX | BRASS | 31688 | | | |
| 2LNP - []/200 | 1/8 | 2.0 | .18 | 7/16 | 7900 | 10,300 | | | |
| 2LNP - []/250 | 1/8 | 2.5 | .18 | 7/16 | 7900 | 10,300 | | | |
| 4LNP - []/200 | 1/4 | 2.0 | .28 | 9/16 | 6600 | 8600 | | | |
| 4LNP - []/250 | 1/4 | 2.5 | .28 | 9/16 | 6600 | 8600 | | | |
| 4LNP - []/300 | 1/4 | 3.0 | .28 | 9/16 | 6600 | 8600 | | | |
| 4LNP - []/400 | 1/4 | 4.0 | .28 | 9/16 | 6600 | 8600 | | | |
| 6LNP - []/200 | 3/8 | 2.0 | .37 | 11/16 | 6100 | 8000 | | | |
| 6LNP - []/250 | 3/8 | 2.5 | .37 | 11/16 | 6100 | 8000 | | | |
| 6LNP - []/400 | 3/8 | 4.0 | .37 | 11/16 | 6100 | 8000 | | | |
| 8LNP - []/300 | 1/2 | 3.0 | .46 | 7/8 | 6000 | 7900 | | | |
| 12LNP - []/300 | 3/4 | 3.0 | .62 | 11/16 | 5500 | 7300 | | | |
| 16LNP - []/300 | 1 | 3.0 | .87 | 1% | 4200 | 5500 | | | |
| 16LNP - []/400 | 1 | 4.0 | .87 | 13/8 | 4200 | 5500 | | | |

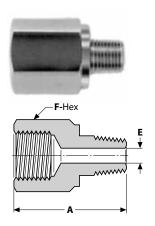






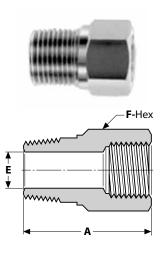
AP Adapter (female NPT same size male NPT)

| | PIPE SIZE | D | IMENSION | S | WORKING PRESSURE (PSIG) | | |
|----------------------|-----------|------|----------|-------|-------------------------|-------|--|
| ORDER BY PART NUMBER | MALE | Α | E MIN | F HEX | BRASS | 316SS | |
| 2AP – [] | 1/8 | 1.00 | .18 | 9/16 | 5100 | 6700 | |
| 4AP – [] | 1/4 | 1.37 | .28 | 3/4 | 5300 | 6900 | |
| 6AP – [] | 3/8 | 1.56 | .37 | 7/8 | 4200 | 5500 | |
| 8AP – [] | 1/2 | 1.90 | .46 | 11/16 | 3900 | 5100 | |
| 12AP – [] | 3/4 | 1.96 | .65 | 11/4 | 3000 | 3900 | |



RAP Reducing Adapter (female NPT to reduced male NPT)

| ORDER BY PART | PIPE | SIZE | DI | MENSION | IS | WORKING F (PS | |
|---------------|--------|------|------|---------|-------|------------------|-------|
| NUMBER | FEMALE | MALE | Α | E MIN | F HEX | BRASS | 316SS |
| 4RAP2 - [] | 1/4 | 1/8 | 1.25 | .18 | 3/4 | 5300 | 6900 |
| 6RAP2 - [] | 3/8 | 1/8 | 1.31 | .18 | 7/8 | 4200 | 5500 |
| 6RAP4 – [] | 3/8 | 1/4 | 1.50 | .28 | 7/8 | 4200 | 5500 |
| 8RAP4 – [] | 1/2 | 1/4 | 1.75 | .28 | 11/16 | 3900 | 5100 |
| 8RAP6 – [] | 1/2 | 3/8 | 1.75 | .37 | 11/16 | 3900 | 5100 |
| 12RAP4 – [] | 3/4 | 1/4 | 1.83 | .28 | 11/4 | 3000 | 3900 |
| 12RAP6 – [] | 3/4 | 3/8 | 1.83 | .37 | 11/4 | 3000 | 3900 |
| 12RAP8 – [] | 3/4 | 1/2 | 2.00 | .46 | 11/4 | 3000 | 3900 |
| 16RAP8 – [] | 1 | 1/2 | 2.37 | .46 | 1% | 3400 | 4500 |
| 16RAP12 - [] | 1 | 3/4 | 2.37 | .62 | 1% | 3400 | 4500 |

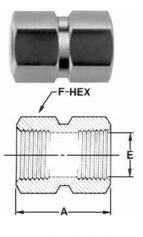


RBP Reducing Bushing (male NPT to reduced female NPT)

| ORDER BY PART | PIPE | SIZE | DI | MENSION | IS | | PRESSURE SIG) |
|---------------|------|--------|------|---------|-------|-------|------------------|
| NUMBER | MALE | FEMALE | Α | E MIN | F HEX | BRASS | 31688 |
| 2RBP1 - [] | 1/8 | 1/16 | 1.00 | .24 | 7/16 | 5500 | 7200 |
| 4RBP2 – [] | 1/4 | 1/8 | 1.00 | .33 | 9/16 | 4900 | 6400 |
| 6RBP2 - [] | 3/8 | 1/8 | 1.12 | .33 | 3/4 | 7600 | 9900 |
| 6RBP4 – [] | 3/8 | 1/4 | 1.12 | .43 | 3/4 | 4700 | 6100 |
| 8RBP4 – [] | 1/2 | 1/4 | 1.16 | .43 | 7/8 | 6900 | 9100 |
| 8RBP6 – [] | 1/2 | 3/8 | 1.16 | .56 | 7/8 | 3900 | 5200 |
| 12RBP4 - [] | 3/4 | 1/4 | 1.22 | .43 | 11/16 | 8700 | 11,400 |
| 12RBP6 – [] | 3/4 | 3/8 | 1.56 | .56 | 11/16 | 6400 | 8400 |
| 12RBP8 - [] | 3/4 | 1/2 | 1.56 | .69 | 11/16 | 3900 | 5100 |
| 16RBP8 – [] | 1 | 1/2 | 1.56 | .69 | 13//8 | 6900 | 9000 |
| 16RBP12 - [] | 1 | 3/4 | 1.75 | .90 | 13/8 | 3900 | 5100 |

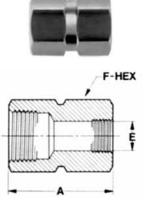
CGP Hex Coupling (female NPT both ends)

| 1 0 | | | | | | | | |
|----------------------|-----------|------|-----------|-------|-------------------------|-------|--|--|
| | PIPE SIZE | | DIMENSION | S | WORKING PRESSURE (PSIG) | | | |
| ORDER BY PART NUMBER | FEMALE | A | E MIN | F HEX | BRASS | 316SS | | |
| 2CGP - [] | 1/8 | .81 | .33 | 9/16 | 5100 | 6700 | | |
| 4CGP - [] | 1/4 | 1.13 | .43 | 3/4 | 5300 | 6900 | | |
| 6CGP - [] | 3/8 | 1.25 | .56 | 7/8 | 4200 | 5500 | | |
| 8CGP - [] | 1/2 | 1.50 | .69 | 11/16 | 3900 | 5100 | | |
| 12CGP - [] | 3/4 | 1.63 | .90 | 11/4 | 3000 | 3900 | | |
| 16CGP - [] | 1 | 2.00 | 1.13 | 15/8 | 3400 | 4500 | | |
| | | | | | | | | |



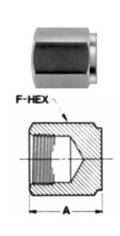
RCGP Reducing Coupling (female NPT to reduced female NPT)

| nous mousemb | | | | | | | |
|---------------|--------|--------|------|-----------|-------|-------------|--------------|
| ORDER BY PART | PIPE | SIZE | D | IMENSIONS | S | WORKING PRE | SSURE (PSIG) |
| NUMBER | FEMALE | FEMALE | Α | E MIN | F HEX | BRASS | 31688 |
| 4RCGP2 - [] | 1/4 | 1/8 | 1.13 | .33 | 3/4 | 5300 | 6900 |
| 6RCGP4 - [] | 3/8 | 1/4 | 1.37 | .43 | 7/8 | 4200 | 5500 |
| 8RCGP4 - [] | 1/2 | 1/4 | 1.50 | .43 | 11/16 | 3900 | 5100 |
| 8RCGP6 - [] | 1/2 | 3/8 | 1.50 | .56 | 11/16 | 3900 | 5100 |
| 12RCGP4 - [] | 3/4 | 1/4 | 1.72 | .43 | 11/4 | 3000 | 3900 |
| 12RCGP6 - [] | 3/4 | 3/8 | 1.72 | .56 | 11/4 | 3000 | 3900 |
| 12RCGP8 - [] | 3/4 | 1/2 | 1.72 | .69 | 11/4 | 3000 | 3900 |
| 16RCGP8 - [] | 1 | 1/2 | 2.31 | .69 | 1% | 3400 | 4500 |
| 16RCGP12 - [] | 1 | 3/4 | 2.37 | .90 | 15/8 | 3400 | 4500 |



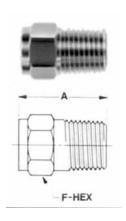
CPP Cap (female NPT)

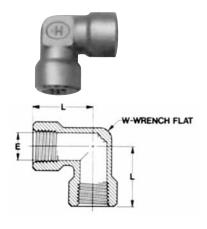
| or cap (terrials till) | | | | | | | | | | |
|------------------------|-----------|-------|-------|------------------------|-------|--|--|--|--|--|
| | PIPE SIZE | DIMEN | SIONS | WORKING PRESSURE (PSIC | | | | | | |
| ORDER BY PART NUMBER | FEMALE | A | F HEX | BRASS | 316SS | | | | | |
| 2CPP - [] | 1/8 | .69 | 9/16 | 5100 | 6700 | | | | | |
| 4CPP - [] | 1/4 | .88 | 3/4 | 5300 | 6900 | | | | | |
| 6CPP - [] | 3/8 | 1.03 | 7/8 | 4200 | 5500 | | | | | |
| 8CPP - [] | 1/2 | 1.25 | 11/16 | 3900 | 5100 | | | | | |
| 12CPP - [] | 3/4 | 1.43 | 11/4 | 3000 | 3900 | | | | | |
| 16CPP - [] | 1 | 1.62 | 1% | 3400 | 4500 | | | | | |



PP Plug (male NPT)

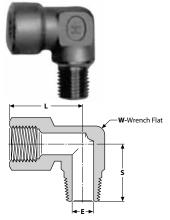
| | , | | | | |
|----------------------|-----------|------------|-------|--|--|
| | PIPE SIZE | DIMENSIONS | | | |
| ORDER BY PART NUMBER | MALE | Α | F HEX | | |
| 1PP – [] | 1/16 | .73 | 5/16 | | |
| 2PP – [] | 1/8 | .75 | 7/16 | | |
| 4PP – [] | 1/4 | .94 | 9/16 | | |
| 6PP – [] | 3/8 | 1.00 | 11/16 | | |
| 8PP – [] | 1/2 | 1.25 | 7/8 | | |
| 12PP – [] | 3/4 | 1.31 | 11/16 | | |
| 16PP – [] | 1 | 1.72 | 1% | | |
| | | | | | |





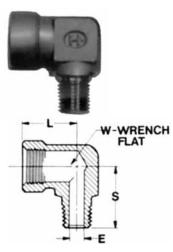
FLP Female Elbow (female NPT both ends)

| ORDER BY PART | PIPE SIZE | 0 | IMENSION | S | WORKING PRESSURE (PSIG) | | |
|---------------|-----------|------|----------|------|-------------------------|-------|--|
| NUMBER | FEMALE | L | E MIN | W | BRASS | 316SS | |
| 2FLP – [] | 1/8 | .75 | .33 | .50 | 3200 | 4200 | |
| 4FLP – [] | 1/4 | .84 | .43 | .68 | 4000 | 5300 | |
| 6FLP – [] | 3/8 | 1.00 | .56 | .81 | 3200 | 4200 | |
| 8FLP – [] | 1/2 | 1.13 | .69 | 1.00 | 3100 | 4100 | |
| 12FLP – [] | 3/4 | 1.25 | .90 | 1.26 | 3000 | 3900 | |



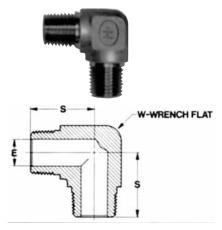
SLP Street Elbow (female to male NPT)

| WODYING PRECCURE | | | | | | | | | | | |
|------------------|-----------|------|-------|----------------------------|------|-------|-------|--|--|--|--|
| ORDER BY PART | PIPE SIZE | | DIMEN | WORKING PRESSURE (PSIG) | | | | | | | |
| NUMBER | FEMALE | L | S | E MIN | W | BRASS | 31688 | | | | |
| 1SLP - [] | 1/16 | .75 | .71 | .12 | .43 | 5500 | 7200 | | | | |
| 2SLP - [] | 1/8 | .75 | .87 | .18 | .50 | 3200 | 4200 | | | | |
| 4SLP - [] | 1/4 | .84 | 1.13 | .28 | .68 | 4000 | 5300 | | | | |
| 6SLP – [] | 3/8 | .84 | 1.25 | .37 | .81 | 3200 | 4200 | | | | |
| 8SLP - [] | 1/2 | 1.13 | 1.50 | .50 | 1.00 | 3100 | 4100 | | | | |
| 12SLP - [] | 3/4 | 1.25 | 1.56 | .62 | 1.25 | 3000 | 3900 | | | | |



RSLP Reducing Street Elbow (female NPT reduced male NPT)

| | PIPE | SIZE | DIMENSIONS | | | WORKING PRESSURE (PSIG) | | |
|----------------------|--------|-----------------|------------|------|-------|-------------------------|-------|-------|
| ORDER BY PART NUMBER | FEMALE | REDUCED MALE | L | s | E MIN | W | BRASS | 31688 |
| 6RSLP4 - [] | 3/8 | 1/4 | .91 | 1.13 | .28 | .81 | 3200 | 4200 |
| 8RSLP4 - [] | 1/2 | 1/4 | 1.13 | 1.40 | .28 | 1.00 | 3100 | 4100 |
| 8RSLP6 - [] | 1/2 | 3/8 | 1.13 | 1.25 | .37 | 1.00 | 3100 | 4100 |

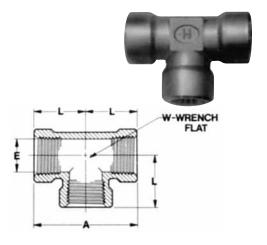


MLP Male Elbow (male NPT both ends)

| · | | | - | | | | | |
|----------------------|-----------|------|----------|------|-------------------------|--------|--|--|
| | PIPE SIZE | | IMENSION | S | WORKING PRESSURE (PSIG) | | | |
| ORDER BY PART NUMBER | MALE | S | E MIN | W | BRASS | 31688 | | |
| 2MLP - [] | 1/8 | .72 | .18 | .43 | 7900 | 10,300 | | |
| 4MLP - [] | 1/4 | 1.00 | .28 | .68 | 6600 | 8600 | | |
| 6MLP - [] | 3/8 | 1.00 | .37 | .68 | 6100 | 8000 | | |
| 8MLP - [] | 1/2 | 1.18 | .50 | 1.00 | 5300 | 7000 | | |
| 12MLP - [] | 3/4 | 1.50 | .62 | 1.25 | 5500 | 7300 | | |

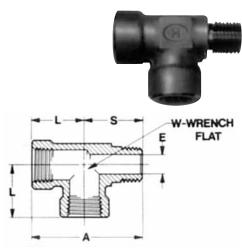
FTP Female Tee (female NPT all ports)

| ORDER BY PART | PIPE SIZE | | DIM | ENSIONS | WORKING PRESSURE (PSIG) | | |
|---------------|-----------|------|------|---------|-------------------------|-------|-------|
| NUMBER | FEMALE | Α | L | E MIN | W | BRASS | 31688 |
| 2FTP – [] | 1/8 | 1.50 | .75 | .33 | .50 | 3500 | 4600 |
| 4FTP – [] | 1/4 | 1.68 | .84 | .43 | .68 | 4000 | 5300 |
| 6FTP – [] | 3/8 | 2.00 | 1.00 | .56 | .81 | 3200 | 4200 |
| 8FTP – [] | 1/2 | 2.25 | 1.13 | .70 | 1.00 | 3100 | 4100 |
| 12FTP - [] | 3/4 | 2.76 | 1.38 | .90 | 1.36 | 4000 | 5200 |



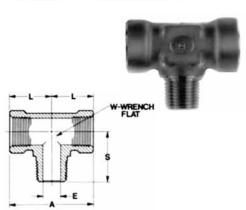
STP Street Tee (female by male run/female branch)

| | • | , | | | | | | | |
|---------------|-----------|------|------------|------|-------|------|-------------------------|-------|--|
| ORDER BY PART | | | DIMENSIONS | | | | WORKING PRESSURE (PSIG) | | |
| NUMBER | PIPE SIZE | Α | L | S | E MIN | W | BRASS | 31688 | |
| 2STP - [] | 1/8 | 1.53 | .75 | .78 | .18 | .50 | 3500 | 4600 | |
| 4STP - [] | 1/4 | 1.86 | .84 | 1.02 | .28 | .68 | 4000 | 5300 | |
| 6STP - [] | 3/8 | 2.13 | 1.00 | 1.13 | .37 | .81 | 3200 | 4200 | |
| 8STP - [] | 1/2 | 2.47 | 1.13 | 1.34 | .50 | 1.00 | 3100 | 4100 | |
| 12STP - [] | 3/4 | 3.16 | 1.44 | 1.72 | .62 | 1.69 | 6500 | 8500 | |



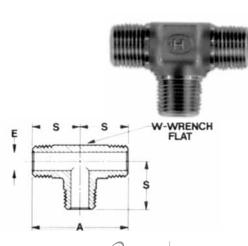
FTBM Male Branch Tee (female run/male branch)

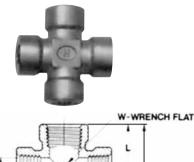
| ORDER BY PART | | DIMENSIONS | | | | | WORKING PRESSURE (PSIG) | | |
|---------------|-----------|------------|------|------|-------|------|-------------------------|-------|--|
| NUMBER | PIPE SIZE | Α | L | S | E MIN | W | BRASS | 31688 | |
| 2FT/BM2 - [] | 1/8 | 1.68 | .84 | .82 | .18 | .69 | 7100 | 9300 | |
| 4FT/BM4 – [] | 1/4 | 1.68 | .84 | 1.00 | .28 | .69 | 4000 | 5300 | |
| 6FT/BM6 - [] | 3/8 | 2.00 | 1.00 | 1.13 | .37 | .81 | 3200 | 4200 | |
| 8FT/BM8 - [] | 1/2 | 2.25 | 1.13 | 1.39 | .50 | 1.00 | 3100 | 4100 | |



MTP Male Tee (male NPT all ports)

| | PIPE SIZE | | DIMEN | ISIONS | WORKING PRESSURE (PSIG) | | |
|----------------------|-----------|------|-------|--------|-------------------------|-------|--------|
| ORDER BY PART NUMBER | MALE | A | S | E MIN | W | BRASS | 316SS |
| 2MTP – [] | 1/8 | 1.50 | .75 | .18 | .43 | 7900 | 10,300 |
| 4MTP – [] | 1/4 | 2.00 | 1.00 | .28 | .68 | 6600 | 8600 |
| 6MTP – [] | 3/8 | 2.00 | 1.00 | .37 | .68 | 6100 | 8000 |
| 8MTP – [] | 1/2 | 2.44 | 1.22 | .50 | 1.00 | 5300 | 7000 |
| 12MTP - [] | 3/4 | 3.00 | 1.50 | .62 | 1.25 | 5500 | 7300 |





CSP Cross

| | PIPE SIZE | | DIMEN | ISIONS | WORKING PRESSURE (PSIG) | | |
|----------------------|-----------|------|-------|--------|-------------------------|-------|-------|
| ORDER BY PART NUMBER | FEMALE | Α | L | E MIN | W | BRASS | 31688 |
| 2CSP - [] | 1/8 | 1.50 | .75 | .34 | .62 | 6200 | 8100 |
| 4CSP - [] | 1/4 | 1.68 | .84 | .44 | .68 | 6100 | 8000 |
| 6CSP - [] | 3/8 | 2.00 | 1.00 | .58 | 1.06 | 6400 | 8400 |
| 8CSP - [] | 1/2 | 2.25 | 1.13 | .72 | 1.06 | 3800 | 5000 |

Safety Instructions

- 1. Do not tighten or loosen any part of a fitting or valve when the system is pressurized. Make sure the system is not pressurized when tightening or loosening a fitting or valve connection.
- 2. Do not loosen GYROLOK® nut or any product component in order to relieve or bleed down system pressure.
- 3. Do not exceed pressure-temperature specifications stated in the appropriate catalog.
- 4. When the application involves use of a toxic or hazardous fluid, exercise extra caution during operation and maintenance.
- 5. Before assembling new, unused GYROLOK® tube fitting ends, loosen the GYROLOK® nut before inserting the tube to allow full insertion of the tube to the base of the body bore.
- 6. Always use tubing that is compatible with the fitting or valve material. Tubing appropriate for use with HOKE® products is described in HOKE®'s Tubing Data Charts. For example, use 316 Stainless Steel fittings with 316 Stainless Steel tubing.
- 7. Always leave a length of straight tube between the tube bend and the fitting. A tube bent too close to the fitting connection may be a source of leakage.
- 8. During assembly of the GYROLOK® tube end, always hold the fitting or valve body with one wrench while separately wrench tightening the GYROLOK® nut. Follow the same precaution when disassembling.
- 9. Always use a HOKE® tube insert (basic part number "T1") when assembling a GYROLOK® fitting to soft, pliable plastic tubing.
- 10. Always use proper thread lubricants or sealants on tapered pipe threads. Note that thread sealants may have lower temperature ratings than the basic fitting.
- 11. When installing an NPT ended valve, hold the valve body near the connection with one wrench, while separately wrench tightening the mating pipe. Turn the pipe, not the valve. Follow the same precaution when disconnecting.
- 12. Do not hold the valve handle when tightening an end connection.
- 13. Do not use excessive force to open or close a Ball Valve, e.g., Do not use a handle extension.
- 14.On initial installation, valves may require an adjustment of the packing nut due to storage variations, systems parameters, and cold flow properties of TFE.

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CI is a global manufacturer that specializes in developing highly engineered, technically superior small bore instrumentation solutions that consistently deliver benchmark performance, quality & safety for general-to-severe service liquid & gas flow applications.

We specialize in small bore instrumentation products up to 2" that deliver benchmark performance quality & safety; provide the broadest array of superior alloy offerings in the market; decades of proven success in a wide range of industries; a roster of "who's who" customers & projects globally; original "Best Solution" engineering & designs; and are focused on continuous improvement in all aspects of our business.

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