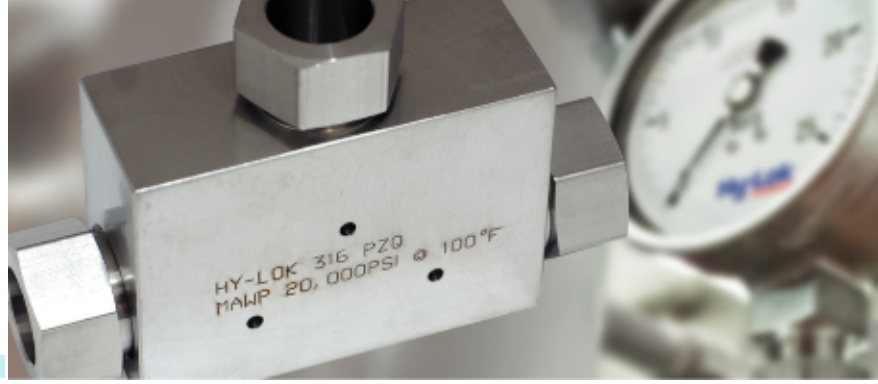




[www.hy-lok.com](http://www.hy-lok.com)

Catalog No. H-100HP  
Jan. 2023



# HP Series High Pressure Fittings

Pressures to 60,000psig



**HY-LOK CORPORATION**

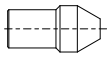
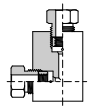
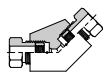
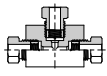
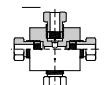
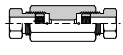
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## HP Series High Pressure Fittings

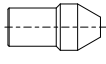
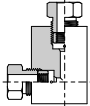
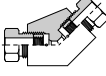
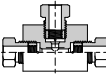
### Medium Pressure Fittings

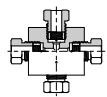
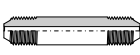
Pressure to 20,000psig

|                             |                                                                                     |   |
|-----------------------------|-------------------------------------------------------------------------------------|---|
| Glands                      |    | 1 |
| Collars                     |    | 1 |
| Plugs                       |    | 1 |
| Elbows                      |    | 2 |
| 45° Elbows                  |    | 2 |
| Tees                        |    | 2 |
| Crosses                     |    | 3 |
| Straight Couplings          |  | 3 |
| Union Couplings (Slip Type) |  | 3 |

### Sour Gas Service Fittings

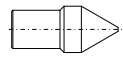
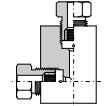
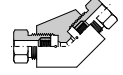
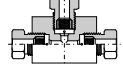
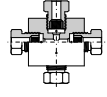
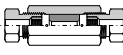
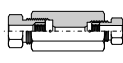
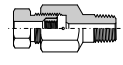
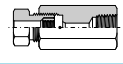
Pressure to 10,000psig

|            |                                                                                     |   |
|------------|-------------------------------------------------------------------------------------|---|
| Glands     |  | 4 |
| Collars    |  | 4 |
| Plugs      |  | 4 |
| Elbows     |  | 5 |
| 45° Elbows |  | 5 |
| Tees       |  | 5 |

|                             |                                                                                   |   |
|-----------------------------|-----------------------------------------------------------------------------------|---|
| Crosses                     |  | 6 |
| Straight Couplings          |  | 6 |
| Union Couplings (Slip Type) |  | 6 |
| Nipples                     |  | 7 |

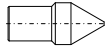
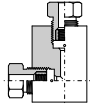
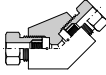
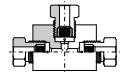
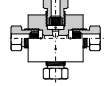
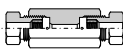
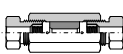
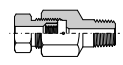
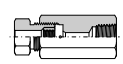
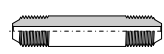
### High Pressure Fittings

Pressure to 60,000psig

|                                      |                                                                                     |    |
|--------------------------------------|-------------------------------------------------------------------------------------|----|
| Glands                               |    | 8  |
| Collars                              |   | 8  |
| Plugs                                |  | 8  |
| Elbows                               |  | 9  |
| 45° Elbows                           |  | 9  |
| Tees                                 |  | 9  |
| Crosses                              |  | 10 |
| Straight Couplings                   |  | 10 |
| Union Couplings (Slip Type)          |  | 10 |
| Reducing Couplings                   |  | 11 |
| Male Connectors (H/P Tube to Pipe)   |  | 11 |
| Female Connectors (H/P Tube to Pipe) |  | 11 |

### Sour Gas Service Fittings

Pressure to 30,000psig

|                                      |                                                                                       |    |
|--------------------------------------|---------------------------------------------------------------------------------------|----|
| Glands                               |    | 12 |
| Collars                              |    | 12 |
| Plugs                                |    | 12 |
| Elbows                               |    | 13 |
| 45° Elbows                           |    | 13 |
| Tees                                 |    | 13 |
| Crosses                              |    | 14 |
| Straight Couplings                   |   | 14 |
| Union Couplings (Slip Type)          |  | 14 |
| Reducing Couplings                   |  | 15 |
| Male Connectors (H/P Tube to Pipe)   |  | 15 |
| Female Connectors (H/P Tube to Pipe) |  | 15 |
| Nipples                              |  | 16 |

### Installation Instruction

|                                   |    |
|-----------------------------------|----|
| General                           | 17 |
| What's the Difference             | 17 |
| Coning and Threading of Tubing    | 18 |
| Assembly and Makeup of Connection | 18 |

### Installation Tools

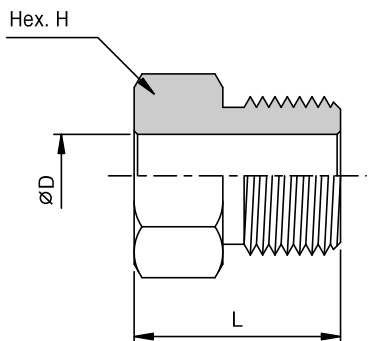
|                |    |
|----------------|----|
| Coning Tool    | 19 |
| Threading Tool | 19 |
| Tube Vise      | 19 |

### Ordering Information

|                          |    |
|--------------------------|----|
| Catalog Numbering System | 19 |
| How to order             | 19 |

## Medium Pressure Fittings Pressure to 20,000psig

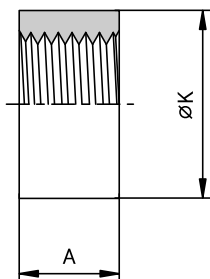
A complete range of elbows, tees, and crosses is available for all of the tubing connection sizes. Material is high tensile 316 stainless steel, Standard tubing glands and collars are provided unless otherwise specified.



### Glands

Unit : mm

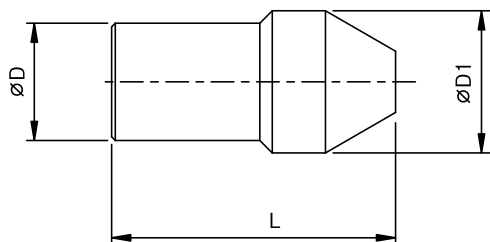
| Catalog No. | Pressure Rating psig | Tube Size | D    | L    | H    |
|-------------|----------------------|-----------|------|------|------|
| HPG20K-4M   | 20,000               | 1/4"      | 6.4  | 14.2 | 12.7 |
| HPG20K-6M   | 20,000               | 3/8"      | 9.5  | 18.3 | 15.7 |
| HPG20K-9M   | 20,000               | 9/16"     | 14.3 | 25.4 | 22.4 |
| HPG20K-12M  | 20,000               | 3/4"      | 19.1 | 23.9 | 28.4 |
| HPG20K-16M  | 20,000               | 1"        | 25.4 | 35.1 | 35.1 |



### Collars

Unit : mm

| Catalog No. | Pressure Rating psig | Tube Size | A    | K    |
|-------------|----------------------|-----------|------|------|
| HPC20K-4M   | 20,000               | 1/4"      | 5.6  | 9.7  |
| HPC20K-6M   | 20,000               | 3/8"      | 6.4  | 11.9 |
| HPC20K-9M   | 20,000               | 9/16"     | 7.9  | 18.3 |
| HPC20K-12M  | 20,000               | 3/4"      | 9.7  | 23.9 |
| HPC20K-16M  | 20,000               | 1"        | 12.7 | 31.8 |



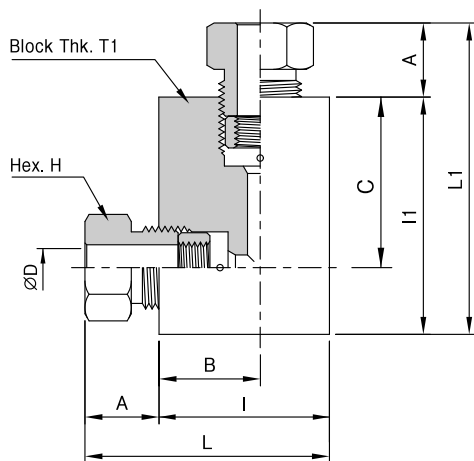
### Plugs

Unit : mm

| Catalog No. | Pressure Rating psig | Tube Size | D    | L    | D <sub>1</sub> |
|-------------|----------------------|-----------|------|------|----------------|
| HPP20K-4M   | 20,000               | 1/4"      | 6.4  | 25.4 | 9.7            |
| HPP20K-6M   | 20,000               | 3/8"      | 9.5  | 31.8 | 11.9           |
| HPP20K-9M   | 20,000               | 9/16"     | 14.3 | 39.6 | 18.3           |
| HPP20K-12M  | 20,000               | 3/4"      | 19.1 | 41.1 | 23.9           |
| HPP20K-16M  | 20,000               | 1"        | 25.4 | 55.6 | 31.8           |

All dimensions are for reference only, subject to change.

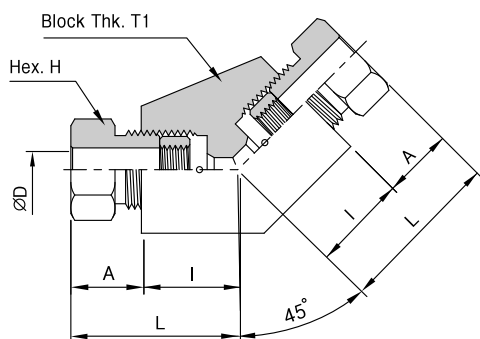
## Medium Pressure Fittings Pressure to 20,000psig



### Elbows

Unit : mm

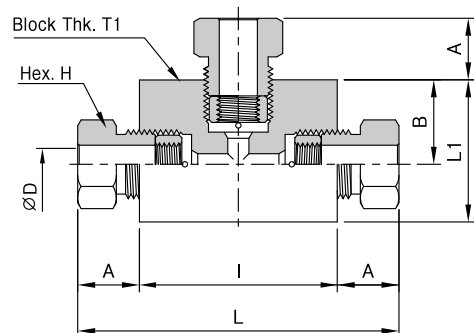
| Catalog No. | Pressure Rating psig | Tube Size | D    | A    | B    | C    | I    | I <sub>1</sub> | L    | L <sub>1</sub> | H    | T <sub>1</sub> |
|-------------|----------------------|-----------|------|------|------|------|------|----------------|------|----------------|------|----------------|
| HPL20K-4M   | 20,000               | 1/4"      | 6.4  | 9.7  | 19.1 | 19.1 | 28.4 | 38.1           | 38.1 | 47.8           | 12.7 | 15.7           |
| HPL20K-6M   | 20,000               | 3/8"      | 9.5  | 11.9 | 25.4 | 25.4 | 35.1 | 50.8           | 47.0 | 62.7           | 15.7 | 19.1           |
| HPL20K-9M   | 20,000               | 9/16"     | 14.3 | 13.5 | 31.8 | 31.8 | 44.5 | 63.5           | 58.0 | 77.0           | 22.4 | 25.4           |
| HPL20K-12M  | 20,000               | 3/4"      | 19.1 | 15.7 | 38.1 | 38.1 | 57.2 | 76.2           | 72.9 | 91.9           | 28.4 | 35.0           |
| HPL20K-16M  | 20,000               | 1"        | 25.4 | 18.3 | 52.3 | 52.3 | 76.2 | 104.6          | 94.5 | 122.9          | 35.1 | 44.5           |



### 45° Elbows

Unit : mm

| Catalog No. | Pressure Rating psig | Tube Size | D    | A    | I    | L    | H    | T <sub>1</sub> |
|-------------|----------------------|-----------|------|------|------|------|------|----------------|
| HPLB20K-4M  | 20,000               | 1/4"      | 6.4  | 9.1  | 19.1 | 28.8 | 12.7 | 15.7           |
| HPLB20K-6M  | 20,000               | 3/8"      | 9.5  | 11.9 | 25.4 | 37.3 | 15.7 | 19.1           |
| HPLB20K-9M  | 20,000               | 9/16"     | 14.3 | 13.5 | 31.8 | 45.3 | 22.4 | 25.4           |
| HPLB20K-12M | 20,000               | 3/4"      | 19.1 | 15.7 | 38.1 | 53.8 | 28.4 | 35.0           |
| HPLB20K-16M | 20,000               | 1"        | 25.4 | 18.3 | 52.3 | 70.6 | 35.1 | 44.5           |



### Tees

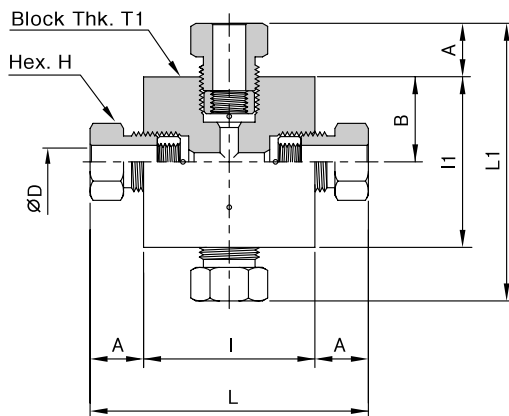
Unit : mm

| Catalog No. | Pressure Rating psig | Tube Size | D    | A    | B    | I     | L <sub>1</sub> | L     | H    | T <sub>1</sub> |
|-------------|----------------------|-----------|------|------|------|-------|----------------|-------|------|----------------|
| HPT20K-4M   | 20,000               | 1/4"      | 6.4  | 9.7  | 19.1 | 38.1  | 28.4           | 57.5  | 12.7 | 15.7           |
| HPT20K-6M   | 20,000               | 3/8"      | 9.5  | 11.9 | 25.4 | 50.8  | 35.0           | 74.6  | 15.7 | 19.1           |
| HPT20K-9M   | 20,000               | 9/16"     | 14.3 | 13.5 | 31.8 | 63.5  | 44.5           | 90.5  | 22.4 | 25.4           |
| HPT20K-12M  | 20,000               | 3/4"      | 19.1 | 15.7 | 38.1 | 76.2  | 57.2           | 107.6 | 28.4 | 35.0           |
| HPT20K-16M  | 20,000               | 1"        | 25.4 | 18.3 | 52.3 | 104.6 | 76.2           | 141.2 | 35.1 | 44.5           |

All dimensions are for reference only, subject to change.



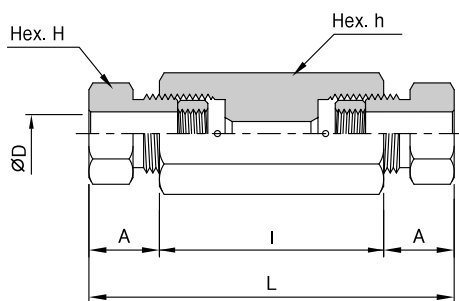
## Medium Pressure Fittings Pressure to 20,000psig



### Crosses

Unit : mm

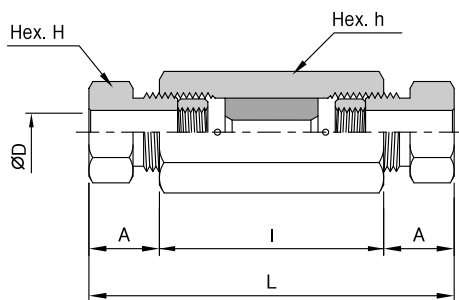
| Catalog No. | Pressure Rating psig | Tube Size | D    | A    | B    | I     | I <sub>1</sub> | L     | L <sub>1</sub> | H    | T <sub>1</sub> |
|-------------|----------------------|-----------|------|------|------|-------|----------------|-------|----------------|------|----------------|
| HPX20K-4M   | 20,000               | 1/4"      | 6.4  | 9.7  | 19.1 | 38.1  | 38.1           | 57.5  | 57.5           | 12.7 | 15.7           |
| HPX20K-6M   | 20,000               | 3/8"      | 9.5  | 11.9 | 25.4 | 50.8  | 50.8           | 74.6  | 74.6           | 15.7 | 19.1           |
| HPX20K-9M   | 20,000               | 9/16"     | 14.3 | 13.5 | 31.8 | 63.5  | 63.5           | 90.5  | 90.5           | 22.4 | 25.4           |
| HPX20K-12M  | 20,000               | 3/4"      | 19.1 | 15.7 | 38.1 | 76.2  | 76.2           | 107.6 | 107.6          | 28.4 | 35.0           |
| HPX20K-16M  | 20,000               | 1"        | 25.4 | 18.3 | 52.3 | 104.6 | 104.6          | 141.2 | 141.2          | 35.1 | 44.5           |



### Straight Couplings

Unit : mm

| Catalog No. | Pressure Rating psig | Tube Size | D    | A    | I    | L     | h    | H    |
|-------------|----------------------|-----------|------|------|------|-------|------|------|
| HPF20K-4M   | 20,000               | 1/4"      | 6.4  | 9.7  | 35.1 | 54.5  | 15.7 | 12.7 |
| HPF20K-6M   | 20,000               | 3/8"      | 9.5  | 11.9 | 44.5 | 68.3  | 19.1 | 15.7 |
| HPF20K-9M   | 20,000               | 9/16"     | 14.3 | 13.5 | 53.8 | 80.8  | 25.4 | 22.4 |
| HPF20K-12M  | 20,000               | 3/4"      | 19.1 | 15.7 | 63.5 | 94.9  | 35.0 | 28.4 |
| HPF20K-16M  | 20,000               | 1"        | 25.4 | 18.3 | 88.9 | 125.5 | 44.5 | 35.1 |



### Union Couplings(Slip Type)

Unit : mm

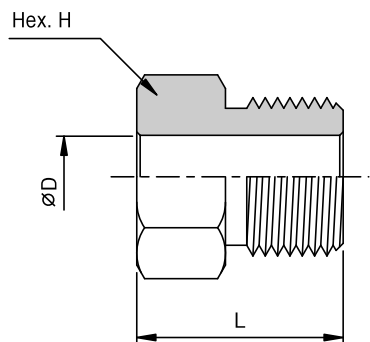
| Catalog No. | Pressure Rating psig | Tube Size | D    | A    | I    | L     | h    | H    |
|-------------|----------------------|-----------|------|------|------|-------|------|------|
| HPUF20K-4M  | 20,000               | 1/4"      | 6.4  | 9.7  | 35.1 | 54.5  | 15.7 | 12.7 |
| HPUF20K-6M  | 20,000               | 3/8"      | 9.5  | 11.9 | 44.5 | 68.3  | 19.1 | 15.7 |
| HPUF20K-9M  | 20,000               | 9/16"     | 14.3 | 13.5 | 53.8 | 80.8  | 25.4 | 22.4 |
| HPUF20K-12M | 20,000               | 3/4"      | 19.1 | 15.7 | 63.5 | 94.9  | 35.0 | 28.4 |
| HPUF20K-16M | 20,000               | 1"        | 25.4 | 18.3 | 88.9 | 125.5 | 44.5 | 35.1 |

All dimensions are for reference only, subject to change.

## Sour Gas Service Fittings Pressure to 10,000psig

Hy-Lok High pressure Fittings are designed to resist in sour environment and rated for a maximum working pressure of 10,000psig at 100°F.

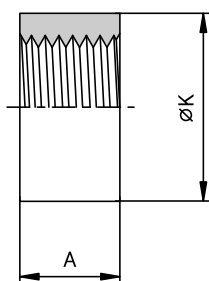
Material for wetted parts are selected in accordance with NACE MR-0175 for sulfide stress cracking resistant materials.



### Glands

Unit : mm

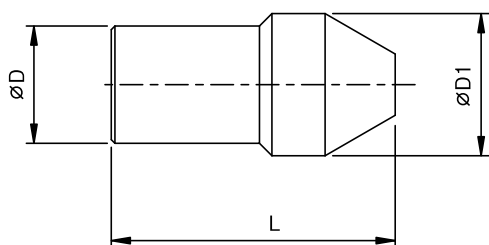
| Catalog No.    | Pressure Rating psig | Tube Size | D    | L    | H    |
|----------------|----------------------|-----------|------|------|------|
| HPG10K-4M-SOG  | 10,000               | 1/4"      | 6.4  | 14.2 | 12.7 |
| HPG10K-6M-SOG  | 10,000               | 3/8"      | 9.5  | 18.3 | 15.7 |
| HPG10K-9M-SOG  | 10,000               | 9/16"     | 14.3 | 25.4 | 22.4 |
| HPG10K-12M-SOG | 10,000               | 3/4"      | 19.1 | 23.9 | 28.4 |
| HPG10K-16M-SOG | 10,000               | 1"        | 25.4 | 35.1 | 35.1 |



### Collars

Unit : mm

| Catalog No.    | Pressure Rating psig | Tube Size | A    | K    |
|----------------|----------------------|-----------|------|------|
| HPC10K-4M-SOG  | 10,000               | 1/4"      | 5.6  | 9.7  |
| HPC10K-6M-SOG  | 10,000               | 3/8"      | 6.4  | 11.9 |
| HPC10K-9M-SOG  | 10,000               | 9/16"     | 7.9  | 18.3 |
| HPC10K-12M-SOG | 10,000               | 3/4"      | 9.7  | 23.9 |
| HPC10K-16M-SOG | 10,000               | 1"        | 12.7 | 31.8 |



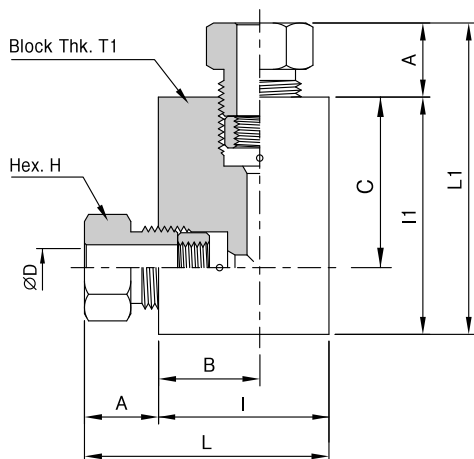
### Plugs

Unit : mm

| Catalog No.    | Pressure Rating psig | Tube Size | D    | L    | D <sub>1</sub> |
|----------------|----------------------|-----------|------|------|----------------|
| HPP10K-4M-SOG  | 10,000               | 1/4"      | 6.4  | 25.4 | 9.7            |
| HPP10K-6M-SOG  | 10,000               | 3/8"      | 9.5  | 31.8 | 11.9           |
| HPP10K-9M-SOG  | 10,000               | 9/16"     | 14.3 | 39.6 | 18.3           |
| HPP10K-12M-SOG | 10,000               | 3/4"      | 19.1 | 41.1 | 23.9           |
| HPP10K-16M-SOG | 10,000               | 1"        | 25.4 | 55.6 | 31.8           |

All dimensions are for reference only, subject to change.

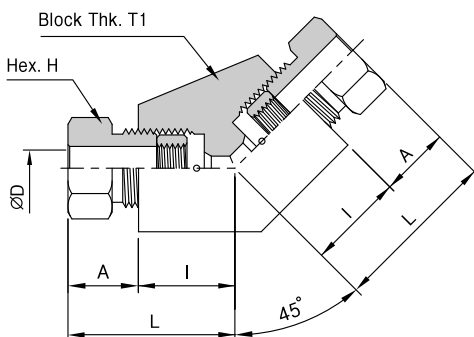
## Sour Gas Service Fittings Pressure to 10,000psig



### Elbows

Unit : mm

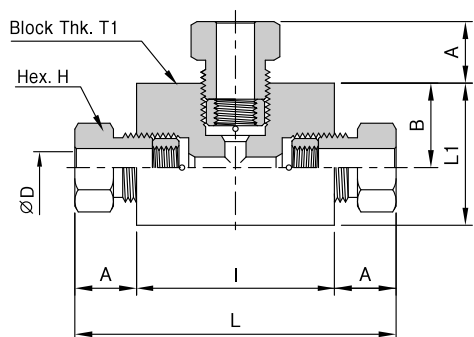
| Catalog No.    | Pressure Rating psig | Tube Size | D    | A    | B    | C    | I    | I <sub>1</sub> | L    | L <sub>1</sub> | H    | T <sub>1</sub> |
|----------------|----------------------|-----------|------|------|------|------|------|----------------|------|----------------|------|----------------|
| HPL10K-4M-SOG  | 10,000               | 1/4"      | 6.4  | 9.7  | 19.1 | 19.1 | 28.4 | 38.1           | 38.1 | 47.8           | 12.7 | 15.7           |
| HPL10K-6M-SOG  | 10,000               | 3/8"      | 9.5  | 11.9 | 25.4 | 25.4 | 35.1 | 50.8           | 47.0 | 62.7           | 15.7 | 19.1           |
| HPL10K-9M-SOG  | 10,000               | 9/16"     | 14.3 | 13.5 | 31.8 | 31.8 | 44.5 | 63.5           | 58.0 | 77.0           | 22.4 | 25.4           |
| HPL10K-12M-SOG | 10,000               | 3/4"      | 19.1 | 15.7 | 38.1 | 38.1 | 57.2 | 76.2           | 72.9 | 91.9           | 28.4 | 35.0           |
| HPL10K-16M-SOG | 10,000               | 1"        | 25.4 | 18.3 | 52.3 | 52.3 | 76.2 | 104.6          | 94.5 | 122.9          | 35.1 | 44.5           |



### 45° Elbows

Unit : mm

| Catalog No.     | Pressure Rating psig | Tube Size | D    | A    | I    | L    | H    | T <sub>1</sub> |
|-----------------|----------------------|-----------|------|------|------|------|------|----------------|
| HPLB10K-4M-SOG  | 10,000               | 1/4"      | 6.4  | 9.1  | 19.1 | 28.8 | 12.7 | 15.7           |
| HPLB10K-6M-SOG  | 10,000               | 3/8"      | 9.5  | 11.9 | 25.4 | 37.3 | 15.7 | 19.1           |
| HPLB10K-9M-SOG  | 10,000               | 9/16"     | 14.3 | 13.5 | 31.8 | 45.3 | 22.4 | 25.4           |
| HPLB10K-12M-SOG | 10,000               | 3/4"      | 19.1 | 15.7 | 38.1 | 53.8 | 28.4 | 35.0           |
| HPLB10K-16M-SOG | 10,000               | 1"        | 25.4 | 18.3 | 52.3 | 70.6 | 35.1 | 44.5           |



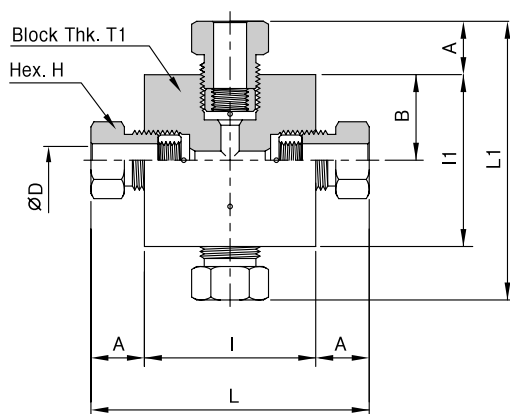
### Tees

Unit : mm

| Catalog No.    | Pressure Rating psig | Tube Size | D    | A    | B    | I     | L <sub>1</sub> | L     | H    | T <sub>1</sub> |
|----------------|----------------------|-----------|------|------|------|-------|----------------|-------|------|----------------|
| HPT10K-4M-SOG  | 10,000               | 1/4"      | 6.4  | 9.7  | 19.1 | 38.1  | 28.4           | 57.5  | 12.7 | 15.7           |
| HPT10K-6M-SOG  | 10,000               | 3/8"      | 9.5  | 11.9 | 25.4 | 50.8  | 35.0           | 74.6  | 15.7 | 19.1           |
| HPT10K-9M-SOG  | 10,000               | 9/16"     | 14.3 | 13.5 | 31.8 | 63.5  | 44.5           | 90.5  | 22.4 | 25.4           |
| HPT10K-12M-SOG | 10,000               | 3/4"      | 19.1 | 15.7 | 38.1 | 76.2  | 57.2           | 107.6 | 28.4 | 35.0           |
| HPT10K-16M-SOG | 10,000               | 1"        | 25.4 | 18.3 | 52.3 | 104.6 | 76.2           | 141.2 | 35.1 | 44.5           |

All dimensions are for reference only, subject to change.

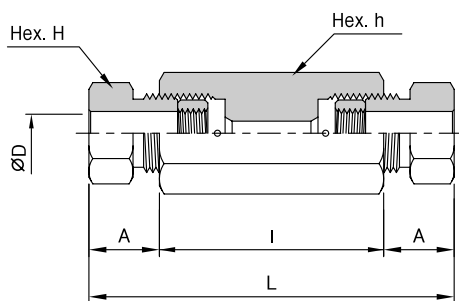
## Sour Gas Service Fittings Pressure to 10,000psig



### Crosses

Unit : mm

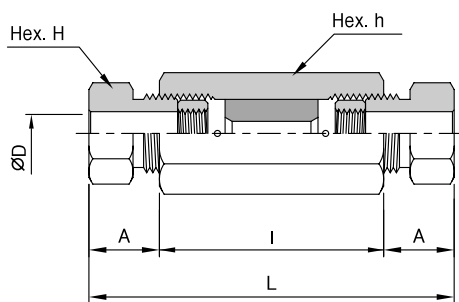
| Catalog No.    | Pressure Rating psig | Tube Size | D    | A    | B    | I     | I1    | L     | L1    | H    | T1   |
|----------------|----------------------|-----------|------|------|------|-------|-------|-------|-------|------|------|
| HPX10K-4M-SOG  | 10,000               | 1/4"      | 6.4  | 9.7  | 19.1 | 38.1  | 38.1  | 57.5  | 57.5  | 12.7 | 15.7 |
| HPX10K-6M-SOG  | 10,000               | 3/8"      | 9.5  | 11.9 | 25.4 | 50.8  | 50.8  | 74.6  | 74.6  | 15.7 | 19.1 |
| HPX10K-9M-SOG  | 10,000               | 9/16"     | 14.3 | 13.5 | 31.8 | 63.5  | 63.5  | 90.5  | 90.5  | 22.4 | 25.4 |
| HPX10K-12M-SOG | 10,000               | 3/4"      | 19.1 | 15.7 | 38.1 | 76.2  | 76.2  | 107.6 | 107.6 | 28.4 | 35.0 |
| HPX10K-16M-SOG | 10,000               | 1"        | 25.4 | 18.3 | 52.3 | 104.6 | 104.6 | 141.2 | 141.2 | 35.1 | 44.5 |



### Straight Couplings

Unit : mm

| Catalog No.    | Pressure Rating psig | Tube Size | D    | A    | I    | L     | h    | H    |
|----------------|----------------------|-----------|------|------|------|-------|------|------|
| HPF10K-4M-SOG  | 10,000               | 1/4"      | 6.4  | 9.7  | 35.1 | 54.5  | 15.7 | 12.7 |
| HPF10K-6M-SOG  | 10,000               | 3/8"      | 9.5  | 11.9 | 44.5 | 68.3  | 19.1 | 15.7 |
| HPF10K-9M-SOG  | 10,000               | 9/16"     | 14.3 | 13.5 | 53.8 | 80.8  | 25.4 | 22.4 |
| HPF10K-12M-SOG | 10,000               | 3/4"      | 19.1 | 15.7 | 63.5 | 94.9  | 35.0 | 28.4 |
| HPF10K-16M-SOG | 10,000               | 1"        | 25.4 | 18.3 | 88.9 | 125.5 | 44.5 | 35.1 |



Catalog No.

### Union Couplings(Slip Type)

Unit : mm

| Catalog No.     | Pressure Rating psig | Tube Size | D    | A    | I    | L     | h    | H    |
|-----------------|----------------------|-----------|------|------|------|-------|------|------|
| HPUF10K-4M-SOG  | 10,000               | 1/4"      | 6.4  | 9.7  | 35.1 | 54.5  | 15.7 | 12.7 |
| HPUF10K-6M-SOG  | 10,000               | 3/8"      | 9.5  | 11.9 | 44.5 | 68.3  | 19.1 | 15.7 |
| HPUF10K-9M-SOG  | 10,000               | 9/16"     | 14.3 | 13.5 | 53.8 | 80.8  | 25.4 | 22.4 |
| HPUF10K-12M-SOG | 10,000               | 3/4"      | 19.1 | 15.7 | 63.5 | 94.9  | 35.0 | 28.4 |
| HPUF10K-16M-SOG | 10,000               | 1"        | 25.4 | 18.3 | 88.9 | 125.5 | 44.5 | 35.1 |

All dimensions are for reference only, subject to change.

## Medium Pressure Fittings

### Nipples

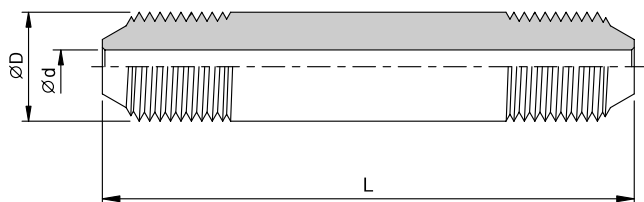
#### Special Lengths

In addition to the standard lengths cataloged in the table below, nipples are available in any custom length. Consult factory.

#### Materials

Catalog numbers in table refer to Type 316 stainless steel.

Type 304 stainless steel nipples available. Consult factory.



### Pressure to 20,000psig

| Catalog No.     |               |               |                |                |                |                | Tube Size (inches) |        | Working Pressure at 100°F psig |
|-----------------|---------------|---------------|----------------|----------------|----------------|----------------|--------------------|--------|--------------------------------|
| 2.75" Length(L) | 3" Length(L)  | 4" Length(L)  | 6" Length(L)   | 8" Length(L)   | 10" Length(L)  | 12" Length(L)  | O.D(D)             | I.D(d) |                                |
| HPNP20K-4M02L   | HPNP20K-4M03L | HPNP20K-4M04L | HPNP20K- 4M06L | HPNP20K- 4M08L | HPNP20K- 4M10L | HPNP20K- 4M12L | 1/4"               | 0.109" | 20,000                         |
|                 | HPNP20K-6M03L | HPNP20K-6M04L | HPNP20K- 6M06L | HPNP20K- 6M08L | HPNP20K- 6M10L | HPNP20K- 6M12L | 3/8"               | 0.203" | 20,000                         |
|                 |               | HPNP20K-9M04L | HPNP20K- 9M06L | HPNP20K- 9M08L | HPNP20K- 9M10L | HPNP20K- 9M12L | 9/16"              | 0.312" | 20,000                         |
|                 |               |               | HPNP20K-12M06L | HPNP20K-12M08L | HPNP20K-12M10L | HPNP20K-12M12L | 3/4"               | 0.438" | 20,000                         |
|                 |               |               | HPNP20K-16M06L | HPNP20K-16M08L | HPNP20K-16M10L | HPNP20K-16M12L | 1"                 | 0.562" | 20,000                         |

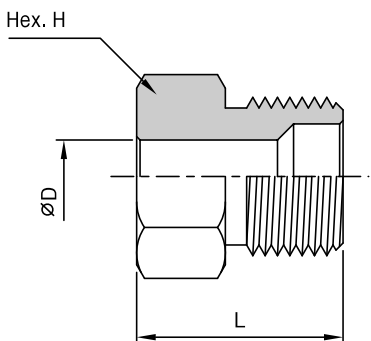
### Pressure to 10,000psig for Sour Gas Service Fittings

| Catalog No.       |                   |                   |                    |                    |                    |                    | Tube Size (inches) |        | Working Pressure at 100°F psig |
|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------|--------------------------------|
| 2.75" Length(L)   | 3" Length(L)      | 4" Length(L)      | 6" Length(L)       | 8" Length(L)       | 10" Length(L)      | 12" Length(L)      | O.D(D)             | I.D(d) |                                |
| HPNP10K-4M02L-SOG | HPNP10K-4M03L-SOG | HPNP10K-4M04L-SOG | HPNP10K- 4M06L-SOG | HPNP10K- 4M08L-SOG | HPNP10K- 4M10L-SOG | HPNP10K- 4M12L-SOG | 1/4"               | 0.109" | 10,000                         |
|                   | HPNP10K-6M03L-SOG | HPNP10K-6M04L-SOG | HPNP10K- 6M06L-SOG | HPNP10K- 6M08L-SOG | HPNP10K- 6M10L-SOG | HPNP10K- 6M12L-SOG | 3/8"               | 0.203" | 10,000                         |
|                   |                   | HPNP10K-9M04L-SOG | HPNP10K- 9M06L-SOG | HPNP10K- 9M08L-SOG | HPNP10K- 9M10L-SOG | HPNP10K- 9M12L-SOG | 9/16"              | 0.312" | 10,000                         |
|                   |                   |                   | HPNP10K-12M06L-SOG | HPNP10K-12M08L-SOG | HPNP10K-12M10L-SOG | HPNP10K-12M12L-SOG | 3/4"               | 0.438" | 10,000                         |
|                   |                   |                   | HPNP10K-16M06L-SOG | HPNP10K-16M08L-SOG | HPNP10K-16M10L-SOG | HPNP10K-16M12L-SOG | 1"                 | 0.562" | 10,000                         |

All dimensions are for reference only, subject to change.

## High Pressure Fittings Pressure to 60,000psig

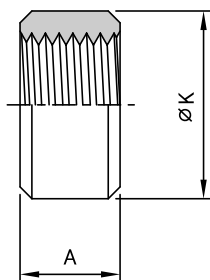
A complete range of elbows, tees, and crosses is available for all of the tubing connection sizes. Material high tensile 316 stainless steel, Standard tubing glands and collars are provided unless otherwise specified.



### Glands

Unit : mm

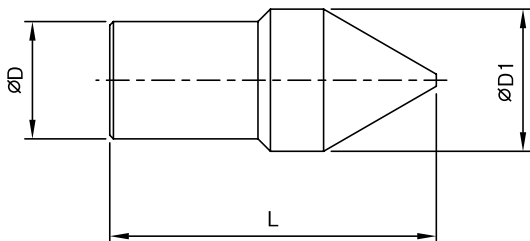
| Catalog No. | Pressure Rating psig | Tube Size | D    | L    | H    |
|-------------|----------------------|-----------|------|------|------|
| HPG60K-2H   | 60,000               | 1/8"      | 3.2  | 19.1 | 12.7 |
| HPG60K-4H   | 60,000               | 1/4"      | 6.4  | 22.6 | 15.9 |
| HPG60K-6H   | 60,000               | 3/8"      | 9.5  | 30.1 | 20.6 |
| HPG60K-9H   | 60,000               | 9/16"     | 14.3 | 38.1 | 30.2 |



### Collars

Unit : mm

| Catalog No. | Pressure Rating psig | Tube Size | A    | K    |
|-------------|----------------------|-----------|------|------|
| HPC60K-2H   | 60,000               | 1/8"      | 7.9  | 6.4  |
| HPC60K-4H   | 60,000               | 1/4"      | 9.5  | 9.5  |
| HPC60K-6H   | 60,000               | 3/8"      | 12.7 | 12.7 |
| HPC60K-9H   | 60,000               | 9/16"     | 15.7 | 20.6 |



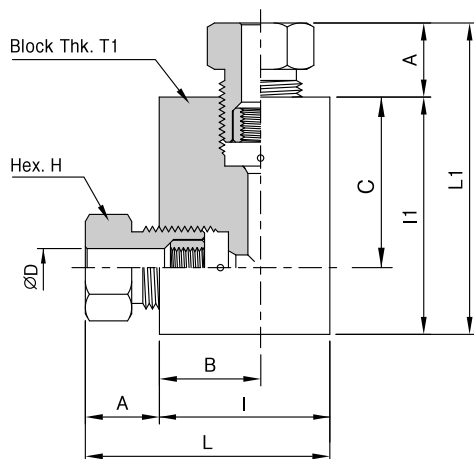
### Plugs

Unit : mm

| Catalog No. | Pressure Rating psig | Tube Size | D    | L    | D <sub>1</sub> |
|-------------|----------------------|-----------|------|------|----------------|
| HPP60K-2H   | 60,000               | 1/8"      | 3.2  | 22.2 | 6.4            |
| HPP60K-4H   | 60,000               | 1/4"      | 6.4  | 29.2 | 9.7            |
| HPP60K-6H   | 60,000               | 3/8"      | 9.5  | 39.6 | 12.7           |
| HPP60K-9H   | 60,000               | 9/16"     | 14.3 | 51.0 | 20.5           |

All dimensions are for reference only, subject to change.

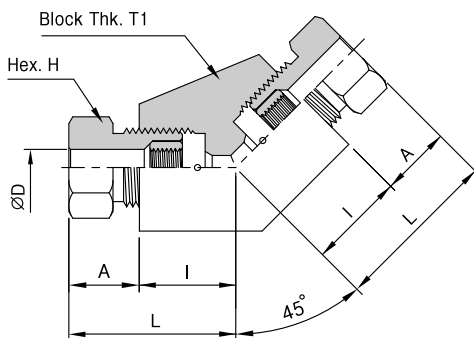
## High Pressure Fittings Pressure to 60,000psig



### Elbows

Unit : mm

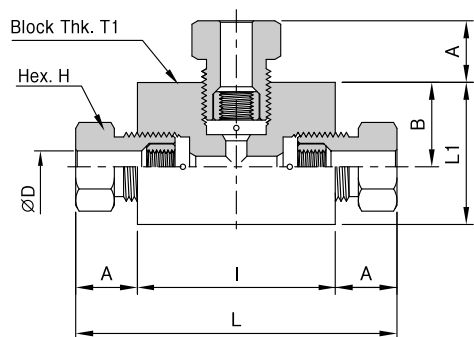
| Catalog No. | Pressure Rating psig | Tube Size | D    | A    | B    | C    | I    | I <sub>1</sub> | L    | L <sub>1</sub> | H    | T <sub>1</sub> |
|-------------|----------------------|-----------|------|------|------|------|------|----------------|------|----------------|------|----------------|
| HPLB60K-2H  | 60,000               | 1/8"      | 3.2  | 10.5 | 19.1 | 19.1 | 28.6 | 28.6           | 39.1 | 39.1           | 12.7 | 19.1           |
| HPLB60K-4H  | 60,000               | 1/4"      | 6.4  | 12.7 | 15.7 | 22.4 | 25.4 | 38.1           | 38.1 | 50.1           | 15.9 | 19.1           |
| HPLB60K-6H  | 60,000               | 3/8"      | 9.5  | 13.5 | 25.4 | 31.8 | 38.1 | 50.1           | 51.6 | 63.6           | 20.6 | 25.4           |
| HPLB60K-9H  | 60,000               | 9/16"     | 14.3 | 20.5 | 28.4 | 47.8 | 47.8 | 66.5           | 68.3 | 87.0           | 30.2 | 38.0           |



### 45° Elbows

Unit : mm

| Catalog No. | Pressure Rating psig | Tube Size | D    | A    | I    | L    | H    | T <sub>1</sub> |
|-------------|----------------------|-----------|------|------|------|------|------|----------------|
| HPLB60K-2H  | 60,000               | 1/8"      | 3.2  | 10.5 | 19.1 | 29.6 | 12.7 | 19.1           |
| HPLB60K-4H  | 60,000               | 1/4"      | 6.4  | 12.7 | 15.7 | 28.4 | 15.9 | 19.1           |
| HPLB60K-6H  | 60,000               | 3/8"      | 9.5  | 13.5 | 25.4 | 38.9 | 20.6 | 25.4           |
| HPLB60K-9H  | 60,000               | 9/16"     | 14.3 | 20.5 | 28.4 | 48.9 | 30.2 | 38.0           |



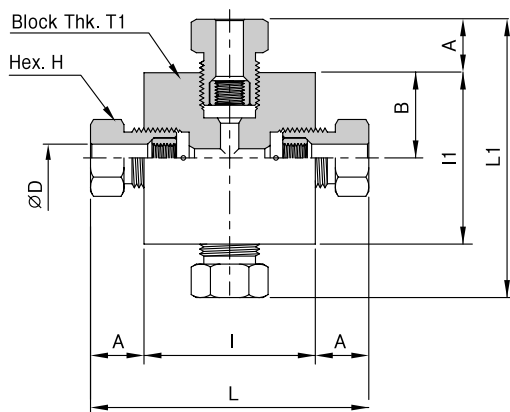
### Tees

Unit : mm

| Catalog No. | Pressure Rating psig | Tube Size | D    | A    | B    | I    | L <sub>1</sub> | L     | H    | T <sub>1</sub> |
|-------------|----------------------|-----------|------|------|------|------|----------------|-------|------|----------------|
| HPT60K-2H   | 60,000               | 1/8"      | 3.2  | 10.5 | 19.1 | 38.1 | 28.6           | 59.1  | 12.7 | 19.1           |
| HPT60K-4H   | 60,000               | 1/4"      | 6.4  | 12.7 | 22.4 | 50.8 | 31.8           | 76.2  | 15.9 | 19.1           |
| HPT60K-6H   | 60,000               | 3/8"      | 9.5  | 13.5 | 26.9 | 50.8 | 39.6           | 77.8  | 20.6 | 25.4           |
| HPT60K-9H   | 60,000               | 9/16"     | 14.3 | 20.5 | 35.1 | 66.5 | 53.8           | 107.5 | 30.2 | 38.0           |

All dimensions are for reference only, subject to change.

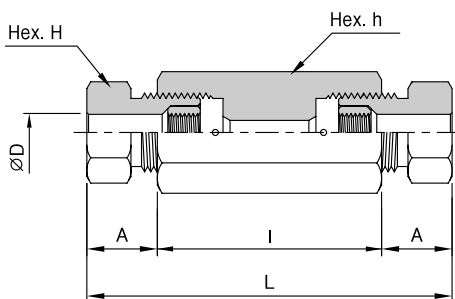
## High Pressure Fittings Pressure to 60,000psig



### Crosses

| Catalog No. | Pressure Rating psig | Tube Size | D    | A    | B    | I    | I <sub>1</sub> | L     | L <sub>1</sub> | H    | T <sub>1</sub> |
|-------------|----------------------|-----------|------|------|------|------|----------------|-------|----------------|------|----------------|
| HPX60K-2H   | 60,000               | 1/8"      | 3.2  | 10.5 | 19.1 | 38.1 | 38.1           | 59.1  | 59.1           | 12.7 | 19.1           |
| HPX60K-4H   | 60,000               | 1/4"      | 6.4  | 12.7 | 15.7 | 50.8 | 31.8           | 76.2  | 57.2           | 15.9 | 19.1           |
| HPX60K-6H   | 60,000               | 3/8"      | 9.5  | 13.5 | 26.9 | 50.8 | 53.8           | 77.8  | 80.8           | 20.6 | 25.4           |
| HPX60K-9H   | 60,000               | 9/16"     | 14.3 | 20.5 | 35.1 | 66.5 | 70.0           | 107.5 | 111.1          | 30.2 | 38.0           |

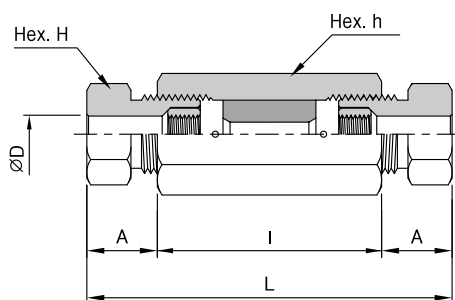
m



### Straight Couplings

Unit : mm

| Catalog No. | Pressure Rating psig | Tube Size | D    | A    | I    | L    | h    | H    |
|-------------|----------------------|-----------|------|------|------|------|------|------|
| HPF60K-2H   | 60,000               | 1/8"      | 3.2  | 10.5 | 28.6 | 49.6 | 19.1 | 12.7 |
| HPF60K-4H   | 60,000               | 1/4"      | 6.4  | 12.7 | 35.1 | 60.5 | 19.1 | 15.9 |
| HPF60K-6H   | 60,000               | 3/8"      | 9.5  | 13.5 | 44.5 | 71.5 | 25.4 | 20.6 |
| HPF60K-9H   | 60,000               | 9/16"     | 14.3 | 20.5 | 55.5 | 96.5 | 35.0 | 30.2 |



### Union Couplings(Slip Type)

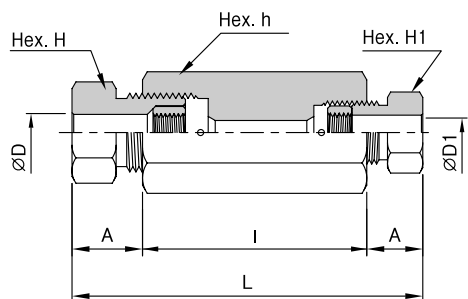
Unit : mm

| Catalog No. | Pressure Rating psig | Tube Size | D    | A    | I    | L    | h    | H    |
|-------------|----------------------|-----------|------|------|------|------|------|------|
| HPUF60K-2H  | 60,000               | 1/8"      | 3.2  | 10.5 | 28.6 | 49.6 | 19.1 | 12.7 |
| HPUF60K-4H  | 60,000               | 1/4"      | 6.4  | 12.7 | 35.1 | 60.5 | 19.1 | 15.9 |
| HPUF60K-6H  | 60,000               | 3/8"      | 9.5  | 13.5 | 44.5 | 71.5 | 25.4 | 20.6 |
| HPUF60K-9H  | 60,000               | 9/16"     | 14.3 | 20.5 | 55.5 | 96.5 | 35.0 | 30.2 |

All dimensions are for reference only, subject to change.



## High Pressure Fittings

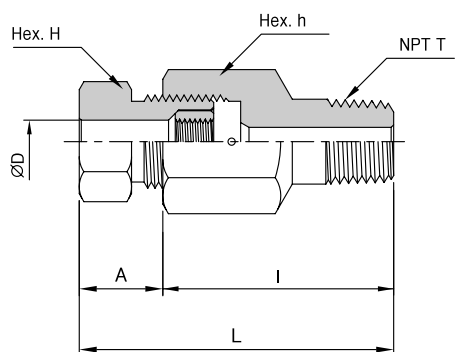


### Reducing Couplings \*

Unit : mm

| Catalog No.    | Pressure Rating<br>psig | Connections       | D    | D <sub>1</sub> | A    | B    | I    | L    | h    | H    | H <sub>1</sub> |
|----------------|-------------------------|-------------------|------|----------------|------|------|------|------|------|------|----------------|
| HPRU20K-4H-4M  | 20,000                  | 1/4"H/Px1/4"M/P   | 6.4  | 6.4            | 10.5 | 9.7  | 38.1 | 58.3 | 19.1 | 15.9 | 12.7           |
| HPRU20K-4H-6M  | 20,000                  | 1/4"H/Px3/8"M/P   | 6.4  | 9.5            | 10.5 | 11.9 | 44.5 | 66.9 | 19.1 | 15.9 | 12.7           |
| HPRU20K-4H-9M  | 20,000                  | 1/4"H/Px9/16"M/P  | 6.4  | 14.3           | 10.5 | 13.5 | 50.8 | 74.8 | 25.4 | 15.9 | 22.4           |
| HPRU20K-4H-12M | 20,000                  | 1/4"H/Px3/4"M/P   | 6.4  | 19.1           | 10.5 | 15.7 | 63.5 | 89.7 | 35.0 | 15.9 | 28.4           |
| HPRU20K-6H-4M  | 20,000                  | 3/8"H/Px1/4"M/P   | 9.5  | 6.4            | 12.7 | 9.7  | 44.5 | 66.9 | 25.4 | 20.6 | 12.7           |
| HPRU20K-6H-6M  | 20,000                  | 3/8"H/Px3/8"M/P   | 9.5  | 9.5            | 12.7 | 11.9 | 50.8 | 75.4 | 25.4 | 20.6 | 15.7           |
| HPRU20K-6H-9M  | 20,000                  | 3/8"H/Px9/16"M/P  | 9.5  | 14.3           | 12.7 | 13.5 | 50.8 | 77.0 | 25.4 | 20.6 | 22.4           |
| HPRU20K-6H-12M | 20,000                  | 3/8"H/Px3/4"M/P   | 9.5  | 19.1           | 12.7 | 15.7 | 63.5 | 91.9 | 35.0 | 20.6 | 28.7           |
| HPRU20K-9H-4M  | 20,000                  | 9/16"H/Px1/4"M/P  | 14.3 | 6.4            | 13.5 | 9.7  | 57.2 | 80.4 | 35.0 | 30.2 | 12.7           |
| HPRU20K-9H-6M  | 20,000                  | 9/16"H/Px3/8"M/P  | 14.3 | 9.5            | 13.5 | 11.9 | 57.2 | 82.6 | 35.0 | 30.2 | 15.7           |
| HPRU20K-9H-9M  | 20,000                  | 9/16"H/Px9/16"M/P | 14.3 | 14.3           | 13.5 | 13.5 | 57.2 | 84.2 | 35.0 | 30.2 | 22.4           |
| HPRU20K-9H-12M | 20,000                  | 9/16"H/Px3/4"M/P  | 14.3 | 19.1           | 13.5 | 15.7 | 63.5 | 92.7 | 35.0 | 30.2 | 28.7           |

"\*" Pressure rating shown is the lower out of two different pressures.

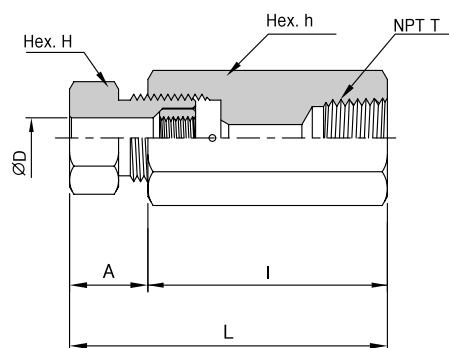


### Male Connectors \* (H/P Tube to Pipe)

Unit : mm

| Catalog No.    | Pressure Rating<br>psig | Connections          | D    | T<br>NPT | A    | h    | H    | I    | L    |
|----------------|-------------------------|----------------------|------|----------|------|------|------|------|------|
| HPMC10K-2H-2N  | 10,000                  | 1/8" H/P x 1/8" NPT  | 3.2  | 1/8"     | 10.5 | 12.7 | 12.7 | 21.3 | 31.8 |
| HPMC10K-2H-4N  | 10,000                  | 1/8" H/P x 1/4" NPT  | 3.2  | 1/4"     | 10.5 | 15.9 | 12.7 | 21.3 | 31.8 |
| HPMC10K-4H-4N  | 10,000                  | 1/4" H/P x 1/4" NPT  | 6.4  | 1/4"     | 12.7 | 19.1 | 15.9 | 22.2 | 34.9 |
| HPMC10K-4H-6N  | 10,000                  | 1/4" H/P x 3/8" NPT  | 6.4  | 3/8"     | 12.7 | 19.1 | 15.9 | 22.2 | 34.9 |
| HPMC10K-6H-6N  | 10,000                  | 3/8" H/P x 3/8" NPT  | 9.5  | 3/8"     | 13.5 | 25.4 | 20.6 | 27.8 | 41.3 |
| HPMC10K-6H-8N  | 10,000                  | 3/8" H/P x 1/2" NPT  | 9.5  | 1/2"     | 13.5 | 25.4 | 20.6 | 31.0 | 44.5 |
| HPMC10K-9H-8N  | 10,000                  | 9/16" H/P x 1/2" NPT | 14.3 | 1/2"     | 20.5 | 35.0 | 30.2 | 53.8 | 74.3 |
| HPMC10K-9H-12N | 10,000                  | 9/16" H/P x 3/4" NPT | 14.3 | 3/4"     | 20.5 | 35.0 | 30.2 | 53.8 | 74.3 |

"\*" Pressure rating shown is according to pipe thread.



### Female Connectors \* (H/P Tube to Pipe)

Unit : mm

| Catalog No.    | Pressure Rating<br>psig | Connections          | D    | T<br>NPT | A    | h    | H    | I    | L    |
|----------------|-------------------------|----------------------|------|----------|------|------|------|------|------|
| HPFC10K-2H-2N  | 10,000                  | 1/8" H/P x 1/8" NPT  | 3.2  | 1/8"     | 10.5 | 19.1 | 12.7 | 26.2 | 38.9 |
| HPFC10K-2H-4N  | 10,000                  | 1/8" H/P x 1/4" NPT  | 3.2  | 1/4"     | 10.5 | 19.1 | 12.7 | 31.0 | 43.7 |
| HPFC10K-4H-4N  | 10,000                  | 1/4" H/P x 1/4" NPT  | 6.4  | 1/4"     | 12.7 | 19.1 | 15.9 | 38.1 | 50.8 |
| HPFC10K-4H-6N  | 10,000                  | 1/4" H/P x 3/8" NPT  | 6.4  | 3/8"     | 12.7 | 25.4 | 15.9 | 41.1 | 53.8 |
| HPFC10K-6H-6N  | 10,000                  | 3/8" H/P x 3/8" NPT  | 9.5  | 3/8"     | 13.5 | 25.4 | 20.6 | 44.5 | 58.0 |
| HPFC10K-6H-8N  | 10,000                  | 3/8" H/P x 1/2" NPT  | 9.5  | 1/2"     | 13.5 | 31.8 | 20.6 | 59.8 | 67.3 |
| HPFC10K-9H-8N  | 10,000                  | 9/16" H/P x 1/2" NPT | 14.3 | 1/2"     | 20.5 | 35.0 | 30.2 | 57.2 | 77.7 |
| HPFC10K-9H-12N | 10,000                  | 9/16" H/P x 3/4" NPT | 14.3 | 3/4"     | 20.5 | 44.5 | 30.2 | 63.5 | 84.0 |

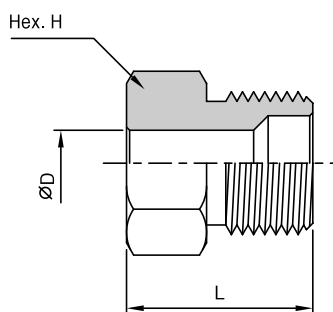
"\*" Pressure rating shown is according to pipe thread.

All dimensions are for reference only, subject to change.

## Sour Gas Service Fittings Pressure to 30,000psig

Hy-Lok High pressure Fittings are designed to resist in sour environment and rated for a maximum working pressure of 30,000psig at 100°F.

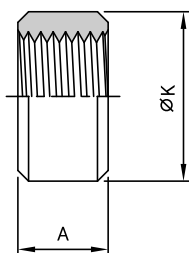
Materials for wetted parts are selected in accordance with NACE MR-0175 for sulfide stress cracking resistant materials.



### Glands

Unit : mm

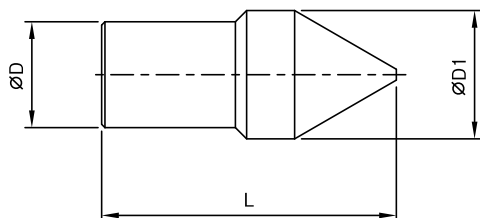
| Catalog No.   | Pressure Rating psig | Tube Size | D    | L    | H    |
|---------------|----------------------|-----------|------|------|------|
| HPG30K-2H-SOG | 30,000               | 1/8"      | 3.2  | 19.1 | 12.7 |
| HPG30K-4H-SOG | 30,000               | 1/4"      | 6.4  | 22.6 | 15.9 |
| HPG30K-6H-SOG | 30,000               | 3/8"      | 9.5  | 30.1 | 20.6 |
| HPG30K-9H-SOG | 30,000               | 9/16"     | 14.3 | 38.1 | 30.2 |



### Collars

Unit : mm

| Catalog No.   | Pressure Rating psig | Tube Size | A    | K    |
|---------------|----------------------|-----------|------|------|
| HPC30K-2H-SOG | 30,000               | 1/8"      | 7.9  | 6.4  |
| HPC30K-4H-SOG | 30,000               | 1/4"      | 9.5  | 9.5  |
| HPC30K-6H-SOG | 30,000               | 3/8"      | 12.7 | 12.7 |
| HPC30K-9H-SOG | 30,000               | 9/16"     | 15.7 | 20.6 |



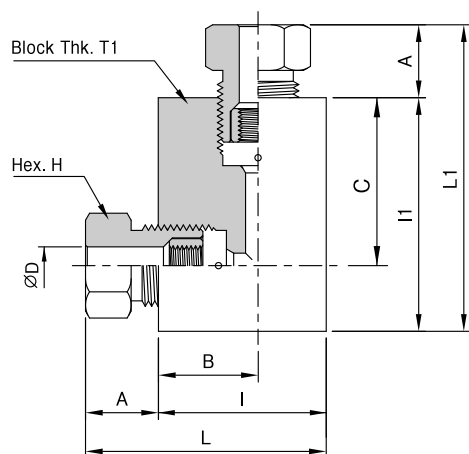
### Plugs

Unit : mm

| Catalog No.   | Pressure Rating psig | Tube Size | D    | L    | D <sub>1</sub> |
|---------------|----------------------|-----------|------|------|----------------|
| HPP30K-2H-SOG | 30,000               | 1/8"      | 3.2  | 22.2 | 6.4            |
| HPP30K-4H-SOG | 30,000               | 1/4"      | 6.4  | 29.2 | 9.7            |
| HPP30K-6H-SOG | 30,000               | 3/8"      | 9.5  | 39.6 | 12.7           |
| HPP30K-9H-SOG | 30,000               | 9/16"     | 14.3 | 51.0 | 20.5           |

All dimensions are for reference only, subject to change.

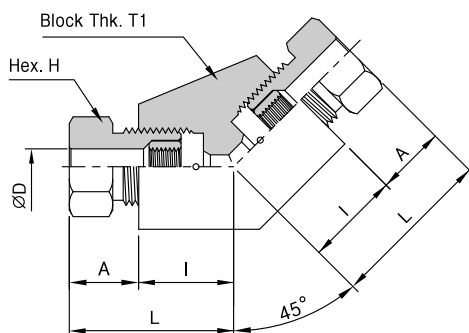
## Sour Gas Service Fittings Pressure to 30,000psig



### Elbows

Unit : mm

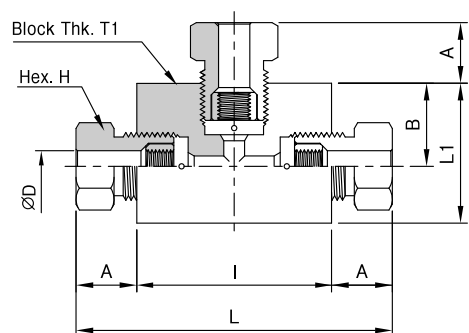
| Catalog No.   | Pressure Rating psig | Tube Size | D    | A    | B    | C    | I    | I <sub>1</sub> | L    | L <sub>1</sub> | H    | T <sub>1</sub> |
|---------------|----------------------|-----------|------|------|------|------|------|----------------|------|----------------|------|----------------|
| HPL30K-2H-SOG | 30,000               | 1/8"      | 3.2  | 10.5 | 19.1 | 19.1 | 28.6 | 28.6           | 39.1 | 39.1           | 12.7 | 19.1           |
| HPL30K-4H-SOG | 30,000               | 1/4"      | 6.4  | 12.7 | 15.7 | 22.4 | 25.4 | 38.1           | 38.1 | 50.1           | 15.9 | 19.1           |
| HPL30K-6H-SOG | 30,000               | 3/8"      | 9.5  | 13.5 | 25.4 | 31.8 | 38.1 | 50.1           | 51.6 | 63.6           | 20.6 | 25.4           |
| HPL30K-9H-SOG | 30,000               | 9/16"     | 14.3 | 20.5 | 28.4 | 47.8 | 47.8 | 66.5           | 68.3 | 87.0           | 30.2 | 38.0           |



### 45° Elbows

Unit : mm

| Catalog No.    | Pressure Rating psig | Tube Size | D    | A    | I    | L    | H    | T <sub>1</sub> |
|----------------|----------------------|-----------|------|------|------|------|------|----------------|
| HPLB30K-2H-SOG | 30,000               | 1/8"      | 3.2  | 10.5 | 19.1 | 29.6 | 12.7 | 19.1           |
| HPLB30K-4H-SOG | 30,000               | 1/4"      | 6.4  | 12.7 | 15.7 | 28.4 | 15.9 | 19.1           |
| HPLB30K-6H-SOG | 30,000               | 3/8"      | 9.5  | 13.5 | 25.4 | 38.9 | 20.6 | 25.4           |
| HPLB30K-9H-SOG | 30,000               | 9/16"     | 14.3 | 20.5 | 28.4 | 48.9 | 30.2 | 38.0           |



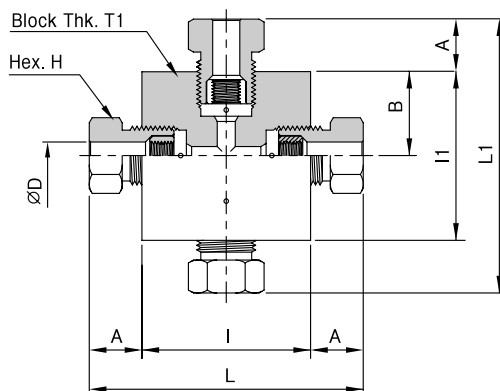
### Tees

Unit : mm

| Catalog No.   | Pressure Rating psig | Tube Size | D    | A    | B    | I    | L <sub>1</sub> | L     | H    | T <sub>1</sub> |
|---------------|----------------------|-----------|------|------|------|------|----------------|-------|------|----------------|
| HPT30K-2H-SOG | 30,000               | 1/8"      | 3.2  | 10.5 | 19.1 | 38.1 | 28.6           | 59.1  | 12.7 | 19.1           |
| HPT30K-4H-SOG | 30,000               | 1/4"      | 6.4  | 12.7 | 22.4 | 50.8 | 31.8           | 76.2  | 15.9 | 19.1           |
| HPT30K-6H-SOG | 30,000               | 3/8"      | 9.5  | 13.5 | 26.9 | 50.8 | 39.6           | 77.8  | 20.6 | 25.4           |
| HPT30K-9H-SOG | 30,000               | 9/16"     | 14.3 | 20.5 | 35.1 | 66.5 | 53.8           | 107.5 | 30.2 | 38.0           |

All dimensions are for reference only, subject to change.

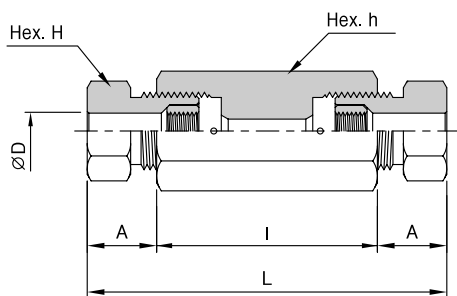
## Sour Gas Service Fittings Pressure to 30,000psig



### Crosses

Unit : mm

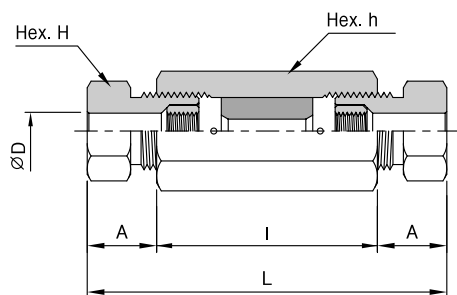
| Catalog No.   | Pressure Rating psig | Tube Size | D    | A    | B    | I    | I <sub>1</sub> | L     | L <sub>1</sub> | H    | T <sub>1</sub> |
|---------------|----------------------|-----------|------|------|------|------|----------------|-------|----------------|------|----------------|
| HPX30K-2H-SOG | 30,000               | 1/8"      | 3.2  | 10.5 | 19.1 | 38.1 | 38.1           | 59.1  | 59.1           | 12.7 | 19.1           |
| HPX30K-4H-SOG | 30,000               | 1/4"      | 6.4  | 12.7 | 15.7 | 50.8 | 31.8           | 76.2  | 57.2           | 15.9 | 19.1           |
| HPX30K-6H-SOG | 30,000               | 3/8"      | 9.5  | 13.5 | 26.9 | 50.8 | 53.8           | 77.8  | 80.8           | 20.6 | 25.4           |
| HPX30K-9H-SOG | 30,000               | 9/16"     | 14.3 | 20.5 | 35.1 | 66.5 | 70.0           | 107.5 | 111.1          | 30.2 | 38.0           |



### Straight Couplings

Unit : mm

| Catalog No.   | Pressure Rating psig | Tube Size | D    | A    | I    | L    | h    | H    |
|---------------|----------------------|-----------|------|------|------|------|------|------|
| HPF30K-2H-SOG | 30,000               | 1/8"      | 3.2  | 10.5 | 28.6 | 49.6 | 19.1 | 12.7 |
| HPF30K-4H-SOG | 30,000               | 1/4"      | 6.4  | 12.7 | 35.1 | 60.5 | 19.1 | 15.9 |
| HPF30K-6H-SOG | 30,000               | 3/8"      | 9.5  | 13.5 | 44.5 | 71.5 | 25.4 | 20.6 |
| HPF30K-9H-SOG | 30,000               | 9/16"     | 14.3 | 20.5 | 55.5 | 96.5 | 35.0 | 30.2 |



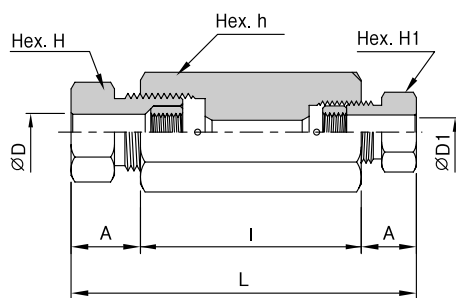
### Union Couplings(Slip Type)

Unit : mm

| Catalog No.    | Pressure Rating psig | Tube Size | D    | A    | I    | L    | h    | H    |
|----------------|----------------------|-----------|------|------|------|------|------|------|
| HPUF30K-2H-SOG | 30,000               | 1/8"      | 3.2  | 10.5 | 28.6 | 49.6 | 19.1 | 12.7 |
| HPUF30K-4H-SOG | 30,000               | 1/4"      | 6.4  | 12.7 | 35.1 | 60.5 | 19.1 | 15.9 |
| HPUF30K-6H-SOG | 30,000               | 3/8"      | 9.5  | 13.5 | 44.5 | 71.5 | 25.4 | 20.6 |
| HPUF30K-9H-SOG | 30,000               | 9/16"     | 14.3 | 20.5 | 55.5 | 96.5 | 35.0 | 30.2 |

All dimensions are for reference only, subject to change.

## Sour Gas Service Fittings

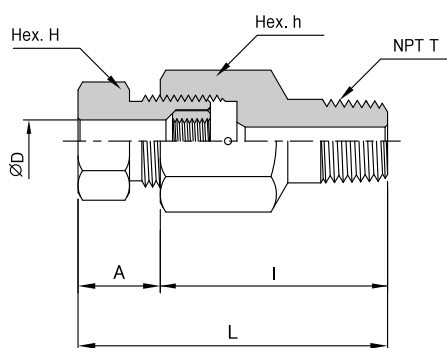


### Reducing Couplings \*

Unit : mm

| Catalog No.        | Pressure Rating psig | Connections       | D    | D <sub>1</sub> | A    | B    | I    | L    | h    | H    | H <sub>1</sub> |
|--------------------|----------------------|-------------------|------|----------------|------|------|------|------|------|------|----------------|
| HPRU10K-4H-4M-SOG  | 10,000               | 1/4"H/Px1/4"M/P   | 6.4  | 6.4            | 10.5 | 9.7  | 38.1 | 58.3 | 19.1 | 15.9 | 12.7           |
| HPRU10K-4H-6M-SOG  | 10,000               | 1/4"H/Px3/8"M/P   | 6.4  | 9.5            | 10.5 | 11.9 | 44.5 | 66.9 | 19.1 | 15.9 | 12.7           |
| HPRU10K-4H-9M-SOG  | 10,000               | 1/4"H/Px9/16"M/P  | 6.4  | 14.3           | 10.5 | 13.5 | 50.8 | 74.8 | 25.4 | 15.9 | 22.4           |
| HPRU10K-4H-12M-SOG | 10,000               | 1/4"H/Px3/4"M/P   | 6.4  | 19.1           | 10.5 | 15.7 | 63.5 | 89.7 | 35.0 | 15.9 | 28.4           |
| HPRU10K-6H-4M-SOG  | 10,000               | 3/8"H/Px1/4"M/P   | 9.5  | 6.4            | 12.7 | 9.7  | 44.5 | 66.9 | 25.4 | 20.6 | 12.7           |
| HPRU10K-6H-6M-SOG  | 10,000               | 3/8"H/Px3/8"M/P   | 9.5  | 9.5            | 12.7 | 11.9 | 50.8 | 75.4 | 25.4 | 20.6 | 15.7           |
| HPRU10K-6H-9M-SOG  | 10,000               | 3/8"H/Px9/16"M/P  | 9.5  | 14.3           | 12.7 | 13.5 | 50.8 | 77.0 | 25.4 | 20.6 | 22.4           |
| HPRU10K-6H-12M-SOG | 10,000               | 3/8"H/Px3/4"M/P   | 9.5  | 19.1           | 12.7 | 15.7 | 63.5 | 91.9 | 35.0 | 20.6 | 28.7           |
| HPRU10K-9H-4M-SOG  | 10,000               | 9/16"H/Px1/4"M/P  | 14.3 | 6.4            | 13.5 | 9.7  | 57.2 | 80.4 | 35.0 | 30.2 | 12.7           |
| HPRU10K-9H-6M-SOG  | 10,000               | 9/16"H/Px3/8"M/P  | 14.3 | 9.5            | 13.5 | 11.9 | 57.2 | 82.6 | 35.0 | 30.2 | 15.7           |
| HPRU10K-9H-9M-SOG  | 10,000               | 9/16"H/Px9/16"M/P | 14.3 | 14.3           | 13.5 | 13.5 | 57.2 | 84.2 | 35.0 | 30.2 | 22.4           |
| HPRU10K-9H-12M-SOG | 10,000               | 9/16"H/Px3/4"M/P  | 14.3 | 19.1           | 13.5 | 15.7 | 63.5 | 92.7 | 35.0 | 30.2 | 28.7           |

\* Pressure rating shown is the lower out of two different pressures.

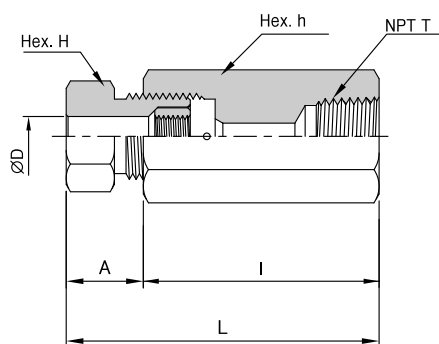


### Male Connectors (H/P Tube to Pipe) \*

Unit : mm

| Catalog No.        | Pressure Rating psig | Connections          | D    | T NPT | A    | h    | H    | I    | L    |
|--------------------|----------------------|----------------------|------|-------|------|------|------|------|------|
| HPMC10K-2H-2N-SOG  | 10,000               | 1/8" H/P x 1/8" NPT  | 3.2  | 1/8"  | 10.5 | 12.7 | 12.7 | 21.3 | 31.8 |
| HPMC10K-2H-4N-SOG  | 10,000               | 1/8" H/P x 1/4" NPT  | 3.2  | 1/4"  | 10.5 | 15.9 | 12.7 | 21.3 | 31.8 |
| HPMC10K-4H-4N-SOG  | 10,000               | 1/4" H/P x 1/4" NPT  | 6.4  | 1/4"  | 12.7 | 19.1 | 15.9 | 22.2 | 34.9 |
| HPMC10K-4H-6N-SOG  | 10,000               | 1/4" H/P x 3/8" NPT  | 6.4  | 3/8"  | 12.7 | 19.1 | 15.9 | 22.2 | 34.9 |
| HPMC10K-6H-6N-SOG  | 10,000               | 3/8" H/P x 3/8" NPT  | 9.5  | 3/8"  | 13.5 | 25.4 | 20.6 | 27.8 | 41.3 |
| HPMC10K-6H-8N-SOG  | 10,000               | 3/8" H/P x 1/2" NPT  | 9.5  | 1/2"  | 13.5 | 25.4 | 20.6 | 31.0 | 44.5 |
| HPMC10K-9H-8N-SOG  | 10,000               | 9/16" H/P x 1/2" NPT | 14.3 | 1/2"  | 20.5 | 35.0 | 30.2 | 53.8 | 74.3 |
| HPMC10K-9H-12N-SOG | 10,000               | 9/16" H/P x 3/4" NPT | 14.3 | 3/4"  | 20.5 | 35.0 | 30.2 | 53.8 | 74.3 |

\* Pressure rating shown is according to pipe thread.



### Female Connectors (H/P Tube to Pipe) \*

Unit : mm

| Catalog No.        | Pressure Rating psig | Connections          | D    | T NPT | A    | h    | H    | I    | L    |
|--------------------|----------------------|----------------------|------|-------|------|------|------|------|------|
| HPFC10K-2H-2N-SOG  | 10,000               | 1/8" H/P x 1/8" NPT  | 3.2  | 1/8"  | 10.5 | 19.1 | 12.7 | 26.2 | 38.9 |
| HPFC10K-2H-4N-SOG  | 10,000               | 1/8" H/P x 1/4" NPT  | 3.2  | 1/4"  | 10.5 | 19.1 | 12.7 | 31.0 | 43.7 |
| HPFC10K-4H-4N-SOG  | 10,000               | 1/4" H/P x 1/4" NPT  | 6.4  | 1/4"  | 12.7 | 19.1 | 15.9 | 38.1 | 50.8 |
| HPFC10K-4H-6N-SOG  | 10,000               | 1/4" H/P x 3/8" NPT  | 6.4  | 3/8"  | 12.7 | 25.4 | 15.9 | 41.1 | 53.8 |
| HPFC10K-6H-6N-SOG  | 10,000               | 3/8" H/P x 3/8" NPT  | 9.5  | 3/8"  | 13.5 | 25.4 | 20.6 | 44.5 | 58.0 |
| HPFC10K-6H-8N-SOG  | 10,000               | 3/8" H/P x 1/2" NPT  | 9.5  | 1/2"  | 13.5 | 31.8 | 20.6 | 59.8 | 67.3 |
| HPFC10K-9H-8N-SOG  | 10,000               | 9/16" H/P x 1/2" NPT | 14.3 | 1/2"  | 20.5 | 35.0 | 30.2 | 57.2 | 77.7 |
| HPFC10K-9H-12N-SOG | 10,000               | 9/16" H/P x 3/4" NPT | 14.3 | 3/4"  | 20.5 | 44.5 | 30.2 | 63.5 | 84.0 |

\* Pressure rating shown is according to pipe thread.

All dimensions are for reference only, subject to change.

## High Pressure Fittings

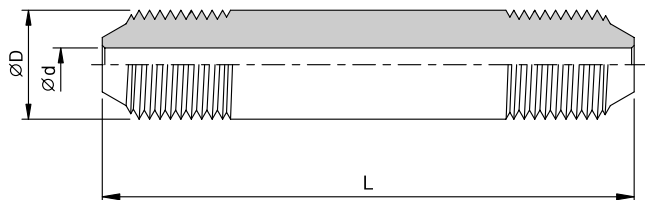
### Nipples

#### Special Lengths

In addition to the standard lengths cataloged in the table below, nipples are available in any custom length. Consult factory.

#### Materials

Catalog numbers in table refer to Type 316 stainless steel.  
Type 304 stainless steel nipples available. Consult factory.



### Pressure to 60,000psig

| Catalog No.     |               |               |               |               |               |               |        |        | Working Pressure at 100°F psig |
|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|--------|--------|--------------------------------|
| 2.75" Length(L) | 3" Length(L)  | 4" Length(L)  | 6" Length(L)  | 8" Length(L)  | 10" Length(L) | 12" Length(L) | O.D(D) | I.D(d) |                                |
| HPNP60K-4H02L   | HPNP60K-4H03L | HPNP60K-4H04L | HPNP60K-4H06L | HPNP60K-4H08L | HPNP60K-4H10L | HPNP60K-4H12L | 1/4"   | 0.083" | 60,000                         |
|                 | HPNP60K-6H03L | HPNP60K-6H04L | HPNP60K-6H06L | HPNP60K-6H08L | HPNP60K-6H10L | HPNP60K-6H12L | 3/8"   | 0.125" | 60,000                         |
|                 |               | HPNP60K-9H04L | HPNP60K-9H06L | HPNP60K-9H08L | HPNP60K-9H10L | HPNP60K-9H12L | 9/16"  | 0.187" | 60,000                         |

### Pressure to 30,000psig for Sour Gas Service Fittings

| Catalog No.       |                   |                   |                   |                   |                   |                   |        |        | Working Pressure at 100°F psig |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------|--------|--------------------------------|
| 2.75" Length(L)   | 3" Length(L)      | 4" Length(L)      | 6" Length(L)      | 8" Length(L)      | 10" Length(L)     | 12" Length(L)     | O.D(D) | I.D(d) |                                |
| HPNP30K-4H02L-SOG | HPNP30K-4H03L-SOG | HPNP30K-4H04L-SOG | HPNP30K-4H06L-SOG | HPNP30K-4H08L-SOG | HPNP30K-4H10L-SOG | HPNP30K-4H12L-SOG | 1/4"   | 0.083" | 30,000                         |
|                   | HPNP30K-6H03L-SOG | HPNP30K-6H04L-SOG | HPNP30K-6H06L-SOG | HPNP30K-6H08L-SOG | HPNP30K-6H10L-SOG | HPNP30K-6H12L-SOG | 3/8"   | 0.125" | 30,000                         |
|                   |                   | HPNP30K-9H04L-SOG | HPNP30K-9H06L-SOG | HPNP30K-9H08L-SOG | HPNP30K-9H10L-SOG | HPNP30K-9H12L-SOG | 9/16"  | 0.187" | 30,000                         |

All dimensions are for reference only, subject to change.

## Installation Instruction

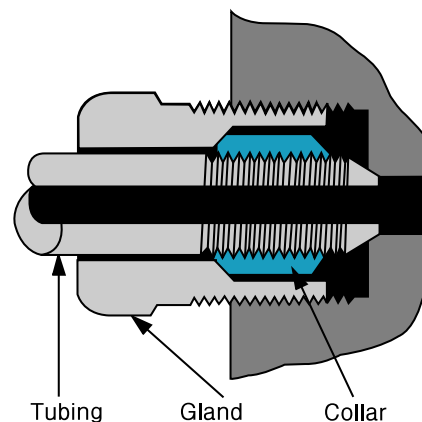
### ■ General

The High Pressure (coned and threaded) tubing connection is available for 1/8, 1/4, and 9/16 inches OD tubing sizes. All sizes are available for up to 60,000 psig working pressure. The tubing may be prepared with the use of tooling or prepared at the factory to specified lengths. Additionally, standard length coned and threaded tubing nipples are available from stock.

This connection has become an industry standard for use at elevated pressures and temperatures in both liquid and gas applications. It may be disassembled and then retightened indefinitely.

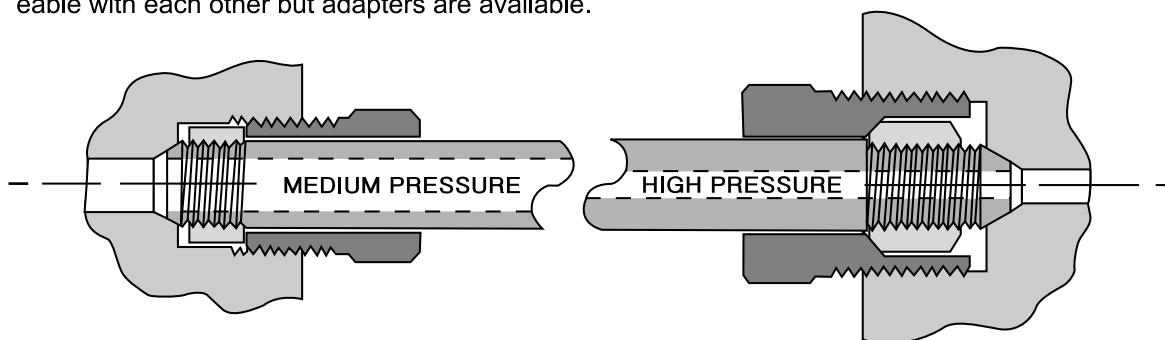
The threads of the gland are right-hand while the threads of the collar and tubing are left-hand to prevent rotation of the collar during assembly.

**Materials.** Both the gland and the collar are made from Type 17-4 PH stainless steel, with both available in Type 316 stainless steel as an option. Plugs are Type 316 stainless steel.



### ■ What's the Difference?

Both the "Medium Pressure" and "High Pressure" connections are coned and threaded tubing designs. The "Medium Pressure" connection provides large bore sizes for use up to 20,000 psig working pressure. The "High Pressure" connection has smaller bore sizes for use up to 60,000 psig working pressure. Note that these connections are not interchangeable with each other but adapters are available.



All dimensions are for reference only, subject to change.

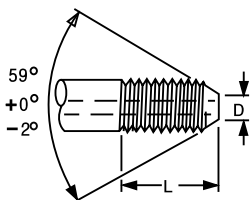
## Installation Instruction

### ■ Coning and Threading of Tubing

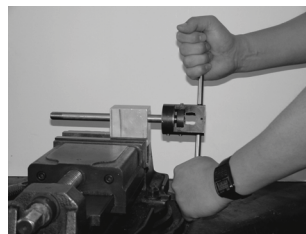
1. Cut tubing to length and deburr. Allow extra length for proper engagement within connection per first table below.

| Pressure Series            | Tube Size | Extra Allowance For Engagement |        |
|----------------------------|-----------|--------------------------------|--------|
|                            |           | Inches                         | (mm)   |
| "M" Series<br>(20,000psi)  | 1/4"      | 0.55                           | (14.0) |
|                            | 3/8"      | 0.69                           | (17.5) |
|                            | 9/16"     | 0.84                           | (21.3) |
|                            | 3/4"      | 1.00                           | (25.4) |
|                            | 1"        | 1.44                           | (36.6) |
| "H" Series<br>(60,000psig) | 1/4"      | 0.50                           | (12.7) |
|                            | 3/8"      | 0.69                           | (17.5) |
|                            | 9/16"     | 0.84                           | (21.3) |

- \* Apply pressure to start cutting action and rotate die holder counter-clockwise until threads of the following lengths have been cut.



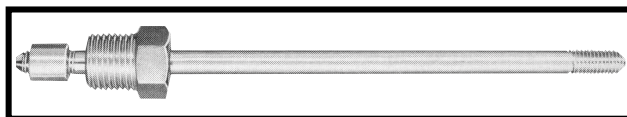
2. Coning



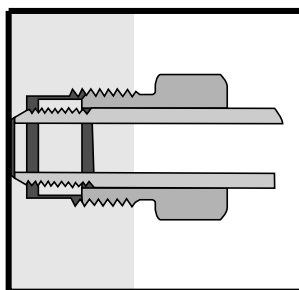
3. Threading

### ■ Assembly and Makeup of Connection

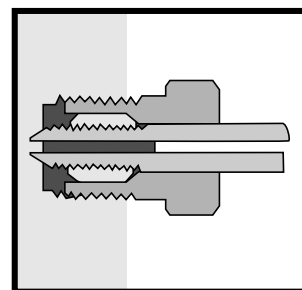
1. Lubricate male threads of gland. Slip gland on tubing as shown and thread collar on tubing until one to two threads are exposed between collar and cone.
2. Lubricate male threads of gland with a metal particle impregnated lubricant. Insert tubing in connection, engage gland and tighten "fingertight".
3. Tighten gland slightly with the wrench



Step 1, 2



"M" Series Connection



"H" Series Connection

Step 3

| Pressure Series                               | Tube Size<br>O.D x I.D<br>Inches (mm) | Dimensions<br>Inches (mm) |         | Thread Size<br>Inches (mm) |
|-----------------------------------------------|---------------------------------------|---------------------------|---------|----------------------------|
|                                               |                                       | D                         | L(max)  |                            |
| Medium Pressure<br>"M" Series<br>(20,000psig) | 1/4 x 0.109                           | 0.141                     | 0.344   | 1/4 -28                    |
|                                               | (6.35) x (2.77)                       | (3.58)                    | (8.74)  | (6.35) -28                 |
|                                               | 3/8 x 0.203                           | 0.250                     | 0.438   | 3/8 -24                    |
|                                               | (9.53) x (5.16)                       | (6.35)                    | (11.1)  | (9.53) -24                 |
|                                               | 9/16 x 0.312                          | 0.406                     | 0.500   | 9/16 -18                   |
|                                               | (14.3) x (7.92)                       | (10.3)                    | (12.70) | (14.3) -18                 |
|                                               | 9/16 x 0.359                          | 0.438                     | 0.500   | 9/16 -18                   |
|                                               | (14.3) x (9.12)                       | (11.1)                    | (12.7)  | (14.3) -18                 |
|                                               | 3/4 x 0.438                           | 0.562                     | 0.625   | 3/4 -16                    |
|                                               | (19.1) x (11.1)                       | (14.3)                    | (15.9)  | (19.1) -16                 |
|                                               | 3/4 x 0.516                           | 0.578                     | 0.625   | 3/4 -16                    |
|                                               | (19.1) x (13.1)                       | (14.7)                    | (15.9)  | (19.1) -16                 |
|                                               | 1 x 0.562                             | 0.719                     | 0.781   | 1 -14                      |
|                                               | (25.4) x (14.3)                       | (18.3)                    | (19.8)  | (25.4) -14                 |
|                                               | 1 x 0.688                             | 0.812                     | 0.781   | 1 -14                      |
|                                               | (25.4) x (17.5)                       | (20.6)                    | (19.8)  | (25.4) -14                 |
| High Pressure<br>"H" Series<br>(60,000psig)   | 1/4 x 0.083                           | 0.125                     | 0.562   | 1/4 -28                    |
|                                               | (6.35) x (2.11)                       | (3.18)                    | (14.3)  | (6.35) -28                 |
|                                               | 3/8 x 0.125                           | 0.219                     | 0.750   | 3/8 -24                    |
|                                               | (9.53) x (3.18)                       | (5.56)                    | (19.1)  | (9.53) -24                 |
|                                               | 9/16 x 0.188                          | 0.281                     | 0.938   | 9/16 -18                   |
|                                               | (14.3) x (4.78)                       | (7.14)                    | (23.8)  | (14.3) -18                 |

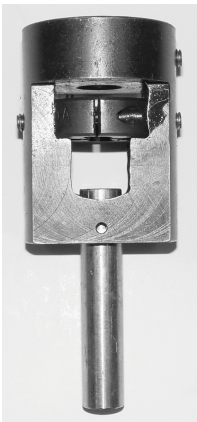
\* Thread is left-hand national fine.





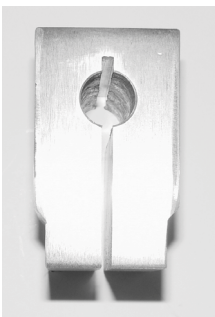
### ■ Coning Tool

- \* Three simple steps, and you have a perfect cone in less than one minute.
- \* No collets or feed nuts to tighten or loosen. NO presetting required. No experience necessary.
- \* No deburring necessary on O.D. of tube.
- \* More coned ends per day. No fatigue on operators, with less cost per hook-up
- \* Tool can be removed anytime during coning operation for quick visual inspections
- \* This Coning Tools are less expensive than other hand operated designs and will give more cones and faster hook-ups. Cutters cut angle and face end of tubing for squareness.
- \* A 3/8" or 1/2" drill motor will be required.



### ■ Threading Tool

- \* New improved designs for cutting a perfect thread.
- \* Two models are offered; a motor driven design for fast cutting of many tubes, and the hand design for threading small quantities of tubing
- \* All threads for pressure tubing are Left Hand National Fine



### ■ Tube Vise

The tube vise is another unique tool manufactured by Hy-Lok Pressure Systems; again, with the operator and technician in mind. Advantages include:

- \* Lightweight and inexpensive
- \* No collapsing tubing
- \* Better holding power on tubes
- \* No soft jaws required on vises
- \* No marking the O.D of the tubing
- \* Use as a stop gauge when coning and threading

### ■ Catalog Numbering System

| HP               | L                                                                                                                                                                                                                                                | 60K                                                                  | -9H                                                                                                                                                                                                                                 | -12M                               | -SOG                         | -S316                      |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|------------------------------|----------------------------|
| Type of Fittings | Type of Components                                                                                                                                                                                                                               | Pressure Series                                                      | Connections Size & Grade                                                                                                                                                                                                            |                                    | Option                       | Material                   |
|                  | G : Gland<br>C : Collar<br>NP : Nipple<br>F : Straight Coupling<br>UF : Union Coupling<br>RU : Reducing Coupling<br>L : 90° Elbow<br>LB : 45° Elbow<br>T : Tee<br>X : Cross<br>MC : Male Connector<br>FC : Female Connector<br>MA : Male Adapter | 10K=10,000 psi<br>20K=20,000 psi<br>30K=30,000 psi<br>60K=60,000 psi | 2 : 1/8" Tube<br>4 : 1/4" Tube<br>6 : 3/8" Tube<br>9 : 9/16" Tube<br>12 : 3/4" Tube<br>16 : 1" Tube<br>2N : 1/8" NPT<br>4N : 1/4" NPT<br>6N : 3/8" NPT<br>8N : 1/2" NPT<br>12N : 3/4" NPT<br>16N : 1" NPT<br>M : Medium<br>H : High | If different from first connection | SOG : Sour Oil & Gas Service | S316 : Stainless Steel 316 |

### ■ How to order

Simply indicate catalog number and specify option

#### Example :

30,000psig 90° Elbow for 9/16" O.D Tubing,

Made from Stainless steel Grade-316 with NACE-MR-01-75

Part Number : AHPL30K-9H-SOG-S316





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