

# |SY-LOK Sanyou

## Tube Fittings



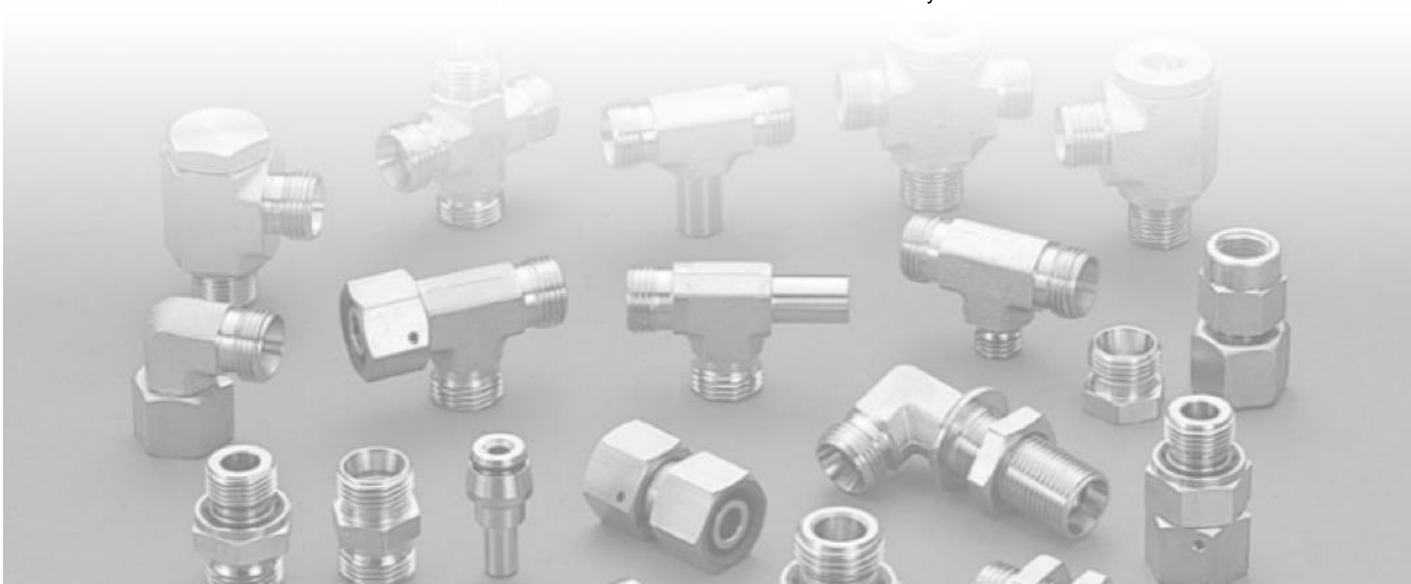
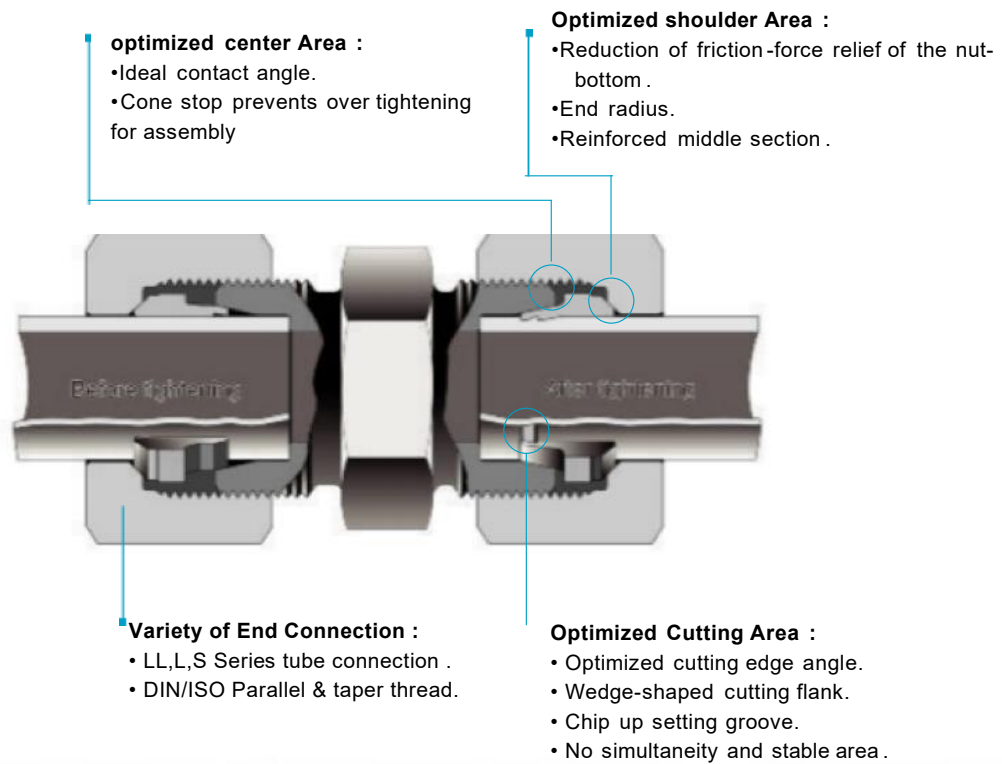
- 24°TUBE FITTINGS
- DIN 2353 & ISO 8434-1

**Catalog No.:SY-100-24SF**

[www.sanyoutubes.com](http://www.sanyoutubes.com)

## Features

- Pressure range up to 600 bar at 120°C
- Constructive design of the cutting-geometry.
- Force- increase is perceptible.
- Secure holding-function is guaranteed.
- Materials are stainless steel and Brass.



**General**

SY-LOK DIN fittings based on Standard DIN 3851 have been improved to comply with current standard requirements. They conform to installation standard ISO 8434 part1 and DIN 2353 and all constituent parts are interchangeable with other brands. SY-LOK has many years of experience in the manufacture of precision products which is in conjunction with stringent quality control from the starting material up to the finished component determines the quality of SY-LOK fittings.

**Fitting materials**

SY-LOK Fittings are machined from drawn steel bar or steel forgings.

Materials are according to DIN 3859 (technical specifications for tube fittings).

Nuts are either cold or hot pressed.

Fittings made of stainless steel ASTM A479 type 316/L.

**Caution!** The use of steel is permissible up to 120 ° C max.

For any temperature higher than 120 ° C. use material 1.4571.

**Stressability of pressure and temperature for SY-LOK tube fittings**

Pressure specification

The pressure specifications. given in our catalog relate to steel fittings with a static load at a temperature up to 120 °C and refer to

- Nominal pressure (PN) according to DIN 2401. The rated pressure has a safety factor of 4(DIN 3859)
- Permissible working pressure (PB) of the operating pressure is according to DIN 2401. The safety factor for PB is 2.5 or 1.5 respectively.

**Pressure Range**

| Series | Pressure      |
|--------|---------------|
| LL     | Up to 100 bar |
| L      | Up to 400 bar |
| S      | Up to 600 bar |

**Allowable working temperatures (TB)**

A) For fitting materials

| Material        | Temperature                    |
|-----------------|--------------------------------|
| Steel           | -40°C up to + 120°C (DIN 3859) |
| Brass           | -60°C up to + 175°C            |
| Stainless Steel | -60°C up to +400°C (DIN 17440) |

Please refer to the information given in the section "Reduction of Pressure"

B) For seal materials

| Material           | Temperature         |
|--------------------|---------------------|
| NBR(e.g.Perbunan®) | -35°C up to + 100°C |
| FPM(e.g.Viton®)    | -25°C up to +200°C  |
| PTFE e.g.Teflon®)  | -60°C up to +240°C  |

**Caution!** If different fitting and sealing material is used. the lowest temperature as indicated for each material is applicable!

**Pressure reduction with temperature**

The reduction of pressure is necessary for operating at lower or higher temperature.

| Materials of fittings | Temperature range    | Reduction of pressure |
|-----------------------|----------------------|-----------------------|
| Steel                 | -40 C up to + 120 °C | .                     |
| Brass                 | -60 C up to +175 °C  | 35%                   |
| 316/L                 | -60 C up to +20 °C   | .                     |
|                       | -60 C up to +50 °C   | 4%                    |
|                       | +100 °C              | 11%                   |
|                       | +200 °C              | 20%                   |
|                       | +300 °C              | 29%                   |
|                       | +400°C               | 33%                   |

For different material of tubes and fittings. tubes must be tested separately considering the allowed temperature range and the required reduction of pressure.

**Fluids**

SY-LOK DIN fittings are designed for the use of commercial hydraulic oils. If it is special fluids. please contact our technical support team.

## Tubing guide

### seamless precision steel tube DIN E355

| Tube O. D (D) | Tolerance | Wall * Thickness (t) | weight | Design pressure |     |
|---------------|-----------|----------------------|--------|-----------------|-----|
|               |           |                      |        | DIN 2413        |     |
|               |           |                      |        | I               | III |
| mm            | mm        | mm                   | kg/m   | bar             | bar |
| 4             | ±0.1      | 0.5                  | 0.047  | 313             | 274 |
| 4             |           | 0.75                 | 0.060  | 409             | 391 |
| 4             |           | 1                    | 0.074  | 522             | 500 |
| 6             | ±0.1      | •0.75                | 0.103  | 333             | 289 |
| 6             |           | 1                    | 0.123  | 389             | 372 |
| 6             |           | 1.5                  | 0.166  | 549             | 526 |
| 6             |           | 2                    | 0.197  | 692             | 662 |
| 6             |           | 2.25                 | 0.208  | 757             | 725 |
| 8             | ±0.1      | 1                    | 0.173  | 333             | 288 |
| 8             |           | 1.5                  | 0.240  | 431             | 412 |
| 8             |           | 2                    | 0.296  | 549             | 526 |
| 8             |           | 2.5                  | 0.339  | 658             | 630 |
| 10            | ±0.1      | 1                    | 0.222  | 282             | 248 |
| 10            |           | 1.5                  | 0.314  | 373             | 357 |
| 10            |           | 2                    | 0.395  | 478             | 458 |
| 10            |           | 2.5                  | 0.462  | 576             | 551 |
| 10            |           | 3                    | 0.518  | 651             | 638 |
| 12            | ±0.08     | •1                   | 0.271  | 235             | 209 |
| 12            |           | 1.5                  | 0.389  | 353             | 303 |
| 12            |           | 2                    | 0.493  | 409             | 391 |
| 12            |           | 2.5                  | 0.586  | 495             | 474 |
| 12            |           | 3                    | 0.606  | 576             | 551 |
| 12            | 3.5       | 0.734                | 651    | 624             |     |
| 15            | ±0.08     | •1                   | 0.345  | 188             | 171 |
| 15            |           | 1.5                  | 0.499  | 282             | 248 |
| 15            |           | 2                    | 0.641  | 336             | 321 |
| 15            |           | 2.5                  | 0.771  | 409             | 391 |
| 15            | 3         | 0.888                | 478    | 458             |     |
| 16            | ±0.08     | •1                   | 0.370  | 176             | 160 |
| 16            |           | 1.5                  | 0.536  | 264             | 234 |
| 16            |           | 2                    | 0.691  | 353             | 303 |
| 16            |           | 2.5                  | 0.832  | 386             | 370 |
| 16            | 3         | 0.962                | 452    | 433             |     |
| 18            | ±0.08     | •1                   | 0.419  | 157             | 143 |
| 18            |           | 1.5                  | 0.610  | 235             | 209 |
| 18            |           | 2                    | 0.789  | 313             | 273 |
| 18            |           | 2.5                  | 0.956  | 348             | 333 |
| 18            | 3         | 1.110                | 409    | 391             |     |

Reinforced tube inserts are recommended where thin-wall tubes are subject to severe strain

\*Permissible variation in wall thickness (DIN 2391)

#### ■ Calculation Pressures

- Calculated pressures to DIN 2413 part I for primarily static load conditions.
- Yield point(K): 235 N/mm<sup>2</sup> (to DIN 1630)
- Safety factor(S): 1.5
- Allowance factor(C)

$$P = \frac{20 \cdot K \cdot t \cdot c}{S \cdot D} \text{ (bar)}$$

| Tube O. D (D) | Tolerance | Wall * Thickness (t) | weight | Design pressure |     |
|---------------|-----------|----------------------|--------|-----------------|-----|
|               |           |                      |        | DIN 2413        |     |
|               |           |                      |        | I               | III |
| mm            | mm        | mm                   | kg/m   | bar             | bar |
| 20            | ±0.08     | •1.5                 | 0.684  | 212             | 191 |
| 20            |           | 2                    | 0.888  | 282             | 249 |
| 20            |           | 2.5                  | 1.08   | 353             | 303 |
| 20            |           | 3                    | 1.26   | 373             | 357 |
| 20            |           | 3.5                  | 1.424  | 426             | 408 |
| 20            | 4         | 1.578                | 478    | 458             |     |
| 22            | ±0.08     | •1                   | 0.518  | 128             | 118 |
| 22            |           | 1.5                  | 0.758  | 192             | 174 |
| 22            |           | 2                    | 0.986  | 256             | 227 |
| 22            |           | 2.5                  | 1.202  | 320             | 278 |
| 22            | 3         | 1.406                | 343    | 328             |     |
| 25            | ±0.08     | 2                    | 1.134  | 226             | 201 |
| 25            |           | 2.5                  | 1.387  | 282             | 248 |
| 25            |           | 3                    | 1.628  | 338             | 292 |
| 25            |           | 4                    | 2.072  | 394             | 378 |
| 25            |           | 4.5                  | 2.275  | 437             | 418 |
| 25            | 5         | 2.466                | 478    | 458             |     |
| 28            | ±0.08     | 1.5                  | 0.980  | 151             | 139 |
| 28            |           | 2                    | 1.282  | 201             | 181 |
| 28            |           | 2.5                  | 1.572  | 252             | 223 |
| 28            |           | 3                    | 1.850  | 302             | 264 |
| 28            |           | 4                    | 2.368  | 357             | 342 |
| 28            | 5         | 2.836                | 434    | 415             |     |
| 30            | ±0.08     | •2                   | 1.381  | 188             | 171 |
| 30            |           | 2.5                  | 1.695  | 235             | 210 |
| 30            |           | 3                    | 2.00   | 282             | 248 |
| 30            |           | 4                    | 2.57   | 336             | 321 |
| 30            | 5         | 3.08                 | 409    | 391             |     |
| 35            | ±0.08     | 2                    | 1.63   | 151             | 147 |
| 35            |           | 2.5                  | 2.00   | 201             | 181 |
| 35            |           | 3                    | 2.37   | 242             | 215 |
| 35            |           | 4                    | 3.06   | 322             | 280 |
| 35            |           | 5                    | 3.69   | 357             | 342 |
| 35            |           | 6                    | 4.29   | 434             | 401 |
| 38            | ±0.15     | •2.5                 | 2.189  | 186             | 168 |
| 38            |           | 3                    | 2.589  | 223             | 200 |
| 38            |           | 4                    | 3.35   | 297             | 260 |
| 38            |           | 5                    | 4.07   | 332             | 318 |
| 38            |           | 6                    | 4.74   | 390             | 373 |
| 38            |           | 7                    | 5.35   | 446             | 427 |
| 42            | ±0.2      | •2                   | 1.973  | 134             | 124 |
| 42            |           | 3                    | 2.89   | 201             | 181 |
| 42            |           | 4                    | 3.75   | 269             | 237 |

- Calculated pressures to DIN 2413 part III for dynamic load conditions
- Yield point (K): 225 N/mm<sup>2</sup> (DIN 2413 4.2.8)
- Safety factor(S): 1.5

$$P = \frac{20 \cdot K \cdot t \cdot c}{S \cdot (D + t \cdot c)} \text{ (bar)}$$

Factor for consideration of wall thickness divergence for static and dynamic stress

| Tube Range | 4mm / 5mm | 6mm / 8mm | Larger |
|------------|-----------|-----------|--------|
| Factor(c)  | 0.8       | 0.85      | 0.9    |

#### ■ Note

For a diameter ratio of O.D/I.D > 1.35 . calculation was made to DIN 2413 part III and based on a pulsating fatigue limit of 235 N/mm<sup>2</sup>

■ Temperature range : - 40°C to +120°C Without reduction in pressure.

**Seamless precision stainless steel 316/L**

The following tube wall thickness are suitable for use :

| Tube O. D (D) | Tolerance | Wall * Thickness (t) | weight | Design pressure |     |
|---------------|-----------|----------------------|--------|-----------------|-----|
|               |           |                      |        | DIN 2413        |     |
|               |           |                      |        | I               | III |
| mm            | mm        | mm                   | kg/m   | bar             | bar |
| 4             | ±0.1      | 0.75                 | 0.061  | 391             | 376 |
| 4             |           | 1                    | 0.075  | 500             | 480 |
| 6             | ±0.1      | 1                    | 0.125  | 372             | 357 |
| 6             |           | 1.5                  | 0.168  | 526             | 505 |
| 6             |           | 2                    | 0.200  | 662             | 637 |
| 6             |           | 2.25                 | 0.211  | 725             | 696 |
| 8             | ±0.1      | 1                    | 0.175  | 347             | 277 |
| 8             |           | 1.5                  | 0.244  | 412             | 396 |
| 8             |           | 2                    | 0.300  | 526             | 505 |
| 8             |           | 2.5                  | 0.344  | 630             | 604 |
| 10            | ±0.1      | 1                    | 0.225  | 294             | 238 |
| 10            |           | 1.5                  | 0.319  | 357             | 343 |
| 10            |           | 2                    | 0.401  | 458             | 439 |
| 10            |           | 2.5                  | 0.469  | 551             | 529 |
| 10            |           | 3                    | 0.525  | 638             | 612 |
| 12            | ±0.08     | •1                   | 0.275  | 245             | 201 |
| 12            |           | 1.5                  | 0.394  | 368             | 291 |
| 12            |           | 2                    | 0.501  | 391             | 376 |
| 12            |           | 2.5                  | 0.594  | 474             | 455 |
| 12            |           | 3                    | 0.615  | 551             | 529 |
| 12            |           | 3.5                  | 0.744  | 624             | 599 |
| 15            | ±0.08     | 1.5                  | 0.507  | 294             | 238 |
| 15            |           | 2                    | 0.651  | 321             | 309 |
| 15            |           | 2.5                  | 0.782  | 391             | 376 |
| 15            |           | 3                    | 0.901  | 458             | 439 |
| 16            | ±0.08     | 2                    | 0.701  | 368             | 291 |
| 16            |           | 2.5                  | 0.845  | 370             | 355 |
| 16            |           | 3                    | 0.977  | 433             | 416 |
| 18            | ±0.08     | •1.5                 | 0.620  | 245             | 201 |
| 18            |           | 2                    | 0.801  | 327             | 262 |
| 18            |           | 2.5                  | 0.967  | 333             | 320 |
| 18            |           | 3                    | 1.126  | 391             | 376 |

| Tube O. D (D) | Tolerance | Wall * Thickness (t) | weight | Design pressure |     |
|---------------|-----------|----------------------|--------|-----------------|-----|
|               |           |                      |        | DIN 2413        |     |
|               |           |                      |        | I               | III |
| mm            | mm        | mm                   | kg/m   | bar             | bar |
| 20            | ±0.08     | 2.5                  | 1.095  | 368             | 291 |
| 20            |           | 3                    | 1.277  | 357             | 343 |
| 20            |           | 3.5                  | 1.443  | 408             | 392 |
| 20            |           | 4                    | 1.600  | 458             | 439 |
| 22            | ±0.08     | •2                   | 1.002  | 267             | 218 |
| 22            |           | 2.5                  | 1.220  | 334             | 267 |
| 22            |           | 3                    | 1.426  | 328             | 315 |
| 25            | ±0.08     | •2                   | 1.152  | 235             | 193 |
| 25            |           | 2.5                  | 1.408  | 294             | 238 |
| 25            |           | 3                    | 1.635  | 353             | 281 |
| 25            |           | 4                    | 2.092  | 378             | 363 |
| 25            |           | 4.5                  | 2.307  | 418             | 402 |
| 25            |           | 5                    | 2.501  | 458             | 439 |
| 28            | ±0.08     | 2                    | 1.302  | 210             | 174 |
| 28            |           | 2.5                  | 1.594  | 263             | 214 |
| 28            |           | 3                    | 1.874  | 315             | 253 |
| 28            |           | 4                    | 2.402  | 342             | 328 |
| 28            |           | 5                    | 2.876  | 415             | 399 |
| 30            | ±0.08     | 3                    | 2.028  | 294             | 238 |
| 30            |           | 4                    | 2.605  | 321             | 309 |
| 30            |           | 5                    | 3.400  | 391             | 376 |
| 35            | ±0.15     | 2                    | 1.644  | 168             | 141 |
| 35            |           | 2.5                  | 2.018  | 210             | 174 |
| 35            |           | 3                    | 2.392  | 252             | 206 |
| 35            |           | 4                    | 3.086  | 336             | 269 |
| 35            |           | 5                    | 3.742  | 342             | 328 |
| 35            |           | 6                    | 4.351  | 401             | 385 |
| 38            | ±0.15     | 4                    | 3.405  | 309             | 249 |
| 38            |           | 5                    | 4.131  | 318             | 305 |
| 38            |           | 6                    | 4.807  | 373             | 358 |
| 38            |           | 7                    | 5.426  | 427             | 410 |
| 42            | ±0.2      | 3                    | 2.930  | 210             | 174 |
| 42            |           | 4                    | 3.798  | 280             | 227 |

Reinforced tube inserts are recommended where thin-wall tubes are subject to severe strains.

\*Permissible variation in wall thickness (DIN 2391)

■Calculation Pressures

•Calculated pressures to DIN 2413 part I for primarily static load conditions.

•Yield point(K):245 N/mm<sup>2</sup> (to DIN 17458)

•Safety factor(S):1.5

•Allowance factor(C)

$$P = \frac{20 \cdot K \cdot t \cdot c}{S \cdot D} \text{ (bar)}$$

•Calculated pressures to DIN 2413 part III for dynamic load conditions

•Yield point (K):216 N/mm<sup>2</sup> (assumed value)

•Safety factor(S):1.5

$$P = \frac{20 \cdot K \cdot t \cdot c}{S \cdot (D + t \cdot c)} \text{ (bar)}$$

Factor for consideration of wall thickness divergence for static and dynamic stress

| Tube Range | 4mm / 5mm | 6mm / 8mm | Larger |
|------------|-----------|-----------|--------|
| Factor(c)  | 0.8       | 0.85      | 0.9    |

■Note

For a diameter ratio of O.D/I.D > 1.35 . calculation was made to DIN 2413 part III and based on a pulsating fatigue limit of 225 N/mm<sup>2</sup>

■Temperature range : - 60°C to +400°C

Reduction in pressure for higher temperatures (See page 3)

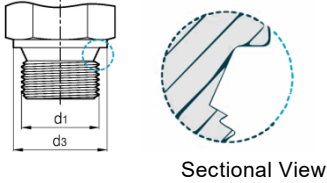
## Stud Ends & Tapped Hole Forms for tube Fittings

This standard specifies dimensions for stud ends and tapped holes with metric fine pitch thread and pipe thread for use with compression fittings, valves and screw plugs.

### Forms of Stud Ends

#### Form A (DIN 3852 Part 1+2)

with sealing by washer



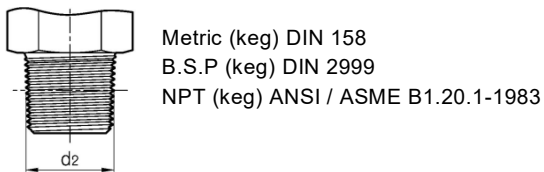
#### Form B (DIN 3852 Part 1+2)

with sealing by compression against face of body



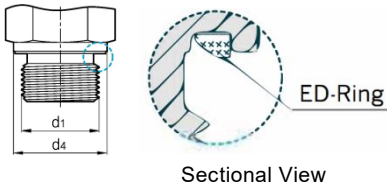
#### Form C (DIN 3852 Part 1+2)

with sealing in tapered thread



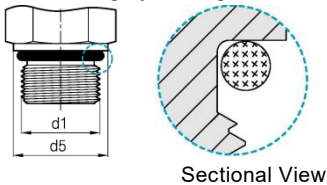
#### Form E (DIN 3852 Part 11)

with sealing by DIN 3869 ring seals (\*ED-Ring)



#### Form F (DIN 3852 Part 3)

with sealing by \*O-ring



| Thread size                               |                                 | d <sub>3</sub> | d <sub>4-0.2</sub> <sup>0</sup> | d <sub>5</sub> <sup>±0.1</sup> |
|---|---------------------------------|----------------|---------------------------------|--------------------------------|
| Form A,B and E.F stud ends d <sub>1</sub> | Form C stud ends d <sub>2</sub> |                |                                 |                                |
| M 8×1.0                                   | M 8×1.0keg.                     | 14             | 13.9                            | 10.9                           |
| M10×1.0                                   | M10×1.0keg.                     | 17             | 16.9                            | 12.9                           |
| M12×1.5                                   | M12×1.5keg.                     | 19             | 18.9                            | 16.9                           |
| M14×1.5                                   | M14×1.5 keg.                    | 21             | 21.9                            | 18.9                           |
| M16×1.5                                   | M16×1.5keg.                     | 23             | 23.9                            | 20.9                           |
| M18×1.5                                   | M18×1.5keg.                     | 25             | 25.9                            | 22.9                           |
| M20×1.5                                   | M20×1.5 keg.                    | 27             | 26.9                            | 24.9                           |
| M22×1.5                                   | M22×1.5 keg.                    | 31             | 31.9                            | 26.9                           |
| M26×1.5                                   | -                               | 32             | 31.9                            | 30.9                           |
| M27×2.0                                   | -                               | 39             | 39.9                            | 31.9                           |
| M33×2.0                                   | -                               | 49             | 49.9                            | 37.9                           |
| M42×2.0                                   | -                               | 55             | 54.9                            | 47.9                           |
| M48×2.0                                   | -                               | 14             | 13.9                            | 54.9                           |
| G 1/8                                     | 1/8 NPT                         | 18             | 18.9                            | -                              |
| G 1/4                                     | 1/4 NPT                         | 22             | 21.9                            | -                              |
| G 3/8                                     | 3/8 NPT                         | 26             | 26.9                            | -                              |
| G 1/2                                     | 1/2 NPT                         | 32             | 31.9                            | -                              |
| G 3/4                                     | 3/4 NPT                         | 39             | 39.9                            | -                              |
| G 1                                       | 1 NPT                           | 49             | 49.9                            | -                              |
| G 1 1/4                                   | 1 1/4 NPT                       | 55             | 54.9                            | -                              |
| G 1 1/2                                   | 1 1/2 NPT                       | -              | -                               | 14.4                           |
| 7/16 -20UNF                               | R 1/8 keg                       | -              | -                               | 17.6                           |
| 9/16 -18UNF                               | R 1/4keg                        | -              | -                               | 22.3                           |
| 3/4 -16UNF                                | R 3/8 keg                       | -              | -                               | 25.5                           |
| 7/8 -14UNF                                | R 1/2 keg                       | -              | -                               | 31.9                           |
| 1 1/16 -12UN                              | R 3/4keg                        | -              | -                               | 38.2                           |
| 1 5/16 -12UN                              | R 1 keg                         | -              | -                               | 47.7                           |
| 1 5/8 -12UN                               | R 1 1/4keg                      | -              | -                               | -                              |
| -   | R 1 1/2 keg                     | -              | -                               | -                              |

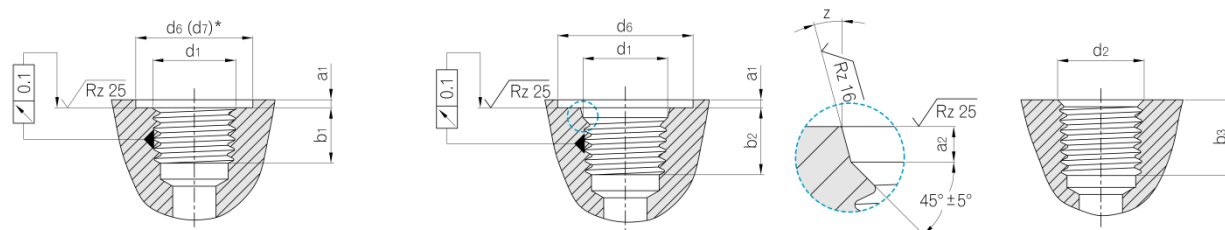
\* ED-Ring & O-Ring Seals are made in compliance with NBR Standard (-20°C to 90°C)  
Viton is available on request (-20°C to 200°C)

Forms of Tapped Holes

**Form X** (DIN 3852 part 1+2)  
for parallel stud Ends. (Form A. B) \* d7  
is for stud Ends Form E

**Form W** (DIN 3852 part 3)  
for stud Ends with O-Ring. (Form F)

**Form Z** (DIN 3852 part 1+2)  
for tapered thread stud Ends.



| Thread size                               |   | d <sub>6</sub><br>min | d <sub>7</sub> | a <sub>1</sub><br>max | a <sub>2</sub> <sup>+0.4</sup> <sub>0</sub> | b <sub>1</sub><br>min | b <sub>2</sub><br>min | b <sub>3</sub><br>min | α <sup>0</sup> <sub>±1°</sub> |
|---|---|-----------------------|----------------|-----------------------|---|-----------------------|-----------------------|-----------------------|-------------------------------|
| From X.W<br>Tapped ends<br>d <sub>1</sub> | From Z<br>Tapped ends<br>d <sub>2</sub> |                       |                |                       |   |                       |                       |                       |                               |
| M8×1.0                                    | M8×1.0 keg .                            | 13                    | -              | 1.0                   | 1.6   | -                     | 10.0                  | 5.5                   | 12                            |
| M10×1.0                                   | M10×1.0 keg.                            | 15                    | 15             | 1.0                   | 1.6   | 8                     | 10.0                  | 5.5                   | 12                            |
| M12×1.5                                   | M12×1.5 keg.                            | 18                    | 18             | 1.5                   | 2.4   | 12                    | 11.5                  | 8.5                   | 12                            |
| M14×1.5                                   | M14×1.5 keg .                           | 20                    | 20             | 1.5                   | 2.4   | 12                    | 11.5                  | 8.5                   | 15                            |
| M16×1.5                                   | M16×1.5 keg.                            | 22                    | 23             | 1.5                   | 2.4   | 12                    | 13.0                  | 8.5                   | 15                            |
| M18×1.5                                   | M18×1.5 keg .                           | 24                    | 25             | 2.0                   | 2.4   | 12                    | 14.5                  | 8.5                   | 15                            |
| M20×1.5                                   | M20×1.5 keg .                           | 26                    | 27             | 2.0                   | 2.4   | 14                    | 14.0                  | 10.5                  | 15                            |
| M22×1.5                                   | M22×1.5 keg.                            | 28                    | 28             | 2.5                   | 2.4   | 14                    | 15.5                  | 10.5                  | 15                            |
| M26×1.5                                   | -                                       | 32                    | 33             | 2.5                   | 3.1   | 16                    | 16.0                  | -                     | 15                            |
| M27×2.0                                   | -                                       | 33                    | 33             | 2.5                   | 3.1   | 16                    | 19.0                  | -                     | 15                            |
| M33×2.0                                   | -                                       | 40                    | 41             | 2.5                   | 3.1   | 18                    | 19.0                  | -                     | 15                            |
| M42×2.0                                   | -                                       | 50                    | 51             | 2.5                   | 3.1   | 20                    | 19.5                  | -                     | 15                            |
| M48×2.0                                   | -                                       | 56                    | 56             | 2.5                   | 3.1   | 22                    | 22                    | -                     | 15                            |
| G 1/8                                     | 1/8 NPT                                 | 15                    | 15             | 1.0                   | -   | 8                     | -                     | 6.9                   | -                             |
| G 1/4                                     | 1/4 NPT                                 | 19                    | 20             | 1.5                   | -   | 12                    | -                     | 10.0                  | -                             |
| G 3/8                                     | 3/8 NPT                                 | 23                    | 23             | 2.0                   | -   | 12                    | -                     | 10.3                  | -                             |
| G 1/2                                     | 1/2 NPT                                 | 27                    | 28             | 2.5                   | -   | 14                    | -                     | 13.6                  | -                             |
| G 3/4                                     | 3/4 NPT                                 | 33                    | 33             | 2.5                   | -   | 16                    | -                     | 14.1                  | -                             |
| G 1                                       | 1 NPT                                   | 40                    | 41             | 2.5                   | -   | 18                    | -                     | 16.8                  | -                             |
| G 1 1/4                                   | 1 1/4 NPT                               | 50                    | 51             | 2.5                   | -   | 20                    | -                     | 17.3                  | -                             |
| G 1 1/2                                   | 1 1/2 NPT                               | 56                    | 56             | 2.5                   | -   | 22                    | -                     | 17.3                  | -                             |
| 7/16 - 20UNF                              | R 1/8 keg .                             | 21                    | -              | 1.6                   | 2.4   | -                     | 11.5                  | 5.5                   | 12                            |
| 9/16 - 18UNF                              | R 1/4 keg.                              | 25                    | -              | 1.6                   | 2.5   | -                     | 12.7                  | 8.5                   | 12                            |
| 3/4 - 16UNF                               | R 3/8 keg.                              | 30                    | -              | 2.4                   | 2.5   | -                     | 14.3                  | 8.5                   | 15                            |
| 7/8 - 14UNF                               | R 1/2 keg.                              | 34                    | -              | 2.4                   | 2.5   | -                     | 16.7                  | 10.5                  | 15                            |
| 1 1/16 - 12UN                             | R 3/4 keg.                              | 41                    | -              | 2.4                   | 3.3   | -                     | 19.0                  | 13.0                  | 15                            |
| 1 5/16 - 12UN                             | R 1 keg.                                | 49                    | -              | 3.2                   | 3.3   | -                     | 19.0                  | 16.0                  | 15                            |
| 1 5/8 - 12UN                              | R 1 1/4 keg .                           | 58                    | -              | 3.2                   | 3.3   | -                     | 19.0                  | 17.0                  | 15                            |
|   | R 1 1/2 keg .                           | -                     | -              | -                     | -   | -                     | -                     | 17.0                  | -                             |

### Tightening Torques for studs

■Recommend tightening torques MA

The table below shows the Nm value for studs to avoid leakages.

■Sealing of taper thread

Taper threads are not self-sealing. To achieve a leakproof seal an additional sealant is necessary.

A Well -established sealing- medium is PTFE-tape (e.g. Teflon)

■Note

The quoted figures relate to fittings out of steel(galvanized) and to counterpart made of steel

Lubricate stud with hydraulic oil before screwing in

unit: MA(Nm)

| BSPB straight port connections |          |               | Straight male stud fittings with port tapping |                  |                        |                            |  | Banjo fittings |           | Adjustable ends           |        | Blanking plugs             |                       | Non-return valves |
|--------------------------------|----------|---------------|---|------------------|------------------------|----------------------------|--|----------------|-----------|---------------------------|--------|----------------------------|-----------------------|-------------------|
| Series                         | Tube O.D | T Thread Size | form A for sealing washer                     | Form B with face | form E with ED sealing | form F with O-ring sealing | O-ring with sealing and retaining ring | SYD WH / SYDTH | SYD SWV E | O-ring and retaining ring | O-ring | SYDVSTI-ED with ED sealing | SYDCV with ED sealing |                   |
| L                              | 6        | 1/8           | 9   | 18               | 18                     | 18                         | 18                                     | 18             | 18        | 18                        | 18     | 13                         | 18                    |                   |
|                                | 8        | 1/4           | 35  | 35               | 35                     | 35                         | 35                                     | 45             | 40        | 35                        | 35     | 30                         | 35                    |                   |
|                                | 10       | 1/4           | 35  | 35               | 35                     | 35                         | 35                                     | 45             | 40        | 35                        | 35     |                            | 35                    |                   |
|                                | 12       | 3/8           | 45  | 70               | 70                     | 70                         | 70                                     | 70             | 65        | 70                        | 70     | 60                         | 50                    |                   |
|                                | 15       | 1/2           | 65  | 140              | 140                    | 90                         | 90                                     | 120            | 90        | 110                       | 110    | 80                         | 85                    |                   |
|                                | 18       | 1/2           | 65  | 100              | 100                    | 90                         | 90                                     | 120            | 90        | 110                       | 110    |                            | 65                    |                   |
|                                | 22       | 3/4           | 90  | 180              | 180                    | 180                        | 180                                    | 230            | 125       | 180                       | 180    | 140                        | 140                   |                   |
|                                | 28       | 1             | 150   | 330              | 330                    | 310                        | 310                                    | 320            |           | 310                       | 310    | 200                        | 190                   |                   |
|                                | 35       | 1 1/4         | 240   | 540              | 540                    | 450                        | 450                                    | 540            |           | 450                       | 450    | 400                        | 360                   |                   |
| 42                             | 1 1/2    | 290           | 630   | 630              | 540                    | 540                        | 700                                    |                | 540       | 540                       | 450    | 540                        |                       |                   |
| S                              | 6        | 1/4           | 35  | 55               | 40                     | 40                         |  | 45             | 40        | 55                        | 55     |                            | 45                    |                   |
|                                | 8        | 1/4           | 35  | 55               | 40                     | 40                         |  | 45             | 40        | 55                        | 55     |                            | 45                    |                   |
|                                | 10       | 3/8           | 45  | 90               | 80                     | 80                         |  | 70             | 65        | 90                        | 90     |                            | 60                    |                   |
|                                | 12       | 3/8           | 45  | 90               | 80                     | 80                         |  | 70             | 65        | 90                        | 90     |                            | 60                    |                   |
|                                | 14       | 1/2           | 65  | 150              | 115                    | 115                        |  | 120            | 90        | 110                       | 110    |                            | 145                   |                   |
|                                | 16       | 1/2           | 65  | 130              | 115                    | 115                        |  | 120            | 90        | 110                       | 110    |                            | 100                   |                   |
|                                | 20       | 3/4           | 90  | 270              | 180                    | 180                        |  | 230            | 125       | 115                       | 115    |                            | 145                   |                   |
|                                | 25       | 1             | 150   | 340              | 310                    | 310                        |  | 320            |           | 420                       | 420    |                            | 260                   |                   |
|                                | 30       | 1 1/4         | 240   | 540              | 450                    | 450                        |  | 540            |           | 550                       | 550    |                            | 360                   |                   |
| 38                             | 1 1/2    | 290           | 700   | 540              | 540                    |                            | 700                                    |                | 600       | 600                       |        | 540                        |                       |                   |

unit: MA(Nm)

| BSPB straight port connections |          |             | Straight male stud fittings with port tapping |                  |                        |                            |  | Banjo fittings |          | Adjustable ends           |        | Blanking plugs             |                             | Non-return valves     |
|--------------------------------|----------|-------------|---|------------------|------------------------|----------------------------|--|----------------|----------|---------------------------|--------|----------------------------|-----------------------------|-----------------------|
| Series                         | Tube O.D | Thread Size | form A for sealing washer                     | Form B with face | form E with ED sealing | form F with O-ring sealing | O-ring with sealing and retaining ring | SYDWH / SYDTH  | SYD SWVE | O-ring and retaining ring | O-ring | SYDVSTI-ED with ED sealing | SYDVSTI with O-ring sealing | SYDCV with ED sealing |
| L                              | 6        | M10×1.0     | 9   | 18               | 18                     | 15                         | 18                                     | 18             | 18       | 18                        | 15     | 12                         | 20                          | 18                    |
|                                | 8        | M12×1.5     | 20  | 30               | 25                     | 25                         | 35                                     | 45             | 35       | 35                        | 25     | 25                         |                             | 25                    |
|                                | 10       | M14×1.5     | 35  | 45               | 45                     | 35                         | 45                                     | 55             | 50       | 45                        | 35     | 35                         |                             | 35                    |
|                                | 12       | M16×1.5     | 45  | 65               | 55                     | 40                         | 55                                     | 80             | 60       | 55                        | 40     | 50                         |                             | 50                    |
|                                | 15       | M18×1.5     | 55  | 80               | 70                     | 45                         | 70                                     | 100            | 80       | 70                        | 45     | 65                         |                             | 70                    |
|                                | 18       | M22×1.5     | 65  | 140              | 125                    | 60                         | 160                                    | 140            | 120      | 180                       | 60     | 90                         |                             | 125                   |
|                                | 22       | M26×1.5     | 90  | 190              | 180                    | 100                        | 250                                    | 320            | 130      | 180                       | 100    | 135                        |                             | 145                   |
|                                | 28       | M33×2.0     | 150   | 340              | 310                    | 160                        | 310                                    | 360            |          | 310                       | 160    | 225                        |                             | 210                   |
|                                | 35       | M42×2.0     | 240   | 500              | 450                    | 210                        | 450                                    | 540            |          | 450                       | 210    | 360                        |                             | 360                   |
| 42                             | M48×2.0  | 290         | 630   | 540              | 260                    | 540                        | 700                                    |                | 600      | 260                       | 360    |                            | 540                         |                       |
| S                              | 6        | M12×1.5     | 20  | 35               | 40                     | 35                         |  | 45             | 35       | 35                        | 35     |                            | 35                          | 35                    |
|                                | 8        | M14×1.5     | 35  | 55               | 40                     | 45                         |  | 55             | 50       | 60                        | 45     |                            | 45                          | 45                    |
|                                | 10       | M16×1.5     | 45  | 70               | 70                     | 55                         |  | 80             | 60       | 95                        | 55     |                            | 55                          | 55                    |
|                                | 12       | M18×1.5     | 55  | 110              | 90                     | 70                         |  | 100            | 80       | 120                       | 90     |                            | 70                          | 70                    |
|                                | 14       | M20×1.5     | 55  | 150              | 125                    | 80                         |  | 125            | 110      |                           |        | 80                         | 80                          | 100                   |
|                                | 16       | M22×1.5     | 65  | 170              | 135                    | 100                        |  | 135            | 120      | 190                       | 100    |                            | 100                         | 125                   |
|                                | 20       | M27×2.0     | 90  | 270              | 180                    | 170                        |  | 320            | 135      | 190                       | 170    |                            | 170                         | 135                   |
|                                | 25       | M33×2.0     | 150   | 410              | 310                    | 310                        |  | 360            |          | 500                       | 310    |                            | 310                         | 210                   |
|                                | 30       | M42×2.0     | 240   | 540              | 450                    | 330                        |  | 540            |          | 600                       | 330    |                            | 330                         | 360                   |
| 38                             | M48×2.0  | 290         | 700   | 540              | 420                    |                            | 700                                    |                | 600      | 420                       |        | 420                        | 540                         |                       |

## Ordering Information

Example 1. Tube to Tube Connection

SYDI - 12 S - S316/L  
 ①                      ②③                      ⑥

Example 3. Tube to Tube Port

SYDEW - 16 S - S316/L  
 ①                      ②③                      ⑥

Example 5. Banjo Fitting

SYDWH - 16 S - 04G - S316/L  
 ①                      ②③                      ④                      ⑥

Example 2. Tube to Thread Connection

SYDMC - 10 L - 02G ED - S316/L  
 ①                      ②③                      ④⑤                      ⑥

Example 4. Tube Port to Female Port

SYDMC - 16 S - 04G ED - STEL  
 ①                      ②③                      ④⑤                      ⑥

Example 6. Male/Female Adapter

SYMFAE - 04G.03G - STEL  
 ①                      ④                      ⑥

- ① Name of Fitting : Refer to Index
- ② Tube O.D : See Tube O.D Designator
- ③ Series : See Series Designator
- ④ Thread Connection : See Thread Designator
- ⑤ Elastomer Seal : ED-Ring (Refer to seal materials)
- ⑥ Material : See Material Designator

### Tube O.D Designator

|            |     |     |     |       |      |      |
|------------|-----|-----|-----|-------|------|------|
| Tube O.D   | 4mm | 6mm | 8mm | ..... | 38mm | 42mm |
| Identifier | 04  | 06  | 08  | ..... | 38   | 42   |

### Series Designator

|            |            |       |       |
|------------|------------|-------|-------|
| Series     | Very Light | Light | Heavy |
| Identifier | LL         | L     | S     |

### Thread Designator (Pipe Thread)

|              |                                 |      |      |      |      |      |     |        |        |
|--------------|---------------------------------|------|------|------|------|------|-----|--------|--------|
| Nominal Size |                                 | 1/8" | 1/4" | 3/8" | 1/2" | 3/4" | 1"  | 1 1/4" | 1 1/2" |
| Identifier   | ANSI/ASME B1.20.1NPT            | 01N  | 02N  | 03N  | 04N  | 06N  | 08N | 10N    | 12N    |
|              | DIN-ISO228(DIN 259)BSP/Parallel | 01G  | 02G  | 03G  | 04G  | 06G  | 08G | 10G    | 12G    |
|              | DIN-2999 BSP Tapered            | 01R  | 02R  | 03R  | 04R  | 06R  | 08R | 10R    | 12R    |

### Thread Designator (Metric Thread)

|             |                     |        |         |         |         |       |         |         |         |         |
|-------------|---------------------|--------|---------|---------|---------|-------|---------|---------|---------|---------|
| Metric Size |                     | M8x1.0 | M10x1.0 | M12x1.5 | M14x1.5 | ..... | M27x2.0 | M33x2.0 | M42x2.0 | M48x2.0 |
| Identifier  | DIN 158 Taper (Keg) | M8K    | M10K    | M12K    | M14K    | ..... |         |         |         |         |
|             | DIN-13 Parallel     | M8     | M10     | M12     | M14     | ..... | M27     | M33     | M42     | M48     |

### Thread Designator (Unified)









|            |            |            |           |           |             |             |            |
|------------|------------|------------|-----------|-----------|-------------|-------------|------------|
| Size       | 7/16-20UNF | 9/16-18UNF | 3/4-16UNF | 7/8-14UNF | 1 1/16-12UN | 1 5/16-12UN | 1 7/8-12UN |
| Identifier | 04U        | 06U        | 08U       | 10U       | 12U         | 16U         | 20U        |


### Material Designator

|            |                         |                  |                     |       |
|------------|-------------------------|------------------|---------------------|-------|
| Material   | Carbon Steel (DIN 3859) | Stainless Steel  |                     | Brass |
|            |                         | DIN 17440/1.4571 | ASTM A479TYPE 316/L |       |
| Identifier | STEL                    | 4571             | S316/L              | BRAS  |










| Tube to Tube Page   |                        | Page | EO  | EMB | VOLZ | VOSS  | WALPRO |
|---|------------------------|------|-----|-----|------|-------|--------|
|  | SYDU                   | 14   | G   | E   | G-V  | 111.. | P-GV   |
|   | Straight Union         |      |     |     |      | 112.. |        |
|  | SYDL                   | 14   | W   | F   | W-V  | 119.. | P-WV   |
|   | Union Elbow            |      |     |     |      | 120.. |        |
|  | SYDUR                  | 15   | GR  | ER  | GR-V |       | P-GV   |
|   | Reducing Union         |      |     |     |      |       |        |
|  | SYDT                   | 16   | T   | G   | T-V  | 133.. | P-TV   |
|   | Union Tee              |      |     |     |      | 134.. |        |
|  | SYDC                   | 16   | K   | H   | K-V  | 135.. | P-KV   |
|   | Union Cross            |      |     |     |      | 136.. |        |
|  | SYDTR                  | 17   | TR  | GR  |      |       | P-TV   |
|   | Reducing Tee           |      |     |     |      |       |        |
|  | SYDBU                  | 18   | SV  | K   | GS-V | 137.. | P-GSV  |
|   | Bulkhead Union         |      |     |     |      |       |        |
|  | SYDBUW                 | 18   | ESV | N   | ES-V | 141.. | P-ESV  |
|   | Welding Bulkhead Union |      |     |     |      |       |        |
|  | SYDBL                  | 19   | WSV | L   | WS-V | 138.. | P-WSV  |
|   | Bulkhead Union Elbow   |      |     |     |      |       |        |

### Tube to Female Port



|   |  |    |                   |                  |            |        |                            |
|---|--|----|-------------------|------------------|------------|--------|----------------------------|
|   | SYDOM-U/M                                      | 20 | GE-UNF /UN<br>GEO | A/UNF /UN<br>A/O |            | 182..  | P-GEV..U P-<br>GEV..M-FO.F |
|   | Male Connector (UNF /Metric)with O-Ring        |    |                   |                  |            |        |                            |
|  | SYDMC-G  | 21 | GE-R              | AP-R             | GE-V..RK   | 103... | P-GEV..RK                  |
|   | Connector (ISO/BSP Tapered)                    |    |                   |                  |            | 104... |                            |
|  | SYDMC-R  | 22 | GE-R              | A-R              | GE-V..R    | 110..  | P-GEV.R                    |
|   | Male Connector (ISO/BSP Parallel)              |    |                   |                  |            |        |                            |
|  | SYDMC-M  | 23 | GE-M              | A-M              | GE-V..M    | 109..  | P-GEV..M                   |
|   | Male Connector (Metric)                        |    |                   |                  |            |        |                            |
|  | SYDMC-GED                                      | 24 | GE-R-ED           | A-RWD            | GE-V..RWD  | 184... | P-GEV..R-WD                |
|   | Male Connector (ISO/BSP Parallel) with ED-Ring |    |                   |                  |            |        |                            |
|  | SYDMC-MED                                      | 25 | GE-M-ED           | A-MWD            | GE-V..MWD  | 184... | P-GEV..M-WD                |
|   | Male Connector (Metric) with ED-Ring           |    |                   |                  |            |        |                            |
|  | SYDMC-N  | 26 | GE-NPT            | A/NPT            | GE-V..NPT  | 105... | P-GEV..NPT                 |
|   | Male Connector (NPT)                           |    |                   |                  |            | 106    |                            |
|  | SYDLM-R/M                                      | 27 | WE • R-M          | B-R-M            | WE-V..R..M | 115... | P-<br>WEV..RK ..MK         |
|   | Male Elbow(ISO/BSP Tapered /Metric)            |    |                   |                  |            | 116... |                            |
|   |  |    |                   |                  |            | 113... |                            |
|   |  |    |                   |                  |            | 114... |                            |


| Tube to Male Thread   |   | Page | E0      | EMB    | VOLZ       | VOSs            | WALPRO      |
|---|---|------|---------|--------|------------|-----------------|-------------|
|  | SYDFC-G /M                                    | 28   | GAI-R-M | AL-R-M | GAIV..R..M | 144...<br>143.. | P-GAV..R .M |
|   | Female Connector<br>(ISO/BSP Parallel/Metric) |      |         |        |            |                 |             |





### Tube to Tube Port(Adjustable Fittings)

|   |                              |    |     |                        |          |                     |           |
|---|------------------------------|----|-----|------------------------|----------|---------------------|-----------|
|    | SYDLA                        | 29 | EVW | VB                     | EW-V     | 158...              | P-EWV.SV  |
|   | Adjustable Elbow             |    |     |                        |          |                     |           |
|    | SYDBTA                       | 29 | EVT | VC                     | ET-V     | 160..               | P-ETV.SV  |
|   | Adjustable Branch Tee        |    |     |                        |          |                     |           |
|    | SYDRTA                       | 30 | EVL | VD                     | EL-V     | 162...              | P-ELV-SV  |
|   | Adjustable Run Tee           |    |     |                        |          |                     |           |
|    | SYDEW                        | 30 | EW  | VBSYDKO                | EWVD     |                     | P-EWVD    |
|   | Swivel Adjustable Elbow      |    |     |                        |          |                     |           |
|    | SYDET                        | 31 | ET  | VCSYDK0                | ETVD     |                     | P-ETVD    |
|   | Swivel Adjustable Branch Tee |    |     |                        |          |                     |           |
|   | SYDEL                        | 31 | EL  | VSYDDK0                | ELVD     |                     | P-ELVD    |
|   | Swivel Adjustable Run Tee    |    |     |                        |          |                     |           |
|  | SYDKOR                       | 32 | KOR | RL,RS                  |          |                     |           |
|   | Stand Pipe Reducer           |    |     |                        |          |                     |           |
|  | SYDR                         | 33 | KOR | KOR-V                  | 148...78 | P-<br>RESYDV-<br>SV |           |
|   | Reducer                      |    |     |                        |          |                     |           |
|  | SYDRED                       | 34 | RED | RLSYDKO<br>RSSYDK<br>O | RESYDV   |                     | P-RESYDVD |
|   | Swivel Reducing Tube Adaptor |    |     |                        |          |                     |           |





### Tube Port To Female Port

|   |   |    |                         |                        |                    |            |                              |
|---|---|----|-------------------------|------------------------|--------------------|------------|------------------------------|
|  | SYDA-GED/MED  | 35 | EVGE-<br>R-ED -<br>M-ED | VA-<br>RWD-<br>MWD     | EG-V..RWD<br>..MWD | 177.174... | P-EGES..R-WD-SV..M-WD-<br>SV |
|   | Adaptor(ISO/BSP Parallel /Metric)with<br>ED-Ring        |    |                         |                        |                    |            |                              |
|  | SYDEGE-G/M  | 36 | EGE.R-<br>FD .M-<br>ED  | VASYDKO<br>-RWD<br>MWD | EGVD..RWD<br>..MWD |            | EGESD.R-WD..M..WD            |
|   | Swivel Adaptor(ISO/BSP Parallel<br>/Metric)with ED-Ring |    |                         |                        |                    |            |                              |





| Tube Port to Tube Port  |              | Page | E0 | EMB    | VOLZ   | VOSS | WALPRO |
|---|--------------|------|----|--------|--------|------|--------|
|  | SYDUE        | 37   | GE | ESYDK0 | ESYDKV |      | SNV    |
|   | Swivel Union |      |    |        |        |      |        |

| Weld Fittings   |                         | Page | EO   | EMB  | VOLZ     | VOSS   | WALPRO |
|---|-------------------------|------|------|------|----------|--------|--------|
|  | SYDAS                   | 38   | AS   | V    | GAS-V    | 139... | P-ASV  |
|   | Welding Connector       |      |      |      |          |        |        |
|  | SYDASK                  | 38   | ASK  | ESNO | ASKK..0D |        |        |
|   | Welding Connector       |      |      |      |          |        |        |
|  | SYDAK                   | 39   | SKA  | SNO  | SK-A..0D | 070... | SN     |
|   | Welding Nipple          |      |      |      |          |        |        |
|  | SYDAK                   | 39   | SKAR | SNR  |          |        |        |
|   | Reducing Welding Nipple |      |      |      |          |        |        |


**Male &Female Adaptors**


|   |                                  |    |       |       |          |        |          |
|---|----------------------------------|----|-------|-------|----------|--------|----------|
|  | SYH-MFAD                         | 41 | RI    | RI    | RIAS     | 149..  | RED      |
|   | Male Female Adaptor              |    |       |       |          |        |          |
|  | SYH-MFAE                         | 41 | RI    | RI    | RIBS     | 149... | RED      |
|   | Male Female Adaptor              |    |       |       |          |        |          |
|  | SYH-MFAD-ED                      | 42 | RI-ED | RI-WD | RIAS..WD |        | RED...WD |
|   | Male Female Adaptor with ED-Ring |    |       |       |          |        |          |
|  | SYH-MFAE-ED                      | 42 | RI-ED | RI-WD | RIBS..WD |        | RED...WD |
|   | Male Female Adaptor with ED-Ring |    |       |       |          |        |          |

**Plugs and Caps**

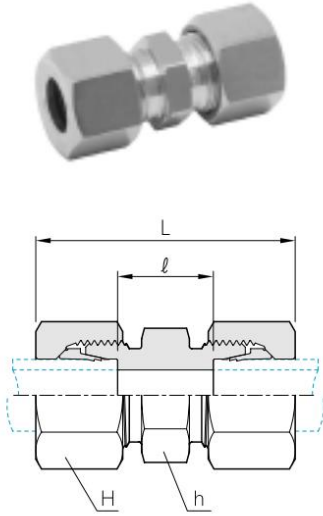
|   |  |    |                 |                |           |        |       |
|---|--|----|-----------------|----------------|-----------|--------|-------|
|  | SYDVSTI-GED/MED  | 43 | VSIT R-ESYDM-ED | VSCH - RWD-MWD | VSCH.WD   | 189... |       |
|   | Blanking Plug(ISO/BSP Parallel/Metric)with ED-Ring for ports |    |                 |                |           |        |       |
|  | SYDVSTI  | 43 | VSIT M-OR       |                |           |        |       |
|   | Blanking Plug(Metric) with O-Ring for ports                  |    |                 |                |           |        |       |
|  | SYDVKA   | 44 | VKA             | STO-0          | VST0...0D |        | VS... |
|   | Blanking Plug with O-Ring                                    |    |                 |                |           |        |       |
|  | SYDCA  | 44 | ROV             | VSCHK          | EVSV      |        |       |
|   | Tube Cap   |    |                 |                |           |        |       |

## Plugs and Caps

|   |                   |    |    |     |      |        |    |
|---|-------------------|----|----|-----|------|--------|----|
|  | SYDIL             | 45 | VH | VSH | VS-H | 020... | EH |
|   | Tube Insert       |    |    |     |      |        |    |
|   | SYN-              | 45 | GM | GM  | G-M  | 080... |    |
|   | Bulkhead Lock Nut |    |    |     |      |        |    |

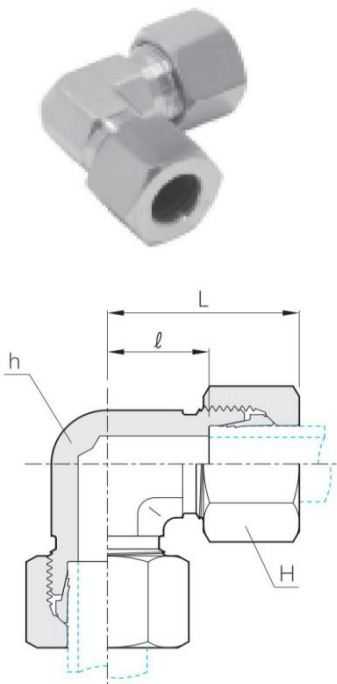
| <b>Spare Parts</b>  |      | Page | E0    | EMB | VOLZ   | VOSS  | WALPRO  |
|---|------|------|-------|-----|--------|-------|---------|
|  | SYDN | 46   | M     | M   | U-M    | 4     | M       |
|   | Nut  |      |       |     |        |       |         |
|   | SYDS | 46   | SYDPR | S   | S-SYDR | 007.. | S-R P-R |
| Cutting Ring  |      |      |       |     |        |       |         |

**Straight Union  
SYDU**



| Series   | Part No.  | Tube<br>O. D. | H  | h  | L  | l   | PN(bar) |         |       |
|----------|-----------|---------------|----|----|----|-----|---------|---------|-------|
|          |           |               |    |    |    |     | C.Steel | SS316/L | BRASS |
| LL       | SYDU-04LL | 4             | 10 | 9  | 31 | 12  | 100     | 100     | 63    |
|          | SYDU-06LL | 6             | 12 | 11 | 32 | 9   | 100     | 100     | 63    |
|          | SYDU-08LL | 8             | 14 | 12 | 35 | 12  | 100     | 100     | 63    |
|          | SYDU-10LL | 10            | 17 | 14 | 35 | 12  | 100     | 100     | 63    |
|          | SYDU-12LL | 12            | 19 | 17 | 35 | 11  | 100     | 100     | 63    |
| L        | SYDU-06L  | 6             | 14 | 12 | 39 | 10  | 500     | 315     | 200   |
|          | SYDU-08L  | 8             | 17 | 14 | 40 | 11  | 500     | 315     | 200   |
|          | SYDU-10L  | 10            | 19 | 17 | 42 | 13  | 500     | 315     | 200   |
|          | SYDU-12L  | 12            | 22 | 19 | 43 | 14  | 400     | 315     | 200   |
|          | SYDU-15L  | 15            | 27 | 24 | 46 | 16  | 400     | 315     | 200   |
|          | SYDU-18L  | 18            | 32 | 27 | 48 | 16  | 400     | 315     | 200   |
|          | SYDU-22L  | 22            | 36 | 32 | 52 | 20  | 250     | 160     | 100   |
|          | SYDU-28L  | 28            | 41 | 41 | 54 | 21  | 250     | 160     | 100   |
|          | SYDU-35L  | 35            | 50 | 46 | 63 | 20  | 250     | 160     | 100   |
|          | SYDU-42L  | 42            | 60 | 55 | 66 | 21  | 250     | 160     | 100   |
| S        | SYDU-06S  | 6             | 17 | 14 | 45 | 16  | 800     | 630     | 400   |
|          | SYDU-08S  | 8             | 19 | 17 | 47 | 18  | 800     | 630     | 400   |
|          | SYDU-10S  | 10            | 22 | 19 | 49 | 17  | 800     | 630     | 400   |
|          | SYDU-12S  | 12            | 24 | 22 | 51 | 19  | 630     | 630     | 400   |
|          | SYDU-14S  | 14            | 27 | 24 | 57 | 22  | 630     | 630     | 400   |
|          | SYDU-16S  | 16            | 30 | 27 | 57 | 21  | 630     | 400     | 250   |
|          | SYDU-20S  | 20            | 36 | 32 | 66 | 23  | 420     | 400     | 250   |
|          | SYDU-25S  | 25            | 46 | 41 | 74 | 26  | 420     | 400     | 250   |
| SYDU-30S | 30        | 50            | 46 | 80 | 27 | 420 | 400     | 250     |       |
| SYDU-38S | 38        | 60            | 55 | 90 | 29 | 420 | 315     | 200     |       |

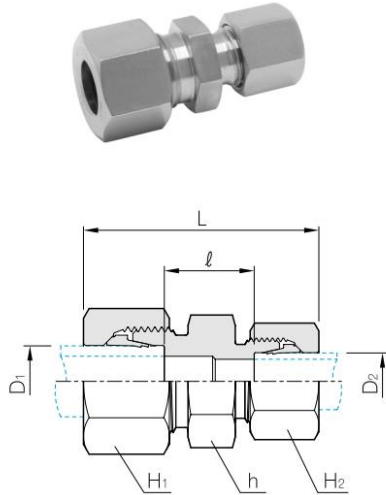
**Union Elbow  
SYDL**



| Series | Part No.  | Tube<br>OD. | H  | h  | L  | l    | PN(bar) |         |       |
|--------|-----------|-------------|----|----|----|------|---------|---------|-------|
|        |           |             |    |    |    |      | C.Steel | SS316/L | BRASS |
| LL     | SYDU-04LL | 4           | 10 | 9  | 21 | 11.0 | 100     | 100     | 63    |
|        | SYDU-06LL | 6           | 12 | 9  | 21 | 9.5  | 100     | 100     | 63    |
|        | SYDU-08LL | 8           | 14 | 12 | 23 | 11.5 | 100     | 100     | 63    |
|        | SYDU-10LL | 10          | 17 | 14 | 24 | 12.5 | 100     | 100     | 63    |
|        | SYDU-12LL | 12          | 19 | 17 | 25 | 13.0 | 100     | 100     | 63    |
| L      | SYDU-06L  | 6           | 14 | 12 | 27 | 12.0 | 500     | 315     | 200   |
|        | SYDU-08L  | 8           | 17 | 12 | 29 | 14.0 | 500     | 315     | 200   |
|        | SYDU-10L  | 10          | 19 | 14 | 30 | 15.0 | 500     | 315     | 200   |
|        | SYDU-12L  | 12          | 22 | 17 | 32 | 17.0 | 400     | 315     | 200   |
|        | SYDU-15L  | 15          | 27 | 19 | 36 | 21.0 | 400     | 315     | 200   |
|        | SYDU-18L  | 18          | 32 | 24 | 40 | 23.5 | 400     | 315     | 200   |
|        | SYDU-22L  | 22          | 36 | 27 | 44 | 27.5 | 250     | 160     | 100   |
|        | SYDU-28L  | 28          | 41 | 36 | 47 | 30.5 | 250     | 160     | 100   |
|        | SYDU-35L  | 35          | 50 | 41 | 56 | 34.5 | 250     | 160     | 100   |
|        | SYDU-42L  | 42          | 60 | 50 | 63 | 40.0 | 250     | 160     | 100   |
| S      | SYDU-06S  | 6           | 17 | 12 | 31 | 16.0 | 800     | 630     | 400   |
|        | SYDU-08S  | 8           | 19 | 14 | 32 | 17.0 | 800     | 630     | 400   |
|        | SYDU-10S  | 10          | 22 | 17 | 34 | 17.5 | 800     | 630     | 400   |
|        | SYDU-12S  | 12          | 24 | 17 | 38 | 21.5 | 630     | 630     | 400   |
|        | SYDU-14S  | 14          | 27 | 19 | 40 | 22.0 | 630     | 630     | 400   |
|        | SYDU-16S  | 16          | 30 | 24 | 43 | 24.5 | 630     | 400     | 250   |
|        | SYDU-20S  | 20          | 36 | 27 | 48 | 26.5 | 420     | 400     | 250   |
|        | SYDU-25S  | 25          | 46 | 36 | 54 | 30.0 | 420     | 400     | 250   |
|        | SYDU-30S  | 30          | 50 | 41 | 62 | 35.5 | 420     | 400     | 250   |
|        | SYDU-38S  | 38          | 60 | 50 | 72 | 41.0 | 420     | 315     | 200   |

Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change

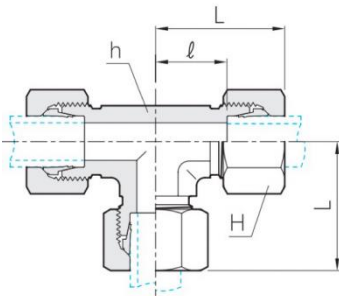
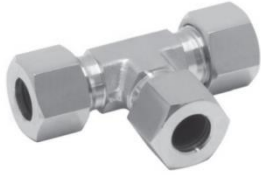
## Reducing Union SYDUR



| Series       | Part No.     | Tube O. D.     |                | H <sub>1</sub> | H <sub>2</sub> | h  | L    | l    | PN(bar) |         |        |
|--------------|--------------|----------------|----------------|----------------|----------------|----|------|------|---------|---------|--------|
|              |              | D <sub>1</sub> | D <sub>2</sub> |                |                |    |      |      | C.Steel | SS316/L | BRA SS |
| L            | SYDUR08L-06L | 8              | 6              | 17             | 14             | 14 | 40   | 11.0 | 500     | 315     | 200    |
|              | SYDUR10L-06L | 10             | 6              | 19             | 14             | 17 | 41   | 12.0 | 500     | 315     | 200    |
|              | SYDUR10L-08L | 10             | 8              | 19             | 17             | 17 | 41   | 12.0 | 500     | 315     | 200    |
|              | SYDUR12L-06L | 12             | 6              | 22             | 14             | 19 | 42   | 13.0 | 400     | 315     | 200    |
|              | SYDUR12L-08L | 12             | 8              | 22             | 17             | 19 | 42   | 13.0 | 400     | 315     | 200    |
|              | SYDUR12L-10L | 12             | 10             | 22             | 19             | 19 | 43   | 14.0 | 400     | 315     | 200    |
|              | SYDUR15L-10L | 15             | 10             | 27             | 19             | 24 | 45   | 15.0 | 400     | 315     | 200    |
|              | SYDUR15L-12L | 15             | 12             | 27             | 22             | 24 | 45   | 15.0 | 400     | 315     | 200    |
|              | SYDUR18L-10L | 18             | 10             | 32             | 19             | 27 | 46   | 15.5 | 400     | 315     | 200    |
|              | SYDUR18L-12L | 18             | 12             | 32             | 22             | 27 | 46   | 15.5 | 400     | 315     | 200    |
|              | SYDUR18L-15L | 18             | 15             | 32             | 27             | 27 | 48   | 16.5 | 400     | 315     | 200    |
|              | SYDUR22L-12L | 22             | 12             | 36             | 22             | 32 | 48   | 17.5 | 250     | 160     | 100    |
|              | SYDUR22L-15L | 22             | 15             | 36             | 27             | 32 | 50   | 18.5 | 250     | 160     | 100    |
|              | SYDUR22L-18L | 22             | 18             | 36             | 32             | 32 | 50   | 18.0 | 250     | 160     | 100    |
|              | SYDUR28L-18L | 28             | 18             | 41             | 32             | 41 | 52   | 19.0 | 250     | 160     | 100    |
|              | SYDUR28L-22L | 28             | 22             | 41             | 36             | 41 | 54   | 21.0 | 250     | 160     | 100    |
| SYDUR35L-22L | 35           | 22             | 50             | 36             | 46             | 59 | 21.0 | 250  | 160     | 100     |        |
| SYDUR35L-28L | 35           | 28             | 50             | 41             | 46             | 59 | 21.0 | 250  | 160     | 100     |        |
| S            | SYDUR08S-06S | 8              | 6              | 19             | 17             | 17 | 47   | 18.0 | 800     | 630     | 400    |
|              | SYDUR10S-06S | 10             | 6              | 22             | 17             | 19 | 48   | 17.5 | 800     | 630     | 400    |
|              | SYDUR10S-08S | 10             | 8              | 22             | 19             | 19 | 48   | 17.5 | 800     | 630     | 400    |
|              | SYDUR12S-06S | 12             | 6              | 24             | 17             | 22 | 50   | 19.5 | 630     | 630     | 400    |
|              | SYDUR12S-08S | 12             | 8              | 24             | 19             | 22 | 50   | 19.5 | 630     | 630     | 400    |
|              | SYDUR12S-10S | 12             | 10             | 24             | 22             | 22 | 51   | 19.0 | 630     | 630     | 400    |
|              | SYDUR14S-10S | 14             | 10             | 27             | 22             | 24 | 54   | 20.5 | 630     | 630     | 400    |
|              | SYDUR14S-12S | 14             | 12             | 27             | 24             | 24 | 54   | 20.5 | 630     | 630     | 400    |
|              | SYDUR16S-12S | 16             | 12             | 30             | 24             | 27 | 54   | 20.0 | 630     | 400     | 250    |
|              | SYDUR16S-14S | 16             | 14             | 30             | 27             | 27 | 57   | 21.5 | 630     | 400     | 250    |
|              | SYDUR20S-10S | 20             | 10             | 36             | 22             | 32 | 60   | 22.0 | 420     | 400     | 250    |
|              | SYDUR20S-12S | 20             | 12             | 36             | 24             | 32 | 60   | 22.0 | 420     | 400     | 250    |
|              | SYDUR20S-16S | 20             | 16             |                | 30             | 32 | 63   | 23.0 | 420     | 400     | 250    |
|              | SYDUR25S-16S | 25             | 16             | 46             | 30             | 41 | 68   | 25.0 | 420     | 400     | 250    |
|              | SYDUR25S-20S | 25             | 20             | 46             | 36             | 41 | 71   | 25.5 | 420     | 400     | 250    |
|              | SYDUR30S-20S | 30             | 20             | 50             | 36             | 46 | 74   | 26.0 | 420     | 400     | 250    |
| SYDUR30S-25S | 30           | 25             | 50             | 46             | 46             | 77 | 26.5 | 420  | 400     | 250     |        |
| SYDUR38S-30S | 38           | 30             | 60             | 50             | 55             | 87 | 29.5 | 420  | 315     | 200     |        |

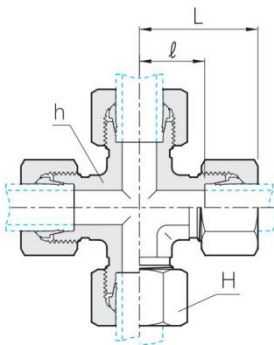
Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change.

Union Tee  
**SYDT**



| Series   | Part No.  | Tube O. D. | H  | h  | L    | l    | PN(bar) |         |       |
|----------|-----------|------------|----|----|------|------|---------|---------|-------|
|          |           |            |    |    |      |      | C.Steel | SS316/L | BRASS |
| LL       | SYDT-04LL | 4          | 10 | 9  | 21   | 11.0 | 100     | 100     | 63    |
|          | SYDT-06LL | 6          | 12 | 9  | 21   | 9.5  | 100     | 100     | 63    |
|          | SYDT-08LL | 8          | 14 | 12 | 23   | 11.5 | 100     | 100     | 63    |
|          | SYDT-10LL | 10         | 17 | 14 | 24   | 12.5 | 100     | 100     | 63    |
|          | SYDT-12LL | 12         | 19 | 17 | 25   | 13.0 | 100     | 100     | 63    |
| L        | SYDT-06L  | 6          | 14 | 12 | 27   | 12.0 | 500     | 315     | 200   |
|          | SYDT-08L  | 8          | 17 | 12 | 29   | 140  | 500     | 315     | 200   |
|          | SYDT-10L  | 10         | 19 | 14 | 30   | 15.0 | 500     | 315     | 200   |
|          | SYDT-12L  | 12         | 22 | 17 | 32   | 170  | 400     | 315     | 200   |
|          | SYDT-15L  | 15         | 27 | 19 | 36   | 21.0 | 400     | 315     | 200   |
|          | SYDT-18L  | 18         | 32 | 24 | 40   | 235  | 400     | 315     | 200   |
|          | SYDT-22L  | 22         | 36 | 27 | 44   | 27.5 | 250     | 160     | 100   |
|          | SYDT-28L  | 28         | 41 | 36 | 47   | 30.5 | 250     | 160     | 100   |
|          | SYDT-35L  | 35         | 50 | 41 | 56   | 34.5 | 250     | 160     | 100   |
| SYDT-42L | 42        | 60         | 50 | 63 | 40.0 | 250  | 160     | 100     |       |
| S        | SYDT-06S  | 6          | 17 | 12 | 31   | 16.0 | 800     | 630     | 400   |
|          | SYDT-08S  | 8          | 19 | 14 | 32   | 17.0 | 800     | 630     | 400   |
|          | SYDT-10S  | 10         | 22 | 17 | 34   | 17.5 | 800     | 630     | 400   |
|          | SYDT-12S  | 12         | 24 | 17 | 38   | 215  | 630     | 630     | 400   |
|          | SYDT-14S  | 14         | 27 | 19 | 40   | 22.0 | 630     | 630     | 400   |
|          | SYDT-16S  | 16         | 30 | 24 | 43   | 245  | 630     | 400     | 250   |
|          | SYDT-20S  | 20         | 36 | 27 | 48   | 26.5 | 420     | 400     | 250   |
|          | SYDT-25S  | 25         | 46 | 36 | 54   | 30.0 | 420     | 400     | 250   |
|          | SYDT-30S  | 30         | 50 | 41 | 62   | 35.5 | 420     | 400     | 250   |
|          | SYDT-38S  | 38         | 60 | 50 | 72   | 41.0 | 420     | 315     | 200   |

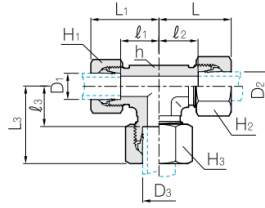
Union Cross  
**SYDC**



| Series   | Part No.  | Tube O. D. | H  | h  | L    | l    | PN(bar) |         |       |
|----------|-----------|------------|----|----|------|------|---------|---------|-------|
|          |           |            |    |    |      |      | C.Steel | SS316/L | BRASS |
| LL       | SYDC-04LL | 4          | 10 | 9  | 21   | 11.0 | 100     | 100     | 63    |
|          | SYDC-06LL | 6          | 12 | 9  | 21   | 9.5  | 100     | 100     | 63    |
|          | SYDC-08LL | 8          | 14 | 12 | 23   | 11.5 | 100     | 100     | 63    |
|          | SYDC-10LL | 10         | 17 | 14 | 24   | 12.5 | 100     | 100     | 63    |
|          | SYDC-12LL | 12         | 19 | 17 | 25   | 13.0 | 100     | 100     | 63    |
| L        | SYDC-06L  | 6          | 14 | 12 | 27   | 12.0 | 500     | 315     | 200   |
|          | SYDC-08L  | 8          | 17 | 12 | 29   | 140  | 500     | 315     | 200   |
|          | SYDC-10L  | 10         | 19 | 14 | 30   | 15.0 | 500     | 315     | 200   |
|          | SYDC-12L  | 12         | 22 | 17 | 32   | 170  | 400     | 315     | 200   |
|          | SYDC-15L  | 15         | 27 | 19 | 36   | 21.0 | 400     | 315     | 200   |
|          | SYDC-18L  | 18         | 32 | 24 | 40   | 235  | 400     | 315     | 200   |
|          | SYDC-22L  | 22         | 36 | 27 | 44   | 27.5 | 250     | 160     | 100   |
|          | SYDC-28L  | 28         | 41 | 36 | 47   | 30.5 | 250     | 160     | 100   |
|          | SYDC-35L  | 35         | 50 | 41 | 56   | 34.5 | 250     | 160     | 100   |
| SYDC-42L | 42        | 60         | 50 | 63 | 40.0 | 250  | 160     | 100     |       |
| S        | SYDC-06S  | 6          | 17 | 12 | 31   | 16.0 | 800     | 630     | 400   |
|          | SYDC-08S  | 8          | 19 | 14 | 32   | 17.0 | 800     | 630     | 400   |
|          | SYDC-10S  | 10         | 22 | 17 | 34   | 17.5 | 800     | 630     | 400   |
|          | SYDC-12S  | 12         | 24 | 17 | 38   | 215  | 630     | 630     | 400   |
|          | SYDC-14S  | 14         | 27 | 19 | 40   | 22.0 | 630     | 630     | 400   |
|          | SYDC-16S  | 16         | 30 | 24 | 43   | 245  | 630     | 400     | 250   |
|          | SYDC-20S  | 20         | 36 | 27 | 48   | 26.5 | 420     | 400     | 250   |
|          | SYDC-25S  | 25         | 46 | 36 | 54   | 30.0 | 420     | 400     | 250   |
|          | SYDC-30S  | 30         | 50 | 41 | 62   | 35.5 | 420     | 400     | 250   |
|          | SYDC-38S  | 38         | 60 | 50 | 72   | 41.0 | 420     | 315     | 200   |

Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change

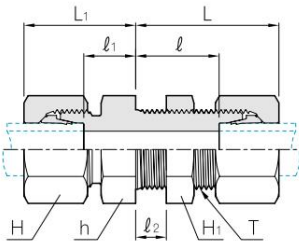
# Reducing Tee SYDTR



| Series            | Part No.          | Tube O.D.      |                |                | H <sub>1</sub> | H <sub>2</sub> | H <sub>3</sub> | h  | L <sub>1</sub> | L <sub>2</sub> | L <sub>3</sub> | l <sub>1</sub> | l <sub>2</sub> | l <sub>3</sub> | PN(bar) |         |       |
|-------------------|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|----|----------------|----------------|----------------|----------------|----------------|----------------|---------|---------|-------|
|                   |                   | D <sub>1</sub> | D <sub>2</sub> | D <sub>3</sub> |                |                |                |    |                |                |                |                |                |                | C.Steel | SS316/L | BRASS |
| L                 | SYDTR 06L-06L-08L | 6              | 6              | 8              | 14             | 14             | 17             | 14 | 29             | 29             | 29             | 14             | 14             | 14             | 500     | 315     | 200   |
|                   | SYDTR 08L-08L-06L | 8              | 8              | 6              | 17             | 17             | 14             | 14 | 29             | 29             | 29             | 14             | 14             | 14             | 500     | 315     | 200   |
|                   | SYDTR 06L-06L-10L | 6              | 6              | 10             | 14             | 14             | 19             | 14 | 30             | 30             | 30             | 15             | 15             | 15             | 500     | 315     | 200   |
|                   | SYDTR 08L-08L-10L | 8              | 8              | 10             | 17             | 17             | 19             | 14 | 30             | 30             | 30             | 15             | 15             | 15             | 500     | 315     | 200   |
|                   | SYDTR 10L-10L-06L | 10             | 10             | 6              | 19             | 19             | 14             | 14 | 30             | 30             | 30             | 15             | 15             | 15             | 500     | 315     | 200   |
|                   | SYDTR 10L-10L-08L | 10             | 10             | 8              | 19             | 19             | 17             | 14 | 30             | 30             | 30             | 15             | 15             | 15             | 500     | 315     | 200   |
|                   | SYDTR 10L-06L-10  | 10             | 16             | 10             | 19             | 14             | 19             | 14 | 30             | 30             | 30             | 15             | 15             | 15             | 500     | 315     | 200   |
|                   | SYDTR 08L-08L-12L | 8              | 8              | 12             | 17             | 17             | 22             | 17 | 32             | 32             | 32             | 17             | 17             | 17             | 400     | 315     | 200   |
|                   | SYDTR 12L-12L-06L | 12             | 12             | 6              | 22             | 22             | 14             | 17 | 32             | 32             | 32             | 17             | 17             | 17             | 400     | 315     | 200   |
|                   | SYDTR 12L-08L-08L | 12             | 18             | 8              | 22             | 17             | 17             | 17 | 32             | 32             | 32             | 17             | 17             | 17             | 400     | 315     | 200   |
|                   | SYDTR 12L-12L-08L | 12             | 12             | 8              | 22             | 22             | 17             | 17 | 32             | 32             | 32             | 17             | 17             | 17             | 400     | 315     | 200   |
|                   | SYDTR 12L-10L-10L | 12             | 10             | 10             | 22             | 19             | 19             | 17 | 32             | 32             | 32             | 17             | 17             | 17             | 400     | 315     | 200   |
|                   | SYDTR 12L-12L-10L | 12             | 12             | 10             | 22             | 22             | 19             | 17 | 32             | 32             | 32             | 17             | 17             | 17             | 400     | 315     | 200   |
|                   | SYDTR 12L-10L-12L | 12             | 10             | 12             | 22             | 19             | 22             | 17 | 32             | 32             | 32             | 17             | 17             | 17             | 400     | 315     | 200   |
|                   | SYDIR 10L-10L-15  | 10             | 10             | 15             | 19             | 19             | 27             | 19 | 36             | 36             | 36             | 21             | 21             | 21             | 400     | 315     | 200   |
|                   | SYDTR 12L-12L-15L | 12             | 12             | 15             | 22             | 22             | 27             | 19 | 36             | 36             | 36             | 21             | 21             | 21             | 400     | 315     | 200   |
|                   | SYDTR 15L-15L-06L | 15             | 15             | 6              | 27             | 27             | 14             | 19 | 36             | 36             | 36             | 21             | 21             | 21             | 400     | 315     | 200   |
|                   | SYDTR 15L-15L-10L | 15             | 15             | 10             | 27             | 27             | 19             | 19 | 36             | 36             | 36             | 21             | 21             | 21             | 400     | 315     | 200   |
|                   | SYDTR 15L-12L-12L | 15             | 12             | 12             | 27             | 22             | 22             | 19 | 36             | 36             | 36             | 21             | 21             | 21             | 400     | 315     | 200   |
|                   | SYDIR 15L-15L-12  | 15             | 15             | 12             | 27             | 27             | 22             | 19 | 36             | 36             | 36             | 21             | 21             | 21             | 400     | 315     | 200   |
|                   | SYDTR 15L-12L-15L | 15             | 12             | 15             | 27             | 22             | 27             | 19 | 36             | 36             | 36             | 21             | 21             | 21             | 400     | 315     | 200   |
|                   | SYDTR 12L-12L-18L | 12             | 12             | 18             | 22             | 22             | 32             | 24 | 39             | 39             | 40             | 24             | 24             | 23.5           | 400     | 315     | 200   |
|                   | SYDTR 18L-10L-10L | 18             | 10             | 10             | 32             | 19             | 19             | 24 | 40             | 39             | 39             | 23.5           | 24             | 24             | 400     | 315     | 200   |
|                   | SYDTR 18L-18L-10L | 18             | 18             | 10             | 32             | 32             | 19             | 24 | 40             | 40             | 39             | 23.5           | 23.5           | 24             | 400     | 315     | 200   |
|                   | SYDTR18L-18L-12L  | 18             | 18             | 12             | 32             | 32             | 22             | 24 | 40             | 40             | 39             | 23.5           | 23.5           | 24             | 400     | 315     | 200   |
|                   | SYDTR 18L-18L-15L | 18             | 18             | 15             | 32             | 32             | 27             | 24 | 40             | 40             | 39             | 23.5           | 23.5           | 24             | 400     | 315     | 200   |
|                   | SYDTR 18L-10L-18L | 18             | 10             | 18             | 32             | 19             | 32             | 24 | 40             | 39             | 40             | 23.5           | 24             | 23.5           | 400     | 315     | 200   |
|                   | SYDIR 22L-22L-10  | 22             | 22             | 10             | 36             | 36             | 19             | 27 | 44             | 44             | 43             | 27.5           | 27.5           | 28             | 250     | 160     | 100   |
|                   | SYDIR 22L-22L-12  | 22             | 22             | 12             | 36             | 36             | 22             | 27 | 44             | 44             | 43             | 27.5           | 27.5           | 28             | 250     | 160     | 100   |
|                   | SYDTR 22L-15L-15L | 22             | 15             | 15             | 36             | 27             | 27             | 27 | 44             | 43             | 43             | 27.5           | 28             | 28             | 250     | 160     | 100   |
|                   | SYDTR 22L-22L-15L | 22             | 22             | 15             | 36             | 36             | 27             | 27 | 44             | 44             | 43             | 27.5           | 27.5           | 28             | 250     | 160     | 100   |
|                   | SYDTR 22L-18L-18L | 22             | 18             | 18             | 36             | 32             | 32             | 27 | 44             | 44             | 44             | 27.5           | 27.5           | 27.5           | 250     | 160     | 100   |
|                   | SYDTR 22L-22L-18L | 22             | 22             | 18             | 36             | 36             | 32             | 27 | 44             | 44             | 44             | 27.5           | 27.5           | 27.5           | 250     | 160     | 100   |
|                   | SYDTR 22L-18L-22L | 22             | 18             | 22             | 36             | 32             | 36             | 27 | 44             | 44             | 44             | 27.5           | 27.5           | 27.5           | 250     | 160     | 100   |
|                   | SYDTR 28L-28L-10L | 28             | 28             | 10             | 41             | 41             | 19             | 36 | 47             | 47             | 46             | 30.5           | 30.5           | 31             | 250     | 160     | 100   |
|                   | SYDTR 28L-28L-12L | 28             | 28             | 12             | 41             | 41             | 22             | 36 | 47             | 47             | 46             | 30.5           | 30.5           | 31             | 250     | 160     | 100   |
| SYDTR 28L-28L-15L | 28                | 28             | 15             | 41             | 41             | 27             | 36             | 47 | 47             | 46             | 30.5           | 30.5           | 31             | 250            | 160     | 100     |       |
| SYDTR 28L-28L-18L | 28                | 28             | 18             | 41             | 41             | 32             | 36             | 47 | 47             | 47             | 30.5           | 30.5           | 30.5           | 250            | 160     | 100     |       |
| SYDTR 28L-22L-22L | 28                | 22             | 22             | 41             | 36             | 36             | 36             | 47 | 47             | 47             | 30.5           | 30.5           | 30.5           | 250            | 160     | 100     |       |
| SYDTR 28L-28L-22L | 28                | 28             | 22             | 41             | 41             | 36             | 36             | 47 | 47             | 47             | 30.5           | 30.5           | 30.5           | 250            | 160     | 100     |       |
| S                 | SYDTR 10S-10S-06S | 10             | 10             | 6              | 22             | 22             | 17             | 17 | 34             | 34             | 33             | 17.5           | 17.5           | 18             | 800     | 630     | 400   |
|                   | SYDTR 12S-08S-08S | 12             | 18             | 8              | 24             | 19             | 19             | 17 | 38             | 37             | 37             | 21.5           | 22             | 22             | 630     | 630     | 400   |
|                   | SYDTR 12S-12S-08S | 12             | 12             | 8              | 24             | 24             | 19             | 17 | 38             | 38             | 37             | 21.5           | 21.5           | 22             | 630     | 630     | 400   |
|                   | SYDTR 12S-12S-10S | 12             | 12             | 10             | 24             | 24             | 22             | 17 | 38             | 38             | 38             | 21.5           | 21.5           | 21.5           | 630     | 630     | 400   |
|                   | SYDTR 12S-12S-16S | 12             | 12             | 16             | 24             | 24             | 30             | 24 | 42             | 42             | 43             | 25.5           | 25.5           | 24.5           | 630     | 400     | 250   |
|                   | SYDTR 16S-16S-06S | 16             | 16             | 6              | 30             | 30             | 17             | 24 | 43             | 43             | 41             | 24.5           | 24.5           | 26             | 630     | 400     | 250   |
|                   | SYDTR 16S-16S-08S | 16             | 16             | 8              | 30             | 30             | 19             | 24 | 43             | 43             | 41             | 24.5           | 24.5           | 26             | 630     | 400     | 250   |
|                   | SYDTR 16S-16S-10S | 16             | 16             | 10             | 30             | 30             | 22             | 24 | 43             | 43             | 42             | 24.5           | 24.5           | 25.5           | 630     | 400     | 250   |
|                   | SYDTR 16S-16S-12S | 16             | 16             | 12             | 30             | 30             | 24             | 24 | 43             | 43             | 42             | 24.5           | 24.5           | 25.5           | 630     | 400     | 250   |
|                   | SYDTR16S-16S-20S  | 16             | 16             | 20             | 30             | 30             | 36             | 27 | 47             | 47             | 48             | 28.5           | 28.5           | 26.5           | 420     | 400     | 250   |
|                   | SYDTR 20S-20S-10S | 20             | 20             | 10             | 36             | 36             | 22             | 27 | 48             | 48             | 46             | 26.5           | 26.5           | 29.5           | 420     | 400     | 250   |
|                   | SYDTR 20S-20S-12S | 20             | 20             | 12             | 36             | 36             | 24             | 27 | 48             | 48             | 46             | 26.5           | 26.5           | 29.5           | 420     | 400     | 250   |
|                   | SYDTR 20S-20S-16S | 20             | 20             | 16             | 36             | 36             | 30             | 27 | 48             | 48             | 47             | 26.5           | 26.5           | 28.5           | 420     | 400     | 250   |
|                   | SYDTR 20S-20S-25S | 20             | 20             | 25             | 36             | 36             | 46             | 36 | 53             | 53             | 54             | 31.5           | 31.5           | 30             | 420     | 400     | 250   |
|                   | SYDTR 25S-25S-16S | 25             | 25             | 16             | 46             | 46             | 30             | 36 | 54             | 54             | 52             | 30             | 30             | 33.5           | 420     | 400     | 250   |
|                   | SYDTR 25S-25S-20S | 25             | 25             | 20             | 46             | 46             | 36             | 36 | 54             | 54             | 53             | 30             | 30             | 31.5           | 420     | 400     | 250   |
| SYDTR 25S-25S-30S | 25                | 25             | 30             | 46             | 46             | 50             | 41             | 61 | 61             | 62             | 37             | 37             | 35.5           | 420            | 400     | 250     |       |

Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change.

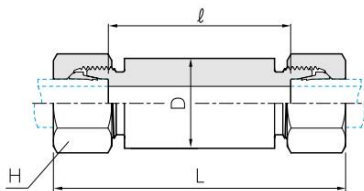
**Bulkhead Union  
SYDBU**



$l_2 = 16\text{mm Max.}$   
 = 3mm Min (06-18L and 06-16S)  
 = 4mm Min (22-42L and 20-38S)

| Series | Part No.  | Tube<br>O.D. | H  | H <sub>1</sub> | h  | L  | L <sub>1</sub> | l    | l <sub>1</sub> | T       | PN(bar)      |             |       |
|--------|-----------|--------------|----|----------------|----|----|----------------|------|----------------|---------|--------------|-------------|-------|
|        |           |              |    |                |    |    |                |      |                |         | C.S<br>steel | SS<br>316/L | BRASS |
| L      | SYDBU-06L | 6            | 14 | 17             | 17 | 42 | 22             | 27   | 7              | M12×1.5 | 500          | 315         | 200   |
|        | SYDBU-08L | 8            | 17 | 19             | 19 | 42 | 23             | 27   | 8              | M14×1.5 | 500          | 315         | 200   |
|        | SYDBU-10L | 10           | 19 | 22             | 22 | 43 | 25             | 28   | 10             | M16×1.5 | 500          | 315         | 200   |
|        | SYDBU-12L | 12           | 22 | 24             | 24 | 44 | 25             | 29   | 10             | M18×1.5 | 400          | 315         | 200   |
|        | SYDBU-15L | 15           | 27 | 30             | 27 | 46 | 27             | 31   | 12             | M22×1.5 | 400          | 315         | 200   |
|        | SYDBU-18L | 18           | 32 | 36             | 32 | 49 | 30             | 32.5 | 13.5           | M26×1.5 | 400          | 315         | 200   |
|        | SYDBU-22L | 22           | 36 | 41             | 36 | 51 | 33             | 34.5 | 16.5           | M30×2.0 | 250          | 160         | 100   |
|        | SYDBU-28L | 28           | 41 | 46             | 41 | 52 | 35             | 35.5 | 18.5           | M36×2.0 | 250          | 160         | 100   |
|        | SYDBU-35L | 35           | 50 | 55             | 50 | 58 | 40             | 36.5 | 18.5           | M45×2.0 | 250          | 160         | 160   |
|        | SYDBU-42L | 42           | 60 | 65             | 60 | 59 | 42             | 36   | 19             | M52×2.0 | 250          | 160         | 160   |
| S      | SYDBU-06S | 6            | 17 | 19             | 19 | 44 | 27             | 29   | 12             | M14×1.5 | 800          | 630         | 400   |
|        | SYDBU-08S | 8            | 19 | 22             | 22 | 44 | 28             | 29   | 13             | M16×1.5 | 800          | 630         | 400   |
|        | SYDBU-10S | 10           | 22 | 24             | 24 | 46 | 31             | 29.5 | 14.5           | M18×1.5 | 800          | 630         | 400   |
|        | SYDBU-12S | 12           | 24 | 27             | 27 | 47 | 31             | 30.5 | 14.5           | M20×1.5 | 630          | 630         | 400   |
|        | SYDBU-14S | 14           | 27 | 30             | 30 | 50 | 35             | 32   | 17             | M22×1.5 | 630          | 630         |       |
|        | SYDBU-16S | 16           | 30 | 32             | 32 | 50 | 35             | 31.5 | 16.5           | M24×1.5 | 630          | 400         | 250   |
|        | SYDBU-20S | 20           | 36 | 41             | 41 | 55 | 39             | 33.5 | 17.5           | M30×2.0 | 420          | 400         | 250   |
|        | SYDBU-25S | 25           | 46 | 46             | 46 | 59 | 44             | 35   | 20             | M36×2.0 | 420          | 400         | 250   |
|        | SYDBU-30S | 30           | 50 | 50             | 50 | 64 | 48             | 37.5 | 21.5           | M42×2.0 | 420          | 400         | 250   |
|        | SYDBU-38S | 38           | 60 | 65             | 65 | 68 | 53             | 37   | 22             | M52×2.0 | 420          | 315         |       |

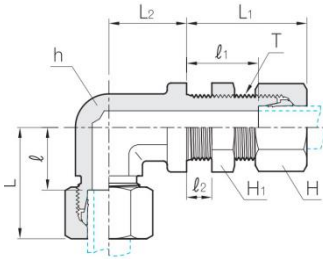
**Welding Bulkhead Elbow  
SYDBUW**



| Series | Part No.   | Tube<br>O. D. | H  | h  | L   | l  | PN(bar) |         |
|--------|------------|---------------|----|----|-----|----|---------|---------|
|        |            |               |    |    |     |    | C.Steel | SS316/L |
| L      | SYDBUW-06L | 6             | 18 | 14 | 85  | 56 | 500     | 315     |
|        | SYDBUW-08L | 8             | 20 | 17 | 85  | 56 | 500     | 315     |
|        | SYDBUW-10L | 10            | 22 | 19 | 87  | 58 | 500     | 315     |
|        | SYDBUW-12L | 12            | 25 | 22 | 87  | 58 | 400     | 315     |
|        | SYDBUW-15L | 15            | 28 | 27 | 100 | 70 | 400     | 315     |
|        | SYDBUW-18L | 18            | 32 | 32 | 101 | 69 | 400     | 315     |
|        | SYDBUW-22L | 22            | 36 | 36 | 105 | 73 | 250     | 160     |
|        | SYDBUW-28L | 28            | 40 | 41 | 106 | 73 | 250     | 160     |
|        | SYDBUW-35L | 35            | 50 | 50 | 114 | 71 | 250     | 160     |
|        | SYDBUW-42L | 42            | 60 | 60 | 115 | 70 | 250     | 160     |
| S      | SYDBUW-06S | 6             | 20 | 17 | 89  | 60 | 800     | 630     |
|        | SYDBUW-08S | 8             | 22 | 19 | 89  | 60 | 800     | 630     |
|        | SYDBUW-10S | 10            | 25 | 22 | 91  | 59 | 800     | 630     |
|        | SYDBUW-12S | 12            | 28 | 24 | 91  | 59 | 630     | 630     |
|        | SYDBUW-14S | 14            | 30 | 27 | 107 | 72 | 630     | 630     |
|        | SYDBUW-16S | 16            | 35 | 30 | 107 | 71 | 630     | 400     |
|        | SYDBUW-20S | 20            | 38 | 36 | 114 | 71 | 420     | 400     |
|        | SYDBUW-25S | 25            | 45 | 46 | 120 | 72 | 420     | 400     |
|        | SYDBUW-30S | 30            | 50 | 50 | 126 | 73 | 420     | 400     |
|        | SYDBUW-38S | 38            | 60 | 60 | 133 | 72 | 420     | 315     |

Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change

## Bulkhead Union Elbow SYDBL

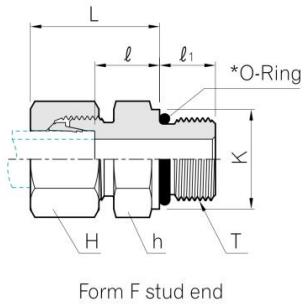


$l_2 = 16\text{mm Max.}$   
 $= 3\text{mm Min (06-18L and 06-16S)}$   
 $= 4\text{mm Min (22-42L and 20-38S)}$

| Series | Part No.  | Tube (I.D.) | H  | H <sub>1</sub> | h  | L  | L <sub>1</sub> | L <sub>2</sub> | l    | l <sub>1</sub> | T       | PN(bar) |         |       |
|--------|-----------|-------------|----|----------------|----|----|----------------|----------------|------|----------------|---------|---------|---------|-------|
|        |           |             |    |                |    |    |                |                |      |                |         | C.Steel | SS316/L | BRASS |
| L      | SYDBL-06L | 6           | 14 | 17             | 12 | 27 | 0              | 14             | 12   | 27             | M12X1.5 | 315     | 315     | 200   |
|        | SYDBL-08L | 8           | 17 | 19             | 1  | 0  | 2              | 17             | 14   | 27             | M14X1.5 | 315     | 315     | 200   |
|        | SYDBL-10L | 10          | 19 | 22             | 14 | 30 | 43             | 18             | 15   | 28             | M16X1.5 | 315     | 315     | 200   |
|        | SYDBL-12L | 12          | 22 | 24             | 17 | 32 | 44             | 20             | 17   | 29             | M18X1.5 | 315     | 315     | 200   |
|        | SYDBL-15L | 15          | 27 | 30             | 19 | 36 | 46             | 23             | 21   | 31             | M22X1.5 | 315     | 315     | 200   |
|        | SYDBL-18L | 18          | 32 | 36             | 24 | 40 | 49             | 24             | 23.5 | 32.5           | M26X1.5 | 315     | 315     | 200   |
|        | SYDBL-22L | 22          | 36 | 41             | 27 | 44 | 51             | 30             | 27.5 | 34.5           | M30X2   | 160     | 160     |       |
|        | SYDBL-28L | 28          | 41 | 46             | 36 | 47 | 52             | 39             | 30.5 | 35.5           | M36X2   | 160     | 160     |       |
|        | SYDBL-35L | 35          | 50 | 55             | 41 | 56 | 58             | 39             | 34.5 | 36.5           | M45X2   | 160     | 160     |       |
|        | SYDBL-42L | 40          | 60 | 65             | 50 | 63 | 59             | 43             | 40   | 36             | M52X2   | 160     | 160     |       |
| S      | SYDBL-06S | 6           | 17 | 19             | 12 | 31 | 44             | 17             | 16   | 29             | M14X1.5 | 630     | 630     |       |
|        | SYDBL-08S | 8           | 19 | 22             | 14 | 32 | 44             | 18             | 17   | 29             | M16X1.5 | 630     | 630     |       |
|        | SYDBL-10S | 10          | 22 | 24             | 17 | 34 | 46             | 20             | 17.5 | 29.5           | M18X1.5 | 630     | 630     |       |
|        | SYDBL-12S | 12          | 0  | 27             | 17 | 38 | 47             | 21             | 21.5 | 30.5           | M20X1.5 | 630     | 630     |       |
|        | SYDBL-14S | 14          | 27 | 30             | 19 | 40 | 50             | 23             | 22   | 32             | M22X1.5 | 630     | 630     |       |
|        | SYDBL-16S | 16          | 30 | 32             | 24 | 43 | 50             | 24             | 24.5 | 31.5           | M24X1.5 | 400     | 400     |       |
|        | SYDBL-20S | 20          | 36 | 41             | 27 | 48 | 55             | 30             | 26.5 | 33.5           | M30X2   | 400     | 400     |       |
|        | SYDBL-25S | 25          | 46 | 46             | 36 | 5  | 59             | 34             | 30   | 35             | M36X2   | 400     | 400     |       |
|        | SYDBL-30S | 30          | 50 | 50             | 41 | 62 | 64             | 39             | 35.5 | 37.5           | M42X2   | 400     | 400     |       |
|        | SYDBL-38S | 0           | 60 | 65             | 50 | 72 | 68             | 43             | 41   | 37             | M52X2   | 315     | 315     |       |

Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change.

Male Connector(Unified and Metric Parallel) with \*O.Ring  
**SYDOM-U/M**



**for Unified**

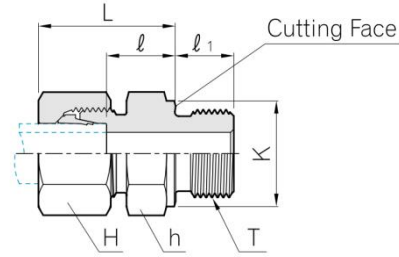
| Series        | PartNo.       | Tube<br>Ø.D. | H  | h    | K    | L    | l    | l <sub>1</sub> | T              | PN(bar) |         |
|---------------|---------------|--------------|----|------|------|------|------|----------------|----------------|---------|---------|
|               |               |              |    |      |      |      |      |                |                | C.Steel | SS 316L |
| L             | SYDOM 08L-04U | 8            | 17 | 17   | 14.4 | 25   | 9    | 10             | 7/16-20 UNF-2A | 315     | 315     |
|               | SYDOM 10L-04U | 10           | 19 | 17   | 14.4 | 26   | 10   | 11             | 7/16-20UNF-2A  | 315     | 315     |
|               | SYDOM 12L-06U | 12           | 22 | 19   | 17.6 | 26   | 10   | 11             | 9/16-18UNF-2A  | 315     | 315     |
|               | SYDOM 12L-08U | 12           | 22 | 24   | 22.3 | 28   | 11   | 13             | 3/4-16 UNF-2A  | 315     | 315     |
|               | SYDOM 12L-10U | 12           | 22 | 27   | 25.5 | 29   | 12.7 | 14.3           | 7/8-14UNF-2A   | 315     | 315     |
|               | SYDOM 15L-08U | 15           | 27 | 24   | 22.3 | 29   | 11   | 14             | 3/4-16UNF-2A   | 315     | 315     |
|               | SYDOM 15L-10U | 15           | 27 | 27   | 25.5 | 30   | 12.7 | 15.3           | 7/8-14UNF-2A   | 315     | 315     |
|               | SYDOM 18L-08U | 18           | 32 | 27   | 22.3 | 31   | 11.0 | 14.5           | 3/4-16UNF-2A   | 315     | 315     |
|               | SYDOM 18L-10U | 18           | 32 | 27   | 25.5 | 31   | 12.7 | 14.8           | 7/8-14UNF-2A   | 315     | 315     |
|               | SYDOM 22L-10U | 22           | 36 | 32   | 25.5 | 33   | 12.7 | 16.8           | 7/8-14UNF-2A   | 160     | 160     |
|               | SYDOM 22L-12U | 22           | 36 | 32   | 31.9 | 33   | 15   | 16.5           | 11/16-12 UN-2A | 160     | 160     |
|               | SYDOM 22L-16U | 22           | 36 | 41   | 38.2 | 34   | 15   | 17.5           | 15/16-12 UN-2A | 160     | 160     |
|               | SYDOM 28L-12U | 28           | 41 | 41   | 31.9 | 34   | 15   | 17.5           | 11/16-12 UN-2A | 160     | 160     |
|               | SYDOM 28L-16U | 28           | 41 | 41   | 38.2 | 34   | 15   | 17.5           | 15/16-12 UN-2A | 160     | 160     |
|               | SYDOM 35L-16U | 35           | 50 | 46   | 38.2 | 39   | 15   | 17.5           | 15/16-12 UN-2A | 160     | 160     |
|               | SYDOM 35L-20U | 35           | 50 | 50   | 47.7 | 39   | 15   | 17.5           | 15/8-12 UN-2A  | 160     | 160     |
| SYDOM 42L-20U | 42            | 60           | 55 | 47.7 | 42   | 15.0 | 19   | 15/8-12 UN-2A  | 160            | 160     |         |
| S             | SYDOM 08S-04U | 8            | 19 | 17   | 16   | 30   | 9    | 15             | 7/16-20UNF-2A  | 630     | 630     |
|               | SYDOM 10S-06U | 10           | 22 | 19   | 17.6 | 31   | 10   | 14.5           | 9/16-18UNF-2A  | 630     | 630     |
|               | SYDOM 12S-06U | 12           | 24 | 22   | 17.6 | 31   | 10   | 14.5           | 9/16-18UNF-2A  | 630     | 630     |
|               | SYDOM 12S-08U | 12           | 24 | 24   | 22.3 | 34   | 11   | 17.5           | 3/4-16UNF-2A   | 630     | 630     |
|               | SYDOM 16S-08U | 16           | 30 | 24   | 22.3 | 34   | 11   | 15.5           | 3/4-16UNF-2A   | 400     | 400     |
|               | SYDOM 16S-10U | 16           | 30 | 27   | 25.5 | 37   | 12.7 | 18.8           | 7/8-14UNF-2A   | 400     | 400     |
|               | SYDOM 20S-08U | 20           | 36 | 32   | 22.3 | 42   | 11.0 | 20.5           | 3/4-16UNF-2A   | 400     | 400     |
|               | SYDOM 20S-10U | 20           | 36 | 32   | 25.5 | 42   | 12.7 | 20.8           | 7/8-14UNF-2A   | 400     | 400     |
|               | SYDOM 20S-12U | 20           | 36 | 32   | 31.9 | 42   | 15   | 20.5           | 11/16-12 UN-2A | 400     | 400     |
|               | SYDOM 25S-12U | 25           | 46 | 36   | 31.9 | 47   | 15   | 23             | 11/16-12UN-2A  | 400     | 400     |
|               | SYDOM 25S-16U | 25           | 46 | 41   | 38.2 | 47   | 15   | 23             | 15/16-12 UN-2A | 400     | 400     |
|               | SYDOM30S-16U  | 30           | 50 | 46   | 38.2 | 50   | 15   | 23.5           | 15/16-12UN-2A  | 400     | 400     |
|               | SYDOM 30S-20U | 30           | 50 | 50   | 47.7 | 50   | 15   | 23.5           | 15/8-12 UN-2A  | 400     | 400     |
|               | SYDOM 38S-20U | 38           | 60 | 55   | 47.7 | 57   | 15   | 26             | 15/8-12 UN-2A  | 315     | 315     |

**for Metric Parallel**

| Series       | PartNo.      | Tube<br>Ø.D. | H  | h  | K  | L    | l <sub>1</sub> | l       | T       |
|--------------|--------------|--------------|----|----|----|------|----------------|---------|---------|
| L            | SYDOM06L-M10 | 6            | 14 | 14 | -  | 23   | 10.0           | 8.5     | M10x1.0 |
|              | SYDOM08L-M12 | 8            | 17 | 17 | -  | 25   | 11.5           | 10.0    | M12x1.5 |
|              | SYDOM10L-M14 | 10           | 19 | 19 | -  | 26   | 11.5           | 11.0    | M14x1.5 |
|              | SYDOM12L-M16 | 12           | 22 | 22 | -  | 27   | 13.0           | 12.0    | M16x1.5 |
|              | SYDOM15L-M18 | 15           | 27 | 24 | -  | 29   | 14.5           | 13.5    | M18x1.5 |
|              | SYDOM18L-M22 | 18           | 32 | 27 | -  | 30   | 15.5           | 14.0    | M22x1.5 |
|              | SYDOM22L-M26 | 22           | 36 | 32 | -  | 32   | 16.0           | 16.0    | M26x1.5 |
|              | SYDOM28L-M33 | 28           | 41 | 41 | 38 | 34   | 19             | 17.5    | M33x2.0 |
| SYDOM35L-M42 | 35           | 50           | 50 | 48 | 39 | 19.5 | 17.5           | M42x2.0 |         |
| S            | SYDOM06S-M12 | 6            | 17 | 17 | -  | 27   | 11.5           | 12.0    | M12x1.5 |
|              | SYDOM08S-M14 | 8            | 19 | 19 | -  | 27   | 11.5           | 12.0    | M14x1.5 |
|              | SYDOM10S-M16 | 10           | 22 | 22 | -  | 29   | 13.0           | 12.5    | M16x1.5 |
|              | SYDOM12S-M18 | 12           | 24 | 24 | -  | 29   | 14.5           | 13.0    | M18x1.5 |
|              | SYDOM16S-M22 | 16           | 30 | 27 | -  | 33   | 15.5           | 15.0    | M22x1.5 |
|              | SYDOM20S-M27 | 20           | 36 | 32 | -  | 37   | 19.0           | 15.0    | M27x2.0 |
|              | SYDOM25S-M33 | 25           | 46 | 41 | 38 | 41   | 19.0           | 17.0    | M33x2.0 |
|              | SYDOM30S-M42 | 30           | 50 | 50 | 48 | 45   | 19.5           | 18.5    | M42x2.0 |

Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change  
 \*The standard O-Ring material is NBR(e.g. perbunan) however FPM(e.g. Viton) is also available on request (See Page 3).

# Male Connector (ISO/BSP Parallel) SYDMC-G

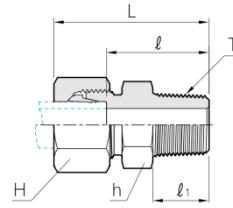


Form B stud end

| Series        | Part No.      | Tube<br>O.D. | H  | h  | K  | L    | l    | l <sub>1</sub> | T     | PN(bar) |            |       |
|---------------|---------------|--------------|----|----|----|------|------|----------------|-------|---------|------------|-------|
|               |               |              |    |    |    |      |      |                |       | C.Steel | SS<br>316L | BRASS |
| L             | SYDMC 06L-01G | 6            | 14 | 14 | 14 | 23   | 8.5  | 8              | G 1/8 | 315     | 315        | 200   |
|               | SYDMC 06L-02G | 6            | 14 | 19 | 18 | 25   | 10   | 12             | G 1/4 | 315     | 315        | 200   |
|               | SYDMC 06L-03G | 6            | 14 | 22 | 22 | 26   | 11.5 | 12             | G 3/8 | 315     | 315        | 200   |
|               | SYDMC 06L-04G | 6            | 14 | 27 | 26 | 27   | 12   | 14             | G 1/2 | 315     | 315        |       |
|               | SYDMC 08L-01G | 8            | 17 | 14 | 14 | 23   | 8.5  | 8              | G 1/8 | 315     | 315        |       |
|               | SYDMC 08L-02G | 8            | 17 | 19 | 18 | 25   | 10   | 12             | G 1/4 | 315     | 315        | 200   |
|               | SYDMC 08L-03G | 8            | 17 | 22 | 22 | 26   | 11.5 | 12             | G 3/8 | 315     | 315        | 200   |
|               | SYDMC 08L-04G | 8            | 17 | 27 | 26 | 27   | 12   | 14             | G 1/2 | 315     | 315        | 200   |
|               | SYDMC 10L-02G | 10           | 19 | 19 | 18 | 26   | 11   | 12             | G 1/4 | 315     | 315        | 200   |
|               | SYDMC 10L-03G | 10           | 19 | 22 | 22 | 27   | 12.5 | 12             | G 3/8 | 315     | 315        | 200   |
|               | SYDMC 10L-04G | 10           | 19 | 27 | 26 | 28   | 13   | 14             | G 1/2 | 315     | 315        | 200   |
|               | SYDMC 12L-02G | 12           | 22 | 19 | 18 | 27   | 12   | 12             | G 1/4 | 315     | 315        | 200   |
|               | SYDMC 12L-03G | 12           | 22 | 22 | 22 | 27   | 12.5 | 12             | G 3/8 | 315     | 315        | 200   |
|               | SYDMC 12L-04G | 12           | 22 | 27 | 26 | 28   | 13   | 14             | G 1/2 | 315     | 315        | 200   |
|               | SYDMC 12L-06G | 12           | 22 | 32 | 32 | 29   | 14   | 16             | G 3/4 | 315     | 315        |       |
|               | SYDMC 15L-03G | 15           | 27 | 24 | 22 | 29   | 13.5 | 12             | G 3/8 | 250     | 250        | 160   |
|               | SYDMC 15L-04G | 15           | 27 | 27 | 26 | 29   | 14   | 14             | G 1/2 | 250     | 250        | 160   |
|               | SYDMC 15L-06G | 15           | 27 | 32 | 32 | 30   | 15   | 16             | G 3/4 | 250     | 250        |       |
|               | SYDMC 18L-03G | 18           | 32 | 27 | 22 | 29.5 | 14   | 12             | G 3/8 | 250     | 250        |       |
|               | SYDMC 18L-04G | 18           | 32 | 27 | 26 | 31   | 14.5 | 14             | G 1/2 | 250     | 250        | 160   |
|               | SYDMC 18L-06G | 18           | 32 | 32 | 32 | 30   | 14.5 | 16             | G 3/4 | 250     | 250        |       |
|               | SYDMC 22L-04G | 22           | 36 | 32 | 26 | 33   | 16.5 | 14             | G 1/2 | 160     | 160        | 100   |
|               | SYDMC 22L-06G | 22           | 36 | 32 | 32 | 33   | 16.5 | 16             | G 3/4 | 160     | 160        | 100   |
| SYDMC 28L-06G | 28            | 41           | 41 | 32 | 34 | 17.5 | 16   | G 3/4          | 160   | 160     |            |       |
| SYDMC 28L-08G | 28            | 41           | 41 | 39 | 34 | 17.5 | 18   | G 1            | 160   | 160     | 100        |       |
| SYDMC 35L-08G | 35            | 50           | 46 | 39 | 39 | 17.5 | 18   | G 1            | 160   | 160     |            |       |
| SYDMC 35L-10G | 35            | 50           | 50 | 49 | 39 | 17.5 | 20   | G 1 1/4        | 160   | 160     | 100        |       |
| SYDMC 42L-12G | 42            | 60           | 55 | 55 | 42 | 19   | 22   | G 1 1/2        | 160   | 160     | 100        |       |
| S             | SYDMC 06S-02G | 6            | 17 | 19 | 18 | 28   | 13.0 | 12             | G 1/4 | 400     | 400        | 250   |
|               | SYDMC 06S-04G | 6            | 17 | 27 | 26 | 33   | 18   | 14             | G 1/2 | 400     | 400        |       |
|               | SYDMC 08S-02G | 8            | 19 | 19 | 18 | 30   | 15   | 12             | G 1/4 | 400     | 400        | 250   |
|               | SYDMC 08S-03G | 8            | 19 | 22 | 22 | 30   | 15.5 | 12             | G 3/8 | 400     | 400        |       |
|               | SYDMC 10S-02G | 10           | 22 | 19 | 18 | 31   | 14.5 | 12             | G 1/4 | 400     | 400        |       |
|               | SYDMC 10S-03G | 10           | 22 | 22 | 22 | 31   | 15   | 12             | G 3/8 | 400     | 400        | 250   |
|               | SYDMC 10S-04G | 10           | 22 | 27 | 26 | 34   | 17.5 | 14             | G 1/2 | 400     | 400        |       |
|               | SYDMC 12S-02G | 12           | 24 | 22 | 18 | 33   | 16.5 | 12             | G 1/4 | 400     | 400        |       |
|               | SYDMC 12S-03G | 12           | 24 | 22 | 22 | 33   | 17   | 12             | G 3/8 | 400     | 400        | 250   |
|               | SYDMC 12S-04G | 12           | 24 | 27 | 26 | 34   | 17.5 | 14             | G 1/2 | 400     | 400        |       |
|               | SYDMC 14S-03G | 14           | 27 | 24 | 22 | 36   | 18.5 | 12             | G 3/8 | 400     | 400        |       |
|               | SYDMC 14S-04G | 14           | 27 | 27 | 26 | 37   | 19   | 14             | G 1/2 | 400     | 400        | 250   |
|               | SYDMC 16S-03G | 16           | 30 | 27 | 22 | 36   | 18   | 12             | G 3/8 | 400     | 400        |       |
|               | SYDMC 16S-04G | 16           | 30 | 27 | 26 | 37   | 18.5 | 14             | G 1/2 | 400     | 400        | 250   |
|               | SYDMC 16S-06G | 16           | 30 | 32 | 32 | 39   | 20.5 | 16             | G 3/4 | 400     | 400        |       |
|               | SYDMC 20S-04G | 20           | 36 | 32 | 26 | 42   | 20.5 | 14             | G 1/2 | 400     | 400        |       |
|               | SYDMC 20S-06G | 20           | 36 | 32 | 32 | 42   | 20.5 | 16             | G 3/4 | 400     | 400        | 250   |
|               | SYDMC 25S-06G | 25           | 46 | 41 | 32 | 47   | 23   | 16             | G 3/4 | 250     | 250        | 160   |
|               | SYDMC 25S-08G | 25           | 46 | 41 | 39 | 47   | 23   | 18             | G 1   | 250     | 250        |       |
|               | SYDMC 30S-08G | 30           | 50 | 46 | 39 | 50   | 23.5 | 18             | G 1   | 160     | 160        |       |
| SYDMC 30S-10G | 30            | 50           | 50 | 49 | 50 | 23.5 | 20   | G 1 1/4        | 160   | 160     | 100        |       |
| SYDMC 38S-10G | 38            | 60           | 55 | 49 | 57 | 26   | 20   | G 1 1/4        | 160   | 160     |            |       |
| SYDMC 38S-12G | 38            | 60           | 55 | 55 | 57 | 26   | 22   | G 1 1/2        | 160   | 160     | 100        |       |

Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change.

Male Connector(ISO/BSP Tapered)  
**SYDMC-R**

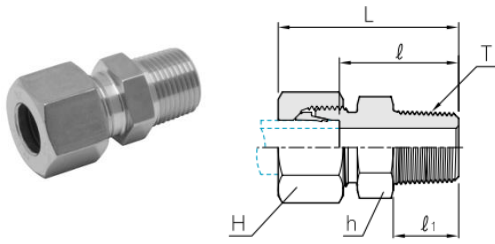


Form C stud end

| Series | Part No.       | Tube<br>O.D. | H  | h  | K | L  | l    | l <sub>1</sub> | T     | PN(bar) |         |       |
|--------|----------------|--------------|----|----|---|----|------|----------------|-------|---------|---------|-------|
|        |                |              |    |    |   |    |      |                |       | C.Steel | SS316/L | BRASS |
| LL     | SYDMC 04LL-01R | 4            | 10 | 11 | - | 26 | 16.0 | 8              | R1/8  | 100     | 100     | 63    |
|        | SYDMC 06LL-01R | 6            | 12 | 11 | - | 26 | 14.5 | 8              | R 1/8 | 100     | 100     | 63    |
|        | SYDMC08LL-01R  | 8            | 14 | 12 | - | 28 | 16.5 | 8              | R 1/8 | 100     | 100     | 63    |
|        | SYDMC 08LL-02R | 8            | 14 | 14 | - | 32 | 20.5 | 12             | R 1/4 | 100     | 100     | 63    |
|        | SYDMC 10LL-02R | 10           | 17 | 14 | - | 32 | 20.5 | 12             | R1/4  | 100     |         | 63    |
|        | SYDMC 12LL-02R | 12           | 19 | 17 | - | 32 | 20.0 | 12             | R1/4  | 100     |         | 63    |
|        | SYDMC 12LL-03R | 12           | 19 | 17 | - | 32 | 20.0 | 12             | R 3/8 | 100     |         | 63    |
| L      | SYDMC06L-01R   | 6            | 14 | 12 | - | 30 | 15.0 | 8              | R 1/8 | 315     | 315     |       |
|        | SYDMC 08L-02R  | 8            | 17 | 17 | - | 35 | 20.0 | 12             | R1/4  | 315     | 315     |       |
|        | SYDMC 10L-02R  | 10           | 19 | 17 | - | 36 | 21.0 | 12             | R 1/4 | 315     | 315     |       |
|        | SYDMC 12L-02R  | 12           | 22 | 19 | - | 37 | 22.0 | 12             | R 1/4 | 315     |         | 200   |
|        | SYDMC 12L-03R  | 12           | 22 | 19 | - | 37 | 22.0 | 12             | R 3/8 | 315     | 315     |       |
|        | SYDMC12L-04R   | 12           | 22 | 24 | - | 39 | 24.0 | 14             | R1/2  | 315     | 315     | 200   |
|        | SYDMC15L-03R   | 15           | 27 | 24 | - | 38 | 23.0 | 12             | R 3/8 | 315     | 250     | 200   |
|        | SYDMC 15L-04R  | 15           | 27 | 24 | - | 40 | 25.0 | 14             | R1/2  | 315     | 315     |       |
|        | SYDMC 18L-04R  | 18           | 32 | 27 | - | 41 | 25.5 | 14             | R 1/2 | 315     | 250     | 100   |
|        | SYDMC 22L-06R  | 22           | 36 | 32 | - | 46 | 29.5 | 16             | R3/4  | 160     | 160     | 100   |

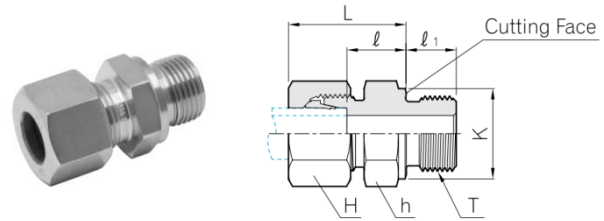
Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for only, subject to change.

## Male Connector (Metric Tapered) SYDMC-MK



Form C stud end

## Male Connector (Metric Parallel) SYDMC-M

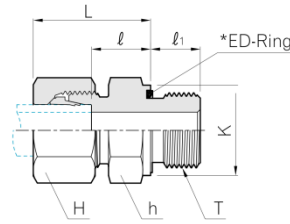


Form B stud end

| Series         | Part No.        | Tube<br>O.D. | H  | h  | K  | L    | l    | l <sub>1</sub> | T        | PN(bar) |            |       |
|----------------|-----------------|--------------|----|----|----|------|------|----------------|----------|---------|------------|-------|
|                |                 |              |    |    |    |      |      |                |          | C.Steel | SS<br>316L | BRASS |
| LL             | SYDMC04LL-M 6K  | 4            | 10 | 9  | -  | 26   | 16   | 8              | M 6x1Keg | 100     |            |       |
|                | SYDMC04LL-M 8K  | 4            | 10 | 10 | -  | 26   | 16   | 8              | M 8x1Keg | 100     | 100        | 63    |
|                | SYDMC 06LL-M10K | 6            | 12 | 11 | -  | 26   | 14.5 | 8              | M10x1Keg | 100     | 100        | 63    |
|                | SYDMC 08LL-M10K | 8            | 14 | 12 | -  | 28   | 16.5 | 8              | M10x1Keg | 100     | 100        | 63    |
| L              | SYDMC06L -M10   | 6            | 14 | 14 | 14 | 23   | 8.5  | 8              | M 10x1.0 | 315     | 315        | 200   |
|                | SYDMC 08L -M12  | 8            | 17 | 17 | 17 | 25   | 10   | 12             | M 12x1.5 | 315     | 315        | 200   |
|                | SYDMC 08L -M18  | 8            | 17 | 24 | 23 | 26   | 11.5 | 12             | M 18x1.5 | 315     | 315        |       |
|                | SYDMC 10L -M14  | 10           | 19 | 19 | 19 | 26   | 11   | 12             | M 14x1.5 | 315     | 315        | 200   |
|                | SYDMC10L -M16   | 10           | 19 | 22 | 21 | 27   | 12   | 12             | M 16x1.5 | 315     | 315        |       |
|                | SYDMC10L -M18   | 10           | 19 | 24 | 23 | 27   | 12.5 | 12             | M 18x1.5 | 315     | 315        |       |
|                | SYDMC 10L -M22  | 10           | 19 | 27 | 27 |      | 14   | 14             | M 22x1.5 | 315     | 315        |       |
|                | SYDMC 12L -M14  | 12           | 22 | 19 | 19 | 26   | 11   | 12             | M 14x1.5 | 315     | 315        |       |
|                | SYDMC12L -M16   | 12           | 22 | 22 | 21 | 27   | 12.5 | 12             | M 16x1.5 | 315     | 315        |       |
|                | SYDMC 12L -M18  | 12           | 22 | 24 | 23 | 27   | 12.5 | 12             | M 18x1.5 | 315     | 315        |       |
|                | SYDMC 12L -M22  | 12           | 22 | 27 | 27 | 29   | 14   | 14             | M 22x1.5 | 315     | 315        |       |
|                | SYDMC 15L -M16  | 15           | 27 | 24 | 21 | 28   | 13   | 12             | M 16x1.5 | 250     | 250        |       |
|                | SYDMC 15L -M18  | 15           | 27 | 24 | 23 | 29   | 13.5 | 12             | M18x1.5  | 250     | 250        | 100   |
|                | SYDMC 15L -M22  | 15           | 27 | 27 | 27 | 30   | 15   | 14             | M 22x1.5 | 250     | 250        |       |
|                | SYDMC 18L -M18  | 18           | 32 | 27 | 23 | 30   | 14   | 12             | M18x1.5  | 250     | 250        |       |
|                | SYDMC 18L -M22  | 18           | 32 | 27 | 27 | 31   | 14.5 | 14             | M22x1.5  | 250     | 250        | 160   |
|                | SYDMC 22L -M22  | 22           | 36 | 32 | 27 | 33   | 16.5 | 14             | M 22x1.5 | 160     | 160        |       |
|                | SYDMC 22L -M26  | 22           | 36 | 32 | 31 | 33   | 16.5 | 16             | M 26x1.5 | 160     | 160        | 100   |
| SYDMC28L -M33  | 28              | 41           | 41 | 39 | 34 | 17.5 | 18   | M 33x2.0       | 160      | 160     | 100        |       |
| SYDMC35L -M42  | 35              | 50           | 50 | 49 | 39 | 17.5 | 20   | M 42x2.0       | 160      | 160     | 100        |       |
| SYDMC 42L -M48 | 42              | 60           | 55 | 55 | 42 | 19.0 | 22   | M 48x2.0       | 160      | 160     | 100        |       |
| S              | SYDMC 06S -M12  | 6            | 17 | 17 | 17 | 28   | 13   | 12             | M12x1.5  | 400     | 400        | 250   |
|                | SYDMC 08S -M14  | 8            | 19 | 19 | 19 | 30   | 15.0 | 12             | M 14x1.5 | 400     | 400        | 250   |
|                | SYDMC 10S -M16  | 10           | 22 | 22 | 21 | 31   | 15   | 12             | M 16x1.5 | 400     | 400        | 250   |
|                | SYDMC 12S -M18  | 12           | 24 | 24 | 23 | 33   | 17   | 12             | M 18x1.5 | 400     | 400        | 250   |
|                | SYDMC 12S -M22  | 12           | 24 | 27 | 27 | 34   | 17.5 | 14             | M22x1.5  | 400     | 400        |       |
|                | SYDMC14S -M20   | 14           | 27 | 27 | 25 | 37   | 19   | 14             | M20x1.5  | 400     | 400        | 250   |
|                | SYDMC 16S -M18  | 16           | 30 | 27 | 23 | 36   | 18   | 12             | M18x1.5  | 400     | 400        |       |
|                | SYDMC 16S -M22  | 16           | 30 | 27 | 27 | 37   | 18.5 | 14             | M22x1.5  | 400     | 400        | 250   |
|                | SYDMC20S -M27   | 20           | 36 | 32 | 32 | 42   | 20.5 | 16             | M 27x2.0 | 400     | 400        | 250   |
|                | SYDMC25S -M33   | 25           | 46 | 41 | 39 | 47   | 23   | 18             | M33x2.0  | 250     | 250        | 160   |
| SYDMC 30S -M42 | 30              | 50           | 50 | 49 | 50 | 23.5 | 20   | M 42x2.0       | 160      | 160     | 100        |       |
| SYDMC 38S -M48 | 38              | 60           | 55 | 55 | 57 | 26   | 22   | M 48x2.0       | 160      | 160     | 100        |       |

Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change.

Male Connector(ISO/BSP Parallel) with \*ED-Ring  
**SYDMC-GED**

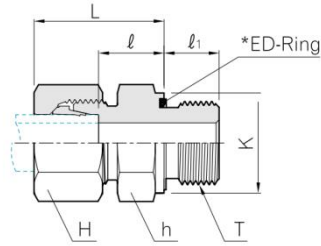


Form E stud end

| Series          | Part No.         | Tube O. D. | H  | h  | K  | L    | l    | l <sub>1</sub> | T     | PN(bar) |        |       |
|-----------------|------------------|------------|----|----|----|------|------|----------------|-------|---------|--------|-------|
|                 |                  |            |    |    |    |      |      |                |       | C.Steel | SS316L | BRASS |
| L               | SYDMC 06L-01GED  | 6          | 14 | 14 | 14 | 23   | 8.5  | 8              | G 1/8 | 500     | 315    | 200   |
|                 | SYDMC 06L-02GED  | 6          | 14 | 19 | 19 | 25   | 10   | 12             | G 1/4 | 500     | 315    | 200   |
|                 | SYDMC 08L-01GED  | 8          | 17 | 14 | 14 | 24   | 9.5  | 8              | G1/8  | 500     | 315    | 200   |
|                 | SYDMC 08L-02GED  | 8          | 17 | 19 | 19 | 25   | 10   | 12             | G 1/4 | 500     | 315    | 200   |
|                 | SYDMC 08L-03GED  | 8          | 17 | 22 | 22 | 26   | 11.5 | 12             | G3/8  | 420     | 315    | 200   |
|                 | SYDMC 10L-02GED  | 10         | 19 | 19 | 19 | 26   | 11   | 12             | G 1/4 | 500     | 315    | 200   |
|                 | SYDMC 10L-03GED  | 10         | 19 | 22 | 22 | 27   | 12.5 | 12             | G3/8  | 420     | 315    | 200   |
|                 | SYDMC 10L-04GED  | 10         | 19 | 27 | 27 | 28   | 13   | 14             | G 1/2 | 400     | 315    | 200   |
|                 | SYDMC 12L-02GED  | 12         | 22 | 19 | 19 | 27   | 12   | 12             | G 1/4 | 400     | 315    | 200   |
|                 | SYDMC 12L-03GED  | 12         | 22 | 22 | 22 | 27   | 12.5 | 12             | G3/8  | 420     | 315    | 200   |
|                 | SYDMC 12L-04GED  | 12         | 22 | 27 | 27 | 28   | 13   | 14             | G 1/2 | 400     | 315    | 200   |
|                 | SYDMC 15L-03GED  | 15         | 27 | 24 | 22 | 29   | 13.5 | 12             | G3/8  | 400     | 315    | 200   |
|                 | SYDMC 15L-04GED  | 15         | 27 | 27 | 27 | 29   | 14   | 14             | G 1/2 | 400     | 315    | 200   |
|                 | SYDMC 18L-04GED  | 18         | 32 | 27 | 27 | 31   | 14.5 | 14             | G 1/2 | 400     | 315    | 200   |
|                 | SYDMC 18L-06GED  | 18         | 32 | 32 | 32 | 31   | 14.5 | 16             | G3/4  | 250     | 160    | 100   |
|                 | SYDMC 22L-06GED  | 22         | 36 | 32 | 32 | 33   | 16.5 | 16             | G3/4  | 250     | 160    | 100   |
| SYDMC28L-08GED  | 28               | 41         | 41 | 40 | 34 | 17.5 | 18   | G1             | 250   | 160     | 100    |       |
| SYDMC 35L-10GED | 35               | 50         | 50 | 50 | 39 | 17.5 | 20   | G1 1/4         | 250   | 160     | 100    |       |
| SYDMC 42L-12GED | 42               | 60         | 55 | 55 | 42 | 19   | 22   | G1 1/2         | 250   | 160     | 100    |       |
| S               | SYDMC 06S-02GED  | 6          | 17 | 19 | 19 | 28   | 13   | 12             | G 1/4 | 800     | 630    | 400   |
|                 | SYDMC 08S -02GED | 8          | 19 | 19 | 19 | 30   | 15   | 12             | G 1/4 | 800     | 630    | 400   |
|                 | SYDMC 08S -03GED | 8          | 19 | 22 | 22 | 30   | 15.5 | 12             | G3/8  | 800     | 630    |       |
|                 | SYDMC 10S-02GED  | 10         | 22 | 19 | 19 | 31   | 14.5 | 12             | G 1/4 | 800     | 630    |       |
|                 | SYDMC 10S-03GED  | 10         | 22 | 22 | 22 | 31   | 15   | 12             | G3/8  | 800     | 630    | 400   |
|                 | SYDMC 10S -04GED | 10         | 22 | 27 | 27 | 34   | 17.5 | 14             | G 1/2 | 630     | 630    |       |
|                 | SYDMC 12S-02GED  | 12         | 24 | 22 | 19 | 33   | 16.5 | 12             | G 1/4 | 630     | 630    |       |
|                 | SYDMC 12S-03GED  | 12         | 24 | 22 | 22 | 33   | 17   | 12             | G3/8  | 630     | 630    | 400   |
|                 | SYDMC 12S-04GED  | 12         | 24 | 27 | 32 | 34   | 17.5 | 14             | G 1/2 | 630     | 630    |       |
|                 | SYDMC 14S-04GED  | 14         | 27 | 27 | 27 | 37   | 19   | 14             | G 1/2 | 630     | 630    | 400   |
|                 | SYDMC 16S-03GED  | 16         | 30 | 27 | 22 | 36   | 18   | 12             | G3/8  | 630     | 400    |       |
|                 | SYDMC 16S-04GED  | 16         | 30 | 27 | 27 | 37   | 18.5 | 14             | G 1/2 | 630     | 400    | 250   |
|                 | SYDMC 16S-06GED  | 16         | 30 | 32 | 27 | 39   | 20.5 | 16             | G3/4  | 420     | 400    |       |
|                 | SYDMC 20S -06GED | 20         | 36 | 32 | 32 | 42   | 20.5 | 16             | G3/4  | 420     | 400    | 250   |
|                 | SYDMC 25S-04GED  | 25         | 46 | 41 | 27 | 47   | 23   | 14             | G 1/2 | 420     | 400    |       |
|                 | SYDMC 25S-06GED  | 25         | 46 | 41 | 32 | 47   | 23   | 16             | G3/4  | 420     | 400    |       |
| SYDMC25S-08GED  | 25               | 46         | 41 | 40 | 47 | 23   | 18   | G1             | 420   | 400     | 250    |       |
| SYDMC 30S-10GED | 30               | 50         | 50 | 50 | 50 | 23.5 | 20   | G 1 1/4        | 420   | 400     | 250    |       |
| SYDMC 38S-12GED | 38               | 60         | 55 | 55 | 57 | 26   | 22   | G1 1/2         | 420   | 315     | 200    |       |

Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change.  
 \*The standard ED-Ring material is NBR(e.g, perbunan) however FPM(e.g. Viton) is also available on request (See Page 3).

## Male Connector(Metric Parallel) with \*ED-Ring SYDMC-MED

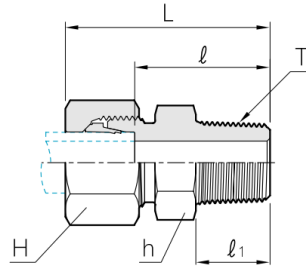


Form E stud end

| Series          | Part No.        | Tube<br>O.D. | H  | h  | K  | L    | l    | l <sub>1</sub> | T        | PN(bar) |            |
|-----------------|-----------------|--------------|----|----|----|------|------|----------------|----------|---------|------------|
|                 |                 |              |    |    |    |      |      |                |          | C.Steel | SS<br>316L |
| L               | SYDMC 06L-M10ED | 6            | 14 | 14 | 14 | 23   | 8.5  | 8              | M 10x1.0 | 500     | 315        |
|                 | SYDMC 08L-M12ED | 8            | 17 | 17 | 17 | 25   | 10   | 12             | M 12x1.5 | 500     | 315        |
|                 | SYDMC 10L-M14ED | 10           | 19 | 19 | 19 | 26   | 11   | 12             | M14x1.5  | 500     | 315        |
|                 | SYDMC 12L-M16ED | 12           | 22 | 22 | 22 | 27   | 12.5 | 12             | M 16x1.5 | 400     | 315        |
|                 | SYDMC 12L-M18ED | 12           | 22 | 24 | 24 | 27   | 12.5 | 12             | M 18x1.5 | 400     | 315        |
|                 | SYDMC 12L-M22ED | 12           | 22 | 27 | 27 | 29   | 14   | 14             | M 22x1.5 | 400     | 315        |
|                 | SYDMC 15L-M18ED | 15           | 27 | 24 | 24 | 29   | 13.5 | 12             | M18x1.5  | 400     | 315        |
|                 | SYDMC 15L-M22ED | 15           | 27 | 27 | 27 | 30   | 15   | 14             | M 22x1.5 | 400     | 315        |
|                 | SYDMC 18L-M22ED | 18           | 32 | 27 | 27 | 31   | 14.5 | 14             | M 22x1.5 | 400     | 315        |
|                 | SYDMC22L-M26ED  | 22           | 36 | 32 | 32 | 33   | 16.5 | 16             | M26x1.5  | 250     | 160        |
|                 | SYDMC 28L-M33ED | 28           | 41 | 41 | 40 | 34   | 17.5 | 18             | M33x2.0  | 250     | 160        |
| SYDMC 35L-M42ED | 35              | 50           | 50 | 50 | 39 | 17.5 | 20   | M42x2.0        | 250      | 160     |            |
| SYDMC 42L-M48ED | 42              | 60           | 55 | 55 | 42 | 19   | 22   | M48x2.0        | 250      | 160     |            |
| S               | SYDMC 06S-M12ED | 6            | 17 | 17 | 17 | 28   | 130  | 12             | M12x1.5  | 800     | 630        |
|                 | SYDMC 08S-M14ED | 8            | 19 | 19 | 19 | 30   | 150  | 12             | M14x1.5  | 800     | 630        |
|                 | SYDMC 10S-M16ED | 10           | 22 | 22 | 22 | 31   | 15   | 12             | M 16x1.5 | 800     | 630        |
|                 | SYDMC 12S-M18ED | 12           | 24 | 24 | 24 | 33   | 17   | 12             | M 18x1.5 | 630     | 630        |
|                 | SYDMC 14S-M20ED | 14           | 27 | 27 | 26 | 37   | 19   | 14             | M 20x1.5 | 630     | 630        |
|                 | SYDMC 16S-M22ED | 16           | 30 | 27 | 27 | 37   | 18.5 | 14             | M22x1.5  | 630     | 400        |
|                 | SYDMC 20S-M27ED | 20           | 36 | 32 | 32 | 42   | 20.5 | 16             | M 27x2.0 | 420     | 400        |
|                 | SYDMC 25S-M33ED | 25           | 46 | 41 | 40 | 47   | 23   | 18             | M33x2.0  | 420     | 400        |
| SYDMC 30S-M42ED | 30              | 50           | 50 | 50 | 50 | 23.5 | 20   | M 42x2.0       | 420      | 400     |            |
| SYDMC 38S-M48ED | 38              | 60           | 55 | 55 | 57 | 26   | 22   | M48x2.0        | 420      | 315     |            |

Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change.  
\*The standard ED-Ring material is NBR(e.g.perbunan, however FPM(e.g. Viton), is also available on request (See Page 3).

Male Connector (NPT Tapered)  
**SYDMC-N**



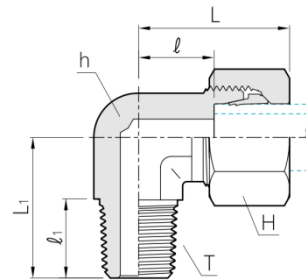
Form C stud end

| Series | Part No.       | Tube O.D. | H  | h  | L  | l    | h    | T               | PN(bar) |         |       |
|--------|----------------|-----------|----|----|----|------|------|-----------------|---------|---------|-------|
|        |                |           |    |    |    |      |      |                 | C.Steel | SS 316L | BRASS |
| LL     | SYDMC 04LL-01N | 4         | 10 | 11 | 28 | 18.5 | 9.9  | 1/8-27.0 NPT    | 100     | 100     |       |
|        | SYDMC 06LL-01N | 6         | 12 | 11 | 28 | 16.5 | 9.9  | 1/8-27.0 NPT    | 100     | 100     | 63    |
|        | SYDMC 08LL-01N | 8         | 14 | 12 | 30 | 18.5 | 9.9  | 1/8-27.0 NPT    | 100     | 100     | 63    |
| L      | SYDMC 06L -01N | 6         | 14 | 12 | 32 | 17.0 | 9.9  | 1/8-27.0 NPT    | 315     | 315     | 200   |
|        | SYDMC 06L -02N | 6         | 14 | 17 | 38 | 23.0 | 14.2 | 1/4-18.0 NPT    | 315     | 315     | 200   |
|        | SYDMC08L -02N  | 8         | 17 | 17 | 38 | 23.0 | 14.2 | 1/4-18.0 NPT    | 315     | 315     | 200   |
|        | SYDMC10L -02N  | 10        | 19 | 17 | 39 | 24.0 | 14.2 | 1/4-18.0 NPT    | 315     | 315     | 200   |
|        | SYDMC 10L -03N | 10        | 19 | 19 | 40 | 25.0 | 14.2 | 3/8-18.0 NPT    | 315     | 315     |       |
|        | SYDMC 12L -02N | 12        | 22 | 19 | 40 | 25.0 | 14.2 | 1/4-18.0 NPT    | 315     | 315     | 200   |
|        | SYDMC 12L -03N | 12        | 22 | 19 | 40 | 25.0 | 14.2 | 3/8-18.0 NPT    | 315     | 315     | 200   |
|        | SYDMC 12L -04N | 12        | 22 | 22 | 45 | 30.0 | 19.1 | 1/2-14.0 NPT    | 315     | 315     | 200   |
|        | SYDMC 15L -04N | 15        | 27 | 24 | 46 | 31.0 | 19.1 | 1/2-14.0 NPT    | 315     | 315     | 200   |
|        | SYDMC 18L -04N | 18        | 32 | 27 | 48 | 31.5 | 19.1 | 1/2-14.0 NPT    | 315     | 315     | 200   |
|        | SYDMC 22L -06N | 22        | 36 | 32 | 50 | 33.5 | 19.1 | 3/4 -14.0 NPT   | 160     | 160     | 100   |
|        | SYDMC 28L -08N | 28        | 41 | 41 | 56 | 39.5 | 23.9 | 1 -11.5 NPT     | 160     | 160     | 100   |
|        | SYDMC 35L -10N | 35        | 50 | 46 | 62 | 40.5 | 23.9 | 1 1/4 -11.5 NPT | 160     | 160     |       |
|        | SYDMC42L -12N  | 42        | 60 | 55 | 65 | 42.0 | 25.4 | 1 1/2-11.5 NPT  | 160     | 160     |       |
| S      | SYDMC06S -02N  | 6         | 17 | 17 | 43 | 28.0 | 14.2 | 1/4-18.0 NPT    | 630     | 630     | 400   |
|        | SYDMC 08S -02N | 8         | 19 | 17 | 43 | 28.0 | 14.2 | 1/4-18.0 NPT    | 630     | 630     | 400   |
|        | SYDMC 10S -02N | 10        | 22 | 19 | 44 | 27.5 | 14.2 | 1/4-18.0 NPT    | 630     | 630     |       |
|        | SYDMC 10S -03N | 10        | 22 | 19 | 44 | 27.5 | 14.2 | 3/8-18.0 NPT    | 630     | 630     | 400   |
|        | SYDMC 12S -02N | 12        | 24 | 22 | 46 | 29.5 | 14.2 | 1/4-18.0 NPT    | 630     | 630     |       |
|        | SYDMC12S -03N  | 12        | 24 | 22 | 46 | 29.5 | 14.2 | 3/8-18.0 NPT    | 630     | 630     | 400   |
|        | SYDMC 12S -04N | 12        | 24 | 22 | 51 | 34.5 | 19.1 | 1/2-14.0 NPT    | 630     | 630     | 400   |
|        | SYDMC 14S -04N | 14        | 27 | 24 | 54 | 36.0 | 19.1 | 1/2-14.0 NPT    | 630     | 630     | 400   |
|        | SYDMC 16S -04N | 16        | 30 | 27 | 54 | 35.5 | 19.1 | 1/2-14.0 NPT    | 400     | 400     | 250   |
|        | SYDMC 20S -06N | 20        | 36 | 32 | 59 | 37.5 | 19.1 | 3/4 -14.0 NPT   | 400     | 400     | 250   |
|        | SYDMC25S -08N  | 25        | 46 | 41 | 69 | 45.0 | 23.9 | 1 -11.5 NPT     | 400     | 400     |       |
|        | SYDMC 30S -10N | 30        | 50 | 46 | 73 | 46.5 | 23.9 | 1 1/4-11.5 NPT  | 400     | 400     |       |
|        | SYDMC 38S -12N | 38        | 60 | 55 | 80 | 49.0 | 25.4 | 1 1/2-11.5 NPT  | 315     | 315     |       |

Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change.

Male Elbow (ISO/BSP Tapered / Metric Tapered)

**SYDLM-R/M**



Form C stud end

**for ISO/BSP Tapered**

| Series | Part No.       | Tube O.D. | H  | h  | L  | L <sub>1</sub> | l    | l <sub>1</sub> | T     | PN(bar) |        |       |
|--------|----------------|-----------|----|----|----|----------------|------|----------------|-------|---------|--------|-------|
|        |                |           |    |    |    |                |      |                |       | C.Steel | SS316L | BRASS |
| LL     | SYDLM 04LL-01R | 4         | 10 | 9  | 21 | 17             | 11.0 | 10             | R 1/8 | 100     | 100    | 63    |
|        | SYDLM 06LL-01R | 6         | 12 | 9  | 21 | 17             | 9.5  | 10             | R 1/8 | 100     | 100    | 63    |
|        | SYDLM 08LL-01R | 8         | 14 | 12 | 23 | 20             | 11.5 | 10             | R 1/8 | 100     | 100    | 63    |
|        | SYDLM 10LL-02R | 10        | 17 | 14 | 24 | 23             | 12.5 | 14             | R 1/4 | 100     |        |       |
|        | SYDLM 12LL-02R | 12        | 19 | 17 | 25 | 23             | 13.0 | 14             | R 1/4 | 100     |        |       |
| L      | SYDLM 06L -01R | 6         | 14 | 12 | 27 | 20             | 12.0 | 10             | R 1/8 | 315     | 315    | 200   |
|        | SYDLM 08L -02R | 8         | 17 | 12 | 29 | 26             | 14.0 | 14             | R 1/4 | 315     | 315    | 200   |
|        | SYDLM 10L -02R | 10        | 19 | 14 | 30 | 27             | 15.0 | 14             | R 1/4 | 315     | 315    | 200   |
|        | SYDLM 12L -03R | 12        | 22 | 17 | 32 | 28             | 17.0 | 15             | R 3/8 | 315     | 315    | 200   |
|        | SYDLM 15L -04R | 15        | 27 | 19 | 36 | 34             | 21.0 | 19             | R 1/2 | 315     | 315    | 200   |
| S      | SYDLM 18L -04R | 18        | 32 | 24 | 40 | 36             | 23.5 | 19             | R 1/2 | 315     | 315    | 200   |
|        | SYDLM 06S -02R | 6         | 17 | 12 | 31 | 26             | 16.0 | 14             | R 1/4 | 400     | 400    | 250   |
|        | SYDLM 08S -02R | 8         | 19 | 14 | 32 | 27             | 17.0 | 14             | R 1/4 | 400     | 400    | 250   |
|        | SYDLM 10S -03R | 10        | 22 | 17 | 34 | 28             | 17.5 | 15             | R 3/8 | 400     | 400    | 250   |
|        | SYDLM 12S -03R | 12        | 24 | 17 | 38 | 28             | 21.5 | 15             | R 3/8 | 400     | 400    | 250   |
|        | SYDLM 14S -04R | 14        | 27 | 19 | 40 | 32             | 22.0 | 19             | R 1/2 | 400     | 400    |       |
|        | SYDLM 16S -04R | 16        | 30 | 24 | 43 | 32             | 24.5 | 19             | R 1/2 | 400     | 400    | 250   |

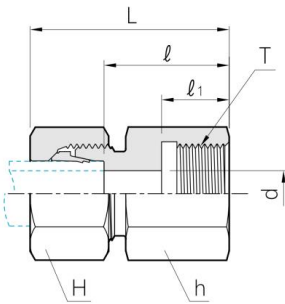
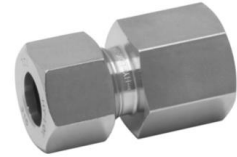
**for Metric Tapered**

| Series | Part No.        | Tube O.D. | H  | h  | L  | L <sub>1</sub> | l    | l <sub>1</sub> | T       | PN(bar) |        |       |
|--------|-----------------|-----------|----|----|----|----------------|------|----------------|---------|---------|--------|-------|
|        |                 |           |    |    |    |                |      |                |         | C.Steel | SS316L | BRASS |
| LL     | SYDLM 04LL-M 8K | 4         | 10 | 9  | 21 | 17             | 11.0 | 8              | M 8x1.0 | 100     | 100    | 63    |
|        | SYDLM 06LL-M10K | 6         | 12 | 9  | 21 | 17             | 9.5  | 8              | M10x1.0 | 100     | 100    | 63    |
|        | SYDLM 08LL-M10K | 8         | 14 | 12 | 23 | 20             | 11.5 | 8              | M10x1.0 | 100     | 100    | 63    |
| L      | SYDLM 06L -M10K | 6         | 14 | 12 | 27 | 20             | 12.0 | 8              | M10x1.0 | 315     | 315    | 200   |
|        | SYDLM 08L -M12K | 8         | 17 | 12 | 29 | 26             | 14.0 | 12             | M12x1.5 | 315     | 315    | 200   |
|        | SYDLM 10L -M14K | 10        | 19 | 14 | 30 | 27             | 15.0 | 12             | M14x1.5 | 315     | 315    | 200   |
|        | SYDLM 12L -M16K | 12        | 22 | 17 | 32 | 28             | 17.0 | 14             | M16x1.5 | 315     | 315    | 200   |
|        | SYDLM 15L -M18K | 15        | 27 | 19 | 36 | 34             | 21.0 | 14             | M18x1.5 | 315     | 315    | 200   |
|        | SYDLM 18L -M22K | 18        | 32 | 24 | 40 | 36             | 23.5 | 17             | M22x1.5 | 315     | 315    | 200   |
| S      | SYDLM06S -M12K  | 6         | 17 | 12 | 31 | 26             | 16.0 | 12             | M12x1.5 | 400     | 400    | 250   |
|        | SYDLM 08S -M14K | 8         | 19 | 14 | 32 | 27             | 17.0 | 12             | M14x1.5 | 400     | 400    | 250   |
|        | SYDLM 10S -M16K | 10        | 22 | 17 | 34 | 28             | 17.5 | 12             | M16x1.5 | 400     | 400    | 250   |
|        | SYDLM 12S -M18K | 12        | 24 | 17 | 38 | 28             | 21.5 | 12             | M18x1.5 | 400     | 400    | 250   |
|        | SYDLM 14S -M20K | 14        | 27 | 19 | 40 | 32             | 22.0 | 14             | M20x1.5 | 400     | 400    |       |
|        | SYDLM 16S -M22K | 16        | 30 | 24 | 43 | 32             | 24.5 | 17             | M22x1.5 | 400     | 400    | 250   |

Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change.

Female Connector(ISO/BSP Parallel / Metric Parallel)  
**SYDFC-G/M**

for ISO/BSP Parallel



Form Y Tapped Hole

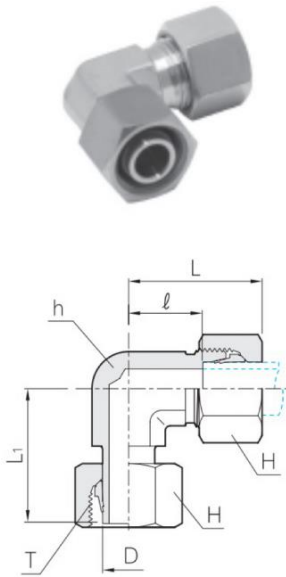
| Series       | Part No.      | Tube O.D. | d  | H  | h  | L    | l    | l <sub>1</sub> | T      | PN(bar) |          |        |
|--------------|---------------|-----------|----|----|----|------|------|----------------|--------|---------|----------|--------|
|              |               |           |    |    |    |      |      |                |        | C.Steel | SS 316/L | BRA SS |
| L            | SYDFC06L-01G  | 6         | 4  | 14 | 14 | 34   | 19   | 12             | G 1/8  | 315     | 315      | 200    |
|              | SYDFC08L-02G  | 8         | 6  | 17 | 19 | 39   | 24   | 17             | G 1/4  | 315     | 315      | 200    |
|              | SYDFC08L-03G  | 8         | 6  | 17 | 24 | 40   | 25   | 17             | G3/8   | 315     | 315      | 200    |
|              | SYDFC08L-04G  | 8         | 6  | 17 | 27 | 44   | 29   | 20             | G 1/2  | 315     | 315      | 200    |
|              | SYDFC10L-02G  | 10        | 8  | 19 | 19 | 40   | 25   | 17             | G1/4   | 315     | 315      | 200    |
|              | SYDFC 10L-036 | 10        | 8  | 19 | 24 | 41   | 26   | 17             | G3/8   | 315     | 315      | 200    |
|              | SYDFC10L-04G  | 10        | 8  | 19 | 27 | 45   | 30   | 20             | G 1/2  | 315     | 315      | 200    |
|              | SYDFC12L-03G  | 12        | 10 | 22 | 24 | 41   | 26   | 17             | G3/8   | 315     | 315      | 200    |
|              | SYDFC12L-04G  | 12        | 10 | 22 | 27 | 45   | 30   | 20             | G 1/2  | 315     | 315      | 200    |
|              | SYDFC 15L-04G | 15        | 12 | 27 | 27 | 46   | 31   | 20             | G 1/2  | 315     | 315      | 200    |
|              | SYDFC 18L-04G | 18        | 15 | 32 | 27 | 47   | 30.5 | 200            | G 1/2  | 315     | 315      | 200    |
|              | SYDFC22L-06G  | 22        | 19 | 36 | 36 | 52   | 35.5 | 22             | G3/4   | 160     | 160      | 100    |
|              | SYDFC28L-0BG  | 28        | 24 | 41 | 41 | 55   | 38   | 245            | G1     | 160     | 160      | 100    |
|              | SYDFC35L-10G  | 35        | 30 | 50 | 55 | 63   | 41   | 26.5           | G1 1/4 | 160     | 160      | 100    |
| SYDFC42L-12G | 42            | 36        | 60 | 60 | 65 | 42.5 | 28.5 | G1 1/2         | 160    | 160     | 100      |        |
| S            | SYDFC06S-02G  | 6         | 4  | 17 | 19 | 41   | 26   | 17             | G 1/4  | 400     | 400      |        |
|              | SYDFC08S-02G  | 8         | 5  | 19 | 19 | 41   | 26   | 17.0           | G 1/4  | 400     | 400      |        |
|              | SYDFC10S-036  | 10        | 7  | 22 | 24 | 43   | 26.5 | 17             | G 3/8  | 400     | 400      |        |
|              | SYDFC12S-03G  | 12        | 8  | 24 | 24 | 43   | 26.5 | 17.0           | G3/8   | 400     | 400      |        |
|              | SYDFC14S-04G  | 14        | 10 | 27 | 30 | 50   | 32   | 20             | G 1/2  | 400     | 400      |        |
|              | SYDFC 16S-04G | 16        | 12 | 30 | 30 | 50   | 31.5 | 20             | G 1/2  | 400     | 400      |        |
|              | SYDFC20S-06G  | 20        | 16 | 36 | 36 | 56   | 34.5 | 22             | G 3/4  | 315     | 315      |        |
|              | SYDFC25S-0BG  | 25        | 20 | 46 | 41 | 62   | 37.5 | 24.5           | G1     | 315     | 315      |        |
|              | SYDFC30S-10G  | 30        | 25 | 50 | 55 | 69   | 42   | 26.5           | G1 1/4 | 315     | 315      |        |
|              | SYDFC38S-12G  | 38        | 32 | 60 | 60 | 74   | 43.5 | 28.5           | G1 1/2 | 250     | 250      |        |

for Metric Parallel

| Series | Part No.      | Tube O.D. | d  | H  | h  | L  | l    | l <sub>1</sub> | T        | PN(bar) |          |
|--------|---------------|-----------|----|----|----|----|------|----------------|----------|---------|----------|
|        |               |           |    |    |    |    |      |                |          | C.Steel | SS 316/L |
| L      | SYDFC 06L-M10 | 6         | 4  | 14 | 14 | 34 | 19.5 | 12.5           | M 10x1.0 | 315     | 315      |
|        | SYDFC 08L-M12 | 8         | 6  | 17 | 17 | 39 | 24   | 17             | M12x1.5  | 315     | 315      |
|        | SYDFC 10L-M14 | 10        | 8  | 19 | 19 | 40 | 25   | 17             | M 14x1.5 | 315     | 315      |
|        | SYDFC 12L-M16 | 12        | 10 | 22 | 22 | 41 | 26   | 17.0           | M 16x1.5 | 315     | 315      |
|        | SYDFC 15L-M18 | 15        | 12 | 27 | 24 | 43 | 28   | 17             | M 18x1.5 | 315     | 315      |
|        | SYDFC 18L-M22 | 18        | 15 | 32 | 30 | 46 | 29.5 | 19             | M22x1.5  | 315     | 315      |
|        | SYDFC22L-M26  | 22        | 19 | 36 | 32 | 51 | 34.5 | 21             | M26x1.5  | 160     | 160      |
|        | SYDFC28L-M33  | 28        | 24 | 41 | 41 | 54 | 37.5 | 24             | M33x2.0  | 160     | 160      |
|        | SYDFC 35L-M42 | 35        | 30 | 50 | 55 | 62 | 40.5 | 26             | M 42x2.0 | 160     | 160      |
|        | SYDFC42L-M48  | 42        | 36 | 60 | 60 | 65 | 42   | 28             | M48x2.0  | 160     | 160      |
| S      | SYDFC 06S-M12 | 6         | 4  | 17 | 17 | 41 | 26   | 17             | M 12x1.5 | 400     | 400      |
|        | SYDFC08S-M14  | 8         | 5  | 19 | 19 | 41 | 26   | 17             | M14x1.5  | 400     | 400      |
|        | SYDFC 10S-M16 | 10        | 7  | 22 | 22 | 43 | 26.5 | 17             | M 16x1.5 | 400     | 400      |
|        | SYDFC 12S-M18 | 12        | 8  | 24 | 24 | 44 | 27.5 | 17             | M18x1.5  | 400     | 400      |
|        | SYDFC 14S-M20 | 14        | 10 | 27 | 27 | 49 | 31   | 19             | M20x1.5  | 400     | 400      |
|        | SYDFC 16S-M22 | 16        | 12 | 30 | 30 | 49 | 30.5 | 19             | M22x1.5  | 400     | 400      |
|        | SYDFC 20S-M27 | 20        | 16 | 36 | 36 | 56 | 34.5 | 22             | M27x2.0  | 315     | 315      |
|        | SYDFC 25S-M33 | 25        | 20 | 46 | 41 | 61 | 37   | 24             | M33x2.0  | 315     | 315      |
|        | SYDFC 30S-M42 | 30        | 25 | 50 | 55 | 68 | 41.5 | 26             | M 42x2.0 | 315     | 315      |
|        | SYDFC 38S-M48 | 38        | 32 | 60 | 60 | 74 | 43   | 28             | M 48x2.0 | 250     | 250      |

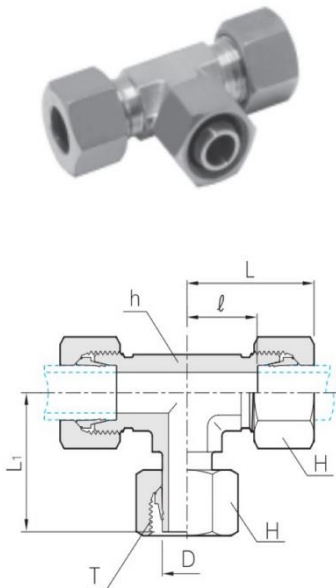
Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change.

## Adjustable Elbow with Standpipe SYDLA



| Series    | Part No.  | Tube O.D. | d  | H  | h  | L  | l    | h <sub>1</sub> | T         |
|-----------|-----------|-----------|----|----|----|----|------|----------------|-----------|
| L         | SYDLA-06L | 6         | 6  | 14 | 12 | 27 | 26   | 12             | M12x1.5   |
|           | SYDLA-08L | 8         | 8  | 17 | 12 | 29 | 27.5 | 14.0           | M 14x1.5  |
|           | SYDLA-10L | 10        | 10 | 19 | 14 | 30 | 29   | 15             | M 16x1.5  |
|           | SYDLA-12L | 12        | 12 | 22 | 17 | 32 | 29.5 | 17             | M 18x 1.5 |
|           | SYDLA-15L | 15        | 15 | 27 | 19 | 36 | 32.5 | 21             | M22x1.5   |
|           | SYDLA-18L | 18        | 18 | 32 | 24 | 40 | 35.5 | 23.5           | M26x1.5   |
|           | SYDLA-22L | 22        | 22 | 36 | 27 | 44 | 38.5 | 27.5           | M 30x2    |
|           | SYDLA-28L | 28        | 28 | 41 | 36 | 47 | 41.5 | 30.5           | M 36x2    |
| S         | SYDLA-35L | 35        | 35 | 50 | 41 | 56 | 51   | 34.5           | M 45x2    |
|           | SYDLA-42L | 42        | 42 | 60 | 50 | 63 | 56   | 40             | M52x2     |
|           | SYDLA-06S | 6         | 6  | 17 | 12 | 31 | 27   | 16             | M14x1.5   |
|           | SYDLA-08S | 8         | 8  | 19 | 14 | 32 | 27.5 | 17             | M 16x1.5  |
|           | SYDLA-10S | 10        | 10 | 22 | 17 | 34 | 30   | 17.5           | M18x1.5   |
|           | SYDLA-12S | 12        | 12 | 24 | 17 | 38 | 31   | 21.5           | M 20x1.5  |
|           | SYDLA-14S | 14        | 14 | 27 | 19 | 40 | 35   | 22             | M22x1.5   |
|           | SYDLA-16S | 16        | 16 | 30 | 24 | 43 | 36.5 | 24.5           | M24x1.5   |
|           | SYDLA-20S | 20        | 20 | 36 | 27 | 48 | 44.5 | 26.5           | M30x2     |
|           | SYDLA-25S | 25        | 25 | 46 | 36 | 54 | 50   | 30             | M 36x2    |
| SYDLA-30S | 30        | 30        | 50 | 41 | 62 | 55 | 35.5 | M 42x2         |           |
| SYDLA-38S | 38        | 38        | 60 | 50 | 72 | 63 | 41   | M52x2          |           |

## Adjustable Branch Tee with Standpipe SYDBTA

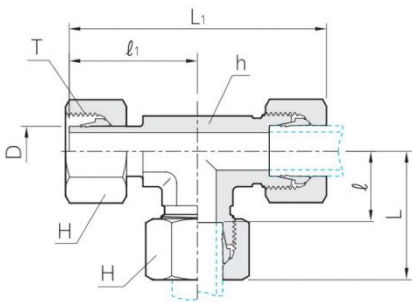


| Series     | Part No.   | Tube O.D. | d  | H  | h  | L  | l    | h <sub>1</sub> | T        |
|------------|------------|-----------|----|----|----|----|------|----------------|----------|
| L          | SYDBTA-06L | 6         | 6  | 14 | 12 | 27 | 26   | 12             | M 12x1.5 |
|            | SYDBTA-08L | 8         | 8  | 17 | 12 | 29 | 27.5 | 14             | M14x1.5  |
|            | SYDBTA-10L | 10        | 10 | 19 | 14 | 30 | 29   | 15             | M 16x1.5 |
|            | SYDBTA-12L | 12        | 12 | 22 | 17 | 32 | 29.5 | 17             | M18x1.5  |
|            | SYDBTA-15L | 15        | 15 | 27 | 19 | 36 | 32.5 | 21             | M22x1.5  |
|            | SYDBTA-18L | 18        | 18 | 32 | 24 | 40 | 35.5 | 23.5           | M26x1.5  |
|            | SYDBTA-22L | 22        | 22 | 36 | 27 | 44 | 38.5 | 27.5           | M30x2    |
|            | SYDBTA-28L | 28        | 28 | 41 | 36 | 47 | 41.5 | 30.5           | M 36x2   |
| S          | SYDBTA-35L | 35        | 35 | 50 | 41 | 56 | 51   | 34.5           | M45x2    |
|            | SYDBTA-42L | 42        | 42 | 60 | 50 | 63 | 56   | 40             | M52x2    |
|            | SYDBTA-06S | 6         | 6  | 17 | 12 | 31 | 27   | 16             | M 14x1.5 |
|            | SYDBTA-08S | 8         | 8  | 19 | 14 | 32 | 27.5 | 17             | M 16x1.5 |
|            | SYDBTA-10S | 10        | 10 | 22 | 17 | 34 | 30   | 17.5           | M18x1.5  |
|            | SYDBTA-12S | 12        | 12 | 24 | 17 | 38 | 31   | 21.5           | M20x1.5  |
|            | SYDBTA-14S | 14        | 14 | 27 | 19 | 40 | 35   | 22             | M 22x1.5 |
|            | SYDBTA-16S | 16        | 16 | 30 | 24 | 43 | 36.5 | 24.5           | M24x1.5  |
|            | SYDBTA-20S | 20        | 20 | 36 | 27 | 48 | 44.5 | 26.5           | M30x2    |
|            | SYDBTA-25S | 25        | 25 | 46 | 36 | 54 | 50   | 30             | M 36x2   |
| SYDBTA-30S | 30         | 30        | 50 | 41 | 62 | 55 | 35.5 | M 42x2         |          |
| SYDBTA-38S | 38         | 38        | 60 | 50 | 72 | 63 | 41   | M52x2          |          |

Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change.  
Pre-set nut and cutting ring for connection are provided without male stud.  
Please refer to final assembly instructions on Page 49.

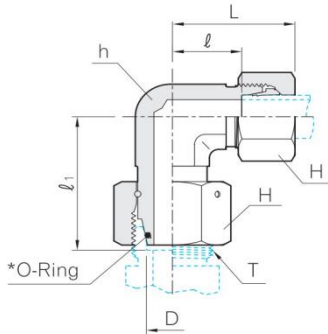
## Tube To Tube Port (Adjustable Fittings)

### Adjustable Run Tee with Standpipe SYDRTA



| Series     | Part No.   | Tube O.D. | d  | H  | h  | L   | L <sub>1</sub> | l    | h <sub>1</sub> | T       |
|------------|------------|-----------|----|----|----|-----|----------------|------|----------------|---------|
| L          | SYDRTA-06L | 6         | 6  | 12 | 14 | 27  | 53             | 12.0 | 26.0           | M12x1.5 |
|            | SYDRTA-08L | 8         | 8  | 12 | 17 | 29  | 56             | 14.0 | 27.5           | M14x1.5 |
|            | SYDRTA-10L | 10        | 10 | 14 | 19 | 30  | 59             | 15.0 | 29.0           | M16x1.5 |
|            | SYDRTA-12L | 12        | 12 | 17 | 22 | 32  | 62             | 17.0 | 29.5           | M18x1.5 |
|            | SYDRTA-15L | 15        | 15 | 19 | 27 | 36  | 69             | 21.0 | 32.5           | M22x1.5 |
|            | SYDRTA-18L | 18        | 18 | 24 | 32 | 40  | 75             | 23.5 | 35.5           | M26x1.5 |
|            | SYDRTA-22L | 22        | 22 | 27 | 36 | 44  | 83             | 27.5 | 38.5           | M30x2   |
|            | SYDRTA-28L | 28        | 28 | 36 | 41 | 47  | 91             | 30.5 | 41.5           | M36x2   |
|            | SYDRTA-35L | 35        | 35 | 41 | 50 | 56  | 111            | 34.5 | 51.0           | M45x2   |
| SYDRTA-42L | 42         | 42        | 50 | 60 | 63 | 123 | 40.0           | 56.0 | M52x2          |         |
| S          | SYDRTA-06S | 6         | 6  | 12 | 17 | 31  | 58             | 16.0 | 27.0           | M14x1.5 |
|            | SYDRTA-08S | 8         | 8  | 14 | 19 | 32  | 61             | 17.0 | 27.5           | M16x1.5 |
|            | SYDRTA-10S | 10        | 10 | 17 | 22 | 34  | 66             | 17.5 | 30.0           | M18x1.5 |
|            | SYDRTA-12S | 12        | 12 | 17 | 24 | 38  | 71             | 21.5 | 31.0           | M20x1.5 |
|            | SYDRTA-14S | 14        | 14 | 19 | 27 | 40  | 75             | 22.0 | 35.0           | M22x1.5 |
|            | SYDRTA-16S | 16        | 16 | 24 | 30 | 43  | 79             | 24.5 | 36.5           | M24x1.5 |
|            | SYDRTA-20S | 20        | 20 | 27 | 36 | 48  | 93             | 26.5 | 44.5           | M30x2   |
|            | SYDRTA-25S | 25        | 25 | 36 | 46 | 54  | 105            | 30.0 | 50.0           | M36x2   |
|            | SYDRTA-30S | 30        | 30 | 41 | 50 | 62  | 119            | 35.5 | 55.0           | M42x2   |
| SYDRTA-38S | 38         | 38        | 50 | 60 | 72 | 138 | 41.0           | 63.0 | M52x2          |         |

### Swivel Adjustable Elbow with Cone SYDEW



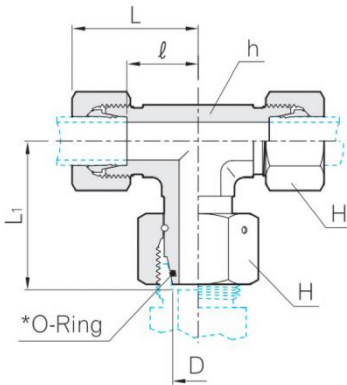
| Series    | Part No.  | Tube O.D. | H  | h  | L    | l    | h <sub>1</sub> | T        |
|-----------|-----------|-----------|----|----|------|------|----------------|----------|
| L         | SYDEW-06L | 6         | 14 | 12 | 27   | 12.0 | 26.0           | M12x1.5  |
|           | SYDEW-08L | 8         | 17 | 12 | 29   | 14.0 | 27.5           | M14x1.5  |
|           | SYDEW-10L | 10        | 19 | 14 | 30   | 15.0 | 29.0           | M16x1.5  |
|           | SYDEW-12L | 12        | 22 | 17 | 32   | 17.0 | 29.5           | M18x1.5  |
|           | SYDEW-15L | 15        | 27 | 19 | 36   | 21.0 | 32.5           | M22x1.5  |
|           | SYDEW-18L | 18        | 32 | 24 | 40   | 23.5 | 35.5           | M 26x1.5 |
|           | SYDEW-22L | 22        | 36 | 27 | 44   | 27.5 | 38.5           | M 30x2   |
|           | SYDEW-28L | 28        | 41 | 36 | 47   | 30.5 | 41.5           | M 36x2   |
|           | SYDEW-35L | 35        | 50 | 41 | 56   | 34.5 | 51.0           | M 45x2   |
| SYDEW-42L | 42        | 60        | 50 | 63 | 40.0 | 56.0 | M52x2          |          |
| S         | SYDEW-06S | 6         | 17 | 12 | 31   | 16.0 | 27.0           | M14x1.5  |
|           | SYDEW-08S | 8         | 19 | 14 | 32   | 17.0 | 27.5           | M16x1.5  |
|           | SYDEW-10S | 10        | 22 | 17 | 34   | 17.5 | 30.0           | M18x1.5  |
|           | SYDEW-12S | 12        | 24 | 17 | 38   | 21.5 | 31.0           | M 20x1.5 |
|           | SYDEW-14S | 14        | 27 | 19 | 40   | 22.0 | 35.0           | M 22x1.5 |
|           | SYDEW-16S | 16        | 30 | 24 | 43   | 24.5 | 36.5           | M 24x1.5 |
|           | SYDEW-20S | 20        | 36 | 27 | 48   | 26.5 | 44.5           | M 30x2   |
|           | SYDEW-25S | 25        | 36 | 36 | 54   | 30.0 | 50.0           | M36x2    |
|           | SYDEW-30S | 30        | 50 | 41 | 62   | 35.5 | 55.0           | M 42x2   |
| SYDEW-38S | 38        | 60        | 50 | 72 | 41.0 | 63.0 | M52x2          |          |

Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change.  
O-Ring for connection is provided without male stud.

Please refer to final assembly instructions on page 49.

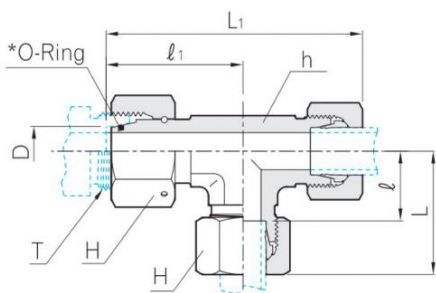
\*The standard O.Ring material is NBR(e.g, Perbunan) however FPM(e.g, Viton) is also available on request (See Page 3).

Swivel Adjustable Branch Tee with Cone  
**SYDET**



| Series    | Part No.  | Tube<br>Ø.D. | H  | h  | L    | L <sub>1</sub> | l     | T       | PN(bar) |          |
|-----------|-----------|--------------|----|----|------|----------------|-------|---------|---------|----------|
|           |           |              |    |    |      |                |       |         | C.Steel | SS 316/L |
| L         | SYDET-06L | 6            | 14 | 12 | 27   | 26             | 12    | M12x1.5 | 500     | 315      |
|           | SYDET-08L | 8            | 17 | 12 | 29   | 27.5           | 14    | M14x1,5 | 500     | 315      |
|           | SYDET-10L | 10           | 19 | 14 | 30   | 29             | 15    | M16x1.5 | 500     | 315      |
|           | SYDET-12L | 12           | 22 | 17 | 32   | 29.5           | 17    | M18x1,5 | 400     | 315      |
|           | SYDET-15L | 15           | 27 | 19 | 36   | 32.5           | 21    | M22x1.5 | 400     | 315      |
|           | SYDET-18L | 18           | 32 | 24 | 40   | 35.5           | 23.5  | M26x1.5 | 400     | 315      |
|           | SYDET-22L | 22           | 36 | 27 | 44   | 38.5           | 27.5  | M30x2   | 250     | 160      |
|           | SYDET-28L | 28           | 41 | 36 | 47   | 41.5           | 30.5  | M36x2   | 250     | 160      |
|           | SYDET-35L | 35           | 50 | 41 | 56   | 51             | 34.5  | M45x2   | 250     | 160      |
| SYDET-42L | 42        | 60           | 50 | 63 | 56,0 | 40             | M52x2 | 250     | 160     |          |
| S         | SYDET-06S | 6            | 17 | 12 | 31   | 27             | 16    | M14x1.5 | 800     | 630      |
|           | SYDET-08S | 8            | 19 | 14 | 32   | 27.5           | 17    | M16x1.5 | 800     | 630      |
|           | SYDET-10S | 10           | 22 | 17 | 34   | 30             | 17.5  | M18x1.5 | 800     | 630      |
|           | SYDET-12S | 12           | 24 | 17 | 38   | 31             | 21.5  | M20x1.5 | 630     | 630      |
|           | SYDET-14S | 14           | 27 | 19 | 40   | 35             | 22    | M22x1.5 | 630     | 630      |
|           | SYDET-16S | 16           | 30 | 24 | 43   | 36.5           | 24.5  | M24x1.5 | 630     | 400      |
|           | SYDET-20S | 20           | 36 | 27 | 48   | 44.5           | 26.5  | M30x2   | 420     | 400      |
|           | SYDET-25S | 25           | 46 | 36 | 54   | 50             | 30    | M36x2   | 420     | 400      |
|           | SYDET-30S | 30           | 50 | 41 | 62   | 55             | 35.5  | M42x2   | 420     | 400      |
| SYDET-38S | 38        | 60           | 50 | 72 | 63   | 41             | M52x2 | 420     | 315     |          |

Swivel Adjustable Run Tee with Cone  
**SYDEL**

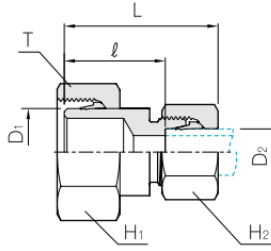


| Series    | Part No.  | Tube<br>Ø.D. | H  | h  | L   | L <sub>1</sub> | l    | l <sub>1</sub> | T        | v       |          |
|-----------|-----------|--------------|----|----|-----|----------------|------|----------------|----------|---------|----------|
|           |           |              |    |    |     |                |      |                |          | C.Steel | SS 316/L |
| L         | SYDEL-06L | 6            | 14 | 12 | 27  | 53             | 12   | 26             | M12x1.5  | 500     | 315      |
|           | SYDEL-08L | 8            | 17 | 12 | 29  | 56             | 14   | 27.5           | M14x1.5  | 500     | 315      |
|           | SYDEL-10L | 10           | 19 | 14 | 30  | 59             | 15   | 29             | M16x1.5  | 500     | 315      |
|           | SYDEL-12L | 12           | 22 | 17 | 32  | 61             | 17   | 29.5           | M18x1.5  | 400     | 315      |
|           | SYDEL-15L | 15           | 27 | 19 | 36  | 69             | 21   | 32.5           | M22x1.5  | 400     | 315      |
|           | SYDEL-18L | 18           | 32 | 24 | 40  | 75             | 23.5 | 35.5           | M26x1.5  | 400     | 315      |
|           | SYDEL-22L | 22           | 36 | 27 | 44  | 82             | 27.5 | 38.5           | M30x2    | 250     | 160      |
|           | SYDEL-28L | 28           | 41 | 36 | 47  | 89             | 30.5 | 41.5           | M36x2    | 250     | 160      |
|           | SYDEL-35L | 35           | 50 | 41 | 56  | 107            | 34.5 | 51             | M45x2    | 250     | 160      |
| SYDEL-42L | 42        | 60           | 50 | 63 | 119 | 40             | 56   | M52x2          | 250      | 160     |          |
| S         | SYDEL-06S | 6            | 17 | 12 | 31  | 58             | 16   | 27             | M14x1.5  | 800     | 630      |
|           | SYDEL-08S | 8            | 19 | 14 | 32  | 59             | 17   | 27.5           | M16x1.5  | 800     | 630      |
|           | SYDEL-10S | 10           | 22 | 17 | 34  | 64             | 17.5 | 30             | M 18x1.5 | 800     | 630      |
|           | SYDEL-12S | 12           | 24 | 17 | 38  | 69             | 21.5 | 31             | M20x1.5  | 630     | 630      |
|           | SYDEL-14S | 14           | 27 | 19 | 40  | 75             | 22   | 35             | M22x1.5  | 630     | 630      |
|           | SYDEL-16S | 16           | 30 | 24 | 43  | 79             | 24.5 | 36.5           | M24x1.5  | 630     | 400      |
|           | SYDEL-20S | 20           | 36 | 27 | 48  | 93             | 26.5 | 44.5           | M30x2    | 420     | 400      |
|           | SYDEL-25S | 25           | 46 | 36 | 54  | 104            | 30   | 50             | M36X2    | 420     | 400      |
|           | SYDEL-30S | 30           | 50 | 41 | 62  | 117            | 35.5 | 55             | M42x2    | 420     | 400      |
| SYDEL-38S | 38        | 60           | 50 | 72 | 135 | 41.0           | 63.0 | M52x2          | 420      | 315     |          |

Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change.  
Pre-set nut and cutting ring for connection is provided without male stud.  
Please refer to final assembly instructions on page 49.

# Tube To Tube Port (Adjustable Fittings)

## Standpipe Reducer SYDKOR



### Series L (Light)

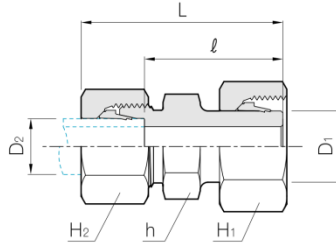
| Part No.       | Tube O. D.     |                | H <sub>1</sub> | H <sub>2</sub> | L  | l    | T       |
|----------------|----------------|----------------|----------------|----------------|----|------|---------|
|                | D <sub>1</sub> | D <sub>2</sub> |                |                |    |      |         |
| SYDKOR 08L-06L | 8              | 6              | 17             | 14             | 38 | 23.5 | M14x1.5 |
| SYDKOR 10L-06L | 10             | 6              | 19             | 14             | 38 | 23.5 | M16x1.5 |
| SYDKOR 10L-08L |                | 8              |                | 17             |    |      |         |
| SYDKOR 12L-06L | 12             | 6              | 22             | 14             | 38 | 23.5 | M18x1.5 |
| SYDKOR 12L-08L |                | 8              |                | 17             | 38 | 23.5 |         |
| SYDKOR12L-10L  |                | 10             |                | 19             |    | 24.5 |         |
| SYDKOR 15L-06L | 15             | 6              | 27             | 14             | 38 | 23.5 | M22x1,5 |
| SYDKOR 15L-08L |                | 8              |                | 17             | 38 | 23.5 |         |
| SYDKOR 15L-10L |                | 10             |                | 19             | 39 | 24.5 |         |
| SYDKOR 15L-12L |                | 12             |                | 22             | 39 | 24.5 |         |
| SYDKOR 18L-06L | 18             | 6              | 32             | 14             | 39 | 24.5 | M26x1.5 |
| SYDKOR 18L-08L |                | 8              |                | 17             | 39 | 24.5 |         |
| SYDKOR 18L-10L |                | 10             |                | 19             | 40 | 25.5 |         |
| SYDKOR 18L-12L |                | 12             |                | 22             | 40 | 25.5 |         |
| SYDKOR 18L-15L |                | 15             |                | 27             | 42 | 26.5 |         |
| SYDKOR 22L-06L | 22             | 6              | 36             | 14             | 40 | 25.5 | M30x2   |
| SYDKOR 22L-08L |                | 8              |                | 17             | 40 | 25.5 |         |
| SYDKOR 22L-10L |                | 10             |                | 19             | 41 | 26.5 |         |
| SYDKOR 22L-12L |                | 12             |                | 22             | 41 | 26.5 |         |
| SYDKOR 22L-15L |                | 15             |                | 27             | 43 | 27.5 |         |
| SYDKOR 22L-18L |                | 18             |                | 32             | 43 | 27.0 |         |
| SYDKOR 28L-06L | 28             | 6              | 41             | 14             | 41 | 26.5 | M36x2   |
| SYDKOR 28L-08L |                | 8              |                | 17             | 41 | 26.5 |         |
| SYDKOR 28L-10L |                | 10             |                | 19             | 42 | 27.5 |         |
| SYDKOR 28L-12L |                | 12             |                | 22             | 42 | 27.5 |         |
| SYDKOR 28L-15L |                | 15             |                | 27             | 44 | 28.5 |         |
| SYDKOR 28L-18L |                | 18             |                | 32             | 44 | 28.0 |         |
| SYDKOR 28L-22L |                | 22             |                | 36             | 46 | 30.0 |         |
| SYDKOR 35L-06L | 35             | 6              | 50             | 14             | 46 | 31,5 | M45x2   |
| SYDKOR 35L-08L |                | 8              |                | 17             | 46 | 31.5 |         |
| SYDKOR 35L-10L |                | 10             |                | 19             | 47 | 32.5 |         |
| SYDKOR 35L-12L |                | 12             |                | 22             | 47 | 32.5 |         |
| SYDKOR 35L-15L |                | 15             |                | 27             | 49 | 33.5 |         |
| SYDKOR 35L-18L |                | 18             |                | 32             | 49 | 33.0 |         |
| SYDKOR 35L-22L |                | 22             |                | 36             | 51 | 35.0 |         |
| SYDKOR 35L-28L |                | 28             |                | 41             | 52 | 35.0 |         |
| SYDKOR 42L-10L | 42             | 10             | 60             | 19             | 48 | 33.5 | M52x2   |
| SYDKOR 42L-12L |                | 12             |                | 22             | 48 | 33.5 |         |
| SYDKOR 42L-15L |                | 15             |                | 27             | 50 | 34.5 |         |
| SYDKOR 42L-18L |                | 18             |                | 32             | 50 | 34.0 |         |
| SYDKOR 42L-22L |                | 22             |                | 36             | 52 | 36.0 |         |
| SYDKOR 42L-28L |                | 28             |                | 41             | 53 | 36.0 |         |
| SYDKOR 42L-35L |                | 35             |                | 50             | 57 | 35.0 |         |

### Series S (Heavy)

| Part No.       | Tube O. D.     |                | H <sub>1</sub> | H <sub>2</sub> | L  | l    | T       |
|----------------|----------------|----------------|----------------|----------------|----|------|---------|
|                | D <sub>1</sub> | D <sub>2</sub> |                |                |    |      |         |
| SYDKOR 08S-06S | 8              | 6              | 17             | 17             | 40 | 25.0 | M16x1,5 |
| SYDKOR 10S-06S | 10             | 6              | 19             | 17             | 41 | 26.0 | M18x1.5 |
| SYDKOR 10S-08S |                | 8              |                | 19             | 41 | 26.0 |         |
| SYDKOR 12S-06S | 12             | 6              |                | 17             | 42 | 27.0 | M20x1.5 |
| SYDKOR 12S-08S |                | 8              |                | 19             | 42 | 27.0 |         |
| SYDKOR 12S-10S |                | 10             |                | 22             | 43 | 26.5 |         |
| SYDKOR 14S-06S | 14             | 6              | 27             | 17             | 44 | 29.0 | M22x1.5 |
| SYDKOR 14S-08S |                | 8              |                | 19             | 44 | 29.0 |         |
| SYDKOR 14S-10S |                | 10             |                | 22             | 45 | 28.5 |         |
| SYDKOR 14S-12S |                | 12             |                | 24             | 45 | 28.5 |         |
| SYDKOR 16S-06S | 16             | 6              | 32             | 17             | 44 | 29.0 | M24x1,5 |
| SYDKOR 16S-08S |                | 8              |                | 19             | 44 | 29.0 |         |
| SYDKOR 16S-10S |                | 10             |                | 22             | 45 | 28.5 |         |
| SYDKOR 16S-12S |                | 12             |                | 24             | 45 | 28.5 |         |
| SYDKOR 16S-14S |                | 14             |                | 27             | 48 | 30.0 |         |
| SYDKOR 20S-06S | 20             | 6              | 36             | 17             | 49 | 34.0 | M30x2   |
| SYDKOR 20S-08S |                | 8              |                | 19             | 49 | 34.0 |         |
| SYDKOR 20S-10S |                | 10             |                | 22             | 50 | 33.5 |         |
| SYDKOR 20S-12S |                | 12             |                | 24             | 50 | 33.5 |         |
| SYDKOR 20S-14S |                | 14             |                | 27             | 53 | 35.0 |         |
| SYDKOR 20S-16S |                | 16             |                | 30             | 53 | 34.5 |         |
| SYDKOR 25S-06S | 25             | 6              | 41             | 17             | 52 | 37.0 | M36x2   |
| SYDKOR 25S-08S |                | 8              |                | 19             | 52 | 37.0 |         |
| SYDKOR 25S-10S |                | 10             |                | 22             | 53 | 36.5 |         |
| SYDKOR 25S-12S |                | 12             |                | 24             | 53 | 36.5 |         |
| SYDKOR 25S-14S |                | 14             |                | 27             | 55 | 37.0 |         |
| SYDKOR 25S-16S |                | 16             |                | 30             | 55 | 36.5 |         |
| SYDKOR 25S-20S |                | 20             |                | 36             | 59 | 37.5 |         |
| SYDKOR 30S-06S | 30             | 6              | 50             | 17             | 54 | 39.0 | M42x2   |
| SYDKOR 30S-08S |                | 8              |                | 19             | 54 | 39.0 |         |
| SYDKOR 30S-10S |                | 10             |                | 22             | 55 | 38.5 |         |
| SYDKOR 30S-12S |                | 12             |                | 24             | 55 | 38.5 |         |
| SYDKOR 30S-14S |                | 14             |                | 27             | 58 | 40.0 |         |
| SYDKOR 30S-16S |                | 16             |                | 30             | 58 | 39.5 |         |
| SYDKOR 30S-20S |                | 20             |                | 36             | 61 | 39.5 |         |
| SYDKOR 30S-25S |                | 25             |                | 46             | 64 | 40.0 |         |
| SYDKOR 38S-06S | 38             | 6              | 60             | 17             | 58 | 43.0 | M52x2   |
| SYDKOR 38S-08S |                | 8              |                | 19             | 58 | 43.0 |         |
| SYDKOR 38S-10S |                | 10             |                | 22             | 59 | 42.5 |         |
| SYDKOR 38S-12S |                | 12             |                | 24             | 59 | 42.5 |         |
| SYDKOR 38S-14S |                | 14             |                | 27             | 62 | 44.0 |         |
| SYDKOR 38S-16S |                | 16             |                | 30             | 62 | 43.5 |         |
| SYDKOR 38S-20S |                | 20             |                | 36             | 65 | 43.5 |         |
| SYDKOR 38S-25S |                | 25             |                | 46             | 68 | 44.0 |         |
| SYDKOR 38S-30S |                | 30             |                | 50             | 71 | 44.5 |         |

Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change. Pre-set nut and cutting ring for connection is provided without male stud. Please refer to final assembly instructions on page 49.

Reducer  
SYDR



Series L (Light)

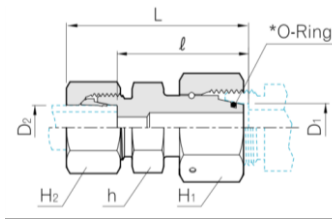
| Part No.    | Tube O. D.     |                | H <sub>1</sub> | H <sub>2</sub> | h  | L  | l    | PN(bar) |
|-------------|----------------|----------------|----------------|----------------|----|----|------|---------|
|             | D <sub>1</sub> | D <sub>2</sub> |                |                |    |    |      |         |
| SYDR08L-06L | 8              | 6              | 17             | 14             | 12 | 40 | 25.5 | 315     |
| SYDR10L-06L | 10             | 6              | 19             | 14             | 12 | 42 | 27.5 | 315     |
| SYDR10L-08L |                | 8              | 19             | 17             | 14 | 43 | 27.5 | 315     |
| SYDR12L-06L | 12             | 6              | 22             | 14             | 14 | 42 | 27.5 | 315     |
| SYDR12L-08L |                | 8              | 22             | 17             | 14 | 43 | 27.5 | 315     |
| SYDR12L-10L |                | 10             | 22             | 19             | 17 | 44 | 28.5 | 315     |
| SYDR15L-06L | 15             | 6              | 27             | 14             | 19 | 44 | 29.0 | 315     |
| SYDR15L-08L |                | 8              | 27             | 17             | 19 | 44 | 29.0 | 315     |
| SYDR15L-10L |                | 10             | 27             | 19             | 19 | 45 | 30.0 | 315     |
| SYDR15L-12L |                | 12             | 27             | 22             | 19 | 45 | 30.0 | 315     |
| SYDR18L-06L | 18             | 6              |                | 14             | 19 | 46 | 31.0 | 315     |
| SYDR18L-08L |                | 8              | 32             | 17             | 19 | 46 | 31.0 | 315     |
| SYDR18L-10L |                | 10             | 32             | 19             | 19 | 47 | 32.0 | 315     |
| SYDR18L-12L |                | 12             | 32             | 22             | 19 |    | 32.0 | 315     |
| SYDR18L-15L |                | 15             | 32             | 27             | 22 | 49 | 33.0 | 315     |
| SYDR22L-06L | 22             | 6              | 36             | 14             | 24 | 48 | 33.0 | 160     |
| SYDR22L-08L |                | 8              | 36             | 17             | 24 | 48 | 33.0 | 160     |
| SYDR22L-10L |                | 10             | 36             | 19             | 24 | 49 | 34.0 | 160     |
| SYDR22L-12L |                | 12             | 36             | 22             | 24 | 49 | 34.0 | 160     |
| SYDR22L-15L |                | 15             | 36             | 27             | 24 | 50 | 35.0 | 160     |
| SYDR22L-18L |                | 18             | 36             | 32             | 27 | 51 | 34.5 | 160     |
| SYDR28L-06L | 28             | 6              | 41             | 14             | 30 | 48 | 33.0 | 160     |
| SYDR28L-08L |                | 8              | 41             | 17             | 30 | 48 | 33.0 | 160     |
| SYDR28L-10L |                | 10             | 41             | 19             | 30 | 49 | 34.0 | 160     |
| SYDR28L-12L |                | 12             | 41             | 22             | 30 | 49 | 34.0 | 160     |
| SYDR28L-15L |                | 15             | 41             | 27             | 30 | 50 | 35.0 | 160     |
| SYDR28L-18L |                | 18             | 41             | 32             | 30 | 51 | 36.0 | 160     |
| SYDR28L-22L |                | 22             | 41             | 36             | 32 | 53 | 36.5 | 160     |
| SYDR35L-06L | 35             | 6              | 50             | 14             | 36 | 53 | 38.5 | 160     |
| SYDR35L-08L |                | 8              | 50             | 17             | 36 | 53 | 38.5 | 160     |
| SYDR35L-10L |                | 10             |                | 19             | 36 | 55 | 39.5 | 160     |
| SYDR35L-12L |                | 12             | 50             | 22             | 36 | 55 | 39.5 | 160     |
| SYDR35L-15L |                | 15             | 50             | 27             | 36 | 56 | 40.5 | 160     |
| SYDR35L-18L |                | 18             | 50             | 32             | 36 | 56 | 40.0 | 160     |
| SYDR35L-22L |                | 22             | 50             | 36             | 36 | 58 | 42.0 | 160     |
| SYDR35L-28L |                | 28             | 50             | 41             | 36 | 59 | 42.0 | 160     |
| SYDR42L-06L | 42             | 6              | 60             | 14             | 46 | 56 | 41.0 | 160     |
| SYDR42L-08L |                | 8              | 60             | 17             | 46 | 56 | 41.0 | 160     |
| SYDR42L-10L |                | 10             | 60             | 19             | 46 | 58 | 42.0 | 160     |
| SYDR42L-12L |                | 12             | 60             | 22             | 46 | 58 | 42.0 | 160     |
| SYDR42L-15L |                | 15             | 60             | 27             | 46 | 60 | 43.0 | 160     |
| SYDR42L-18L |                | 18             | 60             | 32             | 46 | 60 | 42.5 | 160     |
| SYDR42L-22L |                | 22             | 60             | 36             | 46 | 62 | 44.5 | 160     |
| SYDR42L-28L |                |                | 60             | 41             | 46 | 64 | 44.5 | 160     |
| SYDR42L-35L |                | 35             | 60             | 50             | 46 | 67 | 43.5 | 160     |

Series S (Heavy)

| Part No.    | Tube O. D.     |                | H <sub>1</sub> | H <sub>2</sub> | h  | L  | l    | PN(bar) |
|-------------|----------------|----------------|----------------|----------------|----|----|------|---------|
|             | D <sub>1</sub> | D <sub>2</sub> |                |                |    |    |      |         |
| SYDR08S-06S | 8              | 6              | 19             | 17             | 14 | 43 | 280  | 630     |
| SYDR10S-06S | 10             | 6              | 22             | 17             | 14 | 45 | 30.5 | 630     |
| SYDR10S-08S |                | 8              | 22             | 19             | 17 | 45 | 30.5 | 630     |
| SYDR12S-06S | 12             | 6              | 24             | 17             | 14 | 47 | 32.5 | 630     |
| SYDR12S-08S |                | 8              | 24             | 19             | 17 | 47 | 32.5 | 630     |
| SYDR12S-10S |                | 10             | 24             | 22             | 19 | 48 | 32.0 | 630     |
| SYDR14S-06S | 14             | 6              | 27             | 17             | 17 | 51 | 36.5 | 630     |
| SYDR14S-08S |                | 8              | 27             | 19             | 17 | 51 | 36.5 | 630     |
| SYDR14S-10S |                | 10             | 27             | 22             | 19 | 52 | 36.0 | 630     |
| SYDR14S-12S |                | 12             | 27             | 24             | 22 | 52 | 36.0 | 630     |
| SYDR16S-06S | 16             | 6              | 30             | 17             | 17 | 53 | 38.5 | 400     |
| SYDR16S-08S |                | 8              | 30             | 19             | 17 | 53 | 38.5 | 400     |
| SYDR16S-10S |                | 10             | 30             | 22             | 19 | 54 | 38.0 | 400     |
| SYDR16S-12S |                | 12             | 30             | 24             | 22 | 55 | 38.5 | 400     |
| SYDR16S-14S |                | 14             | 30             | 27             | 22 | 57 | 39.5 | 400     |
| SYDR20S-06S | 20             | 6              | 36             | 17             | 22 | 58 | 43.0 | 400     |
| SYDR20S-08S |                | 8              | 36             | 19             | 22 | 58 | 43.0 | 400     |
| SYDR20S-10S |                | 10             | 36             | 22             | 22 | 59 | 42.5 | 400     |
| SYDR20S-12S |                | 12             | 36             | 24             | 22 | 59 | 42.5 | 400     |
| SYDR20S-14S |                | 14             | 36             | 27             | 22 | 62 | 44.0 | 400     |
| SYDR20S-16S |                | 16             | 36             | 30             | 24 | 62 | 43.5 | 400     |
| SYDR25S-06S | 25             | 6              | 46             | 17             | 27 | 62 | 47.5 | 400     |
| SYDR25S-08S |                | 8              | 46             | 19             | 27 | 62 | 47.5 | 400     |
| SYDR25S-10S |                | 10             | 46             | 22             | 27 | 63 | 47.0 | 400     |
| SYDR25S-12S |                | 12             | 46             | 24             | 27 | 63 | 47.0 | 400     |
| SYDR25S-14S |                | 14             | 46             | 27             | 27 | 66 | 48.5 | 400     |
| SYDR25S-16S |                | 16             | 46             | 30             | 27 | 66 | 48.0 | 400     |
| SYDR25S-20S |                | 20             | 46             | 36             | 30 | 70 | 48.0 | 400     |
| SYDR30S-06S | 30             | 6              | 50             | 17             | 32 | 67 | 52.0 | 400     |
| SYDR30S-08S |                | 8              | 50             | 19             | 32 | 67 | 52.0 | 400     |
| SYDR30S-10S |                | 10             | 50             | 22             | 32 | 68 | 51.5 | 400     |
| SYDR30S-12S |                | 12             | 50             | 24             | 32 | 68 | 51.5 | 400     |
| SYDR30S-14S |                | 14             | 50             | 27             | 32 | 71 | 53.0 | 400     |
| SYDR30S-16S |                | 16             | 50             | 30             | 32 | 71 | 52.5 | 400     |
| SYDR30S-20S |                | 20             | 50             | 36             | 32 | 74 | 52.5 | 400     |
| SYDR30S-25S |                | 25             | 50             | 46             | 36 | 77 | 53.0 | 400     |
| SYDR38S-06S | 38             | 6              | 60             | 17             | 41 | 72 | 57.0 | 315     |
| SYDR38S-08S |                | 8              | 60             | 19             | 41 | 72 | 57.0 | 315     |
| SYDR38S-10S |                | 10             | 60             | 22             | 41 | 73 | 56.5 | 315     |
| SYDR38S-12S |                | 12             | 60             | 24             | 41 | 73 | 56.5 | 315     |
| SYDR38S-14S |                | 14             | 60             | 27             | 41 | 76 | 58.0 | 315     |
| SYDR38S-16S |                | 16             | 60             | 30             | 41 | 76 | 57.5 | 315     |
| SYDR38S-20S |                | 20             | 60             | 36             | 41 | 79 | 57.5 | 315     |
| SYDR38S-25S |                | 25             | 60             | 46             | 41 | 82 | 58.0 | 315     |
| SYDR38S-30S |                | 30             | 60             | 50             | 46 | 89 | 58.5 | 315     |

Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change.

## Swivel Reducing Adapter with Cone SYDRED



### Series L (Light)

| Part No.       | Tube<br>O.D.   |                | H <sub>1</sub> | H <sub>2</sub> | h  | L  | l    | PN(bar)     |            |
|----------------|----------------|----------------|----------------|----------------|----|----|------|-------------|------------|
|                | D <sub>1</sub> | D <sub>2</sub> |                |                |    |    |      | C.S<br>teel | S316/<br>L |
| SYDRED 08L-06L | 8              | 6              | 17             | 14             | 12 | 38 | 23.5 | 500         | 315        |
| SYDRED 10L-06L | 10             | 6              | 19             | 14             | 14 | 40 | 25   | 500         | 315        |
| SYDRED 10L-08L |                | 8              |                | 17             |    | 40 | 25   | 500         | 315        |
| SYDRED 12L-06L | 12             | 6              | 22             | 14             | 17 | 40 | 25   | 400         | 315        |
| SYDRED 12L-08L |                | 8              |                | 17             |    | 40 | 25   | 400         | 315        |
| SYDRED 12L-10L |                | 10             |                | 19             |    | 41 | 26   | 400         | 315        |
| SYDRED 15L-06L | 15             | 6              | 27             | 14             | 19 | 43 | 28.5 | 400         | 315        |
| SYDRED 15L-08L |                | 8              |                | 17             |    | 43 | 28.5 | 400         | 315        |
| SYDRED 15L-10L |                | 10             |                | 19             |    | 44 | 29.5 | 400         | 315        |
| SYDRED 15L-12L |                | 12             |                | 22             |    | 44 | 29.5 | 400         | 315        |
| SYDRED 18L-06L | 18             | 6              | 32             | 14             | 24 | 43 | 28   | 400         | 315        |
| SYDRED 18L-08L |                | 8              |                | 17             |    | 43 | 28   | 400         | 315        |
| SYDRED 18L-10L |                | 10             |                |                |    | 44 | 29   | 400         | 315        |
| SYDRED 18L-12L |                | 12             |                | 22             |    | 44 | 29   | 400         | 315        |
| SYDRED 18L-15L |                | 15             |                | 27             |    | 45 | 30   | 400         | 315        |
| SYDRED 22L-06L | 22             | 6              | 36             | 14             | 27 | 47 | 32   | 250         | 160        |
| SYDRED 22L-08L |                | 8              |                | 17             |    | 47 | 32   | 250         | 160        |
| SYDRED 22L-10L |                | 10             |                | 19             |    | 48 | 33   | 250         | 160        |
| SYDRED 22L-12L |                | 12             |                | 22             |    | 48 | 33   | 250         | 160        |
| SYDRED 22L-15L |                | 15             |                | 27             |    | 49 | 34   | 250         | 160        |
| SYDRED 22L-18L |                | 18             |                | 32             |    | 50 | 33.5 | 250         | 160        |
| SYDRED 28L-06L | 28             | 6              | 41             | 14             | 32 | 49 | 34   | 250         | 160        |
| SYDRED 28L-08L |                | 8              |                | 17             |    | 49 | 34   | 250         | 160        |
| SYDRED 28L-10L |                | 10             |                | 19             |    | 50 | 35   | 250         | 160        |
| SYDRED 28L-12L |                | 12             |                | 22             |    | 50 | 35   | 250         | 160        |
| SYDRED 28L-15L |                | 15             |                | 27             |    | 51 | 36   | 250         | 160        |
| SYDRED 28L-18L |                | 18             |                | 32             |    | 52 | 35.5 | 250         | 160        |
| SYDRED 28L-22L |                | 22             |                | 36             |    | 54 | 37.5 | 250         | 160        |
| SYDRED 35L-06L | 35             | 6              | 50             | 14             | 41 | 52 | 37   | 250         | 160        |
| SYDRED 35L-08L |                | 8              |                | 17             |    | 52 | 37   | 250         | 160        |
| SYDRED 35L-10L |                | 10             |                | 19             |    | 53 | 38   | 250         | 160        |
| SYDRED 35L-12L |                | 12             |                | 22             |    | 53 | 38   | 250         | 160        |
| SYDRED 35L-15L |                | 15             |                | 27             |    | 54 | 39   | 250         | 160        |
| SYDRED 35L-18L |                | 18             |                | 32             |    | 55 | 38.5 | 250         | 160        |
| SYDRED 35L-22L |                | 22             |                | 36             |    | 57 | 40.5 | 250         | 160        |
| SYDRED 35L-28L |                | 28             |                | 41             |    | 57 | 40.5 | 250         | 160        |
| SYDRED 42L-06L | 42             | 6              | 60             | 14             | 50 | 55 | 40.5 | 250         | 160        |
| SYDRED 42L-08L |                | 8              |                | 17             |    | 55 | 40.5 | 250         | 160        |
| SYDRED 42L-10L |                | 10             |                | 19             |    | 56 | 41.5 | 250         | 160        |
| SYDRED 42L-12L |                | 12             |                | 22             |    | 56 | 41.5 | 250         | 160        |
| SYDRED 42L-15L |                | 15             |                | 27             |    | 58 | 42.5 | 250         | 160        |
| SYDRED 42L-18L |                | 18             |                | 32             |    | 58 | 42   | 250         | 160        |
| SYDRED 42L-22L |                | 22             |                | 36             |    | 60 | 44   | 250         | 160        |
| SYDRED 42L-28L |                | 28             |                | 41             |    | 61 | 44   | 250         | 160        |
| SYDRED 42L-35L |                | 35             |                | 50             |    | 65 | 43   | 250         | 160        |

### Series S (Heavy)

| Part No.       | Tube<br>O.D.   |                | H <sub>1</sub> | H <sub>2</sub> | h  | L  | l    | PN(bar)     |            |
|----------------|----------------|----------------|----------------|----------------|----|----|------|-------------|------------|
|                | D <sub>1</sub> | D <sub>2</sub> |                |                |    |    |      | C.S<br>teel | S316/<br>L |
| SYDRED 06S-06S | 8              | 6              | 19             | 17             | 14 | 42 | 27   | 800         | 630        |
| SYDRED 10S-06S | 10             | 6              | 22             | 17             | 17 | 42 | 27.5 | 800         | 630        |
| SYDRED 10S-08S |                | 8              |                | 19             |    | 42 | 27.5 | 800         | 630        |
| SYDRED 12S-06S | 12             | 6              | 24             | 17             | 17 | 44 | 29   | 630         | 630        |
| SYDRED 12S-08S |                | 8              |                | 19             |    | 44 | 29   | 630         | 630        |
| SYDRED 12S-10S |                | 10             |                | 22             |    | 46 | 29.5 | 630         | 630        |
| SYDRED 14S-06S | 14             | 6              | 27             | 17             | 19 | 46 | 31.5 | 630         | 630        |
| SYDRED 14S-08S |                | 8              |                | 19             |    | 46 | 31.5 | 630         | 630        |
| SYDRED 14S-10S |                | 10             |                | 22             |    | 47 | 31   | 630         | 630        |
| SYDRED 14S-12S |                | 12             |                | 24             |    | 47 | 31   | 630         | 630        |
| SYDRED 16S-06S | 16             | 6              | 30             | 17             | 22 | 47 | 32   | 630         | 400        |
| SYDRED 16S-08S |                | 8              |                | 19             |    | 47 | 32   | 630         | 400        |
| SYDRED 16S-10S |                | 10             |                | 22             |    | 48 | 31.5 | 630         | 400        |
| SYDRED 16S-12S |                | 12             |                | 24             |    | 48 | 31.5 | 630         | 400        |
| SYDRED 16S-14S |                | 14             |                | 27             |    | 51 | 33   | 630         | 400        |
| SYDRED 20S-06S | 20             | 6              | 36             | 17             | 24 | 51 | 36   | 420         | 400        |
| SYDRED 20S-08S |                | 8              |                | 19             |    | 51 | 36   | 420         | 400        |
| SYDRED 20S-10S |                | 10             |                | 22             |    | 52 | 35.5 | 420         | 400        |
| SYDRED 20S-12S |                | 12             |                | 24             |    | 52 | 35.5 | 420         | 400        |
| SYDRED 20S-14S |                | 14             |                | 27             |    | 55 | 37   | 420         | 400        |
| SYDRED 20S-16S |                | 16             |                | 30             |    | 55 | 36.5 | 420         | 400        |
| SYDRED 25S-06S | 25             | 6              | 46             | 17             | 36 | 53 | 38.5 | 420         | 400        |
| SYDRED 25S-08S |                | 8              |                | 19             |    | 53 | 38.5 | 420         | 400        |
| SYDRED 25S-10S |                | 10             |                | 22             |    | 54 | 38   | 420         | 400        |
| SYDRED 25S-12S |                | 12             |                | 24             |    | 54 | 38   | 420         | 400        |
| SYDRED 25S-14S |                | 14             |                | 27             |    | 57 | 39.5 | 420         | 400        |
| SYDRED 25S-16S |                | 16             |                | 30             |    | 57 | 39   | 420         | 400        |
| SYDRED 25S-20S |                | 20             |                | 36             |    | 61 | 39   | 420         | 400        |
| SYDRED 30S-06S | 30             | 6              | 50             | 17             | 32 | 59 | 44.0 | 420         | 400        |
| SYDRED 30S-08S |                | 8              |                | 19             |    | 59 | 44   | 420         | 400        |
| SYDRED 30S-10S |                | 10             |                | 22             |    | 60 | 43.5 | 420         | 400        |
| SYDRED 30S-12S |                | 12             |                | 24             |    | 60 | 43.5 | 420         | 400        |
| SYDRED 30S-14S |                | 14             |                | 27             |    | 63 | 45   | 420         | 400        |
| SYDRED 30S-16S |                | 16             |                | 30             |    | 63 | 44.5 | 420         | 400        |
| SYDRED 30S-20S |                | 20             |                | 36             |    | 66 | 44.5 | 420         | 400        |
| SYDRED 30S-25S |                | 25             |                | 46             |    | 69 | 45.0 | 420         | 400        |
| SYDRED 38S-06S | 38             | 6              | 60             | 17             | 50 | 62 | 47.5 | 420         | 315        |
| SYDRED 38S-08S |                | 8              |                | 19             |    | 62 | 47.5 | 420         | 315        |
| SYDRED 38S-10S |                | 10             |                | 22             |    | 63 | 47   | 420         | 315        |
| SYDRED 38S-12S |                | 12             |                | 24             |    | 63 | 47   | 420         | 315        |
| SYDRED 38S-14S |                | 14             |                | 27             |    | 66 | 48.5 | 420         | 315        |
| SYDRED 38S-16S |                | 16             |                | 30             |    | 66 | 48   | 420         | 315        |
| SYDRED 38S-20S |                | 20             |                | 36             |    | 70 | 48   | 420         | 315        |
| SYDRED 38S-25S |                | 25             |                | 46             |    | 73 | 48.5 | 420         | 315        |
| SYDRED 38S-30S |                | 30             |                | 50             |    | 76 | 49   | 420         | 315        |

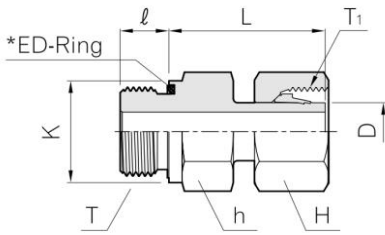
Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change. O-Ring for connection is provided without male stud.

Please refer to final assembly instructions on page 49.

\*The standard O-Ring material is NBR(e.g.Perbunan) however FPM(e.g.Viton) is also available on request (see page 3).

Adapter(ISO/BSP Parallel /Metric Parallel) with \*ED-Ring  
**SYDA-GED/MED**

for ISO/BSP Parallel



Form E stud end

| Series        | Part No.      | Tube O. D. | H  | h  | K    | L    | /     | T     | T <sub>1</sub> | PN(bar) |         |        |
|---------------|---------------|------------|----|----|------|------|-------|-------|----------------|---------|---------|--------|
|               |               |            |    |    |      |      |       |       |                | C.Steel | SS 316L | BRA SS |
| L             | SYDA06L-01GED | 6          | 14 | 14 | 14   | 245  | 8     | G1/8  | M12x1.5        | 315     | 315     | 200    |
|               | SYDA08L-02GED | 8          | 17 | 19 | 19   | 29.5 | 12    | G1/4  | M14x1.5        | 315     | 315     | 200    |
|               | SYDA10L-02GED | 10         | 19 | 19 | 19   | 27.5 | 12    | G 1/4 | M16x1.5        | 315     | 315     | 200    |
|               | SYDA12L-03GED | 12         | 22 | 22 | 22   | 34   | 12    | G3/8  | M 18x1.5       | 315     | 315     | 200    |
|               | SYDA15L-04GED | 15         | 27 | 27 | 27   | 32   | 14    | G1/2  | M22x 1.5       | 315     | 315     | 200    |
|               | SYDA18L-04GED | 18         | 32 | 27 | 27   | 31.5 | 14    | G 1/2 | M26x 1.5       | 315     | 315     | 200    |
|               | SYDA22L-06GED | 22         | 36 | 32 | 32   | 32.5 | 16    | G3/4  | M 30x2         | 160     | 160     | 100    |
|               | SYDA28L-08GED | 28         | 41 | 41 | 40   | 35   | 18    | G 1   | M 36x2         | 160     | 160     |        |
|               | SYDA35L-10GED | 35         | 50 | 50 | 50   | 42.5 | 20    | G11/4 | M 45x2         | 160     | 160     |        |
| SYDA42L-12GED | 42            | 60         | 55 | 55 | 46.5 | 22   | G11/2 | M52x2 | 160            | 160     |         |        |
| S             | SYDA06S-02GED | 6          | 17 | 19 | 19   | 27   | 12    | G 1/4 | M14x1.5        | 630     | 630     |        |
|               | SYDA08S-02GED | 8          | 19 | 19 | 19   | 29.5 | 12    | G 1/4 | M 16x1.5       | 630     | 630     |        |
|               | SYDA10S-03GED | 10         | 22 | 22 | 22   | 32   | 12    | G3/8  | M 18x1.5       | 630     | 630     |        |
|               | SYDA12S-03GED | 12         | 24 | 22 | 22   | 34   | 12    | G3/8  | M 20x1.5       | 630     | 630     |        |
|               | SYDA12S-04GED | 12         | 24 | 27 | 27   | 34.5 | 14    | G 1/2 | M 20x1.5       | 630     | 630     |        |
|               | SYDA14S-04GED | 14         | 27 | 27 | 27   | 36.5 | 14    | G1/2  | M22x1.5        | 630     | 630     |        |
|               | SYDA16S-04GED | 16         | 30 | 27 | 27   | 37   | 14    | G 1/2 | M24x1.5        | 400     | 400     |        |
|               | SYDA16S-06GED | 16         | 30 | 32 | 32   | 39   | 16    | G3/4  | M24x 1.5       | 400     |         |        |
|               | SYDA20S-06GED | 20         | 36 | 32 | 32   | 43   | 16    | G3/4  | M 30x2         | 400     | 400     |        |
|               | SYDA25S-08GED | 25         | 46 | 41 | 40   | 48   | 18    | G1    | M 36x2         | 400     | 400     |        |
|               | SYDA30S-10GED | 30         | 50 | 50 | 50   | 51   | 20    | G11/4 | M 42x2         | 400     | 400     |        |
| SYDA38S-12GED | 38            | 60         | 55 | 55 | 60   | 22   | G11/2 | M52x2 | 315            | 315     |         |        |

for Metric Parallel

| Series        | Part No.      | Tube OD. | d  | H  | h    | L    | /       | T       | T <sub>1</sub> | PN(bar) |         |
|---------------|---------------|----------|----|----|------|------|---------|---------|----------------|---------|---------|
|               |               |          |    |    |      |      |         |         |                | C.Steel | SS 316L |
| L             | SYDA06L-M10ED | 6        | 14 | 14 | 14   | 24.5 | 8       | M10x1.0 | M12x1.5        | 315     | 315     |
|               | SYDA08L-M12ED | 8        | 17 | 17 | 17   | 26.5 | 12      | M12x1.5 | M 14x1.5       | 315     | 315     |
|               | SYDA10L-M14ED | 10       | 19 | 19 | 19   | 27.5 | 12      | M14x1.5 | M 16x1.5       | 315     | 315     |
|               | SYDA12L-M16ED | 12       | 22 | 22 | 22   | 30.5 | 12      | M16x1.5 | M18x1.5        | 315     | 315     |
|               | SYDA15L-M18ED | 15       | 27 | 24 | 24   | 31.5 | 14      | M18x1.5 | M22x1.5        | 315     | 315     |
|               | SYDA18L-M22ED | 18       | 32 | 27 | 27   | 31.5 | 14      | M22x1.5 | M26x1.5        | 315     | 315     |
|               | SYDA22L-M26ED | 22       | 36 | 32 | 32   | 32.5 | 16      | M26x1.5 | M30x2.0        | 160     | 160     |
|               | SYDA28L-M33ED | 28       | 41 | 41 | 40   | 35.0 | 18      | M33x2.0 | M36x2.0        | 160     | 160     |
|               | SYDA35L-M42ED | 35       | 50 | 50 | 50   | 42.5 | 20      | M42x2.0 | M45x2.0        | 160     | 160     |
| SYDA42L-M48ED | 42            | 60       | 55 | 55 | 46.5 | 22   | M48x2.0 | M52x2.0 | 160            | 160     |         |
| S             | SYDA06S-M10ED | 6        | 17 | 17 | 17   | 27   | 12      | M12x1.5 | M14x1.5        | 630     | 630     |
|               | SYDA08S-M14ED | 8        | 19 | 19 | 19   | 29.5 | 12      | M14x1.5 | M 16x1.5       | 630     | 630     |
|               | SYDA10S-M16ED | 10       | 22 | 22 | 22   | 32   | 12      | M16x1.5 | M18x1.5        | 630     | 630     |
|               | SYDA12S-M18ED | 12       | 24 | 24 | 24   | 34   | 12      | M18x1.5 | M20x1.5        | 630     | 630     |
|               | SYDA14S-M20ED | 14       | 27 | 27 | 27   | 36.5 | 14      | M20x1.5 | M22x1.5        | 630     | 630     |
|               | SYDA16S-M22ED | 16       | 30 | 27 | 27   | 37   | 14      | M22x1.5 | M24x1.5        | 400     | 400     |
|               | SYDA20S-M27ED | 20       | 36 | 32 | 32   | 43   | 16      | M27x2.0 | M30x2.0        | 400     | 400     |
|               | SYDA25S-M33ED | 25       | 46 | 41 | 40   | 48   | 18      | M33x2.0 | M36x2.0        | 400     | 400     |
|               | SYDA30S-M42ED | 30       | 50 | 50 | 50   | 51   | 20      | M42x2.0 | M42x2.0        | 400     | 400     |
| SYDA38S-M48ED | 38            | 60       | 55 | 55 | 60   | 22   | M48x2.0 | M52x2.0 | 315            | 315     |         |

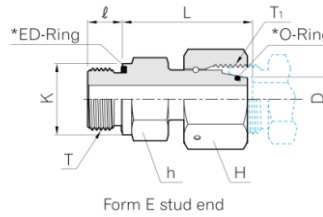
Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change.

O-Ring for connection is provided without male stud.

Please refer to final assembly instructions on page 49.

\*The standard ED-Ring material is NBR(e.g.Perbunan) however FPM(e.g.Viton) is also available on request (see page 3).

Swivel Adapter (ISO/BSP Parallel / Metric Parallel) with Cone and \*ED.Ring  
**SYDEGE-G/M**



for ISO/BSP Parallel

| Series         | Part No.       | Tube O. D. | H  | h  | K  | L    | l     | T        | T <sub>1</sub> | PN(bar) |          |
|----------------|----------------|------------|----|----|----|------|-------|----------|----------------|---------|----------|
|                |                |            |    |    |    |      |       |          |                | C.Steel | SS 316/L |
| L              | SYDEGE 06L-01G | 6          | 14 | 14 | 14 | 24.5 | 8     | G 1/8    | M12x1.5        | 500     | 315      |
|                | SYDEGE 08L-02G | 8          | 17 | 19 | 19 | 29.5 | 12    | G1/4     | M 14x1.5       | 500     | 315      |
|                | SYDEGE 10L-02G | 10         | 19 | 19 | 19 | 27.5 | 12    | G1/4     | M 16x 1.5      | 500     | 315      |
|                | SYDEGE 12L-03G | 12         | 22 | 22 | 22 | 34   | 12    | G3/8     | M 18x1.5       | 400     | 315      |
|                | SYDEGE 15L-04G | 15         | 27 | 27 | 27 | 32   | 14    | G1/2     | M22x1.5        | 400     | 315      |
|                | SYDEGE 18L-04G | 18         | 32 | 27 | 27 | 315  | 14    | G 1/2    | M 26x1.5       | 400     | 315      |
|                | SYDEGE 22L-06G | 22         | 36 | 32 | 32 | 32.5 | 16    | G3/4     | M 30x2.0       | 250     | 160      |
|                | SYDEGE 28L-08G | 28         | 41 | 41 | 40 | 35   | 18    | G1       | M36x2.0        | 250     | 160      |
| S              | SYDEGE 35L-10G | 35         | 50 | 50 | 50 | 42.5 | 20    | G11/4    | M45x2.0        | 250     | 160      |
|                | SYDEGE 42L-12G | 42         | 60 | 55 | 55 | 46.5 | 22    | G11/2    | M52x2.0        | 250     | 160      |
|                | SYDEGE06S-02G  | 6          | 17 | 19 | 19 | 27   | 12    | G 1/4    | M 14x1.5       | 800     | 630      |
|                | SYDEGE 08S-02G | 8          | 19 | 19 | 19 | 29.5 | 12    | G1/4     | M 16x1.5       | 800     | 630      |
|                | SYDEGE 10S-03G | 10         | 22 | 22 | 22 | 32   | 12    | G3/8     | M 18x1.5       | 800     | 630      |
|                | SYDEGE 12S-03G | 12         | 24 | 22 | 22 | 34   | 12    | G3/8     | M 20x1.5       | 630     | 630      |
|                | SYDEGE 14S-04G | 14         | 27 | 27 | 27 | 365  | 14    | G1/2     | M22x1.5        | 630     | 630      |
|                | SYDEGE 16S-04G | 16         | 30 | 27 | 27 | 37   | 14    | G 1/2    | M24x1.5        | 630     | 400      |
|                | SYDEGE 20S-06G | 20         | 36 | 32 | 32 | 430  | 16    | G3/4     | M 30x2,0       | 420     | 400      |
|                | SYDEGE 25S-08G | 25         | 46 | 41 | 40 | 48   | 18    | G1       | M 36x2.0       | 420     | 400      |
| SYDEGE 30S-10G | 30             | 50         | 50 | 50 | 51 | 20   | G11/4 | M 42x2.0 | 420            |         |          |
| SYDEGE 38S-12G | 38             | 60         | 55 | 55 | 60 | 22   | G11/2 | M52x2.0  | 420            | 315     |          |

for Metric Parallel

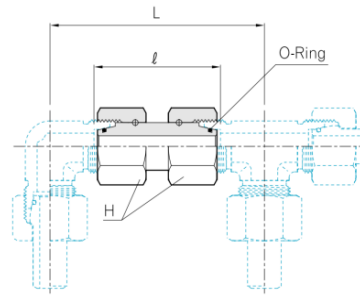
| Series         | Part No.        | Tube O. D. | d  | H  | h  | L    | l        | T        | T <sub>1</sub> | PN(bar) |          |
|----------------|-----------------|------------|----|----|----|------|----------|----------|----------------|---------|----------|
|                |                 |            |    |    |    |      |          |          |                | C.Steel | SS 316/L |
| L              | SYDEGE 06L-M10  | 6          | 14 | 14 | 14 | 24.5 | 8        | M10x1.0  | M 12x1.5       | 500     | 315      |
|                | SYDEGE 08L -M12 | 8          | 17 | 17 | 17 | 26.5 | 12       | M 12x1.5 | M 14x1.5       | 500     | 315      |
|                | SYDEGE 10L-M14  | 10         | 19 | 19 | 19 | 27.5 | 12       | M 14x1.5 | M 16x1.5       | 500     | 315      |
|                | SYDEGE 12L-M16  | 12         | 22 | 22 | 22 | 30.5 | 12       | M 16x1.5 | M18x1.5        | 400     | 315      |
|                | SYDEGE 15L-M18  | 15         | 27 | 24 | 24 | 31.5 | 12       | M 18x1.5 | M22x1.5        | 400     | 315      |
|                | SYDEGE 18L-M22  | 18         | 32 | 27 | 27 | 31.5 | 14       | M22x1.5  | M26x1.5        | 400     | 315      |
|                | SYDEGE 22L-M26  | 22         | 36 | 32 | 32 | 32.5 | 16       | M 26x1.5 | M 30x2.0       | 250     | 160      |
|                | SYDEGE 28L -M33 | 28         | 41 | 41 | 40 | 35   | 18       | M33x2.0  | M36x2.0        | 250     | 160      |
|                | SYDEGE 35L -M42 | 35         | 50 | 50 | 50 | 42.5 | 20       | M42x2.0  | M 45x2,0       | 250     | 160      |
| S              | SYDEGE 42L-M48  | 42         | 60 | 55 | 55 | 46.5 | 22       | M48x2.0  | M52x2.0        | 250     | 160      |
|                | SYDEGE 06S -M12 | 6          | 17 | 17 | 17 | 27   | 12       | M12x1.5  | M14x1.5        | 800     | 630      |
|                | SYDEGE 08S-M14  | 8          | 19 | 19 | 19 | 29.5 | 12       | M14x1.5  | M16x1.5        | 800     | 630      |
|                | SYDEGE 10S -M16 | 10         | 22 | 22 | 22 | 32   | 12       | M 16x1.5 | M18x1.5        | 800     | 630      |
|                | SYDEGE 12S -M18 | 12         | 24 | 24 | 24 | 34   | 12       | M18x1.5  | M20x1.5        | 630     | 630      |
|                | SYDEGE 14S -M20 | 14         | 27 | 27 | 26 | 36.5 | 14       | M 20x1.5 | M22x1.5        | 630     | 630      |
|                | SYDEGE 16S -M22 | 16         | 30 | 27 | 27 | 37   | 14       | M 22x1,5 | M24x1.5        | 630     | 400      |
|                | SYDEGE 20S-M27  | 20         | 36 | 32 | 32 | 43   | 16       | M27x2.0  | M 30x2.0       | 420     | 400      |
|                | SYDEGE 25S-M33  | 25         | 46 | 41 | 40 | 48   | 18       | M33x2,0  | M36x2.0        | 420     | 400      |
| SYDEGE 30S-M42 | 30              | 50         | 50 | 50 | 51 | 20   | M 42x2.0 | M 42x2.0 | 420            | 400     |          |
| SYDEGE 38S.M48 | 38              | 60         | 55 | 55 | 60 | 22   | M 48x2.0 | M52x2.0  | 420            | 315     |          |

Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change.  
 O-Ring for connection is provided without male stud.

Please refer to final assembly instructions on page 49.

\*The standard ED-Ring material is NBR(e.g. perbunan) however FPM(e.g. Viton). is also available on request (See Page 3).

## Swivel Union With Cone SYDUE



| Series | Part No.   | Tube O. D. | H  | L     | l    | PN(bar) |        |
|--------|------------|------------|----|-------|------|---------|--------|
|        |            |            |    |       |      | C.Steel | SS316L |
| L      | SYDUE -06L | 6          | 17 | 610   | 33.0 | 500     | 315    |
|        | SYDUE -08L | 8          | 17 | 61.0  | 33.0 | 500     | 315    |
|        | SYDUE -10L | 10         | 19 | 640   | 34.0 | 500     | 315    |
|        | SYDUE -12L | 12         | 22 | 68.0  | 34.0 | 400     | 315    |
|        | SYDUE -15L | 15         | 27 | 81.0  | 39.0 | 400     | 315    |
|        | SYDUE -18L | 18         | 32 | 85.0  | 38.0 | 400     | 315    |
|        | SYDUE -22L | 22         | 36 | 99.0  | 44.0 | 250     | 160    |
|        | SYDUE -28L | 28         | 46 | 109.0 | 48.0 | 250     | 160    |
|        | SYDUE -35L | 35         | 50 | 121.0 | 52.0 | 250     | 160    |
|        | SYDUE -42L | 42         | 60 | 137.0 | 57.0 | 250     | 160    |
| S      | SYDUE -06S | 6          | 17 | 65.0  | 33.0 | 800     | 630    |
|        | SYDUE -08S | 8          | 19 | 68.0  | 34.0 | 800     | 630    |
|        | SYDUE -10S | 10         | 22 | 70.0  | 35.0 | 800     | 630    |
|        | SYDUE -12S | 12         | 24 | 81.0  | 38.0 | 630     | 630    |
|        | SYDUE -14S | 14         | 27 | 85.0  | 41.0 | 630     | 630    |
|        | SYDUE -16S | 16         | 30 | 91.0  | 42.0 | 630     | 400    |
|        | SYDUE -20S | 20         | 36 | 101.0 | 48.0 | 420     | 400    |
|        | SYDUE -25S | 25         | 46 | 113.0 | 53.0 | 420     | 400    |
|        | SYDUE -30S | 30         | 50 | 133.0 | 62.0 | 420     | 400    |
|        | SYDUE -38S | 38         | 60 | 139.0 | 67.0 | 420     | 315    |

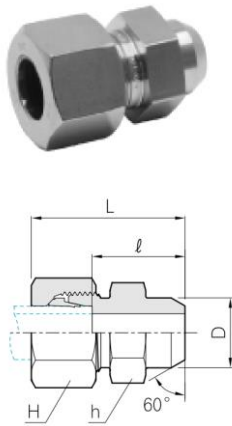
Dimensions are given for approximate length with tightened nut, All dimensions are in millimeters for reference only, subject to change.

O-Ring for connection is provided without male stud.

Please refer to final assembly instructions on page 49.

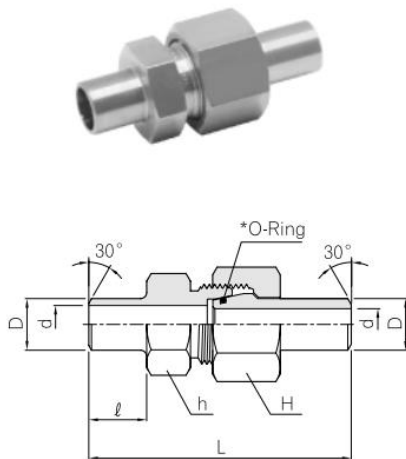
\*The standard O-Ring material is NBR(e.g.Perbunan) however FPM(e.g. Viton), is also available on request (See Page 3).

## Welding Connector SYDAS



| Series    | Part No.  | Tube O.D. | d  | H  | h  | L  | l    | PN(bar) |          |
|-----------|-----------|-----------|----|----|----|----|------|---------|----------|
|           |           |           |    |    |    |    |      | C.Steel | SS 316/L |
| L         | SYDAS-06L | 6         | 10 | 14 | 12 | 29 | 14   | 315     | 315      |
|           | SYDAS-08L | 8         | 12 | 17 | 14 | 31 | 16   | 315     | 315      |
|           | SYDAS-10L | 10        | 14 | 19 | 17 | 33 | 18   | 315     | 315      |
|           | SYDAS-12L | 12        | 16 | 22 | 19 | 33 | 18   | 315     | 315      |
|           | SYDAS-15L | 15        | 19 | 27 | 22 | 37 | 22   | 315     | 315      |
|           | SYDAS-18L | 18        | 22 | 32 | 27 | 40 | 23.5 | 315     | 315      |
|           | SYDAS-22L | 22        | 27 | 36 | 32 | 45 | 28.5 | 160     | 160      |
|           | SYDAS-28L | 28        | 32 | 41 | 41 | 47 | 30.5 | 160     | 160      |
|           | SYDAS-35L | 35        | 40 | 50 | 46 | 54 | 32.5 | 160     | 160      |
| S         | SYDAS-42L | 42        | 46 | 60 | 55 | 58 | 35   | 160     | 160      |
|           | SYDAS-06S | 6         | 11 | 17 | 14 | 34 | 190  | 630     | 630      |
|           | SYDAS-08S | 8         | 13 | 19 | 17 | 36 | 21   | 630     | 630      |
|           | SYDAS-10S | 10        | 15 | 22 | 19 | 39 | 22.5 | 630     | 630      |
|           | SYDAS-12S | 12        | 17 | 24 | 22 | 41 | 24.5 | 630     | 630      |
|           | SYDAS-14S | 14        | 19 | 27 | 24 | 45 | 27   | 630     | 630      |
|           | SYDAS-16S | 16        | 21 | 30 | 27 | 45 | 26.5 | 400     | 400      |
|           | SYDAS-20S | 20        | 26 | 36 | 32 | 51 | 29.5 | 400     | 400      |
|           | SYDAS-25S | 25        | 31 | 46 | 41 | 56 | 32   | 400     | 400      |
|           | SYDAS-30S | 30        | 36 | 50 | 46 | 62 | 35.5 | 400     | 400      |
| SYDAS-38S | 38        | 44        | 60 | 55 | 69 | 38 | 315  | 315     |          |

## Welding Connector with SYDAK SYDASK

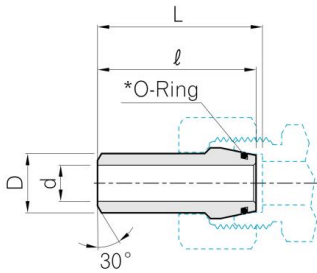


| Series       | Part No.     | Tube O.D. | d  | H  | h     | L     | l    | PN(bar) |          |
|--------------|--------------|-----------|----|----|-------|-------|------|---------|----------|
|              |              |           |    |    |       |       |      | C.Steel | SS 316/L |
| S            | SYDASK10x1.0 | 10        | 8  | 22 | 19    | 58.0  | 10.0 | 249     | 242      |
|              | SYDASK10x1.5 | 10        | 7  | 22 | 19    | 58.0  | 10.0 | 358     | 349      |
|              | SYDASK10x2.0 | 10        | 6  | 22 | 19    | 58.0  | 10.0 | 460     | 447      |
|              | SYDASK12x1.5 | 12        | 9  | 24 | 22    | 65.0  | 15.0 | 305     | 297      |
|              | SYDASK12x2.0 | 12        | 8  | 24 | 22    | 65.0  | 15.0 | 393     | 383      |
|              | SYDASK12x2.5 | 12        | 7  | 24 | 22    | 65.0  | 15.0 | 476     | 463      |
|              | SYDASK16x1.5 | 16        | 13 | 30 | 27    | 74.5  | 16.5 | 234     | 228      |
|              | SYDASK16x2.0 | 16        | 12 | 30 | 27    | 74.5  | 16.5 | 305     | 297      |
|              | SYDASK16x2.5 | 16        | 11 | 30 | 27    | 74.5  | 16.5 | 372     | 362      |
|              | SYDASK16x3.0 | 16        | 10 | 30 | 27    | 74.5  | 16.5 | 400     | 400      |
|              | SYDASK20x2.0 | 20        | 16 | 36 | 32    | 84.0  | 19.0 | 249     | 242      |
|              | SYDASK20x2.5 | 20        | 15 | 36 | 32    | 84.0  | 19.0 | 305     | 297      |
|              | SYDASK20x3.0 | 20        | 14 | 36 | 32    | 84.0  | 19.0 | 358     | 349      |
|              | SYDASK20x4.0 | 20        | 12 | 36 | 32    | 84.0  | 19.0 | 400     | 400      |
|              | SYDASK25x3.0 | 25        | 19 | 46 | 41    | 94.5  | 19.5 | 294     | 286      |
|              | SYDASK25x4.0 | 25        | 17 | 46 | 41    | 94.5  | 19.5 | 379     | 369      |
|              | SYDASK25x5.0 | 25        | 15 | 46 | 41    | 94.5  | 19.5 | 400     | 400      |
|              | SYDASK30x3.0 | 30        | 24 | 50 | 46    | 102.0 | 23.0 | 249     | 242      |
|              | SYDASK30x4.0 | 30        | 22 | 50 | 46    | 102.0 | 23.0 | 323     | 314      |
|              | SYDASK30x5.0 | 30        | 20 | 50 | 46    | 102.0 | 23.0 | 393     | 383      |
|              | SYDASK30x6.0 | 30        | 18 | 50 | 46    | 102.0 | 23.0 | 400     | 400      |
|              | SYDASK38x4.0 | 38        | 30 | 60 | 55    | 111.0 | 23.0 | 261     | 254      |
|              | SYDASK38x5.0 | 38        | 28 | 60 | 55    | 111.0 | 23.0 | 315     | 311      |
|              | SYDASK38x6.0 | 38        | 26 | 60 | 55    | 111.0 | 23.0 | 315     | 315      |
| SYDASK38x7.0 | 38           | 24        | 60 | 55 | 111.0 | 23.0  | 315  | 315     |          |

All dimensions are in millimeters for reference only, subject to change.

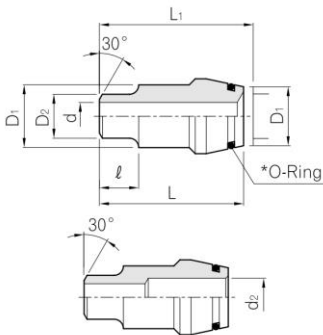
\*The standard O-Ring material is NBR(e.g. Perbunan) however FPM(e.g. Viton) is also available on request (See Page 3).  
Pressure ratings of the stainless steel refers to page 5.

Welding Nipple with \*O-Ring  
**SYDAK**



| Series | Part No.     | Tube OD. D | d  | L    | l    | PN(bar) |         |
|--------|--------------|------------|----|------|------|---------|---------|
|        |              |            |    |      |      | C.Steel | SS 316L |
| L/S    | SYDAK10x1.0  | 10         | 8  | 35.5 | 33.0 | 249     | 242     |
|        | SYDAK10x1.5  | 10         | 7  | 35.5 | 33.0 | 358     | 349     |
|        | SYDAK10x2.0  | 10         | 6  | 35.5 | 33.0 | 460     | 447     |
|        | SYDAK12x1.5  | 12         | 9  | 35.5 | 33.0 | 305     | 297     |
|        | SYDAK12x2.0  | 12         | 8  | 35.5 | 33.0 | 393     | 383     |
| S      | SYDAK12x2.5  | 12         | 7  | 35.5 | 33.0 | 476     | 463     |
|        | SYDAK16x1.5  | 16         | 13 | 42.5 | 39.0 | 234     | 228     |
|        | SYDAK16x2.0  | 16         | 12 | 42.5 | 39.0 | 305     | 297     |
|        | SYDAK16x2.5  | 16         | 11 | 42.5 | 39.0 | 372     | 362     |
|        | SYDAK16x3.0  | 16         | 10 | 42.5 | 39.0 | 400     | 400     |
|        | SYDAK20x2.0  | 20         | 16 | 47.5 | 43.5 | 249     | 242     |
|        | SYDAK20x2.5  | 20         | 15 | 47.5 | 43.5 | 305     | 297     |
|        | SYDAK 20x3.0 | 20         | 14 | 47.5 | 43.5 | 358     | 349     |
|        | SYDAK20x4.0  | 20         | 12 | 47.5 | 43.5 | 400     | 400     |
|        | SYDAK25x3.0  | 25         | 19 | 55.0 | 49.5 | 294     | 286     |
|        | SYDAK 25x4.0 | 25         | 17 | 55.0 | 49.5 | 379     | 369     |
|        | SYDAK 25x5.0 | 25         | 15 | 55.0 | 49.5 | 400     | 400     |
|        | SYDAK 30x3.0 | 30         | 24 | 58.5 | 51.5 | 249     | 242     |
|        | SYDAK30x4.0  | 30         | 22 | 58.5 | 51.5 | 323     | 314     |
|        | SYDAK30x5.0  | 30         | 20 | 58.5 | 51.5 | 393     | 383     |
|        | SYDAK30x6.0  | 30         | 18 | 58.5 | 51.5 | 400     | 400     |
|        | SYDAK 38x4.0 | 38         | 30 | 66.0 | 56.5 | 261     | 254     |
|        | SYDAK 38x5.0 | 38         | 28 | 66.0 | 56.5 | 315     | 315     |
|        | SYDAK38x6.0  | 38         | 26 | 66.0 | 56.5 | 315     | 315     |
|        | SYDAK 38x7.0 | 38         | 24 | 66.0 | 56.5 | 315     | 315     |

Reducing Welding Nipple with \*O-Ring  
**SYDAK**



| Series | Part No.       | Tube O.D.      |                | d <sup>+</sup> | d <sub>2</sub> | L    | L <sub>1</sub> | l  | PN(bar) |         |
|--------|----------------|----------------|----------------|----------------|----------------|------|----------------|----|---------|---------|
|        |                | D <sub>1</sub> | D <sub>2</sub> |                |                |      |                |    | C.Steel | SS 316L |
| L/S    | SYDAK1006x1.5  | 10             | 6              | 3              | 5              | 37.5 | 35.0           | 12 | 528     | 539     |
|        | SYDAK1008x2.0  | 10             | 8              | 4              |                | 37.5 | 35.0           | 12 | 528     | 539     |
|        | SYDAK1208x2.0  | 12             | 8              | 4              | 6              | 37.5 | 35.0           | 14 | 528     | 539     |
|        | SYDAK1210x1.5  | 12             | 10             | 7              |                | 37.5 | 35.0           | 14 | 358     | 349     |
| S      | SYDAK1612x2.5  | 16             | 12             | 7              |                | 46.5 | 43.0           | 15 | 400     | 400     |
|        | SYDAK 2012x2.5 | 20             | 12             | 7              |                | 51.5 | 47.5           | 15 | 400     | 400     |
|        | SYDAK2016x3.0  | 20             | 16             | 10             |                | 53.5 | 49.5           | 17 | 400     | 400     |
|        | SYDAK 2516x3.0 | 25             | 16             | 10             |                | 56.5 | 51.0           | 17 | 400     | 400     |
|        | SYDAK 2520x4.0 | 25             | 20             | 12             |                | 59.5 | 54.0           | 20 | 400     | 400     |
|        | SYDAK 3016x2.0 | 30             | 16             | 12             |                | 67.0 | 60.0           | 17 | 305     | 297     |
|        | SYDAK 3020x2.5 | 30             | 20             | 15             |                | 70.0 | 63.0           | 20 | 305     | 297     |
|        | SYDAK 3025x3.0 | 30             | 25             | 19             |                | 70.0 | 63.0           | 20 | 294     | 286     |
|        | SYDAK 3816x2.0 | 38             | 16             | 12             |                | 79.0 | 69.5           | 17 | 305     | 297     |
|        | SYDAK 3820x2.5 | 38             | 20             | 15             |                | 82.0 | 72.5           | 20 | 305     | 297     |
|        | SYDAK 3825x3.0 | 38             | 25             | 19             |                | 82.0 | 72.5           | 20 | 294     | 286     |
|        | SYDAK 3830x4.0 | 38             | 30             | 22             |                | 82.0 | 72.5           | 20 | 315     | 315     |

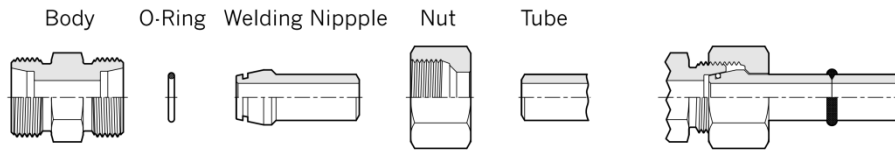
All dimensions are in millimeters for reference only, subject to change.

The standard O-Ring material is NBR(e.g. Perbunan) however FPM(e.g. Viton) is also available on request (See Page 3).

Pressure rating of the stainless steel refers to page 5.

+Mark is based on welding thickness.

## Installation Instruction for Welding Nipple Fittings



Step 1. Cut the pipe at right angle by a sawing machine and remove burrs both inside and outside the pipe.

Step 2. Slide the nut onto the weld nipple.

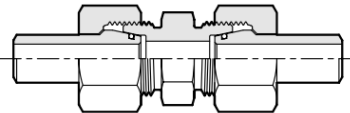
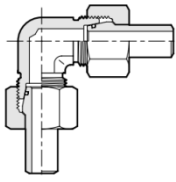
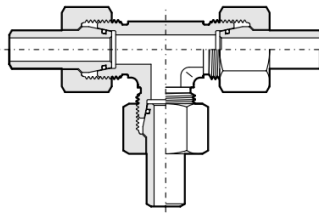
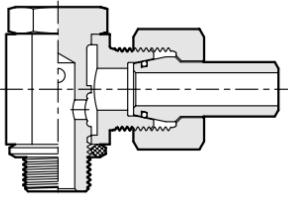
Step 3. Weld the tube with nipple and clean welding area around the runs. The tube must be aligned with the welding nipple.

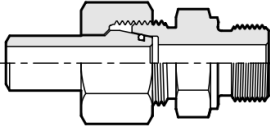
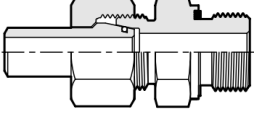
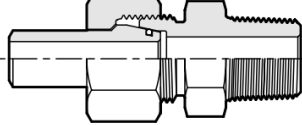
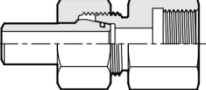
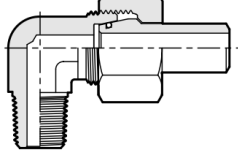
Step 4. Fit the O-Ring (caution: Do not twist O-ring). Taper, nut and cone must be clean.

Step 5. Oil the thread on body and the nut.

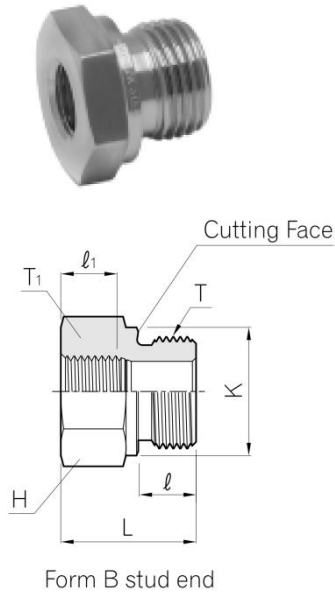
Step 6. Screw the nut by hand then, tighten fully using a wrench with 1/3 turn.

## Ordering information for Welding Nipple Fittings.

| Order No.   | Figures   |
|-------------|---|
| SYDGV       | SYDU (Without Cutting Ring) + SYDAK   |
|             |    |
| SYDWV       | SYDL (Without Cutting Ring) + SYDAK   |
|             |  |
| SYDTV       | SYDT (Without Cutting Ring) + SYDAK   |
|             |  |
| SYDWSE<br>V | SYDSWVE (Without Cutting Ring)+ SYDAK   |
|             |  |

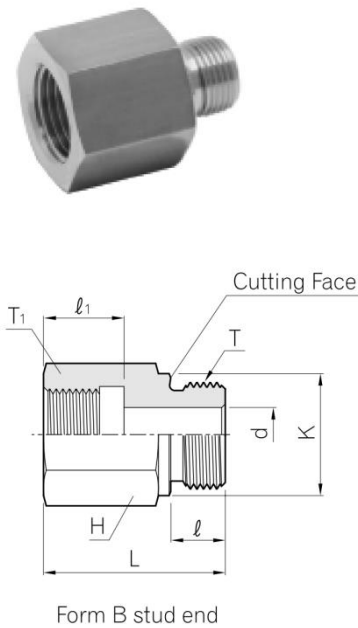
| Order No.    | Figures   |
|--------------|---|
| SYDGEV       | SYDMC (Without Cutting Ring) + SYDAK  |
|              |    |
| SYDGUV       | SYDMC-ED (Without Cutting Ring) + SYDAK   |
|              |  |
| SYDGEV-<br>R | SYDMC (Without Cutting Ring) + SYDAK  |
|              |  |
| SYDGAI       | SYDFC (Without Cutting Ring) + SYDAK  |
|              |  |
| SYDWEV       | SYDLM (Without Cutting Ring) + SYDAK  |
|              |  |

Male Female Adaptor (SIOBSP Parallel)  
**SYH-MFAD**



| PartNo.        | H  | K  | L    | l  | l <sub>1</sub> | Male stud T | Female stud T <sub>1</sub> | PN(bar) |         |        |
|----------------|----|----|------|----|----------------|-------------|----------------------------|---------|---------|--------|
|                |    |    |      |    |                |             |                            | C.Steel | SS 316L | BRAS S |
| SYH-MFAD6-2G   | 22 | 22 | 225  | 12 | 8              | G 3/8       | G 1/8                      | 400     | 400     | 250    |
| SYH-MFAD8-2G   | 27 | 26 | 24.0 | 14 | 8              | G 1/2       | G 1/8                      | 400     | 400     | 250    |
| SYH-MFAD8-4G   | 27 | 26 | 24.0 | 14 | 12             | G 1/2       | G 1/4                      | 315     | 315     | 200    |
| SYH-MFAD12-4G  | 32 | 32 | 26.0 | 16 | 12             | G 3/4       | G 1/4                      | 315     | 315     | 200    |
| SYH-MFAD12-6G  | 32 | 32 | 26.0 | 16 | 12             | G3/4        | G 3/8                      | 315     | 315     | 200    |
| SYH-MFAD16-4G  | 41 | 39 | 29.0 | 18 | 12             | G1          | G 1/4                      | 315     | 315     |        |
| SYH-MFAD16-6G  | 41 | 39 | 29.0 | 18 | 12             | G1          | G 3/8                      | 315     | 315     | 200    |
| SYH-MFAD16-8G  | 41 | 39 | 29.0 | 18 | 14             | G1          | G 1/2                      | 315     | 315     | 200    |
| SYH-MFAD20-8G  | 50 | 49 | 32.0 | 20 | 14             | G11/4       | G 1/2                      | 160     | 160     | 100    |
| SYH-MFAD20-12G | 50 | 49 | 32.0 | 20 | 16             | G11/4       | G 3/4                      | 160     | 160     | 100    |
| SYH-MFAD24-8G  | 55 | 55 | 36.0 | 22 | 14             | G 11/2      | G 1/2                      | 160     | 160     | 100    |
| SYH-MFAD24-12G | 55 | 55 | 36.0 | 22 | 16             | G11/2       | G 3/4                      | 160     | 160     | 100    |
| SYH-MFAD24-16G | 55 | 55 | 36.0 | 22 | 18             | G11/2       | G1                         | 160     | 160     | 100    |

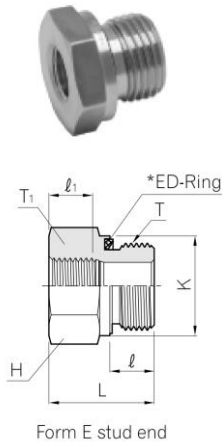
Male Female Adaptor (ISO/BSP Parallel)  
**SYH-MFAE**



| Part No.        | d  | H  | K  | L  | l  | l <sub>1</sub> | Male stud T | Female stud T <sub>1</sub> | PN(bar) |         |        |
|-----------------|----|----|----|----|----|----------------|-------------|----------------------------|---------|---------|--------|
|                 |    |    |    |    |    |                |             |                            | C.Steel | SS 316L | BRA SS |
| SYH-MFAE 2-4G   | 4  | 19 | 14 | 31 | 8  | 17.0           | G 1/8       | G 1/4                      | 400     | 400     | 250    |
| SYH-MFAE 2-6G   | 4  | 24 | 14 | 32 | 8  | 17.0           | G 1/8       | G 3/8                      | 400     | 400     | 250    |
| SYH-MFAE 4-2G   | 5  | 19 | 18 | 28 | 12 | 12.0           | G 1/4       | G 1/8                      | 400     | 400     | 250    |
| SYH-MFAE 4-6G   | 5  | 24 | 18 | 36 | 12 | 17.0           | G 1/4       | G3/8                       | 400     | 400     | 250    |
| SYH-MFAE 4-8G   | 5  | 30 | 18 | 40 | 12 | 20.0           | G 1/4       | G1/2                       | 400     | 400     | 250    |
| SYH-MFAE 4-12G  | 5  | 36 | 18 | 43 | 12 | 22.0           | G 1/4       | G3/4                       | 315     | 315     | 200    |
| SYH-MFAE6-4G    | 8  | 22 | 22 | 36 | 12 | 17.0           | G 3/8       | G1/4                       | 400     | 400     | 250    |
| SYH-MFAE 6-8G   | 8  | 30 | 22 | 41 | 12 | 20.0           | G 3/8       | G 1/2                      | 400     | 400     | 250    |
| SYH-MFAE 6-12G  | 8  | 36 | 22 | 44 | 12 | 22.0           | G 3/8       | G3/4                       | 315     | 315     | 200    |
| SYH-MFAE 8-6G   | 12 | 27 | 26 | 36 | 14 | 17.0           | G 1/2       | G3/8                       | 315     | 315     | 200    |
| SYH-MFAE 8-12G  | 12 | 36 | 26 | 46 | 14 | 22.0           | G 1/2       | G3/4                       | 315     | 315     | 200    |
| SYH-MFAE 8-16G  | 12 | 41 | 26 | 49 | 14 | 24.5           | G1/2        | G1                         | 315     | 315     | 200    |
| SYH-MFAE 8-20G  | 10 | 55 | 26 | 53 | 14 | 26.5           | G 1/2       | G11/4                      | 160     | 160     |        |
| SYH-MFAE 12-8G  | 16 | 32 | 32 | 41 | 16 | 20.0           | G 3/4       | G 1/2                      | 315     | 315     | 200    |
| SYH-MFAE 12-16G | 16 | 41 | 32 | 51 | 16 | 24.5           | G 3/4       | G1                         | 315     | 315     | 200    |
| SYH-MFAE 12-20G | 16 | 55 | 32 | 55 | 16 | 26.5           | G3/4        | G11/4                      | 160     | 160     |        |
| SYH-MFAE 12-24G | 16 | 60 | 32 | 57 | 16 | 28.5           | G 3/4       | G11/2                      | 160     | 160     |        |
| SYH-MFAE 16-12G | 20 | 41 | 39 | 47 | 18 | 22.0           | G1          | G3/4                       | 315     | 315     | 200    |
| SYH-MFAE 16-20G | 20 | 55 | 39 | 57 | 18 | 26.5           | G1          | G11/4                      | 160     | 160     | 100    |
| SYH-MFAE 16-24G | 20 | 60 | 39 | 59 | 18 | 28.5           | G1          | G11/2                      | 160     | 160     | 100    |
| SYH-MFAE 20-16G | 25 | 50 | 49 | 52 | 20 | 24.5           | G11/4       | G1                         | 160     | 160     | 100    |
| SYH-MFAE 20-24G | 25 | 60 | 49 | 60 | 20 | 28.5           | G11/4       | G11/2                      | 160     | 160     | 100    |
| SYH-MFAE 32-24G | 40 | 70 | 68 | 62 | 24 | 28.5           | G2          | G11/2                      | 160     |         |        |

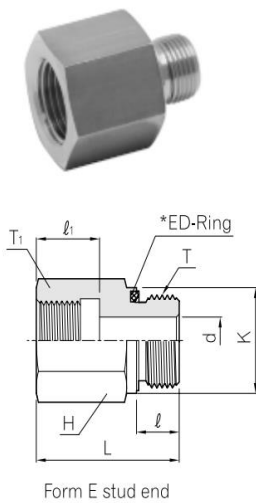
Male/Female thread adaptors with metric and NPT thread are available on request.  
All dimensions are in millimeters for reference only, subject to change.

Male Female Adaptor(ISO/BSP Parallel) with \*ED-Ring  
**SYH-MFAD-ED**



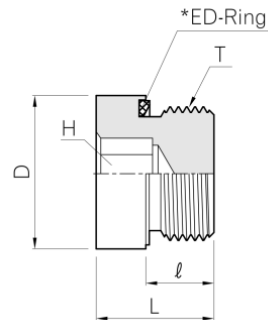
| Part No.          | H  | K  | L    | l  | li | Male stud T | Female stud T <sub>1</sub> | PN(bar) |         |
|-------------------|----|----|------|----|----|-------------|----------------------------|---------|---------|
|                   |    |    |      |    |    |             |                            | C.Steel | SS 316L |
| SYH-MFAD 6ED-2G   | 22 | 22 | 22.5 | 12 | 8  | G 3/8       | G 1/8                      | 400     | 400     |
| SYH-MFAD 8ED-2G   | 27 | 26 | 24.0 | 14 | 8  | G 1/2       | G 1/8                      | 400     | 400     |
| SYH-MFAD 8ED-4G   | 27 | 26 | 24.0 | 14 | 12 | G 1/2       | G 1/4                      | 400     | 400     |
| SYH-MFAD 12ED-4G  | 32 | 32 | 26.0 | 16 | 12 | G 3/4       | G 1/4                      | 315     | 315     |
| SYH-MFAD 12ED-6G  | 32 | 32 | 26.0 | 16 | 12 | G 3/4       | G 3/8                      | 315     | 315     |
| SYH-MFAD 16ED-4G  | 41 | 39 | 29.0 | 18 | 12 | G1          | G 1/4                      | 315     | 315     |
| SYH-MFAD 16ED-6G  | 41 | 39 | 29.0 | 18 | 12 | G1          | G 3/8                      | 315     | 315     |
| SYH-MFAD 16ED-8G  | 41 | 39 | 29.0 | 18 | 14 | G1          | G 1/2                      | 315     | 315     |
| SYH-MFAD 20ED-8G  | 50 | 49 | 32.0 | 20 | 14 | G 11/4      | G 1/2                      | 315     | 315     |
| SYH-MFAD 20ED-12G | 50 | 49 | 32.0 | 20 | 16 | G11/4       | G 3/4                      | 315     | 315     |
| SYH-MFAD 24ED-8G  | 55 | 55 | 36.0 | 22 | 14 | G 11/2      | G 1/2                      | 250     | 250     |
| SYH-MFAD 24ED-12G | 55 | 55 | 36.0 | 22 | 16 | G11/2       | G3/4                       | 250     | 250     |
| SYH-MFAD24ED-16G  | 55 | 55 | 36.0 | 22 | 18 | G11/2       | G 1                        | 250     | 250     |

Male Female Adaptor (ISO/BSP Parallel) with \*ED.Ring  
**SYH-MFAE-ED**



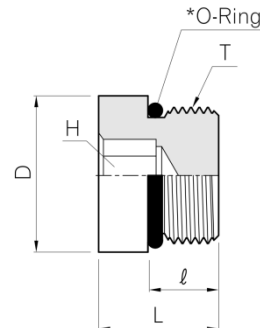
| Part No.          | d  | H  | K  | L  | l  | li   | Male stud T | Female stud T <sub>1</sub> | PN(bar) |         |
|-------------------|----|----|----|----|----|------|-------------|----------------------------|---------|---------|
|                   |    |    |    |    |    |      |             |                            | C.Steel | SS 316L |
| SYH-MFAE 2ED-4G   | 4  | 19 | 14 |    | 8  | 17   | G 1/8       | G 1/4                      | 400     | 400     |
| SYH-MFAE 2ED-6G   | 4  | 24 | 14 | 32 | 8  | 17   | G 1/8       | G 3/8                      | 400     | 400     |
| SYH-MFAE 4ED-2G   | 5  | 19 | 18 | 28 | 12 | 12   | G 1/4       | G 1/8                      | 400     | 400     |
| SYH-MFAE 4ED-6G   | 5  | 24 | 18 | 36 | 12 | 17   | G 1/4       | G 3/8                      | 400     | 400     |
| SYH-MFAE 4ED-8G   | 5  | 30 | 18 | 40 | 12 | 20   | G 1/4       | G 1/2                      | 400     | 400     |
| SYH-MFAE 4ED-12G  | 5  | 36 | 18 | 43 | 12 | 22   | G 1/4       | G 3/4                      | 400     | 400     |
| SYH-MFAE 6ED-4G   | 8  | 22 | 22 | 36 | 12 | 17   | G 3/8       | G 1/4                      | 400     | 400     |
| SYH-MFAE 6ED-8G   | 8  | 30 | 22 | 41 | 12 | 20   | G3/8        | G 1/2                      | 400     | 400     |
| SYH-MFAE 6ED-12G  | 8  | 36 | 22 | 44 | 12 | 22   | G3/8        | G 3/4                      | 315     | 315     |
| SYH-MFAE 8ED-6G   | 12 | 27 | 26 | 36 | 14 | 17   | G 1/2       | G3/8                       | 400     | 400     |
| SYH-MFAE 8ED-12G  | 12 | 36 | 26 | 46 | 14 | 22   | G 1/2       | G 3/4                      | 315     | 315     |
| SYH-MFAE 8ED-16G  | 12 | 41 | 26 | 49 | 14 | 24.5 | G 1/2       | G 1                        | 315     | 315     |
| SYH-MFAE 8ED-20G  | 10 | 55 | 26 | 53 | 14 | 26.5 | G 1/2       | G 11/4                     | 315     | 315     |
| SYH-MFAE 12ED-8G  | 16 | 32 | 32 | 41 | 16 | 20   | G 3/4       | G 1/2                      | 315     | 315     |
| SYH-MFAE 12ED-16G | 16 | 41 | 32 | 51 | 16 | 24.5 | G 3/4       | G 1                        | 315     | 315     |
| SYH-MFAE 12ED-20G | 16 | 55 | 32 | 55 | 16 | 26.5 | G 3/4       | G11/4                      | 315     | 315     |
| SYH-MFAE 12ED-24G | 16 | 60 | 32 | 57 | 16 | 28.5 | G3/4        | G11/2                      | 250     | 250     |
| SYH-MFAE 16ED-12G | 20 | 41 | 39 | 47 | 18 | 22   | G1          | G3/4                       | 315     | 315     |
| SYH-MFAE 16ED-20G | 20 | 55 | 39 | 57 | 18 | 26.5 | G1          | G11/4                      | 315     | 315     |
| SYH-MFAE 16ED-24G | 20 | 60 | 39 | 59 | 18 | 28.5 | G1          | G11/2                      | 250     | 250     |
| SYH-MFAE 20ED-16G | 25 | 50 | 49 | 52 | 20 | 24.5 | G 11/4      | G 1                        | 315     | 315     |
| SYH-MFAE 20ED-24G | 25 | 60 | 49 | 60 | 20 | 28.5 | G11/4       | G11/2                      | 250     | 250     |
| SYH-MFAE 24ED-20G | 32 | 55 | 55 | 58 | 22 | 26.5 | G11/2       | G11/4                      | 250     | 250     |
| SYH-MFAE 32ED-24G | 40 | 70 | 68 | 62 | 24 | 28.5 | G2          | G11/2                      | 160     |         |

Blanking Plugs with \*ED.Ring for Ports  
**SYDVSTI-GED/MED**



| Part No.      | Tube<br>O.D.  | T        | T     | D    | H  | L    | l  | PN(bar) |            |
|---------------|---------------|----------|-------|------|----|------|----|---------|------------|
|               |               |          |       |      |    |      |    | C.Steel | SS<br>316L |
| SYDVSTI-M10ED | SYDVSTI-01GED | M 10x1.0 | G 1/8 | 14.0 | 5  | 12.0 | 8  | 400     | 400        |
| SYDVSTI-M12ED | -             | M 12x1.5 | -     | 17.0 | 6  | 17.0 | 12 | 400     | 400        |
| SYDVSTI-M14ED | SYDVSTI-02GED | M 14x1.5 | G 1/4 | 19.0 | 6  | 17.0 | 12 | 400     | 400        |
| SYDVSTI-M16ED | SYDVSTI-03GED | M16x1.5  | G3/8  | 22.0 | 8  | 17.0 | 12 | 400     | 400        |
| SYDVSTI-M18ED | -             | M18x1.5  | -     | 23.9 | 8  | 17.0 | 12 | 400     | 400        |
| SYDVSTI-M20ED | -             | M 20x1.5 | -     | 25.9 | 10 | 19.0 | 14 | 400     | 400        |
| SYDVSTI-M22ED | SYDVSTI-04GED | M22x1.5  | G 1/2 | 27.0 | 10 | 19.0 | 14 | 400     | 400        |
| SYDVSTI-M26ED | -             | M 26x1.5 | -     | 31.9 | 12 | 21.0 | 16 | 400     | 400        |
| SYDVSTI-M27ED | SYDVSTI-06GED | M27x2.0  | G 3/4 | 32.0 | 12 | 21.0 | 16 | 400     | 400        |
| SYDVSTI-M33ED | SYDVSTI-08GED | M 33x2.0 | G 1   | 39.9 |    | 22.5 | 16 | 400     | 400        |
| SYDVSTI-M42ED | SYDVSTI-10GED | M 42x2.0 | G11/4 | 49.9 | 22 | 22.5 | 16 | 315     | 315        |
| SYDVSTI-M48ED | SYDVSTI-12GED | M 48x2.0 | G11/2 | 55.0 | 24 | 22.5 | 16 | 315     | 315        |

Blanking Plugs with \*O-Ring for Ports acc.to ISO 6149/DIN3852  
**SYDVSTI**

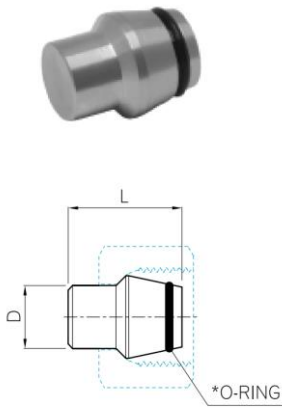


| Part No.    | T        | D  | H  | L    | l    | PN(bar) |
|-------------|----------|----|----|------|------|---------|
|             |          |    |    |      |      | C.Steel |
| SYDVSTI-M10 | M 10x1.0 | 13 | 5  | 14.0 | 10.0 | 630     |
| SYDVSTI-M12 | M12x1.5  | 17 | 6  | 16.5 | 11.5 | 630     |
| SYDVSTI-M14 | M14x1.5  | 19 | 6  | 16.5 | 11.5 | 630     |
| SYDVSTI-M16 | M 16x1.5 | 21 | 6  | 18.0 | 13.0 | 630     |
| SYDVSTI-M18 | M 18x1.5 | 23 | 8  | 19.5 | 14.5 | 630     |
| SYDVSTI-M22 | M 22x1.5 | 27 | 10 | 20.5 | 15.5 | 630     |
| SYDVSTI-M26 | M 26x1.5 | 31 | 12 | 21.0 | 16.0 | 630     |
| SYDVSTI-M27 | M27x2.0  | 32 | 12 | 24.0 | 19.0 | 400     |
| SYDVSTI-M33 | M 33x2.0 | 38 | 17 | 25.5 | 19.0 | 400     |
| SYDVSTI-M42 | M 42x2.0 | 48 | 22 | 26.0 | 19.5 | 400     |

All dimensions are in millimeters for reference only, subject to change.

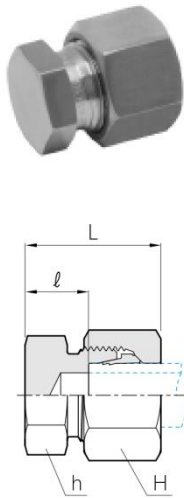
\*The standard ED-Ring,O-Ring material is NBR(e.g.Perbunan) however FPM(e.g. Viton), is also available on request (See Page 3).

Blanking Plug with \*O.Ring  
**SYDVKA**



| Series | Part No.     | Tube OD.<br>D | L    | PN(bar) |         |       |
|--------|--------------|---------------|------|---------|---------|-------|
|        |              |               |      | C.Steel | SS316/L | BRASS |
| L/S    | SYDVKA-06LS  | 6             | 18.5 | 500     | 315     | 200   |
|        | SYDVKA-08LS  | 8             | 18.5 | 500     | 315     | 200   |
|        | SYDVKA-10L/S | 10            | 20.0 | 500     | 315     | 200   |
|        | SYDVKA-12L/S | 12            | 20.5 | 400     | 315     | 200   |
| L      | SYDVKA-15L   | 15            | 20.5 | 400     | 315     | 200   |
|        | SYDVKA-18L   | 18            | 22.5 | 400     | 315     | 200   |
|        | SYDVKA-22L   | 22            | 25.0 | 250     | 160     | 100   |
|        | SYDVKA-28L   | 28            | 25.5 | 250     | 160     | 100   |
|        | SYDVKA-35L   | 35            | 30.0 | 250     | 160     | 100   |
|        | SYDVKA-42L   | 42            | 30.0 | 250     | 160     | 100   |
| S      | SYDVKA-14S   | 14            | 22.5 | 630     | 630     | 400   |
|        | SYDVKA-16S   | 16            | 23.5 | 630     | 400     | 250   |
|        | SYDVKA-20S   | 20            | 28.5 | 420     | 400     | 250   |
|        | SYDVKA-25S   | 25            | 29.0 | 420     | 400     | 250   |
|        | SYDVKA-30S   | 30            | 30.5 | 420     | 400     | 250   |
|        | SYDVKA-38S   | 38            | 330  | 420     | 315     | 200   |

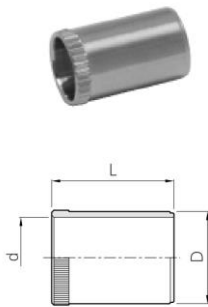
Tube Cap  
**SYDCA**



| Series | Part No.  | Tube O.D. | H  | h  | L  | l    | PN(bar) |         |
|--------|-----------|-----------|----|----|----|------|---------|---------|
|        |           |           |    |    |    |      | C.Steel | SS316/L |
| L      | SYDCA-06L | 6         | 14 | 12 | 22 | 7.0  | 315     | 315     |
|        | SYDCA-08L | 8         | 17 | 14 | 23 | 8.0  | 315     | 315     |
|        | SYDCA-10L | 10        | 19 | 17 | 24 | 9.0  | 315     | 315     |
|        | SYDCA-12L | 12        | 22 | 19 | 25 | 10.0 | 315     | 315     |
|        | SYDCA-15L | 15        | 27 | 24 | 26 | 11.0 | 315     | 315     |
|        | SYDCA-18L | 18        | 32 | 27 | 28 | 11.5 | 315     | 315     |
|        | SYDCA-22L | 22        | 36 | 32 | 30 | 13.5 | 160     | 160     |
|        | SYDCA-28L | 28        | 41 | 41 | 31 | 14.5 | 160     | 160     |
|        | SYDCA-35L | 35        | 50 | 46 | 36 | 14.5 | 160     | 160     |
|        | SYDCA-42L | 42        | 60 | 55 | 39 | 16.0 | 160     | 160     |
| S      | SYDCA-06S | 6         | 17 | 14 | 26 | 11.0 | 630     | 630     |
|        | SYDCA-08S | 8         | 19 | 17 | 28 | 13.0 | 630     | 630     |
|        | SYDCA-10S | 10        | 22 | 19 | 29 | 12.5 | 630     | 630     |
|        | SYDCA-12S | 12        | 24 | 22 | 31 | 14.5 | 630     | 630     |
|        | SYDCA-14S | 14        | 27 | 24 | 34 | 16.0 | 630     | 630     |
|        | SYDCA-16S | 16        | 30 | 27 | 34 | 15.5 | 400     | 400     |
|        | SYDCA-20S | 20        | 36 | 32 | 39 | 17.5 | 400     | 400     |
|        | SYDCA-25S | 25        | 46 | 41 | 44 | 20.0 | 400     | 400     |
|        | SYDCA-30S | 30        | 50 | 46 | 47 | 205  | 400     | 400     |
|        | SYDCA-38S | 38        | 60 | 55 | 54 | 23.0 | 315     | 315     |

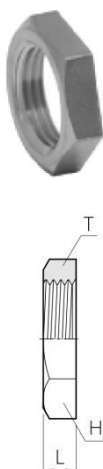
Dimensions are given for approximate length with tightened nut. All dimensions are in millimeters for reference only, subject to change.  
\*The standard O-Ring material is NBR(e.g.Perbunan) however FPM(e.g. Viton) is also available on request (See Page 3).

## Tube Insert SYDIL



| Part No.     | Tube OD. | Tube LD. | d    | D    | L    |
|--------------|----------|----------|------|------|------|
| SYDIL 6-1    | 6        | 4.0      | 2.6  | 3.8  | 15.5 |
| SYDIL 6-0.75 | 6        | 4.5      | 3.1  | 4.3  | 12.5 |
| SYDIL 6-0.5  | 6        | 5.0      | 3.6  | 4.8  | 15.5 |
| SYDIL 8-1    | 8        | 6.0      | 4.6  | 5.8  | 15.5 |
| SYDIL 10-1.5 | 10       | 7.0      | 5.6  | 6.8  | 17.0 |
| SYDIL 10-1   | 10       | 8.0      | 6.6  | 7.8  | 16.5 |
| SYDIL 12-1.5 | 12       | 9.0      | 7.6  | 8.8  | 16.5 |
| SYDIL 12-1   | 12       | 10.0     | 8.6  | 9.8  | 16.5 |
| SYDIL 15-1.5 | 15       | 12.0     | 10.2 | 11.8 | 17.0 |
| SYDIL 15-1   | 15       | 13.0     | 11.2 | 12.8 | 17.0 |
| SYDIL 16-1   | 16       | 14.0     | 12.2 | 13.8 | 17.0 |
| SYDIL 18-1.5 | 18       | 15.0     | 13.2 | 14.8 | 17.5 |
| SYDIL 18-1   | 18       | 16.0     | 14.2 | 15.8 | 17.5 |
| SYDIL 20-1.5 | 20       | 17.0     | 15.2 | 16.8 | 20.0 |
| SYDIL 20-1   | 20       | 18.0     | 16.2 | 17.8 | 22.0 |
| SYDIL 22-1.5 | 22       | 19.0     | 17.2 | 18.8 | 18.0 |
| SYDIL 22-1   | 22       | 20.0     | 18.2 | 19.8 | 18.0 |
| SYDIL 25-2   | 25       | 21.0     | 19.2 | 20.8 | 21.5 |
| SYDIL 25-1.5 | 25       | 22.0     | 20.2 | 21.8 | 23.5 |
| SYDIL 28-2   | 28       | 24.0     | 22.2 | 23.8 | 18.0 |
| SYDIL 28-1.5 | 28       | 25.0     | 23.2 | 24.8 | 18.0 |
| SYDIL 30-2   | 30       | 26.0     | 24.2 | 25.8 | 23.5 |
| SYDIL 35-2   | 35       | 31.0     | 28.8 | 30.8 | 22.5 |
| SYDIL 38-3   | 38       | 32.0     | 29.8 | 31.8 | 26.5 |
| SYDIL 38-2.5 | 38       | 33.0     | 30.8 | 32.8 | 26.5 |
| SYDIL 42-2   | 42       | 38.0     | 35.8 | 37.8 | 23.5 |

## \*Bulkhead Lock Nut SYN-

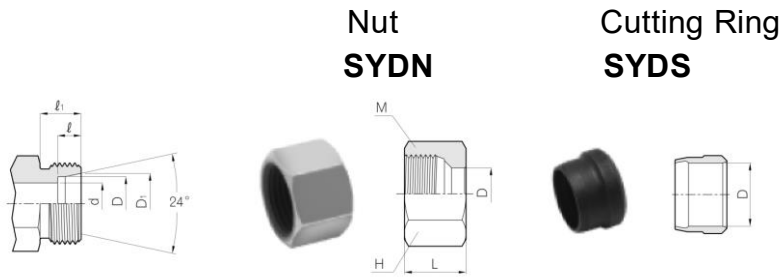


| Part No.             | Tube O.D. |       | H  | L  | T        |
|----------------------|-----------|-------|----|----|----------|
|                      | Light     | Heavy |    |    |          |
| SYN-1215M 17.0T 6.0  | 6         | -     | 17 | 6  | M12x1.5  |
| SYN-1415M 19.0T 6.0  | 8         | 6     | 19 | 6  | M 14x1.5 |
| SYN-1615M 22.0T 6.0  | 10        | 8     | 22 | 6  | M16x1.5  |
| SYN-1815M 24.0 T 6.0 | 12        | 10    | 24 | 6  | M18x1.5  |
| SYN-2015M 27.0T 6.0  | -         | 12    | 27 | 6  | M 20x1.5 |
| SYN-2215M 30.0 T 7.0 | 15        | 14    | 30 | 7  | M22x1.5  |
| SYN-2415M 32.0T 7,0  | -         | 16    | 32 | 7  | M24x1.5  |
| SYN-2615M 36.0 T 8.0 | 18        | -     | 36 | 8  | M26x1.5  |
| SYN-3020M 41.0T 8.0  | 22        | 20    | 41 | 8  | M30x2    |
| SYN-3620M 46.0T 9.0  | 28        | 25    | 46 | 9  | M 36x2   |
| SYN-4220M 50.0 T 9.0 | -         | 30    | 50 | 9  | M 42x2   |
| SYN-4520M 55.0 T 9.0 | 35        | -     | 55 | 9  | M45x2    |
| SYN-5220M 65.0 T10.0 | 42        | 38    | 65 | 10 | M52x2    |

\*According to DIN 80705 for bulkhead screw-joint.

All dimensions are in millimeters for reference only, subject to change.

Tube end Dimension



| Series           | Part No. Nut | Part No. Cutting Ring | Tube O.D | SYDN Size | D    | D <sub>1</sub> | d    | H    | L      | M         | l    | l <sub>1</sub> |
|------------------|--------------|-----------------------|----------|-----------|------|----------------|------|------|--------|-----------|------|----------------|
| LL<br>Very Light | SYDN-04LL    | SYDS -04LL            | 4        | 3         | 4    | 5.0            | 3.0  | 10   | 11.5   | M 8x1.0   | 4.0  | 8              |
|                  | SYDN-06LL    | SYDS-06LL             | 6        | 4         | 6    | 7.5            | 4.5  | 12   | 12.0   | M 10x1.0  | 5.5  | 8              |
|                  | SYDN-08LL    | SYDS-08LL             | 8        | 6         | 8    | 9.5            | 6.0  | 14   | 12.5   | M 12x 1.0 | 6.0  | 9              |
|                  | SYDN-10LL    | SYDS-10LL             | 10       | 8         | 10   | 11.5           | 8.0  | 17   | 12.5   | M 14x1.0  | 6.0  | 9              |
|                  | SYDN-12LL    | SYDS-12LL             | 12       | 10        | 12   | 13.5           | 10.0 | 19   | 13.0   | M 16x1.0  | 6.0  | 9              |
| L<br>Light       | SYDN-06L     | SYDS-06               | 6        | 4         | 6    | 8.1            | 4.0  | 14   | 15.0   | M 12x1.5  | 7.0  | 10             |
|                  | SYDN-08L     | SYDS -08              | 8        | 6         | 8    | 10.1           | 6.0  | 17   | 15.0   | M14x1.6   | 7.0  | 10             |
|                  | SYDN-10L     | SYDS-10               | 10       | 8         | 10   | 12.3           | 8.0  | 19   | 16.0   | M 16x1.5  | 7.0  | 11             |
|                  | SYDN-12L     | SYDS-12               | 12       | 10        | 12   | 14.3           | 10.0 | 22   | 16.0   | M 18x1.5  | 7.0  | 11             |
|                  | SYDN-15L     | SYDS-15               | 15       | 12        | 15   | 17.3           | 12.0 | 27   | 17.5   | M 22x1.5  | 7.0  | 12             |
|                  | SYDN-18L     | SYDS-18               | 18       | 16        | 18   | 20.3           | 15.0 | 32   | 18.0   | M 26x1.5  | 7.5  | 12             |
|                  | SYDN-22L     | SYDS-22               | 22       | 20        | 22   | 24.3           | 19.0 | 36   | 20.5   | M30x2     | 7.5  | 14             |
|                  | SYDN-28L     | SYDS-28               | 28       | 25        | 28   | 30.3           | 24.0 | 41   | 21.0   | M 36x2    | 7.5  | 14             |
|                  | SYDN-35L     | SYDS-35               | 35       | 32        | 35   | 38.0           | 30.0 | 50   | 24.0   | M 45x2    | 10.5 | 16             |
| SYDN-42L         | SYDS-42      | 42                    | 40       | 42        | 45.0 | 36.0           | 60   | 24.0 | M52x2  | 11.0      | 16   |                |
| S<br>Heavy       | SYDN-06S     | SYDS-06               | 6        | 3         | 6    | 8.1            | 4.0  | 17   | 16.5   | M 14x1.5  | 7.0  | 12             |
|                  | SYDN-08S     | SYDS-08               | 8        | 4         | 8    | 10.1           | 5.0  | 19   | 16.5   | M 16x1.5  | 7.0  | 12             |
|                  | SYDN-10S     | SYDS-10               | 10       | 6         | 10   | 12.3           | 7.0  | 22   | 17.5   | M 18x1.5  | 7.5  | 12             |
|                  | SYDN-12S     | SYDS-12               | 12       | 8         | 12   | 14.3           | 8.0  | 24   | 18.0   | M 20x1.5  | 7.5  | 12             |
|                  | SYDN-14S     | SYDS-14               | 14       | 10        | 14   | 16.3           | 10.0 | 27   | 20.5   | M22x1.5   | 8.0  | 14             |
|                  | SYDN-16S     | SYDS-16               | 16       | 12        | 16   | 18.3           | 12.0 | 30   | 21.0   | M24x1.5   | 8.5  | 14             |
|                  | SYDN-20S     | SYDS-20               | 20       | 16        | 20   | 22.9           | 16.0 | 36   | 24.0   | M 30x2    | 10.5 | 16             |
|                  | SYDN-25S     | SYDS-25               | 25       | 20        | 25   | 27.9           | 20.0 | 46   | 27.0   | M36x2     | 12.0 | 18             |
|                  | SYDN-30S     | SYDS-30               | 30       | 25        | 30   | 33.0           | 25.0 | 50   | 29.5   | M.42x2    | 13.5 | 20             |
| SYDN-38S         | SYDS-38      | 38                    | 32       | 38        | 41.0 | 32.0           | 60   | 32.5 | M 52x2 | 16.0      | 22   |                |

All dimensions are in millimeters for reference only, subject to change.

This assembly instruction related to DIN 2353 fittings shows suitable make- up for fittings into seamless pipe in accordance with DIN 3859.

**3 Methods might be used for assembly-**


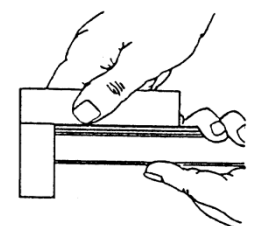
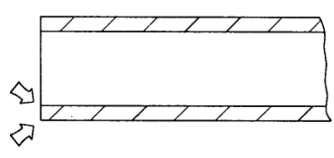
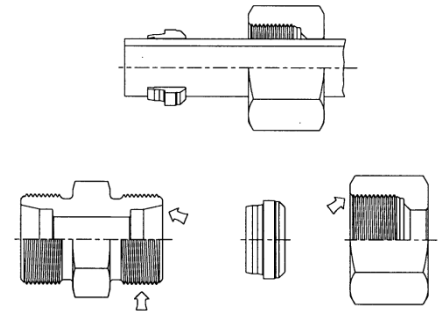
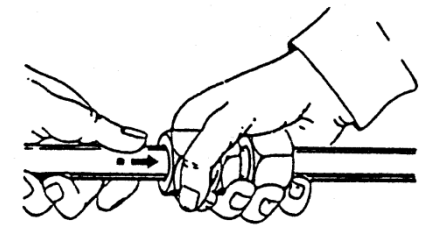
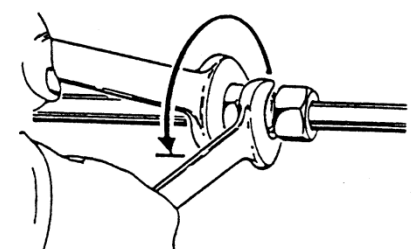
Assembly by direct fitting body.

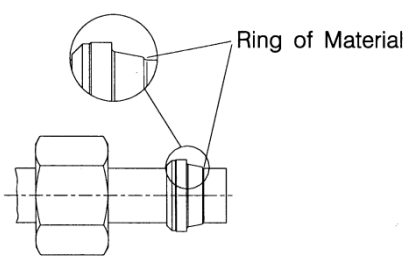
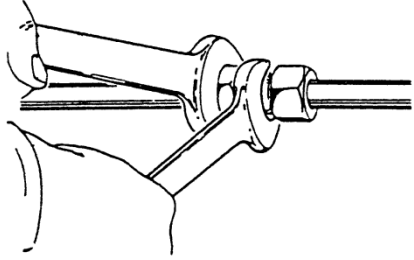
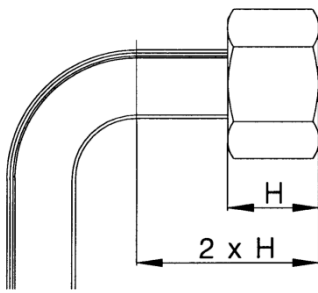
Assembly by using pre-assembly tool.

Assembly of standpipe & cone fitting with O-ring

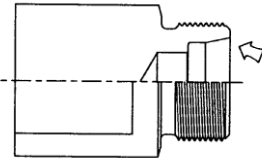
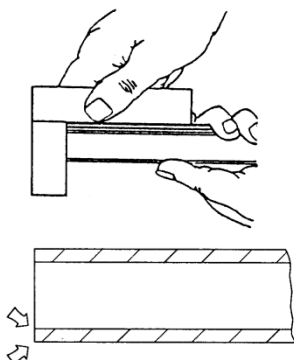
**In order to ensure positive assembly, stainless steel fittings should be always pre-assembled by an oiled pre-assembly tool.**

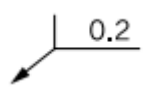
**■ Assembly of cutting ring fittings in direct fitting body-**

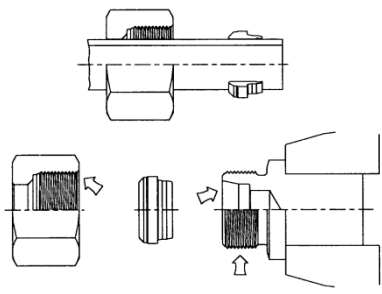
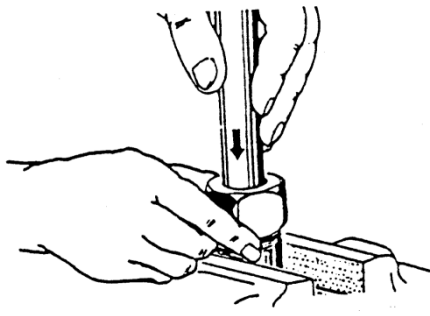
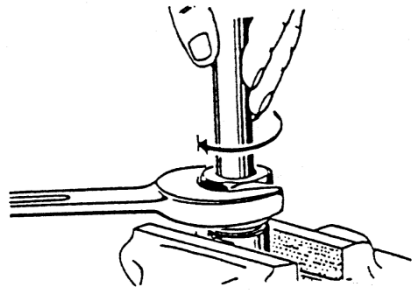
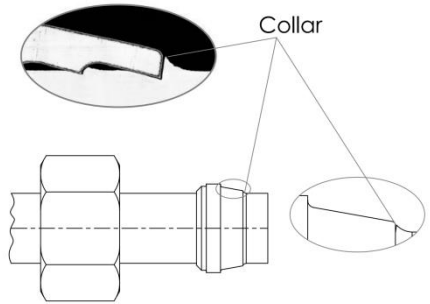
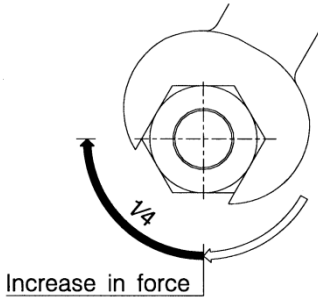
|   |   |
|---|---|
| <p>1.0 saw the tube at right angle. An angular offset of 1/2e in relation to the tube axis is permissible.</p> <p>1.1 After clean, lightly deburr the tube ends on the inside and outside of the edge.</p> <p>1.2 use of a tube cutter may cause formation of considerable burrs and an angular cut. preferred method is to use a sawing machine or a device instead.</p>  |   |
| <p>2.0 Lubricate thread and inside of the fitting body, cutting ring and thread of the nut.<br/>Do not use grease.</p> <p>2.1 place the nut and the cutting ring on tube shown as the picture. Ensure the cutting ring and the nut face the right way.</p>  |   |
| <p>3.0 Insert the tube into the fitting body, up to the tube abutment, then hand-tighten the nut.</p>   |   |
| <p>4.0 Make sure the nut is in hand tight position, then tighten the 1 1/2 turns with a wrench during holding fitting body with a second wrench. (Never turn the fitting body, hold the body and turn the nut)</p> <p><b>Caution!</b><br/>Any deviating of tightening turns reduces the nominal pressure and the service life of the fitting, and may cause leakages or slip of the tube.</p>   |   |

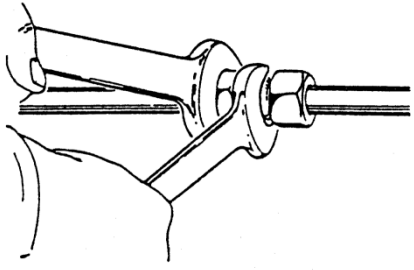
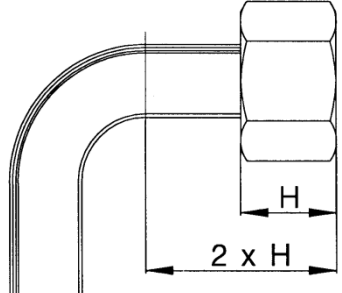
|   |  |
|---|--|
| <p>5.0 check penetration of cutting edge.<br/> A Visible ring of material should fill out the space in front of cutting ring face.<br/> cutting ring may be turned on tube. but should not be moved axial ly.</p> |    |
| <p>6.0 In case that the fitting is disassembled . the nut must be retightened firmly using the same torque as required for final assembly.</p>  |    |
| <p>7.0 Minimum length of a straight tube must be at least twice (2XH) the nut Height (H) .</p>  |  |

■ Assembly of cutting ring fittings in pre-assembly tool .

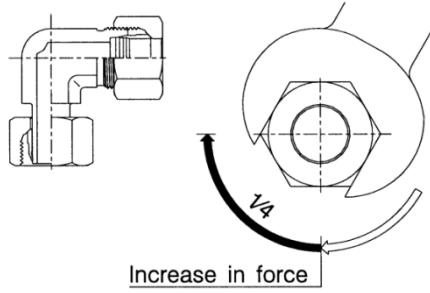
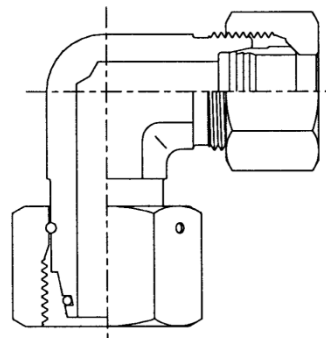
|   |   |
|---|---|
| <p>1.0 In order to ensure positive assembly. SY- LOK Corp. DIN fittings should be always pre-assembled by an oiled pre-assembly tool .<br/> For direct assembly. torque-controlled assembly or mechanical pre-assembly is also possible.</p>  |  |
| <p>2.0 saw the tube at right angle. An angular offset of 1/2° in relation to the tube axis is permissible.<br/> 2.1 After clean, lightly deburr the tube ends at the inside and outside edge.<br/> 2.2 use of tube cutter may cause formation of considerable burrs and an angular cut. preferred method is to use a sawing machine instead .</p> |  |



|   |   |
|---|---|
| <p>3.0 Lubricate the thread . inside of the fitting body. the cutting ring and also the thread of the nut.<br/>Do not grease.</p> <p>3.1 place the nut and the cutting ring on tube shown as the picture.<br/>Ensure the cutting ring and the nut face the right way.</p>   |     |
| <p>4.0 Insert the tube into the fitting body. Up to the tube abutment. then hand-tighten the nut.</p>   |     |
| <p>5.0 Make sure the nut is in hand tight position . then tighten 1 1/4 turns with a wrench during holding fitting body with a second wrench .<br/>(Never turn the fitting body. hold the body and turn the nut)</p> <p>caution!<br/>Application of deviating of tightening turns reduces the nominal pressure rating and the life of the fitting. and may cause leakages or slip of the tube.</p>  |    |
| <p>6.0 check penetration of cutting edge.</p> <p>A Visible ring of material should fill out the space in front of cutting ring face.<br/>The cutting ring may be turned on the tube but should not be moved axially.</p>  |   |
| <p>7.0 Tighten the nut by hand until application of increased effort is required. Beyond this point. tighten the nut by 1/4 turn with a wrench for final assembly.</p> <p>7.1 with unfavourable mounting conditions and great tube dimensions . final assembly must be completed with the fitting body in a vice.</p> <p><b>Caution!</b><br/>Any deviating of tightening turns reduces the nominal pressure rating and the life of the fitting which cause leakage or slip of the tube.</p> |  |

|  |   |
|--|---|
| <p>8.0 In case that the fitting is disassembled . the nut must be retightened firmly using the same torque as required for final assembly.</p> |   |
| <p>9.0 Minimum length of a straight tube must be at least twice (2XH) the nut height (H).</p>  |  |

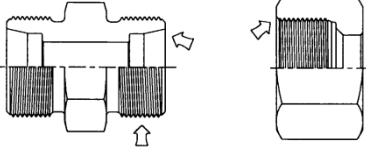
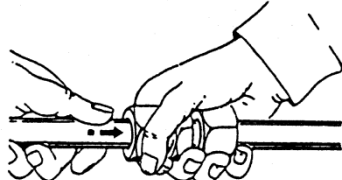
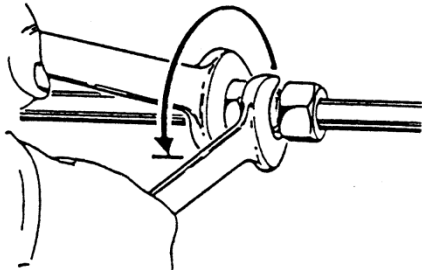
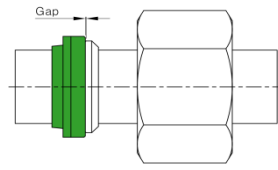
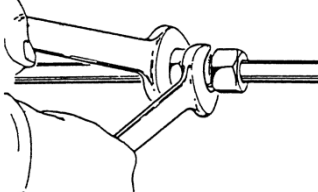
■ Assembly instruction for standpipe & cone fitting with O -Ring ·

|   |   |
|---|---|
| <p>1.0 Tighten the nut 1/4 turn with a wrench beyond application of increased effort is required.</p> <p>1.1 In difficult mounting situation on large tube sizes . final assembly must be completed in vice with the fitting body.</p> <p><b>Caution!</b><br/>Any deviating of tightening turns reduces the nominal pressure and the service life of the fitting. and may cause leakages or slip of the fitting.</p>  |   |
| <p>2.0 oil O. ring.</p> <p>Tighten the nut 1/4 turn with a wrench beyond application of increased effort is required.</p> <p>Hold fitting body firmly by means of wrench .</p> <p>2.1 In difficult mounting situation on large tube sizes . final assembly must be completed in vice with the fitting body.</p> <p><b>Caution!</b><br/>Any deviating of tightening turns reduces the nominal pressure and the service life of the fitting. and may cause leakages or slip of the fitting.</p> |  |

### HYQ Assembly Instruction [Direct Assembly]

■ Instruction for smaller size assembly

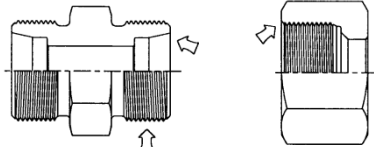
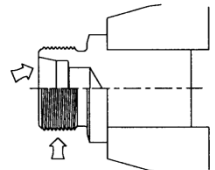
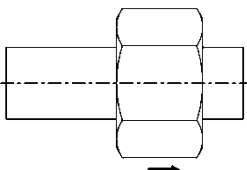
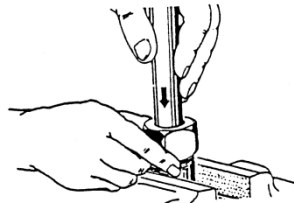
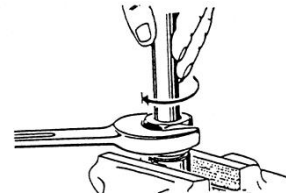
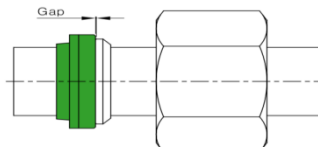
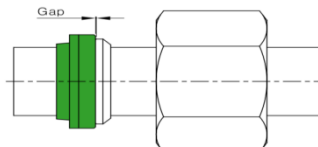
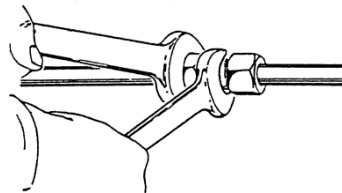
No effect on series Assembly  
 preliminary assembly of tube size 30. 35. 38 and 42mm shall be performed in vice.

|   |   |
|---|---|
| <p>1.0 The thread of fitting shall be lubricated.</p>   |     |
| <p>2.0 certainly push the tube on the inner part.<br/>         Loosen the nut in order to easily insert the tube.</p>                             |    |
| <p>3.0 Tighten the nut until the resistance is felt (about 1 turn to 1 1/2 turn)<br/>         spanner may be better to use in over 20mm O.D]</p>  |    |
| <p>4.0 Assembly verification<br/>         It shall be no space between sealing ring and retaining ring. It may allow the tolerance of 0.2mm .</p> |  |
| <p>5.0 Gap not closed<br/>         All Components including tube shall be verified regarding the space.</p>                                       |   |
| <p>6.0 Fitting shall be assembled until securely tighten with wrench<br/>         (without spanner) The body shall be surely fixed.</p>           |  |
| <p>7.0 securely tighten the fitting by minimum 1/6 turn (max. 1/4)</p>  |   |

■ **Assembly in vice**

Reliable method

This method is economical for small amount of assembly.

|   |   |
|---|---|
| <p>1.0 The thread of fitting shall be lubricated.</p>   |     |
| <p>2.0 using DJ which is preliminary mounting tool. It suggests that the body shall be mounted at once to prevent the leak. and all components shall be included.</p> |    |
| <p>3.0 push the nut to the end of tube.<br/>Benefits: Easy to insert the tube. especially for a large dimension .</p>   |    |
| <p>4.0 certainly push the tube on the inner part. Tighten the nut with hands.</p>   |  |
| <p>5.0 Tighten the nut until the resistance is felt (about 1 turn to 1 1/2 turn) spanner may be better to use in over 20mm O.D</p>                                    |  |
| <p>6.0 Assembly verification<br/>It shall be no space between sealing ring and retaining ring. It may allow the tolerance of 0.2mm .</p>                              |  |
| <p>7.0 Gap not closed<br/>Repeated assembly by increased torque. and verify the gap.</p>  |  |
| <p>8.0 Fitting shall be assembled until securely tighten with wrench (without spanner) The body shall be surely fixed.</p>  |  |