



ACCIAIO AL CARBONIO | CARBON STEEL

**RACCORDI A SALDARE ASME B16.9**  
**BUTT WELDING FITTINGS ASME B16.9**



**DIMENSIONI E SPESSORI SECONDO ASME B16.9 + B36.10 E ASME B36.19**  
**RANGE OF SIZES AND WALL THICKNESS**

| Ø nom.<br>tubo<br>Nom.<br>pipe size | Diam. esterno<br>Outside diam.<br>inch | Sch.<br>5<br>mm | Sch.<br>10<br>mm | Sch.<br>20<br>mm | Sch.<br>30<br>mm | STD<br>WT<br>inch | Sch.<br>40<br>mm | Sch.<br>60<br>mm | XS<br>inch | Sch.<br>80<br>mm | Sch.<br>100<br>mm | Sch.<br>120<br>mm | Sch.<br>140<br>mm | Sch.<br>160<br>mm | XXS   |       |       |       |       |       |       |       |       |       |       |       |       |       |   |   |
|-------------------------------------|--|-----------------|------------------|------------------|------------------|-------------------|------------------|------------------|------------|------------------|-------------------|-------------------|-------------------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|---|
|                                     |  |                 |                  |                  |                  |                   |                  |                  |            |                  |                   |                   |                   |                   | inch  | mm    |       |       |       |       |       |       |       |       |       |       |       |       |   |   |
| 1/2"                                | 0.840                                  | 21,34           | 0,065            | 1,65             | 0,083            | 2,11              | -                | -                | 0,109      | 2,77             | -                 | -                 | 0,147             | 3,73              | -     | -     | 0,187 | 4,75  | 0,294 | 7,47  |       |       |       |       |       |       |       |       |   |   |
| 3/4"                                | 1,050                                  | 26,67           | 0,065            | 1,65             | 0,083            | 2,11              | -                | -                | 0,113      | 2,87             | -                 | -                 | 0,154             | 3,91              | -     | -     | -     | 0,218 | 5,54  | 0,308 | 7,82  |       |       |       |       |       |       |       |   |   |
| 1"                                  | 1,315                                  | 33,40           | 0,065            | 1,65             | 0,109            | 2,77              | -                | -                | 0,133      | 3,38             | -                 | -                 | 0,179             | 4,55              | -     | -     | -     | 0,250 | 6,35  | 0,358 | 9,09  |       |       |       |       |       |       |       |   |   |
| 1 1/4"                              | 1,660                                  | 42,16           | 0,065            | 1,65             | 0,109            | 2,77              | -                | -                | 0,140      | 3,56             | -                 | -                 | 0,191             | 4,85              | -     | -     | -     | 0,250 | 6,55  | 0,352 | 9,70  |       |       |       |       |       |       |       |   |   |
| 1 1/2"                              | 1,900                                  | 48,26           | 0,065            | 1,65             | 0,109            | 2,77              | -                | -                | 0,145      | 3,68             | -                 | -                 | 0,200             | 5,08              | -     | -     | -     | 0,281 | 7,14  | 0,400 | 10,16 |       |       |       |       |       |       |       |   |   |
| 2"                                  | 2,375                                  | 60,33           | 0,065            | 1,65             | 0,109            | 2,77              | -                | -                | 0,154      | 3,91             | -                 | -                 | 0,218             | 5,54              | -     | -     | -     | 0,343 | 8,71  | 0,436 | 11,07 |       |       |       |       |       |       |       |   |   |
| 2 1/2"                              | 2,875                                  | 73,03           | 0,083            | 2,11             | 0,120            | 3,05              | -                | -                | 0,203      | 5,16             | -                 | -                 | 0,276             | 7,01              | -     | -     | -     | 0,375 | 9,53  | 0,552 | 14,02 |       |       |       |       |       |       |       |   |   |
| 3"                                  | 3,500                                  | 88,90           | 0,083            | 2,11             | 0,120            | 3,05              | -                | 3,96             | -          | 0,216            | 5,49              | -                 | -                 | 0,300             | 7,62  | -     | -     | -     | 0,438 | 11,13 | 0,600 | 15,24 |       |       |       |       |       |       |   |   |
| 3 1/2"                              | 4,000                                  | 101,60          | 0,083            | 2,11             | 0,120            | 3,05              | -                | -                | 0,226      | 5,74             | -                 | -                 | 0,318             | 8,08              | -     | -     | -     | -     | -     | 0,636 | 16,15 |       |       |       |       |       |       |       |   |   |
| 4"                                  | 4,500                                  | 114,30          | 0,083            | 2,11             | 0,120            | 3,05              | -                | 4,37             | -          | 0,237            | 6,02              | -                 | -                 | 0,337             | 8,56  | -     | -     | 0,438 | 11,13 | -     | 0,631 | 17,12 |       |       |       |       |       |       |   |   |
| 5"                                  | 5,563                                  | 141,30          | 0,109            | 2,77             | 0,134            | 3,40              | -                | -                | -          | 0,258            | 6,55              | -                 | -                 | 0,375             | 9,53  | -     | -     | 0,500 | 12,70 | -     | 0,625 | 15,88 |       |       |       |       |       |       |   |   |
| 6"                                  | 6,625                                  | 168,28          | 0,109            | 2,77             | 0,134            | 3,40              | -                | 4,78             | -          | 0,280            | 7,11              | -                 | -                 | 0,432             | 10,97 | -     | -     | 0,562 | 14,27 | -     | 0,718 | 18,24 |       |       |       |       |       |       |   |   |
| 8"                                  | 8,625                                  | 219,08          | 0,109            | 2,77             | 0,148            | 3,76              | 0,250            | 6,35             | 0,277      | 7,04             | 0,322             | 8,18              | 0,406             | 10,31             | 0,500 | 12,70 | 0,593 | 15,06 | 0,718 | 18,24 | 0,812 | 20,62 | 0,906 | 23,01 | 0,875 | 22,23 |       |       |   |   |
| 10"                                 | 10,750                                 | 273,05          | 0,134            | 3,40             | 0,165            | 4,19              | 0,250            | 6,35             | 0,307      | 7,80             | 0,365             | 9,27              | 0,500             | 12,70             | 0,500 | 12,70 | 0,593 | 15,06 | 0,718 | 18,24 | 0,843 | 21,41 | 1,000 | 25,40 | 1,125 | 28,58 |       |       |   |   |
| 12"                                 | 12,750                                 | 323,85          | 0,165            | 4,19             | 0,180            | 4,57              | 0,250            | 6,35             | 0,350      | 8,38             | 0,375             | 9,53              | 0,406             | 10,31             | 0,562 | 14,27 | 0,500 | 12,70 | 0,687 | 17,45 | 0,843 | 21,41 | 1,000 | 25,40 | 1,125 | 28,58 |       |       |   |   |
| 14"                                 | 14,000                                 | 355,60          | -                | -                | 0,250            | 6,35              | 0,312            | 7,92             | 0,375      | 9,53             | 0,375             | 9,53              | 0,438             | 11,13             | 0,593 | 15,06 | 0,500 | 12,70 | 0,750 | 19,05 | 0,937 | 23,80 | 1,093 | 27,76 | 1,250 | 31,75 | -     | -     |   |   |
| 16"                                 | 16,000                                 | 406,40          | -                | -                | 0,250            | 6,35              | 0,312            | 7,92             | 0,375      | 9,53             | 0,375             | 9,53              | 0,500             | 12,70             | 0,656 | 16,66 | 0,500 | 12,70 | 0,843 | 21,41 | 1,031 | 26,19 | 1,218 | 30,94 | 1,438 | 36,53 | 1,593 | 40,46 |   |   |
| 18"                                 | 18,000                                 | 457,20          | -                | -                | 0,250            | 6,35              | 0,312            | 7,92             | 0,438      | 11,13            | 0,375             | 9,53              | 0,562             | 14,27             | 0,750 | 19,05 | 0,500 | 12,70 | 0,937 | 23,80 | 1,156 | 29,36 | 1,375 | 34,93 | 1,562 | 39,67 | 1,781 | 45,24 |   |   |
| 20"                                 | 20,000                                 | 508,00          | -                | -                | 0,250            | 6,35              | 0,375            | 9,53             | 0,500      | 12,70            | 0,375             | 9,53              | 0,593             | 15,06             | 0,812 | 20,82 | 0,500 | 12,70 | 1,031 | 26,19 | 1,281 | 32,54 | 1,500 | 38,10 | 1,750 | 44,45 | 1,968 | 49,99 |   |   |
| 22"                                 | 22,000                                 | 558,80          | -                | -                | 0,250            | 6,35              | 0,375            | 9,53             | 0,500      | 12,70            | 0,375             | 9,53              | -                 | -                 | 0,875 | 22,22 | 0,500 | 12,70 | 1,125 | 28,57 | 1,375 | 34,92 | 1,525 | 41,27 | 1,875 | 47,62 | 2,125 | 53,97 |   |   |
| 24"                                 | 24,000                                 | 609,60          | -                | -                | 0,250            | 6,35              | 0,375            | 9,53             | 0,562      | 14,27            | 0,375             | 9,53              | 0,687             | 17,45             | 0,968 | 24,59 | 0,500 | 12,70 | 1,218 | 30,94 | 1,531 | 38,89 | 1,812 | 46,02 | 2,062 | 52,37 | 2,343 | 59,51 | - | - |
| 26"                                 | 26,000                                 | 660,40          | -                | -                | 0,312            | 7,92              | 0,500            | 12,70            | -          | 0,375            | 9,53              | -                 | -                 | -                 | -     | -     | 0,500 | 12,70 | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | - |   |
| 28"                                 | 28,000                                 | 711,20          | -                | -                | 0,312            | 7,92              | 0,500            | 12,70            | 0,625      | 15,87            | 0,375             | 9,53              | -                 | -                 | -     | -     | 0,500 | 12,70 | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | - |   |
| 30"                                 | 30,000                                 | 762,0           | -                | -                | 0,312            | 7,92              | 0,500            | 12,70            | 0,625      | 15,87            | 0,375             | 9,53              | -                 | -                 | -     | -     | 0,500 | 12,70 | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | - |   |
| 32"                                 | 32,000                                 | 812,80          | -                | -                | 0,312            | 7,92              | 0,500            | 12,70            | 0,625      | 15,87            | 0,375             | 9,53              | 0,688             | 17,47             | -     | -     | 0,500 | 12,70 | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | - |   |

Identical to "Extra Strong".

Identical to "Standard".

## INFORMAZIONI GENERALI

### GENERAL INFORMATION

I raccordi a saldare ASME B16.9 sono forniti in accordo alle seguenti norme:

*Intertubi's butt welding fittings are provided in according to the following standards:*

| Norma di raccordo<br>Fitting standard | Norma Standard     | Descrizione<br>Description   | Grado di acciaio<br>Steel grade  | Tipologia di raccordi / Fittings types  |
|---------------------------------------|--------------------|--|--|---|
| ASME B16.9                            | ASTM/ASME A/SA 234 | Raccordi per tubazioni in acciaio al carbonio o basso-legato per impiego in pressione a media-alta temperatura.<br><br><i>Piping fittings of wrought carbon steel and alloy steel for moderate and high temperature service.</i> | Acciai al carbonio:<br>WPB, WPC  | Curve/Elbows (SR, LR, R=3D)<br>Riduzioni concentriche/eccentriche<br><i>Concentric and eccentric reducer</i><br>Tee con derivazione uguale e ridotta<br><i>Equal reducing tee</i><br>Fondi/Caps |
|                                       |                    |  | Acciai legati<br>WP1,<br>WPS(CL.1,3),<br>WP9(CL.1,3),<br>WP11(CL.1,2,3),<br>WP12(CL.1,2)<br>WP22(CL.1,3), WP91 |   |
|                                       | ASTM/ASME A/SA 420 | Raccordi per tubazione in acciaio al carbonio o basso-legato per impiego in pressione a bassa temperatura.<br><br><i>Piping fittings of wrought carbon steel and alloy steel for low-temperature service</i>                     | WPL6   | --  |
| MSS SP75                              | ASTM A 860         | Raccordi a saldare di testa ad alto snervamento per il trasporto di fluidi combustibili.<br><br><i>Wrought high-strength ferritic steel butt-welding fittings.</i>   | WPHY42, WPHY52,<br>WPHY60, WPHY65,<br>WPHY70   | --  |

I raccordi vengono forniti con estremità smussate secondo ASME B16.25.

*Fittings are supplied with beveled ends according to ASME B16.25.*



Le tabelle riportate in seguito permettono un confronto tra i differenti gradi di acciaio secondo la composizione chimica e le proprietà meccaniche:

*Tables shown below allow a comparision between the different steel grades according to the chemical composition and mechanical properties:*

| Grado / Grade              |             | Composizione / Composition % |       |       |             |          |             |             |                    |
|----------------------------|-------------|------------------------------|-------|-------|-------------|----------|-------------|-------------|--------------------|
| Grade WP                   | C           | Mn                           | P     | S     | Si          | Ni       | Cr          | Mo          | Others             |
| WPB <sup>a</sup> B,C,D,E,F | 0.30 max    | 0.29 - 1.06                  | 0.050 | 0.058 | 0.10 min    | 0.40 max | 0.40 max    | 0.15 max    | Vanadium 0.08 max  |
| WPC <sup>c</sup> D,E,F     | 0.35 max    | 0.29 - 1.06                  | 0.050 | 0.058 | 0.10 min    | 0.40 max | 0.40 max    | 0.15 max    | Vanadium 0.08 max  |
| WP1                        | 0.28 max    | 0.30 - 0.90                  | 0.045 | 0.045 | 0.10 - 0.50 | ...      | ...         | 0.44 - 0.65 | ...                |
| WP12 CL1,<br>WP12 CL2      | 0.05 - 0.20 | 0.30 - 0.80                  | 0.045 | 0.045 | 0.60 max    | ...      | 0.80 - 1.25 | 0.44 - 0.65 | ...                |
| WP11 CL1                   | 0.05 - 0.15 | 0.30 - 0.60                  | 0.030 | 0.030 | 0.50 - 1.00 | ...      | 1.00 - 1.50 | 0.44 - 0.65 | ...                |
| WP11 CL2,<br>WP11 CL3      | 0.05 - 0.20 | 0.30 - 0.80                  | 0.040 | 0.040 | 0.50 - 1.00 | ...      | 1.00 - 1.50 | 0.44 - 0.65 | ...                |
| WP22 CL1,<br>WP22 CL3      | 0.05 - 0.15 | 0.30 - 0.60                  | 0.040 | 0.040 | 0.50 max    | ...      | 1.90 - 2.60 | 0.87 - 1.13 | ...                |
| WP5 CL1,<br>WP5 CL3        | 0.15 max    | 0.30 - 0.60                  | 0.040 | 0.030 | 0.50 max    | ...      | 4.0 - 6.0   | 0.44 - 0.65 | ...                |
| WP9 CL1                    | 0.15 max    | 0.30 - 0.60                  | 0.030 | 0.030 | 1.00 max    | ...      | 8.0 - 10.0  | 0.90 - 1.10 | ...                |
| WP91                       | 0.08 - 0.12 | 0.30 - 0.60                  | 0.020 | 0.010 | 0.20 - 0.50 | 0.40 max | 8.0 - 9.5   | 0.85 - 1.05 | Vanadium 0.18-0.25 |
| WPL6                       | 0.30 max    | 0.50 - 1.35                  | 0.035 | 0.040 | 0.15 - 0.40 | 0.40 max | 0.30        | 0.12        | Vanadium 0.08      |
| WPHY                       | 0.20 max    | 1.00 - 1.45                  | 0.030 | 0.010 | 0.15 - 0.40 | 0.50 max | 0.30        | 0.25        | Vanadium 0.10      |

NOTA 1 - Tutti i requisiti sono al massimo se non diversamente indicato.

NOTA 2 - Dove i puntini di sospensione (...) appare in questa tabella, non vi è alcun obbligo.

NOTA 1 - All requirements are maximim unless otherwise indicated.

NOTA 2 - Where an ellipsis (...) appears in this table, there is no requirement.

<sup>a</sup> Quando raccordi sono di costruzione saldata, il simbolo di grado e la marcatura sopra indicato deve essere completata con la lettera "W".

<sup>b</sup> Raccordi prodotti da barra o piastra può avere carbonio max 0,35.

<sup>c</sup> Raccordi a base di forgiate può avere carbonio max 0,35 e 0,35 silicio max sempre minimo.

<sup>d</sup> Per ogni riduzione dello 0,01% al di sotto del massimo di carbonio specificato, con un incremento del 0,06% manganese al di sopra del massimo specificato sarà consentito, fino ad un massimo di 1,35%.

<sup>e</sup> La somma di rame, nichel, cromo, molibdeno e non supera 1,00%.

<sup>f</sup> La somma di cromo e molibdeno non supera 0,32%.

<sup>a</sup> When fittings are of welded construction, the grade and marking symbol shown above shall be supplemented by the letter "W".

<sup>b</sup> Fittings made from bar or plate may have 0,35 max carbon.

<sup>c</sup> Fittings made from forgings may have 0,35 max carbon and 0,35 max silicon with no minimum.

<sup>d</sup> For each reduction of 0,01% below the specified carbon maximum, an increase of 0,06% manganese above the specified maximum will be permitted, up to a maximum of 1,35%.

<sup>e</sup> The sum of Copper, Nickel, chromium, and Molybdenum shall not exceed 1,00%.

<sup>f</sup> The sum of Chromium and Molybdenum shall not exceed 0,32%.

| GRADO E MARCATURA<br>GRADE AND MARKING SYMBOL  | WPB                    | WPC<br>WP11 CL2<br>WP12 CL2 | WP1                    | WP11 CL1<br>WP22 CL1<br>WP5 CL1<br>WP9 CL1 | WPL6                   | WP11 CL3<br>WP22 CL3<br>WP5 CL3<br>WP9 CL3 | WP91                    | WP12 CL1               |
|--|------------------------|-----------------------------|------------------------|--|------------------------|--|-------------------------|------------------------|
| <b>Tensile strength,<br/>range ksi [MPa]</b>   | 60 - 95<br>[415 - 655] | 70 - 95<br>[485 - 655]      | 55 - 85<br>[380 - 550] | 60 - 85<br>[415 - 585]                     | 60 - 85<br>[415 - 585] | 75 - 100<br>[520 - 690]                    | 90 - 120<br>[620 - 840] | 60 - 85<br>[415 - 585] |
| <b>Yield strength,<br/>min. ksi [MPa]<br/>(0,2% offset or 0,5% estension-un-<br/>der-load)</b> | 35 [240]               | 40 [275]                    | 30 [205]               | 30 [205]                                   | 35 [240]               | 45 [310]                                   | 60 [415]                | 32 [220]               |

|  |  | Elongation Requirements                  |            |              |            |               |            |
|--|--|--|------------|--------------|------------|---------------|------------|
|  |  | Grades                                   |            |              |            |               |            |
|  |  | All Grades except WPR,<br>WP91 and WP911 |            | WPR          |            | WP91<br>WP911 |            |
|  |  | Longitudinal                             | Transverse | Longitudinal | Transverse | Longitudinal  | Transverse |
| Elongation:  |  | 22                                       | 14         | 20           | ...        | 20            | 13         |
| Standard campione rotondo, o piccolo campione proporzionale, % min in 4D. Campione rettangolare per spessore della parete 5/16 in [7,94 mm] e oltre, e per tutte le taglie piccole testate nella sezione separata; % min in 2 pollici [50 mm].                                   |  | 30                                       | 20 ^       | 28           | ...        | ...           | ...        |
| Standard round specimen, or small proportional specimen, min % in 4D. Rectangular specimen for wall thickness 5/16 [7.94 mm] and over, and for all small sizes tested in full section; min % in 2 in. [50 mm].   |  | B  | B          | B            | ...        | ...           | ...        |
| Campione rettangolare per spessore della parete inferiore a 5/16 [7,94 mm] % min in 2 pollici [50 mm] (1/2 in. campione [12,7 mm] larghezza).<br>Rectangular specimen for wall thickness less than 5/16 in. [7.94 mm]; min % in 2 in. [50 mm] (1/2 in. [12.7 mm] wide specimen). |  |  |            |              |            |               |            |

<sup>A</sup> Raccordi WPB e WPC fabbricati dalla piastra devono avere un allungamento minimo del 17%

<sup>B</sup> Per ogni 1/32 pollici [0,79 mm] diminuzione dello spessore della parete al di sotto di 5/16 in [7,94 mm], una detrazione del 1,5% per il longitudinale e trasversale per il 1,0% dei valori indicati sopra è consentita. La seguente tabella fornisce il valore minimo per parete diversi spessori.

<sup>A</sup> WPB and WPC fittings manufactured from plate shall have a minimum elongation of 17%

<sup>B</sup> For each 1/32 in. [0,79 mm] decrease in wall thickness below 5/16 in. [7,94 mm], a deduction of 1,5% for longitudinal and 1,0% for transverse from the values shown above is permitted. The following table gives the minimum value for various wall thicknesses.

| Wall Thickness | Grades |      |              |            |              |            |
|----------------|--------|------|--------------|------------|--------------|------------|
|                | in.    | [mm] | Longitudinal | Transverse | Longitudinal | Transverse |
| 5/16 (0,312)   | 7.94   | 30.0 | 20.0         | 30.0       | 16.5         | 20         |
| 0/32 (0,281)   | 7.14   | 28.5 | 19.0         | 28.5       | 15.5         | 19         |
| 1/4 (0,250)    | 6.35   | 27.0 | 18.0         | 27.0       | 14.5         | 18         |
| 7/32 (0,219)   | 5.56   | 25.5 | ...          | ...        | ...          | 17         |
| 3/16 (0,188)   | 4.76   | 24.0 | ...          | ...        | ...          | 16         |
| 5/32 (0,156)   | 3.97   | 22.5 | ...          | ...        | ...          | 15         |
| 1/8 (0,125)    | 3.17   | 21.0 | ...          | ...        | ...          | 14         |
| 3/32 (0,094)   | 2.38   | 19.5 | ...          | ...        | ...          | 13         |
| 1/10 (0,062)   | 1.59   | 18.0 | ...          | ...        | ...          | 12         |

| Property   | Grado / Grade             |                           |                           |                            |                            |                            |
|--|---------------------------|---------------------------|---------------------------|----------------------------|----------------------------|----------------------------|
|  | WPHY 42                   | WPHY 46                   | WPHY 52                   | WPHY 60                    | WPHY 65                    | WPHY 70                    |
| Yield strength min ^0.2% offset, ksi [MPa]                     | 42[290]<br>60[415]        | 46[315]<br>63[435]        | 52[360]<br>66[455]        | 60[415]<br>75[515]         | 65[450]<br>77[530]         | 70[485]<br>80[550]         |
| Tensile strength, ksi [MPa]                                    | -85[585]<br>25<br>32<br>B | -88[605]<br>25<br>32<br>B | -91[625]<br>25<br>32<br>B | -100[690]<br>20<br>28<br>B | -102[705]<br>20<br>28<br>B | -105[725]<br>20<br>28<br>B |
| Toughness:<br>C.energy absorption ^, measured at -50°F (-46°C) |                           |                           |                           |                            |                            |                            |



**LE TOLLERANZE ASME B16.9 SONO RIEPILOGATE NELLE SEGUENTI TABELLE:**

**TOLERANCES ASME B16.9 ARE SUMMARIZED IN THE FOLLOWING TABLES:**

| Tutti i raccordi [Note (1) e (2)]<br>All Fittings [Notes (1) and (2)] |          |   |  | Dimensioni dal centro all'estremità<br>Center-to-End dimensions  |   |  |  | Spessore<br>Thickness         |
|---|----------|---|--|--|---|--|--|-------------------------------|
| Diametro nominale del tubo (NPS)<br>Nominal Pipe Size (NPS)           | DN       | Diametro esterno allo smusso<br>Outside Diameter at Bevel D* <sup>1</sup> | Diametro interno all'estremità<br>Inside Diameter at End* <sup>2</sup> | 90° e 45° curve long e short radius e tee<br>90-deg and 45-deg long and short radius Elbows and tees<br>A, B, C, M | Curve raggio 3D<br>3D Radius<br>Elbows A, B | Lunghezza generale delle riduzioni e delle cartelle<br>Overall Length of reducers and lap joint stub ends F, H | Lunghezza generale dei fondi<br>Overall length of caps E | Alle estremità<br>At the ends |
| 1/2 to 2 1/2  | 15-65    | +1.6, -0.8  | 0.8  | 2  | 3   | 2  | 3  | -12,5%                        |
| 3 to 3 1/2  | 80-90    | 1.6   | 1.6  | 2  | 3   | 2  | 3  |                               |
| 4   | 100      | 1.6   | 1.6  | 2  | 3   | 2  | 3  |                               |
| 5 to 8  | 125-200  | +2.4, -1.6  | 1.6  | 2  | 3   | 2  | 6  |                               |
| 10 to 18  | 250-450  | +4.0, -3.2  | 3.2  | 2  | 3   | 2  | 6  |                               |
| 20 to 24  | 500-600  | +6.4, -4.8  | 4.8  | 2  | 3   | 2  | 6  |                               |
| 26 to 30  | 650-750  | +6.4, -4.8  | 4.8  | 3  | 6   | 5  | 10   |                               |
| 32 to 48  | 800-1200 | +6.4, -4.8  | 4.8  | 5  | 6   | 5  | 10   |                               |

#### NOTE GENERALI / GENERAL NOTES

(a) Tutte le dimensioni sono in millimetri / (a) All dimensions are in millimeters

(b) Le tolleranze sono uguali più o meno eccetto le note / (b) Tolerances are equal plus and minus except as noted

#### NOTES

(1) Il diametro interno e nominale della parete dello spessore alle estremità deve essere specificato dall'acquirente

(1) The inside diameter and the nominal wall thickness at ends are to be specified by the purchaser

(2) Il minimo spessore della parete del 87,5% è applicato a meno che l'acquirente specifichi una differente tolleranza della parete dello spessore

(2) A minimum wall thickness of 87.5% is applied unless the purchaser specifies a different wall thickness tolerance

(3) L'ovalità è la somma dei valori assoluti delle tolleranze minime e massime

(3) Out-of-round is the sum of absolute values of plus and minus tolerances

(4) Questa tolleranza non può essere applicata ad aree localizzate dei raccordi formati dove è necessario un aumento per soddisfare i requisiti di progetto

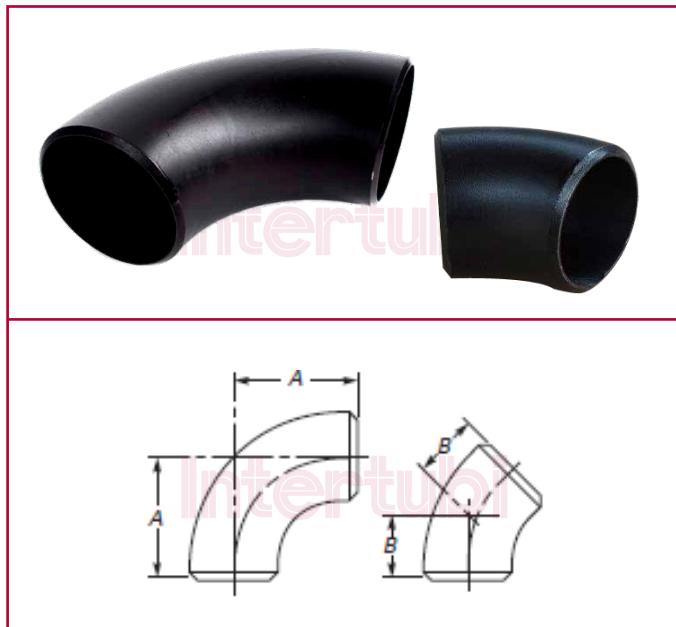
(4) This tolerance may not be applied in localized areas of fittings formed where increased wall thickness is required to meet design requirements

(5) Se non diversamente specificato dall'acquirente queste tolleranze applicate al diametro interno nominale, corrispondono alla differenza tra il diametro esterno nominale e il doppio spessore della parete nominale

(5) Unless otherwise specified by the purchaser, these tolerances applied to the nominal inside diameter, correspond to the difference between the nominal outside diameter and twice the nominal wall thickness

\*1(NOTES 3 AND 4)

\*2(NOTES 3 AND 5)



**CURVE 90°**  
**RAGGIO= 1,5 D DIMA 3**  
 SENZA SALDATURA ASME B16.9

**LONG RADIUS**  
**RADIUS = 1.5 DIMA 3**  
 SEAMLESS ELBOWS

| D.E. POLICI<br>D.E. INCHES | Ø EST. MM X SPESS. MM<br>OUTS. DIAM. MM X<br>THICKN MM | SCH | CURVE / ELBOWS |       | PESO TEORICO<br>THEOREICAL<br>WEIGHT |
|----------------------------|--|-----|----------------|-------|--------------------------------------|
|                            |  |     | 90° A          | 45° B |                                      |
| 1/2"                       | 21,3 x 2,77  | Std | 38*            | 16    | 0,08                                 |
|                            | 21,3 x 3,73  | Xs  |                |       | 0,10                                 |
|                            | 21,3 x 4,75  | 160 |                |       | 0,12                                 |
|                            | 21,3 x 7,47  | XXs |                |       | 0,15                                 |
| 3/4"                       | 26,7 x 2,87  | Std | 38*            | 19    | 0,09                                 |
|                            | 26,7 x 3,91  | Xs  |                |       | 0,11                                 |
|                            | 26,7 x 5,54  | 160 |                |       | 0,12                                 |
|                            | 26,7 x 7,82  | XXs |                |       | 0,17                                 |
| 1"                         | 33,4 x 3,38  | Std | 38*            | 22    | 0,15                                 |
|                            | 33,4 x 4,55  | Xs  |                |       | 0,20                                 |
|                            | 33,4 x 6,35  | 160 |                |       | 0,26                                 |
|                            | 33,4 x 9,09  | XXs |                |       | 0,33                                 |
| 1 1/4"                     | 42,4 x 3,56  | Std | 48             | 25    | 0,26                                 |
|                            | 42,4 x 4,85  | Xs  |                |       | 0,34                                 |
| 1 1/2"                     | 48,3 x 3,68  | Std | 57             | 29    | 0,37                                 |
|                            | 48,3 x 5,08  | Xs  |                |       | 0,49                                 |
|                            | 48,3 x 7,14  | 160 |                |       | 0,65                                 |
|                            | 48,3 x 10,16   | XXs |                |       | 0,86                                 |
| 2"                         | 60,3 x 3,91  | Std | 76             | 35    | 0,65                                 |
|                            | 60,3 x 5,54  | Xs  |                |       | 0,90                                 |
|                            | 60,3 x 8,71  | 160 |                |       | 1,33                                 |
|                            | 60,3 x 11,07   | XXs |                |       | 1,61                                 |
| 2 1/2"                     | 73,1 x 5,16  | Std | 95             | 44    | 1,29                                 |
|                            | 73,1 x 7,01  | Xs  |                |       | 1,71                                 |
|                            | 73,1 x 9,53  | 160 |                |       | 2,23                                 |
|                            | 73,1 x 14,02   | XXs |                |       | 3,06                                 |

| D.E. POLICI<br>D.E. INCHES | Ø EST. MM X SPESS. MM<br>OUTS. DIAM. MM X<br>THICKN MM | SCH | CURVE / ELBOWS |       | PESO TEORICO<br>THEOREICAL<br>WEIGHT |
|----------------------------|--|-----|----------------|-------|--------------------------------------|
|                            |  |     | 90° A          | 45° B |                                      |
| 3"                         | 88,9 x 3,96  | 20  | 114            | 51    | 1,50                                 |
|                            | 88,9 x 5,49  | Std |                |       | 2,03                                 |
|                            | 88,9 x 7,62  | Xs  |                |       | 2,74                                 |
|                            | 88,9 x 11,13   | 160 |                |       | 3,83                                 |
| 3 1/2"                     | 88,9 x 15,24   | XXs | 133            | 57    | 4,97                                 |
|                            | 101,6 x 5,74   | Std |                |       | 2,85                                 |
|                            | 101,6 x 8,08   | Xs  |                |       | 3,91                                 |
|                            | 114,3 x 4,37   | 20  |                |       | 2,92                                 |
| 4"                         | 114,3 x 6,02   | Std | 152            | 64    | 3,85                                 |
|                            | 114,3 x 8,56   | Xs  |                |       | 5,35                                 |
|                            | 114,3 x 11,13  | 120 |                |       | 6,78                                 |
|                            | 114,3 x 13,49  | 160 |                |       | 8,03                                 |
|                            | 114,3 x 17,12  | XXs |                |       | 9,82                                 |
|                            | 141,3 x 6,55   | Std |                |       | 6,52                                 |
| 5"                         | 141,3 x 9,53   | Xs  | 190            | 79    | 9,26                                 |
|                            | 141,3 x 12,70  | 120 |                |       | 12,00                                |
|                            | 141,3 x 15,88  | 160 |                |       | 14,70                                |
|                            | 141,3 x 19,05  | XXs |                |       | 17,20                                |
|                            | 168,3 x 4,76   | 20  | 229            | 95    | 6,50                                 |
| 6"                         | 168,3 x 7,11   | Std |                |       | 10,20                                |
|                            | 168,3 x 10,97  | Xs  |                |       | 15,30                                |
|                            | 168,3 x 14,27  | 120 |                |       | 19,50                                |
|                            | 168,3 x 18,24  | 160 |                |       | 24,30                                |
|                            | 168,3 x 21,95  | XXs |                |       | 28,50                                |

\* SU RICHIESTA 28 / ON REQUEST 28

| D.E. POLICI<br>D.E. INCHES | Ø EST. MM X SPESS. MM<br>OUTS. DIAM. MM X<br>THICKN MM | SCH         | CURVE / ELBOWS |       | PESO TEORICO<br>THEOREICAL<br>WEIGHT |
|----------------------------|--|-------------|----------------|-------|--------------------------------------|
|                            |  |             | 90° A          | 45° B |                                      |
| 8"                         | 219,1 x 6,35   | 20          | 305            | 127   | 16,00                                |
|                            | 219,1 x 7,04   | 30          |                |       | 17,60                                |
|                            | 219,1 x 8,18   | Std         |                |       | 20,40                                |
|                            | 219,1 x 10,31  | 60          |                |       | 25,40                                |
|                            | 219,1 x 12,70  | Xs          |                |       | 30,90                                |
|                            | 219,1 x **15,06  | 100         |                |       | ** 43,30                             |
|                            | 219,1 x 18,24  | 120         |                |       | 43,30                                |
|                            | 219,1 x **20,62  | 140         |                |       | ** 53,30                             |
|                            | 219,1 x **22,23  | XXs         |                |       | ** 53,30                             |
|                            | 219,1 x 23,01  | 160         |                |       | 53,30                                |
| 10"                        | 273,0 x 6,35   | 20          | 381            | 159   | 24,99                                |
|                            | 273,0 x 7,80   | 30          |                |       | 30,53                                |
|                            | 273,0 x 9,27   | Std         |                |       | 36,08                                |
|                            | 273,0 x 12,70  | Xs          |                |       | 48,79                                |
|                            | 273,0 x 15,06  | 80          |                |       | 57,44                                |
|                            | 273,0 x **18,24  | 100         |                |       | **79,60                              |
|                            | 273,0 x 21,41  | 120         |                |       | 79,60                                |
|                            | 273,0 x **25,40  | 140/<br>XXs |                |       | **103,10                             |
|                            | 273,0 x 28,58  | 160         |                |       | 103,10                               |
|                            |  |             |                |       |                                      |
| 12"                        | 323,9 x 6,35   | 20          | 457            | 190   | 35,70                                |
|                            | 323,9 x 8,38   | 30          |                |       | 46,80                                |
|                            | 323,9 x 9,53   | Std         |                |       | 53,00                                |
|                            | 323,9 x 10,31  | 40          |                |       | 57,30                                |
|                            | 323,9 x 12,70  | Xs          |                |       | 70,00                                |
|                            | 323,9 x 14,27  | 60          |                |       | 78,20                                |
|                            | 323,9 x 17,45  | 80          |                |       | 94,80                                |
|                            | 323,9 x **21,41  | 100         |                |       | **134,00                             |
|                            | 323,9 x 25,40  | 120/<br>XXs |                |       | 134,00                               |
|                            | 323,9 x **28,58  | 140         |                |       | **171,00                             |
|                            | 323,9 x 33,32  | 160         |                |       | 171,00                               |
| 14"                        | 355,6 x 6,35   | 10          | 533            | 222   | 45,80                                |
|                            | 355,6 x 7,92   | 20          |                |       | 56,90                                |
|                            | 355,6 x 9,53   | Std         |                |       | 68,10                                |
|                            | 355,6 x **11,13  | 40          |                |       | **90,00                              |
|                            | 355,6 x 12,70  | Xs          |                |       | 90,00                                |
| 14"                        | 355,6 x 19,05  | 80          | 533            | 222   | 132,00                               |
|                            | 355,6 x **23,80  | 100         |                |       | **187,91                             |
|                            | 355,6 x 27,76  | 120         |                |       | 187,91                               |
|                            | 355,6 x **31,75  | 140         |                |       | **235,86                             |
|                            | 355,6 x 35,71  | 160         |                |       | 235,86                               |

| D.E. POLICI<br>D.E. INCHES | Ø EST. MM X SPESS. MM<br>OUTS. DIAM. MM X<br>THICKN MM | SCH | CURVE / ELBOWS |       | PESO TEORICO<br>THEOREICAL<br>WEIGHT |
|----------------------------|--|-----|----------------|-------|--------------------------------------|
|                            |  |     | 90° A          | 45° B |                                      |
| 16"                        | 406,4 x **6,35   | 10  | 610            | 254   | 74,58                                |
|                            | 406,4 x 7,92   | 20  |                |       | 74,58                                |
|                            | 406,4 x 9,53   | Std |                |       | 89,20                                |
|                            | 406,4 x 12,70  | Xs  |                |       | 118,00                               |
|                            | 406,4 x 16,66  | 60  |                |       | 153,00                               |
|                            | 406,4 x 21,41  | 80  |                |       | 195,00                               |
|                            | 406,4 x **26,19  | 100 |                |       | 274,51                               |
|                            | 406,4 x 30,94  | 120 |                |       | 274,51                               |
|                            | 406,4 x **36,53  | 140 |                |       | 350,00                               |
|                            | 406,4 x 40,46  | 160 |                |       | 350,00                               |
| 18"                        | 457,0 x **6,35   | 10  | 686            | 286   | ** 113,00                            |
|                            | 457,0 x **7,92   | 20  |                |       | ** 113,00                            |
|                            | 457,0 x 9,53   | Std |                |       | 113,00                               |
|                            | 457,0 x **11,13  | 30  |                |       | ** 150,00                            |
|                            | 457,0 x 12,70  | Xs  |                |       | 150,00                               |
|                            | 457,0 x 14,27  | 40  |                |       | 168,00                               |
|                            | 457,0 x 19,05  | 60  |                |       | 197,15                               |
|                            | 457,0 x 23,80  | 80  |                |       | 243,63                               |
| 20"                        | 508,0 x **6,35   | 10  | 762            | 318   | ** 140,00                            |
|                            | 508,0 x 9,53   | Std |                |       | 140,00                               |
|                            | 508,0 x 12,70  | Xs  |                |       | 186,00                               |
|                            | 508,0 x 15,06  | 40  |                |       | 219,00                               |
|                            | 508,0 x **20,62  | 60  |                |       | ** 372,00                            |
|                            | 508,0 x 26,19  | 80  |                |       | 372,00                               |
| 22"                        | 558,8 x 9,53   | Std | 838            | 343   | 170,00                               |
|                            | 558,8 x 12,70  | Xs  |                |       | 225,00                               |
|                            | 609,6 x **6,35   | 10  |                |       | ** 202,00                            |
| 24"                        | 609,6 x 9,53   | Std | 914            | 381   | 202,00                               |
|                            | 609,6 x 12,70  | Xs  |                |       | 268,00                               |
|                            | 609,6 x **14,27  | 30  |                |       | ** 366,00                            |
|                            | 609,6 x 17,48  | 40  |                |       | 366,00                               |
|                            | 609,6 x 24,59  | 60  |                |       | 634,00                               |
|                            | 609,6 x 30,94  | 80  |                |       | 634,00                               |
| 28"                        | 711,0 x 7,92   | 10  | 1067           | 438   | 230,00                               |
|                            | 711,0 x 9,53   | Std |                |       | 276,00                               |
|                            | 711,0 x 12,70  | Xs  |                |       | 366,00                               |
| 30"                        | 762,0 x 9,53   | Std | 1143           | 470   | 317,00                               |
|                            | 762,0 x 12,70  | Xs  |                |       | 421,00                               |
| 32"                        | 812,8 x 9,53   | Std | 1219           | 502   | 361,00                               |
|                            | 812,8 x 12,70  | Xs  |                |       | 472,00                               |

\*\* TAPERED FROM HIGHER SCHEDULE

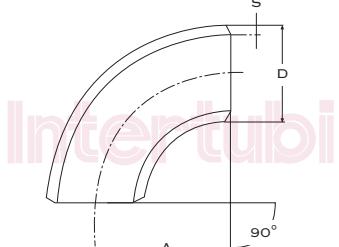


**CURVE 90°**  
**RAGGIO=1D DIMA 2**  
 SENZA SALDATURA ASME B16.9

**SHORT RADIUS**  
**RADIUS=1 DIMA 2**  
 SEAMLESS ELBOWS ASME B16.9

| D.E. POLICI<br>D.E. INCHES | Ø EST. MM X SPESS. MM<br>OUTS. DIAM. MM X<br>THICKN MM | SCH | RAGGIO<br>radius | H   | PESO TEORICO<br>THEOREICAL<br>WEIGHT KG |
|----------------------------|--|-----|------------------|-----|---|
| 11/4"                      | 42,4 x 3,56  | Std | 32               | 52  | 0,17                                    |
| 11/2"                      | 48,3 x 3,68  | Std | 38               | 62  | 0,24                                    |
| 2"                         | 60,3 x 3,91  | Std | 51               | 81  | 0,44                                    |
|                            | 60,3 x 5,54  | Xs  |                  |     | 0,60                                    |
|                            | 60,3 x 8,71  | 160 |                  |     | 0,89                                    |
| 2 1/2"                     | 73,1 x 5,16  | Std | 64               | 100 | 0,86                                    |
| 3"                         | 88,9 x 5,49  | Std | 76               | 121 | 1,35                                    |
|                            | 88,9 x 7,62  | Xs  |                  |     | 1,83                                    |
|                            | 88,9 x 11,13   | 160 |                  |     | 2,55                                    |
| 4"                         | 114,3 x 6,02   | Std | 102              | 159 | 2,57                                    |
|                            | 114,3 x 8,56   | Xs  |                  |     | 3,55                                    |
|                            | 114,3 x 11,13  | 120 |                  |     | 4,54                                    |
|                            | 114,3 x 13,49  | 160 |                  |     | 5,37                                    |
| 5"                         | 141,3 x 6,55   | Std | 127              | 197 | 4,34                                    |
|                            | 141,3 x 9,53   | Xs  |                  |     | 6,17                                    |
| 6"                         | 168,3 x 7,11   | Std | 152              | 237 | 4,77                                    |
|                            | 168,3 x 10,97  | Xs  |                  |     | 10,20                                   |
|                            | 168,3 x 14,27  | 120 |                  |     | 12,95                                   |
|                            | 168,3 x 18,24  | 160 |                  |     | 16,12                                   |

| D.E. POLICI<br>D.E. INCHES | Ø EST. MM X SPESS. MM<br>OUTS. DIAM. MM X<br>THICKN MM | SCH | RAGGIO<br>RADIUS | H   | PESO TEORICO<br>THEOREICAL<br>WEIGHT KG |
|----------------------------|--|-----|------------------|-----|---|
| 8"                         | 219,1 x 6,35   | 20  | 203              | 313 | 10,60                                   |
|                            | 219,1 x 7,04   | 30  |                  |     | 11,70                                   |
|                            | 219,1 x 8,18   | Std |                  |     | 13,60                                   |
|                            | 219,1 x 12,70  | Xs  |                  |     | 20,60                                   |
| 10"                        | 273,0 x 6,35   | 20  | 254              | 391 | 16,70                                   |
|                            | 273,0 x 7,80   | 30  |                  |     | 20,30                                   |
|                            | 273,0 x 9,27   | Std |                  |     | 24,10                                   |
|                            | 273,0 x 12,70  | Xs  |                  |     | 32,50                                   |
| 12"                        | 323,9 x 6,35   | 20  | 305              | 467 | 23,80                                   |
|                            | 323,9 x 8,38   | 30  |                  |     | 31,20                                   |
|                            | 323,9 x 9,53   | Std |                  |     | 35,30                                   |
|                            | 323,9 x 10,31  | 40  |                  |     | 38,20                                   |
|                            | 323,9 x 12,70  | Xs  |                  |     | 46,70                                   |
| 14"                        | 355,6 x 6,35   | 10  | 356              | 533 | 30,60                                   |
|                            | 355,6 x 7,92   | 20  |                  |     | 37,90                                   |
|                            | 355,6 x 9,53   | Std |                  |     | 45,40                                   |
|                            | 355,6 x 12,70  | Xs  |                  |     | 80,00                                   |
| 16"                        | 406,4 x 6,35   | 10  | 406              | 610 | 40,00                                   |
|                            | 406,4 x 7,92   | 20  |                  |     | 50,00                                   |
|                            | 406,4 x 9,53   | Std |                  |     | 59,50                                   |
| 24"                        | 609,4 x **6,35   | 10  | 610              | 914 | 90,50                                   |
|                            | 609,6 x 9,53   | Std |                  |     | 135,00                                  |
|                            | 609,6 x 12,70  | Xs  |                  |     | 179,00                                  |



| D.E. POLICI<br>D.E. INCHES | Ø EST. MM X SPESS. MM<br>OUTS. DIAM. MM X<br>THICKN MM | SCH | RAGGIO<br>RADIUS | H   | PESO TEORICO<br>THEOREICAL<br>WEIGHT KG |
|----------------------------|--|-----|------------------|-----|---|
| 1"                         | 33,4 x 3,38  | Std | 72,5             | 89  | 0,28                                    |
|                            | 33,4 x 4,55  | Xs  |                  |     | 0,37                                    |
| 1 1/4"                     | 42,4 x 3,56  | Std | 92,5             | 114 | 0,50                                    |
|                            | 42,4 x 4,85  | Xs  |                  |     | 0,65                                    |
| 1 1/2"                     | 48,3 x 3,68  | Std | 107,5            | 132 | 0,68                                    |
|                            | 48,3 x 5,08  | Xs  |                  |     | 0,91                                    |
| 2"                         | 60,3 x 3,91  | Std | 135              | 165 | 1,15                                    |
|                            | 60,3 x 5,54  | Xs  |                  |     | 1,59                                    |
| 3"                         | 88,9 x 3,96  | 20  | 205              | 250 | 2,67                                    |
|                            | 88,9 x 5,49  | Std |                  |     | 3,64                                    |
|                            | 88,9 x 7,62  | Xs  |                  |     | 4,92                                    |
| 3 1/2"                     | 101,6 x 5,74   | Std | 237              | 288 | 5,05                                    |
|                            | 101,6 x 8,08   | Xs  |                  |     | 6,94                                    |
| 4"                         | 114,3 x 4,37   | 20  | 270              | 327 | 5,02                                    |
|                            | 114,3 x 6,02   | Std |                  |     | 6,82                                    |
|                            | 114,3 x 8,56   | Xs  |                  |     | 9,47                                    |
| 6"                         | 168,3 x 4,76   | 20  | 390              | 474 | 11,81                                   |
|                            | 168,3 x 7,11   | Std |                  |     | 17,31                                   |
|                            | 168,3 x 10,97  | Xs  |                  |     | 26,07                                   |

### CURVA SENZA SALDATURA

R=2,5 D DIMA 5

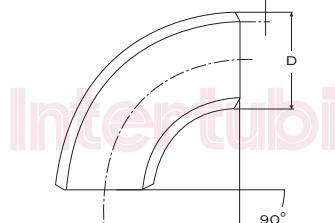
ASME B16.9

R=2.5 D DIMA 5

SEAMLESS ELBOWS

ASME B16.9

| D.E. POLICI<br>D.E. INCHES | Ø EST. MM X SPESS. MM<br>OUTS. DIAM. MM X<br>THICKN MM | SCH | RAGGIO<br>RADIUS | H    | PESO TEORICO<br>THEOREICAL<br>WEIGHT KG |
|----------------------------|--|-----|------------------|------|---|
| 8"                         | 219,1 x 6,35   | 20  | 510              | 619  | 26,69                                   |
|                            | 219,1 x 7,04   | 30  |                  |      | 29,49                                   |
|                            | 219,1 x 8,18   | Std |                  |      | 34,09                                   |
|                            | 219,1 x 10,31  | 60  |                  |      | 42,53                                   |
|                            | 219,1 x 12,70  | Xs  |                  |      | 51,79                                   |
| 10"                        | 273,0 x 6,35   | 20  | 650              | 786  | 42,64                                   |
|                            | 273,0 x 7,80   | 30  |                  |      | 52,09                                   |
|                            | 273,0 x 9,27   | Std |                  |      | 61,56                                   |
|                            | 273,0 x 12,70  | Xs  |                  |      | 83,24                                   |
| 12"                        | 323,9 x 6,35   | 20  | 775              | 937  | 60,54                                   |
|                            | 323,9 x 8,38   | 30  |                  |      | 79,38                                   |
|                            | 323,9 x 9,53   | Std |                  |      | 89,94                                   |
|                            | 323,9 x 10,31  | 40  |                  |      | 97,06                                   |
|                            | 323,9 x 12,70  | Xs  |                  |      | 118,65                                  |
| 14"                        | 355,6 x 6,35   | 10  | 850              | 1028 | 73,02                                   |
|                            | 355,6 x 7,92   | 20  |                  |      | 90,67                                   |
|                            | 355,6 x 9,53   | Std |                  |      | 108,60                                  |
|                            | 355,6 x 11,13  | 40  |                  |      | 126,24                                  |
|                            | 355,6 x 12,70  | Xs  |                  |      | 143,39                                  |
| 16"                        | 406,4 x 6,35   | 10  | 406              | 610  | 95,46                                   |
|                            | 406,4 x 7,92   | 20  |                  |      | 118,59                                  |
|                            | 406,4 x 9,53   | Std |                  |      | 142,12                                  |
|                            | 406,4 x 12,70  | Xs  |                  |      | 187,88                                  |



**CURVA SENZA SALDATURA  
RAGGIO= 3 D DIMA 6**

ASME B16.9

**SEAMLESS ELBOWS  
RADIUS= 3 D DIMA 6**

ASME B16.9

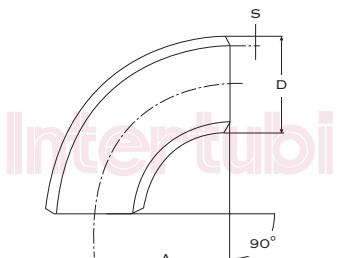
| D.E.<br>POLlici<br>D.E.<br>INCHES | Ø EST. MM X SPESS. MM<br>OUTS. DIAM. MM X<br>THICKN MM | SCH | RAGGIO<br>RADIUS | H   | PESO TEORICO<br>THEOREICAL<br>WEIGHT KG |
|-----------------------------------|--|-----|------------------|-----|---|
| 2"                                | 60,3 x 3,91  | Std | 152              | 182 | 1,30                                    |
|                                   | 60,3 x 5,54  | Xs  |                  |     | 1,79                                    |
| 3"                                | 88,9 x 3,96  | 20  | 229              | 278 | 2,98                                    |
|                                   | 88,9 x 5,49  | Std |                  |     | 4,06                                    |
|                                   | 88,9 x 7,62  | Xs  |                  |     | 5,49                                    |
| 4"                                | 114,3 x 4,37   | 20  | 305              | 352 | 5,68                                    |
|                                   | 114,3 x 6,02   | Std |                  |     | 7,70                                    |
|                                   | 114,3 x 8,56   | Xs  |                  |     | 10,69                                   |
| 6"                                | 168,3 x 4,78   | 20  | 457              | 541 | 13,84                                   |
|                                   | 168,3 x 7,11   | Std |                  |     | 20,29                                   |
|                                   | 168,3 x 10,97  | Xs  |                  |     | 30,55                                   |
| 8"                                | 219,1 x 6,35   | 20  | 610              | 720 | 31,92                                   |
|                                   | 219,1 x 7,04   | 30  |                  |     | 35,28                                   |
|                                   | 219,1 x 8,18   | Std |                  |     | 40,77                                   |
|                                   | 219,1 x 10,31  | 60  |                  |     | 50,87                                   |
|                                   | 219,1 x 12,70  | Xs  |                  |     | 61,94                                   |

| D.E.<br>POLlici<br>D.E.<br>INCHES | Ø EST. MM X SPESS. MM<br>OUTS. DIAM. MM X<br>THICKN MM | SCH | RAGGIO<br>RADIUS | H    | PESO TEORICO<br>THEOREICAL<br>WEIGHT KG |
|-----------------------------------|--|-----|------------------|------|---|
| 10"                               | 273,0 x 6,35   | 20  | 762              | 898  | 49,98                                   |
|                                   | 273,0 x 7,80   | 30  |                  |      | 61,06                                   |
|                                   | 273,0 x 9,27   | Std |                  |      | 72,17                                   |
|                                   | 273,0 x 12,70  | Xs  |                  |      | 97,58                                   |
| 12"                               | 323,9 x 6,35   | 20  | 914              | 1078 | 71,40                                   |
|                                   | 323,9 x 8,38   | 30  |                  |      | 93,62                                   |
|                                   | 323,9 x 9,53   | Std |                  |      | 106,08                                  |
|                                   | 323,9 x 10,31  | 40  |                  |      | 114,47                                  |
|                                   | 323,9 x 12,70  | Xs  |                  |      | 139,94                                  |
| 14"                               | 355,6 x 6,35   | 10  | 1067             | 1245 | 91,67                                   |
|                                   | 355,6 x 7,92   | 20  |                  |      | 113,82                                  |
|                                   | 355,6 x 9,53   | Std |                  |      | 136,32                                  |
|                                   | 355,6 x 11,13  | 40  |                  |      | 158,47                                  |
| 16"                               | 355,6 x 12,70  | Xs  |                  |      | 180,00                                  |
|                                   | 406,4 x 6,35   | 10  | 1219             | 1422 | 119,98                                  |
|                                   | 406,4 x 7,92   | 20  |                  |      | 149,03                                  |
|                                   | 406,4 x 9,53   | Std |                  |      | 178,60                                  |
|                                   | 406,4 x 12,70  | Xs  |                  |      | 236,11                                  |

Nota: i dati tecnici su questo catalogo sono indicativi e non impegnativi / Note: the technical data reported in this catalogue is proximate and not binding.  
Data di emissione: 2020 Revisione: 01 / Date of issue: 2020 Revision: 01 - Copyright © Intertubi S.p.a. Tutti i diritti riservati / Copyright © Intertubi S.p.a. All rights reserved



Intertubi



Intertubi

### CURVA SENZA SALDATURA

**RAGGIO= 5 D DIMA 10**

ASME B16.9

### SEAMLESS ELBOWS

**RADIUS= 5 D DIMA 10**

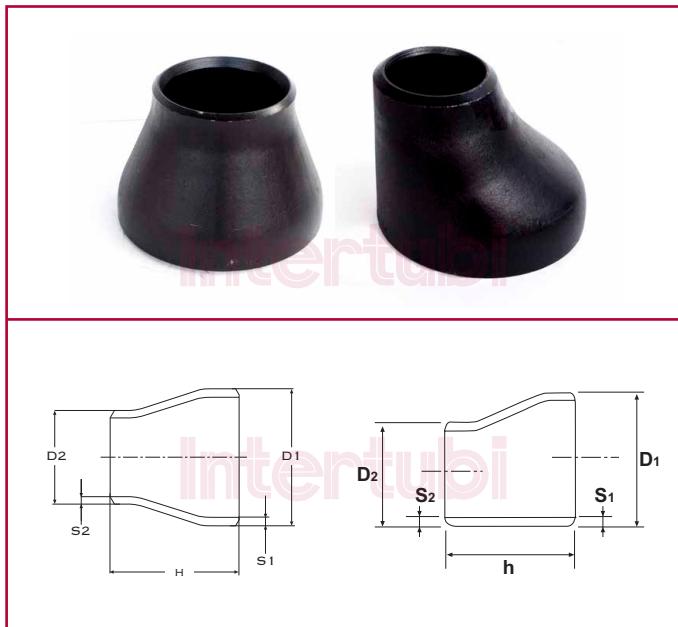
ASME B16.9

| D.E.<br>POLlici<br>D.E.<br>INCHES | Ø EST. MM X SPESS. MM<br>OUTS. DIAM. MM X<br>THICKN MM | SCH | RAGGIO<br>RADIUS | H    | PESO TEORICO<br>THEOREICAL<br>WEIGHT KG |
|-----------------------------------|--|-----|------------------|------|---|
| 2"                                | 60,3 x 3,91  | Std | 254              | 284  | 2,17                                    |
|                                   | 60,3 x 5,54  | Xs  |                  |      | 2,99                                    |
| 3"                                | 88,9 x 3,96  | 20  | 381              | 426  | 4,96                                    |
|                                   | 88,9 x 5,49  | Std |                  |      | 6,76                                    |
|                                   | 88,9 x 7,62  | Xs  |                  |      | 9,14                                    |
|                                   | 114,3 x 4,37   | 20  |                  |      | 9,45                                    |
| 4"                                | 114,3 x 6,02   | Std | 508              | 565  | 12,83                                   |
|                                   | 114,3 x 8,56   | Xs  |                  |      | 17,81                                   |
|                                   | 168,3 x 4,78   | 20  |                  |      | 23,07                                   |
| 6"                                | 168,3 x 7,11   | Std | 762              | 846  | 33,83                                   |
|                                   | 168,3 x 10,97  | Xs  |                  |      | 50,95                                   |
|                                   | 219,1 x 6,35   | 20  |                  |      | 53,17                                   |
| 8"                                | 219,1 x 7,04   | 30  | 1016             | 1126 | 58,76                                   |
|                                   | 219,1 x 8,18   | Std |                  |      | 67,91                                   |
|                                   | 219,1 x 10,31  | 60  |                  |      | 84,72                                   |
|                                   | 219,1 x 12,70  | Xs  |                  |      | 103,17                                  |
|                                   | 273,0 x 6,35   | 20  |                  |      | 83,30                                   |
| 10"                               | 273,0 x 7,80   | 30  | 1270             | 1407 | 101,77                                  |
|                                   | 273,0 x 9,27   | Std |                  |      | 120,28                                  |
|                                   | 273,0 x 12,70  | Xs  |                  |      | 162,64                                  |

| D.E.<br>POLlici<br>D.E.<br>INCHES | Ø EST. MM X SPESS. MM<br>OUTS. DIAM. MM X<br>THICKN MM | SCH | RAGGIO<br>RADIUS | H    | PESO TEORICO<br>THEOREICAL<br>WEIGHT KG |
|-----------------------------------|--|-----|------------------|------|---|
| 12"                               | 323,9 x 6,35   | 20  | 1524             | 1688 | 117,04                                  |
|                                   | 323,9 x 8,38   | 30  |                  |      | 156,10                                  |
|                                   | 323,9 x 9,53   | Std |                  |      | 176,87                                  |
|                                   | 323,9 x 10,31  | 40  |                  |      | 190,87                                  |
|                                   | 323,9 x 12,70  | Xs  |                  |      | 233,33                                  |
| 14"                               | 355,6 x 6,35   | 10  | 1778             | 1956 | 152,75                                  |
|                                   | 355,6 x 7,92   | 20  |                  |      | 189,66                                  |
|                                   | 355,6 x 9,53   | Std |                  |      | 227,16                                  |
|                                   | 355,6 x 11,13  | 40  |                  |      | 264,07                                  |
|                                   | 355,6 x 12,70  | Xs  |                  |      | 299,95                                  |
| 16"                               | 406,4 x 6,35   | 10  | 2032             | 2235 | 199,96                                  |
|                                   | 406,4 x 7,92   | 20  |                  |      | 248,42                                  |
|                                   | 406,4 x 9,53   | Std |                  |      | 297,72                                  |
|                                   | 406,4 x 12,70  | Xs  |                  |      | 393,58                                  |

Nota: i dati tecnici su questo catalogo sono indicativi e non impegnativi / Note: the technical data reported in this catalogue is proximative and not binding.

Data di emissione: 2020 Revisione: 01 / Date of issue: 2020 Revision: 01 - Copyright © Intertubi S.p.a. Tutti i diritti riservati / Copyright © Intertubi S.p.a. All rights reserved



## RIDUZIONI CONCENTRICHE ED ECCENTRICHE SENZA SALDATURA

ASME B16.9

## SEAMLESS CONCENTRIC AND ECCENTRIC REDUCERS

ASME B16.9

| D.E. POLICI<br>D.E. INCHES | <b>D EST. MM X SPESS.<br/>MM</b><br>OUTS. DIAM. MM X<br>THICKN MM | SP X SP. MM<br>THCK X THCK<br>MM | SCH | H  | PESO TEORICO<br>THEORETICAL<br>WEIGHT KG |
|----------------------------|---|----------------------------------|-----|----|--|
| 1" x 3/4"                  | 33,40 x 26,70   | 3,38 x 2,87                      | Std | 51 | 0,14                                     |
|                            | 33,40 x 26,70   | 4,55 x 3,91                      | Xs  |    | 0,17                                     |
| 11/4" x 3/4"               | 42,60 x 26,70   | 3,56 x 2,87                      | Std | 64 | 0,20                                     |
|                            | 42,60 x 26,70   | 4,85 x 3,91                      | Xs  |    | 0,23                                     |
| 11/4" x 1"                 | 42,60 x 33,40   | 3,56 x 3,38                      | Std | 76 | 0,20                                     |
|                            | 42,60 x 33,40   | 4,85 x 4,55                      | Xs  |    | 0,24                                     |
| 11/2" x 3/4"               | 48,30 x 26,70   | 3,68 x 2,87                      | Std | 76 | 0,22                                     |
|                            | 48,30 x 26,70   | 5,08 x 3,91                      | Xs  |    | 0,30                                     |
| 11/2" x 1"                 | 48,30 x 33,40   | 3,68 x 3,38                      | Std | 76 | 0,24                                     |
|                            | 48,30 x 33,40   | 5,08 x 4,55                      | Xs  |    | 0,31                                     |
| 11/2" x 11/4"              | 48,30 x 42,40   | 3,68 x 3,56                      | Std | 76 | 0,26                                     |
|                            | 48,30 x 42,40   | 5,08 x 4,85                      | Xs  |    | 0,33                                     |
| 2" x 1"                    | 60,30 x 33,40   | 3,91 x 3,38                      | Std | 76 | 0,37                                     |
|                            | 60,30 x 33,40   | 5,54 x 4,55                      | Xs  |    | 0,45                                     |
| 2" x 11/4"                 | 60,30 x 42,40   | 3,91 x 3,56                      | Std | 76 | 0,39                                     |
|                            | 60,30 x 42,40   | 5,54 x 4,85                      | Xs  |    | 0,53                                     |
| 2" x 11/2"                 | 60,30 x 48,30   | 3,91 x 3,68                      | Std | 76 | 0,41                                     |
|                            | 60,30 x 48,30   | 5,54 x 5,08                      | Xs  |    | 0,54                                     |
| 2 1/2" x 11/4"             | 73,10 x 42,40   | 5,16 x 3,56                      | Std | 76 | 0,39                                     |
|                            | 73,10 x 42,40   | 7,01 x 4,85                      | Xs  |    | 0,53                                     |

| D.E. POLICI<br>D.E. INCHES | <b>D EST. MM X SPESS.<br/>MM</b><br>OUTS. DIAM. MM X<br>THICKN MM | SP X SP. MM<br>THCK X THCK<br>MM | SCH | H   | PESO TEORICO<br>THEORETICAL<br>WEIGHT KG |
|----------------------------|---|----------------------------------|-----|-----|--|
| 2 1/2" x 11/2"             | 73,10 x 48,30   | 5,16 x 3,66                      | Std | 89  | 0,68                                     |
|                            | 73,10 x 48,30   | 7,01 x 5,08                      | Xs  |     | 0,86                                     |
| 2 1/2" x 2"                | 73,10 x 60,30   | 5,16 x 3,91                      | Std | 89  | 0,73                                     |
|                            | 73,10 x 60,30   | 7,01 x 5,54                      | Xs  |     | 0,94                                     |
| 3" x 1"                    | 88,90 x 33,40   | 5,49 x 3,38                      | Std | 89  | 0,86                                     |
|                            | 88,90 x 33,40   | 7,62 x 4,55                      | Xs  |     | 0,99                                     |
| 3" x 11/2"                 | 88,90 x 48,30   | 5,49 x 3,68                      | Std | 89  | 0,86                                     |
|                            | 88,90 x 48,30   | 7,62 x 5,08                      | Xs  |     | 0,99                                     |
| 3" x 2"                    | 88,90 x 60,30   | 5,49 x 3,91                      | Std | 89  | 0,91                                     |
|                            | 88,90 x 60,30   | 7,62 x 5,54                      | Xs  |     | 1,18                                     |
| 3" x 2 1/2"                | 88,90 x 73,10   | 5,49 x 5,16                      | Std | 102 | 0,98                                     |
|                            | 88,90 x 73,10   | 7,62 x 7,01                      | Xs  |     | 1,29                                     |
| 4" x 2"                    | 114,30 x 60,30  | 6,02 x 3,91                      | Std | 102 | 1,44                                     |
|                            | 114,30 x 60,30  | 8,56 x 5,54                      | Xs  |     | 1,78                                     |
| 4" x 2 1/2"                | 114,30 x 73,10  | 6,02 x 5,16                      | Std | 102 | 1,62                                     |
|                            | 114,30 x 73,10  | 8,56 x 7,01                      | Xs  |     | 1,90                                     |
| 4" x 3"                    | 114,30 x 88,90  | 6,02 x 5,49                      | Std | 102 | 1,59                                     |
|                            | 114,30 x 88,90  | 8,56 x 76,62                     | Xs  |     | 2,13                                     |

Nota: i dati tecnici su questo catalogo sono indicativi e non impegnativi / Note: the technical data reported in this catalogue is proximate and not binding.  
 Data di emissione: 2020 Revisione: 01 / Date of issue: 2020 Revision: 01 - Copyright © Intertubi S.p.a. Tutti i diritti riservati / Copyright © Intertubi S.p.a. All rights reserved

| D.E. POLlici<br>D.E. INCHES | Ø EST. MM X SPESS.<br>MM<br>OUTS. DIAM. MM X<br>THICKN MM | SP X SP. MM<br>THCK X THCK<br>MM | SCH | H   | PESO TEORICO<br>THEOREICAL<br>WEIGHT KG |
|-----------------------------|---|----------------------------------|-----|-----|---|
| 5" x 3"                     | 141,30 x 88,90  | 6,55 x 5,49                      | Std | 127 | 2,60                                    |
|                             | 141,30 x 88,90  | 9,53 x 7,62                      | Xs  |     | 3,55                                    |
| 5" x 4"                     | 141,30 x 114,30   | 6,55 x 6,02                      | Std | 140 | 2,72                                    |
|                             | 141,30 x 114,30   | 9,53 x 8,56                      | Xs  |     | 3,78                                    |
| 6" x 3"                     | 168,30 x 88,90  | 7,11 x 5,49                      | Std | 152 | 3,63                                    |
|                             | 168,30 x 88,90  | 10,97 x 7,62                     | Xs  |     | 5,04                                    |
| 6" x 4"                     | 168,30 x 114,30   | 7,11 x 6,02                      | Std | 178 | 3,72                                    |
|                             | 168,30 x 114,30   | 10,97 x 8,56                     | Xs  |     | 5,45                                    |
| 6" x 5"                     | 168,30 x 141,30   | 7,11 x 6,55                      | Std | 203 | 3,93                                    |
|                             | 168,30 x 141,30   | 10,97 x 9,53                     | Xs  |     | 5,72                                    |
| 8" x 4"                     | 219,10 x 114,30   | 8,18 x 6,02                      | Std | 330 | 5,95                                    |
|                             | 219,10 x 114,30   | 12,70 x 8,56                     | Xs  |     | 8,44                                    |
| 8" x 5"                     | 219,10 x 141,30   | 8,18 x 6,55                      | Std | 330 | 4,08                                    |
|                             | 219,10 x 141,30   | 12,70 x 9,53                     | Xs  |     | 8,88                                    |
| 8" x 6"                     | 219,10 x 168,30   | 8,18 x 7,11                      | Std | 330 | 6,31                                    |
|                             | 219,10 x 168,30   | 12,70 x 10,97                    | Xs  |     | 9,26                                    |
| 10" x 5"                    | 273,00 x 141,30   | 9,27 x 6,55                      | Std | 330 | 9,90                                    |
|                             | 273,00 x 141,30   | 12,70 x 9,53                     | Xs  |     | 13,00                                   |
| 10" x 6"                    | 273,00 x 168,30   | 9,27 x 7,11                      | Std | 330 | 10,10                                   |
|                             | 273,00 x 168,30   | 12,70 x 12,97                    | Xs  |     | 13,50                                   |
| 10" x 8"                    | 273,00 x 219,10   | 9,27 x 8,18                      | Std | 330 | 10,50                                   |
|                             | 273,00 x 219,10   | 12,70 x 12,70                    | Xs  |     | 14,20                                   |
| 12" x 6"                    | 323,90 x 168,30   | 9,53 x 7,11                      | Std | 330 | 14,10                                   |
|                             | 323,90 x 168,30   | 12,70 x 10,97                    | Xs  |     | 18,40                                   |
| 12" x 8"                    | 323,90 x 219,10   | 9,53 x 8,18                      | Std | 330 | 14,60                                   |
|                             | 323,90 x 219,10   | 12,70 x 12,70                    | Xs  |     | 17,00                                   |
| 12" x 10"                   | 323,90 x 273,00   | 9,53 x 9,27                      | Std | 330 | 15,20                                   |
|                             | 323,90 x 273,00   | 12,70 x 12,70                    | Xs  |     | 19,80                                   |
| 14" x 8"                    | 355,60 x 219,10   | 9,53 x 8,18                      | Std | 330 | 26,00                                   |
|                             | 355,60 x 219,10   | 12,70 x 12,70                    | Xs  |     | 34,90                                   |
| 14" x 10"                   | 355,60 x 273,00   | 9,53 x 9,27                      | Std | 330 | 27,40                                   |
|                             | 355,60 x 273,00   | 12,70 x 12,70                    | Xs  |     | 36,10                                   |
| 14" x 12"                   | 355,60 x 323,90   | 9,53 x 9,53                      | Std | 330 | 28,80                                   |
|                             | 355,60 x 323,90   | 12,70 x 12,70                    | Xs  |     | 37,70                                   |

| D.E. POLlici<br>D.E. INCHES | Ø EST. MM X SPESS.<br>MM<br>OUTS. DIAM. MM X<br>THICKN MM | SP X SP. MM<br>THCK X THCK<br>MM | SCH | H   | PESO TEORICO<br>THEOREICAL<br>WEIGHT KG |
|-----------------------------|---|----------------------------------|-----|-----|---|
| 16" x 10"                   | 406,40 x 273,00   | 9,53 x 9,27                      | Std | 356 | 33,10                                   |
|                             | 406,40 x 273,00   | 12,70 x 12,70                    | Xs  |     | 43,70                                   |
| 16" x 12"                   | 406,40 x 323,90   | 9,53 x 9,53                      | Std | 381 | 34,30                                   |
|                             | 406,40 x 323,90   | 12,70 x 12,70                    | Xs  |     | 45,00                                   |
| 16" x 14"                   | 406,40 x 355,60   | 9,53 x 9,53                      | Std | 381 | 35,20                                   |
|                             | 406,40 x 355,60   | 12,70 x 12,70                    | Xs  |     | 46,30                                   |
| 18" x 12"                   | 457,00 x 323,90   | 9,53 x 9,53                      | Std | 508 | 40,50                                   |
|                             | 457,00 x 323,90   | 12,70 x 12,70                    | Xs  |     | 53,60                                   |
| 18" x 14"                   | 457,00 x 355,60   | 9,53 x 9,53                      | Std | 508 | 41,30                                   |
|                             | 457,00 x 355,60   | 12,70 x 12,70                    | Xs  |     | 54,50                                   |
| 18" x 16"                   | 457,00 x 406,40   | 9,53 x 9,53                      | Std | 508 | 42,70                                   |
|                             | 457,00 x 406,40   | 12,70 x 12,70                    | Xs  |     | 55,80                                   |
| 20" x 12"                   | 508,00 x 323,90   | 9,53 x 9,53                      | Std | 508 | 60,80                                   |
|                             | 508,00 x 323,90   | 12,70 x 12,70                    | Xs  |     | 79,90                                   |
| 20" x 14"                   | 508,00 x 355,60   | 9,53 x 9,53                      | Std | 508 | 61,30                                   |
|                             | 508,00 x 355,60   | 12,70 x 12,70                    | Xs  |     | 81,30                                   |
| 20" x 16"                   | 508,00 x 406,40   | 9,53 x 9,53                      | Std | 508 | 62,60                                   |
|                             | 508,00 x 406,40   | 12,70 x 12,70                    | Xs  |     | 82,60                                   |
| 20" x 18"                   | 508,00 x 457,00   | 9,53 x 9,53                      | Std | 508 | 64,50                                   |
|                             | 508,00 x 457,00   | 12,70 x 12,70                    | Xs  |     | 84,40                                   |
| 24" x 14"                   | 609,60 x 355,60   | 9,53 x 9,53                      | Std | 508 | 72,60                                   |
|                             | 609,60 x 355,60   | 12,70 x 12,70                    | Xs  |     | 95,80                                   |
| 24" x 16"                   | 609,60 x 406,40   | 9,53 x 9,53                      | Std | 508 | 72,60                                   |
|                             | 609,60 x 406,40   | 12,70 x 12,70                    | Xs  |     | 95,80                                   |
| 24" x 18"                   | 609,60 x 457,00   | 9,53 x 9,53                      | Std | 508 | 74,00                                   |
|                             | 609,60 x 457,00   | 12,70 x 12,70                    | Xs  |     | 97,60                                   |
| 24" x 20"                   | 609,60 x 508,00   | 9,53 x 9,53                      | Std | 508 | 75,80                                   |
|                             | 609,60 x 508,00   | 12,70 x 12,70                    | Xs  |     | 99,90                                   |



| D.E. POLICI<br>D.E. INCHES | Ø EST. MM X SPESS. MM<br>OUTS. DIAM. MM X THICKN<br>MM | SCH | C<br>M | C+C | PESO TEORICO<br>THEOREICAL<br>WEIGHT KG |
|----------------------------|--|-----|--------|-----|---|
| 1/2"                       | 21,3 x 2,77  | Std | 25     | 50  | 0,12                                    |
|                            | 21,3 x 3,73  | Xs  |        |     | 0,13                                    |
| 3/4"                       | 26,7 x 2,87  | Std | 29     | 58  | 0,16                                    |
|                            | 26,7 x 3,91  | Xs  |        |     | 0,20                                    |
| 1"                         | 33,4 x 3,38  | Std | 38     | 76  | 0,30                                    |
|                            | 33,4 x 4,55  | Xs  |        |     | 0,38                                    |
|                            | 33,4 x 6,35  | 160 |        |     | 0,42                                    |
| 1 1/4"                     | 42,4 x 3,56  | Std | 48     | 96  | 0,54                                    |
|                            | 42,4 x 4,58  | Xs  |        |     | 0,71                                    |
|                            | 42,4 x 6,35  | 160 |        |     | 0,90                                    |
| 1 1/2"                     | 48,3 x 3,68  | Std | 57     | 114 | 0,75                                    |
|                            | 48,3 x 5,08  | Xs  |        |     | 1,02                                    |
|                            | 48,3 x 7,14  | 160 |        |     | 1,61                                    |
| 2"                         | 60,3 x 3,91  | Std | 76     | 106 | 0,65                                    |
|                            | 60,3 x 5,54  | Xs  |        |     | 0,90                                    |
|                            | 60,3 x 8,71  | 160 |        |     | 1,33                                    |
|                            | 60,3 x 11,07   | XXs |        |     | 1,61                                    |
| 2 1/2"                     | 73,1 x 5,16  | Std | 76     | 152 | 2,07                                    |
|                            | 73,1 x 7,01  | Xs  |        |     | 2,78                                    |
|                            | 73,1 x 9,53  | 160 |        |     | 3,63                                    |
| 3"                         | 88,9 x 5,49  | Std | 86     | 172 | 3,05                                    |
|                            | 88,9 x 7,62  | Xs  |        |     | 3,75                                    |
|                            | 88,9 x 11,13   | 160 |        |     | 6,19                                    |
| 4"                         | 114,3 x 6,02   | Std | 105    | 210 | 5,02                                    |
|                            | 114,3 x 8,56   | Xs  |        |     | 6,67                                    |
|                            | 114,3 x 11,13  | 120 |        |     | 8,10                                    |
|                            | 114,3 x 13,49  | 160 |        |     | 11,80                                   |
| 5"                         | 141,3 x 6,55   | Std | 124    | 248 | 7,72                                    |
|                            | 141,3 x 9,53   | Xs  |        |     | 10,51                                   |
|                            | 141,3 x 12,70  | 120 |        |     | 15,75                                   |
|                            | 141,3 x 15,88  | 160 |        |     | 19,90                                   |

## TEE UGUALI SENZA SALDATURA

ASME B16.9

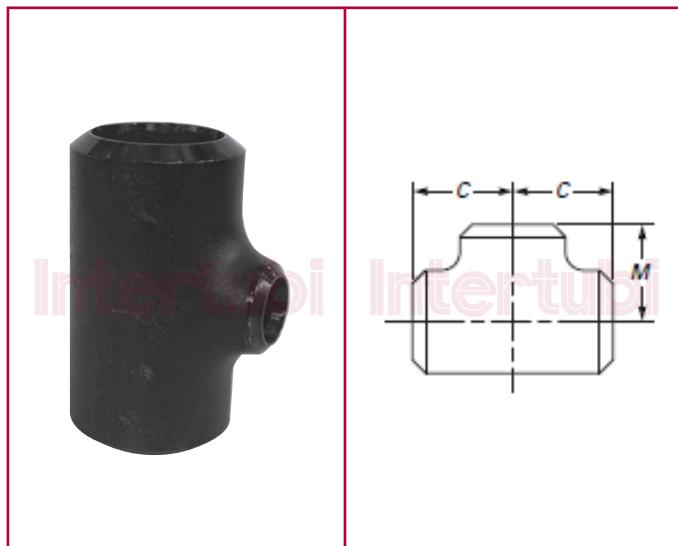
## SEAMLESS EQUAL TEES

ASME B16.9

| D.E. POLICI<br>D.E. INCHES | Ø EST. MM X SPESS. MM<br>OUTS. DIAM. MM X THICKN<br>MM | SCH | C<br>M | C+C | PESO TEORICO<br>THEOREICAL<br>WEIGHT KG |
|----------------------------|--|-----|--------|-----|---|
| 6"                         | 168,3 x 7,11   | Std | 143    | 286 | 11,51                                   |
|                            | 168,3 x 10,97  | Xs  |        |     | 17,21                                   |
|                            | 168,3 x 14,27  | 120 |        |     | 21,60                                   |
|                            | 168,3 x 18,24  | 160 |        |     | 31,10                                   |
| 8"                         | 219,1 x 6,35   | 20  | 178    | 356 | 20,70                                   |
|                            | 219,1 x 7,04   | 30  |        |     | 22,14                                   |
|                            | 219,1 x 8,18   | Std |        |     | 29,45                                   |
|                            | 219,1 x 12,70  | Xs  |        |     | 29,48                                   |
|                            | 219,1 x 18,24  | 120 |        |     | 44,55                                   |
|                            | 219,1 x 23,01  | 160 |        |     | 63,50                                   |
| 10"                        | 273,0 x 6,35   | 20  | 216    | 432 | 31,23                                   |
|                            | 273,0 x 7,80   | 30  |        |     | 36,00                                   |
|                            | 273,0 x 9,27   | Std |        |     | 33,86                                   |
|                            | 273,0 x 12,70  | Xs  |        |     | 44,15                                   |
|                            | 273,0 x 15,06  | 80  |        |     | 60,75                                   |
|                            | 273,0 x 21,41  | 120 |        |     | 83,70                                   |
|                            | 273,0 x 28,58  | 160 |        |     | 118,00                                  |
|                            | 323,9 x 6,35   | 20  |        |     | 39,06                                   |
| 12"                        | 323,9 x 8,38   | 30  | 254    | 508 | 50,94                                   |
|                            | 323,9 x 9,53   | Std |        |     | 55,00                                   |
|                            | 323,9 x 10,31  | 40  |        |     | 63,45                                   |
|                            | 323,9 x 12,70  | Xs  |        |     | 78,70                                   |
|                            | 323,9 x 14,27  | 60  |        |     | 85,50                                   |
|                            | 323,9 x 17,45  | 80  |        |     | 103,50                                  |
| 14"                        | 323,9 x 22,23  | 120 | 279    | 558 | 135,00                                  |
|                            | 323,9 x 33,32  | 160 |        |     | 155,00                                  |
|                            | 355,6 x 7,92   | 20  |        |     | 75,60                                   |
| 16"                        | 355,6 x 9,53   | Std | 305    | 610 | 72,60                                   |
|                            | 355,6 x 12,70  | Xs  |        |     | 96,70                                   |
|                            | 406,4 x 7,92   | 20  |        |     | 90,00                                   |
| 18"                        | 406,4 x 9,53   | Std | 343    | 686 | 90,30                                   |
|                            | 406,4 x 12,70  | Xs  |        |     | 120,00                                  |
| 20"                        | 457,4 x 9,53   | Std | 381    | 762 | 131,00                                  |
|                            | 457,4 x 12,70  | Xs  |        |     | 139,00                                  |
| 24"                        | 508,0 x 9,53   | Std | 432    | 864 | 151,20                                  |
|                            | 508,0 x 12,70  | Xs  |        |     | 220,50                                  |

Nota: i dati tecnici su questo catalogo sono indicativi e non impegnativi / Note: the technical data reported in this catalogue is proximative and not binding.

Data di emissione: 2020 Revisione: 01 / Date of issue: 2020 Revision: 01 - Copyright © Intertubi S.p.a. Tutti i diritti riservati / Copyright © Intertubi S.p.a. All rights reserved



| D.E. POLICI<br>D.E. INCHES | Ø EST. MM X<br>SPESS. MM<br>OUTS. DIAM. MM<br>X THICKN MM | SP X SP MM<br>THCK X THCK<br>MM | SCH | C  | M  | PESO TEORICO<br>THEOREICAL<br>WEIGHT KG |
|----------------------------|---|---------------------------------|-----|----|----|---|
| 3/4" x 1/2"                | 26,70 x 21,30   | 2,87 x 2,77                     | Std | 29 | 29 | 0,16                                    |
|                            | 26,70 x 21,30   | 3,91 x 3,73                     | Xs  |    |    | 0,20                                    |
| 1" x 1/2"                  | 33,40 x 21,30   | 3,38 x 2,77                     | Std | 38 | 38 | 0,30                                    |
|                            | 33,40 x 21,30   | 4,55 x 3,73                     | Xs  |    |    | 0,37                                    |
| 1" x 3/4"                  | 33,40 x 26,70   | 3,38 x 2,87                     | Std | 48 | 48 | 0,30                                    |
|                            | 33,40 x 26,70   | 4,55 x 3,91                     | Xs  |    |    | 0,38                                    |
| 1 1/4" x 1/2"              | 42,40 x 21,30   | 3,56 x 2,77                     | Std | 57 | 57 | 0,54                                    |
|                            | 42,40 x 21,30   | 4,85 x 3,73                     | Xs  |    |    | 0,68                                    |
| 1 1/4" x 3/4"              | 42,60 x 26,70   | 3,56 x 2,87                     | Std | 64 | 57 | 0,54                                    |
|                            | 42,60 x 26,70   | 4,85 x 3,91                     | Xs  |    |    | 0,68                                    |
| 1 1/4" x 1"                | 42,60 x 33,40   | 3,56 x 3,38                     | Std | 60 | 60 | 0,54                                    |
|                            | 42,60 x 33,40   | 4,85 x 4,55                     | Xs  |    |    | 0,69                                    |
| 1 1/2" x 3/4"              | 48,30 x 26,70   | 3,68 x 2,87                     | Std | 51 | 51 | 0,77                                    |
|                            | 48,30 x 26,70   | 5,08 x 3,91                     | Xs  |    |    | 0,98                                    |
| 1 1/2" x 1"                | 48,30 x 33,40   | 3,68 x 3,38                     | Std | 64 | 57 | 0,77                                    |
|                            | 48,30 x 33,40   | 5,08 x 4,55                     | Xs  |    |    | 1,02                                    |
| 1 1/2" x 1 1/4"            | 48,30 x 42,40   | 3,68 x 3,56                     | Std | 60 | 60 | 0,77                                    |
|                            | 48,30 x 42,40   | 5,08 x 4,85                     | Xs  |    |    | 1,02                                    |
| 2" x 1"                    | 60,30 x 33,40   | 3,91 x 3,38                     | Std | 64 | 57 | 0,98                                    |
|                            | 60,30 x 33,40   | 5,54 x 4,55                     | Xs  |    |    | 1,32                                    |
| 2" x 1 1/4"                | 60,30 x 42,40   | 3,91 x 3,56                     | Std | 60 | 60 | 1,04                                    |
|                            | 60,30 x 42,40   | 5,54 x 4,85                     | Xs  |    |    | 1,44                                    |
| 2" x 1 1/2"                | 60,30 x 48,30   | 3,91 x 3,68                     | Std | 60 | 60 | 1,06                                    |
|                            | 60,30 x 48,30   | 5,54 x 5,08                     | Xs  |    |    | 1,44                                    |

## TEE RIDOTTI SENZA SALDATURA ASME B16.9

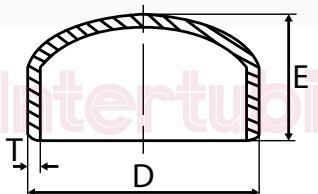
## SEAMLESS REDUCING TEES ASME B16.9

| D.E. POLICI<br>D.E. INCHES | Ø EST. MM X<br>SPESS. MM<br>OUTS. DIAM. MM<br>X THICKN MM | SP X SP MM<br>THCK X THCK<br>MM | SCH | C   | M   | PESO TEORICO<br>THEOREICAL<br>WEIGHT KG |
|----------------------------|---|---------------------------------|-----|-----|-----|---|
| 2 1/2" x 11/4"             | 73,10 x 42,40   | 5,16 x 3,56                     | Std | 76  | 64  | 1,72                                    |
|                            | 73,10 x 42,40   | 7,01 x 4,85                     | Xs  |     |     | 2,14                                    |
| 2 1/2" x 11/2"             | 73,10 x 48,30   | 5,16 x 3,68                     | Std | 76  | 67  | 1,72                                    |
|                            | 73,10 x 48,30   | 7,01 x 5,08                     | Xs  |     |     | 2,14                                    |
| 2 1/2" x 2"                | 73,10 x 60,30   | 5,16 x 3,91                     | Std | 70  | 70  | 1,72                                    |
|                            | 73,10 x 60,30   | 7,01 x 5,54                     | Xs  |     |     | 2,24                                    |
| 3" x 1"                    | 88,90 x 33,40   | 5,49 x 3,38                     | Std | 86  | 70  | 2,45                                    |
|                            | 88,90 x 33,40   | 7,62 x 4,55                     | Xs  |     |     | 2,80                                    |
| 3" x 11/4"                 | 88,90 x 42,40   | 5,49 x 3,56                     | Std | 86  | 70  | 2,45                                    |
|                            | 88,90 x 42,40   | 7,62 x 4,85                     | Xs  |     |     | 2,80                                    |
| 3" x 11/2"                 | 88,90 x 48,30   | 5,49 x 3,68                     | Std | 86  | 73  | 2,48                                    |
|                            | 88,90 x 48,30   | 7,62 x 5,08                     | Xs  |     |     | 3,05                                    |
| 3" x 2"                    | 88,90 x 60,30   | 5,49 x 3,91                     | Std | 76  | 76  | 2,48                                    |
|                            | 88,90 x 60,30   | 7,62 x 5,54                     | Xs  |     |     | 3,09                                    |
| 3" x 2 1/2"                | 88,90 x 73,10   | 5,49 x 5,16                     | Std | 83  | 83  | 2,91                                    |
|                            | 88,90 x 73,10   | 7,62 x 7,01                     | Xs  |     |     | 3,50                                    |
| 4" x 2"                    | 114,30 x 60,30  | 6,02 x 60,30                    | Std | 105 | 89  | 4,12                                    |
|                            | 114,30 x 60,30  | 8,56 x 4,54                     | Xs  |     |     | 5,08                                    |
| 4" x 2 1/2"                | 114,30 x 73,10  | 6,02 x 5,16                     | Std | 105 | 95  | 4,48                                    |
|                            | 114,30 x 73,10  | 8,56 x 7,01                     | Xs  |     |     | 5,96                                    |
| 4" x 3"                    | 114,30 x 88,90  | 6,02 x 5,49                     | Std | 124 | 98  | 4,56                                    |
|                            | 114,30 x 88,90  | 8,56 x 76,62                    | Xs  |     |     | 6,13                                    |
| 5" x 3"                    | 141,30 x 88,90  | 6,55 x 5,49                     | Std | 124 | 111 | 7,60                                    |
|                            | 141,30 x 88,90  | 9,53 x 7,62                     | Xs  |     |     | 8,85                                    |
| 5" x 4"                    | 141,30 x 114,30   | 6,55 x 6,02                     | Std | 143 | 117 | 7,10                                    |
|                            | 141,30 x 114,30   | 9,53 x 8,56                     | Xs  |     |     | 9,90                                    |
| 6" x 3"                    | 168,30 x 88,90  | 7,11 x 5,49                     | Std | 124 | 124 | 10,22                                   |
|                            | 168,30 x 88,90  | 10,97 x 7,62                    | Xs  |     |     | 13,33                                   |
| 6" x 4"                    | 168,30 x 114,30   | 7,11 x 6,02                     | Std | 143 | 130 | 10,25                                   |
|                            | 168,30 x 114,30   | 10,97 x 8,56                    | Xs  |     |     | 14,26                                   |
| 6" x 5"                    | 168,30 x 141,30   | 7,11 x 6,55                     | Std | 143 | 137 | 11,13                                   |
|                            | 168,30 x 141,30   | 10,97 x 9,53                    | Xs  |     |     | 15,04                                   |

| D.E. POLICI<br>D.E. INCHES | Ø EST. MM X<br>SPESS. MM<br>OUTS. DIAM. MM<br>X THICKN MM | SP X SP MM<br>THCK X THCK<br>MM | SCH | C   | M      | PESO TEORICO<br>THEOREICAL<br>WEIGHT KG |
|----------------------------|---|---------------------------------|-----|-----|--------|---|
| 8" x 4"                    | 219,10 x 114,30   | 8,18 x 6,02                     | Std | 156 | 16,77  |   |
|                            | 219,10 x 114,30   | 12,70 x 8,56                    | Xs  |     | 24,59  |   |
| 8" x 5"                    | 219,10 x 141,30   | 8,18 x 6,55                     | Std | 162 | 17,36  |   |
|                            | 219,10 x 141,30   | 12,70 x 9,53                    | Xs  |     | 24,59  |   |
| 8" x 6"                    | 219,10 x 168,00   | 8,18 x 7,11                     | Std | 168 | 17,96  |   |
|                            | 219,10 x 168,00   | 12,70 x 10,97                   | Xs  |     | 28,27  |   |
| 10" x 4"                   | 273,00 x 114,30   | 9,27 x 6,02                     | Std | 184 | 26,93  |   |
|                            | 273,00 x 114,30   | 12,70 x 8,56                    | Xs  |     | 35,11  |   |
| 10" x 6"                   | 273,00 x 168,00   | 9,27 x 7,11                     | Std | 194 | 26,93  |   |
|                            | 273,00 x 168,00   | 12,70 x 10,97                   | Xs  |     | 35,11  |   |
| 10" x 8"                   | 273,00 x 219,10   | 9,27 x 8,18                     | Std | 203 | 28,35  |   |
|                            | 273,00 x 219,10   | 12,70 x 12,70                   | Xs  |     | 36,97  |   |
| 12" x 6"                   | 323,90 x 168,30   | 9,53 x 7,11                     | Std | 219 | 40,50  |   |
|                            | 323,90 x 168,30   | 12,70 x 10,97                   | Xs  |     | 75,20  |   |
| 12" x 8"                   | 323,90 x 219,10   | 7,53 x 8,18                     | Std | 229 | 40,50  |   |
|                            | 323,90 x 219,10   | 12,70 x 12,70                   | Xs  |     | 75,20  |   |
| 12" x 10"                  | 323,90 x 273,00   | 9,53 x 9,27                     | Std | 241 | 43,00  |   |
|                            | 323,90 x 273,00   | 12,70 x 12,70                   | Xs  |     | 75,20  |   |
| 14" x 10"                  | 355,60 x 273,00   | 9,53 x 9,27                     | Std | 257 | 87,84  |   |
|                            | 355,60 x 273,00   | 12,70 x 12,70                   | Xs  |     | 98,60  |   |
| 14" x 12"                  | 355,60 x 323,90   | 9,53 x 9,53                     | Std | 270 | 91,80  |   |
|                            | 355,60 x 323,90   | 12,70 x 12,70                   | Xs  |     | 103,50 |   |
| 16" x 10"                  | 406,40 x 273,00   | 9,53 x 9,27                     | Std | 283 | 95,85  |   |
|                            | 406,40 x 273,00   | 12,70 x 12,70                   | Xs  |     | 144,00 |   |
| 16" x 12"                  | 406,40 x 323,90   | 9,53 x 9,53                     | Std | 295 | 99,00  |   |
|                            | 406,40 x 323,90   | 12,70 x 12,70                   | Xs  |     | 147,60 |   |
| 16" x 14"                  | 406,40 x 355,60   | 9,53 x 9,53                     | Std | 305 | 99,00  |   |
|                            | 406,40 x 355,60   | 12,70 x 12,70                   | Xs  |     | 150,30 |   |

| D.E. POLICI<br>D.E. INCHES | Ø EST. MM X<br>SPESS. MM<br>OUTS. DIAM. MM<br>X THICKN MM | SP X SP MM<br>THCK X THCK<br>MM | SCH | C   | M      | PESO TEORICO<br>THEOREICAL<br>WEIGHT KG |
|----------------------------|---|---------------------------------|-----|-----|--------|---|
| 18" x 10"                  | 457,00 x 273,00   | 9,53 x 9,27                     | Std | 308 | 116,10 |   |
|                            | 457,00 x 273,00   | 12,70 x 12,70                   | Xs  |     | 138,60 |   |
| 18" x 12"                  | 457,00 x<br>323,90  | 9,53 x 9,53                     | Std | 321 | 121,50 |   |
|                            | 457,00 x<br>323,90  | 12,70 x 12,70                   | Xs  |     | 147,60 |   |
| 18" x 14"                  | 457,00 x<br>355,60  | 9,53 x 9,53                     | Std | 330 | 121,50 |   |
|                            | 457,00 x<br>355,60  | 12,70 x 12,70                   | Xs  |     | 171,00 |   |
| 18" x 16"                  | 457,00 x<br>406,40  | 9,53 x 9,53                     | Std | 330 | 121,50 |   |
|                            | 457,00 x<br>406,40  | 12,70 x 12,70                   | Xs  |     | 171,00 |   |
| 20" x 10"                  | 508,00 x<br>273,00  | 9,53 x 9,27                     | Std | 333 | 147,15 |   |
|                            | 508,00 x<br>273,00  | 12,70 x 12,70                   | Xs  |     | 192,60 |   |
| 20" x 12"                  | 508,00 x<br>323,90  | 9,53 x 9,53                     | Std | 346 | 147,15 |   |
|                            | 508,00 x<br>323,90  | 12,70 x 12,70                   | Xs  |     | 192,60 |   |
| 20" x 14"                  | 508,00 x<br>355,60  | 9,53 x 9,53                     | Std | 356 | 147,15 |   |
|                            | 508,00 x<br>355,60  | 12,70 x 12,70                   | Xs  |     | 192,60 |   |
| 20" x 16"                  | 508,00 x<br>406,40  | 9,53 x 9,53                     | Std | 356 | 151,20 |   |
|                            | 508,00 x<br>406,40  | 12,70 x 12,70                   | Xs  |     | 196,20 |   |
| 20" x 18"                  | 508,00 x<br>457,00  | 9,53 x 9,53                     | Std | 368 | 151,20 |   |
|                            | 508,00 x<br>457,00  | 12,70 x 12,70                   | Xs  |     | 196,20 |   |
| 24" x 14"                  | 609,60 x<br>355,60  | 9,53 x 9,53                     | Std | 397 | 155,25 |   |
|                            | 609,60 x<br>355,60  | 12,70 x 12,70                   | Xs  |     | 220,50 |   |
| 24" x 16"                  | 609,60 x<br>406,40  | 9,53 x 9,53                     | Std | 406 | 188,10 |   |
|                            | 609,60 x<br>406,40  | 12,70 x 12,70                   | Xs  |     | 234,00 |   |
| 24" x 18"                  | 609,60 x<br>457,00  | 9,53 x 9,53                     | Std | 419 | 188,10 |   |
|                            | 609,60 x<br>457,00  | 12,70 x 12,70                   | Xs  |     | 234,00 |   |
| 24" x 20"                  | 609,60 x<br>508,00  | 9,53 x 9,53                     | Std | 432 | 198,00 |   |
|                            | 609,60 x<br>508,00  | 12,70 x 12,70                   | Xs  |     | 252,00 |   |

Nota: i dati tecnici su questo catalogo sono indicativi e non impegnativi / Note: the technical data reported in this catalogue is proximate and not binding.  
Data di emissione: 2020 Revisione: 01 / Date of issue: 2020 Revision: 01 - Copyright © Intertubi S.p.a. Tutti i diritti riservati / Copyright © Intertubi S.p.a. All rights reserved



| D.E. POLICI<br>D.E. INCHES | <b>D EST. MM X SPESS. MM<br/>OUTS. DIAM. MM X THICKN<br/>MM</b> | SCH | E  | <b>PESO TEORICO<br/>THEOREICAL WEIGHT KG</b> |
|----------------------------|---|-----|----|--|
| 1"                         | 33,4 x 3,38   | Std | 38 | 0,10   |
|                            | 33,4 x 4,55   | Xs  |    | 0,13   |
|                            | 33,4 x 6,35   | 160 |    | 0,15   |
| 11/4"                      | 42,4 x 3,56   | Std | 38 | 0,14   |
|                            | 42,4 x 4,85   | Xs  |    | 0,19   |
|                            | 42,4 x 6,35   | 160 |    | 0,23   |
| 11/2"                      | 48,3 x 3,68   | Std | 38 | 0,20   |
|                            | 48,3 x 5,08   | Xs  |    | 0,23   |
|                            | 48,3 x 7,14   | 160 |    | 0,30   |
| 2"                         | 60,3 x 3,91   | Std | 38 | 0,25   |
|                            | 60,3 x 5,54   | Xs  |    | 0,30   |
|                            | 60,3 x 8,71   | 160 |    | 0,55   |
| 2 1/2"                     | 73,1 x 5,16   | Std | 38 | 0,35   |
|                            | 73,1 x 7,01   | Xs  |    | 0,45   |
|                            | 73,1 x 9,53   | 160 |    | 0,90   |
| 3"                         | 88,9 x 5,49   | Std | 51 | 0,70   |
|                            | 88,9 x 7,62   | Xs  |    | 0,85   |
|                            | 88,9 x 11,13  | 160 |    | 1,45   |
| 4"                         | 114,3 x 6,02  | Std | 64 | 1,10   |
|                            | 114,3 x 8,56  | Xs  |    | 1,60   |
|                            | 114,3 x 11,13   | 120 |    | 2,50   |
|                            | 114,3 x 13,49   | 160 |    | 2,75   |
| 5"                         | 141,3 x 6,55  | Std | 76 | 2,00   |
|                            | 141,3 x 9,53  | Xs  |    | 2,70   |
|                            | 141,3 x 12,70   | 120 |    | 4,00   |
|                            | 141,3 x 15,88   | 160 |    | 5,00   |
| 6"                         | 168,3 x 4,78  | 20  | 89 | 2,01   |
|                            | 168,3 x 7,11  | Std |    | 3,00   |
|                            | 168,3 x 10,97   | Xs  |    | 4,40   |
|                            | 168,3 x 14,27   | 120 |    | 6,00   |
|                            | 168,3 x 18,24   | 160 |    | 7,50   |

### FONDI

ASME B16.9

### CAPS

ASME B16.9

| D.E. POLICI<br>D.E. INCHES | <b>D EST. MM X SPESS. MM<br/>OUTS. DIAM. MM X THICKN<br/>MM</b> | SCH | E   | <b>PESO TEORICO<br/>THEOREICAL WEIGHT KG</b> |
|----------------------------|---|-----|-----|--|
| 8"                         | 219,1 x 6,35  | 20  | 102 | 4,50   |
|                            | 219,1 x 7,04  | 30  |     | 5,00   |
|                            | 219,1 x 8,18  | Std |     | 5,50   |
|                            | 219,1 x 10,31   | 60  |     | 7,00   |
|                            | 219,1 x 12,70   | Xs  |     | 8,35   |
|                            | 219,1 x 18,24   | 120 |     | 12,27  |
|                            | 219,1 x 23,01   | 160 |     | 19,49  |
| 10"                        | 273,0 x 6,35  | 20  | 127 | 6,00   |
|                            | 273,0 x 7,80  | 30  |     | 8,00   |
|                            | 273,0 x 9,27  | Std |     | 9,00   |
|                            | 273,0 x 12,70   | Xs  |     | 13,60  |
|                            | 273,0 x 15,06   | 80  |     | 16,25  |
|                            | 273,0 x 21,41   | 120 |     | 24,74  |
|                            | 273,0 x 28,58   | 160 |     | 32,98  |
| 12"                        | 323,9 x 6,35  | 20  | 152 | 10,00  |
|                            | 323,9 x 8,38  | 30  |     | 13,00  |
|                            | 323,9 x 9,53  | Std |     | 15,00  |
|                            | 323,9 x 10,31   | 40  |     | 19,00  |
|                            | 323,9 x 12,70   | Xs  |     | 22,50  |
|                            | 323,9 x 14,27   | 60  |     | 25,50  |
|                            | 323,9 x 17,45   | 80  |     | 29,50  |
| 14"                        | 323,9 x 25,40   | 120 | 165 | 41,00  |
|                            | 323,9 x 33,32   | 160 |     | 53,77  |
|                            | 355,6 x 7,92  | 20  |     | 14,00  |
| 16"                        | 355,6 x 9,53  | Std | 178 | 16,00  |
|                            | 355,6 x 12,70   | Xs  |     | 27,00  |
|                            | 406,4 x 7,92  | 20  |     | 18,00  |
| 18"                        | 406,4 x 9,53  | Std | 203 | 21,00  |
|                            | 406,4 x 12,70   | Xs  |     | 31,50  |
|                            | 457,0 x 7,92  | 20  |     | 22,00  |
| 20"                        | 457,0 x 9,53  | Std | 229 | 26,00  |
|                            | 457,0 x 12,70   | Xs  |     | 36,00  |
|                            | 508,0 x 9,53  | Std |     | 32,00  |
| 24"                        | 508,0 x 12,70   | Xs  | 267 | 42,00  |
|                            | 609,6 x 9,53  | Std |     | 46,00  |
|                            | 609,6 x 12,70   | Xs  |     | 60,00  |

Nota: i dati tecnici su questo catalogo sono indicativi e non impegnativi / Note: the technical data reported in this catalogue is proximative and not binding.

Data di emissione: 2020 Revisione: 01 / Date of issue: 2020 Revision: 01 - Copyright © Intertubi S.p.a. Tutti i diritti riservati / Copyright © Intertubi S.p.a. All rights reserved