

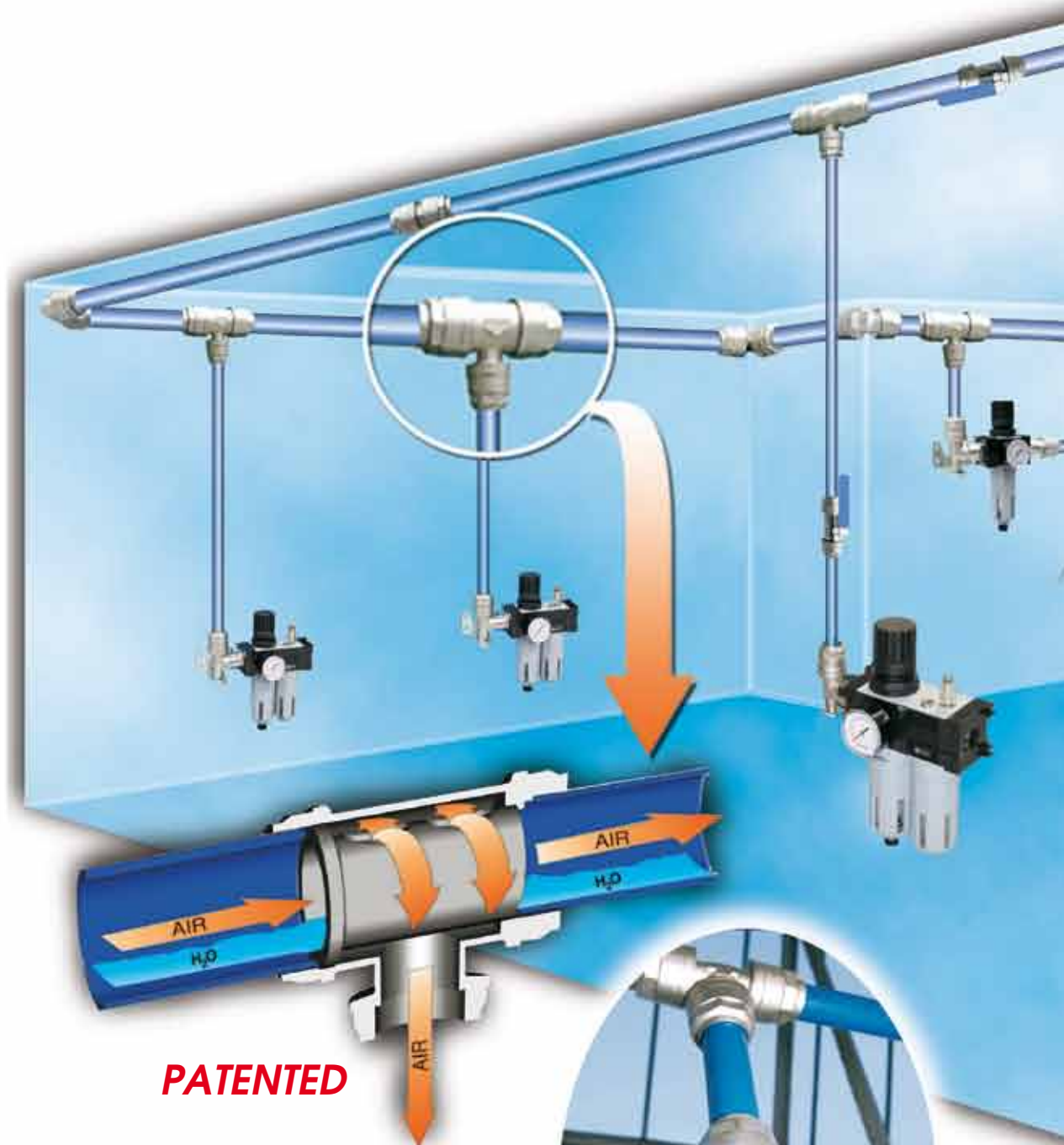


Catalogue

2012



INFINITY LINE



**RACCORDI AUTOMATICI PER GLI
IMPIANTI DI DISTRIBUZIONE DELL'ARIA**
*PUSH-IN FITTINGS FOR INSTALLATION OF
COMPRESSED-AIR PIPELINES*

FACILITA' E RAPIDITA' DI MONTAGGIO
EASINESS AND QUICKNESS OF ASSEMBLING

SISTEMA DI SEPARAZIONE DELLA CONDENSA
SEPARATION SYSTEM FOR THE CONDENSE

GAMMA COMPLETA DI ACCESSORI
WIDE RANGE OF ACCESSORIES



AFFIDABILITA' E SICUREZZA
RELIABILITY AND SECURITY

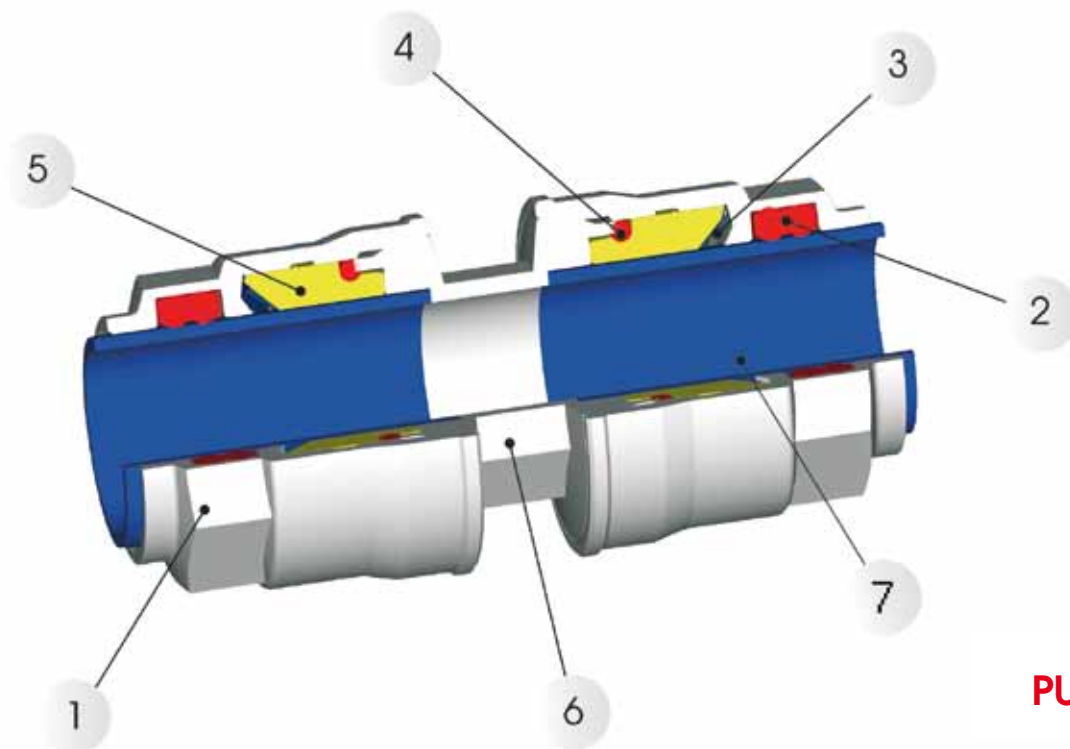
ELEVATA PORTATA D'ARIA
HIGH FLOW RATE

MOVE THE AIR POWER



Caratteristiche tecniche / Technical characteristics

ø20 - ø25 - ø32 - ø40 - ø50 - ø63



PUSH-IN

Materiali e componenti / Component part and materials

- 1 Dado in Ottone Nichelato
- 2 Guarnizione in NBR
- 3 Pinza D'aggraffaggio in INOX AISI 304
- 4 Guarnizione O-RING in NBR
- 5 Anello di Sicurezza in Tecnopolimero
- 6 Corpo in Ottone Nichelato
- 7 Tubo in alluminio estruso verniciato calibrato
Colore Blu (RAL 5010) - Colore Grigio (RAL 7035).

- 1 Nut made in Nickel-Plated Brass
- 2 Seal made in NBR
- 3 Clamping Washer made in Inox AISI 304
- 4 O-RING Seals made in NBR
- 5 Safety Ring made in Technopolymeric
- 6 Body made in Nickel-Plated Brass
- 7 Extruded Aluminium tube calibrated and powder coated
Blue Color (RAL 5010) - Gray Color (RAL 7035).

Pressioni / Pressures

Pressione minima / Minimum pressure **-0.99 bar (0.099 Mpa)**
Pressione massima / Maximum pressure **16 bar (1.6 Mpa)**

Temperature / Temperatures

Temperatura minima / Minimum temperature **-20°C**
Temperatura massima / Maximum temperature **+80°C**

Fluidi compatibili / Compatible fluids

Aria compressa / Compressed air.
Vuoto / Vacuum
Gas inerti (AZOTO, ARGON) / Inert Gas (AZOTO, ARGON)

Tenuta al fuoco / Fire resistance

Il sistema non alimenta e non propaga il fuoco
The system does not stroke or propagate any fires

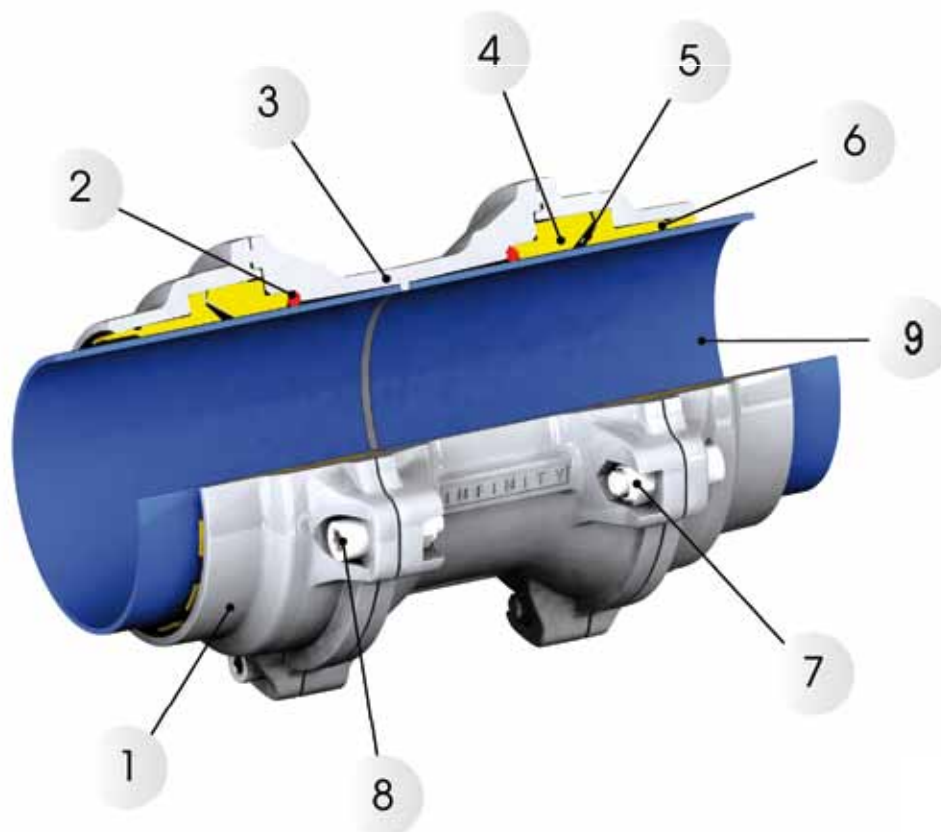
Filettature / Threads

Maschi gas conico ISO7
Male threads taper in conformity with ISO
Femmine gas cilindrica ISO228
Female threads in conformity with ISO 228

Caratteristiche tecniche dei tubi Technical characteristics to the tubes

Alluminio estruso **UNI 9006/1 Al Mg 0.5 Si 0.4 Fe 0.2**
Extruded Aluminium
Designazioni UNI EN 573-3 **EN AW 6060 T6**
Designations UNI EN 573-3
Trattamento superficiale **Verniciatura elettrostatica**
Surface treatment **Electrostatic painting**
Peso specifico **2.70 Kg/dm³**
Specific weight
Coefficiente di dilatazione **0.024 mm/(m °C)**
Expansion coefficient

Ø110



PUSH-IN

Materiali e componenti / Component part and materials

- | | |
|---|--|
| 1 Dado in alluminio trattato superficialmente | 1 Nut made in aluminium with finished surface treatment |
| 2 Guarnizione O-RING in NBR | 2 O-RING Seal made in NBR |
| 3 Corpo in alluminio trattato superficialmente | 3 Body made in aluminium with finished surface treatment |
| 4 Anello di sicurezza in Tecnopolimero | 4 Safety Ring made in Technopolymeric |
| 5 Pinza d'aggraffaggio in INOX AISI 301 | 5 Clamping Washer made in AISI 301 |
| 6 Anello guida-tubo in Tecnopolimero | 6 Tube-guide Ring made in technopolymeric |
| 7 Dado autobloccante in acciaio zincato | 7 Selflocking Nut in Zinc-Plated Steel |
| 8 Vite TCEI in acciaio zincato | 8 TCEI Screw in Zinc-Plated Steel |
| 9 Tubo in alluminio estruso verniciato calibrato Colore Blu (RAL 5010) - Colore Grigio (RAL 7035). | 9 Extruded Aluminium tube calibrated and powder coated Blue Color (RAL 5010) - Grey Color (RAL 7035). |

Pressioni / Pressures

Pressione minima / Minimum pressure **-0.99 bar (0.099 Mpa)**
 Pressione massima / Maximum pressure **16 bar (1.6 Mpa)**

Fluidi compatibili / Compatible fluids

Aria compressa / Compressed air.
 Vuoto / Vacuum
 Gas inerti (AZOTO, ARGON) / Inert Gas (AZOTO, ARGON)

Filettature / Threads

Raccordo flangiato UNI EN 1092 - 4 PN 16
 Raccordo flangiato DIN UNI EN 1092 - 4 PN 16
 Femmine gas cilindrica ISO228
 Female threads in conformity with ISO 228

Temperature / Temperatures

Temperatura minima / Minimum temperature **-20°C**
 Temperatura massima / Maximum temperature **+80°C**

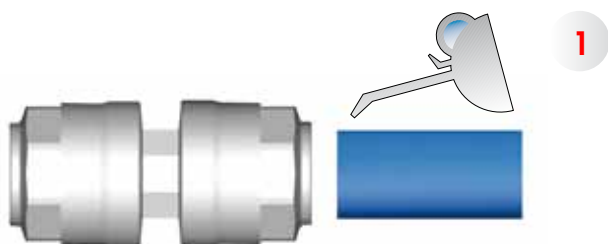
Tenuta al fuoco / Fire resistance

Il sistema non alimenta e non propaga il fuoco
 The system does not stroke or propagate any fires

Caratteristiche tecniche dei tubi Technical characteristics to the tubes

| | |
|--|---|
| Alluminio estruso Extruded Aluminium | UNI 9006/1 Al Mg 0.5 Si 0.4 Fe 0.2 |
| Designazioni UNI EN 573-3 Designations UNI EN 573-3 | EN AW 6060 T6 |
| Trattamento superficiale Surface treatment | Verniciatura elettrostatica Electrostatic painting |
| Peso specifico Specific weight | 2.70 Kg/dm ³ |
| Coefficiente di dilatazione Expansion coefficient | 0.024 mm/(m °C) |

Montaggio Impianto - Installation $\varnothing 20$ - $\varnothing 25$ - $\varnothing 32$ - $\varnothing 40$

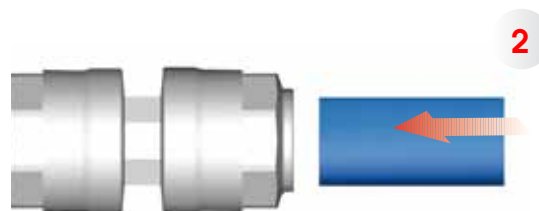


1

1 I raccordi $\varnothing 20$ - $\varnothing 25$ - $\varnothing 32$ - $\varnothing 40$ sono premontati con dado già serrato. I tubi di 4 e 6 mt sono già verniciati, calibrati e sbavati.
Fittings of $\varnothing 20$ - $\varnothing 25$ - $\varnothing 32$ - $\varnothing 40$ are pre-assembled. Tubes of 4 & 6 mt are pre-coated, calibrated and burred.

2 Inserire il tubo nel raccordo sino in battuta per la connessione automatica.

Push tube into the fitting for automatic connection.



2

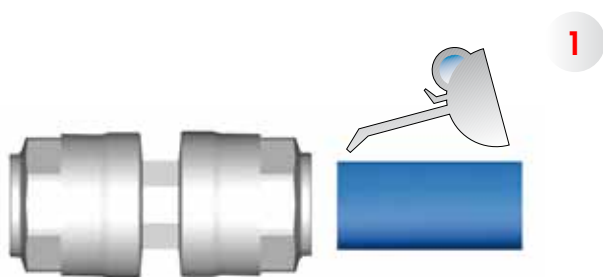
3 Nel caso si dovesse smontare un raccordo, utilizzare le coppie di serraggio riportate in tabella per il successivo montaggio.

In case of fitting disassembling, use the torques as in the chart to re-assemble the fitting.

3

| Diametro Diameter | Coppia Torque |
|----------------------|------------------|
| 20 | 300 cN.m |
| 25 | 300 cN.m |
| 32 | 400 cN.m |
| 40 | 650 cN.m |

Montaggio Impianto - Installation $\varnothing 50$ - $\varnothing 63$



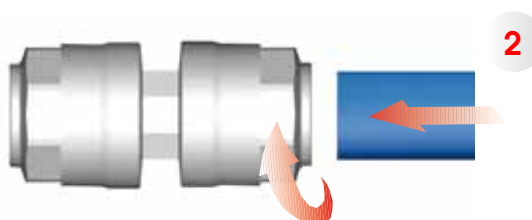
1

1 I raccordi $\varnothing 50$ - $\varnothing 63$ sono premontati con dado allentato per facilitare l'inserimento del tubo. I tubi di 4 e 6 mt sono già verniciati, calibrati e sbavati.

Fittings of $\varnothing 50$ - $\varnothing 63$ are pre-assembled with nut untwisted to help tube connection. Tubes of 4 & 6 mt are pre-coated, calibrated and burred.

2 Inserire il tubo nel raccordo sino in battuta per la connessione e serrare il dado utilizzando la coppia di serraggio riportata in tabella.

Push tube into the fitting for connection and tighten the nut using torques as in the chart.

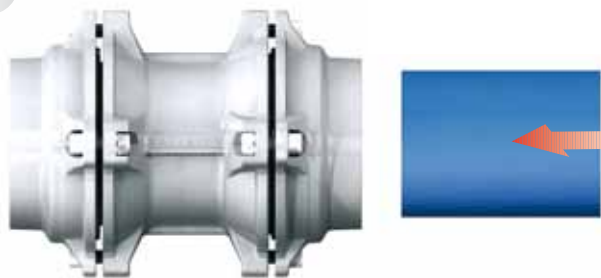


2

| Diametro Diameter | Coppia Torque |
|----------------------|------------------|
| 50 | 75 N.m |
| 63 | 75 N.m |

Montaggio Impianto - Installation $\varnothing 110$

1

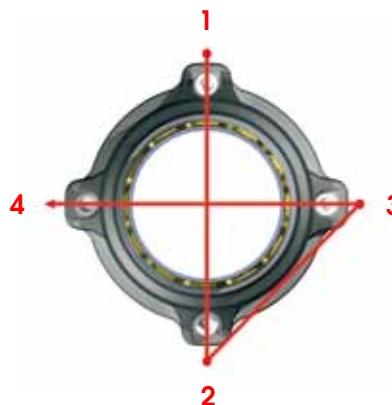
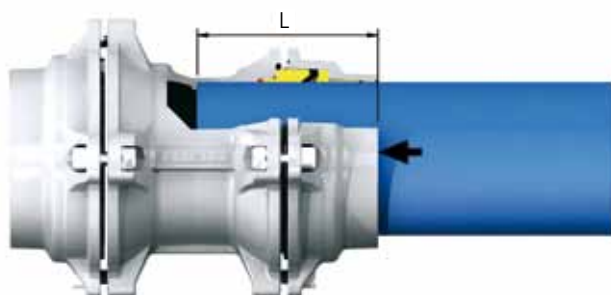


1 I raccordi $\varnothing 110$ sono premontati con quattro viti allentate per facilitare l'inserimento del tubo. I tubi di 4 e 6 mt sono già verniciati, calibrati e sbavati.

Fittings of $\varnothing 110$ are pre-assembled with four screws untwisted to help tube connection. Tubes of 4 & 6 mt are pre-coated, calibrated and burred.

2 Inserire il tubo nel raccordo sino in battuta per la connessione automatica e stringere le quattro viti nella sequenza suggerita. Coppia di serraggio 30Nm.

Push tube into the fitting for automatic connection and screw up in the suggested sequence. Tightening torque 30Nm.

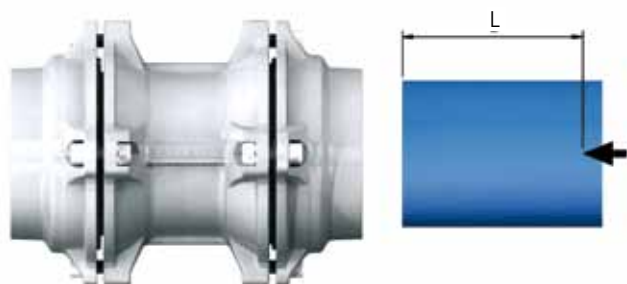


Inserimento tubo - Tube Connection



La corretta connessione del tubo è confermata dalla posizione della freccia pre-marcata. In caso esistesse la necessità di tagliare il tubo, si consiglia di segnare la lunghezza del tubo che va inserita nel raccordo.

The correct connection of tube is confirmed by the position of the arrow pre-stamp. If you need to cut the tube, mark the distance of tube to insert in the fitting.



| Diametro Diameter | L mm |
|----------------------|----------|
| 20 | 31.5 mm |
| 25 | 38.5 mm |
| 32 | 46 mm |
| 40 | 52 mm |
| 50 | 63.5 mm |
| 63 | 75.5 mm |
| 110 | 125.5 mm |

Dimensionamento della rete / Chose the diameter four the installation

La tabella sottostante permette di determinare il diametro della linea principale.

The Diagram below allows to determinate the diameter of the main line.

- 1 Trovare la portata del compressore nella colonna rossa.**
Choose the Flow rate of compressor in the Red column.
- 2 Trovare la distanza fra compressore e utilizzo piu' lontano nella riga blu.**
Choose the Distance between compressor and the most distant using point in the Blue column.
- 3 Trovare il diametro incrociando la riga della portata con la colonna della distanza.**
Cross the lines of Flow rate and blue column of Distance to choose the diameter.

| Portata Flow Rate NI/min Nm ³ /h cfm | | | Distanza fra compressore e utilizzo più lontano Distance between compressor and the most distant using point. | | | | | | | | | |
|---|------|------|--|--------------|---------------|---------------|---------------|---------------|----------------|----------------|-----------------|-----------------|
| | | | 25m 82ft | 50m 164ft | 100m 328ft | 150m 492ft | 200m 656ft | 300m 984ft | 400m 1312ft | 500m 1640ft | 1000m 3280ft | 1500m 4921ft |
| 230 | 14 | 8 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 25 | 25 |
| 650 | 39 | 23 | 20 | 20 | 20 | 20 | 25 | 25 | 25 | 25 | 32 | 32 |
| 900 | 54 | 32 | 20 | 20 | 20 | 25 | 25 | 25 | 32 | 32 | 32 | 40 |
| 1200 | 72 | 42 | 20 | 20 | 25 | 25 | 25 | 32 | 32 | 32 | 40 | 40 |
| 1750 | 105 | 62 | 20 | 25 | 25 | 32 | 32 | 32 | 32 | 40 | 40 | 50 |
| 2000 | 120 | 71 | 20 | 25 | 32 | 32 | 32 | 32 | 40 | 40 | 40 | 50 |
| 2500 | 150 | 88 | 25 | 25 | 32 | 32 | 32 | 40 | 40 | 40 | 50 | 50 |
| 3000 | 180 | 106 | 25 | 32 | 32 | 32 | 40 | 40 | 40 | 40 | 50 | 63 |
| 3500 | 210 | 124 | 25 | 32 | 32 | 40 | 40 | 40 | 40 | 50 | 50 | 63 |
| 4500 | 270 | 159 | 32 | 32 | 40 | 40 | 40 | 50 | 50 | 50 | 63 | 63 |
| 6000 | 360 | 212 | 32 | 40 | 40 | 40 | 50 | 50 | 50 | 63 | 63 | 63* |
| 7000 | 420 | 247 | 32 | 40 | 40 | 50 | 50 | 50 | 63 | 63 | 63 | 63* |
| 8500 | 510 | 300 | 40 | 40 | 50 | 50 | 50 | 63 | 63 | 63 | 63* | 110 |
| 12000 | 720 | 424 | 40 | 50 | 50 | 63 | 63 | 63 | 63 | 110 | 110 | 110 |
| 15000 | 900 | 530 | 40 | 50 | 63 | 63 | 63 | 63 | 63* | 110 | 110 | 110 |
| 18000 | 1080 | 636 | 50 | 50 | 63 | 63 | 63 | 110 | 110 | 110 | 110 | 110 |
| 21000 | 1260 | 742 | 50 | 63 | 63 | 63 | 63* | 110 | 110 | 110 | 110 | 110* |
| 26000 | 1560 | 918 | 50 | 63 | 63 | 63* | 110 | 110 | 110 | 110 | 110* | 110* |
| 31000 | 1860 | 1095 | 63 | 63 | 63* | 110 | 110 | 110 | 110 | 110 | 110* | 110* |
| 33000 | 1980 | 1165 | 63 | 63 | 110 | 110 | 110 | 110 | 110 | 110 | 110* | 110* |
| 44000 | 2640 | 1554 | 63 | 63* | 110 | 110 | 110 | 110 | 110 | 110 | 110* | 110* |
| 50000 | 3000 | 1766 | 63 | 110 | 110 | 110 | 110 | 110 | 110 | 110* | 110* | 110* |
| 58000 | 3480 | 2048 | 63 | 110 | 110 | 110 | 110 | 110 | 110* | 110* | 110* | 110* |
| 67000 | 4020 | 2366 | 63* | 110 | 110 | 110 | 110 | 110* | 110* | 110* | 110* | 110* |
| 75000 | 4500 | 2648 | 110 | 110 | 110 | 110 | 110 | 110* | 110* | 110* | 110* | 110* |
| 83000 | 4980 | 2931 | 110 | 110 | 110 | 110 | 110* | 110* | 110* | 110* | 110* | 110* |
| 92000 | 5520 | 3249 | 110 | 110 | 110 | 110* | 110* | 110* | 110* | 110* | 110* | 110* |
| 100000 | 6000 | 3531 | 110 | 110 | 110 | 110* | 110* | 110* | 110* | 110* | 110* | 110* |

Pressione 7 bar - Perdita di carico totale 4% / Pressure 7 bar - Total pressure drop 4%

* La perdita di carico è superiore al 4% / * Pressure drop is higher than 4%

Esempio / Example

Portata: 1750 NL/min

Distanza fra compressore e
utilizzo più lontano: 300 m

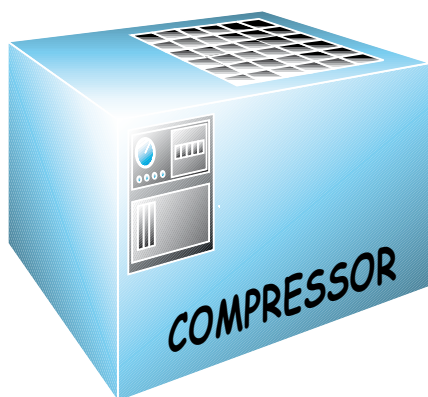
Diametro tubo: **32**

Flow rate: 1750 NL/min

Distance between compressor
and most distant using point: 300 m

Tube diameter: **32**

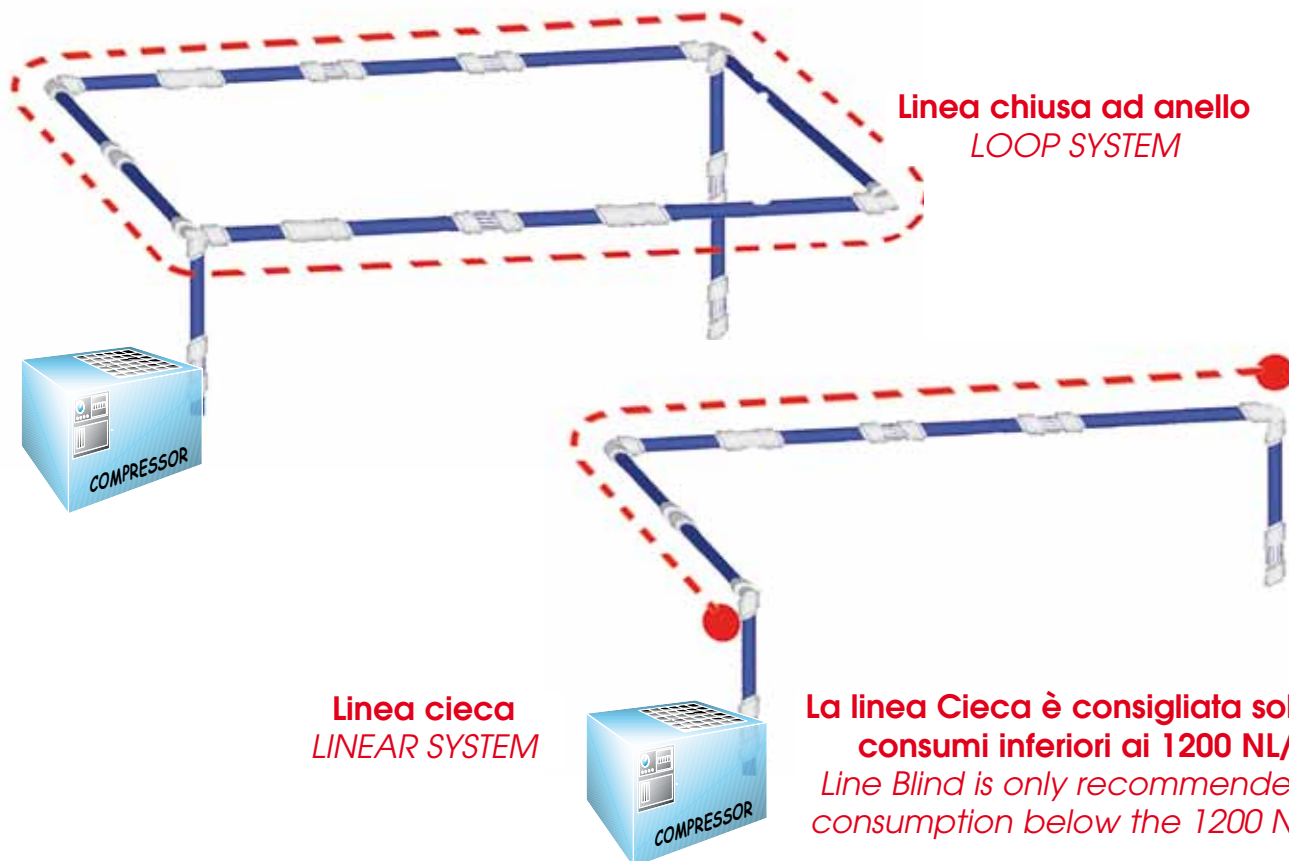
Portate indicative dei compressori a 7 bar / Indicative flow rates of the compressors to 7



| KW | CV | Nl/min |
|------|-----|--------|
| 1.5 | 2 | 230 |
| 3 | 4 | 460 |
| 4 | 6 | 650 |
| 5.5 | 7,5 | 900 |
| 7.5 | 10 | 1200 |
| 11 | 15 | 1750 |
| 12.5 | 17 | 2000 |
| 15 | 20 | 2500 |
| 18 | 25 | 3000 |
| 22 | 30 | 3500 |
| 29 | 40 | 4500 |
| 37 | 50 | 6000 |
| 45 | 60 | 7000 |
| 55 | 75 | 8500 |
| 74 | 100 | 12000 |
| 92 | 125 | 15000 |
| 110 | 150 | 18000 |
| 132 | 180 | 21000 |
| 170 | 230 | 26000 |
| 200 | 270 | 31000 |
| 250 | 340 | 44000 |

Distanza fra compressore e utilizzo più lontano

Distance between compressor and the most distant using point.



Distanza fra compressore e utilizzo più lontano

Distance between compressor and the most distant using point.

Tubo di calata / Tube diameter for the outlets

Sono previste calate:

Ø20 con portata fino a 2000 NI/min
 Ø25 con portata fino a 3500 NI/min
 Ø32 con portata fino a 7000 NI/min

Specifications about available tube diameters for the outlets:

Ø 20 with flow rate till 2000 NI/min
 Ø 25 with flow rate till 3500 NI/min
 Ø 32 with flow rate till 7000 NI/min

Dilatazioni e contrazioni termiche / Expansion and shrinkage due to the heat

Per calcolare la dilatazione - contrazione lineare utilizziamo la seguente formula:

$$\Delta L = \Delta T \times L \times \alpha \quad \text{dove:}$$

- ΔL = dilatazione - contrazione lineare in mm
- ΔT = variazione di temperatura tra quella di esercizio e quella di posa in °C
- L = lunghezza tubo in m
- α = coefficiente di dilatazione termica lineare che per l'alluminio é 0.024 mm/ m °C

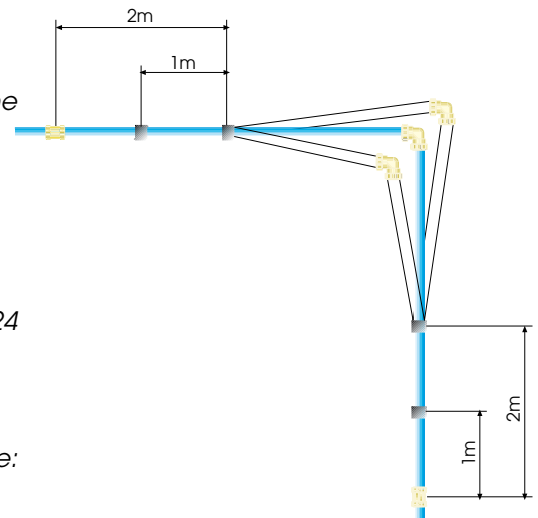
- l'impianto deve essere posto in modo che all'estremità si preveda uno spazio che ne consenta la dilatazione-contrazione, ed i supporti devono essere posizionati come in figura:

To calculate the linear expansion - shrinkage we can use the following formula:

$$\Delta L = \Delta T \times L \times \alpha \quad \text{i.e.:$$

- ΔL = Linear expansion - shrinkage in mm
- ΔT = Heat variation between the operating temperature and the installation one at °C
- L = Tube length in m
- α = Linear expansion factor, for the aluminium it is 0.024 mm/ m °C

- The installation have to be positioned, considering at the two ends free space which permits the expansion - shrinkage and supports have to be fixed as showed in the picture:





90000 - 4MT

TUBI IN ALLUMINIO CALIBRATI DI COLORE BLU
CALIBRATED ALUMINIUM TUBES BLUE COLOUR

| Codice Code | Ø Esterno | Spessore | Pressione | Peso | Lung. | Conf. |
|----------------|-----------|-----------|-----------|--------|--------|-------|
| | Outside Ø | Thickness | Pressure | Weight | Length | Pack. |
| | mm | mm | bar | gr/m | 4 Mt. | |
| 900000011Y9B5 | 20 | 1.5 | 15 | 235 | 4 m | 8 |
| 900000011J4B5 | 25 | 1.5 | 15 | 298 | 4 m | 8 |
| 900000011J9B5 | 32 | 1.5 | 15 | 387 | 4 m | 9 |
| 900000011K4B5 | 40 | 1.5 | 15 | 490 | 4 m | 9 |
| 900000011W0B5 | 50 | 2 | 15 | 814 | 4 m | 4 |
| 900000011W3B5 | 63 | 2 | 15 | 1034 | 4 m | 4 |
| 900000011HTB5 | 110 | 2.5 | 15 | 2280 | 4 m | 2 |



90000GR - 4MT

TUBI IN ALLUMINIO CALIBRATI DI COLORE GRIGIO
CALIBRATED ALUMINIUM TUBES GREY COLOUR

| Codice Code | Ø Esterno | Spessore | Pressione | Peso | Lung. | Conf. |
|----------------|-----------|-----------|-----------|--------|--------|-------|
| | Outside Ø | Thickness | Pressure | Weight | Length | Pack. |
| | mm | mm | bar | gr/m | 4 Mt. | |
| 900000011Y9GR | 20 | 1.5 | 15 | 235 | 4 m | 8 |
| 900000011J4GR | 25 | 1.5 | 15 | 298 | 4 m | 8 |
| 900000011J9GR | 32 | 1.5 | 15 | 387 | 4 m | 9 |
| 900000011K4GR | 40 | 1.5 | 15 | 490 | 4 m | 9 |
| 900000011W0GR | 50 | 2 | 15 | 814 | 4 m | 4 |
| 900000011W3GR | 63 | 2 | 15 | 1034 | 4 m | 4 |
| 900000011HTGR | 110 | 2.5 | 15 | 2280 | 4 m | 2 |



90000 - 6MT

TUBI IN ALLUMINIO CALIBRATI DI COLORE BLU
CALIBRATED ALUMINIUM TUBES BLUE COLOUR

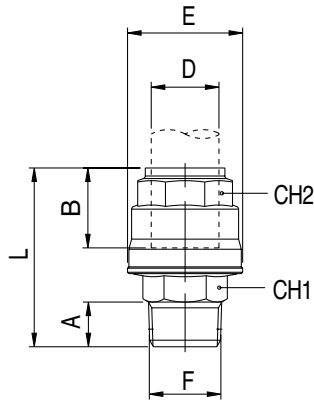
| Codice Code | Ø Esterno | Spessore | Pressione | Peso | Lung. | Conf. |
|----------------|-----------|-----------|-----------|--------|--------|-------|
| | Outside Ø | Thickness | Pressure | Weight | Length | Pack. |
| | mm | mm | bar | gr/m | 6 Mt. | |
| 900006020BL | 20 | 1.5 | 15 | 235 | 6 m | 8 |
| 900006025BL | 25 | 1.5 | 15 | 298 | 6 m | 8 |
| 900006032BL | 32 | 1.5 | 15 | 387 | 6 m | 9 |
| 900006040BL | 40 | 1.5 | 15 | 490 | 6 m | 4 |
| 900006050BL | 50 | 2 | 15 | 814 | 6 m | 4 |
| 900006063BL | 63 | 2 | 15 | 1034 | 6 m | 2 |
| 900006110BL | 110 | 2.5 | 15 | 2280 | 6 m | 1 |



90000GR - 6MT

TUBI IN ALLUMINIO CALIBRATI DI COLORE GRIGIO
CALIBRATED ALUMINIUM TUBES GREY COLOUR

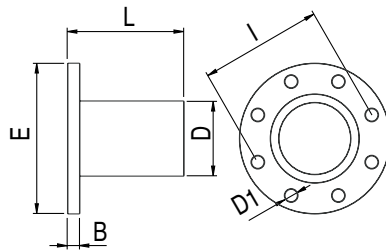
| Codice Code | Ø Esterno | Spessore | Pressione | Peso | Lung. | Conf. |
|----------------|-----------|-----------|-----------|--------|--------|-------|
| | Outside Ø | Thickness | Pressure | Weight | Length | Pack. |
| | mm | mm | bar | gr/m | 6 Mt. | |
| 900006020GR | 20 | 1.5 | 15 | 235 | 6 m | 8 |
| 900006025GR | 25 | 1.5 | 15 | 298 | 6 m | 8 |
| 900006032GR | 32 | 1.5 | 15 | 387 | 6 m | 9 |
| 900006040GR | 40 | 1.5 | 15 | 490 | 6 m | 4 |
| 900006050GR | 50 | 2 | 15 | 814 | 6 m | 4 |
| 900006063GR | 63 | 2 | 15 | 1034 | 6 m | 2 |
| 900006110GR | 110 | 2.5 | 15 | 2280 | 6 m | 1 |



90010

RACCORDO DIRITTO MASCHIO - STRAIGHT MALE ADAPTOR

| Codice Code | D | F | A | B | E | L | CH1 | CH2 | Conf. Pack. |
|-------------|----|-------|------|------|------|-------|-----|-----|-------------|
| 9001000001 | 20 | 1/2 | 14 | 31.5 | 34.5 | 56 | 22 | 30 | 10 |
| 9001000002 | 25 | 3/4 | 16.5 | 38.5 | 42.5 | 66 | 27 | 35 | 5 |
| 9001000003 | 32 | 1" | 19 | 46 | 52 | 76.5 | 34 | 45 | 2 |
| 9001000004 | 40 | 1 1/4 | 21.5 | 52 | 63 | 89.5 | 45 | 55 | 2 |
| 9001000007 | 40 | 1 1/2 | 21.5 | 52 | 63 | 92 | 50 | 55 | 2 |
| 9001000005 | 50 | 1 1/2 | 21.5 | 63.5 | 73 | 105 | 50 | 65 | 2 |
| 9001000006 | 63 | 2" | 24 | 59 | 92 | 107.5 | 65 | 70 | 2 |



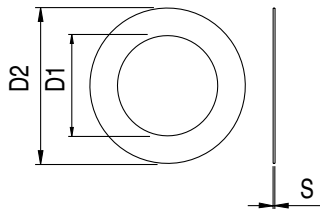
90015-110

TUBO FLANGIATO - FLANGED TUBE

| Codice Code | D | B | E | L | D1 | I | Conf. Pack. |
|-------------|-----|----|-----|-----|----|-----|-------------|
| 9001500001 | 110 | 18 | 220 | 183 | 18 | 180 | 1 |

Le dimensioni di accoppiamento della flangia rispettano la norma UNI EN 1092 - 4 PN 16 (Flange in leghe di alluminio).

The connection dimensions of the flange are designed in conformity with standard UNI EN 1092 - 4 PN 16 (Flange made in aluminium alloy).



90017-110

GUARNIZIONE PIATTA PER FLANGIA (RICAMBIO)
FLAT GASKET FOR FLANGE (SPARE PART)

| Codice Code | D | D1 | D2 | S | Conf. Pack. |
|---------------|-----|-----|-----|---|-------------|
| 900170057HT00 | 110 | 105 | 162 | 2 | 1 |

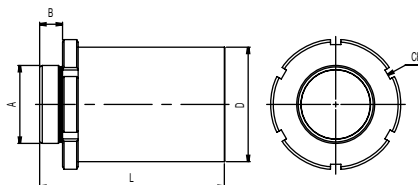


90019-110

KIT VITI PER FLANGIA - FLANGE KIT

| Codice Code | LUNGHEZZA / SIZE | Conf. Pack. |
|-------------|------------------|-------------|
| 9001900001 | M16 65 mm | 1 |

KIT: 8 VITI + 8 DADI + 16 RONDELLE
KIT: 8 SCREW + 8 NUT + 16 WASHER



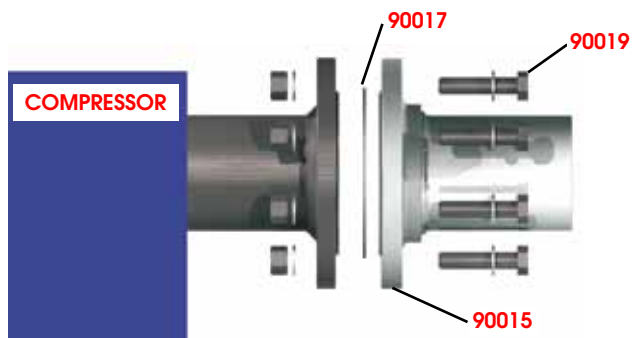
90020-110

TUBO - TUBE

| Codice Code | D | A | B | L | CH | Conf. Pack. |
|-------------|-----|--------|----|-----|------|-------------|
| 9002000001 | 110 | 2"-1/2 | 22 | 178 | *125 | 1 |
| 9002000002 | 110 | 3" | 23 | 179 | *125 | 1 |

*DIMENSIONI CHIAVE A SETTORE
*HOOK WRENCH DIMENSIONS

Montaggio / Installation 90015



Per collegare l'impianto al compressore utilizzare il tubo flangiato art. 90015.

To connect the pipe system to the compressor use flanged tube art.90015

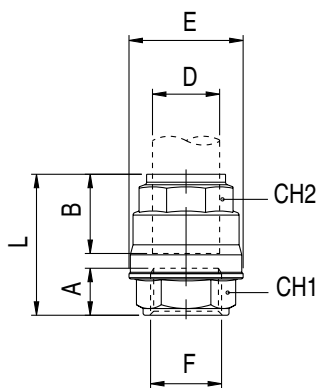
Porre la guarnizione art. 90017 tra la flangia del compressore e art. 90015. Stringere le otto viti art. 90019. Coppia di serraggio 60 Nm.

Lay flange gasket art. 90017 between compressor flange and art. 90015. Tighten the eight screws art. 90019. Tightening torque 60 Nm.



A montaggio ultimato si presenta così.

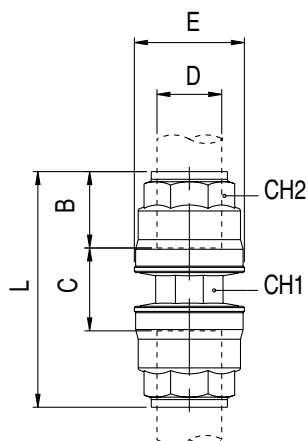
See right-hand side picture for final assembly.



90030

RACCORDO DIRITTO FEMMINA - STRAIGHT FEMALE ADAPTOR

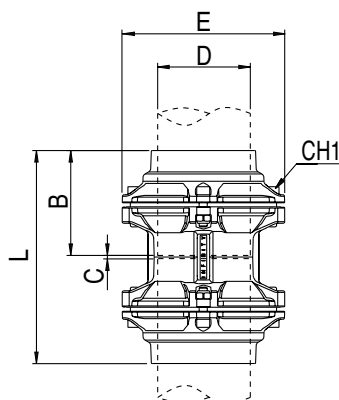
| Codice Code | D | F | A | B | E | L | CH1 | CH2 | Conf. Pack. |
|-------------|----|-------|------|------|------|------|-----|-----|-------------|
| 9003000001 | 20 | 1/2 | 15 | 31.5 | 34.5 | 49 | 24 | 30 | 10 |
| 9003000002 | 25 | 3/4 | 16.5 | 38.5 | 42.5 | 56.5 | 32 | 35 | 5 |
| 9003000003 | 32 | 1" | 19 | 46 | 52 | 66.5 | 38 | 45 | 2 |
| 9003000004 | 40 | 1"1/4 | 22 | 52 | 63 | 76 | 50 | 55 | 2 |
| 9003000005 | 50 | 1"1/2 | 22 | 63.5 | 73 | 85.5 | 55 | 65 | 2 |
| 9003000006 | 63 | 2" | 22 | 59 | 92 | 82.5 | 65 | 70 | 2 |



90040

RACCORDO DIRITTO INTERMEDIO - STRAIGHT CONNECTOR

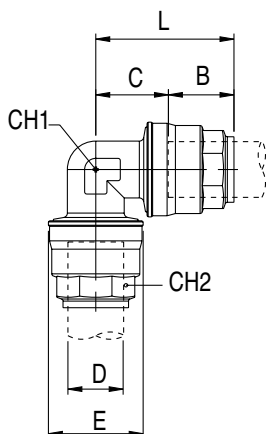
| Codice Code | D | B | C | E | L | CH1 | CH2 | Conf. Pack. |
|-------------|----|------|------|------|-------|-----|-----|-------------|
| 9004000001 | 20 | 31.5 | 14.5 | 34.5 | 76.5 | 21 | 30 | 5 |
| 9004000002 | 25 | 38.5 | 13.5 | 42.5 | 90.5 | 26 | 35 | 5 |
| 9004000003 | 32 | 46 | 14.5 | 52 | 106.5 | 32 | 45 | 2 |
| 9004000004 | 40 | 52 | 21 | 63 | 125 | 41 | 55 | 2 |
| 9004000005 | 50 | 63.5 | 21.5 | 73 | 148.5 | 50 | 65 | 2 |
| 9004000006 | 63 | 59 | 25 | 92 | 160 | 65 | 70 | 1 |



90040-110

RACCORDO DIRITTO INTERMEDIO - STRAIGHT CONNECTOR

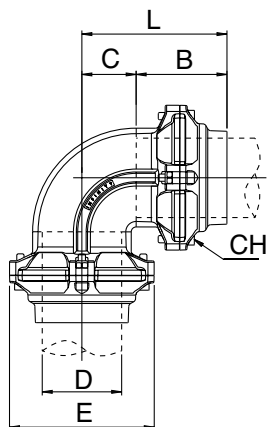
| Codice Code | D | B | C | E | L | CH1 | Conf. Pack. |
|-------------|-----|-------|---|-----|-----|-----|-------------|
| 900400008 | 110 | 125.5 | 4 | 200 | 255 | 8 | 1 |



90130

RACCORDO A L INTERMEDIO - ELBOW CONNECTOR

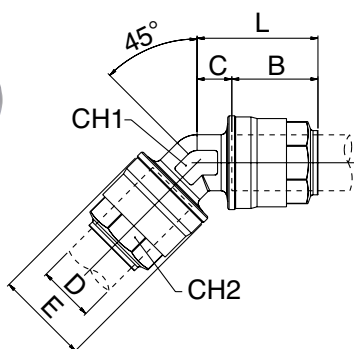
| Codice Code | D | B | C | E | L | CH1 | CH2 | Conf. Pack. |
|-------------|----|------|------|------|------|-----|-----|-------------|
| 901300001 | 20 | 31.5 | 19 | 34.5 | 51 | 21 | 30 | 4 |
| 901300002 | 25 | 38.5 | 23 | 42.5 | 61.5 | 26 | 35 | 4 |
| 901300003 | 32 | 46 | 28 | 52 | 74.5 | 34 | 45 | 2 |
| 901300004 | 40 | 52 | 34 | 63 | 86.5 | 41 | 55 | 2 |
| 901300005 | 50 | 63.5 | 40.5 | 73 | 104 | 50 | 65 | 2 |
| 901300006 | 63 | 59 | 52 | 92 | 111 | 65 | 70 | 1 |



90130-110

RACCORDO A L INTERMEDIO - ELBOW CONNECTOR

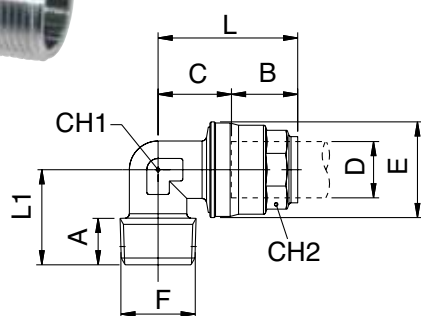
| Codice Code | D | B | C | E | L | CH | Conf. Pack. |
|-------------|-----|-------|----|-----|-------|----|-------------|
| 901300008 | 110 | 125.5 | 75 | 200 | 200.5 | 8 | 1 |



90140

RACCORDO A 135° INTERMEDIO - 135° CONNECTOR

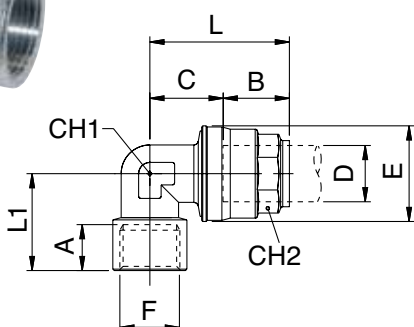
| Codice Code | D | B | C | E | L | CH1 | CH2 | Conf. Pack. |
|-------------|----|------|------|------|------|-----|-----|-------------|
| 901400001 | 20 | 31.5 | 12.5 | 34.5 | 44 | 21 | 30 | 4 |
| 901400002 | 25 | 38.5 | 13.5 | 42.5 | 52 | 26 | 35 | 4 |
| 901400003 | 32 | 46 | 15 | 52 | 61 | 34 | 45 | 2 |
| 901400004 | 40 | 52 | 18 | 63 | 70 | 41 | 55 | 2 |
| 901400005 | 50 | 63.5 | 20 | 73 | 83.5 | 50 | 65 | 2 |
| 901400006 | 63 | 59 | 24 | 92 | 83 | 65 | 70 | 1 |



90150

RACCORDO A L MASCHIO-TUBO
ELBOW CONNECTOR MALE-TUBE

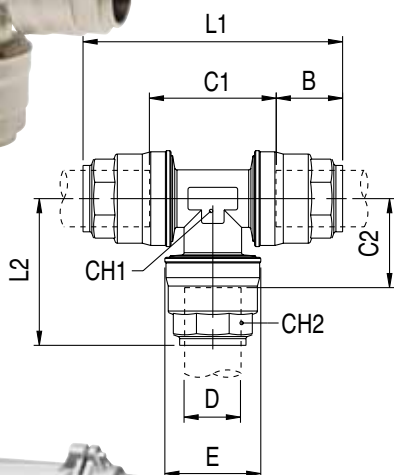
| Codice Code | D | F | A | B | C | E | L | L1 | CH | CH1 | Conf. Pack. |
|-------------|----|--------|------|------|------|------|------|----|----|-----|-------------|
| 9015000001 | 20 | 1/2 | 14 | 31.5 | 19 | 34.5 | 51 | 32 | 21 | 30 | 4 |
| 9015000002 | 25 | 3/4 | 16.5 | 38.5 | 23 | 42.5 | 61.5 | 37 | 26 | 35 | 4 |
| 9015000003 | 32 | 1" | 19 | 46 | 28 | 52 | 74.5 | 49 | 34 | 45 | 2 |
| 9015000004 | 40 | 1"-1/4 | 21.5 | 52 | 34 | 63 | 86.5 | 54 | 41 | 55 | 2 |
| 9015000005 | 50 | 1"-1/2 | 21.5 | 63.5 | 40.5 | 73 | 104 | 59 | 50 | 65 | 2 |
| 9015000006 | 63 | 2" | 24 | 59 | 52 | 92 | 111 | 71 | 65 | 70 | 1 |



90160

RACCORDO A L FEMMINA-TUBO
ELBOW CONNECTOR FEMALE-TUBE

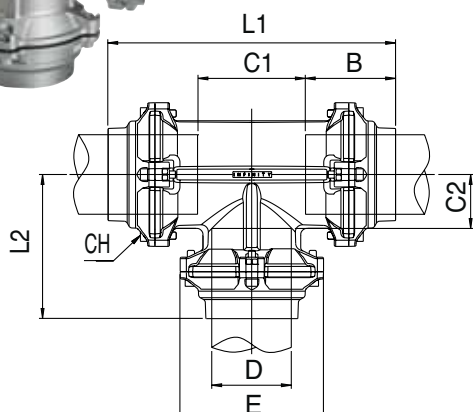
| Codice Code | D | F | A | B | C | E | L | L1 | CH | CH1 | Conf. Pack. |
|-------------|----|--------|------|------|------|------|------|------|----|-----|-------------|
| 9016000001 | 20 | 1/2 | 13 | 31.5 | 19 | 34.5 | 51 | 34.5 | 21 | 30 | 4 |
| 9016000002 | 25 | 3/4 | 14.5 | 38.5 | 23 | 42.5 | 61.5 | 38.5 | 26 | 35 | 4 |
| 9016000003 | 32 | 1" | 16.5 | 46 | 28 | 52 | 74.5 | 47.5 | 34 | 45 | 2 |
| 9016000004 | 40 | 1"-1/4 | 20 | 52 | 34 | 63 | 86.5 | 56.5 | 41 | 55 | 2 |
| 9016000005 | 50 | 1"-1/2 | 22 | 63.5 | 40.5 | 73 | 104 | 64.7 | 50 | 65 | 2 |
| 9016000006 | 63 | 2" | 21.7 | 59 | 52 | 92 | 111 | 77 | 65 | 70 | 1 |



90230

RACCORDO A T INTERMEDIO - TEE CONNECTOR

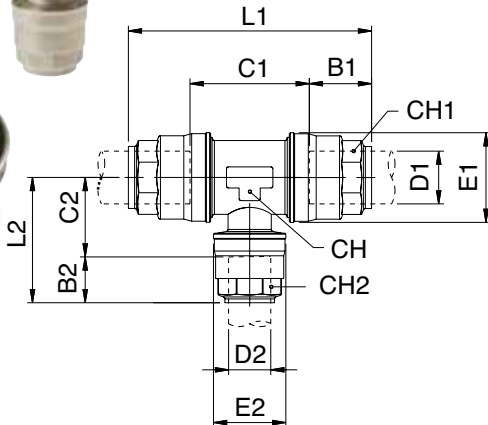
| Codice Code | D | E | B | C1 | C2 | L1 | L2 | CH1 | CH2 | Conf. Pack. |
|-------------|----|------|------|------|------|-------|-------|-----|-----|-------------|
| 9023000001 | 20 | 34.5 | 31.5 | 34.5 | 22.5 | 98 | 54.5 | 21 | 30 | 3 |
| 9023000002 | 25 | 42.5 | 38.5 | 37.5 | 26 | 113.5 | 65 | 26 | 35 | 3 |
| 9023000003 | 32 | 52 | 46 | 46.5 | 31.5 | 138.5 | 77 | 34 | 45 | 2 |
| 9023000004 | 40 | 63 | 52 | 55.5 | 38 | 159.5 | 90 | 41 | 55 | 1 |
| 9023000005 | 50 | 73 | 63.5 | 69 | 44.5 | 196 | 108 | 50 | 65 | 1 |
| 9023000006 | 63 | 92 | 59 | 87 | 55.5 | 205.5 | 114.5 | 65 | 70 | 1 |



90230-110

RACCORDO A T INTERMEDIO - TEE CONNECTOR

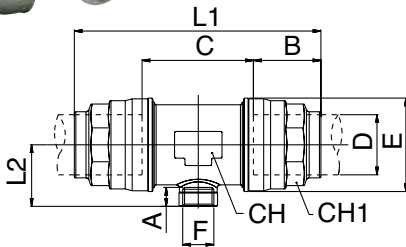
| Codice Code | D | E | B | C1 | C2 | L1 | L2 | CH | Conf. Pack. |
|-------------|-----|-----|-------|-------|----|-----|-------|----|-------------|
| 9023000008 | 110 | 200 | 125.5 | 150.5 | 75 | 401 | 200.5 | 8 | 1 |



90235

RACCORDO PER CALATA - FITTING FOR OUTLET

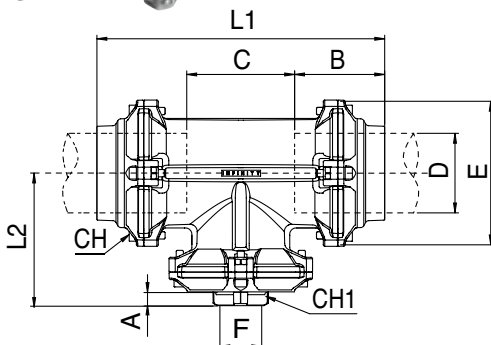
| Codice Code | D1 | D2 | B1 | B2 | C1 | C2 | E1 | E2 | L1 | L2 | CH | CH1 | CH2 | Conf. Pack. |
|-------------|----|----|------|------|------|------|------|------|-------|------|----|-----|-----|-------------|
| 9023500013 | 20 | 20 | 31.5 | 31.5 | 48 | 22.5 | 34.5 | 34.5 | 109 | 54 | 28 | 30 | 30 | 3 |
| 9023500001 | 25 | 20 | 38 | 31.5 | 45.5 | 27.5 | 42.5 | 34.5 | 121.5 | 59 | 35 | 35 | 30 | 3 |
| 9023500002 | 32 | 20 | 46 | 31.5 | 54.5 | 31.5 | 52 | 34.5 | 146.5 | 63 | 45 | 45 | 30 | 2 |
| 9023500003 | 32 | 25 | 46 | 38 | 54.5 | 31.5 | 52 | 42.5 | 146.5 | 70 | 45 | 45 | 35 | 2 |
| 9023500004 | 40 | 20 | 52.5 | 31.5 | 60 | 34.5 | 63 | 34.5 | 165.5 | 66 | 55 | 55 | 30 | 2 |
| 9023500005 | 40 | 25 | 52.5 | 38 | 60 | 34.5 | 63 | 42.5 | 165.5 | 73 | 55 | 55 | 35 | 2 |
| 9023500007 | 50 | 20 | 63.5 | 31.5 | 73.5 | 41.5 | 73 | 34.5 | 201 | 73 | 65 | 65 | 30 | 1 |
| 9023500008 | 50 | 25 | 63.5 | 38.5 | 73.5 | 41 | 73 | 42.5 | 201 | 80 | 65 | 65 | 35 | 1 |
| 9023500009 | 50 | 32 | 63.5 | 46 | 73.5 | 41 | 73 | 52 | 201 | 87.5 | 65 | 65 | 45 | 1 |
| 9023500010 | 63 | 20 | 59 | 31.5 | 86 | 49.5 | 92 | 34.5 | 204.5 | 81 | 80 | 70 | 30 | 1 |
| 9023500011 | 63 | 25 | 59 | 38.5 | 86 | 49 | 92 | 42.5 | 204.5 | 88 | 80 | 70 | 35 | 1 |
| 9023500012 | 63 | 32 | 59 | 46 | 86 | 49 | 92 | 52 | 204.5 | 95.5 | 80 | 70 | 45 | 1 |



90236

RACCORDO PER CALATA FEMMINA - FEMALE FITTING FOR OUTLET

| Codice Code | D | F | A | B | C | E | L1 | L2 | CH | CH1 | Conf. Pack. |
|-------------|----|-------|------|------|------|------|-------|------|----|-----|-------------|
| 9023600006 | 20 | - 3/8 | 11 | 31.5 | 48 | 34.5 | 109 | 25 | 28 | 30 | 3 |
| 9023600007 | 20 | - 1/2 | 13.5 | 31.5 | 48 | 34.5 | 109 | 28 | 28 | 30 | 3 |
| 9023600001 | 25 | - 3/8 | 11 | 38.5 | 45.5 | 42.5 | 121.5 | 29 | 35 | 35 | 3 |
| 9023600008 | 25 | - 1/2 | 13.5 | 38.5 | 45.5 | 42.5 | 121.5 | 31 | 35 | 35 | 2 |
| 9023600002 | 32 | - 1/2 | 13.5 | 46 | 54.5 | 52 | 146.5 | 36.5 | 45 | 45 | 2 |
| 9023600003 | 40 | - 1/2 | 13.5 | 52.5 | 60 | 63 | 165.5 | 41.5 | 55 | 55 | 2 |
| 9023600004 | 50 | - 3/4 | 14.5 | 63.5 | 73.5 | 73 | 201 | 47.5 | 65 | 65 | 1 |
| 9023600005 | 63 | - 3/4 | 14.5 | 59 | 86 | 92 | 204.5 | 55 | 80 | 70 | 1 |



90236-110

RACCORDO PER CALATA FEMMINA - FEMALE FITTING FOR OUTLET

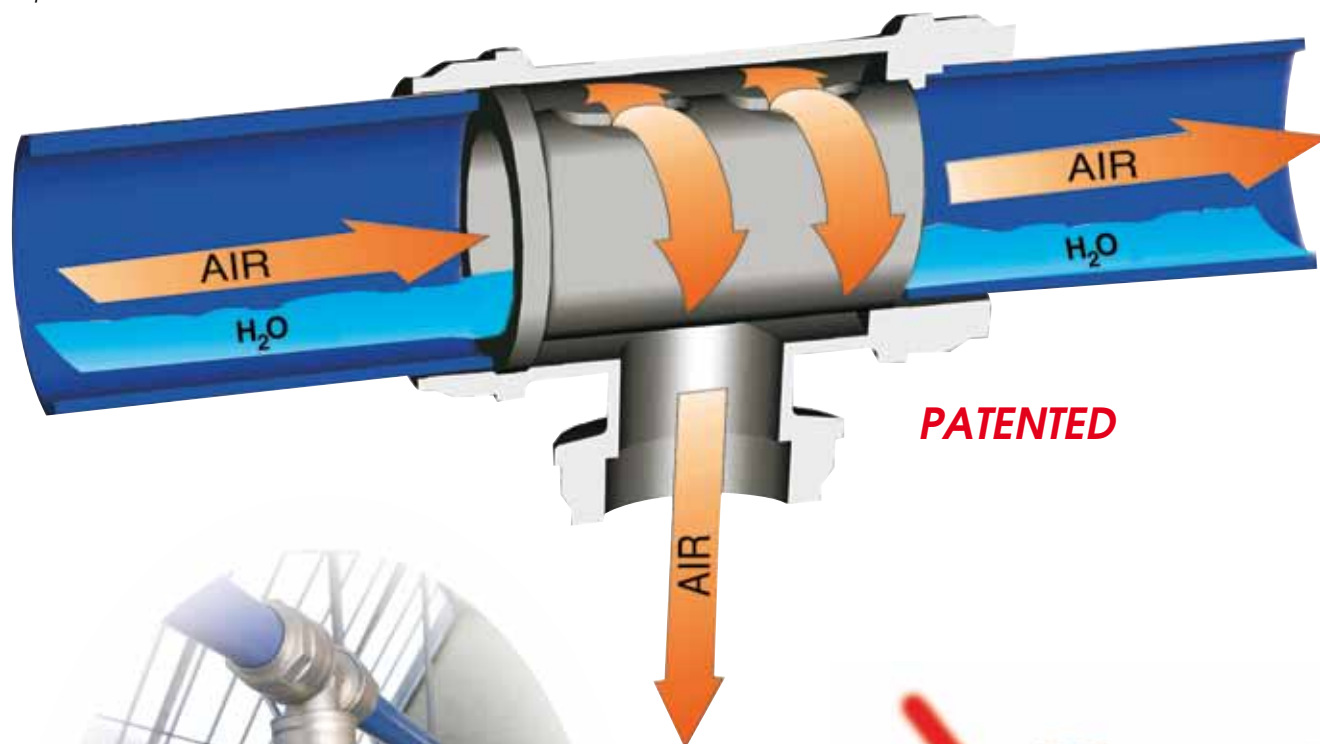
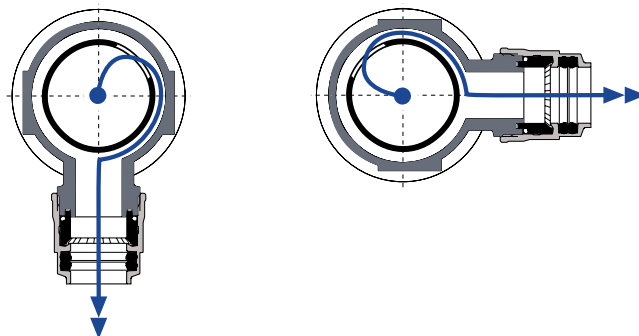
| Codice Code | D | F | A | B | C | E | L1 | L2 | CH | CH1 | Conf. Pack. |
|-------------|-----|----------|------|-------|-------|-----|-----|-----|----|-----|-------------|
| 9023600013 | 110 | - 3/4 | 14.5 | 125.5 | 150.5 | 200 | 401 | 180 | 8 | *42 | 1 |
| 9023600014 | 110 | - 1" | 17 | 125.5 | 150.5 | 200 | 401 | 180 | 8 | *49 | 1 |
| 9023600015 | 110 | - 1"-1/2 | 20 | 125.5 | 150.5 | 200 | 401 | 180 | 8 | *66 | 1 |
| 9023600016 | 110 | - 2" | 22 | 125.5 | 150.5 | 200 | 401 | 180 | 8 | *80 | 1 |

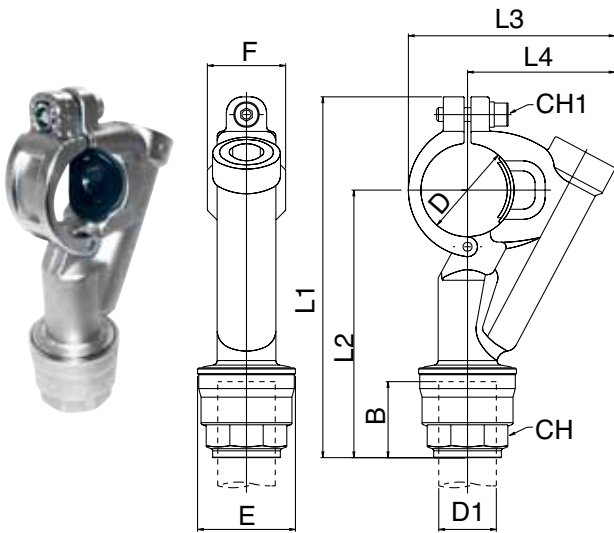
*DIMENSIONI CHIAVE A SETTORE
*HOOK WRENCH DIMENSIONS

Funzionamento / Function 90235 - 90236

Questo raccordo è una valida alternativa al tradizionale collo di cigno ma si dimostra una soluzione più rapida ed economica. L'efficace sistema interno permette all'aria, senza ridurre il passaggio, di giungere all'utilizzo priva di condensa che rimanendo nel circuito primario potrà essere così drenata nel punto più conveniente.

This fitting is a valid alternative to the traditional swan-neck; it shows itself as a quicker and cost effective solution. The efficient internal system allows to the air to reach the usage points without any condense which stays within the main circuit and than it can be drained in the most convenient point.

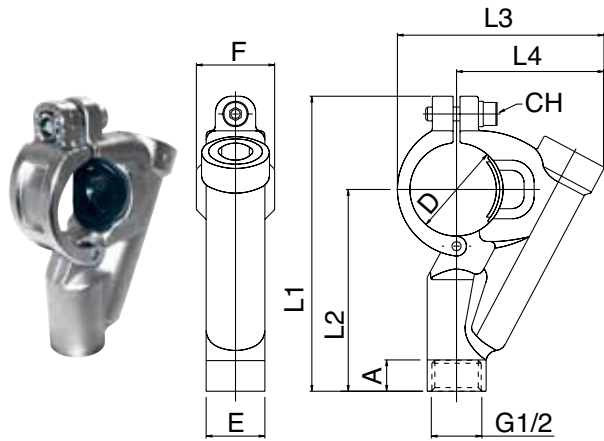
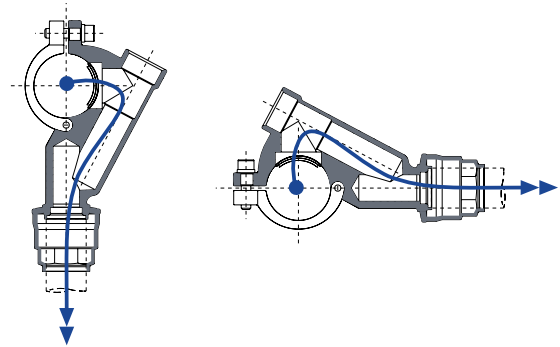




90240

FLANGIA PER CALATA - SADDLE CLAMP CONNECTOR

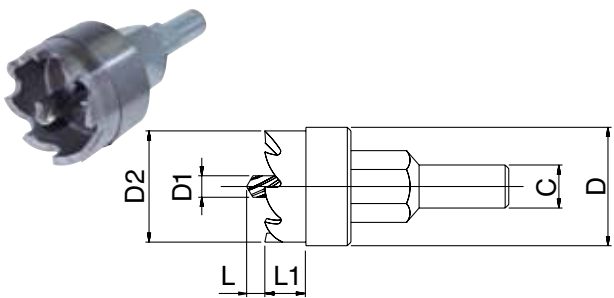
| Codice Code | D | D1 | B | E | F | L1 | L2 | L3 | L4 | CH | CH1 | Conf. Pack. |
|-------------|----|----|------|------|------|-------|-------|-------|----|----|-----|-------------|
| 9024000003 | 32 | 20 | 31.5 | 34.5 | 34 | 136.5 | 100.5 | 78 | 57 | 30 | 5 | 6 |
| 9024000004 | 32 | 25 | 38.5 | 42.5 | 34 | 144.5 | 108.5 | 78 | 57 | 35 | 5 | 6 |
| 9024000005 | 40 | 20 | 31.5 | 34.5 | 34 | 148.5 | 108 | 89.5 | 64 | 30 | 5 | 4 |
| 9024000006 | 40 | 25 | 38.5 | 42.5 | 34 | 156.5 | 116 | 89.5 | 64 | 35 | 5 | 4 |
| 9024000007 | 50 | 20 | 31.5 | 34.5 | 42.5 | 167.5 | 118.5 | 105.5 | 74 | 30 | 6 | 2 |
| 9024000008 | 50 | 25 | 38.5 | 42.5 | 42.5 | 175.5 | 126.5 | 105.5 | 74 | 35 | 6 | 1 |
| 9024000010 | 63 | 20 | 31.5 | 34.5 | 42.5 | 185 | 130 | 119 | 81 | 30 | 6 | 1 |
| 9024000011 | 63 | 25 | 38.5 | 42.5 | 42.5 | 193 | 138 | 119 | 81 | 35 | 6 | 1 |



90246

FLANGIA PER CALATA FEMMINA
FEMALE SADDLE CLAMP CONNECTOR

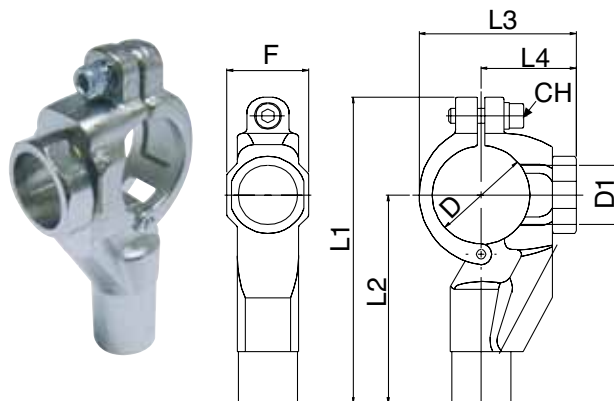
| Codice Code | D | A | E | F | L1 | L2 | L3 | L4 | CH | Conf. Pack. | |
|-------------|----|-----|----|------|------|-------|------|-------|----|-------------|---|
| 9024600003 | 32 | 1/2 | 13 | 25.5 | 34 | 115 | 79 | 78 | 57 | 5 | 2 |
| 9024600004 | 40 | 1/2 | 13 | 25.5 | 34 | 125.5 | 85 | 89.5 | 64 | 5 | 2 |
| 9024600005 | 50 | 1/2 | 13 | 25.5 | 42.5 | 144.5 | 95.5 | 105.5 | 74 | 6 | 2 |
| 9024600006 | 63 | 1/2 | 13 | 25.5 | 42.5 | 162 | 107 | 119 | 81 | 6 | 1 |



90241

FRESA PER FLANGIA DI CALATA
TOOL FOR SADDLE CLAMP CONNECTOR

| Codice Code | Tube | C | D | D1 | D2 | L | L1 | Conf. Pack. |
|-------------|-------|---|----|----|------|---|----|-------------|
| 9024100001 | 32 40 | 9 | 24 | 6 | 23.5 | 3 | 10 | 1 |
| 9024100002 | 50 63 | 9 | 31 | 6 | 30.5 | 3 | 9 | 1 |



90242

DIMA PER FORATURA TUBO - DRILLING JIG

| Codice Code | D | D1 | F | L1 | L2 | L3 | L4 | CH | Conf. Pack. |
|-------------|----|------|------|-------|-------|----|------|----|-------------|
| 9024200001 | 32 | 24.5 | 34 | 115 | 79 | 56 | 35 | 5 | 1 |
| 9024200002 | 40 | 24.5 | 34 | 127 | 86.5 | 65 | 39.5 | 5 | 1 |
| 9024200003 | 50 | 32 | 42.5 | 146 | 97 | 79 | 47.5 | 6 | 1 |
| 9024200004 | 63 | 32 | 42.5 | 163.5 | 108.5 | 93 | 55 | 6 | 1 |

Montaggio / Installation 90240

La flangia di calata permette di realizzare una nuova calata in un impianto esistente senza rimuovere tubazioni.
Saddle clamp allows to set up a new drop in an existing system without removing tubes.

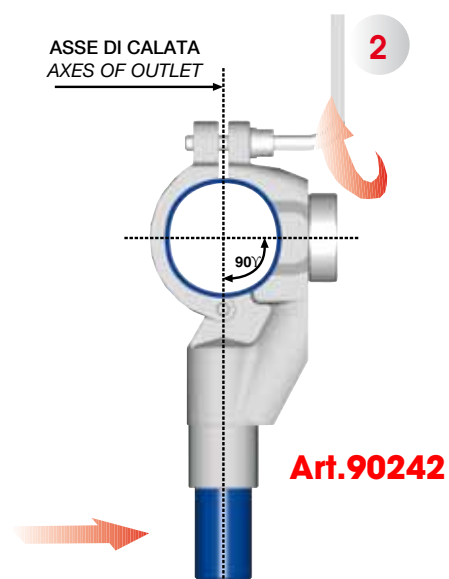


1

- 1** Depressurizzazione
Depressurization

ASSE DI CALATA
AXES OF OUTLET

2



Art.90242

- 2** Posizionare art. 90242 sul tubo nel punto desiderato. Accertarsi che il foro di guida sia perpendicolare all'asse di calata. E' possibile inserire un tubo d20 per facilitare il posizionamento della dima.
Mount art. 90242 on tube wherever necessary. Be careful that jig bore must intersect the axis of tube drop. It is possible to connect a tube diameter 20 to take easier the positioning of the drilling jig.

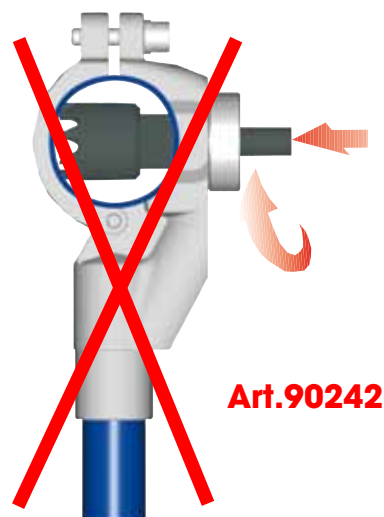
3



Art.90242

- 3** Forare il tubo con utensile art. 90241
Drill the tube with proper tool art. 90241

4



Art.90242

- 4** Fare attenzione a non danneggiare il tubo.
Do not damage the tube.

5



Art.90240

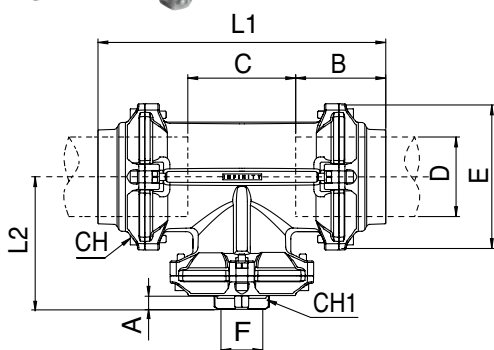
- 5** Smontare art. 90242 e togliere eventuali residui di materiale
Take down art. 90242 and remove residual material

6



Art.90240

- 6** Montare e avvitare art. 90240. Fate attenzione che la guarnizione a labbro entri correttamente nel foro. Serrate la vite.
Mount and tighten art. 90240. Be careful that lipseal lays into the hole correctly. Screw up



90250-110

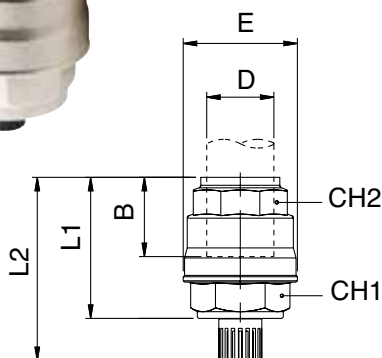
RACCORDO DI SCARICO CONDENSA FEMMINA

FEMALE FITTING WITH CONDENSE EXHAUST INCORPORATED

| Codice Code | D | F | A | B | C | E | L1 | L2 | CH | CH1 | Conf. Pack. |
|-------------|-----|-----|------|-------|-------|-----|-----|-----|----|-----|-------------|
| 902500001 | 110 | 3/4 | 14.5 | 125.5 | 150.5 | 200 | 401 | 180 | 8 | *42 | 1 |

*DIMENSIONI CHIAVE A SETTORE

*HOOK WRENCH DIMENSIONS

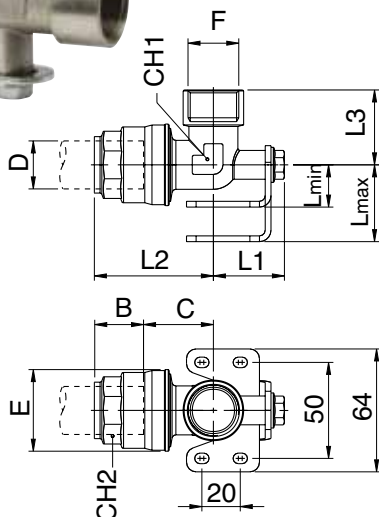


90260

RACCORDO DI SCARICO CONDENSA

FITTING WITH CONDENSE EXHAUST INCORPORATED

| Codice Code | D | B | E | L1 | L2 | CH1 | CH2 | Conf. Pack. |
|-------------|----|------|------|------|------|-----|-----|-------------|
| 902600001 | 20 | 36 | 34.5 | 52.5 | 67 | 32 | 30 | 2 |
| 902600002 | 25 | 38.5 | 42.5 | 57.5 | 72 | 32 | 35 | 2 |
| 902600003 | 32 | 46 | 52 | 67.5 | 82 | 38 | 45 | 2 |
| 902600004 | 40 | 52 | 63 | 77 | 91.5 | 50 | 55 | 2 |
| 902600005 | 50 | 63.5 | 73 | 86.5 | 101 | 55 | 65 | 1 |
| 902600006 | 63 | 59 | 92 | 84 | 98.5 | 65 | 70 | 1 |

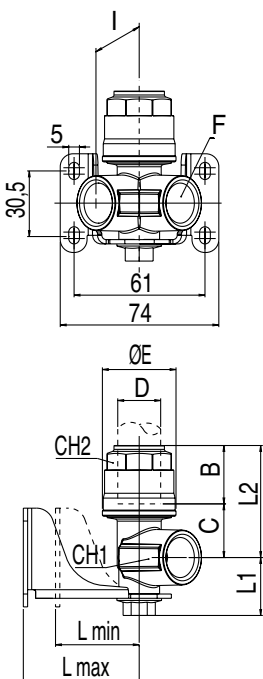


90600

RACCORDO A STAFFA - BRACKET FITTING

| Codice Code | D | F | B | C | E | L1 | L2 | L3 | Lmax | Lmin | CH1 | CH2 | Conf. Pack. |
|-------------|----|-----|------|------|------|----|------|------|------|------|-----|-----|-------------|
| 906000001 | 20 | 1/2 | 31.5 | 19.5 | 34.5 | 35 | 51 | 35 | 40 | 22 | 21 | 30 | 4 |
| 906000002 | 25 | 3/4 | 38.5 | 23 | 42.5 | 37 | 62 | 39 | 40 | 22 | 26 | 35 | 3 |
| 906000003 | 32 | 1" | 46 | 28 | 52 | 41 | 74.5 | 48.5 | 40 | 26 | 34 | 45 | 2 |

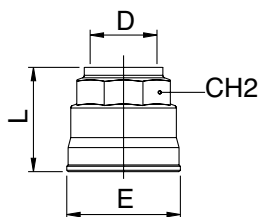
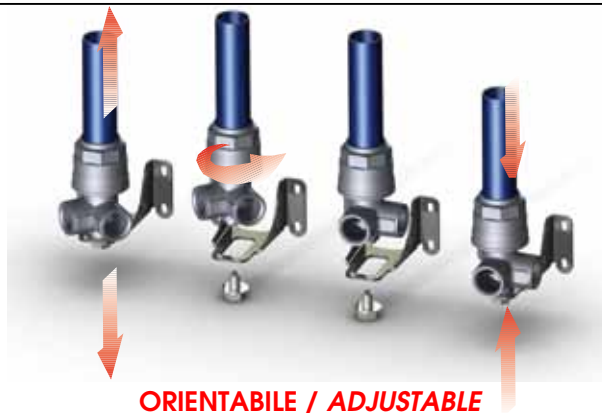
ORIENTABILE / ADJUSTABLE



90602

RIPARTITORE 2 VIE - 2 WAYS MANIFOLD

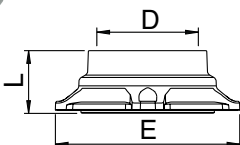
| Codice Code | D | F | B | C | E | I | L1 | L2 | Lmin | Lmax | CH1 | CH2 | Conf. Pack. |
|-------------|----|-----|------|----|------|------|----|------|------|------|-----|-----|-------------|
| 9060200001 | 20 | 1/2 | 31.5 | 20 | 34.5 | 28.5 | 27 | 51.5 | 22 | 54 | 26 | 30 | 2 |
| 9060200002 | 25 | 1/2 | 38.5 | 21 | 42.5 | 28.5 | 27 | 59 | 22 | 54 | 26 | 35 | 2 |



90610

TAPPO - PLUG

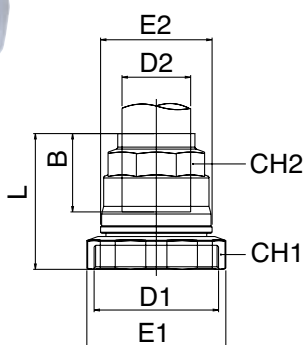
| Codice Code | D | L | E | CH2 | Conf. Pack. |
|-------------|----|------|------|-----|-------------|
| 9061000001 | 20 | 33 | 34.5 | 30 | 10 |
| 9061000002 | 25 | 39 | 42.5 | 35 | 6 |
| 9061000003 | 32 | 46.5 | 52 | 45 | 4 |
| 9061000004 | 40 | 53 | 63 | 55 | 4 |
| 9061000005 | 50 | 62 | 73 | 65 | 2 |
| 9061000006 | 63 | 58 | 92 | 70 | 1 |



90610-110

TAPPO - PLUG

| Codice Code | D | L | E | Conf. Pack. |
|-------------|-----|----|-----|-------------|
| 9061000008 | 110 | 68 | 200 | 1 |



90620

RIDUZIONE DIRITTA - REDUCING

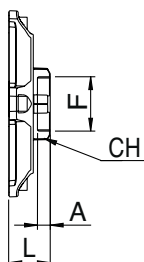
| Code Code | D1 | D2 | B | E1 | E2 | L | CH1 | CH2 | Pack. |
|--------------|----|----|------|------|------|------|-----|-----|-------|
| 9062000001 | 25 | 20 | 31.5 | 43.5 | 34.5 | 48 | 42 | 30 | 5 |
| 9062000002 | 32 | 20 | 31.5 | 54 | 34.5 | 48.5 | 52 | 30 | 5 |
| 9062000003 | 32 | 25 | 38.5 | 54 | 42.5 | 55 | 63 | 35 | 5 |
| 9062000004 | 40 | 20 | 31.5 | 65 | 34.5 | 50 | 63 | 30 | 4 |
| 9062000005 | 40 | 25 | 38.5 | 65 | 42.5 | 56.5 | 63 | 35 | 4 |
| 9062000006 | 40 | 32 | 46 | 65 | 52 | 63.5 | 63 | 45 | 3 |
| 9062000011 | 50 | 25 | 38.5 | 75 | 42.5 | 55 | 73 | 35 | 1 |
| 9062000007 | 50 | 32 | 46 | 75 | 52 | 63.5 | 73 | 45 | 1 |
| 9062000008 | 50 | 40 | 52 | 75 | 63 | 69 | 73 | 55 | 1 |
| 9062000009 | 63 | 40 | 52 | 95 | 63 | 58 | 92 | 55 | 1 |
| 9062000010 | 63 | 50 | 63.5 | 95 | 73 | 68 | 92 | 65 | 1 |



REMOVE THE NUT



MOUNT ART. 90620



90630 - 110

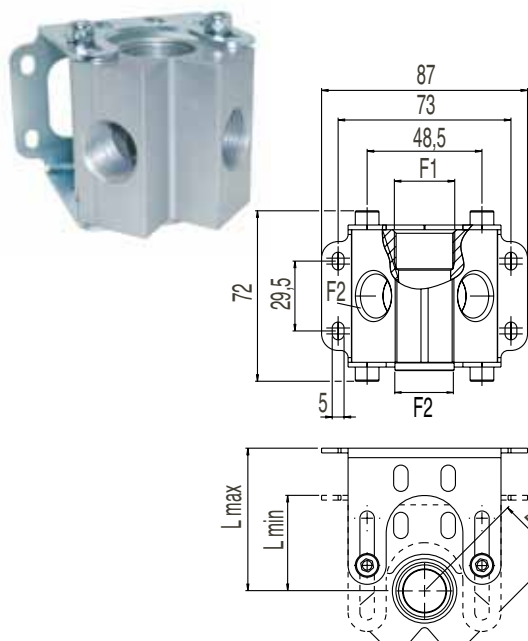
RIDUZIONE FEMMINA- FEMALE REDUCING

| Code Code | D | F | A | L | CH | Conf. Pack. |
|--------------|-----|--------|------|----|-----|----------------|
| 9063000001 | 110 | 3/4 | 14.5 | 48 | *42 | 1 |
| 9063000002 | 110 | 1" | 17 | 48 | *49 | 1 |
| 9063000003 | 110 | 1"-1/2 | 20 | 48 | *66 | 1 |
| 9063000004 | 110 | 2" | 22 | 48 | *80 | 1 |

*DIMENSIONI CHIAVE A SETTORE

*HOOK WRENCH DIMENSIONS





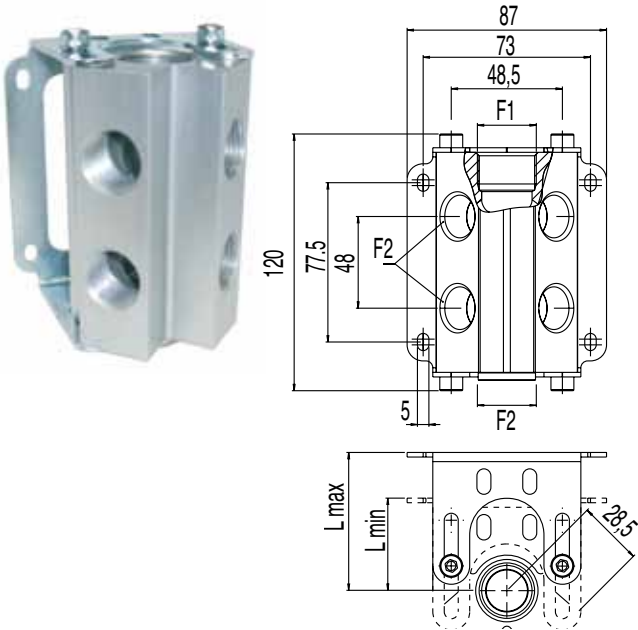
90642

RIPARTITORE 2 VIE - 2 WAYS MANIFOLD

| Codice Code | F1 | F2 | n° | Lmax | Lmin | Conf. Pack. |
|-------------|-----|-----|----|------|------|-------------|
| 9064200001 | 1/2 | 1/2 | 2 | 60 | 35 | 1 |
| 9064200002 | 3/4 | 1/2 | 2 | 60 | 35 | 1 |

Esempi di applicazioni / Applications example





90644

RIPARTITORE 4 VIE - 4 WAYS MANIFOLD

| Codice Code | F1 | F2 | n° | Lmax | Lmin | Conf. Pack. |
|-------------|-----|-----|----|------|------|-------------|
| 9064400001 | 1/2 | 1/2 | 4 | 60 | 35 | 1 |
| 9064400002 | 3/4 | 1/2 | 4 | 60 | 35 | 1 |

Esempi di applicazioni / Applications example

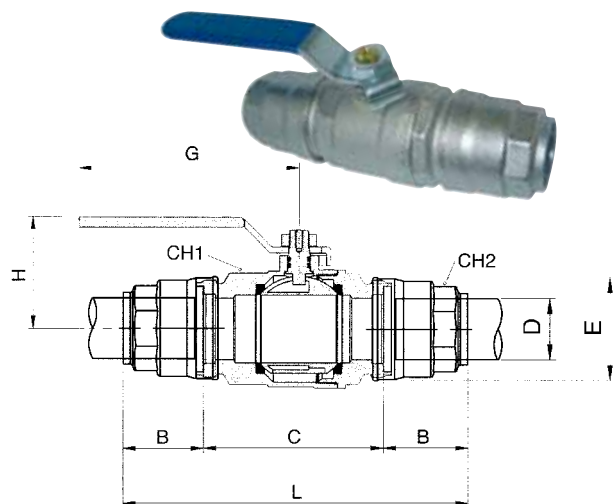
| | | | |
|--|--------------------------------|---|---|
| <p>90644 90010 661</p> | <p>90644 90720 661</p> | <p>90644 90010 6310 661</p> | <p>90644 90720 6310 661</p> |
| <p>90644 90010 191</p> | <p>90644 90720 191</p> | <p>90644 90010 6310 191</p> | <p>90644 90720 6310 191</p> |
| <p>90644 90010 2060 T100 661</p> | | | |

90700

VALVOLA A SFERA - BALL VALVE

| Codice Code | D | DN | B | C | E | L | CH1 | CH2 | G | H | Conf. Pack. |
|-------------|----|----|------|------|------|-------|-----|-----|-----|-------|-------------|
| 9070000001 | 20 | 17 | 31.5 | 58.5 | 34.5 | 121.5 | 32 | 30 | 88 | 42 | 6 |
| 9070000002 | 25 | 22 | 38.5 | 61.5 | 42.5 | 138.5 | 41 | 35 | 106 | 47.5 | 6 |
| 9070000003 | 32 | 29 | 46 | 75 | 52 | 167 | 50 | 45 | 106 | 53 | 2 |
| 9070000004 | 40 | 37 | 52.5 | 81 | 63 | 186 | 59 | 55 | 134 | 65 | 1 |
| 9070000005 | 50 | 46 | 63.5 | 103 | 73 | 230 | 69 | 65 | 134 | 72.5 | 1 |
| 9070000006 | 63 | 59 | 59 | 126 | 92 | 247 | 92 | 70 | 240 | 111.5 | 1 |

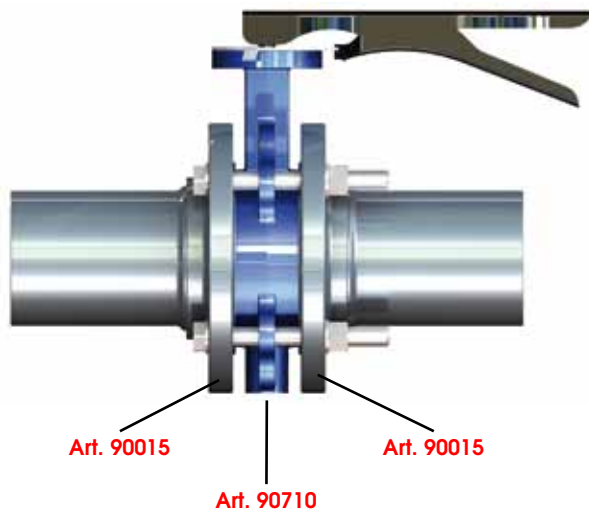
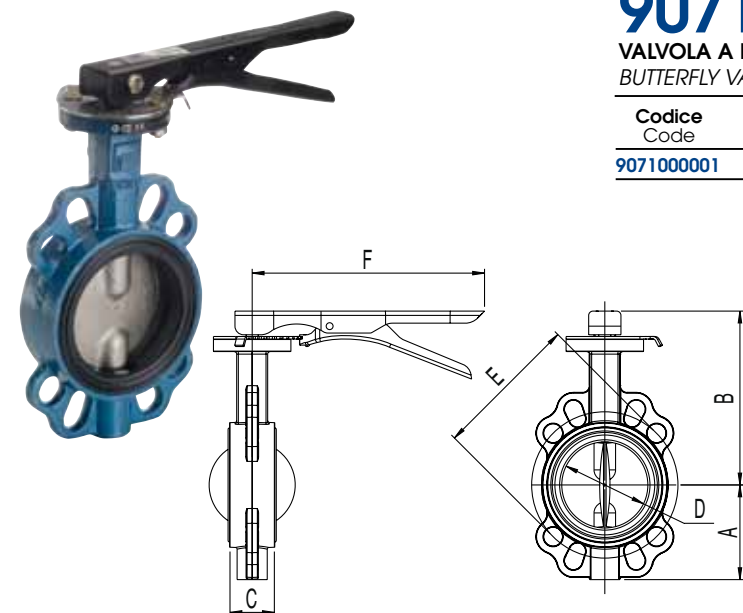
VALVOLA A PASSAGGIO TOTALE
FULL FLOW RATE BALL VALVE



90710-110

VALVOLA A FARFALLA + VITI + DADI + RONDELLE
BUTTERFLY VALVE + SCREWS + NUTS + WASHERS

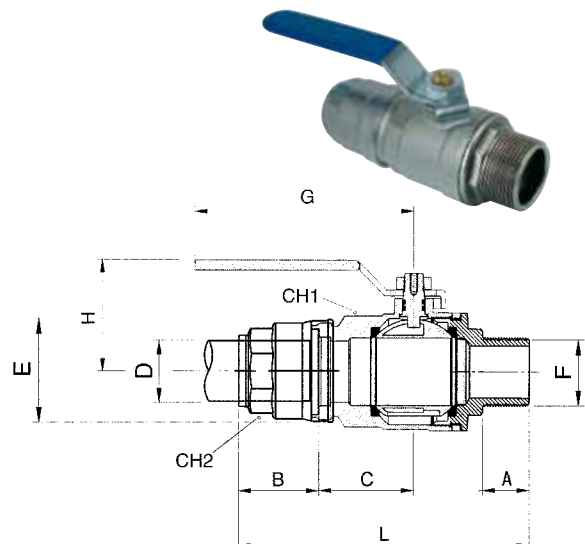
| Codice Code | D | DN | A | B | C | D | E | F | Conf. Pack. |
|-------------|-----|-----|-----|-----|----|-----|-----|-----|-------------|
| 9071000001 | 110 | 100 | 110 | 203 | 52 | 100 | 170 | 265 | 1 |

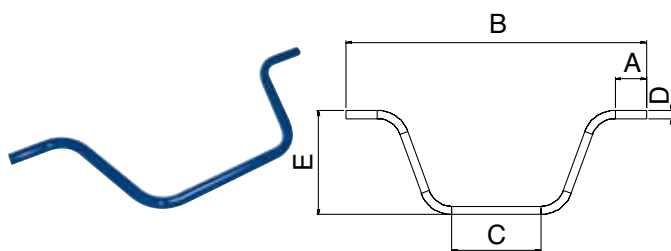


90720

VALVOLA A SFERA MASCHIO-TUBO - MALE-TUBE BALL VALVE

| Codice Code | D | F | DN | A | B | C | E | L | CH1 | CH2 | G | H | Conf. Pack. |
|-------------|----|-----|----|----|------|------|------|-------|-----|-----|-----|------|-------------|
| 9072000001 | 20 | 1/2 | 15 | 18 | 31.5 | 29.3 | 34.5 | 100.8 | 32 | 30 | 88 | 42 | 2 |
| 9072000002 | 25 | 3/4 | 20 | 18 | 38.5 | 30.8 | 42.5 | 119.3 | 41 | 35 | 106 | 47.5 | 2 |

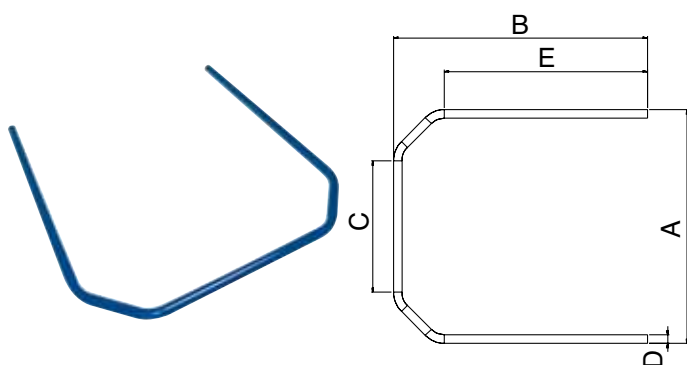




90800

TUBO EVITA OSTACOLI A C - TUBE TO AVOID OBSTACLES

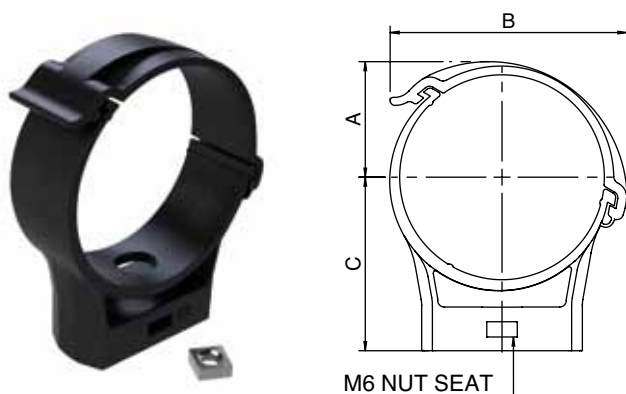
| Codice Code | D | A | B | C | E | Conf. Pack. |
|---------------|----|----|-----|-----|-----|-------------|
| 908000011Y9B5 | 20 | 75 | 760 | 254 | 250 | 1 |
| 908000011J4B5 | 25 | 75 | 743 | 240 | 250 | 1 |



90805

TUBO EVITA OSTACOLI AD U - TUBE TO AVOID OBSTACLES

| Codice Code | D | A | B | C | E | Conf. Pack. |
|---------------|----|-----|-----|-----|-----|-------------|
| 908050011Y9B5 | 20 | 690 | 753 | 394 | 605 | 1 |
| 908050011J4B5 | 25 | 690 | 755 | 389 | 604 | 1 |
| 908050011J9B5 | 32 | 690 | 773 | 352 | 604 | 1 |
| 908050011K4B5 | 40 | 690 | 784 | 289 | 583 | 1 |

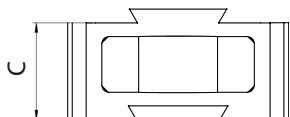


90815

COLLARI IN TECNOPOLIMERO CON DADO M6
COLLARS MADE IN TECHNOPOLYMERIC WITH M6 NUT

| Codice Code | D | A | B | C | Conf. Pack. |
|-------------|----|------|------|----|-------------|
| 9081500001 | 20 | 15 | 35.5 | 26 | 5 |
| 9081500002 | 25 | 17 | 39.5 | 26 | 5 |
| 9081500003 | 32 | 20 | 44.5 | 40 | 5 |
| 9081500004 | 40 | 24.5 | 53.5 | 40 | 5 |
| 9081500005 | 50 | 30 | 62 | 54 | 5 |
| 9081500006 | 63 | 36 | 73.5 | 54 | 5 |

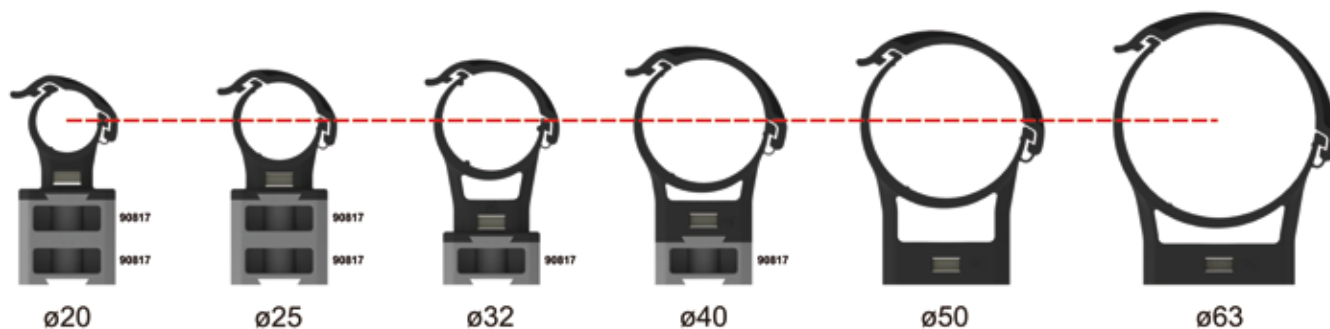




90817

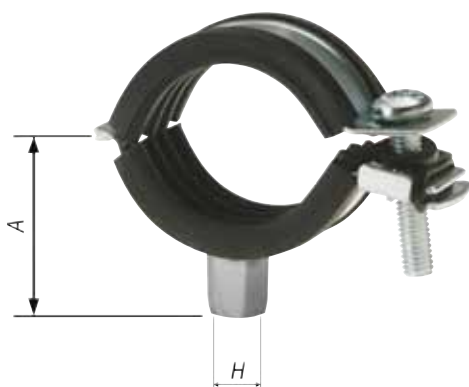
DISTANZIALE PER COLLARE 90815 IN TECNOPOLIMERO
SPACER FOR COLLARS 90815 MADE IN TECHNOPOLYMERIC

| Codice Code | C | Conf. Pack. |
|-------------|----|-------------|
| 9081700001 | 14 | 5 |



90820

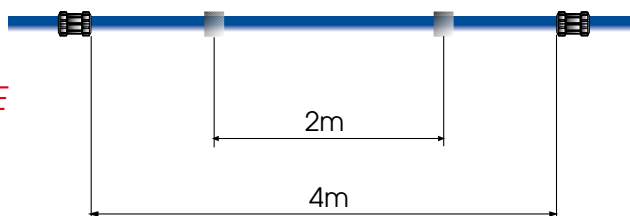
COLLARI IN ACCIAIO - COLLARS MADE IN STEEL



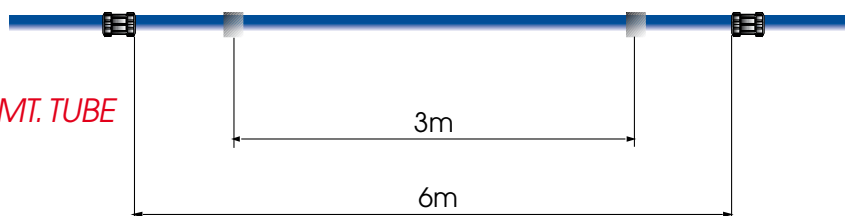
| Codice Code | D | H | A | Conf. Pack. |
|-------------|-----|----------|------|-------------|
| 9082000001 | 20 | M8 / M10 | 28.5 | 5 |
| 9082000002 | 25 | M8 / M10 | 31 | 5 |
| 9082000003 | 32 | M8 / M10 | 34.5 | 5 |
| 9082000004 | 40 | M8 / M10 | 39.5 | 5 |
| 9082000005 | 50 | M8 / M10 | 44 | 5 |
| 9082000006 | 63 | M8 / M10 | 51 | 5 |
| 9082000008 | 110 | M8 / M10 | 81.5 | 2 |

POSIZIONAMENTO COLLARI - COLLAR POSITIONS

TUBO DA 4 MT. - 4 MT. TUBE



TUBO DA 6 MT. - 6 MT. TUBE



Avvolgitubo Serie Infinity / Hose Reel Infinity Series



Art. 9082500001 9+1



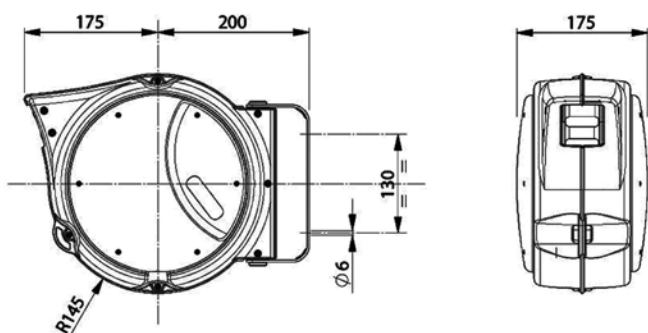
| |
|--|
| <p>Costruiti in conformità alle Norme ISO EN 12100-1 ISO EN 12100-2</p> <p>CE</p> <p>Prodotti conformi ai requisiti della Direttiva 2006/42/CE</p> <p>Legge 626: OK!</p> |
|--|

Art. 9082500003 15+1

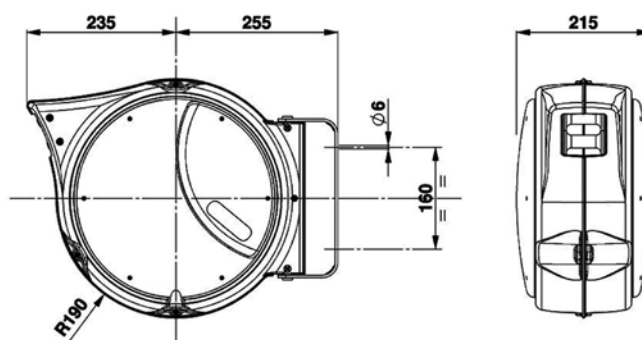


| Articolo | 9082500001 9+1 | 9082500003 15+1 |
|---|-----------------------------------|----------------------------|
| Tubo / Tube | Ø INT. 8mm (5/16") Ø EXT. 12mm | Ø INT. 10mm Ø EXT. 14mm |
| Tubo Mt. / Tube Mt. | 9+1 | 15+1 |
| Max. Press. | 15bar (1.5Mpa) | 15bar (1.5Mpa) |
| Temperatura Temperature | -5°/+40° C | -5°/+40° C |
| Raccordo in uscita Outlet Fitting | 1/4 M | 3/8 M |
| Raccordo in entrata Inlet Fitting | NO | NO |
| Spezzone ingresso Cut Down Size Tube | 1.5 mt | 1.5 mt |
| Aria / Air | SI | SI |
| Acqua Fredda Cold Water | SI | SI |
| Conf. / Pack. | mm 390x330x230 / Kg 4.5 | mm 500x450x255 / Kg 8.0 |
| Portata a 6 bar Flow Rate at 6 bar | 450 NI/min | 610 NI/min |

9082500001 9+1



9082500003 15+1



Materiali e Componenti / Component Parts and Materials

Tubo in poliuretano nero lucido
Black Polyurethane tube

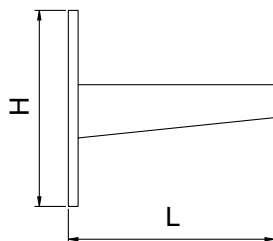
Struttura in tecnopolimero
Technopolymer Structure

Staffa di fissaggio metallica orientabile
Metal Swivel Fixing Bracket

Dispositivo automatico di arresto del tubo alla lunghezza desiderata. Questo dispositivo è facilmente disinseribile, qualora si voglia il tubo costantemente in trazione.
Automatic device to stop tube at chosen length. This device is easy to disconnect whenever you may need tube in constant traction.

Idoneo per il passaggio di aria e acqua fredda.
Compatible with Air and Cold Water

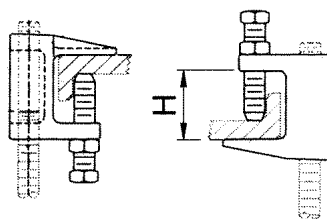




90830

MENSOLA - BRACKET

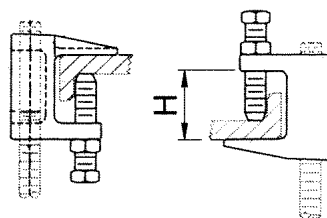
| Codice Code | H | L | Conf. Pack. |
|-------------|-----|-----|-------------|
| 9083000001 | 165 | 225 | 1 |



90860

MORSETTO - YOKE

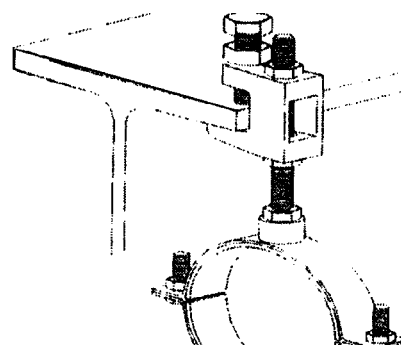
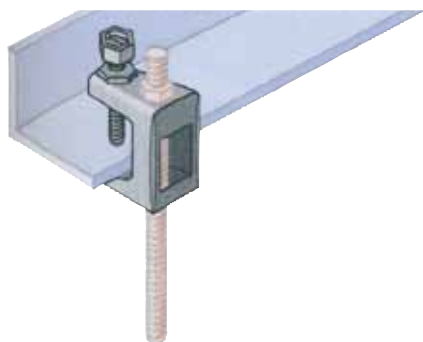
| Codice Code | A | H | Conf. Pack. |
|-------------|----|----|-------------|
| 9086000001 | Ø9 | 18 | 1 |



90861

MORSETTO FILETTATO - THREADED YOKE

| Codice Code | A | H | Conf. Pack. |
|-------------|----|----|-------------|
| 9086100001 | M8 | 18 | 1 |



90870

TAGLIATUBO - PIPE CUTTER

| Codice Code | | Conf. Pack. |
|-------------|--------|-------------|
| 9087000001 | 20-63 | 1 |
| 9087000002 | 50-110 | 1 |



90880

SBAVATORE TUBO - DE-BURRER

| Codice Code | Conf. Pack. |
|-----------------|----------------|
| 908800001 20-40 | 1 |



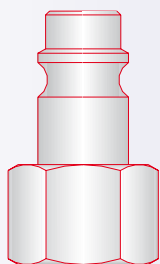
VAL01

VALIGETTA ESPOSITIVA - DEMO CASE

| Codice Code | Conf. Pack. |
|----------------|----------------|
| VAL01 | 1 |



Accessori / Accessories



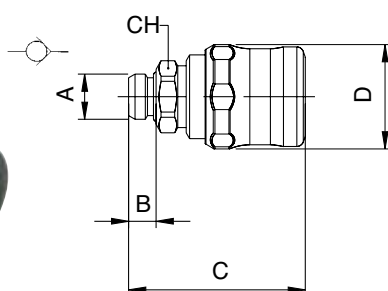
EUROPEAN
1:1

660 SERIES EUROPEAN

DN 7,5 mm



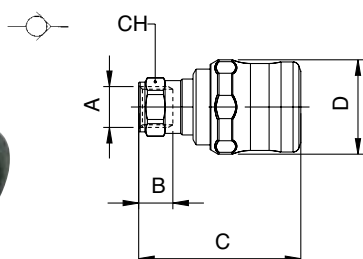
Pressione d'esercizio / Working pressure: 0 - 15 bar



661

PRESA CON ATTACCO MASCHIO - MALE SOCKET

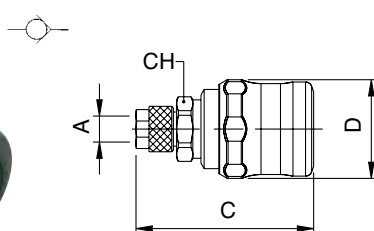
| Codice Code | A | B | C | D | CH | Conf. Pack. |
|-------------|-----|----|------|------|----|-------------|
| 0066100001 | 1/4 | 8 | 51 | 30.5 | 19 | 10 |
| 0066100002 | 3/8 | 9 | 51.5 | 30.5 | 20 | 10 |
| 0066100003 | 1/2 | 10 | 52.5 | 30.5 | 25 | 10 |



662

PRESA CON ATTACCO FEMMINA - FEMALE SOCKET

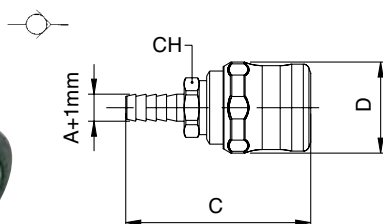
| Codice Code | A | B | C | D | CH | Conf. Pack. |
|-------------|-----|----|------|------|----|-------------|
| 0066200001 | 1/4 | 11 | 51.5 | 30.5 | 17 | 10 |
| 0066200002 | 3/8 | 12 | 52.5 | 30.5 | 20 | 10 |
| 0066200003 | 1/2 | 15 | 55.5 | 30.5 | 24 | 10 |



664

PRESA CON ATTACCO A CALZAMENTO - COMPRESSION SOCKET

| Codice Code | A | B | C | D | CH | Conf. Pack. |
|-------------|--------|---|------|------|----|-------------|
| 0066400001 | 6/4 | - | 54.5 | 30.5 | 18 | 10 |
| 0066400002 | 8/6 | - | 54 | 30.5 | 18 | 10 |
| 0066400005 | 10/6.5 | - | 57 | 30.5 | 18 | 10 |
| 0066400003 | 10/8 | - | 56 | 30.5 | 18 | 10 |
| 0066400006 | 12/8 | - | 57.5 | 30.5 | 18 | 10 |
| 0066400004 | 12/10 | - | 56.5 | 30.5 | 18 | 10 |



665

PRESA CON PORTAGOMMA A RESCA
SOCKET WITH BARBED CONNECTION

| Codice Code | A | B | C | D | CH | Conf. Pack. |
|-------------|----|---|----|------|----|-------------|
| 0066500001 | 6 | - | 61 | 30.5 | 18 | 10 |
| 0066500002 | 8 | - | 61 | 30.5 | 18 | 10 |
| 0066500003 | 10 | - | 61 | 30.5 | 18 | 10 |
| 0066500004 | 12 | - | 61 | 30.5 | 18 | 10 |

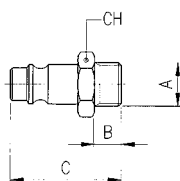


CONSULTA IL CATALOGO GENERALE, TROVERAI LA GAMMA COMPLETA.

LOOK AT THE GENERAL CATALOGUE TO FIND ALL PRODUCTS.



**ACCIAIO
STEEL**



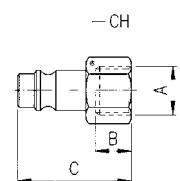
261AC

INNESTO IN AVP CON ATTACCO MASCHIO - AVP MALE PLUG

| Codice Code | A | B | C | D | CH | Conf. Pack. |
|---------------|-----|----|------|---|----|-------------|
| 261AC005103ZI | 1/4 | 8 | 33 | - | 17 | 25 |
| 261AC005104ZI | 3/8 | 9 | 34 | - | 19 | 25 |
| 261AC005105ZI | 1/2 | 10 | 35.5 | - | 24 | 25 |



**ACCIAIO
STEEL**



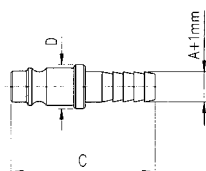
262AC

INNESTO IN AVP CON ATTACCO FEMMINA - AVP FEMALE PLUG

| Codice Code | A | B | C | D | CH | Conf. Pack. |
|---------------|-----|------|------|---|----|-------------|
| 262AC005103ZI | 1/4 | 11 | 33 | - | 17 | 25 |
| 262AC005104ZI | 3/8 | 11.5 | 33.5 | - | 19 | 25 |
| 262AC005105ZI | 1/2 | 14 | 36 | - | 24 | 25 |



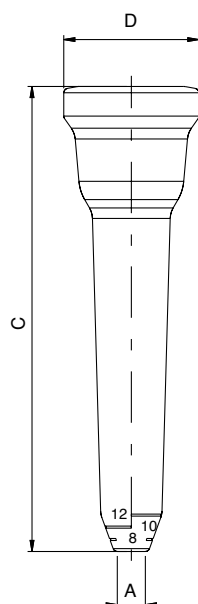
**ACCIAIO
STEEL**



265AC

INNESTO IN AVP CON PORTAGOMMA A RESCA
AVP PLUG WITH BARBED CONNECTION

| Codice Code | A | B | C | D | CH | Conf. Pack. |
|---------------|----|---|------|----|----|-------------|
| 265AC0051X4ZI | 6 | - | 39.5 | 12 | - | 25 |
| 265AC0051X7ZI | 8 | - | 39.5 | 12 | - | 25 |
| 265AC0051X9ZI | 10 | - | 42.5 | 14 | - | 25 |
| 265AC0051Y1ZI | 12 | - | 42.5 | 16 | - | 25 |



628

PROTEZIONE PRESA IN EPDM - EPDM SOCKET PROTECTION

| Codice Code | A | B | C | D | CH | Conf. Pack. |
|---------------|------------------|---|-----|------|----|-------------|
| 0062800200000 | *6 / 8 / 10 / 12 | - | 105 | 30.5 | - | 10 |

*Tagliare la protezione in corrispondenza della scritta indicante la misura del diametro esterno del tubo utilizzato.
Cut the protection on external tube diameter sign.

L'articolo 628 è particolarmente indicato per le prese con terminale portagomma Art. 665 e attacco a calzamento Art. 664.

Art. 628 Item is particularly used on socket with barbed connection and socket with compression fitting Art. 665 and Art.664.



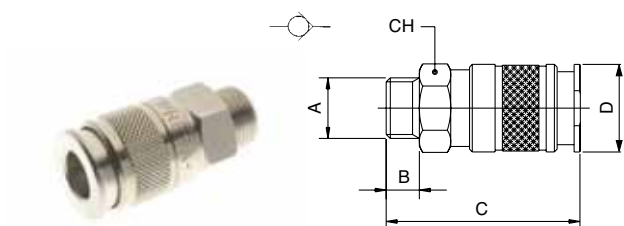
CONSULTA IL CATALOGO GENERALE, TROVERAI LA GAMMA COMPLETA.

LOOK AT THE GENERAL CATALOGUE TO FIND ALL PRODUCTS.

Multipresa - Multisocket

UN'UNICA PRESA PER 4 TIPI DI INNesti - MULTISOCKET ONE SOCKET FOR 4 DIFFERENT PLUGS.

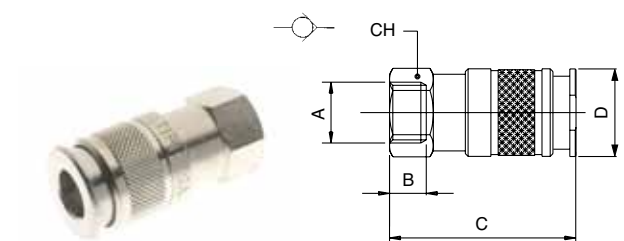
Serie 190



191

PRESA CON ATTACCO MASCHIO - MALE SOCKET

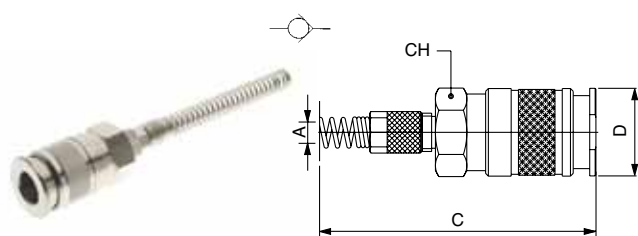
| Codice Code | A | B | C | D | CH | Conf. Pack. |
|-------------|-----|----|----|----|----|-------------|
| 0019100001 | 1/4 | 8 | 49 | 24 | 21 | 10 |
| 0019100002 | 3/8 | 9 | 50 | 24 | 21 | 10 |
| 0019100003 | 1/2 | 10 | 51 | 24 | 24 | 10 |



192

PRESA CON ATTACCO FEMMINA - FEMALE SOCKET

| Codice Code | A | B | C | D | CH | Conf. Pack. |
|-------------|-----|------|----|----|----|-------------|
| 0019200001 | 1/4 | 11 | 51 | 24 | 21 | 10 |
| 0019200002 | 3/8 | 11.5 | 51 | 24 | 21 | 10 |
| 0019200003 | 1/2 | 14 | 55 | 24 | 24 | 10 |



193

PRESA CON ATTACCO A CALZAMENTO CON MOLLA
COMPRESSION SOCKET WITH SPRING

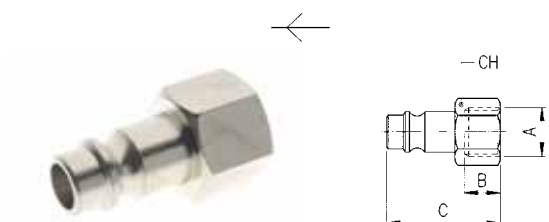
| Codice Code | A | B | C | D | CH | Conf. Pack. |
|-------------|-------|---|-------|----|----|-------------|
| 0019300001 | 6/4 | - | 138 | 24 | 21 | 10 |
| 0019300002 | 8/6 | - | 144.5 | 24 | 21 | 10 |
| 0019300003 | 10/8 | - | 153.5 | 24 | 21 | 10 |
| 0019300005 | 12/10 | - | 159 | 24 | 21 | 10 |



261

INNESTO CON ATTACCO MASCHIO - MALE PLUG

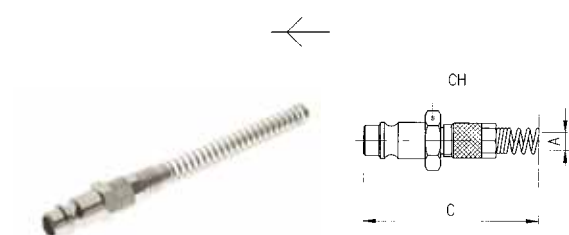
| Codice Code | A | B | C | D | CH | Conf. Pack. |
|---------------|-----|----|------|---|----|-------------|
| 00261000103NB | 1/4 | 8 | 33 | - | 17 | 25 |
| 00261000104NB | 3/8 | 9 | 34 | - | 19 | 25 |
| 00261000105NB | 1/2 | 10 | 35.5 | - | 24 | 25 |



262

INNESTO CON ATTACCO FEMMINA - FEMALE PLUG

| Codice Code | A | B | C | D | CH | Conf. Pack. |
|---------------|-----|------|------|---|----|-------------|
| 00262000103NB | 1/4 | 11 | 33 | - | 17 | 25 |
| 00262000104NB | 3/8 | 11.5 | 33.5 | - | 19 | 25 |
| 00262000105NB | 1/2 | 14 | 36 | - | 24 | 25 |



263

INNESTO CON ATTACCO A CALZAMENTO CON MOLLA
COMPRESSION PLUG WITH SPRING

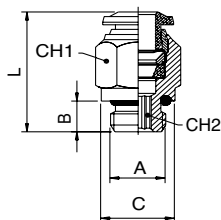
| Codice Code | A | B | C | D | CH | Conf. Pack. |
|-------------|-------|---|-------|---|----|-------------|
| 0026300001 | 6/4 | - | 124.5 | - | 13 | 25 |
| 0026300002 | 8/6 | - | 130 | - | 13 | 25 |
| 0026300003 | 10/8 | - | 137.5 | - | 14 | 25 |
| 0026300004 | 12/10 | - | 143 | - | 16 | 25 |



CONSULTA IL CATALOGO GENERALE, TROVERAI LA GAMMA COMPLETA.
LOOK AT THE GENERAL CATALOGUE TO FIND ALL PRODUCTS.

50020

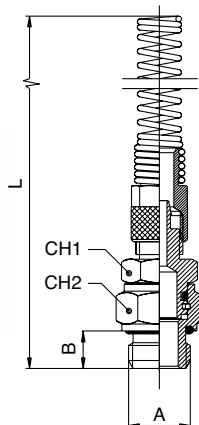
RACCORDO DIRITTO MASCHIO CILINDRICO STRAIGHT MALE ADAPTOR (PARALLEL)



| Codice Code | Tubo Tube | A | B | C | L | CH1 | CH2 | Conf. Pack. |
|-------------|-----------|----------|----|----|------|-----|-----|-------------|
| 500200021 | 3 | M5 | 4 | 8 | 19 | 8 | 2 | 25 |
| 500200001 | 4 | M5 | 4 | 8 | 21 | 10 | 2 | 25 |
| 500200002 | 4 | 1/8 | 6 | 13 | 20 | 10 | 3 | 25 |
| 500200022 | 4 | 1/4 | 8 | 16 | 19.5 | 16 | 3 | 25 |
| 500200018 | 5 | M5 | 4 | 8 | 23.5 | 12 | 2 | 25 |
| 500200019 | 5 | 1/8 | 6 | 13 | 22 | 12 | 4 | 25 |
| 500200020 | 6 | M5 | 4 | 10 | 24.5 | 13 | 2 | 25 |
| 500200003 | 6 | 1/8 | 6 | 13 | 23.5 | 13 | 4 | 25 |
| 500200004 | 6 | 1/4 | 8 | 16 | 23.5 | 13 | 4 | 25 |
| 500200027 | 6 | 3/8 | 9 | 20 | 25 | 13 | 4 | 25 |
| 500200028 | 6 | 1/2 | 10 | 25 | 27 | 13 | 4 | 25 |
| 500200005 | 8 | 1/8 | 6 | 13 | 25 | 14 | 5 | 25 |
| 500200006 | 8 | 1/4 | 8 | 16 | 23 | 14 | 6 | 25 |
| 500200007 | 8 | 3/8 | 9 | 20 | 24 | 14 | 6 | 25 |
| 500200029 | 8 | 1/2 | 10 | 25 | 26.5 | 14 | 6 | 25 |
| 500200008 | 10 | 1/4 | 8 | 16 | 30.5 | 17 | 6 | 25 |
| 500200009 | 10 | 3/8 | 9 | 20 | 27.5 | 17 | 8 | 25 |
| 500200031 | 10 | 1/2 | 10 | 25 | 27 | 17 | 8 | 25 |
| 500200032 | 12 | 1/4 | 8 | 16 | 34.5 | 20 | 6 | 25 |
| 500200011 | 12 | 3/8 | 9 | 20 | 34 | 20 | 8 | 25 |
| 500200023 | 12 | 1/2 | 10 | 25 | 31 | 22 | 10 | 10 |
| 500200024 | 14 | 3/8 | 9 | 20 | 35 | 21 | 10 | 10 |
| 500200025 | 14 | 1/2 | 10 | 25 | 32 | 22 | 10 | 10 |
| 500200012 | 6 | M12x1 | 8 | 15 | 23.5 | 13 | 4 | 25 |
| 500200013 | 6 | M12x1.25 | 8 | 15 | 23.5 | 13 | 4 | 25 |
| 500200014 | 6 | M12x1.5 | 8 | 15 | 23.5 | 13 | 4 | 25 |
| 500200017 | 8 | M12x1.5 | 8 | 15 | 27.5 | 14 | 6 | 25 |

1027

RACCORDO DIRITTO ORIENTABILE MASCHIO CILINDRICO + DADO CON MOLLA ORIENTING STRAIGHT MALE ADPTOR (PARALLEL) + NUT AND SPRING



| Codice Code | Tubo Tube | A | B | L | CH1 | CH2 | Conf. Pack. |
|-------------|-----------|-----|---|-----|-----|-----|-------------|
| 010270001 | 6/4 | 1/8 | 6 | 116 | 12 | 13 | 25 |
| 010270002 | 6/4 | 1/4 | 8 | 121 | 14 | 16 | 25 |
| 010270003 | 8/6 | 1/8 | 6 | 122 | 12 | 13 | 25 |
| 010270004 | 8/6 | 1/4 | 8 | 126 | 14 | 16 | 25 |
| 010270005 | 10/6.5 | 1/4 | 8 | 134 | 14 | 16 | 25 |
| 010270006 | 10/8 | 1/4 | 8 | 134 | 14 | 16 | 25 |
| 010270007 | 12/8 | 3/8 | 9 | 143 | 17 | 18 | 25 |
| 010270008 | 12/10 | 3/8 | 9 | 142 | 17 | 18 | 25 |

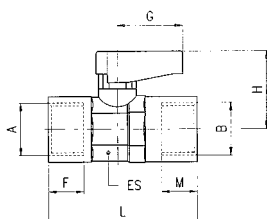
Misure specifiche per tubi in POLIURETANO.
Particular sizes for the POLYURETHANE tubing.

Per tubo in POLIURETANO da 8/5 consigliamo l'utilizzo della nostra misura standard 8/6.

For the POLYURETHANE tube 8/5 we suggest to use the standard size 8/6.

6300

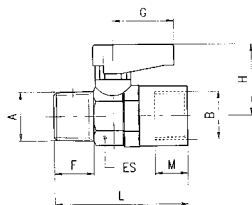
FEMMINA RP ISO 7 - FEMMINA RP ISO 7 FEMALE RP ISO 7 - FEMALE RP ISO 7



| Codice Code | A | B | (DN) | ES | F | M | L | G | H | Conf. Pack. |
|-------------|-----|-----|------|-------|------|------|----|----|------|-------------|
| 063000001 | 1/8 | 1/8 | 5.5 | 14-15 | 7.4 | 7.4 | 36 | 19 | 21 | 25 |
| 063000002 | 1/4 | 1/4 | 5.5 | 14-15 | 11 | 11 | 43 | 19 | 21 | 25 |
| 063000003 | 3/8 | 3/8 | 8 | 18-19 | 11.4 | 11.4 | 47 | 19 | 22 | 10 |
| 063000004 | 1/2 | 1/2 | 10 | 22-23 | 15 | 15 | 59 | 26 | 30.5 | 10 |
| 063000005 | 3/4 | 3/4 | 14 | 28-30 | 16.3 | 16.3 | 67 | 50 | 33 | 5 |



CONSULTA IL CATALOGO GENERALE, TROVERAI LA GAMMA COMPLETA.
LOOK AT THE GENERAL CATALOGUE TO FIND ALL PRODUCTS.



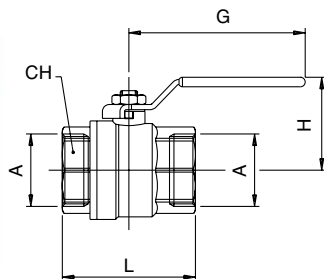
6310

MASCHIO CONICO R ISO 7 - FEMMINA RP ISO 7
TAPER MALE R ISO 7 - FEMALE RP ISO 7

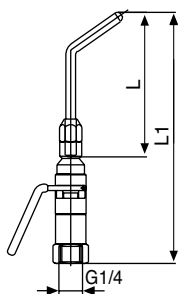
| Codice Code | A | B | (DN) | ES | F | M | L | G | H | Conf. Pack. |
|-------------|-----|-----|------|-------|------|------|------|----|------|-------------|
| 063100001 | 1/8 | 1/8 | 5.5 | 14-15 | 7.4 | 7.4 | 36 | 19 | 21 | 25 |
| 063100002 | 1/4 | 1/8 | 5.5 | 14-15 | 11 | 7.4 | 40.5 | 19 | 21 | 25 |
| 063100003 | 1/4 | 1/4 | 5.5 | 14-15 | 11 | 11 | 43 | 19 | 21 | 25 |
| 063100004 | 3/8 | 3/8 | 8 | 18-19 | 11.4 | 11.4 | 46 | 19 | 22 | 10 |
| 063100005 | 1/2 | 1/2 | 10 | 22-23 | 15 | 15 | 57 | 26 | 30.5 | 10 |
| 063100006 | 3/4 | 3/4 | 14 | 28-30 | 16.3 | 16.3 | 63 | 50 | 33 | 5 |

6067

VALVOLA A SFERA, FEMMINA-FEMMINA
BALL VALVE, FEMALE-FEMALE



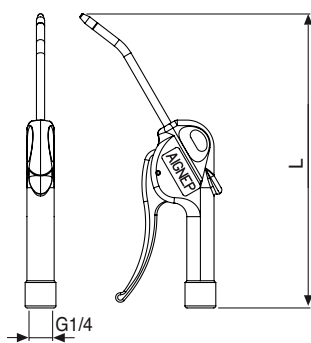
| Codice Code | A | (DN) | CH | L | G | H | Conf. Pack. |
|-------------|-------|------|----|-------|-----|------|-------------|
| 060670001 | 1/2 | 15 | 25 | 46 | 75 | 47.5 | 10 |
| 060670002 | 3/4 | 20 | 31 | 56.5 | 75 | 51 | 10 |
| 060670003 | 1" | 25 | 38 | 65.5 | 110 | 63 | 5 |
| 060670004 | 1"1/4 | 32 | 48 | 77 | 110 | 68.5 | 2 |
| 060670005 | 1"1/2 | 40 | 54 | 88.5 | 140 | 84.5 | 1 |
| 060670006 | 2" | 50 | 67 | 101.5 | 140 | 92.5 | 1 |



321

PISTOLA DI SOFFIAGGIO - ATTACCO FEMMINA
BLOW GUN FEMALE CONNECTION

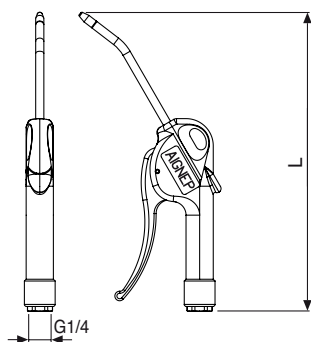
| Codice Code | L | L1 | Conf. Pack. |
|-------------|-----|-----|-------------|
| 003210001 | 90 | 157 | 10 |
| 003210002 | 200 | 267 | 1 |
| 003210003 | 290 | 357 | 1 |



340

PISTOLA DI SOFFIAGGIO Ø6MM CON ATTACCO FEMMINA IN TECNOPOLIMERO
BLOWGUN WITH Ø6MM BENT PIPE FEMALE POLYMER THREAD

| Codice Code | L | Conf. Pack. |
|-------------|-----|-------------|
| 003400001 | 215 | 1 |



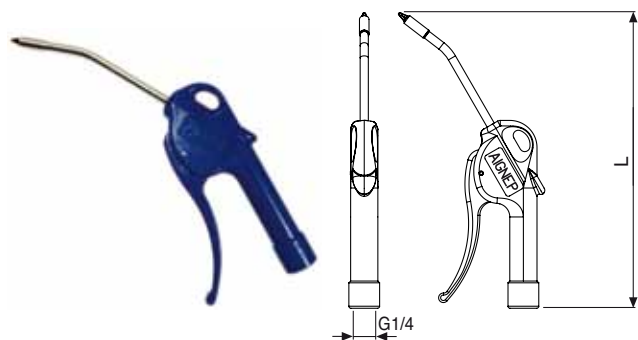
341

PISTOLA DI SOFFIAGGIO Ø6MM CON ATTACCO FEMMINA IN METALLO
BLOWGUN WITH Ø6MM BENT PIPE WITH METAL BUSHING

| Codice Code | L | Conf. Pack. |
|-------------|-----|-------------|
| 003410001 | 217 | 1 |



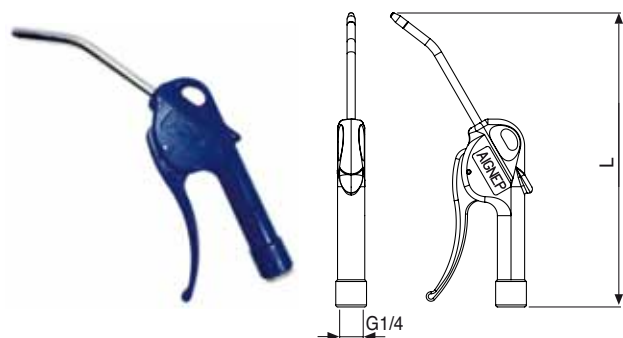
CONSULTA IL CATALOGO GENERALE, TROVERAI LA GAMMA COMPLETA.
LOOK AT THE GENERAL CATALOGUE TO FIND ALL PRODUCTS.



342

PISTOLA DI SOFFIAGGIO Ø6MM INOX CON TUBO RICURVO SUPER SILENZIOSE
BLOWGUN WITH Ø6MM STAINLESS BENT PIPE SUPER SILENT

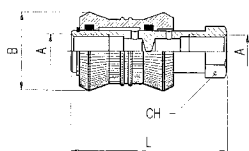
| Codice Code | L | Conf. Pack. |
|-------------|-----|-------------|
| 0034200001 | 215 | 1 |



343

PISTOLA DI SOFFIAGGIO DI SICUREZZA A 3,5 BAR CON TUBO RICURVO DA Ø8MM
BLOWGUN WITH Ø8MM BENT PIPE - 3,5 BAR UNBLOCKABLE

| Codice Code | L | Conf. Pack. |
|-------------|-----|-------------|
| 0034300001 | 217 | 1 |



6060

VALVOLA A CORSOIO - SLIDE VALVE

| Codice Code | A | B | L | CH | Conf. Pack. |
|-------------|-----|----|----|----|-------------|
| 0606000001 | 1/8 | 25 | 48 | 14 | 10 |
| 0606000002 | 1/4 | 30 | 58 | 17 | 10 |
| 0606000003 | 3/8 | 35 | 70 | 22 | 5 |
| 0606000004 | 1/2 | 40 | 80 | 26 | 5 |



T100 Mini

FILTRO REGOLATORE + LUBRIFICATORE
FILTER REGULATOR + LUBRIFICATOR

| Codice Code | | | | Conf. Pack. |
|---------------|---------------|------|---------|-------------|
| T100002231100 | FR+L mini 1/8 | 20µm | 0-8 bar | 1 |
| T100003231100 | FR+L mini 1/4 | 20µm | 0-8 bar | 1 |



T100

FILTRO REGOLATORE + LUBRIFICATORE
FILTER REGULATOR + LUBRIFICATOR

| Codice Code | | | | Conf. Pack. |
|---------------|------------|------|---------|-------------|
| T100103231100 | FR+L 1 1/4 | 20µm | 0-8 bar | 1 |
| T100104231100 | FR+L 1 3/8 | 20µm | 0-8 bar | 1 |
| T100205231100 | FR+L 2 1/2 | 20µm | 0-8 bar | 1 |
| T100309231100 | FR+L 3 1" | 20µm | 0-8 bar | 1 |



MAN01

MANOMETRO
MANOMETER

| Codice Code | | | | Conf. Pack. |
|---------------|-----|----------|------|-------------|
| MAN0102040000 | Ø40 | 0-12 bar | R1/8 | 1 |



CONSULTA IL CATALOGO GENERALE, TROVERAI LA GAMMA COMPLETA.
LOOK AT THE GENERAL CATALOGUE TO FIND ALL PRODUCTS.

2020

NIPLO DI RIDUZIONE CONICO - REDUCING NIPPLE (TAPER)

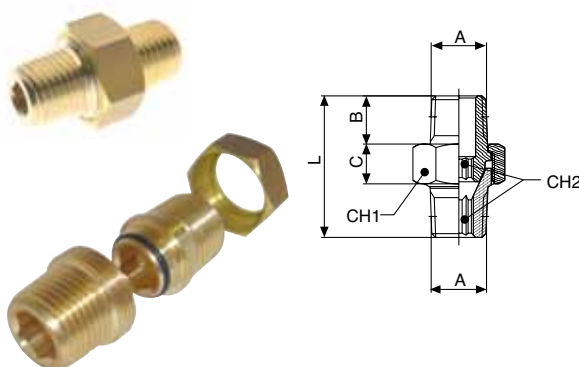


| Codice Code | A | A1 | B | C | L | CH | Conf. Pack. |
|---------------|-----|-----|------|------|------|----|-------------|
| 020200001ATNB | 1/8 | 1/4 | 7.5 | 11 | 23.5 | 14 | 50 |
| 0202000013WNB | 1/8 | 3/8 | 7.5 | 11.5 | 24 | 17 | 25 |
| 0202000014WNB | 1/8 | 1/2 | 7.5 | 14 | 27 | 22 | 25 |
| 0202000017WNB | 1/4 | 3/8 | 11 | 11.5 | 27.5 | 17 | 25 |
| 0202000018WNB | 1/4 | 1/2 | 11 | 14 | 30.5 | 22 | 25 |
| 020200001ACNB | 3/8 | 1/2 | 11.5 | 14 | 31 | 22 | 25 |
| 020200001AHNB | 1/2 | 3/4 | 14 | 16.5 | 37.5 | 27 | 25 |
| 020200001ASNT | 3/4 | 1" | 16.5 | 19 | 44 | 34 | 10 |

2060

ARTICOLO NON NICHELATO
ARTICLE NOT NICHEL-PLATED

NIPLO CONICO ORIENTABILE (3 pezzi) - TAPER NIPPLE (3 pieces)



| Codice Code | A | B | C | L | CH1 | CH2 | Conf. Pack. |
|-------------|-----|------|-----|------|-----|-----|-------------|
| 0206000001 | 1/8 | 7.5 | 8.5 | 27 | 15 | 5 | 25 |
| 0206000002 | 1/4 | 11 | 9.5 | 33.5 | 19 | 6 | 25 |
| 0206000003 | 3/8 | 11.5 | 10 | 36.5 | 22 | 8 | 10 |
| 0206000004 | 1/2 | 14 | 12 | 45 | 27 | 12 | 10 |
| 0206000005 | 3/4 | 16.5 | 17 | 54 | 36 | 14 | 5 |
| 0206000006 | 1" | 19 | 20 | 65 | 46 | 19 | 1 |

Temperatura minima / Minimum temperature: -20 °C
 Temperatura massima / Maximum temperature: +80 °C
 Pressione minima / Minimum pressure: -0.99 bar (-0.099 MPa)
 Pressione massima / Maximum pressure: +15 bar (1.5 MPa)

2080

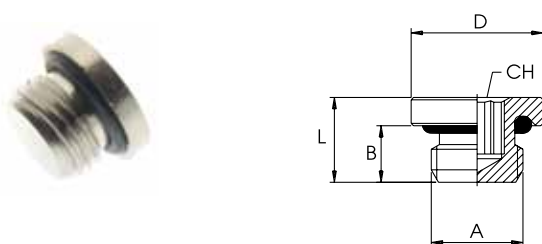
RIDUZIONE CONICA - REDUCER (TAPER)



| Codice Code | A | A1 | B | L | CH | Conf. Pack. |
|---------------|-------|-----|------|------|----|-------------|
| 0208000015WNB | 1/4 | 1/8 | 11 | 16 | 14 | 50 |
| 0208000019WNB | 3/8 | 1/8 | 11.5 | 16.5 | 17 | 50 |
| 020800001ADNB | 1/2 | 1/8 | 14 | 19.5 | 22 | 25 |
| 020800001AANB | 3/8 | 1/4 | 11.5 | 16.5 | 17 | 50 |
| 020800001AENB | 1/2 | 1/4 | 14 | 19.5 | 22 | 25 |
| 020800001AFNB | 1/2 | 3/8 | 14 | 19.5 | 22 | 25 |
| 020800001ALNB | 3/4 | 3/8 | 16.5 | 23.5 | 27 | 25 |
| 020800001AMNB | 3/4 | 1/2 | 16.5 | 23.5 | 27 | 25 |
| 020800001APNT | 1" | 1/2 | 19 | 27.5 | 34 | 10 |
| 020800001AQNT | 1" | 3/4 | 19 | 27.5 | 34 | 10 |
| 020800001ARNT | 1 1/4 | 1/2 | 22 | 31 | 45 | 10 |
| 020800001AUNT | 1 1/4 | 3/4 | 22 | 31 | 45 | 10 |
| 020800001AVNT | 1 1/4 | 1" | 22 | 31 | 45 | 10 |
| 02080000182NT | 1 1/2 | 1" | 22 | 32 | 50 | 5 |
| 02080000183NT | 2" | 1" | 24 | 36 | 60 | 5 |

3015

TAPPO MASCHIO CILINDRICO ESAGONO INCASSATO CON O-RING NBR
MALE PLUG (PARALLEL) EXAGON EMBEDDED WITH NBR O-RING

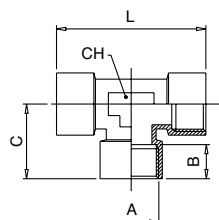


| Codice Code | A | B | L | D | CH | Conf. Pack. |
|-------------|-----|----|------|----|----|-------------|
| 0301500005 | M5 | 4 | 6 | 8 | 2 | 50 |
| 0301500001 | 1/8 | 6 | 8.5 | 14 | 5 | 50 |
| 0301500002 | 1/4 | 8 | 11 | 17 | 6 | 50 |
| 0301500003 | 3/8 | 9 | 12.5 | 20 | 8 | 25 |
| 0301500004 | 1/2 | 10 | 13.5 | 25 | 10 | 25 |

Temperatura minima / Minimum temperature: -20 °C
 Temperatura massima / Maximum temperature: +80 °C
 Pressione minima / Minimum pressure: -0.99 bar (-0.099 MPa)
 Pressione massima / Maximum pressure: +15 bar (1.5 MPa)



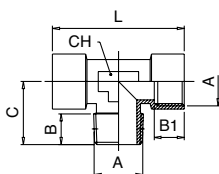
CONSULTA IL CATALOGO GENERALE, TROVERAI LA GAMMA COMPLETA.
LOOK AT THE GENERAL CATALOGUE TO FIND ALL PRODUCTS.



4000

RACCORDO A T FEMMINA - FEMALE TEE

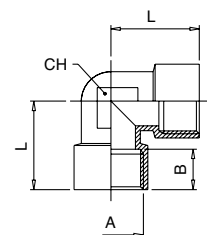
| Codice Code | A | B | C | L | CH | Conf. Pack. |
|--------------|-----|------|------|----|----|-------------|
| 0400000102NB | 1/8 | 8.5 | 19.5 | 39 | 12 | 25 |
| 0400000103NB | 1/4 | 11 | 24.5 | 49 | 13 | 25 |
| 0400000104NB | 3/8 | 12 | 27 | 54 | 16 | 25 |
| 0400000105NB | 1/2 | 15 | 32 | 64 | 20 | 10 |
| 0400000107NT | 3/4 | 16.5 | 36.5 | 73 | 27 | 10 |
| 0400000109NT | 1" | 19 | 45 | 90 | 30 | 5 |



4040

RACCORDO A T MASCHIO CENTRALE - CENTRE LEG MALE TEE

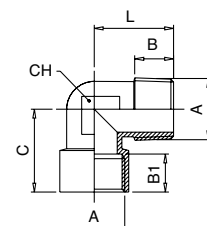
| Codice Code | A | B | B1 | C | L | CH | Conf. Pack. |
|---------------|-----|------|------|------|----|----|-------------|
| 04040000102NB | 1/8 | 8 | 8.5 | 17.5 | 39 | 12 | 25 |
| 04040000103NB | 1/4 | 11 | 11 | 23 | 49 | 13 | 25 |
| 04040000104NB | 3/8 | 11.5 | 12 | 25.5 | 54 | 16 | 25 |
| 04040000105NB | 1/2 | 14 | 15 | 29.5 | 64 | 20 | 10 |
| 04040000107NT | 3/4 | 14.5 | 16.5 | 32 | 73 | 27 | 10 |
| 04040000109NT | 1" | 16.8 | 19 | 39 | 90 | 30 | 5 |



5010

RACCORDO A L FEMMINA - FEMALE ELBOW

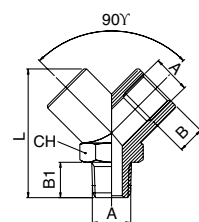
| Codice Code | A | B | L | CH | Conf. Pack. |
|---------------|-----|------|------|----|-------------|
| 05010000102NB | 1/8 | 8.5 | 21 | 11 | 50 |
| 05010000103NB | 1/4 | 11 | 25.5 | 13 | 25 |
| 05010000104NB | 3/8 | 11.5 | 28 | 17 | 25 |
| 05010000105NB | 1/2 | 15 | 32 | 20 | 25 |
| 05010000107NT | 3/4 | 16.5 | 36.5 | 27 | 10 |
| 05010000109NT | 1" | 19 | 45 | 30 | 5 |



5020

RACCORDO A L MASCHIO-FEMMINA - MALE-FEMALE ELBOW

| Codice Code | A | B | B1 | C | L | CH | Conf. Pack. |
|---------------|-----|------|------|------|------|----|-------------|
| 05020000102NB | 1/8 | 7.5 | 8.5 | 21 | 18 | 11 | 50 |
| 05020000103NB | 1/4 | 11 | 11 | 25.5 | 24 | 13 | 25 |
| 05020000104NB | 3/8 | 11.5 | 12 | 28 | 27 | 17 | 25 |
| 05020000105NB | 1/2 | 14 | 15 | 32 | 29.5 | 20 | 25 |
| 05020000107NT | 3/4 | 14.5 | 16.5 | 36.5 | 32 | 27 | 10 |
| 05020000109NT | 1" | 16 | 19 | 45 | 39 | 30 | 5 |



6000

RACCORDO A Y 90° MASCHIO - MALE Y 90°

| Codice Code | A | B | B1 | L | CH | Conf. Pack. |
|---------------|-----|------|------|----|----|-------------|
| 06000000102NB | 1/8 | 8.5 | 9 | 33 | 14 | 25 |
| 06000000103NB | 1/4 | 11 | 11 | 37 | 17 | 25 |
| 06000000104NB | 3/8 | 11.5 | 12.5 | 46 | 22 | 20 |
| 06000000105NB | 1/2 | 14 | 16.5 | 58 | 26 | 10 |



CONSULTA IL CATALOGO GENERALE, TROVERAI LA GAMMA COMPLETA.

LOOK AT THE GENERAL CATALOGUE TO FIND ALL PRODUCTS.

RICONOSCIMENTI UFFICIALI MINISTERI ITALIANI:

- Legge 1086/71 con D.M. 27/1/82 n. 20913 "Prove su materiali da costruzione".
- D.M. 09/11/99 "Certificazione CE per le valvole a sfera".
- D.M. 04/08/94 "Certificazione CE sulle macchine".
- Notifica n. 73780 del 15/12/98 "Certificazione CE per gli apparecchi a gas".
- D.M. 09/07/93 "Certificazione CE in materia di recipienti sottoposti a pressione".
- D.M. 09/07/93 "Certificazione CE concernente la sicurezza dei giocattoli".
- Incarico di verifica della sicurezza e conformità dei prodotti nell'ambito della sorveglianza sui mercati e tutela del consumatore.
- D.M. 02/04/95 "Missivo di attestazioni di conformità delle caratteristiche e prestazioni energetiche dei componenti degli edifici e degli impianti".
- Legge 818/84 e D.M. 26/03/85 con autorizzazione del 12/03/88 "Prove di reazione al fuoco secondo D.M. 26/05/84".
- Legge 818/84 e D.M. 26/03/85 con autorizzazione del 10/07/88 "Prove di resistenza al fuoco secondo Circolare n. 91 del 14/08/81".
- Legge 818/84 e D.M. 26/03/85 con autorizzazione del 02/07/92 "Prove di resistenza al fuoco secondo Circolare n. 7 del 05/04/91 comma CIVVICO UNI 9722".
- Legge 818/84 e D.M. 26/03/85 con autorizzazione del 12/04/88 "Prove su estensori d'incendio portatili secondo D.M. 20/12/92".
- Legge 46/92 con D.M. 09/10/95 "Inmissione nell'ambito dei laboratori autorizzati a svolgere ricerche di carattere applicativo a favore delle piccole e medie industrie".
- Protocollo n. 118 del 27/03/87 "Incarico allo Schedario Anagrafe Nazionale delle ricerche con notifica N.03491919".
- Decreto 34/03/02 "Certificazione CE di rispondenza della conformità delle attrezzature a pressione".
- Decreto 14/05/05 "Certificazione CE di conformità in materia di emissione acustica ambientale per macchine e attrezzature".
- Decreto 05/02/03 "Esecuzione delle procedure di validazione della conformità dell'equipaggiamento marittimo".
- G.U.R.L. n. 238 del 07/10/04 "Certificazione CE sugli accessori".
- Notifica per le attività di attestazione della conformità alle norme armonizzate della Direttiva 89/106 sui prodotti da costruzione.

ENTI TERZI:

- SINCERT: Accreditamenti n. 057A del 19/12/01 "Organismo di certificazione di sistema di gestione per la qualità" e n. 5028 del 12/04/06 "Organismo di certificazione di prodotto".
- SIT: Centro nazionale n. 20 (Bellaria - Pinerolo) per prodotti termoelettrici ed elettrici.
- ICM: "Prove di laboratorio nell'ambito degli schemi di Certificazione di Prodotto".
- SAC: "Prove di laboratorio nell'ambito degli schemi di Certificazione di Prodotto per cavi forati".
- UNCSAM: Riconoscimento del 26/03/85 "Laboratorio per le prove di certificazione UNCSAM, su sarmanti e fascce continue".
- MG-UNI: "Prove di laboratorio nell'ambito degli schemi di Certificazione di Prodotto per termocamere a lega con flusso a circolazione forata".
- CD-UNI: "Prove di laboratorio in ambito degli schemi di Certificazione di Prodotto per sarmanti esterni".
- KEYMARK per isolanti termici: "Misura di conduttività termica per materiali isolanti".
- IT: "Prove di laboratorio e sorveglianza in sede nell'ambito degli schemi di Certificazione di Prodotto per porte, finestre, chiusure scorrevoli (antifurto) e serramenti".
- EFSG: "Prove di laboratorio su cassetti e altri pezzi di custodia".
- AENOR: "Validazione della conformità ai fini della marcatura CE per alcuni prodotti inseriti in direttive prodotti da costruzione".
- VTT-Finlandia: "Validazione della conformità ai fini della marcatura CE per alcuni prodotti inseriti in direttive prodotti da costruzione".
- C.C.I.A.A. Rimini: 28/01/04 "Verifica periodica dell'accuratezza metrologica di strumenti metrologici in materia di commercio".

PARTECIPAZIONI ASSOCIATIVE:

- AIA: Associazione Italiana di Acustica.
- AICARR: Associazione Italiana Condizionamento dell'Aria Riscaldamento Refrigerazione.
- AICD: Associazione Italiana per la Qualità.
- AIPD: Associazione Italiana Prove non Distruttive.
- ALP: Associazione Laboratori Italiani Fuoco.
- ALPI: Associazione Laboratori di Prove Indipendenti.
- ASHRAE: American Society of Heating, Refrigerating and AirConditioning Engineers Inc.
- ASTM: American Society for Testing and Materials.
- ATG: Associazione Tecnica Italiana del Gas.
- CTE: Collegio dei Tecnici della Industrializzazione Edilizia.
- CTV: Comitato Tecnico Italiano.
- EAFMA: European Association of Research Managers and Administrators.
- EARTO: European Association of Research and Technology Organisation.
- EGOLF: European Group of Official Laboratories for Fire Testing.
- UNI: Ente Nazionale Italiano di Unificazione.

CLAUSELE:

Il presente documento si riferisce solamente al campione e materiale sottoposto a prova.
 Il presente documento non può essere riprodotto parzialmente, salvo approvazione scritta del laboratorio.

ABRIDGED TEST REPORT No. 238763
 (Refers to test report No. 236272 issued by this Institute on 07/02/2008)

Place and date of issue: Bellaria-Igea Marina - Italy, 07/04/2008

Customer: AIGNEP S.p.A. - Via Industriale, 1 - 25070 BIONE (BS) - Italy

Date test requested: 09/11/2007

Order number and date: 39092, 09/11/2007

Date specimen received: 20/11/2007

Date test effected: from 20/12/2007 to 08/01/2008

Purpose of test: Testing copper-alloy quick-action couplings for use with aluminium tubes

Test site: Istituto Giordano S.p.A. - Blocco 1 - Via Rossini, 2 - 47814 Bellaria-Igea Marina (RN) - Italy

Specimen origin: sampled and supplied by Customer

Identification of specimen received: No. 2007/2505

Description of specimen

The test specimens are known as "Raccordi ad innesto rapido per tubazioni in alluminio Serie 90.000" ("Copper-alloy quick-action couplings for use with aluminium tubes Series 90.000"), DN 110.

Result of test

The tests listed below, agreed with the Customer and, in the absence of specific standards, conducted in accordance with standard UNI EN 1254-2:2000, gave the following results:

- leaktightness under internal pneumatic pressure: No visible signs of leakage;
- bursting strength test: 51 bar;
- resistance to pull-out: maximum axial movement 0,49 mm and no visible leakage in the subsequent pneumatic pressure test;
- leaktightness under internal hydraulic pressure whilst subjected to bending: no visible signs of leakage or damage.

As regards the description of the specimen, normative references, test methods, test equipment, test results and everything else necessary for the identification of the work carried out, please see Test Report No. 236272 issued by this Institute on 07/02/2008.

Test Technician (Per. Ind. Walter Frattini) Manager, Applied Physics Laboratory (Dott. Ing. Vincenzo Iommi) Chairman or Managing Director (Dott. Ing. Vincenzo Iommi)

Comp. AV Revisi This abridged report consists of 1 sheet This document is the English translation of the shridged test report No. 238763 of 07/04/2008 issued in Italian. Date of translation: 07/04/2008. Sheet 1 of 1

RISULTATI ESTRATTI DAL RAPPORTO DI PROVA N° 189076 E N° 236272 DELL' ISTITUTO GIORDANO
OUTCOME OF THE TEST NR.189076 AND NR. 236272 OF GIORDANO INSTITUT.

Prodotto:

Sistema di distribuzione aria Infinity composto da:

- tubi in alluminio calibrato
- raccordi automatici in ottone con pinza di aggraffaggio in acciaio e componenti in tecnopolimero e guarnizioni in NBR.

Product:

Air distribution system consisting of:

- tubes in gauged aluminium
- push-in fittings in brass with clamping washer in steel and tecnopolymeric parts with seal in NBR.

Prova eseguita: Verifica della tenuta sotto pressione a 1,5 volte la pressione Max dichiarata.

Test: Test of pressure 1.5 time higher of the max declared.

| Diametro nominale raccordi e tubo in alluminio <i>Diameter Fittings and tube</i> | Verifica tenuta pneumatica a 22,5 bar (1,5 PN) per 15 minuti <i>Pneumatic resistance at 22,5 bar (1,5 PN) for 15 minute</i> | Verifica tenuta pneumatica a 0,5 bar per 15 minuti <i>Pneumatic resistance at 0,5 bar for 15 minute</i> |
|--|---|---|
| DN 20 DN 25 DN 32 DN 40 DN 50 DN 63 DN110 | *Nessuna perdita visibile <i>*No visible leakage</i> | *Nessuna perdita visibile <i>*No visible leakage</i> |

Prova eseguita: Verifica della pressione di scoppio.

Test: Pressure of explosion.

| Diametro nominale raccordi e tubo in alluminio <i>Diameter Fittings and tube</i> | Pressione idraulica di rottura <i>Hydraulic pressure of breaking</i> |
|--|--|
| DN 20 | Alla pressione di 115 bar si è avuto un parziale sfilamento del tubo da un raccordo, con perdita di notevole entità. <i>Pressure 115 bar unthreading of a fitting from the tube with leakage.</i> |
| DN 25 | Alla pressione di 75 bar si è prodotto lo sfilamento totale del tubo da un raccordo. <i>Complete unthreading pressure 75 bar of a tube.</i> |
| DN 32 | Alla pressione di 78 bar è iniziato lo sfilamento del tubo da un raccordo, con tenuta idraulica: a 93 bar si è prodotto lo sfilamento completo. <i>At 78 bar unthreading of a tube with wet seal: at 93 total unthreading.</i> |
| DN 40 | Alla pressione di 75 bar il tubo ha iniziato a sfilarsi da un raccordo: mentre si cercava di mantenere/innalzare il valore della pressione, si è prodotto lo sfilamento totale del tubo dal raccordo. <i>At 75 bar the tube becomes unthreaded while trying to increase the pressure.</i> |
| DN 50 | Alla pressione di 58 bar il tubo ha iniziato a sfilarsi da un raccordo: lo sfilamento progressivo e la successiva perdita non hanno permesso di innalzare ulteriormente la pressione. <i>At 58 bar the tube has become unthreaded.</i> |
| DN 63 | Alla pressione di 62 bar si è manifestata una perdita, la cui entità è aumentata senza permettere un ulteriore innalzamento della pressione. <i>At 62 bar, leakage, no possibility to increase pressure.</i> |
| DN 110 | Alla pressione di 36 bar si è manifestata una perdita. <i>At 36 bar, leakage.</i> |

Prova eseguita:

Prove di trazione a carico costante secondo la **Norma UNI-EN 1254-2:2000 punto 5.5.**

Test:

*Constant tensile stress in accordance with **Norma UNI-EN 1254-2:2000 punto 5.5.***

| Diametro nominale raccordi e tubo in alluminio <i>Diameter Fittings and tube</i> | Carico di trazione applicato (N) <i>Power of stress (N)</i> | Sfilamento massimo del tubo dai raccordi (mm) <i>Unthreading of tubes (mm)</i> | Verifica tenuta pneumatica a 6 bar <i>Resistance at 6 bar</i> |
|--|---|--|---|
| DN 20 | 1500 | 0,9 | Nessuna perdita visibile <i>*No visible leakage</i> |
| DN 25 | 1500 | 0,4 | |
| DN 32 | 2000 | 0,4 | |
| DN 40 | 2000 | 0 | |
| DN 50 | 2000 | 0 | |
| DN 63 | 2500 | 0 | |
| DN 110 | 2500 | 0,49 | |

Prova eseguita:

Verifica della tenuta sotto pressione pneumatica interna e contemporanea applicazione di sollecitazione a flessione, come **Norma UNI-EN 1254-2:2000 punto 5.6.**

Prova eseguita:

Test:

*Resistance under pneumatic internal pressure and bending stress at the same time according to **Norma UNI-EN 1254-2:2000 punto 5.6.***

| Diametro nominale raccordi e tubo in alluminio <i>Diameter Fittings and tube</i> | Distanza tra i centri dei supporti applicato (mm) <i>Distance between bearing points</i> | Pressione pneumatica interna di prova <i>Pneumatic pressure</i> | Verifica resistenza mecca- nica e tenuta pneumatica (bar) <i>Resistance and pneumatic stamina</i> |
|--|--|---|---|
| DN 20 | 1800 | 10 | Nessuna perdita visibile <i>*No visible leakage</i> |
| DN 25 | 1800 | 10 | |
| DN 32 | 1800 | 10 | |
| DN 40 | 2400 | 10 | |
| DN 50 | 2700 | 10 | |
| DN 63 | 3000 | 6 | |
| DN 110 | 3000 | 6 | |

Il certificato che riporta tutti i dettagli e modalità delle prove può essere richiesto.

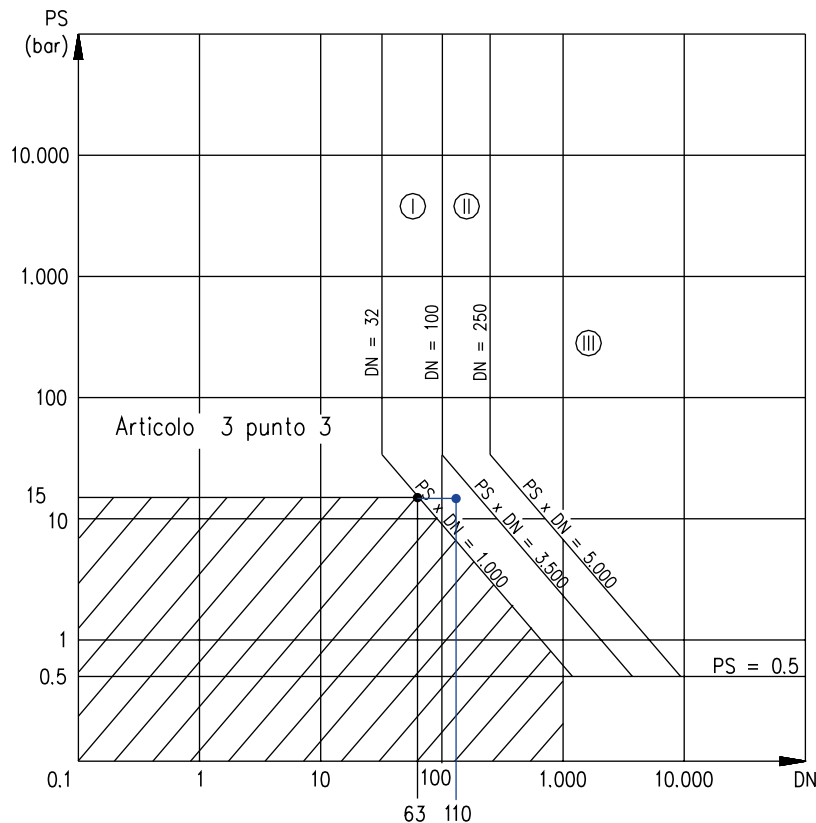
The certificate is available upon request.

DICHIARAZIONE DI CONFORMITA' PER GLI IMPIANTI DI DISTRIBUZIONE DELL'ARIA.

CONFORMITY DECLARATION FOR THE DISTRIBUTION OF COMPRESSED-AIR.

Dichiariamo che il sistema di distribuzione dell'aria alle seguenti condizioni di utilizzo: pressione $-0,99 \pm 15$ bar - temperatura $-20^{\circ}\text{C} \div 80^{\circ}\text{C}$ soddisfa la **direttiva 97/23/CE Art. 3.3 (PED: Pressure Equipment Directive)**

We declare that the system used with pressure 0.99 ± 15 bar and temperature $-20^{\circ}\text{C} \div 80^{\circ}\text{C}$ with **directive 97/23/CE Art. 3.3 (PED: Pressure Equipment Directive)**.



Prendendo in considerazione il diametro $\varnothing 63$ e la pressione massima di 15 bar, si osserva nel grafico, che il punto di intersezione $PS \times DN = 63 \times 15 = 945$ è alla sinistra della zona $PS \times DN = 1.000$: zona esente dalla marcatura CE secondo la direttiva menzionata (Art.3.3). Quindi in base alla direttiva **97/23/CE Art. 3.3** per tutti i tubi e i relativi raccordi ($\varnothing 20$ - $\varnothing 25$ - $\varnothing 32$ - $\varnothing 40$ - $\varnothing 50$ - $\varnothing 63$) che costituiscono gli impianti di distribuzione dell'aria Infinity non è necessaria la marcatura CE.

Prendendo in considerazione il diametro 110 e la pressione massima di 15 bar, si osserva nel grafico, che il punto d'intersezione $PS \times DN = 110 \times 15 = 1650$ è nella zona individuata come categoria I. In base alla direttiva 97/23/CE per tale zona si prevede la valutazione della conformità secondo un controllo di fabbricazione interno.

With diameter 63 and max pressure 15 bar, on can see on the graphic that the intersection point $PS \times DN = 63 \times 15 = 945$ is on the left side of zone $PS \times DN = 1.000$: it meas is exempt from **CEE** marking according to the above mentioned directive (Art.3.3). Therefore all tubes and fitting ($\varnothing 20$ - $\varnothing 25$ - $\varnothing 32$ - $\varnothing 40$ - $\varnothing 50$ - $\varnothing 63$) do not require any **CEE** marking.

Considering the diameter 110 and maximum pressure of 15 bar, the intersection point $PS \times DN = 110 \times 15 = 1650$ in the chart above, is in the area called "CATEGORIA I". According to Directive 97/23/CE this area has a conformity evaluation made at factory.

CONFORMITA' DEL PROCESSO DI VERNICIATURA A POLVERE POLIESTERE SU TUBI DI ALLUMINIO DELLA SERIE INFINITY

CONFORMITY OF POLYESTER POWDER PAINTING ON ALUMINIUM TUBES OF SERIE INFINITY.

- PRETRATTAMENTO

Garantisce l'ancoraggio della vernice all'alluminio e ne previene la corrosione e l'ossidazione delle parti non verniciate. E' conforme alle seguenti normative tecniche: **UNI 9921 - DIN 50939 - ASTM D 1730 - MIL C 5541**

- PRE-TREATMENT.

*It guarantees the anchorage of the painting to the tube and prevents corrosion and oxydation of not painted parts according to: **UNI 9921 - DIN 50939 - ASTM D 1730 - MIL C 5541.***

- VERNICIATURA

E' effettuata utilizzando vernice in polvere poliestere atossica certificata QUALICOT e GSB in conformita' alle seguenti normative: **UNI 9983 - BS 6496 - AAMA 603-605**

I sopradescritti trattamenti rendono inattaccabile alla corrosione in ambienti marini la parte esterna dei tubi, in quanto completamente ricoperta di vernice. La parte interna solamente pretrattata (cromatata) offre comunque una discreta protezione.

- PAINTING.

*Made using powder painting not-toxic certified QUALICOT and GSB according to: **UNI 9983 - BS 6496 - AAMA 603-605.** The above mentioned treatments prevents corrosion to external part. Inside is treated with chrome.*



CONFORMITA' ALLA TENUTA AL FUOCO RESISTANCE TO FIRE.

Oggetto:

Classificazione resistenza al fuoco di prodotti e componenti, sulla base dei risultati delle prove di reazione al fuoco secondo **UNI EN 13501-1:2005.**

Descrizione prodotto:

Tubo di alluminio verniciato Serie 90000

La classificazione è determinata dall'analisi del calore di combustione della vernice in combinazione con i risultati dei test specificati in **UNI EN ISO 13823** su lamine piatte equivalenti per spessore di alluminio e di vernice.

Risultato Test:

Il prodotto sottoposto al test è riconosciuto come prodotto di **Classe A2 - d1 - d0** alla resistenza al fuoco.

Subject:

*Fire classification of construction products and building elements, based on the result of reaction to fire testing in accordance with **UNI EN 13501-1:2005.***

Description of the product:

Painted aluminium pipe 90000 SERIES.

*Classification was determined by analysis of the paint's gross heat of combustion, coupled with test result as specified in **UNI EN 13823** on equivalent flat sheets, having the same thickness of aluminium and paint as the pipe.*

Test Result:

*The product under test has been awarded reaction to **Fire Class A2 - d1 - d0**, in accordance with test result obtained.*



AIGNEP

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