

RACCORDI A COMPRESSIONE, RACCORDI A BICONO E RACCORDI UNIVERSALI

COMPRESSION FITTINGS, DOUBLE CONE FITTINGS AND UNIVERSAL FITTINGS

KLEMMRING VERSCHRAUBUNGEN, DOPPELKEGEL VERSCHRAUBUNGEN, UNIVERSAL VERSCHRAUBUNGEN

RACCORDS À COMPRESSION, RACCORDS À BICONE, RACCORDS UNIVERSELS LAITON

RACORDAJE A COMPRESIÓN, RACORDAJE UNIVERSAL A BICONO, RACORDAJE UNIVERSAL

CONEXÕES DE COMPRESSÃO, CONEXÕES UNIVERSAIS DE CONE DUPLO, CONEXÕES UNIVERSAIS



Serie Compression Fittings

Serie 9000



Serie 10000



Serie 13000



RACCORDI UNIVERSALI A BICONO*UNIVERSAL DOUBLE CONE FITTINGS**DOPPELKEGEL VERSCHRAUBUNGEN**RACCORDS UNIVERSELS A DOUBLE CONE**RACORDAJE UNIVERSAL A BICONO**CONEXÕES UNIVERSAIS DE CONE DUPLO*


CARATTERISTICHE TECNICHE

TECHNICAL CHARACTERISTICS
TECHNISCHE ANGABEN
CARACTÉRISTIQUES TECHNIQUES
CARACTERÍSTICAS TÉCNICAS
CARACTERÍSTICAS TÉCNICAS


Norma di Riferimento

Reference standard

Entspricht der Norm

Norme de référence

Normativa de referencia

Norma de referência

1907/2006

REACH ✓

2011/65/CE

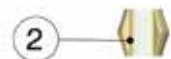
RoHS ✓

PED

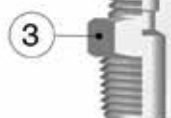
2014/68/UE

SILICON

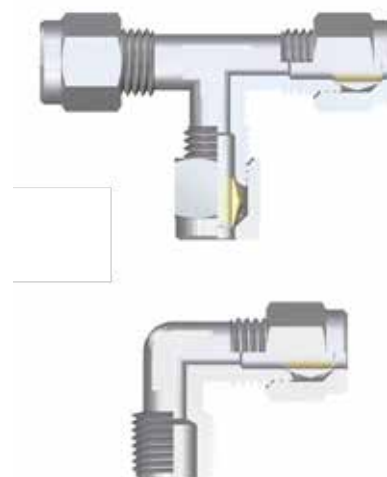
FREE



Sede e bicono a norma DIN 3862.
Seat and olive in conformity with
DIN Standards 3862.
Ein Registriert unter DIN 3862 Bicone.
Un enregistrés en application DIN 3862 bicone.
Sede y bicono a norma DIN 3861.
Sede e bucha conforme Norma DIN 3862.



Rinforzo Art. 10770.
Internal support bush Art. 10770.
Verstärkung Art. 10770.
Renforcement Art. 10770.
Refuerzo Art. 10770.
Bucha de reforço interno Cód. 10770.



| Materiali e Componenti | IT | Component Parts and Materials | GB | Komponenten und Materialien | DE |
|--------------------------------------|----|------------------------------------|----|----------------------------------------|----|
| 1 Dado in Ottone Nichelato | | 1 Nickel-plated Brass Nut | | 1 Überwurfmutter Messing vernickelt | |
| 2 Ogiva in Ottone (PTFE a richiesta) | | 2 Brass Olive (If requested PTFE) | | 2 Klemmring Messing (PTFE auf Anfrage) | |
| 3 Corpo in Ottone Nichelato | | 3 Nickel-plated Brass Body | | 3 Körper Messing vernickelt | |
| 4 Bussolina di rinforzo | | 4 Internal support bush | | 4 Stützhülse Messing | |
| Matériaux et Composants | FR | Materiales y Componentes | ES | Materiais e Componentes | PT |
| 1 Ecrou: laiton nickelé | | 1 Tuerca en Latón Niquelado | | 1 Porca em Latão niquelado | |
| 2 Ague: laiton (sur demande en PTFE) | | 2 Bicono en Latón (PTFE a demanda) | | 2 Bucha em Latão (PTFE sob encomenda) | |
| 3 Corps: laiton nickelé | | 3 Cuerpo en Latón Niquelado | | 3 Corpo em Latão niquelado | |
| 4 Fourrure intérieure: laiton | | 4 Refuerzo | | 4 Bucha de reforço interna | |



| Tubi di Collegamento | IT | Connection Tubes | GB | Geeignete Rohre | DE |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Tubi in rame, ferro, acciaio, alluminio, ottone, ecc. Con apposito rinforzo interno (art. 10770), possono essere utilizzati anche tubi in PA11, PA6, ecc. | | Tubes made in copper, steel, iron, aluminium, brass, etc. With an inside support bush (art. 10770), can be used also for plastic material such as PA11, PA6, etc. | | Rohre in Kupfer, Eisen, Stahl, Aluminium, Messing, usw. Mit einer internen Stützhülse (Art. 10770), können auch Rohre aus PA11, PA6, usw. verwendet werden. | |
| Tubes Conseillés | FR | Tubos de Conexión | ES | Tubos de Conexão | PT |
| Tubes en cuivre, acier, aluminium, laiton, etc. Avec une fourrure intérieure (art. 10770), les tubes plastiques PA11, PA6, etc. peuvent être utilisés. | | Tubos en cobre, hierro, acero, aluminio, latón, etc. Con el correspondiente refuerzo interno (art. 10770), pueden utilizarse también con tubo en PA11, PA6, etc. | | Tubos de cobre, ferro, aço, alumínio, latão, etc. Com bucha de reforço interna (cód. 10770), podem ser utilizados também com tubos em PA11, PA6, etc. | |



| Filettatura | IT | Threads | GB | Gewindearten | DE |
|----------------------------------------------------------------------------------------------------------------------------------------------------|----|------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Gas conica conforme ISO 7.1, BS 21, DIN 2999. Gas cilindrica conforme ISO 228 Classe A. Metrica conforme ISO R/262. | | Tapered gas in conformity with ISO 7.1, BS 21, DIN 2999. Parallel gas in conformity with ISO 228 Class A. Metric in conformity with ISO R/262. | | Konisches Gewinde nach Norm ISO 7.1, BS 21, DIN 2999. Zylindrisches Gewinde nach Norm ISO 228 Classe A. Metrisches Gewinde nach Norm ISO R/262. | |
| Filetages | FR | Roscas | ES | Roscas | PT |
| Filetage conique conforme: ISO 7.1, BS 21, DIN 2999. Filetage cylindrique conforme: ISO 228 Classe A. Filetage métrique conforme: ISO R/262. | | Gas cónica conforme ISO 7.1, BS 21, DIN 2999. Gas cilíndrica conforme ISO 228 Clase A. Métrica conforme ISO R/262. | | Gas cônica conforme ISO 7.1, BS 21, DIN 2999. Gas paralela conforme ISO 228 Classe A. Métrica conforme ISO R/262. | |



Pressioni e Temperature

IT

Pressioni e temperature vengono determinate dal tipo di tubo impiegato, pertanto tali valori sono da definirsi in base alle caratteristiche del tubo stesso.

Riportiamo di seguito i valori delle pressioni massime consigliate per l'utilizzo dei raccordi con tubi di rame dallo spessore di 1 mm a 20° C.

I valori delle pressioni consigliate, riportate in tabella, sono stati ottenuti dai valori di prova adottando un Coefficiente di Sicurezza 4.

Sono disponibili i certificati delle prove rilasciati dai vari laboratori che le hanno eseguite.

Pressures and Temperatures

GB

The working pressures and working temperatures depend on which type of tube is used, for this reason, the values must be determined in accordance with the tube's features.

Hereunder, we specify the values of the maximum pressure advised for the fittings at a temperature of 20° C connected with copper tube, which has a thickness of 1 mm.

The values of working pressures advised, specified in table have been obtained from the test values using a Safety Factor 4.

It is available the test report made by the external laboratory test.

Druckbereich und Temperatur

DE

Drücke und Temperaturen sind definiert durch die verwendete Ausführung der Leitung, d.h. die Werte der eingesetzten Rohre sind zu beachten.

Nachfolgend geben wir die Werte des maximalen Druckes für den Einsatz der Verschraubungen mit Kupferrohren an, deren Wandstärke min. 1mm beträgt und bei einer Temperatur von 20° C.

Es muss berücksichtigt werden, dass die angegebenen Druckwerte in der Tabelle mit einem Sicherheitsfaktors von 4 berechnet wurden.

Es stehen Prüfberichte zur Verfügung, die von verschiedenen, externen Labors gemacht wurden.

Pressions et Températures

FR

Les pressions et températures de service dépendent du type de tube utilisé. Pour cette raison, les valeurs doivent être déterminées en conformité avec les caractéristiques du tube. Ci-dessous, nous indiquons les valeurs de la pression maximale recommandée pour une connexion avec un tube en cuivre de 1 mm d'épaisseur à une température de 20° C.

Les pressions de service indiquées ont été calculées avec un coefficient de sécurité de 4.

Des rapports externes de tests sont disponibles sur demande pour attester ces valeurs.

Presiones y Temperaturas

ES

Presión y temperatura vienen determinadas según el tipo de tubo empleado, por lo tanto estos valores se definen en base a las características del mismo tubo. Representamos a continuación los valores de las presiones máximas aconsejadas para la utilización de los racores con tubo de cobre espesor 1 mm a 20° C.

Los valores de las presiones aconsejadas, representadas en la tabla, han sido obtenidas de valores de prueba adoptando un coeficiente de seguridad 4.

Están disponibles los certificados de las pruebas realizadas en distintos laboratorios especializados.

Pressões e Temperaturas

PT

Pressões e temperaturas dependem do tipo de tubo aplicado, portanto tais valores devem ser definidos com base nas características do tubo em questão.

A seguir apresentamos os valores das pressões máximas aconselhadas para a utilização das conexões com tubos de cobre de espessura de 1 mm a 20° C.

Os valores das pressões aconselhadas, reportados na tabela, foram obtidas dos valores de teste adotando-se um Coeficiente de Segurança 4.

Os certificados de teste executados por laboratórios externos estão disponíveis.



Temperature

Temperatures
Temperatur
Températures
Temperaturas
Temperaturas

- 60 °C
+ 300 °C

| Misura Size Größe Dimensions Tamaño Tamanho | Pressione massima consigliata - 20 °C Maximum pressure advised - 20 °C Maximal empfohlener Druck - 20 °C Pression maximum conseillée - 20 °C Presión máxima aconsejada - 20 °C Pressão máxima aconselhada - 20 °C |
|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ø | kg/cm ² bar |
| 4 | 150 148.4 |
| 6 | 150 148.4 |
| 8 | 130 128.6 |
| 10 | 180 178.1 |
| 12 | 150 148.4 |
| 14 | 115 113.3 |
| 15 | 75 74.2 |
| 16 | 75 74.2 |
| 18 | 60 59.4 |
| 22 | 40 39.6 |



Fluidi compatibili

Acqua / Olio / Aria compressa
Fluidi in genere per l'impiantistica idraulica, oleodinamica, idropneumatica, ecc.

Fluids

Water / Oils / Compressed air
Fluids in general for the hydraulic, pneumatic and oildynamic plants etc.

Geeignete Medien

Wasser / Öl / Druckluft
Medien im Allgemeinen für hydraulische-, hydropneumatische- und pneumatische Anlagen, usw.

Fluides compatibles

Eau / Huile / Air comprimé
Fluides courants utilisés en hydraulique et pneumatique, etc.

Fluidos compatibles

Agua / Aceite / Aire comprimido
Fluidos en general para los campos hidráulicos, neumáticos y oleodinámicos, etc.

Fluidos compatíveis

Água / Óleo / Ar comprimido
Fluidos em geral para aplicações hidráulicas, oleodinâmicas, hidropneumáticas, etc.



Coppia di serraggio

Torque specifications
Angaben Drehmoment
Couple de serrage
Par de apriete
Especificações de Torque

| COPPIE DI SERRAGGIO DADO SU OGIVA TORQUE FORCE ON OLIVE NUT ANZUGSDREHMOMENT ZWISCHEN MUTTER UND KLEMMRING COUPLE DE SERRAGE DE L'ÉCROU SUR LA BAGUE OLIVE PAR DE APRIETE DE LA TUERCA DE OJIVA TORQUE DE APERTO PARA PORCA EM BUCHA | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Ø | N° Giri chiave N° Key turns N° Schlüssel Umdrehungen N° de tours N° Giro de la tuerca N° Rotação da porca | Forza Force Drehmoment Couple Fuerza Força | Forza Force Drehmoment Couple Fuerza Força |
| mm | | Nm | kgf |
| 4 | 1 1/4 + 1/4 | 15 | 1.55 |
| 6 | 1 1/4 + 1/4 | 18 | 1.85 |
| 8 | 1 1/4 + 1/4 | 22 | 2.25 |
| 10 | 1 1/4 + 1/4 | 40 | 4 |
| 12 | 1 1/4 + 1/4 | 50 | 5 |
| 14 | 1 1/4 + 1/4 | 70 | 7.1 |
| 15 | 1 + 1/4 | 90 | 9.1 |
| 16 | 1 + 1/4 | 90 | 9.1 |
| 18 | 1 + 1/4 | 130 | 13.25 |
| 22 | 1 + 1/4 | 130 | 13.25 |

Forze di serraggio, minime consigliate, e n° di giri utili, per garantire un montaggio corretto.
Torque force, minimum recommended, and useful turn, to ensure a correct installation.
Empfohlenes Anzugsdrehmoment und mindest umdrehungsanzahl für eine korrekte montage.
Couple de serrage minimum recommandé et nombre de tours pour assurer une installation correcte.
Par de apriete mínimo recomendado y n. giros necesarios para garantizar un montaje correcto.
Torque de aperto mínimo garantido, n. rotações necessário para garantir a correcta instalação.

10200

RACCORDO A T INTERMEDIO

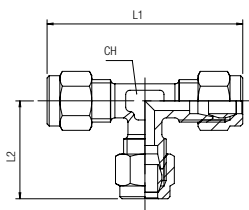
TEE CONNECTOR

T-ANSCHLUSS

RACCORD TÉ

RACOR A T INTERMEDIO

CONEXÃO EM "T" TUBO-TUBO



| Code | Tube | L1 | L2 | CH | Pack. |
|--------------|------|----|------|----|-------|
| 10200 00 001 | 4 | 41 | 20.5 | 8 | 10 |
| 10200 00 002 | 6 | 46 | 23 | 9 | 10 |
| 10200 00 003 | 8 | 53 | 26.5 | 12 | 10 |
| 10200 00 004 | 10 | 62 | 31 | 13 | 10 |
| 10200 00 005 | 12 | 67 | 33.5 | 14 | 10 |
| 10200 00 006 | 14 | 72 | 36 | 18 | 10 |
| 10200 00 007 | 15 | 78 | 39 | 18 | 10 |
| 10200 00 008 | 16 | 78 | 39 | 17 | 10 |
| 10200 00 009 | 18 | 83 | 41.5 | 20 | 10 |
| 10200 00 010 | 22 | 86 | 43 | 27 | 10 |

10220

RACCORDO A T MASCHIO CENTRALE

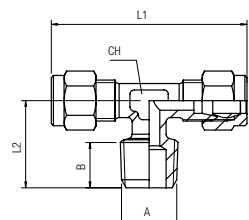
TEE MALE ADAPTOR CENTRE LEG

T-EINSCHRAUBVERSCHRAUBUNG KONISCH

TÉ À PIQUAGE MÂLE CENTRAL, CONIQUE

RACOR A T MACHO CENTRAL

CONEXÃO EM "T" COM ROSCA MACHO CENTRAL



| Code | Tube | A | L1 | L2 | CH | Pack. |
|--------------|------|-----|----|------|----|-------|
| 10220 00 001 | 4 | 1/8 | 41 | 15 | 8 | 10 |
| 10220 00 002 | 6 | 1/8 | 46 | 16.5 | 9 | 10 |
| 10220 00 003 | 6 | 1/4 | 46 | 20.5 | 9 | 10 |
| 10220 00 004 | 8 | 1/8 | 53 | 16.5 | 12 | 10 |
| 10220 00 005 | 8 | 1/4 | 53 | 20.5 | 12 | 10 |
| 10220 00 006 | 8 | 3/8 | 57 | 23 | 13 | 10 |
| 10220 00 007 | 10 | 1/4 | 62 | 22.5 | 13 | 10 |
| 10220 00 008 | 10 | 3/8 | 62 | 23.5 | 13 | 10 |
| 10220 00 009 | 10 | 1/2 | 64 | 27 | 14 | 10 |
| 10220 00 010 | 12 | 1/4 | 66 | 24.5 | 14 | 10 |
| 10220 00 011 | 12 | 3/8 | 66 | 25 | 14 | 10 |
| 10220 00 012 | 12 | 1/2 | 67 | 26.5 | 14 | 10 |
| 10220 00 013 | 14 | 3/8 | 75 | 26 | 16 | 10 |
| 10220 00 014 | 14 | 1/2 | 78 | 31 | 18 | 10 |
| 10220 00 015 | 15 | 1/2 | 80 | 31 | 18 | 10 |
| 10220 00 016 | 16 | 1/2 | 79 | 29 | 17 | 10 |
| 10220 00 017 | 18 | 1/2 | 84 | 29.5 | 20 | 10 |
| 10220 00 018 | 18 | 3/4 | 82 | 32.5 | 20 | 10 |
| 10220 00 019 | 22 | 3/4 | 86 | 34 | 27 | 10 |

10230

RACCORDO A T MASCHIO LATERALE

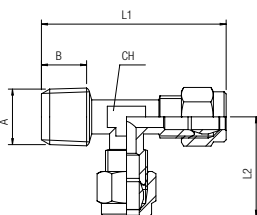
TEE MALE ADAPTOR OFF SET LEG

L-EINSCHRAUBVERSCHRAUBUNG KONISCH

TÉ À PIQUAGE LATÉRAL, CONIQUE

RACOR A T MACHO LATERAL

CONEXÃO EM "T" COM ROSCA MACHO LATERAL



| Code | Tube | A | L1 | L2 | CH | Pack. |
|--------------|------|-----|----|----|----|-------|
| 10230 00 001 | 4 | 1/8 | 35 | 21 | 8 | 10 |
| 10230 00 002 | 6 | 1/8 | 39 | 24 | 9 | 10 |
| 10230 00 003 | 6 | 1/4 | 43 | 23 | 9 | 10 |
| 10230 00 004 | 8 | 1/8 | 43 | 26 | 12 | 10 |
| 10230 00 005 | 8 | 1/4 | 46 | 26 | 12 | 10 |
| 10230 00 006 | 8 | 3/8 | 49 | 26 | 13 | 10 |
| 10230 00 007 | 10 | 1/4 | 55 | 31 | 13 | 10 |
| 10230 00 008 | 10 | 3/8 | 54 | 31 | 13 | 10 |
| 10230 00 009 | 12 | 3/8 | 58 | 33 | 14 | 10 |
| 10230 00 010 | 12 | 1/2 | 59 | 34 | 15 | 10 |
| 10230 00 011 | 14 | 1/2 | 67 | 39 | 18 | 10 |

10240

RACCORDO A T FEMMINA CENTRALE

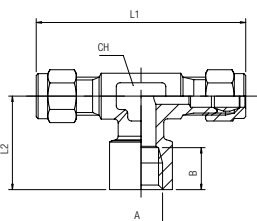
TEE FEMALE CENTRE LEG

T-EINSCHRAUBVERSCHRAUBUNG INNENGEWINDE

TÉ FEMELLE CENTRAL

RACOR A T HEMBRA CENTRAL

CONEXÃO EM "T" COM ROSCA FÊMEA CENTRAL

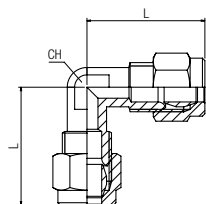


| Code | Tube | A | B | L1 | L2 | CH | Pack. |
|--------------|------|-----|------|------|------|----|-------|
| 10240 00 001 | 4 | 1/8 | 8.5 | 42 | 18 | 8 | 10 |
| 10240 00 002 | 6 | 1/8 | 8.5 | 46.5 | 19.5 | 9 | 10 |
| 10240 00 003 | 6 | 1/4 | 11 | 54 | 24.5 | 13 | 10 |
| 10240 00 004 | 8 | 1/8 | 8.5 | 53 | 19.5 | 12 | 10 |
| 10240 00 005 | 8 | 1/4 | 11 | 55 | 24.5 | 13 | 10 |
| 10240 00 007 | 10 | 1/4 | 11 | 63 | 24.5 | 13 | 10 |
| 10240 00 008 | 10 | 3/8 | 10.5 | 65 | 26 | 14 | 10 |
| 10240 00 009 | 10 | 1/2 | 10.5 | 66 | 26 | 15 | 10 |
| 10240 00 010 | 12 | 1/4 | 11 | 66 | 25.5 | 14 | 10 |
| 10240 00 011 | 12 | 3/8 | 10.5 | 66 | 26 | 14 | 10 |
| 10240 00 012 | 12 | 1/2 | 10.5 | 66 | 26 | 15 | 10 |
| 10240 00 013 | 14 | 1/2 | 10.5 | 67 | 30 | 18 | 10 |
| 10240 00 014 | 15 | 1/2 | 10.5 | 77 | 30 | 18 | 10 |
| 10240 00 015 | 16 | 1/2 | 10.5 | 77 | 28.5 | 17 | 10 |
| 10240 00 016 | 18 | 1/2 | 10.5 | 84 | 28 | 20 | 10 |
| 10240 00 017 | 18 | 3/4 | 14 | 83 | 34 | 20 | 10 |

10260

RACCORDO A L INTERMEDIO

ELBOW CONNECTOR
WINKELVERSCHRAUBUNG
RACCORD EQUERRE
RACOR A L INTERMEDIO
CONEXÃO EM "L" TUBO-TUBO

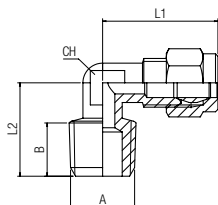


| Code | Tube | L | CH | Pack. |
|--------------|------|------|----|-------|
| 10260 00 001 | 4 | 20 | 8 | 10 |
| 10260 00 002 | 6 | 24 | 9 | 10 |
| 10260 00 003 | 8 | 28 | 11 | 10 |
| 10260 00 004 | 10 | 32 | 13 | 10 |
| 10260 00 005 | 12 | 34 | 14 | 10 |
| 10260 00 006 | 14 | 36.5 | 17 | 10 |
| 10260 00 007 | 15 | 38 | 17 | 10 |
| 10260 00 008 | 16 | 39 | 17 | 10 |
| 10260 00 009 | 18 | 41.5 | 20 | 10 |
| 10260 00 010 | 22 | 43 | 27 | 10 |

10280

RACCORDO A L MASCHIO

ELBOW MALE ADAPTOR
WINKELVERSCHRAUBUNG KONISCH
EQUERRE MÂLE, CONIQUE
RACOR A L MACHO
CONEXÃO EM "L" COM ROSCA MACHO

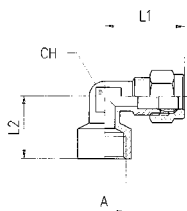


| Code | Tube | A | L1 | L2 | CH | Pack. |
|--------------|------|-----|------|------|----|-------|
| 10280 00 001 | 4 | 1/8 | 20.5 | 15 | 8 | 10 |
| 10280 00 002 | 6 | 1/8 | 23.5 | 17 | 9 | 10 |
| 10280 00 003 | 6 | 1/4 | 23.5 | 19 | 9 | 10 |
| 10280 00 004 | 8 | 1/8 | 28 | 18 | 11 | 10 |
| 10280 00 005 | 8 | 1/4 | 28 | 21.5 | 11 | 10 |
| 10280 00 006 | 8 | 3/8 | 28.5 | 24 | 13 | 10 |
| 10280 00 007 | 10 | 1/4 | 32 | 23.5 | 13 | 10 |
| 10280 00 008 | 10 | 3/8 | 32 | 24.5 | 13 | 10 |
| 10280 00 009 | 10 | 1/2 | 34 | 25 | 14 | 10 |
| 10280 00 010 | 12 | 1/4 | 34 | 24 | 14 | 10 |
| 10280 00 011 | 12 | 3/8 | 34 | 26 | 14 | 10 |
| 10280 00 012 | 12 | 1/2 | 34 | 25 | 14 | 10 |
| 10280 00 013 | 14 | 3/8 | 38 | 26 | 17 | 10 |
| 10280 00 014 | 14 | 1/2 | 38 | 28.5 | 17 | 10 |
| 10280 00 015 | 15 | 1/2 | 39 | 28.5 | 17 | 10 |
| 10280 00 016 | 16 | 1/2 | 40 | 28 | 17 | 10 |
| 10280 00 017 | 18 | 1/2 | 42 | 29.5 | 20 | 10 |
| 10280 00 018 | 18 | 3/4 | 42 | 32 | 20 | 10 |
| 10280 00 019 | 22 | 3/4 | 42.5 | 34 | 27 | 10 |

10290

RACCORDO A L FEMMINA

ELBOW FEMALE ADAPTOR
WINKELVERSCHRAUBUNG INNENGEWINDE
EQUERRE FEMELLE
RACOR A L HEMBRA
CONEXÃO EM "L" COM ROSCA FÊMEA

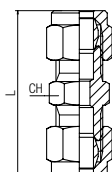


| Code | Tube | A | B | L1 | L2 | CH | Pack. |
|--------------|------|-----|------|------|------|----|-------|
| 10290 00 001 | 4 | 1/8 | 8.5 | 22 | 18 | 8 | 10 |
| 10290 00 002 | 6 | 1/8 | 8.5 | 23.5 | 18 | 9 | 10 |
| 10290 00 003 | 6 | 1/4 | 10.5 | 24 | 22.5 | 11 | 10 |
| 10290 00 004 | 8 | 1/8 | 8.5 | 28 | 21 | 11 | 10 |
| 10290 00 005 | 8 | 1/4 | 11 | 28.5 | 25.5 | 13 | 10 |
| 10290 00 006 | 8 | 3/8 | 10.5 | 29 | 25 | 14 | 10 |
| 10290 00 007 | 10 | 1/4 | 11 | 34 | 25 | 13 | 10 |
| 10290 00 008 | 10 | 3/8 | 10.5 | 33 | 25 | 14 | 10 |
| 10290 00 009 | 10 | 1/2 | 10.5 | 33 | 27 | 15 | 10 |
| 10290 00 010 | 12 | 1/4 | 11 | 34 | 26 | 14 | 10 |
| 10290 00 011 | 12 | 3/8 | 10.5 | 34 | 26 | 14 | 10 |
| 10290 00 012 | 12 | 1/2 | 10.5 | 33 | 27 | 15 | 10 |
| 10290 00 013 | 14 | 1/2 | 10.5 | 38.5 | 30 | 18 | 10 |
| 10290 00 014 | 15 | 1/2 | 10.5 | 39 | 30 | 18 | 10 |
| 10290 00 015 | 16 | 1/2 | 10.5 | 40 | 30 | 18 | 10 |
| 10290 00 016 | 18 | 1/2 | 10.5 | 42 | 29 | 20 | 10 |
| 10290 00 017 | 18 | 3/4 | 14 | 42 | 33.5 | 20 | 10 |

10460

RACCORDO DIRITTO INTERMEDIO

STRAIGHT CONNECTOR
VERBINDUNGSVERSCHRAUBUNG
RACCORD UNION DOUBLE
RACOR RECTO INTERMEDIO
CONEXÃO RETA TUBO-TUBO

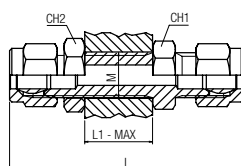


| Code | Tube | L | CH | Pack. |
|--------------|------|------|----|-------|
| 10460 00 001 | 4 | 30.5 | 10 | 10 |
| 10460 00 002 | 6 | 35 | 11 | 10 |
| 10460 00 003 | 8 | 36 | 13 | 10 |
| 10460 00 004 | 10 | 43.5 | 16 | 10 |
| 10460 00 005 | 12 | 44 | 18 | 10 |
| 10460 00 006 | 14 | 47 | 21 | 10 |
| 10460 00 007 | 15 | 52 | 21 | 10 |
| 10460 00 008 | 16 | 52.5 | 22 | 10 |
| 10460 00 009 | 18 | 56.5 | 26 | 10 |
| 10460 00 010 | 22 | 55 | 30 | 10 |

10465

RACCORDO DRITTO INTERMEDIO DI ATTRAVERSAMENTO

STRAIGHT BULKHEAD CONNECTOR
 SCHOTTVERSCHRAUBUNG
 RACCORD DROIT TRAVERSÉE DE CLOISON
 RACOR RECTO INTERMEDIO PASATABIQUES
 CONEXÃO RETA PASSAMURO TUBO-TUBO

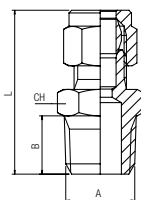


| Code | Tube | L | L1 max | CH1 | CH2 | M | Pack. |
|--------------|------|------|--------|-----|-----|---------|-------|
| 10465 00 001 | 4 | 46.5 | 15 | 10 | 13 | M8x1 | 10 |
| 10465 00 002 | 6 | 51.5 | 15 | 14 | 14 | M10x1 | 10 |
| 10465 00 003 | 8 | 53 | 15 | 14 | 17 | M12x1 | 10 |
| 10465 00 004 | 10 | 61.5 | 16 | 19 | 21 | M16x1,5 | 10 |
| 10465 00 005 | 12 | 67.5 | 20 | 22 | 24 | M18x1,5 | 10 |
| 10465 00 006 | 14 | 72 | 20 | 24 | 24 | M20x1,5 | 10 |

10480

RACCORDO DIRITTO MASCHIO CONICO

STRAIGHT MALE ADAPTOR (TAPER)
 GERADE EINSCHRAUBVERSCHRAUBUNG KONISCH
 RACCORD DROIT MÂLE CONIQUE
 RACOR RECTO MACHO
 CONEXÃO RETA COM ROSCA MACHO

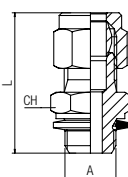


| Code | Tube | A | L | CH | Pack. |
|--------------|------|-----|------|----|-------|
| 10480 00 001 | 4 | 1/8 | 25.5 | 11 | 10 |
| 10480 00 002 | 4 | 1/4 | 28.5 | 14 | 10 |
| 10480 00 003 | 6 | 1/8 | 27.5 | 11 | 10 |
| 10480 00 004 | 6 | 1/4 | 31 | 14 | 10 |
| 10480 00 005 | 6 | 3/8 | 31.5 | 17 | 10 |
| 10480 00 006 | 8 | 1/8 | 28 | 13 | 10 |
| 10480 00 007 | 8 | 1/4 | 31.5 | 14 | 10 |
| 10480 00 008 | 8 | 3/8 | 32 | 17 | 10 |
| 10480 00 009 | 10 | 1/4 | 35 | 16 | 10 |
| 10480 00 010 | 10 | 3/8 | 35.5 | 17 | 10 |
| 10480 00 011 | 10 | 1/2 | 37 | 21 | 10 |
| 10480 00 012 | 12 | 1/4 | 36 | 18 | 10 |
| 10480 00 013 | 12 | 3/8 | 37 | 18 | 10 |
| 10480 00 014 | 12 | 1/2 | 37 | 21 | 10 |
| 10480 00 015 | 14 | 3/8 | 37 | 20 | 10 |
| 10480 00 016 | 14 | 1/2 | 39.5 | 21 | 10 |
| 10480 00 017 | 15 | 1/2 | 40 | 21 | 10 |
| 10480 00 018 | 16 | 1/2 | 42.5 | 22 | 10 |
| 10480 00 019 | 16 | 3/4 | 44 | 27 | 10 |
| 10480 00 020 | 18 | 1/2 | 44 | 24 | 10 |
| 10480 00 021 | 18 | 3/4 | 45.5 | 27 | 10 |
| 10480 00 022 | 22 | 1/2 | 44 | 30 | 10 |
| 10480 00 023 | 22 | 3/4 | 45.5 | 30 | 10 |

10485

RACCORDO DIRITTO MASCHIO CILINDRICO

STRAIGHT MALE ADAPTOR (PARALLEL)
 GERADE EINSCHRAUBVERSCHRAUBUNG ZYLINDRISCH
 RACCORD DROIT MÂLE CYLINDRIQUE
 RACOR RECTO MACHO CILÍNDRICO
 CONEXÃO RETA COM ROSCA MACHO PARALELA



| Code | Tube | A | L | CH | Pack. |
|--------------|------|-----|------|----|-------|
| 10485 00 001 | 4 | 1/8 | 25 | 13 | 10 |
| 10485 00 002 | 6 | 1/8 | 26.5 | 13 | 10 |
| 10485 00 003 | 6 | 1/4 | 30 | 17 | 10 |
| 10485 00 004 | 8 | 1/8 | 28.5 | 13 | 10 |
| 10485 00 005 | 8 | 1/4 | 31 | 17 | 10 |
| 10485 00 006 | 8 | 3/8 | 34.5 | 22 | 10 |
| 10485 00 007 | 10 | 1/4 | 34.5 | 17 | 10 |
| 10485 00 008 | 10 | 3/8 | 38 | 22 | 10 |
| 10485 00 009 | 14 | 3/8 | 39.5 | 22 | 10 |
| 10485 00 010 | 14 | 1/2 | 42 | 27 | 10 |
| 10485 00 011 | 22 | 3/4 | 47 | 32 | 10 |
| 10485 00 012 | 22 | 1" | 50 | 40 | 10 |



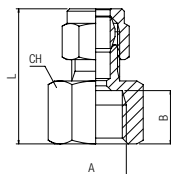
Temperature

| | |
|------------|------------|
| min | max |
| - 20 °C | + 80 °C |

10500

RACCORDO DIRITTO FEMMINA

STRAIGHT FEMALE ADAPTOR
 AUFSCRAUBVERSCHRAUBUNG
 RACCORD DROIT TARAUEE
 RACOR RECTO HEMBRA
 CONEXÃO RETA COM ROSCA FÊMEA

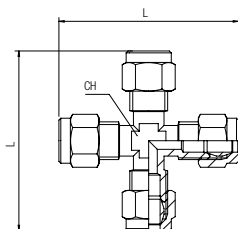


| Code | Tube | A | B | L | CH | Pack. |
|--------------|------|-----|------|------|----|-------|
| 10500 00 001 | 4 | 1/8 | 8.5 | 24 | 14 | 10 |
| 10500 00 002 | 4 | 1/4 | 11 | 26.5 | 17 | 10 |
| 10500 00 003 | 6 | 1/8 | 8.5 | 25.5 | 14 | 10 |
| 10500 00 004 | 6 | 1/4 | 11 | 28 | 17 | 10 |
| 10500 00 005 | 8 | 1/8 | 8.5 | 26 | 14 | 10 |
| 10500 00 006 | 8 | 1/4 | 11 | 28.5 | 17 | 10 |
| 10500 00 007 | 8 | 3/8 | 11.5 | 29.5 | 20 | 10 |
| 10500 00 008 | 10 | 1/4 | 11 | 32 | 17 | 10 |
| 10500 00 009 | 10 | 3/8 | 11.5 | 32.5 | 20 | 10 |
| 10500 00 010 | 10 | 1/2 | 13.5 | 34.5 | 24 | 10 |
| 10500 00 011 | 12 | 1/4 | 14.5 | 32 | 18 | 10 |
| 10500 00 012 | 12 | 3/8 | 11.5 | 32.5 | 20 | 10 |
| 10500 00 013 | 12 | 1/2 | 13.5 | 34.5 | 24 | 10 |
| 10500 00 014 | 14 | 3/8 | 11.5 | 34 | 20 | 10 |
| 10500 00 015 | 14 | 1/2 | 13.5 | 36.5 | 24 | 10 |
| 10500 00 016 | 15 | 1/2 | 13.5 | 36.5 | 24 | 10 |
| 10500 00 017 | 16 | 1/2 | 13.5 | 39 | 24 | 10 |
| 10500 00 018 | 16 | 3/4 | 14.5 | 40.5 | 30 | 10 |
| 10500 00 019 | 18 | 1/2 | 13.5 | 40 | 24 | 10 |
| 10500 00 020 | 18 | 3/4 | 14.5 | 41 | 30 | 10 |
| 10500 00 021 | 22 | 3/4 | 14.5 | 40 | 30 | 10 |

10510

RACCORDO A CROCE

EQUAL CROSS
 KREUZVERSCHRAUBUNG
 RACCORD EN CROIX
 RACOR A CRUZ
 CONEXÃO TIPO CRUZETA TUBO-TUBO

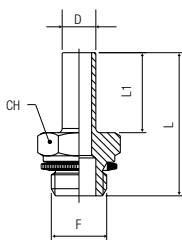


| Code | Tube | L | CH | Pack. |
|--------------|------|------|----|-------|
| 10510 00 001 | 4 | 45 | 8 | 10 |
| 10510 00 002 | 6 | 47 | 9 | 10 |
| 10510 00 003 | 8 | 54 | 11 | 10 |
| 10510 00 004 | 10 | 64 | 13 | 10 |
| 10510 00 005 | 12 | 70 | 17 | 10 |
| 10510 00 006 | 14 | 74.5 | 17 | 10 |

13530

ADATTATORE ORIENTABILE MASCHIO CILINDRICO

ORIENTING MALE ADAPTOR PARALLEL
 EINSCHRAUBSTECKVERSCHRAUBUNG ZYLINDRISCH
 ADAPTATEUR D'ORIENTATION CYLINDRIQUE
 ADAPTADOR ORIENTABLE MACHO CILÍNDRICO
 ADAPTADOR ORIENTÁVEL COM ROSCA MACHO PARALELA



| Code | D | F | L | L1 | CH | Pack. |
|--------------|----|-----|------|----|----|-------|
| 13530 00 001 | 6 | 1/8 | 27.5 | 16 | 13 | 10 |
| 13530 00 002 | 6 | 1/4 | 31 | 16 | 17 | 10 |
| 13530 00 003 | 8 | 1/8 | 31.5 | 19 | 13 | 10 |
| 13530 00 004 | 8 | 1/4 | 34 | 19 | 17 | 10 |
| 13530 00 005 | 8 | 3/8 | 38 | 19 | 22 | 10 |
| 13530 00 006 | 10 | 1/4 | 35 | 20 | 17 | 10 |
| 13530 00 007 | 10 | 3/8 | 39 | 20 | 22 | 10 |
| 13530 00 008 | 14 | 3/8 | 40 | 21 | 22 | 10 |
| 13530 00 009 | 14 | 1/2 | 42 | 21 | 27 | 10 |



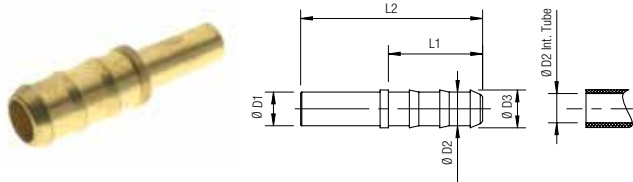
Temperature

| | |
|------------|------------|
| min | max |
| - 20 °C | + 80 °C |

13540

MANICOTTO PORTAGOMMA PER TUBO CAUCCIÙ

SLEEVE HOSE ADAPTER FOR CAOUTCHOUC TUBES
SCHLAUCHTÜLLE FÜR GUMMISCHLAUCH
DOUILLE ANNELÉE POUR TUBE CAOUTCHOUC
MANGUITO PORTAGOMA PARA TUBO DE CAUCHO
ESPIGÃO PARA ENGATE DE MANGUEIRAS

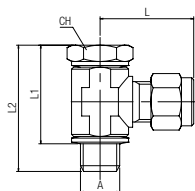


| Code | D1 | D2 | D3 | L1 | L | Pack. |
|-------------------|----|----|------|------|------|-------|
| 13540 00 01 GG 00 | 6 | 7 | 9 | 22.5 | 40.5 | 10 |
| 13540 00 01 GH 00 | 8 | 7 | 9 | 22.5 | 43.5 | 10 |
| 13540 00 01 GP 00 | 8 | 10 | 12 | 22.5 | 43.5 | 10 |
| 13540 00 01 GI 00 | 10 | 7 | 9 | 22.5 | 44.5 | 10 |
| 13540 00 01 FR 00 | 10 | 10 | 12 | 22.5 | 44.5 | 10 |
| 13540 00 01 FS 00 | 12 | 10 | 12 | 22.5 | 45 | 10 |
| 13540 00 01 GM 00 | 12 | 13 | 15.5 | 29.5 | 52 | 10 |
| 13540 00 01 GN 00 | 14 | 13 | 15.5 | 29.5 | 52.5 | 10 |

10550

RACCORDO ORIENTABILE A L CON VITE

SINGLE BANJO BODY WITH STEM
WINKELSCHWENKVERSCHRAUBUNG (DREHBAR)
EQUERRE MÂLE BANJO, ORIENTABLE
RACOR ORIENTABLE A L CON TORNILLO
CONEXÃO EM "L" ORIENTÁVEL TIPO BANJO



| Code | Tube | A | L | L2 | L1 | CH | Pack. |
|--------------|------|-----|------|----|------|----|-------|
| 10550 00 001 | 4 | 1/8 | 21.5 | 31 | 23 | 14 | 10 |
| 10550 00 002 | 6 | 1/8 | 23 | 31 | 23 | 14 | 10 |
| 10550 00 003 | 6 | 1/4 | 26 | 32 | 23.5 | 17 | 10 |
| 10550 00 004 | 8 | 1/8 | 26.5 | 31 | 23 | 14 | 10 |
| 10550 00 005 | 8 | 1/4 | 27 | 32 | 23.5 | 17 | 10 |
| 10550 00 006 | 8 | 3/8 | 28 | 36 | 26.5 | 19 | 10 |
| 10550 00 007 | 10 | 1/4 | 31.5 | 32 | 23.5 | 17 | 10 |
| 10550 00 008 | 10 | 3/8 | 32.5 | 36 | 26.5 | 19 | 10 |
| 10550 00 009 | 14 | 1/4 | 36.5 | 44 | 36.5 | 17 | 10 |
| 10550 00 010 | 14 | 3/8 | 36.5 | 46 | 37 | 22 | 10 |
| 10550 00 011 | 14 | 1/2 | 36.5 | 49 | 38 | 24 | 10 |
| 10550 00 012 | 22 | 3/4 | 45.5 | 64 | 52 | 32 | 10 |



Temperature

min

- 20 °C

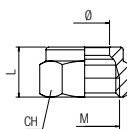
max

+ 80 °C

10680

DADO

NUT
ÜBERWURFMUTTER
ECROU
TUERCA
PORCA

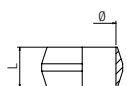


| Code | Tube | L | CH | M | Pack. |
|-------------------|------|------|----|----------|-------|
| 10680 00 01 X1 NB | 4 | 9.5 | 10 | M 8x1 | 50 |
| 10680 00 01 X4 NB | 6 | 10.5 | 12 | M 10x1 | 50 |
| 10680 00 01 X7 NB | 8 | 11.5 | 14 | M 12x1 | 50 |
| 10680 00 01 X9 NB | 10 | 13.5 | 19 | M 16x1.5 | 50 |
| 10680 00 01 Y1 NB | 12 | 13.5 | 21 | M 18x1.5 | 50 |
| 10680 00 01 Y3 NB | 14 | 14.5 | 23 | M 20x1.5 | 20 |
| 10680 00 01 Y4 NB | 15 | 16 | 23 | M 20x1.5 | 20 |
| 10680 00 01 Y5 NB | 16 | 17 | 25 | M 22x1.5 | 20 |
| 10680 00 01 Y7 NB | 18 | 18 | 28 | M 24x1.5 | 20 |
| 10680 00 01 J1 NB | 22 | 18 | 34 | M 30x1.5 | 10 |

10740

OGIVA OTTONE

BRASS OLIVE
KLEMMRING MESSING
OLIVE LAITON
BICONO LATÓN
BUCHA DE LATÃO

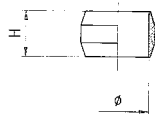


| Code | Tube | L | Pack. |
|-------------------|------|-----|-------|
| 10740 00 02 X1 00 | 4 | 5.5 | 50 |
| 10740 00 02 X4 00 | 6 | 6.5 | 50 |
| 10740 00 02 X7 00 | 8 | 6.5 | 50 |
| 10740 00 02 X9 00 | 10 | 7.5 | 50 |
| 10740 00 02 Y1 00 | 12 | 8 | 50 |
| 10740 00 02 Y3 00 | 14 | 8.5 | 20 |
| 10740 00 02 Y4 00 | 15 | 9 | 20 |
| 10740 00 02 Y5 00 | 16 | 9.5 | 20 |
| 10740 00 02 Y7 00 | 18 | 10 | 20 |
| 10740 00 02 J1 00 | 22 | 10 | 10 |

10760

OGIVA PTFE

PTFE OLIVE
KLEMMRING PTFE
OLIVE PTFE
BICONO PTFE
BUCHA EM PTFE

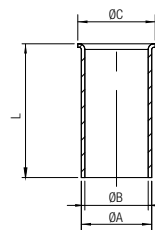


| Code | Tube | H | Pack. |
|-------------------|------|-----|-------|
| 10760 00 28 X1 00 | 4 | 5.5 | 50 |
| 10760 00 28 X4 00 | 6 | 6.5 | 50 |
| 10760 00 28 X7 00 | 8 | 6.5 | 50 |
| 10760 00 28 X9 00 | 10 | 7.5 | 50 |
| 10760 00 28 Y1 00 | 12 | 8 | 50 |
| 10760 00 28 Y3 00 | 14 | 8.5 | 50 |
| 10760 00 28 Y4 00 | 15 | 9 | 50 |
| 10760 00 28 Y5 00 | 16 | 9.5 | 50 |
| 10760 00 28 Y7 00 | 18 | 10 | 50 |
| 10760 00 28 J1 00 | 22 | 10 | 50 |

10770

BUSSOLA DI RINFORZO

INTERNAL SUPPORT BUSH
STÜTZHÜLSE MESSING
FOURRURE INTÉRIEURE
REFUERZO
BUCHA DE REFORÇO INTERNA

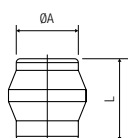


| Code | Tube | A | B | C | L | Pack. |
|-------------------|---------|------|------|------|------|-------|
| 10770 00 01 1D 00 | 4/2.7 | 2.7 | 2.1 | 3.7 | 13 | 10 |
| 10770 00 01 3D 00 | 6/4 | 4 | 3.2 | 5 | 13 | 10 |
| 10770 00 01 4D 00 | 8/6 | 6 | 5 | 7 | 16.5 | 10 |
| 10770 00 01 5D 00 | 10/8 | 8 | 7 | 9 | 17 | 10 |
| 10770 00 01 7D 00 | 12/9 | 9 | 8 | 11 | 19 | 10 |
| 10770 00 01 8D 00 | 12/10 | 10 | 9 | 11 | 19 | 10 |
| 10770 00 01 0E 00 | 14/12 | 12 | 11 | 13.5 | 21 | 10 |
| 10770 00 01 1E 00 | 15/12.5 | 12.5 | 11.6 | 14 | 21 | 10 |
| 10770 00 01 3E 00 | 16/13 | 13 | 12 | 15.5 | 22 | 10 |
| 10770 00 01 7E 00 | 18/15 | 15 | 14 | 17.5 | 23 | 10 |
| 10770 00 01 8E 00 | 18/16 | 16 | 15 | 17.5 | 23 | 10 |
| 10770 00 01 0F 00 | 22/18 | 18 | 17 | 21 | 25 | 10 |

13780

TAPPO PER RACCORDI UNIVERSALI

PLUG FOR UNIVERSAL FITTINGS
STOPFEN FÜR DOPPELKEGEL VERSCHRAUBUNGEN
BOUCHON POUR RACCORDS UNIVERSELS
TAPÓN PARA RACORES UNIVERSALES
TAMPÃO PARA CONEXÃO UNIVERSAIS

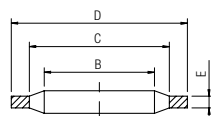


| Code | Tube | L | Pack. |
|-------------------|------|------|-------|
| 13780 00 01 X1 00 | 4 | 10 | 50 |
| 13780 00 01 X4 00 | 6 | 10.5 | 50 |
| 13780 00 01 X7 00 | 8 | 10.5 | 50 |
| 13780 00 01 X9 00 | 10 | 11.5 | 50 |
| 13780 00 01 Y1 00 | 12 | 12 | 50 |
| 13780 00 01 Y3 00 | 14 | 14 | 20 |
| 13780 00 01 Y4 00 | 15 | 14 | 20 |
| 13780 00 01 Y5 00 | 16 | 14 | 20 |
| 13780 00 01 Y7 00 | 18 | 16 | 20 |
| 13780 00 01 J1 00 | 22 | 15 | 20 |

1612

RONDELLA BIMATERIALE IN ACCIAIO E NBR

STEEL AND NBR BIMATERIAL WASHER
VERBUNDDICHTRINGE AUS STAHL UND NBR
RONDELLE-JOINT BI-MATIÈRE (NBR - ACIER)
ARANDELA BIMATERIAL EN ACERO Y NBR
ARRUELA BI-MATERIAL EM AÇO E NBR



| Code | Size | B | C | D | E | Pack. |
|--------------|------|-------|-------|------|------|-------|
| 01612 00 001 | 1/8 | 10.4 | 12 | 14.7 | 1.25 | 20 |
| 01612 00 002 | 1/4 | 13.85 | 15.75 | 18.7 | 1.25 | 20 |
| 01612 00 003 | 3/8 | 17.35 | 19.25 | 22.7 | 1.25 | 20 |
| 01612 00 004 | 1/2 | 21.65 | 23.55 | 26.7 | 1.25 | 20 |
| 01612 00 005 | 3/4 | 27.3 | 29.2 | 32.5 | 1.25 | 20 |
| 01612 00 006 | 1" | 34.2 | 36.1 | 39.5 | 2 | 20 |



Temperature

min

- 30 °C

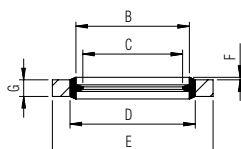
max

+ 100 °C

1613

RONDELLA AUTOCENTRANTE BIMATERIALE IN ACCIAIO E NBR

STEEL AND NBR CENTERING BIMATERIAL WASHER
BI-MATERIAL STAHL SCHEIBE UND NBR
RONDELLE JOINT BI-MATIÈRE - ACIER/NBR
ARANDELA BIMATERIAL EN ACERO Y NBR
ARRUELA BI-MATERIAL EM AÇO E NBR



| Code | Size | B | C | D | E | G | F | Pack. |
|--------------|------|-------|-------|-------|----|-----|-----|-------|
| 01613 00 001 | 1/8 | 10,37 | 8,56 | 11,84 | 14 | 2 | 0,3 | 20 |
| 01613 00 002 | 1/4 | 13,74 | 11,45 | 15,21 | 17 | 2 | 0,3 | 20 |
| 01613 00 003 | 3/8 | 17,28 | 14,96 | 18,75 | 22 | 2 | 0,3 | 20 |
| 01613 00 004 | 1/2 | 21,54 | 18,64 | 23,01 | 26 | 2,5 | 0,4 | 20 |
| 01613 00 005 | 3/4 | 27,05 | 24,13 | 28,53 | 32 | 2,5 | 0,4 | 20 |
| 01613 00 006 | 1" | 33,89 | 30,30 | 36,88 | 41 | 3,2 | 0,5 | 20 |



Temperature

min

- 30 °C

max

+ 100 °C