

## Messing M

Verschraubungen

## Laiton M

Raccords

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Unions



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**4M.60-4M.61**

Einstellwinkel  
Coude orientable  
Adjustable elbow union


**SO 42621**
**4M.62-4M.63**

Winkel-Schottverschraubung  
Coude pour passage de cloison  
Panel mount elbow union


**SO 42721**
**4M.64-4M.66**

Schwenkverschraubung  
Coude banjo  
Single banjo


**SO 42824**
**4M.67-4M.71**

T-Verschraubung  
Té  
Tee union


**SO 43021**
**4M.72-4M.74**

Einstell-T und L  
Té et L orientable  
Adjustable tee and L union


**SO 43621**
**4M.75-4M.76**

T- und L-Einschraubverschraubung  
Té et L mâle  
Male adaptor tee and L union


**SO 43721**
**4M.77-4M.78**

T-Schwenkverschraubung  
Té banjo  
Tee banjo


**SO 43824**
**4M.79**

Kreuzverschraubung  
Croix  
Cross union


**SO 44021**

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**4M.80-4M.81**

Schwenkverschraubung  
Coude banjo  
Single banjo


**SO 47624**
**4M.89-4M.90**

SAE Flare  
SAE Flare  
SAE Flare


**SAE**
**Sonderausführungen:**
**Exécution en option:**
**Optional Services:**


Spezialbehandlung für Einsatz mit Sauerstoff  
Traitement spécial pour utilisation sous oxygène  
Special treatment for use with oxygen



Spezialbehandlung - silikonfrei  
Traitement spécial - sans silicone  
Special treatment - silicone free



Spezialreinigung - entfettet  
Traitement spécial - sans silicone  
Special treatment - degreased



Vorbeschichtete Gewinde mit Loctite 5061  
Filetages pré enduits avec Loctite 5061  
Pre-coated threads with Loctite 5061



Vorbeschichtete Gewinde PTFE-Band umwickelt  
Filetages pré enduits avec ruban en PTFE  
Pre-coated threads with PTFE-tape



Chemisch vernickelt  
Nickelage chimique  
Chemical nickel-plated



Messing bleiarml  
Laiton à faible teneur en plomb  
Low-lead brass

## Messing M

## Laiton M

## Brass M

### Eigenschaften, Besonderheiten

- einfache, schnelle Montage
- kompakte Baumassee
- grosse Sortimentsvielfalt
- sehr viele Kombinationsmöglichkeiten
- zwei Ausführungen:  
M = Anschlussmutter metrisch  
G = Anschlussmutter Rohrgewinde (Zoll)  
(M und G nicht austauschbar)

### Funktionsprinzip

Siehe Kapitel i

### Werkstoff

Messing CW 617N (CuZn40Pb2), Oberfläche gebeizt.  
Chemisch vernickelt siehe Kapitel 8.

### Betriebsdruck PN

Siehe Produktetabellen (4fache Sicherheit).  
Dynamische Belastungen auf Anfrage.

### Temperaturbereich

-40°C bis +180°C

### Helium - Leckrate

10<sup>-8</sup>mbar • l/s \*

### Vakuum

Bis 10<sup>-4</sup>mbar, höhere Werte möglich

### Anzuschliessende Rohre

Kunststoffrohre und nahtlose, gezogene Kupferrohre (insbes. EN 12449/1057) mit sauberer, glatter Oberfläche. Aussendurchmesser innerhalb ± 0,1 mm; Ausnahme: Kunststoffrohre. Siehe auch Kapitel Rohre und Schläuche. Weitere Materialien auf Anfrage.

### Zulassungen

SVGW, DVGW

### Einschraubzapfen, Gewinde

Rohrgewinde (Zoll) und metrisches Feingewinde DIN 3852, kegelig nach Form C, zylindrisch nach Form B, mit Dichtkante nach Form E. NPT-Gewinde nach ANSI/ASME B1.20.1-1983.

### Druckauswertungsgrad in % des PN

### Généralités

- montage facile et rapide
- compactes dimensions
- programme étendu
- multiples possibilités de combinaisons
- deux exécutions:  
M = Ecrou SERTO avec filetage métrique  
G = Ecrou SERTO avec filetage (BSP) gaz  
(M et G ne sont pas interchangeables)

### Principe de fonctionnement

Voir chapitre i

### Matériau

Laiton CW 617N (CuZn40Pb2), la surface est décapée.  
Nickelé chimiquement voir chapitre 8.

### Pression de service PN

Voir tableaux des produits (facteur de sécurité 4). Sollicitations dynamique sur demande.

### Plage de température admissible

-40°C à +180°C

### Débit de fuite avec hélium

10<sup>-8</sup>mbar • l/s \*

### Vide

Jusqu'à 10<sup>-4</sup>mbar, valeurs plus élevées possible

### Tubes à utiliser

Tubes en matière plastique et tous les tubes en cuivre sans soudure (selon EN 12449/1057) avec surface propre et lisse. Le diamètre extérieur doit être situé dans une tolérance de ± 0,1 mm; exception: tubes en plastique. Voir chapitre tubes et tuyaux. Autres matériaux sur demande.

### Homologations

SSIGE, DVGW

### Embouts mâles, filetages

Filetage-gaz (BSP) et filetage métrique à pas fin DIN 3852; conique selon forme C; cylindrique selon forme B; filetage d'étanchéité selon forme E. Filetage NPT selon ANSI/ASME B1.20.1-1983.

### Coefficient de pression de service admissible en % de PN

### Characteristics, specialities

- easy and fast to install
- compact size
- extensive range
- many combination possibilities
- two models:  
M = Connection nut with metric thread  
G = Connection nut with British Standard Pipe (BSP) thread  
(M and G are not interchangeable)

### Operating principle

See chapter i

### Material

Brass CW 617N (CuZn40Pb2), the surface is pickled.  
Chemically nickel plated see chapter 8.

### Working pressure PN

See product table (safety factor 4).  
Dynamic loads on demand.

### Temperature range

-40°C to +180°C

### Leak rate with helium

10<sup>-8</sup>mbar • l/s \*

### Vacuum

Up to 10<sup>-4</sup>mbar, higher values are possible

### Tubes to use

Tubes of plastic and seamless copper tubes (esp. EN 12449/1057) with clean smooth surface. Outside diameter of ± 0,1 mm; exception: plastic tubes. See also chapter tubes and hoses. Further materials on request.

### Approvals

SVGW, DVGW

### Adaptor stem, male thread

British Standard Pipe (BSP) and metric fine thread DIN 3852; tapered form C; parallel form B; thread with sealing form E. NPT-thread according to ANSI/ASME B1.20.1-1983.

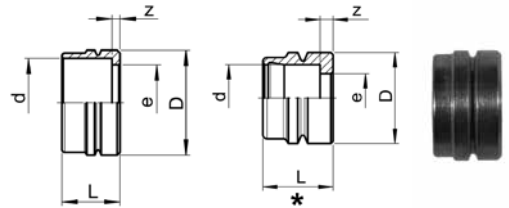
### Pressure coefficient % of PN



\* bei fachgerechter Montage; siehe Kapitel i:  
- Montageanleitung  
- Rohrempfehlungen

\* à la base d'un montage dans les règles de l'art ;  
voir chapitre i:  
- Instructions de montage  
- Recommandations pour tubes

\* when professionally assembled; see chapter i:  
- Installation instructions  
- Recommendations for tubes

**Klemmring**
**Bague de serrage**
**Compression ferrule**

**SO 40001**

| Type -d             | Mat.-Nr.             | bar              | D    | L    | z   | e    | kg/100 |
|---------------------|----------------------|------------------|------|------|-----|------|--------|
| Für metrische Rohre | Pour tubes métriques | For metric tubes |      |      |     |      |        |
| SO 40001-2          | 016.0010.020         | 125              | 5.0  | 3.5  | 0.6 | 1.5  | 0.015  |
| SO 40001-3          | 016.0010.030         | 125              | 5.0  | 4.5  | 0.8 | 2.5  | 0.030  |
| SO 40001-4          | 016.0010.040         | 125              | 6.0  | 5.0  | 1.0 | 3.4  | 0.060  |
| SO 40001-5          | 016.0010.050         | 125              | 6.8  | 5.5  | 1.0 | 4.0  | 0.060  |
| SO 40001-6 *        | 016.0010.060         | 250              | 8.4  | 6.5  | 1.2 | 4.5  | 0.120  |
| SO 40001-8 *        | 016.0010.080         | 150              | 10.5 | 7.0  | 1.2 | 6.5  | 0.170  |
| SO 40001-10 *       | 016.0010.100         | 125              | 12.7 | 7.8  | 1.2 | 8.5  | 0.250  |
| SO 40001-12 *       | 016.0010.120         | 100              | 14.7 | 8.8  | 1.2 | 10.0 | 0.330  |
| SO 40001-14         | 016.0010.140         | 40               | 17.5 | 10.0 | 1.4 | 12.0 | 0.510  |
| SO 40001-15         | 016.0010.150         | 40               | 18.0 | 10.0 | 1.4 | 13.0 | 0.510  |
| SO 40001-16         | 016.0010.160         | 40               | 21.0 | 11.7 | 1.4 | 14.0 | 0.510  |
| SO 40001-17         | 016.0010.170         | 40               | 21.0 | 11.7 | 1.4 | 15.0 | 0.850  |
| SO 40001-18         | 016.0010.180         | 40               | 22.0 | 11.7 | 1.4 | 16.0 | 0.910  |
| SO 40001-22         | 016.0010.220         | 25               | 26.0 | 13.0 | 1.4 | 20.0 | 1.270  |
| SO 40001-28         | 016.0010.280         | 16               | 32.5 | 15.4 | 2.0 | 24.0 | 2.140  |
| SO 40001-35         | 016.0010.350         | 16               | 39.5 | 17.0 | 2.0 | 32.5 | 3.000  |

|                 |                   |                |      |      |     |      |       |
|-----------------|-------------------|----------------|------|------|-----|------|-------|
| Für Zollrohre   | Pour tubes pouces | For inch tubes |      |      |     |      |       |
| SO 40001-3,2    | 016.0010.032      | 125            | 5.0  | 4.5  | 0.8 | 2.5  | 0.030 |
| SO 40001-6,35 * | 016.0010.063      | 100            | 8.4  | 6.5  | 1.2 | 4.5  | 0.120 |
| SO 40001-7,94   | 016.0010.079      | 150            | 10.5 | 7.0  | 1.2 | 6.5  | 0.170 |
| SO 40001-9,52 * | 016.0010.095      | 64             | 12.0 | 7.8  | 1.2 | 8.0  | 0.220 |
| SO 40001-15,88  | 016.0010.158      | 40             | 21.0 | 11.7 | 1.4 | 14.0 | 0.510 |
| SO 40001-22,22  | 016.0010.222      | 25             | 26.0 | 13.5 | 1.4 | 20.0 | 1.280 |

# Klemmring

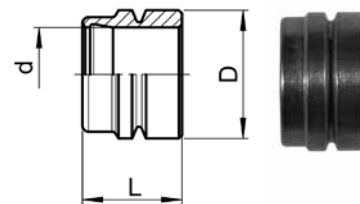
für Messleitungen

# Bague de serrage

pour conduites de mesure

# Compression ferrule

for gauge lines



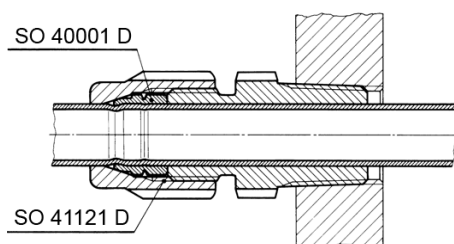
## SO 40001 D

| Type -d          | Mat.-Nr.     | bar | L    | D    | kg/100 |
|------------------|--------------|-----|------|------|--------|
| SO 40001-4 D     | 016.0012.040 | 125 | 5.0  | 6.0  | 0.050  |
| SO 40001-6 D     | 016.0012.060 | 100 | 6.5  | 8.5  | 0.100  |
| SO 40001-8 D     | 016.0012.080 | 100 | 7.0  | 10.5 | 0.150  |
| SO 40001-10 D    | 016.0012.100 | 100 | 8.0  | 12.5 | 0.220  |
| SO 40001-4-3,2 D | 016.0012.042 | 125 | 7.0  | 6.0  | 0.750  |
| SO 40001-6-4 D   | 016.0012.110 | 100 | 8.5  | 8.4  | 0.220  |
| SO 40001-8-6 D   | 016.0012.188 | 100 | 9.5  | 10.5 | 0.280  |
| SO 40001-10-8 D  | 016.0012.190 | 64  | 11.5 | 12.5 | 0.340  |

## Anwendungsbeispiele:

## Exemples d'utilisation:

## Sample combinations:



Messleitungen können durch den Klemmring ohne Innenbund druchgesteckt werden. Durchgangverschraubungen für Messleitungen sind auch erhältlich. Bei Bestellung ist die Typennummer der Standard Verschraubung zusätzlich mit "D" zu ergänzen; z.B. SO 41121-8-1/4 D.

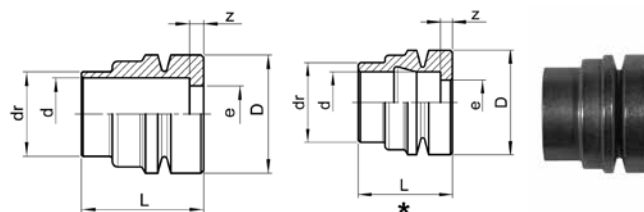
Les câbles de mesure peuvent être insérés à travers la bague de serrage sans collet intérieur. Les raccords à compression pour câbles de mesure sont également disponibles. Lors de la commande, le numéro de type du raccord à vis standard est complété en plus avec la lettre "D"; par exemple SO 41121-8-1/4 D.

Measuring lines without a collar can be pushed through the clamping ring. Screw gland fittings for measuring lines are also available. For ordering, the type number of the standard screw fitting must be supplemented with "D"; e.g. SO 41121-8-1/4 D.

# Klemmring reduziert

## Bague de serrage de réduction

### Reduction compression ferrule



#### SO 40001 RED

| Type-dr-d           | Mat.-Nr.             | bar | L    | D    | z                | e    | kg/100 |
|---------------------|----------------------|-----|------|------|------------------|------|--------|
| Für metrische Rohre | Pour tubes métriques |     |      |      | For metric tubes |      |        |
| SO 40001-5-3        | 016.0014.060         | 125 | 7.5  | 6.8  | 0.8              | 2.5  | 0.130  |
| SO 40001-6-4        | 016.0014.110         | 100 | 8.5  | 8.4  | 1.0              | 3.4  | 0.230  |
| SO 40001-6-5        | 016.0014.117         | 100 | 8.7  | 8.4  | 1.0              | 4.0  | 0.180  |
| SO 40001-8-6 *      | 016.0014.140         | 250 | 9.5  | 10.5 | 1.2              | 4.5  | 0.330  |
| SO 40001-10-8 *     | 016.0014.190         | 150 | 11.5 | 12.7 | 1.2              | 6.5  | 0.450  |
| SO 40001-12-10 *    | 016.0014.240         | 100 | 12.5 | 14.7 | 1.2              | 8.5  | 0.610  |
| SO 40001-14-12      | 016.0014.340         | 40  | 14.0 | 17.5 | 1.4              | 10.0 | 0.890  |
| SO 40001-15-12      | 016.0014.420         | 40  | 14.0 | 18.0 | 1.4              | 10.0 | 1.050  |
| SO 40001-15-13      | 016.0014.430         | 40  | 14.0 | 18.0 | 1.4              | 11.0 | 3.030  |
| SO 40001-17-14      | 016.0014.530         | 40  | 15.7 | 21.0 | 1.4              | 12.0 | 1.560  |
| SO 40001-18-15      | 016.0014.610         | 40  | 15.7 | 22.0 | 1.4              | 13.0 | 1.660  |
| SO 40001-18-16      | 016.0014.620         | 40  | 15.7 | 22.0 | 1.4              | 14.0 | 1.430  |
| SO 40001-22-17      | 016.0014.750         | 25  | 19.0 | 26.0 | 1.4              | 15.0 | 3.030  |
| SO 40001-22-18      | 016.0014.755         | 25  | 19.0 | 26.0 | 1.4              | 16.0 | 2.850  |
| SO 40001-22-19      | 016.0014.760         | 25  | 19.0 | 26.0 | 1.4              | 16.0 | 2.600  |

Für Zollrohre

Pour tubes pouces

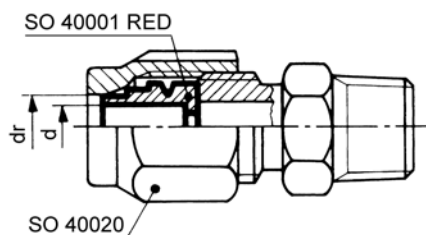
For inch tubes

|                   |              |     |      |      |     |      |       |
|-------------------|--------------|-----|------|------|-----|------|-------|
| SO 40001-4-3,2    | 016.0014.042 | 125 | 7.0  | 6.0  | 0.8 | 2.5  | 0.090 |
| SO 40001-10-7,94  | 016.0014.187 | 150 | 11.5 | 12.7 | 1.2 | 6.5  | 0.450 |
| SO 40001-15-12,7  | 016.0014.427 | 40  | 14.0 | 18.0 | 1.4 | 11.0 | 3.030 |
| SO 40001-22-19,05 | 016.0014.762 | 25  | 19.0 | 26.0 | 1.4 | 17.0 | 2.600 |

#### Anwendungsbeispiele:

#### Exemples d'utilisation:

#### Sample combinations:



Einstufige Reduktionen von Rohranschlüssen sind auf eine einfachste Art durch Auswechseln der normalen gegen die reduzierten Klemmringe möglich.

Les réductions à une étape des raccords sont disponibles de manière simple en remplaçant la normale par rapport aux bagues de serrage réduites.

Single stage reductions for tube connections can be simply achieved by replacing the normal compression ferrule with reduced compression ferrules.

Beispiel:

Reduktion eines Rohranschlusses d=15mm auf d=12mm:

Klemmring SO 40001-15 austauschen gegen Klemmring SO 40001-15-12 RED. Anschlussmutter SO 40020-15 bleibt.

Exemple:

Réduction d'un raccord d=15mm sur d=12mm:

Bague de serrage SO 40001-15 en échange de la bague de serrage SO 40001-15-12 RED. L'écrou SO 40020-15 reste.

Example:

Reduction of a tube connection d=15mm to d=12mm:

Replace compression ferrule SO 40001-15 with SO 40001-15-12 RED. The SO 40020-15 union nut is retained.

Messing M

Laiton M

Brass M

## Klemmring

mit fixierter Stützhülse

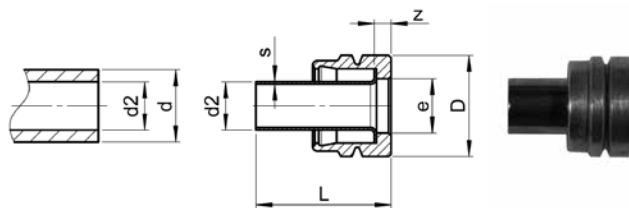
## Bague de serrage

avec douille d'appui fixée

## Compression ferrule

with fixed stiffener sleeve

**SO 40001 FIX**



| Type -d -d2      | Mat.-Nr.     | bar | L    | D    | s    | z   | e   | kg/100 |
|------------------|--------------|-----|------|------|------|-----|-----|--------|
| SO 40001-6-4 FIX | 016.0015.110 | 250 | 11.0 | 8.5  | 0.20 | 1.0 | 4.5 | 0.143  |
| SO 40001-8-6 FIX | 016.0015.140 | 150 | 13.0 | 10.5 | 0.25 | 1.0 | 6.5 | 0.230  |

d=Rohrussen-ø  
d2=Rohrinnen-ø  
e=kleinste Bohrung  
s=Rohrwandstärke

d=ø extérieur du tube  
d2=ø intérieur du tube  
e=ø-min. de passage  
s=épaisseur de la paroi du tube

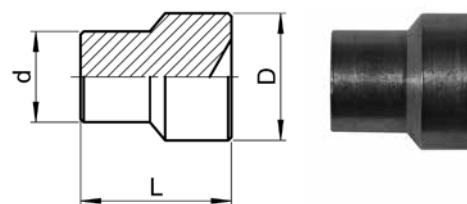
d=tube outside diameter  
d2=tube inside diameter  
e=minimum bore  
s=tube wall thickness



# Abschlusszapfen

## Bouchon d'arrêt

### Plug



#### SO 40002

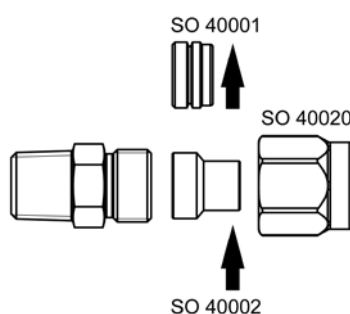
| Type -d             | Mat.-Nr.             | L    | D                | kg/100 |
|---------------------|----------------------|------|------------------|--------|
| Für metrische Rohre | Pour tubes métriques |      | For metric tubes |        |
| SO 40002-2          | 016.0020.020         | 5.3  | 5.0              | 0.040  |
| SO 40002-3          | 016.0020.030         | 7.0  | 5.0              | 0.080  |
| SO 40002-4          | 016.0020.040         | 8.0  | 6.8              | 0.150  |
| SO 40002-5          | 016.0020.050         | 8.5  | 6.8              | 0.190  |
| SO 40002-6          | 016.0020.060         | 10.0 | 8.4              | 0.310  |
| SO 40002-8          | 016.0020.080         | 10.5 | 10.5             | 0.570  |
| SO 40002-10         | 016.0020.100         | 13.0 | 12.7             | 0.960  |
| SO 40002-12         | 016.0020.120         | 14.0 | 14.8             | 1.470  |
| SO 40002-14         | 016.0020.140         | 15.0 | 17.5             | 2.230  |
| SO 40002-15         | 016.0020.150         | 15.0 | 18.0             | 2.370  |
| SO 40002-17         | 016.0020.170         | 17.2 | 21.0             | 3.680  |
| SO 40002-18         | 016.0020.180         | 16.8 | 22.0             | 4.000  |
| SO 40002-22         | 016.0020.220         | 19.0 | 26.0             | 6.300  |
| SO 40002-28         | 016.0020.280         | 22.5 | 32.5             | 11.900 |
| SO 40002-35         | 016.0020.350         | 25.2 | 39.5             | 20.000 |

|               |                   |      |                |       |
|---------------|-------------------|------|----------------|-------|
| Für Zollrohre | Pour tubes pouces |      | For inch tubes |       |
| SO 40002-6,35 | 016.0020.063      | 10.0 | 8.4            | 0.310 |
| SO 40002-7,94 | 016.0020.079      | 10.5 | 10.5           | 0.570 |
| SO 40002-9,52 | 016.0020.095      | 13.0 | 12.7           | 0.960 |
| SO 40002-12,7 | 016.0020.127      | 15.0 | 17.5           | 2.230 |

#### Anwendungsbeispiele:

#### Exemples d'utilisation:

#### Sample combinations:



Der Abschlusszapfen lässt sich in jede Verschraubung anstelle eines Klemmringes der gleichen Größe einsetzen. Wird ein reduzierter Klemmring durch einen Abschlusszapfen ersetzt, so muss immer von der Größe der Anschlussmutter ausgegangen werden.

Montagehinweis: Anschlussmutter mit 1/4 Drehung anziehen.

Le bouchon d'arrêt s'insère dans tout raccord au lieu d'une bague de serrage de la même taille. Si une bague de serrage réduite d'une est remplacée, elle doit toujours être prise à partir de la taille de l'écrou de raccordement.

Note d'installation: Serrez l'écrou d'accouplement de 1/4 de tour.

The plug can be inserted into all screw fittings instead of a clamping ring of the same size. If a reduced compression ferrule is replaced by a plug, the size of the union nut must always be used as a basis.

Assembly information: Tighten the union nut 1/4 turn.

# **Stützhülse**

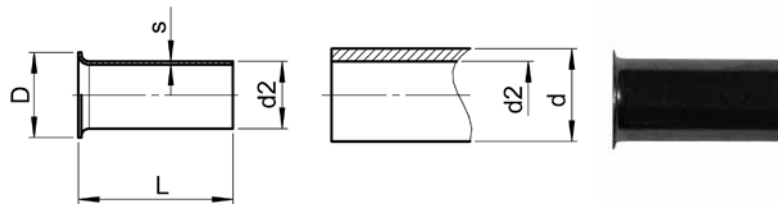
zur Rohrverstärkung

# **Douille d'appui**

pour renforcer les tubes

# **Stiffener sleeve**

to reinforce the tubes


**SO 40003**

| Type -d -d2         | Mat.-Nr.             | L    | D    | s                | kg/100 |
|---------------------|----------------------|------|------|------------------|--------|
| Für metrische Rohre | Pour tubes métriques |      |      | For metric tubes |        |
| SO 40003-3-2        | 016.0030.020         | 6.0  | 2.8  | 0.20             | 0.006  |
| SO 40003-3-2,4      | 016.0030.024         | 6.0  | 2.8  | 0.20             | 0.007  |
| SO 40003-4-2        | 016.0030.030         | 8.0  | 3.8  | 0.20             | 0.008  |
| SO 40003-4-2,5      | 016.0030.035         | 8.0  | 3.8  | 0.20             | 0.010  |
| SO 40003-4-3        | 016.0030.040         | 8.0  | 3.8  | 0.20             | 0.010  |
| SO 40003-5-3        | 016.0030.060         | 8.0  | 4.5  | 0.20             | 0.015  |
| SO 40003-5-3,5      | 016.0030.075         | 8.0  | 4.5  | 0.20             | 0.020  |
| SO 40003-6-3        | 016.0030.100         | 10.0 | 5.2  | 0.20             | 0.015  |
| SO 40003-6-4        | 016.0030.110         | 10.0 | 5.5  | 0.20             | 0.025  |
| SO 40003-6-4,4      | 016.0030.113         | 10.0 | 5.5  | 0.20             | 0.025  |
| SO 40003-6-4,65     | 016.0030.116         | 10.0 | 5.5  | 0.20             | 0.025  |
| SO 40003-6-4,7 D    | 016.0030.118         | 10.0 | 5.5  | 0.40             | 0.046  |
| SO 40003-8-5        | 016.0030.136         | 12.0 | 7.5  | 0.25             | 0.040  |
| SO 40003-8-5,5      | 016.0030.138         | 12.0 | 7.5  | 0.25             | 0.045  |
| SO 40003-8-6        | 016.0030.140         | 12.0 | 7.5  | 0.25             | 0.045  |
| SO 40003-8-6,4      | 016.0030.144         | 12.0 | 7.5  | 0.25             | 0.050  |
| SO 40003-10-7       | 016.0030.180         | 16.0 | 9.5  | 0.30             | 0.080  |
| SO 40003-10-7,5     | 016.0030.185         | 16.0 | 9.5  | 0.30             | 0.090  |
| SO 40003-10-8       | 016.0030.190         | 16.0 | 9.5  | 0.30             | 0.100  |
| SO 40003-10-8 D     | 016.0030.189         | 16.0 | 9.5  | 0.60             | 0.190  |
| SO 40003-10-8,4     | 016.0030.192         | 16.0 | 9.5  | 0.30             | 0.095  |
| SO 40003-10-8,6     | 016.0030.193         | 16.0 | 9.5  | 0.30             | 0.095  |
| SO 40003-12-9       | 016.0030.230         | 20.0 | 11.5 | 0.40             | 0.190  |
| SO 40003-12-9,5     | 016.0030.235         | 20.0 | 11.5 | 0.40             | 0.195  |
| SO 40003-12-10      | 016.0030.240         | 20.0 | 11.5 | 0.40             | 0.195  |
| SO 40003-12-10,4    | 016.0030.254         | 20.0 | 11.5 | 0.40             | 0.195  |
| SO 40003-12-11 D    | 016.0030.257         | 20.0 | 12.0 | 1.00             | 0.500  |
| SO 40003-13-11      | 016.0030.280         | 20.0 | 12.5 | 0.50             | 0.330  |
| SO 40003-13-11 D    | 016.0030.279         | 20.0 | 12.5 | 1.00             | 0.530  |
| SO 40003-14-11      | 016.0030.330         | 24.0 | 13.5 | 0.50             | 0.350  |
| SO 40003-14-11,5    | 016.0030.335         | 24.0 | 13.5 | 0.50             | 0.350  |
| SO 40003-14-12      | 016.0030.340         | 24.0 | 13.5 | 0.50             | 0.370  |
| SO 40003-15-12,5    | 016.0030.425         | 24.0 | 14.5 | 0.50             | 0.390  |
| SO 40003-15-13      | 016.0030.430         | 24.0 | 14.5 | 0.50             | 0.390  |
| SO 40003-16-13,5    | 016.0030.495         | 26.0 | 15.5 | 0.50             | 0.430  |
| SO 40003-16-14      | 016.0030.500         | 26.0 | 15.5 | 0.50             | 0.470  |
| SO 40003-16-14 D    | 016.0030.499         | 26.0 | 15.5 | 1.00             | 0.900  |
| SO 40003-17-15      | 016.0030.540         | 26.0 | 16.5 | 0.60             | 0.590  |
| SO 40003-18-15      | 016.0030.610         | 26.0 | 16.5 | 0.60             | 0.590  |
| SO 40003-18-15,6    | 016.0030.616         | 26.0 | 17.5 | 0.60             | 0.610  |
| SO 40003-18-16      | 016.0030.620         | 26.0 | 17.5 | 0.60             | 0.630  |
| SO 40003-19-17      | 016.0030.640         | 28.0 | 18.5 | 0.60             | 0.820  |
| SO 40003-19-17 D    | 016.0030.642         | 28.0 | 19.0 | 1.00             | 1.140  |

Fortsetzung nächste Seite

Suite à la prochaine page

Continued on next page

d=Rohraussen-ø  
d2=Rohrinnen-ø  
s=Rohrwandstärke

d=ø extérieur du tube  
d2=ø intérieur de tube  
s=épaisseur de la paroi du tube

d=tube outside diameter  
d2=tube inside diameter  
s=tube wall thickness

# **Stützhülse**

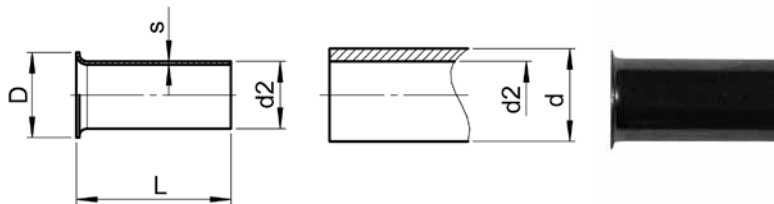
zur Rohrverstärkung

# **Douille d'appui**

pour renforcer les tubes

# **Stiffener sleeve**

to reinforce the tubes


**SO 40003**

| Type -d -d2            | Mat.-Nr.             | L    | D    | s                | kg/100 |
|------------------------|----------------------|------|------|------------------|--------|
| Für metrische Rohre    | Pour tubes métriques |      |      | For metric tubes |        |
| SO 40003-20-17         | 016.0030.690         | 28.0 | 19.5 | 0.60             | 0.800  |
| SO 40003-20-18         | 016.0030.700         | 28.0 | 19.5 | 0.60             | 0.830  |
| SO 40003-22-19         | 016.0030.760         | 30.0 | 21.5 | 0.60             | 0.850  |
| SO 40003-22-19,6       | 016.0030.771         | 30.0 | 21.5 | 0.60             | 0.940  |
| SO 40003-22-20         | 016.0030.775         | 30.0 | 21.5 | 0.60             | 0.980  |
| SO 40003-28-25         | 016.0030.870         | 36.0 | 27.5 | 0.80             | 1.500  |
| SO 40003-28-25,6       | 016.0030.876         | 36.0 | 27.5 | 0.80             | 1.600  |
| SO 40003-35-32         | 016.0030.890         | 41.0 | 34.0 | 0.85             | 2.500  |
| Für Zollrohre          | Pour tubes pouces    |      |      | For inch tubes   |        |
| SO 40003-6,35-4,3      | 016.0030.112         | 10.0 | 5.5  | 0.20             | 0.023  |
| SO 40003-9,52-6,35     | 016.0030.160         | 16.0 | 9.0  | 0.30             | 0.080  |
| SO 40003-12,7-10,7     | 016.0030.269         | 20.0 | 12.5 | 0.50             | 0.200  |
| SO 40003-12,7-10,9     | 016.0030.271         | 20.0 | 12.5 | 0.50             | 0.286  |
| SO 40003-15,88-14,25 D | 016.0030.465         | 26.0 | 15.5 | 0.50             | 0.916  |

Werkstoff: Messing

Matériau: Laiton

Material: Brass

Verstärken:

Dünnwandige und weiche Rohre sowie alle Kunststoffrohre sind vor dem Einführen in die SERTO Verschraubungen mit Stützhülsen zu verstärken.

Genaue Angaben über das Verstärken siehe Kapitel i.

Zum Entgraten und Kalibrieren der Rohre eignen sich unsere Hilfswerkzeuge (Kapitel 11).

Renforcement:

Les tubes présentant une paroi mince, les tubes en matière souple ainsi que les tubes en matière plastique doivent être renforcés à l'aide de douilles d'appui avant d'être introduits dans les raccords SERTO.

Pour des indications concernant le renforcement voir chapitre i.

Pour des outils pour l'ébarbage et le calibrage du tube voir chapitre 11.

Reinforcement:

Thin walled, soft tubes and all plastic tubes are to be reinforced with stiffener sleeves before inserting them into the SERTO unions.

Details concerning stiffening are to be found in chapter i.

Useful tools for deburring and calibrating tubing see chapter 11.

d=Rohraussen-ø  
d2=Rohrinnen-ø  
s=Rohrwandstärke

d=ø extérieur du tube  
d2=ø intérieur de tube  
s=épaisseur de la paroi du tube

d=tube outside diameter  
d2=tube inside diameter  
s=tube wall thickness

**4M**

# **Stützhülse**

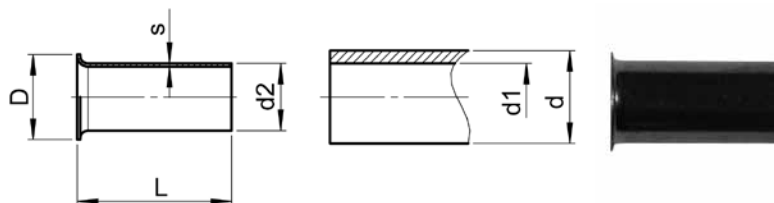
für SERTOflex-Rohre

# **Douille d'appui**

pour tubes SERTOflex

# **Stiffener sleeve**

for SERTOflex tubes



## **SO 40003 FLEX**

| Type -d -d1         | Mat.-Nr.             | L    | D   | d2               | s    | kg/100 |
|---------------------|----------------------|------|-----|------------------|------|--------|
| Für metrische Rohre | Pour tubes métriques |      |     | For metric tubes |      |        |
| SO 40003-6-4 FLEX   | 440.0035.110         | 10.0 | 5.5 | 3.95             | 0.20 | 0.025  |
| SO 40003-8-5,3 FLEX | 440.0035.137         | 12.0 | 7.5 | 4.90             | 0.25 | 0.045  |
| SO 40003-12-8 FLEX  | 440.0035.225         | 16.0 | 9.5 | 7.85             | 0.30 | 0.190  |

|                         |                   |      |     |                |      |       |
|-------------------------|-------------------|------|-----|----------------|------|-------|
| Für Zollrohre           | Pour tubes pouces |      |     | For inch tubes |      |       |
| SO 40003-6,35-4,35 FLEX | 440.0035.113      | 10.0 | 5.5 | 4.35           | 0.20 | 0.025 |
| SO 40003-10-6,35 FLEX   | 440.0035.177      | 12.0 | 7.5 | 5.90           | 0.25 | 0.080 |

Werkstoff: Messing vernickelt

Matériau: Laiton nickelé

Material: Brass nickel-plated

Verstärken von SERTOflex-Rohren:

Vor dem Einführen in die SERTO Verschraubungen können SERTOflex-Rohre mit Stützhülsen verstärkt werden.

Renforcement des tubes SERTOflex:

Les tubes SERTOflex peuvent être renforcés à l'aide de douilles d'appui avant d'être introduits dans les raccords SERTO.

Reinforcement of SERTOflex tubes:

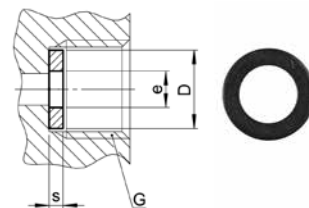
SERTOflex tubes can be reinforced with stiffener sleeves before inserting them into the SERTO unions.

Zum Entgraten und Kalibrieren der Rohre eignen sich unsere Hilfswerkzeuge (Kapitel 11).

Pour des outils pour l'ébarbage et le calibrage du tube voir chapitre 11.

Useful tools for deburring and calibrating tubing see chapter 11.

# Dichtung für Innengewinde Joint pour filetage femelle Washer for female threads

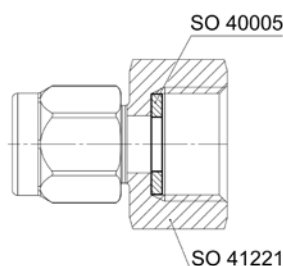


## SO 40005

| Type -d -G                       | Mat.-Nr.     | D    | s    | e    | kg/100 |
|----------------------------------|--------------|------|------|------|--------|
| G=Rohrgewinde (zylindrisch)      |              |      |      |      |        |
| G=Filetage-gaz BSP (cylindrique) |              |      |      |      |        |
| G=BSP thread (straight)          |              |      |      |      |        |
| SO 40005-4-1/8                   | 016.0050.060 | 8.5  | 2.00 | 4.0  | 0.070  |
| SO 40005-5-1/8                   | 016.0050.082 | 8.5  | 2.00 | 4.0  | 0.070  |
| SO 40005-6-1/4                   | 016.0050.110 | 11.2 | 2.00 | 5.2  | 0.130  |
| SO 40005-8-1/4                   | 016.0050.170 | 11.2 | 2.00 | 6.8  | 0.090  |
| SO 40005-8,2-1/4                 | 016.0050.173 | 11.2 | 2.00 | 8.2  | 0.080  |
| SO 40005-10-3/8                  | 016.0050.280 | 14.8 | 2.00 | 9.0  | 0.170  |
| SO 40005-10,2-3/8                | 016.0050.283 | 14.8 | 2.00 | 10.2 | 0.150  |
| SO 40005-12-1/2                  | 016.0050.400 | 18.5 | 2.00 | 10.0 | 0.330  |
| SO 40005-14-1/2                  | 016.0050.504 | 18.5 | 2.00 | 13.5 | 0.210  |
| SO 40005-15-1/2                  | 016.0050.534 | 18.5 | 2.00 | 13.5 | 0.210  |
| SO 40005-15-3/4                  | 016.0050.536 | 24.0 | 2.00 | 14.2 | 0.490  |
| SO 40005-17-3/4                  | 016.0050.598 | 24.0 | 2.00 | 16.2 | 0.410  |
| SO 40005-18-7/8                  | 016.0050.650 | 27.8 | 2.00 | 16.2 | 0.700  |
| SO 40005-22-1                    | 016.0050.770 | 30.0 | 2.00 | 20.0 | 0.670  |

4M

### Anwendungsbeispiele:

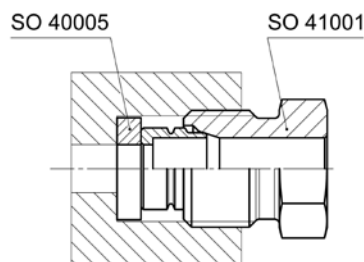


Material: Kupfer weich

Zu verwenden:

Als stirnseitige Abdichtung in Anschlussgewinden bei Verschraubungen z.B. SO 41221 und bei Übergangsmuffe SO 40030 (nicht abgebildet).  
 Als Auflage für den Klemmring bei Verwendung von Einschraubstutzen SO 41001.

### Exemples d'utilisation:



Matériau: cuivre mou

Pour l'utilisation:

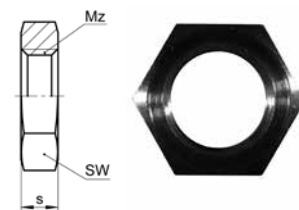
Comme l'étanchéité de la façade dans les filets au niveau des raccords à vis par exemple SO 41221 et au niveau de l'adaptateur femelle SO 40030 (non représenté).  
 Comme support de la bague de serrage pour l'utilisation d'écrou de raccord mâle SO 41001.

### Sample combinations:

Material: soft copper

Use:

As a face side seal in connecting threads for screw fittings, e.g. SO 41221 and for male adaptor SO 40030 (not illustrated).  
 As a support for the compression ferrule if the nipple connection SO 41001 is used.

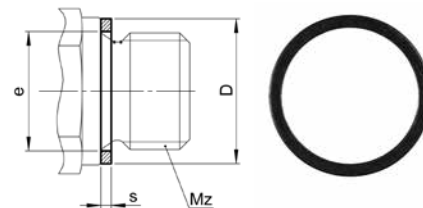
**Sechskantmutter METR**
**Ecrou à six pans METR**
**Hexagon nut METR**

**SO 40006 METR**

| Type -Mz                            | Mat.-Nr.                           | SW                          | s    | kg/100 |
|-------------------------------------|------------------------------------|-----------------------------|------|--------|
| Mz=metrisches Gewinde (zylindrisch) | Mz=Filetage métrique (cylindrique) | Mz=Metric thread (straight) |      |        |
| SO 40006-M8x1                       | 016.0063.120                       | 12                          | 3.50 | 0.220  |
| SO 40006-M10x1                      | 016.0063.150                       | 14                          | 4.00 | 0.270  |
| SO 40006-M12x1                      | 016.0063.190                       | 17                          | 4.00 | 0.460  |
| SO 40006-M14x1                      | 016.0063.220                       | 19                          | 4.00 | 0.530  |
| SO 40006-M16x1                      | 016.0063.260                       | 19                          | 4.00 | 0.380  |
| SO 40006-M20x1                      | 016.0063.340                       | 24                          | 4.50 | 0.690  |
| SO 40006-M20x1,5                    | 016.0063.345                       | 27                          | 6.00 | 1.640  |
| SO 40006-M24x1,5                    | 016.0063.405                       | 27                          | 7.00 | 1.140  |
| SO 40006-M28x1,5                    | 016.0063.445                       | 36                          | 8.00 | 3.760  |

Sechskantmutter für SO 41521, SO 41524 und Ventile

Ecrou à six pans pour SO 41521, SO 41524 et robinets

Hexagon nut for SO 41521, SO 41524 and valves

**Dichtung für Aussengewinde METR**
**Joint pour filetage mâle METR**
**Washer for male thread METR**

**SO 40507 METR**

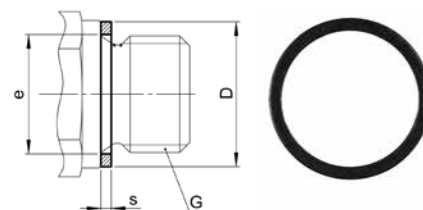
| Type -Mz                            | Mat.-Nr.                           | D                           | s    | e    | kg/100 |
|-------------------------------------|------------------------------------|-----------------------------|------|------|--------|
| Mz=metrisches Gewinde (zylindrisch) | Mz=Filetage métrique (cylindrique) | Mz=Metric thread (straight) |      |      |        |
| SO 40507-M5                         | 016.0075.080                       | 8.0                         | 1.00 | 5.2  | 0.005  |
| SO 40507-M5-2                       | 016.0075.083                       | 8.0                         | 2.00 | 5.2  | 0.010  |
| SO 40507-M6                         | 016.0075.100                       | 9.0                         | 1.00 | 6.2  | 0.004  |
| SO 40507-M8                         | 016.0075.120                       | 10.0                        | 1.00 | 8.2  | 0.003  |
| SO 40507-M10                        | 016.0075.150                       | 12.0                        | 1.00 | 10.2 | 0.006  |

Material: Kunststoff POM

Matériau: Plastique POM

Material: Plastic POM

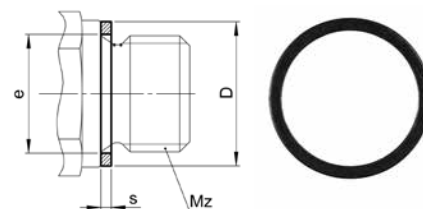
# Dichtung für Aussengewinde Joint pour filetage mâle Washer for male threads



## SO 40007

| Type -G                          | Mat.-Nr.     | D    | s    | e    | kg/100 |
|----------------------------------|--------------|------|------|------|--------|
| G=Rohrgewinde (zylindrisch)      |              |      |      |      |        |
| G=Filetage-gaz BSP (cylindrique) |              |      |      |      |        |
| G=BSP thread (straight)          |              |      |      |      |        |
| SO 40007-1/8                     | 016.0070.020 | 13.4 | 1.50 | 10.2 | 0.050  |
| SO 40007-1/4                     | 016.0070.040 | 17.9 | 1.50 | 14.2 | 0.110  |
| SO 40007-3/8                     | 016.0070.060 | 20.9 | 1.50 | 17.2 | 0.130  |
| SO 40007-1/2                     | 016.0070.080 | 25.9 | 1.50 | 21.2 | 0.220  |
| SO 40007-3/4                     | 016.0070.120 | 31.0 | 1.50 | 26.5 | 0.230  |

# Dichtung für Aussengewinde METR Joint pour filetage mâle METR Washer for male threads METR



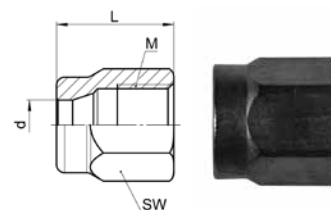
## SO 40007 METR

| Type -Mz                            | Mat.-Nr.     | D    | s    | e    | kg/100 |
|-------------------------------------|--------------|------|------|------|--------|
| Mz=metrisches Gewinde (zylindrisch) |              |      |      |      |        |
| Mz=Filetage métrique (cylindrique)  |              |      |      |      |        |
| Mz=Metric thread (straight)         |              |      |      |      |        |
| SO 40007-M5                         | 016.0073.080 | 8.0  | 1.00 | 5.2  | 0.023  |
| SO 40007-M6                         | 016.0073.100 | 8.0  | 1.00 | 6.2  | 0.014  |
| SO 40007-M8                         | 016.0073.173 | 11.2 | 2.00 | 8.2  | 0.080  |
| SO 40007-M10                        | 016.0073.150 | 13.4 | 1.50 | 10.2 | 0.050  |
| SO 40007-M12                        | 016.0073.190 | 15.4 | 1.50 | 12.2 | 0.080  |
| SO 40007-M14                        | 016.0073.220 | 17.9 | 1.50 | 14.2 | 0.110  |
| SO 40007-M16                        | 016.0073.260 | 19.9 | 1.50 | 16.2 | 0.120  |
| SO 40007-M18                        | 016.0073.300 | 22.0 | 1.50 | 18.2 | 0.140  |
| SO 40007-M22                        | 016.0073.370 | 27.0 | 1.50 | 22.2 | 0.225  |

# Anschlussmutter

## Ecrou

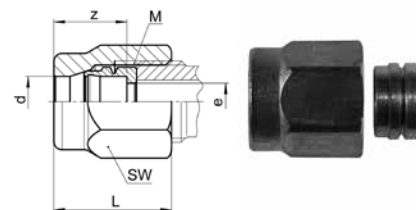
## Union nut



### SO 40020

| Type -d             | Mat.-Nr.             | bar | M      | SW               | L    | kg/100 |
|---------------------|----------------------|-----|--------|------------------|------|--------|
| Für metrische Rohre | Pour tubes métriques |     |        | For metric tubes |      |        |
| SO 40020-2          | 016.0200.020         | 125 | 6x0.75 | 8                | 8.5  | 0.245  |
| SO 40020-3          | 016.0200.030         | 125 | 6x0.75 | 8                | 10.0 | 0.270  |
| SO 40020-4          | 016.0200.040         | 125 | 8x1    | 10               | 13.0 | 0.510  |
| SO 40020-5          | 016.0200.050         | 125 | 8x1    | 10               | 13.5 | 0.500  |
| SO 40020-6          | 016.0200.060         | 250 | 10x1   | 12               | 14.5 | 0.720  |
| SO 40020-8          | 016.0200.080         | 150 | 12x1   | 14               | 16.0 | 0.950  |
| SO 40020-10         | 016.0200.100         | 125 | 14x1   | 17               | 18.5 | 1.640  |
| SO 40020-12         | 016.0200.120         | 100 | 16x1   | 19               | 20.0 | 2.010  |
| SO 40020-14         | 016.0200.140         | 40  | 20x1.5 | 24               | 21.5 | 4.050  |
| SO 40020-15         | 016.0200.150         | 40  | 20x1.5 | 24               | 21.5 | 3.730  |
| SO 40020-16         | 016.0200.160         | 40  | 24x1.5 | 27               | 24.0 | 4.790  |
| SO 40020-17         | 016.0200.170         | 40  | 24x1.5 | 27               | 24.0 | 4.680  |
| SO 40020-18         | 016.0200.180         | 40  | 24x1.5 | 27               | 24.0 | 4.350  |
| SO 40020-22         | 016.0200.220         | 25  | 28x1.5 | 32               | 27.0 | 7.150  |
| SO 40020-28         | 016.0200.280         | 16  | 36x2   | 41               | 32.0 | 14.300 |
| SO 40020-35         | 016.0200.350         | 16  | 42x2   | 50               | 36.0 | 26.200 |
| Für Zollrohre       | Pour tubes pouces    |     |        | For inch tubes   |      |        |
| SO 40020-3,2        | 016.0200.032         | 125 | 6x0.75 | 8                | 10.0 | 0.270  |
| SO 40020-6,35       | 016.0200.063         | 100 | 10x1   | 12               | 14.5 | 0.710  |
| SO 40020-7,94       | 016.0200.079         | 150 | 12x1   | 14               | 16.0 | 0.950  |
| SO 40020-9,52       | 016.0200.095         | 64  | 14x1   | 17               | 18.5 | 1.730  |
| SO 40020-15,88      | 016.0200.158         | 40  | 24x1.5 | 27               | 24.0 | 4.790  |
| SO 40020-22,22      | 016.0200.222         | 25  | 28x1.5 | 32               | 27.0 | 7.020  |

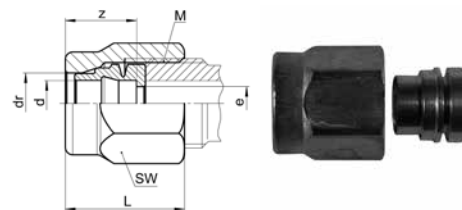


**Armaturenanschluss**
**Ecrou de raccordement**
**Nut connection**

**SO 40021**

| Type -d             | Mat.-Nr.             | bar | M      | SW | L                | z    | e    | kg/100 |
|---------------------|----------------------|-----|--------|----|------------------|------|------|--------|
| Für metrische Rohre | Pour tubes métriques |     |        |    | For metric tubes |      |      |        |
| SO 40021-2          | 016.0210.020         | 125 | 6x0.75 | 8  | 8.5              | 4.0  | 1.5  | 0.260  |
| SO 40021-3          | 016.0210.030         | 125 | 6x0.75 | 8  | 10.0             | 5.0  | 2.5  | 0.300  |
| SO 40021-4          | 016.0210.040         | 125 | 8x1    | 10 | 13.0             | 6.0  | 3.4  | 0.570  |
| SO 40021-5          | 016.0210.050         | 125 | 8x1    | 10 | 13.5             | 6.5  | 4.0  | 0.560  |
| SO 40021-6          | 016.0210.060         | 250 | 10x1   | 12 | 14.5             | 7.5  | 4.5  | 0.840  |
| SO 40021-8          | 016.0210.080         | 150 | 12x1   | 14 | 16.0             | 8.0  | 6.5  | 1.120  |
| SO 40021-10         | 016.0210.100         | 125 | 14x1   | 17 | 18.5             | 10.0 | 8.5  | 1.890  |
| SO 40021-12         | 016.0210.120         | 100 | 16x1   | 19 | 20.0             | 11.0 | 10.0 | 2.340  |
| SO 40021-14         | 016.0210.140         | 40  | 20x1.5 | 24 | 21.5             | 12.5 | 12.0 | 4.560  |
| SO 40021-15         | 016.0210.150         | 40  | 20x1.5 | 24 | 21.5             | 12.5 | 13.0 | 4.240  |
| SO 40021-16         | 016.0210.160         | 40  | 24x1.5 | 27 | 24.0             | 14.0 | 14.0 | 5.300  |
| SO 40021-17         | 016.0210.170         | 40  | 24x1.5 | 27 | 24.0             | 14.0 | 15.0 | 5.530  |
| SO 40021-18         | 016.0210.180         | 40  | 24x1.5 | 27 | 24.0             | 14.0 | 16.0 | 5.260  |
| SO 40021-22         | 016.0210.220         | 25  | 28x1.5 | 32 | 27.0             | 17.5 | 20.0 | 8.420  |
| SO 40021-28         | 016.0210.280         | 16  | 36x2   | 41 | 32.0             | 19.5 | 24.0 | 16.700 |
| SO 40021-35         | 016.0210.350         | 16  | 42x2   | 50 | 36.0             | 22.0 | 32.5 | 29.200 |

|                |                   |     |        |    |                |      |      |       |
|----------------|-------------------|-----|--------|----|----------------|------|------|-------|
| Für Zollrohre  | Pour tubes pouces |     |        |    | For inch tubes |      |      |       |
| SO 40021-3,2   | 016.0210.032      | 125 | 6x0.75 | 8  | 10.0           | 5.0  | 2.5  | 0.300 |
| SO 40021-6,35  | 016.0210.063      | 100 | 10x1   | 12 | 14.5           | 7.5  | 4.5  | 0.830 |
| SO 40021-7,94  | 016.0210.079      | 100 | 12x1   | 14 | 16.0           | 8.0  | 6.5  | 1.120 |
| SO 40021-9,52  | 016.0210.095      | 64  | 14x1   | 17 | 18.5           | 10.0 | 8.0  | 1.950 |
| SO 40021-15,88 | 016.0210.158      | 40  | 24x1.5 | 27 | 24.0           | 14.0 | 14.0 | 5.300 |
| SO 40021-22,22 | 016.0210.222      | 25  | 28x1.5 | 32 | 27.0           | 17.5 | 20.0 | 8.300 |

# Armaturenanschluss reduziert Ecrou de raccordement réduit Reduction tube connection



## SO 40021 RED

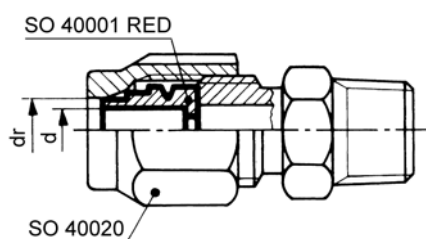
| Type-dr-d           | Mat.-Nr.             | bar | M      | SW | L                | z    | e    | kg/100 |
|---------------------|----------------------|-----|--------|----|------------------|------|------|--------|
| Für metrische Rohre | Pour tubes métriques |     |        |    | For metric tubes |      |      |        |
| SO 40021-5-3        | 016.0214.060         | 125 | 8x1    | 10 | 13.5             | 6.5  | 2.5  | 0.620  |
| SO 40021-6-4        | 016.0214.110         | 100 | 10x1   | 12 | 14.5             | 7.5  | 3.4  | 0.950  |
| SO 40021-6-5        | 016.0214.117         | 100 | 10x1   | 12 | 14.5             | 7.5  | 4.0  | 0.900  |
| SO 40021-8-6        | 016.0214.140         | 250 | 12x1   | 14 | 16.0             | 8.0  | 4.5  | 1.280  |
| SO 40021-10-8       | 016.0214.190         | 150 | 14x1   | 17 | 18.5             | 10.0 | 6.5  | 2.090  |
| SO 40021-12-10      | 016.0214.240         | 100 | 16x1   | 19 | 20.0             | 11.0 | 8.5  | 2.620  |
| SO 40021-14-12      | 016.0214.340         | 40  | 20x1.5 | 24 | 21.5             | 12.5 | 10.0 | 4.940  |
| SO 40021-15-12      | 016.0214.420         | 40  | 20x1.5 | 24 | 21.5             | 12.5 | 10.0 | 4.780  |
| SO 40021-15-13      | 016.0214.430         | 40  | 20x1.5 | 24 | 21.5             | 12.5 | 11.0 | 4.670  |
| SO 40021-17-14      | 016.0214.530         | 40  | 24x1.5 | 27 | 24.0             | 14.0 | 12.0 | 6.240  |
| SO 40021-18-15      | 016.0214.610         | 40  | 24x1.5 | 27 | 24.0             | 14.0 | 13.0 | 6.010  |
| SO 40021-18-16      | 016.0214.620         | 40  | 24x1.5 | 27 | 24.0             | 14.0 | 14.0 | 5.780  |
| SO 40021-22-17      | 016.0214.750         | 25  | 28x1.5 | 32 | 27.0             | 17.5 | 15.0 | 10.180 |
| SO 40021-22-18      | 016.0214.755         | 25  | 28x1.5 | 32 | 27.0             | 17.5 | 16.0 | 10.000 |
| SO 40021-22-19      | 016.0214.760         | 25  | 28x1.5 | 32 | 27.0             | 17.5 | 16.0 | 9.800  |

|                   |                   |     |        |    |                |      |      |       |
|-------------------|-------------------|-----|--------|----|----------------|------|------|-------|
| Für Zollrohre     | Pour tubes pouces |     |        |    | For inch tubes |      |      |       |
| SO 40021-4-3,2    | 016.0214.042      | 125 | 8x1    | 10 | 13.0           | 6.0  | 2.5  | 0.600 |
| SO 40021-10-7,94  | 016.0214.187      | 64  | 14x1   | 17 | 18.5           | 10.0 | 6.5  | 2.090 |
| SO 40021-15-12,7  | 016.0214.427      | 40  | 20x1.5 | 24 | 21.0           | 12.5 | 11.0 | 4.670 |
| SO 40021-18-15,88 | 016.0214.618      | 40  | 24x1.5 | 27 | 23.0           | 14.0 | 14.0 | 5.780 |
| SO 40021-22-19,05 | 016.0214.762      | 25  | 28x1.5 | 32 | 27.5           | 17.5 | 17.0 | 9.800 |

### Anwendungsbeispiele:

### Exemples d'utilisation:

### Sample combinations:



Mit diesem Armaturenanschluss können einstufige Reduktionen vorgenommen werden. Die Anschlussgewindegrößen sind im Kapitel i aufgeführt.

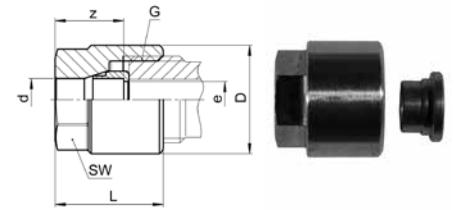
Avec cet écrou de raccordement, les réductions à une étape peuvent être faites. Les tailles des filets sont listées dans le chapitre i.

Single stage reductions can be made with this tube connection. The connecting threads are listed in chapter i.

# Manometeranschluss

## Ecrou de manomètre

### Pressure gauge connection



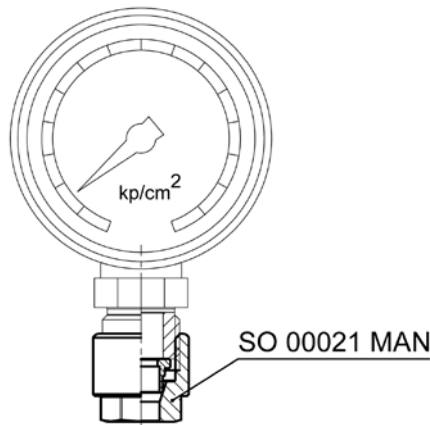
#### SO 00021 MAN

| Type -d -G                  | Mat.-Nr.                         | bar                     | SW | L    | z    | e    | kg/100 |
|-----------------------------|----------------------------------|-------------------------|----|------|------|------|--------|
| G=Rohrgewinde (zylindrisch) | G=Filetage-gaz BSP (cylindrique) | G=BSP thread (straight) |    |      |      |      |        |
| SO 00021-6-¼ MAN            | 246.0211.110                     | 125                     | 14 | 20.0 | 8.5  | 5.5  | 2.200  |
| SO 00021-6-½ MAN            | 246.0211.125                     | 125                     | 22 | 25.5 | 8.5  | 5.0  | 6.700  |
| SO 00021-8-¼ MAN            | 246.0211.170                     | 125                     | 14 | 19.0 | 10.5 | 7.0  | 2.000  |
| SO 00021-8-½ MAN            | 246.0211.185                     | 125                     | 22 | 26.0 | 10.0 | 6.5  | 6.750  |
| SO 00021-10-½ MAN           | 246.0211.285                     | 100                     | 19 | 24.0 | 12.0 | 9.0  | 5.400  |
| SO 00021-12-½ MAN           | 246.0211.400                     | 100                     | 19 | 26.0 | 14.0 | 11.0 | 5.860  |

#### Anwendungsbeispiele:

#### Exemples d'utilisation:

#### Sample combinations:

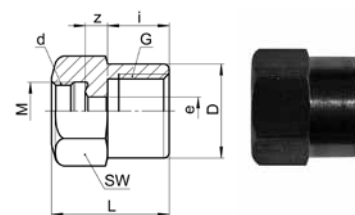


Gewindezapfen für SERTO-Anschlüsse siehe Kapitel i.

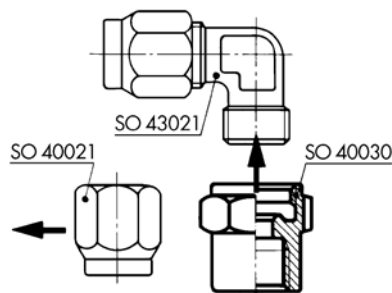
Embout fileté por écrous de raccordement SERTO voir chapitre i.

Threaded stem for SERTO connections please see chapter i.

# Übergangsmuffe Adaptateur femelle Female adaptor

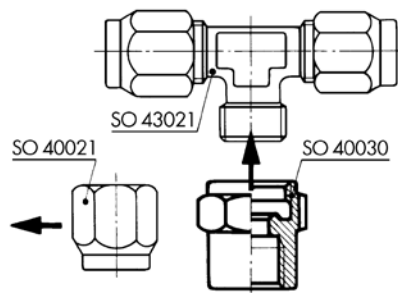
**SO 40030**


| Type -d -G                  | Mat.-Nr.                         | bar | M                       | SW | L    | D    | i    | z   | e    | kg/100 |
|-----------------------------|----------------------------------|-----|-------------------------|----|------|------|------|-----|------|--------|
| G=Rohrgewinde (zylindrisch) | G=Filetage-gaz BSP (cylindrique) |     | G=BSP thread (straight) |    |      |      |      |     |      |        |
| SO 40030-6-1/8              | 016.0301.100                     | 250 | 10x1                    | 14 | 20.0 | 13.8 | 10.0 | 4.0 | 5.0  | 1.670  |
| SO 40030-6-1/4              | 016.0301.110                     | 250 | 10x1                    | 17 | 21.0 | 16.8 | 11.0 | 4.0 | 5.0  | 2.530  |
| SO 40030-6-3/8              | 016.0301.120                     | 250 | 10x1                    | 22 | 22.0 | 21.8 | 12.0 | 4.0 | 5.0  | 4.800  |
| SO 40030-8-1/8              | 016.0301.160                     | 150 | 12x1                    | 17 | 21.0 | 16.8 | 10.0 | 4.0 | 6.5  | 2.790  |
| SO 40030-8-1/4              | 016.0301.170                     | 150 | 12x1                    | 17 | 23.0 | 16.8 | 11.0 | 5.0 | 6.5  | 2.540  |
| SO 40030-8-3/8              | 016.0301.180                     | 150 | 12x1                    | 22 | 23.0 | 21.8 | 12.0 | 4.0 | 6.5  | 4.780  |
| SO 40030-10-1/4             | 016.0301.270                     | 125 | 14x1                    | 17 | 22.0 | 16.8 | 11.0 | 4.0 | 8.5  | 2.090  |
| SO 40030-10-3/8             | 016.0301.280                     | 125 | 14x1                    | 22 | 23.0 | 21.8 | 12.0 | 5.0 | 8.5  | 4.760  |
| SO 40030-12-1/4             | 016.0301.380                     | 100 | 16x1                    | 19 | 22.0 | 18.8 | 11.0 | 4.0 | 10.5 | 2.780  |
| SO 40030-12-3/8             | 016.0301.390                     | 100 | 16x1                    | 22 | 23.0 | 21.8 | 12.0 | 4.0 | 10.5 | 4.090  |
| SO 40030-12-1/2             | 016.0301.400                     | 100 | 16x1                    | 27 | 25.0 | 26.8 | 14.0 | 4.0 | 10.5 | 7.270  |
| SO 40030-15-3/8             | 016.0301.532                     | 40  | 20x1.5                  | 24 | 25.0 | 23.8 | 12.0 | 5.0 | 13.0 | 5.100  |
| SO 40030-15-1/2             | 016.0301.534                     | 40  | 20x1.5                  | 27 | 27.0 | 26.8 | 14.0 | 5.0 | 13.0 | 7.130  |
| SO 40030-15-3/4             | 016.0301.536                     | 40  | 20x1.5                  | 32 | 30.0 | 31.8 | 17.0 | 5.0 | 13.0 | 10.980 |
| SO 40030-18-1/2             | 016.0301.646                     | 40  | 24x1.5                  | 30 | 28.0 | 29.8 | 14.0 | 6.0 | 15.0 | 9.410  |
| SO 40030-18-3/4             | 016.0301.648                     | 40  | 24x1.5                  | 32 | 31.0 | 31.8 | 17.0 | 6.0 | 15.0 | 10.350 |
| SO 40030-22-3/4             | 016.0301.768                     | 25  | 28x1.5                  | 36 | 31.0 | 35.8 | 17.0 | 6.0 | 19.0 | 14.320 |
| SO 40030-28-1               | 016.0301.850                     | 16  | 36x2                    | 41 | 37.0 | 40.8 | 20.0 | 7.0 | 25.0 | 16.700 |
| SO 40030-35-1 1/4           | 016.0301.944                     | 16  | 42x2                    | 50 | 41.0 | 49.8 | 22.0 | 7.0 | 31.0 | 27.400 |

**Anwendungsbeispiele:**


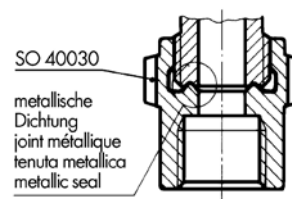
Die Übergangsmuffe kann auf jedes SERTO-Formteil mit dem passenden zylindrischen Gewinde geschraubt werden.

Dichtungsprinzip: Bei der Montage drückt sich die Dichtkante des Übergangsstückes in das SERTO-Formteil ein, dadurch entsteht eine einwandfreie Dichtung. Wir empfehlen, das Gewinde mit einem geeigneten Flüssigklebstoff gegen unbeabsichtigtes Lösen zu sichern.

**Exemples d'utilisation:**


L'adaptateur femelle peut être vissé à toute pièce moulée SERTO avec le filetage cylindrique approprié.

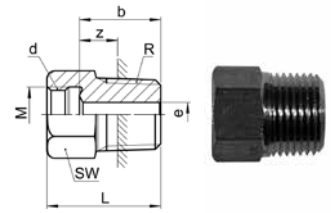
Principe d'étanchéité: Lors de l'assemblage, l'arête d'étanchéité du réducteur appuie sur la pièce moulée SERTO, créant ainsi une étanchéité parfaite. Nous recommandons de fixer le filetage avec une colle liquide appropriée pour empêcher le desserrage involontaire.

**Sample combinations:**


The female adaptor can be screwed onto all SERTO moulded parts with a matching cylindrical thread.

Sealing principle: During assembly, the sealing edge of the transition sleeve presses into the SERTO moulded part to produce a perfect seal. We recommend that the thread is secured against accidental unscrewing by means of a suitable liquid adhesive.

# Übergangsnippel Adaptateur mâle Male adapter

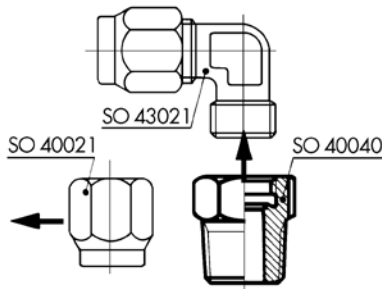


## SO 40040

| Type -d -R              | Mat.-Nr.     | bar                          | M      | SW                     | L    | b    | z    | e    | kg/100 |
|-------------------------|--------------|------------------------------|--------|------------------------|------|------|------|------|--------|
| R=Rohrgewinde (kegelig) |              | R=Filetage-gaz BSP (conique) |        | R=BSP thread (tapered) |      |      |      |      |        |
| SO 40040-6-1/8          | 016.0401.100 | 250                          | 10x1   | 12                     | 17.0 | 11.0 | 4.5  | 4.5  | 0.800  |
| SO 40040-6-1/4          | 016.0401.110 | 250                          | 10x1   | 14                     | 21.0 | 15.0 | 5.3  | 4.5  | 1.850  |
| SO 40040-6-3/8          | 016.0401.120 | 250                          | 10x1   | 17                     | 20.0 | 14.0 | 4.0  | 4.5  | 3.030  |
| SO 40040-6-1/2          | 016.0401.125 | 250                          | 10x1   | 22                     | 23.0 | 17.0 | 9.0  | 4.5  | 5.700  |
| SO 40040-8-1/8          | 016.0401.160 | 150                          | 12x1   | 14                     | 18.0 | 11.0 | 4.5  | 4.5  | 0.990  |
| SO 40040-8-1/4          | 016.0401.170 | 150                          | 12x1   | 14                     | 22.0 | 15.0 | 5.3  | 6.5  | 1.520  |
| SO 40040-8-3/8          | 016.0401.180 | 150                          | 12x1   | 17                     | 22.0 | 15.0 | 5.0  | 6.5  | 2.970  |
| SO 40040-10-1/4         | 016.0401.270 | 125                          | 14x1   | 17                     | 22.0 | 15.0 | 5.3  | 8.5  | 1.710  |
| SO 40040-10-3/8         | 016.0401.280 | 125                          | 14x1   | 17                     | 22.0 | 15.0 | 4.9  | 8.5  | 2.440  |
| SO 40040-10-1/2         | 016.0401.285 | 125                          | 14x1   | 22                     | 23.0 | 16.0 | 2.8  | 8.5  | 5.030  |
| SO 40040-12-1/4         | 016.0401.380 | 100                          | 16x1   | 19                     | 23.0 | 16.0 | 6.3  | 8.5  | 2.110  |
| SO 40040-12-3/8         | 016.0401.390 | 100                          | 16x1   | 19                     | 23.0 | 16.0 | 5.9  | 10.5 | 2.870  |
| SO 40040-12-1/2         | 016.0401.400 | 100                          | 16x1   | 22                     | 24.0 | 17.0 | 3.8  | 10.5 | 4.840  |
| SO 40040-15-3/8         | 016.0401.532 | 40                           | 20x1.5 | 24                     | 24.0 | 16.0 | 5.9  | 10.5 | 3.760  |
| SO 40040-15-1/2         | 016.0401.534 | 40                           | 20x1.5 | 24                     | 26.0 | 18.0 | 4.8  | 13.0 | 4.430  |
| SO 40040-15-3/4         | 016.0401.536 | 40                           | 20x1.5 | 27                     | 27.0 | 19.0 | 4.5  | 13.0 | 8.250  |
| SO 40040-18-1/2         | 016.0401.646 | 40                           | 24x1.5 | 30                     | 27.0 | 19.0 | 5.8  | 13.5 | 6.010  |
| SO 40040-18-3/4         | 016.0401.648 | 40                           | 24x1.5 | 30                     | 29.5 | 21.5 | 6.5  | 15.0 | 8.930  |
| SO 40040-22-1/2         | 016.0401.764 | 25                           | 28x1.5 | 36                     | 29.0 | 21.0 | 8.0  | 15.0 | 8.910  |
| SO 40040-22-3/4         | 016.0401.768 | 25                           | 28x1.5 | 36                     | 29.5 | 21.5 | 6.5  | 19.0 | 9.480  |
| SO 40040-28-1           | 016.0401.850 | 16                           | 36x2   | 41                     | 36.0 | 26.0 | 11.2 | 24.0 | 14.900 |
| SO 40040-35-1 1/4       | 016.0401.944 | 16                           | 42x2   | 50                     | 42.0 | 30.0 | 11.0 | 31.0 | 26.600 |

4M

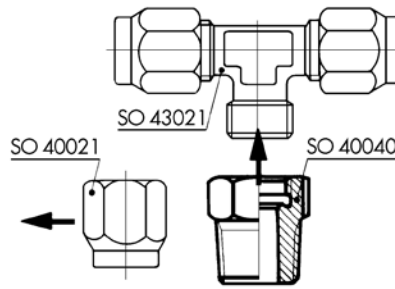
### Anwendungsbeispiele:



Der Übergangsnippel kann auf jedes SERTO-Formteil mit dem passenden zylindrischen Gewinde geschraubt werden.

Dichtungsprinzip: Bei der Montage drückt sich die Dichtkante des Übergangsstückes in das SERTO-Formteil ein, dadurch entsteht eine einwandfreie Dichtung. Wir empfehlen, das Gewinde mit einem geeigneten Flüssigklebstoff gegen unbeabsichtigtes Lösen zu sichern.

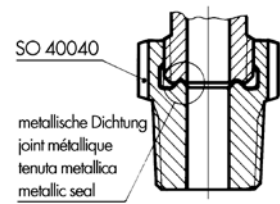
### Exemples d'utilisation:



L'adaptateur mâle peut être vissé à toute pièce moulée SERTO avec le filetage cylindrique approprié.

Principe d'étanchéité : Lors de l'assemblage, l'arête d'étanchéité du réducteur appuie sur la pièce moulée SERTO, créant ainsi une étanchéité parfaite. Nous recommandons de fixer le filetage avec une colle liquide appropriée pour empêcher le desserrage involontaire.

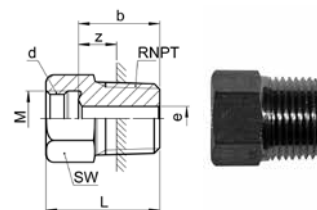
### Sample combinations:



The male adaptor can be screwed onto all SERTO moulded parts with a matching cylindrical thread.

Sealing principle: During assembly, the sealing edge of the transition piece presses into the SERTO moulded part to produce a perfect seal. We recommend that the thread is secured against accidental unscrewing by means of a suitable liquid adhesive.

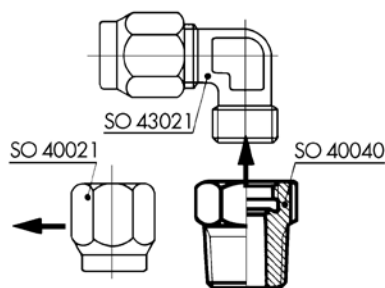
# Übergangsnippel NPT Adaptateur mâle NPT Male adapter NPT



## SO 40040 NPT

| Type -d -RNPT       | Mat.-Nr.     | bar | M    | SW | L    | b    | z   | e   | kg/100 |
|---------------------|--------------|-----|------|----|------|------|-----|-----|--------|
| RNPT=NPT Gewinde    |              |     |      |    |      |      |     |     |        |
| SO 40040-6-1/8 NPT  | 016.0402.100 | 250 | 10x1 | 12 | 19.0 | 13.0 | 6.3 | 4.5 | 0.910  |
| SO 40040-6-1/4 NPT  | 016.0402.110 | 250 | 10x1 | 14 | 23.0 | 17.0 | 6.8 | 4.5 | 2.030  |
| SO 40040-8-1/8 NPT  | 016.0402.160 | 150 | 12x1 | 14 | 20.0 | 13.0 | 6.3 | 6.0 | 0.990  |
| SO 40040-8-1/4 NPT  | 016.0402.170 | 150 | 12x1 | 14 | 24.0 | 17.0 | 6.8 | 6.5 | 1.730  |
| SO 40040-10-1/4 NPT | 016.0402.270 | 125 | 14x1 | 17 | 24.0 | 17.0 | 6.8 | 8.5 | 1.800  |

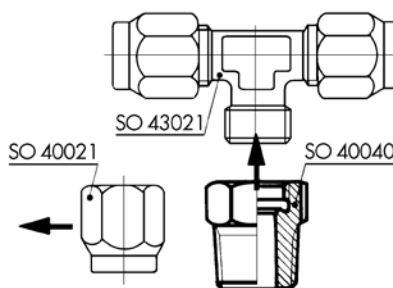
### Anwendungsbeispiele:



Der Übergangsnippel kann auf jedes SERTO-Formteil mit dem passenden zylindrischen Gewinde geschraubt werden.

Dichtungsprinzip: Bei der Montage drückt sich die Dichtkante des Übergangsstückes in das SERTO-Formteil ein, dadurch entsteht eine einwandfreie Dichtung. Wir empfehlen, das Gewinde mit einem geeigneten Flüssigklebstoff gegen unbeabsichtigtes Lösen zu sichern.

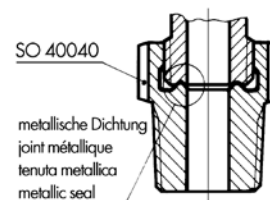
### Exemples d'utilisation:



L'adaptateur mâle peut être vissé à toute pièce moulée SERTO avec le filetage cylindrique approprié.

Principe d'étanchéité : Lors de l'assemblage, l'arête d'étanchéité du réducteur appuie sur la pièce moulée SERTO, créant ainsi une étanchéité parfaite. Nous recommandons de fixer le filetage avec une colle liquide appropriée pour empêcher le desserrage involontaire.

### Sample combinations:



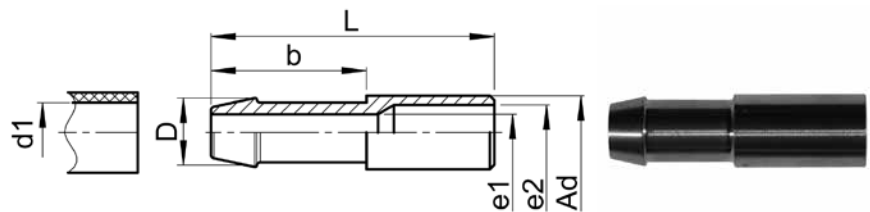
The male adaptor can be screwed onto all SERTO moulded parts with a matching cylindrical thread.

Sealing principle: During assembly, the sealing edge of the transition piece presses into the SERTO moulded part to produce a perfect seal. We recommend that the thread is secured against accidental unscrewing by means of a suitable liquid adhesive.

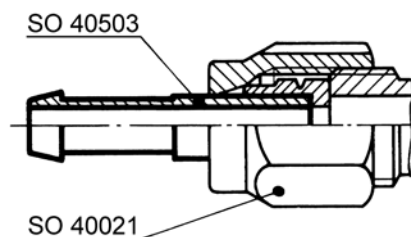
# Schlauchtülle

## Douille cannelée

### Hose nozzle


**SO 40503**

| Type -Ad-d1     | Mat.-Nr.     | L    | D    | b    | e1   | e2   | kg/100 |
|-----------------|--------------|------|------|------|------|------|--------|
| SO 40503-A4-2,5 | 016.0500.035 | 17.0 | 3.0  | 8.0  | 2.0  | 2.0  | 0.090  |
| SO 40503-A5-2,5 | 016.0500.055 | 17.0 | 3.0  | 8.0  | 2.0  | 3.0  | 0.120  |
| SO 40503-A5-3   | 016.0500.060 | 18.0 | 3.8  | 9.0  | 2.5  | 3.0  | 0.140  |
| SO 40503-A6-2,5 | 016.0500.095 | 22.0 | 3.0  | 8.0  | 2.0  | 4.0  | 0.210  |
| SO 40503-A6-3   | 016.0500.100 | 23.0 | 3.8  | 9.0  | 2.5  | 4.0  | 0.260  |
| SO 40503-A6-4   | 016.0500.110 | 25.0 | 5.0  | 11.0 | 3.0  | 4.0  | 0.270  |
| SO 40503-A6-6   | 016.0500.122 | 31.0 | 7.5  | 17.0 | 4.0  | 4.0  | 0.480  |
| SO 40503-A6-8   | 016.0500.121 | 31.0 | 9.5  | 17.0 | 4.0  | 4.0  | 0.804  |
| SO 40503-A8-4   | 016.0500.132 | 25.0 | 5.0  | 11.0 | 3.0  | 6.0  | 0.275  |
| SO 40503-A8-5   | 016.0500.136 | 27.0 | 6.0  | 13.0 | 4.0  | 6.0  | 0.324  |
| SO 40503-A8-6   | 016.0500.140 | 31.0 | 7.5  | 17.0 | 5.0  | 6.0  | 0.520  |
| SO 40503-A8-8   | 016.0500.154 | 31.0 | 9.5  | 17.0 | 6.0  | 6.0  | 0.710  |
| SO 40503-A8-10  | 016.0500.157 | 33.0 | 11.5 | 19.0 | 6.0  | 6.0  | 1.392  |
| SO 40503-A10-8  | 016.0500.190 | 35.0 | 9.5  | 17.0 | 7.0  | 8.0  | 0.720  |
| SO 40503-A10-10 | 016.0500.198 | 37.0 | 11.5 | 19.0 | 8.0  | 8.0  | 1.370  |
| SO 40503-A10-12 | 016.0500.199 | 37.0 | 13.5 | 19.0 | 8.0  | 8.0  | 1.918  |
| SO 40503-A10-13 | 016.0500.200 | 39.0 | 15.0 | 21.0 | 8.0  | 8.0  | 2.443  |
| SO 40503-A12-10 | 016.0500.240 | 37.0 | 11.5 | 19.0 | 8.5  | 9.0  | 1.230  |
| SO 40503-A12-13 | 016.0500.260 | 39.0 | 15.0 | 21.0 | 9.0  | 9.0  | 2.889  |
| SO 40503-A15-13 | 016.0500.430 | 41.0 | 15.0 | 21.0 | 11.0 | 12.0 | 2.050  |
| SO 40503-A18-16 | 016.0500.620 | 47.0 | 18.0 | 26.0 | 14.0 | 15.0 | 3.240  |
| SO 40503-A22-19 | 016.0500.760 | 50.0 | 21.5 | 26.0 | 16.0 | 19.0 | 4.590  |

**4M**
**Anwendungsbeispiele:**
**Exemples d'utilisation:**
**Sample combinations:**


Mit dieser Schlauchtülle können Schläuche und Rohre aus Kunststoff wie z.B. PTFE, PVDF, Polyamid usw. direkt an SERTO-Verschraubungen angeschlossen werden.

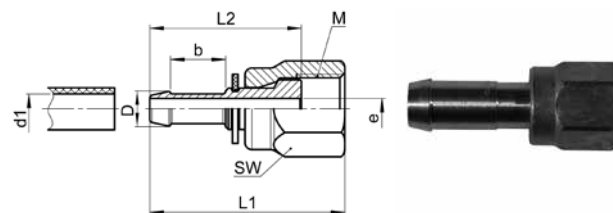
Für die Schlauchsicherung verwenden Sie bitte Schlauchklemme SO 40512 (s. Kapitel 11).

Avec ce douille cannelée, les tuyaux et les tubes en plastique comme p.exp. PTFE, PVDF, polyamide, etc. peuvent être branchés directement au raccord fileté SERTO.

Pour fixer le tuyau, utilisez le collier de serrage SO 40512 (voir chapitre 11).

With this hose nozzle, hoses and pipes made of plastic, e.g. PTFE, PVDF, polyamide etc. can be connected directly to SERTO screw fittings.

To secure the hose, please use the SO 40512 hose clamp (see chapter 11).

**Schlauchtülle vormontiert**
**Douille cannelée prémontée**
**Hose nozzle pre-assembled**

**SO 40526**

| Type -Ad -d1    | Mat.-Nr.     | M      | SW | L1   | L2   | D    | b    | e    | kg/100 |
|-----------------|--------------|--------|----|------|------|------|------|------|--------|
| SO 40526-A4-2,5 | 018.0520.035 | 8x1    | 10 | 24.0 | 18.0 | 3.0  | 6.2  | 2.0  | 0.660  |
| SO 40526-A5-2,5 | 018.0520.055 | 8x1    | 10 | 25.0 | 19.0 | 3.0  | 6.2  | 2.0  | 0.680  |
| SO 40526-A5-3   | 018.0520.060 | 8x1    | 10 | 26.0 | 20.0 | 3.8  | 6.8  | 2.5  | 0.700  |
| SO 40526-A6-2,5 | 018.0520.095 | 10x1   | 12 | 25.0 | 19.0 | 3.0  | 6.2  | 2.0  | 1.050  |
| SO 40526-A6-3   | 018.0520.100 | 10x1   | 12 | 26.0 | 20.0 | 3.8  | 6.8  | 2.5  | 1.100  |
| SO 40526-A6-4   | 018.0520.110 | 10x1   | 12 | 28.0 | 22.0 | 5.0  | 8.0  | 3.0  | 1.110  |
| SO 40526-A6-8   | 018.0520.121 | 10x1   | 12 | 38.0 | 32.0 | 9.5  | 8.0  | 4.0  | 1.115  |
| SO 40526-A6-6   | 018.0520.122 | 10x1   | 12 | 38.0 | 32.0 | 7.5  | 8.0  | 4.0  | 1.320  |
| SO 40526-A8-4   | 018.0520.132 | 12x1   | 14 | 30.0 | 23.0 | 5.0  | 8.0  | 3.0  | 1.395  |
| SO 40526-A8-5   | 018.0520.136 | 12x1   | 14 | 32.0 | 25.0 | 6.0  | 10.0 | 4.0  | 1.444  |
| SO 40526-A8-6   | 018.0520.140 | 12x1   | 14 | 36.0 | 29.0 | 7.5  | 12.0 | 4.0  | 1.640  |
| SO 40526-A8-8   | 018.0520.154 | 12x1   | 14 | 41.0 | 32.0 | 9.5  | 12.0 | 6.0  | 1.830  |
| SO 40526-A8-10  | 018.0520.157 | 12x1   | 14 | 45.0 | 34.0 | 11.5 | 12.0 | 6.0  | 2.512  |
| SO 40526-A10-8  | 018.0520.190 | 14x1   | 17 | 39.0 | 32.0 | 9.5  | 12.0 | 6.0  | 2.610  |
| SO 40526-A10-10 | 018.0520.198 | 14x1   | 17 | 45.0 | 38.0 | 11.5 | 14.0 | 7.0  | 3.260  |
| SO 40526-A10-12 | 018.0520.199 | 14x1   | 17 | 45.0 | 38.0 | 13.5 | 14.0 | 7.0  | 3.520  |
| SO 40526-A10-13 | 018.0520.200 | 14x1   | 17 | 45.0 | 40.0 | 15.0 | 14.0 | 7.0  | 3.550  |
| SO 40526-A12-10 | 018.0520.240 | 16x1   | 19 | 42.0 | 35.0 | 11.5 | 14.0 | 7.0  | 3.570  |
| SO 40526-A15-13 | 018.0520.430 | 20x1.5 | 24 | 45.0 | 38.0 | 15.0 | 15.0 | 11.0 | 6.290  |
| SO 40526-A18-16 | 018.0520.620 | 24x1.5 | 27 | 53.0 | 45.0 | 18.0 | 18.0 | 13.0 | 8.500  |
| SO 40526-A22-19 | 018.0520.760 | 28x1.5 | 32 | 56.0 | 48.0 | 21.5 | 18.0 | 16.0 | 13.010 |

Mit dieser Schlauchtülle können Schläuche und Rohre aus Kunststoff wie z.B. PTFE, PVDF, Polyamid usw. direkt an SERTO-Verschraubungen angeschlossen werden.

Für die Schlauchsicherung verwenden Sie bitte Schlauchklemme SO 40512 (s. Kapitel 11).

Avec ce douille cannelée, les tuyaux et les tubes en plastique comme p.ex. PTFE, PVDF, polyamide, etc. peuvent être branchés directement au raccord fileté SERTO.

Pour fixer le tuyau, utilisez le collier de serrage SO 40512 (voir chapitre 11).

With this hose nozzle, hoses and pipes made of plastic, e.g. PTFE, PVDF, polyamide etc. can be connected directly to SERTO screw fittings.

To secure the hose, please use the SO 40512 hose clamp (see chapter 11).

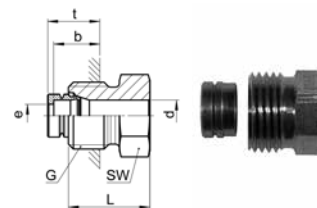
d1=Rohrinnendurchmesser  
Ad=Aussen-ø der Andrehung  
e=kleinste Bohrung  
L=Mass in montiertem Zustand

ø diam. Intérieur du tube  
Ad=ø extérieur de la portée cylindrique  
e=ø-min. de passage  
L=après montage

d1=tube inside diameter  
Ad=outside diameter of cyl. Stub  
e=minimum bore  
L=installed length



# Anschlussnippel Ecrou de raccord mâle Nipple connection



## SO 41001

| Type -d-G                                          | Mat.-Nr.                                                 | bar | SW                                          | L    | b    | t    | e    | kg/100 |
|----------------------------------------------------|----------------------------------------------------------|-----|---------------------------------------------|------|------|------|------|--------|
| Für metrische Rohre<br>G=Rohrgewinde (zylindrisch) | Pour tubes métriques<br>G=Filetage-gaz BSP (cylindrique) |     | For metric tubes<br>G=BSP thread (straight) |      |      |      |      |        |
| SO 41001-4-1/8                                     | 016.1001.060                                             | 125 | 10                                          | 12.0 | 6.0  | 6.5  | 3.4  | 0.650  |
| SO 41001-5-1/8                                     | 016.1001.082                                             | 125 | 10                                          | 12.0 | 6.0  | 6.5  | 4.0  | 0.550  |
| SO 41001-6-1/4                                     | 016.1001.110                                             | 250 | 14                                          | 16.0 | 8.5  | 9.5  | 4.5  | 1.450  |
| SO 01001-8-1/4                                     | 246.1001.170                                             | 125 | 14                                          | 16.0 | 8.5  | 9.5  | 6.5  | 1.200  |
| SO 01001-10-3/8                                    | 246.1001.280                                             | 100 | 17                                          | 17.0 | 9.0  | 10.0 | 9.0  | 2.000  |
| SO 41001-12-1/2                                    | 016.1001.400                                             | 100 | 22                                          | 20.5 | 11.0 | 14.0 | 10.0 | 4.060  |
| SO 41001-15-1/2                                    | 016.1001.534                                             | 40  | 22                                          | 19.5 | 11.0 | 14.0 | 13.0 | 3.010  |

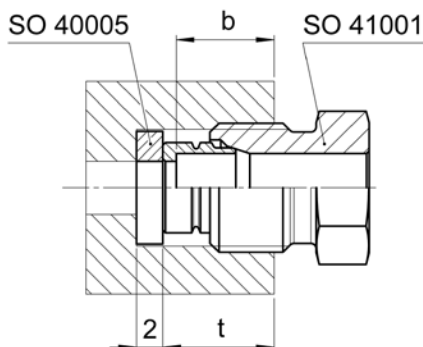
|                   |                   |     |                |      |     |     |     |       |
|-------------------|-------------------|-----|----------------|------|-----|-----|-----|-------|
| Für Zollrohre     | Pour tubes pouces |     | For inch tubes |      |     |     |     |       |
| SO 41001-6,35-1/4 | 016.1001.140      | 100 | 14             | 16.0 | 8.5 | 9.5 | 4.5 | 1.420 |
| SO 01001-9,52-3/8 | 246.1001.235      | 100 | 17             | 17.0 | 8.5 | 9.5 | 8.0 | 2.094 |

4M

### Anwendungsbeispiele:

### Exemples d'utilisation:

### Sample combinations:

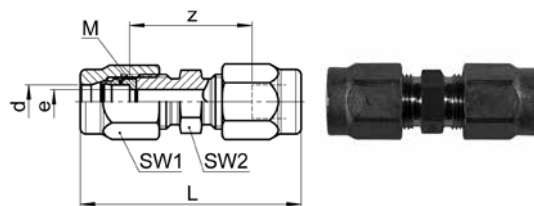


Die entsprechende Kupferdichtung SO 40005 ist immer separat zu bestellen.

Les joints correspondants SO 40005 sont à commander séparément.

The relevant copper washer SO 40005 must always be ordered separately.

# Gerade Verschraubung Union double Straight union



## SO 41021

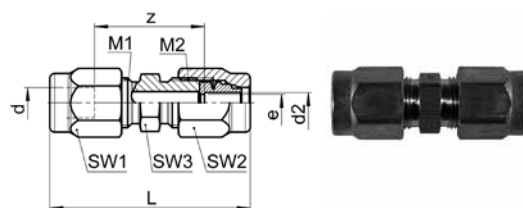
| Type -d             | Mat.-Nr.             | bar              | M      | SW1 | SW2 | L    | z    | e    | kg/100 |
|---------------------|----------------------|------------------|--------|-----|-----|------|------|------|--------|
| Für metrische Rohre | Pour tubes métriques | For metric tubes |        |     |     |      |      |      |        |
| SO 41021-2          | 018.1020.020         | 125              | 6x0.75 | 8   | 7   | 23.5 | 15.5 | 1.5  | 0.810  |
| SO 41021-3          | 018.1020.030         | 125              | 6x0.75 | 8   | 7   | 26.0 | 16.0 | 2.5  | 0.890  |
| SO 41021-4          | 018.1020.040         | 125              | 8x1    | 10  | 10  | 34.0 | 22.0 | 3.4  | 1.770  |
| SO 41021-5          | 018.1020.050         | 125              | 8x1    | 10  | 10  | 35.0 | 22.0 | 3.4  | 1.750  |
| SO 41021-6          | 018.1020.060         | 250              | 10x1   | 12  | 10  | 37.5 | 22.0 | 4.5  | 2.520  |
| SO 41021-8          | 018.1020.080         | 150              | 12x1   | 14  | 12  | 41.0 | 25.0 | 6.5  | 3.530  |
| SO 41021-10         | 018.1020.100         | 125              | 14x1   | 17  | 14  | 46.0 | 26.0 | 8.5  | 5.490  |
| SO 41021-12         | 018.1020.120         | 100              | 16x1   | 19  | 17  | 48.5 | 26.5 | 10.0 | 7.030  |
| ★ SO 41021-13       | 018.1020.130         | 40               | 20x1.5 | 24  | 22  | 57.0 | 31.0 | 11.0 | 12.950 |
| SO 41021-14         | 018.1020.140         | 40               | 20x1.5 | 24  | 22  | 57.0 | 32.0 | 12.0 | 13.160 |
| SO 41021-15         | 018.1020.150         | 40               | 20x1.5 | 24  | 22  | 57.0 | 32.0 | 13.0 | 12.520 |
| SO 41021-16         | 018.1020.160         | 40               | 24x1.5 | 27  | 24  | 61.0 | 33.0 | 14.0 | 16.330 |
| SO 41021-17         | 018.1020.170         | 40               | 24x1.5 | 27  | 24  | 61.0 | 33.0 | 15.0 | 16.350 |
| SO 41021-18         | 018.1020.180         | 40               | 24x1.5 | 27  | 24  | 61.0 | 33.0 | 15.0 | 15.810 |
| ★ SO 41021-19       | 018.1020.190         | 25               | 28x1.5 | 32  | 30  | 69.0 | 34.0 | 16.0 | 27.100 |
| SO 41021-22         | 018.1020.220         | 25               | 28x1.5 | 32  | 30  | 69.0 | 34.0 | 19.0 | 24.380 |
| SO 41021-28         | 018.1020.280         | 16               | 36x2   | 41  | 36  | 81.0 | 42.0 | 24.0 | 49.320 |
| SO 41021-35         | 018.1020.350         | 16               | 42x2   | 50  | 46  | 92.0 | 48.0 | 31.0 | 81.900 |
| Für Zollrohre       | Pour tubes pouces    | For inch tubes   |        |     |     |      |      |      |        |
| SO 41021-3,2        | 018.1020.032         | 125              | 6x0.75 | 8   | 7   | 26.0 | 16.0 | 2.5  | 0.850  |
| SO 41021-6,35       | 018.1020.063         | 100              | 10x1   | 12  | 10  | 37.5 | 22.0 | 4.5  | 2.490  |
| SO 41021-9,52       | 018.1020.095         | 64               | 14x1   | 17  | 14  | 46.0 | 26.0 | 8.0  | 5.610  |
| ★ SO 41021-12,7     | 018.1020.127         | 40               | 20x1.5 | 24  | 22  | 57.0 | 31.0 | 11.0 | 12.950 |
| SO 41021-15,88      | 018.1020.158         | 40               | 24x1.5 | 27  | 24  | 61.0 | 33.0 | 14.0 | 16.330 |

d=Rohraussen-ø  
 e=kleinste Bohrung  
 L=Mass in montiertem Zustand  
 \*=mit reduziertem Klemmring

d=ø extérieur du tube  
 e=ø-min. de passage  
 L=après montage  
 \*=avec bague de serrage de réduction

d=tube outside diameter  
 e=minimum bore  
 L=installed length  
 \*=with reduction compression ferrule

# Gerade Verschraubung reduziert Union double réduite Straight reduction union



## SO 41021 RED

| Type -d -d2         | Mat.-Nr.             | bar | M1     | M2     | SW1 | SW2 | SW3 | L    | z    | e    | kg/100 |
|---------------------|----------------------|-----|--------|--------|-----|-----|-----|------|------|------|--------|
| Für metrische Rohre | Pour tubes métriques |     |        |        |     |     |     |      |      |      |        |
| SO 41021-3-2        | 018.1024.020         | 125 | 6x0.75 | 6x0.75 | 8   | 8   | 8   | 25.0 | 15.5 | 1.5  | 0.850  |
| ★ SO 41021-5-3      | 018.1024.060         | 125 | 8x1    | 8x1    | 10  | 10  | 10  | 35.0 | 22.0 | 2.5  | 1.810  |
| SO 41021-5-4        | 018.1024.080         | 125 | 8x1    | 8x1    | 10  | 10  | 10  | 34.5 | 22.0 | 3.4  | 0.560  |
| ★ SO 41021-6-4      | 018.1024.110         | 125 | 10x1   | 10x1   | 12  | 12  | 10  | 37.5 | 22.5 | 3.4  | 2.630  |
| ★ SO 41021-6-5      | 018.1024.117         | 125 | 10x1   | 10x1   | 12  | 12  | 10  | 37.5 | 22.5 | 4.0  | 2.580  |
| ★ SO 41021-8-4      | 018.1024.132         | 125 | 12x1   | 10x1   | 14  | 12  | 12  | 39.5 | 23.5 | 3.4  | 3.500  |
| ★ SO 41021-8-5      | 018.1024.136         | 125 | 12x1   | 10x1   | 14  | 12  | 12  | 39.5 | 23.5 | 4.0  | 3.500  |
| SO 41021-8-6        | 018.1024.140         | 150 | 12x1   | 10x1   | 14  | 12  | 12  | 39.5 | 24.0 | 4.5  | 3.400  |
| ★ SO 41021-10-8     | 018.1024.190         | 125 | 14x1   | 14x1   | 17  | 17  | 14  | 46.0 | 26.5 | 6.5  | 5.690  |
| ★ SO 41021-12-8     | 018.1024.225         | 100 | 16x1   | 14x1   | 24  | 17  | 22  | 51.0 | 29.5 | 6.5  | 7.210  |
| ★ SO 41021-12-10    | 018.1024.240         | 100 | 16x1   | 16x1   | 19  | 19  | 17  | 48.5 | 30.0 | 8.5  | 7.310  |
| ★ SO 41021-14-8     | 018.1024.308         | 40  | 20x1.5 | 14x1   | 24  | 17  | 22  | 51.0 | 29.5 | 6.5  | 6.080  |
| SO 41021-14-10      | 018.1024.320         | 40  | 20x1.5 | 14x1   | 24  | 17  | 22  | 51.0 | 29.5 | 8.5  | 5.850  |
| ★ SO 41021-14-12    | 018.1024.340         | 40  | 20x1.5 | 20x1.5 | 24  | 24  | 22  | 57.0 | 32.0 | 10.0 | 13.540 |
| ★ SO 41021-15-8     | 018.1024.400         | 40  | 20x1.5 | 14x1   | 24  | 17  | 22  | 51.0 | 29.5 | 6.5  | 6.080  |
| SO 41021-15-10      | 018.1024.410         | 40  | 20x1.5 | 14x1   | 24  | 17  | 22  | 52.0 | 29.5 | 8.5  | 5.850  |
| ★ SO 41021-15-12    | 018.1024.420         | 40  | 20x1.5 | 20x1.5 | 24  | 24  | 22  | 57.0 | 32.0 | 10.0 | 13.060 |
| ★ SO 41021-15-13    | 018.1024.430         | 40  | 20x1.5 | 20x1.5 | 24  | 24  | 22  | 57.0 | 32.0 | 11.0 | 12.950 |
| ★ SO 41021-16-15    | 018.1024.510         | 40  | 24x1.5 | 24x1.5 | 27  | 27  | 24  | 61.0 | 33.0 | 13.0 | 16.400 |
| ★ SO 41021-17-14    | 018.1024.530         | 40  | 24x1.5 | 24x1.5 | 27  | 27  | 24  | 61.0 | 33.0 | 12.0 | 17.060 |
| ★ SO 41021-18-15    | 018.1024.610         | 40  | 24x1.5 | 24x1.5 | 27  | 27  | 24  | 61.0 | 33.0 | 13.0 | 16.560 |
| SO 41021-18-16      | 018.1024.620         | 40  | 24x1.5 | 24x1.5 | 27  | 27  | 24  | 61.0 | 33.0 | 14.0 | 16.330 |
| ★ SO 41021-22-17    | 018.1024.750         | 25  | 28x1.5 | 28x1.5 | 32  | 33  | 30  | 69.0 | 34.0 | 15.0 | 26.140 |
| ★ SO 41021-22-18    | 018.1024.755         | 25  | 28x1.5 | 28x1.5 | 32  | 33  | 30  | 69.0 | 34.0 | 16.0 | 25.960 |
| ★ SO 41021-22-19    | 018.1024.760         | 25  | 28x1.5 | 26x1.5 | 32  | 33  | 30  | 69.0 | 34.0 | 16.0 | 25.700 |
| Für Zollrohre       | Pour tubes pouces    |     |        |        |     |     |     |      |      |      |        |
| SO 41021-6-6,35     | 018.1024.119         | 100 | 10x1   | 10x1   | 12  | 12  | 10  | 37.5 | 22.5 | 4.5  | 2.480  |
| SO 41021-8-6,35     | 018.1024.143         | 100 | 12x1   | 10x1   | 14  | 12  | 12  | 39.5 | 24.0 | 4.5  | 3.400  |
| SO 41021-10-9,52    | 018.1024.197         | 64  | 14x1   | 14x1   | 17  | 17  | 14  | 46.0 | 26.5 | 8.0  | 5.600  |
| SO 41021-14-9,52    | 018.1024.312         | 40  | 20x1.5 | 14x1   | 24  | 17  | 22  | 51.0 | 29.5 | 8.0  | 5.780  |
| SO 41021-15-9,52    | 018.1024.408         | 40  | 20x1.5 | 14x1   | 24  | 17  | 22  | 51.0 | 29.5 | 8.0  | 5.870  |
| ★ SO 41021-15-12,7  | 018.1024.427         | 40  | 20x1.5 | 20x1.5 | 24  | 24  | 22  | 57.0 | 32.0 | 11.0 | 12.950 |
| Für Zollrohre       | Pour tubes pouces    |     |        |        |     |     |     |      |      |      |        |
| SO 41021-6-6,35     | 018.1024.119         | 100 | 10x1   | 10x1   | 12  | 12  | 10  | 37.5 | 22.5 | 4.5  | 2.480  |
| SO 41021-8-6,35     | 018.1024.143         | 100 | 12x1   | 10x1   | 14  | 12  | 12  | 39.5 | 24.0 | 4.5  | 3.400  |
| SO 41021-10-9,52    | 018.1024.197         | 64  | 14x1   | 14x1   | 17  | 17  | 14  | 46.0 | 26.5 | 8.0  | 5.600  |
| SO 41021-14-9,52    | 018.1024.312         | 40  | 20x1.5 | 14x1   | 24  | 17  | 22  | 51.0 | 29.5 | 8.0  | 5.780  |
| SO 41021-15-9,52    | 018.1024.408         | 40  | 20x1.5 | 14x1   | 24  | 17  | 22  | 51.0 | 29.5 | 8.0  | 5.870  |
| ★ SO 41021-15-12,7  | 018.1024.427         | 40  | 20x1.5 | 20x1.5 | 24  | 24  | 22  | 57.0 | 32.0 | 11.0 | 12.950 |

Weitere Reduktionen siehe SO 41821

Autres réductions voir SO 41521

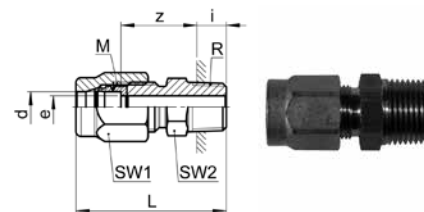
Alternative reductions see SO 41821

d/d2=Rohraussen-ø  
 e=kleinste Bohrung  
 L=Mass in montiertem Zustand  
 \*=mit reduziertem Klemmring

d/d2=ø extérieur du tube  
 e=ø-min. de passage  
 L=après montage  
 \*=avec bague de serrage de réduction

d/d2=tube outside diameter  
 e=minimum bore  
 L=installed length  
 \*=with reduction compression ferrule

# Gerade Einschraubverschraubung Union mâle Male adaptor union



## SO 41121

| Type -d-R                                      | Mat.-Nr.                                             | bar | M      | SW1 | SW2 | L    | i    | z    | e    | kg/100 |
|------------------------------------------------|------------------------------------------------------|-----|--------|-----|-----|------|------|------|------|--------|
| Für metrische Rohre<br>R=Rohrgewinde (kegelig) | Pour tubes métriques<br>R=Filetage-gaz BSP (conique) |     |        |     |     |      |      |      |      |        |
|                                                |                                                      |     |        |     |     |      |      |      |      |        |
|                                                |                                                      |     |        |     |     |      |      |      |      |        |
| SO 41121-2-1/8                                 | 018.1101.020                                         | 125 | 6x0.75 | 8   | 10  | 22.5 | 5.0  | 14.0 | 1.5  | 0.880  |
| SO 41121-3-1/8                                 | 018.1101.040                                         | 125 | 6x0.75 | 8   | 10  | 24.5 | 5.0  | 15.0 | 2.5  | 0.920  |
| SO 41121-4-1/8                                 | 018.1101.060                                         | 125 | 8x1    | 10  | 10  | 27.0 | 5.0  | 17.0 | 3.4  | 1.410  |
| ★ SO 41121-4-1/4                               | 018.1101.065                                         | 125 | 10x1   | 12  | 14  | 34.5 | 8.0  | 21.0 | 3.4  | 2.930  |
| ★ SO 41121-4-3/8                               | 018.1101.068                                         | 125 | 10x1   | 12  | 17  | 34.5 | 8.0  | 20.5 | 3.4  | 3.500  |
| SO 41121-5-1/8                                 | 018.1101.082                                         | 125 | 8x1    | 10  | 10  | 27.5 | 5.0  | 17.0 | 3.5  | 1.390  |
| ★ SO 41121-5-1/4                               | 018.1101.084                                         | 125 | 10x1   | 12  | 14  | 34.5 | 8.0  | 21.0 | 4.0  | 2.880  |
| ★ SO 41121-5-3/8                               | 018.1101.086                                         | 125 | 10x1   | 12  | 17  | 34.5 | 8.0  | 20.5 | 4.0  | 3.450  |
| SO 41121-6-1/8                                 | 018.1101.100                                         | 250 | 10x1   | 12  | 10  | 28.5 | 5.0  | 17.0 | 4.5  | 1.690  |
| SO 41121-6-1/4                                 | 018.1101.110                                         | 250 | 10x1   | 12  | 14  | 34.5 | 8.0  | 21.0 | 4.5  | 2.820  |
| SO 41121-6-3/8                                 | 018.1101.120                                         | 250 | 10x1   | 12  | 17  | 34.5 | 8.0  | 20.5 | 4.5  | 3.390  |
| ★ SO 41121-6-1/2                               | 018.1101.125                                         | 250 | 12x1   | 14  | 22  | 41.0 | 10.0 | 20.0 | 4.5  | 6.180  |
| SO 41121-8-1/8                                 | 018.1101.160                                         | 150 | 12x1   | 14  | 12  | 30.0 | 5.0  | 18.0 | 6.0  | 2.260  |
| SO 41121-8-1/4                                 | 018.1101.170                                         | 150 | 12x1   | 14  | 14  | 36.0 | 8.0  | 22.0 | 6.5  | 3.110  |
| SO 41121-8-3/8                                 | 018.1101.180                                         | 150 | 12x1   | 14  | 17  | 36.0 | 8.0  | 21.5 | 6.5  | 3.730  |
| SO 41121-8-1/2                                 | 018.1101.185                                         | 150 | 12x1   | 14  | 22  | 41.0 | 10.0 | 25.0 | 6.5  | 6.040  |
| SO 41121-10-1/4                                | 018.1101.270                                         | 125 | 14x1   | 17  | 14  | 38.0 | 8.0  | 22.0 | 8.5  | 3.630  |
| SO 41121-10-3/8                                | 018.1101.280                                         | 125 | 14x1   | 17  | 17  | 38.0 | 8.0  | 21.5 | 8.5  | 4.830  |
| SO 41121-10-1/2                                | 018.1101.285                                         | 125 | 14x1   | 17  | 22  | 43.0 | 10.0 | 25.0 | 8.5  | 8.550  |
| SO 41121-12-1/4                                | 018.1101.380                                         | 100 | 16x1   | 19  | 17  | 39.0 | 8.0  | 22.0 | 8.5  | 4.820  |
| SO 41121-12-3/8                                | 018.1101.390                                         | 100 | 16x1   | 19  | 17  | 39.0 | 8.0  | 21.5 | 10.0 | 5.110  |
| SO 41121-12-1/2                                | 018.1101.400                                         | 100 | 16x1   | 19  | 22  | 44.0 | 10.0 | 25.0 | 10.0 | 7.760  |
| ★ SO 41121-12-3/4                              | 018.1101.405                                         | 100 | 20x1.5 | 24  | 27  | 49.5 | 12.0 | 28.0 | 10.0 | 11.190 |
| ★ SO 41121-13-1/4                              | 018.1101.445                                         | 40  | 20x1.5 | 24  | 22  | 43.0 | 8.0  | 24.5 | 8.5  | 9.200  |
| ★ SO 41121-13-3/8                              | 018.1101.450                                         | 40  | 20x1.5 | 24  | 22  | 43.0 | 8.0  | 24.0 | 10.5 | 9.250  |
| ★ SO 41121-13-1/2                              | 018.1101.454                                         | 40  | 20x1.5 | 24  | 22  | 46.0 | 10.0 | 27.5 | 11.0 | 9.540  |
| ★ SO 41121-13-3/4                              | 018.1101.456                                         | 40  | 20x1.5 | 24  | 27  | 49.0 | 12.0 | 28.0 | 11.0 | 11.080 |
| SO 41121-14-1/4                                | 018.1101.500                                         | 40  | 20x1.5 | 24  | 22  | 43.0 | 8.0  | 24.5 | 8.5  | 9.100  |
| SO 41121-14-3/8                                | 018.1101.502                                         | 40  | 20x1.5 | 24  | 22  | 43.0 | 8.0  | 24.0 | 10.5 | 9.340  |
| SO 41121-14-1/2                                | 018.1101.504                                         | 40  | 20x1.5 | 24  | 22  | 48.0 | 10.0 | 27.5 | 12.0 | 9.430  |
| SO 41121-14-3/4                                | 018.1101.506                                         | 40  | 20x1.5 | 24  | 27  | 50.0 | 12.0 | 28.0 | 12.0 | 10.970 |
| SO 41121-15-1/4                                | 018.1101.528                                         | 40  | 20x1.5 | 24  | 22  | 43.0 | 8.0  | 24.5 | 8.5  | 8.900  |
| SO 41121-15-3/8                                | 018.1101.532                                         | 40  | 20x1.5 | 24  | 22  | 43.0 | 8.0  | 24.0 | 10.5 | 8.820  |
| SO 41121-15-1/2                                | 018.1101.534                                         | 40  | 20x1.5 | 24  | 22  | 46.0 | 10.0 | 27.5 | 13.0 | 9.110  |
| SO 41121-15-3/4                                | 018.1101.536                                         | 40  | 20x1.5 | 24  | 27  | 50.0 | 12.0 | 28.0 | 13.0 | 10.650 |

Fortsetzung nächste Seite

Suite à la prochaine page

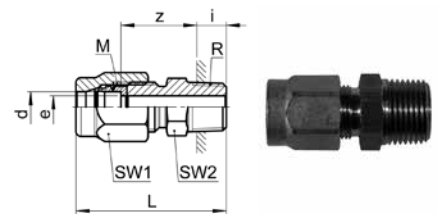
Continued on next page

d=Rohrtaussen-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

# Gerade Einschraubverschraubung Union mâle Male adaptor union



## SO 41121

| Type -d-R                                      | Mat.-Nr.                                             | bar                                        | M      | SW1 | SW2 | L    | i    | z    | e    | kg/100 |
|------------------------------------------------|------------------------------------------------------|--------------------------------------------|--------|-----|-----|------|------|------|------|--------|
| Für metrische Rohre<br>R=Rohrgewinde (kegelig) | Pour tubes métriques<br>R=Filetage-gaz BSP (conique) | For metric tubes<br>R=BSP thread (tapered) |        |     |     |      |      |      |      |        |
| SO 41121-16-1/2                                | 018.1101.566                                         | 40                                         | 24x1.5 | 27  | 24  | 50.5 | 10.0 | 22.0 | 14.0 | 11.280 |
| SO 41121-16-3/4                                | 018.1101.568                                         | 40                                         | 24x1.5 | 27  | 27  | 51.5 | 12.0 | 22.5 | 14.0 | 12.970 |
| SO 41121-17-1/2                                | 018.1101.596                                         | 40                                         | 24x1.5 | 27  | 24  | 50.5 | 12.0 | 22.0 | 15.0 | 11.030 |
| SO 41121-17-3/4                                | 018.1101.598                                         | 40                                         | 24x1.5 | 27  | 27  | 51.5 | 12.0 | 22.5 | 15.0 | 12.720 |
| ★ SO 41121-17-1                                | 018.1101.602                                         | 25                                         | 28x1.5 | 32  | 36  | 61.0 | 14.0 | 26.0 | 15.0 | 24.990 |
| SO 41121-18-1/2                                | 018.1101.646                                         | 40                                         | 24x1.5 | 27  | 24  | 50.5 | 10.0 | 22.0 | 15.0 | 10.760 |
| SO 41121-18-3/4                                | 018.1101.648                                         | 40                                         | 24x1.5 | 27  | 27  | 51.5 | 12.0 | 22.5 | 15.0 | 12.450 |
| ★ SO 41121-18-1                                | 018.1101.652                                         | 25                                         | 28x1.5 | 32  | 36  | 61.0 | 14.0 | 26.0 | 16.0 | 24.840 |
| ★ SO 41121-19-3/4                              | 018.1101.678                                         | 25                                         | 28x1.5 | 32  | 30  | 55.0 | 12.0 | 22.5 | 16.0 | 17.800 |
| ★ SO 41121-19-1                                | 018.1101.686                                         | 25                                         | 28x1.5 | 32  | 36  | 61.0 | 14.0 | 26.0 | 16.0 | 24.540 |
| SO 41121-22-3/4                                | 018.1101.768                                         | 25                                         | 28x1.5 | 32  | 30  | 55.0 | 12.0 | 22.5 | 19.0 | 16.440 |
| SO 41121-22-1                                  | 018.1101.770                                         | 25                                         | 28x1.5 | 32  | 36  | 61.0 | 14.0 | 26.0 | 19.0 | 23.330 |
| SO 41121-28-1                                  | 018.1101.850                                         | 16                                         | 36x2   | 41  | 36  | 64.5 | 14.0 | 29.0 | 24.0 | 31.300 |
| SO 41121-35-1 1/4                              | 018.1101.944                                         | 16                                         | 42x2   | 50  | 46  | 75.5 | 17.0 | 33.0 | 31.0 | 56.300 |

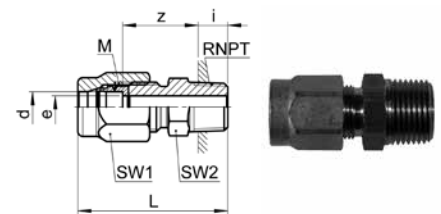
|                      |                   |                |        |    |    |      |      |      |      |        |
|----------------------|-------------------|----------------|--------|----|----|------|------|------|------|--------|
| Für Zollrohre        | Pour tubes pouces | For inch tubes |        |    |    |      |      |      |      |        |
| SO 41121-3,2-1/8     | 018.1101.045      | 125            | 6x0.75 | 8  | 10 | 27.5 | 5.0  | 17.0 | 2.5  | 0.900  |
| SO 41121-6,35-1/8    | 018.1101.135      | 100            | 10x1   | 12 | 10 | 28.5 | 5.0  | 17.0 | 4.5  | 1.680  |
| SO 41121-6,35-1/4    | 018.1101.140      | 100            | 10x1   | 12 | 14 | 34.5 | 8.0  | 21.0 | 4.5  | 2.810  |
| SO 41121-6,35-3/8    | 018.1101.145      | 100            | 10x1   | 12 | 17 | 34.5 | 8.0  | 20.5 | 4.5  | 3.350  |
| SO 41121-9,52-1/4    | 018.1101.230      | 64             | 14x1   | 17 | 14 | 38.0 | 8.0  | 22.0 | 8.0  | 3.690  |
| SO 41121-9,52-3/8    | 018.1101.235      | 64             | 14x1   | 17 | 17 | 38.0 | 8.0  | 21.5 | 8.0  | 1.890  |
| ★ SO 41121-12,7-1/4  | 018.1101.430      | 40             | 20x1.5 | 24 | 22 | 43.0 | 8.0  | 24.5 | 8.5  | 9.200  |
| ★ SO 41121-12,7-3/8  | 018.1101.432      | 40             | 20x1.5 | 24 | 22 | 43.0 | 8.0  | 24.0 | 10.5 | 9.250  |
| ★ SO 41121-12,7-1/2  | 018.1101.434      | 40             | 20x1.5 | 24 | 22 | 48.0 | 10.0 | 27.5 | 11.0 | 9.540  |
| ★ SO 41121-12,7-3/4  | 018.1101.436      | 40             | 20x1.5 | 24 | 27 | 49.0 | 12.0 | 28.0 | 11.0 | 11.080 |
| SO 41121-15,88-1/2   | 018.1101.541      | 40             | 24x1.5 | 27 | 24 | 50.5 | 10.0 | 22.0 | 14.0 | 11.280 |
| ★ SO 41121-19,05-3/4 | 018.1101.760      | 25             | 28x1.5 | 32 | 30 | 55.5 | 12.0 | 22.5 | 16.0 | 17.800 |
| ★ SO 41121-22,22-1   | 018.1101.785      | 25             | 28x1.5 | 32 | 36 | 62.5 | 14.0 | 26.0 | 19.0 | 23.300 |

d=Rohraussen-ø  
 e=kleinste Bohrung  
 L=Mass in montiertem Zustand  
 \*=mit reduziertem Klemmring

d=ø extérieur du tube  
 e=ø-min. de passage  
 L=après montage  
 \*=avec bague de serrage de réduction

d=tube outside diameter  
 e=minimum bore  
 L=installed length  
 \*=with reduction compression ferrule

# Gerade Einschraubverschraubung NPT Union mâle NPT Male adaptor union NPT



## SO 41121 NPT

| Type -d -RNPT                           | Mat.-Nr.                                  | bar | M      | SW1 | SW2 | L    | i    | z    | e    | kg/100 |
|-----------------------------------------|-------------------------------------------|-----|--------|-----|-----|------|------|------|------|--------|
| Für metrische Rohre<br>RNPT=NPT Gewinde | Pour tubes métriques<br>RNPT=Filetage NPT |     |        |     |     |      |      |      |      |        |
|                                         |                                           |     |        |     |     |      |      |      |      |        |
| ★ SO 41121-3-1/8 NPT                    | 018.1102.040                              | 125 | 8x1    | 10  | 12  | 29.0 | 7.0  | 17.0 | 2.5  | 1.710  |
| SO 41121-4-1/8 NPT                      | 018.1102.060                              | 125 | 8x1    | 10  | 12  | 30.0 | 7.0  | 17.0 | 3.4  | 1.670  |
| ★ SO 41121-4-1/4 NPT                    | 018.1102.065                              | 125 | 10x1   | 12  | 14  | 35.0 | 10.0 | 18.5 | 3.4  | 3.230  |
| SO 41121-5-1/8 NPT                      | 018.1102.082                              | 125 | 8x1    | 10  | 12  | 30.5 | 7.0  | 17.0 | 3.4  | 1.650  |
| ★ SO 41121-5-1/4 NPT                    | 018.1102.084                              | 125 | 10x1   | 12  | 14  | 36.0 | 10.0 | 18.5 | 4.0  | 3.180  |
| SO 41121-6-1/8 NPT                      | 018.1102.100                              | 250 | 10x1   | 12  | 12  | 31.0 | 10.0 | 17.0 | 4.5  | 1.940  |
| SO 41121-6-1/4 NPT                      | 018.1102.110                              | 250 | 10x1   | 12  | 14  | 36.5 | 10.0 | 18.5 | 4.5  | 3.120  |
| ★ SO 41121-6-3/8 NPT                    | 018.1102.120                              | 250 | 12x1   | 14  | 22  | 38.0 | 10.0 | 20.0 | 4.5  | 5.540  |
| ★ SO 41121-6-1/2 NPT                    | 018.1102.125                              | 250 | 12x1   | 14  | 22  | 44.0 | 14.0 | 22.5 | 4.5  | 6.200  |
| SO 41121-8-1/4 NPT                      | 018.1102.170                              | 150 | 12x1   | 14  | 14  | 38.0 | 10.0 | 19.5 | 6.5  | 3.350  |
| SO 41121-8-3/8 NPT                      | 018.1102.180                              | 150 | 12x1   | 14  | 17  | 38.0 | 10.0 | 20.0 | 6.5  | 5.540  |
| SO 41121-8-1/2 NPT                      | 018.1102.185                              | 150 | 12x1   | 14  | 22  | 44.0 | 14.0 | 22.5 | 6.5  | 6.040  |
| SO 41121-10-1/4 NPT                     | 018.1102.270                              | 125 | 14x1   | 17  | 14  | 40.0 | 10.0 | 19.5 | 8.5  | 3.860  |
| SO 41121-10-3/8 NPT                     | 018.1102.280                              | 125 | 14x1   | 17  | 17  | 40.0 | 10.0 | 19.5 | 8.5  | 5.340  |
| ★ SO 41121-10-1/2 NPT                   | 018.1102.285                              | 125 | 16x1   | 19  | 17  | 41.0 | 10.0 | 19.5 | 8.5  | 10.350 |
| SO 41121-12-1/4 NPT                     | 018.1102.380                              | 100 | 16x1   | 19  | 17  | 41.0 | 10.0 | 20.5 | 8.5  | 4.980  |
| SO 41121-12-3/8 NPT                     | 018.1102.390                              | 100 | 16x1   | 19  | 17  | 41.0 | 10.0 | 19.5 | 10.0 | 5.390  |
| SO 41121-12-1/2 NPT                     | 018.1102.400                              | 100 | 16x1   | 19  | 22  | 41.0 | 14.0 | 19.5 | 10.0 | 10.350 |
| ★ SO 41121-13-1/2 NPT                   | 018.1102.454                              | 40  | 20x1.5 | 24  | 22  | 47.0 | 14.0 | 25.0 | 11.0 | 10.240 |
| SO 41121-14-1/2 NPT                     | 018.1102.504                              | 40  | 20x1.5 | 24  | 22  | 47.0 | 14.0 | 25.0 | 12.0 | 10.130 |
| SO 41121-15-1/2 NPT                     | 018.1102.534                              | 40  | 20x1.5 | 24  | 22  | 47.0 | 14.0 | 25.0 | 13.0 | 9.810  |

Für Zollrohre

Pour tubes pouces

For inch tubes

|                         |              |     |        |    |    |      |      |      |      |        |
|-------------------------|--------------|-----|--------|----|----|------|------|------|------|--------|
| SO 41121-3,2-1/8 NPT    | 018.1102.045 | 100 | 8x1    | 10 | 12 | 29.5 | 7.0  | 17.0 | 2.5  | 1.710  |
| SO 41121-6,35-1/8 NPT   | 018.1102.135 | 100 | 10x1   | 12 | 12 | 31.0 | 7.0  | 17.0 | 4.5  | 1.930  |
| SO 41121-6,35-1/4 NPT   | 018.1102.140 | 100 | 10x1   | 12 | 14 | 36.0 | 10.0 | 18.5 | 4.5  | 3.110  |
| SO 41121-9,52-1/4 NPT   | 018.1102.230 | 64  | 14x1   | 17 | 14 | 40.0 | 10.0 | 19.5 | 8.0  | 3.920  |
| SO 41121-9,52-3/8 NPT   | 018.1102.235 | 64  | 14x1   | 17 | 17 | 40.0 | 10.0 | 19.5 | 8.0  | 5.340  |
| ★ SO 41121-12,7-1/2 NPT | 018.1102.434 | 40  | 20x1.5 | 24 | 22 | 47.0 | 14.0 | 25.0 | 11.0 | 10.240 |

d=Rohraussen-ø  
 e=kleinste Bohrung  
 L=Mass in montiertem Zustand  
 \*=mit reduziertem Klemmring

d=ø extérieur du tube  
 e=ø-min. de passage  
 L=après montage  
 \*=avec bague de serrage de réduction

d=tube outside diameter  
 e=minimum bore  
 L=installed length  
 \*=with reduction compression ferrule

# Gerade Einschraubverschraubung

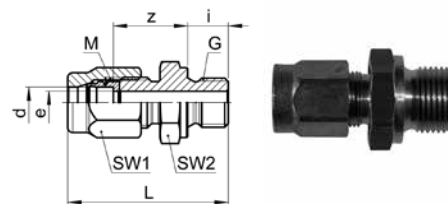
mit Dichtkante

## Union mâle

avec arête d'étanchéité

## Male adaptor union

with edge seal



### SO 41124

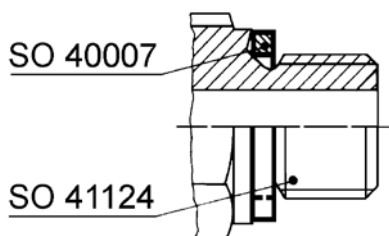
| Type -d-G                   | Mat.-Nr.                         | bar | M      | SW1 | SW2 | L                       | i    | z    | e    | kg/100 |
|-----------------------------|----------------------------------|-----|--------|-----|-----|-------------------------|------|------|------|--------|
| Für metrische Rohre         | Pour tubes métriques             |     |        |     |     | For metric tubes        |      |      |      |        |
| G=Rohrgewinde (zylindrisch) | G=Filetage-gaz BSP (cylindrique) |     |        |     |     | G=BSP thread (straight) |      |      |      |        |
| SO 41124-2-1/8              | 018.1141.020                     | 125 | 6x0.75 | 8   | 14  | 23.5                    | 8.0  | 11.5 | 1.5  | 1.360  |
| SO 41124-3-1/8              | 018.1141.040                     | 125 | 6x0.75 | 8   | 14  | 25.0                    | 8.0  | 12.0 | 2.5  | 1.400  |
| SO 41124-4-1/8              | 018.1141.060                     | 125 | 8x1    | 10  | 14  | 28.5                    | 8.0  | 14.5 | 3.4  | 1.820  |
| ★ SO 41124-4-1/4            | 018.1141.065                     | 125 | 10x1   | 12  | 19  | 35.5                    | 8.0  | 16.0 | 3.4  | 3.840  |
| SO 41124-5-1/8              | 018.1141.082                     | 125 | 8x1    | 10  | 14  | 29.0                    | 8.0  | 14.5 | 3.5  | 1.790  |
| ★ SO 41124-5-1/4            | 018.1141.084                     | 125 | 10x1   | 12  | 19  | 35.5                    | 12.0 | 16.0 | 4.0  | 3.790  |
| SO 41124-6-1/8              | 018.1141.100                     | 250 | 10x1   | 12  | 14  | 30.0                    | 8.0  | 14.5 | 4.5  | 2.070  |
| SO 41124-6-1/4              | 018.1141.110                     | 250 | 10x1   | 12  | 19  | 35.5                    | 12.0 | 16.0 | 4.5  | 3.730  |
| ★ SO 41124-6-3/8            | 018.1141.120                     | 250 | 12x1   | 14  | 22  | 38.5                    | 12.0 | 18.5 | 6.5  | 5.880  |
| ★ SO 41124-6-1/2            | 018.1141.125                     | 250 | 12x1   | 14  | 27  | 42.0                    | 14.0 | 20.0 | 4.5  | 6.900  |
| SO 41124-8-1/8              | 018.1141.160                     | 150 | 12x1   | 14  | 14  | 31.5                    | 8.0  | 15.5 | 4.5  | 2.830  |
| SO 41124-8-1/4              | 018.1141.170                     | 150 | 12x1   | 14  | 19  | 37.0                    | 12.0 | 17.0 | 6.5  | 3.860  |
| SO 41124-8-3/8              | 018.1141.180                     | 150 | 12x1   | 14  | 22  | 38.5                    | 12.0 | 18.5 | 6.5  | 5.720  |
| SO 41124-8-1/2              | 018.1141.185                     | 150 | 12x1   | 14  | 27  | 42.0                    | 14.0 | 20.0 | 6.5  | 9.457  |
| SO 41124-10-1/4             | 018.1141.270                     | 125 | 14x1   | 17  | 19  | 39.0                    | 12.0 | 17.0 | 7.0  | 4.860  |
| SO 41124-10-3/8             | 018.1141.280                     | 125 | 14x1   | 17  | 22  | 40.5                    | 12.0 | 18.5 | 8.5  | 6.250  |
| ★ SO 41124-10-1/2           | 018.1141.285                     | 125 | 16x1   | 19  | 27  | 45.0                    | 14.0 | 20.0 | 8.5  | 7.500  |
| SO 41124-12-1/4             | 018.1141.380                     | 100 | 16x1   | 19  | 19  | 40.0                    | 12.0 | 17.0 | 7.0  | 5.800  |
| SO 41124-12-3/8             | 018.1141.390                     | 100 | 16x1   | 19  | 22  | 41.5                    | 12.0 | 18.5 | 10.0 | 6.500  |
| SO 41124-12-1/2             | 018.1141.400                     | 100 | 16x1   | 19  | 27  | 45.0                    | 14.0 | 20.0 | 10.0 | 7.200  |
| Für Zollrohre               | Pour tubes pouces                |     |        |     |     | For inch tubes          |      |      |      |        |
| SO 41124-3,2-1/8            | 018.1141.045                     | 125 | 6x0.75 | 8   | 14  | 25.0                    | 8.0  | 12.0 | 2.2  | 1.300  |
| SO 41124-6,35-1/8           | 018.1141.135                     | 100 | 10x1   | 12  | 14  | 30.0                    | 8.0  | 14.5 | 4.5  | 2.006  |
| SO 41124-6,35-1/4           | 018.1141.140                     | 100 | 10x1   | 12  | 19  | 35.5                    | 12.0 | 16.0 | 4.5  | 3.720  |
| SO 41124-9,52-1/4           | 018.1141.230                     | 64  | 14x1   | 17  | 19  | 39.0                    | 12.0 | 17.0 | 8.0  | 4.920  |
| SO 41124-9,52-3/8           | 018.1141.235                     | 64  | 14x1   | 17  | 22  | 40.5                    | 12.0 | 18.5 | 8.0  | 6.310  |

4M

#### Anwendungsbeispiele:

#### Exemples d'utilisation:

#### Sample combinations:


 Bei Bedarf ist die entsprechende Dichtung  
SO 40007 / SO 40507 separat zu bestellen.

 Si nécessaire, le joint approprié SO 40007 /  
SO 40507 doit être commandé séparément.

 If necessary, the matching seal SO 40007 /  
SO 40507 must be ordered separately.

d=Rohrassens-ø  
 e=kleinste Bohrung  
 L=Mass in montiertem Zustand  
 \*=mit reduziertem Klemmring

d=ø extérieur du tube  
 e=ø-min. de passage  
 L=après montage  
 \*=avec bague de serrage de réduction

d=tube outside diameter  
 e=minimum bore  
 L=installed length  
 \*=with reduction compression ferrule



# Gerade Einschraubverschraubung METR

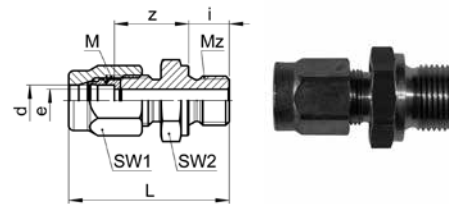
mit Dichtkante

## Union mâle METR

avec arête d'étanchéité

## Male adaptor union METR

with edge seal



### SO 41124 METR

| Type -d-Mz                          | Mat.-Nr.                           | bar | M      | SW1 | SW2 | L                           | i    | z    | e    | kg/100 |
|-------------------------------------|------------------------------------|-----|--------|-----|-----|-----------------------------|------|------|------|--------|
| Für metrische Rohre                 | Pour tubes métriques               |     |        |     |     | For metric tubes            |      |      |      |        |
| Mz=metrisches Gewinde (zylindrisch) | Mz=Filetage métrique (cylindrique) |     |        |     |     | Mz=Metric thread (straight) |      |      |      |        |
| SO 41124-2-M5                       | 018.1143.020                       | 125 | 6x0.75 | 8   | 8   | 18.0                        | 4.5  | 9.5  | 1.5  | 0.500  |
| SO 41124-3-M5                       | 018.1143.050                       | 125 | 6x0.75 | 8   | 8   | 20.0                        | 4.5  | 10.0 | 2.2  | 0.540  |
| ★ SO 41124-3-M6x0,75                | 018.1143.055                       | 125 | 8x1    | 10  | 8   | 26.0                        | 6.0  | 13.0 | 2.5  | 1.110  |
| ★ SO 41124-3-M8x1                   | 018.1143.060                       | 125 | 8x1    | 10  | 12  | 29.5                        | 8.0  | 14.0 | 2.5  | 1.570  |
| SO 41124-4-M5                       | 018.1143.080                       | 125 | 8x1    | 10  | 8   | 24.0                        | 4.5  | 13.0 | 2.2  | 1.000  |
| SO 41124-4-M6x0,75                  | 018.1143.085                       | 125 | 8x1    | 10  | 8   | 25.5                        | 6.0  | 13.0 | 2.5  | 1.070  |
| SO 41124-4-M6x1                     | 018.1143.086                       | 125 | 6x1    | 10  | 10  | 24.5                        | 5.0  | 13.0 | 2.5  | 1.050  |
| SO 41124-4-M8x1                     | 018.1143.090                       | 125 | 8x1    | 10  | 12  | 29.0                        | 8.0  | 15.0 | 3.4  | 1.530  |
| ★ SO 41124-4-M10x1                  | 018.1143.096                       | 125 | 10x1   | 12  | 14  | 30.5                        | 8.0  | 14.5 | 3.4  | 1.490  |
| SO 41124-5-M5                       | 018.1143.110                       | 125 | 8x1    | 10  | 8   | 24.5                        | 4.5  | 13.0 | 2.2  | 0.990  |
| SO 41124-5-M6x0,75                  | 018.1143.115                       | 125 | 8x1    | 10  | 8   | 26.0                        | 6.0  | 13.0 | 2.5  | 1.050  |
| SO 41124-5-M6                       | 018.1143.118                       | 125 | 6x1    | 10  | 10  | 25.0                        | 5.0  | 13.0 | 2.5  | 1.030  |
| SO 41124-5-M8x1                     | 018.1143.125                       | 125 | 8x1    | 10  | 12  | 29.5                        | 8.0  | 14.5 | 3.5  | 1.510  |
| ★ SO 41124-5-M10x1                  | 018.1143.135                       | 125 | 10x1   | 12  | 14  | 33.5                        | 8.0  | 14.5 | 4.0  | 1.440  |
| SO 41124-6-M5                       | 018.1143.155                       | 250 | 10x1   | 12  | 10  | 25.5                        | 4.5  | 13.0 | 2.2  | 1.560  |
| SO 41124-6-M8x1                     | 018.1143.170                       | 250 | 10x1   | 12  | 12  | 30.5                        | 8.0  | 14.5 | 3.5  | 1.450  |
| SO 41124-6-M10x1                    | 018.1143.180                       | 250 | 10x1   | 12  | 14  | 30.5                        | 8.0  | 14.5 | 4.5  | 2.193  |
| ★ SO 41124-6-M12x1,5                | 018.1143.195                       | 250 | 12x1   | 14  | 17  | 37.5                        | 12.0 | 17.0 | 4.5  | 3.760  |
| SO 41124-8-M12x1,5                  | 018.1143.240                       | 150 | 12x1   | 14  | 17  | 37.5                        | 12.0 | 17.0 | 6.0  | 3.600  |
| ★ SO 41124-8-M14x1,5                | 018.1143.245                       | 150 | 14x1   | 17  | 19  | 40.0                        | 12.0 | 17.0 | 6.5  | 5.120  |
| SO 41124-10-M12x1,5                 | 018.1143.275                       | 125 | 14x1   | 17  | 17  | 40.5                        | 12.0 | 17.0 | 6.0  | 4.940  |
| SO 41124-10-M14x1,5                 | 018.1143.280                       | 125 | 14x1   | 17  | 19  | 40.5                        | 12.0 | 17.0 | 7.5  | 4.920  |
| ★ SO 41124-10-M16x1,5               | 018.1143.285                       | 125 | 16x1   | 19  | 22  | 43.5                        | 12.0 | 19.0 | 8.5  | 5.780  |
| SO 41124-12-M16x1,5                 | 018.1143.330                       | 100 | 16x1   | 19  | 22  | 44.0                        | 12.0 | 19.0 | 9.0  | 5.500  |
| ★ SO 41124-12-M18x1,5               | 018.1143.333                       | 100 | 20x1.5 | 24  | 24  | 48.0                        | 12.0 | 23.0 | 10.0 | 10.820 |
| SO 41124-12-M22x1,5                 | 018.1143.338                       | 100 | 16x1   | 19  | 27  | 47.0                        | 14.0 | 20.0 | 10.0 | 12.350 |
| ★ SO 41124-13-M18x1,5               | 018.1143.365                       | 40  | 20x1.5 | 24  | 24  | 48.0                        | 12.0 | 23.0 | 11.0 | 10.710 |
| ★ SO 41124-13-M22x1,5               | 018.1143.369                       | 40  | 20x1.5 | 24  | 27  | 50.0                        | 14.0 | 22.5 | 11.0 | 12.100 |
| SO 41124-14-M18x1,5                 | 018.1143.380                       | 40  | 20x1.5 | 24  | 24  | 48.0                        | 12.0 | 23.0 | 11.0 | 10.600 |
| SO 41124-14-M22x1,5                 | 018.1143.385                       | 40  | 20x1.5 | 24  | 27  | 49.5                        | 14.0 | 22.5 | 12.0 | 12.000 |
| SO 41124-15-M18x1,5                 | 018.1143.390                       | 40  | 20x1.5 | 24  | 24  | 48.0                        | 12.0 | 23.0 | 11.0 | 10.280 |
| SO 41124-15-M22x1,5                 | 018.1143.395                       | 40  | 20x1.5 | 24  | 27  | 50.0                        | 14.0 | 25.0 | 13.0 | 11.680 |

|                         |                   |     |        |    |    |                |      |      |      |        |
|-------------------------|-------------------|-----|--------|----|----|----------------|------|------|------|--------|
| Für Zollrohre           | Pour tubes pouces |     |        |    |    | For inch tubes |      |      |      |        |
| SO 41124-3,2-M5         | 018.1143.067      | 125 | 6x0.75 | 8  | 8  | 20.0           | 4.5  | 10.0 | 2.2  | 0.500  |
| SO 41124-6,35-M5        | 018.1143.205      | 100 | 10x1   | 12 | 10 | 25.5           | 4.5  | 13.0 | 2.2  | 1.550  |
| SO 41124-6,35-M8x1      | 018.1143.207      | 125 | 10x1   | 12 | 12 | 30.5           | 8.0  | 14.5 | 3.5  | 1.450  |
| SO 41124-6,35-M10x1     | 018.1143.210      | 100 | 10x1   | 12 | 14 | 30.5           | 8.0  | 14.5 | 4.5  | 2.090  |
| SO 41124-9,52-M12x1,5   | 018.1143.261      | 64  | 14x1   | 17 | 17 | 40.0           | 12.0 | 17.0 | 6.0  | 5.000  |
| SO 41124-9,52-M14x1,5   | 018.1143.265      | 64  | 14x1   | 17 | 19 | 40.0           | 12.0 | 17.0 | 7.5  | 4.980  |
| ★ SO 41124-12,7-M18x1,5 | 018.1143.354      | 40  | 20x1.5 | 24 | 24 | 48.0           | 12.0 | 22.5 | 11.0 | 10.710 |
| ★ SO 41124-12,7-M22x1,5 | 018.1143.358      | 40  | 20x1.5 | 24 | 27 | 50.0           | 14.0 | 22.5 | 11.0 | 12.100 |

d=Rohrassens-ø  
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\*=mit reduziertem Klemmring

d=ø extérieur du tube  
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d=tube outside diameter  
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L=installed length  
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# Gerade Einschraubverschraubung

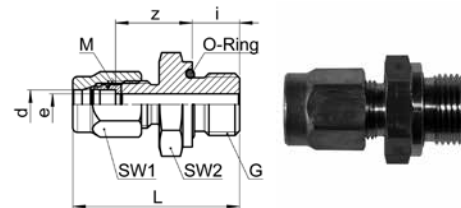
mit Conovor O-Ringabdichtung (NBR)

## Union mâle

avec joint torique Conovor (NBR)

## Male adaptor union

with Conovor O-ring seal (NBR)



### SO 41124 OR

| Type -d-G                   | Mat.-Nr.                         | bar | M      | SW1 | SW2 | L                       | D    | i    | s    | O-Ring    | z    | e    | kg/100 |
|-----------------------------|----------------------------------|-----|--------|-----|-----|-------------------------|------|------|------|-----------|------|------|--------|
| Für metrische Rohre         | Pour tubes métriques             |     |        |     |     | For metric tubes        |      |      |      |           |      |      |        |
| G=Rohrgewinde (zylindrisch) | G=Filetage-gaz BSP (cylindrique) |     |        |     |     | G=BSP thread (straight) |      |      |      |           |      |      |        |
| ★ SO 41124-4-1/8 OR         | 018.1171.060                     | 100 | 10x1   | 12  | 14  | 30.5                    | 15.0 | 8.0  | 1.00 | 8.7x1.78  | 14.5 | 2.5  | 2.300  |
| ★ SO 41124-4-1/4 OR         | 018.1171.065                     | 100 | 10x1   | 12  | 19  | 34.0                    | 19.0 | 10.0 | 1.50 | 11.1x1.78 | 16.0 | 3.4  | 3.900  |
| ★ SO 41124-5-1/8 OR         | 018.1171.082                     | 100 | 10x1   | 12  | 14  | 30.5                    | 15.0 | 8.0  | 1.00 | 8.7x1.78  | 14.5 | 4.0  | 2.200  |
| ★ SO 41124-5-1/4 OR         | 018.1171.084                     | 100 | 10x1   | 12  | 19  | 34.0                    | 19.0 | 10.0 | 1.50 | 11.1x1.78 | 16.0 | 4.0  | 3.900  |
| SO 41124-6-1/8 OR           | 018.1171.100                     | 250 | 10x1   | 12  | 14  | 30.0                    | 15.0 | 8.0  | 1.00 | 8.7x1.78  | 14.5 | 4.5  | 2.000  |
| SO 41124-6-1/4 OR           | 018.1171.110                     | 250 | 10x1   | 12  | 19  | 34.0                    | 19.0 | 10.0 | 1.50 | 11.1x1.78 | 16.0 | 4.5  | 3.900  |
| SO 41124-8-1/4 OR           | 018.1171.170                     | 150 | 12x1   | 14  | 19  | 33.5                    | 19.0 | 10.0 | 1.50 | 11.1x1.78 | 17.0 | 6.5  | 4.000  |
| ★ SO 41124-8-3/8 OR         | 018.1171.180                     | 150 | 14x1   | 14  | 22  | 38.5                    | 23.0 | 10.0 | 2.00 | 14.0x1.78 | 18.5 | 6.5  | 6.400  |
| SO 41124-10-1/4 OR          | 018.1171.270                     | 125 | 14x1   | 17  | 19  | 37.0                    | 19.0 | 10.0 | 1.50 | 11.1x1.78 | 17.0 | 6.5  | 4.700  |
| SO 41124-10-3/8 OR          | 018.1171.280                     | 125 | 14x1   | 17  | 22  | 38.5                    | 23.0 | 10.0 | 2.00 | 14.0x1.78 | 18.5 | 8.5  | 6.200  |
| ★ SO 41124-10-1/2 OR        | 018.1171.285                     | 125 | 16x1   | 17  | 27  | 42.0                    | 27.0 | 12.0 | 2.50 | 18.7x2.62 | 19.0 | 8.5  | 7.900  |
| SO 41124-12-3/8 OR          | 018.1171.390                     | 100 | 16x1   | 19  | 22  | 41.5                    | 23.0 | 10.0 | 2.00 | 14.0x1.78 | 18.5 | 10.0 | 6.300  |
| SO 41124-12-1/2 OR          | 018.1171.400                     | 100 | 16x1   | 19  | 27  | 42.0                    | 27.0 | 12.0 | 2.50 | 18.7x2.62 | 19.0 | 10.0 | 7.700  |
| ★ SO 41124-13-1/2 OR        | 018.1171.454                     | 40  | 20x1.5 | 24  | 27  | 46.0                    | 27.0 | 12.0 | 2.50 | 18.7x2.62 | 21.5 | 14.0 | 13.600 |
| SO 41124-14-3/8 OR          | 018.1171.502                     | 40  | 20x1.5 | 24  | 22  | 44.5                    | 23.0 | 10.0 | 2.00 | 14.0x1.78 | 20.0 | 10.5 | 11.000 |
| SO 41124-14-1/2 OR          | 018.1171.504                     | 40  | 20x1.5 | 24  | 27  | 46.0                    | 27.0 | 12.0 | 2.50 | 18.7x2.62 | 21.5 | 12.0 | 13.500 |
| SO 41124-15-3/8 OR          | 018.1171.532                     | 40  | 20x1.5 | 24  | 22  | 44.5                    | 23.0 | 10.0 | 2.00 | 14.8x1.78 | 20.0 | 10.5 | 11.000 |
| SO 41124-15-1/2 OR          | 018.1171.534                     | 40  | 20x1.5 | 24  | 27  | 46.5                    | 27.0 | 12.0 | 2.50 | 18.7x2.62 | 21.5 | 13.0 | 13.500 |
| SO 41124-16-1/2 OR          | 018.1171.566                     | 40  | 24x1.5 | 27  | 27  | 47.5                    | 27.0 | 12.0 | 2.50 | 18.7x2.62 | 21.5 | 13.0 | 16.100 |
| SO 41124-17-1/2 OR          | 018.1171.596                     | 40  | 24x1.5 | 27  | 27  | 47.5                    | 27.0 | 12.0 | 2.50 | 18.7x2.62 | 21.5 | 13.0 | 15.500 |
| ★ SO 41124-17-3/4 OR        | 018.1171.598                     | 40  | 28x1.5 | 32  | 32  | 52.0                    | 33.0 | 12.0 | 2.50 | 23.6x2.62 | 22.5 | 15.0 | 23.800 |
| SO 41124-18-1/2 OR          | 018.1171.646                     | 40  | 24x1.5 | 27  | 27  | 47.5                    | 27.0 | 12.0 | 2.50 | 18.7x2.62 | 21.5 | 13.0 | 15.300 |
| ★ SO 41124-18-3/4 OR        | 018.1171.648                     | 25  | 28x1.5 | 32  | 32  | 52.0                    | 33.0 | 12.0 | 2.50 | 23.6x2.62 | 22.5 | 16.0 | 23.600 |
| ★ SO 41124-19-3/4 OR        | 018.1171.678                     | 25  | 28x1.5 | 32  | 32  | 52.0                    | 33.0 | 12.0 | 2.50 | 23.6x2.62 | 22.5 | 16.0 | 23.500 |
| SO 41124-22-3/4 OR          | 018.1171.768                     | 25  | 28x1.5 | 32  | 32  | 52.0                    | 33.0 | 12.0 | 2.50 | 23.6x2.62 | 22.5 | 19.0 | 22.100 |

Für Zollrohre

Pour tubes pouces

For inch tubes

|                       |              |     |        |    |    |      |      |      |      |           |      |      |        |
|-----------------------|--------------|-----|--------|----|----|------|------|------|------|-----------|------|------|--------|
| SO 41124-6,35-1/8 OR  | 018.1171.135 | 100 | 10x1   | 12 | 14 | 30.0 | 15.0 | 8.0  | 1.00 | 8.7x1.78  | 14.5 | 4.5  | 2.100  |
| SO 41124-6,35-1/4 OR  | 018.1171.140 | 100 | 10x1   | 12 | 19 | 33.5 | 19.0 | 10.0 | 1.50 | 11.1x1.78 | 16.0 | 4.5  | 3.800  |
| SO 41124-9,52-1/4 OR  | 018.1171.230 | 64  | 14x1   | 17 | 19 | 37.0 | 19.0 | 10.0 | 1.50 | 11.1x1.78 | 17.0 | 6.5  | 4.800  |
| SO 41124-9,52-3/8 OR  | 018.1171.235 | 64  | 14x1   | 17 | 22 | 38.5 | 23.0 | 10.0 | 2.00 | 14.0x1.78 | 18.5 | 8.0  | 6.100  |
| SO 41124-12,7-1/2 OR  | 018.1171.434 | 40  | 20x1.5 | 24 | 27 | 46.0 | 27.0 | 12.0 | 2.50 | 18.7x2.62 | 21.5 | 11.0 | 13.800 |
| SO 41124-15,88-1/2 OR | 018.1171.541 | 40  | 24x1.5 | 27 | 27 | 48.5 | 27.0 | 12.0 | 2.50 | 18.7x2.62 | 21.5 | 13.0 | 16.100 |

d=Rohraussen-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

4M

## Gerade Einschraubverschraubung METR

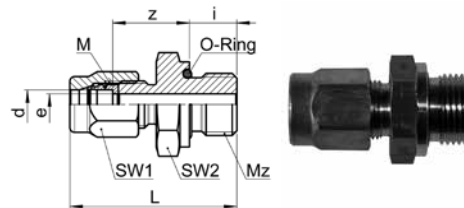
mit Conovor O-Ringabdichtung (NBR)

## Union mâle METR

avec joint torique Conovor (NBR)

## Male adaptor union METR

with Conovor O-ring seal (NBR)



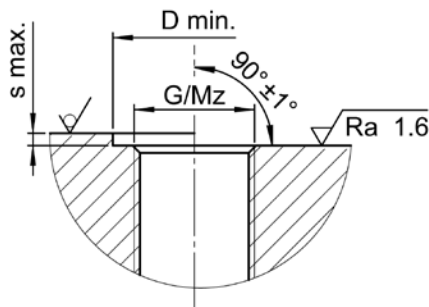
### SO 41124 OR METR

| Type -d -Mz                         | Mat.-Nr.                           | bar | M   | SW1 | SW2 | L                           | D   | i   | s    | O-Ring | z    | e   | kg/100 |
|-------------------------------------|------------------------------------|-----|-----|-----|-----|-----------------------------|-----|-----|------|--------|------|-----|--------|
| Für metrische Rohre                 | Pour tubes métriques               |     |     |     |     | For metric tubes            |     |     |      |        |      |     |        |
| Mz=metrisches Gewinde (zylindrisch) | Mz=Filetage métrique (cylindrique) |     |     |     |     | Mz=Metric thread (straight) |     |     |      |        |      |     |        |
| SO 41124-4-M5 OR                    | 018.1173.080                       | 100 | 8x1 | 10  | 8   | 25.5                        | 9.0 | 5.0 | 0.50 | 4x1.50 | 14.0 | 2.2 | 1.000  |
| SO 41124-5-M5 OR                    | 018.1173.110                       | 100 | 8x1 | 10  | 8   | 26.0                        | 9.0 | 5.0 | 0.50 | 4x1.50 | 14.0 | 2.2 | 0.900  |

#### Anwendungsbeispiele:

#### Exemples d'utilisation:

#### Sample combinations:



#### Einsatzbereich:

Temperatur zwischen -30 °C und +100 °C

Die Vorteile dieser O-Ringabdichtung:

- keine Dichtmittelreste in Geräten
- einwandfreie Abdichtung
- keine Beschädigung von Geräten durch konische Gewinde
- schnelle Montage

Conovor® patentierte O-Ring Abdichtung

#### Champ d'application:

Température comprise entre -30 °C et +100 °C

Les avantages de cette étanchéité à joint torique:

- aucun reste de scellant dans les équipements
- une étanchéité parfaite
- aucun dommage de l'équipement par le filetage conique
- facilité d'installation

Etanchéité à joint torique brevetée Conovor®

#### Range of use:

Temperature between -30 °C and +100 °C

Advantages of this O-ring seal:

- no sealing residues in devices
- perfect seal
- no damage to devices due to conical thread
- rapid assembly

Conovor® patented O-ring seal

d=Rohraussen-ø

e=kleinste Bohrung

L=Mass in montiertem Zustand

\*=mit reduziertem Klemmring

d=ø extérieur du tube

e=ø-min. de passage

L=après montage

\*=avec bague de serrage de réduction

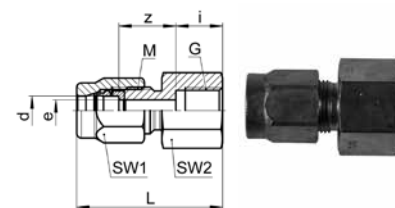
d=tube outside diameter

e=minimum bore

L=installed length

\*=with reduction compression ferrule

# Gerade Aufschraubverschraubung Union femelle Female adaptor union



## SO 41221

| Type -d-G                                          | Mat.-Nr.                                                 | bar | M      | SW1 | SW2 | L    | i    | z    | e    | kg/100 |
|----------------------------------------------------|----------------------------------------------------------|-----|--------|-----|-----|------|------|------|------|--------|
| Für metrische Rohre<br>G=Rohrgewinde (zylindrisch) | Pour tubes métriques<br>G=Filetage-gaz BSP (cylindrique) |     |        |     |     |      |      |      |      |        |
|                                                    |                                                          |     |        |     |     |      |      |      |      |        |
| ★ SO 41221-3-1/8                                   | 018.1201.040                                             | 125 | 8x1    | 10  | 14  | 28.5 | 10.0 | 12.0 | 2.5  | 2.060  |
| SO 41221-4-1/8                                     | 018.1201.060                                             | 125 | 8x1    | 10  | 14  | 28.0 | 10.0 | 12.0 | 3.4  | 2.000  |
| ★ SO 41221-4-1/4                                   | 018.1201.065                                             | 125 | 10x1   | 12  | 17  | 31.5 | 11.0 | 13.0 | 3.4  | 3.110  |
| SO 41221-5-1/8                                     | 018.1201.082                                             | 125 | 8x1    | 10  | 14  | 28.5 | 10.0 | 12.0 | 3.5  | 2.000  |
| ★ SO 41221-5-1/4                                   | 018.1201.084                                             | 125 | 10x1   | 12  | 17  | 31.5 | 11.0 | 13.0 | 4.0  | 3.060  |
| SO 41221-6-1/8                                     | 018.1201.100                                             | 250 | 10x1   | 12  | 14  | 29.5 | 10.0 | 12.0 | 4.5  | 2.360  |
| SO 41221-6-1/4                                     | 018.1201.110                                             | 250 | 10x1   | 12  | 17  | 31.5 | 11.0 | 13.0 | 4.5  | 3.000  |
| ★ SO 41221-6-3/8                                   | 018.1201.120                                             | 250 | 12x1   | 14  | 22  | 34.0 | 12.0 | 14.0 | 4.5  | 5.100  |
| ★ SO 41221-6-1/2                                   | 018.1201.125                                             | 250 | 12x1   | 14  | 27  | 36.0 | 14.0 | 14.0 | 4.5  | 7.400  |
| SO 41221-8-1/8                                     | 018.1201.160                                             | 150 | 12x1   | 14  | 14  | 31.0 | 10.0 | 13.0 | 6.5  | 2.790  |
| SO 41221-8-1/4                                     | 018.1201.170                                             | 150 | 12x1   | 14  | 17  | 33.0 | 11.0 | 14.0 | 6.5  | 2.430  |
| SO 41221-8-3/8                                     | 018.1201.180                                             | 150 | 12x1   | 14  | 22  | 34.0 | 12.0 | 14.0 | 6.5  | 4.940  |
| SO 41221-8-1/2                                     | 018.1201.185                                             | 150 | 12x1   | 14  | 27  | 36.0 | 14.0 | 14.0 | 6.5  | 7.300  |
| SO 41221-10-1/4                                    | 018.1201.270                                             | 125 | 14x1   | 17  | 17  | 35.0 | 11.0 | 14.0 | 8.5  | 4.180  |
| SO 41221-10-3/8                                    | 018.1201.280                                             | 125 | 14x1   | 17  | 22  | 36.0 | 12.0 | 14.0 | 8.5  | 5.900  |
| ★ SO 41221-10-1/2                                  | 018.1201.285                                             | 100 | 16x1   | 19  | 27  | 39.0 | 14.0 | 14.0 | 8.5  | 9.060  |
| SO 41221-12-1/4                                    | 018.1201.380                                             | 100 | 16x1   | 19  | 17  | 36.0 | 11.0 | 14.0 | 8.5  | 4.790  |
| SO 41221-12-3/8                                    | 018.1201.390                                             | 100 | 16x1   | 19  | 22  | 37.0 | 12.0 | 14.0 | 10.5 | 6.450  |
| SO 41221-12-1/2                                    | 018.1201.400                                             | 100 | 16x1   | 19  | 27  | 39.0 | 14.0 | 14.0 | 10.0 | 8.780  |
| ★ SO 41221-12-3/4                                  | 018.1201.405                                             | 40  | 20x1.5 | 24  | 32  | 45.5 | 17.0 | 16.0 | 10.0 | 14.180 |
| ★ SO 41221-13-1/2                                  | 018.1201.454                                             | 40  | 20x1.5 | 24  | 27  | 45.0 | 14.0 | 18.5 | 11.0 | 11.950 |
| ★ SO 41221-13-3/4                                  | 018.1201.456                                             | 40  | 20x1.5 | 24  | 32  | 45.5 | 17.0 | 16.0 | 11.0 | 14.070 |
| SO 41221-14-1/2                                    | 018.1201.504                                             | 40  | 20x1.5 | 24  | 27  | 45.0 | 14.0 | 18.5 | 12.0 | 11.840 |
| SO 41221-14-3/4                                    | 018.1201.506                                             | 40  | 20x1.5 | 24  | 32  | 45.5 | 17.0 | 16.0 | 12.0 | 13.960 |
| SO 41221-15-1/2                                    | 018.1201.534                                             | 40  | 20x1.5 | 24  | 27  | 45.0 | 14.0 | 18.5 | 12.5 | 11.520 |
| SO 41221-15-3/4                                    | 018.1201.536                                             | 40  | 20x1.5 | 24  | 32  | 45.5 | 17.0 | 16.0 | 13.0 | 13.640 |
| SO 41221-16-1/2                                    | 018.1201.566                                             | 40  | 24x1.5 | 27  | 27  | 45.0 | 10.0 | 17.0 | 14.0 | 13.270 |
| SO 41221-16-3/4                                    | 018.1201.568                                             | 40  | 24x1.5 | 27  | 32  | 47.0 | 17.0 | 16.0 | 14.0 | 15.700 |
| SO 41221-17-1/2                                    | 018.1201.596                                             | 40  | 24x1.5 | 27  | 27  | 45.0 | 14.0 | 17.0 | 14.5 | 13.020 |
| SO 41221-17-3/4                                    | 018.1201.598                                             | 40  | 24x1.5 | 27  | 32  | 47.0 | 17.0 | 16.0 | 15.0 | 15.450 |
| SO 41221-18-1/2                                    | 018.1201.646                                             | 40  | 24x1.5 | 27  | 27  | 45.0 | 14.0 | 17.0 | 14.5 | 12.750 |
| SO 41221-18-3/4                                    | 018.1201.648                                             | 40  | 24x1.5 | 27  | 32  | 47.0 | 17.0 | 16.0 | 15.0 | 15.180 |
| ★ SO 41221-19-3/4                                  | 018.1201.678                                             | 25  | 28x1.5 | 32  | 32  | 51.5 | 17.0 | 17.0 | 16.0 | 20.100 |
| SO 41221-22-3/4                                    | 018.1201.768                                             | 25  | 28x1.5 | 32  | 32  | 51.5 | 17.0 | 17.0 | 19.0 | 18.710 |
| SO 41221-28-1                                      | 018.1201.850                                             | 16  | 36x2   | 41  | 41  | 60.5 | 20.0 | 21.0 | 24.0 | 38.000 |

Fortsetzung nächste Seite

Suite à la prochaine page

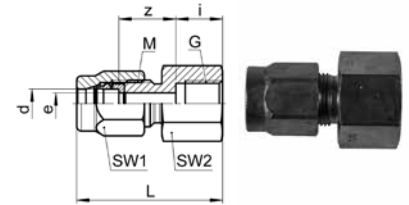
Continued on next page

d=Rohrtaussen-ø  
 e=kleinste Bohrung  
 L=Mass in montiertem Zustand  
 \*=mit reduziertem Klemmring

d=ø extérieur du tube  
 e=ø-min. de passage  
 L=après montage  
 \*=avec bague de serrage de réduction

d=tube outside diameter  
 e=minimum bore  
 L=installed length  
 \*=with reduction compression ferrule

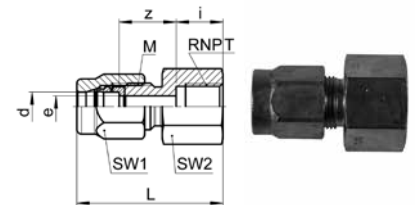
# Gerade Aufschraubverschraubung Union femelle Female adaptor union



## SO 41221

| Type -d -G                     | Mat.-Nr.                         | bar | M                       | SW1 | SW2 | L    | i    | z    | e    | kg/100 |
|--------------------------------|----------------------------------|-----|-------------------------|-----|-----|------|------|------|------|--------|
| Für Zollrohre                  | Pour tubes pouces                |     | For inch tubes          |     |     |      |      |      |      |        |
| G=Rohrgewinde (zylindrisch)    | G=Filetage-gaz BSP (cylindrique) |     | G=BSP thread (straight) |     |     |      |      |      |      |        |
| SO 41221-6,35- $\frac{1}{8}$   | 018.1201.135                     | 100 | 10x1                    | 12  | 14  | 29.5 | 10.0 | 12.0 | 4.5  | 2.350  |
| SO 41221-6,35- $\frac{1}{4}$   | 018.1201.140                     | 100 | 10x1                    | 12  | 17  | 31.5 | 11.0 | 13.0 | 4.5  | 2.990  |
| SO 41221-9,52- $\frac{1}{4}$   | 018.1201.230                     | 64  | 14x1                    | 17  | 17  | 35.0 | 11.0 | 14.0 | 8.0  | 4.240  |
| SO 41221-9,52- $\frac{3}{8}$   | 018.1201.235                     | 64  | 14x1                    | 17  | 22  | 36.0 | 12.0 | 14.0 | 8.0  | 4.860  |
| ★ SO 41221-12,7- $\frac{1}{2}$ | 018.1201.434                     | 40  | 20x1.5                  | 24  | 27  | 45.0 | 14.0 | 18.5 | 11.0 | 11.950 |
| ★ SO 41221-12,7- $\frac{3}{4}$ | 018.1201.436                     | 40  | 20x1.5                  | 24  | 32  | 45.5 | 17.0 | 16.0 | 11.0 | 14.070 |

# Gerade Aufschraubverschraubung NPT Union femelle NPT Female adaptor union NPT



## SO 41221 NPT

| Type -d -RNPT                    | Mat.-Nr.             | bar | M                | SW1 | SW2 | L    | i    | z    | e    | kg/100 |
|----------------------------------|----------------------|-----|------------------|-----|-----|------|------|------|------|--------|
| Für metrische Rohre              | Pour tubes métriques |     | For metric tubes |     |     |      |      |      |      |        |
| RNPT=NPT Gewinde                 | RNPT=Filetage NPT    |     | RNPT=NPT thread  |     |     |      |      |      |      |        |
| SO 41221-6- $\frac{1}{8}$ NPT    | 018.1202.100         | 250 | 10x1             | 12  | 14  | 29.5 | 10.0 | 12.0 | 4.5  | 2.360  |
| SO 41221-6- $\frac{1}{4}$ NPT    | 018.1202.110         | 250 | 10x1             | 12  | 17  | 34.0 | 14.0 | 12.5 | 4.5  | 2.650  |
| ★ SO 41221-6- $\frac{3}{8}$ NPT  | 018.1202.120         | 250 | 12x1             | 14  | 22  | 36.0 | 14.0 | 14.0 | 4.5  | 5.100  |
| ★ SO 41221-8- $\frac{1}{4}$ NPT  | 018.1202.170         | 150 | 14x1             | 17  | 17  | 37.0 | 14.0 | 13.0 | 6.5  | 3.000  |
| SO 41221-8- $\frac{3}{8}$ NPT    | 018.1202.180         | 150 | 12x1             | 14  | 22  | 36.0 | 14.0 | 14.0 | 6.5  | 5.100  |
| SO 41221-8- $\frac{1}{2}$ NPT    | 018.1202.185         | 150 | 12x1             | 14  | 27  | 40.5 | 18.0 | 14.5 | 6.5  | 5.900  |
| SO 41221-10- $\frac{1}{4}$ NPT   | 018.1202.270         | 125 | 14x1             | 17  | 17  | 37.0 | 14.0 | 13.0 | 8.5  | 4.180  |
| ★ SO 41221-10- $\frac{3}{8}$ NPT | 018.1202.280         | 100 | 16x1             | 19  | 22  | 38.0 | 14.0 | 14.0 | 8.5  | 7.300  |
| ★ SO 41221-10- $\frac{1}{2}$ NPT | 018.1202.285         | 100 | 16x1             | 19  | 27  | 43.5 | 18.0 | 14.5 | 8.5  | 9.000  |
| SO 41221-12- $\frac{3}{8}$ NPT   | 018.1202.390         | 100 | 16x1             | 19  | 22  | 39.0 | 14.0 | 14.0 | 10.0 | 8.900  |
| SO 41221-12- $\frac{1}{2}$ NPT   | 018.1202.400         | 100 | 16x1             | 19  | 27  | 43.5 | 18.0 | 14.5 | 10.0 | 9.000  |

Für Zollrohre

Pour tubes pouces

For inch tubes

|                                  |              |     |      |    |    |      |      |      |     |       |
|----------------------------------|--------------|-----|------|----|----|------|------|------|-----|-------|
| SO 41221-6,35- $\frac{1}{8}$ NPT | 018.1202.135 | 100 | 10x1 | 12 | 14 | 29.5 | 10.0 | 12.0 | 4.5 | 2.350 |
| SO 41221-6,35- $\frac{1}{4}$ NPT | 018.1202.140 | 100 | 10x1 | 12 | 17 | 34.0 | 14.0 | 12.5 | 4.5 | 2.640 |
| SO 41221-9,52- $\frac{1}{4}$ NPT | 018.1202.230 | 64  | 14x1 | 17 | 17 | 37.0 | 14.0 | 13.0 | 8.5 | 4.240 |

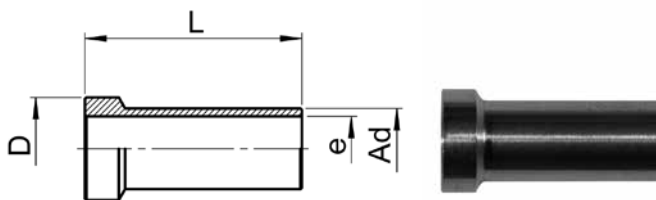
d=Rohraussen-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

# Verbindungsniessel Pièce folle Tube stub

## SO 41300

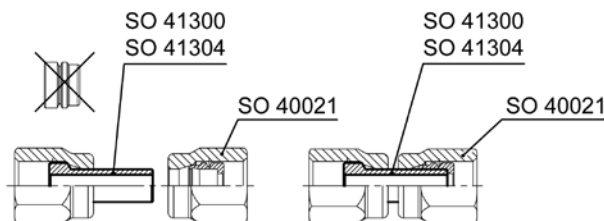


| Type -Ad     | Mat.-Nr.     | bar | L    | D    | e    | kg/100 |
|--------------|--------------|-----|------|------|------|--------|
| SO 41300-A6  | 016.1300.060 | 250 | 19.0 | 8.4  | 4.0  | 0.350  |
| SO 41300-A8  | 016.1300.080 | 150 | 22.0 | 10.5 | 6.0  | 0.520  |
| SO 41300-A10 | 016.1300.100 | 125 | 27.0 | 12.7 | 8.0  | 0.850  |
| SO 41300-A12 | 016.1300.120 | 100 | 30.0 | 14.7 | 9.0  | 1.400  |
| SO 41300-A14 | 016.1300.140 | 40  | 31.0 | 17.5 | 11.0 | 2.000  |
| SO 41300-A15 | 016.1300.150 | 40  | 31.0 | 18.0 | 12.0 | 2.100  |
| SO 41300-A17 | 016.1300.170 | 40  | 37.0 | 21.0 | 14.0 | 2.900  |
| SO 41300-A18 | 016.1300.180 | 40  | 36.0 | 22.0 | 15.0 | 3.200  |
| SO 41300-A22 | 016.1300.220 | 25  | 40.0 | 26.0 | 19.0 | 4.100  |
| SO 41300-A28 | 016.1300.280 | 16  | 47.0 | 32.5 | 23.0 | 9.800  |

### Anwendungsbeispiele:

### Exemples d'utilisation:

### Sample combinations:



Werden die Verbindungsniessel mit einer Anschlussmutter und einem Armaturenanschluss (Anschlussmutter und Klemmring) verbunden, ergibt dies eine einstellbare Kupplung.

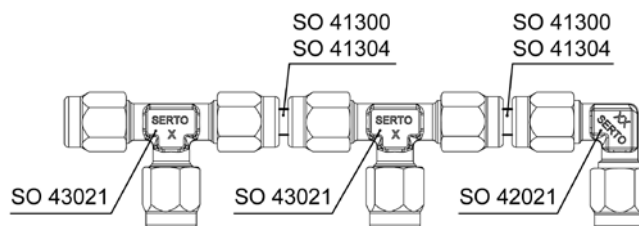
Si l'insert de la pièce folle est relié à un écrou et à un écrou de raccordement (écrou et bague de serrage), cela fournit un accouplement réglable.

If the tube stubs are coupled with a union nut and a nut connection (union nut and compression ferrule), an adjustable coupling is produced.

### Anwendungsbeispiele:

### Exemples d'utilisation:

### Sample combinations:



Mit der einstellbaren Kupplung lassen sich alle Formteile mit dem gleichen Anschlussgewinde verbinden.

Avec l'accouplement réglable, toutes les pièces moulées peuvent se relier aux mêmes filets.

All moulded parts with the same connecting thread can be connected with the adjustable coupling.

Hinweis: Nur mit Verbindungsniessel SO 41304, ist eine radiale Demonatge möglich.

Remarque: Un démontage radial n'est possible qu'avec la pièce folle SO 41304.

Note: Radial dismantling is only possible with tube stub SO 41304.

# Verbindungsstippel

radial demontierbar

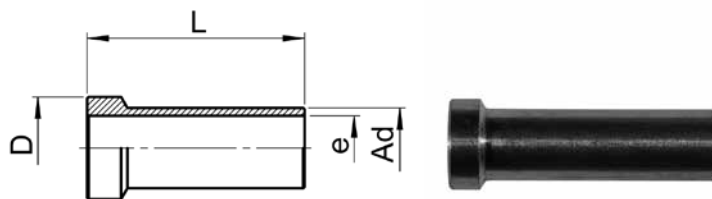
## Pièce folle

démontable radialement

## Tube stub

radial dismantling

SO 41304

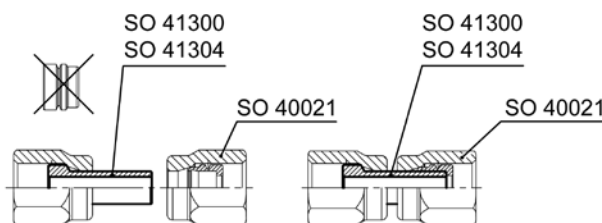


| Type -Ad     | Mat.-Nr.     | bar | L    | D    | e   | kg/100 |
|--------------|--------------|-----|------|------|-----|--------|
| SO 41304-A6  | 016.1310.060 | 250 | 29.0 | 8.4  | 4.0 | 0.470  |
| SO 41304-A8  | 016.1310.080 | 150 | 32.0 | 10.5 | 6.0 | 0.700  |
| SO 41304-A10 | 016.1310.100 | 125 | 37.0 | 12.7 | 8.0 | 1.040  |
| SO 41304-A12 | 016.1310.120 | 100 | 39.0 | 14.7 | 9.0 | 1.800  |

### Anwendungsbeispiele:

### Exemples d'utilisation:

### Sample combinations:



Werden die Verbindungsstippel mit einer Anschlussmutter und einem Armaturenanschluss (Anschlussmutter und Klemmring) verbunden, ergibt dies eine einstellbare Kupplung.

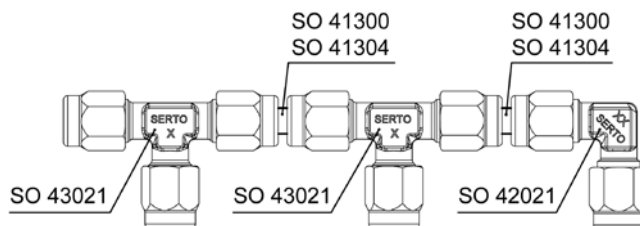
Si l'insert de la pièce folle est relié à un écrou et à un écrou de raccordement (écrou et bague de serrage), cela fournit un accouplement réglable.

If the tube stubs are coupled with a union nut and a nut connection (union nut and compression ferrule), an adjustable coupling is produced.

### Anwendungsbeispiele:

### Exemples d'utilisation:

### Sample combinations:



Mit der einstellbaren Kupplung lassen sich alle Formteile mit dem gleichen Anschlussgewinde verbinden.

Avec l'accouplement réglable, toutes les pièces moulées peuvent se relier aux mêmes filets.

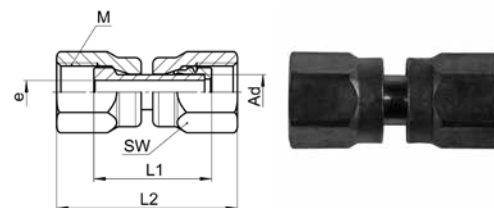
All moulded parts with the same connecting thread can be connected with the adjustable coupling.

Hinweis: Nur mit Verbindungsstippel SO 41304, ist eine radiale Demontage möglich.

Remarque: Un démontage radial n'est possible qu'avec la pièce folle SO 41304.

Note: Radial dismantling is only possible with tube stub SO 41304.

# **Einstellbare Kupplung** **Pièce folle prémontée** **Tube stub pre-assembled**

**SO 41325**


| Type -Ad     | Mat.-Nr.     | bar | M      | SW | L1   | L2   | e    | kg/100 |
|--------------|--------------|-----|--------|----|------|------|------|--------|
| SO 41325-A6  | 018.1320.060 | 250 | 10x1   | 12 | 20.0 | 31.0 | 4.0  | 2.050  |
| SO 41325-A8  | 018.1320.080 | 150 | 12x1   | 14 | 23.0 | 35.0 | 6.0  | 2.750  |
| SO 41325-A10 | 018.1320.100 | 125 | 14x1   | 17 | 26.0 | 38.0 | 8.0  | 4.650  |
| SO 41325-A12 | 018.1320.120 | 100 | 16x1   | 19 | 29.0 | 41.0 | 9.0  | 6.150  |
| SO 41325-A14 | 018.1320.140 | 40  | 20x1.5 | 24 | 32.0 | 45.0 | 11.0 | 11.100 |
| SO 41325-A15 | 018.1320.150 | 40  | 20x1.5 | 24 | 32.0 | 45.0 | 12.0 | 10.600 |
| SO 41325-A18 | 018.1320.180 | 40  | 24x1.5 | 27 | 37.0 | 51.0 | 15.0 | 13.700 |
| SO 41325-A22 | 018.1320.220 | 25  | 28x1.5 | 32 | 41.0 | 55.0 | 19.0 | 20.900 |
| SO 41325-A28 | 018.1320.280 | 16  | 36x2   | 41 | 49.0 | 66.0 | 23.0 | 43.200 |

# **Einstellbare Kupplung**

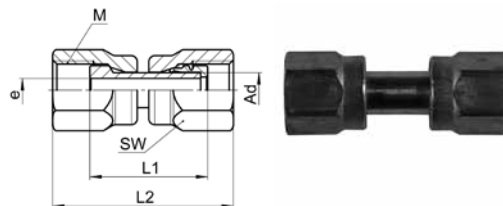
radial demontierbar

# **Pièce folle prémontée**

démontable radialement

# **Tube stub pre-assembled**

radial dismantling

**SO 41326**


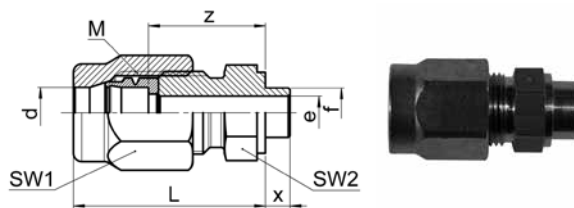
| Type -Ad     | Mat.-Nr.     | bar | M    | SW | L1   | L2   | e   | kg/100 |
|--------------|--------------|-----|------|----|------|------|-----|--------|
| SO 41326-A6  | 018.1330.060 | 250 | 10x1 | 12 | 30.0 | 41.0 | 4.0 | 2.150  |
| SO 41326-A8  | 018.1330.080 | 150 | 12x1 | 14 | 33.0 | 45.0 | 6.0 | 2.950  |
| SO 41326-A10 | 018.1330.100 | 125 | 14x1 | 17 | 38.0 | 50.0 | 8.0 | 4.800  |
| SO 41326-A12 | 018.1330.120 | 100 | 16x1 | 19 | 40.0 | 52.0 | 9.0 | 6.500  |

Mit der einstellbaren Kupplung lassen sich alle Formteile mit dem gleichen Anschlussgewinde verbinden. Weitere einstellbare Verschraubungen siehe SO 41600, SO 42621, SO 42824, SO 43621, SO 43824.

L'union orientable permet l'assemblage de tous les raccords de même filetage mâle. Autres raccords orientables, voir SO 41600, SO 42621, SO 42824, SO 43621, SO 43824, SO 43924.

The adjustable coupling permits the connection of all fittings with the same connector thread. For other adjustable unions see SO 41600, SO 42621, SO 42824, SO 43621, SO 43824.

# Verschraubung mit Einlötnippel Union avec embout à braser Adaptor union with soldering nipple

**SO 41421**


| Type -d             | Mat.-Nr.             | bar | M      | SW1 | SW2 | L    | f    | x   | z    | e    | kg/100 |
|---------------------|----------------------|-----|--------|-----|-----|------|------|-----|------|------|--------|
| Für metrische Rohre | Pour tubes métriques |     |        |     |     |      |      |     |      |      |        |
| ★ SO 41421-4        | 018.1400.060         | 125 | 10x1   | 12  | 10  | 21.5 | 6.0  | 3.0 | 14.0 | 3.4  | 1.640  |
| ★ SO 41421-5        | 018.1400.080         | 125 | 10x1   | 12  | 10  | 21.5 | 6.0  | 3.0 | 14.0 | 4.0  | 1.590  |
| SO 41421-6          | 018.1400.100         | 250 | 10x1   | 12  | 10  | 21.5 | 6.0  | 3.0 | 14.0 | 4.0  | 1.530  |
| SO 41421-8          | 018.1400.140         | 150 | 12x1   | 14  | 12  | 24.0 | 9.0  | 4.0 | 16.0 | 6.0  | 2.200  |
| SO 41421-10         | 018.1400.180         | 125 | 14x1   | 17  | 14  | 27.0 | 11.0 | 5.0 | 17.0 | 8.0  | 3.385  |
| SO 41421-12         | 018.1400.200         | 100 | 16x1   | 19  | 17  | 29.0 | 14.0 | 6.0 | 18.0 | 10.0 | 4.530  |
| ★ SO 41421-13       | 018.1400.240         | 40  | 20x1.5 | 24  | 22  | 33.0 | 17.0 | 6.0 | 20.5 | 11.0 | 8.330  |
| SO 41421-14         | 018.1400.260         | 40  | 20x1.5 | 24  | 22  | 33.0 | 17.0 | 6.0 | 20.5 | 12.0 | 8.220  |
| SO 41421-15         | 018.1400.280         | 40  | 20x1.5 | 24  | 22  | 33.0 | 17.0 | 6.0 | 20.5 | 13.0 | 7.900  |
| SO 41421-16         | 018.1400.300         | 40  | 24x1.5 | 27  | 24  | 35.5 | 19.0 | 7.0 | 21.5 | 14.0 | 10.800 |
| SO 41421-17         | 018.1400.320         | 40  | 24x1.5 | 27  | 24  | 35.5 | 19.0 | 7.0 | 21.5 | 15.0 | 10.550 |
| SO 41421-18         | 018.1400.340         | 40  | 24x1.5 | 27  | 24  | 35.5 | 19.0 | 7.0 | 21.5 | 15.0 | 10.280 |
| ★ SO 41421-19       | 018.1400.360         | 25  | 28x1.5 | 32  | 30  | 41.0 | 23.0 | 7.0 | 23.5 | 16.0 | 17.080 |
| SO 41421-22         | 018.1400.400         | 25  | 28x1.5 | 32  | 30  | 41.0 | 23.0 | 7.0 | 23.5 | 19.0 | 15.680 |
| Für Zollrohre       | Pour tubes pouces    |     |        |     |     |      |      |     |      |      |        |
| SO 41421-6,35       | 018.1400.120         | 100 | 10x1   | 12  | 10  | 21.5 | 6.0  | 3.0 | 14.0 | 4.0  | 1.520  |
| SO 41421-9,52       | 018.1400.160         | 64  | 14x1   | 17  | 14  | 27.0 | 11.0 | 5.0 | 17.0 | 8.0  | 3.440  |
| ★ SO 41421-12,7     | 018.1400.220         | 40  | 20x1.5 | 24  | 22  | 33.0 | 17.0 | 6.0 | 20.5 | 11.0 | 8.330  |

d=Rohraussen-ø  
 e=kleinste Bohrung  
 L=Mass in montiertem Zustand  
 \*=mit reduziertem Klemmring

d=ø extérieur du tube  
 e=ø-min. de passage  
 L=après montage  
 \*=avec bague de serrage de réduction

d=tube outside diameter  
 e=minimum bore  
 L=installed length  
 \*=with reduction compression ferrule



# **Gerade Schottverschraubung**

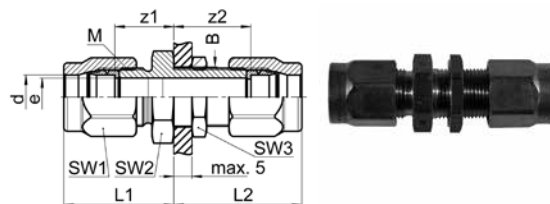
Durchführungslänge max. 5 mm

## **Union double pour passage de cloison**

Pour cloison max. 5 mm

## **Panel mount union**

Max. panel thickness 5 mm

**SO 41521**


| Type -d             | Mat.-Nr.             | bar              | M      | SW1 | SW2 | SW3 | L1   | L2   | B    | z1   | z2   | e    | kg/100 |
|---------------------|----------------------|------------------|--------|-----|-----|-----|------|------|------|------|------|------|--------|
| Für metrische Rohre | Pour tubes métriques | For metric tubes |        |     |     |     |      |      |      |      |      |      |        |
| ★ SO 41521-3        | 018.1500.030         | 125              | 8x1    | 10  | 12  | 12  | 20.0 | 25.5 | 8.5  | 13.5 | 19.0 | 2.5  | 2.580  |
| SO 41521-4          | 018.1500.040         | 125              | 8x1    | 10  | 12  | 12  | 19.5 | 25.0 | 8.5  | 13.5 | 19.0 | 3.4  | 2.460  |
| SO 41521-5          | 018.1500.050         | 125              | 8x1    | 10  | 12  | 12  | 20.0 | 25.5 | 8.5  | 13.5 | 19.0 | 3.5  | 2.440  |
| SO 41521-6          | 018.1500.060         | 250              | 10x1   | 12  | 14  | 14  | 21.0 | 26.5 | 10.5 | 13.5 | 19.0 | 4.5  | 3.540  |
| SO 41521-8          | 018.1500.080         | 150              | 12x1   | 14  | 17  | 17  | 23.0 | 28.0 | 12.5 | 15.0 | 20.0 | 6.5  | 5.320  |
| SO 41521-10         | 018.1500.100         | 125              | 14x1   | 17  | 19  | 19  | 25.5 | 31.0 | 14.5 | 15.5 | 21.0 | 8.5  | 7.710  |
| SO 41521-12         | 018.1500.120         | 100              | 16x1   | 19  | 22  | 19  | 27.0 | 32.0 | 16.5 | 16.0 | 21.0 | 10.0 | 9.320  |
| ★ SO 41521-13       | 018.1500.130         | 40               | 20x1.5 | 24  | 27  | 27  | 32.0 | 37.0 | 20.5 | 19.5 | 24.5 | 11.0 | 16.510 |
| SO 41521-14         | 018.1500.140         | 40               | 20x1.5 | 24  | 27  | 27  | 32.0 | 37.0 | 20.5 | 19.5 | 24.5 | 12.0 | 16.720 |
| SO 41521-15         | 018.1500.150         | 40               | 20x1.5 | 24  | 27  | 27  | 32.0 | 37.0 | 20.5 | 19.5 | 24.5 | 13.0 | 16.080 |
| SO 41521-16         | 018.1500.160         | 40               | 24x1.5 | 27  | 30  | 27  | 33.5 | 36.5 | 24.5 | 19.5 | 22.5 | 14.0 | 19.500 |
| SO 41521-17         | 018.1500.170         | 40               | 24x1.5 | 27  | 30  | 27  | 33.5 | 36.5 | 24.5 | 19.5 | 22.5 | 15.0 | 19.000 |
| SO 41521-18         | 018.1500.180         | 40               | 24x1.5 | 27  | 30  | 27  | 33.5 | 36.5 | 24.5 | 19.5 | 22.5 | 15.0 | 18.500 |
| ★ SO 41521-19       | 018.1500.190         | 40               | 28x1.5 | 32  | 36  | 36  | 38.0 | 39.0 | 28.5 | 20.5 | 35.5 | 16.0 | 25.000 |
| SO 41521-22         | 018.1500.220         | 40               | 28x1.5 | 32  | 36  | 36  | 38.0 | 39.0 | 28.5 | 20.5 | 35.5 | 19.0 | 23.300 |
| Für Zollrohre       | Pour tubes pouces    | For inch tubes   |        |     |     |     |      |      |      |      |      |      |        |
| SO 41521-6,35       | 018.1500.063         | 100              | 10x1   | 12  | 14  | 14  | 21.0 | 26.5 | 10.5 | 13.5 | 19.0 | 4.5  | 3.510  |
| SO 41521-9,52       | 018.1500.095         | 64               | 14x1   | 17  | 19  | 19  | 25.5 | 31.0 | 14.5 | 15.5 | 21.0 | 8.0  | 7.830  |
| ★ SO 41521-12,7     | 018.1500.127         | 40               | 20x1.5 | 24  | 27  | 27  | 32.0 | 37.0 | 20.5 | 19.5 | 24.5 | 11.0 | 16.510 |

Sechskantmutter siehe SO 40006

Ecrou à six pans voir SO 40006

Hexagon nut see SO 40006

d=Rohraussen-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

## Gerade Schottverschraubung reduziert

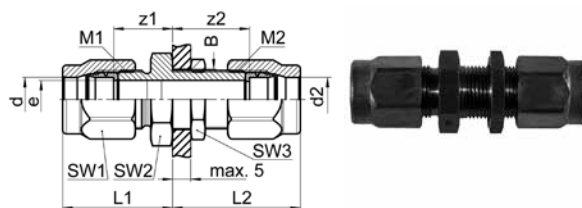
Durchführungslänge max. 5 mm

## Union double réduite pour passage de cloison

pour cloison max. 5 mm

## Panel mount reduction union

max. panel thickness 5 mm

**SO 41521 RED**


| Type -d -d2         | Mat.-Nr.     | bar | M1                   | M2     | SW1 | SW2 | SW3 | L1   | L2               | B    | z1   | z2   | e    | kg/100 |
|---------------------|--------------|-----|----------------------|--------|-----|-----|-----|------|------------------|------|------|------|------|--------|
| Für metrische Rohre |              |     | Pour tubes métriques |        |     |     |     |      | For metric tubes |      |      |      |      |        |
| * SO 41521-5-3      | 018.1504.060 | 125 | 8x1                  | 8x1    | 10  | 12  | 12  | 20.5 | 25.5             | 8.5  | 13.5 | 19.0 | 2.5  | 2.500  |
| * SO 41521-6-4      | 018.1504.110 | 100 | 10x1                 | 10x1   | 12  | 14  | 14  | 21.0 | 26.5             | 10.5 | 13.5 | 19.0 | 3.4  | 3.650  |
| * SO 41521-6-5      | 018.1504.117 | 100 | 10x1                 | 10x1   | 12  | 14  | 14  | 21.0 | 26.5             | 10.5 | 13.5 | 19.0 | 4.0  | 3.600  |
| * SO 41521-8-6      | 018.1504.140 | 250 | 12x1                 | 12x1   | 14  | 17  | 17  | 23.0 | 28.0             | 12.5 | 15.0 | 20.0 | 4.5  | 5.480  |
| * SO 41521-10-8     | 018.1504.190 | 150 | 14x1                 | 14x1   | 17  | 19  | 19  | 25.5 | 31.0             | 14.5 | 15.5 | 21.0 | 6.5  | 7.910  |
| * SO 41521-12-10    | 018.1504.240 | 100 | 16x1                 | 16x1   | 19  | 22  | 19  | 27.0 | 32.0             | 16.5 | 16.0 | 21.0 | 8.5  | 9.600  |
| * SO 41521-15-12    | 018.1504.420 | 40  | 20x1.5               | 20x1.5 | 24  | 27  | 27  | 32.0 | 37.0             | 20.5 | 19.5 | 24.5 | 10.0 | 16.620 |
| * SO 41521-15-13    | 018.1504.430 | 40  | 20x1.5               | 20x1.5 | 24  | 27  | 27  | 32.0 | 37.0             | 20.5 | 19.5 | 24.5 | 11.0 | 16.510 |
| * SO 41521-18-15    | 018.1504.610 | 40  | 24x1.5               | 24x1.5 | 27  | 30  | 27  | 33.5 | 36.5             | 24.5 | 19.5 | 22.5 | 18.0 | 18.400 |

|                    |              |     |                   |        |    |    |    |      |                |      |      |      |      |        |
|--------------------|--------------|-----|-------------------|--------|----|----|----|------|----------------|------|------|------|------|--------|
| Für Zollrohre      |              |     | Pour tubes pouces |        |    |    |    |      | For inch tubes |      |      |      |      |        |
| SO 41521-6-6,35    | 018.1504.119 | 100 | 10x1              | 10x1   | 12 | 14 | 14 | 21.0 | 26.5           | 10.5 | 13.5 | 19.0 | 4.5  | 3.530  |
| SO 41521-10-9,52   | 018.1504.197 | 64  | 14x1              | 14x1   | 17 | 19 | 19 | 25.5 | 31.0           | 14.5 | 15.5 | 21.0 | 8.0  | 7.780  |
| * SO 41521-15-12,7 | 018.1504.427 | 40  | 20x1.5            | 20x1.5 | 24 | 27 | 27 | 32.0 | 37.0           | 20.5 | 19.5 | 24.5 | 11.0 | 16.510 |

Weitere Reduktionen siehe SO 41821  
Sechskantmutter siehe SO 40006

Autres réductions voir SO 41821  
Ecrou à six pans voir SO 40006

Alternative reductions see SO 41821  
Hexagon nut see SO 40006

d=Rohraussen-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

## Gerade Schottverschraubung

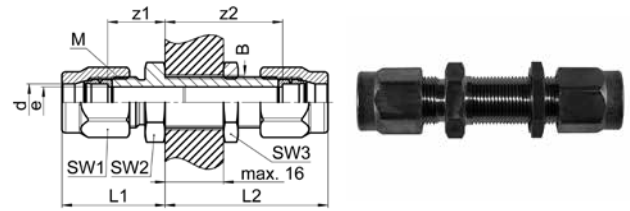
Durchführungslänge max. 16 mm

## Union double pour passage de cloison

pour cloison max. 16 mm

## Panel mount union

max. panel thickness 16 mm

**SO 41524**


| Type -d             | Mat.-Nr.             | bar              | M      | SW1 | SW2 | SW3 | L1   | L2   | B    | z1   | z2   | e    | kg/100 |
|---------------------|----------------------|------------------|--------|-----|-----|-----|------|------|------|------|------|------|--------|
| Für metrische Rohre | Pour tubes métriques | For metric tubes |        |     |     |     |      |      |      |      |      |      |        |
| ★ SO 41524-4        | 018.1540.040         | 125              | 10x1   | 12  | 14  | 14  | 21.0 | 37.5 | 10.5 | 13.5 | 30.0 | 3.4  | 4.130  |
| ★ SO 41524-5        | 018.1540.050         | 125              | 10x1   | 12  | 14  | 14  | 21.0 | 37.5 | 10.5 | 13.5 | 30.0 | 4.0  | 4.080  |
| SO 41524-6          | 018.1540.060         | 250              | 10x1   | 12  | 14  | 14  | 21.0 | 37.5 | 10.5 | 13.5 | 30.0 | 4.5  | 4.020  |
| SO 41524-8          | 018.1540.080         | 150              | 12x1   | 14  | 17  | 17  | 23.0 | 40.0 | 12.5 | 15.0 | 32.0 | 6.5  | 6.030  |
| SO 41524-10         | 018.1540.100         | 125              | 14x1   | 17  | 19  | 19  | 25.5 | 42.0 | 14.5 | 15.5 | 32.0 | 8.5  | 8.520  |
| SO 41524-12         | 018.1540.120         | 100              | 16x1   | 19  | 22  | 19  | 27.0 | 43.0 | 16.5 | 16.0 | 32.0 | 10.0 | 10.220 |
| ★ SO 41524-13       | 018.1540.130         | 40               | 20x1.5 | 24  | 27  | 27  | 32.0 | 46.0 | 20.5 | 19.5 | 33.5 | 11.0 | 17.740 |
| SO 41524-14         | 018.1540.140         | 40               | 20x1.5 | 24  | 27  | 27  | 32.0 | 46.0 | 20.5 | 19.5 | 33.5 | 12.0 | 17.950 |
| SO 41524-15         | 018.1540.150         | 40               | 20x1.5 | 24  | 27  | 27  | 32.0 | 46.0 | 20.5 | 19.5 | 33.5 | 13.0 | 17.310 |
| SO 41524-16         | 018.1540.160         | 40               | 24x1.5 | 27  | 30  | 27  | 33.0 | 47.5 | 24.5 | 19.5 | 33.5 | 14.0 | 25.800 |
| SO 41524-17         | 018.1540.170         | 40               | 24x1.5 | 27  | 30  | 27  | 33.0 | 47.5 | 24.5 | 19.5 | 33.5 | 15.0 | 25.350 |
| SO 41524-18         | 018.1540.180         | 40               | 24x1.5 | 27  | 30  | 27  | 33.0 | 47.5 | 24.5 | 19.5 | 33.5 | 15.0 | 24.850 |
| ★ SO 41524-19       | 018.1540.190         | 40               | 28x1.5 | 32  | 36  | 36  | 38.0 | 53.0 | 28.5 | 20.5 | 35.5 | 16.0 | 34.200 |
| SO 41524-22         | 018.1540.220         | 40               | 28x1.5 | 32  | 36  | 36  | 38.0 | 53.0 | 28.5 | 20.5 | 35.5 | 19.0 | 31.500 |
| Für Zollrohre       | Pour tubes pouces    | For inch tubes   |        |     |     |     |      |      |      |      |      |      |        |
| SO 41524-6,35       | 018.1540.063         | 100              | 10x1   | 12  | 14  | 14  | 21.0 | 37.5 | 10.5 | 13.5 | 30.0 | 4.5  | 3.990  |
| SO 41524-9,52       | 018.1540.095         | 64               | 14x1   | 17  | 19  | 19  | 25.5 | 42.0 | 14.5 | 15.5 | 32.0 | 8.0  | 8.640  |
| ★ SO 41524-12,7     | 018.1540.127         | 40               | 20x1.5 | 24  | 27  | 27  | 32.0 | 46.0 | 20.5 | 19.5 | 33.5 | 11.0 | 17.740 |

Sechskantmutter siehe SO 40006

Ecrou à six pans voir SO 40006

Hexagon nut see SO 40006

d=Rohraussen-ø  
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L=Mass in montiertem Zustand  
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L=après montage  
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L=installed length  
\*=with reduction compression ferrule

# Gerade Schottverschraubung reduziert

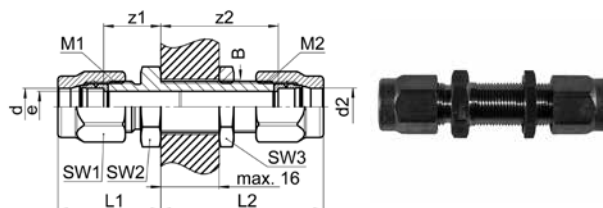
Durchführungslänge max. 16 mm

## Union double réduite pour passage de cloison

Pour cloison max. 16 mm

## Panel mount reduction union

Max. panel thickness 16 mm

**SO 41524 RED**


| Type -d -d2         | Mat.-Nr.     | bar | M1                   | M2     | SW1 | SW2              | SW3 | L1   | L2   | B    | z1   | z2   | e    | kg/100 |
|---------------------|--------------|-----|----------------------|--------|-----|------------------|-----|------|------|------|------|------|------|--------|
| Für metrische Rohre |              |     | Pour tubes métriques |        |     | For metric tubes |     |      |      |      |      |      |      |        |
| * SO 41524-6-4      | 018.1544.110 | 100 | 10x1                 | 10x1   | 12  | 14               | 14  | 21.0 | 37.5 | 10.5 | 13.5 | 30.0 | 3.4  | 4.130  |
| * SO 41524-6-5      | 018.1544.117 | 100 | 10x1                 | 10x1   | 12  | 14               | 14  | 21.0 | 37.5 | 10.5 | 13.5 | 30.0 | 4.0  | 4.080  |
| * SO 41524-8-6      | 018.1544.140 | 250 | 12x1                 | 12x1   | 14  | 17               | 17  | 23.0 | 40.0 | 12.5 | 15.0 | 32.0 | 4.5  | 6.190  |
| * SO 41524-10-8     | 018.1544.190 | 150 | 14x1                 | 14x1   | 17  | 19               | 19  | 25.5 | 42.0 | 14.5 | 15.5 | 32.0 | 6.5  | 8.720  |
| * SO 41524-12-10    | 018.1544.240 | 100 | 16x1                 | 16x1   | 19  | 22               | 19  | 27.0 | 43.0 | 16.5 | 16.0 | 32.0 | 8.5  | 10.500 |
| * SO 41524-15-12    | 018.1544.420 | 40  | 20x1.5               | 20x1.5 | 24  | 27               | 27  | 32.0 | 46.0 | 20.5 | 19.5 | 33.5 | 10.0 | 17.850 |
| * SO 41524-15-13    | 018.1544.430 | 40  | 20x1.5               | 20x1.5 | 24  | 27               | 27  | 32.0 | 46.0 | 20.5 | 19.5 | 33.5 | 11.0 | 17.740 |

Für Zollrohre

Pour tubes pouces

For inch tubes

|                    |              |     |        |        |    |    |    |      |      |      |      |      |      |        |
|--------------------|--------------|-----|--------|--------|----|----|----|------|------|------|------|------|------|--------|
| SO 41524-6-6,35    | 018.1544.119 | 100 | 10x1   | 10x1   | 12 | 14 | 14 | 22.5 | 37.5 | 10.5 | 13.5 | 30.0 | 4.5  | 4.010  |
| SO 41524-10-9,52   | 018.1544.197 | 64  | 14x1   | 14x1   | 17 | 19 | 19 | 28.0 | 42.0 | 14.5 | 15.5 | 32.0 | 8.0  | 8.580  |
| * SO 41524-15-12,7 | 018.1544.427 | 40  | 20x1.5 | 20x1.5 | 24 | 27 | 27 | 30.5 | 47.5 | 20.5 | 19.5 | 33.5 | 11.0 | 17.740 |

Weitere Reduktionen siehe SO 41821  
Sechskantmutter siehe SO 40006

Autres réductions voir SO 41821  
Ecrou à six pans voir SO 40006

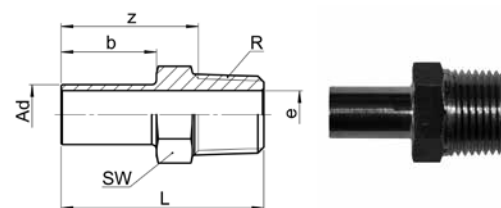
Alternative reductions see SO 41821  
Hexagon nut see SO 40006

d=Rohraussen-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

# Einstellnippel Union orientable mâle Adjustable male adaptor

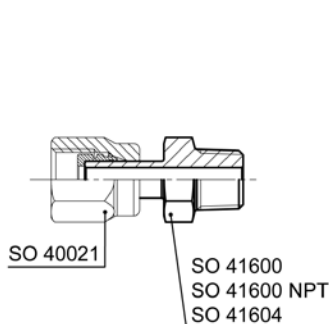


## SO 41600

| Type -Ad -R             | Mat.-Nr.                     | bar | SW | L                      | b    | z    | e    | kg/100 |
|-------------------------|------------------------------|-----|----|------------------------|------|------|------|--------|
| R=Rohrgewinde (kegelig) | R=Filetage-gaz BSP (conique) |     |    | R=BSP thread (tapered) |      |      |      |        |
| SO 41600-A6-1/8         | 016.1601.100                 | 250 | 12 | 26.0                   | 13.0 | 19.5 | 4.0  | 1.000  |
| SO 41600-A6-1/4         | 016.1601.110                 | 250 | 14 | 31.0                   | 13.0 | 21.0 | 4.0  | 1.950  |
| SO 41600-A8-1/8         | 016.1601.160                 | 150 | 12 | 28.0                   | 14.0 | 21.5 | 6.0  | 1.200  |
| SO 41600-A8-1/4         | 016.1601.170                 | 150 | 14 | 32.0                   | 14.0 | 22.0 | 6.0  | 1.800  |
| SO 41600-A10-1/4        | 016.1601.270                 | 125 | 14 | 34.0                   | 16.0 | 24.0 | 8.0  | 1.650  |
| SO 41600-A10-3/8        | 016.1601.280                 | 125 | 17 | 34.0                   | 16.0 | 24.0 | 8.0  | 2.900  |
| SO 41600-A10-1/2        | 016.1601.285                 | 125 | 22 | 39.0                   | 16.0 | 25.5 | 8.0  | 5.570  |
| SO 41600-A12-1/4        | 016.1601.380                 | 100 | 14 | 36.0                   | 18.0 | 26.0 | 8.0  | 1.750  |
| SO 41600-A12-3/8        | 016.1601.390                 | 100 | 17 | 36.0                   | 18.0 | 26.0 | 9.0  | 3.000  |
| SO 41600-A12-1/2        | 016.1601.400                 | 100 | 22 | 41.0                   | 18.0 | 27.5 | 9.0  | 5.670  |
| SO 41600-A14-1/2        | 016.1601.504                 | 64  | 22 | 44.0                   | 21.0 | 31.0 | 11.0 | 5.650  |
| SO 41600-A15-3/8        | 016.1601.532                 | 64  | 17 | 39.0                   | 21.0 | 29.0 | 10.5 | 3.200  |

4M

### Anwendungsbeispiele:

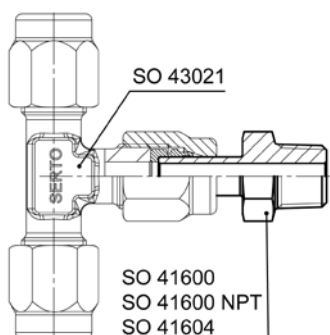


#### Mögliche Kombinationen:

- mit Armaturenanschluss zu einstellbaren Anschlüssen
- mit Verschraubungen/Ventilen zu einstellbaren Verschraubungen/Ventilen

Hinweis: Nur mit Einstellnippel SO 41604 ist eine radiale Demontage möglich.

### Exemples d'utilisation:

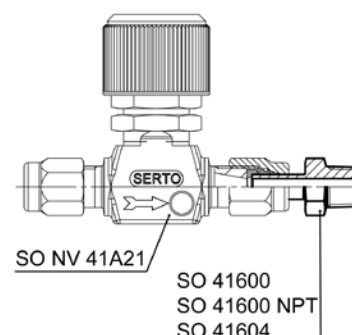


#### Combinaisons possibles:

- avec écrou de raccordement ça donne des raccords orientables
- avec raccords/vannes ça donne des raccords/vannes orientables

Remarque: Un démontage radial n'est possible qu'avec l'union orientable mâle SO 41604.

### Sample combinations:



#### Possible combinations:

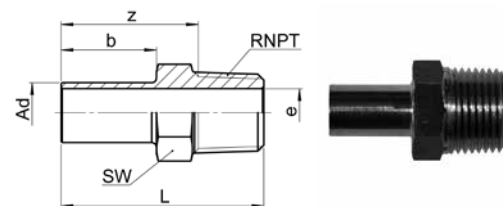
- with nut connection to adjustable connections
- with unions/valves to adjustable unions/valves

Note: Radial dismantling is only possible with adjustable male adaptor SO 41604.

## Einstellnippel NPT

## Union orientable mâle NPT

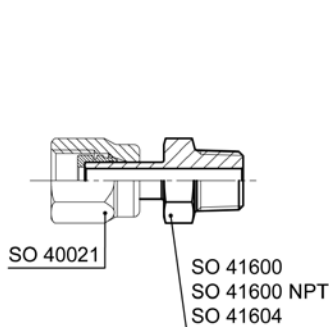
## Adjustable male adaptor NPT



### SO 41600 NPT

| Type -Ad -RNPT       | Mat.-Nr.          | bar | SW | L    | b    | z    | e    | kg/100 |
|----------------------|-------------------|-----|----|------|------|------|------|--------|
| RNPT=NPT Gewinde     | RNPT=Filetage NPT |     |    |      |      |      |      |        |
| SO 41600-A6-1/8 NPT  | 016.1602.100      | 250 | 12 | 27.5 | 13.0 | 22.0 | 4.0  | 1.150  |
| SO 41600-A6-1/4 NPT  | 016.1602.110      | 250 | 14 | 32.5 | 13.0 | 23.0 | 4.0  | 2.200  |
| SO 41600-A8-1/8 NPT  | 016.1602.160      | 150 | 12 | 28.5 | 14.0 | 23.0 | 6.0  | 1.100  |
| SO 41600-A8-1/4 NPT  | 016.1602.170      | 150 | 14 | 33.5 | 14.0 | 24.0 | 6.0  | 1.900  |
| SO 41600-A10-1/4 NPT | 016.1602.270      | 125 | 14 | 35.5 | 16.0 | 26.0 | 8.0  | 2.050  |
| SO 41600-A10-3/8 NPT | 016.1602.280      | 125 | 17 | 36.0 | 16.0 | 26.0 | 8.0  | 2.900  |
| SO 41600-A10-1/2 NPT | 016.1602.285      | 125 | 22 | 42.0 | 16.0 | 28.0 | 8.0  | 5.800  |
| SO 41600-A12-1/4 NPT | 016.1602.380      | 100 | 14 | 37.5 | 18.0 | 28.0 | 8.5  | 2.250  |
| SO 41600-A12-3/8 NPT | 016.1602.390      | 100 | 17 | 38.0 | 18.0 | 28.0 | 9.0  | 3.100  |
| SO 41600-A12-1/2 NPT | 016.1602.400      | 100 | 22 | 44.0 | 18.0 | 30.0 | 9.0  | 5.750  |
| SO 41600-A14-1/2 NPT | 016.1602.504      | 40  | 22 | 47.0 | 21.0 | 33.0 | 11.0 | 5.850  |
| SO 41600-A15-3/8 NPT | 016.1602.532      | 40  | 17 | 41.0 | 21.0 | 33.0 | 10.5 | 5.700  |
| SO 41600-A15-1/2 NPT | 016.1602.534      | 40  | 22 | 47.0 | 21.0 | 33.0 | 12.0 | 5.800  |

#### Anwendungsbeispiele:

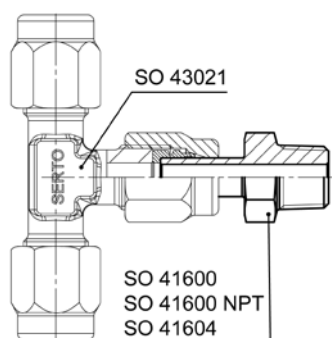


#### Mögliche Kombinationen:

- mit Armaturenanschluss zu einstellbaren Anschlüssen
- mit Verschraubungen/Ventilen zu einstellbaren Verschraubungen/Ventilen

Hinweis: Nur mit Einstellnippel SO 41604 ist eine radiale Demontage möglich.

#### Exemples d'utilisation:

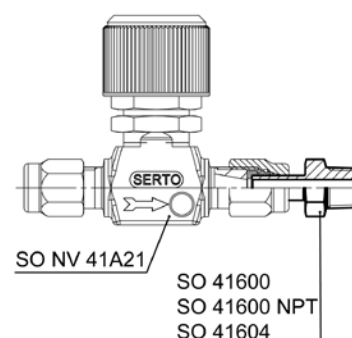


#### Combinaisons possibles:

- avec écrou de raccordement ça donne des raccords orientables
- avec raccords/vannes ça donne des raccords/vannes orientables

Remarque: Un démontage radial n'est possible qu'avec l'union orientable mâle SO 41604.

#### Sample combinations:



#### Possible combinations:

- with nut connection to adjustable connections
- with unions/valves to adjustable unions/valves

Note: Radial dismantling is only possible with adjustable male adaptor SO 41604.

## Einstellnippel

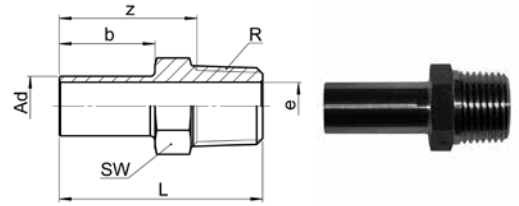
radial demontierbar

## Union orientable mâle

démontable radialement

## Adjustable male adaptor

radial dismantling


**SO 41604**

| Type -Ad -R             | Mat.-Nr.                     | bar                    | SW | L    | b    | z    | e    | kg/100 |
|-------------------------|------------------------------|------------------------|----|------|------|------|------|--------|
| R=Rohrgewinde (kegelig) | R=Filetage-gaz BSP (conique) | R=BSP thread (tapered) |    |      |      |      |      |        |
| SO 41604-A15-1/2        | 016.1611.534                 | 64                     | 22 | 53.0 | 30.0 | 40.0 | 12.0 | 5.760  |
| SO 41604-A15-3/4        | 016.1611.536                 | 64                     | 27 | 55.0 | 30.0 | 40.0 | 12.0 | 7.800  |
| SO 41604-A22-1          | 016.1611.770                 | 40                     | 36 | 65.0 | 36.0 | 48.5 | 18.0 | 16.540 |
| SO 41604-A28-1 1/4      | 016.1611.860                 | 40                     | 46 | 75.5 | 41.5 | 56.5 | 23.0 | 33.860 |

Mögliche Kombinationen:

- mit Armaturenanschluss zu einstellbaren Anschlüssen
- mit Verschraubungen/Ventilen zu einstellbaren Verschraubungen/Ventilen

Combinaisons possibles:

- avec écrou de raccordement ça donne des raccords orientables
- avec raccords/vannes ça donne des raccords/vannes orientables

Possible combinations:

- with nut connection to adjustable connections
- with unions/valves to adjustable unions/valves

Note: Radial dismantling is only possible with adjustable male adaptor SO 41604.

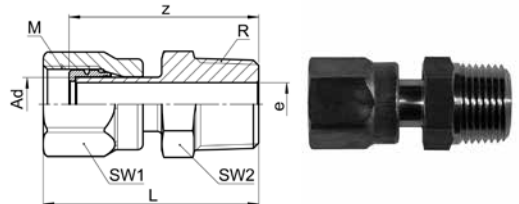
Hinweis: Nur mit Einstellnippel SO 41604 ist eine radiale Demontage möglich.

Remarque: Un démontage radial n'est possible qu'avec l'union orientable mâle SO 41604.

## Einstellnippel vormontiert

## Union orientable mâle prémontée

## Adjustable male adaptor pre-assembled


**SO 41625**

| Type -Ad -R             | Mat.-Nr.                     | bar                    | M      | SW1 | SW2 | L    | z    | e    | kg/100 |
|-------------------------|------------------------------|------------------------|--------|-----|-----|------|------|------|--------|
| R=Rohrgewinde (kegelig) | R=Filetage-gaz BSP (conique) | R=BSP thread (tapered) |        |     |     |      |      |      |        |
| SO 41625-A6-1/8         | 018.1621.100                 | 250                    | 10x1   | 12  | 12  | 32.5 | 27.0 | 4.0  | 1.840  |
| SO 41625-A6-1/4         | 018.1621.110                 | 250                    | 10x1   | 12  | 14  | 37.5 | 32.0 | 4.0  | 2.790  |
| SO 41625-A8-1/8         | 018.1621.160                 | 150                    | 12x1   | 14  | 12  | 35.5 | 29.0 | 6.0  | 2.320  |
| SO 41625-A8-1/4         | 018.1621.170                 | 150                    | 12x1   | 14  | 14  | 39.5 | 33.0 | 6.0  | 2.920  |
| SO 41625-A10-1/4        | 018.1621.270                 | 125                    | 14x1   | 17  | 14  | 41.0 | 35.0 | 8.0  | 3.540  |
| SO 41625-A10-3/8        | 018.1621.280                 | 125                    | 14x1   | 17  | 17  | 41.0 | 35.0 | 8.0  | 6.760  |
| SO 41625-A10-1/2        | 018.1621.285                 | 125                    | 14x1   | 17  | 22  | 46.0 | 40.0 | 8.0  | 7.460  |
| SO 41625-A12-1/4        | 018.1621.380                 | 100                    | 16x1   | 19  | 14  | 43.0 | 37.0 | 8.0  | 4.090  |
| SO 41625-A12-3/8        | 018.1621.390                 | 100                    | 16x1   | 19  | 17  | 43.0 | 37.0 | 9.0  | 5.340  |
| SO 41625-A12-1/2        | 018.1621.400                 | 100                    | 16x1   | 19  | 22  | 48.0 | 42.0 | 9.0  | 8.010  |
| SO 41625-A14-1/2        | 018.1621.504                 | 40                     | 20x1.5 | 24  | 22  | 52.0 | 45.0 | 11.0 | 10.210 |
| SO 41625-A15-3/8        | 018.1621.532                 | 40                     | 20x1.5 | 24  | 17  | 47.0 | 40.5 | 10.5 | 7.440  |

Ad=Aussen-ø der Andrehung  
e=kleinste Bohrung  
L=Mass in montiertem Zustand

Ad=ø extérieur de la portée cylindrique  
e=ø-min. de passage  
L=après montage

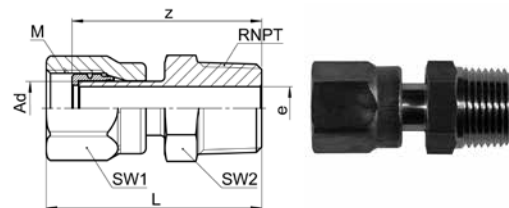
Ad=outside diameter of cyl. stub  
e=minimum bore  
L=installed length

## Einstellnippel vormontiert NPT

## Union orientable mâle prémontée NPT

## Adjustable male adaptor pre-assembled NPT

### SO 41625 NPT



| Type -Ad -RNPT       | Mat.-Nr.          | bar | M               | SW1 | SW2 | L    | z    | e    | kg/100 |
|----------------------|-------------------|-----|-----------------|-----|-----|------|------|------|--------|
| RNPT=NPT Gewinde     | RNPT=Filetage NPT |     | RNPT=NPT thread |     |     |      |      |      |        |
| SO 41625-A6-1/8 NPT  | 018.1622.100      | 250 | 10x1            | 12  | 12  | 34.0 | 22.5 | 4.0  | 1.700  |
| SO 41625-A6-1/4 NPT  | 018.1622.110      | 250 | 10x1            | 12  | 14  | 39.0 | 33.5 | 4.0  | 1.750  |
| SO 41625-A8-1/8 NPT  | 018.1622.160      | 150 | 12x1            | 14  | 12  | 36.0 | 29.5 | 6.0  | 2.250  |
| SO 41625-A8-1/4 NPT  | 018.1622.170      | 150 | 12x1            | 14  | 14  | 41.0 | 34.5 | 6.0  | 3.020  |
| SO 41625-A10-1/4 NPT | 018.1622.270      | 125 | 14x1            | 17  | 14  | 42.5 | 36.0 | 8.0  | 3.940  |
| SO 41625-A10-3/8 NPT | 018.1622.280      | 125 | 14x1            | 17  | 17  | 43.0 | 37.0 | 8.0  | 4.790  |
| SO 41625-A10-1/2 NPT | 018.1622.285      | 125 | 14x1            | 17  | 22  | 49.0 | 43.0 | 8.0  | 7.690  |
| SO 41625-A12-1/4 NPT | 018.1622.380      | 100 | 16x1            | 19  | 14  | 44.5 | 38.5 | 8.5  | 4.590  |
| SO 41625-A12-3/8 NPT | 018.1622.390      | 100 | 16x1            | 19  | 17  | 45.0 | 39.0 | 9.0  | 5.440  |
| SO 41625-A12-1/2 NPT | 018.1622.400      | 100 | 16x1            | 19  | 22  | 51.0 | 45.0 | 9.0  | 8.090  |
| SO 41625-A14-1/2 NPT | 018.1622.504      | 40  | 20x1.5          | 24  | 22  | 55.0 | 48.5 | 11.0 | 10.410 |
| SO 41625-A15-3/8 NPT | 018.1622.532      | 40  | 20x1.5          | 24  | 17  | 49.0 | 42.5 | 10.5 | 9.940  |
| SO 41625-A15-1/2 NPT | 018.1622.534      | 40  | 20x1.5          | 24  | 22  | 55.0 | 48.5 | 12.0 | 10.040 |

## Einstellnippel vormontiert

radial demontierbar

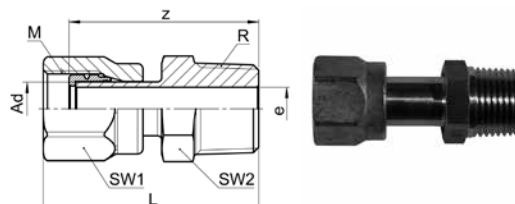
## Union orientable mâle prémontée

démontable radialement

## Adjustable male adaptor pre-assembled

radial dismantling

### SO 41626



| Type -Ad -R             | Mat.-Nr.                     | bar | M                      | SW1 | SW2 | L    | z    | e    | kg/100 |
|-------------------------|------------------------------|-----|------------------------|-----|-----|------|------|------|--------|
| R=Rohrgewinde (kegelig) | R=Filetage-gaz BSP (conique) |     | R=BSP thread (tapered) |     |     |      |      |      |        |
| SO 41626-A15-1/2        | 018.1631.534                 | 40  | 20x1.5                 | 22  | 24  | 61.0 | 54.5 | 12.0 | 10.000 |
| SO 41626-A15-3/4        | 018.1631.536                 | 40  | 20x1.5                 | 27  | 24  | 63.0 | 56.5 | 12.0 | 12.040 |
| SO 41626-A22-1          | 018.1631.770                 | 25  | 28x1.5                 | 36  | 32  | 73.5 | 66.5 | 18.0 | 24.960 |
| SO 41626-A28-1 1/4      | 018.1631.860                 | 16  | 36x2                   | 46  | 41  | 86.5 | 77.5 | 23.0 | 50.560 |

Ad=Aussen-ø der Andrehung  
e=kleinste Bohrung  
L=Mass in montiertem Zustand

Ad=ø extérieur de la portée cylindrique  
e=ø-min. de passage  
L=après montage

Ad=outside diameter of cyl. stub  
e=minimum bore  
L=installed length



## Einstellmuffe

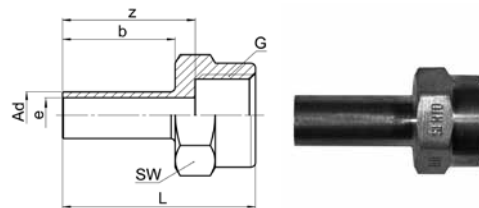
radial demontierbar

## Union orientable femelle

démontable radialement

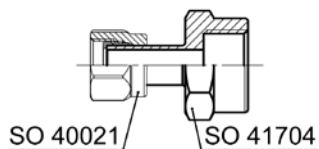
## Adjustable female adaptor

radial dismantling


**SO 41704**

| Type -Ad -G                  | Mat.-Nr.     | bar                              | SW | L                       | b    | z    | e    | kg/100 |
|------------------------------|--------------|----------------------------------|----|-------------------------|------|------|------|--------|
| G=Rohrgewinde (zylindrisch)  |              | G=Filetage-gaz BSP (cylindrique) |    | G=BSP thread (straight) |      |      |      |        |
| SO 41704-A12- $\frac{3}{8}$  | 016.1711.390 | 100                              | 22 | 44.0                    | 28.0 | 32.0 | 9.0  | 4.350  |
| SO 41704-A12- $\frac{1}{2}$  | 016.1711.400 | 100                              | 27 | 48.0                    | 28.0 | 33.0 | 9.0  | 5.500  |
| SO 41704-A15- $\frac{1}{2}$  | 016.1711.534 | 64                               | 27 | 50.0                    | 30.0 | 35.0 | 12.0 | 7.540  |
| SO 41704-A15- $\frac{3}{4}$  | 016.1711.536 | 64                               | 36 | 54.0                    | 30.0 | 37.0 | 12.0 | 15.310 |
| SO 41704-A22-1               | 016.1711.770 | 40                               | 41 | 64.0                    | 36.0 | 44.0 | 18.0 | 21.390 |
| SO 41704-A28-1 $\frac{1}{4}$ | 016.1711.860 | 40                               | 50 | 72.5                    | 41.5 | 49.5 | 23.0 | 32.960 |

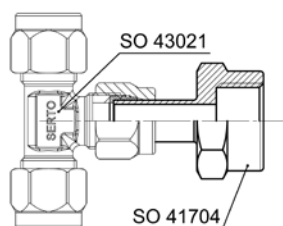
### Anwendungsbeispiele:



#### Mögliche Kombinationen:

- mit Armaturenanschluss zu einstellbaren Anschlüssen
- mit Verschraubungen/Ventilen zu einstellbaren Verschraubungen/Ventilen

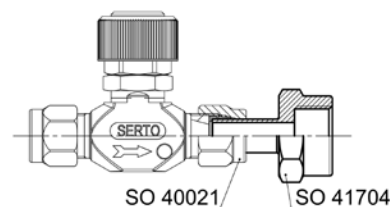
### Exemples d'utilisation:



#### Combinaisons possibles:

- avec écrou de raccordement ça donne des raccords orientables
- avec raccords/vannes ça donne des raccords/vannes orientables

### Sample combinations:



#### Possible combinations:

- with nut connection to adjustable connections
- with unions/valves to adjustable unions/valves

## Einstellmuffe vormontiert

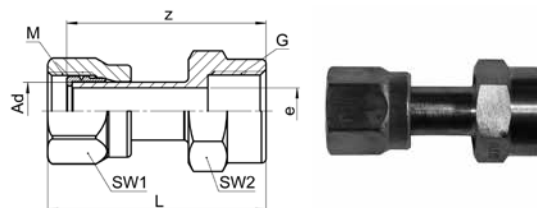
radial demontierbar

## Union orientable femelle prémontée

démontable radialement

## Adjustable female adaptor union pre-assembled

radial dismantling

**SO 41726**


| Type -Ad -G                  | Mat.-Nr.                         | bar | M                       | SW1 | SW2 | L    | z    | e    | kg/100 |
|------------------------------|----------------------------------|-----|-------------------------|-----|-----|------|------|------|--------|
| G=Rohrgewinde (zylindrisch)  | G=Filetage-gaz BSP (cylindrique) |     | G=BSP thread (straight) |     |     |      |      |      |        |
| SO 41726-A12- $\frac{3}{8}$  | 018.1731.390                     | 100 | 16x1                    | 19  | 22  | 52.5 | 45.0 | 9.0  | 6.690  |
| SO 41726-A12- $\frac{1}{2}$  | 018.1731.400                     | 100 | 16x1                    | 19  | 27  | 56.5 | 49.0 | 9.0  | 7.840  |
| SO 41726-A15- $\frac{1}{2}$  | 018.1731.534                     | 40  | 20x1.5                  | 24  | 27  | 58.5 | 51.5 | 12.0 | 11.780 |
| SO 41726-A15- $\frac{3}{4}$  | 018.1731.536                     | 40  | 20x1.5                  | 24  | 36  | 62.5 | 55.5 | 12.0 | 19.550 |
| SO 41726-A22-1               | 018.1731.770                     | 25  | 28x1.5                  | 32  | 41  | 74.0 | 65.5 | 18.0 | 29.810 |
| SO 41726-A28-1 $\frac{1}{4}$ | 018.1731.860                     | 16  | 36x2                    | 41  | 50  | 84.5 | 74.5 | 23.0 | 49.660 |

Ad=Aussen-ø der Andrehung  
e=kleinste Bohrung  
L=Mass in montiertem Zustand

Ad=ø extérieur de la portée cylindrique  
e=ø-min. de passage  
L=après montage

Ad=outside diameter of cyl. stub  
e=minimum bore  
L=installed length

# Reduktionsverschraubung

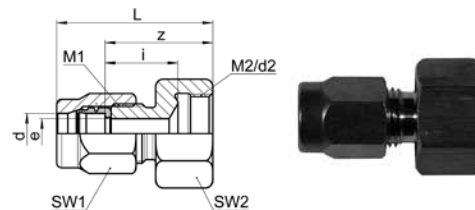
für Grundteile

## Réduction

pour pièces de base

## Reduction union

for union body


**SO 41821**

| Type -d2-d          | Mat.-Nr.             | bar | M1     | M2     | SW1 | SW2 | L    | i    | z    | e    | kg/100 |
|---------------------|----------------------|-----|--------|--------|-----|-----|------|------|------|------|--------|
| Für metrische Rohre | Pour tubes métriques |     |        |        |     |     |      |      |      |      |        |
| SO 41821-8-10       | 018.1820.083         | 125 | 14x1   | 12x1   | 17  | 17  | 34.0 | 7.0  | 14.0 | 6.5  | 4.310  |
| ★ SO 41821-10-4     | 018.1800.167         | 125 | 10x1   | 14x1   | 12  | 17  | 27.5 | 7.0  | 13.0 | 3.4  | 2.580  |
| ★ SO 41821-10-5     | 018.1800.170         | 125 | 10x1   | 14x1   | 12  | 17  | 27.5 | 7.0  | 13.0 | 4.0  | 2.530  |
| SO 41821-10-6       | 018.1800.175         | 125 | 10x1   | 14x1   | 12  | 17  | 27.5 | 7.0  | 13.0 | 4.5  | 2.470  |
| ★ SO 41821-12-6     | 018.1800.215         | 100 | 12x1   | 16x1   | 14  | 19  | 29.5 | 7.0  | 14.5 | 4.5  | 3.500  |
| SO 41821-12-8       | 018.1800.225         | 100 | 12x1   | 16x1   | 14  | 19  | 29.5 | 7.0  | 14.5 | 6.0  | 3.340  |
| ★ SO 41821-15-8     | 018.1800.400         | 40  | 14x1   | 20x1.5 | 17  | 24  | 33.5 | 8.0  | 15.5 | 6.5  | 5.920  |
| SO 41821-15-10      | 018.1800.410         | 40  | 14x1   | 20x1.5 | 17  | 24  | 33.5 | 8.0  | 15.5 | 8.0  | 5.720  |
| ★ SO 41821-18-10    | 018.1800.575         | 40  | 16x1   | 24x1.5 | 19  | 30  | 35.5 | 8.0  | 16.5 | 8.5  | 9.100  |
| SO 41821-18-12      | 018.1800.580         | 40  | 16x1   | 24x1.5 | 19  | 30  | 35.5 | 8.0  | 16.5 | 10.0 | 8.820  |
| ★ SO 41821-22-12    | 018.1800.730         | 25  | 20x1.5 | 28x1.5 | 24  | 36  | 39.0 | 8.0  | 18.5 | 10.0 | 15.140 |
| ★ SO 41821-22-13    | 018.1800.735         | 25  | 20x1.5 | 28x1.5 | 24  | 36  | 39.0 | 8.0  | 18.5 | 11.0 | 15.100 |
| SO 41821-22-14      | 018.1800.740         | 25  | 20x1.5 | 28x1.5 | 24  | 36  | 39.0 | 8.0  | 18.5 | 12.0 | 14.920 |
| SO 41821-22-15      | 018.1800.745         | 25  | 20x1.5 | 28x1.5 | 24  | 36  | 39.0 | 8.0  | 18.5 | 12.0 | 14.600 |
| ★ SO 41821-28-17    | 018.1800.868         | 16  | 28x1.5 | 36x2   | 32  | 41  | 50.0 | 10.0 | 22.5 | 15.0 | 25.300 |
| ★ SO 41821-28-18    | 018.1800.870         | 16  | 28x1.5 | 36x2   | 32  | 41  | 50.0 | 10.0 | 22.5 | 16.0 | 25.150 |
| ★ SO 41821-28-19    | 018.1800.875         | 16  | 28x1.5 | 36x2   | 32  | 41  | 50.0 | 10.0 | 22.5 | 16.0 | 24.840 |
| SO 41821-28-22      | 018.1800.900         | 16  | 28x1.5 | 36x2   | 32  | 41  | 50.0 | 10.0 | 22.5 | 19.0 | 23.620 |
| Für Zollrohre       | Pour tubes pouces    |     |        |        |     |     |      |      |      |      |        |
| SO 41821-10-6,35    | 018.1800.177         | 125 | 10x1   | 14x1   | 12  | 17  | 27.5 | 7.0  | 13.0 | 4.5  | 2.460  |
| SO 41821-15-9,52    | 018.1800.408         | 40  | 14x1   | 20x1.5 | 17  | 24  | 33.5 | 8.0  | 15.5 | 8.0  | 5.780  |
| ★ SO 41821-22-12,7  | 018.1800.732         | 25  | 20x1.5 | 28x1.5 | 24  | 36  | 39.0 | 8.0  | 18.5 | 11.0 | 15.100 |

4M

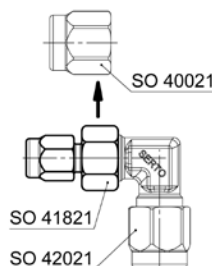
### Anwendungsbeispiele:



Die Reduktion SO 41821 kann auf jedes SERTO Formteil mit dem passenden Gewinde geschraubt werden. Durch diese Kombination ergeben sich weitere Rohrreduktionen.

Dichtungsprinzip: Bei der Montage drückt sich die Dichtkante des Übergangstückes in das SERTO Formteil ein. Dadurch entsteht eine einwandfreie metallische Dichtung. Wir empfehlen, das Gewinde mit einem geeigneten Flüssigklebstoff gegen unbeabsichtigtes Lösen zu sichern.

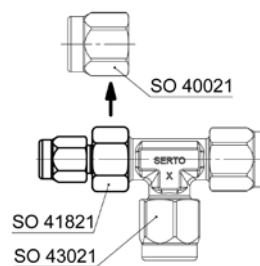
### Exemples d'utilisation:



La réduction SO 41821 peut être vissée sur chacune des pièces moulées SERTO avec le filetage correspondant. Grâce à cette combinaison, des réductions de tube plus importantes peuvent être obtenues.

Principe d'étanchéité: Lors du montage, l'arête d'étanchéité du réducteur s'appuie sur la pièce moulée SERTO. Cela crée un joint métallique parfait. Nous recommandons de fixer le filetage avec une colle liquide appropriée pour empêcher le desserrage involontaire.

### Sample combinations:



The SO 41821 reduction can be screwed onto all SERTO moulded parts with a matching thread. This combination enables further pipe reductions.

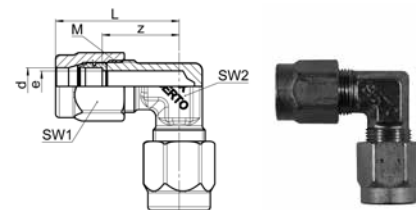
Sealing principle: On assembly, the sealing edge of the transition piece presses into the SERTO moulded part. This produces a perfect metallic seal. We recommend that the thread is secured against accidental unscrewing by means of a suitable liquid adhesive.

d=Rohrassens-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

# Winkelverschraubung Coude Elbow union



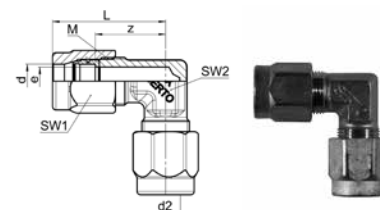
## SO 42021

| Type -d             | Mat.-Nr.             | bar | M      | SW1 | SW2 | L                | z    | e    | kg/100 |
|---------------------|----------------------|-----|--------|-----|-----|------------------|------|------|--------|
| Für metrische Rohre | Pour tubes métriques |     |        |     |     | For metric tubes |      |      |        |
| SO 42021-2          | 018.2000.020         | 125 | 6x0.75 | 8   | 7   | 16.5             | 12.5 | 1.5  | 1.000  |
| SO 42021-3          | 018.2000.030         | 125 | 6x0.75 | 8   | 7   | 18.0             | 13.0 | 2.5  | 1.000  |
| SO 42021-4          | 018.2000.040         | 125 | 8x1    | 10  | 7   | 22.0             | 16.0 | 3.4  | 1.940  |
| SO 42021-5          | 018.2000.050         | 125 | 8x1    | 10  | 7   | 22.5             | 16.0 | 3.5  | 1.920  |
| SO 42021-6          | 018.2000.060         | 250 | 10x1   | 12  | 10  | 23.5             | 16.0 | 4.5  | 2.750  |
| SO 42021-8          | 018.2000.080         | 150 | 12x1   | 14  | 10  | 26.0             | 18.0 | 6.5  | 3.680  |
| SO 42021-10         | 018.2000.100         | 125 | 14x1   | 17  | 14  | 30.5             | 20.5 | 8.5  | 6.340  |
| SO 42021-12         | 018.2000.120         | 100 | 16x1   | 19  | 17  | 32.5             | 21.5 | 10.0 | 7.200  |
| * SO 42021-13       | 018.2000.130         | 40  | 20x1.5 | 24  | 19  | 36.0             | 23.5 | 11.0 | 13.540 |
| SO 42021-14         | 018.2000.140         | 40  | 20x1.5 | 24  | 19  | 36.0             | 23.5 | 12.0 | 13.750 |
| SO 42021-15         | 018.2000.150         | 40  | 20x1.5 | 24  | 19  | 36.0             | 23.5 | 13.0 | 13.110 |
| SO 42021-16         | 018.2000.160         | 40  | 24x1.5 | 27  | 22  | 40.5             | 26.5 | 14.0 | 18.540 |
| SO 42021-17         | 018.2000.170         | 40  | 24x1.5 | 27  | 22  | 40.5             | 26.5 | 15.0 | 18.560 |
| SO 42021-18         | 018.2000.180         | 40  | 24x1.5 | 27  | 22  | 40.5             | 26.5 | 15.0 | 18.020 |
| * SO 42021-19       | 018.2000.190         | 25  | 28x1.5 | 32  | 27  | 48.0             | 30.5 | 16.0 | 28.600 |
| SO 42021-22         | 018.2000.220         | 25  | 28x1.5 | 32  | 27  | 48.0             | 30.5 | 19.0 | 26.400 |
| SO 42021-28         | 018.2000.280         | 16  | 36x2   | 41  | 32  | 58.5             | 39.0 | 24.0 | 38.300 |
| SO 42021-35         | 018.2000.350         | 16  | 42x2   | 50  | 41  | 67.0             | 45.0 | 31.0 | 64.600 |
| Für Zollrohre       | Pour tubes pouces    |     |        |     |     | For inch tubes   |      |      |        |
| SO 42021-3,2        | 018.2000.032         | 125 | 6x0.75 | 8   | 7   | 18.0             | 13.0 | 2.5  | 0.920  |
| SO 42021-6,35       | 018.2000.063         | 100 | 10x1   | 12  | 10  | 23.5             | 16.0 | 4.5  | 2.720  |
| SO 42021-9,52       | 018.2000.095         | 64  | 14x1   | 17  | 14  | 30.5             | 20.5 | 8.5  | 6.460  |
| * SO 42021-12,7     | 018.2000.127         | 40  | 20x1.5 | 24  | 19  | 36.0             | 23.5 | 11.0 | 13.540 |
| SO 42021-15,88      | 018.2000.158         | 40  | 24x1.5 | 27  | 22  | 40.5             | 26.5 | 14.0 | 18.540 |

d=Rohraussen-ø  
 e=kleinste Bohrung  
 L=Mass in montiertem Zustand  
 \*=mit reduziertem Klemmring

d=ø extérieur du tube  
 e=ø-min. de passage  
 L=après montage  
 \*=avec bague de serrage de réduction

d=tube outside diameter  
 e=minimum bore  
 L=installed length  
 \*=with reduction compression ferrule

**Winkelverschraubung reduziert**
**Coude réduit**
**Elbow reduction union**

**SO 42021 RED**

| Type -d -d2         | Mat.-Nr.             | bar              | M      | SW1 | SW2 | L    | z    | e    | kg/100 |
|---------------------|----------------------|------------------|--------|-----|-----|------|------|------|--------|
| Für metrische Rohre | Pour tubes métriques | For metric tubes |        |     |     |      |      |      |        |
| * SO 42021-5-3      | 018.2004.060         | 125              | 8x1    | 10  | 7   | 22.5 | 16.0 | 2.5  | 2.000  |
| * SO 42021-6-4      | 018.2004.110         | 100              | 10x1   | 12  | 10  | 23.5 | 16.0 | 3.4  | 2.860  |
| * SO 42021-6-5      | 018.2004.117         | 100              | 10x1   | 12  | 10  | 23.5 | 16.0 | 4.0  | 2.810  |
| * SO 42021-8-6      | 018.2004.140         | 250              | 12x1   | 14  | 10  | 26.0 | 18.0 | 4.5  | 3.740  |
| * SO 42021-10-8     | 018.2004.190         | 150              | 14x1   | 17  | 14  | 30.5 | 20.5 | 6.5  | 6.540  |
| * SO 42021-12-10    | 018.2004.240         | 100              | 16x1   | 19  | 17  | 32.5 | 21.5 | 8.5  | 9.000  |
| * SO 42021-14-12    | 018.2004.340         | 40               | 20x1.5 | 24  | 19  | 36.0 | 23.5 | 10.0 | 14.130 |
| * SO 42021-15-12    | 018.2004.420         | 40               | 20x1.5 | 24  | 19  | 36.0 | 23.5 | 10.0 | 13.650 |
| * SO 42021-15-13    | 018.2004.430         | 40               | 20x1.5 | 24  | 19  | 36.0 | 23.5 | 11.0 | 13.540 |
| * SO 42021-17-14    | 018.2004.530         | 40               | 24x1.5 | 27  | 22  | 40.5 | 26.5 | 12.0 | 19.270 |
| * SO 42021-18-15    | 018.2004.610         | 40               | 24x1.5 | 27  | 22  | 40.5 | 26.5 | 13.0 | 18.720 |
| SO 42021-18-16      | 018.2004.620         | 40               | 24x1.5 | 27  | 22  | 40.5 | 26.5 | 14.0 | 18.530 |
| * SO 42021-22-17    | 018.2004.750         | 25               | 28x1.5 | 32  | 27  | 48.0 | 30.5 | 15.0 | 28.060 |
| * SO 42021-22-18    | 018.2004.755         | 25               | 28x1.5 | 32  | 27  | 48.0 | 30.5 | 16.0 | 27.880 |
| * SO 42021-22-19    | 018.2004.760         | 25               | 28x1.5 | 32  | 27  | 48.0 | 30.5 | 16.0 | 27.620 |

Für Zollrohre

Pour tubes pouces

For inch tubes

|                    |              |     |        |    |    |      |      |      |        |
|--------------------|--------------|-----|--------|----|----|------|------|------|--------|
| SO 42021-6-6,35    | 018.2004.119 | 100 | 10x1   | 12 | 10 | 23.5 | 16.0 | 3.4  | 2.740  |
| SO 42021-10-9,52   | 018.2004.197 | 64  | 14x1   | 17 | 14 | 30.5 | 20.5 | 8.0  | 6.450  |
| * SO 42021-15-12,7 | 018.2004.427 | 40  | 20x1.5 | 24 | 19 | 36.0 | 23.5 | 11.0 | 13.540 |

Weitere Reduktionen siehe SO 41821

Autres réductions voir SO 41821

Alternative reductions see SO 41821

d/d2=Rohraussen-ø  
 e=kleinste Bohrung  
 L=Mass in montiertem Zustand  
 \*=mit reduziertem Klemmring

d/d2=ø extérieur du tube  
 e=ø-min. de passage  
 L=après montage  
 \*=avec bague de serrage de réduction

d/d2=tube outside diameter  
 e=minimum bore  
 L=installed length  
 \*=with reduction compression ferrule

# Winkelverschraubung

mit Übergangsnippel SO 40040

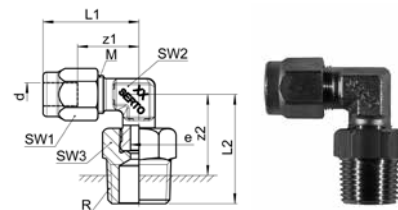
## Coude

avec adaptateur mâle SO 40040

## Elbow union

with male adaptor SO 40040

### SO 42121



| Type -d -R                  | Mat.-Nr.                     | bar | M    | SW1                    | SW2 | SW3 | L1   | L2   | z1   | z2   | e    | kg/100 |
|-----------------------------|------------------------------|-----|------|------------------------|-----|-----|------|------|------|------|------|--------|
| R=Rohrgewinde (kegelig)     | R=Filetage-gaz BSP (conique) |     |      | R=BSP thread (tapered) |     |     |      |      |      |      |      |        |
| * SO 42121-4- $\frac{3}{8}$ | 018.2101.068                 | 125 | 10x1 | 12                     | 7   | 17  | 10.0 | 29.0 | 16.0 | 19.0 | 3.4  | 5.040  |
| SO 42121-6- $\frac{1}{8}$   | 018.2101.100                 | 250 | 10x1 | 12                     | 10  | 12  | 23.5 | 26.0 | 16.0 | 19.0 | 4.5  | 3.240  |
| SO 42121-6- $\frac{1}{4}$   | 018.2101.110                 | 250 | 10x1 | 12                     | 10  | 14  | 23.5 | 30.0 | 16.0 | 20.0 | 4.5  | 4.400  |
| SO 42121-6- $\frac{3}{8}$   | 018.2101.120                 | 250 | 10x1 | 12                     | 10  | 17  | 23.5 | 29.0 | 16.0 | 19.0 | 4.5  | 4.930  |
| SO 42121-6- $\frac{1}{2}$   | 018.2101.125                 | 250 | 10x1 | 12                     | 10  | 22  | 23.5 | 32.0 | 16.0 | 18.0 | 4.5  | 7.480  |
| SO 42121-8- $\frac{1}{8}$   | 018.2101.160                 | 150 | 12x1 | 14                     | 10  | 14  | 26.0 | 28.0 | 18.0 | 21.0 | 5.0  | 4.070  |
| SO 42121-8- $\frac{1}{4}$   | 018.2101.170                 | 150 | 12x1 | 14                     | 10  | 14  | 26.0 | 32.0 | 18.0 | 22.0 | 6.5  | 4.710  |
| SO 42121-8- $\frac{3}{8}$   | 018.2101.180                 | 150 | 12x1 | 14                     | 10  | 17  | 26.0 | 32.0 | 18.0 | 22.0 | 6.5  | 6.210  |
| SO 42121-10- $\frac{1}{4}$  | 018.2101.270                 | 125 | 14x1 | 17                     | 14  | 17  | 31.5 | 34.5 | 21.5 | 24.5 | 8.5  | 6.990  |
| SO 42121-10- $\frac{3}{8}$  | 018.2101.280                 | 125 | 14x1 | 17                     | 14  | 17  | 31.5 | 34.5 | 21.5 | 24.5 | 8.5  | 7.810  |
| SO 42121-10- $\frac{1}{2}$  | 018.2101.285                 | 100 | 14x1 | 17                     | 14  | 22  | 31.5 | 36.5 | 21.5 | 21.5 | 8.5  | 7.840  |
| SO 42121-12- $\frac{1}{4}$  | 018.2101.380                 | 100 | 16x1 | 19                     | 17  | 19  | 32.5 | 36.5 | 21.5 | 26.5 | 8.5  | 9.010  |
| SO 42121-12- $\frac{3}{8}$  | 018.2101.390                 | 100 | 16x1 | 19                     | 17  | 19  | 32.5 | 36.5 | 21.5 | 26.5 | 10.5 | 9.450  |
| SO 42121-12- $\frac{1}{2}$  | 018.2101.400                 | 100 | 16x1 | 19                     | 17  | 22  | 32.5 | 39.5 | 21.5 | 25.5 | 10.0 | 12.290 |
| SO 42121-28-1               | 018.2101.850                 | 16  | 36x2 | 41                     | 32  | 41  | 58.5 | 65.0 | 39.0 | 48.0 | 24.0 | 36.430 |
| SO 42121-35-1 $\frac{1}{4}$ | 018.2101.944                 | 16  | 42x2 | 50                     | 41  | 50  | 67.0 | 73.0 | 40.0 | 5.0  | 31.0 | 62.000 |

# Winkelverschraubung

mit Übergangsnippel SO 40040 NPT

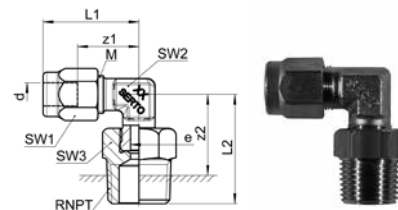
## Coude

avec adaptateur mâle SO 40040 NPT

## Elbow union

with male adaptor SO 40040 NPT

### SO 42121 NPT



| Type -d -RNPT                 | Mat.-Nr.             | bar | M    | SW1              | SW2 | SW3 | L1   | L2   | z1   | z2   | e   | kg/100 |
|-------------------------------|----------------------|-----|------|------------------|-----|-----|------|------|------|------|-----|--------|
| Für metrische Rohre           | Pour tubes métriques |     |      | For metric tubes |     |     |      |      |      |      |     |        |
| RNPT=NPT Gewinde              | RNPT=Filetage NPT    |     |      | RNPT=NPT thread  |     |     |      |      |      |      |     |        |
| SO 42121-6- $\frac{1}{4}$ NPT | 018.2102.110         | 250 | 10x1 | 12               | 10  | 14  | 23.5 | 32.0 | 16.0 | 22.0 | 4.5 | 4.720  |
| SO 42121-8- $\frac{1}{8}$ NPT | 018.2102.160         | 150 | 12x1 | 14               | 7   | 14  | 26.0 | 30.5 | 18.0 | 24.0 | 6.0 | 3.550  |

|                                  |                   |     |      |                |   |    |      |      |      |      |     |       |
|----------------------------------|-------------------|-----|------|----------------|---|----|------|------|------|------|-----|-------|
| Für Zollrohre                    | Pour tubes pouces |     |      | For inch tubes |   |    |      |      |      |      |     |       |
| SO 42121-6,35- $\frac{1}{4}$ NPT | 018.2102.140      | 100 | 10x1 | 12             | 7 | 14 | 23.5 | 32.0 | 16.0 | 22.0 | 4.5 | 3.920 |

d=Rohrassens-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

# Winkelverschraubung

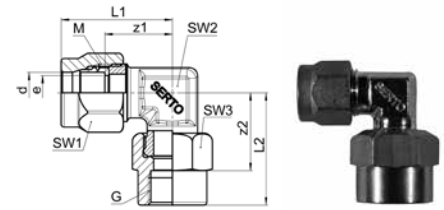
mit Übergangsmuffe SO 40030

## Coude

avec adaptateur femelle SO 40030

## Elbow union

with female adaptor SO 40030



### SO 42221

| Type -d -G                  | Mat.-Nr.                         | bar | M      | SW1 | SW2 | SW3 | L1                      | L2   | z1   | z2   | e    | kg/100 |
|-----------------------------|----------------------------------|-----|--------|-----|-----|-----|-------------------------|------|------|------|------|--------|
| Für metrische Rohre         | Pour tubes métriques             |     |        |     |     |     | For metric tubes        |      |      |      |      |        |
| G=Rohrgewinde (zylindrisch) | G=Filetage-gaz BSP (cylindrique) |     |        |     |     |     | G=BSP thread (straight) |      |      |      |      |        |
| SO 42221-6-1/8              | 018.2201.100                     | 250 | 10x1   | 12  | 10  | 14  | 23.5                    | 29.0 | 16.0 | 19.0 | 4.5  | 3.580  |
| SO 42221-6-1/4              | 018.2201.110                     | 250 | 10x1   | 12  | 10  | 17  | 23.5                    | 30.0 | 16.0 | 19.0 | 4.5  | 4.440  |
| SO 42221-6-3/8              | 018.2201.120                     | 250 | 10x1   | 12  | 10  | 22  | 23.5                    | 31.0 | 16.0 | 19.0 | 4.5  | 6.710  |
| SO 42221-8-1/8              | 018.2201.160                     | 150 | 12x1   | 14  | 10  | 17  | 26.0                    | 31.0 | 18.0 | 21.0 | 6.5  | 5.460  |
| SO 42221-8-1/4              | 018.2201.170                     | 150 | 12x1   | 14  | 10  | 17  | 26.0                    | 33.0 | 18.0 | 22.0 | 6.5  | 5.370  |
| SO 42221-10-1/4             | 018.2201.270                     | 125 | 14x1   | 17  | 14  | 17  | 30.5                    | 34.5 | 20.5 | 23.5 | 8.5  | 6.740  |
| SO 42221-10-3/8             | 018.2201.280                     | 125 | 14x1   | 17  | 14  | 22  | 30.5                    | 35.5 | 20.5 | 23.5 | 8.5  | 9.220  |
| * SO 42221-10-1/2           | 018.2201.285                     | 100 | 16x1   | 19  | 17  | 27  | 32.5                    | 38.5 | 21.5 | 24.5 | 8.5  | 12.180 |
| SO 42221-12-1/4             | 018.2201.380                     | 100 | 16x1   | 19  | 17  | 19  | 32.5                    | 35.5 | 21.5 | 24.5 | 10.5 | 7.010  |
| SO 42221-12-3/8             | 018.2201.390                     | 100 | 16x1   | 19  | 17  | 22  | 32.5                    | 36.5 | 21.5 | 24.5 | 10.0 | 9.250  |
| SO 42221-14-3/4             | 018.2201.506                     | 64  | 20x1.5 | 24  | 19  | 32  | 36.0                    | 44.0 | 23.5 | 27.0 | 12.0 | 20.170 |
| SO 42221-15-3/8             | 018.2201.532                     | 64  | 20x1.5 | 24  | 19  | 24  | 36.0                    | 39.0 | 23.5 | 27.0 | 13.0 | 13.970 |
| SO 42221-15-3/4             | 018.2201.536                     | 64  | 20x1.5 | 24  | 19  | 32  | 36.0                    | 44.0 | 23.5 | 27.0 | 13.0 | 19.850 |
| SO 42221-28-1               | 018.2201.850                     | 16  | 36x2   | 41  | 32  | 41  | 58.5                    | 64.0 | 39.0 | 44.0 | 24.0 | 38.230 |
| Für Zollrohre               | Pour tubes pouces                |     |        |     |     |     | For inch tubes          |      |      |      |      |        |
| SO 42221-6,35-1/4           | 018.2201.140                     | 100 | 10x1   | 12  | 10  | 17  | 23.5                    | 30.0 | 16.0 | 19.0 | 4.5  | 4.420  |

d=Rohraussen-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

# Anschlusswinkel

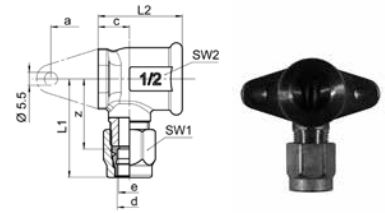
mit Wandflansch

## Coude femelle

avec applique de fixation

## Female adaptor elbow union

with wall flange


**SO 42321**

| Type -d -G                                   | Mat.-Nr.                         | bar | M      | SW1 | SW2 | L1                      | L2   | a    | c    | z    | e    | kg/100 |
|----------------------------------------------|----------------------------------|-----|--------|-----|-----|-------------------------|------|------|------|------|------|--------|
| Für metrische Rohre                          | Pour tubes métriques             |     |        |     |     | For metric tubes        |      |      |      |      |      |        |
| G=Rohrgewinde (zylindrisch)                  | G=Filetage-gaz BSP (cylindrique) |     |        |     |     | G=BSP thread (straight) |      |      |      |      |      |        |
| ★ SO 42321-8- <sup>3</sup> / <sub>8</sub>    | 018.2301.180                     | 150 | 14x1   | 17  | 22  | 34.5                    | 27.0 | 40.0 | 11.0 | 24.5 | 6.5  | 10.140 |
| SO 42321-10- <sup>3</sup> / <sub>8</sub>     | 018.2301.280                     | 125 | 14x1   | 17  | 22  | 34.5                    | 27.0 | 40.0 | 11.0 | 24.5 | 8.0  | 9.940  |
| ★ SO 42321-10- <sup>1</sup> / <sub>2</sub>   | 018.2301.285                     | 100 | 16x1   | 19  | 27  | 41.0                    | 35.0 | 40.0 | 13.0 | 29.0 | 8.5  | 14.080 |
| SO 42321-12- <sup>3</sup> / <sub>8</sub>     | 018.2301.390                     | 100 | 16x1   | 19  | 27  | 36.0                    | 27.0 | 40.0 | 11.0 | 25.0 | 9.0  | 10.160 |
| SO 42321-12- <sup>1</sup> / <sub>2</sub>     | 018.2301.400                     | 100 | 16x1   | 19  | 27  | 41.0                    | 35.0 | 40.0 | 13.0 | 29.0 | 9.0  | 13.800 |
| ★ SO 42321-13- <sup>1</sup> / <sub>2</sub>   | 018.2301.454                     | 40  | 20x1.5 | 24  | 27  | 43.0                    | 36.0 | 40.0 | 14.0 | 30.5 | 11.0 | 16.230 |
| SO 42321-14- <sup>1</sup> / <sub>2</sub>     | 018.2301.504                     | 40  | 20x1.5 | 24  | 27  | 43.0                    | 36.0 | 40.0 | 14.0 | 30.5 | 12.0 | 16.120 |
| SO 42321-15- <sup>1</sup> / <sub>2</sub>     | 018.2301.534                     | 40  | 20x1.5 | 24  | 27  | 43.0                    | 36.0 | 40.0 | 14.0 | 30.5 | 13.0 | 15.800 |
| Für Zollrohre                                | Pour tubes pouces                |     |        |     |     | For inch tubes          |      |      |      |      |      |        |
| SO 42321-9,52- <sup>3</sup> / <sub>8</sub>   | 018.2301.235                     | 64  | 14x1   | 17  | 22  | 34.5                    | 27.0 | 40.0 | 11.0 | 24.5 | 8.0  | 10.000 |
| ★ SO 42321-12,7- <sup>1</sup> / <sub>2</sub> | 018.2301.434                     | 40  | 20x1.5 | 24  | 27  | 43.0                    | 36.0 | 40.0 | 14.0 | 30.5 | 11.0 | 16.230 |

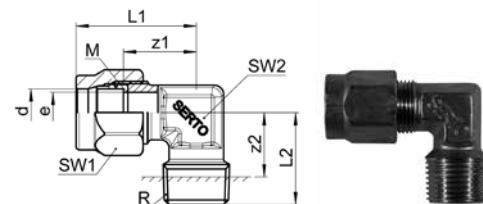
d=Rohraussen-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule



# Winkel-Einschraubverschraubung Coude mâle Male adaptor elbow union


**SO 42421**

| Type -d-R                                      | Mat.-Nr.                                             | bar                                        | M      | SW1 | SW2 | L1   | L2   | z1   | z2   | e    | kg/100 |
|------------------------------------------------|------------------------------------------------------|--------------------------------------------|--------|-----|-----|------|------|------|------|------|--------|
| Für metrische Rohre<br>R=Rohrgewinde (kegelig) | Pour tubes métriques<br>R=Filetage-gaz BSP (conique) | For metric tubes<br>R=BSP thread (tapered) |        |     |     |      |      |      |      |      |        |
| ★ SO 42421-3-1/8                               | 018.2401.040                                         | 125                                        | 8x1    | 10  | 7   | 22.5 | 17.0 | 16.0 | 11.0 | 2.5  | 1.600  |
| SO 42421-4-1/8                                 | 018.2401.060                                         | 125                                        | 8x1    | 10  | 7   | 22.0 | 17.0 | 16.0 | 11.0 | 3.4  | 1.560  |
| ★ SO 42421-4-1/4                               | 018.2401.065                                         | 100                                        | 10x1   | 12  | 10  | 25.5 | 22.5 | 18.0 | 13.0 | 3.4  | 3.000  |
| SO 42421-5-1/8                                 | 018.2401.082                                         | 125                                        | 8x1    | 12  | 7   | 22.5 | 17.0 | 16.0 | 11.0 | 3.5  | 1.540  |
| ★ SO 42421-5-1/4                               | 018.2401.084                                         | 100                                        | 10x1   | 12  | 10  | 25.5 | 22.5 | 18.0 | 13.0 | 4.0  | 2.940  |
| SO 42421-6-1/8                                 | 018.2401.100                                         | 250                                        | 10x1   | 12  | 10  | 23.5 | 17.5 | 16.0 | 12.0 | 4.5  | 2.150  |
| SO 42421-6-1/4                                 | 018.2401.110                                         | 250                                        | 10x1   | 14  | 10  | 23.5 | 22.5 | 18.0 | 13.0 | 4.5  | 2.880  |
| SO 42421-8-1/8                                 | 018.2401.160                                         | 150                                        | 12x1   | 14  | 10  | 26.0 | 18.0 | 18.0 | 11.5 | 6.0  | 2.540  |
| SO 42421-8-1/4                                 | 018.2401.170                                         | 150                                        | 12x1   | 17  | 10  | 26.0 | 22.5 | 18.0 | 13.0 | 6.5  | 3.090  |
| ★ SO 42421-8-3/8                               | 018.2401.180                                         | 150                                        | 14x1   | 17  | 14  | 30.5 | 25.0 | 20.5 | 15.0 | 6.5  | 5.310  |
| SO 42421-10-1/4                                | 018.2401.270                                         | 125                                        | 14x1   | 17  | 14  | 30.5 | 25.0 | 20.5 | 15.5 | 8.5  | 4.640  |
| SO 42421-10-3/8                                | 018.2401.280                                         | 125                                        | 14x1   | 19  | 14  | 30.5 | 25.0 | 20.5 | 15.0 | 8.5  | 5.110  |
| ★ SO 42421-10-1/2                              | 018.2401.285                                         | 100                                        | 16x1   | 19  | 19  | 34.0 | 29.5 | 23.0 | 16.5 | 8.5  | 9.020  |
| SO 42421-12-1/4                                | 018.2401.380                                         | 100                                        | 16x1   | 19  | 17  | 32.5 | 26.0 | 21.5 | 16.5 | 8.5  | 8.480  |
| SO 42421-12-3/8                                | 018.2401.390                                         | 100                                        | 16x1   | 19  | 17  | 32.5 | 26.0 | 21.5 | 16.0 | 10.0 | 6.120  |
| SO 42421-12-1/2                                | 018.2401.400                                         | 100                                        | 16x1   | 19  | 19  | 34.0 | 29.5 | 23.0 | 16.5 | 10.0 | 8.710  |
| ★ SO 42421-13-1/2                              | 018.2401.454                                         | 40                                         | 20x1.5 | 24  | 19  | 36.0 | 29.5 | 23.5 | 16.5 | 11.0 | 10.380 |
| SO 42421-14-3/8                                | 018.2401.502                                         | 40                                         | 20x1.5 | 24  | 19  | 36.0 | 28.0 | 23.5 | 16.0 | 10.5 | 7.570  |
| SO 42421-14-1/2                                | 018.2401.504                                         | 40                                         | 20x1.5 | 24  | 19  | 36.0 | 29.5 | 23.5 | 16.5 | 12.0 | 10.270 |
| ★ SO 42421-14-3/4                              | 018.2401.506                                         | 64                                         | 24x1.5 | 27  | 22  | 41.0 | 35.0 | 26.5 | 21.0 | 12.0 | 16.100 |
| SO 42421-15-3/8                                | 018.2401.532                                         | 40                                         | 20x1.5 | 24  | 19  | 36.0 | 28.0 | 23.5 | 16.0 | 10.5 | 7.350  |
| SO 42421-15-1/2                                | 018.2401.534                                         | 40                                         | 20x1.5 | 24  | 22  | 36.0 | 29.5 | 23.5 | 16.5 | 13.0 | 9.950  |
| ★ SO 42421-15-3/4                              | 018.2401.536                                         | 40                                         | 24x1.5 | 27  | 22  | 40.5 | 35.0 | 26.5 | 21.0 | 13.0 | 15.900 |
| SO 42421-16-1/2                                | 018.2401.566                                         | 40                                         | 24x1.5 | 27  | 22  | 40.5 | 31.5 | 26.5 | 18.5 | 14.0 | 13.040 |
| SO 42421-16-3/4                                | 018.2401.568                                         | 40                                         | 24x1.5 | 27  | 22  | 40.5 | 35.0 | 26.5 | 21.0 | 14.0 | 15.670 |
| SO 42421-17-1/2                                | 018.2401.596                                         | 40                                         | 24x1.5 | 27  | 22  | 40.5 | 31.5 | 26.5 | 18.5 | 15.0 | 12.790 |
| SO 42421-17-3/4                                | 018.2401.598                                         | 40                                         | 24x1.5 | 27  | 22  | 40.5 | 35.0 | 26.5 | 21.0 | 15.0 | 15.420 |
| SO 42421-18-1/2                                | 018.2401.646                                         | 40                                         | 24x1.5 | 27  | 22  | 40.5 | 31.5 | 26.5 | 18.5 | 15.0 | 12.520 |
| SO 42421-18-3/4                                | 018.2401.648                                         | 40                                         | 24x1.5 | 27  | 22  | 40.5 | 35.0 | 26.5 | 21.0 | 15.0 | 15.150 |
| ★ SO 42421-19-3/4                              | 018.2401.678                                         | 25                                         | 28x1.5 | 32  | 27  | 48.0 | 35.5 | 30.5 | 21.0 | 16.0 | 19.600 |
| SO 42421-22-3/4                                | 018.2401.768                                         | 25                                         | 28x1.5 | 32  | 27  | 48.0 | 35.5 | 30.5 | 21.0 | 19.0 | 18.500 |

Für Zollrohre

Pour tubes pouces

For inch tubes

|                     |              |     |        |    |    |      |      |      |      |      |        |
|---------------------|--------------|-----|--------|----|----|------|------|------|------|------|--------|
| ★ SO 42421-3,2-1/8  | 018.2401.042 | 125 | 8x1    | 10 | 7  | 22.0 | 17.0 | 16.0 | 11.0 | 2.5  | 1.600  |
| SO 42421-6,35-1/8   | 018.2401.135 | 100 | 10x1   | 12 | 10 | 23.5 | 17.5 | 16.0 | 12.0 | 4.5  | 2.140  |
| SO 42421-6,35-1/4   | 018.2401.140 | 100 | 10x1   | 12 | 10 | 25.5 | 22.5 | 18.0 | 13.0 | 4.5  | 2.870  |
| SO 42421-9,52-1/4   | 018.2401.230 | 64  | 14x1   | 17 | 14 | 30.5 | 25.0 | 20.5 | 15.5 | 8.0  | 4.700  |
| SO 42421-9,52-3/8   | 018.2401.235 | 64  | 14x1   | 17 | 14 | 30.5 | 25.0 | 20.5 | 15.0 | 8.0  | 5.170  |
| ★ SO 42421-12,7-1/2 | 018.2401.434 | 40  | 20x1.5 | 24 | 19 | 36.0 | 29.5 | 23.5 | 16.5 | 11.0 | 10.380 |
| SO 42421-15,88-1/2  | 018.2401.541 | 40  | 24x1.5 | 27 | 22 | 40.5 | 31.5 | 26.5 | 18.5 | 14.0 | 13.040 |

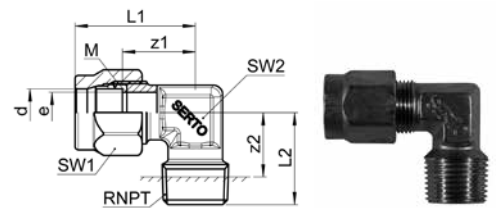
d=Rohraussen-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

# Winkel-Einschraubverschraubung NPT Coude mâle NPT Male adaptor elbow union NPT

## SO 42421 NPT



| Type -d -RNPT                           | Mat.-Nr.                                  | bar | M    | SW1 | SW2 | L1   | L2   | z1   | z2   | e    | kg/100 |
|-----------------------------------------|-------------------------------------------|-----|------|-----|-----|------|------|------|------|------|--------|
| Für metrische Rohre<br>RNPT=NPT Gewinde | Pour tubes métriques<br>RNPT=Filetage NPT |     |      |     |     |      |      |      |      |      |        |
| For metric tubes<br>RNPT=NPT thread     |                                           |     |      |     |     |      |      |      |      |      |        |
| ★ SO 42421-3-1/8 NPT                    | 018.2402.040                              | 125 | 8x1  | 10  | 7   | 22.5 | 17.0 | 16.0 | 10.5 | 2.5  | 1.550  |
| SO 42421-4-1/8 NPT                      | 018.2402.060                              | 125 | 8x1  | 10  | 7   | 22.0 | 17.0 | 16.0 | 10.5 | 3.4  | 1.510  |
| SO 42421-5-1/8 NPT                      | 018.2402.082                              | 125 | 8x1  | 10  | 7   | 22.5 | 17.0 | 16.0 | 10.5 | 3.5  | 1.490  |
| SO 42421-6-1/8 NPT                      | 018.2402.100                              | 250 | 10x1 | 12  | 10  | 23.5 | 17.5 | 16.0 | 11.0 | 4.5  | 2.020  |
| ★ SO 42421-6-1/4 NPT                    | 018.2402.110                              | 250 | 12x1 | 14  | 10  | 26.0 | 22.5 | 18.0 | 12.5 | 4.5  | 3.260  |
| SO 42421-8-1/4 NPT                      | 018.2402.170                              | 150 | 12x1 | 14  | 10  | 26.0 | 22.5 | 18.0 | 12.5 | 6.5  | 3.100  |
| SO 42421-8-3/8 NPT                      | 018.2402.180                              | 150 | 14x1 | 17  | 14  | 30.5 | 25.0 | 20.5 | 15.5 | 6.5  | 5.100  |
| SO 42421-10-1/4 NPT                     | 018.2402.270                              | 125 | 14x1 | 17  | 14  | 30.5 | 25.0 | 20.5 | 15.0 | 6.5  | 4.610  |
| SO 42421-10-3/8 NPT                     | 018.2402.280                              | 125 | 14x1 | 17  | 14  | 30.5 | 25.0 | 20.5 | 15.5 | 8.5  | 4.900  |
| SO 42421-10-1/2 NPT                     | 018.2402.285                              | 125 | 16x1 | 19  | 19  | 34.0 | 29.5 | 23.0 | 16.0 | 8.5  | 9.050  |
| SO 42421-12-3/8 NPT                     | 018.2402.390                              | 100 | 16x1 | 19  | 17  | 32.5 | 26.0 | 21.5 | 15.5 | 8.5  | 6.100  |
| SO 42421-12-1/2 NPT                     | 018.2402.400                              | 100 | 16x1 | 19  | 19  | 34.0 | 29.5 | 23.0 | 16.0 | 10.0 | 8.700  |

Für Zollrohre

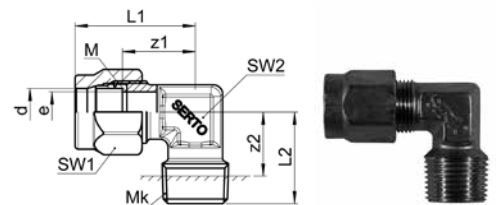
Pour tubes pouces

For inch tubes

|                       |              |     |      |    |    |      |      |      |      |     |       |
|-----------------------|--------------|-----|------|----|----|------|------|------|------|-----|-------|
| SO 42421-6,35-1/8 NPT | 018.2402.135 | 100 | 10x1 | 12 | 10 | 23.5 | 17.5 | 16.0 | 11.0 | 4.5 | 2.010 |
| SO 42421-9,52-1/4 NPT | 018.2402.230 | 64  | 14x1 | 17 | 14 | 30.5 | 25.0 | 20.5 | 15.0 | 6.5 | 4.670 |
| SO 42421-9,52-3/8 NPT | 018.2402.235 | 64  | 14x1 | 17 | 14 | 30.5 | 25.0 | 20.5 | 15.5 | 8.0 | 4.960 |

# Winkel-Einschraubverschraubung METR Coude mâle METR Male adaptor elbow union METR

## SO 42421 METR



| Type -d -Mk                                            | Mat.-Nr.                                               | bar | M    | SW1 | SW2 | L1   | L2   | z1   | z2   | e   | kg/100 |
|--------------------------------------------------------|--------------------------------------------------------|-----|------|-----|-----|------|------|------|------|-----|--------|
| Für metrische Rohre<br>Mk=metrisches Gewinde (kegelig) | Pour tubes métriques<br>Mk=Filetage métrique (conique) |     |      |     |     |      |      |      |      |     |        |
| For metric tubes<br>Mk=metric thread (tapered)         |                                                        |     |      |     |     |      |      |      |      |     |        |
| ★ SO 42421-3-M8X1                                      | 018.2403.060                                           | 125 | 8x1  | 10  | 7   | 22.5 | 17.0 | 16.0 | 10.0 | 2.5 | 1.370  |
| SO 42421-4-M8X1                                        | 018.2403.090                                           | 125 | 8x1  | 10  | 7   | 22.0 | 17.0 | 16.0 | 10.0 | 3.4 | 1.330  |
| ★ SO 42421-4-M10X1                                     | 018.2403.096                                           | 125 | 10x1 | 12  | 10  | 23.5 | 17.5 | 16.0 | 10.5 | 3.4 | 2.120  |
| SO 42421-5-M8X1                                        | 018.2403.125                                           | 125 | 8x1  | 10  | 7   | 22.5 | 17.0 | 16.0 | 10.0 | 3.5 | 1.310  |
| ★ SO 42421-5-M10X1                                     | 018.2403.135                                           | 125 | 10x1 | 12  | 10  | 23.5 | 17.5 | 16.0 | 10.5 | 4.0 | 2.070  |
| SO 42421-6-M10X1                                       | 018.2403.180                                           | 250 | 10x1 | 12  | 10  | 23.5 | 17.5 | 16.0 | 10.5 | 4.5 | 2.010  |

Für Zollrohre

Pour tubes pouces

For inch tubes

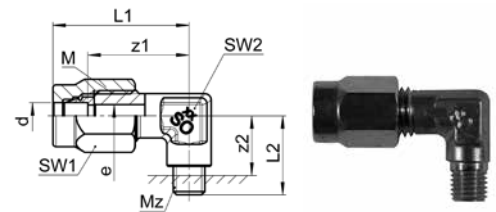
|                     |              |     |      |    |    |      |      |      |      |     |       |
|---------------------|--------------|-----|------|----|----|------|------|------|------|-----|-------|
| SO 42421-6,35-M10X1 | 018.2403.210 | 100 | 10x1 | 12 | 10 | 23.5 | 17.5 | 16.0 | 10.5 | 4.5 | 2.000 |
|---------------------|--------------|-----|------|----|----|------|------|------|------|-----|-------|

d=Rohrassens-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

# Winkel-Einschraubverschraubung METR Coude mâle METR Male adaptor elbow union METR



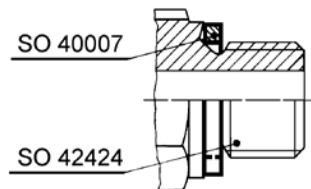
## SO 42424 METR

| Type -d -Mz                         | Mat.-Nr.     | bar                                | M      | SW1                         | SW2 | L1   | L2   | z1   | z2  | e   | kg/100 |
|-------------------------------------|--------------|------------------------------------|--------|-----------------------------|-----|------|------|------|-----|-----|--------|
| Mz=metrisches Gewinde (zylindrisch) |              | Mz=Filetage métrique (cylindrique) |        | Mz=Metric thread (straight) |     |      |      |      |     |     |        |
| SO 42424-2-M5                       | 018.2443.020 | 125                                | 6x0.75 | 8                           | 7   | 16.5 | 12.0 | 12.5 | 8.5 | 1.5 | 0.770  |
| SO 42424-3-M5                       | 018.2443.050 | 125                                | 6x0.75 | 8                           | 7   | 18.0 | 12.0 | 13.0 | 8.5 | 2.2 | 0.810  |
| * SO 42424-3-M6x0,75                | 018.2443.055 | 125                                | 8x1    | 10                          | 7   | 22.5 | 14.0 | 16.0 | 9.0 | 2.5 | 1.260  |
| SO 42424-4-M5                       | 018.2443.080 | 125                                | 8x1    | 10                          | 7   | 22.0 | 12.5 | 16.0 | 9.0 | 2.2 | 1.170  |
| SO 42424-4-M6x0,75                  | 018.2443.085 | 125                                | 8x1    | 10                          | 7   | 22.0 | 14.0 | 16.0 | 9.0 | 2.5 | 1.220  |
| SO 42424-5-M5                       | 018.2443.110 | 125                                | 8x1    | 10                          | 7   | 22.5 | 12.5 | 16.0 | 9.0 | 2.2 | 1.150  |
| SO 42424-5-M6x0,75                  | 018.2443.115 | 125                                | 8x1    | 10                          | 7   | 22.5 | 14.0 | 16.0 | 9.0 | 2.5 | 1.200  |

### Anwendungsbeispiele:

### Exemples d'utilisation:

### Sample combinations:



Die entsprechende Dichtung SO 40007/  
SO 40507 ist separat zu bestellen.

Le joint correspondant SO 40007/  
SO 40507 doit être commandé séparément.

The appropriate washer SO 40007/  
SO 40507 is to be ordered separately.

d=Rohraussen-ø  
 e=kleinste Bohrung  
 L=Mass in montiertem Zustand  
 \*=mit reduziertem Klemmring

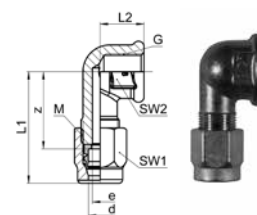
d=ø extérieur du tube  
 e=ø-min. de passage  
 L=après montage  
 \*=avec bague de serrage de réduction

d=tube outside diameter  
 e=minimum bore  
 L=installed length  
 \*=with reduction compression ferrule

# Winkel-Aufschraubverschraubung

## Coude femelle

## Female adaptor elbow union



### SO 42521

| Type -d-G                                          | Mat.-Nr.                                                 | bar                                         | M      | SW1 | SW2 | L1   | L2   | z    | e    | kg/100 |
|----------------------------------------------------|----------------------------------------------------------|---------------------------------------------|--------|-----|-----|------|------|------|------|--------|
| Für metrische Rohre<br>G=Rohrgewinde (zylindrisch) | Pour tubes métriques<br>G=Filetage-gaz BSP (cylindrique) | For metric tubes<br>G=BSP thread (straight) |        |     |     |      |      |      |      |        |
| ★ SO 42521-3-1/8                                   | 018.2501.040                                             | 125                                         | 8x1    | 10  | 14  | 26.5 | 11.5 | 20.0 | 2.5  | 2.250  |
| SO 42521-4-1/8                                     | 018.2501.060                                             | 125                                         | 8x1    | 10  | 14  | 26.0 | 11.5 | 20.0 | 3.4  | 2.220  |
| SO 42521-5-1/8                                     | 018.2501.082                                             | 125                                         | 8x1    | 10  | 14  | 26.5 | 11.5 | 20.0 | 3.5  | 2.190  |
| SO 42521-6-1/8                                     | 018.2501.100                                             | 250                                         | 10x1   | 12  | 14  | 27.5 | 11.5 | 20.0 | 4.0  | 2.600  |
| ★ SO 42521-6-1/4                                   | 018.2501.110                                             | 250                                         | 12x1   | 14  | 19  | 31.5 | 13.5 | 23.5 | 4.5  | 4.460  |
| SO 42521-8-1/4                                     | 018.2501.170                                             | 150                                         | 12x1   | 14  | 19  | 31.5 | 13.5 | 23.5 | 6.0  | 4.300  |
| ★ SO 42521-8-3/8                                   | 018.2501.180                                             | 150                                         | 14x1   | 17  | 22  | 34.5 | 16.0 | 24.5 | 6.5  | 6.590  |
| SO 42521-10-3/8                                    | 018.2501.280                                             | 125                                         | 14x1   | 17  | 22  | 34.5 | 16.0 | 24.5 | 8.0  | 6.390  |
| SO 42521-12-3/8                                    | 018.2501.390                                             | 100                                         | 16x1   | 19  | 22  | 35.5 | 16.0 | 24.5 | 9.0  | 6.860  |
| ★ SO 42521-12-1/2                                  | 018.2501.400                                             | 40                                          | 20x1.5 | 24  | 27  | 42.0 | 22.0 | 29.5 | 10.0 | 12.950 |
| ★ SO 42521-13-1/2                                  | 018.2501.454                                             | 40                                          | 20x1.5 | 24  | 27  | 42.0 | 22.0 | 29.5 | 11.0 | 12.840 |
| SO 42521-14-1/2                                    | 018.2501.504                                             | 40                                          | 20x1.5 | 24  | 27  | 42.0 | 22.0 | 29.5 | 12.0 | 12.730 |
| SO 42521-15-1/2                                    | 018.2501.534                                             | 40                                          | 20x1.5 | 24  | 27  | 42.0 | 22.0 | 29.5 | 13.0 | 12.410 |
| ★ SO 42521-15-3/4                                  | 018.2501.536                                             | 40                                          | 24x1.5 | 27  | 32  | 47.0 | 24.0 | 33.0 | 13.0 | 19.160 |
| SO 42521-16-1/2                                    | 018.2501.566                                             | 40                                          | 24x1.5 | 27  | 27  | 45.0 | 24.0 | 31.0 | 14.0 | 16.350 |
| SO 42521-16-3/4                                    | 018.2501.568                                             | 40                                          | 24x1.5 | 27  | 32  | 47.0 | 24.0 | 33.0 | 14.0 | 18.930 |
| SO 42521-17-1/2                                    | 018.2501.596                                             | 40                                          | 24x1.5 | 27  | 27  | 45.0 | 22.0 | 31.0 | 15.0 | 16.100 |
| SO 42521-17-3/4                                    | 018.2501.598                                             | 40                                          | 24x1.5 | 27  | 32  | 47.0 | 24.0 | 33.0 | 15.0 | 18.680 |
| SO 42521-18-1/2                                    | 018.2501.646                                             | 40                                          | 24x1.5 | 27  | 27  | 45.0 | 22.0 | 31.0 | 13.0 | 15.830 |
| SO 42521-18-3/4                                    | 018.2501.648                                             | 40                                          | 24x1.5 | 27  | 32  | 47.0 | 24.0 | 33.0 | 15.0 | 18.410 |
| ★ SO 42521-19-3/4                                  | 018.2501.678                                             | 25                                          | 28x1.5 | 32  | 32  | 52.5 | 24.0 | 33.0 | 16.0 | 22.360 |
| SO 42521-22-3/4                                    | 018.2501.768                                             | 25                                          | 28x1.5 | 32  | 32  | 52.5 | 24.0 | 33.0 | 19.0 | 20.960 |
| Für Zollrohre                                      | Pour tubes pouces                                        | For inch tubes                              |        |     |     |      |      |      |      |        |
| SO 42521-6,35-1/8                                  | 018.2501.135                                             | 100                                         | 10x1   | 12  | 14  | 27.5 | 11.5 | 20.0 | 4.0  | 2.590  |
| SO 42521-9,52-3/8                                  | 018.2501.235                                             | 64                                          | 14x1   | 17  | 22  | 34.5 | 16.0 | 24.5 | 8.0  | 6.450  |
| ★ SO 42521-12,7-1/2                                | 018.2501.434                                             | 40                                          | 20x1.5 | 24  | 27  | 42.0 | 22.0 | 29.5 | 11.0 | 12.840 |

d=Rohraussen-ø  
 e=kleinste Bohrung  
 L=Mass in montiertem Zustand  
 \*=mit reduziertem Klemmring

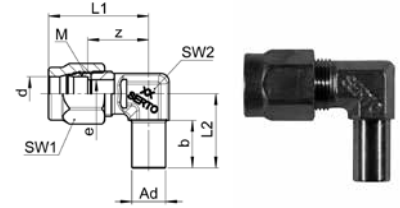
d=ø extérieur du tube  
 e=ø-min. de passage  
 L=après montage  
 \*=avec bague de serrage de réduction

d=tube outside diameter  
 e=minimum bore  
 L=installed length  
 \*=with reduction compression ferrule

# Einstellwinkel

## Coude orientable

### Adjustable elbow union

**SO 42621**


| Type -d -Ad         | Mat.-Nr.             | bar              | M      | SW1 | SW2 | L1   | L2   | b    | z    | e    | kg/100 |
|---------------------|----------------------|------------------|--------|-----|-----|------|------|------|------|------|--------|
| Für metrische Rohre | Pour tubes métriques | For metric tubes |        |     |     |      |      |      |      |      |        |
| ★ SO 42621-4-A6     | 018.2600.045         | 100              | 10x1   | 12  | 10  | 23.5 | 17.5 | 11.0 | 16.0 | 3.4  | 1.980  |
| ★ SO 42621-5-A6     | 018.2600.053         | 100              | 10x1   | 12  | 10  | 23.5 | 17.5 | 11.0 | 16.0 | 4.0  | 1.930  |
| SO 42621-6-A6       | 018.2600.060         | 250              | 10x1   | 12  | 10  | 23.5 | 17.5 | 11.0 | 16.0 | 4.0  | 1.870  |
| ★ SO 42621-6-A8     | 018.2600.063         | 150              | 12x1   | 14  | 10  | 26.0 | 21.0 | 13.0 | 18.0 | 4.5  | 2.600  |
| SO 42621-8-A8       | 018.2600.080         | 150              | 12x1   | 14  | 10  | 26.0 | 21.0 | 13.0 | 18.0 | 6.0  | 2.460  |
| ★ SO 42621-8-A10    | 018.2600.083         | 125              | 14x1   | 17  | 14  | 30.5 | 26.0 | 16.5 | 20.5 | 8.0  | 4.180  |
| SO 42621-10-A10     | 018.2600.100         | 125              | 14x1   | 17  | 14  | 30.5 | 26.0 | 16.5 | 20.5 | 8.0  | 3.990  |
| ★ SO 42621-10-A12   | 018.2600.103         | 100              | 16x1   | 19  | 17  | 32.5 | 26.5 | 17.0 | 21.5 | 8.5  | 5.780  |
| SO 42621-12-A12     | 018.2600.120         | 100              | 16x1   | 19  | 17  | 32.5 | 26.5 | 17.0 | 21.5 | 9.0  | 5.500  |
| ★ SO 42621-13-A15   | 018.2600.135         | 40               | 20x1.5 | 24  | 19  | 36.0 | 29.0 | 18.0 | 23.5 | 11.0 | 8.980  |
| SO 42621-14-A15     | 018.2600.143         | 40               | 20x1.5 | 24  | 19  | 36.0 | 29.0 | 18.0 | 23.5 | 12.0 | 8.870  |
| SO 42621-15-A15     | 018.2600.150         | 40               | 20x1.5 | 24  | 19  | 36.0 | 29.0 | 18.0 | 23.5 | 12.0 | 8.550  |
| ★ SO 42621-15-A18   | 018.2600.156         | 40               | 24x1.5 | 27  | 22  | 40.5 | 33.5 | 18.0 | 26.5 | 13.0 | 13.280 |
| SO 42621-16-A18     | 018.2600.165         | 40               | 24x1.5 | 27  | 22  | 40.5 | 33.5 | 18.0 | 26.5 | 14.0 | 13.050 |
| SO 42621-17-A18     | 018.2600.173         | 40               | 24x1.5 | 27  | 22  | 40.5 | 33.5 | 18.0 | 26.5 | 15.0 | 12.800 |
| SO 42621-18-A18     | 018.2600.180         | 40               | 24x1.5 | 27  | 22  | 40.5 | 35.0 | 20.0 | 26.5 | 15.0 | 12.530 |
| ★ SO 42621-19-A22   | 018.2600.195         | 25               | 28x1.5 | 32  | 27  | 48.0 | 36.0 | 21.0 | 30.5 | 16.0 | 17.850 |
| SO 42621-22-A22     | 018.2600.220         | 25               | 28x1.5 | 32  | 27  | 48.0 | 36.0 | 21.0 | 30.5 | 19.0 | 16.750 |
| SO 42621-28-A28     | 018.2600.280         | 16               | 36x2   | 41  | 32  | 58.5 | 44.0 | 24.5 | 39.0 | 24.0 | 33.000 |
| SO 42621-35-A35     | 018.2600.350         | 16               | 42x2   | 50  | 41  | 67.0 | 48.5 | 26.0 | 45.0 | 31.0 | 56.600 |

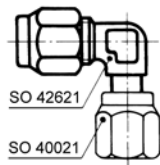
Für Zollrohre

Pour tubes pouces

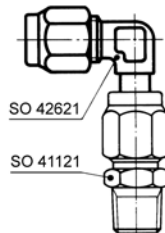
For inch tubes

|                     |              |     |        |    |    |      |      |      |      |      |        |
|---------------------|--------------|-----|--------|----|----|------|------|------|------|------|--------|
| SO 42621-6,35-A6    | 018.2600.067 | 100 | 10x1   | 12 | 10 | 23.5 | 17.5 | 11.0 | 16.0 | 4.0  | 1.870  |
| SO 42621-9,52-A10   | 018.2600.090 | 64  | 14x1   | 17 | 14 | 30.5 | 26.0 | 16.5 | 20.5 | 8.0  | 3.050  |
| ★ SO 42621-12,7-A15 | 018.2600.125 | 40  | 20x1.5 | 24 | 19 | 36.0 | 29.0 | 18.0 | 23.5 | 11.0 | 8.980  |
| SO 42621-15,88-A18  | 018.2600.163 | 40  | 24x1.5 | 27 | 22 | 40.5 | 33.5 | 18.0 | 26.5 | 14.0 | 13.050 |

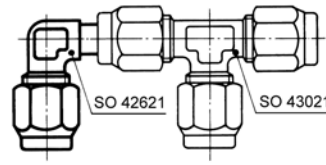
#### Anwendungsbeispiele:



#### Exemples d'utilisation:



#### Sample combinations:



Mögliche Kombinationen:

- mit Armaturenanschluss zu einstellbaren Winkelverschraubungen
- mit Verschraubungen zu einstellbaren Verschraubungen
- mit Einschraubverschraubungen zu einstellbaren Einschraubwinkeln. Gegenüber dem Einschraubwinkel lässt sich diese Kombination einfacher einstellen, da Einschrauben und Ausrichten getrennt voneinander vorgenommen werden.

Combinaisons possibles:

- avec écrou de raccordement ça donne des raccords coudé orientables
- avec raccords ça donne des raccords orientables
- avec une union mâle ça donne un coude fileté orientable. Par rapport au coude orientable, cette combinaison est facile à régler, puisque le vissage et l'alignement sont réalisés séparément l'un de l'autre.

Possible combinations:

- with a nut connection to adjustable elbow unions
- with a union to adjustable unions
- with a male adaptor union to adjustable male adaptor elbow unions. This combination is simpler to produce, as screwing in and alignment are carried out separately.

d=Rohrassens-ø

Ad=Aussen-ø der Andrehung

e=kleinste Bohrung

L=Mass in montiertem Zustand

\*=mit reduziertem Klemmring

d=ø extérieur du tube

Ad=ø extérieur de la portée cylindrique

e=ø-min. de passage

L=après montage

\*=avec bague de serrage de réduction

d=tube outside diameter

Ad=outside diameter of cyl. stub

e=minimum bore

L=installed length

\*=with reduction compression ferrule

# Winkelverschraubung

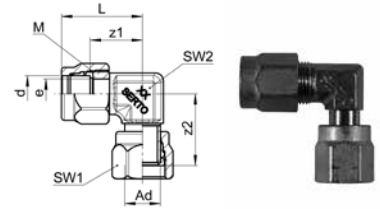
mit Einstellzapfen vormontiert

## Coude orientable

prémonté

## Adjustable elbow union

pre-assembled



SO 42625

| Type -d-Ad          | Mat.-Nr.             | bar | M      | SW1 | SW2 | L    | z1   | z2   | e    | kg/100 |
|---------------------|----------------------|-----|--------|-----|-----|------|------|------|------|--------|
| Für metrische Rohre | Pour tubes métriques |     |        |     |     |      |      |      |      |        |
| SO 42625-4-A6       | 018.2620.045         | 100 | 10x1   | 12  | 10  | 6.0  | 16.0 | 18.5 | 3.4  | 2.820  |
| SO 42625-5-A6       | 018.2620.053         | 100 | 10x1   | 12  | 10  | 23.5 | 16.0 | 18.5 | 4.0  | 2.770  |
| SO 42625-6-A6       | 018.2620.060         | 250 | 10x1   | 12  | 10  | 23.5 | 16.0 | 18.5 | 4.0  | 2.710  |
| ★ SO 42625-6-A8     | 018.2620.063         | 150 | 12x1   | 14  | 11  | 28.0 | 18.0 | 22.0 | 4.5  | 3.000  |
| SO 42625-8-A8       | 018.2620.080         | 150 | 12x1   | 14  | 11  | 28.0 | 18.0 | 22.0 | 6.0  | 3.580  |
| ★ SO 42625-8-A10    | 018.2620.083         | 125 | 14x1   | 17  | 14  | 33.0 | 20.5 | 27.0 | 8.0  | 6.070  |
| SO 42625-10-A10     | 018.2620.100         | 125 | 14x1   | 17  | 14  | 33.0 | 20.5 | 27.0 | 8.0  | 5.880  |
| ★ SO 42625-10-A12   | 018.2620.103         | 100 | 16x1   | 19  | 17  | 33.5 | 21.5 | 27.5 | 8.5  | 8.000  |
| SO 42625-12-A12     | 018.2620.120         | 100 | 16x1   | 19  | 17  | 33.5 | 21.5 | 27.5 | 9.0  | 7.840  |
| ★ SO 42625-13-A15   | 018.2620.135         | 40  | 20x1.5 | 24  | 19  | 36.0 | 23.0 | 30.0 | 11.0 | 13.000 |
| SO 42625-14-A15     | 018.2620.143         | 40  | 20x1.5 | 24  | 19  | 36.0 | 23.0 | 30.0 | 12.0 | 13.000 |
| SO 42625-15-A15     | 018.2620.150         | 40  | 20x1.5 | 24  | 19  | 36.0 | 23.0 | 30.0 | 12.0 | 12.790 |
| ★ SO 42625-15-A18   | 018.2620.156         | 40  | 24x1.5 | 27  | 22  | 42.0 | 26.0 | 35.0 | 13.0 | 18.000 |
| SO 42625-16-A18     | 018.2620.165         | 40  | 24x1.5 | 27  | 22  | 42.0 | 26.0 | 35.0 | 14.0 | 18.000 |
| SO 42625-17-A18     | 018.2620.173         | 40  | 24x1.5 | 27  | 22  | 42.0 | 26.0 | 35.0 | 15.0 | 18.000 |
| SO 42625-18-A18     | 018.2620.180         | 40  | 24x1.5 | 27  | 22  | 42.0 | 26.0 | 35.0 | 15.0 | 17.790 |
| ★ SO 42625-19-A22   | 018.2620.195         | 25  | 28x1.5 | 32  | 27  | 45.0 | 30.0 | 37.5 | 16.0 | 26.000 |
| SO 42625-22-A22     | 018.2620.220         | 25  | 28x1.5 | 32  | 27  | 45.0 | 30.0 | 37.5 | 19.0 | 25.170 |
| SO 42625-28-A28     | 018.2620.280         | 16  | 36x2   | 41  | 32  | 52.0 | 38.0 | 44.0 | 24.0 | 49.700 |
| SO 42625-35-A35     | 018.2620.350         | 16  | 42x2   | 50  | 41  | 60.5 | 44.0 | 50.5 | 31.0 | 85.800 |

|                    |                   |     |        |    |    |      |      |      |      |        |
|--------------------|-------------------|-----|--------|----|----|------|------|------|------|--------|
| Für Zollrohre      | Pour tubes pouces |     |        |    |    |      |      |      |      |        |
| SO 42625-6,35-A6   | 018.2620.067      | 100 | 10x1   | 12 | 10 | 23.5 | 16.0 | 18.0 | 4.0  | 2.000  |
| SO 42625-9,52-A10  | 018.2620.090      | 64  | 14x1   | 17 | 14 | 33.0 | 20.5 | 27.0 | 8.0  | 5.000  |
| SO 42625-12,7-A15  | 018.2620.125      | 40  | 20x1.5 | 24 | 19 | 36.0 | 23.0 | 30.0 | 11.0 | 7.000  |
| SO 42625-15,88-A18 | 018.2620.163      | 40  | 24x1.5 | 27 | 22 | 42.0 | 26.0 | 35.0 | 14.0 | 18.000 |

Ad=Aussen-ø der Andrehung  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

Ad=ø extérieur de la portée cylindrique  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

Ad=outside diameter of cyl. stub  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

**Messing M**
**Laiton M**
**Brass M**

## Winkel-Schottverschraubung

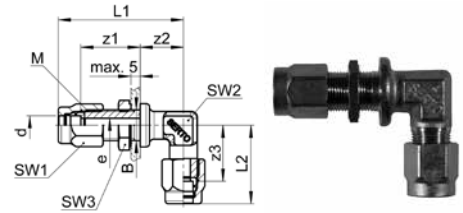
Durchführungslänge max. 5 mm

## Coude pour passage de cloison

pour cloison max. 5 mm

## Panel mount elbow union

max. panel thickness 5 mm

**SO 42721**


| Type -d             | Mat.-Nr.     | bar                  | M      | SW1 | SW2 | SW3 | L1               | L2   | B    | z1   | z2   | z3   | e    | kg/100 |
|---------------------|--------------|----------------------|--------|-----|-----|-----|------------------|------|------|------|------|------|------|--------|
| Für metrische Rohre |              | Pour tubes métriques |        |     |     |     | For metric tubes |      |      |      |      |      |      |        |
| * SO 42721-4        | 018.2700.040 | 100                  | 10x1   | 12  | 10  | 14  | 40.5             | 25.5 | 10.0 | 19.0 | 14.0 | 18.0 | 3.4  | 4.270  |
| * SO 42721-5        | 018.2700.050 | 100                  | 10x1   | 12  | 10  | 14  | 40.5             | 25.5 | 10.0 | 19.0 | 14.0 | 18.0 | 4.0  | 4.220  |
| SO 42721-6          | 018.2700.060 | 250                  | 10x1   | 12  | 10  | 14  | 40.5             | 25.5 | 10.0 | 19.0 | 14.0 | 18.0 | 4.5  | 4.160  |
| SO 42721-8          | 018.2700.080 | 150                  | 12x1   | 14  | 11  | 17  | 45.0             | 28.5 | 12.0 | 20.0 | 17.0 | 20.5 | 6.5  | 6.480  |
| SO 42721-10         | 018.2700.100 | 125                  | 14x1   | 17  | 17  | 19  | 49.0             | 33.5 | 14.0 | 21.0 | 18.0 | 23.5 | 8.5  | 9.560  |
| SO 42721-12         | 018.2700.120 | 100                  | 16x1   | 19  | 17  | 19  | 50.0             | 34.5 | 16.0 | 21.0 | 18.0 | 23.5 | 10.0 | 10.640 |
| * SO 42721-13       | 018.2700.130 | 40                   | 20x1.5 | 24  | 19  | 27  | 57.0             | 38.0 | 20.0 | 24.5 | 20.0 | 25.5 | 11.0 | 18.730 |
| SO 42721-14         | 018.2700.140 | 40                   | 20x1.5 | 24  | 19  | 27  | 57.0             | 38.0 | 20.0 | 24.5 | 20.0 | 25.5 | 12.0 | 18.940 |
| SO 42721-15         | 018.2700.150 | 40                   | 20x1.5 | 24  | 19  | 27  | 57.0             | 38.0 | 20.0 | 24.5 | 20.0 | 25.5 | 13.0 | 18.300 |
| Für Zollrohre       |              | Pour tubes pouces    |        |     |     |     | For inch tubes   |      |      |      |      |      |      |        |
| SO 42721-6,35       | 018.2700.063 | 100                  | 10x1   | 12  | 10  | 14  | 40.5             | 25.5 | 10.0 | 19.0 | 14.0 | 18.0 | 4.5  | 4.130  |
| SO 42721-9,52       | 018.2700.095 | 64                   | 14x1   | 17  | 17  | 19  | 49.0             | 33.5 | 14.0 | 21.0 | 18.0 | 23.5 | 8.0  | 9.680  |
| * SO 42721-12,7     | 018.2700.127 | 40                   | 20x1.5 | 24  | 19  | 27  | 57.0             | 38.0 | 20.0 | 24.5 | 20.0 | 25.5 | 11.0 | 18.730 |

Sechskantmutter siehe SO 40006

Ecrou à six pans voir SO 40006

Hexagon nut see SO 40006

d=Rohraussen-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

**4M**



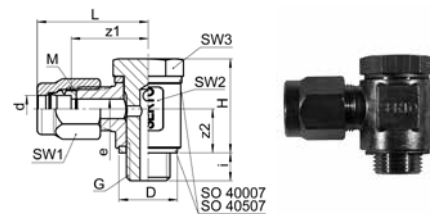




# Schwenkverschraubung

## Coude banjo

### Single banjo

**SO 42824**


| Type -d-G                                          | Mat.-Nr.     | bar | M      | SW1 | SW2 | SW3 | L    | D    | H    | i    | z1   | z2   | e    | kg/100 |
|----------------------------------------------------|--------------|-----|--------|-----|-----|-----|------|------|------|------|------|------|------|--------|
| Für metrische Rohre<br>G=Rohrgewinde (zylindrisch) |              |     |        |     |     |     |      |      |      |      |      |      |      |        |
|                                                    |              |     |        |     |     |     |      |      |      |      |      |      |      |        |
| ★ SO 42824-3-1/8                                   | 018.2841.040 | 125 | 8x1    | 10  | 14  | 14  | 24.0 | 15.0 | 21.5 | 6.5  | 17.5 | 10.0 | 2.5  | 3.710  |
| SO 42824-4-1/8                                     | 018.2841.060 | 125 | 8x1    | 10  | 14  | 14  | 23.5 | 15.0 | 21.5 | 6.5  | 17.5 | 10.0 | 3.4  | 3.670  |
| SO 42824-5-1/8                                     | 018.2841.082 | 125 | 8x1    | 10  | 14  | 14  | 24.0 | 15.0 | 21.5 | 6.5  | 17.5 | 10.0 | 3.5  | 3.650  |
| SO 42824-6-1/8                                     | 018.2841.100 | 250 | 10x1   | 12  | 14  | 14  | 25.0 | 15.0 | 21.5 | 6.5  | 17.5 | 10.0 | 3.8  | 4.050  |
| ★ SO 42824-6-1/4                                   | 018.2841.110 | 250 | 12x1   | 14  | 19  | 19  | 29.0 | 20.0 | 28.0 | 8.0  | 21.0 | 13.5 | 4.5  | 8.170  |
| SO 42824-8-1/8                                     | 018.2841.160 | 150 | 12x1   | 14  | 19  | 14  | 25.5 | 15.0 | 21.5 | 6.5  | 17.5 | 10.0 | 3.8  | 4.420  |
| SO 42824-8-1/4                                     | 018.2841.170 | 150 | 12x1   | 14  | 19  | 19  | 29.0 | 20.0 | 28.0 | 8.0  | 21.0 | 13.5 | 6.5  | 8.010  |
| SO 42824-10-1/4                                    | 018.2841.270 | 125 | 14x1   | 17  | 19  | 19  | 31.0 | 20.0 | 28.0 | 8.0  | 21.0 | 13.5 | 6.5  | 8.590  |
| ★ SO 42824-10-3/8                                  | 018.2841.280 | 100 | 16x1   | 19  | 24  | 22  | 33.5 | 25.0 | 31.0 | 8.0  | 22.5 | 15.0 | 8.5  | 13.670 |
| SO 42824-12-3/8                                    | 018.2841.390 | 100 | 16x1   | 19  | 24  | 22  | 33.5 | 25.0 | 31.0 | 8.0  | 22.5 | 15.0 | 8.5  | 13.390 |
| ★ SO 42824-12-1/2                                  | 018.2841.400 | 100 | 20x1.5 | 24  | 30  | 27  | 39.0 | 30.0 | 37.0 | 10.0 | 26.5 | 18.0 | 10.0 | 25.600 |
| ★ SO 42824-13-1/2                                  | 018.2841.454 | 40  | 20x1.5 | 24  | 30  | 27  | 39.0 | 30.0 | 37.0 | 10.0 | 26.5 | 18.0 | 10.5 | 25.490 |
| SO 42824-14-1/2                                    | 018.2841.504 | 40  | 20x1.5 | 24  | 30  | 27  | 39.0 | 30.0 | 37.0 | 10.0 | 26.5 | 18.0 | 10.5 | 25.320 |
| SO 42824-15-1/2                                    | 018.2841.534 | 40  | 20x1.5 | 24  | 30  | 27  | 39.0 | 30.0 | 37.0 | 10.0 | 26.5 | 18.0 | 10.5 | 25.060 |

Für Zollrohre

Pour tubes pouces

For inch tubes

|                     |              |     |        |    |    |    |      |      |      |      |      |      |      |        |
|---------------------|--------------|-----|--------|----|----|----|------|------|------|------|------|------|------|--------|
| SO 42824-3,2-1/8    | 018.2841.045 | 125 | 8x1    | 10 | 14 | 14 | 24.0 | 15.0 | 21.5 | 6.5  | 17.5 | 10.0 | 2.5  | 3.710  |
| SO 42824-6,35-1/8   | 018.2841.135 | 100 | 10x1   | 12 | 14 | 14 | 25.0 | 15.0 | 21.5 | 6.5  | 17.5 | 10.0 | 3.8  | 4.050  |
| SO 42824-9,52-1/4   | 018.2841.230 | 64  | 14x1   | 17 | 19 | 19 | 31.0 | 20.0 | 28.0 | 8.0  | 21.0 | 13.5 | 6.5  | 8.590  |
| ★ SO 42824-12,7-1/2 | 018.2841.434 | 40  | 20x1.5 | 24 | 30 | 27 | 39.0 | 30.0 | 37.0 | 10.0 | 26.5 | 18.0 | 10.5 | 25.490 |

Dichtungen werden mitgeliefert.

Ersatzdichtungen siehe SO 40007 / SO 40507.  
Schwenkverschraubung mit Drossel- bzw.  
Drosselrückschlagventil siehe SO 47624 und  
SO 47724.

Les joints sont fournis.

Joints de rechange voir SO 40007 / SO 40507.  
Coude banjo à passage réglable resp. à passage  
réglable et soupape de retenue voir SO 47624  
et SO 47724.

The washers are included.

Spare washers please see SO 40007 /  
SO 40507.  
Single banjo with throttle valve or non-return  
throttle valve please see SO 47624 and  
SO 47724.

d=Rohraussen-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

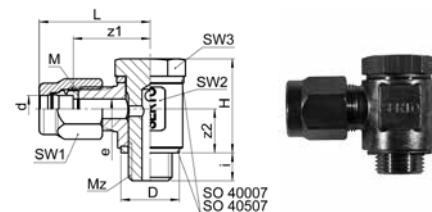
d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

# Schwenkverschraubung METR

## Coude banjo METR

## Single banjo METR



### SO 42824 METR

| Type -d -Mz                         | Mat.-Nr.     | bar | M    | SW1 | SW2 | SW3 | L    | D    | H    | i   | z1   | z2   | e   | kg/100 |
|-------------------------------------|--------------|-----|------|-----|-----|-----|------|------|------|-----|------|------|-----|--------|
| Für metrische Rohre                 |              |     |      |     |     |     |      |      |      |     |      |      |     |        |
| Mz=metrisches Gewinde (zylindrisch) |              |     |      |     |     |     |      |      |      |     |      |      |     |        |
| ★ SO 42824-3-M5                     | 018.2843.050 | 125 | 8x1  | 10  | 12  | 8   | 20.0 | 9.0  | 17.5 | 3.0 | 13.5 | 6.8  | 2.2 | 1.150  |
| ★ SO 42824-3-M10x1                  | 018.2843.065 | 125 | 8x1  | 10  | 14  | 14  | 24.0 | 15.0 | 21.5 | 6.5 | 17.5 | 10.5 | 2.5 | 6.410  |
| SO 42824-4-M5                       | 018.2843.080 | 125 | 8x1  | 10  | 12  | 8   | 19.5 | 9.0  | 17.5 | 3.0 | 13.5 | 6.8  | 2.2 | 1.480  |
| SO 42824-4-M10x1                    | 018.2843.096 | 125 | 8x1  | 10  | 14  | 14  | 24.0 | 15.0 | 21.5 | 6.5 | 17.5 | 10.5 | 3.4 | 6.360  |
| SO 42824-5-M5                       | 018.2843.110 | 125 | 8x1  | 10  | 12  | 8   | 20.0 | 9.0  | 17.5 | 3.0 | 13.5 | 6.8  | 2.2 | 1.470  |
| SO 42824-5-M10x1                    | 018.2843.135 | 125 | 8x1  | 10  | 14  | 14  | 24.0 | 15.0 | 21.5 | 6.5 | 17.5 | 10.5 | 3.5 | 6.350  |
| SO 42824-6-M10x1                    | 018.2843.180 | 250 | 10x1 | 12  | 14  | 14  | 25.0 | 15.0 | 21.5 | 6.5 | 17.5 | 10.5 | 3.8 | 4.010  |
| ★ SO 42824-6-M12x1,5                | 018.2843.195 | 250 | 12x1 | 14  | 19  | 19  | 29.5 | 20.0 | 28.5 | 7.5 | 21.5 | 13.0 | 4.5 | 8.150  |
| ★ SO 42824-6-M14x1,5                | 018.2843.198 | 250 | 12x1 | 14  | 19  | 19  | 29.5 | 20.0 | 29.0 | 7.0 | 21.5 | 13.0 | 4.5 | 8.110  |
| SO 42824-8-M10x1                    | 018.2843.230 | 150 | 12x1 | 14  | 14  | 14  | 25.5 | 15.0 | 21.5 | 6.5 | 17.5 | 10.0 | 3.8 | 4.310  |
| SO 42824-8-M12x1,5                  | 018.2843.240 | 150 | 12x1 | 14  | 19  | 19  | 29.5 | 20.0 | 29.0 | 7.0 | 21.5 | 13.0 | 6.5 | 7.990  |
| SO 42824-8-M14x1,5                  | 018.2843.245 | 150 | 12x1 | 14  | 19  | 19  | 29.5 | 20.0 | 29.0 | 7.0 | 21.5 | 13.0 | 6.5 | 7.950  |
| SO 42824-10-M12x1,5                 | 018.2843.275 | 150 | 14x1 | 17  | 19  | 19  | 31.5 | 20.0 | 29.0 | 7.0 | 21.5 | 13.5 | 6.5 | 8.720  |
| SO 42824-10-M14x1,5                 | 018.2843.280 | 150 | 14x1 | 17  | 19  | 19  | 31.5 | 20.0 | 29.0 | 7.0 | 21.5 | 13.5 | 6.5 | 8.680  |
| Für Zollrohre                       |              |     |      |     |     |     |      |      |      |     |      |      |     |        |
|                                     |              |     |      |     |     |     |      |      |      |     |      |      |     |        |
| SO 42824-6,35-M10x1                 | 018.2843.210 | 100 | 10x1 | 12  | 14  | 19  | 25.0 | 15.0 | 21.5 | 6.5 | 17.5 | 10.5 | 3.8 | 4.000  |
| SO 42824-9,52-M12x1,5               | 018.2843.261 | 64  | 14x1 | 17  | 19  | 19  | 31.5 | 20.0 | 29.0 | 7.0 | 21.5 | 13.5 | 6.5 | 8.780  |
| SO 42824-9,52-M14x1,5               | 018.2843.265 | 64  | 14x1 | 17  | 19  | 19  | 31.5 | 20.0 | 29.0 | 7.0 | 21.5 | 13.5 | 6.5 | 8.740  |

Dichtungen werden mitgeliefert.

Ersatzdichtungen siehe SO 40007 / SO 40507.

Schwenkverschraubung mit Drossel- bzw.

Drosselrückschlagventil siehe SO 47624 und SO 47724.

Les joints sont fournis.

Joints de rechange voir SO 40007 / SO 40507.

Coude banjo à passage réglable resp. à passage réglable et soupape de retenue voir SO 47624 et SO 47724.

The washers are included.

Spare washers please see SO 40007 / SO 40507.

Single banjo with throttle valve or non-return throttle valve please see SO 47624 and SO 47724.

d=Rohraussen-ø

e=kleinste Bohrung

L=Mass in montiertem Zustand

\*=mit reduziertem Klemmring

d=ø extérieur du tube

e=ø-min. de passage

L=après montage

\*=avec bague de serrage de réduction

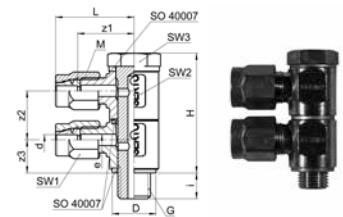
d=tube outside diameter

e=minimum bore

L=installed length

\*=with reduction compression ferrule

# 2-fach Winkel-Schwenkverschraubung Coude banjo multiple Double banjo


**SO 42924**

| Type - n x d - G                                   | Mat.-Nr.     | bar | M    | SW1 | SW2 | SW3 | L    | D    | H    | i   | z1   | z2   | z3   | e   | kg/100 |
|----------------------------------------------------|--------------|-----|------|-----|-----|-----|------|------|------|-----|------|------|------|-----|--------|
| Für metrische Rohre<br>G=Rohrgewinde (zylindrisch) |              |     |      |     |     |     |      |      |      |     |      |      |      |     |        |
|                                                    |              |     |      |     |     |     |      |      |      |     |      |      |      |     |        |
| ★ SO 42924-2x3-1/8                                 | 018.2941.040 | 125 | 8x1  | 10  | 14  | 14  | 24.0 | 15.0 | 37.0 | 7.0 | 17.5 | 16.0 | 10.0 | 2.5 | 6.300  |
| SO 42924-2x4-1/8                                   | 018.2941.060 | 125 | 8x1  | 10  | 14  | 14  | 23.5 | 15.0 | 37.0 | 7.0 | 17.5 | 16.0 | 10.0 | 3.4 | 6.190  |
| SO 42924-2x5-1/8                                   | 018.2941.082 | 125 | 8x1  | 10  | 14  | 14  | 24.0 | 15.0 | 37.0 | 7.0 | 17.5 | 16.0 | 10.0 | 3.5 | 6.170  |
| SO 42924-2x6-1/8                                   | 018.2941.100 | 250 | 10x1 | 12  | 14  | 14  | 25.0 | 15.0 | 37.0 | 7.0 | 17.5 | 16.0 | 10.0 | 3.8 | 7.000  |
| ★ SO 42924-2x6-1/4                                 | 018.2941.110 | 250 | 12x1 | 14  | 19  | 19  | 29.0 | 20.0 | 49.0 | 9.0 | 21.0 | 22.0 | 14.0 | 4.5 | 14.110 |
| SO 42924-2x8-1/8                                   | 018.2941.160 | 150 | 12x1 | 14  | 14  | 14  | 25.5 | 15.0 | 37.0 | 7.0 | 17.5 | 16.0 | 10.0 | 3.8 | 7.790  |
| SO 42924-2x8-1/4                                   | 018.2941.170 | 150 | 12x1 | 14  | 19  | 19  | 29.0 | 20.0 | 49.0 | 9.0 | 21.0 | 22.0 | 14.0 | 6.5 | 13.790 |
| SO 42924-2x10-1/4                                  | 018.2941.270 | 125 | 14x1 | 17  | 19  | 19  | 31.0 | 20.0 | 49.0 | 9.0 | 21.0 | 22.0 | 14.0 | 6.5 | 14.990 |
| Für Zollrohre                                      |              |     |      |     |     |     |      |      |      |     |      |      |      |     |        |
|                                                    |              |     |      |     |     |     |      |      |      |     |      |      |      |     |        |
| SO 42924-2x6,35-1/8                                | 018.2941.135 | 100 | 10x1 | 12  | 14  | 14  | 25.0 | 15.0 | 37.0 | 7.0 | 17.5 | 16.0 | 10.0 | 3.8 | 7.000  |
| SO 42924-2x9,52-1/4                                | 018.2941.230 | 64  | 14x1 | 17  | 19  | 19  | 31.0 | 20.0 | 49.0 | 9.0 | 21.0 | 22.0 | 14.0 | 6.5 | 15.110 |

Dichtungen werden mitgeliefert.  
Ersatzdichtungen siehe SO 40007.

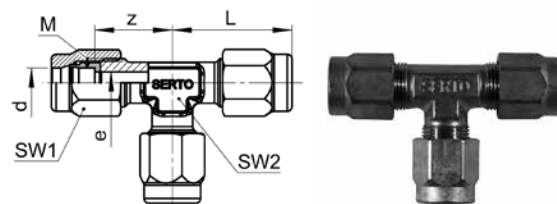
Les joints sont fournis.  
Joints de rechange voir SO 40007.

The washers are included.  
Spare washers please see SO 40007.

n=Anzahl Schwenkkörper  
d=Rohraussen-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

n=nombre d'éléments orientables  
d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

n=number of swivel bodies  
d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

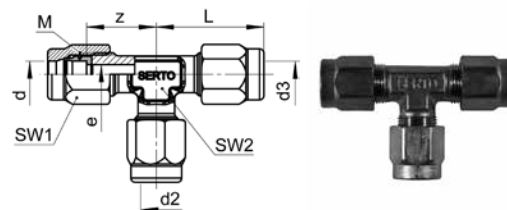
**T-Verschraubung**
**Té**
**Tee union**
**SO 43021**


| Type -d             | Mat.-Nr.             | bar | M      | SW1 | SW2 | L                | z    | e    | kg/100  |
|---------------------|----------------------|-----|--------|-----|-----|------------------|------|------|---------|
| Für metrische Rohre | Pour tubes métriques |     |        |     |     | For metric tubes |      |      |         |
| SO 43021-2          | 018.3000.020         | 125 | 6x0.75 | 8   | 7   | 16.5             | 12.5 | 1.5  | 1.480   |
| SO 43021-3          | 018.3000.030         | 125 | 6x0.75 | 8   | 7   | 18.0             | 13.0 | 2.2  | 1.500   |
| SO 43021-4          | 018.3000.040         | 125 | 8x1    | 10  | 10  | 22.0             | 16.0 | 3.4  | 2.670   |
| SO 43021-5          | 018.3000.050         | 125 | 8x1    | 10  | 10  | 22.5             | 16.0 | 3.5  | 2.630   |
| SO 43021-6          | 018.3000.060         | 250 | 10x1   | 12  | 10  | 23.5             | 16.0 | 4.5  | 4.240   |
| SO 43021-8          | 018.3000.080         | 150 | 12x1   | 14  | 10  | 26.0             | 18.0 | 6.5  | 5.590   |
| SO 43021-10         | 018.3000.100         | 125 | 14x1   | 17  | 14  | 30.5             | 20.5 | 8.5  | 8.840   |
| SO 43021-12         | 018.3000.120         | 100 | 16x1   | 19  | 17  | 32.5             | 21.5 | 10.0 | 11.320  |
| * SO 43021-13       | 018.3000.130         | 40  | 20x1.5 | 24  | 19  | 36.0             | 23.5 | 11.0 | 19.180  |
| SO 43021-14         | 018.3000.140         | 40  | 20x1.5 | 24  | 19  | 36.0             | 23.5 | 12.0 | 19.710  |
| SO 43021-15         | 018.3000.150         | 40  | 20x1.5 | 24  | 19  | 36.0             | 23.5 | 13.0 | 18.750  |
| SO 43021-16         | 018.3000.160         | 40  | 24x1.5 | 27  | 22  | 40.5             | 26.5 | 14.0 | 27.160  |
| SO 43021-17         | 018.3000.170         | 40  | 24x1.5 | 27  | 22  | 40.5             | 26.5 | 15.0 | 26.400  |
| SO 43021-18         | 018.3000.180         | 40  | 24x1.5 | 27  | 22  | 40.5             | 26.5 | 15.0 | 25.600  |
| * SO 43021-19       | 018.3000.190         | 25  | 28x1.5 | 32  | 27  | 48.0             | 30.5 | 16.0 | 41.400  |
| SO 43021-22         | 018.3000.220         | 25  | 28x1.5 | 32  | 27  | 48.0             | 30.5 | 19.0 | 37.350  |
| SO 43021-28         | 018.3000.280         | 16  | 36x2   | 41  | 32  | 58.5             | 39.0 | 24.0 | 44.500  |
| SO 43021-35         | 018.3000.350         | 16  | 42x2   | 50  | 41  | 67.0             | 45.0 | 31.0 | 135.500 |
| Für Zollrohre       | Pour tubes pouces    |     |        |     |     | For inch tubes   |      |      |         |
| * SO 43021-3,2      | 018.3000.032         | 125 | 8x1    | 10  | 10  | 22.0             | 16.0 | 2.5  | 2.700   |
| SO 43021-6,35       | 018.3000.063         | 100 | 10x1   | 12  | 10  | 23.5             | 16.0 | 4.5  | 4.200   |
| SO 43021-9,52       | 018.3000.095         | 64  | 14x1   | 17  | 14  | 30.5             | 20.5 | 8.0  | 9.020   |
| * SO 43021-12,7     | 018.3000.127         | 40  | 20x1.5 | 24  | 19  | 36.0             | 23.5 | 11.0 | 19.180  |
| SO 43021-15,88      | 018.3000.158         | 40  | 24x1.5 | 27  | 22  | 40.5             | 26.5 | 14.0 | 27.160  |
| SO 43021-22,22      | 018.3000.222         | 25  | 28x1.5 | 32  | 27  | 48.0             | 30.5 | 19.0 | 37.350  |

d=Rohraussen-ø  
 e=kleinste Bohrung  
 L=Mass in montiertem Zustand  
 \*=mit reduziertem Klemmring

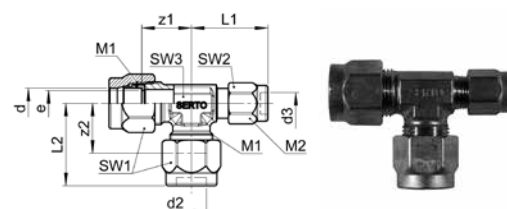
d=ø extérieur du tube  
 e=ø-min. de passage  
 L=après montage  
 \*=avec bague de serrage de réduction

d=tube outside diameter  
 e=minimum bore  
 L=installed length  
 \*=with reduction compression ferrule

**T-Verschraubung reduziert**
**Té réduit**
**Tee reduction union**

**SO 43021 RED**

| Type -d -d2 -d3     | Mat.-Nr.     | bar | M      | SW1 | SW2 | L    | z    | e    | kg/100 |
|---------------------|--------------|-----|--------|-----|-----|------|------|------|--------|
| * SO 43021-5-3-3    | 018.3004.030 | 125 | 8x1    | 10  | 10  | 22.5 | 16.0 | 2.5  | 2.750  |
| * SO 43021-5-3-5    | 018.3004.034 | 125 | 8x1    | 10  | 10  | 22.5 | 16.0 | 2.5  | 2.690  |
| * SO 43021-6-4-4    | 018.3004.046 | 100 | 10x1   | 12  | 10  | 23.5 | 16.0 | 3.4  | 4.460  |
| * SO 43021-6-4-6    | 018.3004.049 | 100 | 10x1   | 12  | 10  | 23.5 | 16.0 | 3.4  | 4.350  |
| * SO 43021-6-8-6    | 018.3004.058 | 150 | 12x1   | 14  | 12  | 26.0 | 18.0 | 4.5  | 5.910  |
| * SO 43021-8-6-6    | 018.3004.091 | 150 | 12x1   | 14  | 10  | 26.0 | 18.0 | 4.5  | 5.910  |
| * SO 43021-8-6-8    | 018.3004.093 | 150 | 12x1   | 14  | 10  | 26.0 | 18.0 | 4.5  | 5.750  |
| * SO 43021-8-10-8   | 018.3004.104 | 125 | 14x1   | 17  | 14  | 30.5 | 20.5 | 6.5  | 9.240  |
| * SO 43021-10-8-10  | 018.3004.153 | 125 | 14x1   | 17  | 14  | 30.5 | 20.5 | 6.5  | 9.040  |
| * SO 43021-10-10-8  | 018.3004.161 | 125 | 14x1   | 17  | 14  | 30.5 | 20.5 | 6.5  | 9.040  |
| * SO 43021-10-12-10 | 018.3004.165 | 100 | 16x1   | 19  | 17  | 32.5 | 21.5 | 8.5  | 11.880 |
| * SO 43021-12-10-10 | 018.3004.220 | 100 | 16x1   | 19  | 17  | 32.5 | 21.5 | 8.5  | 11.880 |
| * SO 43021-12-12-10 | 018.3004.232 | 100 | 16x1   | 19  | 17  | 32.5 | 21.5 | 8.5  | 11.600 |
| * SO 43021-12-14-12 | 018.3004.246 | 40  | 20x1.5 | 24  | 19  | 36.0 | 23.5 | 10.0 | 20.470 |
| * SO 43021-12-15-12 | 018.3004.254 | 40  | 20x1.5 | 24  | 19  | 36.0 | 23.5 | 10.0 | 19.830 |
| * SO 43021-14-12-12 | 018.3004.342 | 40  | 20x1.5 | 24  | 19  | 36.0 | 23.5 | 10.0 | 20.470 |
| * SO 43021-14-12-14 | 018.3004.346 | 40  | 20x1.5 | 24  | 19  | 36.0 | 23.5 | 10.0 | 20.090 |
| * SO 43021-14-14-12 | 018.3004.361 | 40  | 20x1.5 | 24  | 19  | 36.0 | 23.5 | 10.0 | 20.090 |
| * SO 43021-14-17-14 | 018.3004.375 | 40  | 24x1.5 | 27  | 22  | 40.5 | 26.5 | 12.0 | 27.820 |
| * SO 43021-15-12-12 | 018.3004.417 | 40  | 20x1.5 | 24  | 19  | 36.0 | 23.5 | 10.0 | 19.830 |
| * SO 43021-15-12-15 | 018.3004.422 | 40  | 20x1.5 | 24  | 22  | 36.0 | 23.5 | 10.0 | 19.290 |
| * SO 43021-15-15-12 | 018.3004.435 | 40  | 20x1.5 | 24  | 19  | 36.0 | 23.5 | 10.0 | 19.290 |
| * SO 43021-15-18-15 | 018.3004.447 | 40  | 24x1.5 | 27  | 22  | 40.5 | 26.5 | 13.0 | 27.100 |
| * SO 43021-17-14-14 | 018.3004.498 | 40  | 24x1.5 | 27  | 22  | 40.5 | 26.5 | 12.0 | 27.800 |
| * SO 43021-17-14-17 | 018.3004.502 | 40  | 24x1.5 | 27  | 22  | 40.5 | 26.5 | 12.0 | 27.400 |
| * SO 43021-17-17-14 | 018.3004.518 | 40  | 24x1.5 | 27  | 22  | 40.5 | 26.5 | 12.0 | 27.400 |
| * SO 43021-18-15-15 | 018.3004.624 | 40  | 24x1.5 | 27  | 22  | 40.5 | 26.5 | 13.0 | 27.100 |
| * SO 43021-18-15-18 | 018.3004.628 | 40  | 24x1.5 | 27  | 22  | 40.5 | 26.5 | 13.0 | 26.350 |
| * SO 43021-18-18-15 | 018.3004.644 | 40  | 24x1.5 | 27  | 22  | 40.5 | 26.5 | 13.0 | 26.350 |
| * SO 43021-22-18-22 | 018.3004.862 | 25  | 28x1.5 | 32  | 27  | 48.0 | 30.5 | 16.0 | 38.900 |

4M

**T-Verschraubung reduziert**
**Té réduit**
**Tee reduction union**

**SO 43021 RED V1**

| Type -d -d2 -d3     | Mat.-Nr.     | bar | M1     | M2   | SW1 | SW2 | SW3 | L1   | L2   | z1   | z2   | e    | kg/100 |
|---------------------|--------------|-----|--------|------|-----|-----|-----|------|------|------|------|------|--------|
| SO 43021-14-14-10   | 018.3004.359 | 40  | 20x1.5 | 14x1 | 24  | 17  | 19  | 36.0 | 36.0 | 23.5 | 23.5 | 13.0 | 16.760 |
| SO 43021-15-15-10   | 018.3004.433 | 40  | 20x1.5 | 14x1 | 24  | 17  | 19  | 36.0 | 36.0 | 23.5 | 23.5 | 13.0 | 16.230 |
| * SO 43021-17-14-12 | 018.3004.494 | 40  | 24x1.5 | 16x1 | 27  | 19  | 22  | 40.5 | 40.5 | 26.5 | 26.5 | 15.0 | 23.450 |
| * SO 43021-18-15-12 | 018.3004.619 | 40  | 24x1.5 | 16x1 | 27  | 19  | 22  | 40.5 | 40.5 | 26.5 | 26.5 | 15.0 | 23.020 |

d=Rohrassen-ø  
 e=kleinste Bohrung  
 L=Mass in montiertem Zustand  
 \*=mit reduziertem Klemmring

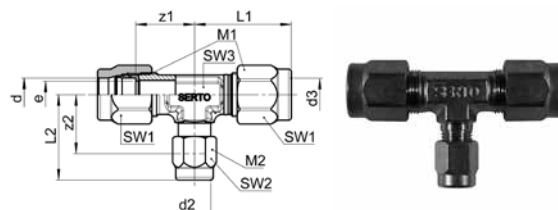
d=ø extérieur du tube  
 e=ø-min. de passage  
 L=après montage  
 \*=avec bague de serrage de réduction

d=tube outside diameter  
 e=minimum bore  
 L=installed length  
 \*=with reduction compression ferrule

# T-Verschraubung reduziert

## Té réduit

### Tee reduction union



#### SO 43021 RED V2

| Type -d -d2 -d3     | Mat.-Nr.             | bar | M1               | M2     | SW1 | SW2 | SW3 | L1   | L2   | z1   | z2   | e    | kg/100 |
|---------------------|----------------------|-----|------------------|--------|-----|-----|-----|------|------|------|------|------|--------|
| Für metrische Rohre | Pour tubes métriques |     | For metric tubes |        |     |     |     |      |      |      |      |      |        |
| SO 43021-6-10-6     | 018.3004.062         | 125 | 10x1             | 14x1   | 12  | 12  | 14  | 30.5 | 26.5 | 20.5 | 20.5 | 4.5  | 7.440  |
| SO 43021-10-6-10    | 018.3004.147         | 125 | 14x1             | 10x1   | 17  | 12  | 14  | 30.5 | 26.5 | 20.5 | 20.5 | 4.5  | 8.600  |
| * SO 43021-12-6-12  | 018.3004.200         | 100 | 16x1             | 12x1   | 19  | 19  | 17  | 32.5 | 27.5 | 21.5 | 21.5 | 4.5  | 10.710 |
| SO 43021-12-8-12    | 018.3004.210         | 100 | 16x1             | 12x1   | 19  | 14  | 17  | 32.5 | 29.0 | 21.5 | 21.5 | 6.5  | 10.540 |
| * SO 43021-14-10-12 | 018.3004.330         | 40  | 20x1.5           | 14x1   | 24  | 17  | 19  | 36.0 | 34.5 | 23.5 | 23.5 | 8.5  | 18.220 |
| SO 43021-14-10-14   | 018.3004.334         | 40  | 20x1.5           | 14x1   | 24  | 17  | 19  | 36.0 | 33.5 | 23.5 | 23.5 | 8.5  | 17.660 |
| * SO 43021-15-10-12 | 018.3004.405         | 40  | 20x1.5           | 14x1   | 24  | 17  | 19  | 36.0 | 33.5 | 23.5 | 23.5 | 8.5  | 17.800 |
| SO 43021-15-10-15   | 018.3004.410         | 40  | 20x1.5           | 14x1   | 24  | 17  | 19  | 36.0 | 33.5 | 23.5 | 23.5 | 8.5  | 17.300 |
| SO 43021-15-22-15   | 018.3004.453         | 25  | 20x1.5           | 28x1.5 | 24  | 32  | 27  | 43.0 | 36.3 | 30.5 | 30.5 | 13.0 | 29.500 |
| * SO 43021-17-10-17 | 018.3004.468         | 40  | 24x1.5           | 16x1   | 27  | 19  | 22  | 40.5 | 36.0 | 26.5 | 26.5 | 8.5  | 23.170 |
| SO 43021-17-12-17   | 018.3004.480         | 40  | 24x1.5           | 16x1   | 27  | 19  | 22  | 40.5 | 36.0 | 26.5 | 26.5 | 10.0 | 22.850 |
| * SO 43021-18-10-18 | 018.3004.584         | 40  | 24x1.5           | 16x1   | 27  | 19  | 22  | 40.5 | 36.0 | 26.5 | 26.5 | 8.5  | 22.750 |
| SO 43021-18-12-18   | 018.3004.599         | 40  | 24x1.5           | 16x1   | 27  | 19  | 22  | 40.5 | 36.0 | 26.5 | 26.5 | 10.0 | 22.430 |
| * SO 43021-22-12-22 | 018.3004.740         | 25  | 28x1.5           | 20x1.5 | 32  | 24  | 27  | 48.0 | 41.5 | 30.5 | 30.5 | 10.0 | 34.600 |
| SO 43021-22-14-22   | 018.3004.784         | 25  | 28x1.5           | 20x1.5 | 32  | 24  | 27  | 48.0 | 41.5 | 30.5 | 30.5 | 12.0 | 34.300 |
| SO 43021-22-15-22   | 018.3004.800         | 25  | 28x1.5           | 20x1.5 | 32  | 24  | 27  | 48.0 | 41.5 | 30.5 | 30.5 | 13.0 | 34.100 |
| * SO 43021-22-17-22 | 018.3004.824         | 25  | 28x1.5           | 20x1.5 | 32  | 32  | 27  | 48.0 | 48.0 | 30.5 | 30.5 | 15.0 | 39.100 |

Für Zollrohre

Pour tubes pouces

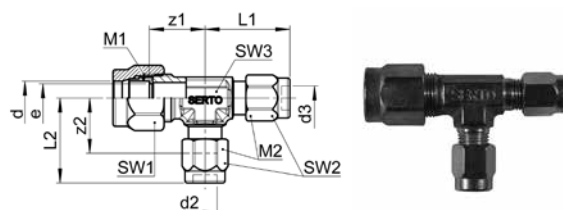
For inch tubes

|                           |              |    |        |        |    |    |    |      |      |      |      |      |        |
|---------------------------|--------------|----|--------|--------|----|----|----|------|------|------|------|------|--------|
| SO 43021-9,52-6,35-9,52   | 018.3004.126 | 64 | 14x1   | 10x1   | 17 | 12 | 14 | 30.5 | 26.5 | 20.5 | 20.5 | 4.5  | 7.440  |
| SO 43021-12,7-9,52-12,7   | 018.3004.270 | 40 | 20x1.5 | 14x1   | 24 | 17 | 19 | 36.0 | 33.5 | 23.5 | 23.5 | 8.0  | 17.860 |
| SO 43021-19,05-12,7-19,05 | 018.3004.689 | 25 | 28x1.5 | 20x1.5 | 32 | 24 | 27 | 48.0 | 41.5 | 30.5 | 30.5 | 11.0 | 34.000 |

# T-Verschraubung reduziert

## Té réduit

### Tee reduction union



#### SO 43021 RED V3

| Type -d -d2 -d3   | Mat.-Nr.     | bar | M1     | M2   | SW1 | SW2 | SW3 | L1   | L2   | z1   | z2   | e   | kg/100 |
|-------------------|--------------|-----|--------|------|-----|-----|-----|------|------|------|------|-----|--------|
| SO 43021-10-6-6   | 018.3004.143 | 125 | 14x1   | 10x1 | 17  | 12  | 14  | 30.5 | 26.5 | 20.5 | 20.5 | 4.5 | 7.440  |
| SO 43021-14-10-10 | 018.3004.328 | 40  | 20x1.5 | 14x1 | 24  | 17  | 19  | 36.0 | 33.5 | 23.5 | 23.5 | 8.5 | 14.160 |
| SO 43021-15-10-10 | 018.3004.403 | 40  | 20x1.5 | 14x1 | 24  | 17  | 19  | 36.0 | 33.5 | 23.5 | 23.5 | 8.5 | 13.770 |

Weitere reduzierte T-Verschraubungen können mit dem Klemmring reduziert SO 40001 RED oder der Reduktion SO 41821 zusammengestellt werden.

D'autres téés réduits peuvent s'obtenir par bague de serrage de réduction SO 40001 RED ou par réduction SO 41821.

Further tee reductions can be produced with the reduction compression ferrule SO 40001 RED or the reduction union SO 41821.

d=Rohraussen-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

# T-Verschraubung

mit Übergangsnippel SO 40040

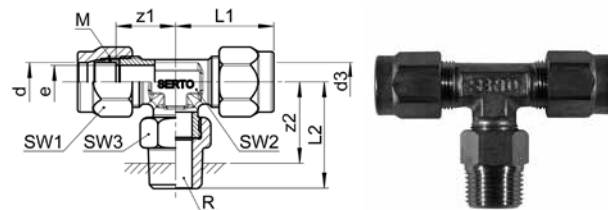
## Té

avec adaptateur mâle SO 40040

## Tee union

with male adaptor SO 40040

### SO 43121



| Type -d-R-d3            | Mat.-Nr.     | bar | M                            | SW1 | SW2 | SW3                    | L1   | L2   | z1   | z2   | e    | kg/100 |
|-------------------------|--------------|-----|------------------------------|-----|-----|------------------------|------|------|------|------|------|--------|
| R=Rohrgewinde (kegelig) |              |     | R=Filetage-gaz BSP (conique) |     |     | R=BSP thread (tapered) |      |      |      |      |      |        |
| SO 43121-6-1/8-6        | 018.3101.100 | 250 | 10x1                         | 12  | 10  | 12                     | 23.5 | 28.0 | 16.0 | 21.5 | 3.4  | 4.330  |
| SO 43121-6-1/4-6        | 018.3101.110 | 250 | 10x1                         | 12  | 10  | 14                     | 23.5 | 32.0 | 16.0 | 22.0 | 4.0  | 5.450  |
| SO 43121-6-3/8-6        | 018.3101.120 | 250 | 10x1                         | 12  | 10  | 17                     | 23.5 | 29.0 | 16.0 | 19.0 | 4.5  | 6.430  |
| SO 43121-8-1/8-8        | 018.3101.160 | 150 | 12x1                         | 14  | 10  | 14                     | 26.0 | 30.0 | 18.0 | 23.5 | 4.5  | 5.460  |
| SO 43121-8-1/4-8        | 018.3101.170 | 150 | 12x1                         | 14  | 10  | 14                     | 26.0 | 34.0 | 18.0 | 34.0 | 6.5  | 6.200  |
| SO 43121-8-3/8-8        | 018.3101.180 | 150 | 12x1                         | 14  | 10  | 17                     | 26.0 | 32.0 | 18.0 | 22.0 | 6.5  | 7.440  |
| SO 43121-10-1/4-10      | 018.3101.270 | 125 | 14x1                         | 17  | 14  | 17                     | 30.5 | 36.5 | 20.5 | 26.5 | 8.5  | 8.750  |
| SO 43121-10-3/8-10      | 018.3101.280 | 125 | 14x1                         | 17  | 14  | 17                     | 30.5 | 34.5 | 20.5 | 24.5 | 8.5  | 9.390  |
| SO 43121-10-1/2-10      | 018.3101.290 | 125 | 14x1.5                       | 17  | 14  | 22                     | 30.5 | 35.5 | 20.5 | 25.5 | 8.5  | 9.420  |
| SO 43121-12-1/4-12      | 018.3101.380 | 100 | 16x1                         | 19  | 17  | 19                     | 32.5 | 36.5 | 21.5 | 27.0 | 8.5  | 11.090 |
| SO 43121-12-3/8-12      | 018.3101.390 | 100 | 16x1                         | 19  | 17  | 19                     | 32.5 | 36.5 | 21.5 | 26.5 | 10.5 | 11.850 |
| SO 43121-12-1/2-12      | 018.3101.400 | 100 | 16x1                         | 19  | 17  | 22                     | 32.5 | 37.5 | 21.5 | 24.5 | 10.5 | 13.820 |
| SO 43121-14-1/2-14      | 018.3101.540 | 40  | 20x1.5                       | 24  | 19  | 24                     | 36.0 | 40.0 | 23.5 | 27.0 | 13.0 | 19.580 |
| SO 43121-15-1/2-15      | 018.3101.590 | 40  | 20x1.5                       | 24  | 19  | 24                     | 36.0 | 40.0 | 23.5 | 27.0 | 13.0 | 18.940 |
| SO 43121-15-3/4-15      | 018.3101.600 | 40  | 20x1.5                       | 24  | 19  | 27                     | 36.0 | 41.0 | 23.5 | 26.5 | 13.0 | 22.760 |
| SO 43121-18-1/2-18      | 018.3101.730 | 40  | 24x1.5                       | 27  | 22  | 30                     | 40.5 | 44.0 | 26.5 | 31.0 | 13.5 | 26.330 |
| SO 43121-18-3/4-18      | 018.3101.740 | 40  | 24x1.5                       | 27  | 22  | 30                     | 40.5 | 46.0 | 26.5 | 31.5 | 15.0 | 29.280 |
| SO 43121-22-3/4-22      | 018.3101.830 | 25  | 28x1.5                       | 28  | 27  | 36                     | 48.0 | 50.0 | 30.5 | 35.5 | 19.0 | 38.500 |
| SO 43121-28-1-28        | 018.3101.880 | 16  | 36x2                         | 41  | 27  | 41                     | 58.5 | 65.0 | 39.0 | 48.0 | 24.0 | 42.700 |

**4M**

# T-Verschraubung

mit Übergangsnippel SO 40040 NPT

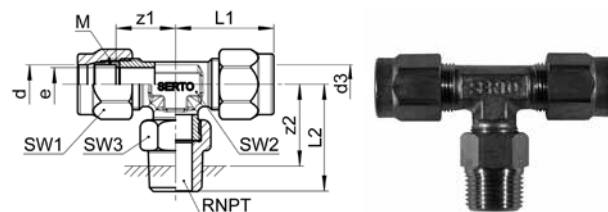
## Té

avec adaptateur mâle SO 40040 NPT

## Tee union

with male adaptor SO 40040 NPT

### SO 43121 NPT



| Type -d-RNPT-d3        | Mat.-Nr.     | bar | M                 | SW1 | SW2 | SW3             | L1   | L2   | z1   | z2   | e   | kg/100 |
|------------------------|--------------|-----|-------------------|-----|-----|-----------------|------|------|------|------|-----|--------|
| RNPT=NPT Gewinde       |              |     | RNPT=Filetage NPT |     |     | RNPT=NPT thread |      |      |      |      |     |        |
| SO 43121-6-1/8 NPT-6   | 018.3102.100 | 250 | 10x1              | 12  | 10  | 12              | 23.5 | 28.0 | 16.0 | 21.5 | 4.5 | 4.330  |
| SO 43121-6-1/4 NPT-6   | 018.3102.110 | 250 | 10x1              | 12  | 10  | 14              | 23.5 | 32.0 | 16.0 | 22.0 | 4.5 | 5.450  |
| SO 43121-8-1/8 NPT-8   | 018.3102.160 | 150 | 12x1              | 14  | 10  | 14              | 26.0 | 30.0 | 18.0 | 23.5 | 6.0 | 5.460  |
| SO 43121-8-1/4 NPT-8   | 018.3102.170 | 150 | 12x1              | 14  | 10  | 14              | 26.0 | 34.0 | 18.0 | 24.0 | 6.5 | 6.200  |
| SO 43121-10-1/4 NPT-10 | 018.3102.270 | 125 | 14x1              | 17  | 14  | 17              | 30.5 | 36.5 | 20.5 | 26.5 | 8.5 | 8.750  |



# T-Verschraubung

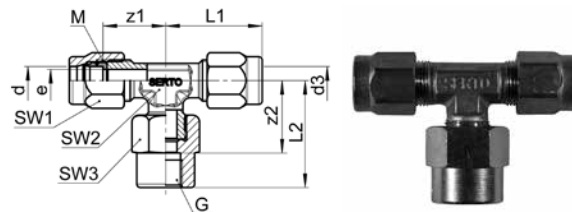
mit Übergangsmuffe SO 40030

## Té

avec pièce intermédiaire femelle SO 40030

## Tee union

with female adaptor SO 40030



### SO 43221

| Type -d-G-d3                | Mat.-Nr.                         | bar | M      | SW1 | SW2 | SW3 | L1                      | L2   | z1   | z2   | e    | kg/100 |
|-----------------------------|----------------------------------|-----|--------|-----|-----|-----|-------------------------|------|------|------|------|--------|
| Für metrische Rohre         | Pour tubes métriques             |     |        |     |     |     | For metric tubes        |      |      |      |      |        |
| G=Rohrgewinde (zylindrisch) | G=Filetage-gaz BSP (cylindrique) |     |        |     |     |     | G=BSP thread (straight) |      |      |      |      |        |
| SO 43221-6-1/8-6            | 018.3201.100                     | 250 | 10x1   | 12  | 10  | 14  | 23.5                    | 29.0 | 16.0 | 19.0 | 4.5  | 5.090  |
| SO 43221-6-1/4-6            | 018.3201.110                     | 250 | 10x1   | 12  | 10  | 17  | 23.5                    | 30.0 | 16.0 | 19.0 | 4.5  | 5.950  |
| SO 43221-6-3/8-6            | 018.3201.120                     | 250 | 10x1   | 12  | 10  | 22  | 23.5                    | 31.0 | 16.0 | 19.0 | 4.5  | 8.220  |
| SO 43221-8-1/8-8            | 018.3201.160                     | 100 | 12x1   | 14  | 10  | 17  | 26.0                    | 31.0 | 18.0 | 21.0 | 6.5  | 7.260  |
| SO 43221-8-1/4-8            | 018.3201.170                     | 100 | 12x1   | 14  | 10  | 17  | 26.0                    | 33.0 | 18.0 | 22.0 | 6.5  | 7.010  |
| SO 43221-8-3/8-8            | 018.3201.180                     | 100 | 12x1   | 14  | 10  | 22  | 26.0                    | 33.0 | 18.0 | 21.0 | 6.5  | 9.250  |
| SO 43221-10-1/4-10          | 018.3201.270                     | 64  | 14x1   | 17  | 14  | 17  | 30.5                    | 34.5 | 20.5 | 23.5 | 8.5  | 9.040  |
| SO 43221-10-3/8-10          | 018.3201.280                     | 64  | 14x1   | 17  | 14  | 22  | 30.5                    | 36.5 | 20.5 | 24.5 | 8.5  | 11.710 |
| * SO 43221-10-1/2-10        | 018.3201.290                     | 64  | 16x1   | 19  | 17  | 27  | 32.5                    | 38.5 | 21.5 | 24.5 | 10.0 | 16.530 |
| SO 43221-12-1/4-12          | 018.3201.380                     | 64  | 16x1   | 19  | 17  | 19  | 32.5                    | 35.5 | 21.5 | 24.5 | 10.0 | 11.990 |
| SO 43221-12-3/8-12          | 018.3201.390                     | 64  | 16x1   | 19  | 17  | 22  | 32.5                    | 36.5 | 21.5 | 24.5 | 10.5 | 13.070 |
| SO 43221-12-1/2-12          | 018.3201.400                     | 64  | 16x1   | 19  | 17  | 27  | 32.5                    | 38.5 | 21.5 | 24.5 | 10.0 | 16.250 |
| SO 43221-14-1/2-14          | 018.3201.540                     | 40  | 20x1.5 | 24  | 19  | 27  | 36.0                    | 41.0 | 23.5 | 27.0 | 13.0 | 22.280 |
| SO 43221-14-3/4-14          | 018.3201.550                     | 40  | 20x1.5 | 24  | 19  | 32  | 36.0                    | 44.0 | 23.5 | 27.0 | 13.0 | 26.130 |
| SO 43221-15-3/8-15          | 018.3201.580                     | 40  | 20x1.5 | 24  | 19  | 24  | 36.0                    | 39.0 | 23.5 | 27.0 | 13.0 | 19.610 |
| SO 43221-15-1/2-15          | 018.3201.590                     | 40  | 20x1.5 | 24  | 19  | 27  | 36.0                    | 41.0 | 23.5 | 27.0 | 13.0 | 21.640 |
| SO 43221-15-3/4-15          | 018.3201.600                     | 40  | 20x1.5 | 24  | 19  | 32  | 36.0                    | 44.0 | 23.5 | 27.0 | 13.0 | 25.490 |
| SO 43221-17-1/2-17          | 018.3201.680                     | 40  | 24x1.5 | 27  | 22  | 30  | 40.5                    | 45.0 | 26.5 | 31.0 | 15.0 | 30.300 |
| SO 43221-17-3/4-17          | 018.3201.690                     | 40  | 24x1.5 | 27  | 22  | 32  | 40.5                    | 48.0 | 26.5 | 31.0 | 15.0 | 31.240 |
| SO 43221-18-1/2-18          | 018.3201.730                     | 40  | 24x1.5 | 27  | 22  | 30  | 40.5                    | 45.0 | 26.5 | 31.0 | 15.0 | 29.760 |
| SO 43221-22-3/4-22          | 018.3201.830                     | 25  | 28x1.5 | 32  | 27  | 36  | 48.0                    | 52.0 | 30.5 | 35.0 | 19.0 | 43.340 |

Für Zollrohre

Pour tubes pouces

For inch tubes

|                        |              |     |      |    |    |    |      |      |      |      |     |       |
|------------------------|--------------|-----|------|----|----|----|------|------|------|------|-----|-------|
| SO 43221-6,35-1/8-6,35 | 018.3201.140 | 100 | 10x1 | 12 | 10 | 14 | 23.5 | 29.0 | 16.0 | 19.0 | 4.5 | 5.060 |
|------------------------|--------------|-----|------|----|----|----|------|------|------|------|-----|-------|

d=Rohraussen-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

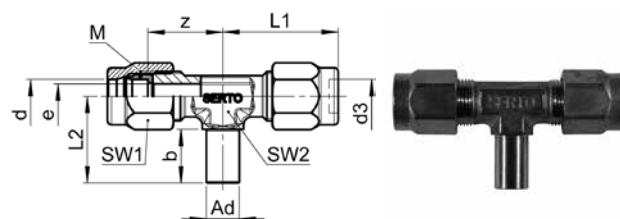
d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule



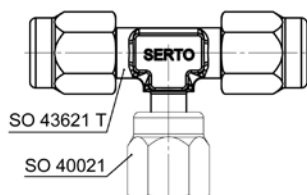
# Einstellbare T-Verschraubung Té orientable Adjustable tee union

## SO 43621 T



| Type -d -Ad -d3    | Mat.-Nr.     | bar | M    | SW1 | SW2 | L1   | L2   | b    | z    | e   | kg/100 |
|--------------------|--------------|-----|------|-----|-----|------|------|------|------|-----|--------|
| * SO 43621-4-A6-4  | 018.3600.045 | 100 | 10x1 | 12  | 10  | 23.5 | 17.5 | 11.0 | 16.0 | 3.4 | 3.540  |
| * SO 43621-5-A6-5  | 018.3600.053 | 100 | 10x1 | 12  | 10  | 23.5 | 17.5 | 11.0 | 16.0 | 4.0 | 3.500  |
| SO 43621-6-A6-6    | 018.3600.060 | 250 | 10x1 | 12  | 10  | 23.5 | 17.5 | 11.0 | 16.0 | 4.0 | 3.160  |
| * SO 43621-6-A8-6  | 018.3600.063 | 150 | 12x1 | 14  | 10  | 26.0 | 21.0 | 13.0 | 18.0 | 4.5 | 4.670  |
| SO 43621-8-A8-8    | 018.3600.080 | 150 | 12x1 | 14  | 10  | 26.0 | 21.0 | 13.0 | 18.0 | 6.0 | 4.230  |
| * SO 43621-8-A10-8 | 018.3600.083 | 125 | 14x1 | 17  | 14  | 30.5 | 26.0 | 16.5 | 20.5 | 6.5 | 7.940  |
| SO 43621-10-A10-10 | 018.3600.100 | 125 | 14x1 | 17  | 14  | 30.5 | 26.0 | 16.5 | 20.5 | 7.5 | 6.970  |

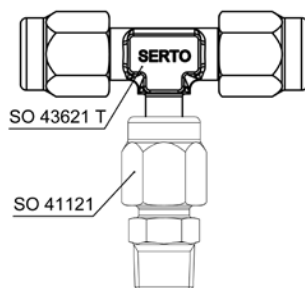
### Anwendungsbeispiele:



#### Mögliche Kombinationen:

- mit Armaturenanschluss zu einstellbaren T-Verschraubungen
- mit Verschraubungen zu einstellbaren Verschraubungen
- mit Einschraubverschraubungen zu einstellbaren T-Einschraubverschraubungen. Gegenüber der T-Einschraubverschraubung lässt sich diese Kombination einfacher einstellen, da Einschrauben und Ausrichten getrennt voneinander vorgenommen werden.

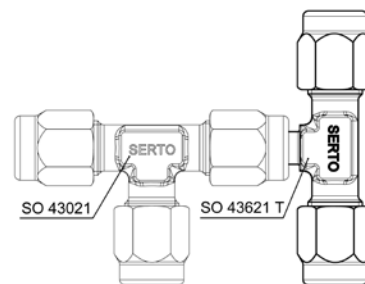
### Exemples d'utilisation:



#### Combinaisons possibles:

- avec écrou de raccordement ça donne un Té orientable
- avec raccords ça donne des raccords orientables
- avec une union mâle ça donne un Té fileté orientable. Par rapport au Té orientable, cette combinaison est facile à régler, puisque le vissage et l'alignement sont réalisés séparément l'un de l'autre.

### Sample combinations:



#### Possible combinations:

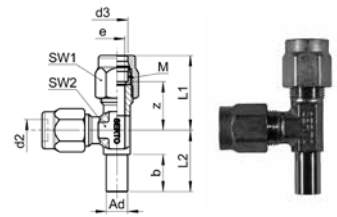
- with nut connections to adjustable Tee unions
- with unions to adjustable unions
- with male adaptor unions to adjustable male adaptor Tee unions. This combination is simpler to produce, as screwing in and alignment are carried out separately.

d=Rohrassens-ø  
 Ad=Aussen-ø der Andrehung  
 e=kleinste Bohrung  
 L=Mass in montiertem Zustand  
 \*=mit reduziertem Klemmring

d=ø extérieur du tube  
 Ad=ø extérieur de la portée cylindrique  
 e=ø-min. de passage  
 L=après montage  
 \*=avec bague de serrage de réduction

d=tube outside diameter  
 Ad=outside diameter of cyl. Stub  
 e=minimum bore  
 L=installed length  
 \*=with reduction compression ferrule

# Einstellbare L-Verschraubung L orientable Adjustable L union



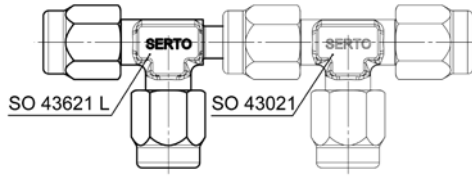
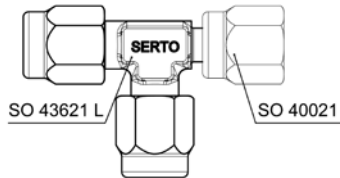
## SO 43621 L

| Type -Ad -d2 -d3   | Mat.-Nr.     | bar | M    | SW1 | SW2 | L1   | L2   | b    | z    | e   | kg/100 |
|--------------------|--------------|-----|------|-----|-----|------|------|------|------|-----|--------|
| * SO 43621-A6-4-4  | 018.3610.045 | 100 | 10x1 | 12  | 10  | 23.5 | 17.5 | 11.0 | 16.0 | 3.4 | 3.600  |
| * SO 43621-A6-5-5  | 018.3610.053 | 100 | 10x1 | 12  | 10  | 23.5 | 17.5 | 11.0 | 16.0 | 4.0 | 3.560  |
| SO 43621-A6-6-6    | 018.3610.060 | 250 | 10x1 | 12  | 10  | 23.5 | 17.5 | 11.0 | 16.0 | 4.0 | 3.220  |
| * SO 43621-A8-6-6  | 018.3610.063 | 150 | 12x1 | 14  | 10  | 26.0 | 21.0 | 13.0 | 18.0 | 4.5 | 4.700  |
| SO 43621-A8-8-8    | 018.3610.080 | 150 | 12x1 | 14  | 10  | 26.0 | 21.0 | 13.0 | 18.0 | 6.0 | 4.260  |
| * SO 43621-A10-8-8 | 018.3610.083 | 125 | 14x1 | 17  | 14  | 30.5 | 26.0 | 16.5 | 20.5 | 6.5 | 7.970  |
| SO 43621-A10-10-10 | 018.3610.100 | 125 | 14x1 | 17  | 14  | 30.5 | 26.0 | 16.5 | 20.5 | 8.0 | 7.000  |

### Anwendungsbeispiele:

### Exemples d'utilisation:

### Sample combinations:



#### Mögliche Kombinationen:

- mit Armaturenanschluss zu einstellbaren L-Verschraubungen
- mit Verschraubungen zu einstellbaren Verschraubungen
- mit Einschraubverschraubungen zu einstellbaren L-Einschraubverschraubungen. Gegenüber der L-Einschraubverschraubung lässt sich diese Kombination einfacher einstellen, da Einschrauben und Ausrichten getrennt voneinander vorgenommen werden.

#### Combinaisons possibles:

- avec écrou de raccordement ça donne un L orientable
- avec raccords ça donne des raccords orientables
- avec une union mâle ça donne un L fileté orientable. Par rapport au L orientable, cette combinaison est facile à régler, puisque le vissage et l'alignement sont réalisés séparément l'un de l'autre.

#### Possible combinations:

- with nut connections to adjustable L unions
- with unions to adjustable unions
- with male adaptor unions to adjustable male adaptor L unions. This combination is simpler to produce, as screwing in and alignment are carried out separately.

d=Rohrassen-ø  
 Ad=Aussen-ø der Andrehung  
 e=kleinste Bohrung  
 L=Mass in montiertem Zustand  
 \*=mit reduziertem Klemmring

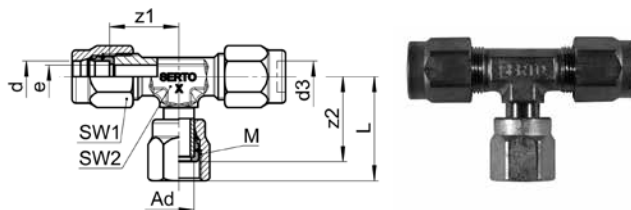
d=ø extérieur du tube  
 Ad=ø extérieur de la portée cylindrique  
 e=ø-min. de passage  
 L=après montage  
 \*=avec bague de serrage de réduction

d=tube outside diameter  
 Ad=outside diameter of cyl. Stub  
 e=minimum bore  
 L=installed length  
 \*=with reduction compression ferrule

## Einstellbare T-Verschraubung vormontiert

### Té orientable prémonté

### Adjustable tee union pre-assembled

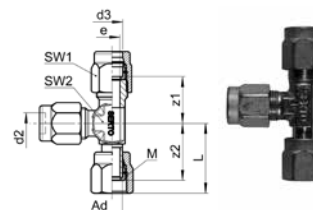
**SO 43625 T**


| Type -d -Ad -d3    | Mat.-Nr.     | bar | M    | SW1 | SW2 | L    | z1   | z2   | e   | kg/100 |
|--------------------|--------------|-----|------|-----|-----|------|------|------|-----|--------|
| * SO 43625-4-A6-4  | 018.3620.045 | 100 | 10x1 | 12  | 10  | 23.5 | 16.0 | 18.5 | 3.4 | 4.380  |
| * SO 43625-5-A6-5  | 018.3620.053 | 100 | 10x1 | 12  | 10  | 23.5 | 16.0 | 18.5 | 4.0 | 4.340  |
| SO 43625-6-A6-6    | 018.3620.060 | 250 | 10x1 | 12  | 10  | 23.5 | 16.0 | 18.5 | 4.0 | 4.000  |
| * SO 43625-6-A8-6  | 018.3620.063 | 150 | 12x1 | 14  | 10  | 28.0 | 18.0 | 22.0 | 4.5 | 5.790  |
| SO 43625-8-A8-8    | 018.3620.080 | 150 | 12x1 | 14  | 10  | 28.0 | 18.0 | 22.0 | 6.0 | 5.350  |
| * SO 43625-8-A10-8 | 018.3620.083 | 125 | 14x1 | 17  | 14  | 33.0 | 20.5 | 27.0 | 6.5 | 9.830  |
| SO 43625-10-A10-10 | 018.3620.100 | 125 | 14x1 | 17  | 14  | 33.0 | 20.5 | 27.0 | 7.5 | 8.860  |

## Einstellbare L-Verschraubung vormontiert

### L orientable prémonté

### Adjustable L union pre-assembled

**SO 43625 L**


| Type -Ad -d2 -d3   | Mat.-Nr.     | bar | M    | SW1 | SW2 | L    | z1   | z2   | e   | kg/100 |
|--------------------|--------------|-----|------|-----|-----|------|------|------|-----|--------|
| * SO 43625-A6-4-4  | 018.3630.045 | 100 | 10x1 | 12  | 10  | 23.5 | 16.0 | 18.5 | 3.4 | 4.400  |
| * SO 43625-A6-5-5  | 018.3630.053 | 100 | 10x1 | 12  | 10  | 23.5 | 16.0 | 18.5 | 4.0 | 4.400  |
| SO 43625-A6-6-6    | 018.3630.060 | 250 | 10x1 | 12  | 10  | 23.5 | 16.0 | 18.5 | 4.0 | 4.060  |
| * SO 43625-A8-6-6  | 018.3630.063 | 150 | 12x1 | 14  | 10  | 28.0 | 18.0 | 22.0 | 4.5 | 5.820  |
| SO 43625-A8-8-8    | 018.3630.080 | 150 | 12x1 | 14  | 10  | 28.0 | 18.0 | 22.0 | 6.0 | 5.380  |
| * SO 43625-A10-8-8 | 018.3630.083 | 125 | 14x1 | 17  | 14  | 33.0 | 20.5 | 27.0 | 6.5 | 9.860  |
| SO 43625-A10-10-10 | 018.3630.100 | 125 | 14x1 | 17  | 14  | 33.0 | 20.5 | 27.0 | 8.0 | 8.890  |

d=Rohraussen-ø  
 Ad=Aussen-ø der Andrehung  
 e=kleinste Bohrung  
 L=Mass in montiertem Zustand  
 \*=mit reduziertem Klemmring

d=ø extérieur du tube  
 Ad=ø extérieur de la portée cylindrique  
 e=ø-min. de passage  
 L=après montage  
 \*=avec bague de serrage de réduction

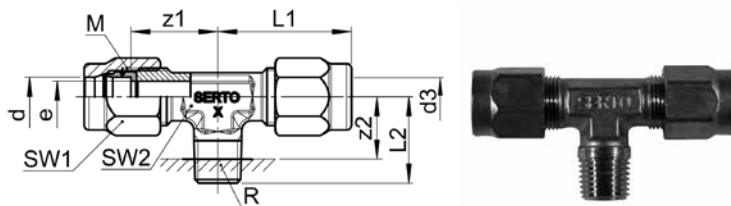
d=tube outside diameter  
 Ad=outside diameter of cyl. stub  
 e=minimum bore  
 L=installed length  
 \*=with reduction compression ferrule

## T-Einschraubverschraubung

### Té mâle

### Male adaptor tee union

#### SO 43721 T



| Type -d -R -d3                                 | Mat.-Nr.                                             | bar                                        | M    | SW1 | SW2 | L1   | L2   | z1   | z2   | e   | kg/100 |
|------------------------------------------------|------------------------------------------------------|--------------------------------------------|------|-----|-----|------|------|------|------|-----|--------|
| Für metrische Rohre<br>R=Rohrgewinde (kegelig) | Pour tubes métriques<br>R=Filetage-gaz BSP (conique) | For metric tubes<br>R=BSP thread (tapered) |      |     |     |      |      |      |      |     |        |
| ★ SO 43721-3-1/8-3                             | 018.3701.030                                         | 125                                        | 8x1  | 10  | 10  | 22.5 | 17.0 | 16.0 | 10.5 | 2.5 | 2.390  |
| SO 43721-4-1/8-4                               | 018.3701.040                                         | 125                                        | 8x1  | 10  | 10  | 22.0 | 17.0 | 16.0 | 10.5 | 3.4 | 2.350  |
| ★ SO 43721-4-1/4-4                             | 018.3701.045                                         | 125                                        | 10x1 | 12  | 10  | 25.5 | 21.5 | 18.0 | 13.0 | 3.4 | 4.110  |
| SO 43721-5-1/8-5                               | 018.3701.070                                         | 125                                        | 8x1  | 10  | 10  | 22.5 | 17.0 | 16.0 | 10.5 | 3.5 | 2.330  |
| ★ SO 43721-5-1/4-5                             | 018.3701.075                                         | 125                                        | 10x1 | 12  | 10  | 25.5 | 21.5 | 18.0 | 13.0 | 4.0 | 4.060  |
| SO 43721-6-1/8-6                               | 018.3701.100                                         | 250                                        | 10x1 | 12  | 10  | 23.5 | 17.5 | 16.0 | 11.0 | 4.5 | 3.240  |
| SO 43721-6-1/4-6                               | 018.3701.110                                         | 250                                        | 10x1 | 12  | 10  | 25.5 | 21.5 | 18.0 | 13.0 | 4.5 | 4.000  |
| ★ SO 43721-8-1/8-8                             | 018.3701.160                                         | 150                                        | 12x1 | 14  | 10  | 26.0 | 18.0 | 18.0 | 13.0 | 6.0 | 4.800  |
| SO 43721-8-1/4-8                               | 018.3701.170                                         | 150                                        | 12x1 | 14  | 10  | 26.0 | 22.5 | 18.0 | 13.0 | 6.5 | 4.730  |
| SO 43721-10-1/4-10                             | 018.3701.270                                         | 125                                        | 14x1 | 17  | 14  | 30.5 | 25.0 | 20.5 | 15.5 | 8.5 | 7.900  |
| Für Zollrohre                                  | Pour tubes pouces                                    | For inch tubes                             |      |     |     |      |      |      |      |     |        |
| SO 43721-6,35-1/8-6,35                         | 018.3701.140                                         | 100                                        | 10x1 | 12  | 10  | 23.5 | 17.5 | 16.0 | 11.0 | 4.5 | 3.210  |
| SO 43721-6,35-1/4-6,35                         | 018.3701.145                                         | 100                                        | 10x1 | 12  | 10  | 25.5 | 21.5 | 18.0 | 13.0 | 4.5 | 3.970  |
| SO 43721-9,52-1/4-9,52                         | 018.3701.210                                         | 64                                         | 14x1 | 17  | 14  | 30.5 | 25.0 | 20.5 | 15.5 | 8.0 | 7.210  |

Die entsprechende Dichtung ist immer separat zu bestellen. Weitere Einschraub-T siehe T-Verschraubung mit Übergangsnippel SO 43121.

Les joints correspondants sont à commander séparément. Autres Tés mâles voir Té avec adaptateur mâle SO 43121.

The relevant washer must always be ordered separately. Alternative male adaptor Tee see Tee union with male adaptor SO 43121.

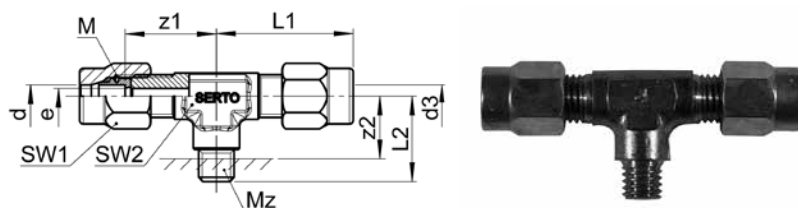
## T-Einschraubverschraubung

### METR

### Té mâle METR

### Male adaptor tee union METR

#### SO 43724 T METR



| Type -d -Mz -d3                     | Mat.-Nr.                           | bar                                             | M      | SW1 | SW2 | L1   | L2   | z1   | z2  | e   | kg/100 |
|-------------------------------------|------------------------------------|-------------------------------------------------|--------|-----|-----|------|------|------|-----|-----|--------|
| Mz=metrisches Gewinde (zylindrisch) | Mz=Filetage métrique (cylindrique) | For metric tubes<br>Mz=Metric thread (straight) |        |     |     |      |      |      |     |     |        |
| SO 43724-2-M5-2                     | 018.3743.050                       | 125                                             | 6x0.75 | 8   | 7   | 16.5 | 12.0 | 12.5 | 8.5 | 1.5 | 1.210  |
| SO 43724-3-M5-3                     | 018.3743.055                       | 125                                             | 6x0.75 | 8   | 7   | 18.0 | 12.0 | 13.0 | 8.5 | 2.2 | 1.290  |

Die entsprechende Dichtung ist immer separat zu bestellen.

Les joints correspondants sont à commander séparément.

The relevant washer must always be ordered separately.

d=Rohraussen-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

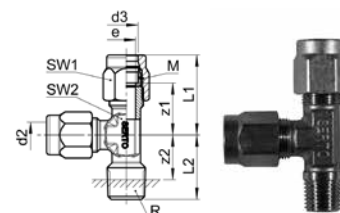
d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

## L-Einschraubverschraubung

### L mâle

### Male adaptor L union



#### SO 43721 L

| Type -R -d2 -d3                                | Mat.-Nr.                                             | bar                                        | M    | SW1 | SW2 | L1   | L2   | z1   | z2   | e   | kg/100 |
|------------------------------------------------|------------------------------------------------------|--------------------------------------------|------|-----|-----|------|------|------|------|-----|--------|
| Für metrische Rohre<br>R=Rohrgewinde (kegelig) | Pour tubes métriques<br>R=Filetage-gaz BSP (conique) | For metric tubes<br>R=BSP thread (tapered) |      |     |     |      |      |      |      |     |        |
| ★ SO 43721-1/8-3-3                             | 018.3711.030                                         | 125                                        | 8x1  | 10  | 10  | 22.5 | 17.5 | 16.0 | 10.5 | 2.5 | 2.410  |
| SO 43721-1/8-4-4                               | 018.3711.050                                         | 125                                        | 8x1  | 10  | 10  | 22.0 | 17.5 | 16.0 | 10.5 | 3.4 | 2.370  |
| SO 43721-1/8-5-5                               | 018.3711.070                                         | 125                                        | 8x1  | 10  | 10  | 22.5 | 17.5 | 16.0 | 10.5 | 3.5 | 2.350  |
| ★ SO 43721-1/4-4-4                             | 018.3711.140                                         | 125                                        | 10x1 | 12  | 10  | 25.5 | 21.5 | 18.0 | 13.0 | 4.0 | 4.180  |
| ★ SO 43721-1/4-5-5                             | 018.3711.160                                         | 125                                        | 10x1 | 12  | 10  | 25.5 | 21.5 | 18.0 | 13.0 | 4.5 | 4.130  |
| SO 43721-1/8-6-6                               | 018.3711.100                                         | 250                                        | 10x1 | 12  | 10  | 23.5 | 17.5 | 16.0 | 11.0 | 3.4 | 3.520  |
| SO 43721-1/4-6-6                               | 018.3711.180                                         | 250                                        | 10x1 | 12  | 10  | 23.5 | 21.5 | 18.0 | 13.0 | 4.5 | 4.070  |
| SO 43721-1/4-8-8                               | 018.3711.220                                         | 150                                        | 12x1 | 14  | 10  | 26.0 | 22.5 | 18.0 | 13.0 | 6.5 | 4.750  |
| SO 43721-1/4-10-10                             | 018.3711.260                                         | 125                                        | 14x1 | 17  | 14  | 30.5 | 25.0 | 20.5 | 15.5 | 8.5 | 7.040  |

Für Zollrohre

Pour tubes pouces

For inch tubes

|                        |              |     |      |    |    |      |      |      |      |     |       |
|------------------------|--------------|-----|------|----|----|------|------|------|------|-----|-------|
| SO 43721-1/8-6,35-6,35 | 018.3711.110 | 100 | 10x1 | 12 | 10 | 23.5 | 17.5 | 16.0 | 11.0 | 4.5 | 3.490 |
| SO 43721-1/4-6,35-6,35 | 018.3711.190 | 100 | 10x1 | 12 | 10 | 23.5 | 21.5 | 18.0 | 13.0 | 4.5 | 4.040 |
| SO 43721-1/4-9,52-9,52 | 018.3711.240 | 64  | 14x1 | 17 | 14 | 30.5 | 25.0 | 20.5 | 15.5 | 8.0 | 7.160 |

Die entsprechende Dichtung ist immer separat zu bestellen.

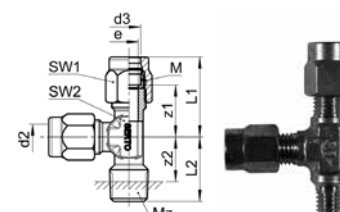
Les joints correspondants sont à commander séparément.

The relevant washer must always be ordered separately.

## L-Einschraubverschraubung METR

### L mâle METR

### Male adaptor L union METR



#### SO 43724 L METR

| Type -Mz -d2 -d3                    | Mat.-Nr.                           | bar                         | M      | SW1 | SW2 | L1   | L2   | z1   | z2  | e   | kg/100 |
|-------------------------------------|------------------------------------|-----------------------------|--------|-----|-----|------|------|------|-----|-----|--------|
| Mz=metrisches Gewinde (zylindrisch) | Mz=Filetage métrique (cylindrique) | Mz=Metric thread (straight) |        |     |     |      |      |      |     |     |        |
| SO 43724-M5-2-2                     | 018.3753.050                       | 125                         | 6x0.75 | 8   | 7   | 16.5 | 12.0 | 12.5 | 8.5 | 1.5 | 1.180  |
| SO 43724-M5-3-3                     | 018.3753.055                       | 125                         | 6x0.75 | 8   | 7   | 18.0 | 12.0 | 13.0 | 8.5 | 2.2 | 1.260  |

Die entsprechende Dichtung ist immer separat zu bestellen.

Les joints correspondants sont à commander séparément.

The relevant washer must always be ordered separately.

d=Rohrtaussen-ø  
 e=kleinste Bohrung  
 L=Mass in montiertem Zustand  
 \*=mit reduziertem Klemmring

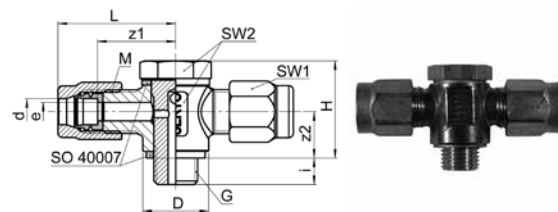
d=ø extérieur du tube  
 e=ø-min. de passage  
 L=après montage  
 \*=avec bague de serrage de réduction

d=tube outside diameter  
 e=minimum bore  
 L=installed length  
 \*=with reduction compression ferrule

# T-Schwenkverschraubung

## Té banjo

## Tee banjo

**SO 43824**


| Type -d-G                   | Mat.-Nr.                         | bar | M                       | SW1 | SW2 | L    | D    | H    | i   | z1   | z2   | e   | kg/100 |
|-----------------------------|----------------------------------|-----|-------------------------|-----|-----|------|------|------|-----|------|------|-----|--------|
| Für metrische Rohre         | Pour tubes métriques             |     | For metric tubes        |     |     |      |      |      |     |      |      |     |        |
| G=Rohrgewinde (zylindrisch) | G=Filetage-gaz BSP (cylindrique) |     | G=BSP thread (straight) |     |     |      |      |      |     |      |      |     |        |
| ★ SO 43824-4-1/8            | 018.3841.060                     | 125 | 10x1                    | 12  | 14  | 25.0 | 15.0 | 22.0 | 6.0 | 17.5 | 10.5 | 3.4 | 4.130  |
| ★ SO 43824-5-1/8            | 018.3841.082                     | 125 | 10x1                    | 12  | 14  | 25.0 | 15.0 | 22.0 | 6.0 | 17.5 | 10.5 | 3.8 | 4.410  |
| SO 43824-6-1/8              | 018.3841.100                     | 250 | 10x1                    | 12  | 14  | 25.0 | 15.0 | 22.0 | 6.0 | 17.5 | 10.5 | 3.8 | 5.180  |
| ★ SO 43824-6-1/4            | 018.3841.110                     | 250 | 12x1                    | 14  | 19  | 29.0 | 20.0 | 29.0 | 7.0 | 21.0 | 14.0 | 4.5 | 9.610  |
| SO 43824-8-1/8              | 018.3841.160                     | 150 | 12x1                    | 14  | 14  | 25.5 | 15.0 | 22.0 | 6.0 | 17.5 | 10.5 | 3.8 | 5.970  |
| SO 43824-8-1/4              | 018.3841.170                     | 150 | 12x1                    | 14  | 19  | 29.0 | 20.0 | 29.0 | 7.0 | 21.0 | 14.0 | 6.5 | 9.450  |
| Für Zollrohre               | Pour tubes pouces                |     | For inch tubes          |     |     |      |      |      |     |      |      |     |        |
| SO 43824-6,35-1/8           | 018.3841.135                     | 100 | 10x1                    | 12  | 14  | 25.0 | 15.0 | 22.0 | 6.0 | 17.5 | 9.5  | 3.8 | 5.150  |

Dichtungen werden mitgeliefert.  
Ersatzdichtungen siehe SO 40007.

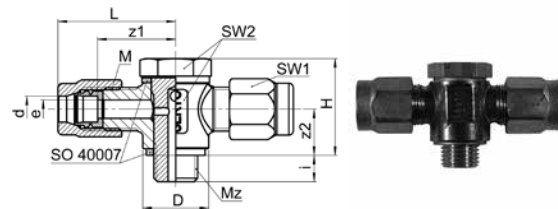
Les joints sont fournis.  
Joints de rechange voir SO 40007.

The washers are included.  
Spare washers please see SO 40007.

# T-Schwenkverschraubung METR

## Té banjo METR

## Tee banjo METR

**SO 43824 METR**


| Type -d-Mz                          | Mat.-Nr.                           | bar | M                           | SW1 | SW2 | L    | D    | H    | i   | z1   | z2   | e   | kg/100 |
|-------------------------------------|------------------------------------|-----|-----------------------------|-----|-----|------|------|------|-----|------|------|-----|--------|
| Für metrische Rohre                 | Pour tubes métriques               |     | For metric tubes            |     |     |      |      |      |     |      |      |     |        |
| Mz=metrisches Gewinde (zylindrisch) | Mz=Filetage métrique (cylindrique) |     | Mz=Metric thread (straight) |     |     |      |      |      |     |      |      |     |        |
| ★ SO 43824-4-M10X1                  | 018.3843.096                       | 125 | 10x1                        | 12  | 14  | 25.0 | 15.0 | 22.0 | 6.0 | 17.5 | 10.5 | 3.4 | 4.440  |
| ★ SO 43824-5-M10X1                  | 018.3843.135                       | 125 | 10x1                        | 12  | 14  | 25.0 | 15.0 | 22.0 | 6.0 | 17.5 | 10.5 | 3.8 | 4.430  |
| SO 43824-6-M10X1                    | 018.3843.180                       | 250 | 10x1                        | 12  | 14  | 25.0 | 15.0 | 22.0 | 6.0 | 17.5 | 10.5 | 3.8 | 5.240  |
| ★ SO 43824-6-M12X1,5                | 018.3843.195                       | 250 | 12x1                        | 14  | 19  | 29.0 | 20.0 | 29.0 | 7.0 | 21.0 | 13.5 | 4.5 | 10.110 |
| ★ SO 43824-6-M14X1,5                | 018.3843.198                       | 250 | 12x1                        | 14  | 19  | 29.0 | 20.0 | 29.0 | 7.0 | 21.0 | 13.5 | 4.5 | 10.070 |
| SO 43824-8-M10X1                    | 018.3843.230                       | 150 | 12x1                        | 14  | 14  | 25.0 | 15.0 | 22.0 | 6.0 | 21.0 | 10.5 | 3.8 | 6.050  |
| SO 43824-8-M12X1,5                  | 018.3843.240                       | 150 | 12x1                        | 14  | 19  | 29.0 | 20.0 | 29.0 | 7.0 | 21.0 | 13.5 | 6.5 | 9.790  |
| SO 43824-8-M14X1,5                  | 018.3843.245                       | 150 | 12x1                        | 14  | 19  | 29.0 | 20.0 | 29.0 | 7.0 | 21.0 | 13.5 | 6.5 | 9.750  |
| Für Zollrohre                       | Pour tubes pouces                  |     | For inch tubes              |     |     |      |      |      |     |      |      |     |        |
| SO 43824-6,35-M10X1                 | 018.3843.210                       | 100 | 10x1                        | 12  | 14  | 25.0 | 15.0 | 22.0 | 6.0 | 17.5 | 10.5 | 3.8 | 5.230  |

Dichtungen werden mitgeliefert.  
Ersatzdichtungen siehe SO 40007.

Les joints sont fournis.  
Joints de rechange voir SO 40007.

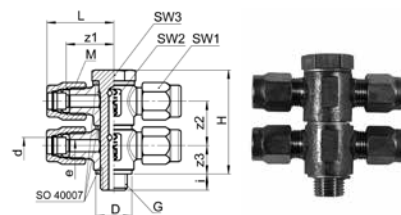
The washers are included.  
Spare washers please see SO 40007.

d=Rohrassens-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

# 2-fach T-Schwenkverschraubung Té banjo multiple Tee double banjo

**SO 43924**


| Type -n x d -G                                     | Mat.-Nr.     | bar | M    | SW1 | SW2 | SW3 | L    | D    | H    | i   | z1   | z2   | z3   | e   | kg/100 |
|----------------------------------------------------|--------------|-----|------|-----|-----|-----|------|------|------|-----|------|------|------|-----|--------|
| Für metrische Rohre<br>G=Rohrgewinde (zylindrisch) |              |     |      |     |     |     |      |      |      |     |      |      |      |     |        |
|                                                    |              |     |      |     |     |     |      |      |      |     |      |      |      |     |        |
| ★ SO 43924-2x4-1/8                                 | 018.3941.060 | 125 | 10x1 | 12  | 14  | 14  | 25.0 | 15.0 | 38.5 | 6.0 | 17.5 | 16.5 | 10.5 | 3.4 | 7.270  |
| ★ SO 43924-2x5-1/8                                 | 018.3941.082 | 125 | 10x1 | 12  | 14  | 14  | 25.0 | 15.0 | 38.5 | 6.0 | 17.5 | 16.5 | 10.5 | 3.8 | 7.830  |
| SO 43924-2x6-1/8                                   | 018.3941.100 | 250 | 10x1 | 12  | 14  | 14  | 25.0 | 15.0 | 38.5 | 6.0 | 17.5 | 16.5 | 10.5 | 3.8 | 9.370  |
| ★ SO 43924-2x6-1/4                                 | 018.3941.110 | 250 | 12x1 | 14  | 19  | 19  | 29.0 | 20.0 | 49.0 | 9.0 | 21.0 | 21.5 | 13.5 | 4.5 | 17.270 |
| SO 43924-2x8-1/8                                   | 018.3941.160 | 150 | 12x1 | 14  | 14  | 14  | 25.5 | 15.0 | 38.5 | 6.0 | 17.5 | 16.5 | 10.5 | 3.8 | 10.950 |
| SO 43924-2x8-1/4                                   | 018.3941.170 | 150 | 12x1 | 14  | 19  | 19  | 29.0 | 20.0 | 49.0 | 9.0 | 21.0 | 21.5 | 13.5 | 6.5 | 16.950 |

Für Zollrohre

Pour tubes pouces

For inch tubes

|                     |              |     |      |    |    |    |      |      |      |     |      |      |      |     |       |
|---------------------|--------------|-----|------|----|----|----|------|------|------|-----|------|------|------|-----|-------|
| SO 43924-2x6,35-1/8 | 018.3941.135 | 100 | 10x1 | 12 | 14 | 14 | 25.0 | 15.0 | 38.5 | 6.0 | 17.5 | 16.5 | 10.5 | 3.8 | 9.310 |
|---------------------|--------------|-----|------|----|----|----|------|------|------|-----|------|------|------|-----|-------|

Dichtungen werden mitgeliefert.  
Ersatzdichtungen siehe SO 40007.

Les joints sont fournis.  
Joints de rechange voir SO 40007.

The washers are included.  
Spare washers please see SO 40007.

d=Rohraussen-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

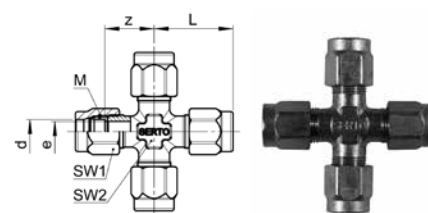
d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

**4M**
**4M.78**

# Kreuzverschraubung

## Croix

## Cross union



### SO 44021

| Type -d             | Mat.-Nr.             | bar              | M      | SW1 | SW2 | L    | z    | e    | kg/100 |
|---------------------|----------------------|------------------|--------|-----|-----|------|------|------|--------|
| Für metrische Rohre | Pour tubes métriques | For metric tubes |        |     |     |      |      |      |        |
| * SO 44021-4        | 018.4000.040         | 125              | 10x1   | 12  | 10  | 25.5 | 18.0 | 3.4  | 4.800  |
| SO 44021-5          | 018.4000.050         | 125              | 8x1    | 10  | 10  | 25.0 | 19.5 | 3.4  | 4.800  |
| SO 44021-6          | 018.4000.060         | 250              | 10x1   | 12  | 10  | 25.5 | 18.0 | 4.0  | 6.030  |
| SO 44021-8          | 018.4000.080         | 150              | 12x1   | 14  | 11  | 28.5 | 20.5 | 6.5  | 7.930  |
| SO 44021-10         | 018.4000.100         | 125              | 14x1   | 17  | 14  | 30.5 | 20.5 | 8.5  | 11.880 |
| SO 44021-12         | 018.4000.120         | 100              | 16x1   | 19  | 14  | 32.5 | 21.5 | 9.0  | 14.650 |
| * SO 44021-13       | 018.4000.130         | 40               | 20x1.5 | 24  | 19  | 39.0 | 26.5 | 11.0 | 25.770 |
| SO 44021-14         | 018.4000.140         | 40               | 20x1.5 | 24  | 19  | 39.0 | 26.5 | 12.0 | 26.620 |
| SO 44021-15         | 018.4000.150         | 40               | 20x1.5 | 24  | 19  | 39.0 | 26.5 | 13.0 | 25.340 |
| Für Zollrohre       | Pour tubes pouces    | For inch tubes   |        |     |     |      |      |      |        |
| SO 44021-6,35       | 018.4000.063         | 100              | 10x1   | 12  | 10  | 25.5 | 18.0 | 4.0  | 5.980  |
| SO 44021-9,52       | 018.4000.095         | 64               | 14x1   | 17  | 14  | 30.5 | 20.5 | 8.0  | 12.120 |
| * SO 44021-12,7     | 018.4000.127         | 40               | 20x1.5 | 24  | 19  | 39.0 | 26.5 | 11.0 | 25.770 |

d=Rohraussen-ø  
 e=kleinste Bohrung  
 L=Mass in montiertem Zustand  
 \*=mit reduziertem Klemmring

d=ø extérieur du tube  
 e=ø-min. de passage  
 L=après montage  
 \*=avec bague de serrage de réduction

d=tube outside diameter  
 e=minimum bore  
 L=installed length  
 \*=with reduction compression ferrule



# Schwenkverschraubung

mit Drossel-Ventil

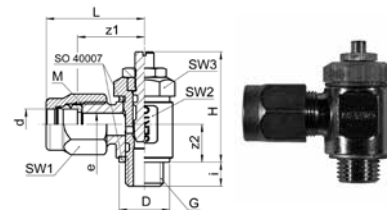
## Coude banjo

à passage réglable

## Single banjo

with throttle valve

**SO 47624**



| Type -d -G                  | Mat.-Nr.     | bar | M    | SW1 | SW2 | SW3 | L    | D    | H    | i   | z1   | z2   | e   | kv  | kg/100 |
|-----------------------------|--------------|-----|------|-----|-----|-----|------|------|------|-----|------|------|-----|-----|--------|
| Für metrische Rohre         |              |     |      |     |     |     |      |      |      |     |      |      |     |     |        |
| G=Rohrgewinde (zylindrisch) |              |     |      |     |     |     |      |      |      |     |      |      |     |     |        |
| ★ SO 47624-3-1/8            | 028.7600.040 | 16  | 8x1  | 10  | 14  | 14  | 24.0 | 15.0 | 26.0 | 6.5 | 17.5 | 10.0 | 2.5 | 3.0 | 4.000  |
| SO 47624-4-1/8              | 028.7600.060 | 16  | 8x1  | 10  | 14  | 14  | 23.5 | 15.0 | 26.0 | 6.5 | 17.5 | 10.0 | 3.4 | 3.0 | 3.800  |
| SO 47624-5-1/8              | 028.7600.082 | 16  | 8x1  | 10  | 14  | 14  | 24.0 | 15.0 | 26.0 | 6.5 | 17.5 | 10.0 | 3.5 | 3.0 | 3.700  |
| SO 47624-6-1/8              | 028.7600.100 | 16  | 10x1 | 12  | 14  | 14  | 25.0 | 15.0 | 26.0 | 6.5 | 17.5 | 10.0 | 3.5 | 3.0 | 4.300  |
| ★ SO 47624-6-1/4            | 028.7600.110 | 16  | 12x1 | 14  | 19  | 19  | 29.0 | 20.0 | 31.5 | 8.0 | 21.0 | 13.5 | 4.5 | 6.0 | 8.600  |
| SO 47624-8-1/8              | 028.7600.160 | 16  | 12x1 | 14  | 14  | 14  | 25.5 | 15.0 | 31.5 | 6.5 | 17.5 | 10.0 | 3.5 | 3.0 | 4.600  |
| SO 47624-8-1/4              | 028.7600.170 | 16  | 12x1 | 14  | 19  | 19  | 29.0 | 20.0 | 31.5 | 8.0 | 21.0 | 13.5 | 5.0 | 6.0 | 8.400  |
| SO 47624-10-1/4             | 028.7600.270 | 16  | 14x1 | 17  | 19  | 19  | 32.0 | 20.0 | 31.5 | 8.0 | 21.0 | 13.5 | 5.0 | 6.0 | 9.000  |
| Für Zollrohre               |              |     |      |     |     |     |      |      |      |     |      |      |     |     |        |
|                             |              |     |      |     |     |     |      |      |      |     |      |      |     |     |        |
| SO 47624-6,35-1/8           | 028.7600.135 | 16  | 10x1 | 12  | 14  | 14  | 25.0 | 15.0 | 26.0 | 6.5 | 17.5 | 10.0 | 3.5 | 3.0 | 4.200  |
| SO 47624-9,52-1/4           | 028.7600.230 | 16  | 14x1 | 17  | 19  | 19  | 31.0 | 20.0 | 31.5 | 8.0 | 21.0 | 13.5 | 5.0 | 6.0 | 9.100  |

Temperatur -20°C/+80°C

Dieses Drossel-Ventil dient zur Regulierung von Luftströmen in beiden Richtungen. Die Spindelfixierung mittels Kontermutter garantiert, dass sich die Spindel auch bei Vibration nicht verstellt.

Technische Hinweise:

Körper, Ventileinsatz und Anschlüsse aus Messing.  
O-Ring aus NBR.

Température -20°C/+80°C

Cet élément d'étanchéité sert au réglage de l'écoulement d'air dans les deux sens. La fixation de la broche à l'aide d'un contre-écrou garantit la stabilité du réglage même en cas de vibrations.

Données techniques:

Soupape, pointeau et écrous en laiton.  
Joint torique en matière NBR caoutchouc.

Temperature -20°C/+80°C

This throttle can be used for regulating air flow in both directions. The spindle fixture via counter-nut assures that spindle cannot shift, even due to vibration.

Technical notes:

Valve body, valve components and connections of brass. O-ring of NBR.

d=Rohrassens-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

**4M**

**4M.80**

# Schwenkverschraubung

mit Drosselrückschlag-Ventil

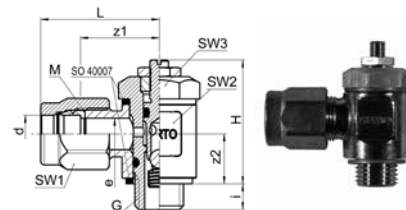
## Coude banjo

à passage réglable et soupape de retenue

## Single banjo

with throttle non-return valve

**SO 47724**



| Type -d-G                   | Mat.-Nr.     | bar | M    | SW1 | SW2 | SW3 | L    | D    | H    | i   | z1   | z2   | e   | kv  | kg/100 |
|-----------------------------|--------------|-----|------|-----|-----|-----|------|------|------|-----|------|------|-----|-----|--------|
| Für metrische Rohre         |              |     |      |     |     |     |      |      |      |     |      |      |     |     |        |
| G=Rohrgewinde (zylindrisch) |              |     |      |     |     |     |      |      |      |     |      |      |     |     |        |
| ★ SO 47724-3-1/8            | 028.7700.040 | 16  | 8x1  | 10  | 14  | 14  | 24.0 | 15.0 | 26.0 | 6.5 | 17.5 | 10.0 | 2.5 | 3.0 | 4.000  |
| SO 47724-4-1/8              | 028.7700.060 | 16  | 8x1  | 10  | 14  | 14  | 23.5 | 15.0 | 26.0 | 6.5 | 17.5 | 10.0 | 3.4 | 3.0 | 3.800  |
| SO 47724-5-1/8              | 028.7700.082 | 16  | 8x1  | 10  | 14  | 14  | 24.0 | 15.0 | 26.0 | 6.5 | 17.5 | 10.0 | 3.5 | 3.0 | 3.700  |
| SO 47724-6-1/8              | 028.7700.100 | 16  | 10x1 | 12  | 14  | 14  | 25.0 | 15.0 | 26.0 | 6.5 | 17.5 | 10.0 | 3.5 | 3.0 | 4.300  |
| ★ SO 47724-6-1/4            | 028.7700.110 | 16  | 12x1 | 14  | 19  | 19  | 29.0 | 20.0 | 31.5 | 8.0 | 21.0 | 13.5 | 4.5 | 6.0 | 8.600  |
| SO 47724-8-1/8              | 028.7700.160 | 16  | 12x1 | 14  | 14  | 14  | 25.5 | 15.0 | 26.0 | 6.5 | 17.5 | 10.0 | 3.5 | 3.0 | 4.600  |
| SO 47724-8-1/4              | 028.7700.170 | 16  | 12x1 | 14  | 19  | 19  | 29.0 | 20.0 | 31.5 | 8.0 | 21.0 | 13.5 | 5.0 | 6.0 | 8.400  |
| SO 47724-10-1/4             | 028.7700.270 | 16  | 14x1 | 17  | 19  | 19  | 32.0 | 20.0 | 33.5 | 8.0 | 21.0 | 13.5 | 5.0 | 6.0 | 9.000  |

Für Zollrohre

Pour tubes pouces

For inch tubes

|                   |              |    |      |    |    |    |      |      |      |     |      |      |     |     |       |
|-------------------|--------------|----|------|----|----|----|------|------|------|-----|------|------|-----|-----|-------|
| SO 47724-6,35-1/8 | 028.7700.135 | 16 | 10x1 | 12 | 14 | 14 | 25.0 | 15.0 | 26.0 | 6.5 | 17.5 | 10.0 | 3.5 | 3.0 | 4.200 |
| SO 47724-9,52-1/4 | 028.7700.230 | 16 | 14x1 | 17 | 19 | 19 | 31.0 | 20.0 | 31.5 | 8.0 | 21.0 | 13.5 | 5.0 | 6.0 | 9.100 |

Temp: -20°C /+ 80°C

Temp: -20°C/+ 80°C

Temp: -20°C/+80°C

Dieses Drossel-Rückschlag-Ventil wird dort eingesetzt, wo unterschiedliche Geschwindigkeiten von Luftströmen benötigt werden. Die Spindelfixierung mittels Kontermutter garantiert, dass sich die Spindel auch bei Vibration nicht verstellt.

Cet élément à passage réglable et soupape de retenue est utilisé lorsque les écoulements d'air doivent avoir une vitesse différente. La fixation de la broche à l'aide d'un contre-écrou garantit la stabilité du réglage même en cas de vibrations.

This non-return-throttle valve is installed where various air flow rates are required. The spindle fixture via counter-nut assures that spindle cannot shift, even due to vibration.

Technische Hinweise:

Körper, Ventileinsatz und Anschlüsse aus Messing, O-Ring aus NBR, Feder aus nichtrostendem Stahl, Kugel aus Polyurethan.

Données techniques:

Soupape, pointeau et écrous en laiton. Joint torique en matière NBR caoutchouc, ressort en acier inoxydable, bille en polyuréthane.

Technical notes:

Valve body, valve components and connections of brass, O-ring of NBR, spring of stainless steel, ball of polyurethane.

Schwenkverschraubungen siehe SO 42824, SO 42924, SO 43824 und SO 43924.

Coudes banjo voir SO 42824, SO 42924, SO 43824 et SO 43924.

Single banjo please see SO 42824, SO 42924, SO 43824 and SO 43924.

d=Rohrassens-ø  
e=kleinste Bohrung  
L=Mass in montiertem Zustand  
\*=mit reduziertem Klemmring

d=ø extérieur du tube  
e=ø-min. de passage  
L=après montage  
\*=avec bague de serrage de réduction

d=tube outside diameter  
e=minimum bore  
L=installed length  
\*=with reduction compression ferrule

## Ventile Messing M

## Vannes laiton M

## Valves brass M

### SO NV 41A21



Regulierventil  
Robinet de réglage  
Regulating valve

7.21

### SO NV 41A30



Regulierventil mit Übergangsmuffe SO 40030  
Robinet de réglage avec adaptateur femelle SO 40030  
Regulating valve with female adaptor SO 40030

7.22

### SO NV 41A40



Regulierventil mit Übergangsnippel SO 40040  
Robinet de réglage avec adaptateur mâle SO 40040  
Regulating valve with male adaptor SO 40040

7.23

### SO NV 41C21



Feinregulierventil  
Robinet de réglage fin  
Fine regulating valve

7.24

### SO NV 41A21E



Regulier-Eckventil  
Robinet-équerre de réglage  
Elbow regulating valve

7.25

### SO NV 41A30E



Regulier-Eckventil mit Übergangsmuffe SO 40030  
Robinet-équerre de réglage avec adaptateur femelle SO 40030  
Elbow regulating valve with female adaptor SO 40030

7.26

### SO NV 41A40E



Regulier-Eckventil mit Übergangsnippel SO 40040  
Robinet-équerre avec adaptateur mâle SO 40040  
Elbow regulating valve with male adaptor SO 40040

7.27

### SO NV 41A21EB



Regulier-Eckventil mit Einschraubgewinde  
Robinet-équerre de réglage avec filetage mâle  
Elbow regulating valve with male adaptor thread

7.28

### SO NV 41A21EL



Regulier-Eckventil mit Einstellzapfen  
Robinet-équerre de réglage orientable  
Elbow regulating valve adjustable

7.29

### SO NV 41C21E



Feinregulier-Eckventil  
Robinet-équerre de réglage fin  
Elbow fine regulating valve

7.30

### SO NV 41C21EB



Feinregulier-Eckventil mit Einschraubgewinde  
Robinet-équerre de réglage fin avec filetage mâle  
Elbow fine regulating valve with male adaptor thread

7.31

### SO NV 41C21EL



Feinregulier-Eckventil mit Einstellzapfen  
Robinet-équerre de réglage fin orientable  
Elbow fine regulating valve adjustable

7.32

4M

## Ventile Messing M

## Vannes laiton M

## Valves brass M

### SO 09900



Anschraubfuss  
Support de fixation  
Flange mount

7.33

### VSD SO NV



Ventilschilder (Satz)  
Plaques indicatrices (set)  
Valve labels (set)

7.33

### SO CV 43A21



Kegelmückschlagventil  
Soupape de retenue à siège conique  
Taper seat non-return valve

7.36

### SO CV 43A30



Kegelmückschlagventil mit Übergangsmuffe  
SO 40030  
Soupape de retenue à siège conique avec  
adaptateur femelle SO 40030  
Taper seat non-return valve with female  
adaptor SO 40030

7.37

### SO CV 43A40



Kegelmückschlagventil mit Übergangsnippel  
SO 40040  
Soupape de retenue à siège conique avec  
adaptateur mâle SO 40040  
Taper seat non-return valve with male  
adaptor SO 40040

#R01#

### SO CV 43B05



Doppelkugelmückschlagventil für Heizöltanks  
Soupape de retenue à deux billes pour des  
citernes à mazout  
Double ball valve for oil tanks

7.38

### SO CV 43B01



Doppelkugelmückschlagventil für Heizöltanks  
Soupape de retenue à deux billes pour des  
citernes à mazout  
Double ball valve for oil tanks

7.38

### SO CV 43C21



Doppelschutzventil für Ölfeuerungsanlagen  
Vanne à double protection pour installations  
de chauffage  
Double action valve for oil firing installation

7.39

### SO BV 48A00



Mini-Kugelhahn mit Innengewinde  
Mini robinet à bille avec filetage femelle  
Mini-Ball valve with female thread

7.42

### SO BV 48A05



Mini-Kugelhahn mit Innen-/Aussengewinde  
Mini robinet à bille avec filetage femelle-  
mâle  
Mini-Ball valve with female/male thread

7.42

### SO BV 48A10



Mini-Kugelhahn mit Aussengewinde  
Mini robinet à bille avec filetage mâle  
Mini-Ball valve with male thread

7.43

## Adapter Messing M

## Adaptateurs laiton M

## Adaptors brass M

### AD HN 40 R



Doppelnippel R  
Mamelon double R  
Male adaptor R

9.16

### AD HN 40 R-NPT



Doppelnippel R-NPT  
Mamelon double R-NPT  
Male adaptor R-NPT

9.16

### AD HN 40 NPT-NPT



Doppelnippel NPT-NPT  
Mamelon double NPT-NPT  
Male adaptor NPT-NPT

9.16

### ADH HNC 40



Doppelnippel 60°-Innenkonus  
Mamelon double cône intérieur 60°  
Male adaptor 60° inner cone

9.17

### AD FA 40



Reduziermuffe  
Réduction femelle-femelle  
Female reduction socket

9.17

### AD FA 40 NPT



Reduziermuffe NPT  
Réduction femelle-femelle NPT  
Female reduction socket NPT

9.18

### AD A 40 G-R



Reduziernippel Einschraubgewinde kegelig  
Réduction femelle-mâle filetage conique  
Male reduction nipple tapered adaptor thread

9.19

### AD A 40 G-NPT



Reduziernippel G-NPT Einschraubgewinde kegelig  
Réduction femelle-mâle G-NPT filetage conique  
Male reduction nipple G-NPT tapered adaptor thread

9.20

### AD A 40 NPT-R



Reduziernippel NPT-R Einschraubgewinde kegelig  
Réduction femelle-mâle NPT-R filetage conique  
Male reduction nipple NPT-R tapered adaptor thread

9.20

### AD A 40 NPT-NPT



Reduziernippel NPT-NPT Einschraubgewinde kegelig  
Réduction femelle-mâle NPT-NPT filetage conique  
Male reduction nipple NPT-NPT tapered adaptor thread

9.21

### AD HC 40



Sechskantmuffe  
Manchon hexagonal  
Hexagonal sleeve

9.21

### AD HRC 40



Sechskantmuffe reduziert  
Manchon hexagonal réduit  
Hexagonal reducing sleeve

9.21

4M

## Adapter Messing M

## Adaptateurs laiton M

## Adaptors brass M

### AD HCP 40



Rohrkappe mit Dichtung EPDM  
Capuchon avec joint EPDM  
Hexagonal cap with EPDM sealing

9.22

### AD HP 40



Verschlussschraube mit Aussen-6kt.  
Bouchon fileté à 6 pans  
Screw plug with hex-nut

9.22

### AD HP 40 NPT



Verschlussschraube NPT mit Aussen-6kt.  
Bouchon fileté NPT à 6 pans  
Screw plug NPT with hex-nut

9.22

### AD SP 40



Verschlussschraube  
Bouchon d'obturation  
Screw plug

9.23

### AD HPS 40



Verschlussschraube mit Aussen-6kt.  
Bouchon fileté à 6 pans  
Screw plug with hex-nut

9.23

### AD HPO 40



Verschlussschraube mit O-Ring  
Bouchon fileté avec joint torique  
Screw plug with O-ring

9.23

### AD HSP 40



Verschlussschraube mit Innen-6kt.  
Bouchon fileté avec six pans creux  
Screw plug with hexagon socket

9.24

### AD HSPO 40



Verschlussschraube mit O-Ring  
Bouchon fileté avec joint torique  
Screw plug with O-ring

9.24

### AD FE 40



Aufschraub-Winkel  
Coude double femelle  
Female elbow

9.24

### AD FT 40



Aufschraub-T  
Té femelle  
Female tee

9.25

### SO 40511



Einschraubtülle  
Douille canellée à visser  
Male adaptor hose nozzle

9.25

### SO 40511 NPT



Einschraubtülle NPT  
Douille canellée à visser NPT  
Male adaptor hose nozzle NPT

9.26

## **SAE Flare**



**Verschraubung  
für die Kälte- und  
Klimaindustrie**

**Le raccord pour  
l'industrie du  
froid et de la  
climatisation**

**Unions for the  
cooling and air-  
conditioning  
industries**

**Seite/Page/Page**
**4M.89**

Verschraubungskit SAE  
Kit raccordements SAE  
Kit unions SAE


**SO 40231 SAE**
**4M.90**

Aufweitdorn SAE  
Calibreur SAE  
Calibration tool SAE


**AC 957200**
**4M.90**

Kalibrierwerkzeug SAE  
Outil de calibrage SAE  
Calibration tool SAE


**AC 950116**
**Sonderausführungen:**
**Exécution en option:**
**Optional Services:**


Chemisch vernickelt  
Nickelage chimique  
Chemical nickel-plated



## SAE

### Eigenschaften, Besonderheiten

- einfache, schnelle Montage
- kompakte Baumassee
- CETIM-geprüft, entspricht den Normen und Empfehlungen der Kälteindustrie
- kein Lötanschluss oder bördeln mehr nötig
- mit Werkzeugen zur Rohkalibrierung

### Funktionsprinzip

Siehe Kapitel i

### Anwendung

Speziell für die Montage von Leitungen in der Kälte-/Klimaindustrie. Direkter Anschluss auf den SAE-Konus.

### Werkstoff

Messing CuZn40Pb2 (CW 617N), Oberfläche gebeizt.

### Betriebsdruck PN

Siehe Produktetabellen (4fache Sicherheit). Dynamische Belastungen auf Anfrage.

### Temperaturbereich

-40°C bis +180°C

### Vakuum

Bis 10<sup>-4</sup>mbar, höhere Werte möglich

### Anzuschliessende Rohre

Kunststoffrohre und nahtlose, gezogene Kupferrohre (insbes. EN 12449/1057) mit sauberer, glatter Oberfläche. Aussendurchmesser innerhalb ± 0,1 mm; Ausnahme: Kunststoffrohre. Siehe auch Kapitel Rohre und Schläuche. Weitere Materialien auf Anfrage.

## SAE

### Généralités

- montage facile et rapide
- compactes dimensions
- raccord attesté CETIM, conformité avec les normes et recommandations de l'industrie de la réfrigération
- ne nécessite ni raccord soudé ni collerette
- avec des outils pour calibration des tubes

### Principe de fonctionnement

Voir chapitre i

### Application

Développé pour l'industrie de la réfrigération et de la climatisation. Raccordement direct sur le cône SAE.

### Matériau

Laiton CuZn40Pb2 (CW 617N), la surface est décapée.

### Pression de service PN

Voir tableaux des produits (facteur de sécurité 4). Sollicitations dynamique sur demande.

### Plage de température admissible

-40°C à +180°C

### Vide

Jusqu'à 10<sup>-4</sup>mbar, valeurs plus élevées possible

### Tubes à utiliser

Tubes en matière plastique et tous les tubes en cuivre sans soudure (selon EN 12449/1057) avec surface propre et lisse. Le diamètre extérieur doit être situé dans une tolérance de ± 0,1 mm; exception: tubes en plastique. Voir chapitre tubes et tuyaux. Autres matériaux sur demande.

## SAE

### Characteristics, specialities

- easy and fast to install
- compact size
- CETIM-tested, conforms to standards and guidelines of the cooling industry
- no more soldering, brazing or flaring
- with calibration tools for tubes

### Operating principle

See chapter i

### Application

Specifically developed for the cooling/air-conditioning industry. Connects directly to the SAE cone.

### Material

Brass CuZn40Pb2 (CW 617N), the surface is pickled.

### Working pressure PN

See product table (safety factor 4). Dynamic loads on demand.

### Temperature range

-40°C to +180°C

### Vacuum

Up to 10<sup>-4</sup>mbar, higher values are possible

### Tubes to use

Tubes of plastic and seamless copper tubes (esp. EN 12449/1057) with clean smooth surface. Outside diameter of ± 0,1 mm; exception: plastic tubes. See also chapter tubes and hoses. Further materials on demand.

4M

### Druckauswertungsgrad in % des PN

### Coefficient de pression de service admissible en % de PN

### Pressure coefficient % of PN

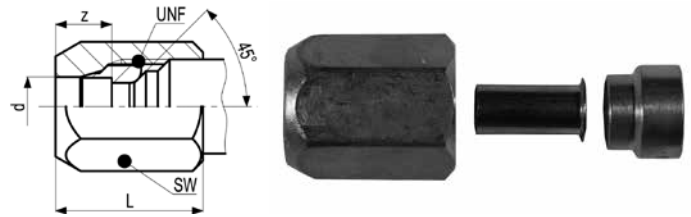


**SAE**
**SAE**
**SAE**

## Verschraubungskit SAE

### Kit raccords SAE

### Kit unions SAE



## SO 40231 SAE

| Type -d / -s          |                      | bar | UNF           | SW | L    | z    | kg/100 |
|-----------------------|----------------------|-----|---------------|----|------|------|--------|
| Für metrische Rohre   | Pour tubes métriques |     |               |    |      |      |        |
| SO 40231-6 SAE/1,00   | 416.2388.060         | 100 | 7/16-20       | 17 | 20.0 | 6.5  | 3.000  |
| SO 40231-10 SAE/1,00  | 416.2388.100         | 64  | 5/8-18        | 19 | 25.0 | 9.5  | 4.100  |
| SO 40231-12 SAE/1,00  | 416.2388.120         | 45  | 3/4-16        | 22 | 31.0 | 12.5 | 6.200  |
| SO 40231-16 SAE/1,00  | 416.2388.160         | 45  | 7/8-14        | 27 | 31.0 | 12.5 | 9.500  |
| Für Zollrohre         | Pour tubes pouces    |     |               |    |      |      |        |
| SO 40231-1/4 SAE/0,80 | 416.2384.063         | 100 | 7/16-20       | 17 | 20.0 | 6.5  | 3.000  |
| SO 40231-3/8 SAE/0,80 | 416.2384.095         | 64  | 5/8-18        | 19 | 25.0 | 9.5  | 4.100  |
| SO 40231-1/2 SAE/0,80 | 416.2384.127         | 45  | 3/4-16        | 22 | 31.0 | 12.5 | 6.200  |
| SO 40231-5/8 SAE/0,80 | 416.2384.158         | 45  | 7/8-14        | 27 | 31.0 | 12.5 | 9.500  |
| SO 40231-1/4 SAE/1,00 | 416.2388.063         | 100 | 7/16-20       | 17 | 20.0 | 6.5  | 3.000  |
| SO 40231-3/8 SAE/1,00 | 416.2388.095         | 64  | 5/8-18        | 19 | 25.0 | 9.5  | 4.100  |
| SO 40231-1/2 SAE/1,00 | 416.2388.127         | 45  | 3/4-16        | 22 | 31.0 | 12.5 | 6.200  |
| SO 40231-5/8 SAE/1,00 | 416.2388.158         | 45  | 7/8-14        | 27 | 31.0 | 12.5 | 9.500  |
| SO 40231-3/4 SAE/1,00 | 416.2388.188         | 45  | 1 1/16-14 UNS | 32 | 31.0 | 11.5 | 12.200 |

Kit mit Mutter, Klemmring und Stützhülse

Kit avec écrou, bague de serrage et douille d'appui

Kit with union nut, compression ferrule and stiffener sleeve

SAE

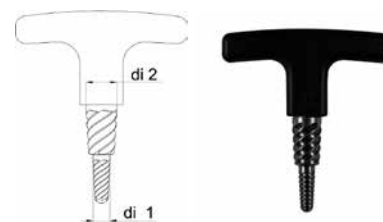
SAE

SAE

## Aufweitdorn SAE

## Calibreur SAE

## Calibration tool SAE



**AC 957200**

| Type      | Mat.-Nr.     | d         | s         | di1 - di2  | kg/100 |
|-----------|--------------|-----------|-----------|------------|--------|
| AC 957200 | 988.8570.200 | 1/4"-1/2" | 0.80      | 4.75-11.80 | 8.100  |
| AC 958400 | 988.8580.400 | 3/8"-5/8" | 0.80      | 7.90-14.26 | 9.500  |
| AC 958500 | 988.8580.500 | 3/8"-5/8" | 0.80-0.90 | 7.90-14.10 | 9.500  |
| AC 959801 | 988.8590.801 | 3/4"      | 0.90      | 17.22      | 8.900  |
| AC 959900 | 988.8590.900 | 3/4"      | 1.00      | 16.90      | 10.500 |

Für weiches Kupferrohr

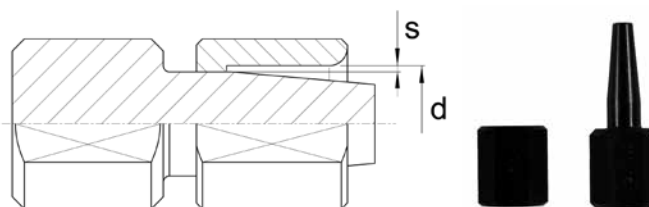
Pour tubes en cuivre mou

For soft copper tubes

## Kalibrierwerkzeug SAE

## Outil de calibrage SAE

## Calibration tool SAE



**AC 950116**

| Type                | Mat.-Nr.             | d                | s    | kg/100 |
|---------------------|----------------------|------------------|------|--------|
| Für metrische Rohre | Pour tubes métriques | For metric tubes |      |        |
| AC 950060           | 988.8501.111         | 6.000            | 1.00 | 0.105  |
| AC 952000           | 988.8520.189         | 10.000           | 1.00 | 0.140  |
| AC 953020           | 988.8530.240         | 12.000           | 1.00 | 0.165  |
| AC 954160           | 988.8540.499         | 16.000           | 1.00 | 0.210  |

Für Zollrohre

Pour tubes pouces

For inch tubes

|           |              |      |      |       |
|-----------|--------------|------|------|-------|
| AC 950116 | 988.8501.116 | 1/4" | 0.80 | 0.105 |
| AC 950112 | 988.8501.112 | 1/4" | 1.00 | 0.105 |
| AC 952090 | 988.8520.190 | 3/8" | 0.76 | 0.140 |
| AC 952085 | 988.8520.185 | 3/8" | 0.90 | 0.140 |
| AC 952087 | 988.8520.187 | 3/8" | 1.00 | 0.140 |
| AC 953080 | 988.8530.280 | 1/2" | 0.81 | 0.165 |
| AC 953081 | 988.8530.281 | 1/2" | 0.90 | 0.165 |
| AC 953069 | 988.8530.269 | 1/2" | 1.00 | 0.165 |
| AC 954050 | 988.8540.500 | 5/8" | 0.90 | 0.210 |
| AC 954150 | 988.8541.500 | 5/8" | 1.02 | 0.210 |
| AC 955041 | 988.8550.640 | 3/4" | 0.90 | 0.230 |

Für weiches Kupferrohr

Pour tubes en cuivre recuit

For soft copper tubes

d=Rohraussen-Ø  
s=Wandstärke Rohr

d=Ø extérieur du tube  
s=épaisseur de la paroi

d=tube outside diameter  
s=wall thickness

4M

4M.90

