

Kunststoff PA

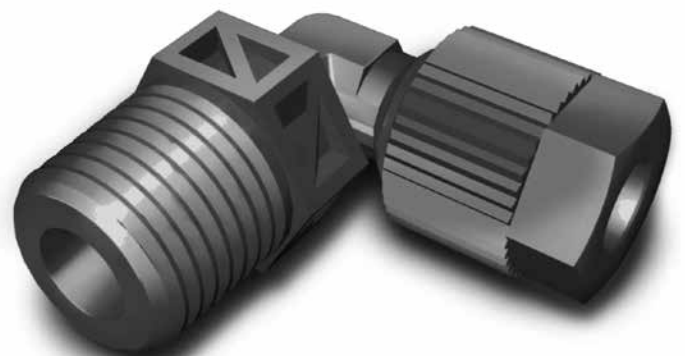
Verschraubungen

**Materiale plastico
PA**

Raccordi

Plastic PA

Unions



Übersicht		Descrizione		Overview	
Seite/Pagina/Page		Seite/Pagina/Page		Seite/Pagina/Page	
Klemmring Anello di serraggio Compression ferrule	3.3  SO 30001	Einstellnippel Intermedio maschio orientabile Adjustable male adaptor	3.12-3.13  SO 31600	2-fach Winkelschwenkverschraubung Ripartitore multiplo Double banjo	3.20  SO 32921
Abschlusszapfen Anello a tappo Plug	3.3  SO 30002	Reduktionsverschraubung Riduzione Reduced union	3.14  SO 31821	T-Verschraubung Raccordo a T Tee union	3.21  SO 33021
Rändelmutter Dado zigrinato Knurled nut	3.4  SO 30020	Winkelverschraubung Raccordo a gomito Elbow union	3.14  SO 32021	Einstellbare T-Verschraubung Raccordo a T orientabile Adjustable tee union	3.21  SO 33621
Gerade Verschraubung Raccordo intermedio diritto Straight union	3.4  SO 31021	Winkel-Einschraubverschraubung Gomito maschio Male adaptor elbow union	3.15  SO 32421	T-Einschraubverschraubung Raccordo a T maschio Male adaptor tee union	3.22  SO 33721
Gerade Einschraubverschraubung Raccordo diritto filettato maschio Male adaptor union	3.5-3.7  SO 31121	Einstellwinkel Gomito orientabile Adjustable elbow union	3.16  SO 32621	Sonderausführungen: Servizi opzionali: Optional Services:  Spezialreinigung - entfettet Trattamento speciale - sgrassato Special treatment - degreased  Vorbeschichtete Gewinde mit Loctite 5061 Filetti priveristiti con Loctite 5061 Pre-coated threads with Loctite 5061  Vorbeschichtete Gewinde PTFE-Band umwickelt Filetti priveristiti con nastro PTFE Pre-coated threads with PTFE-tape	
Gerade Aufschraubverschraubung Raccordo diritto filetto femmina Female adaptor union	3.8  SO 31221	Winkelschottverschraubung Gomito passaparatia Panel mount elbow union	3.17  SO 32721		
Verbindungs-nippel Nipplo di collegamento Tube stub	3.9-3.10  SO 31300	Schwenkverschraubung Raccordo girevole Single banjo	3.18  SO 32821		
Gerade Schottverschraubung Raccordo diritto passaparatia Panel mount union	3.11  SO 31521	Schwenkverschraubung Raccordo girevole Single banjo	3.19  SO 37621		

Eigenschaften, Besonderheiten

- einfache, schnelle Montage
- preisgünstige Verschraubungsreihe
- Kombinationsmöglichkeit mit Messing-, Stahl- und Edelstahl-Verschraubungen
- grosse Sortimentsvielfalt

Funktionsprinzip

Siehe Kapitel i

Anwendung

Hervorragend für Pneumatikanwendungen geeignet. Nicht direkter Sonnenbestrahlung aussetzen.

Werkstoff

Formteile und Nippel aus hitzestabilisiertem Polyamid 6.6, grau.

Betriebsdruck PN

10 bar bei +23 °C (3fache Sicherheit)

Temperaturbereich

-40 °C bis +80 °C

Anzuschliessende Rohre

Toleranzhaltige Rohre und Schläuche mit sauberer Oberfläche und gleichmässiger Wandung. Siehe auch Kapitel Rohre und Schläuche.

Caratteristiche, particolarità

- montaggio facile e veloce
- economicamente vantaggiosi
- possibilità di combinazione con raccordi in ottone, acciaio e acciaio inossidabile
- ampia gamma

Principio di funzionamento

Vedi capitolo i

Applicazione

Il campo principale di applicazione è rappresentato dai sistemi pneumatici. Non esporre alla luce solare diretta.

Materiale

I pezzi stampati, i dadi dei raccordi e gli anelli sono realizzati in poliammide 6.6 grigio stabilizzato alle alte temperature.

Pressione di esercizio PN

10 bar a +23 °C (fattore di sicurezza 3)

Gamma di temperature

-40 °C a +80 °C

Tubi da utilizzare

I tubi e i tubi flessibili che rientrano nelle tolleranze con superficie pulita e spessore di parete uniforme. Vedi anche nel capitolo tubi e ai tubi flessibili.

Characteristics, specialities

- easy and fast to install
- advantageous price
- combinations possible with unions of brass, steel and stainless steel
- extensive range

Operating principle

See chapter i

Application

The main field of application is pneumatic tubing. Should not be subjected to direct sunlight.

Material

Moulded body, union nut and ferrule are made of heat-stabilized grey polyamide 6.6.

Working pressure PN

10 bar at +23 °C (safety factor 3)

Temperature range

-40 °C to +80 °C

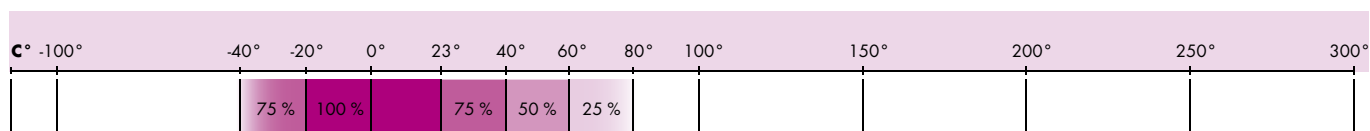
Tubes to use

True to tolerance tubes and hoses with clean surface and uniform wall thickness. See also chapter tubes and hoses.

Druckauswertungsgrad in % des PN

Coefficiente di pressione in % della PN

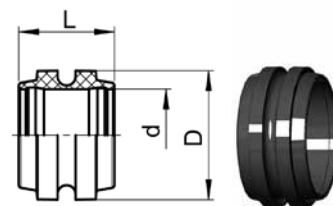
Pressure coefficient % of PN



Klemmring

Anello di serraggio

Compression ferrule



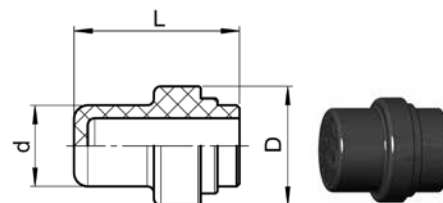
SO 30001

Type -d	Mat.-Nr.	bar	L	D	kg/100
SO 30001-6	166.0010.060	10	6.4	8.6	0.019
SO 30001-8	166.0010.080	10	6.4	10.7	0.025
SO 30001-10	166.0010.100	10	6.9	12.7	0.032
SO 30001-12	166.0010.120	10	7.5	14.8	0.043

Abschlusszapfen

Anello a tappo

Plug



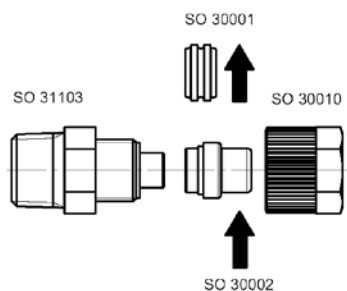
SO 30002

Type -d	Mat.-Nr.	bar	L	D	kg/100
SO 30002-6	166.0020.060	10	12.0	8.8	0.036
SO 30002-8	166.0020.080	10	12.5	10.8	0.051
SO 30002-10	166.0020.100	10	15.0	12.8	0.078
SO 30002-12	166.0020.120	10	17.0	14.8	0.105

Anwendungsbeispiele:

Esempio di utilizzo:

Sample combinations:

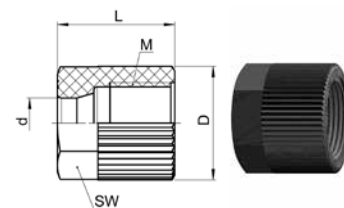


Der Abschlusszapfen SO 30002 lässt sich in jede Verschraubung anstelle eines Klemmringes der gleichen Größe einsetzen.

L'anello a tappo SO 30002 può essere usato in qualsiasi raccordo al posto di un anello di serraggio della stessa dimensione.

The plug SO 30002 can be used in every union instead of a compression ferrule of the same size.

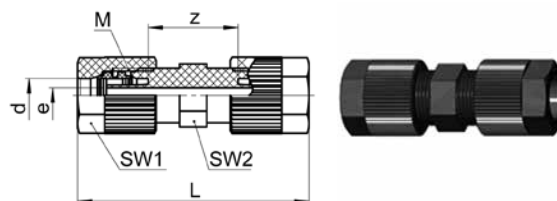
Rändelmutter Dado zigrinato Knurled nut



SO 30020

Type -d	Mat.-Nr.	bar	M	SW	L	D	kg/100
SO 30020-6	166.0100.060	10	10x1	12	14.5	14.0	0.160
SO 30020-8	166.0100.080	10	12x1	14	16.0	16.0	0.210
SO 30020-10	166.0100.100	10	14x1	17	17.5	19.5	0.360
SO 30020-12	166.0100.120	10	16x1	19	19.5	22.0	0.480

Gerade Verschraubung Raccordo intermedio diritto Straight union



SO 31021

Type -d	Mat.-Nr.	bar	M	SW1	SW2	L	z	e	kg/100
SO 31021-6	168.1000.060	10	10x1	12	10	39.0	16.0	2.8	0.513
SO 31021-8	168.1000.080	10	12x1	14	12	42.0	17.5	4.8	0.702
SO 31021-10	168.1000.100	10	14x1	17	14	45.5	17.5	6.6	1.096
▼ SO 31021-10/7	168.1000.102	10	14x1	17	14	45.5	17.5	5.6	1.111
SO 31021-12	168.1000.120	10	16x1	19	17	49.0	16.0	8.0	1.492
▼ SO 31021-12/9	168.1000.122	10	16x1	19	17	49.0	16.0	7.0	1.506

d=Rohraussen- $\varnothing$ / mit Wandung 1 mm
L=Mass in montiertem Zustand
e=kleinste Bohrung
▼=für Rohre mit Wandung 1,5 mm

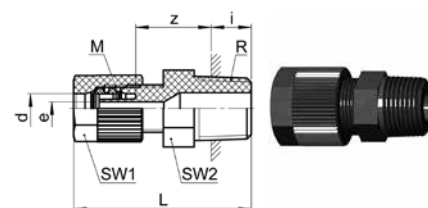
d=diametro esterno del tubo / con pareti di 1 mm
L=dimensione raccordo montato
e=foro minimo di passaggio
▼=per tubi con pareti di 1,5 mm di spessore

d=tube outside diameter / with wall thickness 1 mm
L=installed length
e=minimum bore
▼=for tubes with wall thickness of 1,5 mm

Gerade Einschraubverschraubung

Raccordo diritto filetto maschio

Male adaptor union



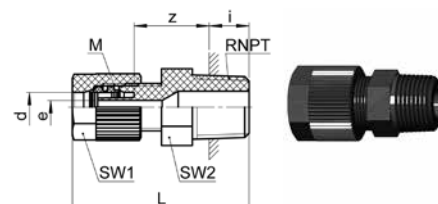
SO 31121

Type -d-R	Mat.-Nr.	bar	M	SW1	SW2	L	i	z	e	kg/100
R=Rohrgewinde (kegelig)	R=Filettatura BSP (conica)		R=BSP thread (tapered)							
SO 31121-6-1/8	168.1101.100	10	10x1	12	12	30.0	5.0	11.0	2.8	0.143
SO 31121-6-1/4	168.1101.110	10	10x1	12	14	35.5	8.0	12.5	2.8	0.302
SO 31121-6-3/8	168.1101.120	10	10x1	12	17	36.0	8.0	13.0	2.8	0.460
SO 31121-8-1/8	168.1101.160	10	12x1	14	12	31.2	5.0	11.0	4.8	0.175
SO 31121-8-1/4	168.1101.170	10	12x1	14	14	36.5	8.0	12.5	4.8	0.328
SO 31121-8-3/8	168.1101.180	10	12x1	14	17	37.5	8.0	13.0	4.8	0.485
SO 31121-10-1/4	168.1101.270	10	14x1	17	14	38.0	8.0	12.0	6.6	0.352
SO 31121-10-3/8	168.1101.280	10	14x1	17	17	38.5	8.0	12.5	6.6	0.508
▼ SO 31121-10-7/16	168.1101.320	10	14x1	17	14	38.0	8.0	12.0	5.6	0.360
▼ SO 31121-10-7-3/8	168.1101.330	10	14x1	17	17	38.5	8.0	12.5	5.6	0.516
SO 31121-12-1/4	168.1101.380	10	16x1	19	14	39.5	8.0	11.0	6.6	0.385
SO 31121-12-3/8	168.1101.390	10	16x1	19	17	40.0	8.0	11.5	8.0	0.538
SO 31121-12-1/2	168.1101.400	10	16x1	19	22	45.0	10.0	12.5	8.0	0.876
▼ SO 31121-12-9-1/4	168.1101.410	10	16x1	19	14	39.5	8.0	11.0	6.6	0.394
▼ SO 31121-12-9-3/8	168.1101.412	10	16x1	19	17	40.0	8.0	11.5	7.0	0.551
▼ SO 31121-12-9-1/2	168.1101.414	10	16x1	19	22	45.0	10.0	12.5	7.0	0.879

Gerade Einschraubverschraubung NPT

Raccordo diritto filetto maschio NPT

Male adaptor union NPT



SO 31121 NPT

Type -d-RNPT	Mat.-Nr.	bar	M	SW1	SW2	L	i	z	e	kg/100
RNPT=NPT Gewinde	RNPT=Filettatura NPT		RNPT=NPT thread							
SO 31121-6-1/8 NPT	168.1102.100	10	10x1	12	11	32.0	7.0	11.0	2.8	0.165
SO 31121-6-1/4 NPT	168.1102.110	10	10x1	12	14	37.5	10.0	12.5	2.8	0.293
SO 31121-8-1/8 NPT	168.1102.160	10	12x1	14	11	33.0	7.0	11.0	4.8	0.193
SO 31121-8-1/4 NPT	168.1102.170	10	12x1	14	14	38.5	10.0	12.5	4.8	0.321
SO 31121-10-1/4 NPT	168.1102.270	10	14x1	17	14	40.0	10.0	12.0	6.6	0.347
SO 31121-10-3/8 NPT	168.1102.280	10	14x1	17	17	40.5	10.0	12.5	6.6	0.500
▼ SO 31121-10-7-1/4 NPT	168.1102.320	10	14x1	17	14	40.0	10.0	12.0	5.6	0.353
▼ SO 31121-10-7-3/8 NPT	168.1102.330	10	14x1	17	17	40.5	10.0	12.5	5.6	0.508
SO 31121-12-9-3/8 NPT	168.1102.412	10	16x1	19	17	45.0	10.0	11.5	7.0	1.164

Zum Abdichten der Einschraubgewinde empfehlen wir unseren Dichtstift «Plasto-Joint» AC 833 oder PTFE Band.

Per una tenuta sicura delle filettature maschio, consigliamo il nostro Plasto-Joint AC 833 o nastro in PTFE.

For sealing the male threads we recommend our sealing stick «Plasto-Joint» AC 833 or PTFE tape.

d=Rohrassen-ø / mit Wandung 1 mm
e=kleinste Bohrung
L=Mass in montiertem Zustand
▼=für Rohre mit Wandung 1,5 mm

d=diametro esterno del tubo / con pareti di 1 mm
e=foro minimo di passaggio
L=dimensione raccordo montato
▼=per tubi con pareti di 1,5 mm di spessore

d=tube outside diameter / with wall thickness 1 mm
e=minimum bore
L=installed length
▼=for tubes with wall thickness of 1,5 mm

Gerade Einschraubverschraubung

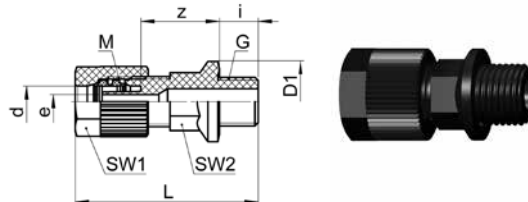
mit Dichtkante

Raccordo diritto filetto maschio

con bordo di tenuta

Male adapter union

with edge seal

SO 31124


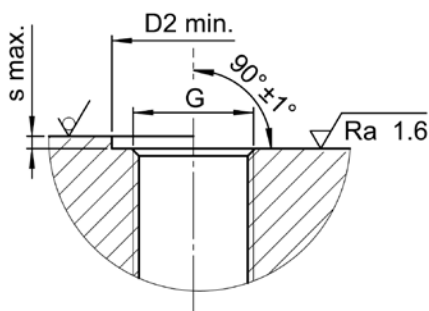
Type -d-G	Mat.-Nr.	bar	M	SW1	SW2	L	D1	D2	i	s	z	e	kg/100
G=Rohrgewinde (zylindrisch)	G=Filettatura BSP (cilindrica)		G=BSP thread (straight)										
SO 31124-6-1/8	168.1161.100	10	10x1	12	10	34.5	16.0	15.0	8.0	1.00	15.5	2.8	0.577
SO 31124-6-1/4	168.1161.110	10	10x1	12	13	36.5	19.5	19.0	10.0	1.50	15.5	2.8	0.746
SO 31124-8-1/8	168.1161.160	10	12x1	14	10	35.5	16.0	15.0	8.0	1.00	15.5	4.8	0.690
SO 31124-8-1/4	168.1161.170	10	12x1	14	13	37.5	19.5	19.0	10.0	1.50	15.5	4.8	0.846
SO 31124-10-1/4	168.1161.270	10	14x1	17	13	39.0	19.5	19.0	10.0	1.50	15.0	6.6	1.097
SO 31124-10-3/8	168.1161.280	10	14x1	17	17	40.0	23.5	23.0	10.0	2.00	16.0	6.6	1.398
SO 31124-12-1/4	168.1161.380	10	16x1	19	13	41.5	19.5	19.0	10.0	1.50	14.0	8.0	1.317
SO 31124-12-3/8	168.1161.390	10	16x1	19	17	41.5	23.5	23.0	10.0	2.00	15.0	8.0	1.632

3

Anwendungsbeispiele:

Esempio di utilizzo:

Sample combinations:



Gerade Einschraubverschraubung

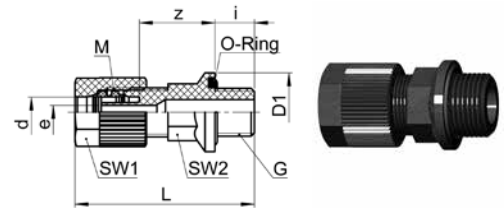
mit Conovor O-Ringabdichtung (NBR)

Raccordo diritto filetto maschio

con O-ring Conovor (NBR)

Male adaptor union

with Conovor O-Ring seal (NBR)

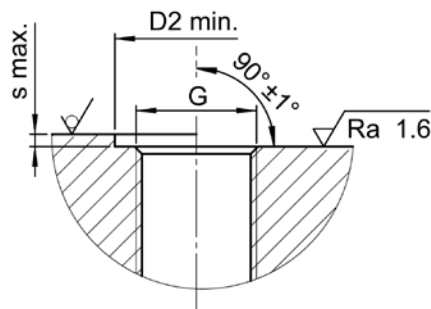

SO 31124 OR

Type -d-G	Mat.-Nr.	bar	M	SW1	SW2	L	D1	D2	i	s	O-Ring	z	e	kg/100
G=Rohrgewinde (zylindrisch)			G=Filettatura BSP (cilindrica)			G=BSP thread (straight)								
SO 31124-6-1/8 OR	168.1171.100	10	10x1	12	10	34.5	16.0	15.0	8.0	1.00	9.25x1.78	15.5	2.8	0.378
SO 31124-6-1/4 OR	168.1171.110	10	10x1	12	13	36.5	19.5	19.0	10.0	1.50	12.42x1.78	15.5	2.8	0.482
SO 31124-6-3/8 OR	168.1171.120	10	10x1	12	17	37.5	23.5	23.0	10.0	2.00	15.6x1.78	16.5	2.8	0.695
SO 31124-8-1/8 OR	168.1171.160	10	12x1	14	10	35.5	16.0	15.0	8.0	1.00	9.25x1.78	15.5	4.8	0.462
SO 31124-8-1/4 OR	168.1171.170	10	12x1	14	13	37.5	19.5	19.0	10.0	1.50	12.42x1.78	15.5	4.8	0.557
SO 31124-8-3/8 OR	168.1171.180	10	12x1	14	17	38.5	23.5	23.0	10.0	2.00	15.6x1.78	16.5	4.8	0.758
SO 31124-10-1/4 OR	168.1171.270	10	14x1	17	13	39.0	19.5	19.0	10.0	1.50	12.42x1.78	15.0	6.6	0.737
SO 31124-10-3/8 OR	168.1171.280	10	14x1	17	17	40.0	23.5	23.0	10.0	2.00	15.6x1.78	16.0	6.6	0.924
SO 31124-10-1/2 OR	168.1171.285	10	14x1	17	19	45.0	30.0	27.0	12.0	2.50	20.29x2.62	19.0	6.6	1.210
SO 31124-12-1/4 OR	168.1171.380	10	16x1	19	13	41.5	19.5	19.0	10.0	1.50	12.42x1.78	14.0	8.0	0.897
SO 31124-12-3/8 OR	168.1171.390	10	16x1	19	17	41.5	23.5	23.0	10.0	2.00	15.6x1.78	15.0	8.0	1.092
SO 31124-12-1/2 OR	168.1171.400	10	16x1	19	19	46.5	30.0	27.0	12.0	2.50	20.29x2.62	18.0	8.0	1.376

Anwendungsbeispiele:

Esempio di utilizzo:

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

Intervallo di utilizzo:

Temperatura tra -30° C e +100° C

I vantaggi di questa guarnizione O-ring:

- assenza di residui di sigillante nelle apparecchiature
- tenuta perfetta
- assenza di danni alle apparecchiature dovuti a filettature coniche
- montaggio rapido

Guarnizione O-ring brevettata Conovor®

Range of use:

Temperature between -30° C and +100° C

Advantages of this O-ring seal:

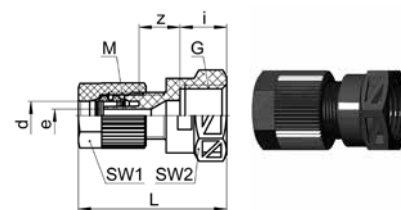
- no sealing residues in devices
- perfect seal
- no damage to devices due to conical thread
- rapid assembly

Conovor® patented O-ring seal

Gerade Aufschraubverschraubung

Raccordo diritto filetto femmina

Female adaptor union


SO 31221

Type -d -G	Mat.-Nr.	bar	M	SW1	SW2	L	i	z	e	kg/100
G=Rohrgewinde (zylindrisch)	G=Filettatura BSP (cilindrica)		G=BSP thread (straight)							
SO 31221-6-1/8	168.1201.100	10	10x1	12	14	29.0	9.0	9.0	2.8	0.309
SO 31221-6-1/4	168.1201.110	10	10x1	12	17	30.0	10.0	9.0	2.8	0.379
SO 31221-6-3/8	168.1201.120	10	10x1	12	22	31.0	11.0	9.0	2.8	0.526
SO 31221-6-1/2	168.1201.125	10	10x1	12	27	34.5	14.0	9.5	2.8	0.864
SO 31221-8-1/8	168.1201.160	10	12x1	14	14	30.0	9.0	9.0	4.8	0.376
SO 31221-8-1/4	168.1201.170	10	12x1	14	17	31.0	10.0	9.0	4.8	0.453
SO 31221-8-3/8	168.1201.180	10	12x1	14	22	33.0	11.0	9.0	4.8	0.587
SO 31221-8-1/2	168.1201.185	10	12x1	14	27	35.5	14.0	9.5	4.8	0.938
SO 31221-10-1/4	168.1201.270	10	14x1	17	17	33.5	10.0	8.5	6.6	0.602
SO 31221-10-3/8	168.1201.280	10	14x1	17	22	34.5	11.0	8.5	6.6	0.742
SO 31221-10-1/2	168.1201.285	10	14x1	17	27	37.0	14.0	9.0	6.6	1.074
▼ SO 31221-10-7/16	168.1201.320	10	14x1	17	17	33.0	10.0	8.5	5.0	0.615
▼ SO 31221-10-7/8	168.1201.330	10	14x1	17	22	34.0	11.0	8.5	5.0	0.755
SO 31221-12-3/8	168.1201.390	10	16x1	19	22	35.0	11.0	7.5	8.0	0.883
SO 31221-12-1/2	168.1201.400	10	16x1	19	27	37.5	14.0	8.0	8.0	1.234
▼ SO 31221-12-9/16	168.1201.412	10	16x1	19	22	35.0	11.0	7.5	7.0	0.908
▼ SO 31221-12-9/16	168.1201.414	10	16x1	19	27	37.5	14.0	8.0	8.0	1.253

d=Rohraussen-ø / mit Wandung 1 mm

e=kleinste Bohrung

L=Mass in montiertem Zustand

▼=für Rohre mit Wandung 1,5 mm

d=diámetro externo del tubo / con paredes di 1 mm

e=foro mínimo di passaggio

L=dimensione raccordo montato

▼=per tubi con pareti di 1,5 mm di spessore

d=tube outside diameter / with wall thickness 1 mm

e=minimum bore

L=installed length

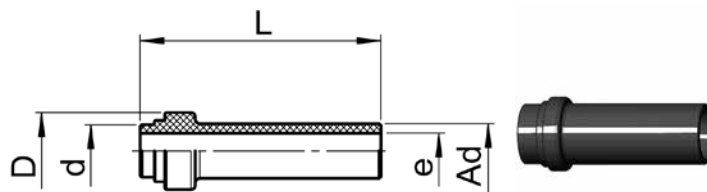
▼=for tubes with wall thickness of 1,5 mm

Verbindungsniessel

Nipplo di collegamento

Tube stub

SO 31300



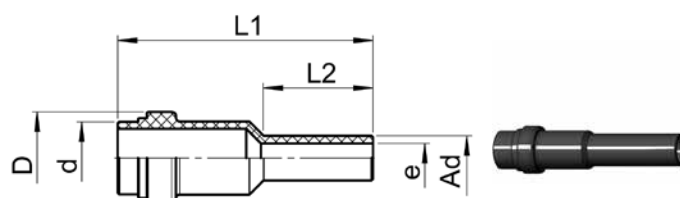
Type -d -Ad	Mat.-Nr.	bar	L	D	e	kg/100
SO 31300-6-A6	166.1300.060	10	27.0	8.7	4.0	0.060
SO 31300-8-A8	166.1300.080	10	28.0	10.8	6.0	0.085
SO 31300-10-A10	166.1300.100	10	33.0	12.8	8.0	0.127
SO 31300-12-A12	166.1300.120	10	37.0	14.7	10.0	0.171
▼ SO 31300-12/9-A12	166.1300.122	10	37.0	14.7	9.0	0.233

Verbindungsniessel reduziert

Nipplo di collegamento ridotto

Tube stub reduced

SO 31300 RED

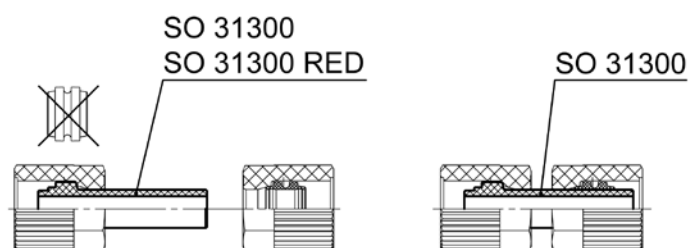


Type -d -Ad	Mat.-Nr.	bar	L1	L2	D	e	kg/100
SO 31300-8-A6 RED	166.1304.140	10	30.0	15.0	10.6	4.0	0.080
SO 31300-10-A6 RED	166.1304.175	10	35.0	15.0	12.6	4.0	0.113
SO 31300-10-A8 RED	166.1304.190	10	35.0	15.0	12.6	6.0	0.124
SO 31300-12-A8 RED	166.1304.225	10	39.0	19.0	14.6	6.0	0.150
SO 31300-12-A10 RED	166.1304.240	10	39.0	19.0	14.6	8.0	0.166

Anwendungsbeispiele:

Esempio di utilizzo:

Sample combinations:



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

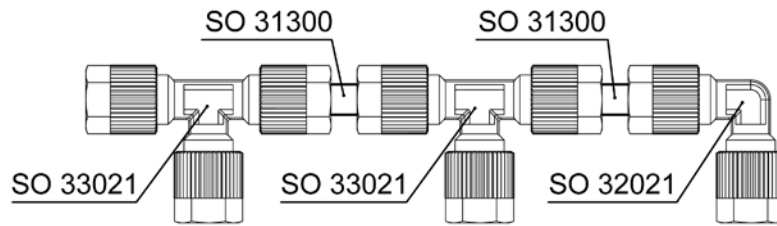
Se i nippoli di collegamento vengono uniti ad un dado di attacco e ad un raccordo per rubinetti (dado di attacco e anello di serraggio), si forma un accoppiamento orientabile.

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

d=Rohrussen-ø / mit Wandung 1 mm
Ad=Aussen-ø der Andrehung
e=kleinste Bohrung
L=Mass in montiertem Zustand
▼=für Rohre mit Wandung 1,5 mm

d=diametro esterno del tubo / con pareti di 1 mm
Ad=diametro esterno del nipplo cil.
e=foro minimo di passaggio
L=dimensione raccordo montato
▼=per tubi con pareti di 1,5 mm di spessore

d=tube outside diameter / with wall thickness 1 mm
Ad=outside diameter of cyl. Stub
e=minimum bore
L=installed length
▼=for tubes with wall thickness of 1,5 mm

Anwendungsbeispiele:
Esempio di utilizzo:
Sample combinations:


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

Grazie all'accoppiamento orientabile è possibile collegare tutti i corpi sagomati con la stessa filettatura.

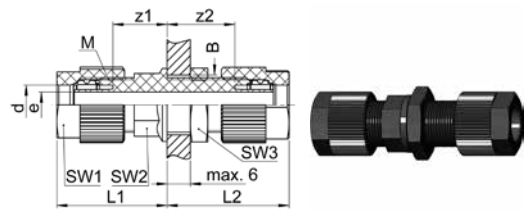
All moulded parts with the same connecting thread can be connected with the adjustable coupling.

d=Rohraussen- $\varnothing$ / mit Wandung 1 mm
 Ad=Aussen- $\varnothing$ der Andrehung
 e=kleinste Bohrung
 L=Mass in montiertem Zustand
 ▼=für Rohre mit Wandung 1,5 mm

d=diametro esterno del tubo / con pareti di 1 mm
 Ad=diametro esterno del nipplo cil.
 e=foro minimo di passaggio
 L=dimensione raccordo montato
 ▼=per tubi con pareti di 1,5 mm di spessore

d=tube outside diameter / with wall thickness 1 mm
 Ad=outside diameter of cyl. Stub
 e=minimum bore
 L=installed length
 ▼=for tubes with wall thickness of 1,5 mm

Gerade Schottverschraubung Raccordo diritto passaparatia Panel mount union

SO 31521


Type -d	Mat.-Nr.	bar	M	SW1	SW2	SW3	L1	L2	B	z1	z2	e	kg/100
SO 31521-6	168.1500.060	10	10x1	12	14	14	24.0	28.0	10.5	13.0	17.0	2.8	0.678
SO 31521-8	168.1500.080	10	12x1	14	12	17	26.0	30.0	12.5	14.0	18.0	4.8	0.938
SO 31521-10	168.1500.100	10	14x1	17	14	19	27.5	31.5	14.5	14.0	17.5	6.6	1.387
▼ SO 31521-10/7	168.1500.102	10	14x1	17	14	19	27.5	31.5	14.5	14.0	17.5	5.6	1.417
SO 31521-12	168.1500.120	10	16x1	19	17	22	30.5	33.0	16.5	14.0	20.0	8.0	1.917
▼ SO 31521-12/9	168.1500.122	10	16x1	19	17	22	30.5	33.0	16.5	14.0	20.0	7.0	1.957

Sechskantmutter SO 40006 (Messing)

Dado esagonale SO 40006 (ottone)

Hexagon nut SO 40006 (brass)

d=Rohraussen-ø / mit Wandung 1 mm
e=kleinste Bohrung
L=Mass in montiertem Zustand
▼=für Rohre mit Wandung 1,5 mm

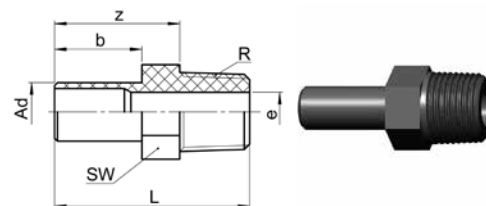
d=diámetro esterno del tubo / con pareti di 1 mm
e=foro minimo di passaggio
L=dimensione raccordo montato
▼=per tubi con pareti di 1,5 mm di spessore

d=tube outside diameter / with wall thickness 1 mm
e=minimum bore
L=installed length
▼=for tubes with wall thickness of 1,5 mm

Einstellnippel

Intermedio maschio orientabile

Adjustable male adaptor

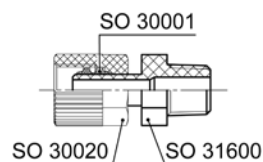


SO 31600

Type -Ad -R	Mat.-Nr.	bar	SW	L	b	z	e	kg/100
R=Rohrgewinde (kegelig)	R=Filettatura BSP (conica)							
SO 31600-A6-1/8	166.1601.100	10	12	27.0	13.0	19.0	4.0	0.110
SO 31600-A6-1/4	166.1601.110	10	14	31.5	13.0	19.5	4.0	0.268
SO 31600-A6-3/8	166.1601.120	10	17	32.0	13.0	20.0	4.0	0.410
SO 31600-A8-1/8	166.1601.160	10	12	28.0	14.0	20.0	5.0	0.124
SO 31600-A8-1/4	166.1601.170	10	14	32.5	14.0	20.5	6.0	0.282
SO 31600-A8-3/8	166.1601.180	10	17	33.0	14.0	21.0	6.0	0.429
SO 31600-A10-1/4	166.1601.270	10	14	33.5	15.0	21.5	6.7	0.285
SO 31600-A10-3/8	166.1601.280	10	17	34.0	15.0	22.0	6.5	0.442
SO 31600-A10-1/2	166.1601.285	10	22	39.0	15.0	23.0	8.0	0.760
SO 31600-A12-1/4	166.1601.380	10	14	37.5	19.0	25.5	6.7	0.315
SO 31600-A12-3/8	166.1601.390	10	17	38.0	19.0	26.0	8.0	0.464
SO 31600-A12-1/2	166.1601.400	10	22	43.0	19.0	27.0	8.5	0.798

3

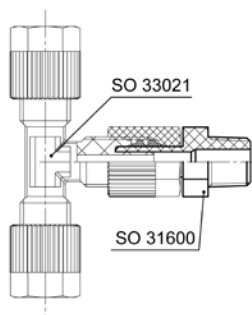
Anwendungsbeispiele:



Mögliche Kombinationen:

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

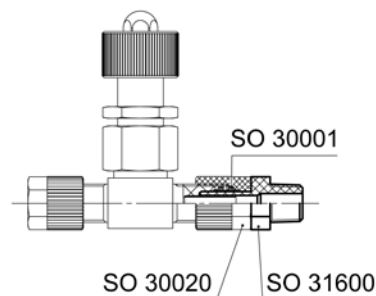
Esempio di utilizzo:



Combinazioni possibili:

- con raccordo per rubinetti a raccordi orientabili
- con raccordi/valvole a raccordi/valvole orientabili

Sample combinations:



Possible combinations:

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

Einstellnippel

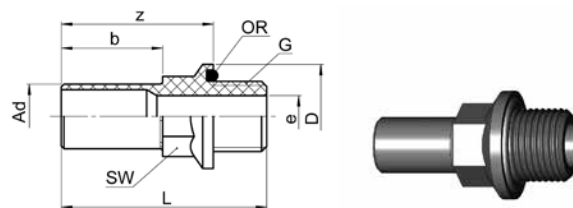
mit O-Ringabdichtung (NBR)

Intermedio maschio orientabile

con tenuta O-ring (NBR)

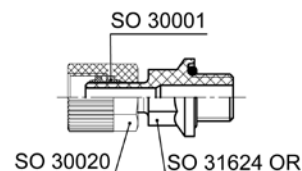
Adjustable male adaptor

with O-Ring seal (NBR)

SO 31624 OR


Type -Ad -G	Mat.-Nr.	bar	SW	L	D	b	O-Ring	z	e	kg/100
G=Rohrgewinde (zylindrisch)		G=Filettatura BSP (cilindrica)		G=BSP thread (straight)						
SO 31624-A6-1/8 OR	166.1681.100	10	10	30.5	16.0	13.0	9.25x1.78	22.5	4.0	0.175
SO 31624-A6-1/4 OR	166.1681.110	10	13	32.5	19.5	13.0	12.42x1.78	22.5	4.0	0.274
SO 31624-A6-3/8 OR	166.1681.120	10	17	33.5	23.5	13.0	15.6x1.78	23.5	4.0	0.470
SO 31624-A8-1/8 OR	166.1681.160	10	10	31.5	16.0	14.0	9.25x1.78	23.5	5.1	0.183
SO 31624-A8-1/4 OR	166.1681.170	10	13	33.5	19.5	14.0	12.42x1.78	23.5	6.0	0.287
SO 31624-A8-3/8 OR	166.1681.180	10	17	34.5	23.5	14.0	15.6x1.78	24.5	6.0	0.482
SO 31624-A10-1/4 OR	166.1681.270	10	13	34.5	19.5	15.0	12.42x1.78	24.5	8.0	0.298
SO 31624-A10-3/8 OR	166.1681.280	10	17	35.5	23.5	15.0	15.6x1.78	25.5	8.0	0.482
SO 31624-A10-1/2 OR	166.1681.285	10	19	40.5	30.0	15.0	20.63x2.62	28.5	8.0	0.768
SO 31624-A12-1/4 OR	166.1681.380	10	13	38.5	19.5	19.0	12.42x1.78	28.5	6.6	0.326
SO 31624-A12-3/8 OR	166.1681.390	10	17	39.5	23.5	19.0	15.6x1.78	29.5	10.0	0.511
SO 31624-A12-1/2 OR	166.1681.400	10	19	44.5	30.0	19.0	20.63x2.62	32.5	10.0	0.794

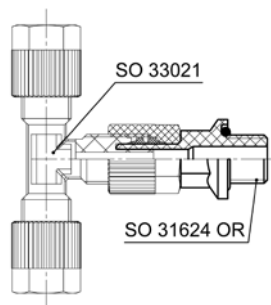
Anwendungsbeispiele:



Mögliche Kombinationen:

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

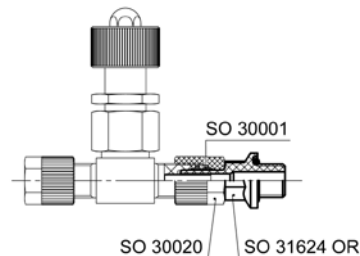
Esempio di utilizzo:



Combinazioni possibili:

- con raccordo per rubinetti a raccordi orientabili
- con raccordi/valvole a raccordi/valvole orientabili

Sample combinations:



Possible combinations:

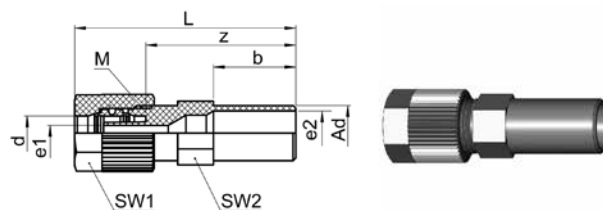
- with nut connection to adjustable connections
- with unions/valves to adjustable unions/valves

Reduktionsverschraubung

Riduzione

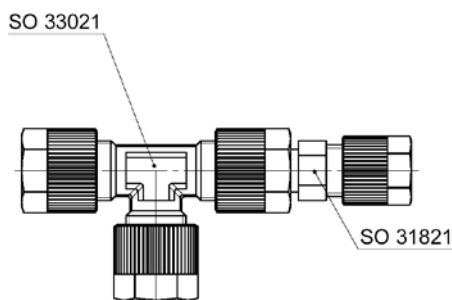
Reduced union

SO 31821



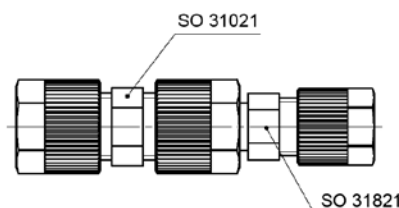
Type -Ad -d	Mat.-Nr.	bar	M	SW1	SW2	L	b	z	e1	e2	kg/100
SO 31821-A8-6	168.1800.140	10	10x1	12	10	35.5	14.0	25.8	2.8	6.0	0.301
SO 31821-A10-6	168.1800.175	10	10x1	12	10	39.0	15.0	27.5	2.8	6.5	0.308
SO 31821-A10-8	168.1800.190	10	12x1	14	12	39.5	15.5	27.5	4.8	8.0	0.415
SO 31821-A12-6	168.1800.215	10	10x1	12	10	42.0	19.0	32.0	2.8	10.0	0.348
SO 31821-A12-8	168.1800.225	10	12x1	14	12	43.5	19.0	32.0	4.8	10.0	0.436
SO 31821-A12-10	168.1800.240	10	14x1	17	14	45.0	19.0	32.0	6.6	10.0	0.500
▼ SO 31821-A12-10/7	168.1800.242	10	14x1	17	14	45.0	19.0	31.5	5.6	10.0	0.667

Anwendungsbeispiele:



Mit dieser Reduktion können Verschraubungen reduziert werden.

Esempio di utilizzo:



Questa riduzione consente di ridurre i raccordi.

Sample combinations:

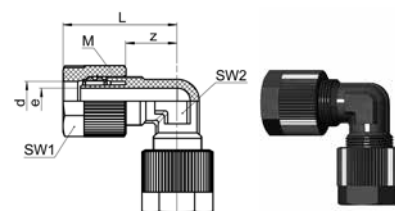
Unions can be reduced with this reduction.

Winkelverschraubung

Raccordo a gomito

Elbow union

SO 32021



Type -d	Mat.-Nr.	bar	M	SW1	SW2	L	z	e	kg/100
SO 32021-6	168.2000.060	10	10x1	12	8	25.0	14.0	2.8	0.546
SO 32021-8	168.2000.080	10	12x1	14	10	26.5	14.5	4.8	0.743
SO 32021-10	168.2000.100	10	14x1	17	12	30.0	16.0	6.6	1.178
▼ SO 32021-10/7	168.2000.102	10	14x1	17	12	30.0	16.0	5.6	1.209
SO 32021-12	168.2000.120	10	16x1	19	13	32.5	16.0	8.0	1.545
▼ SO 32021-12/9	168.2000.122	10	16x1	19	13	32.5	16.0	7.0	1.580

d=Rohraussen-ø / mit Wandung 1 mm

Ad=Aussen-ø der Andrehung

e=kleinste Bohrung

L=Mass in montiertem Zustand

▼=für Rohre mit Wandung 1,5 mm

d=diámetro externo del tubo / con paredes de 1 mm

Ad=diámetro externo del nipplo cil.

e=foro mínimo de pasaggio

L=dimensione raccordo montato

▼=per tubi con pareti di 1,5 mm di spessore

d=tube outside diameter / with wall thickness 1 mm

Ad=outside diameter of cyl. Stub

e=minimum bore

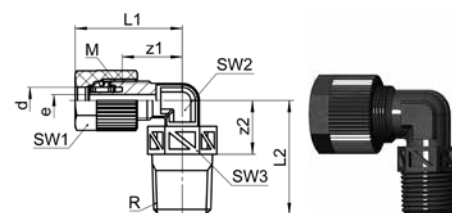
L=installed length

▼=for tubes with wall thickness of 1,5 mm

Winkel-Einschraubverschraubung

Gomito maschio

Male adaptor elbow union



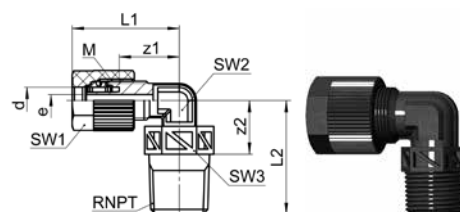
SO 32421

Type -d -R	Mat.-Nr.	bar	M	SW1	SW2	SW3	L1	L2	z1	z2	e	kg/100
R=Rohrgewinde (kegelig)	R=Filettatura BSP (conica)											
SO 32421-6-1/8	168.2401.100	10	10x1	12	8	10	25.0	19.0	14.0	11.0	2.8	0.387
SO 32421-6-1/4	168.2401.110	10	10x1	12	8	14	25.0	24.5	14.0	12.5	2.8	0.528
SO 32421-8-1/8	168.2401.160	10	12x1	14	10	10	26.5	20.0	14.5	12.0	4.8	0.499
SO 32421-8-1/4	168.2401.170	10	12x1	14	10	14	26.5	25.5	14.5	13.5	4.8	0.640
SO 32421-10-1/4	168.2401.270	10	14x1	17	12	14	30.0	26.5	16.0	14.5	6.6	0.877
SO 32421-10-3/8	168.2401.280	10	14x1	17	12	17	29.5	27.0	15.5	15.0	6.6	1.016
▼ SO 32421-10-7/16	168.2401.320	10	14x1	17	12	14	30.0	26.5	16.0	14.5	5.6	0.892
▼ SO 32421-10-7/8	168.2401.330	10	14x1	17	12	17	30.0	27.0	16.0	15.0	5.6	1.031
SO 32421-12-1/4	168.2401.380	10	16x1	19	13	14	32.5	27.5	16.0	15.5	8.0	1.080
SO 32421-12-3/8	168.2401.390	10	16x1	19	13	17	32.5	28.0	16.0	16.0	8.0	1.207
SO 32421-12-1/2	168.2401.400	10	16x1	19	13	22	32.5	35.5	16.0	19.5	8.0	1.574
▼ SO 32421-12-9/16	168.2401.410	10	16x1	19	13	14	32.5	27.5	16.0	15.5	7.0	1.098
▼ SO 32421-12-9/8	168.2401.412	10	16x1	19	13	17	32.5	28.0	16.0	16.0	7.0	1.224
▼ SO 32421-12-9/2	168.2401.414	10	16x1	19	13	22	32.5	35.5	16.0	19.5	7.0	1.607

Winkel-Einschraubverschraubung NPT

Gomito maschio NPT

Male adaptor elbow union NPT



SO 32421 NPT

Type -d -RNPT	Mat.-Nr.	bar	M	SW1	SW2	SW3	L1	L2	z1	z2	e	kg/100
RNPT=NPT Gewinde	RNPT=Filettatura NPT											
SO 32421-6-1/8 NPT	168.2402.100	10	10x1	12	8	11	25.0	21.0	14.0	11.0	2.8	0.419
SO 32421-6-1/4 NPT	168.2402.110	10	10x1	12	8	14	25.0	26.5	14.0	12.5	2.8	0.559
SO 32421-8-1/8 NPT	168.2402.160	10	12x1	14	10	11	26.5	22.0	14.5	12.0	4.8	0.532
SO 32421-8-1/4 NPT	168.2402.170	10	12x1	14	10	14	26.5	27.5	14.5	13.5	4.8	0.672
SO 32421-10-1/4 NPT	168.2402.270	10	14x1	17	12	14	30.0	28.5	16.0	14.5	6.6	0.905
SO 32421-10-3/8 NPT	168.2402.280	10	14x1	17	12	17	30.0	29.0	16.0	15.0	6.6	1.057
▼ SO 32421-10-7/16 NPT	168.2402.320	10	14x1	17	12	14	30.0	28.5	16.0	14.5	5.6	0.920
▼ SO 32421-10-7/8 NPT	168.2402.330	10	14x1	17	12	17	30.0	29.0	16.0	15.0	5.6	1.072

Zum Abdichten der Einschraubgewinde empfehlen wir unseren Dichtstift «Plasto-Joint» AC 833 oder PTFE Band.

Per una tenuta sicura delle filettature maschio, consigliamo il nostro Plasto-Joint AC 833 o nastro in PTFE.

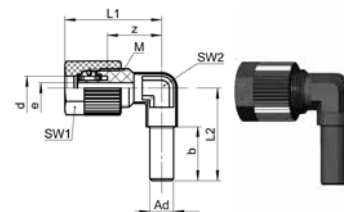
For sealing the male threads we recommend our sealing stick «Plasto-Joint» AC 833 or PTFE tape.

d=Rohrassens-ø / mit Wandung 1 mm
e=kleinste Bohrung
L=Mass in montiertem Zustand
▼=für Rohre mit Wandung 1,5 mm

d=diámetro externo del tubo / con paredes de 1 mm
L=dimensione raccordo montato
e=foro minimo di passaggio
▼=per tubi con pareti di 1,5 mm di spessore

d=tube outside diameter / with wall thickness 1 mm
L=installed length
e=minimum bore
▼=for tubes with wall thickness of 1,5 mm

Einstellwinkel Gomito orientabile Adjustable elbow union

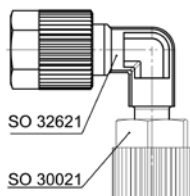


SO 32621

Type -d -Ad	Mat.-Nr.	bar	M	SW1	SW2	L1	L2	b	z	e	kg/100
SO 32621-6-A6	168.2600.060	10	10x1	12	8	25.0	24.0	14.0	14.0	2.8	0.353
SO 32621-8-A8	168.2600.080	10	12x1	14	10	25.5	25.0	16.0	14.5	4.8	0.486
SO 32621-10-A10	168.2600.100	10	14x1	17	12	30.0	29.0	18.0	16.0	6.6	0.755
SO 32621-12-A12	168.2600.120	10	16x1	19	13	32.5	32.0	21.0	16.0	8.0	0.983

3

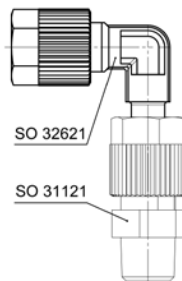
Anwendungsbeispiele:



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.

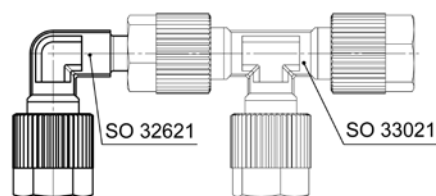
Esempio di utilizzo:



Combinazioni possibili:

- con raccordi per rubinetti a raccordi orientabili
- con raccordi a raccordi orientabili
- con raccordi filettati maschi a un gomito con bocchettone orientabile. Contrariamente al gomito maschio, questa combinazione risulta più semplice da realizzare poiché l'incastro e l'allineamento vengono effettuati separatamente.

Sample combinations:



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.

Winkelschottverschraubung

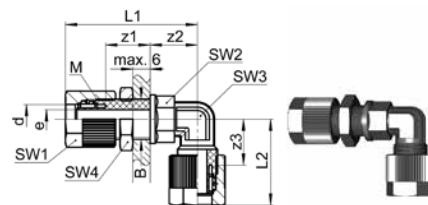
Durchführungslänge max. 6 mm

Gomito passaparatia

spessore max. paratia 6 mm

Panel mount elbow union

max. panel thickness 6 mm

SO 32721


Type -d	Mat.-Nr.	bar	M	SW1	SW2	SW3	SW4	L1	L2	B	z1	z2	z3	e	kg/100
SO 32721-6	168.2700.060	10	10x1	12	10	8	14	40.0	25.0	10.5	16.0	13.0	14.0	2.8	1.234
SO 32721-8	168.2700.080	10	12x1	14	12	10	17	43.0	26.5	12.5	15.0	15.0	14.5	4.8	1.040
SO 32721-10	168.2700.100	10	14x1	17	14	12	19	46.0	30.0	14.5	15.5	16.5	16.0	6.6	1.490
SO 32721-12	168.2700.120	10	16x1	19	17	13	19	48.5	32.5	16.5	13.5	17.5	16.0	8.0	2.000

Sechskantmutter SO 40006 (Messing)

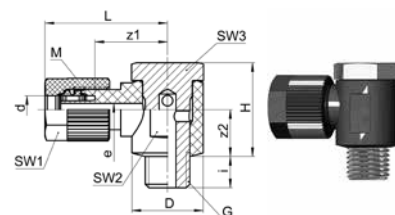
Dado esagonale SO 40006 (ottone)

Hexagon nut SO 40006 (brass)

Schwenkverschraubung

Raccordo girevole

Single banjo

SO 32821


Type -d-G	Mat.-Nr.	bar	M	SW1	SW2	SW3	L	D	H	i	z1	z2	e	kg/100
G=Rohrgewinde (zylindrisch)			G=Filettatura BSP (cilindrica)			G=BSP thread (straight)								
SO 32821-6-1/8	168.2841.100	10	10x1	12	14	14	27.5	16.0	21.0	7.0	16.5	10.5	2.8	1.950
SO 32821-6-1/4	168.2841.110	10	10x1	12	19	19	27.5	20.0	26.0	10.0	16.5	12.5	2.8	4.080
SO 32821-8-1/8	168.2841.160	10	12x1	14	14	19	29.0	16.0	21.0	7.0	17.0	10.5	4.8	2.040
SO 32821-8-1/4	168.2841.170	10	12x1	14	19	19	29.0	20.0	26.0	10.0	17.0	12.5	4.8	4.160
SO 32821-10-1/4	168.2841.270	10	14x1	17	19	19	32.5	20.0	26.0	10.0	18.5	12.5	6.6	4.360
▼ SO 32821-10/7-1/4	168.2841.320	10	14x1	17	19	19	32.5	20.0	26.0	10.0	18.5	12.5	5.6	4.450

Hohlschraube aus Messing

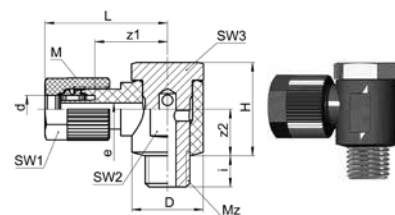
Vite femmina in ottone

Hollow screw of brass

Schwenkverschraubung METR

Raccordo girevole METR

Single banjo METR

SO 32821 METR


Type -d-Mz	Mat.-Nr.	bar	M	SW1	SW2	SW3	L	D	H	i	z1	z2	e	kg/100
Mz=metrisches Gewinde (zylindrisch)			Mz=Filettatura metrica (cilindrica)			Mz=Metric thread (straight)								
SO 32821-6-M10x1	168.2843.180	10	10x1	12	14	14	27.5	16.0	21.0	7.0	16.5	10.5	2.8	1.960
SO 32821-6-M12x1,5	168.2843.195	10	10x1	12	19	19	27.5	20.0	27.0	9.0	16.5	12.5	2.8	4.050
SO 32821-6-M14x1,5	168.2843.198	10	10x1	12	19	19	27.5	20.0	27.0	9.0	16.5	12.5	2.8	4.050
SO 32821-8-M10x1	168.2843.230	10	12x1	14	14	14	29.0	16.0	21.0	7.0	17.0	10.5	4.8	2.040
SO 32821-8-M12x1,5	168.2843.240	10	12x1	14	19	19	29.0	20.0	27.0	9.0	17.0	12.5	4.8	4.130
SO 32821-8-M14x1,5	168.2843.245	10	12x1	14	19	19	29.0	20.0	27.0	9.0	17.0	12.5	4.8	4.160
SO 32821-10-M12x1,5	168.2843.275	10	14x1	17	19	19	32.5	20.0	27.0	9.0	18.5	12.5	6.6	4.320
SO 32821-10-M14x1,5	168.2843.280	10	14x1	17	19	19	32.5	20.0	27.0	9.0	18.5	12.5	6.6	4.340
▼ SO 32821-10/7-M12x1,5	168.2843.300	10	14x1	17	19	19	32.5	20.0	27.0	9.0	18.5	12.5	5.6	4.420
▼ SO 32821-10/7-M14x1,5	168.2843.305	10	14x1	17	19	19	32.5	20.0	27.0	9.0	18.5	12.5	5.6	4.430

Hohlschraube aus Messing

Vite femmina in ottone

Hollow screw of brass

d=Rohraussen-ø / mit Wandung 1 mm
L=Mass in montiertem Zustand
e=kleinste Bohrung
▼=für Rohre mit Wandung 1,5 mm

d=diámetro externo del tubo / con paredes de 1 mm
L=dimensione raccordo montato
e=foro mínimo de passaggio
▼=per tubi con pareti di 1,5 mm di spessore

d=tube outside diameter / with wall thickness 1 mm
L=installed length
e=minimum bore
▼=for tubes with wall thickness of 1,5 mm

Schwenkverschraubung

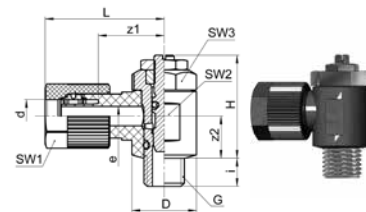
mit Drossel-Ventil

Raccordo girevole

con valvola a passaggio regolabile

Single banjo

with throttle valve

SO 37621


Type -d -G	Mat.-Nr.	bar	M	SW1	SW2	SW3	L	D	H	i	z1	z2	e	kv	kg/100
G=Rohrgewinde (zylindrisch)															
G=Filettatura BSP (cilindrica)															
G=BSP thread (straight)															
SO 37621-6-1/8	168.7600.100	10	10x1	12	14	14	27.5	16.0	25.0	7.0	16.5	10.5	2.8	3.0	2.100
SO 37621-6-1/4	168.7600.110	10	10x1	12	19	19	27.5	20.0	32.0	9.0	16.5	12.5	2.8	6.0	4.400
SO 37621-8-1/8	168.7600.160	10	12x1	14	14	14	29.5	16.0	25.5	7.0	16.5	10.5	3.6	3.0	2.800
SO 37621-8-1/4	168.7600.170	10	12x1	14	19	19	29.5	20.0	30.5	9.0	16.5	12.5	4.8	6.0	4.500
SO 37621-10-1/4	168.7600.270	10	14x1	17	19	19	30.0	20.0	30.5	9.0	16.0	12.5	5.0	6.0	4.600

Dieses Drossel-Ventil dient zur Regulierung von Luftströmen in beiden Richtungen. Die Kombination von Verschraubung und Drossel-Ventil erlaubt den Anbau direkt an den Zylinder. Die Spindelfixierung mittels Kontermutter garantiert, dass sich die Spindel auch bei Vibration nicht verstellt.

Technische Hinweise:

Körper und Anschlussmutter aus Polyamid 6.6, O-Ringe aus NBR. Hohlschrauben und Ventileinsätze aus Messing.

Schwenkverschraubungen siehe SO 32821, SO 32921, SO 33821, SO 33921, SO 42821, SO 42921, SO 43821 und SO 43921.

Queste valvole a farfalla servono a regolare il flusso d'aria in entrambe le direzioni. La combinazione raccordo- valvola regolabile consente il montaggio diretto sul cilindro. Il fissaggio dello stelo tramite un controdado garantisce una regolazione stabile anche in caso di vibrazioni.

Dati tecnici:

Elementi e dadi di raccordo in poliammide 6.6, O-Ring in NBR. Vite cava e parti valvola in ottone. Per il raccordo girevole, vedere SO 32821, SO 32921, SO 33821, SO 33921, SO 42821, SO 42921, SO 43821 e SO 43921.

This throttle valves serve to regulate air flow in both directions. The combination of union and throttle valve permits direct fitting to the cylinder. The spindle fixation via counter-nut assures that the spindle can not shift, even due to vibration.

Technical notes:

Bodies and union nuts of polyamide 6.6, O-Rings of NBR. Hollow screws and valve parts of brass.

Single banjo please see SO 32821, SO 32921, SO 33821, SO 33921, SO 42821, SO 42921, SO 43821 and SO 43921.

Schwenkverschraubung

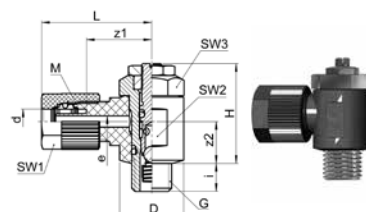
mit Drossel-Rückschlag-Ventil

Raccordo girevole

con valvole a passaggio regolabile e valvole di ritegno

Single banjo

with throttle valve and non-return

SO 37721


Type -d -G	Mat.-Nr.	bar	M	SW1	SW2	SW3	L	D	H	i	z1	z2	e	kv	kg/100
G=Rohrgewinde (zylindrisch)															
G=Filettatura BSP (cilindrica)															
G=BSP thread (straight)															
SO 37721-6-1/8	168.7700.100	10	10x1	12	14	14	27.5	16.0	25.0	7.0	16.5	10.5	2.8	3.0	2.100
SO 37721-6-1/4	168.7700.110	10	10x1	12	19	19	27.5	20.0	32.0	9.0	16.5	12.5	2.8	6.0	4.300
SO 37721-8-1/8	168.7700.160	10	12x1	14	14	14	29.5	16.0	25.5	7.0	16.5	10.5	3.6	3.0	2.400
SO 37721-8-1/4	168.7700.170	10	12x1	14	19	19	29.5	20.0	30.5	9.0	16.5	12.5	4.8	6.0	4.500
SO 37721-10-1/4	168.7700.270	10	14x1	17	19	19	30.0	20.0	30.5	9.0	16.0	12.5	5.0	6.0	4.600

d=Rohrassens-ø / mit Wandung 1 mm

kv=Kenngröße für das Durchflussverhalten (l/min)

L=Mass in montiertem Zustand

e=kleinste Bohrung

d=diámetro externo del tubo / con paredes de 1 mm

kv=fattore di scarico (l/min)

L=dimensione raccordo montato

e=foro minimo di passaggio

d=tube outside diameter / with wall thickness 1 mm

kv=flow factor (l/min)

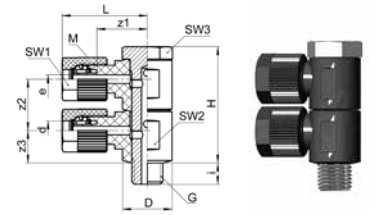
L=installed length

e=minimum bore

2-fach Winkelschwenkverschraubung

Ripartitore multiplo

Double banjo


SO 32921

Type -d -G	Mat.-Nr.	bar	M	SW1	SW2	SW3	L	D	H	i	z1	z2	z3	e	kg/100
G=Rohrgewinde (zylindrisch)			G=Filettatura BSP (cilindrica)			G=BSP thread (straight)									
SO 32921-2x6-1/8	168.2941.100	10	10x1	12	14	14	27.5	16.0	38.0	6.5	16.5	16.0	10.5	2.8	3.080
SO 32921-2x6-1/4	168.2941.110	10	10x1	12	19	19	27.5	20.0	48.0	10.0	16.5	21.0	12.5	2.8	6.140
SO 32921-2x8-1/8	168.2941.160	10	12x1	14	14	14	29.0	16.0	38.0	6.5	17.0	16.0	10.5	4.8	3.260
SO 32921-2x8-1/4	168.2941.170	10	12x1	14	19	19	29.0	20.0	48.0	10.0	17.0	21.0	12.5	4.8	6.300
SO 32921-2x10-1/4	168.2941.270	10	14x1	17	19	19	32.5	20.0	48.0	10.0	18.5	21.0	12.5	6.6	6.700
▼ SO 32921-2x10-7/8	168.2941.320	10	14x1	17	19	19	32.5	20.0	48.0	10.0	18.5	21.0	12.5	5.6	6.810

3

d=Rohraussen-Ø / mit Wandung 1 mm
L=Mass in montiertem Zustand
e=kleinste Bohrung
▼=für Rohre mit Wandung 1,5 mm

d=diametro esterno del tubo / con pareti di 1 mm
L=dimensione raccordo montato
e=foro minimo di passaggio
▼=per tubi con pareti di 1,5 mm di spessore

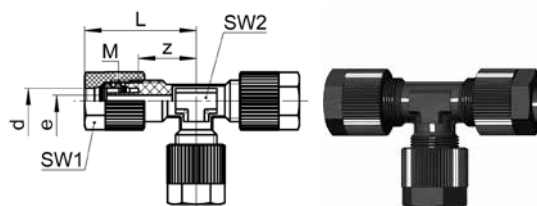
d=tube outside diameter / with wall thickness 1 mm
L=installed length
e=minimum bore
▼=for tubes with wall thickness of 1,5 mm

T-Verschraubung

Raccordo a T

Tee union

SO 33021



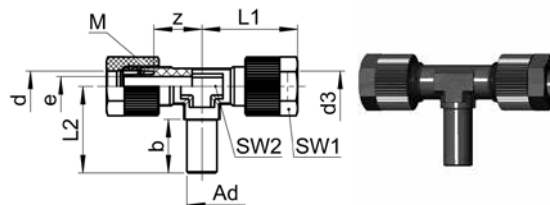
Type -d	Mat.-Nr.	bar	M	SW1	SW2	L	z	e	kg/100
SO 33021-6	168.3000.060	10	10x1	12	8	25.0	14.0	2.8	0.804
SO 33021-8	168.3000.080	10	12x1	14	10	26.5	14.5	4.8	1.089
SO 33021-10	168.3000.100	10	14x1	17	12	30.0	16.0	6.6	1.724
▼ SO 33021-10/7	168.3000.102	10	14x1	17	12	30.0	16.0	5.6	1.766
SO 33021-12	168.3000.120	10	16x1	19	13	32.5	16.0	8.0	2.267
▼ SO 33021-12/9	168.3000.122	10	16x1	19	13	32.5	16.0	7.0	2.313

Einstellbare T-Verschraubung

Raccordo a T orientabile

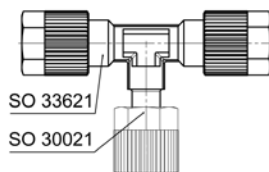
Adjustable tee union

SO 33621



Type -d -Ad -d3	Mat.-Nr.	bar	M	SW1	SW2	L1	L2	b	z	e	kg/100
SO 33621-6-A6-6	168.3600.060	10	10x1	12	8	25.0	24.0	14.0	14.0	2.8	0.618
SO 33621-8-A8-8	168.3600.080	10	12x1	14	10	26.5	25.0	16.0	14.5	4.8	0.850
SO 33621-10-A10-10	168.3600.100	10	14x1	17	12	30.0	29.0	20.0	16.0	6.6	1.304
SO 33621-12-A12-12	168.3600.120	10	16x1	19	13	32.5	30.0	21.0	16.0	8.0	1.715

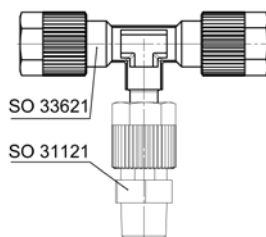
Anwendungsbeispiele:



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.

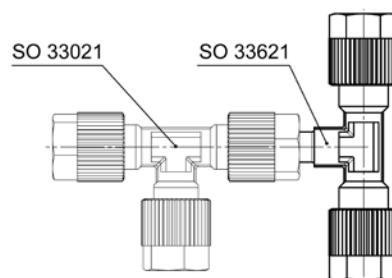
Esempio di utilizzo:



Combinazioni possibili:

- con raccordi per rubinetti a raccordi a T orientabili
- con raccordi a raccordi orientabili
- con raccordi filettati maschi a raccordi a T maschi orientabili. Contrariamente al raccordo a T maschio, questa combinazione risulta più semplice da realizzare poiché l'incastro e l'allineamento vengono effettuati separatamente.

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=Rohrassen-ø / mit Wandung 1 mm

Ad=Aussen-ø der Andrehung

e=kleinste Bohrung

L=Mass in montiertem Zustand

▼=für Rohre mit Wandung 1,5 mm

d=diámetro externo del tubo / con paredes di 1 mm

Ad=diámetro externo del nipplo cil.

e=foro mínimo di passaggio

L=dimensione raccordo montato

▼=per tubi con pareti di 1,5 mm di spessore

d=tube outside diameter / with wall thickness 1 mm

Ad=outside diameter of cyl. Stub

e=minimum bore

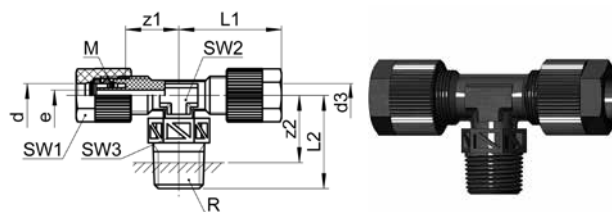
L=installed length

▼=for tubes with wall thickness of 1,5 mm

T-Einschraubverschraubung

Raccordo a T maschio

Male adaptor tee union

SO 33721


Type -d -R -d3	Mat.-Nr.	bar	M	SW1	SW2	SW3	L1	L2	z1	z2	e	kg/100
R=Rohrgewinde (kegelig)	R=Filettatura BSP (conica)			R=BSP thread (tapered)								
SO 33721-6-1/8-6	168.3701.100	10	10x1	12	8	10	25.0	19.0	14.0	11.0	2.8	0.645
SO 33721-6-1/4-6	168.3701.110	10	10x1	12	8	14	25.0	24.5	14.0	12.5	2.8	0.499
SO 33721-8-1/8-8	168.3701.160	10	12x1	14	10	10	26.5	20.0	14.5	12.0	4.8	0.814
SO 33721-8-1/4-8	168.3701.170	10	12x1	14	10	14	26.5	25.5	14.5	13.5	4.8	0.984
SO 33721-10-1/4-10	168.3701.270	10	14x1	17	12	14	30.0	26.5	16.0	14.5	6.6	1.420
SO 33721-10-3/8-10	168.3701.280	10	14x1	17	12	17	30.0	27.0	16.0	15.0	6.6	1.561
▼ SO 33721-10-7-1/4-10/7	168.3701.320	10	14x1	17	12	14	30.0	26.5	16.0	14.5	5.6	1.448
▼ SO 33721-10-7-3/8-10/7	168.3701.330	10	14x1	17	12	17	30.0	27.0	16.0	15.0	5.6	1.387

Zum Abdichten der Einschraubgewinde empfehlen wir unseren Dichtstift «Plasto-Joint» AC 833 oder PTFE Band.

Per una tenuta sicura delle filettature maschio, consigliamo il nostro Plasto-Joint AC 833 o nastro in PTFE.

For sealing the male threads we recommend our sealing stick «Plasto-Joint» AC 833 or PTFE tape.

d=Rohraussen-Ø / mit Wandung 1 mm
L=Mass in montiertem Zustand
e=kleinste Bohrung
▼=für Rohre mit Wandung 1,5 mm

d=diametro esterno del tubo / con pareti di 1 mm
L=dimensione raccordo montato
e=foro minimo di passaggio
▼=per tubi con pareti di 1,5 mm di spessore

d=tube outside diameter / with wall thickness 1 mm
L=installed length
e=minimum bore
▼=for tubes with wall thickness of 1,5 mm

SO NV 31A21E


Regulier-Eckventil
Valvola di regolazione ad angolo
Elbow regulating valve

7.14
SO NV 31A21EB


Regulier-Eckventil mit Einschraubgewinde
Valvola di regolazione ad angolo con filetto
maschio
Elbow regulating valve with male adaptor
thread

7.14
SO CV 33A21


Kegelrückschlagventil
Valvola di ritegno a sede conica
Taper seat non-return valve

7.17

SO 30511



Einschraubtülle
Ugello per tubo flessibile con filetto maschio
Male adaptor hose nozzle

9.15

