

## Kunststoff Flip

Verschraubungen

























## Plastique Flip

Raccords

## Plastic Flip

Unions



	Seite/Page/Page		Seite/Page/Page		Seite/Page/Page
Abschlusszapfen Bouchon d'arrêt Plug	<b>458</b> 	Einschraubwinkel Coude mâle Male elbow connector	<b>464</b> 	Y-Verbindung Y égal Y connector	<b>469</b> 
Gerade Verbindung Union double Straight connector	<b>459</b> 	Einschraubwinkel lang Coude mâle long Male elbow connector long	<b>464</b> 	Y-Einschraubverbindung Y mâle Y connector male	<b>470</b> 
Gerade Verbindung reduziert Union double réduite Straight connector reduced	<b>459</b> 	Einstellwinkel Coude enfichable Adjustable elbow	<b>465</b> 	Einschraubwinkel 45° Coude mâle 45° Male elbow connector 45°	<b>470</b> 
Einschraubverbindung Union mâle Male connector	<b>460</b> 	Einstellwinkel reduziert Coude enfichable réduit Adjustable elbow reduced	<b>465</b> 	Y-Einsteckverbindung Y enfichable Y connector	<b>471</b> 
Aufschraubverbindung kegelig Union femelle conique Female connector tapered	<b>461</b> 	Schwenkverbindung Coude banjo Banjo connector	<b>466</b> 	Einschraubverbindung drehbar Union mâle rotatif Male connector swivelling	<b>472-473</b> 
Gerade Schottverbindung Union double traversée de cloison Panel mount connector	<b>461</b> 	T-Verbindung Té égal Tee connector	<b>467</b> 	Einschraubwinkel drehbar Coude mâle rotatif Male elbow connector swivelling	<b>473</b> 
Gerade Einsteckreduzierung Réduction droite enfichable Reduction connector	<b>462</b> 	T-Einschraubverbindung Té mâle Male tee connector	<b>468</b> 	Einschraubverbindung mit Rückschlagventil Union mâle avec clapet anti-retour Straight connector with non-return valve	<b>474</b> 
Winkelverbindung Coude égal Elbow connector	<b>463</b> 	L-Einschraubverbindung Té mâle L Male L connector	<b>468</b> 	Schwenkbares Drosselrückschlagventil Clapet anti-retour lim. de débit orientable Swivelling throttle non-return valve	<b>475-476</b> 

**Führung / Guide / Guide**  
**Spannzange / Griffe / Chuck**  
 Verwendung von Nylon- und Polyurethanschläuchen  
 Hohe Rückhaltekraft  
 Utilisation de tubes nylon et polyuréthane  
 Effort de maintien  
 Accepts nylon, soft nylon and polyurethane tubes  
 Has large retaining force

**Druckring / Colletette de déblocage / Release button**  
 Leicht lösbar  
 Der Druckring löst die Spannzange zum Abnehmen des Schlauchs und verhindert, dass die Spannzange zu tief in die Schlauchoberfläche eindringt.  
 Faible force de dégagement  
 La colletette de déblocage libère la griffe pour retirer le tuyau et empêche la griffe de pénétrer trop profondément dans la surface du tuyau.  
 Low disconnection force  
 The release button unblocks the chuck for removing the hose and prevents the chuck from penetrating too deeply into the hose surface.

**Dichtung / Joint / Seal**  
 Für grossen Druckbereich von 1 bar bis 10 bar geeignet. Die Spezialdichtung gewährleistet gute Dichtheit, verbunden mit geringem Widerstand beim Einfügen des Schlauches.  
 Approprié pour une large gamme de pression de 1 bar à 10 bar. L'utilisation d'un joint spécial assure l'étanchéité et réduit l'effort à l'insertion du tube.  
 Can be used for a wide range of pressure 1 bar to 10 bar. The use of a special seal ensures positive sealing and reduced resistance when the tube is being inserted.

**Kunststoffschlauch / Tube en plastique / Plastic tube**  
 (nur kalibrierte Schläuche verwenden)  
 (n'utiliser que des tubes calibrés)  
 (use only calibrated tubes)

**Körper / Corps / Body**  
**O-Ring / Joint torique / O-ring**  
**Anschlussgewinde / Filetage de connexion / Connection thread**

- Kleiner Einbauraum
- Schwenkbarer Körper
- Mit Dichtung (M5 zylindrisch) oder PTFE beschichtet (R 1/8 konisch)
- Raccordement dans les espaces réduits
- Corps orientable
- Avec joint (M5 cylindrique) ou filetage revêtu avec PTFE (R 1/8 conique)
- Effective when piping in a confined space
- Rotatable body
- With O-ring (M5 cylindrical) or PTFE coated (R 1/8 taper)

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## Technische Daten / Données techniques / Technical data

Medium / Fluide / Operating media	Druckluft, Wasser <sup>1)</sup> / Air comprimé, eau <sup>1)</sup> / Compressed air, water <sup>1)</sup>	
Betriebsdruckbereich / Plage de pression de fonctionnement / Operating pressure range	1 bar - 10 bar	
Prüfdruck / Pression de test / Test pressure	30 bar	
Umgebungs- und Medientemperatur / Température ambiante et du fluide / Ambient and media temperature	Druckluft / Air comprimé / Compressed air: -5°C - +60°C Wasser / Eau / Water: 0°C - +40°C	
Anschlussmöglichkeiten / Options de connexion / Connections options	M5	mit Dichtung / avec joint / with O-ring
	1/8 - 1/2 konisch / conique / taper thread	PTFE beschichtet / revêtement PTFE / PTFE coated
	Kunststoffschlauch / Tube / Plastic tube	metrisch / métrique / metric

<sup>1)</sup> Kein Trinkwasser! Druckspitzen müssen kleiner als der max. zulässige Betriebsdruck sein.

<sup>1)</sup> Pas d'eau potable! Les pointes de pression doivent être inférieures à la pression de service maximale admissible.

<sup>1)</sup> No drinking water! Pressure peaks must be lower than the max. permissible operating pressure.

## Werkstoff / Matériau / Material

Körper / Corps / Body	PBT
Anschlussgewinde / Filetage de connexion / Connection thread	Messing / Laiton / Brass
Spannzange / Griffe / Chuck	Edelstahl / Acier inoxydable / Stainless steel
Führung / Guide / Guide	Edelstahl / Acier inoxydable / Stainless steel Messing / laiton / brass
Druckring / Colletette de déblocage / Release button	POM
Dichtung, O-Ring / Joint, Joint torique / Seal, O-ring	NBR

## Verwendbare Schläuche / Tubes utilisables / Applicable tubes

Material / Matériau / Material	Polyamid PA 11w/12w, Polyurethan Polyamide PA 11w/12w, Polyurethane Polyamide PA 11w/12w, Polyurethane
Aussendurchmesser / Diamètre ext. du tube / Tube outside diameter	4, 6, 8, 10, 12

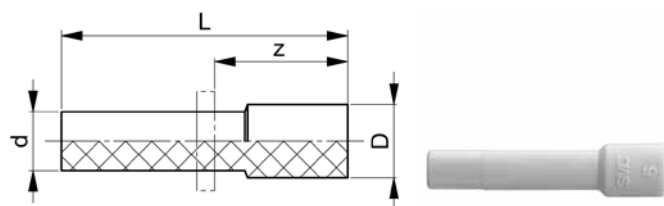
- Schnelle Montage und Demontage
- Für grossen Druckbereich von 1 bar bis 10 bar geeignet
- Verwendung von Nylon- und Polyurethanschläuchen

- Montage et démontage économique
- Pour une large plage de pression 1 bar à 10 bar
- Utilisation de tubes nylon ou polyuréthane

- Quick assembling and disassembling
- Can be used for wide range of pressure 1 bar to 10 bar
- Accepts nylon and polyurethane tubes

# Abschlusszapfen Bouchon d'arrêt Plug

## FP 30002



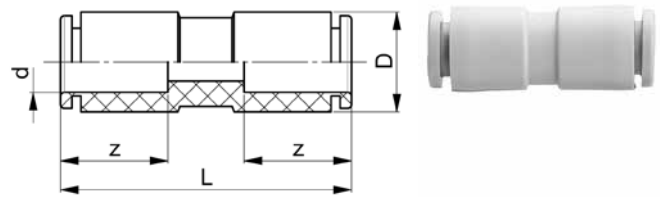
Type -d	Mat.-Nr.	L	D	z	g/Stk
FP 30002-4	TFP.300.0400	32.0	6.0	19.0	1
FP 30002-6	TFP.300.0600	35.0	8.0	22.0	1
FP 30002-8	TFP.300.0800	39.0	10.0	25.0	2
FP 30002-10	TFP.300.1000	43.0	12.0	27.5	4
FP 30002-12	TFP.300.1200	45.5	14.0	28.5	5

Den Abschlusszapfen FP 30002 bis zum Anschlag in den SERTO-Flip einführen. Zur Demontage Druckring leicht andrücken und Abschlusszapfen herausziehen.

Introduire le bouchon d'arrêt FP 30002 jusqu'au fond dans le SERTO-Flip. Pour démonter, presser légèrement le poussoir manuel et sortir le bouchon d'arrêt du SERTO-Flip.

Insert the plug FP 30002 and push it all the way into the SERTO-Flip fitting. To dismantle press the release button and withdraw the plug.

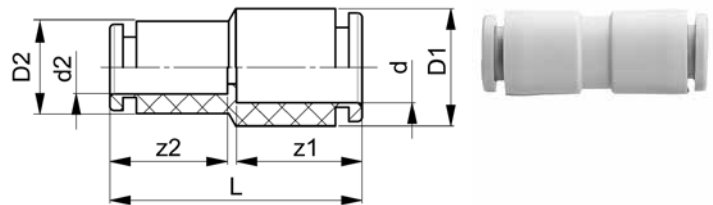
**Gerade Verbindung**  
**Union double**  
**Straight connector**



**FP 31050**

Type -d	Mat.-Nr.	L	D	z	g/Stk
FP 31050-4	TFP.310.0400	27.6	8.2	13.3	2
FP 31050-6	TFP.310.0600	27.6	10.4	13.3	2
FP 31050-8	TFP.310.0800	29.4	13.3	14.2	4
FP 31050-10	TFP.310.1000	32.2	15.9	15.6	6
FP 31050-12	TFP.310.1200	35.0	18.5	17.0	8

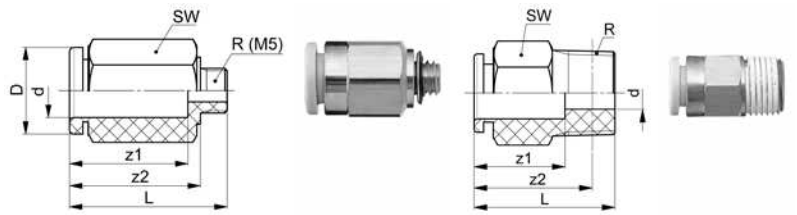
**Gerade Verbindung redu-  
 ziert**  
**Union double réduite**  
**Straight connector reduced**



**FP 31050 RED**

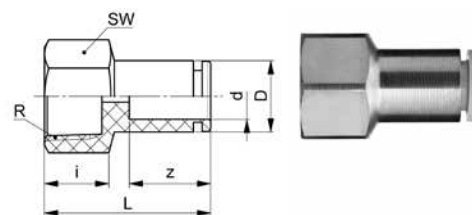
Type -d -d2	Mat.-Nr.	L	D1	D2	z1	z2	g/Stk
FP 31050-6-4	TFP.310.0604	27.6	10.4	8.2	13.3	13.3	2
FP 31050-8-6	TFP.310.0806	28.5	13.3	10.4	14.2	13.3	3
FP 31050-10-8	TFP.310.1008	30.8	15.9	13.2	15.6	14.2	5
FP 31050-12-10	TFP.310.1210	33.6	18.5	15.9	17.0	15.6	7

**Einschraubverbindung**  
**Union mâle**  
**Male connector**

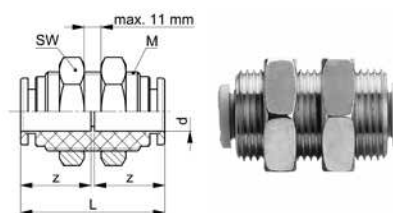


**FP 31150**

Type -d -R	Mat.-Nr.	SW	L	D	z1	z2	g/Stk
R=Rohrgewinde (kegelig)	R=Filetage-gaz BSP (conique)						
FP 31150-4-M5	TFP.311.0441	8	17.7	8.0	13.3	14.7	3
FP 31150-6-M5	TFP.311.0641	10	17.7	10.0	13.3	14.7	4
FP 31150-4-1/8	TFP.311.0411	10	14.3	7.7	13.3	11.2	6
FP 31150-4-1/4	TFP.311.0412	14	16.7	7.7	13.3	12.0	15
FP 31150-6-1/8	TFP.311.0611	10	18.5	9.7	13.3	15.3	6
FP 31150-6-1/4	TFP.311.0612	14	16.7	9.7	13.3	12.0	13
FP 31150-6-3/8	TFP.311.0613	17	18.1	9.7	13.3	13.0	25
FP 31150-8-1/8	TFP.311.0811	14	22.5	13.0	14.2	19.4	12
FP 31150-8-1/4	TFP.311.0812	14	22.0	13.0	14.2	17.3	14
FP 31150-8-3/8	TFP.311.0813	17	18.1	13.0	14.2	13.0	21
FP 31150-10-1/8	TFP.311.1011	17	23.8	15.5	15.6	20.7	17
FP 31150-10-1/4	TFP.311.1012	17	27.3	15.5	15.6	22.6	22
FP 31150-10-3/8	TFP.311.1013	17	23.5	15.5	15.6	18.4	23
FP 31150-10-1/2	TFP.311.1014	22	22.3	15.5	15.6	15.9	45
FP 31150-12-1/4	TFP.311.1212	19	28.7	18.0	17.0	24.0	24
FP 31150-12-3/8	TFP.311.1213	19	26.0	18.0	17.0	20.7	25
FP 31150-12-1/2	TFP.311.1214	22	22.3	18.0	17.0	15.9	38

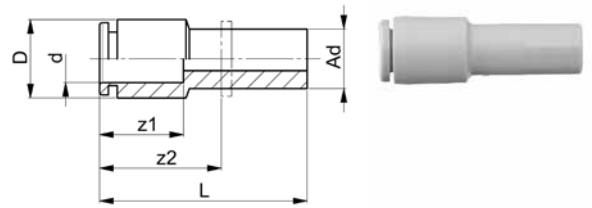
**Aufschraubverbindung kegelig**
**Union femelle conique**
**Female connector tapered**

**FP 31250**

Type -d-R	Mat.-Nr.	SW	L	D	i	z	g/Stk
R=Rohrgewinde (kegelig)	R=Filetage-gaz BSP (conique)			R=BSP thread (tapered)			
FP 31250-4-1/8	TFP.312.0411	14	24.0	8.0	8.5	13.3	12
FP 31250-4-1/4	TFP.312.0412	17	29.0	8.0	13.0	13.3	22
FP 31250-6-1/8	TFP.312.0611	14	23.5	10.0	8.5	13.3	12
FP 31250-6-1/4	TFP.312.0612	17	28.5	10.0	13.0	13.3	22
FP 31250-6-3/8	TFP.312.0613	19	30.0	10.0	12.7	13.3	23
FP 31250-8-1/8	TFP.312.0811	14	24.0	13.0	8.5	14.2	13
FP 31250-8-1/4	TFP.312.0812	17	29.0	13.0	12.2	14.2	22
FP 31250-8-3/8	TFP.312.0813	19	30.5	13.0	13.5	14.2	31
FP 31250-10-1/4	TFP.312.1012	17	30.0	15.5	13.0	15.6	24
FP 31250-10-3/8	TFP.312.1013	19	31.3	15.5	13.3	15.6	26
FP 31250-12-1/4	TFP.312.1212	19	31.0	18.0	12.0	17.0	33
FP 31250-12-3/8	TFP.312.1213	19	32.3	18.0	13.3	17.0	28
FP 31250-12-1/2	TFP.312.1214	24	36.3	18.0	16.0	17.0	46

**Gerade Schottverbindung**
**Union double traversée de cloison**
**Panel mount connector**

**FP 31550**

Type -d	Mat.-Nr.	M	SW	L	z	g/Stk
FP 31550-4	TFP.315.0400	12x1.0	14	27.5	13.3	23
FP 31550-6	TFP.315.0600	14x1.0	17	27.5	13.3	28
FP 31550-8	TFP.315.0800	16x1.0	19	29.0	14.2	34
FP 31550-10	TFP.315.1000	20x1.0	24	32.0	15.6	64
FP 31550-12	TFP.315.1200	22x1.0	27	34.5	17.0	64

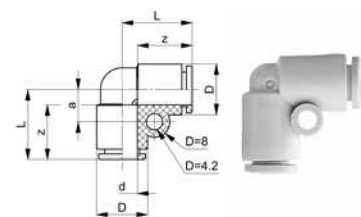
**Gerade Einsteckreduzierung**  
**Réduction droite enfichable**  
**Reduction connector**


**FP 31850**

Type -d -Ad	Mat.-Nr.	L	D	z1	z2	g/Stk
FP 31850-4-A6	TFP.318.0406	28.7	8.2	13.3	15.3	2
FP 31850-6-A4	TFP.318.0604	33.6	10.4	13.3	20.3	2
FP 31850-6-A8	TFP.318.0608	31.5	10.4	13.3	17.5	2
FP 31850-6-A10	TFP.318.0610	34.0	10.4	13.3	18.4	2
FP 31850-6-A12	TFP.318.0612	35.6	12.0	13.3	18.7	3
FP 31850-8-A10	TFP.318.0810	35.2	13.3	14.2	19.5	3
FP 31850-8-A12	TFP.318.0812	36.5	13.3	14.2	19.5	3
FP 31850-10-A12	TFP.318.1012	39.2	15.9	15.6	22.1	5



**Winkelverbindung**  
**Coude égal**  
**Elbow connector**



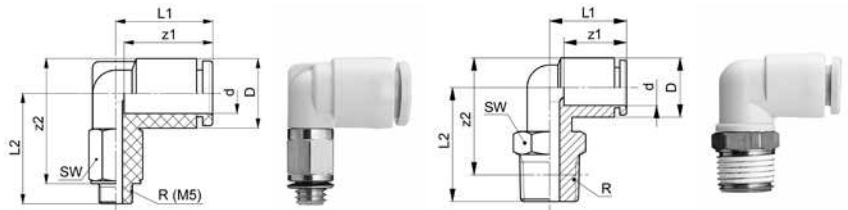
**FP 32050**

Type -d	Mat.-Nr.	L	D	a	z	g/Stk
FP 32050-4	TFP.320.0400	15.4	8.2	5.7	13.3	2
FP 32050-6	TFP.320.0600	16.2	10.4	6.8	13.3	3
FP 32050-8	TFP.320.0800	18.3	13.0	8.4	14.2	5
FP 32050-10	TFP.320.1000	20.5	15.9	9.7	15.6	7
FP 32050-12	TFP.320.1200	23.0	18.5	10.7	17.0	11

**Einschraubwinkel**

**Coude mâle**

**Male elbow connector**



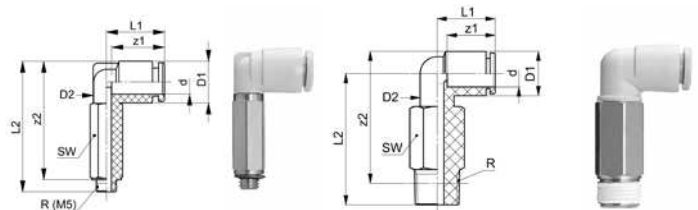
**FP 32450**

Type -d-R	Mat.-Nr.	SW	L1	L2	D	z1	z2	g/Stk
R=Rohrgewinde (kegelig)	R=Filetage-gaz BSP (conique)	R=BSP thread (tapered)						
FP 32450-4-M5	TFP.324.0441	7	15.4	14.7	8.2	13.3	15.9	3
FP 32450-6-M5	TFP.324.0641	7	14.5	16.5	10.4	13.3	18.7	3
FP 32450-4-1/8	TFP.324.0411	10	14.7	16.2	8.2	13.3	17.3	5
FP 32450-4-1/4	TFP.324.0412	14	14.7	21.7	8.2	13.3	21.0	14
FP 32450-6-1/8	TFP.324.0611	10	15.5	17.3	10.4	13.3	19.4	5
FP 32450-6-1/4	TFP.324.0612	14	15.5	22.8	10.4	13.3	23.3	15
FP 32450-6-3/8	TFP.324.0613	17	15.5	24.2	10.4	13.3	24.2	27
FP 32450-8-1/8	TFP.324.0811	10	16.5	18.7	13.3	14.2	22.1	6
FP 32450-8-1/4	TFP.324.0812	14	17.2	25.5	13.3	14.2	27.3	18
FP 32450-8-3/8	TFP.324.0813	17	17.2	25.5	13.3	14.2	27.0	25
FP 32450-10-1/4	TFP.324.1012	17	19.3	28.7	15.9	15.6	32.0	22
FP 32450-10-3/8	TFP.324.1013	17	19.3	29.6	15.9	15.6	32.5	22
FP 32450-12-1/4	TFP.324.1212	17	21.5	30.0	18.5	17.0	34.5	24
FP 32450-12-3/8	TFP.324.1213	17	21.5	30.8	18.5	17.0	35.0	24
FP 32450-12-1/2	TFP.324.1214	22	21.5	35.0	18.5	17.0	37.8	47

**Einschraubwinkel lang**

**Coude mâle long**

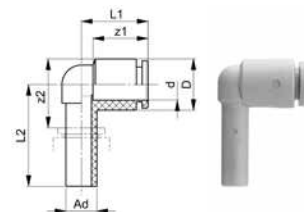
**Male elbow connector long**



**FP 32550**

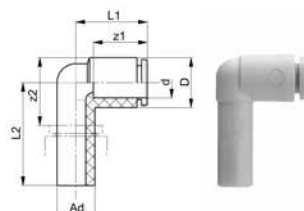
Type -d-R	Mat.-Nr.	SW	L1	L2	D1	D2	z1	z2	g/Stk
R=Rohrgewinde (kegelig)	R=Filetage-gaz BSP (conique)	R=BSP thread (tapered)							
FP 32550-4-M5	TFP.325.0441	7	15.4	25.7	8.2	7.0	13.3	26.8	6
FP 32550-6-M5	TFP.325.0641	7	14.5	27.5	10.4	7.0	13.3	29.5	6
FP 32550-4-1/8	TFP.325.0411	10	14.7	30.0	8.2	10.0	13.3	31.0	11
FP 32550-6-1/8	TFP.325.0611	10	15.5	31.0	10.4	10.0	13.3	33.0	12
FP 32550-6-1/4	TFP.325.0612	14	15.5	34.4	10.4	10.0	13.3	35.0	28
FP 32550-8-1/8	TFP.325.0811	10	16.5	32.4	13.3	10.0	14.2	36.0	12
FP 32550-8-1/4	TFP.325.0812	14	17.2	39.0	13.3	12.0	14.2	41.0	40
FP 32550-10-1/4	TFP.325.1012	17	19.3	53.0	15.9	17.0	15.6	56.2	59
FP 32550-10-3/8	TFP.325.1013	17	19.3	48.5	15.9	17.0	15.6	51.5	51
FP 32550-12-1/4	TFP.325.1212	17	21.5	54.2	18.5	17.0	17.0	58.8	61
FP 32550-12-3/8	TFP.325.1213	17	21.5	49.8	18.5	17.0	17.0	54.0	53

**Einstellwinkel**  
**Coude enfichable**  
**Adjustable elbow**


**FP 32650**

Type -d -Ad	Mat.-Nr.	L1	L2	D	z1	z2	g/Stk
FP 32650-4-A4	TFP.326.0400	14.5	21.0	8.2	13.3	12.0	2
FP 32650-6-A6	TFP.326.0600	15.4	22.4	10.4	13.3	14.2	2
FP 32650-8-A8	TFP.326.0800	17.2	26.2	13.3	14.2	18.7	3
FP 32650-10-A10	TFP.326.1000	19.3	28.2	15.9	15.6	20.5	5
FP 32650-12-A12	TFP.326.1200	21.5	31.0	18.5	17.0	23.3	7

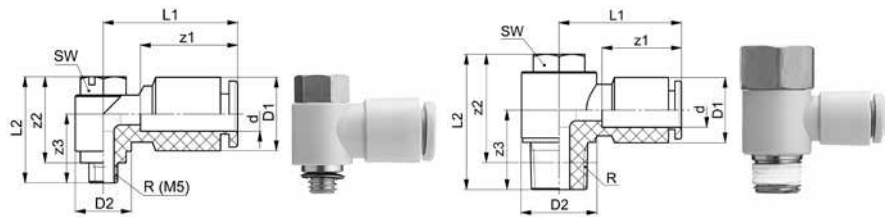
**Einstellwinkel reduziert**  
**Coude enfichable réduit**  
**Adjustable elbow reduced**


**FP 32650 RED**

Type -d -Ad	Mat.-Nr.	L1	L2	D	z1	z2	g/Stk
FP 32650-4-A6	TFP.326.0406	14.7	24.5	8.2	13.3	15.5	2
FP 32650-4-A8	TFP.326.0408	14.7	29.5	8.2	13.3	19.4	2
FP 32650-6-A8	TFP.326.0608	15.5	24.2	10.4	13.3	15.3	2
FP 32650-6-A10	TFP.326.0610	15.5	31.5	10.4	13.3	21.3	3
FP 32650-8-A10	TFP.326.0810	18.8	27.0	13.3	14.2	18.0	4
FP 32650-8-A12	TFP.326.0812	18.8	34.0	13.3	14.2	23.5	5

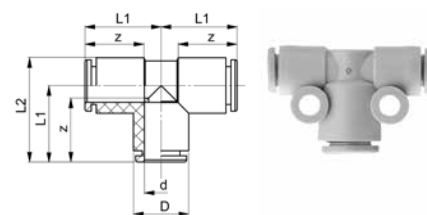
**Schwenkverbindung**  
**Coude banjo**  
**Banjo connector**

**FP 32850**



Type -d-R	Mat.-Nr.	SW	L1	L2	D1	D2	z1	z2	z3	g/Stk
R=Rohrgewinde (kegelig)	R=Filetage-gaz BSP (conique)	R=BSP thread (tapered)								
FP 32850-4 M5	TFP.328.0441	8	17.5	18.5	8.2	9.8	13.3	15.0	11.0	6
FP 32850-6 M5	TFP.328.0641	8	18.3	18.5	10.4	9.8	13.3	15.0	11.0	6
FP 32850-4-1/8	TFP.328.0411	8	19.3	25.5	8.2	13.5	13.3	22.5	13.7	13
FP 32850-6-1/8	TFP.328.0611	8	20.5	25.5	10.4	13.5	13.3	22.5	13.7	14
FP 32850-6-1/4	TFP.328.0612	10	20.0	30.5	10.4	15.4	13.3	26.0	18.0	25
FP 32850-8-1/8	TFP.328.0811	12	23.5	27.5	13.3	17.6	14.2	24.5	15.0	23
FP 32850-8-1/4	TFP.328.0812	12	23.5	31.0	13.3	17.6	14.2	26.5	18.5	29
FP 32850-8-3/8	TFP.328.0813	14	23.0	35.5	13.3	20.6	14.2	30.0	19.5	44
FP 32850-10-1/4	TFP.328.1012	14	26.0	35.0	15.9	20.6	15.6	30.0	20.0	38
FP 32850-10-3/8	TFP.328.1013	14	26.0	35.3	15.9	20.6	15.6	30.0	20.3	46
FP 32850-12-3/8	TFP.328.1213	17	28.5	37.5	18.5	25.2	17.0	32.5	21.5	60
FP 32850-12-1/2	TFP.328.1214	17	28.5	41.0	18.5	25.2	17.0	34.4	24.5	78

**T-Verbindung**  
**Té égal**  
**Tee connector**



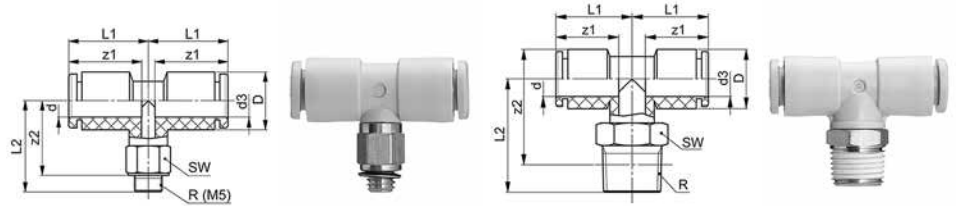
**FP 33050**

Type -d	Mat.-Nr.	L1	L2	D	z	g/Stk
FP 33050-4	TFP.330.0400	15.4	19.5	8.2	13.3	6
FP 33050-6	TFP.330.0600	16.2	21.5	10.4	13.3	8
FP 33050-8	TFP.330.0800	18.5	25.2	13.3	14.2	7
FP 33050-10	TFP.330.1000	22.5	30.5	15.9	15.6	11
FP 33050-12	TFP.330.1200	24.5	33.7	18.5	17.0	16

## T-Einschraubverbindung

### Té mâle

### Male tee connector



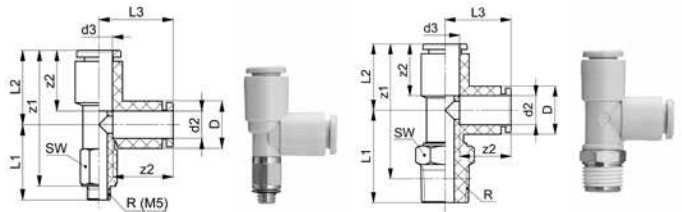
### FP 33750

Type -d-R-d3	Mat.-Nr.	SW	L1	L2	D	z1	z2	g/Stk
R=Rohrgewinde (kegelig)	R=Filetage-gaz BSP (conique)	R=BSP thread (tapered)						
FP 33750-4-M5-4	TFP.337.0441	7	15.4	14.7	8.2	13.3	15.9	4
FP 33750-6-M5-6	TFP.337.0641	7	14.5	16.5	10.4	13.3	18.7	4
FP 33750-4-1/8-4	TFP.337.0411	10	14.7	16.2	8.2	13.3	17.3	6
FP 33750-6-1/8-6	TFP.337.0611	10	15.5	17.3	10.4	13.3	19.4	6
FP 33750-6-1/4-6	TFP.337.0612	14	15.5	22.8	10.4	13.3	23.3	16
FP 33750-6-3/8-6	TFP.337.0613	17	15.5	24.2	10.4	13.3	24.2	27
FP 33750-8-1/8-8	TFP.337.0811	10	16.5	18.7	13.3	14.2	22.1	8
FP 33750-8-1/4-8	TFP.337.0812	14	17.2	25.5	13.3	14.2	27.3	19
FP 33750-8-3/8-8	TFP.337.0813	17	17.2	25.5	13.3	14.2	27.0	27
FP 33750-10-1/4-10	TFP.337.1012	17	19.3	28.7	15.9	15.6	32.0	24
FP 33750-10-3/8-10	TFP.337.1013	17	19.3	29.5	15.9	15.6	32.5	25
FP 33750-12-1/4-12	TFP.337.1212	17	21.5	30.0	18.5	17.0	34.5	27
FP 33750-12-3/8-12	TFP.337.1213	17	21.5	30.8	18.5	17.0	35.0	28
FP 33750-12-1/2-12	TFP.337.1214	22	21.5	35.0	18.5	17.0	37.8	50

## L-Einschraubverbindung

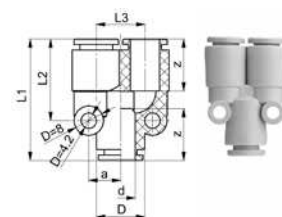
### Té mâle L

### Male L connector

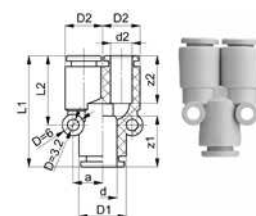


### FP 33850

Type -R-d2-d3	Mat.-Nr.	SW	L1	L2	L3	D	z1	z2	g/Stk
R=Rohrgewinde (kegelig)	R=Filetage-gaz BSP (conique)	R=BSP thread (tapered)							
FP 33850-M5-4-4	TFP.338.0441	7	14.7	15.5	15.4	8.2	27.3	13.3	4
FP 33850-M5-6-6	TFP.338.0641	7	16.5	16.3	16.5	10.4	29.8	13.3	6
FP 33850-1/8-4-4	TFP.338.0411	10	16.2	15.3	15.4	8.2	28.5	13.3	6
FP 33850-1/8-6-6	TFP.338.0611	10	17.3	16.3	16.2	10.4	30.5	13.3	6
FP 33850-1/4-6-6	TFP.338.0612	14	22.8	16.3	16.2	10.4	34.4	13.3	16
FP 33850-3/8-6-6	TFP.338.0613	17	24.2	16.3	16.2	10.4	35.3	13.3	28
FP 33850-1/8-8-8	TFP.338.0811	10	18.7	18.2	18.3	13.3	33.8	14.2	8
FP 33850-1/4-8-8	TFP.338.0812	14	25.5	18.2	18.3	13.3	39.0	14.2	20
FP 33850-3/8-8-8	TFP.338.0813	17	25.5	18.2	18.3	13.3	38.5	14.2	27
FP 33850-1/4-10-10	TFP.338.1012	17	28.7	20.5	20.5	15.9	44.5	15.6	25
FP 33850-3/8-10-10	TFP.338.1013	17	29.5	20.5	20.5	15.9	45.0	15.6	25
FP 33850-1/4-12-12	TFP.338.1212	17	30.0	23.0	23.0	18.5	48.3	17.0	28
FP 33850-3/8-12-12	TFP.338.1213	17	30.8	23.0	23.0	18.5	48.8	17.0	28
FP 33850-1/2-12-12	TFP.338.1214	22	34.8	23.0	23.0	18.5	51.5	17.0	51

**Y-Verbindung**
**Y égal**
**Y connector**

**FP 35050**

Type -d	Mat.-Nr.	L1	L2	L3	D	a	z	g/Stk
FP 35050-4	TFP.350.0400	29.0	18.2	8.2	8.2	5.7	13.3	3
FP 35050-6	TFP.350.0600	30.2	19.5	10.4	10.4	6.8	13.3	4
FP 35050-8	TFP.350.0800	33.2	22.4	13.3	13.3	8.7	14.2	7
FP 35050-10	TFP.350.1000	37.0	25.0	15.9	15.9	10.2	15.6	11
FP 35050-12	TFP.350.1200	41.2	27.8	18.5	18.5	11.5	17.0	16

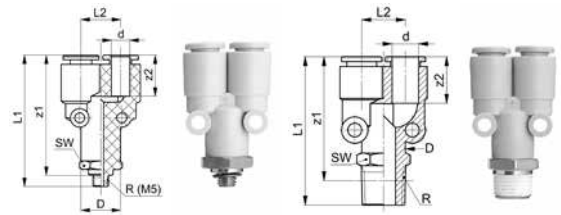
**Y-Verbindung reduziert**
**Y réduit**
**Y connector reduced**

**FP 35050 RED**

Type -d -d2	Mat.-Nr.	L1	L2	D1	D2	a	z1	z2	g/Stk
FP 35050-6-4	TFP.350.0604	29.0	18.0	10.4	8.2	6.8	13.3	13.3	3
FP 35050-8-6	TFP.350.0806	31.0	19.5	13.0	10.4	8.2	14.2	13.3	5
FP 35050-10-8	TFP.350.1008	34.7	22.4	15.9	13.5	10.2	15.6	14.2	9
FP 35050-12-10	TFP.350.1210	38.5	25.0	18.5	15.9	11.5	17.0	15.6	13

## Y-Einschraubverbindung

### Y mâle

### Y connector male



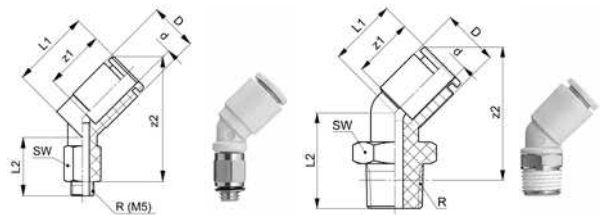
#### FP 35150

Type -d-R	Mat.-Nr.	SW	L1	L2	D	z1	z2	g/Stk
R=Rohrgewinde (kegelig)	R=Filetage-gaz BSP (conique)							
FP 35150-4 M5	TFP.351.0441	10	34.0	8.2	8.2	31.0	13.3	7
FP 35150-6 M5	TFP.351.0641	12	35.0	10.4	10.4	32.0	13.3	10
FP 35150-4-1/8	TFP.351.0411	10	36.5	8.2	8.2	33.4	13.3	9
FP 35150-4-1/4	TFP.351.0412	14	41.0	8.2	8.2	36.2	13.3	19
FP 35150-6-1/8	TFP.351.0611	12	37.5	10.4	10.4	34.5	13.3	10
FP 35150-6-1/4	TFP.351.0612	14	42.0	10.4	10.4	37.3	13.3	19
FP 35150-6-3/8	TFP.351.0613	17	43.4	10.4	10.4	38.3	13.3	31
FP 35150-8-1/8	TFP.351.0811	14	40.7	13.3	13.3	37.5	14.2	16
FP 35150-8-1/4	TFP.351.0812	14	45.2	13.3	13.3	40.5	14.2	21
FP 35150-8-3/8	TFP.351.0813	17	46.5	13.3	13.3	41.5	14.2	33
FP 35150-10-1/4	TFP.351.1012	17	49.0	15.9	15.9	44.3	15.6	26
FP 35150-10-3/8	TFP.351.1013	17	50.5	15.9	15.9	45.3	15.6	33
FP 35150-12-3/8	TFP.351.1213	19	54.4	18.5	18.5	49.3	17.0	39

## Einschraubwinkel 45°

### Coude mâle 45°

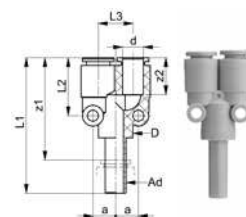
### Male elbow connector 45°



#### FP 35250

Type -d-R	Mat.-Nr.	SW	L1	L2	D	z1	z2	g/Stk
R=Rohrgewinde (kegelig)	R=Filetage-gaz BSP (conique)							
FP 35250-4 M5	TFP.352.0441	7	14.5	13.0	8.2	13.3	22.9	3
FP 35250-6 M5	TFP.352.0641	7	14.5	17.0	10.4	13.3	27.5	4
FP 35250-4-1/8	TFP.352.0411	10	14.5	12.6	8.2	13.3	22.3	5
FP 35250-4-1/4	TFP.352.0412	14	14.5	17.3	8.2	13.3	25.3	14
FP 35250-6-1/8	TFP.352.0611	10	14.7	14.7	10.4	13.3	25.3	5
FP 35250-6-1/4	TFP.352.0612	14	14.7	19.3	10.4	13.3	28.3	15
FP 35250-8-1/8	TFP.352.0811	10	16.0	15.7	13.3	14.2	28.0	6
FP 35250-8-1/4	TFP.352.0812	17	16.0	22.4	13.3	14.2	33.0	18
FP 35250-8-3/8	TFP.352.0813	17	16.0	22.5	13.3	14.2	32.7	25
FP 35250-10-1/4	TFP.352.1012	17	17.6	29.0	15.9	15.6	41.8	22
FP 35250-10-3/8	TFP.352.1013	17	17.6	24.2	15.9	15.6	36.7	22
FP 35250-12-3/8	TFP.352.1213	17	19.5	24.2	18.5	17.0	38.5	23
FP 35250-12-1/2	TFP.352.1214	22	19.5	28.2	18.5	17.0	41.3	46



**Y-Einsteckverbindung**
**Y enfichable**
**Y connector**

**FP 35650**

Type -d -Ad	Mat.-Nr.	L1	L2	L3	D	a	z1	z2	g/Stk
FP 35650-4-A4	TFP.356.0404	45.0	18.2	8.2	8.2	5.7	31.5	13.3	3
FP 35650-6-A6	TFP.356.0606	46.5	19.5	10.4	10.4	6.8	33.0	13.3	5
FP 35650-8-A8	TFP.356.0808	52.0	22.4	13.3	13.3	8.7	38.0	14.2	8
FP 35650-10-A10	TFP.356.1010	57.5	25.0	15.9	15.9	10.2	41.8	15.6	12
FP 35650-12-A12	TFP.356.1212	63.0	27.8	18.5	18.5	11.5	46.0	17.0	18

# Einschraubverbindung drehbar

Gerade oder Winkel

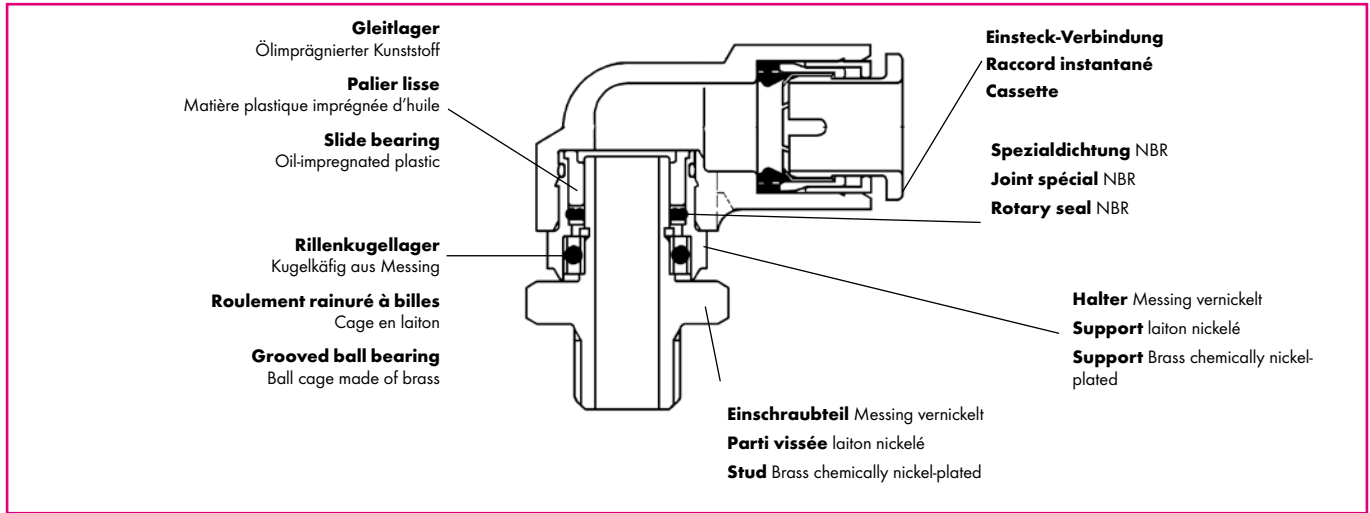
## Union mâle rotatif

Droit ou coudé

## Male connector rotary

Straight or elbow

**FP 31950**  
**FP 32950**



### Technische Daten / Données techniques / Technical notes

Medium / Fluide / Fluid	Druckluft / Air comprimé / Compressed air				
Arbeitsdruck / Pression de travaille / Operating pressure max.	10 bar				
Arbeitsdruck / Pression de travaille / Operating pressure min.	1 bar				
Prüfdruck / Pression d'épreuve / Proof pressure	30 bar				
Umgebungstemperatur / Température ambiante / Ambient and fluid temperature	0°C - +60°C				
Drehzahl / Vitesse / Permissible number of rotation [1/min]	Ø 4	Ø 6	Ø 8	Ø 10	Ø 12
	500	500	400	300	250
Gewinde / Filetage / Thread	M5 metrisch/métrique/metric; 1/8 - 1/2 konisch/conique/taper				

### Hinweise

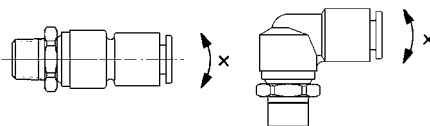
Da Miniaturkugellager verwendet werden, müssen die Querkräfte möglichst klein gehalten werden. In diesen Fällen wird empfohlen, Polyurethanschläuche einzusetzen.

### Remarque

Etant donné que des roulements à billes miniatures sont utilisés, les forces transversales doivent être maintenues aussi faibles que possible. Dans ces cas, il est recommandé d'utiliser des tuyaux en polyuréthane.

### Caution

Minimise the load shown below to protect the ball bearing. A flexible polyurethane tube is recommended.

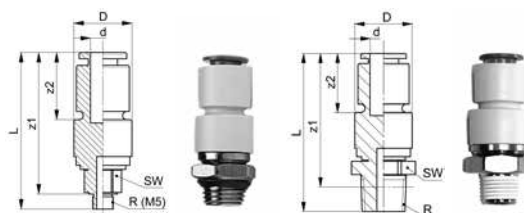


## Einschraubverbindung drehbar

### Union mâle rotatif

### Male connector swivelling

#### FP 31950



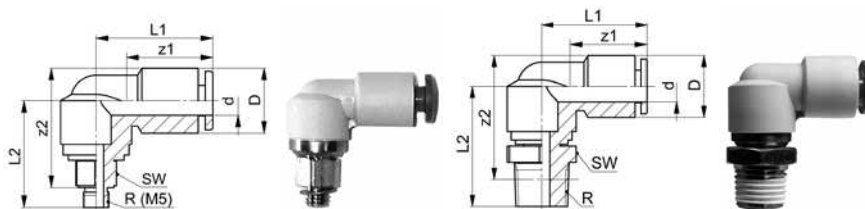
Type -d -R	Mat.-Nr.	SW	L	D	z1	z2	g/Stk
R=Rohrgewinde (kegelig)	R=Filetage-gaz BSP (conique)				R=BSP thread (tapered)		
FP 31950-4 M5	TFP.319.0441	8	36.5	12.0	33.0	16.0	9
FP 31950-6 M5	TFP.319.0641	8	37.5	14.0	33.5	17.0	12
FP 31950-4-1/8	TFP.319.0411	12	37.0	12.0	34.0	16.0	14
FP 31950-6-1/8	TFP.319.0611	14	38.5	14.0	35.5	17.0	17
FP 31950-6-1/4	TFP.319.0612	14	42.0	14.0	36.5	17.0	23
FP 31950-8-1/8	TFP.319.0811	17	43.0	17.0	40.0	18.5	23
FP 31950-8-1/4	TFP.319.0812	17	46.5	17.0	41.0	18.5	29
FP 31950-8-3/8	TFP.319.0813	17	47.0	17.0	41.5	18.5	37
FP 31950-10-1/4	TFP.319.1012	22	53.5	22.0	48.0	21.0	55
FP 31950-10-3/8	TFP.319.1013	22	54.0	22.0	48.5	21.0	63
FP 31950-10-1/2	TFP.319.1014	22	56.5	22.0	49.5	21.0	81
FP 31950-12-3/8	TFP.319.1213	24	56.0	24.0	50.5	22.0	75
FP 31950-12-1/2	TFP.319.1214	24	60.0	24.0	52.0	22.0	92

## Einschraubwinkel drehbar

### Coude mâle rotatif

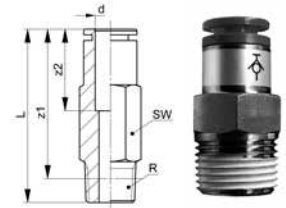
### Male elbow connector swivelling

#### FP 32950



Type -d -R	Mat.-Nr.	SW	L1	L2	D	z1	z2	g/Stk
R=Rohrgewinde (kegelig)	R=Filetage-gaz BSP (conique)							
FP 32950-4 M5	TFP.329.0441	8	21.0	20.5	10.4	16.0	22.0	9
FP 32950-6 M5	TFP.329.0641	8	23.0	21.0	12.8	17.0	23.5	12
FP 32950-4-1/8	TFP.329.0411	12	21.0	21.0	10.4	16.0	23.5	14
FP 32950-6-1/8	TFP.329.0611	14	23.0	22.0	12.8	17.0	25.5	17
FP 32950-6-1/4	TFP.329.0612	14	23.0	25.5	12.8	17.0	26.5	23
FP 32950-8-1/8	TFP.329.0811	17	26.0	25.5	15.2	18.5	30.0	23
FP 32950-8-1/4	TFP.329.0812	17	26.0	29.0	15.2	18.5	31.0	29
FP 32950-8-3/8	TFP.329.0813	17	26.0	30.0	15.2	18.5	32.0	38
FP 32950-10-1/4	TFP.329.1012	22	31.5	33.5	18.5	21.0	37.5	56
FP 32950-10-3/8	TFP.329.1013	22	31.5	34.0	18.5	21.0	38.0	64
FP 32950-12-3/8	TFP.329.1213	24	34.0	37.0	21.0	22.0	40.5	76
FP 32950-12-1/2	TFP.329.1214	24	34.0	38.5	21.0	22.0	42.0	93

**Einschraubverbindung mit Rückschlagventil**  
**Union mâle avec clapet anti-retour**  
**Straight connector with non-return valve**



**FP 37350**

Type -d -R	Mat.-Nr.	SW	L	z1	z2	g/Stk
R=Rohrgewinde (kegelig)	R=Filetage-gaz BSP (conique)	R=BSP thread (tapered)				
FP 37350-4-1/8	TFP.373.0411	10	25.2	22.1	18.0	8
FP 37350-6-1/8	TFP.373.0611	12	36.5	33.4	19.0	16
FP 37350-6-1/4	TFP.373.0612	14	28.5	22.9	19.0	14
FP 37350-8-1/4	TFP.373.0812	14	45.0	39.7	21.5	27
FP 37350-10-1/4	TFP.373.1012	17	50.0	44.5	24.0	34

# Schwenkbares Drosselrückschlagventil Clapet anti-retour limiteur de débit orientable Swivelling throttle non-return valve

**FP 37650**  
**FP 37750**

## Technische Daten / Données techniques / Technical notes

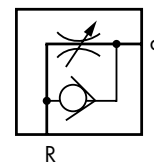
Medium / Fluide / Fluid	Druckluft gefiltert 10 µm, geölt oder ungeölt Air comprimé filtre à 10 microns avec ou sans huile Compressed air filtered 10 µm oiled or not
Anschluss / Raccordement / Stud	PTFE beschichtet / revêtement PTFE / PTFE coated
Aussengewinde / Filetage / Thread	1/8, 1/4, 3/8, 1/2 konisch / conique / taper
Einstellbereich / Plage de réglage / Number of needle rotation	10 Umdrehungen / tours / turns
Prüfdruck / Pression d'épreuve / Proof pressure	1.5 MPa (~ 15-bar)
Betriebsdruckbereich / Pression de service / Working pressure	0.1 - 1.0 MPa (~ 1 - 10-bar)
Betriebstemperaturbereich / Température / Ambient and fluid temperature	+5°C - +60°C
Einbaulage / Position de montage / Built-in position	beliebig / quelconque / any

- Kostengünstige Montage
- Hoher Durchfluss
- Präzise Regulierbarkeit auch bei kleinem Durchfluss
- 360° schwenkbar
- Für Nylon- und Polyurethanschläuche geeignet
- Montage et démontage économique
- Débit optimal
- Grand précision de réglage même pour les petits débits
- Orientable sur 360°
- Utilisation pour tubes en nylon et polyuréthane
- Minimises installation time
- Constant speed easily set
- Speed may be accurately controlled even at low speed
- Body swivels 360°
- Accepts nylon and polyurethane tubing

FP 37650



FP 37750



### Durchfluss

Eingangsdruck 5 bar

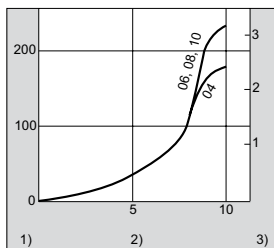
### Caractéristique de débit

Pression d'alimentation 5 bar

### Air flow

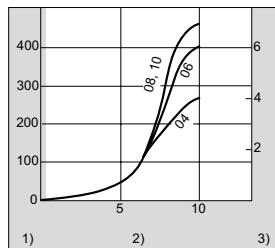
Supply pressure 5 bar

Grösse/Taille/Size  
4-1/8, 6-1/8, 8-1/8



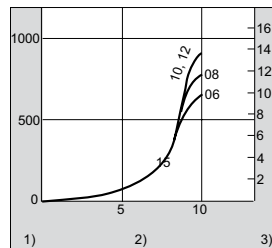
1) Volumenstrom / Débit / Air flow [l/min]

Grösse/Taille/Size  
6-1/4, 8-1/4, 10-1/4



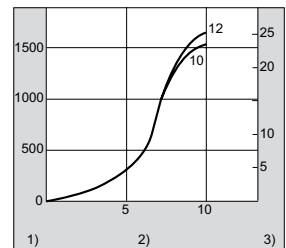
2) Anzahl Nadelumdrehungen / Nombre de tour de vis / Number of needle rotation

Grösse/Taille/Size  
6-3/8, 8-3/8, 10-3/8, 12-3/8



3) Aequ. Querschnitt / Section équivalente / Effective orifice [mm²]

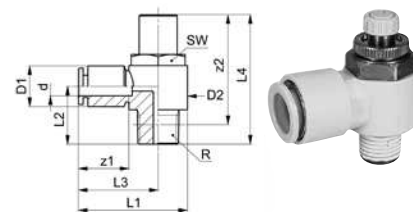
Grösse/Taille/Size  
12-1/2



## Schwenkbares Drosselrückschlagventil

### Clapet anti-retour limiteur de débit orientable

### Throttle non-return valve swivelling



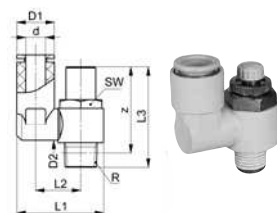
#### FP 37650

Type -d -R	Mat.-Nr.	SW	L1	L2	L3	L4	D1	D2	z1	z2	g/Stk
R=Rohrgewinde (kegelig)	R=Filetage-gaz BSP (conique)	R=BSP thread (tapered)									
FP 37650-4-1/8	TFP.376.0411	12	27.5	13.5	20.5	35.0	9.5	14.0	12.5	32.0	17
FP 37650-6-1/8	TFP.376.0611	12	27.5	13.5	20.5	35.0	11.5	14.0	13.5	32.0	17
FP 37650-6-1/4	TFP.376.0612	17	34.5	18.0	25.0	40.0	13.0	18.5	17.0	34.5	32
FP 37650-6-3/8	TFP.376.0613	19	39.5	20.0	28.0	45.5	13.0	23.0	17.0	40.0	55
FP 37650-8-1/8	TFP.376.0811	12	32.5	13.5	25.5	35.0	15.0	14.0	18.5	32.0	19
FP 37650-8-1/4	TFP.376.0812	17	36.5	18.0	27.0	40.0	15.0	18.5	18.5	34.5	34
FP 37650-8-3/8	TFP.376.0813	19	41.0	20.0	29.5	45.5	15.0	23.0	18.5	40.0	57
FP 37650-10-1/4	TFP.376.1012	17	43.0	18.5	32.0	40.0	18.5	18.5	21.0	34.5	36
FP 37650-10-3/8	TFP.376.1013	19	43.5	20.0	32.0	45.5	18.5	23.0	21.0	40.0	59
FP 37650-12-3/8	TFP.376.1213	19	44.5	20.0	33.0	45.5	21.0	23.0	22.0	40.0	61
FP 37650-12-1/2	TFP.376.1214	24	49.0	24.5	35.0	56.5	21.0	28.5	22.0	49.5	101

## 360° schwenkbares Drosselrückschlagventil

### Clapet anti-retour limiteur de débit orientable 360°

### Throttle non-return valve swivelling 360°



#### FP 37750

Type -d -R	Mat.-Nr.	SW	L1	L2	L3	D1	D2	z	g/Stk
R=Rohrgewinde (kegelig)	R=Filetage-gaz BSP (conique)	R=BSP thread (tapered)							
FP 37750-4-1/8	TFP.377.0411	12	25.0	13.0	35.0	9.5	9.5	32.0	18
FP 37750-6-1/8	TFP.377.0611	12	27.0	14.0	35.0	11.5	11.0	32.0	18
FP 37750-6-1/4	TFP.377.0612	17	34.0	18.5	40.0	13.0	13.0	34.5	33
FP 37750-6-3/8	TFP.377.0613	19	38.5	21.0	45.5	13.0	13.0	40.0	56
FP 37750-8-1/8	TFP.377.0811	12	31.0	16.0	35.0	15.0	13.0	32.0	21
FP 37750-8-1/4	TFP.377.0812	17	35.0	18.5	40.0	15.0	13.0	34.5	36
FP 37750-8-3/8	TFP.377.0813	19	39.5	20.5	45.5	15.0	13.0	40.0	59
FP 37750-10-1/4	TFP.377.1012	19	43.5	23.0	48.5	18.5	16.0	43.0	67
FP 37750-10-3/8	TFP.377.1013	19	43.5	23.0	45.5	18.5	16.0	40.0	63
FP 37750-12-3/8	TFP.377.1213	19	45.0	23.0	45.5	21.0	16.0	40.0	65
FP 37750-12-1/2	TFP.377.1214	24	52.0	27.0	57.0	21.5	19.5	50.5	106