

# **Function Fittings**

Metric valves have BSPP threads

Compact push-to-connect • Temp. range: flow valves help ensure excellent performance of flow and are perfectly suited for reduced spaces. Nylon and nickelplated brass construction, except where noted. Polypropylene push button and Buna nitrile elastomer seals for leakfree connections. For use with polyurethane, polyethylene, or PTFE tubing.

### **FLOW CONTROLS**

### **Compact**

- Pressure range: 14.5 to 145 psi
- Temp. range: 32° to 158°F

Adjustment screw controls airflow, while locking nut protects the flow setting from being changed due to tampering or vibration.

### Swivel

- Pressure range: 14.5 to 145 psi
- Temp. range: 32° to 158°F

Allow access to vertical or angled tubing in restrictive installations.

# In-Line

- Pressure range: 14.5 to 145 psi
- Temp. range: 32° to 158°F

Unidirectional airflow allows air to flow freely in through the flow control; metered out through the adjustment screw.

# **Miniature**

- Pressure range: 14.5 to 145 psi
- Temp. range: 30° to 158°F

Specially designed for use with small-bore cylinders in very small pneumatic applications.

## **LOCKOUT VALVES**

- Pressure range: 14.5 to 145 psi
- Temp. range: -4° to 160°F

Mount on a cylinder to cut off both supply and exhaust. Designed for maximum flow capacity in the open position. Brass material.

# MINI BALL VALVES

- Max. range: 145 psi
- -4° to 176°F

Enable in-line pneumatic circuit opening and closing.

### **PILOTED NONRETURN VALVES**

- Pressure range: 14.5 to 145 psi
- Temp. range: 23° to 140°F

Help protect equipment by blocking cylinder movement in a vertical or horizontal position. Valves allow the cylinder to stop in mid-stroke.

## **PNEUMATIC** THRESHOLD SENSORS

- Pressure range: 43.5 to 116 psi
- Back pressure: 0.85 psi to 1 Bar
- Temp. range: 5° to 140°F

Detect the absence of pressure and translate it to a pneumatic output which emits a signal to pilot the next step. Sensors are compact and can be mounted on a cylinder or control valve on any pneumatic equipment to control the operation of the cylinder.

## **METER IN CHECK VALVES**

- Pressure range: 14.5 to 145 psi
- Temp. range: 32° to 158°F

Valves are compact, lightweight, and allow air to pass in 1 direction while blocking air flow in the other, 7 psi will overcome the spring pressure.

### **QUICK EXHAUST** VALVES

- Pressure range: 10 to 150 psi
- Temp. range: 0° to 160°F

Help increase system efficiency and the cylinder speed by purging cylinder exhaust air at the cylinder port instead of at the control valve.

# Looking for High-**Pressure Fittings** and Couplers

For more Pneumatic Tubing, see page 2621. Additional tubing products are available on Grainger.com®.



	Tube Size	Pipe Size	ltem No.
Flow Controls, Compact, Me BSPP x Tube	ter Out		
DOFF X TUDE		440	
<b>669</b>	4mm	1/8"	1PFX1
(3)	6mm	1/8"	1PFX2
	6mm	1/4"	1PFX3
	8mm	1/8"	1PFX4
	8mm	1/4"	1PFX5
	10mm	1/4"	1PFX6
DODT T. L.	10mm	3/8"	1PFX7
BSPT x Tube	C	1/1	400000
40	6mm	1/8" 1/8"	19G982 19G983
400	8mm 8mm	1/4"	19G984
	10mm	1/4"	19G985
-	10mm	3/8"	19G986
	10mm	1/2"	19G987
	12mm	1/4"	19G988
	12mm	3/8"	19G989
	12mm	1/2"	19G990
MNPT x Tube	12	72	150550
-	5/32"	1/8"	1PFX8
	5/32"	1/4"	1PFX9
	1/4"	1/8"	1PFY1
	1/4"	1/4"	1PFY2
	3/8"	1/4"	1PFY3
Con Contract of the Contract o	3/8"	3/8"	1PFY4
Flow Controls, Compact, Kn	obless, Meter	Out	
BSPP x Tube			
	4mm	1/8"	1DFB4
	6mm	1/8"	1DFB7
	6mm	1/4"	1DFB8
	8mm	1/8"	1DFC1
	8mm	1/4"	1DFC2
	8mm	3/8"	1DFN1
	10mm	1/4"	1DFN2
	10mm	3/8"	1DFN3

ALC:	4mm	M5	1DFB5
	6mm	M5	1DFB9
MNPT x Tube			
	1/8"	1/8"	1DDW9
	5/32"	1/8"	1DDW6
	1/4"	1/8"	1DDX1
	1/4"	1/4"	1DDX2
	5/16"	1/8"	1DDW7
(All	5/16"	1/4"	1DDW8
	3/8"	1/4"	1DDX3
	3/8"	3/8"	1DDX4
Tube x UNF			
A.	1/8"	10-32	1DDW4
	5/32"	10-32	1DFB6
5	1/4"	10-32	1DDW5
Flow Controls, Swivel, Meter	Out		

Metric Threads x Tube

Flow Controls, Swivel, Met	ter Out		
BSPP x Tube			
	6mm	1/8"	1DFN7
	6mm	1/4"	1DFN8
	8mm	1/8"	1DFN9
	8mm	1/4"	1DFP1
	8mm	3/8"	1DFP2
	10mm	1/4"	1DFP3
	12mm	3/8"	1DFP5
MNPT x Tube			
	1/4"	1/8"	1DDX5
	1/4"	1/4"	1DDX6
A STATE OF THE PARTY OF THE PAR	3/8"	1/4"	1DDX7
	3/8"	3/8"	1DDX8
Flow Controls In Line One	. Way		

IOW CONTROIS, IN-LINE, UNE	way		
ube	-		
	5/32"	_	1PFZ7
	1/4"	_	1PFZ8
	3/8"	_	1PFZ9
	1/2"	_	1PGB1
	6mm	_	1DFP7
	8mm	_	1DFP8
	10mm	_	1DFP9
	12mm	_	1DFR1

	Tube Size	Pipe Size	Item No.
Flow Controls, Miniature, Co BSPP x Tube	introl Flow N	leter Uut	
	6mm	1/8" 1/4"	1PFY7 1PFY9
ي الله	8mm	3/8"	1PFZ1
BSPT x Tube			
9	4mm 6mm	1/8" 1/8"	19G991 19G992
<b>A</b>	6mm	1/4"	19G993
	6mm 8mm	3/8" 1/8"	19G994 19G995
	8mm	1/4"	19G996
MAIDT Tub.	8mm	3/8"	19G997
MNPT x Tube	1/8"	1/8"	1PFZ4
ă.	5/32" 1/4"	1/8"	1PFZ3 1PFZ5
	1/4"	1/4"	1PFZ6
-	4mm	M5 x 0.8 M5 x 0.8	1PFY5 1PFY8
Tube x UNF	6mm	IVID X U.8	IPFY8
	1/4"	10-32	1PFZ2
	4mm	10-32	1PFY6
Lockout Valves BSPP x Tube			
POLI VIANO	8mm	1/4"	1DFL5
15760	10mm	3/8"	1DFL7
NPT		1/8"	19G998
		1/4"	19G999
NPT x Tube	_	1/2"	19H002
NP1 X IUDE	1/4"	1/8"	1DDY8
1	1/4" 3/8"	1/4" 3/8"	1DDY9
24			1DDZ1
March	1/2"	1/2"	1DDZ2
Mini Ball Valve - Inline			
Tube			
	3⁄8 in	_	1PGB2
Mini Ball Valves With Vent MNPT x Tube			
A TATALO		½ in	1PGB5
Charles .	1/4 in	1⁄4 in	1PGB6
Washing to	¾ in	1/4 in	1PGB7
Mini Ball Valves With Vent - Tube	Inline		
Tube	1/4 in	_	1PGB3
	3⁄8 in		1PGB4
Piloted Non Return Valves BSPP x Tube	76 111		11 004
	6mm	1/4"	19H024
	8mm 8mm	1/8" 3/8"	19H025 19H027
	10mm	3/8" 1/2"	19H027 19H028
	10mm 12mm	1/2"	19H029 19H030
Piloted Non Return Valves wi BSPP x Tube	ith Flow Reg	ulator	
DOLL X LUDC	6mm	1/8"	19H031
	6mm 8mm	1/4" 3/8"	19H032 19H035
	10mm	3/8"	19H036
OF C	10mm	1/2"	19H037
10	12mm	1/2"	19H038
Pneumatic Threshold Sensor NPT x Tube	S		
III I A IUUC	5/32" or 4mn	n 1/8"	19H011
	5/32" or 4mn 5/32" or 4mn 5/32" or 4mn	n ½" n ¾"	19H012 19H013
	5/32" or 4mn		19H014
	Pipe Size (	`onnostic=	Item
Quick Exhaust Valves		Connection	No.
		VPT x Tube	19H015
	3/8" I	NPT x Tube	19H016 19H017
100	1/2"	NPT x Tube	19H018