

- Designed for direct cylinder mounting
- Safer pneumatic systems
- Push-in or threaded ports available
- Compact banjo design

Technical Data

Medium:

Compressed air

Operating Pressure:

1 - 10 bar

Operating Temperature:

-20°C to +80°C

Inlet Port:

4, 6, 8, 10, 12mm Push-in Fittings

1/4, 3/8, 1/2 Push-in Fittings

1/8, 1/4, 3/8, 1/2 NPTF Threaded Ports

Outlet Port:

1/8, 1/4, 3/8, 1/2 BSPP Thread

1/8, 1/4, 3/8, 1/2 NPTF Thread

Pilot Port:

M5

10-32" UNF

Tube Sizes

4, 6, 8, 10, 12mm O/D

1/4, 3/8, 1/2 O/D

Tubing Types:

Nylon 11 or 12, polyurethane and other plasticised or unplasticised tubing which conforms to the tolerances specified in BS 5409, Part 1, 1976, light and normal duty, DIN 73378, DIN 74234, NFE 49-100

Materials

Nickel plated brass body

Nickel plated brass collet

Plastic sealing washer

Nitrile and polyurethane elastomeric parts

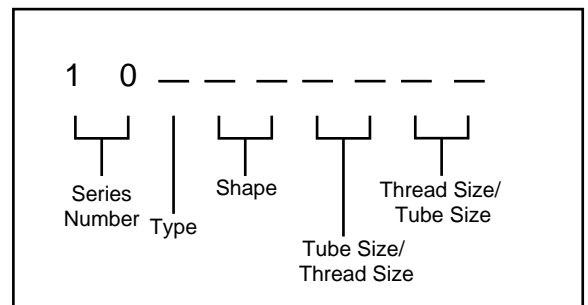
Zinc plated brass banjo bolts



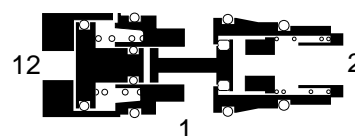
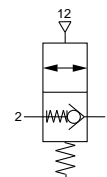
Ordering Information

To order, quote appropriate product number from the tables on the following pages.

Product numbering system is designed to make identification and selection simple:



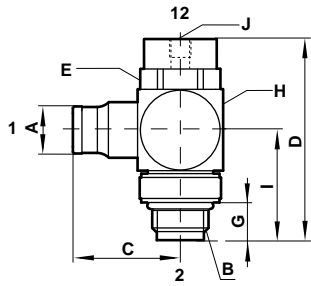
102GA
124GA





Pilot Operated Check Valve (Blocking Fitting) - 102GA

PIF x BSPP thread



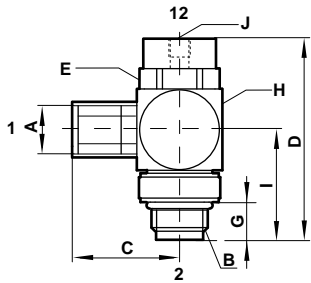
| Product number | A O/D tube | B thread BSPP | C | D | E | G | H SQ | I | J |
|----------------|------------|---------------|------|------|----|------|------|------|----|
| 102GA0418 | 4 | 1/8" | 22,2 | 41,0 | 13 | 6,3 | 16 | 19,8 | M5 |
| 102GA0618 | 6 | 1/8" | 23,2 | 41,0 | 13 | 6,3 | 16 | 19,8 | M5 |
| 102GA0628 | 6 | 1/4" | 25,2 | 48,0 | 17 | 10,5 | 20 | 25,8 | M5 |
| 102GA0828 | 8 | 1/4" | 26,2 | 48,0 | 17 | 10,5 | 20 | 25,8 | M5 |
| 102GA0838 | 8 | 3/8" | 28,2 | 55,0 | 22 | 10,8 | 24 | 29,0 | M5 |
| 102GA1038 | 10 | 3/8" | 32,7 | 55,0 | 22 | 10,8 | 24 | 29,0 | M5 |
| 102GA1248 | 12 | 1/2" | 39,7 | 65,5 | 27 | 12,8 | 30 | 36,0 | M5 |

- 1) Inlet Port
- 2) Outlet Port
- 12) Pilot Port

Note: For mounting in pairs on a cylinder

Pilot Operated Check Valve (Blocking Fitting) - 102GA

BSPP threaded port x BSPP thread



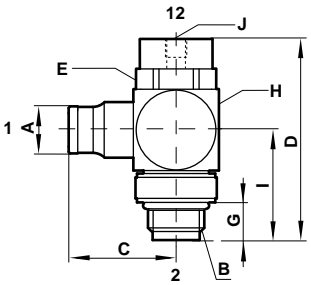
| Product number | Body port A | B thread BSPP | C | D | E | G | H SQ | I | J |
|----------------|-------------|---------------|------|------|----|------|------|------|----|
| 102GA1818 | 1/8 BSPP | 1/8 | 17,5 | 41,0 | 13 | 6,3 | 16 | 19,8 | M5 |
| 102GA1828 | 1/8 BSPP | 1/4 | 20,0 | 48,0 | 17 | 10,5 | 20 | 25,8 | M5 |
| 102GA2828 | 1/4 BSPP | 1/4 | 24,5 | 48,0 | 17 | 10,5 | 20 | 25,8 | M5 |
| 102GA3838 | 3/8 BSPP | 3/8 | 27,0 | 55,0 | 22 | 10,8 | 24 | 29,0 | M5 |
| 102GA4848 | 1/2 BSPP | 1/2 | 34,0 | 65,5 | 27 | 12,8 | 30 | 36,0 | M5 |

- 1) Inlet Port
- 2) Outlet Port
- 12) Pilot Port

Note: For mounting in pairs on a cylinder

Pilot Operated Check Valve (Blocking Fitting) - 124GA

PIF x NPTF thread



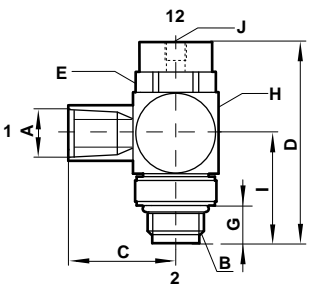
| Product number | Body port A | B thread NPTF | C | D | E | G | H SQ | I | J |
|----------------|-------------|---------------|------|------|----|------|------|------|-----------|
| 124GA0418 | 1/4PIF | 1/8 | 23,2 | 41,0 | 13 | 12,3 | 16 | 19,8 | 10-32"UNF |
| 124GA0428 | 1/4PIF | 1/4 | 25,2 | 48,0 | 17 | 16,3 | 20 | 25,8 | 10-32"UNF |
| 124GA0638 | 3/8PIF | 3/8 | 32,7 | 55,0 | 22 | 17,5 | 24 | 29,0 | 10-32"UNF |
| 124GA0748 | 1/2PIF | 1/2 | 39,7 | 65,5 | 27 | 22 | 30 | 36,0 | 10-32"UNF |

- 1) Inlet Port
- 2) Outlet Port
- 12) Pilot Port

Note: For mounting in pairs on a cylinder

Pilot Operated Check Valve (Blocking Fitting) - 124GA

NPTF threaded port x NPTF thread



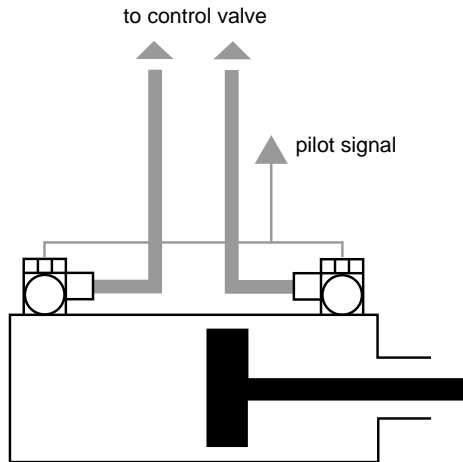
| Product number | Body port A | B thread NPTF | C | D | E | G | H SQ | I | J |
|----------------|-------------|---------------|------|------|----|------|------|------|-----------|
| 124GA1818 | 1/8NPTF | 1/8 | 22,0 | 41,0 | 13 | 12,3 | 16 | 19,8 | 10-32"UNF |
| 124GA2828 | 1/4NPTF | 1/4 | 29,0 | 48,0 | 17 | 16,3 | 20 | 25,8 | 10-32"UNF |
| 124GA3838 | 3/8NPTF | 3/8 | 30,5 | 55,0 | 22 | 17,5 | 24 | 29,0 | 10-32"UNF |
| 124GA4848 | 1/2NPTF | 1/2 | 39,0 | 65,5 | 27 | 22 | 30 | 36,0 | 10-32"UNF |

- 1) Inlet Port
- 2) Outlet Port
- 12) Pilot Port

Note: For mounting in pairs on a cylinder



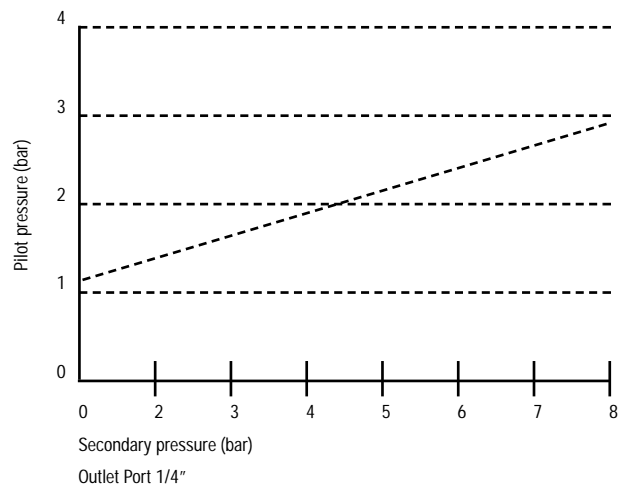
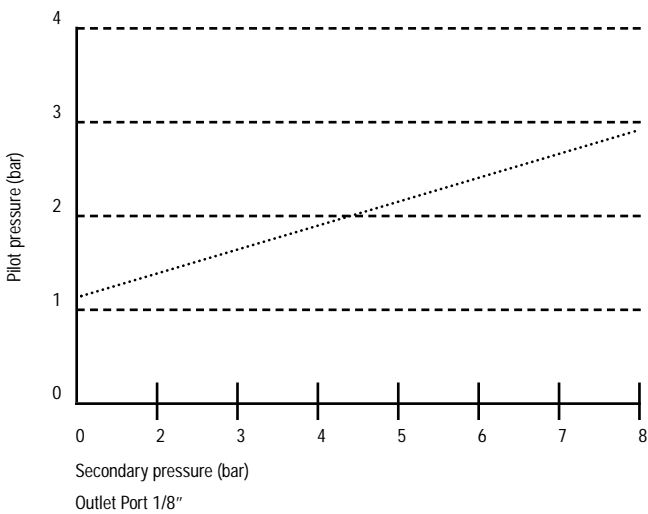
Guidelines for Typical Installation

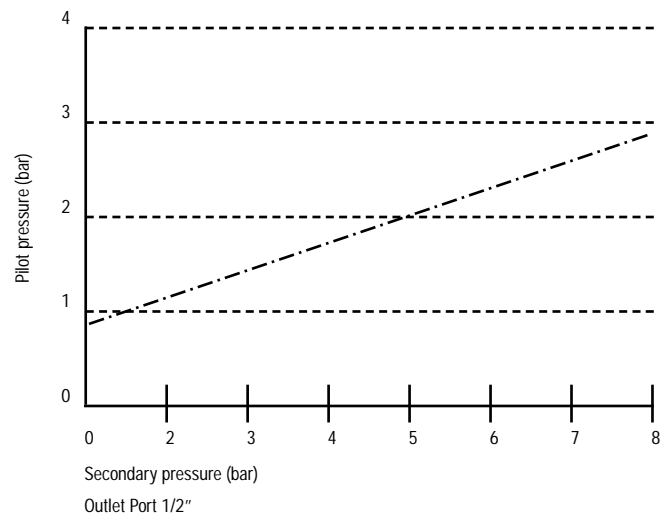
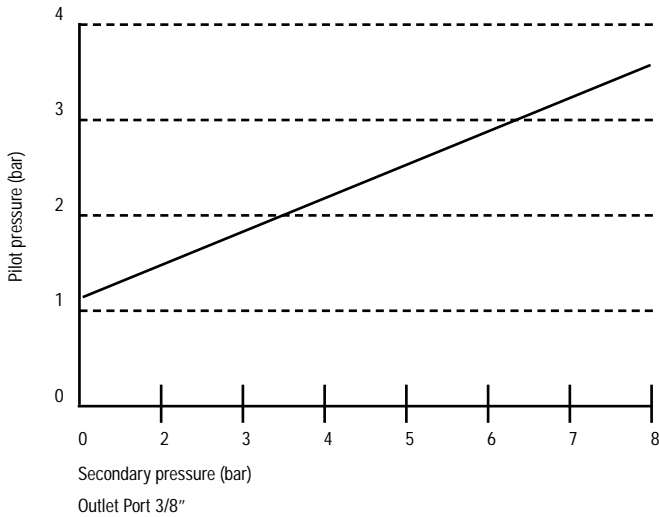


The pilot operated check valve should be mounted directly onto a cylinder. This installation minimises the volume of air trapped in the system and gives the 'fastest' blocking response.

Pilot Pressure Characteristics

These characteristics were measured with pressure on port 2 (secondary pressure), but no pressure on port 1. The pilot pressure was gradually increased until the valve opened.





Note:
The pilot signal pressure should be an on/off signal, rather than one that is allowed to decay slowly.

Flow Chart
Flow at 6 bar

| Thread Size | Flow (l/m) |
|-------------|------------|
| 1/8" | 289 |
| 1/4" | 676 |
| 3/8" | 1,156 |
| 1/2" | 1,910 |

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under 'Technical Data'. Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult Norgren. Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure. **System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.** System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products where applicable.