Non-return Valves



- Allow free flow in one direction only
- Simple reliable design
- Low weight
- Low cracking pressure
- High operating pressure

Medium:

Compressed Air, Filtered, Lubricated and Non-Lubricated, Vacuum

Body:

Anodised Aluminium

Collet:

Nickel Plated Brass

Spring:

Stainless Steel

Seals:

Nitrile Rubber

Valve & Insert:

Aluminium

> Port size: O/D tube 4 ... 12 mm

> Allow free flow in one direction only

> Simple reliable design

> Low weight

Mounting:

Line Mounted, Push-In Connection

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 49100





Operating Pressure:

-0,9 to 16 bar (dependent upon operating specification of tubing)



Technical features

Medium:

Compressed air, filtered, lubricated or non-lubricated, vacuum

Operation:

Non-return valve

Operating pressure:

-0,9 ... 16 bar (-13 ... 232 psi)

Cracking pressure:

0,03 ... 0,05 bar (0,4 ... 0,7 psi)

O/D tube:

> Low cracking

> High operating

pressure

pressure

Ø 4, 6, 8, 10, 12 mm

Ambient/Media temperature:

-20 ... +80°C max.(-4 ...+176°F) Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F)

Tubing types:

PA 11 or 12, PUR 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:

Body: aluminium Grab ring: nickel plated brass 'O'-ring: NBR

Technical data

Symbol	Ø Tube (mm)	Flow fac C *1)	tor b *3)	Cv	Kv *2)	Flow at 6 » 5 bar (dm³/min)	Weight (kg)	Model
1—∕₩—2	4	0,4	0,23	0,1	0,09	96	0,010	T50P0004
	6	1,45	0,36	0,36	0,31	349	0,016	T50P0006
	8	2,9	0,3	0,7	0,62	699	0,022	T50P0008
	10	5,1	0,35	1,25	1,09	1229	0,048	T50P0010
	12	8,4	0,42	2,1	1,79	2024	0,064	T50P0012

^{*1)} Measured in dm³/(s.bar)

Options selector

T50P00★★

Tube size (mm)	Substitute
4	04
6	06
8	80
10	10
12	12

^{*2)} Measured in m³/h

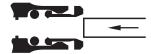
^{*3)} b = critical pressure ratio

Method of assembly



1. Ensure that the end of the tube is cut square and is free from burrs.

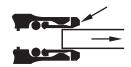
2. Push the tube through the collet into the fitting.





3. Continue pushing the tube through the 'O'-ring until it bottoms on the tube stop then pull back.

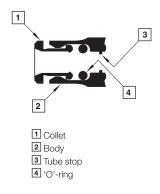
4. To disconnect push the tube into the fitting, hold down the collet and withdraw the tube.



Technical data

Ø A O/D tube	øs	Ø T *1)	V	ØК
4	2,8	14	7,5	10
5	3,4	15	10	11
6	4,4	15,5	11	12
8	6	16,5	13	14
10	7,6	21	14,5	17
12	9,6	24,5	18	20,5

*1) Dimensions here and in the individual tables refer to the collet being in the 'IN' position.

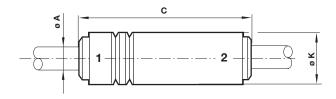


Dimensions in mm Projection/First angle





Dimensions



Ø A	С	ØΚ	Model
4	49	11	T50P0004
6	56,5	13	T50P0006
8	61	15	T50P0008
10	77,5	20	T50P0010
12	88,5	22	T50P0012

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 features/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 IMI 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.