# 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:

> Port size:

Aluminium

> Low cracking O/D tube 4 ... 12 mm pressure

> Allow free flow in one direction only

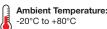
> High operating pressure

- > 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:

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— <del>(}}}}_2</del>	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

<sup>\*1)</sup> Measured in dm<sup>3</sup>/(s.bar)

### **Options selector**

### T50P00★★

Tube size (mm)	Substitute
4	04
6	06
8	08
10	10
12	12

<sup>\*2)</sup> Measured in m³/h

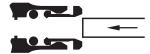
<sup>\*3)</sup> b = critical pressure ratio

### Method of assembly



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

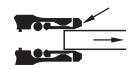
2. Push the tube through the collet into the fitting.





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	ØΚ
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.

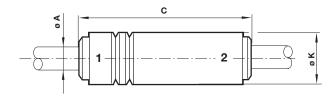
# 1 Collet 2 Body 3 Tube stop 4 'O'-ring

Dimensions in mm Projection/First angle





### **Dimensions**



ØA	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.