

In-Line, Non-Return Valves
G 1/8 to G 1 or 1/8 to 1 NPT

Permit free flow of air in one direction only

Simple, reliable design

High operating pressure



Technical data

Medium:

Compressed air, filtered, lubricated
and non-lubricated

Operation:

Non-return valve

Mounting:

Line mounted

Port sizes:

| | | | |
|-------|-------|---------|-------|
| G 1/8 | S/520 | 1/8 NPT | C/520 |
| G 1/4 | S/521 | 1/4 NPT | C/521 |
| G 3/8 | S/532 | 3/8 NPT | C/532 |
| G 1/2 | S/522 | 1/2 NPT | C/522 |
| G 3/4 | S/523 | 3/4 NPT | C/523 |
| G 1 | S/524 | 1 NPT | C/524 |

Operating pressure:

0,3 - 16 bar

Operating temperature:

-20°C to +80°C

*Consult our Technical Service for use below +2°C

For high temperature applications (150°C Max) TS, TC/520
Series version should be ordered

Materials:

Brass body, nitrile rubber seals, aluminium valve

Note: FKM Seals for high temperature version

Ordering information

To order, quote model number from table
overleaf, e.g. S/521 for the G 1/4 model

Alternative Models

T50 Series In-line push-in non-return valves,
see page 5.10.002

T55 and 56 Series In-line threaded Aluminium
non-return, see page 5.10.007



General information

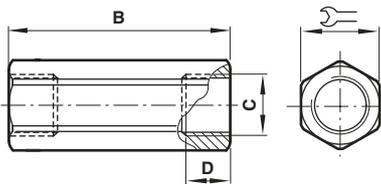
| Model | Port size | Flow Factor | Cracking Pressure (bar) | Weight (kg) | Kit BSPP | (Note) NPT |
|-------|-----------|-------------|-------------------------|-------------|-----------|------------|
| BSPP | NPT | C * Cv | | | | |
| S/520 | 1/8 | 2,4 0,6 | <0,1 | 0,04 | QS/520/00 | |
| | C/520 | 2,4 0,6 | <0,1 | 0,04 | | QC/520/00 |
| S/521 | 1/4 | 4,3 1 | <0,1 | 0,09 | QS/521/00 | |
| | C/521 | 4,3 1 | <0,1 | 0,09 | | QC/521/00 |
| S/532 | 3/8 | 10,5 2,6 | <0,1 | 0,14 | QS/532/00 | |
| | C/532 | 9,2 2,2 | <0,1 | 0,14 | | QC/532/00 |
| S/522 | 1/2 | 17 4,2 | <0,1 | 0,21 | QS/522/00 | |
| | C/522 | 13 3,2 | <0,1 | 0,21 | | QC/522/00 |
| S/523 | 3/4 | 42 10,3 | <0,1 | 0,55 | QS/523/00 | |
| | C/523 | 38 9,3 | <0,1 | 0,55 | | QC/523/00 |
| S/524 | 1 | 65 16 | <0,1 | 1,1 | QS/524/00 | |
| | C/524 | 65 16 | <0,1 | 1,1 | | QC/524/00 |

1)C in dm³/ (s.bar)

*2)Ku** in m³/ h

Note: For high temperature applications a T should be added on spares Kit part number (Te. TQS) 520)00

Non-return Valve



| Model | S/520 (BSPP) | S/521 (BSPP) | S/532 (BSPP) | S/522 (BSPP) | S/523 (BSPP) | S/524 (BSPP) |
|----------|--------------|--------------|--------------|--------------|--------------|--------------|
| | C/520 (NPT) | C/521 (NPT) | C/532 (NPT) | C/522 (NPT) | C/523 (NPT) | C/524 (NPT) |
| B | 43 | 48 | 62 | 76 | 92 | 124 |
| C | 1/8 | 1/4 | 3/8 | 1/2 | 3/4 | 1 |
| D | 10 | 11 | 13 | 17 | 18 | 25 |
| | 14 | 19 | 22 | 27 | 36 | 49 |

BSPP = According to BS2779 and ISO-228/1

NPT = Products are finished with National Pipe Straight Threads for Couplings, which

are specifically designed to mate with NPT male threads

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.