

S/666, S/667

Manual, mechanical and air pilot operated 3/2 poppet valves

- Port size: G1/8
- Long established and well-proven valves
- Compact size
- Normally closed and normally open models
- May also be used as 2/2 valves



Technical features

Medium:

Compressed air, filtered, lubricated and non-lubricated or hydraulic fluid

Operation:

Poppet valves, directly actuated

Mounting:

Through-holes in valve body

Operating pressure:

2 ... 10 bar (29 ... 145 psi)

Port size:

G1/8

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).

Flow:

| | l/min | Cv |
|----------|-------|------|
| S/666/.. | 174 | 0,20 |
| S/667/.. | 156 | 0,18 |

Materials:

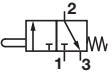
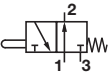
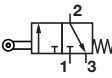
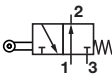
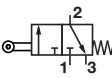
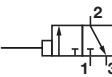
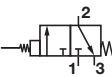
Body: Diecast zinc alloy
Piston: aluminium
Seals: NBR

Others:

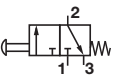
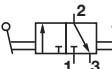
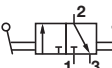
For use as a 2/2 valve the main supply must be connected to port '1' and the exhaust port 3' should be plugged.

Technical data

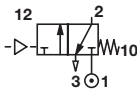
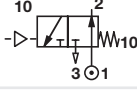
3/2 mechanical valves

| Symbol | Port size | Function | Operator/Return | Operating pressure (bar) | Operating force or torque at 6,3 bar | Weight (kg) | Spares Kit | Dimension No. | Model |
|---|-----------|----------|-----------------|--------------------------|--------------------------------------|-------------|-------------|---------------|-----------|
|  | G1/8 | NC | Plunger/Spring | 2 ...10 | 35 N | 0,20 | QS/666/1/00 | 1 | S/666/14 |
|  | G1/8 | NO | Plunger/Spring | 2 ...10 | 72 N | 0,20 | QS/667/1/00 | 1 | S/667/14 |
|  | G1/8 | NC | Roller/Spring | 2 ...10 | 20 N | 0,30 | QS/666/1/00 | 2 | S/666/8 |
|  | G1/8 | NO | Roller/Spring | 2 ...10 | 40 N | 0,30 | QS/667/1/00 | 2 | S/667/8 |
|  | G1/8 | NC | Roller/Spring | 2 ...10 | 0,25 Nm | 0,30 | QS/666/1/00 | 3 | S/666/108 |
|  | G1/8 | NC | Rod/Spring | 2 ...10 | 0,25 Nm | 0,30 | QS/666/1/00 | 4 | S/666/106 |
|  | G1/8 | NC | Antenna/Spring | 2 ...10 | 0,25 Nm | 0,30 | QS/666/1/00 | 5 | S/666/116 |

3/2 manual valves

| Symbol | Port size | Function | Knob colour | Operator/ Return | Operating pressure (bar) | Operating force or torque at 6,3 bar | Weight (kg) | Spares Kit | Dimension No. | Model |
|--|-----------|----------|-------------|-------------------------------------|--------------------------|--------------------------------------|-------------|-------------|---------------|-----------|
|  | G1/8 | NC | Silver | Knob/spring | 2 ... 10 | 35 N | 0,20 | QS/666/1/00 | 7 | S/666/1 |
| | G1/8 | NC | Black | Knob/spring | 2 ... 10 | 35 N | 0,20 | QS/666/1/00 | 7 | PS/666/1N |
| | G1/8 | NC | Red | Knob/spring | 2 ... 10 | 35 N | 0,20 | QS/666/1/00 | 7 | PS/666/1R |
| | G1/8 | NC | Green | Knob/spring | 2 ... 10 | 35 N | 0,20 | QS/666/1/00 | 7 | PS/666/1G |
|  | G1/8 | NC | — | Lever/lever (Panel mounting) | 2 ... 10 | 14 N | 0,30 | QS/666/1/00 | 8 | S/666/7 |
| | | | | | | | | | | |
|  | G1/8 | NC | — | Lever (long)/lever (Panel mounting) | 2 ... 10 | 10 N | 0,30 | QS/666/1/00 | 6 | S/666/117 |
| | | | | | | | | | | |

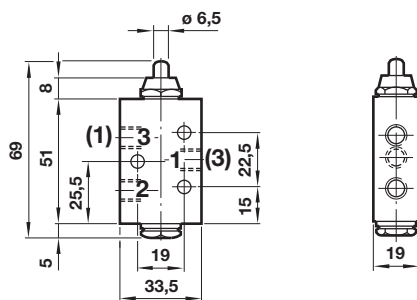
3/2 pilot operated valves

| Symbol | Port size | Function | Operator/ Return | Operating pressure (bar) | Pilot pressure (bar) at 7 bar supply pressure | Weight (kg) | Spares Kit | Dimension No. | Model |
|--|-----------|----------|------------------|--------------------------|---|-------------|--------------|---------------|----------|
|  | G1/8 | NC | Pressure/spring | 2 ... 10 | 2,8 | 0,20 | QS/666/40/00 | 9 | S/666/40 |
| | | | | | | | | | |
|  | G1/8 | NO | Pressure/spring | 2 ... 10 | 5,3 *1) | 0,20 | QS/667/40/00 | 9 | S/667/40 |
| | | | | | | | | | |

*1) 4,6 bar at 3,5 bar supply, 6,0 bar at 10 bar supply

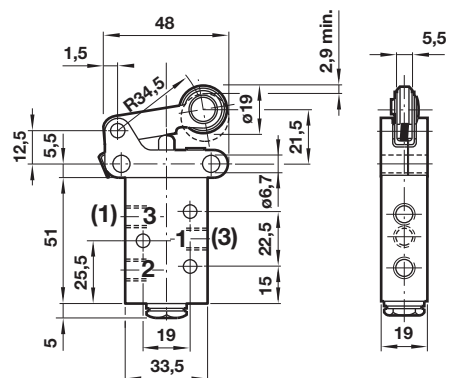
Dimensions

①



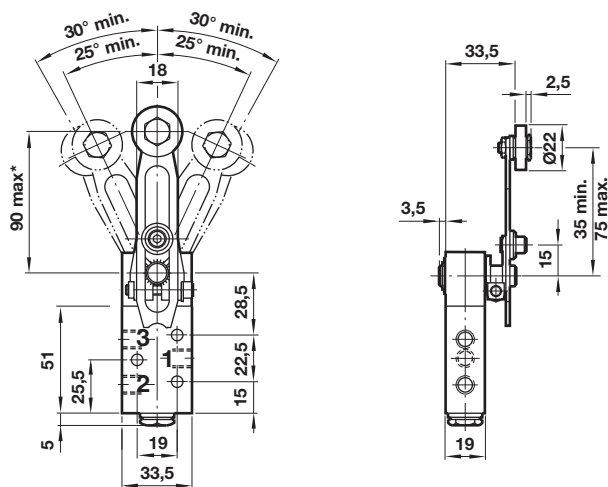
Pre-travel: 0,8 mm closed top seat
Operating Travel: 0,8 mm open bottom seat
Over-travel: 1,5 mm
Model number S/667/14 type 3/2 normally open numbers are shown in brackets.

②



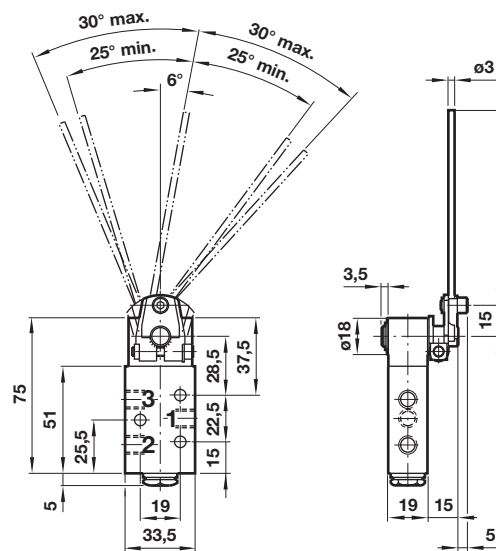
Pre-travel: 1,4 mm closed top seat
Operating Travel: 1,4 mm open bottom seat
Over-travel: 2,2 mm
Model number S/667/8 type 3/2 normally open numbers are shown in brackets.

③



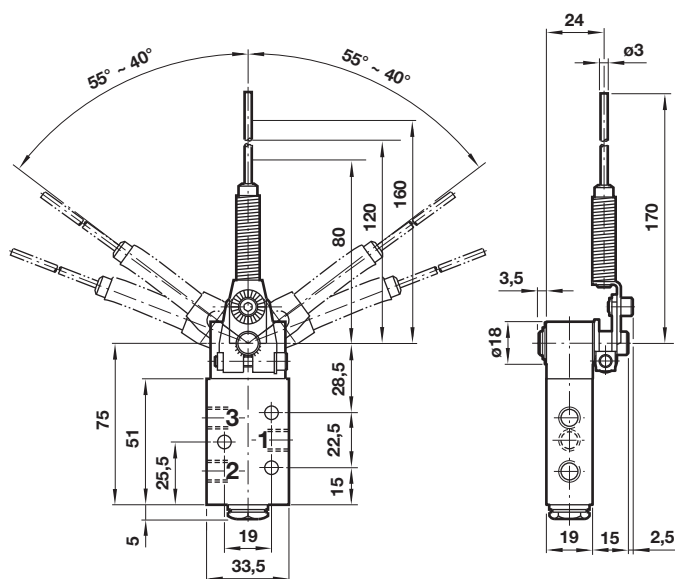
Mechanism may be operated either side of centre line.
When the valve is mounted horizontally, the roller is recommended to be positioned on the upper face of the arm.
*Alternative position

④

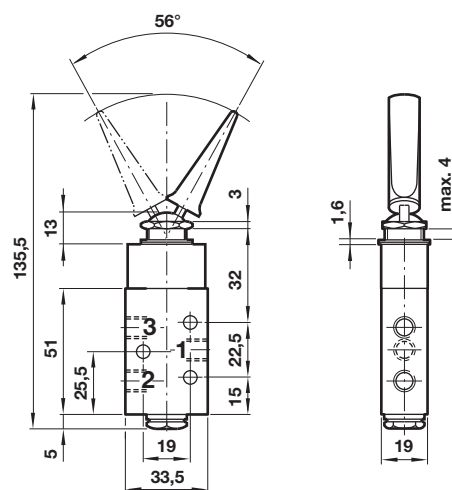


Mechanism may be operated either side of centre line.
*Recommended

5



6



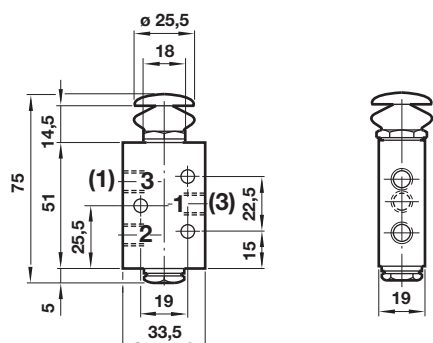
Dimensions in mm
Projection/First angle



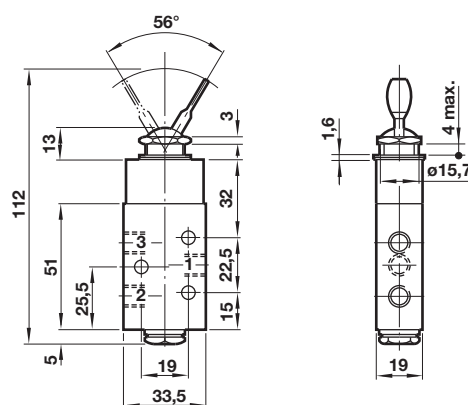
*Rotation at Point of Application: 40° minimum @ 80 mm
50° minimum @ 120 mm
55° minimum @ 160 mm
Mechanism may be operated either side of centre line.

Panel hole: \varnothing 16 mm
Panel thickness: 4 mm maximum

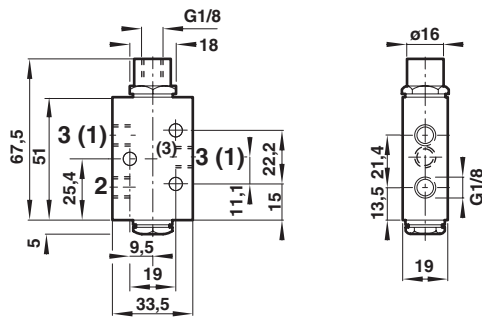
7



8



Panel hole: \varnothing 16 mm
Panel thickness: 4 mm maximum



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 Norgren Ltd.

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.