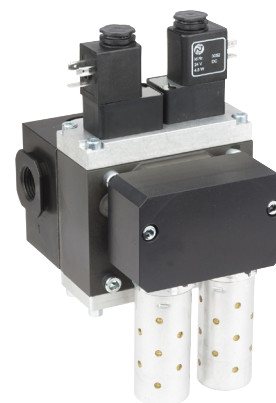
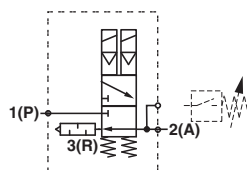


# SCVA10, 3/2

## Solenoid actuated safety valves



- > Port size: 1/2 (ISO G/NPT)
- > Redundant valve assembly, pneumatic selfmonitoring with integrated safety silencer
- > Ensures safe loading and venting
- > Requires no cyclical monitoring or evaluation system
- > With the appropriate application, performance level "e" (cat. 4) of DIN EN ISO 13849-1 is achieved for the safety function "Pressure building up from '1' to '2' and pressure dropping from '2' to '3' "- DGV approval



### Technical features

#### Medium:

Compressed air, filtered  $\leq 50 \mu\text{m}$ , lubricated or non-lubricated

#### Operating pressure:

See table below

#### B10 characteristic service life value on basis ISO 19973:

$8 \times 10^6$  cycles

#### Mounting:

Preferably upright with solenoids on top

#### Press control:

Valves are not approved for press clutch and brake applications

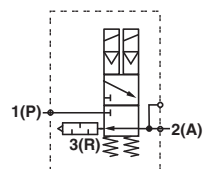
#### Ambient/Media temperature:

$-10 \dots +60^\circ\text{C}$  ( $+14 \dots +140^\circ\text{F}$ )  
Air supply must be dry enough to avoid ice formation at temperatures below  $+2^\circ\text{C}$  ( $+35^\circ\text{F}$ ).

#### Materials:

Housing: Aluminium  
Seals: PUR or NBR

### Technical data

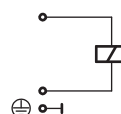
| Symbol                                                                              | Port size | Orifice | Power at 24 V d.c. | Pressure range | Flow          |               | Port sizes |         |         | Weight (kg) | Model             |
|-------------------------------------------------------------------------------------|-----------|---------|--------------------|----------------|---------------|---------------|------------|---------|---------|-------------|-------------------|
|                                                                                     |           | (mm)    | (W)                | (bar)          | 1 » 2 (l/min) | 2 » 3 (l/min) | 1          | 2       | 3       |             |                   |
|  | G1/2      | 10      | 4,8                | 2 ... 10       | 3400          | 6500          | G1/2       | G1/2    | G3/4    | 2,4         | SCVA101DE1A 02400 |
|                                                                                     | 1/2 NPT   | 10      | 4,8                | 2 ... 10       | 3400          | 6500          | 1/2 NPT    | 1/2 NPT | 3/4 NPT | 2,4         | SCVA101TU1A 02400 |
|                                                                                     |           |         |                    |                |               |               |            |         |         |             |                   |
|                                                                                     |           |         |                    |                |               |               |            |         |         |             |                   |
|                                                                                     |           |         |                    |                |               |               |            |         |         |             |                   |
|                                                                                     |           |         |                    |                |               |               |            |         |         |             |                   |
|                                                                                     |           |         |                    |                |               |               |            |         |         |             |                   |

### Technical data – solenoids





|                   |           |
|-------------------|-----------|
| Standard voltages | 24 V d.c. |
| Duty cycle        | 100% ED   |
| Protection class  | IP65      |

Other voltages on request!

### Circuit diagram



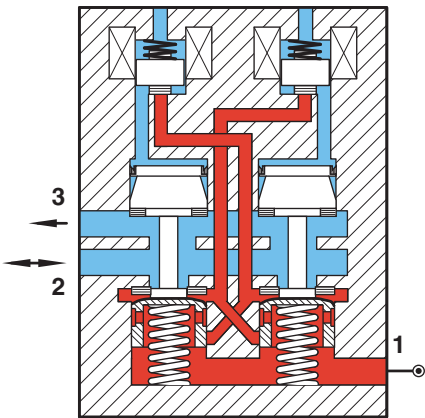
Accessories

|                                                                                                                                    |                                                                                                                                   |                                                                                                                        |                                                                                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Connector form B,<br/>DIN EN 175301-803</b><br> | <b>Quickclamp® with<br/>wall bracket *1)</b><br> | <b>Quikmount<br/>pipe adaptor</b><br> | <b>Pressure switch - flange/face<br/>mounted direct onto valve *2)</b><br> |
| 0680003                                                                                                                            | 4314-52                                                                                                                           | 4315-11 (G1/2)<br>4315-03 (1/2 NPT)                                                                                    | 0881400                                                                                                                                                       |
|                                                                                                                                    | Page 3                                                                                                                            | Page 3                                                                                                                 | Datasheet N/en 5.11.001                                                                                                                                       |

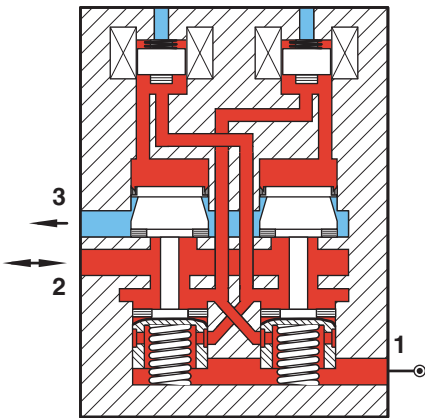
\*1) Quikmount pipe adaptor please order separately  
\*2) The pressure switch is not required as part of the safe functioning system within the valve, its is offered as a means of indicating that the valve taken up a safe condition ie. no pressure at the output port 2

Functional diagram

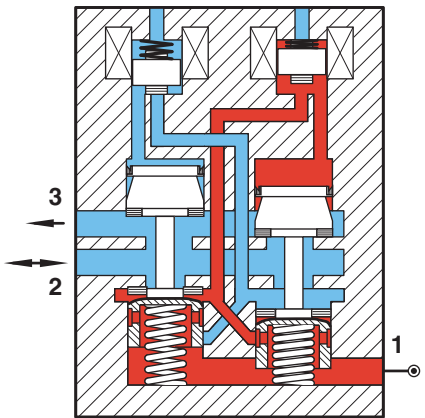
Basic position  
Channel "2" onto "3"  
Safety silencer relieved



Working position  
Both solenoids energized  
Channel "1" onto "2" turned on



Safety position  
For unbalanced control,  
faulty solenoid, dirty valve, etc.

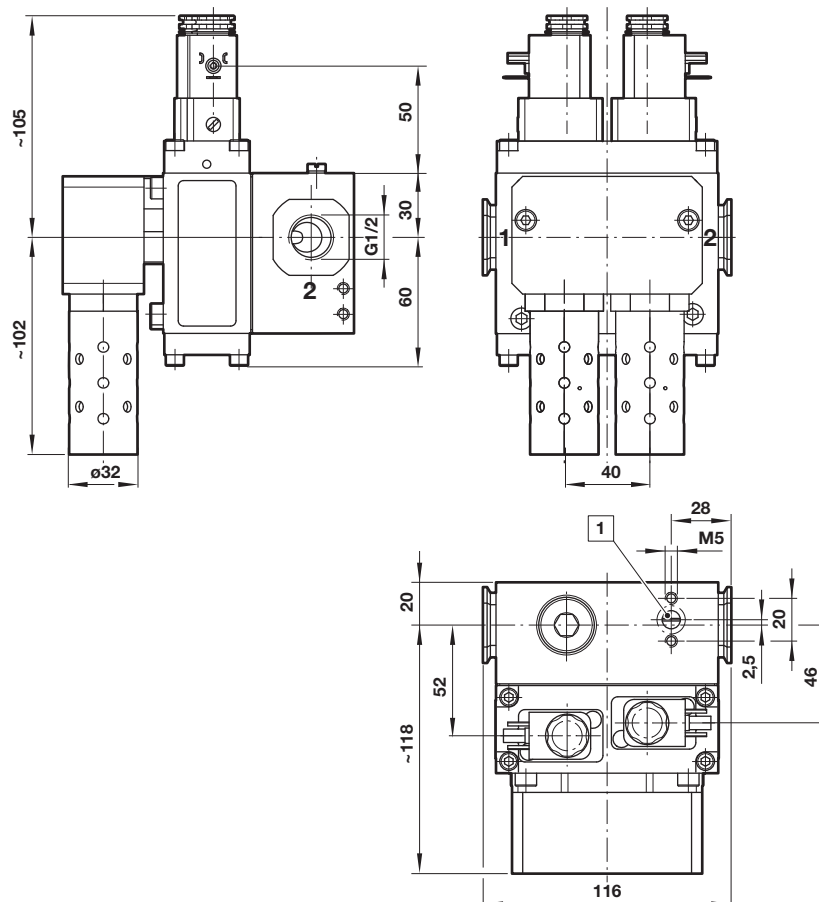


Time to vent residual pressure to 0,5 bar

| Model      | Volume<br>(dm³) | Operating pressure<br>(bar) | Exhaust time<br>(ms) |
|------------|-----------------|-----------------------------|----------------------|
| SCVA101... | 3               | 5                           | 200                  |
|            |                 | 8                           | 250                  |
|            |                 | 10                          | 280                  |
|            | 8               | 5                           | 450                  |
|            |                 | 8                           | 580                  |
|            |                 | 10                          | 640                  |

## Dimensions

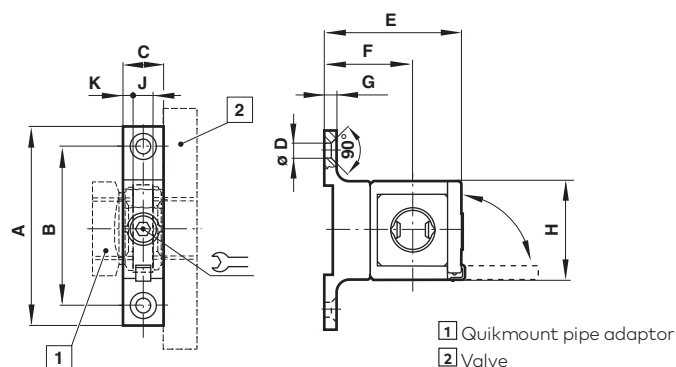
Dimensions in mm  
Projection/Firstangle



1 Interface for pressure switch

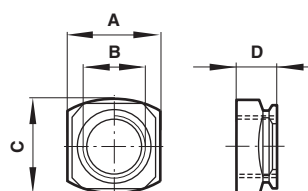
## Quikclamp® with wall bracket

## Quikmount pipe adaptor



1 Quikmount pipe adaptor  
2 Valve

| A   | B  | C    | $\varnothing D$ | E  | F  | G   | H  | J    | K   |   |
|-----|----|------|-----------------|----|----|-----|----|------|-----|---|
| 102 | 83 | 24,5 | 6,5             | 74 | 51 | 6,5 | 51 | 13,5 | 5,5 | 4 |



| A    | B        | C    | D  |
|------|----------|------|----|
| 38,5 | 1/2 inch | 38,5 | 18 |

## 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.

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.