

- > Port size: 1/4, 3/4 and 1 ISO G, NPT)
- > Redundant valve assembly, pneumatic self monitoring with integrated safety silencer
- > Ensures safe loading and venting
- > Requires no cyclical monitoring or evaluation system
- > Range of sizes - DN 8, 20 and 32
- > 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'" - DGUV 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:

10^7 cycles - SCVA08

8×10^6 cycles - SCVA20

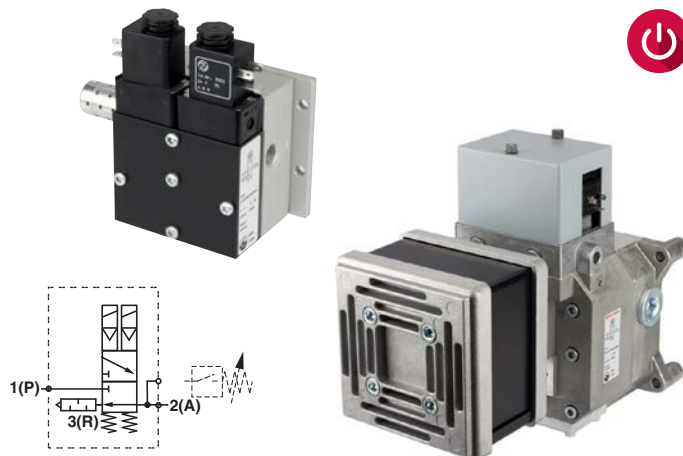
5×10^6 cycles - SCVA32

Mounting:

Preferably upright with solenoids on top

Press control:

Valves are not approved for press clutch and brake applications



Ambient/Media temperature:

$-10 \dots +60^\circ\text{C}$ ($+14 \dots +140^\circ\text{F}$)

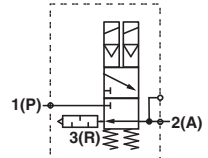
Air supply must be dry enough to avoid ice formation at temperatures below $+2^\circ\text{C}$ ($+35^\circ\text{F}$).

Materials:

Housing: aluminium

Seals: PUR or NBR

Technical data

Symbol	Port size	Orifice (mm)	Power at 24 V d.c. (W)	Pressure range (bar)	Flow 1 » 2 (l/min)	2 » 3 (l/min)	Port sizes			Weight (kg)	Model *1)
	G1/4	8	4,8	3 ... 10	1280	1550	G 1/4	G 1/4	G 1/4	1,1	SCVA081BB0A02400
	1/4 NPT	8	4,8	3 ... 10	1280	1550	1/4 NPT	1/4 NPT	1/4 NPT	1,1	SCVA081RR0A02400
	G3/4	20	11	2 ... 10	3900	14000	G 3/4	G 3/4	G 1	4,7	SCVA201EF0B02400
	3/4 NPT	20	11	2 ... 10	3900	14000	3/4 NPT	3/4 NPT	1 NPT	4,7	SCVA201UV0B02400
	G1	32	16	2 ... 10	8250	30000	G 1	G 1	G 1 1/2	7,5	SCVA321FH0C02400
	1 NPT	32	16	2 ... 10	8250	30000	1 NPT	1 NPT	1 1/2 NPT	7,5	SCVA321VX0C02400

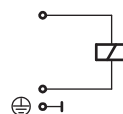
*1) Model with 1/2" port size (DN10) series SCVA10 - see data sheet en 5.3.773

Technical data – solenoids

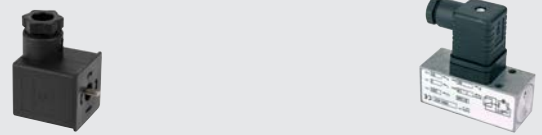
Standard voltages	24 V d.c.
Duty cycle	100% ED
Protection class	IP65

Other voltages on request

Circuit diagram



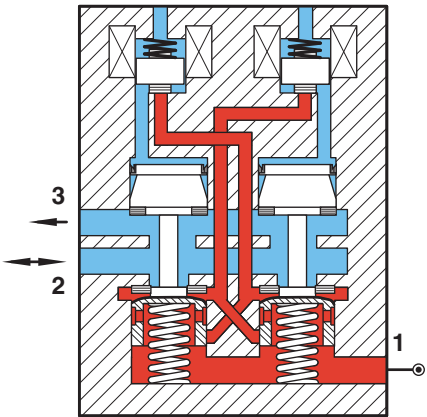
Accessories

Model	Plug	Model	Pressure switch - flange/ face mounted direct onto valve *2)
			
Datasheet N/en 5.11.001			
SCVA08	0680003, EN 175301-803 - form B	All SCVA...	0881400
SCVA20	0570275, EN 175301-803 - form A		
SCVA32	0570275, EN 175301-803 - form A		

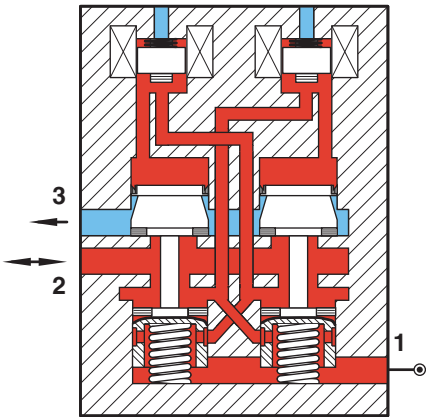
*2) The pressure switch is not required as part of the safe functioning system within the valve, its is offered as a means of indicating that the valve taken up a safe condition ie. no pressure at the output port 2

Functional diagram

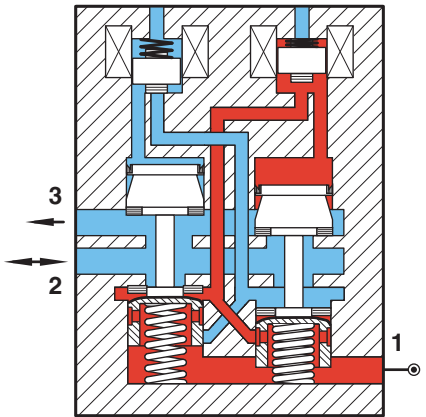
Basic position
Channel "2" onto "3"
Safety silencer relieved



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 (dm³)	Operating pressure (bar)	Exhaust time (ms)
SCVA081...	1	5	200
		8	250
		10	290
	3	5	560
		8	730
		10	820

Model	Volume (dm³)	Operating pressure (bar)	Exhaust time (ms)
SCVA201...	8	5	230
		8	290
		10	330
	20	5	520
		8	700
		10	800

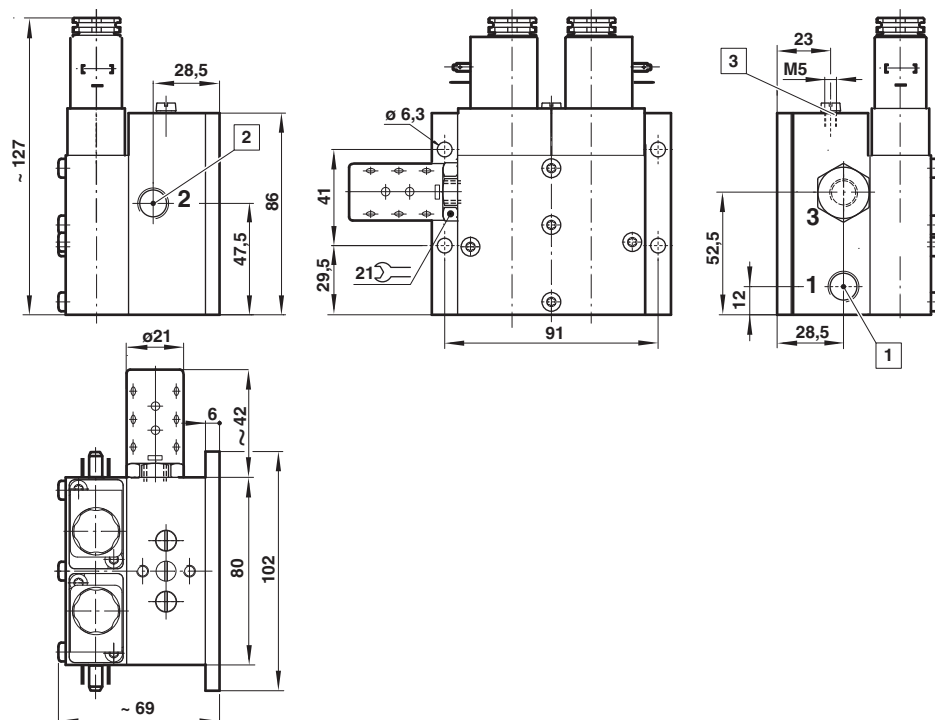
Model	Volume (dm³)	Operating pressure (bar)	Exhaust time (ms)
SCVA321...	20	5	310
		8	400
		10	420
	50	5	730
		8	930
		10	1100

Dimensions

Dimensions in mm
 Projection/First angle

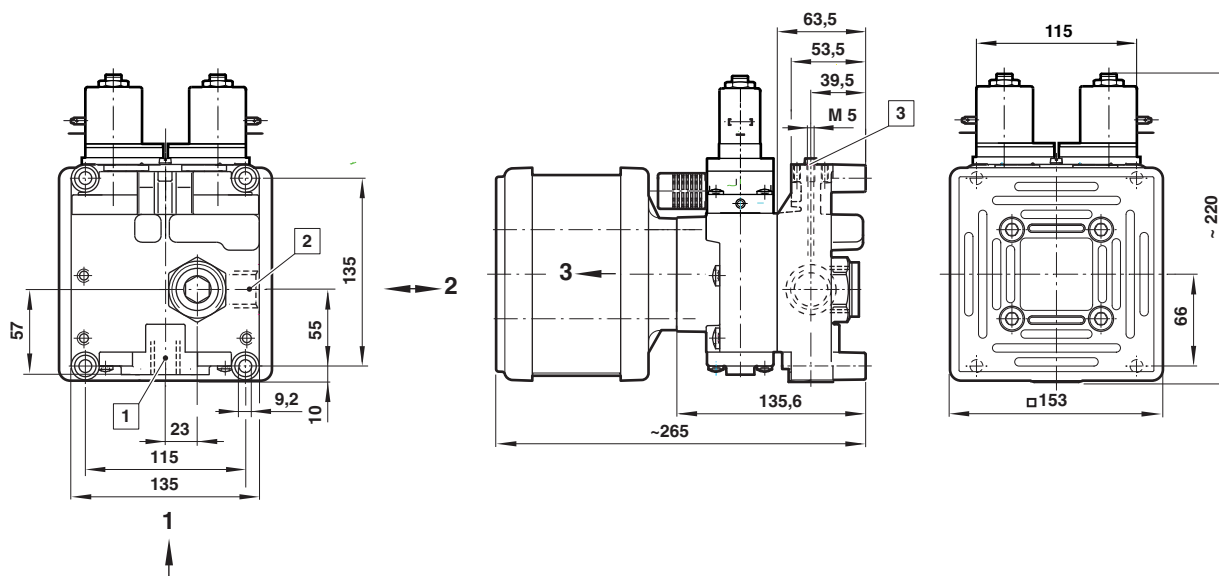


SCVA081BB0A02400 (G1/4), SCVA081RR0A02400 (1/4 NPT)



- 1 Port 1 (G1/4 or 1/4 NPT)
- 2 Port 2 (G1/4 or 1/4 NPT)
- 3 Interface for pressure switch

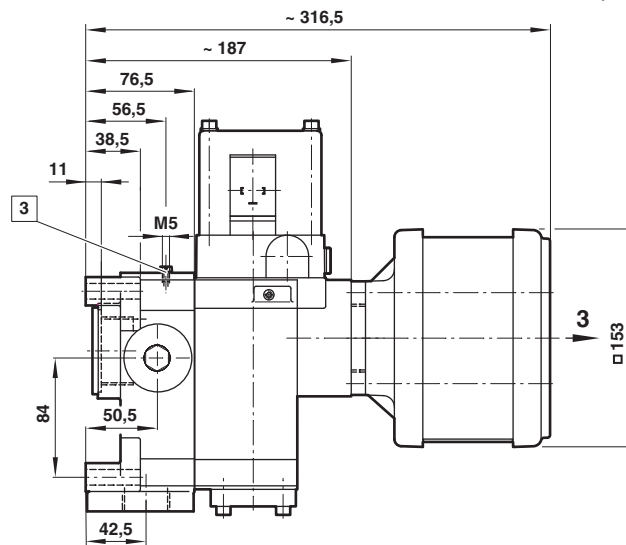
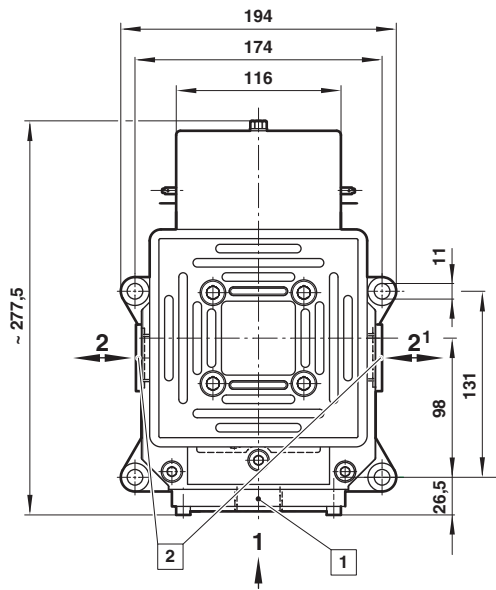
SCVA201EF0B02400 (G3/4), SCVA201UV0B02400 (3/4 NPT)



- 1 Port 1 (G3/4 or 3/4 NPT)
- 2 Port 2 (G3/4 or 3/4 NPT)
- 3 Interface for pressure switch

SCVA321FH0C02400 (G1), SCVA321VX0C02400 (1 NPT)

Dimensions in mm
 Projection/First angle



- 1** Port1 (G1 or 1 NPT)
- 2** Alternative ports (G1), two plugs are in scope of delivery
 NPT version: Port 2 useable only!
- 3** Interface for pressure switch

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 Precision Engineering, Norgren GmbH. 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.