
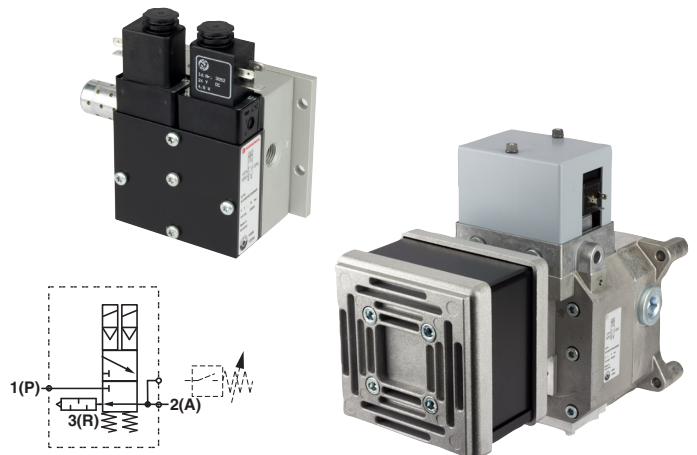


SCVA08, SCVA10, SCVA20 & SCVA32, 3/2

Solenoid actuated safety valve



- > Port size: 1/4, 1/2, 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, 10, 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.
- > SCVA08 & SVA10 also available with UL- recognized solenoids 



Technical features

Medium:

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

Operating Pressure:

see table below

B_{10} (median) characteristic service life value on basis ISO 19973:

12 x 10⁶ cycles - SCVA08
 10 x 10⁶ cycles - SCVA10
 10 x 10⁶ cycles - SCVA20
 6 x 10⁶ cycles - SCVA32

Mounting:

Preferably upright with solenoids on top

Press control:

Valves are not approved for press clutch and brake applications

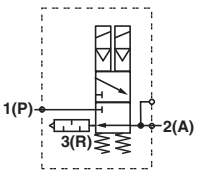
Ambient/Media temperature:

-10 ... +60°C (+14 ... +140°F)
 Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Materials:

Housing: aluminium
 Seals: PUR or NBR

Technical data

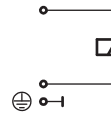
Symbol	Port size	Orifice (mm)	Power at 24 V d.c. (W)	Pressure range (bar)	Flow		Port sizes			Weight (kg)	Model
					1 » 2 (l/min)	2 » 3 (l/min)	1	2	3		
	G1/4	8	4,8	3 ... 10	1280	1550	G1/4	G1/4	G1/4	1,1	SCVA081BB0A02400
	G1/4	8	4,8	3 ... 10	1280	1550	G1/4	G1/4	G1/4	1,1	SCVA081BB0E02400 *1)
	1/4 NPT	8	4,8	3 ... 10	1280	1550	1/4 NPT	1/4 NPT	1/4 NPT	1,1	SCVA081RR0A02400
	1/4 NPT	8	4,8	3 ... 10	1280	1550	1/4 NPT	1/4 NPT	1/4 NPT	1,1	SCVA081RR0E02400 *1)
	G1/2	10	4,8	2 ... 10	3400	6500	G1/2	G1/2	G3/4	2,4	SCVA101DE1A02400
	G1/2	10	4,8	2 ... 10	3400	6500	G1/2	G1/2	G3/4	2,4	SCVA101DE1E02400 *1)
	1/2 NPT	10	4,8	2 ... 10	3400	6500	1/2 NPT	1/2 NPT	3/4 NPT	2,4	SCVA101TU1A02400
	1/2 NPT	10	4,8	2 ... 10	3400	6500	1/2 NPT	1/2 NPT	3/4 NPT	2,4	SCVA101TU1E02400 *1)
	G3/4	20	11	2 ... 10	3500	13250	G3/4	G3/4	G1	3,6	SCVA201EF0B02400
	3/4 NPT	20	11	2 ... 10	3500	13250	3/4 NPT	3/4 NPT	1 NPT	3,6	SCVA201UV0B02400
	G1	32	16	2 ... 10	7300	23000	G1	G1	G1 1/2	10,3	SCVA321FH0C02400
	1 NPT	32	16	2 ... 10	7300	23000	1 NPT	1 NPT	1 1/2 NPT	10,3	SCVA321VX0C02400

*1) with UL recognized solenoid (24VDC, other voltages on request)

Technical data – solenoids





Model	0200, 0800, 3048 (UL) and 3052
Standard voltages	24 V d.c. and 230 V a.c., other on request
Duty cycle	100% ED
Protection class	IP65
Electrical connection	DIN EN 175301-803 (DIN 43650), form A & form B

Circuit diagram



Model	Power consumption V DC (W)	Current Inrush V AC (VA)	Hold (VA)	Connector	SCVA Model
0200	11	22	15	Form A	SCVA20
0800	16	50	27	Form A	SCVA32
3048	3,7	-	-	Form A	SCVA08 / SCVA10 (UL)
3052	4,8	12	8,5	Form B	SCVA08 / SCVA10

Accessories for SCVA

Model	Plug	Pressure switch - flange/ face mounted direct onto valve *1)	Quikclamp® with wall bracket *2)	Quikmount pipe adaptor
				
		Datasheet en 5.11.001	Page 6	Page 6
SCVA08xxxx	0680003, EN 175301-803-form B	0881400*3)	-	-
SCVA10xxxx	0680003, EN 175301-803-form B	0881400	840014-52KIT	840015-11R (G1/2)
SCVA20xxxx	0570275, EN 175301-803-form A	0881400	-	840015-03R (1/2 NPT)
SCVA32xxxx	0570275, EN 175301-803-form A	0881400	-	-

*1) 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.

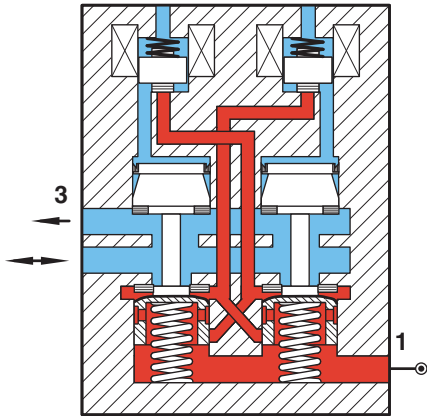
*2) Quikclamp in order to connect the SCVA10 safety valve to the outlet of Excelon Plus series 84 Airline units.

In case the Quikclamp is placed as last piece at the outlet of the SCVAS10 safety valve, an end connector 840015-11R is needed in addition – please order separately

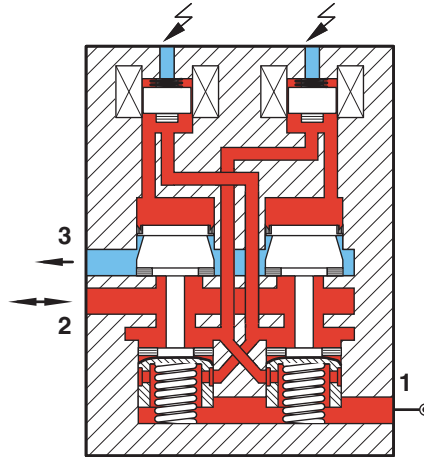
*3) Pressure switch 0881400 can not be used when using solenoid 3048 (UL).

Functional diagram

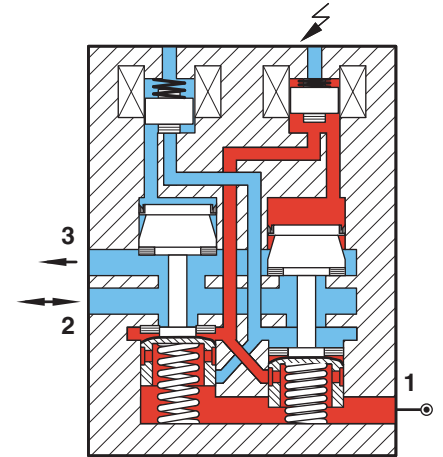
Basic position
Channel "2" onto "3"
Safety silencer relieved



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

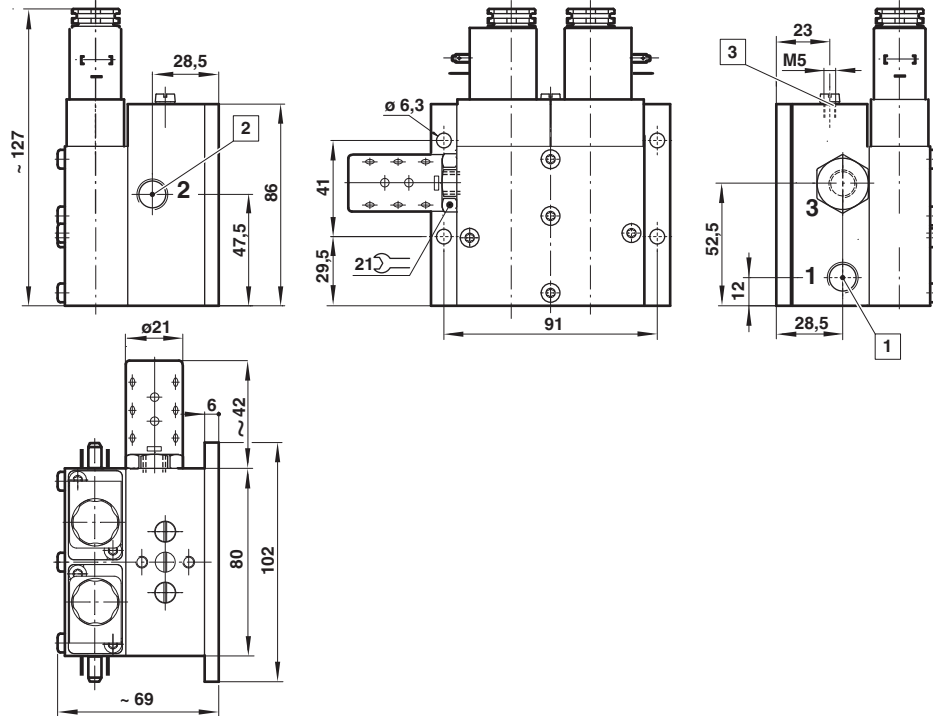
Model	Volume (dm ³)	Operating pressure (bar)	Exhaust time (ms)
SCVA081...	1	5	200
		8	250
		10	290
	3	5	560
		8	730
		10	820

Model	Volume (dm ³)	Operating pressure (bar)	Exhaust time (ms)
SCVA101...	3	5	200
		8	250
		10	280
	8	5	450
		8	580
		10	640

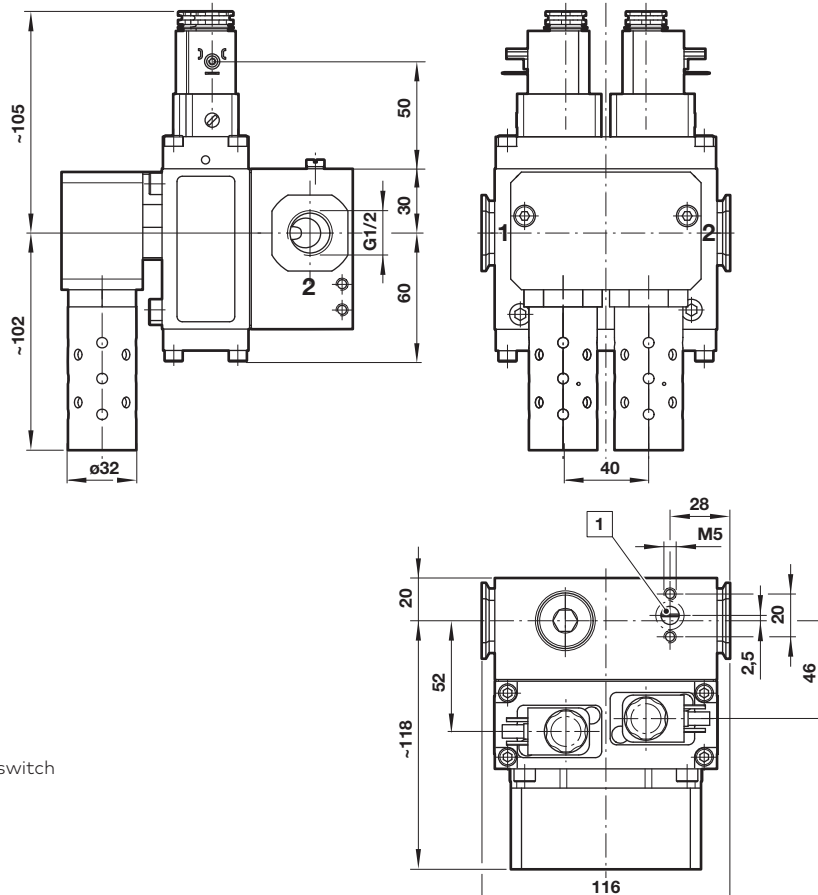
Model	Volume (dm ³)	Operating pressure (bar)	Exhaust time (ms)
SCVA201...	8	5	230
		8	290
		10	330
	20	5	520
		8	700
		10	790

Model	Volume (dm ³)	Operating pressure (bar)	Exhaust time (ms)
SCVA321...	20	5	310
		8	400
		10	420
	50	5	730
		8	930
		10	1100

Dimensions
**SCVA081BB0A02400 (G1/4), SCVA081RR0A02400 (1/4 NPT),
SCVA081BB0E02400 (G1/4, UL), SCVA081RR0E02400 (1/4-NPT, UL)**

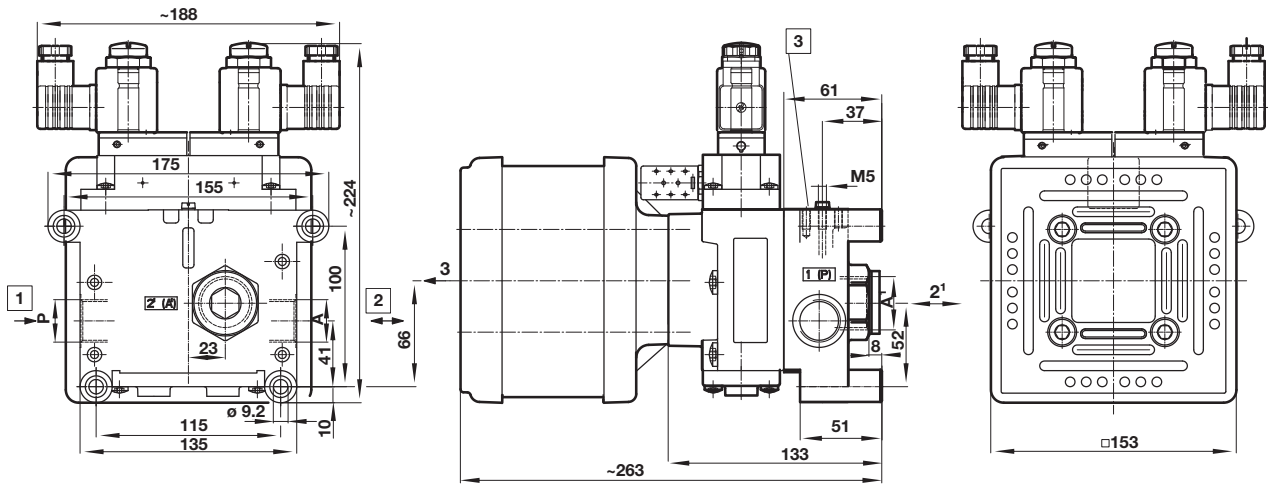
 Dimensions in mm
Projection/First angle


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

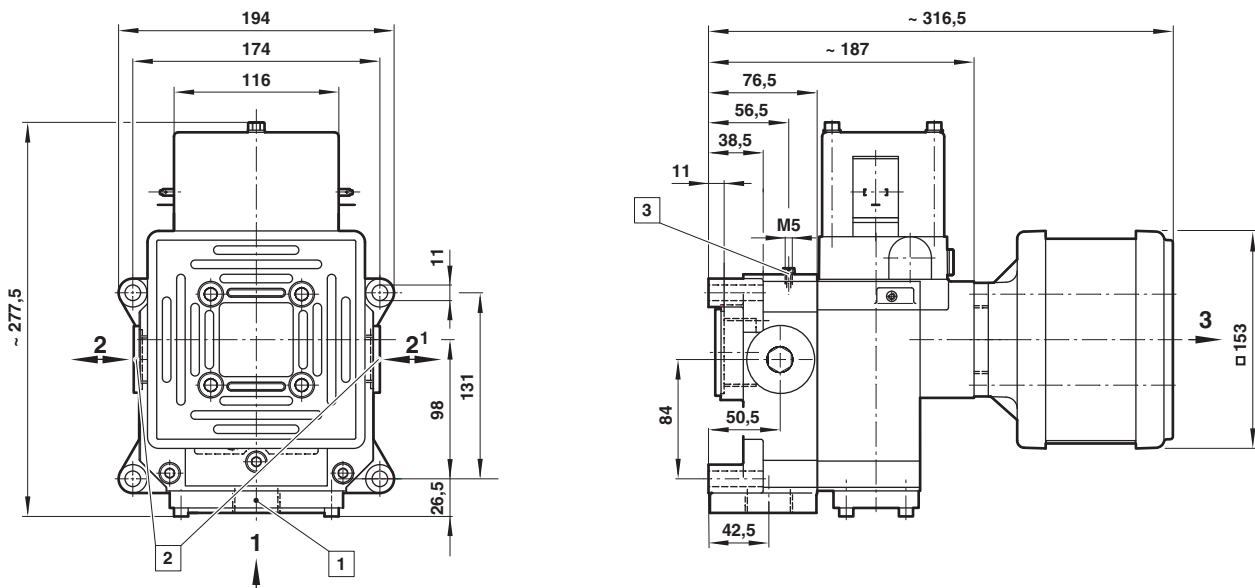
**SCVA101DE1A02400 (G1/2), SCVA101TU1A02400 (1/2 NPT), SCVA101DE1E02400 (G1/2, UL),
SCVA101TU1E02400 (1/2-NPT, UL)**


- 1 Interface for pressure switch

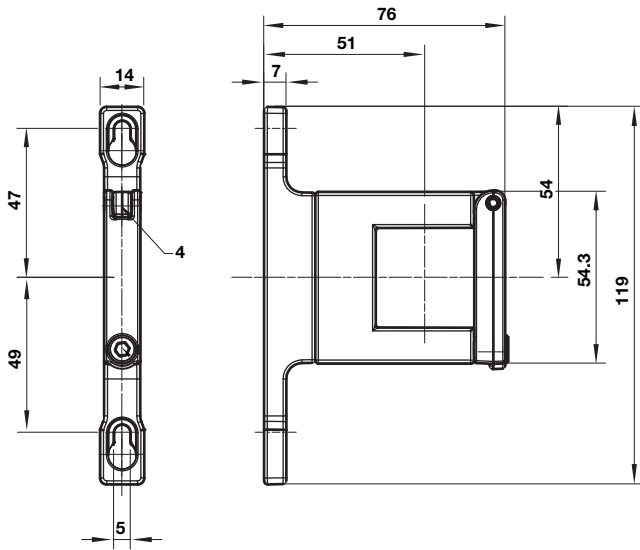
SCVA201EF0B02400 (G3/4), SCVA201UV0B02400 (3/4 NPT)

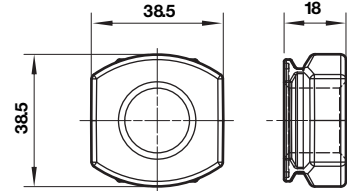
 Dimensions in mm
 Projection/First angle


- 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)


- 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

Quikclamp® with wall bracket

Quikmount pipe adaptor

 Dimensions in mm
 Projection/First angle

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.