

- > Port size: 1/4" ... 1" (ISO G, NPT)
- Redundant valve assembly, pneumatic selfmonitoring with integrated safety silencer
- > Ensures safe loading and venting
- Requires no cyclical monitoring or evaluation system

#### Technical features Medium:

Compressed air, filtered  $\leq 50 \ \mu$ m, lubricated or non-lubricated **Operating Pressure:** see table below **B10 characteristic service live** value on basis ISO 19973:  $10^7 \ \text{cycles} - \ \text{SCVA08}$  $8 \ \times 10^6 \ \text{cycles} - \ \text{SCVA10} \ \& \dots 20$  $5 \ \times 10^6 \ \text{cycles} - \ \text{SCVA32}$ 

# **Technical data**

- > A complete range in 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 pressuredropping from '2' to '3' "- DGUV approval

#### 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

Symbol		Port size	Orifice	Power at 24 V d.c.	Pressure range	Flow 1 » 2	2 » 3	Port sizes	6		Weight	Model
			(mm)	(W)	(bar)	(l/min)	(I/min)	1	2	3	(kg)	
		G1/4	8	4,8	3 10	1280	1550	G 1/4	G 1/4	G 1/4	1,1	SCVA081BB0A02400
1		1/4 NPT	8	4,8	3 10	1280	1550	1/4 NPT	1/4 NPT	1/4 NPT	1,1	SCVA081RR0A02400
		G1/2	10	4,8	2 10	3150	6500	G 1/2	G 1/2	G 3/4	2,5	SCVA101DE0A02400
		1/2 NPT	10	4,8	2 10	3150	6500	1/2 NPT	1/2 NPT	3/4 NPT	2,5	SCVA101TU0A02400
1(P)-	_ <u>⊨</u> ⊐lrė	G3/4	20	11	2 10	3900	14000	G 3/4	G 3/4	G 1	4,7	SCVA201EF0B02400
	<u>-</u> B) ≤ ≤	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

### Technical data - solenoids

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

Other voltages on request!

#### Accessories

ModelPlugModelPressure switch - flange/ face mounted direct onto valve *2)SeventSeventSeventSeventSCVA080680003, EN 175301-803 - form B SCVA100680003, EN 175301-803 - form B SCVA200680003, EN 175301-803 - form B SCVA200881400SCVA200570275, EN 175301-803 - form A SCVA320570275, EN 175301-803 - form A11120000000000000000000000000000000000				
SCVA10 0680003, EN 175301-803 - form B All SCVA   SCVA20 0570275, EN 175301-803 - form A All SCVA	Model	Plug	Model	face mounted direct onto valve *2)
SCVA20 0570275, EN 175301-803 - form A All SCVA	SCVA08	0680003, EN 175301-803 - form B		0881400
SCVA20 0570275, EN 175301-803 - form A	SCVA10	0680003, EN 175301-803 - form B		
SCVA32 0570275, EN 175301-803 - form A	SCVA20	0570275, EN 175301-803 - form A	All SCVA	
	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

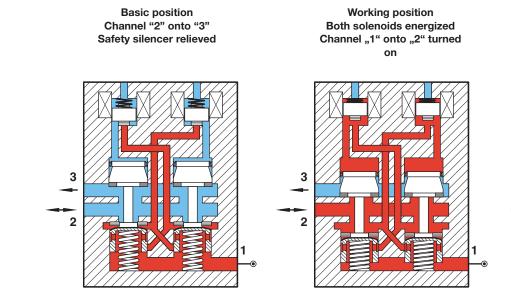


## Circuit diagram

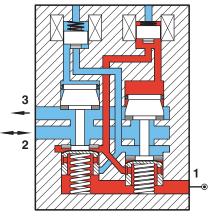


# IMI HERION

#### **Functional diagram**



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)	Model	Volume (dm³)	Operatii (bar)
			5	200		3	5
		1	8	250			8
SCVA081	1		10	290	SCVA101		10
			5	560		8	5
		3	8	730			8
			10	820			10

Volume (dm³)	Operating pressure (bar)	Exhaust time (ms)
	5	180
3	8	230
	10	260
	5	430
8	8	560
	10	620
		(bar) (bar)   3 5   8 10   8 5   8 8

Model	Volume (dm³)	Operating pressure (bar)	Exhaust time (ms)	Model	Volume (dm³)	Operating pre (bar)
8 SCVA201 20		5	230			5
	8	8	290		20	8
		10	330	SCVA321		10
		5	520			5
	20	8	700		50	8
		10	800			10

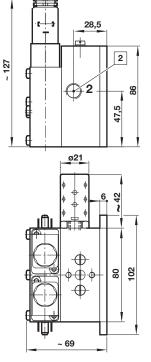


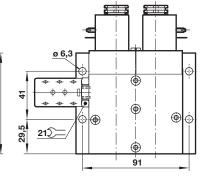
# Dimensions

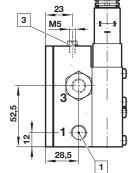
SCVA081BB0A02400 (G1/4), SCVA081RR0A02400 (1/4 NPT)

Dimensions in mm Projection/First angle







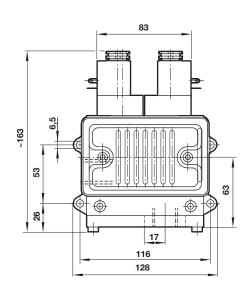


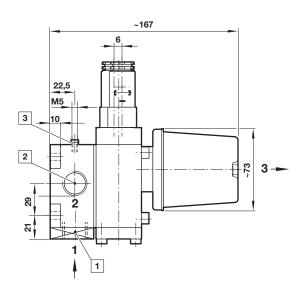
1 Port 1 (G1/4 or 1/4 NPT)

2 Port 2 (G1/4 or 1/4 NPT)

3 Interface for pressure switch

# SCVA101DE0A02400 (G1/2), SCVA101TU0A02400 (1/2 NPT)





1 Port 1 (G1/2 or 1/2 NPT)

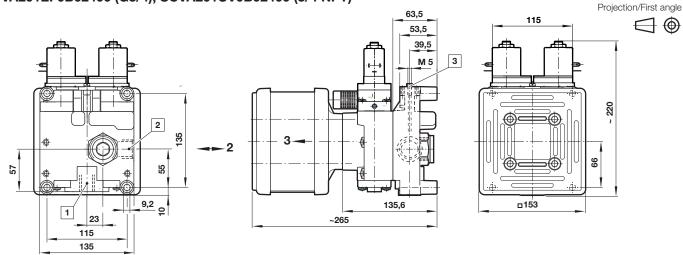
2 Port 2 (G1/2 or 1/2 NPT)

3 Interface for pressure switch

# 

Dimensions in mm

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



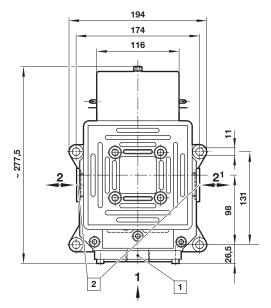
1 Port 1 (G3/4 or 3/4 NPT)

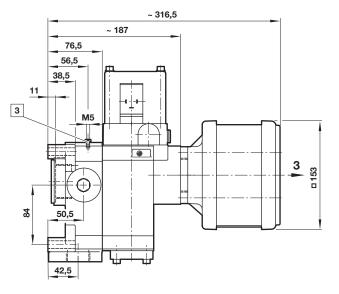
2 Port 2 (G3/4 or 3/4 NPT)

1

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

#### Warning

These products are intended for use in industrial compressed air and fluid 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 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.

#### Functional safety (SIL):

Suitable for certain applications can only be evaluated through examination of each safety-related overall system with regard to the requirements of IEC 61508/61511.