

## Suction Control Valve Type SAG45

### Application

For capacity control of screw compressors with electric motor which are pressurized on shutdown.

### Function

Suction control valve/non-return valve, normally closed.  
For capacity control: full load / idling / stop

**⚠ Attention! Never attempt to disassemble a cylinder whilst under pressure!**

### Example of installation

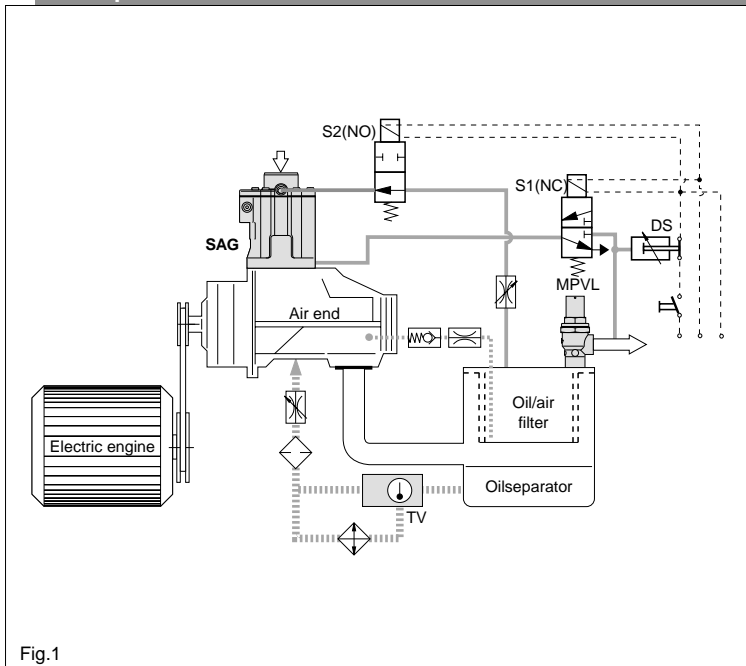


Fig.1

### Schematic figure

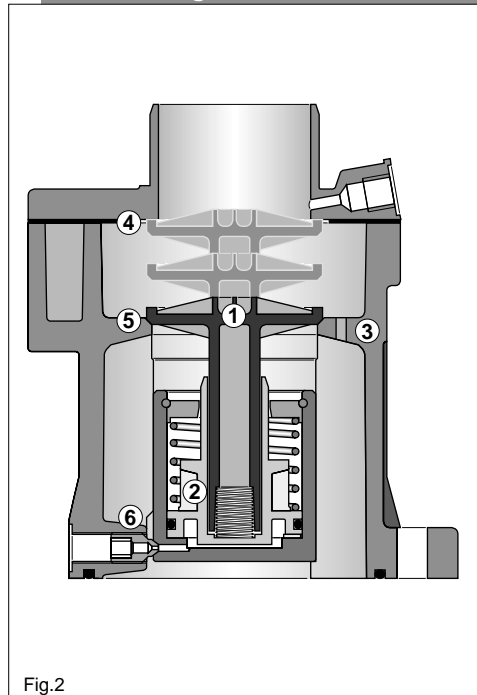


Fig.2

### Functions

Compressor	Electric motor	Electric equipment: Switches S, DS	Suction Control Valve
Shutdown	deenergized	S open DS open /closed	Non-return valve closed, valve disc (1) on valve seat (4)
Start-up	Star connection	S open DS closed	Valve disc (1) is drawn to idling seat (5), compressor draws air through idling jet (3)
Full load operation	Delta connection	S closed DS closed	Valve opens through pressure on cylinder (2), valve disc (1) in full load (central) position
Idling	Delta connection	S closed DS open	Cylinder (2) vented, valve disc (1) on idling seat (5), Compressor draws air through idling jet (3)
Shutdown from idling	deenergized	S open DS open	Valve disc (1) on valve seat (5), Non-return valve closes fast and tight
Shutdown from full load operation/ emergency stop	deenergized	DS open	Valve disc (1) on valve seat (5), Non-return valve closes fast and tight

## HOERBIGER KOMPRESSORTECHNIK GMBH

Im Forchet 5 • D-86956 Schongau  
Phone +49 (0)8861-210-0 • Fax +49 (0)8861-210-3273  
E-mail: rcc@hks.hoerbiger.de • www.hoerbigerkompressortechnik.de

# HOERBIGER

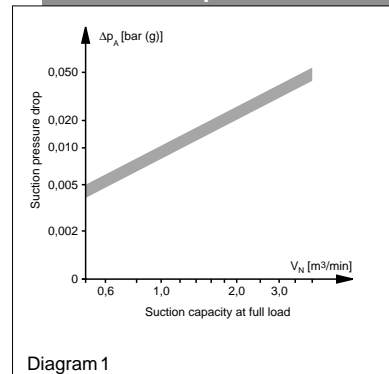
R272E

A1R272E03EAC00D

### Details

Recommended application		motor power up to 22 kW suction capacity 0,6 up to 3.5 m <sup>3</sup> /min
Nominal diameter DN	mm	45
Max. working pressure PS	bar (g)	16
Operating/actuating pressure	bar (g)	3 - 16
Operating temperature	°C	+10 to +90 occasional -20 to +120 (at start, stop)
Control valve		seat valve, normally closed, with non-return valve
Control functions		full load, idling, stop (3 valve positions)
K <sub>VA</sub> -value	m <sup>3</sup> /h	30
Pressure drop at full load		diagram 1
Start up and idling jet		2 mm, other diameters on request
Configuration: standard on request		in-line SAG45 side entry valves and special valve bodies to customer's design
Dimensions, connections		see fig.3
Installation position		optional
Medium		pressurized air, filtered • recommended compressed air quality according to DIN ISO 8573-1, class 5. Reference oil: see <a href="http://www.hoerbigerkompressortechnik.de">www.hoerbigerkompressortechnik.de</a>
Connections		flange 100 x 100 mm, drilling picture see fig.3 others on request standard sleeve 50 mm for air filter others on request signal air: E = G 1/8 air filter: port G 1/8 motor rotation direction: port G 1/8
Materials		body parts: aluminium, zinc plated steel internal parts: anodised aluminium, polyamid, brass, spring steel seals: viton (perbunan on request)
Weight	kg	1.4

### Pressure drop at full load



### Installation

On the suction flange of the air end or in the suction ducting.

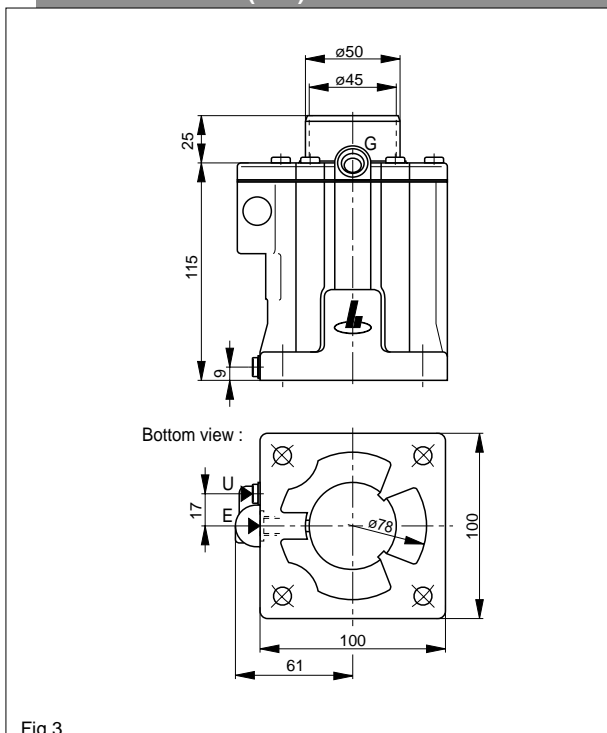
### Maintenance

The service manual W276RCC contains information regarding the maintenance intervals. While disassembling the valve for inspection, cleaning or retrofitting purposes, also refer to the respective information contained in the service manual W276RCC. For the actual service manuals visit our homepage [www.hoerbigerkompressortechnik.de](http://www.hoerbigerkompressortechnik.de).

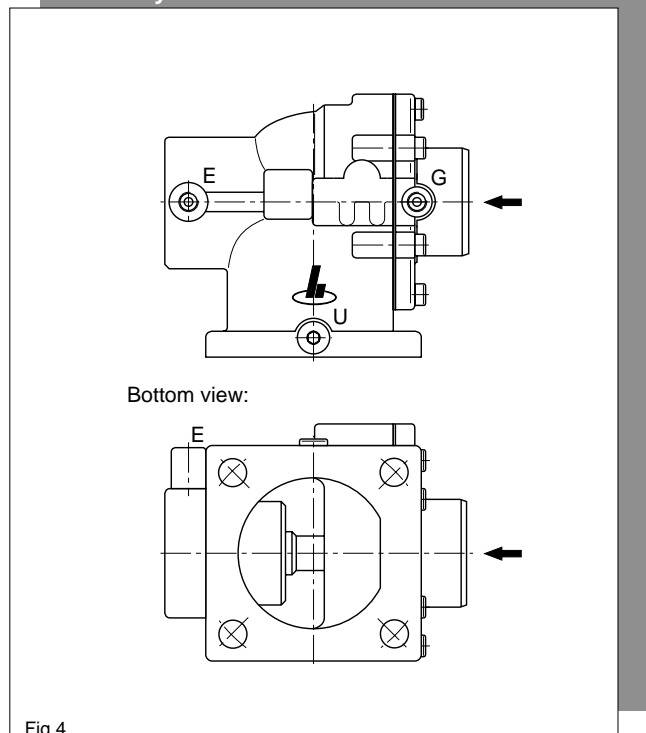
### Ordering details

Type, article number, *specification*: compressor data, connection dimensions required, accessories.

### Standard version (mm)



### Side entry version



HOERBIGER can not grant any warranty for the correctness of technical or other datas in catalogues, brochures and other printed material. HOERBIGER reserves the right to alter its products without notice. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed.