

Swivel angle sensor

Type ASSEMBLY KIT VT-SWA-1



- ▶ Component series 1X
- ▶ For the use of axial piston pumps type A10VSO for recording the swivel angle - especially for pressure and flow control systems type SYDFEE, SYDFEC, SYDFEn, SYDFED, SYDFEF (systems with integrated electronics)

Features

- ▶ Contactless measurement of a swivel angle using a hall-effect sensor
- ▶ Consisting of magnetic holder and sensor with integrated electronics in the housing

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Ordering code

01	02	03
ASSEMBLY KIT VT-SWA-1-1X/SYDFEE	/	18 ... 180
		*

01	Swivel angle sensor for SYDFEE, SYDFEC and SYDFEn systems with integrated electronics (complete assembly kit with sensor and evaluation electronics, magnetic holder and built-in parts)	ASSEMBLY KIT VT-SWA-1-1X/SYDFEE
02	Suitable for size 18 ... 180 of pump type A10V(S)O..DFE.	18 ... 180
03	For further information, see the plain text	*

Material no.: R900868651

01	02
ASSEMBLY KIT VT-SWA-1-1X/DFEE-G15	/
	*

01	Swivel angle sensor for SYDFED and SYDFEF systems with integrated electronics (complete assembly kit with sensor and evaluation electronics, magnetic holder and built-in parts), suitable for size 18 ... 180 of pump type A10V(S)O..DFE.	Assembly kit VT-SWA-1-1X/DFEE-G15
02	For further information, see the plain text	*

Material no.: R901396459

Technical data

(For applications outside these values, please consult us!)

General			
Type		Assembly kit VT-SWA-1-1X/SYDFEE	Assembly kit VT-SWA-1-1X/DFEE-G15
Weight	kg	0.3	0.4
Ambient temperature range	°C	0 ... +60	
Storage temperature range	°C	0 ... +70	
Protection class according to EN 60529		IP65	
Housing material		GD-ZnAl4Cu1	

Electrical			
Operating voltage	V	-10.0 ¹⁾	13 ... 36
Current consumption	mA	Approx. 25	
Measurement range	°	±18	
Output signal	V	-8 ... -2	2 ... 8
Temperature drift	▶ Zero point	%/10 K	<0.2
	▶ Range	%/10 K	<0.2
Electrical connection		G4A5M connector for G4W1F mating connector	Connection cable with M12 line connector

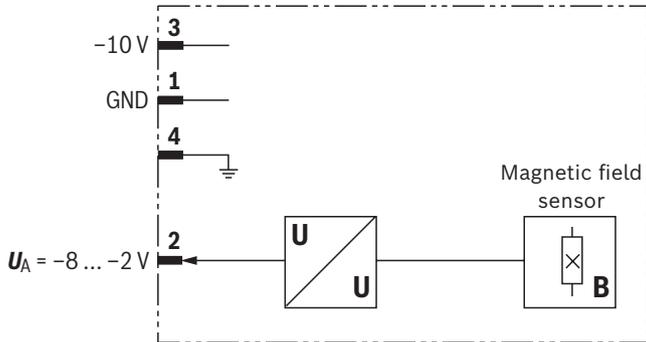
¹⁾ Reference voltage from the integrated electronics of the control system

**Notice:**

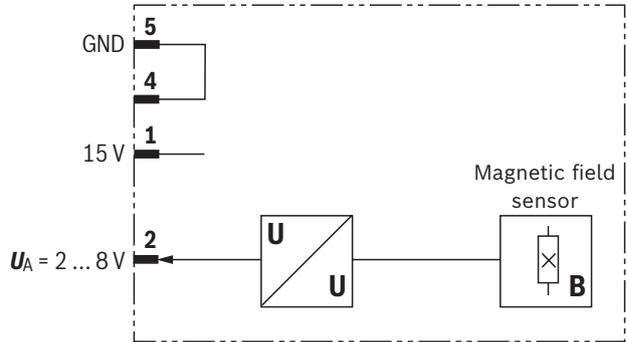
For information on the environment simulation testing for the areas EMC (electro-magnetic compatibility), climate and mechanical load, see data sheet 29016.

Block diagram / pin assignment

Assembly kit VT-SWA-1-1X/SYDFEE



Assembly kit VT-SWA-1-1X/DFEE-G15

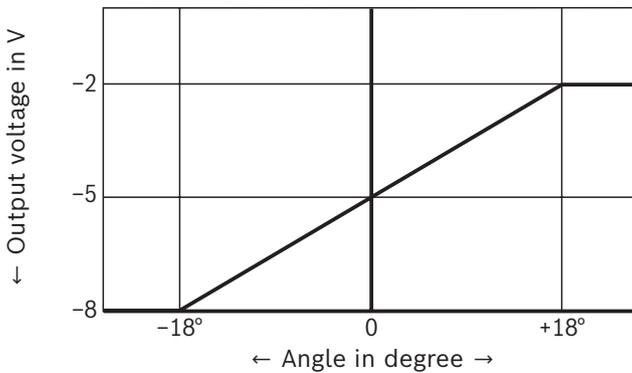


Notice:

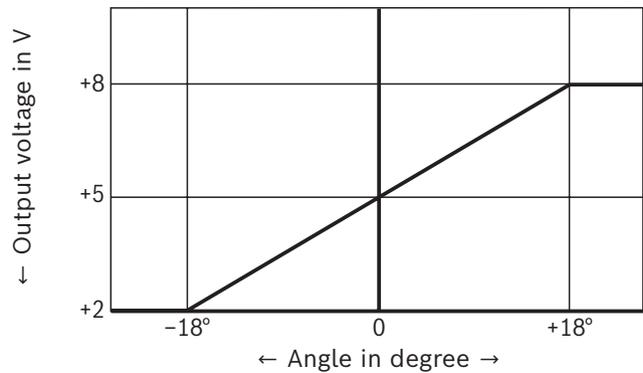
The swivel angle sensor type VT-SWA-1-1X/DFEE-G15 is only designed for operation on pressure and flow control systems type SY(H)DFED(F). In independent operation, reversed polarity at the pins leads to the destruction of the VT-SWA-1-1X/DFEE-G15 swivel angle sensor.

Output characteristic curve

Assembly kit VT-SWA-1-1X/SYDFEE

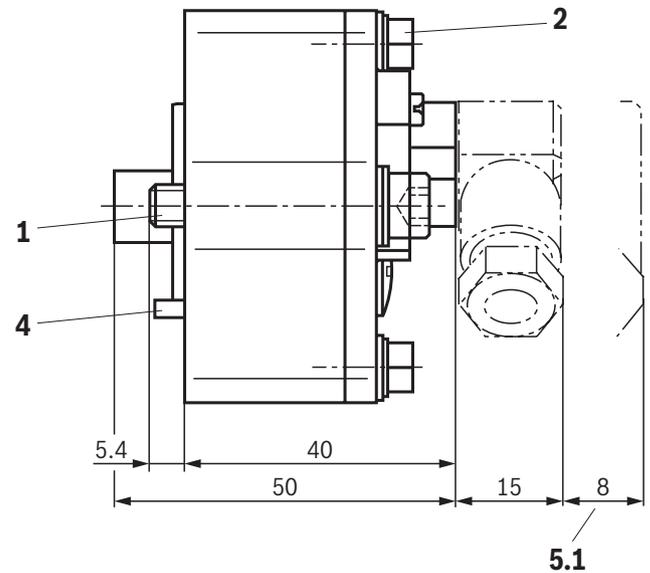
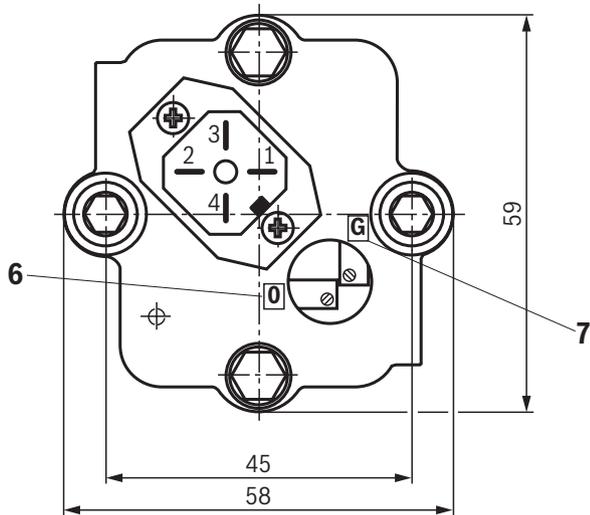
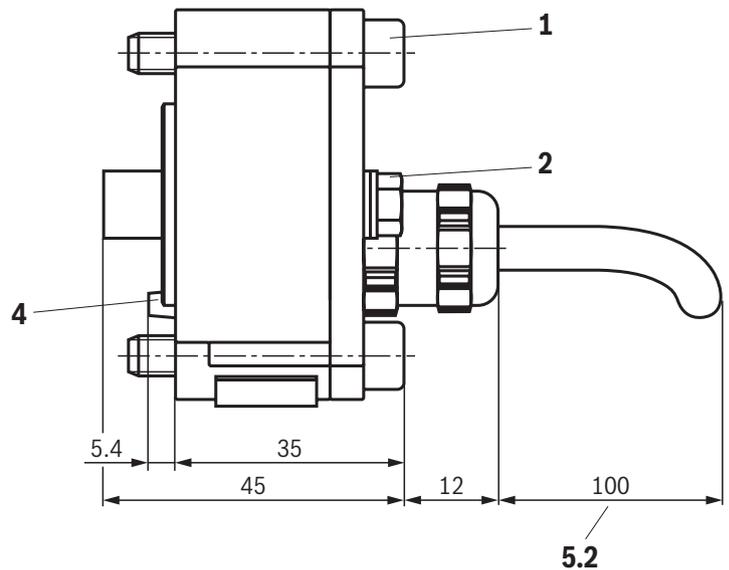
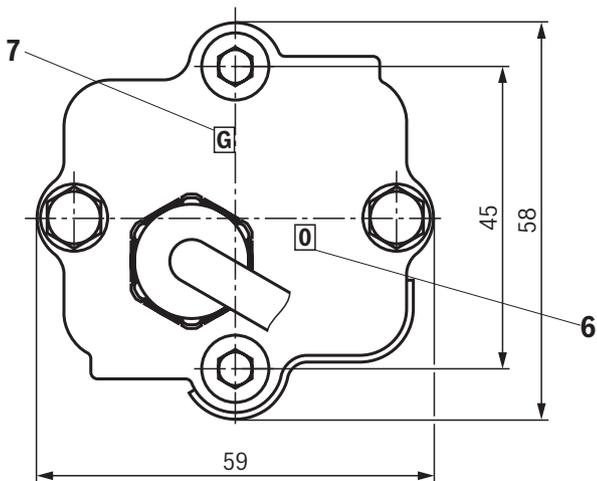


Assembly kit VT-SWA-1-1X/DFEE-G15



Dimensions

(dimensions in mm)

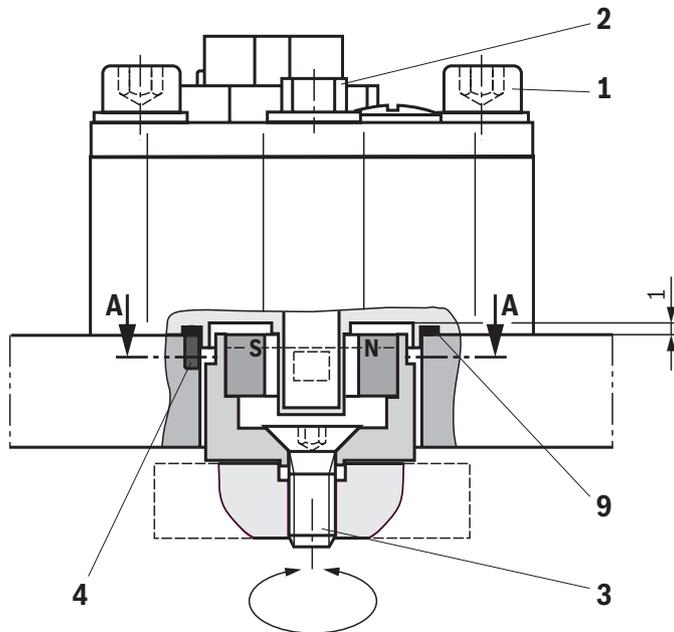
Assembly kit VT-SWA-1-1X/SYDFEE**Assembly kit VT-SWA-1-1X/DFEE-G15**

- 1 Mounting screw (included in the scope of delivery) (hexagon socket head cap screw with internal hexagon M6 x 35 and washer, tightening torque $M_A = 9 \text{ Nm}$)
- 2 Cover fastening (screw with external hexagon SW8)
- 3 Countersunk screw with internal hexagon M6 x 12, tightening torque $M_A = 9 \text{ Nm}$ (included in the scope of delivery)
- 4 Guide pin for housing
- 5.1 Space required for removing the mating connector
- 5.2 Space required for connection cable bending radius

- 6 Zero point setting of the swivel angle (-5 V)
- 7 Setting of the maximum swivel angle (-2 V)

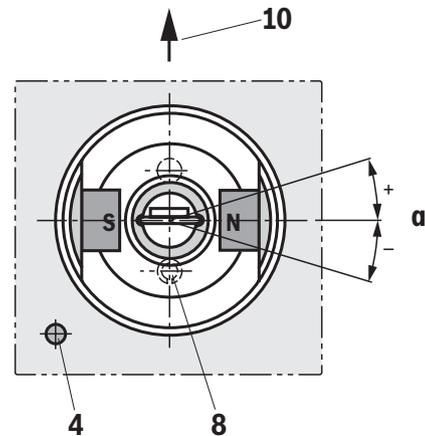
Dimensions

Installation example



- 1 Mounting screw (included in the scope of delivery) (hexagon socket head cap screw with internal hexagon M6 x 35 and washer, tightening torque $M_A = 9 \text{ Nm}$)
- 2 Cover fastening (screw with external hexagon SW8)
- 3 Countersunk screw with internal hexagon M6 x 12, tightening torque $M_A = 9 \text{ Nm}$ (included in the scope of delivery)
- 4 Guide pin for housing

Installation position of the magnetic holder ("A - A")



- 8 Locating pin for magnetic holder (for pumps which are clockwise)
- 9 Seal ring (included in the scope of delivery)
- 10 Drive shaft

Further information

- ▶ Pressure and flow control system SY(H)DFEE
- ▶ Pressure and flow control system SY(H)DFEF
- ▶ Control system SY(H)DFEC
- ▶ Variable-speed pressure and flow control system SY(H)DFEn
- ▶ Pressure and flow control system SY(H)DFED
- ▶ Installation and calibration at SYDFE. systems with integrated electronics

- Operating instructions 30012-B
- Operating instructions 30013-B
- Operating instructions 30027-B
- Operating instructions 30014-B
- Operating instructions 30017-B
- Operating instructions 30268-R