

## Swivel angle sensor

### Type BAUSATZ VT-SWA-1



- ▶ Component series 1X
- ▶ For use in SYDFEE, SYDFEC, SYDFED, SYDFEn and SYDFEF systems (systems with integrated electronics) for measuring the swivel angle of the pump type A10V(S)O...DFE ... and converting the measured value into an electric signal

#### Features

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

#### Contents

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**Ordering code**

01	02	03
<b>BAUSATZ VT-SWA-1-1X/SYDFEE</b>	<b>/</b>	<b>18 ... 180 *</b>

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)	<b>BAUSATZ VT-SWA-1-1X/SYDFEE</b>
02	Suitable for size 18 ... 180 of pump type A10V(S)O..DFE.	<b>18 ... 180</b>
03	For further information, see the plain text	*

**Material no.: R900868651**

01	02
<b>BAUSATZ VT-SWA-1-1X/DFEE-G15</b>	<b>/ *</b>

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.	<b>Assembly kit VT-SWA-1-1X/DFEE-G15</b>
02	For further information, see the plain text	*

**Material no.: R901396459**

**Technical data**

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

<b>General</b>		
Type	<b>Assembly kit VT-SWA-1-1X/SYDFEE</b>	<b>Assembly kit VT-SWA-1-1X/DFEE-G15</b>
Housing material	GD-ZnAl4Cu1	
Ambient temperature range	°C	0 ... +60
Storage temperature range	°C	0 ... +70
Weight	kg	0.3
		0.4

<b>Electric</b>				
Operating voltage	V	-10.0 <sup>1)</sup>	15.0 -2/+9	
Current consumption	mA	approx. 25		
Measurement range	°	±18		
Output signal	V	-8 ... -2	2 ... 8	
Temperature drift	▶ Zero point	%/10 K	<0.2	<0.2
	▶ Range	%/10 K	<0.2	<0.2
Electrical connection		G4A5M connector for G4W1F mating connector	Connection cable with M12 line connector	
Protection class according to EN 60529		IP65		

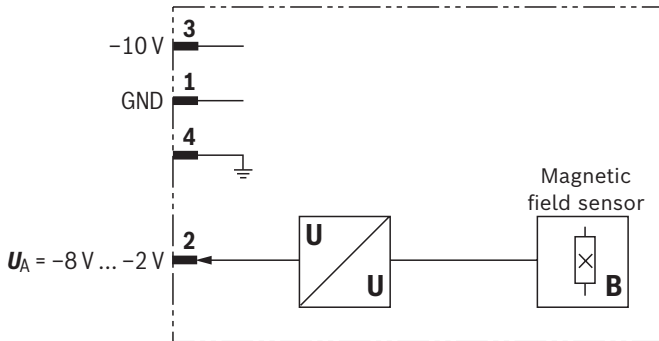
<sup>1)</sup> Reference voltage from the integrated electronics of the control system

**Notice:**

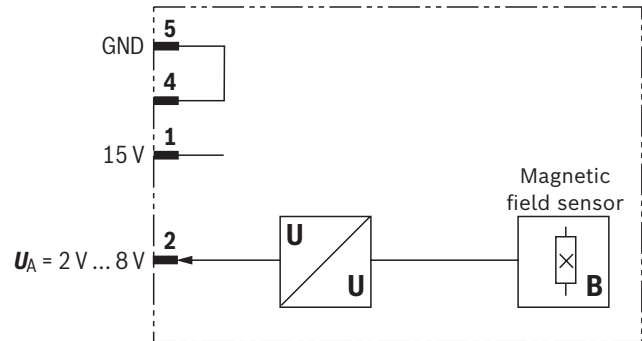
For information on the environment simulation testing for the areas EMC (electro-magnetic compatibility), climate and mechanical load, see data sheet 29016.

## Block diagram / pin assignment

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



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

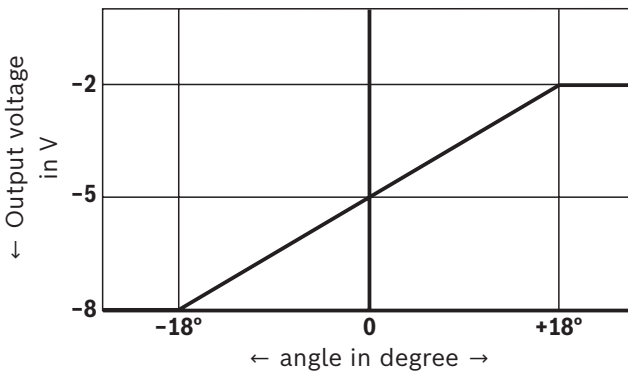


**Notice:**

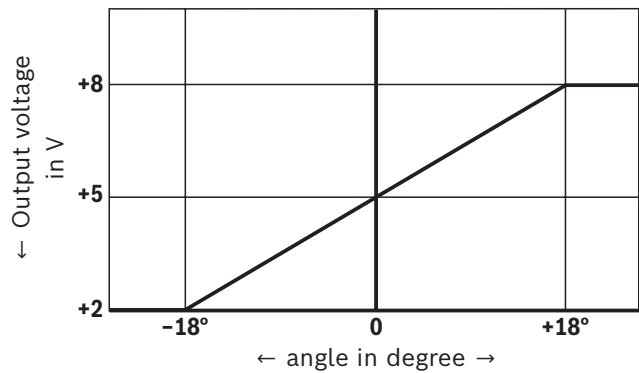
The VT-SWA-1-1X/DFEE-G15 swivel angle sensor is only dedicated for operation at SY(H)DFED(F) systems. In independent operation, reversed polarity at the pins leads to the destruction of the VT-SWA-1-1X/DFEE-G15 swivel angle sensor.

## Output characteristic curve

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



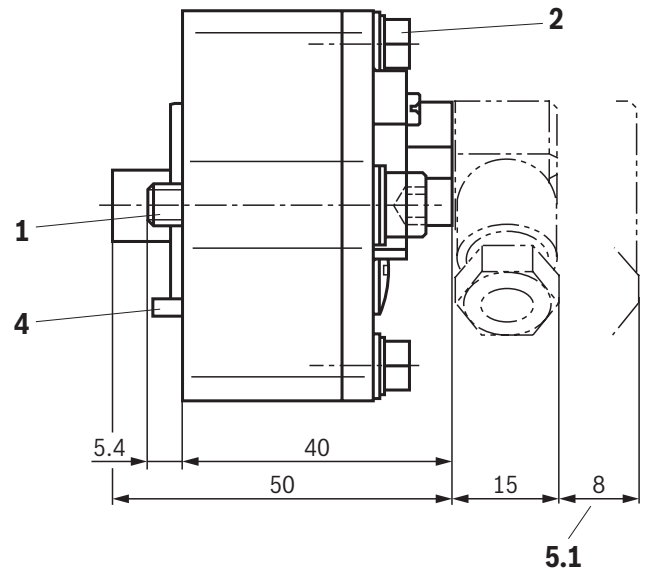
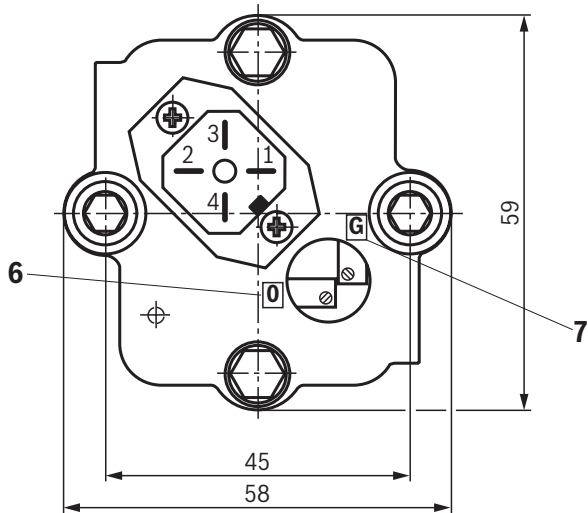
Assembly kit VT-SWA-1-1X/DFEE-G15



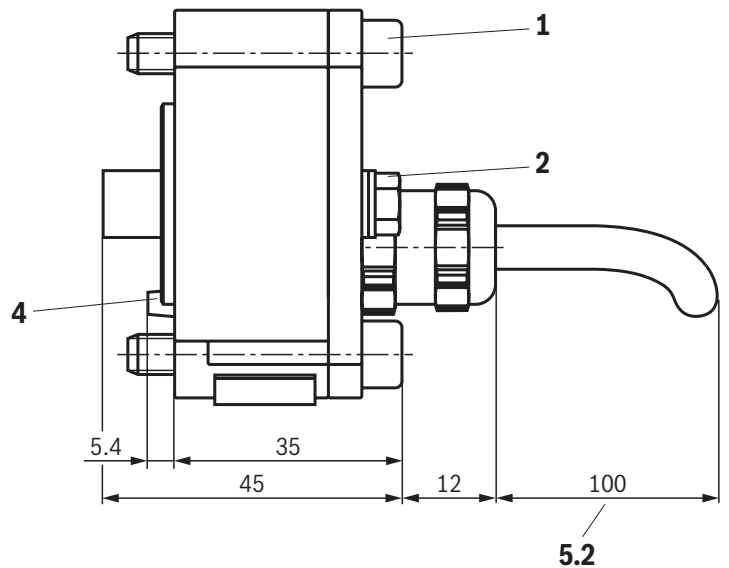
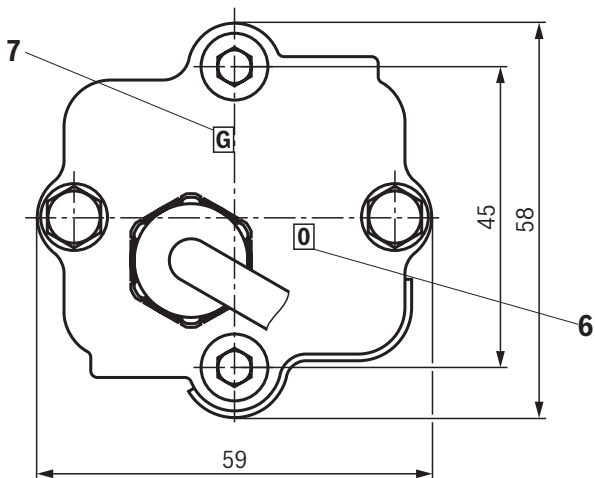
## Dimensions

(dimensions in mm)

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



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

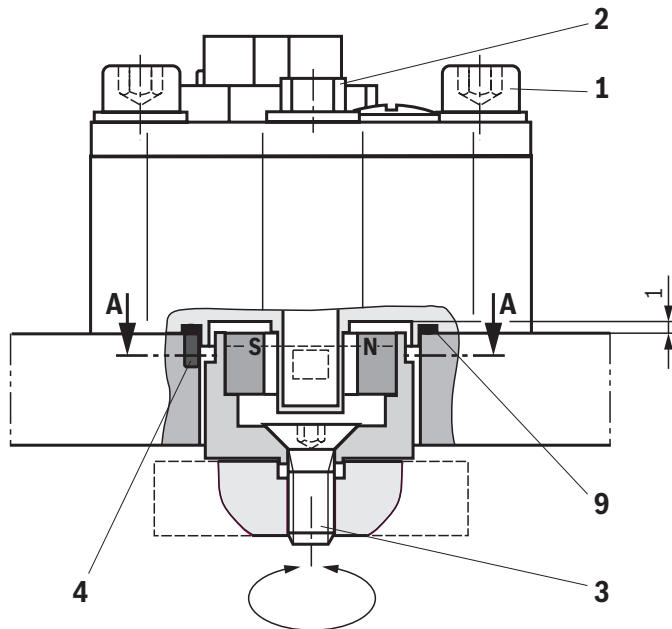


- 1 Mounting screw (included in the scope of delivery) (hexagon socket head cap screw with internal hexagon M6 x 35 and washer, tightening torque  $M_A = 9 \text{ Nm}$ )
- 2 Cover fastening (screw with external hexagon SW8)
- 3 Countersunk screw with internal hexagon M6 x 12, tightening torque  $M_A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

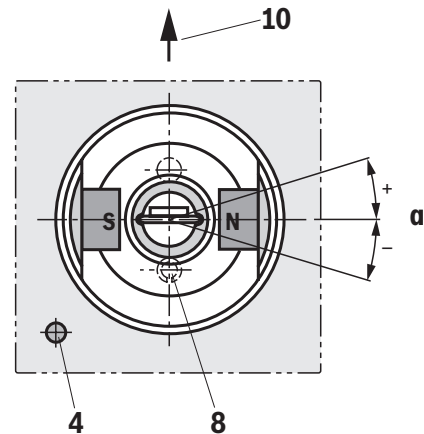
## Dimensions

### 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

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 It must be remembered that our products are subject to a natural process of wear and aging.

## Notes

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