Rexroth
Bosch Group

# Rotary angle sensor

**RE 30268/07.05**
Replaces: 12.04



**Type VT-SWA-1**

Series 1X



H20559

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## Features

- Suitable for use in SYDFEE and SYDFEC systems (systems with integrated electronics) for sensing the swivel angle of the A10V(S)O…DFE… pump and conversion of the measured value into an electrical signal
- Contact-free acquisition of a rotary angle using a Hall-effect sensor
- Consisting of magnet carrier and sensor with integral electronics in the housing
- Electronics calibrated to 167 mV/degree (±18 °)

More detailed documentation:

RE 30268-R, installation and matching to SYDFE. systems with integrated electronics

## Ordering code

**Bausatz VT-SWA1-1X / SYDFEE / 18...140 | ***

Rotary angle sensor for SYDFE. systems with integrated electronics (complete kit with sensor and evaluation electronics, magnet carrier and parts to be installed)

Further details in clear text

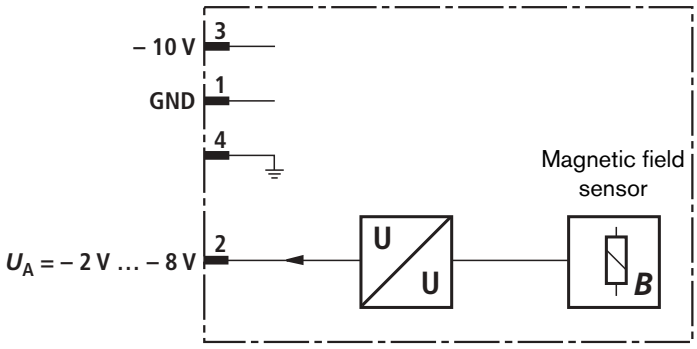
Suitable for all sizes of the A10V(S)O..DFE. pump

**Material No.: R900868651**

### Ordering code for individual components

| Designation | Type / ordering code | Material no. |
|---|---|---|
| Magnet carrier | TRAEGER VT-SWA-1X | R900029748 |
| Cable socket | LEITUNGSDOSE 04POL G4W1F PG7 | R900023126 |
| Plug screw PG7 (without seal) | VERSCHLUSSSCHRAUBE PG7 | R900012764 |
| Plug screw seal | O-RING 9,00 x 1,50 -N- FKM80 RN 181.20 | R900008205 |
| O-ring | O-RING 31,47 x 1,78 | R900008893 |
| Built-in plug-in connector | GERAETESTECKER 04POL K44 G4A5M SW | R900773515 |

## Block circuit diagram / pin allocation



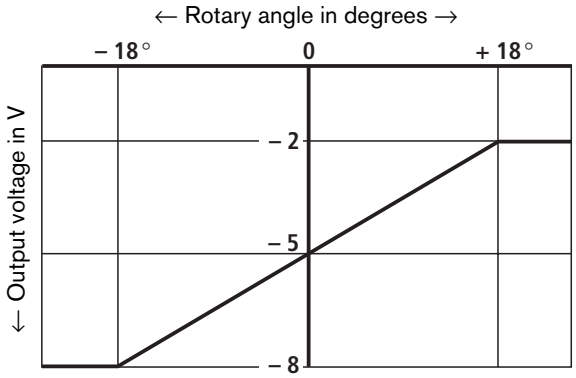
## Technical data (for applications outside these parameters, please consult us!)

| | | |
|---|---|---|
| Operating voltage | $U_0$ | –10.0 V (reference voltage) |
| Current consumption | $I$ | approx. 25 mA |
| Measuring range | $\alpha$ | ±18 ° |
| Output signal | $U$ | –2 V to –8 V |
| Temperature drift: | | |
| – Zero point | | < 0.2 %/10K |
| – Span | | < 0.2 %/10K |
| Electrical connection | | G4A5M component plug with G4W1F cable socket |
| Type of protection | | IP 65 to EN 60529 |
| Housing material | | GD-ZnAl4Cu1 |
| Permissible ambient temperature range | $\vartheta$ | 0 to +60 °C |
| Storage temperature range | $\vartheta$ | 0 to +70 °C |
| Weight | $m$ | 0.3 kg |

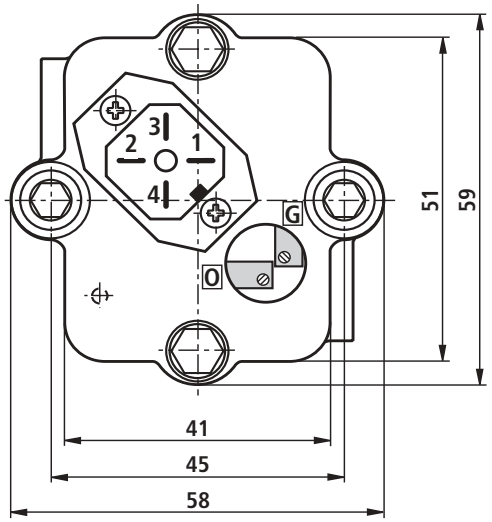
**Note:**

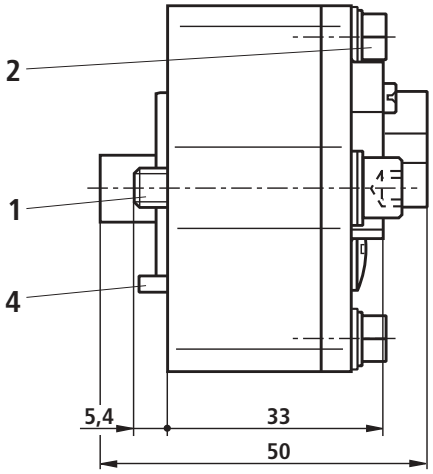
For details regarding **Environment simulation tests** in the fields of EMC (electromagnetic compatibility), climate and mechanical stress, see RE 30030-U for SYDFEE systems or RE 30027-U for SYDFEC systems (declaration on environmental compatibility).

## Output characteristic curves



## **Unit dimensions** (nominal sizes in mm)

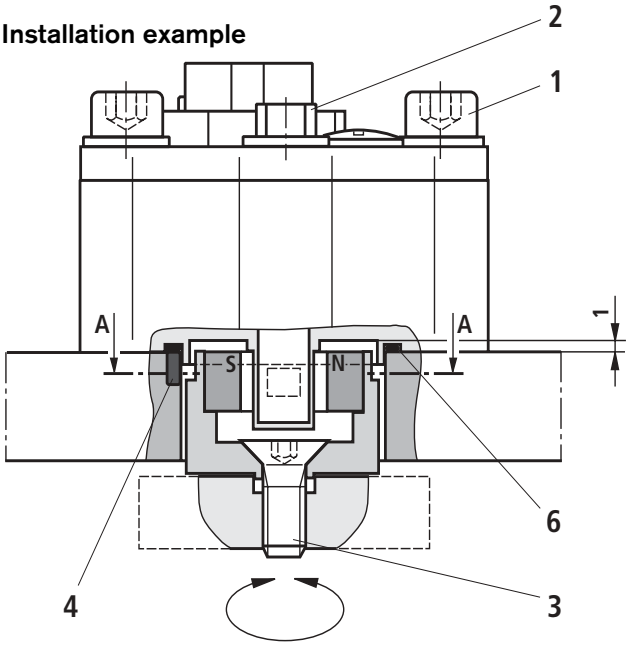



**G** Setting of max. swivel angle (–2 V)

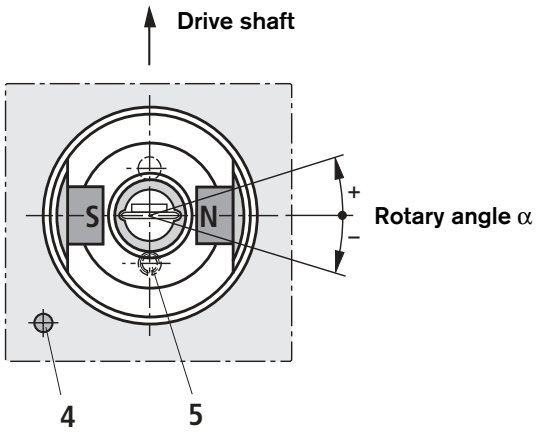
**0** Swivel angle zero point adjustment (–5 V)

### Installation example




**1** Socket head cap screw M6 x 35 with washer (fixing screws, 2 off; included in the scope of supply)
Tightening torque $M_T$ = 15.5 Nm

### Installation position of the magnet (A – A)




**2** Hexagon head cap screw A/F8
(cover fasteners, 2 off)

**3** Countersunk socket head cap screw M6 x 12
(included in the scope of supply)
Tightening torque $M_T$ = 10. 5 Nm

**4** Guide pin for housing

**5** Locating pin for magnet carrier (for clockwise rotating pump)

**6** O-ring 31 .47 x 1 .78-N-FKM80 (included in the scope of supply)

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