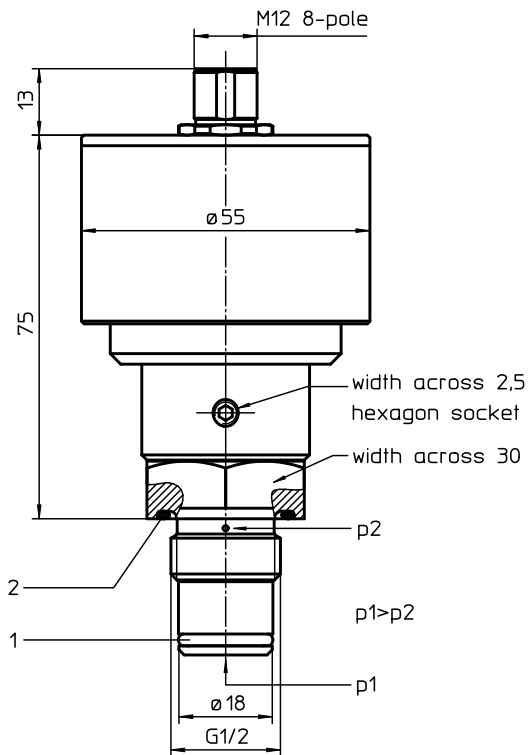


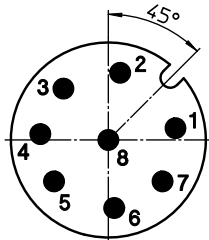
# ELECTRONICAL CLOGGING INDICATOR

## Series VS5 (thread execution)

Sheet No  
**1619 E**



Configuration of M12 connector at VS5



### Connection configuration

- 1 GND/0V
- 2 24VDC current supply
- 3 24V PNP at  $\Delta p$  75%
- 4 24V PNP at  $\Delta p$  100%
- 5 6...20 mA
- 6  $\oplus$ PE
- 7 reserve not connected
- 8 reserve not connected

### 3. Spare parts:

item	qty.	designation	dimension	article-no.	
1	1	O-ring	14 x 2	304342 (NBR)	304722 (FPM)
2	1	O-ring	22 x 2	304708 (NBR)	304721 (FPM)

### 1. Type index: (ordering example)

**VS5. 1,5. V. -. NO. CS. -. -**

1	2	3	4	5	6	7	8
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#### 1 series:

VS5 = electronic clogging indicator with analog output 6...20mA and 2x PNP-switching contacts (75% and 100%)

#### 2 indicator-pressure difference: $\Delta p$ -nominal

1,5 = 1,5 bar      5,0 = 5,0 bar  
2,5 = 2,5 bar      6,0 = 6,0 bar

#### 3 sealing material:

P = Nitrile (NBR),  
V = Viton (FPM)

#### 4 material: (screw-in-housing)

- = standard (aluminium)  
VA = stainless steel

#### 5 contact:

NO = normally opened  
NC = normally closed

#### 6 cold start:

CS = with cold start suppression up to  $25 \pm 3^\circ\text{C}$   
- = without cold start suppression

#### 7 execution:

- = standard

#### 8 connection:

- = without  
GS5 = M12, 8-pole female connector  
SS5 = M12, 8-pol. female connector with 5m cable and 3 installed LED's red/yellow/green (only in combination with contact "NO = normally opened")

### 2. Technical data:

max. operating pressure: 420 bar (stainless steel)  
220 bar (aluminium)

max. pressure difference: 160 bar

operating temperature: - 40°C...+80°C

temperature range of fluid: - 25°C...+ 100°C (NBR)  
- 10°C...+ 100°C (FPM)

other temperature ranges on request  
sealing material: NBR / FPM

further seals on request

power voltage: +24VDC  $\pm 20\%$

current consumption: approx... 25mA + current signal output (measured with 24VDC)

output signal:  $\Delta p$ : 6...20mA, max load: 400 $\Omega$   
5mA by cold start suppression

75% and 100% from  $\Delta p_{\text{nominal}}$  as 24VDC

error of measurement:  $\pm 5\% v. \Delta p_{\text{nominal}}$

operating ability: < 400mA at closed state

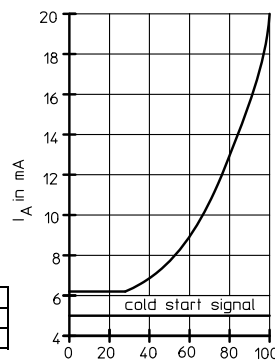
< 1mA at opened state

IP65 (IP67 on request)

fatigue strength: max. 1 Mio load cycles for aluminium

starting torque: 100 Nm (stainless steel)

80 Nm (aluminium)



$\Delta p$ -nominal in %

EDV 05/17

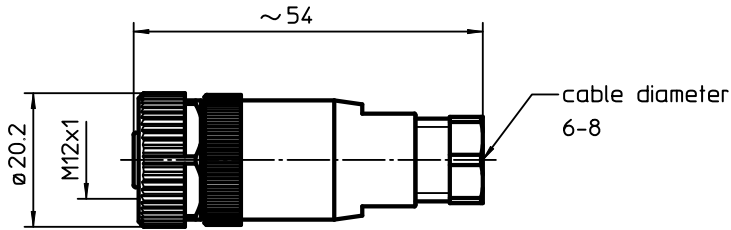
Changes of measures and design are subject to alteration!

## 4. Functions:

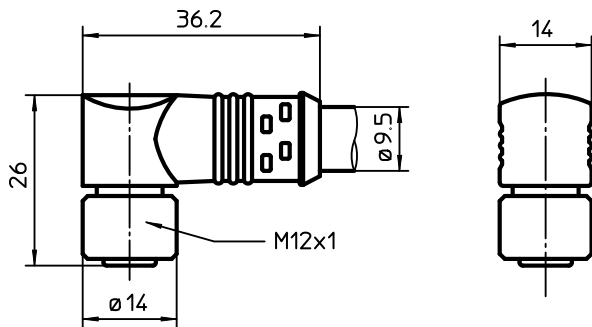
- continuous pressure difference measuring
- cold start indication up to approx. + 25°C
- suppression of pressure peaks
- dust-proof and splash-proof aluminium or stainless steel housing
- interference-free signal transmission over longer distances
- optimal utilization of the filter elements based on a high definition of the measure value within the final measure range
- interchangeable with clogging indicator type AE

## 5. Connection:

GS5 = M12, 8-pole female connector (article-no. 345742)  
 temperature range: -40°C ... +80°C



SS5 = M12, 8-pole female connector with 5m cable and 3 installed LED's red/yellow/green (article-no. 347370)  
 temperature range: -25°C ... +80°C



### Connection configuration

WH	1	GND/0V
BN	2	24VDC current supply
GN	3	24V PNP at $\Delta p$ 75%
YE	4	24V PNP at $\Delta p$ 100%
GY	5	6...20 mA
PK	6	⊕PE
BU	7	reserve not connected
RD	8	reserve not connected

## 6. Accessories for replacing VS1/VS2 by VS5: (To use the previous connector)

The following adapters are available:

- Article No.: 347425, description: GSA1: for replacing VS1 of executions according to data sheet: 44522 / 60551 / 1617
- Article No.: 350639, description: GSA1-X: for replacing VS1 of executions according to data sheet: 49211 / 44368 / 43477
- Article No.: 347428, description: GSA2: for replacing VS2

