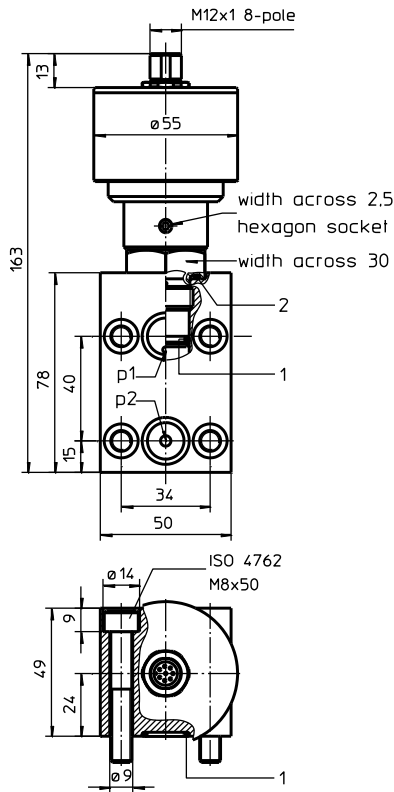


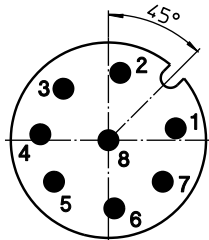
# ELECTRONICAL CLOGGING INDICATOR

## Series VS5 (block execution)

Sheet No  
**1641 D**



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	3	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. B. -**

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: (block)

- = 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:

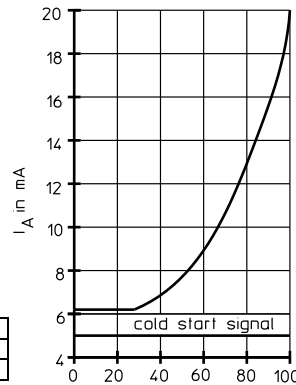
B = block execution

#### 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
protection:	IP65 (IP67 on request)
fatigue strength:	max. 1 Mio load cycles for aluminium



$\Delta p$ -nominal in %

Changes of measures and design are subject to alteration!

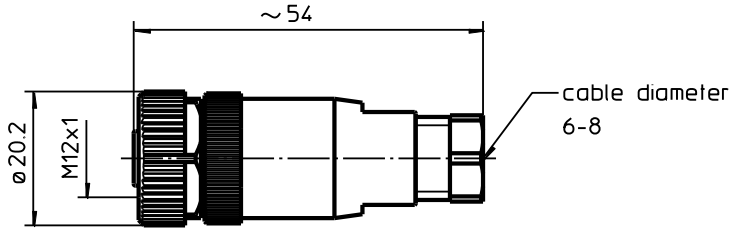
EDV 03/20

## 4. Functions:

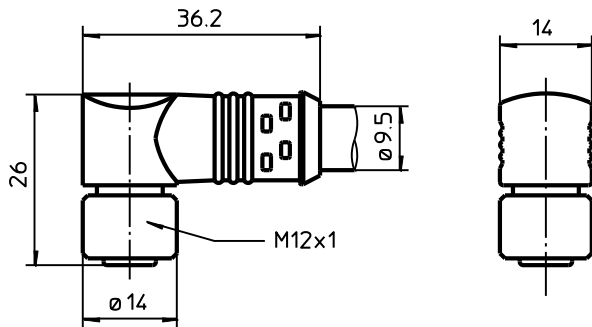
- continuous pressure difference measuring
- cold start indication up to approx. + 25°C
- suppression of pressure peaks
- dust-proof and splash-proof aluminium or stainless steel housing
- interference-free signal transmission over longer distances
- optimal utilization of the filter elements based on 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 / 1607
- 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

