



Versorgung 10 ... 36 V DC
Frequenzbereich 0,5 ... 20.000 Hz
Betriebstemperatur -40 ... +125°C
Schutzart (IEC 529) IP67

Data summary

Power supply 10 ... 36 V DC
Frequency range 0.5 ... 20.000 Hz
Operating temperature -40 ... +260°F
Degree of protection IP67

- Drehzahlerfassung an Zahnrädern mit kleinem Modul und hoher Auflösung
- Anwendung in Fahrzeugen, mobilen Arbeitsmaschinen und hydraulischen Antrieben
- Einbaumaß M18

Applications

- *Speed detection of gearwheels with small module and high resolution.*
- *Applications in vehicles, mobile operating machines and in hydraulic drives*
- *Installation dimension DIN M18*

- Messungen bis 20.000 Hz
- großer Schaltabstand
- Edelstahl

Features

- *Detection up to 20,000 Hz*
- *huge airgap*
- *Stainless steel*

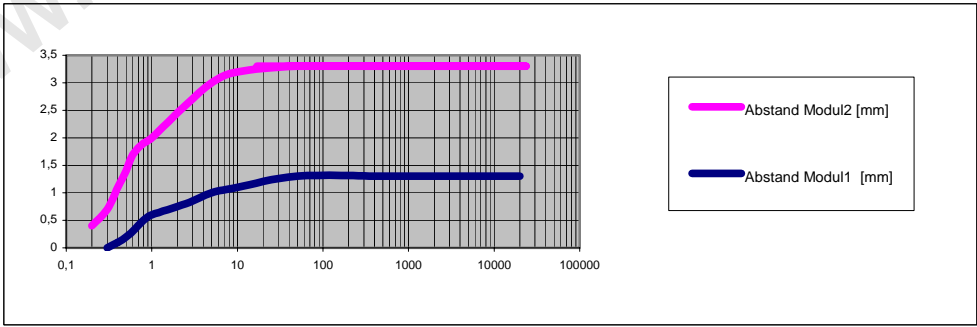


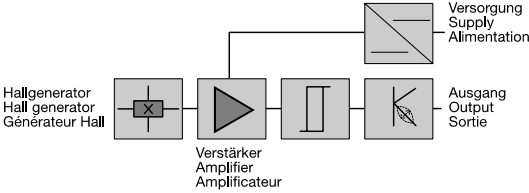
■ Type Overview

Type	Housing	Connection	Output
SDN2.GP06.E2	M18x1x50mm	Kabel 4x0,75mm ² , TPE, 2000mm <i>Cable, 4x0.75mm², TPE, 2000mm</i>	NPN
SDP2.GP06.E2	M18x1x50mm	Kabel 4x0,75mm ² , TPE, 2000mm <i>Cable, 4x0.75mm², TPE, 2000mm</i>	PNP
SDN2.GP06.SB	M18x1x50mm	Stecker M12 <i>Connector M12</i>	NPN
SDP2.GP06.SB	M18x1x50mm	Stecker M12 <i>Connector M12</i>	PNP
SDP2.GR16.08	M18x1,5x50mm	Kabel 4x0,75mm ² , TPE, 540mm, mit SS4P Stecker <i>Cable, 4x0.75mm², TPE, 540mm, with connector SS4P</i>	PNP
SDP2.GR16.E55	M18x1,5x50mm	Kabel 4x0,75mm ² , TPE, 5500mm <i>Cable, 4x0.75mm², TPE, 5500mm</i>	PNP

Scope of supply	Sensor, Kontermuttern (siehe Zeichnung) <i>Sensor, fixing nuts (see drawings)</i>
------------------------	--

■ Mounting

Air gap	3,3 mm @ 1KHz;M2 Basis: Evolventenverzahnung 3.3 mm @ 1KHz;M2 basis: involute gear																								
Mounting principle	Einschraubgewinde DIN type thread																								
Tightening torque	20 Nm 20 Nm																								
Bending radius of connection cable	50 mm 50 mm																								
Housing material	<table border="0"> <tr> <td>SDN2.GP06.E2</td> <td>Edelstahl</td> </tr> <tr> <td>SDP2.GP06.E2</td> <td></td> </tr> <tr> <td>SDN2.GP06.SB</td> <td></td> </tr> <tr> <td>SDP2.GP06.SB</td> <td></td> </tr> <tr> <td>SDP2.GR16.08</td> <td>Messing</td> </tr> <tr> <td>SDP2.GR16.E55</td> <td></td> </tr> <tr> <td>SDN2.GP06.E2</td> <td></td> </tr> <tr> <td>SDP2.GP06.E2</td> <td></td> </tr> <tr> <td>SDN2.GP06.SB</td> <td></td> </tr> <tr> <td>SDP2.GP06.SB</td> <td>Stainless Steel</td> </tr> <tr> <td>SDP2.GR16.08</td> <td></td> </tr> <tr> <td>SDP2.GR16.E55</td> <td>Brass</td> </tr> </table>	SDN2.GP06.E2	Edelstahl	SDP2.GP06.E2		SDN2.GP06.SB		SDP2.GP06.SB		SDP2.GR16.08	Messing	SDP2.GR16.E55		SDN2.GP06.E2		SDP2.GP06.E2		SDN2.GP06.SB		SDP2.GP06.SB	Stainless Steel	SDP2.GR16.08		SDP2.GR16.E55	Brass
SDN2.GP06.E2	Edelstahl																								
SDP2.GP06.E2																									
SDN2.GP06.SB																									
SDP2.GP06.SB																									
SDP2.GR16.08	Messing																								
SDP2.GR16.E55																									
SDN2.GP06.E2																									
SDP2.GP06.E2																									
SDN2.GP06.SB																									
SDP2.GP06.SB	Stainless Steel																								
SDP2.GR16.08																									
SDP2.GR16.E55	Brass																								
Installation drawings	Siehe Seite 5 See page 5																								
Maximum air gap related to pitch and working frequency																									

Circuit diagram	
Power supply	10 ... 36 V DC 10 ... 36 V DC
Current consumption	<20 mA <20 mA

Technisches Datenblatt ■ *Technical Data*

■ *Electrical Specification*

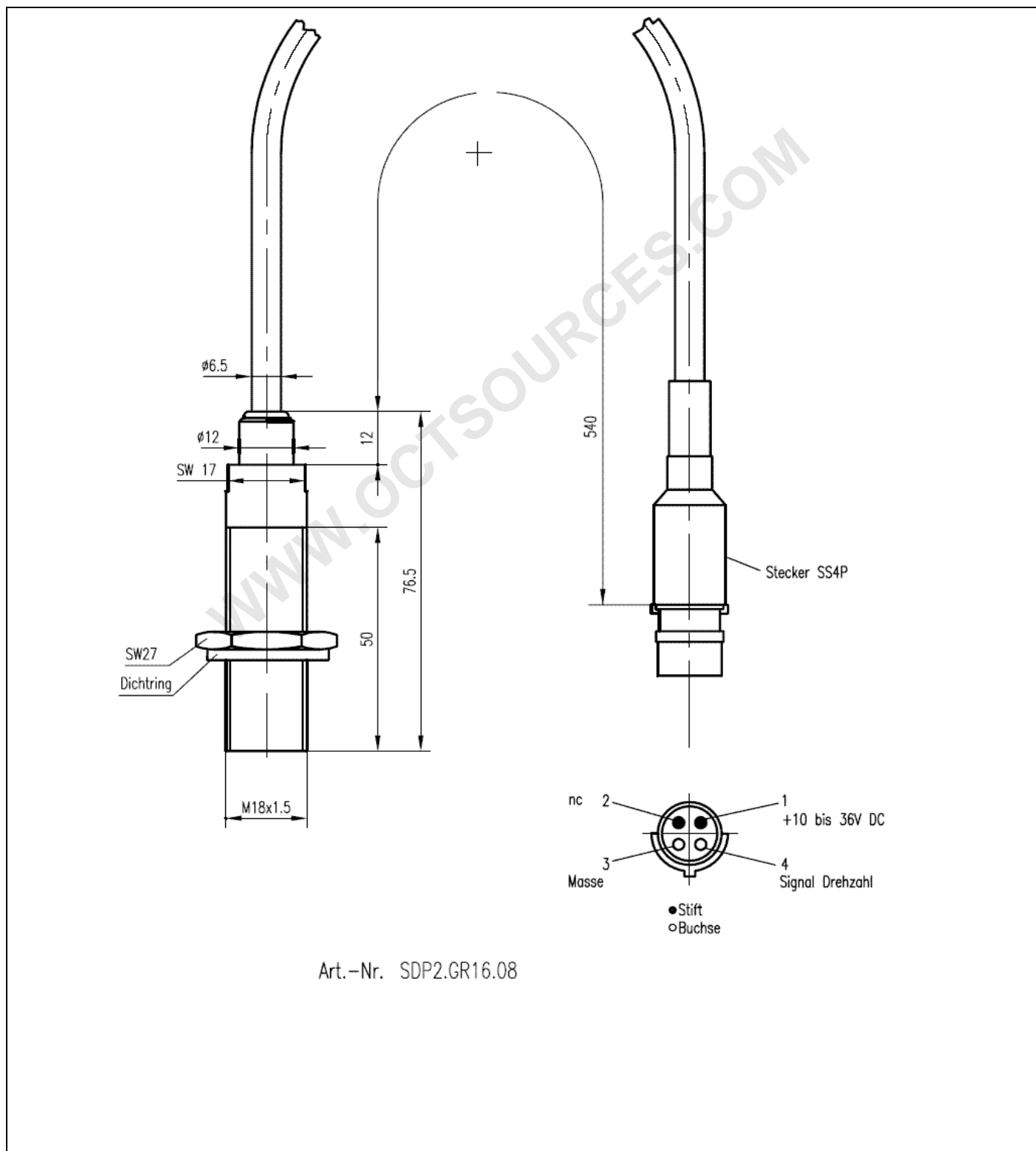
Electrical connection (NPN)		
Frequency range	0,5 ... 20.000 Hz 0.5 ... 20,000 Hz	
Maximum output current	500 mA @ 24 V DC, +25°C 50 mA @ 36 V DC, +125°C	
Output signal level	Low: $\leq 2\text{ V}$; High: $\geq U_b - 2\text{V}$ Low: $\leq 2\text{ V}$; High: $\geq U_b - 2\text{V}$	
Short circuit immunity	Gegen alle Leiter <i>against all terminals</i>	
Reverse polarity protection	Gegen alle Leiter <i>against all terminals</i>	
Calculation of maximum load		(VDC) (mA)
Terminal connection SDN2.GP06.E2, SDP2.GR16.E55 and SDP2.GP06.E2	braun: +8 ... 36 VDC schwarz: Signal blau: Masse weiß: frei brown: +8 ... 36 VDC black: signal blue: ground white: not connected	
Anschlussbelegung SDN2.GP06.SB und SDP2.GP06.SB Terminal connection SDN2.GP06.SB and SDP2.GP06.SB	1: = VDC 2: = Signal 3: = Masse 4: = frei 1: = VDC 2: = signal 3: = ground 4: = nc	
Anschlussbelegung SDP2.GR16.08 Terminal connection SDP2.GR16.08	1: +8 ... 36 VDC 2: frei 3: Masse 4: Signal 1: +8 ... 36 VDC 2: nc 3: ground 4: signal	

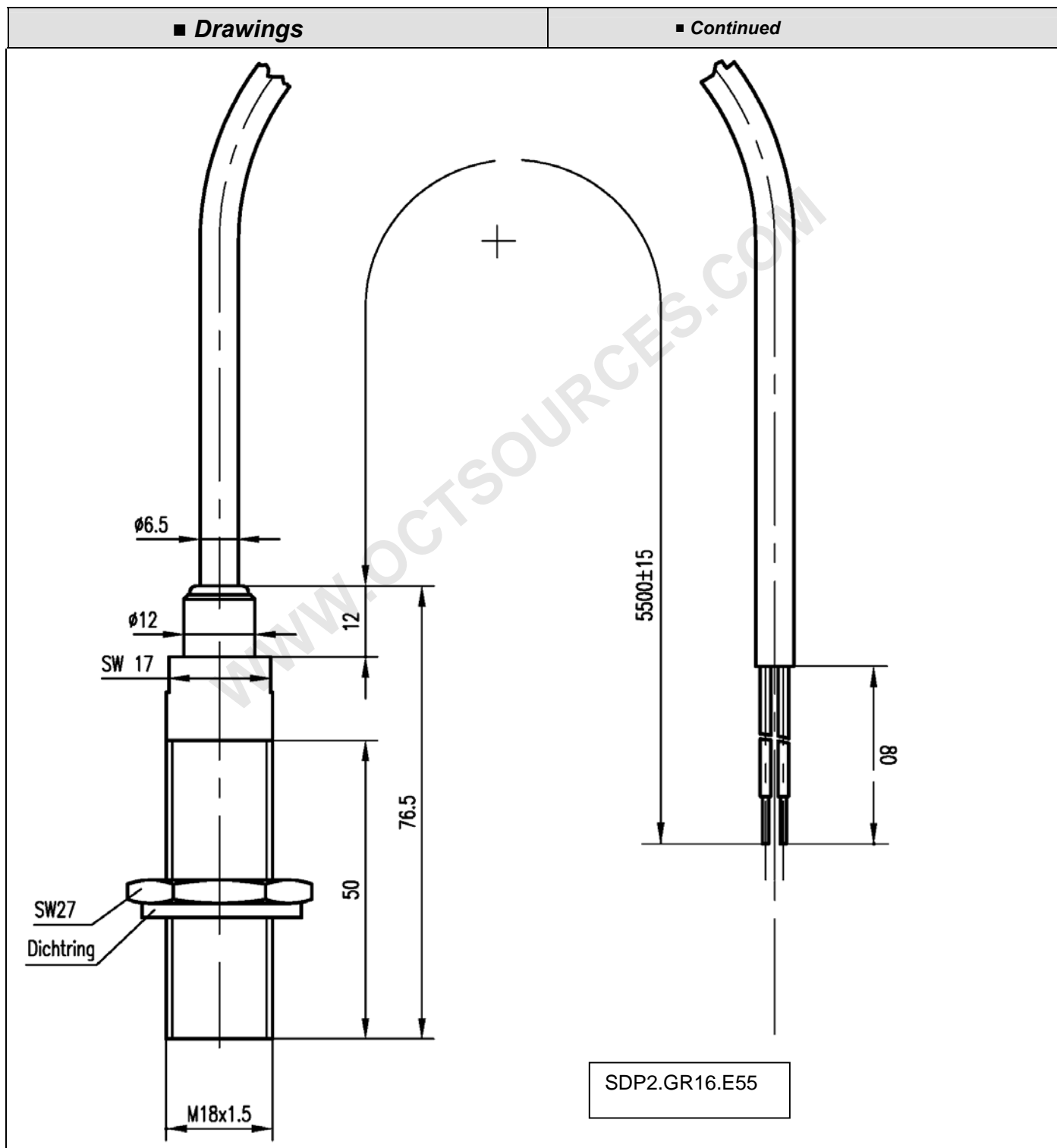


■ **Environmental conditions**

Operating temperature range	-40°... +125°C -40°... +260°F
Max. pressure on sensing surface	20 Bar 20 bar
Degree of protection (IEC 529)	IP67 mit geeignetem Gegenstecker IP67 suitable connector plugged
Vibration resistance (IEC 68-2-6, IEC 68-2-26)	15g @ 1...2.000Hz 15g @ 1...2,000Hz
Shock resistance (IEC 68-2-27)	30g @ 11ms 30g @ 11ms
EMC Standards	EN 50081-2 EN55011 EN55022 EN 50082-2 EN 61000-4-2 (ESD, Level B) EN 61000-4-3 (HF-Field, Level A) EN 61000-4-4 (Burst, Level B) EN 61000-4-6 (HF-Line, Level A)
Approvals / Classifications	 Konformitätserklärung auf Anforderung verfügbar. <i>Declaration of Conformity available on request.</i>

■ Drawings





■ Drawings

■ Continued

