


<p><b>SO</b></p> <p>Oszillatorisch Induktive Drehzahlsensoren</p> <p><i>Oscillatory inductive Speed Sensors</i>)</p> 	<p><b>Technologie</b> <i>Technologie</i></p> <p>Induktiv Oszillatorisch <i>Inductive oscillatory</i></p> <p><b>Messprinzip</b> <i>Princip of measurement</i></p> <p>Induktiv Oszillatorisch <i>Inductive oscillatory</i></p> <p><b>Versorgung</b> <i>Power Supply</i></p> <p>10...35VDC</p> <p><b>Frequenzbereich je nach Typ</b> <i>Frequency range depending upon type</i></p> <p>0...3.000 Hz</p> <p><b>Betriebstemperatur</b> <i>Operating temperature</i></p> <p>-25...+70 °C -13...158°F</p> <p><b>Schutzart (IEC 529)</b> <i>Protection code</i></p> <p>IP 67</p> <p><b>Merkmale</b> <i>Characteristics</i></p> <p>Tastet große Module ab <i>scans large modules</i> Stillstands-(Zero) Erfassung (Speed) <i>Standstill detection</i> Erkennt 0 Hz <i>Recognizes 0 Hz</i></p>
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**Andere Typen auf Nachfrage.**

**Other types on request.**

Induktive oszillatorische Sensoren eignen sich besonders für die einfache Drehzahl- und Stillstandserfassung zur Anzeige an Maschinen und Anlagen. Hiermit lassen sich Nuten, Bolzen, Schraubenköpfe oder ähnlich auf eine Welle aufgebrachte Objekte erfassen. Vorzugsweise sind induktive oszillatorische Sensoren dort eingesetzt, wo nur ein (oder einige wenige) Impuls pro Umdrehung in normaler industrieller Umgebung erfasst werden sollen.

*Inductive oscillatory sensors are particularly suitable for the rotational speed and zero-speed detection and subsequent display on machines and systems. They allow the detection of keyways, bolts, screw heads and similar shaft-mounted objects. Inductive oscillatory sensors are preferably used where only one (or only a few) pulses per revolution need to be detected in a normal industrial environment.*

- **Allgemeine Daten**
- **General Specifications**

<p><b>Typenübersicht</b> Type survey</p> <p><b>Andere Typen auf Nachfrage.</b> Other types on request.</p>	<p><b>Kabeltypen bündig</b> <i>Cable types flush</i></p> <p>Kabel Typ K: 3x0,34mm<sup>2</sup>, ungeschirmt; PUR, ≈2m  <i>Kabel Type K: 3x0,34mm<sup>2</sup>, not shielded; PUR, ≈2m, against motoroil and diesel fuel</i></p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Gehäuse <i>Housing</i></th> <th>Art.Nr. <i>Article number</i></th> <th>Zeichnung <i>Drawing</i></th> <th>Ausgang <i>Output</i></th> </tr> </thead> <tbody> <tr> <td>M12x1x40</td> <td>SON0.GI00.K2</td> <td>11133</td> <td>NPN</td> </tr> <tr> <td>M12x1x40</td> <td>SOP0.GI00.K2</td> <td>11133</td> <td>PNP</td> </tr> <tr> <td>M18x1x55</td> <td>SON0.GP00.K2</td> <td>11136</td> <td>NPN</td> </tr> <tr> <td>M18x1x55</td> <td>SOP0.GP00.K2</td> <td>11136</td> <td>PNP</td> </tr> </tbody> </table> <p><b>Kabeltypen nicht bündig</b> <i>Cable types non-flush</i></p> <p>Kabel Typ K: 3x0,34mm<sup>2</sup>, ungeschirmt; PUR, ≈2m  <i>Kabel Type K: 3x0,34mm<sup>2</sup>, not shielded; PUR, ≈2m, against motoroil and diesel fuel</i></p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Gehäuse <i>Housing</i></th> <th>Art.Nr. <i>Article number</i></th> <th>Zeichnung <i>Drawing</i></th> <th>Ausgang <i>Output</i></th> </tr> </thead> <tbody> <tr> <td>M12x1x40</td> <td>SON0.GI01.K2</td> <td>10538</td> <td>NPN</td> </tr> <tr> <td>M12x1x40</td> <td>SOP0.GI01.K2</td> <td>10538</td> <td>PNP</td> </tr> <tr> <td>M18x1x55</td> <td>SON0.GP01.K2</td> <td>10462</td> <td>NPN</td> </tr> <tr> <td>M18x1x55</td> <td>SOP0.GP01.K2</td> <td>10462</td> <td>PNP</td> </tr> </tbody> </table> <p><b>Steckertypen bündig</b> <i>Plug types flush</i></p> <p>Steckeradapter SB: M12-Serie            Plug connector SB: M12-series</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Gehäuse <i>Housing</i></th> <th>Art.Nr. <i>Article number</i></th> <th>Zeichnung <i>Drawing</i></th> <th>Ausgang <i>Output</i></th> </tr> </thead> <tbody> <tr> <td>M12x1x40</td> <td>SON0.GI00.SB</td> <td>11134</td> <td>NPN</td> </tr> <tr> <td>M12x1x40</td> <td>SOP0.GI00.SB</td> <td>11134</td> <td>PNP</td> </tr> <tr> <td>M18x1x55</td> <td>SON0.GP00.SB</td> <td>11135</td> <td>NPN</td> </tr> <tr> <td>M18x1x55</td> <td>SOP0.GP00.SB</td> <td>11135</td> <td>PNP</td> </tr> </tbody> </table>	Gehäuse <i>Housing</i>	Art.Nr. <i>Article number</i>	Zeichnung <i>Drawing</i>	Ausgang <i>Output</i>	M12x1x40	SON0.GI00.K2	11133	NPN	M12x1x40	SOP0.GI00.K2	11133	PNP	M18x1x55	SON0.GP00.K2	11136	NPN	M18x1x55	SOP0.GP00.K2	11136	PNP	Gehäuse <i>Housing</i>	Art.Nr. <i>Article number</i>	Zeichnung <i>Drawing</i>	Ausgang <i>Output</i>	M12x1x40	SON0.GI01.K2	10538	NPN	M12x1x40	SOP0.GI01.K2	10538	PNP	M18x1x55	SON0.GP01.K2	10462	NPN	M18x1x55	SOP0.GP01.K2	10462	PNP	Gehäuse <i>Housing</i>	Art.Nr. <i>Article number</i>	Zeichnung <i>Drawing</i>	Ausgang <i>Output</i>	M12x1x40	SON0.GI00.SB	11134	NPN	M12x1x40	SOP0.GI00.SB	11134	PNP	M18x1x55	SON0.GP00.SB	11135	NPN	M18x1x55	SOP0.GP00.SB	11135	PNP
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**Andere Typen auf Nachfrage.**  
**Other types on request.**

**Steckertypen nicht bündig**

*Plug types non-flush*

Steckeradapter SB: M12-Serie

Plug connector SB: M12-series

Gehäuse <i>Housing</i>	Art.Nr. <i>Article number</i>	Zeichnung <i>Drawing</i>	Ausgang <i>Output</i>
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**Frequenzbereich**

*Frequency Range*

Gehäuse <i>Housing</i>	Frequenzbereich <i>Frequency Range</i>
M12x1x40	0...3.000 Hz
M18x1x55	0...2.000 Hz

**Schalt-/ Einbaubabstand**

*Air gap*

Abstand <i>Air gap</i>	Art.Nr. <i>Article number</i>
8mm @ 1kHz	SON0.GP01.K2 SOP0.GP01.K2 SON0.GP01.SB SOP0.GP01.SB
5 mm @ 1kHz	SON0.GP00.K2 SOP0.GP00.K2 SON0.GP00.SB SOP0.GP00.SB
4 mm @ 1kHz	SON0.GI01.K2 SOP0.GI01.K2 SON0.GI01.SB SOP0.GI01.SB
2 mm @ 1kHz	SON0.GI00.K2 SOP0.GI00.K2 SON0.GI00.SB SOP0.GI00.SB


**Gehäusewerkstoff**  
**Housing material**

Messing, verchromt  
*brass, chrome plated*

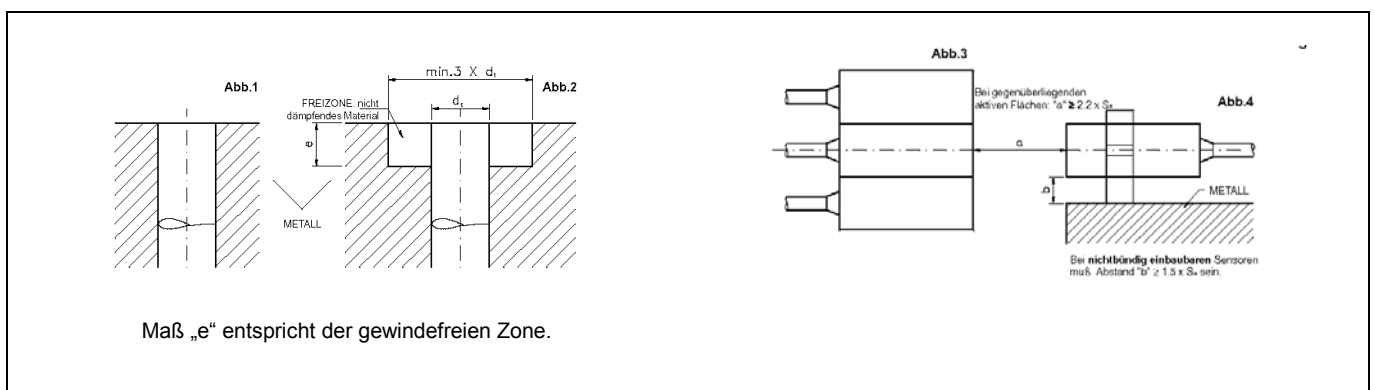
■ Elektrische Daten  
 ■ Electrical Specifications

Messprinzip <i>Principle of measurement</i>	Oszillatorisch induktiv oscillatory inductive
Frequenzbereich je nach Typ <i>Frequency range depending upon type</i>	0...3.000 Hz
Prinzipschaltbild <i>Circuit diagramm</i>	
Versorgung <i>Power supply</i>	10...35 VDC
Stromaufnahme <i>Current consumption</i>	15 mA @ 24VDC, 25°C
Strombelastbarkeit [I <sub>max</sub> ] <i>Current consumption</i>	250 mA @ 24VDC, 25°C
Ausgang <i>Output</i>	PNP / NPN
Anschlussschaltbild <i>Electrical connection</i>	
Kurzschlußfestigkeit <i>Short circuit proof</i>	Ja yes
Verpolungsschutz <i>Reverse polarity protection</i>	Ja yes
Berechnung der maximalen Last <i>Calculation of maximal load</i>	$R_L = U_b \text{ (VDC)} / I_{max} \text{ (mA)}$
Anschlussbelegung <i>Terminal connection</i>	(1) braun = Versorgung (+) (3) blau = Masse (0) (4) schwarz = Signal - Ausgang  (1) brown = Power supply (+) (3) blue = Ground (0) (4) black = Signal - Output

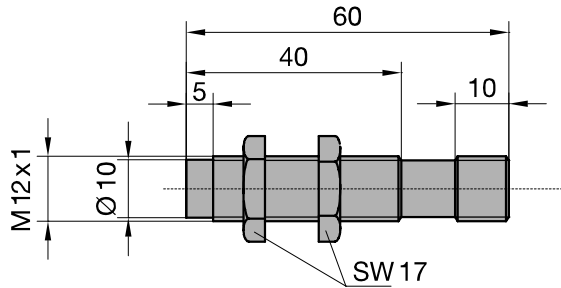
■ Einsatzbedingungen  
 ■ Environmental Conditions

Betriebstemperatur <i>Operating temperature</i>	-25°...+70°C (-13...158°F)
Lagertemperatur <i>Storage temperature</i>	-25°...+70°C (-13...158°F)
Schutzart (IEC 529) <i>Protection code acc. IEC 529</i>	IP 67
zulässiges Anzugsdrehmoment <i>Max. torque</i>	16 Nm @ M12 28 Nm @ M18
EMV Normen <i>EMC Standards</i>	IEC 947-5-2 (Low Voltage Agreement Group Test Instructions)
Zulassungen / Baumusterprüfung <i>Approvals / Classifications</i>	 Konformitätserklärung auf Anforderung verfügbar. <i>Declaration of Conformity available on request.</i>

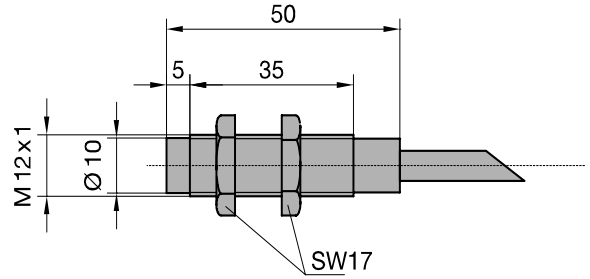
■ Einbau der Sensoren  
 ■ Mounting principle



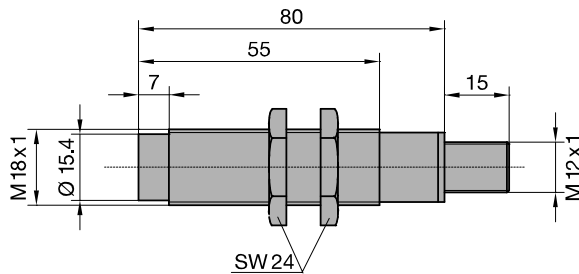
- Zeichnungen
- Drawings



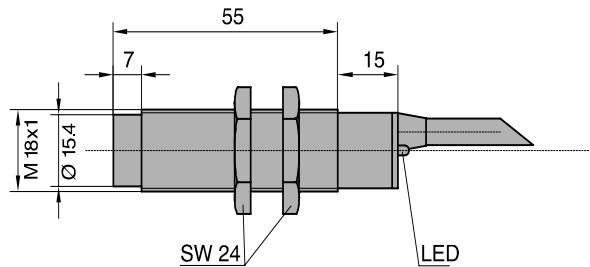
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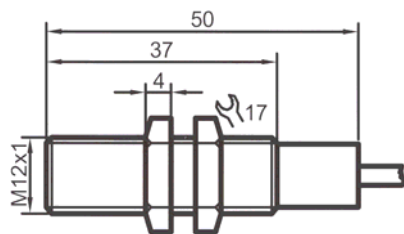
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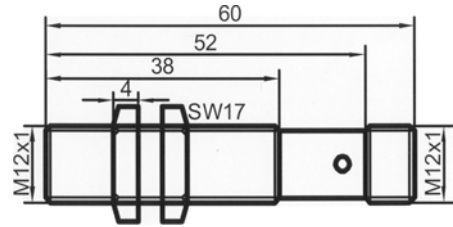
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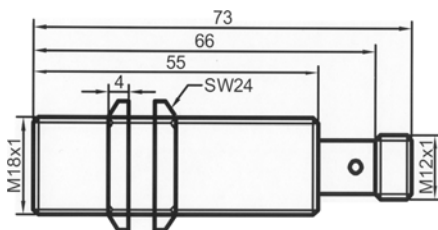
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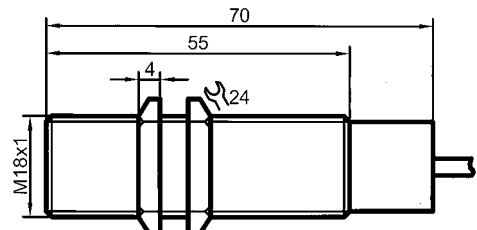
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