

Induktive Sensoren  
Inductive sensors  
DéTECTEURS inductifs

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# IR12V.P04S-11177442

Induktive Näherungsschalter

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Inductive proximity switch

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DéTECTEURS de proximité inductifs

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11177442



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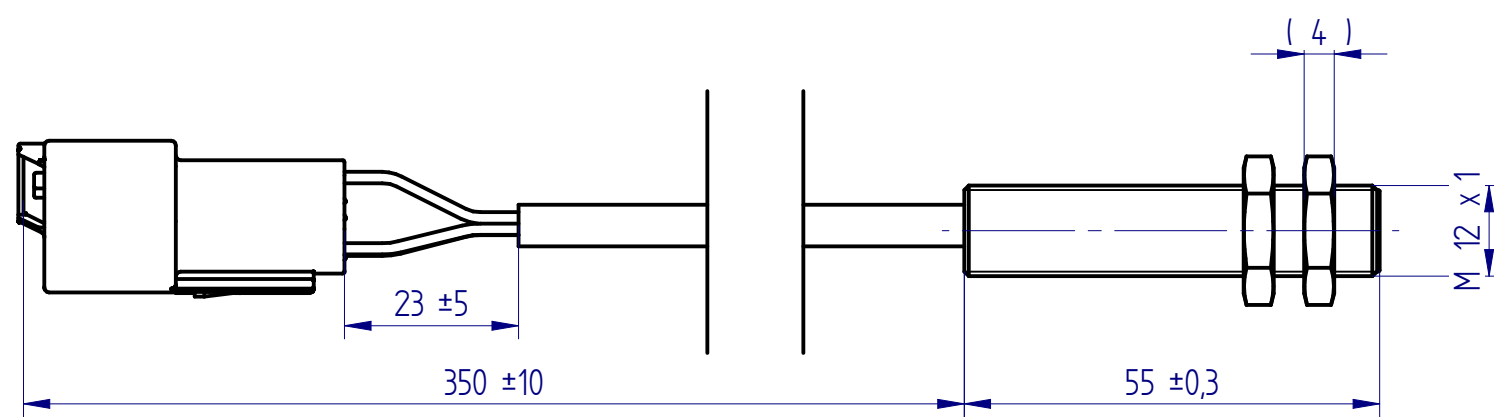
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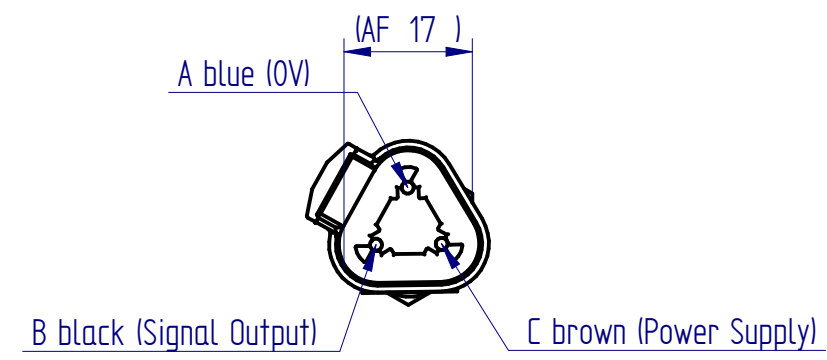
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15. Apr. 2019 06Z6

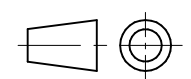
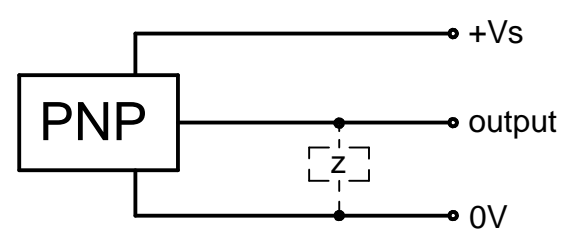


Connector: Deutsch DT04-3P



NOTES:

1. ELECTRICAL SPECIFICATION:
  - a. VOLTAGE: 7V...48 VDC (12V / 24V vehicles supply; UL Class2 or device shall be protected by an external R/C or listed Fuse, rated max. 100W/Vp or max. 5A below 20V; UL rated supply voltage max. 42 VDC)
  - b. SUPPLY CURRENT: ≤ 10mA
  - d. SENSING DISTANCE Sn: 4mm
  - e. OUTPUT CIRCUIT: PNP
  - f. MAX. OUTPUT CURRENT: ≤ 200mA
  - g. TEMPERATURE DRIFT: +/- 10%
  - h. VOLTAGE DROP: <2VDC
  - i. SWITCHING FREQUENCY: <2000Hz
  - j. REVERSE POLARITY PROTECTION: yes
  - k. SHORT CIRCUIT PROTECTION: yes
2. MECHANICAL DATA:
  - a. CYLINDRICAL THREADED (M12 x 1)
  - b. HOUSING MATERIAL: BRASS NICKEL PLATED
  - c. CABLE: PUR 3x0.75mm<sup>2</sup>
  - d. MAXIMUM INSTALLATION TORQUE: 15Nm (at 10mm of front part and at 13mm of back part the tightening torque is reduced by 30%)
3. AMBIENT CONDITIONS:
  - a. STORAGE TEMPERATURE: -40°C...+85°C
  - b. OPERATING TEMPERATURE: -40°C...+85°C
4. SENSOR MEETS THE FOLLOWING REQUIREMENTS EMC (no ECE Type Approval)
  - a. ELECTROMAGNETIC SUSCEPTIBILITY:
    - ISO 11452-4, BCI (2011-12) Frequency Range: 0.5...400MHz, 200mA (AM)
    - ISO 11452-2, Free Field (2004-11), Frequency Range: 200...1000MHz (AM)
    - 800...2700MHz (PM); 200...2700MHz (CW)
  - b. COMPONENT LEVEL EMISSIONS: CISPR 25 (2002)
    - Broadband: 0.53...30MHz: 24dBµV/m; 30...1000MHz: UN/ECE R10 Rev 5 ch. 6.5.2.1
    - Narrowband: 0.53...30MHz: 15dBµV/m, 30...1000MHz: UN/ECE R10 Rev 5 ch. 6.6.2.1; 1159...1590MHz: 10dBµV/m; 2320...2500MHz: 25dBµV/m
  - c. ELECTROSTATIC DISCHARGE (UN-POWERED): ISO 10605
    - Air max. +/- 15kV, Contact max. +/- 15kV
    - ELECTROSTATIC DISCHARGE (POWERED): ISO 10605
    - Air max. +/- 15kV, Contact max. +/- 20kV
  - d. FAST TRANSIENT (24V): ISO 7637-3 Pulse b/a
  - e. POSITIVE / NEGATIVE SWITCHING SPIKES (12V / 24V): ISO 7637-2 Pulse 3b/3a, Status A
  - f. PARALLEL INDUCTIVE LOAD SWITCHING (12V / 24V): ISO 7637-2 Pulse 1, Status C
  - g. LOAD DUMP (24V) CLAMPED 58V: ISO7637-2 Pulse 5b (ISO 16750-2), Status A
  - h. DC MOTOR ACTING AS A GENERATOR TRANSIENT (12V / 24V): ISO 7637-2 Pulse 2b, Status C
  - i. WIRING HARNESS INDUCTIVE SWITCHING (12V / 24V): ISO 7637-2 Pulse 2a, Status A
  - j. STARTING PROFILE (12V / 24V): ISO7637-2 Pulse 4 (ISO 16750-2), Status C/B
5. SENSOR MEETS THE FOLLOWING REQUIREMENTS ENVIRONMENTAL
  - a. PROTECTION CLASS: IP69K (FRONT PART) / IP68 (1,5m/ 24h)
  - b. RANDOM VIBRATION: IEC 600068-2-64: 10...2000Hz, 117.1m/s<sup>2</sup> (rms), 8h/axis
  - c. OPERATING SHOCK: IEC 600068-2-27: 10Shocks/axis, 50g, 11ms
  - d. BENCH HANDLING SHOCK: IEC 60068-2-31: 1m / 3 Drops per side



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	Mod	Rev	Drawn	Approved	Mod	Rev	Drawn	Approved		
		a	25.01.2018	ts		25.01.2018	rou	deburred	Project	TLD 12er 18er Agri
		b	23.03.2018	ts		23.03.2018	rou		Replaced by	
	c	17.07.2018	ts	17.07.2018	linz	Replacement for				
<b>IR12V.P04S-11177442</b>								Scale	1:1	
								Drawn	23.01.2017	ts
								Checked	25.01.2018	rou
								Approved	25.01.2018	rou
<b>Baumer Electric AG</b> Postfach · Hummelstrasse 17 · CH-8501 Frauenfeld Phone +41 (0)52 728 11 22 · Fax +41 (0)52 728 11 44								11177442	112.3120	C