Capacitive level probe

- Typenreihe Leveltec M -









Example: Leveltec M with different adaptions

FEATURES

- LEVEL DETECTION IN FLUIDS, PUMP PROTECTION, PROTECTION AGAINST DRY RUN, EMPTY / FULL INDICATION
- INSTALLATION WITH DIFFERENT PROCESS CONNECTIONS WITH RESPECT OF HYGIENIC ASPECTS
- CONSTANT SWITCH-POINT WITHOUT ANY ALIGNMENT
- DIRECT CONNECTION TO SPS OR PCS

DESCRIPTION

The level switch Leveltec M is used in nonconductive media for the level detection and as dry running protection for pumps. The capacitive measuring procedure enables a wide range of applications also for varying media. Crusts, foam and condensate are not detected.

By its M12x1,5 thread the Leveltec M is best suitable for small pipe dimensions and narrow built-in situations in hygienic applications. Due to its resistance at high cleaning temperature sterilization and CIP-cleaning processes are executable.

The output signal can directly be connected to a SPS or PCS for further processing. The adaption to the process according to hygienic standards is ensured by adequate weld-in parts and by flush mounting.

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TECHNICAL DATA

Housing	
Material codes	Housing 1.4301 / 1.4305
	Threaded connector end WS 22, 1.4571
	Coupling part PEEK
Process connection	M 12x1,5 with metallic sealing cone
	Coupling part PEEK (conform to FDA standards)
	Connection head stainless steel V2A 1.4305
El. Connection	- Cable gland: M16 x 1,5 -optional: M12 plug in - strip terminal
Operational temperature	Process temp.: -20 +100°C Ambient temp.: -20 + 80°C Cleaning temp.: 0 +140°C, max.30 Min.
Operational pressure	max. 10 bar (with zem / TP 16)
Switching-function	High- / Low level control are determined by the polarity of the auxiliary supply, Constant indication by dichromatic LED
Time delay	0,1 s preset
Output signal	Active output 50 mA max., short-circuit-proof
Supply voltage	1035 V DC, max. 25 mA without switching load
Interference resistance	Conform to CE
Installation position	optimal: horizontal mounting, sensor tip should immerse almost completely
Weld-in accessories	 zem / TP 16, metallic sealing M12x1,5 Connecting adapters: VARIVENT DN 50/40 (d = 68 mm), pipe screwing DIN 11851, starting DN 40 all types are installed in pipes DIN 11851, adapter sleeves for vibrating forks
<u>OPTIONS</u>	external switching status indication by LED

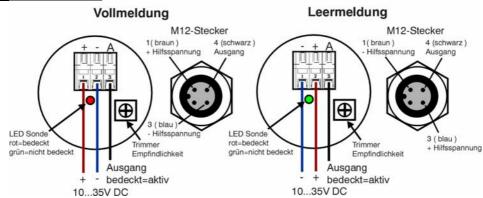
TECHNICAL SPECIALTIES

Leveltec M	Reliable detection at water contents in the medium of >20%, by factory the DK-value is set to ϵ = 20
	Sensitivity adjustment at trimmer (optional, on the circuit board): - Higher trigger sensitivity > turn trimmer in + direction (in case of low or no water content of medium) - Low trigger sensitivity > turn trimmer in – direction (in case of crusting or foam media)

Installation advices

- No use of isolating sealing materials.
- The PEEK coupling part should immerge almost completely in the media to ensure proper function.
- Recommended is horizontal installation e.g. in pipes with '10h' or'14h' position respectively.
- With acid or aqueous media mismeasurements can happen if strong crusts occur.

ELECTRICAL CONNECTION

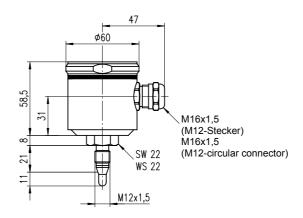


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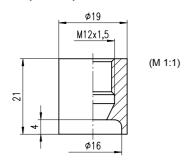
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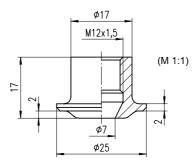
DIMENSIONAL DRAWINGS



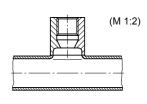
Prozessanschlussadapter adapters for process-connection



zem / TP26 Einschweißmuffe TP26 mit Schweißbund welding socket TP26 with welded collar

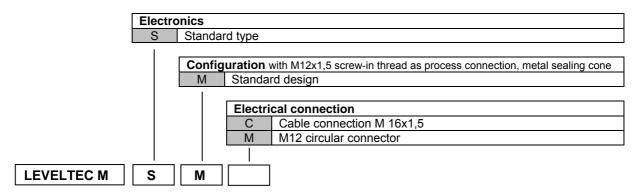


zem / TP26K Einschweißmuffe TP26K mit Kragen welding socket TP26K with flange



ztm / DN... - M12 Einschweiß-T-Stück mit zem/TP26 DN 15 ... 65 T-piece with zem/TP26 DN 15 ... 65

ORDER INFORMATION



Our products are constantly in further development, therefore subjects to modifications.