

## Uronjene Magnetne Sonde Serija T-20..

### Osnovni podaci

T20 uronjene magnetne sonde se koriste za ustanovljavanje vrednosti nivoa popune u rezervoarima za tecne supstance. Materijali koji se koriste uključuju PVC, PE, PPH, PTFE, MESING ili nerđajući celik(1.4571), u zavisnosti od zahteva. Zbog toga su uronjene magnetne sonde pogodne za korišćenje sa visoko agresivnim supstancama.

Prstenasti magnet koji uključuje kontakt na cevici je ugradjen u provodnu cev, i umetnut u plovak na provodnoj cevi.

Kontakti izmedju prekidača su hermeticki zatvoreni gasni kontakti, koji mogu biti postavljeni kao kontaktki za prelaz ili postavku/prekid.

Uz pomoc ELB magnetne uronjene sonde za ogranicavanje vrednosti moguće je rukovati odredjenim brojem prekidača konsektivno sa jednim plovkom i, u tom slucaju, moguće je izmeriti broj nivoa tecnosti. Monostabilni kontakti su ugradjeni kao standardni, to jest, sistem za prekidanje se menja kada se kontaktom upravlja preko magnetna koji je ugradjen u plovak. Ako magnet predje iznad ili ispod kontakta, kontakt ce se vratiti u stanje mirovanja. Ako kontakt treba da se zadrži, potreban je prsten za podešavanje. Ako nekoliko nivoa tecnosti treba da se izmere, nekoliko plovaka i prstenova za podešavanje je neophodno.

Ako je potrebno, bistabilni kontakti su dostupni, to jest, ovim kontaktima se upravlja i zadržava ovakvo stanje dok se kontaktom ponovo rukuje.

Obratite pažnju! Ovi kontakti su osetljivi na potrese i zbog toga ne treba da se koriste u slucaju vecih potresa i turbulencija.

Uronjene sonde sa test-oznakom [paragraf 19 h u WHG - Zakonu o vodnim izvorima u Nemackoj] za korišćenje u tecnostima koje oštecuju vodu se nalaze u sekciji 1.

- Ne zavisi od
  - Pritiska, - Temperature, - Pene,
  - Provodljivosti, - Izolatora
- Lako za instalaciju
- Velika moc podešavanja
- Visoka moc reproduktivnosti

### Detalji o sistemu

Uronjene magnetne sonde ove serije su sacinjene od tipova T-20..., T-20 (EX) (vidite sekciju 6) i T-20-F... (vidite sekciju 01). Da bi se zaštitile veze od varnicenja i varenja zbog prebacivanja induktivnih tereta, kao što su prolazi ili solenoidni ventili, preporucujemo naš relej za zaštitu veze, tip KR-16... ili unutrašnji bezbedan relej ER-14... (vidite sekciju 10).

Specijalni modeli dostupni na zahtev

## Immersible Magnetic Probes Type series T-20...

### General Data

T20 immersible magnetic probes are used for ascertaining the filling level limit values in tanks for liquid media. The materials used include PVC, PE, PPH, PTFE, brass or stainless steel (1.4571), depending on requirements. Through this the immersible magnetic probes are suitable for use with highly aggressive media.

A ring magnet which switches the reed contacts built into the guide pipe is inserted into the float on the guide pipe. The switch contacts are hermetically sealed gas contacts which can be set up as changeover contacts or make or break contacts.

With the E.L.B. limiting value magnet immersible probe it is possible to operate a number of switch contacts consecutively with one floater and, therefore, to measure a number of liquid levels. Mono-stable contacts are in-built as standard, i.e. the switch mode changes when the contact is operated by the magnet which is built into the floater. If the magnet goes above or below the contact, the contact will return to idle mode. If the contact is to be retained, an adjusting ring is required. If several levels are to be ascertained, several floats and adjusting rings are necessary.

If required, bistable contacts are available, i.e. these contacts are operated and maintain this state until the contact is operated again. Please note! These contacts are shock-sensitive and therefore should not be used in the case of heavy turbulence.

Immersible probes with test mark [parag. 19 h according to WHG (German Water Resources Law)] for use in water-endangering, non-combustible liquids are given under section 1.

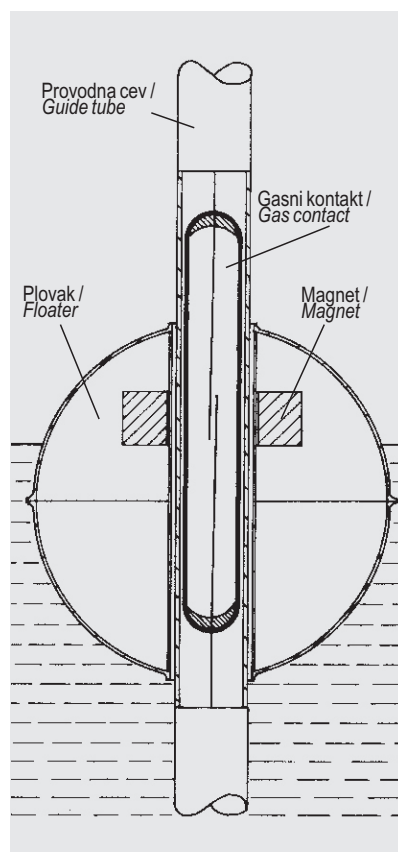
- Independent of
  - Pressure, - Temperature, - Foam
  - Conductivity, - Dielectrics
- Easy to install
- High switching capacity
- High reproducibility

### System Details

The immersible magnetic probe type series is made up of the types T-20..., T-20...EX (see section 06) and T-20-F... (see section 01). In order to protect the contacts from sparking and welding due to switching inductive loads such as gates or solenoid valves, we recommend our contact protection relay, type KR-16... or intrinsically safe relay ER-14... (see section 10).

Special models on request

## Nacin rada Function



## Tehnicki podaci

<b>Spoj</b>	Poliester-kutija Aluminijum-kutija
<b>Sistem zaštite EN 60529</b>	IP 65 kutija spoja IP 68 provodna cev
<b>Utikac konektor</b>	Trostruki, šestostruki
<b>Navoj veze</b>	G 1/8", G 3/8", G 1/2", G 3/4", G 1", G 1 1/4", G 1 1/2", G 2", G 3"
<b>Na zahtev</b>	Druge velicine, kao NPT
<b>Kabl</b>	LiYY max. 80 °C PTFE gajtan, 0,24mm <sup>2</sup> Silikon max. 150 °C
<b>Dužina cevi</b>	Max. 1000mm (cev Ø8mm) Ostale 6000mm
<b>Operativna temperatura</b>	Max. +60...+150 °C U zavisnosti od modela Min. -20...-10 °C U zavisnosti od modela Više/níže temperature na zahtev
<b>Operativni pritisak</b>	Max. 20 bar u zavisnosti od modela
<b>Gustina supstance</b>	Vidite podatke o plovku
<b>Viskoznost</b>	<100cp
<b>Histereza uključivanja</b>	Pribl. 2...5mm Razlike u nivou
<b>Obim retencije</b>	Pribl. 12mm
<b>Broj veza</b>	Max. 8 promenljivih veza. 10 NO, 7 NC
<b>Funkcija veza na zahtev</b>	U odnosu na povećanje nivoa; standardna; monostabilna; bistabilna;
<b>Minimalni razmak veza</b>	70mm promenljiva veza 35mm NO/NC 50 VA 45mm NO/NC 100VA ostale na zahtev
<b>Voltaža uključenja</b>	Max. 250 V
<b>Struja uključenja</b>	Max. 1 A (promenljiva veza) Max. 2 A (NO/NC)
<b>Kapacitet uključivanja</b>	Promenljiva veza 60 W/VA NO 100 W/VA NC 60 W/VA

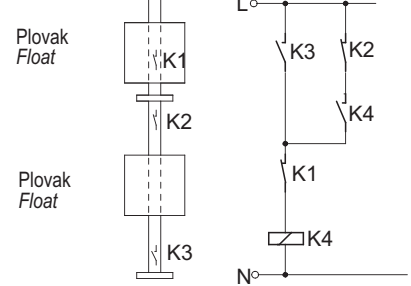
## Technical Data

<b>Connector</b>	Polyester box Aluminum box
<b>System of protection EN 60529</b>	IP 65 connector box IP 68 guide tube
<b>Connector plug</b>	triple, sixfold
<b>Connecting thread</b>	G 1/8", G 3/8", G 1/2", G 1", G 1 1/4", G 1 1/2", G 2", G 3" other sizes, e.g. NPT
<b>On request</b>	
<b>Cable</b>	LiYY max. 80 °C PTFE cord, 0,24 mm <sup>2</sup> Silicon max. 150 °C
<b>Pipe length</b>	max. 1000 mm (pipe Ø 8 mm) others 6000 mm
<b>Operating temperature</b>	max. +60...+150 °C depending on model min. -20...-10 °C depending on model higher/lower temperatures on request
<b>Operating pressure</b>	max. 20 bar depending on model
<b>Media density</b>	see float data
<b>Viscosity</b>	< 100 cp
<b>Switching hysteresis</b>	approx. 2...5 mm level difference
<b>Retention range</b>	approx. 12 mm
<b>Number of contacts</b>	max. 8 change-over contacts, 10 NO, 7 NC
<b>Contact function</b>	with reference to increasing level; standard: monostable bistable
<b>On request</b>	
<b>Minimum contact gap</b>	70 mm change-over contact 35 mm NO/NC 50 VA 45 mm NO/NC 100 VA others on request
<b>Switching voltage</b>	max. 250 V
<b>Switching current</b>	max. 1 A (change-over contact) max. 2 A (NO/NC)
<b>Switching capacity</b>	change-over contact 60 W/VA NO 100 W/VA NC 60 W/VA

## Primer veze Connection Examples

### Ispunjavanje sa senzorom prepunjenja

#### Fill-up with overflow sensor



sa 2 plovka

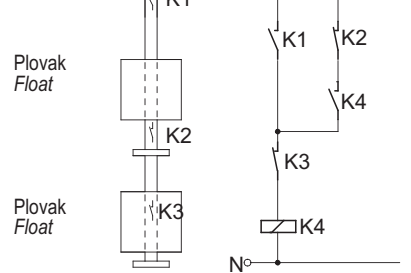
K1 za ojacani plovak  
K2 ogranicen na gore, K3 ogranicen na dole  
K4 samodrzeca veza

With 2 floats

K1 for supported float  
K2 limited upwards, K3 limited downwards  
K4 self-holding contact

### Ispumpavanje sa senzorom na suvo

#### Pump out with dry-up sensor



sa 2 plovka

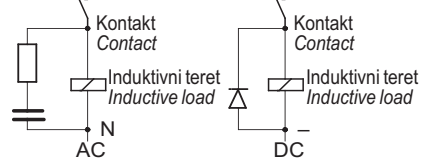
K1 ogranicen na gore, K3 ogranicen na dole  
K2 ogranicen na dole  
K4 samodrzeci kontakt

With 2 floats

K1 limited upwards, K3 limited downwards  
K2 limited downwards  
K4 self-holding contact

### Prekidac sa ekstenzijom za varnice

#### Spark extinction switch



## Tip plovka / Float Type

Tip	Material	A	B	C	ET	Min. Temp	Max. Temp	Max. prit. Max. Press.	Min. gust. Min. Density
02	1.4571	9,4	42	44	25	-10 °C	+120 °C	16 bar	0,66 g/cm <sup>3</sup>
03	1.4571	15	52	52	33	-10 °C	+150 °C	20 bar	0,87 g/cm <sup>3</sup>
04	1.4571	15	62	62	35	-10 °C	+150 °C	20 bar	0,72 g/cm <sup>3</sup>
05	1.4571	18	96	80	60	-20 °C	+150 °C	20 bar	0,89 g/cm <sup>3</sup>
06	1.4571	18	110	94	65	-20 °C	+150 °C	20 bar	0,72 g/cm <sup>3</sup>
07	1.4571	23	102	105	50	-20 °C	+150 °C	20 bar	0,58 g/cm <sup>3</sup>

Tip	Material	A	B	C	ET	Min. Temp	Max. Temp	Max. prit. Max. Press.	Min. gust. Min. Density
08	1.4571	10	31	27	24	-10 °C	+120 °C	10 bar	0,92 g/cm <sup>3</sup>
09	1.4571	15	52	44	38	-10 °C	+150 °C	15 bar	0,87 g/cm <sup>3</sup>
10	PE	19	63	52	40	-20 °C	+80 °C	6 bar	0,72 g/cm <sup>3</sup>
11	PE	25	80	78	40	-20 °C	+80 °C	6 bar	0,60 g/cm <sup>3</sup>
12	PPH	10	31	19	26	-10 °C	+90 °C	3 bar	1,00 g/cm <sup>3</sup>
13	PPH	10	31	25	19	-10 °C	+90 °C	3 bar	0,95 g/cm <sup>3</sup>
14	PPH	19	65	52	40	-20 °C	+90 °C	6 bar	0,72 g/cm <sup>3</sup>
15	PPH	25	80	78	40	-20 °C	+90 °C	6 bar	0,59 g/cm <sup>3</sup>
16	PTFE	25	80	80	51	-20 °C	+120 °C	3 bar	0,79 g/cm <sup>3</sup>
17	PVC	25	80	78	42	-20 °C	+60 °C	6 bar	0,63 g/cm <sup>3</sup>

Dimenzije u mm / Dimensioning in mm

ET = dubina uranjanja (pri gustini od 1 g/cm<sup>3</sup>) /  
depth of immersion (at density 1 g/cm<sup>3</sup>)

Moguće izmene bez prethodne najave.

Subject to change without prior notice,  
errors excepted.