

BEZBEDNOSNA TEHNOLOGIJA
ZA ZAŠTITU
ŽIVOTNE SREDINE

SAFETY AND
ENVIRONMENTAL
TECHNOLOGY

E.L.B.
FÜLLSTANDSGERÄTE

Prepunjavanje uređaja za odsecanje (Senzor nivoa) T-20 F

(Regulator Plovka)

sa opštim odobrenjem za
konstruisanje Z-65.11-404

Senzori nivoa tipa T-20 F su odobreni od strane DIBT (Nemački Institut za Strukturni Inženjering) kao prekidači za granicanje nivoa tečnosti za zaštitu od preopterećenja rezervoara za čuvanje tečnosti koje zagadjuju vodu.

Plovak menja kontakt sa cevnicom koja je postavljena u provodnoj cevi kada se podigne nivo tečnosti.

Promena otpora u kolu senzora je rezultat toga što je operacija promene procenjena a relej za izlaz aktiviran. Delovi senzora nivoa koji dolaze u kontakt sa tom sredinom su u potpunosti napravljeni od PE/ PP / PVC. Zbog toga senzori nivoa T-20 F su potpuno odgovarajući za korišćenje u rezervoarima za čuvanje visoko agresivnih supstanci.

- Lako za instalaciju
- Otporan dizajn
- Malih dimenzija
- Niske cene za održavanje sistema
- Mere protiv smetnji
- Visoka hemijska izdržljivost
- Podesivi prekidači
- Različiti načini povezivanja (stabilizator / utikac / kabl)
- Za korišćenje u kategoriji 2 (Bivša zona 1) (u kombinaciji sa IExI relejom za zaštitu kontakt KR163/A/Ex)
- Nadgledanje grešaka u izolaciji / otvorenog strujnog kola (u kombinaciji sa relejom za zaštitu kontakta KR-163.../KR-268 / alarm-indikator OAA-100...)
- Kod F-kontakta mogu se dalje realizovati alternativni prekidači
- Pod F-kontaktom takodje je moguće integrisati neprekidno merenje.

Detalji o sistemu

Uređaj za prekidanje prepunjavanja sastoji se od senzora nivoa i transduktora za merenje. Naši "releji za zaštitu kontakta" tipa KR-163, koji su takodje odobreni od strane DIBT, mogu se koristiti kao podudarni merni transduktori (Videti Odeljak 10). Senzori nivoa T-20 F mogu se povezati sa našim "alarm-indikatorom" tipa OAA-100 (Videti Odeljak 01)

Overfill Cut-out Device (Level Sensor) T-20 .F... (Float Regulator)

with general approval for
construction Z-65.11-404

Level sensors type T-20 .F... are approved by the DIBT (German Institute for Structural Engineering) as liquid level limit switches for the overcharge protection of containers for storing water-dangerous liquids.

The floater switches the reed contact mounted in the guide tube when the liquid level rises. The change in resistance in the sensor circuit resulting from the switching operation is evaluated and the output relay triggered.

Parts of the level sensor which get into contact with the media are completely made of PE / PP / PVC. So the level sensors T-20 .F... are perfectly suited for being used with tanks for storing highly aggressive media.

- Easy to install
- Sturdy design
- Small dimensions
- Low system costs
- Interference-proof measurement
- High chemical resistance
- Switching point adjustable
- Various options for connection (connector box / plug / cable)
- For usage in category 2 (Ex zone 1) (in combination with IExI contact protective relay KR-163/A/Ex)
- Short-line fault / open circuit monitoring (in combination with contact protective relay KR-163... and KR-268... / alarm indicator OAA-100...)
- Under the F-contact further optional switching points can be realized
- Under the F-contact its also possible to integrate a continuous measurement

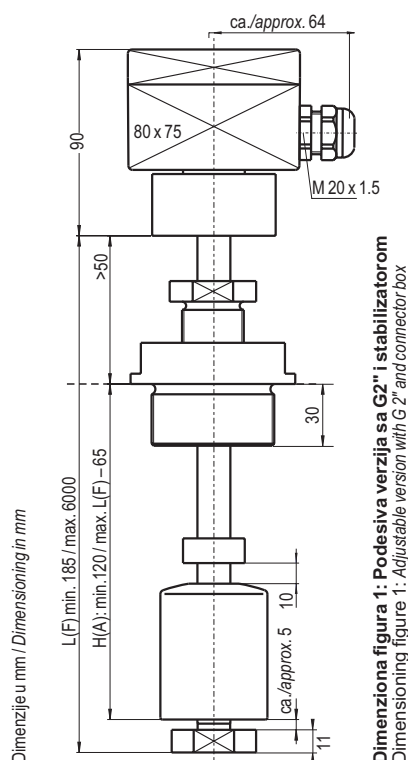
System Details

The overfill cut-out device consists of the level sensor and the measuring transducer. Our "contact protective relays" type KR-163... and KR-268..., which are also approved by the DIBT, can be used as corresponding measuring transducers (see section 10). The level sensors T-20 .F... can be connected to our "alarm indicators" type OAA-100... (see section 01).



T-200.F

Dimenzioni crtež Dimensional Drawing



Dimenziona figura 1: Podesiva verzija sa G2" i stabilizatorom
Dimensioning figure 1: Adjustable version with G 2" and connector box

Tehniski podaci

Spojnica	Kutija od poliestera, aluminijumska kutija, polietilenska, glava spojnice, kabl, utikac
Sistem zaštite	EN 60529 IP 65
Navoj za povezivanje	G1", G1 1/4", G1 1/2", G2", G3"
Zaštitni navrtanj	G2 3/4", S 100x8
Dužina provodne cevi	max. 6m
Operativna temperatura	atmosferska sa PP max. 90 °C
Operativni pritisak	atmosferski
Gustina supstance	$\rho \geq 0,6 \text{ g/cm}^3$
(u zavisnosti od vrste plovka)	
Histereza prilikom prekidanja	tip. 2mm
Nivo tolerancije prekidača	max. 2 mm
Senzor nivoa otpora:	
Dostupnost	približno 1kW
Signal za prepunjenost	približno 12kW
Vreme uključivanja/isključivanja	približno 20ms

Ključ tipa

Osnovne indikacije (materijal, spojnica, provodna cev i plovak, standard: PE)

Provodna cev

0 = Ø 16mm: PE 52, PP 52

8 = Ø 20mm: PE 78, PP 78, PV 78

Bezbednosne funkcije

F = deo sistema za zaštitu od prepunjavanja

Materijal spojnice i provodna cev bez indikacija = PE (Polietilen)

PP = Polipropilen

PV = Polivinil hlorid

Navoj za povezivanje

1" = G1"

1 1/4" = G1 1/4"

1 1/2" = G1 1/2"

2" = G2"

3" = G3"

GF = zaštitni navrtanj G2 3/4"

S2 = zaštitni navrtanj S100 x 8

FL = sa obodom

Pricvršćen

V = promenljiv (od G1 1/2")

O = fiksiran

Broj prekidača

0 = F kontakt

1...5 = broj

(bez "F kontakta")

K = neprekidne uronjene sonde

Materijal plovka bez indikacija = PE (Polietilen)

PP = Polipropilen

PV = Polivinil hlorid

(samo T208)

Stabilizator bez indikacija = PO

(Poliester, standard)

AA = Aluminijum

PE = Polietilenska glava

ST = utikac (tro/šestostruki)

LY = LiYY kabl u mm

Dužine = LF mera u mm

T20

Technical Data

Connector	Polyester box, Aluminum box, Polyethylene connection head, cable, plug
System of protection	EN 60529 IP 65
Connecting thread	G1", G1 1/4", G1 1/2", G2", G3"
Sleeve nut	G2 3/4", S 100x8
Guide tube length	max. 6m
Operating temperature	atmospheric with PP max. 90 °C
Operating pressure	atmospheric
Media density	$\rho \geq 0,6 \text{ g/cm}^3$ (depending on type of float)
Switching hysteresis	typ. 2 mm
Switching point toler.	max. 2 mm
Resistance level sensor:	
Availability	approx. 1 kW
Overflow signal	approx. 12 kW
Switching time	approx. 20 ms

Type Key

Basic indication (material, coupling, guide pipe and float, standard: PE)

Guide tube

0 = R 16 mm for float type: PE 52, PP 52

8 = R 20 mm for float type: PE 78, PP 78, PV 78

Safety function

F = part of an overflow protection system

Material coupling and guide pipe without indication = PE (Polyethylene)

PP = Polypropylene

PV = Polyvinyl chloride

Connecting thread

1" = G1"

1 1/4" = G1 1/4"

1 1/2" = G1 1/2"

2" = G2"

3" = G3"

GF = sleeve nut G2 3/4"

S2 = sleeve nut S100 x 8

FL = with flange

Screwed socket

V = variable (from G1 1/2")

O = fixed

Number of switching contacts

0 = F contact

1...5 = number

(without "F contact")

K = continuous immersible probes

Float material without indication =

PE (Polyethylene)

PP = Polypropylene

PV = Polyvinylchloride (T208 only)

Connector box without indication = PO

(Polyester, standard)

AA = Aluminum

PE = Polyethylene head

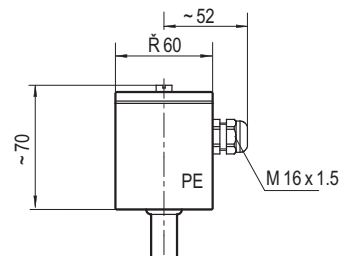
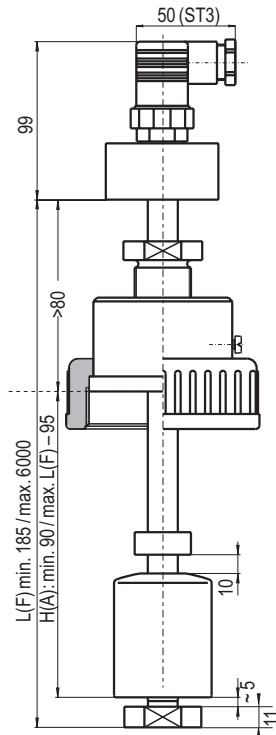
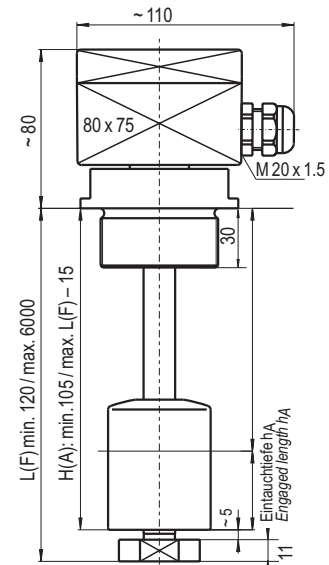
ST = plug (3- or 6-fold)

LY = LiYY-cable in mm

Lengths = LF measure in mm

T20

Dimenzioni crtez Dimensional Drawing

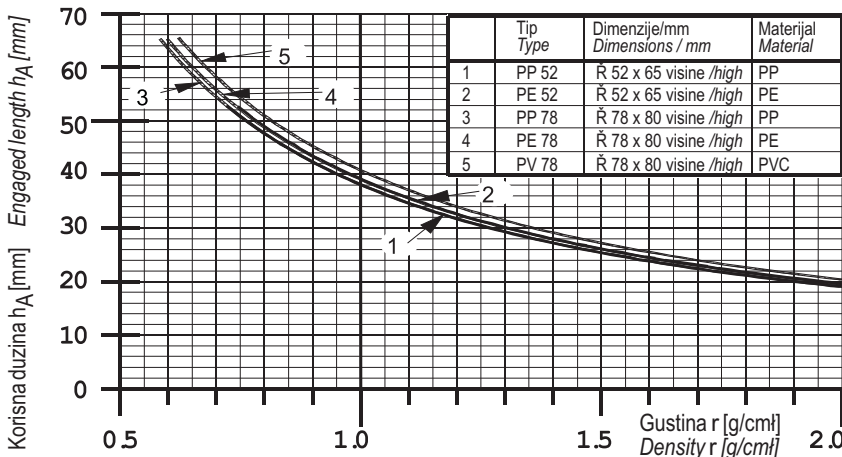


DIMENZIONIRANJE: (dimenzije u mm)
Dimensioning figure 2: Fixed version with G 2" and connector box

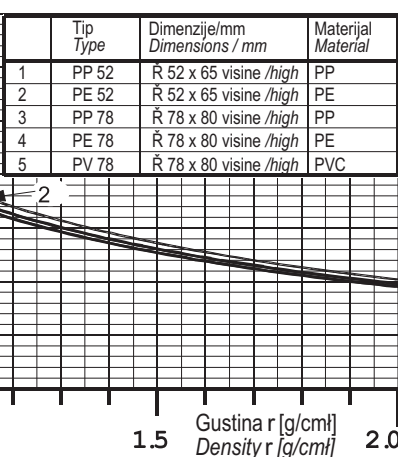
Dimenzioni crtez: (dimenzije u mm)
Dimensioning figure 3: Adjustable version with swivel nut G 2 1/4" and plug connection (ST3)

Dimenzioni crtez: (dimenzije u mm)
Dimensioning figure 4: PE glava spojnice
Dimensioning figure 4: PE connection head

Dimenzije i korišćene dužine plovaka



Dimensions and engaged length of the floats



Dimenzije u mm / Dimensioning in mm

Dozvoljene izmene bez upozorenja.

Subject to change without prior notice, errors excepted.