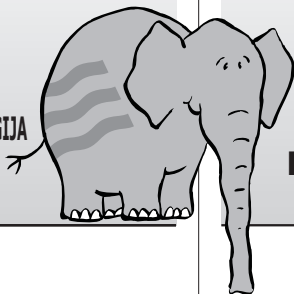


BEZBEDONOSNA TEHNOLOGIJA
ZA ZAŠTITU
ŽIVOTNE SREDINE



SAFETY AND
ENVIRONMENTAL
TECHNOLOGY

E.L.B.
FÜLLSTANDSGERÄTE

03-01-01E

Bistabilna promenljiva veza BK-380, BK-390

BK-380, BK-390 bistabilna veza je prekidač promenljive veze kojim upravlja magnet koji trajno menja svoj električni operativni status u zavisnosti od pravca kretanja prolaznog magnetnog sistema. Može se koristiti na indikatorima nivoa, na primer **W-35 indikator nivoa vode MTA-50 indikator nivoa u rezervoaru, ŪTA-32...** izdignutim indikatorima rezervoara, itd. za realizaciju ili retrogradnju kontrolnog sistema nivoa.

BK-380 je pogodan za indikator inoava tipa MKL; koji poseduje još jedan magnetni sistem.

Jedinica sa prekidačem je smeštena u polikarbonatnom kućišu sa stepenom zaštite IP65.

Operativni status BK-380, BK-390 je pokazan u statusnom prozoru zaštite kućišta. Kada je kućište otvoreno, bistabilna promenljiva veza može da se ručno podešava. Ovo pojednostavljuje naručivanje i omogućava testiranje naknadno povezanih kontrolnih jedinica.

Cevasta spona od visoko kvalitetnog čelika služi za popravku jedinice za zaobilaznje i cevi od providnog stakla sa prečnicima od 32-50 mm i 50-70 mm.

Bistabilna promenljiva veza BK-390 takodje se može pričvrstiti trakama kabla. One su pogodne za cevi prečnika od 32-70 mm.

Jedinica za promenu brzine za BK-380, BK-390 sastoji se u osnovi od mikroprekidača, trajnog magnetnog pokretača i feromagnetnog elementa držača.

Dok magnetni sistem prolazi pored aktivne površine BK-380, BK-390, sila između pokretača i elementa držača je poništena. Ovo prouzrokuje rotiranje pokretača, na ovaj način pokretajući promenu mikroprekidača.

Kao rezultat gotovo simetričnog rotacionog dizajna pokretača i magnetne stabilizacije operativnih tačaka, postignuta je maksimalna otpornost na šok i vibraciju.

Detalji o sistemu

BK-390 bistabilna veza se koristi u kombinaciji sa našim indikatorima nivoa MTA, ŪTA i W-35... . BK-380 se koristi sa indikatorom nivoa MKL. Videti sekciju 02.

Bistable change-over contact BK-380, BK-390

The BK-380, BK-390 bistable contact is a magnetically operated changeover switch which permanently changes its electrical operating status depending on the direction of movement of a passing magnet system. It can be used on level indicators, e.g. **W-35 water level indicators, MTA-50 tank level indicators, ŪTA-32...** raised tank indicators, etc., for realising or retrofitting a level control system.

The BK-380 is suitable for the level indicator type MKL; this possesses another magnetic system.

The switchgear unit is accommodated in a Polycarbonate housing with the degree of protection IP65.

The operating status of the BK-380, BK-390 is indicated in the status window of the housing cover. With the housing open, the bistable changeover contact can be operated manually. This simplifies commissioning and enables testing of subsequently connected control units.

A high-grade steel tube clamp serves for fixing the unit to bypass and sight-glass tubes with diameters of 32-50 mm and 50-70 mm.

The bistable changeover contact BK-390 can be fastened also with cable straps. These are suitable for pipes with a diameter of 32-70 mm.

The switchgear unit of the BK-380, BK-390 consists essentially of a microswitch, permanent magnetic actuator and ferromagnetic holding element.

As a magnet system passes the active surface of the BK-380, BK-390, the holding force between the actuator and holding element is cancelled. This causes the actuator to rotate, thus initiating a changeover of the microswitch.

As a result of the virtually symmetrically rotational design of the actuator and magnetic stabilisation of the operating points, maximum shock and vibration resistance is achieved.

System Details

The BK-390 bistable contact is used in combination with our level indicators MTA, ŪTA and W-35... . The BK-380 is used with the level indicator MKL. See for this section 02.



BK-390



BK-380

KONTAKTE / SWITCH CONTACTS

Tehnički podaci

Sistem zaštite EN 60529	IP 65
Materijal:	
Kučiče	Polikarbonsko
Spona za fiksiranje	V2A, trakasti kabl
Zakivak	V2A
Veza zavrtnja	M20 x 1.5, Poliamid
Operativna temperatura	-20...+70 °C
Max.presek provodnika	1,5 mm ²
Razdaljina tačke za uključivanje	Min. 40mm između dve kontaktne veze
Histereza uključivanja	Pribl. 10-15 mm (u zavisnosti od magnetnog pokretača)
Težina	BK-390-50 137 g
	BK-390-63 / BK-380-63 140 g

Srebrna veza	
BK-390...0 / BK-380.63.0	
Voltaža uključivanja	24...230 V AC/DC
Struja uključivanja	20 mA...6 AAC/DC
Kapacitet uključivanja	max. 500 VA, 60 W min. 2 VA/W

Zlatna veza	
BK-390...1 / BK-380.63.1	
Voltaža uključivanja	5...250 V AC/DC
Struja uključivanja	1 mA...0,3 AAC/DC
Kapacitet uključivanja	max. 25 VA, 3 W min. 5 mW

Ključ tipa

Osnovne oznake bistabilne promenljive veze	
380 (za MKL, vidite 02-03-01E)	
390	
Spoljašnji prečnik cevi	
50 = 32-50 mm (samo BK-390/...)	
63 = 50-70 mm	
K = trakasti kabl (samo BK-390/...)	
ST = utikač	
bez indikacija = srebrna veza	
1 = zlatna veza	

Uputstva za ugradnju

Pouzdana funkcija BK-390 za postavljanje na cevi od providnog stakla varirajućeg prečnika je samo obezbeđena u kombinaciji sa odgovarajućim magnetnim sistemom E.L.B. Füllstandsgeräte i obezbeđenjem tačnog položaja za ugradnju.

Operativni status Bk-390 može se manualno uspostaviti pre stavljanja u pogon pažljivim okretanjem točkica indikatora:

Okretanje u smeru kazaljki na satu ⇌ „iznad domašaja“

Okretanje suprotno od smeru kazaljki na satu ⇌ „ispod domašaja“

Kada je kučište zatvoreno, na statusnom prozoru vidi se bela oznaka " iznad domašaja", ili crna oznaka "ispod domašaja".

Pažnja! Magnetni ili meki magnetni materijali na ili u direktnoj blizini cevi od providnog stakla ili BK-390 mogu trajno da ugroze tačno funkcionisanje plovlaka i bistabilne veze!

Technical Data

System of protection EN 60529	IP 65
Material:	
Housing	Polycarbonate
Fixing clamp	V2A, cable strap
Rivet	V2A
Screw connection	M20 x 1.5, Polyamide
Operating temperature	-20...+70 °C
max. conductor cross section	1,5 mm ²
Switching point distance	min. 40 mm between two contacts
Switching hysteresis	approx. 10-15 mm (depending on actuating magnet)
Weight	BK-390-50 137 g
	BK-390-63 / BK-380-63 140 g

Silver contact	
BK-390...0 / BK-380.63.0	
Switching voltage	24...230 V AC/DC
Switching current	20 mA...6 AAC/DC
Switching capacity	max. 500 VA, 60 W min. 2 VA/W

Gold contact	
BK-390...1 / BK-380.63.1	
Switching voltage	5...250 V AC/DC
Switching current	1 mA...0,3 AAC/DC
Switching capacity	max. 25 VA, 3 W min. 5 mW

Type Key

Basic designation of bistable changeover contact	
380 (for MKL, see 02-03-01E)	
390 (standard)	
Tube outer diameter	
50 = 32-50 mm (BK-390/... only)	
63 = 50-70 mm	
K = cable strap (BK-390/... only)	
ST = plug	
without indication = silver contact	
1 = gold contact	

Mounting Instructions

The reliable function of the BK-390 for mounting on sight-glass tubes of varying diameter is only ensured in conjunction with the matching magnet systems of E.L.B.

Füllstandsgeräte and observance of the correct mounting position („O“ for Top resp. red mark).

The operating status of the BK-390 can be preset manually prior to operation by carefully turning the indicator wheel:

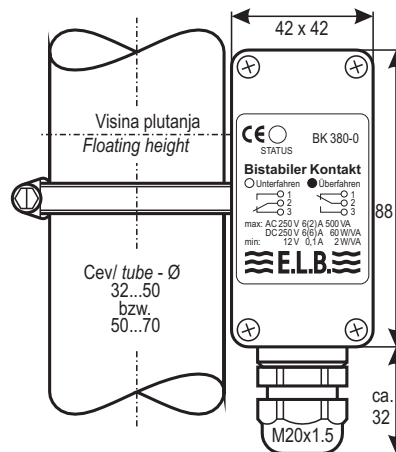
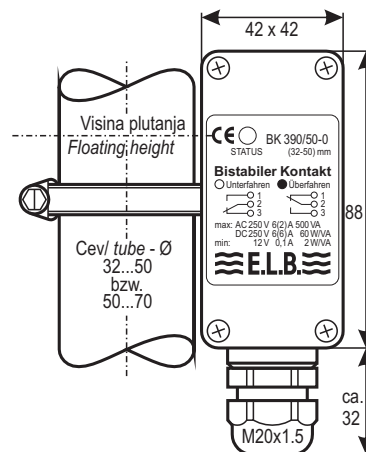
Turning clockwise ⇌ "over range"

Turning counter-clockwise ⇌ "under range"

With the housing closed, a white mark is visible in the status window with "over range", a black mark is visible with "under range".

ATTENTION! Magnetic or soft magnetic materials or in the direct vicinity of the sight-glass tube or the BK-390 can permanently impair the correct function of the float and bistable contact!

Dimenzioni crtež / Dimensional Drawing



Dimenzije u mm /
Dimensioning in mm

Podložno promeni bez prethodne najave.
Subject to change without prior notice,
errors excepted.

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