

## SOLUTIONS FOR THE CHEMICAL & PETROCHEMICAL INDUSTRY



# Trimod Besta

Level measurement A brand of Bachofen AG  
[www.trimodbesta.com](http://www.trimodbesta.com)



ClassNK



## Chemical & Petrochemical market



Trimod'Besta modular designs solve many special application problems in the chemical and petrochemical industry that requires high pressure, high/low temperature and corrosion resistant components. We offer a complete program of stainless steel and plastic switches for the measurement and control of highly aggressive or high purity media.

Trimod'Besta level switches carry ATEX, IECEx, Inmetro and TR CU (GostR Ex / RTN) approvals. The level switches and the float chambers are available acc. to PED 97/23/EC.

### Level switch for high temperature application

#### Type ZHK8 132R 07

Type of protection	Ex ed IIC T6...T5 Ga/Gb   EPS 12 ATEX 1430 X
Nominal pressure	ANSI cl. 300
Operating temperature	0 to 380°C
Ambient temperature	acc. to EN 50014
Density of the liquid	min. 0.5 kg/dm <sup>3</sup>
Operating differential	12 mm, fixed
Wetside material	Stainless steel (CrNiMo/316 equiv.)
Flange material	
Seal part	Stainless steel (CrNiMo/316 equiv.)
Slip-on flange	Carbon steel (P265GH), zinc galvanised, passivated (not in contact with medium)
Housing material	Seawater resistant die cast aluminium
Flange	DN 3", PN cl. 300, ANSI B16.5
Flange facing	Raised face
Switch element	Hermetically sealed microswitch SPDT
Switch rating	250 VAC, 5 A 250 VDC, 0.25 A
Enclosure	IP67
Cable gland	Internal thread M20x1.5
Safety Integrity Level (SIL)	SIL 1 (Type ZHKK8 132R 07: SIL 2)

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### Typical applications

- Cracking process
- Crude oil storage
- Separation layer measurement
- Gas condensation tanks
- Refinery tank farms
- Steam generation
- Storage tanks
- Chemical tanks



#### Options

- Nominal pressure up to ANSI cl. 2500 and EN/ DIN 320
- All stainless steel version
- Material wet side in Hastelloy C
- Material wet side acc. to NACE (max. 22 HRC)
- Switch element: proximity switch
- Flange facing: male, tongue, groove and ring joint



## Trimod'Besta

## Chemical & Petrochemical market

### Level switch for use in hazardous areas

#### Type XA8 132R 04

Type of protection	Ex de IIC T6   EPS 09 ATEX 1238 X
Nominal pressure	ANSI cl. 300
Operating temperature	-29 to 330°C
Ambient temperature	-29 to 80°C
Density of liquid	min. 0.7 kg/dm <sup>3</sup>
Operating differential	12 mm, fixed
Wetside material	Stainless steel (CrNiMo/316 equiv.)
Flange material	
Seal part	Stainless steel (CrNiMo/316 equiv.)
Slip-on flange	Carbon steel (P265GH), zinc galvanised, passivated
Housing material	Seawater resistant chilled cast aluminium and stainless steel (tube)
Flange	DN 3", PN cl. 300, ANSI B16.5
Flange facing	Raised face
Switch element	Microswitch SPDT with silver contacts
Switch rating	250 VAC, 5 A 250 VDC, 0.25 A
Enclosure	IP67
Cable gland	Internal thread M20x1.5
Safety Integrity Level (SIL)	SIL 1 (Type XAA8 132R 04: SIL 2)



#### Options

- Nominal pressure up to ANSI cl. 2500 and EN/ DIN 320
- All stainless steel version
- Material wet side in Hastelloy C
- Material wet side acc. to NACE (max. 22 HRC)
- Enclosure IP68
- Microswitch with gold plated contacts
- Switch element: proximity switch
- Flange facing: male, tongue, groove and ring joint

### Level switch for low temperature applications

#### Type Z5TDK8 32CF 04

Type of protection	Ex ed IIC T6...T5 Ga/Gb   EPS 12 ATEX 1430 X
Nominal pressure	EN/DIN PN 40
Operating temperature	-196 to 270°C
Ambient temperature	acc. to EN 50014
Density of the liquid	min. 0.7 kg/dm <sup>3</sup>
Operating differential	12 mm, fixed
Wetside material	Stainless steel (CrNiMo/316 equiv.)
Flange material	
Fixed flange	Stainless steel (CrNiMo/316 equiv.)
Housing material	Stainless steel (CrNiMo/316 equiv.)
Flange	DN 80, PN 40 acc. to EN 1092-1 (DIN 2501)
Flange facing	Raised face type B1 (type C, DIN 2526)
Switch element	Hermetically sealed microswitch SPDT
Switch rating	250 VAC, 5 A 250 VDC, 0.25 A
Enclosure	IP67
Cable gland	Internal thread M20x1.5
Safety Integrity Level (SIL)	SIL 1 (Type XAA8 132R 04: SIL 2)



#### Options

- Nominal pressure up to ANSI cl. 2500 and EN/ DIN 320
- Material wet side in Hastelloy C
- Material wet side acc. to NACE (max. 22 HRC)
- Switch element: proximity switch
- Flange facing: male, tongue, groove and ring joint



## Chemical & Petrochemical market

### Level switch for use in aggressive liquids

#### Type A 1314 98

Nominal pressure	ANSI cl. 150
Operating temperature	0 to +200°C
Ambient temperature	0 to +70°C
Density of the liquid	min. 0.75 kg/dm <sup>3</sup>
Operating differential	12 mm, fixed
Wetside material	PTFE
Flange material	
Seal part	PTFE with 25% glass fibre
Slip-on flange	Carbon steel (P265GH), zinc galvanised, passivated (not in contact with medium)
Housing material	Seawater resistant die cast aluminium
Flange	DN 3", PN cl. 150, ANSI B16.5
Flange facing	Flat face
Switch element	Microswitch SPDT with silver contacts
Switch rating	250 VAC, 5 A 30 VDC, 5 A
Enclosure	IP65
Cable gland	M20x1.5



#### Options

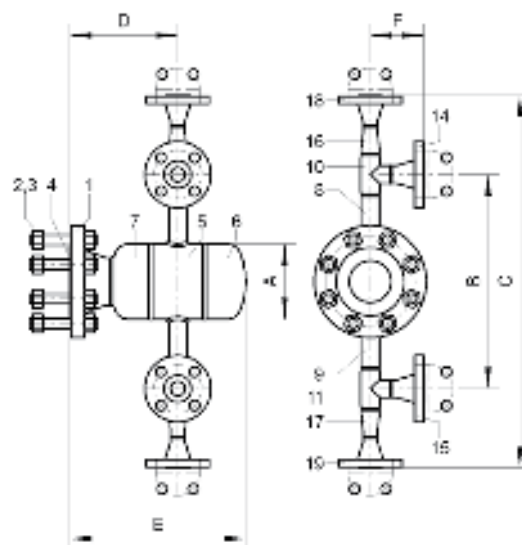
- Seal part: virgin PTFE
- Slip-on flange: stainless steel (CrNiMo/316 equiv.) or PVC (EN/DIN only)
- Sealing unit for vacuum duty
- Housing material: stainless steel (CrNiMo/316 equiv.)

### Float chambers for high pressure applications

- Pressure range: up to ANSI cl. 2500 and EN/DIN PN 320
- Temperature range: -200 to 400°C
- Material: carbon steel, low and high temperature carbon steel, stainless steel 304 and 316 equiv.
- Max. hardness of HRC 22 acc. to NACE
- Manufacturing approvals
- Welding certificates
- PED conformity

### Documentation and services

- Test reports acc. to EN 10204-2.2
- Inspection certificates acc. to EN 10204-3.1
- Pressure test protocols
- Detailed documentation: parts information with technical specifications, material data, incl. lot and charge information
- Non-destructive testing: ultrasonic, x-ray, dye penetration test
- Mechanical testing: tension, notch and hardness tests
- Base- and protective coatings



Overall drawing Type: I120-1R1RH-Z584