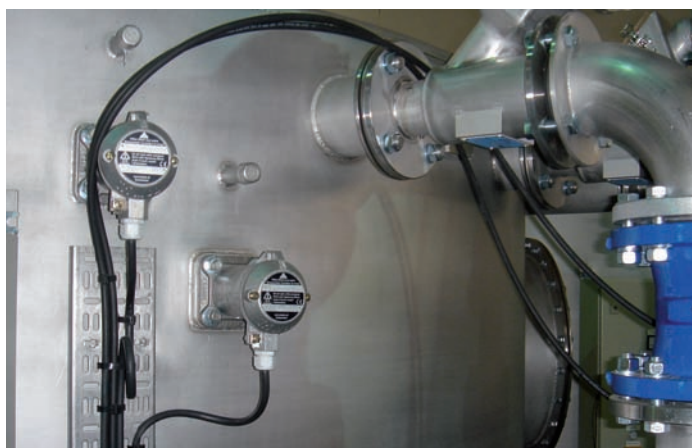


MARKET INFORMATION  
WATER MANAGEMENT INDUSTRY



# Trimod'Besta

Solutions for the Water Management Industry



Level switch type: A 01 051E15, see also page 4



**SIL**  
IEC 61508/615  
SIL 3 Capable

We offer standard range and mini float switches, as well as level indicators and transmitters for applications in water management. Bachofen AG has been certified according to ISO 9001 since 1991. Production and internal processes are continuously monitored by the installed management system, to ensure that you can trust our products.

### Typical applications

- Water collection bassins
- Freshwater tanks
- Industrial waste water
- Black and grey water tanks
- Vacuum tanks for human waste systems

## Vertical level switch for top mount installations

### Type A 01 140 and A 01 141

Function	2-point control (pump) or 1 switching point (alarm)
Nominal pressure	PN 16 acc. to EN/DIN
Operating temperature	0 to 300°C
Ambient temperature	0 to 70°C
Density of the liquid	
Pump control	min. 0.45 kg/dm <sup>3</sup>
Alarm	min. 0.30 kg/dm <sup>3</sup>
Operating differential	A 01 140: 12 to 1340 mm A 01 141: 12 to 2840 mm
Wetside material	Stainless steel (CrNiMo)
Housing material	Seawater resistant die cast aluminium
Flange dimensions	Square 92 x 92 mm, PCD 92 mm
Switch element	Microswitch SPDT with silver contacts
Switch rating	250 VAC, 5 A / 30 VDC, 5 A
Enclosure	IP65
Cable gland	M20x1.5
Safety Integrity Level (SIL)	SIL 1 (Type AA 01 140 / 141: SIL 2)



### Options

- Enclosure IP67
- All stainless steel version
- Flanges acc. to EN/DIN, ANSI, BS, JIS
- For hazardous areas
- Microswitch with gold plated contacts
- Dual SPDT microswitches, galvanically isolated

## Level switch for adjustable operating differential

### Type DA 01 093

These level switches are mainly used for two-point operation, for example pump and valve control.

Nominal pressure	PN 25 acc. to EN/DIN
Operating temperature	-30 to 120°C
Ambient temperature	-30 to 120°C
Density of the liquid	Min. 0.75 kg/dm <sup>3</sup>
Operating differential	Adjustable from 97 to 557 mm
Wetside material	Stainless steel (CrNiMo)
Housing material	Seawater resistant die cast aluminium
Flange	Square 92 x 92 mm, 92 mm PCD
Switch element	Microswitch SPDT with silver contacts
Switch rating	250 VAC, 5 A / 30 VDC, 5 A
Enclosure	IP67
Cable gland	M20x1.5
Safety Integrity Level (SIL)	SIL 1 (Type DAA 01 093: SIL 2)



#### Options

- Different operating differential  
DA 01 090: 37 to 218 mm  
DA 01 091: 56 to 317 mm  
DA 01 092: 83 to 442 mm  
DA 01 095: 34 to 190 mm
- Flanges acc. to EN/DIN, ANSI, BS, JIS
- For hazardous areas
- Microswitch with gold plated contacts
- Dual SPDT microswitches, galvanically isolated

## The pneumatic controller

### Type M 01 04

Function	proportional controller
Supply pressure	1.4 bar
Output signal	0.2 to 1 bar
Nominal pressure	PN 25 acc. to EN/DIN
Operating temperature	1 to 250°C
Ambient temperature	1 to 80°C
Density of the liquid	min. 0.7 kg/dm <sup>3</sup>
Control range	without rod: 30 mm with rod: max. 230 mm
Control connections	G 1/8" (BSPP) IT
Wetside material	Stainless steel (CrNiMo)
Housing material	Seawater resistant die cast aluminium

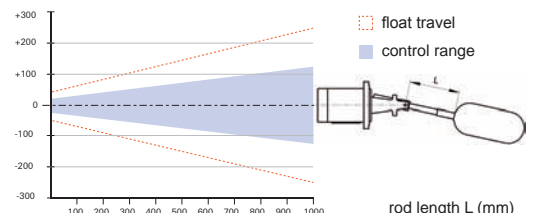


#### Options

- Type 5M 01 04 all stainless steel design
- Type FM 01 04 with declaration of conformity for use in explosion proof areas
- Flanges acc. to EN/DIN, ANSI, BS, JIS
- Pneumatic ON/OFF switches, e.g. type P 01 04

#### Control range

The normal control range is 30 mm, i.e. +15 mm/-15 mm from the centre line, measured in water at 20°C. With the float in the central position, the output is 0.6 bar. The control range can be increased by lengthening the float arm.



### Level switch for contaminated liquids

#### Type A 01 051E15

Nominal pressure	PN 25 acc. to EN/DIN
Operating temperature	0 to 120°C
Ambient temperature	0 to 70°C
Density of the liquid	Min. 0.75 kg/dm <sup>3</sup>
Operating differential	12 mm, fixed
Bellow material	Perbunan
Wetside material	Stainless steel (CrNiMo)
Housing material	Seawater resistant die cast aluminium
Flange	Square 92 x 92 mm, 92 mm PCD
Switch element	Microswitch SPDT with silver contacts
Switch rating	250 VAC, 5 A / 30 VDC, 5 A
Enclosure	IP65
Cable gland	Internal thread M20x1.5
Safety Integrity Level (SIL)	SIL 1 (Type AA 01 051E15: SIL 2)



#### Options

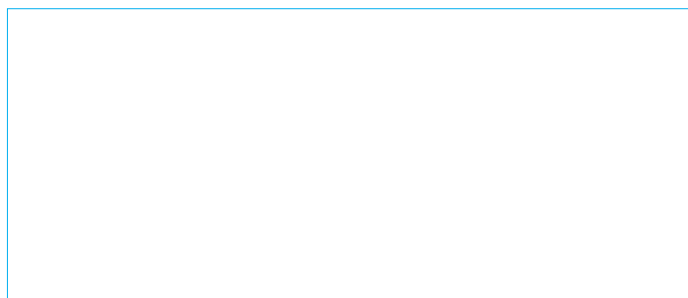
- Enclosure IP67
- All stainless steel version
- Flanges acc. to EN/DIN, ANSI, BS, JIS
- Bellow material: Silicon, FPM, PTFE
- Operating temperature  
Silicon, FPM Bellow: max. 200°C  
PTFE Bellow: max. 250°C



Level switch type: A 01 051E15

### Waste water tank for vacuum toilets

New vacuum tank unit heavy duty series are vacuum tank solutions for passenger and military vessels, in which traditional method is enhanced by new pump technology. Energy consumption of the vacuum tank units is more than 50% lower than that of competing technology. Extra vacuum reservoir and powerful pumps make complex new piping designs possible on large vessels even with only one vacuum generation unit. In vacuum tank units, separate discharge pumps feed waste water mixing tanks in batches in combination with advanced treatment solutions. Tank units have low maintenance, also because of the very robust Trimod Besta level switches.



Your Trimod Besta level switch distributor

**BACHOFEN**

Industrial Automation

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