

## Bypass Level Indicators

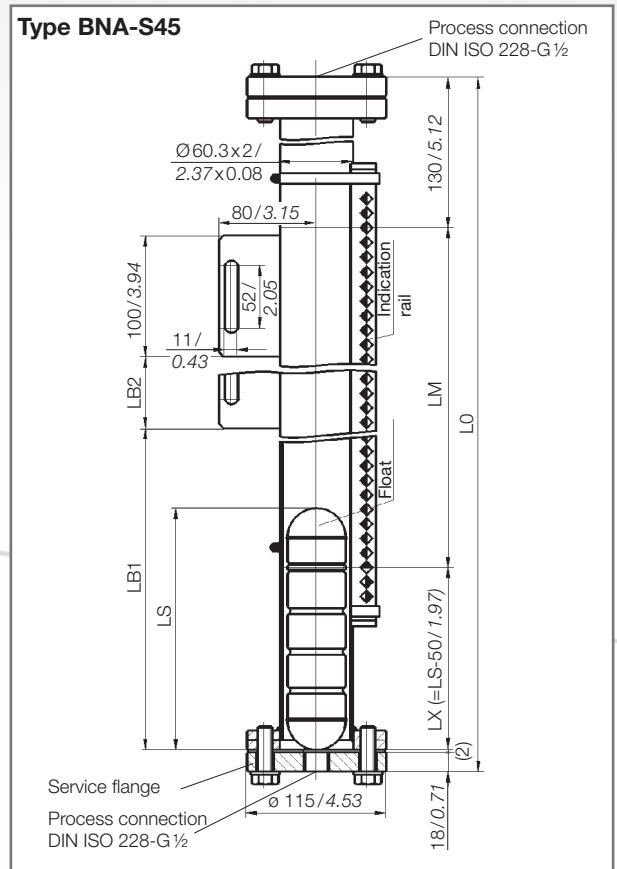
## Type BNA-S45/S46

The Bypass Level Indicator is available with lengths up to 5700 mm, in one piece, medium temperature up to 320 °C max. and pressures up to 40 bar max.

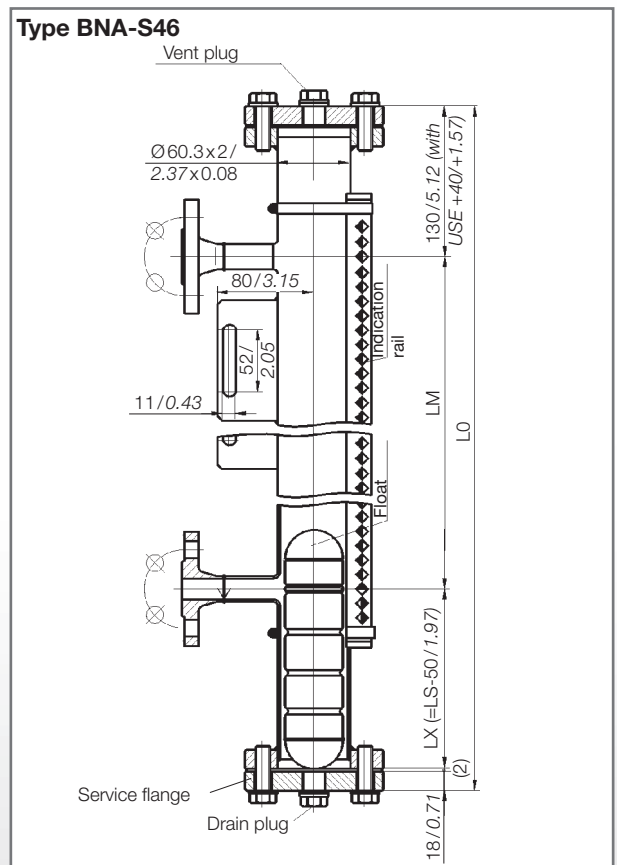
### Applications

Tanks in which due to their construction internal measurement is impossible, e.g. ship building, sewage works.

### Dimensions (in mm/inch)



Index: B



Specifications are subject to changes without notice.

### Technical Data

<b>Bypass tube:</b>	Stainless steel 1.4571 (SS 316 Ti) PN 40, Ø = 60.3x2 mm
<b>Float:</b>	
Standard:	<b>TT 50/10</b> in Titanium, min. density: 0.56 g/cm <sup>3</sup> max. temperature: 320 °C media dependent
Option:	<b>TT 50/15</b> in Titanium, with M4 plug min. density: 0.57 g/cm <sup>3</sup> , max. temperature: 320 °C media dependent
<b>Proof pressure:</b>	1.5 x operating pressure
<b>Process connections:</b>	<b>BNA-S45</b> top and bottom connections: top G 1/2, bottom service flange 1/2"
	<b>BNA-S46</b> side connections: threaded R 1/2", R 3/4", 1", or flanges in: DIN DN 15, 20, 25, 32, 40, 50 or ANSI 1/2", 3/4", 1", 1 1/2", 2", NPT: 1/2", 3/4", 1"
Option:	Instead of G 1/2, top and bottom 1/2" NPT or flange connections with weld neck flanges.
<b>Indication rail:</b>	
Standard:	Makrolon (polycarbonate) clear, with white/red indication flags, up to 150 °C media dependent
Option:	Aluminium, black anodized, flags painted silver/red, up to max. 350 °C - <b>A2</b>
<b>Accessories:</b>	Limit switches, Transmitters, Scale, Isolation, Tests/certificates

## Type BNA-S31...S46

Type:	Version:
BNA-S31	PN 16, top and bottom G $\frac{1}{2}$ connections, Makrolon indication rail, bottom service flange only
BNA-S32	PN 16, G $\frac{1}{2}$ side connection, Makrolon indication rail, bottom service flange only
BNA-S35	PN 16, top and bottom G $\frac{1}{2}$ connections, Makrolon indication rail, top and bottom service flange
BNA-S36	PN 16, G $\frac{1}{2}$ side connection, Makrolon indication rail, top and bottom service flange
BNA-S41	PN 40, top and bottom G $\frac{1}{2}$ connections, Makrolon indication rail, bottom service flange only
BNA-S42	PN 40, G $\frac{1}{2}$ side connection, Makrolon indication rail, bottom service flange only
BNA-S45	PN 40, top and bottom G $\frac{1}{2}$ connections, Makrolon indication rail, top and bottom service flange
BNA-S46	PN 40, G $\frac{1}{2}$ side connection, Makrolon indication rail, top and bottom service flange

### Side connections:

R 1/2" or R 1/2" NPT	Process connection
R 3/4" or R 3/4" NPT	Process connection
R 1" or R 1" NPT	Process connection
DN 15	Flange PN16/DIN 2633 or PN 40/DIN 2635
DN 20	Flange PN16/DIN 2633 or PN 40/DIN 2635
DN 25	Flange PN16/DIN 2633 or PN 40/DIN 2635
DN 32	Flange PN16/DIN 2633 or PN 40/DIN 2635
DN 40	Flange, as above, however with conical reducer, extended from DN 32 to DN 40
DN 50	Flange, as above, however with conical reducer, extended from DN 32 to DN 50
1/2"	Flange 150 lbs, 300 lbs ANSI B 16,5
3/4"	Flange 150 lbs, 300 lbs ANSI B 16,5
1"	Flange 150 lbs, 300 lbs ANSI B 16,5
1 1/4"	Flange 150 lbs, 300 lbs ANSI B 16,5
1 1/2"	Flange 150 lbs, 300 lbs ANSI B 16,5, however with conical reducer, extended from DN 32 to 1 1/2"
2"	Flange 150 lbs, 300 lbs ANSI B 16,5, however with conical reducer, extended from DN 32 to 2"

### Indicator length [mm] (example):

2000/1	LM = 2000 mm/in one piece
6000/2	LM = 6000 mm/in two pieces

### Float:

VA 50/10	material 1.4571, max. 25 bar/+150 °C, min. density: 0.62 g/cm <sup>3</sup>
VA 50/15	material 1.4571, as above, however with plug M4, density: 0.63 g/cm <sup>3</sup>
TT 50/10	material titanium, max. 40 bar/+320 °C, min. density: 0.56 g/cm <sup>3</sup>
TT 50/15	material titanium, as above, however with plug M4, density: 0.57 g/cm <sup>3</sup>

### Indication rail:

MA	Makrolon = standard, max. temperature: +150 °C
A2	Aluminium painted, max. temperature: +350 °C

### Isolation:

GL	Glass fiber tape, contact protection, temperature -40...350 °C
PO	Poliolefine shrink tubing, weather and dust protection for indication rail

### Limit switches:

*Note:* The digit preceding the first letter indicates the desired quantity.

1GK03	1 limit switch GK03, temperature: -55 °C...+140 °C
2GKHT1	2 high-temperature limit switches, temperature: -55 °C...+350 °C

### Remote indication:

XM	Remote indicator, potentiometer
XM <sub>i</sub>	As above, <b>Ex i</b> version
TX	with 4...20 mA
TX <sub>i</sub>	with 4...20 mA <b>Ex i</b>

### Scale:

SK	Scale*
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### Heating:

EL	Electric heating*
ELX	in EX d *
D	Double tube*

**BNA-S32 - DN 25 - 2600/1 - VA 50/15 - MA - GL - 2GK03 - XT<sub>i</sub> - SK - EL** (Example)

\* Detailed specification and description required.