

Multi Level Switches Type UNS-1000

Dimensions
(in mm)

1. Length tolerance ± 3 mm
2. L0 = max. 1000 mm

* Immersion depth at density 1:
VA27 = 21 ± 2 mm
BN25 = 13 ± 2 mm

Float position:
VA27 = NO/NC \Rightarrow see float marking
SPDT \Rightarrow NO-function
BN30 = NO \Rightarrow compound points at bottom
NC \Rightarrow compound points at top
SPDT \Rightarrow compound points at bottom

Dual switching
(1 float for 2 switchpoints)

Function

The multi Level Switch Series UNS-1000 can be supplied with up to 5 switchpoints (see max. switchpoints). Besides the float operated reed contacts to detect liquid levels, the UNS-1000 can be supplied also with a PT100 temperature sensor (PT100 = switchpoint).

A wide selection of mounting elements, electrical connections, various materials and options allow you to “design” your own switch, within the given dimension limits, for your particular application. (see “Variations”)

The min. dimensions are based upon the medium water. Depending on the density of other fluids this dimension can vary several millimetres.

The contact modes (NO or NC) are defined on the basis of an empty tank and for installation through the top or through the bottom (when specified as “-U”). When not specified otherwise we will set the switch position for density 1 (water) and the switch action to be on moving upward.

Temperature sensor PT100 = dimension B + 10 mm

Switchpoint Dimensions

Dimensions Float type	Min. distances in mm					
	A _F	A _T	A _D	B	C	D
VA27	26	42	38	40	65	32
BN25	--	37	34	25	45	32

When using -DR: Dimension B + 20 mm!

Max. Switchpoints

	KL6	KL12	ST1	ST2	Pg Cable-connect.
Connect. group 1	5	5	2	5	3
Connect. group 2	2	4	1	2	1
Connect. group 3	3	4	1	3	2
Connect. group 4	2	3	1	2	1

Variations

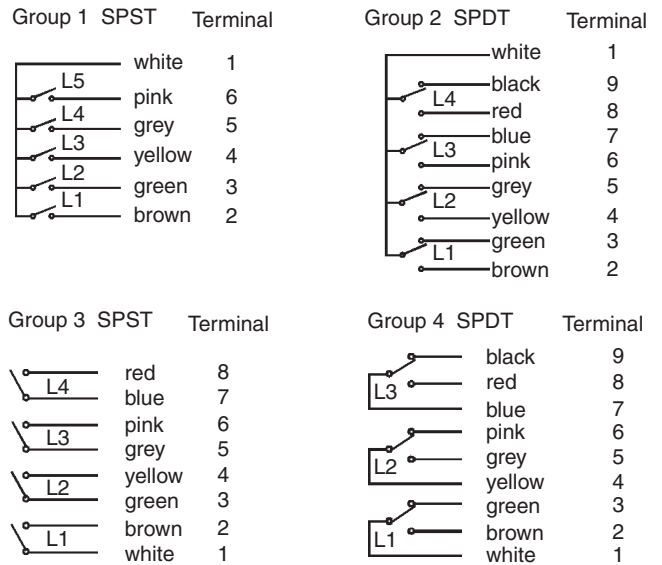
Material	Mounting	Electr. connect.	Float	Switch-points
VA	T1 FL2 FL3	ST1 ST2 KL6 KL12 Pg K	VA27	See max. switch-points
	G3/8	Pg K		
Ms	T1	ST1 ST2 KL6 KL12 Pg K	BN25	See max. switch-points
	G3/8	Pg K		

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Technical Data

12 / 04 UNS US 04/1

Max. Operating Pressure	: 15 bar, BN- and VA-float
Max. Temperature Range	: -10 °C...+105 °C, PVC-cable -40 °C...+150 °C, Silicone cab. (-HT) and KL6 with 5 terminals max.
Min. Fluid Specific Gravity	: See specifications below
Mounting Position	: Vertical, ±30°, through top or bottom
Protection Class	: IP65 for ST-, KL- and PG-design IP67, IP68 on request IP54 for K-design
Weight	: Depends on length and design
Special Design	: - Damping Tube - DR - High Temperature Application (up to +150 °C) - HT - Mounting through bottom - U - PT100-Element - PT100 - Vertical Adjustment (s. also P20) - ATEX-approval EEX ia



Specifications for Multi Level Switches Type UNS-1000

Barksdale Level Switches

Specifications are subject to changes without notice.

UNS-1000 - VA/T1 - KL6 - VA27 - L2/2.1 - U - HT - DR - VV - PT100 - Exi

Options, please specify when needed

Contact Mode	Contact Rating	Order: L1, L2, L3, L4, L5
1 - SPST (NO)	230 V AC / DC, 2 A, 40 VA / W	
2 - SPST (NC)	230 V AC / DC, 2 A, 40 VA / W	
3 - SPDT	150 V AC / 100 V DC, 0,2 A, 3 VA / W	(ATEX see page 4)

Total Length L0 = . . . mm (max. 1000 mm)

Specify with your order: L1 = . . . mm, L2 = . . . mm, etc.

Number of Switchpoints

- L1 = 1 Switchpoint
 - L2 = 2 Switchpoints
 - L3 = 3 Switchpoints
 - L4 = 4 Switchpoints
 - L5 = 5 Switchpoints
- See also „Connection Groups“ in table „Max. Switchpoints“ on left page

Float type	min. Density	Material	Form	Dia-meter	max. Temp.	Pressure (+20 °C)
BN25	0,57 g/cm³	Buna N	Cylinder	25 mm	100 °C	15 bar
VA27	0,71 g/cm³	Stainl. St. W.Nr. 1.4571	Cylinder	27 mm	150 °C	15 bar
VA44*	0,67 g/cm³	Stainl. St. W.Nr. 1.4571	Ball	44 mm	150 °C	15 bar
* Option	(Others on request)					

Electrical Connection

- ST1 - Cube Plug DIN 43650, 3-pin + Earth
- ST2 - Angle Plug DIN 43651, 6-pin + Earth
- STDB - Angle Plug with LED-Display DIN 43651, 6-pin + Earth
- KL6 - Aluminum Terminal Box, 6 Terminals
- KL12 - Aluminum Terminal Box, 9 Terminals
- PG7 - PG7-Cable Gland with 1 m PVC-cable, -HT with silicone cable
- K - PCV-Cable sealed, specify length at order, -HT with silicone cable (Others on request)

Mounting Element

- 1/8 - G1/8 mounting thread : only with cable
- 3/8 - G3/8 mounting thread : only with -PG 7
- T1 - G1 Tank screw (not with VA44 float)
- T1½ - G1½ Tank screw (not with VA44 float)
- T2* - G2 Tank screw
- FL2 - Flange DIN 2527, DN 32/PN 16
- FL3 - Flange DIN 2527, DN 50/PN 16
- * Option (Others on request)

Material of Stem and Mounting Element

- VA - SS316 Ti 1.4571, 1.4408
- MS - Brass, W. Nr. MS58