

Multi Level Switch

UNS-2000 Series

Formerly Series BLS 800

Features

- ▶ Fully customizable
- ▶ Up to 6 independent switch points
- ▶ Reversible switch logic
- ▶ Suitable for high viscosity liquids
- ▶ Optional integral temperature switch
- ▶ Hermetically sealed reed switches

Applications

- ▶ Sump tanks
- ▶ Hydraulic power units
- ▶ Storage tanks
- ▶ Solvent recovery systems
- ▶ Lube oil console systems
- ▶ Marine applications



General Specifications*

Max. Operating Pressure:	580 PSI (40 bar), depends on mounting element and float
Minimum Specific Gravity:	
NBR floats:	.6 g/cm ³
Stainless steel floats:	.78 g/cm ³
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

* See Order Number for additional options.

Operating Temperature:	+14 °F to +221 °F (-10 °C to +105 °C), PVC-cable or -40 °F to +302 °F (-40 °C to +150 °C), Silicone cable (-HT) and KL6C / KL12C
Special Design:	DR - Damping Tube HT - High Temperature Application (up to +150 °C) 302°F U - Mounting through bottom PT100 - PT100-Element TP - Temperature switch VV - Vertical Adjustment EXi - ATEX-approval EEx ia
Contact Mode:	NO or NC are defined on the basis of an empty tank and for installation through the top
Weight:	Depends on length and design

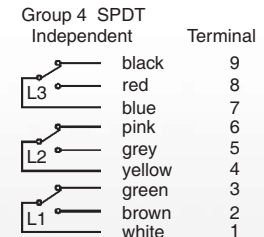
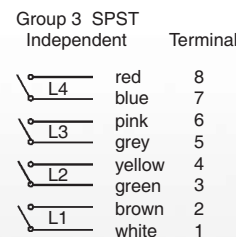
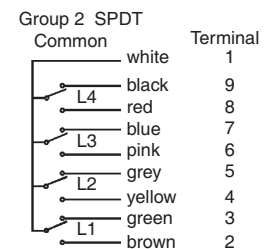
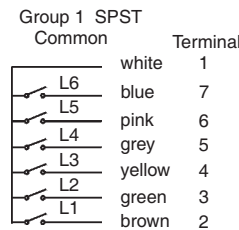
Max. Switchpoints

	KL6C AL Terminal Box	KL12C AL Terminal Box	ST1 DIN Connector	PG7 Cable gland
Connect. group 1	5	6	2	6
Connect. group 2	2	4	1	4
Connect. group 3	3	4	1	4
Connect. group 4	2	3	1	3

Variations

Material	Mounting	Electrical Connection	Float
Stainless Steel (VA)	1/1/4" NPT (T1-1/4NPT)	DIN Connector (ST1) Terminal box (KL6C or KL12C)	Stainless Steel (VA52)
	2" NPT (T2NPT)	Cable gland (PG7) PVC Cable (K)	
Brass (MS)	2" NPT (T1/2NPT)	Cable gland (PG7) PVC Cable (K)	NBR (Buna-N) (BN30)
	T1-1/4NPT	DIN Connector (ST1) Terminal box (KL6C or KL12C) Cable gland (PG7) PVC Cable (K)	
	T1/2NPT	Cable gland (PG7) PVC Cable (K)	

Wiring Color / Code



Barksdale
CONTROL PRODUCTS

Barksdale, Inc./Barksdale GmbH
A Subsidiary of Crane Co.



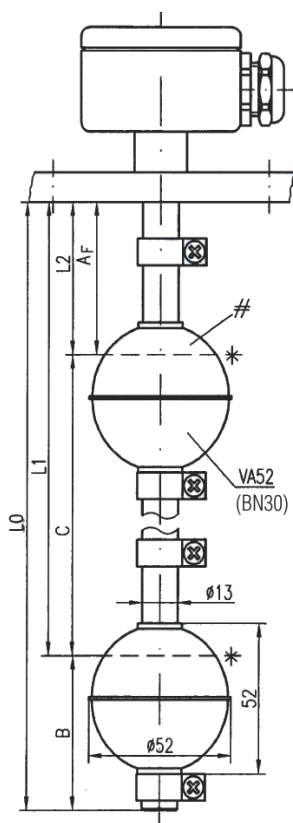
Multi Level Switch

UNS-2000 Series

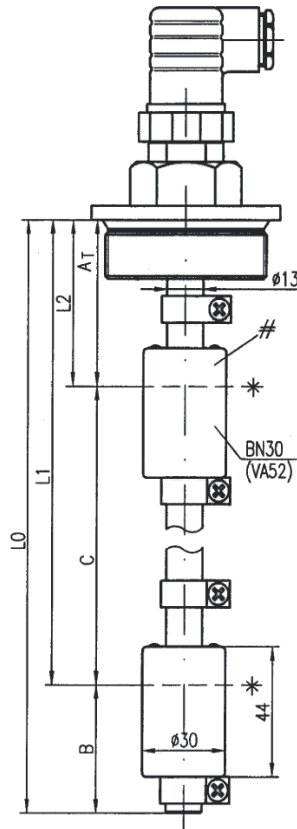
Technical Drawing

Formerly Series BLS 800

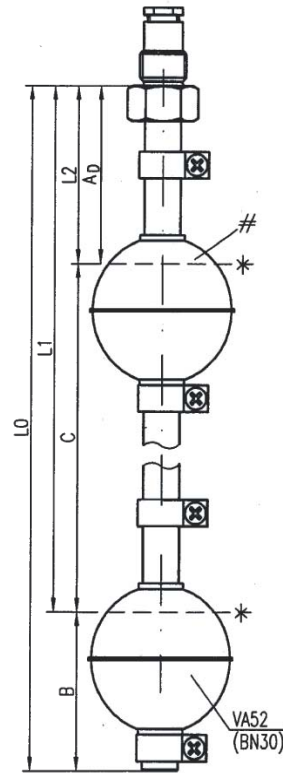
Dimensions in inch (mm)



With Alumin.
Terminal Box
(KL6C or
KL12C)



With DIN
Connector
(ST1)



With Cable
gland
(PG7)

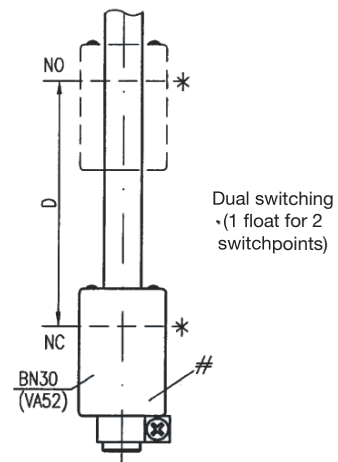
1. Length tolerance ± 3 mm
2. L0 = max. 3000 mm

* Immersion depth at density 1:
VA52 = 36 ± 2 mm
BN30 = 20 ± 2 mm

Float position:
VA52 = 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

Dimensions Float type	Min. distances in mm					
	A _F	A _T	A _D	B	C	D
VA52	32	52	44	55	85	55
BN30	--	60	52	39	77	55

When using -DR: Dimension B + 20 mm!



Dual switching
(1 float for 2
switchpoints)

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UNS-2000 Series

UNS-2000 Series Order Form

Check Boxes to Select Specification Requirements

Enter Order #:

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Product Configurator

Example	UNS 2000	VA	T2NPT	KL6C	VA52	L2 / 2.1	(DR)-(VV)-HT-U-PT100-TP/XX.X-Exi
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Basic Configuration

Check Required Specs UNS 2000 Level switches type

Material of Stem

- VA SS316
- MS Brass

Mounting Element

- T1/2NPT Integral thread, only with PG7
- T1-1/4NPT 1-1/4" NPT tank screw
- T2NPT 2" NPT tank screw
- FLA5 Blind flange (150#)

Electrical Connection

- ST1 Cube plug DIN 43650, 3-pin + earth
- KL6C Aluminum terminal box, 6 terminals
- KL12C Aluminum terminal box, 9 terminals
- PG7 PG7-cable gland with 1 m PVC-cable, -HT with silicone cable (22 AWG)
- K PCV-cable sealed, specify length at order. -HT with silicone cable (22 AWG)
- KXPC Explosion proof junction box with 1/2" conduit

No. of Switchpoints²

L=Level, T=Temperature

- L1 1 Switchpoint @ _____ in/mm
- L2 2 Switchpoints @ _____ in/mm
- L3 3 Switchpoints @ _____ in/mm
- L4 4 Switchpoints @ _____ in/mm
- L5 5 Switchpoints @ _____ in/mm
- L6 6 Switchpoints @ _____ in/mm

See also Connection Groups in table "Max. Switchpoints"

Options, please specify when needed

- DR Damping tube
- HT High temperature application (up to +150 °C) 302°F
- U Mounting through bottom
- PT100 PT100-element
- VV Vertical adjustment
- Exi ATEX approval EEx ia
- TP 3A, 12 or 24V DC
- X Contact mode 2
- XX Setpoint at rising

Standard +122 °F / +158 °F / +194 °F (+50 °C / +70 °C / +90 °C)
Others on request

Float Type

	Min. Density	Material	Form	∅	Max. Temp.	Max. Bar	
<input type="checkbox"/>	BN30	0.6 g/cm ³	NBR	Cylinder	30 mm 1-3/16	212 °F (100 °C) - Oil 176 °F (80 °C) - Water	15
<input type="checkbox"/>	VA52	0.78 g/cm ³	Stainless steel, 316	Ball	52 mm 2-1/16	302 °F (150 °C)	40

Contact Type of Float

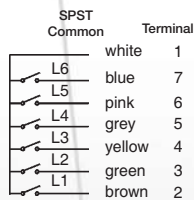
	Contact Mode	Contact Rating
<input type="checkbox"/>	1-SPST (NO)	250 V AC / DC, 3 A, 100 VA / W
<input type="checkbox"/>	2-SPST (NC)	250 V AC / DC, 3 A, 100 VA / W
<input type="checkbox"/>	3-SPDT	140 V AC / DC 1 A, 60 VA / W

Must specify with your orders

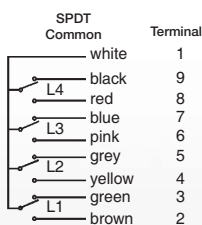
Check List:

- 1 - Overall stem length: L0= _____ (in/mm) (Upto 3000mm std.)
- 2 - Add dimensional position of float
- 3 - Pick wiring code:

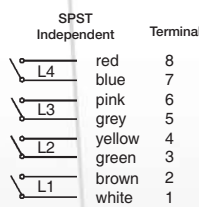
Group 1



Group 2



Group 3



Group 4

