

VTCS 100 Capacitive Level Switch

- ▶ Structural diversity
- ▶ Pressure resistance up to 60bar
- ▶ Applicable to the conductive/non-conductive/corrosive fluids
- ▶ Optional ex-proof
- ▶ Optional high temperature model

VTCS100 is designed to measure the limit level of the non-conductive fluids, non-corrosive conductive liquids and moderately corrosive conductive liquids in tanks, vessels, pipes, etc.



Specifications

Electrode Length	Standard type 3cm, Extended type 5–100cm
Power Supply	6...30Vdc, 8...9Vdc(ex-proof model)
Pulse Output	
Supply Current	Max. 0.6/7mA(off/on state)
Conversion Current	100mA
Remanent Voltage(On State)	1.8V
Switching Output	
Supply Current	Max. 0.6/7mA(off/on state)
Conversion Current	3.3mA/40mA(Min./Max.)
Remanent Voltage(On State)	6.0V
Output Time Delay	0.1s
Cable	PVC2x0.34mm ² , PVC 3x0.34mm ² (for pulse output)
Temperature	For details, see Temperature and Pressure Durability
Material	
Housing	PP(Polypropylene)
Process Connection	303 stainless steel
Rod	303 stainless steel
Coated	FEP
Protection Class	IP65
Ex-proof Parameters	
Current Supply	≤1mA/≥2.2mA(state off/on)
Coupling Capacity	44nF
Electric Strength	250Vac
Cable LC Parameters	Typical C<150pF/m; L<0.8μH/m
Electrical Connection	M12x1 plug
Process Connection	G external thread

Applications

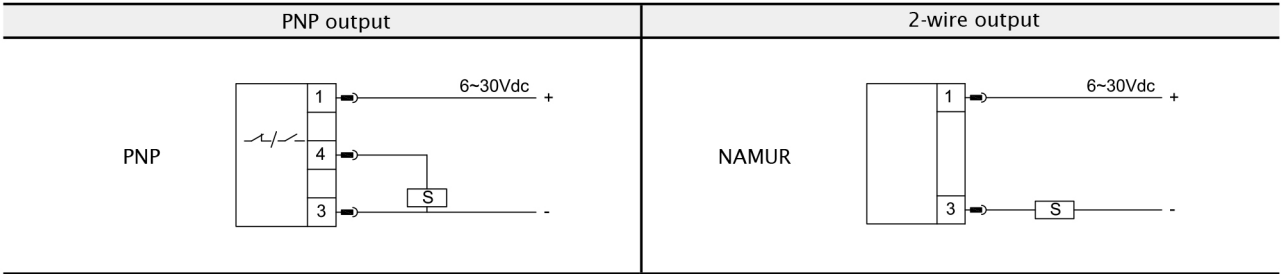
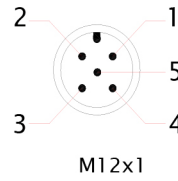
- ▶ Petrochemical industry
- ▶ Energy industry
- ▶ Equipment manufacture
- ▶ Water treatment
- ▶ Hydraulic/lubrication system

Temperature and Pressure Durability

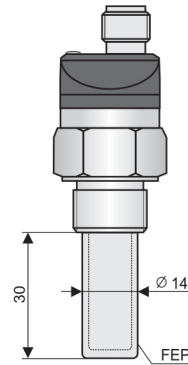
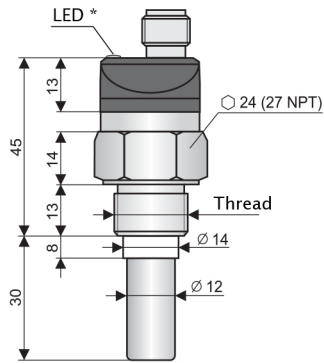
Medium Temperature	Ambient Temperature	Temperature of Process Connection Spot	Max. Operating Pressure for Process Connection Spot		
			30°C	85°C	105°C
-25°C ... 105°C	-20°C ... 80°C	-25°C ... 105°C	8MPa	6MPa	5MPa
-10°C ... 105°C	-10°C ... 80°C	-10°C ... 105°C	7MPa	5MPa	4MPa
-25°C ... 105°C	-20°C ... 80°C	-25°C ... 105°C	8MPa	6MPa	5MPa

Wiring

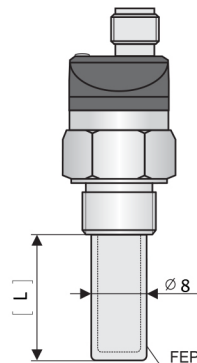
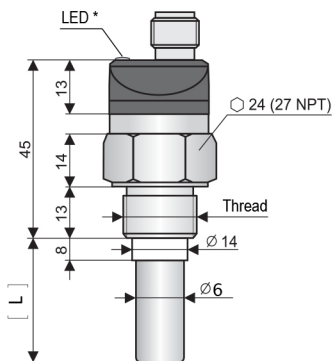
Signal	Plug	Cable
U+	1	Brown
U-	3	Blue
Switching output S1	4	Black
Switching output S2	2	White



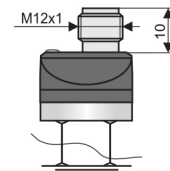
Dimensions in inches (mm)



Standard type



Extended type



M12x1 Plug

Model Number

OrderNO.	Type	Probe rod type 12/21/T	Active length cm	Process connection	Output type mA /V
VTLC10003	VTLC200-3G12PSFN12/03	12 Standard type Ø14mm	3	G1/2	2-wire PNP/NPN Output
VTLC10103	VTLC200-3G12RSFXi12/03				2-wire NAMUR Output (Intrinsically safe Ex-proof)
VTLC10003T	VTLC200-3G12RSFN12T/03	12T Standard high temperature type Ø14mm	3		2-wire PNP/NPN Output
VTLC10103T	VTLC200-3G12RSFXi12T/03				2-wire NAMUR Output (Intrinsically safe Ex-proof)
VTLC100XX	VTLC200-3G12RSFN21/XX	21Extended type Ø8mm	XX (XX=5...100)		2-wire PNP/NPN Output
VTLC101XX	VTLC200-3G12RSFXi21/XX				2-wire NAMUR Output (Intrinsically safe Ex-proof)
VTLC100XXT	VTLC200-3G12RSFN21T/XX	21T Extended high-temperature type Ø8mm	XX (XX=5...100)		2-wire PNP/NPN Output
VTLC101XXT	VTLC200-3G12RSFXi21T/XX				2-wire NAMUR Output (Intrinsically safe Ex-proof)

Note: When choosing elongated type, XX is replaced by rod length (unit: cm); 12 standard type, 21 elongated type, T high temperature type (XX=100cm XX=A0)