

SCLTSDI Level/Temperature Switch

Device features

Display

- Large displays for level and temperature
- 2-color switching status display
- Reversal of viewing direction by 180°
- Bevelled for better readability
- Units:
 - Level = mm, cm, m, inch and %
 - Temp = °C and °F

Easy to use

- 3 tactile buttons
- VDMA-Menu navigation

Outputsignal

- IO-Link interface
- Stable metallic M12x1 thread
- Pin assignment according to VDMA
- Can be selected between switching output, current output and voltage output

Housing

- Metallic housing
- High quality surface
- 240° rotatable
- IP67 protection

Installation

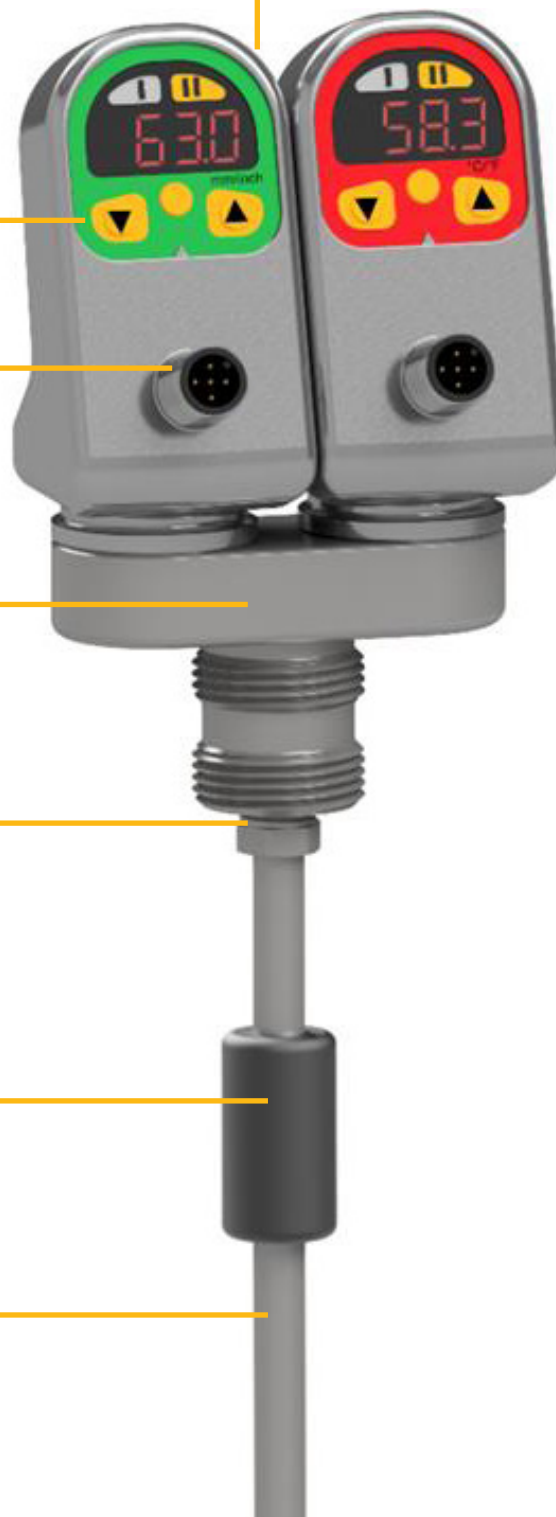
- G3/4" external thread
- Brass: CW724R
- 2 in 1 concept
- One coupling hole

Float element

- Proven measuring system
- High float dynamics
- Small design
- Universal usage

Measuring element

- Measuring range up to 1000mm and 85°C
- Tempsensor element integrated in the rod end
- High Pressure rating up to 5 bar
- High accuracy up to 0,5% FS
- Long-term stable measuring cell



SCLTSDI Level/Temperature Switch

Technical data

SCLTSDI-	250	370	520	800	1000
Measuring range	30...215	30...335	30...485	20...750	20...950
Lowest reset point RSP	30	30	30	20	20
Highest switching point SP	215	335	485	750	950
Display resolution	5	5	5	10	10
Display resolution SP und rSP	5	5	5	10	10
Measuring temperature range	-20°C .. 85°C	-20°C .. 85°C	-20°C .. 85°C	-20°C .. 85°C	-20°C .. 85°C

All units in mm

Process connection

Process connection	G3/4 BSPP external
Tightening torque	105 Nm

Parts in contact with media

External thread	Brass: CW724R (CuZn21Si3P) Sealing: ED NBR SH70
Sliding tube	Stainless steel 1.4301
Float element	NBR
Circlip	Bronze

Output variables

Current input	0..20mA or 4..20mA (programmable)
Voltage input	0..10V

Switching point

Switching current:	max. 200 mA
Short circuit current:	400mA (short term), short circuit proof
Switching voltage:	Supply voltage - 0,5 VDC
Execution:	PNP/ NPN (programmable)
Max switching frequency	250 Hz

Accuracy (level)

@ 25°C	±0,50% FS ±1 Digit
@ -20...+85C	±1,5% FS ±1 Digit

Accuracy (temperature)

@ 25°C	±0,35% FS ±1 Digit
@ -20...+85C	±1,5% FS ±1 Digit

Electrical connection

Supply voltage V _s	18...30 VDC
Connector	M12x1; 4pol / M12x1; 5pol
Short circuit protection	Yes
Reverse polarity protection	Yes
Overload protection	Yes
Overvoltage	50 V
Current consumption	<40 mA @24V
Inrush current	<100 mA @24V

IO-Link

Profile:	Smart Sensor Profile 2nd Edition V1.1.2
Process Cyklustime	4 ms
SIO-Mode	Yes
Master port type	A
Process data analogue	2 Byte Process data 1 Byte Scaling factor
Process data binary	1 Byte
SDCI Standard	IEC 61131-9
Vendor ID	271 (dec) / 10f (hex)
Device IODD	https://parker.com/

Response speed

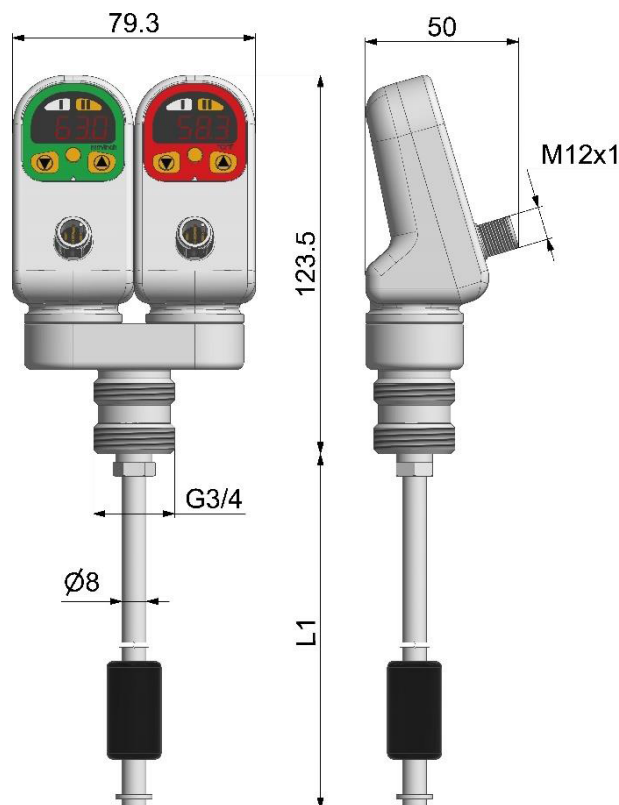
Switching output	≤3 ms
Analogue output	≤3 ms
Sample rate	≤3 ms



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Technical data

Housing		EM compatibility	
Rotatability	>240°	Immunity to interference	
Readability display	Reversal of viewing direction by 180° (programmable)	Emission of interference	EN 55011
Display	7-Segment-LED (4-digit)	ESD	EN 61000-4-2
	2-color switching status display (red/yellow)	high-frequency electromagnetic fields	EN 61000-4-3
Buttons	3 tactile buttons for up, down, enter	fast transient electrical disturbances	EN 61000-4-4
Material		Conducted disturbances induced by high-frequency fields	EN 61000-4-6
Housing	Zinc die-cast (bright nickel-plated)	Environmental conditions	
Display cover	Polyester Autotex V207	Ambient temperature	-20...+85 °C
Protection class	IP67	Operating temperature	-20...+85 °C
Weight	~860 g	Storage temperature	-40...+85 °C
General		Medium temperature	-20...+85 °C
MTTFd	>100 years	Vibration resistance	DIN EN 60068-2-6, 20 g
RoHS-Conformity	2011/65/EU, 2024/232	Shock resistance	DIN EN 60068-2-27, 50g
Float dimensions			
M. Range<= 520mm	Ø17,8mm / length = 32mm		
M. Range<= 520mm	Ø21mm/ length = 36mm		



SCLTSDI Level/Temperature Switch

Order code

SCLTSDI Digital Level/Temp switch

2 switching points; no analogue output SCLTSDI-xxx-00-07

M12x1 connector; 4-Pin

1 switching point; with current output SCLTSDI-xxx-10-07

M12x1 connector; 4-Pin

2 switching points; with current output or voltage output SCLTSDI-xxx-x0-05

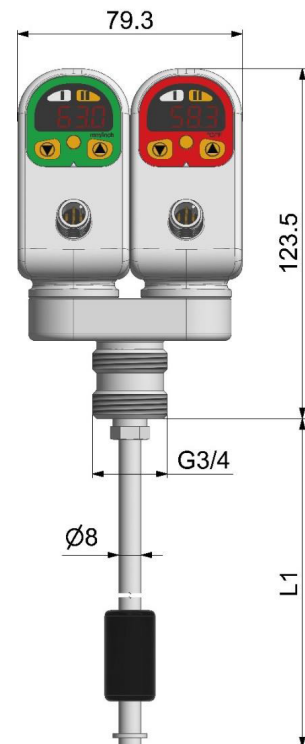
M12x1 connector; 5-Pin

Installation length L1 mm

250 mm	250
370 mm	370
520 mm	520
800 mm	800
1000 mm	1000

Analogue output

No analogue output	0
0..20 mA / 4..20 mA	1
0..10 V	4



Accessory

Securing clamp

Reducing adapter M22x1,5

Reducing adapter G1/2 BSPP

Attenuation adapter

SCSD-S24
RI22X1.5EDX1/4CF
RI1/2EDX1/4CF
SCA-1/4EDX1/4-D

Connection cable and single plug

Connection cable, assembled

(open cable end)

SCK-400-xx-xx

Cable length (m)

2 m	02
5 m	05
10 m	10

Connector

M12 cable jack; straight	45
M12 cable jack; 90° angled	55

Single connector

M12 cable jack; straight

M12 cable jack; 90° angled

SCK-145
SCK-155

PIN	SCxSDI-xxx-x4-x7
1	V ₊
2	Analogue out
3	0 V/GND
4	S1 out / IO-Link

PIN	SCxSDI-xxx-04-x7
1	V ₊
2	S2 out
3	0 V/GND
4	S1 out / IO-Link

PIN	SCxSDI-xxx-x4-x5
1	V ₊
2	S2 out
3	0 V/GND
4	S1 out / IO-Link
5	Analogue out

