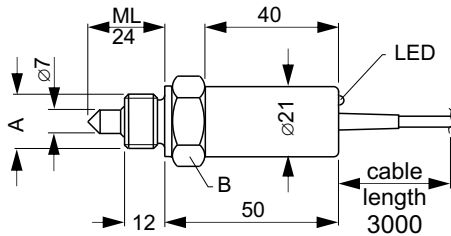


<h2>Mini Switch</h2> <p>Optoelectronic liquid Level limit switch                  Threaded connection                  integrated switched light circuit module                  Output open-collector pnp transistor</p>	<b>Product group</b> <b>720</b>
	<b>Type</b> <b>0020</b>
	Page: 1/1    Revision: 5
	Date: 4/05



Version M16x1,5



This type can be delivered in three versions:

Typ	A	B
720.0020SX	M16 x 1,5	SW24
720.0021SX	NPT 1/2"	SW24
720.0023SX	G1/2A	SW30

**Cross reference:**

New ordering no	Old ordering no
7200020SE	178 558
7200020SA	178 559
7200021SE	178 556
7200021SA	178 557
7200023SE	178 562
7200023SA	178 561

measures in mm

**Field of application**

This Optoelectronic limit switch is for signalling liquid level limits. A big advantage is that to a great extent the optoelectronic sensor works independently of physical properties like density, dielectric constant, conductivity or color. The very compact construction only needs a minimum of space and enables it also to measure very small volume levels. With its built in green LED the activated state is indicated. It can also be used in transparent tanks.

**General Data**

Measuring accuracy:	+/-0,5 mm
Light source:	IR-Light 930 nm
Ambient light:	max. 10.000 Lux
Minimum distance	
Sensor tip to any opposite wall:	>10 mm
Mounting direction:	any
Indication of active output:	green LED
Switch direction:	to be set at factory

**Design Data**

Operating temperature:	-30 to +140 °C
Ambient temperature:	-25 to +70 °C
Operating pressure:	0 - 5 MPa (0 - 50 bar)
Material Sensor-housing:	SS
Material Light guide:	Quartzglass
Material packing:	PTFE
Material housing:	SS
Weight:	0.15 kg

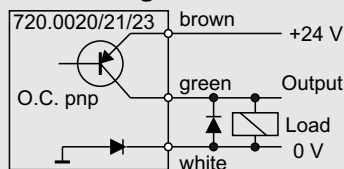
**Electrical Data**

Rated voltage:	24 V DC +/- 30 %
Supply current max.:	40 mA
Output:	O.C. pnp-Transistor
	current, voltage dissipation limited
	short-circuit-protected

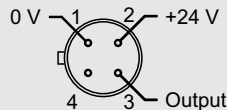
Switch current (Tu=70 °C):	0,5 A
Connection:	PVC-cable 3*0.14 mm2
	or plug 4-pole serie 713, M12
Ingress protection EN 60529 with plug:	IP 65
With cable:	IP 66

subject to alterations

**Connection diagram**



**pin assignment**



**Ordering no.**

7 2 0 0 0 2 X S X - 5 9 \_ \_ \_ X X X

Connection	M16x1,5	0	B	Plug M12	Cable or plug type	
	NPT 1/2"	1		P		PVC cable
	G1/2A	3		3		3 m
Switch direction	switching immersed	E	5	5 m	Cable length	
	switching dry	A	A	Cable shielded	electrical connection	
			K	Cable		
		S	Plug			

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