

SH 2015

Photoelectric scanning head for testing of electronic meters



The photoelectric scanning head Type SH 2015 is especially designed to detect pulses from electronic meters. A permanent ring-magnet is built into the scanning head, thus enabling the SH 2015 scanning head to be magnetically attached to meters with built-in metal ring or magnet around the light emitting diode.

Thanks to this magnetic holding device, the scanning head can be used for both measurements on meter test consoles or in the field.

In addition a LED shows the state of operation:

Green ⇨ Power On

Red ⇨ Pulses detected

Technical Data SH 2015

Mechanical data

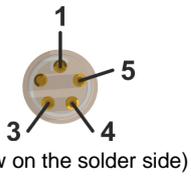
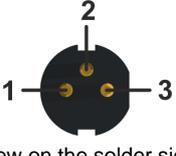
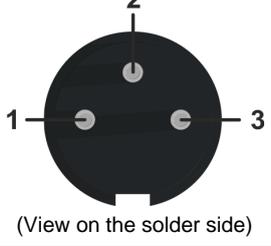
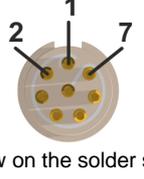
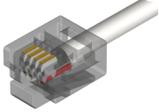
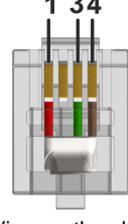
Diameter:	32 mm
Height:	20 mm
Weight:	110 g (incl. cable)
Housing:	Hard plastic
Operation temperature:	-10°C ... +50°C
Storage temperature:	-40°C ... +70°C
Cable length:	4 m
Force of magnetic attraction:	approx. 15 N

Electrical data

Auxiliary supply voltage:	8 VDC ... 30 VDC
Maximum current consumption:	3 mA ... 13 mA (at $R_L \geq 10 \text{ k}\Omega$)
Rising edge time of output signals:	< 5 μs
Falling edge time of output signals:	< 10 μs
Constant pulse length up to 800 Hz:	approx. 1 ms
Constant pulse-pause ratio from 800 Hz	
Wave length range at filter glass:	R: Red (standard) 610 ... 1000 nm Y: Yellow (option) 550 ... 1000 nm

Connections

The connecting cable is permanently attached to the scanning head and uses a plug for the connection to electronic meter test devices. The subscript table explain the several constructions to connect the meter test devices of the MTE AG.

Type	Connector type	Connection detail	For use with
SH 2015/1 	5-pole LEMO  (View on the solder side)	Pin 1 \Rightarrow +24 V Pin 3 \Rightarrow Impulse Pin 4 \Rightarrow 0 V Pin 5 \Rightarrow Screen	K2006 PRS 600.3 PRS 400.3 PRS 1.3 PWS 3.3 PWS 2.3 genX PWS 2.3 PLUS CheckMeter 2.1 CheckMeter 2.3 PTS 2.3 C PTS 3.1 C PTS 3.3 C PTS 400.3 PTS 400.3 PLUS
SH 2015/2 	3-pole Binder series 711  (View on the solder side)	Pin 1 \Rightarrow 0 V Pin 2 \Rightarrow Impulse Pin 3 \Rightarrow +12 V	KOM 200.3 PRS 200.3 PRS 121.3
SH 2015/3 	3-pole Binder series 678  (View on the solder side)	Pin 1 \Rightarrow 0 V Pin 2 \Rightarrow Impulse Pin 3 \Rightarrow +12 V	PWS 1.3 PTS 1.3
SH 2015/4 	8-pole Redel series 1P  (View on the solder side)	Pin 1 \Rightarrow 0 V Pin 2 \Rightarrow +12 V Pin 7 \Rightarrow Impulse	CheckSystem 2.1 CheckSystem 2.3 PTS 2.1 PTS 2.3 PTS 3.1 PTS 3.3
SH 2015/5 	FCC RJ 6P4C  (View on the plug)	Pin 1 \Rightarrow +24 V Pin 3 \Rightarrow Impulse Pin 4 \Rightarrow 0 V	SMM 397 SMM 400+