

Controller type		KSS6420	KSS6430	KSS6420(01)	KSS6430(01)
Sensor		KSH5(01)		KSH10	
Target thickness (insulator thickness) ¹⁾		40 μm ... 3 mm		40 μm ... 6 mm	
Working distance		2 mm ... 5 mm		4 mm ... 10 mm	
Min. diameter measurement surface		45 mm		65 mm	
Resolution ^{2) 3)}	static, 100 Hz	0.0018 % FSO	0.0004 % FSO	0.0030 % FSO	0.0006 % FSO
	dynamic, 3.9 kHz	0.0075 % FSO	0.0015 % FSO	0.0120 % FSO	0.0025 % FSO
Bandwidth		analog: 1 kHz (3 dB) ⁴⁾ , digital: 2.6 ... 3900 Sa/s (adjustable)			
Linearity		≤ ± 0.05 % FSO			
Temperature stability	Sensor (+10 ... +50 °C)	± 50 ppm			
	Controller (+10 ... +50 °C)	± 50 ppm	± 50 ppm	± 50 ppm	± 70 ppm
Temperature range	Operation	controller: +10 ... +60 °C; sensor: -10 ... +85 °C; sensor cable: -10 ... +125 °C			
	Storage	sensor, cable: -10 ... +100 °C; controller: 0 ... +75 °C			
Supply		12 ... 36 VDC (5.5 W)			
Output	Analog	capacitive, eddy current and differential signal: 0 ... 10 V (short circuit proof); internal sensor temperature signal (not scaled)			
	Ethernet	capacitive, eddy current, differential and internal temperature signal: 24 Bit			
	EtherCAT	capacitive, eddy current, differential and internal temperature signal: float			
Trigger		TTL, 5 V			
Target geometry		straight surface or min. diameter 200 mm ⁵⁾			
Protection class		sensor: IP54, controller: IP40			
Weight		sensor: 80 g; controller: 750 g			

FSO = Full Scale Output

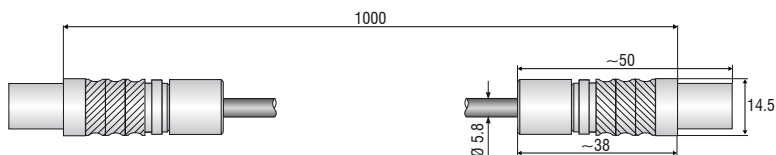
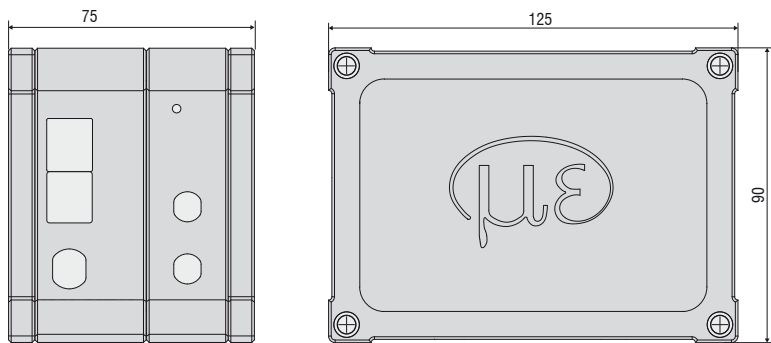
¹⁾ Insulator thickness below 40 μm on request; ²⁾ RMS noise related to mid of measuring range

³⁾ Difference signal of the digital output, measured with working distance = 50 % FSO

⁴⁾ only valid when sampling rate = 3900 Sa/s

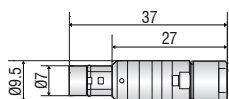
⁵⁾ Reference material ground electrode: VA steel (1.4571) or aluminum. Changes of the ground electrode (material or geometry) require a recalibration of sensor and controller by the manufacturer.

Controller

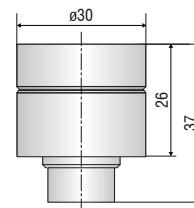


SCAC3/5 connector

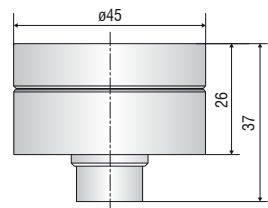
Signal output (5-pole plug)



KSH5 sensor



KSH10 sensor



Scope of supply:

- KSH sensor
- Sensor cable 1m
- Controller
- PC6200 3/4 supply and trigger cable (3m)

Accessories:

- SCAC3/5 signal output cable analog (3m)