



More Precision

wire**SENSOR**

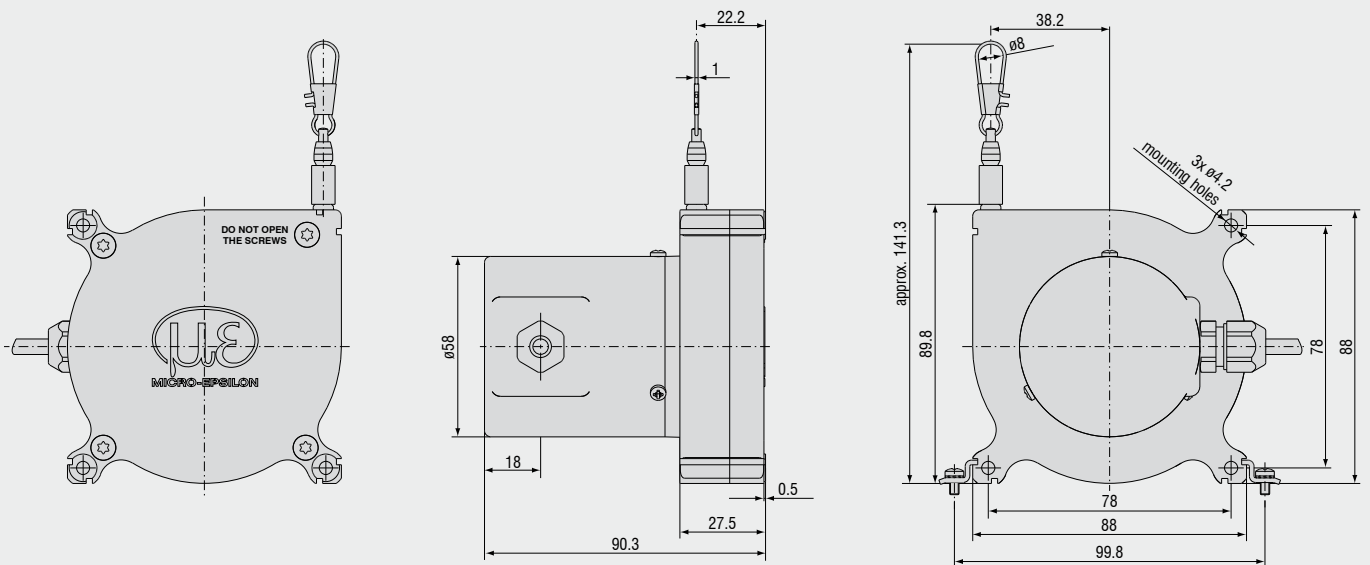
Draw-wire displacement sensors





- Robust plastic housing
- Customized versions for OEM
- Potentiometer, current and voltage output

Model MK88



Modell	WPS-2300-MK88 (01)	WPS-3500-MK88 (01)	WPS-5000-MK88 (01)
Output	P/U/I		
Sensor element	potentiometer		
Measuring range	2300mm	3500mm	5000mm
Linearity	±0.15 % FSO	±0.3 % FSO	±0.4 % FSO
Resolution/sensitivity	quasi infinite		
Temperature range	-20 to 80°C		
Material	housing	plastic, PA 6 GF 30	
	wire	coated polyamid stainless steel	
	protection cap	aluminium	
Wire diameter	ø0.45mm		
Wire mounting	wire clip		
Sensor mounting	mounting holes / mounting grooves on the sensor housing		
Wire retraction force (min)	4 N		
Wire extension force (max)	9 N		
Wire acceleration (max)	appr. 7g		
Protection class	IP 65		
Electrical connection	integrated cable, 1m		
Weight (with cable)	400-430g		

FSO = Full Scale Output
 Specifications for analog outputs on page 47.

Article description

WPS - 2300 - MK88 - CR - P

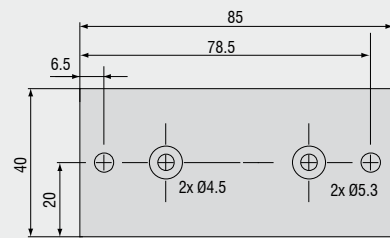
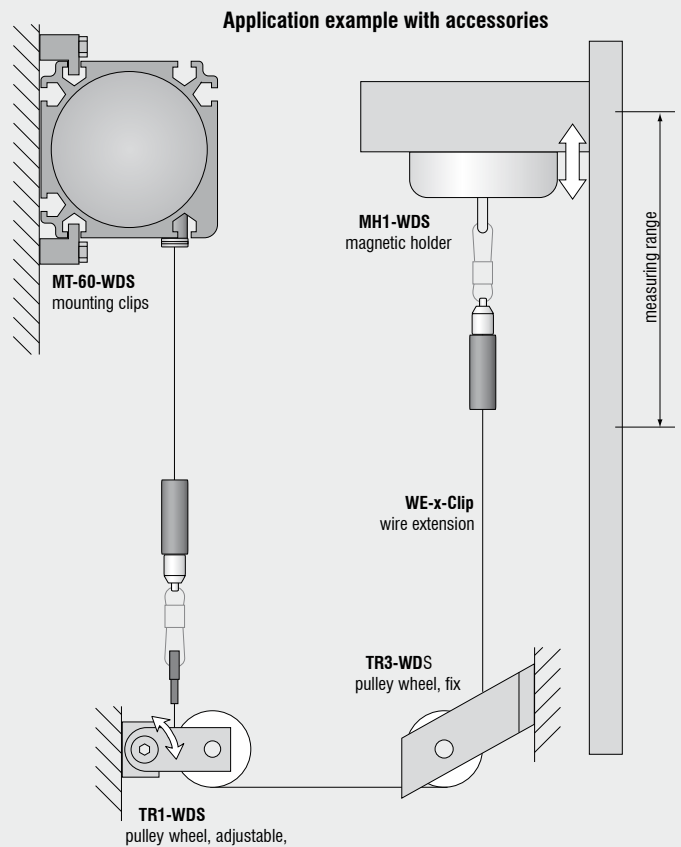
Output option:
 P: potentiometer
 U: voltage
 I: current

Connection CR: integrated cable, radial, 1m

Model MK88

Measuring range in mm

WE-x-M4, WE-x-Clip	Wire extension x=length
TR1-WDS	Pulley wheel, adjustable
TR3-WDS	Pulley wheel, fixed
GK1-WDS	Attachment head for M4
MH1-WDS	Magnetic holder for wire mounting
MH2-WDS	Magnetic holder for sensor mounting
MT-60-WDS	Mounting clamp for WDS-P60
FC8	Female connector for WDS, 8-pin
FC8/90	Female connector 90° for WDS
PC 3/8	Sensor cable, length 3 m
PS 2010	Power supply (chassis mounting 35 x 7.5 mm); input 120/230 VAC; output 24 VDC/2.5 A; L/B/H 120 x 20 x 40 mm
WDS-MP60	Mounting plate for P60 sensors



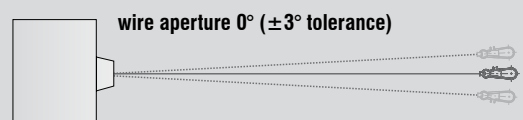
Mounting plate WDS-MP60

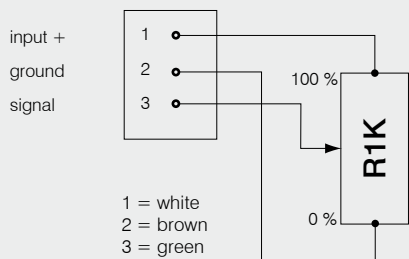
Installation information:

Wire attachment: The free return of the measurement wire is not permissible and it is essential that this is avoided during installation.

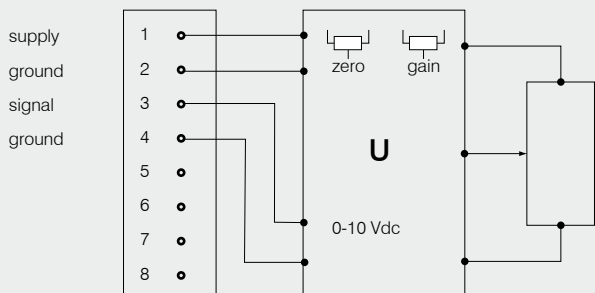
Wire exit angle:

When mounting a draw-wire displacement sensor, a straight wire exit ($\pm 3^\circ$ tolerance) must be taken into account. If this tolerance is exceeded, increased material wear on the wire and at the wire aperture must be expected.

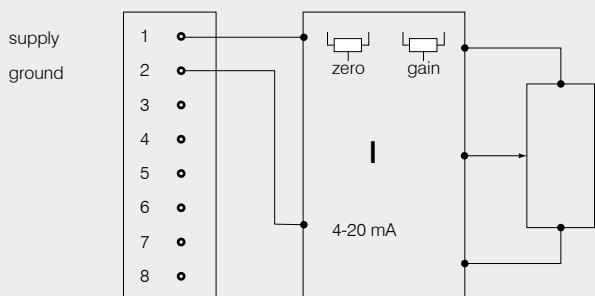




Potentiometric output (P)	
Supply voltage	max. 32VDC at 1kOhm / 1 Wmax
Resistance	1kOhm ±10% (potentiometer)
Temperature coefficient	±0.0025% FSO/°C
Sensitivity	depends on measuring range individually shown on test report



Voltage output (U)	
Supply voltage	14 ... 27VDC (non stabilized)
Current consumption	30mA max
Output voltage	0 ... 10VDC Option 0 ... 5 / ±5V
Load impedance	>5kOhm
Signal noise	0.5mV _{eff}
Temperature coefficient	±0.005% FSO/°C
Electromagnetic compatibility (EMC)	EN 50081-2 EN 50082-2
Adjustment ranges	
Zero	±20 %FSO
Sensitivity	±20 %



Current Output (I)	
Supply voltage	14 ... 27VDC (non stabilized)
Current consumption	35mA max
Output current	4 ... 20mA
Load	<600Ohm
Signal noise	<1.6μA _{eff}
Temperature coefficient	±0.01% FSO/°C
Electromagnetic compatibility (EMC)	EN 50081-2 EN 50082-2
Adjustment ranges	
Zero	±18% FSO
Sensitivity	±15%

High performance sensors made by Micro-Epsilon



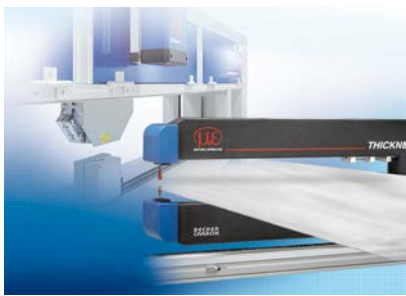
Sensors and systems for displacement and position



Sensors and measurement devices for non-contact temperature measurement



2D/3D profile sensors (laser scanner)



Measurement and inspection systems for quality assurance



Optical micrometers, fibre optic sensors and fibre optics



Colour recognition sensors, LED analyzers and colour online spectrometer



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