

# More Precision

# wireSENSOR // Draw-wire displacement sensors



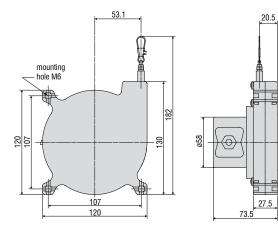
# 24 Low-cost draw-wire displacement sensors

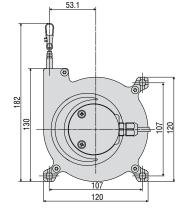
# wireSENSOR MK120 analogue



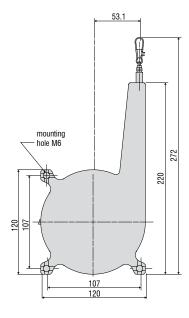
- Robust plastic housing
- Customised versions for OEM
- Potentiometer, current and voltage output

#### Model MK120 (Measuring range 3000, 5000mm)



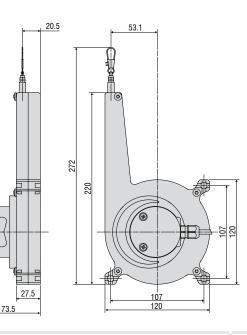


Model MK120 (Measuring range 7500mm)



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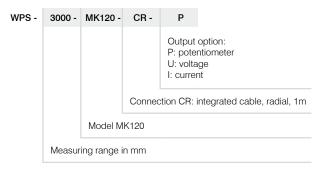
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Model		WPS-3000-MK120	WPS-5000-MK120	WPS-7500-MK120
Output			P, U, I	
Measuring range		3000mm	5000mm	7500mm
Linearity	±0.15% FSO	±4.5mm	±7.5mm	±11.25mm
Resolution			quasi infinite	
Temperature range		-20 to 80°C		
Material	housing		plastic PA6	
	draw wire	coated polamide stainless steel (ø 0.45mm)		
Wire mounting			wire clip	
Wire acceleration		2.5g 1.5g		
Wire retraction force (min)		5.5N	5N	7N
Wire extension force (max)		8N 13N		
Electrical connection		integrated cable, radial, 1m		
Protection class		IP 65		
Weight		0.75kg 0.9kg		
FSO = Full Scale Output				

Specifications for analogue outputs on page 51.

### Article description

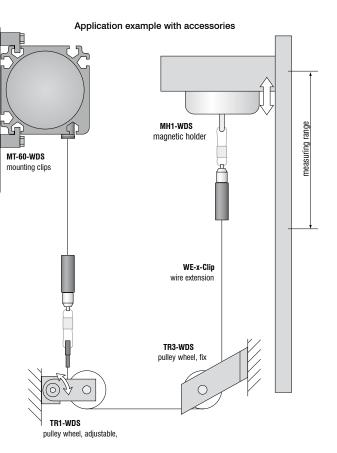


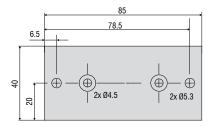
Accessories and mounting

## wireSENSOR

#### Accessories:

WE-xxxx-M4	Wire extension with M4-wire connection, $x=$ length
WE-xxxx-Clip	Wire extension with eyelet, $x=$ 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-WDS	Sensor cable, length 3m
PS 2020	(Power Supply 24 V / 2,5 A, Input 100 - 240 VAC, output 24 VDC / 2.5 A, for snap in mounting on DIN 50022 rail)
WDS-MP60	Mounting plate for P60 sensors





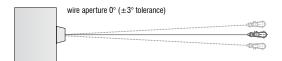
Mounting plate WDS-MP60

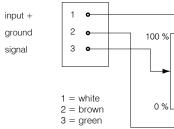
#### Installation information:

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.

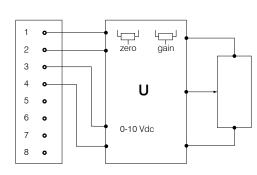




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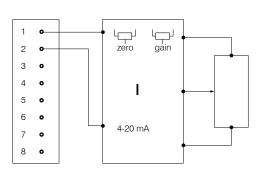
Potentiometric output (P)		
Supply voltage	max. 32VDC at 1kOhm / 1 Wmax	
Resistance	1kOhm ±10% (potentiometer	
Temperature coefficient	±0.0025% FSO/°C	
Sensitivity	depends on measuring range individually shown on test report	





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





Current Output (I)		
Supply voltage	14 27VDC (non stabilised)	
Current consumption	max. 35mA	
Output current	4 20mA	
Load	<6000hm	
Signal noise	<1.6µAeff	
Temperature coefficient	±0.01% FSO/°C	
Electromagnetic	EN 50081-2	
compatibility (EMC)	EN 50082-2	
Adjustment range		
Zero	±18% FSO	
Sensitivity	±15%	

# High performance sensors made by Micro-Epsilon



Sensors and systems for displacement and position



Optical micrometers, fibre optic sensors and fibre optics



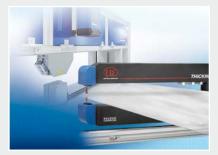
Sensors and measurement devices for non-contact temperature measurement



Colour recognition sensors, LED analysers and colour inline spectrometer



2D/3D profile sensors (laser scanner)



Measurement and inspection systems



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