ALAT UJI
Products, Solution, Services

wireSENSOR
Series MP / MPW

Miniature design

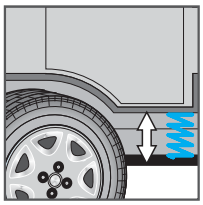
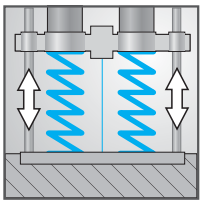
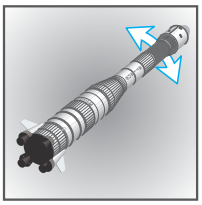
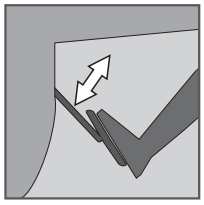
MPW - waterproof option

For fast measurement

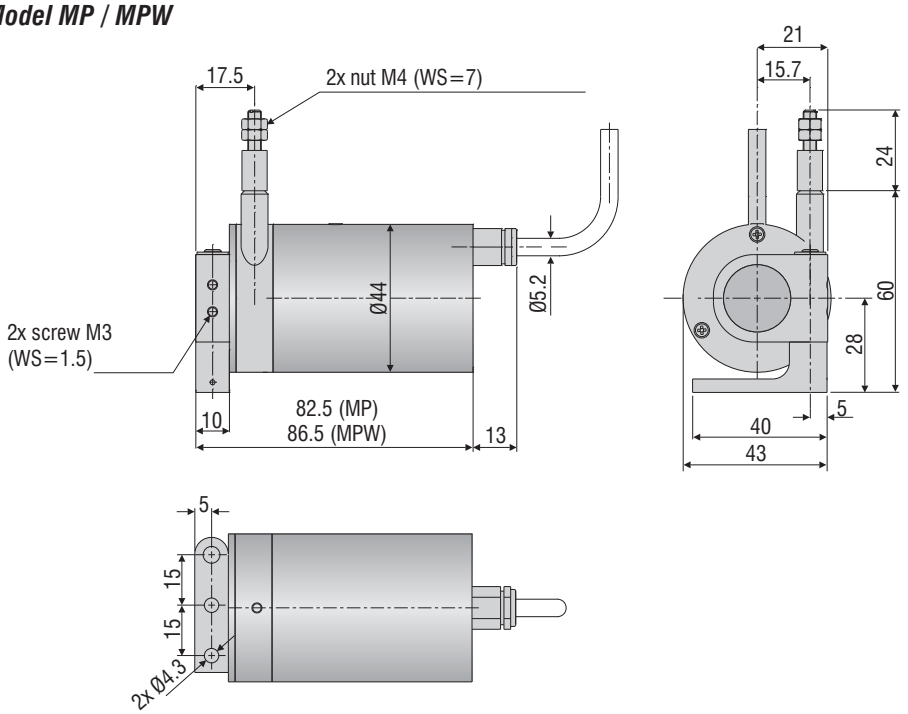
Sensors for stationary and mobile application

String pots of the series MP/MPW are designed both for industrial use and for mobile applications. This draw-wire position sensors are the preferred choice where displacements must be acquired under limited installation conditions. The double swivel flange enables quick and easy sensor adjustment.

The series MPW (waterproof) is particularly intended for applications in harsh ambient conditions.

Model MP / MPW



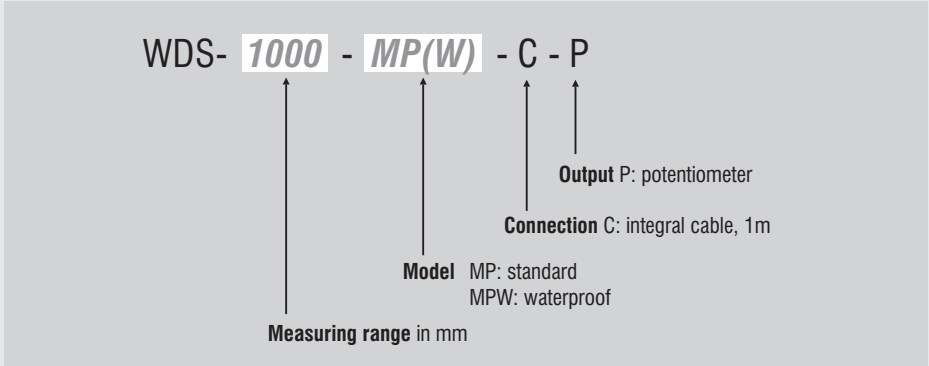
Dimensions in mm, not to scale. Please ask for detailed reference drawings.

Model		WDS-100 MP(W)	WDS-300 MP(W)	WDS-500 MP(W)	WDS-1000 MP(W)
Output		P	P	P	P
Measuring range		100mm	300mm	500mm	1000mm
Linearity	±0.1 % FSO	-	-	0.5mm	1mm
	±0.25 % FSO	-	0.75mm	-	-
	±0.5 % FSO	0.5mm	-	-	-
Resolution		0.15mm	0.2mm	quasi infinite	
Sensor element		wire-wound		hybrid-potentiometer	
Temperature range		-20 ... +80 °C			
Material	housing	aluminum			
	draw wire	stainless steel (ø 0.45mm)			
Wire mounting		thread M4			
Sensor mounting		swivel flange in two axes 180 ° / 360 °			
Wire acceleration		appr. 30g			
Wire retraction force (min)		7 N	7 N	6.5 N	5 N
Wire extension force (max)		8.5 N	8.5 N	8.5 N	8 N
Protection class DIN EN 60529	series MP	IP 65			
	series MPW	IP 67			
Vibration	IEC 68-2-6	20g, 20Hz - 2kHz			
Mechanical shock	IEC 68-2-27	50g, 10ms			
Electrical connection		integral cable, axial, 3-leads, 1m long			
Weight		appr. 270g			

FSO = Full Scale Output

Specifications for analog outputs on page 33.

Article description



wireSENSOR
Accessories and mounting

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

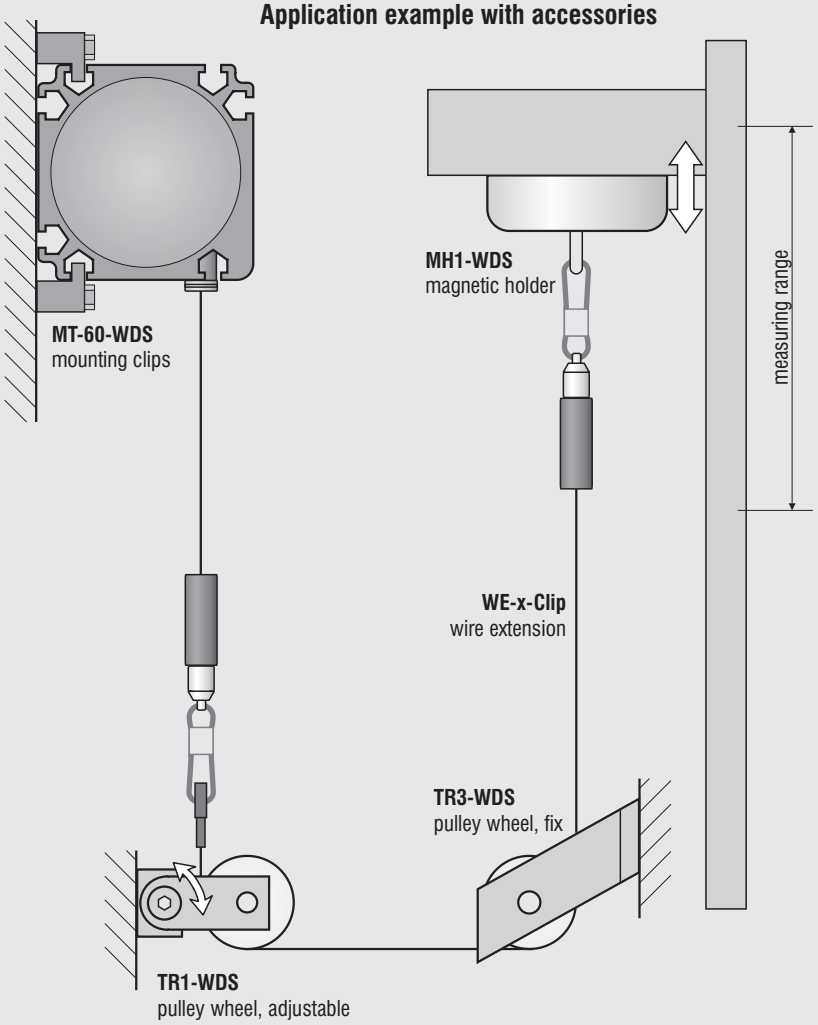
FC8/90 Female connector 90° for WDS, 8-pin

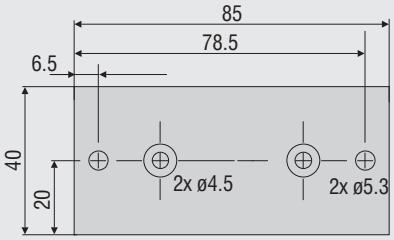
PC 3/8 Sensor cable, length 3 m

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

Application example with accessories





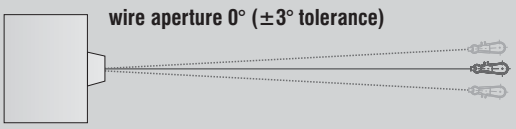
Mounting plate WDS-MP60

Installation information:

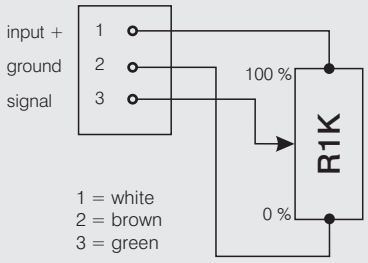
Wire attachment: The free return of the measurement wire is not permissible and it is essential that this is avoided during installation.

Wire exit angle:

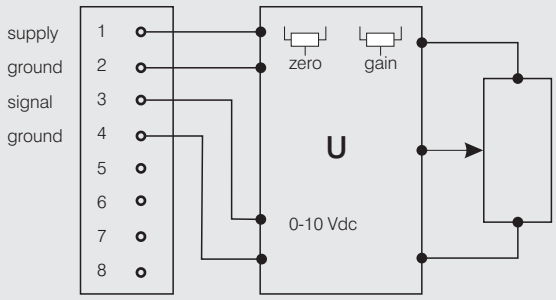
When mounting a draw-wire displacement sensor, a straight wire exit (±3° tolerance) must be taken into account. If this tolerance is exceeded, increased material wear on the wire and at the wire aperture must be expected.



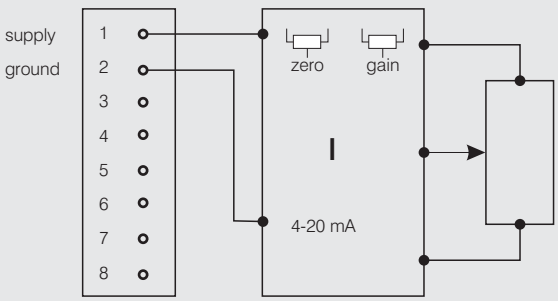
wireSENSOR
Electrical data analog



Potentiometric output (P)	
Supply voltage	max. 32 VDC at 1kOhm / 1W max
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 ... 27 VDC (non stabilized)
Current consumption	30mA max
Output voltage	0 ... 10 VDC
	option 0 ... 5 / ±5 V
Load impendance	>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 ... 27 VDC (non stabilized)
Current consumption	35mA max
Output current	4 ... 20mA
Load	<600Ohm
Signal noise	<1.6 μA_{eff}
Temperature coefficient	±0.01 % FSO/°C
Electromagnetic compatibility (EMC)	EN 50081-2
	EN 50082-2
Adjustment ranges	
Zero	±18 % FSO
Sensitivity	±15 %

Office: Jl. Radin Inten II No. 62 Duren Sawit, Jakarta 13440 - Indonesia
Workshop: Jl. Pahlawan Revolusi No. 22B, Jakarta 13430 - Indonesia
Phone: 021-8690 6777 (Hunting)
Mobile: +62 816 1740 8925
Fax: 021-8690 6771