



More Precision.

wireSENSOR

Draw-wire displacement sensors



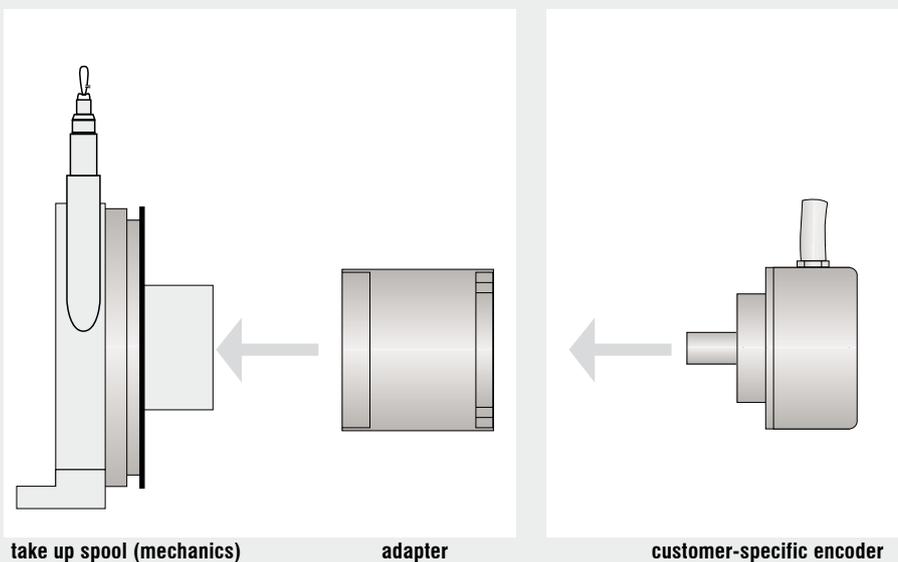


- Use almost any encoder
- Robust aluminium profile housing
- High quality sensor components

Rugged draw-wire mechanics forencoder mounting

The wireSENSOR mechanics of the Z60, P96, P115 and P200 series are designed for easy mounting of an incremental or absolute encoder. The selection of the interface, resolution and type of connection can therefore be individually configured. Optimum matching to the signal conditioning system is ensured. High precision components and a rugged housing offer high operational reliability and a long life time even under harsh industrial conditions.

A complete measurement unit always consists of the basic draw-wire mechanism and the adapter for the customer-specific encoder. The adapter contains all the necessary mounting accessories for fitting the encoder and is included in delivery of the P96, P115 and P200 series.



For the customer-specific encoder or potentiometer various draw-wire mechanics are available with measuring range up to 50m.

Model	WDS-1500 Z60-M	WDS-3000 P96-M	WDS-5000 P115-M	WDS-7500 P115-M	WDS-10000 P115-M	WDS-15000 P115-M	WDS-30000 P200-M	WDS-40000 P200-M	WDS-50000 P200-M	
Measuring range	1500mm	3000mm	5000mm	7500mm	10000mm	15000mm	30000mm	40000mm	50000mm	
Output	dependent upon encoder									
Linearity	±0.01% FSO	-	-	-	-	1mm	1.5mm	3mm	4mm	5mm
	±0.02% FSO	0.3mm	0.6mm	1mm	1.5mm	-	-	-	-	-
Resolution	dependent upon encoder									
Travel per encoder revolution	150mm	260.09mm	315.07mm				500mm			
Suitable encoder- adapter-flange	WDS-EAC 1	not available								
		for clamping flange								
	WDS-EAS 1	included in delivery								
		for synchro flange								
Temperature range	operation	-20...+80°C								
	storage	-40...+80°C								
Material	housing	aluminium								
	wire	coated polyamid stainless steel								
	ø 0.45mm	ø 0.8mm	ø 1.0mm				0.8mm			
Wire mounting	wire clip	thread M4	eyelet							
Sensor mounting	2 mounting holes	slot nuts								
Wire acceleration	10g	7g	5g	6g	3g	3g				
Wire retraction force (min)	3.5N	5N	4N	8N	8N	8N	12N	11N	11N	
Wire extension force (max)	5.5N	10N	16N	24N	21N	25N	22N	22N	24N	
Protection class	dependent upon encoder									
Vibration	20g, 20Hz...2 kHz									
Mechanical shock	50g, 10ms									
Weight	0.3kg	1.1kg	1.4kg	1.9kg	2.8kg	3.2kg	9.5kg	10kg	11kg	

FSO = Full Scale Output
Specifications for digital outputs on page 44.

Article description

WDS - 5000 - P115 - M - SO

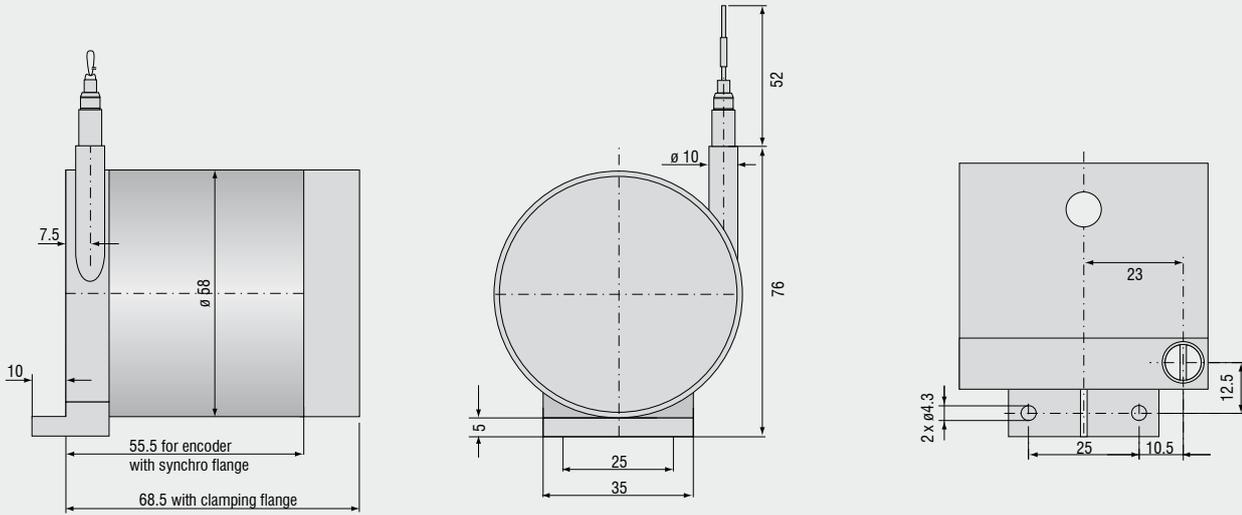
Wire brush (only P115/P200)

Mechanic

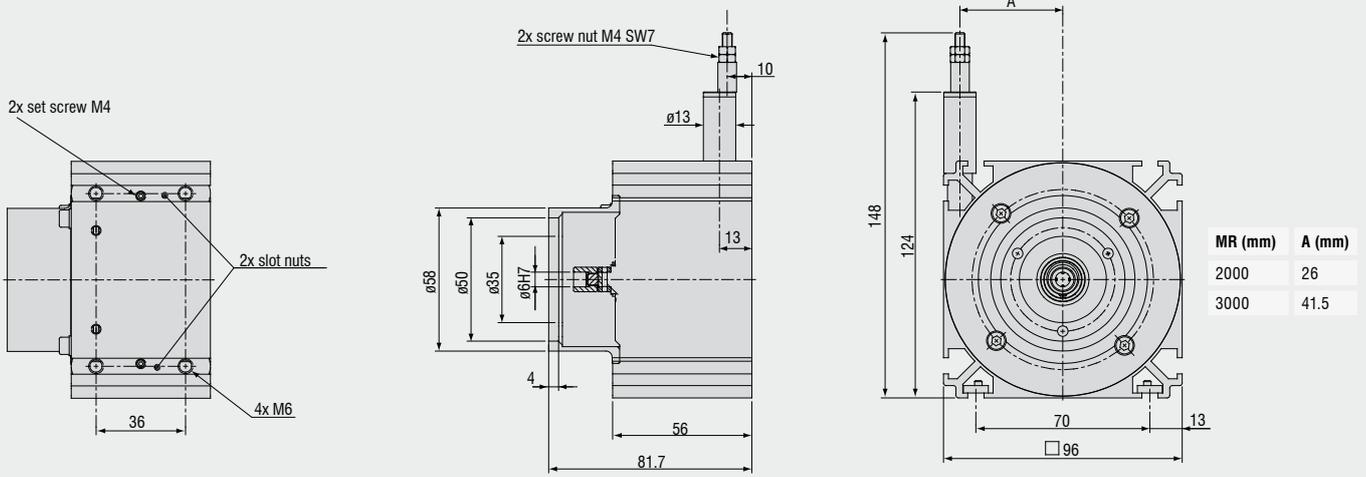
Model Z60/P96/P115/P200

Measuring range in mm

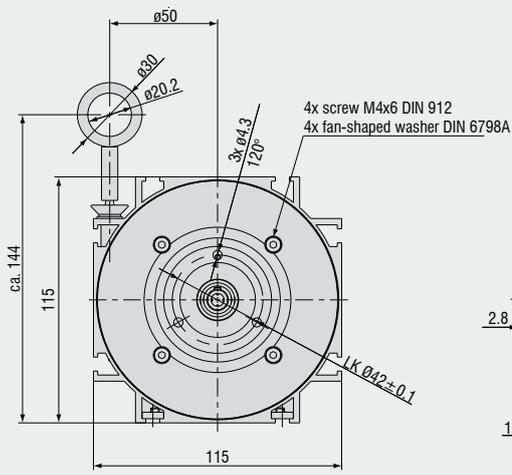
Model Z60



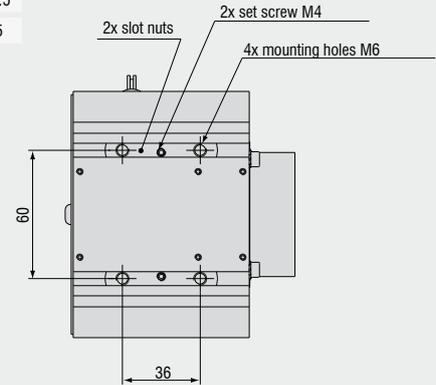
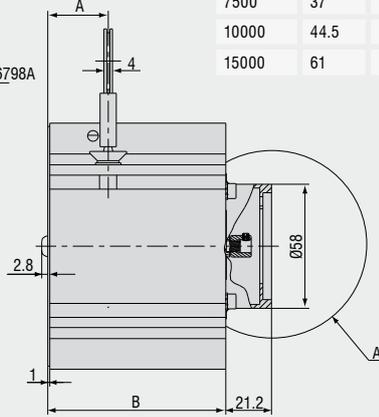
Model P96



Model P115

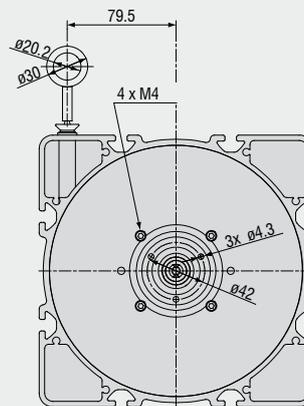
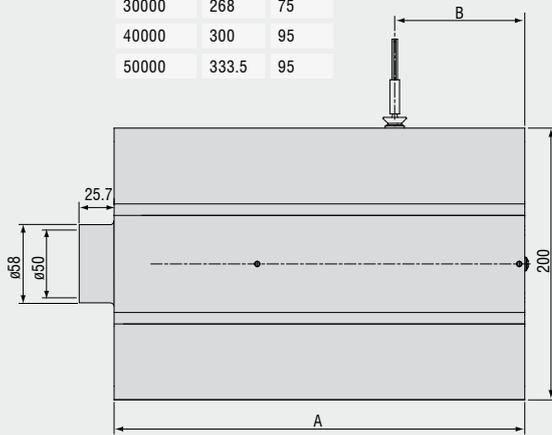


MR (mm)	A (mm)	B (mm)
5000	28	82.5
7500	37	105.5
10000	44.5	1148.5
15000	61	180.5

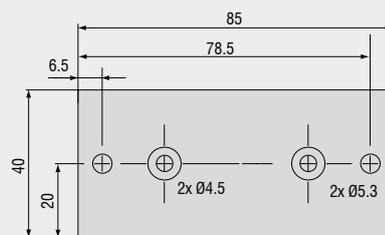
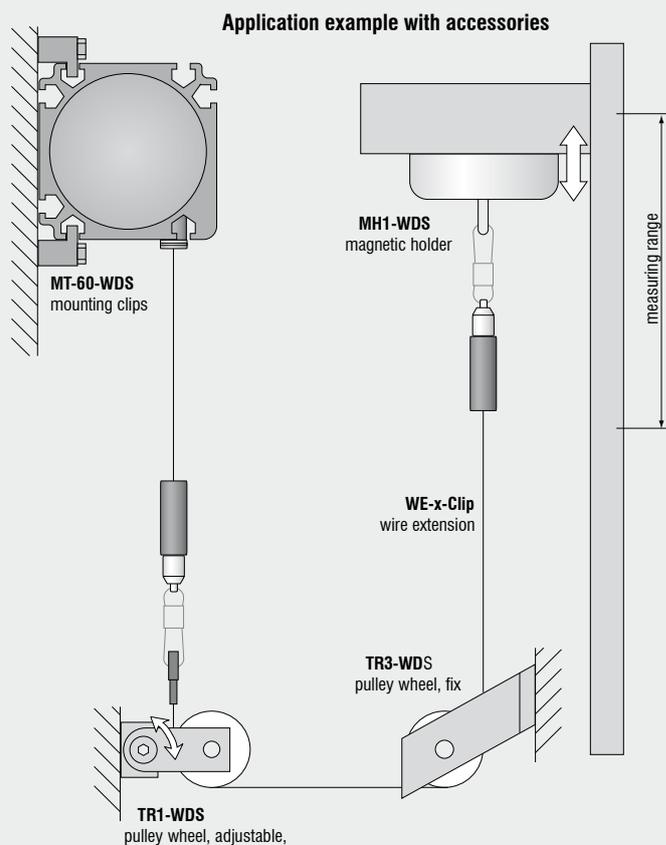


Model P200

MR (mm)	A (mm)	B (mm)
30000	268	75
40000	300	95
50000	333.5	95



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



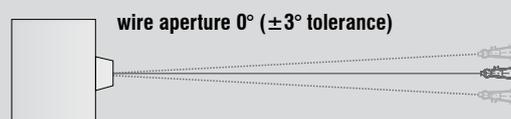
Mounting plate WDS-MP60

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.



High performance sensors made by Micro-Epsilon



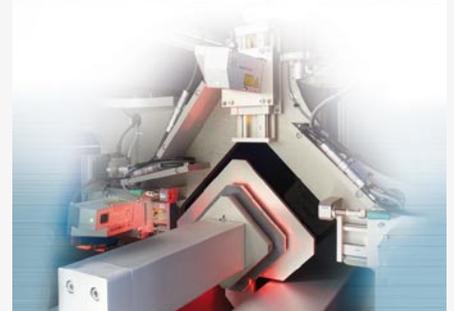
Sensors and systems for displacement, position and dimension

Eddy current displacement sensors
Optical and laser sensors
Capactive sensors
Linear inductive sensors
Draw wire displacement sensors
Laser micrometer
2D/3D profile sensors (laser scanner)
Image processing



Sensors and systems for non-contact temperature measurement

IR handheld
Stationary IR sensors
Thermal imager



Turn key systems for quality inspection

of plastics and film
of tires and rubber
of endless band material
of automotive components
of glass



MICRO-EPSILON

MICRO-EPSILON Headquarters

Koenigbacher Str. 15 · 94496 Ortenburg / Germany
Tel. +49 (0) 8542 / 168-0 · Fax +49 (0) 8542 / 168-90
info@micro-epsilon.com · www.micro-epsilon.com

MICRO-EPSILON UK Ltd.

Unit 1 Pioneer Business Park · Ellesmere Port · CH65 1AD
Phone +44 (0) 151 355 6070
info@micro-epsilon.co.uk · www.micro-epsilon.co.uk

MICRO-EPSILON USA

8120 Brownleigh Dr. · Raleigh, NC 27617 / USA
Phone +1/919/787-9707 · Fax +1/919/787-9706
info@micro-epsilon.us · www.me-sensor.com