



More Precision

wire**SENSOR**

Draw-wire displacement sensors



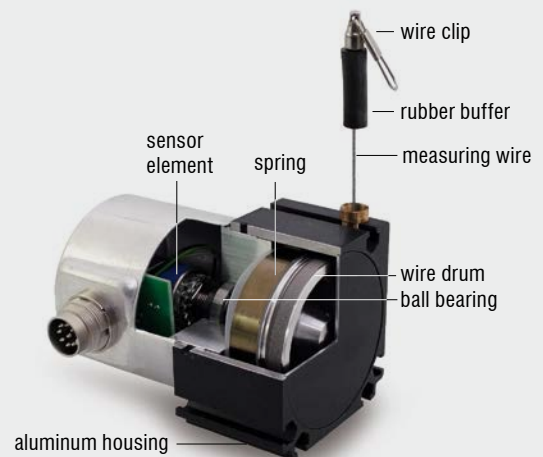


- Measuring ranges to 50,000mm
- Resolution quasi infinite
- Compact overall design
- Easy mounting for any application
- High reliability and long life cycle
- Analog and digital outputs

Principle

Draw-wire displacement sensors measure linear movements using a highly flexible steel cable. The cable drum is attached to a sensor element which provides a proportional output signal. Measurements are performed with high accuracy and high dynamic response. The use of high quality components guarantees a long life cycle and high operational reliability. MICRO-EPSILON offers a wide selection of draw-wire displacement sensors with numerous types of output signal. This means that each customer has the opportunity of selec-

ting the best sensor for his application. Choose between analog and digital outputs to optimize your individual measurement task. OEM-solutions for customized integration possible. wireSENSORS are application friendly due to the excellent measurement range to size ratio and the fact that they are easy to mount and use. The rugged sensor construction ensures reliable operation even under difficult ambient conditions.



Sensor design WDS-P60



Positioning of catering trucks at Airbus A380



Positioning of operating tables



Variable support for mobile cranes and cherry picker platforms



Release of satellites into space



Displacement measurement on slag transporter



Position measurement on X-ray machines



Lift-height measurement in fork-lift trucks



Height of lifting platforms on automobile production lines

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

Article description**WDS - 5000 - P115 - M - S0**

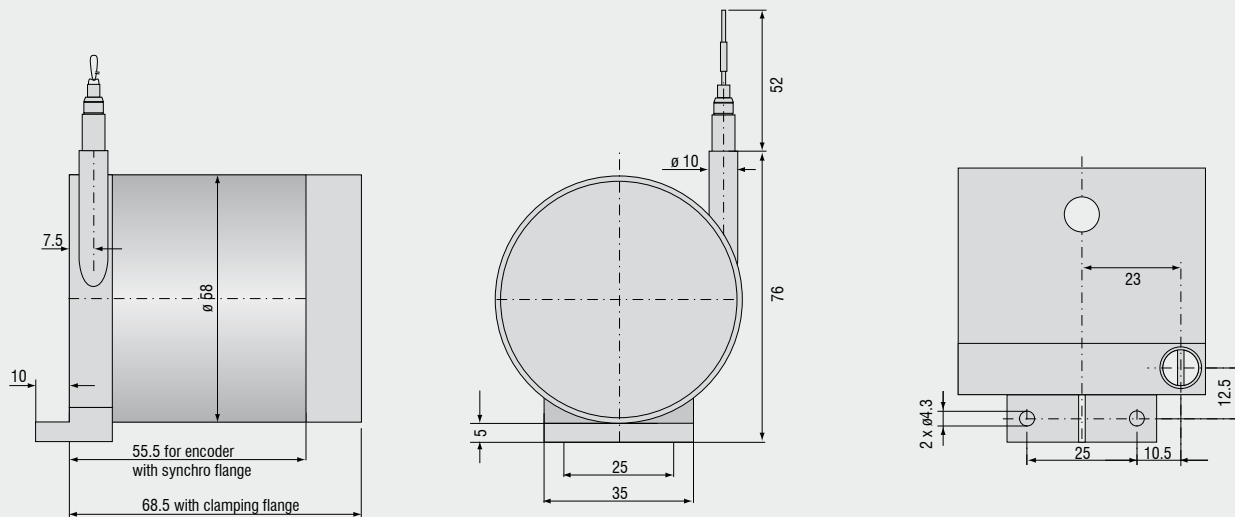
Wire brush (only P115/P200)

Mechanics

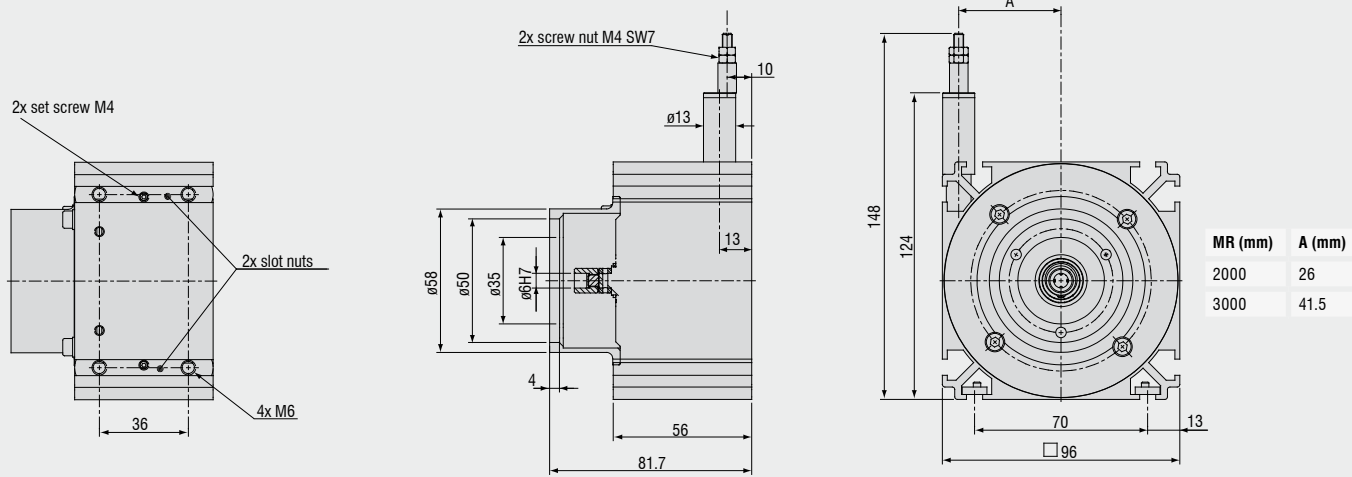
Model Z60/P96/P115/P200

Measuring range in mm

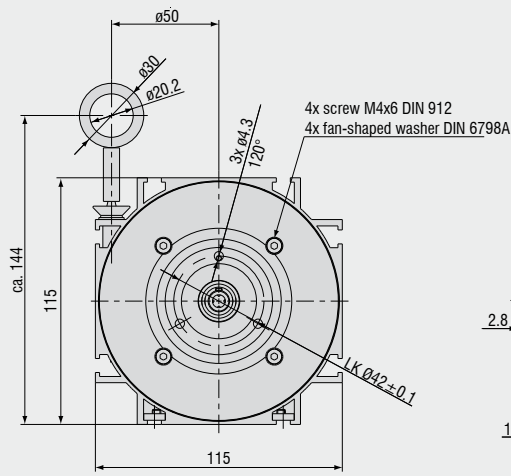
Model Z60



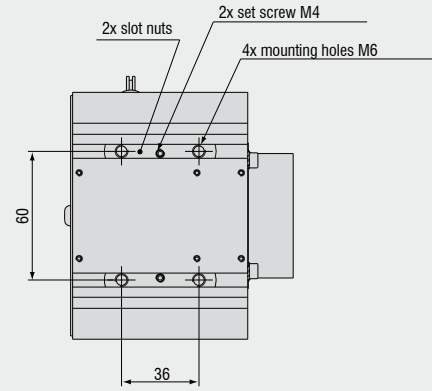
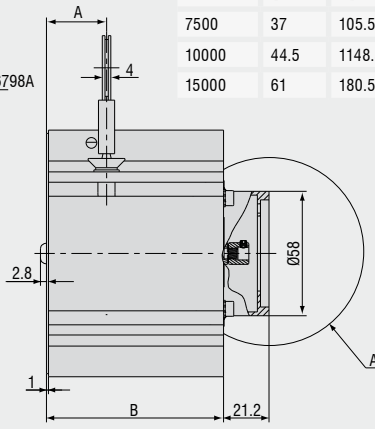
Model P96



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

