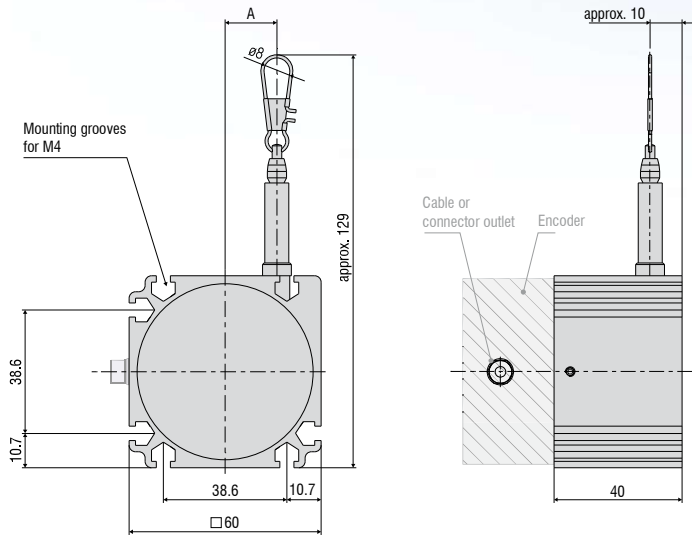


# Industrial draw-wire sensors wire**SENSOR** P60 digital

Robust aluminum profile housing

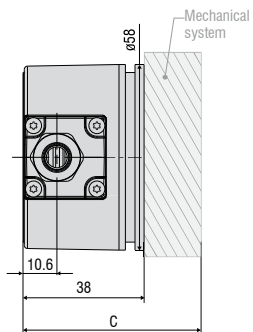
Customer-specific designs

Absolute or incremental encoder

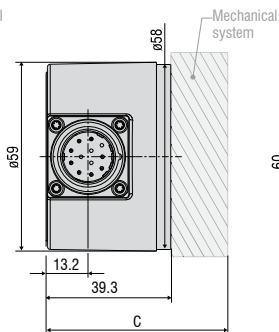


MR (mm)	A (mm)
1000	approx. 16.15
1500	approx. 24.2

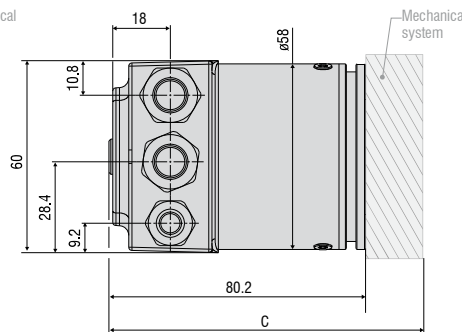
HTL/TTL output



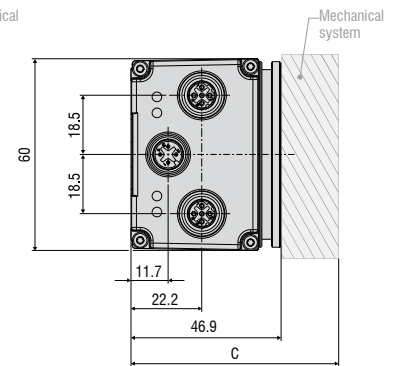
SSI output



Output CO/PB



Output PN/ENIP/CAT



All dimensions in mm, not to scale

Total length mechanics + Encoder (C)				
Output	HTL/TTL	SSI	CO/PB	PN/ENIP/CAT
C (mm)	78	79.3	120.3	86.9

Model	WDS-1000-P60	WDS-1500-P60	
Measuring range	1000 mm	1500 mm	
Digital interface <sup>1)</sup>	PROFINET, Profibus DP, CANopen, EtherNet/IP, EtherCAT		
Digital output <sup>1)</sup>	HTL, TTL, SSI		
Resolution	HTL, TTL	0.067 mm (15 pulses/mm)	0.1 mm (10 pulses/mm)
	SSI, PROFINET, Profibus DP, CANopen, EtherNet/IP, EtherCAT	0.012 mm	0.018 mm
Linearity	≤ ±0.02% FSO	≤ ±0.2 mm	≤ ±0.3 mm
Sensor element	Incremental/absolute encoder		
Wire extension force (max.)	approx. 7.5 N	approx. 5.5 N	
Wire retraction force (min.)	approx. 5 N	approx. 3.5 N	
Wire acceleration (max.)	approx. 10 g	approx. 15 g	
Material	Housing	Aluminum	
	Measuring wire	Polyamide-coated stainless steel (ø 0.45 mm)	
Wire mounting	Wire clip		
Installation	Mounting grooves on the sensor housing		
Temperature range	Storage	-20 ... +80 °C	
	Operation	-20 ... +80 °C	
Connection	HTL, TTL	integrated cable, radial, length 1 m	
	SSI	12-pin flange connector, radial	
	PROFINET, Profibus DP, CANopen, EtherNet/IP, EtherCAT	Bus cover	
Shock (DIN EN 60068-2-27)	50 g / 10 ms in 3 axes, 1000 shocks each		
Vibration (DIN EN 60068-2-6)	20 g / 10 ... 2000 Hz in 3 axes, 10 cycles each		
Protection class (DIN EN 60529)	IP65 <sup>2)</sup>		
Weight	approx. 1 kg		

FSO = Full Scale Output

<sup>1)</sup> Specifications for digital outputs from page 59 onwards.

<sup>2)</sup> With plug version only when connected

## Article designation

WDS -	1000 -	P60 -	CR -	TTL
				Output: HTL TTL CO: CANopen PB: Profibus DP SSI: Gray Code PN: PROFINET ENIP: EtherNet/IP CAT: EtherCAT
				Connection: SR (with SSI output): plug, radial CR (with HTL, TTL output): integrated cable, radial, 1 m BH (with CO, PB, PN, ENIP, CAT output): bus cover
				P60 series
				Measuring range in mm