

# Draw wire



## Draw wire suitable for absolute or incremental encoders

- For linear measurements
- Simple and flexible encoder mounting
- Robust and compact sensor design



## Specifications

Wire unit	WDS P60	WDS P85	WDS P96	WDS P115	WDS P115	WDS P115	WDS P115
Measuring range	2000 mm	2500 mm	3000 mm	5000 mm	7500 mm	10 000 mm	15 000 mm
Linearity < 0,01% FSO*	--	--	--	--	--	1 mm	1,5 mm
Linearity < 0,02% FSO*	0,4 mm	0,5 mm	0,6 mm	1 mm	1,5 mm	--	--
Travel per encoder revolution	150 mm	199,8 mm	260,09 mm	315,07 mm	315,07 mm	315,07 mm	315,07 mm
Wire diameter	0,45 mm	1,2 mm	0,8 mm	1,0 mm	1,0 mm	1,0 mm	1,0 mm
Wire retraction force (min)	3,5 N	6 N	5 N	4 N	8 N	8 N	8 N
Wire extension force (max)	7 N	16 N	10 N	16 N	24 N	21 N	25 N
Wire acceleration max	10 m/s <sup>2</sup>	50 m/s <sup>2</sup>	70 m/s <sup>2</sup>	50 m/s <sup>2</sup>	60 m/s <sup>2</sup>	30 m/s <sup>2</sup>	30 m/s <sup>2</sup>
Wire mounting	Thread M4	Eyelet	Thread M4	Eyelet	Eyelet	Eyelet	Eyelet
Approx. weight	Appr. 400 g	1000 g	1100 g	1400 g	1900 g	2800 g	3200 g
Temperature	Operating: -20 °C .. +80 °C, Storage: -40 °C .. +80 °C						
Material	Housing: Aluminium, anodized, Wire: Coated polyamid stainless steel						
Protection class	Dependent on encoder						
Vibration	< 200 m/s <sup>2</sup> (20 ... 2000 Hz)						
Shock	< 500 m/s <sup>2</sup> (10 ms)						

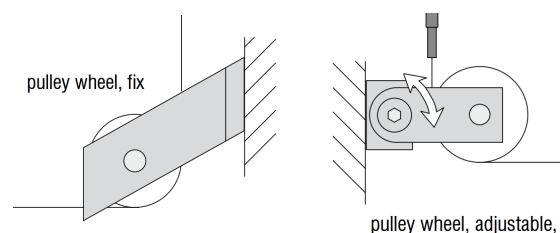
## Encoder specification

Flange type	Synchro (63)
Shaft diameter	Ø 6 mm

Note: All encoders with this specification can be used with the draw wire units.

## Accessories

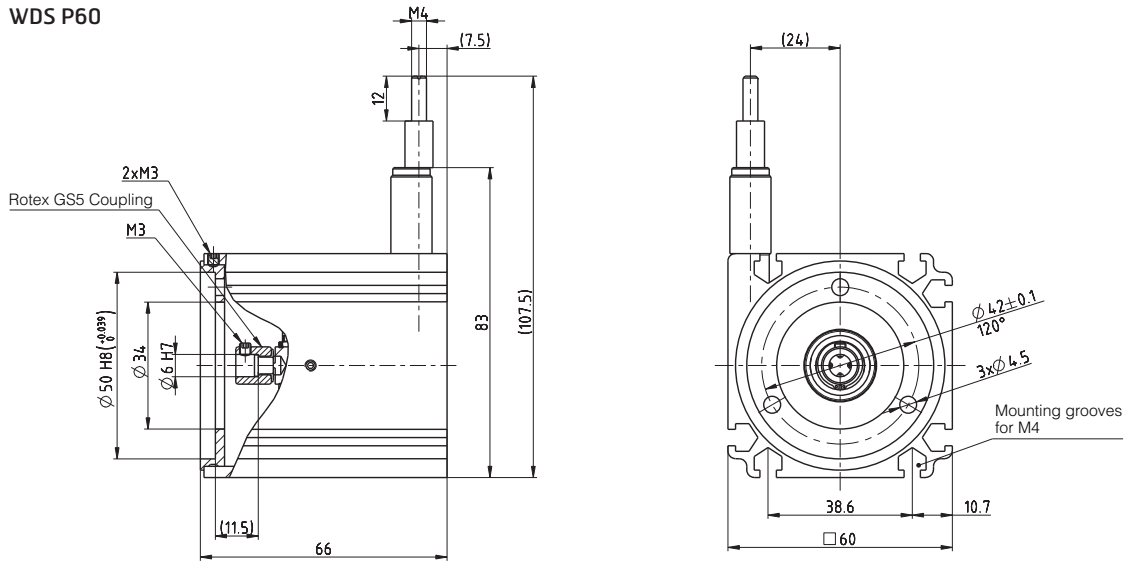
Guide pulley, fixed	Part no. 00208039
Guide pulley, adjustable	Part no. 00208038



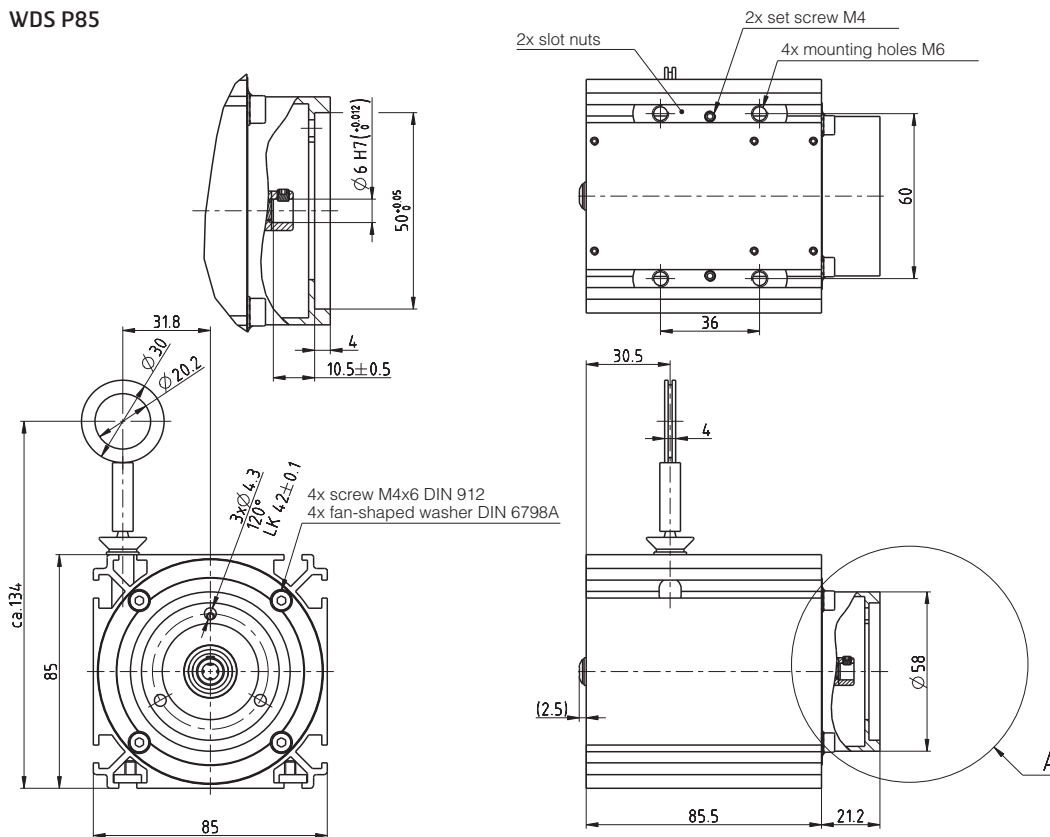
# Draw wire

## Dimensions

### WDS P60

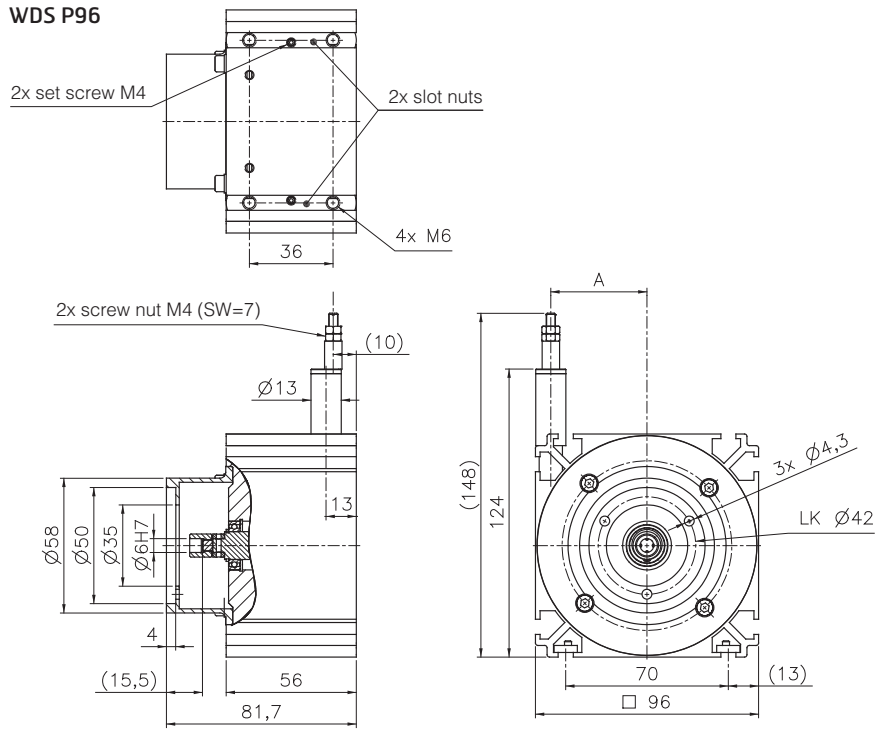


### WDS P85



# Draw wire

## WDS P96

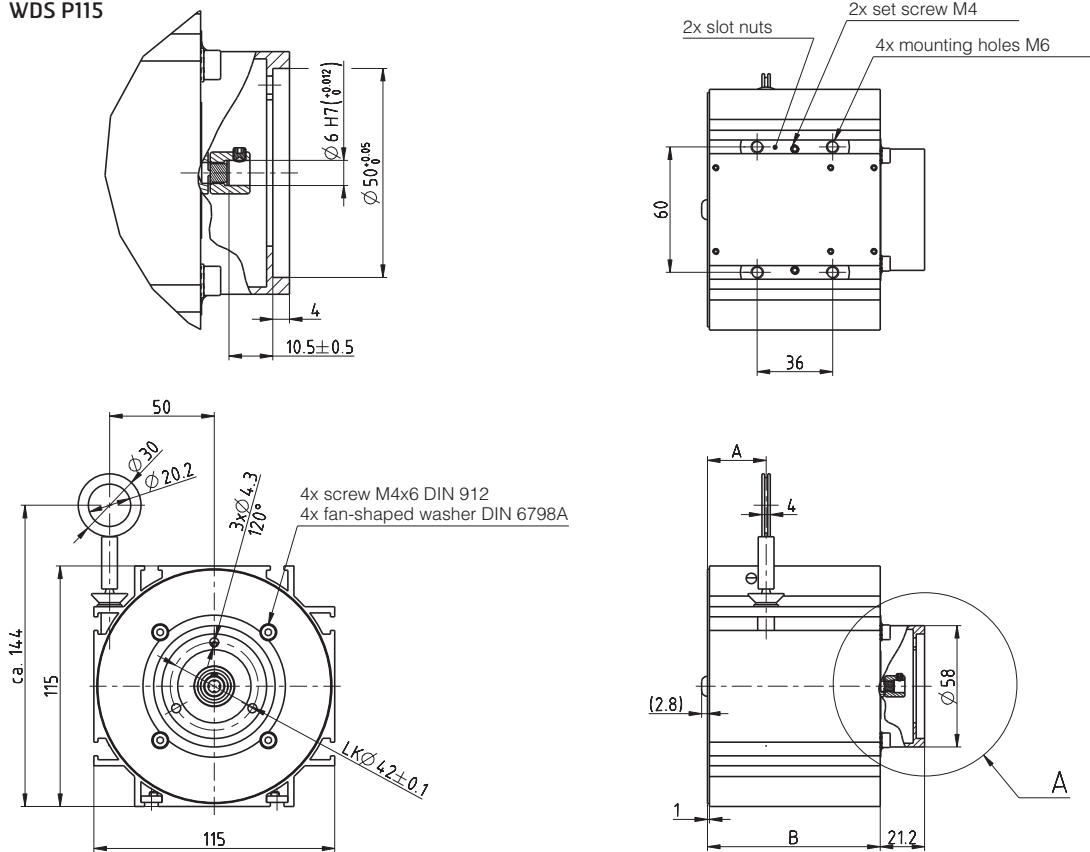


### WDS-xxxx-P96-M

Measuring range (mm)	A (mm)
3000	41,4

# Draw wire

WDS P115



WDS-xxxxx-P115-M-S0

Measuring range (mm)	A (mm)	B (mm)
5000	28	82,5
7500	37	105,5
10000	44,5	148,5
15000	61	180,5

# Draw wire

## Ordering information

Available models	Part no.
Ruggedized draw wire unit WDS P60, measuring range 2.0 m	00208080
Ruggedized draw wire unit WDS P85, measuring range 2.5 m	00208043
Ruggedized draw wire unit WDS P96, measuring range 3.0 m	00208072
Ruggedized draw wire unit WDS P115, measuring range 5.0 m	00208044
Ruggedized draw wire unit WDS P115, measuring range 7.5 m	00208066
Ruggedized draw wire unit WDS P115, measuring range 10.0 m	00208045
Ruggedized draw wire unit WDS P115, measuring range 15.0 m	00208052
Ruggedized draw wire unit WDS P115, measuring range 15.0 m + WDS option LT (low temperature)	00208078

Please, contact your local Leine & Linde representative if other measuring ranges are required.