

Draw wire



Draw wire suitable for absolute or incremental encoders

- For linear measurements up to 50 000 mm
- 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	2 000 mm	2 500 mm	3 000 mm	5 000 mm	7 500 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 ²	50 m/s ²	70 m/s ²	50 m/s ²	60 m/s ²	30 m/s ²	30 m/s ²
Wire mounting	Thread M4	Eyelet	Thread M4	Eyelet	Eyelet	Eyelet	Eyelet
Approx. weight	Appr. 400 g	1 000 g	1 100 g	1 400 g	1 900 g	2 800 g	3 200 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 ² (20 ... 2 000 Hz)						
Shock	< 500 m/s ² (10 ms)						

Specifications continued

Wire unit	WDS P200
Measuring range	30 000 mm
Linearity < 0,01% FSO*	3 mm
Linearity < 0,02% FSO*	--
Travel per encoder revolution	500 mm
Wire diameter	0,8 mm
Wire retraction force (min)	12 N
Wire extension force (max)	22 N
Wire acceleration max	2 g
Wire mounting	Eyelet
Approx. weight	9 500 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 ² (20 ... 2 000 Hz)
Shock	< 500 m/s ² (10 ms)

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Encoder specification

Flange type	Synchro (63)
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Shaft diameter	Ø 6 mm
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Note: All encoders with this specification can be used with the draw wire units.

Accessories

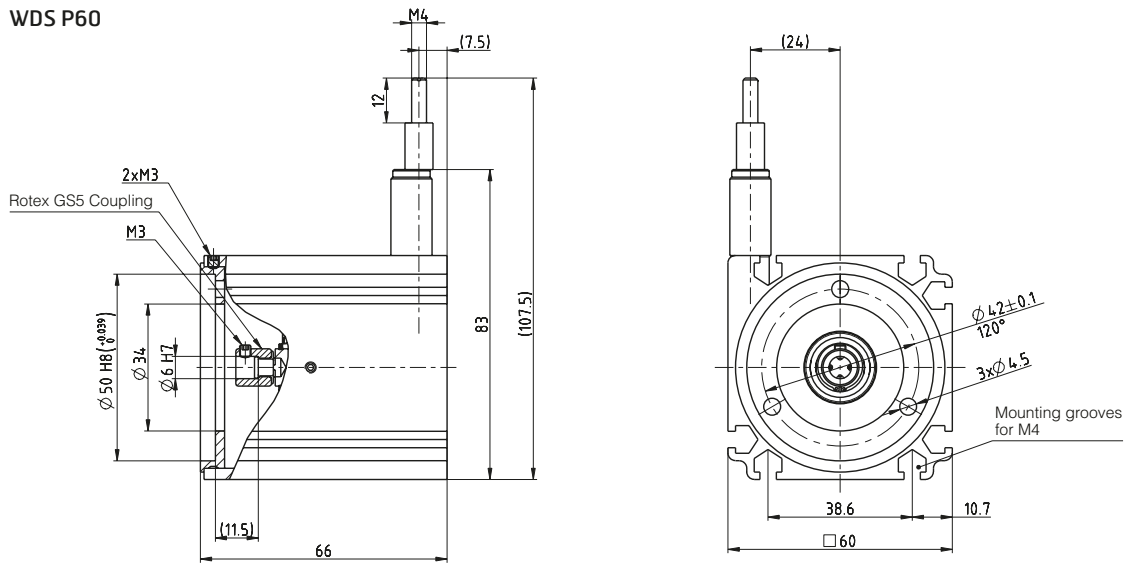
Guide pulley, fixed	Part no. 1322556-01
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Guide pulley, adjustable	Part no. 1322555-01
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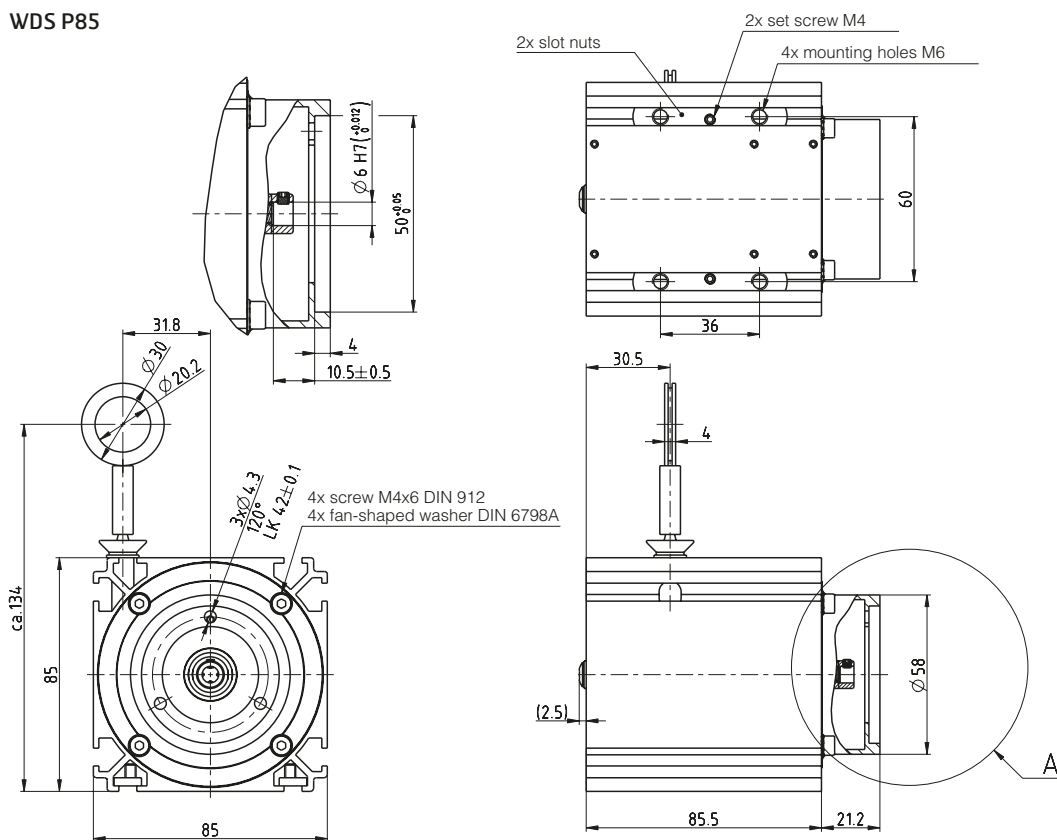
Draw wire

Dimensions

WDS P60

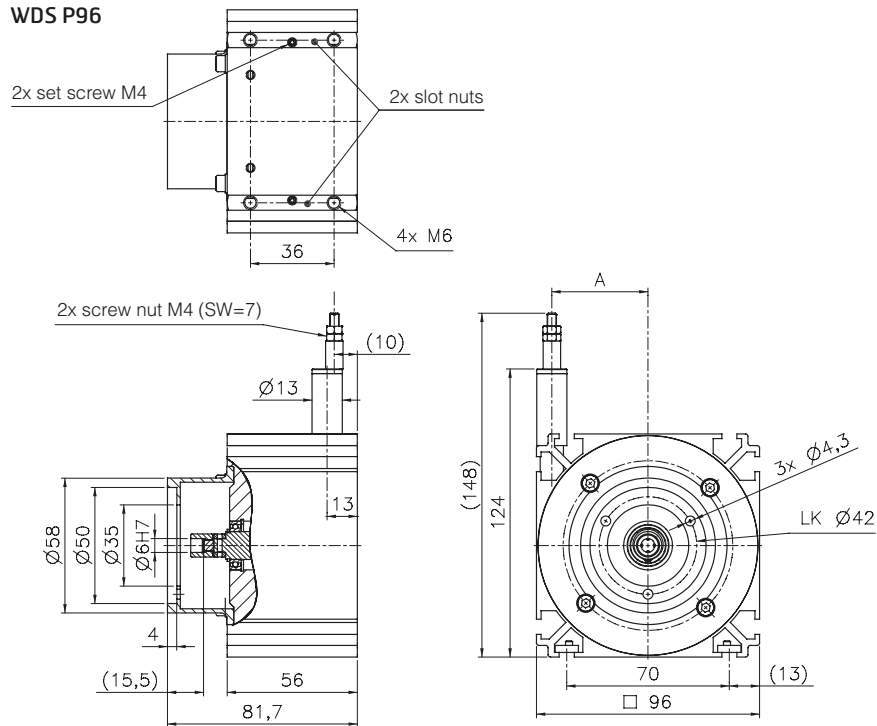


WDS P85



Draw wire

WDS P96

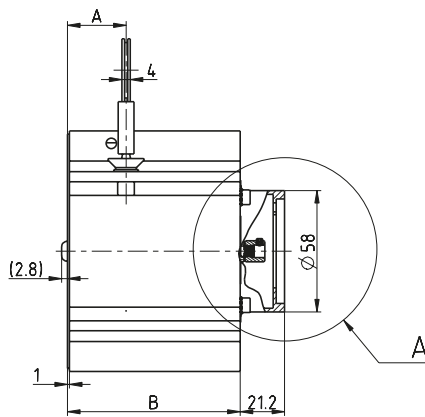
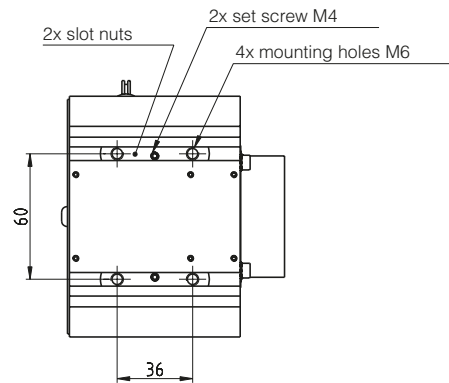
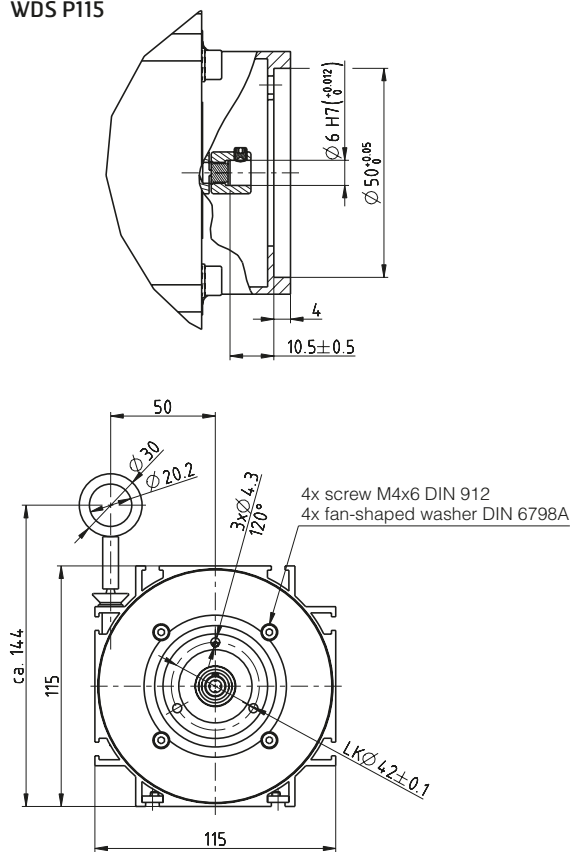


WDS-xxxx-P96-M

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

Draw wire

WDS P115

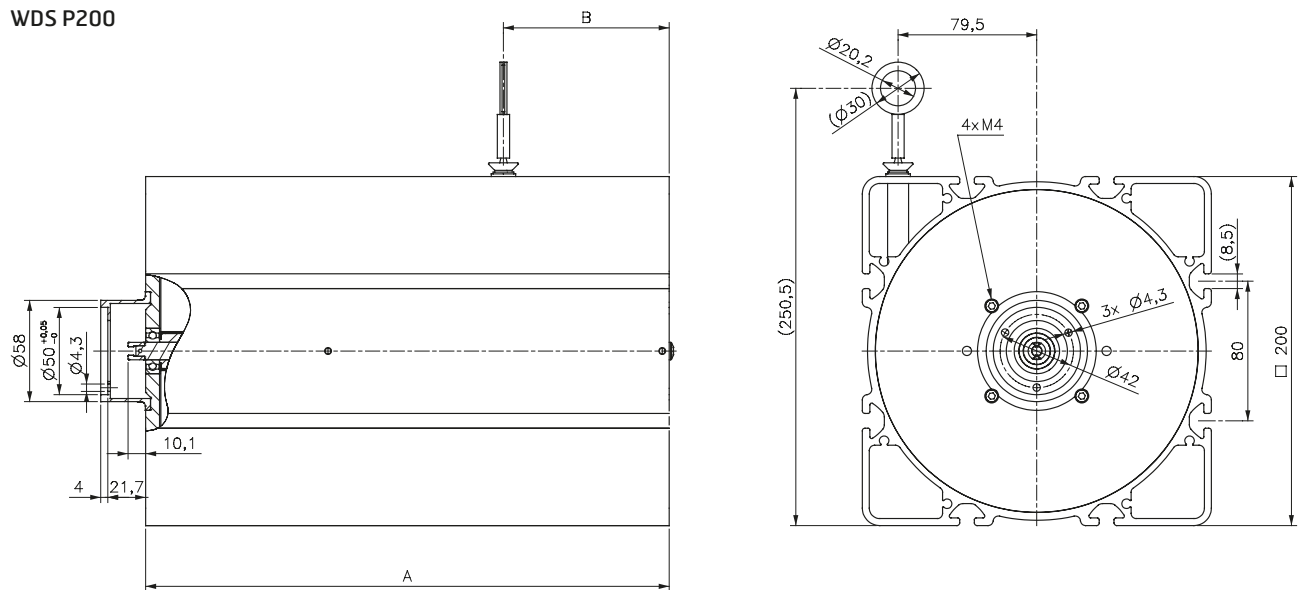


WDS-xxxxx-P115-M-S0

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

WDS P200



WDS-xxxxx-P200-M-S0

Measuring range (mm)	A (mm)	B (mm)
30 000	268	75

* Contact Leine Linde for delivery time

Draw wire



Ordering information

Available models	Part no.
Ruggedized draw wire unit WDS P60, measuring range 2.0 m	1322717-01
Ruggedized draw wire unit WDS P85, measuring range 2.5 m	1322702-01
Ruggedized draw wire unit WDS P96, measuring range 3.0 m	1322714-01
Ruggedized draw wire unit WDS P115, measuring range 5.0 m	1322712-01
Ruggedized draw wire unit WDS P115, measuring range 7.5 m	1322712-02
Ruggedized draw wire unit WDS P115, measuring range 10.0 m	1322712-03
Ruggedized draw wire unit WDS P115, measuring range 15.0 m	1322712-04
Ruggedized draw wire unit WDS P115, measuring range 15.0 m + WDS option LT (low temperature)	1322713-01
Ruggedized draw wire unit WDS P200, measuring range 30.0 m	1322715-01

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