



**PRECIZIKA**  
METROLOGY



# ENCODER SELECTION GUIDE



# ROTARY ENCODERS

MODEL	CROSS REFERENCE	NUMBER OF LINES* / RESOLUTION	ACCURACY (ARC. SEC)	SHAFT TYPE	OUTPUT SIGNALS
 <b>A24HME1</b>		250	± 260	Hollow shaft	 1 Vpp TTL, HTL
 <b>A28</b>		60 – 2.500	Up to 52	Solid shaft	 TTL
 <b>A36</b> (including HME1)	Heidenhain ROD 1000 series	100-3.600	Up to 36	Solid / hollow shaft	 11 uApp  1 Vpp TTL, HTL
 <b>AK36</b> (including HME1)		Up to 21 bit singleturn ----- Up to 40 bit multiturn	± 30	Solid / hollow shaft	SSI BiSS C
 <b>A42M</b>	Heidenhain ERO 1200 Series	1.000; 2.500	Up to 52	Hollow shaft	 11 uApp  1 Vpp TTL
 <b>A75M</b>		512; 2.048; 5.000	Up to 26	Hollow shaft	 1 Vpp TTL
 <b>AK50</b>	Hohner Series R	Up to 8 bit for turret tool holder	± 120	Solid shaft	 TTL, HTL
 <b>A58</b> (including HE, HME, HE1)	Heidenhain ROD 400 Series, ERN 400 series	100-10.800	Up to 12	Solid/hollow/ blind shaft**	 11 uApp  1 Vpp TTL, HTL
 <b>AK58</b> (including HME1)		Up to 20 bit singleturn ----- Up to 40 bit multiturn	± 30	Solid / hollow shaft	SSI BiSS C
 <b>AP58</b>		1 – 65.536 (pulses per revolution)	± 60	Solid / hollow shaft	 TTL, HTL
 <b>A102H</b>		5.000; 9.000	Up to 7	Hollow shaft	 11 uApp  1 Vpp TTL
 <b>AM</b>		16 – 1.024 for HTL / Up to 12 bit for SSI	± 1080	Solid shaft	 TTL, HTL SSI UVW

\*others only on request. Possible interpolation factor up to x10. \*\*depending on the model



# LINEAR ENCODERS

MODEL	CROSS REFERENCE	MEASURING LENGTH (MM)	ACCURACY ( $\mu\text{M/M}$ )	OUTPUT SIGNALS
	<b>L18</b> Heidenhain LS 300, 400, 800, 900 Series Fagor M Series RSF MSA 67 Series	70-2.040	$\pm 10; \pm 5; \pm 3$	 11 uApp  1 Vpp  TTL
	<b>L18B</b> RSF MSA 67 Series	70-3.240	$\pm 10; \pm 5$	 11 uApp  1 Vpp  TTL
	<b>L18T</b> Heidenhain LS 400 Series Fagor SX, SY, SW, SP Series	70-1.240	$\pm 10; \pm 5$	 11 uApp  1 Vpp  TTL
	<b>L23</b>	250-20.000	$\pm 10; \pm 5; \pm 3$	 TTL
	<b>LK24</b>	70-3.240	$\pm 5; \pm 3$	SSI BiSS C FANUC $\alpha$ DRIVE-CLiQ
	<b>L35</b> RSF MSA 37, 39 Series	170-3.240	$\pm 5; \pm 3$	 11 uApp  1 Vpp  TTL
	<b>L35T</b> Heidenhain LS 500, 600, 700 Series RSF MSA 37, 39 Series	170-3.240	$\pm 10; \pm 5; \pm 3$	 11 uApp  1 Vpp  TTL
	<b>L37</b> Heidenhain LS 100 Series	140-3.240	$\pm 10; \pm 5; \pm 3$	 11 uApp  1 Vpp  TTL
	<b>L50</b> Heidenhain LB 300 Series	3.240-30.040	$\pm 10$	 11 uApp  1 Vpp  TTL
	<b>MT</b>	Up to 50.000	$\pm 20$	 1 Vpp  TTL HTL
	<b>MK</b>	Up to 50.000	$\pm 35$	SSI BiSS C CANopen









# TAILOR MADE ENCODER KITS

MODEL	CROSS REFERENCE	RESOLUTION	ACCURACY	SHAFT TYPE	TYPE	INTERFACE
 <b>AR25</b>	Netzer "DS25"	up to 20 Bit (absolute) any number from 1 to 802816 (TTL) 196 lines on disc (1Vpp)	$\pm 10''$ *	Hollow Shaft (Ø6H8)	Absolute / Incremental	BiSS C / SSi (absolute) TTL / 1Vpp
 <b>AR34</b>		22 Bit	$\pm 10''$ *	Hollow Shaft	Absolute	BiSS C / SSi
 <b>AR42</b>		Any number from 1 to 11 796 480	$\pm 10''$ *	....	Incremental	TTL
 <b>AR79</b>	MOOG FMC Resolver	22 Bit	$\pm 10''$ *	Hollow Shaft (Ø27)	Absolute	BiSS C / SSi (Only with one optical chip)
 <b>AR90</b>	Netzer "DS90"	22 Bit	$\pm 10''$ *	Hollow Shaft (Ø50)	Absolute	BiSS C / SSi (Only with one optical chip)
 <b>AR100</b>	Netzer "DF100"	22 Bit	$\pm 10''$ *	Hollow Shaft (Ø57H7)	Absolute	BiSS C / SSi (Only with one optical chip)
 <b>AKW100</b>		24 Bit	$\pm 10''$	Hollow Shaft (Ø40H6)	Absolute	BiSS C / SSi
 <b>AKW150</b>		25 Bit	$\pm 10''$	Hollow Shaft	Absolute	BiSS C / SSi
 <b>Encoder-AN</b>		Up to 22 Bit	$\pm 10''$ *	Hollow Shaft (Ø50)	Absolute	BiSS C / SSi

\* Expected at optimal mechanical installation.



# ANGLE ENCODERS

MODEL	CROSS REFERENCE	NUMBER OF LINES*	ACCURACY (ARC. SEC)	SHAFT TYPE	OUTPUT SIGNALS
 <b>A90H</b>	Heidenhain RON 200 Series Fagor H-D90 Series	18.000	± 5	Hollow shaft w/ integrated stator coupling	~ 11 uApp ~ 1 Vpp TTL
 <b>A110</b>	Heidenhain ROD Series Fagor S-D90 Series	18.000	± 5	Solid shaft	~ 11 uApp ~ 1 Vpp TTL
 <b>A110H</b>	Heidenhain RON 200 Series	18.000	± 5	Hollow shaft w/ integrated stator coupling	~ 11 uApp ~ 1 Vpp TTL
 <b>A170</b>	Heidenhain ROD 700, 800 Series	18.000 / 36.000	± 2.5	Solid shaft	~ 11 uApp ~ 1 Vpp TTL
 <b>A170H</b>	Heidenhain RON 700 Series	18.000 / 36.000	± 2.5	Hollow shaft w/ integrated stator coupling	~ 11 uApp ~ 1 Vpp TTL
 <b>A200H</b>	Heidenhain RON 700, 800 Series	36.000	± 2	Hollow shaft w/ integrated stator coupling	~ 11 uApp ~ 1 Vpp TTL

\*possible interpolation factor up to x100.

Precizika Metrology has a long history of old traditions in the leadership of design and production of metrological equipment – rotary, angle, linear encoders and optical encoder gratings. The Lithuanian company has been in the industry for over 50 years and with this heritage comes both pride and great responsibility to continuously move forward, improve and evolve in order to satisfy the ever-changing industry needs. A huge part of time spent in the industry was dedicated to working with top-of-the-line original equipment manufacturing (OEM) companies, listening to their feedback and providing innovative solutions to a variety of diverse conundrums. Consistent supply of high quality products and services that match or exceed the quality standards our customers expect and deserve is the main goal that drives us forward, constantly

investing in new projects, future proof equipment and bright minds. The ability to take advantage of accumulated know-how and to channel the experience provides us with a unique perspective and position in the market that opens new ways to innovate and provide industry defining product solutions.

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