

MAIN EXPORT COUNTRIES:



The company under the name "Precizika Metrology" began work after the change of name of the Lithuanian - American Joint Venture "Brown & Sharpe - Precizika". The company has a proud history of old traditions in the leadership of design and production of metrological equipment. Its workforce has been involved for over fifty years in the supply of measuring technology and systems to automate factories as well as in the development of optical scale manufacturing technology.

In 2000, the production process was certified to fully meeting the requirements of EN ISO 9002:1994, in 2003 – EN ISO 9001:2000.

The company's goal is to consistently supply high quality products and services to meet customer demands on a timely basis. The company's main products are linear and angular glass scale gratings, and the linear and rotary displacement measuring systems.

JSC "Precizika Metrology" represents worldwide known companies and suppliers of measuring equipment, CNC centers, executes installation and services of them, trains the users, and executes upgrading of used CMM and manual cutting machine-tools.

L23

PHOTOELECTRIC LINEAR ENCODER



Modular sealed photoelectric linear encoder L23 has measuring length up to 20 meters and more on special order. The encoder is used to convert linear displacements of machine key components into electrical signals containing information about the value and direction of the displacement. The encoder operates in reflected from metal band light beam. Metal band with made on its surface grating scale is fixed in rigid aluminium housing with double protection lips. The encoder consists of several separate modules with length up to 3,0 m, which are jointed together, and reading head. The standard encoder has three square-wave TTL output signals: 2 main signals, shifted by 90 degrees and one reference signal.



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L23

RECOMMENDED APPLICATIONS



ROBOTICS



PACKAGING



RETROFITTING



FACTORY AUTOMATION



MILLING / DRILLING / BOREING / CNC MACHINES



TURNING MACHINES & CENTERS



CNC CUTTING MACHINES



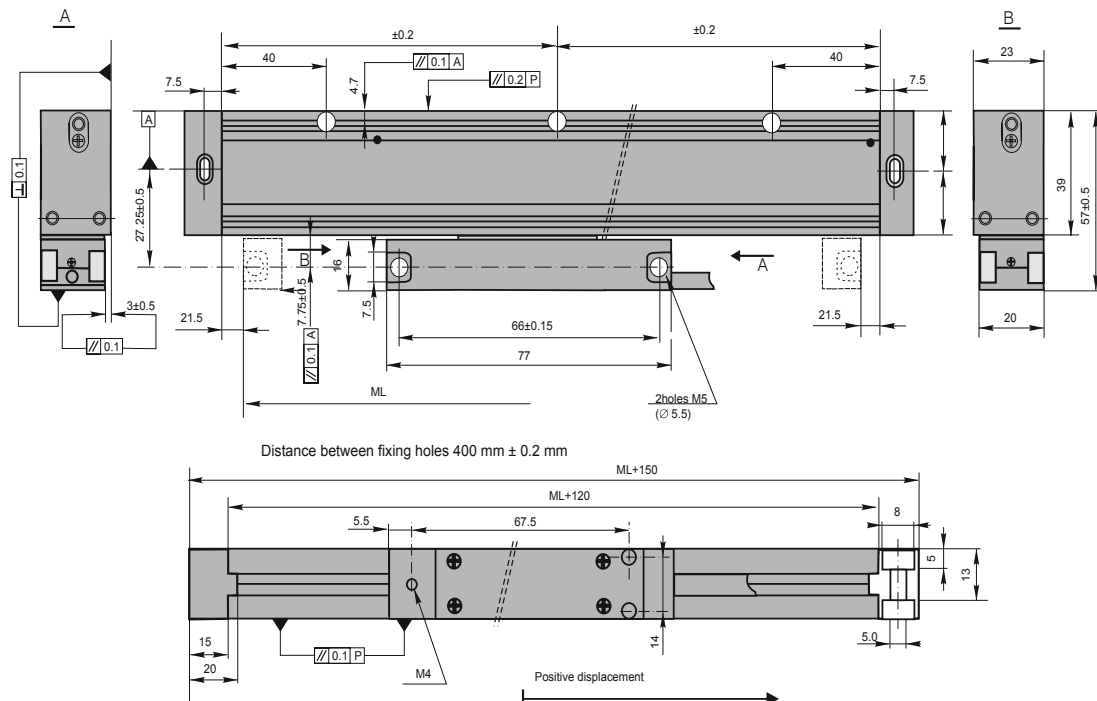
AUTOMOTIVE INDUSTRY



MAINTENANCE

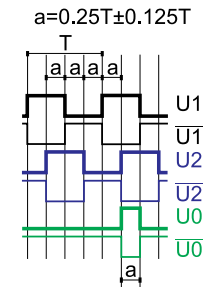
MECHANICAL DATA

Measuring lengths (ML), mm	250, 300, 350, 400, 450, 500...20000 (more on option)	Reference marks (RI): - N - M - P (optional)	without reference mark every 50 mm RI number and place
Accuracy grades to any metre within the ML (at 20 °C)	±10; ±5; ±3 µm	Required moving force	< 4 N
Grating period (T)	400; 40; 20 µm	Protection (IEC 529) -without compressed air -with compressed air	IP54 IP64
Max. traversing speed: - when T=400 µm and resolution 100, 50, 10 µm - when T=40 µm and: - resolution 10, 5 µm - resolution 1 µm - when T=20 µm and: - resolution 5 µm - resolution 0,5 µm	120 m/min 80 m/min 25 m/min 60 m/min 12 m/min	Weight	0.4 kg + 2.8 kg/m
		Operating temperature	0...+50 °C
		Storage temperature	-20...+70 °C
		Permissible vibration (10...2000 Hz)	≤ 100 m/s ²
		Permissible shock (11 ms)	≤ 150 m/s ²
		Coefficient of thermal expansion	10.6x 10 ⁻⁶ °C



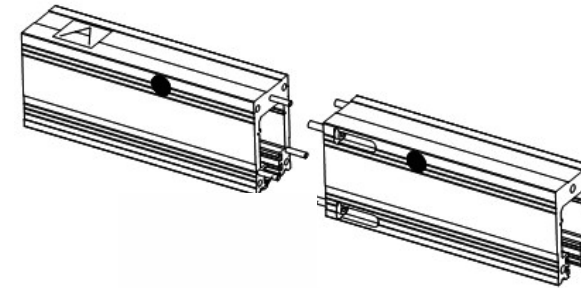
ELECTRICAL DATA

VERSION	L23-F TTL
Supply voltage (U _p)	+5V±5%/ 65 mA; +12V±5%/ 65mA
Light source	LED
Resolution	100, 50; 10; 5; 1; 0.5 µm (after 4-fold in subsequent electronics)
Incremental signals	Differential square-wave U1/U1 and U2/U2
Reference signal	Differential square-wave U0/U0
Signal levels at load current 20 mA:	- low (logic "0") < 0.5 V at U _p =+5V - high (logic "1") > 2.4 V at U _p =+5V - low (logic "0") < 1.5 V at U _p =+12V (HTL) - high (logic "1") > (U _p -2) V at U _p =+12V (HTL)
Direction of signals	U2 lags U1 (displacement from left to right and head position down)
Standard cable length	4 m armoured, without connector
Maximum cable length	25 m
Output signals	



Note: If cable extension is used the power supply conductor section should not be smaller than 0.5 mm².

MODULE CONNECTION PRINCIPLE



ACCESSORIES

CONNECTORS FOR CABLE	B12 12-pin round connector	C9 12-pin round connector	C12 12-pin round connector	D9 9-pin flat connector	D15 15-pin flat connector	RS10 10-pin round connector	ONC 10-pin round connector
DIGITAL REDUCED VICES	CS3000				CS5500		

ORDER FORM

RESOLUTION:	MEASURING LENGTH:	REFERENCE MARKS:	ACCURACY:	SUPPLY VOLTAGE:	COMPRESSED AIR:	CABLE LENGTH:	CONNECTOR TYPE:
F05 - TTL 0.5µm F10 - TTL 1µm F50 - TTL 5µm F100 - TTL 10µm F500 - TTL 50µm F1000 - TTL 100µm	0250 - 250mm 0500 - 500mm ... 20000 - 20000mm ... (on request)	N - none RI M - every 50mm P - RI number and place on option	10 - ±10µm 05 - ±5µm 03 - ±3µm	05V - +5V 12V - +12V	0 - without compressed air 1 - with compressed air	01 - 1m armoured 02 - 2m armoured 03 - 3m armoured ...	W - without connector B12 - round, 12 pins C9 - round, 9 pins C12 - round, 12 pins D9 - flat, 9 pins D15 - flat, 15 pins RS10 - round, 10 pins ONC - round, 10 pins