MAIN EXPORT COUNTRIES:





The company under the nd&@"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 many company company company's many company com

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 PHOTOELECTRIC ROTARY ENCODER services of them, trains the users, and executes upgrading of used CMM and manual cutting machine-tools.



Žirmūnų str. 139, LT-09120 Vilnius, Lithuania sales@precizika.lt Tel.: +370 (5) 236 3683 Fax.: 370 (5) 236 3609 www. precizika.lt

Photoelectric rotary encoder A36 is used to establish an informational link be tween the key machine components, industrial robots, comparators and DCC, NC or Digital Readout Units. It provides information about the value and di rection of motion. The encoder is used in automatic control, on-line gauging, process monitoring systems, etc. Three versions of output signals are available:

- A36-A sinusoidal signals, with amplitude approx. 11 µApp;
- A36-AV sinusoidal signals, with amplitude approx. 1 Vpp;
- A36-F square-wave signals TTL or HTL.







A36

RECOMMENDED APPLICATIONS

























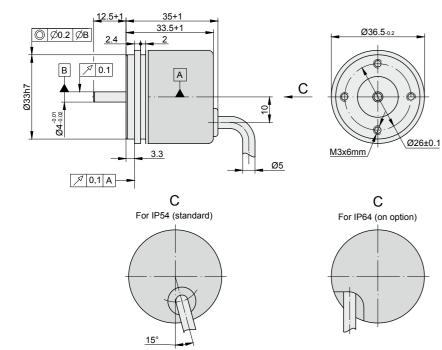
DRILLING CNC MAC HINES



MECHANICAL DATA

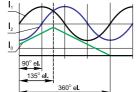
Line number on disc (z)	100; 200; 250; 360; 500; 1000; 1024; 1500; 2000; 2500; 3600
Number of output pulses per revolution	Z x k, where k=1,2,3,4,5,8,10
Maximum shaft speed	10000 rpm
Maximum shaft load: - axial - radial (at shaft end)	5N 10N
Accuracy (T ₁ -period of lines on disc in arc. sec)	±0.1T ₁ arc. sec
Starting torque at 20 $^{\circ}\text{C}$	≤ 0.002 Nm

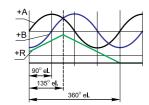
Rotor moment of inertia	< 2 gcm ²		
Protection (IEC 529) - for axial cable outlet - for axial cable outlet through gland and for radial cable outlet	IP54 IP64		
Maximum weight without cable	0.07 kg		
Operating temperature	-10+70 °C		
Storage temperature	-30+80 °C		
Maximum humidity (non-condensing)	98 %		
Permissible vibration (55 to 2000 Hz)	\leq 100 m/s 2		
Permissible shock (11 ms)	≤ 300 m/s ²		

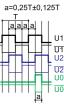


ELECTRICAL DATA

VERSION	A36-A ~11 μApp	A36-AV ~ 1 μApp	A36-F П☐TTL; П☐ HTL	
Supply voltage	+5 V ± 5%	+5 V ± 5%	+5 V ± 5%; +(10 to 30) V	
Max. supply current (without load)	80 mA	120 mA	120 mA	
Light source	LED	LED	LED	
Incremental signals	Two sinusoidal I_1 and I_2 Amplitude at 1 k Ω load: - I1 = 7-16 μ A - I2 = 7-16 μ A	Differential sine +A/-A and +B/-B Amplitude at 120 Ω load: - A = 0.6-1.2 V - B = 0.6-1.2 V	Differential square-wave U1, $\overline{\text{U1}}$ and U2/ $\overline{\text{U2}}$. Signal levels at 20 mA load current: - low (logic "0") \leq 0.5 V at U $_p$ =+5 V - low (logic "0") \leq 1.5 V at U $_p$ =10 to 30 V - high (logic "1") \geq 2.4 V at U $_p$ =+5 V - high (logic "1") \geq (U $_p$ -2) V at U $_p$ =10 to 30 V	
Reference signal	One quasi-triangular $_0^I$ peak per revolution. Signal magnitude at 1 kW load: $_0^I = 2-8~\mu A$ (usable component)	One quasi-triangular +R and its complementary -R per revolution. Signals magnitude at 120W load - R = 0.2-0.8 V (usable component)	One differential square-wave U0/U0 per revolution. Signal levels at 20 mA load current: - low (logic "0") < 0.5 V at U $_p$ =+5 V - low (logic "0") < 1.5 V at U $_p$ =10 to 30 V - high (logic "1") > 2.4 V at U $_p$ =+5 V - high (logic "1") > (U $_p$ -2) V at U $_p$ =10 to 30 V	
Maximum operating frequency	(-3 dB) ≥ 160 kHz	(-3 dB) ≥ 160 kHz	(160 x k) kHz, k-interpolation factor	
Direction of signals	$\mathbf{I_{2}}$ lags $\mathbf{I_{1}}$ for clockwise rotation (viewed from shaft side)	+B lags +A for clockwise rotation (viewed fromshaft side)	U2 lags U1 with clockwise rotation (viewed from shaft side)	
Maximum rise and fall time	-	-	< 0.5 µs	
Standard cable length	1 m, without connector	1 m, without connector	1 m, without connector	
Maximum cable length	5 m	25 m	25 m	
Output signals			0=0.25T±0.425T	







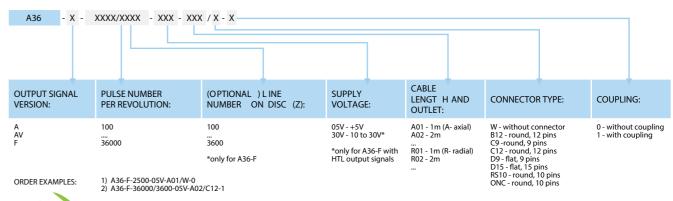
Note:

- 1. Maximum working rotation speed (with proper encoder counting) is limited by maximum operating frequency and maximum mechanical rotation speed.
- 2. If cable extension is used, power supply conductor cross-section should not be smaller than 0.5 mm2

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 READOUT DEVICES	CS3000			CS5500			
COUPLING				SC30			
EXTERNAL INTERPOLATOR				NK			

ORDER FORM





www.imajteknik.com.tr • info@imajteknik.com