

MAIN EXPORT COUNTRIES:



 İMAJ TEKNİK

The company under the name JSC "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 tradition 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 by meeting the requirements of EN ISO 9002:1994 – EN ISO 9001:2000.

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

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

AK58

ABSOLUTE ROTARY ENCODER



Absolute singleturn and multiturn (battery buffered) solid shaft rotary encoders are used for generation of coded output signals which provide information about controlled object absolute position. In singleturn version rotary encoder AK58 has resolution from 9 up to 21 bit per revolution. Output signals interface is or Operating principle is photoelectrical. In multiturn version AK58 has singleturn resolution from 9 up to 20 bit per revolution with 12/16/20/24 bit resolution of multiturn counter on BiSS C interface. With SSI interface the encoder AK58 has resolution from 9 up to 18 bit per revolution with 9 up to 40 bit resolution of multiturn counter. Battery is placed inside of encoder. Operating principle is photoelectrical and magnetic.

Absolute encoder is intended to use in robotics industry, automated and automatized lines in industry, control devices of equipment and machines, various control systems, precise machine tools and others.



Žirmūnų st. r. 139, LT-09120 Vilnius, Lithuania

sales@precizika.lt

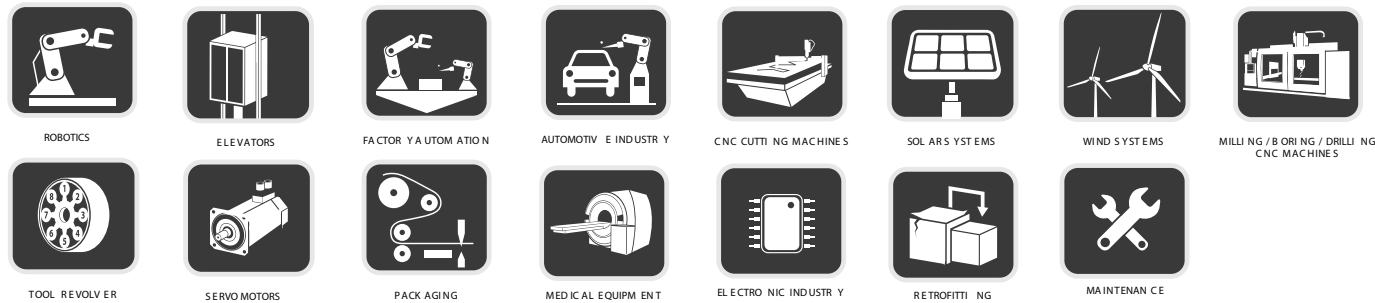
Tel.: +370 (5) 236 3683

Fax.: 370 (5) 236 3609

www.precizika.lt

AK58

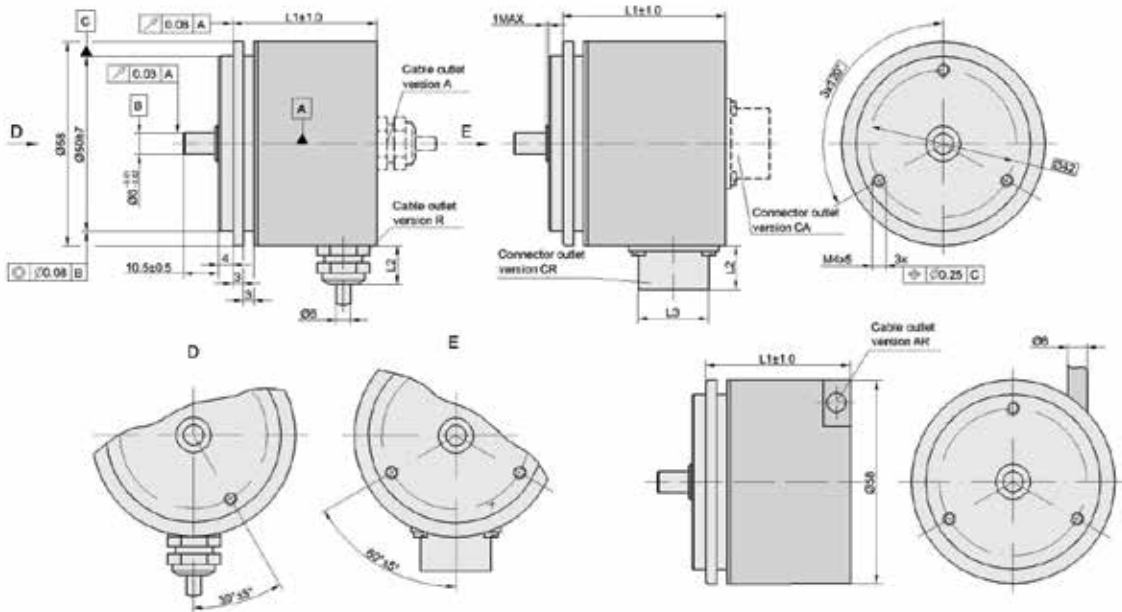
RECOMMENDED APPLICATIONS



MECHANICAL DATA

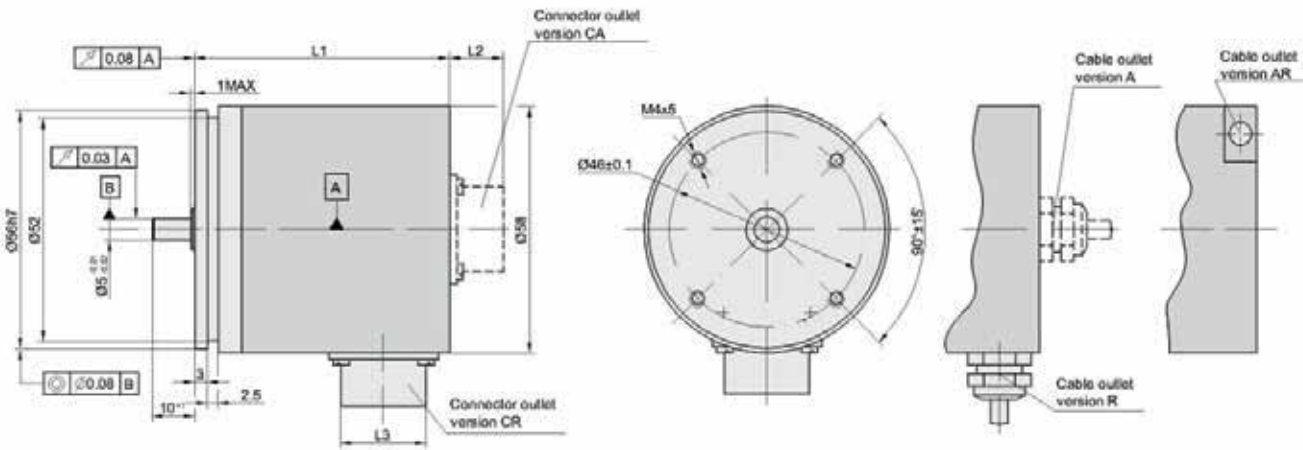
Maximum shaft speed:	12000 rpm	Operating temperature	-10...+70 °C
Maximum shaft load:		Storage temperature	-10...+80 °C
- axial	10 N		
- radial (at shaft end)	20 N		
Starting torque at 20 °C	≤ 0.01 Nm	Maximum humidity (non-condensing)	98 %
Rotor moment of inertia	< 15 gcm ²	Permissible vibration (55 to 2000 Hz)	≤ 100 m/s ²
P protection (IEC 529):		Permissible shock (11 ms)	≤ 1000 m/s ²
- standard	IP65		
- optional	IP67		
Maximum weight without cable	0.3 kg		

AK58



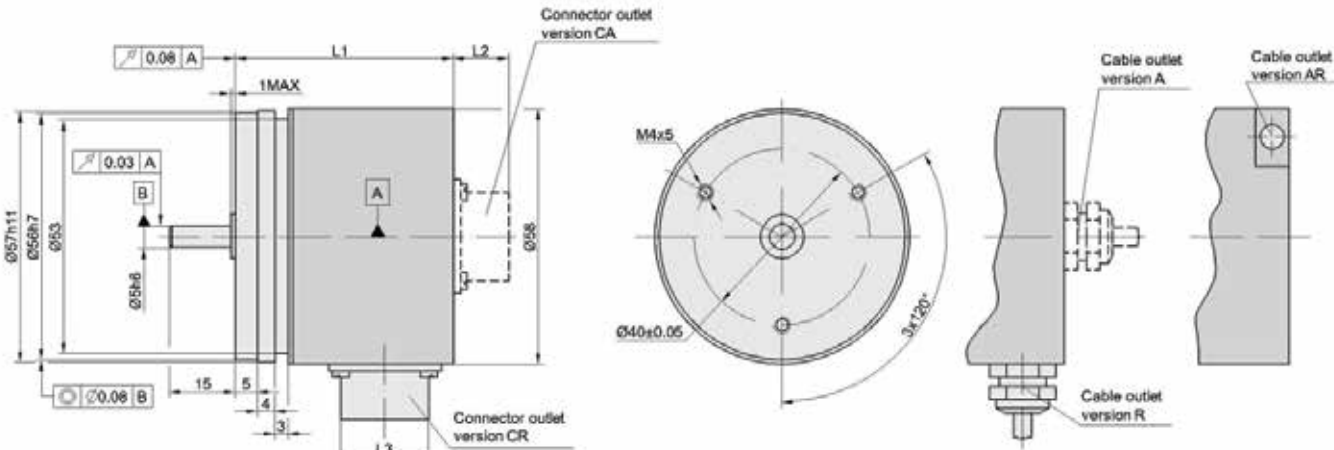
	Connector type /cable outlet	ONC axial	PC10 axial	C12, C9 axial	ONC radial	PC10 radial	C12, C9 radial	Cable axial (ver.A)	Cable radial (ver.R)	Cable axial-radial (ver.AR)
Singleturn	L1	41	41	41	54	53	53	41	41	43
Multiturn	L1	64	64	64	77	76	76	64	64	66
Singleturn/multiturn	L2	16	9	22	16	9	22	12	12	-
Singleturn/multiturn	L3	M24	M14	M23	M24	M14	M23	-	-	-

AK58B



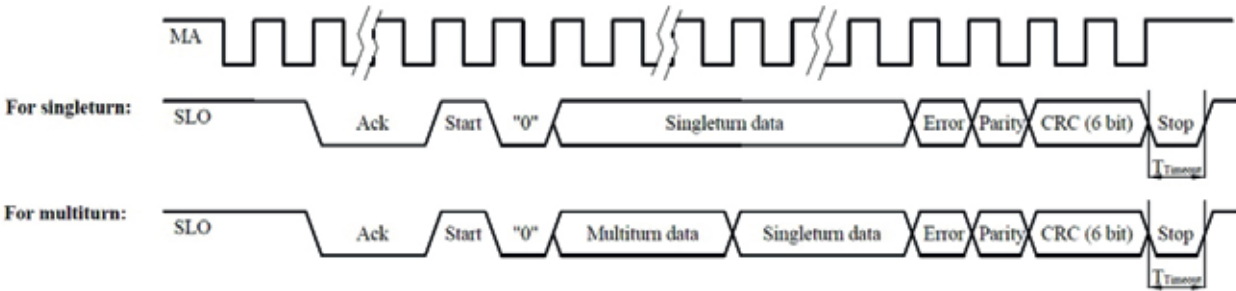
	Connector type /cable outlet	ONC axial	PC10 axial	C12, C9 axial	ONC radial	PC10 radial	C12, C9 radial	Cable axial (ver.A)	Cable radial (ver.R)	Cable axial-radial (ver.AR)
Singleturn	L1	44.5	44.5	44.5	57.5	56.5	56.5	44.5	44.5	46.6
Multiturn	L1	67.5	67.5	67.5	80.5	79.5	79.5	67.5	67.5	69.6
Singleturn/multiturn	L2	16	9	22	16	9	22	12	12	-
Singleturn/multiturn	L3	M24	M14	M23	M24	M14	M23	-	-	-

AK58C

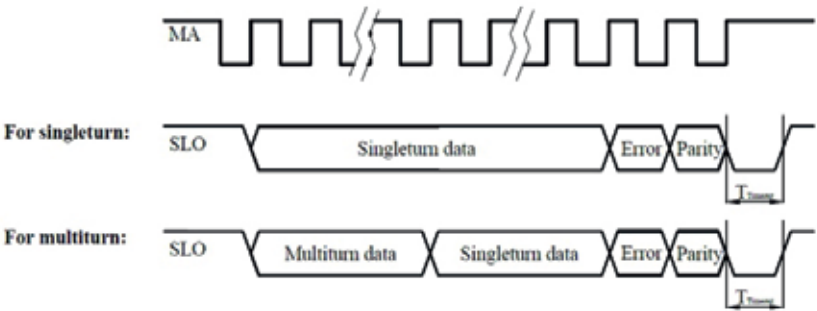


Resolution:	
- Singleturn version:	
- with interface BiSS C	9... 21 bit
- with interface SSI	9... 21 bit
- Multiturn version:	
- single turn resolution with BiSS C	9 ... 20 bit
- multiturn resolution with BiSS C	12/16/20/24 bit
- single turn resolution with SSI	9 ... 18 bit
- multiturn resolution with SSI	9 ... 40 bit
Output code	Gray , binary
Data interface	SSI, BiSS C
Accuracy	± 30 arc sec
Supply voltage	+ 5V ± 5 %
Light source	LED
Maximum operating frequency	
- with interface BiSS C	10 MHz
- with interface SSI	4 MHz
Cable length (standard)	1 m
Maximum cable length	25 m

BiSS C serial interface



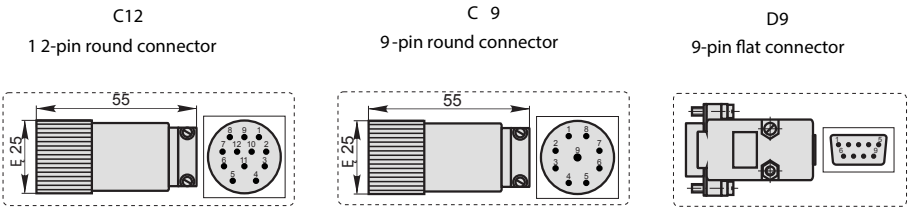
SSI serial interface



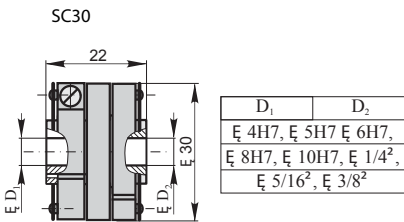
Interface	BiSS C
T _{timeout}	1.2 µs - 26 µs
Clock frequency	62.5 kHz - 10 MHz

Interface	SSI
T _{timeout}	Typ. 25 µs
Clock frequency	62.5 kHz - 4 MHz

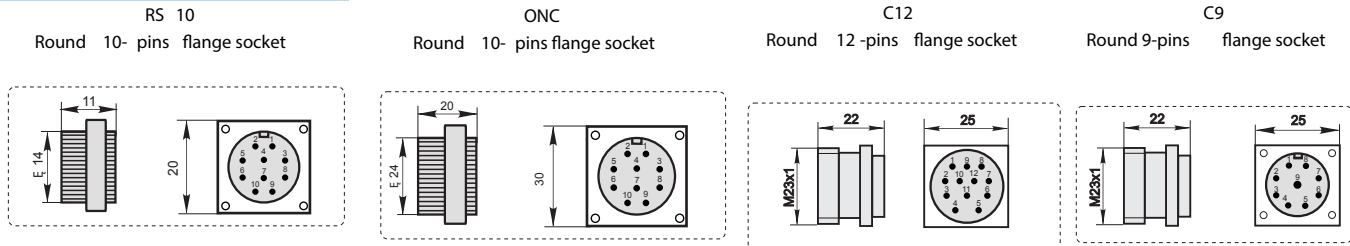
CONNECTORS



COUPLING



FLANGE SOCKETS



ORDER FORM

AK5 8X	X	XX	XXX/XXX - X					
TYPE:	VERSION	OUTPUT SIGNALS INTERFACE (SERIAL):	SINGLETURN BIT NUMBER*:	MULTITURN BIT NUMBER*:	CABLE LENGTH:	CONNECTOR TYPE:	COUPLING:	
M - AK58M B - AK58B C - AK58C C2 - AK58C2 C3 - AK58C3 D - AK58D	ST - singleturn MT - multiturn	S - SSI B - BiSS C	B9 - 9 bit B10 - 10 bit B11 - 11 bit B12 - 12 bit ... B20 - 20 bit	M0 - 0 (for singleturn version) M9 - 9 M10 - 10 M11 - 11 M12 - 12 ... M40 - 40	AR01 - 1m AR02 - 2m AR03 - 3m	W - without connector D9 - flat, 9 pins C9 - round, 9 pins C12 - round, 12 pins RS 10 - round, 10 pins ONC - round, 10 pins	0 - without coupling 1 - with coupling	

ORDER EXAMPLES:
1) AK58M-S-B9-A02/ W-0
2) AK58D-B-B12-R01/C12-1

* See electrical data for possible bit selection withspecific interface