

MAIN EXPORT COUNTRIES:



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 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.

AK58

ABSOLUTE ROTARY ENCODERS



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.

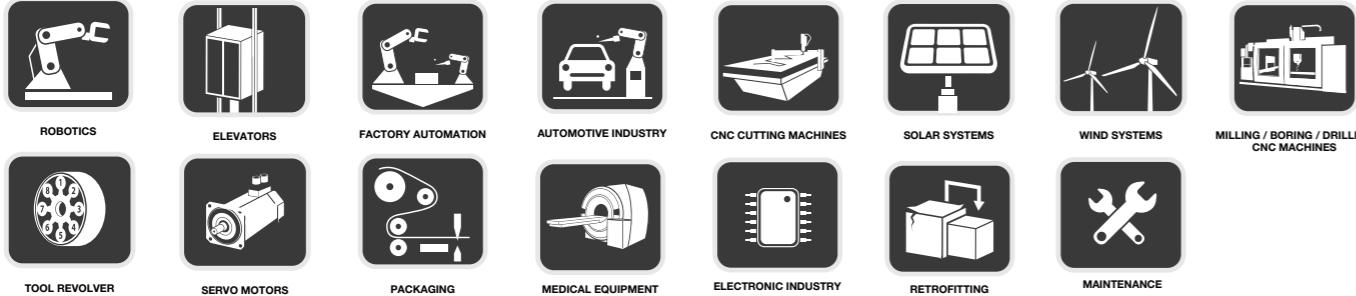


Žirmūnų str. 139, LT-09120 Vilnius, Lithuania
sales@precizika.lt
Tel.: +370 (5) 236 3683
Fax.: 370 (5) 236 3609
www.precizika.lt



AK58

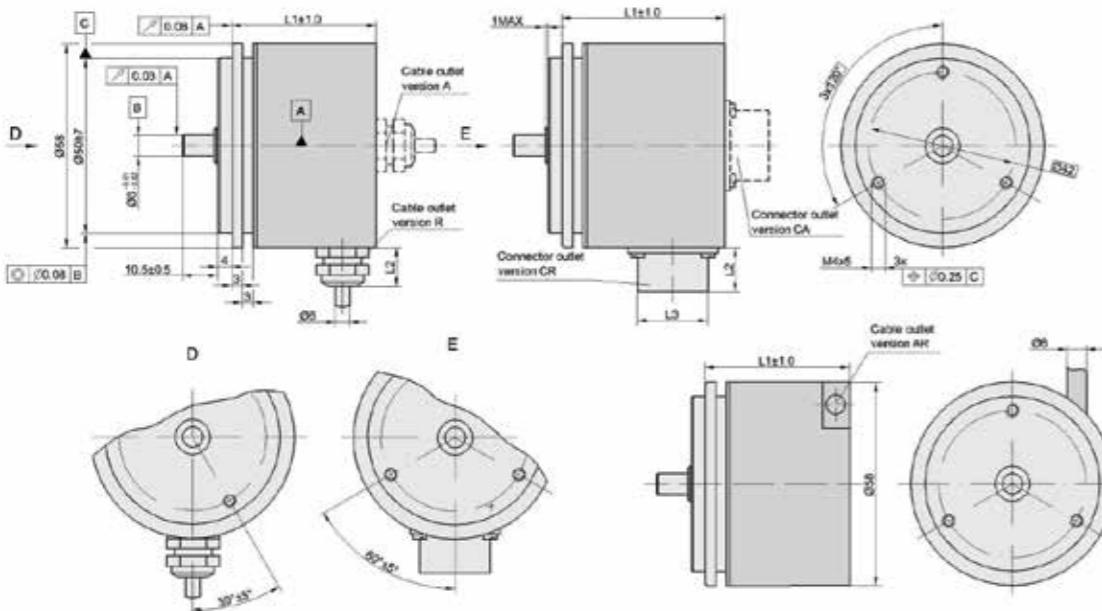
RECOMMENDED APPLICATIONS



MECHANICAL DATA

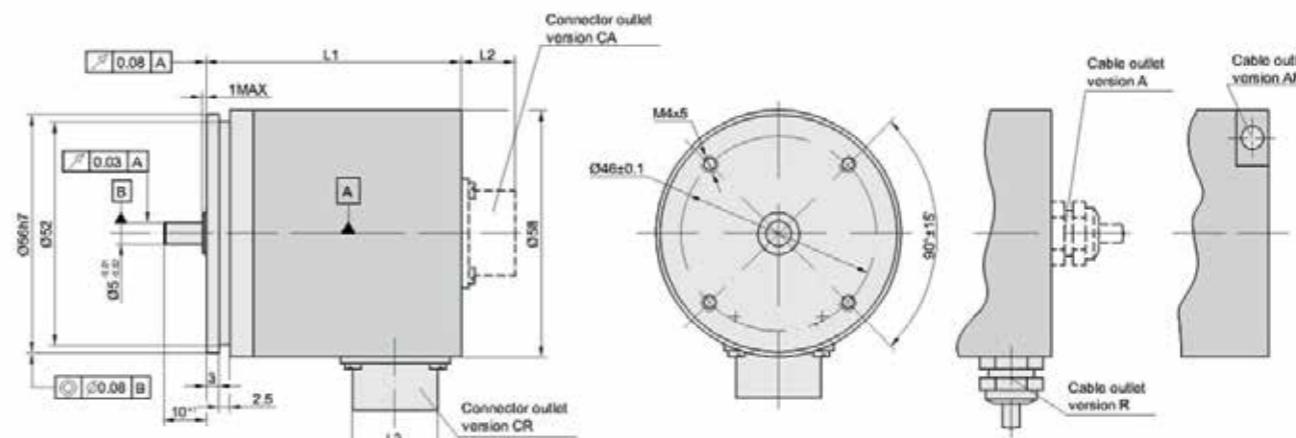
Maximum shaft speed:	12000 rpm	Operating temperature	-10...+70 °C
Maximum shaft load: - axial	10 N (40 N for AK58C2, AK58C3, AK58D)	Storage temperature	-10...+80 °C
- radial (at shaft end)	20 N (60 N for AK58C2, AK58C3, AK58D)		
Starting torque at 20 °C	≤ 0.01 Nm	Maximum humidity (non-condensing)	98 %
Rotor moment of inertia	< 15 gcm²	Permissible vibration (55 to 2000 Hz)	≤ 100 m/s²
Protection (IEC 529): - standard	IP65	Permissible shock (11 ms)	≤ 1000 m/s²
- optional	IP67		
Maximum weight without cable	0.3 kg		

AK58



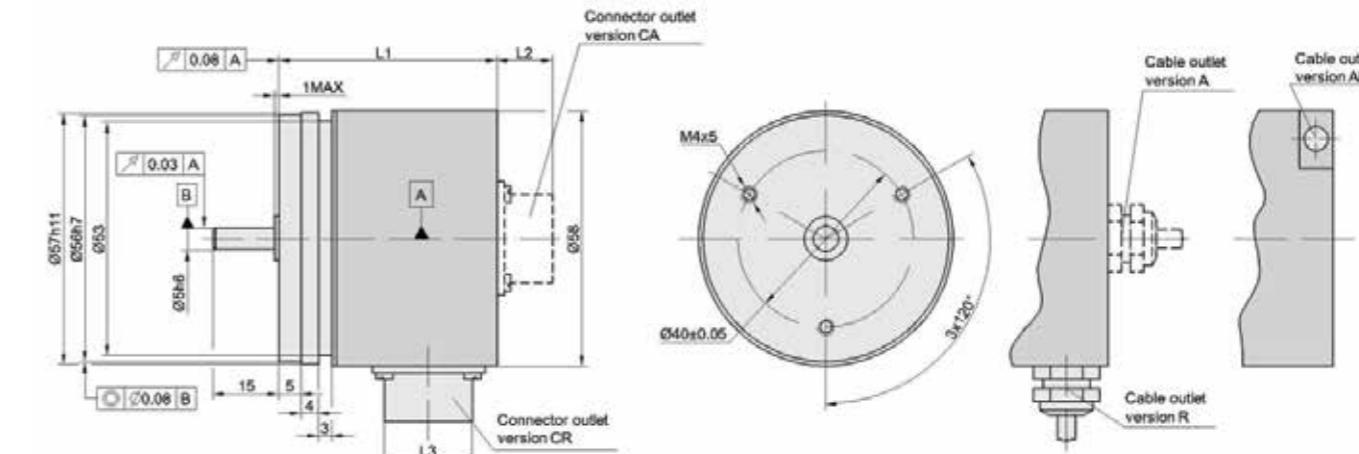
	Connector type /cable outlet	oNC axial	PC10 axial	C12, C9 axial	oNC radial	PC10 radial	C12, C9 radial	Cable axial (ver.A)	Cable radial (ver.R)	Cable axial-radial (ver.AR)
Singleturn	L1	41	41	41	54	53	53	41	41	43
Multiturn	L1	64	64	64	77	76	76	64	64	66
Singleturn/multiturn	L2	16	9	22	16	9	22	12	12	-
Singleturn/multiturn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

AK58B



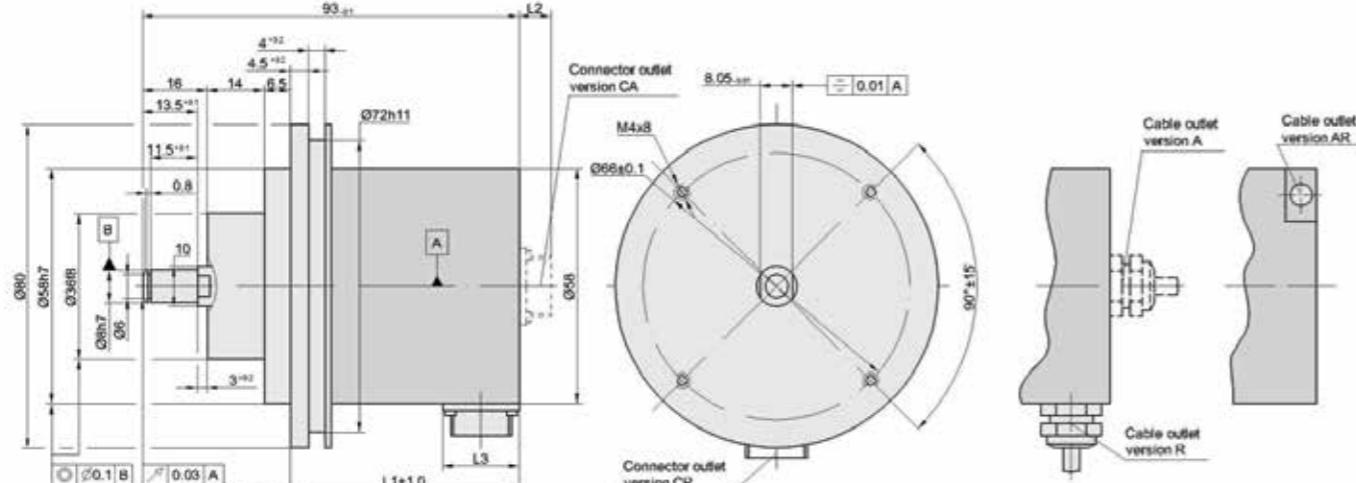
	Connector type /cable outlet	oNC axial	PC10 axial	C12, C9 axial	oNC radial	PC10 radial	C12, C9 radial	Cable axial (ver.A)	Cable radial (ver.R)	Cable axial-radial (ver.AR)
Singleturn	L1	44.5	44.5	44.5	57.5	56.5	56.5	44.5	44.5	46.6
Multiturn	L1	67.5	67.5	67.5	80.5	79.5	79.5	67.5	67.5	69.6
Singleturn/multiturn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

AK58C



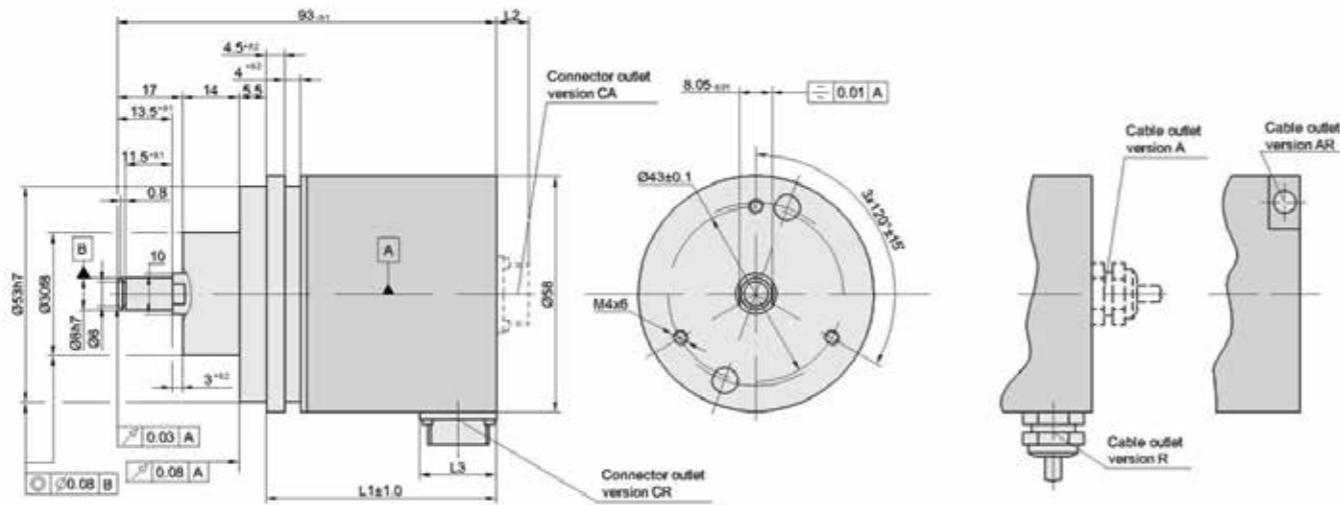
	Connector type /cable outlet	oNC axial	pC10 axial	C12, C9 axial	ONC radial	PC10 radial	C12, C9 radial	Cable axial (ver.A)	Cable radial ver.R)	Cable axial-radial (ver.AR)
Singleturn	L1	47	47	47	60	59	59	47	47	49
Multiturn	L1	70	70	70	83	82	82	70	70	72
Singleturn/multiturn	L2	16	9	22	16	9	22	12	12	-
Singleturn/multiturn	L3	M24	M14	M23	M24	M14	M23	-	-	-

AK58C2



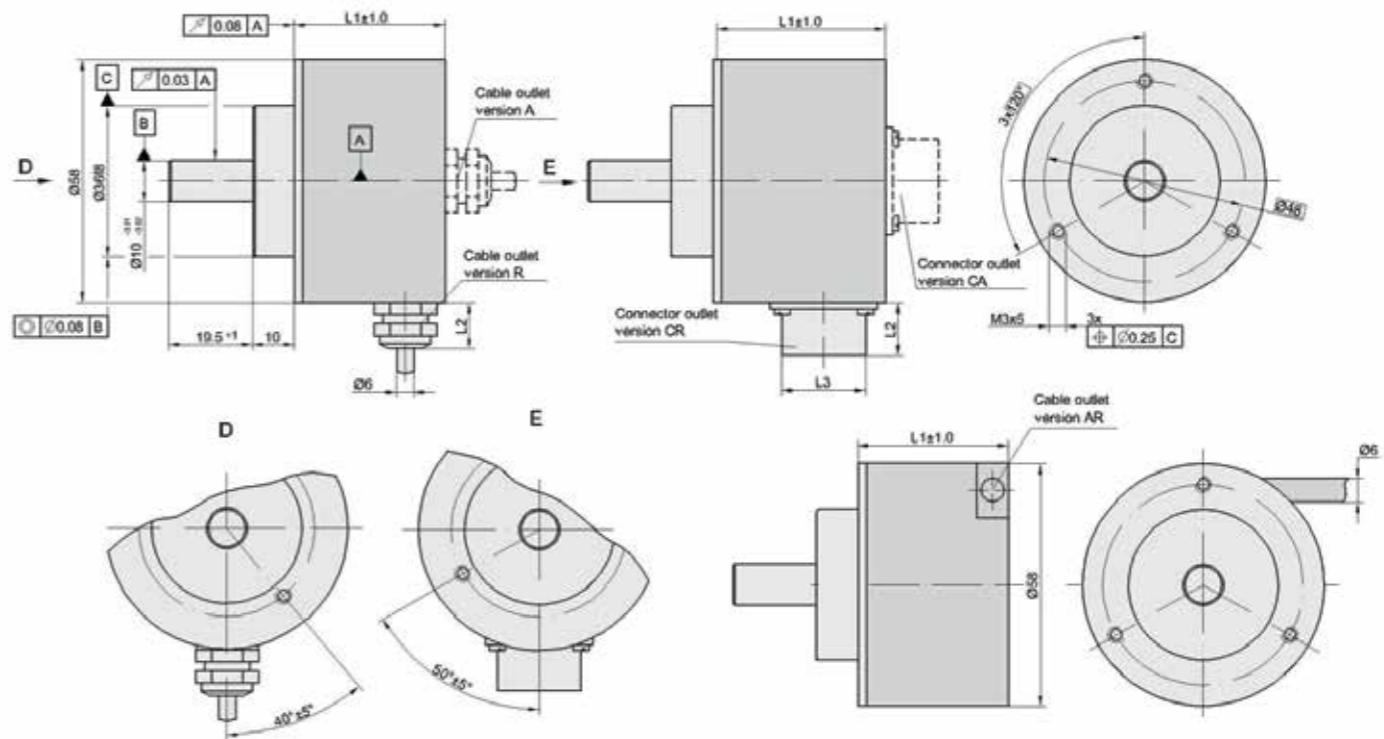
	Connector type /cable outlet	oNC axial	pC10 axial	C12, C9 axial	ONC radial	PC10 radial	C12, C9 radial	Cable axial (ver.A)	Cable radial ver.R)	Cable axial-radial (ver.AR)
Singleturn	L1	44.5	44.5	44.5	no	56.5	56.5	44.5	44.5	46.5
Multiturn	L1	67.5	67.5	67.5	no	79.5	79.5	67.5	67.5	69.5
Singleturn/multiturn	L2	16	9	22	16	9	22	12	12	-
Singleturn/multiturn	L3	M24	M14	M23	M24	M14	M23	-	-	-

AK58C3



	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	50	50	50	no	62	62	50	50	52
Multiturn	L1	73	73	73	no	85	85	73	73	75
Singleturn/multiturn	L2	16	9	22	16	9	22	12	12	-
Singleturn/multiturn	L3	M24	M14	M23	M24	M14	M23	-	-	-

AK58D



	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	37.5	37.5	37.5	no	49.5	49.5	37.5	37.5	39.5
Multiturn	L1	60.5	60.5	60.5	no	72.5	72.5	60.5	60.5	62.5
Singleturn/multiturn	L2	16	9	22	16	9	22	12	12	-
Singleturn/multiturn	L3	M24	M14	M23	M24	M14	M23	-	-	-

ELECTRICAL DATA

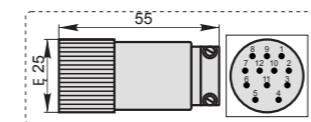
· Resolution:	
- Singleturn version:	
- with interface BiSS C	9... 21 bit
- with interface SSI	9... 21 bit
- Multiturn version:	
- single turn resolution with BiSS C	9 ... 20 bit
- multiturn resolution with BiSS C	12/16/20/24 bit
- single turn resolution with SSI	9 ... 18 bit
- multiturn resolution with 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

ACCESSORIES

CONNECTORS

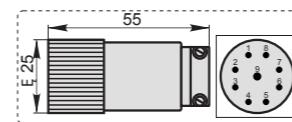
C12

12-pin round connector



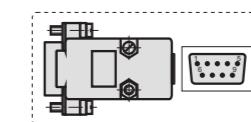
C 9

9-pin round connector



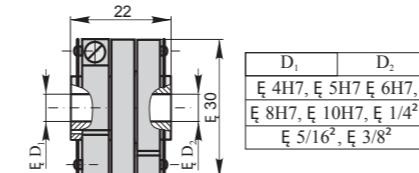
D9

9-pin flat connector



COUPLING

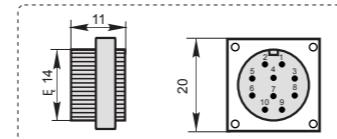
SC30



FLANGE SOCKETS

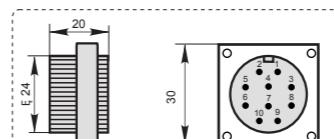
RS 10

Round 10-pins flange socket



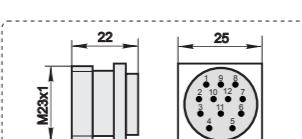
ONC

Round 10-pins flange socket



C12

Round 12-pins flange socket

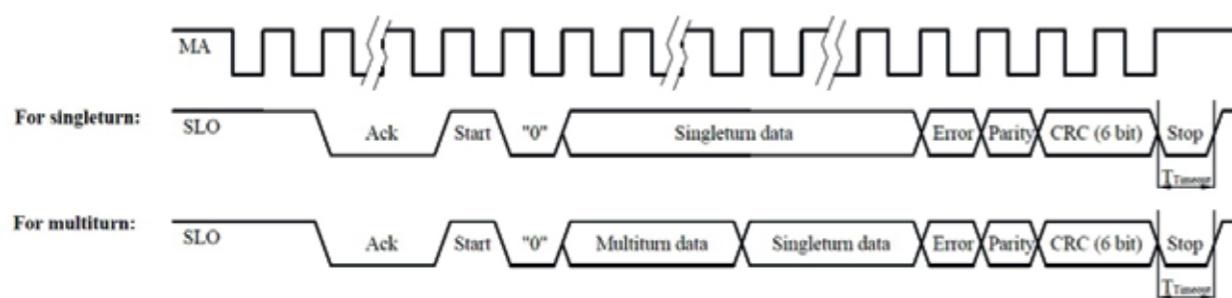


C9

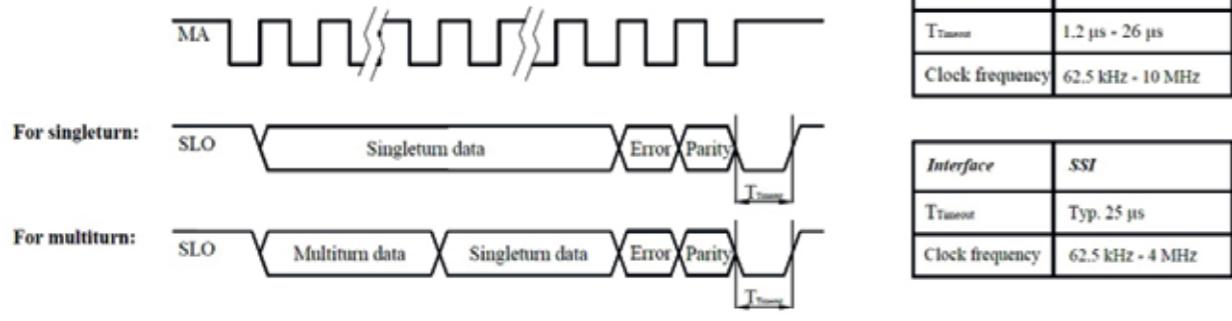
Round 9-pins flange socket



BiSS C serial interface



SSI serial interface



ORDER FORM

AK58X	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			

ORDER EXAMPLES:

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

* See electrical data for possible bit selection with specific interface