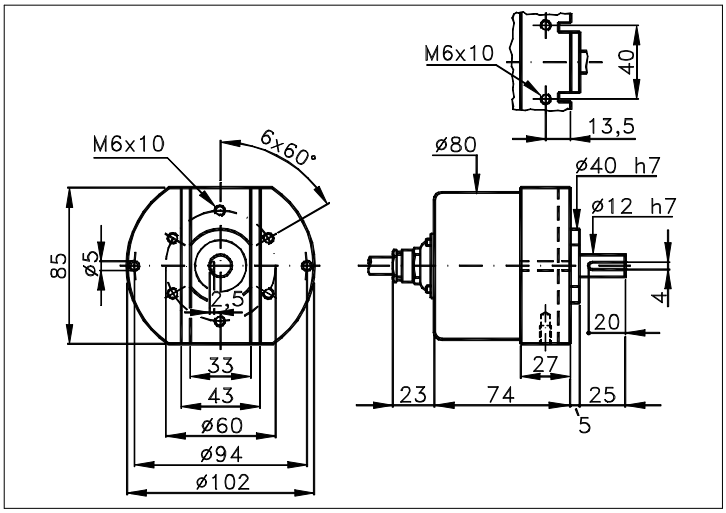
INCREMENTAL ENCODER **102**	ENCODER SUITABLE FOR SEVERE INDUSTRIAL CONDITIONS. METALLIC CASE AND STAINLESS STEEL SHAFT SUITABLE FOR HEAVY AXIAL AND RADIAL LOADS. TWO FIXING POSSIBILITIES.	Family: **I** page: 03.102 1/2 data sheet . II 081 E0A

Sized draw standard version: CW Measures without tolerance according to UNI ISO 2768-mk



TECHNICAL FEATURES AND POSSIBLE CONFIGURATIONS

- **Base**.....: ANODIZED ALUMINIUM (*)
- **Cover**.....: ANODIZED ALUMINIUM (*)
- **Weight**.....: 1000 g
- **Shaft**.....: Ø 12 STAINLESS STEEL (*)
- **Max.rad/axial load.**: 12 kg
- **IP output side.(°).**: see 'CONNECTION' of page 2
- **IP shaft side..(°).>**

std. 65	sealed 66	low torq. 53
standard	Z	B
6000	3000	8000
90	150	30

- **Ball bearings life...**: 1,5 x 10^9 revolutions
- **Impact resistance....**: 50 G x 11ms
- **Vibration resistance.**: 12 G (10 ÷ 2000 Hz)
- **Power supply.....**: 5÷30V (see page 2)
- **Operating temperature**: 0 ÷ 70 °C (*)
- **Storage temperature..**: -30 ÷ 85 °C
- **N° of pulses/rev.....**: 1 ÷ 25000
- **Max frequency.....**: 100 kHz (300 option)
- **Max consumptions mA..**: std 120 line driver 180 (*)
- **Light source.....**: LED with >= 100000 h life

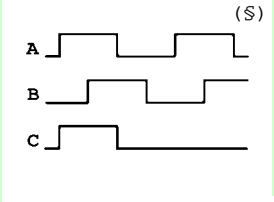
(°) IP according to CEI EN 60529,EN 60529,IEC 529

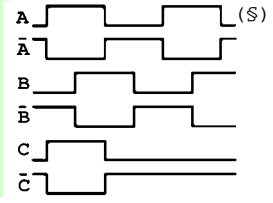
(*) custom options

(**) intermittent max RPM + 30% of continuous max RPM

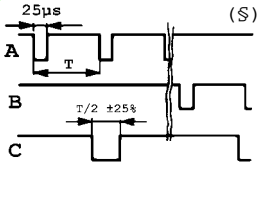
ELECTRONICS

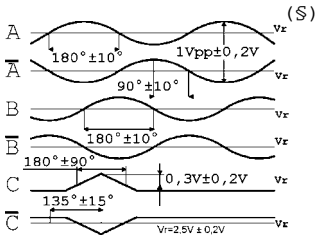
CODE	DESCRIPTION	mA	CODE	DESCRIPTION	mA	CODE	DESCRIPTION	mA	CODE	DESCRIPTION	mA
	STANDARD NPN	10	N	DRIVER 26LS31	30	D	DISCRIMINAT.	70	Y	SINUSOID.1Vpp	10
K	NPN OPEN COLL	10	T	TTL 7404	10						
Q	NPN	70	C	DRIVER 88C30	20						
R	NPN OPEN COLL	70	L	2x PUSH-P.PRO	70						
P	PNP	70	M	2x PUSH-PULL	70						
U	PNP OPEN COLL	70									
B	PUSH-PULL PRO	70									
H	PUSH-PULL	70									





Tolerance between phases ± 25°, symmetry ± 15°





(§) Clock-wise output rotation (see shaft).

elcis
ELCIS s.r.l. Via Rosa Luxembourg 12/14 10093 COLLEGNO (TO) ITALY
Phone: +39 011 715577/78 a.r.
MAIL: ELCIS s.r.l. P.O.Box 43 10093 COLLEGNO (TO) ITALY
* http://www.elcis.com
* e-mail: info@elcis.com
* Fax: +39 011 712613

N.I.F.: B-87969416
GUEMISA
C\ Del Electrodo, 68 Oficina-23
28522 Rivas Vaciamadrid (Madrid)
Tfno.: 91 764 21 00 - info@guemisa.com

POSSIBLE OPTIONS

CODE	DESCRIPTION	CODE	DESCRIPTION
L	Low temperature	C	Low consumption
Y	Unbreakable disk	K	Invert. phase A,B,Zero.
Z	Sealed ball bearing	J	Zero logic combination
B	Low torque ball bear.	M	Impregnated electronic
H	Different shaft Ø	A	High temperature
		P	Compressed air attack
S	160 KHz frequency	G	Tropicalization
W	300 KHz frequency		
X	Custom options		

POSSIBLE CONNECTIONS

CABLE	OUTPUT:
CW	AX RAD

CONNECTOR	OUTPUT:
CM SM CL SL CD CH CH5 CI CE C4 CH6	AX RAD

CABLE END CONNECTOR	OUTPUT:
VM TM VL TL VD VH VH5 VI VE VK TK VN VH6 VM5 VM9 VS VD5	AX RAD

TERMINAL BOX	OUTPUT:
MS	AX RAD

ORDERING INFORMATION

POSSIBLE SHAFT Ø

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( )
( )
(n) Ø n upon requ.

( )
( )
( )
( )

( )
( )
( )
( )

( ) STANDARD NPN
(K) NPN OPEN COLL
(Q) NPN
(R) NPN OPEN COLL
(P) PNP
(U) PNP OPEN COLL
(B) PUSH-PULL PRO
(H) PUSH-PULL
(N) DRIVER 26LS31
(T) TTL 7404
(C) DRIVER 88C30
(L) 2x PUSH-P.PRO
(M) 2x PUSH-PULL
(D) DISCRIMINAT.
(Y) SINUSOID.1Vpp
(X) CUSTOM OPTION
( )
( )

CABLE IP65

( )
(CW) 1 m long
( )

TERMINAL BOX IP00

(MS) Phoenix

CONNECTOR

(CM)	7c norm.	IP65
(SM)	7c sealed	IP66
(CL)	10c norm.	IP65
(SL)	10c sealed	IP66
(CD)	9c sub D	IP63
(CH)	12c ccw	IP67
(CH5)	12c cw	IP67
(CI)	12c crimp.	IP64
(CE)	5c miniat	IP64
( )		
( )		
(C4)	4c screw	IP65
(CH6)	12c cw	IP67
( )		

CABLE END CONNECTOR IP65 encoder output

(VM)	7c normal
(TM)	7c sealed
(VL)	10c normal
(TL)	10c sealed
(VD)	9c
(VH)	12c anticlock.
(VH5)	12c clock-wise
(VI)	12c crimped
(VE)	5c
(VK)	17c normal
(TK)	17c sealed
(VN)	12c
(VH6)	12c clock-wise
(VM5)	26c
(VM9)	16c
(VS)	12c
(VD5)	9c screened

OPTIONS MODEL		/	PULSES/REVOL.(1)	/	POWER SUPPLY	/	VERSION (2)	/	ELECTRONIC (2)	/	CONNECTION (3)	/	OUTPUT
102		/	500	/	5	/	BZ	/	N	/	CW	/	
(L)	(C)		1 ÷ 25000		(Vcc)		(M)						
(Y)	(K)				(5)	5 V ±5%	(B)						
(Z)	(J)				(824)	8÷24 V	(BZ)						
(B)	(M)				(1828)	18÷28 V	(MZ)						
(H)	(A)				(815)	8÷15 V							
( )	(P)				(12)	12 V ±5%							
( )	( )				(24)	24 V ±5%							
(S)	(G)				(1230)	12÷30/12 V							
(W)	( )				(8245)	8÷24/5 V							
( )	( )				(1030)	10÷30 V							
( )	( )				(18285)	18÷28/5 V							
(X)					(1530)	15÷30/15 V							
					( )								

(M)	Monodirectional	AX	( )
(B)	Bidirectional	RAD	(R)
(BZ)	Bidirectional + zero		
(MZ)	Monodirectional + zero		

NOTE: FOR 88C30 MAX 15 Vdc

(1) For further information see PULSES/REVOL. data sheet
(2) For further information see ELECTRONIC data sheet
(3) For further information see CONNECTION data sheet

Product manufactured according to UNI EN ISO 9001:2000, supplied with CHECKING and CONFORMITY declaration with CE mark and with TWO (2) YEARS WARRANTY starting from delivery date.

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elcis
ELCIS s.r.l. Via Rosa Luxembourg 12/14 10093 COLLEGNO (TO) ITALY
Phone: +39 011 715577/78 a.r.
MAIL: ELCIS s.r.l. P.O.Box 43 10093 COLLEGNO (TO) ITALY
* http://www.elcis.com
* e-mail: info@elcis.com
* Fax: +39 011 712613

N.I.F.: B-87969416
GUEMISA
C\ Del Electrodo, 68 Oficina-23
28522 Rivas Vaciamadrid (Madrid)
Tfno.: 91 764 21 00 - info@guemisa.com