



Axial up to 50 N Radial up to 100 N

MIL-connector



NOTE..!
STANDARD COVER with Coninvers
Connector and normal cable take out.
View Coninvers in Section 14 page 3.

CHARACTERISTICS

ENCODER CATEGORY	Shaft encoder
SMD - TECHNOLOGY	Strong compact electronics
HIGH IP-RATING	Std. IP 65
LOW CURRENT CONSUMPTION	To be connected directly to PLC'S and counters
SHORT CIRCUIT PROTECTION	Thermal shut down at 155°C
WIDE SUPPLY RANGE	Min 4,5V to Max. 30V
STRONG MECH. CONSTRUCTION	Based on 2 strong precision ball bearings, for harsh industrial environments

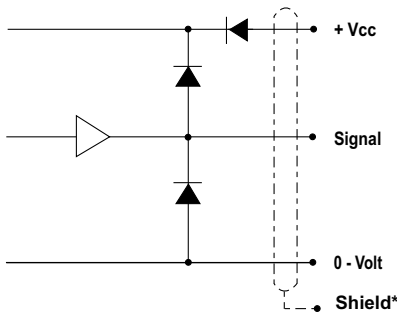
ELECTRICAL SPECIFICATIONS

	At +25°C
Output waveform	Incremental (A, B)
Zero or index pulse	(Z) one pr./rev.
Output	Totempole (OC on request)
Supply-voltage	Min 4,5V to Max. 30V Reverse polarity protection
Current (no load)	Max. 45 mA
Max. load pr. output	30 mA - (Short circuit protected)
V out low	Max. 500 mV at I out low =10 mA
Operating temp.	- 40°C to + 85°C
Storage temp.	- 40°C to + 85°C
Max. pulse frequency	300 kHz
Phase difference	180° ± 36°
Duty cycle	90° ± 18°
Cable data	8 leads (0,14 mm²)pairtwisted/shielded
Output signals	Normal (Standard), Inverted, Differential (RS-422A compatible @ 5V)
Certified acc. to	EN 50081-1 and EN 50082-2

MECHANICAL SPECIFICATIONS

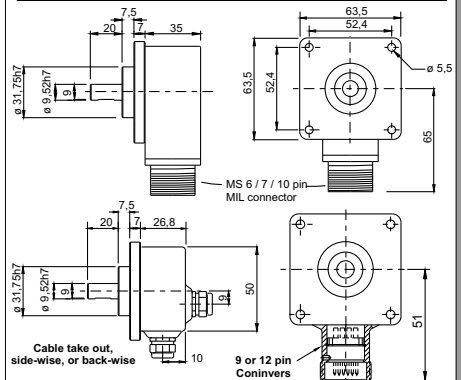
Weight	About 350 g (+ cable 60 g/meter)
Materials : Housing	Aluminum
Shaft	Stainless steel
Bearings	Lifetime lubricated ball bearings
Shaft dimensions	9,52mm, 10 mm
Shaft loads	Axial max. 50 N Radial max. 100 N
Max. rev.	6.000 rev./min.
IP-rating	Standard IP 65
Start torque	< 0,01 Nm at 25°C
Mass moment of inertia	4 gcm²
Max. shock	100 G/11 ms
Bump	10 G - 16 ms (1000 x 3axis)
Vibration	(10 - 2000 Hz)/10 G

OUTPUT CIRCUIT



*Shield connected to housing

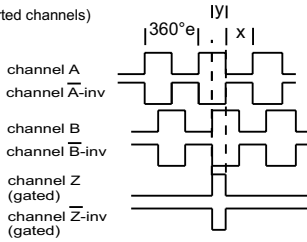
MECHANICAL DIMENSIONS



OUTPUT WAVEFORM

Rotation: Clockwise (cw) from shaftside

(inv = inverted channels)



$X = 180^\circ e \pm 36^\circ e$ and $Y = 90^\circ e \pm 18^\circ e$
Z puls: Gated with A and B (standard)

Options: TTL or HTL compatible. Open Collector NPN or PNP
Gated Z-puls or none-gated Z-puls.
View more Output options in section 15 - page 1 to 2

PULSES/REV.

1	32	150	635	3000
2	36	180	720	3600
5	40	200	800	4000
6	50	250	1000	4096
8	60	256	1024	5000
10	64	300	1131	9000
15	75	360	1250	10000
16	80	400	1500	12500
20	90	455	2000	
25	100	500	2048	
30	125	600	2500	

ORDERING CODES

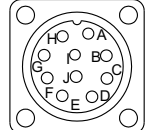
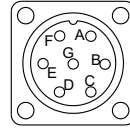
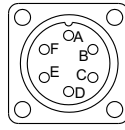
	Options	Ordering codes
Pulses pr. rev.:	No. of pulses	XXXXX
Output signal:	Standard (normal) Inverted Differential	N I D
	Line driver OL 7272 for extra long cable, up to 100 meters (Differential)	M
	Line driver chip 26C31 (V out low < 0,4 V)	L
Shaft dimensions:	1/4" (ø6.35) x 20 mm 3/8" (ø9.525) x 20 mm ø8 x 20 mm ø10 x 20 mm	1/4x20 3/8x20 08x20 10x20
IP-rating:	IP 65 IP67	65 67
Length of cable:	Standard 1 meter No. of meters	01 XX
Cable take out:	Back Side	B S
MIL-Connector ONLY side-wise	6 Pin 7 Pin 10 Pin	06 07 10
Coninvers Connector ONLY side-wise	9 Pin 12 Pin	09 12
Connector:	Coninvers Connector or MIL-connector	
	View Section 14 page 3	

CONNECTIONS MIL-connector

6 pin mil

7 pin mil

10 pin mil



	6 pin mil	7 pin mil	10 pin mil
+Vcc	B	D	D
-Gnd	A	F	F
A	E	A	A
B	D	B	B
Z	C	C	C
A inv.	-	-	H
B inv.	-	-	I
Z inv.	-	-	J

CONNECTIONS for Cable (colours)

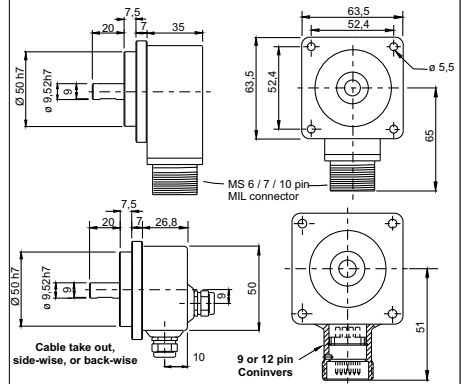
Color code	Standard	Color code	Differential
Pink	Ch. A	Pink	Ch. A
Grey*	Ch. A Gnd	Grey	Ch. A inv.
Green	Ch. B	Green	Ch. B
Yellow*	Ch. B Gnd	Yellow	Ch. B inv.
White	Ch. Z	White	Ch. Z
Brown*	Ch. Z Gnd	Brown	Ch. Z inv.
Red	Vcc	Red	Vcc
Blue*	Gnd	Blue	Gnd

*Blue, grey, yellow and brown are internal connected

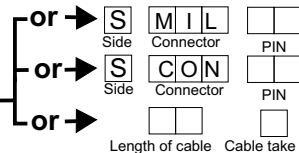
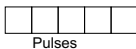
CONNECTIONS CONINVERS connector

View Section 14 - Page 3 to 6

OPTION: 2Q-ELT FACE



2Q
or
2Q-ELT



NOTE...!
Standard cover
View Coninvers in
Section 14 page 3.

NOTE...!
Standard cover