

ROTACOD

Absolute encoders

Series

AS58 • AS58S • ASC58



- Standard absolute single turn encoder
- Resolution up to 8192 counts/rev.
- Cable and connector output



AS58S • AS58 • ASC59

ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms
Vibrations:	10 g, 5-2000 Hz
Protection:	IP65
Operating temperature range:	-25°C +85°C (-13°F +185°F)
Storage temperature range:	-25°C +85°C (-13°F +185°F) (98% R.H. without condensation)
Option:	• Operating temperature range: -40°C +100°C (-40°F +212°F)

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft diameter:	Ø 6, 8, 9.52, 10, 12 mm
Hollow shaft diameter:	Ø 14, 15 mm
Reducing sleeves BR1-xx from Ø 15 mm to:	Ø 6, 8, 9.52, 10, 11, 12 mm
Shaft loading (axial, radial):	40 N max.
Shaft rotational speed:	6000 rpm max.
Starting torque (at 20°C):	AS58: 0,15 Ncm (typ.) AS58S, ASCxx: 0,4 Ncm (typ.)
Bearings life:	400 x10 ⁶ rev. min. (10 ⁹ rev. min. with 20 N shaft loading max.)
Electrical connections:	SSI: MIL 7 pin plug (10 pin plug with zero setting) Bit parallel: MIL 19 pin plug
Weight:	~ 250 g (8,8 oz)
Options:	• DSub 15 pin plug • DSub 25 pin plug • MIL 19 pin plug • cable output 1 m (3.3 ft)

ELECTRICAL SPECIFICATIONS

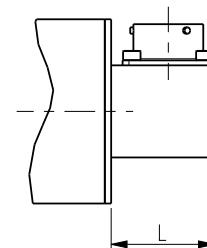
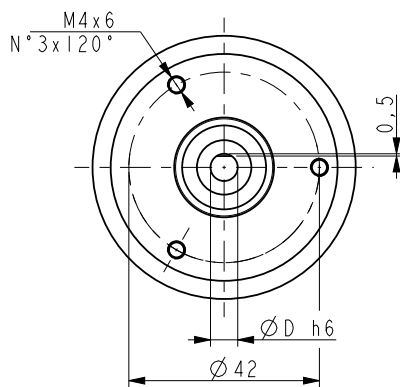
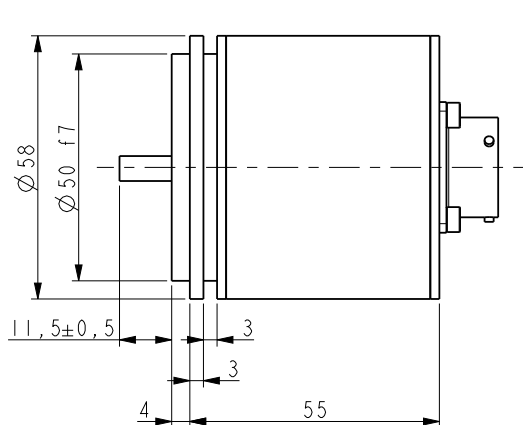
Resolution:	256, 360, 512, 720, 1024, 2048, 4096, 8192 cpr
Output circuits:	SSI (RS422), Bit parallel, NPN, PNP, Push-Pull
Output code:	Gray, Binary
Counting frequency:	50 kHz max.
Power supply:	+10V +30V
Power consumption:	SSI: 1 W Bit parallel: 1,2 W
Protection:	against inversion of polarity, short-circuit
EMC:	electro-magnetic immunity, according to: EN-61000-4-2 EN-61000-4-4
Optoelectronic life:	100.000 h min.
Functions:	• Counting direction (input)
Options:	• Zero setting / Preset (input) • LATCH output • TRI-STATE output • Electronic parity bit (on request)

MATERIALS

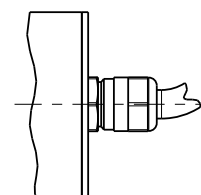
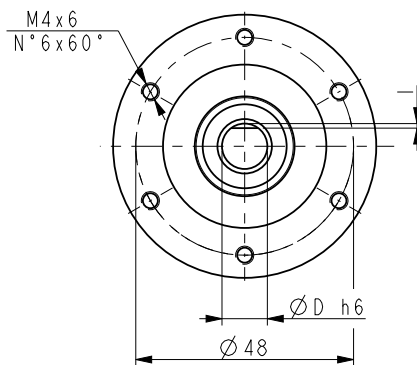
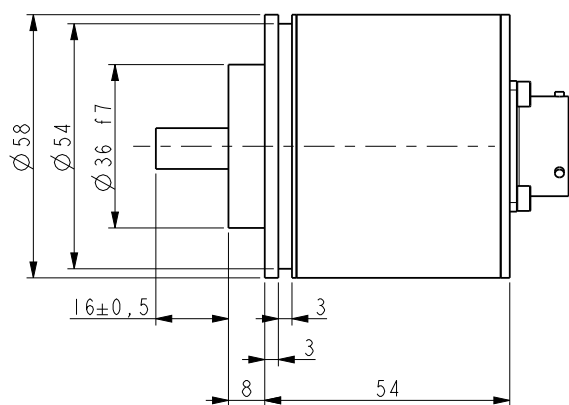
Flange:	anticorodal, UNI EN AW-6082
Housing:	anticorodal, UNI EN AW-6082
Bearings:	ABEC 5
Shaft:	stainless steel, non magnetic, UNI EN 4305
Light source:	GaAl diodes

ACCESSORIES

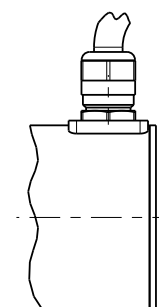
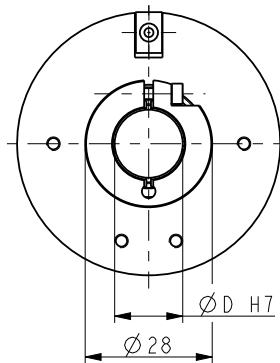
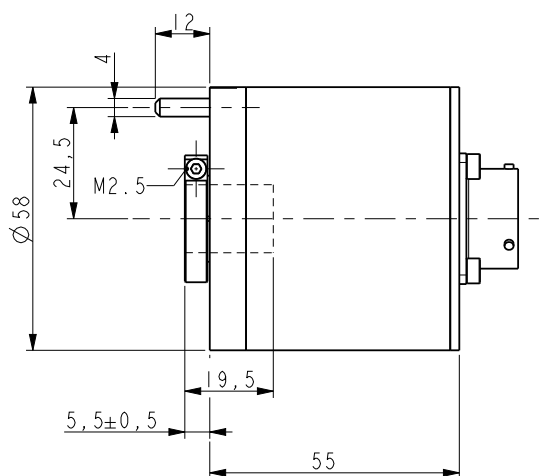
E19MLS:	19 pin MIL mating connector
E7MLS:	7 pin MIL mating connector
E10MLS:	10 pin MIL mating connector
EDB 25S:	25 pin DSub mating connector
EDA 15S:	15 pin DSub mating connector
PAN/PGF:	flexible couplings
BR1:	reducing sleeves
LKM-386:	fixing clamps



AS58



AS58S



ASC58

Order code - Bit parallel output

Additional code (optional)

AS58	X	/	X	X	-	XX	-	X	X	X	X	X	/Sxxx
AS58S	(a)		(b)	(c)		(d)		(e)	(f)	(g)	(h)	(i)	(j)
ASC58													
ASC59													
ASC60													

<p>(a) RESOLUTION</p> <p>08 = 256 cpr 36 = 360 cpr 09 = 512 cpr 72 = 720 cpr 10 = 1024 cpr 11 = 2048 cpr 12 = 4096 cpr 13 = 8192 cpr</p> <p>(b) OUTPUT CODE</p> <p>B = Binary G = Gray</p>	<p>(c) OUTPUT CIRCUITS</p> <p>N = NPN o.c. P = PNP o.c. Y = Push-Pull</p> <p>on request: L = LATCH (NPN) M = LATCH (PNP) H = LATCH (Push-Pull) T = TRI-STATE (NPN) U = TRI-STATE (PNP) E = LATCH+TRI-STATE (PNP) F = LATCH+TRI-STATE (NPN)</p>	<p>(d) SHAFT DIAMETER</p> <p>6 = 6 mm 8 = 8 mm P9 = 9.52 mm - 3/8" 10 = 10 mm 12 = 12 mm 14 = 14 mm (ASCxx) 15 = 15 mm (ASCxx)</p>	<p>(e) E = Zero setting (option)</p> <p>(f) B = Parity bit (option)</p> <p>(g) OPERATING TEMPERATURE RANGE K = -40°C +100°C (-40°F +212°F)</p> <p>(h) R = radial connection</p> <p>(i) CONNECTIONS L1 = cable output 1 m Lx = cable output x m Z = DSub 15 pin plug W = DSub 25 pin plug</p> <p>(j) CUSTOM VERSION</p>
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Order code - SSI output

Additional code (optional)

AS58	X	/	X	X	-	XX	-	X	X	X	X	X	/Sxxx
AS58S	(a)		(b)	(c)		(d)		(e)	(f)	(g)	(h)	(i)	(j)
ASC58													
ASC59													
ASC60													

<p>(a) RESOLUTION</p> <p>08 = 256 cpr 36 = 360 cpr 09 = 512 cpr 72 = 720 cpr 10 = 1024 cpr 11 = 2048 cpr 12 = 4096 cpr 13 = 8192 cpr</p> <p>(b) OUTPUT CODE</p> <p>B = Binary G = Gray</p>	<p>(c) OUTPUT CIRCUITS</p> <p>S = SSI, tree format (connector) R = SSI, tree format (cable) A = SSI, LSB aligned (connector) B = SSI, LSB aligned (cable)</p>	<p>(d) SHAFT DIAMETER</p> <p>6 = 6 mm 8 = 8 mm P9 = 9.52 mm - 3/8" 10 = 10 mm 12 = 12 mm 14 = 14 mm (ASCxx) 15 = 15 mm (ASCxx)</p>	<p>(e) E = Zero setting (option)</p> <p>(f) B = Parity bit (option)</p> <p>(g) OPERATING TEMPERATURE RANGE K = -40°C +100°C (-40°F +212°F)</p> <p>(h) R = radial connection</p> <p>(i) CONNECTIONS L1 = cable output 1 m Lx = cable output x m</p> <p>(j) CUSTOM VERSION</p>
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