

AMT58™-Integrated Fieldbus

Multi-turn with Integrated Fieldbus interface

- Standard dimension Ø58mm
- Very high resolution
- Extremely high accuracy
- Integrated Fieldbus interface



APPLICATIONS

- Motion control
- Automated machinery
- Length measurement and positioning



MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS	
Case dimension	Ø 58 mm, depth 71 mm (encoder + interface module)
Shaft dimension	Solid Ø 10 mm
Shaft loading (axial and radial)	100 N max.
Shaft rotational speed	9000 rpm continuous, 12000 rpm temporary
Bearings life	400x10 ⁶ rev. min. (10 ⁹ rev. min. with shaft loading of 20 N max.)
Weight	0.3 kg (10 oz) ca.
Case material	Aluminium anticorrosion UNI EN AW-6082
Flange material	Aluminium anticorrosion UNI EN AW-6082
Shaft material	Stainless steel non-magnetic UNI EN 4305
Bearings material	ABEC 5
Mechanical protection	IP65
Shock resistance	100g, 6 ms (MIL STD 202F)
Vibration resistance	10 g 5-2000 Hz (MIL STD 202F)
Operating temperature	-25 to +85°C (-13 to 185°F)
Storage temperature	-40 to +100°C (-40 to 212°F), 98% R.H. non condensing

Note: specifications subject to changes without prior notice, please refer to the user manual received with the product for mounting, wiring and operation.

ELECTRICAL SPECIFICATIONS

Resolution	13 x 12 bit = 8192 CPR x 4096 turns / 13 x 14 bit = 8192 CPR x 16384 turns
Counting frequency	220 kHz max.
Accuracy	±0.007°
Output interface	Canopen, Devicenet, Ethercat, Profibus, Profinet
Power supply	7.5 – 34 Vdc
Consumption	2.2 W
Input functions	Counting direction and Zero setting/Preset
Connection	connector M12
Protection	Polarity inversion and short circuit
EMC	EN50081-2, EN50082-2
Light source	Ga-Al diodes
Optoelectronic life	> 100.000 hrs

ELECTRICAL CONNECTIONS

CANopen or Devicenet



M12 5-pin I/O		
CAN Shield	Case	1
+10...30Vdc	+	2
0Vdc	-	3
CAN High	H	4
CAN Low	L	5

Profibus-DP



M12 3-pin	
+10...30Vdc	1
0Vdc	3
Shield	4

M12 5-pin I/O		
n.c.		1
Profibus A	Green	2
n.c.		3
Profibus B	Red	4
n.c.		5

EtherCAT



M12 4-pin PS	
+10...30Vdc	1
n.c.	2
0Vdc	3
n.c.	4

M12 4-pin I/O	
TX Data +	1
RX Data +	2
TX Data -	3
RX Data -	4

Profinet



M12 4-pin P1	
TX Data +	1
RX Data +	2
TX Data -	3
RX Data -	4

M12 4-pin PS	
+10...30Vdc	1
n.c.	2
0Vdc	3
n.c.	4

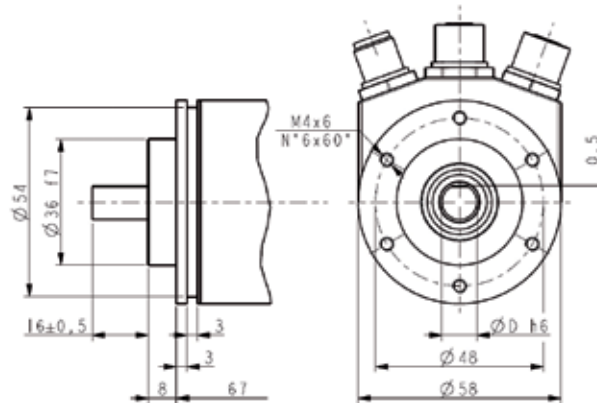
M12 4-pin P2	
TX Data +	1
RX Data +	2
TX Data -	3
RX Data -	4

NOTE: view and pin-out of the connectors on the encoder side

ABSOLUTE ENCODERS

DIMENSIONS

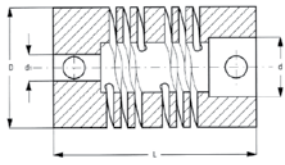
ENCODER WITH INTEGRATED FIELDBUS INTERFACE



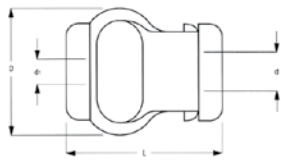
Model selection

INTEGRATED FIELDBUS MODELS					
SHAFT	CONNECTION	INTERFACE	RESOLUTION	MODEL	ORDER NO.
Solid shaft Ø10 mm	M12	Canopen	13x12 bit	AMT58-S10-13x12-CB	95B081630
Hollow shaft Ø15 mm	M12	Canopen	13x12 bit	AMT58-H15-13x12-CB	95B081640
Solid shaft Ø10 mm	M12	Devicenet	13x12 bit	AMT58-S10-13x12-DN	95B081650
Hollow shaft Ø15 mm	M12	Devicenet	13x12 bit	AMT58-H15-13x12-DN	95B081660
Solid shaft Ø10 mm	M12	Ethercat	13x14 bit	AMT58-S10-13x14-EC	95B081220
Hollow shaft Ø15 mm	M12	Ethercat	13x14 bit	AMT58-H15-13x14-EC	95B081680
Solid shaft Ø10 mm	M12	Profibus	13x12 bit	AMT58-S10-13x12-PB	95B081610
Hollow shaft Ø15 mm	M12	Profibus	13x12 bit	AMT58-H15-13x12-PB	95B081620
Solid shaft Ø10 mm	M12	Profinet	13x14 bit	AMT58-S10-13x14-PN	95B081210
Hollow shaft Ø15 mm	M12	Profinet	13x14 bit	AMT58-H15-13x14-PN	95B081670

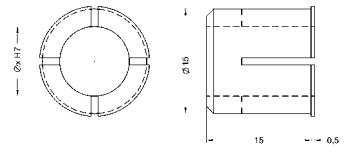
ACCESSORIES		
DESCRIPTION	MODEL	ORDER NO.
Flexible Aluminium coupling Ø6 mm	FAC06-06	95B081300
Flexible Aluminium coupling Ø10 mm	FAC10-10	95B081310
Flexible standard plastic coupling Ø6 mm	FBC06-06	95B081320
Flexible standard plastic coupling Ø10 mm	FBC10-10	95B081330
Encoder reducing sleeve Ø15 - 6 mm	RS15-06	95B081340
Encoder reducing sleeve Ø15 - 8 mm	RS15-08	95B081350
Encoder reducing sleeve Ø15 - 10 mm	RS15-10	95B081360
Encoder reducing sleeve Ø15 - 11 mm	RS15-11	95B081370
Encoder reducing sleeve Ø15 - 12 mm	RS15-12	95B081380
Encoder reducing sleeve Ø15 - 9.52 mm (3/8")	RS15-3/8	95B081390
Ø58 Encoder fixing clamps (3 kits)	ST-58-KIT	95B081400
Ø58 Encoder mounting bell	ST-58-BELL	95B081410
Ø58 Encoder mounting L-bracket	ST-58-BRKT	95B081420
Ø58 Encoder mounting square flange	ST-58-FLNG	95B081430
Canopen/Devicenet 2 connectors kit	CN-M12-CB/DN-KIT	95B081690
Canopen/Devicenet output cable	CN-M12-5P-5M-CB/DN-O	95B081700
Canopen/Devicenet input cable	CN-M12-5P-5M-CB/DN-I	95B081710
Profibus 3 connectors kit	CN-M12-PBUS-KIT	95B081720
Ecat/Pbus/Pnet power supply cable	CN-M12-4P-5M-BUS-PS	95B081730
Profibus input cable	CN-M12-5P-5M-PBUS-I	95B081740
Profibus output cable	CN-M12-5P-5M-PBUS-O	95B081750
Ethercat/Profinet programming cable	CN-M12-4P-5M-EC/PN-RJ	95B081770
Ethercat/Profinet input-output cable	CN-M12-4P-5M-EC/PN-IO	95B081780
Ethercat/Profinet input-output plug	CN-M12-4P-00-EC/PN-IO	95B081790



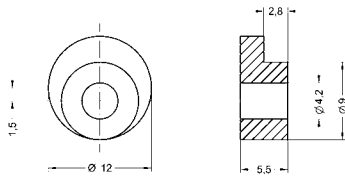
FAC06-06 (L22/D19/d6 mm)
FAC10-10 (L24/D25/d10 mm)



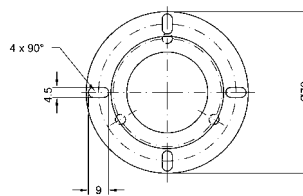
FBC06-06 (L29/D22/d6 mm)
FBC10-10 (L29/D22/d10 mm)



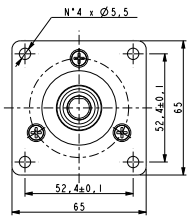
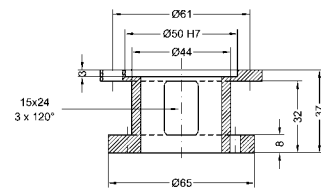
RS15-xx (int. Ø as specified in description)



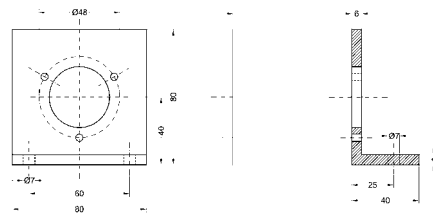
ST58-KIT



ST-58-BELL



ST-58-FLNG



ST-58-BRKT



LINEAR MEASUREMENT ACCESSORIES



LINEAR MEASUREMENT ACCESSORIES

