

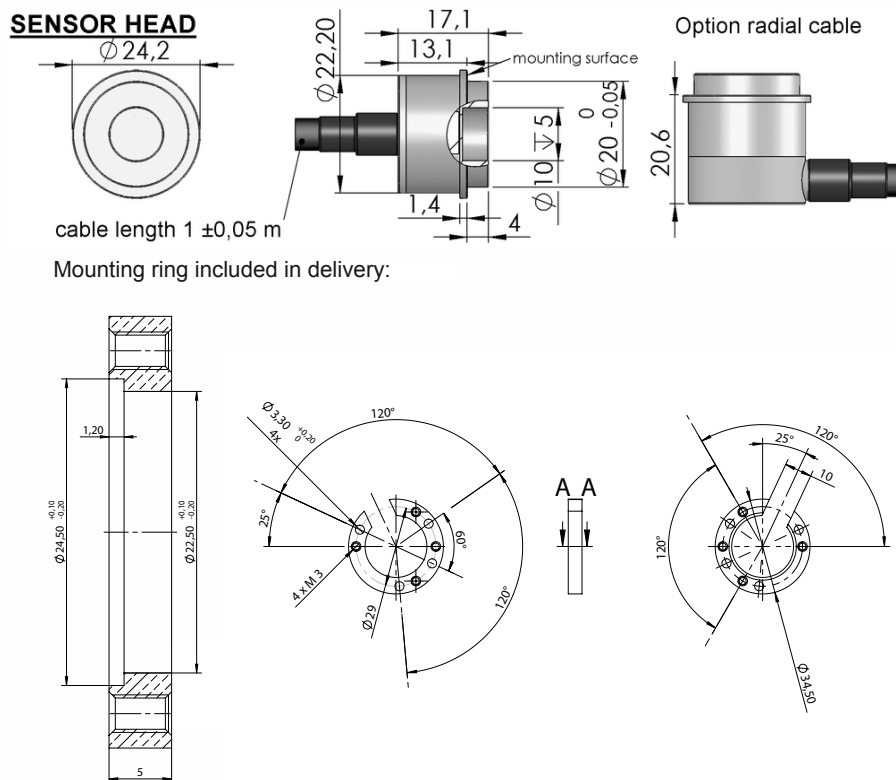
Series MAB22AH / Hall Effect Absolute Encoder with Hollow Shaft

- Angle range 360° (special angles on request)
- 12 Bit resolution
- Wear- and frictionless
- Fine adjustment by a free rotatable clamp ring
- Supply voltage: 5V, 9-30V
- Analog output: 0-5V ratiometric, 0-10V, 4-20mA, 0-20mA
- Various magnet holder as accessory

The MAB22AH is suited for applications in rough environs (IP67). It is space-saving and used for applications with a high demand on lifetime and low torque.

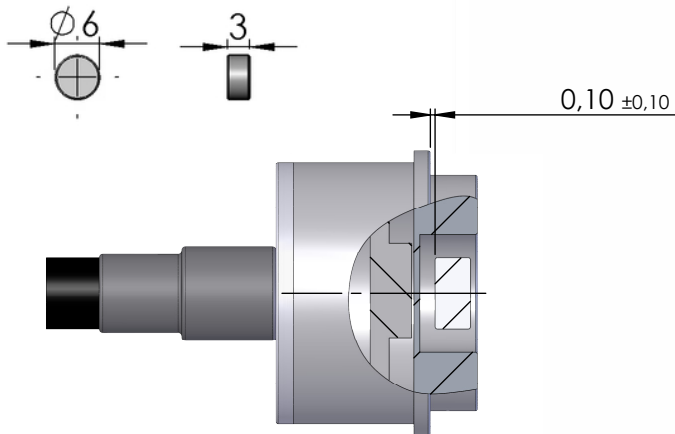


Drawing



Magnet Mounting

MAGNET
(included in delivery)
standard sensor



Influence of an excentric position of the magnet relative to the housing to the signal of the sensor

Excentricity	Max. variance / 360°
<0,5 mm	<0,6°
<0,75 mm	<1,2°

Distance between magnet and mounting surface.

If the shaft is magnetical, it has to be a distance between magnet and shaft of ≥ 1 mm.

Cable: UL/cUL-LIYCY Style 2464/1061

	standard electronic	
Length	1 m	
Outer diameter	4.4 mm	
Lead diameter	1.0 mm	
Cross section	3 x AWG26	
Colour assignment	VSUP	red
	OPUT	brown
	GND	black

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Electrical Data

Electrical angle	360° (other angles on request)
Independent linearity tolerance	±0,3 %
Resolution	4096 steps (12 Bit)
Update rate	1,0 ms Option High Speed 0,2 ms
Output signal	0-10 V, 0-5 V ratiometric
Supply voltage	15-30 VDC, 5 VDC ± 10%
Supply current (no load)	< 20 mA
Supply current redundant type (no load)	< 40 mA
Signal load	> 5k Ohm

Mechanical Data

maximum mechanical rotation speed	10.000 rpm
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Other Data

Protection class	IP67
Operating temperature	-30 ... +80°C
Storage temperature	-40 ... +80°C
Housing material	chromed aluminium
Magnet holder material	brass
Weight	approx. 35 g

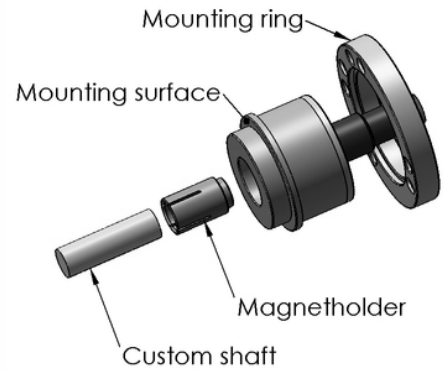
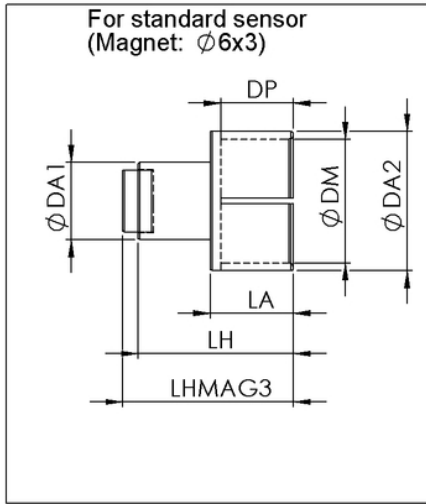
Series MAB22AH / Hall Effect Absolute Encoder with Hollow Shaft

Series MAB22AH with single electronics	MAB22AH				
<u>Update Rate / Supply voltage / Output signal</u>					
High speed / 5 V / 0...5 V		12HS 0505 (*)			
High speed / 24 V (9...30 V) / 0...5 V		12HS 2405 (*)			
High speed / 24 V (15...30 V) / 0...10 V		12HS 2410			
Standard speed / 24 V (9...30 V) / 4...20 mA		12 2442			
Standard speed / 24 V (9...30 V) / 0...20 mA		12 2420 (*)			
Counterclockwise rising signal			CCW360 (*)		
Other electrical effective angle			C(C)Wxxx (*)		
<u>Cable output</u>					
Axial - 1 m					-
Axial [m]					CVxx(*)
Radial [m]					CVRxx(*)

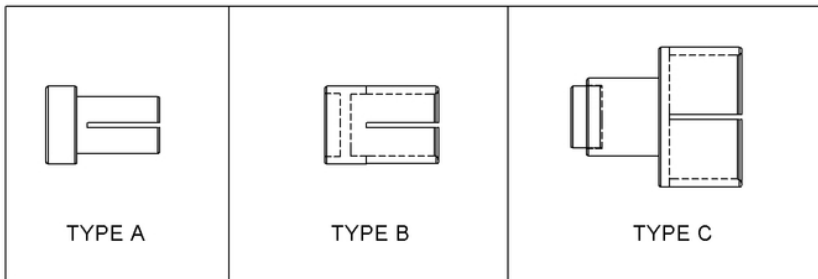
(*) = on request available for projects

Magnet Holder (Accessory: please order separately)

ACCESSORY PUSH-ON-MAGNETHOLDER



Symbol Illustration:
For information on dimensions
and geometry please refer to the
dimension drawings



Type	DM	DA1	DA2	LH	LA	DP	LHMAG3 analog standard	Shaft diameter = DM (h9)
A	3*	7,5	4,5	11	-	8,5	12,5	3 +0/-0,030
	3,175*	7,5	4,5	11	-	8,5	12,5	3,175 +0/-0,030
	4*	7,5	5,5	11	-	8,5	12,5	4 +0/-0,030
B	6	7,5	7,5	11	-	8,5	12,5	6 +0/-0,030
	6,35*	7,5	7,5	11	-	8,5	12,5	6,35 +0/-0,036
	8*	9,5	9,5	11	-	8,5	12,5	8 +0/-0,036
	10*	11,5	11,5	11	-	8,5	12,5	10 +0/-0,036
C	12*	7,5	13,5	15	8	7,0	16,5	12 +0/-0,043

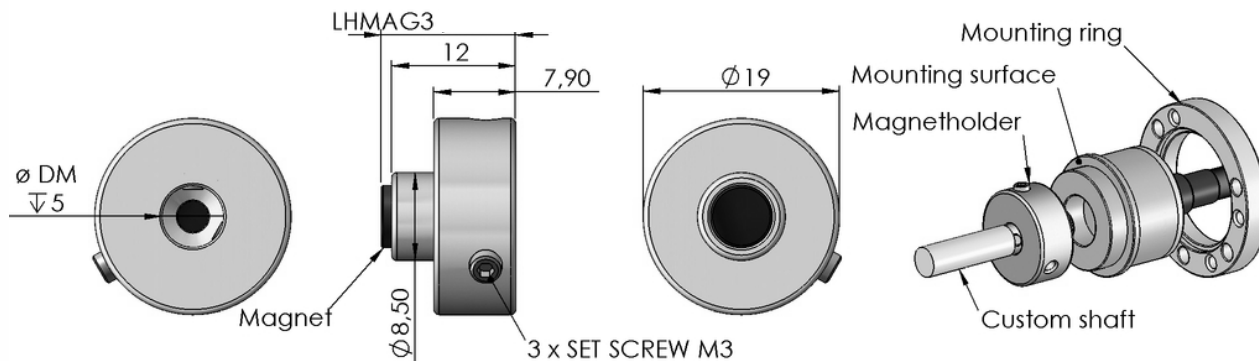
(*) = on request available for projects

If the shaft is magnetical, it has to be a distance between magnet and shaft of ≥ 1 mm.

Series MAB22AH / Hall Effect Absolute Encoder with Hollow Shaft

Magnet Holder (Accessory: please order separately)

ACCESSORY MAGNETHOLDER WITH SET SCREWS



Symbol Illustration:
For information on dimensions
and geometry please refer to the
dimension drawings

DM	LHMAG3 standard	Shaft diameter = DM (h9)
4*	13	3 +0/-0,030
6	13	4 +0/-0,030
6,35*	13	4 +0/-0,036
8*	13	6 +0/-0,036

(*) = on request available for projects

If the shaft is magnetical, it has to be a distance between magnet and shaft of ≥ 1 mm.

Order Description Magnet Holder (not included in delivery)

Type	Shaft Diameter	Magnet	Remark
Push-On	DM3*/3,175*/4*/6/6,35*/8*/10*/12*	MAG6x3	Standard Electronic
Set-Screw	DM3*/3,175*/4*/6/6,35*/8*/10*/12*	MAG6x3	Standard Electronic

(*) = on request available for projects

Our speciality are custom solutions, for reasonable prices even for small series

On serial demand we offer: Special housings and mounting parts, assembling of cables, connectors and others. Please ask us.

Errors and specifications subject to change without notice.

27.10.2016