

Electromagnetic process lock

Magne 3

Approvals:



Application:

- When stopping the process at the “wrong” time generates a lot of extra work at restart. For example, the door/hatch might only be opened at the end of the welding cycle.

Features:

- Less wear than mechanical lock
- Holding force up to 1500 N
- M12 connectors



Magne is an electromagnetic lock intended for electrical locking of doors and hatches with a holding force of up to 1500 N. Magne is usually used when access to the dangerous zone and the consequent stopping of the machine might only happen when specific conditions are met, at the end of the cycle for example.

- **Magne 3** is a non-safe lock and must be associated to a safety interlocking device in safety applications.
- **Magne 3B** has an integrated permanent magnet which holds the door closed when no power is supplied.

Faster installation

- Larger mounting tolerances than mechanical locks facilitate installation
- A large choice of mounting accessories speed up the installation

Less downtime

- Extensive indication with a well visible lamp reduces downtime
- Less wear than a mechanical lock since there are no moving parts
- No tongue or key gets misaligned with time, and breaks when the hanging door is closed violently
- No metal parts stick to the electromagnet and impair the locking since the locking is only possible in presence of the anchor plate
- The anodized aluminum withstands harsh environments
- No current peak at activation strains the electrical circuit

Technical data

Electrical data	
Power supply	+ 24 VDC +/- 15%
Current consumption electromagnet	7 W (300 mA with locking signal +24 VDC)
Current consumption electronics	50 mA at +24 VDC
Information channel output	Max 20 mA
Contacts	
Max switch current	20 mA (non-failsafe)
Mechanical life	
Ambient temperature	>10 ⁷ switch operations
Humidity range	-20...+50°C (with no icing or condensation)
Protection class	
Weight	IP 67
Material	
Magne 3	610 g
Anchor plate 32A/B	290 g
Material	
Anchor plate	Iron with nickel coating
Electromagnet	Iron with zinc-nickel coating
Housing	Anodized aluminium and polycarbonate parts
Potting	PUR, epoxy
Color	
	Silver and black cover

Holding force	
+ 24 VDC	Min 1500 N
0 V	0 N
Anchor plate permanent magnet	30 N (Magne -B--)
Connectors	
Magne 3A/B	M12-5 pole male
Conformity	
	IEC/EN 60664-1:2007
	EN 61000-6-2:2005
	EN 61000-6-4:2007+A1:2011
Connections	
(1) Brown	+24 VDC
(2) White	<i>Not used</i>
(3) Blue	0 V
(4) Black	<i>Not used</i>
(5) Grey	Info output*

Colors according to ABB Jokab Safety standard cables

* +24 VDC when locked, 0 V when unlocked

Models and ordering information

Magne 3A	2TLA042022R2500	Electromagnet with M12 5-pole connector Anchor plate 32A, cell rubber
Magne 3B	2TLA042022R2600	Electromagnet with M12 5-pole connector Anchor plate 32B with permanent magnet, cell rubber

Accessories

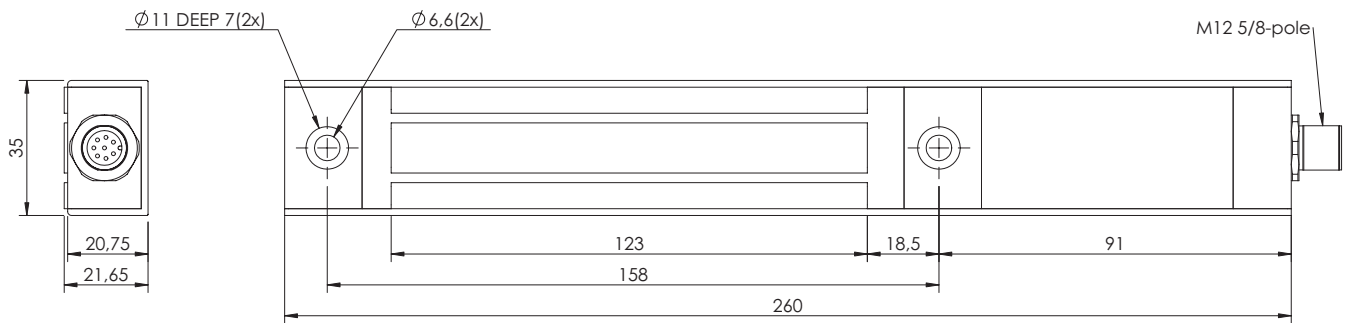
JSMD28	2TLA042023R0100	Aluminium profile for door handle that completely covers a Magne unit when the door is closed. For conventional door (5-15 mm door gap). Fits all Magne.
JSM D21B*	2TLA042023R0500	Mounting kit for Magne. For conventional door (5-15 mm door gap). Fits all Magne.
JSM D23*	2TLA042023R0200	Mounting kit for Magne. For sliding door. Fits all Magne.
JSM D27	2TLA042023R1000	Door handle for JSM D21B
M12-3A	2TLA020055R0000	Y-connector for serial connection of Magne 3A/B.

* All mounting kits include the bolts and nuts necessary to mount Magne on ABB Jokab Safety Quick-Guard® system

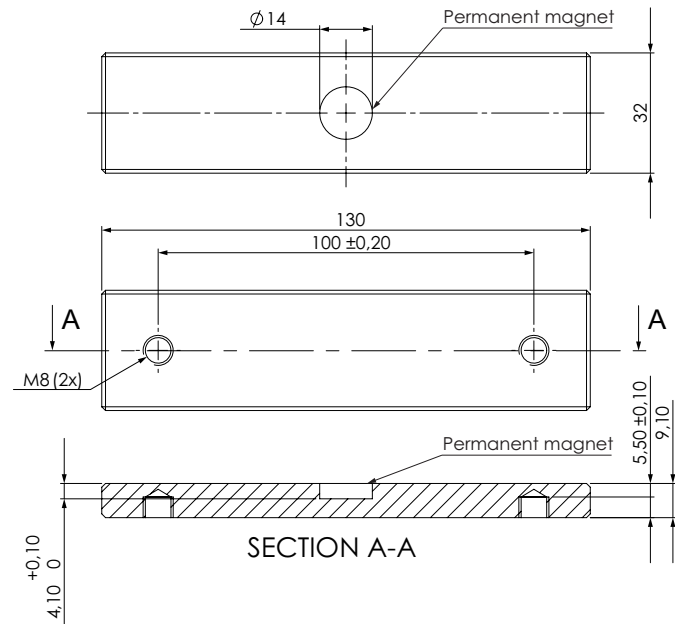
Spare parts

Cellular rubber	2TLA042023R3600	Spare part. Cellular rubber t=10 mm.
Anchor plate 32A	2TLA042023R1300	Spare part. Anchor plate A (32 mm wide, without permanent magnet)
Anchor plate 32B	2TLA042023R0400	Spare part. Anchor plate B. (32 mm wide, with permanent magnet)

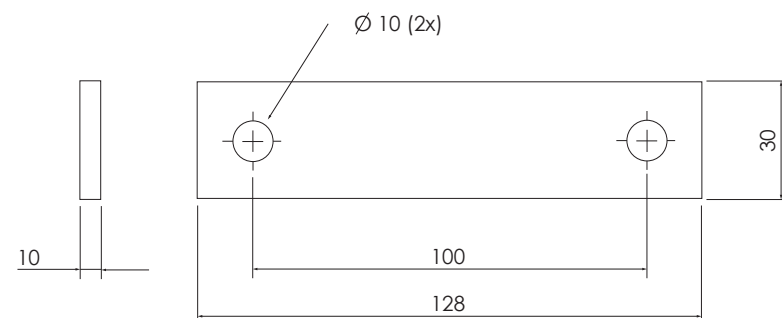
Dimensions



Magne 3



Anchor plate 32B (with permanent magnet)
Anchor plate 32A (without permanent magnet)



Cellular rubber

All dimensions in millimeters

Contact us

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