Cobot MagBase 5 | P/N: 81001276

Summary

Intended for use with collaborative robotic arms, the Cobot Magnet Base firmly fixtures 5 kg payload collaborative robots on ferrous materials with a twist of the wrist. Magswitch pivoting arrays can be anchored to flat and cylindrical surfaces and feature a wide footprint to reduce the risk of peel when the end effector is at its greatest radius. The array pivot points contain electrically isolating bushings and washers to ensure welding and static transient voltages on the part/substrate are decoupled from the robot ground. Refer to the dimensional drawing below for the default mounting pattern. Custom patterns can be incorporated upon request.

Specifications

Nominal Maximum Breakaway Force [1,2,4]	9074 N	
Nominal Maximum Shear [1,2,4]	1814 N	
Full Saturation Thickness	0.75 in	19.1 mm
Net Weight	19.75 lb	8.96 kg
Individual Magnetic Pole Footprint	1.9"x8.7"	48mmx221.2mm
Overall Magnetic Pole Footprint	9.6"x8.7"	243mmx221.2mm

WARNING!
Do Not Operate Unless In Contact With Ferrous Target

Custom bolt and dowel patterns can be incorporated into the mounting surface upon request. 1 month lead time applies. Contact Magswitch for more information.

The following is maximum magnetic force "breakaway" data for ONE swiveling magnet array. There are TWO installed on each Cobot Magnet Base. Consult operation manual 1101387 for more information.

Material Thickness - mm (in)	0.6 (0.024)	1.2 (0.047)	3 (0.118)	4.8 (0.189)	6.4 (0.252)	9.5 (0.374)	12.7 (0.500)	19.1 (0.752)	25.4 (1.000)
Maximum Force [1,2,4] - N	291	615	1852	2361	3021	3940	4218	4519	4535

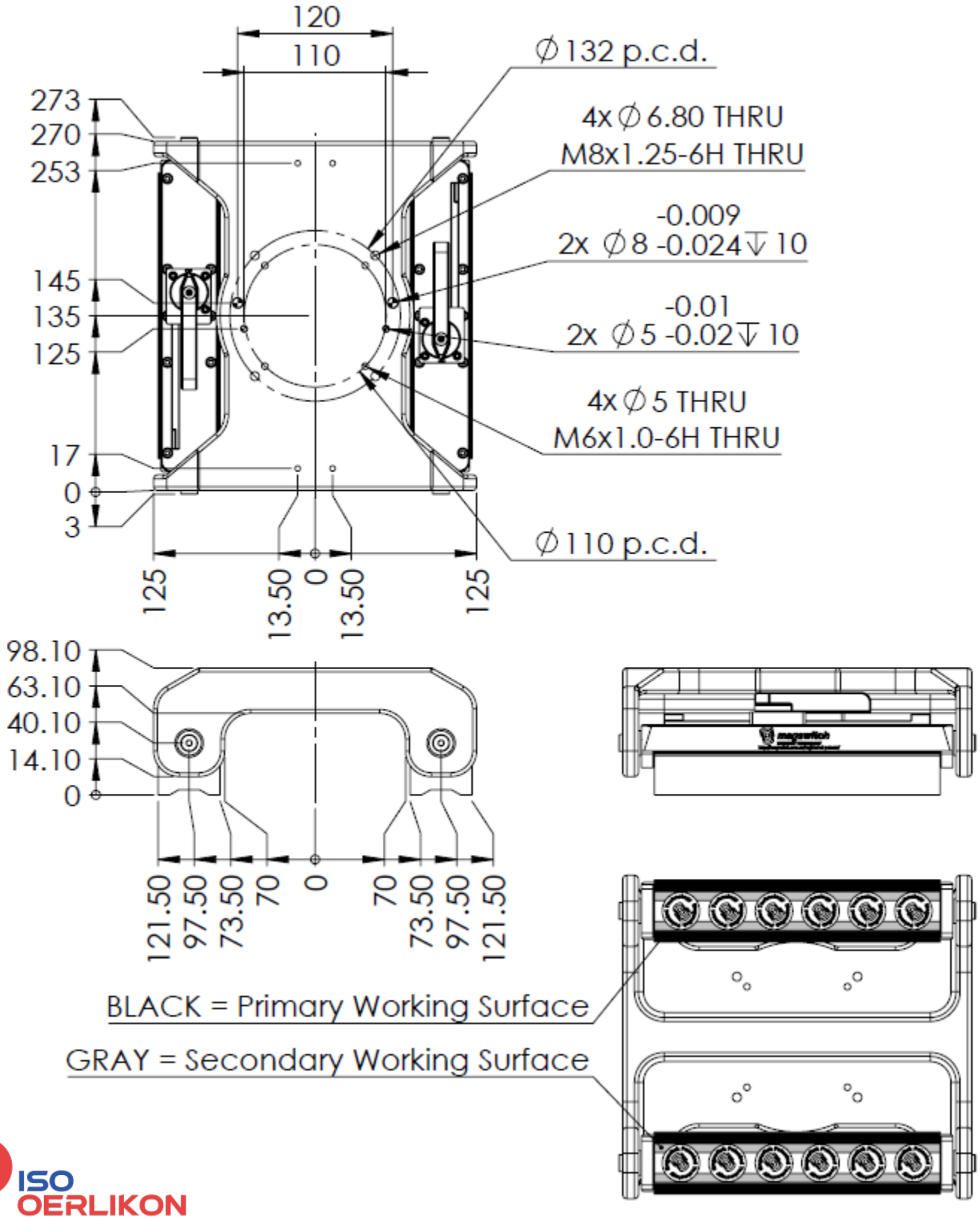
[1] Determined in laboratory environment on 2" thick SAE1018 Steel with surface roughness 63 micro inches with optimized pole shoes. Many factors contribute to the actual breakaway force and safe working load in each application. Consult a Magswitch Applications Engineer and test the Magswitch in each application before deployment.

[2] All data applies to unit with flat pole shoes installed.

[3] Values may vary by +/- 5%.

[4] Maximum forces listed above are not safe lifting forces. Designer must take into account safety factor when specifying tool. Magswitch recommends SWL = 5:1 for most applications.

Generic Dimensions (featuring UR3/UR3e/UR5/UR5e pattern)



ISO OERLIKON AG Schweisstechnik