MAGSWITCH PLAY50X4 2.0 SH
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magswitch.com

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Summary

Magswitch 2.0 LAY series of magnetic grippers for robotic automation utilize magnets arranged in a linear array to extend the depth and footprint of the magnetic field. The PLAY 50x4 SH magnetic gripper adds the capability of handling high temperature parts. The large footprint of the array magnets provide stability when handling long parts or large assemblies. Custom pole shoes can be added to allow optimal holding force for parts that are not flat or have irregular features. The PLAY 50x4 2.0 SH high temperature magnet is a great tool for handling long parts like tube, axles, and angle iron.

WARNING!
Do Not Operate Unless In Contact With Ferrous Target

Specifications

Maximum Breakaway Force [1,2,4]	9750 N	
Maximum Shear [1,2,4]	2334 N	
Thickness for De-Stack [3]	0.37 in	9.50 mm
Maximum Allowable Pressure	145.04 psi	10 bar
Off Target Actuation Pressure	75 psi	5.17 bar
Net Weight	24.91 lbs	11.3 kg
Air Port Threads	Rc 1/4	
Mounting Options	M8x1.25	
Maximum Application Temp	302°F	150°C
Magnetic Pole Footprint	2.76 x 9.41 in	71 x 239 mm

Material Thickness - mm (in)	1.5 (0.06)	1.9 (0.07)	2.70 (0.11)	3.00 (0.12)	3.50 (0.14)	4.76 (0.19)	6.35 (0.25)	9.53 (0.37)	12.70 (0.5)	19.05 (0.75)
Maximum Force [4,5] - N (Newtons)	1031	1459	2113	2476	3011	4241	5818	7897	9154	9750
Required Air Pressure [4] - bar (psi)	3.45 (50.00)	3.10 (45.00)	2.76 (40.00)	2.76 (40.00)	2.41 (35.00)	2.07 (30.00)	2.07 (30.00)	2.07 (30.00)	2.07 (30.00)	1.93 (28.00)

[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] Determined with SAE1018 Steel L=200mm W=200mm.

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

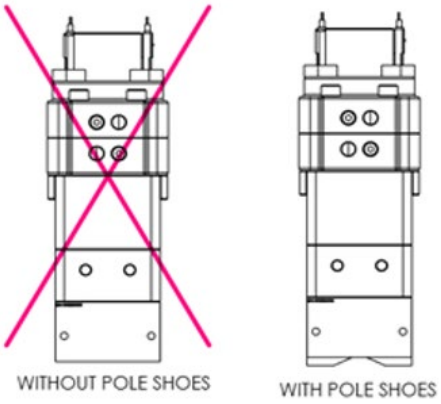
[5] Maximum forces listed above are not safe lifting forces. Designer must take into account safety factor when specifying tool. Magswitch recommends SWL = 5:1 for most applications.

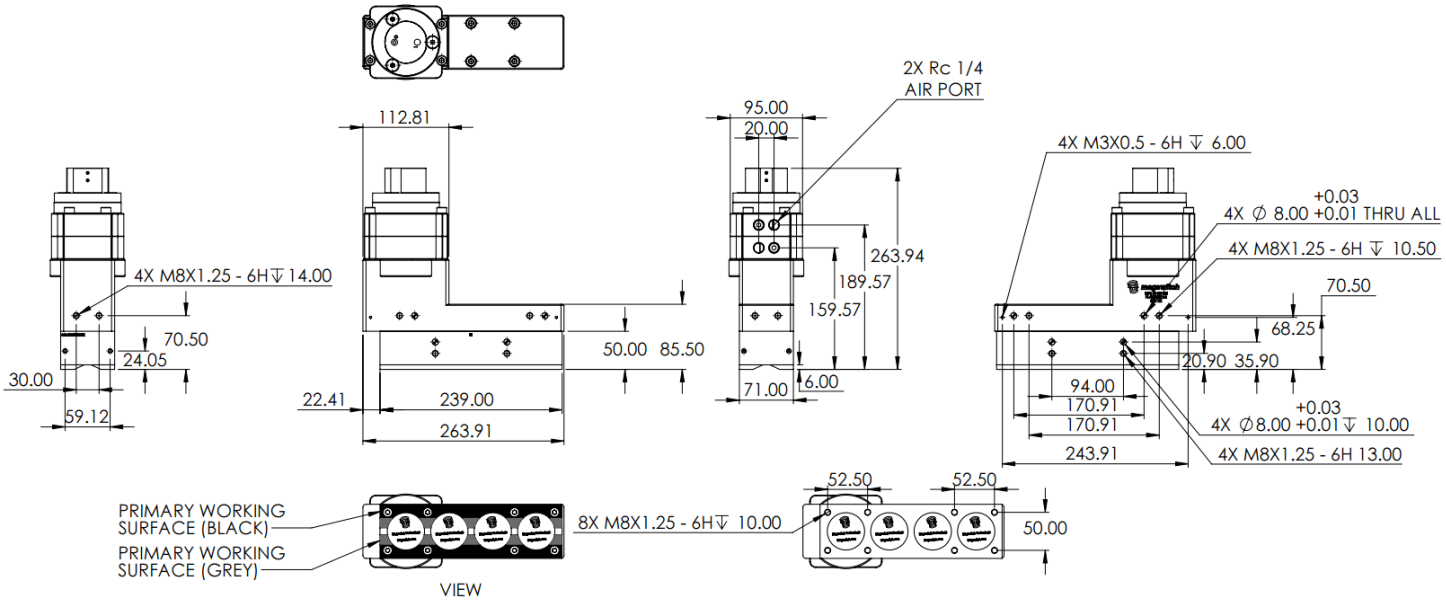
$$SWL\ (Safe\ Working\ Load) = \frac{Maximum\ Force^{5}}{Safety\ Factor\ (\geq 5)}$$

Pole shoes required for operation and included in package

Standard Kits Available:

PSK, PLAY50X4 2.0, STANDARD, HIGH HEAT, NICKEL	88002151
PLAY50X4 Prox Cap Kit (included)	8800293





Center of Mass (COM)