

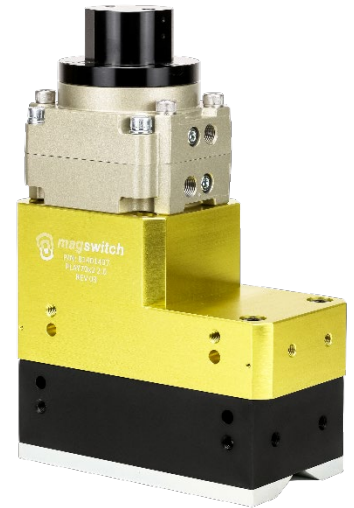
# PLAY70X2 2.0 SH | P/N: 81401735

## Summary

The 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 70x2 2.0 SH magnets have the added capability of handling high temperature parts. The larger footprint of the array magnets provide stability for large end effectors and workpieces. With the ability to add custom pole shoes, the LAY magnets can be used with many different part profiles. The PLAY 70x2 2.0 SH tools are strong, robust and a perfect high temperature material handling solution for angle iron, welded assemblies, axles, tubes and billets.

## Specifications

Maximum Breakaway Force <sup>1,2,4</sup>	8363	N		
Maximum Shear <sup>1,2,4</sup>	1795	N		
Minimum Thickness for De-Stack <sup>3</sup>	0.500	in	12.7	mm
Overall Height (Max)	10.6	in	268.8	mm
Overall Length	7.6	in	193.5	mm
Overall Width	3.8	in	96.0	mm
Net Weight	28.66	lbs	13.0	kg
Air Port Threads	Rc 1/4			
Maximum Application Temperature	302	F	150	C
Magnetic Pole Footprint	3.8x7.0	in	96x177.5	mm
Max Allowable Pressure	145	psi	1.00	MPa



Material Thickness - mm (in)	1 (0.039)	2 (0.079)	3 (0.118)	4 (0.157)	5 (0.197)	6 (0.236)	7 (0.276)	8 (0.315)	9.53 (0.375)	12.7 (0.500)	19.05 (0.750)
Maximum Force <sup>5</sup> (N)	779	1067	1565	2157	2632	3212	3976	5369	6828	7885	8363
Required Air Pressure - bar (psi)	3.8 (55)	3.4 (50)	3.1 (45)	2.8 (40)	2.6 (37)	2.4 (35)	2.3 (33)	2.1 (31)	2.0 (29)	1.9 (27)	1.8 (26)

<sup>1</sup> Determined in laboratory environment on 2" thick SAE1018 Steel with surface roughness 63 micro inches. 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.

<sup>2</sup> All data applies to standard tool.

<sup>3</sup> Determined with SAE1018 Steel L=200mm W=200mm.

<sup>4</sup> Values may vary by +/- 5%.

<sup>5</sup> 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.

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



MAGSWITCH PLAY70X2 2.0 SH

P/N: 81401735

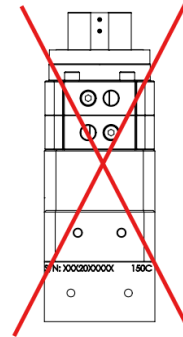
+ 1(303) 468.0662

magswitch.com

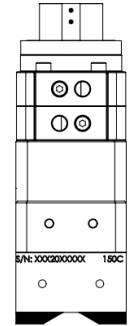
*Pole shoes required for operation and included in package*

Standard kits available:

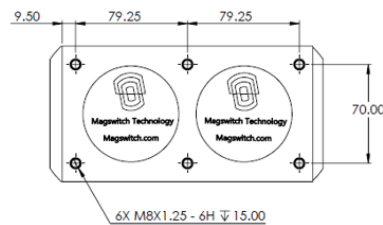
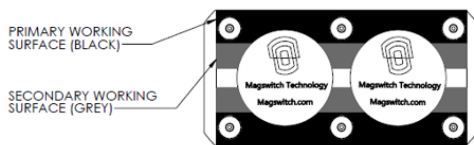
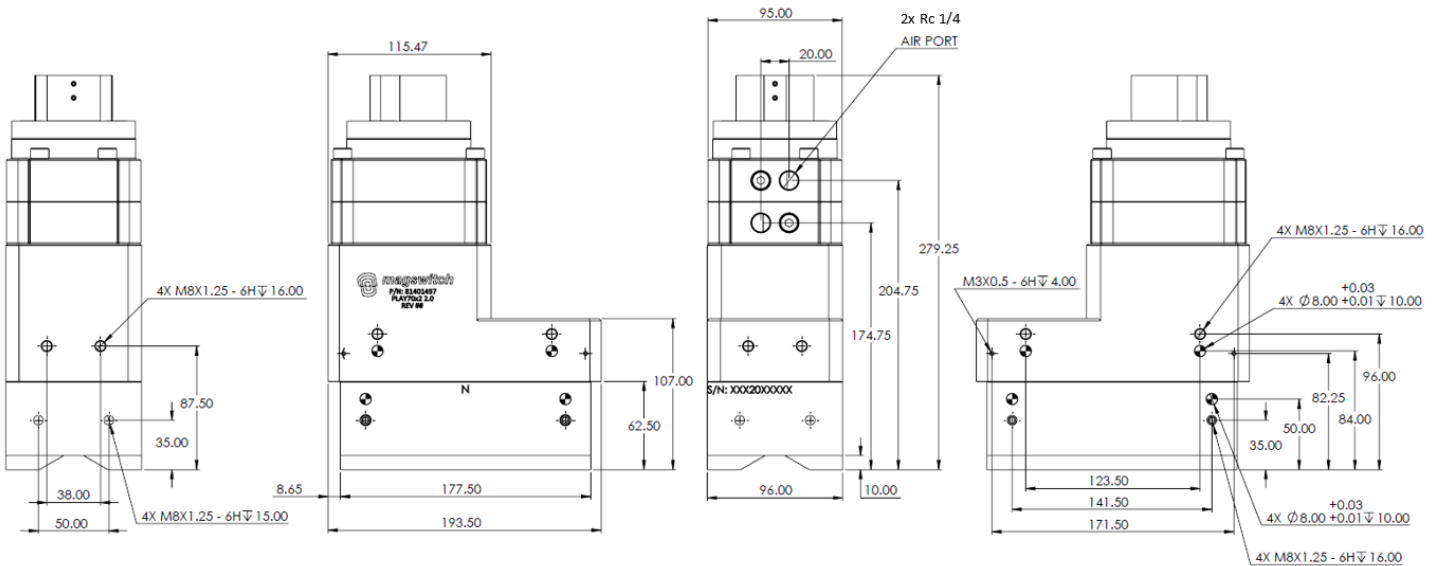
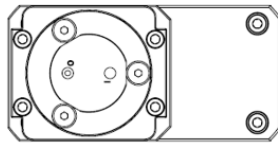
PSK, PLAY70X2 2.0, STANDARD, HIGH HEAT, NICKEL (included) 88002152



WITHOUT POLE SHOES



WITH POLE SHOES





MAGSWITCH PLAY70X2 2.0 SH

P/N: 81401735

+ 1(303) 468.0662

magswitch.com

### Center of Mass

