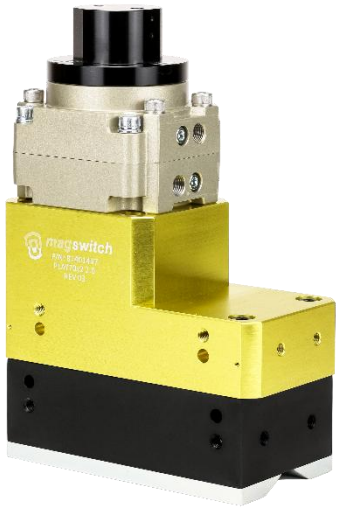
MAGSWITCH PLAY70X2 2.0
P/N: 81401497
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magswitch.com

PLAY70X2 2.0 | P/N: 81401497

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 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 LAY 2.0 tools are strong, robust, and a perfect material handling solution for handling pipe, tubes and plate steel.



Specifications

Maximum Breakaway Force [1,2,4]	8363	N		
Maximum Shear [1,2,4]	1795	N		
Minimum Thickness for De-Stack [3]	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
Magnetic Pole Footprint	3.8x7.0	in	96x177.5	mm
Max Allowable Pressure	145	psi	1.00	MPa
Air Port Threads	Rc 1/4			

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 [5] (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)

[1] 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.

[2] All data applies to standard tool.

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

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

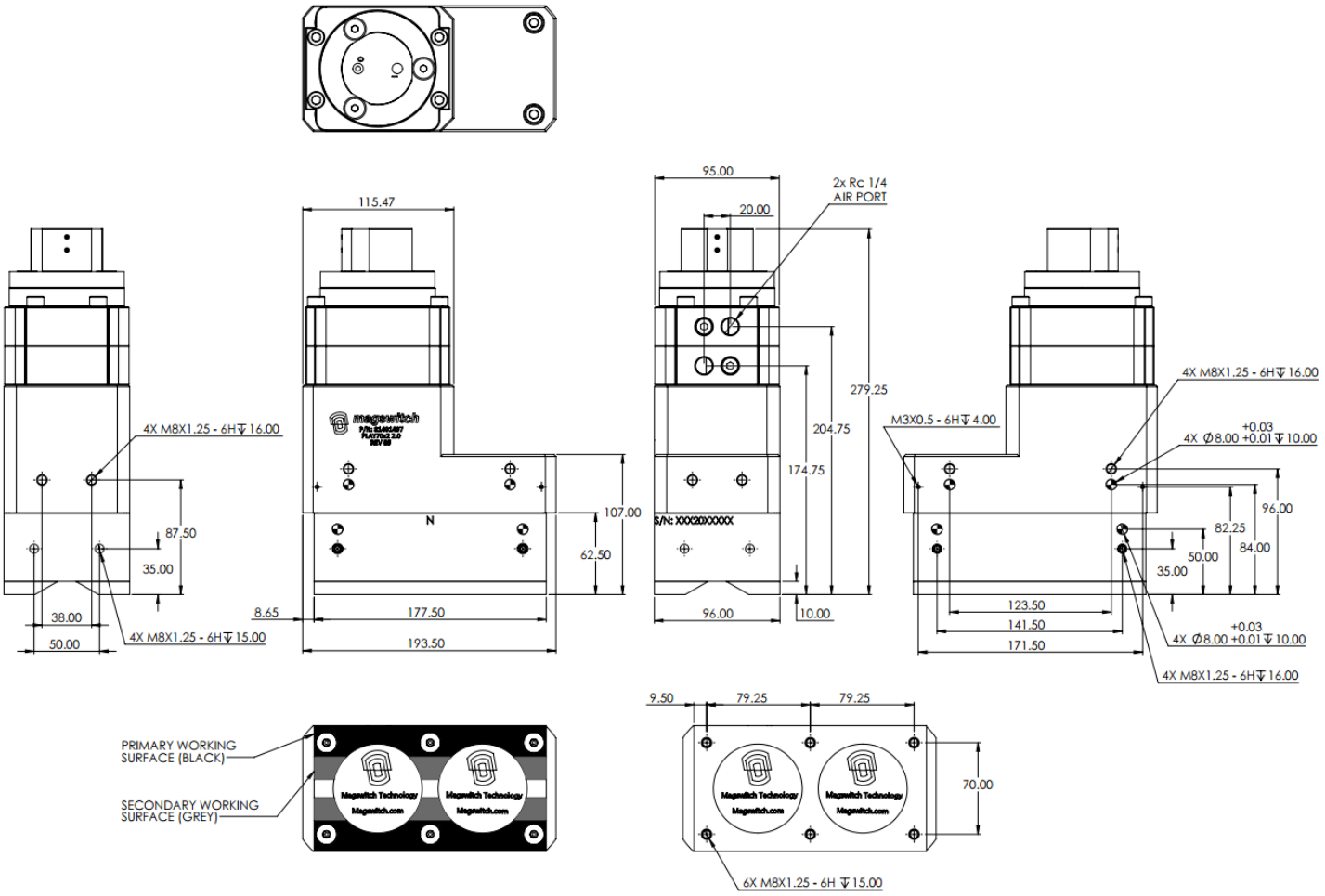
[5] Maximum forces listed above are not safe lifting forces. Designer must take into account safety factor when specifying tool. Magswitch recommends SWL = 5:1 for most applications.

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

Pole shoes required for operation

Standard kits available:

Flat Pole Shoe Kit (Included)	88001704
135Deg V Pole Shoe Kit	88001705
155Deg V Pole Shoe Kit	88001706
Flat w/ Teeth Pole Shoe Kit	88001707



Center of Mass

