

PLAY 30X7 SH | P/N 81401733

Magswitch LAY series of magnetic grippers utilizes magnets arranged in a linear array to extend the footprint of the magnetic field. The SH versions add the capability of handling high temperature parts. Custom pole shoes can be added to the PLAY 30x7 SH to optimize holding force on parts that are not flat. The extended footprint of the PLAY 30x7 SH magnetic gripper provides stability when handling long parts or an array of parts. The PLAY 30x7 SH is a great fit for handling long parts like tubes, rails, and beams.

WARNING!
Do Not Operate Unless In Contact With Ferrous Target



Specifications

Nominal Maximum Breakaway Force ^{1,2}	782.6 lb	355 Kg
Nominal Maximum Shear Force ^{1,2}	215.3 lb	97.67 Kg
Thickness for De-Stack ³	0.187 in	4.76 mm
Minimum Actuation Pressure	26.11 psi	1.8 Bar
Maximum Actuation Pressure	116.03 psi	8.0 Bar
Off-Target Actuation Pressure	60.92 psi	4.2 Bar
Air Port Threads	2x M5x0.8	
Maximum Application Temperature	302 F	150 C
Individual Magnet Pole Footprint	10.16"x1.6"	258mm x 41 mm
Net Weight	10.6 lb	4.8 Kg
Mounting Options	4x Side: Ø5-M5-Ø5 2x Top: Ø8-M8-Ø8	

Material Thickness - mm (in)	0.60 (0.024)	0.80 (0.031)	1.20 (0.047)	3.00 (0.118)	4.76 (0.187)	6.35 (0.250)	9.50 (0.374)	12.70 (0.500)	50.80 (2.000)
Maximum Force ^{1,2,5} - kg (lbs)	30.57 (67.39)	31.50 (69.45)	59.20 (130.51)	177.27 (390.81)	210.10 (463.19)	252.07 (555.71)	307.30 (677.48)	355.00 (782.64)	354.57 (781.69)
Required Air Pressure ⁴ - bar (psi)	3.60 (52)	3.20 (46)	2.80 (41)	1.80 (26)	1.80 (26)	1.80 (26)	1.80 (26)	1.80 (26)	1.80 (26)

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%.

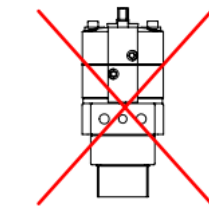
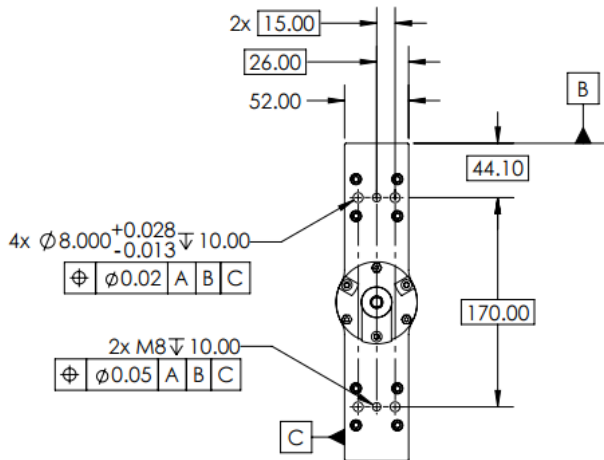
⁵ Maximum forces listed above are not safe lifting forces. Designer must take into account safety factor when specifying tool. Magswitch recommends SWL = 5:1 for most applications.

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

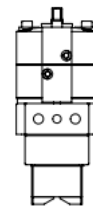
Pole shoes required for operation and included in package

Standard Kits Available:

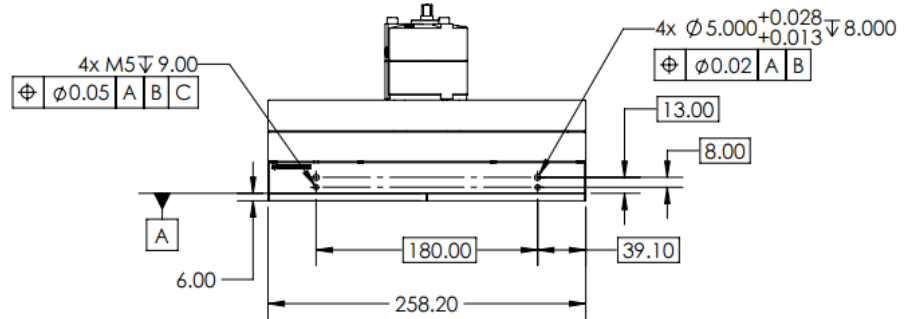
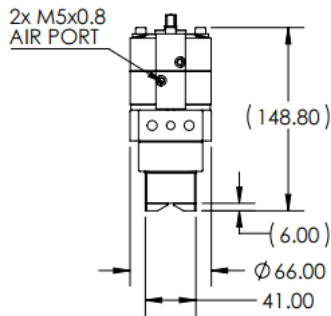
PSK, PLAY30X7, FLAT/V COMBO, HIGH HEAT, NICKEL (included)	88002155
PLAY30X7 Prox Cap Kit (sold separately)	8800758



WITHOUT POLE SHOES



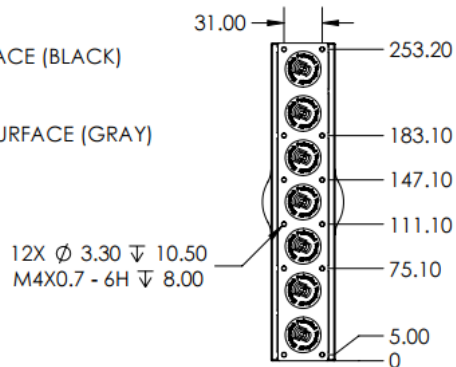
WITH POLE SHOES



PRIMARY WORKING SURFACE (BLACK)

SECONDARY WORKING SURFACE (GRAY)

WORKING SURFACE WITH POLE SHOES



POLE SHOE FASTENER LOCATIONS



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Center of Mass

