

PLAY 20x4 NAAMS

P/N: 81401096

Tool Features

Magswitch PLAY series utilizes field interaction between individual magnets to increase depth of field and spread the attractive force over a larger footprint. This allows for greater working loads and increased control over larger work pieces. With customizable pole shoes to fit almost any application, the PLAY is a great all around tool that is perfect for picking pipe and round as well as plate steel.

WARNING!
DO NOT OPERATE UNLESS IN
CONTACT WITH FERROUS TARGET



Specifications

Maximum Breakaway Force ^{1,2}	1272 N	
Maximum Shear Force ^{1,2}	50 lb	23 kg
Thickness for De-Stack ³	0.16 in	4 mm
Minimum Actuation Pressure	30 psi	2.1 Bar
Maximum Actuation Pressure	145 psi	10 Bar
Off-Target Actuation Pressure	56 psi	3.9 Bar
Actuator Volume	0.92 in ^{^3}	15 cm ^{^3}
Air Port Threads	2x M5x0.8	
Net Weight	2.6 lb	1.2 kg
Individual Magnetic Pole Footprint	3.8"x1.2"	96.2 mm x 31.12 mm
Mounting Options	2x Side: Ø6-M8-Ø6 / 1x Back: Ø6-M8-Ø6 / 1x Front: M6-M6	

Material Thickness - mm (in)	0.5 (0.020)	0.8 (0.031)	1.0 (0.039)	1.5 (0.059)	2.0 (0.079)	3.0 (0.118)	4.0 (0.157)	5.0 (0.197)	6.0 (0.236)	7.0 (0.276)
Maximum Force ^{1,2,5} - Newton (N)	111	210	256	547	711	909	1134	1280	1284	1284

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.

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

Magswitch Technology Europe GmbH
cs@magswitch.com | www.magswitch.com

PLAY 20x4 NAAMS
81401096 / REV 4

Doc Num 01

Subject to technical and color changes. No liability for errors and misprints assumed. © Magswitch Technology Europe 2024

PLAY 20x4 NAAMS

P/N: 81401096

Drawings

Pole shoes are required for operation - Standard kits available:

PLAY20X4 Combination Pole Shoe Kit - 8800172

PLAY20X4 Teeth Pole Shoe Kit - 8800832

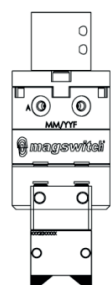
PLAY20X4 NAAMS 32mm Ball Mount (3-hole) - 8800500

PLAY20X4 NAAMS 28.5mm Ball Mount (3-hole) - 8800501

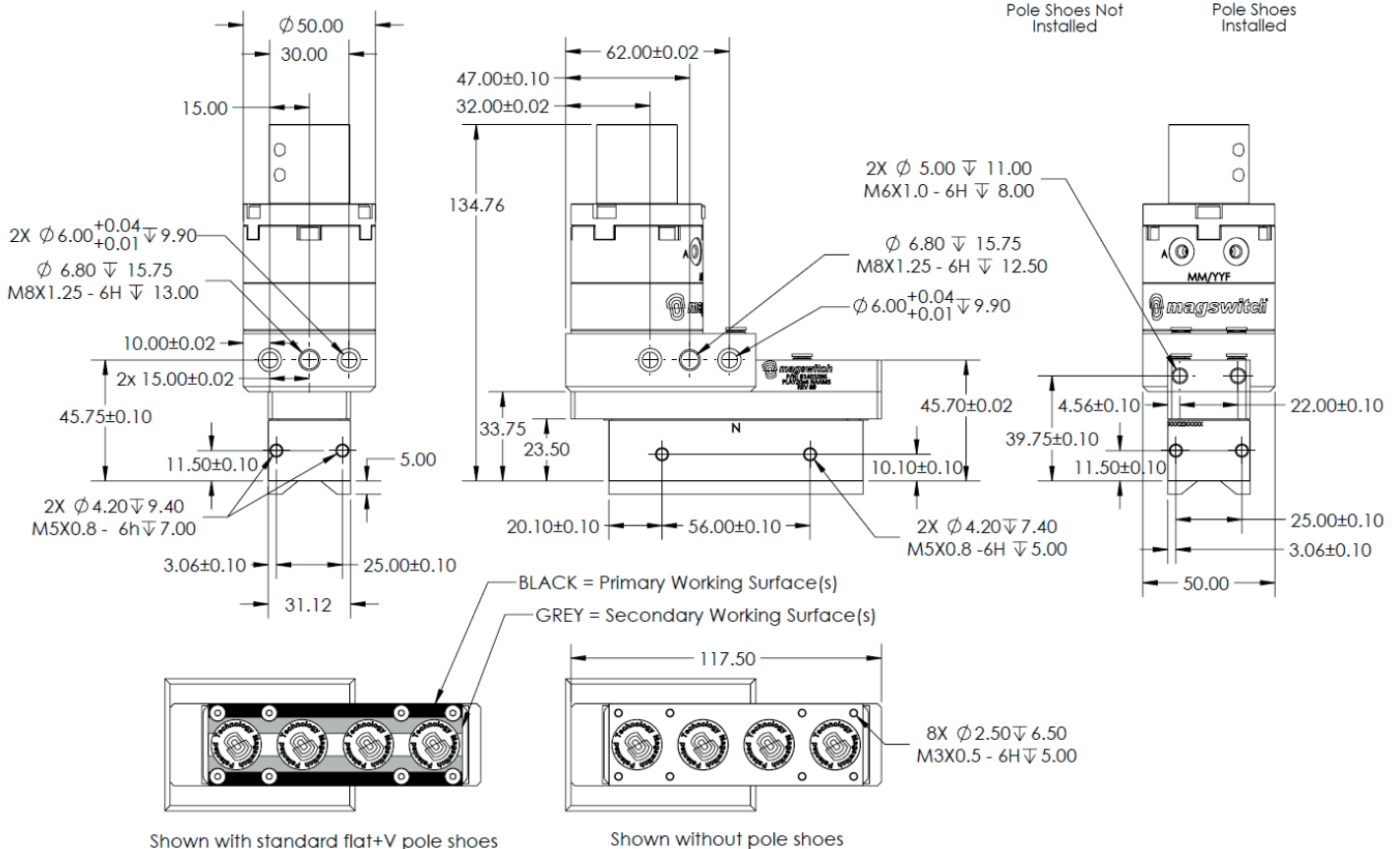
WARNING!
DO NOT OPERATE UNLESS IN
CONTACT WITH FERROUS TARGET



Pole Shoes Not Installed



Pole Shoes Installed



PLAY30x7

P/N: 81401193

Tool Features

Magswitch PLAY series utilizes field interaction between individual magnets to increase depth of field and spread the attractive force over a larger footprint. This allows for greater working loads and increased control over larger work pieces. With customizable pole shoes to fit almost any application, the PLAY is a great all around tool that is perfect for picking pipe and round as well as large plate steel.

WARNING!
DO NOT OPERATE UNLESS IN
CONTACT WITH FERROUS TARGET



Specifications

Maximum Breakaway Force ^{1,2}	3481 N								
Maximum Shear Force ^{1,2}	215 lb					97 kg			
Thickness for De-Stack ³	0.187 in					4,8 mm			
Minimum Actuation Pressure	26.11 psi					1.8 Bar			
Maximum Actuation Pressure	116 psi					8 Bar			
Off-Target Actuation Pressure	61 psi					4.2 Bar			
Air Port Threads	2x M5x0.8								
Net Weight	10.6 lb					4.8 kg			
Individual Magnetic Pole Footprint	10.16"x1.6"					258 mm x 41 mm			
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.
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.

$$SWL \text{ (Safe Working Load)} = \frac{\text{Maximum Force}^5}{\text{Safety Factor} (\geq 3)}$$

Magswitch Technology Europe GmbH
cs@magswitch.com | www.magswitch.com

PLAY30x7
81401193 / REV 8

Doc Num 01

Subject to technical and color changes. No liability for errors and misprints assumed. © Magswitch Technology Europe 2024

PLAY30x7

P/N: 81401193

Drawings

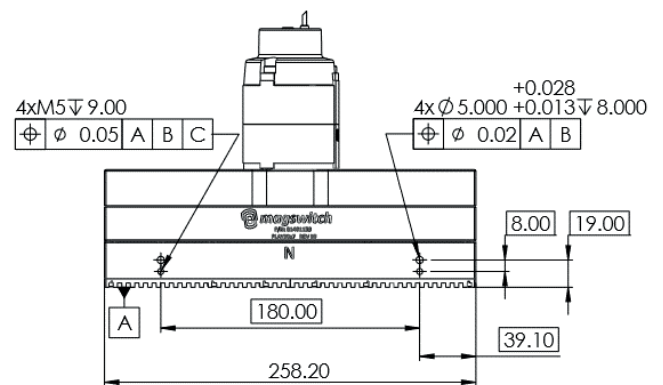
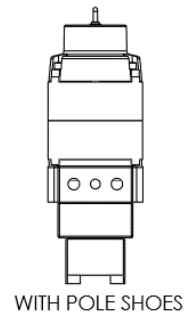
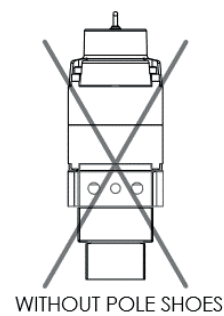
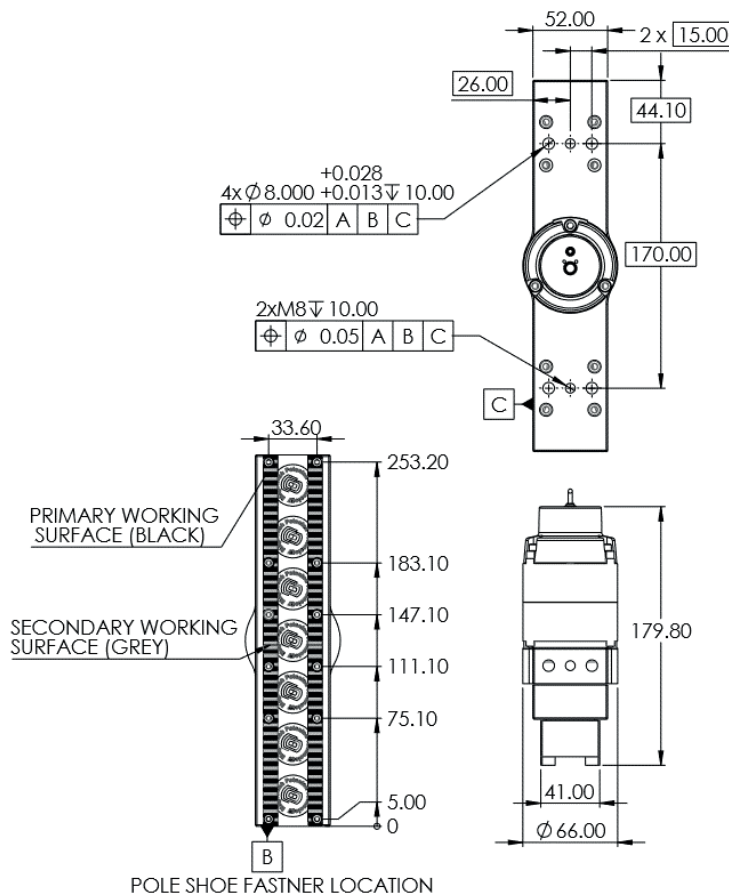
Pole shoes are required for operation - Standard kits available:

PLAY30x7 Standard Pole Shoe Kit - 8800739

PLAY30x7 2mm Comb/Tooth Pole Shoe Kit - 8800748

PLAY30x7 Prox Cap Kit - 8800758

WARNING!
DO NOT OPERATE UNLESS IN
CONTACT WITH FERROUS TARGET



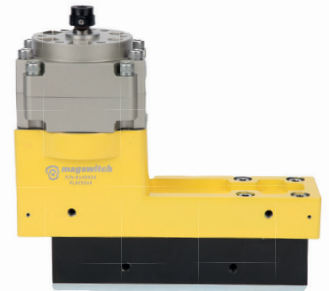
PLAY50x4

P/N: 8140404

Tool Features

Magswitch PLAY series utilizes field interaction between individual magnets to increase depth of field and spread the attractive force over a larger footprint. This allows for greater working loads and increased control over larger work pieces. With customizable pole shoes to fit almost any application, the PLAY is a great all around tool that is perfect for picking pipe and round as well as large plate steel.

WARNING!
DO NOT OPERATE UNLESS IN
CONTACT WITH FERROUS TARGET



Specifications

Maximum Breakaway Force ^{1,2}	9865 N									
Maximum Shear Force ^{1,2}	442.2 lb					200.6 kg				
Thickness for De-Stack ³	0.375 in					9.5 mm				
Minimum Actuation Pressure	30.46 psi					2.1 Bar				
Maximum Actuation Pressure	145.04 psi					10 Bar				
Net Weight	22.0 lb					10 kg				
Air Port Threads	Rc 1/8									
Mounting Options	M8x1.25									
Magnetic Pole Footprint	8.78 " x 2.8 "					223 mm x 71.1 mm				
Material Thickness - mm (in)	1.5 (0.059)	1.9 (0.075)	2.7 (0.106)	3 (0.118)	3.5 (0.138)	4.76 (0.187)	6.35 (0.25)	9.53 (0.375)	12.7 (0.5)	19.05 (0.75)
Maximum Force ^{1,2,5} - kg (lbs)	104.8 (231.04)	146.8 (323.64)	214.9 (473.77)	255.5 (563.28)	310.2 (683.87)	434 (956.81)	592.1 (1305.3)	802.6 (1769.4)	943 (2078.9)	1005.8 (2217.4)

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 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.

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

PLAY50x4

P/N: 8140404

Drawings

Pole shoes are required for operation - Standard kits available:

PLAY50X4 Standard Pole Shoe Kit - 8800308

PLAY50X4 Prox Cap Kit - 8800293

PLAY50X4 Mounting Kit - 8800719

WARNING!
DO NOT OPERATE UNLESS IN
CONTACT WITH FERROUS TARGET

