

# D85 | P/N: 81401267

The D85 is a narrow-footprint tool intended for use picking sheet metal. Featuring multipole shallow field array technology, it is a mighty pneumatic tool which excels at de-stacking and lifting thin materials when most larger magnets can't get a grip.

**WARNING!**  
**Do Not Operate Unless In Contact With Ferrous Target**



## Specifications

Maximum Breakaway Force <sup>1,2</sup>	125.5 lb	56.9 kg
Maximum Shear <sup>1,2</sup>	31.2 lb	14.2 kg
Thickness for De-Stack <sup>3</sup>	0.08 in	2.0 mm
Maximum Allowable Pressure	116 psi	8.0 Bar
On Target Actuation Pressure	40.6 psi	2.8 Bar
Net Weight	1.46 lb	0.67 kg
Air Port Thread	2x G1/8 (1/8 BSP)	
Mounting Options	Side - 1x NAAMS Ø6-M8-Ø6 Top - 1x 3/8-18 NPT	
Magnetic Pole Footprint	2.13" x 1.12"	54.0mm x 28.5mm

Material Thickness - mm (in)	0.5 (.020)	0.6 (.025)	0.7 (.028)	0.8 (.031)	1.0 (.039)	2.0 (.079)	3.0 (.118)	4.0 (0.157)	5.0 (0.197)
Maximum Force <sup>1,2,5</sup> - kg (lbs)	16.8 (37.1)	18.1 (40.0)	25.3 (55.7)	29.9 (65.9)	42.8 (94.4)	54.3 (119.8)	55.7 (122.7)	56.3 (124.1)	56.93 (125.5)
Required Air Pressure <sup>4</sup> - bar (psi)	1.4 (20.3)	1.4 (20.3)	1.6 (23.2)	1.8 (26.1)	2.0 (29.0)	2.6 (37.7)	2.8 (40.6)	2.8 (40.6)	2.8 (40.6)

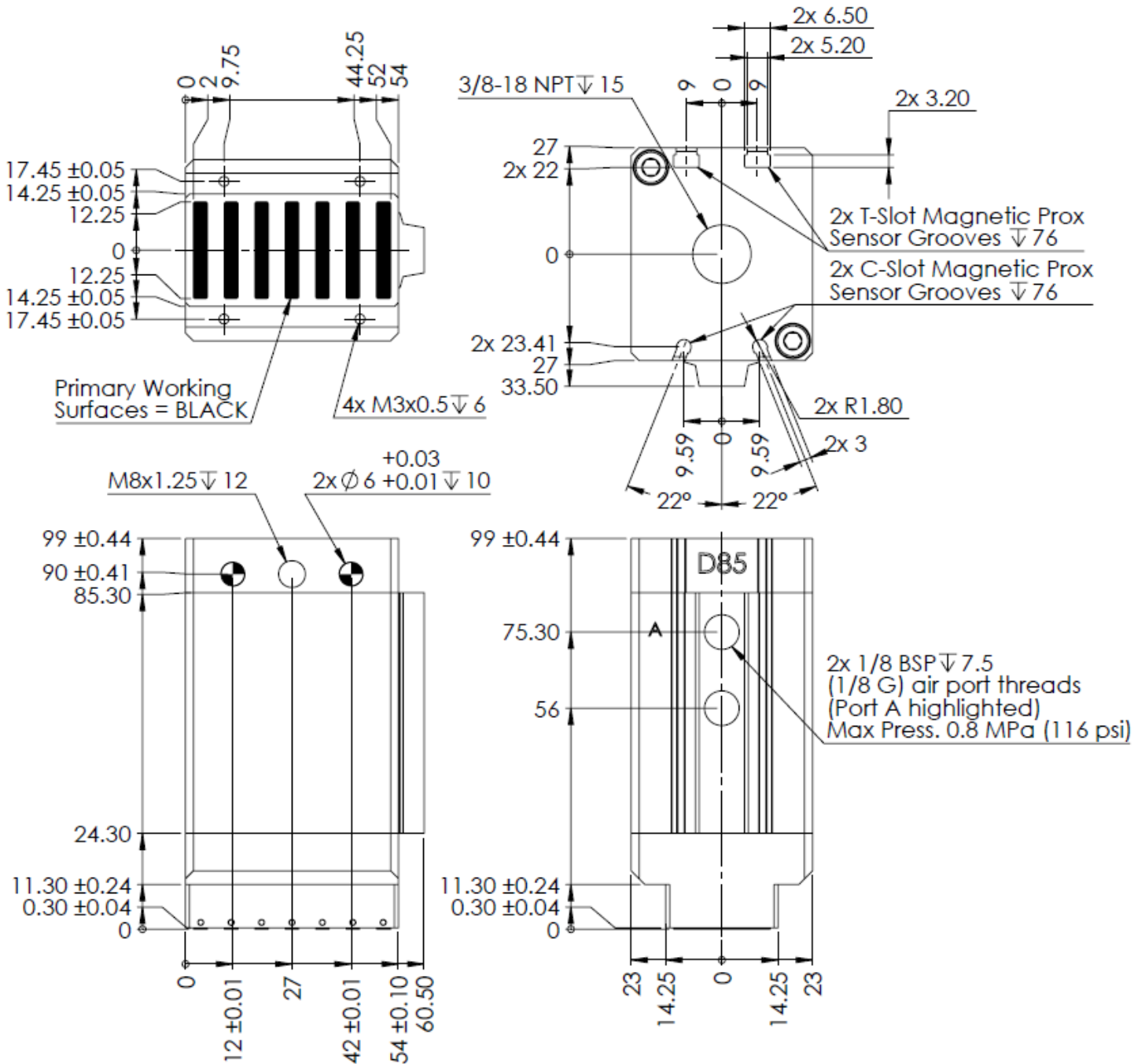
<sup>1</sup> Determined in laboratory environment on 2" thick SAE1018 Steel with surface roughness 63 micro inches. Many factors contribute to the actual breakaway force and safe working load in each application. Consult a Magswitch Applications Engineer and test the Magswitch in each application before 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.



### Center of Gravity (COG) Location

