

# AR50 2.0 | P/N 81401167

## Summary

The AR50 2.0 improves upon our best-selling AR50 Classic by reducing height and weight, while retaining its substantial breakaway force. Featuring precision NAAMS mounting, manual override, and improved ingress protection, the AR50 2.0 is prepared for whatever challenge you create.



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

## Specifications

Maximum Breakaway Force <sup>1,2</sup>	476 lb	216 kg
Maximum Shear <sup>1,2</sup>	165 lb	75 kg
Thickness for De-Stack <sup>3</sup>	3/8 in	9.5 mm
Maximum Allowable Pressure	90 psi	6.2 Bar
Off Target Actuation Pressure	65 psi	4.5 Bar
Net Weight	4.9 lb	2.2 kg
Air Port Thread	2x M5 x 0.8	
Mounting Options	Side - 3x NAAMS Ø8-M8-Ø8	
Magnetic Pole Footprint	2.52" x 2.05"	64mm x 52mm

Material Thickness - mm (in)	0.5 (.02)	1.0 (.04)	2.0 (.08)	3.0 (.12)	4.0 (.16)	5.0 (.20)	6.0 (.24)	7.0 (0.28)	9.5 (0.37)	12.7 (0.50)
Maximum Force <sup>1,2,5</sup> - kg (lbs)	13.2 (29.0)	31.7 (70.0)	58.2 (128)	96.5 (213)	122 (269)	168 (370)	184 (406)	199 (438)	215 (475)	216 (476)
Required Air Pressure <sup>4</sup> - bar (psi)	4.0 (58)	3.0 (44)	2.6 (38)	2.0 (29)	1.8 (27)	1.6 (24)	1.6 (24)	1.4 (21)	1.4 (21)	1.4 (21)

<sup>1</sup> 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.

<sup>2</sup> All data applies to unit with flat pole shoes installed.

<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.

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

**Pole shoes required for operation**

**Standard Kits Available:**

AR50 2.0 Standard Pole Shoe Kit	8800760
Flat/V Combination Pole Shoe Kit	8800881
AR50 2.0 M8 Prox Sensor Bracket Kit	8800797

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