

# Electro-Permanent Holding Magnet: 50mm



## Energise To Release Electro-Permanent Magnet

### Technical Data

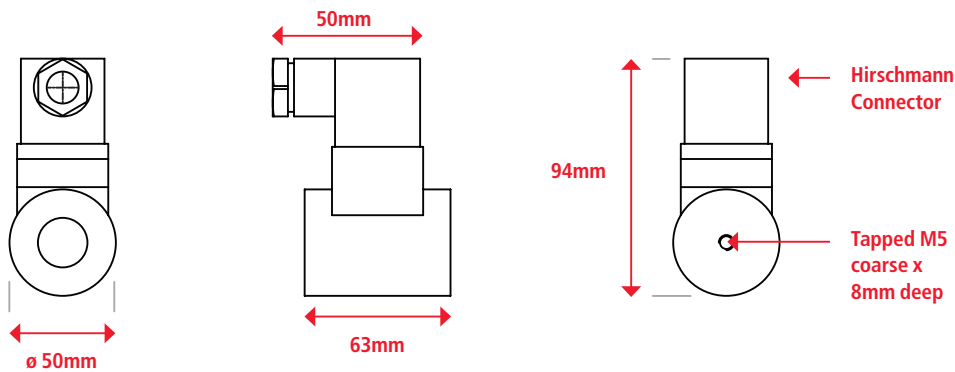
<b>Mountings</b>	Central machined hole in rear face of magnet
<b>Finish</b>	Bright nickel-plated with machined face
<b>Weight</b>	24VDC: 874g 240VAC: 880g
<b>Typical Holding Force</b>	55kg
<b>IP Rating</b>	54
<b>Standard Operating Voltage</b>	24VDC M52178/24VDC 240VAC M52178/240VA
<b>Current</b>	24VDC - 350mA 240VAC - 40mA
<b>Typical Power</b>	24VDC: 8.4W 240VAC: 8.56W
<b>Duty cycle</b>	S2
<b>Ambient temperature</b>	35°C
<b>Connection Type</b>	24VDC: Hirschmann connector 240VAC: Hirschmann connector with rectifier



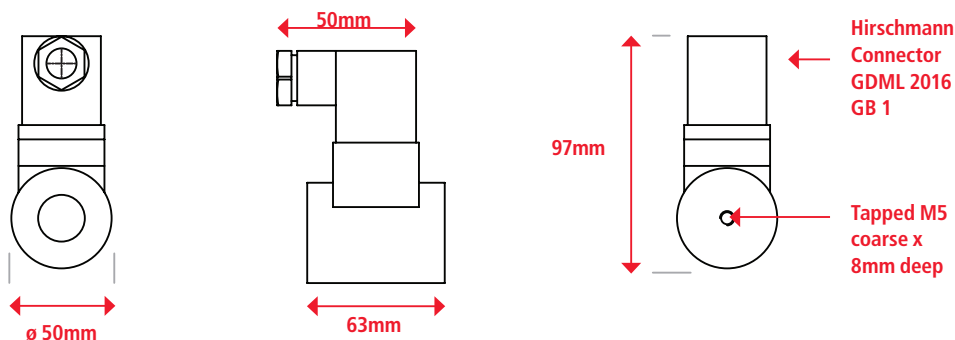
### Recommended Armature Plate

<b>Finish</b>	Bright nickel-plated
<b>Diameter</b>	50mm
<b>Height</b>	6mm
<b>Screw</b>	M4
<b>Part Number</b>	M52171/50ARM
<b>Weight</b>	100g

### 24VDC



### 240VAC



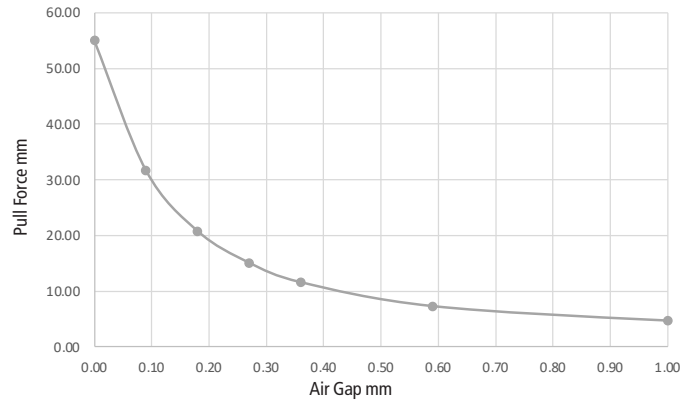
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### 24VDC

Air Gap (mm)	Pull Force* (kg)
0.00	55.00
0.09	31.70
0.18	20.80
0.27	15.10
0.36	11.60
0.59	7.30
1.00	4.70
1.50	2.80

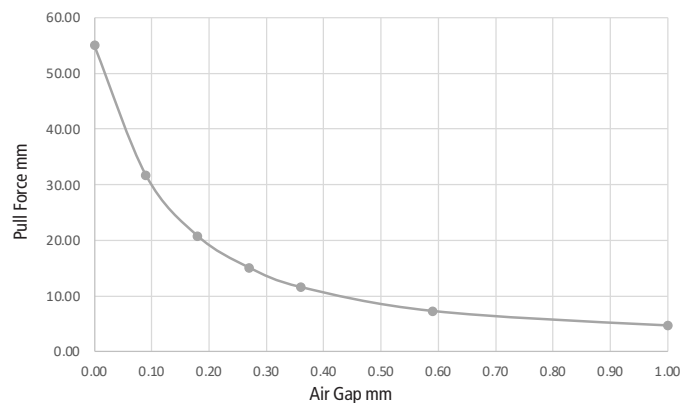
Electro-Permanent Holding Magnet: 50mm 24VDC



### 240VAC

Air Gap (mm)	Pull Force* (kg)
0.00	55.00
0.09	31.70
0.18	20.80
0.27	15.10
0.36	11.60
0.59	7.30
1.00	4.70
1.50	2.80

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#### \* +/- 10% at room temperature

To achieve the optimum pull force 100% contact area must be achieved using the recommended armature plate. The force will be affected if other material specifications, thicknesses and surfaces are used, or if the armature fails to make positive contact over the full diameter of the face of the magnet.

Where misalignment is likely to be an issue we recommend that an oversized armature plate is used to ensure 100% full contact, this however will reduce the stated pull force by approximately 10%.