Electro-Holding Magnet: 20mm



Energise To Hold

Technical Data

Mountings Threaded holes in rear face Finish Bright nickel-plated with machined face Weight 36g **Typical** 53N **Holding Force** 100% **ED Rating IP Rating** Standard 12VDC M52180/12VDC **Operating** 24VDC M52180/24VDC Voltage Current 12V - 210mA 24V - 100mA **Typical** 2.5W Power

> 12VDC & 24VDC Free Leads (500mm Long)



Recommended Armature Plate

Finish Bright nickel-plated

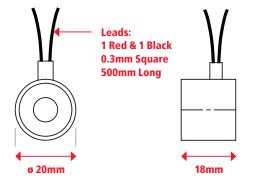
Diameter 25mm Height 3mm Screw М3

Connection

Type

M52171/25ARM **Part Number**

Weight 15g





Air Gap (mm)	Pull Force* (N)
0.00	53
0.09	22
0.18	9
0.27	5
0.36	3
0.59	2
1.00	1

* +/- 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%.

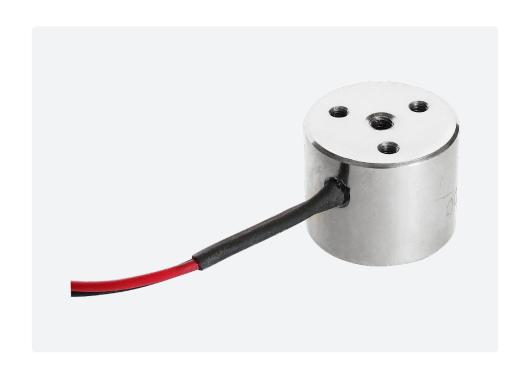
Electro-Holding Magnet: 25mm



Energise To Hold

Technical Data

Mountings Threaded holes in rear face Finish Bright nickel-plated with machined face Weight 66g **Typical** 150N **Holding Force ED** Rating 100% **IP Rating** Standard 12VDC M52172/12VDC Operating 24VDC M52172/24VDC Voltage Current 12V - 180mA 24V - 90mA **Typical** 2W Power Connection 12VDC & 24VDC Free Leads (500mm Long) Туре



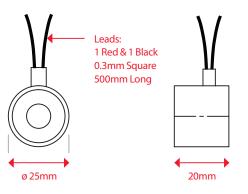
Recommended Armature Plate

Finish Bright nickel-plated

Diameter 25mm Height 3mm Screw M3

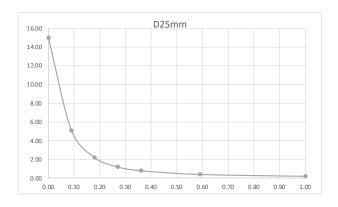
Part Number M52171/25ARM

Weight 15g





Air Gap (mm)	Pull Force* (N)
0.00	150
0.09	51
0.18	22
0.27	12
0.36	8
0.59	4
1.00	2



* +/- 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%.

Electro-Holding Magnet: 30mm



Energise To Hold

Technical Data

Mountings Threaded holes in rear face Finish Bright nickel-plated with machined face Weight 108g **Typical Holding** 280N Force 100% **ED Rating IP Rating** Standard 12VDC M52173/12VDC

Operating 24VDC M52173/24VDC

Voltage

Current 12V - 280mA 24V - 140mA

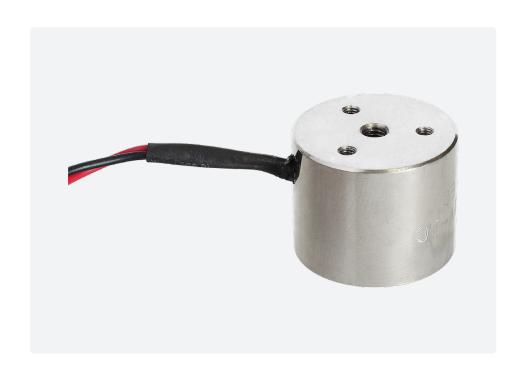
Typical 3.3W

Power

Connection

12VDC & 24VDC

Free Leads (500mm Long) Type



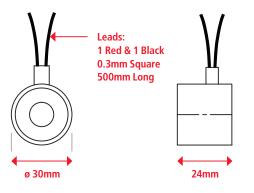
Recommended Armature Plate

Finish Bright nickel-plated

Diameter 30mm Height 4mm Screw M4

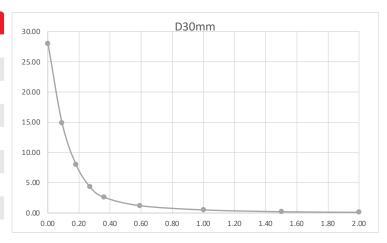
M52171/30ARM **Part Number**

Weight 30g





Air Gap (mm)	Pull Force* (N)
0.00	280
0.09	149
0.18	80
0.27	43
0.36	26
0.59	12
1.00	5
1.59	2
2.00	2



* +/- 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%.

Electro-Holding Magnet: 40mm



Energise To Hold

Technical Data

Mountings Threaded holes in rear face Finish Bright nickel-plated with machined face Weight 210g

Typical Holding 550N Force

ED Rating 100% **IP Rating**

Standard 12VDC M52174/12VDC Operating 24VDC M52174/24VDC

Voltage

Current 12V - 440mA 24V - 230mA

Typical 5.28W

Power

Finish

Connection 12VDC & 24VDC Two-pole connector Type

Recommended Armature Plate



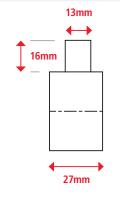
Bright nickel-plated

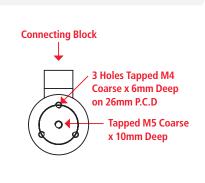
Diameter 40mm Height 5mm Screw M4

Part Number M52171/40ARM

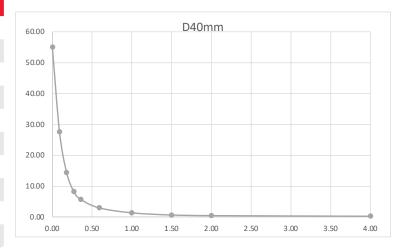
Weight 50g







Air Gap (mm)	Pull Force* (N)
0.00	550
0.09	276
0.18	144
0.27	83
0.36	57
0.59	30
1.00	14
1.59	7
2.00	5
4.00	3



* +/- 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%.

Eclipse Magnetics. Innovative Magnetic Solutions

Electro-Holding Magnet: 80mm



Energise To Hold

Technical Data

Mountings Threaded holes in rear face Finish Bright nickel-plated with machined face Weight 1203g 2000N **Typical Holding Force**

100% **ED Rating IP Rating**

Standard 12VDC M52183/12VDC **Operating** 24VDC M52183/24VDC

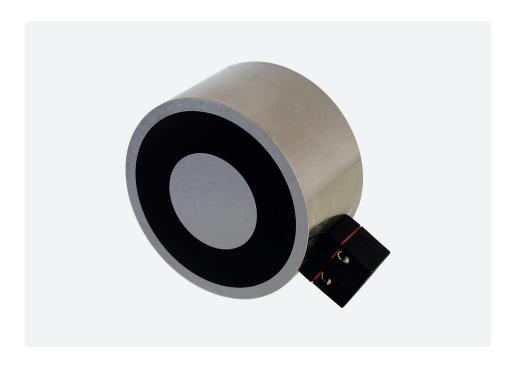
Voltage

Current 12V - 1116mA 24V - 580mA

Typical Power

13W

Connection 12VDC & 24VDC Two-pole connector Type



Recommended Armature Plate

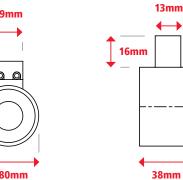
Finish Bright nickel-plated

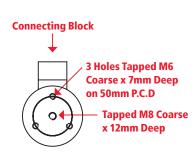
Diameter 80mm Height 10mm Screw M6

M52171/80ARM **Part Number**

Weight 400g







* +/- 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%.

Air Gap (mm)	Pull Force* (N)
0.00	2000
0.09	1560
0.18	1117
0.27	715
0.36	567
0.59	283
1.00	130
1.59	67
2.00	37
4.00	20

Electro-Holding Magnet: 100mm



Energise To Hold

Technical Data

Mountings Threaded holes in rear face Finish Bright nickel-plated with

machined face

Weight 2200g

3600N

Typical Holding Force

100% **ED Rating**

IP Rating

Standard 12VDC M52184/12VDC **Operating** 24VDC M52184/24VDC

Voltage

Current 12V - 1850mA

24V - 940mA

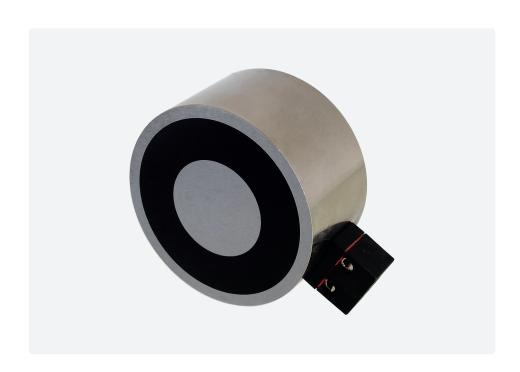
Typical Power

22W

Connection

12VDC & 24VDC

Two-pole connector Type



Recommended Armature Plate

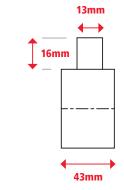
Finish Bright nickel-plated

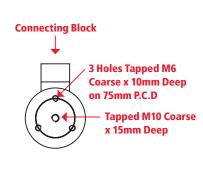
Diameter 100mm Height 12mm Screw M10

M52171/100ARM **Part Number**

Weight 740g







* +/- 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%.

Air Gap (mm)	Pull Force* (N)
0.00	3600
0.09	2790
0.18	2230
0.27	1610
0.36	1360
0.59	1340
1.00	470
1.59	260
2.00	150
4.00	60