



ElectroMagnets

High performance ElectroMagnets
and Electro-Permanent Magnets for
energise-to-hold and energise-to-
release applications

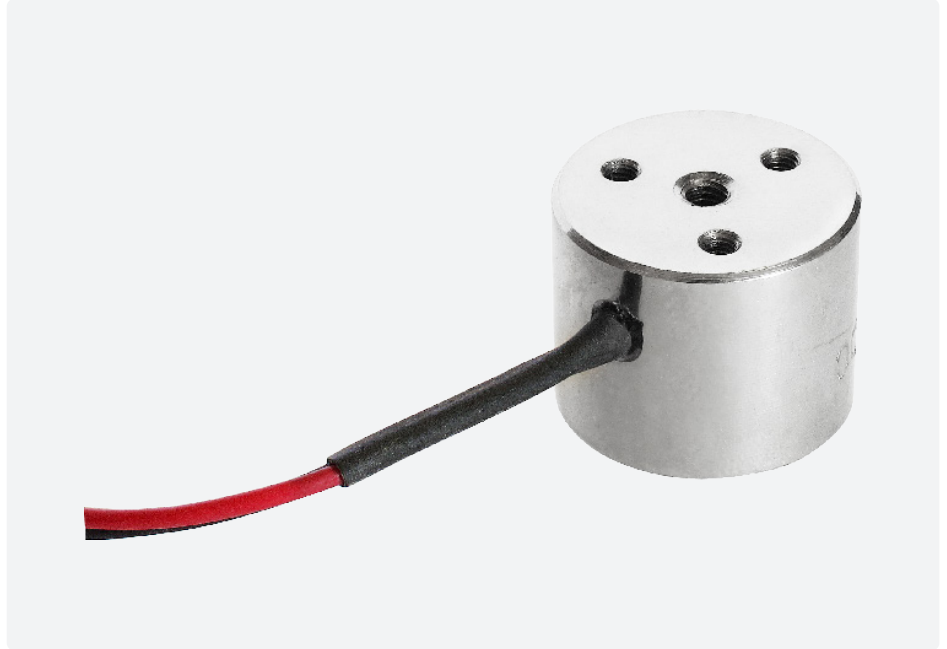
Electro-Holding Magnet: 20mm



Energise To Hold ElectroMagnet

Technical Data

Mountings	Threaded holes in rear face
Finish	Bright nickel-plated with machined face
Weight	36g
Typical Holding Force	5.2kg
ED Rating	100%
IP Rating	54
Standard Operating Voltage	12VDC M52180/12VDC 24VDC M52180/24VDC
Current	12V - 210mA 24V - 100mA
Typical Power	2.4 - 2.5W
Connection Type	12VDC & 24VDC Free Leads (500mm Long)

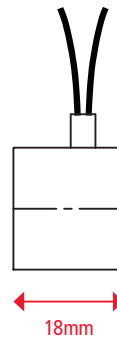


Recommended Armature Plate

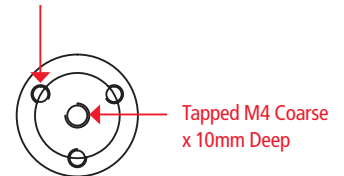
Finish	Bright nickel-plated
Diameter	25mm
Height	3mm
Screw	M3
Part Number	M52171/25ARM
Weight	15g



Leads:
1 Red & 1 Black
0.3mm Square
500mm Long

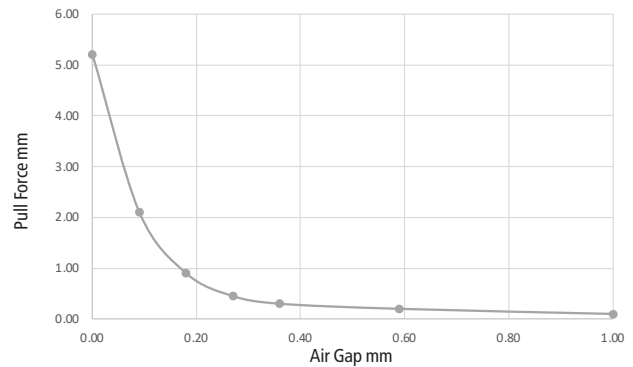


3 Holes Tapped M3
Coarse x 5mm Deep
on 14mm P.C.D.



Air Gap (mm)	Pull Force* (kg)
0.00	5.20
0.09	2.10
0.18	0.90
0.27	0.45
0.36	0.30
0.59	0.20
1.00	0.10

Electro-Holding Magnet: 20mm



* +/- 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.

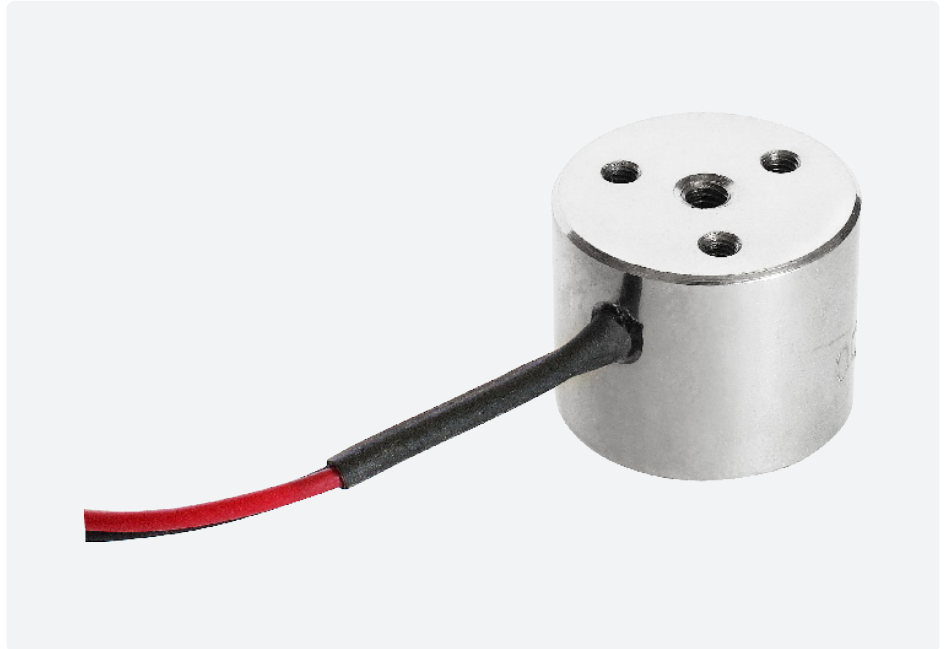
Where misalignment is likely to be an issue we recommend that an oversized armature plate is used to ensure 100% full contact, this however will reduce the stated pull force by approximately 10%.

Electro-Holding Magnet: 25mm

Energise To Hold ElectroMagnet

Technical Data

Mountings	Threaded holes in rear face
Finish	Bright nickel-plated with machined face
Weight	66g
Typical Holding Force	15.0kg
ED Rating	100%
IP Rating	54
Standard Operating Voltage	12VDC M52172/12VDC 24VDC M52172/24VDC
Current	12V - 180mA 24V - 90mA
Typical Power	2.1 -2.2W
Connection Type	12VDC & 24VDC Free Leads (500mm Long)

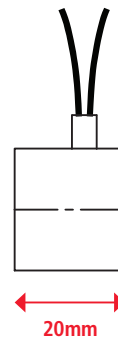


Recommended Armature Plate

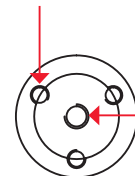
Finish	Bright nickel-plated
Diameter	25mm
Height	3mm
Screw	M3
Part Number	M52171/25ARM
Weight	15g



Leads:
1 Red & 1 Black
0.3mm Square
500mm Long



3 Holes Tapped M3
Coarse x 5mm Deep
on 15mm P.C.D.



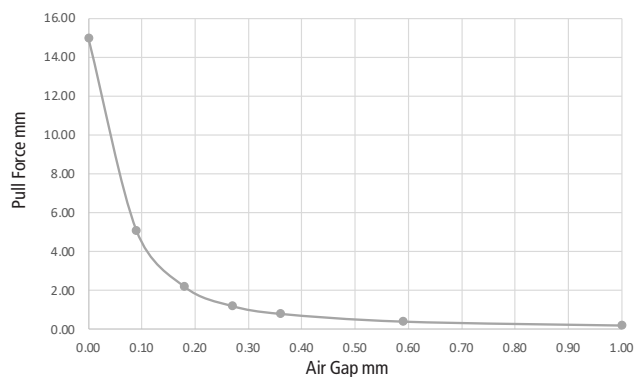
Tapped M4 Coarse
x 10mm Deep

Air Gap (mm)

Pull Force* (kg)

0.00	15.00
0.09	5.10
0.18	2.20
0.27	1.20
0.36	0.80
0.59	0.40
1.00	0.20

Electro-Holding Magnet: 25mm



* +/- 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.

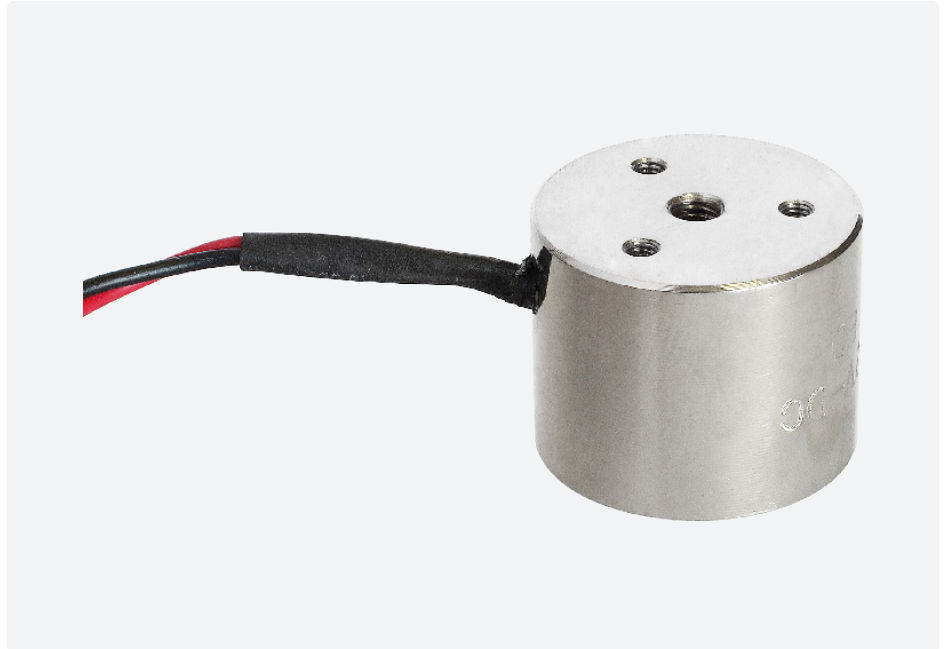
Where misalignment is likely to be an issue we recommend that an oversized armature plate is used to ensure 100% full contact, this however will reduce the stated pull force by approximately 10%.

Electro-Holding Magnet: 30mm

Energise To Hold ElectroMagnet

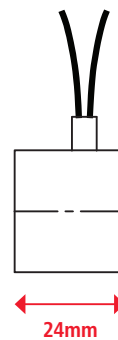
Technical Data

Mountings	Threaded holes in rear face
Finish	Bright nickel-plated with machined face
Weight	108g
Typical Holding Force	28.0kg
ED Rating	100%
IP Rating	54
Standard Operating Voltage	12VDC M52173/12VDC 24VDC M52173/24VDC
Current	12V - 280mA 24V - 140mA
Typical Power	3.3W
Connection Type	12VDC & 24VDC Free Leads (500mm Long)

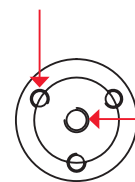


Recommended Armature Plate

Finish	Bright nickel-plated
Diameter	30mm
Height	4mm
Screw	M4
Part Number	M52171/30ARM
Weight	30g



3 Holes Tapped M3
Coarse x 5mm Deep
on 18mm P.C.D.

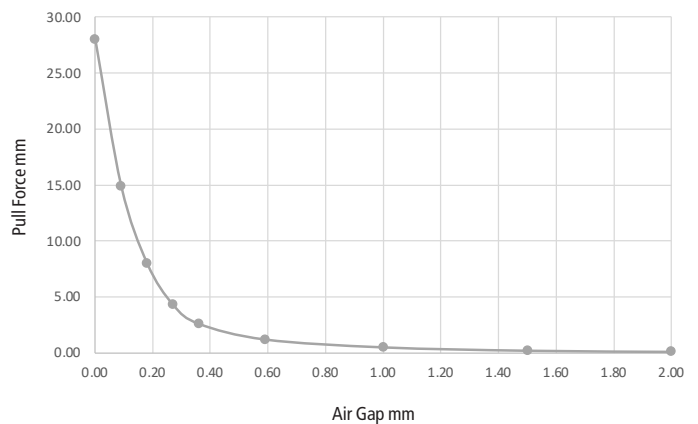


Air Gap (mm)

Pull Force* (kg)

0.00	28.00
0.09	14.90
0.18	8.00
0.27	4.30
0.36	2.60
0.59	1.20
1.00	0.50
1.50	0.20
2.00	0.10

Electro-Holding Magnet: 30mm



* +/- 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 ElectroMagnet

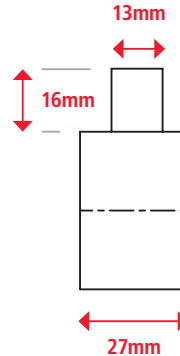
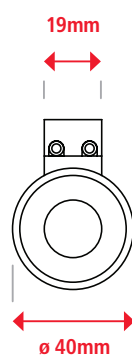
Technical Data

Mountings	Threaded holes in rear face
Finish	Bright nickel-plated with machined face
Weight	210g
Typical Holding Force	55.0 kg
ED Rating	100%
IP Rating	20
Standard Operating Voltage	12VDC M52174/12VDC 24VDC M52174/24VDC
Current	12V - 440mA 24V - 230mA
Typical Power	5.28 - 5.5W
Connection Type	12VDC & 24VDC Two-pole connector

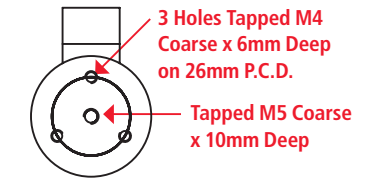


Recommended Armature Plate

Finish	Bright nickel-plated
Diameter	40mm
Height	5mm
Screw	M4
Part Number	M52171/40ARM
Weight	50g



Connecting Block

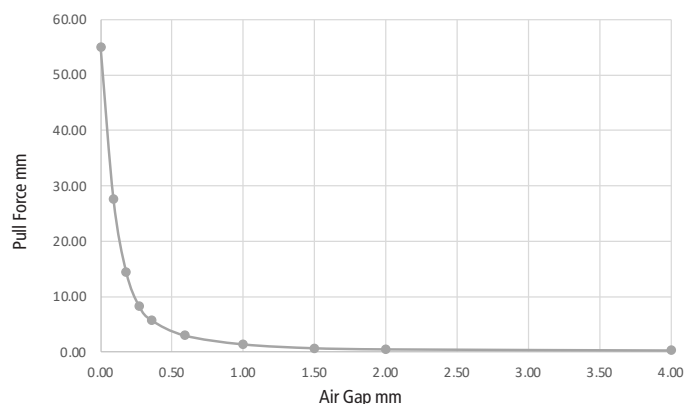


Air Gap (mm)

Pull Force* (kg)

0.00	55.00
0.09	27.60
0.18	14.40
0.27	8.30
0.36	5.70
0.59	3.00
1.00	1.40
1.50	0.70
2.00	0.50
4.00	0.30

Electro-Holding Magnet: 40mm



* +/- 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.

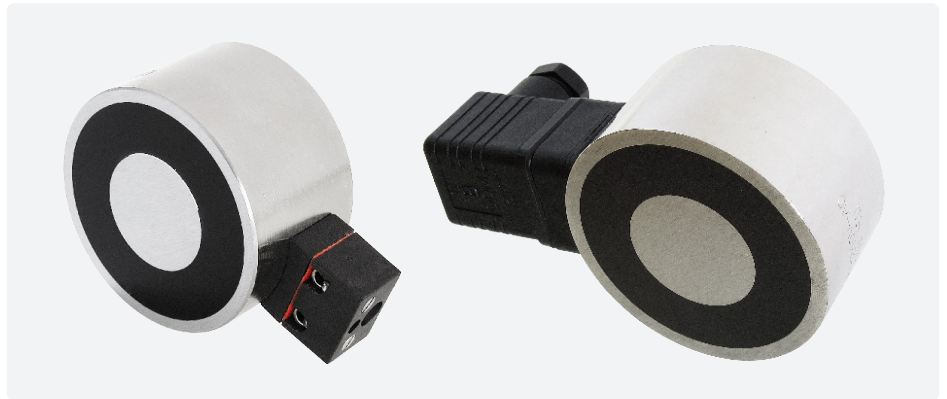
Where misalignment is likely to be an issue we recommend that an oversized armature plate is used to ensure 100% full contact, this however will reduce the stated pull force by approximately 10%.

Electro-Holding Magnet: 50mm

Energise To Hold ElectroMagnet

Technical Data

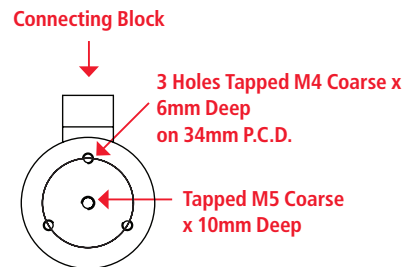
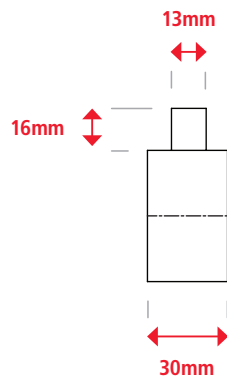
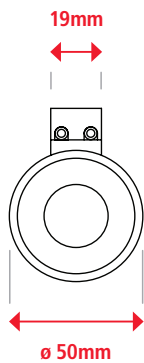
Mountings	Threaded holes in rear face
Finish	Bright nickel-plated with machined face
Weight	12V / 24V: 364g. 240V: 408g
Typical Holding Force	100.0kg
ED Rating	100%
IP Rating	20 - Two-pole connector 54 - Hirschmann connector
Standard Operating Voltage	12VDC M52175/12VDC 24VDC M52175/24VDC 240VAC M52175/240VA
Current	12V - 470mA 24V - 240mA 240V - 40mA
Typical Power	12V & 24V - 5.64 - 5.76W 240V - 8.56W
Connection Type	12VDC & 24VDC: Two-pole connector 240VAC: Hirschmann connector with Rectifier



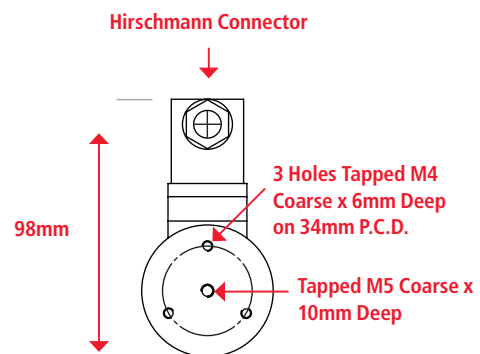
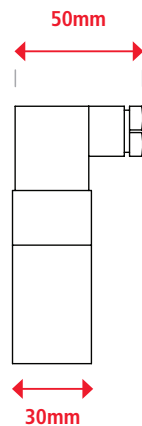
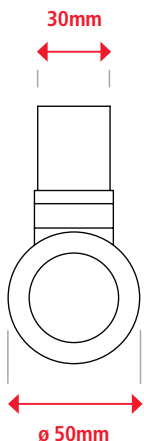
Recommended Armature Plate

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

12VDC/24VDC



240VAC

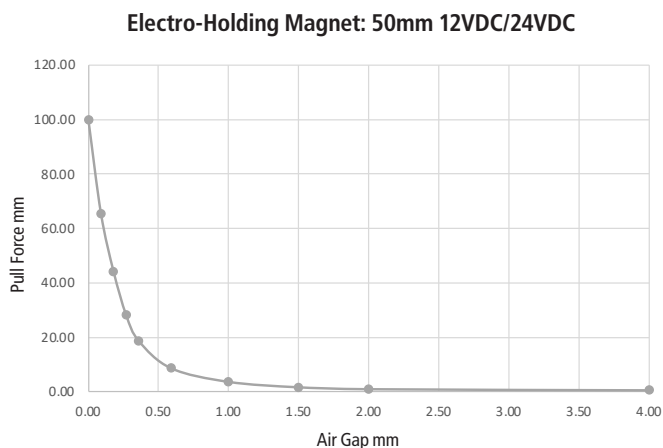


Electro-Holding Magnet: 50mm

Energise To Hold ElectroMagnet

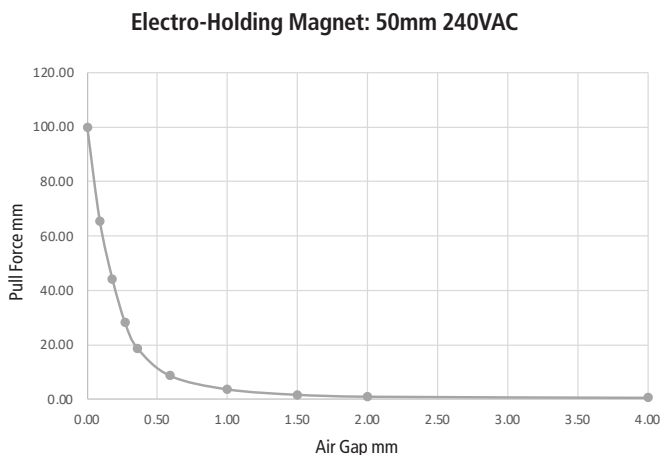
12VDC/24VDC

Air Gap (mm)	Pull Force* (kg)
0.00	100.00
0.09	65.50
0.18	44.20
0.27	28.20
0.36	18.70
0.59	8.70
1.00	3.70
1.50	1.70
2.00	1.00
4.00	0.60



240VAC

Air Gap (mm)	Pull Force* (kg)
0.00	100.00
0.09	65.50
0.18	44.20
0.27	28.20
0.36	18.70
0.59	8.70
1.00	3.70
1.50	1.70
2.00	1.00
4.00	0.60



* +/- 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%.

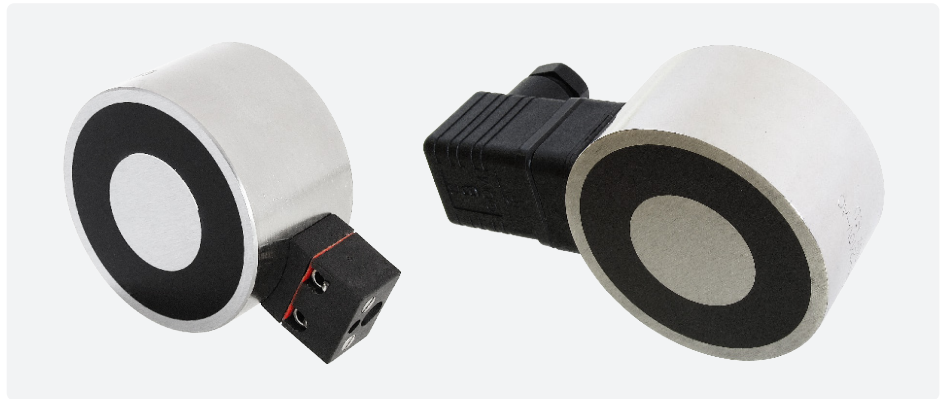
Electro-Holding Magnet: 65mm



Energise To Hold ElectroMagnet

Technical Data

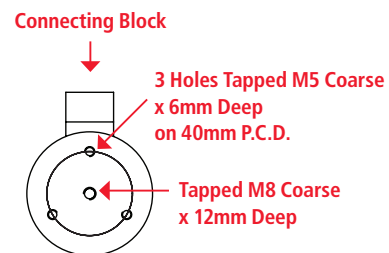
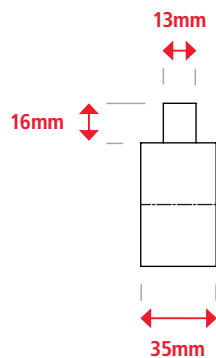
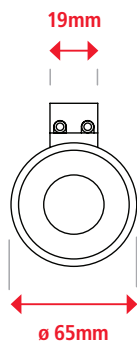
Mountings	Threaded holes in rear face
Finish	Bright nickel-plated with machined face
Weight	12V / 24V: 710g, 240V: 744g
Typical Holding Force	164.0kg 100%
ED Rating	20 - Two-pole connector
IP Rating	54 - Hirschmann connector
Standard Operating Voltage	12VDC M52176/12VDC
	24VDC M52176/24VDC
	240VAC M52176/240VA
Current	12V - 690mA
	24V - 340mA
Typical Power	240V - 50mA
	12V & 24V - 8.28W
Connection Type	240V - 10.7W
	12VDC & 24VDC: Two-pole connector
	240VAC: Hirschmann connector with Rectifier



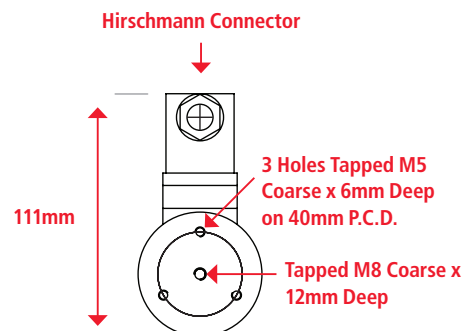
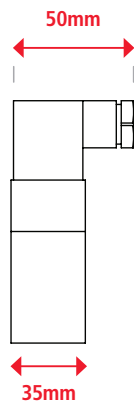
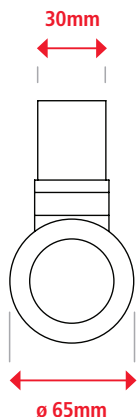
Recommended Armature Plate

Finish	Bright nickel-plated
Diameter	65mm
Height	8mm
Screw	M5
Part Number	M52171/65ARM
Weight	210g

12VDC/24VDC



240VAC



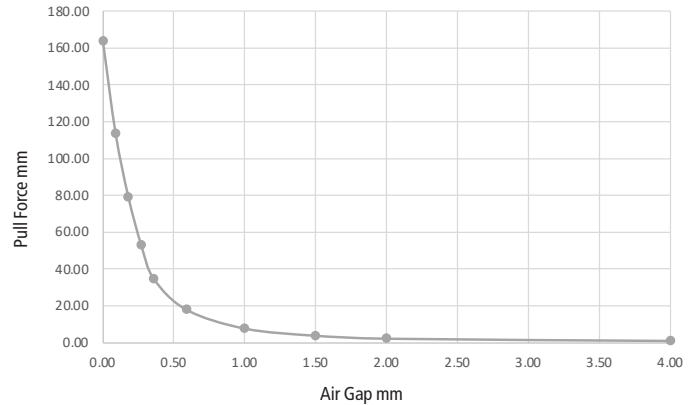
Electro-Holding Magnet: 65mm

Energise To Hold ElectroMagnet

12VDC/24VDC

Air Gap (mm)	Pull Force* (kg)
0.00	164.00
0.09	113.70
0.18	79.20
0.27	53.30
0.36	34.70
0.59	18.00
1.00	7.80
1.50	3.90
2.00	2.30
4.00	1.10

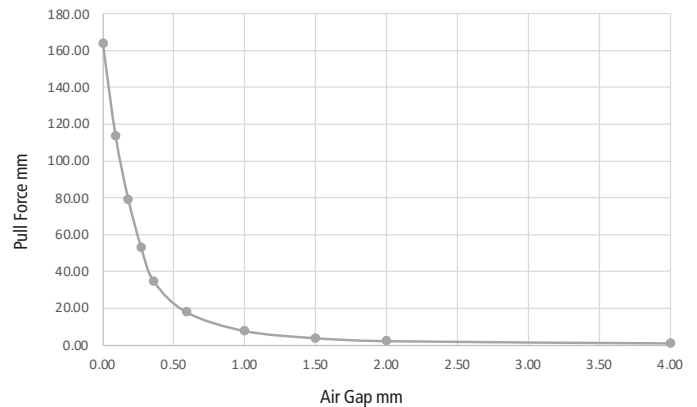
Electro-Holding Magnet: 65mm 12VDC/24VDC



240VAC

Air Gap (mm)	Pull Force* (kg)
0.00	164.00
0.09	113.70
0.18	79.20
0.27	53.30
0.36	34.70
0.59	18.00
1.00	7.80
1.50	3.90
2.00	2.30
4.00	1.10

Electro-Holding Magnet: 65mm 240VAC



* +/- 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.

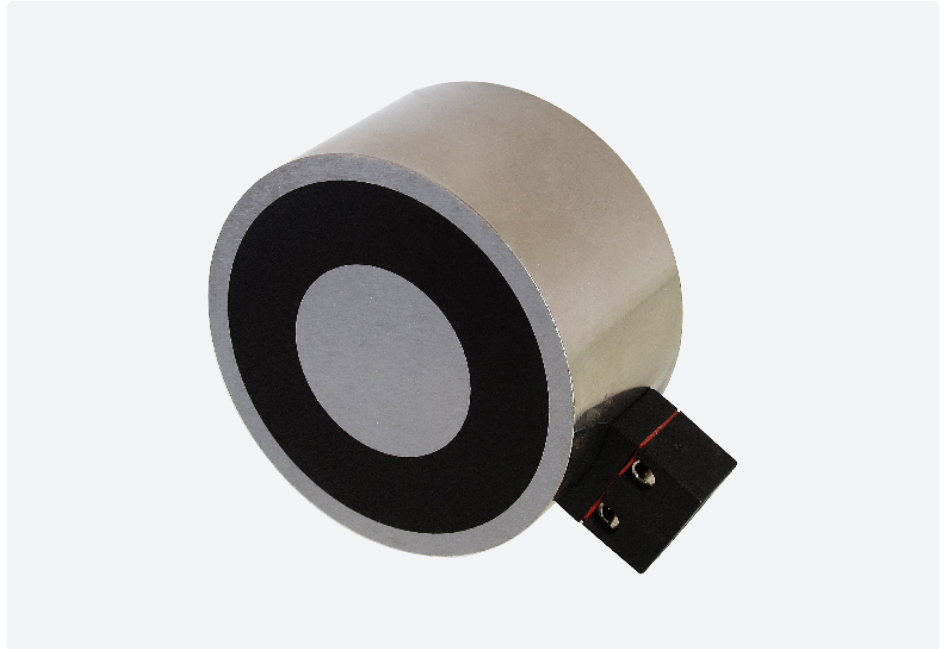
Where misalignment is likely to be an issue we recommend that an oversized armature plate is used to ensure 100% full contact, this however will reduce the stated pull force by approximately 10%.

Electro-Holding Magnet: 80mm

Energise To Hold ElectroMagnet

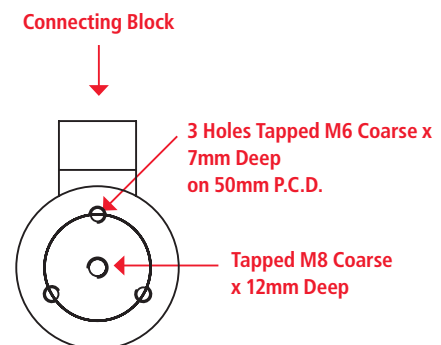
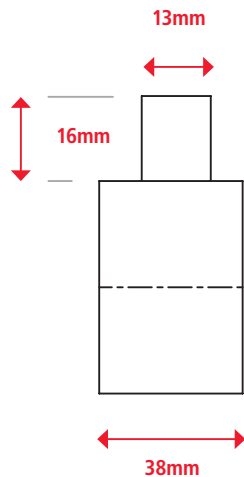
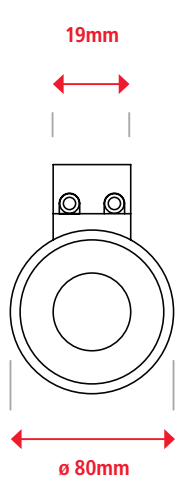
Technical Data

Mountings	Threaded holes in rear face
Finish	Bright nickel-plated with machined face
Weight	1203g
Typical Holding Force	228.0kg
ED Rating	100%
IP Rating	20
Standard Operating Voltage	12VDC M52183/12VDC 24VDC M52183/24VDC
Current	12V - 1116mA 24V - 580mA
Typical Power	13.4 - 13.9W
Connection Type	12VDC & 24VDC Two-pole connector



Recommended Armature Plate

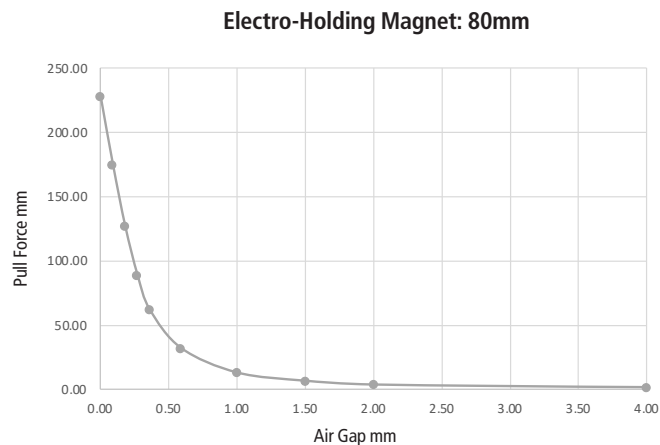
Finish	Bright nickel-plated
Diameter	80mm
Height	10mm
Screw	M6
Part Number	M52171/80ARM
Weight	400g



Electro-Holding Magnet: 80mm

Energise To Hold ElectroMagnet

Air Gap (mm)	Pull Force* (kg)
0.00	228.00
0.09	175.00
0.18	127.00
0.27	89.00
0.36	62.00
0.50	32.00
1.00	13.00
1.50	6.60
2.00	3.65
4.00	1.60
6.00	1.10
8.00	0.90



* +/- 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.

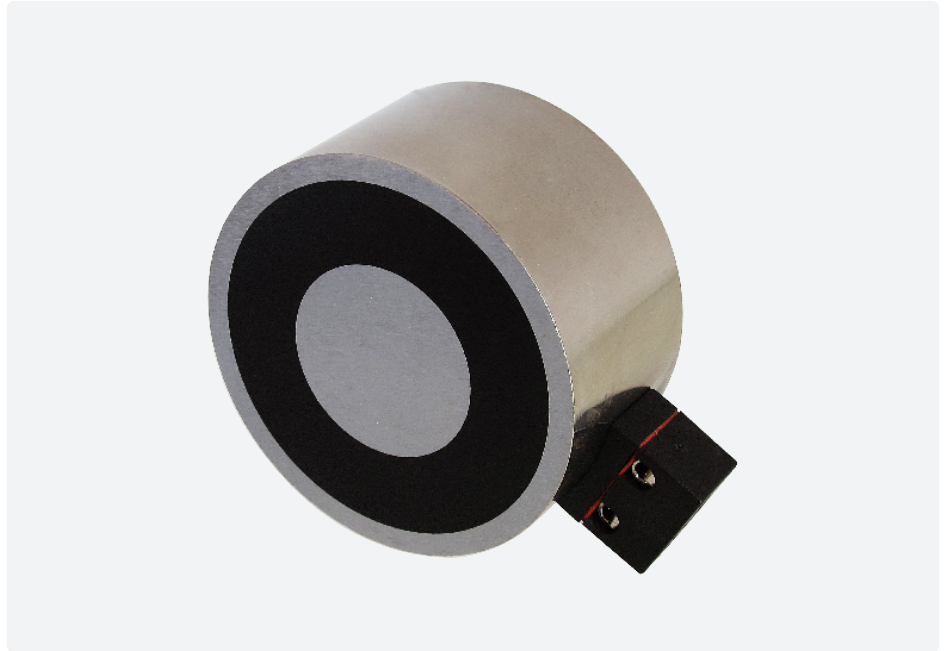
Where misalignment is likely to be an issue we recommend that an oversized armature plate is used to ensure 100% full contact, this however will reduce the stated pull force by approximately 10%.

Electro-Holding Magnet: 100mm

Energise To Hold ElectroMagnet

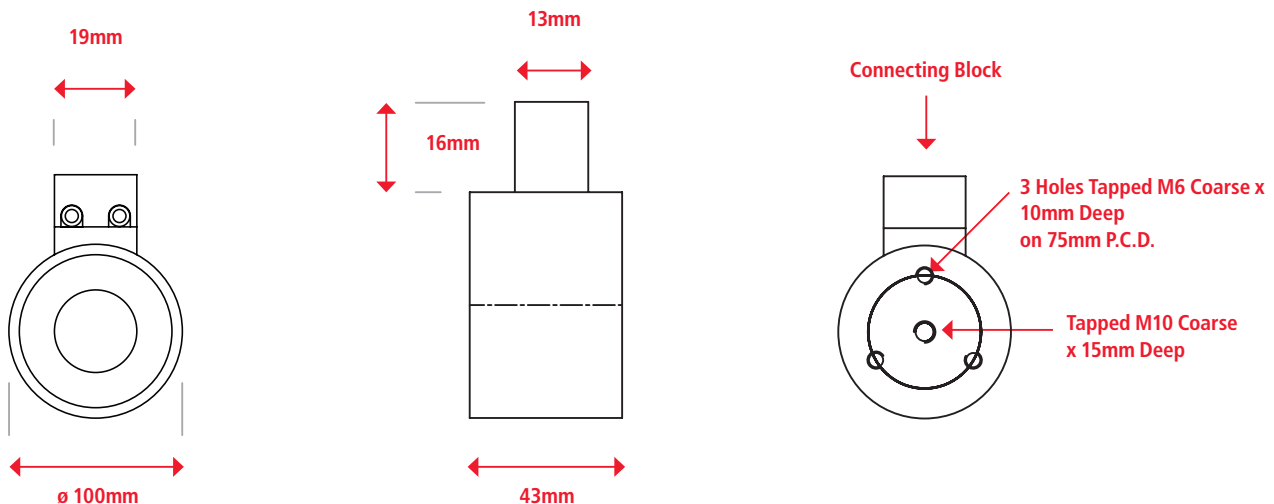
Technical Data

Mountings	Threaded holes in rear face
Finish	Bright nickel-plated with machined face
Weight	2200g
Typical Holding Force	360.0kg
ED Rating	100%
IP Rating	20
Standard Operating Voltage	12VDC M52184/12VDC 24VDC M52184/24VDC
Current	12V - 1850mA 24V - 940mA
Typical Power	22.2 - 22.6W
Connection Type	12VDC & 24VDC Two-pole connector



Recommended Armature Plate

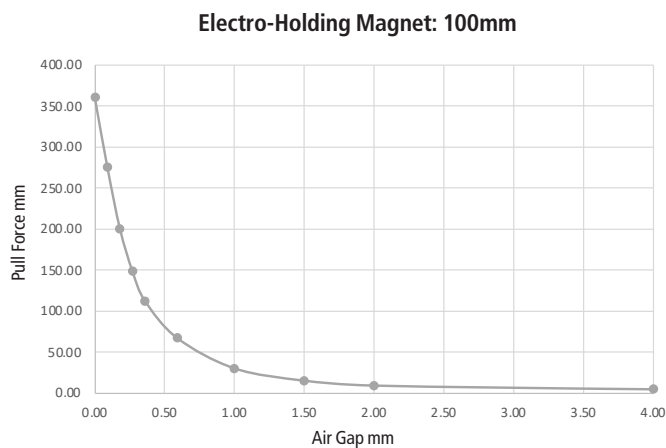
Finish	Bright nickel-plated
Diameter	100mm
Height	12mm
Screw	M10
Part Number	M52171/100ARM
Weight	740g



Electro-Holding Magnet: 100mm

Energise To Hold ElectroMagnet

Air Gap (mm)	Pull Force* (kg)
0.00	360.00
0.09	275.00
0.18	200.00
0.27	148.00
0.36	112.00
0.59	67.00
1.00	30.00
1.50	15.00
2.00	9.00
4.00	4.50
6.00	2.80
8.00	1.95



* +/- 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-Permanent Holding Magnet: 35mm



Energise To Release Electro-Permanent Magnet

Technical Data

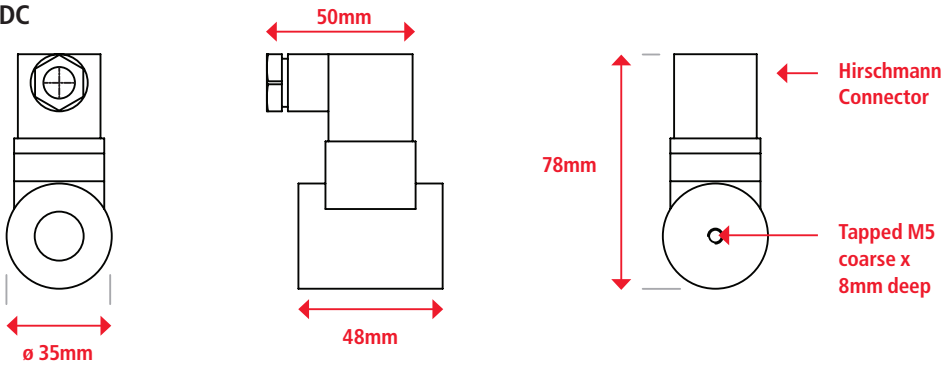
Mountings	Central machined hole in rear face of magnet
Finish	Bright nickel-plated with machined face
Weight	24VDC: 352g 240VAC: 354g
Typical Holding Force	23.0 kg
IP Rating	54
Standard Operating Voltage	24VDC M52177/24VDC 240VAC M52177/240VA
Current	24V - 240mA 240V - 50mA
Typical Power	24VDC: 5.28W 240VAC: 6.42W
Duty cycle	S2
Connection Type	24VDC: Hirschmann connector 240VAC: Hirschmann connector with rectifier



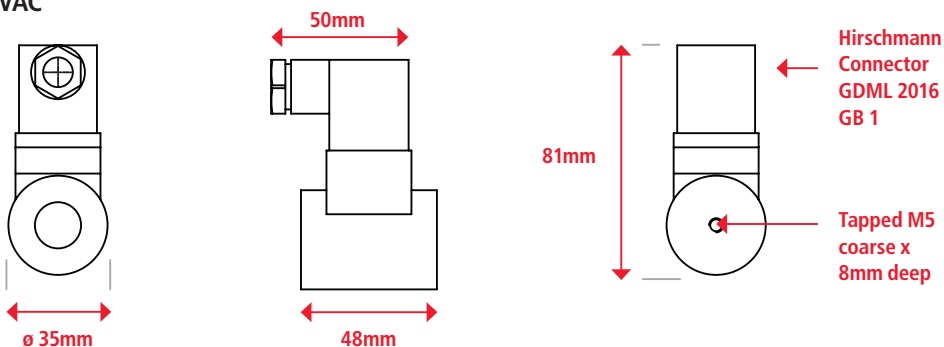
Recommended Armature Plate

Finish	Bright nickel-plated
Diameter	40mm
Height	5mm
Screw	M4
Part Number	M52171/40ARM
Weight	50g

24VDC



240VAC

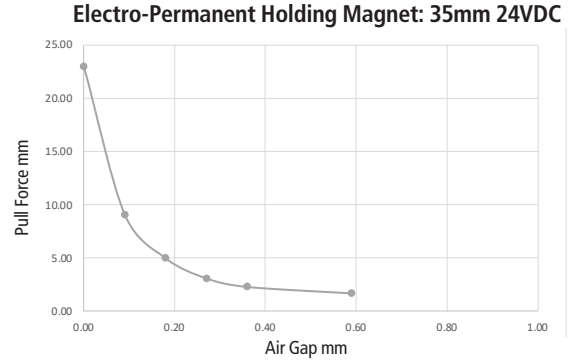


Electro-Permanent Holding Magnet: 35mm

Energise To Release Electro-Permanent Magnet

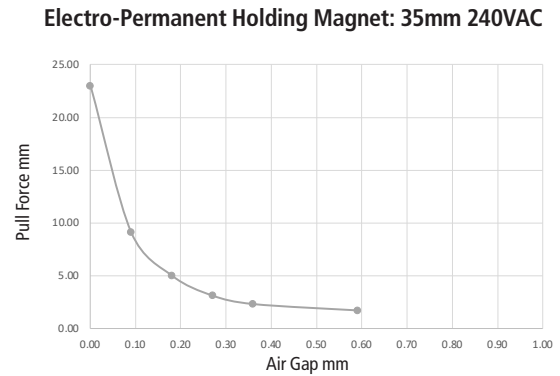
24VDC

Air Gap (mm)	Pull Force* (kg)
0.00	23.00
0.09	9.10
0.18	5.00
0.27	3.10
0.36	2.30
0.59	1.70



240VAC

Air Gap (mm)	Pull Force* (kg)
0.00	23.00
0.09	9.10
0.18	5.00
0.27	3.10
0.36	2.30
0.59	1.70



* +/- 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-Permanent Holding Magnet: 50mm



Energise To Release Electro-Permanent Magnet

Technical Data

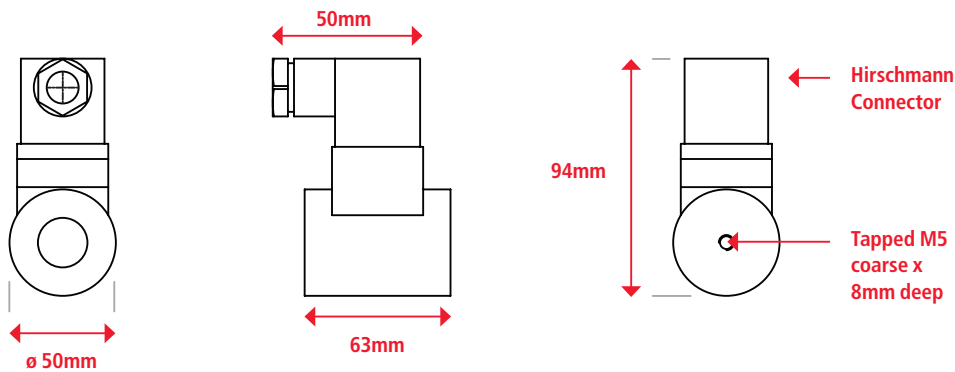
Mountings	Central machined hole in rear face of magnet
Finish	Bright nickel-plated with machined face
Weight	24VDC: 874g 240VAC: 880g
Typical Holding Force	55kg
IP Rating	54
Standard Operating Voltage	24VDC M52178/24VDC 240VAC M52178/240VA
Current	24VDC - 350mA 240VAC - 40mA
Typical Power	24VDC: 8.4W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



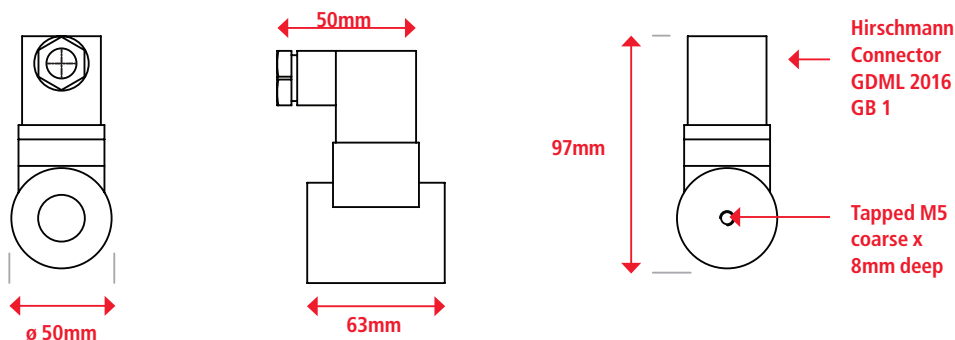
Recommended Armature Plate

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

24VDC



240VAC



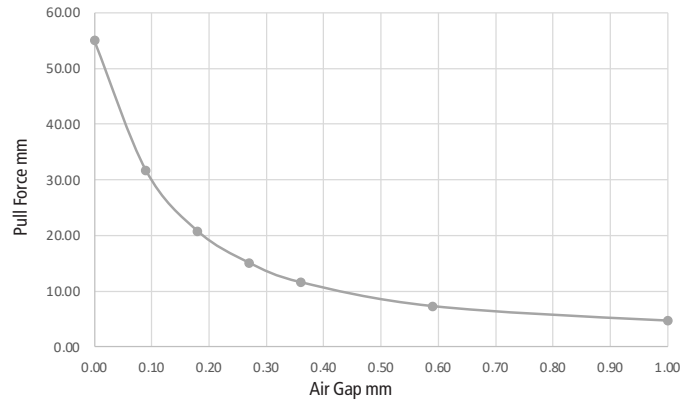
Electro-Permanent Holding Magnet: 50mm

Energise To Release Electro-Permanent Magnet

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

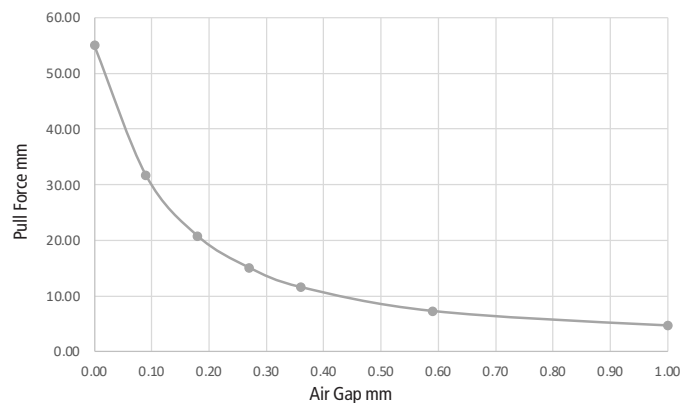
Electro-Permanent Holding Magnet: 50mm 24VDC



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

Electro-Permanent Holding Magnet: 50mm 240VAC



* +/- 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.

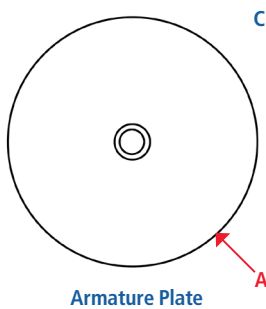
Where misalignment is likely to be an issue we recommend that an oversized armature plate is used to ensure 100% full contact, this however will reduce the stated pull force by approximately 10%.

Armature Plates

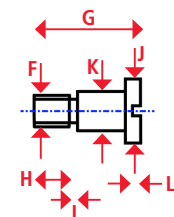
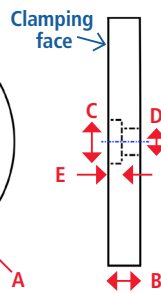
- To fit both ElectroMagnets and Electro-Permanent Magnets.
- Rubber ring supplied to allow for a small degree of flex in their movement (at the back) to maximise direct contact (by allowing minimum air gap) to the ElectroMagnet clamping face to allow maximum possible pull forces to be achieved.
- Pull force data is based on use with these Armature Plates.
- Select an Armature Plate of same or bigger diameter than the ElectroMagnet or Electro-Permanent Magnet you wish to use.
- Air gaps and incomplete overlap will reduce the Pull Force.



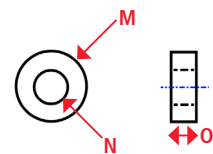
Product Number	Diameter mm	Height mm	Screw supplied	To Suit ElectroMagnet Diameter mm	Weight g	Recommended to be used with ElectroMagnet Product Number	Recommended to be used with Electro-Permanent Magnet Product Number
M52171/25ARM	25	3	M3	20 / 25	15	M52180/12VDC, M52180/24VDC, M52172/12VDC, M52172/24VDC	
M52171/30ARM	30	4	M4	30	30	M52173/12VDC, M52173/24VDC	
M52171/40ARM	40	5	M4	35 / 40	50	M52174/12VDC, M52174/24VDC	M52177/24VDC, M52177/240VA
M52171/50ARM	50	6	M4	50	100	M52175/12VDC, M52175/24VDC, M52175/240VA	M52178/24VDC, M52178/240VA
M52171/65ARM	65	8	M5	65	210	M52176/12VDC, M52176/24VDC, M52176/240VA	
M52171/80ARM	80	10	M6	80	400	M52183/12VDC, M52183/24VDC	
M52171/100ARM	100	12	M10	100	740	M52184/12VDC, M52184/24VDC	



Armature Plate



Armature Screw



Armature Mount (rubber ring)

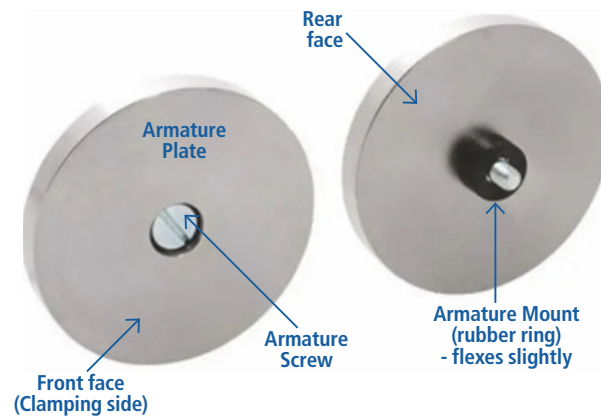
Product Number	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	K mm	L mm	M mm	N mm	O mm
M52171/25ARM	ø25	3	ø8	ø4.4	2.1	M3	9.25	4.25	N/A	ø7	ø4	2	ø8	ø3.75	3
M52171/30ARM	ø30	5	ø9.5	ø5.9	3	M4	13.25	6	N/A	ø8.25	ø5.5	2.5	ø10.5	ø5.2	4.5
M52171/40ARM	ø40	5	ø9.5	ø5.9	3	M4	13.25	6	N/A	ø8.25	ø5.5	2.5	ø10.5	ø5.2	4.5
M52171/50ARM	ø50	6	ø9.5	ø5.9	3	M4	13.25	6	N/A	ø8.25	ø5.5	2.5	ø10.5	ø5.2	4.5
M52171/65ARM	ø65	8	ø12	ø7.9	4	M5	17.75	5.5	1.5	ø11	ø7	2.75	ø13.8	ø7	5.5
M52171/80ARM	ø80	10	ø14	ø8.5	4.2	M6	22	7.5	1.5	ø13	ø8	3.2	ø16.25	ø8	6
M52171/100ARM	ø100	12	ø17	ø10.5	4.5	M10	26	9.5	1.5	ø16	ø10	3.7	ø21.5	ø10	8

* +/- 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%.

Armature Plates



- Pull force will be reduced with any air gap between the ElectroMagnet or Electro-Permanent Magnet and the Armature Plate.
- The Armature Mount is a rubber ring (rubber washer). When assembled this rubber ring mount allows a slight flex.
- The flex aids minimising the air gap between Armature Plate and ElectroMagnet or Electro-Permanent Magnet (ideal is zero gap). This allows the ElectroMagnet or Electro-Permanent Magnet to maximise the contact with the Armature Plate, aiding pull forces.
- Full surface contact is needed between the ElectroMagnet or Electro-Permanent Magnet and the Armature Plate for maximum performance for pull force. If not the pull force will be reduced.
- The Armature Screw head is under the front face of the Armature Plate so will not mechanically interfere with any clamping magnet.
- If you use a material other than our Armature Plates to clamping against the pull force you will achieve may differ to the stated values. The material type, thickness, area, smoothness of surface, etc can all affect the performance that could be achieved. If your material is thinner than our recommended Armature Plate thickness you should expect a reduced pull force in your application.

* +/- 10% at room temperature

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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%.

Additional Notes

- It is assumed that the user has good knowledge of electrical components and electrical circuit designs.
- If you do not have suitable knowledge you should seek guidance from an electrical circuit expert to properly and safely guide you.
- We do not provide the Power Source or the Circuit Design.



- The Hirschmann Connector can be positioned in four ways as shown. There is a visible screw which when removed reveals a plastic clip holder which can be pushed through releasing the outer part to allow rotation in 90 degree increments. Once the right 90 degree position is selected, press the outer part back in to clip it back in place and put the screw back in to re-secure the assembly.
- When connecting same ElectroMagnets in Series, the power source voltage is multiplied by the number of ElectroMagnets in series. So, for example, if you have four identical 12V dc units in series, you would require a $4 \times 12V = 48V$ dc power supply (the current for the ElectroMagnet would be the same as the stated current for the single unit). In simple series connections, if a component electrically fails (goes open circuit), that section in series will stop working (due to zero current).
- When connecting same ElectroMagnets in Parallel (the most common method), the power source current becomes the sum of the currents needed for all the ElectroMagnets in parallel (unchanged voltage). So, for example, if you have four identical 440mA units in parallel, you would require a $4 \times 440mA = 1760mA$ (1.76A) power supply (the voltage for the ElectroMagnet would be the same as the stated voltage for the single unit). In simple parallel connections, if a component electrically fails (goes open circuit), the section in series with it will stop working (due to zero current) but the other parallel sections may continue to work (but you may not be aware of the failure if your circuit has no detection or indication designed in) - it always depends on the circuit design as to what effect you may or may not notice if part of the circuit fails.
- You must not use dc voltage units with an ac supply. You must not use ac voltage units with a dc supply. Both are extremely dangerous. You must use the correct voltage and/or current supply for your circuit (see above note on circuit knowledge).
- Too high a voltage into an ElectroMagnet risks damaging the ElectroMagnet (burning out the coil) so must be avoided.
- Too low a voltage into an ElectroMagnet will give a reduced performance (as it lowers the current in the coil).
- When a current flows within an ElectroMagnet, this is an input of power which eventually becomes heat - the ElectroMagnet will start to heat up over time (by how much depends on your application) which could increase the resistance in the armature windings which then causes the electric current flow to reduce. If your application has cooling (heat sinks) this effect may be reduced. If your application has a low duty cycle, the component will potentially not heat up as much or as quickly.

Although we have made every attempt to provide accurate information, we do reserve the right to change any of the information in this document without notice.

We cannot accept any responsibility or liability for any errors or problems caused by using any of the information provided.

Conversions Guide:-

1kg \approx 2.204lb \approx 9.806N

1lb \approx 0.453kg \approx 4.448N

1N \approx 0.101kg \approx 0.224lb

10mm \approx 0.393in (\approx $\frac{25}{64}$ in)

1in \approx 25.4mm

(the above conversion values are rounded down)

* +/- 10% at room temperature

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