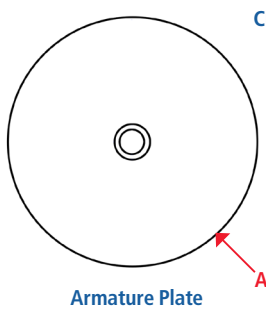


# Armature Plates

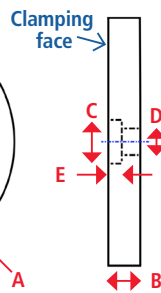
- To fit both ElectroMagnets and Electro-Permanent Magnets.
- Rubber ring supplied to allow for a small degree of flex in their movement (at the back) to maximise direct contact (by allowing minimum air gap) to the ElectroMagnet clamping face to allow maximum possible pull forces to be achieved.
- Pull 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.



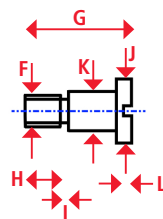
Product Number	Diameter mm	Height mm	Screw supplied	To Suit ElectroMagnet Diameter mm	Weight g	Recommended to be used with ElectroMagnet Product Number	Recommended to be used with Electro-Permanent Magnet Product Number
M52171/25ARM	25	3	M3	20 / 25	15	M52180/12VDC, M52180/24VDC, M52172/12VDC, M52172/24VDC	
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	



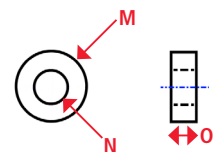
Armature Plate



Armature Screw



Armature Mount (rubber ring)



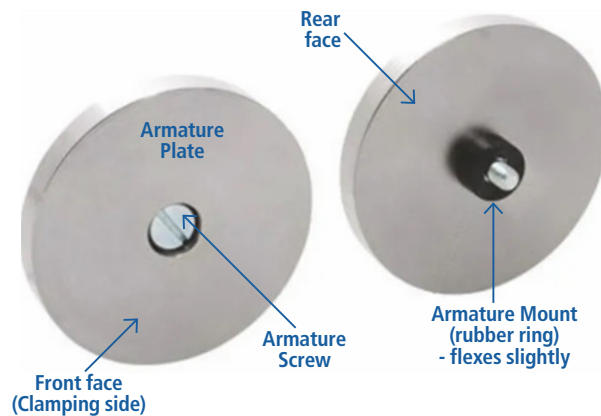
Product Number	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	K mm	L mm	M mm	N mm	O mm
M52171/25ARM	ø25	3	ø8	ø4.4	2.1	M3	9.25	4.25	N/A	ø7	ø4	2	ø8	ø3.75	3
M52171/30ARM	ø30	5	ø9.5	ø5.9	3	M4	13.25	6	N/A	ø8.25	ø5.5	2.5	ø10.5	ø5.2	4.5
M52171/40ARM	ø40	5	ø9.5	ø5.9	3	M4	13.25	6	N/A	ø8.25	ø5.5	2.5	ø10.5	ø5.2	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

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%.