



Ital Produtos Industriais Ltda – Tel: (11) 4148 2518 – FAX: (11) 4703-5501–E-mail: ital@italpro.com.br

Description

EP-CHLUK EPF SERIES

Fine Pole Rectangular Electro-permanent Magnetis Chuck

EPF series Fine Pole Electro-Permanent Magnetic Chuck

- No heat build up or deformation provides high precision accuracy
- No electricity required to keep the electro permanent magnetic chuck on.
- Large metal top plate of brass and steel lamination provides more active magnetic area.
- Variable power makes it possible to adjust the magnetic force.
- Small transverse pole arrangement, the laminations 2 mm brass / 4 mm steel or 0.5 mm brass / 1.5 mm steel. Suitable for milling work and thin work piece.

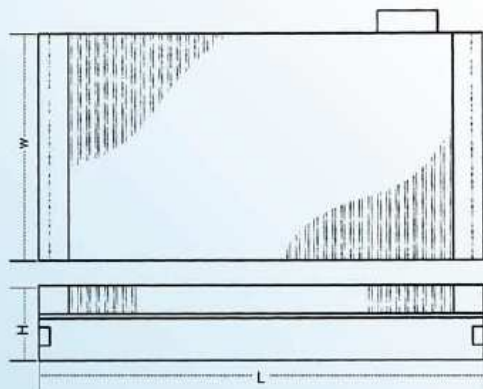
Use:

Heavy milling of thin plates

- min. thickness of workpiece: 5 - 8 mm
- min. size of workpiece: 45 x 45 mm²
- nominal holding force: 110 N/cm²

FEATURES

- No electricity required to keep the electro permanent magnetic chuck on.
- Electro permanent magnetic chuck can be easily fitted to the surface grinder.
- Large area can be arranged by multiple mounting of EPM chucks side by side which can be operated by a single controller.
- Special purpose EPM chucks can also be designed to suit particular applications.
- Pole pitch of 2mm (1.5+0.5) can be made at extra cost.



APPLICATION

- For grinding application of all sizes of jobs.
- Electro permanent magnetic chucks are suitable for horizontal spindle surface grinding machines as the main cutting thrust is towards the length of the chuck, poles at right angle of the wheel give more gripping of the job.

Specifications

Art No.	W(mm)	L(mm)	Pole Pitch(mm)	H(mm)	pole pitch on request(mm)
EPF2050	200	500	6 (2+4)	80	2(0.5+1.5)
EPF2060	200	600	6 (2+4)	80	2(0.5+1.5)
EPF2560	250	800	6 (2+4)	80	2(0.5+1.5)
EPF2575	250	750	6 (2+4)	80	2(0.5+1.5)
EPF25100	250	1000	6 (2+4)	80	2(0.5+1.5)
EPF25150	250	1500	6 (2+4)	80	2(0.5+1.5)
EPF3060	300	600	6 (2+4)	85	2(0.5+1.5)
EPF3075	300	750	6 (2+4)	85	2(0.5+1.5)
EPF3090	300	900	6 (2+4)	85	2(0.5+1.5)
EPF30100	300	1000	6 (2+4)	85	2(0.5+1.5)
EPF30120	300	1200	6 (2+4)	85	2(0.5+1.5)
EPF30150	300	1500	6 (2+4)	85	2(0.5+1.5)
EPF4060	400	600	6 (2+4)	88	2(0.5+1.5)
EPF4090	400	900	6 (2+4)	88	2(0.5+1.5)
EPF5075	500	750	6 (2+4)	90	2(0.5+1.5)

• For Controller details, kindly visit the EPM Controller page.

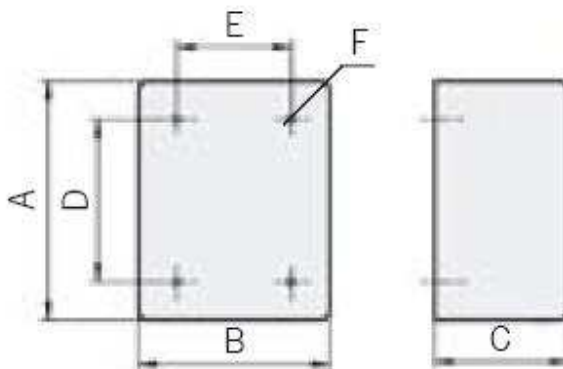
• Due to continuous upgradation in design there could be changes in specification.

• Other size on request.



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Control Unit



Description

For electro-permanent magnetic chucks this control unit is supplying the current impulse for switching the chuck on and off.

The integrated, microprocessor controlled, pole reversing function demagnetizes the magnetic system and also eliminates the remanence magnetism in the workpiece.

Due to this the workpieces can easily be released from the chuck, any chips are easy to remove, and, even more important, separate demagnetization of the workpiece is no longer required.

When control unit and magnetic chuck are ordered as a set, it will be programmed with the most optimum settings in time and function.

The control unit continuously monitors the main supply voltage / current, its outputs, all connecting cables and magnet coils.

Technical data

Maximum ambient temperature: 45 °C

Input voltage: 230 / 400 Vac

Frequency: 50 / 60 Hz

Cycle time for electropermanent magnets: > 3 min.

Smaller cycles on request.



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Specifications

Model	voltage out put (DCV)	Magnet current max. in A	voltage in put (ACV)	Max. magnet rating DC in kW	Fuse in A
Control unit A	360	60	400	21.6	45
Control unit B	360	60x2	400	21.6x2	45
Control unit C	360	60x3	400	21.6x3	45
Control unit D	360	60x4	400	21.6x4	45

Model	A	B	C	D	E	F	Weight in kg
Control unit A	300	250	130	-	-	-	5
Control unit B	300	250	130	-	-	-	5
Control unit C	350	300	150	-	-	-	6
Control unit D	350	300	150	-	-	-	6

other size on request