

## Electro Permanent Lifting Magnet



### Options:

- Different suspension brackets (also special designs)
- Complete magnet cross bars
- Pole plate to protect the pole surface in case of rough use
- Special design for high workpiece temperatures
- Special design for low ambient temperatures
- Plug-type connectors for supply and control system connection
- Inching function to ensure one-plate pick-up

**Electro Permanent Lifting Magnets of type 5180N** are used where ferromagnetic parts are to be lifted and transported safely.

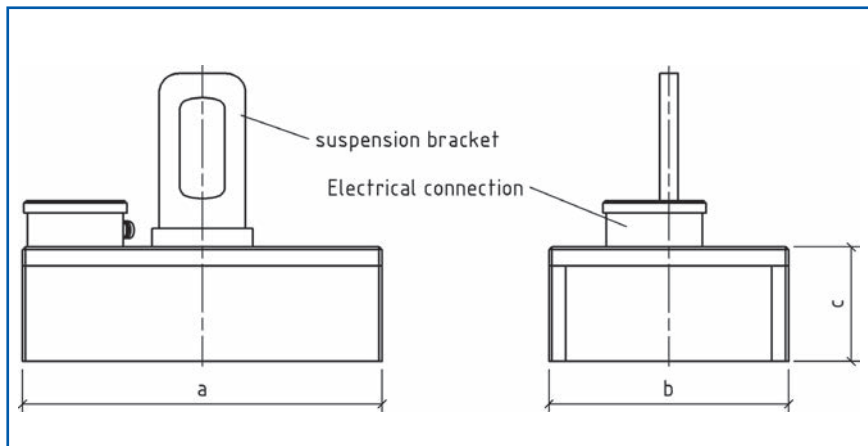
With their integrated double magnet system high lifting capacities are achieved with very little weight of the magnet. Due to the good depth effect large air gaps can easily be bridged. Therefore, type 5180N is particularly suited for the transport of flat workpieces such as plates, slabs and large machine components.

For large or very long workpieces it is possible to use several magnets on one cross bar.

Clamping and unclamping of ferromagnetic parts on and from Electro Permanent Lifting Magnets is made by a short current pulse which activates or deactivates the permanent magnet system. This pulse control ensures low energy consumption at very low self-heating.

The workpieces are held by the integrated permanent magnet system without further current supply. A high-maintenance battery system as used for electric magnets is therefore not necessary. In case of power failure, the magnet maintains its holding force and the workpieces do not fall off!

Our pole reversal control units activate the Electro Permanent Lifting Magnets quickly and reliably. The magnetizing process is monitored at every activation of the magnet. This guarantees optimal operational safety, even in the event of a power failure. Depending on the type, up to 16 holding force levels are available in order to be able, for example, to pick up even very thin parts. The use of multiple demagnetizing programs enables quick and exact demagnetizing. The pole reversal unit can be activated via the PLC or a separate control unit, or by using the keyboard on the lifting magnet.



## Electro Permanent Lifting Magnet Type 5180N

### Characteristics:

Highest level of safety

- Magnetic force maintained even in case of power failure
- Lifting capacity specifications with triple safety acc. to EN13155 to pull-off strength

Energy-conscious

- Power used only for short pulses

### Dimensions and technical data:

Type	Width b [mm]	Length a [mm]	Height c [mm]	Weight ca. [kg]	Pull-off-strength [daN] ①	lifting capacity [daN] ②	at air gap [mm] ③
5180N-25/50	250	500	240	230	8700	2400	0,8
5180N-25/60	250	600	240	255	12900	3200	0,8
5180N-25/75	250	750	240	320	18900	4500	0,8
5180N-50/60	500	600	240	510	28500	5400	1,5
5180N-50/75	500	750	240	640	39600	7900	1,5
5180N-75/100	750	1000	270	1450	72000	10000	2,5
5180N-75/130	750	1300	270	1800	96000	12000	2,5
5180N-75/160	750	1600	270	2400	126000	17500	2,5

① measured acc. to EN13155, at air gap = 0 mm, steel plate thickness: 100 mm

② calculated with triple safety for pull-off strength with regard to air gap specification

③ approx. width magnet / 300 acc. to EN13155 for lifting capacity design

- For lifting magnets, type 5180N-25/... and 5180N-50/... the pole plate can be ordered optionally.
- For lifting magnets, type 5180N-75/... the pole plate is part of the standard scope of delivery, that means the height c = incl. pole plate specified in the table.
- Nominal voltage as pulse EP360 Volt DC
- Protection class: IP 64
- Other dimensions available upon request.

