

Electro Lifting Magnet



Options:

- Different suspension brackets
- Transport holes at rear side
- Special lengths
- Continuous center pole
- Pole plate to protect the pole surface in case of rough applications
- Complete magnet cross bars
- Rectifier and demagnetizing switch for simple demands
- Pole-reversal control units used as DC supply and pole reversal units
- Control units to operate pole-reversal control units and rectifiers

Electro Lifting Magnets of type 518 are used in docks, steel works and shipyards. They are used for handling and transport of various steel products.

The magnetic field is created by the DC-coil in the magnet system. The coil encloses an iron core which is connected with both yoke and arm. By this, north and south pole are generated.

The body of the magnet consists of special steel with high magnetic conductivity. The coil area can be protected using a pole plate (for rough applications). The winding is made of highly insulated copper or aluminum wire, which is tightly encapsulated into the magnet housing, and protected

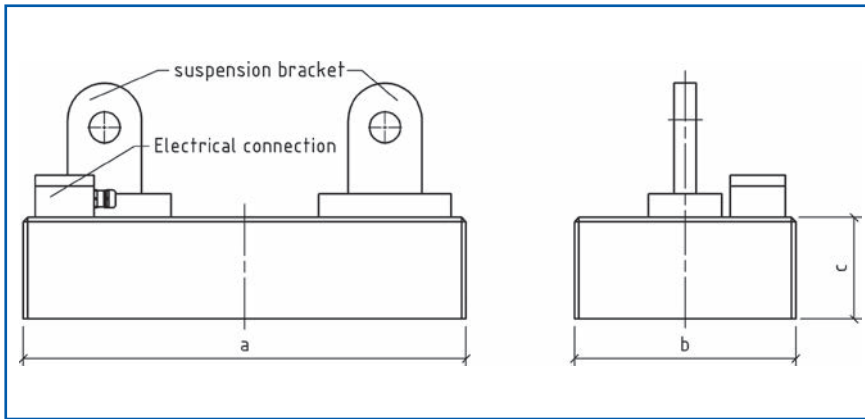
against any vibration or moisture. The electrical connection on the back side of the magnet is covered by a massive steel cover to protect against any damage.

The optimized structure of the magnet housing allows high holding forces even with large air gaps. The continuous center pole allows the picking-up of mass parts up to the outermost sections over the complete length of the magnet.

Due to the different widths of the magnets with different depth effect, special applications are possible such as single transport or package transport of metal sheets.

If the Electro Lifting Magnet is not only used in secured areas, a backup battery and an automatic warning device to signal any power failure are required. This ensures that the transported parts are held safely and emergency measures can be taken. After switching off or in case of power failure, the parts become loose instantly or slightly delayed, depending on the material and weight.

Electro Lifting Magnet Type 518



Dimensions and technical data:

Type	Width b [mm]	Length a [mm]	Height c [mm]	Output [Watt]	Pull-off- strength [daN] ①	lifting capacity [daN] ②	at air gap [mm] ③
518-13/40	130	400	110	220	1540	770	0,5
518-13/50	130	500	110	280	2160	1080	0,5
518-13/60	130	600	110	315	2600	1300	0,5
518-13/80	130	800	110	420	3200	1600	0,5
518-13/100	130	1000	110	560	4600	2300	0,5
518-20/40	200	400	117	260	2600	1150	0,7
518-20/60	200	600	180	970	4000	1750	0,7
518-20/100	200	1000	180	1450	8200	3800	0,7
518-20/120	200	1200	180	1600	9800	4500	0,7
518-30/50	300	500	138	450	4200	1800	1,0
518-30/60	300	600	138	590	5200	2200	1,0
518-30/70	300	700	235	680	7000	3000	1,0
518-30/100	300	1000	235	800	10800	4400	1,0
518-45/100	450	1000	320	2900	19000	8000	1,5
518-60/100	600	1000	350	4000	26000	10000	2,0
518-60/160	600	1600	370	5800	53000	22000	2,0

① measured acc. to EN13155, at air gap = 0.5 mm

② calculated with double safety for pull-off strength at operating temperature, with regard to air gap specification

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

- Nominal voltage: 110 / 220 Volt DC
- Protection class: IP 64
- rel. operating time: 60 to 100 %
- Other dimensions available upon request.
- Power supply:

If the lifting magnet is not only used in secured areas, a backup battery and an automatic warning device to signal any power failure are required. This backup battery provides power to the magnet which allows holding the load for at least 10 minutes. We offer magnet control units which include the backup batteries required acc. to EN13155 (not necessary in secured areas).