- USE AND MAINTENANCE MANUAL
- OPERACIÓN Y MANTENIMIENTO
- MODE D'EMPLOI ET INSTRUCTIONS D'ENTRETIEN

CE

FXE LIFTING MAGNETS

FXE Lifting Magnet Type 50

Suitable for lifting sheet metal, laser and flame-cut parts, tools and blanks.

FXE Lifting Magnet Type 50L

Suitable for lifting strips, rails, pipes, beams and bars.

FXE Lifting Magnet Type 80

Suitable for lifting heavy plates, plasma and flame cut parts, tools and blanks.

FXE Lifting Magnet Type 100

Suitable for lifting forged parts, heavy plates, plasma and flame-cut parts, tools and cast ingots.

USE AND MAINTENANCE MANUAL

English

OPERACIÓN Y MANTENIMIENTO

Español

FONCTIONNEMENT ET DE MAINTENANCE

Français

English

Use and maintenance manual for FXE Lifting magnets

READ AND UNDERSTAND THIS MANUAL BEFORE INSTALLATION AND OPERATION OF YOUR LIFT MAGNET PRODUCT.

If used carelessly or improperly, there is a possibility that property damage or personal injury can result. The responsibility for safe operation ultimately rests with the operator. This manual is part of the lifting magnet and must be available to the user at any time.

Caution:

The magnet shall only be used for lifting steel as described below. If any doubts exist, contact Industrial Magnetics. Do not change the original configuration of the device.

The warranty period is 12 months after delivery. Excluded are defects which arise from:

- Improper use and/or not following the instructions and/or the maintenance instructions
- Normal wear
- Modifications and/or repairs that have not been carried out by an authorized workshop

1. WORKING LOAD LIMIT (WLL):

Your Lift Magnet has a stated Working Load Limit (WLL) which is sometimes referred to as the Lift Capacity. The stated Working Load Limit value is calculated by applying a De-rating (Design) factor to the maximum value of the Lift Magnet. The maximum value is determined by pulling a new magnet in a perpendicular motion from a thick, newly machined, piece of steel. This method of testing is conducted under what is considered “ideal conditions”. The amount of force it takes to break the Lift Magnet away from the steel test surface under these conditions is the Lift Magnet’s maximum value.
The stated Working Load Limit value is for the benefit and safety of the user. Ideal conditions rarely exist in the field. Conditions such as worn or damaged magnet poles and load surfaces that have mill scale, oxidation, dirt, or other coatings will cause a reduction in performance of the Lift Magnet.

1.1 Scope of application

FXE type Permanent lifting magnets are made for holding and lifting ferromagnetic parts (magnetically behaving as iron). The lifting magnets are compact, easy to use, safe and reliable. Use of lifting magnets can simplify operations and reduce loading and unloading times. These magnets are suitable for lifting in many areas such as manufacturing, industry, shipyards, warehouses, transportation and conveying technology. Usually, lifting magnets are used with cranes, but can also be used with other machines such as forklifts and excavators.
This manual only regulates the use of FXE lifting magnets. Safety concerns associated with the hoist and rigging cannot be covered in this manual.

1.2 Notes on commissioning/Start Up

Installation and start-up are very simple and safe provided that the load limits and the application standards of the Lift Magnet are observed for handling suspended loads.

1.2.1 Remove the Lift Magnet from packaging and set on a non-ferrous floor or support structure. This operation is to be done with a crane or hoist of appropriate capacity by hooking to the lift lug the top of the Lift Magnet. Check the Lift Magnet for missing parts, loose bolts or damage. Tighten where necessary or contact the manufacturer.
1.2.2 Clean the area where the Lift Magnet will touch. With a crane or hoist of appropriate capacity, position the Lift Magnet in the center of the load to be moved. Be careful to make sure that the load to be lifted does not exceed the Lift Magnet's Working Load Limit for the steel's thickness. See the Safety Precautions section 1.3 below for more information.
1.2.3 Make sure the magnetic poles are in full and perfect contact with the load and is properly located on the load to be lifted. The FXE models feature pushbuttons to control the Lift Magnet's magnetism. These magnets will be functionally on or off as indicated by LED lights. See Section 4. Operation and Use (page 11) for model specific information
1.2.4 Proceed to move the load observing applicable standards for handling any suspended load. See the Safety Precautions for general safe lifting protocols.
1.2.5 Set the load on the floor or an appropriate support and ensure that the load is perfectly settled before releasing the Lift Magnet from the load.
1.2.6 See section 4. Operation and Use (page 11) for model specific information on how to release the Lift Magnet from the load.
1.2.7 Lifting magnets may be used only by qualified persons who are trained to safely use these lifting magnets.
1.2.8 Only with the consent of a doctor, may persons with pacemakers or other implanted electrical devices use lifting magnets.

1.3 Safety Precautions for the Operation of Lifting Magnets

Please read the entire manual before using.

ALWAYS use the entire pole surface of the Lift Magnet.
ALWAYS keep contact pole areas perfectly flat & parallel on the surface of the load.
ALWAYS keep contact pole areas and surface of the load clean and free of debris.
ALWAYS protect pole surfaces from oxidation after use by treating with oil.
ALWAYS store magnet in a dry environment.
ALWAYS check the magnetic poles to make sure they are flat and not damaged.

ALWAYS use lifting magnets with personal protective equipment (PPE, helmet, gloves etc.)

ALWAYS use lifting magnets in a way to ensure that they are not overloaded, and the load is secured from falling. Only use standards-compliant hoists equipped safety latches on the hook.

DO NOT place any body part between the Lift Magnet's face and steel. Sudden magnetic attraction may occur causing bodily harm.

DO NOT hoist a load weighing more than the Lift Magnet's stated Working Load Limit or capacity.
DO NOT attempt to energize the Lift Magnet before resting it on the steel to be lifted.
DO NOT hoist a load if it is flexing or unbalanced. Load must not be angled more than 5 degrees from horizontal. Magnet 'peel-off' may occur and the load may fall.
DO NOT hoist a load before ensuring proper magnetic contact. First make a TEST lift of 2 or 3 inches (5-7.5 cm) using the 33% test feature to ensure proper magnetic holding force. See Section 4.2

DO NOT disengage the Lift Magnet before firmly setting down the load on the floor or appropriate support and making sure the load is secure.
DO NOT weld in close proximity to the Lift Magnet or use the Lift Magnet as a part of the ground circuit during a welding operation.
DO NOT place the magnet directly onto an electrically grounded floor.
Use a non-conductive spacer.
DO NOT lift people or loads with people on them
DO NOT leave suspended loads unattended.
DO NOT operate a Lift Magnet that is missing parts, damaged or malfunctioning.
DO NOT remove or obscure product labeling.
DO NOT lift loads higher than necessary or over people.
DO NOT center the Lift Magnet by pounding on the sides of the Lift Magnet with a hammer or other blunt instrument.
DO NOT lift dangerous goods (e.g. filled gas cylinders)
DO NOT use in a way, that persons are harmed (i.e. Warn Bystanders)
DO NOT use for loads that are comprised of many pieces (scrap) or stacks of sheet
DO NOT cause the load to jar or bounce

Notes:
Especially when lifting very light workpieces or hardened and tough materials such as tool steel, it may be that the load adheres by residual magnetism or adhesion to the magnet after switching off the magnet. If in this situation, raise the magnet slowly and only a few inches of the ground and loosen the load by tapping or pry the load off the magnet.

1.4 Electrical Hazards

1. DANGER - High Voltage - 480VAC
2. Replace power cable immediately if cable jacket is damaged or worn.
3. Replace line fuses ONLY with same type and ampere rating.
4. Check cable entries to magnet and power connector on a regular schedule. Look for loose fit or damage to cable jacket.

2. Factors affecting the lifting force of the lifting magnets

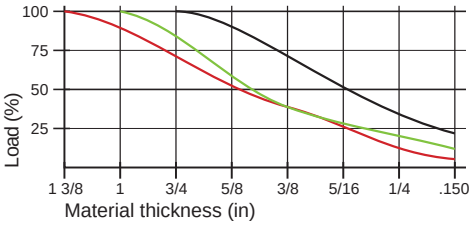
On the underside of the lifting magnets are the magnetic poles, which transmit the magnetic force to the load in the ON state. The maximum possible force, and therefore the lifting capacity, depend on the factors described in Sections 2.1-2.5. Always observe these factors and confirm BEFORE lifting to see whether the data of the lifting magnets and the load allows for safe transport.

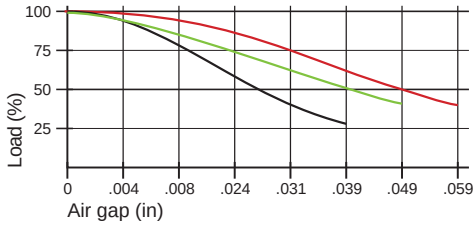
2.1 The contact surface

The contact area between magnet and the load to be lifted must be clean and free of any irregularities (dirt, rust scale, weld BB's, paint, paper, roughly machined surfaces, etc.). If a distance (air gap) exists between the lifting magnet(s) and the load to be lifted, the lifting capacity will be reduced. Please refer to the tables below.

2.2 The Material thickness

The lift capacity of the lifting magnets requires a minimum material thickness. If the workpiece is less than the minimum material thickness, the lift capacity will be reduced. Generally, higher lifting capacity requires increased thickness.





Pole structure 50 is designed for lifting sheets from .150 in and steel parts with a flat or processed surface. The nominal values of the FXE Lifting magnets with pole structure type 50 are achieved up to an Air gap of .012 in. With air gap 0, the pole structure 50 reaches a holding force of 854 lbs.

Pole structure 80 is designed for lifting sheets from 5/16 in and solid steel parts and internal sections with a medium air gap. The nominal values of the FXE Lifting magnets with pole structure 80 are achieved up to an air gap of .015 in. With air gap 0, the pole structure 80 reaches a holding force of 2,023 lbs.

Pole structure 100 is designed for lifting of heavy plates from 1/2 in and greater thickness steel, form and Forgings with larger Air gap. The nominal values of the FXE Lifting magnets with pole structure 100 are achieved up to an air gap of .024 in. With air gap 0, the pole structure 100 reaches a holding force of 3,260 lbs.

Lifting Capacities below

FXE0660-50

Working Load Limit on sheets and square pipes		
Material thickness	WLL (lbs)	max. Dimension (ft)
from 5/32 in	154	6x5
from 1/4 in	309	7x5
from 5/16 in	440	7x5
from 3/8 in	617	7x5
from 1/2 in	660	7x5

FXE1650-50

Working Load Limit on sheets and square pipes		
Material thickness	WLL (lbs)	max. Dimension (ft)
from 5/32 in	330	6x5
from 1/4 in	551	7x5
from 5/16 in	882	7x5
from 3/8 in	1323	7x5
from 1/2 in	1650	9x5

FXE3525-50

Working Load Limit on sheets and square pipes		
Material thickness	WLL (lbs)	max. Dimension (ft)
from 5/32 in	661	9x5
from 1/4 in	1102	9x5
from 5/16 in	1764	9x5
from 3/8 in	3087	9x5
from 1/2 in	3525	9x7

FXE0880-50L

Working Load Limit on sheets and square pipes		
Material thickness	WLL (lbs)	max. Dimension (ft)
from 5/32 in	150	6x3
from 1/4 in	305	7x3
from 5/16 in	440	7x3
from 3/8 in	550	8x3
from 5/8 in	880	10x3

FXE1320-50L

Working Load Limit on sheets and square pipes		
Material thickness	WLL (lbs)	max. Dimension (ft)
from 5/32 in	220	7x3
from 1/4 in	440	8x3
from 5/16 in	660	8x3
from 3/8 in	770	10x3
from 5/8 in	1320	13x3

FXE2200-50L

Working Load Limit on sheets and square pipes		
Material thickness	WLL (lbs)	max. Dimension (ft)
from 5/32 in	330	8x5
from 1/4 in	660	10x5
from 5/16 in	880	10x5
from 3/8 in	1100	13x5
from 5/8 in	2200	16x5

FXE2200-80

Working Load Limit on sheets and square pipes		
Material thickness	WLL (lbs)	max. Dimension (ft)
from 5/16 in	440	7x5
from 3/8 in	660	7x5
from 5/8 in	1320	7x5
from 1 in	2200	7x5

FXE5500-80

Working Load Limit on sheets and square pipes		
Material thickness	WLL (lbs)	max. Dimension (ft)
from 5/16 in	1100	7x5
from 3/8 in	1650	10x5
from 5/8 in	3300	10x5
from 1 in	5500	10x7

FXE8800-80

Working Load Limit on sheets and square pipes		
Material thickness	WLL (lbs)	max. Dimension (ft)
from 5/16 in	1775	10x5
from 3/8 in	2650	10x5
from 5/8 in	5290	10x5
from 1 in	8800	13x5

FXE-3525-100

Working Load Limit on sheets and square pipes		
Material thickness	WLL (lbs)	max. Dimension (ft)
from 3/8 in	880	7x5
from 3/4 in	2200	7x5
from 1 3/8 in	3525	10x5

FXE5300-100

Working Load Limit on sheets and square pipes		
Material thickness	WLL (lbs)	max. Dimension (ft)
from 3/8 in	1320	7x5
from 3/4 in	3300	10x5
from 1 3/8 in	5300	10x5

FXE7000-100

Working Load Limit on sheets and square pipes		
Material thickness	WLL (lbs)	max. Dimension (ft)
from 3/8 in	1760	10x5
from 3/4 in	4850	10x5
from 1 3/8 in	7000	13x5

FXE10600-100

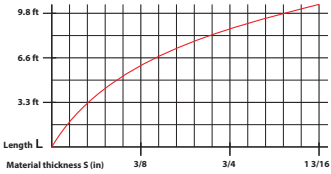
Working Load Limit on sheets and square pipes		
Material thickness	WLL (lbs)	max. Dimension (ft)
from 3/8 in	2650	10x8
from 3/4 in	6600	12x8
from 1 3/8 in	10600	16x10

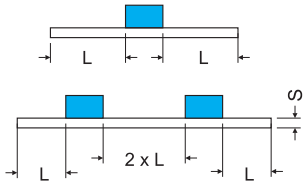
FXE35000-100

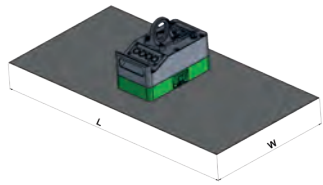
Working Load Limit on sheets and square pipes		
Material thickness	WLL (lbs)	max. Dimension (ft)
from 3/8 in	8500	10x8
from 3/4 in	20000	12x8
from 1 3/8 in	35000	16x10

2.3 The workpiece dimensions / susceptibility to deflection (sag)

In addition to material thickness, material size plays a role. Longer and thinner sheet and bars tend to deflect, or sag, due to gravity. This causes the magnet contact area to become a large arc, not a flat surface, which is required. If longer or thinner parts need to be lifted, multiple magnets on a spreader system should be utilized.







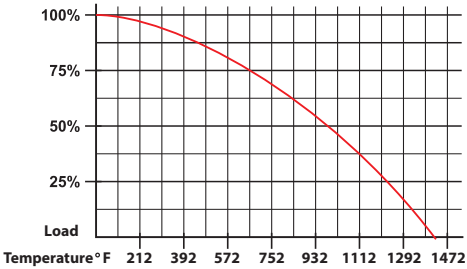
2.4 The composition of the load to be lifted

Steel with low carbon content (0.05% to 0.29%) is a good magnetic conductor. Steel with a high carbon content, or other materials such as alloyed steel, lose some of their magnetic properties. Therefore, the capacity of the lifting magnet is reduced. Heat treatments and other conditions which affect the steel structure also reduce the lifting power. Harder steels also tend to have increased residual magnetism. The nominal power of lifting magnets is measured using low carbon steel.

Percentage of Stated Lifting Power by Material	Lifting capacity in %
Low Carbon 0.05 - 0.29%	100
Moderate Carbon 0.30 - 0.59%	85
High Carbon 0.60 - 0.99%	75

2.5 The Temperature of the Load to be lifted

The temperature of the material being lifted will affect the capacity of the magnet. The figures are for a **workpiece temperature** up to a maximum of 180°F/82°C.



ATTENTION

Always pay attention to the temperature of the Lifter. The workpiece temperature is NOT THE SAME as the Lifter temperature!

Caution:

The sum of the reduction factors 2.1-2.5 gives the actual payload for your individual application. All factors must be considered BEFORE every lifting operation!

3. Technical Data

FXE lifting magnets are permanent magnets that use electricity to change state (ON and OFF, grip/release).

To determine the magnet dimensions, weights and permissible load limits on loads with a smooth surface (RA < 250 micro-inch), please refer to the following tables:

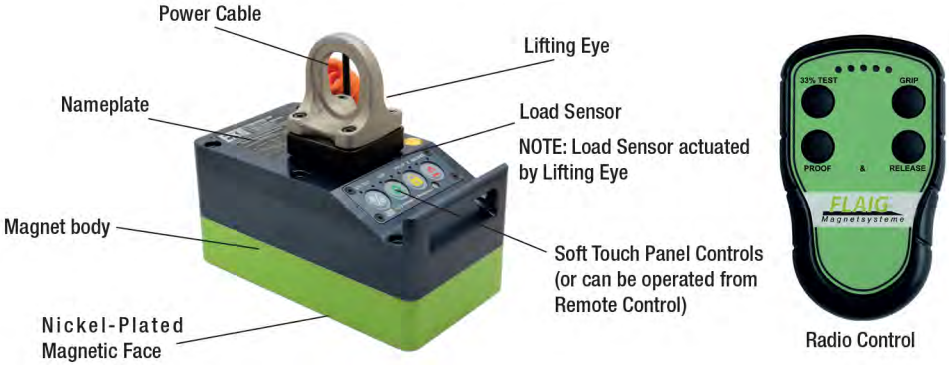
FXE Series Imperial System

Model	Dim. (in)			Working Load Limit (lbs)	Weight (lbs)	Voltage (V)	Fuse* (Time Delay type)
	L	W	H				
FXE0660-50	6.4	6.4	16.5	660	50	380-480 50/60Hz	15 A
FXE1650-50	11.7	6.4	9.8	1650	60	380-480 50/60Hz	15 A
FXE3525-50	24.4	6.4	10.6	3525	125	380-480 50/60Hz	20 A
FXE0880-50L	11.5	3.7	17.7	880	50	380-480 50/60Hz	15 A
FXE1320-50L	16.5	3.7	17.7	1320	70	380-480 50/60Hz	20 A
FXE2200-50L	26.8	3.7	17.7	2200	100	380-480 50/60Hz	20 A
FXE2200-80	9	9	11.6	2200	85	380-480 50/60Hz	15 A
FXE5500-80	20	9	11.6	5500	170	380-480 50/60Hz	25 A
FXE8800-80	31	9	11.6	8800	290	380-480 50/60Hz	30 A
FXE3525-100	11.6	11.6	13.6	3525	180	380-480 50/60Hz	25 A
FXE5300-100	16.5	11.6	13.2	5300	260	380-480 50/60Hz	30 A
FXE7000-100	21.1	11.6	13.2	7000	340	380-480 50/60Hz	30 A
FXE10600-100	30.6	11.6	15.7	10600	660	380-480 50/60Hz	35 A
FXE35000-100	60	21.5	18	35000	1810	380-480 50/60Hz	35 A
*BUSSMAN LP-CC or LPJ or EQUAL							

FXE Series Metric System

Model	Dim. (mm)			Working Load Limit (kg)	Weight (kg)	Voltage (V)	Fuse* (Time Delay type)
	L	W	H				
FXE0660-50	164	164	420	300	23	380-480 50/60Hz	15 A
FXE1650-50	298	164	250	750	27	380-480 50/60Hz	15 A
FXE3525-50	620	164	270	1600	56	380-480 50/60Hz	20 A
FXE0880-50L	294	95	450	400	23	380-480 50/60Hz	15 A
FXE1320-50L	420	95	450	600	31	380-480 50/60Hz	20 A
FXE2200-50L	680	95	450	1000	44	380-480 50/60Hz	20 A
FXE2200-80	228	228	295	1000	39	380-480 50/60Hz	15 A
FXE5500-80	506	228	295	2500	77	380-480 50/60Hz	25 A
FXE8800-80	783	228	295	4000	132	380-480 50/60Hz	30 A
FXE3525-100	296	296	345	1600	82	380-480 50/60Hz	25 A
FXE5300-100	415	296	335	2400	118	380-480 50/60Hz	30 A
FXE7000-100	536	296	335	3200	154	380-480 50/60Hz	30 A
FXE10600-100	778	296	400	4800	202	380-480 50/60Hz	35 A
FXE35000-100	1270	600	255	16000	680	380-480 50/60Hz	35 A
*BUSSMAN LP-CC or LPJ or EQUAL							

3.1 The main components of the FXE lifting magnets are:



Should any parts be damaged or missing, the magnet must be inspected by a qualified person before further use.

4. Operation and Use

After observing the previous instructions and parameters, and the material to be lifted is clearly defined, you can start the lifting operation. Proceed as follows:
The FXE magnets are controlled via four pushbuttons, they are from left to right:
33% TEST (red LED) • GRIP (green LED) • PROOF (orange LED) • RELEASE (white LED)

4.1 Connect the lifting magnet to 480VAC, single phase supply voltage. When power is applied, the white LED above the button labeled RELEASE will flash to indicate that the magnet is in an undefined state. Connect brown lead to L1, blue lead to L2 and green/yellow to ground. Hardwiring to a junction box or use of twist-lock style connectors are recommended.

4.2 If it is desired to test the magnet on the target item to be lifted, the magnet can be placed in TEST mode to lift the part with 33% of full power.

To check whether the workpiece can be transported safely, place the magnet on the workpiece and press the 33% TEST button, the orange PROOF LED will flash briefly above the PROOF button. The red LED above the 33% TEST button then lights up to indicate that the magnet is activated with partial power. In this state, the workpiece may only be lifted slightly but must not be transported under any circumstances!

If the magnet can lift the part, place the magnet into full power mode. This is done by pressing the GRIP button. After pressing GRIP, the orange PROOF LED above the PROOF button lights up briefly and then the green status LED above the GRIP button turns on to indicate that the maximum magnetization has occurred. The magnet will then operate with a 3-to-1 design factor as required.

4.3 After checking the safety by means of the 33% TEST operation or directly from the RELEASE switching state, the maximum magnetization can be triggered with the GRIP button. After pressing, the orange cycle LED above the PROOF button lights up briefly and then the green status LED above the GRIP button turns on to indicate that the maximum magnetization has occurred. **Carry out transport only if the green LED lights up and the alarm LED (PROOF) does not flash!**

4.4 Releasing the workpiece with PROOF & RELEASE: ONLY when the load is supported securely from below.

To release the workpiece, the PROOF and RELEASE buttons must be pressed simultaneously. The orange cycle LED above the PROOF button lights up briefly and then the white status LED above the RELEASE button lights up.

4.5 If there is insufficient magnetization, the orange LED flashes above the PROOF button as an alarm signal. The cause may be low supply voltage caused by insufficient cable cross-section or a too much resistance at the cable connection(s).

If this lamp is illuminated:
OK to GRIP
White LED's indicate magnet OFF

The magnet is demagnetized, the lifting eye is unloaded; Ready for magnetization

If this lamp not illuminated:
Load is not supported from below and GRIP and RELEASE are inhibited

The lifting eye is loaded; GRIP and RELEASE are prohibited

The magnet is magnetized, the lifting eye is loaded; RELEASE is inhibited

If this lamp is illuminated:
OK to RELEASE
Green LED's indicate magnet ON

The magnet is magnetized, the lifting eye is unloaded

ATTENTION: FXE magnets utilize a load sensor protection circuit which senses a slack rope or chain. The magnet can only be demagnetized AFTER the lifting eye has been lifted and lowered, i.e. if the magnet is turned ON, it cannot be turned OFF unless the lifting eye is lifted slightly and lowered again.

IMPORTANT: Demagnetization must take place within 5 seconds of lowering the lifting eye. Otherwise, demagnetization is only possible after raising and lowering the lifting eye again.

CAUTION: Do Not attempt to activate the magnet before it is placed on the load. The lifting force is up to 10X lower if magnet is activated while suspended above the load.

Remove the magnet only when it is demagnetized (turned OFF)!

4.6 Radio Remote Control:

Please note when using the remote control:

First press the RELEASE button on the magnet
Function and operation of each button is described in section 4 of this manual
The center green LED will illuminate, indicating a button was pressed
The strongest signal can be achieved by aiming the remote at the magnet
Maximum reach is 25 feet (8 meters)

CAUTION: Only one person is to operate the magnet at any time!

When the red LED illuminates, change the battery

BATTERIES = 3 x AAA (LR03) ALKALINE

Batteries accessible by removing five screws holding the back cover in place

4.7 Teaching a Wireless Remote Control

Log off remote control from receiver

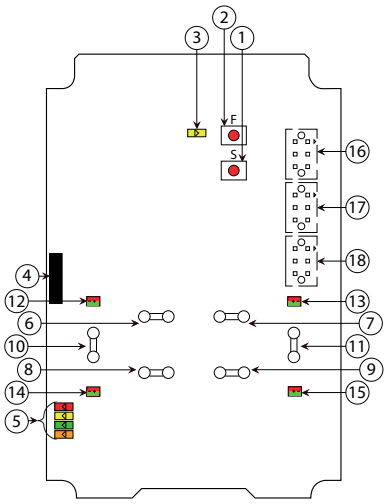
This logout option is used when a lost or damaged remote control must be logged out by the receiver.
1. 1. Press the 'Select' button on the receiver board - orange Function LED lights up.
2. Press and hold (at least 4 seconds). LED goes out.
The transmitter is now logged off. Another transmitter can be registered.

Registering the new Radio Control 603929 with the FXE receiver

REGISTERING THE REMOTE CONTROL WITH THE RECEIVER
WARNING: Only register one remote control with the magnet.
IMPORTANT! To establish a radio connection between remote control and receiver, both must be in the same radio mode.

1. Press the 'Function' button (F) on the receiver. The function LED lights up (red).
2. Press the 'Select' button (S) on the receiver. The Status LEDs (12-15) will light (red).
3. Press and hold buttons 1 and 2 (33% TEST & GRIP on Remote Control)
The relay LEDs light up (red). The Status LEDs (12-15) flash twice (red).
4. Release button 1 and 2. The Status LEDs (12-15) flash once (red).
The remote control is registered.

If no remote control is found within 10 seconds, the receiver returns to normal operation.



1. 'Select'-button (OK)
2. 'Function'-button (Cancel)
3. Power supply-LED (yellow)
4. Programming Connection
5. Function-LEDs
   (5 = red, 6 = yellow, 7 = green, 8 = orange)
6. Transistor output 1*
7. Transistor output 2*
8. Transistor output 3*
9. Transistor output 4*
10. Input power supply ground*
11. Input power supply ground 12-24 V DC*
12. Status-LED 1 for Transistor output 1 (red/green)
13. Status-LED 2 for Transistor output 2 (red/green)
14. Status-LED 3 for Transistor output 3 (red/green)
15. Status-LED 4 for Transistor output 4 (red/green)
16. Connection for different inputs (not used)
17. Connection for different inputs (not used)
18. Connection for different inputs (not used)

*Flat plug (4.8 mm, male)

5. Tests, Maintenance and Repair

Tests:

Visual inspection

New magnets are delivered with a manufacturer's Declaration of Conformity, which confirms compliance with the standards MD 2006/42 EEC and EN 13155, USA Standard ASME B30.20 BTH-1 Design Category B Service Class 3.

As required by ASME B30.20, break away Test Certificate are provided with the magnet shipment.
We recommend noting the date of initial operation in the Test Certificate.

Annual Breakaway Test

An annual Breakaway test, performed by an approved testing facility, is recommended by ASME B30.20 to ensure that your Lift Magnet is performing to its optimal level. Under an "Ideal Condition" environment, a series of Breakaway tests will determine the current "de-rated" Working Load Limit of your magnet. This Working Load Limit must meet or exceed the value stated on your Lift Magnet. If the stated Working Load Limit is met, the Lift Magnet can be returned to use and scheduled for another Breakaway test in one year. The outcome of the test allows the operator/owner of the Lift Magnet to know that the Lift Magnet meets the lift standards as designed by the manufacturer.
If the stated Working Load Limit is not met, the Lift Magnet can possibly be machined to bring all magnet face poles back to a smooth, level condition. If that does not bring the Lift Magnet back to the manufacturer's original Working Load Limit, the Lift Magnet should be removed from operation and replaced with another magnet.

IMI or its representatives will gladly check your lifting magnets, either at your location or at our factory. Our mobile testing service for lifting magnets checks all brands, up to 5,000 capacity (15,000 lbs break away). The mobile Breakaway Testing device can be brought directly to the workplace of the user so that the test can be performed without much downtime and paperwork.

Spare parts for almost all lifting magnets are carried by the factory and Industrial Magnetics. This will minimize downtime, even if repairs are required.

Use/Maintenance: 

Before each use:

The lifting magnet must be checked for defects and mechanical function before each use. The pole pieces must not be deformed or worn. The soft touch buttons and/or remote control must be intact.

Weekly:

Check the entire magnet, including lifting eye, for deformation, cracks or other defects. If the lifting eye or shackle is bent or visibly worn, they must be replaced immediately. Check whether all nameplates are in place and legible. Check the Pole pieces. If these are damaged or worn (holes, notches, etc.) then these must be repaired or replaced.

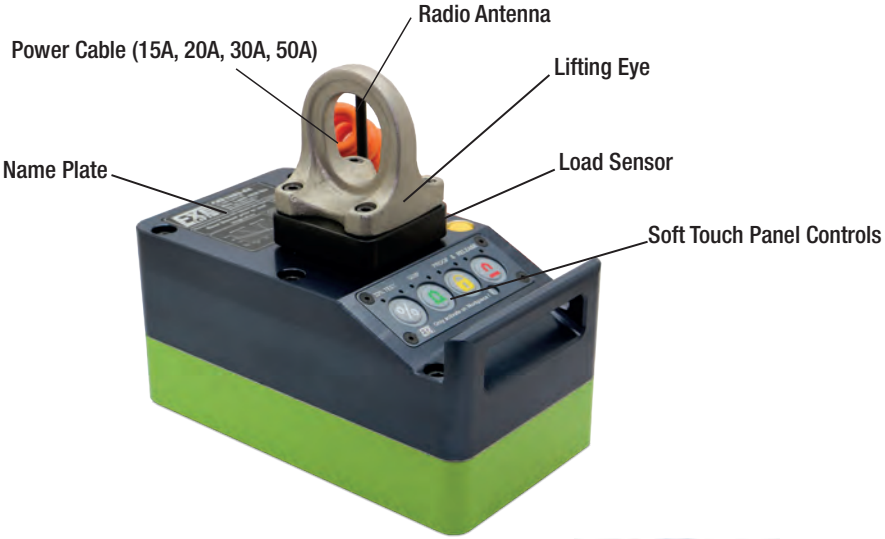
If Refurbished:
Repair work on lifting magnets must be carried out by a qualified person before further use.
Any changes must be documented by a new break away test.

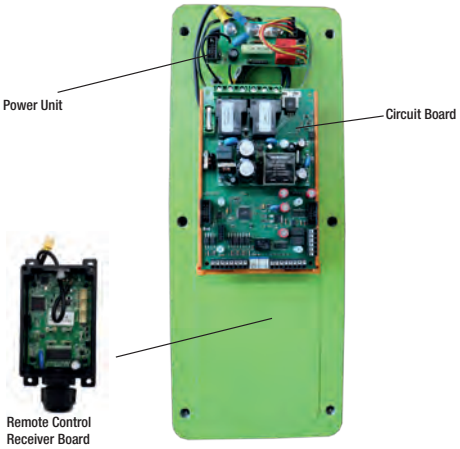
6. Storage and disposal

Lifting magnets must be stored in a way such that they do not tilt, fall or slide. Lifting magnets should be stored protected from the weather and corrosive substances. For longer storage, it is advisable to lubricate the magnet face.
When the lifting magnet is no longer in use, or at end of life, the device must be disposed of properly and in an environmentally friendly manner. Take note of the relevant provisions of the relevant authorities.

7. Spare parts for FXE lifting magnets

FXE lifting magnets consist of various components. These are also available as spare parts. The following spare parts are available for all FXE lifting magnet models.





Radio Control

Declaration of Conformity

2006/42 EG

Flaig Magnetsysteme GmbH & Co. KG
St.Georgener Straße 73
78739 Hardt
Germany

We declare on our own Responsibility the Machine below

FXE type Electric Permanent Magnetic Lifter

Model:
FXE0660-50 • FXE1650-50 • FXE3525-50
FXE0880-50L • FXE1320-50L FXE2200-50L
FXE2200-80 • FXE5500-80 • FXE8800-80
FXE3525-100 • FXE5300-100 • FXE7000-100 • FXE10600-100 • FXE35000-100

TO WHICH THIS DECLARATION REFERS; CONFORMS WITH THE REQUIREMENTS OF THE FOLLOWING DIRECTIVES:

EN 292/1, EN 292/2, EN 13155, EN 61000-6-4, EN 61000-6-2, EN 550111

IN COMPLIANCE WITH DIRECTIVE:
2018 ASME B30.20 BTH-1 Design Category B, Service Class 3
2006/42 EG

Hardt/Germany 01.01.2020 Horst Flaig (Director)

Notes

Notes

Test Certificate for FXE Lifting Magnets

Model and Serial Number

_____

Initial start-up

_____

Regular inspection every 12 months

Model	S-Nr.	Date	Reason	OK?	Person/ Sig	Notes

Test Certificate for FXE Lifting Magnets

Model and Serial Number

_____

Initial start-up

_____

Regular inspection every 12 months

Model	S-Nr.	Date	Reason	OK?	Person/ Sig	Notes

Test Certificate for FXE Lifting Magnets

Model and Serial Number

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Initial start-up

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Regular inspection every 12 months

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Test Certificate for FXE Lifting Magnets

Model and Serial Number

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Initial start-up

_____

Regular inspection every 12 months

Model	S-Nr.	Date	Reason	OK?	Person/ Sig	Notes

FXE LIFT

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V 2.0 201020