

Circular Lifting Magnets Type : LRV

ELEKTROMAG" Lifting magnets Type: LRV... are particularly suited for transporting piled up material of irregular shape such as pig iron, turnings, scrap etc. Optimum dimensioning of magnetic, mechanical and electrical components ensure outstanding lifting capacity in relation to magnet dead weight. Thus the load-carrying capacities of even small cranes is used to the full.

"ELEKTROMAG" Lifting magnets Type : LRV... are of sturdy construction, warranting extreme operating safety in toughest working conditions. The magnet body is of permeability steel of maximum toughness. The bumping plate is of non-magnetic, wear resistant, high manganese steel and is generously dimensioned and strongly rib-reinforced. An extra-high inner ring-shaped rib closely surrounds the centre pole to safeguard pole edges against wear.

The standard three-fall chain suspension with common suspension ring has been dimensioned to suit all normal duty loads. To handle extreme weights special chains are available at extra cost.

Fort connection of the supply cable magnets are fitted with a metalclad plug and socket, two -pole plus earth, additionally protected by a cats steel cover. the cover is closed by a captive bolt which cannot get lost and prevents any inadvertent opening of the cover at high acceleration.

COILS

Standard exciter coils are wound with high conductivity aluminium conductor. Using highest grade insulating material. Coils are cast into their magnet body with a special resin compound of excellent heat conductivity and thus rigidly fixed in position. In special cases can be furnished with copper conductor.

DUTY FACTOR

The permissible relative duty factor is 60% 10 minutes, i.e. 6 minutes ON and 4 minutes OFF and rated for class 'H' insulation.

Normal operating voltage is 220 volts DC with the exception of type : LRV5 which is for an operating voltage of 110 Volts DC. Power input for cold magnet listed in table governs selection of suitable electrical accessories. In continuous service, heating of the exciter windings reduces power input.

TECHNICAL DATA

Tear-off forces listed relate to a level solid, thick slab and an air-gap corresponding to 1/300 or 1/20 of outer magnet diameter (d).

Lifting capacity values listed in table apply to magnets at service temperature.

Lifting capacity values are average values. They may be exceeded or not be reached in actual duty since the volume seized in each lifting operation depends largely on type, shape, alloy composition, distribution and storage of the material.

ELECTRICAL ACCESSORIES REQUIRED WITH THE LIFTING MAGNET: (AVAILABLE FROM ELEKTROMAG)

1. Transform rectifier set.
2. Contactor panel.
3. Cable reeling drum.
4. Master controller or push button station.

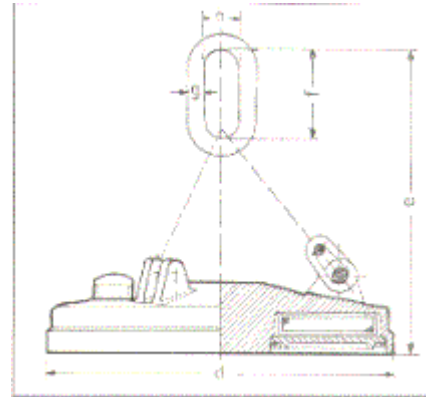


TABLE FOR LIFTING MAGNETS TYPE :LRV... 60% 10 MINS. DUTY FACTOR

TYPE	P.C. COLD KW	APPROX. WEIGHT Kg.	DIMENSIONS IN MM					LOAD CAPACITY OF CHAIN (MAX.) KG.
			D	E APPROX.	F	G	H	
LRV5	1.2*	112	498	482	135	18	75	2350
LRV7	2.3	264	700	579	135	18	75	2350
LRV9	3.7	510	888	676	160	22	90	4250
LRV10	4.5	629	988	736	180	26	100	5800
LRV11	5.6	1000	1094	810	180	26	110	6500
LRV13	7.9	1425	1297	918	200	32	110	10,200
LRV15	9.2	1970	1500	1015	200	32	110	11,000

TEAR OFF FORCE				APPROXIMATE LIFTING CAPACITIES FOR MAGNETS				
TYPE	MAGNET d/300 COLD	MAGNET d/300 WARM	MAGNET d/20 WARM	SLAB INGOT	PIG	CAST IRON SCRAP Grade 3a	SOLID SCRAP Grade 24	SHORT STEEL TURNINGS Grade 40
	daN	daN	daN	Kg.	Kg.	Kg.	Kg.	Kg.
LRV5	3200	2800	260	1400	90	75	70	30
LRV7	6200	5500	520	2750	195	165	145	70
LRV9	10250	9200	850	4600	350	250	235	120
LRV10	12900	11700	1100	5850	450	330	320	165
LRV11	15800	14000	1400	7000	600	470	410	210
LRV13	20000	18600	1950	9300	950	770	550	370
LRV15	25200	23500	2500	11900	1340	1130	750	510

*For 110 volts only

1Kg = 0.981 daN; 1 daN = 1.02 Kg.

Note : The design, dimensions and specifications are subject to alterations without prior notice due to constant development for better performance.

