

EM Brno Ltd.

GEARLESS LIFT MACHINES SERIES NL 4xxxx



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The gearless lift machines NL 4xxxx are designated for drives of cable lifts. The construction of the series NL lift machine enables to built-in this engine directly to the upper or lower part of the lift shaft. Feeding from frequency controllers connected to the mains 3 x 400 V (UDC = 560 V), the speed sensor chosen acc. type and demands of the used frequency controller.

It is possible to deliver this lift machine with any resolver or encoder acc. the customer's order. The lift machines of the series NL are designated in one frame size (diameter of the cable pulley) with four active motor lengths.

The stator of the multipole synchronous motor lies inside the rotor, which internal surface is covered by permanent magnets. The external rotor surface serves as a cable pulley and at the same time as a friction surface of the double security brake.

Transmission of the whole loading of the lift engine to the ground frame is made by means of two equally loaded ball bearings sitting in two side boards positioned on both sides of the pulley.

The new construction of the lift drives is characterized by important advantages:

- low noise level
- half duty energy costs
- maintenance free
- using of one direction catches only
- fluent speed control
- high precision control of the cabine movement
- small values of the currents incl. start

Lift machines are offered with:

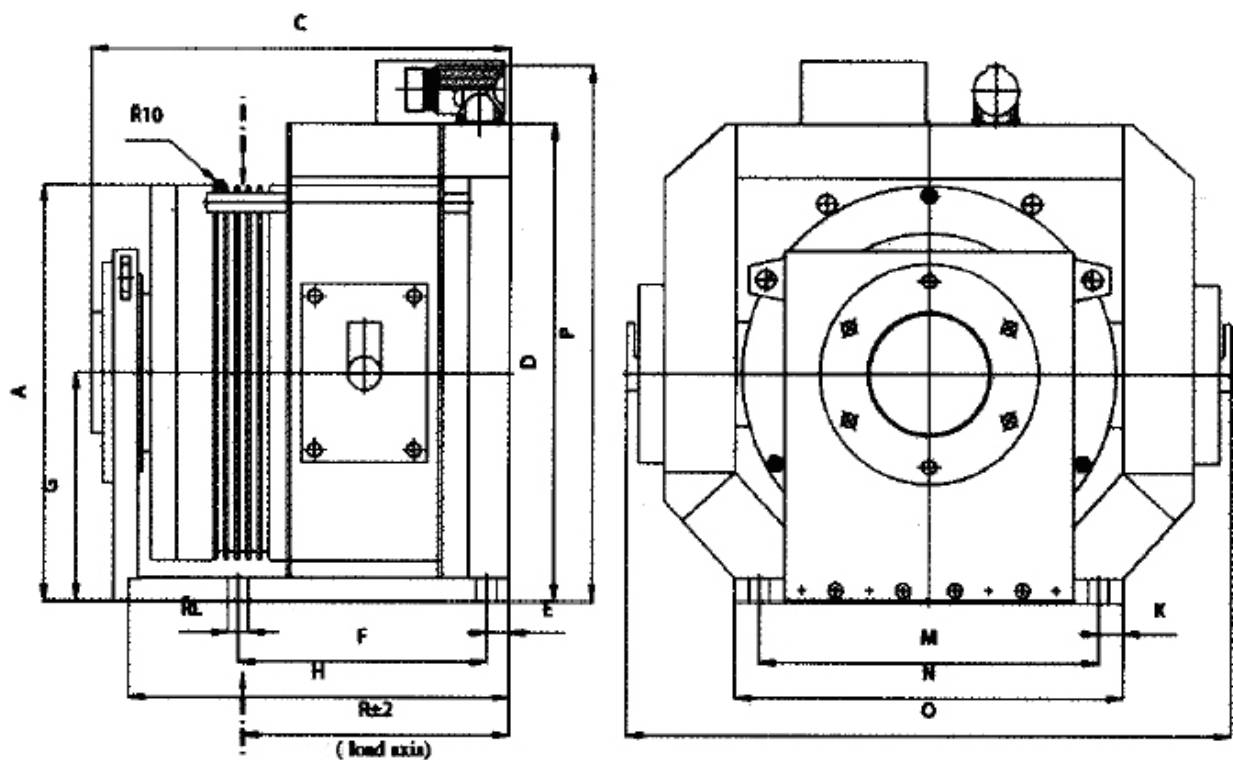
- a fixed
- or preferably with an exchangeable cable pulley

Option: handy release equipment.

TECHNICAL DATA

Type of cable machine		NL40630	NL40800	NL41000	NL41250
Pulley diameter	[mm]	400	400	400	400
Max. loading	[kN]	30	30	40	40
Torque	[Nm]	355	450	550	690
Mass	[kg]	240	280	320	380
Cable ratio 1:1	Pay load	[kg]	320	400	500
	Speed	[min ⁻¹]	48	48	48
	Power	[kW]	1,8	2,3	2,8
	Rated current	[A]	9,3	11,8	14,3
	Pulley velocity	[m/s]	1,0	1,0	1,0
	Cabin velocity	[m/s]			
Cable ratio 2:1	Pay load	[kg]	630	800	1 000
	Speed	[min ⁻¹]	95	95	95
	Power	[kW]	3,5	4,5	5,6
	Rated current	[A]	9,4	11,8	14,5
	Rated current [A] by n=145min ⁻¹	[A]	9,2	11,6	14,5
	Pulley velocity	[m/s]	2,0	2,0	2,0
	Cabin velocity	[m/s]	1,0	1,0	1,0

DIMENSIONS



		Type			
		NL40630	NL40800	NL41000	NL41250
A	[mm]	400	400	400	400
C		420	445	480	549
D		515	515	515	480
E		20	20	20	20
F		265	290	320	330
G		240	240	240	300
H		365	390	425	412
K		25	25	25	25
L		22	22	24	24
M		315	315	315	315
N		365	365	365	365
O		630	630	630	655
P		540	540	540	562
R		239	245	274	303

Manufacturer and supplier:



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