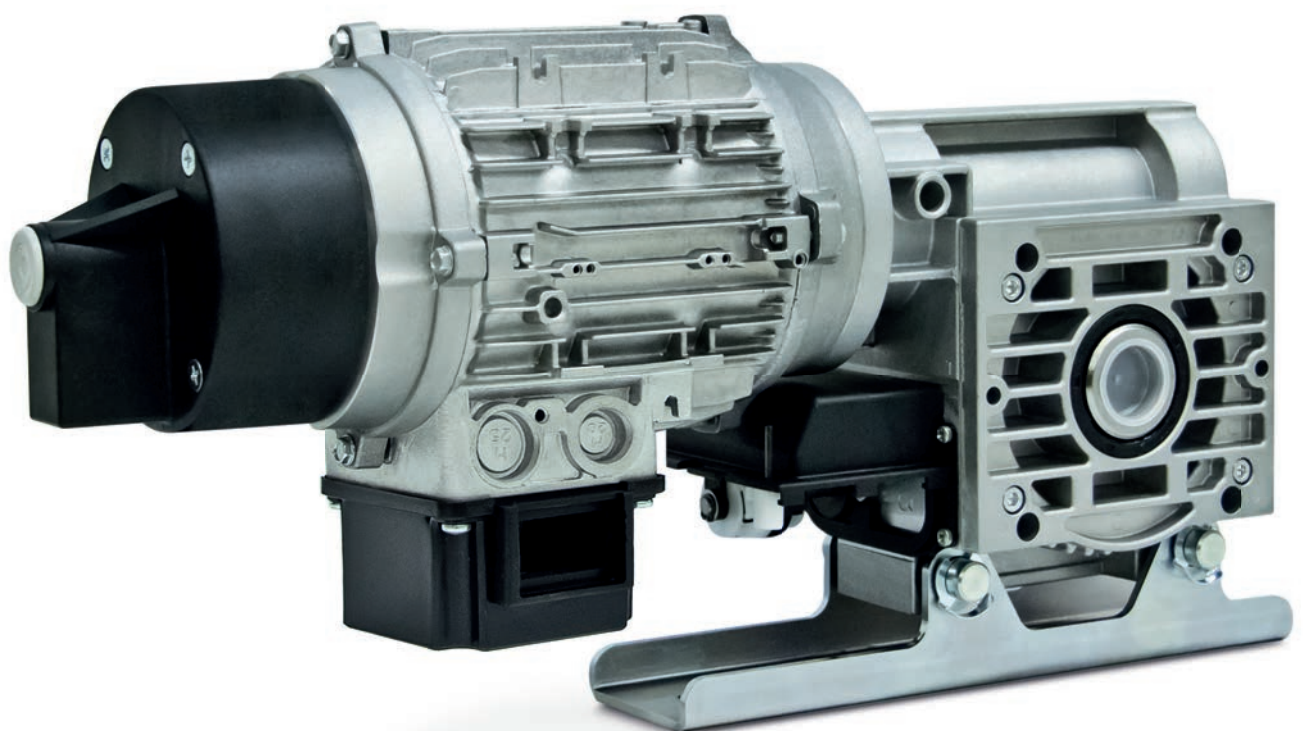




Rolling door drives and controls – robust and safe



elero

A lot of advantages

The robust elero door drives are available in different versions. Combined with equal controls they offer a solution for almost every requirement.



Rolling door drives from elero – powerful and versatile

made in
GERMANY



Robust drive and various control offering

The elero door drives can be used with all types of rolling doors and are available in various versions with an integrated safety brake or as chain wheel drives. All the drives are available as 400/230 V models, with a plug-in connection and 4 or 6 precise mechanical limit switches. The rolling door drives can be easily mounted directly on either side of the rolling shaft.

The elero rolling door drives in combination with the control provide a high safety standard and fulfill the requirements laid down in the EN 12453 and EN 12604 standards for type-tested doors.

Door controls are at the heart of a door system

4 control versions developed and tested to European door standards cover virtually every requirement.

The BoxControl compact for rolling door drives

The BoxControl compact is an economic control option for basic door operation requirements.



The BoxControl compact

The modular BoxControl for rolling doors and grilles

The modular BoxControl was developed to meet the requirements for many door versions. Thanks to the pluggable BoxCards, it is possible to convert and retrofit doors with simple functions right through to full automation. The mains, motor and control cables are pluggable and can be laid with the minimum of effort, thus ensuring quick and easy installation. The casing is made of impact-resistant, halogen-free and temperature-resistant polycarbonate; it has an IP rating of 65.

- BoxCard basic:** For simple door systems with dead man or impulse control (maintained mode), external analytical devices and remote controls can be connected.
- BoxCard plus:** For simple door systems with impulse control. Analysis for an optoelectronic or electro-mechanical door edge safety system (8.2 K Ω) is integrated. There are additional connections for light barriers, additional limit switches and an emergency key switch. Moreover, a radio module can be plugged in. An integrated, non-deletable door cycle counter and a maintenance interval counter are displayed and read using the integrated LEDs.
- BoxCard premium:** The ideal automatic closing system for doors and rolling grilles with traffic lights. The functions are the same as those with the BoxCard plus; there are also various adjustable operating modes. It is also possible to connect red/green traffic lights and a door status display, warning lights and a light barrier test unit (entanglement protection), as well as the garage lighting. There is also a slot for a timer.



BoxControl with pluggable BoxCards open up many possibilities

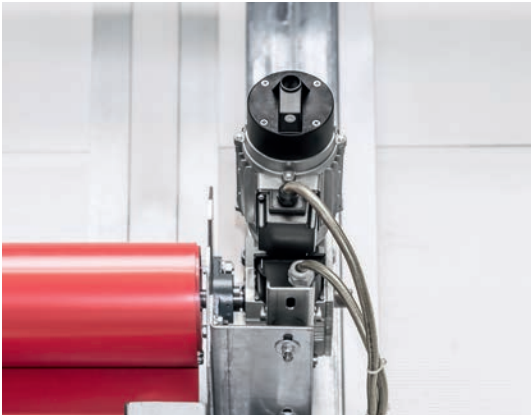
The versatile MasterControl for rolling doors and grilles

The MasterControl is ideally suited to automatic rolling door and grille systems for underground car parks with simple traffic light control or oncoming traffic control. The casing with IP 65 rating is easy to install and the control is ready for operation immediately thanks to the pre-assembled mains, motor and control cables. Testing of the door edge safety system and of the entanglement protection system, as well as the automatic closing function, make this an outstanding universal control. Programming is performed using the integrated LCD monitor and the menu can be displayed in three languages (German, English or French).

The gentle SoftControl only with DFM/DKM 170 for small rolling doors and grilles

The SoftControl with a frequency converter is ideally suited to small automatic rolling door and grille systems for underground car parks with simple traffic light control or oncoming traffic control, so as to operate the door gently and quickly. The specifications, operating modes and displays are virtually the same as the MasterControl, only with rolling grilles etc. an additional light barrier test unit is necessary.

Control selection table – Box-, Master- and SoftControl



	BoxControl-M compact	BoxControl-M D 400 with plug-in modules			MasterControl ²⁾	SoftControl
		basic	BoxCard-M plus	premium		
Recommendations for doors shown below ¹⁾						
Doors with occasional use, warehouses etc. Control without maintained mode (dead-man)	•	•				
Doors for commercial and industrial halls etc. Pulse signal control with or without sight of door (maintained mode)			•	•	•	•
Rolling doors for underground garages etc. Automatic control / single lane traffic with red / green traffic light				•	•	•
Rolling doors or roller grilles with ingr. prot. for underground garages etc. Automatic control / single lane traffic with red traffic light				•	•	•
Rolling doors or roller grilles with ingr. prot. for underground garages etc. Automatic control / two-way traffic with red / green traffic light				•	•	•

1) Be sure to follow EN 12453! § 5.5. Table 1 – Follow the “Minimum protection levels for security of main door-edge”!
Maintained mode only if this represents no risk of injury or damage. Connection of protection systems is essential.

2) Ingress protection with testing for roller grilles can be connected. Item no.: 17 700.5401 light barriers test unit for
2 one-way light barriers item no.: 24 961.0001 or light barrier requirements: Voltage 24V DC; Power consumption ≤ 1.5 VA. Standby delay ≤ 250 ms

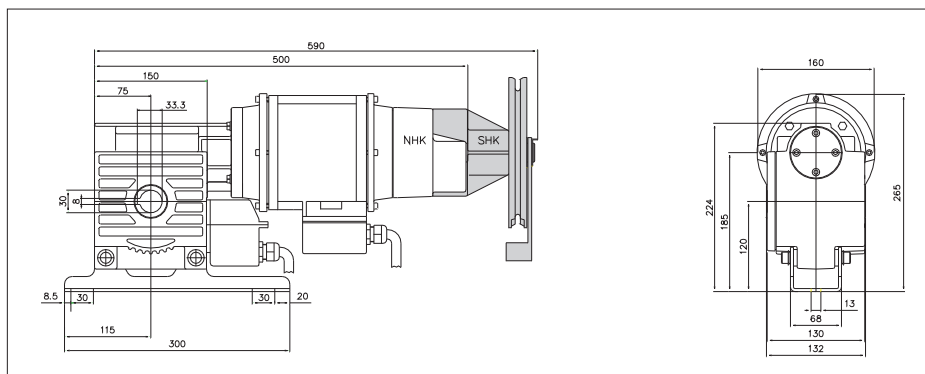
Door drives – technical data and dimensions



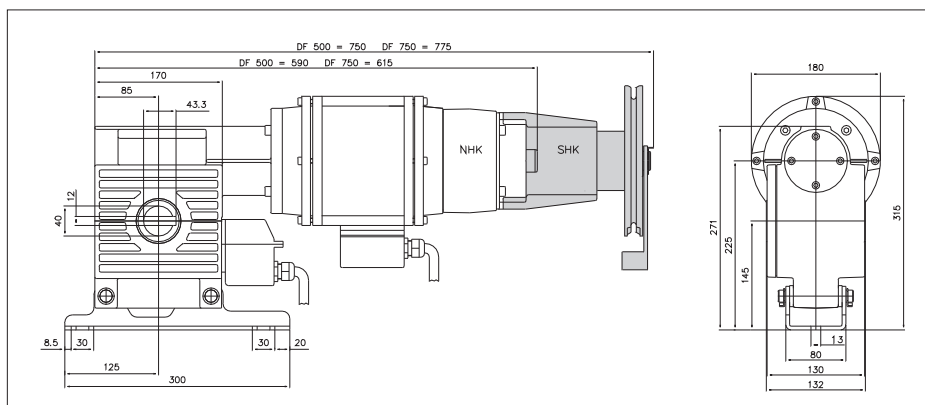
	WFM/WKM 170/14 NHK/SHK	DFM 100/90 NHK	DFM/DKM 170/12.5 NHK/SHK	DFM/DKM 250/12.5 NHK/SHK	DFM 250/27 NHK/SHK	DFM/DKM 350/13.5 NHK/SHK	DFM/DKM 500/11 NHK/SHK	DFM 500/31 NHK/SHK	DFM 750/8 NHK/SHK	DFM/DKM 750/11 NHK/SHK
Rated Voltage (V)	1 ~ 230		3 ~ 230/400							
Rated frequency (Hz)	50									
Max. torque (Nm) ¹⁾	170	100	170	250		350	500		750	
Speed n ² (1/min)	14	90	12.5	12.5	27	13.5	11	31	8	11
Rated current (A)	6.7	5.5/3.2	3.2/1.85	4.5/2.6	5.2/3.0	4.2/2.4	5.7/3.3	10.0/6.0	5.9/3.4	6.9/4.0
Power factor (cos φ)	0.92	0.8	0.58	0.45	0.8	0.6	0.74	0.8	0.6	0.68
Insulation class	H									
Power consumption (kW)	1.4	1.25	0.75	0.8	1.1	1.0	1.7	2.2	1.4	1.9
Ingress protection (IP)	54 (optional 65)									
Max. limit switch range mech. (centrally set at 9 revs.)	18									
Rated operating time (S3)	KB 4 min.	40%	60%	40%		60%		40%		
Door cycles per hour \bar{n} h ⁻¹ ²⁾	10	60	35	30	45	34	28	50	20	24
TÜV-Sued certificate no.	5/061						5/062			
VDE checked	-	-	•	•	-	•	-	-	-	•
VDE EMC checked	-	-	-	-	•	-	-	-	-	•

- 1) The rated torques of the drives are guaranteed from -20 °C to +60 °C/ -4 °F to +140 °F.
2) One door cycle is: 5 revolutions OPEN – 30 sec. pause – CLOSE.

WFM/WKM 170, DFM 100–350, DKM 170–350



DFM/DKM 500–750



Lifting capacity table for rolling door drives

	up to shaft-Ø	Nominal bar thickness up to 20 mm door height up to			Nominal bar thickness up to 30 mm door height up to		
	[mm]	[kg]					
		3 m	5 m	7 m	3 m	5 m	7 m
DFM / WFM 170 Nm	108	205	173	153	175	146	127
	133	186	163	146	164	139	122
	168	162	149	136	147	130	118
	193	142	136	128	138	124	112
	219	126	125	120	124	115	107
DFM 250 Nm	108	302	254	225	257	214	186
	133	273	240	214	242	204	180
	168	239	219	200	216	191	173
	193	209	200	188	203	182	165
	219	186	185	176	182	169	157
DFM 350 Nm	108	430	361	317	364	301	264
	133	382	336	300	338	286	252
	168	334	307	280	303	268	243
	193	293	281	263	284	255	231
	219	260	258	247	254	237	220
DFM 500 Nm	133	546	479	429	484	408	360
	168	478	439	401	433	383	347
	193	419	401	375	405	365	330
	219	371	369	352	363	339	315
	244	335	335	326	328	318	301
DFM 750 Nm	133	819	719	643	725	613	540
	168	716	658	601	649	574	520
	193	628	601	563	608	547	494
	219	557	554	528	545	508	472
	244	502	502	489	492	477	452

Lifting capacity table for chain wheel door drives on request. Please refer to the chart "Permissible load for shafts" in our technical documentation. All the figures are guideline figures. Liability is excluded and we reserve the right to make technical changes. The stated figures refer to the complete rolling door in kg (15% friction has been taken into consideration).



elero rolling door drives and controls are developed in line with the state of the art and the EN standard, and are certified by TÜV and VDE.



Further information about drives and controls by elero can be found on our homepage or via QR code.

www.elero.com

Your elero specialist supplier: