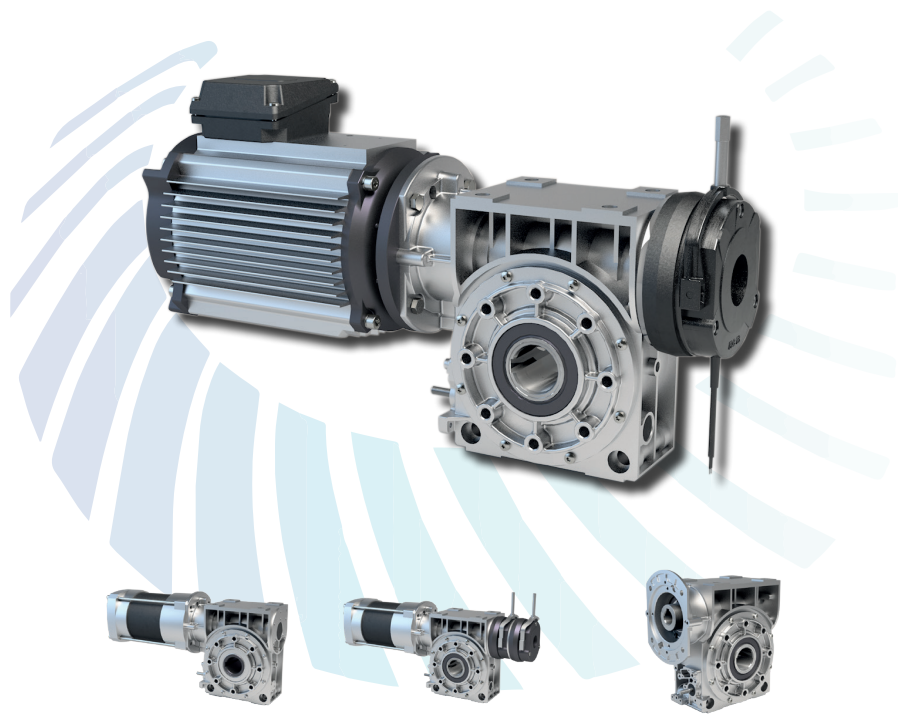


# Gear Motors TD 4.5



## Applications

### Accessibility / Lift Industry

- Platform Lifts
- Passenger Lifts
- Goods & Service lifts

### Theatre & Stage Machinery

- Rigging
- Scenery hoists & Winches
- Flying, Curtain track Systems
- Turntables and platforms

### Industrial Door Automation

- Sectional, High-Speed doors
- Rolling Shutters

### Industrial Applications

- Mechanical Engineering
- Conveyor & Crane
- Printing and Textile

## Benefits

- High Operation Reliability
- High Flexibility and Efficiency
- High Modularity
- Compact Design
- Lifetime lubrication
- Excellent mechanical strength and particularly lightweight

## Features

- Output Speed: max. 280 rpm
- Output Torque max. 700 Nm
- Motor Power max. 4,0 kW
- Gear Ratios from 10,25 to 99
- Fitted with different motor combinations
  - “Integrated” using Tornado Motors
  - “Combined” with standard IEC Motors (CE, UL/CSA...)
- Operating Voltage: 1x230V/AC, 3x230V/400V/AC (50Hz / 60Hz)

## Options

- Safety Feature Built-in TÜV-certified Safety Catch or Anti-Drop Protection (TDA Version)
- Brake Assembly: Motor or gearbox side
- Frequency Converter: Yes
- Gearbox Flange: B14 mounting up to IEC112 motors
- Shafts: Single and Double Shaft, extended Input Shafts (Encoder)
- Emergency Operation Hand crank / Chain hoist mechanisms
- Limit Switch: 3 gear ratios (i=10, i=20, i=40) Mechanical / digital (Single-Turn / Multi-turn)

# Gear Motors TD 4.5

## Specifications



### Performance (2 pole)

Gear Ratio	Input Speed	Output Speed	Gear Motors TD 4.5 - Performance (2-pole) torque range (Nm)												
			Efficiency DIN3996:2012	0.5 kW		1.1 kW		1.5 kW		2.2 kW		3 kW		4 kW	
				Mn	Ma	Mn	Ma	Mn	Ma	Mn	Ma	Mn	Ma	Mn	Ma
i	n <sub>1</sub> [min <sup>-1</sup> ]	n <sub>2</sub> [min <sup>-1</sup> ]													
10,25	2800	273	90%	25	30	35	45	45	55	70	85	95	115	125	150
14,75	2800	190	87%	35	45	50	60	65	80	95	115	130	155	175	210
19,67	2800	142	84%	40	50	60	70	85	100	125	150	170	205	225	270
29,5	2800	95	79%	60	70	90	110	120	145	175	210	240	290	315	380
55	2800	51	67%	95	115	140	170	190	230	270	325	380	455	505	600
59	2800	47	65%	100	120	145	175	195	235	290	350	395	475	525	600
63	2800	44	54%	85	100	130	155	175	210	255	305	350	420	465	530
69	2800	41	61%	110	130	160	190	215	260	315	380	430	515	575	640
71	2800	39	50%	90	110	130	155	180	215	265	320	365	440	-	-
-	2800	34	42%	90	110	130	155	180	215	265	320	360	430	-	-
99	2800	28	35%	90	110	130	155	175	210	260	310	350	400	-	-

### Performance (4 pole)

Gear Ratio	Input Speed	Output Speed	Gear Motors TD 4.5 - Performance (4-pole) torque range (Nm)												
			Efficiency DIN3996:2012	0.5 kW		1.1 kW		1.5 kW		2.2 kW		3 kW		4 kW	
				Mn	Ma	Mn	Ma	Mn	Ma	Mn	Ma	Mn	Ma	Mn	Ma
i	n <sub>1</sub> [min <sup>-1</sup> ]	n <sub>2</sub> [min <sup>-1</sup> ]													
10,25	1370	134	91%	50	60	70	85	95	115	145	175	195	235	260	310
14,75	1370	93	88%	70	85	100	120	135	160	195	235	270	325	360	430
19,67	1370	70	85%	85	100	130	155	175	210	255	305	350	420	465	560
29,5	1370	46	79%	120	145	180	215	245	295	360	430	490	590	650	700
55	1370	25	68%	195	235	285	340	390	470	570	685	-	-	-	-
59	1370	23	66%	200	240	300	360	405	485	600	680	-	-	-	-
63	1370	22	55%	180	220	265	320	360	430	530	580	-	-	-	-
69	1370	20	61%	220	265	325	390	440	530	650	650	-	-	-	-
71	1370	19	50%	185	220	275	330	375	440	-	-	-	-	-	-
83	1370	17	43%	185	220	275	330	375	450	-	-	-	-	-	-
99	1370	14	37%	190	230	280	335	385	420	-	-	-	-	-	-

### Performance (6 pole)

Gear Ratio	Input Speed	Output Speed	Gear Motors TD 4.5 - Performance (6-pole) torque range (Nm)												
			Efficiency DIN3996:2012	0.5 kW		1.1 kW		1.5 kW		2.2 kW		3 kW		4 kW	
				Mn	Ma	Mn	Ma	Mn	Ma	Mn	Ma	Mn	Ma	Mn	Ma
i	n <sub>1</sub> [min <sup>-1</sup> ]	n <sub>2</sub> [min <sup>-1</sup> ]													
10,25	920	90	91%	70	85	105	125	145	175	210	250	290	350	385	465
14,75	920	62	87%	100	120	145	175	200	240	295	350	400	480	535	620
19,67	920	47	85%	130	155	190	230	260	310	380	460	520	620	-	-
29,5	920	31	79%	180	220	265	320	365	430	530	640	-	-	-	-
55	920	17	68%	290	350	425	510	580	690	-	-	-	-	-	-
59	920	16	66%	300	360	440	530	600	680	-	-	-	-	-	-
63	920	15	55%	270	325	390	470	540	580	-	-	-	-	-	-
69	920	13	61%	330	400	480	580	650	650	-	-	-	-	-	-
71	920	13	50%	280	335	410	440	-	-	-	-	-	-	-	-
83	920	11	43%	275	330	405	490	-	-	-	-	-	-	-	-
99	920	9	35%	270	325	390	440	-	-	-	-	-	-	-	-

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