

**PARTZSCH**

ELEKTROMASCHINENBAU

# STRAIGHT TO THE TOP

LIFT DRIVES FROM

*Swiss Traction*

A brand of PARTZSCH



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SWISS TRACTION – A BRAND OF PARTZSCH

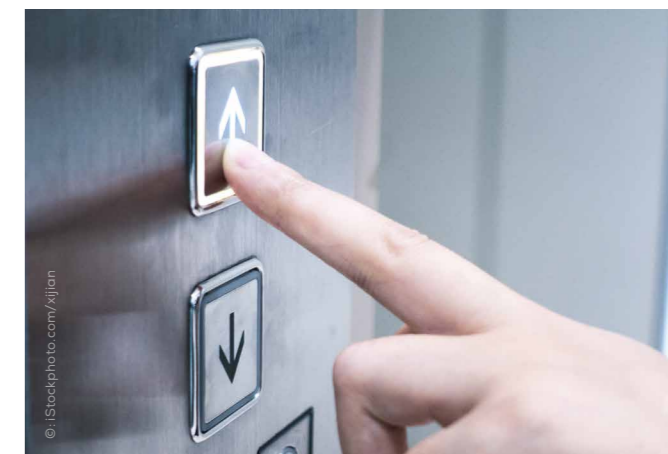
# NATURALLY WITHOUT GEAR

Head straight for the top. With Swiss Traction lift motors, heights of up to 65 metres can be overcome almost effortlessly. Place your trust in decades of experience, which enable the PARTZSCH Group and Swiss Traction to offer their customers the best possible technologies in the field of lift motors.

Quiet running and requiring only a bare minimum of maintenance thanks to the patented permanent-magnet synchronous drive technology – the ZEFIR series is your ideal choice for the most varied types of buildings. Even individual customer wishes, such as different rope groove types, different rope diameters or different brake systems, can be accommodated by Swiss Traction. Experience the benefits at first hand, and allow yourself to be carried straight to the top with Swiss Traction!

## YOUR ADVANTAGES AT A GLANCE

- Extremely quiet running for maximum passenger comfort
- Low weight and space requirement – perfect for sophisticated building projects
- Air cooling minimises susceptibility to faults
- Energy-efficient – high efficiency thanks to patented permanent-magnet synchronous drive technology
- High torque / stall torque for fast travelling
- High positioning accuracy thanks to implemented encoder system



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# OUR PRODUCTS

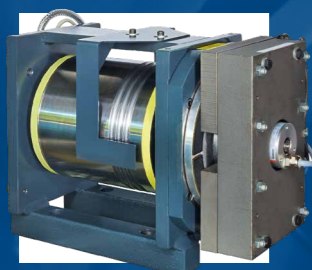


Size 1

## Z 18X

### MINI CLASS

Useful load 225 ... 630 kg  
Lifting height up to 20 m



Size 2

## Z 24X

### MAGIC CLASS

Useful load 225 ... 1,250 kg  
Lifting height up to 35 m



Size 3

## Z 32X

### COMPACT CLASS

Useful load 400 ... 2,000 kg  
Lifting height up to 35 m



Size 4

## Z 42X

### MEDIUM CLASS

Useful load 800 ... 2,000 kg  
Lifting height up to 35 m

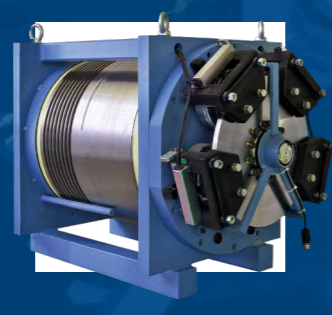


Size 5

## Z 52X

### PREMIUM CLASS

Useful load 1,250 ... 5,600 kg  
Lifting height up to 35 m

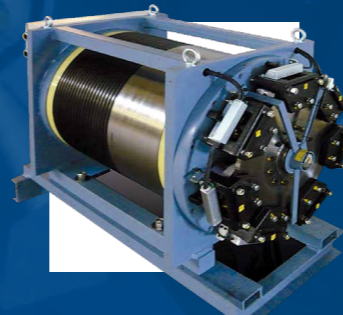


Size 6

## Z 62X

### BISON CLASS

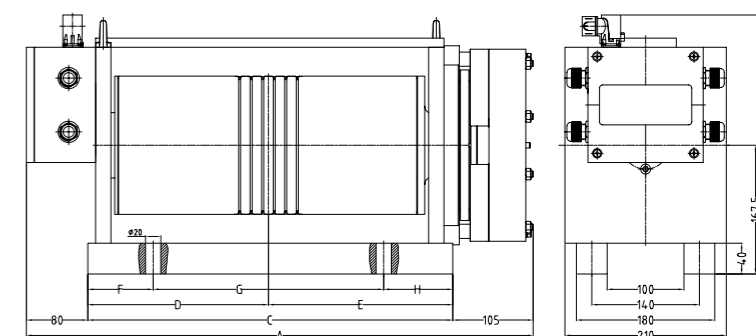
Useful load 1,600 ... 14,000 kg  
Lifting height up to 35 m



Size 1

## Z 18X MINI CLASS

Diameter of the rotating drive cylinder: 180 mm



Type	A	B	C	D	E	F	G	H
Z 182-S	395	-	290	165	125	70	150	70
Z 183-S	431	-	340	170	170	70	200	70
Z 185-S	521	-	430	215	215	70	290	70

## TECHNICAL SPECIFICATIONS FOR TRACTION DRIVES

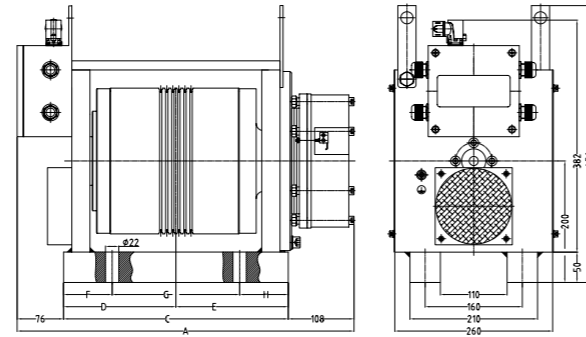
		Z 182-S	Z 183-S	Z 183-S	Z 185-S	Z 185-S
Useful load Q	kg	320	225	450	325	630
Suspension		2:1	1:1	2:1	1:1	2:1
Velocity v	m/s	1	1	1	1	1
Travels/hour		100	100	100	100	100
Lifting height	m	20	20	20	20	20
Shaft efficiency $\eta$	%	78	81	78	81	78
Load compensation/balancing	%	50	50	50	50	50
Nominal power PN	kW	2	1.35	2.8	2	4
Nominal current I	A	7	5	8	7	10
Number of poles	2p	12	12	12	12	12
Nominal torque MN	Nm	95	123	127	178	180
Speed n	rpm	210	105	210	105	210
Axle load	kN	12	12	12	15	15
Total weight	kg	82	100	100	125	125
Braking torque	Nm	2 x 80	2 x 115	2 x 115	2 x 160	2 x 150
Brake voltage	VDC	207	207	207	207	207
Encoder (standard)		ECN 1313 Ed	ECN 1313 Ed	ECN 1313 Ed	ECN 1313 Ed	ECN 1313 Ed

Subject to change without prior notice, status as per 01/2019

Size 2

# Z 24X MAGIC CLASS

Diameter of the rotating drive cylinder: 240 mm



Type	A	B	C	D	E	F	G	H
Z 242-S	535	-	350	175	175	80	190	80
Z 244-S	635	-	450	225	225	72	300	78
Z 245-S	675	-	495	245	250	100	300	95
Z 246-S	720	-	540	270	270	120	300	120

## TECHNICAL SPECIFICATIONS FOR TRACTION DRIVES

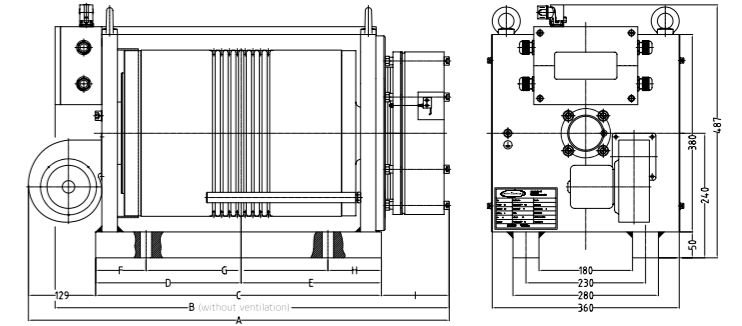
		Z 242-S	Z 242-S	Z 244-S	Z 244-S	Z 245-S	Z 245-S	Z 246-S	Z 246-S
Useful load Q	kg	225	450	325	650	400	800	525	1250
Suspension		1:1	2:1	1:1	2:1	1:1	2:1	1:1	2:1
Velocity v	m/s	1	1	1	1	1	1	1	1
Travels/hour		120...150	120...150	120...150	120...150	120...150	120...150	120...150	120...150
Lifting height	m	35	35	35	35	35	35	35	35
Shaft efficiency η	%	81	78	81	78	81	78	81	78
Load compensation/balancing	%	50	50	50	50	50	50	50	50
Nominal power PN	kW	2.2	3.2	1.8	4.5	2.8	5.7	3.4	7
Nominal current I	A	6	9	6.5	11	7.5	15	8	19
Number of poles	2p	16	16	16	16	16	16	16	16
Nominal torque MN	Nm	133	190	267	275	333	339	403	410
Speed n	rpm	80	159	80	159	80	159	80	159
Axle load	kN	15	15	25	25	25	25	28	28
Number and diameter of the ropes (standard)	mm	4 x 6	4 x 6	6 x 6	6 x 6	6 x 6	6 x 6	8 x 6	8 x 6
Total weight	kg	150	150	185	185	205	205	220	220
Braking torque	Nm	2 x 225	2 x 150	2 x 280	2 x 280	2 x 280	2 x 280	2 x 325	2 x 350
Brake voltage	VDC	207	207	207	207	207	207	207	207
Encoder (standard)		ECN 1313 Ed	ECN 1313 Ed	ECN 1313 Ed	ECN 1313 Ed	ECN 1313 Ed	ECN 1313 Ed	ECN 1313 Ed	ECN 1313 Ed

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Size 3

# Z 32X COMPACT CLASS

Diameter of the rotating drive cylinder: 320 mm



Type	A	B	C	D	E	F	G	H
Z 324-S	720	668	465	235	230	110	250	105
Z 326-S	810	758	550	280	270	97	350	103
Z 328-S	798	747	640	320	320	95	450	95
Z 329-S	843	792	690	345	345	110	450	130

## TECHNICAL SPECIFICATIONS FOR TRACTION DRIVES

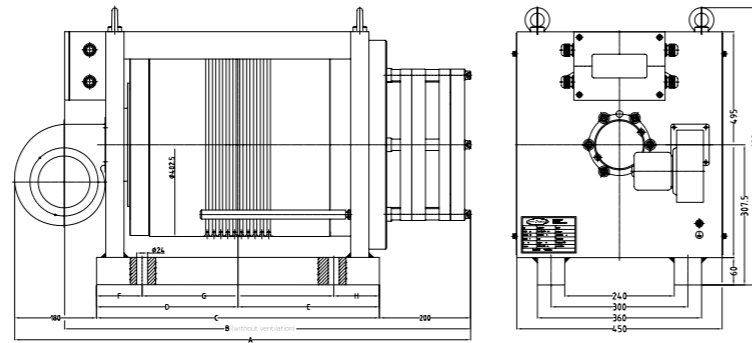
		Z 324-S	Z 324-S	Z 326-S	Z 326-S	Z 328-S	Z 328-S	Z 329-S	Z 329-S
Useful load Q	kg	400	800	630	1,250	800	1,600	1,000	2,000
Suspension		1:1	2:1	1:1	2:1	1:1	2:1	1:1	2:1
Velocity v	m/s	1	1	1	1	1	1	1	1
Travels/hour		120...240	120...240	120...240	120...240	120...240	120...240	120...240	120...240
Lifting height	m	35	35	35	35	35	35	35	35
Shaft efficiency η	%	81	78	81	78	81	78	81	78
Load compensation/balancing	%	50	50	50	50	50	50	50	50
Nominal power PN	kW	3	6.1	4.6	9.4	5.7	11.9	7	14.5
Nominal current I	A	8	14	12	20	14	25	17	31
Number of poles	2p	20	20	20	20	20	20	20	20
Nominal torque MN	Nm	472	491	725	748	920	956	1,116	1,160
Speed n	rpm	60	119	60	119	60	119	60	119
Axle load	kN	35	35	35	35	45	45	45	45
Number and diameter of the ropes (standard)	mm	6 x 8	6 x 8	8 x 8	8 x 8	10 x 8	10 x 8	10 x 8	10 x 8
Total weight	kg	336	336	370	370	450	450	510	510
Braking torque	Nm	2 x 325	2 x 325	2 x 600	2 x 600	2 x 900	2 x 900	2 x 900	2 x 900
Brake voltage	VDC	207	207	207	207	207	207	207	207
Encoder (standard)		ECN 1313Ed	ECN 1313Ed	ECN 1313Ed	ECN 1313Ed	ECN 1313Ed	ECN 1313Ed	ECN 1313Ed	ECN 1313Ed

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Size 4

# Z 42X MEDIUM CLASS

Diameter of the rotating drive cylinder: 402.5 mm



Type	A	B	C	D	E	F	G	H
Z 426-S	873	822	620	310	310	100	420	100
Z 428-S	963	912	710	355	355	100	510	100

## TECHNICAL SPECIFICATIONS FOR TRACTION DRIVES

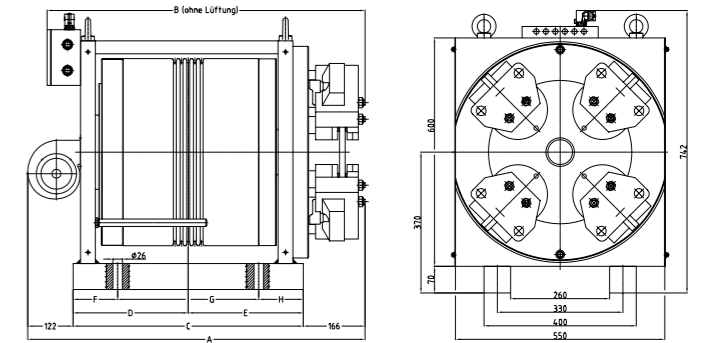
		Z 426-S	Z 426-S	Z 428-S	Z 428-S
Useful load Q	kg	800	1,600	1,050	2,000
Suspension		1:1	2:1	1:1	2:1
Velocity v	m/s	1	1	1	1
Travels/hour		120...240	120...240	120...240	120...240
Lifting height	m	35	35	35	35
Shaft efficiency η	%	81	78	81	78
Load compensation/balancing	%	50	50	50	50
Nominal power PN	kW	5.7	12	7	15
Nominal current I	A	14	25	16	30
Number of poles	2p	24	24	24	24
Nominal torque MN	Nm	1,143	1,187	1,418	1,473
Speed n	rpm	47	95	47	95
Axle load	kN	58	58	58	58
Number and diameter of the ropes (standard)	mm	6 x 10	6 x 10	7 x 10	7 x 10
Total weight	kg	550	550	725	725
Braking torque	Nm	2 x 900	2 x 900	2 x 1,200	2 x 1,200
Brake voltage	VDC	207	207	207	207
Encoder (standard)		ECN 1313Ed	ECN 1313Ed	ECN 1313Ed	ECN 1313Ed

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Size 5

# Z 52X PREMIUM CLASS

Diameter of the rotating drive cylinder: 504 mm



Type	A	B	C	D	E	F	G	H
Z 526-S	954	901	665	332.5	332.5	120	425	120
Z 527-S	999	946	710	355	355	120	470	120

## TECHNICAL SPECIFICATIONS FOR TRACTION DRIVES

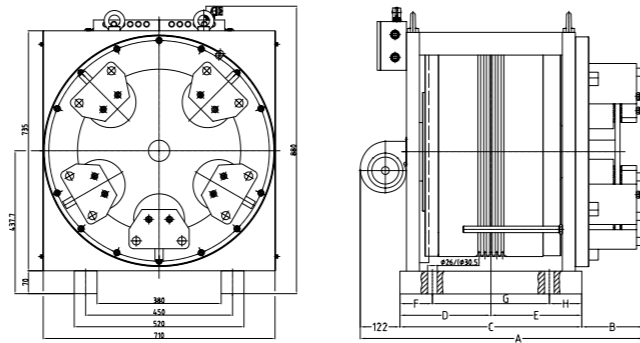
		Z 526-S	Z 526-S	Z 527-S	Z 527-S
Useful load Q	kg	1,250	2,500	1,400	2,900
Suspension		1:1	2:1	1:1	2:1
Velocity v	m/s	1	1	1	1
Travels/hour		120...240	120...240	120...240	120...240
Lifting height	m	35	35	35	35
Shaft efficiency η	%	81	78	81	78
Load compensation/balancing	%	50	50	50	50
Nominal power PN	kW	8.5	17.7	9.6	20
Nominal current I	A	19	36	22	43
Number of poles	2p	36	36	36	36
Nominal torque MN	Nm	2,153	2,237	2,420	2,514
Speed n	rpm	38	76	38	76
Axle load	kN	75	75	75	75
Number and diameter of the ropes (standard)	mm	6 x 11	6 x 11	7 x 11	7 x 11
Total weight	kg	1,075	1,075	1,160	1,160
Braking torque	Nm	4 x 650	4 x 650	4 x 650	4 x 650
Brake voltage	VDC	207/103	207/103	207/103	207/103
Encoder (standard)		ECN 1313Ed	ECN 1313Ed	ECN 1313Ed	ECN 1313Ed

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Size 6

# Z 62X BISON CLASS

Diameter of the rotating drive cylinder: 645 mm



Type	A	B	C	D	E	F	G	H
Z 626-S	916	189	605	302,5	302,5	100	405	100
Z 628-S	1010	178	710	355	355	120	470	120
Z 632-S	1239	174	890	445	445	210	470	210

## TECHNICAL SPECIFICATIONS FOR TRACTION DRIVES

		Z 626-S	Z 626-S	Z 628-S	Z 628-S	Z 632-S	Z 632-S
Useful load Q	kg	1,600	3,200	2,250	4,500	3,500	7,000
Suspension		1:1	2:1	1:1	2:1	1:1	2:1
Velocity v	m/s	1	1	1	1	1	1
Travels/hour		120...240	120...240	120...240	120...240	120...240	120...240
Lifting height	m	35	35	35	35	35	35
Shaft efficiency $\eta$	%	81	78	81	78	81	78
Load compensation/balancing	%	50	50	50	50	50	50
Nominal power PN	kW	10	23.5	14.3	30	22.5	46
Nominal current I	A	22	45	31	59	46	91
Number of poles	2p	44	44	44	44	44	44
Nominal torque MN	Nm	3,222	3,758	4,606	4,785	7,250	7,525
Speed n	rpm	30	59	30	59	30	59
Axle load	kN	75	75	100	100	100	100
Number and diameter of the ropes (standard)	mm	6 x 13	6 x 13	7 x 13	7 x 13	8 x 13	8 x 13
Total weight	kg	1,575	1,575	1,900	1,900	2,200	2,200
Braking torque	Nm	6 x 800	6 x 800	7 x 800	7 x 800	7 x 800	7 x 800
Brake voltage	VDC	207/103	207/103	207/103	207/103	207/103	207/103
Encoder (standard)		ECN 1313Ed	ECN 1313Ed	ECN 1313Ed	ECN 1313Ed	ECN 1313Ed	ECN 1313Ed

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# QUALITY IS MANUFACTURED, NOT SIMPLY MEASURED

**Our credo: Quality is manufactured, not simply measured! This is the reason why the most important components for measuring are already installed on our machines. In addition, we perform initial sample and series tests with creation of the appropriate reports.**

The overarching goal of our work is customer satisfaction. Accordingly, on-schedule delivery of a flawless quality product is one of our top priorities.

Quality determines the thoughts and actions of our employees, and they contribute actively to continuous quality improvement along the whole process chain. The stipulations of ISO 9001, in combination with individual customer specifications, form the basis for all activities. Through internal audits and monitoring by an accredited

certification body, our quality management system is evaluated with regard to its effectiveness, certified and adapted continuously to the growing demands of the market.

### Testing and measuring instruments:

- Mitutoyo measuring machine Euro-C-A9106 Measuring range 1,000 x 700 x 500 for components up to 500 kg
- ROMER measuring arm RA-7525 SE for precise mobile measurements in the process chain
- MessTESA micro-hite M900, and various other process-oriented manual measuring technology integrated into the production sequence
- Twinner T12 (instrument for the measurement of shafts)
- Equipment for hardness testing



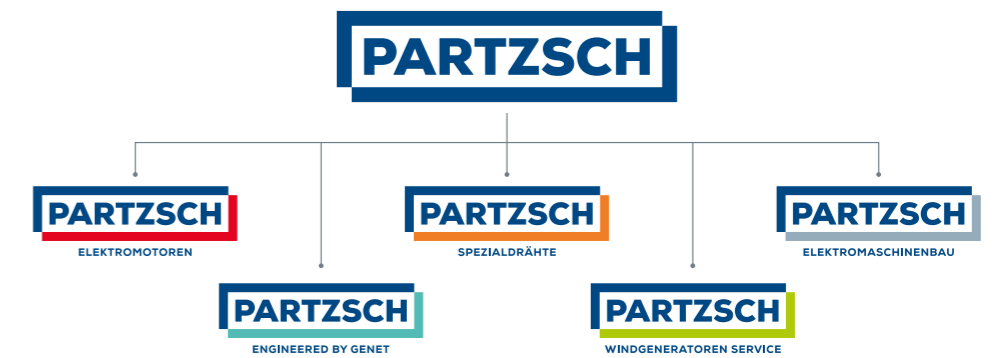
# POWER FOR YOUR VISION

Founded in 2005, the company Swiss Traction Germany GmbH has built up an outstanding reputation through the development, manufacturing and distribution of over 7,500 lift motors. Within the PARTZSCH Group, this innovative spirit is now merged with a service philosophy which leaves no customer wish unanswered.

As one of the leading mid-size companies in the electrical engineering branch, the PARTZSCH Group manufactures a broad spectrum of products related to electric motors, from its own range of wires to wind turbine generators. This enables you to rely on comprehensive expertise and a vertical range of manufacture with which even the most challenging customer wishes can be turned into reality.

- 60 years of experience
- Know-how and manufacturing facilities for electric machines up to the highest outputs and for voltage levels up to 21 kV
- Modern machinery base accommodating the highest weights and diameters
- References in numerous branches and with all renowned manufacturers
- 42,000 m<sup>2</sup> of production space

**Discover the benefits for yourself –  
Power for your vision.**

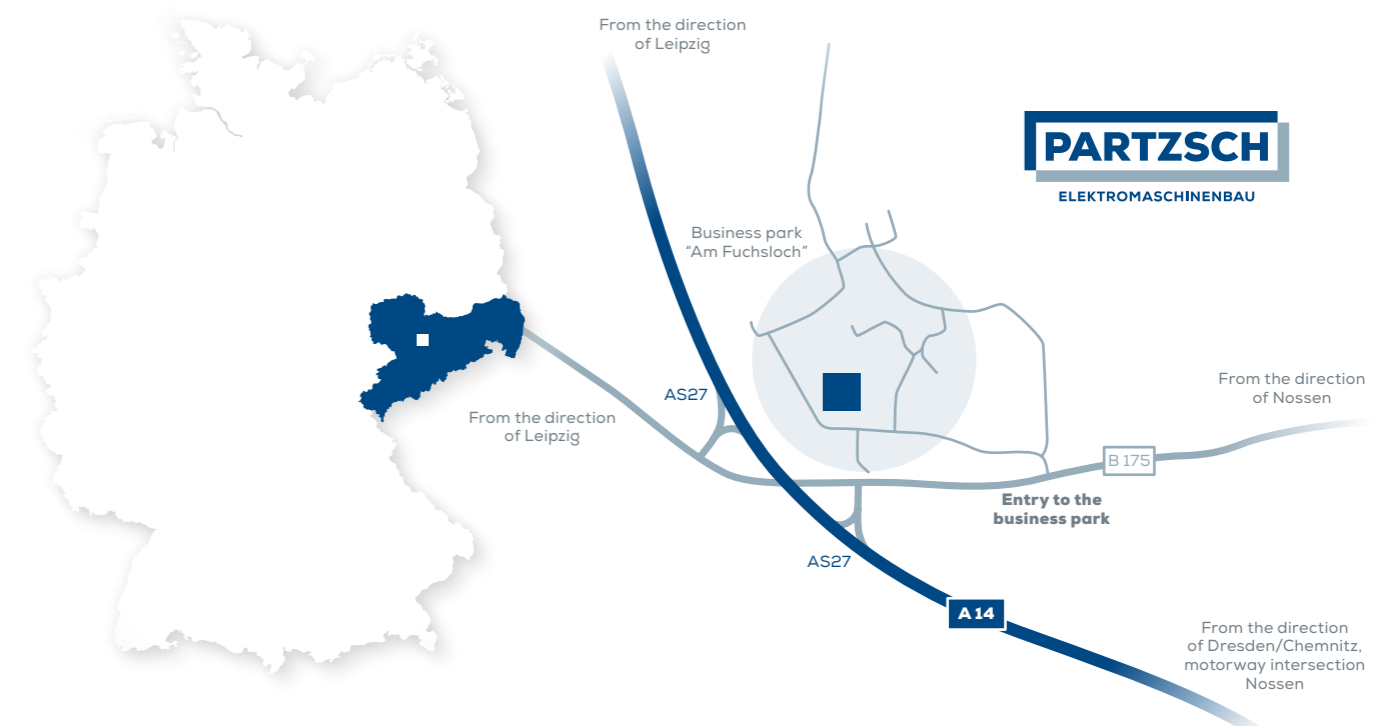


## SERVICE MAKES THE DIFFERENCE

Our qualified team would be pleased to elaborate a solution together with you, taking into account your particular product requirements. Contact us! We are looking forward to hearing from you.

## FAST AND FLEXIBLE

Our central location and excellent links to the A14 motorway guarantee fast and flexible deliveries.



# SELECTION TABLE FOR PERMANENT-MAGNET SYNCHRONOUS DRIVES

	Size 1	Size 2	Size 3	Size 4	Size 5	Size 6
Diameter of the rotating drive cylinder	180 mm	240 mm	320 mm	402.5 mm	504 mm	645 mm
Lifting height up to	20 m	35 m	35 m	35 m	35 m	35 m
Diameter of the pulley grooves (steel)	6 mm	6 mm, 6.5 mm	8 mm	bis 10 mm	bis 12 mm	bis 16 mm
Brugg CTP	6.5 G2	8.1 G2				

Suspension 1:1		Size 1	Size 2	Size 3	Size 4	Size 5	Size 6
Q (kg)	Persons						
225	3	Z 183-S	Z 242-S				
325	4	Z 185-S	Z 244-S	(Z 324-S)			
400	5		Z 245-S	Z 324-S			
500	6		Z 246-S	(Z 326-S)			
630	8		Z 246-S	Z 326-S			
800	10			Z 328-S	Z 426-S		
1,000	12			Z 329-S	(Z 428-S)		
1,050	13				Z 428-S		
1,250	16					Z 526-S	
1,400	18					Z 527-S	(Z 626-S)
1,800	24						Z 626-S
2,250	30						Z 628-S
3,000	38						(Z 632-S)
3,500	44						Z 632-S

Suspension 2:1		Size 1	Size 2	Size 3	Size 4	Size 5	Size 6
Q (kg)	Persons						
250	3	(Z 182-S)					
320	4	Z 182-S	(Z 242-S)				
450	6	Z 183-S	Z 242-S				
630	8	Z 185-S	(Z 244-S)	(Z 324-S)			
650	8		Z 244-S	(Z 324-S)			
800	10		Z 245-S	Z 324-S			
1,000	12		(Z 246-S)	(Z 326-S)			
1,050	13		(Z 246-S)	(Z 326-S)			
1,250	16		Z 246-S	Z 326-S			
1,600	20			Z 328-S	Z 426-S		
2,000	26			Z 329-S	Z 428-S		
2,500	33					Z 526-S	
2,900	38					Z 527-S	(Z 626-S)
3,200	42						Z 626-S
4,500	60						Z 628-S
6,000	75						(Z 632-S)
7,000	88						Z 632-S

Suspension 4:1		Size 1	Size 2	Size 3	Size 4	Size 5	Size 6
Q (kg)	Persons						
5,000	62					Z 526-S	(Z 626-S)
5,600	74					Z 527-S	
7,200	96						Z 626-S
9,000	120						Z 628-S
12,000	160						(Z 632-S)
14,000	186						Z 632-S

Other lifting heights and different useful loads (Q) on request. Drives in brackets ( ) can also be used for lower useful loads.  
Standard velocity = 1.0 m/s (possible velocity: 1.6 m/s, 2.0 m/s, 2.5 m/s)



**PARTZSCH**  
ELEKTROMASCHINENBAU

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