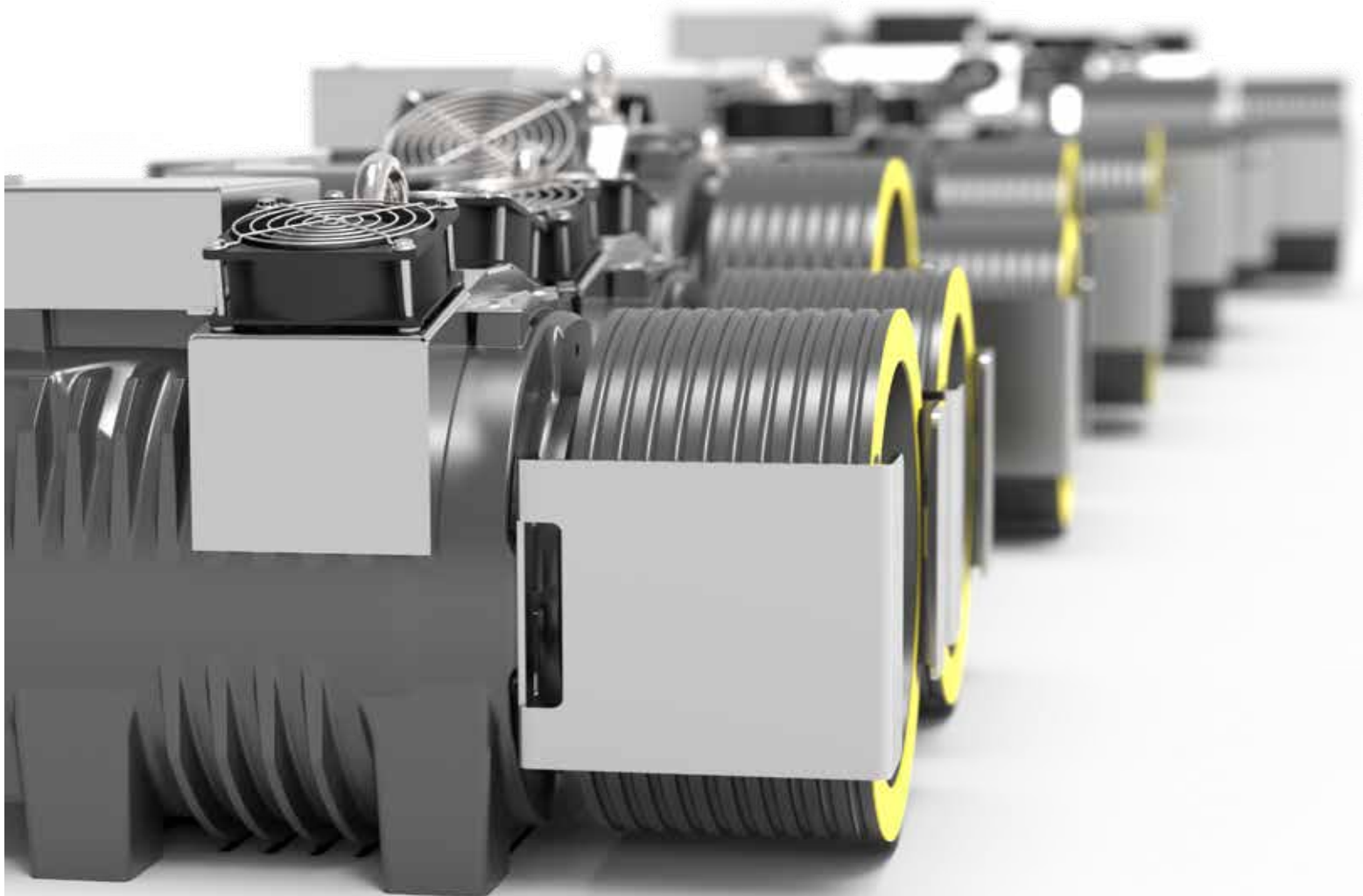


SG Series Machines

***SG15/ SG22/ SG30
SG40/ SG48/ SG53***



GEARLESS SG15

Model → **SG15**

Rated Torque → **245 Nm SG15F (S3 40%)**

Braking Torque → **2x280 Nm**

Power Range (min - max) → **2,5 - 7,4 kW**

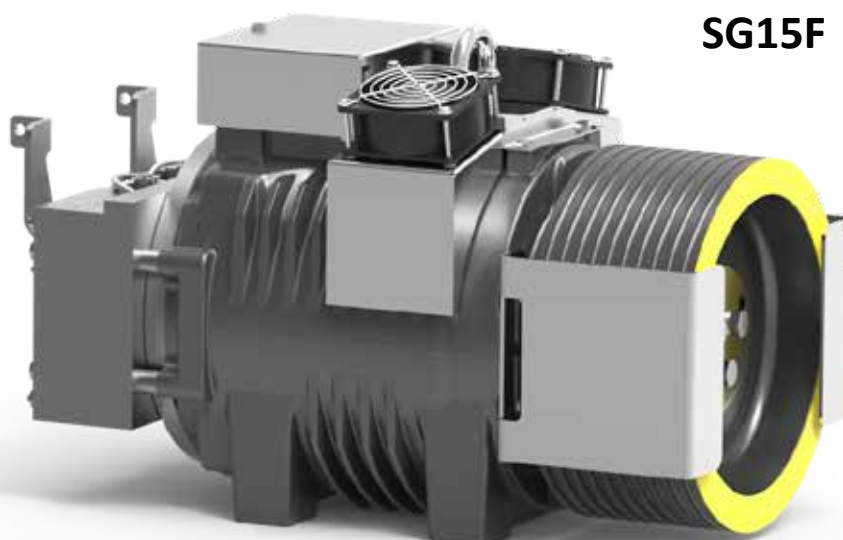
Max. Static Load → **34,3 kN - 3500 kg**

Maximum Weight → **155 kg**

Motor Rated Voltage → **360 V - 208 V**



Gearless without fan kit



Gearless with fan kit

GEARLESS SG15

** EXAMPLE CONFIGURATION TABLE

Model	Ø Traction sheave	Car speed	Rated load	Car weight	rpm	p ***	I ***	Installation frequency	Ropes Nr x diameter Ø
	[mm]	[m/s]	[kg]	[kg]	[min-1]	[kW]	[A]	[Hz]	[mm]
SG15145BF	120	0,63	1275	1400	199	4,93	12,5	33,2	6 x Ø 6 (*)
SG15145B	160	0,63	800	950	199	3,12	10,5	25,0	4 x Ø 6 (*)
SG15145BF	160	1,00	800	950	254	4,94	12,9	39,6	4 x Ø 6 (*)
SG15145BF	200	0,63	630	900	120	2,87	7,9	20,0	7 x Ø 6
SG15145BF	200	1,00	630	900	199	4,50	12,0	31,7	7 x Ø 6
SG15145BF	210	0,63	630	900	120	2,75	8,1	19,1	7 x Ø 6
SG15145B	210	1,00	630	900	199	4,41	12,21	30,2	7 x Ø 6
SG15145BF	210	1,60	480	700	291	5,64	13,5	48,5	6 x Ø 6
SG15145B	240	0,63	480	700	120	2,13	7,2	16,6	5 x Ø 6
SG15145BF	240	1,00	480	700	199	3,54	11,2	26,6	6 x Ø 6
SG15145BF	240	1,60	480	700	291	5,67	13,7	42,4	6 x Ø 6
SG15145BF	320	0,63	400	550	120	1,81	8,1	12,5	3 x Ø 8
SG15145BF	320	1,00	400	550	120	2,87	8,1	19,8	3 x Ø 8
SG15145BF	320	1,60	320	500	199	3,87	10,3	31,8	3 x Ø 8
SG15145BF	320	2,00	320	500	254	4,83	12,6	39,7	3 x Ø 8

Harmonized Standards of reference EN81-20 and EN81-50

Roping: 2:1 — Conventional Single Wrap

Machine position: Top

Compartment efficiency: 0,9

Nr of deflection pulleys on ball bearings:

2 for rated load ≤ 1000 kg, 3 for rated load > 1000 kg

Counterweight balancing: 50%

Travel height: 30 m

Duty cycle: S3 40%

Starts/hour: 180

Wrap angle: 180°

Acceleration: 0,3÷0,5m/s² for car speed ≤ 1 m/s

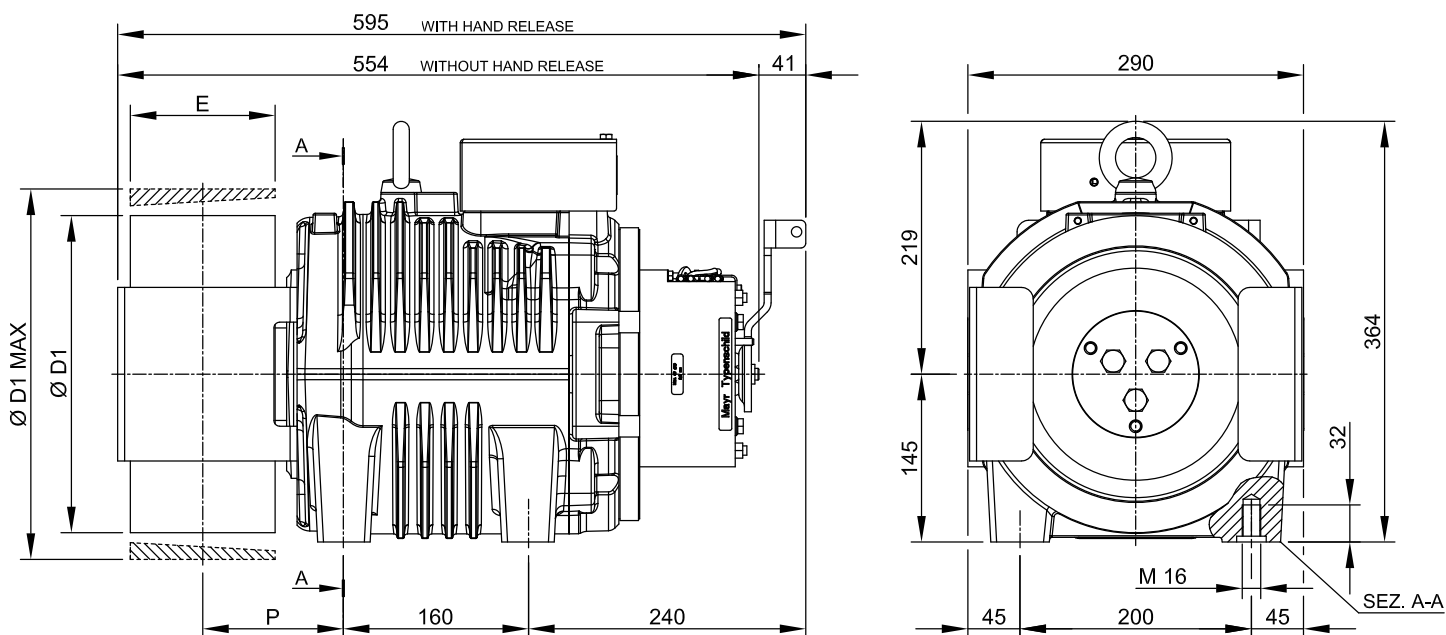
0,5÷0,7m/s² for car speed > 1 m/s

Refer to the product configurator for the value of the short circuit torque, the relative speed and the minimum voltage that allows the operation of gearless machine.

*) Pu-coated ropes

**) Sample data; for more detailed evaluations we recommend our product configurator.

***) Values referred to configuration table (360V)



Model	Ø D1	E	P	Max Weight	Inertia	Roping System	Torque S3 40%	Max Static Load	Max Power **
	[mm]	[mm]	[mm]	[kg]	[kgm ²]		[Nm]	[kN - kg]	[kW]
SG15145B	120	125	122	152	0,10	CSW *	200	34,3 - 3500	6,2
	160				0,14				
	200				0,22				
	210				0,25				
	240				0,37				
	270				0,48				
	320	117			0,55				

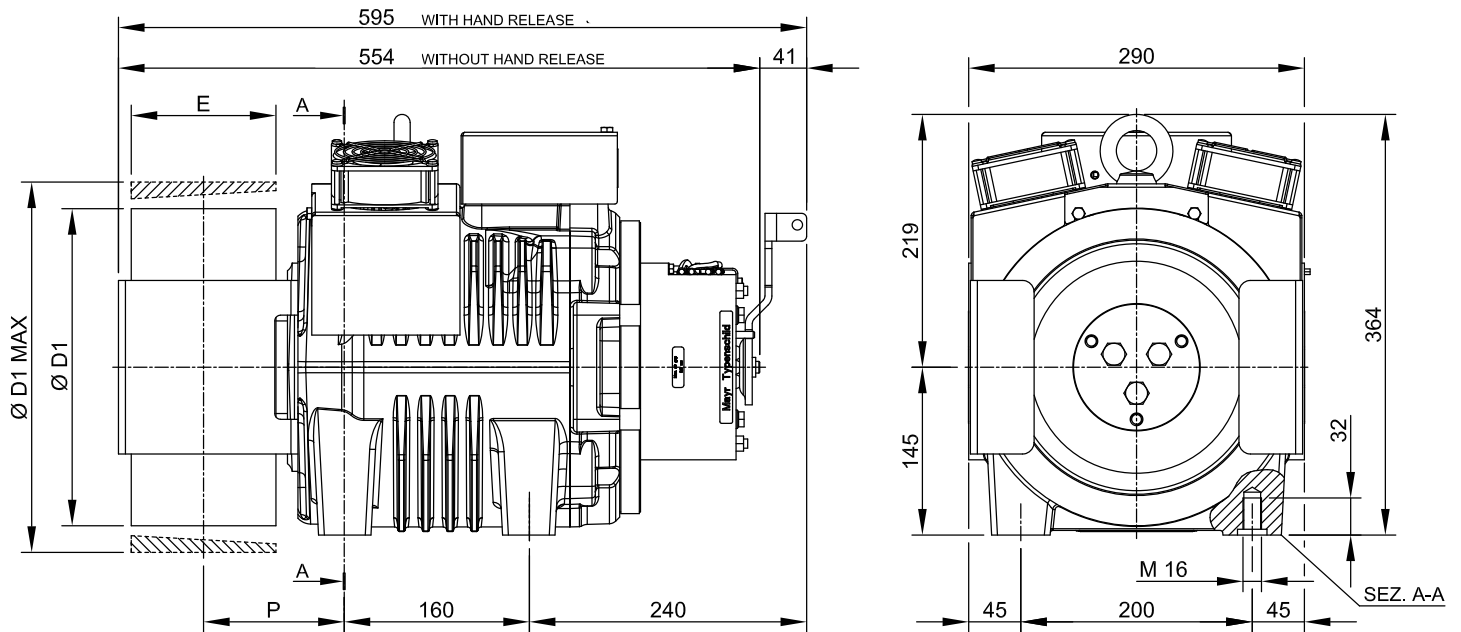
Brake Specifications		
Braking Torque	2x280	[Nm]
Standard Supply Voltage	207	[V DC]
Overexcitation	--	[V DC]
Power	2x79	[W]
Overexcitation	--	[W]
Degree of Protection	IP10	

Standard Encoder Data		
Type	Absolute - EnDat	
Model	Heidenhain ECN 1313	
Positions values/rev	2048 imp/giro 13 bits	
Degree of Protection	IP40	
Standard Cable Length	10	[m]

*) CSW : Conventional single wrap.

**) Sample data; for more detailed evaluations we recommend our product configurator.

GEARLESS SG15F



Model	Ø D1	E	P	Max Weight	Inertia	Roping System	Torque S3 40%	Max Static Load	Max Power **
	[mm]	[mm]	[mm]	[kg]	[kgm ²]		[Nm]	[kN - kg]	[kW]
SG15145BF	120	125	122	155	0,10	CSW *	245	34,3 - 3500	7,4
	160				0,14				
	200				0,22				
	210				0,25				
	240				0,37				
	270				0,48				
	320				0,55				
		117							

Brake Specifications		
Braking Torque	2x280	[Nm]
Standard Supply Voltage	207	[V DC]
Overexcitation	--	[V DC]
Power	2x79	[W]
Overexcitation	--	[W]
Degree of Protection	IP10	

Standard Encoder Data		
Type	Absolute - EnDat	
Model	Heidenhain ECN 1313	
Positions values/rev	2048 imp/giro 13 bits	
Degree of Protection	IP40	
Standard Cable Length	10	[m]

Ventilation data		
Tensione Voltage	[V]	220
Potenza Power	[W]	2x16

*) CSW : Conventional single wrap.

**) Sample data; for more detailed evaluations we recommend our product configurator.

GEARLESS SG22

Model → **SG22**

Rated Torque → **290 Nm SG22F (S3 40%)**

Braking Torque → **2x280 Nm**

Power Range (min - max) → **3,1 - 8,8 kW**

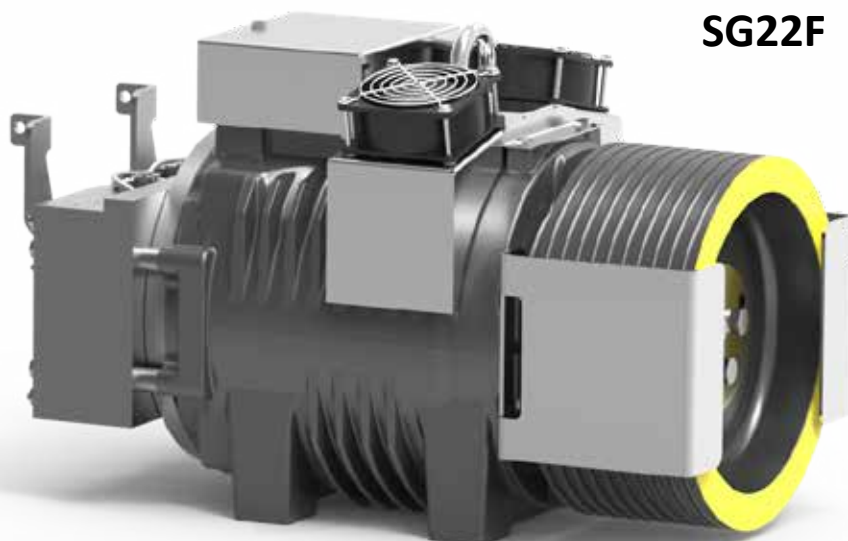
Max. Static Load → **34,3 kN - 3500 kg**

Maximum Weight → **163 kg**

Motor Rated Voltage → **360 V - 208 V**



Gearless without fan kit



Gearless with fan kit

GEARLESS SG22

** EXAMPLE CONFIGURATION TABLE

Model	Ø Traction sheave [mm]	Car speed [m/s]	Rated load [kg]	Car weight [kg]	rpm [min-1]	P *** [kW]	I *** [A]	Installation frequency [Hz]	Ropes Nr x diameter Ø [mm]
SG22145B	120	0,63	1600	1600	199	6,25	15,39	33,4	7 x Ø 6,5 (*)
SG22145B	160	0,63	1000	1200	199	3,90	12,9	25	5 x Ø 6,5 (*)
SG22145B	160	1,00	1000	1200	254	6,22	15,1	39,6	5 x Ø 6,5 (*)
SG22145BF	200	0,63	800	950	120	3,61	9,7	20	9 x Ø 6,5
SG22145BF	200	1,00	800	950	199	5,85	15,3	31,7	10 x Ø 6,5
SG22145B	210	0,63	800	950	120	3,55	9,91	19	8 x Ø 6,5
SG22145BF	210	1,00	675	930	199	5,01	13,7	30,2	9 x Ø 6,5
SG22145BF	210	1,60	630	930	291	7,83	18,7	48,5	10 x Ø 6,5
SG22145BF	240	0,63	675	930	120	2,99	9,6	16,6	7 x Ø 6,5
SG22145BF	240	1,00	675	930	199	4,88	15,3	26,4	8 x Ø 6,5
SG22145B	240	1,60	480	700	254	5,83	13,4	42,4	7 x Ø 6,5
SG22145BF	320	0,63	480	700	120	2,17	9,3	12,5	4 x Ø 8
SG22145BF	320	1,00	480	700	120	3,60	9,7	19,8	5 x Ø 8
SG22145BF	320	1,60	400	680	199	5,27	13,64	31,8	4 x Ø 8
SG22145BF	320	2,00	400	600	254	6,29	15,4	39,7	5 x Ø 8

Harmonized Standards of reference EN81-20 and EN81-50

Roping: 2:1 — Conventional Single Wrap

Machine position: Top

Compartment efficiency: 0,9

Nr of deflection pulleys on ball bearings:

2 for rated load ≤ 1000 kg, 3 for rated load > 1000 kg

Counterweight balancing: 50%

Travel height: 30 m

Duty cycle: S3 40%

Starts/hour: 180

Wrap angle: 180°

Acceleration: 0,3÷0,5m/s² for car speed ≤ 1 m/s

0,5÷0,7m/s² for car speed > 1 m/s

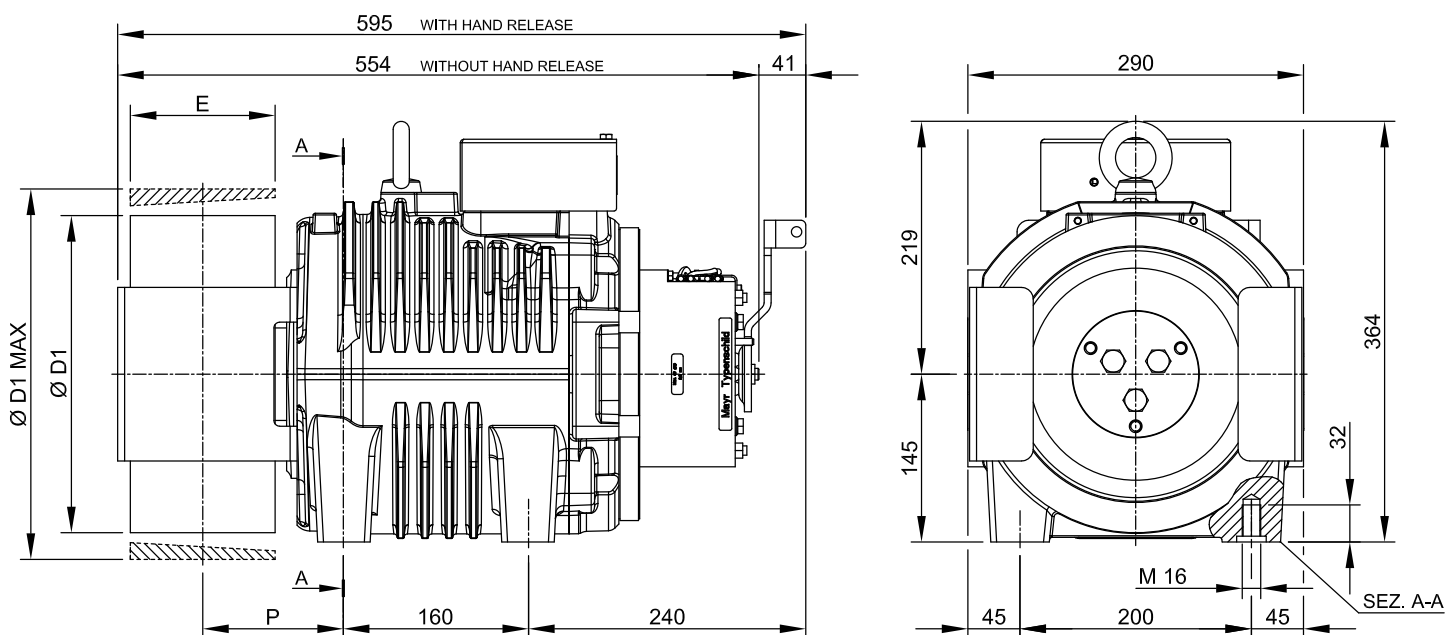
Refer to the product configurator for the value of the short circuit torque, the relative speed and the minimum voltage that allows the operation of gearless machine.

*) Pu-coated ropes

**) Sample data; for more detailed evaluations we recommend our product configurator.

***) Values referred to configuration table (360V)

GEARLESS SG22



Model	Ø D1 [mm]	E [mm]	P [mm]	Max Weight [kg]	Inertia [kgm ²]	Roping System	Torque [Nm]	Max Static Load [kN - kg]	Max Power ** [kW]
SG22145B	120	125	122	160	0,11	CSW *	250	34,3 - 3500	7,6
	160				0,16				
	200				0,24				
	210				0,27				
	240				0,38				
	270				0,49				
	320		117		0,57				

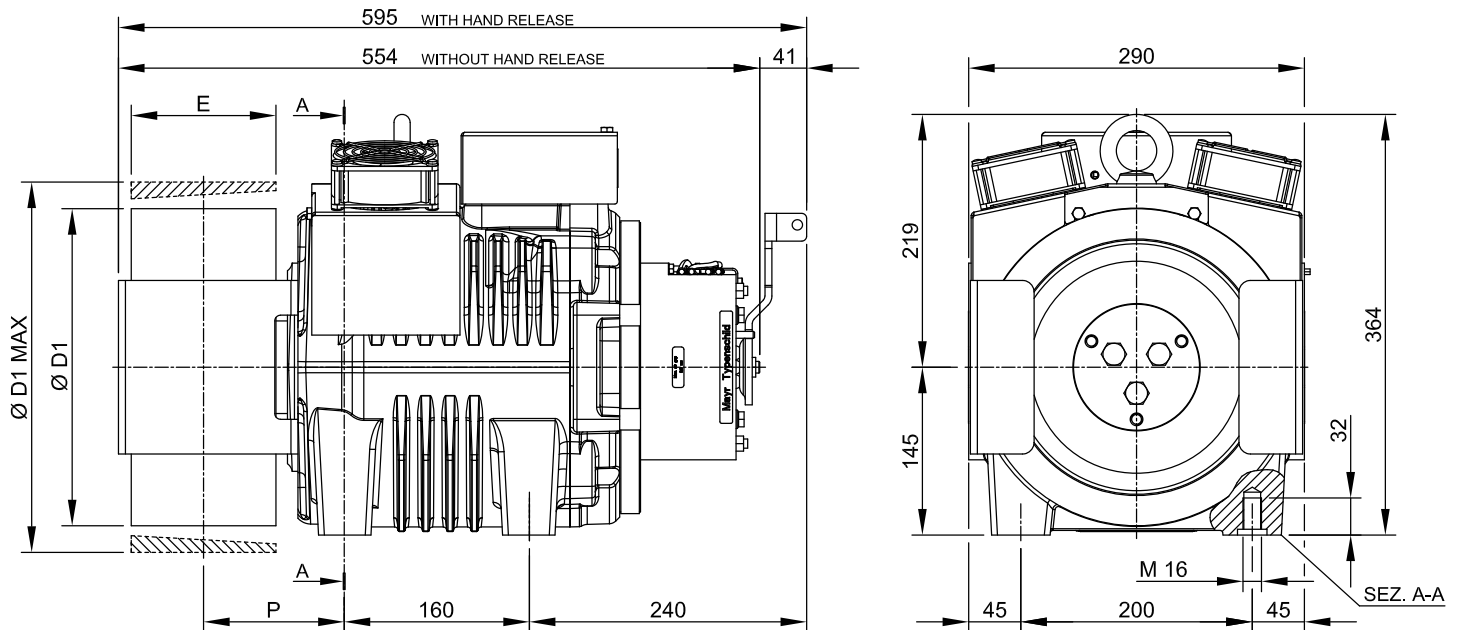
Brake Specifications		
Braking Torque	2x280	[Nm]
Standard Supply Voltage	207	[V DC]
Overexcitation	--	[V DC]
Power	2x79	[W]
Overexcitation	--	[W]
Degree of Protection	IP10	

Standard Encoder Data		
Type	Absolute - EnDat	
Model	Heidenhain ECN 1313	
Positions values/rev	2048 imp/giro 13 bits	
Degree of Protection	IP40	
Standard Cable Length	10	[m]

*) CSW : Conventional single wrap.

**) Sample data; for more detailed evaluations we recommend our product configurator.

GEARLESS SG22F



Model	Ø D1 [mm]	E [mm]	P [mm]	Max Weight [kg]	Inertia [kgm ²]	Roping System	Torque [Nm]	Max Static Load [kN - kg]	Max Power ** [kW]
SG22145BF	120	125	122	163	0,11	CSW *	290	34,3 - 3500	8,8
	160				0,16				
	200				0,24				
	210				0,27				
	240				0,38				
	270				0,49				
	320		117		0,57				

Brake Specifications		
Braking Torque	2x280	[Nm]
Standard Supply Voltage	207	[V DC]
Overexcitation	--	[V DC]
Power	2x79	[W]
Overexcitation	--	[W]
Degree of Protection	IP10	

Standard Encoder Data		
Type	Absolute - EnDat	
Model	Heidenhain ECN 1313	
Positions values/rev	2048 imp/giro 13 bits	
Degree of Protection	IP40	
Standard Cable Length	10	[m]

Ventilation data		
Voltage	[V]	220
Power	[W]	2x16

*) CSW : Conventional single wrap.

**) Sample data; for more detailed evaluations we recommend our product configurator.

GEARLESS SG30

Model → **SG30**

Rated Torque → 395 Nm SG30F (S3 40%)

Braking Torque → 2x410 Nm

Power Range (min - max) → 4,1 - 13,9 kW

Max. Static Load → 34,3 kN - 3500 kg

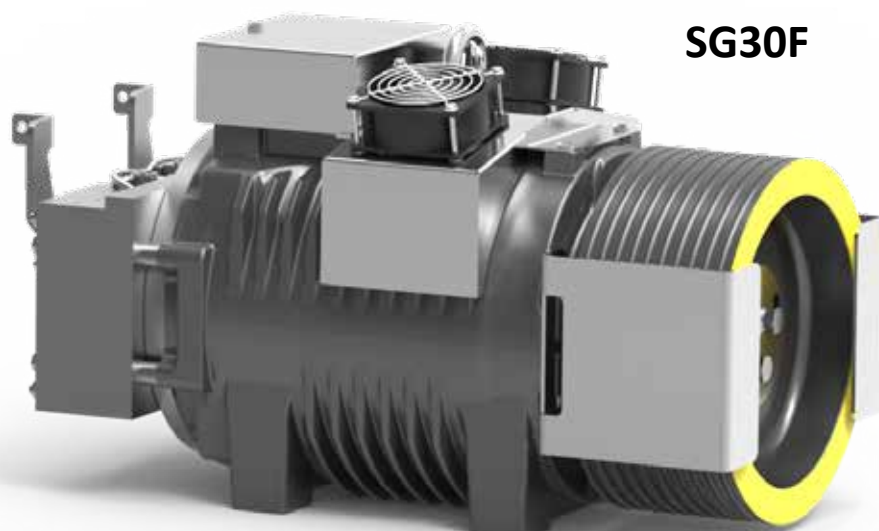
Maximum Weight → 200 kg

Motor Rated Voltage → 360 V - 208 V



SG30

Gearless without fan kit



SG30F

Gearless with fan kit

GEARLESS SG30

**EXAMPLE CONFIGURATION TABLE

Model	Ø Traction sheave [mm]	Car speed [m/s]	Rated load [kg]	Car weight [kg]	rpm [min-1]	P *** [kW]	I *** [A]	Installation frequency [Hz]	Ropes Nr x diameter Ø [mm]
SG30145B	120	0,63	2000	1650	199	7,72	20,19	33,2	8 x Ø 6,5 (*)
SG30145B	120	1,00	1600	1600	380	10,00	29,80	53,0	8 x Ø 6,5 (*)
SG30145B	160	0,63	1275	1400	199	5,02	17,51	24,9	7 x Ø 6,5 (*)
SG30145B	160	1,00	1275	1400	254	7,99	20,30	39,6	7 x Ø 6,5 (*)
SG30145B	160	1,60	1275	1400	380	12,67	31,53	63,5	7 x Ø 6,5 (*)
SG30145B	200	0,63	1000	1200	120	4,45	12,25	20,0	10 x Ø 6,5
SG30145B	200	1,00	1000	1200	199	7,10	19,33	31,9	10 x Ø 6,5
SG30145BF	200	1,60	800	950	380	9,38	29,40	50,8	10 x Ø 6,5
SG30145BF	200	2,00	675	930	380	10,26	25,80	63,4	10 x Ø 6,5
SG30145B	210	0,63	1000	1200	120	4,46	12,87	19,1	10 x Ø 6,5
SG30145B	210	1,00	1000	1200	199	7,06	20,29	30,2	10 x Ø 6,5
SG30145B	210	1,60	800	950	291	9,47	23,37	48,5	10 x Ø 6,5
SG30145BF	210	2,00	675	930	380	10,28	35,20	60,7	10 x Ø 6,5
SG30145B	240	0,63	800	950	120	3,49	11,50	16,7	7 x Ø 6,5
SG30145B	240	1,00	800	950	199	5,66	18,55	26,5	8 x Ø 6,5
SG30145B	240	1,60	800	950	254	9,06	21,51	42,4	8 x Ø 6,5
SG30145BF	240	2,00	675	930	380	9,87	29,42	53,0	9 x Ø 6,5
SG30145B	320	0,63	675	930	120	3,00	13,22	12,5	5 x Ø 8
SG30145B	320	1,00	675	930	120	4,75	13,22	19,8	5 x Ø 8
SG30145B	320	1,60	480	700	199	5,82	15,88	31,8	5 x Ø 8
SG30145B	320	2,00	480	700	254	7,26	18,41	39,7	5 x Ø 8
SG30145BF	320	2,50	450	680	380	8,66	27,52	49,7	5 x Ø 8

Harmonized Standards of reference EN81-20 and EN81-50

Roping: 2:1 — Conventional Single Wrap

Machine position: Top

Compartment efficiency: 0,9

Nr of deflection pulleys on ball bearings:

2 for rated load ≤ 1000 kg, 3 for rated load > 1000 kg

Counterweight balancing: 50%

Travel height: 30 m

Duty cycle: S3 40%

Starts/hour: 180

Wrap angle: 180°

Acceleration: 0,3÷0,5m/s² for car speed ≤ 1 m/s

0,5÷0,7m/s² for car speed > 1 m/s

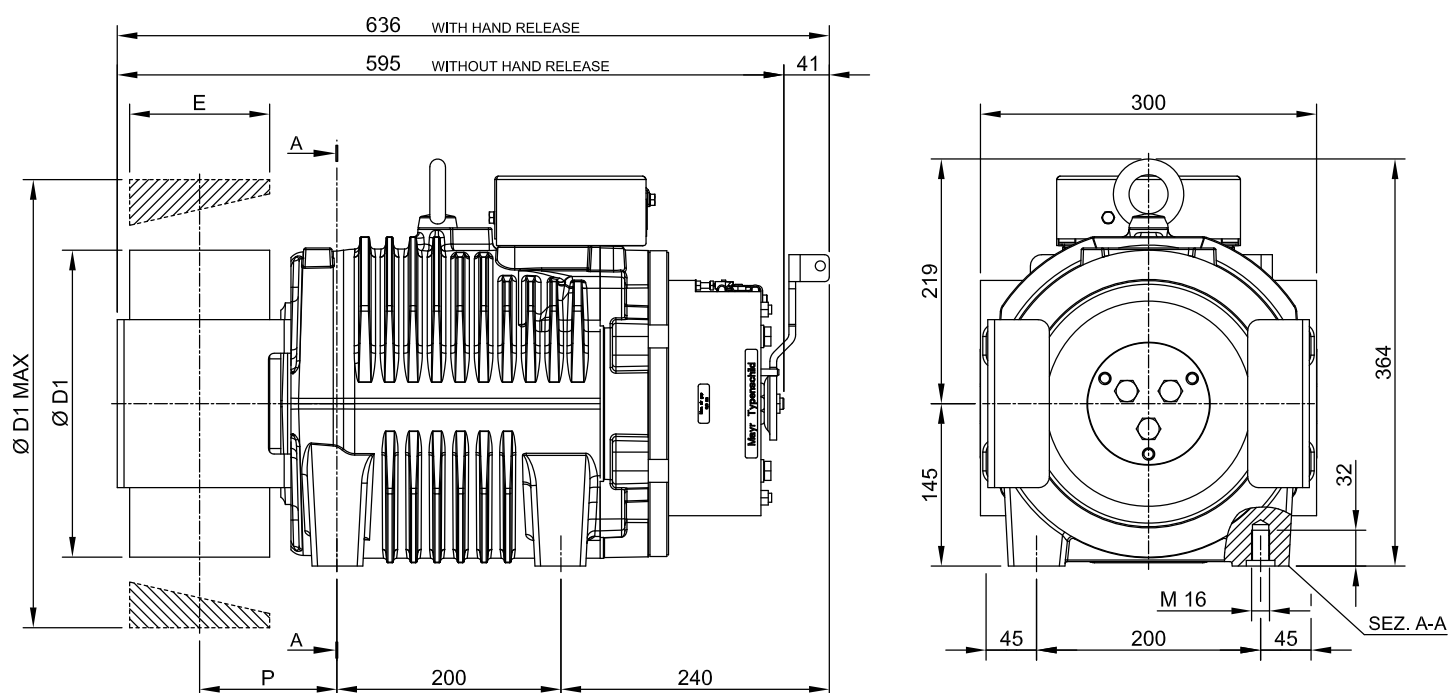
Refer to the product configurator for the value of the short circuit torque, the relative speed and the minimum voltage that allows the operation of gearless machine.

*) Pu-coated ropes

**) Sample data; for more detailed evaluations we recommend our product configurator.

***) Values referred to configuration table (360V)

GEARLESS SG30



Model	Ø D1	E	P	Max Weight	Inertia	Roping System	Torque S3 40%	Max Static Load	Max Power **	
	[mm]	[mm]	[mm]	[kg]	[kgm²]		[Nm]	[kN - kg]	[kW]	
SG30145B	120	125	123	190	0,15	CSW *	330	34,3 - 3500	11,1	
	160				0,19					
	200				0,27					
	210				0,30					
	240				0,42					
	270				0,53					
	320	118	0,60							
	360	100	110		0,78					
	400				1.07					

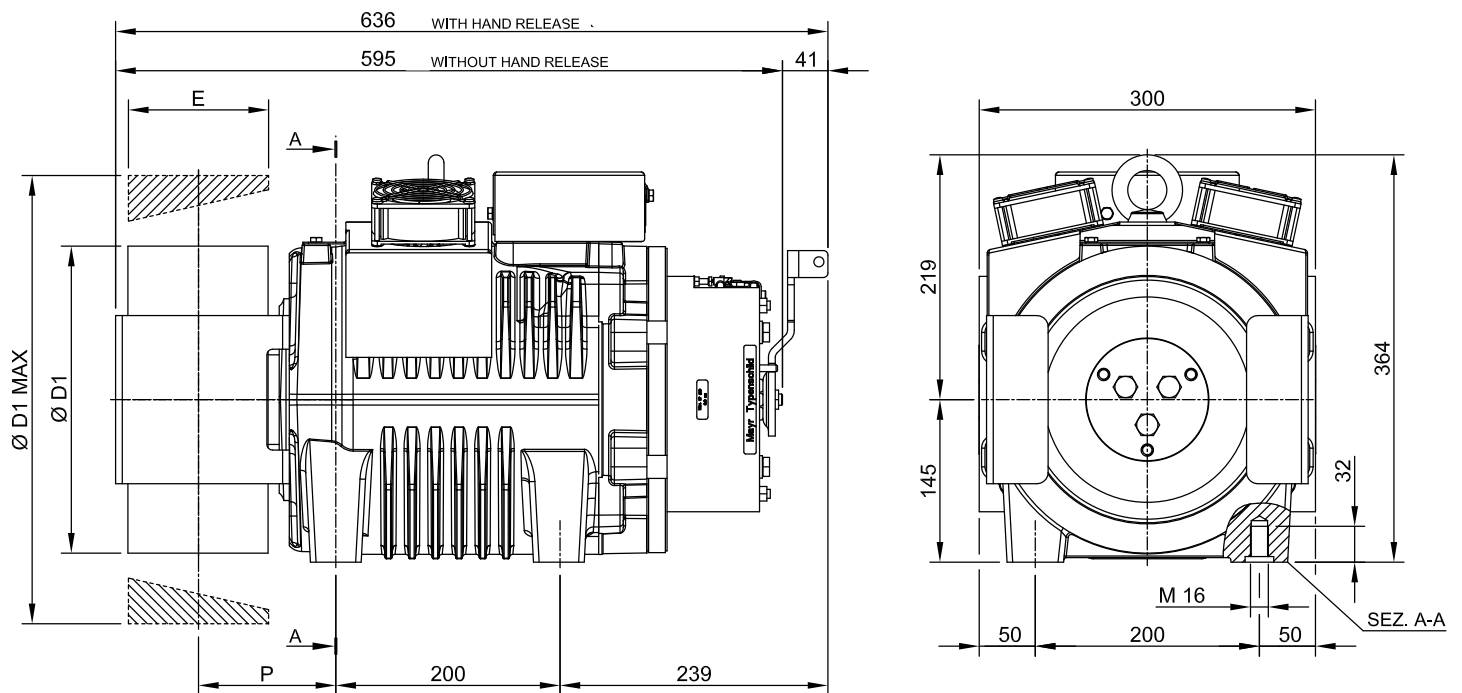
Brake Specifications		
Braking Torque	2x410	[Nm]
Standard Supply Voltage	207	[V DC]
Overexcitation	--	[V DC]
Power	2x82	[W]
Overexcitation	--	[W]
Degree of Protection	IP10	

Standard Encoder Data		
Type	Absolute - EnDat	
Model	Heidenhain ECN 1313	
Positions values/rev	2048 imp/giro 13 bits	
Degree of Protection	IP40	
Standard Cable Length	10	[m]

*) CSW : Conventional single wrap.

**) Sample data; for more detailed evaluations we recommend our product configurator.

GEARLESS SG30F



<i>Model</i>	Ø D1	E	P	<i>Max Weight</i>	<i>Inertia</i>	Roping System	<i>Torque</i> S3 40%	<i>Max Static Load</i>	<i>Max Power</i> **
	[mm]	[mm]	[mm]	[kg]	[kgm²]		[Nm]	[kN - kg]	[kW]
SG30145BF	120	125	123	193	0,15	CSW *	395	34,3 - 3500	13,9
	160				0,19				
	200				0,27				
	210				0,30				
	240				0,42				
	270				0,53				
	320	118	0,60						
	360	100	110		0,78				
	400				1.07				

Brake Specifications		
Braking Torque	2x410	[Nm]
Standard Supply Voltage	207	[V DC]
Overexcitation	--	[V DC]
Power	2x82	[W]
Overexcitation	--	[W]
Degree of Protection	IP10	

Standard Encoder Data		
Type	Absolute - EnDat	
Model	Heidenhain ECN 1313	
Positions values/rev	2048 imp/giro 13 bits	
Degree of Protection	IP40	
Standard Cable Length	10	[m]

Ventilation data		
Voltage	[V]	220
Power	[W]	2x16

*) CSW : Conventional single wrap.

**) Sample data; for more detailed evaluations we recommend our product configurator.

GEARLESS SG40

Model → **SG40**

Rated Torque → 490 Nm SG40F (S3 40%)

Braking Torque → 2x410 Nm (F) 2x600Nm (HF)

Power Range (min - max) → 5,1 - 19,5 kW

Max. Static Load → 34,3 kN - 3500 kg

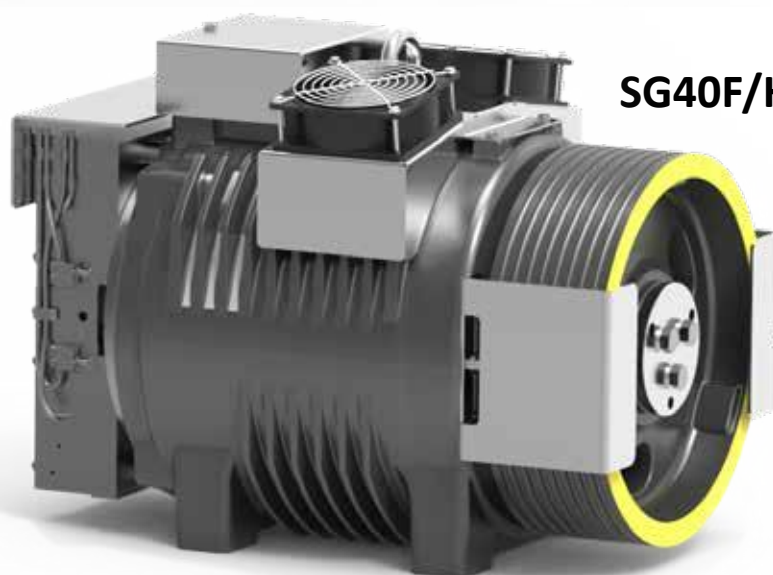
Maximum Weight → 238 kg (F) 245 kg (HF)

Motor Rated Voltage → 360 V - 208 V



SG40

Gearless without fan kit



SG40F/HF

Gearless with fan kit

GEARLESS SG40

EXAMPLE CONFIGURATION TABLE **

Model	Ø Traction sheave [mm]	Car speed [m/s]	Rated load [kg]	Car weight [kg]	rpm [min-1]	P *** [kW]	I *** [A]	Installation frequency [Hz]	Ropes Nr x diameter Ø [mm]
SG40185HF	160	0,63	2000	1650	191	7,75	20,67	25	8 x Ø 6,5
SG40185HF	160	1,00	2000	1650	255	12,28	26,92	39,6	8 x Ø 6,5
SG40185BF	160	1,60	1600	1600	380	15,83	32,56	63,5	7 x Ø 6,5
SG40185B	200	0,63	1000	1200	119	4,42	9,8	19,9	10 x Ø 6,5
SG40185B	200	1,00	1000	1200	191	7,68	16,2	31,8	10 x Ø 8
SG40185B	200	1,60	800	950	380	9,38	24,3	50,8	10 x Ø 6,5
SG40185B	200	2,00	630	900	380	9,74	20,2	63,4	10 x Ø 6,5
SG40185B	210	0,63	1000	1200	119	4,43	10,3	19,1	10 x Ø 6,5
SG40185B	210	1,00	1000	1200	191	7,71	17,0	30,4	10 x Ø 8
SG40185B	210	1,60	800	950	300	9,38	19,9	48,4	10 x Ø 6,5
SG40185B	210	2,00	630	900	380	9,79	21,2	60,7	10 x Ø 6,5
SG40185HF	240	0,63	1275	1400	119	5,47	14,42	16,7	10 x Ø 6,5
SG40185B	240	1,00	1000	1200	191	7,05	17,8	26,6	10 x Ø 6,5
SG40185BF	240	1,60	1000	1200	255	11,35	23,19	42,5	10 x Ø 6,5
SG40185B	240	2,00	800	950	380	11,83	29,14	53	9 x Ø 6,5
SG40185HF	320	0,63	1000	1200	119	4,30	15,13	12,5	6 x Ø 8
SG40185BF	320	1,00	800	950	119	5,77	12,9	19,8	7 x Ø 8
SG40185BF	320	1,60	800	950	191	9,27	19,6	31,8	7 x Ø 8
SG40185BF	320	2,00	675	930	255	10,13	22,3	39,7	7 x Ø 8
SG40185BF	320	2,50	675	930	300	13,12	27,1	49,8	8 x Ø 8

Harmonized Standards of reference EN81-20 and EN81-50

Roping: 2:1 — Conventional Single Wrap

Machine position: Top

Compartment efficiency: 0,9

Nr of deflection pulleys on ball bearings:

2 for rated load ≤ 1000 kg, 3 for rated load > 1000 kg

Counterweight balancing: 50%

Travel height: 30 m

Duty cycle: S3 40%

Starts/hour: 180

Wrap angle: 180°

Acceleration: $0,3 \div 0,5 \text{ m/s}^2$ for car speed ≤ 1 m/s

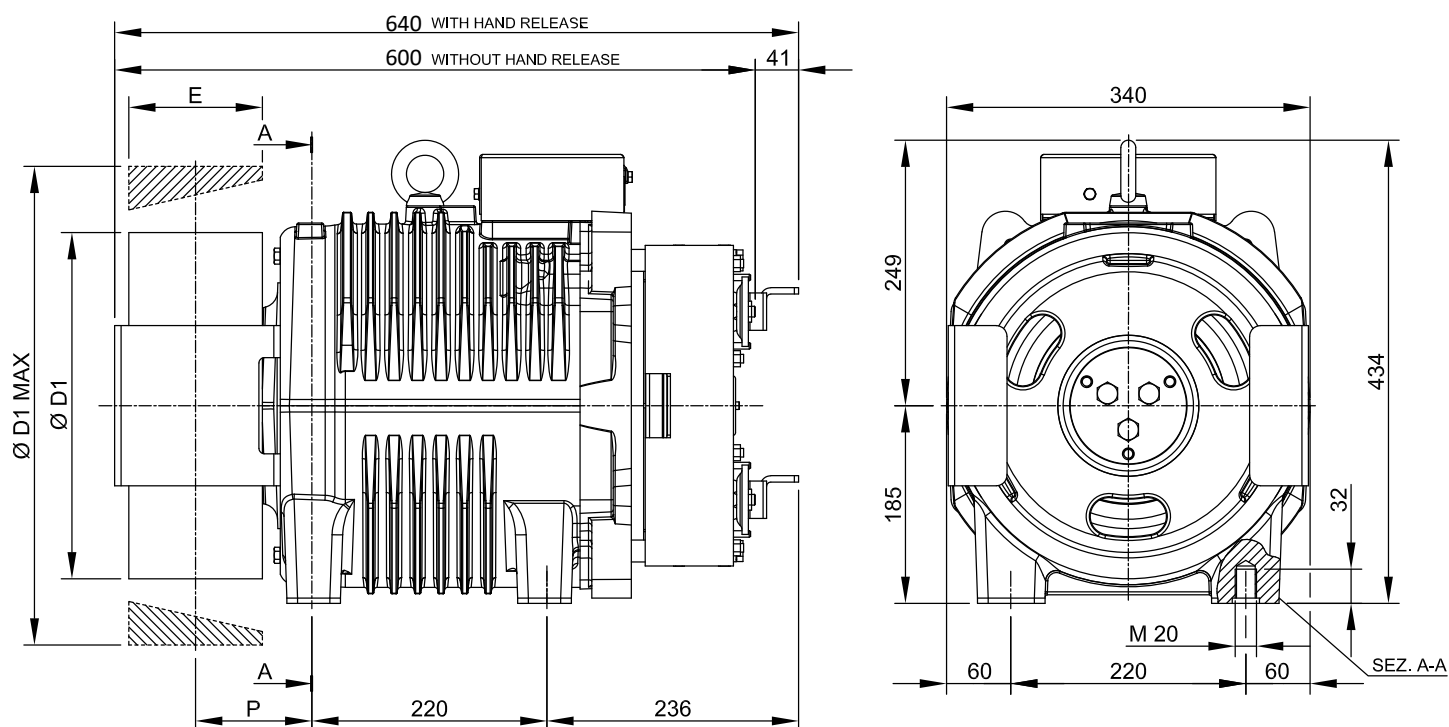
$0,5 \div 0,7 \text{ m/s}^2$ for car speed > 1 m/s

Refer to the product configurator for the value of the short circuit torque, the relative speed and the minimum voltage that allows the operation of gearless machine.

**) Sample data; for more detailed evaluations we recommend our product configurator.

***) Values referred to configuration table (360V)

GEARLESS SG40



<i>Model</i>	Ø D1	E	P	<i>Max Weight</i>	<i>Inertia</i>	<i>Roping System</i>	<i>Torque</i> <i>S3 40%</i>	<i>Max Static</i> <i>Laad</i>	<i>Max Power **</i>	
	[mm]	[mm]	[mm]	[kg]	[kgm²]		[Nm]	[kN - kg]	[kW]	
SG40185B	120	125	114	235	0,27	CSW *	410	34,3 - 3500	16,3	
	160				0,32					
	200				0,40					
	210				0,43					
	240				0,54					
	270				0,66					
	320	109	0,73							
	360	100	101		0,91					
	400				1,20					
	440	110	112		1.54					

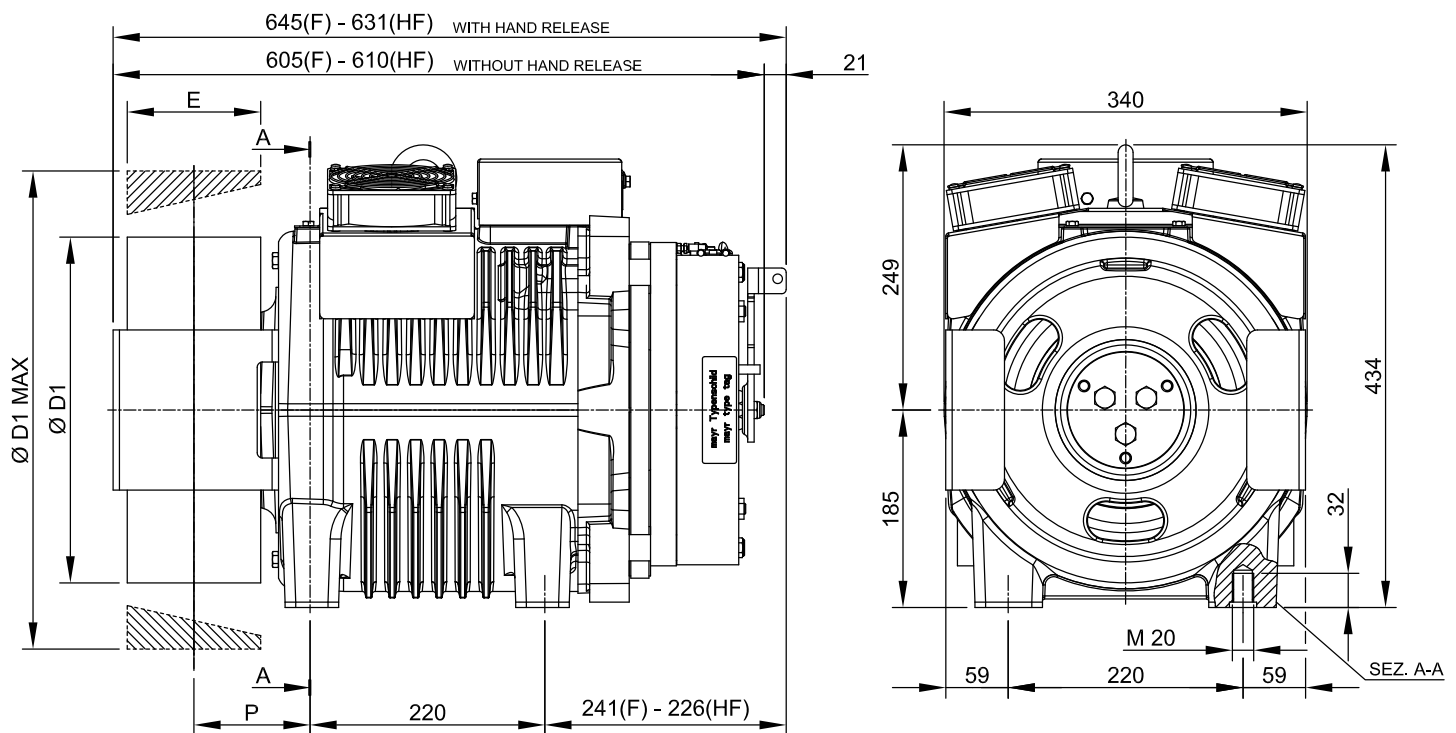
Brake Specifications		
Braking Torque	2x410	[Nm]
Standard Supply Voltage	207	[V DC]
Overexcitation	--	[V DC]
Power	2x82	[W]
Overexcitation	--	[W]
Degree of Protection	IP10	

Standard Encoder Data		
Type	Absolute - EnDat	
Model	Heidenhain ECN 1313	
Positions values/rev	2048 imp/giro 13 bits	
Degree of Protection	IP40	
Standard Cable Length	10	[m]

*) CSW : Conventional single wrap.

**) Sample data; for more detailed evaluations we recommend our product configurator.

GEARLESS SG40F/HF



Model	Ø D1	E	P	Max Weight	Inertia	Roping System	Torque S3 40%	Max Static Laad	Max Power **
	[mm]	[mm]	[mm]	[kg]	[kgm²]		[Nm]	[kN - kg]	[kW]
SG40185BF SG40185HF	120	125	114	238 (F) 245 (HF)	0,27	CSW *	490	34,3 - 3500	19,5
	160				0,32				
	200				0,40				
	210				0,43				
	240				0,54				
	270				0,66				
	320	109	0,73						
	360	100	101		0,91				
	400				1,20				
	440				110				

Brake Specifications	SG40F	SG40HF ***	
Braking Torque	2x410	2x600	[Nm]
Standard Supply Voltage	207	207	[V DC]
Overexcitation	--	--	[V DC]
Power	2x82	2x92	[W]
Overexcitation	--	--	[W]
Degree of Protection	IP10	IP10	

Standard Encoder Data		
Type	Absolute - EnDat	
Model	Heidenhain ECN 1313	
Positions values/rev	2048 imp/giro 13 bits	
Degree of Protection	IP40	
Standard Cable Length	10	[m]

Ventilation data		
Voltage	[V]	220
Power	[W]	2x16

*) CSW : Conventional single wrap.

**) Sample data; for more detailed evaluations we recommend our product configurator.

***) For heavy duty.

GEARLESS SG48

Model → **SG48**

Rated Torque → **720 Nm SG48F (S3 40%)**

Braking Torque → **2x600 Nm (F) 2x850 Nm (HF)**

Power Range (min - max) → **4,1 - 23,4 kW**

Max. Static Load → **34,3 kN - 3500 kg**

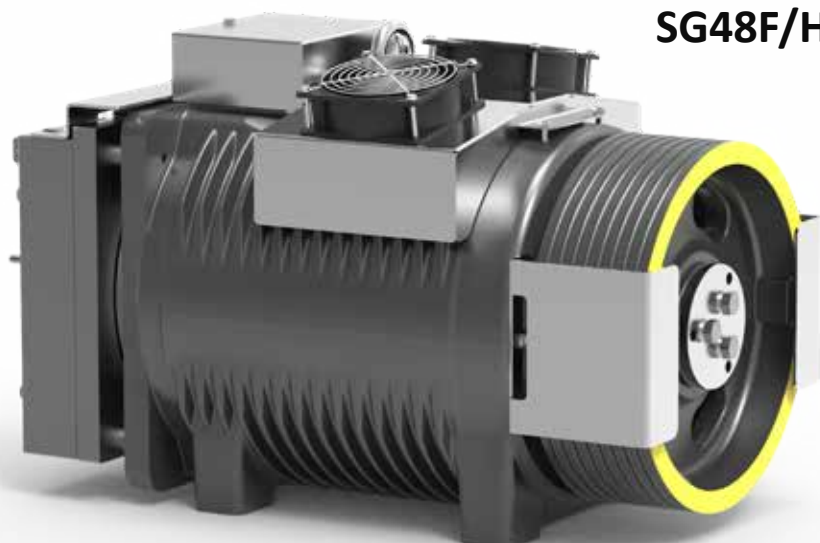
Maximum Weight → **310 kg (F) 350 kg (HF)**

Motor Rated Voltage → **360 V - 208 V**



SG48

Gearless without fan kit



SG48F/HF

Gearless with fan kit

GEARLESS SG48

** EXAMPLE CONFIGURATION

Model	Ø Traction sheave [mm]	Car speed [m/s]	Rated load [kg]	Car weight [kg]	rpm [min-1]	P *** [kW]	I *** [A]	Installation frequency [Hz]	Ropes Nr x diameter Ø [mm]
SG48185B	200	0,63	1275	1400	120	5,80	13,1	19,9	10 x Ø 8
SG48185B	200	1,00	1000	1200	195	7,70	16,9	31,9	10 x Ø 8
SG48185B	200	1,60	800	950	310	9,38	25,9	50,8	10 x Ø 6,5
SG48185HF	240	0,63	1600	1600	120	7,08	18,97	16,7	10 x Ø 8
SG48185HF	240	1,00	1600	1600	195	11,28	29,37	26,6	10 x Ø 8
SG48185B	240	1,60	1275	1400	275	14,83	34,4	42,4	10 x Ø 8
SG48185HF	320	0,63	1275	1400	120	5,24	18,77	12,5	8 x Ø 8
SG48185HF	320	1,00	1275	1400	120	8,95	20,13	19,9	9 x Ø 8
SG48185BF	320	1,60	1000	1200	195	11,65	25,6	31,8	9 x Ø 8
SG48185BF	320	2,00	1000	1200	375	14,88	36,8	39,7	10 x Ø 8
SG48185BF	320	2,50	1000	1200	310	18,35	39,68	49,7	9 x Ø 8
SG48185HF	360	0,63	1275	1400	120	5,41	21,80	11,1	7 x Ø 8
SG48185BF	360	1,00	1000	1200	120	6,92	17,7	17,6	7 x Ø 8
SG48185BF	360	1,60	1000	1200	195	11,40	28,1	28,3	8 x Ø 8
SG48185BF	360	2,00	1000	1200	275	14,26	39,6	35,4	8 x Ø 8
SG48185BF	360	2,50	800	950	375	14,50	32,2	44,2	7 x Ø 8
SG48185HF	400	0,63	1000	1200	65	4,32	11,88	10	4 x Ø 10
SG48185HF	400	1,00	1000	1200	120	7,12	20,05	15,9	5 x Ø 10
SG48185BF	400	1,60	800	950	195	9,09	24,9	25,4	5 x Ø 9
SG48185BF	400	2,00	800	950	195	11,86	26,0	31,9	5 x Ø 10
SG48185BF	400	2,50	675	930	375	12,99	32,1	39,8	5 x Ø 10
SG48185HF	440	0,63	1000	1200	65	4,20	12,69	9,1	5 x Ø 8
SG48185HF	440	1,00	1000	1200	120	6,86	21,16	14,5	6 x Ø 8
SG48185BF	400	1,60	800	950	195	9,04	27,3	23,1	4 x Ø 10
SG48185BF	440	2,00	800	950	195	11,37	27,4	29	5 x Ø 9
SG48185BF	440	2,50	800	950	275	14,20	38,5	36,2	5 x Ø 9

Harmonized Standards of reference EN81-20 and EN81-50

Roping: 2:1 — Conventional Single Wrap

Machine position: Top

Compartment efficiency: 0,9

Nr of deflection pulleys on ball bearings:

2 for rated load ≤ 1000 kg, 3 for rated load > 1000 kg

Counterweight balancing: 50%

Travel height: 30 m

Duty cycle: S3 40%

Starts/hour: 180

Wrap angle: 180°

Acceleration: 0,3÷0,5m/s² for car speed ≤ 1 m/s

0,5÷0,7m/s² for car speed > 1 m/s

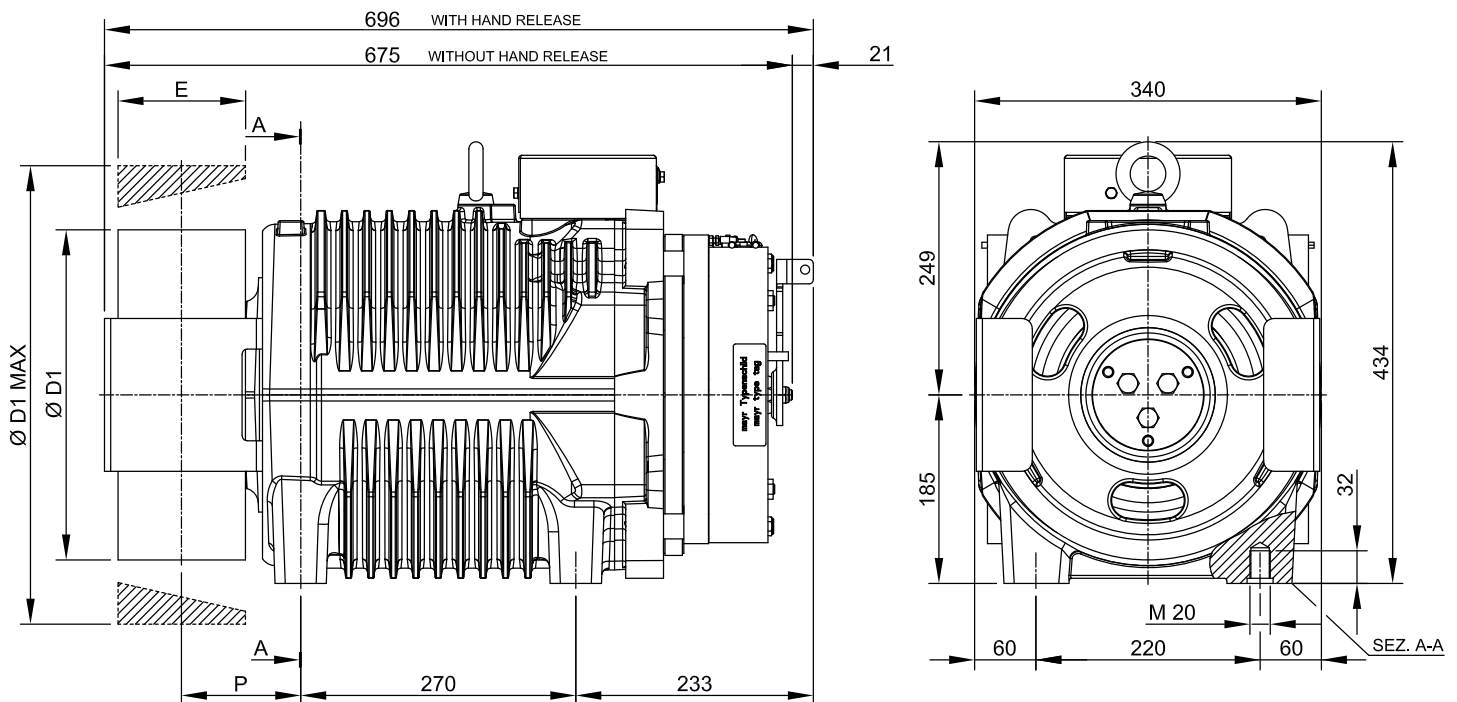
For heavy duty model SG48185HF available

Refer to the product configurator for the value of the short circuit torque, the relative speed and the minimum voltage that allows the operation of gearless machine.

**) Sample data; for more detailed evaluations we recommend our product configurator.

***) Values referred to configuration table (360V)

GEARLESS SG48

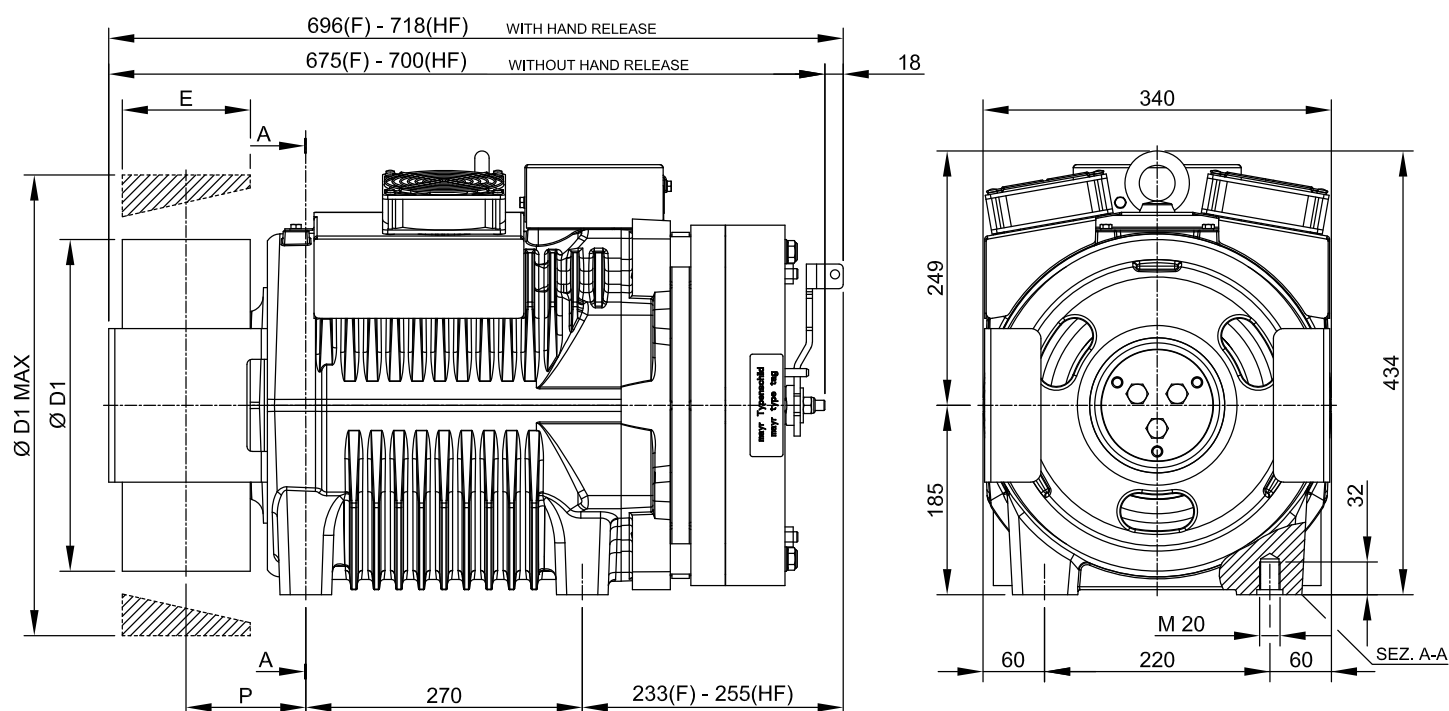


Model	Ø D1	E	P	Max Weight	Inertia	Roping System	Torque S3 40%	Max Static Load	Power **
	[mm]	[mm]	[mm]	[kg]	[kgm²]		[Nm]	[kN - kg]	[kW]
SG48185B	120	125	122	295	0,36	CSW *	600	34,3 - 3500	12,3
	160				0,40				
	200				0,48				
	210				0,51				
	240				0,63				
	270				0,74				
	320	117	0,81						
	360	100	109		0,99				
	400				1,28				
	440				110				

*) CSW : Conventional single wrap.

**) Sample data; for more detailed evaluations we recommend our product configurator.

GEARLESS SG48F/HF



<i>Model</i>	Ø D1	E	P	<i>Max Weight</i>	<i>Inertia</i>	<i>Roping System</i>	<i>Torque</i>	<i>Max Static Load</i>	<i>Max Power **</i>
	[mm]	[mm]	[mm]	[kg]	[kgm²]		[Nm]	[kN - kg]	[kW]
SG48185BF SG48185HF	120	125	122	310 (F) 350 (HF)	0,36	CSW *	720	34,3 - 3500	23,4
	160				0,40				
	200				0,48				
	210				0,51				
	240				0,63				
	270				0,74				
	320	117	0,81						
	360	100	109		0,99				
	400				1,28				
	440				110				

Brake Specifications	SG48F	SG48HF ***	
Braking Torque	2x550	2x850	[Nm]
Standard Supply Voltage	104	207	[V DC]
Overexcitation	207	--	[V DC]
Power	2x92	2x131	[W]
Overexcitation	2x366	--	[W]
Degree of Protection	IP10	IP10	

Standard Encoder Data		
Type	Absolute - EnDat	
Model	Heidenhain ECN 1313	
Positions values/rev	2048 imp/giro 13 bits	
Degree of Protection	IP40	
Standard Cable Length	10	[m]

Ventilation data		
Voltage	[V]	220
Power	[W]	2x16

*) CSW : Conventional single wrap.

**) Sample data; for more detailed evaluations we recommend our product configurator.

***) For heavy duty.

GEARLESS SG53

Model → **SG53**

Rated Torque → **900 Nm SG53F (S3 40%)**

Braking Torque → **2x850 Nm**

Power Range (min - max) → **5,1 - 29,3 kW**

Max. Static Load → **39,2 kN - 4000 kg**

Maximum Weight → **382 kg**

Motor Rated Voltage → **360 V**



SG53

Gearless without fan kit



SG53F

Gearless with fan kit

GEARLESS SG53

** EXAMPLE CONFIGURATION TABLE

Model	Ø Traction sheave [mm]	Car speed [m/s]	Rated load [kg]	Car weight [kg]	rpm [min-1]	P *** [kW]	I *** [A]	Installation frequency [Hz]	Ropes Nr x diameter Ø [mm]
SG53185BF	320	0,63	1600	1600	120	6,92	24,36	12,5	10 x Ø 8
SG53185BF	320	1,00	1600	1600	120	11,18	24,73	19,9	11 x Ø 8
SG53185BF	320	1,60	1275	1400	195	14,94	33,59	31,8	10 x Ø 8
SG53185BF	320	2,00	1275	1400	275	19,08	45,64	39,8	11 x Ø 8
SG53185BF	320	2,50	1275	1400	310	23,88	51,54	49,8	11 x Ø 8
SG53185BF	360	0,63	1600	1600	120	6,82	27,03	11,2	8 x Ø 8
SG53185BF	360	1,00	1275	1400	120	8,73	21,84	17,6	7 x Ø 8
SG53185BF	360	1,60	1275	1400	195	14,35	36,25	28,3	8 x Ø 8
SG53185BF	360	2,00	1275	1400	275	17,90	48,26	35,3	8 x Ø 8
SG53185BF	360	2,50	1000	1200	275	18,40	39,62	44,2	8 x Ø 8
SG53185BF	400	0,63	1275	1400	65	5,51	14,12	60,0	7 x Ø 8
SG53185BF	400	1,00	1275	1400	120	8,77	24,26	15,9	7 x Ø 8
SG53185BF	400	1,60	1000	1200	195	11,14	34,49	23,1	6 x Ø 8
SG53185BF	400	2,00	1000	1200	195	14,33	32,21	31,8	7 x Ø 8
SG53185BF	400	2,50	1000	1200	275	17,93	42,88	39,8	7 x Ø 8
SG53185BF	400	3,00	1000	1200	310	21,54	48,42	47,8	7 x Ø 8
SG53185BF	440	0,63	1275	1400	65	5,40	15,19	9,1	6 x Ø 8
SG53185B	440	1,00	1000	1200	120	6,99	21,23	14,5	6 x Ø 8
SG53185BF	440	1,60	1000	1200	195	11,14	34,49	23,1	6 x Ø 8
SG53185BF	440	2,00	1000	1200	195	13,99	34,49	29,0	6 x Ø 8
SG53185BF	440	2,50	800	950	275	14,54	38,24	36,2	6 x Ø 8
SG53185BF	440	3,00	800	950	275	17,44	38,24	43,4	6 x Ø 8

Harmonized Standards of reference EN81-20 and EN81-50

Roping: 2:1 — Conventional Single Wrap

Machine position: Top

Compartment efficiency: 0,9

Nr of deflection pulleys on ball bearings:

2 for rated load ≤ 1000 kg, 3 for rated load > 1000 kg

Counterweight balancing: 50%

Travel height: 30 m

Duty cycle: S3 40%

Starts/hour: 180

Wrap angle: 180°

Accelleration: 0,3÷0,5m/s² for car speed ≤ 1 m/s

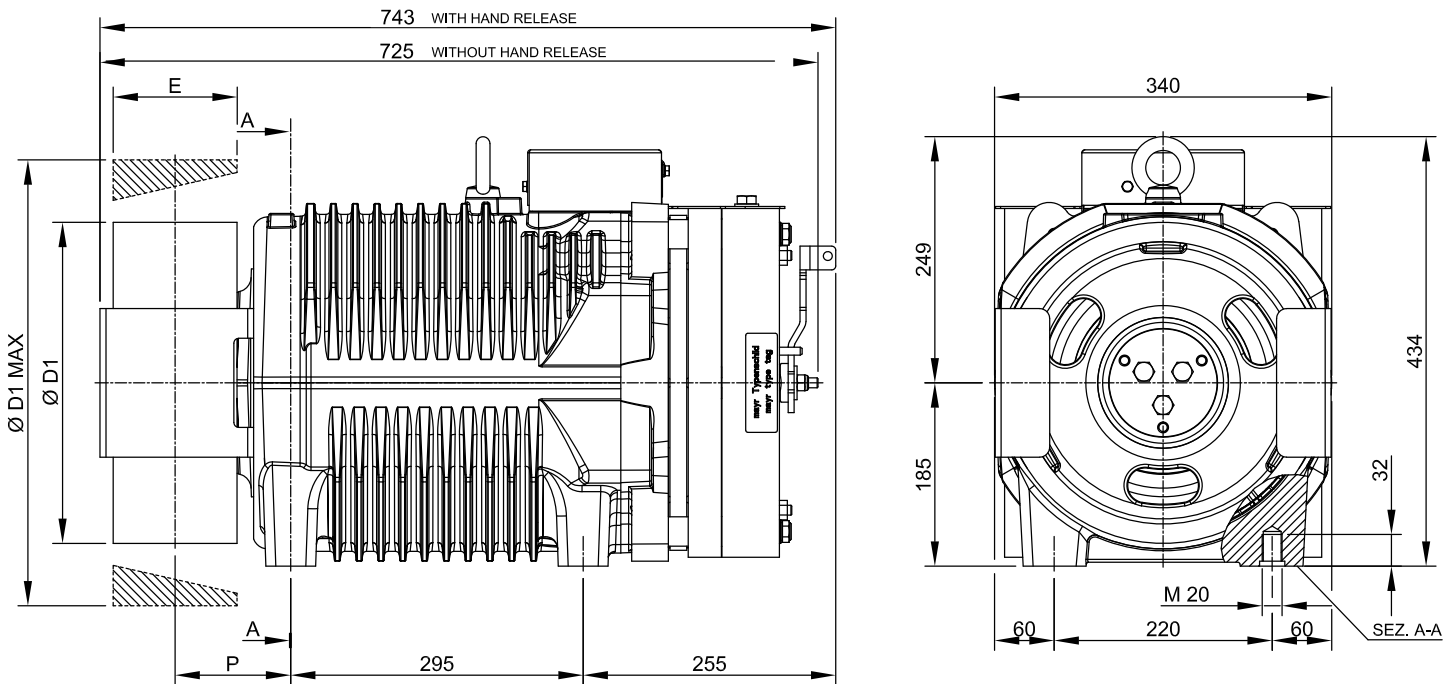
0,5÷0,7m/s² for car speed > 1 m/s

Refer to the product configurator for the value of the short circuit torque, the relative speed and the minimum voltage that allows the operation of gearless machine.

**) Sample data; for more detailed evaluations we recommend our product configurator.

***) Values referred to configuration table (360V)

GEARLESS SG53



<i>Model</i>	Ø D1	E	P	<i>Max Weight</i>	<i>Inertia</i>	<i>Roping System</i>	<i>Torque S3 40%</i>	<i>Max Static Laad</i>	<i>Max Power **</i>	
	[mm]	[mm]	[mm]	[kg]	[kgm²]		[Nm]	[kN - kg]	[kW]	
SG53185B	120	125	122	377	0,47	CSW *	750	39,2 - 4000	24,3	
	160				0,51					
	200				0,59					
	210				0,62					
	240				0,74					
	270				0,85					
	320	117	0,92							
	360	100	109		1,1					
	400				1,39					
	440	110	114		1,73					

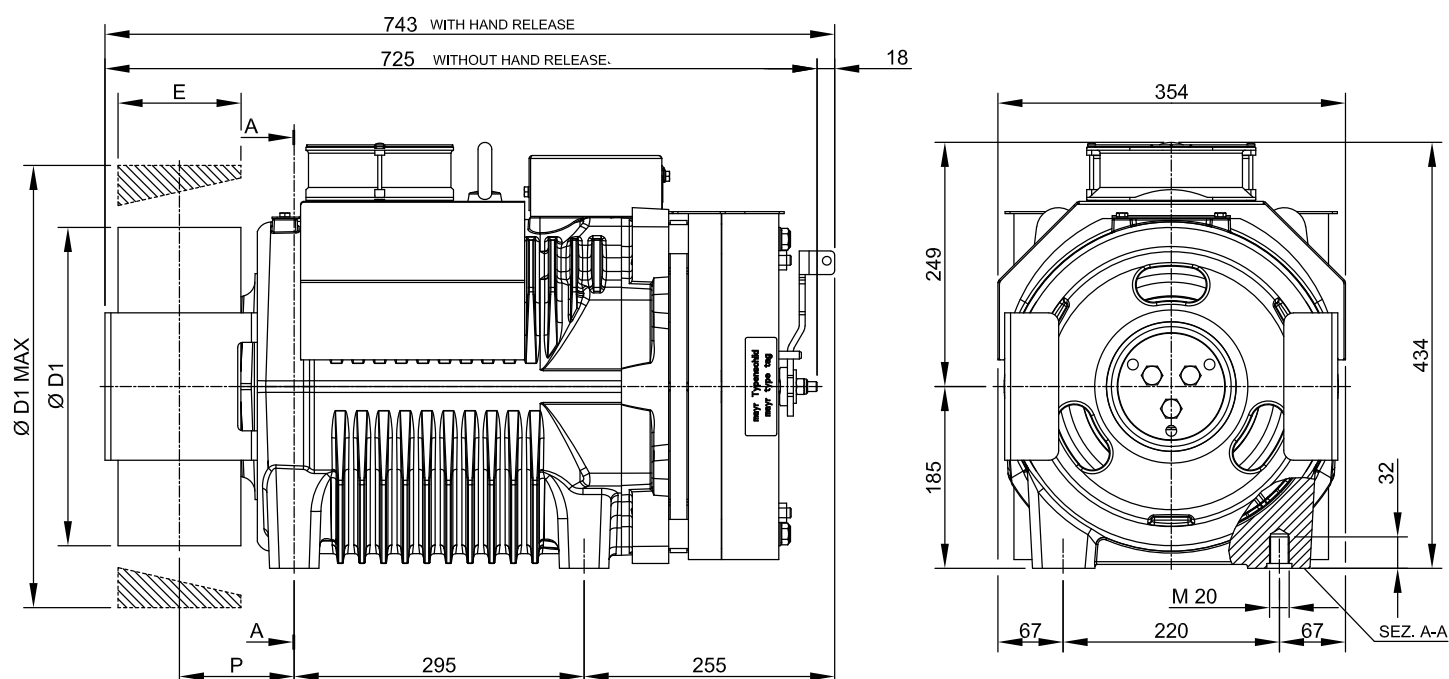
Brake Specifications		
Braking Torque	2x850	[Nm]
Standard Supply Voltage	207	[V DC]
Overexcitation	--	[V DC]
Power	2x131	[W]
Overexcitation	--	[W]
Degree of Protection	IP10	

Encoder Data		
Type	Absolute - EnDat	
Model	Heidenhain ECN 1313	
Positions values/rev	2048 imp/giro 13 bits	
Degree of Protection	IP40	
Standard Cable Length	10	[m]

*) CSW : Conventional single wrap.

**) Sample data; for more detailed evaluations we recommend our product configurator.

GEARLESS SG53F



<i>Model</i>	Ø D1	E	P	<i>Max Weight</i>	<i>Inertia</i>	<i>Roping System</i>	<i>Torque</i>	<i>Max Static Load</i>	<i>Max Power *</i>
	[mm]	[mm]	[mm]	[kg]	[kgm²]		[Nm]	[kN - kg]	[kW]
SG53185BF	120	125	122	382	0,47	CSW *	900	39,2 - 4000	29,3
	160				0,51				
	200				0,59				
	210				0,62				
	240				0,74				
	270				0,85				
	320	0,92							
	360	100	109		1,1				
	400				1,39				
	440	110	114		1,73				

Brake Specifications		
Braking Torque	2x850	[Nm]
Standard Supply Voltage	207	[V DC]
Overexcitation	--	[V DC]
Power	2x131	[W]
Overexcitation	--	[W]
Degree of Protection	IP10	

Encoder Data		
Type	Absolute - EnDat	
Model	Heidenhain ECN 1313	
Positions values/rev	2048 imp/giro 13 bits	
Degree of Protection	IP40	
Standard Cable Length	10	[m]

Ventilation data		
Voltage	[V]	220
Power	[W]	2x16

*) CSW : Conventional single wrap.

**) Sample data; for more detailed evaluations we recommend our product configurator.



KÖHLER Elevator GmbH
Benzstrasse 5
72793 Pfullingen
Deutschland

Tel./Fax.: +49 (0) 7121 7068 077
Email: contact@koehlerelevator.de
Website: www.koehlerelevator.de