


Model	For rated loads up to [kg]	Car speed range in 2:1 [m/s]	Traction sheaves diameter range [mm]	Max Static Load [kN-kg]
 <b>SG53</b>	<b>1600</b>	0,63 ... 3,00	120(*), 160(*), 200, 210, 240, 270, <b>320</b> , 360, 400, 450, 480, 520	39,2-4000

With sheave on drive side.

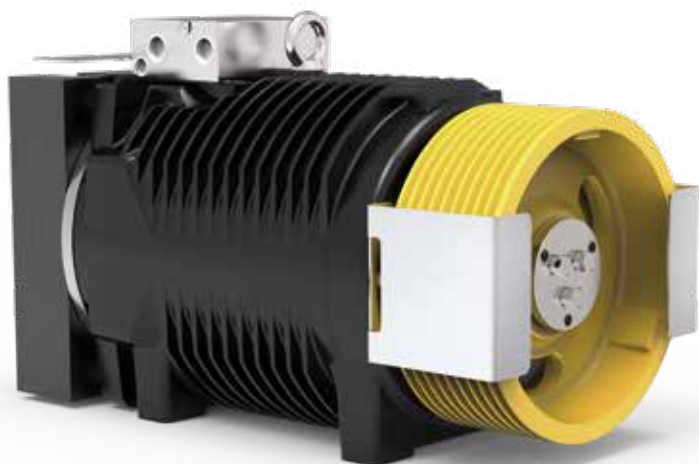
\* Pu-coated ropes

Highlighted pulley diameter is the one used to calculate max allowed capacity in standard condition (see calculation for each model).

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



# SG53 - SG53F



SG53 Gearless without fan kit

Rated Torque **900 Nm SG53F (S3 40%)**  
 Braking Torque **2x850 Nm**  
 Power Range (min - max) **5,1 - 29,2 kW**  
 Maximum Static Load **39,2 kN - 4000 kg**  
 Maximum Weight **396 kg**  
 Motor Rated Voltage **360 V**



SG53F Gearless with fan kit

## CONFIGURATION EXAMPLES TABLE\*\*

Model	Ø Traction sheave	Car speed	Q Rated load	P Car weight	rpm	p ***	I ***	Installation Frequency	Ropes Nr x diameter Ø
	[mm]	[m/s]	[kg]	[kg]	[min <sup>-1</sup> ]	[kW]	[A]	[Hz]	[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	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
SG53185B	480	0,63	800	950	65	3,7	11,3	8,3	4 x Ø 10
SG53185B	480	1,00	800	950	120	5,9	19,5	13,3	4 x Ø 10
SG53185BF	480	1,60	800	950	195	9,2	30,9	21,2	4 x Ø 10
SG53185BF	480	2,00	800	950	195	11,5	30,9	26,5	4 x Ø 10
SG53185BF	480	2,50	800	950	209	14,3	30,9	33,1	4 x Ø 10
SG53185BF	480	0,63	1000	1200	65	4,4	13,5	8,3	4 x Ø 10
SG53185BF	480	1,00	1000	1200	120	6,9	22,8	13,3	4 x Ø 10
SG53185BF	520	0,63	1000	1200	65	4,3	14,4	7,7	4 x Ø 10

Configurations specifications	
Harmonized standards of reference	EN 81-20 e EN 81-50
Roping - Wrapping type	2:1 - Conventional Single Wrap
Machine position	Top
Compartment efficiency	0,9
Nr of deflecti on pulleys on ball bearing	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
Wrapping angle	180°
Acceleration	0,3+0,5m/s <sup>2</sup> for car speed ≤ 1 m/s - 0,5+0,7m/s <sup>2</sup> 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.

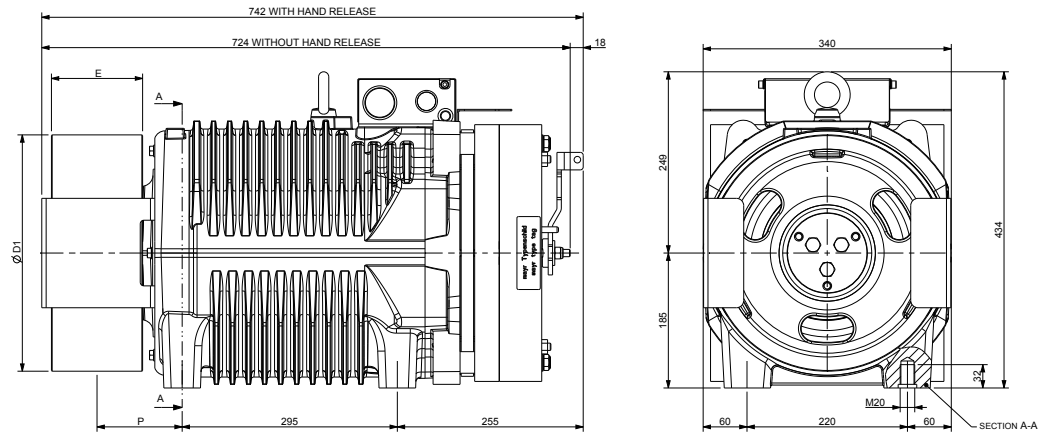
\* Pu-coated ropes

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

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

## SG53 - DIMENSIONS

Mod. SG53185B



Ø D1	E	P	Max Weight	Inertia	Roping System	Torque S3 40%	Max Static Load	Max Power **
[mm]	[mm]	[mm]	[kg]	[kgm <sup>2</sup> ]		[Nm]	[kN - kg]	[kW]
120	125	122	391	0,47	CSW*	750	39,2 - 4000	24,3
160				0,50				
200				0,55				
210				0,58				
240				0,64				
270				0,89				
320	100	109	396	0,98	CSW*	900	39,2 - 4000	29,2
360				1,05				
400				1,35				
450				1,77				
480				2,40				
520	110	114	396	2,75	CSW*	900	39,2 - 4000	29,2

### Brake Specifications

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

### Standard Encoder Data

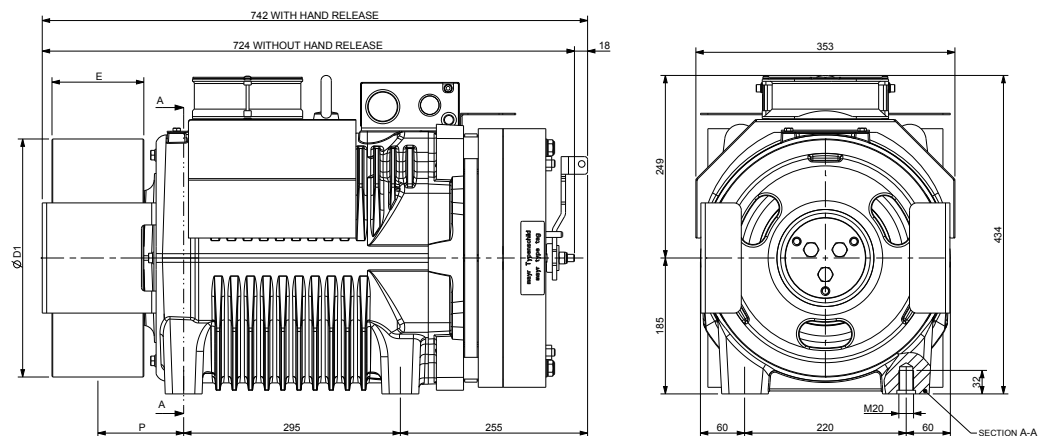
Type: Absolute EnDat  
 Model: Heidenhain ECN 1313  
 Positions values/rev: 2048 imp 13 bits  
 Degree of Protection: IP40  
 Standard Cable Length: 10 [m]

\* CSW: Conventional single wrap.

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

## SG53F - DIMENSIONS

Mod. SG53185BF



Ø D1	E	P	Max Weight	Inertia	Roping System	Torque S3 40%	Max Static Load	Max Power **
[mm]	[mm]	[mm]	[kg]	[kgm <sup>2</sup> ]		[Nm]	[kN - kg]	[kW]
120	125	122	396	0,47	CSW*	900	39,2 - 4000	29,2
160				0,50				
200				0,55				
210				0,58				
240				0,64				
270				0,89				
320	100	109	396	0,98	CSW*	900	39,2 - 4000	29,2
360				1,05				
400				1,35				
450				1,77				
480				2,40				
520	110	114	396	2,75	CSW*	900	39,2 - 4000	29,2

### Brake Specifications

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

### Standard Encoder Data

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

### Ventilation data

Voltage: 220 [V]  
 Power: 2x16 [W]

\* CSW: Conventional single wrap.

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



by  
**SICOR ITALY**  
AN  ELEVANTIS COMPANY

**Sicor Italy S.R.L.**

Viale Caproni, 32 Rovereto (TN) - Italy · Tel: +39 0464 484 111 · [info@sicoritaly.com](mailto:info@sicoritaly.com)

[www.sicoritaly.com](http://www.sicoritaly.com)