

INTERROLL DRUM MOTOR 113S-SMP



Drum Motors
113S-SMP

Compact premium drive for light-duty conveyors

Product Description

Because of its strength, reliability and zero maintenance, this drum motor is perfect for supermarket applications.

- ✓ Small light-duty conveyors
- ✓ Bottle recycling
- ✓ 3-phase or 1-phase AC induction motor
- ✓ Single-rated voltage
- ✓ Integral motor protection
- ✓ Techno-polymer planetary gearbox
- ✓ Low noise
- ✓ Supermarket checkout conveyors
- ✓ Lightweight
- ✓ Maintenance-free
- ✓ Lifetime lubricated
- ✓ Reversible

Note: For applications without belt please use a frequency converter.

Technical Data

Motor data	
Motor type	Asynchronous squirrel cage motor, IEC 34 (VDE 0530)
Insulation class of motor windings	Class F, IEC 34 (VDE 0530)
Voltage	230/400 V ±5 % (IEC 34/38) 115 V 60 Hz (on request)
Frequency	50 Hz
Internal shaft sealing system	Double-lipped, NBR
External shaft sealing system	Deflection seal, NBR (optional)
Protection rate	IP64 (IP66 optional)
Thermal protection	Bi-metal switch
Ambient temperature, 3-phase motor	+5 to +40 °C
Ambient temperature, 1-phase motor	+10 to +40 °C
Dimensions	
Shell length SL	240 to 1,090 mm

Order Information

Please refer to fold-out page at the end of the catalogue.

Material Versions

Component	Version	Material	
		Aluminium	Mild steel
Shell	Crowned		✓
	Cylindrical		✓
End housing	Standard	✓	
Shaft cap	Standard	✓	

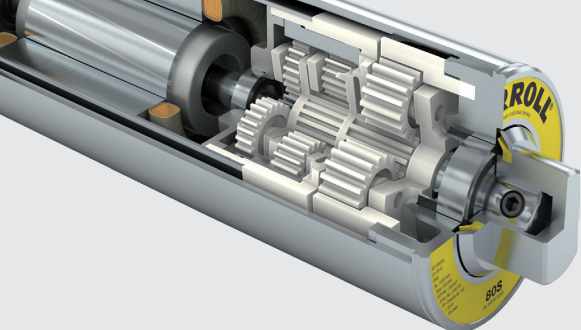
Options

- Lagging for friction drive belts
- Sprockets for plastic modular belts
- Backstops
- Balancing
- Low temperature oil
- UL/cUL safety certifications
- Non-horizontal mounting (more than ± 5°)

Note: Please refer to the drum motor catalogue for detailed information.

Accessories

- Anti-vibration brackets, see p 44
- Idler pulleys, see p 46
- Conveyor rollers, see p 48



INTERROLL DRUM MOTOR 113S-SMP

Compact premium drive for light-duty conveyors

Drum Motors
113S-SMP

Product Range

The following tables give an overview of the possible motor versions. Choosing versions without exclamation mark will ensure the lowest cost and fastest delivery. When ordering, please specify the version in accordance with the configurator on the fold-out page.

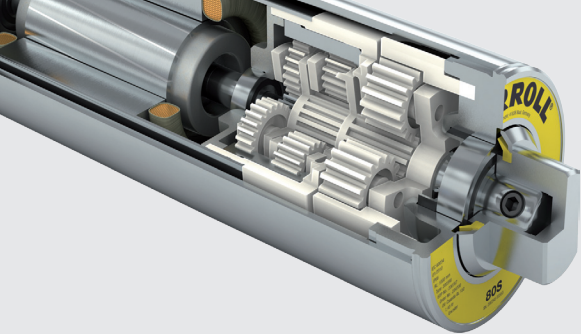
Mechanical data for 3-phase motors

P_N kW	np	gs	i	v m/s	n_A min ⁻¹	M_A Nm	F_N N	TE N	SL_{min} mm			
0.04	8	3	63.00	0.07	11.4	28.6	505	2,700	260			
			49.29	0.09	14.6	22.4	395	2,700	260			
			38.51	0.11	18.7	17.5	309	2,700	260			
0.11	6	2	11.57	0.44	74.8	12.6	223	1,500	275			
			10.27	0.50	84.2	11.2	198	1,500	275			
		4	3	63.00	0.13	21.7	41.6	734	2,000	240		
	49.29			0.16	27.7	32.5	574	2,000	240			
	44.09			0.18	31.0	29.1	514	2,000	240			
	38.51			0.21	35.4	25.4	449	2,000	240			
	30.77			0.26	44.4	20.3	359	2,000	240			
	26.84			0.30	50.9	17.7	313	2,000	240			
	23.96			0.34	57.0	15.8	279	2,000	240			
	15.00			0.54	91.0	10.4	184	1,500	240			
	11.57			0.70	118.0	8.0	142	1,500	240			
	10.27			0.79	132.9	7.1	126	1,500	240			
	0.16	4	3	44.09	0.18	30.6	42.7	754	2,000	260		
				38.51	0.21	35.2	41.9	740	2,000	275		
	0.18	4	3	30.77	0.26	44.0	33.5	591	2,000	275		
26.84				0.30	50.5	29.2	516	2,000	275			
23.96				0.34	56.6	26.1	461	2,000	275			
15.00				0.54	90.3	17.2	303	1,500	275			
11.57				0.69	117.1	13.3	234	1,500	275			
10.27				0.78	131.9	11.8	208	1,500	275			
8.88				0.91	152.6	10.2	180	1,500	275			
7.86				1.02	172.5	9.0	159	1,500	275			
0.33				2	3	44.09	0.38	63.5	42.7	754	2,000	275
						38.51	0.43	72.7	37.3	659	2,000	275
		30.77	0.54			91.0	29.8	526	2,000	275		
		26.84	0.62			104.3	26.0	459	2,000	275		
		23.96	0.69			116.9	23.2	410	2,000	275		
0.33		2	2	15.00	1.11	186.7	15.3	270	1,500	275		
				11.57	1.44	242.0	11.8	208	1,500	275		
	10.27			1.62	272.6	10.5	185	1,500	275			
	8.88			1.87	315.4	9.1	160	1,500	275			
	7.86			2.11	356.4	8.0	141	1,500	275			

P_N	Rated power
np	Number of poles
gs	Gear stages
i	Gear ratio
v	Rated velocity of the shell
n_A	Rated revolutions of the shell
M_A	Rated torque of drum motor
F_N	Rated belt pull of drum motor
TE	Max. belt tension
SL_{min}	Min. shell length

Mechanical data for 1-phase motors

P_N kW	np	gs	i	v m/s	n_A min ⁻¹	M_A Nm	F_N N	TE N	SL_{min} mm		
0.06	4	3	63.00	0.12	20.6	23.8	420	2,000	240		
			49.29	0.16	26.4	18.6	328	2,000	240		
			44.09	0.17	29.5	16.6	294	2,000	240		
			38.51	0.20	33.8	14.5	256	2,000	240		
			30.77	0.25	42.3	11.6	205	2,000	240		
			26.84	0.29	48.4	10.1	179	2,000	240		
			23.96	0.32	54.3	9.0	160	2,000	240		
			15.00	0.51	86.7	6.0	105	1,500	240		
			11.57	0.67	112.3	4.6	81	1,500	240		
			10.27	0.75	126.5	4.1	72	1,500	240		
		8.88	0.87	146.4	3.5	62	1,500	240			
		7.86	0.98	165.5	3.1	55	1,500	240			
		0.08	6	2	15.00	0.35	59.3	11.6	206	1,800	275
					11.57	0.46	76.9	9.0	159	1,800	275
		0.11	4	3	63.00	0.12	20.6	43.8	772	2,000	260
49.29	0.16				26.4	34.2	604	2,000	260		
44.09	0.17				29.5	30.6	541	2,000	260		
38.51	0.20				33.8	26.7	472	2,000	260		
30.77	0.25				42.3	21.4	377	2,000	260		
26.84	0.29			48.4	18.6	329	2,000	260			
23.96	0.32			54.3	16.6	294	2,000	260			
15.00	0.51			86.7	11.0	194	1,500	260			
11.57	0.67			112.3	8.5	149	1,500	260			
10.27	0.75			126.5	7.5	133	1,500	260			
0.11	4	2	8.88	0.87	146.4	6.5	115	1,500	260		
			7.86	0.98	165.5	5.7	101	1,500	260		



INTERROLL DRUM MOTOR 113S-SMP

Compact premium drive for light-duty conveyors

Drum Motors
113S-SMP

Cable Specifications

- 6 x 0.5 mm², 7 x 0.5 mm²
- Wirepins for proper installation
- Ø Cable: 7 mm
- Length: 1.5 / 2 / 3 / 5 m (Other lengths available on request)
- Screened cable for frequency converter operation and halogen-free cable available on request

Connection Diagrams

For connection diagrams, see planning section on p 90.

Dimensions

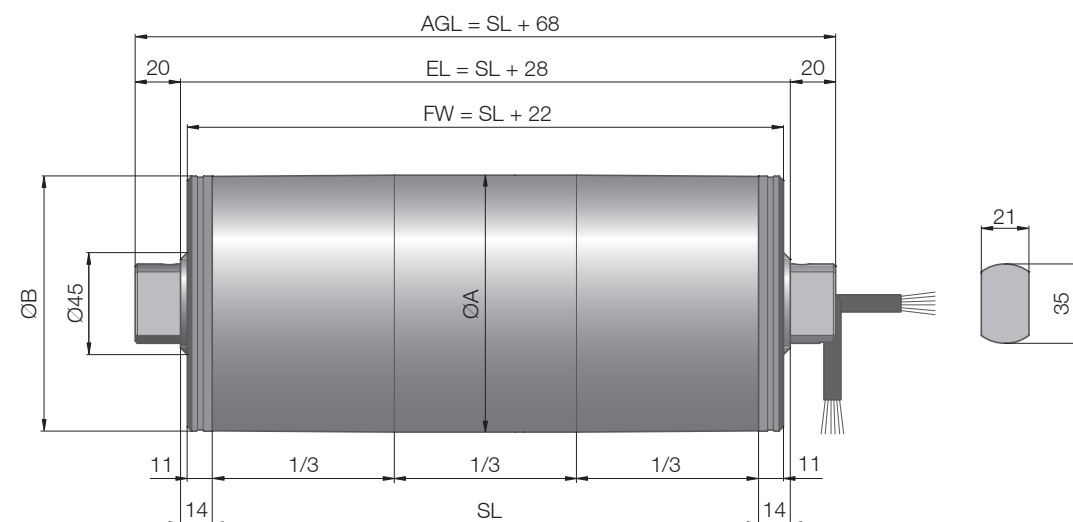


Fig.: Drum motor with straight connector

Type	Ø A mm	Ø B mm
113S-SMP crowned shell	113.3	112.3
113S-SMP cylindrical shell	113.3	113.3

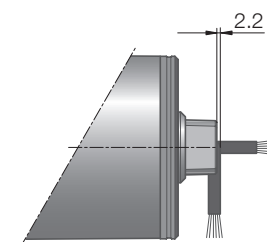


Fig.: Shaft cap

The drum motor's weight depends on its length.

Shell length SL in mm	240	Weight increases by 0.7 kg in 50 mm increments	1,090
Average weight in kg	7.6		19.6

Connector
dimensions

Standard length
and weight

Standard
dimensions