

# INTERROLL DRUM MOTOR 80S-SMP

*Compact premium drive for small light-duty conveyors*



**Drum Motors  
80S-SMP**

## Product Description

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

- ✓ Small light-duty conveyors
- ✓ Bottle recycling
- ✓ Supermarket checkout conveyors

- ✓ 3-phase or 1-phase AC induction motor
- ✓ Single-rated voltage
- ✓ Integral motor protection
- ✓ Techno-polymer planetary gearbox
- ✓ Low noise
- ✓ 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	260 to 952 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	✓	

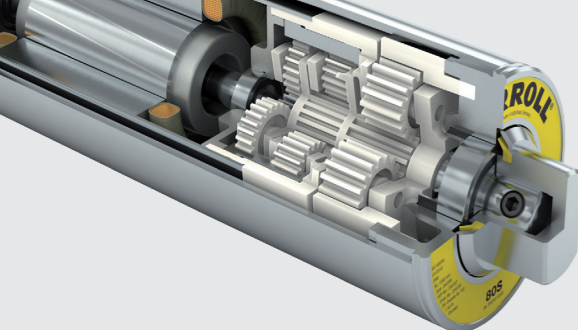
## Options

- Lagging for friction drive belts
- 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



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## 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.

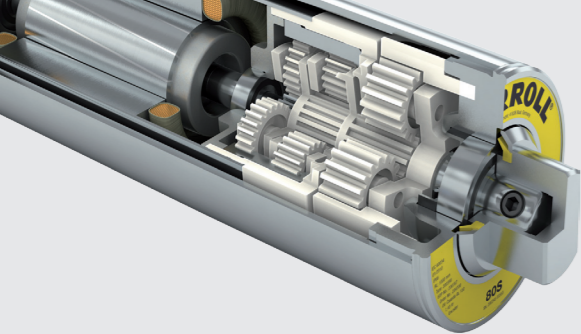
### Mechanical data for 3-phase motors

$P_N$ kW	np	gs	i	v m/s	$n_A$ min <sup>-1</sup>	$M_A$ Nm	$F_N$ N	TE N	$SL_{min}$ mm
0.04	4	3	78.55	0.07	16.8	19.5	479	2,000	270
			71.56	0.08	18.4	17.8	437	2,000	270
			63.51	0.09	20.8	15.8	387	2,000	270
0.05	2	3	115.20	0.10	23.9	16.8	412	2,000	270
0.06	4	2	19.20	0.29	68.8	7.5	183	1,500	295
			16.00	0.35	82.5	6.2	152	1,500	295
			13.09	0.43	100.8	5.1	125	1,500	295
0.075	2	3	96.00	0.13	29.4	20.6	505	2,000	270
0.085	2	3	78.55	0.15	35.6	19.5	479	2,000	270
			71.56	0.17	39.1	17.8	437	2,000	270
			63.51	0.19	44.1	15.8	387	2,000	270
			52.92	0.23	52.9	13.2	323	2,000	270
		48.79	0.24	57.4	12.1	298	2,000	270	
		43.30	0.28	64.7	10.8	264	2,000	270	
		19.20	0.62	145.8	5.0	123	1,500	270	
		16.00	0.75	175.0	4.2	103	1,500	270	
13.09	0.91	213.9	3.4	84	1,500	270			

$P_N$	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 <sup>-1</sup>	$M_A$ Nm	$F_N$ N	TE N	$SL_{min}$ mm		
0.025	4	3	115.20	0.05	11.5	17.8	436	2,000	285		
			96.00	0.06	13.8	14.8	364	2,000	285		
			78.55	0.07	16.8	12.1	297	2,000	285		
			71.56	0.08	18.4	11.0	271	2,000	285		
		19.20	0.29	68.8	3.1	77	1,500	285			
		16.00	0.35	82.5	2.6	64	1,500	285			
		13.09	0.43	100.8	2.1	52	1,500	285			
		0.05	2	3	115.20	0.10	23.9	16.8	412	2,000	260
96.00	0.12				28.6	14.0	343	2,000	260		
78.55	0.15				35.0	11.4	281	2,000	260		
71.56	0.16				38.4	10.4	256	2,000	260		
63.51	0.18				43.3	9.3	227	2,000	260		
52.92	0.22				52.0	7.7	189	2,000	260		
48.79	0.24			56.4	7.1	175	2,000	260			
43.30	0.27			63.5	6.3	155	2,000	260			
19.20	0.61			143.2	2.9	72	1,500	260			
16.00	0.73			171.9	2.5	60	1,500	260			
13.09	0.90			210.1	2.0	49	1,500	260			
0.075	2			3	96.00	0.12	28.6	21.4	525	2,000	270
		78.55	0.15		35.0	17.5	430	2,000	270		
		71.56	0.16		38.4	16.0	391	2,000	270		
		63.51	0.18		43.3	14.2	347	2,000	270		
		52.92	0.22		52.0	11.8	290	2,000	270		
		48.79	0.24		56.4	10.9	267	2,000	270		
		43.30	0.27	63.5	9.7	237	2,000	270			
		19.20	0.61	143.2	4.5	111	1,500	270			
		16.00	0.73	171.9	3.8	92	1,500	270			
		13.09	0.90	210.1	3.1	75	1,500	270			
		0.085	2	3	78.55	0.15	35.0	20.2	496	2,000	285
					71.56	0.16	38.4	18.4	452	2,000	285
63.51	0.18				43.3	16.3	401	2,000	285		
52.92	0.22				52.0	13.6	334	2,000	285		
48.79	0.24				56.4	12.6	308	2,000	285		
43.30	0.27				63.5	11.1	273	2,000	285		
19.20	0.61			143.2	5.2	128	1,500	285			
16.00	0.73			171.9	4.3	106	1,500	285			
13.09	0.90			210.1	3.5	87	1,500	285			
0.11	2			3	63.51	0.18	43.3	20.7	508	2,000	285
					52.92	0.22	52.0	17.2	423	2,000	285
					48.79	0.24	56.4	15.9	390	2,000	285
		43.30	0.27	63.5	14.1	346	2,000	285			
		19.20	0.61	143.2	6.6	162	1,500	285			
		16.00	0.73	171.9	5.5	135	1,500	285			
13.09	0.90	210.1	4.5	110	1,500	285					



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## Cable Specifications

- 6 x 0.5 mm<sup>2</sup>, 7 x 0.5 mm<sup>2</sup>
- 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

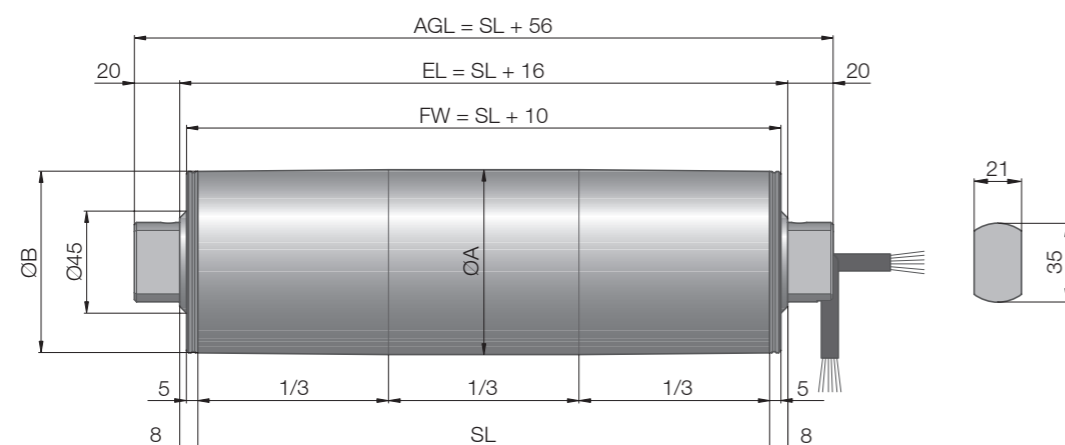


Fig.: Drum motor with straight connector

Type	Ø A mm	Ø B mm
80S-SMP crowned shell length SL 260 to 602 mm	81.5	80.0
80S-SMP crowned shell length SL 602 to 952 mm	83.0	81.0
80S-SMP cylindrical shell length SL 260 to 602 mm	80.5	80.5
80S-SMP cylindrical shell length SL 602 to 952 mm	83.0	83.0

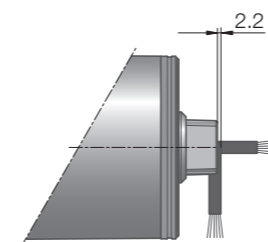


Fig.: Shaft cap

The drum motor's weight depends on its length.

Shell length SL in mm	260	Weight increases by 0.6 kg in 50 mm increments	952
Average weight in kg	4.6		13.1

Connector  
dimensions

Standard length  
and weight

Standard  
dimensions