

MOTOR ROLLER



Zhongda Leader Realizes Infinite Possibility In Automation Application

Motor Drivers Micro Motors Precision Reducers



Headquarters Ningbo Zhongda Leader Intelligent Transmission Co., Ltd.



Subsidiary

Ningbo Zhongda Chuangyuan Precision Equipment Co., Ltd.



Subsidiary

Foshan Zhongda Leader Drive Technology Co., Ltd.

Ningbo Zhongda Leader Intelligent Transmission Co., Ltd. was founded in 1998. It is an electromechanical automation enterprise integrating R&D, manufacturing, sales and service of motor drives, micro motors, precision reducers and integrated products. It has 9 branches and subsidiaries, over 1,800 employees, and a registered capital of 151.17 million yuan. In August 2017, it was listed on the A-shares of the Shenzhen Stock Exchange (stock code 002896).

The company is a national-level high-tech enterprise, leading and participating in the drafting of 10 national standards and 5 industry standards, maintaining 107 patents and 11 invention patents. It's owning a Zhejiang-level enterprise R&D center.

The company is based on intelligent and automation equipment core component manufacturers and design solution providers. With its differentiated and cost-effective advantages, the company's products are widely used in industrial robots, intelligent logistics, new energy, machine tools and other fields, as well as special machinery and equipment for food, packaging, textiles, electronics, and medical treatment. On the basis of realizing domestic substitution of imported products, gradually participate in international competition.

DRUM MOTOR DEVELOPMENT HISTORY

■ Use

Compared with the traditional drive system, the installation of drum motor is much easier, simpler, which means lower cost of designing and purchasing.

■ Durable

Even under severe conditions, full of water, dust, chemicals, oil, grease, even during high-pressure water washing, 113, 138, 165 series drum motors can normally operate.

■ Sanitary Design

Due to the smooth stainless steel material, and tightly sealed and fully enclosed design, drum motor is easier to clean, thus reducing the risk of contamination in food processing.

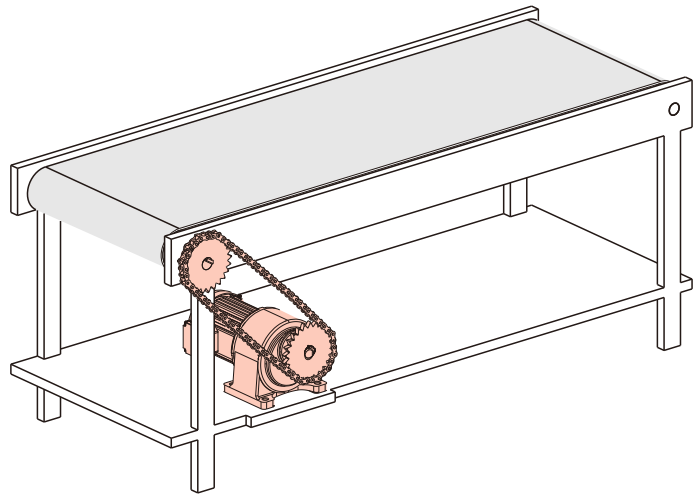
■ Save Space

Because the motor, gearbox and bearings are installed inside of the drum, drum motor occupies less space.

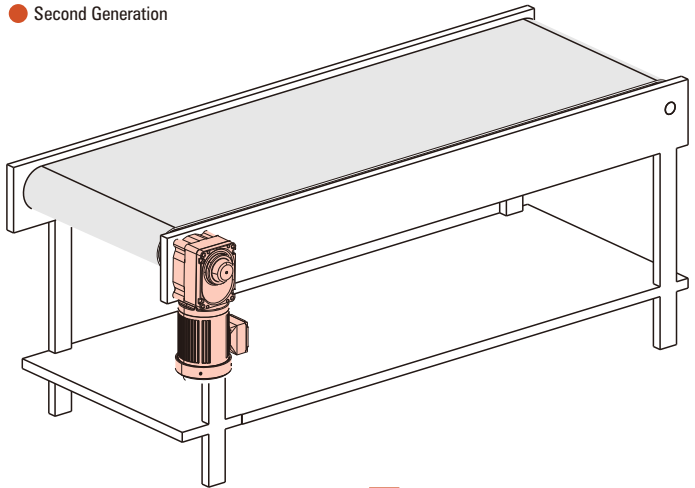
■ Security

As a complete unit with no protruding parts and fixed by external axial, drum motor is the safest drive system used for first-class transporting equipments.

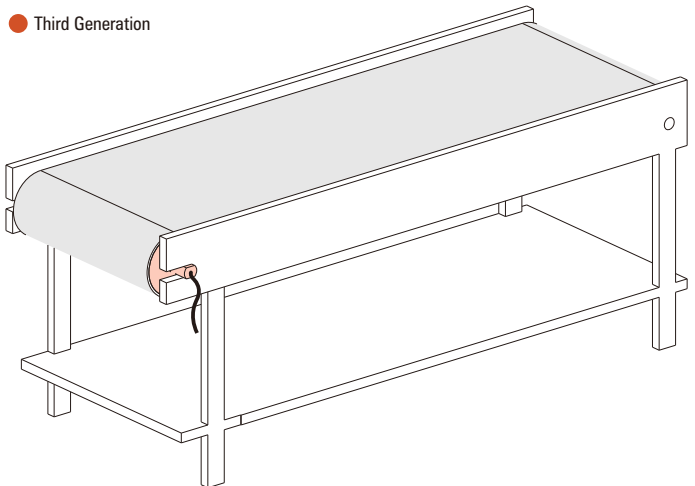
● First Generation



● Second Generation



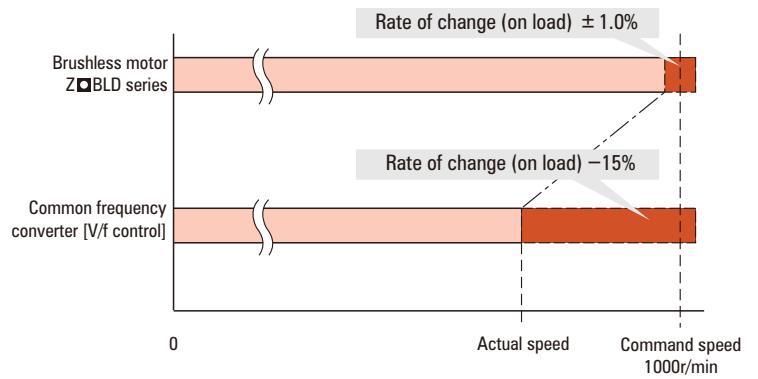
● Third Generation



GENERAL TECHNICAL INFORMATION—DC DRUM MOTOR

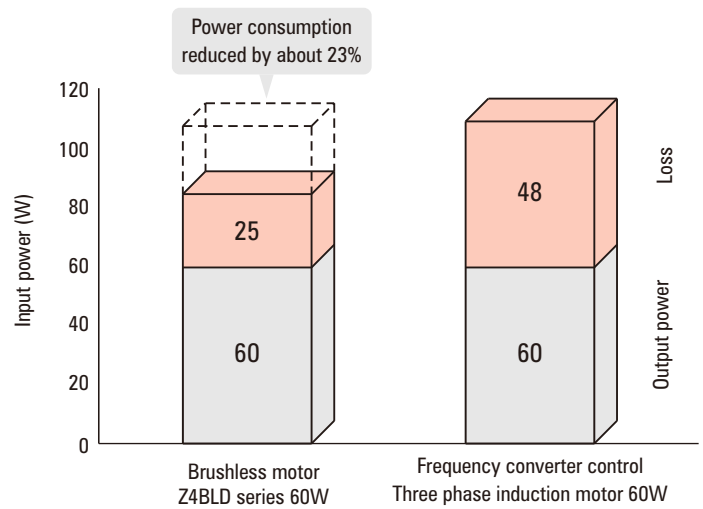
Stable Speed Control

Brushless motor continues to set speed and a feedback signal are compared from the speed of the motor to adjust the voltage applied to the motor; therefore, even if the load change, still can set the speed from slow instantaneous adjustment to, and in order to stabilize the running speed. Three phase induction motor with inverter control is not feedback control, so the load becomes larger, the speed will be greatly reduced; for the high speed stability requirements, it is recommended to use brushless motor.

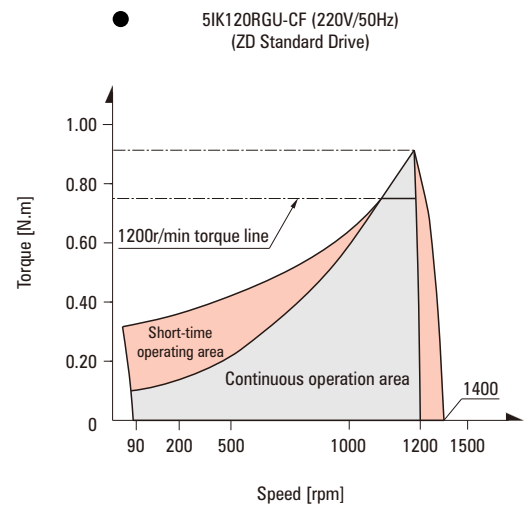
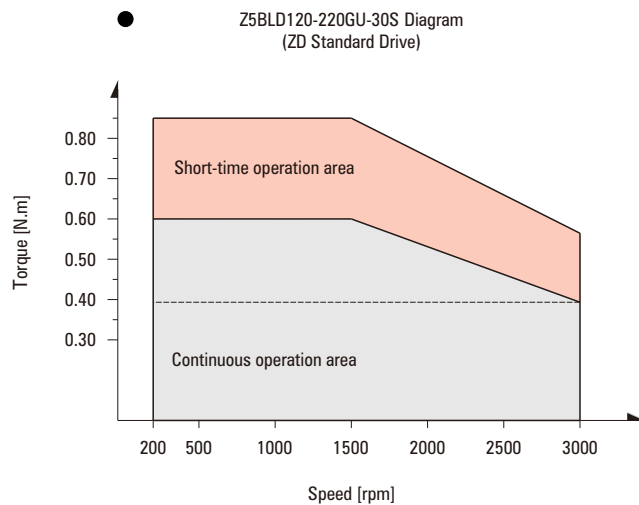


Contribute To Energy Saving

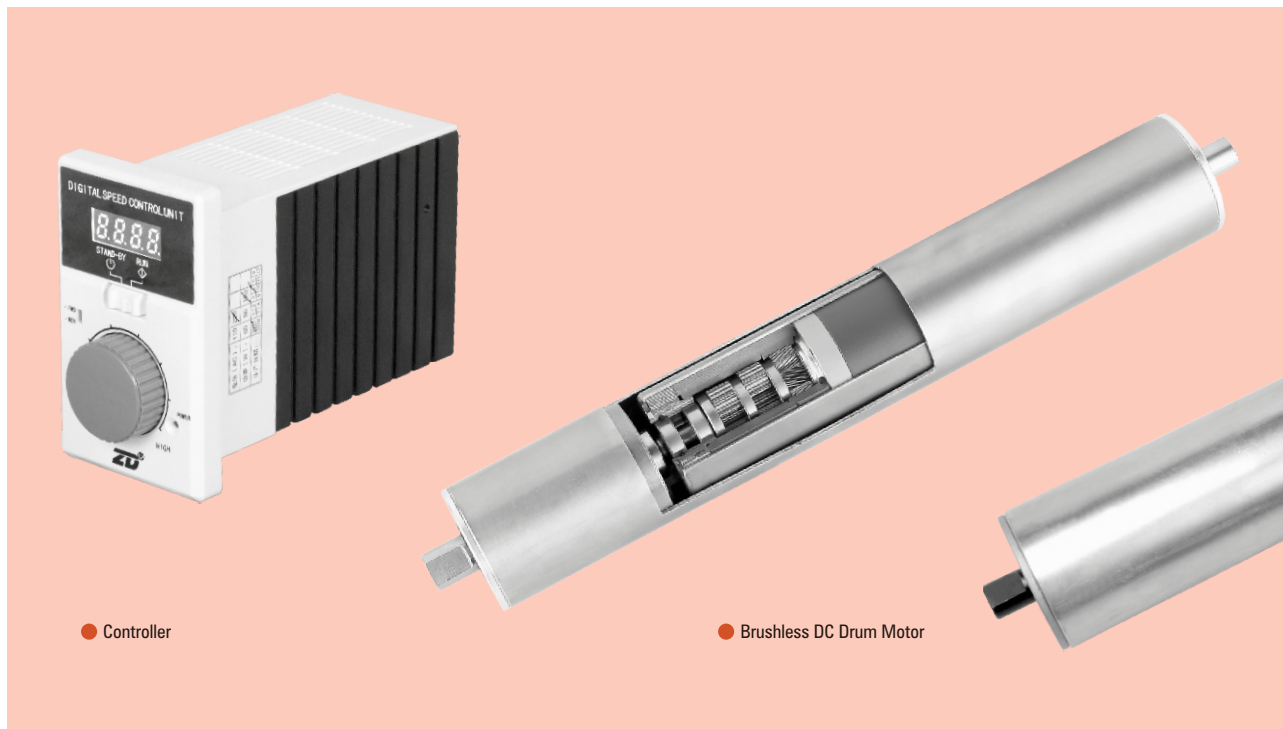
The rotor of the brushless motor is used for the permanent magnet, which can reduce the two loss of the rotor, so the power consumption is reduced by more than 20% compared with the three phase induction motor with variable frequency control, which is helpful for the energy saving of the device.



Low Speed And High Torque Performance



BRUSHLESS DC DRUM MOTOR



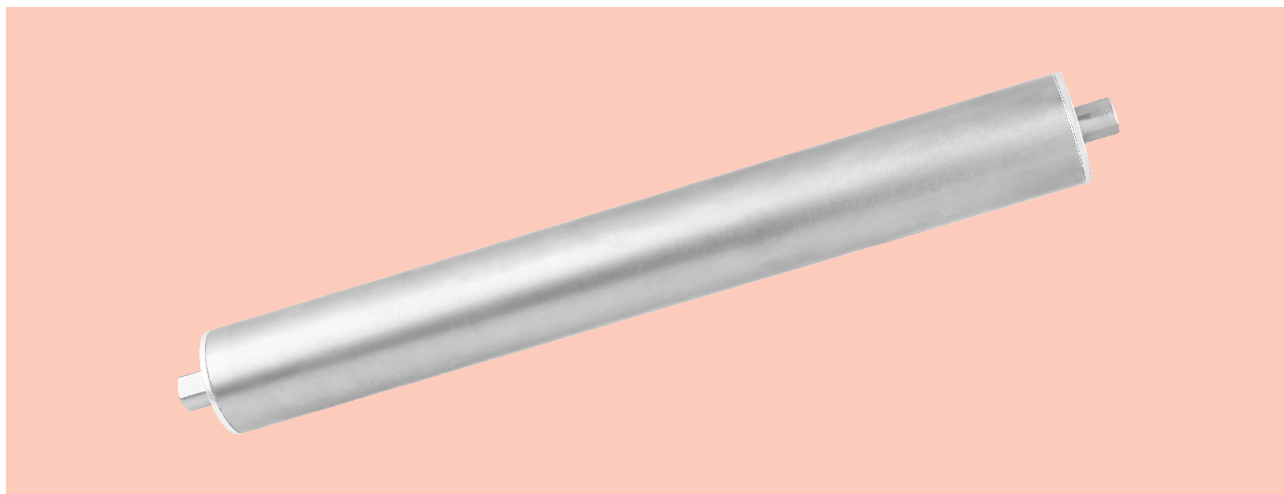
MODEL NO. CODING

Motor

ZD BL S 50 - A - 25 - 380 - 40 - D - 24 - P
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪

①	Company	ZD Motor
②	Model & Dimension	
	Motor type	BL: Brushless motor
③	Drum material	T: Carbon steel pipe (Galvanized) S: 304 Stainless steel pipe
④	Drum diameter	(Example) 50: Drum diameter 50mm
⑤	Drum shape	A: Cylindrical tube
⑥	Linear speed	(Example) 25: Rotary line speed 25m/min
⑦	Drum length	(Example) 400: Total length 400mm (Out shaft is not included)
⑧	Rated power	(Example) 40: Motor rated power 40W
⑨	Voltage type	D: DC power supply
⑩	Voltage	(Example) 24:24V
⑪	Belt line (Omissible)	P: Belt line bearing 6203, shaft diameter 17 Roller line bearing 6902, shaft diameter 15

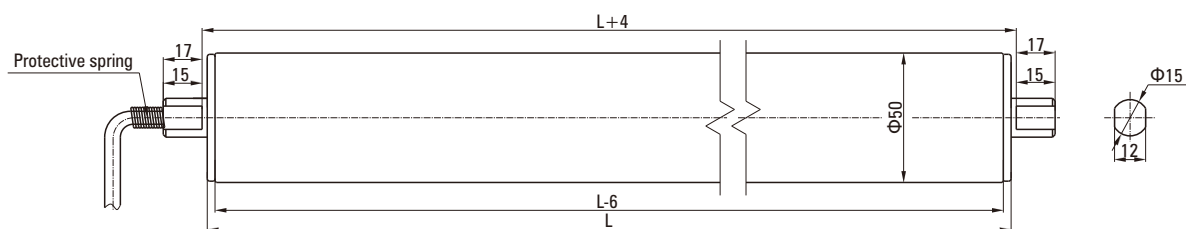
BL50 DRUM MOTOR



P06

• Safe voltage • Super torque • Speed regulation • Conveying speed

BL50 Outlining Dimensions



Lead Out Outlet

Blue (thick)	Yellow (thick)	Green (thick)	Red (fine)	Yellow (fine)	Green (fine)	Blue (fine)	black (fine)
W	U	V	Vcc+5V	Hu	Hv	Hw	GND

- Diameter: $\Phi 50$
- Wall thickness: t1.5
- Material of the outer tube: SUS304
- Carbon steel: Zinc plating

BL50 Mechanical Parameters

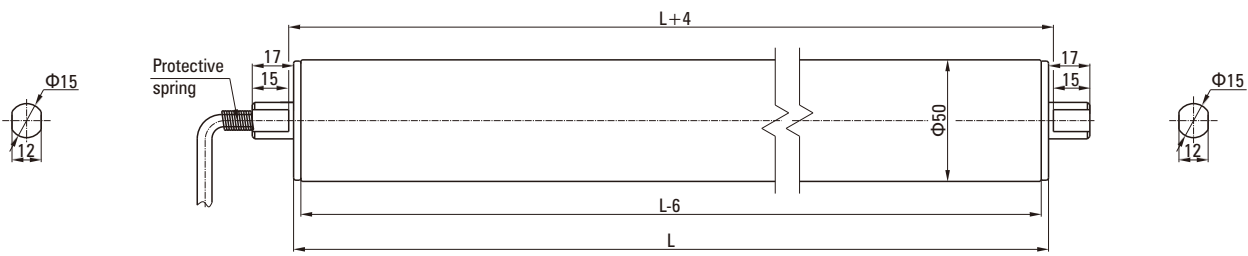
● Drum Shell

Voltage 24V/48V

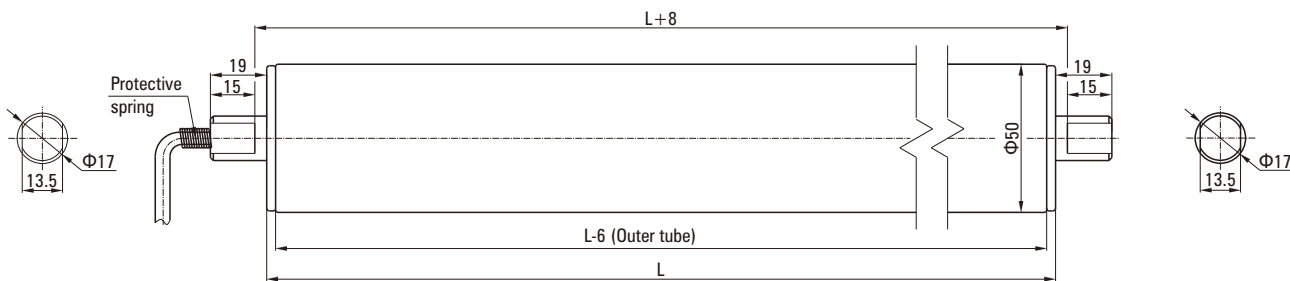
Rated Power P W	Gear Box Series	Reduction Ratio i	Max Speed V m/min	Rated Speed n RPM	Rated Torque T Nm	Traction F N	Length L mm
40	1	3.65	129	821.9	0.420	16.73	270
		5.36	88	559.7	0.610	24.57	
		6.55	72	458.0	0.750	30.03	
		8.63	55	347.6	0.990	39.56	
	2	13.53	35	221.7	1.400	55.82	285
		18.92	25	158.6	1.950	78.06	
		24.65	19	121.7	2.540	101.70	
		33.92	14	88.40	3.500	139.94	
	3	44.69	11	67.10	4.610	184.37	300
		67.08	7	44.70	6.240	249.41	
		91.36	5	32.80	8.490	339.69	
		165.64	3	18.10	15.00	600.00	

Conventional Shaft Outlet With Different Installation Methods

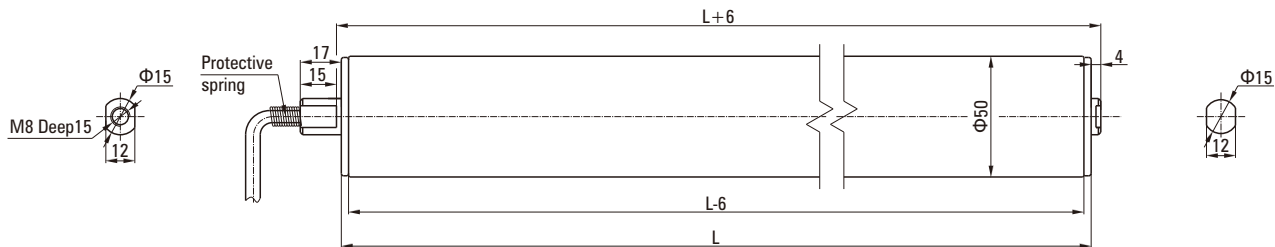
- Conventional shaft output, double milling flat



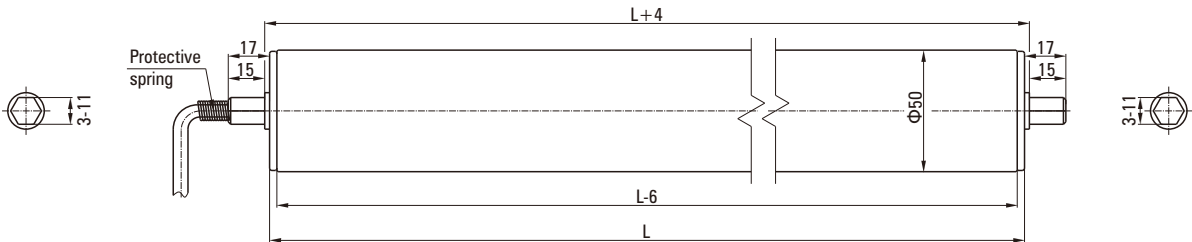
- Belt line



- Conventional shaft outlet, double milling flat, with internal threaded hole at the shaft end

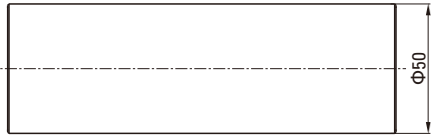


- Conventional shaft outlet, hexagonal milling

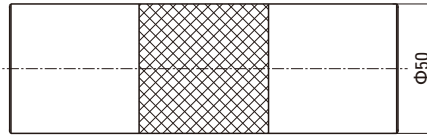


Special Treatment For Outer Tube Of Drum

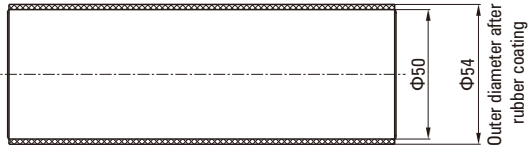
● Conventional outer tube, no special treatment



● Knurling treatment of the surface of the middle section of the outer tube



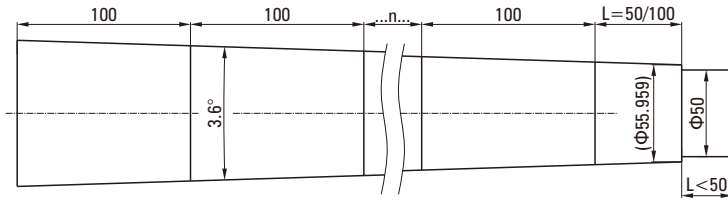
● Surface rubber (Silica gel)



● Polyurethane lagging

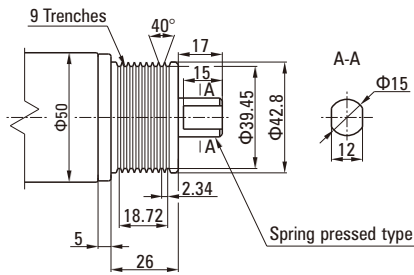


● Taper sleeve

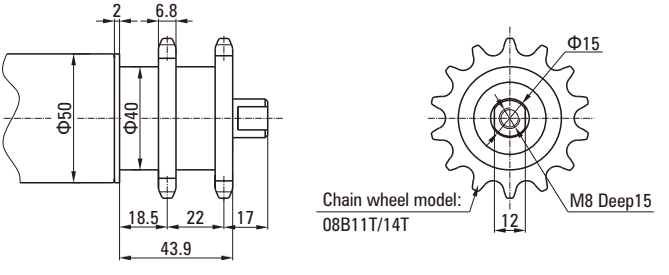


Connecting Structure Of Roller End Cover

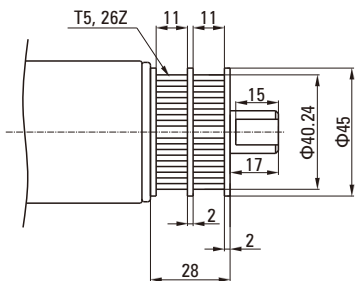
● Multi wedge pulley end cover



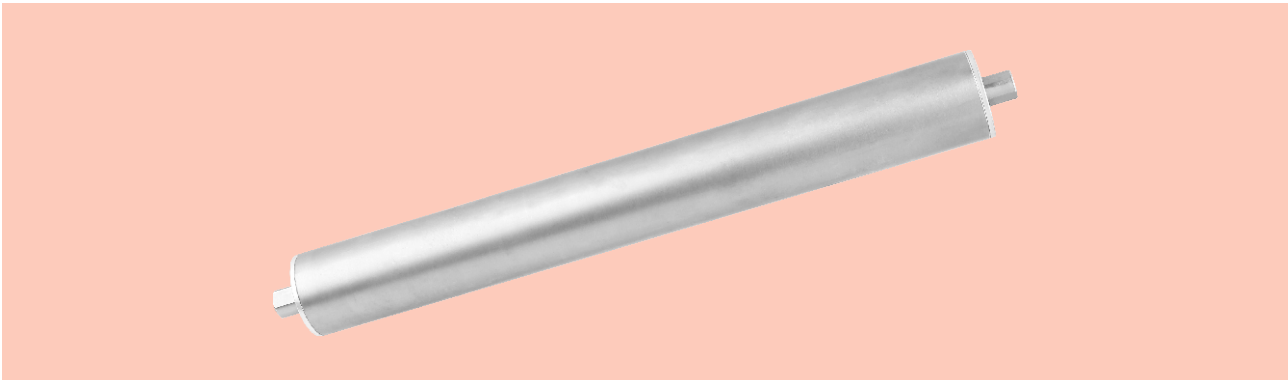
● Double sprocket end cover



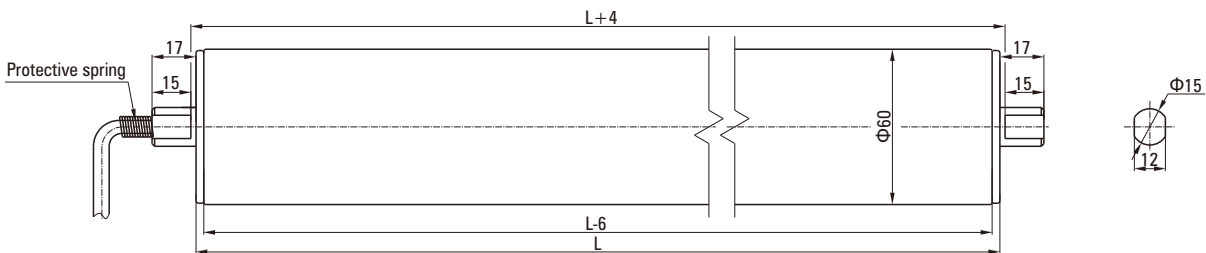
● Synchronizing wheel



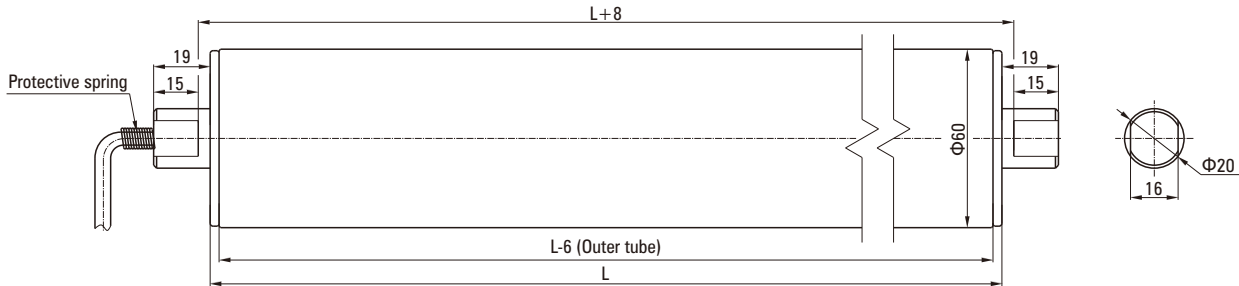
BL60 DRUM MOTOR



BL60 Outlining Dimensions



Belt line



Lead Out Outlet

Blue (thick)	Yellow (thick)	Green (thick)	Red (fine)	Yellow (fine)	Green (fine)	Blue (fine)	black (fine)
W	U	V	Vcc+5V	Hu	Hv	Hw	GND

- Diameter: $\Phi 60$
- Wall thickness: t1.5
- Material of the outer tube: SUS304
- Carbon steel: Zinc plating

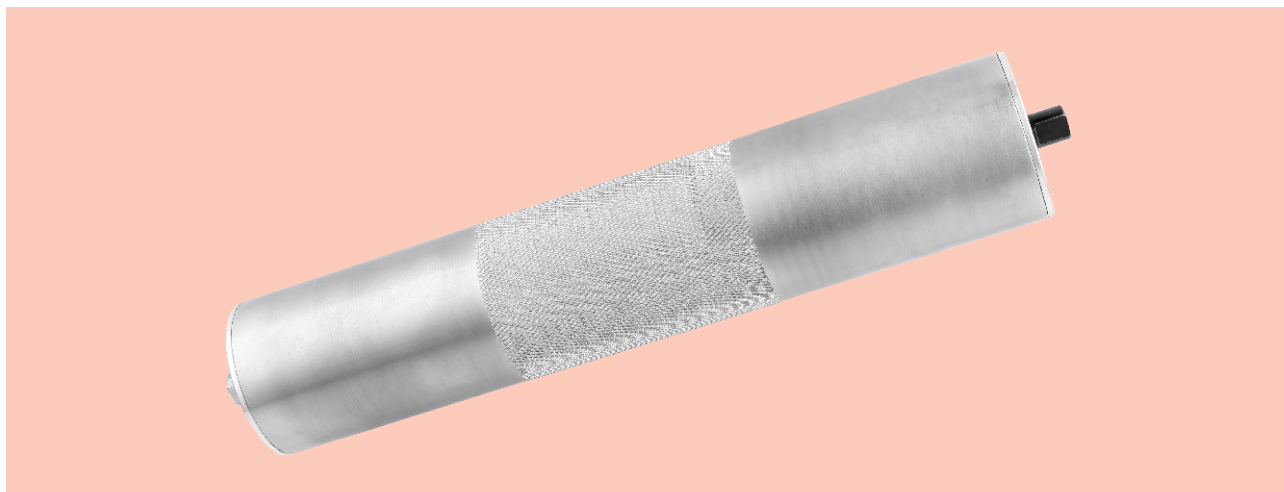
BL60 Mechanical Parameters

● Drum Shell

Voltage 24V/48V

Rated Power P W	Gear Box Series	Reduction Ratio i	Max Speed V m/min	Rated Speed n RPM	Rated Torque T Nm	Traction F N	Length L mm
60	1	3.65	155	821.9	0.630	20.91	290
		5.36	106	559.7	0.920	30.71	
		6.55	86	458.0	1.130	37.53	
		8.63	66	347.6	1.480	49.45	
	2	13.53	42	221.7	2.090	69.77	305
		18.92	30	158.6	2.930	97.57	
		24.65	23	121.7	3.810	127.12	
		33.92	17	88.44	5.250	174.93	
	3	44.69	13	67.13	6.910	230.47	320
		67.08	8	44.72	9.350	311.77	
		91.36	6	32.84	12.74	424.61	
		165.64	3	18.11	23.10	769.84	

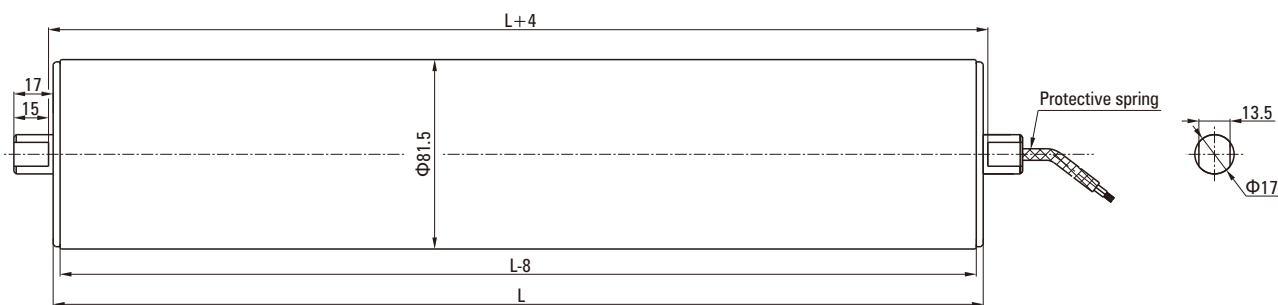
BL80 DRUM MOTOR



P10

• Safe voltage • Super torque • Speed regulation • Conveying speed

BL80 Outlining Dimensions



Lead Out Outlet

Blue(thick)	Yellow(thick)	Green(thick)	Red(fine)	Yellow(fine)	Green(fine)	Blue(fine)	black(fine)
W	U	V	Vcc+5V	Hu	Hv	Hw	GND

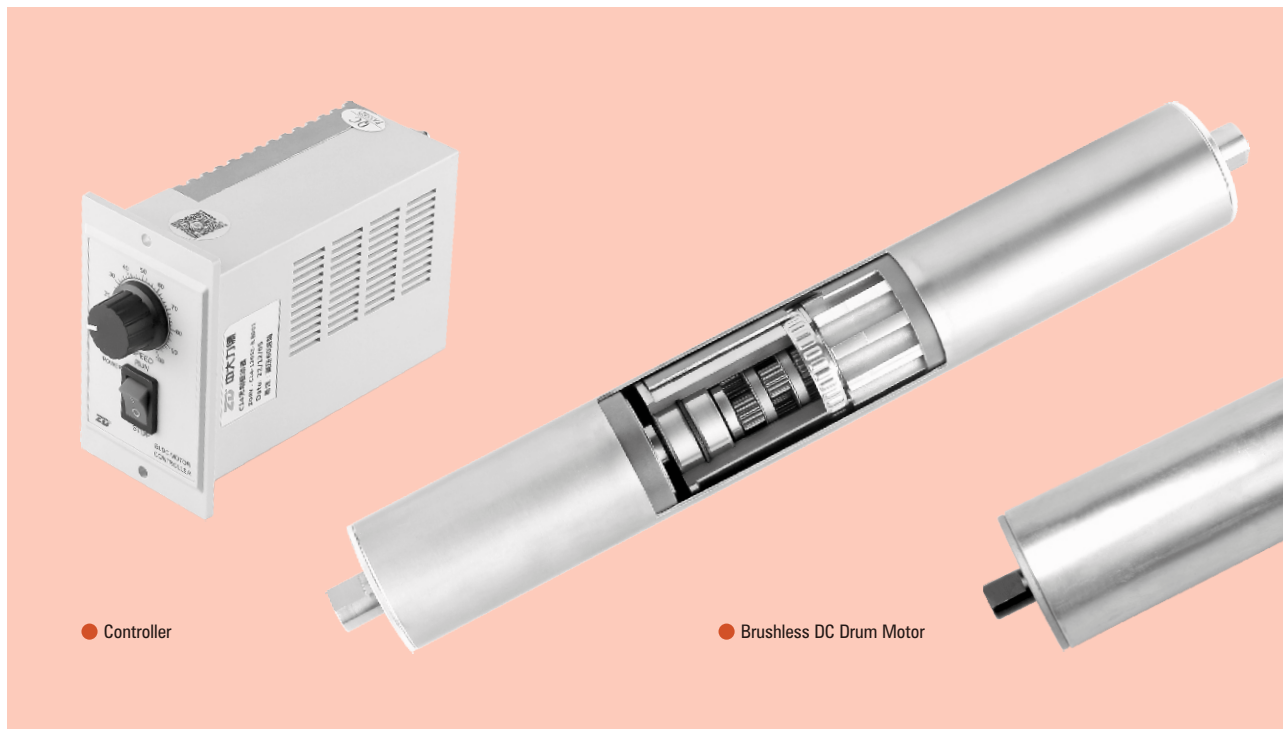
- Diameter: $\Phi 80$
- Wall thickness: t2.25
- Material of the outer tubes: Cst
- Surface treatment: Zinc plating

BL80 Mechanical Parameters

Voltage 24V/48V

Rated Power P W	Gear Box Series	Reduction Ratio i	Max Speed V m/min	Rated Speed n RPM	Rated Torque T Nm	Traction F N	Length L mm
120	1	3.65	210	821.9	1.25	30.79	360
		5.36	143	559.7	1.84	45.22	
		6.55	117	458.0	2.25	55.26	
		8.63	89	347.6	2.97	72.81	
	2	13.53	57	221.7	4.19	102.74	380
		18.92	41	158.6	5.85	143.66	
		24.65	31	121.7	7.63	187.17	
		33.92	23	88.40	10.50	257.56	
	3	44.69	17	67.13	13.83	339.34	400
		67.08	11	44.72	18.71	459.04	
		91.36	8	32.84	25.48	625.19	
		165.64	5	18.11	46.19	1133.51	

BRUSHLESS DC DRUM MOTOR



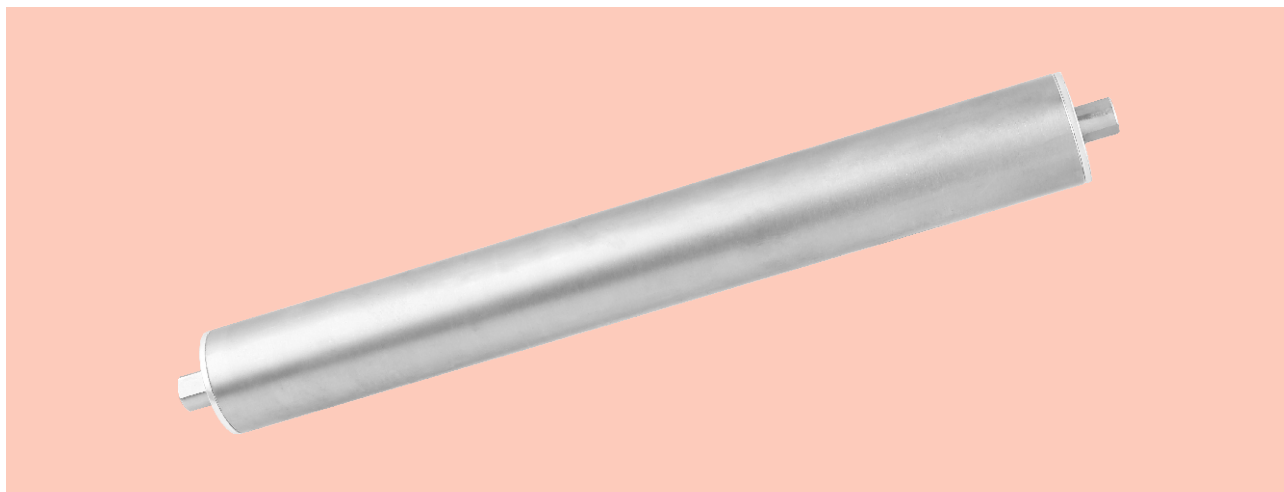
MODEL NO. CODING

Motor

ZD BL S 50 - A - 25 - 380 - 60 - AC - 220 - W - P
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

①	Company	ZD Motor
②	Model & Dimension	
	Motor type	Brushless motor
③	Drum material	T: Carbon steel pipe S: 304 Stainless steel pipe
④	Drum diameter	(Example) 50: Drum diameter 50mm
⑤	Drum shape	A: cylindrical tube
⑥	Linear speed	(Example) 25: Rotary line speed 25m/min
⑦	Drum length	(Example) 400: Total length 400mm (Out shaft is not included)
⑧	Rated power	(Example) 60: Motor rated power 60W
⑨	Voltage type	Single phase AC
⑩	Voltage	(Example) 220V
⑪	Insensibility	Insensibility motor
⑫	Belt line	Bearing enlargement

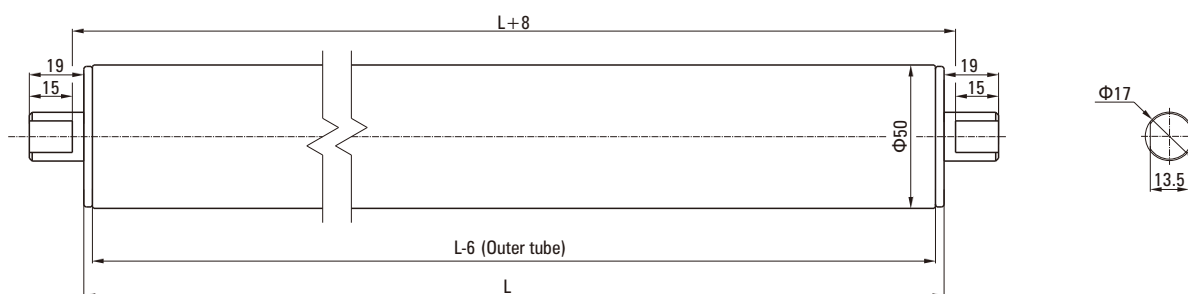
BL50 DRUM MOTOR



P12

- Safe voltage
- Super torque
- Speed regulation
- Conveying speed

BL50 Outlining Dimensions



Lead Out Outlet

Yellow ^(thick)	Green ^(thick)	Blue ^(thick)	Yellow/Green
U	V	W	PE

- Diameter: $\Phi 50$
- Wall thickness: t1.5
- Material of the outer tube: SUS304
- Carbon steel: Zinc plating

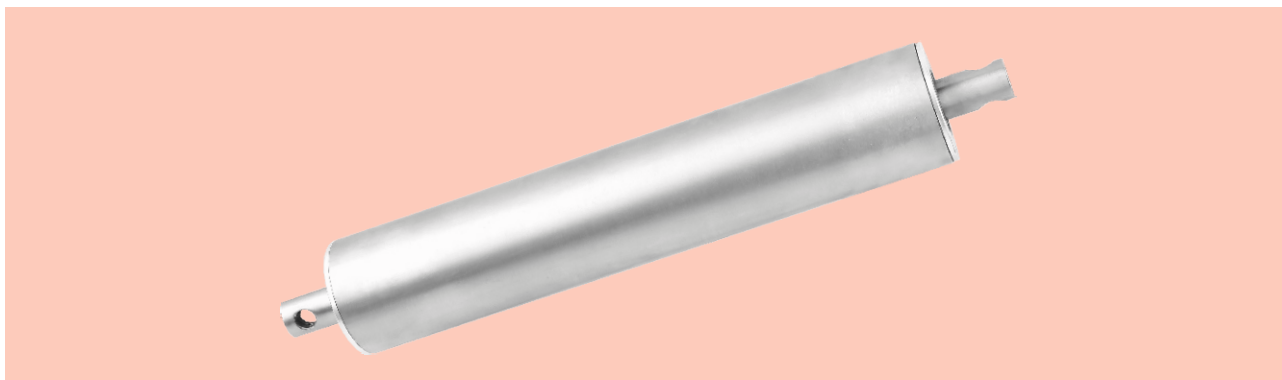
BL50 Mechanical Parameters

- Drum Shell

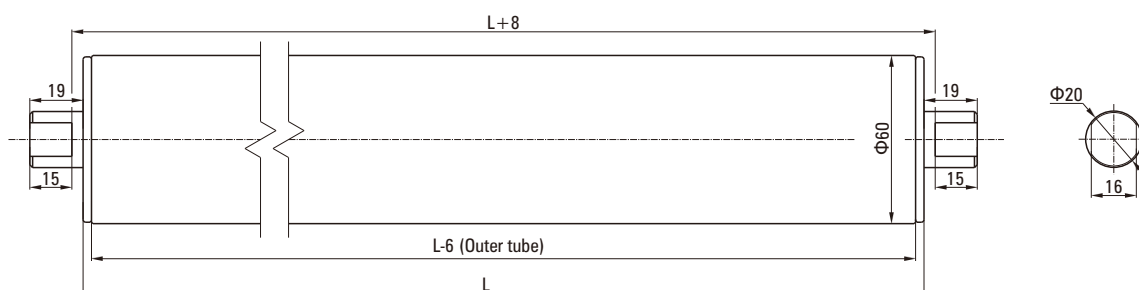
Voltage 220V

Rated Power P W	Gear Box Series	Reduction Ratio i	Max Speed V m/min	Rated Speed n RPM	Rated Torque T Nm	Traction F N	Length L mm
60	1	5.18	91	579.10	0.89	35.62	260
		13.69	34	219.14	2.12	84.72	
	2	19.16	25	156.58	2.96	118.57	265
		26.83	18	111.82	4.15	166.03	
		34.96	13	85.81	5.41	216.35	
	3	50.65	9	59.23	7.05	282.10	270
		70.91	7	42.31	9.87	394.94	
		99.27	5	30.22	13.82	552.89	

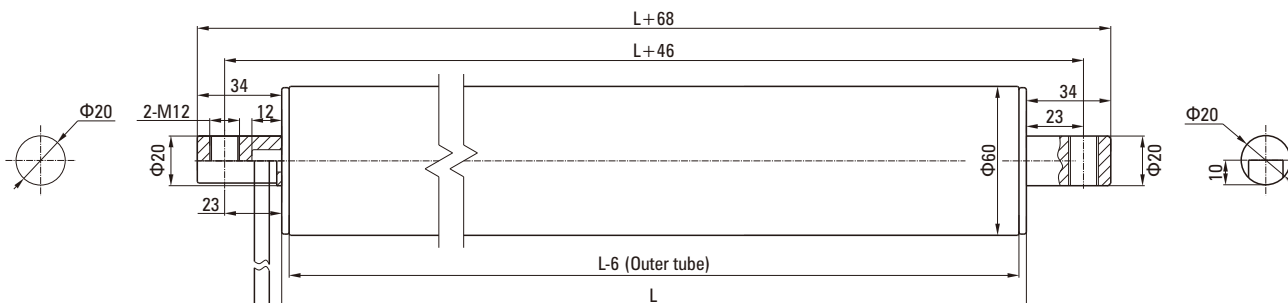
BL60 DRUM MOTOR



BL60 Outlining Dimensions



Thread hoisting



Lead Out Outlet

Yellow ^(thick)	Green ^(thick)	Blue ^(thick)	Yellow/Green
U	V	W	PE

- Diameter: $\Phi 60$
- Wall thickness: t1.5
- Material of the outer tube: SUS304
- Carbon steel: Zinc plating

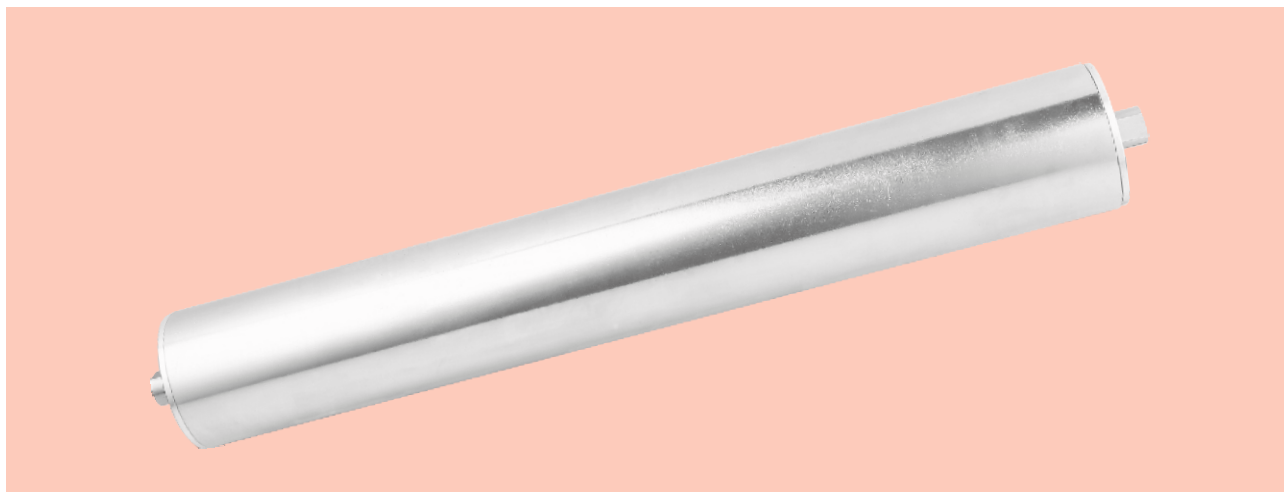
BL60 Mechanical Parameters

Drum Shell

Voltage 220V

Rated Power P W	Gear Box Series	Reduction Ratio i	Max Speed V m/min	Rated Speed n RPM	Rated Torque T Nm	Traction F N	Length L mm
60	1	5.18	109	579.10	0.89	29.68	300
		13.69	41	219.14	2.12	70.67	
	2	19.16	30	156.58	2.96	98.67	305
		26.83	21	111.82	4.15	138.33	
		34.96	16	85.81	5.41	180.33	
		50.65	11	59.23	7.06	235.33	
	3	70.91	8	42.31	9.89	329.67	310
		99.27	6	30.22	13.84	461.33	

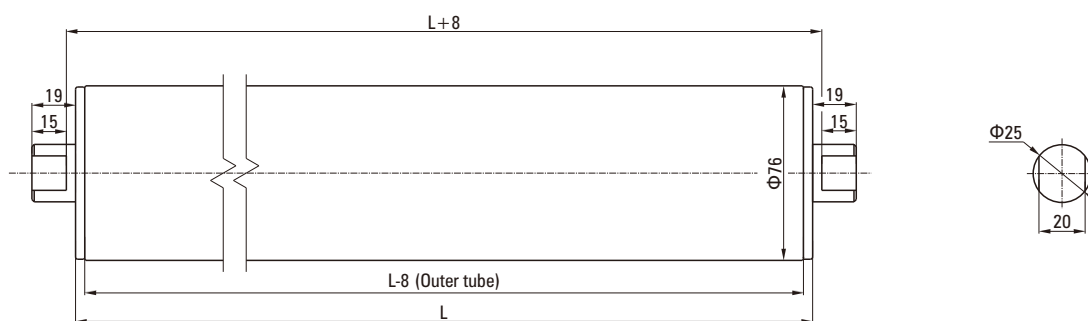
BL76 DRUM MOTOR



P14

- Safe voltage
- Super torque
- Speed regulation
- Conveying speed

BL76 Outlining Dimensions



Lead Out Outlet

Yellow ^(thick)	Green ^(thick)	Blue ^(thick)	Yellow/Green
U	V	W	PE

- Diameter: $\Phi 76$
- Wall thickness: $t2.5$
- Material of the outer tube: SUS304
- Carbon steel: Zinc plating

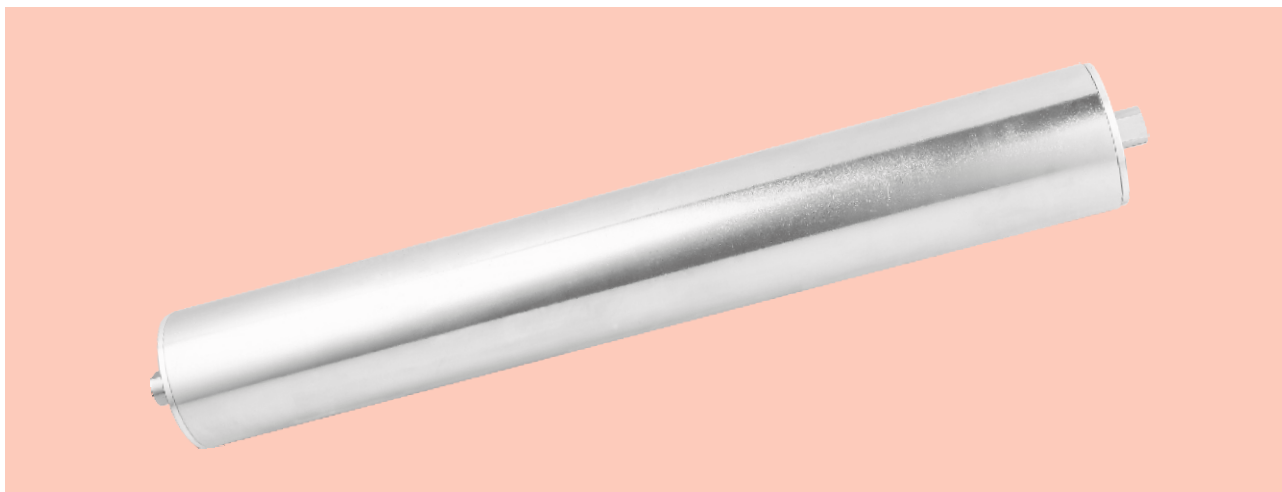
BL76 Mechanical Parameters

Drum Shell

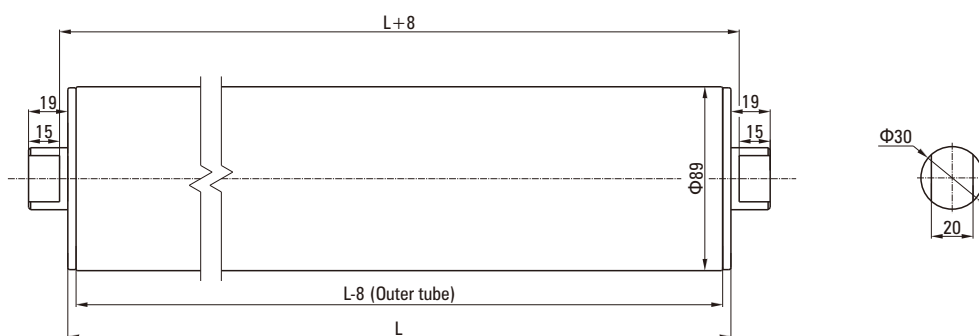
Voltage 220V

Rated Power P W	Gear Box Series	Reduction Ratio i	Max Speed V m/min	Rated Speed n RPM	Rated Torque T Nm	Traction F N	Length L mm
180	1	6.75	106	444.00	3.48	91.6	370
		13.69	52	219.14	6.35	167.11	
	2	19.16	37	156.58	8.89	233.95	375
		26.83	27	111.82	12.45	327.63	
		34.96	20	85.81	16.23	427.11	
	3	50.65	14	59.23	21.19	557.63	380
			70.91	10	42.31	29.66	
		99.27	7	30.22	41.52	1092.63	

BL89 DRUM MOTOR



BL89 Outlining Dimensions



Lead Out Outlet

Yellow ^(thick)	Green ^(thick)	Blue ^(thick)	Yellow/Green
U	V	W	PE

- Diameter: $\Phi 89$
- Wall thickness: t3
- Material of the outer tube: SUS304
- Carbon steel: Zinc plating

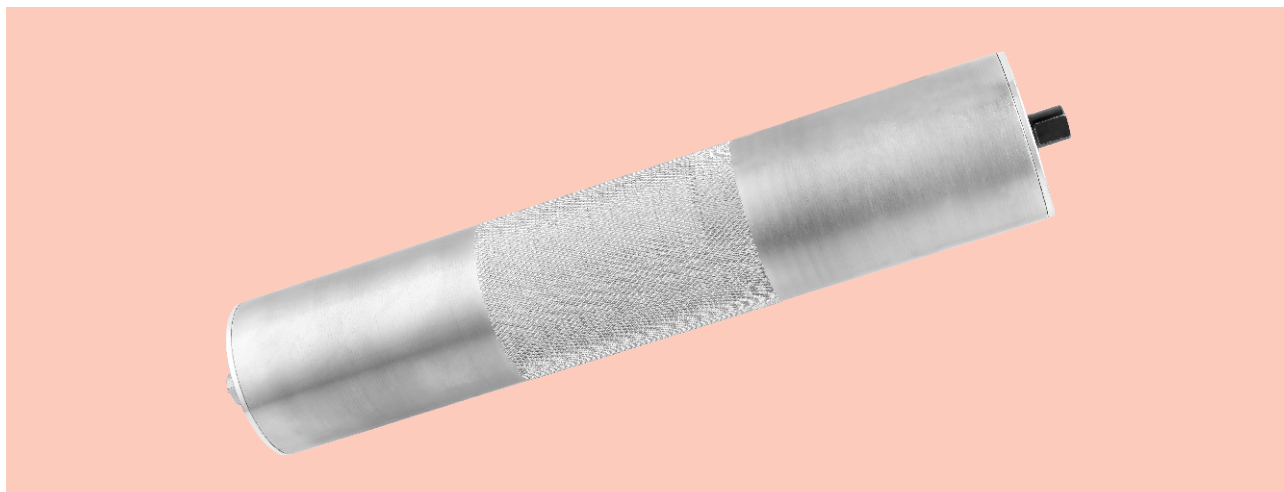
BL89 Mechanical Parameters

Drum Shell

Voltage 220V

Rated Power P W	Gear Box Series	Reduction Ratio i	Max Speed V m/min	Rated Speed n RPM	Rated Torque T Nm	Traction F N	Length L mm
300	1	6.75	124	444.00	5.80	130.37	400
	2	13.69	61	219.14	10.59	237.98	405
		19.16	44	156.58	14.82	333.03	
		26.83	31	111.82	20.75	466.29	
		34.96	24	85.81	27.04	607.64	
	3	50.65	17	59.23	35.31	793.48	410
		70.91	12	42.31	49.43	1110.79	
		99.27	8	30.22	69.21	1555.28	

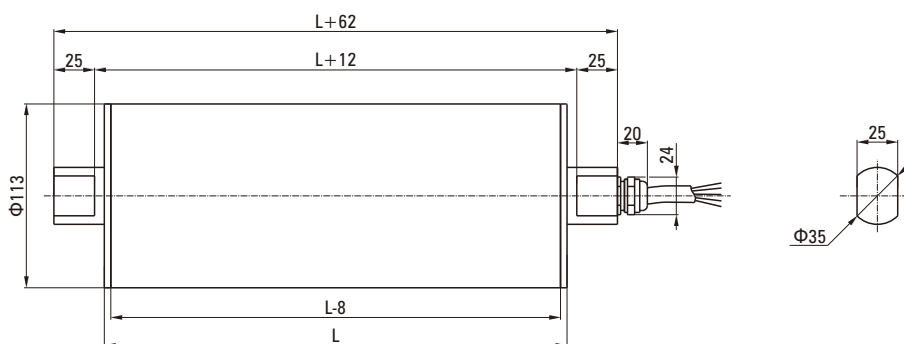
BL113 DRUM MOTOR



P16

• Safe voltage • Super torque • Speed regulation • Conveying speed

BL113 Outlining Dimensions



Lead Out Outlet

Yellow ^(thick)	Green ^(thick)	Blue ^(thick)	Yellow/Green
U	V	W	PE

- Diameter: $\Phi 113$
- Wall thickness: t_4
- Material of the outer tube: SUS304
- Carbon steel: Zinc plating

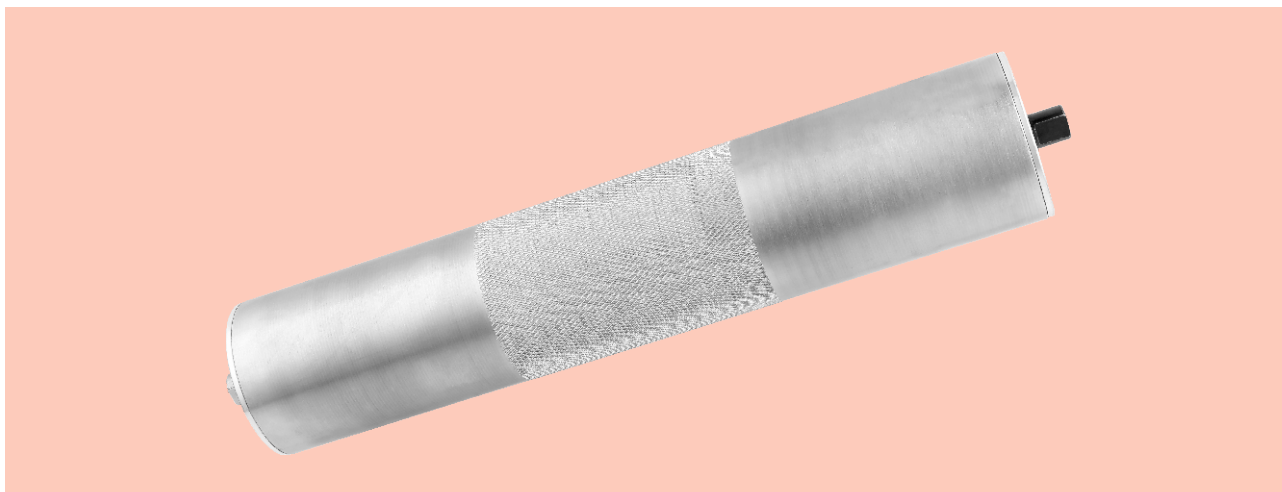
BL113 Mechanical Parameters

● Drum Shell

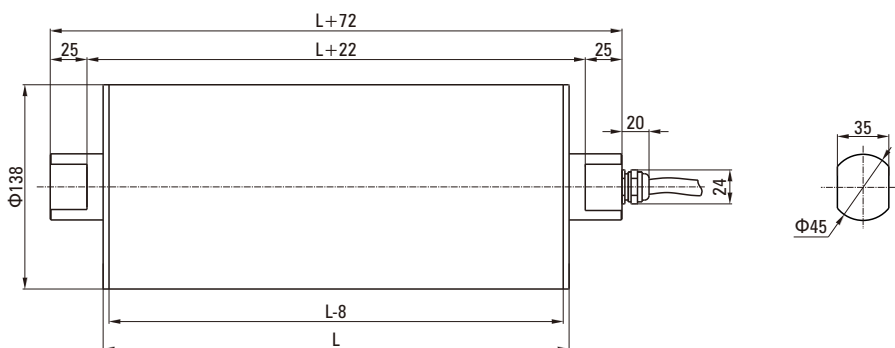
Voltage 220V

Rated Power P W	Gear Box Series	Reduction Ratio i	Max Speed V m/min	Rated Speed n RPM	Rated Torque T Nm	Traction F N	Length L mm
370	2	13.53	78	221.7	12.9	227	450
		33.92	31	88.4	32.4	570	
		58.22	18	51.5	55.5	978	
	3	91.36	12	32.8	78.4	1388	450

BL138 DRUM MOTOR



BL138 Outlining Dimensions



Lead Out Outlet

Yellow ^(thick)	Green ^(thick)	Blue ^(thick)	Yellow/Green
U	V	W	PE

- Diameter: $\Phi 138$
- Wall thickness: t4
- Material of the outer tube: SUS304
- Carbon steel: Zinc plating

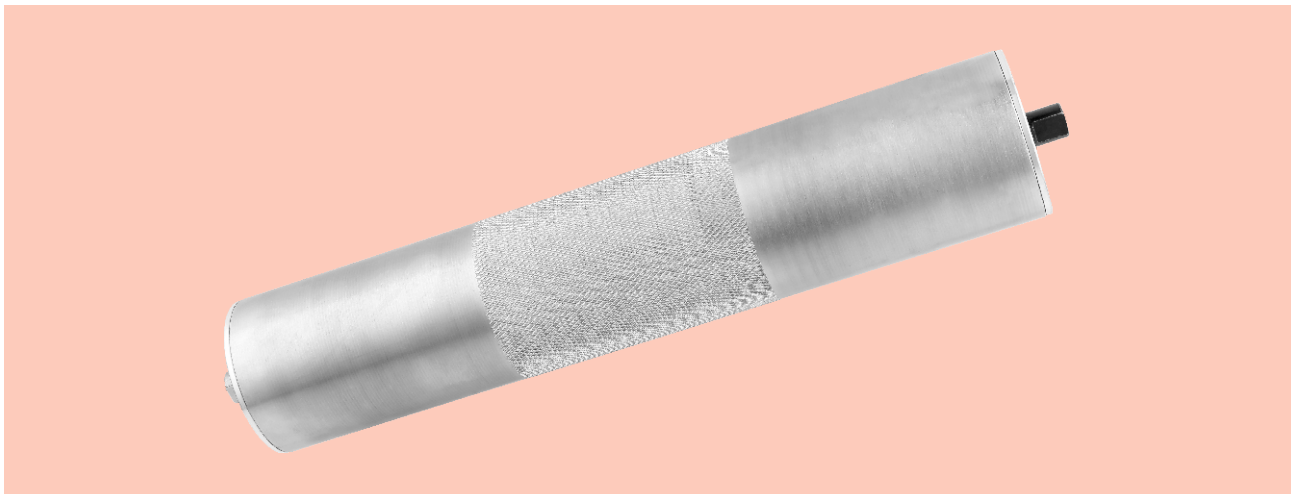
BL138 Mechanical Parameters

● Drum Shell

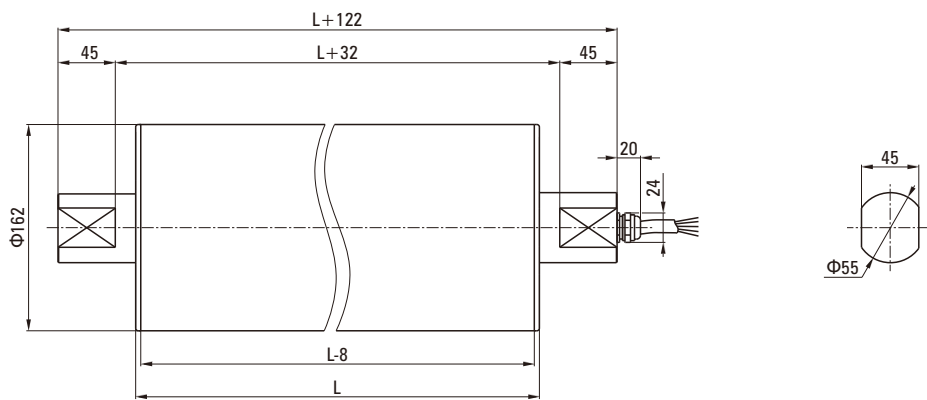
Voltage 220V

Rated Power P W	Gear Box Series	Reduction Ratio i	Max Speed V m/min	Rated Speed n RPM	Rated Torque T Nm	Traction F N	Length L mm
550	2	13.53	96	221.7	19.2	278	550
		33.92	38	88.4	48.1	698	
		58.22	22	51.5	82.6	1197	
	3	91.36	14	32.8	116.6	1691	550

BL165 DRUM MOTOR



BL165 Outlining Dimensions



Lead Out Outlet

Yellow ^(thick)	Green ^(thick)	Blue ^(thick)	Yellow/Green
U	V	W	PE

- Diameter: $\Phi 162$
- Wall thickness: t_5
- Material of the outer tube: SUS304
- Carbon steel: Zinc plating

BL165 Mechanical Parameters

● Drum Shell

Voltage 220V

Rated Power P W	Gear Box Series	Reduction Ratio i	Max Speed V m/min	Rated Speed n RPM	Rated Torque T Nm	Traction F N	Length L mm
1100	2	13.53	115	221.7	38.4	465	600
		33.92	46	88.4	96.2	1166	
		58.22	27	51.5	165.1	2002	
	3	91.36	17	32.8	233.2	2827	600

CATALOGUE



PRECISION HARMONIC REDUCER



CYCLOIDAL PIN WHEEL
PRECISION REDUCER



TRANSMISSION PLANETARY
GEAR MOTOR



HIGH PRECISION
PLANETARY GEAR BOX



AC & DC
RIGHT ANGLE GEAR MOTOR



SMALL AC GEAR MOTOR





MOTOR ROLLER CATALOGUE

NINGBO ZHONGDA LEADER INTELLIGENT TRANSMISSION CO., LTD.

Add: NO.185 1st Xinxing Road, New Industrial Zone, Cixi City, Zhejiang, China.

ZHONGDA CHUANGYUAN PRECISE TRANSMISSION EQUIPMENT CO., LTD.

Add: No.159 Jinci Road, Hangzhouwan District, Cixi City, Zhejiang, China.

FOSHAN ZHONGDALIDE DRIVE TECHNOLOGY CO., LTD.

Add: No.8 Chuangsheng Road, Beijiao Town, Shunde District, Foshan City, Guangdong, China.

Domestic trade services:

Tel: 0574-63537377

Fax: 0574-63534879

E-mail: china@zd-motor.com

International trade department:

Tel: 86-574-63530538 Fax: 86-574-63534879

E-mail: trade@zd-motor.com

Web: www.zddriver.com

www.zd-motor.com

www.zd-motor.com

Any changes in product contents without notice.