

BLWS6523 Series - Sealed Brushless DC Motors



FEATURES

- **NEMA Size 23 BLDC Motors**
- **IP65 Rating**
- **Complete protection from dust particles**
- **Can be subjected to wet environments**
- **Can be Customized for**
 - Maximum Speed
 - Winding Current
 - Shaft Options
 - Cables and Connectors



DESCRIPTION

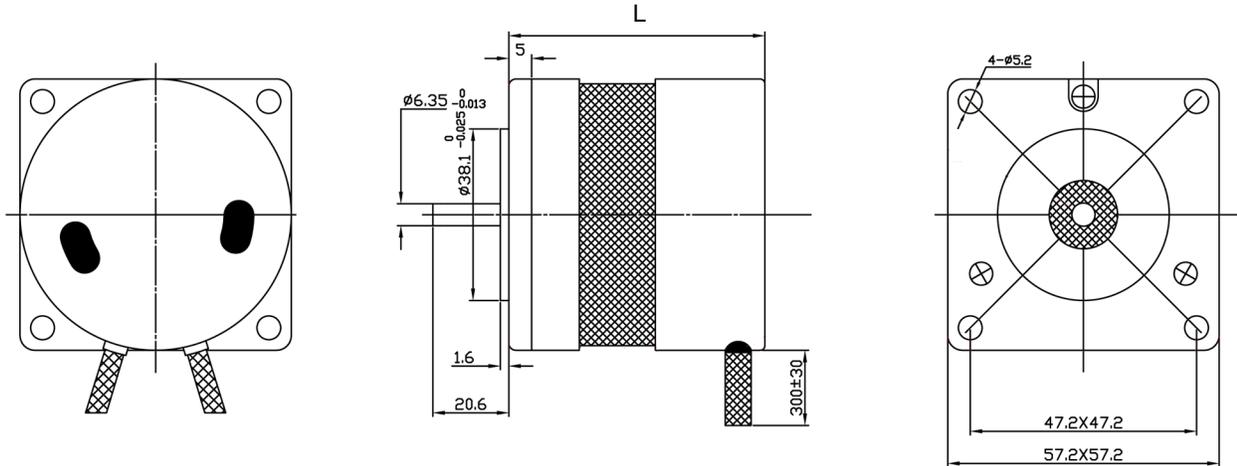
The compact BLWS6523 Series are NEMA 23 Brushless DC Motors that are IP65 rated which meet the splash-proof requirements for most applications. The sealed shafts further protect the motor, which in turn provides for longer life cycles. These round-bodied motors have a square-mounting flange, making them easy to install. The popular BLWS6523 series motors are available in five stack lengths, rated from 25 to 185 ounce-inches of torque, and offer an 8-lead configuration as standard. Customization to perfectly match a specific voltage, current, and maximum operating speed, as well as special shaft modifications, cables and connectors, is available.

SPECIFICATIONS

Model #	FRAME Size	Rated Voltage (V)	Rated Speed (RPM)	Rated Power (W)	Peak Torque (oz-in)	Peak Current (A)	Line to Line Resistance (ohms)	Line to Line Inductance (mH)	Torque Constant (oz-in/A)	Back EMF Voltage (V/kRPM)	Rotor Inertia (oz-in-sec ²)	Weight (lbs)	"L" Length (in)
BLWS65235S-24V-4000	NEMA 23	24	4000	185	186	22.5	0.20	0.435	5.52	4.28	0.00326	2.8	4.53
BLWS65235S-36V-4000	NEMA 23	36	4000	180	185	22.5	0.35	1.000	9.00	6.60	0.00326	2.8	4.53
BLWS65231S-36V-4000	NEMA 23	36	4000	25	25	3.5	4.1	10.0	7.5	5.5	0.00042	0.6	1.77
BLWS65232S-36V-4000	NEMA 23	36	4000	50	55	7.0	1.5	4.2	9.0	6.6	0.00106	1.1	2.16
BLWS65233S-36V-4000	NEMA 23	36	4000	95	100	15.0	0.7	2.2	9.0	6.6	0.00189	1.7	2.95
BLWS65234S-36V-4000	NEMA 23	36	4000	135	145	18.0	0.45	1.4	9.0	6.6	0.00245	2.2	3.74
BLWS65235S-36V-4000	NEMA 23	36	4000	180	185	22.5	0.35	1.0	9.0	6.6	0.00326	2.8	4.53

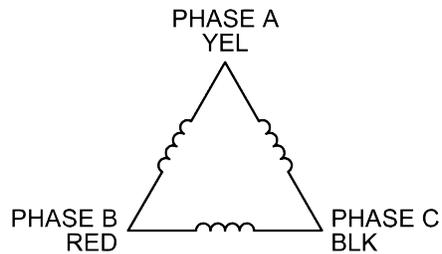
Notes: The 8th character "S" denotes a single shaft, use "D" for double shaft. Custom leadwires, cables, connectors, and windings are available upon request.

L010575



(All units are mm)

Wire Color	Description
Red	Hall Supply
Blue	Hall A
Green	Hall B
White	Hall C
Black	Hall Ground
Yellow	Phase A
Red	Phase B
Black	Phase C



Winding Type:	Delta, 4 Poles	Max. radial force:	75N @ 20mm from the flange
Hall effect angle:	120 degree electrical angle	Max. axial force:	10N
Shaft run out:	0.025mm	Insulation class:	Class B
Radial Play:	0.02mm@450g	Dielectric strength:	500VDC for one minute
End play:	0.08mm@450g	Insulation resistance:	100MOhm, 500VDC