








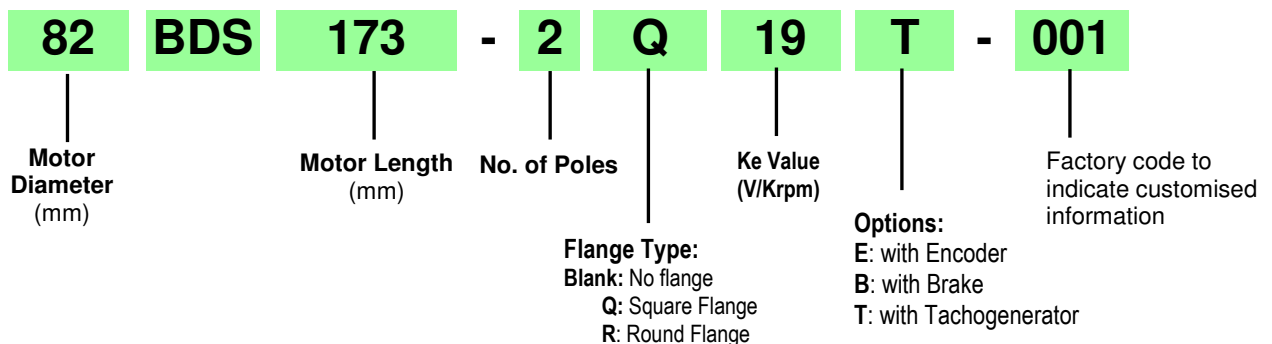
Brushed DC Servo Motor

The BDS ranges of brushed DC Servomotors provide a high torque to inertia ratio, giving fast acceleration and rapid dynamic response. Their design features and construction contribute to smooth-running performance and extended service life. They are suitable for most servo and variable speed applications and are compatible with most available drives on the market.

The motors are ideally suited for heavy-duty power applications with their capability to achieve continuous torque in a compact size. Their design features and construction contribute to smooth performance and extended service life, these motors can perform reliably for applications in a wide range of industries, including medical/biotech, semiconductor, processing, machine tools, CMM machines, robotics & automation and more.

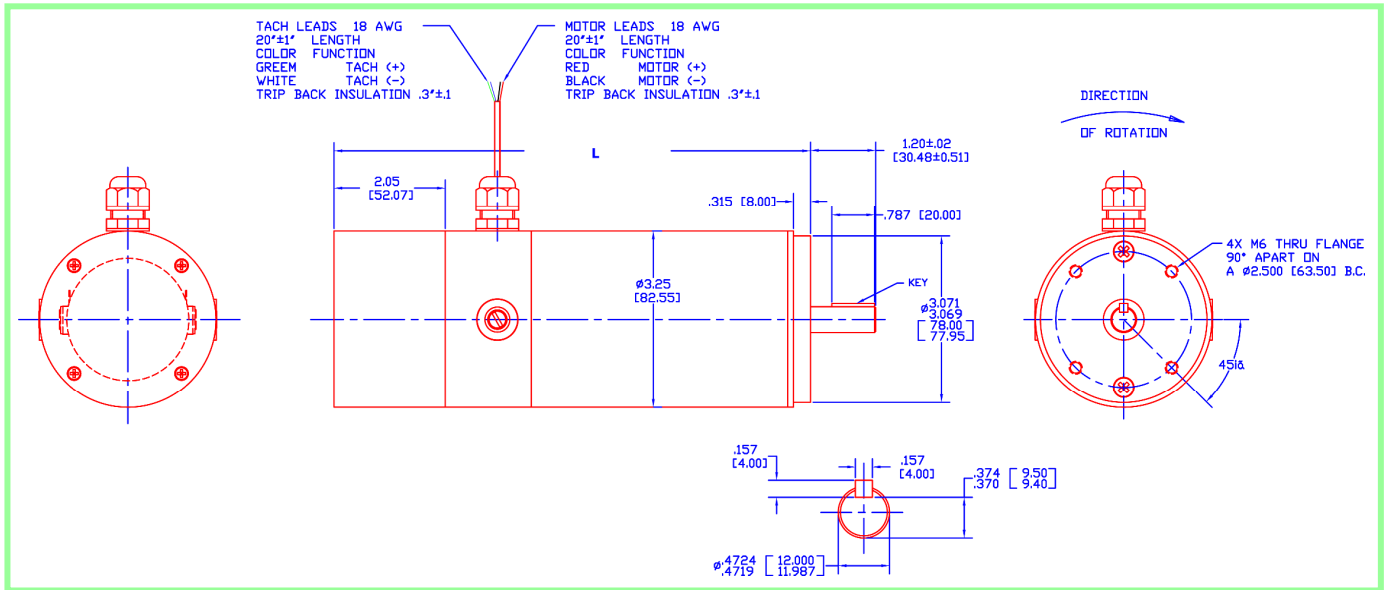
-  **Frame size: Ø82mm & Ø102mm**
-  **Power range: 100W ~ 960W**
-  **Continuous stall torque: 0.5Nm (4.4 lb-in) ~ 4.5Nm (39.8 lb-in)**
-  **Optional Tachogenerator and / or Encoder to provide speed and position feedback**
-  **Optional holding brake**
-  **Customised design on output shafts, flanges and wiring connections**
-  **Compatible with MCP's extensive portfolio of gearboxes**

Part Number Configuration



82BDS SERIES- 135mm Length

Dimensions** (inch [mm])



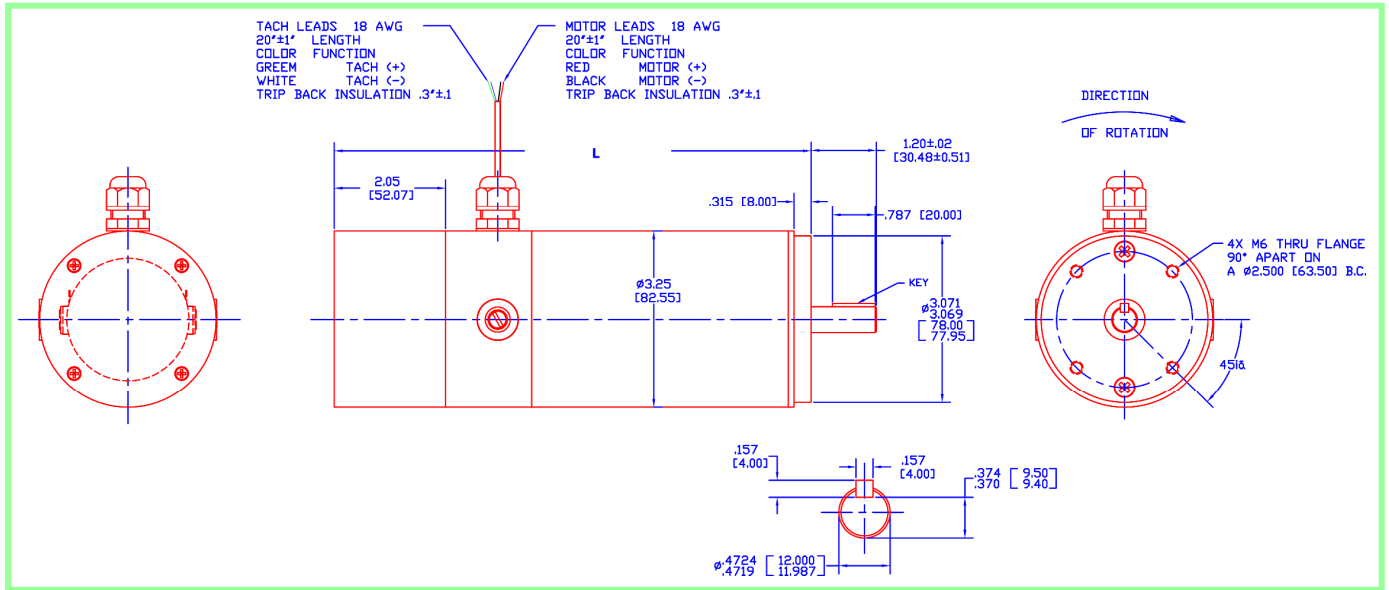
Technical Specifications

PARAMETERS		MODEL		
		82BDS135-205	82BDS135-210	82BDS135-219
Rated Speed	rpm	3000	3000	3000
Rated Torque	Nm	0.21	0.35	0.35
Rated Voltage	V	17	33	65
Rated Current	A	6.1	4.5	2.3
Rated Power	W	66	110	110
Back EMF Constant (Ke)	V/krpm	4.9	9.8	19
Torque Constant (Kt)	Nm/A	0.05	0.09	0.18
	lb-in/A	0.41	0.83	1.61
Max. Voltage	V	24.5	49	95
Continuous Stall Torque	Nm	0.5	0.5	0.5
	lb-in	4.4	4.4	4.4
Continuous Stall Current	A	12.3	6.1	3.2
Peak Stall Torque	Nm	2.0	2.0	2.0
	lb-in	17.7	17.7	17.7
Peak Current	A	44.2	22.1	11.4
Max. Speed	rpm	5000	5000	5000
Resistance	Ohms	0.41	0.74	2.03
Inductance	mH	0.38	1.28	5.03
Motor length	mm	135	135	135
Tachogenerator	V/krpm	9.5	9.5	9.5
Motor Length with tach 'L'	mm	178	178	178

** Drawing above is only for reference. Shafts, flange type and wirings can be customised to meet the customer's requirement.

82BDS SERIES- 147mm Length

Dimensions (inch [mm])



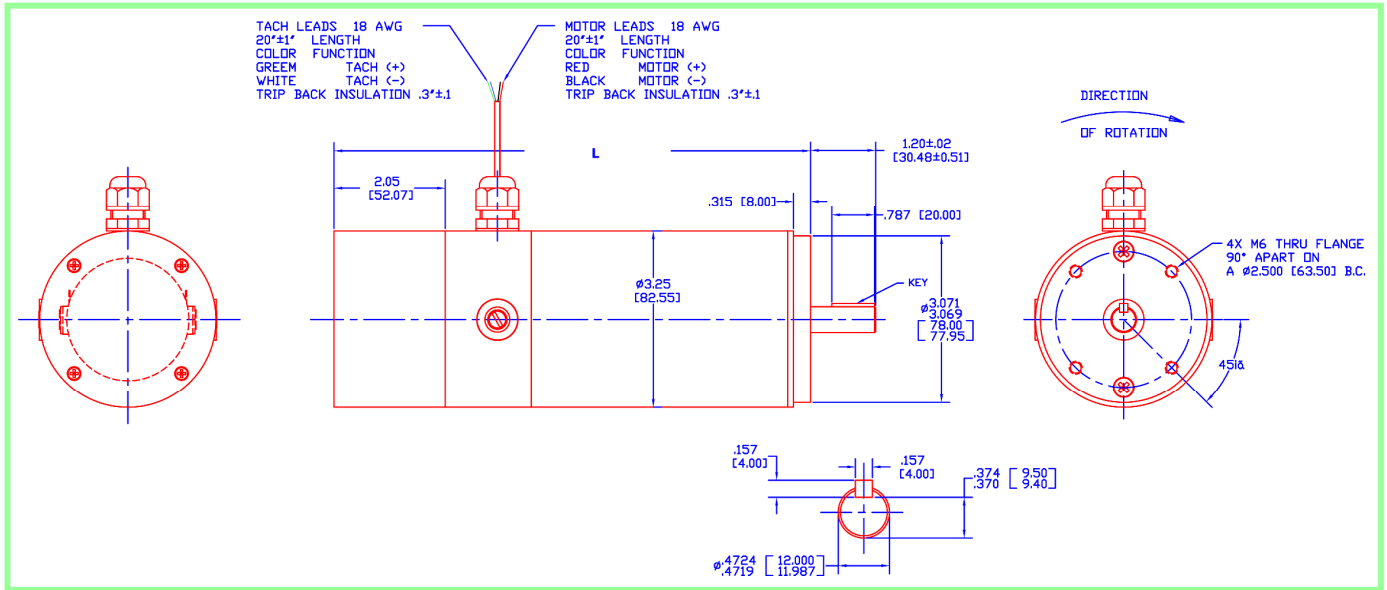
Technical Specifications

PARAMETERS		MODEL		
		82BDS147-205	82BDS147-209	82BDS147-219
Rated Speed	rpm	3000	3000	3000
Rated Torque	Nm	0.28	0.43	0.43
Rated Voltage	V	16.5	31	62
Rated Current	A	8.1	5.7	2.7
Rated Power	W	88	134	134
Back EMF Constant (Ke)	V/krpm	4.6	9.2	19.2
Torque Constant (Kt)	Nm/A lb-in/A	0.04 0.39	0.09 0.78	0.18 1.62
Max. Voltage	V	23	46	96
Continuous Stall Torque	Nm lb-in	0.7 6.2	0.7 6.2	0.7 6.2
Continuous Stall Current	A	4.3	8.8	4.2
Peak Stall Torque	Nm lb-in	4.0 35.4	4.0 35.4	4.0 35.4
Peak Current	A	92.7	46.3	22.2
Max. Speed	rpm	5000	5000	5000
Resistance	Ohms	0.37	0.58	1.44
Inductance	mH	0.61	0.96	3.79
Motor length	mm	148	148	148
Tachogenerator	V/kprm	9.5	9.5	9.5
Motor Length with tacho 'L'	mm	191	191	191

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82BDS SERIES- 173mm Length

Dimensions (inch [mm])



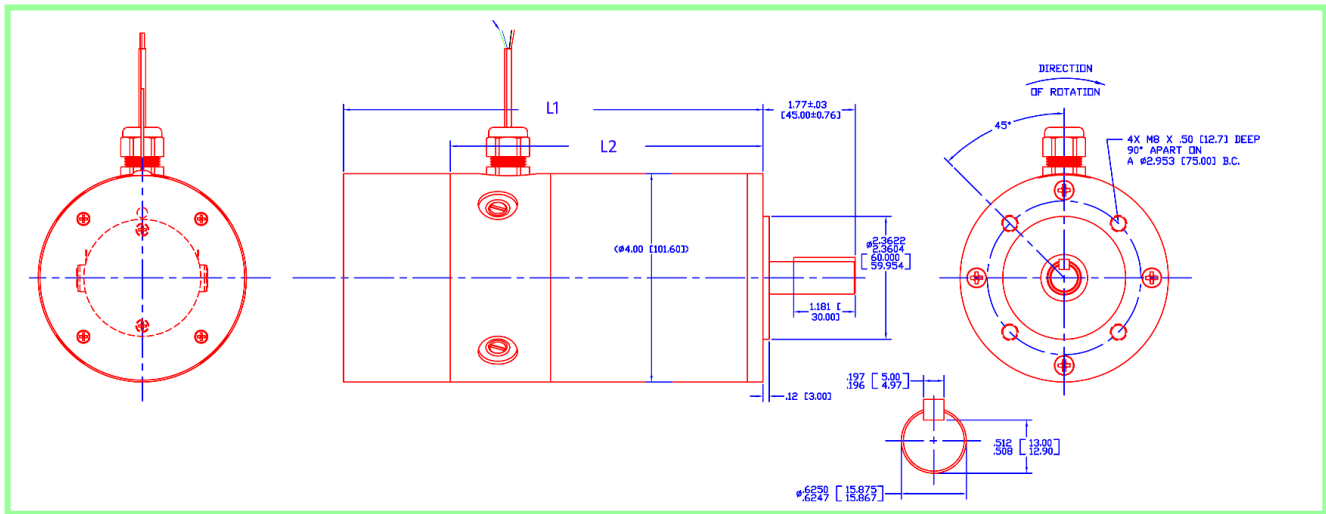
Technical Specifications

PARAMETERS		MODEL			
		82BDS173-210	82BDS173-212	82BDS173-216	82BDS173-226
Rated Speed	rpm	3000	3000	3000	3000
Rated Torque	Nm	0.60	0.67	0.81	0.81
Rated Voltage	V	34.5	41	55	85
Rated Current	A	7.0	6.5	5.8	3.7
Rated Power	W	189	211	255	255
Back EMF Constant (Ke)	V/krpm	10.2	12.1	16.3	25.5
Torque Constant (Kt)	Nm/A	0.10	0.12	0.16	0.24
	lb-in/A	0.86	1.02	1.38	2.16
Max. Voltage	V	51	61	82	128
Continuous Stall Torque	Nm	1.2	1.2	1.2	1.2
	lb-in	10.6	10.6	10.6	10.6
Continuous Stall Current	A	13.2	11.1	8.3	5.3
Peak Stall Torque	Nm	8.0	8.0	8.0	8.0
	lb-in	70.8	70.8	70.8	70.8
Peak Current	A	83.0	70.0	51.9	33.2
Max. Speed	rpm	5000	5000	5000	5000
Resistance	Ohms	0.56	0.75	0.95	2.00
Inductance	mH	0.77	1.22	1.90	4.90
Motor length	mm	173	173	173	173
Tachogenerator	V/kprpm	9.5	9.5	9.5	9.5
Motor Length with tacho 'L'	mm	216	216	216	216

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102BDS SERIES- 219mm Length

Dimensions** (inch [mm])



Technical Specifications

PARAMETERS		MODEL			
		102BDS219-428	102BDS219-434	102BDS219-442	102BDS219-466
Rated Speed	rpm	3000	2800	2000	1800
Rated Torque	Nm	1.80	2.20	3.00	3.20
Rated Voltage	V	90	102	93	132
Rated Current	A	7.9	7.8	8.4	5.6
Rated Power	W	566	645	628	603
Back EMF Constant (Ke)	V/krpm	28.1	33.7	41.6	66.0
Torque Constant (Kt)	Nm/A	0.27	0.32	0.40	0.63
	lb-in/A	2.38	2.85	3.52	5.58
Max. Voltage	V	115	130	130	140
Continuous Stall Torque	Nm	3.5	3.5	3.5	3.5
	lb-in	31.0	31.0	31.0	31.0
Continuous Stall Current	A	14.2	11.9	9.6	6.1
Peak Stall Torque	Nm	18.0	18.0	18.0	18.0
	lb-in	159.3	159.3	159.3	159.3
Peak Current	A	68.3	56.9	45.9	29.1
Max. Speed	rpm	4000	3800	3000	2100
Resistance	Ohms	0.75	0.95	1.15	2.36
Inductance	mH	1.03	1.63	2.40	6.40
Motor length 'L2'	mm	221	221	221	221
Tachogenerator	V/krpm	9.5	9.5	9.5	9.5
Motor Length with tach 'L1'	mm	277	277	277	277

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