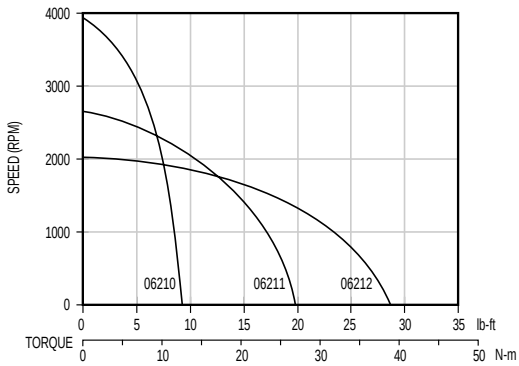
RBE(H) 06210 MOTOR SERIES PERFORMANCE DATA

Motor Parameters		Symbols	Units	06210	06211	06212
Max Cont. Output Power		HP Rated	HP	3.06	4.31	4.95
at 25°C amb.		P Rated	Watts	2286	3212	3690
Speed at Rated Power		N Rated	RPM	2650	1750	1390
Max Mechanical Speed		N Max	RPM	4500	4500	4500
Continuous Stall Torque		Tc	lb-ft	8.67	19.0	28.4
at 25°C amb.			N-m	11.8	25.8	38.4
Peak Torque		Tp	lb-ft	41.9	94.6	145
			N-m	56.8	128	197
Max Torque		Tsl	lb-ft	20.2	45.5	97
for Linear KT			N-m	27.4	61.7	131
Motor Constant		Km	lb-ft/$\sqrt{W}$	0.80	1.64	2.37
			N-m/$\sqrt{W}$	1.09	2.23	3.22
Thermal Resistance*		Rth	°C/Watt	0.70	0.62	0.58
Viscous Damping		Fi	lb-ft/RPM	1.50E-04	5.75E-04	1.00E-03
			N-m/RPM	2.03E-04	7.80E-04	1.36E-03
Max Static Friction		Tf	lb-ft	0.24	0.47	0.70
			N-m	0.325	0.637	0.949
Max Cogging Torque		Tcog	lb-ft	0.13	0.18	0.23
Peak to Peak			N-m	0.176	0.244	0.312
Frameless Motor	Inertia	Jmf	lb-ft-sec^2	3.60E-03	7.30E-03	1.11E-02
			Kg-m^2	4.88E-03	9.90E-03	1.50E-02
	Weight	Wtf	lb	10.8	18.2	25.6
			Kg	4.90	8.26	11.6
Housed Motor	Inertia	Jmh	lb-ft-sec^2	3.70E-03	1.15E-02	1.20E-02
			Kg-m^2	5.02E-03	1.56E-02	1.63E-02
	Weight	Wth	lb	22.3	29.8	37.3
			Kg	10.1	13.5	16.9
No. of poles		P		12	12	12

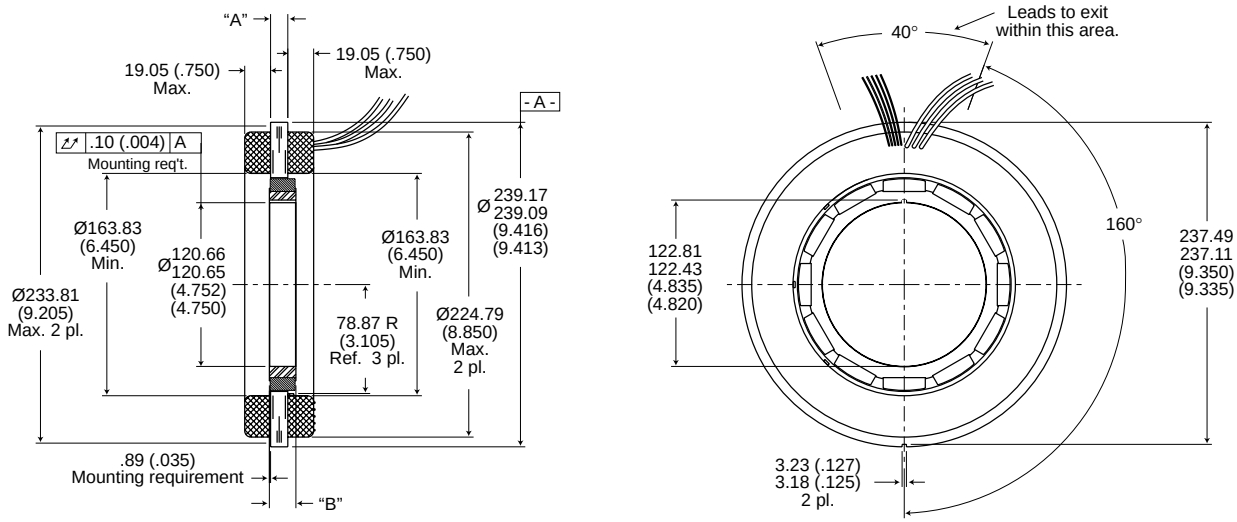
Winding Constants	Symbols	Units	A	B	C	A	B	C	A	B	C
Current at Cont. Torque	Ic	Amps	17.5	8.0	12.4	16.9	7.8	12.0	18.5	29.6	11.7
Current at Peak Torque	Ip	Amps	162	85.7	114	162	85.7	114	182	289	114
Torque Sensitivity	Kt	lb-ft/Amp	0.510	1.11	0.718	1.15	2.51	1.62	1.57	0.981	2.49
		N-m/Amp	0.691	1.51	0.973	1.56	3.40	2.19	2.13	1.33	3.37
Back EMF constant	Kb	V/KRPM	72.4	158	102	163	356	230	223	139	353
Motor Resistance	Rm	Ohms	0.405	1.93	0.804	0.489	2.33	0.970	0.438	0.172	1.10
Motor Inductance	Lm	mH	2.1	9.9	4.1	3.6	17	7.2	4.0	1.6	10

*Rth assumes a housed motor mounted to a 13" x 12.5" x 0.5" aluminum heatsink or equivalent

Continuous Duty Capability for 130°C Rise — RBE - 06210 Series



RBE-0621X-X00

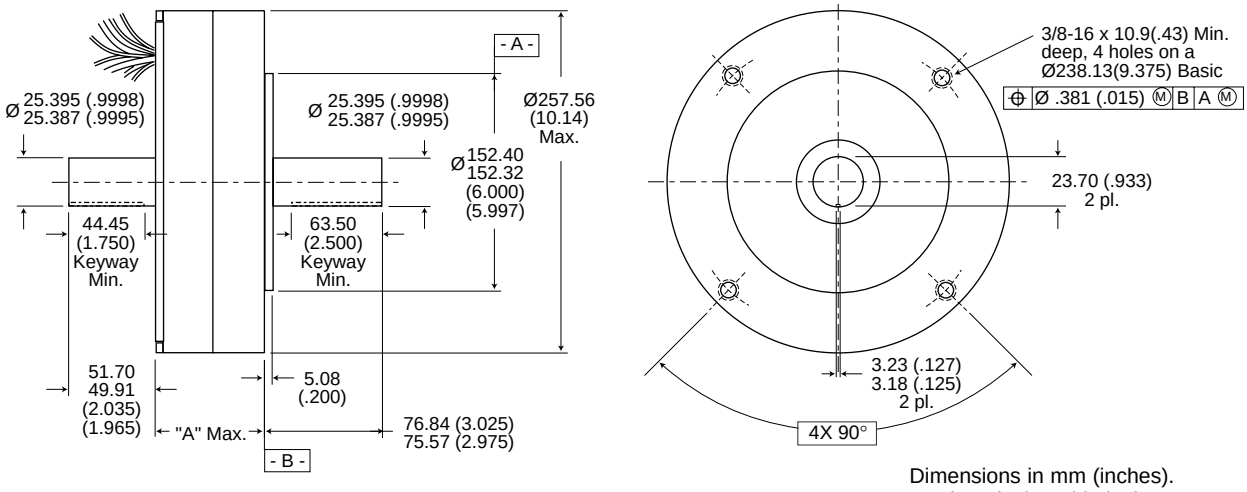


Dimensions in mm (inches).
Product designed in inches.
Metric conversions provided for reference only.

MODEL NUMBER	RBE-06210	RBE-06211	RBE-06212
"A" Dimension	12.7 (0.500)	29.21 (1.150)	45.72 (1.800)
"B" Dimension	19.56 (0.770)	36.07 (1.420)	52.58 (2.070)
Tolerance ± .010 on "A" Dimension.			

Notes:
2) For a C.W. rotation, as viewed from lead end, energize per excitation sequence table.
4) V-AB, V-BC and V-CA is back EMF of motor phases AB, BC and CA respectively, aligned with sensor output as shown for C.W. rotation only.
5) Mounting surface is between Ø 233.81 (9.205) and Ø 239.17 (9.416) on both sides.

RBEH-0621X-X00



Dimensions in mm (inches).
Product designed in inches.
Metric conversions provided for reference only.

Notes:
1) Shaft end play: with a 34 lb reversing load, the axial displacement shall be .013-.15 (.0005-.006).
2) For a C.C.W. rotation, as viewed from pilot end, energize per excitation sequence table.
3) V-AB, V-BC and V-CA is back EMF of motor phases AB, BC and CA respectively, aligned with sensor output as shown for C.C.W. rotation only.

MODEL NUMBER	RBEH-06210	RBEH-06211	RBEH-06212
"A" Dimension	82.30 (3.240)	98.81 (3.890)	115.32 (4.540)

RBE/RBEH LEADWIRE

Motor Leads: #12 AWG type Teflon coated per MIL-W-22759/11, 3 leads, 152 (6.00) min. long each 1-black, 1-red, 1-white.

Sensor Leads: #26 AWG type "ET" Teflon coated per MIL-W-16878, 5 leads, 152 (6.00) min long each, 1-blue, 1-brown, 1-green, 1-orange, 1-yellow.