



NEMA Size 17 hybrid stepper motors produce high torque in a small, RoHS compliant package. They are ideal for motion control applications where the benefits of smaller size with high torque are essential.

The NEMA Size 17 stepper motors measure only 42mm (1.65in) square by as little as 25mm (0.98in) long.

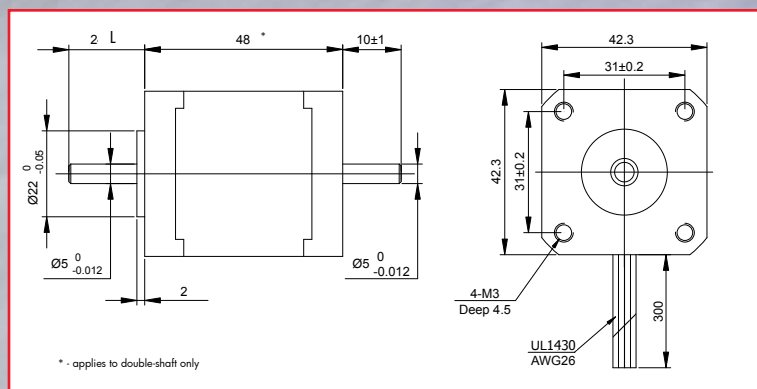
Specifications

Specification	
Motor Type	Hybrid
Type Of Winding	Bipolar
Operating Temp. Range	-20° C to +50° C
Temperature Rise	80° C
Insulation Class	B

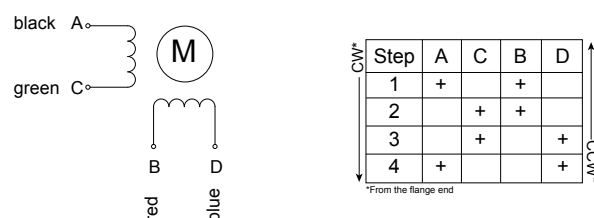
Model No.	Max. Length
PR42H-33	34mm
PR42H-38	40mm
PR42H-47	48mm

Specification	Step Angle	Rated Voltage	Rated Current	Resistance	Inductance	Holding Torque	Rotor Inertia	Motor Length	Weight
Unit	°	V	A/Ø	ohm/Ø	mH/Ø	mN•m	kg•m ²	mm	g
PR42H-33-0404Jx	1.8	12	0.4	30	36	250	35 x 10 ⁻⁷	34	220
PR42H-33-1004Jx	1.8	3.6	1	3.6	4.6	220	35 x 10 ⁻⁷	34	220
PR42H-33-1004Mx	0.9	3.6	1	3.6	7.5	220	35 x 10 ⁻⁷	34	220
PR42H-33-1334Jx	1.8	2.8	1.3	2.1	2.5	220	35 x 10 ⁻⁷	34	220
PR42H-33-1334Mx	0.9	2.8	1.3	2.1	4.2	220	35 x 10 ⁻⁷	34	220
PR42H-38-1004Jx	1.8	4.8	1	4.8	9.2	360	54 x 10 ⁻⁷	40	360
PR42H-38-1004Mx	0.9	4.8	1	4.8	9.2	360	54 x 10 ⁻⁷	40	360
PR42H-38-1684Jx	1.8	2.8	1.68	1.65	3.2	360	54 x 10 ⁻⁷	40	360
PR42H-38-1684Mx	0.9	2.8	1.68	1.65	3.2	360	54 x 10 ⁻⁷	40	280
PR42H-47-1004Jx	1.8	6	1	6	8.4	440	68 x 10 ⁻⁷	48	440
PR42H-47-1004Mx	0.9	6	1	6	14	440	68 x 10 ⁻⁷	48	440
PR42H-47-1684Jx	1.8	2.8	1.68	1.65	2.8	440	68 x 10 ⁻⁷	48	350
PR42H-47-1684Mx	0.9	2.8	1.68	1.65	4.1	440	68 x 10 ⁻⁷	48	350

* - All hybrid motor specifications are based on full-step constant current operation
x represents shaft option, single (A) or double (B)

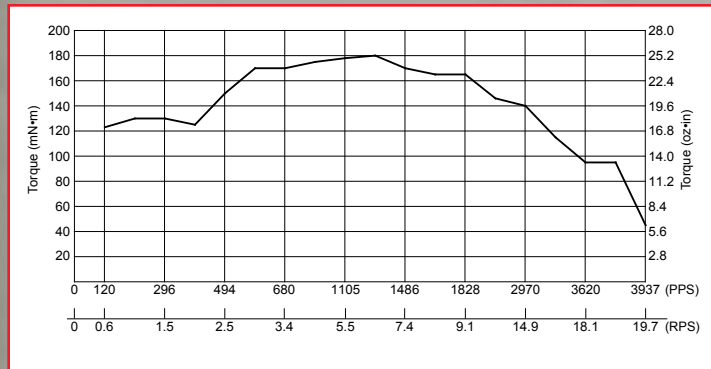


Wiring Diagram



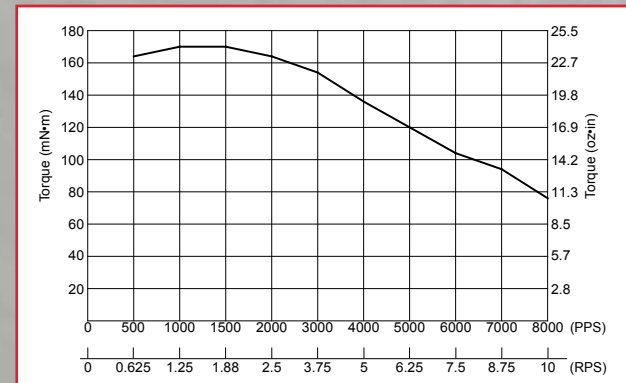
Torque Curves

PR42H-33-1004JA/JB w/Bipolar Constant Current



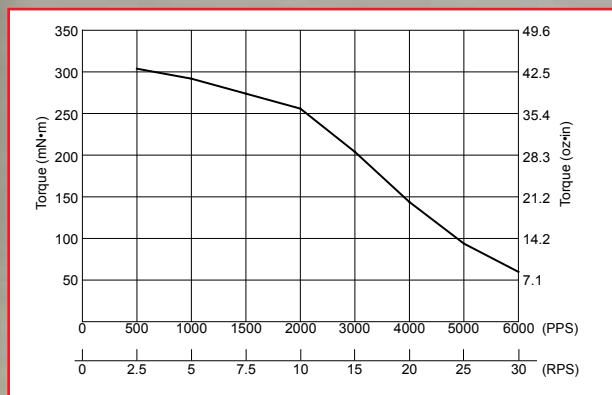
Excitation Mode: Full-step
Voltage: 24VDC
Current: 1.0A

PR42H-33-1004MA/MB w/Bipolar Constant Current



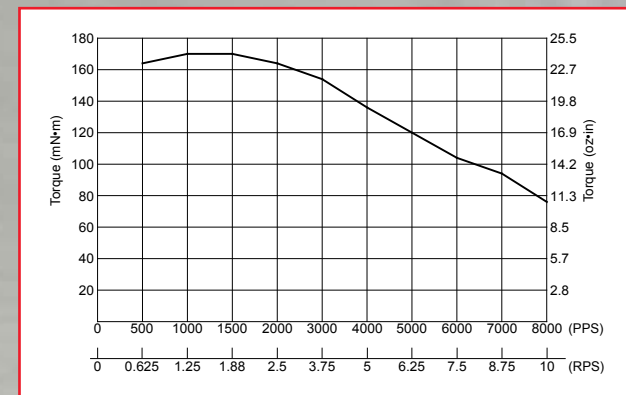
Excitation Mode: Half-step
Voltage: 24VDC
Current: 1.0A

PR42H-38-1004JA/JB w/Bipolar Constant Current



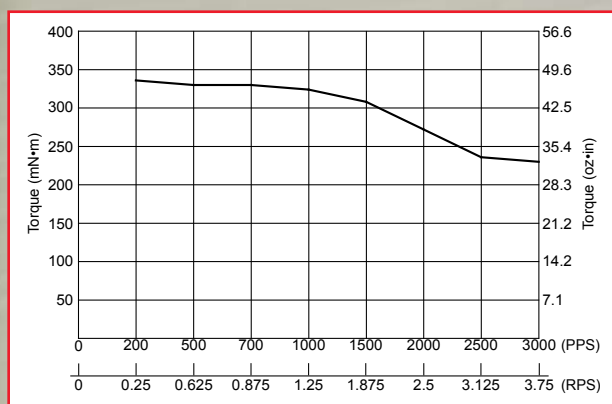
Excitation Mode: Full-step
Voltage: 24VDC
Current: 1.0A

PR42H-38-1004MA/MB w/Bipolar Constant Current



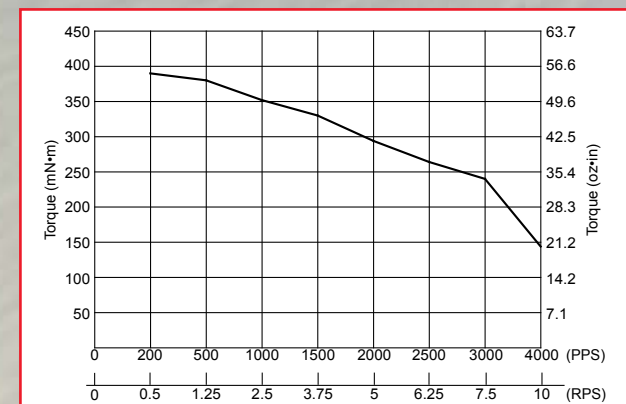
Excitation Mode: Full-step
Voltage: 24VDC
Current: 0.4A

PR42H-47-1004MA/MB w/Bipolar Constant Current



Excitation Mode: Half-step
Voltage: 24VDC
Current: 1.0A

PR42H-47-1004JA/JB w/Bipolar Constant Current



Excitation Mode: Half-step
Voltage: 24VDC
Current: 1.0A