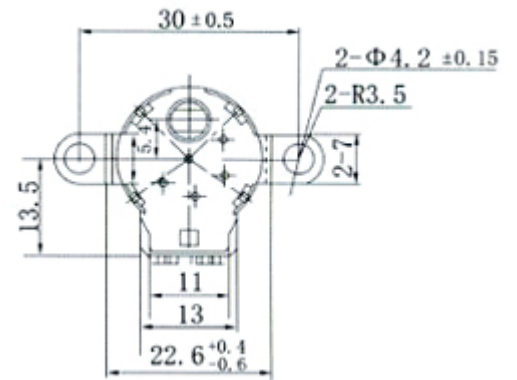
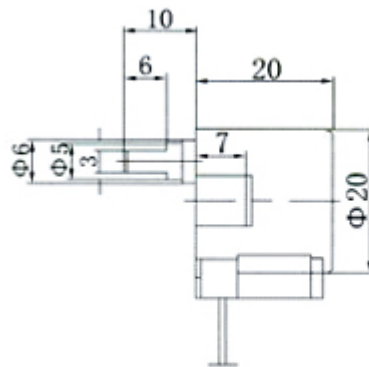


BYJ STEPPING MOTOR

B10



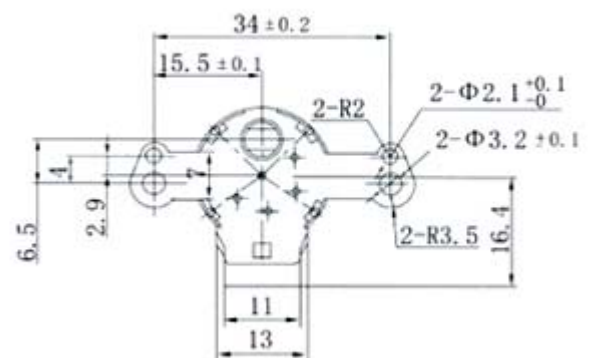
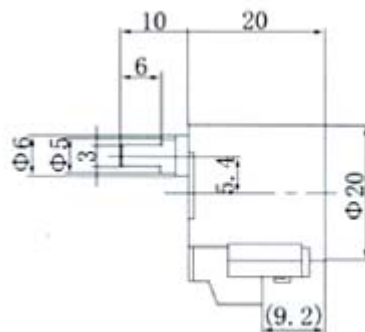
20BYJ46



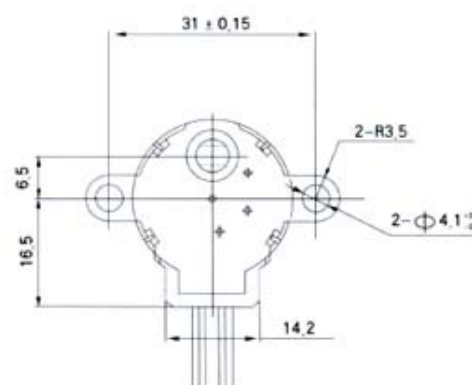
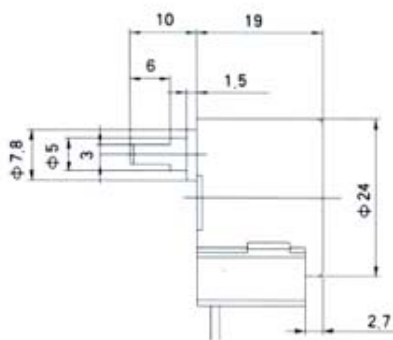
Model	Rated Voltage (DCV)	Resistance Ω/Phase (at25°C)	Max.Free-load Pull-in Frequency (PPS)	Max.Free-load Pull-out Frequency (PPS)	Pull-in Torque (mN.m)	Operation Frequency (PPS)	Detent Torque(mN.m)	Temperature Rise(K)	Noise(dB)	Step Angle (1-2phase)	Insulation Class
20BYJ46	12	200	≥500	≥900	≥29.4	100	≥21.6	≤40		7.5 °/85	E
20BYJ46	5	60	≥500	≥900	≥29.4	100	≥21.6	≤40		7.5 °/85	E



20BYJ46
(without leadwire)

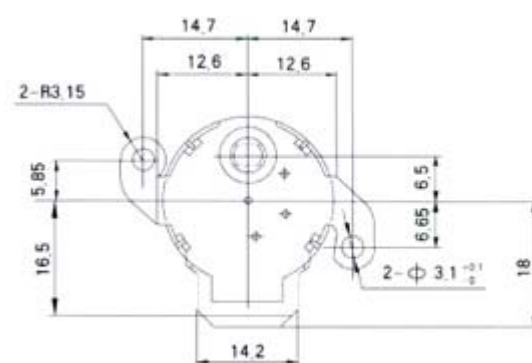
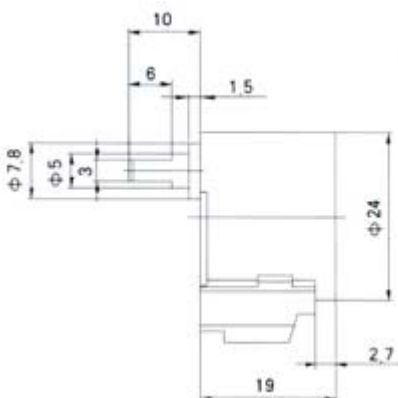


Model	Rated Voltage (DCV)	Resistance Ω/Phase (at25°C)	Max.Free-load Pull-in Frequency (PPS)	Max.Free-load Pull-out Frequency(PPS)	Pull-in Torque(mN.m)	Operation Frequency (PPS)	Detent Torque (mN.m)	Temperature Rise(K)	Noise (dB)	Step Angle (1-2phase)	Insulation Class
20BYJ46	12	200	≥500	≥900	≥29.4	100	≥21.6	≤40		7.5 °/85	E
20BYJ46	5	60	≥500	≥900	≥29.4	100	≥21.6	≤40		7.5 °/85	E



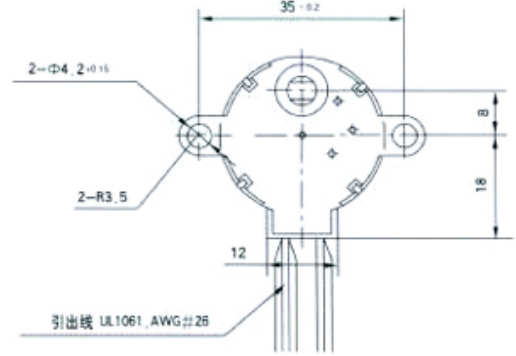
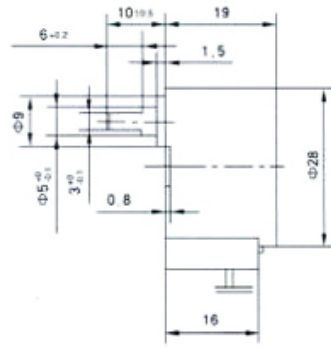
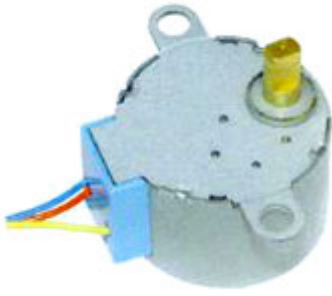
24BYJ48

Model	Rated Voltage(DCV)	Resistance Ω/Phase (at25℃)	Max.Free-load Pull-in Frequency (PPS)	Max.Free-load Pull-out Frequency (PPS)	Pull-in Torque (mN.m)	Operation Frequency (PPS)	Detent Torque (mN.m)	Temperature Rise (K)	Noise (dB)	Step Angle (1-2phase)	Insulation Class
24BYJ48	5	70	≥500	≥900	≥29.4	100	≥29.4	≤40	≤35	5.625°/64	E
24BYJ48	12	200	≥500	≥900	≥29.4	100	≥29.4	≤40	≤35	5.625°/64	E
24BYJ48	12	250	≥500	≥900	≥29.4	100	≥29.4	≤40	≤35	5.625°/64	E
24BYJ48	12	300	≥500	≥900	≥29.4	100	≥29.4	≤40	≤35	5.625°/64	E
24BYJ48	12	320	≥500	≥900	≥29.4	100	≥29.4	≤40	≤35	5.625°/64	E
24BYJ48	12	380	≥500	≥800	≥29.4	100	≥29.4	≤40	≤35	5.625°/64	E
24BYJ48	12	200	≥300	≥600	≥9.8	100	≥7.35	≤45	≤40	5.625°/16	E



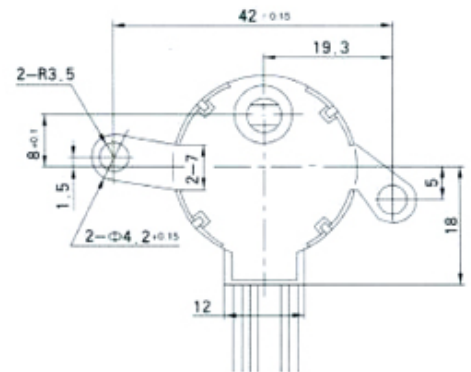
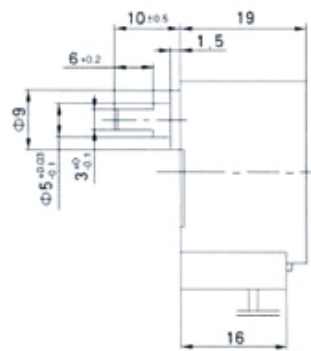
24BYJ48(without leadwire)

Model	Rated Voltage (DCV)	Resistance Ω/Phase (at25℃)	Max.Free-load Pull-in Frequency (PPS)	Max.Free-load Pull-out Frequency (PPS)	Pull-in Torque (mN.m)	Operation Frequency (PPS)	Detent Torque (mN.m)	Temperature Rise(K)	Noise (dB)	Step Angle (1-2phase)	Insulation Class
24BYJ48	5	70	≥500	≥900	≥29.4	100	≥29.4	≤40	≤35	5.625°/64	E
24BYJ48	12	200	≥500	≥900	≥29.4	100	≥29.4	≤40	≤35	5.625°/64	E
24BYJ48	12	250	≥500	≥900	≥29.4	100	≥29.4	≤40	≤35	5.625°/64	E
24BYJ48	12	300	≥500	≥900	≥29.4	100	≥29.4	≤40	≤35	5.625°/64	E
24BYJ48	12	320	≥500	≥900	≥29.4	100	≥29.4	≤40	≤35	5.625°/64	E
24BYJ48	12	380	≥500	≥800	≥29.4	100	≥29.4	≤40	≤35	5.625°/64	E
24BYJ48	12	200	≥300	≥600	≥9.8	100	≥7.35	≤45	≤40	5.625°/16	E



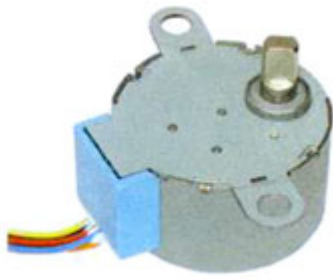
28BYJ48

Model	Rated Voltage (DCV)	Resistance Ω/Phase (at25℃)	Max.FreeLoad Pull-in Frequency (PPS)	Max.FreeLoad Pull-out Frequency (PPS)	Pull-in Torque(mN.m)	Operation Frequency (PPS)	Detent Torque (mN.m)	Temperature Rise(K)	Noise (dB)	Step Angle (1-2phase)	Insulation Class
28BYJ48	5	60	≥500	≥900	≥29.4	100	≥29.4	≤40	≤35	5.625°/64	E
28BYJ48	12	130	≥500	≥900	≥44.1	100	≥29.4	≤40	≤35	5.625°/64	E
28BYJ48	12	200	≥500	≥900	≥34.3	100	≥29.4	≤40	≤35	5.625°/64	E
28BYJ48	12	250	≥500	≥900	≥34.3	100	≥29.4	≤40	≤35	5.625°/64	E
28BYJ48	12	300	≥500	≥900	≥34.3	100	≥29.4	≤40	≤35	5.625°/64	E
28BYJ48	12	320	≥500	≥900	≥29.4	100	≥29.4	≤40	≤35	5.625°/64	E
28BYJ48	12	380	≥500	≥900	≥29.4	100	≥29.4	≤40	≤35	5.625°/64	E

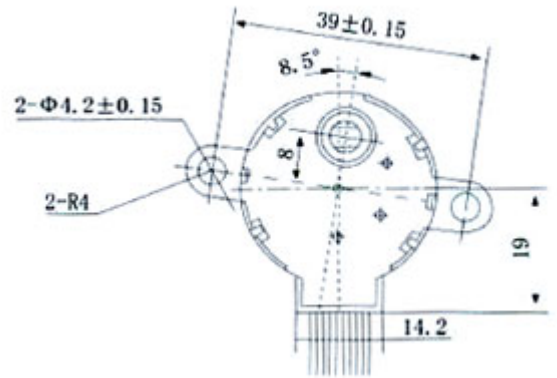
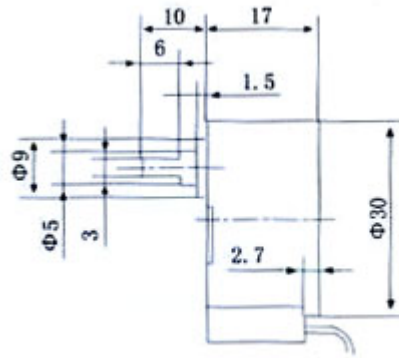


28BYJ48

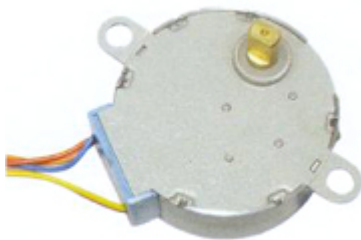
Model	Rated Voltage (DCV)	Resistance Ω/Phase (at25℃)	Max.FreeLoad Pull-in Frequency (PPS)	Max.FreeLoad Pull-out Frequency (PPS)	Pull-in Torque (mN.m)	Operation Frequency (PPS)	Detent Torque (mN.m)	Temperature Rise (K)	Noise (dB)	Step Angle (1-2phase)	Insulation Class
28BYJ48	5	60	≥500	≥900	≥29.4	100	≥29.4	≤40	≤35	5.625°/64	E
28BYJ48	12	130	≥500	≥900	≥44.1	100	≥29.4	≤40	≤35	5.625°/64	E
28BYJ48	12	200	≥500	≥900	≥34.3	100	≥29.4	≤40	≤35	5.625°/64	E
28BYJ48	12	250	≥500	≥900	≥34.3	100	≥29.4	≤40	≤35	5.625°/64	E
28BYJ48	12	300	≥500	≥900	≥34.3	100	≥29.4	≤40	≤35	5.625°/64	E
28BYJ48	12	320	≥500	≥900	≥29.4	100	≥29.4	≤40	≤35	5.625°/64	E
28BYJ48	12	380	≥500	≥900	≥29.4	100	≥29.4	≤40	≤35	5.625°/64	E



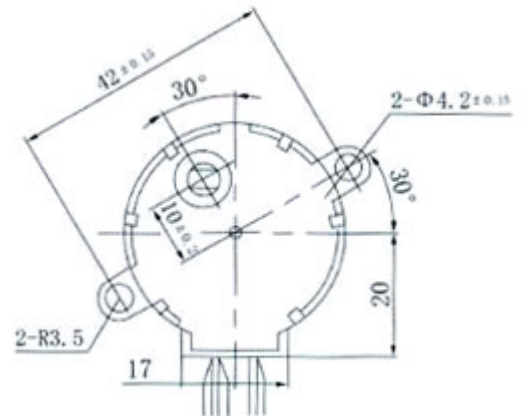
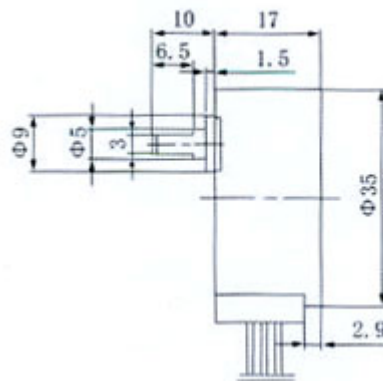
30BYJ46



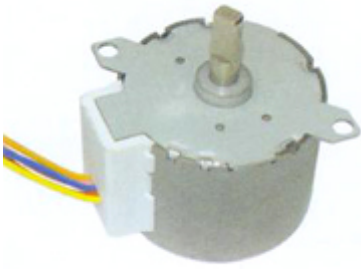
Model	Rated Voltage (DCV)	Resistance Ω/Phase (at 25°C)	Max. Freeload Pull-in Frequency (PPS)	Max. Freeload Pull-out Frequency (PPS)	Pull-in Torque (mN.m)	Operation Frequency (PPS)	Detent Torque (mN.m)	Temperature Rise (K)	Noise (dB)	Step Angle (1-2phase)	Insulation Class
30BYJ46	12	100	≥350	≥800	≥147	100	≥78.4	≤45	≤40	7.5 °/85.25	E
30BYJ46	12	130	≥750	≥800	≥78.4	100	≥39.2	≤45	≤40	7.5 °/85.25	E
30BYJ46	12	200	≥350	≥600	≥58.8	100	≥39.2	≤45	≤40	7.5 °/85.25	E



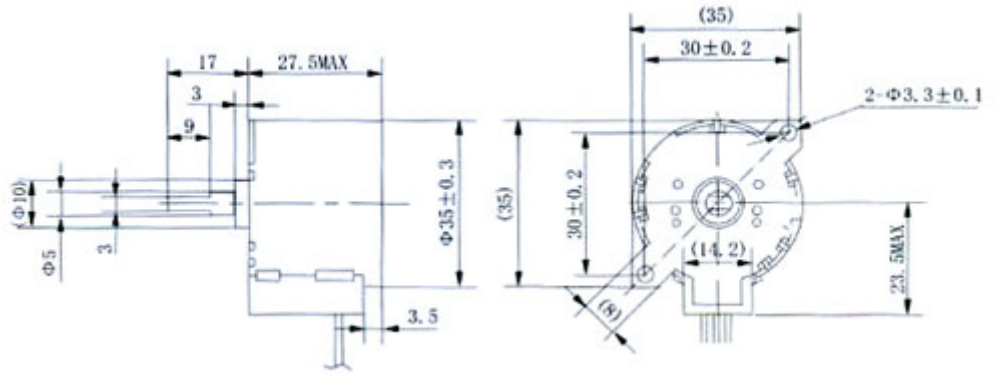
35BYJ46



Model	Rated Voltage (DCV)	Resistance Ω/Phase (at 25°C)	Max. Freeload Pull-in Frequency (PPS)	Max. Freeload Pull-out Frequency (PPS)	Pull-in Torque (mN.m)	Operation Frequency (PPS)	Detent Torque (mN.m)	Temperature Rise (K)	Noise (dB)	Step Angle (1-2phase)	Insulation Class
35BYJ46	12	110	≥350	≥800	≥98	100	≥39.2	≤40	≤35	7.5 °/85	E
35BYJ46	12	130	≥350	≥800	≥78.4	100	≥39.2	≤40	≤35	7.5 °/85	E
35BYJ46	12	200	≥350	≥800	≥58.8	100	≥39.2	≤40	≤35	7.5 °/85	E
35BYJ46	12	150	≥350	≥800	≥78.4	100	≥39.2	≤45	≤40	7.5 °/85	E



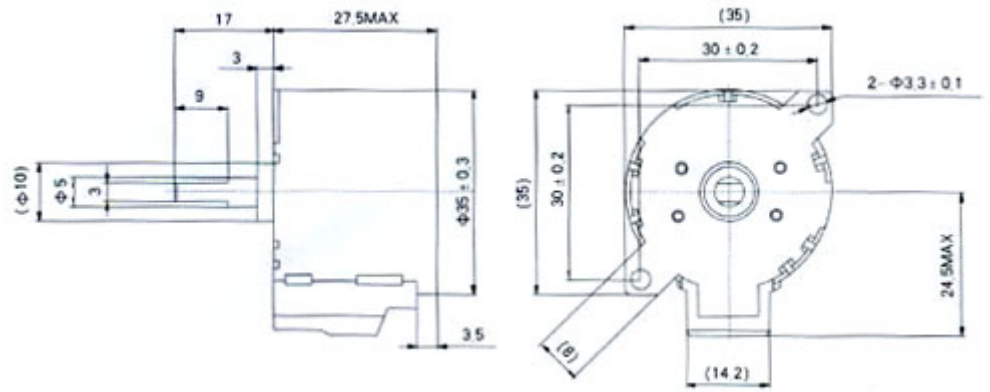
35BYJ412B



Model	Rated Voltage (DCV)	Resistance Ω /Phase (at 25°C)	Max. Freeload Pull-in Frequency (PPS)	Max. Freeload Pull-out Frequency (PPS)	Pull-in Torque (mN.m)	Operation Frequency (PPS)	Detent Torque (mN.m)	Temperature Rise (K)	Noise (dB)	Step Angle (1-2phase)	Insulation Class
35BYJ412B	12	30	>450	≥550	≥147	200	≥68.6	<60	≤40	3.75 °/42.5	E



35BYJ412B
(without leadwire)



Model	Rated Voltage (DCV)	Resistance Ω /Phase (at 25°C)	Max. Freeload Pull-in Frequency (PPS)	Max. Freeload Pull-out Frequency (PPS)	Pull-in Torque (mN.m)	Operation Frequency (PPS)	Detent Torque (mN.m)	Temperature Rise (K)	Noise (dB)	Step Angle (1-2phase)	Insulation Class
35BYJ412B	12	30	>450	≥550	≥147	200	≥68.6	<60	≤40	3.75 °/42.5	E