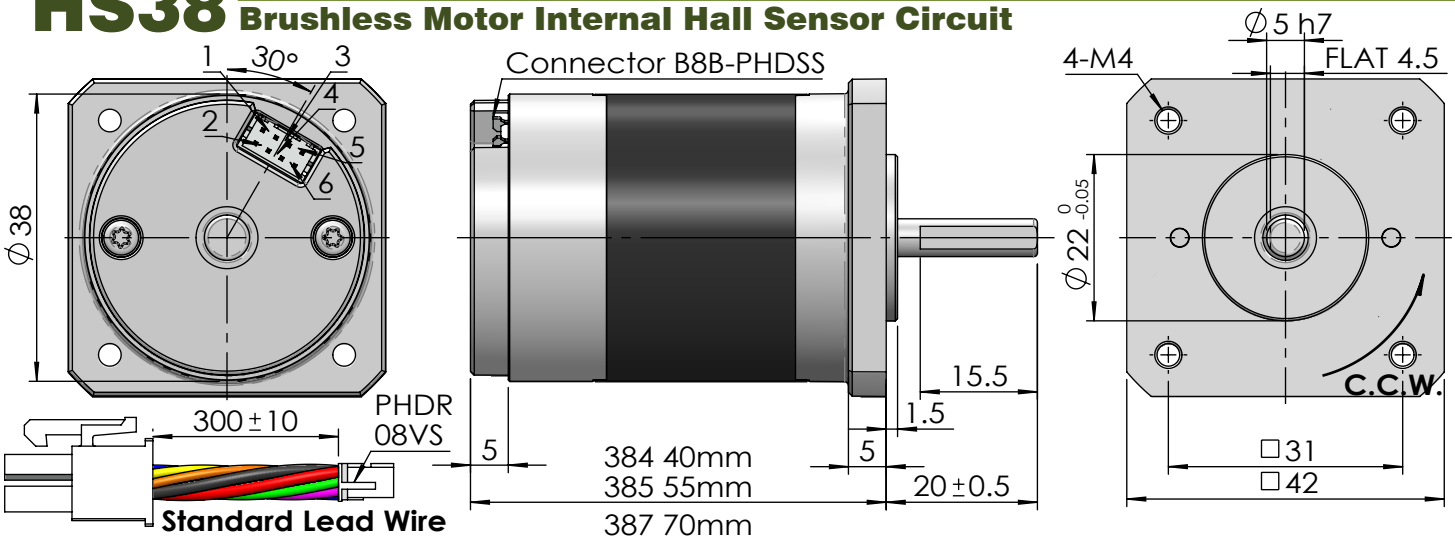
SOHOMOTOR

HS38

B-Class Insulation / IP5X Protection

Brushless Motor Internal Hall Sensor Circuit



HS384 Motor Data — 15W

Weight	Inertia	Cogging
160 g	17.1 g-cm²	10 g-cm

Item	Volt	No Load		Rated at Max. Eff.					Stall		Pmax	Rt	La	Kt	Ke	Ks	Tm	Te
Unit	V	rpm	mA	rpm	mA	g-Cm	W	%	g-Cm	mA	W	Ω	mH	Kg-cm/A	V/krpm	rpm/V	mS	mS
-120	12	1900	80	1456	267	131	2.0	61.09	560	880	2.7	13.5	11	0.700	7.19	139	4.7	0.81
-139	12	3900	280	3005	950	225	6.9	60.88	980	3200	9.8	3.4	2.8	0.336	3.45	290	5.2	0.82
-161	12	6100	400	4974	1840	277	14.1	64.07	1500	8200	23.5	1.4	1.1	0.192	1.97	507	6.5	0.79
-195	12	9500	830	7611	3449	342	26.7	64.60	1720	14000	42.0	0.65	0.48	0.131	1.34	746	6.5	0.74
-220	24	2080	80	1462	193	196	2.9	63.60	660	460	3.5	49.4	32.6	1.737	17.83	56	2.8	0.66
-239	24	3900	95	3142	403	204	6.6	68.08	1050	1680	10.5	13.5	11	0.662	6.80	147	5	0.81
-258	24	5800	140	4812	695	235	11.6	69.62	1380	3400	20.6	6.4	5.4	0.423	4.35	230	6.1	0.84
-267	24	6700	200	5521	974	264	15.0	64.01	1500	4600	25.8	4.8	3.9	0.341	3.50	286	7.1	0.81
-287	24	8700	380	7108	1774	366	26.7	62.74	2000	8000	44.7	2.8	2.2	0.262	2.69	371	7.0	0.79

HS385 Motor Data — 30W

Weight	Inertia	Cogging
250 g	34.7 g-cm²	13 g-cm

Item	Volt	No Load		Rated at Max. Eff.					Stall		Pmax	Rt	La	Kt	Ke	Ks	Tm	Te
Unit	V	rpm	mA	rpm	mA	g-Cm	W	%	g-Cm	mA	W	Ω	mH	Kg-cm/A	V/krpm	rpm/V	mS	mS
-120	12	2000	140	1624	636	312	5.2	68.17	1660	2780	8.5	4.3	4.5	0.629	6.45	155	1.9	1.05
-136	12	3600	220	3075	1296	350	11.1	71.06	2400	7600	22.2	1.47	1.51	0.325	3.34	300	2.4	1.03
-163	12	6300	500	5390	3128	462	25.6	68.15	3200	18700	51.8	0.55	0.48	0.176	1.80	554	3	0.87
-225	24	2500	100	2044	465	325	6.8	61.10	1780	2100	11.4	11.8	12	0.890	9.14	109	2.5	1.02
-237	24	3700	140	3146	838	479	15.5	77.00	3200	4800	30.4	5.4	5.8	0.687	7.05	142	2.0	1.07
-252	24	5200	220	4420	1282	525	23.8	77.46	3500	7300	46.7	3	2.9	0.494	5.07	197	2.1	0.97
-272	24	7250	300	6342	2216	601	39.1	73.62	4800	15600	89.3	1.47	1.51	0.314	3.22	311	2.6	1.03
-291	24	9100	400	7937	2879	639	52.1	75.38	5000	19800	116.8	0.97	0.96	0.258	2.65	378	2.5	0.99

HS387 Motor Data — 40W

Weight	Inertia	Cogging
340 g	51.4 g-cm²	15 g-cm

Item	Volt	No Load		Rated at Max. Eff.					Stall		Pmax	Rt	La	Kt	Ke	Ks	Tm	Te
Unit	V	rpm	mA	rpm	mA	g-Cm	W	%	g-Cm	mA	W	Ω	mH	Kg-cm/A	V/krpm	rpm/V	mS	mS
-130	12	2940	210	2541	1404	462	12.1	71.53	3400	9000	25.7	1.3	1.4	0.387	3.97	252	1.5	1.08
-142	12	4160	300	3600	2092	485	17.9	71.43	3600	13600	38.5	0.70	0.73	0.271	2.78	360	1.6	1.04
-165	12	6500	600	5732	4548	662	39.0	71.40	5600	34000	93.5	0.3	0.3	0.168	1.72	581	1.8	1.00
-232	24	3200	150	2747	950	623	17.6	77.09	4400	5800	36.2	4.5	5.0	0.779	7.99	125	1	1.11
-248	24	4800	200	4231	1658	711	30.9	77.67	6000	12500	73.9	2.0	2.3	0.488	5.01	200	1.4	1.15
-260	24	6050	280	5361	2345	752	41.4	73.58	6600	18400	102.5	1.3	1.4	0.364	3.74	267	1.7	1.08
-272	24	7220	320	6433	2792	763	50.4	75.23	7000	23000	129.8	0.9	1.0	0.309	3.17	316	1.6	1.11

#AWG24 / UL1430	
U	Red
V	White
W	Black
Vcc DC3.5~26V	Orange
Hall U	Yellow
Hall V	Blue
Hall W	Purple
GND	Green