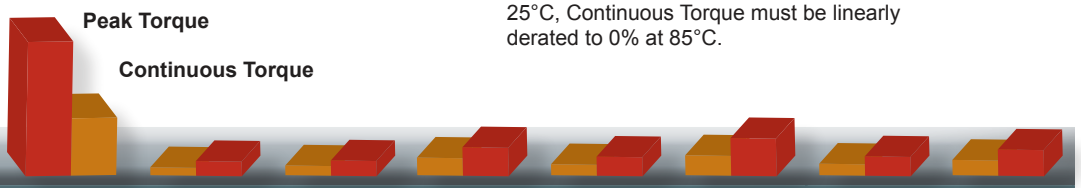
D-Style Motor Comparison Chart

★ BEST VALUE

- All D-style SmartMotors have a primary RS-232 communications port
- All D-style SmartMotors have 7 channels 5V TTL non-isolated I/O
- Optional 10 channels expanded 24VDC isolated I/O
- Dedicated Encoder Out



Relative Torque Comparison

NOTE: All torque curves based on 25°C ambient. For ambient temperatures above 25°C, Continuous Torque must be linearly derated to 0% at 85°C.

		SM17205D	SM23165D	SM23165DT	SM23375D	SM23375DT	SM23205D	SM23305D
Continuous Torque	in-lb	2.08	2.50	4.61	2.86	5.18	2.96	3.98
	oz-in	33	40	74	46	83	47	64
	N-m	0.24	0.28	0.52	0.32	0.59	0.33	0.45
Peak Torque	in-lb	3.82	4.00	7.40	5.00	9.80	5.03	6.86
	oz-in	61	64	118	80	157	80	110
	N-m	0.43	0.45	0.84	0.57	1.11	0.57	0.77
Nominal Continuous Power	Watts	145	181	204	191	186	226	220
No Load Speed	RPM	7,900	10,400	5,200	8,000	4,000	8,100	5,600
Max. Continuous Current	RPM	6,000	6,500	3,800	6,000	3,250	6,900	4,750
	Amps	3.81	3.545	5.074	5.072	4.52	6.02	5.57
Peak Current	RPM	4,200	6,000	3,500	4,750	2,450	6,000	4,000
	Amps	4.69	4.43	5.73	5.829	5.67	8.67	8.18
Voltage Constant	V/krpm	6.506	4.45	9.08	5.62	10.95	6.137	8.873
Inductance	mH	1.4	0.829	1.31	0.770	0.906	0.40	0.61
Encoder Resolution	Counts/Rev	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Rotor Inertia	oz-in-sec2	0.000217	0.00099	0.001	0.0019	0.0019	0.0022	0.0033
	10-5 Kg-m2	0.15324	0.6991	0.706	1.342	1.342	1.592	2.344
Weight	lb	1.2	1.0	1.3	2.1	2.2	1.7	2.3
	kg	0.55	0.45	0.59	0.95	0.98	0.79	1.03
Shaft Diameter	in	0.197	0.250	0.250	0.250	0.250	0.250	0.250
	mm	5.00	6.35	6.35	6.35	6.35	6.35	6.35
Shaft, Radial Load	lb	7	7	7	7	7	7	7
	kg	3.18	3.18	3.18	3.18	3.18	3.18	3.18
Shaft, Axial Thrust Load	lb	3	3	3	3	3	3	3
	kg	1.36	1.36	1.36	1.36	1.36	1.36	1.36
DeviceNet Option		Yes	Yes	Yes	Yes	Yes	Yes	Yes
PROFIBUS Option			Yes	Yes				
CANopen Option		Yes	Yes	Yes	Yes	Yes	Yes	Yes

Due to the variety of operating conditions and applications for Moog Animatics' products, the end user is solely responsible for making the final selection of the Moog Animatics products and systems based on their own analysis and testing and ensuring that all performance, safety and warning requirements for the application and product are met.
Please consult factory for any supporting hardware and cables needed, full details and latest information.

Moog Inc., Animatics • All integrated motor products made by Moog Animatics are covered by patent number 5,912,541
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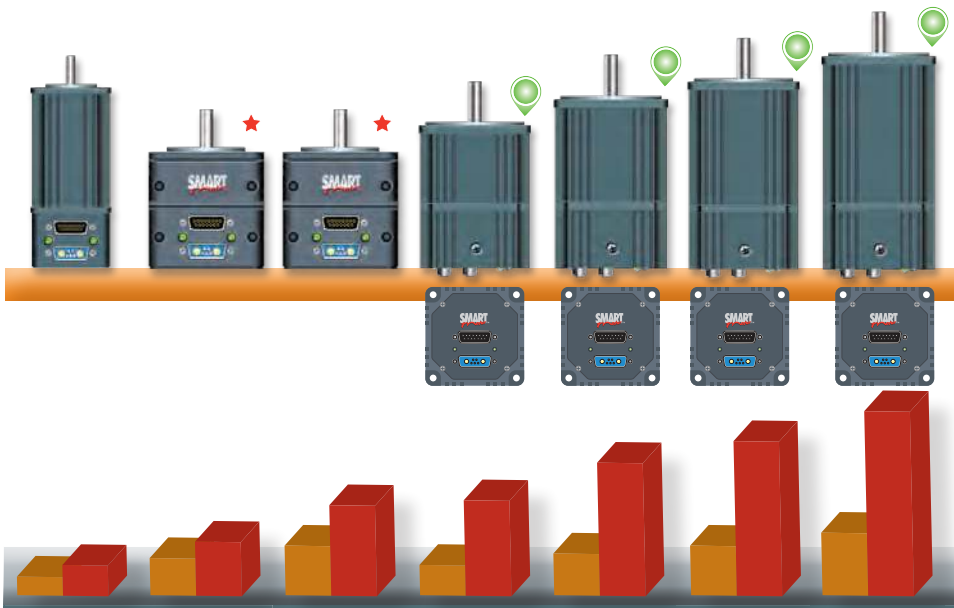

SM23405D	SM34165D	SM34165DT	SM34205D	SM34305D	SM34405D	SM34505D		
4.88	9.67	12.83	7.91	10.87	12.94	16.34	in-lb	Continuous Torque
78	155	205	126	174	207	261	oz-in	
0.55	1.09	1.45	0.89	1.23	1.46	1.85	N-m	
8.04	14.12	30.00	24.91	34.75	40.38	48.19	in-lb	Peak Torque
129	226	480	399	556	646	771	oz-in	
0.91	1.60	3.39	2.81	3.93	4.56	5.44	N-m	
253	235	615	324	400	438	527	Watts	Nominal Continuous Power
5,300	3,100	5,100	4,500	4,100	3,800	3,300	RPM	No Load Speed
4,500	2,400	4,500	3,750	3,600	3,300	3,100	RPM	Max. Continuous Current
6.76	6.02	16.93	8.28	10.31	11.69	14.37	Amps	
3,900	1,800	3,500	2,250	2,500	2,450	2,300	RPM	Peak Current
8.62	6.38	23.86	11.17	17.73	20.71	23.01	Amps	
9.612	14.98	8.9	10.8	12.1	12.9	14.049	V/krpm	Voltage Constant
0.49	1.72	0.32	0.596	0.490	0.913	0.871	mH	Inductance
4,000	8,000	8,000	8,000	8,000	8,000	8,000	Counts/Rev	Encoder Resolution
0.00439	0.014	0.0142	0.012	0.018	0.024	0.03	oz-in-sec2	Rotor Inertia
3.100	9.890	10.031	8.448	12.56	17.02	20.92	10-5 Kg-m2	
2.8	5.0	5.5	3.5	4.5	5.5	6.5	lb	Weight
1.27	2.27	2.49	1.59	2.04	2.49	2.95	kg	
0.250	0.375	0.500	0.375	0.375	0.375	0.375	in	Shaft Diameter
6.35	9.53	12.70	9.53	9.53	9.53	9.53	mm	
7	15	30	15	15	15	15	lb	Shaft, Radial Load
3.18	6.80	13.61	6.80	6.80	6.80	6.80	kg	
3	3	3	3	3	3	3	lb	Shaft, Axial Thrust Load
1.36	1.36	1.36	1.36	1.36	1.36	1.36	kg	
Yes	Yes	Yes	Yes	Yes	Yes	Yes		DeviceNet Option
	Yes	Yes						PROFIBUS Option
Yes	Yes	Yes	Yes	Yes	Yes	Yes		CANopen Option

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