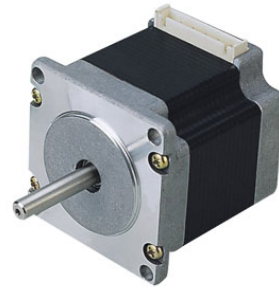
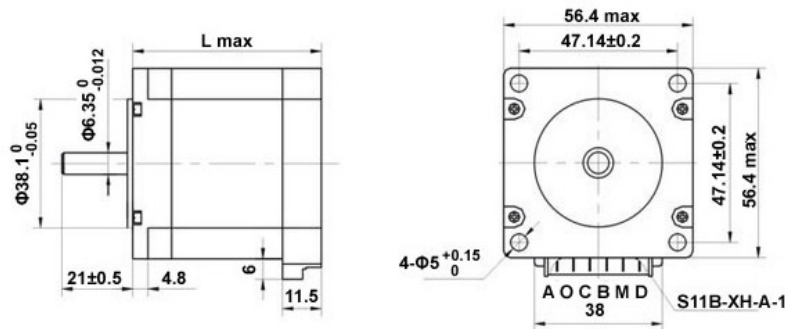


## 23HD Series

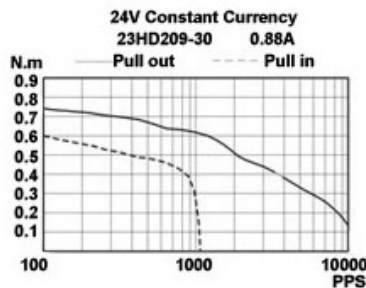
Positional error:  $\pm 5\%$ ;  
 Working Temperature:  $-10^{\circ}\text{C}$ – $+40^{\circ}\text{C}$ ;  
 Temperature rise: 85K;  
 Insulation resistance: 100Mohm min 500V DC;  
 Insulation class: B.



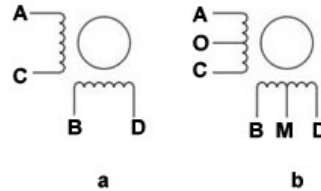
### Figure Dimensions



### Pulse-torque characteristics



### Wiring Diagram



Code	Step angle	Rated current (A)	Resistance per phase (Ω)	Inductance per phase (mH)	Holding torque (mN.m)	Detent torque (mN.m)	Rotor inertia (g.cm <sup>2</sup> )	Wiring diagram	Motor mass (g)	Motor length "L"
23HD002-1	1.8°	0.60	12.0	25	0.50	22	135	a	0.42	41
23HD003-1	1.8°	1.50	1.5	1.5	0.35	22	135	b	0.42	41
23HD209-30	1.8°	0.88	7.0	22	0.82	32	220	a	0.55	51
23HD219-18	1.8°	1.00	5.1	9	0.62	32	220	a	0.55	51
23HD906-29	1.8°	0.60	14.0	55	1.5	78	520	a	1.2	82
23HD001	1.8°	0.50	12.0	20	/	/	135	/	0.42	41
23HD006	1.8°	1.00	5.0	5	/	/	135	/	0.42	41
23HD101	1.8°	0.60	12.0	28	/	/	155	/	0.5	45
23HD203	1.8°	0.70	12.0	40	/	/	220	/	0.55	51
23HD401	1.8°	0.60	12.0	43	/	/	260	/	0.6	54
23HD402	1.8°	0.88	7.5	21	/	/	260	/	0.6	54
23HD601	1.8°	0.60	12.0	35	/	/	280	/	0.62	56
23HD606	1.8°	0.60	2.0	3.5	/	/	280	/	0.62	56
23HD701	1.8°	5.00	0.75	1.5	/	/	380	/	0.82	65
23HD801	1.8°	0.75	16.0	60	/	/	460	/	1	76
23HD802	1.8°	4.20	20.5	2.1	/	/	460	/	1	76