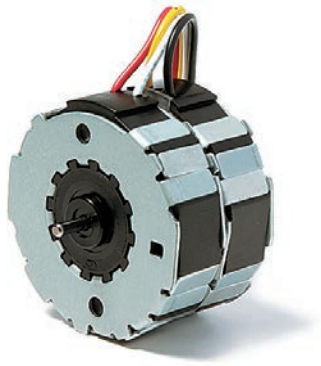
UBB

UBB1/2/5/6

Dimensions (mm)	∅ 36 x 21
Step angle (°)	15
Holding torque (cNm)	0.85–1.6
Detent torque (cNm)	0.21/0.31
Winding	bipolar/unipolar
Gear combination	D, M, B, F, V



Note: All torque and power output values are minimum values, at rated voltage and motor temperature 23°C.

Standard Data

Climatic class	wide-spread according to DIN IEC 60721-2-1 : 2015
Ambient temperature operation	°C -15...+55
Ambient temperature storage	°C -20...+100
Thermal resistance at f=0 R_{therm}	27 K/W
Thermal class	105 (A) according to DIN EN 60085 : 2008
Approval	standard (UL/CSA on request)
Mounting	any position
Electrical connection	cable
Protection	IP40 according to DIN EN 60529 : 2014
Weight	60 g
Rotor stalling	motor can be stopped when voltage is applied, without being overheated
Bearings	sintered bronze, self-lubricating
Electric strength	according to DIN EN 60034-1/DIN EN 60335-1

Order Reference

Type	Stepper Motor				UBB	1	0	N	03	R	E
Configuration	1	bipolar, standard magnet	5	bipolar, stronger magnet							
	2	unipolar, standard magnet	6	unipolar, stronger magnet							
Rotor shaft, mounting	0	centring 8 mm, shaft 2.0 mm, clip	A	centring 10 mm, shaft 2.0 mm, clip							
	1	centring 8 mm, shaft 1.5 mm, clip	C	centring 10 mm, shaft 1.5 mm, clip							
	3	centring 8 mm, shaft 2.0 mm, screw plate	E	centring 10 mm, shaft 2.0 mm, screw plate							
	4	centring 8 mm, shaft 1.5 mm, screw plate	K	centring 10 mm, shaft 1.5 mm, screw plate							
Approval	N	Approval Standard									
Resistance		See next page Resistance per winding for bipolar or unipolar.									
Direction		reversible									
Cable	E	cable 150 mm (other on request)									

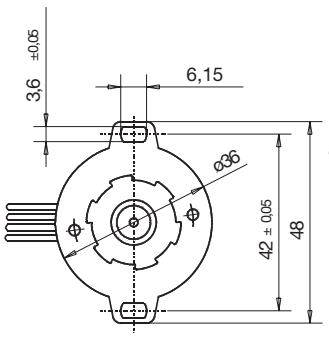
All specifications are representative only and maybe subject to variation. For confirmation of values, please contact Johnson Electric.
Please also read "Saia Motors Important Notes" on catalog or at www.johnsonelectric.com/SaiaMotorsNotes

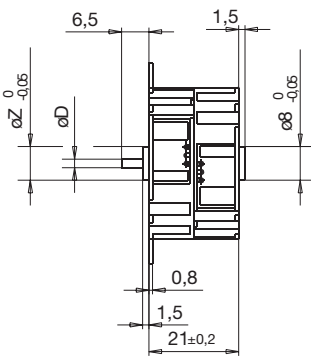
Technical Data

bipolar			UBB1	UBB5	
	Holding torque M_H	cNm	1.3	1.6	
	Detent torque M_S	cNm	0.21	0.31	
	Rotor inertia J_R	gcm²	2.8	2.9	
UBB1/5	Rated voltage U_N	V	6	12	24
	Duty cycle	%	100	100	100
	Resistance R_{20}	Ω	18.5	100	460
	Winding code		03	05	06
unipolar			UBB2	UBB6	
	Holding torque M_H	cNm	0.85	1.2	
	Detent torque M_S	cNm	0.21	0.31	
	Rotor inertia J_R	gcm²	2.8	2.9	
UBB2/6	Rated voltage U_N	V	6	12	24
	Duty cycle	%	100	100	100
	Resistance R_{20}	Ω	28	120	500
	Winding code		07	08	09
UBB3/7	Rated voltage U_N	V	6	12	24
	Duty cycle	%	100	100	100
	Resistance R_{20}	Ω	18.5	100	460
	Winding code		03	05	06
UBB4/8	Rated voltage U_N	V	6	12	24
	Duty cycle	%	100	100	100
	Resistance R_{20}	Ω	28	120	500
	Winding code		07	08	09
	Steps per revolution		24		
	Winding temperature T_{max}	°C	105		
	Direction of rotation		reversible		

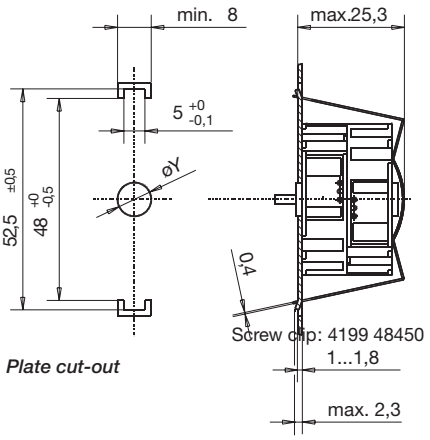
Dimensions

Mounting with screw plate





Mounting with snap-on clip
(item no. 4199 48230)



Mounting with screw plate

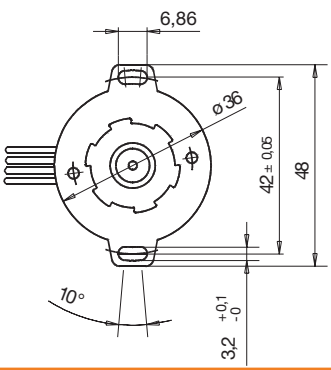
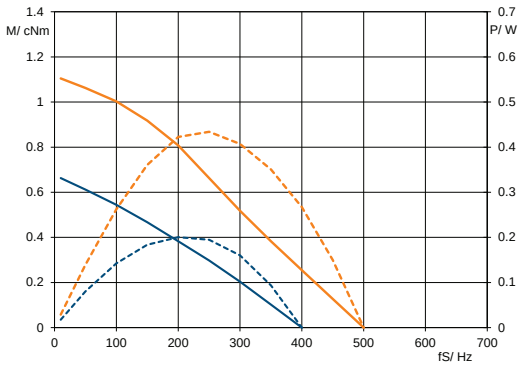


Plate cut-out

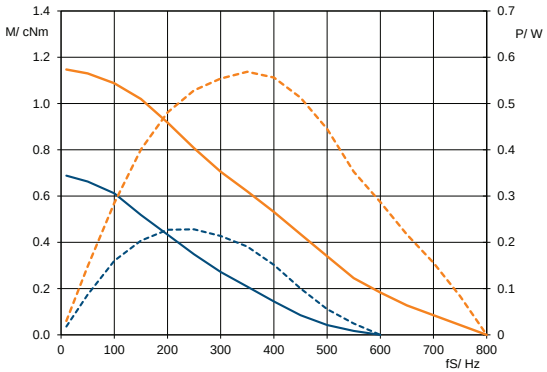
øD Rotor shaft	
ø 2 h6	
ø 1.5 js8	
øZ	**øY**
8	**8F8**
10	**10F8**

Performance Chart

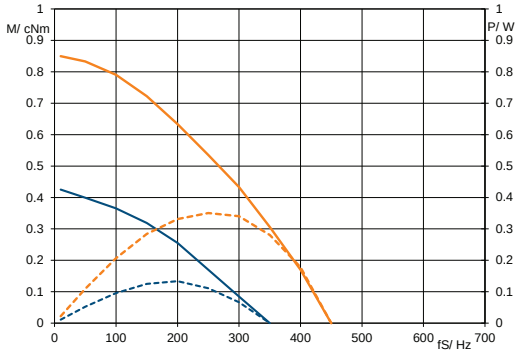
UBB1 - Pull-in range



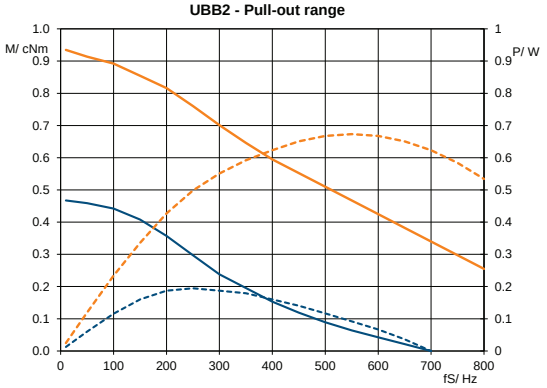
UBB1 - Pull-out range



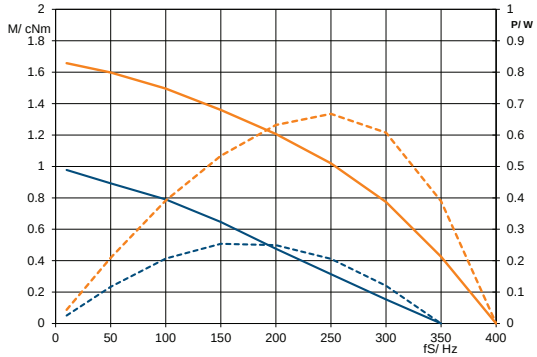
UBB2 - Pull-in range



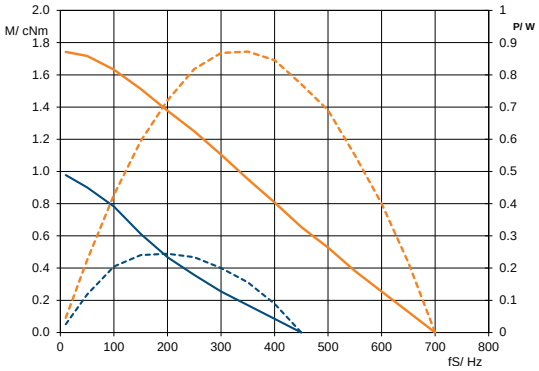
UBB2 - Pull-out range



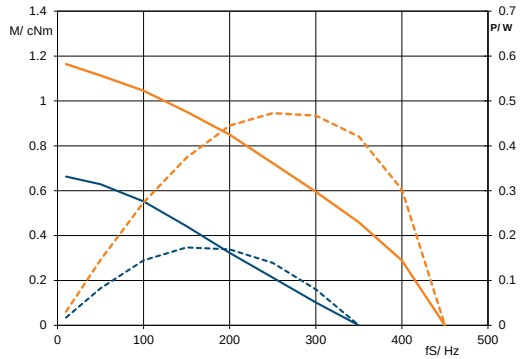
UBB5 - Pull-in range



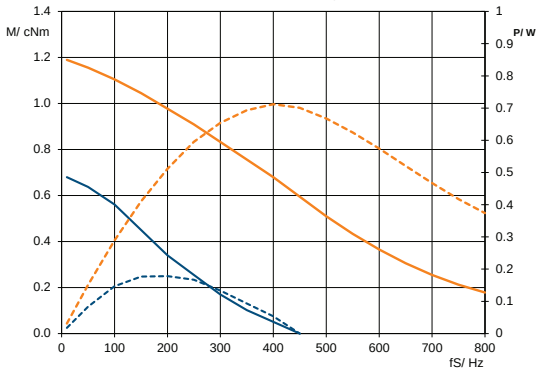
UBB5 - Pull-out range



UBB6 - Pull-in range



UBB6 - Pull-out range



M - Duty cycle 30 %
M - Duty cycle 100%
P - Duty cycle 30 %
P - Duty cycle 100 %