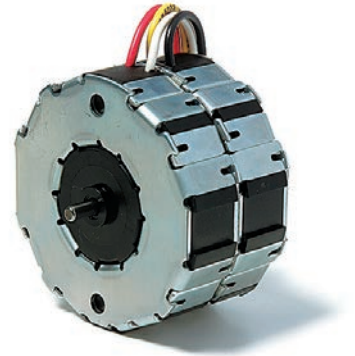


UFD1/2

Dimensions (mm)	∅ 52 x 28
Step angle (°)	7.5
Holding torque (cNm)	5.4/3.9
Detent torque (cNm)	0.38
Winding	bipolar/unipolar
Gear combination	D, M, B, F, V, J, O, P



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}	13 K/W
Thermal class	105 (A) according to DIN EN 60085 : 2008 (130 / B on request)
Approval	standard (UL/CSA on request)
Mounting	any position
Electrical connection	lead wires AWG22, insulation ∅ 1.72 ± 0.08 mm
Protection	IP40 according to DIN EN 60529 : 2014
Weight	180 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						UFD	1	0	N	02	R	N
Configuration	1	bipolar, two coils											
	2	unipolar, two coils											
Rotor shaft, mounting	0	centring 8 mm, shaft 3.0 mm, clip	E	centring 10 mm, shaft 3.0 mm, screw plate									
	1	centring 8 mm, shaft 2.0 mm, clip	K	centring 10 mm, shaft 2.0 mm, screw plate									
	2	centring 8 mm, shaft 1.5 mm, clip	M	centring 10 mm, shaft 1.5 mm, screw plate									
	3	centring 8 mm, shaft 3.0 mm, screw plate	B	centring 10 mm, shaft 3.0 mm, clip									
	4	centring 8 mm, shaft 2.0 mm, screw plate	A	centring 10 mm, shaft 2.0 mm, clip									
	5	centring 8 mm, shaft 1.5 mm, screw plate	C	centring 10 mm, shaft 1.5 mm, clip									
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)												

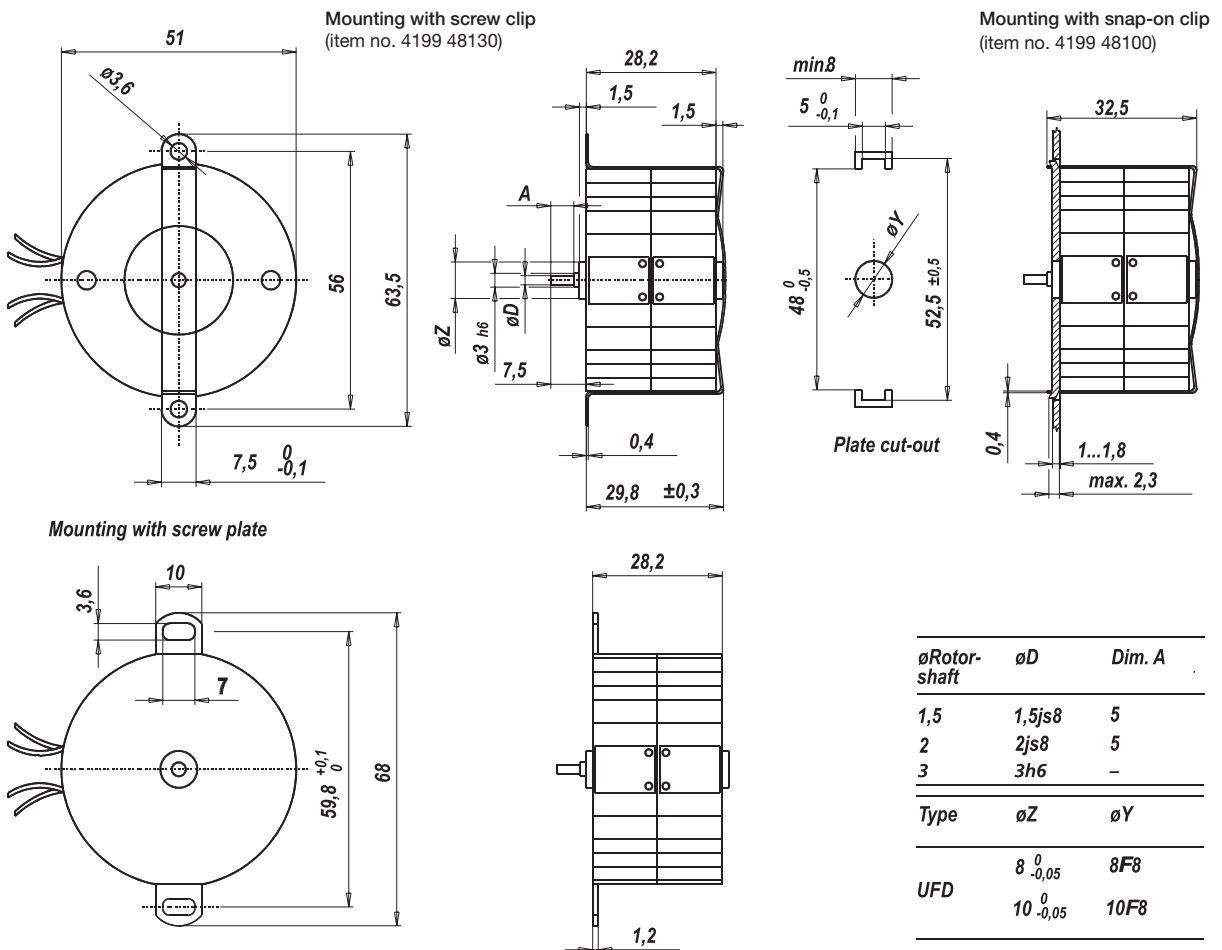
All specifications are representative only and maybe subject to variation. For confirmation of values, please contact Johnson Electric. Please also read "Saia Motors Important Notes" on catalog or at www.johnsonelectric.com/SaiaMotorsNotes



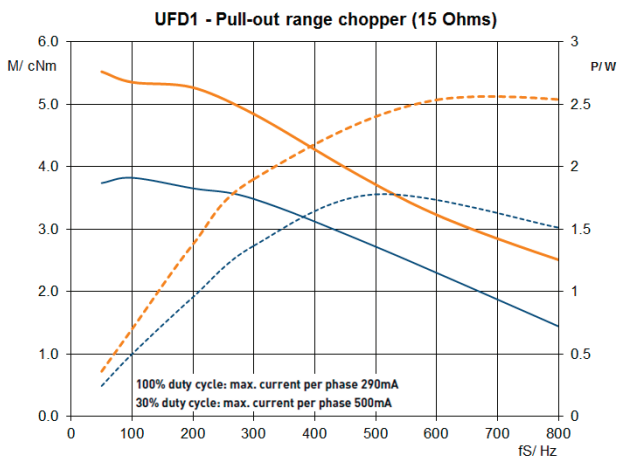
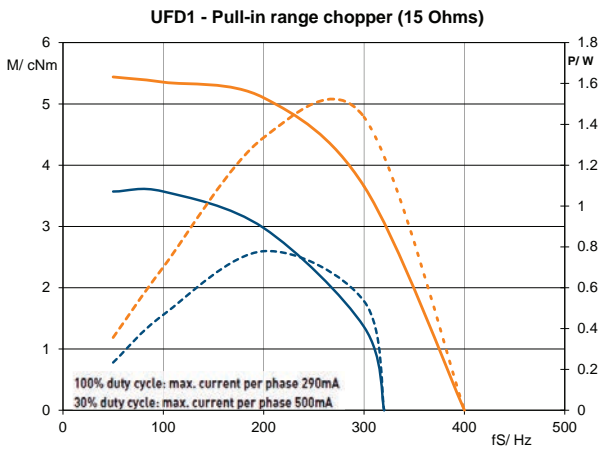
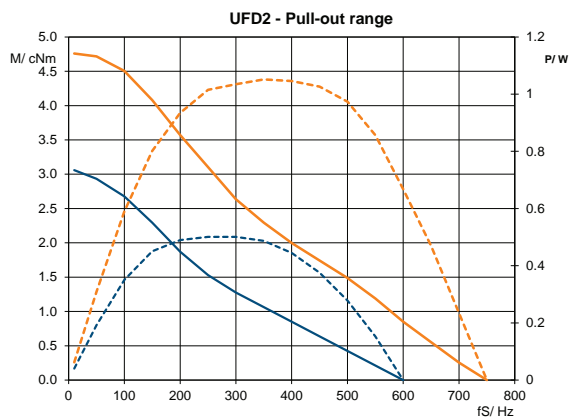
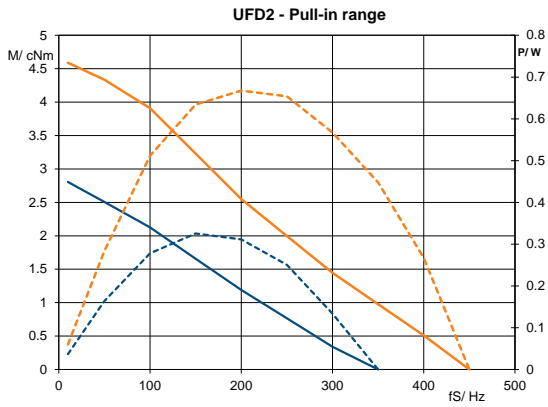
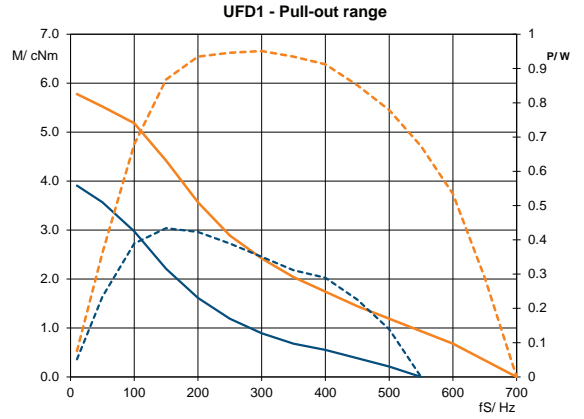
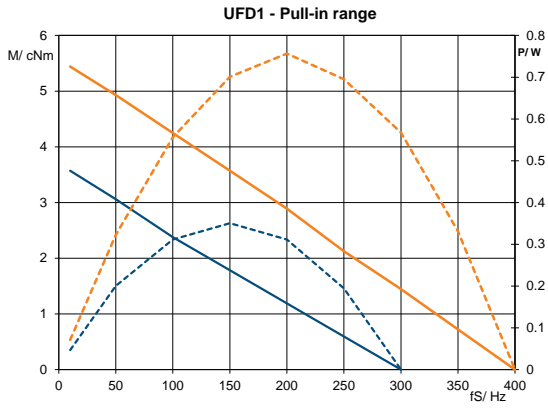
Technical Data

bipolar (UFD1)	Holding torque M_H	cNm	5.4		
	Detent torque M_S	cNm	0.38		
	Rotor inertia J_R	gcm ²	14.4		
	Rated voltage U_N	V	6	12	24
	Duty cycle	%	100	100	100
	Resistance R_{20}	Ω	9.5	52	250
	Winding code		01	02	03
unipolar (UFD2)	Holding torque M_H	cNm	3.9		
	Detent torque M_S	cNm	0.38		
	Rotor inertia J_R	gcm ²	14.4		
	Rated voltage U_N	V	6	12	24
	Duty cycle	%	100	100	100
	Resistance R_{20}	Ω	15	61	251
	Winding code		01	02	03
	Steps per revolution		48		
	Winding temperature T_{max}	$^{\circ}C$	105		
	Direction of rotation		reversible		
Rotor shaft		3, $\varnothing D = 3h6$, Dim. A = „-“			

Dimensions



Performance Chart



— M - Duty cycle 30 %
— M - Duty cycle 100%

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