

UAG3/4

3/4

Dimensions (mm)	Ø 20 x 17
Step angle (°)	18
Holding torque (mNm)	5.3 / 3.9 (standard magnet, stronger magnet on request)
Detent torque (mNm)	> 0.6 (standard magnet, stronger magnet on request)
Winding	bipolar/unipolar
Gear combination	on request



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 -20...+60
Ambient temperature storage	°C -40...+100
Thermal resistance at f=0 R _{therm}	47 K/W
Thermal class	130 (B) according to DIN EN 60085 : 2008
Approval	standard
Mounting	any position
Electrical connection	lead wires AWG28, insulation Ø 0.82 mm
Protection	IP40 according to DIN EN 60529 : 2014
Weight	22 g
Rotor stalling	motor can be stopped when voltage is applied, without being overheated
Bearings	sintered bronze, self-lubricating

Order Reference

Type	Stepper Motor	UAG	3	3	N	05	R	E
Configuration	3 bipolar 4 unipolar							
Rotor shaft, mounting	3 centring 8 mm, mounting plate with long holes 5 centring 8 mm, mounting plate (for clipping) E centring 6 mm, mounting plate with long holes G centring 6 mm, mounting plate (for clipping)							
Approval	N Approval Standard							
Resistance	See next page Resistance per winding for bipolar or unipolar.							
Direction	reversible							
Cable	E cable 150 mm with Tyco connector CT 173977-4 1-6 (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

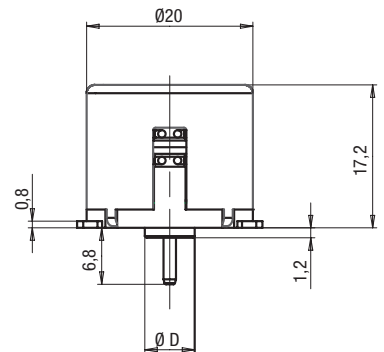
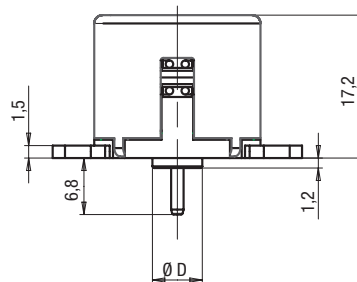
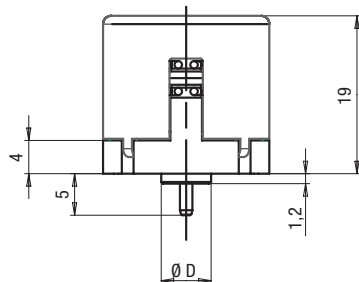
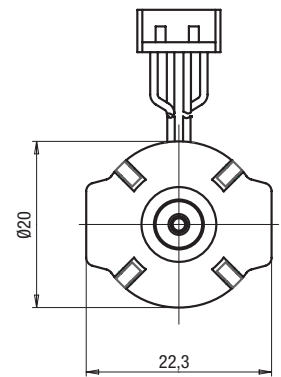
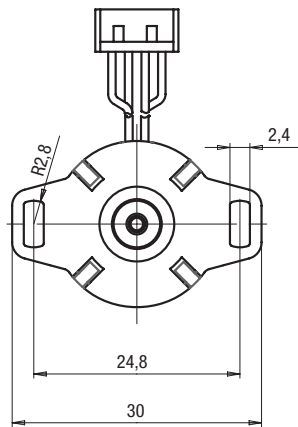
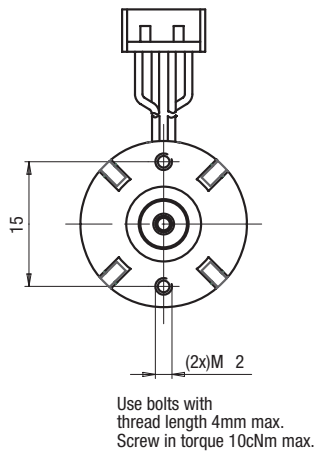
bipolar (UAG3)	Rated voltage UN	V	12	6
	Duty cycle	%	100	100
	Resistance R ₂₀	Ω	150	40
	Winding code		05	07
unipolar (UAG4)	Rated voltage UN	V	12	
	Duty cycle	%	100	
	Resistance R ₂₀	Ω	150	
	Winding code		06	
	Steps per revolution	20		
	Winding temperature T _{max}	130° C		
	Rotor inertia J _R	0.26 gcm ²		
	Holding torque M _H	0.53 cNm (UAG3) 0.39 cNm (UAG4) (standard magnet, stronger magnet on request)		
	Detent torque M _H	> 0.6 mNm		
	Direction of rotation	reversible		

Dimensions

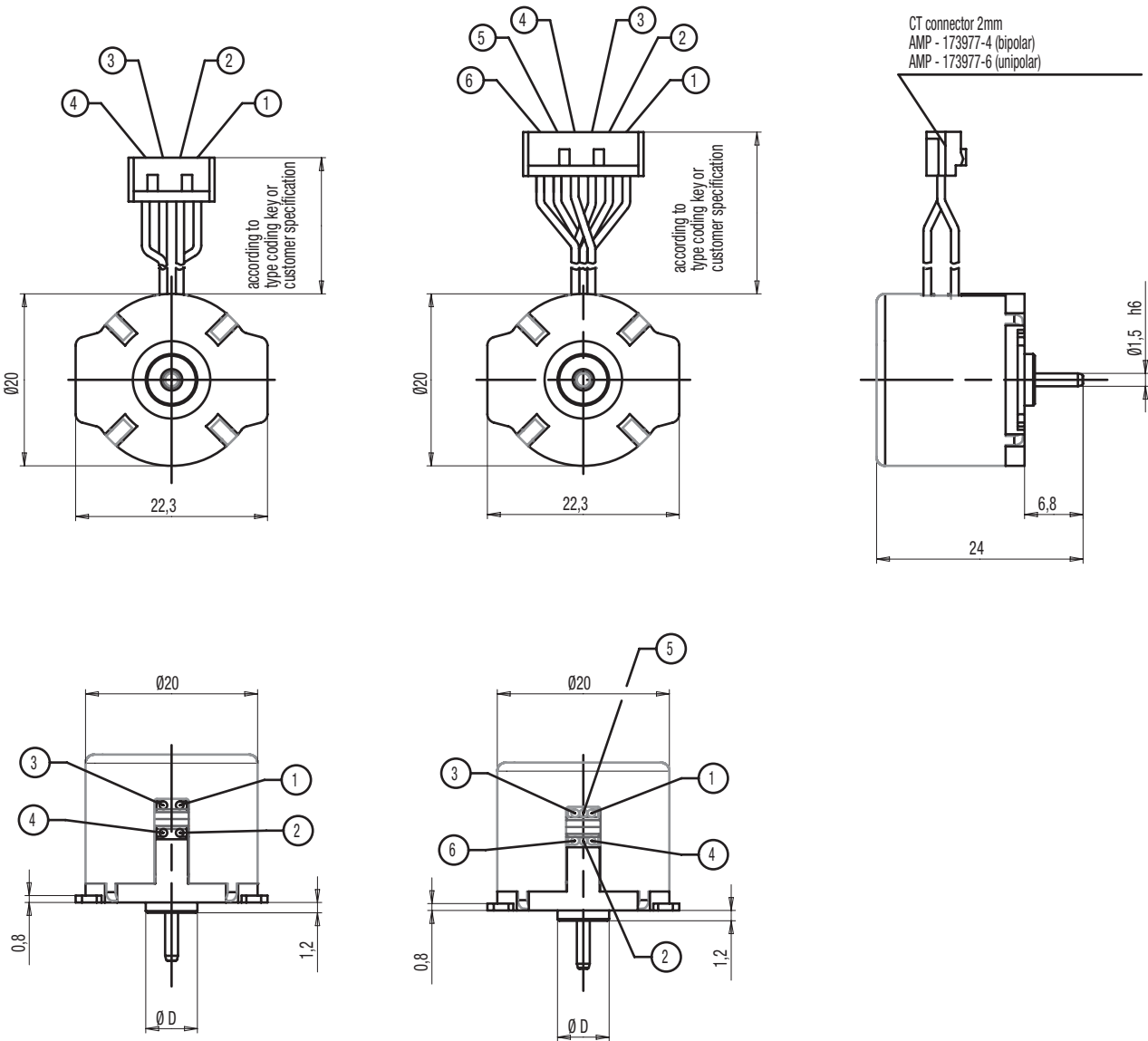
motor type	Ø D	
UAG30	Ø 8	0 -0.05
UAG3A	Ø 6	0 -0.05
UAG40	Ø 8	0 -0.05
UAG4A	Ø 6	0 -0.05

motor type	Ø D	
UAG33	Ø 8	0 -0.05
UAG3E	Ø 6	0 -0.05
UAG43	Ø 8	0 -0.05
UAG4E	Ø 6	0 -0.05

motor type	Ø D	
UAG35	Ø 8	0 -0.05
UAG3G	Ø 6	0 -0.05
UAG45	Ø 8	0 -0.05
UAG4G	Ø 6	0 -0.05



Dimensions



Circuit diagram

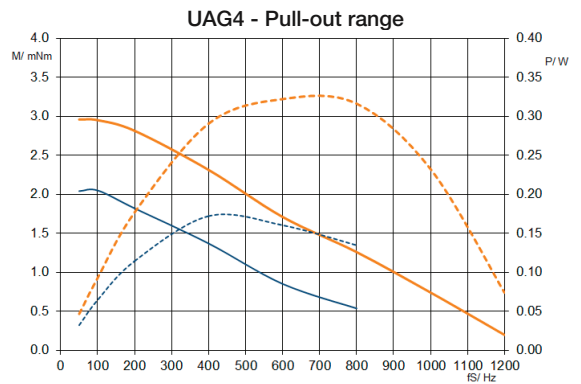
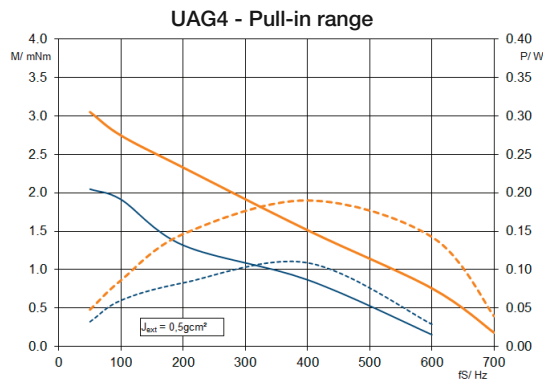
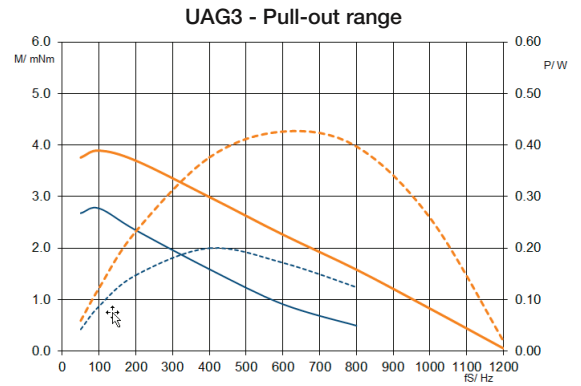
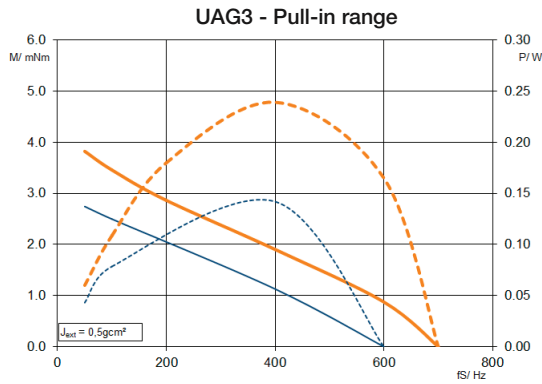
bipolar

		step				
		0	I	II	III	IV
wire	1	+	+	-	-	+
	2	+	-	-	+	+
	3	-	-	+	+	-
	4	-	+	+	-	-

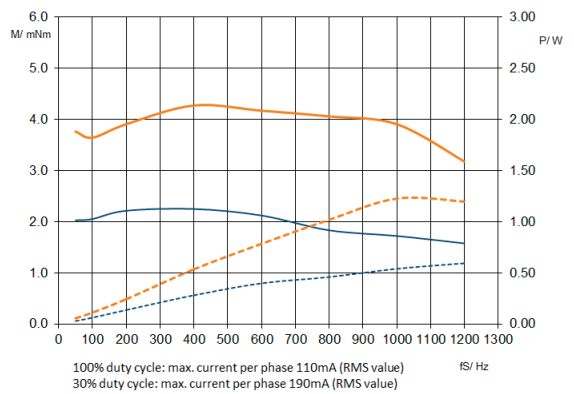
unipolar

		step				
		0	I	II	III	IV
wire	1	-	-			-
	2	-			-	-
	3	+	+	+	+	+
	4	+	+	+	+	+
	5			-	-	
	6		-	-		

→ clockwise rotation
← counter clockwise rotation



UAG3 - Pull-out range chopper (winding 40ohm, voltage 24Vdc)



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

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