

UAL 1/5; UAL 2/6

Dimensions (mm)	∅ 20 x 30
Travel (mm)	15
Travel per step (mm)	0,021
Thread pitch (mm)	0,5
Speed (mm/s) at 200 Hz	4,16
Step angle (°)	15
Max. Force (N)*	28



*Depends on winding, frequency and lifetime required.
 Drive against end stops only permissible after clarification of operating conditions and approval by Saia Motor.
 Radial forces on the shaft will reduce life time and performance.

Standard Data

Climatic class	wide-spread according to DIN IEC 60721-2-1 : 1992
Ambient temperature operation	°C -15 ... +60
Ambient temperature storage	°C -20 ... +100
Thermal resistance at f=0 R _{them}	47 K/W
Thermal class	130 (B) according to DIN EN 60085 : 2004
Approval	standard
Mounting	any position
Electrical connection	lead wire with CT connector
Protection	IP40 according to DIN EN 60529 : 2000
Weight	33 g
Rotor stalling	motor can be stopped when voltage is applied, without being overheated
Bearings	ball bearing

Order Reference

Type	Stepper Motor	UAL	1E	N	01	E	1A
Configuration	1A bipolar, standard magnet, screw flange 1E bipolar, standard magnet, bayonet flange 2A unipolar, standard magnet, screw flange 2E unipolar, standard magnet, bayonet flange 5A bipolar, stronger magnet, screw flange 5E bipolar, standard magnet, bayonet flange 6A unipolar, standard magnet, screw flange 6E unipolar, standard magnet, bayonet flange						
Approval	N standard						
Winding code	see next page, resistance per winding for bipolar or unipolar						
Connection	E 100 mm lead wire with CT connector						
Shaft	1A Travel 15 mm ± 0,7 mm (others on request)						

Technical Data

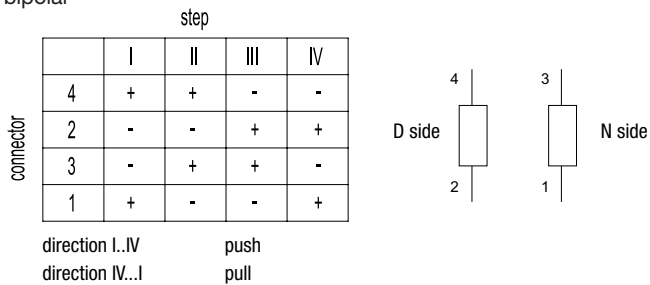
Steps per mm		48
Winding temperature T_{max}	°C	130
Linear travel max.	mm	15
Axial play at 20 N force	mm	0,25

unipolar versions available upon request

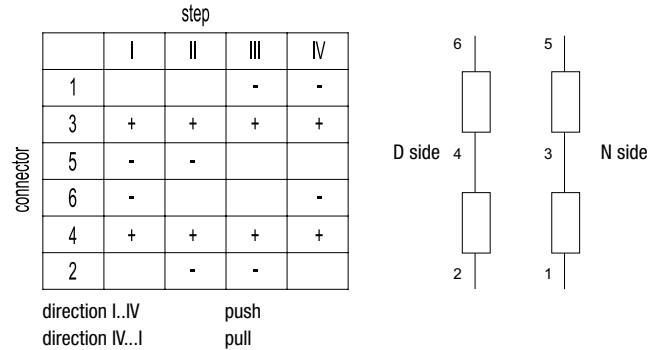
bipolar	Rated voltage U_N	V	6	12	24
	Duty cycle	%	100	100	100
	Resistance R_{20}	Ω	40	150	610
	Winding code		03	01	04

* measured at 23 °C, lifetime depends on load characteristics and ambient conditions

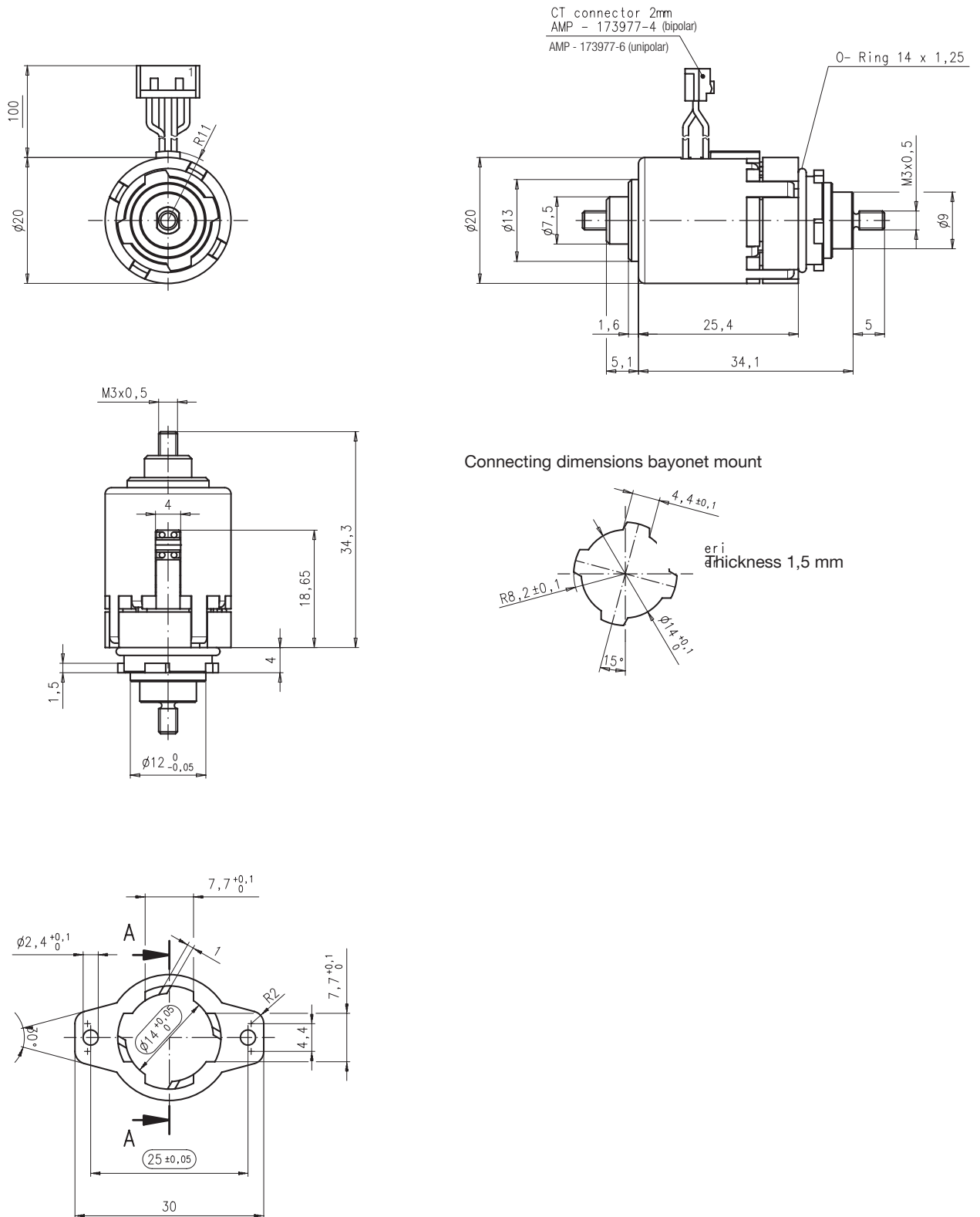
Circuit diagram bipolar



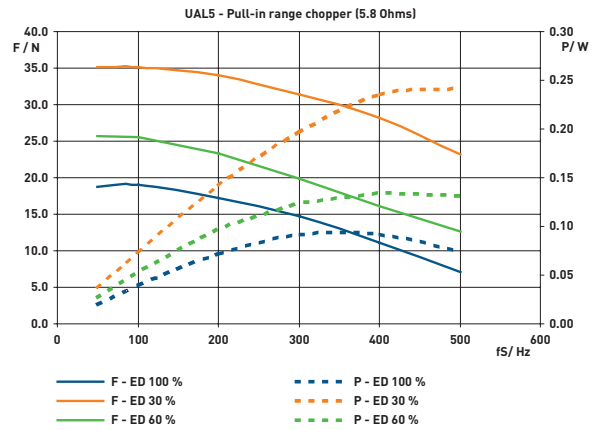
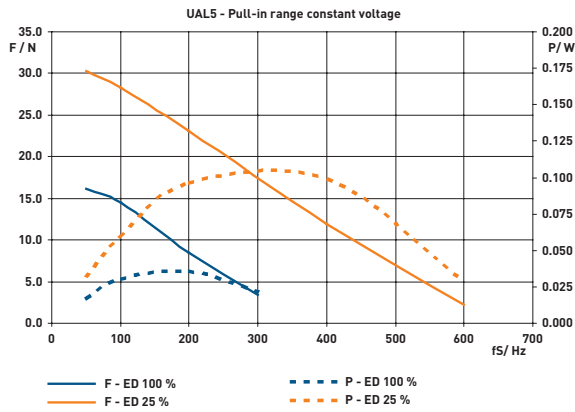
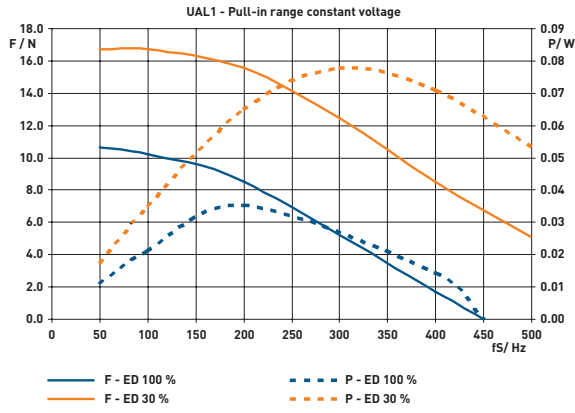
unipolar



Dimensions Version with 100 mm leads and CT connector, 15 mm travel



Performance Chart



100% duty cycle: max. current per phase 300 mA
 60% duty cycle: max. current per phase 360 mA
 30% duty cycle: max. current per phase 500 mA