

UCL1/7; UCL2/8

Dimensions (mm)	∅ 28 x 31
Travel (mm)	10/13
Travel per step (mm)	0,041
Thread pitch (mm)	1,0
Speed (mm/s) at 200 Hz	8,33
Step angle (°)	15
Max. Force (N)*	35



*Depends on winding, frequency and lifetime required.
Drive against end stops only permissible after clarification of operating conditions and approval by Saia-Burgess.

Standard Data

Climatic class	wide-spread according to DIN IEC 60721-2-1
Ambient temperature operation	°C -15 ... +60
Ambient temperature storage	°C -20 ... +100
Thermal resistance at f=0 R _{therm}	29 K/W
Thermal class	B according to DIN EN 60085
Approval	standard
Mounting	any position
Electrical connection	connector type C, D
Protection	IP 40 according to DIN EN 60529
Weight	67 g
Rotor stalling	motor can be stopped when voltage is applied, without being overheated
Bearings	ball bearing

Order Reference

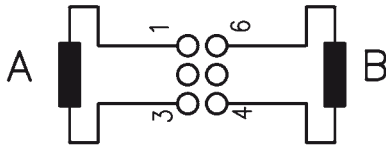
Type	Stepper Motor	UCL	13	N	24 Ω	B	1A
Configuration	13 bipolar, standard magnet	73 bipolar, stronger magnet	23 unipolar, standard magnet	83 unipolar, stronger magnet			
Approval	N						
Resistance	see next page, Resistance per winding for bipolar or unipolar						
Connection	C see next pages „Connection Types“ D						
Shaft	1A Travel 10 mm ± 0,7 mm		1B Travel 13 mm ± 0,7 mm				

Technical Data

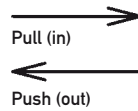
bipolar	type		UCL1	UCL1	UCL5	UCL5
	Operating frequency	Hz	100	200	100	200
	max. Push/Pull force *	30% ED 100% ED	N N	35 30	30 20	50 35
unipolar	type		UCL2	UCL2	UCL6	UCL6
	Operating frequency	Hz	100	200	100	200
	max. Push/Pull force *	30% ED 100% ED	N N	25 15	20 12	35 21
Rated voltage U_N :		V	6	12	24	
Resistance per winding R_{20}		Ω	24	90	380	
Steps per mm			24			
Duty cycle			100 %			
Winding temperature T_{max}		$^{\circ}C$	130			
Linear travel max.		mm	10/13			
Axial play at ± 20 N force		mm	< 0.25			

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

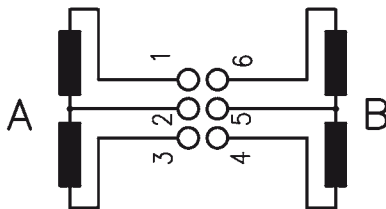
Circuit diagram bipolar



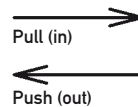
	0	I	II	III	IV
1	+	+	-	-	+
3	-	-	+	+	-
4	-	+	+	-	-
6	+	-	-	+	+



unipolar



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



Dimensions Version with connector D, 10 mm travel

