

UCE1/7; UCE2/8

Dimensions (mm)	∅ 28 x 31
Travel (mm)	10/13
Travel per step (mm)	0.021
Speed (mm/s) at 200 Hz	4.16
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 Motors.
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 _{therm}	29 K/W
Thermal class	130 (B) according to DIN EN 60085 : 2004
Approval	standard
Mounting	any position
Electrical connection	connector type C, D
Protection	IP40 according to DIN EN 60529 : 2000
Weight	67 g
Rotor stalling	motor can be stopped when voltage is applied, without being overheated
Bearings	ball bearing

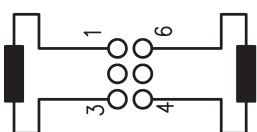
Order Reference

Type	Stepper Motor	UCE	13	N	01	D	1B
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 pages 151, „Connection Types“						
	D						
Shaft	1B Travel 13 mm ± 0.7 mm (other standard shafts see under dimensions)						

Technical Data

bipolar	Rated voltage U_N :	V	6	12	24
	Resistance per winding R_{20}	Ω	24	90	380
Travel per step		mm	0.021		
Winding temperature T_{max}		$^{\circ}C$	130		
Axial play at ± 20 N force		mm	< 0.25		

Circuit diagram bipolar

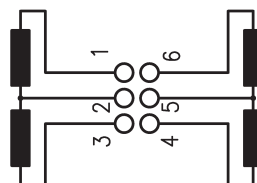


stepping sequence number

	I	II	III	IV	I
pin number 1	+	+	-	-	+
pin number 3	-	-	+	+	-
pin number 4	-	+	+	-	-
pin number 6	+	-	-	+	+

Pull in (step I to IV, I to IV, etc.)
 Push out (step IV to I, step IV to I, etc.)

unipolar

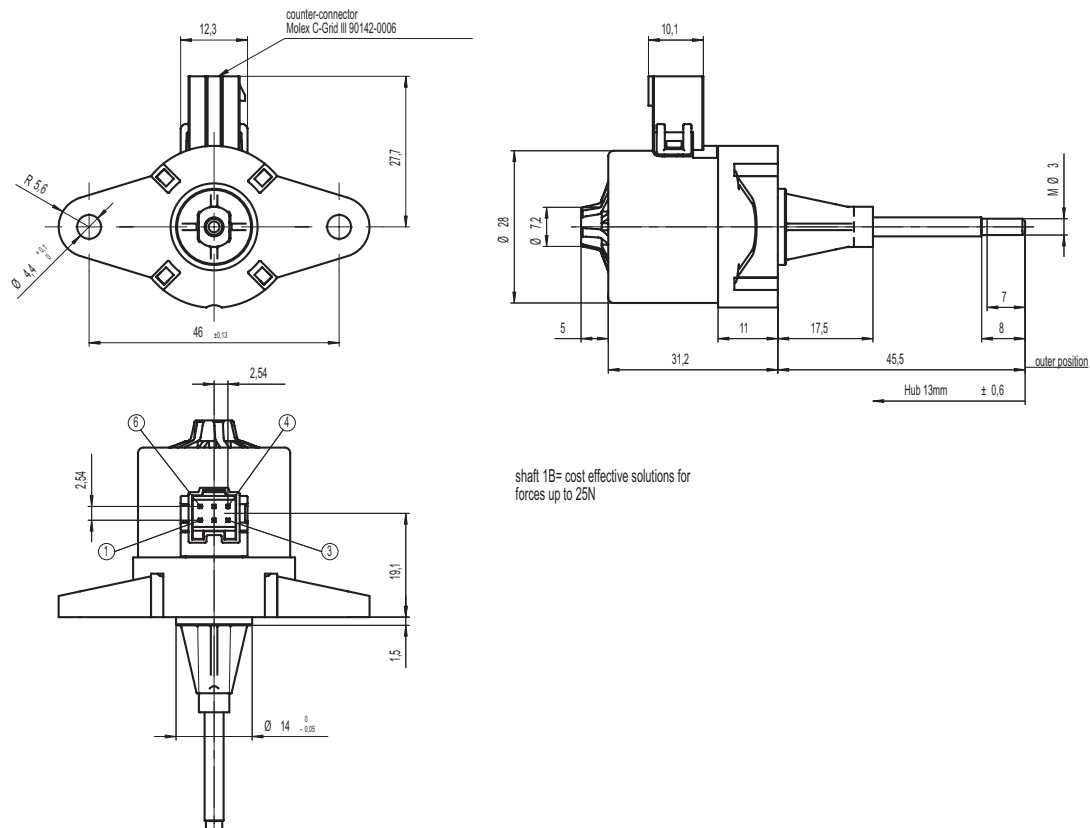


stepping sequence number

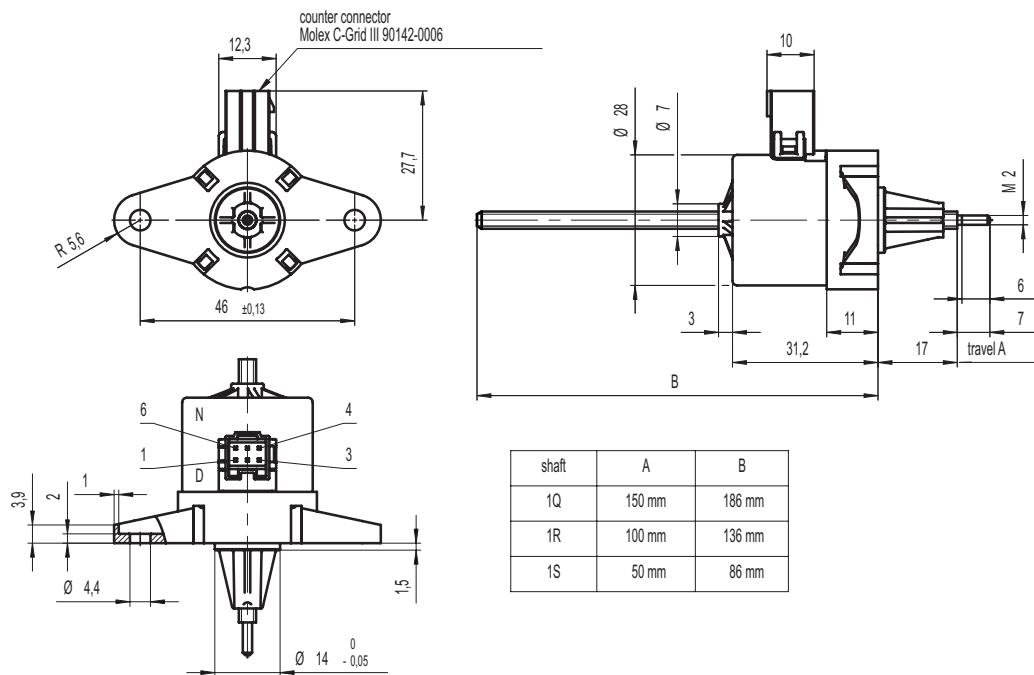
	I	II	III	IV	I
pin number 1	-	-			-
pin number 2	+	+	+	+	+
pin number 3			-	-	
pin number 4		-	-		
pin number 5	+	+	+	+	+
pin number 6	-			-	-

Pull in (step I to IV, I to IV, etc.)
 Push out (step IV to I, step IV to I, etc.)

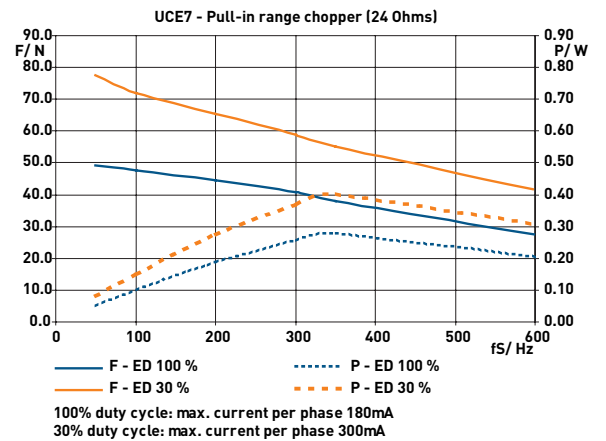
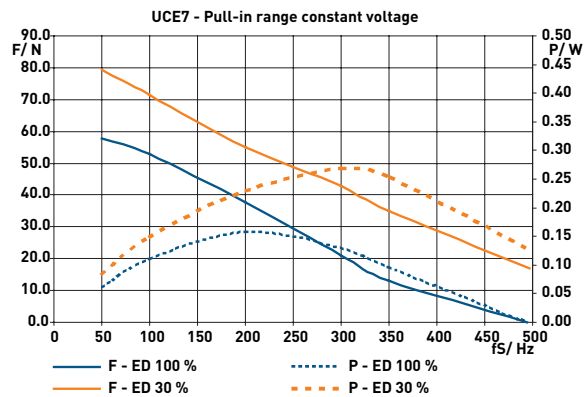
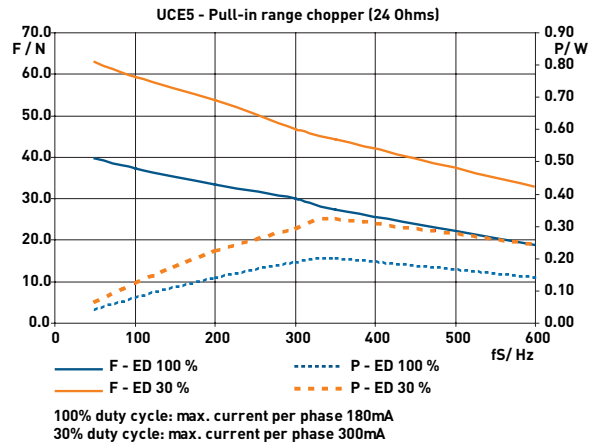
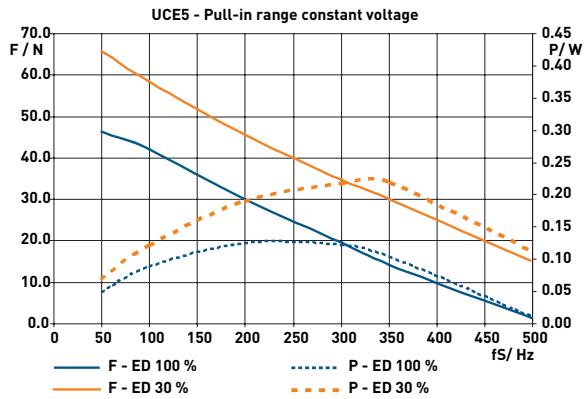
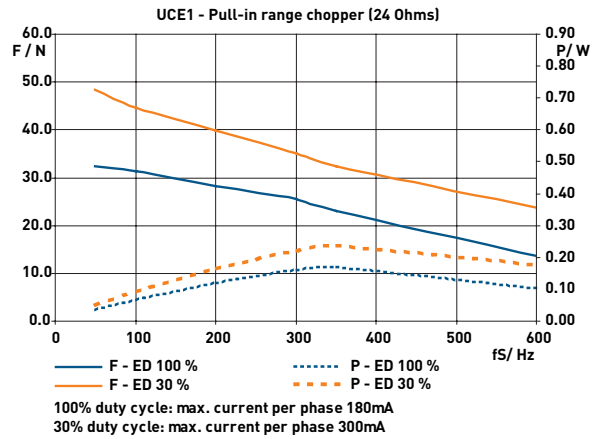
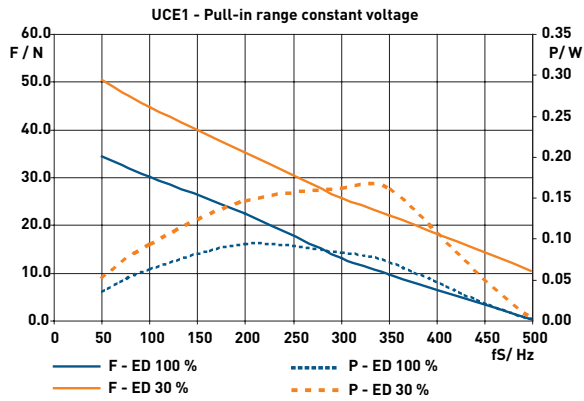
Dimensions



Version with Connector D, with 50..150 mm travel, shaft 1R, 1S, 1Q



Performance Chart



Performance Chart

