

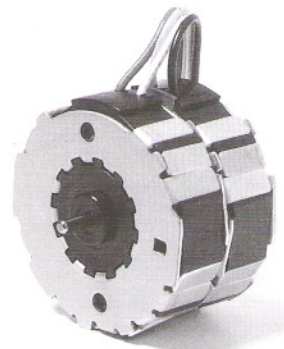
UBD

Stepper Motors

Rotational

UBD1/2/5/6

Dimensions (mm)	Ø 36 x 21
Step angle (°)	7.5
Holding torque (cNm)	1.3–1.9
Detent torque (cNm)	0.22/0.27
Winding	bipolar/unipolar
Gear combination	A, D, M, B, F, V



Standard Data

Climatic class	wide-spread according to DIN IEC 60721-2-1
Ambient temperature operation	°C -15...+55
Ambient temperature storage	°C -20...+100
Thermal resistance at f=0 R _{therm}	27 K/W
Thermal class	A according to DIN EN 60085
Approval	standard (UL/CSA on request)
Mounting	any position
Electrical connection	cable
Protection	IP 40 according to DIN EN 60529
Weight	60 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

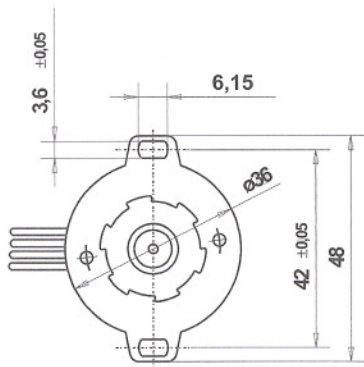
Type	Stepper Motor									
Configuration	1	bipolar, standard magnet	5	bipolar, stronger magnet						
	2	unipolar, standard magnet	6	unipolar, stronger magnet						
Rotor shaft, mounting	0	centring 8 mm, shaft 2.0 mm, clip	A	centring 10 mm, shaft 2.0 mm, clip						
	1	centring 8 mm, shaft 1.5 mm, clip	C	centring 10 mm, shaft 1.5 mm, clip						
	3	centring 8 mm, shaft 2.0 mm, screw plate	E	centring 10 mm, shaft 2.0 mm, screw plate						
	4	centring 8 mm, shaft 1.5 mm, screw plate	K	centring 10 mm, shaft 1.5 mm, screw plate						
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)								

Technical Data

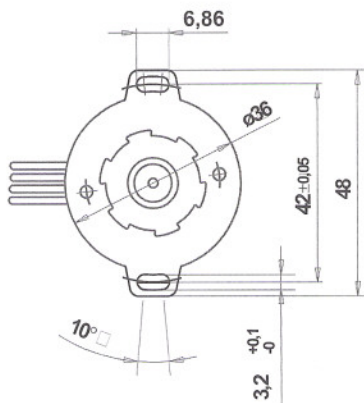
bipolar (UBD1/5)	Rated voltage U_N	V	3	6	12	24
	Resistance per winding R_{20}	Ω	11,5	18,5	100	460
	Holding torque M_H	cNm	1,8 (UBD1); 1,9 (UBD5)			
	Detent torque M_S	cNm	0,22 (UBD1); 0,27 (UBD5)			
	Rotor inertia J_R	gcm ²	2,8 (UBD 1), 2,9 (UBD 5)			
unipolar (UBD2/6)	Rated voltage U_N	V	3	6	12	24
	Resistance per winding R_{20}	Ω	12	28	120	500
	Holding torque M_H	cNm	1,3 (UBD2); 1,6 (UBD6)			
	Detent torque M_S	cNm	0,22 (UBD2); 0,27 (UBD6)			
	Rotor inertia J_R	gcm ²	2,8 (UBD2); 2,9 (UBD6)			
Steps per revolution		48				
Winding temperature T_{max}		105° C				
Duty cycle		100%				
Direction of rotation		reversible				

Dimensions

Mounting with screw plate



Mounting with screw plate



Mounting with snap on clip

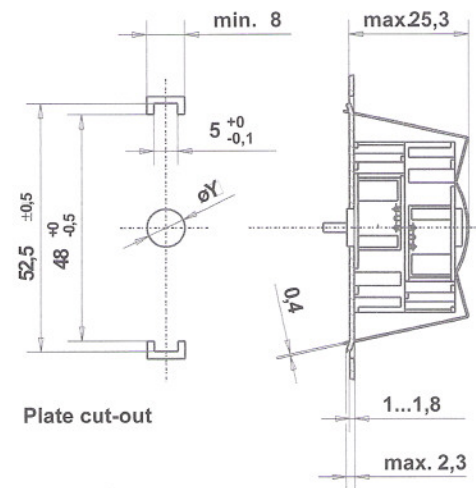


Plate cut-out

øD Rotor shaft

ø 2 h6

ø 1.5 js8

øZ øY

8 8F8

10 10F8

Performance Chart

