

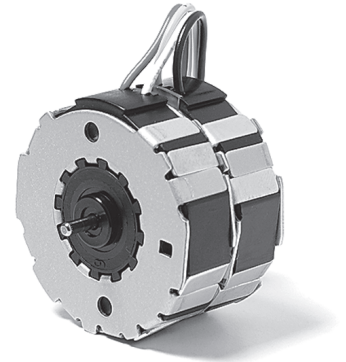
UBB

Stepper Motors

Rotational

UBB1/2/5/6

Dimensions (mm)	∅ 36 x 21
Step angle (grad)	15
Holding torque (cNm)	1,0 - 1,9
Detent torque (cNm)	0,25 / 0,36
Resistance per winding	
6 V (Ω)	18,5 (UBB1/5); 28 (UBB2/6)
12 V (Ω)	100 (UBB1/5); 120 (UBB2/6)
24 V (Ω)	460 (UBB1/5); 500 (UBB2/6)
Gear combination	A, D, M, B, F, V



Standard Data

Climatic class	wide-spread according to IEC 721, part 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 IEC 85
Approval	Standard/UL/CSA
Life expectancy	3 years in continuous operation
Mounting	any position
Electrical connection	ribbon cable
Protection	IP 40 according to DIN 40 050/DIN EN 60034-5
Weight	60 g
Rotor stalling	motor can be stopped when voltage is applied, without being overheated
Bearings	sintered bronze, self-lubricating
Surge voltage strength	according to EN 60 034-1/EN 60-335-1

Order Reference

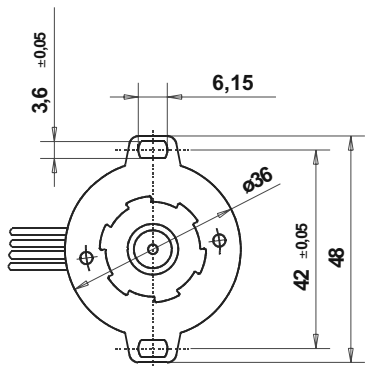
Type	Stepper Motor	UBB	1	0	N	18,5 Ω	R	E
Configuration	1 bipolar, standard magnet 2 unipolar, standard magnet	5 bipolar, stronger magnet 6 unipolar, stronger magnet						
Rotor shaft, mounting	0 centre bolt 8 mm, shaft 2,0 mm, clip 1 centre bolt 8 mm, shaft 1,5 mm, clip 3 centre bolt 8 mm, shaft 2,0 mm, screw plate 4 centre bolt 8 mm, shaft 1,5 mm, screw plate	A centre bolt 10 mm, shaft 2,0 mm, clip C centre bolt 10 mm, shaft 1,5 mm, clip E centre bolt 10 mm, shaft 2,0 mm, screw plate K centre bolt 10 mm, shaft 1,5 mm, screw plate						
Approval	N Approval Standard UL Approval UL CSA Approval UL/CSA							
Resistance	See page 42							
Direction	reversible							
Cable	E ribbon cable 150 mm (other on request)							

Technical Data

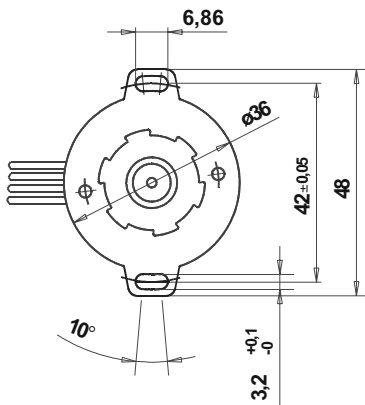
bipolar (UBB1/5)	Rated voltage U_N	V	3	6	12	24
	Resistance per winding	R_{20}	11,5	18,5	100	460
	Holding torque M_H	cNm	1,5 (UBB1); 1,9 (UBB5)			
	Detent torque M_S	cNm	0,25 (UBB1); 0,36 (UBB5)			
	Rotor inertia J_R	gcm^2	2,8 (UBB1); 2,9 (UBB5)			
unipolar (UBB2/6)	Rated voltage U_N	V	3	6	12	24
	Resistance per winding	R_{20}	12	28	120	
	Holding torque M_H	cNm	1,5 (UBB2); 1,4 (UBB6)			
	Detent torque M_S	cNm	0,25 (UBB2); 0,36 (UBB6)			
	Rotor inertia J_R	gcm^2	2,8 (UBB2); 2,9 (UBB6)			
	Steps per revolution		24			
	Winding temperature T_{max}		105°C			
	Duty cycle		100%			
	Direction of rotation		reversible			

Drawing

Mounting with screw plate



Mounting with screw plate



Mounting with snap on clip

Order number for clip
4 199 4823 0

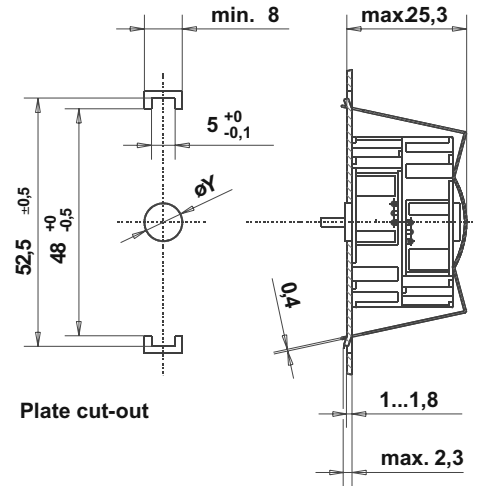


Plate cut-out

$\varnothing D$ Rotor shaft

$\varnothing 2 h6$

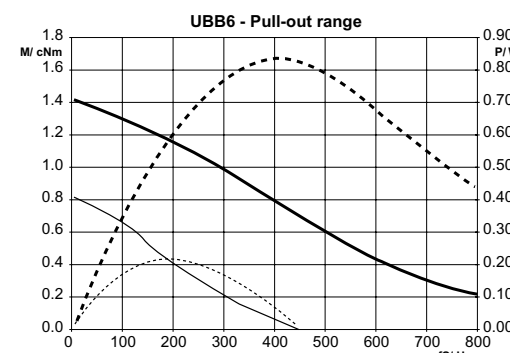
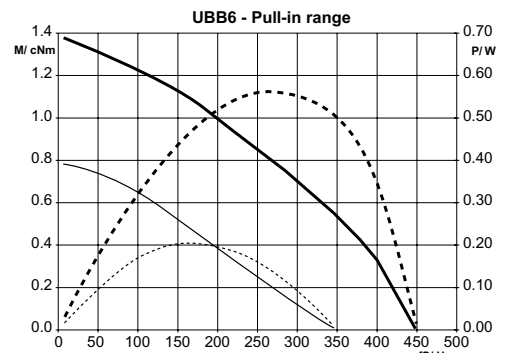
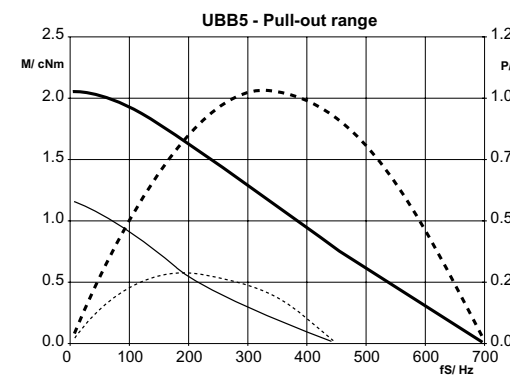
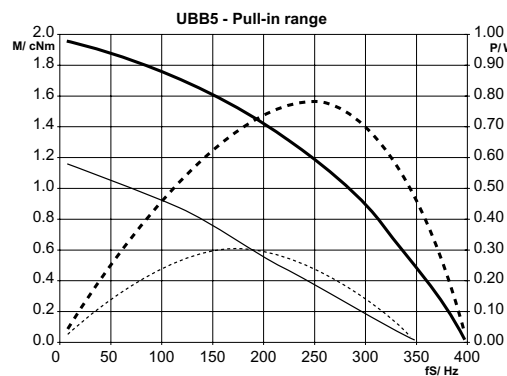
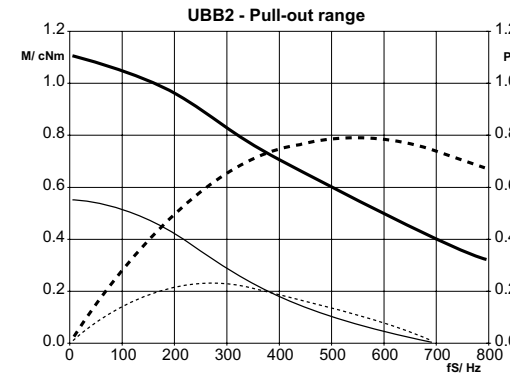
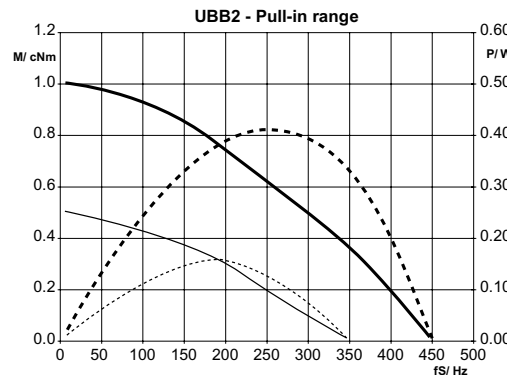
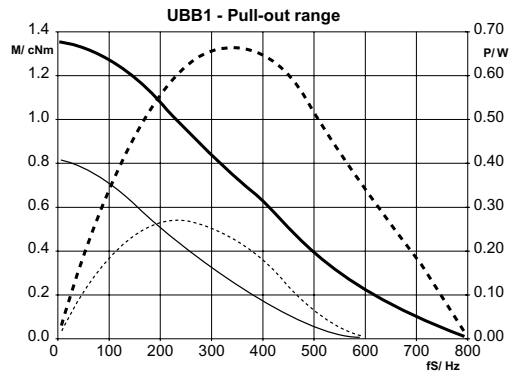
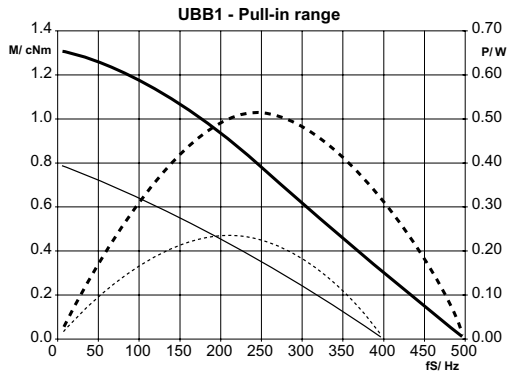
$\varnothing 1.5 js8$

$\varnothing Z$ $\varnothing Y$

8 8F8

10 10F8

Performance Chart



— M - ED 100 %
 — M - ED 30 %

..... P - ED 100 %
 - - - - - P - ED 30 %