

UFB1/2; UFB3/4

Dimensions (mm) $\varnothing 52 \times 28 / \varnothing 52 \times 56$

Step angle (°) 15

Holding torque (cNm) 4,3–5,5 (UFB1/2); 7,6–10,4 (UFB3/4)

Detent torque (cNm) 0.45 (UFB1/2); 0,8 (UFB3/4)

Winding bipolar/unipolar

Gear combination A, D, M, B, F, V, J, O



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}	11 K/W (UFB1/2), 7 K/W (UFB3/4)
Thermal class	A according to DIN EN 60085 (B on request)
Approval	standard (UL/CSA on request)
Mounting	any position
Electrical connection	cable
Protection	IP 30 according to DIN EN 60529
Weight	180 g (UFB1/2), 350 g (UFB3/4)
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		UFB	1	0	N	52 Ω	R	N
Configuration	1 bipolar, two coils	3 bipolar, four coils							
	2 unipolar, two coils	4 unipolar, four coils							
Rotor shaft, mounting	0 centring 8 mm, shaft 3,0 mm, clip	E centring 10 mm, shaft 3,0 mm, screw plate *							
	1 centring 8 mm, shaft 2,0 mm, clip	K centring 10 mm, shaft 2,0 mm, screw plate *							
	2 centring 8 mm, shaft 1,5 mm, clip	M centring 10 mm, shaft 1,5 mm, screw plate *							
	3 centring 8 mm, shaft 3,0 mm, screw plate *	A centring 12 mm, shaft 3,0 mm, clip							
	4 centring 8 mm, shaft 2,0 mm, screw plate *								
	5 centring 8 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	N cable 150 mm (other on request)								

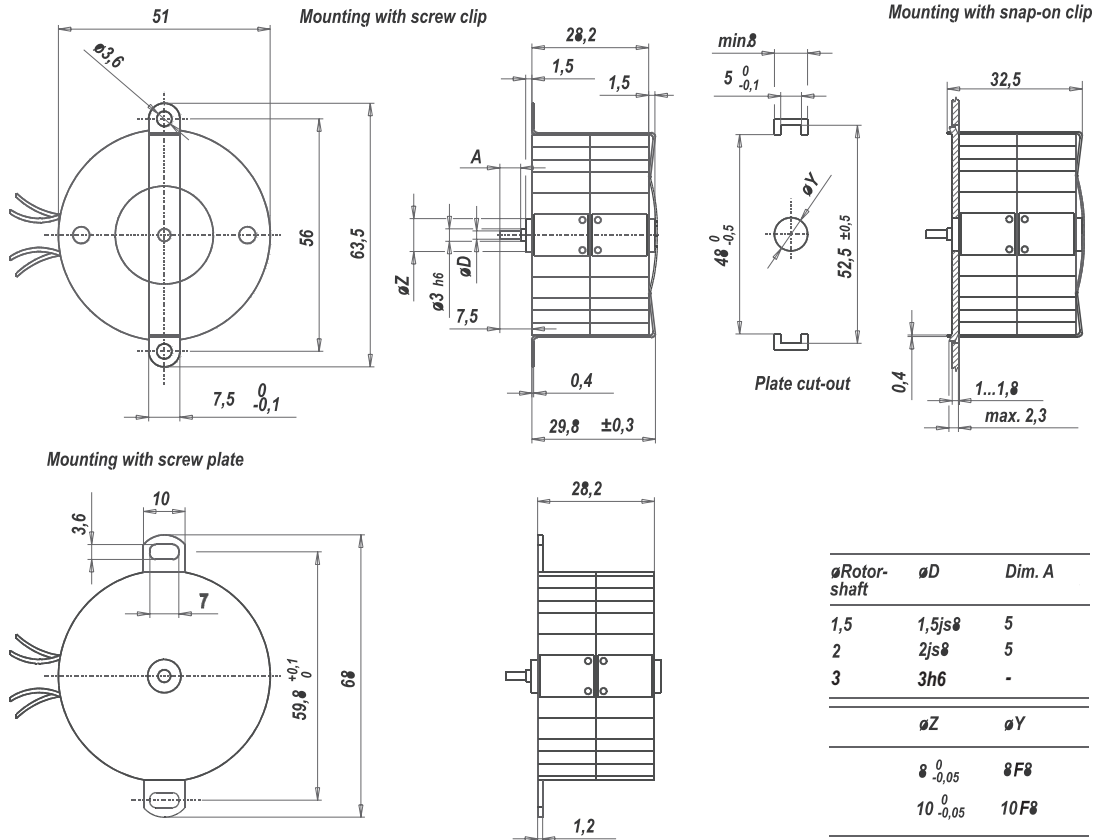
* screw plate not for UFB3 and UFB4

Technical Data

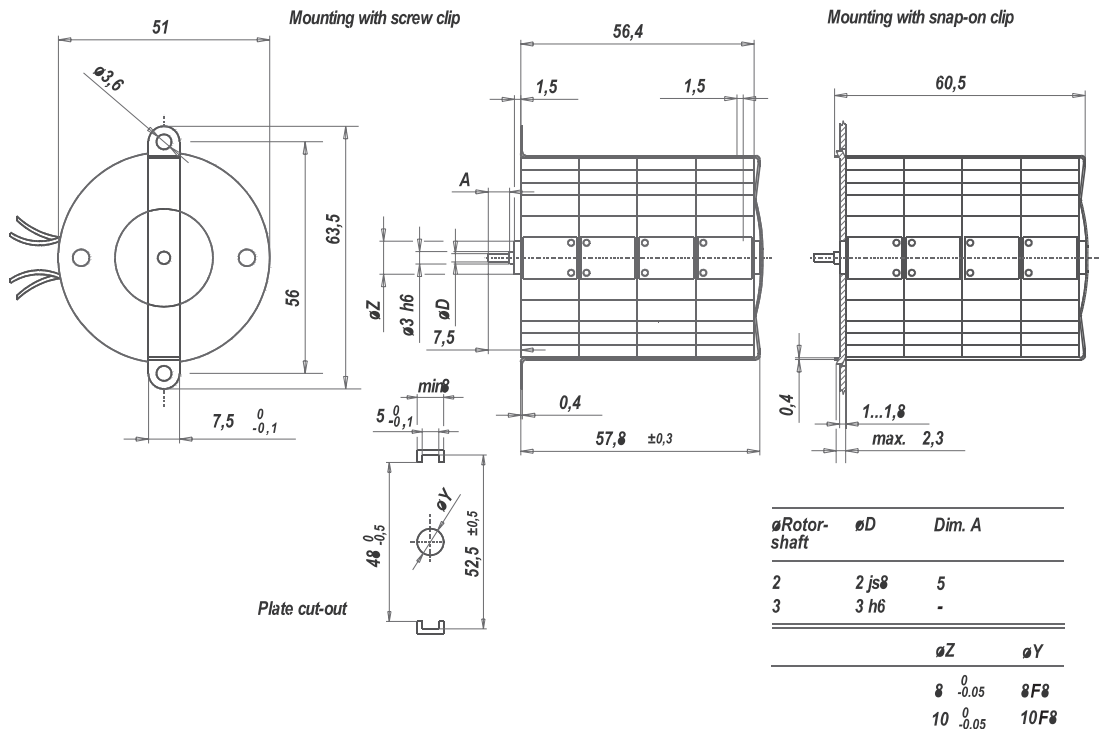
bipolar (UFB1/3)	Rated voltage U_N	V	6	12	24
	Resistance per winding R_{20} (UFB1) Ω		9,5	52	250
	Resistance per winding R_{20} (UFB3) Ω		5	25,5	125
	Holding torque M_H	cNm	5,5 (UFB1); 10,4 (UFB3)		
	Detent torque M_S	cNm	0,46 (UFB1); 0,8 (UFB3)		
	Rotor inertia J_R	gcm ²	14,2 (UFB1); 24,2 (UFB3)		
unipolar (UFB2/4)	Rated voltage U_N	V	6	12	24
	Resistance per winding R_{20} (UFB2) Ω		15	61	251
	Resistance per winding R_{20} (UFB4) Ω		7,5	30,5	125
	Holding torque M_H	cNm	4,3 (UFB2); 7,6 (UFB4)		
	Detent torque M_S	cNm	0,46 (UFB2); 0,8 (UFB4)		
	Rotor inertia J_R	gcm ²	14,2 (UFB2); 24,2 (UFB4)		
	Steps per revolution		24		
	Duty cycle		100%		
	Winding temperature T_{max}		105° C		
	Direction of rotation		reversible		

Dimensions

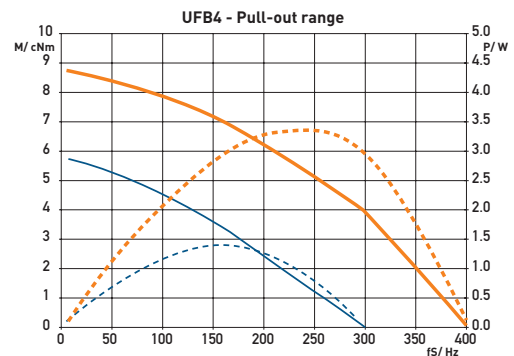
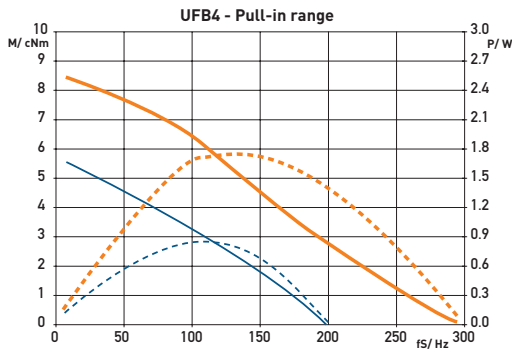
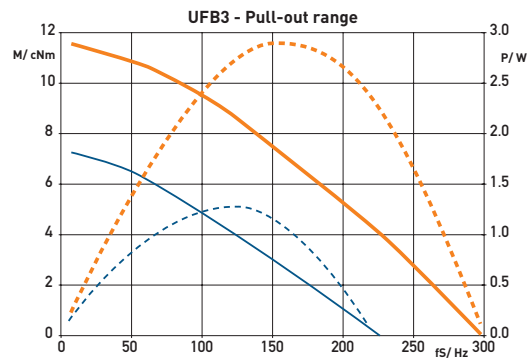
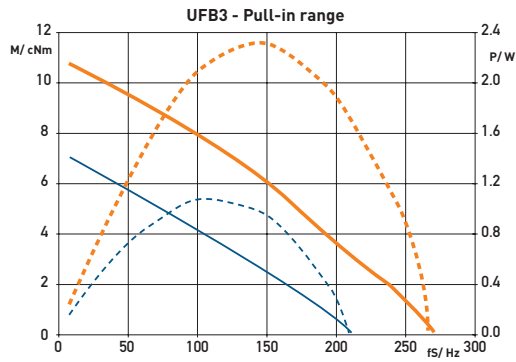
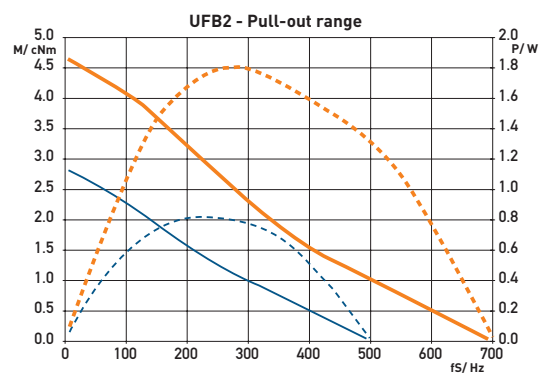
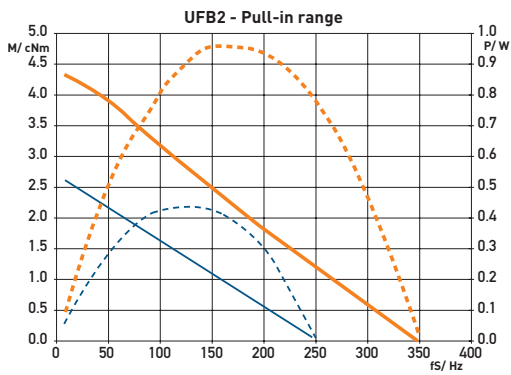
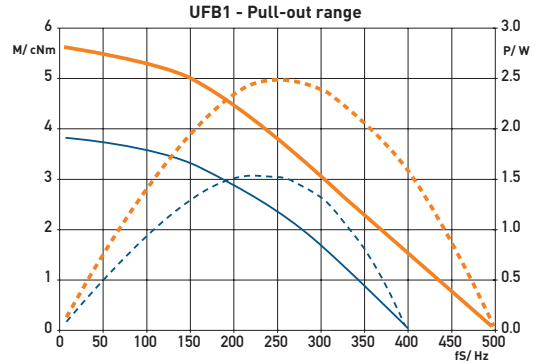
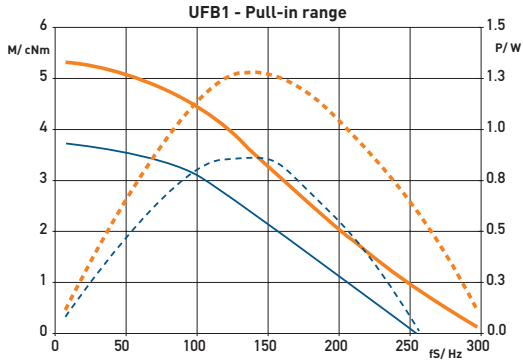
UFB1/2



UFB3/4



Performance Chart



— M - Duty cycle 30 %
 — M - Duty cycle 100%

- - - P - Duty cycle 30 %
 - - - P - Duty cycle 100 %