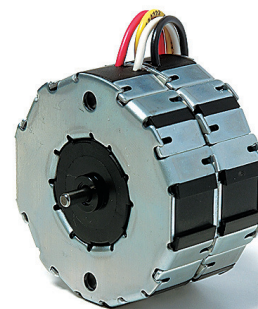


# UFB

## UFB1/2/5; UFB3/4

Dimensions (mm)	∅ 52 x 28 / ∅ 52 x 56
Step angle (°)	15
Holding torque (cNm)	4.3–5.5 (UFB1/2); 8.3 (UFB5); 7.6–10.4 (UFB3/4)
Detent torque (cNm)	0.45 (UFB1/2); 0.8 (UFB5); 0.8 (UFB3/4)
Winding	bipolar/unipolar
Gear combination	D, M, B, F, V, J, O, P



## Standard Data

Climatic class	wide-spread according to DIN IEC 60721-2-1 : 1992
Ambient temperature operation	°C -15...+55
Ambient temperature storage	°C -20...+100
Thermal resistance at f=0 R <sub>therm</sub>	11 K/W (UFB1/2/5), 7 K/W (UFB3/4)
Thermal class	105 (A) according to DIN EN 60085 : 2004 [130 (B) on request]
Approval	standard (UL/CSA on request)
Mounting	any position
Electrical connection	lead wires AWG22, insulation ∅ 1.75 ± 0.08 mm
Protection	IP40 according to DIN EN 60529 : 2000
Weight	180 g (UFB1/2/5), 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	01	R	N
Configuration	1	bipolar, two coils, standard magnet	3	bipolar, four coils, standard magnet					
	2	unipolar, two coils, standard magnet	4	unipolar, four coils, standard magnet					
	5	bipolar, two coils, stronger magnet							
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 *	B	centring 10 mm, shaft 3.0 mm, clip					
	4	centring 8 mm, shaft 2.0 mm, screw plate *	A	centring 10 mm, shaft 2.0 mm, clip					
	5	centring 8 mm, shaft 1.5 mm, screw plate *	C	centring 10 mm, shaft 1.5 mm, clip					
Approval	N	Approval Standard							
Winding code		see next page							
Direction		reversible							
Cable	N	cable 150 mm (other on request)							

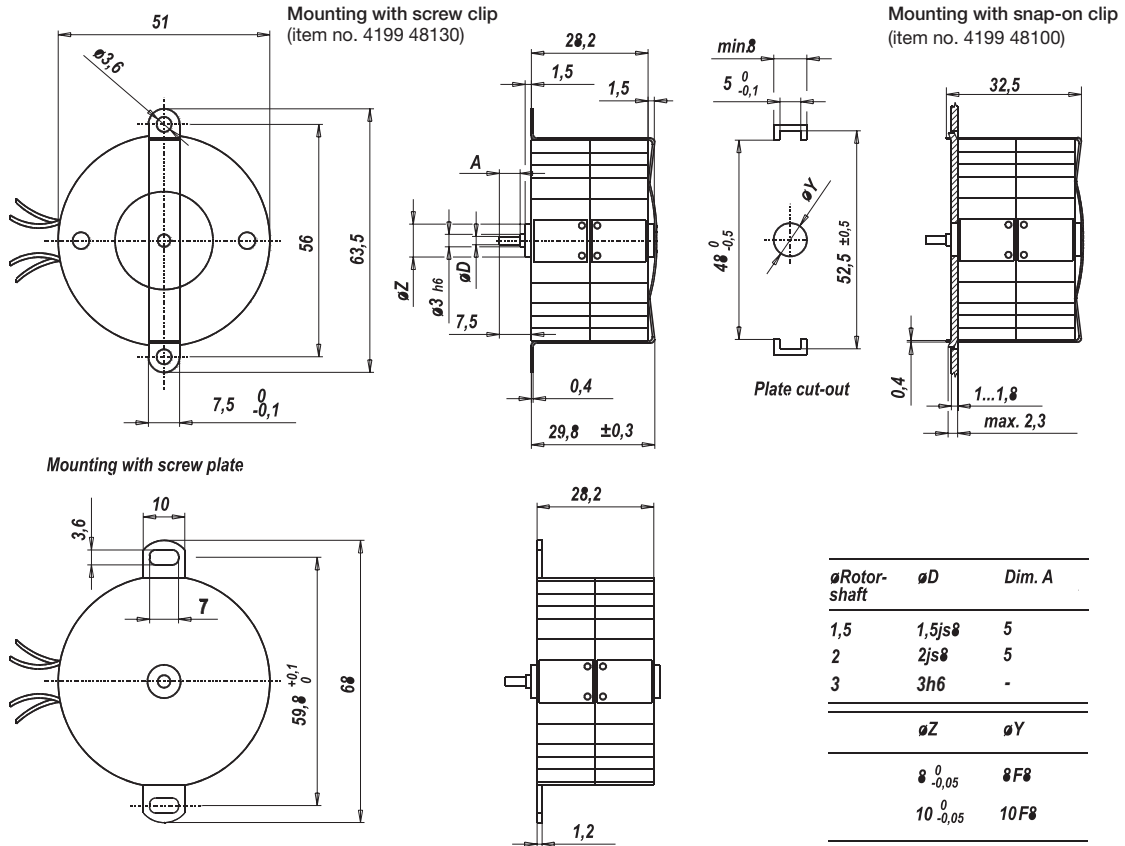
\* screw plate not for UFB3 and UFB4

## Technical Data

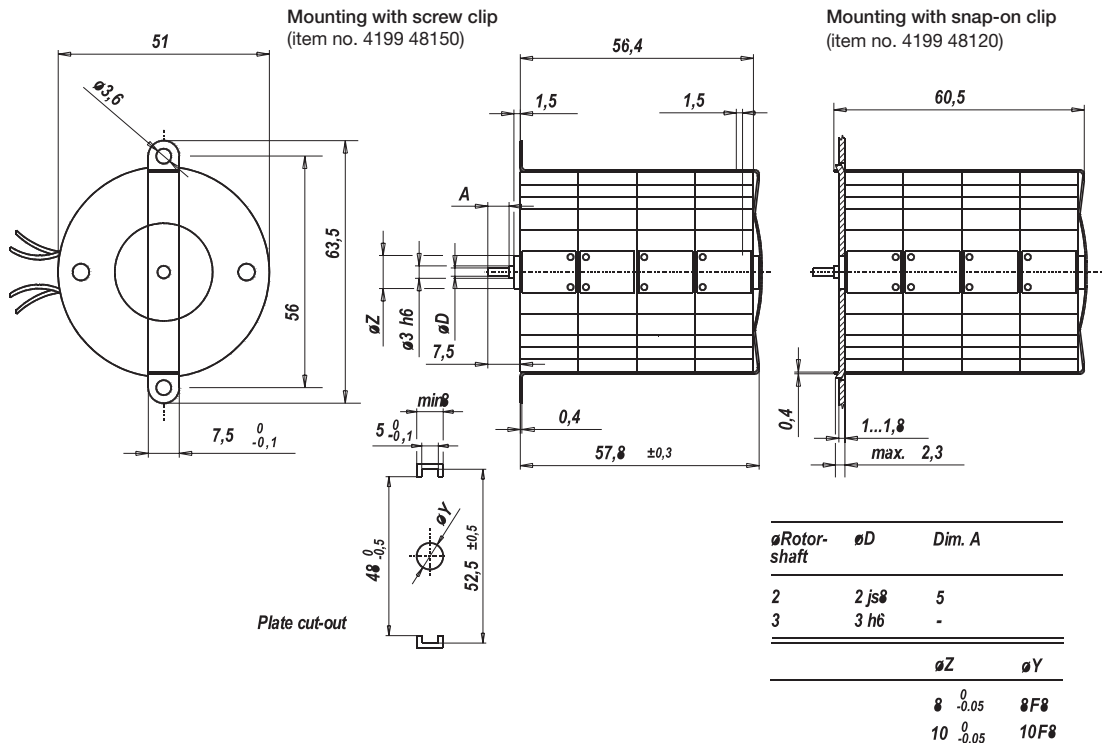
		UFB1	UFB3	UFB5	
bipolar	Holding torque $M_H$	cNm	5.5	10.4	8.3
	Detent torque $M_S$	cNm	0.46	0.8	0.8
	Rotor inertia $J_R$	gcm <sup>2</sup>	14.2	24.2	17.8
UFB1/5	Rated voltage $U_N$	V	6	12	24
	Duty cycle	%	100	100	100
	Resistance $R_{20}$	$\Omega$	9.5	52	250
	Winding code		01	02	04
UFB3	Rated voltage $U_N$	V	6	12	24
	Duty cycle	%	100	100	100
	Resistance $R_{20}$	$\Omega$	5	25.5	125
	Winding code		01	02	04
unipolar			UFB2	UFB4	
	Holding torque $M_H$	cNm	4.3	7.6	
	Detent torque $M_S$	cNm	0.46	0.8	
	Rotor inertia $J_R$	gcm <sup>2</sup>	14.2	24.2	
UFB2	Rated voltage $U_N$	V	6	12	24
	Duty cycle	%	100	100	100
	Resistance $R_{20}$	$\Omega$	15	61	251
	Winding code		01	02	03
UFB4	Rated voltage $U_N$	V	6	12	24
	Duty cycle	%	100	100	100
	Resistance $R_{20}$	$\Omega$	7.5	30.5	125
	Winding code		01	02	03
	Steps per revolution		24		
	Winding temperature $T_{max}$		105° C		
	Direction of rotation		reversible		

## Dimensions

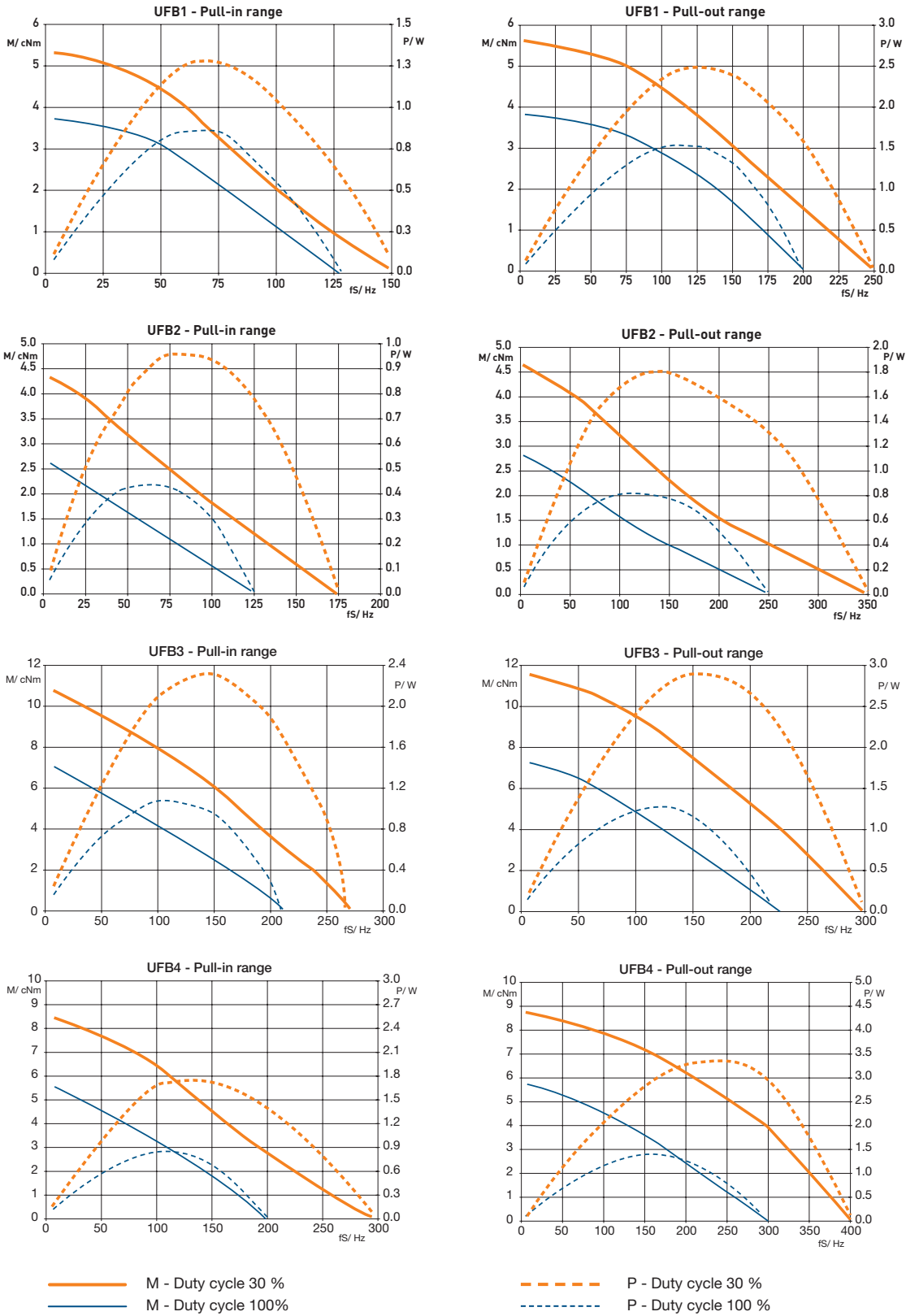
UFB1/2/5



UFB3/4



## Performance Chart



## Performance Chart

