

UFD1/2

| | |
|----------------------|------------------------|
| Dimensions (mm) | ∅ 52 x 28 |
| Step angle (°) | 7.5 |
| Holding torque (cNm) | 6,4/6,4 |
| Detent torque (cNm) | 0.45 |
| 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} | 13 K/W |
| Thermal class | A according to DIN EN 60085 |
| Approval | standard (UL/CSA on request) |
| Mounting | any position |
| Electrical connection | cable |
| Protection | IP 30 according to DIN EN 60529 |
| Weight | 180 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 |

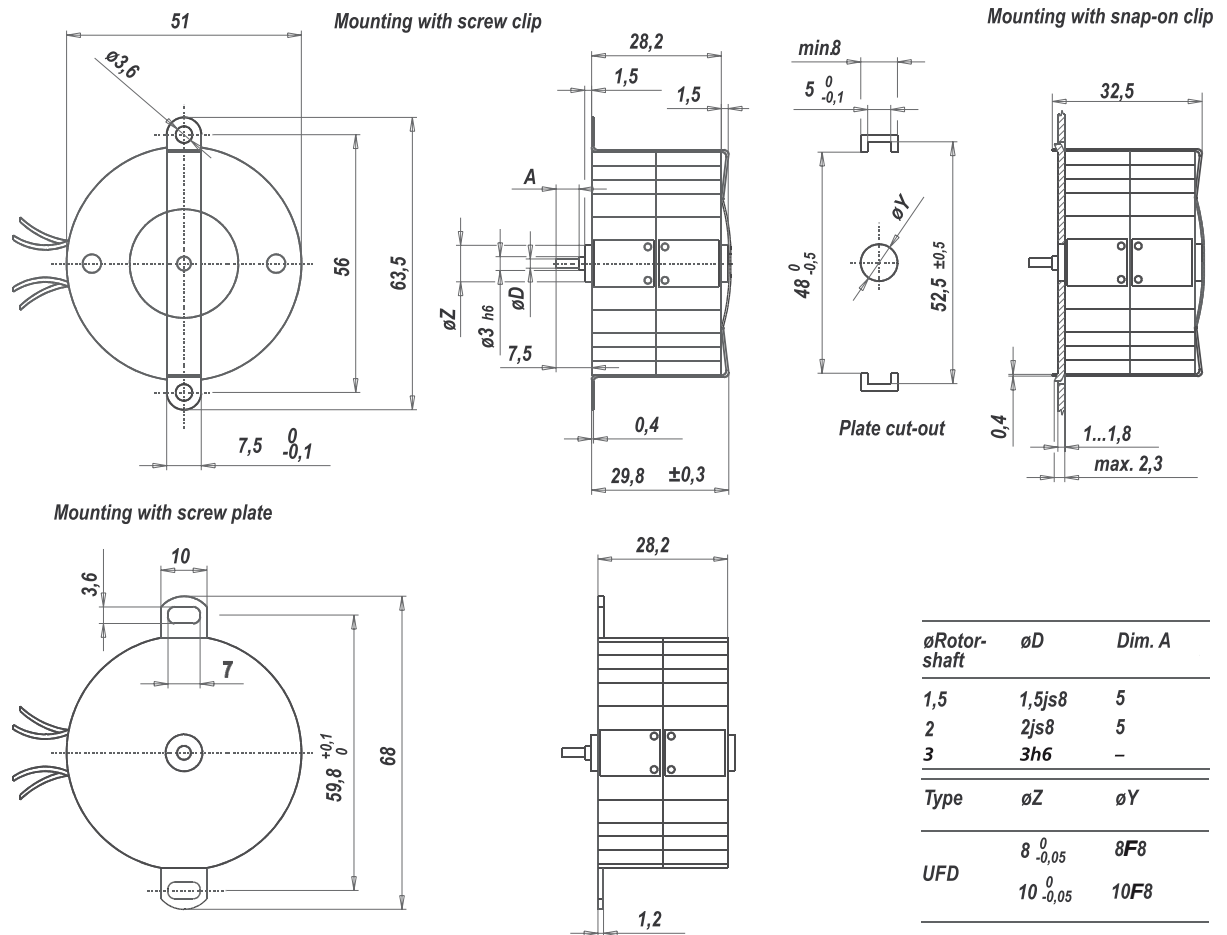
Order Reference

| | | | | | | | | |
|-----------------------|---|-------------|---|---|---|----|---|---|
| Type | Stepper Motor | UFD | 1 | 0 | N | 52 | R | N |
| Configuration | 1 bipolar, two coils 2 unipolar, two coils | | | | | | | |
| Rotor shaft, mounting | 0 centring 8 mm, shaft 3,0 mm, clip 1 centring 8 mm, shaft 2,0 mm, clip 2 centring 8 mm, shaft 1,5 mm, clip 3 centring 8 mm, shaft 3,0 mm, screw plate 4 centring 8 mm, shaft 2,0 mm, screw plate 5 centring 8 mm, shaft 1,5 mm, screw plate | E K M | centring 10 mm, shaft 3,0 mm, screw plate centring 10 mm, shaft 2,0 mm, screw plate 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) | | | | | | | |

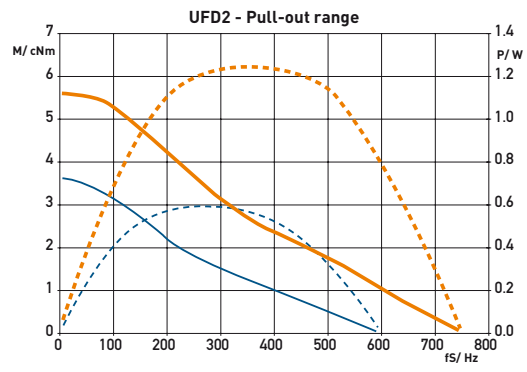
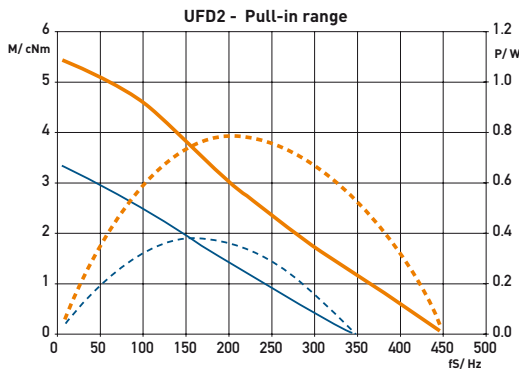
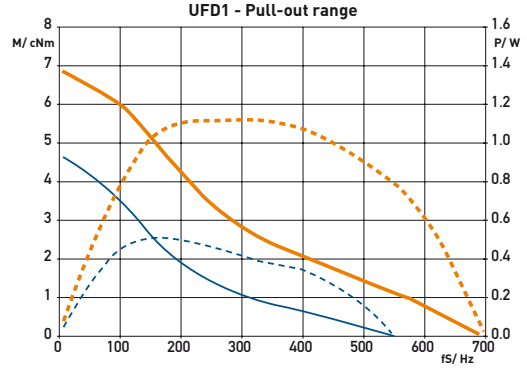
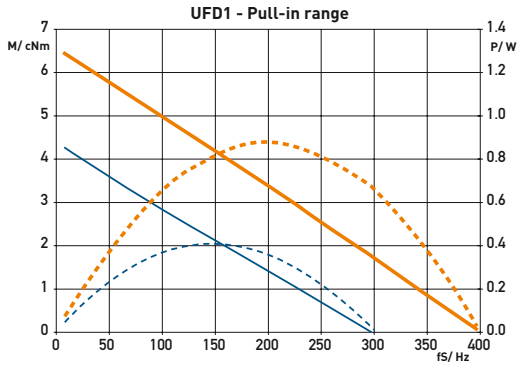
Technical Data

| | | | | | |
|--------------------------------------|---------------------------------|----------------|---|----|-----|
| bipolar (UFD1) | Rated voltage U_N | V | 6 | 12 | 24 |
| | Resistance per winding R_{20} | Ω | 9,5 | 52 | 250 |
| | Holding torque M_H | cNm | 6,4 | | |
| | Detent torque M_S | cNm | 0,45 | | |
| | Rotor inertia J_R | gcm^2 | 14,4 | | |
| unipolar (UFD2) | Rated voltage U_N | V | 6 | 12 | 24 |
| | Resistance per winding R_{20} | Ω | 15 | 61 | 251 |
| | Holding torque M_H | cNm | 4,6 | | |
| | Detent torque M_S | cNm | 0,45 | | |
| | Rotor inertia J_R | gcm^2 | 14,4 | | |
| Steps per revolution | | | 48 | | |
| Winding temperature T_{max} | | | 105° C | | |
| Duty cycle | | | 100% | | |
| Direction of rotation | | | reversible | | |
| Rotor shaft | | | 3, $\varnothing D = 3h6$, Dim. A = „-“ | | |

Dimensions



Performance Chart



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

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