

Stepper Motors – Linear UBL

UBL1/2

| | |
|---|--------------|
| Dimensions (mm) | ∅ 36 x 36 |
| Travel (mm) | 4, 8, 13, 45 |
| Travel per step (mm) | 0.033 |
| Speed by 200 Hz (mm/s) | 6.67 |
| Resistance per winding bipolar/unipolar | |
| 6 V (Ω) | 18.5/28 |
| 12 V (Ω) | 100/120 |
| 24 V (Ω) | 460/500 |
| Max. Force (N) | 35 |

**RoHS
Compliant**



Standard Data

| | |
|--|--|
| Climatic class | wide-spread according to IEC 721, part 2-1 |
| Ambient temperature operation | °C -15...+90 |
| Ambient temperature storage | °C -20...+100 |
| Thermal resistance at f=0 R _{therm} | 27 K/W |
| Thermal class | F according to IEC 85 |
| Approval | Standard |
| Mounting | any position |
| Electrical connection | Jack connector |
| Protection | IP 40 according to DIN 40 050/DIN EN 60034-5 |
| Weight | 90 g |
| Rotor stalling | motor can be stopped when voltage is applied, without being overheated |
| Bearings | Ball bearing, for live lubricated |
| Surge voltage strength | according to EN 60 034-1/EN 60-335-1 |

Order Reference – How to Build a Part Number

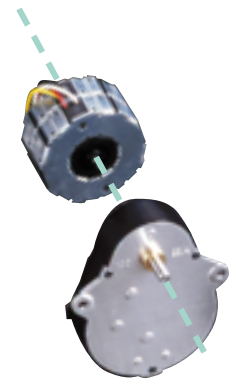
| | | | | | | | |
|---------------|---|-----|----|---|-------|---|----|
| Type | Stepper Motor | UBL | 13 | N | 100 Ω | B | 1A |
| Configuration | 13 bipolar 23 unipolar | | | | | | |
| Approval | N Approval Standard | | | | | | |
| Resistance | See page 57 | | | | | | |
| Connection | Jack connector 6 pin (other on request) | | | | | | |
| Shaft | 1A Travel 8 mm (other on request) | | | | | | |

Motoréducteurs synchrones

- Moteurs type UDS1 et réducteur type D
- Tension d'alimentation 220V, 50 Hz
- Couple maximum 0,32 Nm
- Axe de sortie : Ø 4 mm, long. 10 mm
- Raccordement par fils long. 250 mm

| Vitesse* | Vitesse (durée/tour) | Sens rotation** | Couple Nm | Références |
|-----------|----------------------|-----------------|-----------|----------------|
| 12 RPM | 5 Sec | AIG | 0.18 | UDS1NE1D41AKNN |
| 12 RPM | 5 Sec | INV | 0.18 | UDS1NE1D41BKNN |
| 10 RPM | 6 Sec | AIG | 0.19 | UDS1NE1D50AKNN |
| 10 RPM | 6 Sec | INV | 0.19 | UDS1NE1D50BKNN |
| 5 RPM | 12 Sec | AIG | 0.22 | UDS1NE1D10CKNN |
| 5 RPM | 12 Sec | INV | 0.22 | UDS1NE1D10DKNN |
| 3 RPM | 20 Sec | AIG | 0.25 | UDS1NE1D16CKNN |
| 3 RPM | 20 Sec | INV | 0.25 | UDS1NE1D16DKNN |
| 1 1/3 RPM | 45 Sec | AIG | 0.28 | UDS1NE1D37CKNN |
| 1 1/3 RPM | 45 Sec | INV | 0.28 | UDS1NE1D37DKNN |
| 1 RPM | 1 Min | AIG | 0.30 | UDS1NE1D50CKNN |
| 1 RPM | 1 Min | INV | 0.30 | UDS1NE1D50DKNN |
| 4 RPH | 15 Min | AIG | 0.32 | UDS1NE1D75EKNN |
| 4 RPH | 15 Min | INV | 0.32 | UDS1NE1D75FKNN |
| 2 RPH | 30 Min | AIG | 0.32 | UDS1NE1D15GKNN |
| 2 RPH | 30 Min | INV | 0.32 | UDS1NE1D15HKNN |
| 1 RPH | 1 H | AIG | 0.32 | UDS1NE1D30GKNN |
| 1 RPH | 1 H | INV | 0.32 | UDS1NE1D30HKNN |
| 1/24 RPH | 24 H | AIG | 0.32 | UDS1NE1D72MKNN |
| 1/24 RPH | 24 H | ING | 0.32 | UDS1NE1D72NKNN |

* RPM = rotation par minute, RPH = rotation par heure - ** AIG = horaire, INV = anti horaire



Moteurs pas à pas

| Type | Pas/tour de maintien | Couple | Tens./nom | Résistance | Références |
|-------|----------------------|---------|-----------|------------|------------|
| UAG23 | 20 | 4,2 mNm | 6Vcc | 35 Ohms | UAG23N04RC |
| UAG23 | 20 | 4,2 mNm | 12Vcc | 170 Ohms | UAG23N05RC |
| UBD23 | 48 | 1 cNm | 12Vcc | 120 Ohms | UBD23N08RN |
| UFD23 | 48 | 3,6 cNm | 12Vcc | 61 Ohms | UFD23N02RN |



Moteur linéaire pas à pas

| Type | Avance/pas de maintien | Course | Force d'action | Résistance | Ten./nom | Références |
|---|------------------------|-----------|----------------|------------|----------|--------------|
| UBL23 | 0,033 mm | 8mm + 0,7 | 21N | 120 Ohms | 12V | UBL23N08B1A |
| Connecteur câblé pour UBL23 avec fils longueur 100 mm | | | | | | 4.408.4935.0 |



Stepper Motors – Linear UBL

Technical Data

| | | | | | |
|-----------------|-------------------------------|----------|-----------------|-----|-----|
| bipolar (UBL1) | Rated voltage U_N | V | 6 | 12 | 24 |
| | Resistance per winding | R_{20} | 18.5 | 100 | 460 |
| unipolar (UBL2) | Rated voltage U_N | V | 6 | 12 | 24 |
| | Resistance per winding | R_{20} | 28 | 120 | 500 |
| | Steps per revolution | | 24 | | |
| | Steps per mm | | 30 | | |
| | Winding temperature T_{max} | | 155° C | | |
| | Duty cycle | | 100% | | |
| | Linear travel max. | | 4, 8, 13, 45 mm | | |
| | Axial play at 20 N force | | < 0.25 mm | | |
| | Axial force by 200 Hz F_A | | 10 N | | |

Dimensions (mm)

