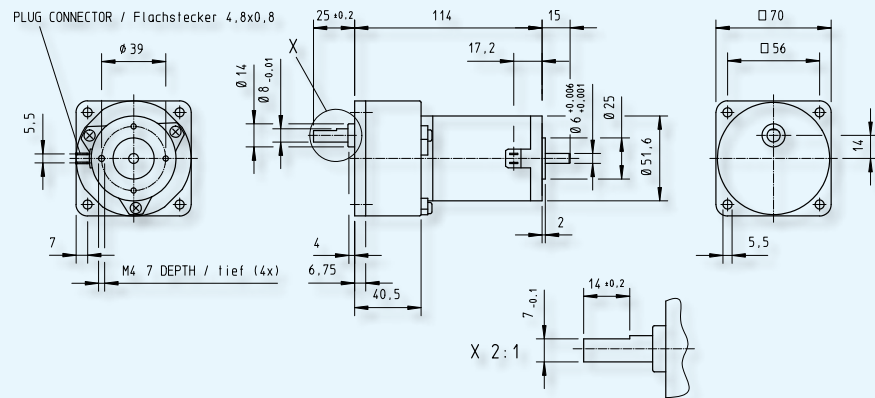


Gear Motor 70 x 114
1.61.050.4XX



■ Type / Baureihe 1.61.050.XXX

444 445 446 447 448 449

| Characteristics* | Nenndaten* | | | | | | | | |
|------------------|-----------------|-----------|-----------------------|-------|-------|-------|-------|-------|-------|
| Rated voltage | Nennspannung | U/V | V | 12 | 12 | 12 | 12 | 12 | 12 |
| Rated current | Nennstrom | I_N | A | 2.400 | 2.500 | 2.500 | 1.900 | 1.500 | 1.200 |
| Rated torque | Nenn Drehmoment | T_N/M_N | Ncm | 90 | 180 | 330 | 400 | 500 | 500 |
| Rated speed | Nenn Drehzahl | n_N | rpm/min ⁻¹ | 92 | 48 | 24 | 14 | 7.2 | 4.0 |

| No load characteristics* | Leerlaufdaten* | | | | | | | | |
|--------------------------|-------------------|-------|-----------------------|-------|-------|-------|-------|-------|-------|
| No load speed | Leerlauf Drehzahl | n_0 | rpm/min ⁻¹ | 121 | 64 | 31 | 16 | 8.0 | 4.2 |
| No load current | Leerlaufstrom | I_0 | A | 0.800 | 0.800 | 0.800 | 0.800 | 0.800 | 0.800 |

| Features* | Kenndaten* | | | | | | | | |
|-------------------------|--------------------------|-------------------|-----|------------|------------|------------|------------|------------|------------|
| max. Torque | max. Drehmoment | T_{max}/M_{max} | Ncm | 126 | 252 | 462 | 560 | 700 | 700 |
| Terminal resistance | Anschlusswiderstand | R | Ohm | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 |
| Gear ratio | Untersetungsverhältnis | i | | 24.7 | 46.7 | 96.5 | 183.0 | 377.0 | 714.0 |
| Stages | Stufen | | | 3 | 3 | 4 | 4 | 5 | 5 |
| Weight | Gewicht | W | g | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| Axial play output shaft | Axialspiel Abtriebswelle | | mm | 0.05 - 0.6 | 0.05 - 0.6 | 0.05 - 0.6 | 0.05 - 0.6 | 0.05 - 0.6 | 0.05 - 0.6 |

| Operational conditions | Einsatzbedingungen | | | | | | | | |
|--|--------------------------------------|-------|----|-----------|-----------|-----------|-----------|-----------|-----------|
| Temperature range | Temperaturbereich | T | °C | -10 - +70 | -10 - +70 | -10 - +70 | -10 - +70 | -10 - +70 | -10 - +70 |
| Axial force | Axialkraft | F_A | N | 30 | 30 | 30 | 30 | 30 | 30 |
| Radial force, 5 mm from mounting surface | Radialkraft, 5 mm ab Anschraubfläche | F_R | N | 100 | 100 | 100 | 100 | 100 | 100 |

* at 25 °C

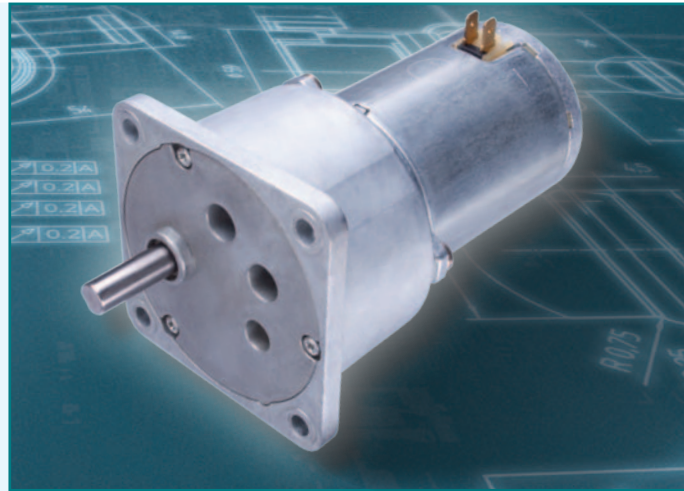
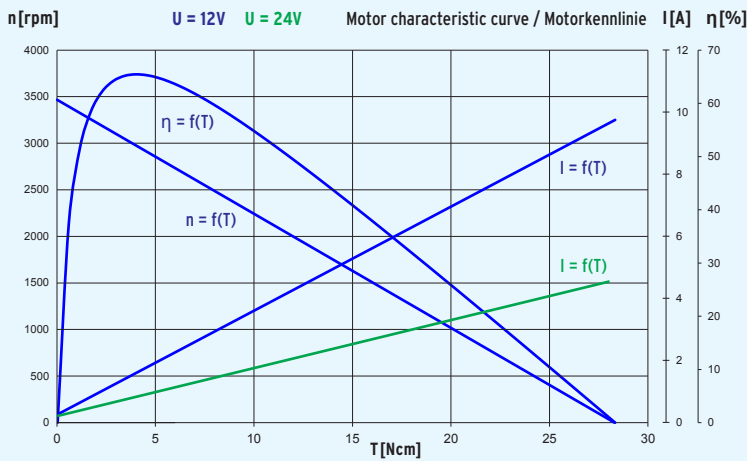
* bezogen auf 25 °C

Customized Bühler drives / Maßgeschneiderte Bühler Antriebe

- ▶ Variants: p. 84 / Varianten: S. 84
- ▶ Customer specific developments: p. 88 / Kundenspezifische Entwicklungen: S. 88

Applications Examples / Applikationsbeispiele

- ▶ Building automation / Gebäudeautomation
- ▶ Miscellaneous Industrial / verschiedene Industriezweige



464 465 466 467 468 469

| | | | | | |
|-------|-------|-------|-------|-------|-------|
| | | | | | |
| 24 | 24 | 24 | 24 | 24 | 24 |
| 1.200 | 1.250 | 1.250 | 0.950 | 0.750 | 0.600 |
| 90 | 180 | 330 | 400 | 500 | 500 |
| 92 | 48 | 24 | 14 | 7.2 | 4.0 |

| | | | | | |
|-------|-------|-------|-------|-------|-------|
| | | | | | |
| 121 | 64 | 31 | 16 | 8.0 | 4.2 |
| 0.400 | 0.400 | 0.400 | 0.400 | 0.400 | 0.400 |

| | | | | | |
|------------|------------|------------|------------|------------|------------|
| | | | | | |
| 126 | 252 | 462 | 560 | 700 | 700 |
| 7.6 | 7.6 | 7.6 | 7.6 | 7.6 | 7.6 |
| 24.7 | 46.7 | 96.5 | 183.0 | 377.0 | 714.0 |
| 3 | 3 | 4 | 4 | 5 | 5 |
| 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| 0.05 - 0.6 | 0.05 - 0.6 | 0.05 - 0.6 | 0.05 - 0.6 | 0.05 - 0.6 | 0.05 - 0.6 |

| | | | | | |
|-----------|-----------|-----------|-----------|-----------|-----------|
| | | | | | |
| -10 - +70 | -10 - +70 | -10 - +70 | -10 - +70 | -10 - +70 | -10 - +70 |
| 30 | 30 | 30 | 30 | 30 | 30 |
| 100 | 100 | 100 | 100 | 100 | 100 |

| Design | |
|-------------------------|-----------------------------|
| Gear housing | Zinc die-cast |
| Commutator | Copper / 12-segments |
| RFI protection | - |
| Insulation class | Winding H, otherwise A |
| Protection class | IP40 |
| Commutation | Carbon brushes |
| Armature | skewed slot |
| Magnet system | Permanent magnets, 2-pole |
| Bearings | 2 sintered bronze bearings |
| Motor housing | Steel, corrosion protected |
| Motor end shields | zinc die-cast on both sides |
| Spur gear | Metal and plastic gears |
| Typical life expectancy | 1000 h |

| Aufbau | |
|----------------------|-------------------------------------|
| Getriebegehäuse | Zinkdruckguss |
| Kollektor | Kupfer / 12-teilig |
| Grundentstörung | - |
| Isolierstoffklasse | Wicklung H, ansonsten A |
| Schutzart | IP40 |
| Kommutierung | Kohlebürsten |
| Anker | geschränkte Nut |
| Magnetsystem | Permanentmagnete, 2-polig |
| Motorlager | 2 ölgetränkte Sinterbronzelager |
| Motorgehäuse | Stahl, korrosionsgeschützt |
| Motorlagerschilde | beidseitig Zinkdruckguss |
| Stirnradgetriebe | Zahnräder aus Metall und Kunststoff |
| Typische Lebensdauer | 1000 h |