

CROUZET - BLDC PLANETARY GEARED MOTOR WITH INTEGRATED TNi21 DRIVE

801495XX TNi21

Planetary 52mm gearmotor 77W 12→32Vdc

13→593rpm 25Nm max

- 12→32 V dc, 52→81 mmØ, 25→120 Nm, 11→775 rpm
- Speed & torque control. Easy use
- Reduce control panel space & cabling
- Long life (>20,000 hours)
- IP65 as standard



PRODUCT DESCRIPTION

The TNi21 integrated drive is ideal for applications where speed and torque control is required.

The long lifetime of the brushless motor (>20,000 hours with rated load) means it is ideal for continuous or long duty applications.

Having the drive integrated into the motor can also save control panel space, reduce cabling and save set-up time.

3 motor sizes available with the same diameter (57mm x 57mm), with increasing motor lengths for more power/torque.

Planetary & worm gearbox options available for reducing the speed & increasing the output torque.

Pre-set I/O mean that the motor can be used immediately without any complex preliminary set-up. It can be controlled via basic switches or by external PLC.

Motor power and logic connections are via cable output or connector options.

The motors are rated to IP65 dust/water protection class as standard.

Options for adaptation to the standard motor include adding an encoder, holding brake, special output shaft, special connectors, upgraded IP protection & special firmware developed according to your specific application requirements.

* Product datasheets & 3D drawing for 0-10Vdc, cable version attached as an example. Further information for PWM version, brake options & connector version available upon request.

Full documentation & user manuals also available upon request.

TECHNICAL DATA

| | |
|--|--------------|
| Diameter | 52 mm |
| Integrated control | TNi21 |
| IP class | IP65 |
| Life span | 20,000h |
| Max. torque | 25 Nm |
| Number of pulses per revolution | 12 |
| Positioning feedback | Yes |
| Power | 77 W |
| Ratio | i=6,75→308:1 |
| Shaft diameter | 12 mm |

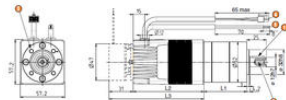
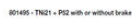
Supply voltage

13rpm→593rpm

12 V DC, 24 V DC

Type of gearbox

Planetary 1→3 stages



- L1 1 stage: 55.3 ± 0.5
 - L1 2 stages: 69.5 ± 0.5
 - L1 3 stages: 83.7 ± 0.5
 - L2 80140: 92 max.
 - L3 80140: 129 max.
- ① Parallel key 4 x 4 x 16 DIN 6885 A
 - ② M4 x 10
 - ③ 4 x M5 at 90°, depth 10 over O 40
 - ④ Command cable 8 x AVG24 / 500 mm
 - ⑤ Power cable 2 x AVG16 / 500 mm

GEARBOXES FOR DCmind BRUSHLESS RANGE

4 to 120 Nm

- Planetary and worm gearboxes
- Shafts on ball bearings
- Long service life
- IP65



Part numbers

[illegible]

Comments
 @ 52 planetary gearbox: 1

52 planetary gearbox: On the first stage, the planet gears are made of composite materials which improve efficiency and service life. On the other stages, the metal gears turn on needle bearings. IP65 apart from the output shaft.

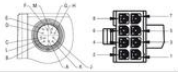
• **G2 planetary gearbox:** On the first stage, the planet gears are made of composite materials which improve efficiency and service life. On the other stages, the metal gears turn on needle bearings, 100% apart from the output shaft.

Worm gearbox: This gearbox combines a tempered steel worm and a hard bronze helical gear wheel, thus ensuring a long service life. The wheel is coated with grease, ensuring an excellent slip coefficient and good heat dissipation. Curings and lipseals are used in combination with a compression spring to create a tight seal at the gearbox output shaft and the motor input shaft. IP65 gearbox.

The casing is made of aluminum to maximize heat exchanges with its supporting surface on the machine. However, due to the high power that can be transmitted by this gearbox and the low efficiency inherent in large worm gearbox reduction ratios, make sure that the gearbox casing temperature does not exceed 70°C during operation. The output shaft can be placed on the right or left, or can be a double shaft (shaft output on both sides).

Connections

| | Connector | Cable | Color |
|------------------------------|-----------|------------------|-------|
| Power ground | M16 | AWG16 Blue | |
| Power supply +12 to +30 V DC | E-6 | AWG16 Brown | |
| Logic ground | H | AWG24 Black (5) | |
| Input 1 On/Off | C | AWG24 Green (3) | |
| Input 2 Direction | A | AWG24 Yellow (2) | |
| Input 3 Speed | J | AWG24 Orange (4) | |
| Output 1 Tachometer* | A | AWG24 Brown (3) | |
| Output 2 Feed direction | L | AWG24 Red (4) | |
| Input 4 Stop | B | AWG24 Blue (5) | |
| Output 3 Torque at max | K | AWG24 Purple (7) | |



Options

Holding brake 0.5 Nm - 24 V---

