

## 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
Number of pulses per revolution	12
Positioning feedback	Yes
Power	77 W
Ratio	i=6,75→308:1
Shaft diameter	12 mm

## Speed options

13rpm→593rpm

## Supply voltage

12 V DC, 24 V DC

## Type of gearbox

Planetary 1→3 stages

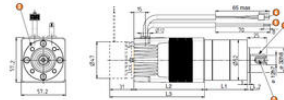
### GEARBOXES FOR DcMind BRUSHLESS RANGE

4 to 120 Nm

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



801405 - TNe21 + P52 with or without brake

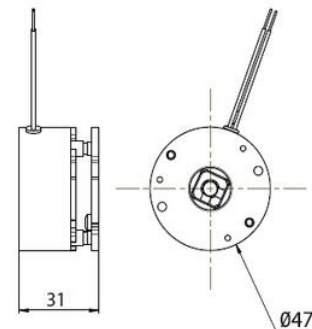


- L1 1 stage: 10.3 ±0.5
- L1 2 stages: 68.5 ±0.5
- L1 3 stages: 83.7 ±0.5
- L2: 801402, 82 max.
- L3: 801402, 123 max.

- Parallel key 4 x 4 x 16 DIN 6885 A
- MA x 10
- 1 x M6 at 90°, depth 10 over Ø 40
- Command cable 8 x AWG24 / 500 mm
- Power cable 2 x AWG18 / 500 mm

## Options

Holding brake 0.5 Nm - 24 V---



### Part numbers

Designation	Planetary D 40	Planetary D 60	Planetary D 80	Planetary D 100
Type	801405	801406	801407	801408
801405 TNe21	801405 TNe21	801406 TNe21	801407 TNe21	801408 TNe21
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**Other ratios possible**

**801405 planetary gearbox:** Metal gears on all stages. IP65 apart from the output shaft.

**801406 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.

**801407 planetary gearbox:** All gears are metal and turn on needle bearings, resulting in excellent robustness and a very long service life. IP65 apart from the output shaft.

**Worm gearbox:** This gearbox combines a hardened 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. Gearing and bearings 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 exchange 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
Power ground	801405 Blue
Power supply +12 to +24 V DC	801405 Black (1)
Logic ground	801405 Green (1)
Input 1 On/Off	801405 Yellow (2)
Input 2 Direction	801405 Orange (4)
Input 3 Speed	801405 Brown (3)
Output 1 Technometer	801405 Red (1)
Output 2 Feed direction	801405 Blue (2)
Input 4 Torque	801405 Blue (2)
Output 3 Torque at max	801405 Purple (1)

1: 10 pins, and 24 for 801405 motor

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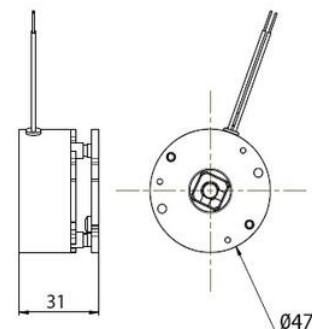
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