

CROUZET - BLDC GEARED MOTOR WITH INTEGRATED SMI21 DRIVE & CANOPEN NETWORK

801495XX SMI21 CANOPEN
Planetary 52mm gearmotor 88W 12→48Vdc
12→555rpm 25Nm max



- 12→48 V dc, 10→120 Nm, worm and planetary gears
- Speed, torque & position control. CANopen network
- Reduce control panel space & cabling
- Long life (>20,000 hours)
- IP65 as standard

PRODUCT DESCRIPTION

The SMI21 integrated drive is ideal for applications where speed, torque & positional control is required.

The motor also incorporates a high resolution 4096ppr incremental encoder ideal for precise positioning applications.

With CANopen communication the motor can be connected & controlled via the master CANopen control network.

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.

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

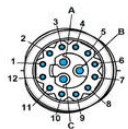
Options for adaptation to the standard motor include adding a holding brake, special output shaft, special connectors, upgraded IP protection & special firmware developed according to your specific application requirements.

* Full documentation & user manuals available upon request.

TECHNICAL DATA

Diameter	52 mm
Integrated control	SMi21 CANopen
IP class	IP65
Life span	20,000h
Max. torque	25 Nm
Number of pulses per revolution	4096
Positioning feedback	Yes
Power	88 W
Ratio	i=6,75→308:1
Shaft diameter	12 mm
Speed options	12rpm→555rpm
Supply voltage	12 V DC, 24 V DC, 48 V DC
Type of gearbox	Planetary 1→3 stages

Connecting	
Input / Output - M16 - 15 pins	Pin N°
Input 1 (digital)	1
Input 2 (digital)	2
Input 3 (digital)	3
Input 4 (digital)	4
Input 5 (analogic)	5
Input 6 (analogic)	6
OV	7
Output 1 (digital - PWM)	8
Output 2 (digital - PWM)	9
Output 3 (digital)	10
Output 4 (digital)	11
Not connected	12
Not connected	A - B - C
Power supply - M16 - 3 pins	Pin N°
Non connecte	1
+ 12Vcc -> + 48 Vcc	2
OV	3
Micro-USB B	
Monitors and setting	
CAN - M12 - 5 pins	Pin N°
Not connected	1
Not connected	2
OV	3
CAN High	4
CAN Low	5



GEARBOXES FOR DcMind BRUSHLESS RANGE

4 to 120 Nm

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



Part numbers

Gearboxes	Planetary 0.16	Planetary 0.16	Planetary 0.16	Worm
Type	P10495	P10495	P10497	P10410
Input speed	3000rpm	3000rpm	3000rpm	3000rpm
Ratio	30:1	30:1	30:1	30:1
Output speed	100rpm	100rpm	100rpm	100rpm
Output torque	4Nm	8Nm	20Nm	120Nm
Output speed	100rpm	100rpm	100rpm	100rpm
Output torque	4Nm	8Nm	20Nm	120Nm
Output speed	100rpm	100rpm	100rpm	100rpm
Output torque	4Nm	8Nm	20Nm	120Nm
Output speed	100rpm	100rpm	100rpm	100rpm
Output torque	4Nm	8Nm	20Nm	120Nm
Output speed	100rpm	100rpm	100rpm	100rpm
Output torque	4Nm	8Nm	20Nm	120Nm

Other notes:

- 0.16 planetary gearbox:** Metal gears on all stages. 170° apart from the output shaft.
- 0.16 planetary gearbox:** On the first stage, the internal gears are made of composite materials which improve efficiency and service life. On the other stages, the metal gears turn on needle bearings. 170° apart from the output shaft.
- 0.16 planetary gearbox:** All gears are metal and turn on needle bearings, resulting in excellent robustness and a very long service life. 170° apart from the output shaft.
- Worm gearbox:** This gearbox combines a hardened steel worm and a hard bronze-halved gear wheel, thus ensuring a long service life. The wheel is coated with graphite, ensuring an excellent slip coefficient and good heat dissipation. Cuttings and shavings are used in combination with a compression spring to create a tight seal of 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 the 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).