

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

801495XX SMI21 CANOPEN
Planetary 52mm gearmotor 88W 12V48Vdc 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
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

4 to 120 Nm

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



Part numbers

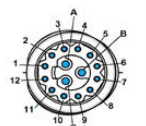
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Other ratios possible
Expenditure

• **02 elementary gears:** Most gears on the first stage, the input gear, are made from the output shaft.
 • **03 planetary gears:** On the 01 stage, the planet gears are made of composite materials which improve efficiency and service life. On the other stages, most gears can be made from steel.
 • **04 planetary gears:** All gears are made and run on needle bearings, resulting in excellent oil efficiency and a very long service life. The input gear from the output shaft.
 • **05 planetary gears:** This gearbox contains a planetary drive and a hand knob for hand gear shift, that ensuring a long service life. The wheel is coated with an anti-rust oil, ensuring an excellent oil coefficient and good heat dissipation. Conings and Splines are used in combination with a compression spring to create a firm gear on the gearbox output shaft and the motor input shaft. The input gears.
 • **06 gears:** Most of gears attempt to maximize their torque capacity, efficiency and service life on the machine.
 • **07 gears:** Due to the high power that can be transmitted by this gearbox and the low shaft efficiency input in large worm gearbox reduction units, make sure that the input gear is made from steel. The input gear is made from steel.
 • **08 gears:** The input gear can be placed on the right or left, or can be made to drive the output shaft on both sides.

Connecting

Input / Output - M16 - 16 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
0V	7
Output 1 (digital - PWM)	8
Output 2 (digital - PWM)	9
Output 3 (digital)	10
Output 4 (digital)	11
Not connected	12
A - B - C	
Not connect	13
Power supply - M16 - 3 pins	Pin N°
+12Vcc -> +48 Vcc	2
Not connect	3



Micro-USB B

Monitoring and setting

CAN - M12 - 5 pins	Pin N°
Not connected	1
Not connected	2
0V	3
CAN High	4
CAN Low	5



4 to 120 Nm

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



Part numbers

[illegible]

Other ratios possible:
Expenditure:

0 02 planetary gearbox: Metal gears on the output shaft. 4000 rpm from the motor shaft.

0 03 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 planet gears turn on metal gears.

0 04 planetary gearbox: All gears are metal and run on needle bearings, reducing in excellent oil-lubed and a very long service life. 4000 rpm from the output shaft.

Motor gearbox: This gearbox contains a tapered shaft motor and a hard bearing holding gear wheel, that ensuring a long service life. The wheel is coated with an anticorrosive oil compound and good heat dissipation. Gears and bearings are used in combination with a compression spring to make a tight seal of the gearbox output shaft and the motor input shaft. 4000 rpm.

Motor gearbox: The motor is made of aluminum to minimize heat on the bearing. The motor is made of stainless steel to ensure long service life. However, due to the high power that can be transmitted by this gearbox and the low efficiency (around 10-15% torque reduction index), make sure the gearbox is used in a low speed range. The gearbox is made of stainless steel to ensure long service life. The output shaft can be placed on the right or left, or it can be a double shaft motor output on both sides.