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# CROUZET

# **CROUZET - BLDC WORM GEARED MOTOR WITH INTEGRATED SMI21 DRIVE**

801410XX SMI21 Worm gearmotor 92W 12?48Vdc 78?780rpm 10Nm

- 12→48 V dc, 92→170 W, 57→780 rpm, 10 Nm max
- Speed, torque & postion control
- 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.

Motion programming, configuring & set-up performed through the dedicated user friendly DCmind-soft PC software. The program can be controlled via basic switches or by external PLC.

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 adapation 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.

\* Product datasheets & 3D drawing for standard IP65 cable version attached as an example. Further information for braked version available upon request. Full documentation & user manuals also available upon request.

# **TECHNICAL DATA**

Integrated control	SMi21
IP class	IP65
Length	194 mm
Life span	20,000h
Max. torque	10
Number of pulses per revolution	4096
Positioning feedback	Yes
Power	92 W
Ratio	i=5→50:1

Shaft diameter	10 mm
Speed options	78rpm→780rpm
Supply voltage	12 V DC, 24 V DC, 48 V DC
Type of gearbox	Worm
Weight	1,87 kg

### GEARBOXES FOR DCmind BRUSHLESS RANGE

4 to 120 Nm





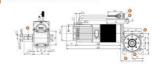






Geartocee	Planetary O 62			Planetary (7:52			Placeta	ry O at	Worm:	
Type .	810495			810496			810492		810410	
	Post number			PAR REPRESE			15/75/2019		Part operan	
80140 TNO1	soness TNon			801496 TN21					801410 TN21	
80180 1901	1200			801896 TN21			801897 TNQ1			801810 TNZ1
BOOKS TWO!	801496 SM21			801696 SMQ1 801896 SMQ1			900997	TNOT	800810 TNQ1 801410 SMQ1	
90140 BMQ1							-	-		
80180 SMI21							801897 SMg1.			801810 SMQ1
BODIO SMICH				_			802897	5MQ1		800810 SMQ1
Gearbox charactertatics				_						
	DE 001,00			205.7mt			500,000			L/S-
Maximum parmitted torque (Nin)	4	12	. 26	- 8	. 25	80	20	60	120	10
Efficiency	0.8	0.7%	0.7	0.9	0.8	0.7	0.9	0.8	0.7	0.6 - 0.3
Axial dynamic load (dsN)		-10	16	7	- 50	15.		112	20	10
Radial dynamic load (dafe)	20	-32	45	74	36	52	40	60	100	15.
Operating temperature	-20 -= =70°C		-20 = +70°C			-2070°C			-50 ns +70°C	
Integra (kg)	0.7	0.8	2.1	0.8	1.2	1.6	5.8	2.5	3.2	0.7
Standard reduction ratios	6.76	25 46	93 169 308	6,75	19 27 46	100 139 236 308		19 27	100 139 236	5 - 10 - 20 - 30 - 50
Other ratios possible			_			100				15 - 100







## GEARBOXES FOR DCmind BRUSHLESS RANGE

4 to 120 Nm



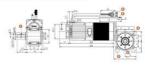






Pin	Logic cable		Power cable				
	Description	Wines. color	Description	Wires			
1	Input 1 - logic	Green	+12 Vm = 48 Vm	Brown			
2	Input 2 - logic	Yellow	0 V	Elue			
3	Input 3 - logic	White					
4	input 4 - logic	White-brown					
8	input 5 - analog	titue					
6	Input 6 - analog	Orange					
7	0 V:::	Black					
	0 V:::	White-black					
9	Output 1 - PWM	Erown					
10	Output 2 - PWM	Purpte					
11	Output 3 - logic	Reed					
12	Output 4 - logic	Grey					





L3 80140: 154 max. L3 80180 - 80280: 174 max.

Guartioces	Planetary (2 62			Planetary (7 62			Planeta	BY O ST.	Worm:	
Tipe	810495			810496			810497			810410
	DOI DOV			Plat surdies			1275,279		Pail control	
80140 TN21	soness TNOT			807496 TN21			1.		801410 TN21	
80180 TNQ1	801496 SM01			801896 TN01 801896 SMQ1 801896 SMQ1			801897		801816 TNG1	
80390 TN21							goggest Thigh			800910 TNQ1 801410 SMQ1
90140 SMQ1										
80180 SMI21							801897		801810 SMQ1 800810 SMQ1	
BCDIO SMIZY							802897	5MQ1		
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