

MINIMOTOR - DBSE BRUSHLESS SERVOMOTORS WITH PLANETARY GEARBOX

DBSE 55/50-5
24/48V dc 600rpm 1.9 Nm

- Efficient and compact
- Saves individual cable runs
- Up to 95Nm
- Open Bus protocols
- Reduce machine build components



PRODUCT DESCRIPTION

MOTOR: Brushless 4-pole three-phase sinusoidal motor, totally enclosed. Rotor with NdFeB magnets. Thermal cutoff. Winding Class F. Thermal cutoff. Protection IP65 in compliance with IEC/EN 60529 standards. Bearings with reduced backlash and special grease for high temperatures.

DRIVE: Power 24 and/or 48 Vdc • Magnetic absolute encoder SSI (12bit single-turn / 20bit multi-turn) with internal buffer battery • 5 PNP digital inputs and 1 analogue input -10 +10V ext. (0-5 o 4-20mA optional) • 1 relay output (NC-NO) • USB port for parametrisation • Torque, speed, position and homing control.

GEAR UNIT: planetary with hardened steel case with broached precision teeth Class 7. Heat-treated sun and planet gears.

Seal rings in special high-temperature rubber (FKM).

Lubrication with special long-lasting oil.

Rated torque up to 95 Nm.

All the models are implemented with the new "open" platform, which permits configuration with the following primary protocols: CanOpen, Ethercat, Modbus, Ethernet/IP, Profinet, Powerlink.

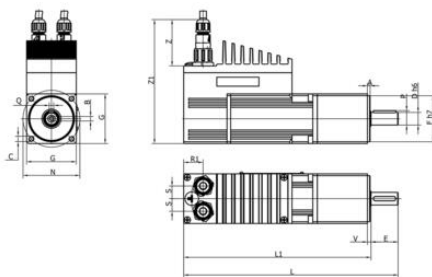
For full motor specifications please see motor only 'DBS' or download literature below.

[Please click here for 2D and 3D drawings](#)

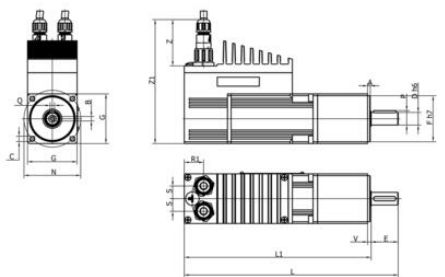
TECHNICAL DATA

Ambient temperature	-10 ... +40°C
CanOpen	Yes
CE approved	Yes
Communication	USB
Communication error protection	Yes
Digital inputs	2 pnp (24Vdc, 500kHz) , 3 pnp (24Vdc, 7kHz)
Electronic brake output	24Vdc, max 0.5A
Ethercat	Yes

Ethernet IP	Yes
Gear stages	1
Input voltage dc	24/48 Vdc
IP class	IP65
Memory error protection	Yes
Modbus RTU	Yes
Motor control algorithm	Sinusoidal brushless with 12Bit single-turn / 20Bit multi-turn absolute encoder
Nominal output frequency carrier	4/8/12 kHz
Nominal overload	200% x 60 sec
Nominal speed	400 rpm
Nominal torque	1.9
Output power	125 W
Outputs	1 NO 2A (42 Vdc)
Over voltage protection	Yes
Overcurrent protection	Yes
Overheat protection	Yes
Overload protection	Yes
Polarity reverse protection	Yes
PowerLink	Yes
ProfiNET	Yes
Rated current	8A@24V/4.2A@48V
Ratio	5:1
Under voltage protection	Yes



Model	Power	Speed	Current	Torque	Weight	Length	Width	Height	Mounting	Encoder	Output	Protection	Material	Price
EM100-10	10W	400rpm	0.42A	0.19Nm	0.5kg	100mm	40mm	40mm	Flange	12Bit	1NO	IP65	Aluminum	100.00
EM100-20	20W	400rpm	0.84A	0.38Nm	0.5kg	100mm	40mm	40mm	Flange	12Bit	1NO	IP65	Aluminum	120.00
EM100-30	30W	400rpm	1.26A	0.57Nm	0.5kg	100mm	40mm	40mm	Flange	12Bit	1NO	IP65	Aluminum	140.00
EM100-40	40W	400rpm	1.68A	0.76Nm	0.5kg	100mm	40mm	40mm	Flange	12Bit	1NO	IP65	Aluminum	160.00
EM100-50	50W	400rpm	2.10A	0.95Nm	0.5kg	100mm	40mm	40mm	Flange	12Bit	1NO	IP65	Aluminum	180.00
EM100-60	60W	400rpm	2.52A	1.14Nm	0.5kg	100mm	40mm	40mm	Flange	12Bit	1NO	IP65	Aluminum	200.00
EM100-70	70W	400rpm	2.94A	1.33Nm	0.5kg	100mm	40mm	40mm	Flange	12Bit	1NO	IP65	Aluminum	220.00
EM100-80	80W	400rpm	3.36A	1.52Nm	0.5kg	100mm	40mm	40mm	Flange	12Bit	1NO	IP65	Aluminum	240.00
EM100-90	90W	400rpm	3.78A	1.71Nm	0.5kg	100mm	40mm	40mm	Flange	12Bit	1NO	IP65	Aluminum	260.00
EM100-100	100W	400rpm	4.20A	1.90Nm	0.5kg	100mm	40mm	40mm	Flange	12Bit	1NO	IP65	Aluminum	280.00



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EM100-20	20W	400rpm	0.84A	0.38Nm	0.5kg	100mm	40mm	40mm	Flange	12Bit	1NO	IP65	Aluminum	120.00
EM100-30	30W	400rpm	1.26A	0.57Nm	0.5kg	100mm	40mm	40mm	Flange	12Bit	1NO	IP65	Aluminum	140.00
EM100-40	40W	400rpm	1.68A	0.76Nm	0.5kg	100mm	40mm	40mm	Flange	12Bit	1NO	IP65	Aluminum	160.00
EM100-50	50W	400rpm	2.10A	0.95Nm	0.5kg	100mm	40mm	40mm	Flange	12Bit	1NO	IP65	Aluminum	180.00
EM100-60	60W	400rpm	2.52A	1.14Nm	0.5kg	100mm	40mm	40mm	Flange	12Bit	1NO	IP65	Aluminum	200.00
EM100-70	70W	400rpm	2.94A	1.33Nm	0.5kg	100mm	40mm	40mm	Flange	12Bit	1NO	IP65	Aluminum	220.00
EM100-80	80W	400rpm	3.36A	1.52Nm	0.5kg	100mm	40mm	40mm	Flange	12Bit	1NO	IP65	Aluminum	240.00
EM100-90	90W	400rpm	3.78A	1.71Nm	0.5kg	100mm	40mm	40mm	Flange	12Bit	1NO	IP65	Aluminum	260.00
EM100-100	100W	400rpm	4.20A	1.90Nm	0.5kg	100mm	40mm	40mm	Flange	12Bit	1NO	IP65	Aluminum	280.00

2D/3D model selection



Electric motors

15.06.2017



Gear motor

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Storm gearmotors

15.06.2017



Brushless servomotors

15.06.2017



Crank products

15.06.2017



Others

15.06.2017

Please see product description
above for 2D and 3D drawings