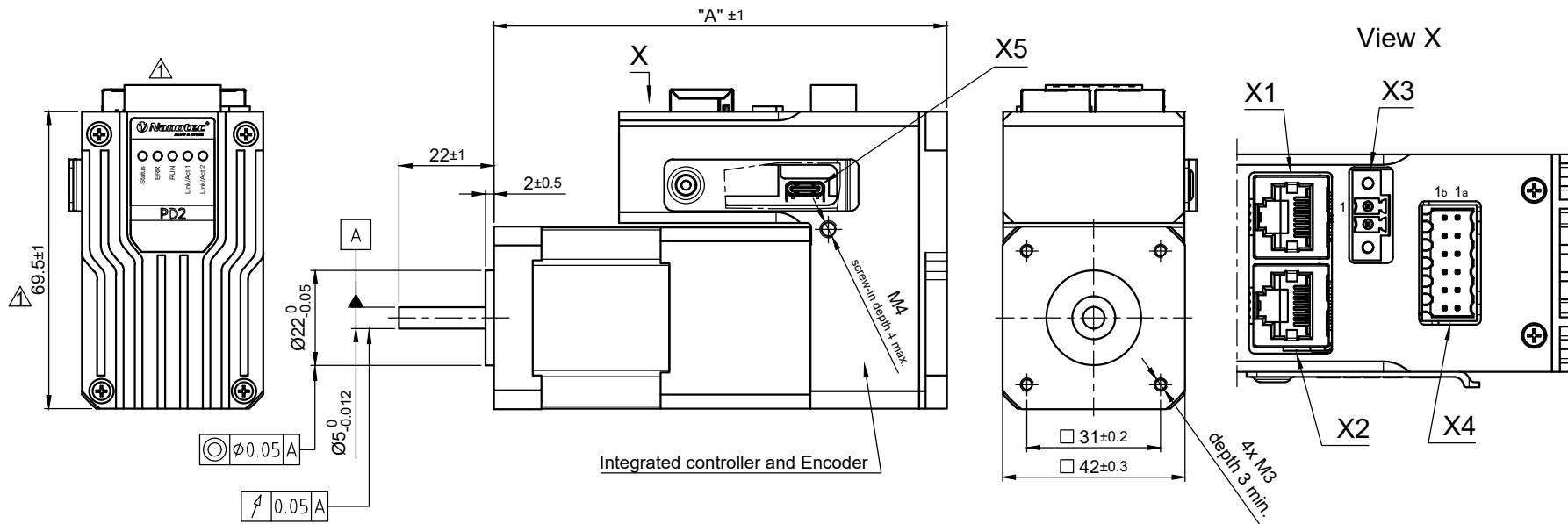




X1 EtherCAT IN	
RJ45	
Pin No.	Function
1	TD+
2	TD-
3	RD+
4	n.c.
5	n.c.
6	RD-
7	n.c.
8	n.c.

X2 EtherCAT OUT	
RJ45	

X3 Power	
Degson 15EDGVM-3.5-02P	
Pin No.	Function
1	V+
2	GND

X4 IO	
Degson 15EDGVHD-3.5-12P	
Pin No.	Function
a1	GND
a2	V+Logic
a3	Input 1
a4	Input 2
a5	Input 3
a6	Input 4
b1	Analog Input 1
b2	Analog Input 2
b3	Output 1 (push-pull)
b4	Output 2 (push-pull)
b5	Brake -
b6	Brake +

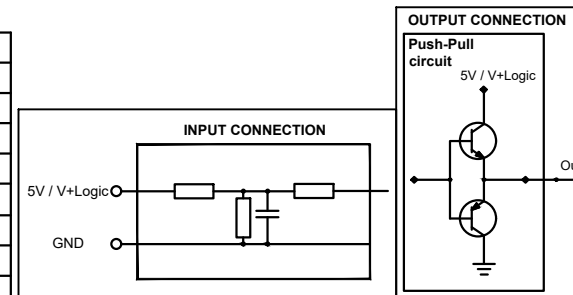
X5 USB	
Type C	

MOTOR SPECIFICATION

PD2-EB42xx-x-30-1		MB-E	MB-M	LB-E	LB-M	MD-E	MD-M	LD-E	LD-M	CD-E	CD-M
Motor Length "A"	mm	98	105	118	125	98	105	118	125	138	145
No. of Poles		6				6					
Rated Voltage	V DC	24				48					
Operating Voltage -5%/+20%	V DC	12 ... 48									
Resistance Line to Line (20°C) ±15%	Ω	1.05		0.54		4.3		2.2		1.5	
Inductance Line to Line (1kHz) ±20%	mH	0.75		0.45		2.65		1.7		1.25	
Current - Rated / Peak	A	3.1 / 9.3		4.8 / 14.4		1.5 / 4.6		2.4 / 7.2		3.66 / 11	
Torque - Rated / Peak	Nm	0.17/ 0.51		0.3 / 0.9		0.17 / 0.51		0.3 / 0.9		0.44 / 1.32	
Torque Constant	Nm/A	0.055		0.0625		0.11		0.125		0.12	
Power Rated	W	53		94		53		94		138	
Speed - No Load / Rated ±10%	rpm	3900 / 3000		3750 / 3000		3900 /3000		3750 /3000		3700 /3000	
Rotor Inertia	kg m²	6.0 x10 ⁻⁶		8.0 x10 ⁻⁶		6.0 x10 ⁻⁶		8.0 x10 ⁻⁶		16.7x10 ⁻⁶	
Multiturn Encoder Resolution	bit	-	16	-	16	-	16	-	16	-	16
Singleturn Encoder Resolution	bit	16	17	16	17	16	17	16	17	16	17
Weight ±10%	kg	0.58	0.6	0.78	0.8	0.58	0.6	0.78	0.8	0.98	1.0

GENERAL MOTOR SPECIFICATION

Interface	ETHERCAT
Ambient Temperature	°C -10 ... 40
Storage Temperature	°C -20 ... 85
Max. Ambient Humidity (non condensing)	% 85
Insulation Class	B
Insulation Resistance (@500VDC)	MΩ 100
Dielectric Strength (for 1 sec - coil to case)	V AC 600
Protection Class (except shaft outlet)	IP30



A-Shaft	Preload Spring	B-Shaft
Max. Axial Force Fa	N	10
Max. Radial Force Fr (a = 10 mm)	N	28
Axial Play	Fa = 4.0 N	mm 0.14
Radial Play	Fr = 4.0 N	mm 0.02

ISO 8015		ISO 1302		ISO 2768 cK		ISO 13715	
					Date	Name	
					Drawn	14.01.2026	Schneid_A
					Reviewed	03.03.2026	Reith_S
					Released	03.03.2026	Reith_S
01	change dimension	Reith_S	06.07.2026				
REV	Rev. Text	Name	Date				



PD2-EB42xx-x-30-1

20003392

State: Released

Rev: 01

CONFIDENTIAL

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