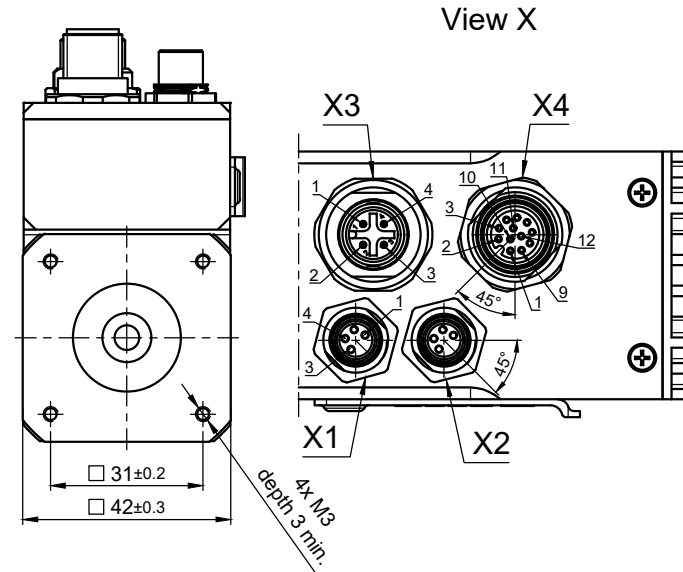
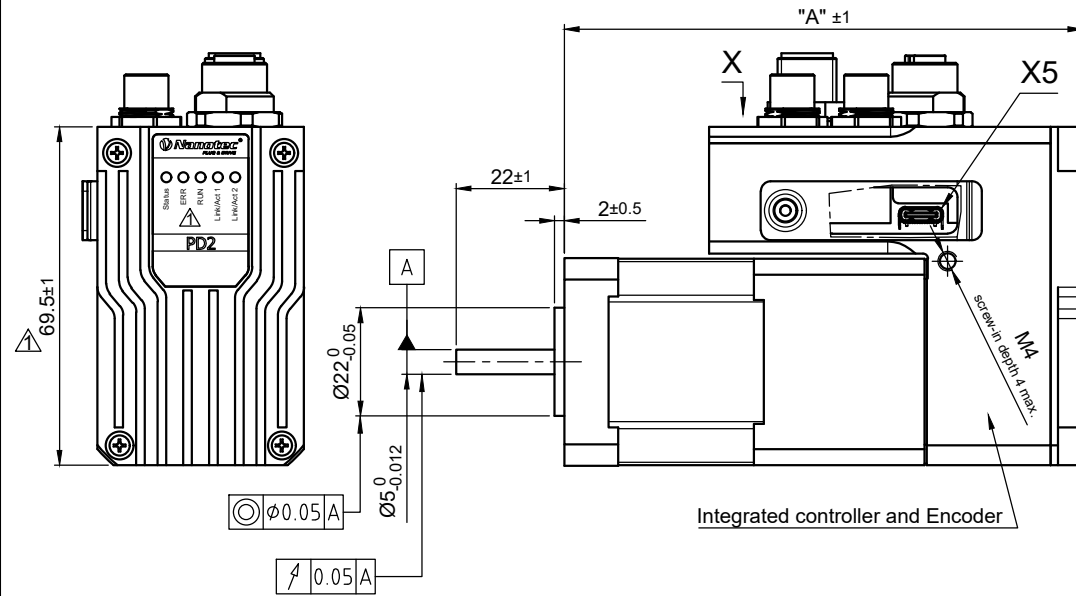


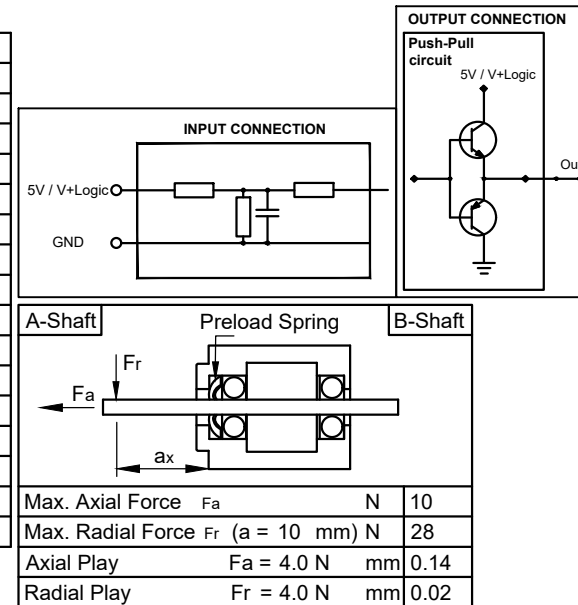


X1 EtherCAT IN	
M8/ 4-Pole / A-Coding / female	
cable shield on housing	
X2 EtherCAT OUT	
M8/ 4-Pole / A-Coding / female	
Pin No.	Function
1	TD+
2	RD+
3	TD-
4	RD-
cable shield on housing	
X3 POWER	
M12 / 4-Pole / A-Coding / male	
Pin No.	Function
1	V+
2	V+
3	GND
4	GND
cable shield on housing	
X4 IO	
M12 / 12-Pole / A-Coding / female	
Pin No.	Function
1	GND
2	Input 1
3	Input 2
4	Input 3
5	Input 4
6	Analog Input1
7	Analog Input2
8	Output 1 (push-pull)
9	Output 2 (push-pull)
10	V+Logic
11	Brake +
12	Brake -
cable shield on housing	
X5 USB	
Type C	

MOTOR SPECIFICATION											
PD2-EB42xx-x-65-1		MB-E	MB-M	LB-E	LB-M	MD-E	MD-M	LD-E	LD-M	CD-E	CD-M
Motor Length "A"	mm	98.5	105.8	118.5	125.8	98.5	105.8	118.5	125.8	138.5	145.8
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	0.63	0.65	0.83	0.85	0.63	0.65	0.83	0.85	1.1	1.1

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)	IP65

ISO 8015		ISO 1302		ISO 2768 cK		ISO 13715	
01	change dimension	Reith_S	06.07.2026				
REV	Rev. Text	Name	Date				



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State: Released				Rev: 01			
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