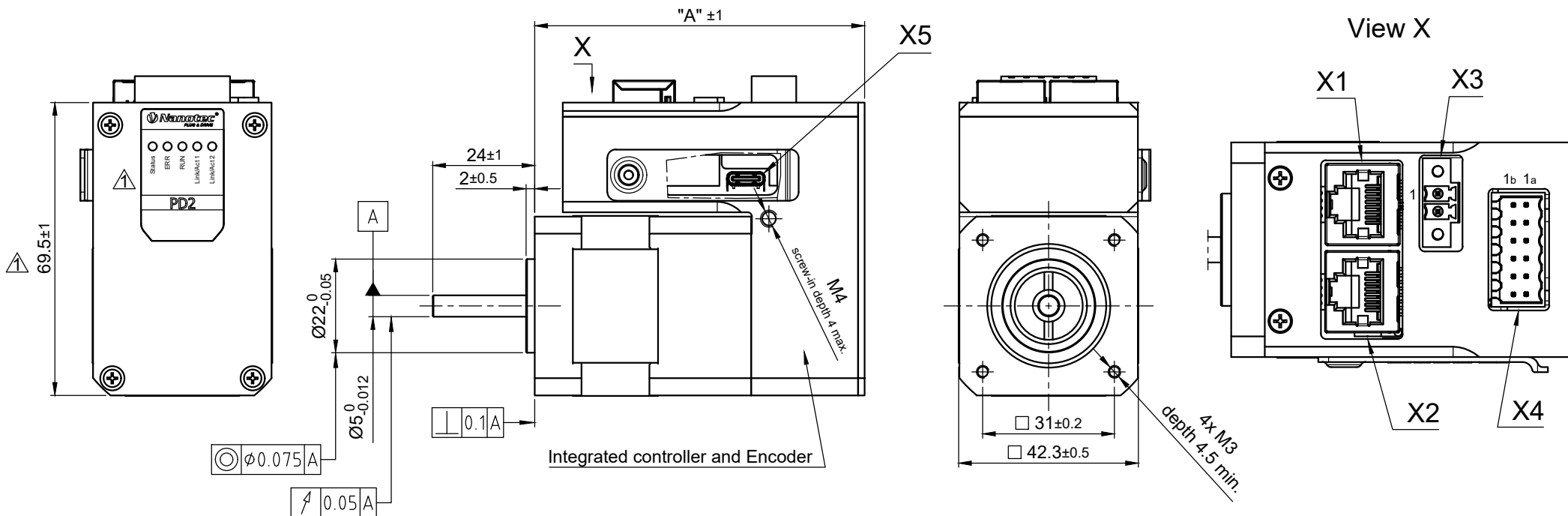
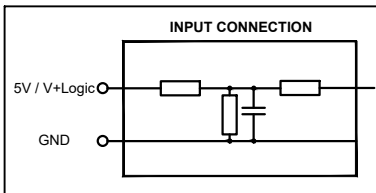


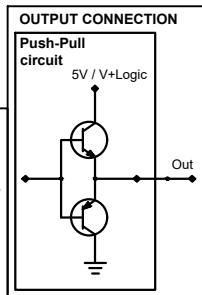


MOTOR SPECIFICATION						
PD2-E421x-x-30-1	M-E	M-M	L-E	L-M	D-E	D-M
Motor Length "A"	74.7	81.7	86.2	93.2	92.5	99.5
Operating Voltage -5%/+20%	12 ... 48					
Current per Winding	1.8	1.8	1.8	1.8	1.8	1.8
Resistance per Phase (20°C) ±15%	1.1	1.75	3.0	3.0	3.0	3.0
Inductance per Phase (1kHz) ±20%	1.85	3.3	7.0	7.0	7.0	7.0
Step Angle ±5%	1.8	1.8	1.8	1.8	1.8	1.8
Holding Torque	0.28	0.5	0.8	0.8	0.8	0.8
Rotor Inertia	5.7 x10 ⁻⁶	8.2 x10 ⁻⁶	10.2x10 ⁻⁶	10.2x10 ⁻⁶	10.2x10 ⁻⁶	10.2x10 ⁻⁶
Multiturn Encoder Resolution	16	16	16	16	16	16
Singleturn Encoder Resolution	16	17	16	17	16	17
Weight ±10%	0.39	0.41	0.49	0.51	0.65	0.67

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 min - coil to case)	V AC 500
Protection Class (except shaft outlet)	IP30



A-Shaft	Preload Spring	B-Shaft
Max. Axial Force F_a	N	10
Max. Radial Force F_r (a = 20 mm)	N	28
Axial Play $F_a = 4.0$ N	mm	0.08
Radial Play $F_r = 4.0$ N	mm	0.02



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	

ISO 8015		ISO 1302		ISO 2768 cK		ISO 13715	
						Date	Name
						Drawn	Schneid_A
						Reviewed	Reith_S
						Released	Reith_S
01	change dimension	Reith_S	07.07.2026				
REV	Rev. Text	Name	Date				



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State: Released	Rev: 01	CONFIDENTIAL	