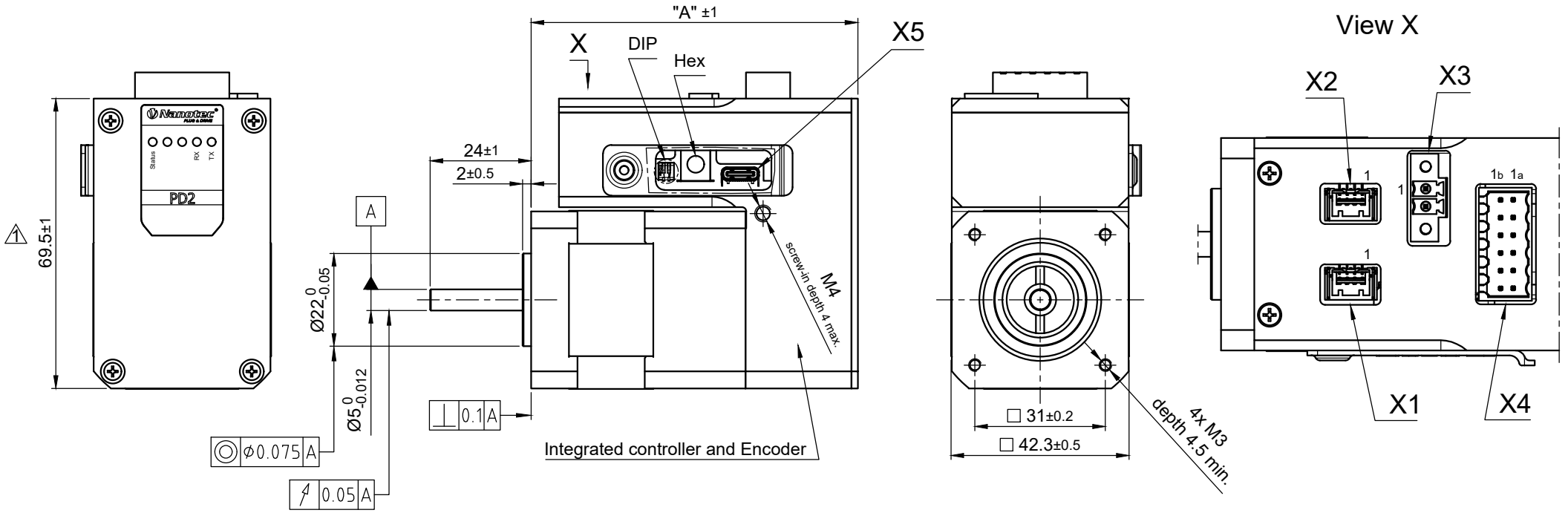
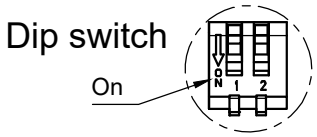
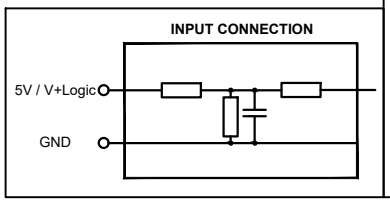
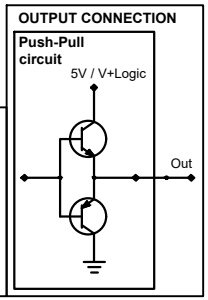
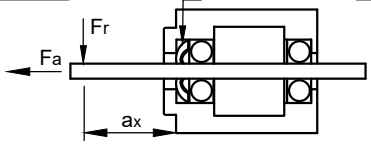










MOTOR SPECIFICATION							
PD2-E421x-x-30-5		M-E	M-M	L-E	L-M	D-E	D-M
Motor Length "**A**" ⚠1	mm	74.7	81.7	86.2	93.2	92.5	99.5
Operating Voltage -5%/+20%	V DC	⚠1 12 ... 48					
Current per Winding	A	1.8		1.8		1.8	
Resistance per Phase (20°C) ±15%	Ω	1.1		1.75		3.0	
Inductance per Phase (1kHz) ±20%	mH	1.85		3.3		7.0	
Step Angle ±5%	°	1.8		1.8		1.8	
Holding Torque	Nm	0.28		0.5		0.8	
Rotor Inertia	kg m²	5.7 x10^{-6}		8.2 x10^{-6}		10.2x10^{-6}	
Multiturn Encoder Resolution	bit	--	16	--	16	--	16
Singleturn Encoder Resolution	bit	16	17	16	17	16	17
Weight ±10%	kg	0.39	0.41	0.49	0.51	0.65	0.67

Max. Axial Force	Fa N	10
Max. Radial Force	Fr (a = 20 mm) N	28
Axial Play	Fa = 4.0 N mm	0.08
Radial Play	Fr = 4.0 N mm	0.02

GENERAL MOTOR SPECIFICATION		
Interface		MODBUS RTU (RS485)
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

X1	Modbus RTU IN
MOLEX 5025840470	
Pin No.	**Function**
1	n.c.
2	RS485+
3	RS485-
4	GND

X2	Modbus RTU OUT
MOLEX 5025840470	

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	07.01.2026	Schneid_A
				Reviewed	03.03.2026	Reith_S
				Released	03.03.2026	Reith_S
01	change dimension	Reith_S	07.07.2026			
REV	Rev. Text	Name	Date			

Nanotec PLUG & DRIVE

PD2-E421x-x-30-5

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State: Released | Rev: 01 | CONFIDENTIAL