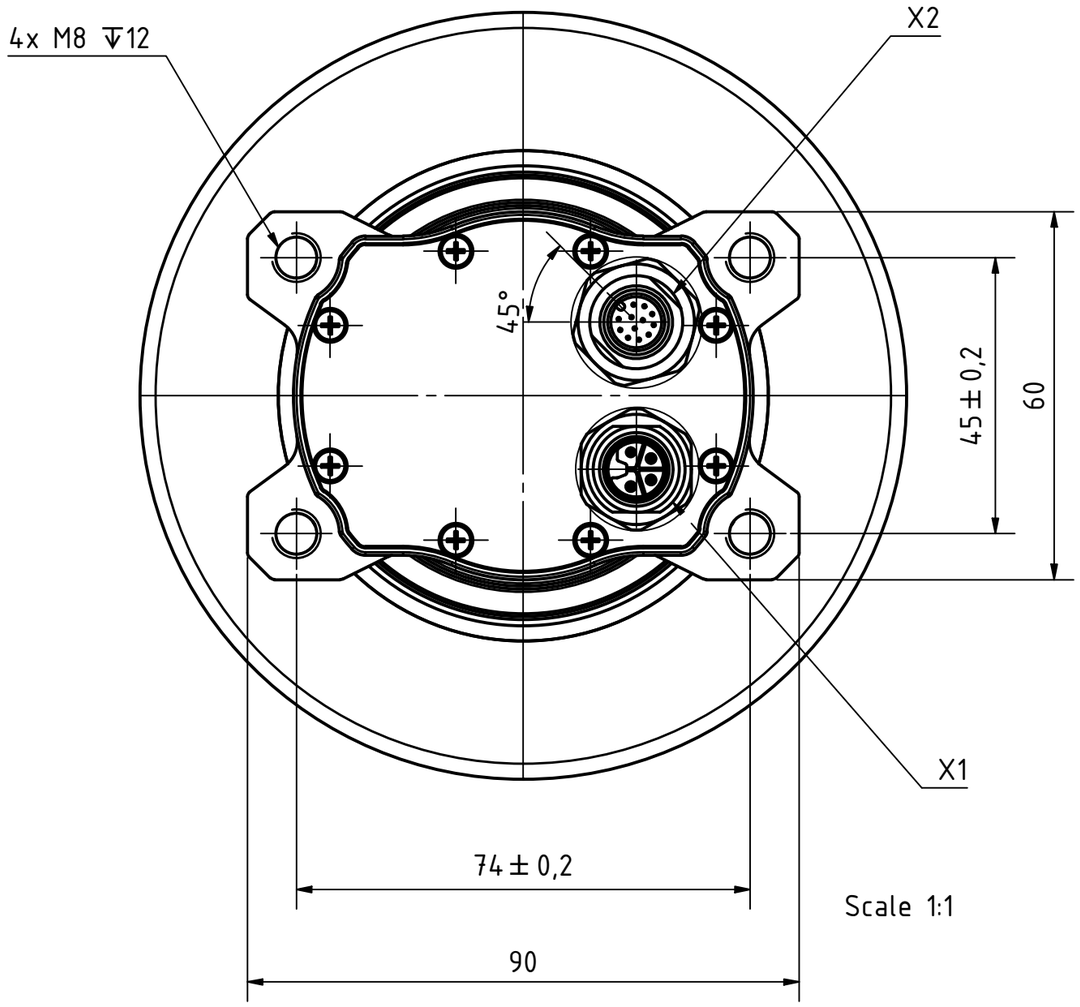
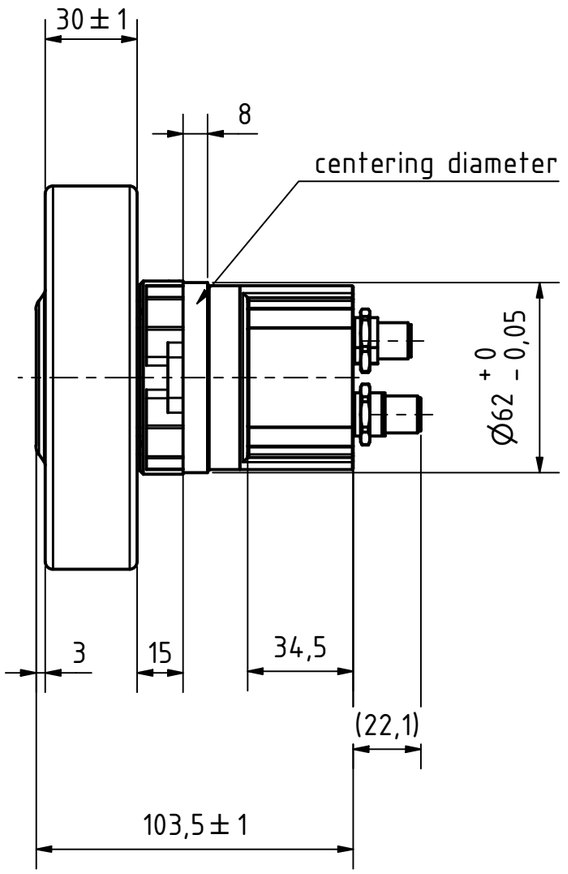
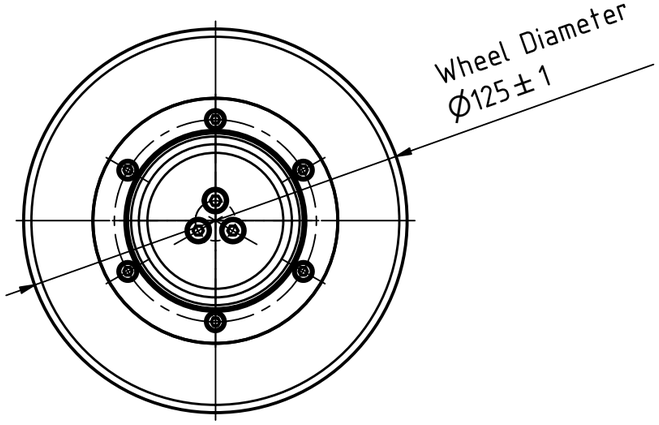


Scale 1:1

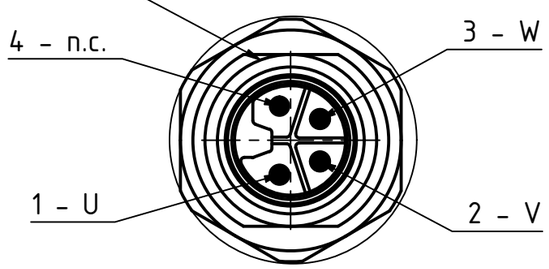




X1
M12/ 4-Pole
L-Coding male

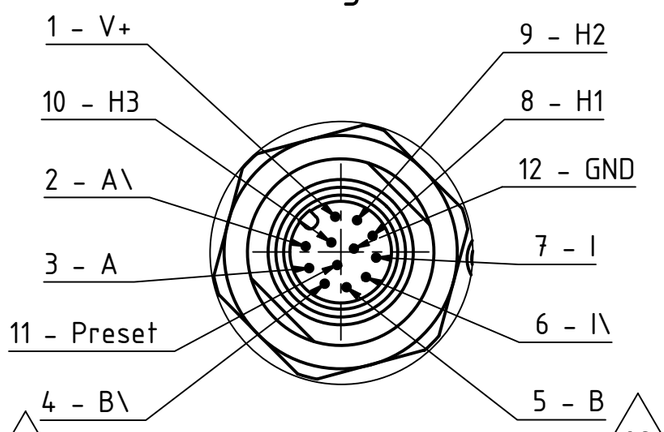
02

Motor versions may feature a 5-pin connector. The 5th pin is not used.
The function and position of other 4 pins are the same in all versions.



X2
M12/ 12-Pole
A-Coding male

02



Missing dimensions see in Step File

01

02

	WD12530-42xx-50-E3		12	15	21	26
System	Output Torque - Rated / Max.	Nm	4.88 / 14.64	6.41 / 19.23	8.56 / 25.68	10.63 / 26.28
	Speed Rated	m/s	1.9	1.5	1.1	0.9
	Load Capacity	kg	200			
	Inertia (on motor shaft)	kg m² x 10^{-6}	30.4	27.1	25.0	24.1
	Protection Class		IP54			
Motor	Rated Voltage	V DC	48			
	Current - Rated / Peak	A	5.9 / 17.7			5.9 / 14.6
	Speed Rated	rpm	3500			
	No. of Poles		20			
Mechanical	Gearbox Reduction Ratio		11.76 (576/49)	15.45 (12996/841)	20.64 (1197/58)	25.62 (333/13)
	Mechanical Efficiency	%	~83			
	Backlash Max.	°	<1			
	Wheel Material		Vulkollan 92 Shore A			
Encoder	Operating Voltage (±10%)	V DC	5			
	Resolution	cpr / ppr	4096 / 16384			
	Interface		incremental			
Envir	Ambient Temperature	°C	-15 ... +40			
	Ambient Humidity Max. (non condensing)	%	85			

ISO 8015	ISO 1302	ISO 2768 c	ISO 13715	Material:	Weight: 1.7 ±10% kg

					Date	Name
				Drawn	27.10.2023	Kaiming_C
				Reviewed	02.11.2023	Kolev._I
02	change as CR2025-0028	Kaiming_C	09.07.2026	Released	02.11.2023	Kolev._I
01	Drawing Standard changed	Kaiming_C	30.01.2026			
REV	Rev. Text	Name	Date			

Nanotec® PLUG & DRIVE

WD12530-42xx-50-E3

20002143 | Scale: 1 : 2 | A3 Page 1

State: Released | Rev: 02 | CONFIDENTIAL