

Plug & Drive® stepper motors

PD4-I5709 and PD4-I5918 series stepper motor with integrated controller

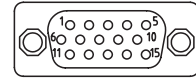


Option



Pin configuration D-SUB 15

Pin configuration D-SUB 15

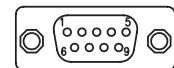


PIN	NAME
1	Input 5
2	Input 4
3	Input 3
4	Input 2
5	Input 1
6	+48 V
7	Input 6
8	Output 3
9	COM
10	GND
11	+48 V
12	N.C.
13	Output 2
14	Output 1
15	GND (OV)

PIN 6 and 11 or PIN 10 and 15 must be connected

Pin configuration D-SUB-9

Pin configuration D-SUB 9



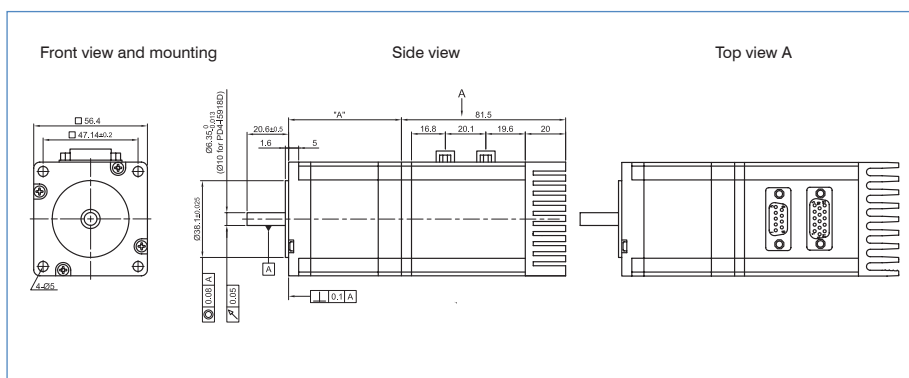
PIN	OBSERVATIONS
1	not assigned
2	RS-485 Rx +
3	+5V output
4	RS-485 Tx +
5	not assigned
6	not assigned
7	RS-485 Rx -
8	GND output (OV)
9	RS-485 Tx -

Technical data

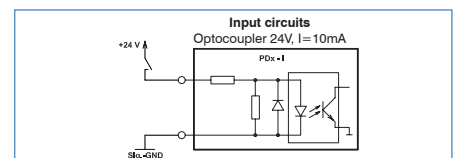
Operating voltage:	DC 24 V to 70 V
Phase current:	Rated current 4.2A; Adjustable to max. 6.3 A/phase
Interface:	RS485, (optional CAN)
Operating mode:	Position, speed, flag position, clock direction, analog, joystick, analog position
Step resolution:	1/1, 1/2, 1/4, 1/5, 1/8, 1/10, 1/32, adaptive (1/128)
Step frequency:	0 to 50kHz in the clock/direction mode, 0 to 25 kHz in all other modes
Inputs:	6 optocoupler inputs (24 V), or analog input
Outputs:	3 transistor outputs (open collector)
Position monitoring:	Automatic error correction up to 0.9°
Current reduction:	adjustable 0 - 100%
Protection circuit:	Overvoltage, undervoltage and heatsink temperature > 80 °C
Temperature range:	0 to + 40°C
Delivery condition:	D-SUB 15 for I/O and power, D-SUB 9 for RS-485

Note: An intermediate circuit capacitor of at least 4,700 μ F (Z-K4700/50) must be provided on the supply voltage.

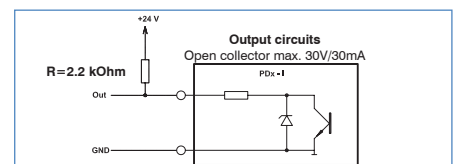
Outline drawing (mm)



Input circuits



Output circuits

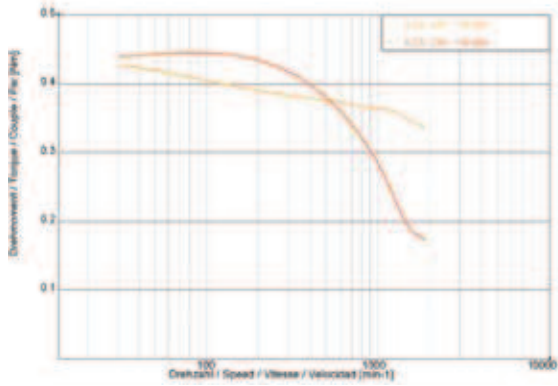


Available power sizes (others on request)

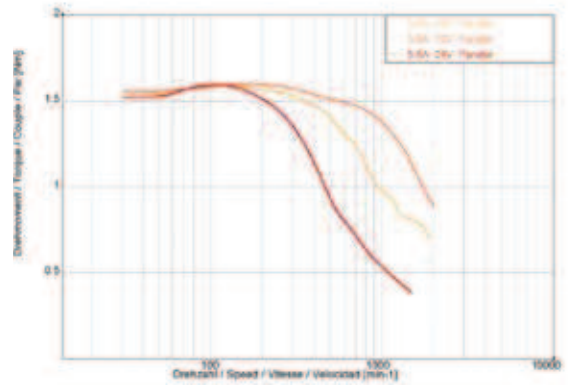
Type	Holding torque (duration) Ncm	Holding torque (max.) Ncm	Weight kg	"A" mm
PD4-I5709X3008-P	61	61	0.45	43.5
PD4-I5709L4008-P	140	190	1.00	77.5
PD4-I5918X3008-P	54	54	0.49	41.0
PD4-I5918M4508-P	69	105	0.71	54.0
PD4-I5918L3008-P	190	190	1.00	76.0
PD4-I5918L4508-P	125	190	1.00	76.0
PD4-I5918D4208-P	180	250	1.30	115.0

Speed-Torque curves

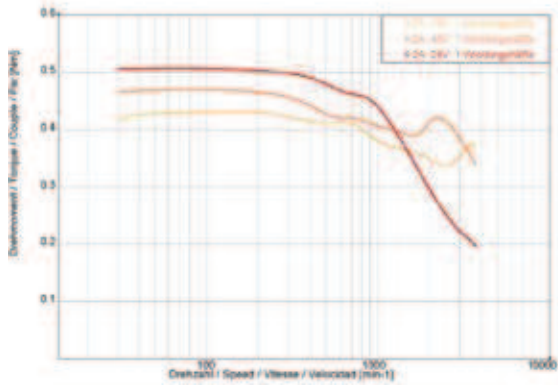
PD4-I5709X3008-P



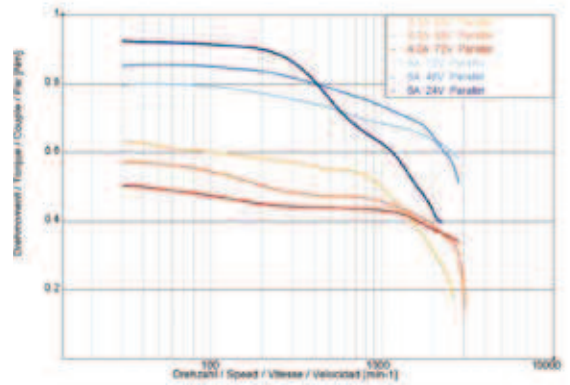
PD4-I5709L4008-P



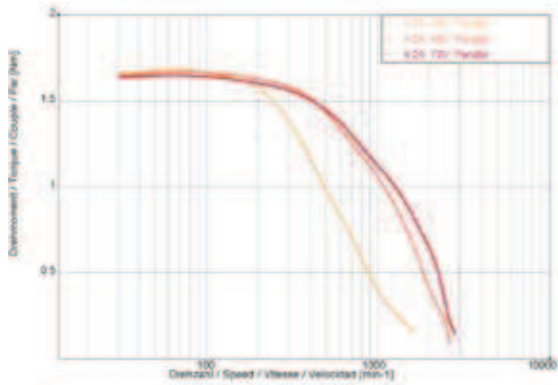
PD4-I5918X3008-P



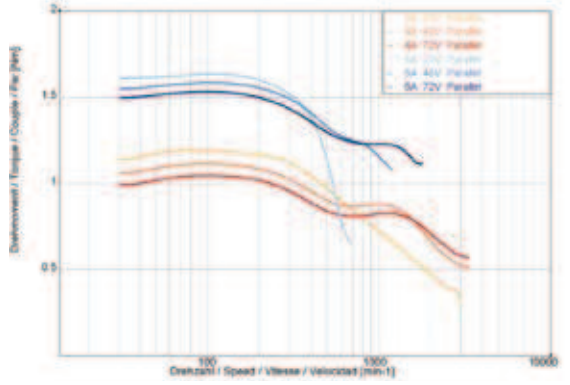
PD4-I5918M4508-P



PD4-I5918L3008-P



PD4-I5918L4508-P



PD4-I5918D4208-P

