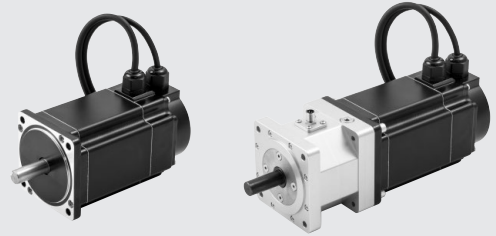


STEPPING MOTORS WITH IP65 ENCODER (WITH OR WITHOUT BRAKE)



For the ELEKTRO series actuators, Metal Work offers a range of stepping motors other than the standard one.

In case of interest, you can send a new specific request of actuator sizing that will be examined by our engineers given that such parameters as performance, features and dimensions may vary.

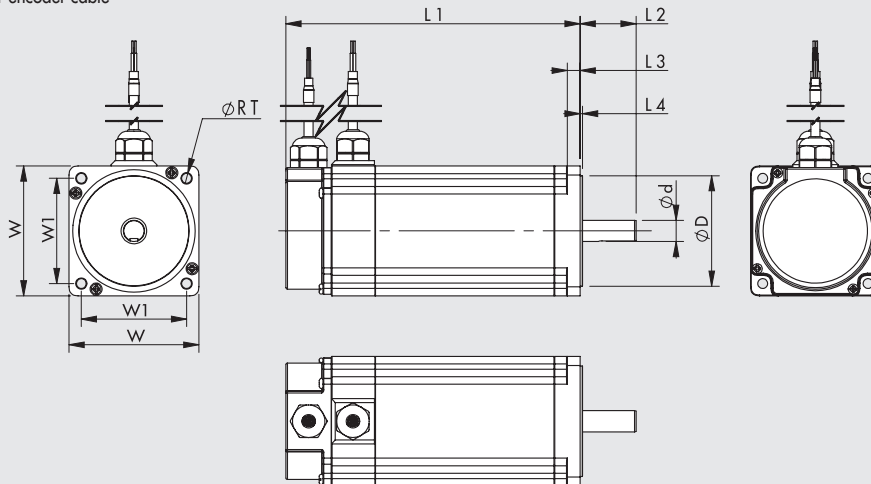


TECHNICAL DATA		MOTOR 37M8230002	MOTOR 37M8470002	MOTOR 37M8470003	MOTOR 37M3230002	MOTOR 37M3470002	MOTOR 37M3470003
Motor type		STEPPING + ENCODER			STEPPING with BRAKE + ENCODER		
Nominal torque	Nm	2.3	7.4	9.2	2.3	7.4	9.2
Coupling flange		NEMA 24	NEMA 34	NEMA 34	NEMA 24	NEMA 34	NEMA 34
Base step angle		1.8°±0.09°			1.8°±0.09°		
Bipolar current	A	5	6	6	5	6	6
Resistance	Ω	0.45	0.54	0.72	0.45	0.54	0.72
Inductance	mH	1.8	5	7.3	1.8	5	7.3
Bipolar holding torque	Nm	3	8.5	12	3	8.5	12
Rotor inertia	kgmm ²	69	360	540	69	360	540
Mass	kg	1.4	3.6	5	1.4	3.6	5
Degree of protection		IP65			IP65		
Motor encoder		Incremental			Incremental		
Type of output circuit		Differential			Differential		
Output signal channels		2 channels (NO zero mark)			2 channels (NO zero mark)		
Resolution	positions per rev	1000			1000		
Encoder supply voltage	VDC	5			5		
BRAKE							
Braking torque	Nm				2	9	9
Supply voltage	VDC				24	24	24
Power consumption	W				11	18	18
Connecting time	ms				6	7	7
Delay time	ms				2	2	2
Connecting time	ms				25	40	40

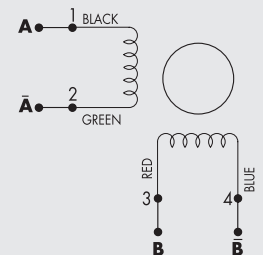
DIMENSIONS OF VERSION WITHOUT BRAKE

Motors are supplied with 1-metre long ready-wired cables, with free wires to the drive.

1 = access for power cable and brake
2 = access for encoder cable



WIRING DIAGRAM



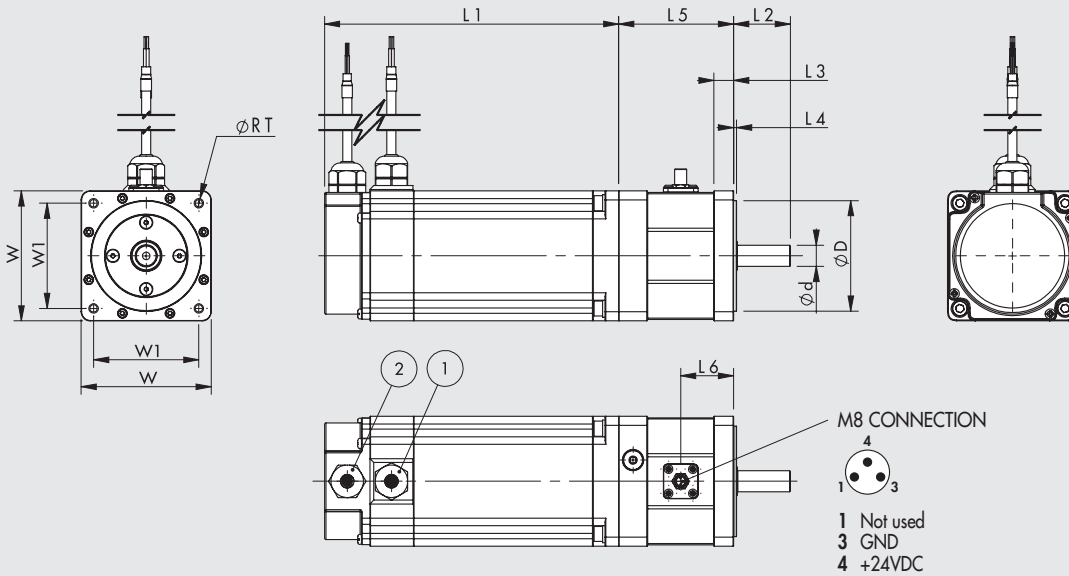
Encoder	Color	Function
1	Black	GND
2	Red	VCC
3	Blue/White	EA-
4	Blue	EA+
5	Orange/White	EB-
6	Orange	EB+

Motor type	Motor code	Motor torque [Nm]	Coupling flange	ød 0/-0.013	øD ±0.05	L1 ±1	L2 ±1	L3	L4 ±0.2	RT	W	W1
STEPPING + ENCODER	37M8230002	2.3	NEMA 24	10	36	107.2	21	5	1.6	5	60	50
	37M8470002	7.4	NEMA 34	14	73	156.5	37	9	1.6	6.5	85.85	69.58
	37M8470003	9.2	NEMA 34	14	73	194.5	37	9	1.6	6.5	85.85	69.58

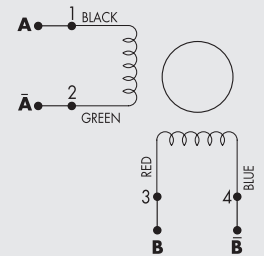
Please contact our sales offices for further information and quotation.

DIMENSION OF VERSION WITH BRAKE

Motors are supplied with 1-metre long ready-wired cables, with free wires to the drive.
 1 = access for power cable and brake
 2 = access for encoder cable



WIRING DIAGRAM



Encoder	Color	Function
1	Black	GND
2	Red	VCC
3	Blue/White	EA-
4	Blue	EA+
5	Orange/White	EB-
6	Orange	EB+

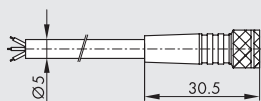
Motor type	Motor code	Motor torque [Nm]	Braking torque [Nm]	ød 0/-0.013	øD ±0.25	L1 ±1	L2 ±1	L3	L4 ±0.2	L5	L6	RT	W	W1
STEPPING + ENCODER	37M3230002	2.3	2	8	38.1	107.2	21	15	1.6	65.8	32.9	4.25	60	47.16
+ ENCODER + BRAKE	37M3470002	7.4	9	14	73	156.5	37.5	13	1.6	76	35	6.25	86	69.58
+ BRAKE	37M3470003	9.2	9	14	73	194.5	37.5	13	1.6	76	35	6.25	86	69.58

STANDARD AND ALTERNATIVE SYNOPTIC

Motor type	Standard code	Alternative (with encoder)	Motor type	Standard code	Alternative	Motor type	Standard code	Alternative
STEPPING	37M1470000	37M8470003	STEPPING	37M8220000	37M8230002	STEPPING	37M3220000	37M3230002
	37M1220000	37M8230002	+ ENCODER	37M8230000	37M8230002	+ ENCODER	37M3230000	37M3230002
				37M8470000	37M8470003	+ BRAKE	37M3430000	37M3470002
							37M3460000	37M3470002
							37M3450000	37M3470002
							37M3470000	37M3470003

ACCESSORIES FOR BRAKE

CABLE WITH STRAIGHT CONNECTOR

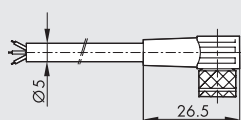


Pin	Cable color
1	Brown
3	Blue
4	Black

Code	Description
02400A0100	M8 female 3 PIN HIGH FLEX CL6 connector with cable L = 1 m
02400A0250	M8 female 3 PIN HIGH FLEX CL6 connector with cable L = 2.5 m
02400A0500	M8 female 3 PIN HIGH FLEX CL6 connector with cable L = 5 m
02400A1000	M8 female 3 PIN HIGH FLEX CL6 connector with cable L = 10 m

Note: Very flexible cables, class 6 according to IEC 60228

CABLE WITH 90° CONNECTOR



Pin	Cable color
1	Brown
3	Blue
4	Black

Code	Description
02400B0100	M8 female 3 PIN 90° HIGH FLEX CL6 connector with cable L = 1 m
02400B0250	M8 female 3 PIN 90° HIGH FLEX CL6 connector with cable L = 2.5 m
02400B0500	M8 female 3 PIN 90° HIGH FLEX CL6 connector with cable L = 5 m
02400B1000	M8 female 3 PIN 90° HIGH FLEX CL6 connector with cable L = 10 m

Note: Very flexible cables, class 6 according to IEC 60228

Please contact our sales offices for further information and quotation.