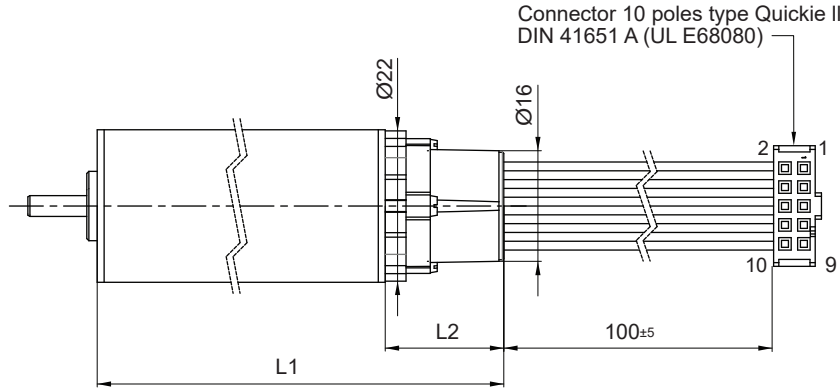


M-Sense22

Magnetic Encoder (incremental/absolute output)



Dimensions in mm

Pin allocation		
	M-Sense22i	M-Sense22a
1 (red)	Do not connect	VCC
2	VCC	GND
3	GND	SLO
4	Do not connect	MA
5	Channel A/	SLI
6	Channel A	Do not connect
7	Channel B/	Not connected
8	Channel B	Not connected
9	Channel Z/	Not connected
10	Channel Z/	Not connected

General Data			M-Sense22i Incremental	M-Sense22a Absolute	Unit
1	Number of Lines Available*		1 to 1024	1 to 1024	LPR
2	Supply Voltage	Min/Max	4.5 / 5.5	4.5 / 5.5	Volt
3	Supply Current	Max	23	23	mA
4	Rise/Fall Time (CL=50pF)		60 / 60	60 / 60	ns
5	Output Frequency		16	-	MHz
6	Maximum Communication Speed		-	10	Mbit/s
7	Electrical Phase Shift	Binary Resolutions up to 256 LPR	90 ±45	-	°e
		Binary Resolutions up to 1024 LPR	90 ±75	-	°e
	Non-Binary Resolutions	up to 250 LPR	90 ±50	-	°e
		up to 1000 LPR	90 -75/+145	-	°e
8	Duty Cycle	Binary Resolutions up to 256 LPR	50 ±15	-	%
		Binary Resolutions up to 1024 LPR	50 ±25	-	%
	Non-Binary Resolutions	up to 250 LPR	50 ±25	-	%
		up to 1000 LPR	50 ±35	-	%
9	INL (Integral Non-Linearity)		1.5	1.5	°m
10	Maximum Speed		120'000	120'000	rpm
11	Line Driver Parameters*		4 mA / 10 MHz (default)	-	-
12	Interface type		-	Absolute BiSS-C or SSI	-
13	Cable Type		AWG28 Ribbon cable pitch 1.27mm	AWG28 Ribbon cable pitch 1.27mm	-
14	Operating Temperature Range		-40 to +125 (-40 to 257)	-40 to +125 (-40 to 257)	°C (°F)
15	Weight		6 (0.21)	6 (0.21)	g (oz)

Notes:

All parameters are given at 22°C - room temperature. Most of those parameters will vary w/ temperature
 Supply Voltage for measurement is 5Vdc / - Phase Shift & Duty cycle are given for 5'000 rpm
 *Factory configured

Available on Motor Types	22ECP35 Ultra EC	22ECP45 Ultra EC	22ECP60 Ultra EC	22ECS45 Ultra EC	22ECS60 Ultra EC	22ECT35 Ultra EC	22ECT48 Ultra EC	22ECT60 Ultra EC
L1 Length with motor mm (in)	52.1 (2.05)	62.1 (2.44)	77.1 (3.04)	62.1 (2.44)	77.1 (3.04)	52.1 (2.05)	65.1 (2.56)	77.1 (3.04)
L2 Length without motor mm (in)	17.1 (0.67)	17.1 (0.67)	17.1 (0.67)	17.1 (0.67)	17.1 (0.67)	17.1 (0.67)	17.1 (0.67)	17.1 (0.67)

Available on Motor Types	22ECT82 Ultra EC	30ECT64 Ultra EC	30ECT90 Ultra EC	35ECS60 Ultra EC	35ECS80 Ultra EC
L1 Length with motor mm (in)	99.1 (3.90)	78.1 (3.07)	104.1 (4.10)	74.1 (2.92)	94.1 (3.70)
L2 Length without motor mm (in)	17.1 (0.67)	14.1 (0.56)	14.1 (0.56)	14.1 (0.56)	14.1 (0.56)

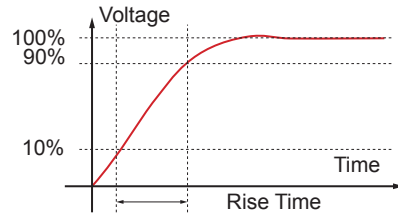
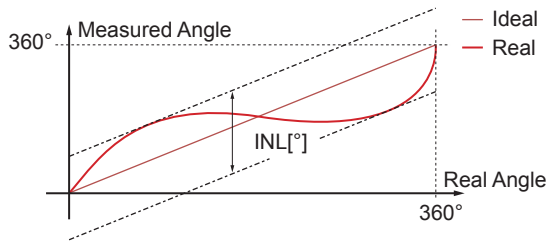
Encoder performance option available on request (contact us):

Optional Line driver type: 4mA-10MHz (default) / 60mA-10MHz / 60mA-300kHz / 20mA-3MHz. 4mA-10MHz is recommended for use as single ended outputs. Other options are dedicated for use of differential outputs.

Other parameters can be customized: Index synchronization mode, minimal edge distance, direction of rotation, low current mode and others.

M-Sense22

Magnetic Encoder (incremental/absolute output)



For incremental version:

