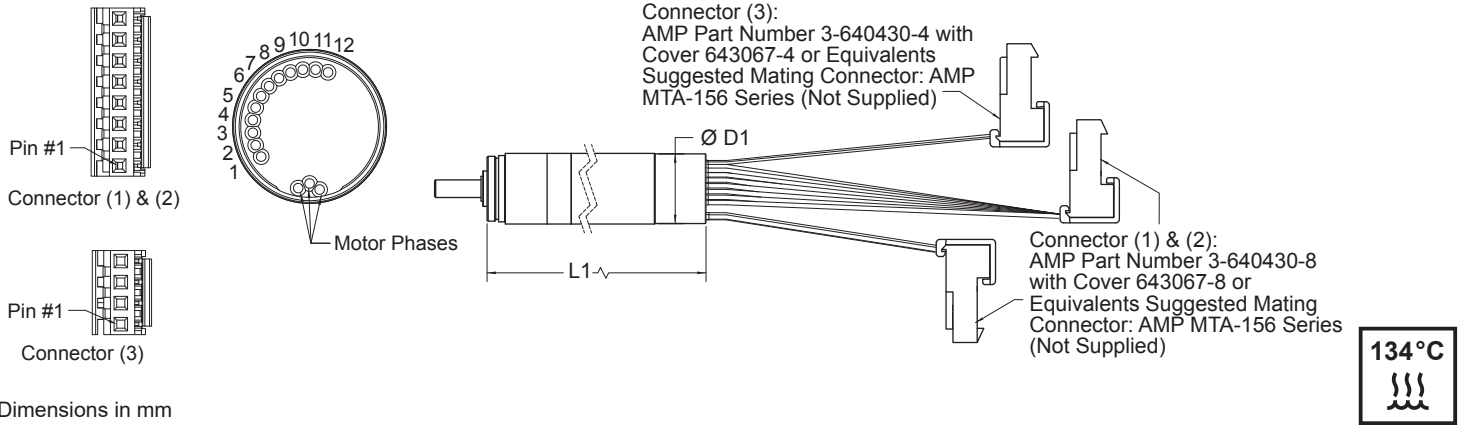


M-Sense12A

Autoclavable Magnetic Encoder (incremental/absolute output)



General Data			M-Sense12Ai Incremental	M-Sense12Aa 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	30	30	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		8 in (203 mm) min long, AWG26 Stranded, Extruded PTFE Insulation	8 in (203 mm) min long, AWG26 Stranded, Extruded PTFE Insulation	
14	Operating Temperature Range		-40 to +125 (-40 to 257)	-40 to +125 (-40 to 257)	°C (°F)
15	Weight		8 (0.28)	8 (0.28)	g (oz)
16	Autoclaves Cycles		2000	2000	Cycles

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	B0512A4002
L1 Length with motor mm (in)	64.54 (2.54)
D1 Diameter mm (in)	12.67 (0.5)

Encoder performance option available on request (contact us):

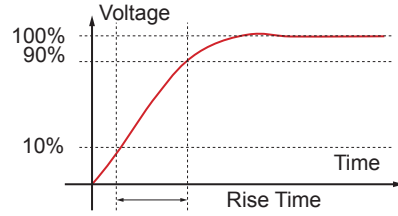
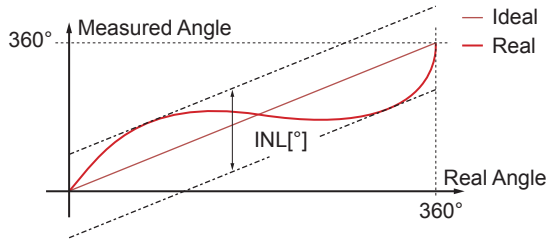
Optional Line driver type: 4mA-10MHz (default) / 60mA-10MHz / 60mA-300kHz / 20mA-3MHz. 4mA-10MHz is recommended for use as single ended outputs. Other options are dedicated for use of differential outputs.

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

CONNECTOR WIRING (1)			
Motor Pinout	Pos. #	Color	Function
N/A	1	Blue	Phase A
N/A	2	Brown	Phase B
N/A	3	Violet	Phase C
CONNECTOR WIRING (2)			
1	1	White	NZ
2	2	White	Z
3	3	White	NB
4	4	White	B
5	5	White	NA
6	6	White	A
7	7	White	GND
8	8	White	VCC
CONNECTOR WIRING (3)			
9	1	White	SLO
10	2	White	MA
11	3	White	SLI
12	4	White	VZAP

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Autoclavable Magnetic Encoder (incremental/absolute output)



For incremental version:

