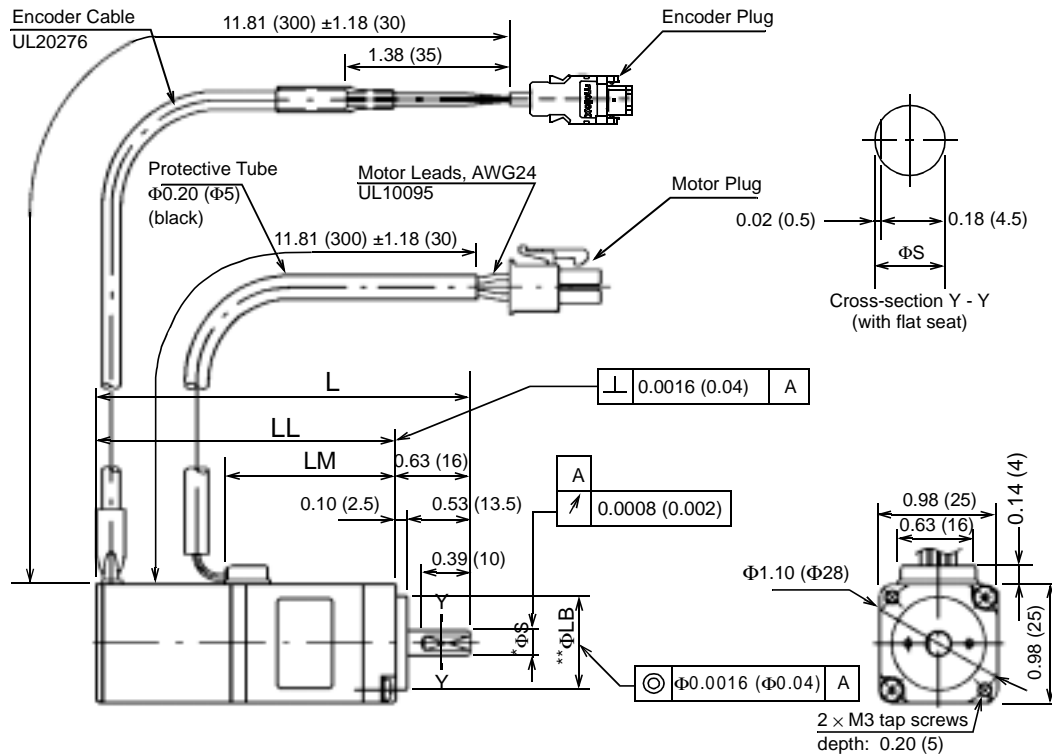


Dimensions in inches (mm)

(1) 2048PPR Incremental Encoder, without Brake

•10W (0.013hp), 20W (0.027hp)



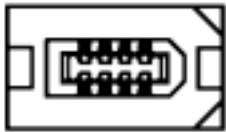
Type SGMM-		L	LL	LM	* ΦS	ΦLB	Output W (hp)	Approx Mass Oz (g)	Allowable Radial Load lb (N)	Allowable Thrust Load lb (N)
A1S312	Without Flat Seat	2.76	2.13	1.04	0.197	0.787	0.0133	4.23	7.7	3.3
A1S313	With Flat Seat	(70)	(54)	(26.5)						
A2S312	Without Flat Seat	3.15	2.52	1.44	(5)	(20)	0.0266	5.64	9.9	
A2S313	With Flat Seat	(80)	(64)	(36.5)						

Specified Tolerances		
	Diameter	Tolerance
* ΦS	0.197in	-0.0001 -0.0005
	5.000mm	+0.000 -0.008
** ΦLB	0.787in	+0.0004 -0.0001
	20mm	+0.000 -0.013

Note: The detector uses a 2048PPR incremental encoder.
The allowable load is applied to the shaft end.

Connector Specifications

Encoder Plug Plug 55101-0800 (Molex Japan)
1 7



Connected to:
Socket: 54280-0600

2 8

Motor Plug

Receptacle: 5557-04R (Molex)
Terminal: 5556T



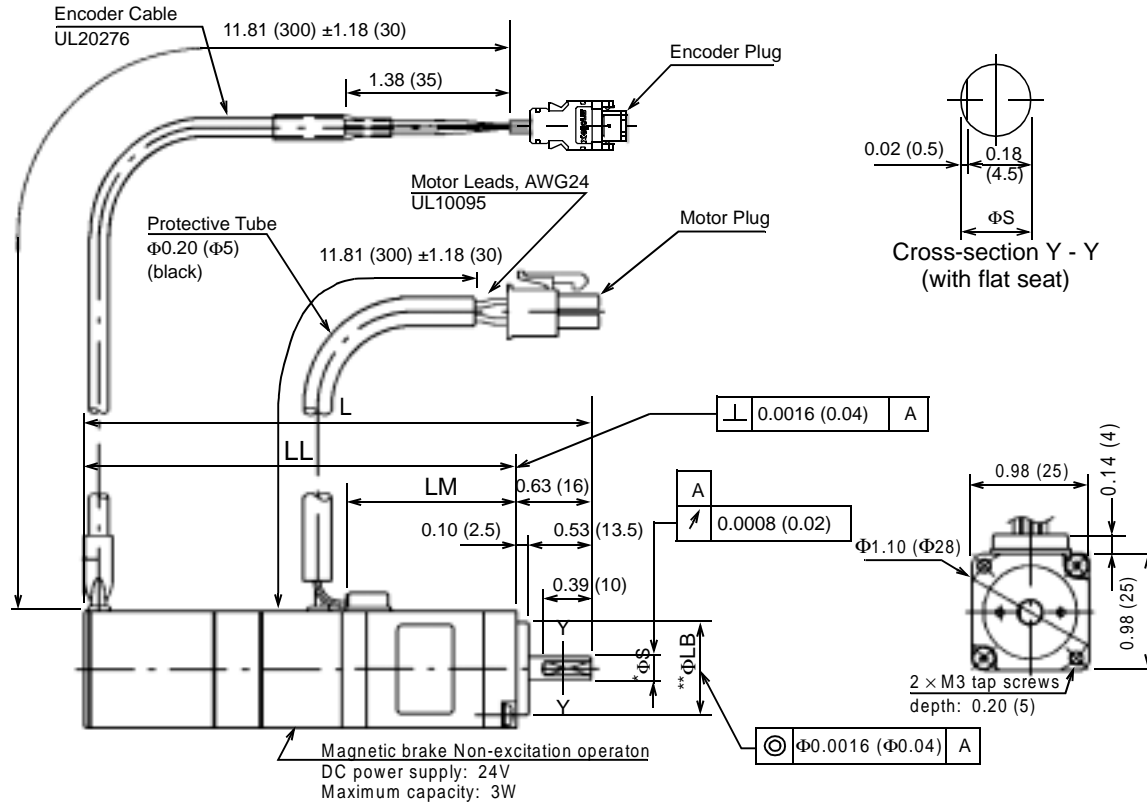
Connected to:
Socket: 5559-04P
Terminal: 5558T

Incremental Encoder Connection		
1	Channel A Output	Blue
2	Channel \bar{A} Output	Blue/Black
3	Channel B Output	Yellow
4	Channel \bar{B} Output	Yellow/Black
5	Channel C Output	Green
6	Channel \bar{C} Output	Green/Black
7	0V (Power Supply)	Grey
8	+5V (Power Supply)	Red
9	FG (Frame Ground)	Orange

Motor Connection		
1	Phase U	Red
2	Phase V	White
3	Phase W	Blue
4	FG (Frame Ground)	Green

(2) 2048PPR Incremental Encoder, with Brake

•10W (0.013hp), 20W (0.027hp)



Type SGMM-	QK	L	LL	LM	* ΦS	ΦLB	Output W (hp)	Approx Mass Oz (g)	Allowable Radial Load lb (N)	Allowable Thrust Load lb (N)
A1S312C	Without Flat Seat	3.72	3.09	1.04	0.197	0.787	0.0133 (10)	7.23 (205)	7.7 (34.3)	3.3 (14.7)
A1S313C	With Flat Seat	(94.5)	(78.5)	(26.5)						
A2S312C	Without Flat Seat	4.27	3.64	1.44	(5)	(20)	0.0266 (20)	9.17 (260)	9.9 (44.1)	
A2S313C	With Flat Seat	(108.5)	(92.5)	(36.5)						

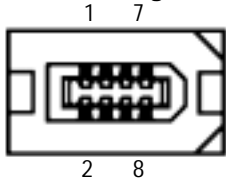
Specified Tolerances		
	Diameter	Tolerance
* ΦS	0.197in	-0.0001 -0.0005
	5.000mm	+0.000 -0.008
** ΦLB	0.787in	+0.0004 -0.0001
	20mm	+0.000 -0.013

Note: The detector uses a 2048PPR incremental encoder.

The allowable load is applied to the shaft end.

Connector Specifications

Encoder Plug



Plug 55101-0800 (Molex Japan)

Connected to:
Socket: 54280-0800

Motor Plug



Receptacle: 5557-06R (Molex)
Terminal: 5556T

Connected to:
Socket: 5559-06P
Terminal: 5558T

Incremental Encoder Connection		
1	Channel A Output	Blue
2	Channel \bar{A} Output	Blue/Black
3	Channel B Output	Yellow
4	Channel \bar{B} Output	Yellow/Black
5	Channel C Output	Green
6	Channel \bar{C} Output	Green/Black
7	0V (Power Supply)	Grey
8	+5V (Power Supply)	Red
9	FG (Frame Ground)	Orange

Motor Connection		
1	Phase U	Red
2	Phase V	White
3	Phase W	Blue
4	FG (Frame Ground)	Green
5	Brake Terminal	Black
6	Brake Terminal	Black