DWSR100 - Converts Encoder to Linear Position Sensor

Fits virtually any encoder

Range: 0-60000mm

with or without encoder

DWSR100

Industrial Grade · Encoder



Our unique cable-drum encoder module fits virtually any encoder, giving you a cost-effective advance position measurement solution. This modular approach provides ample flexibility. To order, simply select the measuring range, cable tension and encoder mounting ? that's it! We even supply all the necessary encoder mounting hardware and accessories. If you cannot find a particular encoder mounting method, or need us to supply the encoder, please call us.

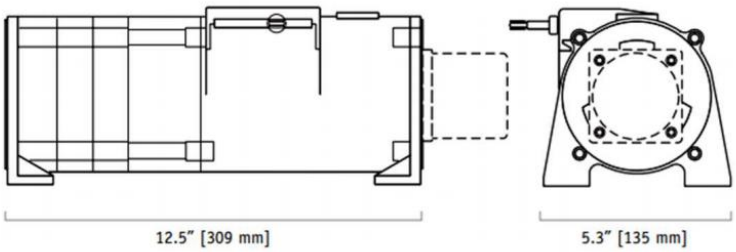
SPECIFICATIONS

SUMMARY

Full Stroke Range 0-60000mm
Conversion Ratio ..... see ordering information
Accuracy ..... 0.02% f.s. or 0.04% of reading ±1/2 pulse, whichever is less
High Accuracy ..... not less than 0.03 mm
Repeatability ..... ±0.02% of reading ±1/2 pulse
Measuring Cable ..... see ordering information
Enclosure ..... painted aluminum or stainless steel
Encoder Coupling..... aluminum flexible coupling
Max. Allowable Sensor Torque..... 11521.25gf·mm
Max. Cable Accel. ..... see ordering information
Max. Velocity ..... see ordering information
Weight, Aluminum (Stainless Steel) Enclosure
6356 mm (12712 mm) max.

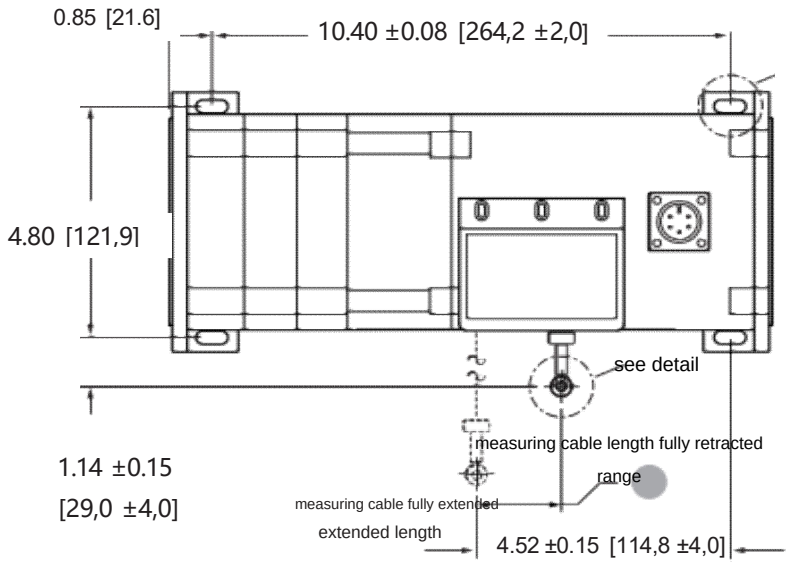
ENVIRONMENTAL

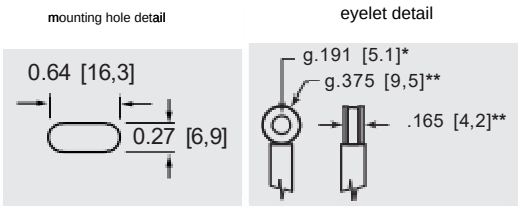
Operating Temperature ..... -40° to 200°F (-40° to 90°C)

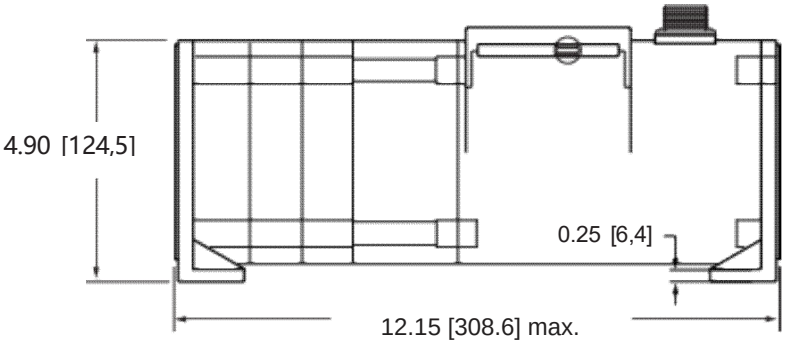


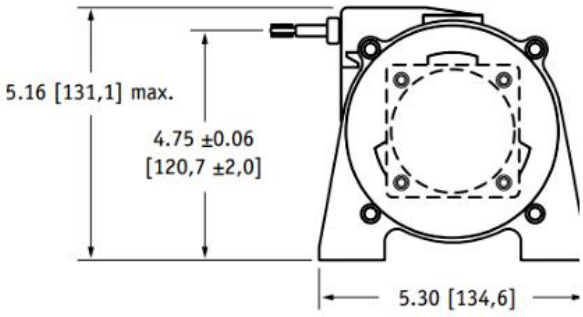
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Outline Drawing:









Dimensions are in inches [mm]. Tolerances are 0.03 in. [0.5 mm] unless otherwise noted.

* tolerance = +.005 ·.001 [+.13 ·.03]

** tolerance = +.005 ·.005 [+.13 ·.13]

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ORDERING INFORMATION

Model Number:

DWSR100 - R range ·A enclosure material ·B cable material C cable exit ·D mounting

Sample Model Number:

DWSR100 - 25 - 3 - 1 - 1 - F66
Ⓡ Ⓐ Ⓑ Ⓒ Ⓓ

Ⓡ 25 = 25 m stroke
Ⓐ 3 = stainless steel enclosure
Ⓑ 1 = nylon-coated stainless steel cable
Ⓒ 1 = front cable exit
Ⓓ F66 = flange mounting

Range:

R order code:	2	5	10	12	14	20	25	30	38	43	60
Range Stroke:	2m	5m	10m	12m	14m	20m	25m	30m	38m	43m	60m
Cable Tension (±35%) (oz.):			36			27	20	19	18	17	10

Conversion Ratio (Nylon-Coated Stainless)

Cable Diameter:	0.8636mm	0.4826mm	0.3556mm	0.254mm
Aluminum Housing, 1 Turn = 321.89 ±0.41 mm		320.70±0.41mm	320.37±0.41mm	312.27±0.41mm
Stainless Steel Housing, 1 Turn = 319.51 ±0.56 mm		318.31±0.56mm	317.98±0.56mm	309.88±0.56mm

Conversion Ratio (Stainless Steel)

Cable Diameter:	0.7874mm	0.4572mm	0.3556mm	0.254mm
Aluminum Housing, 1 Turn = 321.61 ±0.41 mm		320.62±0.41mm	320.37±0.41mm	312.27±0.41mm
Stainless Steel Housing, 1 Turn = 319.28 ±0.56 mm		318.24±0.56mm	317.98±0.56mm	309.88±0.56mm

Enclosure Material:

A order code:	3
Enclosure Body:	303 stainless steel
Acceleration:	1g
Vel. Range:	1524mm/s

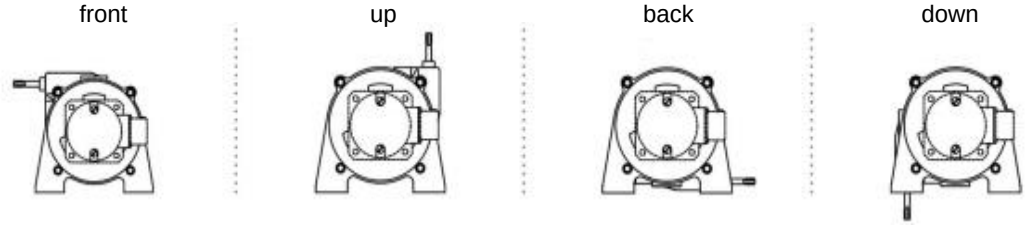
Cable Material:

B order code:	1	2
	Nylon-Coated Stainless Steel*	Stainless Steel*
Application:	indoor	outdoor, debris, high temperature

Range:	20	25	30	38	43	60
*Nylon-Coated Stainless Steel: 0.8636 mm	0.4826mm	0.4826mm	0.4826mm	0.3556mm	0.254mm	
Stainless Steel: 0.7874 mm	0.4572mm	0.4572mm	0.4572mm	0.381mm	0.254mm	

Cable Exit:

C order code:	1	2	3	4
	front	up	back	down



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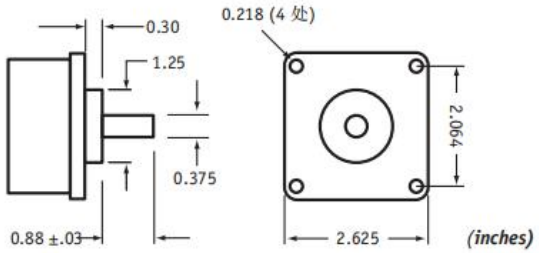
Mounting:

D order code:	F01	F02	S01	S02	S04
	63.5 mm flange mounting	50.8 mm flange mounting	Face Mounting	Face Mounting	Face Mounting
	Shaft Dia. 76.2/203.2 mm	Shaft Dia. 76.2/203.2 mm	Shaft Dia. 6 mm	Shaft Dia. 10 mm	Shaft Dia. 10 mm
			M4 mounting screws	M4 mounting screws	M3 mounting screws

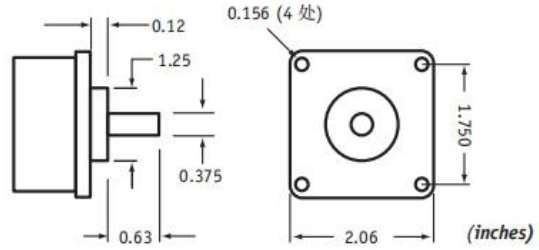
D order code: F66

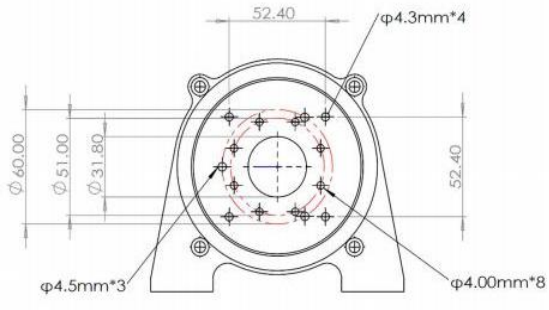
Universal Flange Mounting

F01 - 63.5mm方形法兰安装(76.2/203.2mm轴径)

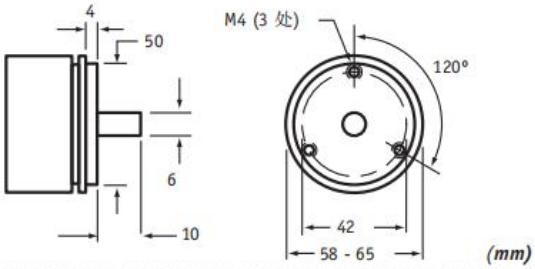


F02 - 50.8mm方形法兰安装 (76.2/203.2mm 轴径)

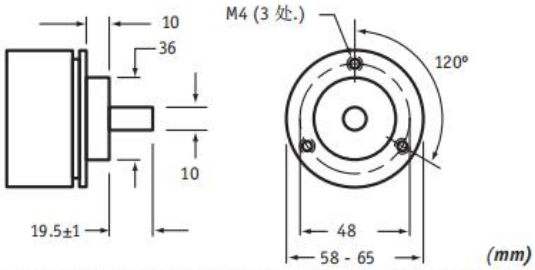




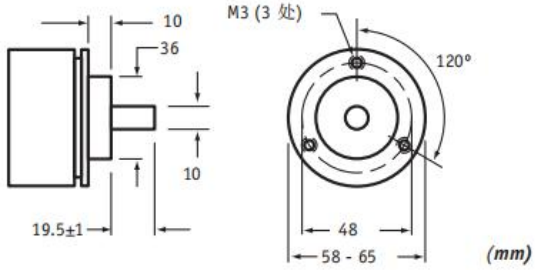
S01 - 法兰安装(6mm轴径/M4 螺纹螺丝)



S02 - 法兰安装 (10mm 轴径/M4 螺纹螺丝)



S04 - 法兰安装 (10mm 轴径/M3 螺纹螺丝)



*NOTE: for other flange mounting requirements, contact our sales engineer; custom versions available on request.