

HXLR SERIES

LINEAR TO ROTARY CONVERSION MODULE



The UniMeasure HXLR module provides an easy method of converting linear motion to a digital output from nearly any industrial rotary encoder whether incremental or absolute. The module includes adapter plate, shaft coupling and o-ring seal to facilitate attachment of the encoder. With a NEMA 4 rated encoder attached to the environmentally sealed module, the completed assembly is also NEMA 4 capable.

Of note are the number of revolutions for the measurement range and the linear travel per revolution as shown in Table 15 on the following page. With this information, one can easily determine the resolution in counts per inch for a particular encoder. Prior to shipment, each Linear to Rotary Module is calibrated to determine the precise linear travel per revolution.

SPECIFICATIONS

General

Construction (Ranges to 80")	Anodized Aluminum Mounting Base, Stainless Steel and Anodized Aluminum Housing
Construction (Ranges 100" and more)	Stainless Steel Mounting Base, High Impact, Corrosion Resistant Thermoplastic Housings
Included Parts	Shaft Adapter, O-ring Seal, Encoder Specific Adapter Plate
Wire Rope (Ranges to 80")	Ø.018 Nylon Jacketed Stainless Steel
Wire Rope (Ranges 100" and more)	Ø.024 Stainless Steel
Available Ranges	See Table 15
Travel per Shaft Revolution	See Table 15
Wire Rope Tension	See Table 15
Wire Rope Diameter	See Table 15
Weight	See Table 15

Environmental

Case Sealing	NEMA 4
Operating Temperature	-50°C to 95°C

Model Number Configuration

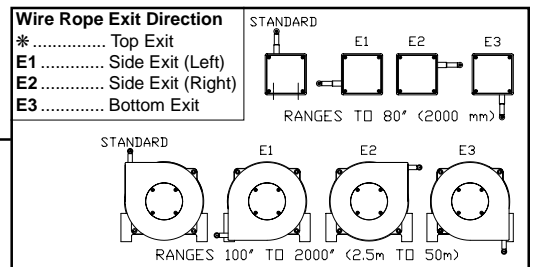
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Range
Select Measurement Range from Table 15, Supplemental Data.

Wire Rope
* Stainless Steel
NJC Ø.018 (0,45 mm) Nylon Jacketed Stainless Steel
Ranges to 80" (2m) only.
NJC037 Ø.037 (0,94 mm) Nylon Jacketed Stainless Steel
Ranges 100" (2.5m) to 500" (12.7m) only.

Wire Rope Tension
* Standard
004 Reduced (Ranges to 50" only)

Encoder Adapter
A BEI H25D Flange Mount
B BEI H25E Servo Mount
C CCC HMR90-64T
D Stegmann AG-626-XSR
& Siemens 6FX-2001
E P+F TRD-G Servo Mount
F Balluff BDG-61 Internal Mount
G P+F TRD-J Servo Mount



NOTE
1) *—Asterisk items are standard configuration. No option designator is required.
2) Shaded options available at additional cost.
3) See HX Series Supplemental Data for options.

Example
HXLR-150-E3-C

Table 15

Measurement Range Designator	Standard Measurement Ranges		Number of Shaft Revolutions for Range (Approx)	Nominal Travel per Shaft Revolution		Wire Rope Tension (Nominal)		Wire Rope Diameter		Weight		DIMENSIONAL INFORMATION
	(in)	(mm)		(in)	(mm)	(oz)	(N)	(in)	(mm)	(lb)	(Kg)	
2	2	50	.94	2.11	53.7	34	9.4	.016	.41	2	0.9	See Figure 1
3	3	75	.97	3.09	78.4	24	6.7	.016	.41	2	0.9	
4	4	100	.97	4.11	104.4	24	6.7	.016	.41	2	0.9	
5	5	125	.98	5.11	129.9	19	5.3	.016	.41	2	0.9	
6	6	150	.99	6.07	154.2	24	6.7	.016	.41	2	0.9	
10	10	250	4.70	2.11	53.7	34	9.4	.016	.41	2	0.9	
15	15	390	4.85	3.09	78.4	24	6.7	.016	.41	2	0.9	
20	20	500	4.85	4.11	104.4	24	6.7	.016	.41	2	0.9	
25	25	640	4.90	5.11	129.9	19	5.3	.016	.41	2	0.9	
30	30	750	9.70	3.09	78.4	24	6.7	.016	.41	2	0.9	
40	40	1000	9.70	4.11	104.4	24	6.7	.016	.41	2	0.9	
50	50	1250	9.80	5.11	129.9	19	5.3	.016	.41	2	0.9	
60	60	1500	9.90	6.07	154.2	24	6.7	.016	.41	2	0.9	
80	80	2.0m	9.93	8.05	204.5	21	5.8	.016	.41	2	0.9	
100	100	2.5m	6.63	15.07	382.9	36	10.0	.024	0.6	6.8	3.1	See Figure 2
120	120	3.0m	7.96	15.07	382.9	36	10.0	.024	0.6	6.8	3.1	
150	150	3.8m	9.95	15.07	382.9	36	10.0	.024	0.6	6.8	3.1	
200	200	5.0m	13.27	15.07	382.9	36	10.0	.024	0.6	6.8	3.1	
250	250	6.3m	16.58	15.07	382.9	36	10.0	.024	0.6	6.8	3.1	
300	300	7.5m	19.90	15.07	382.9	36	10.0	.024	0.6	6.8	3.1	
350	350	8.8m	23.21	15.07	382.9	36	10.0	.024	0.6	6.8	3.1	
400	400	10.0m	26.53	15.07	382.9	36	10.0	.024	0.6	6.8	3.1	

DIMENSIONAL INFORMATION

RANGES TO 80"

Range	"A"	
	inch	mm
2", 10"	1.21	30.8
3", 15", 30"	1.37	34.7
4", 20", 40"	1.53	38.8
5", 25", 50"	1.69	42.9
60"	1.84	46.8
80"	2.16	54.8

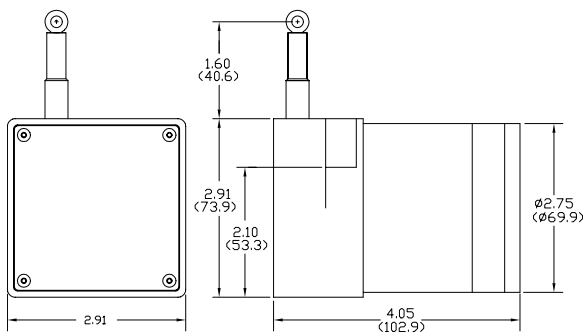
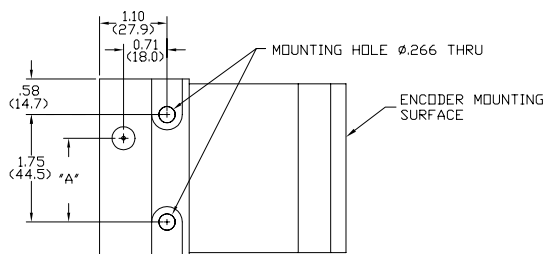


Fig. 1

RANGES 100" to 400"

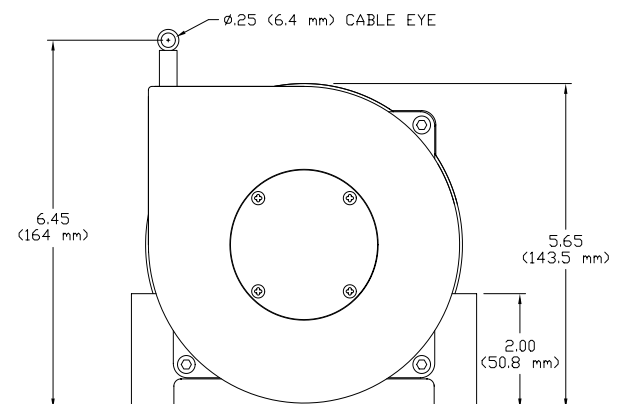
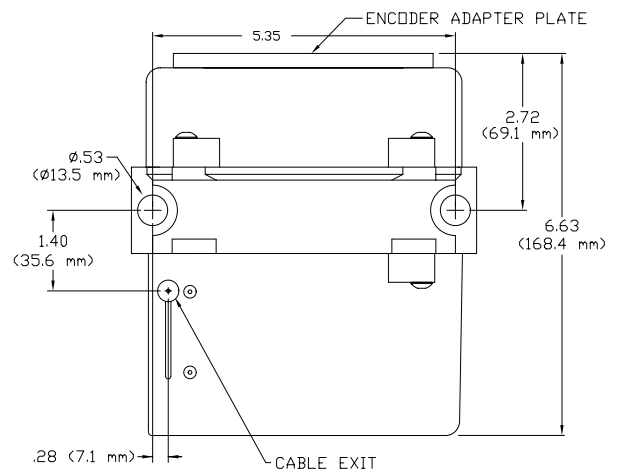


Fig. 2