

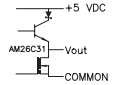

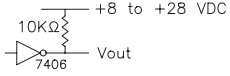
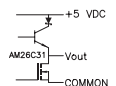

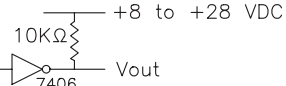
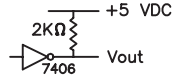
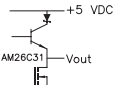
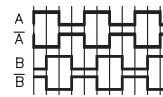
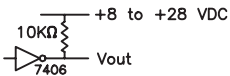
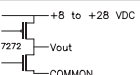
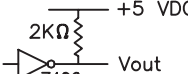
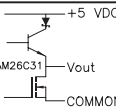
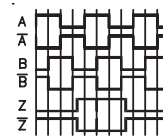
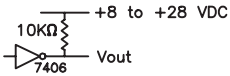
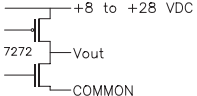
HX-EP SERIES

WIRING AND CIRCUIT DIAGRAM

INSTALLATION GUIDE

HX-EP- 0 1 2 3 4 5 7 8 9

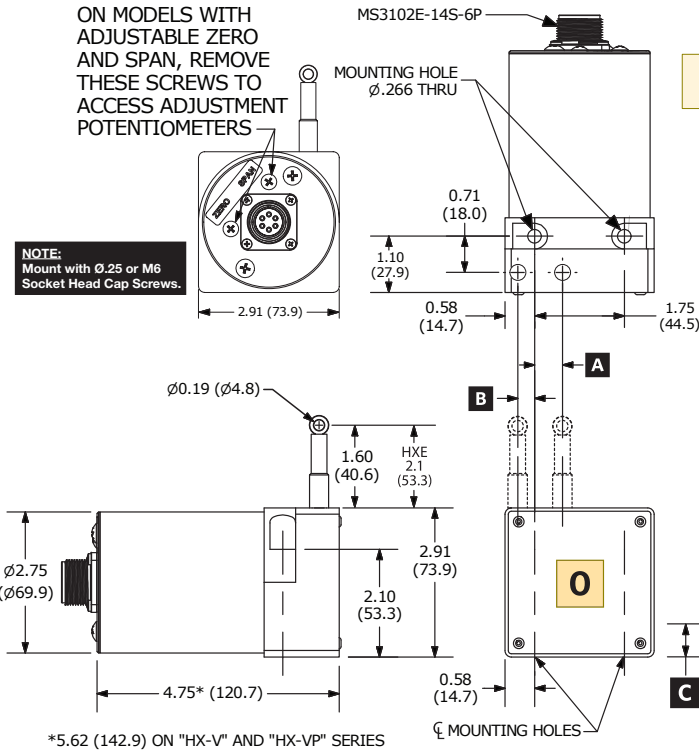
DIGITAL OUTPUT DESIGNATOR ↗

OPTION	DIGITAL OUTPUT, 2 CHANNEL	OUTPUT STAGE	WAVEFORM	CONNECTOR WIRING																
10 Standard EP EPM, HX-EP	5 VDC Current Sinking 5 VDC TTL compatible open collector current sinking output. Two channels with optional index channel available.			<table border="1"> <tr><td>A</td><td>+Vin</td></tr> <tr><td>B</td><td>COMMON</td></tr> <tr><td>C</td><td>CHANNEL A</td></tr> <tr><td>D</td><td>CHANNEL B</td></tr> <tr><td>E</td><td>N.C.</td></tr> <tr><td>F</td><td>N.C.</td></tr> </table>	A	+Vin	B	COMMON	C	CHANNEL A	D	CHANNEL B	E	N.C.	F	N.C.				
A	+Vin																			
B	COMMON																			
C	CHANNEL A																			
D	CHANNEL B																			
E	N.C.																			
F	N.C.																			
50 Old Designator H1	8 to 28 VDC Current Sinking Current sinking output with 10KΩ internal pullup resistors 8 to 28 VDC input voltage.																			
OPTION	DIGITAL OUTPUT, 2 CH W/ INDEX	OUTPUT STAGE	WAVEFORM	CONNECTOR WIRING																
11 Standard EP EPM, HX-EP With INDEX	5 VDC Current Sinking 5 VDC TTL compatible open collector current sinking output. Two channels with optional index channel available. 11 is same as Option 10 but adds the INDEX (Z) channel.			<table border="1"> <tr><td>A</td><td>+Vin</td></tr> <tr><td>B</td><td>COMMON</td></tr> <tr><td>C</td><td>CHANNEL A</td></tr> <tr><td>D</td><td>CHANNEL B</td></tr> <tr><td>E</td><td>CHANNEL Z</td></tr> <tr><td>F</td><td></td></tr> </table>	A	+Vin	B	COMMON	C	CHANNEL A	D	CHANNEL B	E	CHANNEL Z	F					
A	+Vin																			
B	COMMON																			
C	CHANNEL A																			
D	CHANNEL B																			
E	CHANNEL Z																			
F																				
51 Old Designator H11	8 to 28 VDC Current Sinking Current sinking output with 10KΩ internal pullup resistors 8 to 28 VDC input voltage. 51 is same as Option 50 but adds the INDEX (Z) channel.																			
OPTION	DIGITAL OUTPUT / LINE DRIVE	OUTPUT STAGE	WAVEFORM	CONNECTOR WIRING																
20 Old Designator H2	5 VDC TTL Current Sinking Differential Line Drive Current sinking line drive output with 2KΩ internal pullup resistors. 5VDC input voltage.																			
30 Old Designator H5	5 VDC Push-Pull Differential Line Drive Push-Pull, current sourcing and current sinking output. 5 VDC input voltage. Output is compliant with requirements of TIA/EIA-422-B.			<table border="1"> <tr><td>A</td><td>+Vin</td></tr> <tr><td>B</td><td>COMMON</td></tr> <tr><td>C</td><td>CHANNEL A</td></tr> <tr><td>D</td><td>CHANNEL \bar{A}</td></tr> <tr><td>E</td><td>CHANNEL B</td></tr> <tr><td>F</td><td>CHANNEL \bar{B}</td></tr> </table>	A	+Vin	B	COMMON	C	CHANNEL A	D	CHANNEL \bar{A}	E	CHANNEL B	F	CHANNEL \bar{B}				
A	+Vin																			
B	COMMON																			
C	CHANNEL A																			
D	CHANNEL \bar{A}																			
E	CHANNEL B																			
F	CHANNEL \bar{B}																			
60 Old Designator H3	8 to 28 VDC Current Sinking Current sinking output with 10KΩ Pullup resistors, 8 to 28 VDC input voltage.																			
70 Old Designator H4	8 to 28 VDC Push-Pull Differential Line Drive Push-Pull, current sourcing and current sinking output. 8 to 28 VDC input voltage.																			
OPTION	DIGITAL OUTPUT, LINE DRIVE W/ INDEX	OUTPUT STAGE	WAVEFORM	CONNECTOR WIRING																
21 Old Designator H21	5 VDC TTL Current Sinking Differential Line Drive Current sinking line drive output with 2KΩ internal pullup resistors. 5VDC input voltage. 21 is same as Option 20 but adds the INDEX (Z) channel.																			
31 Old Designator H51	5 VDC Push-Pull Differential Line Drive Push-Pull, current sourcing and current sinking output. 5 VDC input voltage. Output is compliant with requirements of TIA/EIA-422-B. 31 is same as Option 30 but adds the INDEX (Z) channel.			<table border="1"> <tr><td>A</td><td>+Vin</td></tr> <tr><td>B</td><td>COMMON</td></tr> <tr><td>C</td><td>CHANNEL A</td></tr> <tr><td>D</td><td>CHANNEL \bar{A}</td></tr> <tr><td>E</td><td>CHANNEL B</td></tr> <tr><td>F</td><td>CHANNEL \bar{B}</td></tr> <tr><td>G</td><td>CHANNEL Z</td></tr> <tr><td>H</td><td>CHANNEL Z</td></tr> </table>	A	+Vin	B	COMMON	C	CHANNEL A	D	CHANNEL \bar{A}	E	CHANNEL B	F	CHANNEL \bar{B}	G	CHANNEL Z	H	CHANNEL Z
A	+Vin																			
B	COMMON																			
C	CHANNEL A																			
D	CHANNEL \bar{A}																			
E	CHANNEL B																			
F	CHANNEL \bar{B}																			
G	CHANNEL Z																			
H	CHANNEL Z																			
61 Old Designator H31	8 to 28 VDC Current Sinking Current sinking output with 10KΩ Pullup resistors, 8 to 28 VDC input voltage. 61 is same as Option 60 but adds the INDEX (Z) channel.																			
71 Old Designator H41	8 to 28 VDC Push-Pull Differential Line Drive Push-Pull, current sourcing and current sinking output. 8 to 28 VDC input voltage. 71 is same as Option 70 but adds the INDEX (Z) channel.																			

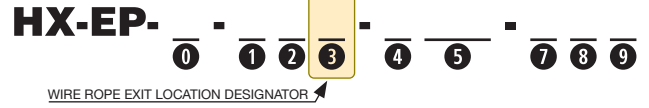
HX RANGES TO 80"

ON MODELS WITH ADJUSTABLE ZERO AND SPAN, REMOVE THESE SCREWS TO ACCESS ADJUSTMENT POTENTIOMETERS

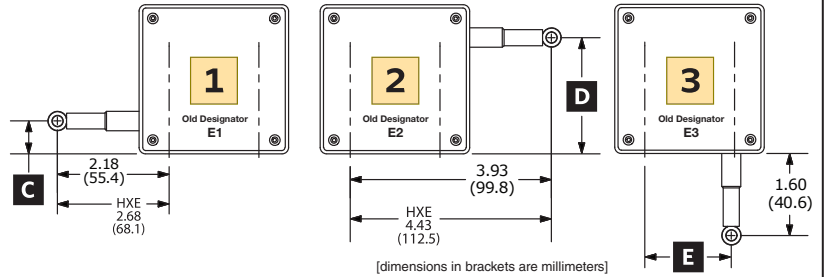
NOTE:
Mount with Ø.25 or M6 Socket Head Cap Screws.



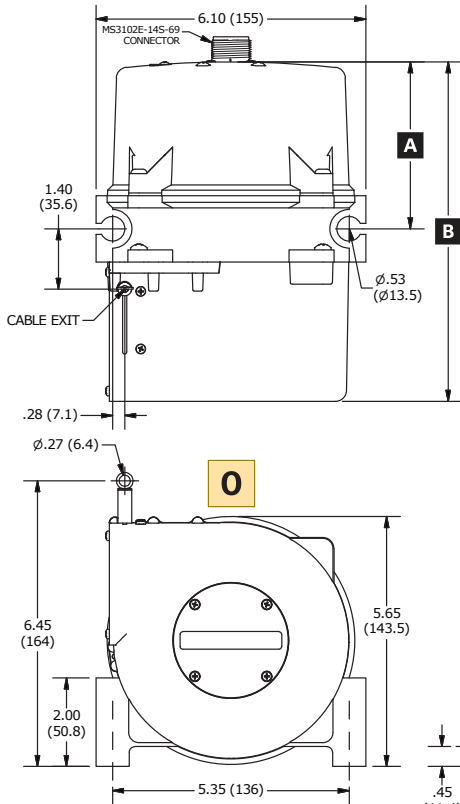
WIRE ROPE EXIT LOCATIONS



RANGE	A	B	C	D	E
2", 10"	0.54 (13.7)	—	1.12 (28.4)	1.79 (45.5)	1.21 (30.7)
3", 15", 30"	0.38 (9.6)	—	0.96(24.4)	1.95 (49.5)	1.37 (34.8)
4", 20", 40"	0.22 (5.6)	—	0.80 (20.3)	2.11 (53.6)	1.53 (38.9)
5", 25", 50"	0.06 (1.5)	—	0.64 (16.3)	2.27 (57.7)	1.69 (42.9)
60"	—	0.09 (2.3)	0.49 (12.4)	2.42 (61.5)	1.84 (46.7)
80"	—	0.33 (8.4)	0.25 (6.4)	2.66 (67.6)	2.08 (52.8)



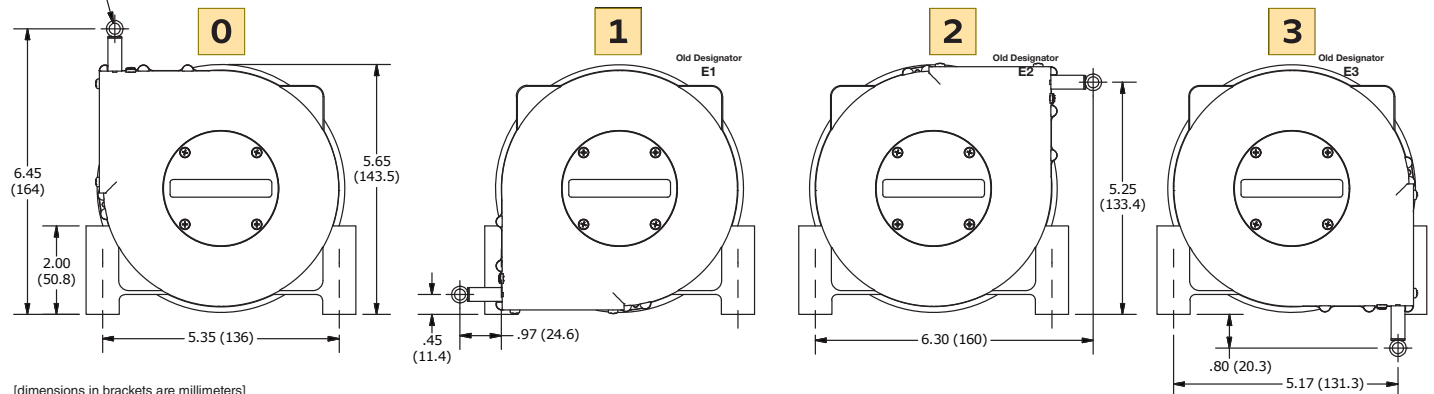
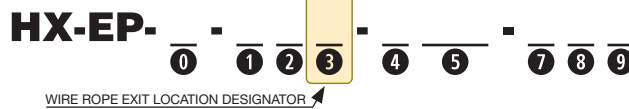
HX RANGES TO 100" TO 2000"



NOTE:
Mount with Ø.50 or M12 Socket Head Cap Screws.

RANGE	A	B
RANGES TO 800"	7.70 (195.6)	3.80 (96.5)
1000" TO 2000"	11.0 (280)	5.60 (142.0)
V & VP 500" 800"	9.5 (241.3)	5.60 (142.0)

WIRE ROPE EXIT LOCATIONS



[dimensions in brackets are millimeters]