

HE3 Series Specifications

MECHANICAL (X & Y AXES)

ANGLE OF MOVEMENT	40° (20° EACH DIRECTION)
EXPECTED CYCLE LIFE	5 MILLION
CENTERING	SPRING RETURN
MAX. APPLIED FORCE	150 lbf
MATERIAL	GLASS/MINERAL FILLED NYLON

MECHANICAL (Z AXIS)

ANGLE	90° (45° EACH DIRECTION)
CENTERING	SPRING RETURN
MAX. APPLIED TORQUE	14 lbFin

ELECTRICAL

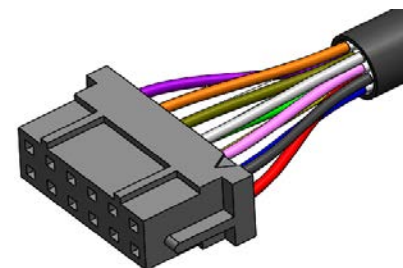
SENSOR TYPE	HALL EFFECT
RESOLUTION	12 BIT
SUPPLY VOLTAGE	5VDC $\pm$ 0.01VDC
OUTPUT VOLTAGE	SEE OPTIONS
RETURN TO CENTER VOLTAGE	$\pm$ 50mV
OVERVOLTAGE MAX.	20VDC
REVERSE POLARITY MAX.	-25VDC

ENVIRONMENTAL

OPERATING TEMPERATURE	-40°F TO 185°F
STORAGE TEMPERATURE	-40°F TO 185°F
IP SEALING ABOVE PANEL	IP67 STANDARD
EMC IMMUNITY LEVEL	EN61000-4-3 *Compliance to 30A/m
EMC EMISSIONS LEVEL	EN61000-6-3
ESD IMMUNITY LEVEL	EN61000-4-2 *Compliance to $\pm$ 15kV/ $\pm$ 8kV
VIBRATION TESTING	Per SAE J1455 Section 4.9 & MIL-STD810G 514.6
MECHANICAL SHOCK	Per SAE J1455 Section 4.10 & MIL-STD-202G

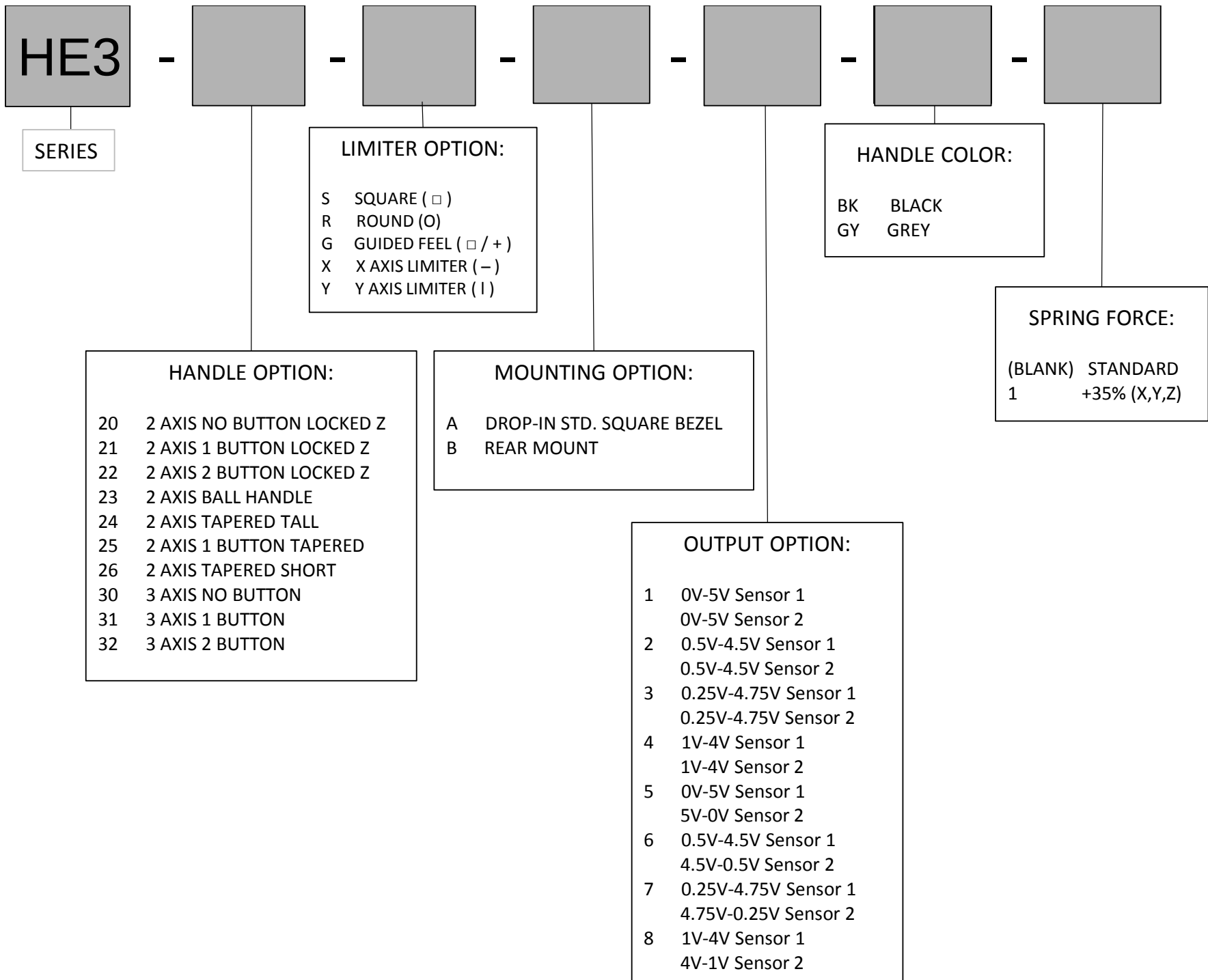
HIROSE DF11-12DP-2DS(24) CONNECTOR (ANALOG)

PIN #	WIRE COLOR	DESCRIPTION
1	BLACK	GROUND
2	RED	+5V SENSOR A
3	PINK	X AXIS SENSOR B
4	BLUE	X AXIS SENSOR A
5	GREY	Y AXIS SENSOR B
6	YELLOW	Y AXIS SENSOR A
7	BROWN	Z AXIS SENSOR B
8	GREEN	Z AXIS SENSOR A
9	ORANGE	BUTTON 1
10	WHITE	BUTTON COMMON
11	VIOLET	BUTTON 2
12	YELLOW/WHITE	+5V SENSOR B



10" CABLE PROVIDED

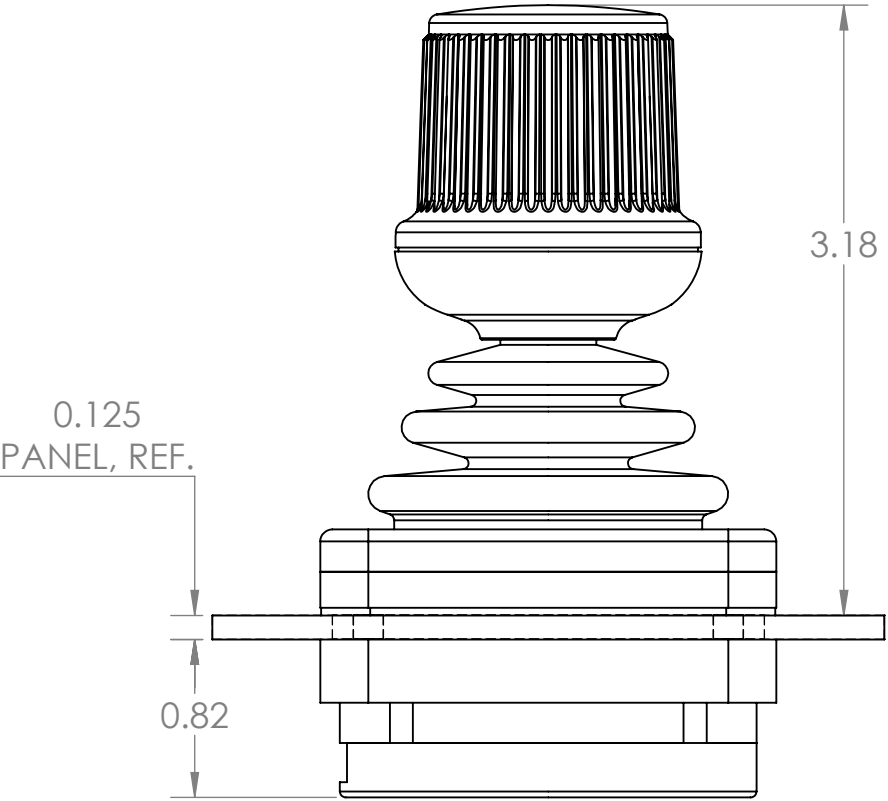
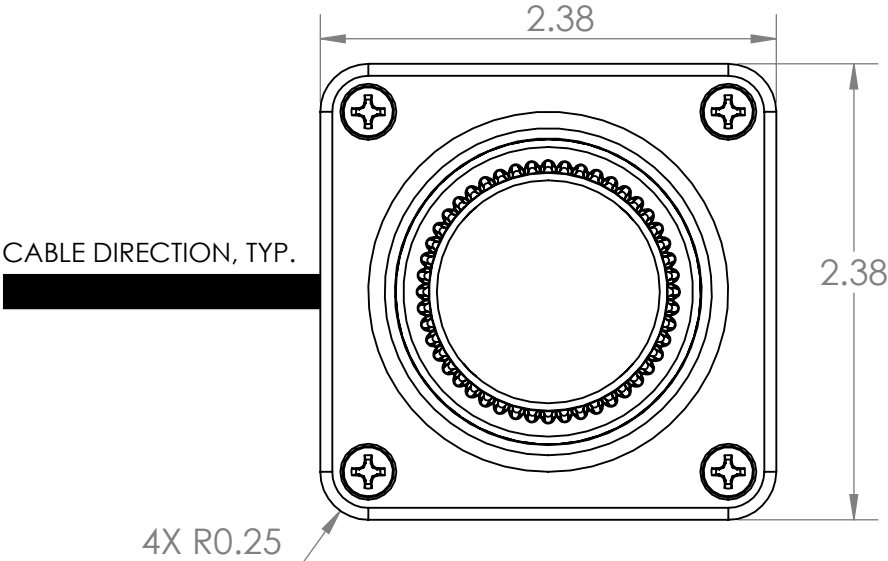
*Extended Testing Levels



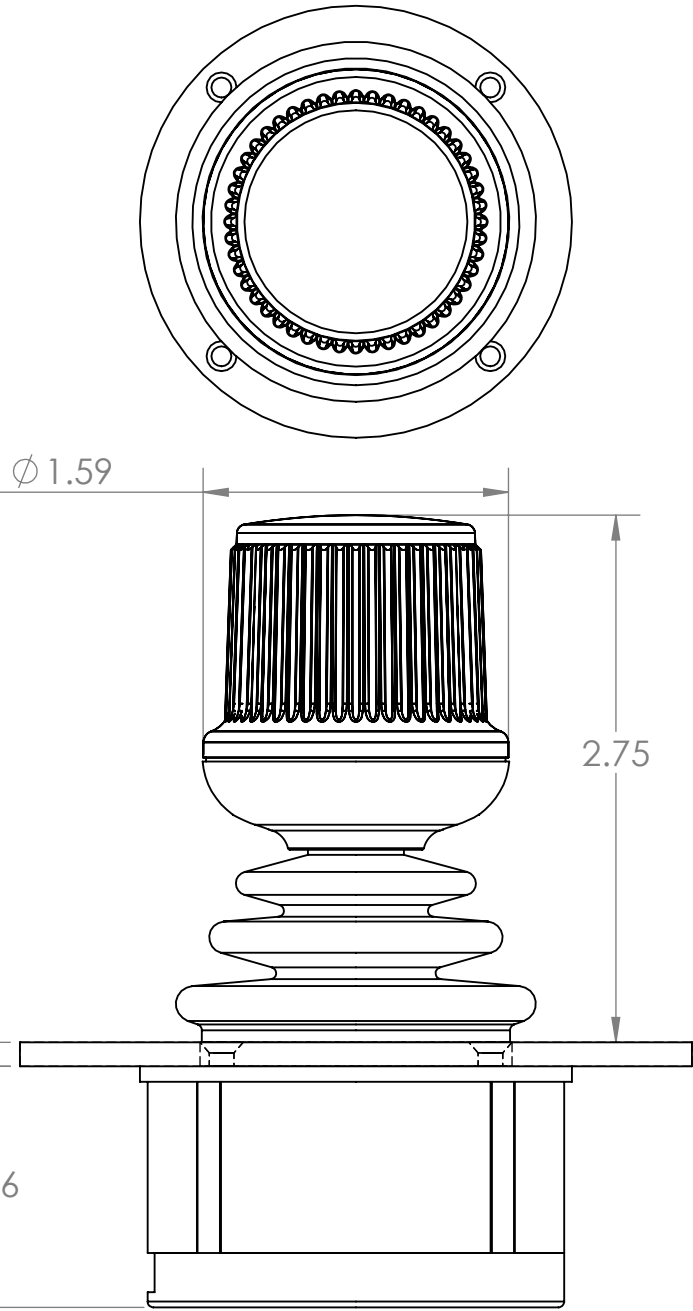
HE3 SERIES - HANDLE OPTIONS

ALL HANDLES AVAILABLE WITH ANY MOUNTING OPTION UNLESS OTHERWISE SPECIFIED

SCALE 1:1



HE3-20-x-A-x-x-x (NO BUTTON HANDLE)
HE3-30-x-A-x-x-x

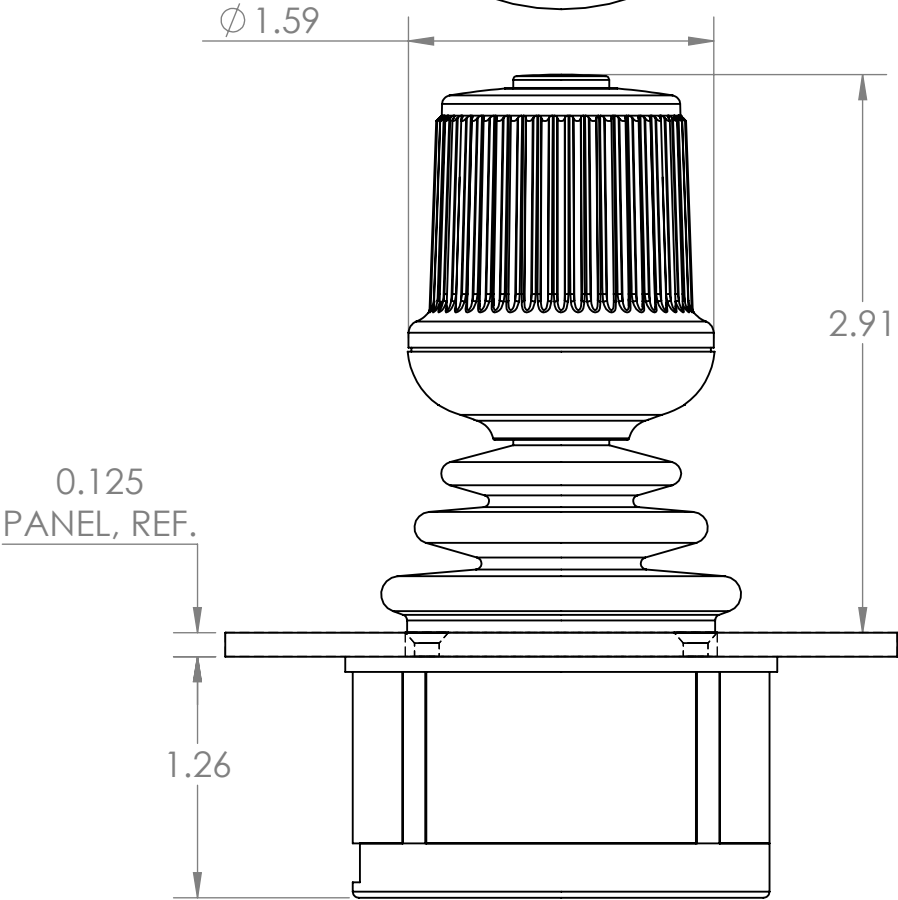
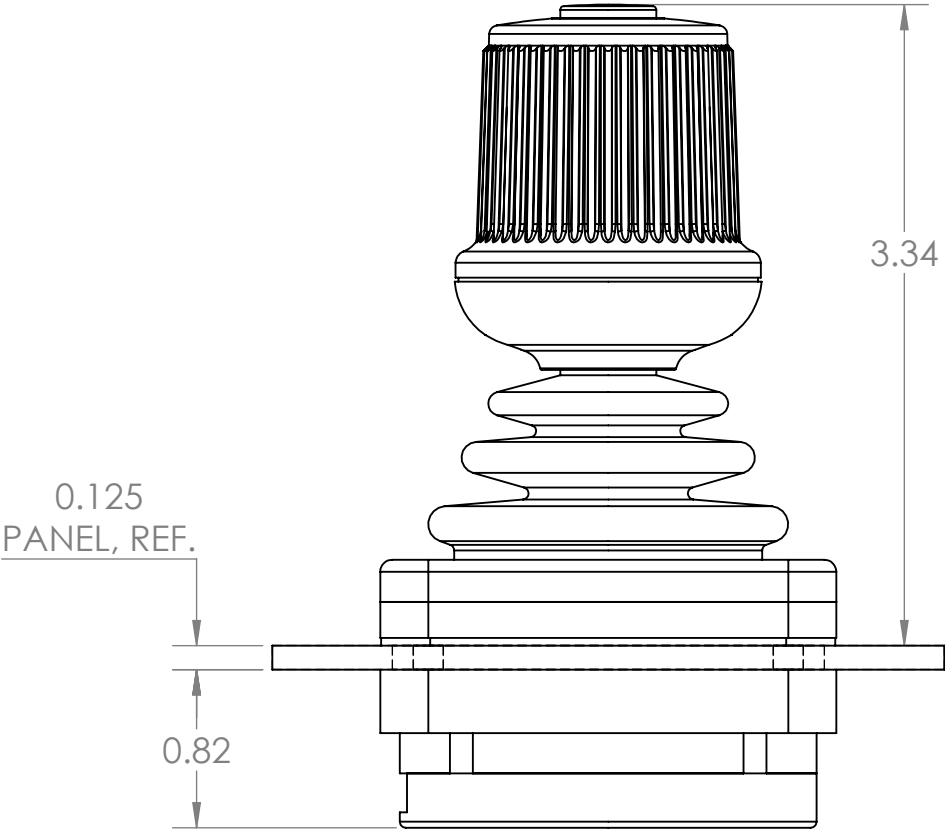
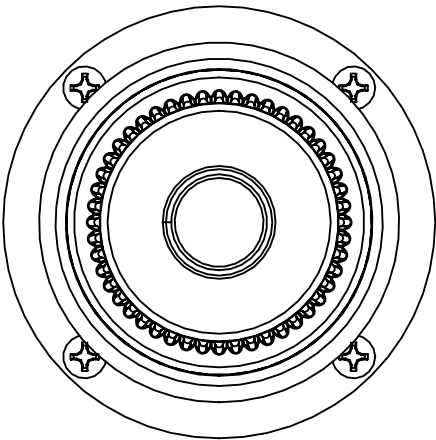
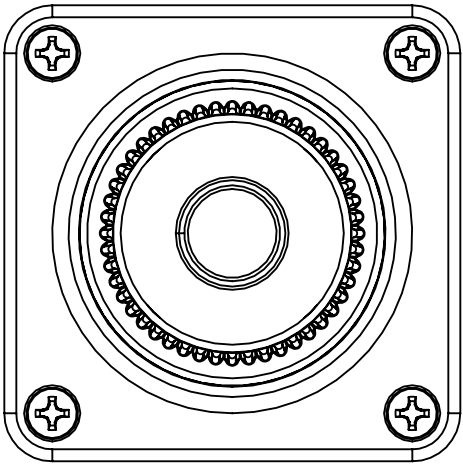


HE3-20-x-B-x-x-x
HE3-30-x-B-x-x-x

HE3 SERIES - HANDLE OPTIONS

ALL HANDLES AVAILABLE WITH ANY MOUNTING OPTION UNLESS OTHERWISE SPECIFIED

SCALE 1:1



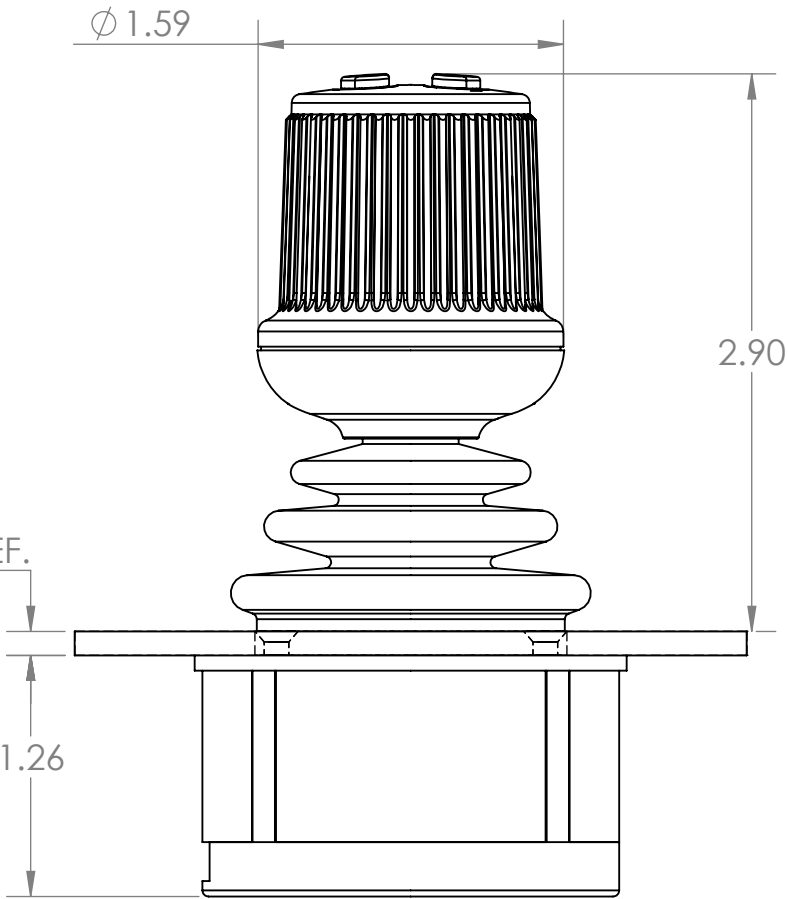
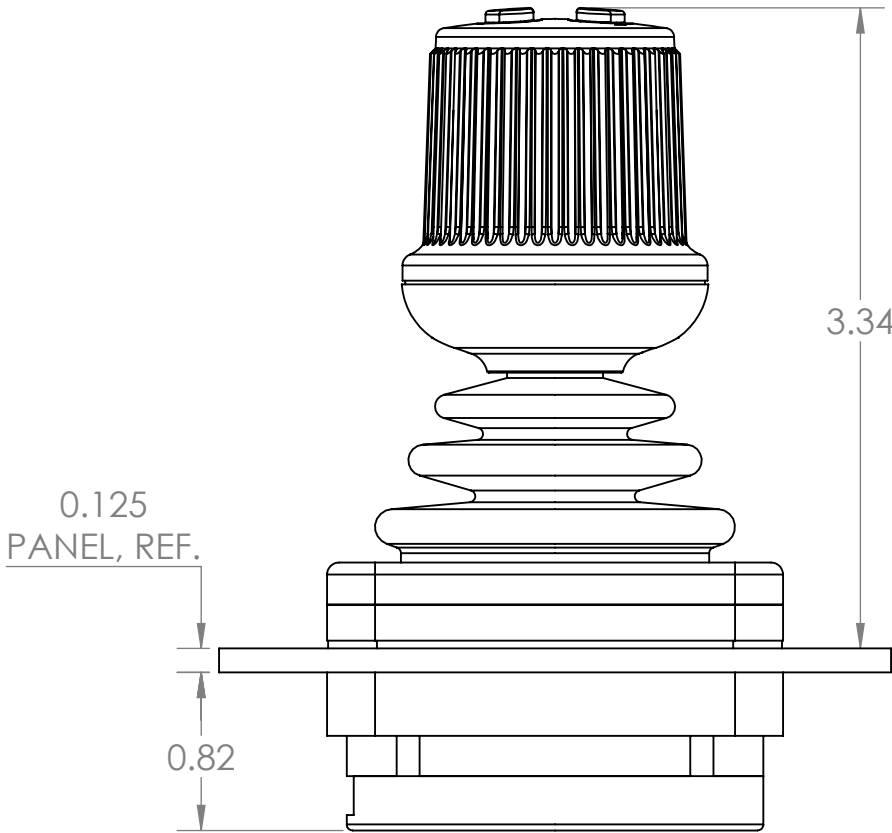
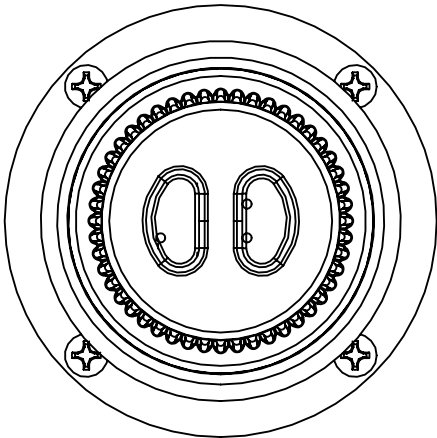
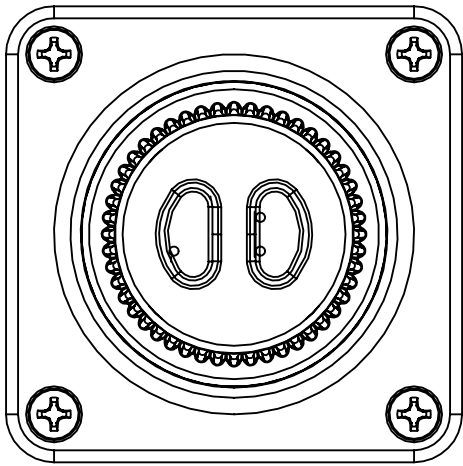
HE3-21-x-A-x-x-x (1 BUTTON HANDLE)
HE3-31-x-A-x-x-x

HE3-21-x-B-x-x-x
HE3-31-x-B-x-x-x

HE3 SERIES - HANDLE OPTIONS

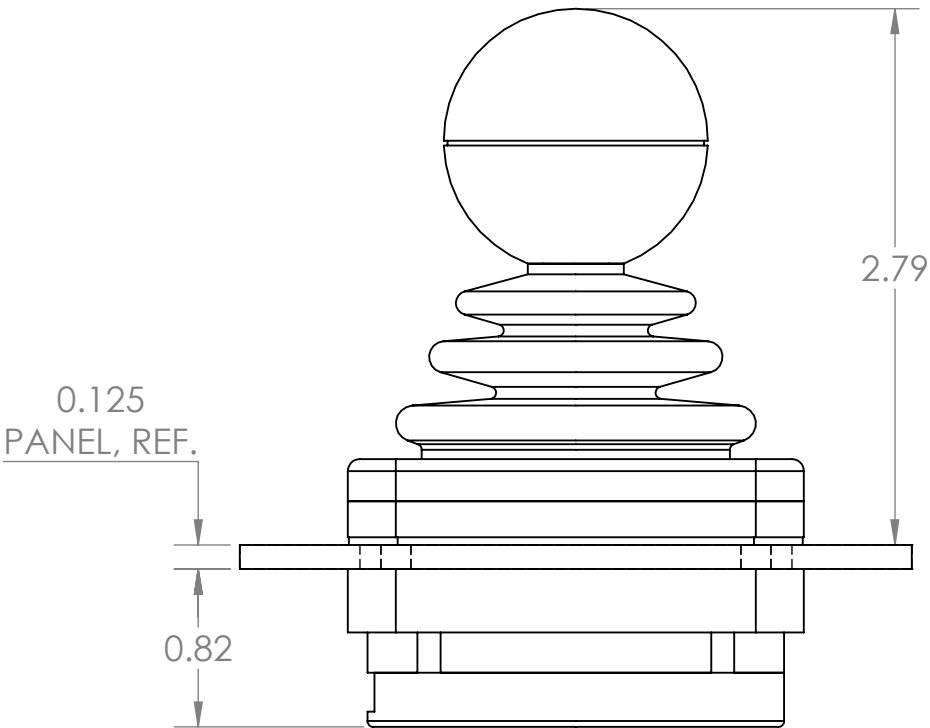
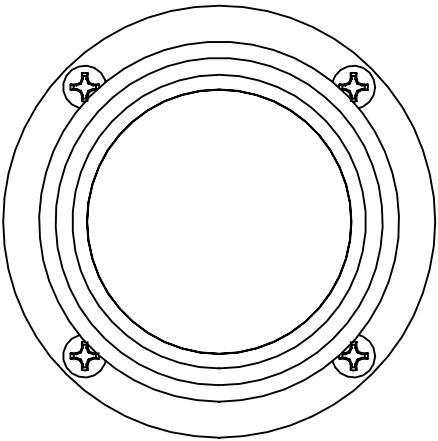
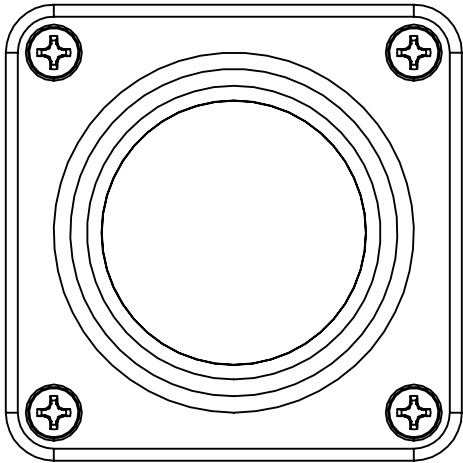
ALL HANDLES AVAILABLE WITH ANY MOUNTING OPTION UNLESS OTHERWISE SPECIFIED

SCALE 1:1



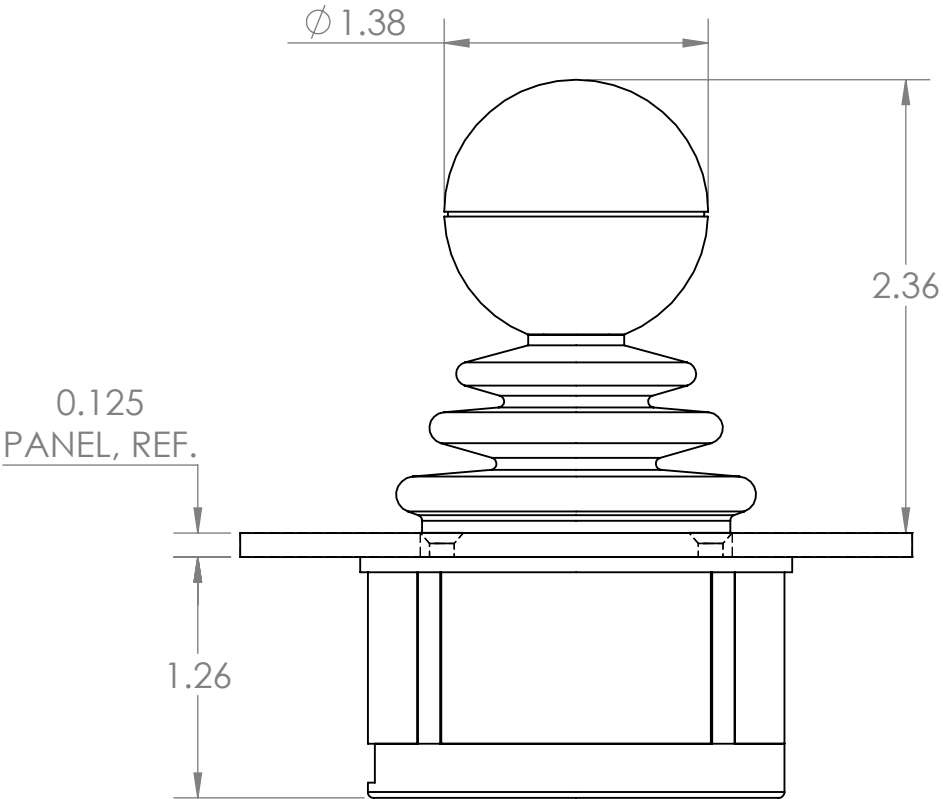
HE3-22-x-A-x-x-x
HE3-32-x-A-x-x-x (2 BUTTON HANDLE)

HE3-22-x-B-x-x-x
HE3-32-x-B-x-x-x



HE3-23-x-A-x-x-x

(BALL HANDLE, NO BUTTON)

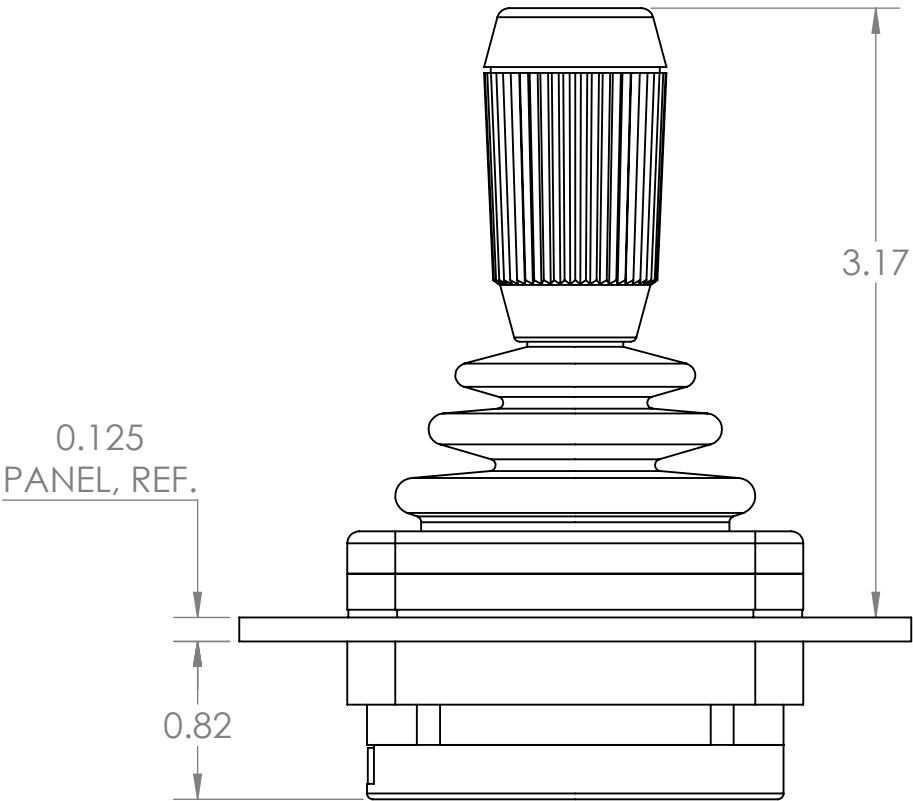
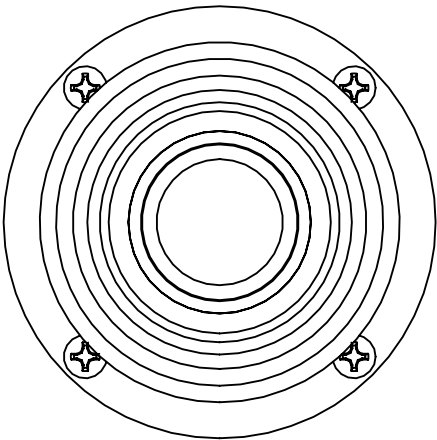
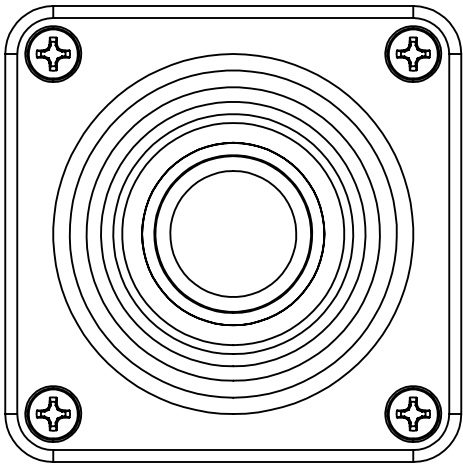


HE3-23-x-B-x-x-x

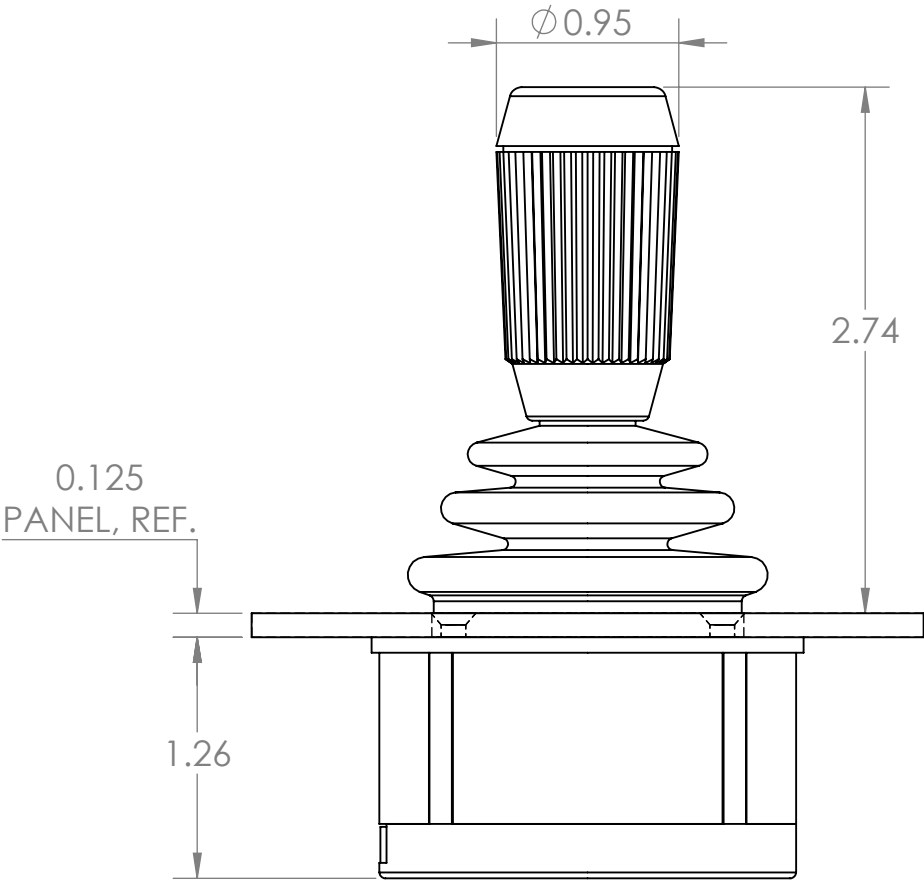
HE3 SERIES - HANDLE OPTIONS

ALL HANDLES AVAILABLE WITH ANY MOUNTING OPTION UNLESS OTHERWISE SPECIFIED

SCALE 1:1



HE3-24-x-A-x-x-x (2 AXIS TAPARED HANDLE, NO BUTTON)

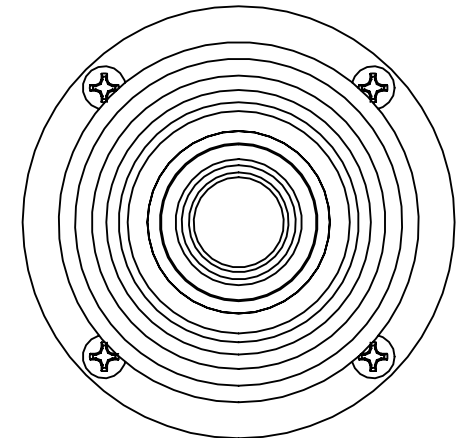
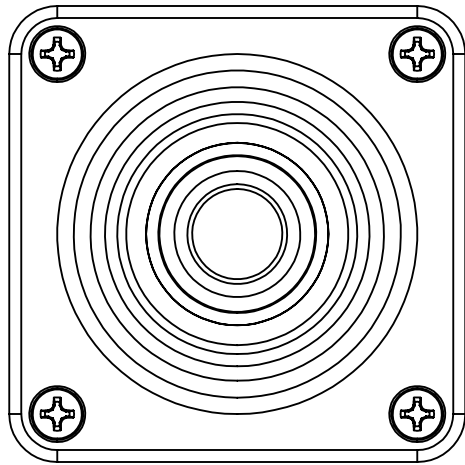


HE3-24-x-B-x-x-x

HE3 SERIES - HANDLE OPTIONS

ALL HANDLES AVAILABLE WITH ANY MOUNTING OPTION UNLESS OTHERWISE SPECIFIED

SCALE 1:1



$\varnothing 0.95$

OTTO P9 SWITCH

OTTO P9 SWITCH

3.52

3.08

0.125

0.125
PANEL, REF.

PANEL, REF.

0.82

1.26

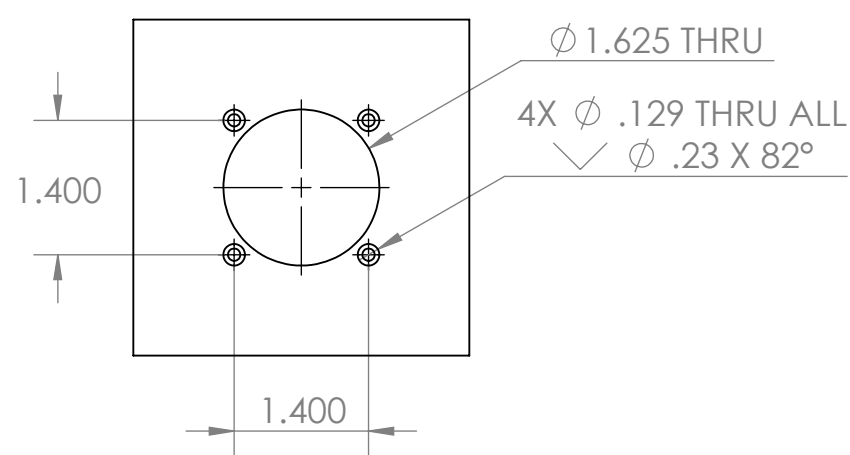
HE3-25-x-A-x-x-x

(2 AXIS TAPARED HANDLE, 1 BUTTON)

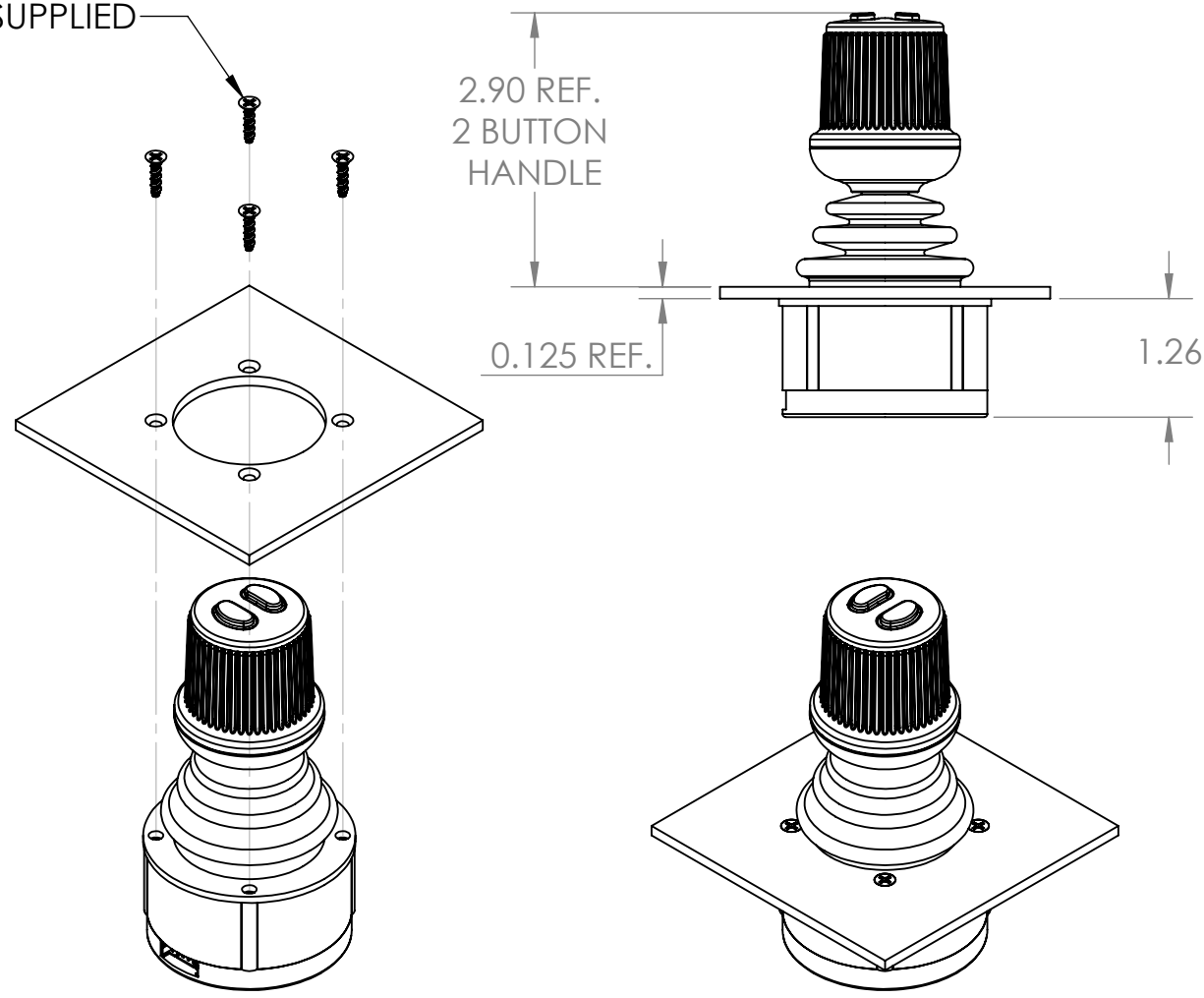
HE3-25-x-B-x-x-x

HE3 - MOUNTING & HANDLE OPTIONS

REAR MOUNT PANEL DIMENSIONS

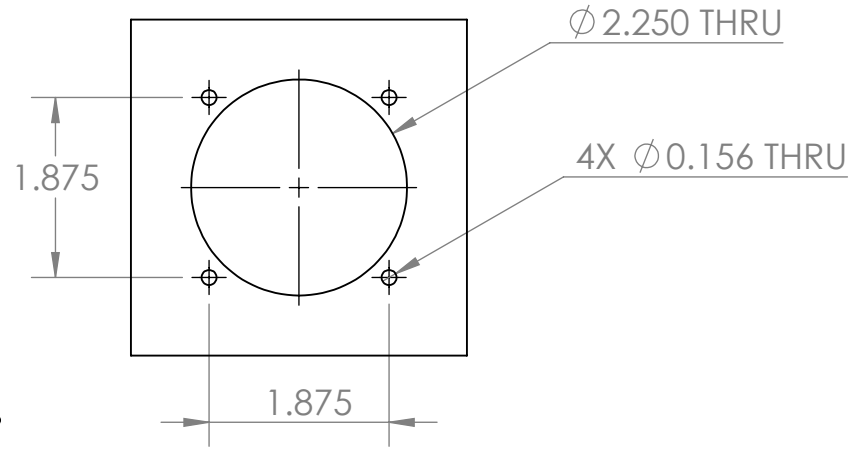


4X #4 FLAT HEAD
SCREW, SUPPLIED



REAR MOUNT OPTION

DROP-IN PANEL DIMENSIONS



4X #6 MACHINE
SCREW, SUPPLIED

