

# WLS

## SPECIALS

ACTUATOR CODE				
CODE	MATERIAL	ROLLER DIA. (IN.)	ROLLER WIDTH (IN.)	ROLLER MOUNTING
FIXED 1.5 INCH RADIUS				
I	ROLLERLESS	N/A	N/A	N/A
IA	NYLON	.75	.25	FRONT
IB	STEEL	.75	.25	FRONT
IC	NYLON	.75	.25	BACK
ID	STEEL	.75	.25	BACK
IF	NYLON	1.0	.50	FRONT
IG	NYLON	1.5	.25	FRONT
IJ	NYLON	1.0	.50	BACK
IL	BALL BEARING	.75	.25	BACK
IM	NYLON	.75	1.30	BACK
IN	STEEL	.75	1.25	FRONT
IP	NYLON	.75	.50	FRONT
ADJUSTABLE 1.5 - 3.5 INCH RADIUS				
2	ROLLERLESS	N/A	N/A	N/A
2A	NYLON	.75	.25	BACK
2B	STEEL	.75	.25	BACK
2C	NYLON	.75	.25	FRONT
2D	STEEL	.75	.25	FRONT
2E	NYLON	.75	1.30	FRONT
2J	NYLON	1.0	.50	FRONT
2K	NYLON	1.5	.25	FRONT
2L	BALL BEARING	.75	.25	FRONT
2M	NYLON	2.0	.25	FRONT
2N	NYLON	.75	.50	FRONT
YOKE 1.5 INCH RADIUS				
3A	NYLON	.75	.25	FRONT/BACK
3B	STEEL	.75	.25	FRONT/BACK
3D	STEEL	.75	.25	FRONT/BACK
3E	NYLON	.75	.25	BACK/FRONT
3M	NYLON	.75	1.25	BACK/FRONT
3P	STEEL	.75	.25	BACK/BACK
3S	NYLON	.75	.25	BACK/BACK
3U	STEEL	.75	.25	BACK/FRONT
ROD				
4	HUB ONLY	N/A	N/A	N/A
4M	ALUMINUM 5.5 INCH	N/A	N/A	N/A
4N	STAINLESS 13.0 INCH	N/A	N/A	N/A
4R	SPRING WIRE 12.0 INCH	N/A	N/A	N/A
4V	FLEXIBLE CABLE 4.8 INCH	N/A	N/A	N/A
OFFSET 1.5 INCH RADIUS				
5	ROLLERLESS	N/A	N/A	N/A
5A	NYLON	.75	.25	BACK
5B	STEEL	.75	.25	BACK
5C	NYLON	.75	.25	FRONT
5D	STEEL	.75	.25	FRONT
5E	NYLON	.75	.50	FRONT
5K	NYLON	1.5	.25	FRONT
WOBBLE STICK				
7A	PLASTIC	N/A	N/A	N/A
7M	WIRE	N/A	N/A	N/A
7N	CABLE	N/A	N/A	N/A
SHORT FIXED 1.3 RADIUS				
9A	NYLON	.75	.25	FRONT
9B	STEEL	.75	.25	FRONT
9C	NYLON	.75	.25	BACK
9D	STEEL	.75	.25	BACK

SOFTWARE VERSION CODE
I   VERSION I

RF CODE
A   2.4 GHz; IEEE 802.15.4

ANTENNA TYPE CODE <sup>7</sup> <sup>8</sup>	
00	NO ANTENNA; RP-SMA CONNECTOR JACK <sup>5</sup>
01	2.2 dBi OMNI WITH SWITCH MOUNT; STRAIGHT DESIGN
02	2.2 dBi OMNI WITH SWITCH MOUNT; TILT & SWIVEL DESIGN
03	3.0 dBi OMNI WITH REMOTE ADHESIVE MOUNT & 9.8 FOOT CABLE
04	5.5 dBi OMNI WITH REMOTE MAGNETIC MOUNT; TILT & SWIVEL DESIGN & 5 FOOT CABLE <sup>6</sup>
05	5.5 dBi OMNI WITH REMOTE MAGNETIC MOUNT; TILT & SWIVEL DESIGN & 10 FOOT CABLE <sup>6</sup>
06	9.0 dBi OMNI WITH REMOTE MAGNETIC MOUNT; TILT & SWIVEL DESIGN & 5 FOOT CABLE <sup>6</sup>
07	9.0 dBi OMNI WITH REMOTE MAGNETIC MOUNT; TILT & SWIVEL DESIGN & 10 FOOT CABLE <sup>6</sup>
08	8.0 dBi OMNI WITH REMOTE BRACKET MOUNT; STRAIGHT DESIGN & 3 FOOT CABLE
09	8.0 dBi OMNI WITH REMOTE BRACKET MOUNT; STRAIGHT DESIGN & 11 FOOT CABLE
10	2.2 dBi OMNI WITH REMOTE MAGNETIC MOUNT; STRAIGHT DESIGN & 10 FOOT CABLE
11	0 dBi OMNI WITH SWITCH MOUNT; STRAIGHT DESIGN

COUNTRY USE CODE <sup>7</sup>	
A	US, CANADA, MEXICO
B	ALL OTHER COUNTRIES

OPERATING HEAD CODE	
A	SIDE ROTARY, MOMENTARY
C	TOP PLUNGER, PLAIN
D	TOP PLUNGER, ROLLER
E	SIDE PLUNGER, MOMENTARY, PLAIN
J	WOBBLE STICK
V	TOP PLUNGER, ADJUSTABLE
N	SIDE ROTARY, MAINTAINED

ACTUATOR CODE	
SEE TABLE FOR DETAILS	

MODIFICATION CODE	
NONE	NOT APPLICABLE
3	HEAD ASSEMBLED WITH ACTUATOR TO RIGHT SIDE
4	HEAD ASSEMBLED WITH ACTUATOR TO LEFT SIDE
5	HEAD ASSEMBLED WITH ACTUATOR TOWARDS MOUNTING SURFACE
6	ROLLER PERPENDICULAR TO MOUNTING SURFACE

ACCESSORIES & REPLACEMENT COMPONENTS CHART <sup>9</sup>		
ACCESSORY CATALOG LISTING	SEE HONEYWELL DRAWING	DESCRIPTION
WAN01RSP	WAN01RSP	REPLACEMENT ANTENNA FOR ANTENNA TYPE CODE 01
WAN02RSP	WAN02RSP	REPLACEMENT ANTENNA FOR ANTENNA TYPE CODE 02
WAN03RSP	WAN03RSP	REPLACEMENT ANTENNA FOR ANTENNA TYPE CODE 03
WAN04RSP	WAN04RSP	REPLACEMENT ANTENNA FOR ANTENNA TYPE CODES 04 & 05, ANTENNA ONLY
WAN05RSP	WAN05RSP	REPLACEMENT ANTENNA FOR ANTENNA TYPE CODES 06 & 07, ANTENNA ONLY
WAN06RNJ	WAN06RNJ	REPLACEMENT ANTENNA FOR ANTENNA TYPE CODES 08 & 09, ANTENNA ONLY
WAN07RSP	WAN07RSP	REPLACEMENT ANTENNA FOR ANTENNA TYPE CODE 11
WCA200RNPRSP-002	WCA200RNPRSP	REPLACEMENT CABLE FOR ANTENNA CODE 08, CABLE ONLY
WCA200RNPRSP-010	WCA200RNPRSP	REPLACEMENT CABLE FOR ANTENNA CODE 09, CABLE ONLY
WAMM100RSP-005	WAMM100RSP	REPLACEMENT MAGNETIC MOUNT & CABLE FOR ANTENNA CODES 04 & 06
WAMM100RSP-010	WAMM100RSP	REPLACEMENT MAGNETIC MOUNT & CABLE FOR ANTENNA CODES 05, 07 & 10

WLS PRODUCT SPECIFICATION CHART <sup>TM</sup>	
<b>WIRELESS STANDARD</b>	WPAN IEEE 802.15.4; 2.4GHz DIRECT SEQUENCE SPREAD SPECTRUM (DSSS), 2.4GHz
<b>SIGNAL RANGE</b>	IN EXCESS OF 305 m [1000 ft] LINE-OF-SIGHT COMMUNICATION BETWEEN LIMITLESS SWITCHES AND MONITOR/RECEIVER WHEN USING 2.2dBi INTEGRAL ANTENNA
<b>DATA RATE</b>	250 kbps
<b>OPERATING FREQUENCY</b>	1SSM 2.4GHz
<b>RF MODULE TRANSMIT POWER MAX</b>	COUNTRY CODE "A": 22dBm COUNTRY CODE "B": 8 dBm
<b>RECEIVE SENSITIVITY (TYP.)</b>	-100dBm
<b>HOUSING MATERIAL/TYPE</b>	POWDER COATED ZINC DIE CAST/EN 50041
<b>BATTERY</b>	3.6 Vdc LITHIUM THIONYL CHLORIDE; 2/3 AA size; MANUFACTURED BY UNIWELL, p/n DEV-10-0009; or GREEN ENERGY p/n ERI4335M
<b>SEALING</b>	IP67, IP68, NEMA 1, 4, 6, 6P, 12, 13
<b>EMC</b>	LATEST APPLICABLE STANDARDS: EN 300 328, V1.7.1; EN 61326-1 (2006); EN 301 489-1, V1.8.1; EN 301 489-17, V2.1.1
<b>SHOCK</b>	IEC 60068-2-27; HALF SINE, 50 g, 6 mS, 3 AXIS
<b>VIBRATION</b>	IEC 60068-2-6; 10 Hz to 58 Hz w/ 0.35 mm PEAK-TO-PEAK, 58 Hz to 500 Hz, 10 g
<b>OPERATING TEMPERATURE</b>	-40°C to 85°C / -40°F TO 185°F (OPERATING HEAD CODE K: -29°C TO 85°C/-20 °F TO 185°F)
<b>WEIGHT</b>	720g/25.4 oz APPROX. WITHOUT ANTENNA (SIDE ROTARY WITHOUT ACTUATOR)

NOTES:

- END USER WILL REQUIRE A HONEYWELL WPMM SERIES MONITOR OR WDRR SERIES RECEIVER UNIT TO RECEIVE SIGNAL FROM THESE WLS PRODUCTS
- OPERATING HEADS MAY BE INDEXED IN 90° INCREMENTS
- LEVERS MAY BE ATTACHED ANYWHERE ON THE SHAFT
- FOR ADDITIONAL LEVER DETAILS SEE LSZ SERIES CHART 1 INSTALLATION DRAWING
- <sup>5</sup> SWITCH WILL REQUIRE AN ANTENNA TO FUNCTION PROPERLY
- <sup>6</sup> 5.5 dBi & 9.0 dBi ANTENNAS RATED FOR LIMITED OUTDOOR EXPOSURE. PROTECT AGAINST DIRECT RAIN, SLEET, SNOW & ICE ETC. EXPOSURE
- <sup>7</sup> ONLY ANTENNA TYPE CODES 00, 01, 02, 03, 05, 10 & 11 AVAILABLE WITH COUNTRY USE CODE B, ALL ANTENNA TYPE CODES AVAILABLE FOR COUNTRY USE CODE A
- <sup>8</sup> FOR ADDITIONAL ANTENNA DETAILS SEE INDIVIDUAL HONEYWELL DRAWINGS LISTED IN THE ACCESSORIES & REPLACEMENT COMPONENT CHART
- <sup>9</sup> OPTIONAL ACCESSORIES & REPLACEMENT COMPONENTS PER THE ATTACHED CHART ARE OFFERED FOR SALE BY HONEYWELL
- RoHS AND REACH COMPLIANT

DESIGN UNITS: INCH TOLERANCES UNLESS NOTED:	DRAWN: MBN 02 JUN 10 CHECK: MM 02 JUN 10	<p align="center"><b>Honeywell</b></p> <p align="center">THIS DRAWING COVERS A PROPRIETARY ITEM AND IS THE PROPERTY OF HONEYWELL. THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE PERMISSION OF HONEYWELL.</p>	<p align="center"><b>SWITCH, LIMIT (WIRELESS)</b></p>
NO PLACES .x ± .400 ONE PLACE .x ± .03 TWO PLACE .xx ± .015 THREE PLACE .xxx ± .005 ANGLES x ± 3°	INTERPRET PER ASME Y14.5M-1994 OTHER HONEYWELL ENGINEERING STANDARDS MAY APPLY		
THIRD ANGLE PROJECTION	Pro/ENGINEER 3D	SCALE: 3:2	SHEET: 1 OF 6

**COUNTRY USE CODE CHART**

COUNTRY USE CODE A						COUNTRY USE CODE B					
ANTENNA TYPE CODE ALLOWED FOR USE	ANTENNAS ALLOWED TO BE USED FOR INTEGRAL MOUNT	ANTENNAS ALLOWED TO BE USED FOR REMOTE MOUNT	ANTENNAS ALLOWED TO BE USED WITH MAGNETIC REMOTE MOUNT ASSEMBLIES WAMM100RSP-005 WAMM100RSP-010	ANTENNAS ALLOWED TO BE USED WITH ONE (1) EXTENSION CABLE ASSEMBLIES REMOTE MOUNT WCA200RSJRSP-002 WCA200RSJRSP-005 WCA200RSJRSP-010 WCA200RSJRSP-015 WCA200RSJRSP-020	ANTENNAS ALLOWED TO BE USED WITH ONE (1) EXTENSION CABLE ASSEMBLIES FOR REMOTE MOUNT WCA200RNPRSP-002 WCA200RNPRSP-010	ANTENNA TYPE CODE ALLOWED FOR USE	ANTENNAS ALLOWED TO BE USED FOR INTEGRAL MOUNT	ANTENNAS ALLOWED TO BE USED FOR REMOTE MOUNT	ANTENNAS ALLOWED TO BE USED WITH MAGNETIC REMOTE MOUNT ASSEMBLIES WAMM100RSP-005	ANTENNAS ALLOWED TO BE USED WITH MAGNETIC REMOTE MOUNT ASSEMBLIES WAMM100RSP-010	ANTENNAS ALLOWED TO BE USED WITH ONE (1) EXTENSION CABLE ASSEMBLIES FOR REMOTE MOUNT WCA200RSJRSP-002 WCA200RSJRSP-005 WCA200RSJRSP-010 WCA200RSJRSP-015 WCA200RSJRSP-020
00	WAN01RSP	WAN03RSP	WAN01RSP	WAN01RSP	WAN06RNJ	00	WAN01RSP	WAN03RSP	WAN01RSP	WAN01RSP	WAN01RSP
01	WAN02RSP	WAN06RNJ	WAN02RSP	WAN02RSP		01	WAN02RSP	WAN09RSP	WAN02RSP	WAN02RSP	WAN02RSP
02	WAN04RSP	WAN09RSP	WAN04RSP	WAN03RSP		02	WAN07RSP	WAN10RSP	WAN04RSP	WAN04RSP	WAN03RSP
03	WAN05RSP	WAN10RSP	WAN05RSP	WAN04RSP		03	WAN08RSP		WAN07RSP	WAN07RSP	WAN07RSP
04	WAN07RSP	WAN11RSP	WAN07RSP	WAN05RSP		05			WAN08RSP	WAN08RSP	WAN08RSP
05	WAN08RSP		WAN08RSP	WAN07RSP		10					WAN09RSP
06				WAN08RSP		11					WAN10RSP
07				WAN09RSP							WAN11RSP
08				WAN10RSP							
09				WAN11RSP							
10											
11											

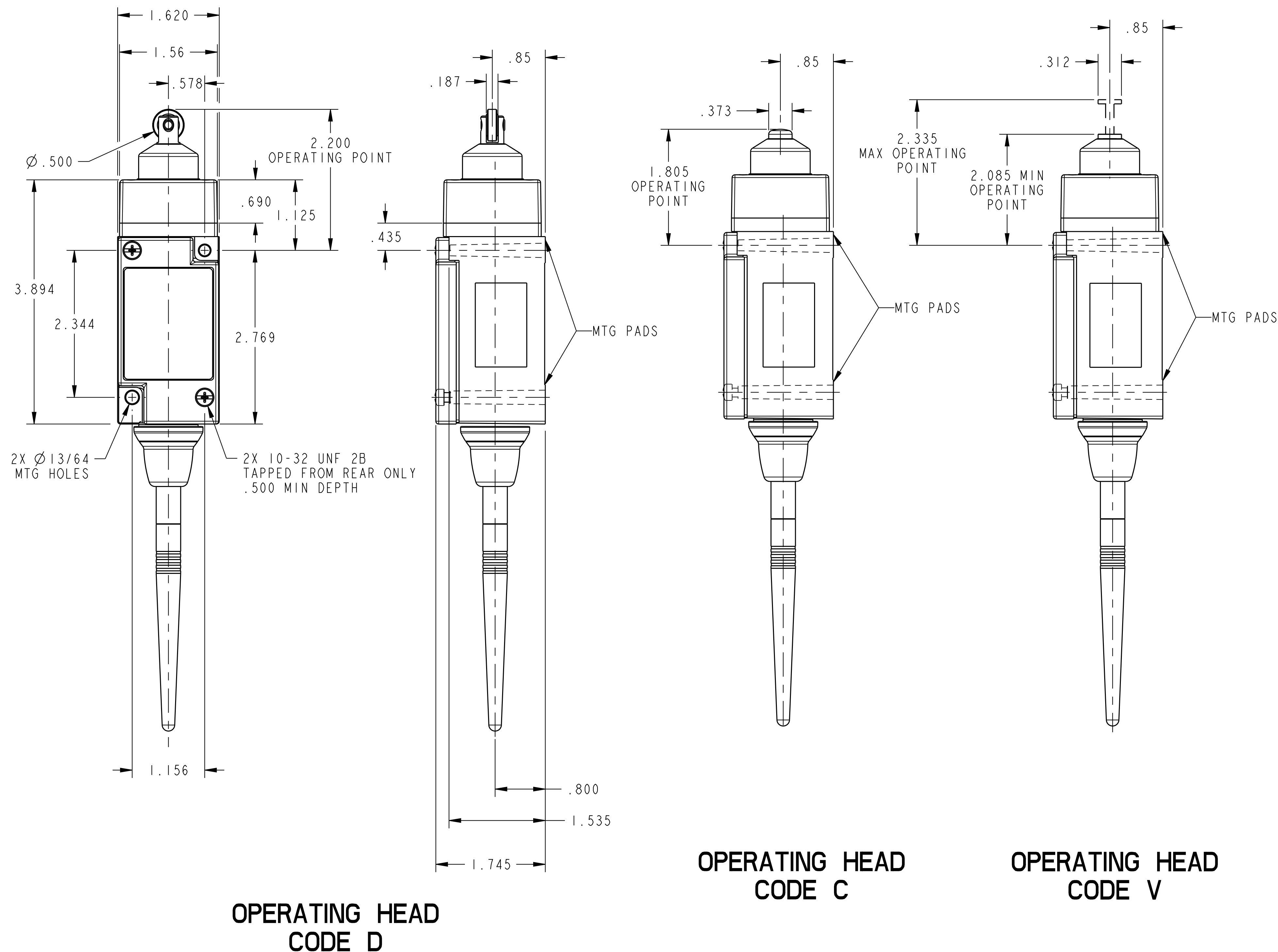
COUNTRY USE CODE	COMMUNICATION AGENCY APPROVAL	COUNTRY
<b>A</b>	IC, COFETEL, FCC	CANADA, MEXICO, US
<b>B</b>	ACMA, ANATEL, SRRC, ETSI, KCC, WPC, IDA	AUSTRALIA, NEW ZEALAND, BRAZIL, CHINA EUROPEAN COUNTRIES*, KOREA, INDIA, SINGAPORE

\*REFER TO WLS TECHNICAL AND INSTALLATION MANUAL FOR FULL LIST OF COUNTRIES APPROVED

### PLUNGER TYPE TOP

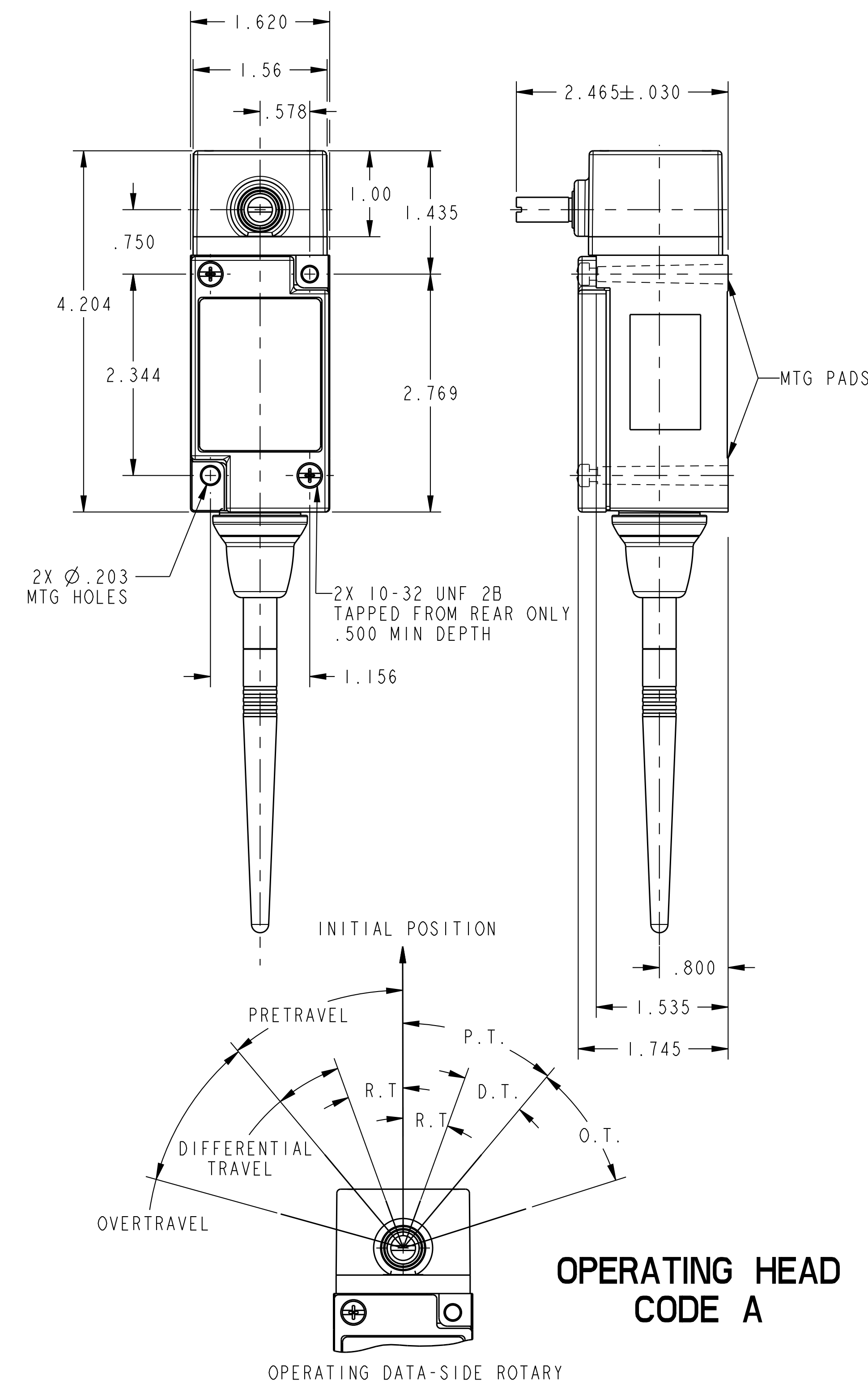
OPERATING POINT GIVEN IN RELATION TO TOP MOUNTING HOLE

CHARACTERISTICS	OPERATING HEAD CODE "C" TOP PLUNGER MOMENTARY	OPERATING HEAD CODE "D" TOP ROLLER PLUNGER MOMENTARY	OPERATING HEAD CODE "V" ADJUSTABLE TOP PLUNGER MOMENTARY
PRETRAVEL (MAX)	.070	.070	.070
DIFFERENTIAL TRAVEL (MAX)	.016	.016	.016
OVERTRAVEL (MIN)	.190	.190	.190
OPERATING FORCE (MAX)	4 LBS	4 LBS	4 LBS
OPERATING POINT	1.805±.030	2.200±.040	2.085 MIN 2.335 MAX
FULL OVERTRAVEL FORCE (MAX)	9 LBS	9 LBS	9 LBS



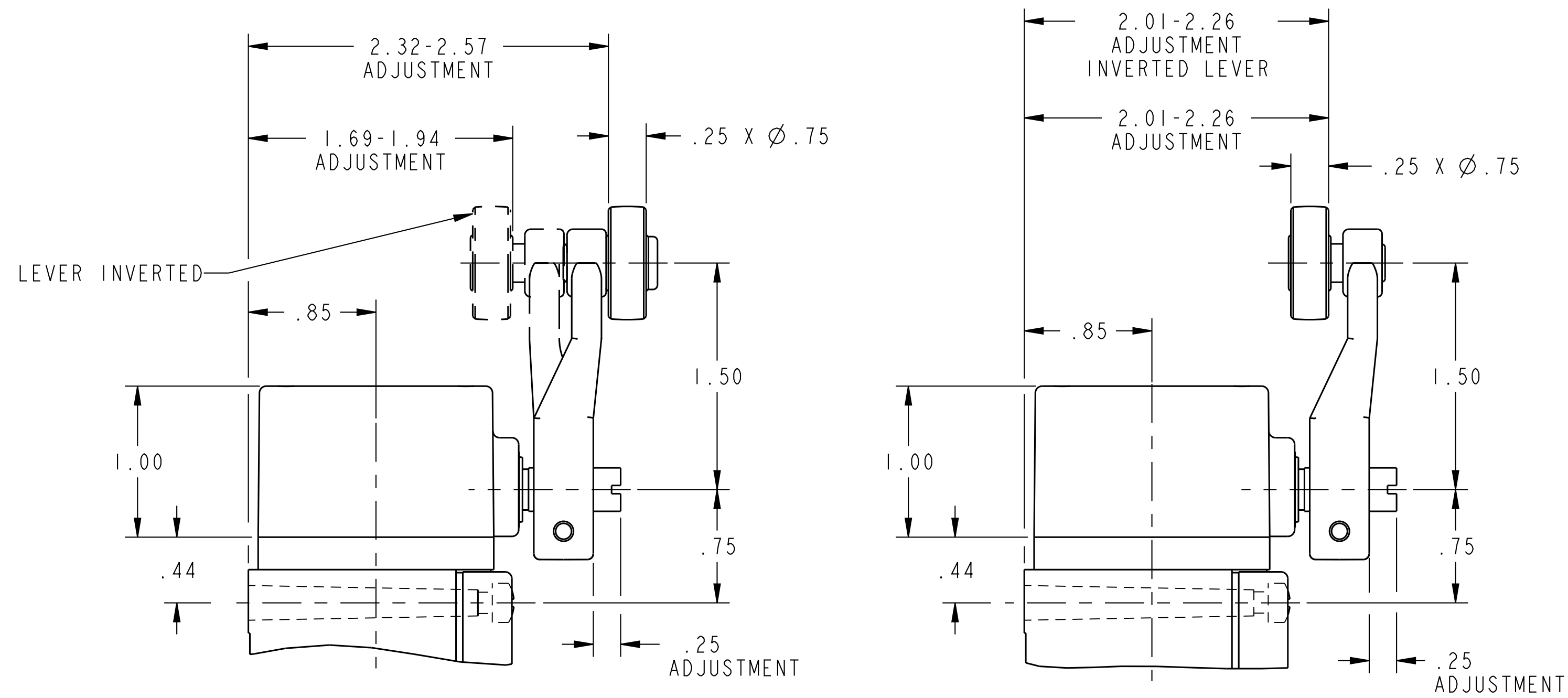
### SIDE ROTARY

OPERATING CHARACTERISTICS	OPERATING HEAD CODE "A" MOMENTARY	OPERATING HEAD CODE "N" MAINTAINED
PRETRAVEL (MAX)	17.5°	65°
OVERTRAVEL (MIN)	60°	20°
DIFFERENTIAL TRAVEL (MAX)	7°	40°
TOTAL TRAVEL (REF)	77.5°	90°
OPERATING TORQUE (MAX)	4 IN. LBS	4 IN. LBS
FULL TRAVEL TORQUE (MAX)	4 IN. LBS	N/A



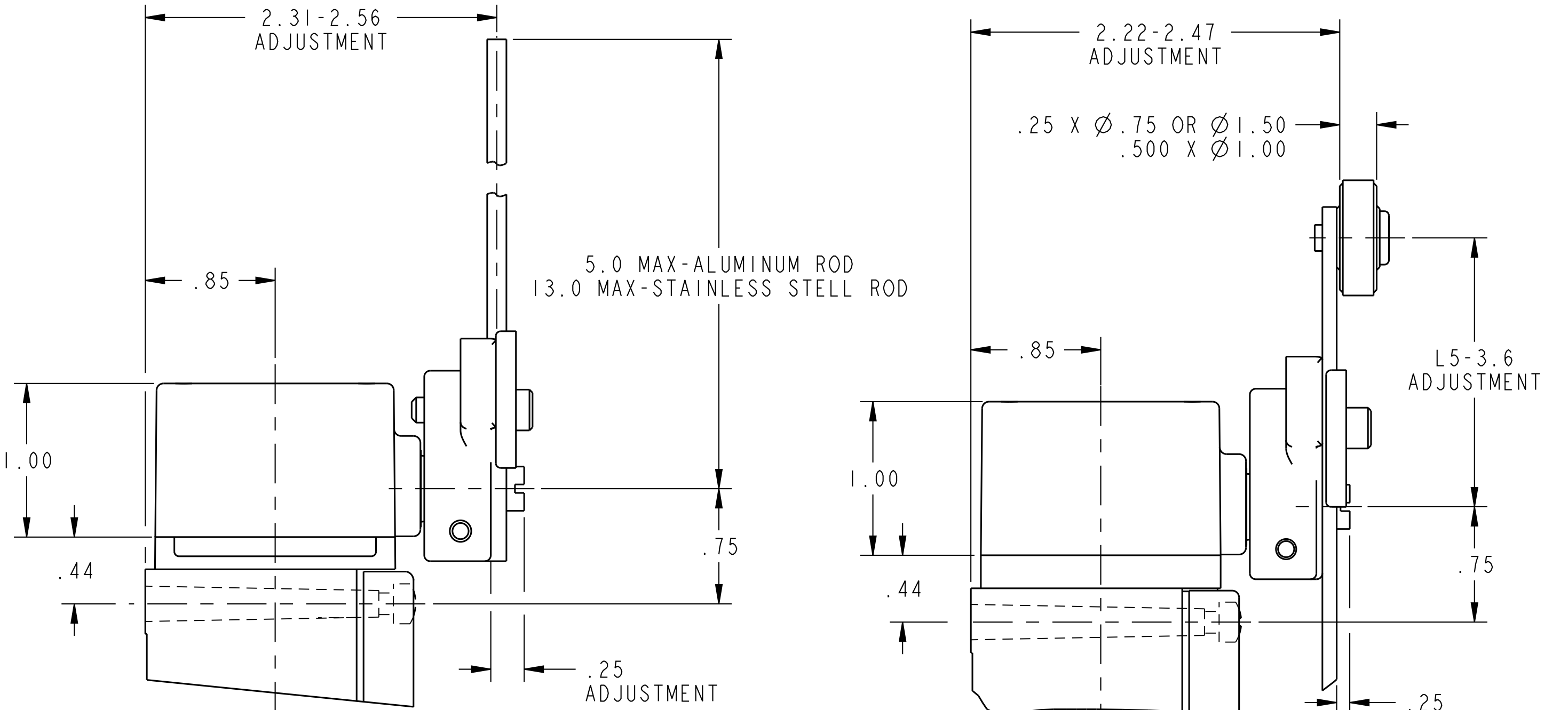
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<b>Honeywell</b>				
SIZE	TYPE	CAGE CODE	DRAWING NAME	REV
D	I	-	WLS SERIES CHART 1	F
SCALE 3:2				SHEET 3 OF 6



**ACTUATOR CODES 1 - 1P DETAIL**

SEE ACTUATOR CODE TABLE ON PAGE 1 FOR ADDITIONAL INFORMATION

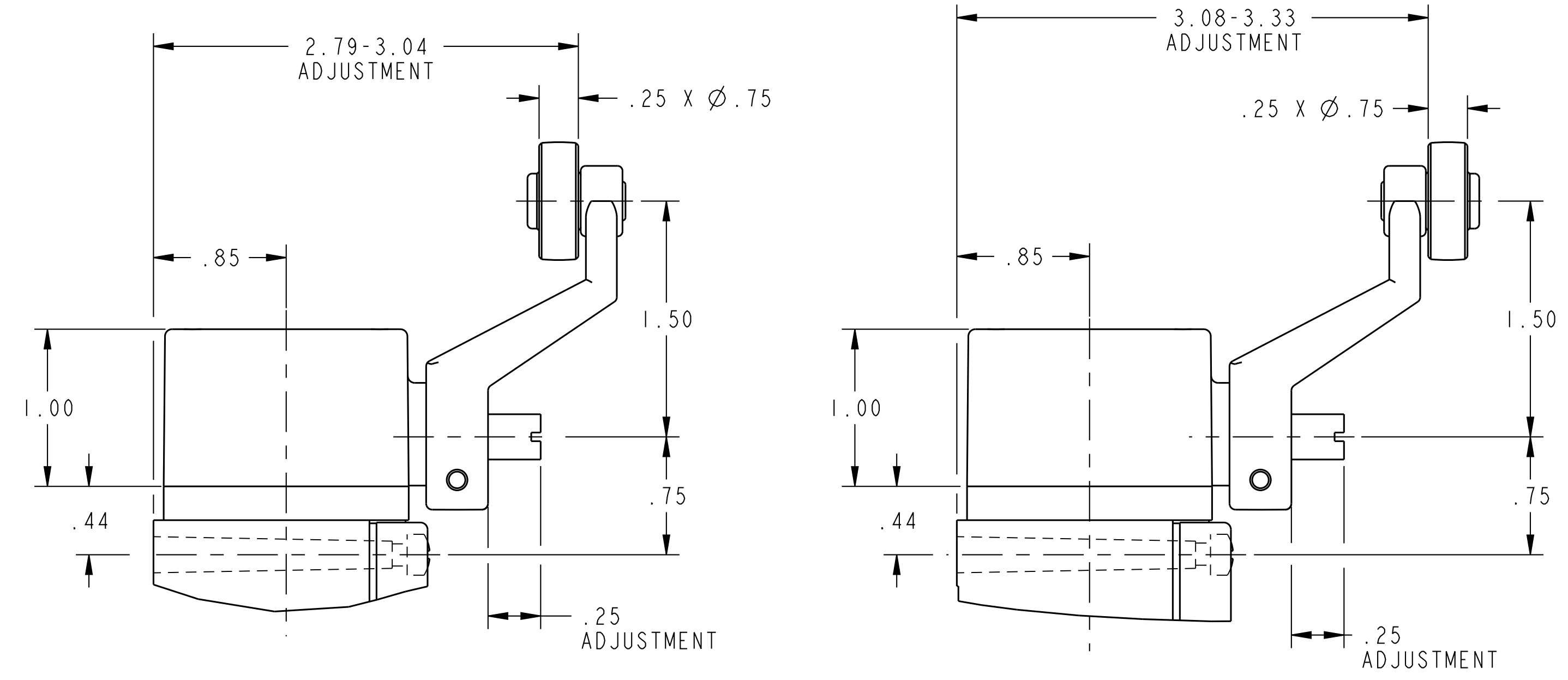


**ACTUATOR CODES 4 - 4V DETAIL**

SEE ACTUATOR CODE TABLE ON PAGE 1 FOR ADDITIONAL INFORMATION

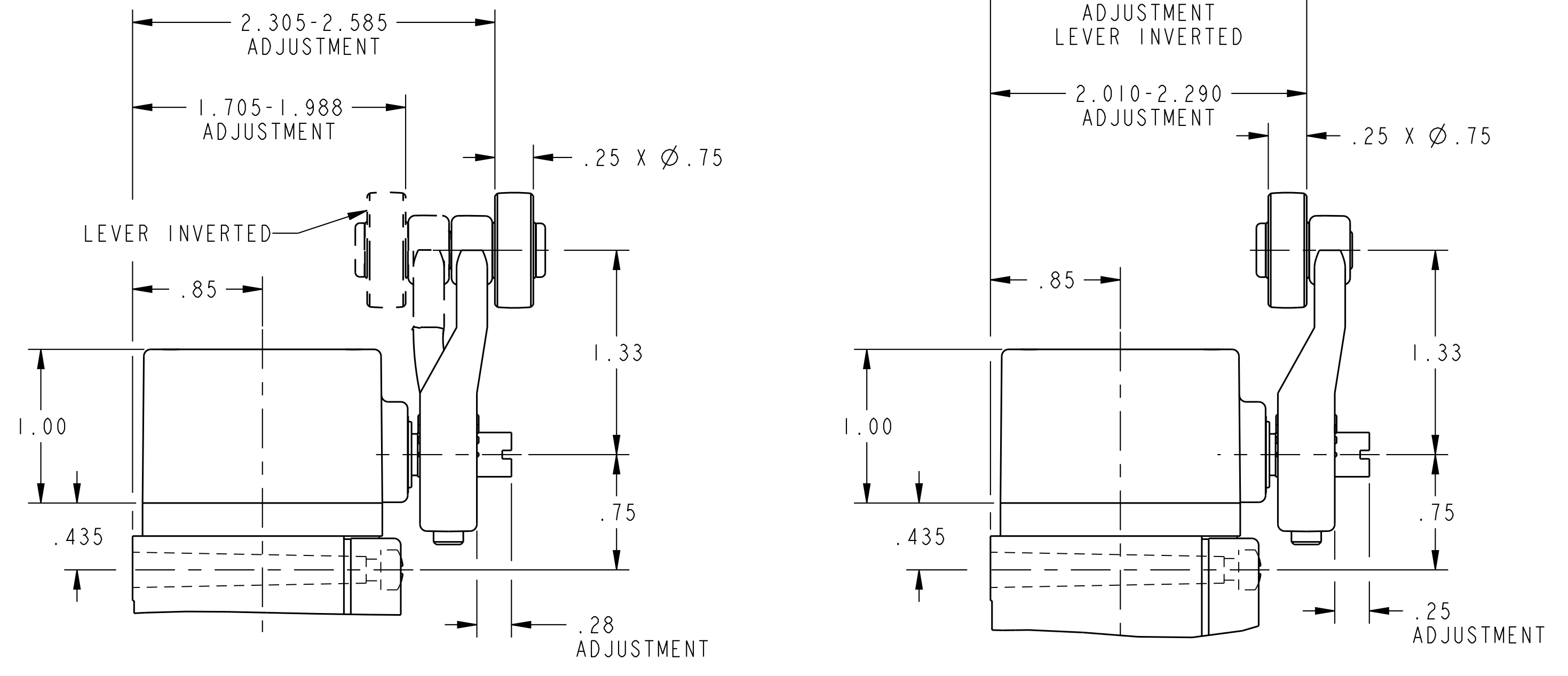
**ACTUATOR CODES 2 - 2N DETAIL**

SEE ACTUATOR CODE TABLE ON PAGE 1 FOR ADDITIONAL INFORMATION



**ACTUATOR CODES K - 5K DETAIL**

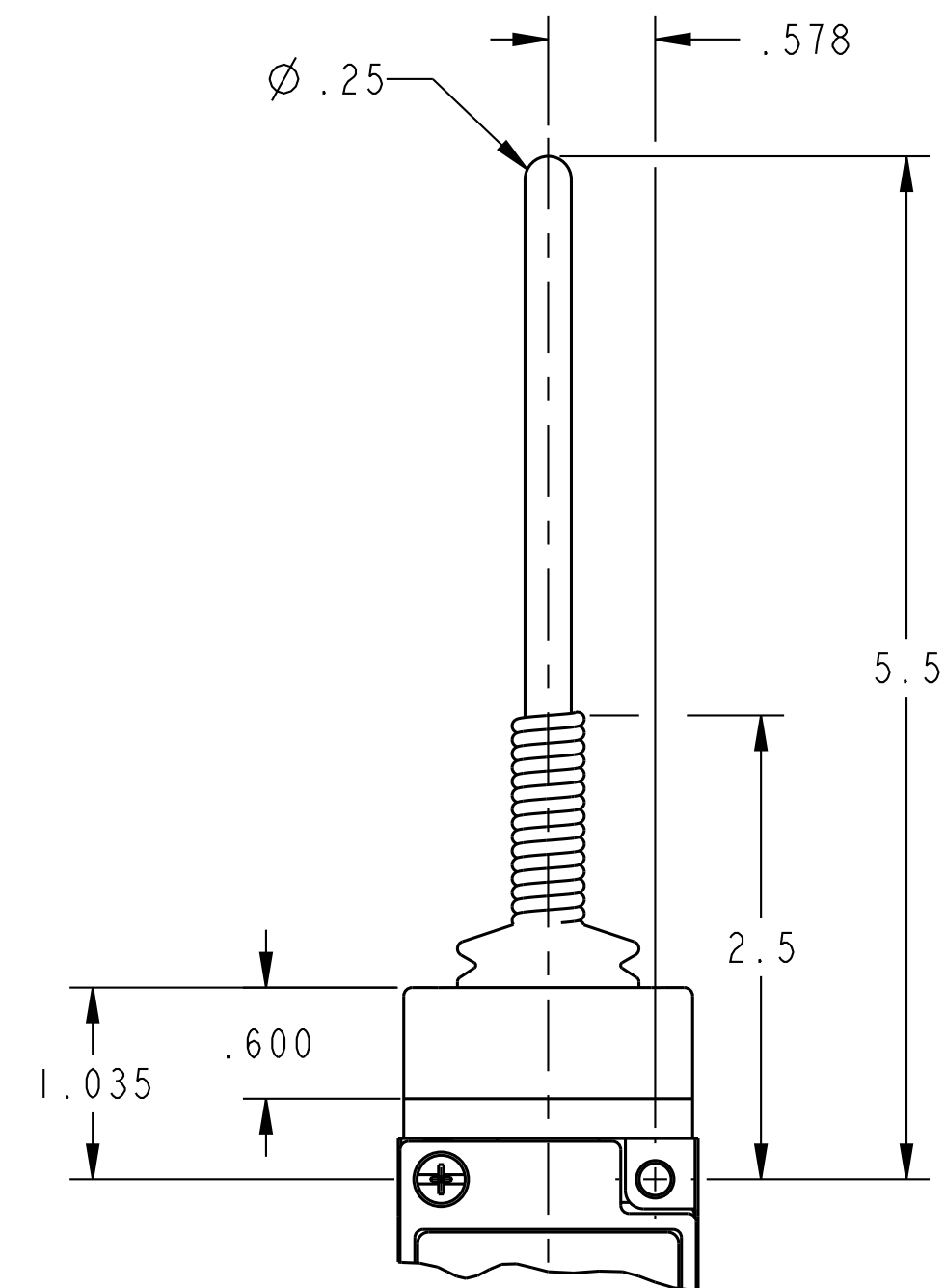
SEE ACTUATOR CODE TABLE ON PAGE 1 FOR ADDITIONAL INFORMATION



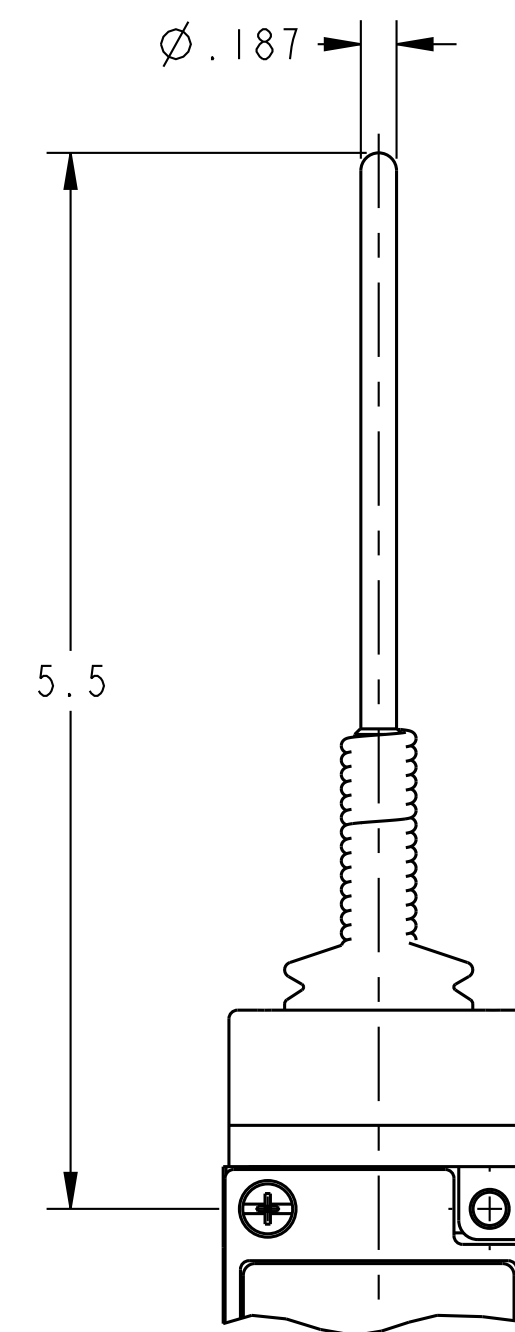
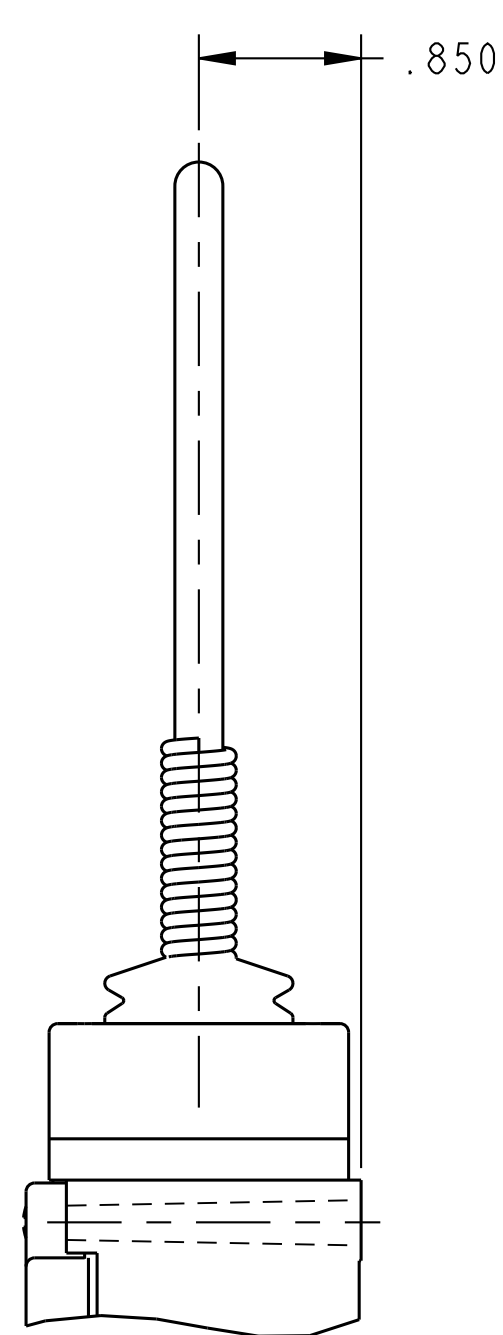
**ACTUATOR CODES 9A - 9D DETAIL**

SEE ACTUATOR CODE TABLE ON PAGE 1 FOR ADDITIONAL INFORMATION

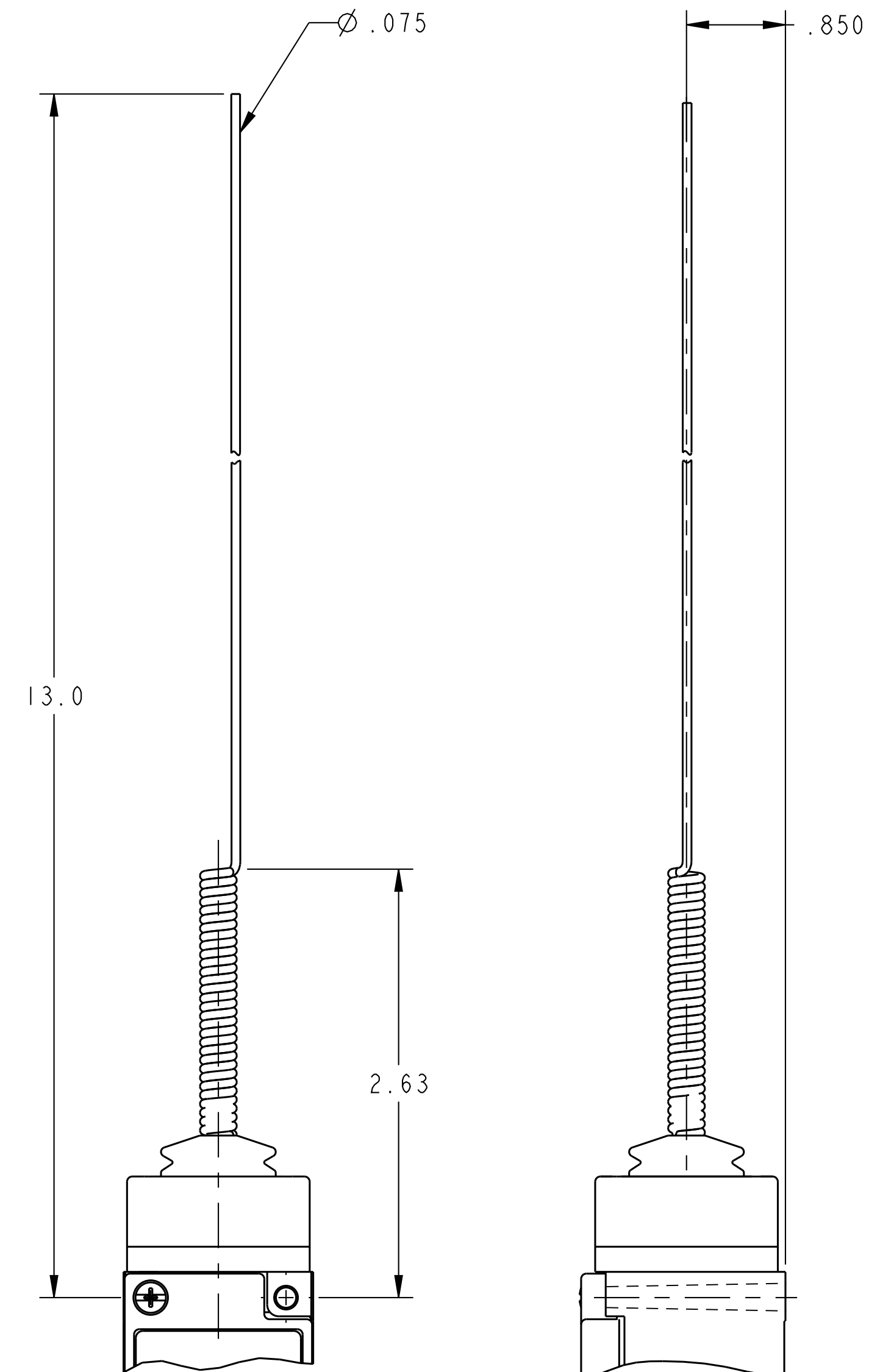
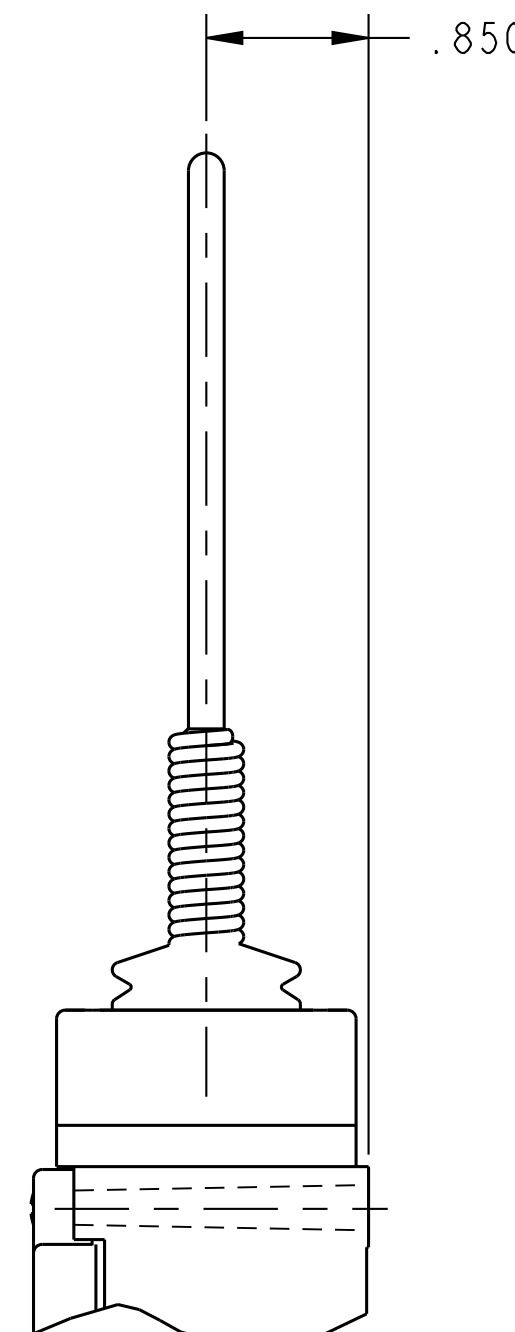
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SIZE	TYPE	CAGE CODE	DRAWING NAME		REV				
D	I	-	WLS SERIES CHART 1		F				
SCALE 3:2					SHEET 4 OF 6				



OPERATING HEAD CODE J  
ACTUATOR CODE 7A



OPERATING HEAD CODE J  
ACTUATOR CODE 7N



OPERATING HEAD CODE J  
ACTUATOR CODE 7M

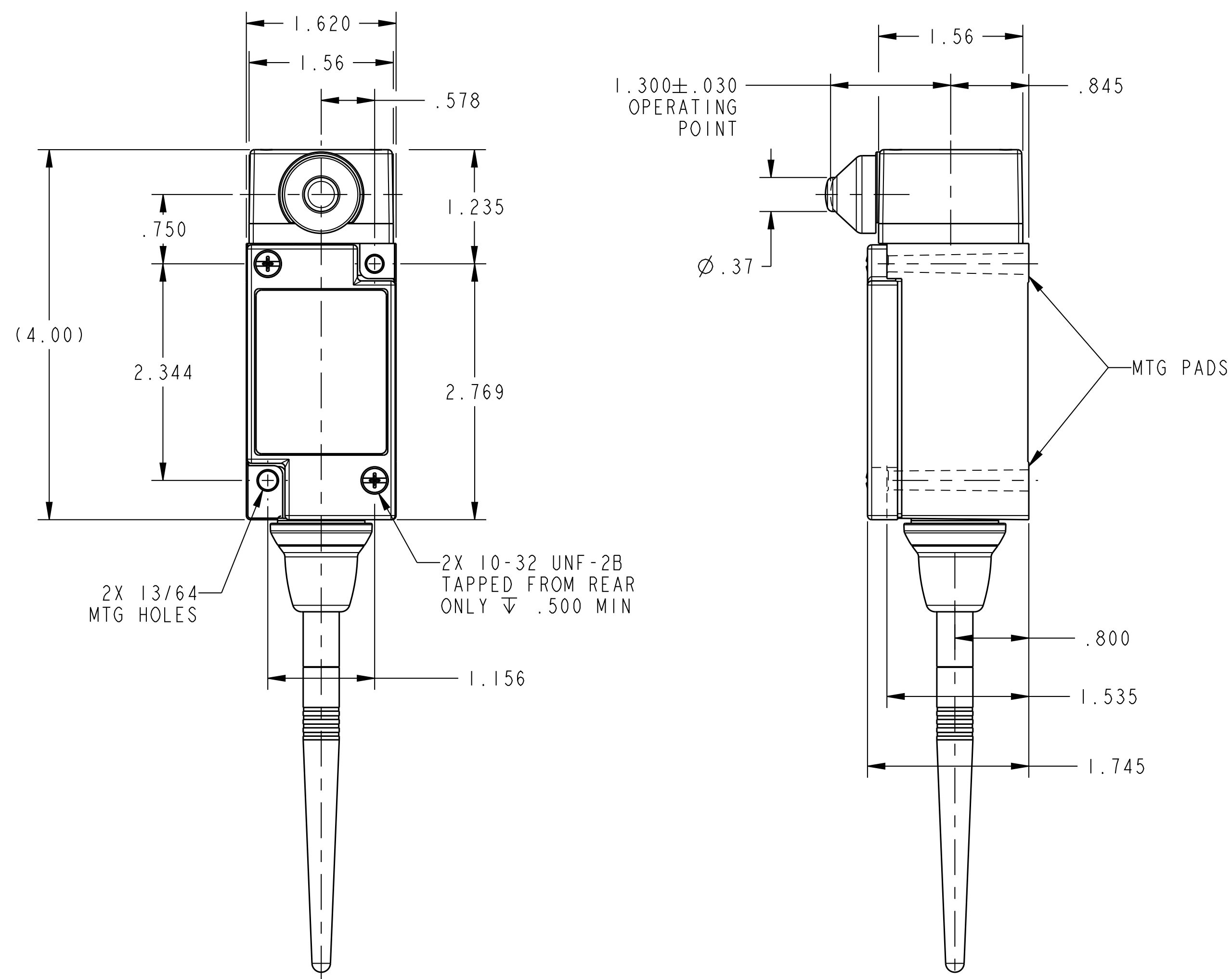
PRETRAVEL (APPROX) IN. RADIUS	WOBBLE STICK		
	ROD	CABLE	WIRE
	1.0	1.5	4.0
OPERATING FORCE - OZ (MAX)	10.0	7.0	5.0

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<b>Honeywell</b>			
SIZE	TYPE	CAGE CODE	DRAWING NAME
D	I	-	WLS SERIES CHART 1
SCALE	3:2	SHEET	5 OF 6

### SIDE PLUNGER TYPE

OPERATING CHARACTERISTICS	
PRETRAVEL (MAX)	.100
DIFFERENTIAL TRAVEL (MAX)	.045
OVERTRAVEL (MIN)	.190
OPERATING FORCE (MAX)	6 LBS
OPERATING POINT	1.300±.030
FULL OVERTRAVEL FORCE (MAX)	6 LBS



### OPERATING HEAD CODE E

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SIZE	TYPE	CAGE CODE	DRAWING NAME	REV	
D	I	-	WLS SERIES CHART 1	F	
SCALE 3:2			SHEET 6 OF 6		