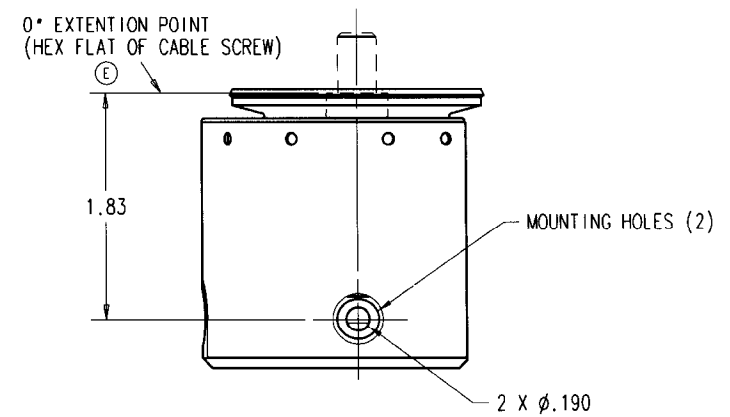
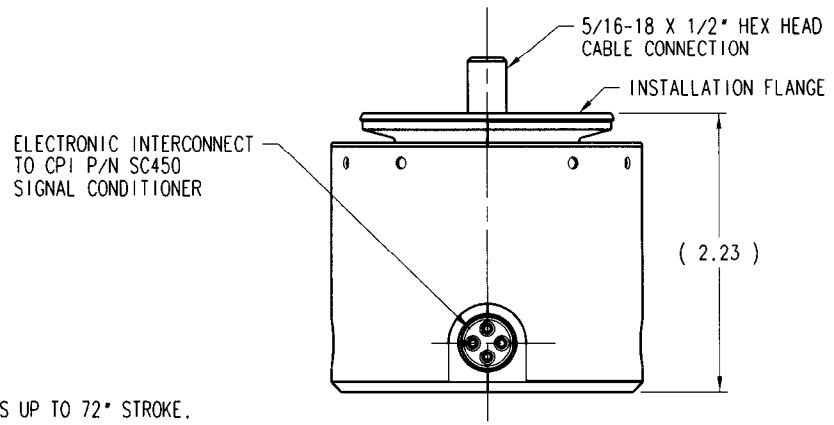
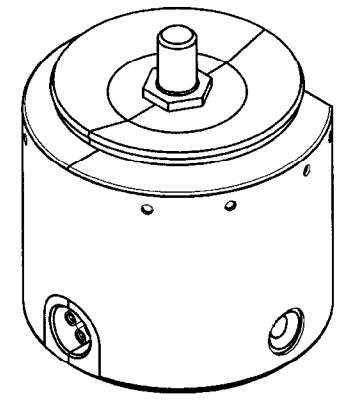
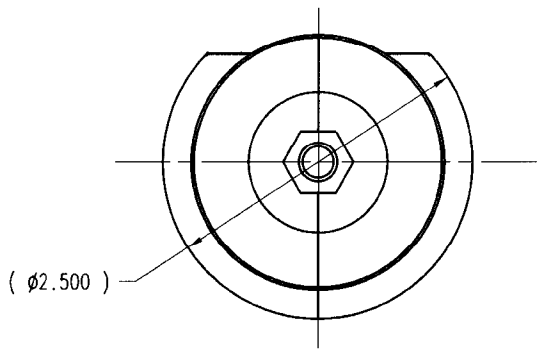


**WARNING!**  
 THIS PRODUCT IS INTENDED FOR USE BY  
 QUALIFIED TECHNICAL PERSONNEL ONLY.  
 IMPROPER OPERATION OF ROBOTIC SYSTEMS  
 MAY RESULT IN SERIOUS INJURY OR DEATH.

SL720

PART NUMBER  
 72" MAX STROKE LENGTH



- NOTES:**
1. SENSOR INSTALLS IN CYLINDERS UP TO 72" STROKE.
  2. OPERATING PRESSURE: 5000 PSI WORKING
  3. OPERATING TEMPERATURE: -13°F(-25°C) TO 185°F(85°C)
  4. STORAGE TEMPERATURE : -40°F(-40°C) TO 185°F(85°C)
  5. ISO CLEANLINESS RECOMMENDATION: 19/18/15
  6. INSTALLATION REQUIREMENTS APPEAR ON CPI DRAWINGS ES-I-148 AND ES-I-150.
  7. OPERATION OF THE SL720 REQUIRES AN SC450 SIGNAL CONDITIONER AND SCREWS, TWO SENSOR MOUNTING SCREWS AND TWO SH012 SEALING WASHERS WHICH MAY BE ORDERED AS AN SH720 MOUNTING KIT.
  8. PROPER APPLICATION OF THIS PRODUCT IS THE RESPONSIBILITY OF THE USER.

REV	DESCRIPTION	DATE	BY	APP
E	ECN5551	11/3/09	RWD	RG
D	ECN5377	10/15/08	RWD	RG
C	ECN5361	09/23/08	KDK	RG

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		APPROVALS	DATE
TOLERANCES ARE:		DRAWN RWD	8/15/05
.X ± .1   .XX ± .03   .XXX ± .015   ANG ± 5°		CHECKED	
MATERIAL		ISSUED ECN4883RG	08/16/05
FINISH AND HEAT TREAT			

<b>CPI CONTROL PRODUCTS, INC.</b> EAST HANOVER, NEW JERSEY WWW.CPI-NJ.COM			
TITLE <b>MOBILE LINEAR POSITION SENSOR                  INSTALLATION DRAWING</b>			
SIZE	SCALE	DRAWING NO.	SHEET
B	NONE	SL720	1 OF 1

REVISIONS

THE INFORMATION FURNISHED HEREIN IS THE PROPERTY OF CONTROL PRODUCTS, INC. AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR COPIED WITHOUT THE EXPRESS WRITTEN CONSENT OF CONTROL PRODUCTS, INC.

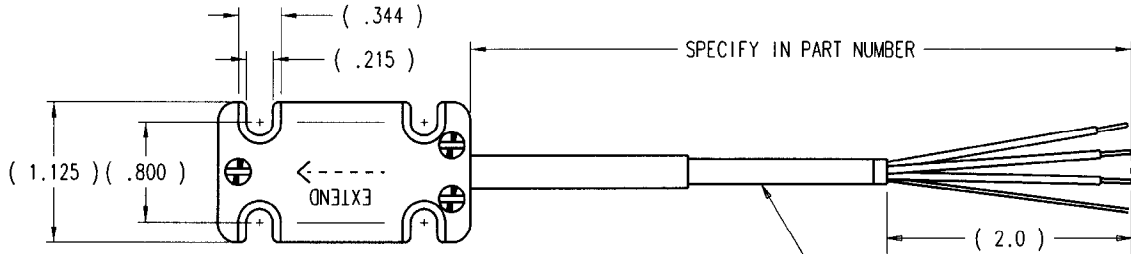
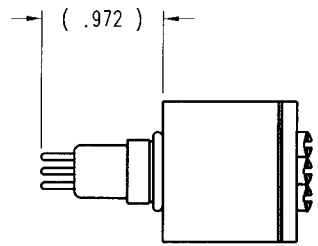
DO NOT SCALE DRAWING

SC450-XX

BASE PART NUMBER

CABLE LENGTH SPECIFIED IN INCHES  
STANDARD LENGTHS 72", 144", OR 240"  
TOLERANCE PER CPI DRAWING ES-1-55

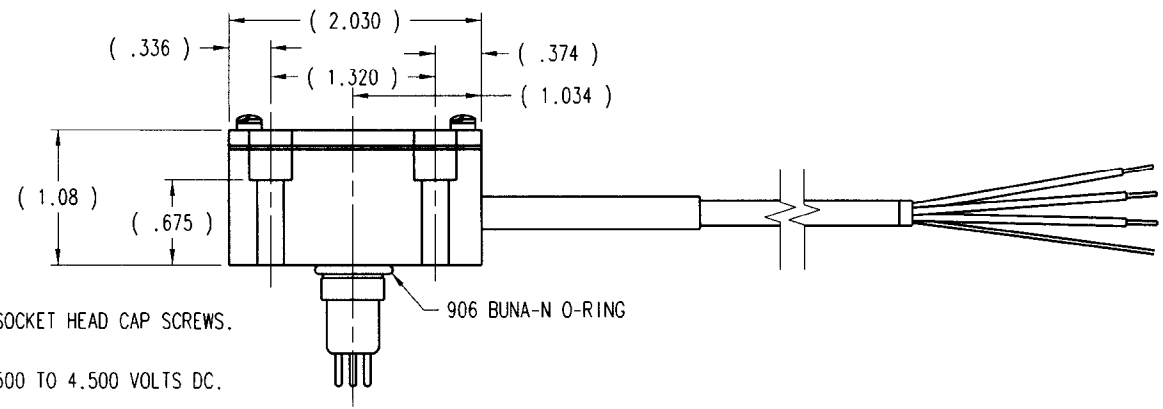
**WARNING!**  
THIS PRODUCT IS INTENDED FOR USE BY  
QUALIFIED TECHNICAL PERSONNEL ONLY.  
IMPROPER OPERATION OF ROBOTIC SYSTEMS  
MAY RESULT IN SERIOUS INJURY OR DEATH.



WIRING SEQUENCE:  
RED - SUPPLY 12 VDC  
WHITE - SIGNAL 0.500 TO 4.500 VDC  
BLACK - COMMON  
BRAID - CHASSIS GROUND

NOTE: INCORRECT WIRING WILL VOID WARRANTY

THREE CONDUCTOR CABLE  
FOIL AND BRAIDED SHIELD  
3 - 24 AWG CONDUCTORS  
1 - 26 AWG DRAIN WIRE



- NOTES:
1. PRESSURE RATING: 5000 PSI OPERATING
  2. WATERPROOF : IP67 COMPLIANT
  3. MOUNTS WITH FOUR 10-32 THD GRADE 8 SOCKET HEAD CAP SCREWS.
  4. INPUT VOLTAGE: 12-24 VOLTS NOMINAL.
  5. FULL STROKE (72") VOLTAGE RANGE: 0.500 TO 4.500 VOLTS DC.
  6. OPERATING TEMPERATURES:  
-13°F TO 185°F  
STANDARD CABLE TEMPERATURE RATING:  
FLEXING CABLE: 41°F - 221°F  
STATIONARY CABLE: 14°F - 221°F  
(OTHER CABLES AVAILABLE UPON REQUEST)
  7. SEE CPI SPECIFICATION ES-1-148 AND ES-1-150 FOR MOUNTING SPECIFICATIONS.
  8. PROPER APPLICATION OF THIS PRODUCT IS THE RESPONSIBILITY OF THE USER.

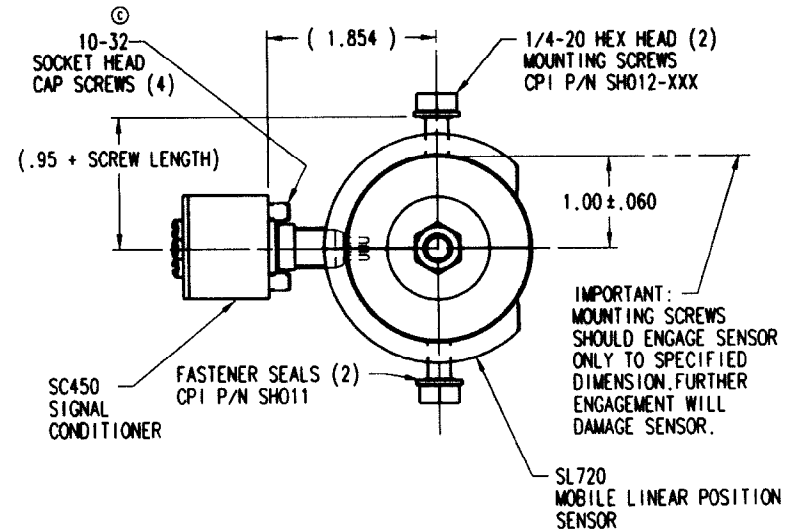
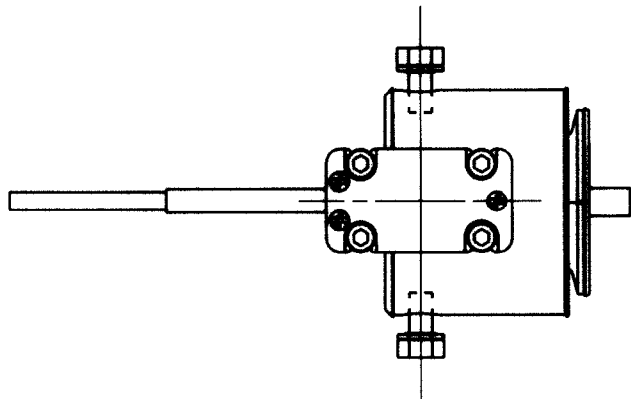
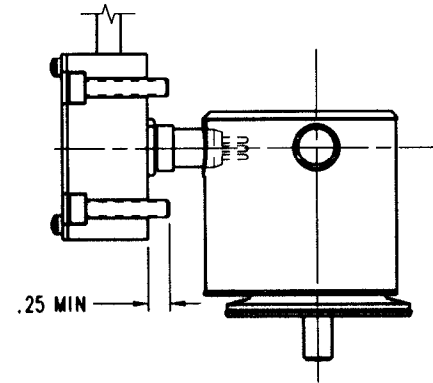
REV	DESCRIPTION	DATE	BY	APP	MATERIAL	ISSUED	DATE
D	ECN5560	11/18/09	KDK	RG			
C	ECN5420	12/19/09	RWD	RG			
B	ECN5353	9/18/08	ROG	RWD	.X ± .1   .XX ± .03   .XXX ± .015   ANG ± 5°		
<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</p> <p>TOLERANCES ARE:</p> <p>CHECKED</p> <p>ISSUED ECN4883 RG 8/16/05</p> <p>DO NOT SCALE DRAWING</p>							

**CPI CONTROL PRODUCTS, INC.**  
EAST HANOVER, NEW JERSEY WWW.CPI-NJ.COM

TITLE  
**SIGNAL CONDITIONER  
INSTALLATION DRAWING**

SIZE B SCALE NONE DRAWING NO. SC450 SHEET 1 OF 1

**WARNING!**  
 THIS PRODUCT IS INTENDED FOR USE BY  
 QUALIFIED TECHNICAL PERSONNEL ONLY.  
 IMPROPER OPERATION OF ROBOTIC SYSTEMS  
 MAY RESULT IN SERIOUS INJURY OR DEATH.

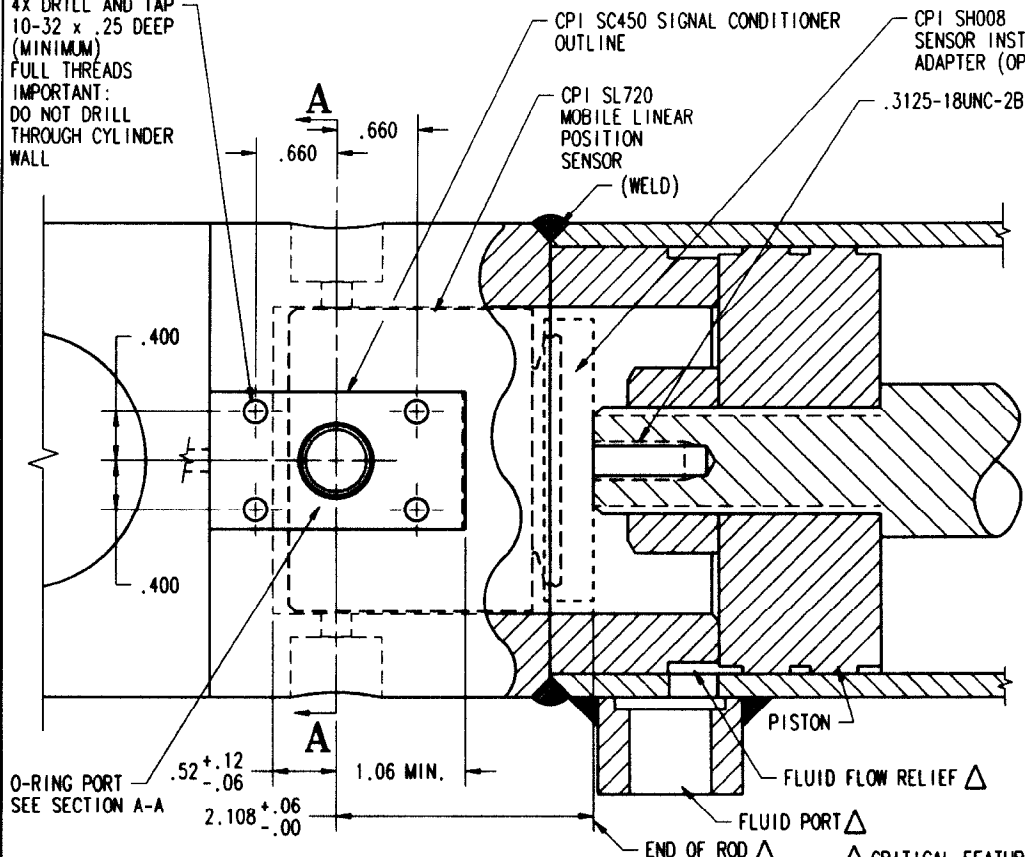


**NOTES:**

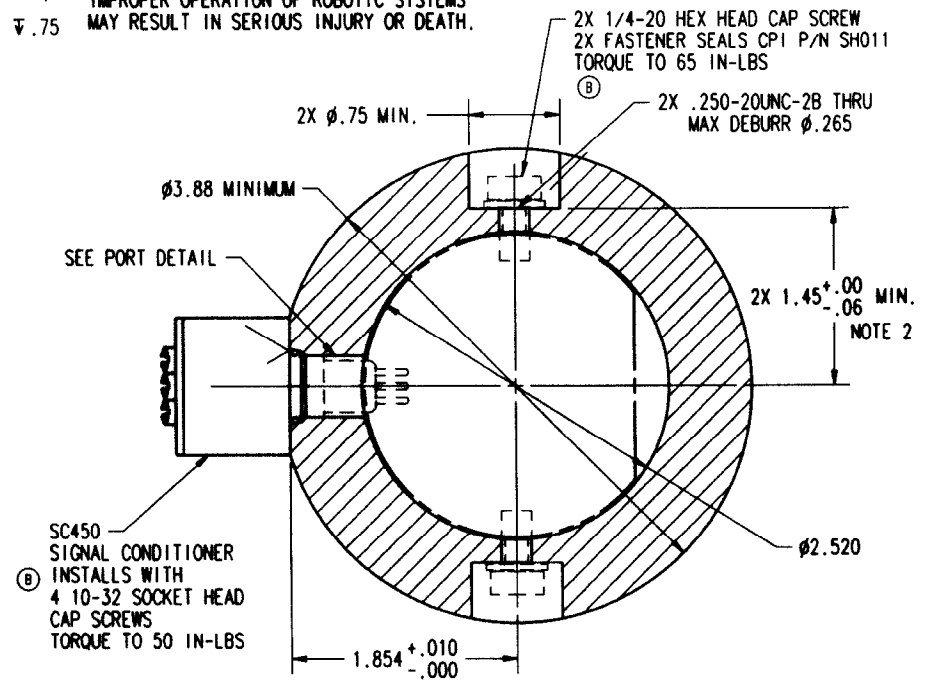
1. THIS DRAWING IS INTENDED TO ILLUSTRATE THE REQUIRED DEPTH RELATIONSHIP OF THE MOUNTING SCREWS AND THE RELATIONSHIP OF ALL THE REQUIRED COMPONENTS.
2. PROPER APPLICATION OF THIS PRODUCT IS THE RESPONSIBILITY OF THE USER.

C	ECN5571	12/22/09	HW	KDK	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVALS	DATE	<b>CPI CONTROL PRODUCTS, INC.</b> EAST HANOVER, NEW JERSEY WWW.CPI-NJ.COM			
B	ECN5381	10/20/08	RWD	RG	TOLERANCES ARE:	DRAWN KDK	05/18/07				
A	ECN5141	5/22/07	KDK	RC	.X ± .1 .XX ± .01 .XXX ± .005 ANG ± 2°	CHECKED		TITLE <b>SL720 MOUNTING SPECIFICATION COMPONENT RELATIONSHIPS</b>			
REV	DESCRIPTION	DATE	BY	APP	MATERIAL	ISSUED ECN5140RG	05/21/07				
REVISIONS					FINISH AND HEAT TREAT	DO NOT SCALE DRAWING		SIZE B	SCALE NONE	DRAWING NO. ES-1-148	SHEET 1 OF 1
THE INFORMATION FURNISHED HEREIN IS THE PROPERTY OF CONTROL PRODUCTS, INC. AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR COPIED WITHOUT THE EXPRESS WRITTEN CONSENT OF CONTROL PRODUCTS, INC.											

4X DRILL AND TAP 10-32 x .25 DEEP (MINIMUM)  
 IMPORTANT: DO NOT DRILL THROUGH CYLINDER WALL

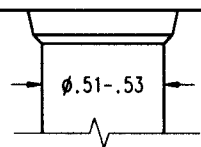


**WARNING!**  
 THIS PRODUCT IS INTENDED FOR USE BY QUALIFIED TECHNICAL PERSONNEL ONLY. IMPROPER OPERATION OF ROBOTIC SYSTEMS MAY RESULT IN SERIOUS INJURY OR DEATH.



**SECTION A-A**  
 THROUGH WHOLE END CAP

MODIFIED SAE-6 O-RING PORT  
 NO SPOTFACE OR THREADS  
 CENTER HOLE THRU.



- CRITICAL FEATURES**
- DESIGN MUST PROVIDE END STOP FOR PISTON. IMPROPER END STOP MAY RESULT IN SENSOR DAMAGE.
  - FLUID FLOW SHOULD NOT BE DIRECTED AT SENSOR OR CABLE.
  - IN SOME APPLICATIONS IT MAY BE ADVISABLE TO PROVIDE A FLUID FLOW PATH TO THE CENTER OF THE PISTON IN A RETRACTED STATE.

- NOTES:**
- THIS DRAWING SHOWS A TYPICAL INSTALLATION. SL720 WILL FIT ANY CYLINDER BORE AND DIAMETER.
  - SEE ES-1-148 FOR SCREW SPECIFICATION ALTERNATIVES.
  - PROPER APPLICATION OF THIS PRODUCT IS THE RESPONSIBILITY OF THE USER.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES				APPROVALS		DATE	
B	EON5571	12/22/09	HN	DRWN	RWD	3/27/08	
TOLERANCES ARE:				CHECKED			
A	EON5545	10/26/09	RWD	ISSUED			
REV	DESCRIPTION	DATE	BY	APP	EON 5377		ROG
REVISIONS				MATERIAL		10/15/08	
THE INFORMATION FURNISHED HEREIN IS THE PROPERTY OF CONTROL PRODUCTS, INC. AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR COPIED WITHOUT THE EXPRESS WRITTEN CONSENT OF CONTROL PRODUCTS, INC.				FINISH AND HEAT TREAT		DO NOT SCALE DRAWING	
CPI CONTROL PRODUCTS, INC. EAST HANOVER, NEW JERSEY WWW.CPI-NJ.COM						TITLE	
SENSOR MOUNTING SPECIFICATION FOR SL720 AND SC450						SIZE	SHEET
B						NONE	1 OF 1
DRAWING NO.						ES-1-150	