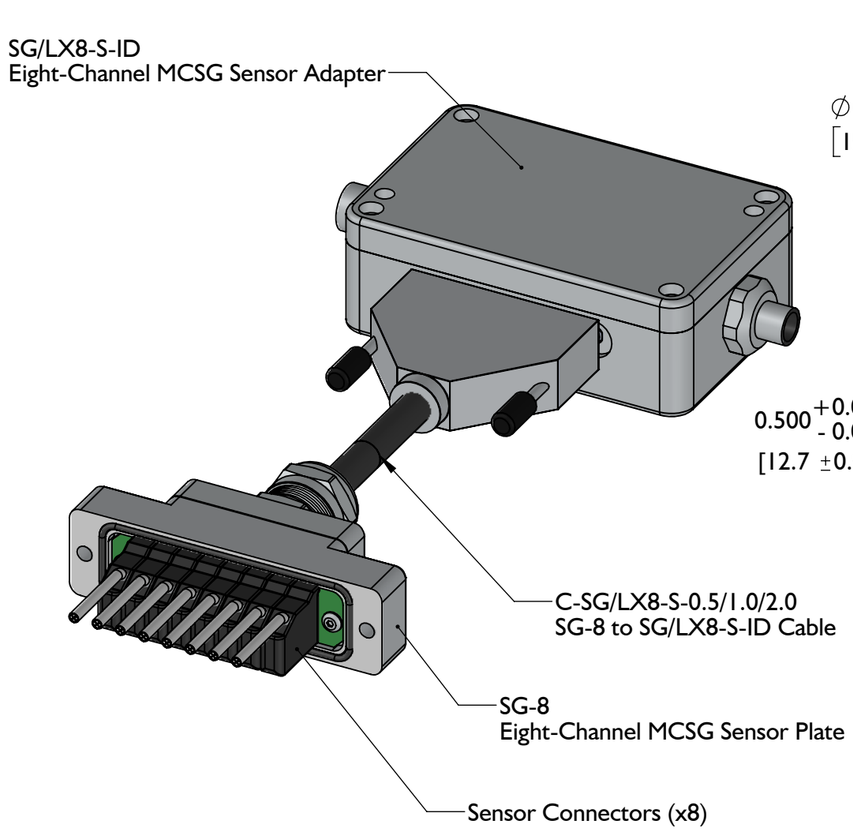
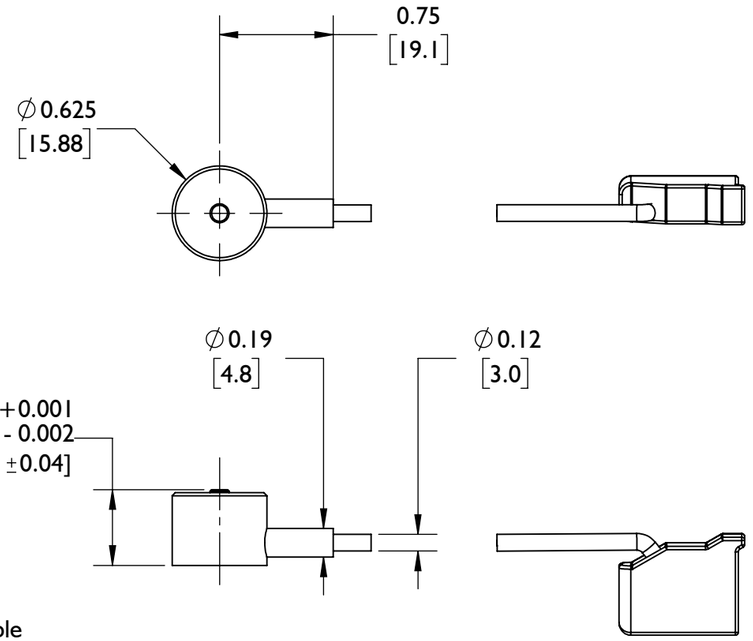
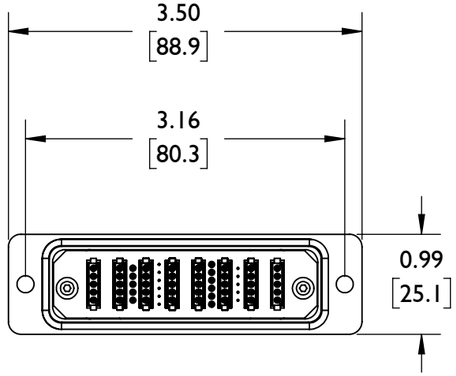
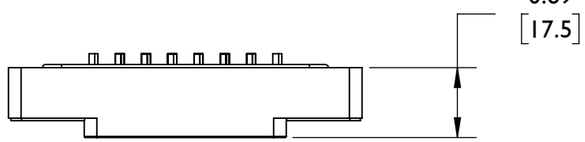
Drawing Title: MCSG-B-159-4000-01

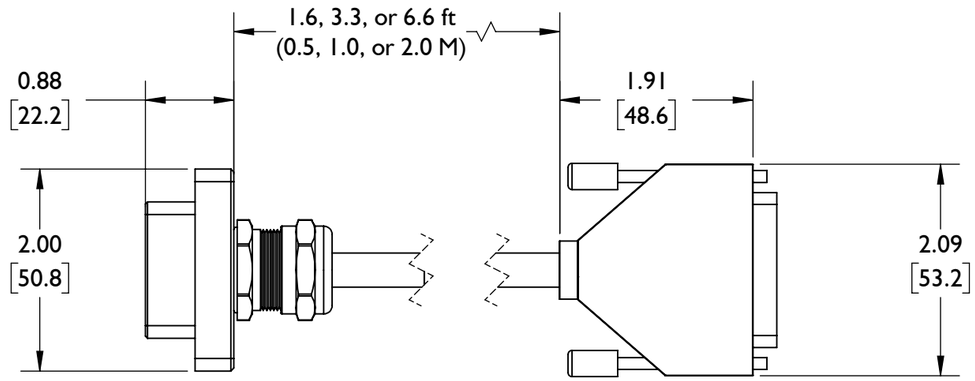
Multi-Channel Strain Gage 4,000 lb. Sensor (MCSG-B-159-4000) Installation—Sensor, Sensor Connector, and Sensor Cable Dimensions











NOTES:
1. CLAMP PLATE APPLICATIONS REQUIRE GUIDED EJECTION
2. EJECTOR AND TRANSFER PIN CONCENTRICITY MUST BE WITHIN 0.030" [0.76] OR 10% OF EJECTOR PIN DIA, WHICHEVER IS SMALLER.
3. ENCLOSED EJECTOR BOX SUGGESTED.
4. DO NOT SCALE PRINT
5. BREAK ALL SHARP EDGES, 0.005 [0.03] R MAX
6. DIMENSIONS IN INCHES [MM], UNLESS NOTED
7. TOLERANCES UNLESS SPECIFIED:
   XXX = ±0.003 [0.08]
   XX = ±0.01 [0.3]
   ANGLES = ±3° 30°

RJG MOLD SMART
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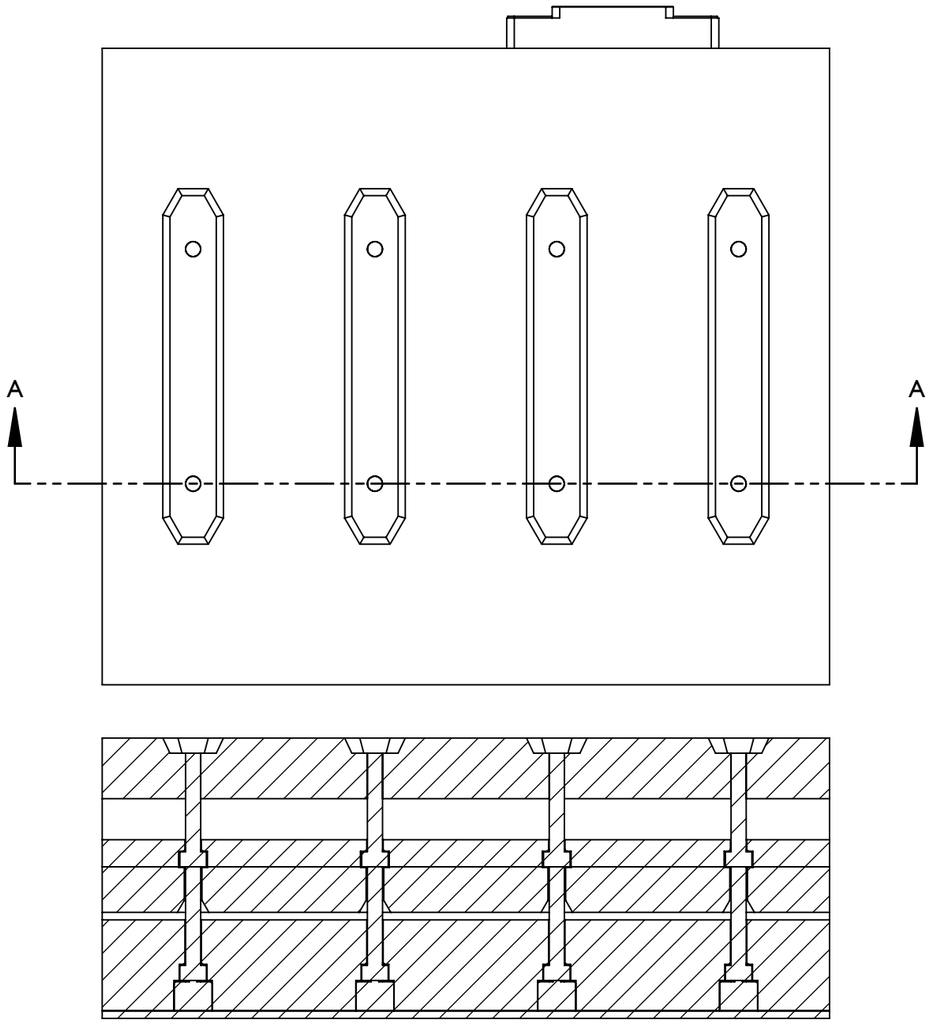
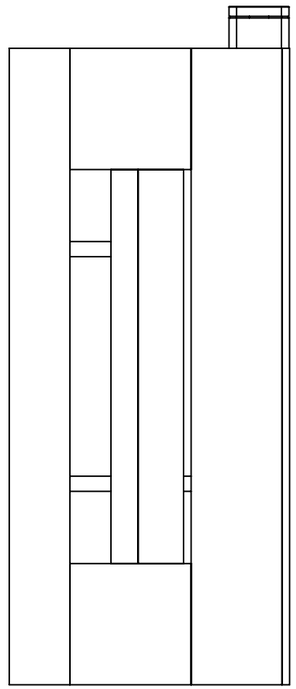
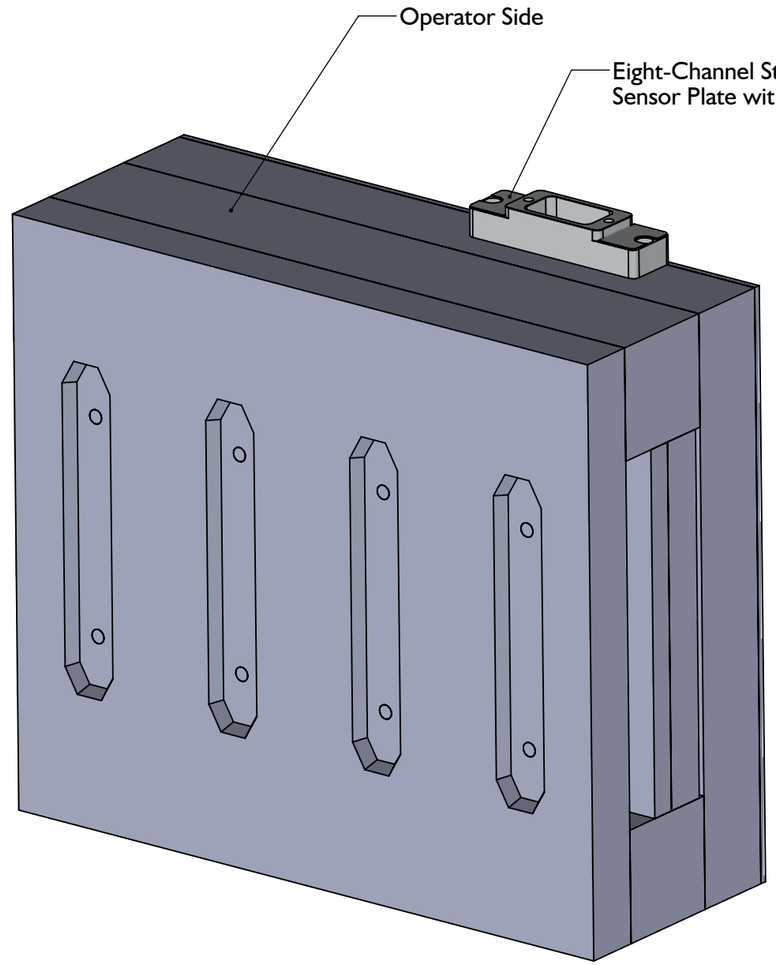
Description: MCSG-B-159-4000 Sensor Installation	
Drawn: K.J.Brettschneider	
Design:	
Check: M.Groleau	
Date: 12.02.2021	

Drawing Title: MCSG-B-159-4000-02

Multi-Channel Strain Gage 4,000 lb. Sensor (MCSG-B-159-4000) Installation—Clamp Plate Installation







SECTION A-A
SCALE 1 : 2.5

NOTES:
1. CLAMP PLATE APPLICATIONS REQUIRE GUIDED EJECTION
2. EJECTOR AND TRANSFER PIN CONCENTRICITY MUST BE WITHIN 0.030" [0.76] OR 10% OF EJECTOR PIN DIA, WHICHEVER IS SMALLER.
3. ENCLOSED EJECTOR BOX SUGGESTED.
4. DO NOT SCALE PRINT
5. BREAK ALL SHARP EDGES, 0.005 [0.03] R MAX
6. DIMENSIONS IN INCHES [MM], UNLESS NOTED
7. TOLERANCES UNLESS SPECIFIED:
   XXX = ±0.003 [0.08]
   XX = ±0.01 [0.3]
   ANGLES = ±3° 30°

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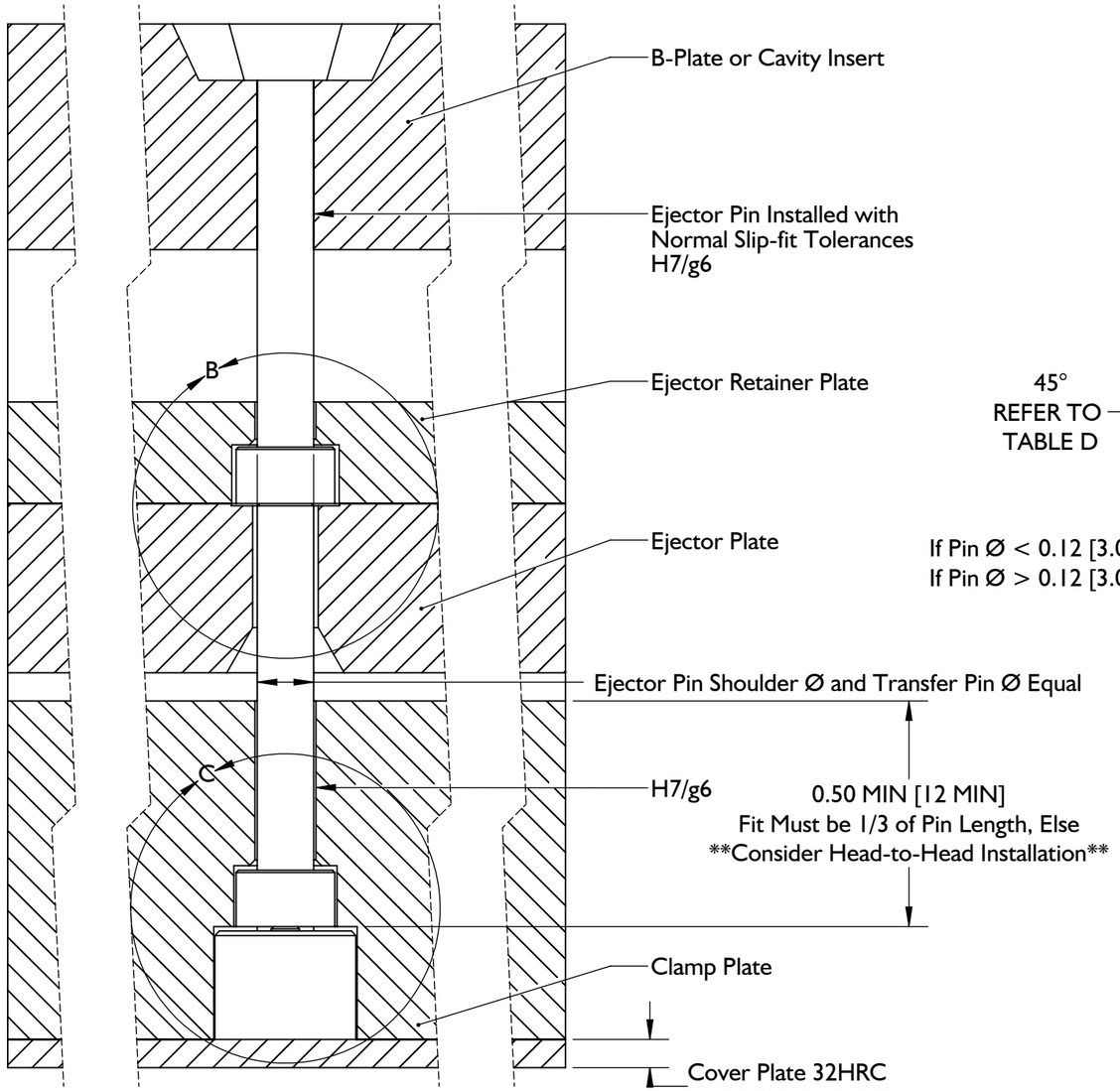
Description: MCSG-B-159-4000 Sensor Installation	
Drawn: K.J.Brettschneider	
Design:	
Check: M.Groleau	
Date: 12.02.2021	

Drawing Title: MCSG-B-159-4000-03

Multi-Channel Strain Gage 4,000 lb. Sensor (MCSG-B-159-4000) Installation—Clamp Plate Installation

CLAMP PLATE INSTALLATION FOR PINS ≤ Ø0.25 [7.0]; PINS > Ø0.25 [7.0] USE HEAD-TO-HEAD INSTALLATION ON SHEET MCSG-B-159-4000-04 & -05.



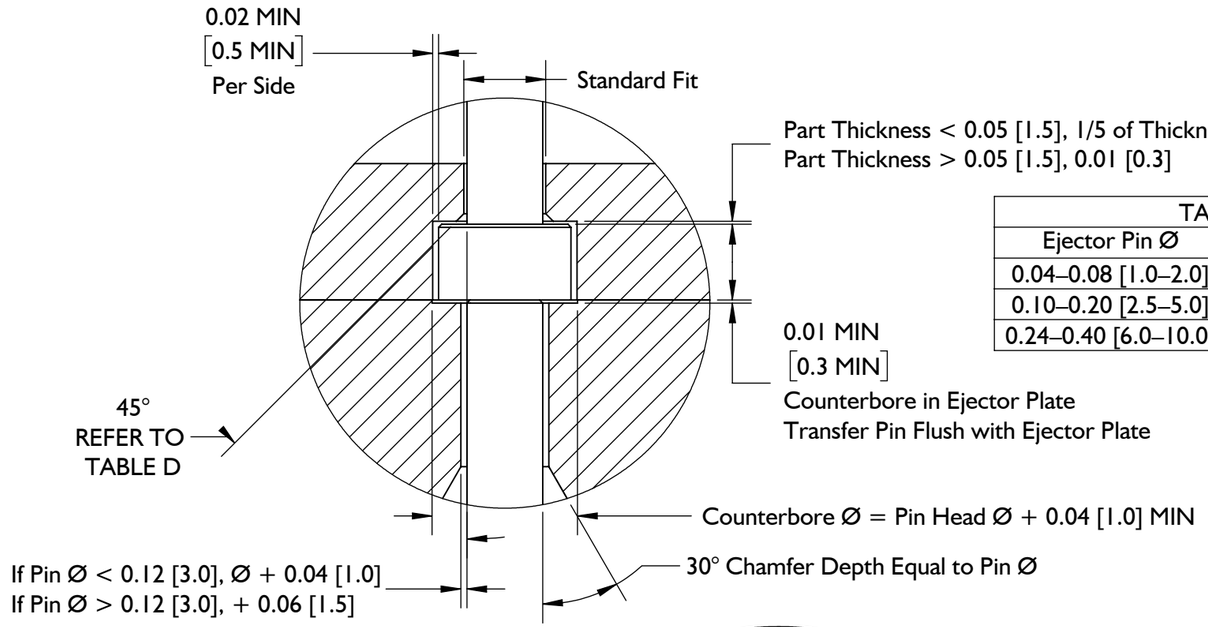
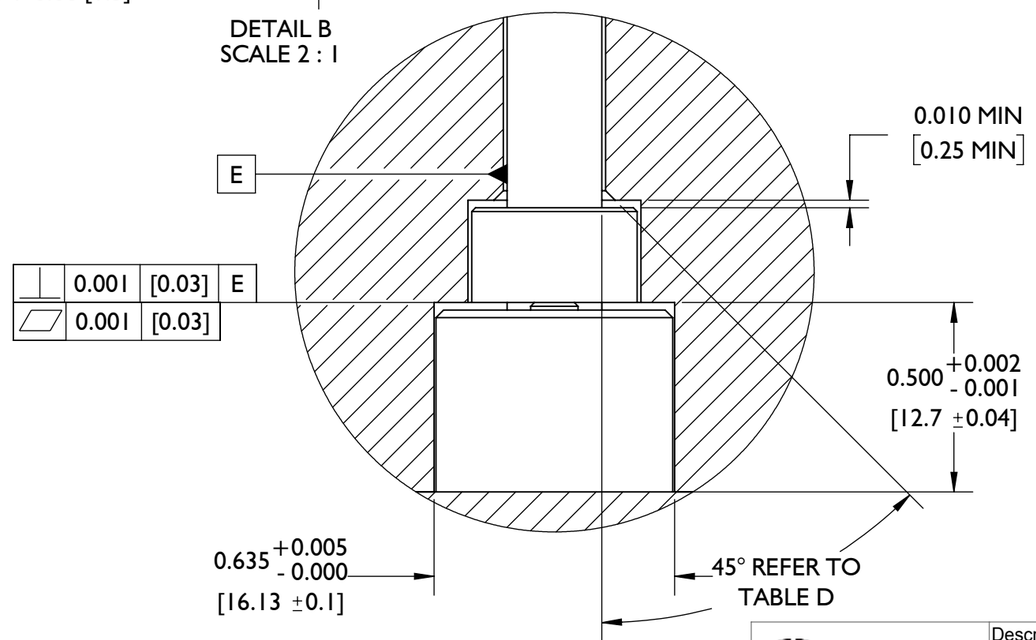


TABLE D	
Ejector Pin Ø	Chamfer Length
0.04–0.08 [1.0–2.0]	0.01 [0.3]
0.10–0.20 [2.5–5.0]	0.02 [0.4]
0.24–0.40 [6.0–10.0]	0.025 [6.0]

DETAIL B
SCALE 2 : 1



DETAIL C
SCALE 2.5 : 1

NOTES:
1. CLAMP PLATE APPLICATIONS REQUIRE GUIDED EJECTION
2. EJECTOR AND TRANSFER PIN CONCENTRICITY MUST BE WITHIN 0.030" [0.76] OR 10% OF EJECTOR PIN DIA, WHICHEVER IS SMALLER.
3. ENCLOSED EJECTOR BOX SUGGESTED.
4. DO NOT SCALE PRINT
5. BREAK ALL SHARP EDGES, 0.005 [0.03] R MAX
6. DIMENSIONS IN INCHES [MM], UNLESS NOTED
7. TOLERANCES UNLESS SPECIFIED:
   XXX = ±0.003 [0.08]
   XX = ±0.01 [0.3]
   ANGLES = ±3° 30°

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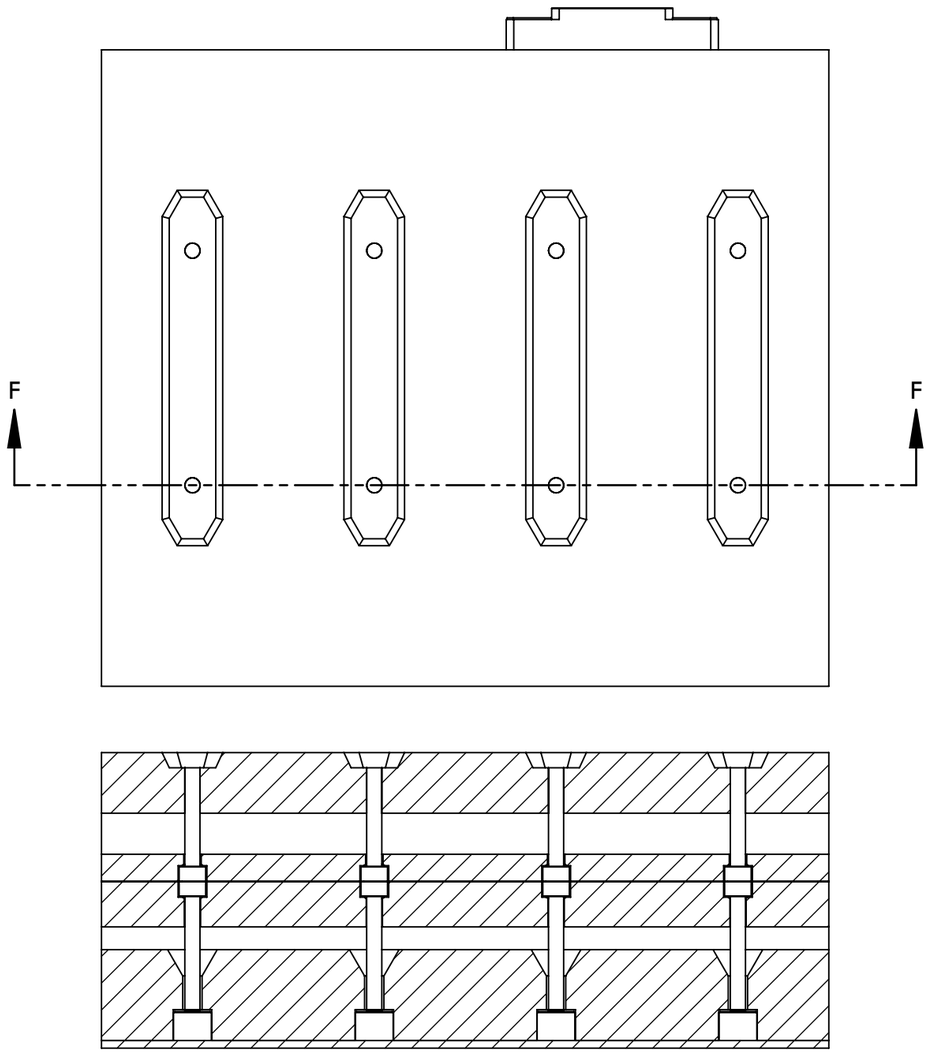
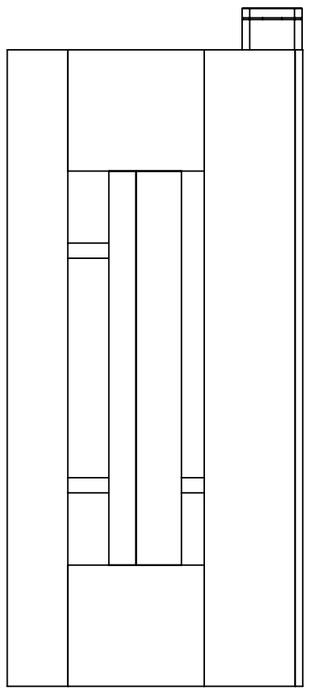
Description: MCSG-B-159-4000 Sensor Installation	
Drawn: K.J.Brettschneider	
Design:	
Check: M.Groleau	
Date: 12.02.2021	

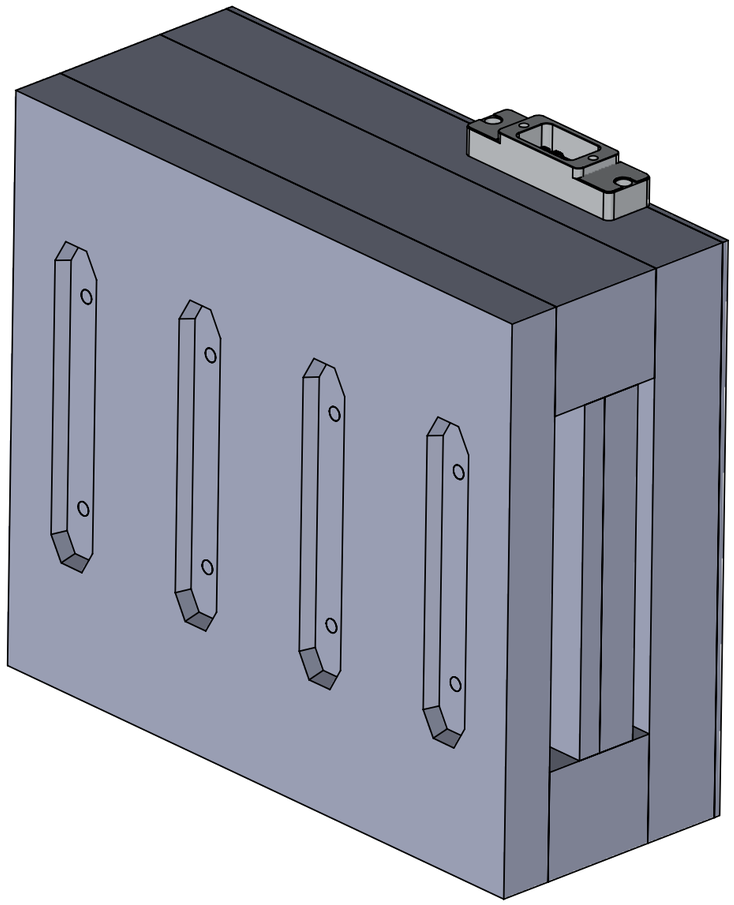
Drawing Title: MCSG-B-159-4000-04

Multi-Channel Strain Gage 4,000 lb. Sensor (MCSG-B-159-4000) Installation—Head-to-Head Installation

CLAMP PLATE INSTALLATION FOR PINS ≤ Ø0.25 [7.0]; PINS >Ø0.25 [7.0] USE HEAD-TO-HEAD INSTALLATION.







SECTION F-F
SCALE 1 : 2.5

NOTES:
1. CLAMP PLATE APPLICATIONS REQUIRE GUIDED EJECTION
2. EJECTOR AND TRANSFER PIN CONCENTRICITY MUST BE WITHIN 0.030" [0.76] OR 10% OF EJECTOR PIN DIA, WHICHEVER IS SMALLER.
3. ENCLOSED EJECTOR BOX SUGGESTED.
4. DO NOT SCALE PRINT
5. BREAK ALL SHARP EDGES, 0.005 [0.03] R MAX
6. DIMENSIONS IN INCHES [MM], UNLESS NOTED
7. TOLERANCES UNLESS SPECIFIED:
   XXX = ±0.003 [0.08]
   XX = ±0.01 [0.3]
   ANGLES = ±3° 30°

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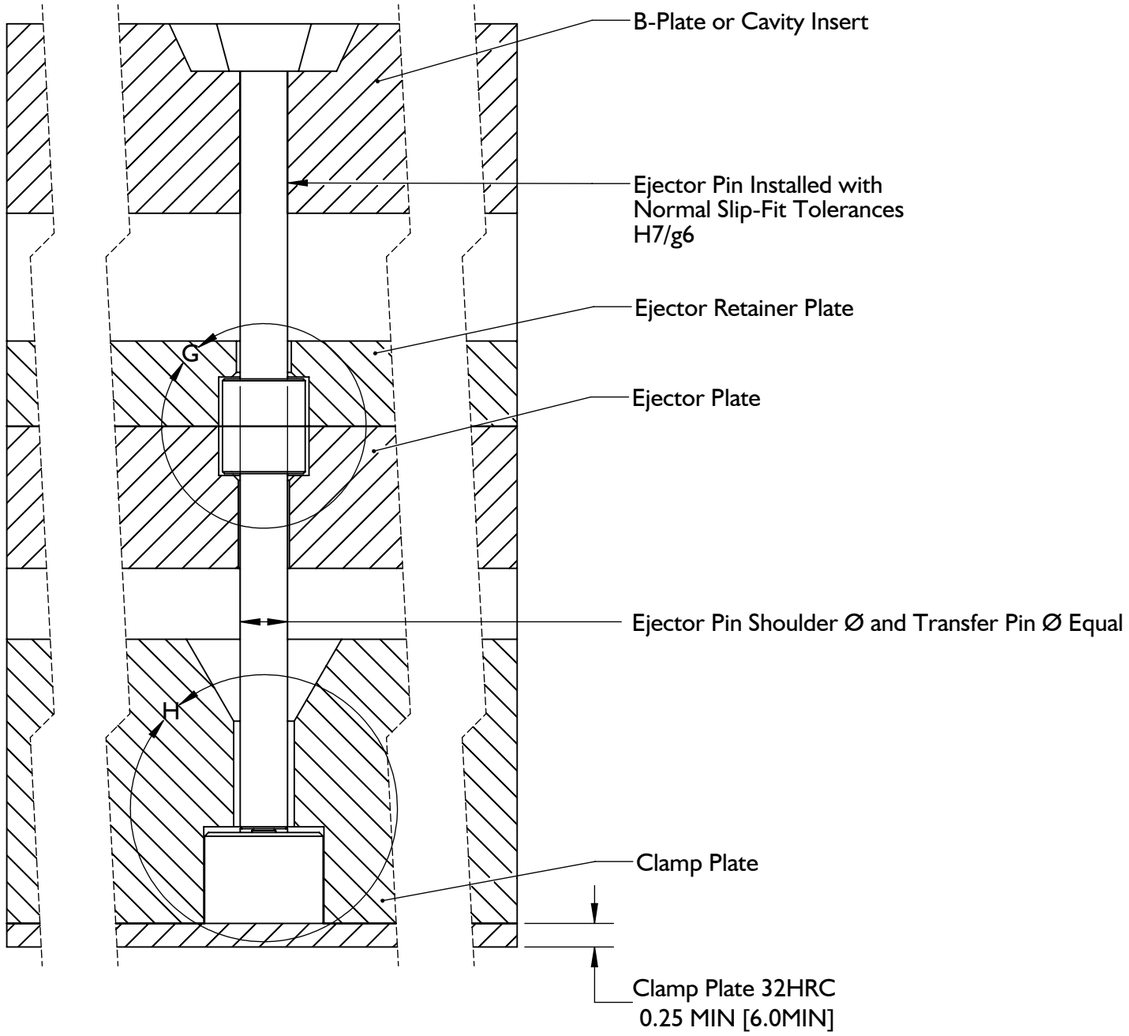
Description: MCSG-B-159-4000 Sensor Installation
Drawn: K.J.Brettschneider
Design:
Check: M.Groleau
Date: 12.02.2021

Drawing Title: MCSG-B-159-4000-05

Multi-Channel Strain Gage 4,000 lb. Sensor (MCSG-B-159-4000) Installation—Clamp Plate Installation

CLAMP PLATE INSTALLATION FOR PINS ≤ Ø0.25 [7.0]; PINS >Ø0.25 [7.0] USE HEAD-TO-HEAD INSTALLATION.



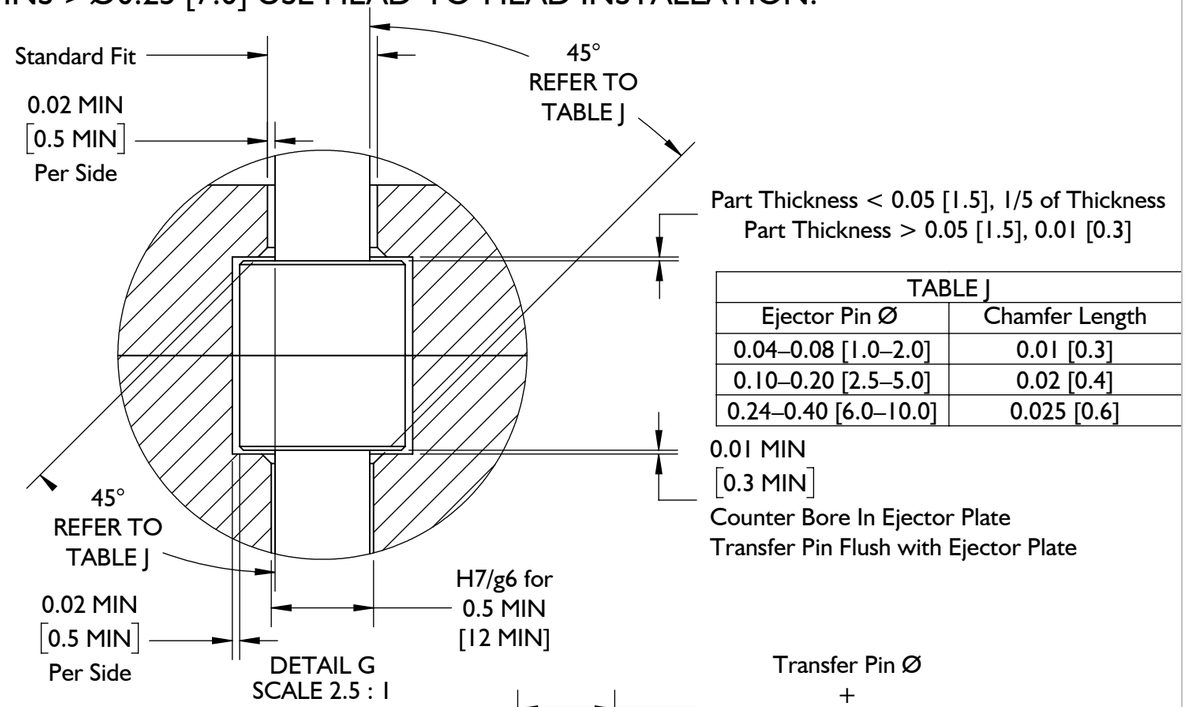
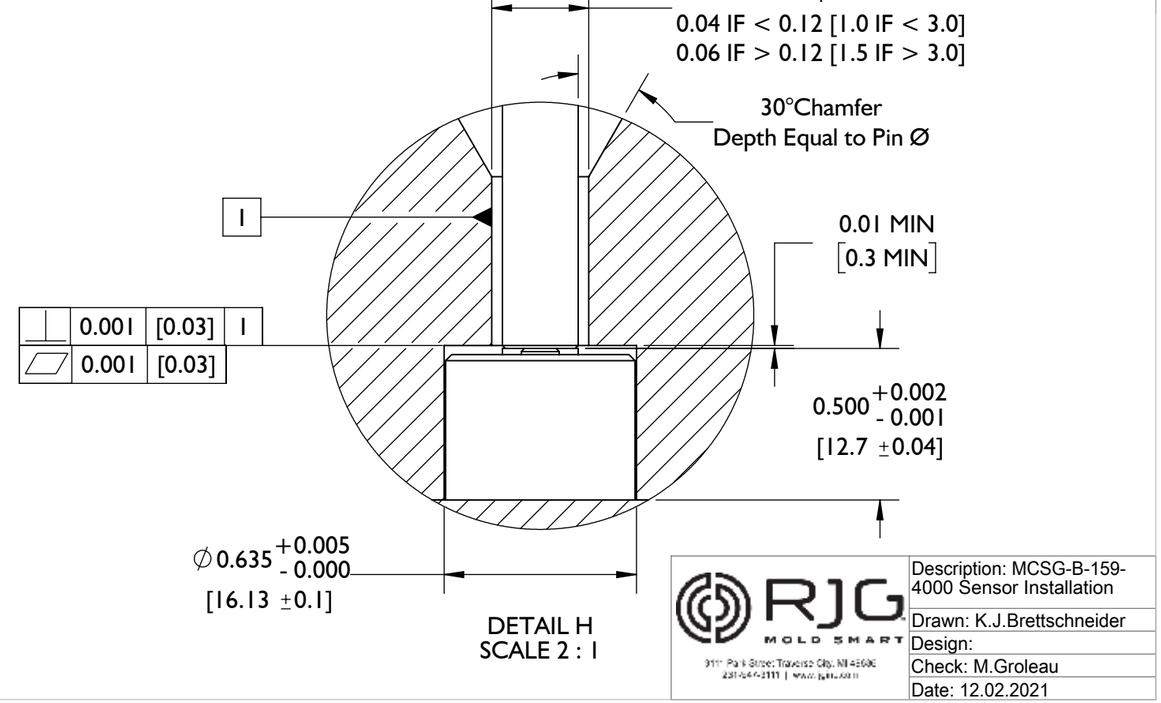


TABLE J	
Ejector Pin Ø	Chamfer Length
0.04–0.08 [1.0–2.0]	0.01 [0.3]
0.10–0.20 [2.5–5.0]	0.02 [0.4]
0.24–0.40 [6.0–10.0]	0.025 [0.6]



NOTES:
1. CLAMP PLATE APPLICATIONS REQUIRE GUIDED EJECTION
2. EJECTOR AND TRANSFER PIN CONCENTRICITY MUST BE WITHIN 0.030" [0.76] OR 10% OF EJECTOR PIN DIA, WHICHEVER IS SMALLER.
3. ENCLOSED EJECTOR BOX SUGGESTED.
4. DO NOT SCALE PRINT
5. BREAK ALL SHARP EDGES, 0.005 [0.03] R MAX
6. DIMENSIONS IN INCHES [MM], UNLESS NOTED
7. TOLERANCES UNLESS SPECIFIED:
   - XXX = ±0.003 [0.08]
   - XX = ±0.01 [0.3]
   - ANGLES = ±3° 30°

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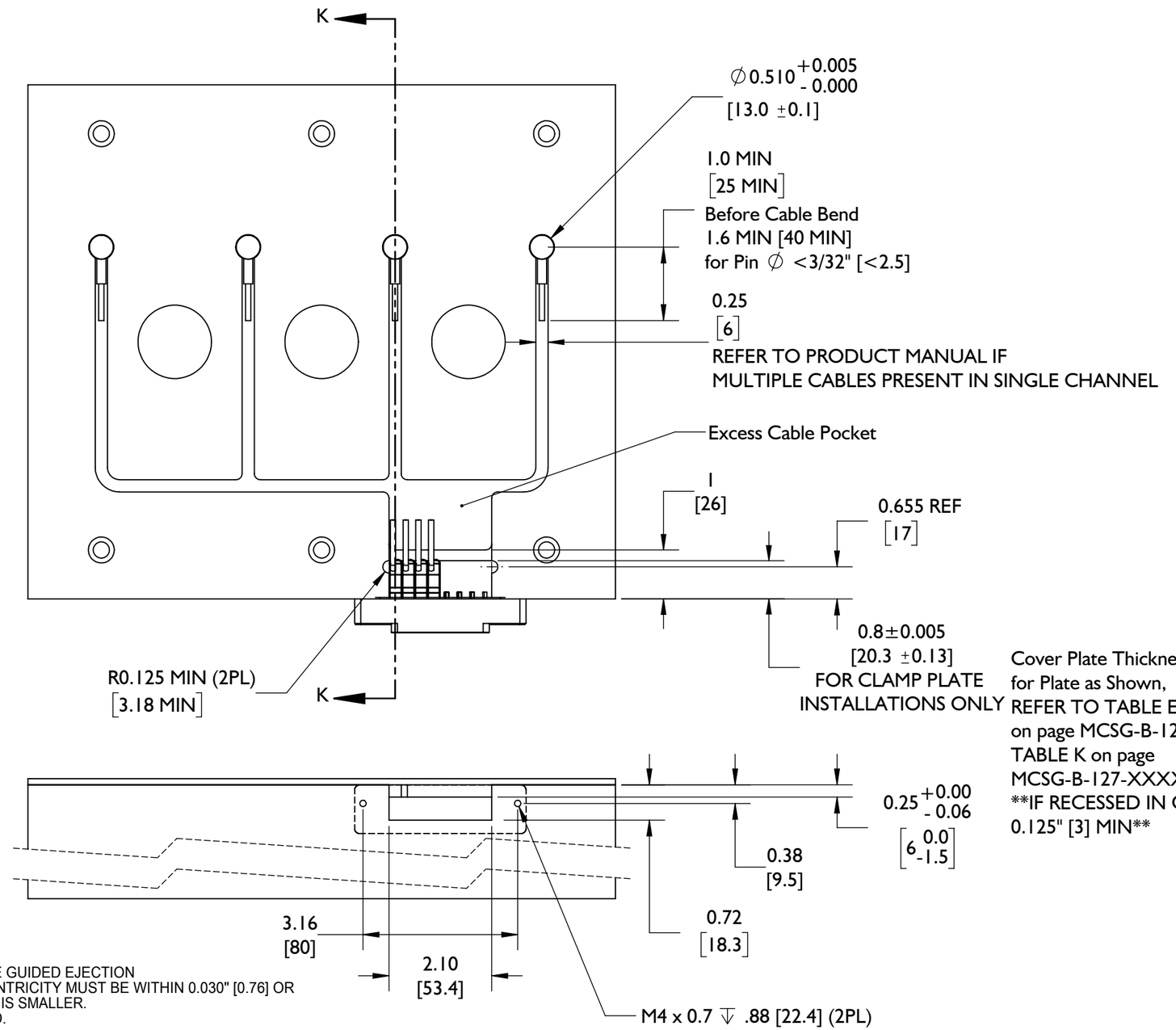
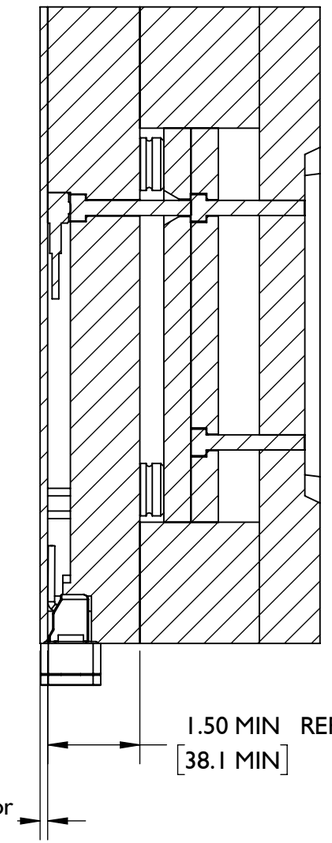
Description: MCSG-B-159-4000 Sensor Installation	
Drawn: K.J.Brettschneider	
Design:	
Check: M.Groleau	
Date: 12.02.2021	

Drawing Title: MCSG-B-159-4000-06

Multi-Channel Strain Gage Sensor (MCSG-B-127-XXXX) Installation—Clamp Plate/Head-to-Head Installation

NOTE: Refer to Product Manual for Cable Channel and Cable Pocket Cover Options and for Electronics Mounting Options When Mold Temperature is Greater Than 140 °F [60 °C]





Cover Plate Thickness MIN
for Plate as Shown,
REFER TO TABLE E
on page MCSG-B-127-XXXX-03 or
TABLE K on page
MCSG-B-127-XXXX-05
**IF RECESSED IN CLAMP PLATE,
0.125" [3] MIN**

SECTION K-K
SCALE 1 : 2.5

NOTES:
1. CLAMP PLATE APPLICATIONS REQUIRE GUIDED EJECTION
2. EJECTOR AND TRANSFER PIN CONCENTRICITY MUST BE WITHIN 0.030" [0.76] OR 10% OF EJECTOR PIN DIA, WHICHEVER IS SMALLER.
3. ENCLOSED EJECTOR BOX SUGGESTED.
4. DO NOT SCALE PRINT
5. BREAK ALL SHARP EDGES, 0.005 [0.03] R MAX
6. DIMENSIONS IN INCHES [MM], UNLESS NOTED
7. TOLERANCES UNLESS SPECIFIED:
   XXX = ±0.003 [0.08]
   XX = ±0.01 [0.3]
   ANGLES = ±3° 30°

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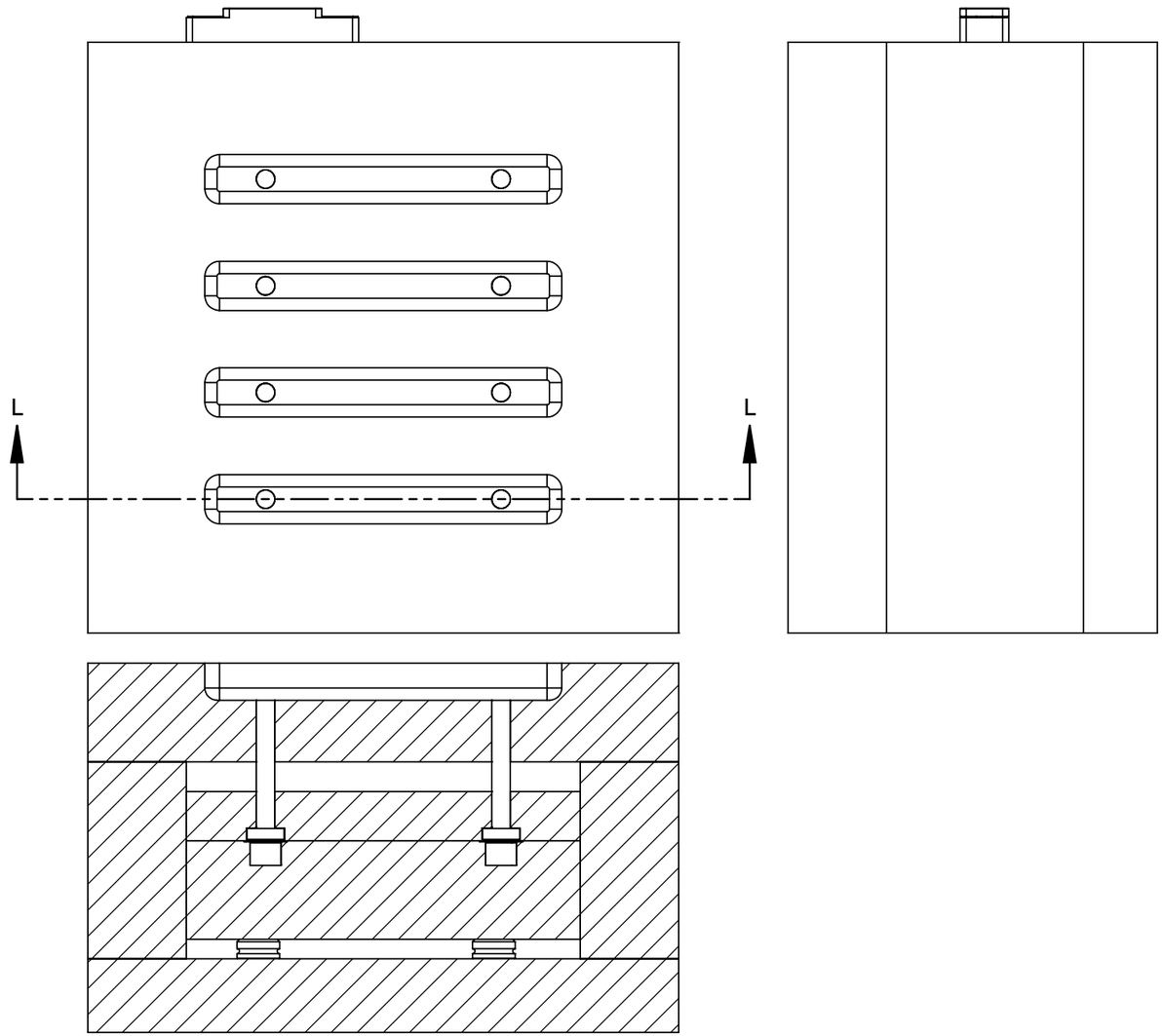
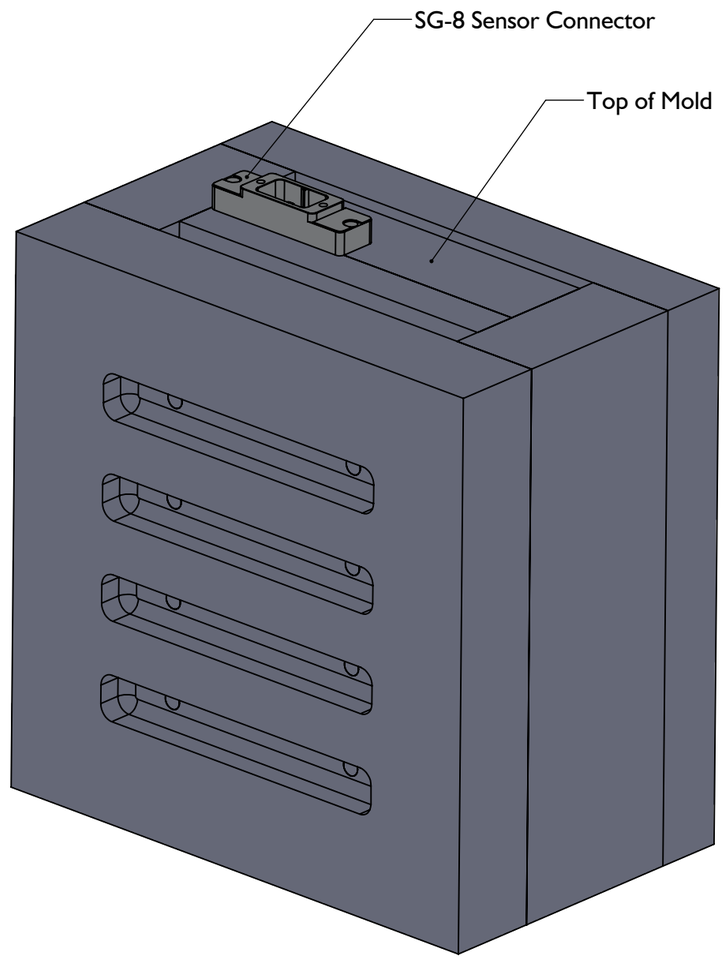
Description: MCSG-B-159-4000 Sensor Installation	
Drawn: K.J.Brettschneider	
Design:	
Check: M.Groleau	
Date: 12.02.2021	

Drawing Title: MCSG-B-159-4000-07

Multi-Channel Strain Gage 4,000 lb. Sensor (MCSG-B-159-4000) Installation—Ejector Plate Installation



SECTION L-L
SCALE 1 : 3



NOTES:
1. CLAMP PLATE APPLICATIONS REQUIRE GUIDED EJECTION
2. EJECTOR AND TRANSFER PIN CONCENTRICITY MUST BE WITHIN 0.030" [0.76] OR 10% OF EJECTOR PIN DIA, WHICHEVER IS SMALLER.
3. ENCLOSED EJECTOR BOX SUGGESTED.
4. DO NOT SCALE PRINT
5. BREAK ALL SHARP EDGES, 0.005 [0.03] R MAX
6. DIMENSIONS IN INCHES [MM], UNLESS NOTED
7. TOLERANCES UNLESS SPECIFIED:
   - XXX = ±0.003 [0.08]
   - XX = ±0.01 [0.3]
   - ANGLES = ±3° 30°

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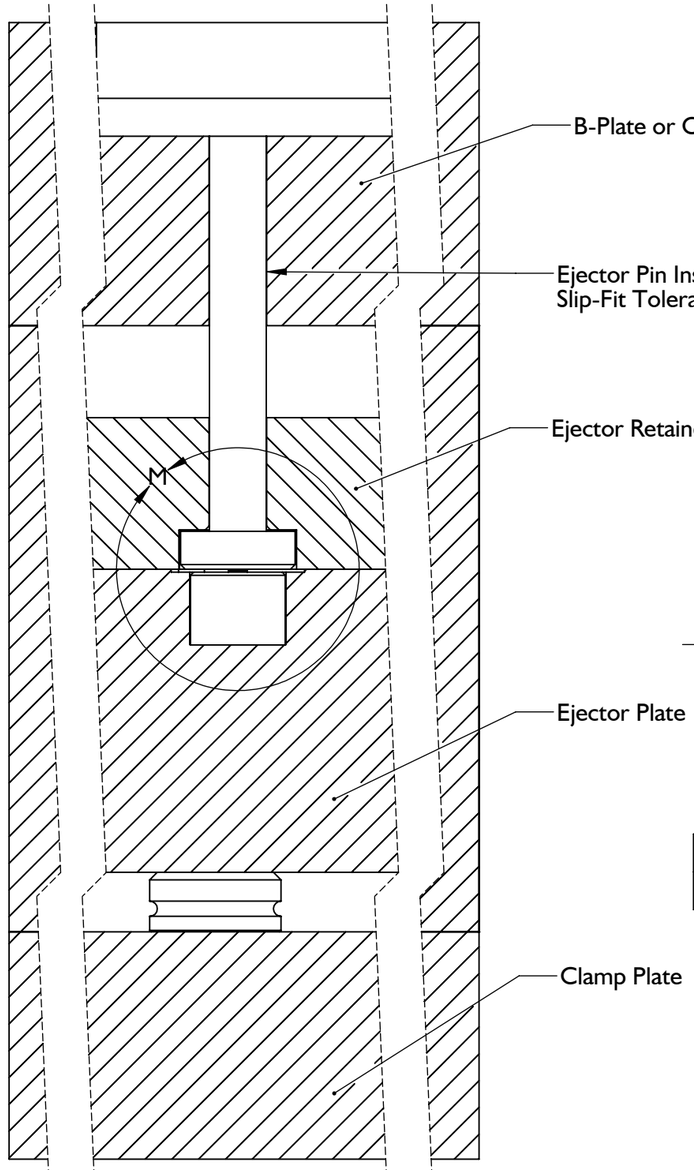
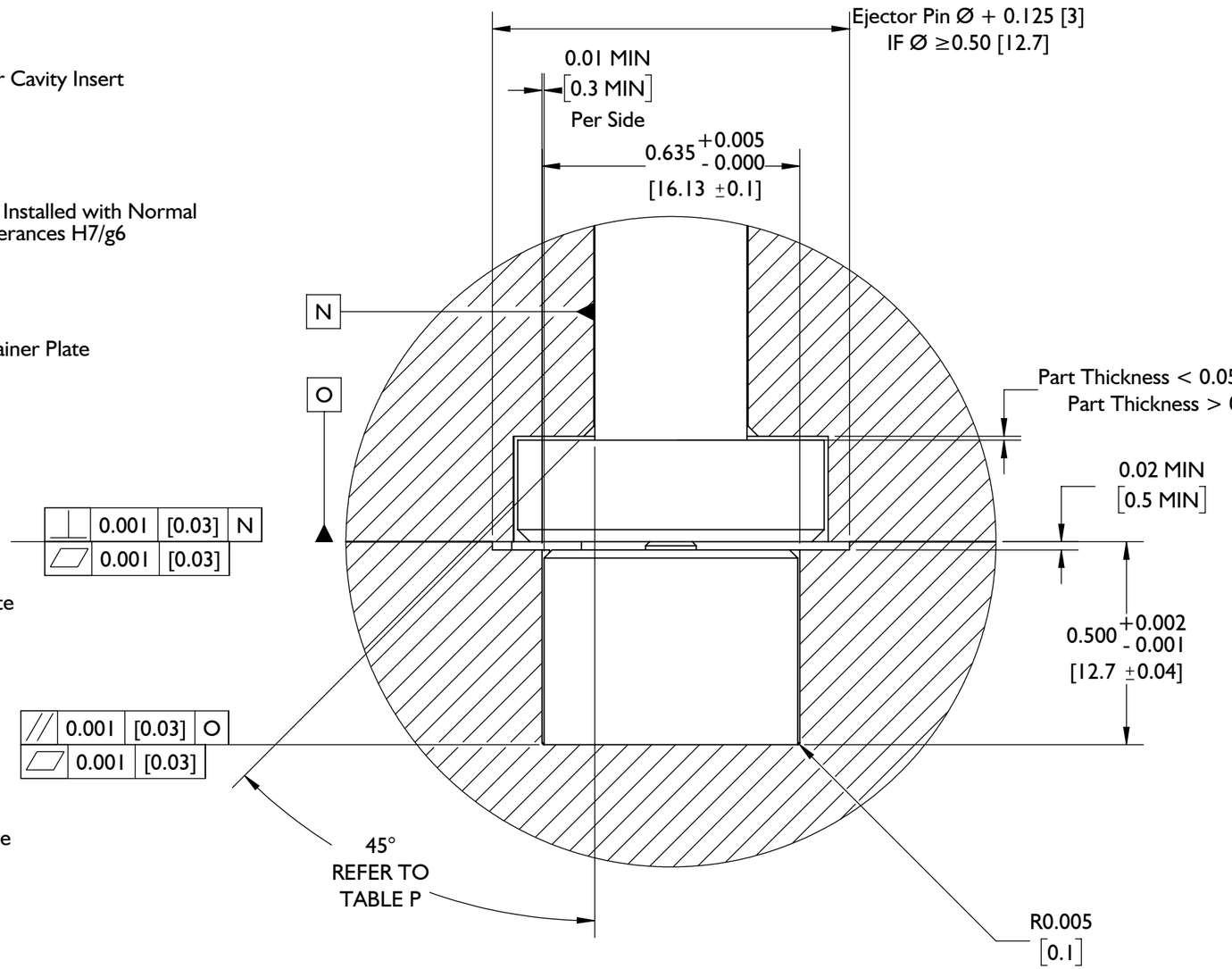
Description: MCSG-B-159-4000 Sensor Installation	
Drawn: K.J.Brettschneider	
Design:	
Check: M.Groleau	
Date: 12.02.2021	

Drawing Title: MCSG-B-159-4000-08

Multi-Channel Strain Gage 4,000 lb. Sensor (MCSG-B-159-4000) Installation—Ejector Plate Installation





DETAIL M
SCALE 3 : 1

NOTES:
1. CLAMP PLATE APPLICATIONS REQUIRE GUIDED EJECTION
2. EJECTOR AND TRANSFER PIN CONCENTRICITY MUST BE WITHIN 0.030" [0.76] OR 10% OF EJECTOR PIN DIA, WHICHEVER IS SMALLER.
3. ENCLOSED EJECTOR BOX SUGGESTED.
4. DO NOT SCALE PRINT
5. BREAK ALL SHARP EDGES, 0.005 [0.03] R MAX
6. DIMENSIONS IN INCHES [MM], UNLESS NOTED
7. TOLERANCES UNLESS SPECIFIED:
   XXX = ±0.003 [0.08]
   XX = ±0.01 [0.3]
   ANGLES = ±3° 30°

TABLE P	
Ejector Pin Ø	Chamfer Length
0.04–0.08 [1.0–2.0]	0.01 [0.3]
0.10–0.20 [2.5–5.0]	0.02 [0.4]
0.24–0.40 [6.0–10.0]	0.025 [0.6]

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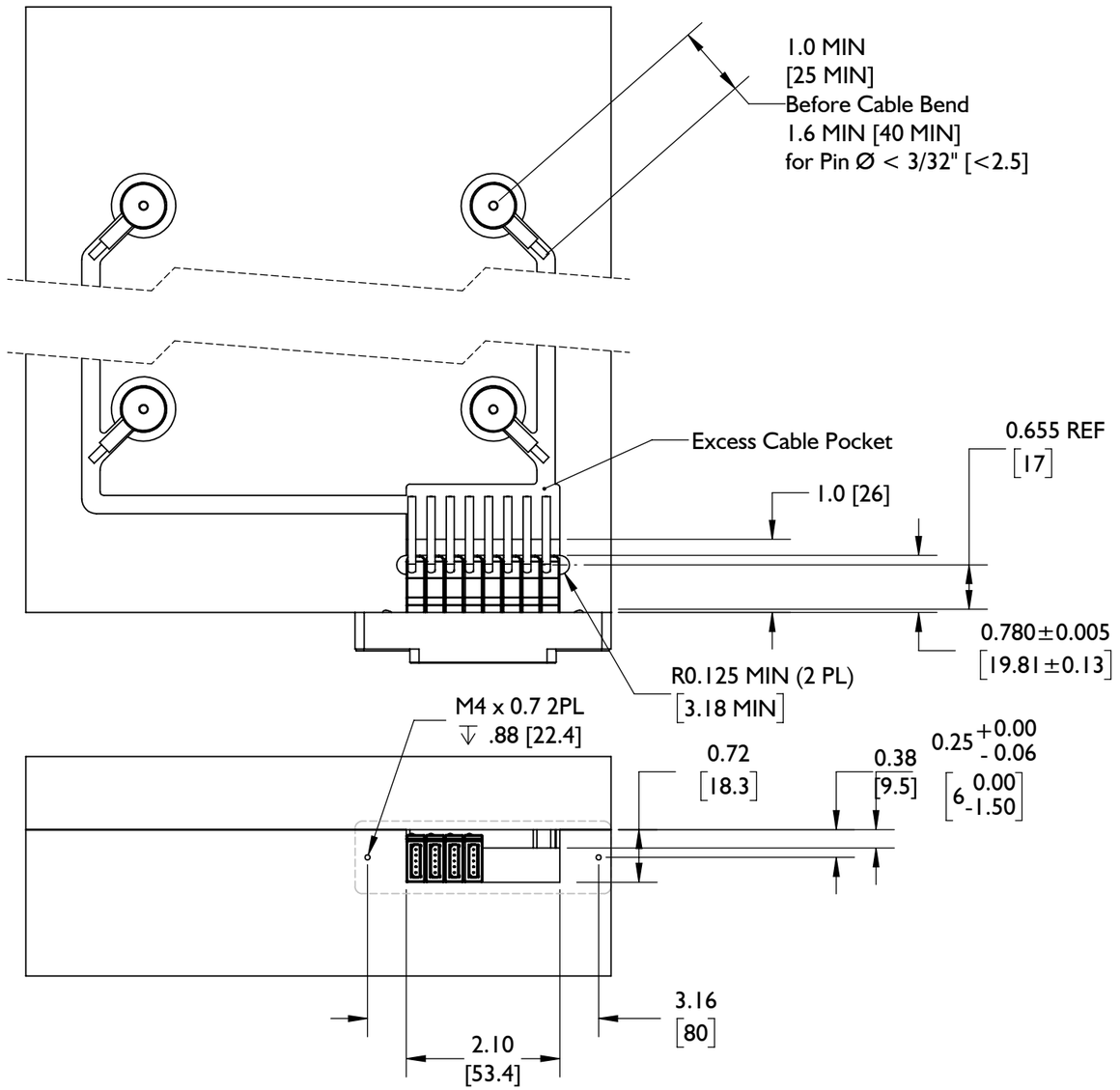
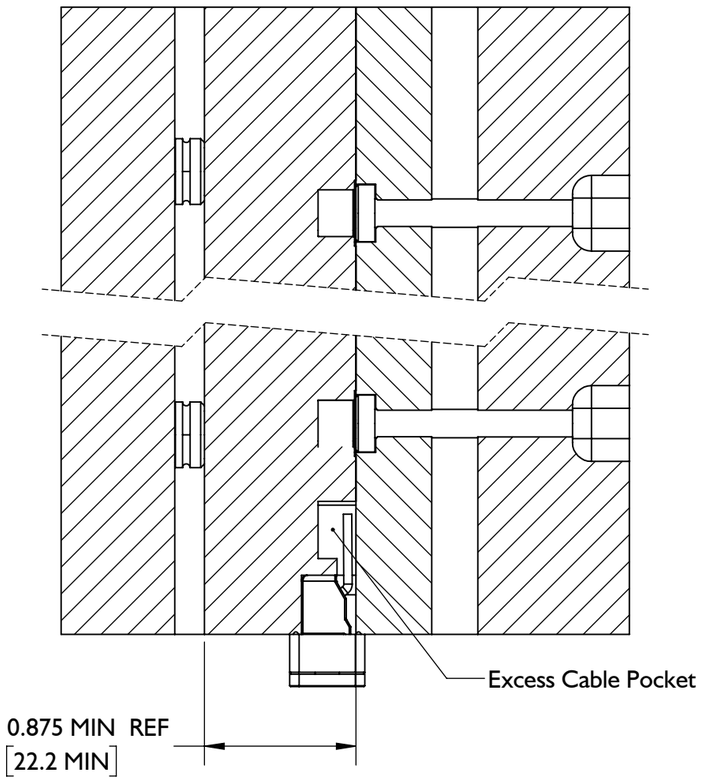
Description: MCSG-B-159-4000 Sensor Installation	
Drawn: K.J.Brettschneider	
Design:	
Check: M.Groleau	
Date: 12.02.2021	

Drawing Title: MCSG-B-159-4000-09

Multi-Channel Strain Gage 4,000 lb. Sensor (MCSG-B-159-4000) Installation—Ejector Plate Installation





NOTES:

1. 0.030" [0.76] OR 10% OF EJECTOR PIN DIA, WHICHEVER IS SMALLER.
2. ENCLOSED EJECTOR BOX SUGGESTED.
3. DO NOT SCALE PRINT
4. BREAK ALL SHARP EDGES, 0.005 [0.03] R MAX
5. DIMENSIONS IN INCHES [MM], UNLESS NOTED
6. TOLERANCES UNLESS SPECIFIED:
   - XXX = ±0.003 [0.08]
   - XX = ±0.01 [0.3]
   - ANGLES = ±3° 30'

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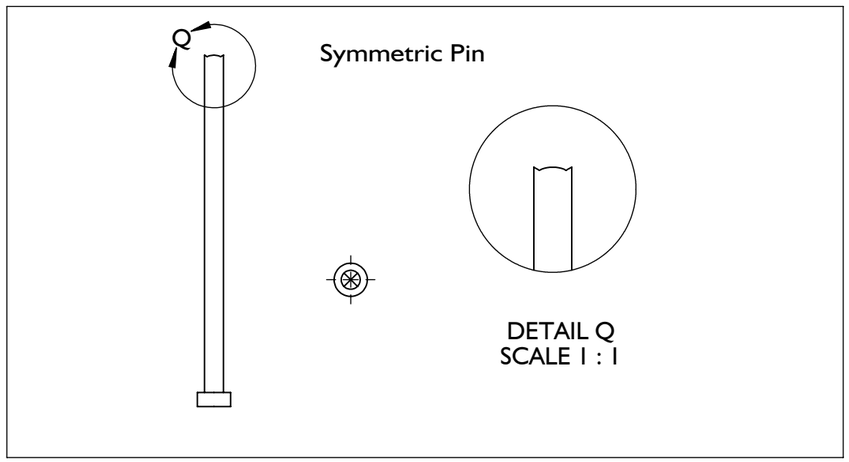
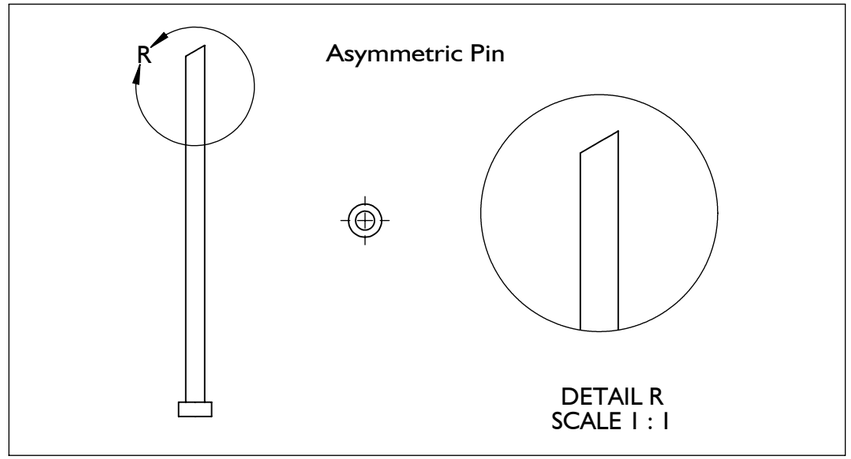
Description: MCSG-B-159-4000 Sensor Installation	
Drawn: K.J.Brettschneider	
Design:	
Check: M.Groleau	
Date: 12.02.2021	

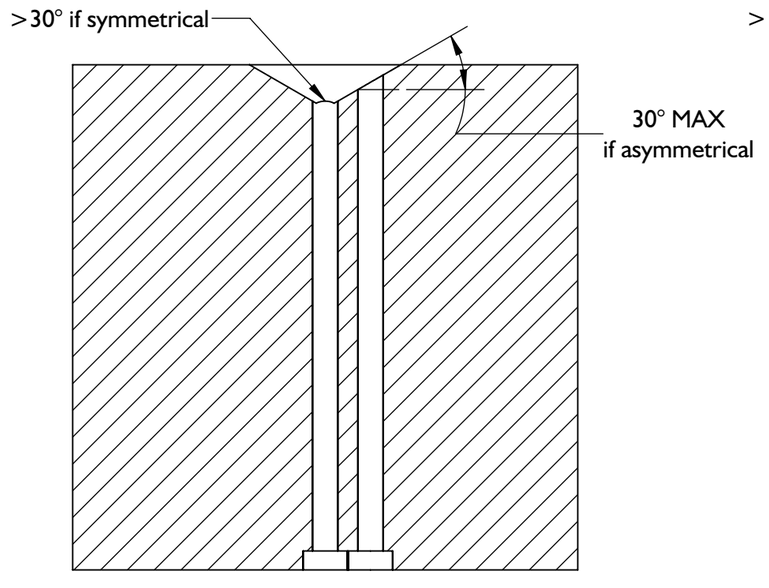
Drawing Title: MCSG-B-159-4000-10

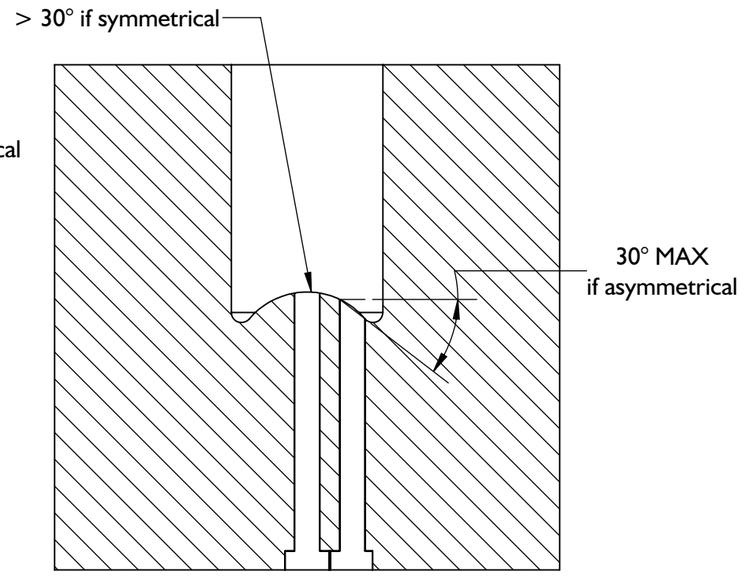
Multi-Channel Strain Gage 4,000 lb. Sensor MCSG-B-159-4000 Installation—Contoured Pin Angle Specification

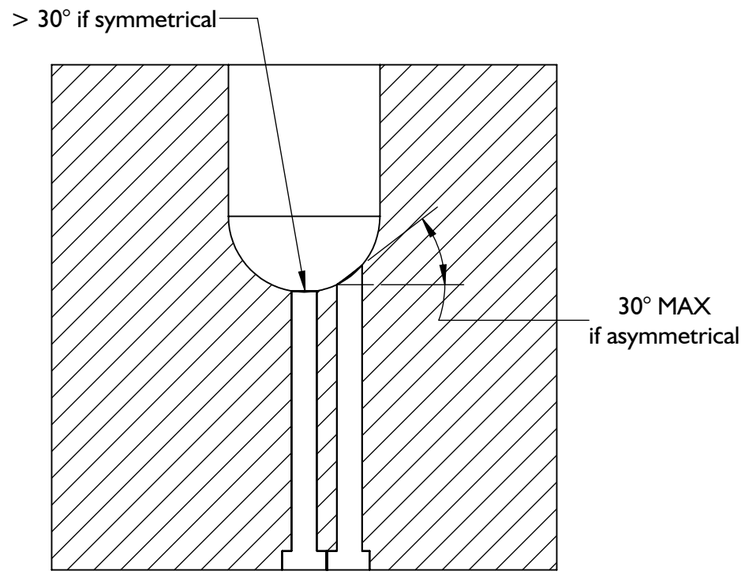
NOTE: Contoured/angled pins (asymmetric) not to exceed 30° MAX unless pin design is symmetrical to provide even, downward pressure across pin surface to loading of sensor. Contact RJG Customer Support for assistance in verification of contoured/angled pin use.











NOTES:
1. CLAMP PLATE APPLICATIONS REQUIRE GUIDED EJECTION
2. EJECTOR AND TRANSFER PIN CONCENTRICITY MUST BE WITHIN 0.030" [0.76] OR 10% OF EJECTOR PIN DIA, WHICHEVER IS SMALLER.
3. ENCLOSED EJECTOR BOX SUGGESTED.
4. DO NOT SCALE PRINT
5. BREAK ALL SHARP EDGES, 0.005 [0.03] R MAX
6. DIMENSIONS IN INCHES [MM], UNLESS NOTED
7. TOLERANCES UNLESS SPECIFIED:
   XXX = ±0.003 [0.08]
   XX = ±0.01 [0.3]
   ANGLES = ±3° 30°

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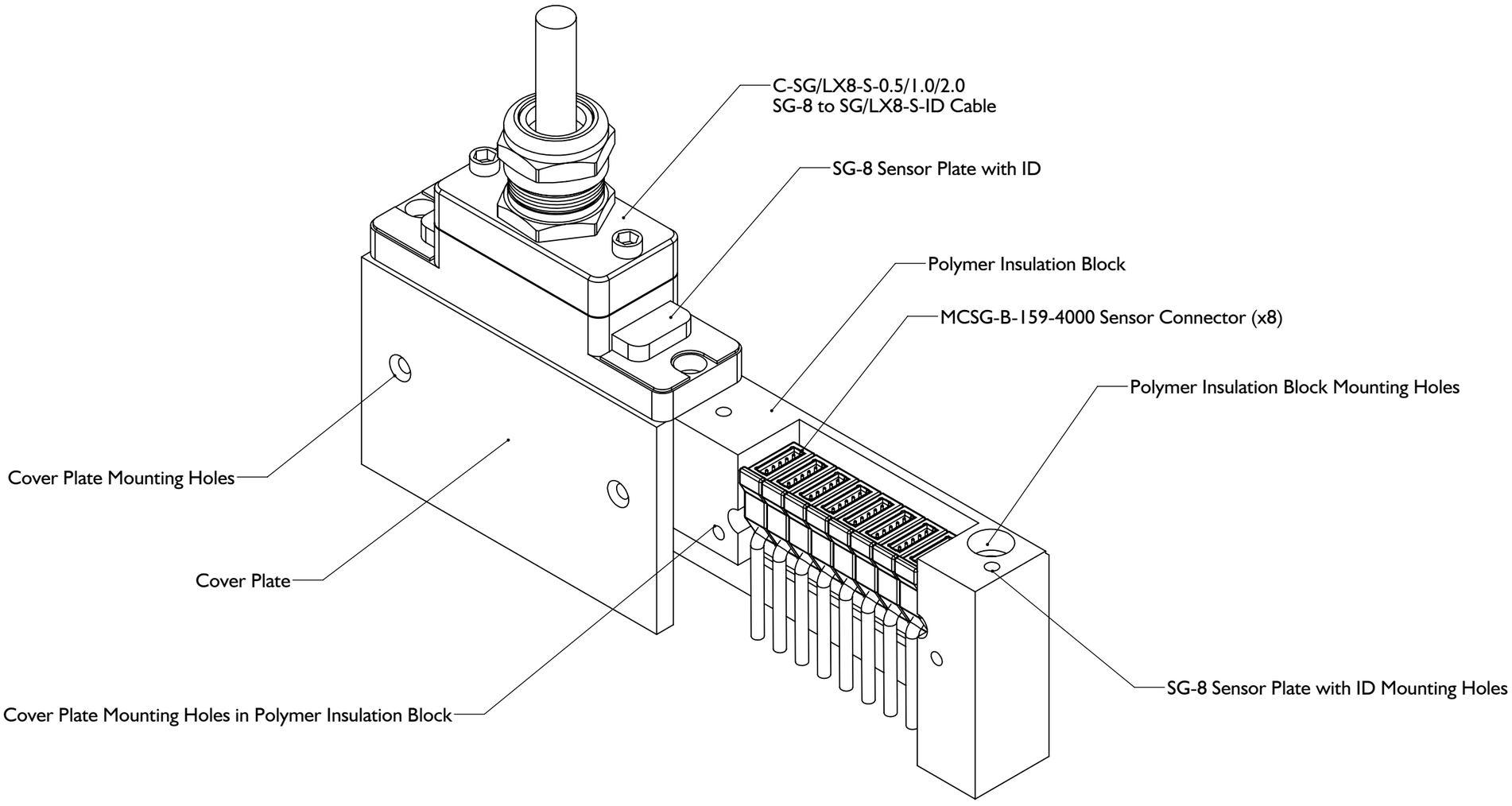
Description: MCSG-B-159-4000 Sensor Installation	
Drawn: K.J.Brettschneider	
Design:	
Check: M.Groleau	
Date: 12.02.2021	

Drawing Title: MCSG-B-159-4000-11

Multi-Channel Strain Gage 4,000 lb. MCSG-B-159-4000 Sensor Installation—High Temperature Installation

NOTE: The sensor electronics must be kept below 140 °F (60 °C) for all MCSG-B-159-4000 sensor models. Refer to the drawing below as a guide; RJG does NOT provide polymer assembly pictured below—polymer assembly and design is responsiblity of customer. Contact RJG Customer Support for assistance with high-temperature sensor protection designs.



NOTES:
1. CLAMP PLATE APPLICATIONS REQUIRE GUIDED EJECTION
2. EJECTOR AND TRANSFER PIN CONCENTRICITY MUST BE WITHIN 0.030" [0.76] OR 10% OF EJECTOR PIN DIA, WHICHEVER IS SMALLER.
3. ENCLOSED EJECTOR BOX SUGGESTED.
4. DO NOT SCALE PRINT
5. BREAK ALL SHARP EDGES, 0.005 [0.03] R MAX
6. DIMENSIONS IN INCHES [MM], UNLESS NOTED
7. TOLERANCES UNLESS SPECIFIED:
   XXX = ±0.003 [0.08]
   XX = ±0.01 [0.3]
   ANGLES = ±3° 30°

RJG MOLD SMART
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Description: MCSG-B-159-4000 Sensor Installation
Drawn: K.J.Brettschneider
Design:
Check: M.Groleau
Date: 12.02.2021