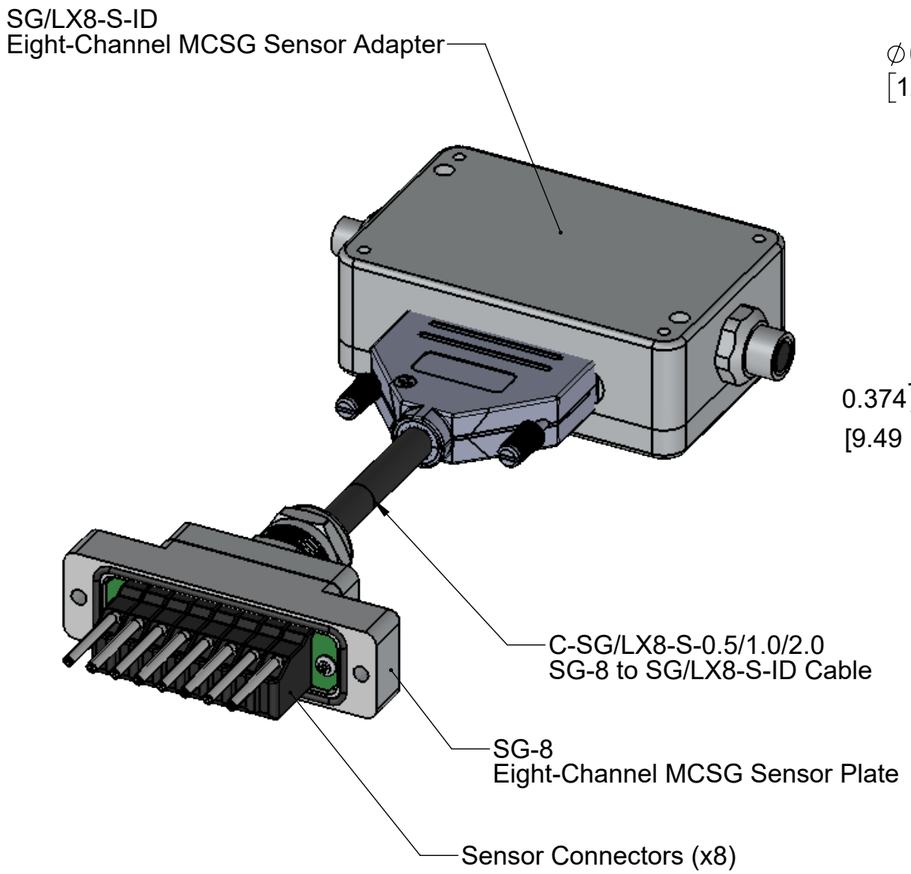
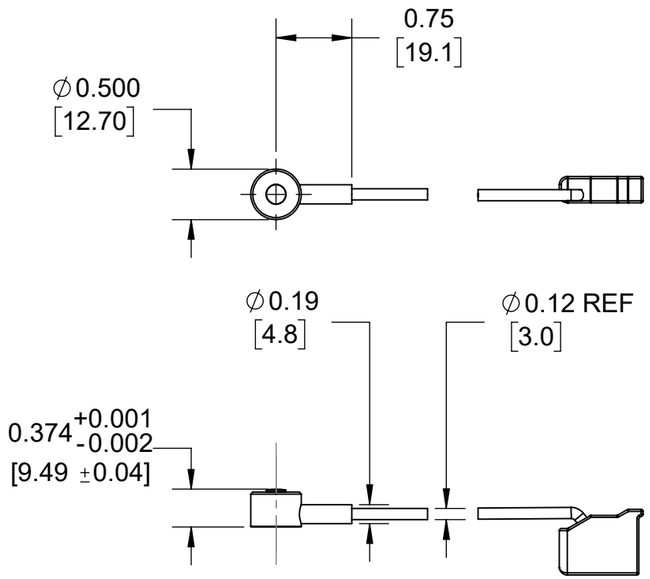
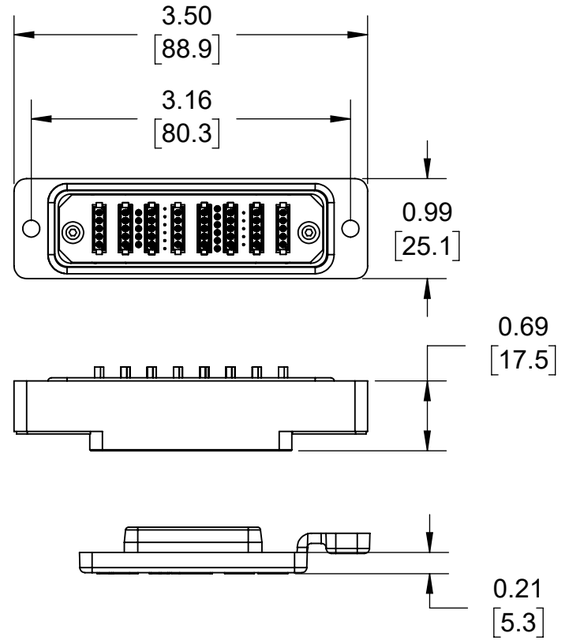
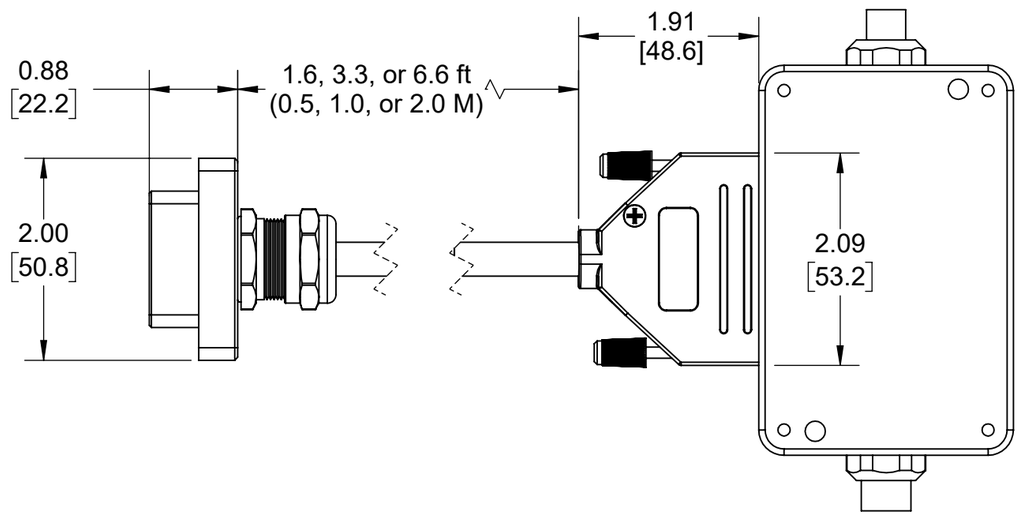
Drawing Title: MCSG-125/500/2000-01

Multi-Channel Strain Gage Sensor (MCSG-125/500/2000) Installation—Sensor, Sensor Connector, and Sensor Cable Dimensions









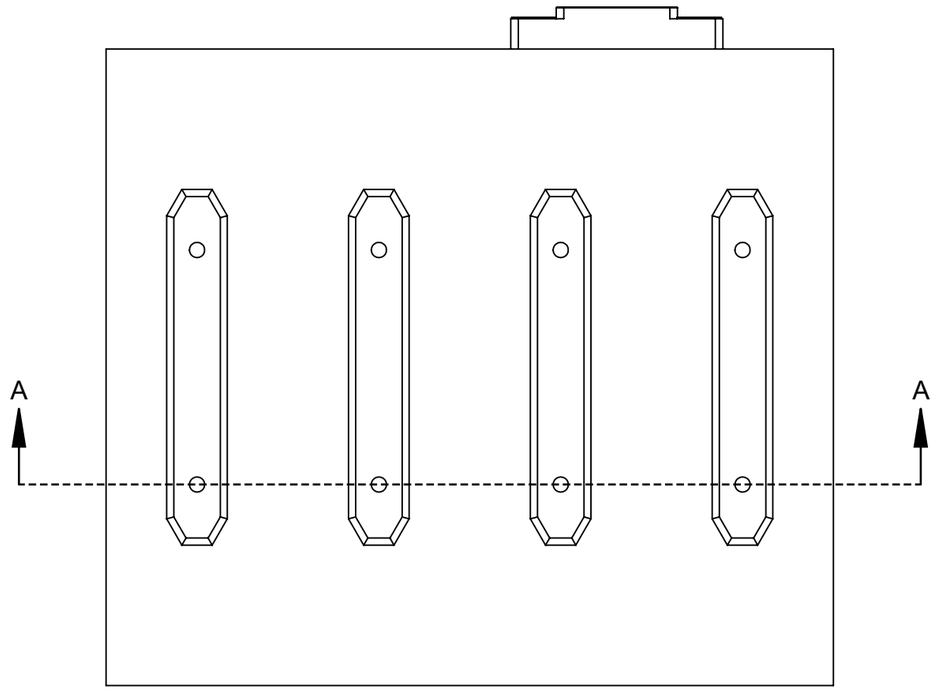
NOTES:
1. CLAMP PLATE APPLICATIONS REQUIRE GUIDED EJECTION
2. EJECTOR AND TRANSFER PIN CONCENTRICITY MUST BE WITHIN 0.030" [0.76] OR 10% OF EJECTOR PIN DIA, WHICHEVER IS SMALLER.
3. ENCLOSED EJECTOR BOX SUGGESTED.
4. DO NOT SCALE PRINT
5. BREAK ALL SHARP EDGES, 0.005 [0.03] R MAX
6. DIMENSIONS IN INCHES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

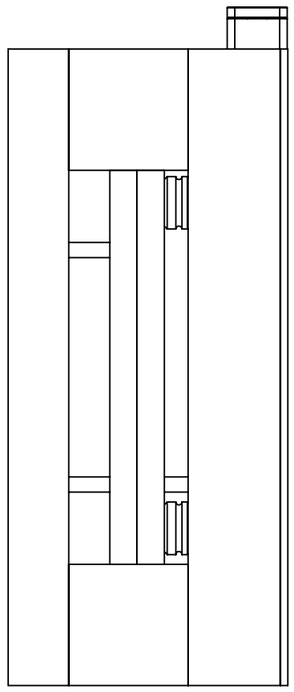
RJG MOLD SMART
3111 Park Street Traverse City, MI 49686
231-947-3111 | www.rjginc.com

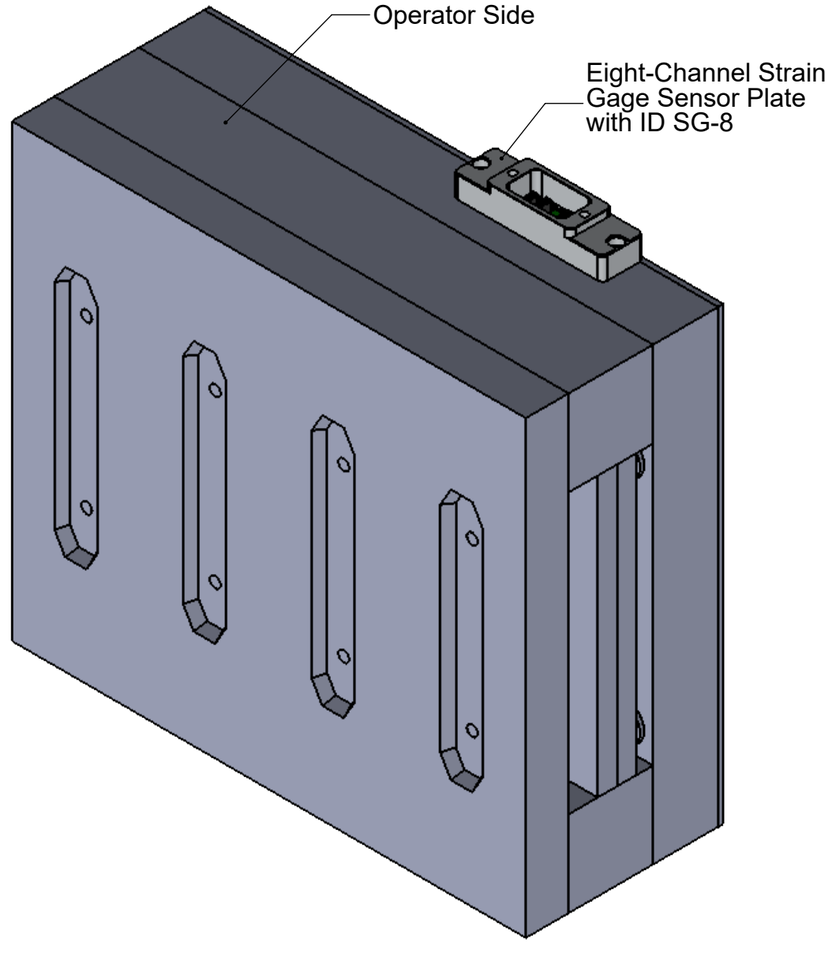
Description	MCSG-125/500/2000Sensor Dimensions
Drawn:	K.J.Brettschneider
Design:	
Check:	M.Groleau
Date:	04.01.2025

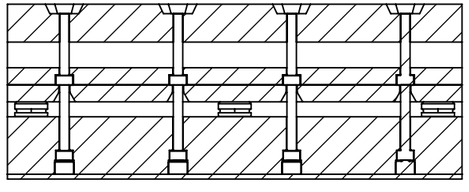
Drawing Title: MCSG-125/500/2000-02

Multi-Channel Strain Gage Sensor (MCSG-125/500/2000) 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'

RJG MOLD SMART
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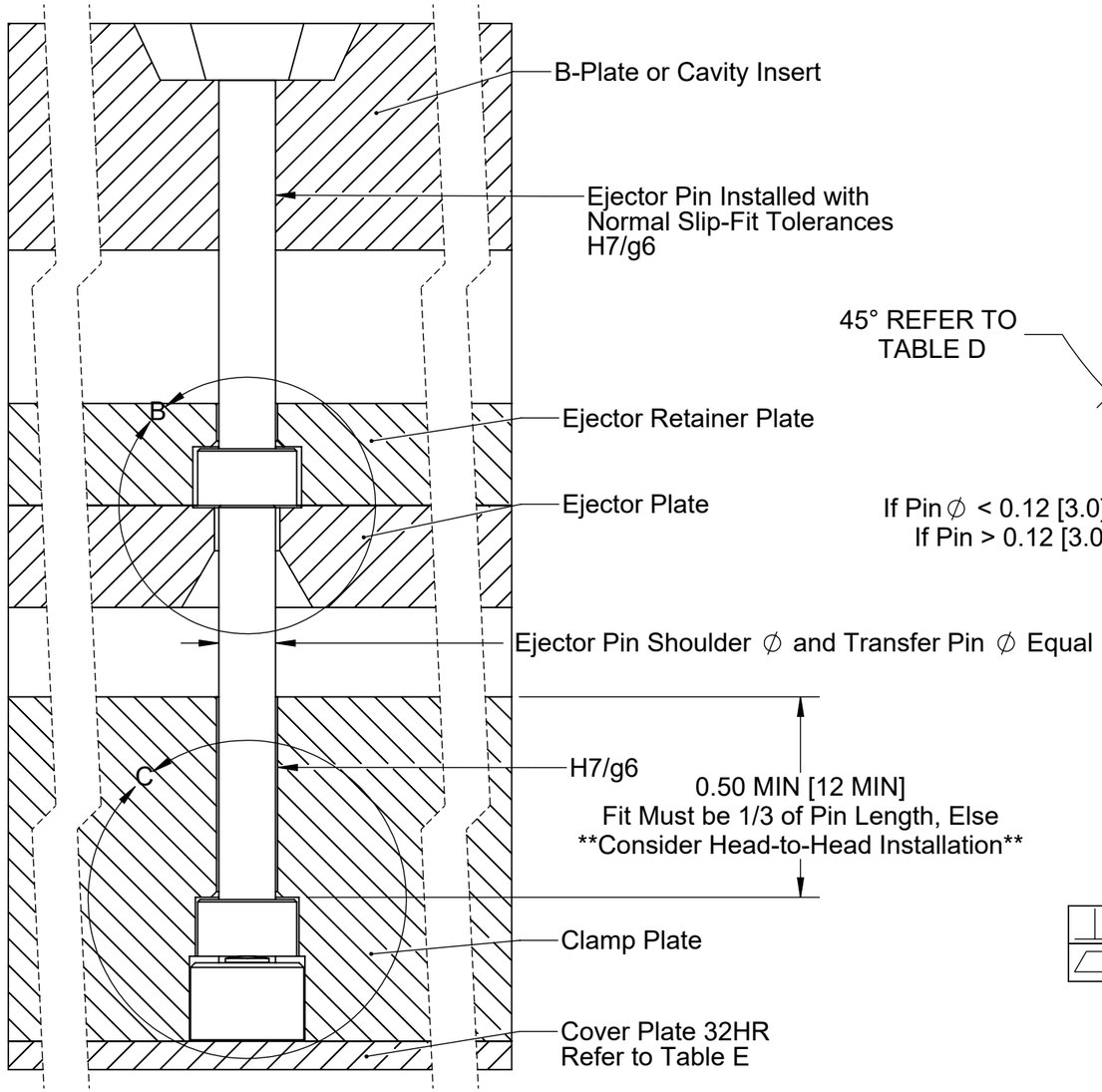
231-947-3111 | www.rjginc.com

Description:MCSG-125/500/2000 SensorDimensions	
Drawn: K.J.Brettschneider	
Design:	
Check: M.Groleau	
Date: 04.01.2025	

Drawing Title: MCSG-125/500/2000-03

Multi-Channel Strain Gage Sensor (MCSG-125/500/2000) Installation—Clamp Plate Installation



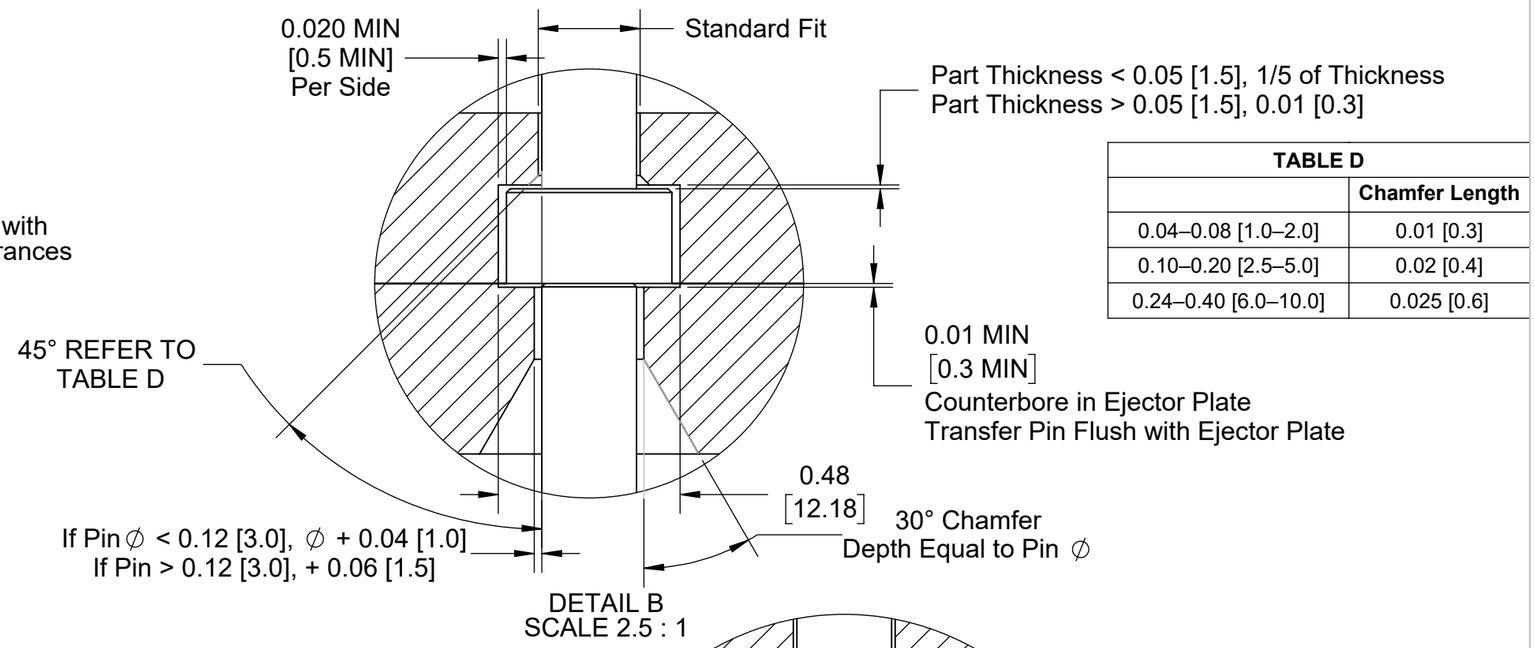
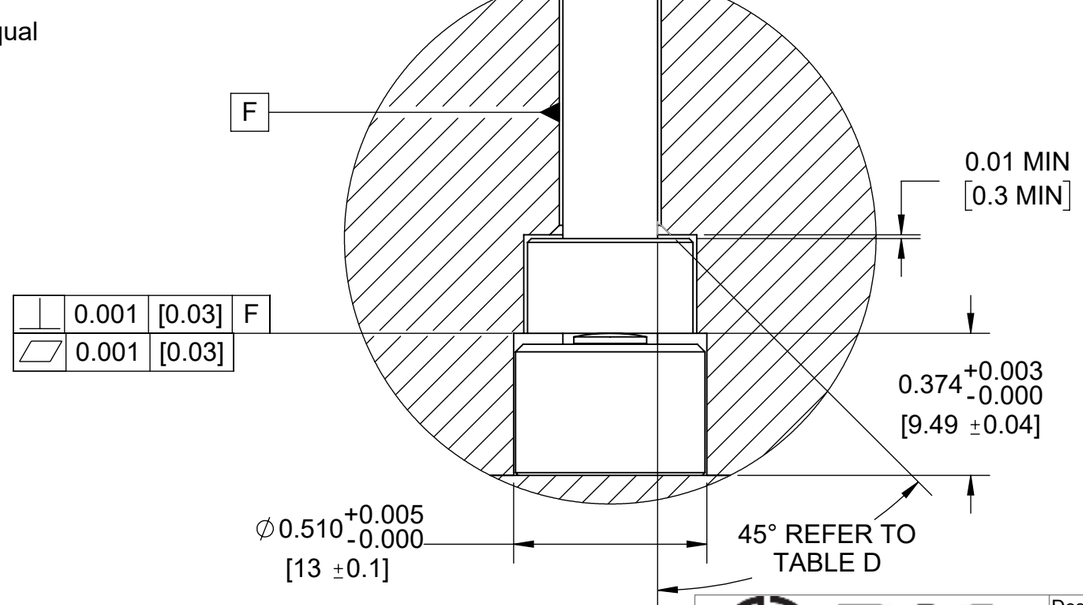


TABLE D	
	Chamfer Length
0.04–0.08 [1.0–2.0]	0.01 [0.3]
0.10–0.20 [2.5–5.0]	0.02 [0.4]
0.24–0.40 [6.0–10.0]	0.025 [0.6]

DETAIL B
SCALE 2.5 : 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°

TABLE E	
Sensor Model	**MIN Plate Thickness**
MCSG-125	0.2 [5]
MCSG-500	0.25 [6.0]
MCSG-2000	0.25 [6.0]

REFER TO PRODUCT MANUAL FOR COVER PLATE ALTERNATIVES

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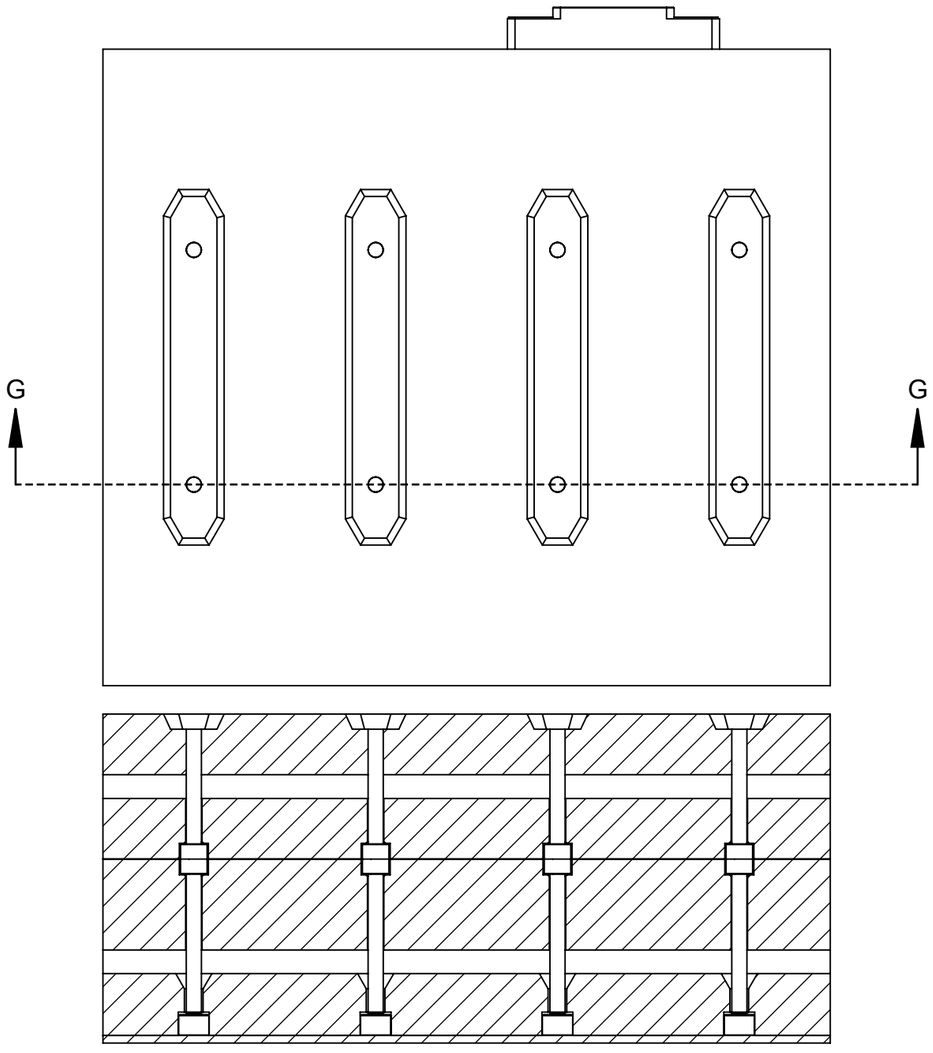
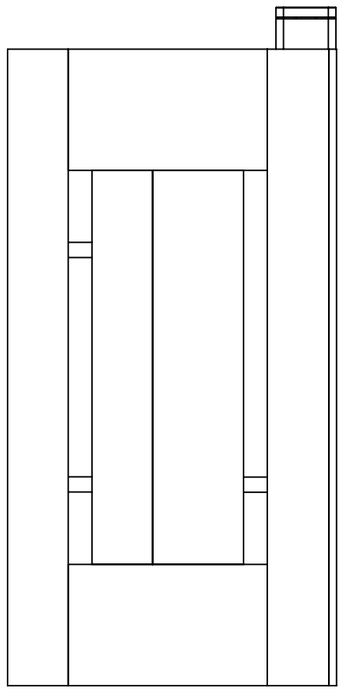
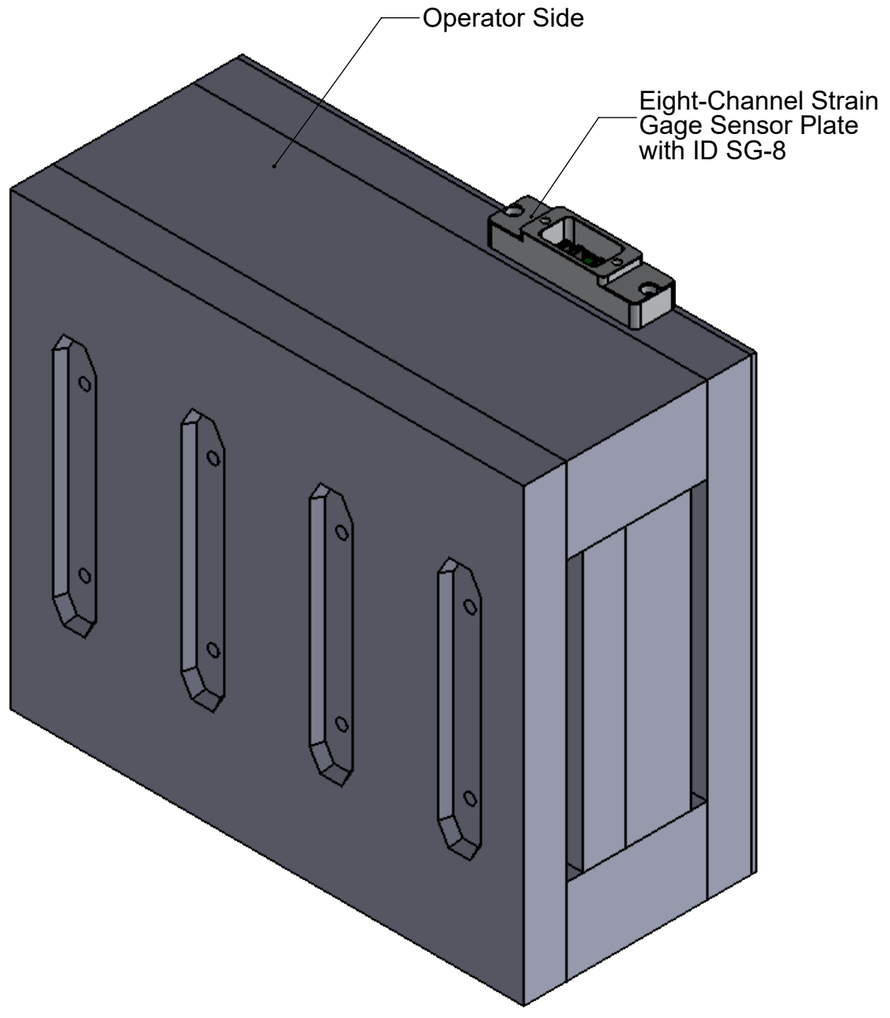
Description:MCSG-125/500/2000Sensor Dimensions	
Drawn: K.J.Brettschneider	
Design:	
Check: M.Groleau	
Date: 04.01.2025	

Drawing Title: MCSG-125/500/2000

Multi-Channel Strain Gage Sensor (MCSG-125/500/2000) Installation—Head-to-Head Installation







SECTION G-G
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'

RJG MOLD SMART
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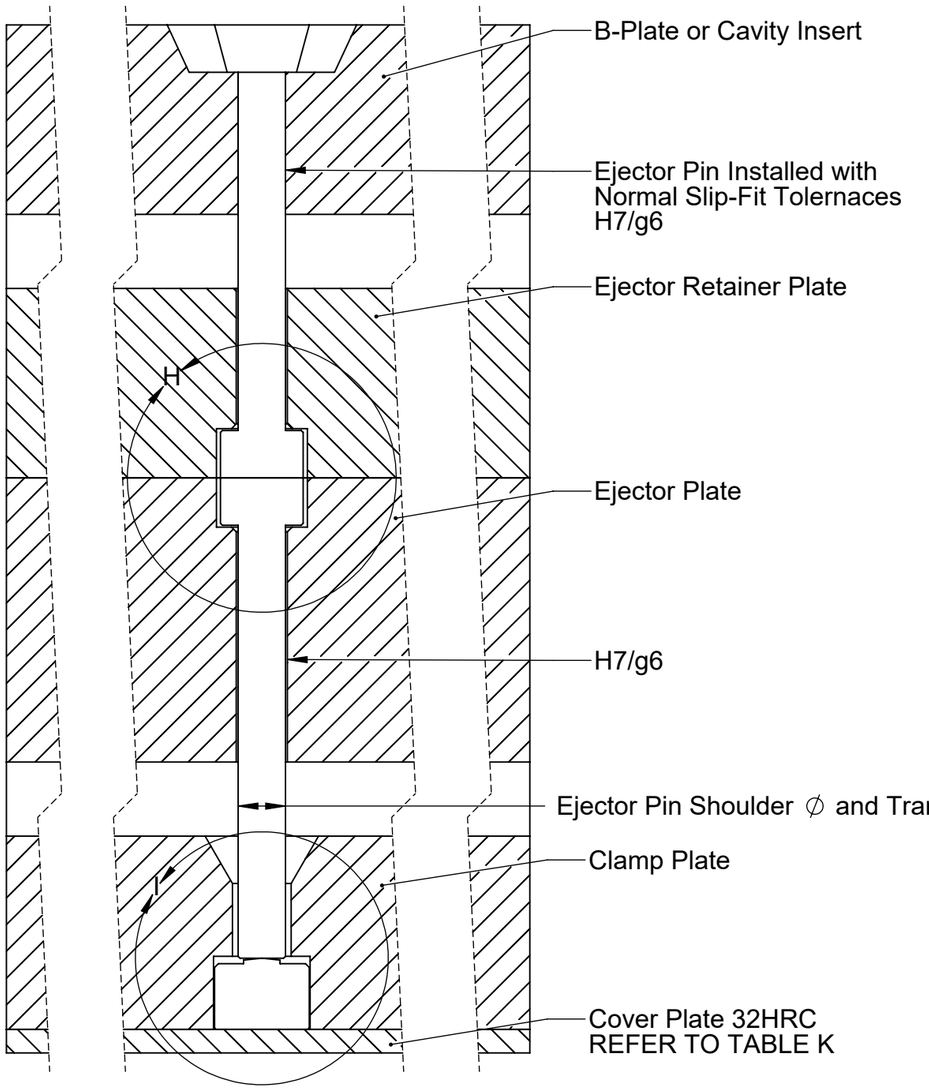
Description:MCSG-125/500/2000Sensor Dimensions	
Drawn: K.J.Brettschneider	
Design:	
Check: M.Groleau	
Date: 04.01.2025	

Drawing Title: MCSG-125/500/2000-05

Multi-Channel Strain Gage Sensor (MCSG-125/500/2000) Installation—Head-to-Head Installation



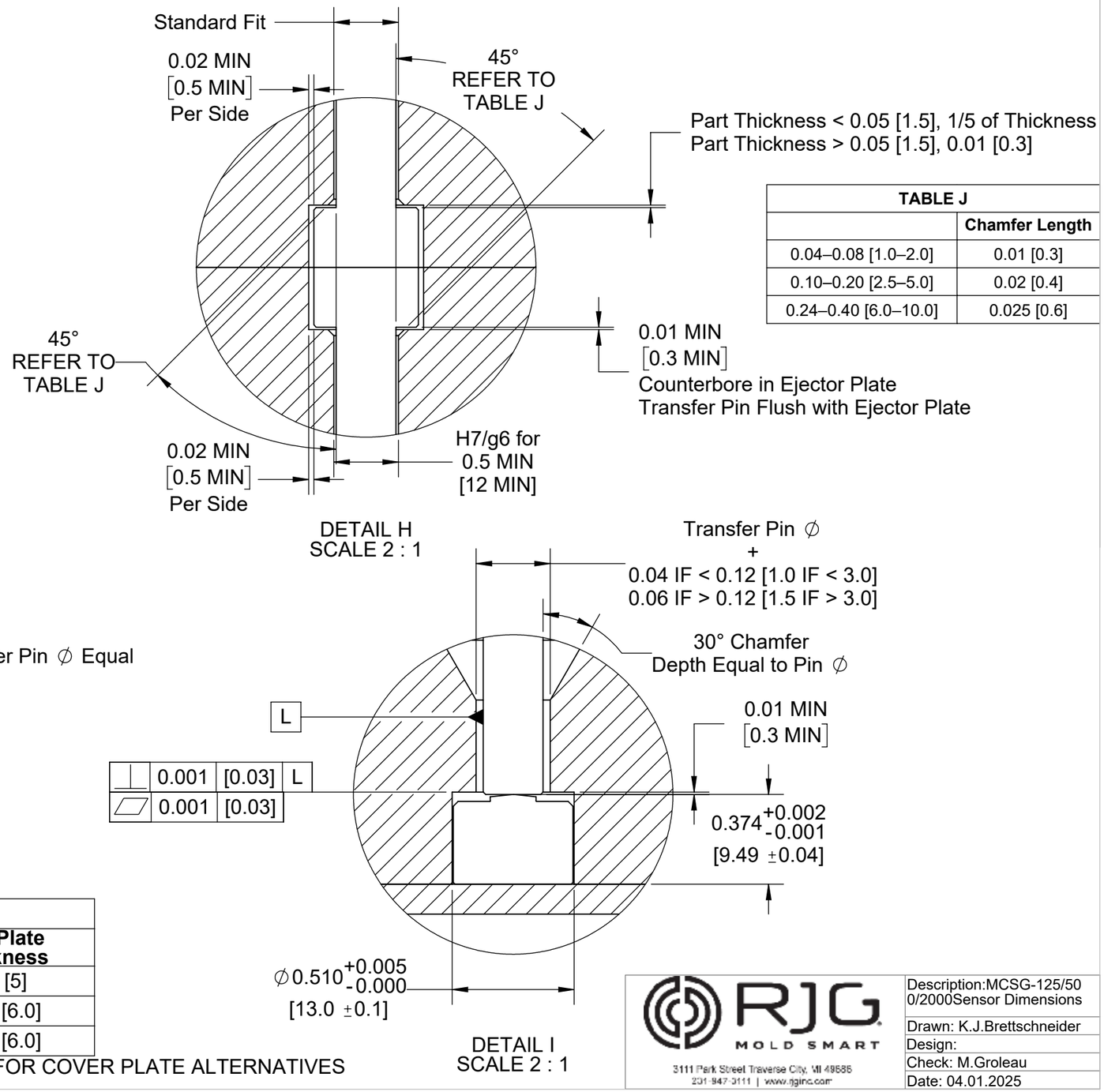


TABLE J	
	Chamfer Length
0.04–0.08 [1.0–2.0]	0.01 [0.3]
0.10–0.20 [2.5–5.0]	0.02 [0.4]
0.24–0.40 [6.0–10.0]	0.025 [0.6]

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'

TABLE K	
Sensor Model	**MIN Plate Thickness**
MCSG-125	0.2 [5]
MCSG-500	0.25 [6.0]
MCSG-2000	0.25 [6.0]

REFER TO PRODUCT MANUAL FOR COVER PLATE ALTERNATIVES

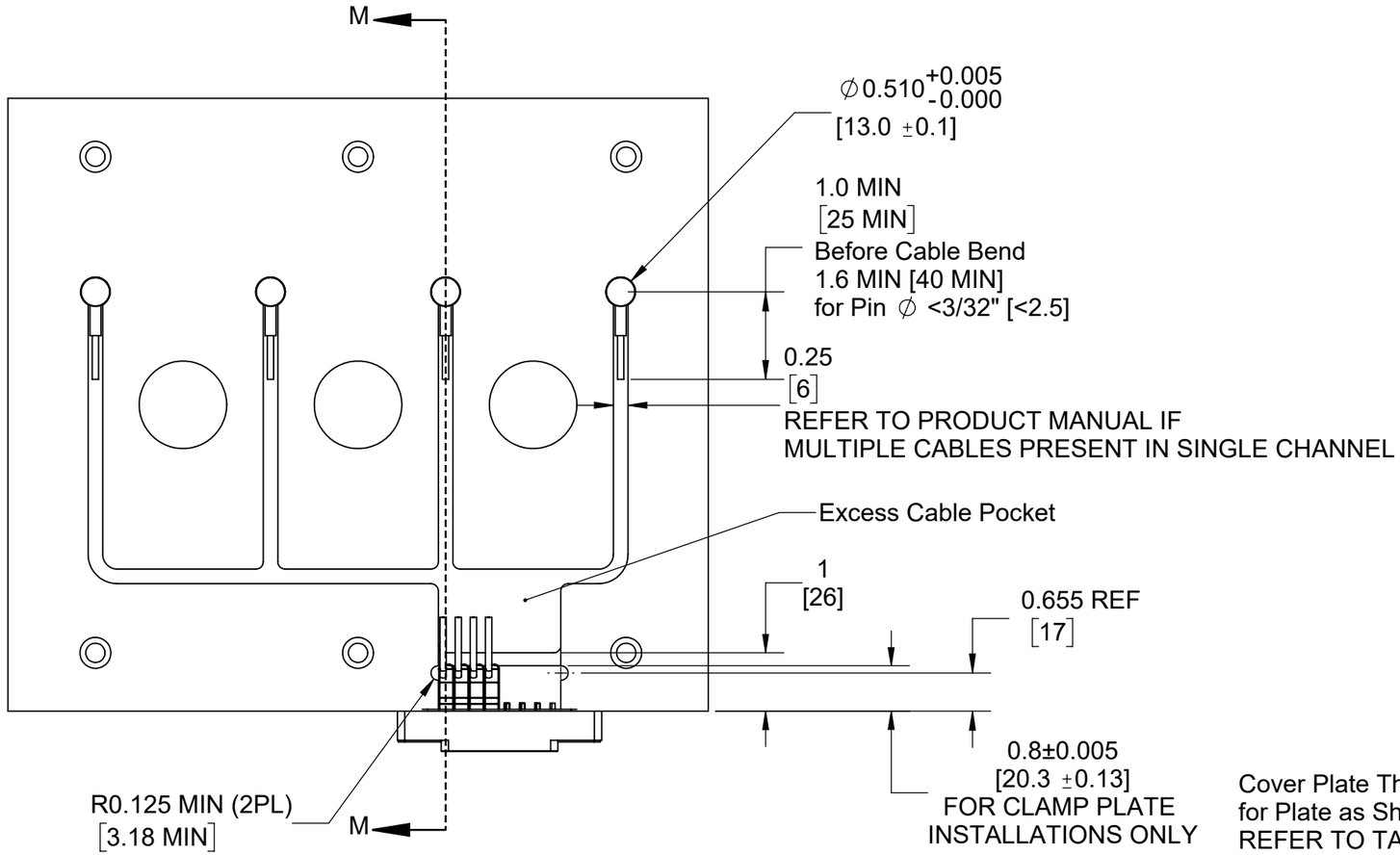
RJG MOLD SMART
3111 Park Street Traverse City, MI 49686
231-947-3111 | www.rjginc.com

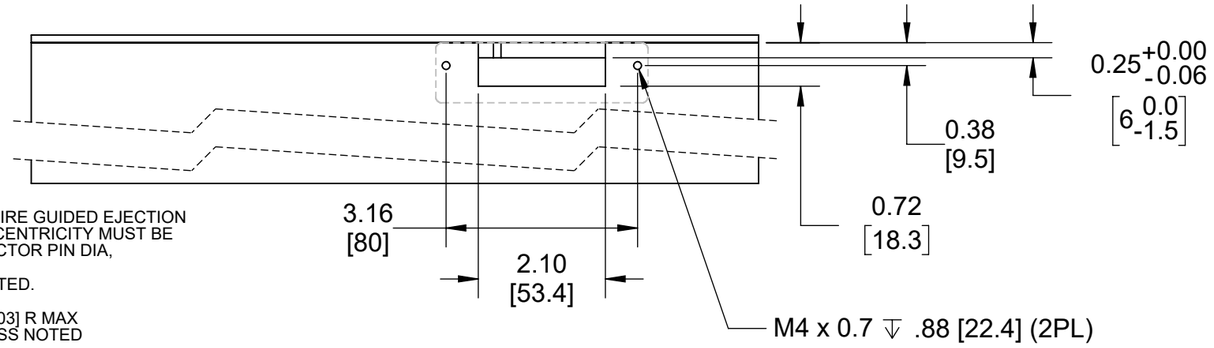
Description:MCSG-125/500/2000Sensor Dimensions	
Drawn: K.J.Brettschneider	
Design:	
Check: M.Groleau	
Date: 04.01.2025	

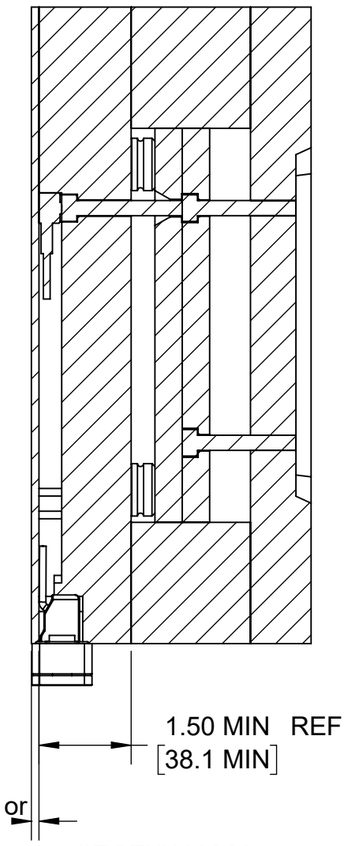
Drawing Title: MCSG-125/500/2000-06

Multi-Channel Strain Gage Sensor (MCSG-125/500/2000) 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-125/500/2000-03 or
TABLE K on page
MCSG-125/500/2000-05
**IF RECESSED IN CLAMP PLATE,
0.125" [3] MIN**

SECTION M-M
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'

RJG MOLD SMART
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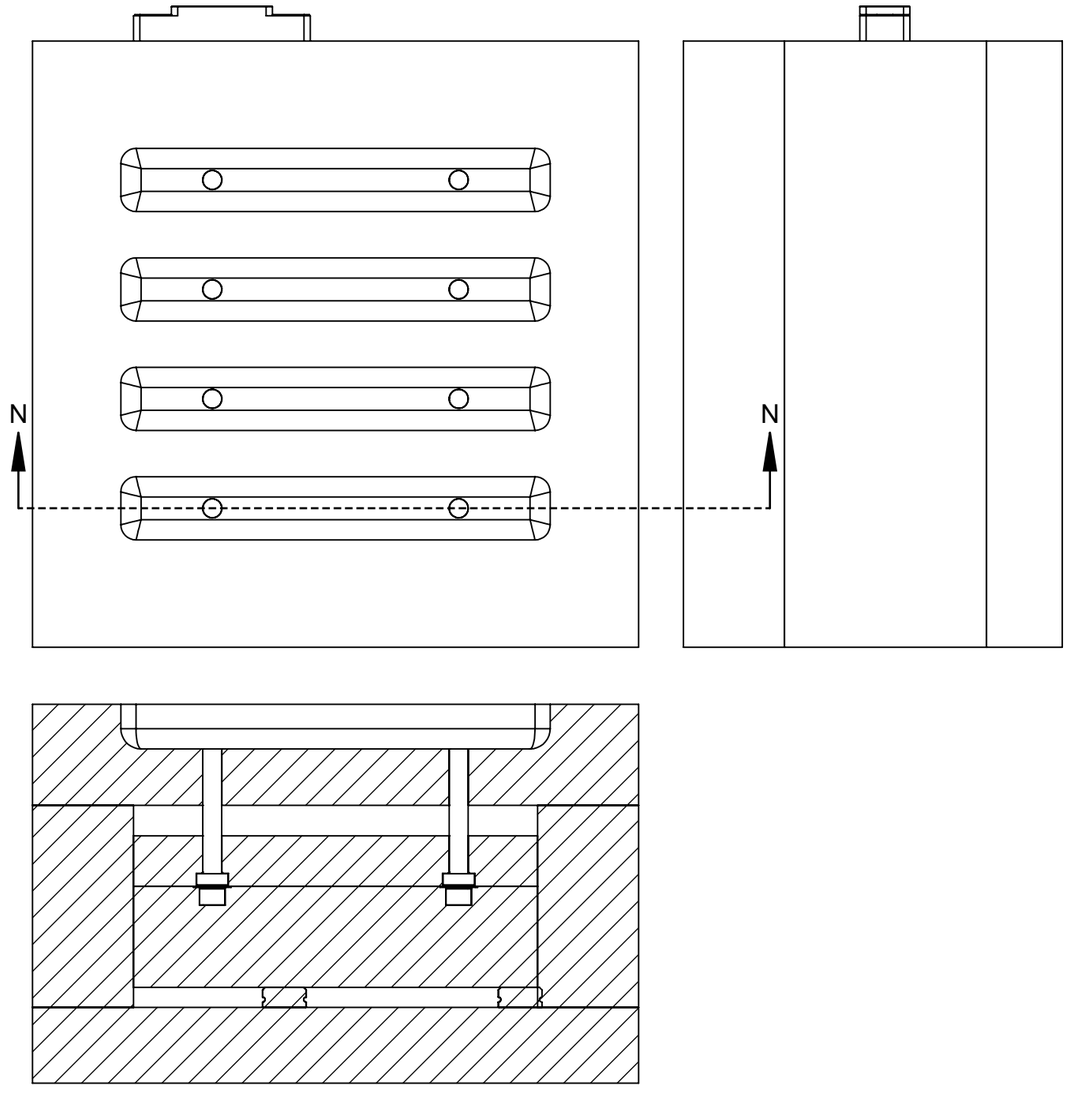
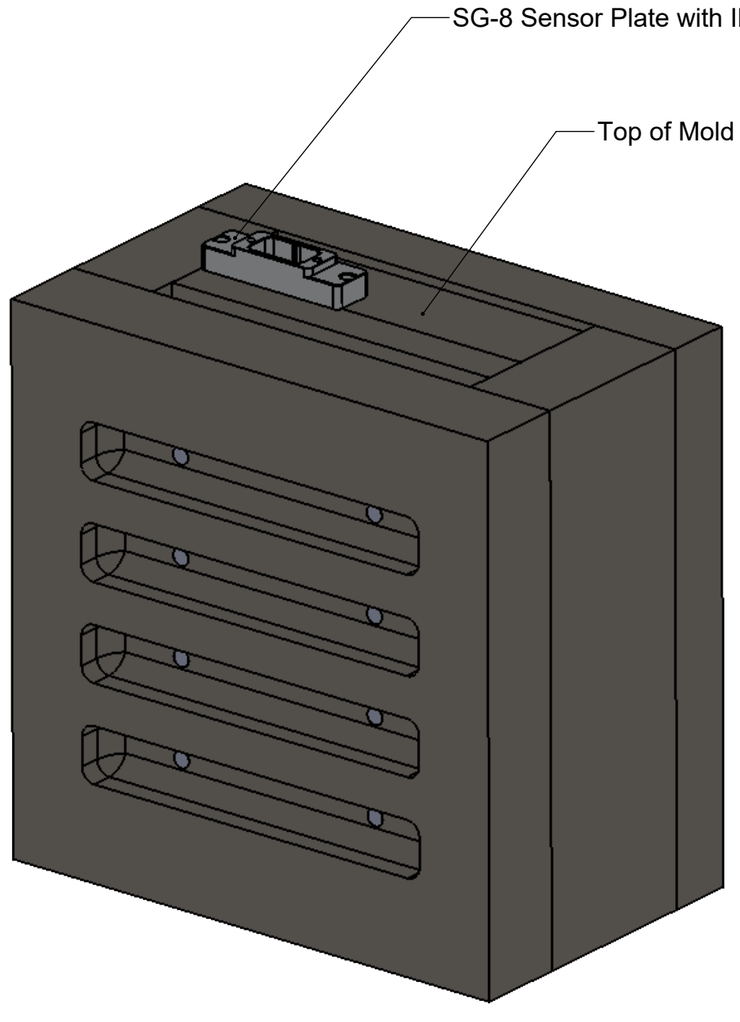
Description:MCSG-125/500/2000Sensor Dimensions	
Drawn: K.J.Brettschneider	
Design:	
Check: M.Groleau	
Date: 04.01.2025	

Drawing Title: MCSG-125/500/2000-07

Multi-Channel Strain Gage Sensor (MCSG-125/500/2000) Installation—Ejector Plate Installation



SECTION N-N
SCALE 1 : 3



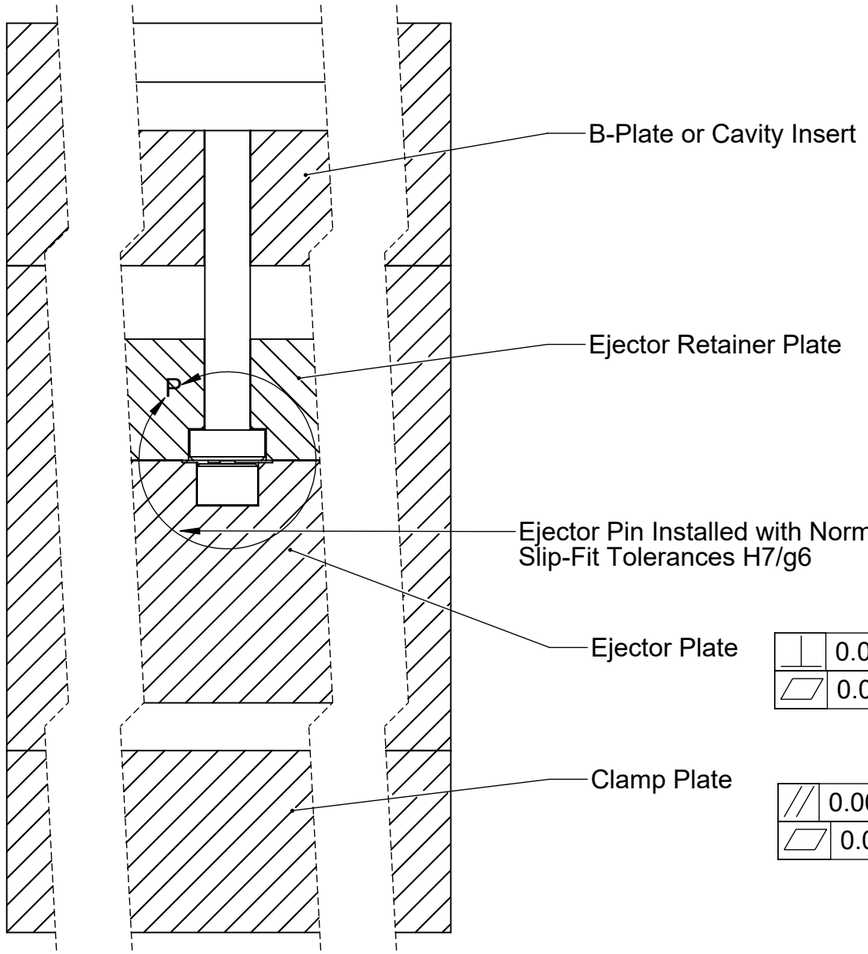
NOTES:
1. CLAMP PLATE APPLICATIONS REQUIRE GUIDED EJECTION
2. EJECTOR AND TRANSFER PIN CONCENTRICITY MUST BE WITHIN 0.030" [0.76] OR 10% OF EJECTOR PIN DIA, WHICHEVER IS SMALLER.
3. ENCLOSED EJECTOR BOX SUGGESTED.
4. DO NOT SCALE PRINT
5. BREAK ALL SHARP EDGES, 0.005 [0.03] R MAX
6. DIMENSIONS IN INCHES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

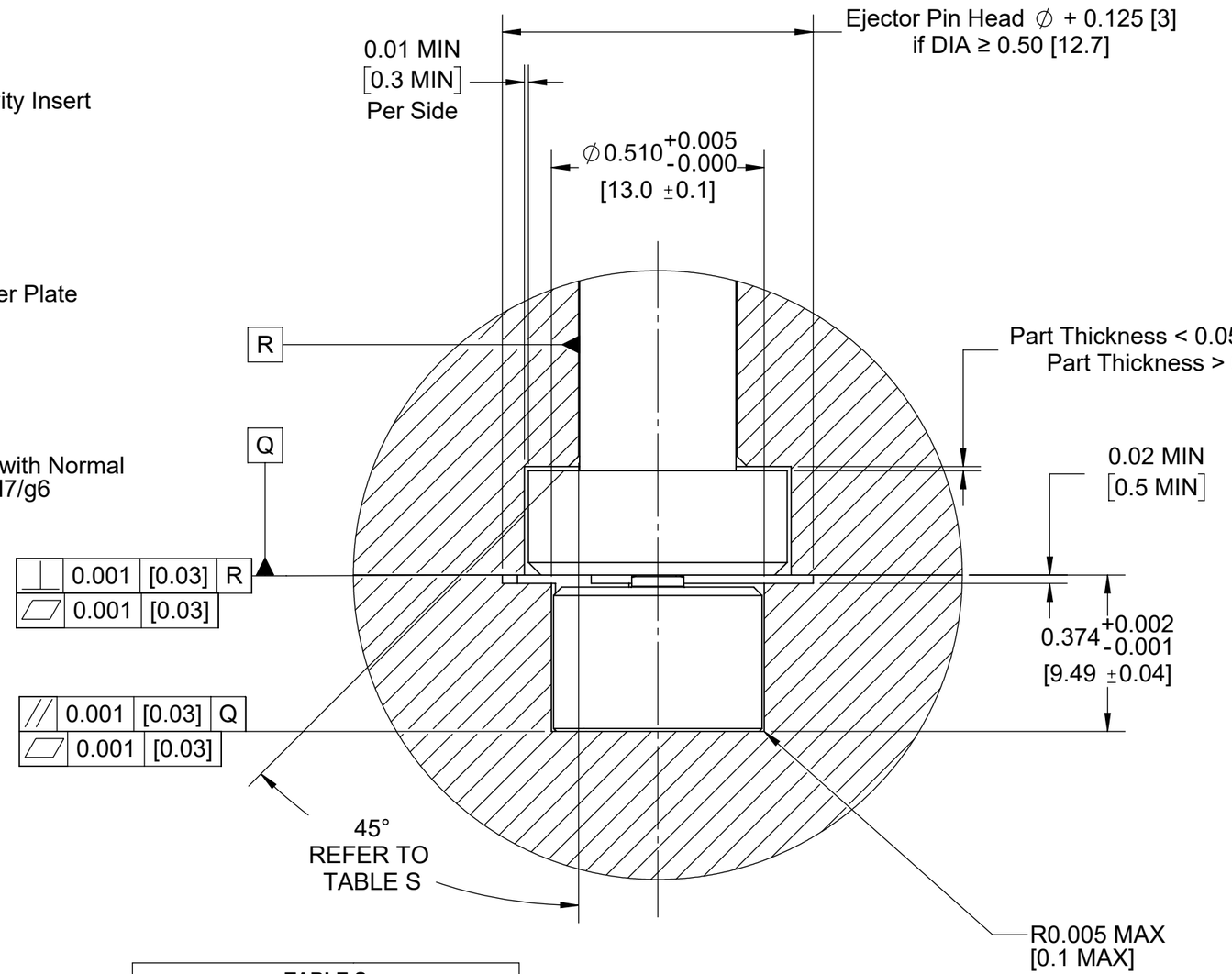
RJG MOLD SMART
3111 Park Street Traverse City, MI 49686
231-947-3111 | www.rjginc.com

Description:MCSG-125/500/2000Sensor Dimensions	
Drawn: K.J.Brettschneider	
Design:	
Check: M.Groleau	
Date: 04.01.2025	

Drawing Title: MCSG-125/500/2000-08

Multi-Channel Strain Gage Sensor (MCSG-125/500/2000) Installation—Ejector Plate Installation





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 S	
	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]

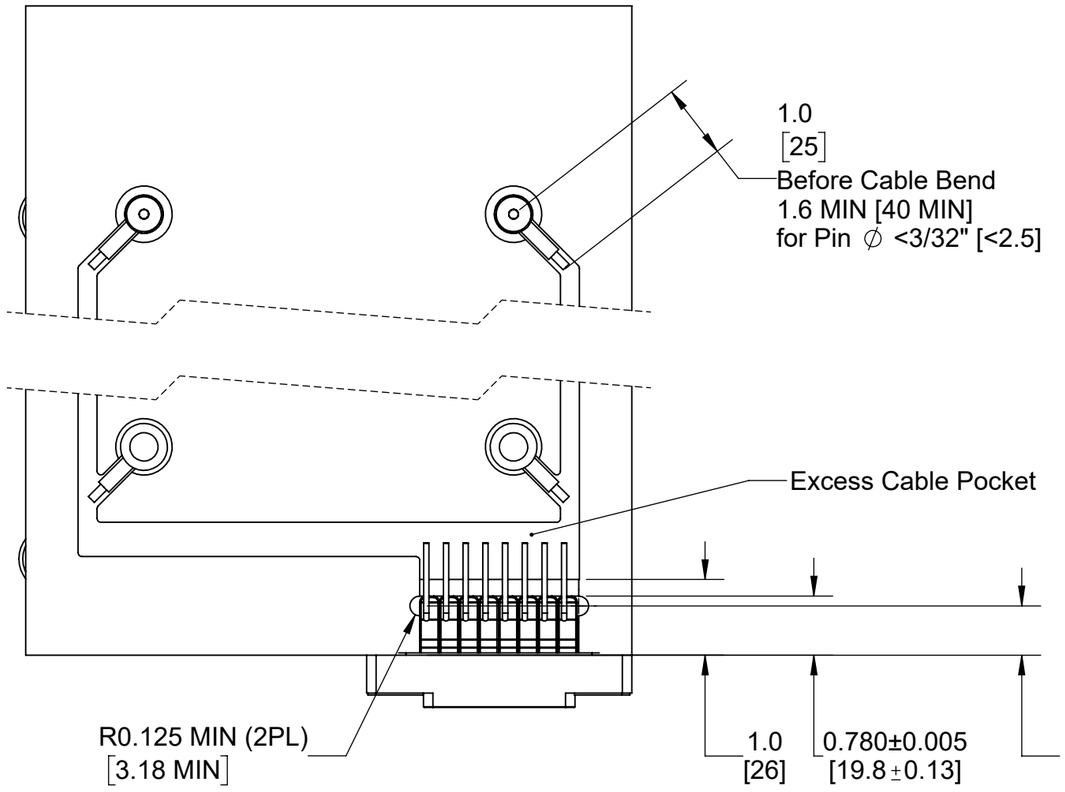
DETAIL P
SCALE 3 : 1

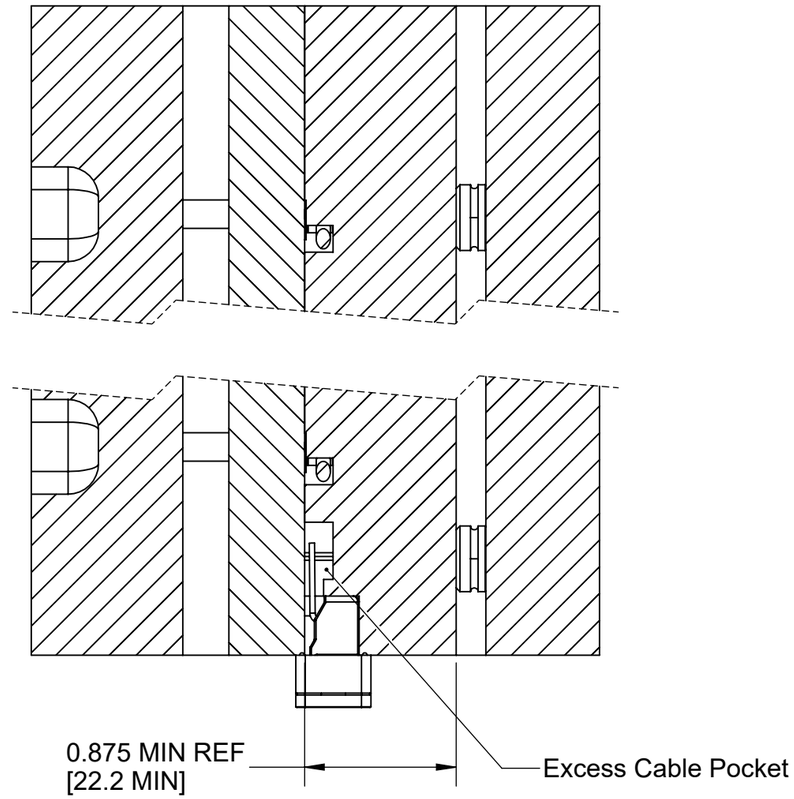
RJG MOLD SMART
3111 Park Street Traverse City, MI 49686
231-947-3111 | www.rjginc.com

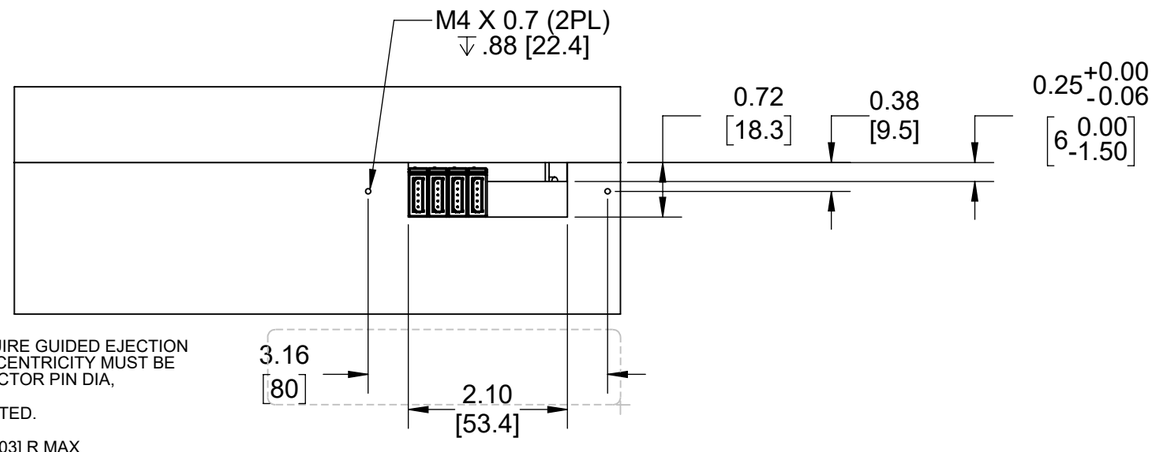
Description:MCSG-125/500/2000Sensor Dimensions	
Drawn: K.J.Brettschneider	
Design:	
Check: M.Groleau	
Date: 04.01.2025	

Drawing Title: MCSG-125/500/2000-09

Multi-Channel Strain Gage Sensor (MCSG-125/500/2000) Installation—Ejector Plate Installation







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'

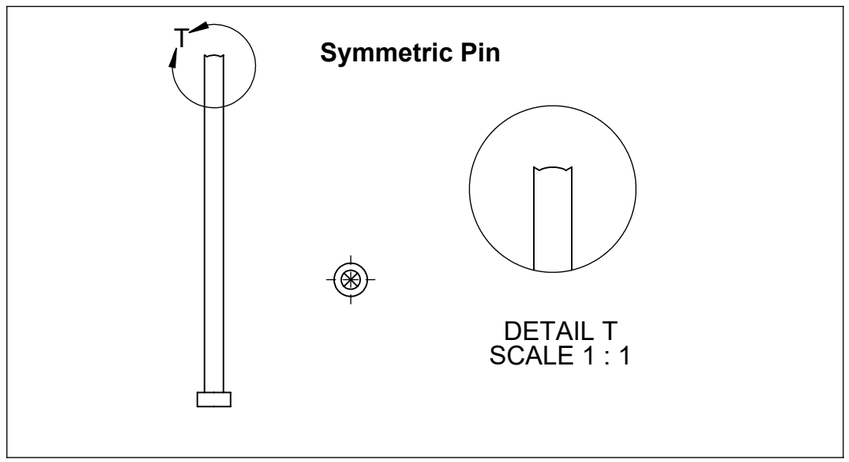
RJG MOLD SMART
3111 Park Street Traverse City, MI 49686
231-947-3111 | www.rjginc.com

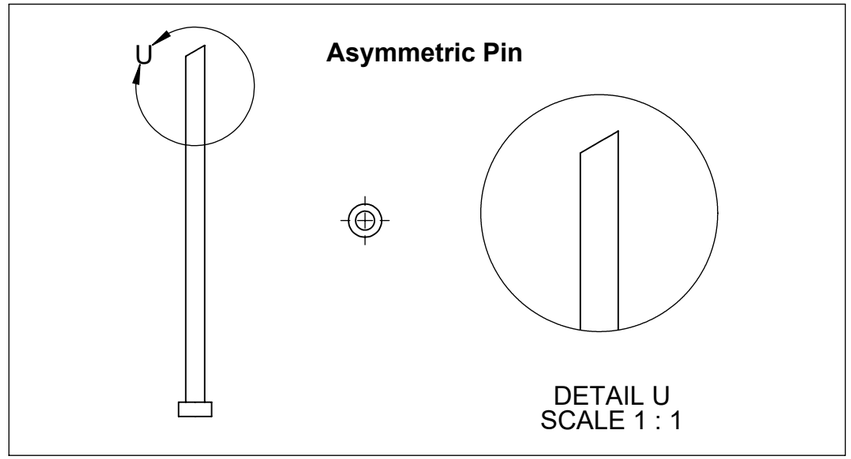
Description:MCSG-125/500/2000Sensor Dimensions	
Drawn: K.J.Brettschneider	
Design:	
Check: M.Groleau	
Date: 04.01.2025	

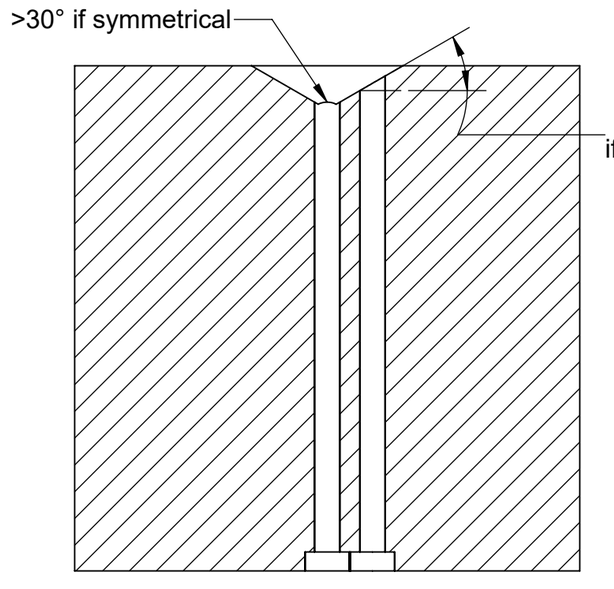
Drawing Title: MCSG-125/500/2000-10

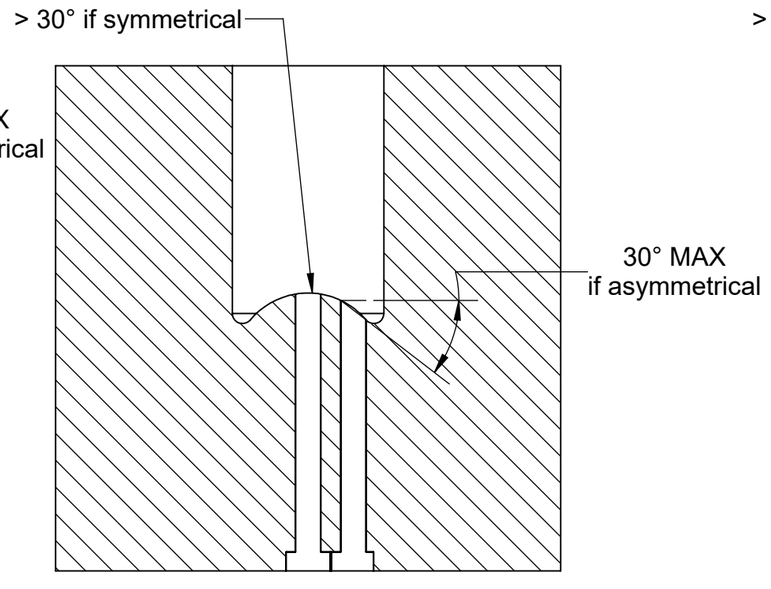
MCSG-125/500/2000 Sensor Installation—Contoured Pin Angle Specification

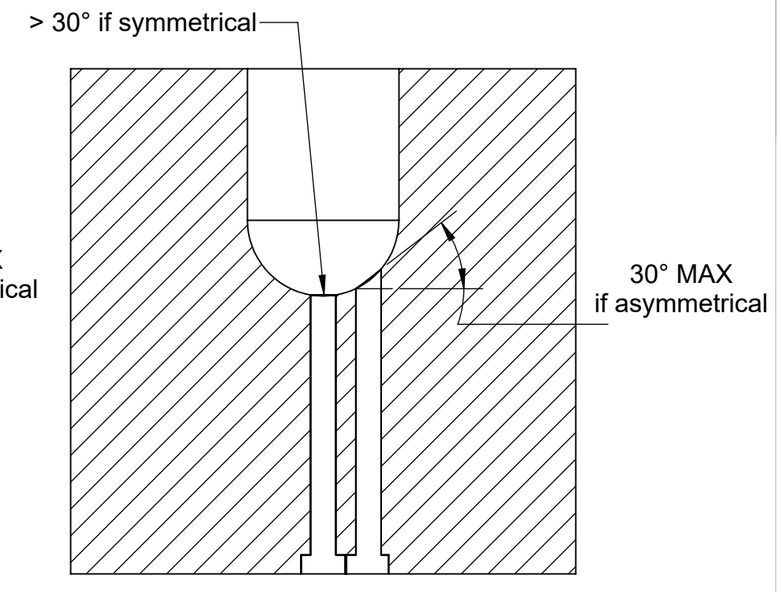
NOTE: Contoured/angled pins (asymmetric) not to exceed 30° MAX unless pin design is symmetrical to provide even, downward pressure across pin surface to loading of sensor. Contact RJG Customer Support for assistance in verification of contoured/angled pin use.











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°

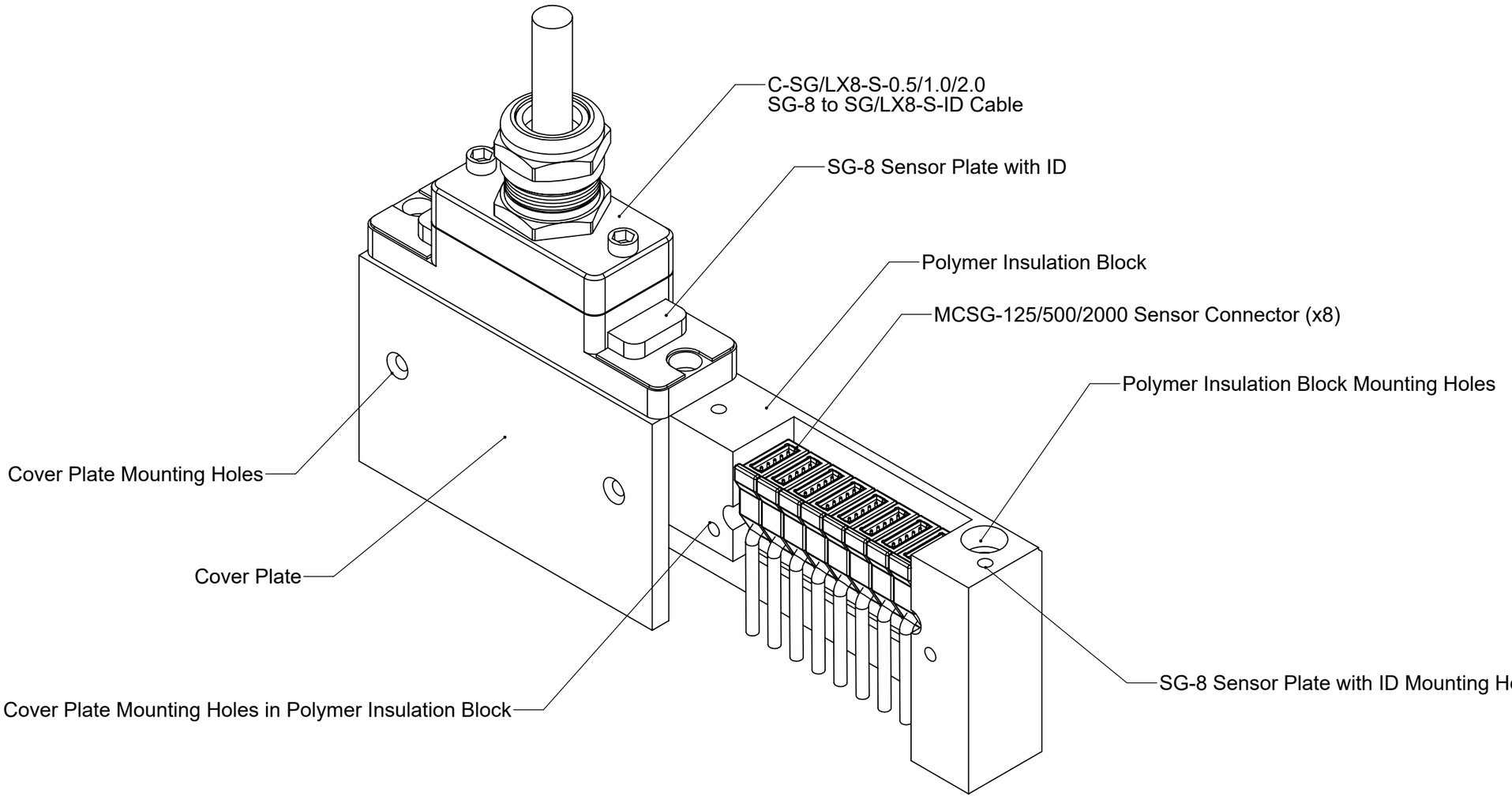
RJG MOLD SMART
3111 Park Street Traverse City, MI 49686
231-947-3111 | www.rjginc.com

Description:MCSG-125/500/2000Sensor Dimensions	
Drawn: K.J.Brettschneider	
Design:	
Check: M.Groleau	
Date: 04.01.2025	

Drawing Title: MCSG-125/500/2000-11

Multi-Channel Strain Gage Sensor MCSG-125/500/2000) Installation—High Temperature Installation

NOTE: The sensor electronics must be kept below 140 °F (60 °C) for all MCSG-125/500/2000 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'

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Description:MCSG-125/500/2000Sensor Dimensions	
Drawn: K.J.Brettschneider	
Design:	
Check: M.Groleau	
Date: 04.01.2025	