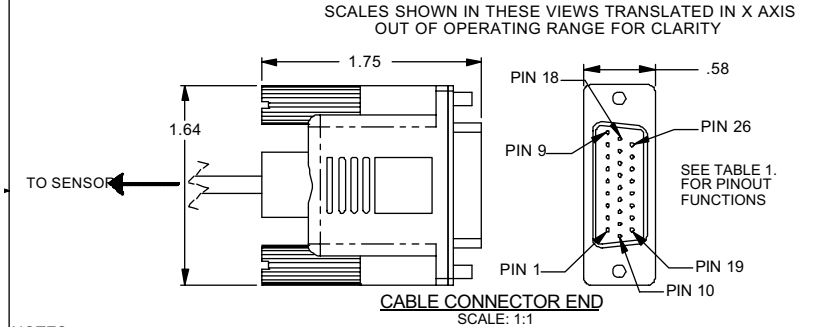
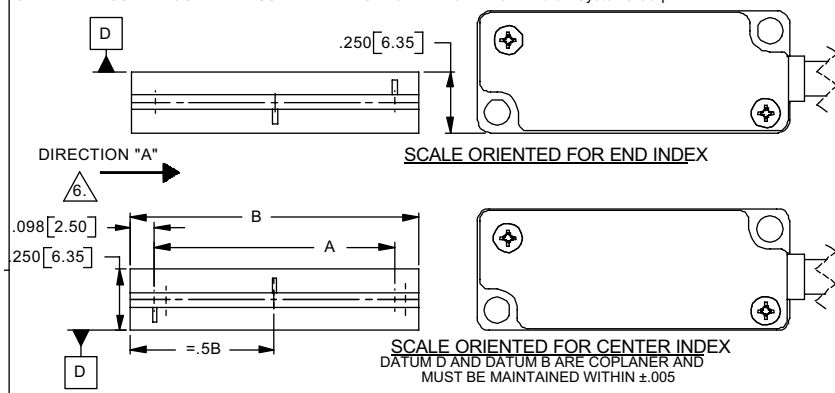


Mercury 1800S Encoder System Interface Drawing: Short Linear Scales

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- NOTES:**
1. RECOMMENDED MOUNTING HARDWARE: 2-56 OR M2 SCREWS w/4 FLAT WASHERS (2 ON EACH SCREW)(OD OF WASHERS NOT TO EXCEED .150 [3.81]. MAX TORQUE: 3.3 in. lbs)
 2. IF BENCHING PINS ARE TO BE USED, PINS MUST BE PLACED ALONG DATUM EDGES OF BOTH THE SENSOR AND THE SCALE FOR PROPER ALIGNMENT. (REFERENCE DATUMS B1, B2, AND C1 FOR SENSOR BENCHING PINS).
 3. HEIGHT OF SENSOR BENCHING PINS MUST BE A MINIMUM OF .170 [4.32] IN HEIGHT FROM DATUM A.
 4. HEIGHT OF SCALE BENCHING PINS NOT TO EXCEED THE THICKNESS OF THE SCALE.
 5. RECOMMENDED SENSOR MOUNTING PLATE: MINIMUM 4 SCREW THREADS, MAXIMUM ALLOW CLEARANCE TO SCALE AND SCALE MOUNTING HARDWARE (BENCHING SURFACES, CLAMPS, HUBS, ETC.)
 6. WHEN SCALE MOVES IN DIRECTION "A" WITH RESPECT TO A STATIONARY READHEAD, OUTPUT SIGNAL RAW COSINE/B+ (PIN 20/PIN 17) LEADS OUTPUT SIGNAL RAW SINE/A+ (PIN 2/PIN 8).
 7. DO NOT CONNECT TO "RESERVED PINS".
 8. FOR SCALES ATTACHED WITH ADHESIVE TAPE (LXX-T), THE SCALE MOUNTING SURFACE MUST BE .006" FURTHER AWAY FROM SENSOR MOUNTING SURFACE FOR NOMINAL Z HEIGHT. DIM = .193[4.90]

SCALE IDENTIFICATION AND SIZE

Scale Identification	Dim A. Measured Length	Dim B. Scale Length
LXX	XXmm-5mm	XXmm
L30	30mm-5mm = 25mm	30mm
(max) L130	130mm-5mm = 125mm	130mm

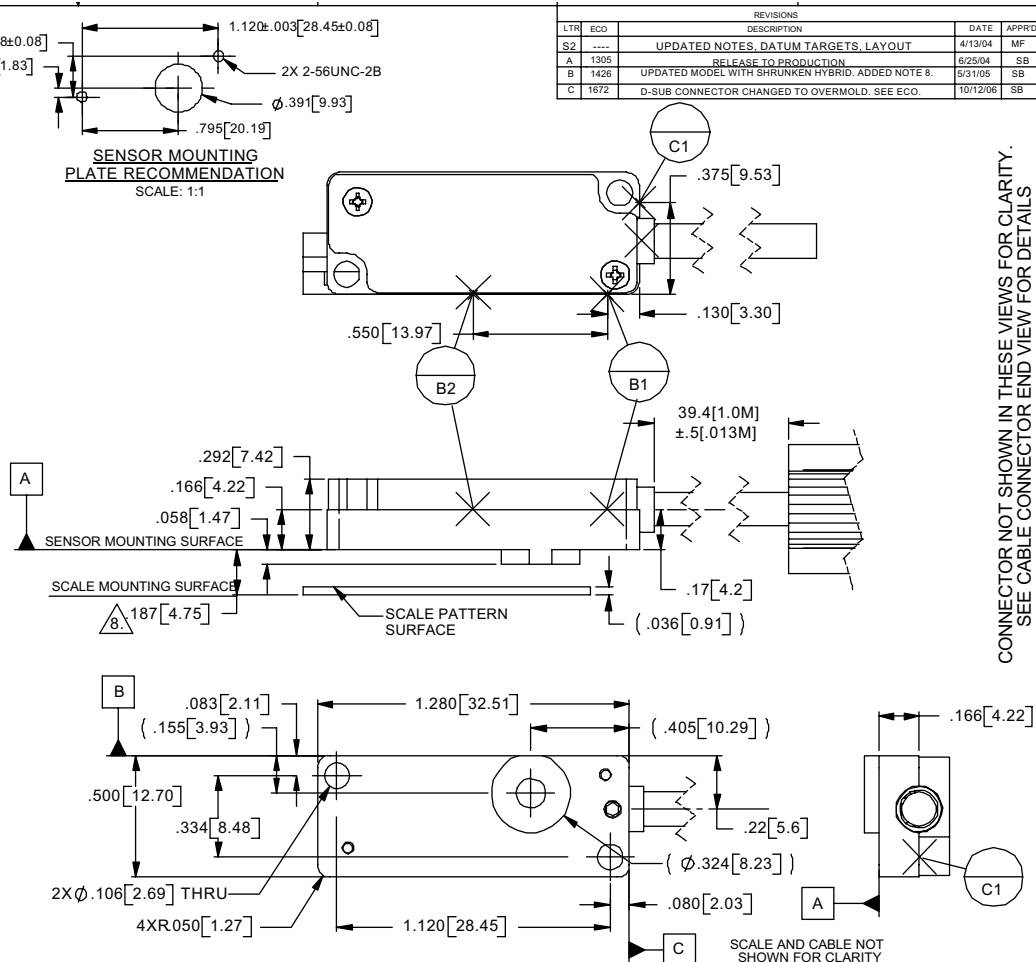


TABLE 1. DB26-HD Pinouts

Pin	Function	Pin	Function
1	RESERVED	14	N/C
2	RAW SINE	15	RESERVED
3	N/C	16	IW-
4	N/C	17	B+
5	RESERVED	18	INDEX-
6	RESERVED	19	RESERVED
7	B-	20	RAW COSINE
8	A+	21	N/C
9	INDEX+	22	N/C
10	RESERVED	23	N/C
11	RESERVED	24	RESERVED
12	+5V	25	IW+
13	GND	26	A-

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES (millimeters). DIM. APPLY AFTER PROCESSING INTERPRET ALL GEOMETRIC TOLS. PER ANSI Y14.5M-1994

TOLERANCES ARE:
DECIMALS: .XX [X], .XX [1.25]
.XXX [X], .XXX [0.05] [13]
ANGULAR: ±30 MIN.

LTR	ECO	REVISIONS DESCRIPTION	DATE	APPR
S2	----	UPDATED NOTES, DATUM TARGETS, LAYOUT	4/13/04	MF
A	1305	RELEASE TO PRODUCTION	6/25/04	SB
B	1426	UPDATED MODEL WITH SHRUNKEN HYBRID. ADDED NOTE 8.	5/31/05	SB
C	1672	D-SUB CONNECTOR CHANGED TO OVERMOLD. SEE ECO.	10/12/06	SB

UNITS: in. [mm]

MicroE Systems
A PRECISION MEASUREMENT COMPANY

APPROVALS: DATE: 4/2/04
DRAWN: S. BUTURLIA
CHECKED:

ENGR. A. GOLDMAN 6/17/04
MFG ENG. TOM GARCIA 6/17/04
QA S. OPPENHEIM 6/17/04

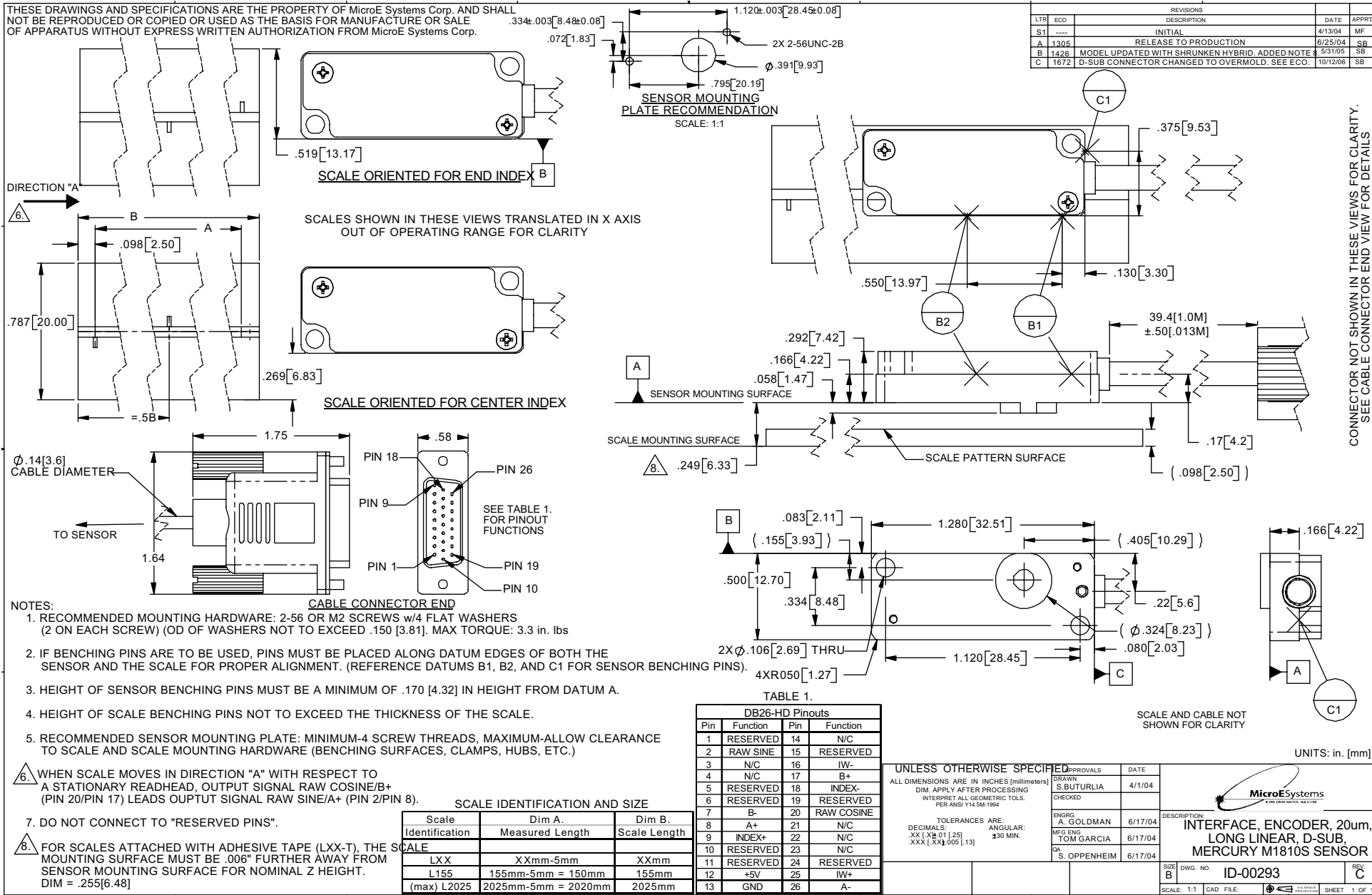
DESCRIPTION: INTERFACE, ENCODER, 20um, SHORT LINEAR, D-SUB MERCURY 1810S SENSOR

SIZE: B DWG. NO. ID-00287 REV. C
SCALE: 2:1 CAD FILE: SHEET 1 OF 1

CONNECTOR NOT SHOWN IN THESE VIEWS FOR CLARITY. SEE CABLE CONNECTOR END VIEW FOR DETAILS.

Mercury 1800S Encoder System Interface Drawing: Long Linear Scales

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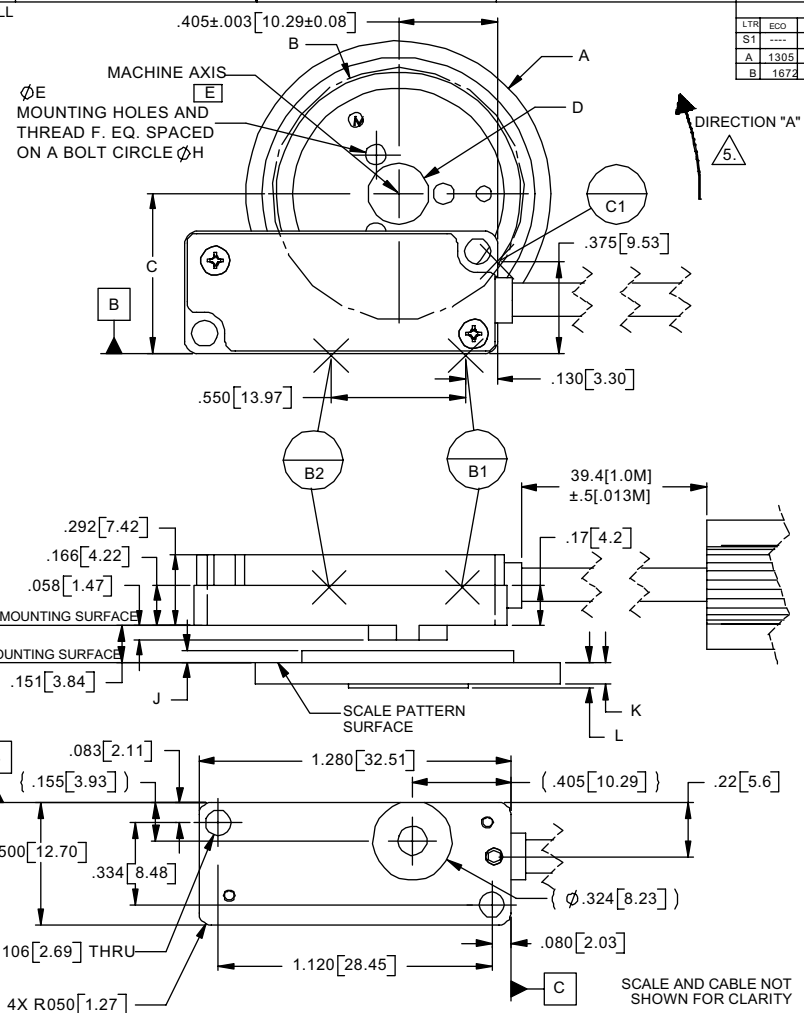
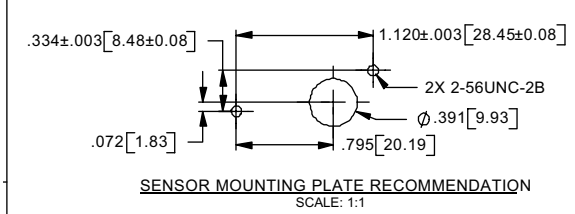
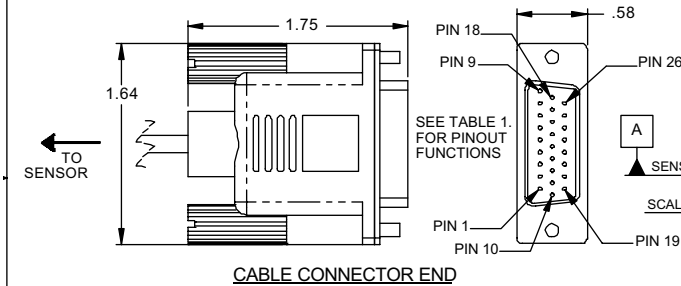


- NOTES:**
1. RECOMMENDED MOUNTING HARDWARE: 2-56 OR M2 SCREWS w/4 FLAT WASHERS (2 ON EACH SCREW) (OD OF WASHERS NOT TO EXCEED .150 [3.81]. MAX TORQUE: 3.3 in. lbs
 2. IF BENCHING PINS ARE TO BE USED, PINS MUST BE PLACED ALONG DATUM EDGES OF BOTH THE SENSOR AND THE SCALE FOR PROPER ALIGNMENT. (REFERENCE DATUMS B1, B2, AND C1 FOR SENSOR BENCHING PINS).
 3. HEIGHT OF SENSOR BENCHING PINS MUST BE A MINIMUM OF .170 [4.32] IN HEIGHT FROM DATUM A.
 4. HEIGHT OF SCALE BENCHING PINS NOT TO EXCEED THE THICKNESS OF THE SCALE.
 5. RECOMMENDED SENSOR MOUNTING PLATE: MINIMUM-4 SCREW THREADS, MAXIMUM-ALLOW CLEARANCE TO SCALE AND SCALE MOUNTING HARDWARE (BENCHING SURFACES, CLAMPS, HUBS, ETC.)
 6. WHEN SCALE MOVES IN DIRECTION "A" WITH RESPECT TO A STATIONARY READHEAD, OUTPUT SIGNAL RAW COSINE/B+ (PIN 20/PIN 17) LEADS OUTPUT SIGNAL RAW SINE/A+ (PIN 2/PIN 8).
 7. DO NOT CONNECT TO "RESERVED PINS".
 8. FOR SCALES ATTACHED WITH ADHESIVE TAPE (LXX-T), THE SCALE MOUNTING SURFACE MUST BE .006" FURTHER AWAY FROM SENSOR MOUNTING SURFACE FOR NOMINAL Z HEIGHT. DIM = .255[6.48]

Mercury 1800S Encoder System Interface Drawing: Rotary Scale with Hub

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- NOTES:
- RECOMMENDED MOUNTING HARDWARE:
2-56 OR M2 SCREWS w/4 FLAT WASHERS (2 ON EACH SCREW)
(OD OF WASHERS NOT TO EXCEED .150 [3.81].
MAX TORQUE: 3.3 in. lbs
 - IF BENCHING PINS ARE TO BE USED, PINS MUST BE PLACED ALONG DATUM EDGES OF BOTH THE SENSOR AND THE SCALE FOR PROPER ALIGNMENT. (REFERENCE DATUMS B1, B2, AND C1 FOR SENSOR BENCHING PINS).
 - HEIGHT OF SENSOR BENCHING PINS MUST BE A MINIMUM OF .170 [4.32] IN HEIGHT FROM DATUM A.
 - RECOMMENDED SENSOR MOUNTING PLATE:
MINIMUM-4 SCREW THREADS
MAXIMUM-ALLOW CLEARANCE TO SCALE AND SCALE MOUNTING HARDWARE (BENCHING SURFACES, CLAMPS, HUBS, ETC.)
- ⚠ WHEN SCALE MOVES IN DIRECTION "A" WITH RESPECT TO A STATIONARY READHEAD, OUTPUT SIGNAL RAW COSINE/B+ (PIN 20/PIN 17) LEADS OUTPUT SIGNAL RAW SINE/A+ (PIN 2/PIN 8).
- DO NOT CONNECT TO "RESERVED PINS"



REVISIONS				
LTR	ECO	DESCRIPTION	DATE	APPR
S1	----	INITIAL	4/13/04	MF
A	1305	RELEASE TO PRODUCTION	6/25/04	SB
B	1673	D-SUB CONNECTOR CHANGED TO OVERMOLD.	10/12/08	SB

TABLE 1.

DB26-HD Pinouts			
Pin	Function	Pin	Function
1	RESERVED	14	N/C
2	RAW SINE	15	RESERVED
3	N/C	16	IW-
4	N/C	17	B+
5	RESERVED	18	INDEX-
6	RESERVED	19	RESERVED
7	B-	20	RAW COSINE
8	A+	21	N/C
9	INDEX+	22	N/C
10	RESERVED	23	N/C
11	RESERVED	24	RESERVED
12	+5V	25	IW+
13	GND	26	A-

CONNECTOR NOT SHOWN IN THESE VIEWS FOR CLARITY. SEE CABLE CONNECTOR END VIEW FOR DETAILS.

SCALE IDENTIFICATION AND SIZE. DIMENSIONS IN INCHES (MILLIMETERS)												
Scale Identification	Counts/Rev	Dim. A Scale O.D.	Scale I.D.	Dim. B Optical Dia.	Dim. C Mounting Dim.	Dim. D Hub I.D.	Dim. E Mounting Hole Dia.	Thread F	Dim. H Bolt Circle	Dim. J Hub Height	Dim. K Scale Thickness	Dim. L Hub Relief
R1206	1,650	0.472 [12.00]	.250+/- .005 [6.35+/- .13]	0.413 [10.50]	0.348+/- .002 [8.84+/- .05]	0.1253+ .0005/- .0000 [3.182+ .013/- .0001]	N/A	N/A	N/A	1.021 [25.98]	.036+/- .002 [0.91+/- .05]	0.045 [1.14]
R1910	2,500	0.750 [19.05]	.375+/- .005 [9.53+/- .013]	0.627 [15.92]	0.454+/- .002 [11.53+/- .05]	0.1253+ .0005/- .0000 [3.182+ .013/- .0001]	0.047 [1.19]	0-80 [2.03]	0.250 [6.35]	1.021 [25.98]	.090+/- .004 [2.29+/- .10]	0.105 [2.67]
R3213	4,096	1.250 [31.75]	.500+/- .005 [12.70+/- .13]	1.027 [26.08]	0.654+/- .002 [16.62+/- .05]	0.2503+ .0005/- .0000 [6.357+ .013/- .0001]	0.070 [1.78]	2-56 [6.35]	0.370 [9.40]	1.127 [28.62]	.090+/- .004 [2.29+/- .10]	0.105 [2.67]
R5725	8,192	2.250 [57.15]	1.000+/- .005 [25.40+/- .13]	2.053 [52.15]	1.168+/- .002 [29.66+/- .05]	0.5003+ .0005/- .0000 [12.707+ .013/- .0001]	0.136 [3.45]	8-32 [2.03]	0.750 [19.05]	1.521 [38.98]	.090+/- .004 [2.29+/- .10]	0.105 [2.67]
R10851	16,384	4.250 [107.95]	2.000+/- .005 [50.80+/- .13]	4.106 [104.30]	2.194+/- .002 [55.73+/- .05]	1.0003+ .0005/- .0000 [25.408+ .013/- .0001]	0.136 [3.45]	8-32 [2.03]	1.375 [34.93]	2.031 [51.69]	.090+/- .004 [2.29+/- .10]	0.105 [2.67]

UNLESS OTHERWISE SPECIFIED, APPROVALS DATE
ALL DIMENSIONS ARE IN INCHES (millimeters) DRAWN S.BUTURLIA 4/1/04
DIM. APPLY AFTER PROCESSING CHECKED
INTERPRET ALL GEOMETRIC TOLS. PER ANSI Y14.5M-1994
TOLERANCES ARE: DECIMALS: .XX [X±.01 | .25] ANGULAR: .250 MIN.
.XXX [X±.005 | .13]

ENGR. A. GOLDMAN	6/17/04
MFG ENG TOM GARCIA	6/17/04
QA S. OPPENHEIM	6/17/04

MicroE Systems
DESCRIPTION: INTERFACE, ENCODER, 20um, ROTARY w/HUB, D-SUB, MERCURY M1810S SENSOR

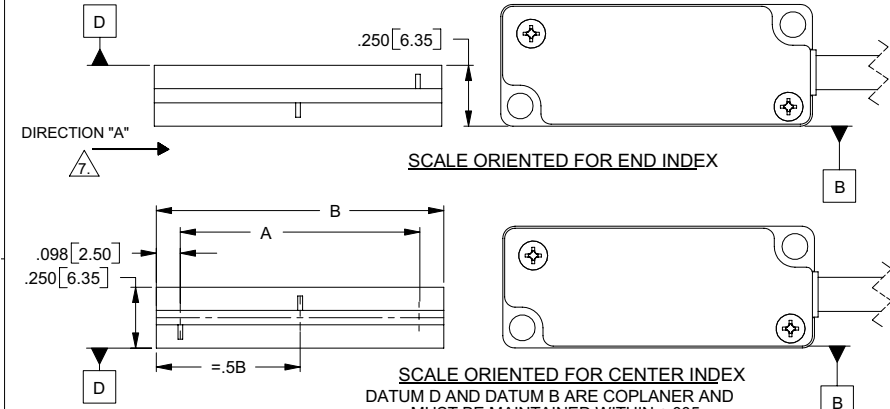
SIZE B DWG. NO. ID-00294 REV B

SCALE: 1:1 CAD FILE: SHEET 1 OF 1

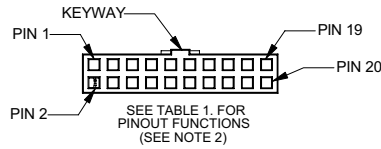
Mercury 1800H Encoder System

Interface Drawing: Short Linear Scales

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SCALES SHOWN IN THESE VIEWS TRANSLATED IN X AXIS OUT OF OPERATING RANGE FOR CLARITY



NOTES:

- RECOMMENDED MOUNTING HARDWARE: 2-56 OR M2 SCREWS w/4 FLAT WASHERS (2 ON EACH SCREW)(OD OF WASHERS NOT TO EXCEED .150 [3.81]. MAX TORQUE: 3.3 in. lbs
- CONNECTOR p/n (FCI p/n 90311-020) CONNECTS TO SUPPLIED ELECTRONICS. RECOMMENDED MATING CONNECTOR: FCI p/n 98424-F52-10U OR EQUIVALENT.
- IF BENCHING PINS ARE TO BE USED, PINS MUST BE PLACED ALONG DATUM EDGES OF BOTH THE SENSOR AND THE SCALE FOR PROPER ALIGNMENT. (REFERENCE DATUMS B1, B2, AND C1 FOR SENSOR BENCHING PINS).
- HEIGHT OF SENSOR BENCHING PINS MUST BE A MINIMUM OF .170 [4.32] IN HEIGHT FROM DATUM A.
- HEIGHT OF SCALE BENCHING PINS NOT TO EXCEED THE THICKNESS OF THE SCALE.
- RECOMMENDED SENSOR MOUNTING PLATE: MINIMUM-4 SCREW THREADS, MAXIMUM-ALLOW CLEARANCE TO SCALE AND SCALE MOUNTING HARDWARE (BENCHING SURFACES, CLAMPS, HUBS, ETC.)

7. WHEN SCALE MOVES IN DIRECTION "A" WITH RESPECT TO A STATIONARY READHEAD, OUTPUT SIGNAL RAW COSINE/B+ (PIN 10/PIN 17) LEADS OUTPUT SIGNAL RAW SINE/A+ (PIN 9/PIN 19).

8. DO NOT CONNECT TO "RESERVED PINS".

9. FOR SCALES ATTACHED WITH ADHESIVE TAPE (LXX-T), THE SCALE MOUNTING SURFACE MUST BE .006" FURTHER AWAY FROM SENSOR MOUNTING SURFACE FOR NOMINAL Z HEIGHT. DIM= .193[4.90]

SCALE IDENTIFICATION AND SIZE		
Scale Identification	Dim A. Measured Length	Dim B. Scale Length
LXX	XXmm-5mm	XXmm
L30	30mm-5mm = 25mm	30mm
(max) L130	130mm-5mm = 125mm	130mm

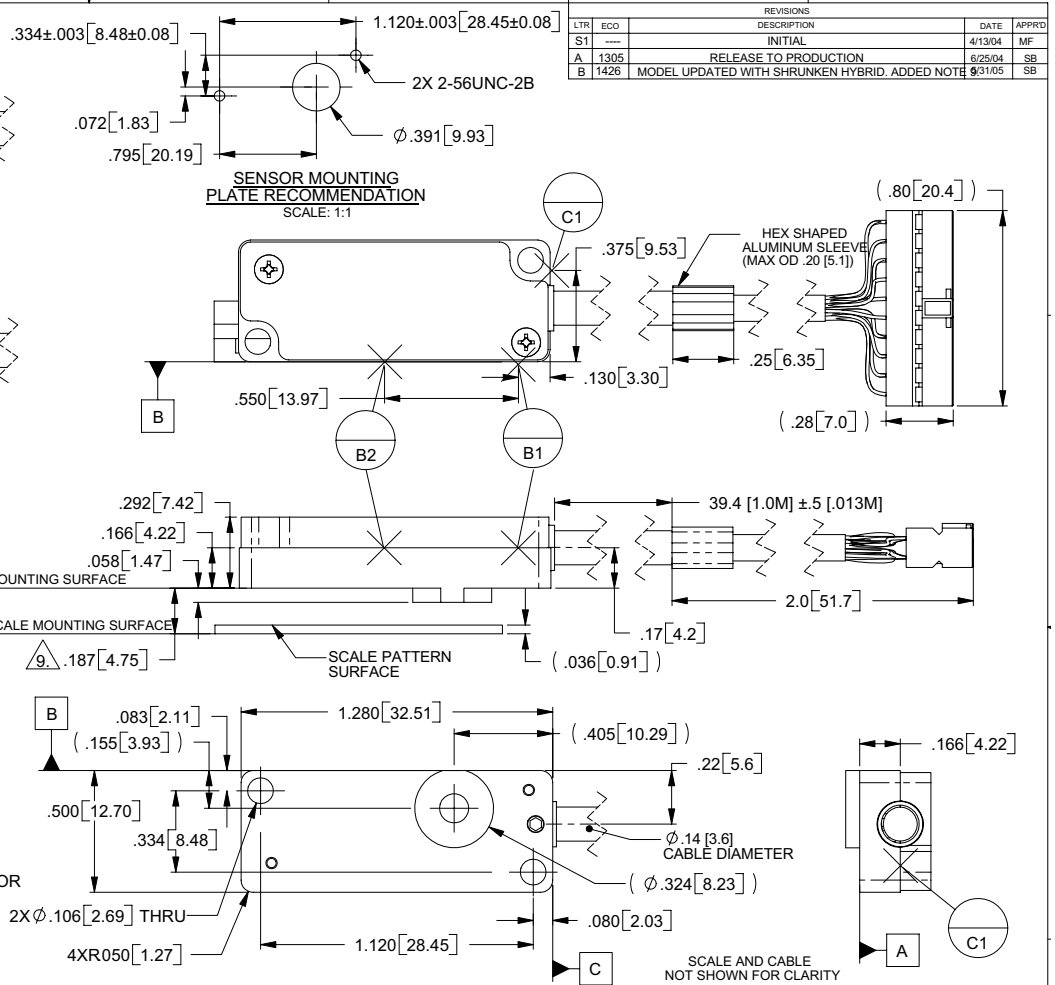


TABLE 1.			
10x2, 2mm PITCH HEADER			
PIN	Function	PIN	Function
1	RESERVED	11	RESERVED
2	INDEX WINDOW-	12	RESERVED
3	RESERVED	13	RESERVED
4	GND	14	RESERVED
5	RESERVED	15	INDEX+
6	INDEX WINDOW+	16	INDEX-
7	RESERVED	17	B+
8	+5V	18	B-
9	RAW SINE	19	A+
10	RAW COSINE	20	A-

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES [millimeters]. DIM. APPLY AFTER PROCESSING. INTERPRET ALL GEOMETRIC TOLS. PER ANSI Y14.5M-1994.

TOLERANCES ARE:
DECIMALS: XX [X] ±.01 [25]
XXX [XX] ±.005 [13]
ANGULAR: ±30 MIN.

REVISIONS				
LT	ECO	DESCRIPTION	DATE	APPRD
ST	---	INITIAL	4/13/04	MF
A	1305	RELEASE TO PRODUCTION	6/25/04	SB
B	1426	MODEL UPDATED WITH SHRUNKEN HYBRID. ADDED NOTE	9/31/05	SB

UNITS: in. [mm]

MicroE Systems

APPROVALS: DRAWN: S.BUTURLIA, DATE: 4/1/04, CHECKED: [blank], ENGRG: A. GOLDMAN, MFG ENG: TOM GARCIA, QA: S. OPPENHEIM

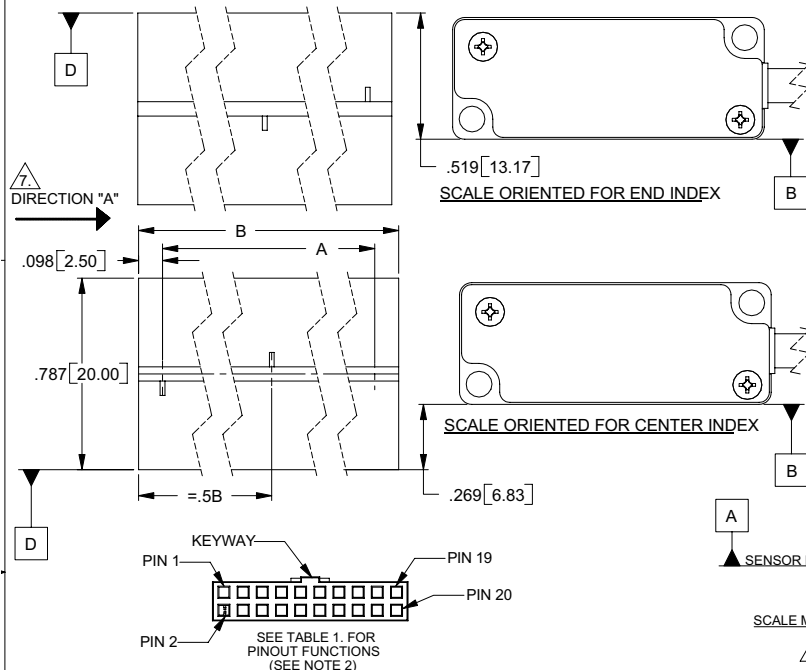
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SIZE: DWG. NO. ID-00295, REV. B

SCALE: 1:1, CAD FILE, SHEET 1 OF 1

Mercury 1800H Encoder System Interface Drawing: Long Linear Scales

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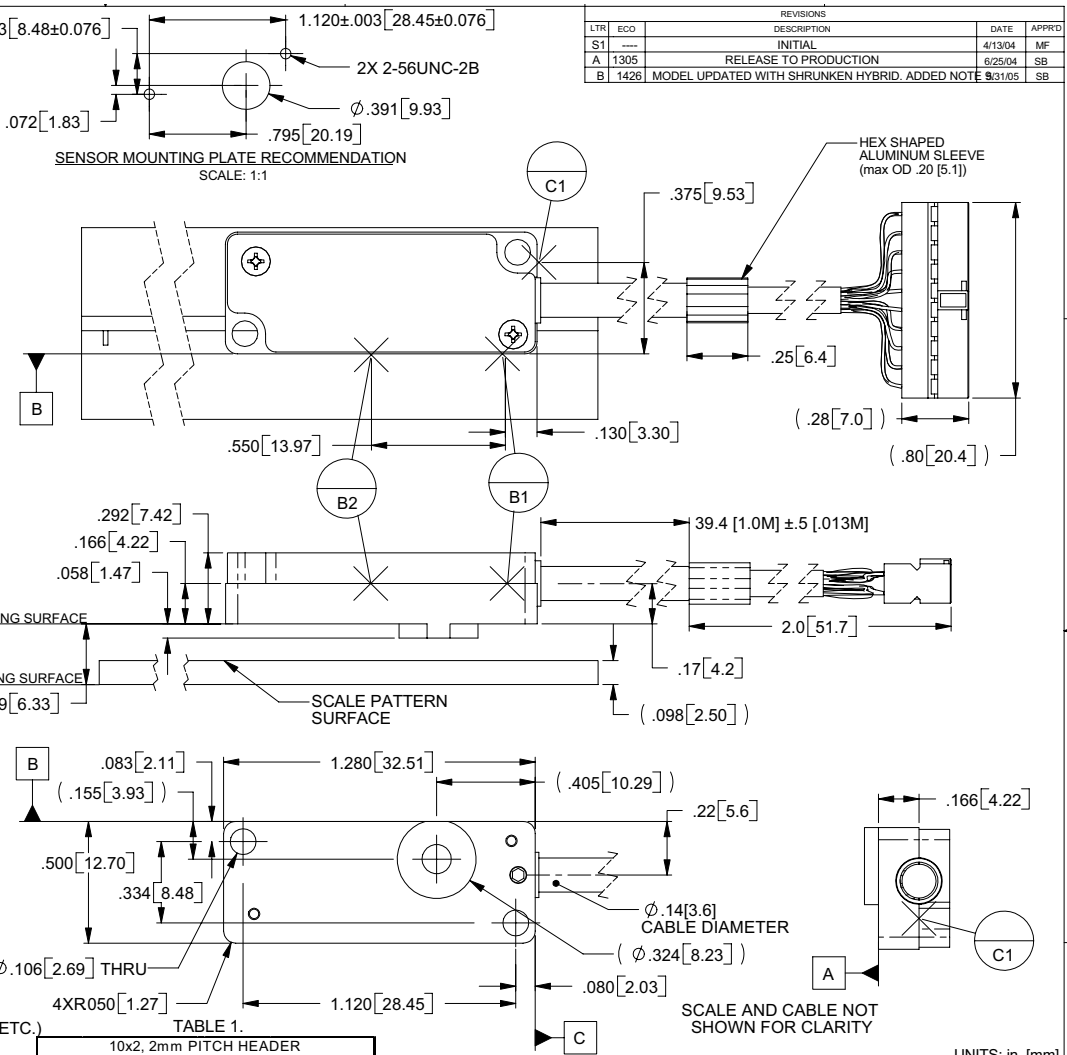
- NOTES:**
- RECOMMENDED MOUNTING HARDWARE: 2-56 OR M2 SCREWS w/4 FLAT WASHERS (2 ON EACH SCREW)(OD OF WASHERS NOT TO EXCEED .150 [3.81]. MAX TORQUE: 3.3 in. lbs
 - CONNECTOR p/n (FCI p/n 90311-020) CONNECTS TO SUPPLIED ELECTRONICS. RECOMMENDED MATING CONNECTOR: FCI p/n 98424-F52-10U OR EQUIVALENT.
 - IF BENCHING PINS ARE TO BE USED, PINS MUST BE PLACED ALONG DATUM EDGES OF BOTH THE SENSOR AND THE SCALE FOR PROPER ALIGNMENT. (REFERENCE DATUMS B1, B2, AND C1 FOR SENSOR BENCHING PINS).
 - HEIGHT OF SENSOR BENCHING PINS MUST BE A MINIMUM OF .170 [4.32] IN HEIGHT FROM DATUM A.
 - HEIGHT OF SCALE BENCHING PINS NOT TO EXCEED THE THICKNESS OF THE SCALE.
 - RECOMMENDED SENSOR MOUNTING PLATE: MINIMUM-4 SCREW THREADS, MAXIMUM-ALLOW CLEARANCE TO SCALE AND SCALE MOUNTING HARDWARE (BENCHING SURFACES, CLAMPS, HUBS, ETC.)

7. WHEN SCALE MOVES IN DIRECTION "A" WITH RESPECT TO A STATIONARY READHEAD, OUTPUT SIGNAL RAW COSINE/B+ (PIN 10/PIN 17) LEADS OUTPUT SIGNAL RAW SINE/A+ (PIN 9/PIN 19).

8. DO NOT CONNECT TO "RESERVED PINS".

9. FOR SCALES ATTACHED WITH ADHESIVE TAPE (LXX-T), THE SCALE MOUNTING SURFACE MUST BE .006" FURTHER AWAY FROM SENSOR MOUNTING SURFACE FOR NOMINAL Z HEIGHT. DIM B = .255[6.48]

Scale	Dim A.	Dim B.
Identification	Measured Length	Scale Length
LXX	XXmm-5mm	XXmm
L155	155mm-5mm = 150mm	155mm
(max) L2025	2025mm-5mm = 2020mm	2025mm



10x2, 2mm PITCH HEADER			
PIN	Function	PIN	Function
1	RESERVED	11	RESERVED
2	INDEX WINDOW-	12	RESERVED
3	RESERVED	13	RESERVED
4	GND	14	RESERVED
5	RESERVED	15	INDEX+
6	INDEX WINDOW+	16	INDEX-
7	RESERVED	17	B+
8	+5V	18	B-
9	RAW SINE	19	A+
10	RAW COSINE	20	A-

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES (millimeters). DIM. APPLY AFTER PROCESSING. INTERPRET ALL GEOMETRIC TOLS. PER ANSI Y14.5M-1994.

TOLERANCES ARE:
 DECIMALS: XX [X] ±.01 [25]
 XX [X] ±.005 [13]
 ANGULAR: ±30 MIN.

REVISIONS				
LTR	ECO	DESCRIPTION	DATE	APPROV
S1		INITIAL	4/13/04	MF
A	1305	RELEASE TO PRODUCTION	8/25/04	SB
B	1426	MODEL UPDATED WITH SHRUNKEN HYBRID. ADDED NOTE 9.31.05	8/31/05	SB

UNITS: in. [mm]

MicroE Systems
 A MICROE SYSTEMS COMPANY

DESCRIPTION:
 INTERFACE, ENCODER, 20um,
 LONG LINEAR, HEADER,
 MERCURY M1810H SENSOR

APPROVALS: S.BUTURLIA 4/1/04
 ENGRG. ANDREW GOLDMAN 6/17/04
 INFO ENG. TOM GARCIA 6/17/04
 QA S. OPPENHEIM 6/17/04

SIZE B DWG. NO. ID-00296 REV. B
 SCALE: 1:1 CAD FILE

Mercury 1800H Encoder System Interface Drawing: Rotary Scale with Hub

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NOTES:

- RECOMMENDED MOUNTING HARDWARE:
2-56 OR M2 SCREWS w/4 FLAT WASHERS (2 ON EACH SCREW)
(OD OF WASHERS NOT TO EXCEED .150 [3.81].
MAX TORQUE: 3.3 in. lbs
 - CONNECTOR p/n (FCI p/n 90311-020) CONNECTS TO SUPPLIED ELECTRONICS.
RECOMMENDED MATING CONNECTOR: FCI p/n 98424-F52-10U OR EQUIVALENT.
 - IF BENCHING PINS ARE TO BE USED, PINS MUST BE PLACED ALONG DATUM EDGES OF BOTH THE SENSOR AND THE SCALE FOR PROPER ALIGNMENT.
(REFERENCE DATUMS B1, B2, AND C1 FOR SENSOR BENCHING PINS).
 - HEIGHT OF SENSOR BENCHING PINS MUST BE A MINIMUM OF .170 [4.32] IN HEIGHT FROM DATUM A.
 - RECOMMENDED SENSOR MOUNTING PLATE:
MINIMUM-4 SCREW THREADS
MAXIMUM-ALLOW CLEARANCE TO SCALE AND SCALE MOUNTING HARDWARE (BENCHING SURFACES, CLAMPS, HUBS, ETC.)
- ▲ WHEN SCALE MOVES IN DIRECTION "A" WITH RESPECT TO A STATIONARY READHEAD, OUTPUT SIGNAL RAW COSINE/B+ (PIN 10/PIN 17) LEADS OUTPUT SIGNAL RAW SINE/A+ (PIN 9/PIN 19).
- DO NOT CONNECT TO "RESERVED PINS"

REVISIONS				
LR	ECO	DESCRIPTION	DATE	APPRD
S1	----	INITIAL	4/13/04	MF
A	1305	RELEASE TO PRODUCTION	6/25/04	SB

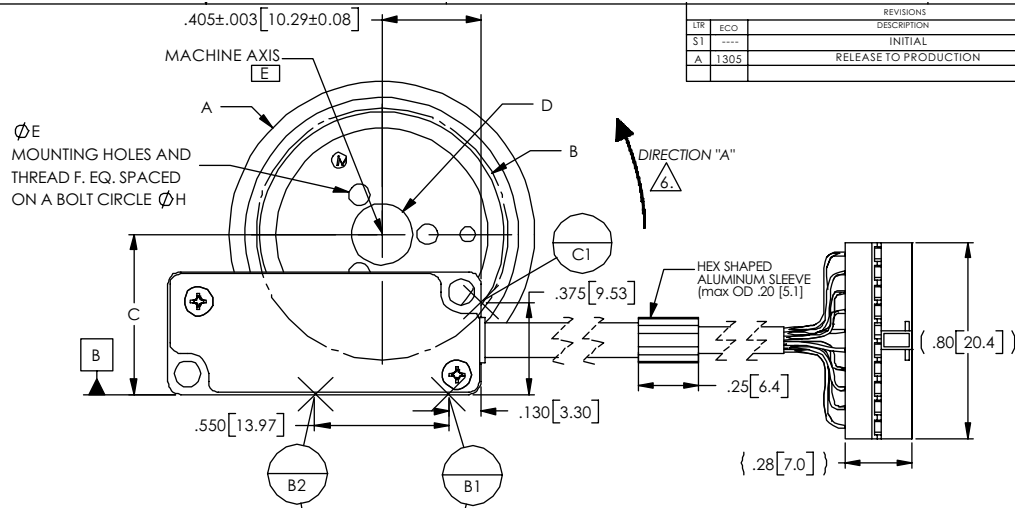
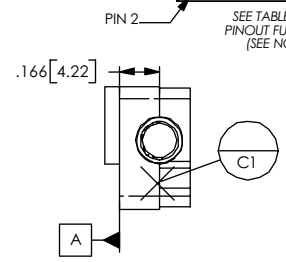
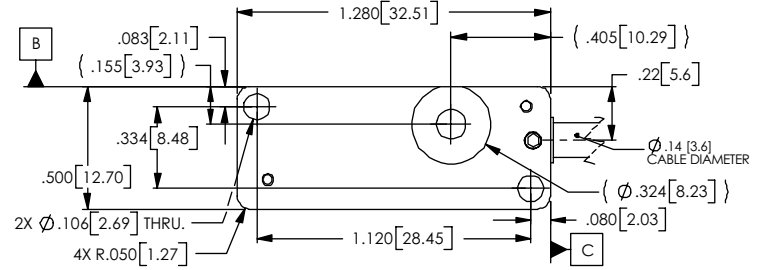
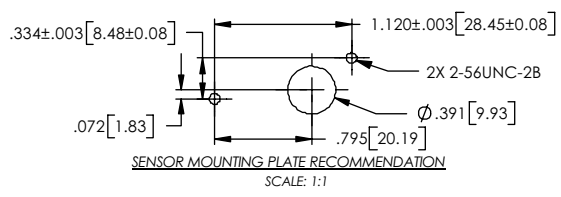
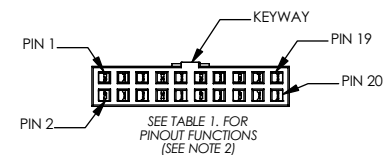
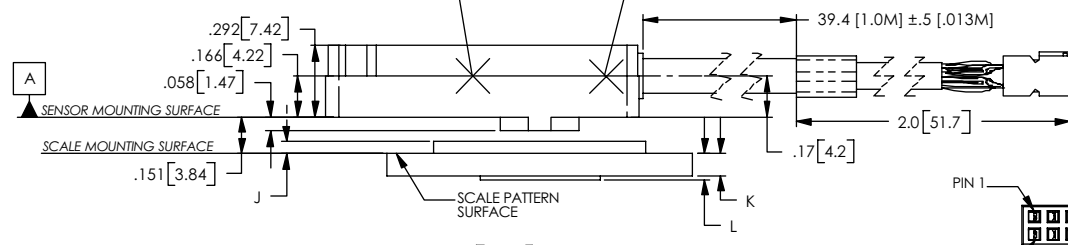


TABLE 1.
10x2, 2mm PITCH HEADER

PIN	Function	PIN	Function
1	RESERVED	11	RESERVED
2	INDEX WINDOW-	12	RESERVED
3	RESERVED	13	RESERVED
4	GND	14	RESERVED
5	RESERVED	15	INDEX+
6	INDEX WINDOW+	16	INDEX-
7	RESERVED	17	B+
8	+5V	18	B-
9	RAW SINE	19	A+
10	RAW COSINE	20	A-



SCALE IDENTIFICATION AND SIZE. DIMENSIONS IN INCHES [MILLIMETERS]

Scale Identification	Counts/Rev	Dim. A Scale O.D.	Scale I.D.	Dim. B Optical Dia.	Dim. C Mounting Dim.	Dim. D Hub I.D.	Dim. E Mounting Hole Dia.	Thread F	Dim. H Bolt Circle	Dim. J Hub Height	Dim. K Scale Thickness	Dim. L Hub Relief
R1206	1,650	0.472 [12.00]	.250+/- .005 [6.35+/- .13]	0.413 [10.50]	0.348+/- .002 [8.84+/- .05]	0.1253+ .0005/- .0000 [3.182+ .013/- .000]	N/A	N/A	N/A	0.040 [1.02]	.036+/- .002 [0.91+/- .05]	0.045 [1.14]
R1910	2,500	0.750 [19.05]	.375+/- .005 [9.53+/- .013]	0.627 [15.92]	0.454+/- .002 [11.53+/- .05]	0.1253+ .0005/- .0000 [3.182+ .013/- .000]	0.047 [1.19]	0-80	0.250 [6.35]	0.040 [1.02]	.090+/- .004 [2.29+/- .10]	0.105 [2.67]
R3213	4,096	1.250 [31.75]	.500+/- .005 [12.70+/- .013]	1.027 [26.08]	0.654+/- .002 [16.62+/- .05]	0.2503+ .0005/- .0000 [6.357+ .013/- .000]	0.070 [1.78]	2-56	0.370 [9.40]	0.050 [1.27]	.090+/- .004 [2.29+/- .10]	0.105 [2.67]
R5725	8,192	2.250 [57.15]	1.000+/- .005 [25.40+/- .013]	2.053 [52.15]	1.168+/- .002 [29.66+/- .05]	0.5003+ .0005/- .0000 [12.707+ .013/- .000]	0.136 [3.45]	8-32	0.750 [19.05]	0.060 [1.52]	.090+/- .004 [2.29+/- .10]	0.105 [2.67]
R10851	16,384	4.250 [107.95]	2.000+/- .005 [50.80+/- .013]	4.106 [104.30]	2.194+/- .002 [55.73+/- .05]	1.0003+ .0005/- .0000 [25.408+ .013/- .000]	0.136 [3.45]	8-32	1.375 [34.93]	0.080 [2.03]	.090+/- .004 [2.29+/- .10]	0.105 [2.67]

UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE IN INCHES [millimeters]
DIM. APPLY AFTER PROCESSING
INTERPRET ALL GEOMETRIC TOLS.
PER ANSI Y14.5M-1994

TOLERANCES ARE:
DECIMALS: .XX [X±.01] [25] .250 MIN.
.XXX [XX]±.005 [13]

APPROVALS	DATE
DRAWN: S.BUTURLIA	4/11/04
CHECKED:	
ENGR: ANDREW GOLDMAN	6/17/04
MFG ENG: TOM GARCIA	6/17/04
QA: S. OPPENHEIM	6/17/04

MicroE Systems
THE ONLY WAY TO LIVE

DESCRIPTION:
INTERFACE, ENCODER, 20µm, ROTARY w/HUB, HEADER, MERCURY M1810H SENSOR

SIZE B DWG. NO. ID-00297 REV. A

SCALE: 1:1 CAD FILE: SHEET 1 OF 1