

Camloc . Delron . Deutsch . Huck . K-Fast . Kaynar . Microdot . RAM . Rosan . Screwcorp . Tridair . Voi - Shan

MANUFACTURE OF THE PROPRIETARY PARTS SHOWN HERE WITHOUT WRITTEN CONSENT IS ABSOLUTELY PROHIBITED

THIS DRAWING EMBODIES A CONFIDENTIAL, PROPRIETARY DESIGN & ALL DESIGN, MANUFACTURING PRODUCTION, USE & SALE RIGHTS REGARDING SAME ARE EXPRESSLY RESERVED.

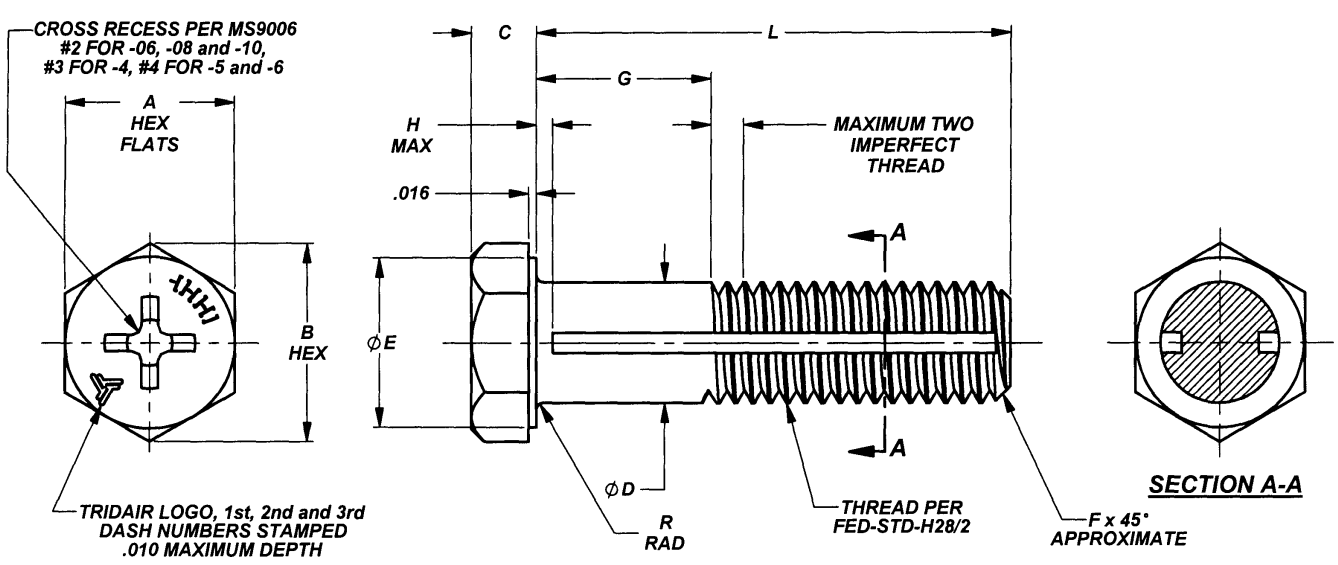
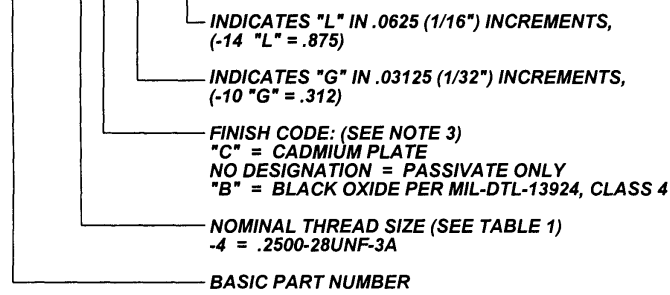


TABLE 1

NOMINAL THREAD SIZE	T THREAD PER AS8879	A HEX	B REF	C	ØD	ØE MIN	F	H MAX	R RAD	ULTIMATE TENSILE STRENGTH MINIMUM (CALCULATED)	ULTIMATE SINGLE SHEAR STRENGTH MINIMUM (CALCULATED)
-06	.1380-32 UNC-3A	.251 .243	.277	.093 .080	.1375 .1365	.210	.030	.050	.015 .005	1,020 LBS.	630 LBS.
-08	.1640-32 UNC-3A	.251 .243	.277	.110 .096	.1635 .1625	.210	.030	.050	.020 .010	1,600 LBS.	980 LBS.
-10	.1900-32 UNF-3A	.314 .305	.348	.120 .105	.1895 .1885	.272	.030	.050	.020 .010	2,350 LBS.	1,440 LBS.
-4	.2500-28 UNF-3A	.376 .367	.410	.140 .125	.2495 .2485	.335	.035	.050	.020 .010	4,470 LBS.	2,740 LBS.
-5	.3125-24 UNF-3A	.500 .489	.545	.230 .208	.3120 .3110	.450	.040	.065	.020 .010	7,160 LBS.	4,390 LBS.
-6	.3750-24 UNF-3A	.562 .551	.614	.295 .270	.3745 .3740	.506	.040	.065	.025 .015	11,020 LBS.	6,750 LBS.

NOTES; UNLESS OTHERWISE SPECIFIED:

- MATERIAL:
 - 17-4PH CRES PER AMS5643.
- HEAT TREAT:
 - CONDITION H1025 PER AMS2759 OR AMS-H-6875.
- FINISH:
 - PASSIVATED PER AMS2700.
 - CADMIUM PLATED PER AMS-QQ-P-416 TYPE II, CLASS 2 DESIGNATED BY LETTER "C".
 - BLACK OXIDE PER MIL-DTL-13924, CLASS 4 DESIGNATED BY LETTER "B".
- THESE SCREWS ARE DESIGNED TO BE USED WITH CA2210-()R RETAINING RING TO CAPTIVATE TO PANEL.
- PANEL PREPARATION PER ALCOA FASTENING SYSTEMS CAL-STD-0260.
- INSTALLATION PROCEDURE PER ALCOA FASTENING SYSTEMS SALES DRAWING NUMBER CA2210T-().
- TOLERANCES, UNLESS OTHERWISE SPECIFIED: .XX .02, .XXX .010, ANGLE ±2°.
- PART CALLOUT EXAMPLES:
 - CA2227 - 4 C - 10 - 14



INTERIM DOCUMENT REVISION		
Rev.	Date	DAF#
E	10/8/2018	117431

APPROVED DATE <u>21 JAN 91</u>	CURRENT DESIGN ACTIVITY: ARCONIC Arconic Fastening Systems	TITLE: SCREW, CAPTIVE, HEX HEAD, CRES, 155 KSI	CURRENT DESIGN ACTIVITY: CAGE CODE: 29372
REV. LETTER AND DATE <u>E</u> <u>21 MAR 12</u>	TRIDAIR PRODUCTS 3000 W. LOMITA BLVD. TORRANCE, CA 90505	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & ASME Y14.5M TOLERANCES:	SALES DRAWING NO. CA2227
DAF NUMBER <u>DAF 100226</u>		ANGLES = ±3° DECIMALS .XX = ±.02 .XXX = ±.010	SHEET 1 OF 4

Camloc . Delron . Deutsch . Huck . K-Fast . Kaynar . Microdot . RAM . Rosan . Screwcorp . Tridair . Voi - Shan

TABLE 2

	G GRIP									L LENGTH
	.062	.094	.125	.156	.187	.218	.250	.281	.312	
.1380-32 SIZE FIRST DASH NUMBER -06	-2-7	-3-7	-4-7	-5-7	-6-7	-7-7	-8-7	-9-7	-10-7	.437
	-2-8	-3-8	-4-8	-5-8	-6-8	-7-8	-8-8	-9-8	-10-8	.500
	-2-9	-3-9	-4-9	-5-9	-6-9	-7-9	-8-9	-9-9	-10-9	.562
	-2-10	-3-10	-4-10	-5-10	-6-10	-7-10	-8-10	-9-10	-10-10	.625
	-2-11	-3-11	-4-11	-5-11	-6-11	-7-11	-8-11	-9-11	-10-11	.687
	-2-12	-3-12	-4-12	-5-12	-6-12	-7-12	-8-12	-9-12	-10-12	.750
	-2-13	-3-13	-4-13	-5-13	-6-13	-7-13	-8-13	-9-13	-10-13	.812
	-2-14	-3-14	-4-14	-5-14	-6-14	-7-14	-8-14	-9-14	-10-14	.875
	-2-15	-3-15	-4-15	-5-15	-6-15	-7-15	-8-45	-9-15	-10-15	.937
	-2-16	-3-16	-4-16	-5-16	-6-16	-7-16	-8-16	-9-16	-10-16	1.000
	-2-17	-3-17	-4-17	-5-17	-6-17	-7-17	-8-17	-9-17	-10-17	1.062
	-2-18	-3-18	-4-18	-5-18	-6-18	-7-18	-8-18	-9-18	-10-18	1.125
	-2-19	-3-19	-4-19	-5-19	-6-19	-7-19	-8-19	-9-19	-10-19	1.187
	-2-20	-3-20	-4-20	-5-20	-6-20	-7-20	-8-20	-9-20	-10-20	1.250
	-2-21	-3-21	-4-21	-5-21	-6-21	-7-21	-8-21	-9-21	-10-21	1.312
	-2-22	-3-22	-4-22	-5-22	-6-22	-7-22	-8-22	-9-22	-10-22	1.375
	-2-23	-3-23	-4-23	-5-23	-6-23	-7-23	-8-23	-9-23	-10-23	1.437
	-2-24	-3-24	-4-24	-5-24	-6-24	-7-24	-8-24	-9-24	-10-24	1.500
	-2-25	-3-25	-4-25	-5-25	-6-25	-7-25	-8-25	-9-25	-10-25	1.562
	-2-26	-3-26	-4-26	-5-26	-6-26	-7-26	-8-26	-9-26	-10-26	1.625
	-2-27	-3-27	-4-27	-5-27	-6-27	-7-27	-8-27	-9-27	-10-27	1.687
	-2-28	-3-28	-4-28	-5-28	-6-28	-7-28	-8-28	-9-28	-10-28	1.750


TABLE 3

	G GRIP									L LENGTH
	.062	.094	.125	.156	.187	.218	.250	.281	.312	
.1640-32 SIZE FIRST DASH NUMBER -08	-2-8	-3-8	-4-8	-5-8	-6-8	-7-8	-8-8	-9-8	-10-8	.500
	-2-9	-3-9	-4-9	-5-9	-6-9	-7-9	-8-9	-9-9	-10-9	.562
	-2-10	-3-10	-4-10	-5-10	-6-10	-7-10	-8-10	-9-10	-10-10	.625
	-2-11	-3-11	-4-11	-5-11	-6-11	-7-11	-8-11	-9-11	-10-11	.687
	-2-12	-3-12	-4-12	-5-12	-6-12	-7-12	-8-12	-9-12	-10-12	.750
	-2-13	-3-13	-4-13	-5-13	-6-13	-7-13	-8-13	-9-13	-10-13	.812
	-2-14	-3-14	-4-14	-5-14	-6-14	-7-14	-8-14	-9-14	-10-14	.875
	-2-15	-3-15	-4-15	-5-15	-6-15	-7-15	-8-45	-9-15	-10-15	.937
	-2-16	-3-16	-4-16	-5-16	-6-16	-7-16	-8-16	-9-16	-10-16	1.000
	-2-17	-3-17	-4-17	-5-17	-6-17	-7-17	-8-17	-9-17	-10-17	1.062
	-2-18	-3-18	-4-18	-5-18	-6-18	-7-18	-8-18	-9-18	-10-18	1.125
	-2-19	-3-19	-4-19	-5-19	-6-19	-7-19	-8-19	-9-19	-10-19	1.187
	-2-20	-3-20	-4-20	-5-20	-6-20	-7-20	-8-20	-9-20	-10-20	1.250
	-2-21	-3-21	-4-21	-5-21	-6-21	-7-21	-8-21	-9-21	-10-21	1.312
	-2-22	-3-22	-4-22	-5-22	-6-22	-7-22	-8-22	-9-22	-10-22	1.375
	-2-23	-3-23	-4-23	-5-23	-6-23	-7-23	-8-23	-9-23	-10-23	1.437
	-2-24	-3-24	-4-24	-5-24	-6-24	-7-24	-8-24	-9-24	-10-24	1.500
	-2-25	-3-25	-4-25	-5-25	-6-25	-7-25	-8-25	-9-25	-10-25	1.562
	-2-26	-3-26	-4-26	-5-26	-6-26	-7-26	-8-26	-9-26	-10-26	1.625
	-2-27	-3-27	-4-27	-5-27	-6-27	-7-27	-8-27	-9-27	-10-27	1.687
	-2-28	-3-28	-4-28	-5-28	-6-28	-7-28	-8-28	-9-28	-10-28	1.750

MANUFACTURE OF THE PROPRIETARY PARTS SHOWN HERE WITHOUT WRITTEN CONSENT IS ABSOLUTELY PROHIBITED

THIS DRAWING EMBODIES A CONFIDENTIAL, PROPRIETARY DESIGN & ALL DESIGN, MANUFACTURING PRODUCTION, USE & SALE RIGHTS REGARDING SAME ARE EXPRESSLY RESERVED.

INTERIM DOCUMENT REVISION		
Rev.	Date	DAF#
E1	10/8/2018	117431

S43140	APPROVED DATE 21 JAN 91	 ARCONIC Arconic Fastening Systems TRIDAIR PRODUCTS 3000 W. LOMITA BLVD. TORRANCE, CA 90505	TITLE: SCREW, CAPTIVE, HEX HEAD, CRES, 155 KSI	CURRENT DESIGN ACTIVITY: CAGE CODE: 29372	
	REV. LETTER AND DATE E 21 MAR 12		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & ASME Y14.5M TOLERANCES:	ANGLES DECIMALS .XX = ±.02 .XXX = ±.010	SALES DRAWING NO.
	DAF NUMBER DAF 100226				CA2227 SHEET 2 OF 4

PROJECT NUMBER: 91-088 and 96-078

TABLE 4

	G GRIP									L LENGTH
	.062	.094	.125	.156	.187	.218	.250	.281	.312	
.1900-32 SIZE FIRST DASH NUMBER -10	-2-7	-3-7	-4-7	-5-7	-6-7	-7-7	-8-7	-----	-----	.437
	-2-8	-3-8	-4-8	-5-8	-6-8	-7-8	-8-8	-9-8	-10-8	.500
	-2-9	-3-9	-4-9	-5-9	-6-9	-7-9	-8-9	-9-9	-10-9	.562
	-2-10	-3-10	-4-10	-5-10	-6-10	-7-10	-8-10	-9-10	-10-10	.625
	-2-11	-3-11	-4-11	-5-11	-6-11	-7-11	-8-11	-9-11	-10-11	.687
	-2-12	-3-12	-4-12	-5-12	-6-12	-7-12	-8-12	-9-12	-10-12	.750
	-2-13	-3-13	-4-13	-5-13	-6-13	-7-13	-8-13	-9-13	-10-13	.812
	-2-14	-3-14	-4-14	-5-14	-6-14	-7-14	-8-14	-9-14	-10-14	.875
	-2-15	-3-15	-4-15	-5-15	-6-15	-7-15	-8-45	-9-15	-10-15	.937
	-2-16	-3-16	-4-16	-5-16	-6-16	-7-16	-8-16	-9-16	-10-16	1.000
	-2-17	-3-17	-4-17	-5-17	-6-17	-7-17	-8-17	-9-17	-10-17	1.062
	-2-18	-3-18	-4-18	-5-18	-6-18	-7-18	-8-18	-9-18	-10-18	1.125
	-2-19	-3-19	-4-19	-5-19	-6-19	-7-19	-8-19	-9-19	-10-19	1.187
	-2-20	-3-20	-4-20	-5-20	-6-20	-7-20	-8-20	-9-20	-10-20	1.250
	-2-21	-3-21	-4-21	-5-21	-6-21	-7-21	-8-21	-9-21	-10-21	1.312
	-2-22	-3-22	-4-22	-5-22	-6-22	-7-22	-8-22	-9-22	-10-22	1.375
	-2-23	-3-23	-4-23	-5-23	-6-23	-7-23	-8-23	-9-23	-10-23	1.437
	-2-24	-3-24	-4-24	-5-24	-6-24	-7-24	-8-24	-9-24	-10-24	1.500
	-2-25	-3-25	-4-25	-5-25	-6-25	-7-25	-8-25	-9-25	-10-25	1.562
	-2-26	-3-26	-4-26	-5-26	-6-26	-7-26	-8-26	-9-26	-10-26	1.625
	-2-27	-3-27	-4-27	-5-27	-6-27	-7-27	-8-27	-9-27	-10-27	1.687
	-2-28	-3-28	-4-28	-5-28	-6-28	-7-28	-8-28	-9-28	-10-28	1.750

TABLE 5

	G GRIP									L LENGTH
	.062	.094	.125	.156	.187	.218	.250	.281	.312	
.2500-28 SIZE FIRST DASH NUMBER -4	-2-7	-3-7	-4-7	-5-7	-6-7	-7-7	-8-7	-9-7	-10-7	.437
	-2-8	-3-8	-4-8	-5-8	-6-8	-7-8	-8-8	-9-8	-10-8	.500
	-2-9	-3-9	-4-9	-5-9	-6-9	-7-9	-8-9	-9-9	-10-9	.562
	-2-10	-3-10	-4-10	-5-10	-6-10	-7-10	-8-10	-9-10	-10-10	.625
	-2-11	-3-11	-4-11	-5-11	-6-11	-7-11	-8-11	-9-11	-10-11	.687
	-2-12	-3-12	-4-12	-5-12	-6-12	-7-12	-8-12	-9-12	-10-12	.750
	-2-13	-3-13	-4-13	-5-13	-6-13	-7-13	-8-13	-9-13	-10-13	.812
	-2-14	-3-14	-4-14	-5-14	-6-14	-7-14	-8-14	-9-14	-10-14	.875
	-2-15	-3-15	-4-15	-5-15	-6-15	-7-15	-8-45	-9-15	-10-15	.937
	-2-16	-3-16	-4-16	-5-16	-6-16	-7-16	-8-16	-9-16	-10-16	1.000
	-2-17	-3-17	-4-17	-5-17	-6-17	-7-17	-8-17	-9-17	-10-17	1.062
	-2-18	-3-18	-4-18	-5-18	-6-18	-7-18	-8-18	-9-18	-10-18	1.125
	-2-19	-3-19	-4-19	-5-19	-6-19	-7-19	-8-19	-9-19	-10-19	1.187
	-2-20	-3-20	-4-20	-5-20	-6-20	-7-20	-8-20	-9-20	-10-20	1.250
	-2-21	-3-21	-4-21	-5-21	-6-21	-7-21	-8-21	-9-21	-10-21	1.312
	-2-22	-3-22	-4-22	-5-22	-6-22	-7-22	-8-22	-9-22	-10-22	1.375
	-2-23	-3-23	-4-23	-5-23	-6-23	-7-23	-8-23	-9-23	-10-23	1.437
	-2-24	-3-24	-4-24	-5-24	-6-24	-7-24	-8-24	-9-24	-10-24	1.500
	-2-25	-3-25	-4-25	-5-25	-6-25	-7-25	-8-25	-9-25	-10-25	1.562
	-2-26	-3-26	-4-26	-5-26	-6-26	-7-26	-8-26	-9-26	-10-26	1.625
	-2-27	-3-27	-4-27	-5-27	-6-27	-7-27	-8-27	-9-27	-10-27	1.687
	-2-28	-3-28	-4-28	-5-28	-6-28	-7-28	-8-28	-9-28	-10-28	1.750

INTERIM DOCUMENT REVISION		
Rev.	Date	DAF#
E1	10/8/2018	117431

APPROVED DATE 21 JAN 91
REV. LETTER AND DATE E 21 MAR 12
DAF NUMBER DAF T00226

CURRENT DESIGN ACTIVITY:



ARCONIC
Arconic Fastening Systems

TRIDAIR PRODUCTS
3000 W. LOMITA BLVD.
TORRANCE, CA 90505

TITLE:
SCREW, CAPTIVE, HEX HEAD, CRES, 155 KSI

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & ASME Y14.5M TOLERANCES:

ANGLES = ±3°
DECIMALS .XX = ±.02
.XXX = ±.010

CURRENT DESIGN ACTIVITY:

CAGE CODE: 29372

SALES DRAWING NO.

CA2227

SHEET 3 OF 4

MANUFACTURE OF THE PROPRIETARY PARTS SHOWN HERE WITHOUT WRITTEN CONSENT IS ABSOLUTELY PROHIBITED

THIS DRAWING EMBODIES A CONFIDENTIAL, PROPRIETARY DESIGN & ALL DESIGN, MANUFACTURING PRODUCTION, USE & SALE RIGHTS REGARDING SAME ARE EXPRESSLY RESERVED.

S43140

MANUFACTURE OF THE PROPRIETARY PARTS SHOWN HERE WITHOUT WRITTEN CONSENT IS ABSOLUTELY PROHIBITED

THIS DRAWING EMBODIES A CONFIDENTIAL, PROPRIETARY DESIGN & ALL DESIGN, MANUFACTURING PRODUCTION, USE & SALE RIGHTS REGARDING SAME ARE EXPRESSLY RESERVED.


TABLE 6

	G GRIP									L LENGTH
	.062	.094	.125	.156	.187	.218	.250	.281	.312	
.3125-24 SIZE FIRST DASH NUMBER -5	-2-10	-3-10	-4-10	-5-10	-6-10	-7-10	-8-10	-9-10	-10-10	.625
	-2-11	-3-11	-4-11	-5-11	-6-11	-7-11	-8-11	-9-11	-10-11	.687
	-2-12	-3-12	-4-12	-5-12	-6-12	-7-12	-8-12	-9-12	-10-12	.750
	-2-13	-3-13	-4-13	-5-13	-6-13	-7-13	-8-13	-9-13	-10-13	.812
	-2-14	-3-14	-4-14	-5-14	-6-14	-7-14	-8-14	-9-14	-10-14	.875
	-2-15	-3-15	-4-15	-5-15	-6-15	-7-15	-8-45	-9-15	-10-15	.937
	-2-16	-3-16	-4-16	-5-16	-6-16	-7-16	-8-16	-9-16	-10-16	1.000
	-2-17	-3-17	-4-17	-5-17	-6-17	-7-17	-8-17	-9-17	-10-17	1.062
	-2-18	-3-18	-4-18	-5-18	-6-18	-7-18	-8-18	-9-18	-10-18	1.125
	-2-19	-3-19	-4-19	-5-19	-6-19	-7-19	-8-19	-9-19	-10-19	1.187
	-2-20	-3-20	-4-20	-5-20	-6-20	-7-20	-8-20	-9-20	-10-20	1.250
	-2-21	-3-21	-4-21	-5-21	-6-21	-7-21	-8-21	-9-21	-10-21	1.312
	-2-22	-3-22	-4-22	-5-22	-6-22	-7-22	-8-22	-9-22	-10-22	1.375
	-2-23	-3-23	-4-23	-5-23	-6-23	-7-23	-8-23	-9-23	-10-23	1.437
	-2-24	-3-24	-4-24	-5-24	-6-24	-7-24	-8-24	-9-24	-10-24	1.500
	-2-25	-3-25	-4-25	-5-25	-6-25	-7-25	-8-25	-9-25	-10-25	1.562
	-2-26	-3-26	-4-26	-5-26	-6-26	-7-26	-8-26	-9-26	-10-26	1.625
	-2-27	-3-27	-4-27	-5-27	-6-27	-7-27	-8-27	-9-27	-10-27	1.687
-2-28	-3-28	-4-28	-5-28	-6-28	-7-28	-8-28	-9-28	-10-28	1.750	

TABLE 7

	G GRIP									L LENGTH
	.062	.094	.125	.156	.187	.218	.250	.281	.312	
.3750-24 SIZE FIRST DASH NUMBER -6	-2-10	-3-10	-4-10	-5-10	-6-10	-7-10	-8-10	-9-10	-10-10	.625
	-2-11	-3-11	-4-11	-5-11	-6-11	-7-11	-8-11	-9-11	-10-11	.687
	-2-12	-3-12	-4-12	-5-12	-6-12	-7-12	-8-12	-9-12	-10-12	.750
	-2-13	-3-13	-4-13	-5-13	-6-13	-7-13	-8-13	-9-13	-10-13	.812
	-2-14	-3-14	-4-14	-5-14	-6-14	-7-14	-8-14	-9-14	-10-14	.875
	-2-15	-3-15	-4-15	-5-15	-6-15	-7-15	-8-45	-9-15	-10-15	.937
	-2-16	-3-16	-4-16	-5-16	-6-16	-7-16	-8-16	-9-16	-10-16	1.000
	-2-17	-3-17	-4-17	-5-17	-6-17	-7-17	-8-17	-9-17	-10-17	1.062
	-2-18	-3-18	-4-18	-5-18	-6-18	-7-18	-8-18	-9-18	-10-18	1.125
	-2-19	-3-19	-4-19	-5-19	-6-19	-7-19	-8-19	-9-19	-10-19	1.187
	-2-20	-3-20	-4-20	-5-20	-6-20	-7-20	-8-20	-9-20	-10-20	1.250
	-2-21	-3-21	-4-21	-5-21	-6-21	-7-21	-8-21	-9-21	-10-21	1.312
	-2-22	-3-22	-4-22	-5-22	-6-22	-7-22	-8-22	-9-22	-10-22	1.375
	-2-23	-3-23	-4-23	-5-23	-6-23	-7-23	-8-23	-9-23	-10-23	1.437
	-2-24	-3-24	-4-24	-5-24	-6-24	-7-24	-8-24	-9-24	-10-24	1.500
	-2-25	-3-25	-4-25	-5-25	-6-25	-7-25	-8-25	-9-25	-10-25	1.562
	-2-26	-3-26	-4-26	-5-26	-6-26	-7-26	-8-26	-9-26	-10-26	1.625
	-2-27	-3-27	-4-27	-5-27	-6-27	-7-27	-8-27	-9-27	-10-27	1.687
-2-28	-3-28	-4-28	-5-28	-6-28	-7-28	-8-28	-9-28	-10-28	1.750	

INTERIM DOCUMENT REVISION		
Rev.	Date	DAF#
E1	10/8/2018	117431

APPROVED DATE 21 JAN 91	CURRENT DESIGN ACTIVITY:  ARCONIC Arconic Fastening Systems	TITLE: SCREW, CAPTIVE, HEX HEAD, CRES, 155 KSI
REV. LETTER AND DATE E 21 MAR 12	TRIDAIR PRODUCTS 3000 W. LOMITA BLVD. TORRANCE, CA 90505	CURRENT DESIGN ACTIVITY: CAGE CODE: 29372 SALES DRAWING NO. CA2227
DAF NUMBER DAF 400226	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & ASME Y14.5M TOLERANCES: ANGLES = ±3° DECIMALS .XX = ±.02 .XXX = ±.010	
PROJECT NUMBER: 91-088 and 96-078		SHEET 4 OF 4