NIST Fully-Toleranced Test Case 07 - Feature and Specification Index [FTC07]

12/16/2016   Rev. D

Bryan Fischer   *Advanced Dimensional Management LLC*

Feature ID	Feature Description	Specification	Element ID	Comments
F1-F2	Datum Feature A	Profile .015	T1	
		2 SURFACES F1.1 AND F1.2	STR1	
		Datum Feature Symbol A	DF1	
		Leader-Directed Note F1.1	LDN1	Labels one of the datum feature A surfaces
		Leader-Directed Note F1.2	LDN2	Labels one of the datum feature A surfaces
F3	Datum Feature B	$\emptyset$.250 +.003/-.000	D1	Holes are sized for threaded insert with 10-32 UNF-2B threads
F4		▽.30 ± .02	D2	Controls edge curve intersection of hole and cone at bottom
		Perpendicularity $\emptyset$.015Ⓟ.425|A	T2	
		Datum Feature Symbol B	DF2	
F5	Datum Feature C	$\emptyset$.250 +.003/-.000	D3	Holes are sized for threaded insert with 10-32 UNF-2B threads
F6		▽.30 ± .02	D4	Controls edge curve intersection of hole and cone at bottom
		Position $\emptyset$.020Ⓟ.425|A|B	T3	
		Datum Feature Symbol C	DF3	
F7-F10	Datum Feature D	Profile .04|A|B|C Profile .01|A	T4	
		4 COPLANAR SURFACES	STR2	
		Datum Feature Symbol D	DF4	
F11-F14	Datum Feature E	Profile .070|A|B|C Profile .015|A	T5	
		4 COPLANAR SURFACES	STR3	
		SIM REQT	STR4	
		Datum Feature Symbol E	DF5	
F15-F16	Pattern of 2 Other Cover Mtg Holes	2X $\emptyset$.250 +.003/-.000	D5	
F17-F18		▽.30 ± .02	D6	Controls edge curve intersection of hole and cone at bottom
		Position $\emptyset$.023Ⓟ.425|A|B|C	T6	
F19-F22	Pattern of 4 Back Panel Mtg Holes	4X $\emptyset$.250 +.003/-.001	D7	
F23-F26		▽.30 ± .02	D8	Controls edge curve intersection of hole and cone at bottom
		Position $\emptyset$.023Ⓟ.150|D|B|C	T7	Holes are sized for threaded insert with 10-32 UNF-2B threads
F27	Bottom Inside Surface	Flatness .01/$\emptyset$1.00	T8	
		Parallelism .03|A	T9	
		Profile .06|A|B|C	T10	
F28-F31	Pattern of 4 Counterbored Holes for Cover Mtg	4X $\emptyset$.281 +.006/-.001	D9	
F32-F35		⌴$\emptyset$.438 ± .010	D10	
F36-F39		▽.30 ± .02	D11	Controls flat surface at bottom of counterbore
		Position $\emptyset$.06Ⓜ|E|B|C Position $\emptyset$.02Ⓜ|E|B|C	T11	
F40-F42	Pattern of 3 Gland Mtg Holes	3X $\emptyset$.875 ±.020 Ⓢ	D12	
		3X $\emptyset$.875 ±.010	D13	
		Position $\emptyset$.050Ⓢ|A|B|C	T12	
F43-F46	Pattern of 4 Placard Mtg Holes	4X $\emptyset$.173 +.005/-.001	D14	
		Position $\emptyset$.060|A|B|C Position $\emptyset$.015|A	T13	
F47-F48	Pattern of 2 Bulkhead Union Holes	2X $\emptyset$.594 +.012/-.002	D15	

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Feature ID	Feature Description	Specification	Element ID	Comments
		Position ⌀.040Ⓜ|⌀.045 MAX|A|B|C	T14	
F49-F50	Pattern of 2 Bulkhead Union Holes	2X ⌀.594 +.012/-.002	D16	
		Position ⌀.040Ⓜ|⌀.045 MAX|A|B|C	T15	
F51-F52	Radii at Bottom of Face Seal Groove	R.012 - .022	D17	
		INNER AND OUTER RADII OF ENTIRE GROOVE	STR5	Note is for clarification only. Applicability indicated by dual-leader and associativity.
F53-F54	Inner and Outer Wall of Face Seal Groove	Profile .030|A|B|C Profile .005|A|B|C	T16	Imposes simultaneous requirement on both sides of groove
		INNER AND OUTER WALL OF ENTIRE GROOVE	STR6	Note is for clarification only. Grouping by dual-leader and associativity.
F55	Bottom of Face Seal Groove	Profile .006|A|B|C	T17	
F56	Bottom Outside Surface (.100 offset from mounting feet)	Profile .070|A|B|C Profile .015|A	T18	
		SIM REQT	STR7	
-	General Profile Tolerance	Profile .06|A|B|C	T19	
MCS1	MCS for Views A, B, C, D		CS1-1	Main MCS for model
	MCS for DRF A		CS1-2	Same location as CS1-1
	MCS for DRF A|B		CS1-3	Same location as CS1-1
	MCS for DRF A|B|C		CS1-4	Same location as CS1-1
MCS2	MCS for DRF D|B|C		CS2	
MCS3	MCS for DRF E|B|C		CS3	
-	General Notes	NOTES...	STR8	Flat to screen
-	Identifier for Detail View D		VSI1	

Notes:

    - Changed and corrected all feature numbers

    - There are no specifications in this FTC that contain semantically-important extension lines or annotation plane placement.

Revisions:

	Was:	R.010 - 015
F51-F52	Is:	R.012 - .022

L E G E N D	
CS	Coordinate System
D	Dimension
DF	Datum Feature
LDN	Leader-Directed Note
RLE	Represented Line Element
SIELD	PMI entity contains Semantically-Important Extension Line Direction
STR	String
T	Tolerance
VSI	View or Section Identifier