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SAE AS642

FEDERAL SUPPLY CLASS

RATIONALE

ESTABLISH CUFF DIMENSIONAL REQUIREMENTS FOR INTEGRAL FIRE SLEEVE ON HOSE AND SLEEVE CODE H & J CONFIGURATIONS, FOR STANDARIZATION PURPOSES.

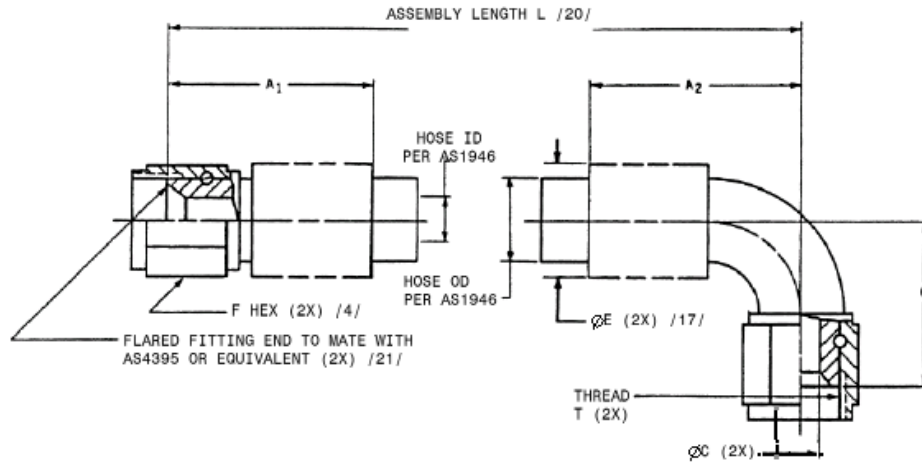


FIGURE 1 - HOSE ASSEMBLY

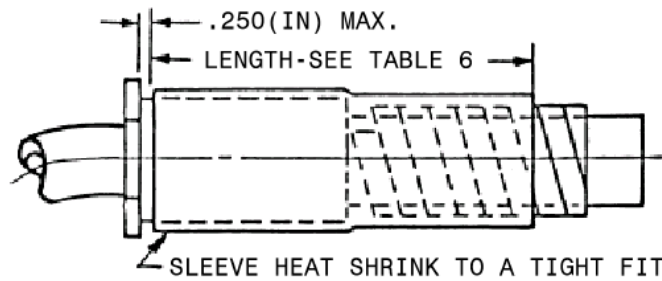


FIGURE 2 - ABRASION SLEEVE ATTACHMENT /7/ /8/

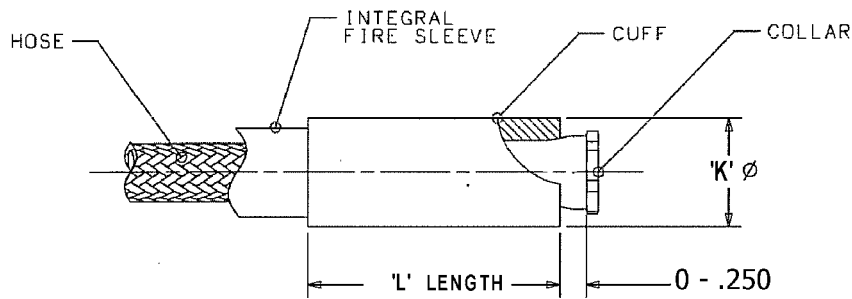
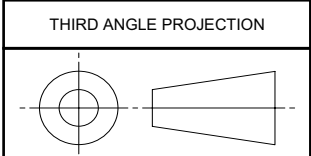


FIGURE 3 - SEE TABLE 7 /26/

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CUSTODIAN: SAE G-3/G-3D

PROCUREMENT SPECIFICATION: /15/ AS1946

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

HOSE ASSEMBLY, POLYTETRAFLUOROETHYLENE, METAL BRAID, MEDIUM PRESSURE, FLARED, STRAIGHT TO 90°

SAE AS642
SHEET 1 OF 7

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ISSUED 2007-03 REVISED 2011-06

TABLE 1 - DIMENSIONS

HOSE ASSEMBLY NO. & SIZE /24/	HOSE SIZE (REF)	FITTING TYPE /25/	FITTING MATL /5/	THREAD T PER AS8879 (REF)	HOSE ID MIN (REF)	A1 MAX	A2 MAX	C MIN BALL DIA ELB/STR /16/	E MAX WITHOUT SLEEVING /17/	F HEX (REF)	G MIN	G MAX
AS642D (-03)	.188	-	-	-	-	-	-	-	-	-	-	-
AS642D (-03)	.188	S	CRES	.3750-24UNJF-3B	.110	1.14	1.56	.068/.072	.49	.500	.510	.680
			AL	.3750-24UNJF-3B	.110	1.14	1.56	.068/.072	.49	.500	.510	.680
			TI	.3750-24UNJF-3B	.110	1.14	1.56	.068/.072	.49	.500	.510	.680
AS642D (-03)	.188	E	CRES	.4375-20UNJF-3B	.110	1.14	1.56	.068/.072	.49	.562	.510	.635
			AL	.4375-20UNJF-3B	.110	1.14	1.56	.068/.072	.49	.562	.510	.635
			TI	.4375-20UNJF-3B	.110	1.14	1.56	.068/.072	.49	.562	.510	.635
AS642E (-04)	.250	R	CRES	.3750-24UNJF-3B	.173	1.14	1.56	.068/.072	.55	.500	.510	.685
			AL	.3750-24UNJF-3B	.173	1.14	1.56	.068/.072	.55	.500	.510	.685
			TI	.3750-24UNJF-3B	.173	1.14	1.56	.068/.072	.55	.500	.510	.685
AS642E (-04)	.250	S	CRES	.4375-20UNJF-3B	.173	1.14	1.56	.112/.119	.55	.562	.560	.685
			AL	.4375-20UNJF-3B	.173	1.14	1.56	.112/.119	.55	.562	.560	.685
			TI	.4375-20UNJF-3B	.173	1.14	1.56	.112/.119	.55	.562	.560	.685
AS642E (-04)	.250	E	CRES	.5000-20UNJF-3B	.173	1.26	1.62	.112/.119	.55	.625	.560	.840
			AL	.5000-20UNJF-3B	.173	1.26	1.62	.112/.119	.55	.625	.560	.840
			TI	.5000-20UNJF-3B	.173	1.26	1.62	.112/.119	.55	.625	.560	.840
AS642F (-05)	.313	R	CRES	.4375-20UNJF-3B	.235	1.26	1.62	.112/.119	.63	.562	.560	.840
			AL	.4375-20UNJF-3B	.235	1.26	1.62	.112/.119	.63	.562	.560	.840
			TI	.4375-20UNJF-3B	.235	1.26	1.62	.112/.119	.63	.562	.560	.840
AS642F (-05)	.313	S	CRES	.5000-20UNJF-3B	.235	1.26	1.62	.164/.174	.63	.625	.635	.840
			AL	.5000-20UNJF-3B	.235	1.26	1.62	.164/.174	.63	.625	.635	.840
			TI	.5000-20UNJF-3B	.235	1.26	1.62	.164/.174	.63	.625	.635	.840
AS642F (-05)	.313	E	CRES	.5625-18UNJF-3B	.235	1.38	1.81	.164/.174	.63	.688	.635	.885
			AL	.5625-18UNJF-3B	.235	1.38	1.81	.164/.174	.63	.688	.635	.885
			TI	.5625-18UNJF-3B	.235	1.38	1.81	.164/.174	.63	.688	.635	.885
AS642G (-06)	.375	R	CRES	.5000-20UNJF-3B	.298	1.38	1.81	.164/.174	.70	.625	.635	.885
			AL	.5000-20UNJF-3B	.298	1.38	1.81	.164/.174	.70	.625	.635	.885
			TI	.5000-20UNJF-3B	.298	1.38	1.81	.164/.174	.70	.625	.635	.885
AS642G (-06)	.375	S	CRES	.5625-18UNJF-3B	.298	1.38	1.81	.218/.230	.70	.688	.700	.885
			AL	.5625-18UNJF-3B	.298	1.38	1.81	.218/.230	.70	.688	.700	.885
			TI	.5625-18UNJF-3B	.298	1.38	1.81	.218/.230	.70	.688	.700	.885
AS642G (-06)	.375	E	CRES	.7500-16UNJF-3B	.298	1.61	1.99	.218/.230	.70	.875	.700	1.060
			AL	.7500-16UNJF-3B	.298	1.61	1.99	.218/.230	.70	.875	.700	1.060
			TI	.7500-16UNJF-3B	.298	1.61	1.99	.218/.230	.70	.875	.700	1.060
AS642H (-08)	.500	R	CRES	.5625-18UNJF-3B	.391	1.61	1.99	.218/.230	.83	.688	.700	1.060
			AL	.5625-18UNJF-3B	.391	1.61	1.99	.218/.230	.83	.688	.700	1.060
			TI	.5625-18UNJF-3B	.391	1.61	1.99	.218/.230	.83	.688	.700	1.060
AS642H (-08)	.500	S	CRES	.7500-16UNJF-3B	.391	1.61	1.99	.289/.306	.83	.875	.810	1.060
			AL	.7500-16UNJF-3B	.391	1.61	1.99	.289/.306	.83	.875	.810	1.060
			TI	.7500-16UNJF-3B	.391	1.61	1.99	.289/.306	.83	.875	.810	1.060
AS642H (-08)	.500	E	CRES	.8750-14UNJF-3B	.391	1.80	2.38	.289/.306	.83	1.000	.810	1.341
			AL	.8750-14UNJF-3B	.391	1.80	2.38	.289/.306	.83	1.000	.810	1.341
			TI	.8750-14UNJF-3B	.391	1.80	2.38	.289/.306	.83	1.000	.810	1.341

HOSE ASSEMBLY NO. & SIZE /24/	HOSE SIZE (REF)	FITTING TYPE /25/	FITTING MATL /5/	THREAD T PER AS8879 (REF)	HOSE ID			C MIN BALL DIA ELB/STR /16/	E MAX WITHOUT SLEEVING /17/	F HEX (REF)	G MIN	G MAX
					MIN (REF)	A1 MAX	A2 MAX					
AS642J (-10)	.625	R	CRES	.7500-16UNJF-3B	.485	1.80	2.38	.289/.306	.97	.875	.810	1.341
			AL	.7500-16UNJF-3B	.485	1.80	2.38	.289/.306	.97	.875	.810	1.341
			TI	.7500-16UNJF-3B	.485	1.80	2.38	.289/.306	.97	.875	.810	1.341
AS642J (-10)	.625	S	CRES	.8750-14UNJF-3B	.485	1.80	2.38	.366/.387	.97	1.000	1.091	1.341
			AL	.8750-14UNJF-3B	.485	1.80	2.38	.366/.387	.97	1.000	1.091	1.341
			TI	.8750-14UNJF-3B	.485	1.80	2.38	.366/.387	.97	1.000	1.091	1.341
AS642J (-10)	.625	E	CRES	1.0625-12UNJ-3B	.485	1.96	2.99	.366/.387	.97	1.250	1.091	1.591
			AL	1.0625-12UNJ-3B	.485	1.96	2.99	.366/.387	.97	1.250	1.091	1.591
			TI	1.0625-12UNJ-3B	.485	1.96	2.99	.366/.387	.97	1.250	1.091	1.591
AS642K (-12)	.750	R	CRES	.8750-14UNJF-3B	.615	1.96	2.99	.366/.387	1.17	1.000	1.091	1.591
			AL	.8750-14UNJF-3B	.615	1.96	2.99	.366/.387	1.17	1.000	1.091	1.591
			TI	.8750-14UNJF-3B	.615	1.96	2.99	.366/.387	1.17	1.000	1.091	1.591
AS642K (-12)	.750	S	CRES	1.0625-12UNJ-3B	.615	1.96	2.99	.466/.493	1.17	1.250	1.341	1.591
			AL	1.0625-12UNJ-3B	.615	1.96	2.99	.466/.493	1.17	1.250	1.341	1.591
			TI	1.0625-12UNJ-3B	.615	1.96	2.99	.466/.493	1.17	1.250	1.341	1.591
AS642K (-12)	.750	E	CRES	1.3125-12UNJ-3B	.615	2.32	3.24	.466/.493	1.17	1.500	1.341	1.715
			AL	1.3125-12UNJ-3B	.615	2.32	3.24	.466/.493	1.17	1.500	1.341	1.715
			TI	1.3125-12UNJ-3B	.615	2.32	3.24	.466/.493	1.17	1.500	1.341	1.715
AS642M (-16)	1.000	R	CRES	1.0625-12UNJ-3B	.851	2.32	3.24	.466/.493	1.52	1.250	1.341	1.715
			AL	1.0625-12UNJ-3B	.851	2.32	3.24	.466/.493	1.52	1.250	1.341	1.715
			TI	1.0625-12UNJ-3B	.851	2.32	3.24	.466/.493	1.52	1.250	1.341	1.715
AS642M (-16)	1.000	S	CRES	1.3125-12UNJ-3B	.851	2.32	3.24	.661/.700	1.52	1.500	1.465	1.715
			AL	1.3125-12UNJ-3B	.851	2.32	3.24	.661/.700	1.52	1.500	1.465	1.715
			TI	1.3125-12UNJ-3B	.851	2.32	3.24	.661/.700	1.52	1.500	1.465	1.715
AS642M (-16)	1.000	E	CRES	1.6250-12UNJ-3B	.851	2.37	3.68	.661/.700	1.52	1.812	1.465	2.122
			AL	1.6250-12UNJ-3B	.851	2.37	3.68	.661/.700	1.52	1.812	1.465	2.122
			TI	1.6250-12UNJ-3B	.851	2.37	3.68	.661/.700	1.52	1.812	1.465	2.122
AS642N (-20)	1.250	R	CRES	1.3125-12UNJ-3B	1.101	2.37	3.68	.661/.700	2.00	1.500	1.465	2.122
			AL	1.3125-12UNJ-3B	1.101	2.37	3.68	.661/.700	2.00	1.500	1.465	2.122
			TI	1.3125-12UNJ-3B	1.101	2.37	3.68	.661/.700	2.00	1.500	1.465	2.122
AS642N (-20)	1.250	S	CRES	1.6250-12UNJ-3B	1.101	2.37	3.68	.850/.900	2.00	1.812	1.747	2.122
			AL	1.6250-12UNJ-3B	1.101	2.37	3.68	.850/.900	2.00	1.812	1.747	2.122
			TI	1.6250-12UNJ-3B	1.101	2.37	3.68	.850/.900	2.00	1.812	1.747	2.122
AS642N (-20)	1.250	E	CRES	1.8750-12UNJ-3B	1.101	2.40	4.17	.850/.900	2.00	2.125	1.747	2.372
			AL	1.8750-12UNJ-3B	1.101	2.40	4.17	.850/.900	2.00	2.125	1.747	2.372
			TI	1.8750-12UNJ-3B	1.101	2.40	4.17	.850/.900	2.00	2.125	1.747	2.372
AS642P (-24)	1.500	R	CRES	1.6250-12UNJ-3B	1.344	2.40	4.17	.850/.900	2.28	1.812	1.747	2.372
			AL	1.6250-12UNJ-3B	1.344	2.40	4.17	.850/.900	2.28	1.812	1.747	2.372
			TI	1.6250-12UNJ-3B	1.344	2.40	4.17	.850/.900	2.28	1.812	1.747	2.372
AS642P (-24)	1.500	S	CRES	1.8750-12UNJ-3B	1.344	2.40	4.17	1.063/1.125	2.28	2.125	1.997	2.372
			AL	1.8750-12UNJ-3B	1.344	2.40	4.17	1.063/1.125	2.28	2.125	1.997	2.372
			TI	1.8750-12UNJ-3B	1.344	2.40	4.17	1.063/1.125	2.28	2.125	1.997	2.372
AS642P (-24)	1.500	-	-	-	-	-	-	-	-	-	-	