FEDERAL SUPPLY CLASS
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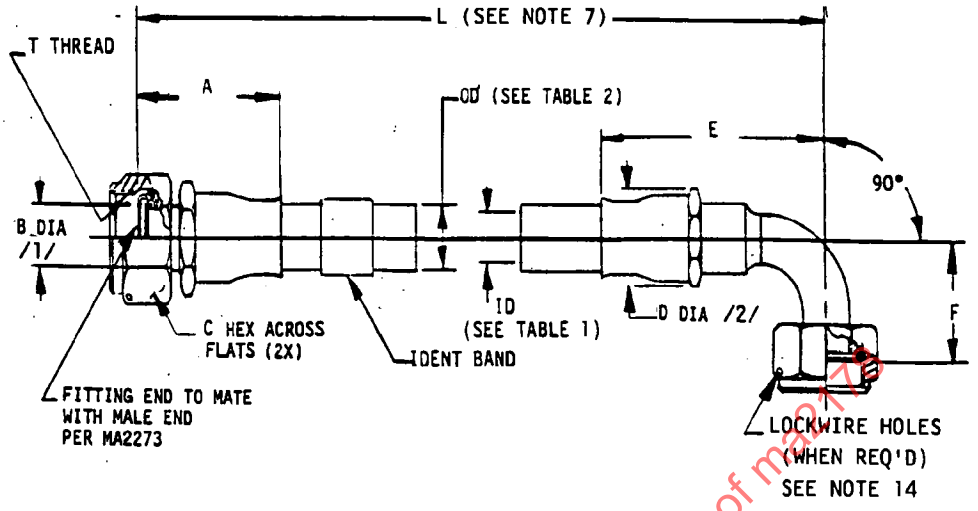

FIGURE 1 - Detail of Hose Assembly

TABLE 1 - FITTING DIMENSIONS

HOSE ASSEMBLY NO. AND SIZE CODE	HOSE SIZE REF	THREAD T PER AS1370 (ISO 5855) 4H-5H REF	I.D. MIN	A MAX	B DRILL DIA MIN /1/	C HEX	D DIA MAX /2/	E MAX	F MIN	F MAX	BALL SIZE THRU DIA MS19059 DASH NO	MIN /1/
MA 2178-06	6.0	MJ 12x1.25	4.39	28.19	6.502	14.2	14.2	39.37	20.37	24.89	4807	3.02
MA 2178-10	10.0	MJ 16x1.5	7.57	33.53	6.502	17.5	18.0	45.70	24.00	34.80	4812	5.84
MA 2178-12	12.0	MJ 18x1.5	9.93	36.83	8.636	22.4	21.4	50.55	24.00	34.80	4816	7.95
MA 2178-16	16.0	MJ 22x1.5	12.32	40.64	10.922	25.4	26.0	60.20	29.46	40.39	4818	9.93
MA 2178-20	20.0	MJ 27x1.5	15.62	45.72	13.919	28.5	30.0	75.69	35.05	49.53	4821	13.08
MA 2178-25	25.0	MJ 33x1.5	21.62	53.85	19.761	35.1	38.6	82.D4	38.10	68.07	4829	19.05
MA 2178-32	32.0	MJ 39x1.5	27.97	51.82	25.400	41.4	50.8	85.34	43.69	69.85	4834	24.61
MA 2178-40	40.0	MJ 50x2.0	34.14	62.23	31.750	50.8	58.0	89.92	48.51	82.55	4841	30.18

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CUSTODIAN: G-3/G-3D

PROCUREMENT SPECIFICATION MA2126

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AEROSPACE STANDARD

HOSE ASSEMBLY, POLYTETRAFLUOROETHYLENE, PTFE CRES REINFORCED, 232°C, 10 500 kPa, BEAM SEAL, STRAIGHT TO 90°, METRIC

MA2178

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TABLE 2 - LENGTH INCREMENTS

HOSE ASSEMBLY LENGTHS	AVAILABLE INCREMENTS	TOLERANCE
UNDER 457 mm	(NOT LESS THAN) 3 mm	±3 mm
457 to 914 mm	(NOT LESS THAN) 7 mm	±7 mm
915 to 1270 mm	(NOT LESS THAN) 13 mm	±13 mm
OVER 1270 mm	(NOT LESS THAN) 26 mm	±1%

TABLE 3 - MAXIMUM WEIGHTS

HOSE OR SLEEVE CODE	HOSE OR TYPE SLEEVE	UNITS	HOSE SIZE 06	HOSE SIZE 10	HOSE SIZE 12	HOSE SIZE 16	HOSE SIZE 20	HOSE SIZE 25	HOSE SIZE 32	HOSE SIZE 40
-	HOSE ONLY	Kg/m	0.13	0.18	0.25	0.30	0.38	0.80	1.02	1.32
A	ABRASION SLEEVE (TFE-AS1291-B)	Kg/m	0.05	0.05	0.07	0.09	0.11	0.14	0.16	0.20
B	ABRASION SLEEVE (NYLON AS1294)	Kg/m	0.02	0.04	0.05	0.07	0.07	0.09	0.11	0.16
C	FIRESLEEVE (15 MIN) AS1072	Kg/m	0.20	0.27	0.30	0.38	0.46	0.64	0.38	0.40
E	ABRASION SLEEVE (FEP)	Kg/m	0.04	0.04	0.05	0.07	0.13	0.18	0.15	0.16
F	ABRASION SLEEVE (AS1073B)	Kg/m	0.02	0.04	0.05	0.05	0.09	0.13	0.12	0.20
H	FIRESLEEVE INTEGRAL	Kg/m	0.34	0.45	0.57	0.68	0.80	1.41	1.79	2.21
K	ABRASION SLEEVE POLYESTER W/HOSE	Kg/m	0.16	0.25	0.34	0.39	0.48	0.89	1.13	1.54
L	ABRASION SLEEVE (PTFE-AS1293)	Kg/m	0.07	0.09	0.14	0.16	0.20	0.32	0.39	0.49
NONE	FIRE SLEEVE CLAMP	Kg/Ea	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
NONE	FITTING END (HOSE SIZE-STRAIGHT)	Kg/Ea	0.02	0.04	0.06	0.08	0.10	0.17	0.22	0.31
NONE	FITTING END (HOSE SIZE-90°)	Kg/Ea	0.02	0.03	0.06	0.08	0.11	0.21	0.32	0.39

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TABLE 4 – HOSE OR SLEEVE OUTSIDE DIAMETERS

SLEEVE CODE	SLEEVE MATERIAL	TEMP LIMIT °C	TOLERANCE	HOSE SIZE 06	HOSE SIZE 10	HOSE SIZE 12	HOSE SIZE 16	HOSE SIZE 20	HOSE SIZE 25	HOSE SIZE 32	HOSE SIZE 40
–	(—) INDICATES HOSE ONLY	204	MAX	8.71	11.91	14.86	17.45	20.62	28.96	35.31	43.36
	NO SLEEVE		MIN	7.72	10.92	13.87	16.28	19.46	27.38	33.7	41.58
A	ABRASION SLEEVE TUBULAR	204	MAX	12.01	14.86	18.16	20.78	23.88	32.51	38.46	46.38
	(TFE–AS1291 – Code B)		MIN	8.74	11.94	14.88	17.30	20.47	28.40	34.75	42.60
B	ABRASION SLEEVE COIL	135	MAX	10.39	13.59	16.99	19.58	22.76	31.09	37.44	45.69
	NYLON (AS1294)		MIN	8.38	11.58	14.99	17.30	20.57	28.50	34.85	42.70
C	FIRESLEEVE (AS1072 SIL–FG)	204	MAX	15.88	19.05	22.23	25.40	28.58	35.31	44.45	50.80
	(15 MIN) /3/		MIN	13.58	16.71	19.76	22.63	23.27	32.72	40.0	47.93
E	ABRASION SLEEVE SHRINK–ON	177	MAX	10.24	13.69	16.64	19.23	22.53	31.19	36.68	44.63
	(FEB)		MIN	8.13	11.48	14.68	17.25	20.60	28.65	34.49	42.34
F	ABRASION SLEEVE SHRINK–ON	135	MAX	10.44	13.89	16.84	19.53	22.71	31.29	37.64	45.95
	(POLYOLEFIN AS1073–CODE B)		MIN	8.84	12.29	15.24	17.75	20.93	29.11	35.46	43.56
H	FIRESLEEVE INTEGRAL SILICONE	204	MAX	16.28	19.46	22.63	25.81	28.98	36.93	43.28	51.21
	(15 MIN) (AS1722)		MIN	15.09	18.26	21.44	24.10	27.28	35.41	41.88	49.71
K	INTEGRAL ABRASION SLEEVE	149	MAX	10.92	14.20	16.89	19.61	22.53	30.73	37.08	45.26
	(BRAIDED) POLYESTER		MIN	9.91	12.95	15.88	18.44	21.36	29.16	35.51	43.48
L	ABRASION SLEEVE COIL	204	MAX	11.30	14.50	19.23	20.04	23.22	31.55	37.90	45.95
	(PTFE–AS1293)		MIN	8.46	11.68	14.88	17.30	20.47	28.40	34.80	42.85

TABLE 5 - FITTING SLEEVE LENGTH

HOSE SIZE	LENGTH (mm)
DN 06 DN 10	50.0 ± 6
DN 12 DN 16	63.5 ± 6
DN 20 DN 25	76.0 ± 6
DN 32 DN 40	102.0 ± 6

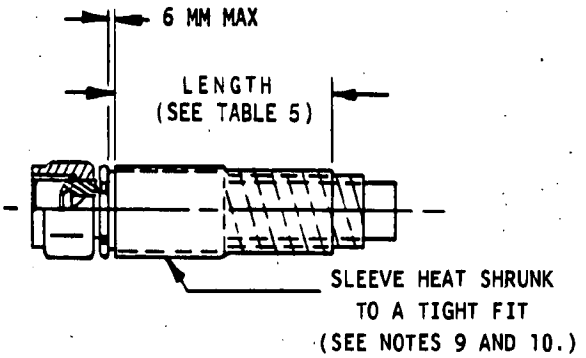

FIGURE 2 - DETAIL OF SLEEVE ASSEMBLY

NOTES:

/1/ A TRUE CIRCULAR CROSS SECTION IS NOT REQUIRED THROUGH THE END FITTING. HOWEVER, THE BALL DIAMETER B LISTED IN TABLE 1 SHALL PASS THROUGH THE END FITTING AFTER THE END FITTING IS ATTACHED TO THE HOSE ASSEMBLY.

/2/ DISTANCE ACROSS CORNERS OF THE COUPLING NUT MAY EXCEED THIS DIMENSION.

/3/ THE SLEEVE DIAMETERS FOR AS1072 SLEEVES APPLY WHEN THE SLEEVE IS COMPRESSED, OR CLAMPED, TO CONTACT THE HOSE. IN THIS CASE A WRINKLE MAY OCCUR OVER APPROXIMATELY 10% OF THE SLEEVE CIRCUMFERENCE.

4. MATERIALS: HOSE AND FITTINGS - PER MA2126. SLEEVES - SEE APPLICABLE STANDARD, TABLE 4.
5. CONSTRUCTION AND PERFORMANCE: THESE HOSE ASSEMBLIES SHALL MEET THE CONSTRUCTION AND PERFORMANCE OF MA2126. FITTINGS SHALL BE PERMANENTLY ATTACHED TO THE HOSE.
6. RATED OPERATING CHARACTERISTICS: SEE MA2126.
7. LENGTH "L" IS A FOUR DIGIT NUMBER OF WHICH THE FIRST THREE DIGITS DESCRIBE THE HOSE ASSEMBLY LENGTH IN WHOLE CENTIMETERS (cm), AND THE FOURTH DIGIT IS THE FRACTION OF A CENTIMETER IN MILLIMETERS (mm). LENGTH "L" IS MEASURED FROM "FACE OF SEAT" TO "FACE OF SEAT". SEE TABLE 2 FOR AVAILABLE LENGTH INCREMENTS AND TOLERANCES.
8. THE CUT ENDS OF THE SILICONE/FIBERGLASS FIRESLEEVE SHALL BE COATED WITH RTV SILICONE RUBBER, PRIOR TO INSTALLATION, TO PREVENT WICKING OF FLUIDS. THE FIRESLEEVE ENDS SHALL BE SECURED TO THE HOSE ASSEMBLY END FITTINGS WITH CORROSION RESISTANT STEEL BANDS. AFTER INSTALLATION, CRACKS OR VOIDS IN THE FIRESLEEVE, WHICH EXPOSE THE FIBERGLASS, SHALL BE COATED WITH RTV SILICONE RUBBER. THE ENDS OF THE INTEGRAL FIRESLEEVE SHALL EXTEND OVER THE END OF THE FITTING SOCKET.
9. COIL ABRASION SLEEVE, WHEN ASSEMBLED IN THE STRAIGHT CONDITION ON THE HOSE, SHALL HAVE AN AVERAGE GAP BETWEEN COILS NOT EXCEEDING 1.3 mm DISPLACEMENT OF THE SPIRAL SLEEVE, CAUSING A GREATER GAP SHALL NOT BE CAUSE FOR REJECTION IF THE COILS CAN BE REPOSITIONED TO MEET THE GAP REQUIREMENT. ENDS OF THE COIL SLEEVE SHALL BE TERMINATED WITH A LENGTH OF MIL-I-23053/5 BLACK POLYOLEFIN TUBING PER TABLE 5 AND FIGURE 2.