

Cover Sheeted DEF STAN

No. TSC47-025™

PIPELINES AND PIPE COUPLINGS FOR AIRCRAFT FLUID SYSTEMS (METRIC)



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FOREWORD

REVISION NOTE

This Defence Standard was amended to add the following administrative changes with no change to the issue status.

- Organisation addresses updated where necessary.
- The following was added to Note 5 “Alternatives are listed for design consideration. Should the user wish to fit one of the listed alternatives, approval shall be sought from the Platform Design Authority.”

HISTORICAL RECORD

Not applicable.

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1. This Defence Standard specifies the requirements, for Ministry of Defence use, for pipelines, pipe couplings, and associated connections to components and equipment used in aircraft fluid systems, but excluding those used in aero-engines. It may also be suitable for other applications subject to the approval of the appropriate Design Authority.
2. Tables I(A) to I(H) inclusive list the standard ranges of pipe fittings and associated accessories to be used in all future designs of aircraft and, whenever acceptable, for the maintenance of existing equipment.
3. Tables II(A) to II(C) inclusive list those items permitted only for the maintenance of existing equipment.
4. Table III lists those pipe fittings that are no longer to be provisioned.
5. This Standard has been agreed by authorities concerned. It is to be implemented, wherever practicable, in all designs, contracts, orders etc. commencing after its date of publication. If a difficulty arises which prevents application of the Defence Standard, the Directorate of Standardization shall be informed so that a remedy can be sought.
6. Any enquiries regarding this Standard in relation to an invitation to tender or a contract in which it is invoked are to be addressed to the responsible technical or supervising authority named in that invitation to tender or contract.
7. This Standard has been devised for the use of the Crown and of its contractors in the execution of contracts for the Crown and, subject to the Unfair Contract Terms Act 1977, the Crown will not be liable in any way whatever (including but without limitation negligence on the part of the Crown its servants or agents) where the Standard is used for other purposes.

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1. SCOPE

- 1.1 This Standard covers the requirements for pipelines, pipe couplings, and associated connections to components used in aircraft fluid systems, but excluding those used in aero-engines.
(Note : The requirements for aero-engines are specified in D Eng RD 2300.)
- 1.2 This Standard introduces a pipe coupling system known as the 'British Metric Swaged Pipe Coupling', details of which are published in SAE ITC Standards AS 43020 and AS 43090. This coupling system was developed and approved under MOD(PE) auspices specifically for aircraft use, but may also be suitable for other applications subject to the approval of the appropriate Design Authorities.
- 1.3 The requirements of this Standard do not apply to:
- 1.3.1 Connections made by use of V-flange couplings conforming to DEF STAN 53-68.
- 1.3.2 Connections made using beaded pipe ends conforming to DEF STAN 47-23.
- 1.3.3 Connections on pipes having an outside diameter larger than 28 mm.

2. RELATED DOCUMENTS

- 2.1 Reference is made in this Standard to:

AS 43020	Swaged couplings - typical joints (steel).
AS 43090	Swaged couplings - typical joints (aluminium alloy).
DEF STAN 47-17	Adaptors and seals for pipe connections to aircraft pitot/ static instruments and associated equipment.
DEF STAN 47-21	Flexible hose assemblies for pitot and static systems in aircraft (metric).
DEF STAN 47-22	End fittings for flexible hose assemblies for aircraft-metric.
DEF STAN 47-23	Bead profile for aircraft piping and ducting (flexible connections).
DEF STAN 53-68	V-flange couplings for aircraft piping and ducting (metric).
DEF STAN 66-27	Pressure connections on aircraft instruments and associated equipment.
D ENG RD 2300	General specification for the design and manufacture of gas turbine aero engines and jet pipes.

- RS 735 Component tapped hole geometry (for use with swaged coupling male nut units ref. AS 43020 and AS 43090).
- TS 93 British metric swaged pipe coupling: Swaging process specification for AS 43022 and AS 43160 (Nipples) and AS 43024 and AS 43161 (Unions) (without jointing compound).
- TS 110 British metric swaged pipe coupling: Swaging process specification for AS 43022 and AS 43160 (Nipples) and AS 43024 and AS 43161 (Unions) incorporating use of a jointing compound.
- 2.2 Reference in this Defence Standard to any Related Document means, in any tender or contract, the edition current at the date of such tender or contract unless a specific edition is indicated.
- 2.3 Related documents are obtainable as follows:
- 2.3.1 AS, RS and TS : SAE ITC
 1 York Street
 London W1U 6PA
 United Kingdom
- 2.3.2 D. Eng RD : UK Defence Standardization
 Kentigern House, Room 1138
 65 Brown Street
 GLASGOW G2 8EX
3. REQUIREMENTS
- 3.1 Pipe fittings
- 3.1.1 General. Except as stated in clauses 1.2 and 3.1.2, all pipe fittings used in aircraft fluid systems (but excluding those on aero-engines) for connecting the ends of metallic rigid pipes to other pipes, hose assemblies, or components shall be selected from those defined in SAE ITC Standards AS 43020 or AS 43090 and listed in Tables I(A) to I(H) of this Standard.
- 3.1.2 Pitot/static systems
- 3.1.2.1 Pressure connections (pitot/static) on instruments and associated equipment shall be in accordance with DEF STAN 66-27, and the adaptors and seals used with such equipment shall be in accordance with DEF STAN 47-17.
- 3.2 Rigid pipes. Unless otherwise specified, all rigid pipes used in aircraft fluid systems incorporating the pipe fittings specified in clause 3.1 shall be limited to the material and sizes listed in TS 93 or TS 110 as appropriate.

3.3 Flexible hose assemblies

3.3.1 General. Unless otherwise specified, the end fittings on flexible hose assemblies used in aircraft fluid systems shall be in accordance with DEF STAN 47-22.

3.3.2 Pitot/static systems. Flexible hose assemblies used in pitot/static systems shall be in accordance with DEF STAN 47-21.

3.4 Tapped holes in components. Unless otherwise specified, the configuration of all tapped holes (port connections) provided in fluid system components for accommodation of the appropriate pipe fittings specified in clauses 3.1.1 and 3.3.1 shall conform to the requirements of RS 735.

4. TABLES I, II AND III

4.1 Tables I(A) to I(H) list the ranges of metric pipe fittings from which selection shall be made for use in appropriate fluid systems.

4.2 Tables II(A) to II(C) list those items which may be provisioned only for the maintenance of existing aircraft and equipment.

4.3 Table III lists those items which may be already fitted in existing aircraft but which are no longer to be provisioned. Should any of these items need to be replaced, the appropriate replacement item listed in the Table shall be used.

4.4 Notes applicable to the Tables are given in the Annex.

TABLE 1(A)
STANDARD RANGE
SWAGED PIPE FITTINGS

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE				ITEM NAME	SYSTEM PIPE OUTSIDE DIAMETER	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	MATERIAL	FINISH	DESCRIPTION								EQUIVALENT PART NUMBER (See Note 5)			FIG. NO.
		NAVY	ARMY	AIR FORCE	LENGTH							NOMINAL DIMENSIONS - mm				NATURAL STANDARD DRAWING/PART NUMBER	EAG	PAN					
												SWAGING BORE	NIPPLE SPHERICAL RADIUS	SHOULDER O/D	THREAD BS.3643				ACROSS FLATS				
																				A	ØB	C	
4730 -	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)		
1	99-977-4974					5	27600					17.2	5.15	4.55	10.50	-	-	-	AS.43022-05	5591/2/05	4010-05		
2	99-641-4054					6	27600					17.45	6.15	5.15	11.60	-	-	-	AS.43022-06	5591/2/06	4010-06		
3	99-651-1406					8	6900					17.9	8.15	6.35	13.60	-	-	-	AS.43022-08	5591/2/08	4010-08		
4	99-651-1407					10	27600					18.1	10.15	7.45	15.60	-	-	-	AS.43022-10	5591/2/10	4010-10		
5	99-977-4975					12	6900					20.1	12.15	8.60	17.65	-	-	-	AS.43022-12	5591/2/12	4010-12		
6	99-651-0453					14	27600					20.2	14.15	9.60	20.00	-	-	-	A.43022-14	5591/2/14	4010-14		
7	99-977-4976				28F	15	6900	-60 to +200		STEEL BS.S154	CADMIUM PLATE DEF STAN 03-19	20.5	15.15	10.25	21.10	-	-	-	AS.43022-15	5591/2/15	4010-15	FIG 1	
8	99-977-4977					16	27600					20.9	16.15	10.75	22.55	-	-	-	AS.43022-16	5591/2/16	4010-16		
9	99-977-4978					18	6900					20.6	18.18	12.15	24.20	-	-	-	AS.43022-18	5591/2/18	4010-18		
10	99-641-4055					20	27600					21.4	20.18	13.50	27.00	-	-	-	AS.43022-20	5591/2/20	4010-20		
11	12-173-5973					22	6900					21.3	22.20	14.75	29.00	-	-	-	AS.43022-22	5591/2/22	4010-22		
12	99-977-4979					28	6900					21.7	28.20	18.10	35.00	-	-	-	AS.43022-28	5591/2/28	4010-28		
13	99-977-4980					15	6900			STEEL (corrosion resisting) BS.S143 or S144		20.5	15.15	10.25	21.10	-	-	-	AS.43160-15	-	-		
14	99-977-4981					18	6900					20.6	18.18	12.15	24.20	-	-	-	AS.43160-18	-	-		

TABLE I(A) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE			SYSTEM PIPE OUTSIDE DIAMETER mm	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	MATERIAL	FINISH	DESCRIPTION						NATIONAL STANDARD DRAWING/PART NUMBER			EQUIVALENT PART NUMBERS (See Note 2)			FIG NO.
		NAVY	AIR FORCE	NAVY						LENGTH	SWAGING BORE	NIPPLE SPHERICAL RADIUS	SHOULDER O/D	THREAD BS. 3643	ACROSS FLATS				ENG	PAN	(t)	(u)
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)
1	977-4982						5	27600									M12x1.0	14.0	AS.43024-05	5591/4/05	4012-05	
2	651-1408						6	27600									M14x1.5	17.0	AS.43024-06	5591/4/06	4012-06	
3	651-1409						8	6900									M16x1.5	17.0	AS.43024-08	5591/4/08	4012-08	
4	651-0220						10	27600									M18x1.5	19.0	AS.43024-10	5591/4/10	4012-10	
5	977-4983						12	6900									M20x1.5	22.0	AS.43024-12	5591/4/12	4012-12	
6	977-4984						14	27600									M22x1.5	24.0	AS.43024-14	5591/4/14	4012-14	
7	977-4985						15	6900									M24x2.0	27.0	AS.43024-15	5591/4/15	4012-15	FIG 2
8	977-4986						16	27600									M25x2.0	27.0	AS.43024-16	5591/4/16	4012-16	
9	977-4987						18	6900									M27x2.0	30.0	AS.43024-18	5591/4/18	4012-18	
10	641-4056						20	27600									M30x2.0	32.0	AS.43024-20	5591/4/20	4012-20	
11	977-4988						22	6900									M32x2.0	36.0	AS.43024-22	5591/4/22	4012-22	
12	977-6081						28	6900									M39x2.0	41.0	AS.43024-28	5591/4/28	4012-28	
13	977-4989						15	6900									M24x2.0	27.0	AS.43161-15	-	-	
14	977-4990						18	6900									M27x2.0	30.0	AS.43161-18	-	-	

TABLE I(B)
STANDARD RANGE
NUTS, UNION AND PIPE LOCKING

PAGE ITEM N.O.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE				ITEM NAME	SYSTEM PIPE OUTSIDE DIAMETER mm	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	DESCRIPTION						EQUIVALENT PART NUMBERS (See Note 5)			FIG. NO.
			NAVY	ARMY	AIR FORCE						MATERIAL	FINISH	NOMINAL DIMENSIONS mm			NATIONAL STANDARD DRAWING/PART NUMBER	EAG	PAN	
													LENGTH OR WIDTH	THREAD BS 3643	ACROSS FLATS				
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)		
1	977- 3371					5		27600			13.0	M12x1.0	14.0	AS.43021-05	5591/1/05	4011-05			
2	629- 0576					6		27600			13.80	M14x1.5	17.0	AS.43021-06	5591/1/06	4011-06			
3	5310-12- 172-8535					8		6900			15.0	M16x1.5	19.0	AS.43021-08	5591/1/08	4011-08			
4	629- 0719					10		27600			15.25	M18x1.5	22.0	AS.43021-10	5591/1/10	4011-10			
5	977- 3372					12		6900			15.50	M20x1.5	24.0	AS.43021-12	5591/1/12	4011-12			
6	977- 3373					14		27600	-60 to +200	CLUMIUM PLATE DEF STAN 03-19	16.30	M22x1.5	27.0	AS.43021-14	5591/1/14	4011-14	FIG 3		
7	977- 3374					15		6900		STEEL BS.5154	16.30	M24x2.0	27.0	AS.43021-15	5591/1/15	4011-15			
8	977- 3375					16		27600			17.40	M25x2.0	30.0	AS.43021-16	5591/1/16	4011-16			
9	977- 3376					18		6900			17.40	M27x2.0	30.0	AS.43021-18	5591/1/18	4011-18			
10	977- 3377					20		27600			18.50	M30x2.0	36.0	AS.43021-20	5591/1/20	4011-20			
11	977- 3378					22		6900			18.50	M32x2.0	36.0	AS.43021-22	5591/1/22	4011-22			
12	977- 3380					28		6900			19.40	M39x2.0	46.0	AS.43021-28	5591/1/28	4011-28			

TABLE 1 (B) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE				ITEM NAME	SYSTEM PIPE OUTSIDE DIAMETER mm	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	DESCRIPTION					NATIONAL STANDARD DRAWING/PART NUMBER	EQUIVALENT PART NUMBERS (See Note 5)			FIG. NO.
		NAVY	ARMY	AIR FORCE	FINISH					MATERIAL	(j)	(k)	NOMINAL DIMENSIONS mm			(p)	(q)		
													LENGTH OR WIDTH	THREAD BS 3643				ACROSS FLATS	
	4730-	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
1	99-977-4991						5	20700					14.0	M12x1.0	16.0	AS 43091-05	5592/1/05	4060-05	
2	99-651-0221						6	20700					15.0	M14x1.5	17.0	AS 43091-06	5592/1/06	4060-06	
3	99-641-4654						8	6900					16.2	M16x1.5	19.0	AS 43091-08	5992/1/08	4060-08	
4	99-651-0222						10	20700					17.0	M18x1.5	22.0	AS 43091-10	5592/1/10	4060-10	
5	99-977-4992						12	6900					17.7	M20x1.5	24.0	AS 43091-12	5592/1/12	4060-12	
6	99-651-0401				28F	NUT, UNION, PIPE	14	20700	-60 to +120		ALUMINIUM ALLOY BS 1485	ANODISE DEF 151 Type 2	19.0	M22x1.5	27.0	AS 43091-14	5592/1/14	4060-14	FIG 3
7	99-641-4652						15	6900					19.0	M24x2.0	27.0	AS 43091-15	5592/1/15	4060-15	
8	99-977-6190						16	20700					20.0	M25x2.0	30.0	AS 43091-16	5592/1/16	4060-16	
9	99-977-5080						18	6900					20.0	M27x2.0	30.0	AS 43091-18	5592/1/18	4060-18	
10	99-977-4993						20	20700					21.2	M30x2.0	36.0	AS 43091-20	5592/1/20	4060-20	
11	12-176-0373						22	6900					21.2	M32x2.0	36.0	AS 43091-22	5592/1/22	4060-22	
12	99-977-5081						28	6900					23.0	M39x2.0	46.0	AS 43091-28	5592/1/28	4060-28	

TABLE I (B) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE				ITEM NAME	SYSTEM PIPE WORKING DIAMETER	MAXIMUM PRESSURE	TEMP. RANGE	DESCRIPTION							EQUIVALENT PART NUMBERS (See Note 5)				FIG. NO.
		NAVY	ARMY	AIR FORCE	FINISH					MATERIAL	(j)	(k)	NOMINAL DIMENSIONS mm			(o)	EAG	PAN			
													LENGTH OR WIDTH	THREAD BS 3643	ACROSS FLATS				NATIONAL STANDARD DRAWING/PART NUMBER		
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)		
1	977-4994						5	20700					16.75	M12x1.0	14.0	AS.43095-05	5592/5/05	4076-05			
2	641-4058						6	20700					17.75	M14x1.5	17.0	AS.43095-06	5592/5/06	4076-06			
3	977-4995						8	6900					18.50	M16x1.5	17.0	AS.43095-08	5592/5/08	4076-08			
4	977-4996						10	20700					19.00	M18x1.5	19.0	AS.43095-10	5592/5/10	4076-10			
5	977-4997						12	6900					20.00	M20x1.5	22.0	AS.43095-12	5592/5/12	4076-12			
6	977-6251						14	20700	-60 to +120	ALUMINIUM ALLOY BS L85	ANODISE DEF 151 Type 2		21.00	M22x1.5	24.0	AS.43095-14	5592/5/14	4076-14	FIG 4		
7	977-4998						15	6900					21.00	M24x2.0	27.0	AS.43095-15	5592/5/15	4076-15			
8	977-6252						16	20700					22.00	M25x2.0	27.0	AS.43095-16	5592/5/16	4076-16			
9	977-4999						18	6900					22.00	M27x2.0	30.0	AS.43095-18	5592/5/18	4076-18			
10	977-6253						20	20700					22.90	M30x2.0	32.0	AS.43095-20	5592/5/20	4076-20			
11	977-5000						22	6900					22.90	M32x2.0	36.0	AS.43095-22	5592/5/22	4076-22			
12	977-6254						28	6900					24.50	M39x2.0	41.0	AS.43095-28	5592/5/28	4076-28			

TABLE I (B) -- CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE				ITEM NAME	SYSTEM PIPE OUTSIDE DIAMETER	MAXIMUM WORKING PRESSURE	TEMP. RANGE	DESCRIPTION					NATIONAL STANDARD DRAWING/PART NUMBER	EQUIVALENT PART NUMBERS (See Note 5)		FIG NO.	
		NAVY	ARMY	AIR FORCE						MATERIAL	FINISH	NOMINAL DIMENSIONS mm				EAG	PAN		
				LENGTH OR WIDTH	THREAD BS.3643							ACROSS PLATS	C						
	4730-	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
1	12-176-0437						5	27600					15.75	M12x1.0	14.0	AS.43025-05	5591/5/05	4057-05	
2	99-629-0771						6	27600					16.75	M14x1.5	17.0	AS.43025-06	5591/5/06	4057-06	
3	99-629-0772						8	6900					17.50	M16x1.5	17.0	AS.43025-08	5591/5/08	4057-08	
4	99-977-3382						10	27600					17.90	M18x1.5	19.0	AS.43025-10	5591/5/10	4057-10	
5	99-977-3383						12	6900					18.00	M20x1.5	22.0	AS.43025-12	5591/5/12	4057-12	
6	99-977-3384						14	27600	-60 to +200	STEEL BS.8154	CADMIUM PLATE DEF STAN 03 19		19.50	M22x1.5	24.0	AS.43025-14	5591/5/14	4057-14	FIG 4
7	99-977-3391						15	6900					19.50	M24x2.0	27.0	AS.43025-15	5591/5/15	4057-15	
8	99-977-3385						16	27600					20.50	M25x2.0	27.0	AS.43025-16	5591/5/16	4057-16	
9	99-977-3386						18	6900					20.50	M27x2.0	30.0	AS.43025-18	5591/5/18	4057-18	
10	99-977-3387						20	27600					21.40	M30x2.0	32.0	AS.43025-20	5591/5/20	4057-20	
11	99-977-3388						22	6900					21.40	M32x2.0	36.0	AS.43025-22	5591/5/22	4057-22	
12	99-977-3390						28	6900					22.80	M39x2.0	41.0	AS.43025-28	5591/5/28	4057-28	

TABLE 1(B) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE			ITEM NAME	SYSTEM PIPE OUTSIDE DIAMETER mm	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	DESCRIPTION						EQUIVALENT PART NUMBERS (see Note 5)		FIG. NO.		
		NAVY	ARMY	AIR FORCE					MATERIAL	FINISH	NOMINAL DIMENSIONS mm			NATIONAL STANDARD DRAWING/PART NUMBER	EAG	PAN			
											LENGTH OR WIDTH	THREAD BS 3643	ACROSS FLATS					C	
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
1	173- 8853						5						4.5	M12x1.0	17.0	AS 43099-05	5592/9/05	4080-05	
2	173- 8856						6						5.5	M14x1.5	19.0	AS 43099-06	5592/9/06	4080-06	
3	173- 8857						8						5.5	M16x1.5	22.0	AS 43099-08	5592/9/08	4080-08	
4	170- 3076						10						5.5	M18x1.5	24.0	AS 43099-10	5592/9/10	4080-10	
5	177- 4375						12						5.5	M20x1.5	27.0	AS 43099-12	5592/9/12	4080-12	
6	177- 4271					NUT, PLAIN, HEXAGON	14	N/A	N/A	ALUMINIUM ALLOY BS 185	ANODISE DEF 151 Type 2		5.5	M22x1.5	30.0	AS 43099-14	5592/9/14	4080-14	FIG 5
7	177- 4272				28F		15						6.5	M24x2.0	32.0	AS 43099-15	5592/9/15	4080-15	
8	175- 9969						16						6.5	M25x2.0	36.0	AS 43099-16	5592/9/16	4080-16	
9	176- 0364						18						6.5	M27x2.0	36.0	AS 43099-18	5592/9/18	4080-18	
10	176- 0351						20						6.5	M30x2.0	41.0	AS 43099-20	5592/9/20	4080-20	
11	176- 0382						22						6.5	M32x2.0	41.0	AS 43099-22	5592/9/22	4080-22	
12	176- 0355						28						7.5	M39x2.0	50.0	AS 43099-28	5592/9/28	4080-28	

TABLE 1 (C)
STANDARD RANGE
UNIONS, PIPES AND REDUCERS, PIPE

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT				ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	DESCRIPTION										NATIONAL STANDARD DRAWING/PART NUMBER	EQUIVALENT PART NUMBERS (See Note 5)		FIG. NO.
		CODE		MATERIAL	FINISH				NOMINAL DIMENSIONS - mm								ACROSS FLATS	ACROSS FLANGE		EAG	PAN	
		NAVY	ARMY						AIR FORCE	DIM. A LENGTH	END (S) B SYSTEM PIPE O/D	THREAD BS.3643	SYSTEM PIPE O/D	THREAD BS.3645	END C	DIM. D ACROSS FLATS						
4730-99	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)		
1	977-6255					27600				26.8	5	M12x1.0	-	-	14.0	-	AS.43023-05	5591/3/05	4013-05			
2	977-5001					27600				28.5	6	M14x1.5	-	-	17.0	-	AS.43023-06	5591/3/06	4013-06			
3	977-5002					6900				30.0	8	M16x1.5	-	-	17.0	-	AS.43023-08	5591/3/08	4013-08			
4	977-6256					27600				30.5	10	M18x1.5	-	-	19.0	-	AS.43023-10	5591/3/10	4013-10			
5	977-6257					6900				30.7	12	M20x1.5	-	-	22.0	-	AS.43023-12	5591/3/12	4013-12			
6	977-6258				DOUBLE ENDED UNION, PIPE, MALE	27600	-60 to +200	STEEL BS.5154	CADMIUM PLATE DEF STAN 03-19	33.2	14	M22x1.5	-	-	24.0	-	AS.43023-14	5591/3/14	4013-14	FIG 6		
7	977-5003					6900				33.2	15	M24x2.0	-	-	27.0	-	AS.43023-15	5591/3/15	4013-15			
8	977-6259					27600				35.1	16	M25x2.0	-	-	27.0	-	AS.43023-16	5591/3/16	4013-16			
9	977-6260					6900				35.1	18	M27x2.0	-	-	30.0	-	AS.43023-18	5591/3/18	4013-18			
10	977-6261					27600				36.8	20	M30x2.0	-	-	32.0	-	AS.43023-20	5591/3/20	4013-20			
11	977-6262					6900				36.8	22	M32x2.0	-	-	36.0	-	AS.43023-22	5591/3/22	4013-22			
12	977-6263					6900				39.0	28	M39x2.0	-	-	41.0	-	AS.43023-28	5591/3/28	4013-28			

TABLE I (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE		ITEM NAME	MAXIMUM WORKING PRESSURE k p a	TEMP . RANGE ° C	DESCRIPTION										NATIONAL STANDARD DRAWING/PART NUMBER	EQUIVALENT PART NUMBERS (See Note 5)		FIG. NO.	
		NAVY	ARMY				AIR FORCE	MATERIAL	FINISH	DIM. A LENGTH	ENDS (S) B				NOMINAL DIMENSIONS - mm			DIM. D ACROSS FLATS	DIM. E ACROSS FLANGE		
											SYSTEM PIPE O/D	THREAD BS. 3643	SYSTEM PIPE O/D	THREAD BS.3643	END C						
	4730-99-	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)
1	977-5004						20700				27.8	5	M12x1.0	-	-	14.0	-	AS.43093-05	5592/3/05	4061-05	
2	977-6264						20700				29.5	6	M14x1.5	-	-	17.0	-	AS.43093-06	5592/3/06	4061-06	
3	917-6265						6900				30.9	8	M16x1.5	-	-	17.0	-	AS.43093-08	5592/3/08	4061-08	
4	977-6266						20700				31.6	10	M18x1.5	-	-	19.0	-	AS.43093-10	5592/3/10	4061-10	
5	977-5005						6900				32.7	12	M20x1.5	-	-	22.0	-	AS.43093-12	5592/3/12	4061-12	
6	971-6267					DOUBLE ENDED UNION, PIPE, MALE	20700	-60 to +120	ALUMINIUM ALLOY BS.185	ANODISE DEF.151 Type 2	34.7	14	M22x1.5	-	-	24.0	-	AS.43093-14	5592/3/14	4061-14	FIG. 6
7	977-6250						6900				34.7	15	M24x2.0	-	-	27.0	-	AS.43093-15	5592/3/15	4061-15	
8	977-6248						20700				36.6	16	M25x2.0	-	-	27.0	-	AS.43093-16	5592/3/16	4061-16	
9	977-6249						6900				36.6	18	M27x2.0	-	-	30.0	-	AS.43093-18	5592/3/18	4061-18	
10	977-6587						20700				38.3	20	M30x2.0	-	-	32.0	-	AS.43093-20	5592/3/20	4061-20	
11	977-6588						6900				38.3	22	M32x2.0	-	-	36.0	-	AS.43093-22	5592/3/22	4061-22	
12	977-6589						6900				40.8	28	M39x2.0	-	-	41.0	-	AS.43093-28	5592/3/28	4061-28	

TABLE I (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE			ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP RANGE °C	MATERIAL	FINISH	DESCRIPTION NOMINAL DIMENSIONS - mm							NATIONAL STANDARD DRAWING/PART NUMBER	EQUIVALENT PART NUMBERS (See Note 5)		FIG. NO.
		NAVY	ARMY	AIR FORCE						DIM. A LENGTH	END (s) SYSTEM PIPE O/D	THREAD BS. 3643	END C	THREAD BS. 3643	DIM. D ACROSS FLATS	DIM. E ACROSS FLANGE		EAG	PAN	
	4730-	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)	(i)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)
1	12-173-8900						27600				5	M12x1.0	-	-	17.0	-	AS. 43027-05	5591/7/05	4014-05	
2	99-641-2958						27600				6	M14x1.5	-	-	19.0	-	AS. 43027-06	5591/7/06	4014-06	
3	99-977-6590						6900				8	M16x1.5	-	-	22.0	-	AS. 43027-08	5591/7/08	4014-08	
4	99-648-2117						27600				10	M18x1.5	-	-	24.0	-	AS. 43027-10	5591/7/10	4014-10	
5	99-977-6591						6900				12	M20x1.5	-	-	27.0	-	AS. 43027-12	5591/7/12	4014-12	
6	99-977-5720					DOUBLE ENDED UNION, PIPE, MALE, Bulkhead	27600	-60 to +200	STEEL BS. S154	CADMIUM PLATE DEF STAN 03-19	14	M22x1.5	-	-	30.0	-	AS. 43027-14	5591/7/14	4014-14	FIG 7
7	99-977-6592						6900				15	M24x2.0	-	-	32.0	-	AS. 43027-15	5591/7/15	4014-15	
8	12-176-0362						27600				16	M25x2.0	-	-	36.0	-	AS. 43027-16	5591/7/16	4014-16	
9	99-977-6593						6900				18	M27x2.0	-	-	36.0	-	AS. 43027-18	5591/7/18	4014-18	
10	99-977-6594						27600				20	M30x2.0	-	-	41.0	-	AS. 43027-20	5591/7/20	4014-20	
11	99-977-6595						6900				22	M32x2.0	-	-	41.0	-	AS. 43027-22	5591/7/22	4014-22	
12	99-977-6596						6900				28	M39x2.0	-	-	50.0	-	AS. 43027-28	5591/7/28	4014-28	

TABLE I (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE				ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	MATERIAL	FINISH	DESCRIPTION										EQUIVALENT PART NUMBERS (See Note 5)		FIG. NO.
		NAVY	ARMY	AIR FORCE	DIM. A LENGTH						END(S)		B	NOMINAL DIMENSIONS - mm			DIM. D ACROSS FLATS	DIM. E ACROSS FLANGE	NATIONAL STANDARD DRAWING/PART NUMBER	EAG	PAN		
											SYSTEM PIPE O/D	THREAD BS. 3643		SYSTEM PIPE O/D	THREAD BS. 3643	END C							
	4730-	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	
1	99-977-6637						20700					42.0	5	M12x1.0	-	-	17.0	-	AS.43097-05	5592/7/05	4062-05		
2	12-176-8208						20700					45.0	6	M14x1.5	-	-	19.0	-	AS.43097-06	5592/7/06	4062-06		
3	12-176-0356						6900					46.3	8	M16x1.5	-	-	22.0	-	AS.43097-08	5592/7/08	4062-08		
4	12-176-4034						20700					46.8	10	M18x1.5	-	-	24.0	-	AS.43097-10	5592/7/10	4062-10		
5	99-977-6597						6900					47.8	12	M20x1.5	-	-	27.0	-	AS.43097-12	5592/7/12	4062-12		
6	99-977-6598					DOUBLE ENDED UNION, PIPE, MALE, Bulkhead	20700	-60 to +120	ALUMINIUM ALLOY BS.L85	ANODISE DEF.151 Type 2		49.8	14	M22x1.5	-	-	30.0	-	AS.43097-14	5592/7/14	4062-14	FIG 7	
7	99-614-2142						6900					51.8	15	M24x2.0	-	-	32.0	-	AS.43097-15	5592/7/15	4062-15		
8	99-977-6600						20700					53.8	16	M25x2.0	-	-	36.0	-	AS.43097-16	5592/7/16	4062-16		
9	99-977-6601						6900					53.8	18	M27x2.0	-	-	36.0	-	AS.43097-18	5592/7/18	4062-18		
10	99-977-6602						20700					55.2	20	M30x2.0	-	-	41.0	-	AS.43097-20	5592/7/20	4062-20		
11	99-977-6603						6900					55.2	22	M32x2.0	-	-	41.0	-	AS.43097-22	5592/7/22	4062-22		
12	99-977-6604						6900					58.8	28	M39x2.0	-	-	50.0	-	AS.43097-28	5592/7/28	4062-28		

TABLE I (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE				ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	MATERIAL	FINISH	DESCRIPTION NOMINAL DIMENSIONS - mm										EQUIVALENT PART NUMBERS (See Note 5)			FIG. NO.
		NAVY	ARMY	AIR FORCE	DIM. A LENGTH						SYSTEM PIPE O/D	END (S) B	THREAD BS. 3643	SYSTEM PIPE O/D	END C BS. 3643	DIM. D ACROSS FLATS	DIM. E ACROSS FLANGE	NATIONAL STANDARD DRAWING/PART NUMBER	EAG	PAN				
	4730-99-	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)		
1	977-6605						27600					32.5	5	M12x1.0	-	-	-	35.0	AS.43034-05	5591/14/05	-			
2	977-6606						27600					35.0	6	M14x1.5	-	-	-	36.0	AS.43034-06	5591/14/06	-			
3	977-5006						6900					36.0	8	M16x1.5	-	-	-	38.0	AS.43034-08	5591/14/08	-			
4	977-6607						27600					37.0	10	M18x1.5	-	-	-	44.0	AS.43034-10	5591/14/10	-			
5	977-6608						6900					37.0	12	M20x1.5	-	-	-	46.0	AS.43034-12	5591/14/12	-			
6	977-6609						27600					39.0	14	M22x1.5	-	-	-	48.0	AS.43034-14	5591/14/14	-			
7	977-6610						6900					39.0	15	M24x2.0	-	-	-	49.5	AS.43034-15	5591/14/15	-	FIG 8		
8	977-6611						27600					41.0	16	M25x2.0	-	-	-	51.0	AS.43034-16	5591/14/16	-			
9	977-6612						6900					41.0	18	M27x2.0	-	-	-	53.5	AS.43034-18	5591/14/18	-			
10	977-6613						27600					42.5	20	M30x2.0	-	-	-	56.5	AS.43034-20	5591/14/20	-			
11	977-6614						6900					43.0	22	M32x2.0	-	-	-	59.0	AS.43034-22	5591/14/22	-			
12	977-6615						6900					44.5	28	M39x2.0	-	-	-	67.0	AS.43034-28	5591/14/28	-			

TABLE I (C) -- CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT			ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	MATERIAL	FINISH	DESCRIPTION										NATIONAL STANDARD DRAWING/PART NUMBER	EQUIVALENT PART NUMBERS (See Note 5)		FIG. NO.
		CODE		DIM.A LENGTH						END(S) B		NOMINAL DIMENSIONS - mm			DIM.D ACROSS FLATS	DIM.E ACROSS FLANGE	EAG	PAN					
		NAVY	ARMY							AIR FORCE	SYSTEM PIPE O/D	THREAD BS.3643	SYSTEM PIPE O/D	THREAD BS.3643									
4730-99-		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	
1	648-2123						20700					33.0	5	M12x1.0	-	-	-	35.0	AS.43104-05	5592/14/05	4064-05		
2	977-5721						20700					35.5	6	M14x1.5	-	-	-	36.0	AS.43104-06	5592/14/06	4064-06		
3	647-2340						6900					36.5	8	M16x1.5	-	-	-	38.0	AS.43104-08	5592/14/08	4064-08		
4	647-2339						20700					37.5	10	M18x1.5	-	-	-	44.0	AS.43104-10	5592/14/10	4064-10		
5	977-5007						6900					37.5	12	M20x1.5	-	-	-	46.0	AS.43104-12	5592/14/12	4064-12		
6	977-5722					DOUBLE ENDED UNION, PIPE, MALE, Bulkhead, sealed flange	20700	-60 to +120	ALUMINIUM to ALLOY BS.L85	ANODISE DEF. 151 Type 2		40.0	14	M22x1.5	-	-	-	48.0	AS.43104-14	5592/14/14	4064-14	FIG 8	
7	977-6616						6900					40.0	15	M24x2.0	-	-	-	49.5	AS.43104-15	5592/14/15	4064-15		
8	977-6617						20700					41.5	16	M25x2.0	-	-	-	51.0	AS.43104-16	5592/14/16	4064-16		
9	977-6618						6900					41.5	18	M27x2.0	-	-	-	53.5	AS.43104-18	5592/14/18	4064-18		
10	977-6619						20700					43.0	20	M30x2.0	-	-	-	56.5	AS.43104-20	5592/14/20	4064-20		
11	977-6620						6900					43.5	22	M32x2.0	-	-	-	59.0	AS.43104-22	5592/14/22	4064-22		
12	977-6636						6900					45.0	28	M39x2.0	-	-	-	67.0	AS.43014-28	5592/14/28	4064-28		

TABLE I (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE			ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	MATERIAL	FINISH	DESCRIPTION										NATIONAL STANDARD DRAWING/PART NUMBER	EQUIVALENT PART NUMBERS (See Note 5)		FIG. NO.
		NAVY	ARMY	AIR FORCE						DIM.A LENGTH	END (S) B				NOMINAL DIMENSIONS		END C	DIM.D	DIM.E				
											SYSTEM PIPE O/D	THREAD BS.3643	THREAD PIPE O/D	SYSTEM PIPE O/D	THREAD BS.3643	ACROSS FLATS					ACROSS FLANGE		
4730-	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)			
1	99-977-5008					27600				32.5	5	M12x1.0	-	-	-	28.1	AS-43032-05	5591/12/05	4017-05				
2	12-176-0393					27600				35.0	6	M14x1.5	-	-	-	28.9	AS-43032-06	5591/12/06	4017-06				
3	99-977-6635					6900				36.0	8	M16x1.5	-	-	-	31.4	AS-43032-08	5591/12/08	4017-08				
4	12-176-0387					27600				37.0	10	M18x1.5	-	-	-	35.5	AS-43032-10	5591/12/10	4017-10				
5	99-977-6634					6900				37.0	12	M20x1.5	-	-	-	37.3	AS-43032-12	5591/12/12	4017-12				
6	99-977-6633					27600	-60 to +200	STEEL BS.S154	CADMIUM PLATE DEF STAN 03-19	39.0	14	M22x1.5	-	-	-	39.0	AS-43032-14	5591/12/14	4017-14	FIG 9			
7	99-977-6632					6900				39.0	15	M24x2.0	-	-	-	40.4	AS-43032-15	5591/12/15	4017-15				
8	99-977-6631					27600				41.0	16	M25x2.0	-	-	-	41.9	AS-43032-16	5591/12/16	4017-16				
9	99-977-6630					6900				41.0	18	M27x2.0	-	-	-	44.4	AS-43032-18	5591/12/18	4017-18				
10	99-977-6629					27600				42.5	20	M30x2.0	-	-	-	47.6	AS-43032-20	5591/12/20	4017-20				
11	99-977-6628					6900				43.0	22	M32x2.0	-	-	-	50.0	AS-43032-22	5591/12/22	4017-22				
12	99-977-6627					6900				45.5	28	M36x2.0	-	-	-	57.8	AS-43032-28	5591/12/28	4017-28				

TABLE 1 (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT				ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	MATERIAL	FINISH	DESCRIPTION								NATIONAL STANDARD DRAWING/PART NUMBER	EQUIVALENT PART NUMBERS (See Note 5)		FIG NO.
		CODE		NAVY	ARMY						AIR FORCE	DIMENSIONS - mm				NOMINAL						
												DIM.A LENGTH	SYSTEM PIPE O/D	END (S) B	THREAD BS.3643	SYSTEM PIPE O/D	THREAD BS.3643	END C		DIM.D ACROSS FLATS	DIM.E ACROSS FLANGE	
4730-	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)		
1	99-648-2122					20700					33.0	5	M12x1.0	-	-	-	28.1	AS.43102-05	5592/12/05	4065-05		
2	99-641-4045					20700					35.5	6	M14x1.5	-	-	-	28.9	AS.43102-06	5592/12/06	4065-06		
3	99-641-4047					6900					36.5	8	M16x1.5	-	-	-	31.4	AS.43102-08	5592/12/08	4065-08		
4	99-977-5009					20700					37.5	10	M18x1.5	-	-	-	35.5	AS.43102-10	5592/12/10	4065-10		
5	12-176-0386					6900					37.5	12	M20x1.5	-	-	-	37.3	AS.43102-12	5592/12/12	4065-12		
6	99-977-6626				DOUBLE ENDED UNION, PIPE, WALE, 28F	20700	-60 to +120	ALUMINIUM to ALLOY BS.1485	ANODISE DEF. 151 Type 2	40.0	14	M22x1.5	-	-	-	39.0	AS.43102-14	5592/12/14	4065-14	FIG 9		
7	99-977-6625				Bulkhead triang- ular flange	6900				40.0	15	M24x2.0	-	-	-	40.4	AS.43102-15	5592/12/15	4065-15			
8	99-977-6624					20700				41.5	16	M25x2.0	-	-	-	41.9	AS.43102-16	5592/12/16	4065-16			
9	99-977-6623					6900				41.5	18	M27x2.0	-	-	-	44.4	AS.43102-18	5592/12/18	4065-18			
10	99-977-6622					20700				43.0	20	M30x2.0	-	-	-	47.6	AS.43102-20	5592/12/20	4065-20			
11	12-176-0359					6900				43.5	22	M32x2.0	-	-	-	50.0	AS.43102-22	5592/12/22	4065-22			
12	99-977-6621					6900				45.0	28	M39x2.0	-	-	-	57.8	AS.43102-28	5592/12/28	4065-28			

TABLE I (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE			ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	MATERIAL	FINISH	DESCRIPTION DIMENSIONS - mm							NATIONAL STANDARD DRAWING/PART NUMBER	EQUIVALENT PART NUMBERS (See Note 5)			FIG NO.
		NAVY	ARMY	AIR FORCE						DIM.A LENGTH	SYSTEM PIPE O/D	THREAD BS.3643	END (S) B	SYSTEM PIPE O/D	THREAD BS.3643	END C	DIM.D ACROSS FLATS	DIM.E ACROSS FLANGE	EAG	PAN	
	4730-	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(u)	(t)	(u)
1	99-977- 6638						27600			27.5	6	M14x1.5			5	M12x1.0	17.0	-	5591/11/ 0605	4016-06-05	
2	99-977- 6639						6900			28.25	8	M16x1.5			5	M12x1.0	17.0	-	5591/11/ 0805	4016-08-05	
3	99-977- 6640						6900			29.0	8	M16x1.5			6	M14x1.5	17.0	-	5591/11/ 0806	4016-08-06	
4	99-977- 6641						27600			28.75	10	M18x1.5			5	M12x1.0	19.0	-	5591/11/ 1005	4016-10-05	
5	12-176- 0370						27600			29.5	10	M18x1.5			6	M14x1.5	19.0	-	5591/11/ 1006	4016-10-06	
6	99-977- 6642						6900			30.15	10	M18x1.5			8	M16x1.5	19.0	-	5591/11/ 1008	4016-10-08	
7	99-977- 6643					REDUCER, PIPE	6900	-60 to +200	STEEL BS.S154	CADMIUM PLATE DEP STAN 03-19		28.75	12	M20x1.5	5	M12x1.0	22.0	-	5591/11/ 1205	4016-12-05	FIG 10
8	99-977- 6644						6900			29.5	12	M20x1.5			6	M14x1.5	22.0	-	5591/11/ 1206	4016-12-06	
9	12-175- 4686						6900			30.15	12	M20x1.5			8	M16x1.5	22.0	-	5591/11/ 1208	4016-12-08	
10	99-977- 6645						6900			30.3	12	M20x1.5			10	M18x1.5	22.0	-	5591/11/ 1210	4016-12-10	
11	99-977- 6646						27600			30.25	14	M22x1.5			5	M12x1.0	24.0	-	5591/11/ 1405	4016-14-05	
12	99-977- 6647						27600			31.0	14	M22x1.5			6	M14x1.5	24.0	-	5591/11/ 1406	4016-14-06	
13	99-977- 6648						6900			31.65	14	M22x1.5			8	M16x1.5	24.0	-	5591/11/ 1408	4016-14-08	
14	99-977- 6649						27600			31.8	14	M22x1.5			10	M18x1.5	24.0	-	5591/11/ 1410	4016-14-10	

TABLE I (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT				ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	DESCRIPTION										EQUIVALENT PART NUMBERS (See Note 5)			FIG. NO.
		CODE		FINISH	MATERIAL				(j)	NOMINAL DIMENSIONS - mm						DIM.E ACROSS FLANGE	NATIONAL STANDARD DRAWING/PART NUMBER	EAG	PAN			
		NAVY	ARMY							AIR FORCE	DIM.A LENGTH	END(S) B	THREAD BS.3643	SYSTEM PIPE O/D	SYSTEM PIPE O/D					THREAD BS.3643	DIM.D ACROSS FLATS	
	4730-99-	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	
1	977-6650						6900				31.9	14	M22x1.5	12	M20x1.5	24.0	-	AS.43031-1412	5591/11/1412	4016-14-12		
2	977-6651						6900				30.25	15	M24x2.0	5	M12x1.0	27.0	-	AS.43031-1505	5591/11/1505	4016-15-05		
3	977-6652						6900				31.0	15	M24x2.0	6	M14x1.5	27.0	-	AS.43031-1506	5591/11/1506	4016-15-06		
4	977-6653						6900				31.65	15	M24x2.0	8	M16x1.5	27.0	-	AS.43031-1508	5591/11/1508	4016-15-08		
5	977-6654						6900				31.8	15	M24x2.0	10	M18x1.5	27.0	-	AS.43031-1510	5591/11/1510	4016-15-10		
6	977-6655						6900				31.9	15	M24x2.0	12	M20x1.5	27.0	-	AS.43031-1512	5591/11/1512	4016-15-12		
7	977-6656						6900	-60 to +200	STEEL BS.S154	CADMIUM PLATE DEF STAN 03-19	32.9	15	M24x2.0	14	M22x1.5	27.0	-	AS.43031-1514	5591/11/1514	4016-15-14		
8	977-6657				28F	REDUCER, PIPE	27600				31.25	16	M25x2.0	5	M12x1.0	27.0	-	AS.43031-1605	5591/11/1605	4016-16-05	FIG 10	
9	977-6658						27600				32.0	16	M25x2.0	6	M14x1.5	27.0	-	AS.43031-1606	5591/11/1606	4016-16-06		
10	977-6659						6900				32.65	16	M25x2.0	8	M16x1.5	27.0	-	AS.43031-1608	5591/11/1608	4016-16-08		
11	977-6660						27600				32.8	16	M25x2.0	10	M18x1.5	27.0	-	AS.43031-1610	5591/11/1610	4016-16-10		
12	977-6661						6900				32.9	16	M25x2.0	12	M20x1.5	27.0	-	AS.43031-1612	5591/11/1612	4016-16-12		
13	977-5011						27600				33.9	16	M25x2.0	14	M22x1.5	27.0	-	AS.43031-1614	5591/11/1614	4016-16-14		
14	977-6662						6900				33.9	16	M25x2.0	15	M24x2.0	27.0	-	AS.43031-1615	5591/11/1615	4016-16-15		
15	977-6663						6900				31.75	18	M27x2.0	5	M12x1.0	30.0	-	AS.43031-1805	5591/11/1805	4016-18-05		
16	977-6664						6900				32.5	18	M27x2.0	6	M14x1.5	30.0	-	AS.43031-1806	5591/11/1806	4016-18-06		

TABLE I (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE			ITEM NAME	MAXIMUM WORKING PRESSURE k P a	TEMP. RANGE °C	MATERIAL	FINISH	DESCRIPTION NOMINAL DIMENSIONS - mm										NATIONAL STANDARD DRAWING/PART NUMBER	EQUIVALENT PART NUMBERS (See Note 5)		FIG. NO.
		NAVY	ARMY	AIR FORCE						DIM. A LENGTH	END (S) B SYSTEM PIPE O/D	THREAD BS. 3643	END C SYSTEM PIPE O/D	THREAD BS. 3643	ACROSS FLATS	DIM. D ACROSS FLATS	DIM. E ACROSS FLANGE						
4730-99-	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)			
1	977-5726					6900				33.15	18	M27x2.0	8	M16x1.5	30.0	-		AS. 43031-1808	5591/11/1808	4016-18-08			
2	977-5727					6900				33.3	18	M27x2.0	10	M18x1.5	30.0	-		AS. 43031-1810	5591/11/1810	4016-18-10			
3	977-5728					6900				33.4	18	M27x2.0	12	M20x1.5	30.0	-		AS. 43031-1812	5591/11/1812	4016-18-12			
4	977-5729					6900				34.4	18	M27x2.0	14	M22x1.5	30.0	-		AS. 43031-1814	5591/11/1814	4016-18-14			
5	977-5730					6900				34.4	18	M27x2.0	15	M24x2.0	30.0	-		AS. 43031-1815	5591/11/1815	4016-18-15			
6	977-5962					6900				35.3	18	M27x2.0	16	M25x2.0	30.0	-		AS. 43031-1816	5591/11/1816	4016-18-16			
7	977-5963					27600				33.25	20	M30x2.0	5	M12x1.0	32.0	-		AS. 43031-2005	5591/11/2005	4016-20-05			
8	977-5964				28F	REDUCER, PIPE	27600 to +200	STEEL BS. S154	CADMIUM PLATE DEF STAN 03-19	34.0	20	M30x2.0	6	M14x1.5	32.0	-		AS. 43031-2006	5591/11/2006	4016-20-06	FIG 10		
9	977-5965					6900				34.65	20	M30x2.0	8	M16x1.5	32.0	-		AS. 43031-2008	5591/11/2008	4016-20-08			
10	977-5966					27600				34.8	20	M30x2.0	10	M18x1.5	32.0	-		AS. 43031-2010	5591/11/2010	4016-20-10			
11	971-5967					6900				34.9	20	M30x2.0	12	M20x1.5	32.0	-		AS. 43031-2012	5591/11/2012	4016-20-12			
12	977-5968					27600				35.9	20	M30x2.0	14	M22x1.5	32.0	-		AS. 43031-2014	5591/11/2014	4016-20-14			
13	977-5969					6900				35.9	20	M30x2.0	15	M24x2.0	32.0	-		AS. 43031-2015	5591/11/2015	4016-20-15			
14	977-5970					27600				36.8	20	M30x2.0	16	M25x2.0	32.0	-		AS. 43031-2016	5591/11/2016	4016-20-16			
15	977-5971					6900				36.8	20	M30x2.0	18	M27x2.0	32.0	-		AS. 43031-2018	5591/11/2018	4016-20-18			

TABLE I (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER 4730-99	SERVICE MANAGEMENT CODE			ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	DESCRIPTION										NATIONAL STANDARD DRAWING/PART NUMBER	EQUIVALENT PART NUMBERS (See Note 5)		FIG. NO.
		NAVY	ARMY	AIR FORCE				MATERIAL	FINISH	DIMENSIONS - mm						ACROSS FLATS	ACROSS FLANGE				
										DIM. A LENGTH	SYSTEM PIPE O/D	END (S) B THREAD BS. 3643	SYSTEM PIPE O/D	END C THREAD BS. 3643	DIM. D				DIM. E		
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)
1	977-5972						6900				33.75	22	M32x2.0	5	M12x1.0	36.0	-	AS.43031-2205	5591/11/2205	4016-22-05	
2	977-5973						6900				34.5	22	M32x2.0	6	M14x1.5	36.0	-	AS.43031-2206	5591/11/2206	4016-22-06	
3	977-5974						6900				35.15	22	M32x2.0	8	M16x1.5	36.0	-	AS.43031-2208	5591/11/2208	4016-22-08	
4	977-5975						6900				35.3	22	M32x2.0	10	M18x1.5	36.0	-	AS.43031-2210	5591/11/2210	4016-22-10	
5	977-5976					REDUCER, PIPE	6900	-60 to +200	STEEL BS.S154	CALCIUM PLATE DEF STAN 03-19	35.4	22	M32x2.0	12	M20x1.5	36.0	-	AS.43031-2212	5591/11/2212	4016-22-12	FIG 10
6	977-5977		See Note 3	See Note 3	28F		6900				36.4	22	M32x2.0	14	M22x1.5	36.0	-	AS.43031-2214	5591/11/2214	4016-22-14	
7	977-5978						6900				36.4	22	M32x2.0	15	M24x2.0	36.0	-	AS.43031-2215	5591/11/2215	4016-22-15	
8	977-5979						6900				37.3	22	M32x2.0	16	M25x2.0	36.0	-	AS.43031-2216	5591/11/2216	4016-22-16	
9	977-5980						6900				37.3	22	M32x2.0	18	M27x2.0	36.0	-	AS.43031-2218	5591/11/2218	4016-22-18	
10	977-5981						6900				36.5	28	M39x2.0	5	M12x1.0	41.0	-	AS.43031-2805	5591/11/2805	4016-28-05	

TABLE I (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE				ITEM NAME	MAXIMUM WORKING PRESSURE kPa	°C	MATERIAL	FINISH	DESCRIPTION NOMINAL DIMENSIONS - mm										EQUIVALENT PART NUMBERS (See Note 5)		FIG. NO.
		NAVY	ARMY	AIR FORCE	DIM.A LENGTH						END (S) B			END C			DIM.D ACROSS FLATS	DIM.E ACROSS FLANGE	NATION/L STANDARD DRAWING/PART NUMBER	EAG	PAN		
											SYSTEM PIPE O/D	THREAD BS.3643	SYSTEM PIPE O/D	THREAD BS.3643	SYSTEM PIPE O/D	THREAD BS.3643							
																						(L)	
4730-99-	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)			
1	977-5982					6900					28	M39x2.0	6	M14x1.5	41.0	-	AS.43031-2806	5591/11/2806	4016-28-06				
2	977-5983					6900					28	M39x2.0	8	M16x1.5	41.0	-	AS.43031-2808	5591/11/2808	4016-28-08				
3	977-5984					6900					28	M39x2.0	10	M18x1.5	41.0	-	AS.43031-2810	5591/11/2810	4016-28-10				
4	977-5985					6900					28	M39x2.0	12	M20x1.5	41.0	-	AS.43031-2812	5591/11/2812	4016-28-12				
5	977-5986				REDUCER, PIPE	6900	-60 to +200	STEEL BS. S154	CADMIUM PLATE DEF STAN 03-19		28	M39x2.0	14	M22x1.5	41.0	-	AS.43031-2814	5591/11/2814	4016-28-14	FIG 10			
6	977-5987					6900					28	M39x2.0	15	M24x2.0	41.0	-	AS.43031-2815	5591/11/2815	4016-28-15				
7	977-5988					6900					28	M39x2.0	16	M25x2.0	41.0	-	AS.43031-2816	5591/11/2816	4016-28-16				
8	977-5989					6900					28	M39x2.0	18	M27x2.0	41.0	-	AS.43031-2818	5591/11/2818	4016-28-18				
9	977-5990					6900					28	M39x2.0	22	M32x2.0	41.0	-	AS.43031-2822	5591/11/2822	4016-28-22				

TABLE I (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT			ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	MATERIAL	FINISH	DESCRIPTION										EQUIVALENT PART NUMBERS (See Note 5)		FIG NO.	
		NAVY	ARMY	AIR FORCE						NOMINAL DIMENSIONS - mm										NATIONAL STANDARD DRAWING/PART NUMBER	EAG		PAN
										DIM.A LENGTH	SYSTEM PIPE O/D	THREAD BS.3643	SYSTEM PIPE O/D	THREAD BS.3643	END C	DIM.D ACROSS FLATS	DIM.E ACROSS FLANGE	TR	S				
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)				
1	99-977-5012					20700					29.25	6	M14x1.5	5	M12x1.0	17.0	-	AS.43101-0605	5592/11/0605	4066-06-05			
2	99-977-6665					6900					30.0	8	M16x1.5	5	M12x1.0	17.0	-	AS.43101-0805	5592/11/0805	4066-08-05			
3	99-977-5013					6900					30.75	8	M16x1.5	6	M14x1.5	17.0	-	AS.43101-0806	5592/11/0806	4066-08-06			
4	99-977-6666					20700					30.5	10	M18x1.5	5	M12x1.0	19.0	-	AS.43101-1005	5592/11/1005	4066-10-05			
5	99-977-6667					20700					31.25	10	M18x1.5	6	M14x1.5	19.0	-	AS.43101-1006	5592/11/1006	4066-10-06			
6	99-977-5014					6900					31.90	10	M18x1.5	8	M16x1.5	19.0	-	AS.43101-1008	5592/11/1008	4066-10-08			
7	99-977-6668					6900					30.5	12	M20x1.5	5	M12x1.0	22.0	-	AS.43101-1205	5592/11/1205	4066-12-05			
8	99-977-6669				28F	REDUCER, PIPE	6900	ALUMINIUM to ALLOY BS.185	ANODISE DEF. 151 Type 2		31.25	12	M20x1.5	6	M14x1.5	22.0	-	AS.43101-1206	5592/11/1206	4066-12-06	FIG 10		
9	12-175-9976					6900					31.9	12	M20x1.5	8	M16x1.5	22.0	-	AS.43101-1208	5592/11/1208	4066-12-08			
10	99-977-6670					6900					32.05	12	M20x1.5	10	M18x1.5	22.0	-	AS.43101-1210	5592/11/1210	4066-12-10			
11	99-997-6671					20700					32.0	14	M22x1.5	5	M12x1.0	24.0	-	AS.43101-1405	5592/11/1405	4066-14-05			
12	99-977-6672					20700					32.75	14	M22x1.5	6	M14x1.5	24.0	-	AS.43101-1406	5592/11/1406	4066-14-06			
13	99-977-6673					6900					33.4	14	M22x1.5	8	M16x1.5	24.0	-	AS.43101-1408	5592/11/1408	4066-14-08			
14	99-977-6674					20700					33.55	14	M22x1.5	10	M18x1.5	24.0	-	AS.43101-1410	5592/11/1410	4066-14-10			
15	99-977-6675					6900					33.65	14	M22x1.5	12	M20x1.5	24.0	-	AS.43101-1412	5592/11/1412	4066-14-12			

TABLE I (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE				ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	MATERIAL	FINISH	DESCRIPTION										NATIONAL STANDARD DRAWING/PART NUMBER	EQUIVALENT PART NUMBERS (See Note 5)		FIG. NO.
		DIM.A		END(S)							NOMINAL DIMENSIONS - mm						DIM.D		DIM.E			EAG	PAN	
		LENGTH	SYSTEM PIPE O/D	SYSTEM PIPE O/D	THREAD BS.3643						SYSTEM PIPE O/D	THREAD BS.3643	END C	ACROSS FLATS	ACROSS FLANGE									
4730-99	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)				
1	977-5991					6900				32.0	15	M24x2.0	5	M12x1.0	27.0	-	AS.43101-1505	5592/11/1505	4066-15-05					
2	977-5992					6900				32.75	15	M24x2.0	6	M14x1.5	27.0	-	AS.43101-1506	5592/11/1506	4066-15-06					
3	977-5993					6900				33.4	15	M24x2.0	8	M16x1.5	27.0	-	AS.43101-1508	5592/11/1508	4066-15-08					
4	977-5994					6900				33.55	15	M24x2.0	10	M18x1.5	27.0	-	A2.43101-1510	5592/11/1510	4066-15-10					
5	977-5995					6900				33.65	15	M24x2.0	12	M20x1.5	27.0	-	AS.43101-1512	5592/11/1512	4066-15-12					
6	977-5996					6900				34.65	15	M24X2.0	14	M22x1.5	27.0	-	AS.43101-1514	5592/11/1514	4066-15-14					
7	977-5997					20700	-60 to +120	ALUMINIUM ALLOY BS.185	ANODISE DEF. 151 Type 2	33.0	16	M25x2.0	5	M12x1.0	27.0	-	AS.43101-1605	5592/11/1605	4066-16-05	FIG 10				
8	977-5998					20700				33.75	16	M25x2.0	6	M14x1.5	27.0	-	AS.43101-1606	5592/11/1606	4066-16-06					
9	977-5999					6900				34.4	16	M25x2.0	8	M16x1.5	27.0	-	AS.43101-1608	5592/11/1608	4066-16-08					
10	977-6000					20700				34.55	16	M25x2.0	10	M18x1.5	27.0	-	AS.43101-1610	5592/11/1610	4066-16-10					
11	977-6001					6900				34.65	16	M25x2.0	12	M20x1.5	27.0	-	AS.43101-1612	5592/11/1612	4066-16-12					
12	977-6002					20700				35.65	16	M25x2.0	14	M22x1.5	27.0	-	AS.43101-1614	5592/11/1614	4066-16-14					
13	977-6003					6900				35.65	16	M25x2.0	15	M24x2.0	27.0	-	AS.43101-1615	5592/11/1615	4066-16-15					
14	977-6004					6900				33.5	18	M27x2.0	5	M12x1.0	30.0	-	AS.43101-1805	5592/11/1805	4066-18-05					

TABLE I (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE				ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	MATERIAL	FINISH	DESCRIPTION								NATIONAL STANDARD DRAWING/PART NUMBER	EQUIVALENT PART NUMBERS (See Note 5)			FIG. NO.
		NAVY	ARMY	AIR FORCE	DIM. A LENGTH						DIM. B END (S) PIPE O/D	THREAD BS. 3643	DIMENSIONS - mm				ACROSS FLATS	DIM. E ACROSS FLANGE					
													SYSTEM PIPE O/D	THREAD BS. 3643	SYSTEM PIPE O/D	THREAD BS. 3643							
																				(k)	(l)	(m)	
4710-99-	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)		
1	977-6005					6900					34.25	18	M27x2.0	6	M14x1.5	30.0	-	AS.43101-1806	5592/11/1806	4066-18-06			
2	977-6006					6900					34.9	18	M27x2.0	8	M16x1.5	30.0	-	AS.43101-1808	5592/11/1808	4066-18-08			
3	977-6007					6900					35.05	18	M27x2.0	10	M18x1.5	30.0	-	AS.43101-1810	5592/11/1810	4066-18-10			
4	977-6008					6900					35.15	18	M27x2.0	12	M20x1.5	30.0	-	AS.43101-1812	5592/11/1812	4066-18-12			
5	977-6009					6900					36.15	18	M27x2.0	14	M22x1.5	30.0	-	AS.43101-1814	5592/11/1814	4006-18-14			
6	977-6010					6900					36.15	18	M27x2.0	15	M24x2.0	30.0	-	AS.43101-1815	5592/11/1815	4066-18-15			
7	977-6011					6900	-60 to +120	ALUMINIUM ALLOY BS.1485	ANODISE DEF. 151 Type 2		37.05	18	M27x2.0	16	M25x2.0	30.0	-	AS.43101-1816	5592/11/1816	4066-18-16	FIG 10		
8	977-6012					20700					35.0	20	M30x2.0	5	M12x1.0	32.0	-	AS.43101-2005	5592/11/2005	4066-20-05			
9	977-6013					20700					35.75	20	M30x2.0	6	M14x1.5	32.0	-	AS.43101-2006	5592/11/2006	4066-20-06			
10	977-6014					6900					36.4	20	M30x2.0	8	M16x1.5	32.0	-	AS.43101-2008	5592/11/2008	4066-20-08			
11	977-6015					20700					36.55	20	M30x2.0	10	M18x1.5	32.0	-	AS.43101-2010	5592/11/2010	4066-20-10			
12	977-6016					6900					36.65	20	M30x2.0	12	M20x1.5	32.0	-	AS.43101-2012	5592/11/2012	4066-20-12			
13	977-6017					20700					37.65	20	M30x2.0	14	M22x1.5	32.0	-	AS.43101-2014	5592/11/2014	4066-20-14			
14	977-6018					6900					37.65	20	M30x2.0	15	M24x2.0	32.0	-	AS.43101-2015	5592/11/2015	4066-20-15			

TABLE 1 (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE			ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	MATERIAL	FINISH	DESCRIPTION DIMENSIONS - mm										EQUIVALENT PART NUMBERS (See Note 5)			FIG. NO.		
		NAVY	ARMY	AIR FORCE						DIM. A LENGTH	ENDS (S) B			NOMINAL			DIMENSIONS - mm				NATIONAL STANDARD DRAWING/PART NUMBER	EAG		PAN	
											SYSTEM PIPE O/D	THREAD BS.3643	SYSTEM PIPE O/D	THREAD BS.3643	END C	DIM. D ACROSS FLATS	DIM. E ACROSS FLANGE	EAG	PAN						
																			(a)	(b)				(c)	(d)
1	977-6019					20700					38.55	20	M30x2.0	16	M25x2.0	32.0	-	AS.43101-2016	5592/11/2016	4066-20-16					
2	977-6020					6900					38.55	20	M30x2.0	18	M27x2.0	32.0	-	AS.43101-2018	5592/11/2018	4066-20-18					
3	977-6021					6900					35.5	22	M32x2.0	5	M12x1.0	36.0	-	AS.43101-2205	5592/11/2205	4066-22-05					
4	977-6022					6900					36.25	22	M32x2.0	6	M14x1.5	36.0	-	AS.43101-2206	5592/11/2206	4066-22-06					
5	977-6023					6900					36.9	22	M32x2.0	8	M16x1.5	36.0	-	AS.43101-2208	5592/11/2208	4066-22-08					
6	977-6024				REDUCER, PIPE	6900	-60 to +120	ALUMINIUM ALLOY BS.1485	ANODISE DEF. 151 Type 2		37.05	22	M32x2.0	10	M18x1.5	36.0	-	AS.43101-2210	5592/11/2210	4066-22-10		FIG 10			
7	977-6025					6900					37.15	22	M32x2.0	12	M20x1.5	36.0	-	AS.43101-2212	5592/11/2212	4066-22-12					
8	977-6026					6900					38.15	22	M32x2.0	14	M22x1.5	36.0	-	AS.43101-2214	5592/11/2214	4066-22-14					
9	977-6027					6900					38.15	22	M32x2.0	15	M24x2.0	36.0	-	AS.43101-2215	5592/11/2215	4066-22-15					
10	977-6028					6900					39.05	22	M32x2.0	16	M25x2.0	36.0	-	AS.43101-2216	5592/11/2216	4066-22-16					
11	977-6029					6900					39.05	22	M32x2.0	18	M27x2.0	36.0	-	AS.43101-2218	5592/11/2218	4066-22-18					
12	977-6030					6900					38.25	28	M39x2.0	5	M12x1.0	41.0	-	AS.43101-2805	5592/11/2805	4066-28-05					

TABLE I (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE				ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	MATERIAL	FINISH	DESCRIPTION NOMINAL DIMENSIONS - mm										NATIONAL STANDARD DRAWING/PART NUMBER	EQUIVALENT PART NUMBERS (See Note 5)		FIG. NO.
		NAVY	ARMY	AIR FORCE							DIM. A LENGTH	SYSTEM PIPE O/D	THREAD BS. 3643	SYSTEM PIPE O/D	THREAD BS. 3645	ACROSS FLATS	DIM. D	DIM. E ACROSS FLANGE						
																				(a)		(b)	(c)	
1	977-6031						6900					39.0	28	M39x2.0	6	M14x1.5	41.0	-	AS.43101-2806	5592/11/2806	4066-28-06			
2	977-6032						6900					39.65	28	M39x2.0	8	M16x1.5	41.0	-	AS.43101-2808	5592/11/2808	4066-28-08			
3	977-6033						6900					39.8	28	M39x2.0	10	M18x1.5	41.0	-	AS.43101-2810	5592/11/2810	4066-28-10			
4	977-6034						6900					39.9	28	M39x2.0	12	M20x1.5	41.0	-	AS.43101-2812	5592/11/2812	4066-28-12			
5	977-6035				28F	REDUCER, PIPE	6900	-60 to +120	ALUMINIUM ALLOY BS.185	ANODISE DEF. 151 Type 2		40.9	28	M39x2.0	14	M22x1.5	41.0	-	AS.43101-2814	5592/11/2814	4066-28-14	FIG 10		
6	977-6036						6900					40.9	28	M39x2.0	15	M24x2.0	41.0	-	AS.43101-2815	5592/11/2815	4066-28-15			
7	977-6037						6900					41.8	28	M39x2.0	16	M25x2.0	41.0	-	AS.43101-2816	5592/11/2816	4066-28-16			
8	977-6038						6900					41.8	28	M39x2.0	18	M27x2.0	41.0	-	AS.43101-2818	5592/11/2818	4066-28-18			
9	977-6039						6900					42.6	28	M39x2.0	22	M32x2.0	41.0	-	AS.43101-2822	5592/11/2822	4066-28-22			

TABLE 1 (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE				ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	DESCRIPTION										EQUIVALENT PART NUMBERS (See Note 5)		FIG. NO.		
		NAVY	ARMY	CODE					MATERIAL	FINISH	NOMINAL DIMENSIONS - mm						NATIONAL STANDARD DRAWING/PART NUMBER	EAG	PAN				
											DIM.A LENGTH	SYSTEM PIPE O/D	END(S) B	THREAD BS. 3643	SYSTEM PIPE O/D	THREAD BS. 3643				DIM. C		DIM. D ACROSS FLATS	DIM. E ACROSS FLANGE
4730-	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)		
1	12-173-8893					27600					43.50	5	M12x1.0	-	-	14.0	-	AS.46733-05	-	4084-05			
2	12-173-8895					27600					44.20	6	M14x1.5	-	-	17.0	-	AS.46733-06	-	4084-06			
3	12-170-1593					6900					45.75	8	M16x1.5	-	-	17.0	-	AS.46733-08	-	4084-08			
4	12-170-1595					27600					46.60	10	M18x1.5	-	-	19.0	-	AS.46733-10	-	4084-10			
5	12-176-0397					6900					47.10	12	M20x1.5	-	-	22.0	-	AS.46733-12	-	4084-12			
6	99-977-6676				ADAPTOR, STRAIGHT, PIPE TO BOSS	27600	-60 to +200	STEEL	CADMIUM PLATE DEF STN 03-19		50.50	14	M22x1.5	-	-	24.0	-	AS.46733-14	-	4084-14	FIG 11		
7	99-977-5015					6900					50.50	15	M24x2.0	-	-	27.0	-	AS.46733-15	-	4084-15			
8	99-977-5016					27600					52.75	16	M25x2.0	-	-	27.0	-	AS.46733-16	-	4084-16			
9	99-977-2924					6900					52.75	18	M27x2.0	-	-	30.0	-	AS.46733-18	-	4084-18			
10	99-977-6677					27600					57.00	20	M30x2.0	-	-	32.0	-	AS.46733-20	-	4084-20			
11	12-176-0385					6900					57.00	22	M32x2.0	-	-	36.0	-	AS.46733-22	-	4084-22			
12	99-977-2926					6900					58.50	28	M39x2.0	-	-	41.0	-	AS.46733-28	-	4084-28			

TABLE 1 (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER 4730-99-	SERVICE MANAGEMENT CODE			ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	DESCRIPTION										EQUIVALENT PART NUMBERS (See Note 5)		FIG. NO.	
		NAVY	ARMY	AIR FORCE				MATERIAL	FINISH	DIM. A LENGTH	NOMINAL DIMENSIONS - mm						NATIONAL STANDARD DRAWING/PART NUMBER	EAG	PAN		
											SYSTEM PIPE O/D	END(S) PIPE O/D	B	C		DIM. D ACROSS FLATS					DIM. E ACROSS FLANGE
														THREAD BS. 3643	SYSTEM PIPE O/D						
1	977-2914					27600					(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)
2	977-6678					6900					43.2	6	M14x1.5	5	M12x1.0	14.0	-	AS.43191-0605	-	4135-06-05	
3	977-2915					6900					44.4	8	M16x1.5	5	M12x1.0	17.0	-	AS.43191-0805	-	4135-08-05	
4	977-6679					27600					45.1	8	M16x1.5	6	M14x1.5	17.0	-	AS.43191-0806	-	4135-08-06	
5	977-6680					27600					44.8	10	M18x1.5	5	M12x1.0	17.0	-	AS.43191-1005	-	4135-10-05	
6	977-6681				ADAPTOR, STRAIGHT, PIPE TO BOSS, Reducing	6900 -60 to +200			CADMIUM PLATE DEF STAN 03-19		45.5	10	M18x1.5	6	M14x1.5	17.0	-	AS.43191-1006	-	4135-10-06	
7	977-6682					6900			STEEL		46.2	10	M18x1.5	8	M16x1.5	17.0	-	AS.43191-1008	-	4135-10-08	FIG 12
8	977-6683					6900					45.5	12	M20x1.5	5	M12x1.0	19.0	-	AS.43191-1205	-	4135-12-05	
9	977-2916					6900					46.2	12	M20x1.5	6	M14x1.5	19.0	-	AS.43191-1206	-	4135-12-06	
10	977-2917					6900					46.9	12	M20x1.5	8	M16x1.5	19.0	-	AS.43191-1208	-	4135-12-08	
11	977-6684					27600					47.0	12	M20x1.5	10	M18x1.5	19.0	-	AS.43191-1210	-	4135-12-10	
12	977-6685					27600					47.4	14	M22x1.5	5	M12x1.0	22.0	-	AS.43191-1405	-	4135-14-05	
						27600					48.1	14	M22x1.5	6	M14x1.5	22.0	-	AS.43191-1406	-	4135-14-06	

TABLE I(C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE			ITEM NAME	MAXIMUM WORKING PRESSURE k p a	TEMP. RANGE °C	MATERIAL	FINISH	DESCRIPTION NOMINAL DIMENSIONS - mm										EQUIVALENT PART NUMBERS (See Note 5)		FIG. NO.
			NAVY	ARMY						AIR FORCE	DIM. A LENGTH	END (S) B		END C		DIM. D ACROSS FLATS	DIM. E ACROSS FLANGE	NATIONAL STANDARD DRAWING/PART NUMBER	EAG	PAN		
												SYSTEM PIPE O/D	THREAD BS. 3643	SYSTEM PIPE O/D	THREAD BS. 3643							
	4730-99-	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	
1	977- 6686						6900				48.8	14	M22x1.5	8	M16x1.5	22.0	-	AS.43191- 1408	-	4135-14-08		
2	977- 6687						27600				48.9	14	M22x1.5	10	M18x1.5	22.0	-	AS.43191- 1410	-	4135-14-10		
3	977- 2918						6900				49.0	14	M22x1.5	12	M20x1.5	22.0	-	AS.43191- 1412	-	4135-14-12		
4	977- 6688						6900				47.9	15	M24x2.0	5	M12x1.0	24.0	-	AS.43191- 1505	-	4135-15-05		
5	977- 6689						6900				48.6	15	M24x2.0	6	M14x1.5	24.0	-	AS.43191- 1506	-	4135-15-06		
6	977- 6690					ADAPTOR, STRAIGHT PIPE TO BOSS, Reducing	6900	-60 to +200	STEEL	CADMIUM PLATE DEF STAN 03-19	49.3	15	M24x2.0	8	M16x1.5	24.0	-	AS.43191- 1508	-	4135-15-08	FIG. 12	
7	977- 6691		See Note 3		28F		6900				49.4	15	M24x2.0	10	M18x1.5	24.0	-	AS.43191- 1510	-	4135-15-10		
8	977- 2919						6900				49.5	15	M24x2.0	12	M20x1.5	24.0	-	AS.43191- 1512	-	4135-15-12		
9	977- 6692						6900				50.5	15	M24x2.0	14	M22x1.5	24.0	-	AS.43191- 1514	-	4135-15-14		
10	977- 6693						27600				49.2	16	M25x2.0	5	M12x1.0	27.0	-	AS.43191- 1605	-	4135-16-05		
11	977- 6694						27600				49.9	16	M25x2.0	6	M14x1.5	27.0	-	AS.43191- 1606	-	4135-16-06		
12	977- 6695						6900				50.6	16	M25x2.0	8	M16x1.5	27.0	-	AS.43191- 1608	-	4135-16-08		

TABLE I(C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT			ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	MATERIAL	FINISH	DESCRIPTION										NATIONAL STANDARD DRAWING/PART NUMBER	EQUIVALENT PART NUMBERS (See Note 5)		FIG NO.
		CODE								NOMINAL DIMENSIONS - mm							EAG	PAN					
		NAVY	ARMY	AIR FORCE						DIM.A LENGTH	END(S)		B	END C		DIM.D ACROSS FLATS			DIM.E ACROSS FLANGE				
											SYSTEM PIPE O/D	THREAD BS.3643		SYSTEM PIPE O/D	THREAD BS.3643								
4730-99-	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)			
1	977-6696									50.7	16	M25x2.0	10	M18x1.5	27.0	-	AS.43191-1610	-	4135-16-10				
2	977-2920									50.8	16	M25x2.0	12	M20x1.5	27.0	-	AS.43191-1612	-	4135-16-12				
3	977-6697									51.8	16	M25x2.0	14	M22x1.5	27.0	-	AS.43191-1614	-	4135-16-14				
4	977-6698									51.8	16	M25x2.0	15	M24x2.0	27.0	-	AS.43191-1615	-	4135-16-15				
5	977-6699									49.3	18	M27x2.0	5	M12x1.0	27.0	-	AS.43191-1805	-	4135-18-05				
6	977-6700				ADAPTOR, STRAIGHT, PIPE TO BOSS, Reducing	6900	-60 to +200	STEEL	CADMIUM PLATE DEF STAN 03-19	50.0	18	M27x2.0	6	M14x1.5	27.0	-	AS.43191-1806	-	4135-18-06	FIG 12			
7	977-6701	See Note 3		28F		6900				50.7	18	M27x2.0	8	M16x1.5	27.0	-	AS.43191-1808	-	4135-18-08				
8	977-6702					6900				50.8	18	M27x2.0	10	M18x1.5	27.0	-	AS.43191-1810	-	4135-18-10				
9	977-6703					6900				50.9	18	M27x2.0	12	M20x1.5	27.0	-	AS.43191-1812	-	4135-18-12				
10	977-2921					6900				51.9	18	M27x2.0	14	M22x1.5	27.0	-	AS.43191-1814	-	4135-18-14				
11	977-2922					6900				51.9	18	M27x2.0	15	M24x2.0	27.0	-	AS.43191-1815	-	4135-18-15				
12	977-2923					6900				52.8	18	M27x2.0	16	M25x2.0	27.0	-	AS.43191-1816	-	4135-18-16				

TABLE 1 (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE			ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	MATERIAL	FINISH	DESCRIPTION NOMINAL DIMENSIONS - mm										EQUIVALENT PART NUMBERS (See Note 5)		FIG. NO.
		NAVY	ARMY	AIR FORCE																EAG	PAN	
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)
1	977-6704						27600					53.3	20	M30x2.0	5	M12x1.0	30.0	-	AS.43191-2005	-	4135-20-05	
2	977-6705						27600					54.0	20	M30x2.0	6	M14x1.5	30.0	-	AS.43191-2006	-	4135-20-06	
3	977-6706						6900					54.7	20	M30x2.0	8	M16x1.5	30.0	-	AS.43191-2008	-	4135-20-08	
4	977-6707						27600					54.8	20	M30x2.0	10	M18x1.5	30.0	-	AS.43191-2010	-	4135-20-10	
5	977-6708						6900					54.9	20	M30x2.0	12	M20x1.5	30.0	-	AS.43191-2012	-	4135-20-12	
6	977-6709				28F	ADAPTOR, STRAIGHT, PIPE TO BOSS, Reducing	27600 to 4200	STEEL	CADMIUM PLATE DEF STAN 03-19			55.9	20	M30x2.0	14	M22x1.5	30.0	-	AS.43191-2014	-	4135-20-14	FIG 12
7	977-6710						6900					55.9	20	M30x2.0	15	M24x2.0	30.0	-	AS.43191-2015	-	4135-20-15	
8	977-6711						27600					56.8	20	M30x2.0	16	M25x2.0	30.0	-	AS.43191-2016	-	4135-20-16	
9	977-2925						6900					56.8	20	M30x2.0	18	M27x2.0	30.0	-	AS.43191-2018	-	4135-20-18	
10	977-6712						6900					53.8	22	M32x2.0	5	M12x1.0	32.0	-	AS.43191-2205	-	4135-22-05	
11	977-6713						6900					54.5	22	M32x2.0	6	M14x1.5	32.0	-	AS.43191-2206	-	4135-22-06	

TABLE I (C) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE			ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	MATERIAL	FINISH	DESCRIPTION										EQUIVALENT PART NUMBERS (See Note 5)		FIG. NO.
		NAVY	ARMY	AIR FORCE						DIM.A LENGTH	END (S) B		NOMINAL DIMENSION - mm			DIM.D ACROSS FLATS	DIM.E ACROSS FLANGE	NATIONAL STANDARD DRAWING/PART NUMBER	EAG	PAN		
											SYSTEM PIPE O/D	THREAD BS. 3643	SYSTEM PIPE O/D	THREAD BS. 3643	END C							
																					(k)	
4730-99-	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)									(u)				
1	977-6040					6900					55.2	22	M32x2.0	8	M16x1.5	32.0	-	AS.43191-2208	-	4135-22-08		
2	977-6041					6900					55.3	22	M32x2.0	10	M18x1.5	32.0	-	AS.43191-2210	-	4135-22-10		
3	977-6042					6900					55.4	22	M32x2.0	12	M20x1.5	32.0	-	AS.43191-2212	-	4135-22-12		
4	977-6043					6900					56.4	22	M32x2.0	14	M22x1.5	32.0	-	AS.43191-2214	-	4135-22-14		
5	977-6044					6900					56.4	22	M32x2.0	15	M24x2.0	32.0	-	AS.43191-2215	-	4135-22-15		
6	977-6045			28F	ADAPTOR, STRAIGHT, PIPE TO BOSS, Reducing	6900	-60 to +200	STEEL	CADMIUM PLATE DEF STAN 03-19		57.3	22	M32x2.0	16	M25x2.0	32.0	-	AS.43191-2216	-	4135-22-16 FIG 12		
7	977-6046					6900					57.3	22	M32x2.0	18	M27x2.0	32.0	-	AS.43191-2218	-	4135-22-18		
8	977-6047					6900					55.8	28	M39x2.0	5	M12x1.0	36.0	-	AS.43191-2805	-	4135-28-05		
9	977-6048					6900					56.5	28	M39x2.0	6	M14x1.5	36.0	-	AS.43191-2806	-	4135-28-06		
10	977-6049					6900					57.2	28	M39x2.0	8	M16x1.5	36.0	-	AS.43191-2808	-	4135-28-08		
11	977-6050					6900					57.3	28	M39x2.0	10	M18x1.5	36.0	-	AS.43191-2810	-	4135-28-10		

TABLE I(C) - CONTINUED

PAGES ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE				ITEM NAME	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	MATERIAL	FINISH	DESCRIPTION NOMINAL DIMENSIONS - mm										EQUIVALENT PART NUMBERS (See Note 5)		FIG. NO.
		NAVY	ARMY	AIR FORCE	DIM. A LENGTH						END (S) B SYSTEM PIPE O/D	THREAD BS. 3643	SYSTEM PIPE O/D	END C THREAD BS. 3643	DIM. D ACROSS FLATS	DIM. E ACROSS FLANGE	NATIONAL STANDARD DRAWING/PART NUMBER	EAG	PAN				
	4730-99-	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)		
1	977-6051						6900				57.4	28	M39x2.0	12	M20x1.5	36.0	-	AS.43191-2812	-	4135-28-12			
2	977-6052						6900				58.4	28	M39x2.0	14	M22x1.5	36.0	-	AS.43191-2814	-	4135-28-14			
3	977-6053					ADAPTOR, STRAIGHT, PIPE TO BOSS, Reducing	6900	-60 to +200	STEEL	CADMIUM PLATE DEF STAN 03-19	58.4	28	M39x2.0	15	M24x2.0	36.0	-	AS.43191-2815	-	4135-28-15	FIG 12		
4	977-6054						6900				59.3	28	M39x2.0	16	M25x2.0	36.0	-	AS.43191-2816	-	4135-28-16			
5	977-6055						6900				59.3	28	M39x2.0	18	M27x2.0	36.0	-	AS.43191-2818	-	4135-28-18			
6	977-6056						6900				60.1	28	M39x2.0	22	M32x2.0	36.0	-	AS.43191-2822	-	4135-28-22			

TABLE 1(D)
STANDARD RANGE
ELEMS, PIPES AND ADAPTOR, ELBOW, PIPE

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT				ITEM NAME	SYSTEM PIPE OUTSIDE DIAMETER mm	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	DESCRIPTION								EQUIVALENT PART NUMBERS (See Note 5)			FIG. NO.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
		NAVY	ARMY	CODE						MATERIAL	FINISH	NOMINAL DIMENSIONS - mm					NATIONAL STANDARD DRAWING/PART NUMBER	EAG	PAN																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
				AIR FORCE	28F							28F	ELBON, PIPE, 90°	14	15	16				18		20	22	28																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
																									(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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TABLE I (D) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE			ITEM NAME	SYSTEM PIPE OUTSIDE DIAMETER	MAXIMUM WORKING PRESSURE	TEMP. RANGE	MATERIAL	FINISH	DESCRIPTION						NATIONAL STANDARD DRAWING/PART NUMBER	EQUIVALENT PART NUMBERS (See Note 5)		FIG. NO.
		NAV	ARMY	AIR FORCE							LENGTH	THREAD BS.3643	NOMINAL DIMENSIONS - mm			ACROSS FLATS				
													A	B	ØC			D	E	
4730-99-	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)	(k)	(l)	(n)	(o)	(p)	(q)	(r)	(s)	(t)		
1	977-5018					5	20700				20.0	-	M12x1.0	14.0	-	AS-43180-05	-	-		
2	977-6722					6	20700				22.0	-	M14x1.5	17.0	-	AS-43180-06	-	-		
3	977-5019					8	6900				23.5	-	M16x1.5	17.0	-	AS-43180-08	-	-		
4	977-5020					10	20700				25.0	-	M18x1.5	19.0	-	AS-43180-10	-	-		
5	977-5021					12	6900				26.0	-	M20x1.5	19.0	-	AS-43180-12	-	-		
6	977-6723				ELBOW, PIPE, 90°	14	20700	-60 to +120	ALUMINIUM TO ALLOY BS.L85	ANODISE TO DEF 151 TYPE 2	27.5	-	M22x1.5	24.0	-	AS-43180-14	-	FIG 13		
7	977-6724					15	6900				28.5	-	M24x2.0	22.0	-	AS-43180-15	-	-		
8	977-6725					16	20700				30.0	-	M25x2.0	27.0	-	AS-43180-16	-	-		
9	977-6726					18	6900				31.0	-	M27x2.0	27.0	-	AS-43180-18	-	-		
10	977-6727					20	20700				33.5	-	M30x2.0	32.0	-	AS-43180-20	-	-		
11	977-6728					22	6900				34.5	-	M32x2.0	30.0	-	AS-43180-22	-	-		
12	977-6729					28	6900				40.0	-	M39x2.0	36.0	-	AS-43180-28	-	-		

TABLE I (D) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE				ITEM NAME	SYSTEM PIPE OUTSIDE DIAMETER	MAXIMUM WORKING PRESSURE	TEMP. RANGE	MATERIAL	FINISH	DESCRIPTION										NATIONAL STANDARD DRAWING/PART NUMBER	EQUIVALENT PART NUMBERS (See Note 5)			FIG. NO.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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TABLE I (D) - CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT				ITEM NAME	SYSTEM PIPE OUTSIDE DIAMETER mm	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	DESCRIPTION							EQUIVALENT PART NUMBERS (See Note 5)			FIG. NO.	
		CODE		MATERIAL	FINISH					NOMINAL DIMENSIONS - mm				NATIONAL STANDARD DRAWING/PART NUMBER	EAG	PAN					
		NAVY	ARMY							AIR FORCE	LENGTH	THREAD BS.3643	ACROSS FLATS				(t)	(s)			
	4730-99	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
1	977- 6737						5	20700					21.0	43.0	M12x1.0	14.0 (12.0)	14.0	AS.43184-05	-	-	
2	977- 5023						6	20700					24.0	47.0	M14x1.5	17.0 (14.0)	17.0	AS.43184-06	-	-	
3	977- 5024						8	6900					25.0	48.5	M16x1.5	17.0	19.0	AS.43184-08	-	-	
4	977- 5025						10	20700					27.0	50.0	M18x1.5	19.0 (17.0)	22.0	AS.43184-10	-	-	
5	977- 6738						12	6900					28.0	51.0	M20x1.5	19.0	24.0	AS.43184-12	-	-	
6	977- 5026						14	20700	-60 to +120	ALUMINIUM TO ALLOY BS.185	ANODISE TO DEF 151 TYPE 2		30.0	53.5	M22x1.5	24.0 (22.0)	27.0	AS.43184-14	-	-	FIG 14
7	977- 5027						15	6900					30.0	57.0	M24x2.0	22.0	27.0	AS.43184-15	-	-	
8	977- 6739						16	20700					33.0	59.0	M25x2.0	27.0 (24.0)	30.0	AS.43184-16	-	-	
9	977- 6740						18	6900					34.0	59.5	M27x2.0	27.0	32.0	AS.43184-18	-	-	
10	977- 6741						20	20700					37.0	62.0	M30x2.0	32.0 (30.0)	36.0	AS.43184-20	-	-	
11	977- 6742						22	6900					37.0	63.0	M32x2.0	30.0	36.0	AS.43184-22	-	-	
12	977- 6743						28	6900					44.0	70.0	M39x2.0	36.0	46.0	AS.43184-28	-	-	

NOTE: - Dimensions in brackets apply to parts manufactured from bar stock. Otherwise, dimensions apply to parts manufactured from both forging and bar stock.

TABLE I (D) -- CONTINUED

PAGE ITEM NO.	NATO STOCK NUMBER	SERVICE MANAGEMENT CODE				ITEM NAME	SYSTEM PIPE OUTSIDE DIAMETER mm	MAXIMUM WORKING PRESSURE kPa	TEMP. RANGE °C	DESCRIPTION										NATIONAL STANDARD DRAWING/PART NUMBER	EQUIVALENT PART NUMBERS (See Note 5)			FIG NO.
		NAVY	ARMY	AIR FORCE	MATERIAL					FINISH	LENGTH				THREAD BS. 3643		NOMINAL DIMENSIONS - mm				EAG	PAN		
											A	B	C	D	E	F	G	H	I				J	
4730-	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)				
1	12-173-8890					5	27600					20.0	35.3	M12x1.0	12.0	14.0	AS.46739-05	-	4141-05					
2	12-173-8880					6	27600					22.0	36.0	M14x1.5	12.0	17.0	AS.46739-06	-	4141-06					
3	12-170-1597					8	6900					23.5	37.5	M16x1.5	14.0	17.0	AS.46739-08	-	4141-08					
4	12-170-1596					10	27600					25.0	38.5	M18x1.5	17.0	19.0	AS.46739-10	-	4141-10					
5	12-176-0395					12	6900					26.0	40.0	M20x1.5	19.0	22.0	AS.46739-12	-	4141-12					
6	12-176-0363					14	27600					27.5	41.8	M22x1.5	22.0	24.0	AS.46739-14	-	4141-14					
7	12-176-0417					15	6900					28.5	42.3	M24x2.0	22.0	27.0	AS.46739-15	-	4141-15	FIG 15				
8	99-977-5028					16	27600					30.0	45.0	M25x2.0	22.0	27.0	AS.46739-16	-	4141-16					
9	99-977-6744					18	6900					31.0	46.0	M27x2.0	24.0	30.0	AS.46739-18	-	4141-18					
10	99-977-6745					20	27600					33.5	50.0	M30x2.0	27.0	32.0	AS.46739-20	-	4141-20					
11	12-176-0421					22	6900					35.5	51.0	M32x2.0	30.0	36.0	AS.46739-22	-	4141-22					
12	99-977-5029					28	6900					40.0	57.0	M39x2.0	36.0	41.0	AS.46739-28	-	4141-28					