

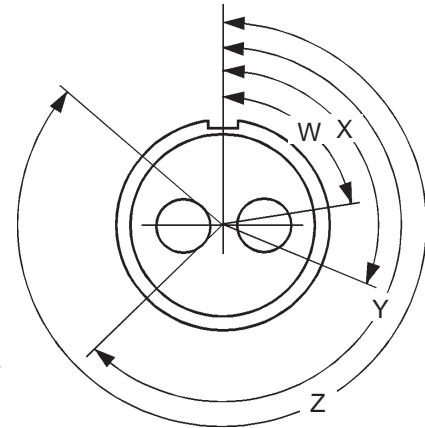
TABLE I

Shell Size	A Ref	B Max	C Max	D Thread Class 2A
08S	.500 (12.7)	1.750 (44.5)	.844 (21.4)	1/2-28 UNEF
10SL	.625 (15.9)	1.750 (44.5)	.969 (24.6)	5/8-24 UNEF
12S	.750 (19.1)	1.750 (44.5)	1.062 (27.0)	3/4-20 UNEF
12	.750 (19.1)	2.125 (54.0)	1.062 (27.0)	3/4-20 UNEF
14S	.875 (22.2)	1.750 (44.5)	1.156 (29.4)	7/8-20 UNEF
14	.875 (22.2)	2.125 (54.0)	1.156 (29.4)	7/8-20 UNEF
16S	1.000 (25.4)	1.750 (44.5)	1.250 (31.8)	1 -20 UNEF
16	1.000 (25.4)	2.125 (54.0)	1.250 (31.8)	1 -20 UNEF
18	1.125 (28.6)	2.125 (54.0)	1.344 (34.1)	1 1/8-18 UNEF
20	1.250 (31.8)	2.125 (54.0)	1.469 (37.3)	1 1/4-18 UNEF
22	1.375 (34.9)	2.125 (54.0)	1.594 (40.5)	1 3/8-18 UNEF
24	1.500 (38.1)	2.125 (54.0)	1.719 (43.7)	1 1/2-18 UNEF
28	1.750 (44.5)	2.125 (54.0)	1.969 (50.0)	1 3/4-18 UNS
32	2.000 (50.8)	2.125 (54.0)	2.219 (56.4)	2 -18 UNEF
36	2.250 (57.2)	2.125 (54.0)	2.469 (62.7)	2 1/4-16 UNS
40	2.500 (63.5)	2.125 (54.0)	2.719 (69.1)	2 1/2-16 UN
44	2.750 (69.9)	2.125 (54.0)	2.969 (75.4)	2 3/4-16 UN
48	3.000 (76.2)	2.125 (54.0)	3.219 (81.8)	3 -16 UN

Metric Dimensions (mm) are indicated in parentheses.

Insert Arrangements											
Shell Size	Insert Arrangement Dash No.	Contact Size: Quantity					Service Rating	Alternate Keyway Positions (Degrees)			
		16	12	8	4	0		W	X	Y	Z
08S	8S-1	1					A	-	-	-	-
10S	10S-2	1					A	-	-	-	-
10SL	10SL-3	3					A	-	-	-	-
	10SL-4	2					A	-	-	-	-
12S	12S-3	2					A	70	145	215	290
14S	14S-2	4					Inst.	-	120	240	-
	14S-5	5					Inst.	-	110	-	-
	14S-6	6					Inst.	-	-	-	-
	14S-7	3					A	90	180	270	-
	14S-9	2					A	70	145	215	290
16	16-7	2		1			A	80	110	250	280
	16-9	2	2				A	35	110	250	325
	16-10		3				A	90	180	270	-
	16-11		2				A	35	110	250	325
16S	16S-1	7					A	80	-	-	280
	16S-4	2					D	35	110	250	325
	16S-8	5					A	-	170	265	-
18	18-1	10					Inst.	70	145	215	290
	18-4	4					D	35	110	250	325
	18-8	7	1				A	70	-	-	290
	18-9	5	2				Inst.	80	110	250	280
	18-10		4				A	-	120	240	-
	18-11		5				A	-	170	265	-
	18-12	6					A	80	-	-	280
	18-22	3					D	70	145	215	290
20	20-4		4				D	45	110	250	-
	20-7	8					A	80	110	250	280
	20-14		3	2			A	80	110	250	280
	20-15		7				A	80	-	-	280
	20-16	7	2				A	80	110	250	280
	20-18	6	3				A	35	110	250	325
	20-2					1	D	-	-	-	-
	20-27	14					A	35	110	250	325
20-29	17					A	80	-	-	280	
22	22-2			3			D	70	145	215	290
	22-22			4			A	-	110	250	-
	22-5	4	2				D	35	110	250	325
	22-13	1	4				A	35	110	250	325
	22-14	19					A	80	-	-	280
	22-18	8					A	80	110	250	280
	22-19	14					A	80	110	250	280
24	24-4	3				1	D	80	110	250	280
	24-7	14	2				A	80	110	250	280
	24-10			7			A	80	-	-	280
	24-11		6	3			A	35	110	250	325
	24-20	9	2				D	80	110	250	280
	24-22				4		D	45	110	250	-
28	24-28	24					Inst.	80	110	250	280
	28-2	12	2				D	35	110	250	325
	28-9	6	6				D	80	110	250	280
	28-11	18	4				A	80	110	250	280
	28-12	26					A	90	180	270	-
	28-15	35					A	80	110	250	280
	28-17	15					A	80	110	250	280
28-21	37					A	80	110	250	280	
32	32-1		3			2	D	80	110	250	280
	32-6	16	2	3	2		A	80	110	250	280
	32-7	28					Inst.	80	125	235	280
	32-9	12			2		D	80	110	250	280
	32-15		6			2	D	35	110	250	280
	32-17				4		D	45	110	250	-
36	36-4					3	A	70	145	214	290
	36-5					4	A	-	120	240	-
	36-6				4	2	A	35	110	250	325
	36-7	40	7				A	80	110	250	280
	36-8	46	1				A	80	110	250	280
	36-9	14	14	2	1		A	80	125	235	280
	36-10	48					A	80	125	235	280
	36-14	6	5	5			D	90	180	270	-
36-15	35					A	60	125	245	305	
40	40-10	16		9	4		A	65	125	225	310
	40-56	85					A	72	144	216	288
44	44-1	36	6				D	65	125	225	310
48	48-5	90	9	1			A	65	125	225	310

INSERT KEYING POSITION



PIN INSERT FACE VIEW
NORMAL INSERT
KEYING SHOWN