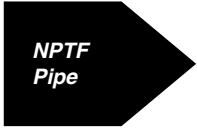
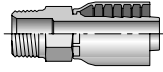

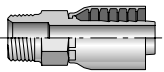

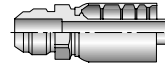
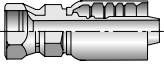
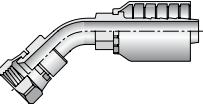
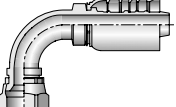
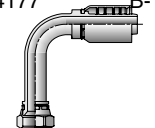
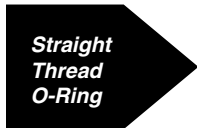
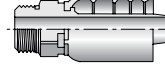

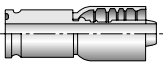
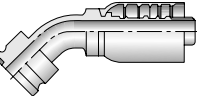
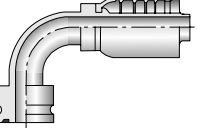

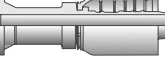
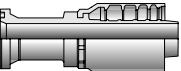


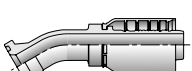

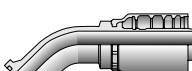
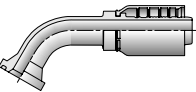
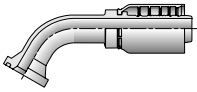
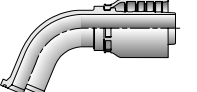
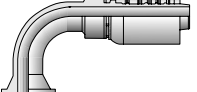
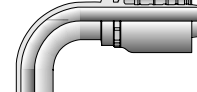

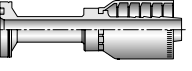


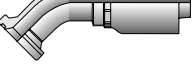



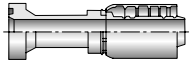




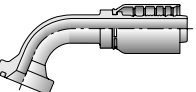
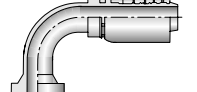

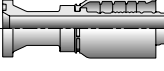
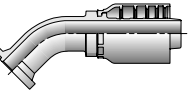

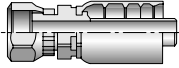
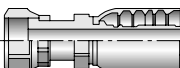
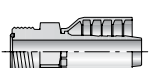
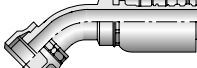


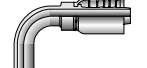

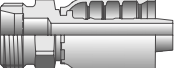
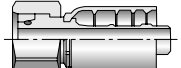
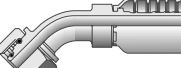


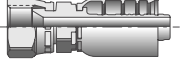


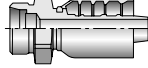


A	 NPTF Pipe	10177 B-98  <i>Male - Rigid</i>	 API	1AP77 B-98  <i>Male - Rigid</i>	 JIC 37°	10377 B-98  <i>Male - Rigid</i>
	10677 B-99  <i>Female - Swivel Straight</i>	13777 B-99  <i>Female - Swivel 45° Elbow - Short</i>	13977 B-99  <i>Female - Swivel 90° Elbow - Short</i>	14177 B-100  <i>Female - Swivel 90° Elbow - Long</i>	 Straight Thread O-Ring	10577 B-100  <i>Male - Rigid</i>
B	 Full Flange	1X577 B-100  <i>Full Flange - Straight</i>	1X777 B-101  <i>45° Elbow</i>	1X977 B-101  <i>90° Elbow</i>	 Flange Code 61	11577 B-101  <i>Code 61 - Straight</i>
	14A77 B-102  <i>Code 61 - Straight</i>	11677 B-102  <i>Code 61 22-1/2° Elbow</i>	14B77 B-102  <i>Code 61 22-1/2° Elbow</i>	12677 B-102  <i>Code 61 - 30° Elbow</i>	11777 B-103  <i>Code 61 - 45° Elbow</i>	14F77 B-103  <i>Code 61 - 45° Elbow</i>
C	12777 B-103  <i>Code 61 - 60° Elbow</i>	14G77 B-104  <i>Code 61 - 60° Elbow</i>	11877 B-104  <i>Code 61 67-1/2° Elbow</i>	11977 B-104  <i>Code 61 - 90° Elbow</i>	14N77 B-105  <i>Code 61 - 90° Elbow</i>	 Flange Code 62
	16A77 B-105  <i>Code 62 - Straight</i>	16B77 B-105  <i>Code 62 22-1/2° Elbow</i>	16E77 B-106  <i>Code 62 - 30° Elbow</i>	16F77 B-106  <i>Code 62 - 45° Elbow</i>	16G77 B-106  <i>Code 62 - 60° Elbow</i>	16N77 B-107  <i>Code 62 - 90° Elbow</i>
D	 Caterpillar® Flange	1XA77 B-107  <i>Caterpillar® - Flange</i>	1XB77 B-107  <i>Caterpillar® - Flange 22-1/2° Elbow</i>	1XE77 B-108  <i>Caterpillar® Flange 30° Elbow</i>	1XF77 B-108  <i>Caterpillar® - Flange 45° Elbow</i>	1XG77 B-108  <i>Caterpillar® - Flange 60° Elbow</i>
		1XM77 B-109  <i>Caterpillar® Flange 67-1/2° Elbow</i>	1XN77 B-109  <i>Caterpillar® Flange 90° Elbow</i>	 Komatsu® Flange	1K577 B-109  <i>Komatsu® Flange Straight</i>	1K777 B-110  <i>Komatsu® Flange 45° Elbow</i>
E						

 Seal-Lok®	1JC77 B-110  <i>Female - Swivel Straight - Short</i>	1JS77 B-111  <i>Female - Swivel Straight - Long</i>	1J077 B-111  <i>Male - Rigid w/O-Ring</i>	1J777 B-112  <i>Female - Swivel 45° Elbow</i>	1J977 B-112  <i>Female - Swivel 90° Elbow - Short</i>
1J577 B-112  <i>Female - Swivel 90° Elbow - Medium</i>	1J177 B-113  <i>Female - Swivel 90° Elbow - Long</i>	 DIN "S" Series w/O-Ring	1D277 B-113  <i>Male Metric S Rigid - 24° Cone</i>	1C977 B-113  <i>Female - Swivel Straight</i>	10C77 B-114  <i>Female Metric S Swivel - 45° Elbow</i>
11C77 B-114  <i>Female - Swivel 90° Elbow</i>	 BSP	1FU77 B-115  <i>Female - Swivel Straight - 30° Flare</i>	1GU77 B-115  <i>Female - Swivel Straight - 60° Cone</i>	 24° Cone	1ZM77 B-115  <i>Male 24° Cone</i>

A

B

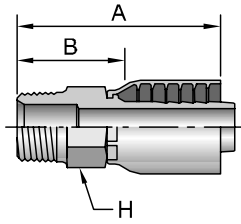
C

D

E

10177

Male NPTF Pipe - Rigid - Straight

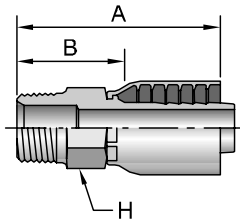


# Part Number	Thread inch	Hose I.D. inch	A		H mm	B	
			inch	mm		inch	mm
10177-8-8	1/2x14	1/2	2.72	69,2	22	1.50	38,2
10177-8-12	1/2x14	3/4	3.43	87,1	30	1.79	45,5
10177-12-12	3/4x14	3/4	3.43	87,1	30	1.79	45,5
10177-16-16	1x11-1/2	1	4.04	102,6	36	2.09	53,1
10177-20-20	1-1/4x11-1/2	1-1/4	4.57	116,1	46	2.30	58,4
10177-24-24	1-1/2x11-1/2	1-1/2	4.89	124,2	50	2.50	63,5
10177-32-32	2x11-1/2	2	5.64	143,1	65	2.88	73,2

All sizes of 10177 fittings are rated at 5,000 psi working pressure.

1AP77

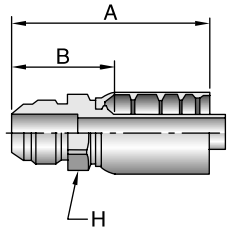
Male API Pipe - Rigid - Straight



# Part Number	Thread inch	Hose I.D. inch	A		H mm	B	
			inch	mm		inch	mm
1AP77-24-24	1-1/2x11-1/2	1-1/2	5.16	131,1	50	2.77	70,4
1AP77-32-32	2x11-1/2	2	6.32	160,4	65	3.56	90,4

10377

Male JIC 37° - Rigid - Straight



# Part Number	Thread inch		Hose I.D. inch	A		H mm	B	
	inch	mm		inch	mm		inch	mm
10377-8-8	1/2	3/4x16	1/2	2.61	66,4	22	1.39	35,4
10377-10-8	5/8	7/8x14	1/2	2.71	68,9	24	1.49	37,9
10377-10-10	5/8	7/8x14	5/8	3.01	76,4	24	1.66	42,2
10377-12-10	3/4	1-1/16x12	5/8	3.22	81,8	30	1.87	47,5
10377-12-12	3/4	1-1/16x12	3/4	3.53	89,6	30	1.89	48,1
10377-16-12	1	1-5/16x12	3/4	3.69	93,6	36	2.05	52,2
10377-16-16	1	1-5/16x12	1	3.99	101,3	36	2.04	51,8
10377-20-16	1-1/4	1-5/8x12	1	4.33	109,9	50	2.38	60,5
10377-20-20	1-1/4	1-5/8x12	1-1/4	4.66	118,4	50	2.39	60,7
10377-32-32	2	2-1/2x12	2	5.83	148,0	65	3.07	78,0

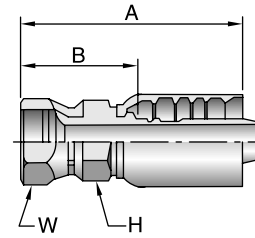
All sizes of 10377 are rated at 5,000 psi working pressure.

⚠ Refer to Pressure Rating of Hose End Connections chart on page E-45.

10677

Female JIC 37° - Swivel - Straight

# Part Number	Thread		Hose I.D. inch	A		H mm	W mm	B	
	inch	3/4x16		inch	mm			inch	mm
10677-8-8	1/2	3/4x16	1/2	2.79	71,1	22	22	1.58	40,1
10677-10-8	5/8	7/8x14	1/2	2.91	74,0	22	27	1.69	43,0
10677-10-10	5/8	7/8x14	5/8	3.18	80,7	24	27	1.83	46,5
10677-10-12	5/8	7/8x14	3/4	3.62	91,8	30	27	1.98	50,3
10677-12-8	3/4	1-1/16x12	1/2	3.17	80,4	30	32	1.95	49,5
10677-12-10	3/4	1-1/16x12	5/8	3.30	83,9	30	32	1.95	49,6
10677-12-12	3/4	1-1/16x12	3/4	3.68	93,5	30	32	2.05	52,0
10677-12-16	3/4	1-1/16x12	1	4.12	104,7	36	32	2.17	55,2
10677-14-12	7/8	1-3/16x12	3/4	3.88	98,5	36	36	2.24	56,9
10677-16-12	1	1-5/16x12	3/4	3.89	98,7	36	41	2.25	57,3
10677-16-16	1	1-5/16x12	1	4.16	105,7	36	41	2.21	56,2
10677-20-16	1-1/4	1-5/8x12	1	4.29	109,1	41	50	2.34	59,5
10677-20-20	1-1/4	1-5/8x12	1-1/4	4.86	123,5	46	50	2.59	65,8
10677-24-20	1-1/2	1-7/8x12	1-1/4	4.98	126,5	50	60	2.71	68,6
10677-24-24	1-1/2	1-7/8x12	1-1/2	5.34	135,7	50	60	2.95	75,0
10677-32-32	2	2-1/2x12	2	6.29	159,8	65	75	3.54	89,9

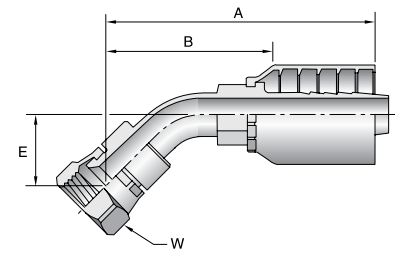


All sizes of 10677 fittings are rated at 5,000 psi working pressure.

13777

Female JIC 37° - Swivel - 45° Elbow - Short Drop

# Part Number	Thread		Hose I.D. inch	A		E		W mm	B	
	inch	3/4x16		inch	mm	inch	mm		inch	mm
13777-8-8	1/2	3/4x16	1/2	2.86	72,7	0.59	15	22	1.64	41,8
13777-10-8	5/8	7/8x14	1/2	3.06	77,8	0.63	16	27	1.84	46,8
13777-10-10	5/8	7/8x14	5/8	3.40	86,3	0.63	16	27	2.05	52,1
13777-12-12	3/4	1-1/16x12	3/4	4.37	110,9	0.83	21	32	2.73	69,4
13777-16-12	1	1-5/16x12	3/4	4.49	114,0	0.94	24	41	2.85	72,5
13777-16-16	1	1-5/16x12	1	4.79	121,7	0.94	24	41	2.84	72,2
13777-20-20	1-1/4	1-5/8x12	1-1/4	6.03	153,2	1.26	32	50	3.76	95,5

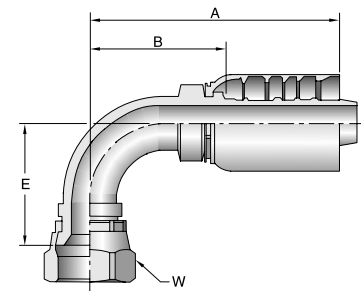


All sizes of 13777 fittings are rated at 5,000 psi working pressure.

13977

Female JIC 37° - Swivel - 90° Elbow - Short Drop

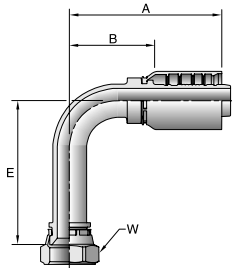
# Part Number	Thread		Hose I.D. inch	A		E		W mm	B	
	inch	3/4x16		inch	mm	inch	mm		inch	mm
13977-8-8	1/2	3/4x16	1/2	2.78	70,7	1.14	29,0	22	1.56	39,7
13977-10-8	5/8	7/8x14	1/2	2.77	70,5	1.26	32,0	27	1.55	39,5
13977-10-10	5/8	7/8x14	5/8	3.21	81,5	1.26	32,0	27	1.86	47,3
13977-12-10	3/4	1-1/16x12	5/8	3.21	81,5	1.89	48,0	32	1.86	47,3
13977-12-12	3/4	1-1/16x12	3/4	4.23	107,4	1.89	48,0	32	2.60	66,0
13977-16-12	1	1-5/16x12	3/4	4.23	107,4	2.93	74,5	41	2.59	65,9
13977-16-16	1	1-5/16x12	1	4.72	119,9	2.93	74,4	41	2.77	70,4
13977-20-20	1-1/4	1-5/8x12	1-1/4	5.81	147,6	3.07	78,0	50	3.54	90,0
13977-24-24	1-1/2	1-7/8x12	1-1/2	6.68	169,7	3.39	86,0	60	4.29	109,0
13977-32-32	2	2-1/2x12	2	8.12	206,1	5.51	140,0	75	5.36	136,2



All sizes of 13977 fittings are rated at 5,000 psi working pressure.

14177

Female JIC 37° - Swivel - 90° Elbow - Long Drop
 ISO 12151-5

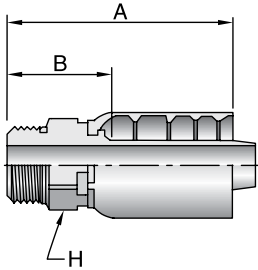


# Part Number	Thread		Hose I.D. inch	A		E		W mm	B	
	inch	inch		inch	mm	inch	mm		inch	mm
14177-8-8	1/2	3/4x16	1/2	2.78	70,7	2.52	64	22	1.56	39,7
14177-12-12	3/4	1-1/16x12	3/4	4.24	107,6	3.78	96	32	2.60	66,1
14177-16-16	1	1-5/16x12	1	4.72	119,9	4.49	114	41	2.77	70,4

All sizes of 14177 fittings are rated at 5,000 psi working pressure.

10577

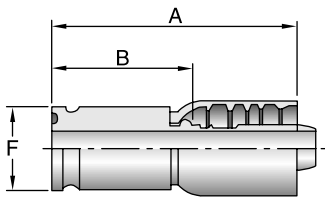
Male SAE Straight Thread with O-Ring - Rigid - Straight



# Part Number	Thread		Hose I.D. inch	A		H mm	B	
	inch	inch		inch	mm		inch	mm
10577-8-8	1/2	3/4x16	1/2	2.39	60,8	22	1.17	29,8
10577-12-12	3/4	1-1/16x12	3/4	3.17	80,5	32	1.53	38,9
10577-16-16	1	1-5/16x12	1	3.73	94,7	41	1.78	45,2
10577-20-20	1-1/4	1-5/8x12	1-1/4	4.17	105,9	50	1.90	48,2

1X577

Full Flange - Straight - Code 61/62



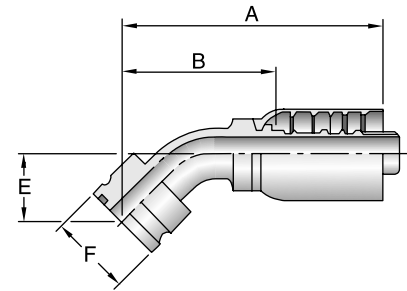
# Part Number	Flange inch	Hose I.D. inch	A		F inch	B	
			inch	mm		inch	mm
1X577-8-8	1/2	1/2	2.44	62,1	1.02	1.22	31,1
1X577-12-12	3/4	3/4	4.06	103,0	1.37	2.42	61,6
1X577-16-12	1	3/4	4.06	103,0	1.54	2.42	61,6
1X577-16-16	1	1	4.45	113,0	1.54	2.50	63,5
1X577-16-20	1	1-1/4	4.73	120,2	1.54	2.46	62,5
1X577-20-16	1-1/4	1	4.45	113,0	1.81	2.50	63,5
1X577-20-20	1-1/4	1-1/4	4.73	120,2	1.81	2.46	62,5
1X577-24-20	1-1/2	1-1/4	4.85	123,2	2.21	2.58	65,5
1X577-24-24	1-1/2	1-1/2	5.07	128,8	2.21	2.68	68,1

See Accessories Section for O-Rings and Flange Kits.

1X777

Full Flange - 45° Elbow - Code 61/62

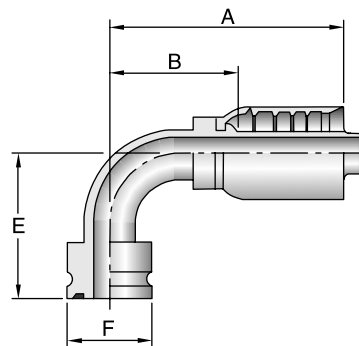
# Part Number	Flange inch	Hose I.D. inch	A		E		F inch	B	
			inch	mm	inch	mm		inch	mm
1X777-12-12	3/4	3/4	4.67	118,5	1.12	28,5	1.37	3.03	77,0
1X777-16-12	1	3/4	4.66	118,3	1.12	28,5	1.54	3.02	76,8
1X777-16-16	1	1	5.11	129,8	1.26	32,0	1.54	3.16	80,3
1X777-16-20	1	1-1/4	5.74	145,8	1.50	38,0	1.54	3.47	88,1
1X777-20-16	1-1/4	1	5.35	135,9	1.50	38,0	1.81	3.40	86,4
1X777-20-20	1-1/4	1-1/4	6.27	159,3	1.50	38,0	1.81	4.00	101,6
1X777-24-20	1-1/2	1-1/4	6.51	165,4	1.73	44,0	2.21	4.24	107,7
1X777-24-24	1-1/2	1-1/2	7.15	181,6	1.73	44,0	2.21	4.76	120,9



1X977

Full Flange - 90° Elbow - Code 61/62

# Part Number	Flange inch	Hose I.D. inch	A		E		F inch	B	
			inch	mm	inch	mm		inch	mm
1X977-8-8	1/2	1/2	3.14	79,8	1.69	43,0	1.02	1.92	48,9
1X977-12-12	3/4	3/4	4.24	107,6	2.38	60,5	1.37	2.60	66,1
1X977-12-16	3/4	1	4.33	109,9	2.76	70,0	1.37	2.38	60,5
1X977-16-12	1	3/4	4.24	107,6	2.38	60,5	1.54	2.60	66,1
1X977-16-16	1	1	4.73	120,1	2.76	70,0	1.54	2.78	70,6
1X977-16-20	1	1-1/4	5.12	130,1	3.54	90,0	1.54	2.85	72,4
1X977-20-16	1-1/4	1	4.73	120,1	2.76	70,0	1.81	2.78	70,6
1X977-20-20	1-1/4	1-1/4	5.81	147,6	3.54	90,0	1.81	3.54	90,0
1X977-24-20	1-1/2	1-1/4	5.81	147,6	3.54	90,0	2.21	3.54	90,0
1X977-24-24	1-1/2	1-1/2	6.68	169,7	4.09	104,0	2.21	4.29	109,0

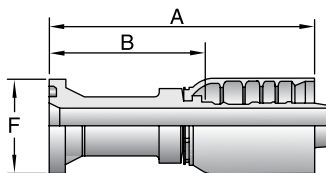


11577

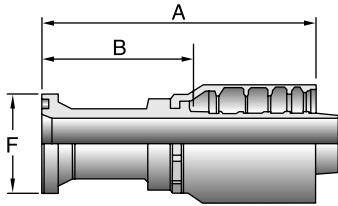
SAE Code 61 Flange Head

ISO 12151-3-S-L

# Part Number	Flange inch	Hose I.D. inch	A		F inch	B	
			inch	mm		inch	mm
11577-8-8	1/2	1/2	3.52	89,6	1-3/16	2.30	58,6
11577-10-10	5/8	5/8	3.90	99,0	1-11/32	2.55	64,8
11577-12-8	3/4	1/2	2.65	67,3	1-1/2	1.43	36,3
11577-12-10	3/4	5/8	2.95	74,9	1-1/2	1.60	40,7
11577-12-12	3/4	3/4	4.23	107,4	1-1/2	2.59	65,9
11577-16-12	1	3/4	3.27	82,9	1-3/4	1.63	41,5
11577-16-16	1	1	4.70	119,4	1-3/4	2.75	69,9
11577-32-32	2	2	6.43	163,2	2-13/16	3.67	93,2



A



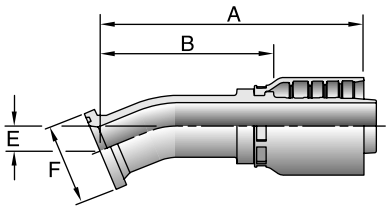
14A77

SAE Code 61 Flange Head - Straight

ISO 12151-3-S-L

# Part Number	Flange inch	Hose I.D. inch	A		F inch	B	
			inch	mm		inch	mm
14A77-20-16	1-1/4	1	3.54	89,9	2	1.59	40,4
14A77-20-20	1-1/4	1-1/4	5.42	137,7	2	3.15	80,0
14A77-24-20	1-1/2	1-1/4	3.94	100,1	2-3/8	1.67	42,4
14A77-24-24	1-1/2	1-1/2	5.52	140,2	2-3/8	3.13	79,6
14A77-32-24	2	1-1/2	4.59	116,6	2-13/16	2.20	55,9
14A77-32-32	2	2	6.43	163,3	2-13/16	3.67	93,2

B



11677

SAE Code 61 Flange Head - 22-1/2° Elbow

ISO 12151-3-E22M-L

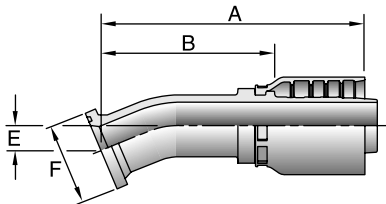
# Part Number	Flange inch	Hose I.D. inch	A		E		F inch	B	
			inch	mm	inch	mm		inch	mm
11677-16-16	1	1	5.44	138,1	0.55	14,0	1-3/4	3.49	88,6
11677-20-20	1-1/4	1-1/4	6.68	169,6	0.59	15,0	2	4.41	111,9
11677-24-24	1-1/2	1-1/2	7.60	193,0	0.87	22,0	2-3/8	5.21	132,4
11677-32-32	2	2	8.90	225,9	0.87	22,0	2-13/16	6.14	156,0

C

14B77

SAE Code 61 Flange Head - 22-1/2° Elbow

ISO 12151-3-E22M-L (5000 psi)



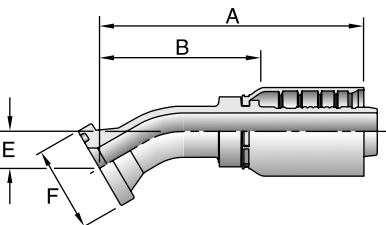
# Part Number	Flange inch	Hose I.D. inch	A		E		F inch	B	
			inch	mm	inch	mm		inch	mm
14B77-20-20	1-1/4	1-1/4	6.68	169,6	0.59	15,0	2	4.41	111,9
14B77-24-24	1-1/2	1-1/2	7.60	193,0	0.71	18,0	2-3/8	5.21	132,4
14B77-32-32	2	2	8.90	225,9	0.87	22,0	2-13/16	6.14	156,0

D

12677

SAE Code 61 Flange Head - 30° Elbow

ISO 12151-3-E30M-L



# Part Number	Flange inch	Hose I.D. inch	A		E		F inch	B	
			inch	mm	inch	mm		inch	mm
12677-16-16	1	1	5.36	136,1	0.75	19,0	1-3/4	3.41	86,6
12677-20-20	1-1/4	1-1/4	6.58	167,2	0.87	22,0	2	4.31	109,5
12677-32-32	2	2	8.76	222,6	1.26	32,0	2-13/16	6.01	152,7

E

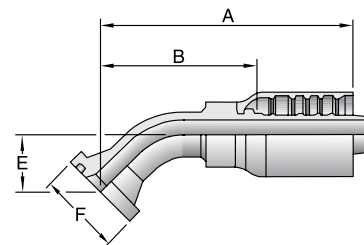
See Accessories Section for O-Rings and Flange Kits.

11777

SAE Code 61 Flange Head - 45° Elbow

ISO 12151-3-E45M-L

# Part Number	Flange inch	Hose I.D. inch	A		E		F inch	B	
			inch	mm	inch	mm		inch	mm
11777-8-8	1/2	1/2	3.11	79,0	0.79	20,0	1-3/16	1.89	48,0
11777-12-12	3/4	3/4	4.57	116,0	1.02	26,0	1-1/2	2.93	74,5
11777-16-12	1	3/4	4.57	116,0	1.02	26,0	1-3/4	2.93	74,5
11777-16-16	1	1	5.11	129,8	1.26	32,0	1-3/4	3.16	80,3
11777-32-32	2	2	8.31	210,9	2.20	56,0	2-13/16	5.55	141,0

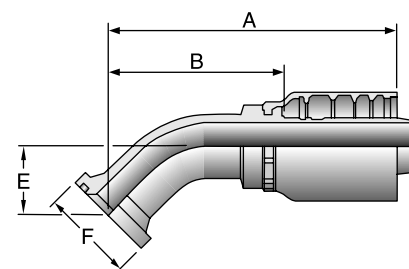


14F77

SAE Code 61 5000 psi Flange Head - 45°

ISO 12151-3-E45M-L

# Part Number	Flange inch	Hose I.D. inch	A		E		F inch	B	
			inch	mm	inch	mm		inch	mm
14F77-20-16	1-1/4	1	5.11	129,8	1.26	32,0	2	3.16	80,3
14F77-20-20	1-1/4	1-1/4	6.27	159,3	1.50	38,0	2	4.00	101,6
14F77-24-20	1-1/2	1-1/4	6.27	159,3	1.50	38,0	2-3/8	4.00	101,6
14F77-24-24	1-1/2	1-1/2	7.15	181,6	1.73	44,0	2-3/8	4.76	120,9
14F77-32-24	2	1-1/2	7.15	181,6	1.73	44,0	2-13/16	4.76	120,9
14F77-32-32	2	2	8.31	210,9	2.20	56,0	2-13/16	5.55	141,0

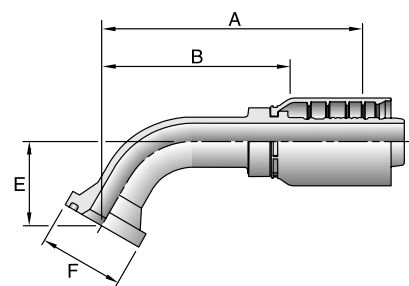


12777

SAE Code 61 Flange Head - 60° Elbow

ISO 12151-3-E60M-L

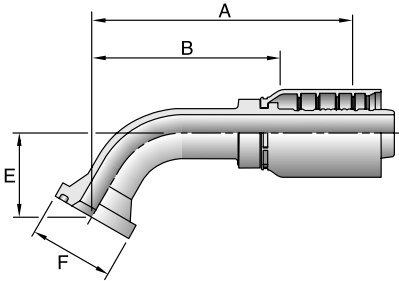
# Part Number	Flange inch	Hose I.D. inch	A		E		F inch	B	
			inch	mm	inch	mm		inch	mm
12777-12-12	3/4	3/4	5.27	133,8	1.46	37,0	1-1/2	3.63	92,3
12777-16-12	1	3/4	5.27	133,8	1.46	37,0	1-3/4	3.63	92,3
12777-16-16	1	1	5.96	151,4	1.73	44,0	1-3/4	4.01	101,9
12777-32-32	2	2	8.44	214,2	3.27	83,0	2-13/16	5.68	144,3






14G77

SAE Code 61 Flange Head - 60° Elbow

ISO 12151-3-E60M-L

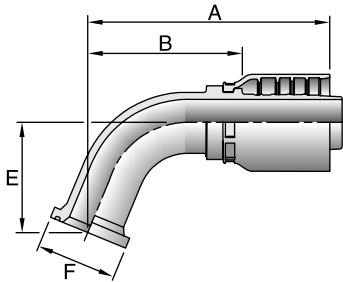





#			A		E			B	
Part Number	Flange inch	Hose I.D. inch	inch	mm	inch	mm	inch	inch	mm
14G77-20-16	1-1/4	1	5.97	151,6	1.73	44,0	2	4.02	102,1
14G77-32-32	2	2	8.44	214,2	3.27	83,0	2-13/16	5.68	144,3

11877

SAE Code 61 Flange Head - 67-1/2° Elbow

ISO 12151-3-E67M-L

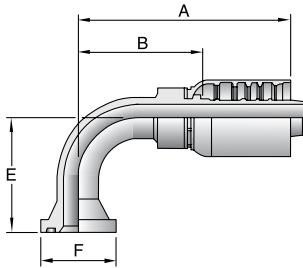





#			A		E			B	
Part Number	Flange inch	Hose I.D. inch	inch	mm	inch	mm	inch	inch	mm
11877-16-16	1	1	5.68	144,3	2.05	52,0	1-3/4	3.73	94,8
11877-32-32	2	2	8.39	213,0	3.82	97,0	2-13/16	5.63	143,0

11977

SAE Code 61 Flange Head - 90° Elbow

ISO 12151-3-E90M-L



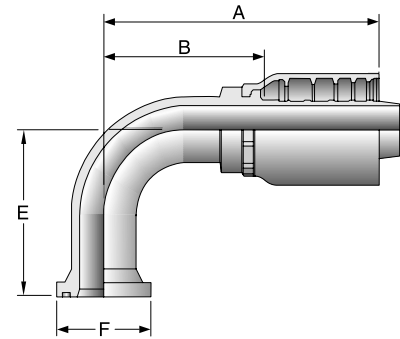
#			A		E			B	
Part Number	Flange inch	Hose I.D. inch	inch	mm	inch	mm	inch	inch	mm
11977-8-8	1/2	1/2	2.99	76,0	1.61	41,0	1-3/16	1.77	45,0
11977-12-8	3/4	1/2	2.77	70,5	1.61	41,0	1-1/2	1.55	39,5
11977-12-12	3/4	3/4	4.24	107,6	2.28	58,0	1-1/2	2.60	66,1
11977-16-10	1	5/8	3.21	81,5	2.09	53,0	1-3/4	1.86	47,3
11977-16-12	1	3/4	4.24	107,6	2.28	58,0	1-3/4	2.60	66,1
11977-16-16	1	1	4.72	119,9	2.76	70,0	1-3/4	2.77	70,4
11977-20-20	1-1/4	1-1/4	5.81	147,6	3.54	90,0	2	3.54	90,0
11977-24-24	1-1/2	1-1/2	6.68	169,7	4.09	104,0	2-3/8	4.29	109,0
11977-32-32	2	2	8.12	206,1	5.43	138,0	2-13/16	5.36	136,2

14N77

SAE Code 61 Flange Head - 90°

ISO 12151-3-E90M-L

# Part Number	Flange inch	Hose I.D. inch	A		E		F inch	B	
			inch	mm	inch	mm		inch	mm
14N77-20-16	1-1/4	1	4.72	119,9	2.76	70,0	2	2.77	70,3
14N77-20-20	1-1/4	1-1/4	5.81	147,6	3.54	90,0	2	3.54	90,0
14N77-24-20	1-1/2	1-1/4	5.81	147,6	3.54	90,0	2-3/8	3.54	89,9
14N77-24-24	1-1/2	1-1/2	6.68	169,7	4.09	104,0	2-3/8	4.29	109,0
14N77-32-24	2	1-1/2	6.68	169,7	4.09	104,0	2-13/16	4.29	109,0
14N77-32-32	2	2	8.12	206,1	5.43	138,0	2-13/16	5.36	136,2

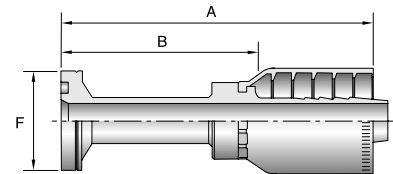


16A77

SAE Code 62 Flange Head - Straight

ISO 12151-3-S-S

# Part Number	Flange inch	Hose I.D. inch	A		F inch	B	
			inch	mm		inch	mm
16A77-8-8	1/2	1/2	3.51	89,3	1-1/4	2.29	58,3
16A77-12-10	3/4	5/8	2.95	74,9	1-5/8	1.60	40,7
16A77-12-12	3/4	3/4	4.49	113,9	1-5/8	2.85	72,5
16A77-12-16	3/4	1	4.96	126,0	1-5/8	3.01	76,5
16A77-16-12	1	3/4	3.47	88,1	1-7/8	1.83	46,6
16A77-16-16	1	1	5.26	133,6	1-7/8	3.31	84,1
16A77-16-20	1	1-1/4	5.66	143,8	1-7/8	3.39	86,1
16A77-20-16	1-1/4	1	4.05	102,9	2-1/8	2.10	53,4
16A77-20-20	1-1/4	1-1/4	5.73	145,6	2-1/8	3.46	87,8
16A77-20-24	1-1/4	1-1/2	6.06	153,9	2-1/8	3.67	93,2
16A77-24-16	1-1/2	1	4.25	108,0	2-1/2	2.30	58,4
16A77-24-20	1-1/2	1-1/4	4.65	118,1	2-1/2	2.38	60,4
16A77-24-24	1-1/2	1-1/2	6.39	162,3	2-1/2	4.00	101,6
16A77-32-24	2	1-1/2	5.23	132,8	3-1/8	2.84	72,2
16A77-32-32	2	2	7.17	182,1	3-1/8	4.41	112,0

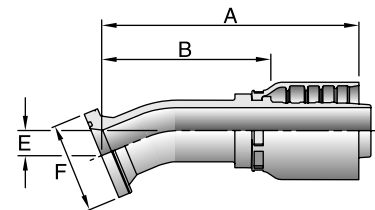


16B77

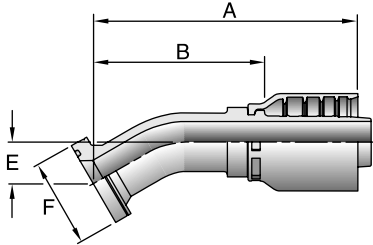
SAE Code 62 Flange Head - 22-1/2° Elbow

ISO 12151-3-E22M-S

# Part Number	Flange inch	Hose I.D. inch	A		E		F inch	B	
			inch	mm	inch	mm		inch	mm
16B77-12-12	3/4	3/4	4.84	122,9	0.43	11,0	1-5/8	3.20	81,4
16B77-16-12	1	3/4	4.85	123,1	0.43	11,0	1-7/8	3.21	81,6
16B77-16-16	1	1	5.44	138,2	0.55	14,0	1-7/8	3.49	88,7
16B77-20-20	1-1/4	1-1/4	6.67	169,4	0.59	15,0	2-1/8	4.40	111,7
16B77-24-24	1-1/2	1-1/2	7.60	193,0	0.71	18,0	2-1/2	5.21	132,4
16B77-32-32	2	2	8.90	225,9	0.87	22,0	3-1/8	6.14	156,0



A



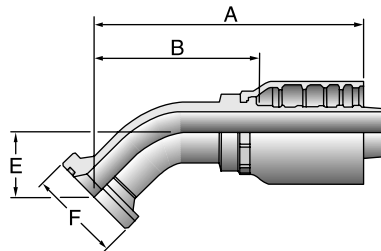
16E77

SAE Code 62 Flange Head - 30° Elbow

ISO 12151-3-E30M-S

# Part Number	Flange inch	Hose I.D. inch	A		E		F inch	B	
			inch	mm	inch	mm		inch	mm
16E77-12-12	3/4	3/4	4.77	121,1	0.63	16,0	1-5/8	3.13	79,6
16E77-16-16	1	1	5.36	136,1	0.75	19,0	1-7/8	3.41	86,6
16E77-20-20	1-1/4	1-1/4	6.58	167,2	0.87	22,0	2-1/8	4.31	109,4
16E77-24-24	1-1/2	1-1/2	7.45	189,2	1.18	30,0	2-1/2	5.06	128,5
16E77-32-32	2	2	8.76	222,6	1.26	32,0	3-1/8	6.01	152,7

B



16F77

SAE Code 62 Flange Head - 45° Elbow

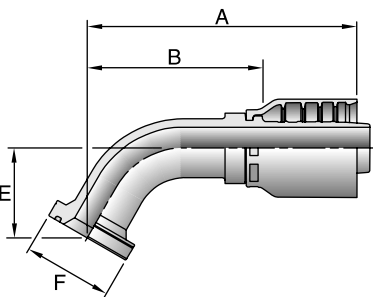
ISO 12151-3-E45M-S

# Part Number	Flange inch	Hose I.D. inch	A		E		F inch	B	
			inch	mm	inch	mm		inch	mm
16F77-8-8	1/2	1/2	3.11	79,0	0.75	19,0	1-1/4	1.89	48,0
16F77-12-10	3/4	5/8	3.77	95,7	1.00	25,5	1-5/8	2.42	61,5
16F77-12-12	3/4	3/4	4.57	116,0	1.02	26,0	1-5/8	2.93	74,5
16F77-12-16	3/4	1	4.98	126,5	1.26	32,0	1-5/8	3.03	77,0
16F77-16-12	1	3/4	4.57	116,0	1.02	26,0	1-7/8	2.93	74,5
16F77-16-16	1	1	5.11	129,8	1.26	32,0	1-7/8	3.16	80,3
16F77-16-20	1	1-1/4	5.74	145,8	1.50	38,0	1-7/8	3.47	88,1
16F77-20-16	1-1/4	1	5.11	129,8	1.26	32,0	2-1/8	3.16	80,3
16F77-20-20	1-1/4	1-1/4	6.27	159,3	1.50	38,0	2-1/8	4.00	101,6
16F77-20-24	1-1/4	1-1/2	6.84	173,7	1.73	44,0	2-1/8	4.45	113,1
16F77-24-20	1-1/2	1-1/4	6.27	159,3	1.50	38,0	2-1/2	4.00	101,6
16F77-24-24	1-1/2	1-1/2	7.15	181,6	1.73	44,0	2-1/2	4.76	120,9
16F77-32-32	2	2	8.31	210,9	2.20	56,0	3-1/8	5.55	141,0

C

D

E



16G77

SAE Code 62 Flange Head - 60° Elbow

ISO 12151-3-E60M-S

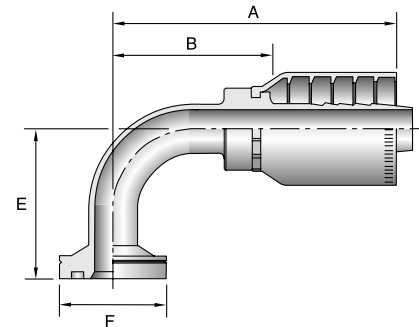
# Part Number	Flange inch	Hose I.D. inch	A		E		F inch	B	
			inch	mm	inch	mm		inch	mm
16G77-12-12	3/4	3/4	5.27	133,8	1.46	37,0	1-5/8	3.63	92,3
16G77-16-16	1	1	5.96	151,4	1.73	44,0	1-7/8	4.01	101,9
16G77-20-20	1-1/4	1-1/4	7.49	190,3	2.17	55,0	2-1/8	5.22	132,6
16G77-24-24	1-1/2	1-1/2	7.54	191,5	2.52	64,0	2-1/2	5.15	130,8
16G77-32-32	2	2	8.43	214,2	3.27	83,0	3-1/8	5.68	144,3

16N77

SAE Code 62 Flange Head - 90° Elbow

ISO 12151-3 - E90M - S

# Part Number	Flange inch	Hose I.D. inch	A		E		F		B	
			inch	mm	inch	mm	inch	inch	mm	
16N77-8-8	1/2	1/2	2.77	70,5	1.61	41,0	1-1/4	1.55	39,5	
16N77-8-10	1/2	5/8	3.09	78,5	2.13	54,0	1-1/4	1.74	44,2	
16N77-12-10	3/4	5/8	3.62	91,8	2.13	54,0	1-5/8	2.27	57,6	
16N77-12-12	3/4	3/4	4.24	107,6	2.28	58,0	1-5/8	2.60	66,1	
16N77-12-16	3/4	1	4.41	112,0	2.76	70,0	1-5/8	2.46	62,5	
16N77-16-12	1	3/4	4.24	107,6	2.28	58,0	1-7/8	2.60	66,1	
16N77-16-16	1	1	4.72	119,9	2.76	70,0	1-7/8	2.77	70,4	
16N77-16-20	1	1-1/4	5.12	130,1	3.54	90,0	1-7/8	2.85	72,4	
16N77-20-16	1-1/4	1	4.72	119,9	2.76	70,0	2-1/8	2.77	70,4	
16N77-20-20	1-1/4	1-1/4	5.81	147,6	3.54	90,0	2-1/8	3.54	90,0	
16N77-20-24	1-1/4	1-1/2	6.15	156,2	4.09	104,0	2-1/8	3.76	95,5	
16N77-24-20	1-1/2	1-1/4	5.81	147,6	3.54	90,0	2-1/2	3.54	90,0	
16N77-24-24	1-1/2	1-1/2	6.68	169,7	4.09	104,0	2-1/2	4.29	109,0	
16N77-32-24	2	1-1/2	6.68	169,7	4.09	104,0	3-1/8	4.29	109,0	
16N77-32-32	2	2	8.12	206,1	5.43	138,0	3-1/8	5.36	136,2	



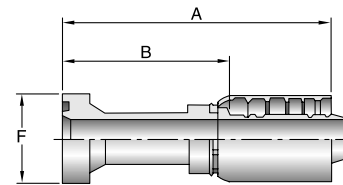
A

B

1XA77

Caterpillar® Flange Head - Straight

# Part Number	Flange inch	Hose I.D. inch	A		F		B	
			inch	mm	inch	inch	mm	
1XA77-12-12	3/4	3/4	4.48	113,7	1-5/8	2.84	72,2	
1XA77-12-16	3/4	1	4.96	126,0	1-5/8	3.01	76,5	
1XA77-16-12	1	3/4	3.47	88,1	1-7/8	1.83	46,6	
1XA77-16-16	1	1	5.54	140,7	1-7/8	3.59	91,2	
1XA77-20-16	1-1/4	1	4.10	104,1	2-1/8	2.15	54,6	
1XA77-20-20	1-1/4	1-1/4	5.98	151,9	2-1/8	3.71	94,2	
1XA77-20-24	1-1/4	1-1/2	6.32	160,5	2-1/8	3.93	99,8	
1XA77-24-20	1-1/2	1-1/4	4.65	118,1	2-1/2	2.38	60,4	
1XA77-24-24	1-1/2	1-1/2	6.94	176,3	2-1/2	4.55	115,6	
1XA77-32-24	2	1-1/2	5.24	133,1	3-1/8	2.85	72,4	
1XA77-32-32	2	2	7.56	191,9	3-1/8	4.80	121,9	



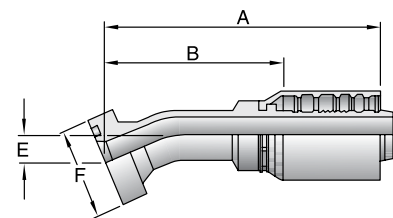
C

D

1XB77

Caterpillar® Flange Head - 22-1/2° Elbow

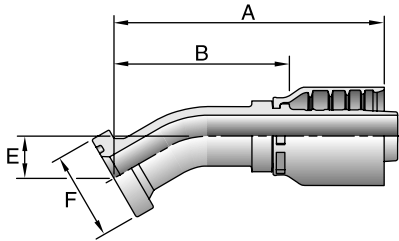
# Part Number	Flange inch	Hose I.D. inch	A		E		F		B	
			inch	mm	inch	mm	inch	inch	mm	
1XB77-12-12	3/4	3/4	5.09	129,2	0.55	14,0	1-5/8	3.45	87,7	
1XB77-16-12	1	3/4	5.09	129,2	0.55	14,0	1-7/8	3.45	87,7	
1XB77-16-16	1	1	5.66	143,8	0.55	14,0	1-7/8	3.71	94,2	
1XB77-20-16	1-1/4	1	5.66	143,8	0.55	14,0	2-1/8	3.71	94,3	
1XB77-20-20	1-1/4	1-1/4	6.60	167,7	0.58	14,7	2-1/8	4.33	109,9	
1XB77-24-20	1-1/2	1-1/4	6.56	166,6	0.75	19,1	2-1/2	4.29	108,9	
1XB77-24-24	1-1/2	1-1/2	7.66	194,6	0.71	18,0	2-1/2	5.27	133,9	



E

1XE77

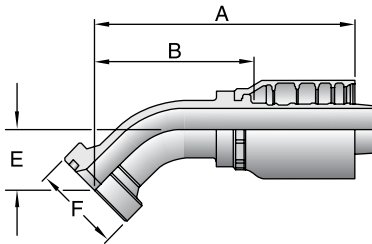
Caterpillar® Flange Head - 30° Elbow



# Part Number	Flange inch	Hose I.D. inch	A		E		F inch	B	
			inch	mm	inch	mm		inch	mm
1XE77-12-12	3/4	3/4	4.99	126,9	0.83	21,0	1-5/8	3.36	85,4
1XE77-16-12	1	3/4	5.02	127,4	0.75	19,0	1-7/8	3.38	86,0
1XE77-16-16	1	1	5.59	142,0	0.75	19,0	1-7/8	3.64	92,5
1XE77-20-16	1-1/4	1	5.55	141,0	0.87	22,0	2-1/8	3.60	91,5
1XE77-20-20	1-1/4	1-1/4	6.50	165,1	0.94	24,0	2-1/8	4.23	107,4
1XE77-24-20	1-1/2	1-1/4	6.50	165,1	0.94	24,0	2-1/2	4.23	107,4
1XE77-24-24	1-1/2	1-1/2	7.52	191,0	1.18	30,0	2-1/2	5.13	130,3

1XF77

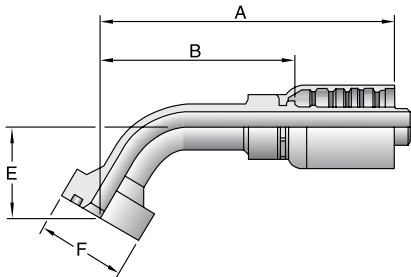
Caterpillar® Flange Head - 45° Elbow



# Part Number	Flange inch	Hose I.D. inch	A		E		F inch	B	
			inch	mm	inch	mm		inch	mm
1XF77-12-12	3/4	3/4	4.76	120,8	1.22	31,0	1-5/8	3.12	79,3
1XF77-16-12	1	3/4	4.76	120,8	1.22	31,0	1-7/8	3.12	79,3
1XF77-16-16	1	1	5.26	133,6	1.42	36,0	1-7/8	3.31	84,1
1XF77-20-16	1-1/4	1	5.26	133,6	1.42	36,0	2-1/8	3.31	84,1
1XF77-20-20	1-1/4	1-1/4	6.23	158,2	1.46	37,0	2-1/8	3.96	100,6
1XF77-24-20	1-1/2	1-1/4	6.23	158,2	1.46	37,0	2-1/2	3.96	100,6
1XF77-24-24	1-1/2	1-1/2	7.19	182,6	1.77	45,0	2-1/2	4.80	121,9

1XG77

Caterpillar® Flange Head - 60° Elbow



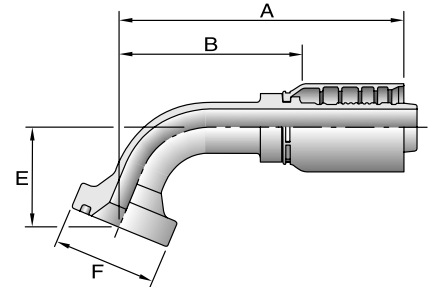
# Part Number	Flange inch	Hose I.D. inch	A		E		F inch	B	
			inch	mm	inch	mm		inch	mm
1XG77-12-12	3/4	3/4	5.35	135,8	1.65	42,0	1-5/8	3.71	94,3
1XG77-16-12	1	3/4	5.35	135,8	1.65	42,0	1-7/8	3.71	94,3
1XG77-16-16	1	1	5.98	151,9	1.97	50,0	1-7/8	4.03	102,4
1XG77-20-16	1-1/4	1	6.12	155,4	1.73	44,0	2-1/8	4.17	105,9
1XG77-20-20	1-1/4	1-1/4	7.74	196,6	2.01	51,0	2-1/8	5.47	138,9
1XG77-24-20	1-1/2	1-1/4	7.07	179,6	2.01	51,0	2-1/2	4.80	121,9
1XG77-24-24	1-1/2	1-1/2	7.52	191,0	2.56	65,0	2-1/2	5.13	130,3

See Accessories Section for O-Rings and Flange Kits.

1XM77

Caterpillar® Flange - 67-1/2° Elbow

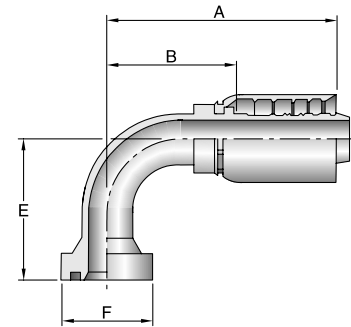
# Part Number	Flange inch	Hose I.D. inch	A		E		F inch	B	
			inch	mm	inch	mm		inch	mm
1XM77-12-12	3/4	3/4	5.27	131,2	1.77	45,0	1-5/8	3.53	90,8
1XM77-16-12	1	3/4	4.98	126,6	1.77	45,0	1-7/8	3.35	85,1
1XM77-16-16	1	1	3.44	87,3	2.05	52,0	1-7/8	1.49	37,8
1XM77-20-16	1-1/4	1	5.84	148,3	2.05	52,1	2-1/8	3.89	98,8
1XM77-20-20	1-1/4	1-1/4	7.63	193,9	2.05	52,0	2-1/8	5.36	136,2
1XM77-24-20	1-1/2	1-1/4	6.96	176,8	2.05	52,0	2-1/2	4.69	119,1



1XN77

Caterpillar® Flange Head - 90° Elbow

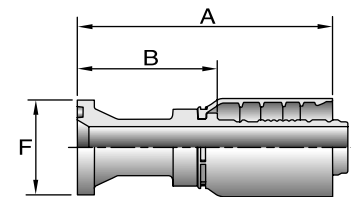
# Part Number	Flange inch	Hose I.D. inch	A		E		F inch	B	
			inch	mm	inch	mm		inch	mm
1XN77-12-12	3/4	3/4	4.23	107,4	2.48	63,0	1-5/8	2.59	65,9
1XN77-16-12	1	3/4	4.23	107,4	2.48	63,0	1-7/8	2.59	65,9
1XN77-16-16	1	1	4.73	120,1	2.91	74,0	1-7/8	2.78	70,5
1XN77-20-16	1-1/4	1	4.73	120,1	2.91	74,0	2-1/8	2.78	70,5
1XN77-20-20	1-1/4	1-1/4	5.81	147,6	3.70	94,0	2-1/8	3.54	90,0
1XN77-20-24	1-1/4	1-1/2	6.15	156,2	4.17	105,9	2-1/8	3.76	95,5
1XN77-24-20	1-1/2	1-1/4	5.81	147,6	3.03	77,0	2-1/2	3.54	90,0
1XN77-24-24	1-1/2	1-1/2	6.68	169,7	4.16	105,6	2-1/2	4.29	109,0
1XN77-32-24	2	1-1/2	6.68	169,7	4.16	105,6	3-1/8	4.29	109,0



1K577

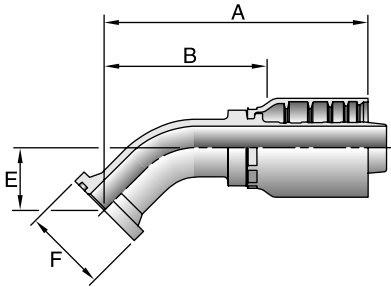
Komatsu® Flange Head - Straight

# Part Number	Flange inch	Hose I.D. inch	A		F inch	B	
			inch	mm		inch	mm
1K577-16-16	1	1	4.70	119,4	1-3/4	2.75	69,9



1K777

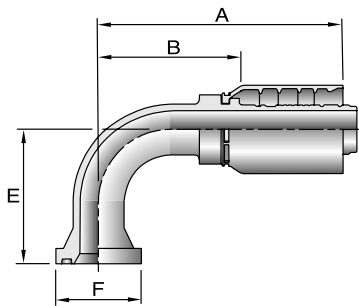
Komatsu® Flange Head - 45° Elbow



# Part Number	Flange inch	Hose I.D. inch	A		E		F		B	
			inch	mm	inch	mm	inch	inch	mm	
1K777-12-12	3/4	3/4	4.57	116,0	1.02	26,0	1-1/2	2.93	74,5	
1K777-16-16	1	1	4.95	125,7	1.10	28,0	1-3/4	3.00	76,2	
1K777-20-20	1-1/4	1-1/4	6.27	159,3	1.50	38,0	2	4.00	101,6	

1K977

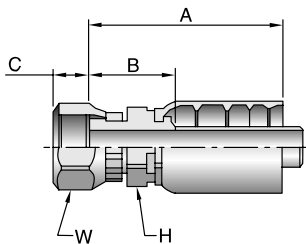
Komatsu® Flange Head - 90° Elbow



# Part Number	Flange inch	Hose I.D. inch	A		E		F		B	
			inch	mm	inch	mm	inch	inch	mm	
1K977-12-12	3/4	3/4	4.23	107,4	2.28	58,0	1-1/2	2.59	65,9	
1K977-16-16	1	1	5.00	127,0	2.76	70,0	1-3/4	3.05	77,5	
1K977-20-20	1-1/4	1-1/4	5.81	147,6	3.54	90,0	2	3.54	89,9	

1JC77

Female Seal-Lok® - Swivel - Straight - Short ISO 12151-1-SWSA



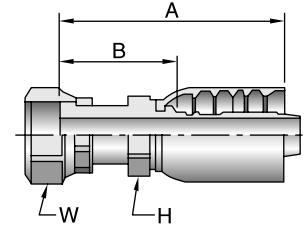
# Part Number	Thread		Hose I.D. inch	A		C		H mm	W mm	B	
	inch	inch		inch	mm	inch	mm			inch	mm
1JC77-8-8	1/2	13/16x16	1/2	2.35	59,8	0.43	11,0	22	24	1.13	28,8
1JC77-10-10	5/8	1x14	5/8	2.75	69,8	0.48	12,0	24	30	1.40	35,6
1JC77-12-12	3/4	1-3/16x12	3/4	3.16	80,2	0.55	12,0	30	36	1.52	38,7
1JC77-16-12	1	1-7/16x12	3/4	3.35	85,0	0.57	14,5	36	41	1.71	43,5
1JC77-16-16	1	1-7/16x12	1	3.59	91,2	0.57	14,5	36	41	1.64	41,7
1JC77-20-16	1-1/4	1-11/16x12	1	3.74	95,0	0.59	15,0	41	50	1.79	45,5
1JC77-32-32	2	2-1/2X12	2	5.64	143,1	0.73	18,4	65	75	2.88	73,2

⚠ Refer to Pressure Rating of Hose End Connections chart on page E-45.
 -32 size rated to 3,000 psi

1JS77

Female Seal-Lok® - Swivel - Straight - Long
 ISO 12151-1-SWSB

# Part Number	Thread		Hose I.D. inch	A		H mm	W mm	B	
	inch	mm		inch	mm			inch	mm
1JS77-6-8	3/8	11/16x16	1/2	2.67	67,8	22	22	1.45	36,8
1JS77-8-8	1/2	13/16x16	1/2	2.80	71,2	22	24	1.58	40,2
1JS77-10-8	5/8	1x14	1/2	2.95	75,0	24	30	1.73	44,0
1JS77-10-10	5/8	1x14	5/8	3.21	81,5	24	30	1.86	47,3
1JS77-12-8	3/4	1-3/16x12	1/2	3.15	80,1	30	36	1.93	49,1
1JS77-12-10	3/4	1-3/16x12	5/8	3.35	85,1	30	36	2.00	50,8
1JS77-12-12	3/4	1-3/16x12	3/4	3.68	93,4	30	36	2.04	51,9
1JS77-12-16	3/4	1-3/16x12	1	4.18	106,2	36	36	2.23	56,7
1JS77-16-12	1	1-7/16x12	3/4	3.90	99,0	36	41	2.26	57,5
1JS77-16-16	1	1-7/16x12	1	4.19	106,4	36	41	2.24	56,9
1JS77-16-20	1	1-7/16x12	1-1/4	4.71	119,7	46	41	2.44	62,0
1JS77-20-16	1-1/4	1-11/16x12	1	4.29	108,9	41	50	2.34	59,5
1JS77-20-20	1-1/4	1-11/16x12	1-1/4	4.78	121,4	46	50	2.51	63,8
1JS77-24-24	1-1/2	2x12	1-1/2	5.12	130,0	60	60	2.73	69,4
1JS77-32-32	2	2-1/2x12	2	6.28	159,5	65	75	3.52	89,4

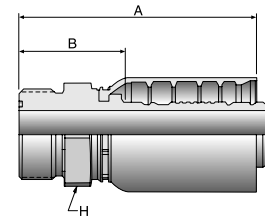


⚠ Refer to Pressure Rating of Hose End Connections chart on page E-45.
 -32 size rated to 3,000 psi

1J077

Male Seal-Lok® - Rigid - Straight - (with O-Ring)
 ISO 12151-1-S

# Part Number	Thread		Hose I.D. inch	A		H mm	B	
	inch	mm		inch	mm		inch	mm
1J077-8-8	13/16x16	1/2	2.46	62,6	22	1.24	31,6	
1J077-10-8	1x14	1/2	2.67	67,9	27	1.45	36,9	
1J077-10-10	1x14	5/8	2.86	72,6	27	1.51	38,4	
1J077-12-10	1-3/16x12	5/8	2.97	75,4	30	1.62	41,2	
1J077-12-12	1-3/16x12	3/4	3.27	82,9	32	1.63	41,5	
1J077-16-12	1-7/16x12	3/4	3.32	84,3	41	1.68	42,8	
1J077-16-16	1-7/16x12	1	3.74	95,0	41	1.79	45,5	
1J077-20-16	1-11/16x12	1	3.82	97,0	50	1.87	47,5	
1J077-20-20	1-11/16x12	1-1/4	4.31	109,5	50	2.04	51,8	
1J077-24-20	2x12	1-1/4	4.56	115,8	60	2.29	58,1	



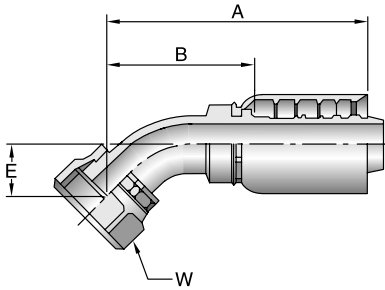
⚠ Refer to Pressure Rating of Hose End Connections chart on page E-45.

A

1J777

Female Seal-Lok® - Swivel - 45° Elbow

ISO 12151-1-SWE45



# Part Number	Thread		Hose I.D. inch	A		E		W mm	B	
	inch	mm		inch	mm	inch	mm		inch	mm
1J777-8-8	1/2	13/16x16	1/2	2.86	72,7	0.59	15	24	1.64	41,8
1J777-10-8	5/8	1x14	1/2	2.97	75,5	0.63	16	30	1.75	44,6
1J777-10-10	5/8	1x14	5/8	3.28	83,3	0.63	16	30	1.93	49,0
1J777-12-12	3/4	1-3/16x12	3/4	4.39	111,4	0.83	21	36	2.75	69,9
1J777-16-16	1	1-7/16x12	1	4.79	121,7	0.94	24	41	2.84	72,2
1J777-20-20	1-1/4	1-11/16x12	1-1/4	5.69	144,6	0.98	25	50	3.42	86,8
1J777-24-20	1-1/2	2x12	1-1/4	5.80	147,3	1.06	27	60	3.53	89,6
1J777-24-24	1-1/2	2x12	1-1/2	6.91	175,5	1.64	42	60	4.52	114,8

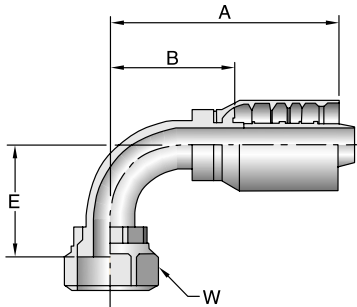
⚠ Refer to Pressure Rating of Hose End Connections chart on page E-45.

B

1J977

Female Seal-Lok® - Swivel - 90° Elbow - Short Drop

ISO 12151-1-SWES90



# Part Number	Thread		Hose I.D. inch	A		E		W mm	B	
	inch	mm		inch	mm	inch	mm		inch	mm
1J977-8-8	1/2	13/16x16	1/2	2.78	70,7	1.14	29	24	1.56	39,7
1J977-10-8	5/8	1x14	1/2	2.77	70,5	1.26	32	30	1.55	39,5
1J977-10-10	5/8	1x14	5/8	3.21	81,5	1.26	32	30	1.86	47,3
1J977-12-8	3/4	1-3/16x12	1/2	2.77	70,5	1.89	48	36	1.55	39,5
1J977-12-10	3/4	1-3/16x12	5/8	3.21	81,5	1.89	48	36	1.86	47,3
1J977-12-12	3/4	1-3/16x12	3/4	4.23	107,5	1.89	48	36	2.60	66,0
1J977-16-12	1	1-7/16x12	3/4	4.23	107,4	2.20	56	41	2.59	65,9
1J977-16-16	1	1-7/16x12	1	4.73	120,1	2.20	56	41	2.78	70,6
1J977-16-20	1	1-7/16x12	1-1/4	5.12	130,1	2.20	56	41	2.85	72,4
1J977-20-16	1-1/4	1-11/16x12	1	4.72	119,9	2.52	64	50	2.77	70,4
1J977-20-20	1-1/4	1-11/16x12	1-1/4	5.73	145,5	2.52	64	50	3.46	87,9
1J977-24-24	1-1/2	2x12	1-1/2	6.41	162,8	2.72	69	60	4.02	102,1

⚠ Refer to Pressure Rating of Hose End Connections chart on page E-45.

C

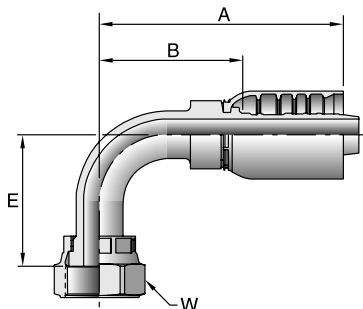
D

E

1J577

Female Seal-Lok® - Swivel - 90° Elbow - Medium Drop

ISO 12151-1 - SWEM90



# Part Number	Thread		Hose I.D. inch	A		E		W mm	B	
	inch	mm		inch	mm	inch	mm		inch	mm
1J577-8-8	1/2	13/16x16	1/2	2.77	70,5	1.61	41	24	1.55	39,5
1J577-10-10	5/8	1x14	5/8	4.11	104,4	1.85	57	30	2.76	70,1
1J577-12-12	3/4	1-3/16x12	3/4	4.24	107,6	2.28	58	36	2.60	66,1
1J577-16-12	1	1-7/16x12	3/4	4.23	107,4	2.80	71	56	2.59	65,9
1J577-16-16	1	1-7/16x12	1	4.72	119,9	2.80	71	56	2.77	70,4
1J577-20-20	1-1/4	1-11/16x12	1-1/4	5.73	145,6	3.07	78	64	3.46	87,9

⚠ Refer to Pressure Rating of Hose End Connections chart on page E-45.

See Accessories Section for O-Rings and Flange Kits.

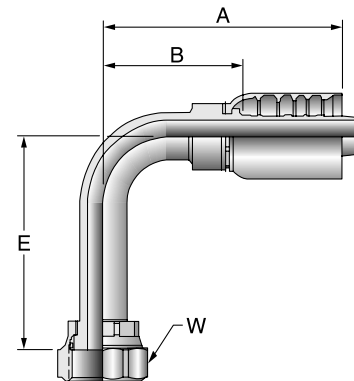
1J177

Female Seal-Lok® - Swivel - 90° Elbow - Long Drop

ISO 12151-1-SWEL90

# Part Number	Thread inch	Hose I.D. inch	A		E		W mm	B	
			inch	mm	inch	mm		inch	mm
1J177-8-8	13/16x16	1/2	2.77	70,5	2.52	64	24	1.55	39,5
1J177-10-10	1x14	5/8	3.21	81,5	2.76	70	30	1.86	47,3
1J177-12-10	1-3/16x12	5/8	3.64	92,4	3.78	96	36	2.29	58,2
1J177-12-12	1-3/16x12	3/4	4.23	107,4	3.78	96	36	2.59	65,9
1J177-16-12	1-7/16x12	3/4	4.23	107,4	4.49	114	41	2.60	66,1
1J177-16-16	1-7/16x12	1	4.73	120,1	4.49	114	41	2.78	70,6
1J177-20-16	1-11/16x12	1	4.73	120,1	5.08	129	50	2.78	70,6
1J177-20-20	1-11/16x12	1-1/4	5.73	145,6	5.08	129	50	3.46	87,9

⚠ Refer to Pressure Rating of Hose End Connections chart on page E-45.

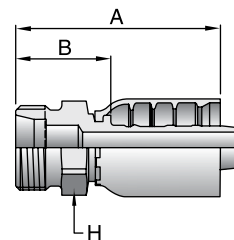


1D277

Male Metric S - Rigid - (24° Cone)

End Connection per ISO 8434-1-BHS

# Part Number	Thread mm	Hose I.D. inch	A		H mm	B	
			inch	mm		inch	mm
1D277-16-8	M24x1,5	1/2	2.53	64,4	24	1.31	33,4
1D277-20-10	M30x2	5/8	2.85	72,4	30	1.50	38,1
1D277-20-12	M30x2	3/4	3.31	84,1	30	1.68	42,6
1D277-25-12	M36x2	3/4	3.39	86,3	36	1.76	44,8
1D277-25-16	M36x2	1	3.78	95,9	36	1.83	46,4
1D277-30-16	M42x2	1	3.91	99,3	46	1.96	49,8
1D277-38-20	M52x2	1-1/4	4.50	114,3	55	2.23	56,6
1D277-38-24	M52x2	1-1/2	4.75	120,5	55	2.36	59,9



1C977

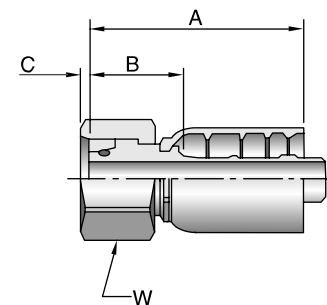
Female Metric S - Swivel - Straight (24° Cone with O-Ring)

ISO 12151-2-SWS

# Part Number	Thread mm	Hose I.D. inch	A		C		W mm	B	
			inch	mm	inch	mm		inch	mm
1C977-16-8	16 M24x1,5	1/2	2.34	59,5	0.09	2,0	30	1.12	28,5
1C977-16-10	16 M24x1,5	5/8	2.64	67,0	0.09	2,0	30	1.29	32,8
1C977-20-10	20 M30x2	5/8	2.64	67,0	0.05	1,3	36	1.29	32,8
1C977-20-12	20 M30x2	3/4	2.99	76,0	0.05	1,3	36	1.34	34,0
1C977-25-12	25 M36x2	3/4	3.00	76,5	0.10	2,6	46	1.37	35,0
1C977-25-16	25 M36x2	1	3.51	89,2	0.10	2,6	46	1.56	39,6
1C977-30-12	30 M42x2	3/4	3.17	80,4	0.19	5,0	50	1.53	39,0
1C977-30-16	30 M42x2	1	3.50	89,0	0.19	5,0	50	1.55	39,5
1C977-30-20	30 M42x2	1-1/4	4.09	103,9	0.19	5,0	50	1.82	46,2
1C977-38-20	38 M52x2	1-1/4	3.86	98,0	0.27	6,9	60	1.38	35,0
1C977-38-24	38 M52x2	1-1/2	4.08	103,7	0.24	6,0	60	1.69	43,1

When measuring overall length to end of nut, B + C dimensions must be used to calculate cut-off allowance.

See Accessories Section for O-Rings and Flange Kits.

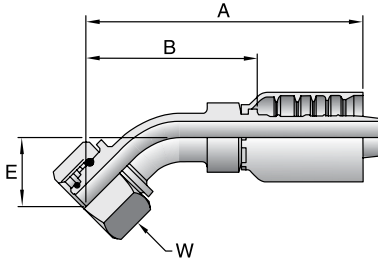


A

10C77

Female Metric S - Swivel - 45° Elbow - (24° Cone with O-Ring)

ISO 12151-2-SWE-45



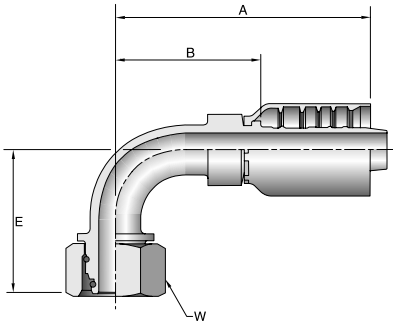
# Part Number	Thread mm	Hose I.D. inch	A		E		W mm	B	
			inch	mm	inch	mm		inch	mm
10C77-16-8	16 M24x1,5	1/2	3.26	82,9	0.93	23,5	30	2.04	51,9
10C77-20-10	20 M30x2	5/8	4.21	106,9	1.10	28,0	36	2.86	72,7
10C77-20-12	20 M30x2	3/4	4.73	120,1	1.18	30,0	36	3.09	78,6
10C77-25-12	25 M36x2	3/4	4.69	119,0	1.14	29,0	46	3.05	77,6
10C77-30-16	30 M42x2	1	5.59	142,0	1.30	33,0	50	3.64	92,5
10C77-38-20	38 M52x2	1-1/4	6.33	160,8	1.44	36,5	60	4.06	103,1
10C77-38-24	38 M52x2	1-1/2	7.33	186,2	1.93	49,0	60	4.94	125,5

B

11C77

Female Metric S - Swivel - 90° Elbow - (24° Cone with O-Ring)

ISO 12151-2-SWE



# Part Number	Thread inch	Hose I.D. inch	A		E		W mm	B	
			inch	mm	inch	mm		inch	mm
11C77-16-8	M24x1,5	1/2	3.03	77,0	1.77	45	30	1.65	45,0
11C77-20-10	M30x2	5/8	3.30	83,8	2.09	53	36	1.95	49,6
11C77-20-12	M30x2	3/4	4.25	108,0	2.36	60	36	2.44	62,0
11C77-25-12	M36x2	3/4	4.25	108,0	2.32	59	46	2.44	62,0
11C77-25-16	M36x2	1	5.16	131,1	2.75	70	46	3.21	81,6
11C77-30-16	M42x2	1	5.16	131,0	2.72	69	50	3.20	81,3
11C77-38-20	M52x2	1-1/4	5.94	151,0	3.07	78	60	3.42	87,0
11C77-38-24	M52x2	1-1/2	6.69	169,9	3.98	101	60	4.30	109,2

C

D

E

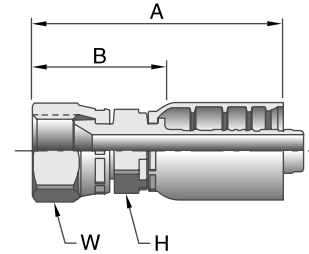
See Accessories Section for O-Rings and Flange Kits.

1FU77

Female BSP Parallel Pipe - Swivel - (30° Flare)

B8363 Code F

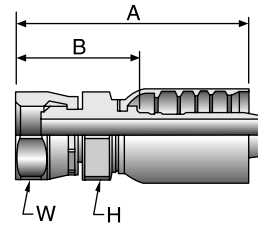
# Part Number	Thread mm	Hose I.D. inch	A		H mm	W mm	B	
			inch	mm			inch	mm
1FU77-8-8	1/2x14	1/2	2.41	61,1	22	27	1.19	30,1
1FU77-12-12	3/4x14	3/4	3.71	94,1	32	36	2.07	52,6
1FU77-16-16	1x11	1	3.72	94,5	41	41	1.77	45,0
1FU77-20-20	1-1/4x11	1-1/4	4.26	108,2	50	50	1.99	50,5



1GU77

Female BSP Parallel Pipe - Swivel - Straight (60° Cone)

# Part Number	Thread inch	Hose I.D. inch	A		H mm	W mm	B	
			inch	mm			inch	mm
1GU77-8-8	1/2x14	1/2	2.97	75,5	27	27	1.75	44,5
1GU77-12-12	3/4x14	3/4	3.74	94,9	36	36	2.10	53,4
1GU77-16-16	1x11	1	4.33	110,0	41	41	2.38	60,5
1GU77-20-20	1-1/4x11	1-1/4	4.91	124,7	46	50	2.64	67,0



1ZM77

Male 24° Cone Metric - Rigid - Straight

# Part Number	Thread mm	Hose I.D. inch	A		H mm	B	
			inch	mm		inch	mm
1ZM77-22-10	M30x1,5	5/8	2.83	71,8	36	1.48	37,6
1ZM77-22-12	M30x1,5	3/4	3.17	80,4	36	1.53	39,0
1ZM77-28-12	M36x1,5	3/4	3.38	85,8	41	1.74	44,3
1ZM77-28-16	M36x1,5	1	3.77	95,8	41	1.82	46,2
1ZM77-35-16	M45x1,5	1	3.85	97,8	50	1.90	48,3

