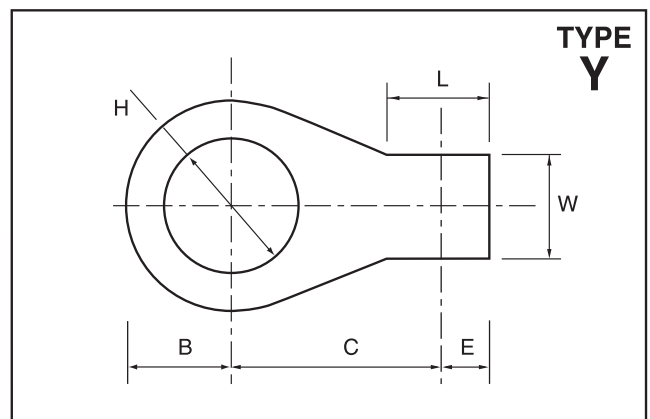
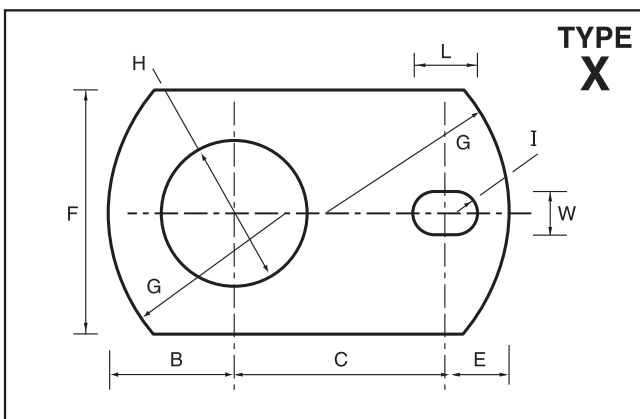
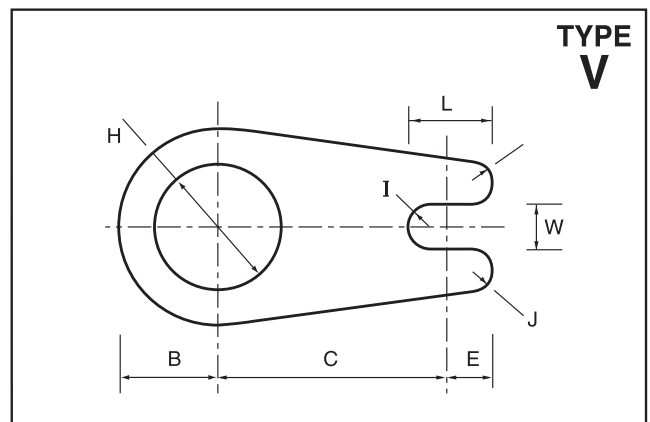
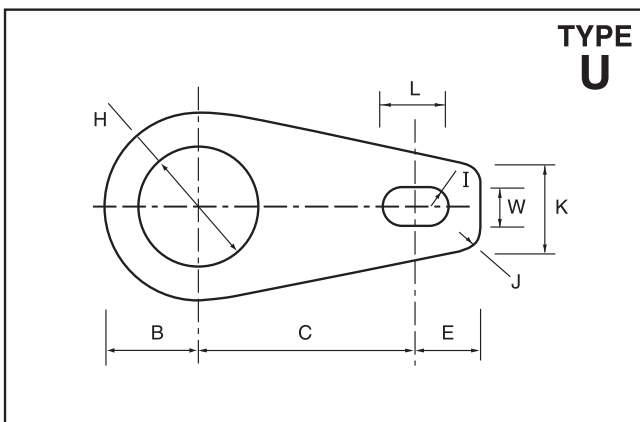
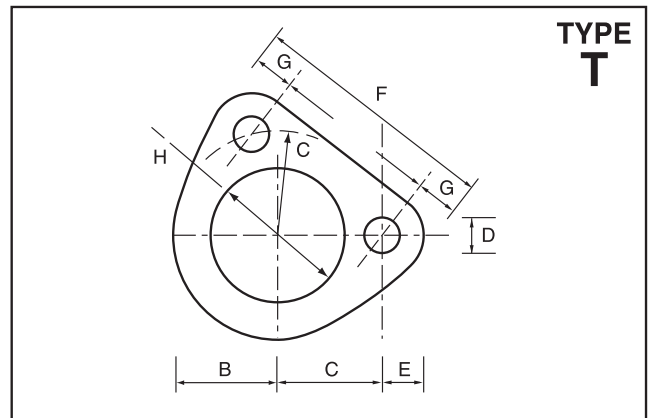
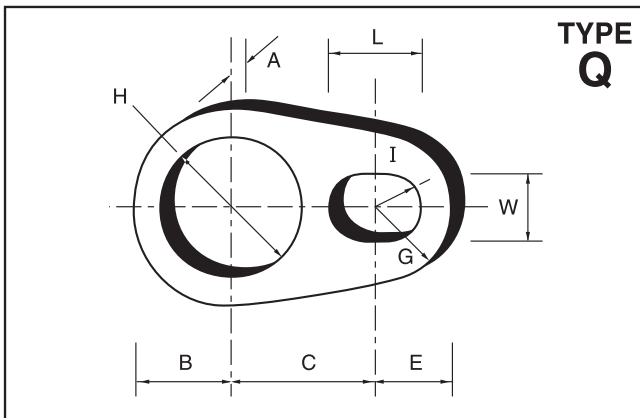
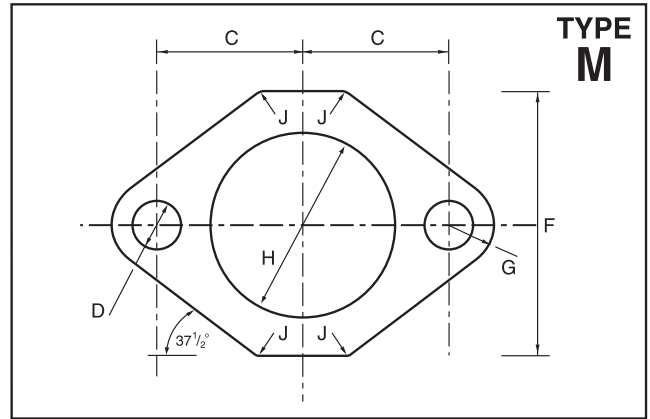
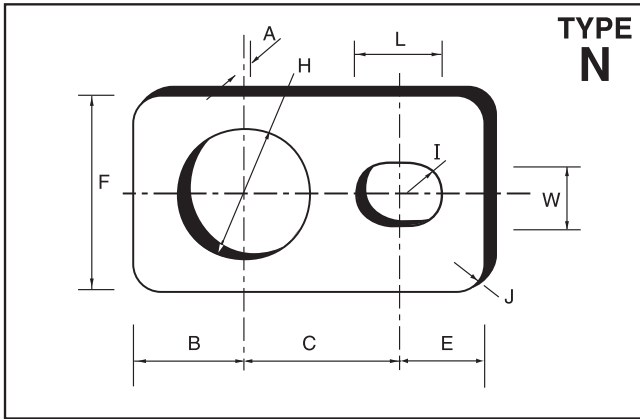


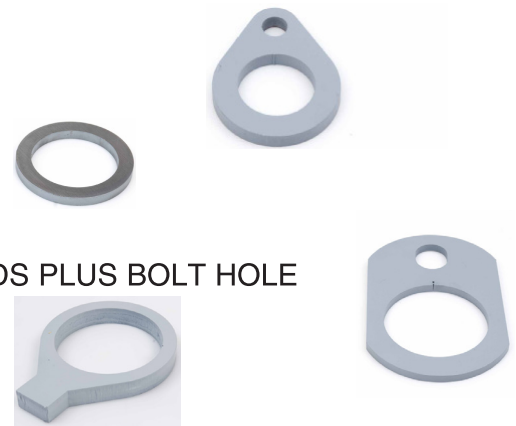
Pin Retainers - Weld-on End Plates - Pin Tags



Pin Retainers - Weld-on End Plates - Pin Tags

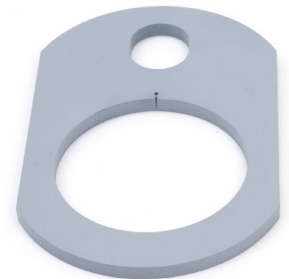
PLATE TYPE SYMBOLS

- M = MANIFOLD FLANGE - TWO BOLT HOLES AT 80°
- N = RECTANGLE PLATE WITH BOLT HOLES
- Q = TEAR DROP SHAPE WITH BOLT HOLE
- R = ROUND FLANGE - NO BOLT HOLES
- T = TRIANGULAR FLANGE - TWO BOLT HOLES
- U = ROUND HEAD, TAPER SIDES, STRAIGHT END
- V = TEAR DROP SHAPE WITH OPEN END SLOT
- X = "RECTANGULAR" - STRAIGHT SIDES, CURVED ENDS PLUS BOLT HOLE
- Y = ROUND FLANGE WITH RECTANGULAR TAG
- Z = SQUARE PLATE - NO BOLT HOLES

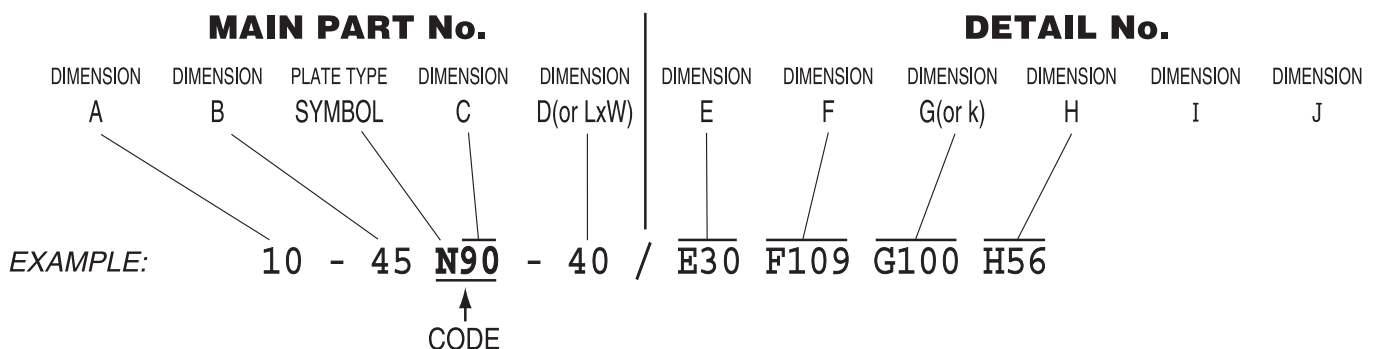


DIMENSION SYMBOLS - DIMENSIONS IN MILLIMETRES

- A = THICKNESS OF PLATE
- B = DISTANCE FROM CENTRE OF LARGE HOLE (PIN AXIS) TO NEAR END OF PLATE
- C = DISTANCE FROM PIN AXIS TO CENTRE OF BOLT HOLE
- D = DIAMETER OF BOLT HOLE - OR SLOT SHOWN AS Lmm x Wmm
- E = DISTANCE FROM CENTRE OF BOLT HOLE TO END OF PLATE
- F = WIDTH OF PLATE
- G = RADIUS AT SMALL END OF PLATE
- H = DIAMETER OF LARGE HOLE (WHERE PIN IS WELDED ON)
- I = RADIUS OF SLOT
- J = BLEND RADIUS
- K = WIDTH OF SMALL END OF TAPERED PLATES
- L = LENGTH OF SLOT OR RECTANGULAR TAG
- W = WIDTH OF SLOT OR RECTANGULAR TAG



PART NUMBER SYSTEM FOR WELD-ON PLATES



Excavator Pin End Plates Laser Cut

Plate Thickness	CODE	Price Ex GST	Pin Hole Diameter	
6 mm	46 M35	11 \$10	E11 F65 G11	H48
8 mm	35 Q34	12 \$12	E12 - -	H29
8 mm	30 Q35	12 \$12	E12 - -	H36
6 mm	49 M37.5	\$11	E11 F75 G11	H58
6 mm	35 U40	0 \$14	E0 - K70	H43
6 mm	35 T39	13 \$14	E15 F90 G15	H48
6 mm	20 Q40	16x13 \$14	E15 G15	H21
6 mm	40 T42.5	13 \$10	E15 F90 G15	H58
6 mm	35 Q43	14 \$15	E18 - -	H50
6 mm	34 Q44	27x21 \$17	E26 - G26	H30
8 mm	24 V44	\$10	E8	H37
6 mm	22.5 X45	14 \$10	E22.5 F45	H23
8 mm	42 Q49	0 \$10	E15 - G15	H50
6 mm	33 Q50	27x23 \$19	E21 - G21	H44
16 mm	38 N51	33 \$24	E26 F76	H55
8 mm	40 V52	25x16 \$18		H58
8 mm	32.5 V57	25x20 \$18	E12.5 L25 W20	H44
10 mm	28 X57	32x27 \$22	E25 F76 G50	H45
6 mm	41 X58	35x30 \$26	E30 F75 G50	H46
12 mm	40 Y58	34x30 \$28	E17	H46
6 mm	36 X59	36x30 \$26	E30 F75 G50	H45
6 mm	40 X60	36x30 \$30	E30 F90 G60	H55
6 mm	33 Q60	14 \$20	E15 - -	H48
6 mm	25 Q61	15x10 \$20	E14 L15 W10	H35
8 mm	45 Y62	30x20 \$20	E15 L30 W20	H58
16 mm	46 Y69	38x38 \$25	E19 L38 W38	H61
8 mm	44 Q70	21x13 \$16	E19 - G19	H63
8 mm	35 V71	32x27 \$20	E16 L32 W27	H48
10 mm	45 V72	32x13 \$20	E13 L32 W13	H56
16 mm	46 Y71	38x38 \$23	E19 L38 W38	H66
12 mm	43 V77	44x25 \$30	E22 VolvoL120F	H42
10 mm	45 Q77	40x30 \$30		H55
16 mm	35 Q79	31 Dia \$30	E25 G25	H37.5
10 mm	53 Q80	38x32 \$30	E33 G30	H60.5
10 mm	50 V80	40x25 \$40	E20 F100	H65
8 mm	50 X80	48x40 \$40	E42 F100 G95	H63
10 mm	53 Q81	38x32 \$30	E33 G30	H60.5
10 mm	53 X81	42x32 \$34	E38 F100 G95	H66
12 mm	55 V82	37x28 \$30	E18 VolvoL120F	H70
10 mm	50 X82	44x40 \$34	E40 F100 G95	H72
16 mm	62 Y81	38x38 \$18	E19 L38 W38	H95

Steel Laser Cutting Sydney

Complete Profiling Services

Laser cut profiles to 12mm thick
Precision Machine

Plasma cut profiles up to 25mm thick
Clean Finish Steel Profiles
Construction Base Plates

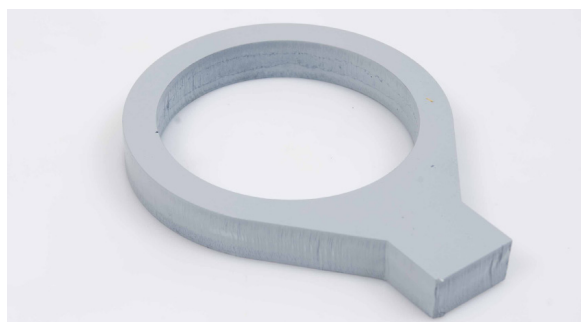
Phone 02 9912 5100



Wholesale Prices shown for \$170
Minimum order

Retail: POA
\$120 Min order

Plus freight & GST. All prices subject to change without notice



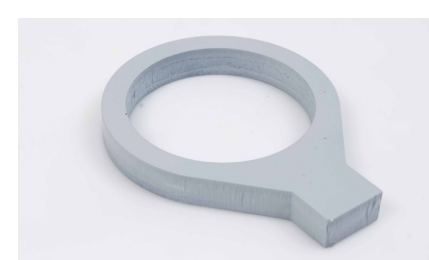
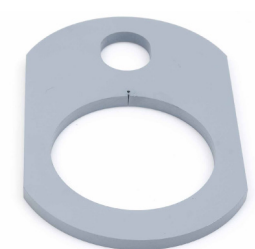
Newcastle - Sydney Region - Australia

Pin Retainers - Weld-on End Plates - Pin Tags

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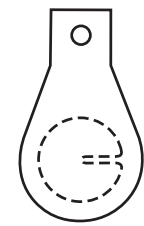
Plate Thickness	CODE	Price Ex GST	Pin Hole Diameter	
12 mm	40 Y83	30x30 \$30	H40	
8 mm	35 V83	24x16 \$15	H46	
20 mm	56 Y84	46x38 \$48	H66	160
8 mm	56 Q85	21x13 \$18	H82	
12 mm	55 U85	50x40 \$30	H67	K80
20 mm	55 Y85	34x40 \$48	H76	160
20 mm	66 Y86	26x40 \$34	H86	163
20 mm	60 Y87	25x40 \$34	H86	160
20 mm	65 Y88	25x40 \$34	H96	166
8 mm	35 V88	32x27 \$20	H48	
12 mm	44 V89	50x30 \$39	H48	I=15,J8
12 mm	85 X89	48x40 \$24	H80	200
20 mm	60 Y89	34x38 \$28	H76	
12 mm	37 N90	31 \$16	H44	
20 mm	60 Y90	50x40 \$50*	H76	175
10 mm	35 Q90	22x16 \$22	H46	
12 mm	68 X90	48x40 \$34	H81	200
10 mm	42 Q91	22x16 \$30	H56	155
20 mm	60 Y91	40x40 \$50	H86	170
12 mm	68 N91	48x40 \$20	H91	
12 mm	68 X91	48x40 \$34	H91	200
12 mm	42 Q92	33x28 \$22	H48	
12 mm	61 X92	44x40 \$34	H91	190
12 mm	50 X95	40x30 \$34	H70	
20 mm	67 Y96	28x38 \$36	H106	177
8 mm	41 Q97	13 \$22	H46	
16 mm	45 N100	16 \$26	H49	
8 mm	49 Q100	35x33 \$28	H66	
12 mm	65 Q101	48x40 \$34	H75	
20 mm	60 Y100	50x40 \$32	H86	185
20 mm	70 Y101	52x52 \$32	H110	196
12 mm	39 X102	44x30 \$30	H55	183
18 mm	60 Y103	35x65 \$48	H85	181
12 mm	50 Q105	28x20 \$40	H58	
10 mm	38 X105	40x30 \$25	H46	183
12 mm	95 Y105	80x100 \$30	H136	
10 mm	38 X107	40x30 \$30	H55	183
16 mm	42 Y107	45x39 \$46	H65	172

Steel Laser Cutting Sydney
Complete Profiling Services
*Laser cut profiles to 12mm thick
Precision Machine*
*Plasma cut profiles up to 25mm thick
Clean Finish Steel Profiles
Construction Base Plates*
Phone 02 9912 5100



Indexation of Grease Exits to End Plates

Plate is viewed with pin hidden, as viewed on the machine, or as by a person welding the plate.
The long end of the PLATE (or bolt hole end) at 12 o'clock, (or pointing away from person welding).
The grease exit position on the circumference is described in an o'clock position, ie, for pin at right: 3 o'clock.
Unless specified, assume grease exit is at 6 o'clock, abbrv: "clk".



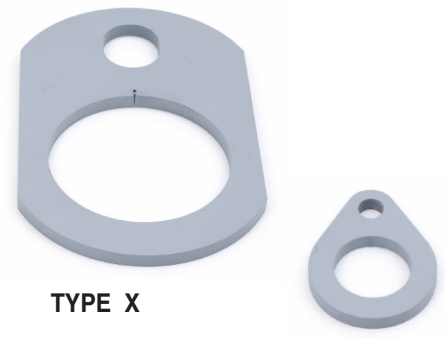
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Pin Retainers - Weld-on End Plates - Pin Tags

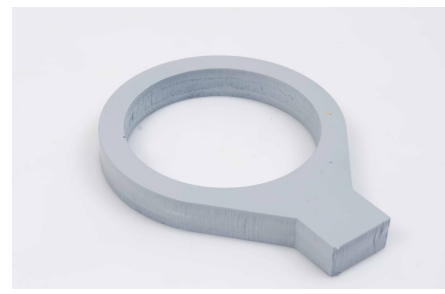
Plate Thickness	CODE	Price Ex GST	Pin Hole Diameter	
18 mm	80 Y108	24x38 \$46	E12 L24 W38	H96 200
16 mm	50 N110	0 \$28	E20 F101 -	H67
12 mm	65 N111	43 \$28	E30 F125	H90
16 mm	47 Y111	40x40 \$30	E20 L40 W40	H76 176
12 mm	51 X114	52x40 \$30	E39 F102 G70	H70 204
10 mm	45 Q115	20x13 \$30	E19 G19	H58
12 mm	51 X115	40x30 \$30	E36 F100 G70	H85 200
12 mm	57 X116	32 \$34	E28 F100 G70	H95
12 mm	65 U117	66x32 \$40	E45 J25 K80	H
12 mm	70 X119	48x40 \$49	E36 F150 G100	H106 225
12 mm	75 Y119	60x80 \$54		H116 225
12 mm	84 Q120	40x48 \$52	E38 F150	H106 242
12 mm	70 X120	48x40 \$50	E35 F150 G100	H117 225
12 mm	97 X121	48x40 \$50	E38 F150 G100	H117 255
12 mm	85 Y122	75x100 \$50	E38	H136 245
18 mm	70 Y124	62x45 \$65	E31 L62 W45	H78
20 mm	69 Y126	52x52 \$65	E26 L52 W52	H105
20 mm	68 Y127	60x60 \$65	E30 L58 W60	H106 225
20 mm	72 Y130	60x60 \$65	E30 L60 W60	H116 232
20 mm	75 Y133	35x54 \$65	E17 L35 W54	H94 225
12 mm	100 X130	55x45 \$60	E50 F180 G100	H136 280
16 mm	65 U144	0x0 \$40	E16 K32	H106 225
16 mm	65 Q148	46 \$46	E35	H76
16 mm	65 Q149	46 \$38	E35 C150	H86 250
16 mm	65 Q150	46 \$40	E35	H106 250
12 mm	55 X150	52x40 \$52	E20	H
12 mm	46 X151	52x43 \$52	E51 F160 G125	H81
20 mm	85 Y150	40x50 \$65	E20 L40 W50	H102 254
20 mm	75 Y154	35x40 \$50	E17 L35 W40	H125 244
12 mm	120 X160	55x45 \$90	E55 F230 G120	H156 335
16 mm	60 Y163	62x50 \$55	E30 L60 W50	H71 253
20 mm	53 Y195	70x48 \$96	E35 L70 W48	H84 283x130
12 mm	68 V196	50x32 \$46	E35 L51 W32	H66
20 mm	69 Y199	60x50 \$60	E25 L60 W50	H76 298
20 mm	83 Y203	64x44 \$60	E32 L64 W44	H109 318
20 mm	75 Y205	50x50 \$60	E25 L50 W50	H96 305

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Laser cut profiles to 12mm thick
Precision Machine
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Construction Base Plates
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TYPE X

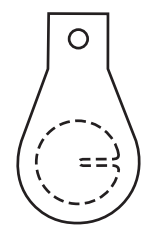
TYPE Q



TYPE Y

Indexation of Grease Exits to End Plates

Plate is viewed with pin hidden, as viewed on the machine, or as by a person welding the plate.
 The long end of the PLATE (or bolt hole end) at 12 o'clock, (or pointing away from person welding).
 The grease exit position on the circumference is described in an o'clock position, ie, for pin at right: 3 o'clock.
 Unless specified, assume grease exit is at 6 o'clock, abbrv: "clk".



Newcastle - Sydney Region - Australia



Pin Retainers - Weld-on End Plates - Pin Tags

Laser Cut Steel Rings - Weld-On End Plates - Spacers

Plate Thickness	Outside Ø	Pin Hole Diameter	CODE	Price Ex GST
6 mm	35 Ø	23 Ø	H23	\$12
6 mm	50 Ø	28 Ø	H28	\$12
6 mm	58 Ø	33 Ø	H33	\$12
mm	Ø	Ø	H34	\$12
12 mm	55 Ø	37 Ø	H37	\$12
6 mm	64 Ø	38 Ø	H38	\$12
6 mm	80 Ø	38.6Ø	H39	\$14
6 mm	66 Ø	40 Ø	H40a	\$13
6 mm	56 AF, 76 Ø	40 Ø	H40	\$13
8 mm	60 Ø	40 Ø	H41	\$12
6 mm	66 Ø	42 Ø	H42	\$12
mm	Square	Ø	H43	\$12
12 mm	66 Ø	44 Ø	H44	\$16
7 mm	76 Ø	46 Ø	H46	\$14
6 mm	72 AF	48 Ø	H48	\$12
10 mm	72 AF	48 Ø	H49	\$12
6 mm	90 Ø	56 Ø	H56	\$13
12 mm	75 Ø	57 Ø	H57	\$20
12 mm	90 Ø	58 Ø	H58	\$20
12 mm	76 Ø	60 Ø	H60	\$20
8 mm	92 Ø	60 Ø	H61	\$20
12 mm	110 Ø	61 Ø	H62	\$48
10 mm	120 Ø	65 Ø	H65	\$20
12 mm	100 Ø	66 Ø	H66	\$20
12 mm	86 Ø	67 Ø	H67	\$20
12 mm	125 Ø	71 Ø	H71	\$50
12 mm	115 Ø	76 Ø	H76	\$20
20 mm	170 Ø	80 Ø	H80	\$30
12 mm	150 Ø	81 Ø	H81	\$56
12 mm	120 Ø	86 Ø	H86	\$22
20 mm	180 Ø	90 Ø	H90	\$30
12 mm	160 Ø	91 Ø	H91	\$60
12 mm	130 Ø	96 Ø	H96	\$24
12 mm	175 Ø	102 Ø	H102	\$70
12 mm	145 Ø	106 Ø	H106	\$30
12 mm	190 Ø	106 Ø	H112	\$80
12 mm	155 Ø	116 Ø	H116	\$65
12 mm	210 Ø	122 Ø	H122	\$80
12 mm	230 Ø	132 Ø	H132	\$90
12 mm	~ ~ ~	~ ~ ~	~ ~ ~	~ ~ ~



Steel Laser Cutting Sydney Complete Profiling Services

Laser cut profiles to 12mm thick
Precision Machine

Plasma cut profiles up to 25mm thick
Clean Finish Steel Profiles
Construction Base Plates

Phone 02 9912 5100

Newcastle - Sydney Region - Australia

Economy Shim Kits - Stainless Steel Shim Kits

PART No.	PRICE		OUTSIDE	INSIDE	THICKNESS	NOTES
	Ex GST					
SM26	\$ 26		50 mm	26.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM31	\$ 29		55 mm	31.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM33	\$ 29		63 mm	33.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM36	\$ 29		70 mm	36.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM37	\$ 20		63 mm	37.5 mm	3mm	10 per Pack
SM40.5	\$16/pr		80 mm	40.5 mm	6mm	2 per pack
SM41	\$ 32		74 mm	41.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM44	\$ 20		70 mm	44.5 mm	3mm	10 per Pack
SM45	\$ 22		70 mm	45.2 mm	2mm	10 per Pack
SM46	\$ 36		80 mm	46.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM51	\$ 40		96 mm	51.2 mm	1mm, 2mm, 3mm	2 of each per Kit
SM52	\$ 44		127 mm	51.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM56	\$ 42		95 mm	56.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM61	\$ 42		100 mm	61.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SD64	\$ 38		101 mm	63.5 mm	10mm Single T79849	Thrust Washer
SD65	\$ 34		114 mm	65.0 mm	5mm Single T67205	Thrust Washer
SM66	\$ 43		115 mm	66.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SD66.3	\$ 32		127 mm	66.3 mm	5mm Single 9J2323	Steel Washer
SM71	\$ 44		120 mm	71.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM77	\$ 45		127 mm	77.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM81	\$ 47		130 mm	81.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SSM81	\$ 48	Stainless	130 mm	81.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SD83	\$ 58	Bronze	152 mm	82.6 mm	5mm Single 7J3663	Bronze Washer
SM86	\$ 50		138 mm	86.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SSM86	\$ 58	Stainless	138 mm	86.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM91	\$ 50		146 mm	91.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM96	\$ 53		150 mm	96.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SD101.5	\$130	Hardened	196 mm	101.57 mm	8mm Single 4J5690	Grooved, Ground
SD101.6	\$ 78	Bronze	173 mm	101.6 mm	6.35mm Single 4J5692	Bronze Washer
SP188-102-16	\$435	PhosBronze	188 mm	102 mm	16mm Stepped Juganaut	0505 10027
SD101.6	\$128	Bronze	197 mm	101.65 mm	6.35mm Single 4J5691	Grooved Bronze
SD101.7	\$ 90	Hardened	196 mm	101.7 mm	8mm Single 4J5689	Precision Ground
SM102	\$ 55		155 mm	102.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM106	\$ 58		160 mm	106.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM111	\$ 58		165 mm	111.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM116	\$ 60		178 mm	116.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM121	\$ 65		185 mm	121.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM126	\$ 80		192 mm	126.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM131	\$ 86		210 mm	131.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM141	\$ 94		220 mm	141.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM151	\$100		240 mm	151.0 mm	1mm, 2mm, 3mm	2 of each per Kit
SM161	\$118		250 mm	161.0 mm	1mm, 2mm, 3mm	2 of each per Kit

See previous page for 12mm Spacers

Shims Australian Made

Bucket, Arm and Cylinder Joints
of excavators and wheel loaders
Heavy Load Joints. Boom Foot
Komatsu excavator shim
Caterpillar wheel loader shims
Kobelco excavator shims



Shim Engineered Application

Moving joints earthmoving equipment
Australian Shim manufacturer
Boom Cylinder Ram Eye
Excavator Pivot Points
WA Loader Shims
Hitachi excavator shim
Earthmoving Shims Mackay
Perth Machinery Shims
Tree Harvester Attachment
Log Grapple Shim
Australia Grabs and Grapples
Rotator Pins and Bushes and Shims
Forestry Attachment Shim
NZ Industrial Shim
NZ Forestry Attachment Shim
Bucket Pin Shim
Forest Harvesting Attachment
Tasmania Industrial Supplies
Port Hedland Bearing & Shim
Australian made shims
All Shims Earthmoving overnight Australia
Brisbane Buckets Shims
Gambier Shims Next day delivery
Darwin Bushes & Shim
Mount Isa Shim supplies
Adelaide Industrial Shim & Bearing
Excavator Shims Melbourne Overnight
Komatsu Loader Shims WA
Airbag Shim deliveries Australia -wide

Wholesale Prices
shown for \$170
Minimum order

Retail: POA
\$120 Min order

Plus freight & GST. All prices
subject to change without notice