

# Inverter Type Thyristors

International  
 Rectifier

345 TO 610 AMPS RMS

T-25-01

Part number	V <sub>RRM</sub> V <sub>DRM</sub> (V)	I <sub>T(RMS)</sub> (A)	I <sub>T(AV)</sub> T <sub>C</sub>		I <sub>TSM</sub> (1)		V <sub>GT</sub> (2) (V)	I <sub>GT</sub> (2) (mA)	V <sub>TM</sub> (3) (V)	t <sub>q</sub> (μs)	R <sub>thJC</sub> DC (7) (°C/W)	Case Outline Number	Notes	Case style
			(A)	(°C)	50Hz (A)	60Hz (A)								
ST093C06CFJ ST093C06CFF ST093C08CFJ ST093C08CFF ST093C10CFJ ST093C10CFF ST093C12CFJ ST093C12CFF	600 600 800 800 1000 1000 1200 1200	345	220	55	1600	1675	3.0	200	1.96	25 40 25 40 25 40 25 40	0.135	T13 A	(5)	TO-200AB (A-PUK)
ST103C02CCL ST103C02CCJ ST103C04CCL ST103C04CCJ ST103C06CCL ST103C06CCJ	200 200 400 400 600 600	376	240	55	1900	2000	3.0	200	1.73	15 25 15 25 15 25	0.135		(4)	
ST163C02CCN ST163C02CCK ST163C04CCN ST163C04CCK ST163C06CCN ST163C06CCK ST163C06CCF ST163C08CCK ST163C08CCF ST163C10CCK ST163C10CCF ST163C12CCK ST163C12CCF	200 200 400 400 600 600 600 800 800 1000 1000 1200 1200	475	305	55	2350	2460	3.0	200	2.30	10 20 10 20 10 20 40 20 40 20 40 20 40	0.095		(4)	
ST173C06CFJ ST173C06CFF ST173C08CFJ ST173C08CFF ST173C10CFJ ST173C10CFF ST173C12CFJ ST173C12CFF	600 600 800 800 1000 1000 1200 1200	520	330	55	2800	2930	3.0	200	2.07	25 40 25 40 25 40 25 40	0.095		(5)	
ST183C02CCN ST183C02CCK ST183C04CCN ST183C04CCK ST183C06CCN ST183C06CCK	200 200 400 400 600 600	530	370	55	3000	3140	3.0	200	1.96	10 20 10 20 10 20	0.095		(5)	
ST203C06CFJ ST203C06CFF ST203C08CFJ ST203C08CFF ST203C10CFJ ST203C10CFF ST203C12CFJ ST203C12CFF	600 600 800 800 1000 1000 1200 1200	580	370	55	3100	3245	3.0	200	1.72	25 40 25 40 25 40 25 40	0.095		(5)	
ST223C02CCL ST223C02CCJ ST223C04CCL ST223C04CCJ ST223C06CCL ST223C06CCJ	200 200 400 400 600 600	610	390	55	3900	4080	3.0	200	1.58	15 25 15 25 15 25	0.095		(4)	

(1) 100% V<sub>RRM</sub> reapplied T<sub>j</sub> = 125°C.

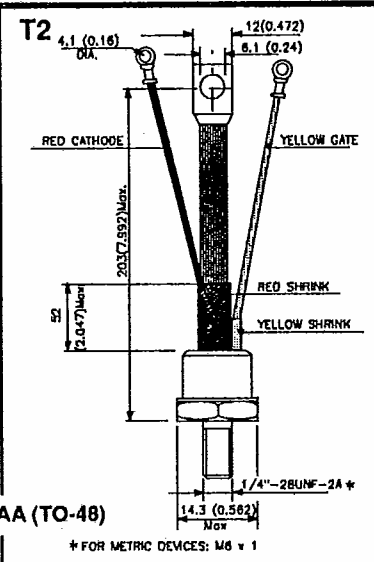
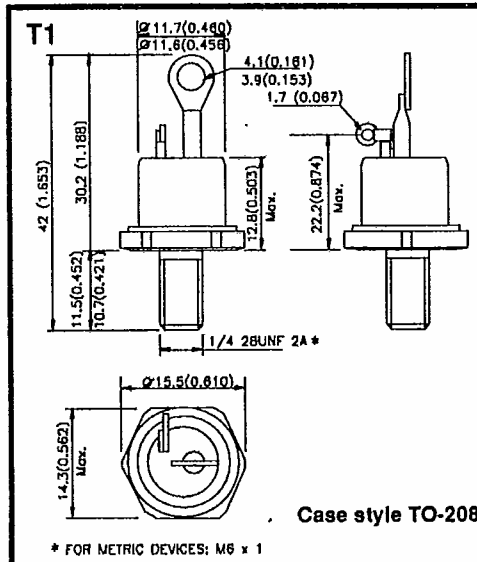
(2) T<sub>j</sub> = 25 °C.

(3) π x I<sub>T(AV)</sub> @ T<sub>j</sub> = 25°C

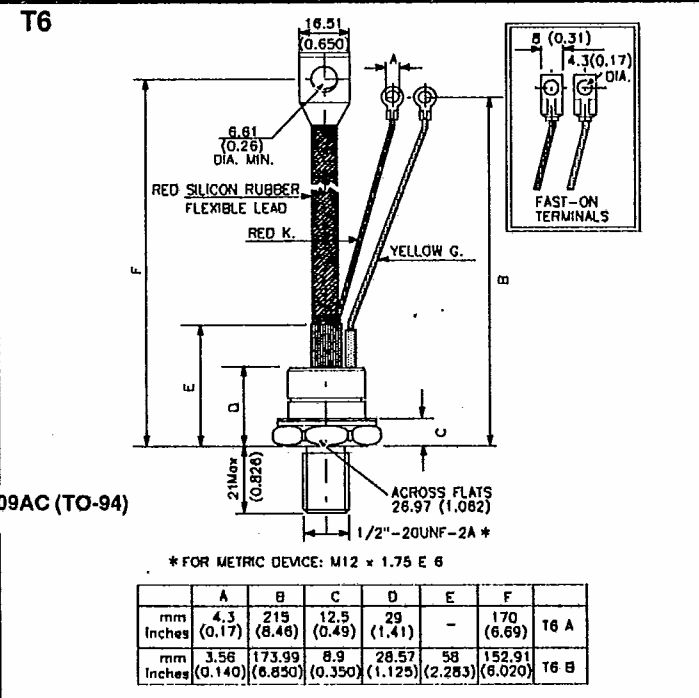
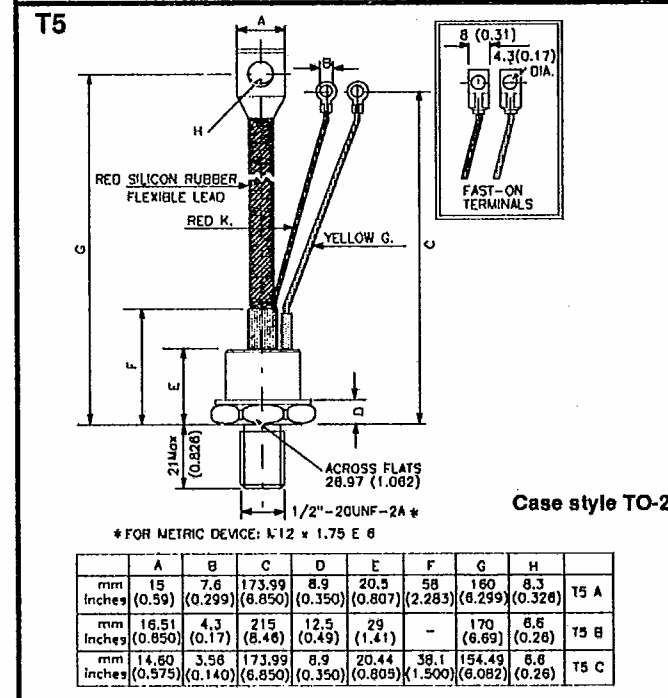
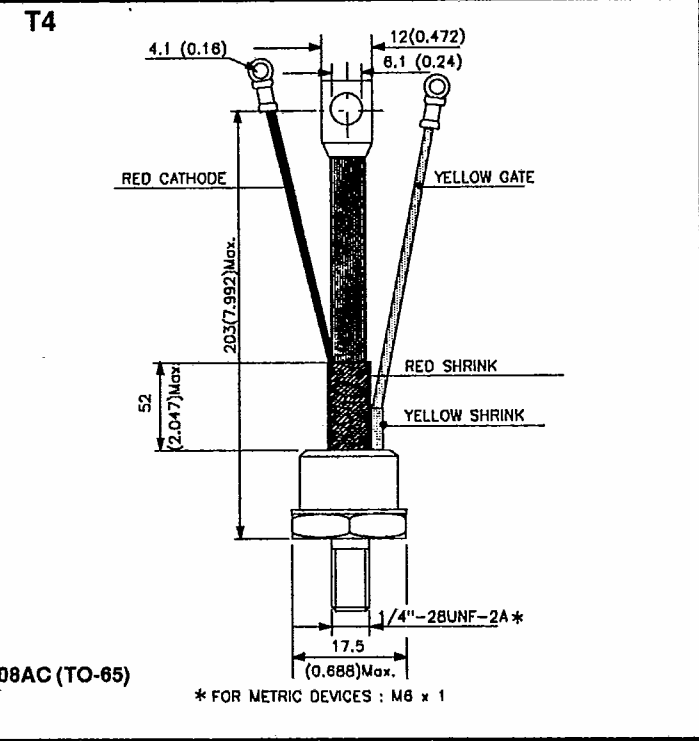
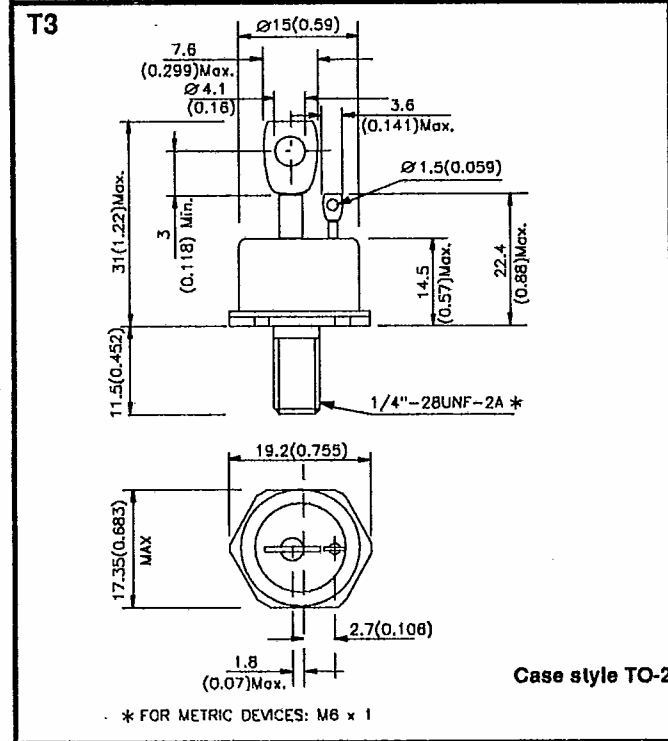
(4) T<sub>q</sub>: T<sub>j</sub> = Max. rated, reapplied dv/dt = 20 V/μs.

(5) T<sub>q</sub>: T<sub>j</sub> = Max. rated, reapplied dv/dt = 200 V/μs.

(7) Double side cooled.



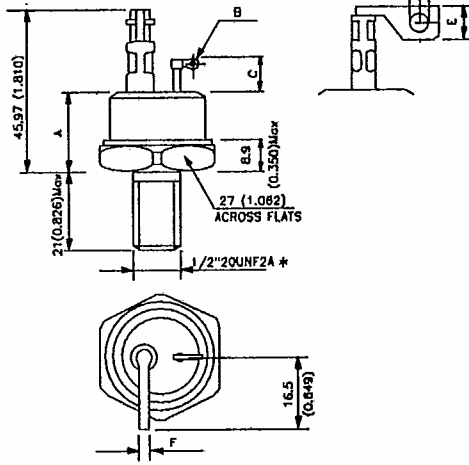
All dimensions in millimetres (inches).  
 Dimensions are nominal.  
 Full engineering drawings are available on request.



Case outlines

T-25-01

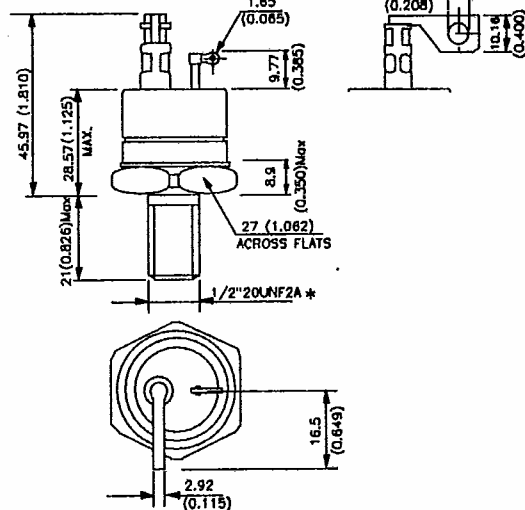
T7



\* FOR METRIC DEVICE: M12 x 1.75 E 6

	A	B	C	D	E	F	
mm	20.5	1.8	9.5	9.5	10	2.3	T7 A
Inches	(0.807)	(0.07)	(0.374)	(0.22)	(0.393)	(0.090)	
mm	20.4	1.85	9.77	9.29	10.18	2.92	T7 B
Inches	(0.805)	(0.065)	(0.385)	(0.208)	(0.400)	(0.115)	

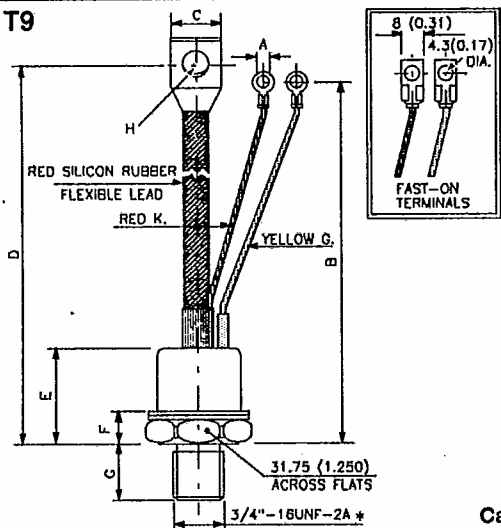
T8



\* FOR METRIC DEVICE: M12 x 1.75 E 6

Case style TO-208AD (TO-83)

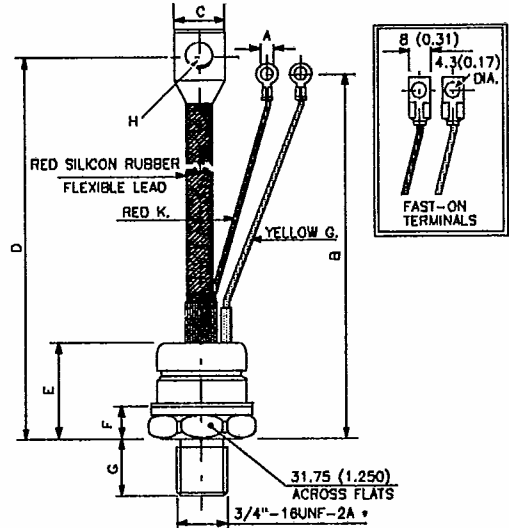
T9



\* FOR METRIC DEVICE : M16 x 1.5 E 6

	A	B	C	D	E	F	G	
mm	4.3	220	19	210	38.5	16	27.5	T9 A
Inches	(0.17)	(8.66)	(0.75)	(8.26)	(1.51)	(0.63)	(1.08)	
mm	3.56	196.21	19.17	186.64	31.75	12.70	27.82	T9 B
Inches	(0.140)	(7.725)	(0.755)	(7.35)	(1.250)	(0.500)	(1.095)	

T10

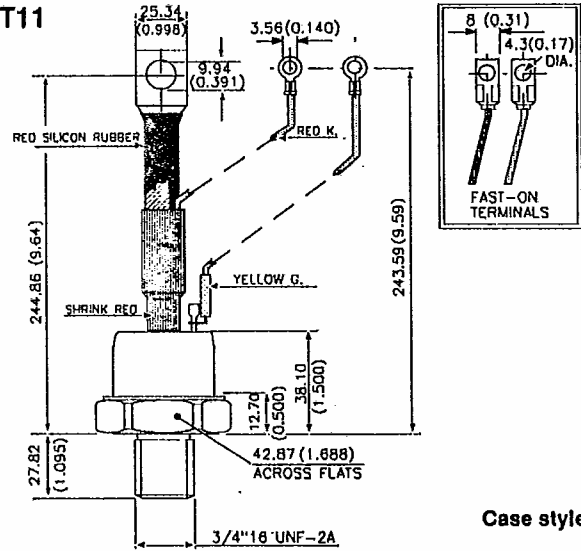


\* FOR METRIC DEVICE : M16 x 1.5 E 6

	A	B	C	D	E	F	G	
mm	4.3	220	19	210	38.5	16	27.5	T10 A
Inches	(0.17)	(8.66)	(0.75)	(8.26)	(1.51)	(0.63)	(1.08)	
mm	3.56	196.21	19.17	186.64	34.29	12.70	27.82	T10 B
Inches	(0.140)	(7.725)	(0.755)	(7.35)	(1.350)	(0.500)	(1.095)	

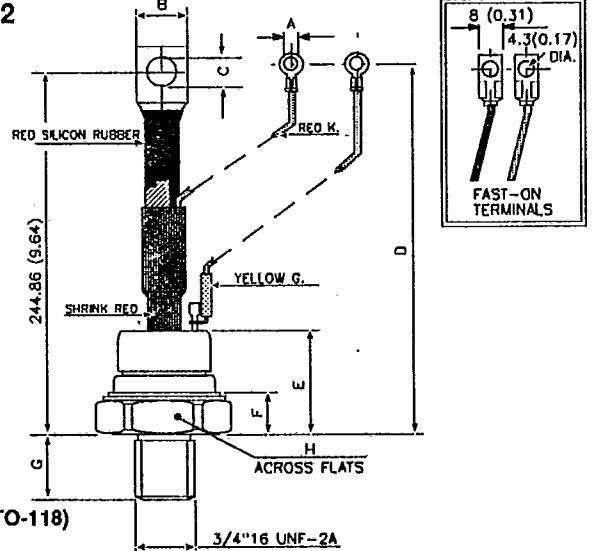
Case style TO-209AB (TO-93)

T11



Case style TO-209AE (TO-118)

T12

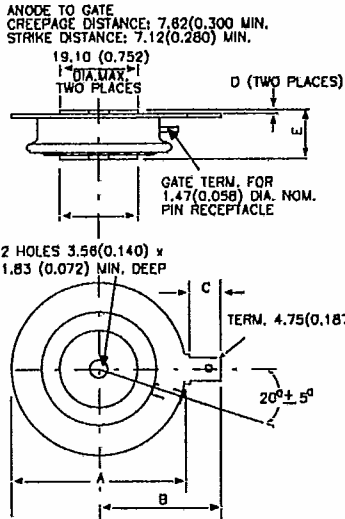


	A	B	C	D	E	F	G	H	
mm	4.3	22	10.5	245	47	21	27.5	45	T12 A
Inches	(0.17)	(0.866)	(0.41)	(9.64)	(1.85)	(0.82)	(1.08)	(1.77)	
mm	3.56	25.34	9.94	243.59	38.10	12.70	27.82	42.87	T12 B
Inches	(0.140)	(0.998)	(0.391)	(9.59)	(1.500)	(0.500)	(1.095)	(1.688)	

All dimensions in millimetres (inches)  
 Dimensions are nominal  
 Full engineering drawings are available on request

T-25-01

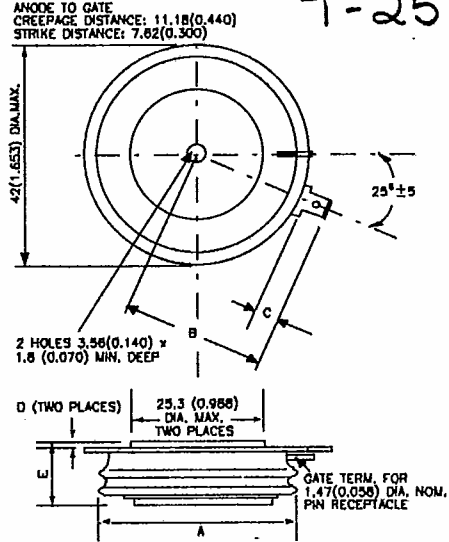
T13



	A	B	C	D	E	
mm	42	28.1	6.5	0.3	13.1/14.4	T13 A
inches	1.65	1.10	0.25	0.012	0.516/0.567	
mm	41.5	28.32	6.10	0.77	13.65/14.35	T13 B
inches	1.63	1.115	0.240	0.030	0.537/0.565	

Case style TO-200AB (A-PUK)

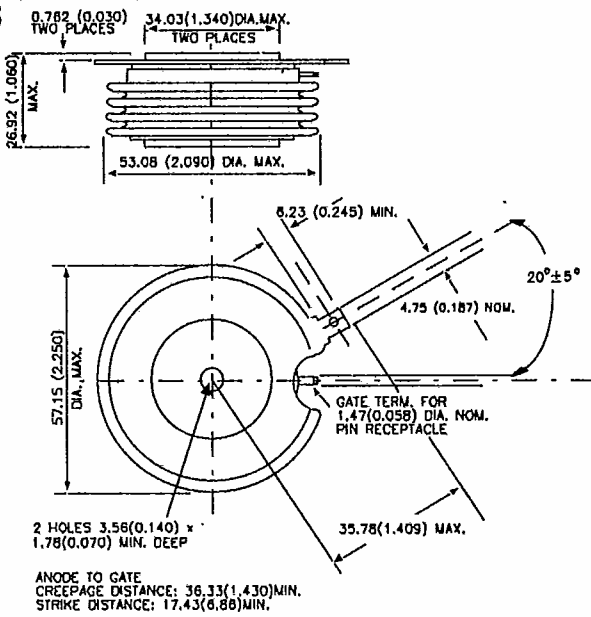
T14



	A	B	C	D	E	
mm	40.1	28.1	6.5	0.3	14.15/15.1	T14 A
inches	1.57	1.10	0.25	0.012	0.557/0.594	
mm	40.25	28.44	6.23	0.77	14.30/15.10	T14 B
inches	1.585	1.120	0.245	0.030	0.563/0.594	

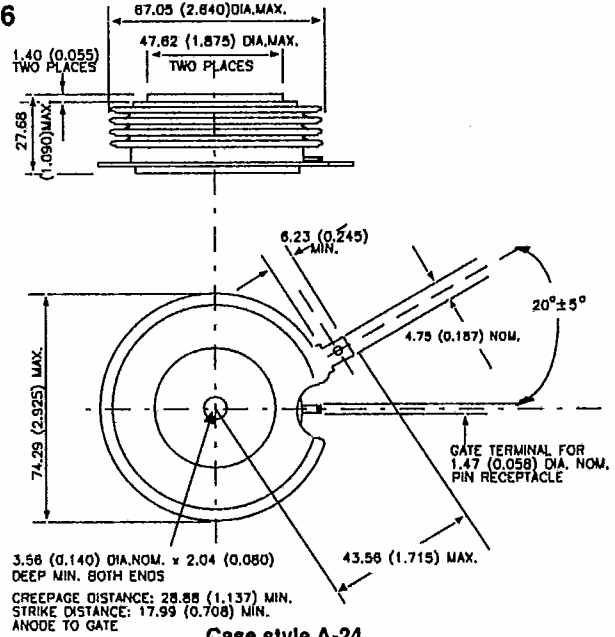
Case style TO-200AB (E-PUK)

T15



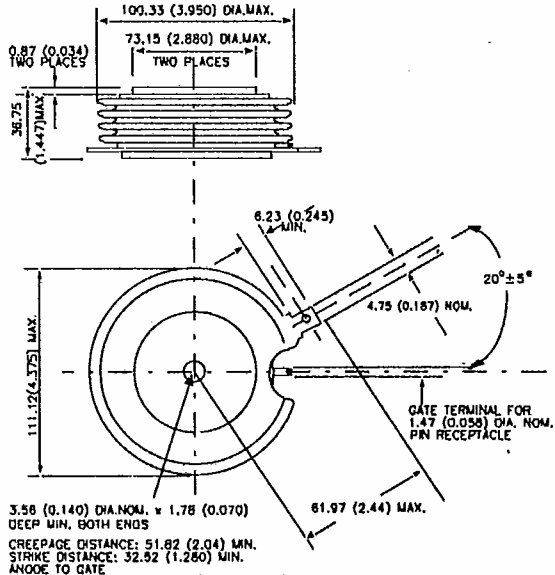
Case style TO-200AC

T16



Case style A-24

T17



Case style A-36

- All dimensions in millimetres (inches)
- Dimensions are nominal
- Full engineering drawings are available on request