Crompton lighting

Comprehensive Catalogue 1986/7.

Crompton Lighting

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Safety Mark

Under the Electrical Equipment (Safety) Regulations: Statutory Instrument 1975 No. 1366, no electrical equipment must be offered for sale that is unsafe.

The Department of Prices and Consumer Protection have accepted that the safety standards incorporated in BS4533 meet their safety requirements and that luminaires which carry the BSI registered safety mark automatically comply. Manufacturers are granted a safety mark licence only after satisfying the following conditions:–

(i) That their product has been independently tested and approved by the BSI Quality Assurance Laboratory as complying with BS4533.
(ii) That their production and quality control procedures conform to the BSI requirements.
(iii) That they agree to periodic random inspection and monitoring by the BSI inspectors, of their production quality control and re-testing of randomly selected production samples.

Photometric Data

The Crompton Parkinson Ltd., Photometric Laboratory is included in the list of BSI Registered Photometric Laboratories, having been assessed in relation to its ability to prepare valid photometric data of tubular fluorescent lamp luminaires.

Published photometric data for such luminaires are derived from tests carried out by the Crompton Parkinson laboratory.

Important

All descriptions represent only particulars of the goods to which they apply and do not form part of any contract. The Company reserves the right to change specifications without prior notification or public announcement.

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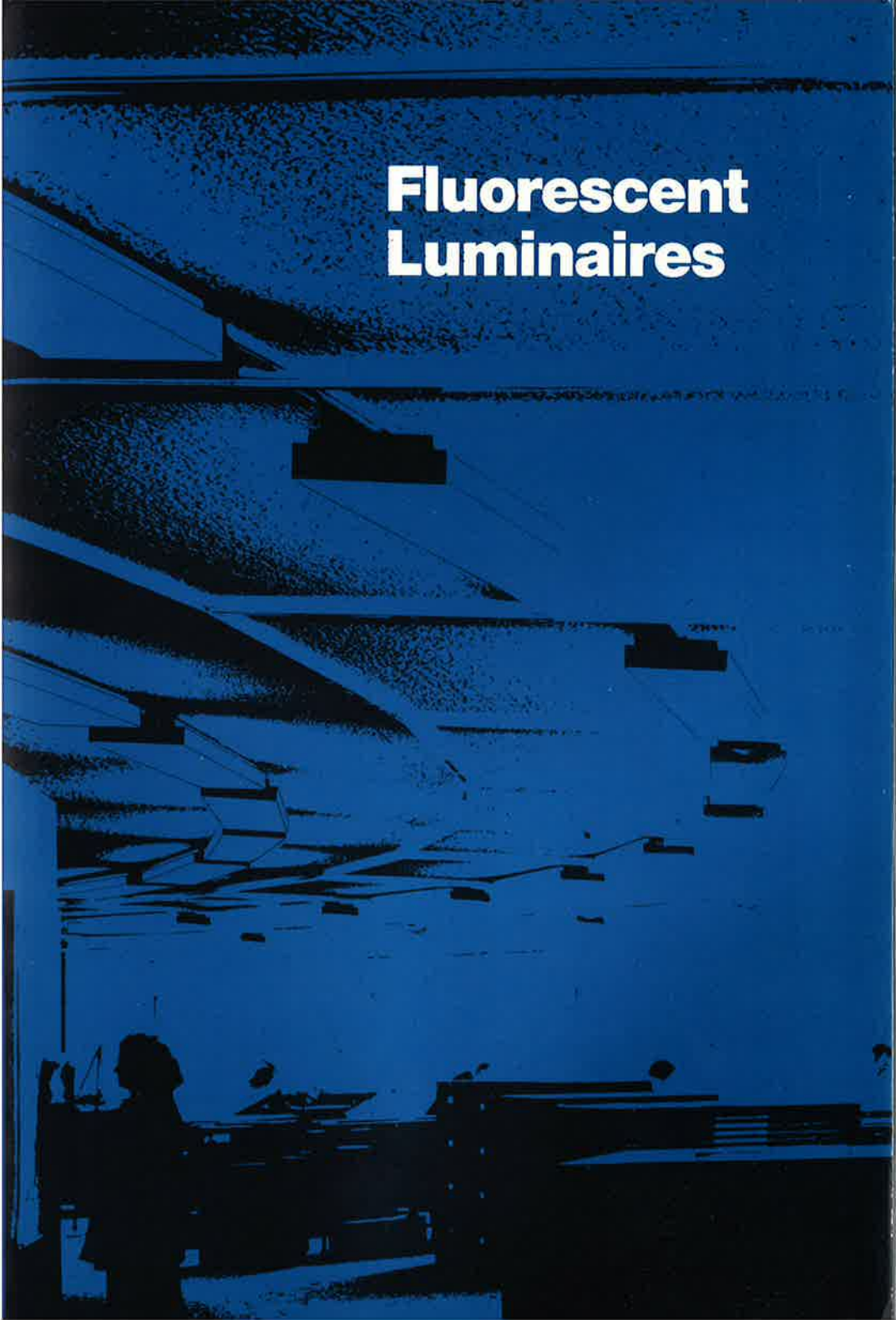
Fluorescent Luminaires



◀ Crompack luminaires with wireguard in the sports hall at Wellingborough School.

▲ Modulay installation in the library of the Sheffield Assay office.

◀ Tufflite luminaires in The Baby Foods packaging area, Colmans of Norwich factory.

Crompton Crompack 4

BSI Safety Mark Licence No. 052

Description

This is the 4th generation of the well-known Crompton Crompack range of fluorescent luminaires. Its smooth slim lines with the new "Permawhite" finish will add quality and style to any installation. Throughout the range all components and accessories have been designed to give optimum efficiency of light output for power used. Supplied with slim section control gear in both switch start and electronic start circuits.

Designed to BS4533 Section 102.2:1981 for use in normal indoor conditions. Classified **IP20.**

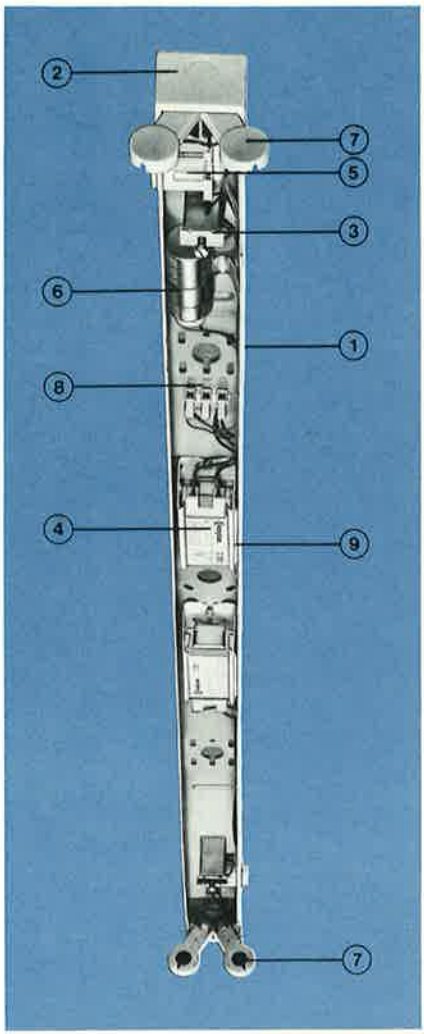
Crompton 'WATTSAVER' 26mm dia. fluorescent lamps are packed as standard with 0.6m, 1.2m, 1.5m and 1.8m length Crompack battens for the U.K. market. This range of batten luminaires can also be provided, less lamps, again suitable for 26mm dia. 'Wattsaver' lamps or alternatively for the equivalent length 38mm dia. 20W, 40W, 65W and 75W lamps.

BSI Safety Mark (Licence No 052)
The BSI safety mark gives an independent guarantee that luminaires are type tested by the British Standards Institution and comply with BS4533.

Range

The basic batten is available single or twin tube, with the following attachments:—

* Opal reeded diffuser.
* Clear all prismatic controller.
* Opal side-prismatic base controller.
* Open end open top metal reflector
* Open end angled metal reflector.
* Wire guard for use with reflectors.
* Metal frame assembly with either flat prismatic base panel/or cross blade louvre.



Electrical Data 240v 50Hz

Rated Lamp Watts	Total Input Watts	Power Factor	Line Current (amps)	Circuit Losses Watts	Third Harmonic (per phase) %
1×18	29	.33	.365	12	3
2×18	50	.91	.215	12	15
1×36	48	.93	.215	12	17
2×36	96	.93	.43	24	17
1×58	70	.89	.33	14	17
2×58	140	.89	.66	28	17
1×70	78	.90	.36	13	18
2×70	156	.90	.72	26	18
1×100	115	.91	.53	15	13
2×100	230	.91	1.06	30	13
1×125	136	.61*	.93	20	13
2×125	272	.61*	1.86	40	13

*Leading power factor

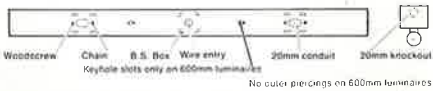
Mechanical Data

1. Channel
The channel is made from a single piece, high quality cold rolled steel sheet, press formed and holes punched before receiving the Crompton 'Permawhite' multi-stage, anti-rust treatment and epoxy base powder coat stoved enamel white finish.

2. End Counduit entry
For surface conduit end entry fit hexagonal male bush from inside the luminaire channel.

As the lampholders are positioned within the channel length, close butted end-to-end mounting is possible for battens and reflectors without affecting lamp insertion.

Installation
Suitable for surface or pendant mounting. Back of channel has preformed holes for conduit or BS box fixing, with additional holes for wood screw or chain suspension.



Close end-to-end mounting of battens and attachments is possible. When 20mm conduit bush fixing is used, an adequately sized steel washer should be placed between the inside of the channel and bush head. When small head fixing screws are used, washers or Crompton **slip fix plates, catalogue number A406/2 (available as extras) should be fitted. White finished steel BS cover plates (catalogue number CBS)** are available on request to mask existing recessed BS boxes, and if supplied with luminaires, are free of charge.

These luminaires are suitable for direct mounting on non-combustible materials e.g. metal, concrete, plaster. They are not suitable for direct **mounting on normally flammable materials e.g. timber, chipboard. For such materials ensure a minimum clearance of 10mm between** luminaires and mounting surface. Do not mount luminaires on or close to readily flammable materials.

Electrical Data

4. Ballasts
Crompton slim section ballasts comply with the requirements of BS2818 and have BSI Kite mark approval. Radio interference suppression — 2×18/20w, 2×36/40w, and 2×58/65w switch-start circuits comply with Statutory Instrument 1978 No. 1269 Regulation 6. Suppressed for use in residential accommodation.

5. Starter Switch
The starter switch has full guide insertion into the switch base on the channel side and is easily replaced by a simple twist action without disturbing the lamp or any attachments.

Spare Starter Switch Cat. No.	Application
S/D	18/20w
S/AE	36/40w 58/65w
S/C	75w 100w
S/OE	70w 125w

6. Power Factor Correction Capacitor
Dry film type capacitor gives required power factor correction except for 1×18/20w luminaire, which is supplied LPF as standard. If required, LPF versions of other ratings can be supplied to special order.

7. Lampholders
BSI Kite mark approved, and pre-wired rotary type lampholders, are **easily fitted to the platform by simple push-fit action. The lamp pins are locked into position by an "insert and twist" action which provides safe and positive pin contact and lamp retention. The lampholders have been carefully proportioned to be visually pleasing whether 26 or 38mm** diameter tubes are used. On twin lamp battens a mechanical 'no-go' device prevents cross-over of lampholders during installation.

8. Terminal Block
Terminal block is directly earthed to the channel and fixed at an angle to simplify mains wiring. The large terminal bore accepts conductors up to 2×2.5mm² or 1×4mm², line, neutral and earth positions clearly embossed into the adjacent channel. A fused terminal block is available as an alternative to special order.

9. Wiring Protection
Full length thermal shield adjacent to ballast gives additional protection to the luminaire wiring, which is single core, high temperature, PVC insulated.

Where supply cables are required to run adjacent to ballasts, use cable insulation rated at not less than 150°C (BS6500, type E12) or alternatively protect standard insulation cables with suitable heat resistant sleeving.

Crompton Crompack 4

Batten

BSI Safety Mark Licence No. 052

Applications

The Crompack 4 range comprises single and twin lamp batten luminaires in 0.6m, 1.2m, 1.5m, 1.8m and 2.4m sizes, together with the wide selection of attachments described on the following pages.

Catalogue Numbers

Nominal Length (m)	Lamp Watts	Catalogue Numbers 240V Batten only with tubes		Catalogue Numbers 240V Batten only without tubes		Catalogue Numbers 220V Batten only without tubes		Weight kg
		Switch start	Electronic start	Switch start	Electronic start	Switch start	Electronic start	
0.6	1×18 2×18	C21S C22S	C21E C22E	C21SX C22SX	C21EX C22EX	C21ST C22ST	C21ET C22ET	1.4 1.5
1.2	1×36 2×36	C41S C42S	C41E C42E	C41SX C42SX	C41EX C42EX	C41ST C42ST	C41ET C42ET	2.0 3.0
1.5	1×58 2×58	C51S C52S	C51E C52E	C51SX C52SX	C51EX C52EX	C51ST C52ST	C51ET C52ET	2.8 4.0
1.8	1×70 2×70	C61SN C62SN	C61E C62E	C61SX C62SX	C61EX C62EX	— —	— —	3.0 4.5
2.4	1×100 2×100 1×125 2×125	C801S C802S — —	C801E C802E — —	C801SX C802SX C81SX C82SX	C801EX C802EX C81EX C82EX	— — — —	— — — —	3.5 7.0 3.4 6.9

For export markets, Crompack battens are packed without tubes as standard.
0.6m luminaires have no outer piercings and 1 x 18/20W no power factor correcting capacitor.

BSI Safety Mark – Gives an independent guarantee that 240V 50Hz Mains luminaires are type tested by the British Standards Institution and comply with BS.4533.

Photometric Data

Type	Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max.)	BZ	FFR	ACG	Luminous Area (cm²)				
									0.6m	1.2m	1.5m	1.8m	2.4m
Batten	1×58	0.95	0.69	1.75	1.91	6	0.38	2	350	700	850	1000	1350
	2×58	0.96	0.64	1.75	1.8	6	0.49	2	500	1000	1250	1700	2300

Utilisation Factors D900

One Lamp Batten 58W

Room Reflectance			Room Index								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	—	.51	.56	.62	.69	.73	.77	.81	.85
	.30		—	.43	.49	.54	.62	.67	.71	.76	.80
	.10		—	.37	.43	.49	.56	.62	.66	.72	.76
.50	.50	.20	—	.45	.51	.56	.62	.66	.68	.73	.76
	.30		—	.39	.45	.50	.56	.61	.64	.69	.72
	.10		—	.34	.40	.45	.51	.56	.60	.65	.70
.30	.50	.20	—	.41	.46	.50	.55	.58	.61	.65	.68
	.30		—	.36	.41	.45	.51	.54	.57	.61	.65
	.10		—	.31	.36	.40	.47	.51	.54	.59	.62
.00	.00	.00	—	.26	.30	.34	.39	.43	.45	.49	.52

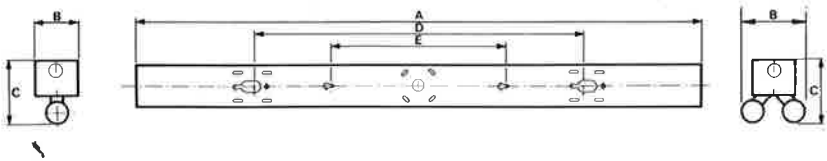
D889

Two Lamp Batten 58W

.70	.50	.20	—	.54	.60	.63	.70	.74	.78	.82	.85
	.30		—	.46	.53	.56	.63	.68	.72	.78	.81
	.10		—	.41	.47	.51	.58	.64	.68	.74	.78
.50	.50	.20	—	.48	.53	.56	.62	.66	.69	.73	.75
	.30		—	.42	.48	.51	.57	.61	.65	.69	.72
	.10		—	.38	.43	.46	.53	.57	.61	.66	.69
.30	.50	.20	—	.43	.47	.50	.55	.58	.60	.64	.66
	.30		—	.38	.43	.45	.51	.54	.57	.61	.64
	.10		—	.34	.39	.42	.47	.51	.54	.59	.62
.00	.00	.00	—	.29	.32	.34	.39	.42	.44	.48	.50

For the lamp wattage used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	1.02	0.99	1.02	0.99	1.0	0.97	1.0	0.97	0.96	0.94

Dimensions

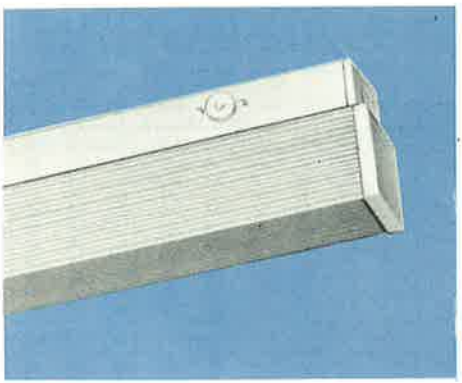


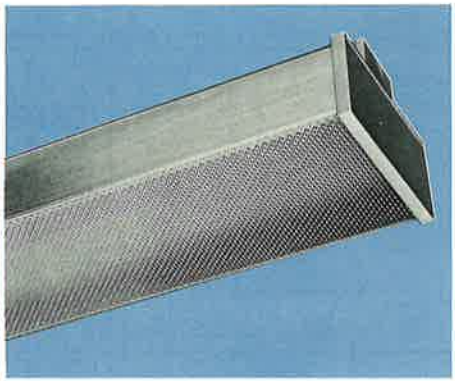
Nominal Length (m)	Lamp Watts	Dimensions (mm) (approx)			Fixing Centres (mm)	
		Length A	Width B	Depth C	Conduit, Chain or Screws D	E
0.6	1×18 2×18	621	58 89	92	—	525
1.2	1×36 2×36	1232	58 89	92	600	
1.5	1×58 2×58	1532	58 89	92	600	
1.8	1×70 2×70	1796	58 89	92	600	
2.4	1×100 2×100 1×125 2×125	2407	58 89 58 89	92	1200	

Crompton Crompack 4

BSI Safety Mark Licence No. 052

Opal Reeded Diffuser
Clear Prismatic Controller





Opal Reeded Diffuser

Made of light stabilised polystyrene, opalised and reeded for comfortably diffused lighting.

Clear Prismatic Controller

Made of light stabilised clear polystyrene with accurately formed prisms in the base and linear side prisms giving a controlled light output.

Neat white polystyrene end plates are supplied with both diffusers and controllers. Support brackets for both single and twin lamp diffusers/controllers are retained by the coverplate fixing screws and incorporate an 'anti-lift' device which holds the diffuser/controller firmly in place.

Catalogue Numbers

Nominal Length (m)	Lamp Watts	Catalogue Numbers		Catalogue Numbers 240V Batten only with tubes		Catalogue Numbers 240V Batten only without tubes		Catalogue Numbers 220V Batten only without tubes		Weight kg (approx)	
		Opal Diffuser	Prismatic Controller	Switch start	Electronic start	Switch start	Electronic start	Switch start	Electronic start	Batten and Diffuser	Batten and Controller
0.6	1×18 2×18	CC21 CD22	CC21 CC22	C21S C22S	C21E C22E	C21SX C22SX	C21EX C22EX	C21ST C22ST	C21ET C22ET	1.7 1.9	2.0 2.1
1.2	1×36 2×36	CD41 CD42	CC41 CC42	C41S C42S	C41E C42E	C41SX C42SX	C41EX C42EX	C41ST C42ST	C41ET C42ET	2.4 3.9	2.7 4.2
1.5	1×58 2×58	CD51 CD52	CC51 CC52	C51S C52S	C51E C52E	C51SX C52SX	C51EX C52EX	C51ST C52ST	C51ET C52ET	3.3 5.1	3.6 5.4
1.8	1×70 2×70	CD61 CD62	CC61 CC62	C61SN C62SN	C61E C62E	C61SX C62SX	C61EX C62EX	— —	— —	3.6 5.7	3.9 6.6
2.4	1×100 2×100 1×125 2×125	CD81 CD82 CD81 CD82	CC81 CC82 CC81 CC82	C801S C802S — —	C801E C802E — —	C801SX C802SX C81SX C82SX	C801EX C802EX C81EX C82EX	— — — —	— — — —	4.3 8.6 4.2 8.5	4.6 9.3 4.5 9.2

For export markets, Crompack battens are packed without tubes as standad.
0.6m luminaires have no outer piercings and 1×18/20W no power factor correcting capacitor.
For complete luminaire, quote all relevant catalogue numbers.

BSI Safety Mark – Gives an independent guarantee that 240V 50Hz Mains luminaires are type tested by the British Standards Institution and comply with BS.4533.

Photometric Data

Type	Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max.)	BZ	FFR	ACG	Luminous Area (cm²)				
									0.6m	1.2m	1.5m	1.8m	2.4m
Opal diffuser	1×58	0.70	0.46	1.75	2.0	7	0.52	2	400	800	1000	1150	1550
	2×58	0.76	0.43	1.5	1.72	6	0.77	2	950	1900	2350	2800	3750
Prismatic controller	1×58	0.75	0.46	1.5	1.72	5(2.5)6	0.63	6	400	800	1000	1150	1550
	2×58	0.80	0.45	1.75	1.76	4(2)5	0.78	5	950	1900	2350	2800	3750

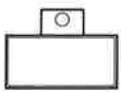
Utilisation Factors

D904

One Lamp
Opal Reeded Diffuser. 58W

Room Reflectance			Room Index								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	—	.36	.41	.44	.48	.53	.54	.58	.60
	.30		—	.31	.35	.38	.44	.48	.51	.53	.57
	.10		—	.26	.31	.34	.39	.44	.47	.51	.54
.50	.50	.20	—	.32	.36	.38	.43	.46	.48	.51	.52
	.30		—	.27	.31	.34	.39	.42	.45	.48	.50
	.10		—	.23	.27	.31	.35	.39	.41	.46	.47
.30	.50	.20	—	.29	.32	.34	.37	.40	.42	.44	.46
	.30		—	.24	.28	.30	.34	.38	.39	.42	.44
	.10		—	.21	.24	.27	.31	.35	.37	.40	.42
.00	.00	.00	—	.17	.20	.22	.25	.28	.30	.32	.34

D893



Two Lamp
Opal Reeded Diffuser. 58W

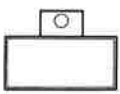
.70	.50	.20	.35	.40	.46	.49	.55	.58	.60	.64	.66
	.30		.30	.35	.40	.43	.50	.53	.57	.60	.63
	.10		.25	.30	.36	.40	.45	.50	.53	.58	.60
.50	.50	.20	.31	.35.	.39	.42	.47	.50	.52	.54	.57
	.30		.26	.31	.36	.39	.43	.46	.49	.52	.54
	.10		.22	.27	.31	.36	.40	.44	.46	.50	.53
.30	.50	.20	.26	.31	.34	.37	.40	.43	.44	.46	.48
	.30		.23	.27	.31	.34	.38	.40	.42	.45	.47
	.10		.20	.24	.28	.31	.35	.38	.40	.43	.45
.00	.00	.00	.16	.19	.22	.24	.27	.29	.31	.33	.35

D902

One Lamp
Clear Prismatic Controller. 58W

.70	.50	.20	.37	.42	.47	.50	.55	.58	.61	.64	.66
	.30		.31	.37	.42	.45	.50	.54	.57	.60	.63
	.10		.27	.33	.38	.41	.46	.50	.53	.58	.60
.50	.50	.20	.33	.38	.41	.43	.48	.51	.53	.55	.58
	.30		.28	.34	.38	.40	.44	.48	.49	.53	.55
	.10		.25	.30	.35	.37	.41	.44	.478	.51	.53
.30	.50	.20	.30	.33	.37	.38	.42	.44	.46	.48	.50
	.30		.25	.30	.34	.36	.39	.42	.44	.46	.47
	.10		.23	.27	.31	.32	.37	.40	.42	.44	.46
.00	.00	.00	.19	.22	.25	.26	.29	.31	.33	.35	.36

D892

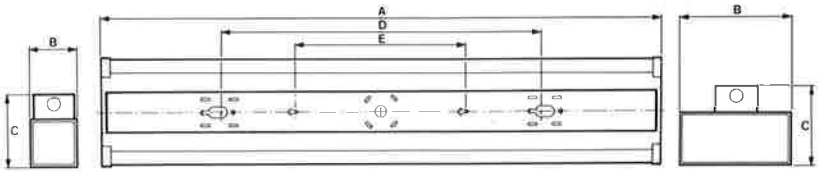


Two Lamp
Clear Prismatic Controller. 58W

.70	.50	.20	—	.49	.53	.56	.61	.64	.67	.70	.71
	.30		—	.43	.48	.52	.57	.61	.63	.67	.69
	.10		—	.40	.44	.48	.54	.57	.60	.64	.67
.50	.50	.20	—	.43	.46	.50	.54	.56	.58	.61	.62
	.30		—	.39	.43	.46	.50	.54	.55	.58	.59
	.10		—	.35	.40	.43	.48	.50	.53	.56	.58
.30	.50	.20	—	.38	.41	.43	.46	.48	.50	.52	.54
	.30		—	.34	.39	.41	.44	.46	.48	.50	.52
	.10		—	.32	.35	.38	.42	.45	.46	.49	.50
.00	.00	.00	—	.27	.29	.31	.34	.35	.36	.38	.39

For the lamp wattage used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	1.02	0.99	1.02	0.99	1.0	0.97	1.0	0.97	0.96	0.94

Dimensions

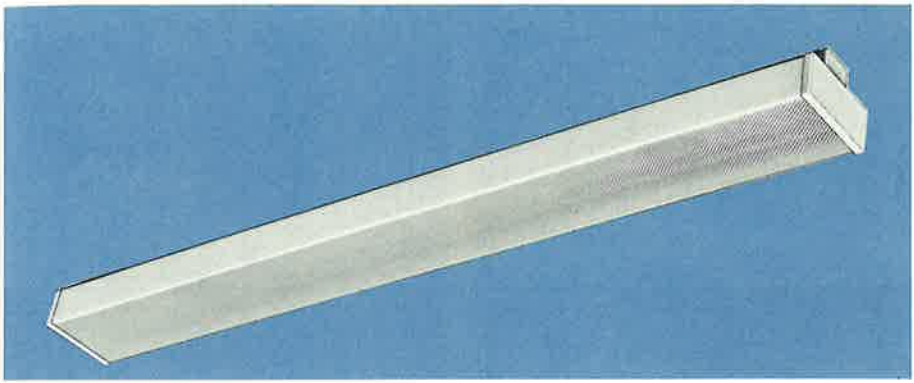


Nominal Length (m)	Lamp Watts	Dimensions (mm)			Fixing Centres (mm)	
		Length A	Width B	Depth C	Conduit, Chain or Screws D	E
0.6	1×18 2×18	630 630	70 160	110 110	— —	525
1.2	1×36 2×36	1240 1240	70 160	110 110	600	—
1.5	1×58 2×58	1540 1540	70 160	110 110	600	—
1.8	1×70 2×70	1804 1804	70 160	110 110	600	—
2.4	1×100 2×100 1×125 2×125	2415 2415 2415 2415	70 160 70 160	110 110 110 110	1200	—

Crompton Crompack 4

BSI Safety Mark Licence No. 052

Opal Side Prismatic Base Controller



Opal Reeded Diffuser

Made of light stabilised polystyrene, having opal sides and clear prismatic base combining attractive appearance and high luminous efficiency.

Neat white polystyrene end plates and easy fix retention brackets.

Catalogue Numbers

Nominal Length (m)	Lamp Watts	Catalogue Numbers Opal side prismatic base controller	Catalogue Numbers 240V Batten only with tubes		Catalogue Numbers 240V Batten only without tubes		Catalogue Numbers 220V Batten only without tubes		Weight kg (approx)
			Switch start	Electronic start	Switch start	Electronic start	Switch start	Electronic start	Batten & Controller
1.2	1×36 2×36	CE42 CE42	C41S C42S	C41E C42E	C41SX C42SX	C41EX C42EX	C41ST C42ST	C41ET C42ET	3.0 4.0
1.5	1×58 2×58	CE52 CE52	C51S C52S	C51E C52E	C51SX C52SX	C51EX C52EX	C51ST C52ST	C51ET C52ET	4.1 5.3
1.8	1×70 2×70	CE62 CE62	C61SN C62SN	C61E C62E	C61SX C62SX	C61EX C62EX	— —	— —	4.5 6.0
2.4	1×100 2×100 1×125 2×125	CE82 CE82 CE82 CE82	C801S C802S — —	C801E C802E — —	C801SX C802SX C81SX C82SX	C801EX C802EX C81EX C82EX	— — — —	— — — —	5.4 9.2 5.4 9.2

For export markets, Crompack battens are packed without tubes as standard.
For complete luminaire, quote all relevant catalogue numbers.

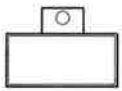
BSI Safety Mark – Gives an independent guarantee that 240V 50Hz Mains luminaires are type tested by the British Standards Institution and comply with BS.4533.

Photometric Data

Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max.)	BZ	FFR	ACG	Luminous Area (cm²)				
								0.6m	1.2m	1.5m	1.8m	2.4m
1×58	0.84	0.56	1.75	1.84	4(1.5)5	0.52	5	—	1860	2300	2700	3620
2×58	0.82	0.52	1.75	1.75	4(2.5)5	0.59	5					

Utilisation Factors

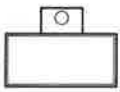
D1068



One Lamp Batten 58W
Opal side, prismatic base

Room Reflectance			Room Index								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	—	.51	.56	.60	.65	.68	.71	.74	.77
	.30		—	.45	.50	.54	.60	.64	.67	.71	.74
	.10		—	.41	.46	.50	.56	.60	.63	.68	.71
.50	.50	.20	—	.46	.50	.53	.58	.61	.63	.66	.68
	.30		—	.41	.46	.49	.54	.57	.60	.63	.66
	.10		—	.38	.42	.46	.51	.54	.57	.61	.63
.30	.50	.20	—	.41	.45	.48	.51	.54	.56	.58	.60
	.30		—	.38	.41	.44	.48	.51	.53	.56	.58
	.10		—	.35	.38	.42	.46	.49	.51	.54	.56
.00	.00	.00	—	.30	.33	.35	.38	.41	.42	.45	.46

D1067

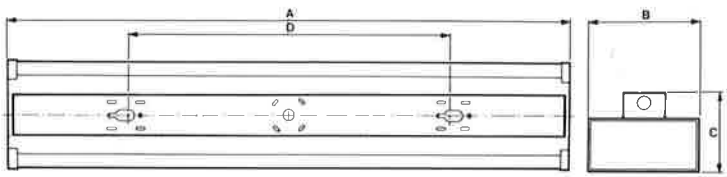


Two Lamp 58W
Opal side, prismatic base

.70	.50	.20	—	.50	.55	.58	.63	.67	.69	.72	.75
	.30		—	.44	.49	.53	.59	.62	.65	.69	.72
	.10		—	.40	.45	.49	.55	.59	.62	.66	.69
.50	.50	.20	—	.45	.49	.52	.56	.59	.61	.64	.66
	.30		—	.40	.45	.48	.53	.56	.58	.61	.63
	.10		—	.37	.41	.45	.49	.53	.55	.59	.61
.30	.50	.20	—	.40	.44	.46	.50	.52	.54	.56	.57
	.30		—	.37	.40	.43	.47	.49	.51	.54	.56
	.10		—	.34	.38	.40	.54	.47	.49	.52	.54
.00	.00	.00	—	.29	.32	.34	.37	.39	.40	.42	.44

For the lamp wattage used multiply above values by the factors given here:	36W	40W	58W	65W	70W	75W	100W	125W
	1.02	0.99	1.0	0.97	1.0	0.97	0.96	0.94

Dimensions



Nominal Length (m)	Lamp Watts	Dimensions (mm)			Fixing Centres (mm)
		Length A	Width B	Depth C	Conduit, Chain or Screws D
1.2	1×36 2×36	1245	155	117	600
1.5	1×58 2×58	1546	155	117	600
1.8	1×70 2×70	1812	155	117	600
2.4	1×100 2×100 1×125 2×125	2421	155	117	1200

Crompton Crompack 4

BSI Safety Mark
Licence No. 052

Open end open top metal reflector
Open end angled metal reflector

Standard Metal Reflector

The reflector is attached to the batten at key-hole slot positions with or without the cover plate retained. Slots along the shoulders improve the airflow and give a controlled proportion of upward light.

For end to end mounting the spaces between the reflector ends can be covered by the easy attachment of joint covers (Catalogue Number CRJ) — available as optional extras.

Angled Reflector

For use in situations where a strong asymmetric light distribution is required, for preferential lighting of vertical or sloping surfaces. To avoid unwanted points of brightness, the angled reflector has no top shoulder slots.

Catalogue Numbers

Nominal Length (m)	Lamp Watts	Catalogue Numbers		Catalogue Numbers 240V Batten only with tubes		Catalogue Numbers 240V Batten only without tubes		Catalogue Numbers 220V Batten only without tubes		Weight (kg) (approx)	
		Standard Reflector	Angle Reflector	Switch start	Electronic start	Switch start	Electronic start	Switch start	Electronic start	Batten and standard Reflector	Batten and angle Reflector
1.2	1×36 2×36	CR4 CR4	CRA4 CRA4	C41S C42S	C41E C42E	C41SX C42SX	C41EX C42EX	C41ST C42ST	C41ET C42ET	3.4 4.4	3.2 4.2
1.5	1×58 2×58	CR5 CR5	CRA5 CRA5	C51S C52S	C51E C52E	C51SX C52SX	C51EX C52EX	C51ST C52ST	C51ET C52ET	4.7 5.9	4.4 5.7
1.8	1×70 2×70	CR6 CR6	CRA6 CRA6	C61SN C62SN	C61E C62E	C61SX C62SX	C61EX C62EX	— —	— —	5.3 6.8	4.8 6.3
2.4	1×100 2×100 1×125 2×125	CR8 CR8 CR8 CR8	CRA8 CRA8 CRA8 CRA8	C801S C802S — —	C801E C802E — —	C801SX C802SX C81SX C82SX	C801EX C802EX C81EX C82EX	— — — —	— — — —	6.6 10.1 6.6 10.1	5.9 9.4 5.8 9.3

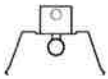
For export markets, Crompack battens are packed without tubes as standard.
For complete luminaire, quote all relevant catalogue numbers.
See following page for details of wire guard attachments for standard and angle reflectors.

BSI Safety Mark – Gives an independent guarantee that 240V 50Hz Mains luminaires are type tested by the British Standards Institution and comply with BS.4533.

Photometric Data — Standard Reflector

Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max.)	BZ	FFR	ACG	Luminous Area (cm²)				
								0.6m	1.2m	1.5m	1.8m	2.4m
1×58	0.84	0.80	1.75	1.85	4	0.05	2	—	2250	2800	3350	4500
2×58	0.82	0.76	1.75	1.82	4	0.08	symm.	—	2250	2800	3350	4500

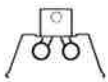
Utilisation Factors D917



One Lamp Reflector 58W

Room Reflectance			Room Index								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	—	.57	.63	.68	.74	.78	.80	.84	.86
	.30		—	.51	.58	.62	.69	.73	.77	.80	.84
	.10		—	.47	.53	.57	.65	.70	.73	.78	.81
.50	.50	.20	—	.55	.61	.65	.71	.73	.77	.79	.82
	.30		—	.50	.55	.60	.67	.70	.74	.76	.80
	.10		—	.45	.52	.56	.63	.67	.70	.75	.78
.30	.50	.20	—	.53	.58	.62	.68	.71	.73	.76	.78
	.30		—	.49	.55	.58	.64	.67	.71	.74	.76
	.10		—	.44	.51	.55	.61	.65	.68	.72	.75
.00	.00	.00	—	.42	.48	.52	.58	.61	.64	.68	.70

D916

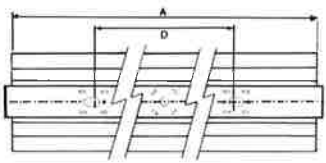


Two Lamp Reflector 58W

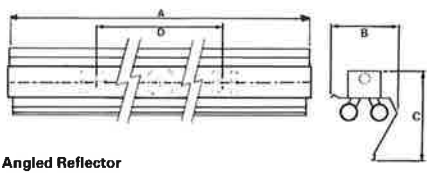
.70	.50	.20	—	.57	.62	.67	.72	.76	.78	.82	.84
	.30		—	.50	.57	.61	.68	.72	.75	.79	.82
	.10		—	.46	.52	.57	.64	.69	.72	.75	.79
.50	.50	.20	—	.54	.60	.63	.68	.72	.74	.77	.80
	.30		—	.49	.54	.59	.65	.68	.71	.75	.77
	.10		—	.45	.51	.55	.61	.66	.69	.73	.75
.30	.50	.20	—	.52	.57	.60	.66	.69	.70	.73	.75
	.30		—	.48	.54	.57	.62	.65	.69	.72	.73
	.10		—	.44	.49	.54	.60	.63	.66	.69	.72
.00	.00	.00	—	.41	.47	.50	.56	.59	.61	.65	.67

For the lamp wattage used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	—	—	1.02	0.99	1.0	0.97	1.0	0.97	0.96	0.94

Dimensions



Standard Reflector



Angled Reflector

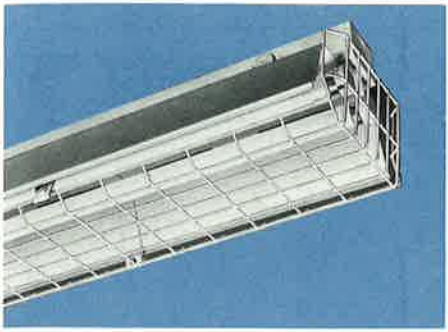
Nominal Length Length (m)	Lamp Watts	Dimensions (mm)						Fixing Centres Centres (mm) Conduit chain or screws D
		With standard reflector			With angled reflector			
		Length A	Width B	Depth C	Length A	Width B	Depth C	
1.2	1×36 2×36	1232	180	130	1232	120	165	600
1.5	1×58 2×58	1532	180	130	1532	120	165	600
1.8	1×70 2×70	1796	180	130	1796	120	165	600
2.4	1×100 2×100 1×125 2×125	2406	180	130	2406	120	165	1200

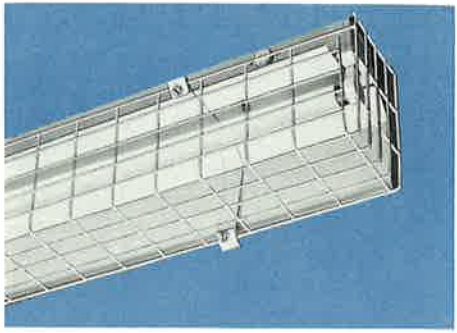
Crompton Crompack 4

BSI Safety Mark Licence No. 052

Wire Guard

for use with standard and angle metal reflector luminaires





Applications

For use in situations where accidental mechanical lamp damage could occur, robust wire guard attachments are available for both the standard and angle reflectors. A heavy gauge welded wire framework has been selected to give an acceptable balance of strength without excessive light loss.
The wire guards hinge clear of the reflector mouth for easy lamp replacement and maintenance.

Catalogue Numbers

Nominal Length (m)	Lamp Watts	Catalogue Numbers		Catalogue Numbers 240V Batten only with tubes		Catalogue Numbers 240V Batten only without tubes		Catalogue Numbers 220V Batten only without tubes		Weight kg (approx) Batten, Reflector & Wire Guard
		Reflector only	Wire Guard only	Switch start	Electronic start	Switch start	Electronic start	Switch start	Electronic start	
Reflector Wire Guard										
1.2	1×36 2×36	CR4	CRG4	C41S C42S	C41E C42E	C41SX C42SX	C41EX C42EX	C41ST C42ST	C41ET C42ET	5.5 6.5
1.5	1×58 2×58	CR5	CRG5	C51S C52S	C51E C52E	C51SX C52SX	C51EX C52EX	C51ST C52ST	C51ET C52ET	7.2 8.5
1.8	1×70 2×70	CR6	CRG6	C61SN C62SN	C61E C62E	C61SX C62SX	C61EX C62EX	— —	— —	8.0 9.5
2.4	1×100 2×100 1×125 2×125	CR8	CRG8	C801S C802S — —	C801E C802E — —	C801SX C802SX C81SX C82SX	C801EX C802EX C81EX C82EX	— — — —	— — — —	9.4 13.0 9.4 12.9
Angle Reflector Wire Guard										
1.2	1×36 2×36	CRA4	CRGA4	C41S C42S	C41E C42E	C41SX C42SX	C41EX C42EX	C41ST C42ST	C41ET C42ET	5.4 6.4
1.5	1×58 2×58	CRA5	CRGA5	C51S C52S	C51E C52E	C51SX C52SX	C51EX C52EX	C51ST C52ST	C51ET C52ET	7.2 8.4
1.8	1×70 2×70	CRA6	CRGA6	C61SN C62SN	C61E C62E	C61SX C62SX	C61EX C62EX	— —	— —	7.6 9.1
2.4	1×100 2×100 1×125 2×125	CRA8	CRGA8	C801S C802S — —	C801E C802E — —	C801SX C802SX C81SX C82SX	C801EX C802EX C81EX C82EX	— — — —	— — — —	8.9 12.5 8.9 12.4

For complete luminaire, quote all relevant catalogue numbers.
For export markets, Crompack battens are packed without tubes as standard.

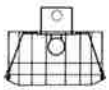
BSI Safety Mark – Gives an independent guarantee that 240V 50Hz Mains luminaires are type tested by the British Standards Institution and comply with BS.4533.

Photometric Data

Type	Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max.)	BZ	FFR	ACG	Luminous Area (cm²)				
									0.6m	1.2m	1.5m	1.8m	2.4m
Standard Reflector with Wire Guard	1×58 2×58	0,79 0,76	0,74 0,69	1,75	1,89 1,82	4	0,09 0,12	2 symm	– –	2250	2800	3350	4500

Utilisation Factors

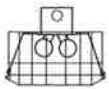
D908



One Lamp Reflector with Wireguard 58W

Room Reflectance			Room Index								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
,70	,50	,20	—	,53	,58	,63	,68	,72	,74	,78	,80
	,30		—	,47	,53	,57	,64	,68	,71	,75	,77
	,10		—	,43	,49	,53	,60	,64	,67	,72	,75
,50	,50	,20	—	,51	,56	,60	,65	,68	,71	,74	,76
	,30		—	,46	,51	,55	,61	,65	,67	,71	,73
	,10		—	,42	,47	,52	,58	,62	,65	,69	,71
,30	,50	,20	—	,49	,53	,57	,62	,65	,67	,70	,72
	,30		—	,44	,49	,53	,59	,62	,64	,68	,70
	,10		—	,41	,46	,50	,56	,60	,62	,66	,68
,00	,00	,00	—	,38	,43	,47	,52	,56	,58	,61	,63

D897

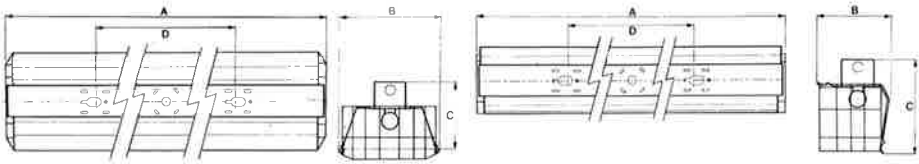


Two Lamp Reflector with Wireguard 58W

,70	,50	,20	—	,51	,56	,60	,65	,69	,71	,74	,77
	,30		—	,46	,51	,55	,61	,65	,68	,72	,74
	,10		—	,42	,47	,52	,58	,62	,65	,69	,72
,50	,50	,20	—	,49	,54	,57	,62	,65	,67	,70	,72
	,30		—	,44	,49	,53	,58	,62	,64	,68	,70
	,10		—	,41	,46	,50	,55	,59	,62	,66	,68
,30	,50	,20	—	,47	,51	,54	,59	,61	,63	,66	,68
	,30		—	,43	,47	,51	,56	,59	,61	,64	,66
	,10		—	,40	,44	,48	,53	,57	,59	,62	,65
,00	,00	,00	—	,37	,41	,45	,49	,52	,55	,57	,59

For the lamp wattage used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	—	—	1,02	0,99	1,0	0,97	1,0	0,97	0,96	0,94

Dimensions

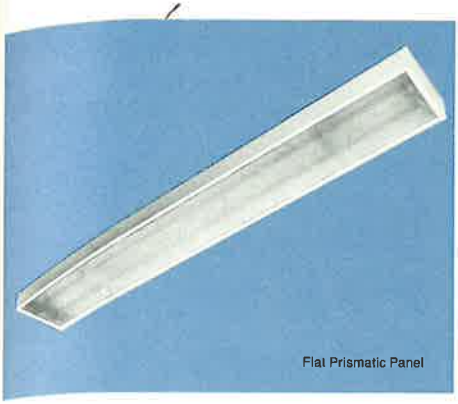


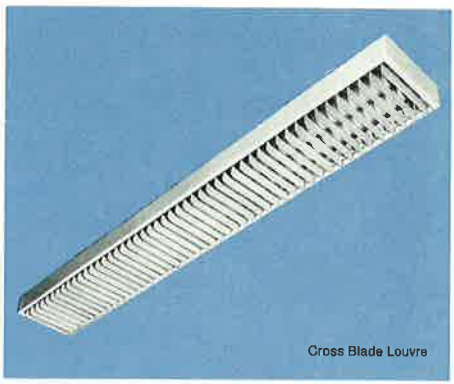
Nominal Length (m)	Dimensions (mm)			Fixing Centres (mm) (see diagram above)	Nominal Length (M)	Dimensions (mm)			Fixing Centres (mm) (see diagram above)
	Length A	Width B	Depth C	Conduit, Chain or Screws D		Length A	Width B	Depth C	Conduit, Chain or Screws D
Reflector Wire Guard					**Angle Reflector Wire Guard**				
1.2	1280	195	160	600	1.2	1260	130	188	600
1.5	1580	195	160	600	1.5	1560	130	188	600
1.8	1835	195	160	600	1.8	1825	130	188	600
2.4	2445	195	160	1200	2.4	2435	130	188	1200

Crompton Crompack 4

BSI Safety Mark Licence No. 052

Frame Attachment with Prismatic Panel or Cross Blade Louvre


Flat Prismatic Panel


Cross Blade Louvre

Description

These extensions to the wide range of attachments already available with Crompack 4 luminaires, consist of white finished metal frame assemblies that are easily attached to Crompack 4 single and twin lamp battens, with a choice of a flat prismatic panel base or cross blade metal louvre baffle in 1.2m, 1.5m or 1.8m lengths.

The frame attachments are metal formed components finished in the Crompton 'Permawhite' anti-rust treatment and epoxy base powder coated stove enamelling.

The flat prismatic panel gives general downward light control whilst the metal louvre baffle provides a generous transverse light distribution with restricted brightness and cut-off along the luminaire main axis.

Applications

For existing or prospective Crompack 4 installations where increased control of luminaire surface brightness is required to reduce the intensity of reflections from vertical work surfaces.

The basic Crompack 4 batten can be employed throughout the commercial or industrial complex with the particular attachments selected to suit the nature of the work area and its lighting needs.

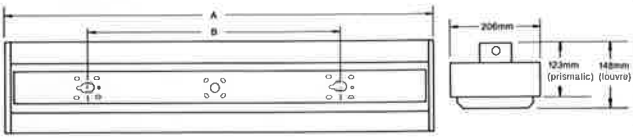
Catalogue Numbers

Nominal Length (m)	Lamp Watts	Catalogue Numbers		Catalogue Numbers 240V Batten only with tubes		Catalogue Numbers 240V Batten only without tubes		Catalogue Numbers 220V Batten only without tubes		Weight (kg)
		Prismatic Panel and Frame	Louvre and Frame	Switch start	Electronic start	Switch start	Electronic start	Switch start	Electronic start	
1.2	1×36 2×36	CFC4	CFL4	C41S C42S	C41E C42E	C41SX C42SX	C41EX C42EX	C41ST C42ST	C41ET C42ET	4.3 5.3
1.5	1×58 2×58	CFC5	CFL5	C51S C52S	C51E C52E	C51SX C52SX	C51EX C52EX	C51ST C52ST	C51ET C52ET	5.6 6.9
1.8	1×70 2×70	CFC6	CFL6	C61SN C62SN	C61E C62E	C61SX C62SX	C61EX C62EX	— —	— —	6.4 7.9

For complete luminaire, quote all relevant catalogue numbers.
For export markets, Crompack battens are without tubes as standard.

BSI Safety Mark – Gives an independent guarantee that 240V 50Hz Mains luminaires are type tested by the British Standards Institution and comply with BS.4533.

Dimensions



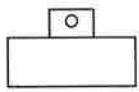
Nominal Length (m)	Dimensions (mm)	
	Length A	Fixing B
1.2	1264	600
1.5	1564	600
1.8	1828	600

Photometric Data

Type	Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max.)	BZ	FFR	ACG	Luminous Area (cm²)				
									0.6m	1.2m	1.5m	1.8m	2.4m
Prismatic controller	1×58 2×58	0.66 0.65	0.52 0.48	1.75 1.5	1.75 1.6	2(1.5)3 2(2)3	0.27 0.35	SYMM	—	2200	2750	3300	—
Louvre	1×58 2×58	0.67 0.67	0.53 0.49	1.5 1.5	1.71 1.62	4 3	0.27 0.37	4 4	—	2200	2750	3300	—

Utilisation Factors

D959

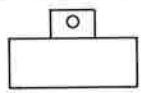


One Lamp 58W

Metal Frame with Prismatic Controller

Room Reflectance			Room Index								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	—	.47	.51	.54	.57	.60	.62	.64	.65
	.30		—	.43	.47	.50	.54	.57	.59	.62	.63
	.10		—	.40	.44	.47	.52	.54	.57	.60	.62
.50	.50	.20	—	.45	.48	.50	.53	.55	.57	.59	.60
	.30		—	.41	.45	.47	.51	.53	.55	.57	.59
	.10		—	.39	.42	.45	.49	.51	.53	.57	.57
.30	.50	.20	—	.42	.45	.47	.50	.51	.52	.54	.55
	.30		—	.39	.42	.45	.48	.50	.51	.53	.54
	.10		—	.37	.40	.43	.46	.48	.50	.52	.53
.00	.00	.00	—	.34	.37	.39	.42	.43	.44	.46	.47

D953

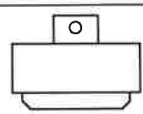


Two Lamp 58W

Metal Frame with Prismatic Controller

.70	.50	.20	.39	.44	.48	.51	.55	.57	.59	.61	.63
	.30		.35	.40	.44	.47	.52	.54	.57	.59	.61
	.10		.32	.37	.41	.44	.49	.52	.54	.57	.60
.50	.50	.20	.37	.41	.45	.47	.50	.52	.54	.56	.57
	.30		.33	.38	.41	.44	.48	.50	.52	.54	.56
	.10		.31	.35	.39	.42	.46	.48	.50	.53	.55
.30	.50	.20	.34	.38	.41	.43	.46	.48	.49	.51	.52
	.30		.31	.35	.39	.41	.44	.46	.48	.50	.51
	.10		.29	.33	.37	.39	.42	.45	.46	.49	.50
.00	.00	.00	.27	.30	.33	.35	.38	.39	.41	.42	.43

D958

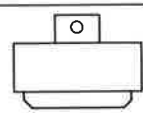


One Lamp 58W

Metal Frame with Cross Blade Louvre

.70	.50	.20	—	.43	.48	.51	.55	.58	.60	.63	.65
	.30		—	.38	.43	.47	.52	.55	.57	.60	.63
	.10		—	.35	.40	.43	.48	.52	.55	.58	.61
.50	.50	.20	—	.40	.44	.47	.51	.54	.56	.58	.59
	.30		—	.36	.41	.44	.48	.51	.53	.56	.58
	.10		—	.33	.38	.41	.46	.49	.51	.54	.56
.30	.50	.20	—	.37	.41	.44	.47	.50	.51	.53	.55
	.30		—	.34	.38	.41	.45	.47	.49	.52	.53
	.10		—	.32	.36	.39	.43	.46	.48	.50	.52
.00	.00	.00	—	.28	.32	.35	.38	.41	.42	.44	.46

D952



Two Lamp 58W

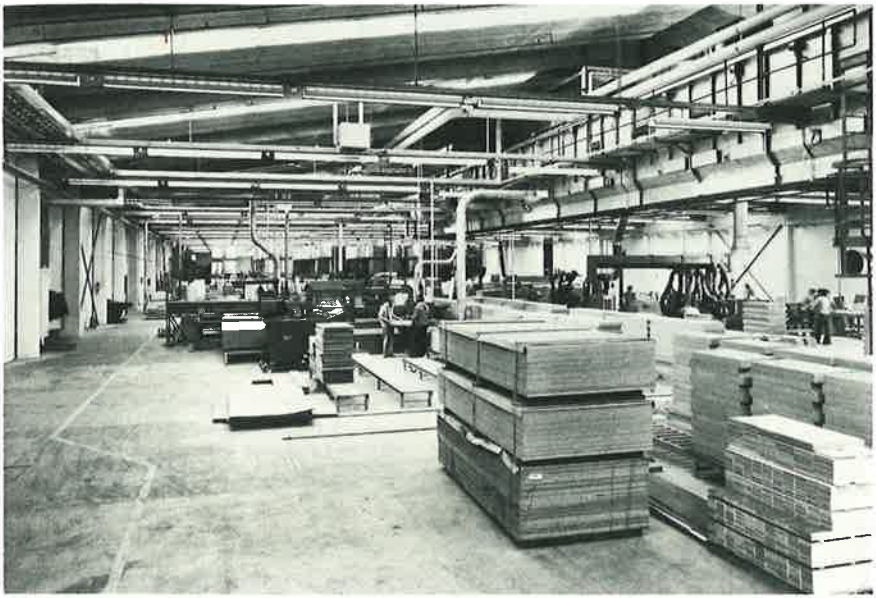
Metal Frame with Cross Blade Louvre

.70	.50	.20	.38	.43	.48	.51	.55	.58	.60	.62	.64
	.30		.34	.39	.43	.47	.51	.55	.57	.60	.62
	.10		.30	.35	.40	.44	.48	.52	.54	.58	.60
.50	.50	.20	.35	.40	.44	.47	.50	.53	.54	.57	.58
	.30		.32	.36	.40	.43	.47	.50	.52	.55	.56
	.10		.29	.33	.38	.41	.45	.48	.50	.53	.55
.30	.50	.20	.33	.37	.40	.43	.46	.48	.49	.51	.52
	.30		.28	.32	.35	.38	.42	.44	.46	.49	.50
	.10		.28	.32	.35	.38	.42	.44	.46	.49	.50
.00	.00	.00	.25	.28	.31	.34	.37	.39	.40	.42	.43

For the lamp wattage used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	—	—	1.02	0.99	1.0	.97	.10	.97	—	—

Crompton Sovereign

BSI Safety Mark Licence No. 052



Description

To complement the Crompton Crompack range, the Sovereign range has a wide channel batten available with either switchstart or electronic start circuits.

Mechanical Data

Channel

One piece of press formed mild steel with cover plate, attached to channel by two transverse keyhole slots. Both finished in Crompton "Permawhite" electrostatically applied stoved enamel white.

Installation

Suitable for close surface or pendant mounting. Back of channel has preformed holes for conduit or BS box fixing, with additional holes for wood screw or chain suspension. 20mm end knock outs in plastic end plates are provided with provision for automatic earth continuity via special spring metal contact. Spine width is adequate for covering recessed circular BS box. (See diagrams).

This luminaire is suitable for direct mounting on non-combustible materials e.g. metal, concrete, plaster. It is not suitable for direct mounting on normally flammable materials e.g. timber, chipboard. For such materials ensure a minimum clearance of 10mm between luminaire and mounting surface. Do not mount luminaire on or close to readily flammable materials.

Range

The basic batten is available in one or two lampway versions with the following attachments:—

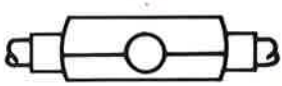
- Opal reeded diffuser.
- Clear prismatic controller.
- Opal side, prismatic base controller.
- Open end open top metal reflector.
- Open end angled metal reflector.

Designed to BS 4533, section 102.1 1981

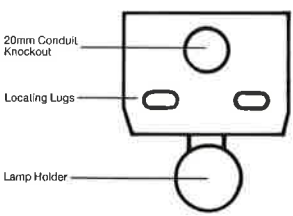
Classified **IP20**, for use in normal interior conditions.

Ambient temperature range: 5°C to 25°C.

BS Box



End View of Luminaire



BSI Safety Mark – Gives an independent guarantee that luminaires are type tested by the British Standards Institution and comply with BS.4533.

Electrical Data

Ballasts
Crompton slim section ballasts comply with the requirements of BS2818 and have BSI Kite mark approval.

Starter Switch
The starter switch has full guide insertion into the switch base on the channel side and is easily replaced by a simple twist action without disturbing the lamp or any attachments.

Spare Starter Switch Cat. No.	Lamp Wattage
S/AE S/OE	36/40W, 58W/65W 70W/75W,100W

Power Factor Correction Capacitor
Dry film capacitor gives required power factor correction for all luminaires.

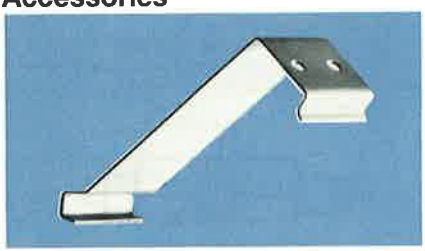
2.4m 125W electronic start luminaires have a leading power factor of approximately 0.6 and suitable provision must be made for the resultant line current.

Lampholders
BSI Kite mark approved, and pre-wired rotary type lampholders, are easily fitted to the platform by simple push-fit action. The lamp pins are locked into position by an "insert and twist" action which provides safe and positive pin contact and lamp retention. The lampholders have been carefully proportioned to be visually pleasing whether 26 or 38mm diameter tubes are used. On twin lamp battens a mechanical 'no-go' device prevents cross-over of lampholders during installation.

Terminal Block
An in-line fused terminal block is mounted within the channel adjacent to a terminal block directly earthed to the channel at a fixed angle to simplify mains wiring.

This terminal block will accept up to 2 x 2.5mm^2 or 1 x 4mm^2 conductors.

Accessories



Reflector Joint Coupler
Use one pair at each reflector joint.
Catalogue Number SRJ (per pair).

Electrical Data 240v 50Hz

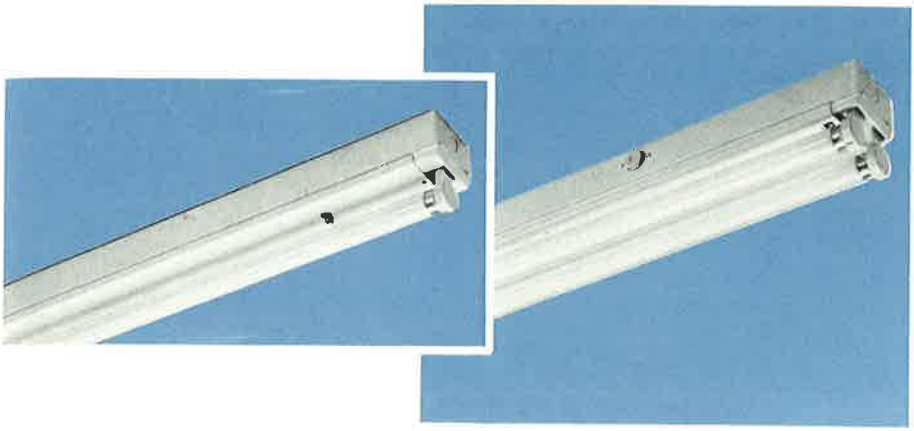
Nominal Length (mm)	Rated Lamp (watts)	Total Input (watts)	Power Factor	Line Current (amps)	Circuit Losses (watts)	3rd Harmonic per phase
		E&S	E&S	E&S	E&S	E&S
1200	1 x 36	48	.93	.215	12	17
	1 x 40	51	.94	.23	12	13
	2 x 36	96	.93	.43	24	17
	2 x 40	102	.94	.45	24	13
1500	1 x 58	70	.89	.33	14	17
	1 x 65	77	.92	.35	14	15
	2 x 58	140	.89	.66	28	17
	2 x 65	154	.92	.70	28	15
1800	1 x 70	78	.90	.36	13	18
	1 x 75	84	.90	.39	12	17
	2 x 70	156	.90	.72	26	18
	2 x 75	168	.90	.78	24	17
2400	1 x 100	115	.91	.53	15	13
	2 x 100	230	.91	1.06	30	13
	1 x 125*	136	.61	.93	20	13
	2 x 125*	272	.61	1.86	40	13

E = Electronic Start
S = Switch Start
* = Electronic Start only – Leading power factor

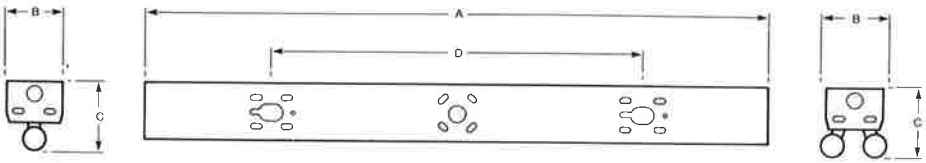
Crompton Sovereign

BSI Safety Mark Licence No. 052

Batten



The Soveriegn range comprises one and two lamp batten luminaires in 1.2m, 1.5m, 1.8m and 2.4m sizes together with a wide selection of attachments described in the following pages.



Catalogue Numbers

Catalogue numbers exclude lamps which should be ordered separately

Nominal Length (m)	Lamp Watts	Catalogue Number	Weight (kg) (approx)	Dimensions (mm)			Fixing Centres (mm)
		Batten only		Length A	Width B	Depth C	Conduit, Chain or Screws D
Switchstart Circuit							
1.2	1 x 36/40 2 x 36/40	S4401S S4402S	2.6 4.0	1235	76 87	95	600
1.5	1 x 58/65 2 x 58/65	S5651S S5652S	3.8 5.9	1534	76 87	95	600
1.8	1 x 70/75 2 x 70/75	S6751S S6752S	4.0 6.1	1800	76 87	95	600
2.4	1 x 100 2 x 100	S8001S S8002S	4.5 7.2	2409	76 87	95	1200
Electronic Start							
1.2	1 x 36/40 2 x 36/40	S4401E S4402E	2.6 4.0	1235	76 87	95	600
1.5	1 x 58/65 2 x 58/65	S5651E S5652E	3.8 5.9	1534	76 87	95	600
1.8	1 x 70/75 2 x 70/75	S6701E S6702E	4.0 6.1	1800	76 87	95	600
2.4	1 x 100 2 x 100	S8001E S8002E	3.7 7.2	2409	76 87	95	1200
2.4	1 x 125 2 x 125	S8251E S8252E	3.6 7.1	2409	76 87	95	1200

Photometric Data

Type	Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max)	BZ	FFR	ACG	Luminous Area (cm²) 0.6m	1.2m	1.5m	1.8m	2.4m
Batten	1 x 65	0.93	0.70	1.75	1.95	7(3)6	0.33	2	—	900	1100	1300	1750
	2 x 65	0.90	0.63	1.75	1.86	6	0.45	2	—	1150	1450	1750	2300

Utilisation Factor

D772

One Lamp

Room Reflectance C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	–	.50	.56	.61	.67	.72	.75	.80	.83
	.30		–	.42	.48	.53	.62	.65	.69	.75	.79
	.10		–	.36	.42	.47	.55	.60	.64	.70	.75
.50	.50	.20	–	.45	.51	.55	.61	.65	.68	.72	.75
	.30		–	.39	.44	.49	.55	.60	.63	.68	.71
	.10		–	.34	.39	.44	.50	.55	.59	.64	.68
.30	.50	.20	–	.41	.46	.49	.55	.58	.61	.65	.67
	.30		–	.35	.40	.44	.50	.54	.57	.61	.64
	.10		–	.31	.36	.40	.46	.50	.54	.58	.62
.00	.00	.00	–	.26	.31	.34	.39	.43	.45	.49	.52

For the lamp wattage used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	–	–	1.06	1.04	1.03	1.0	1.03	1.0	0.99	0.98

D792

Two Lamp

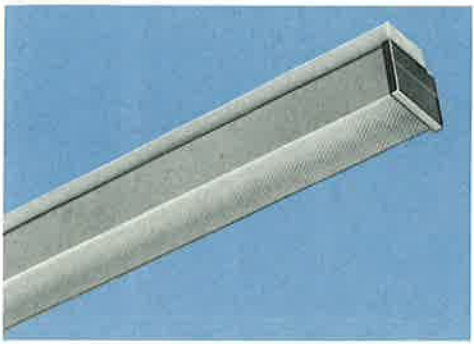
Room Reflectance C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	–	.50	.56	.60	.67	.71	.74	.78	.81
	.30		–	.43	.49	.54	.61	.65	.69	.74	.77
	.10		–	.38	.44	.49	.56	.61	.65	.70	.74
.50	.50	.20	–	.45	.50	.54	.60	.63	.66	.70	.72
	.30		–	.39	.45	.49	.55	.59	.62	.66	.69
	.10		–	.35	.40	.44	.51	.55	.59	.63	.67
.30	.50	.20	–	.41	.45	.48	.53	.56	.59	.62	.64
	.30		–	.36	.40	.44	.49	.53	.56	.59	.62
	.10		–	.32	.37	.41	.46	.50	.53	.57	.60
.00	.00	.00	–	.27	.31	.34	.38	.41	.44	.47	.49

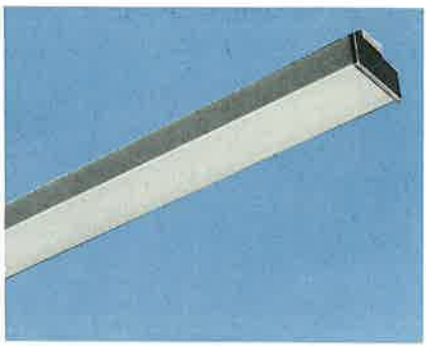
For the lamp wattage used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	–	–	1.06	1.04	1.03	1.0	1.03	1.0	0.99	0.98

Crompton Sovereign

BSI Safety Mark Licence No. 052

Opal Reeded Diffuser
Clear Prismatic Controller





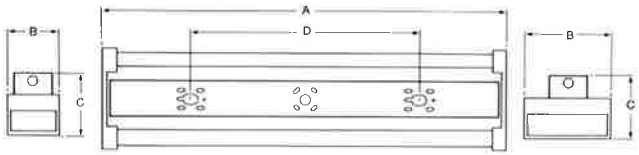
Clear Prismatic Controller

Made of light stabilised clear polystyrene with accurately formed prisms in the base and linear side prisms giving a controlled light output.

Opal Reeded Diffuser

Made of light stabilised polystyrene, opalised and reeded for comfortably diffused lighting.

Neat light grey polystyrene end plates and easy fit retention brackets are supplied with both diffusers and controllers, twin lamp versions incorporate an 'anti-lift' device which holds the diffuser/controller firmly in place.



Catalogue Numbers

Catalogue numbers exclude lamps which should be ordered separately

Nominal Length (m)	Lamp Watts	Catalogue Numbers			Weight (kg)approx	Dimensions			Fixing Centres (mm) Conduit Chain or Screw D
		Batten only	Diffuser only	Controller only	Batten with Diffuser or Controller	Length A	Width B	Depth C	
Switchstart Circuit									
1.2	1 x 36/40 2 x 36/40	S4401S S4402S	S41DF S42DF	S41PC S42PC	3.2 5.0	1242	97 160	115	600
1.5	1 x 58/65 2 x 58/65	S5651S S5652S	S51DF S52DF	S51PC S52PC	4.5 7.0	1542	97 160	115	600
1.8	1 x 70/75 2 x 70/75	S6751S S6752S	S61DF S62DF	S61PC S62PC	4.8 7.3	1808	97 160	115	600
2.4	1 x 100 2 x 100	S8001S S8002S	S81DF S82DF	S81PC S82PC	4.8 8.8	2417	97 160	115	1200
Electronic Start									
1.2	1 x 36/40 2 x 36/40	S4401E S4402E	S41DF S42DF	S41PC S42PC	3.2 5.0	1242	97 160	115	600
1.5	1 x 58/65 2 x 58/65	S5651E S5652E	S51DF S52DF	S51PC S52PC	4.5 7.0	1542	97 160	115	600
1.8	1 x 70/75 2 x 70/75	S6701E S6702E	S61DF S62DF	S61PC S62PC	4.8 7.3	1808	97 160	115	600
2.4	1 x 100 2 x 100	S8001E S8002E	S81DF S82DF	S81PC S82PC	4.8 8.8	2417	97 160	115	1200
2.4	1 x 125 2 x 125	S8251E S8252E	S81DF S82DF	S81PC S82PC	4.8 8.8	2417	97 160	115	1200

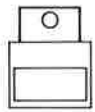
For complete luminaire quote all relevant catalogue numbers.

Photometric Data

Type	Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max)	BZ	FFR	ACG	Luminous Area (cm²) 0.6m	1.2m	1.5m	1.8m	2.4m
Opal Diffuser	1 x 65	0.66	0.46	1.75	1.95	6	0.45	2	—	1100	1400	1700	2250
	2 x 65	0.67	0.42	1.5	1.72	6	0.61	2	—	1900	2350	2800	3750
Prismatic Controller	1 x 65	0.74	0.46	1.75	1.77	4(1.25)5	0.59	5	—	1100	1400	1700	2250
	2 x 65	0.76	0.46	1.5	1.73	3(1.25)5	0.67	5	—	1900	2350	2800	3750

Utilisation Factors

D795

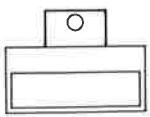


One Lamp Diffuser

Room Reflectance C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	–	.35	.40	.43	.48	.51	.53	.56	.59
	.30		–	.30	.34	.38	.43	.46	.49	.53	.55
	.10		–	.26	.30	.34	.39	.43	.46	.50	.53
.50	.50	.20	–	.32	.35	.38	.42	.45	.47	.50	.52
	.30		–	.27	.31	.34	.39	.42	.44	.47	.49
	.10		–	.24	.28	.31	.35	.39	.41	.45	.47
.30	.50	.20	–	.28	.31	.34	.37	.40	.42	.44	.46
	.30		–	.25	.28	.31	.34	.37	.39	.42	.44
	.10		–	.22	.25	.27	.32	.35	.37	.40	.42
.00	.00	.00	–	.18	.21	.23	.26	.29	.30	.33	.35

For the lamp wattage used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	–	–	1.06	1.04	1.03	1.0	1.03	1.0	0.99	0.98

D793

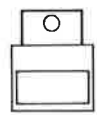


Two Lamp Diffuser

Room Reflectance C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	.32	.36	.41	.44	.48	.52	.54	.59	
	.30		.26	.31	.36	.39	.44	.48	.50	.54	.56
	.10		.23	.27	.32	.36	.41	.44	.47	.51	.54
.50	.50	.20	.28	.32	.36	.39	.43	.45	.47	.50	.51
	.30		.24	.28	.32	.35	.39	.42	.44	.48	.49
	.10		.21	.25	.29	.32	.36	.40	.42	.45	.48
.30	.50	.20	.25	.28	.32	.34	.37	.39	.41	.43	.44
	.30		.21	.26	.28	.31	.35	.37	.39	.41	.43
	.10		.19	.22	.26	.28	.32	.35	.37	.40	.42
.00	.00	.00	.15	.18	.21	.23	.26	.28	.30	.32	.33

For the lamp wattage used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	–	–	1.06	1.04	1.03	1.0	1.03	1.0	0.99	0.98

D841

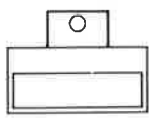


One Lamp Prismatic

Room Reflectance C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	–	.44	.49	.52	.56	.59	.62	.64	.66
	.30		–	.39	.44	.47	.52	.55	.58	.61	.64
	.10		–	.36	.40	.43	.49	.52	.55	.59	.61
.50	.50	.20	–	.40	.43	.46	.50	.52	.54	.57	.58
	.30		–	.36	.40	.42	.46	.49	.51	.55	.57
	.10		–	.33	.37	.39	.44	.47	.49	.52	.54
.30	.50	.20	–	.36	.39	.41	.44	.46	.47	.49	.51
	.30		–	.32	.36	.38	.41	.44	.45	.48	.49
	.10		–	.30	.33	.36	.39	.42	.44	.46	.48
.00	.00	.00	–	.25	.28	.29	.32	.34	.35	.37	.38

For the lamp wattage used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	–	–	1.06	1.04	1.03	1.0	1.03	1.0	0.99	0.98

D843



Two Lamp Prismatic

Room Reflectance C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	.40	.45	.50	.54	.58	.61	.64	.67	.68
	.30		.35	.40	.45	.49	.54	.58	.60	.64	.66
	.10		.32	.37	.42	.45	.51	.54	.57	.61	.64
.50	.50	.20	.36	.41	.45	.47	.51	.54	.56	.58	.60
	.30		.32	.37	.41	.44	.48	.51	.53	.56	.58
	.10		.29	.34	.38	.41	.46	.49	.51	.54	.56
.30	.50	.20	.33	.36	.39	.42	.45	.47	.49	.51	.52
	.30		.29	.33	.37	.39	.43	.45	.47	.49	.51
	.10		.26	.31	.34	.37	.41	.43	.45	.48	.49
.00	.00	.00	.22	.25	.28	.30	.33	.35	.36	.38	.39

For the lamp wattage used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	–	–	1.06	1.04	1.03	1.0	1.03	1.0	0.99	0.98

Crompton Sovereign

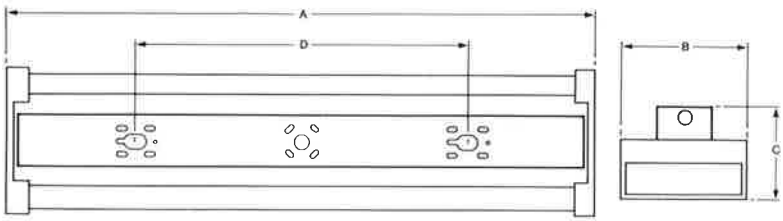
BSI Safety Mark Licence No. 052

Opal Side Prismatic Base Controller

Opal Side Prismatic Base Controller

Made of light stabilised polystyrene having opal sides and clear prismatic base combining attractive appearance and high luminous efficiency.

Neat light grey polystyrene end plates and easy fit retention brackets are supplied with each controller and incorporate an 'anti-lift' device which holds the controller firmly in place.



Catalogue Numbers

Catalogue numbers exclude lamps which should be ordered separately

Nominal Length (m)	Lamp Watts	Catalogue Numbers		Weight (kg) approx Batten with controller	Dimensions (mm)			Fixing Centres (mm) Conduit Chain or Screw D
		Batten only	Controller		Length A	Width B	Depth C	
Switchstart Circuit								
1.2	1 x 36/40 2 x 36/40	S4401S S4402S	CE42	3.6 5.0	1245	155	117	600
1.5	1 x 58/65 2 x 58/65	S5651S S5652S	CE52	5.1 7.2	1546	155	117	600
1.8	1 x 70/75 2 x 70/75	S6751S S6752S	CE62	5.5 7.6	1812	155	117	600
2.4	1 x 100 2 x 100	S8001S S8002S	CE82	5.7 9.2	2421	155	117	1200
Electronic Start								
1.2	1 x 36/40 2 x 36/40	S4401E S4402E	CE42	3.6 5.0	1245	155	117	600
1.5	1 x 58/65 2 x 58/65	S5651E S5652E	CE52	5.1 7.2	1546	155	117	600
1.8	1 x 70/75 2 x 70/75	S6701E S6702E	CE62	5.5 7.6	1812	155	117	600
2.4	1 x 100 2 x 100	S8001E S8002E	CE82	5.7 9.2	2421	155	117	1200
2.4	1 x 125 2 x 125	S8251E S8252E	CE82	5.7 9.2	2421	155	117	1200

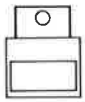
For complete luminaires quote all relevant catalogue numbers.

Photometric Data

Type	Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max)	BZ	FFR	ACG	Luminous Area (cm^2) 0.6m	1.2m	1.5m	1.8m	2.4m
Opal	1 x 65	0.81	0.56	1.75	1.84	4(1.5)5	0.45	5	—	1850	2300	2700	3600
Prismatic	2 x 65	0.79	0.52	1.75	1.75	4(2.5)5	0.52	5	—	1850	2300	2700	3600

Utilisation Factors

D1068

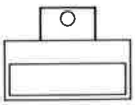


One Lamp
Opal Side
Prismatic Base

Room Reflectance C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	–	.51	.56	.60	.65	.68	.71	.74	.77
	.30		–	.45	.50	.54	.60	.64	.67	.71	.74
	.10		–	.41	.46	.50	.56	.60	.63	.68	.71
.50	.50	.20	–	.46	.50	.53	.58	.61	.63	.66	.68
	.30		–	.41	.46	.49	.54	.57	.60	.63	.66
	.10		–	.38	.42	.46	.51	.54	.57	.61	.63
.30	.50	.20	–	.41	.45	.48	.51	.54	.56	.58	.60
	.30		–	.38	.41	.44	.48	.51	.53	.56	.58
	.10		–	.35	.38	.42	.46	.49	.51	.54	.56
.00	.00	.00	–	.30	.33	.35	.38	.41	.42	.45	.46

For the lamp wattage used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	–	–	1.06	1.04	1.03	1.0	1.03	1.0	0.99	0.98

D1067



Two Lamp
Opal Side
Prismatic Base

Room Reflectance C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	–	.50	.55	.58	.63	.67	.69	.72	.75
	.30		–	.44	.49	.53	.59	.62	.65	.69	.72
	.10		–	.40	.45	.49	.55	.59	.62	.66	.69
.50	.50	.20	–	.45	.49	.52	.56	.59	.61	.64	.66
	.30		–	.40	.45	.48	.53	.56	.58	.61	.63
	.10		–	.37	.41	.45	.49	.53	.55	.59	.61
.30	.50	.20	–	.40	.44	.46	.50	.52	.54	.56	.57
	.30		–	.37	.40	.43	.47	.49	.51	.54	.56
	.10		–	.34	.38	.40	.45	.47	.49	.52	.54
.00	.00	.00	–	.29	.32	.34	.37	.39	.40	.42	.44

For the lamp wattage used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	–	–	1.06	1.04	1.03	1.0	1.03	1.0	0.99	0.98

Crompton Sovereign

BSI Safety Mark Licence No. 052

Open end top metal reflector
Open end angled metal reflector

Standard Metal Reflector

The reflector is attached to the batten at key-hole slot positions with or without the cover plate retained. Slots along the shoulders improve the airflow and give a controlled proportion of upward light.

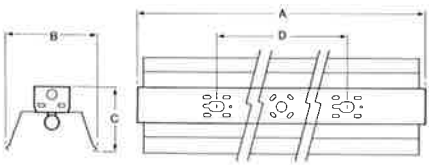
For end to end mounting joint covers Cat. No SRJ- are available as optional extras.

Angled Reflector

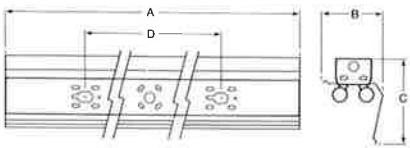
For use in situations where a strong asymmetric light distribution is required, for preferential lighting of vertical or sloping surfaces. To avoid unwanted point of brightness, the angled reflector has no top shoulder slots.

Both types are of steel construction, finished in Crompton 'Permawhite' high reflectance paint and suitable for single or twin lamp battens.

Standard Reflector



Angled Reflector



Catalogue Numbers

Catalogue numbers exclude lamps which should be ordered separately

Nominal Length (m)	Lamp Watts	Catalogue Numbers			Weight (kg) approx		Dimensions (mm)						Fixing Centres (mm) Conduit Chain or Screw D
		Batten only	Standard Reflector only	Angled Reflector only	Batten & Standard reflector	Batten & angled reflector	Standard Reflector			Angled Reflector			
							Length A	Width B	Depth C	Length A	Width B	Depth C	
Switchstart Circuit													
1.2	1 x 36/40 2 x 36/40	S4401S S4402S	S4R	—	4.5 5.9	—	1235	190	132	—	115	170	600
1.5	1 x 58/65 2 x 58/65	S5651S S5652S	S5R	S5AR	7.2 8.3	7.1 8.2	1534	190	132	1534	115	170	600
1.8	1 x 70/75 2 x 70/75	S6751S S6752S	S6R	S6AR	6.9 9.0	6.8 8.9	1800	190	132	1800	115	170	600
2.4	1 x 100 2 x 100	S8001S S8002S	S8R	S8AR	7.6 11.1	7.4 10.9	2409	190	132	2409	115	170	1200
Electronic Start													
1.2	1 x 36/40 2 x 36/40	S4401E S4402E	S4R	—	4.5 5.9	—	1235	190	132	—	115	170	600
1.5	1 x 58/65 2 x 58/65	S5651E S5652E	S5R	S5AR	6.2 8.3	7.1 8.2	1534	190	132	1534	115	170	600
1.8	1 x 70/75 2 x 70/75	S6701E S6702E	S6R	S6AR	6.9 9.0	6.8 8.9	1800	190	132	1800	115	170	600
2.4	1 x 100 2 x 100	S8001E S8002E	S8R	S8AR	7.6 11.1	7.4 10.9	2409	190	132	2409	115	170	1200
2.4	1 x 125 2 x 125	S8251E S8252E	S8R	S8AR	7.6 11.1	7.3 10.9	2409	190	132	2409	115	170	1200

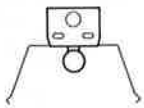
For complete luminaires quote all relevant catalogue numbers.

Photometric Data

Type	Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max)	BZ	FFR	ACG	Luminous Area (cm^2) 0.6m	1.2m	1.5m	1.8m	2.4m
Standard	1 x 65	0.84	0.80	1.75	1.85	4	0.05	2	—	2250	2800	3350	4500
Reflector	2 x 65	0.82	0.76	1.75	1.82	4	0.09	SYMM	—	2250	2800	3350	4500

Utilisation Factors

D917

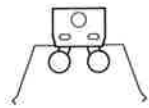


One Lamp

Room Reflectance C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	–	.56	.62	.66	.72	.76	.79	.82	.85
	.30		–	.50	.56	.61	.67	.72	.75	.79	.82
	.10		–	.45	.51	.56	.63	.68	.71	.76	.79
.50	.50	.20	–	.54	.59	.64	.69	.73	.75	.78	.80
	.30		–	.48	.54	.59	.65	.69	.72	.75	.78
	.10		–	.44	.50	.55	.61	.65	.69	.73	.75
.30	.50	.20	–	.52	.57	.61	.66	.69	.72	.74	.76
	.30		–	.47	.53	.57	.63	.66	.69	.72	.74
	.10		–	.43	.49	.53	.59	.63	.66	.70	.72
.00	.00	.00	–	.41	.46	.50	.56	.59	.62	.65	.68

For the lamp wattage used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	–	–	1.06	1.04	1.03	1.0	1.03	1.0	0.99	0.98

D916



Two Lamp

Room Reflectance C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	–	.55	.61	.65	.71	.74	.77	.80	.82
	.30		–	.49	.55	.60	.66	.70	.73	.77	.79
	.10		–	.45	.51	.55	.62	.66	.69	.74	.77
.50	.50	.20	–	.53	.58	.62	.67	.71	.73	.76	.78
	.30		–	.48	.53	.58	.63	.67	.70	.73	.75
	.10		–	.44	.49	.54	.60	.64	.67	.71	.73
.30	.50	.20	–	.51	.56	.59	.64	.67	.69	.72	.74
	.30		–	.46	.52	.55	.61	.64	.66	.70	.72
	.10		–	.43	.48	.52	.58	.61	.64	.68	.70
.00	.00	.00	–	.40	.45	.49	.54	.57	.60	.63	.65

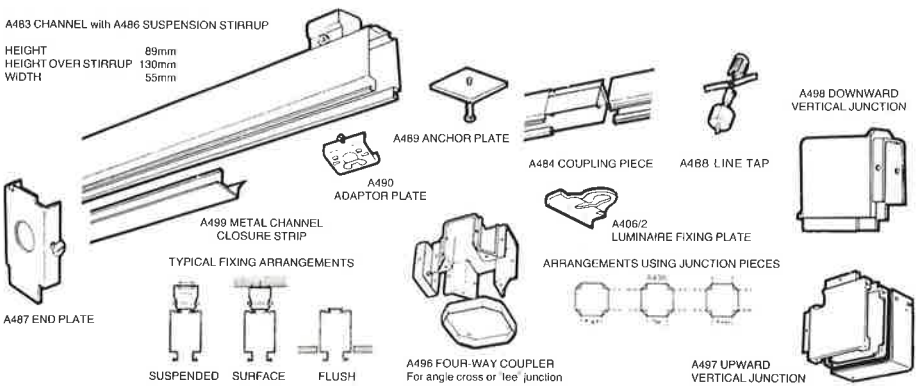
For the lamp wattage used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	–	–	1.06	1.04	1.03	1.0	1.03	1.0	0.99	0.98

Crompton

Newline Trunking

Specification

- Supplied in standard lengths of 4.57 m.
- Coupling is quick, simple and requires no drilling on site.
- Electrical bonding of sections is automatic.
- Suspension centres up to 4.6 m apart even with heavily loaded arrangements.
- Fluorescent, filament and discharge luminaires of any pattern easily attached and connected.
- Trunking capacity up to approximately 50 x 2.5 mm^2 single conductors or equivalent.
- Fully-insulated line taps accept mains conductors from 2.5 mm^2 up to 16mm^2 with tap-off cables of 1.5mm^2.
- 'Slip in'– cable supports and 'Snap-on' channel closures obviate the tedious procedure of 'drawing-in' cables.
- Insulated cable supports.
- Galvanised finish.



Range

Cat. No.	Description	Gauge	Finish	Approx. Weight	Deflection
A 483	Channel 4.57 m length	16 S.W.G.	Galvanised		
A 484	Coupling piece	10 S.W.G.	Zinc Plated		
A 486	Suspension stirrup	10 S.W.G.	Zinc Plated	118.9 kg	With centre load of 22.7 kg
A 487	End plate	16 S.W.G.	Zinc Plated	per 30.5m	
A 488	Line tap	—	Black	run	
A 489	Anchor plate	10 S.W.G.	Zinc Plated	exclusive	Suspension
A 490	Adaptor plate	16 S.W.G.	Zinc Plated	of luminaires	Centres Deflection
A 496	Four-way coupler	–	Aluminium		3.8m 2mm
A 497	Upward vertical junction	–	Casting		4.5m 5mm
A 498	Downward vertical junction	–	Galvanised		
A 499	Channel cover strip 1.68m length	28 S.W.G.	Metallic Grey		
A 411	Cable supports (3 supplied with each A483)	–	Not shown		
A 406/2	Luminaire fixing plate		Zinc Plated		

Crompton Raceline Trunking

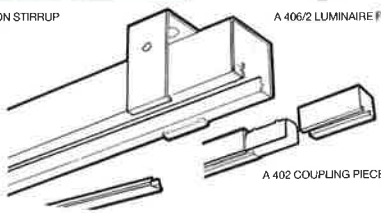
Specification

- Supplied in standard lengths of 4.57 m.
- Galvanised to give a high quality, long-lasting silver-grey finish.
- Coupling substantial, with automatic electrical bonding of sections and no drilling required nor tapped holes to find.
- Wiring capacity of at least 40 x 2.5mm^2 single conductors or equivalent without exceeding the 45 per cent space factor recommended under IEE Wiring regulations.
- Suspension centres – see table of load deflections.
- Luminaires easily attached or repositioned at will, using anchor plates and fixing (slip-fix) plates.
- Fully insulated line taps of adequate capacity for quick electrical connections on to mains cable from 2.5mm^2 up to 16mm^2.
- 'Spring-in' metal closure strip easily cut to length, obviates the tedious procedure of 'drawing-in' cables.
- Die-cast end caps with 25 mm 'knock-outs' simply fitted by pressure screws.

A 401 CHANNEL with A 404 SUSPENSION STIRRUP

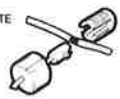
HEIGHT	51mm
HEIGHT OVER STIRRUP	88mm
WIDTH	57mm
WIDTH OVER STIRRUP	60mm

A 406/2 LUMINAIRE FIXING PLATE

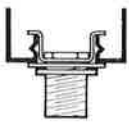


A 402 COUPLING PIECE

A 403 CHANNEL COVER STRIP

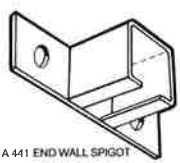


A 488 LINE TAP



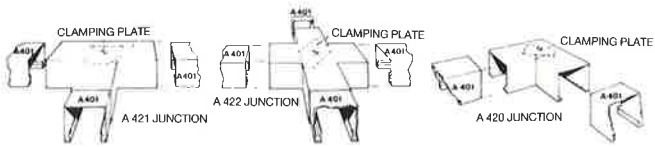
A 440 LUMINAIRE FIXING BUSH

A415 ANCHOR PLATE FOR FLUORESCENT LUMINAIRES



A 441 END WALL SPIGOT

A 405 END CAP



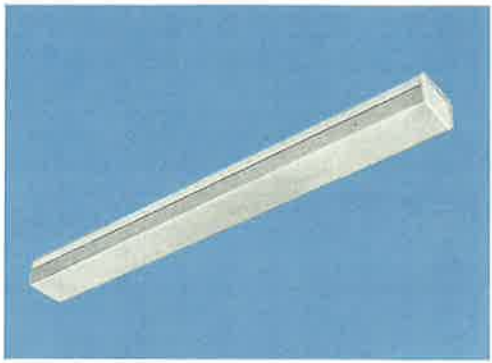
Catalogue Numbers

Cat. No.	Description	Gauge SWG.	Gauge mm	Finish	Weight	Deflection
A 401	Channel 4.57m length	18	1.2	Galvanised		With centre load of 11.3kg Suspension
A 402	Coupling piece	10	3.0	Zinc Plated		
A 403	Channel cover strip 1.68m length	28	0.4	Galvanised	68.0kg	
A 404	Suspension stirrup	16	1.6	Zinc Plated	per 30.5m	Centre Deflection
A 405	End cap (die cast)	—	—	Zinc Alloy	run	3.0m 4mm
A 406/2	Luminaire fixing plate	16	1.6	Zinc Plated	exclusive of	4.0m 7mm
A 411	Cable supports	—	—	Not shown	luminaires	
A 415	Anchor plate for fluorescent luminaires	10	3.0		and	
A 420	Right angle junction	18	1.2		conductors	With centre load of 23 kg Suspension
A 421	3-Way junction	18	1.2	Zinc		
A 422	4-Way junction	18	1.2	Plated		
A 440	Luminaire Fixing Bush	—	—		—	Centre Deflection
A 441	End Wall Spigot	—	—			
A 488	Line tap	—	—	Black		3.0m 7mm 4.0m 13mm

Crompton Varsity

BSI Safety Mark Licence No. 052

Fluorescent Lamp Luminaires



Applications

The range of lamp combinations using diffuser or prismatic light controllers ensures that most commercial and general office lighting requirements can be satisfied by Crompton Varsity range.

In addition, the overall design and production parameters satisfy the requirements of the D.H.S.S. specification for Reference 'A' type luminaires used in hospitals and other associated Health Centres.

Varsity luminaires suitable for D.H.S.S. Reference 'B' ward lighting applications are available when fitted with additional option VWR reflectors.

Asymmetric light distributions for corridors or wall lighting provided by fitting the additional option VXR reflectors.

The range of options and further attachments available are detailed on page 36

Description

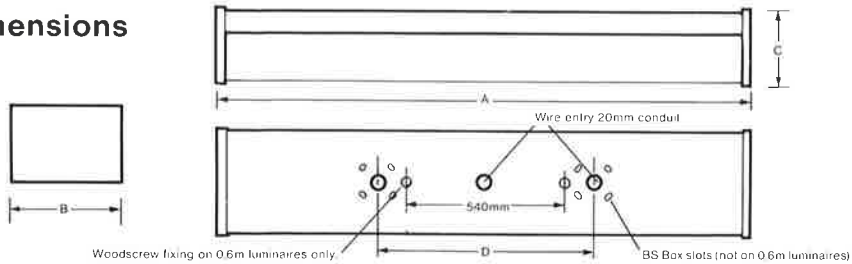
An attractive new range of fluorescent lamp luminaires designed to provide economic, stylish and attractive high quality lighting.

The black finish metal housing and endplates contain switch start control gear and circuitry to operate Crompton 26mm or 38mm diameter fluorescent lamps.

A choice of reeded opal diffuser or prismatic controller having a width identical to the housing ensures a net luminaire profile which is common for both one and two lamp combinations.

These luminaires comply with BS4533 Classified IP20; for use in normal interior conditons.

Dimensions



Catalogue Numbers

Excluding lamps which should be ordered separately.

Note: These luminaires are also available with Electronic Start. When ordering, replace the suffix 'S' of the catalogue number with 'E' for electronic start.

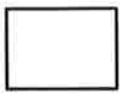
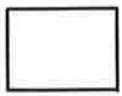
Nominal Length (m)	Lamp Watts	Complete Luminaire		Comprising			Weight (kg)	Dimensions (mm)			
		Diffuser Luminaire	Prismatic Luminaire	Basic Housing	Opal Diffuser	Prismatic Controller		A	B	C	D
0.6	1x18/20 2x18/20	VD21S VD22S	VC21S VC22S	VH21S VH22S	VD2 VD2	VC2 VC2	2.65 2.75	623	160	109	—
1.2	1x36/40 2x36/40	VD41S VD42S	VC41S VC42S	VH41S VH42S	VD4 VD4	VC4 VC4	3.6 4.8	1232	160	109	600
1.5	1x58/65 2x58/65	VD51S VD52S	VC51S VC52S	VH51S VH52S	VD5 VD5	VC5 VC5	4.5 6.0	1533	160	109	600
1.8	1x70/75 2x70/75	VD61S VD62S	VC61S VC62S	VH61S VH62S	VD6 VD6	VC6 VC6	5.9 7.2	1797	160	109	600

BSI Safety Mark (Licence No. 052) The BSI safety mark gives an independent guarantee that luminaires are type tested by the British Standards Institution and comply with BS4533

Photometric Data

Type	Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max)	BZ	FFR	ACG	Luminous Area (cm²) 0.6m	1.2m	1.5m	1.8m
Polystyrene Diffuser	1 x 58 2 x 58	.56 .48	.44 .38	1.5 1.75	1.75 1.77	6 5(2)6	.27 .28	2 2	950	1900	2350	2800
Polystyrene Prismatic	1 x 58 2 x 58	.65 .56	.48 .41	1.75 1.5	1.77 1.71	3(2)4 4(2.5)5	.35 .35	5 6	950	1900	2350	2800

Utilisation Factors

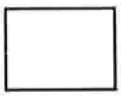
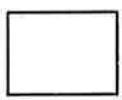
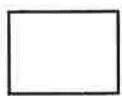
	Room Reflectance C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
	.70	.50	.20	.28	.32	.36	.39	.43	.45	.47	.50	.52
		.30		.23	.27	.32	.34	.39	.42	.44	.47	.50
		.10		.20	.24	.28	.31	.36	.39	.41	.45	.47
	.50	.50	.20	.26	.29	.33	.36	.39	.41	.43	.46	.47
		.30		.22	.26	.29	.32	.36	.39	.41	.44	.45
		.10		.19	.23	.27	.29	.33	.36	.38	.42	.44
	.30	.50	.20	.24	.27	.30	.33	.36	.38	.39	.42	.43
		.30		.20	.24	.27	.30	.33	.36	.37	.40	.42
1 Lamp 58W		.10		.18	.21	.25	.27	.31	.34	.36	.38	.40
Opal Reeded Diffuser – Polystyrene	.00	.00	.00	.16	.19	.22	.24	.27	.29	.31	.33	.35
	.70	.50	.20	—	.28	.31	.33	.37	.39	.41	.43	.44
		.30		—	.24	.27	.30	.33	.36	.38	.41	.42
		.10		—	.21	.25	.27	.31	.33	.36	.38	.40
	.50	.50	.20	—	.26	.29	.31	.34	.36	.37	.39	.41
		.30		—	.23	.26	.28	.31	.33	.35	.37	.39
		.10		—	.20	.23	.25	.29	.31	.33	.36	.37
	.30	.50	.20	—	.24	.26	.28	.31	.33	.34	.36	.37
		.30		—	.21	.24	.26	.29	.31	.32	.34	.36
2 Lamp 58W		.10		—	.19	.22	.24	.27	.29	.31	.33	.34
Opal Reeded Diffuser – Polystyrene	.00	.00	.00	—	.17	.19	.21	.24	.25	.27	.29	.30
	.70	.50	.20	—	.43	.47	.49	.53	.56	.58	.60	.62
		.30		—	.39	.42	.46	.50	.53	.55	.58	.60
		.10		—	.35	.39	.42	.47	.50	.53	.56	.58
	.50	.50	.20	—	.40	.43	.45	.49	.51	.53	.55	.56
		.30		—	.36	.40	.42	.46	.49	.50	.53	.55
		.10		—	.33	.37	.40	.44	.46	.48	.51	.53
	.30	.50	.20	—	.37	.40	.42	.45	.47	.48	.50	.51
		.30		—	.34	.37	.39	.43	.45	.46	.48	.50
1 Lamp 58W		.10		—	.32	.35	.37	.41	.43	.45	.47	.49
Prismatic Controller – Polystyrene	.00	.00	.00	—	.28	.31	.33	.36	.38	.39	.41	.42
	.70	.50	.20	.31	.35	.39	.41	.45	.47	.49	.51	.53
		.30		.27	.31	.35	.38	.42	.44	.46	.49	.51
		.10		.23	.28	.32	.35	.39	.42	.44	.47	.49
	.50	.50	.20	.29	.32	.35	.38	.41	.43	.44	.46	.48
		.30		.25	.29	.32	.35	.38	.41	.42	.44	.46
		.10		.23	.27	.30	.33	.36	.39	.40	.43	.45
	.30	.50	.20	.26	.30	.32	.34	.37	.39	.40	.42	.43
		.30		.23	.27	.30	.32	.35	.37	.38	.40	.42
2 Lamp 58W		.10		.21	.25	.28	.30	.33	.36	.37	.39	.41
Prismatic Controller – Polystyrene	.00	.00	.00	.19	.22	.25	.27	.29	.31	.32	.34	.35

For lamp wattage used multiply above values by the factors given here:	18w	20w	36w	40w	58w	65w	70w	75w
	1.03	1.01	1.03	1.01	1.0	.97	1.0	.97

Photometric Data

Type	Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max)	BZ	FFR	ACG	Luminous Area (cm^2) 0.5m	1.2m	1.5m	1.8m
Acrylic Diffuser	1 x 58	.60	.47	1.5	1.75	6	.28	2	–	1900	2350	2800
	2 x 58	.52	.40	1.75	1.78	6	.28	2				
Acrylic Prismatic	1 x 58	.74	.55	1.75	1.8	4(1.3)5	.35	5	–	1900	2350	2800
	2 x 58	.62	.46	1.75	1.78	4(1.3)5	.33	5				

Utilisation Factors

	Room Reflectance C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
 1 Lamp 58W Opal Reeded Diffuser – Acrylic	.70	.50	.20	.30	.34	.38	.42	.46	.48	.50	.53	.56
		.30		.25	.29	.34	.36	.41	.45	.47	.50	.54
		.10		.21	.26	.30	.33	.39	.42	.44	.48	.50
	.50	.50	.20	.28	.31	.35	.39	.42	.44	.46	.49	.50
		.30		.24	.28	.31	.34	.39	.42	.44	.47	.48
		.10		.20	.25	.29	.31	.35	.39	.41	.45	.47
	.30	.50	.20	.26	.29	.32	.35	.39	.41	.41	.45	.46
		.30		.21	.26	.29	.32	.35	.39	.40	.43	.45
		.10		.19	.23	.27	.29	.33	.36	.39	.41	.43
	.00	.00	.00	.17	.20	.24	.26	.29	.31	.33	.35	.38
 2 Lamp 58W Opal Reeded Diffuser – Acrylic	.70	.50	.20	–	.30	.33	.35	.40	.40	.44	.46	.47
		.30		–	.26	.29	.32	.35	.39	.41	.44	.45
		.10		–	.23	.27	.29	.33	.35	.39	.41	.43
	.50	.50	.20	–	.28	.31	.33	.36	.39	.40	.42	.44
		.30		–	.25	.28	.30	.33	.35	.37	.40	.42
		.10		–	.21	.25	.27	.31	.33	.35	.39	.40
	.30	.50	.20	–	.26	.28	.30	.33	.35	.36	.39	.40
		.30		–	.23	.26	.28	.31	.33	.34	.36	.39
		.10		–	.20	.24	.26	.29	.31	.33	.35	.36
	.00	.00	.00	–	.18	.20	.23	.26	.27	.29	.31	.32
 1 Lamp 58W Prismatic Controller – Acrylic	.70	.50	.20	–	.47	.51	.54	.59	.62	.64	.67	.69
		.30		–	.42	.46	.50	.55	.58	.61	.64	.67
		.10		–	.38	.42	.46	.51	.55	.58	.62	.64
	.50	.50	.20	–	.43	.47	.50	.54	.56	.58	.61	.63
		.30		–	.39	.43	.46	.51	.53	.56	.59	.61
		.10		–	.36	.40	.43	.48	.51	.53	.57	.59
	.30	.50	.20	–	.40	.43	.46	.49	.51	.53	.55	.57
		.30		–	.36	.40	.43	.46	.49	.51	.53	.55
		.10		–	.34	.37	.40	.44	.47	.49	.52	.54
	.00	.00	.00	–	.30	.33	.35	.39	.41	.42	.45	.46
 2 Lamp 58W Prismatic Controller – Acrylic	.70	.50	.20	–	.40	.43	.46	.50	.53	.55	.57	.59
		.30		–	.35	.39	.42	.47	.49	.52	.54	.56
		.10		–	.32	.36	.39	.44	.47	.49	.52	.55
	.50	.50	.20	–	.37	.40	.42	.46	.48	.50	.52	.53
		.30		–	.33	.37	.39	.43	.45	.47	.50	.51
		.10		–	.31	.34	.37	.41	.43	.45	.48	.50
	.30	.50	.20	–	.34	.37	.39	.42	.44	.45	.47	.48
		.30		–	.31	.34	.36	.40	.42	.43	.45	.47
		.10		–	.29	.32	.34	.38	.40	.42	.44	.46
	.00	.00	.00	–	.26	.28	.30	.33	.35	.36	.38	.39
For lamp wattages used multiply above values by the factors given here:					18w —	20w —	36w 1.03	40w 1.01	58w 1.0	65w .97	70w 1.0	75w .97

Mechanical Data

Housing
The steel housing and endcaps are formed and punched prior to receiving anti-rust treatment. The external surfaces of the housing are finished stoved enamel matt black and internal surface in a high reflective white.

Controllers
The plastic light controllers are retained by the spring loaded endcaps.

Installation Notes
Installation guidance notes are supplied with each luminaire, and it is recommended that a copy be retained by the authority responsible for maintenance of the luminaires.

These luminaires are suitable for direct mounting on non-combustible materials e.g. metal, concrete, plaster. They are not suitable for direct mounting on normally flammable materials e.g. timber, chipboard. For such materials ensure a minimum clearance of 10mm between luminaire and mounting surface. Do not mount luminaires on or close to readily flammable materials.

Electrical Data

Control Gear
All control gear is factory fitted with cleated wiring harness to the snap-in rotary contact lampholders, terminating at a fused terminal block adjacent to the grommetted central 20mm cable entry.

Terminal Block
The fused terminal block accepts up to 2 x 2.5mm² mains conductors.

Starter Switch
Starter switches are also centrally located, permitting easy insertion or removal from any one position along the luminaire.

Lamps	Input (Watts)	Line Current (Amps)	Power Factor	Third Harmonic Per Phase %
1x18	29	0.365	0.33	3
2x18	30	0.215	0.91	15
1x36	48	0.215	0.93	17
2x36	96	0.43	0.93	17
1x58	70	0.33	0.89	17
2x58	140	0.66	0.89	17
1x70	78	0.36	0.90	18
1x70	156	0.72	0.90	18

The above values are based on 240v 50Hz supply

Crompton Varsity – Optional Alternatives

The Varsity range detailed allows for an extensive choice of options to be available to meet specific applications. These options may be subject to a minimum order quantity. If there is a requirement for these options information will be available from your local Crompton Depot.

1. **Acrylic Diffusers and Prismatic Controllers.** Acrylic plastic is a more expensive material than standard polystyrene but remains stable in appearance for many years. Utilisation factors are given on page 35.

2. External metalwork finished in white Crompton "Permawhite" can be offered as an alternative to black metalwork.

3. A polyurethene gasket can be fitted along the length of both sides of the housing.

4. A large bore terminal block to accept mains conductors up to 3 x 2.5mm² can be fitted.

5. Two fused terminal blocks for separately switching each lamp in a two-lamp luminaire can be fitted.

6. An emergency lighting facility can be provided whereby in the event of mains failure either a mains lamp will operate on reduced light output from a self contained module kit or an additional 8w fluorescent lamp emergency self contained module will be energised.

7. Removable gear trays can be provided to allow the control gear to be easily removed for maintenance.

8. DHSS Hospital Ward lighting class 'B' twin lamp luminaire specification is met by fitting a reflector baffle Cat. Ref. VWR within the standard twin lamp 1.5m or 1.8m Varsity prismatic acrylic controller luminaires. (VP models).

9. Asymmetric light distribution for side lighting of corridors etc. can be provided by fitting an asymmetric reflector Cat. Ref. VXR within the standard 1.5m or 1.8m Varsity prismatic acrylic controller luminaires. (VP models).

Note: These luminaires are also available with Electronic Start. When ordering, replace the suffix 'S' of the catalogue number with 'E' for electronic start.

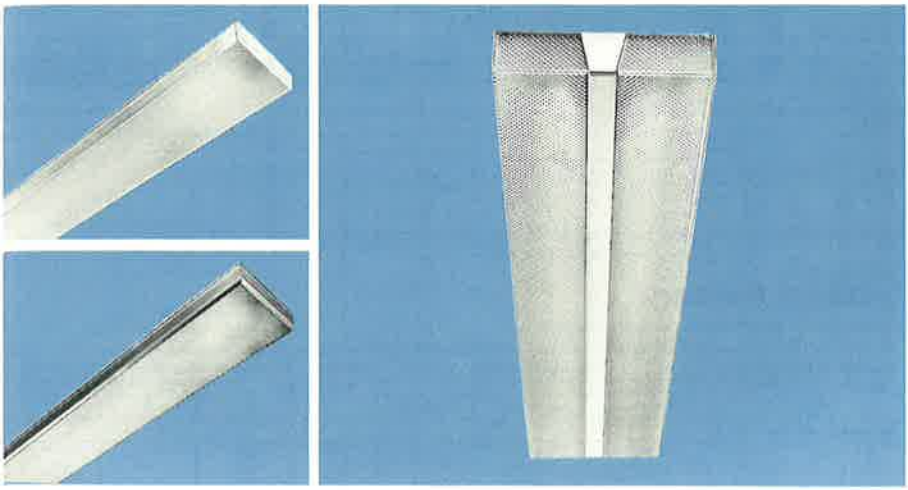
Catalogue Numbers

Acrylic Range excluding lamps which should be ordered separately.

Nominal Length (m)	Lamp Watts	Complete Luminaire		Comprising		
		Acrylic Opal Diffuser	Acrylic Prismatic Controller	Basic Housing	Acrylic Opal Diffuser only	Acrylic Prismatic Controller only
1.2	1 x 36/40	VT41S	VP41S	VH41S	VT4	VP4
	2 x 36/40	VT42S	VP42S	VH42S	VT4	VP4
1.5	1 x 58/65	VT51S	VP51S	VH51S	VT5	VP5
	2 x 58/65	VT52S	VP52S	VH52S	VT5	VP5
1.8	1 x 70/75	VT61S	VP61S	VH61S	VT6	VP6
	2 x 70/75	VT62S	VP62S	VH62S	VT6	VP6

Crompton Slimtrim

BSI Safety Mark
Licence No. 052



Applications

The neatness of design and finish of Slimtrim combined with a shallow projecting profile permits aesthetically pleasing lighting installations particularly where close ceiling mounting in restricted ceiling heights is necessary.

Many modern offices contain computer visual display units, which can impose severe difficulties for operatives. The aluminium frame and prismatic panel attachment is particularly suited to provide the required general illumination with reduced intensity of reflections in the VDU screens. All three styles of attachments are suitable for quality prestige lighting in many commercial and office environments.

Options available to special enquiry

Where the working visual requirement dictates minimal vertical surface reflections, then small cell louvre panels can be offered when using aluminium frame attachments.

Description

The shallow metal backplate that contains all the high quality control gear, is effectively concealed by one of the three controllers available viz — 1) All prismatic polystyrene; 2) Aluminium frame with flat prismatic panel; 3) All prismatic acrylic.

All the light control attachments are designed to satisfy particular lighting needs. The prismatic controllers afford good general light distribution at controlled brightness, whilst the frame and prismatic panel combination provides an attractive luminaire with significantly reduced side brightness to prevent excessive and unacceptable reflections in vertical reflective surfaces.

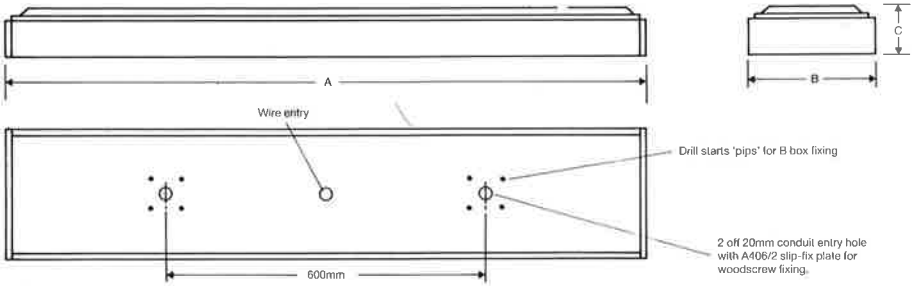
Gasketing is included around the perimeter of the metal backplate, to restrict the top entry of dust and dirt, when any of the attachments are correctly positioned.

The luminaires comply with BS4533 Section 102.1:1981 classified **IP20** for use in normal interior conditions.

BSI Safety Mark – Gives an independent guarantee that luminaires are type tested by the British Standards Institution and comply with BS.4533.

Dimensions

All dimensions in mm



Catalogue Numbers

Excluding lamps which should be ordered separately

Nominal Length (m)	Lamp Watts	Catalogue Numbers			Weight (kg)	Dimensions (mm)		
		Complete Luminaire	Back Plate	Controller		A	B	C
Prismatic Acrylic Controller								
1.2	2x36/40	SP4402S	SH42S	SP42	5.8	1266	249	77
1.5	2x58/65	SP5652S	SH52S	SP52	8.4	1566	249	77
1.8	2x70/75	SP6752S	SH62S	SP62	9.2	1830	249	77
Prismatic Polystyrene Controller								
1.2	2x36/40	SC4402S	SH42S	SC42	5.8	1266	252	90
1.5	2x58/65	SC5652S	SH52S	SC52	8.3	1566	252	90
1.8	2x70/75	SC6752S	SH62S	SC62	9.0	1830	252	90
Aluminium Frame and Prismatic Panel								
1.5	2x58/65	SA5652S	SH52S	SA52	10.3	1558	257	82.5
1.8	2x70/75	SA6752S	SH62S	SA62	11.3	1823	257	82.5

NOTE: These luminaires are also available with Electronic Start.
When ordering, replace the suffix 'S' of the catalogue number with 'E' for electronic start.

Mechanical Data

Back Plate
Formed in one piece with all holes punched prior to undergoing the Crompton "Permawhite" anti-rust treatment and white epoxy base powder coated stoved enamelling.

Reflector Plate
A removable reflector plate covers the lamp control ballast and capacitors which are factory fitted and wired to the snap-in rotary contact lamphold.

Fixing
Two A406/2 slip-fix plates are supplied for wood-screw fixing.

Installation Notes
Installation instruction notes are packed with every luminaire backplate and a copy should be retained by the person responsible for future maintenance.

Slimtrim luminaires are basically designed for close ceiling mounting but can be fixed to trunking or suspended on 20mm conduit at the designed fixing centres.

Slimtrim luminaires are suitable for direct mounting on non-combustible materials e.g. metal, concrete, plaster. They are not suitable for direct mounting on normally flammable materials e.g. timber, chipboard. For such materials ensure a minimum clearance of 10mm between luminaire and mounting surface. Do not mount luminaire on or close to readily flammable materials.

Electrical

Lampholders:
Rotary contact.

Control Gear:
Complies with BS2818. HPF switch start. Starter switches accessible without removal of cover plate.

Wiring:
Heat resistant PVC wired to 3 way fused terminal block accepting up to 2x2.5mm^2 conductors, wiring harness clipped in position.

Electrical Loadings

Lamp Watts	Total Input Watts	Power Factor	Line Current (Amps)	Circuit Losses (Watts)	Third Harmonic (per phase) %
2x36	96	.93	.43	24	17
2x58	140	.89	.66	28	17
2x70	156	.90	.72	26	18

Voltage and Ambient Temperature

Luminaires are normally supplied for use on 240V 50Hz mains supply in ambient temperatures within the range 5°C to 25°C.

Photometric Data

Type	Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max)	BZ	FFR	ACG	Luminous Area (cm²) 0.6m	1.2m	1.5m	1.8m	2.4m
Prismatic – Acrylic	2 x 58	.71	.59	1.5	1.6	3(2,5)4	.20	5	—	3150	3900	4550	—
Prismatic - Polystyrene	2 x 58	.71	.59	1.5	1.66	4(4)5	.20	6	—	3100	3850	4500	—
Aluminium Frame with Prismatic Panel	2 x 58	.51	.51	1.25	1.45	3	0	SYMM	—	—	3600	4150	—

Utilisation Factors

D998

Two Lamp 58W
Prismatic Controller – Acrylic

Room Reflectance C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	.43	.48	.53	.56	.61	.63	.66	.68	.70
	.30		.38	.44	.48	.52	.57	.60	.62	.66	.68
	.10		.35	.40	.45	.48	.53	.57	.60	.63	.66
.50	.50	.20	.41	.46	.50	.53	.57	.59	.61	.63	.65
	.30		.37	.42	.46	.49	.53	.56	.58	.61	.63
	.10		.34	.39	.43	.46	.51	.54	.56	.59	.62
.30	.50	.20	.39	.43	.47	.49	.53	.55	.57	.59	.60
	.30		.35	.40	.44	.47	.50	.53	.55	.57	.59
	.10		.33	.37	.41	.44	.48	.51	.53	.56	.58
.00	.00	.00	.30	.34	.38	.40	.44	.46	.48	.50	.52

For the lamp wattage used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	—	—	1.03	1.01	1.0	0.97	1.0	0.97	—	—

D999

Two Lamp 58W
Prismatic Controller – Polystyrene

Room Reflectance C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	.42	.47	.52	.55	.59	.62	.64	.67	.69
	.30		.37	.43	.47	.51	.55	.59	.61	.64	.67
	.10		.34	.39	.44	.47	.52	.56	.58	.62	.64
.50	.50	.20	.40	.45	.49	.52	.55	.58	.60	.62	.64
	.30		.36	.41	.45	.48	.52	.55	.57	.60	.62
	.10		.33	.37	.42	.45	.49	.52	.55	.58	.60
.30	.50	.20	.38	.42	.46	.48	.52	.54	.55	.58	.59
	.30		.34	.39	.43	.45	.49	.52	.53	.56	.58
	.10		.32	.36	.40	.43	.47	.49	.51	.54	.56
.00	.00	.00	.29	.33	.36	.39	.42	.45	.46	.49	.50

For the lamp wattage used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	—	—	1.03	1.01	1.0	0.97	1.0	0.97	—	—

D1000

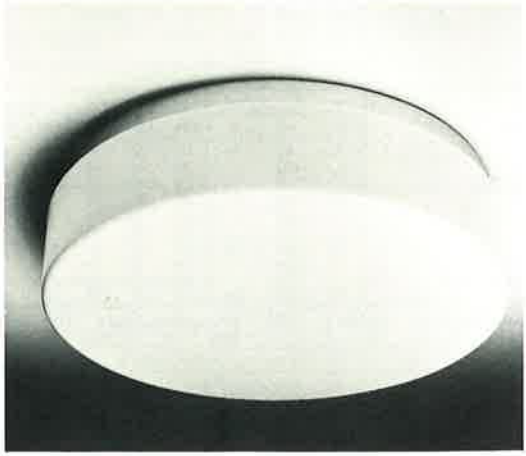
Two Lamp 58W
Aluminium Frame
with Prismatic Panel

Room Reflectance C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	.33	.38	.41	.44	.47	.49	.51	.52	.54
	.30		.30	.35	.38	.41	.44	.47	.48	.51	.52
	.10		.27	.32	.36	.38	.42	.45	.47	.49	.51
.50	.50	.20	.33	.37	.40	.42	.45	.47	.49	.50	.52
	.30		.29	.34	.38	.40	.43	.45	.47	.49	.50
	.10		.27	.32	.35	.38	.41	.44	.45	.48	.49
.30	.50	.20	.32	.36	.39	.41	.44	.46	.47	.49	.50
	.30		.29	.34	.37	.39	.42	.44	.46	.47	.49
	.10		.27	.32	.35	.37	.41	.43	.44	.46	.48
.00	.00	.00	.26	.31	.34	.36	.39	.41	.42	.44	.45

For the lamp wattage used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	—	—	—	—	1.0	0.97	1.0	0.97	—	—

Crompton Cercla

Circular Fluorescent Luminaires for Interior use



Applications

These luminaires are suitable for a wide range of interior applications presenting a prestige appearance. They are suitable for mounting on either horizontal or vertical surfaces.

Description

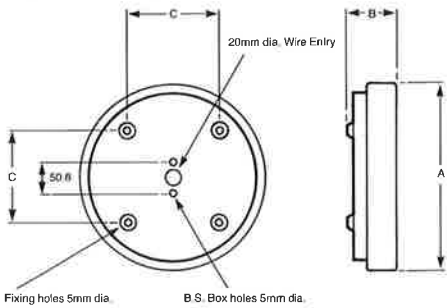
The spun steel housing and removable gear tray are finished in Permawhite enamel.

The one-piece acrylic opal diffuser is retained with spring-loaded catches.

The units is classified **IP20** for use in normal indoor conditions.

Dimensions

All dimensions in mm.



Electrical Data

Switchstart control gear factory wired and terminating at a fused 3 way terminal block that accepts up to $3\times1.5mm^2$ or up to $1\times4mm^2$ conductors.

Lamp Watts	Input Watts	P.f.	Line Current
32	43	0.94	0.19A
40	54	0.95	0.23A
60	76	0.89	0.35A

Suitable for ambient temperature range 5°C to 25°C.

Catalogue Numbers

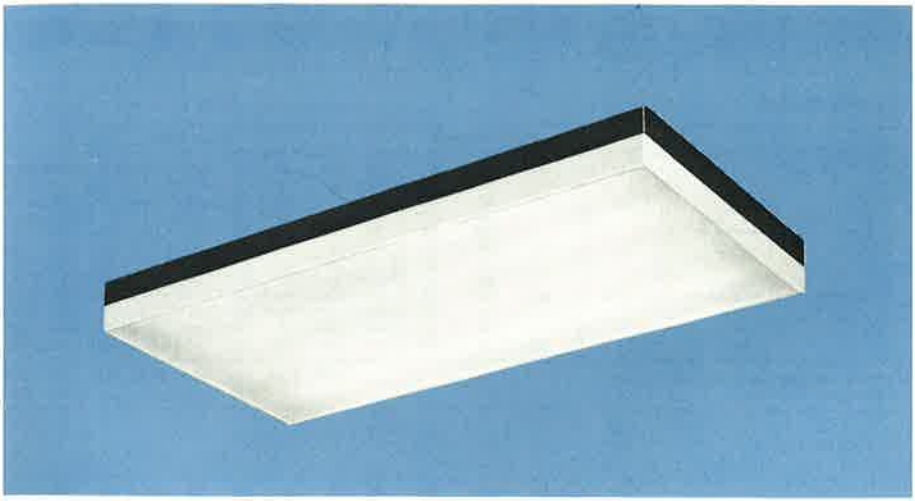
Catalogue numbers exclude lamps which should be ordered separately.

Lamp Watts	Catalogue Numbers	Weight (kg)	Overall Diameter (mm) A	Overall Depth (mm) B	Fixing Crs. (mm) C	Replacement Diffuser
1×32	40051	3·51	380	122	330	C90757
1×40	40052	4·71	470	122	419	C90759
1×60	40053	4·71	470	122	419	C90759

Crompton Contrast

BSI Safety Mark Licence No. 052

Surface mounted luminaires



Application

A range of enclosed surface mounted fluorescent luminaires with opal sided prismatic controllers.

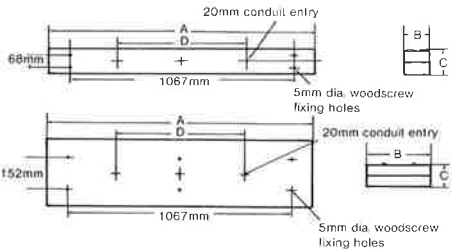
Description

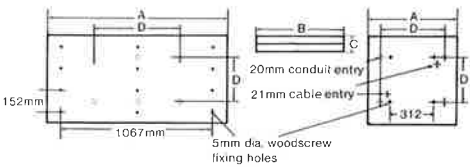
The range is available in switchstart or electronic start versions, in single lamp 115mm wide, twin lamp 312mm wide and four lamp 617mm wide modules.

Approved to BS. 4533.
IP20 – for use in normal indoor conditions.

Dimensions

All dimensions in mm





Catalogue Numbers

Excluding lamps which should be ordered separately

Nominal Length (m)	Rating	Catalogue No Complete Luminaire	Weight (kg)	Dimensions (mm)			Fixing Centres D (mm)	Catalogue No Spare Prismatic Controller
				Length A	Width B	Depth C		
0.6	4 x 18/20W	FD680S	12.7	660	617	115	457 x 318	FDD680
1.2	1 x 36/40W	FB660S	4.9	1270	115	115	610	FBD660
1.2	2 x 36/40W	FB680S	12.7	1270	312	115	610	FBD680
1.2	4 x 36/40W	FB681S	20.6	1270	617	115	610 x 305	FBD681
1.5	2 x 58/65W	FG680S	14.5	1575	312	115	610	FGD680
1.8	1 x 70/75W	FC660S	6.9	1829	115	115	610	FCD660
1.8	2 x 70/75W	FC680S	15.6	1829	312	115	610	FCD680

BSI Safety Mark — Gives an independent guarantee that luminaries are type tested by the British Standards Institution and comply with BS.4533.

Note: These luminaires are also available with Electronic Start. When ordering, replace the suffix 'S' of the catalogue number with 'E' for electronic start.

Photometric Data

Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max.)	BZ	FFR	ACG	Luminous Area (cm^2)			
								0.6m	1.2m	1.5m	1.8m
1 x 40	0.51	0.43	1.25	1.49	4(1.5)5	0.2	3	–	1450	–	2100
2 x 65	0.59	0.55	1.5	1.56	2(1.25)3	0.06	6	–	3850	4850	5650
4 x 40	0.63	0.61	1.5	1.51	2(2.5)3	0.04	Sym.	4050	7750	–	–

Utilisation Factors

One Lamp
Opal Side Prismatic Base Controller 40W

Room Reflectance			Room Index								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	.28	.33	.36	.39	.42	.44	.46	.48	.49
	.30	.20	.25	.29	.33	.35	.39	.41	.43	.46	.47
	.10	.20	.22	.26	.30	.32	.36	.39	.41	.44	.46
.50	.50	.20	.27	.31	.34	.36	.39	.41	.42	.44	.46
	.30	.20	.24	.28	.31	.33	.36	.39	.40	.43	.44
	.10	.20	.21	.25	.28	.31	.34	.37	.38	.41	.43
.30	.50	.20	.25	.29	.32	.34	.36	.38	.39	.41	.42
	.30	.20	.23	.27	.29	.31	.34	.36	.38	.40	.41
	.10	.20	.21	.24	.27	.29	.32	.35	.36	.38	.40
.00	.00	.00	.19	.22	.25	.27	.29	.31	.33	.34	.36

For lamp wattages used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W
	–	–	1.02	1.0	–	–	0.99	0.96

Two Lamp
Opal Side Prismatic Base Controller 65W

.70	.50	.20	.39	.44	.47	.50	.53	.55	.57	.59	.61
	.30	.20	.36	.40	.44	.46	.50	.53	.55	.57	.59
	.10	.20	.33	.37	.41	.44	.48	.50	.52	.55	.57
.50	.50	.20	.38	.42	.45	.48	.51	.53	.54	.56	.58
	.30	.20	.35	.39	.42	.45	.48	.51	.52	.55	.56
	.10	.20	.32	.36	.40	.43	.46	.49	.51	.53	.55
.30	.50	.20	.37	.41	.44	.46	.49	.51	.52	.54	.55
	.30	.20	.34	.38	.41	.44	.47	.49	.50	.52	.53
	.10	.20	.32	.36	.39	.42	.45	.47	.49	.51	.52
.00	.00	.00	.30	.34	.37	.39	.42	.44	.46	.48	.49

For lamp wattages used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W
	–	–	1.06	1.04	1.03	1.0	1.03	1.0

Four Lamp
Opal Side Prismatic Base Controller 40W

.70	.50	.20	.43	.48	.52	.55	.58	.61	.63	.65	.66
	.30	.20	.40	.44	.48	.51	.55	.58	.60	.63	.64
	.10	.20	.37	.41	.45	.49	.53	.56	.58	.61	.63
.50	.50	.20	.42	.47	.50	.53	.56	.58	.60	.62	.63
	.30	.20	.39	.43	.47	.50	.54	.56	.58	.60	.62
	.10	.20	.36	.41	.45	.47	.51	.54	.56	.59	.60
.30	.50	.20	.41	.45	.49	.51	.54	.56	.57	.59	.60
	.30	.20	.38	.42	.46	.49	.52	.54	.56	.58	.59
	.10	.20	.36	.40	.44	.47	.50	.52	.54	.57	.58
.00	.00	.00	.34	.38	.42	.44	.48	.50	.51	.53	.55

For lamp wattages used multiply above values by the factors given here:	18W	20W	36W	40W	58W	65W	70W	75W
	1.02	1.0	1.02	1.0	–	–	–	–

Mechanical Data

Body
Constructed of mild steel to welded construction. Interior finished "Perma-white" electrostatically applied stoved enamel white. Exterior finished black satin stoved enamel. Internal steel reflectors, finished "Perma-white" as above, cover control gear and increase luminaire light output.

Prismatic Controller
Opal sided prismatic based polystyrene controller, attached to body by metal spring catches to give positive location.

Installation
These luminaires are suitable for direct mounting on non-combustible materials eg. metal, concrete, plaster.

They are not suitable for direct mounting on normally flammable materials eg. timber, chipboard. For such materials ensure a minimum clearance of 10mm between luminaires and mounting surface. Do not mount luminaires on or close to readily flammable materials.

Electrical Data

Lampholders
Bi-Pin, spring loaded.

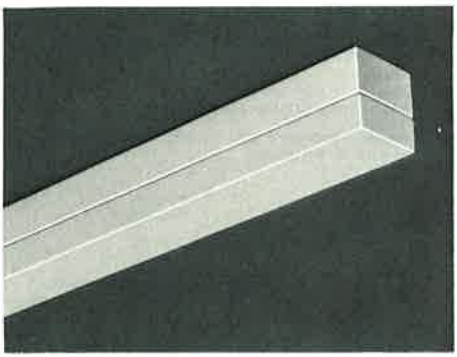
Controller Gear
Complies with BS.2818. Slim section vacuum impregnated. Metallised film power factor correction capacitors Included as standard throughout.

Wiring
Wired to 3 way fused terminal block accepting 2 x 2.5mm² or 1 x 6.0mm² conductors.

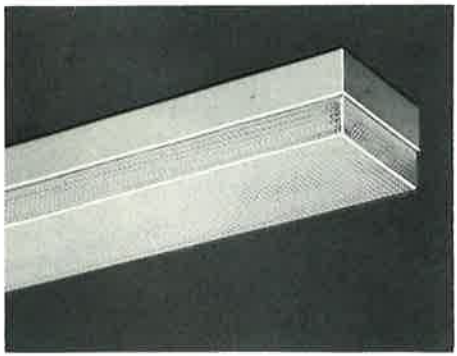
Specially designed cleats hold wires in place and make servicing easier.

Crompton Dulcet

Surface mounted luminaires



Single lamp Opal Diffuser



Twin lamp Prismatic Controller

Description

A range of ceiling mounted luminaires with single piece moulded all-opal or all-prismatic acrylic controllers.

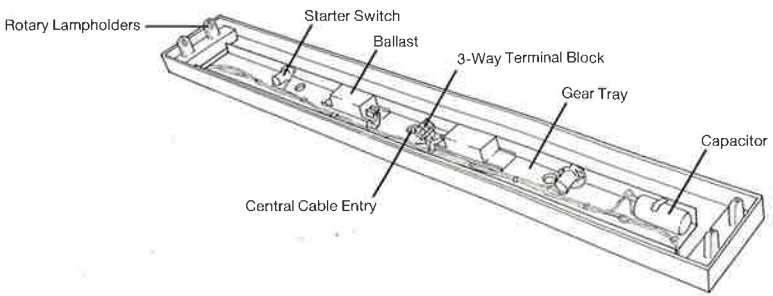
Neat, clean-line design suitable for general office and commercial applications.

Application has been made for BSI 'Safety' and 'F' Mark approval relating to Dulcet luminaires being mounted direct on defined 'Normally Flammable' ceiling surfaces.

Catalogue Numbers

Excluding lamps which should be ordered separately.

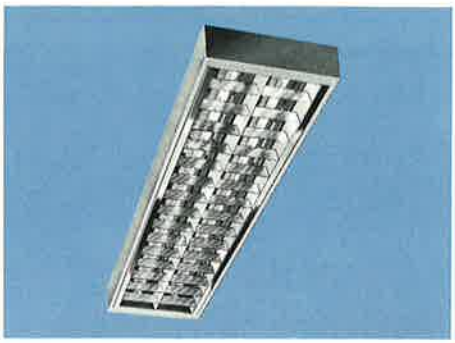
Nominal Length (m)	Lamp Watts	Catalogue Number Switch Start		Catalogue Number Electronic Start		Nominal Width (mm)
		Opal Diffuser	Prismatic	Opal Diffuser	Prismatic	
0.6	4 x 18	DD418S	DP418S	DD418E	DP418E	625
1.2	1 x 36	DD136S	DP136S	DD136E	DP136E	100
	2 x 36	DD236S	DP236S	DD236E	DP236E	165
1.5	1 x 58	DD158S	DP158S	DD158E	DP158E	100
	2 x 58	DD258S	DP258S	DD258E	DP258E	165
1.8	1 x 70	—	DP170S	—	DP170E	100
	2 x 70	—	DP270S	—	DP270E	165
Electronic Ballast – High Frequency Operation						
1.2	2 x 36	DD236Z	DP236Z			100
1.5	2 x 58	DD258Z	DP258Z			165



Crompton Celeste 2

BSI Safety Mark Licence No. 052

Surface mounted luminaires with high efficiency louvres



Applications

The neatness of design and finish of the Celeste 2 range, incorporating the Crompton high efficiency louvre, permits aesthetically pleasing and economic energy saving lighting installations.

Many modern offices contain computer visual display equipment that imposes particular visual demands on the operatives. The Celeste 2 light control system, when combined with other environmental considerations, can make a significant contribution to satisfactory installations.

Celeste 2 luminaires, when used as part of a correctly planned installation, are specifically designed for such applications and because of their 'F' mark classification are suitable for direct mounting on defined "normally flammable" ceiling surfaces.

Description

The range is available in switchstart or electronic start versions in single lamp 180mm wide or twin lamp 300mm wide modules.

The accurate combination of the optical elements, provided by the carefully profiled aluminium specular reflectors and cross louvre baffles, provides an efficient and rigid assembly.

The louvre has a simple but effective mechanical retention system ensuring that the desired positioning of the reflectors, relative to the T8 fluorescent lamps, is maintained at all times even after removal and replacement following normal maintenance or lamp renewal.

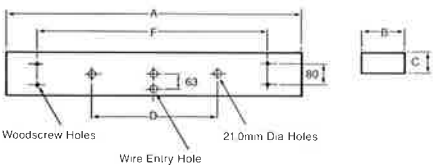
The fluorescent lamps are retained in the correct optical position by means of fixed 'insert - rotate' lamp holders at each end of the housing.

Designed to BS4533 – Section 102.1 1981, **IP20** for use in normal indoor conditions.

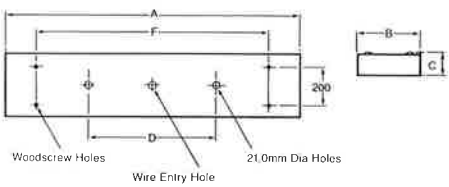
Dimensions

All dimensions in mm.

Housing - One Lamp



Housing - Two Lamp



Catalogue Numbers

Excluding lamps which should be ordered separately.

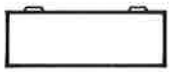
Nominal length (m)	Lamp Watts	Catalogue Number		Weight (kg)	Dimensions mm				Wood Screw Fixing F
		Switch Start	Electronic Start		A	B	C	D	
1.2	1x36	PL136S	PL136E	5.5	1235	180	95	600	900
1.2	2x36	PL236S	PL236E	7.4	1235	300	95	600	900
1.5	1x58	PL158S	PL158E	6.6	1535	180	95	600	1200
1.5	2x58	PL258S	PL258E	9.1	1535	300	95	600	1200
1.8	1x70	PL170S	PL170E	7.8	1835	180	95	600	1500
1.8	2x70	PL270S	PL270E	11.0	1835	300	95	600	1500

BSI Safety Mark – Gives an independent guarantee that luminaires are type tested by the British Standards Institution and comply with BS.4533.

Photometric Data

Type	Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max.)	BZ	FFR	ACG	Luminous Area (cm²)				
									0.6m	1.2m	1.5m	1.8m	2.4m
180mm wide	1 x 36	0.65	0.65	1.5	1.6	1(2)2	0.0	3	—	1400	1750	2100	—
300mm wide	2 x 36	0.65	0.65	1.5	1.6	1(2)2	0.0	3	—	2800	3500	4200	—

Utilisation Factors D1166



One or two lamp
High efficiency louvre

Room Reflectance			Room Index								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	.47	.52	.56	.59	.63	.65	.67	.69	.70
	.30		.43	.48	.53	.56	.60	.62	.64	.67	.68
	.10		.40	.46	.50	.53	.57	.60	.62	.65	.67
.50	.50	.20	.46	.51	.55	.57	.61	.63	.64	.66	.67
	.30		.43	.48	.52	.55	.58	.61	.62	.65	.66
	.10		.40	.45	.49	.52	.56	.59	.61	.63	.65
.30	.50	.20	.45	.50	.53	.56	.59	.61	.62	.64	.65
	.30		.42	.47	.51	.54	.57	.59	.61	.63	.64
	.10		.40	.45	.49	.52	.55	.58	.59	.61	.63
.00	.00	.00	.39	.43	.47	.50	.53	.55	.57	.59	.60

For the lamp wattage used multiply above values by the factors given here	18W	36W	58W	70W
	—	1	1	1

Mechanical Data

Body
Steel housing pierced and formed prior to undergoing the Crompton "Permawhite" anti-rust treatment and white epoxy base powder coated stoved enamel finish.

Louvre
High grade aluminium specular reflectors for transverse light control with longitudinally spaced cross blades, formed into a firm assembly which is retained to the top housing by easy release spring clips. The louvre retaining clips along one side can be released allowing the louvre to hang free during maintenance/relamping.

Installation
Installation instructions are supplied with every luminaire and a copy should be retained by the person responsible for future maintenance.

Electrical Data

Control gear
Ballasts and dry film capacitors are BS Kitemark approved to BS2818 and BS4017 respectively, mounted on a separate gear tray, harness wired to pillar type rotary contact lampholders.

Standard HPF circuits for either switch or electronic start operation.

Luminaire Internal Wiring
Heat resistant PVC insulated single core conductors wired to 3-way terminal block which accepts up to 2×2.5mm² conductors.

Note: Terminal block in twin lamp luminaires is positioned adjacent to central 20mm cable entry hole.

In single lamp luminaires the terminal block is positioned adjacent to the offset cable entry hole. See dimensional diagrams.

Ambient Temperature
Suitable for normal ambient range 5°C to 25°C.

Alternative Ballast Options –
Special Order Enquiry Only
Celeste 2 luminaires can be offered complete with special low loss ballast 50Hz lamp operation or with electronic ballast high frequency lamp operation, at extra cost, for lower energy consumption and reduced electricity costs.

Crompton

Modulay

Recessed Luminaires for Exposed or Concealed Track Ceilings

Application

For Offices, Showrooms, Shops and many other general interiors, where proprietary metric suspended ceilings are to be used, whether in new premises or building renovation projects. The Modulay range has installation facilities for either exposed tee track or concealed track module tile ceilings.

The finished installation provides a modern appearance with neat, clean ceiling lines.

Description

Modulay for Exposed Tee Track Ceilings.

The robust central metal gear channel is supplied with switch start control gear and factory wired harness to fixed rotary action bi-pin lamp-holders for either 26mm or 38mm diameter lamps.

By the simple fixing of four support brackets supplied, the gear channel can be inserted into the ceiling aperture as one assembly. The separate reflector panels then attach to the central channel.

To complete the installation, after the electrical connections have been made and the lamp(s) inserted, the flat polystyrene opal or prismatic panel is positioned within the track aperture, to rest on the 'flats' of the exposed ceiling track.

Against special enquiry, acrylic panels are available, which add to the luminous efficiency and, in addition, have long term resistance to U.V. yellowing of the plastic.

Modulay for Concealed Track Ceilings.

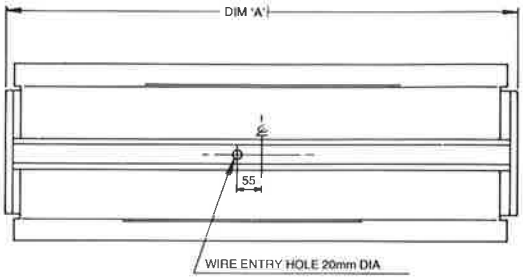
An additional separate aluminium frame assembly is available that can be fixed into position within the concealed track ceiling aperture. The vertical rib of the frame is used to support the Modulay gear channel whilst the frame flanges slightly overlap the adjacent ceiling tiles. Appropriate support bracket positions are provided on the lampholder platforms.

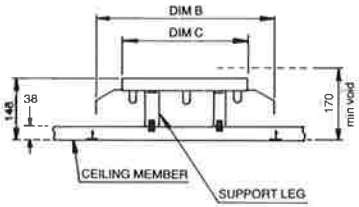
The principle of installation is identical to the procedure previously described, with the choice of either opal or prismatic panels inserted to rest on the aluminium frame section.

All Modulay luminaires comply with BS4533 102.2 Class 1 (IP20) for use in normal interior conditions. Where use in more onerous situations is required, e.g. in part-completed buildings, before drying out is completed, or areas where ambient temperatures are outside the normal temperature range, please contact the nearest Crompton Depot.

Approved normal ambient temperature range: 5°C to 25°C.

Dimensions (mm) All housings require a clear void depth of 170mm





Nominal Size (m)	A (mm)	B (mm)		C (mm)	Maximum Total Weight (kg)
		Exposed Tee	Frame		
1.2 x 0.3 1.8 x 0.3	1233 1833	292 292	250 250	260 260	4.8 7.2
0.6 x 0.6 1.2 x 0.6 1.8 x 0.6	633 1233 1833	592 592 592	550 550 550	450 450 450	4.6 7.7 12.5

Catalogue Numbers (Excluding lamps which should be ordered separately)

Nominal size (m)	Lamps Watts	Housing for exposed or concealed track ceilings	Panel for exposed track ceilings		Frame for concealed track ceilings	Panel for framed concealed track ceilings	
			Opal	Prismatic		Opal	Prismatic
1.2 x 0.3 1.8 x 0.3	2 x 36/40 2 x 70/75	MH412S MH612S	MMD41 MMD61	MMP41 MMP61	MF41 MF61	MFD41 MFD61	MFP41 MFP61
0.6 x 0.6	4 x 18/20	MH24S	MMD22	MMP22	MF22	MFD22	MFP22
1.2 x 0.6 1.2 x 0.6 1.2 x 0.6	2 x 36/40 3 x 36/40 4 x 36/40	MH42S MH43S MH44S	MMD42	MMP42	MF42	MFD42	MFP42
1.8 x 0.6 1.8 x 0.6 1.8 x 0.6	2 x 70/75 3 x 70/75 4 x 70/75	MH62S MH63S MH64S	MMD62	MMP62	MF62	MFD62	MFP62

When ordering, select the housing required and include panel only, or frame and panel appropriate to the type of ceiling to be installed. (See examples below.)

Examples:
MH43S/MMP42 – Housing and prismatic panel for exposed tee track ceilings.
MH43S/MF42/MFP42 – Housing, frame and frame prismatic panel for concealed track ceilings.

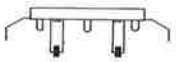
Note: These luminaires are also available with Electronic Start. When ordering, replace the suffix 'S' of the catalogue number with 'E' for electronic start.

Photometric Data

Type	Lamp Watts	TLOR	DLOR	SHR (Nom)	SHR (Max)	BZ	FFR	ACG	Luminous Area (cm²)		
									0.6m	1.2m	1.8m
600mm Opal	3 x 36	0.43	0.43	1.5	1.54	4(1)5	0	Symm	3300	6800	10,200
Prismatic	3 x 36	0.50	0.50	1.5	1.52	2(2)3	0	Symm	3300	6800	10,200
300mm Opal	2 x 36	0.40	0.40	1.5	1.6	4	0	Symm	–	3250	4900
Prismatic	2 x 36	0.45	0.45	1.5	1.5	2	0	Symm	–	3250	4900

Utilisation Factors

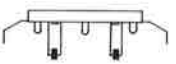
D978

	Room Reflectances			Room Index								
	C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
	.70	.50	.20	.26	.29	.32	.34	.37	.39	.41	.43	.44
		.30		.23	.26	.29	.31	.35	.37	.39	.41	.43
		.10		.20	.23	.26	.29	.32	.35	.37	.39	.41
	.50	.50	.20	.25	.28	.31	.33	.36	.38	.39	.41	.42
		.30		.22	.25	.28	.30	.34	.36	.37	.40	.41
		.10		.20	.23	.26	.28	.32	.34	.36	.38	.40
	.30	.50	.20	.25	.27	.30	.32	.35	.37	.38	.40	.41
		.30		.22	.25	.28	.30	.33	.35	.36	.38	.40
Opal Diffuser 3 x 36W		.10		.20	.23	.26	.28	.31	.33	.35	.37	.39
SHR Nom. = 1.5	.00	.00	.00	.19	.22	.25	.27	.30	.32	.33	.35	.37

For lamp wattages used multiply above values by the factors here:

18w	20w	36w	40w	70w	
1.0	0.97	1.0	0.97	0.98	For 4 Lamp multiply by 1.0 For 2 Lamp multiply by 1.0

D977

	C	W	F	0.75	1.00	.125	1.50	2.00	2.50	3.00	4.00	5.00
	.70	.50	.20	.35	.39	.42	.44	.47	.49	.50	.52	.53
		.30		.32	.36	.39	.41	.44	.47	.48	.50	.52
		.10		.30	.33	.37	.39	.42	.45	.46	.49	.50
	.50	.50	.20	.35	.38	.41	.43	.45	.47	.48	.50	.51
		.30		.32	.35	.38	.40	.43	.45	.47	.48	.50
		.10		.30	.33	.36	.38	.41	.44	.45	.47	.49
	.30	.50	.20	.34	.37	.40	.42	.44	.46	.47	.48	.49
		.30		.31	.35	.38	.40	.42	.44	.45	.47	.48
Prismatic Controller 3 x 36W		.10		.30	.33	.36	.38	.41	.43	.44	.46	.47
SHR Nom. = 1.5	.00	.00	.00	.29	.32	.35	.36	.39	.41	.42	.44	.45

For lamp wattages used multiply above values by the factors here:

18w	20w	36w	40w	70w	
1.0	0.97	1.0	0.97	0.98	For 4 Lamp multiply by 1.0 For 2 Lamp multiply by 1.0

Mechanical Data

Finish: All metalwork is formed and holes punched prior to receiving the Crompton anti-rust treatment and epoxy resin powder coat stoved enamel 'Permawhite' finish.

The support brackets must rest firmly on 38mm high ceiling track or frame members, having ensured that the ceiling support system is adequate to take the weight of the luminaires.

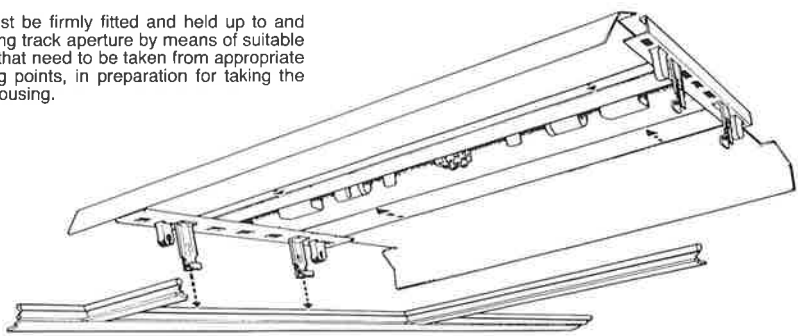
Aluminium Frame Assembly – for use with concealed track ceilings.
The aluminium frame sections are supplied for simple assembly on site.

If the frame is to be used in a 'spring tee' ceiling track system, the aperture may require special preparation to ensure adequate clearance for satisfactory insertion of the frame.

The frame must be firmly fitted and held up to and within the ceiling track aperture by means of suitable support wires that need to be taken from appropriate structural fixing points, in preparation for taking the weight of the housing.

Installation Notes
Installation guidance notes are supplied with each luminaire. It is recommended that a copy of the notes be retained by the authority responsible for maintenance of the luminaires.

These luminaires are for use in proprietary suspended ceilings. They can be installed in direct contact with non-combustible materials, e.g. metal, concrete, plaster. They are also suitable for mounting adjacent to normally flammable materials, e.g. timber, chipboard, providing the top surface is spaced not less than 25mm from such materials. Do not mount luminaires on or close to readily flammable materials.



Electrical Data

Control Gear
Complies with BS2818 for 240V 50Hz supply.

Factory fitted in housing and wired in heat resistant PVC insulated conductors terminating at a fixed 4-way terminal block that accepts up to 2 x 2.5mm^2 or 1 x 4mm^2 conductors.

Three and four lamp luminaires incorporate a link wire which can easily be removed if selective lamp switching is required.

Starter switches are readily accessible without removing the lamps.

Lamp Watts	Total Input Watts	Power Factor	Line Current (Amps)	Circuit Loss Watts	Third Harmonic Per Phase %
4x18	100	0.91	0.43	24	15
2x36	98	0.93	0.43	24	17
3x36	147	0.93	0.65	36	17
4x36	196	0.93	0.86	48	17
2x58	140	0.89	0.66	28	17
2x70	156	0.90	0.72	36	18
3x70	234	0.90	1.08	39	18
4x70	312	0.90	1.44	72	18

Options available against specific enquiry (made to order)

1 1.5m Length Luminaires
Catalogue Numbers (excluding lamps which should be ordered separately)

Nominal size (m)	Lamp Watts	Housing for exposed or concealed track ceilings	Panel for exposed track ceilings		Frame for concealed track ceilings	Panel for framed concealed track ceilings	
			Opal	Prismatic		Opal	Prismatic
1.5x0.3	2x58/65	MH512S	MMD51	MMP51	MF51	MFD51	MFP51

2 Acrylic Prismatic Panels:
These are available with all Modulay Luminaires. Although more expensive, acrylic plastic offers greater resistance to ultra-violet yellowing than polystyrene and also improves the luminous efficiency of the luminaire.

Nominal size (m)	Panel for exposed track ceilings	Panel for framed concealed track ceilings
1.2x0.3 1.5x0.3	MMA41 MMA51	MFA41 MFA51
1.8x0.3	MMA61	MFA61
0.6x0.6 1.2x0.6 1.8x0.6	MMA22 MMA42 MMA62	MFA22 MFA42 MFA62

3 High Efficiency Aluminium Reflector/Louvre Light Control (For concealed track ceilings only)
To achieve more economical use of energy for reduced annual operational costs, the combination of 26mm Krypton filled 'Wattsaver' lamps and high efficiency reflector/louvre systems has become a favoured approach for the lighting of many interiors. Competitively priced Modulay luminaires can now be supplied with these features as indicated in the table below.

Catalogue Numbers (excluding lamps which should be ordered separately)

Nominal size (m)	Lamp Watts	Housing only for concealed track ceilings	Frame for concealed track ceilings	Louvre for concealed track ceilings
1.2x0.3	2x36	MEH412S	MLF41	ML41
1.5x0.3	2x58	MEH512S	MLF51	ML51
1.8x0.3	2x70	MEH612S	MLF61	ML61

Note:
Luminaires and H.E. louvres for exposed track ceilings are available as described, p.64.

4 Electronic Start Circuits:
Electronic start circuits are available for all luminaires.

Crompton Modulux 600mm Wide

BSI Safety Mark Licence No. 052

Recessed Luminaires

Applications

The Crompton Modulux 600mm module width luminaires form the basis of a highly versatile recessable lighting system that is suitable for a wide range of commercial installations where proprietary module suspended ceilings are to be used.

The aesthetic design features incorporate excellent photometric performance for efficient use of the electrical energy.

Information on 300mm wide module luminaires is provided on pages 61-66.

Description

The all metal single piece housing gives strength and durability to the overall luminaire, allowing its fixing to be either from conduit/downrods from the main structural ceiling or side bearer arms that support the luminaire from either the sides or the ends of the suspended ceiling track system.

The housing and trim frames are finished in high quality Crompton 'Permawhite' epoxy base powder coat stoved enamel white paint.

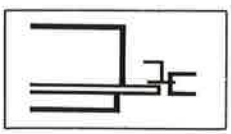
A lamp end box (LEB2) is available as an optional extra where required.

Closures:
All closures are easily detached and removed for normal cleaning and general maintenance.

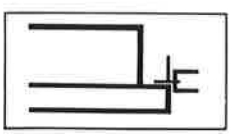
Alternative Trim Frames

These are available as follows:-

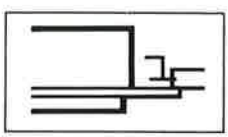
Draw up – Suitable for use with concealed grid ceiling systems.
Draw up trim luminaires occupy the complete module ceiling aperture thereby matching the line of the adjacent tiles.



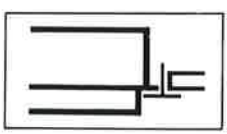
Concealed trim luminaires have the prismatic closure completely occupying the module ceiling aperture with no metalwork visible between the closure and adjacent tiles.



Overlap trim luminaires cover the edges of formed or tile apertures.



Lay-in trim luminaires are suitable for exposed grid ceiling systems where the trim rests on lower flange of the ceiling track.



BSI Safety Mark – Gives an independent guarantee that luminaires are type tested by the British Standards Institution and comply with BS.4533.

Mechanical Data

Body
Manufactured from mild steel. Finished in Crompton "Permawhite" electrostatically applied stove enamel white.

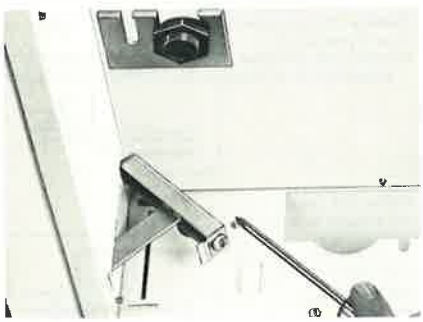
Diffusers
Opal sided prismatic based controller or all opal diffusers both made of polystyrene. Attached to the body by 4 side clips which prevent upward movement and enable the diffuser to be suspended from one side of the housing to facilitate lamp replacement. In the "concealed trim type" the 40mm deep prismatic based controller is attached to the body by 4 concealed steel springs.

Installation
These luminaires are for use in proprietary suspended ceilings. They can be installed in direct contact with materials which have an ignition temperature higher than 200°C. Where materials having an ignition temperature of 200°C or less are used e.g. timber, plastics etc, a minimum spacing of 25mm from the luminaire housing should be ensured.
There are two optional methods of supporting the luminaires, using the extra catalogue items described below.

Suspension side brackets
Supplied in sets of 4 (catalogue No. SSB4) and designed to support the luminaires on the track members of the ceiling system. Adjustment of trim height is achieved by turning a cruciform headed screw from the underside of the housing. When this system is to be used it is necessary to confirm that the ceiling system will accept the additional weight of luminaires.

Outside view of Modulux Luminaire showing track bearer suspension bracket (SSB4).

Suspensions top plates
Also supplied in sets of 4 (Catalogue No. STP4) these plates are for use with 20mm conduit or down rod suspension of the housing from a structural ceiling.



Inside view of Modulux Luminaire showing suspension top plate and side bracket (STP4 and SSB4).

Electrical Data

Control Data
HPF switchstart or electronic start are available as indicated in the following pages. Gear complies with BS 2818 and is mounted on hinged removable gear trays made of mild steel, finished white stove enamel.
Switchstart and Electronic start circuits operate 26mm 'Krypton' filled "Wattsaver" or Argon filled 38mm diameter lamps.

Luminaire Internal Wiring
All gear trays are factory wired to components and lamp holders, terminating at a fused 3-way terminal block accepting 2 x 2.5mm^2 or 1 x 6.0mm^2 conductors.

In 3 and 4-way lamp luminaires one gear tray has additional internal linking wires. These can be omitted, during installation, if separate paired lamp switching is required.

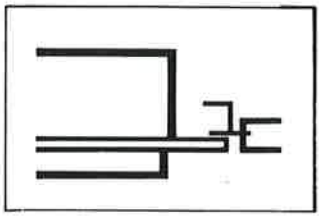
Cable entry
Via mounting holes or 20mm conduit entries.

Installation and Maintenance
Installation and maintenance guidance notes are included with each luminaire. At the commissioning of the installation ensure that the installing electrical contractor provides a copy of the notes to the authority responsible for the subsequent operation and maintenance of the luminaires. These luminaires comply with BS 4533 (IP20) and are suitable for use in normal indoor conditions. Where use in more onerous situations is anticipated e.g. in part-completed buildings before "drying out" is complete or areas where ambient temperatures exist outside the normal temperature range, then consult your nearest Crompton Depot.
The approved normal ambient temperature range is from 5°C to 25°C.

Crompton Modulux

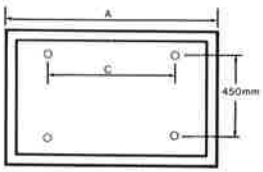
BSI Safety Mark Licence No. 052

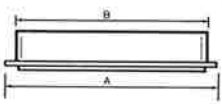
Draw Up – 600mm Wide Module

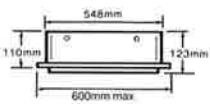


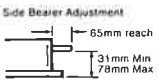
Dimensions

All dimensions in mm









Catalogue Numbers

Excluding lamps, which should be ordered separately

Nominal Size (m)	Lamp Watts	Catalogue Number Complete Luminaire		Catalogue Numbers of Main Components as supplied				Total Lum'aire Weight (kg) (inc. Lamps)	Dimensions (mm)		
		Opal	Prismatic	Housing	Opal Diffuser	Prismatic Controller	Gear Tray		Max. A	B	C
0.6 x 0.6	2 x 18/20 4 x 18/20	MDD222S MDD224S	MDP222S MDP224S	MDH22	MDC22	MPC22	GTM20S GTS20S/GTM20S	7.9 9.7	600	546	450
1.2 x 0.6	2 x 36/40 3 x 36/40 4 x 36/40	MDD422S MDD423S MDD424S	MDP422S MDP423S MDP424S	MDH42	MDC42	MPC42	GTM40S GTS40S/GTC40S GTS40S/GTM40S	13.9 16.0 17.0	1200	1146	900
1.8 x 0.6	2 x 58/65 3 x 58/65 4 x 58/65	MDD522S MDD523S MDD524S	MDP522S MDP523S MDP524S	MDH62	MDC62	MPC62	GTM65S GTS65S/GTC65S GTS65S/GTM65S	20.8 23.9 26.4	1800	1746	1350
1.8 x 0.6	2 x 70/75 3 x 70/75 4 x 70/75	MDD622S MDD623S MDD624S	MDP622S MDP623S MDP624S	MDH62	MDC62	MPC62	GTM75S GTS75S/GTC75S GTS75S/GTM75S	20.8 23.9 26.4	1800	1746	1350

NOTE: These luminaires are also available with Electronic Start circuits.
When ordering please replace the suffix 'S' of the catalogue number with the appropriate suffix for the circuit required.

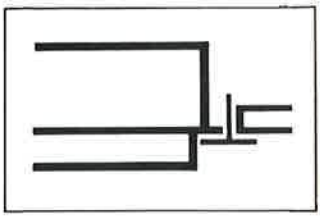
Circuit Suffix:- E for electronic start.

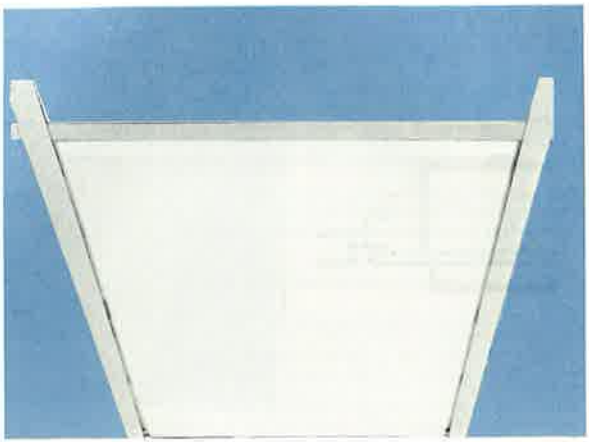
Switchstart and electronic start circuits are suitable for operating both 26mm and 38mm dia. lamps.

Crompton Modulux

BSI Safety Mark Licence No. 052

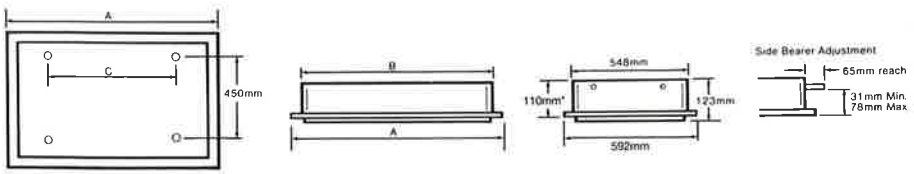
Lay In – 600mm Wide Module





Dimensions

All dimensions in mm



* 125mm clear plenum depth required for insertion of housing.

Catalogue Numbers

Excluding lamps, which should be ordered separately

Nominal Size (m)	Lamp Watts	Catalogue Number Complete Luminaire		Catalogue Numbers of Main Components as supplied				Total Lum'aire Weight (kg) (inc. Lamps)	Dimensions (mm)		
		Opal	Prismatic	Housing	Opal Diffuser	Prismatic Controller	Gear Tray		A	B	C
0.6 x 0.6	2 x 18/20 4 x 18/20	MLD222S MLD224S	MLP222S MLP224S	MLH22	MDC22	MPC22	GTM 20S GTS20S/GTM20S	7.9 9.6	592	546	450
1.2 x 0.6	2 x 36/40 3 x 36/40 4 x 36/40	MLD422S MLD423S MLD424S	MLP422S MLP423S MLP424S	MLH42	MDC42	MPC42	GTM40S GTS40S/GTC40S GTS40S/GTM40S	13.8 15.9 16.9	1192	1146	900
1.8 x 0.6	2 x 58/65 3 x 58/65 4 x 58/65	MLD522S MLD523S MLD524S	MLP522S MLP523S MLP524S	MLH62	MDC62	MPC62	GTM65S GTS65S/GTC65S GTS65S/GTM65S	20.6 23.7 26.2	1792	1746	1350
1.8 x 0.6	2 x 70/75 3 x 70/75 4 x 70/75	MLD622S MLD623S MLD624S	MLP622S MLP623S MLP624S	MLH62	MDC62	MPC62	GTM75S GTS75S/GTC75S GTS75S/GTM75S	20.6 23.7 26.2	1792	1746	1350

NOTE: These luminaires are also available with Electronic Start circuits.
When ordering please replace the suffix 'S' of the catalogue number with the appropriate suffix for the circuit required.

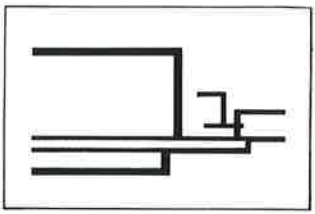
Circuit Suffix:- E for electronic start.

Switchstart and electronic start circuits are suitable for operating both 26mm and 38mm dia. lamps.

Crompton Modulux

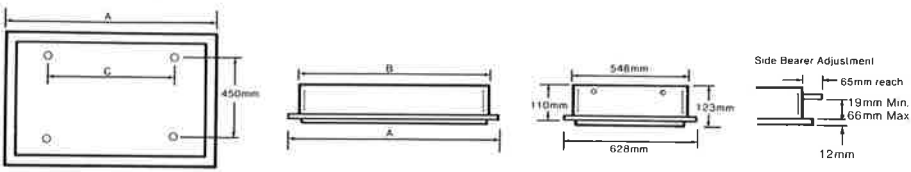
BSI Safety Mark Licence No. 052

Overlap – 600mm Wide Module



Dimensions

All dimensions in mm



Catalogue Numbers

Excluding lamps, which should be ordered separately

Nominal Size (m)	Lamp Watts	Catalogue Number Complete Luminaire		Catalogue Numbers of Main Components as supplied				Total Lum'aire Weight (kg) (inc. Lamps)	Dimensions (mm)		
		Opal	Prismatic	Housing	Opal Diffuser	Prismatic Controller	Gear Tray		A	B	C
0.6 x 0.6	2 x 18/20 4 x 18/20	MOD222S MOD224S	MOP222S MOP224S	MOH22	MDC22	MPC22	GTM 20S GTS20S/GTM20S	8.4 10.2	628	546	450
1.2 x 0.6	2 x 36/40 3 x 36/40 4 x 36/40	MOD422S MOD423S MOD424S	MOP422S MOP423S MOP424S	MOH42	MDC42	MPC42	GTM40S GTS40S/GTC40S GTS40S/GTM40S	14.6 16.7 17.7	1228	1146	900
1.8 x 0.6	2 x 58/65 3 x 58/65 4 x 58/65	MOD522S MOD523S MOD524S	MOP522S MOP523S MOP524S	MOH62	MDC62	MPC62	GTM65S GTS65S/GTC65S GTS65S/GTM65S	21.7 22.8 25.3	1828	1746	1350
1.8 x 0.6	2 x 70/75 3 x 70/75 4 x 70/75	MOD622S MOD623S MOD624S	MOP622S MOP623S MOP624S	MOH62	MDC62	MPC62	GTM75S GTS75S/GTC75S GTS75S/GTM75S	20.6 23.7 26.2	1828	1746	1350

NOTE: These luminaires are also available with Electronic Start circuits.
When ordering please replace the suffix 'S' of the catalogue number with the appropriate suffix for the circuit required.

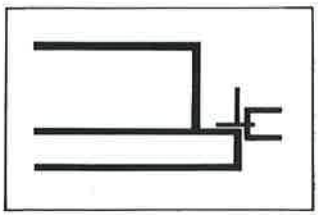
Circuit suffix:- E for electronic start.

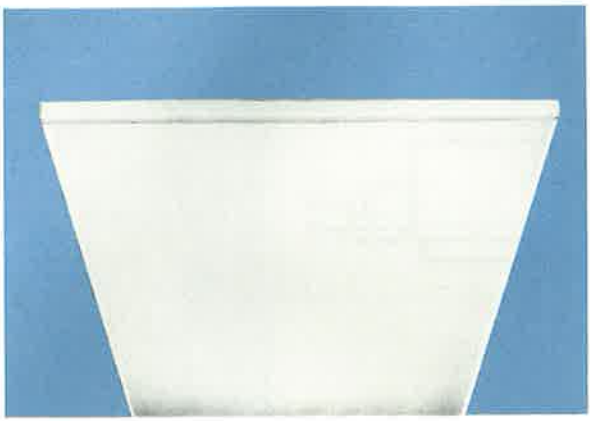
Switchstart and electronic start circuits are suitable for operating both 26mm and 38mm dia. lamps.

Crompton Modulux

BSI Safety Mark Licence No. 052

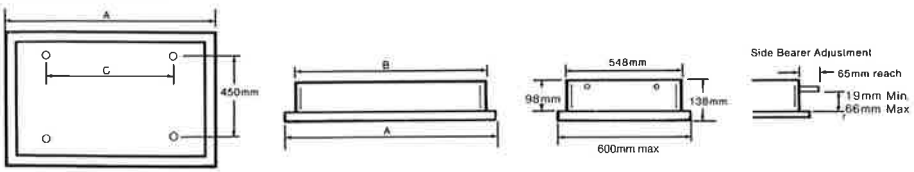
Concealed Trim – 600mm Wide Module





Dimensions

All dimensions in mm



Catalogue Numbers

Excluding lamps, which should be ordered separately

Nominal Size (m)	Lamp Watts	Catalogue Number Complete Luminaire	Catalogue Number of Main Components as supplied			Total Luminaire Weight (Kg) (including Lamps)	Dimension (mm)		
			Housing	Prismatic Controller	Gear Tray		Max. A	B	C
0.6 x 0.6	2 x 18/20 4 x 18/20	MTT222S MTT224S	MTH22	MTC22	GTM20S GTS20S/GTM20S	7.8 9.6	600	546	450
1.2 x 0.6	2 x 36/40 3 x 36/40 4 x 36/40	MTT422S MTT423S MTT424S	MTH42	MTC42	GTM40S GTS40S/GTC40S GTS40S/GTM40S	13.4 15.5 16.5	1200	1146	900
1.8 x 0.6	2 x 58/65 3 x 58/65 4 x 58/65	MTT522S MTT523S MTT524S	MTH62	MTC62	GTM65S GTS65S/GTC65S GTS65S/GTM65S	20.8 23.9 26.4	1800	1746	1350
1.8 x 0.6	2 x 70/75 3 x 70/75 4 x 70/75	MTT622S MTT623S MTT624S	MTH62	MTC62	GTM75S GTS75S/GTC75S GTS75S/GTM75S	20.8 23.9 26.4	1800	1746	1350

NOTE: These luminaires are also available with Electronic Start circuits.
When ordering please replace the suffix 'S' of the catalogue number with the appropriate suffix for the circuit required.

Circuit suffix:- E for electronic start.

Switchstart and electronic start circuits are suitable for operating both 26mm and 38mm dia. lamps.

Photometric Data

Type	Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max)	BZ	FFR	ACG	Luminous Area (cm^2) 0.6m	1.2m	1.8m
Opal diffuser	3 x 40	0.58	0.58	1.5	1.58	4	0	SYMM	3000	6300	9600
Prismatic controller	3 x 40	0.59	0.59	1.5	1.61	2(4)3	0	SYMM	3000	6300	9600

Utilisation Factors

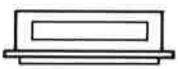
D874

Opal Diffuser
3 x 40W
SHR Nom. = 1.5

Room Reflectance C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	.35	.40	.44	.47	.51	.54	.56	.58	.60
	.30		.31	.36	.40	.43	.48	.51	.53	.56	.58
	.10		.28	.32	.37	.40	.45	.48	.50	.54	.56
.50	.50	.20	.34	.39	.43	.46	.49	.52	.54	.56	.57
	.30		.30	.35	.39	.42	.46	.49	.51	.54	.56
	.10		.28	.32	.36	.39	.44	.47	.49	.52	.54
.30	.50	.20	.33	.38	.41	.44	.48	.50	.52	.54	.55
	.30		.30	.34	.38	.41	.45	.48	.50	.52	.54
	.10		.27	.32	.36	.39	.43	.46	.48	.51	.52
.00	.00	.00	.26	.30	.34	.37	.41	.44	.46	.48	.50

For the lamp wattage used multiply above values by the factors given here:	2 lamp	4 lamp	18W	20W	36W	40W	58W	65W	70W	75W
	1.09	0.97	1.02	1.0	1.02	1.0	0.99	0.96	0.99	0.96

D875



Prismatic Controller
3 x 40W
SHR Nom. = 1.5

Room Reflectance C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	.41	.46	.49	.52	.55	.57	.59	.61	.62
	.30		.37	.42	.46	.48	.52	.55	.57	.59	.61
	.10		.35	.39	.43	.46	.50	.53	.55	.57	.59
.50	.50	.20	.40	.44	.48	.50	.53	.55	.57	.59	.60
	.30		.37	.41	.45	.47	.51	.53	.55	.57	.59
	.10		.34	.39	.43	.45	.49	.51	.53	.56	.57
.30	.50	.20	.39	.43	.47	.49	.52	.54	.55	.57	.58
	.30		.36	.41	.44	.47	.50	.52	.53	.55	.57
	.10		.34	.38	.42	.45	.48	.50	.52	.54	.56
.00	.00	.00	.33	.37	.41	.43	.46	.48	.50	.52	.53

For the lamp wattage used multiply above values by the factors given here:	2 lamp	4 lamp	18W	20W	36W	40W	58W	65W	70W	75W
	1.09	0.97	1.02	1.0	1.02	1.0	0.99	0.96	0.99	0.96

Photometric data derived from tests carried out by the Crompton Parkinson Ltd., B.S.I. approved photometric laboratory.

Crompton Modulux 600mm Wide

BSI Safety Mark Licence No. 052

Recessed Luminaires with Draw-up Trim or Lay-in Trim and High Efficiency Louvres

Applications

The Crompton Modulux 600mm module width luminaires complete with high efficiency, low brightness broad light distribution louvres, provide an opportunity to achieve interior lighting by one of the most attractive and efficient lighting concepts currently available.

These luminaires can be used in most commercial enterprises where a modular suspended ceiling system is to be installed.

Within office areas a significant reduction in installed luminaire quantities is possible particularly if the office working positions and activities are known and established. When used in department stores and shops the potential transverse spacings between rows of luminaires encourages savings in installation costs and total electrical load charges.

Optional Application Features
These luminaires are suitable for modification to provide air extract facilities, against special enquiries.

Self-contained emergency lighting conversion modules also available to operate one of the mains lamps in the event of mains failure.

Luminaires incorporating electronic start control circuitry are available as a standard alternative.

Description

Housing
The all-metal single piece housing gives strength and durability to the overall luminaire, allowing fixing to be from conduit/down rods from the main structural ceiling or side bearer arms on to the suspended ceiling track system or, with lay-in trim to rest on the track flange of 25mm wide exposed tee grid ceilings. The housing, trim frame and lampholder end box are finished in high quality Crompton 'Permawhite' epoxy base powder coat stoved enamel white paint.

Louvre
By accurate combination of the optical elements provided by the carefully profiled aluminium specular reflectors and cross louvre baffles, an efficient and rigid assembly has been achieved. The louvre has a simple but effective mechanical retention system ensuring that the desired positioning of the reflectors, relative to the tubular light source, is maintained at all times even after removal and replacement following normal maintenance or lamp renewal.

Within the housing the appropriate efficient switchstart control gear is factory fitted to the housing back plate.

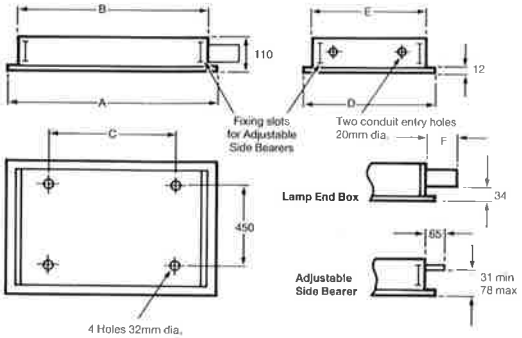
The fluorescent lamps are retained in the correct optical position by means of fixed 'insert-rotate' lamp-holders at each end of the housing.

Designed to BS4533 – Section 102.2:1981 **IP20** for use in normal indoor conditions.

BSI Safety Mark – Gives an independent guarantee that luminaires are type tested by the British Standards Institution and comply with BS.4533.

Dimensions

All dimensions shown in mm



Nominal Size (m)	Draw-up Trim							Lay-in Trim						
	Max A	B	C	Max D	E	F	Maximum Weight (kg)	A	B	C	D	E	F	Maximum Weight (kg)
0.6 x 0.6	600	546	450	600	548	74	8,8	592	546	450	592	548	74	8,7
1.2 x 0.6	1200	1146	900	600	548	86	15,6	1192	1146	900	592	548	86	15,4

Catalogue Numbers

Excluding lamps which should be ordered separately

Nominal Module Size (m)	Number and Wattage of lamps	Catalogue Number Switch Start	Catalogue Number of Main Components Housing	Louvre
Draw-up Trim				
0.6 x 0.6	4 x 18	MDEL 224S	MDEH 224S	MEL 22
1.2 x 0.6	4 x 36	MDEL 424S	MDEH 424S	MEL 42
Lay-in Trim				
0.6 x 0.6	4 x 18	MLEL 224S	MLEH 224S	MLL 22
1.2 x 0.6	4 x 36	MLEL 424S	MLEH 424S	MLL 42

NOTE: These luminaires are also available with Electronic Start.
When ordering, replace the suffix 'S' of the catalogue number with 'E' for electronic start.

Photometric Data

Type	Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max)	BZ	FFR	ACG	Luminous Area (cm^2) 0.6m	1.2m	1.5m	1.8m	2.4m
0.6m x 0.6m	4 x 18	.63	.63	1.5	1.61	1	.00	3	2700	—	—	—	—
1.2m x 0.6m	4 x 36	.63	.63	1.5	1.61	1	.00	3	—	5400	—	—	—

Utilisation Factors

D1104

Four Lamp
High Efficiency Louvre
SHR (Nom.) = 1.5

Room Reflectance C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	.47	.52	.56	.58	.62	.64	.65	.67	.69
	.30		.43	.48	.52	.55	.59	.61	.63	.65	.67
	.10		.41	.46	.50	.53	.57	.59	.61	.64	.66
.50	.50	.20	.46	.51	.54	.57	.60	.62	.63	.65	.66
	.30		.43	.48	.51	.54	.58	.60	.61	.63	.65
	.10		.40	.45	.49	.52	.56	.58	.60	.62	.64
.30	.50	.20	.45	.50	.53	.55	.58	.60	.61	.63	.64
	.30		.42	.47	.51	.53	.56	.58	.60	.61	.63
	.10		.40	.45	.49	.51	.55	.57	.58	.60	.62
.00	.00	.00	.39	.43	.47	.49	.53	.55	.56	.58	.59

For the lamp wattage used multiply above values by the factors given here:	18W	36W
	1	1

Mechanical Data

Draw-up Trim Luminaires
There are two optional methods of supporting the luminaires as illustrated usng the extra catalogue items listed below:-

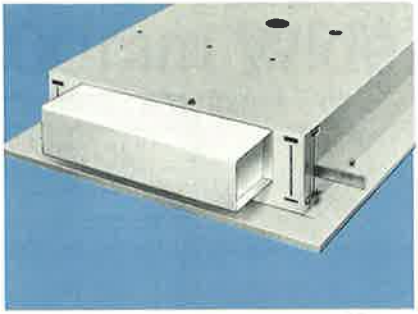
Suspension Side Brackets Cat. No. SSB4.
Supplied in sets of 4 and designed to support the luminaire on the track "tee" members of the ceiling system. Simple insertion into the luminaire housing with height adjustment achieved by turning the cruciform headed screw from the underside of the housing.

Suspension Top Plates Cat. No. STP4.
Supplied in sets of 4, these plates are suitable for use with 6mm dia. down rod, for suspension of the housing from the structural ceiling.

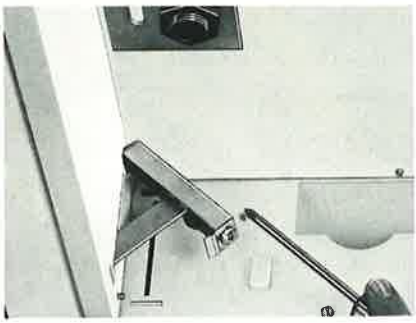
Lay-in Trim Luminaires
The housings rest on the 25mm wide flanges of the exposed tee grid ceilings and supplementary support can be provided by using either SSB4 or STP4.

The fluorescent lamps are retained in their correct position by means of fixed insert-rotate lampholders. Easy removal of the lamps is by simple twist action.

Ambient conditions
These luminaires are approved for use in normal conditions of ambient temperature range between 5°C and 25°C. Where more onerous conditions exist e.g. in part completed buildings before 'drying out' is completed or ambient temperatures outside the approved temperature range, please consult your nearest Crompton Depot.



Outside view of Luminaire showing track bearer suspension bracket SSB4.



Inside view of Luminaire showing method of inserting and adjustment of side suspension bracket.

Electrical Data

Luminaire wiring
A neat wiring harness of single core high temperature PVC insulated cable, electrically connects the control gear components and lampholders. The wiring terminates in a fused terminal block positioned close to the 20mm mains cable entry holes at one end of the housing.

B.S.I. Kite Mark approved ballasts for 240V 50Hz supply comply with BS2818, and the fused terminal block accepts up to 2 x 2.5mm^2 or 1 x 6mm^2 conductors.

Electrical loadings

Lamp Watts	Total Input Watts	Power Factor	Line Current (Amps)	Circuit Loss Watts	Third Harmonic per phase %
4 x 18	100	0.91	0.43	24	15
4 x 36	192	0.93	0.86	48	17

Crompton Modulux 300mm Wide

Recessed Luminaires with Draw-up Trim and Concealed Trim

Applications

The Crompton Modulux 300mm module width luminaires form the basis of a highly versatile recessable lighting system that is suitable for a wide range of commercial installations where proprietary module suspended ceilings are to be used.

The aesthetic design features incorporate excellent photometric performance for efficient use of the electrical energy.

Alternative Trim Frames
These are available as follows:-

1) A neat corner mitre metal trim that draws up into the ceiling aperture, thereby matching the line of the adjacent tiles.

2) A concealed trim version where the prismatic closure matches the ceiling aperture with no visible metalwork between the plastic closures and adjacent tiles.

Description

The all metal single piece housing gives strength and durability to the overall luminaire, allowing its fixing to be either from conduit/down rods from the main structural ceiling or side bearer arms that support the luminaire from either the sides or the ends of the suspended ceiling track system.

The housing, trim frame and lamp-holder end box are finished in high quality Crompton 'Permawhite' epoxy base powder coat stoved enamel white paint.

All closures are easily attached and removed for normal cleaning and general maintenance and can hinge down from one side, thereby allowing free hands for carrying out the servicing.

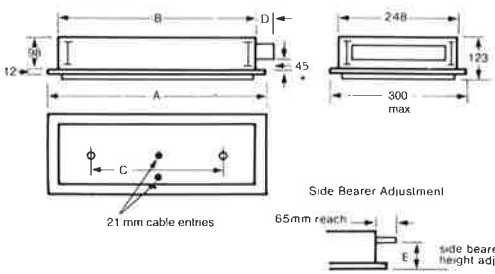
Control Gear: Within each housing the appropriate efficient switchstart control gear is factory fitted to the back of the housing and to the fixed insert-rotate lampholders.

Designed to BS4533: Section 102.2. **IP20** for use in normal indoor conditions.

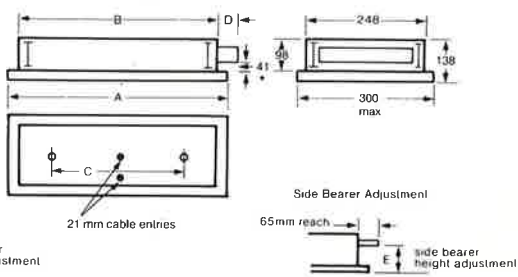
Dimensions

All dimensions in mm

Draw-up Trim Details



Concealed Trim Details



* Clearance required for lamp end box (not applicable to 58/65W luminaires).

Lamp Watts	Nominal Size (m)	A	B	C	Draw up D	Draw up E	Concealed Trim A Max	Concealed Trim D	Concealed Trim E	Maximum Weight (kg)
36/40	1.2 x 0.3	1198	1146	900	87	31 to 78	1200	87	19 to 66	10.7
58/65	1.8 x 0.3	1798	1746	1350	–		1800	–		13.5
70/75	1.8 x 0.3	1798	1746	1350	52		1800	52		13.8

Catalogue Numbers

Excluding lamps which should be ordered separately

Nominal Module Size (m)	Number and Wattage of lamps	Catalogue Number Luminaire with opal diffuser	Catalogue Number Luminaire with prismatic controller	Catalogue Numbers of Main Components		
				Housing	Opal Diffuser	Prismatic Controller
Draw up Trim						
1.2 x 0.3	2 x 36/40	MDDR 412S	MDPR412S	MDHR412S	MDC41	MPC41
1.8 x 0.3	1 x 58/65	MDDR 511S	MDPR511S	MDHR511S		
	2 x 58/65	MDDR 512S	MDPR512S	MDHR512S	MDC61	MPC61
	1 x 70/75	MDDR 611S	MDPR611S	MDHR611S		
	2 x 70/75	MDDR 612S	MDPR612S	MDHR612S		
Concealed Trim						
1.2 x 0.3	2 x 36/40	—	MTTR412S	MTHR412S	—	MTC41
1.8 x 0.3	1 x 58/65	—	MTTR511S	MTHR511S	—	
	2 x 58/65	—	MTTR512S	MTHR512S	—	MTC61
	1 x 70/75	—	MTTR611S	MTHR611S	—	
	2 x 70/75	—	MTTR612S	MTHR612S	—	

Note: These luminaires are also available with Electronic Start. When ordering, replace the suffix 'S' of the catalogue number with 'E' for electronic start.

Photometric Data

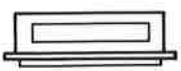
Type	TLOR	ULOR	DLOR	SHR (Nom.)	SHR (Max)	BZ	ACG	FFR	Luminous Area (cm^2) 1.2m	1.8m
Draw-Up Opal Diffuser	0.48	0.0	0.48	1.5	1.6	4	SYMM	0	3000	4500
Draw-Up & Concealed Prismatic Controller Trim	0.50	0.0	0.50	1.5	1.5	2	SYMM	0	3000	4500

Utilisation Factors

Draw up opal
2 x 40W
SHR Nom = 1.5

Room Reflectances C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	.29	.32	.35	.38	.42	.44	.45	.48	.49
	.30		.24	.28	.32	.34	.38	.42	.43	.45	.48
	.10		.22	.25	.30	.32	.36	.40	.41	.44	.46
.50	.50	.20	.28	.31	.34	.36	.40	.43	.44	.46	.47
	.30		.24	.27	.32	.34	.37	.40	.41	.44	.46
	.10		.22	.25	.28	.32	.35	.38	.40	.42	.45
.30	.50	.20	.26	.30	.34	.36	.39	.41	.42	.44	.45
	.30		.24	.27	.30	.33	.37	.39	.41	.43	.44
	.10		.21	.24	.28	.30	.34	.38	.39	.42	.43
.00	.00	.00	.20	.23	.27	.29	.33	.36	.37	.40	.41

For lamp wattage used multiply above values by the factors given here	36W	40W	58W	65W	70W	75W
	1.03	1.0	1.01	1.05	1.07	1.05



Draw up and
concealed trim
prismatic
2 x 40W
SHR Nom = 1.5

Room Reflectances C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	.34	.37	.41	.43	.46	.49	.50	.51	.52
	.30		.31	.34	.37	.39	.44	.46	.47	.50	.51
	.10		.28	.31	.35	.37	.41	.44	.46	.48	.50
.50	.50	.20	.33	.36	.39	.41	.45	.47	.48	.49	.50
	.30		.29	.33	.37	.39	.42	.44	.46	.48	.49
	.10		.27	.30	.35	.37	.40	.43	.44	.47	.48
.30	.50	.20	.33	.35	.38	.40	.43	.45	.46	.47	.48
	.30		.29	.32	.36	.38	.41	.43	.44	.46	.47
	.10		.27	.30	.34	.36	.40	.42	.43	.45	.47
.00	.00	.00	.26	.29	.33	.35	.38	.40	.41	.43	.45

For lamp wattage used multiply above values by the factors given here	36W	40W	58W	65W	70W	75W
	1.03	1.0	1.01	1.05	1.07	1.05

Photometric data derived from tests carried out by the Crompton Parkinson Ltd. B.S.I. approved photometric laboratory.

Mechanical Data

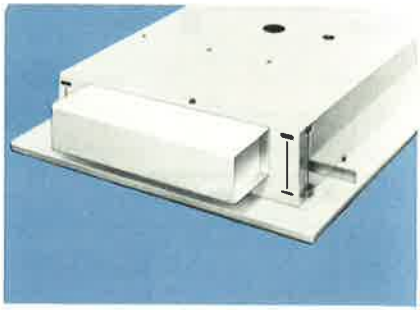
Installation
There are two optional methods of supporting the luminaires as illustrated using the extra catalogue items listed below:-

Suspension Side Brackets Cat. No. SSB4.
Supplied in sets of 4 and designed to support the luminaire on the track "tee" members of the ceiling system. Simple insertion into the luminaire housing with height adjustment achieved by turning the cruciform headed screw from the underside of the housing.

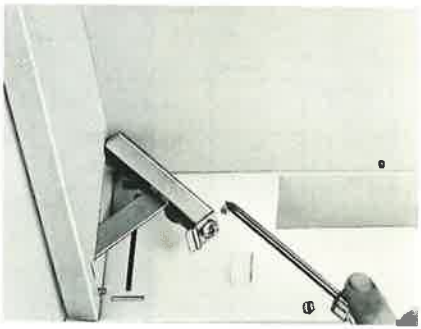
Suspension Top Plates Cat. No. STP4.
Supplied in sets of 4, these plates are suitable for use with 6mm dia. down rod, for suspension of the housing from the structural ceiling.
One STP4 set is sufficient for 2 luminaires.

The fluorescent lamps are retained in their correct position by means of fixed insert-rotate lampholders. Easy removal of the lamps is by simple twist action. As the 58/65 lamps are contained completely within the main housing length, a lamp end box is not fitted and these luminaires can be installed end to end.

Ambient conditions
These luminaires are approved for use in normal conditions of ambient temperature range between 5°C and 25°C. Where more onerous conditions exist e.g. in part completed buildings before 'drying out' is completed or ambient temperatures outside the approved temperature range, please consult your nearest Crompton Depot.



Outside View of Modulux Luminaire showing track bearer suspension bracket SSB4.



Inside view of Modulux Luminaire showing method of inserting and adjustment of side suspension bracket.

Electrical Data

Luminaire wiring
A neat wiring harness of single core high temperature PVC insulated cable, electrically connects the control gear components and lampholders. The wiring terminates in a fused terminal block positioned close to the 21mm mains cable entry hole.

B.S.I. Kite Mark approved ballasts for 240V 50Hz supply comply with BS2818, and the fused terminal block accepts up to 2 x 2.5mm^2 or 1 x 6mm^2 conductors.

Electrical loadings

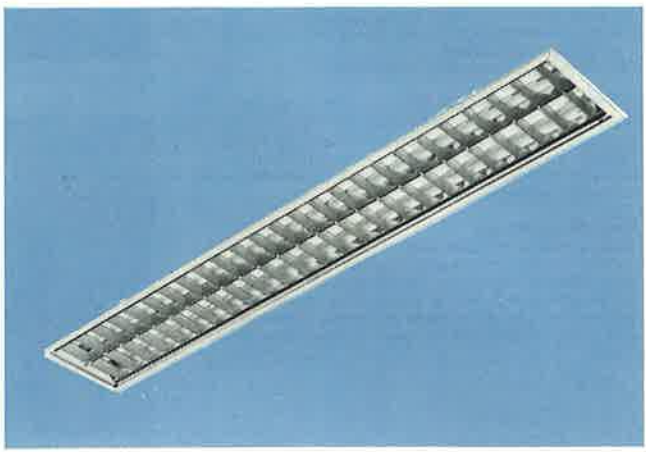
Lamps Watts	Total Input Watts	Power Factor	Line Current (Amps)	Circuit loss (Watts)	Third Harmonic per phase (%)
2 x 36	98	0.93	0.43	24	17
1 x 58	70	0.89	0.33	14	17
2 x 58	140	0.89	0.66	28	17
1 x 70	78	0.90	0.36	13	18
2 x 70	156	0.90	0.72	26	18

Crompton

Modulux 300mm

BSI Safety Mark Licence No. 052

Recessed Luminaires with Draw-up Trim or Lay-in Trim and High Efficiency Louvres



Applications

The Crompton Modulux 300mm module width luminaires complete with high efficiency, low brightness broad light distribution louvres, provide an opportunity to achieve interior lighting by one of the most attractive and efficient lighting concepts currently available.

These luminaires can be of use in most commercial enterprises where a modular suspended ceiling system is to be installed.

Within office areas a significant reduction in installed luminaire quantities is possible particularly if the office working positions and activities are known and established. When used in departmental stores and shops the potential transverse spacings between rows of luminaires encourages savings in installation costs and total electrical load charges.

Optional Application Features
These luminaires are suitable for modification to provide air extract facilities, against special enquiries.

Self-contained emergency lighting conversion modules also available to operate one of the mains lamps in the event of mains failure.

Description

Housing
The all-metal single piece housing gives strength and durability to the overall luminaire, allowing fixing to be from conduit/down rods from the main structural ceiling or side bearer arms on to the suspended ceiling track system or, with lay-in trim to rest on the track flange of 25mm wide exposed tee grid ceilings. The housing, trim frame and lampholder end box are finished in hgh quality Crompton 'Permawhite' epoxy base powder coat stoved enamel white paint.

Louvre
By accurate combination of the optical elements provided by the carefully profiled aluminium specular reflectors and cross louvre baffles, an efficient and rigid assembly has been achieved. The louvre has a simple but effective mechanical retention system ensuring that the desired positioning of the reflectors, relative to the tubular light source, is maintained at all times even after removal and replacement following normal maintenance or lamp renewal.

Within the housing the appropriate efficient switchstart control gear is factory fitted to the housing back plate.

The fluorescent lamps are retained in the correct optical position by means of fixed 'insert-rotate' lamp-holders at each end of the housing.

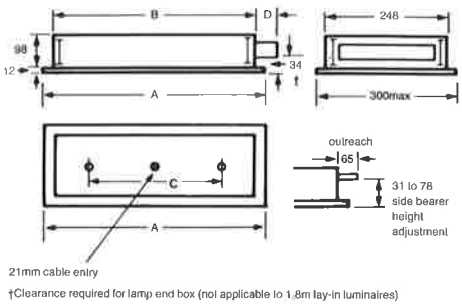
Designed to BS4533 – Section 102.2:1981 **IP20** for use in normal indoor conditions.

BSI Safety Mark – Gives an independent guarantee that luminaires are type tested by the British Standards Institution and comply with BS.4533.

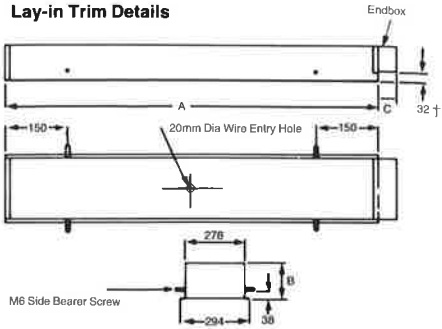
Dimensions

All dimensions shown in mm

Draw-up Trim Details



Lay-in Trim Details



†Clearance required for lamp end box (not applicable to 1.8m lay-in luminaires)

Nominal Size (m)	Draw-up Trim (mm)					Lay-in Trim (mm)			
	A MAX	B	C	D	Maximum Weight (kg)	A	B	C	Maximum Weight (kg)
1.2×0.3	1200	1146	900	87	10.9	1193	110	35	8.8
1.5×0.3	1500	1446	1350	87	13.0	—	—	—	—
1.8×0.3	1800	1746	1350	52	14.0	1793	110	No Endbox	12.5

Catalogue Numbers

Excluding lamps which should be ordered separately

Nominal Module Size (m)	Number and Wattage of lamps	Catalogue Number	Catalogue Numbers of Main Components	
			Housing	Louvre
Draw-up Trim				
1.2 x 0.3	2 x 36	MDEL 412S	MDEH 412 S	MEL41
1.5 x 0.3	2 x 58	MDEL 582S	MDEH 582S	MEL51
1.8 x 0.3	2 x 70	MDEL 612S	MDEH 612 S	MEL61
Lay-in Trim				
1.2 x 0.3	2 x 36	MLEL 412S	MLEH 412 S	MLL41
1.8 x 0.3	2 x 70	MLEL 612S	MLEH 612 S	MLL61

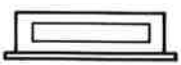
Note: These luminaires are also available with Electronic Start. When ordering, replace the suffix 'S' of the catalogue number with 'E' for electronic start.

Photometric Data

Type	TLOR	ULOR	DLOR	SHR (nom)	SHR (max)	FFR	BZ	ACG	Luminous Area (cm²)		
									1.2m	1.5m	1.8m
Two Lamp	0.65	0.0	0.65	1.5	1.61	0	1(2)2	3	3050	3800	4550

Utilisation Factors

D1166



Two lamp
High efficiency louvre
SHR nom = 1.5

Room Reflectance			Room Index								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	.47	.52	.56	.59	.63	.65	.67	.69	.70
	.30	.20	.43	.48	.53	.56	.60	.62	.64	.67	.68
	.10	.20	.40	.46	.50	.53	.57	.60	.62	.65	.67
.50	.50	.20	.46	.51	.55	.57	.61	.63	.64	.66	.67
	.30	.20	.43	.48	.52	.55	.58	.61	.62	.65	.66
	.10	.20	.40	.45	.49	.52	.56	.59	.61	.63	.65
.30	.50	.20	.45	.50	.53	.56	.59	.61	.62	.64	.65
	.30	.20	.42	.47	.51	.54	.57	.59	.61	.63	.64
	.10	.20	.40	.45	.49	.52	.55	.58	.59	.61	.63
.00	.00	.00	.39	.43	.47	.50	.53	.55	.57	.59	.60

For lamp wattage used multiply above values by factors here	36W	58W	70W
	1.00	1.00	1.00

All data derived from tests carried out by the Crompton Parkinson Photometric Laboratory, a BSI Registered Laboratory.

Mechanical Data

Draw-up Trim Luminaires
There are two optional methods of supporting the luminaires as illustrated using the extra catalogue items listed below:-

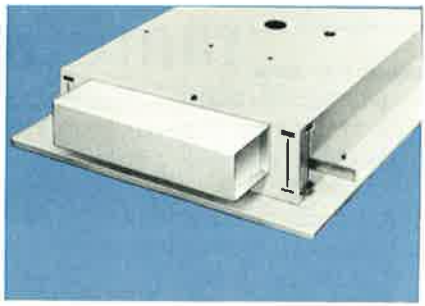
Suspension Side Brackets Cat. No. SSB4.
Supplied in sets of 4 and designed to support the luminaire on the track "tee" members of the ceiling system. Simple insertion into the luminaire housing with height adjustment achieved by turning the cruciform headed screw from the underside of the housing.

Suspension Top Plates Cat. No. STP4.
Supplied in sets of 4, these plates are suitable for use with 6mm dia. down rod, for suspension of the housing from the structural ceiling.
One STP4 set is sufficient for 2 luminaires.

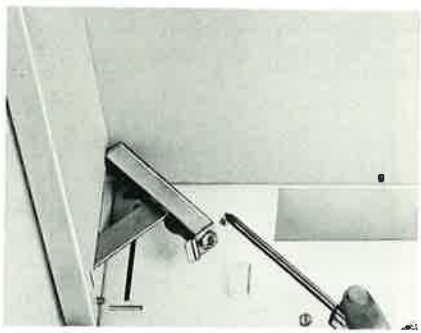
Lay-in Trim Luminaires
The housings rest on the 25mm wide flanges of the exposed tee grid ceilings and four retractable side bearer bolts rest on the 38mm high vertical element of the ceiling track.

The fluorescent lamps are retained in their correct position by means of fixed insert-rotate lampholders. Easy removal of the lamps is by simple twist action. 1.8m lay-in trim luminaires can be mounted end-to-end, as the lamps are contained within the housing and do not have a protruding lamp end box.

Ambient conditions
These luminaires are approved for use in normal conditions of ambient temperature range between 5°C and 25°C. Where more onerous conditions exist e.g. in part completed buildings before 'drying out' is completed or ambient temperatures outside the approved temperature range, please consult your nearest Crompton Depot.



Outside view of the Draw-up Trim Modulux Luminaire showing track bearer suspension bracket SSB4.



Inside view of Draw-up Trim Modulux Luminaire showing method of inserting and adjustment of side suspension bracket.

Electrical Data

Luminaire wiring
A neat wiring harness of single core high temperature PVC insulated cable, electrically connects the control gear components and lampholders. The wiring terminates in a fused terminal block positioned close to the 21mm mains cable entry hole.

B.S.I. Kite Mark approved ballasts for 240V 50Hz supply comply with BS2818, and the fused terminal block accepts up to 2 x 2.5mm^2 or 1 x 6mm^2 conductors.

Electrical loadings

Lamp Watts	Total Input Watts	Power Factor	Line Current (Amps)	Circuit Loss Watts	Third Harmonic per phase %
2 x 36	98	0.83	0.43	24	17
2 x 58	140	0.89	0.66	28	17
2 x 70	156	0.90	0.72	26	18

Crompton Moduline

Continuous recessed modular Luminaire system

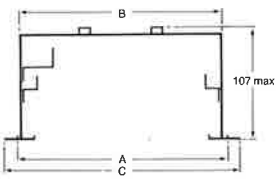
Applications

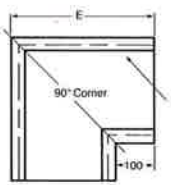
Any commercial or clean air industrial area where a suspended secondary ceiling is to be installed, into which the continuous housings can be recessed. The light distribution from the high efficiency aluminium reflector louvre assemblies ensures low glare, especially for general applications where visual display units are in use.

Dimensions

All dimensions in mm.

Finished Aperture Width A	B	C	D	E
200	194	226	50	326
300	294	326	150	426





Note: Cable Tray is always along the outer side of Corners. Orientation of housing run needs to allow for this prior to installation.

Description

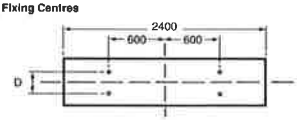
Crompton Moduline is a continuously coupled recessed lighting system. It uses a number of standard components which can be installed in an existing or new ceiling system to provide a custom-made appearance. The system is flexible and ideal to meet the demanding requirements of building shape, configuration of lighting layout and working environment.

The Moduline recessed housings provide the facility of locating luminaire combinations of removable gear tray and high efficiency louvre anywhere along the length of housing run. Straight or specially manufactured angled sections enable the housings to be coupled to form a continuous system.

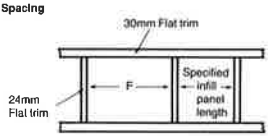
A wide range of illuminance levels can be achieved and the system allows future adjustment with minimum disturbance, should the working conditions dictate the need for changes in the lighting requirements.

Moduline can incorporate built-in emergency lighting, air extraction and other compatible services.

Housing Fixing Centres



Cross Tee Spacing



F for 0.6m = 615mm
1.2m = 1225mm
1.5m = 1526mm
1.8m = 1769mm

Catalogue Numbers

Excluding lamps which should be ordered separately

Width		Description		Weight (kg)	
200mm	300mm			200mm	300mm
M2E	M3E	Basic 2.4m housing		9.7	11.6
M2EA	M3EA	Basic 2.4m housing with air extract holes			
M2E2399	M3E2399	Basic housing up to 2399mm long. Specify length by replacing final four numerals with mm length required			
M2EA2399	M3EA2399	As above with air extract holes			
M2EE	M3EE	Housing end piece			
M2EC	M3EC	90° housing corner			
M2EC180	M3EC180	Housing corner up to 180°. Specify angle by replacing final three numerals with angular value required			
M2T	M3T	Cross-tee			
MCU	MCU	Mains connector unit			
M2P999	M3P999	Infill panel up to 999mm visible length. Specify visible length by replacing final three numerals with mm length of visible panel required			
MABP	MABP	Air extract blanking plug			
Gear Trays					
M2G118S	M3G118S	1×18W S/S circuit	*For electronic start circuit replace final 'S' of Cat. No. with 'E'. Gear Trays for air extract housings insert 'A' after the 'G' of the catalogue number.	1.3	—
M2G136S	M3G136S	1×36W S/S circuit		2.0	—
M2G158S	M3G158S	1×58W S/S circuit		3.0	—
M2G170S	M3G170S	1×70W S/S circuit		3.3	—
	M3G218S	2×18W S/S circuit		—	2.4
	M3G236S	2×36W S/S circuit		—	3.4
	M3G258S	2×58W S/S circuit		—	4.9
	M3G270S	2×70W S/S circuit		—	5.7
High Efficiency Louvres					
M2L106	M3L106	0.6m for – single lamp	Louvres for use with tri-phosphor lamps, add a final 'T' to the catalogue number.	0.24	—
M2L112	M3L112	1.2m for – single lamp		0.48	—
M2L115	M3L115	1.5m for – single lamp		0.6	—
M2L118	M3L118	1.8m for – single lamp		0.72	—
	M3L206	0.6m for – two lamp		—	0.34
	M3L212	1.2m for – two lamp		—	0.68
	M3L215	1.5m for – two lamp		—	0.85
	M3L218	1.8m for – two lamp		—	1.0

***Example**

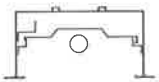
M2G136S	1×36W Switch Start Circuit
M2G136E	1×36W Electronic Start Circuit
M2GA136E	1×36W Electronic Circuit for air extract

Photometric Data

Type	Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max.)	BZ	FFR	ACG	Luminous Area (cm^2) 0.6m	1.2m	1.5m	1.8m	2.4m
200mm wide	1×18	,62	,62	1,75	1,84	2	0	3	950	1900	2400	2850	—
300mm wide	2×36	,65	,65	1,50	1,60	2	0	3	1500	3150	3950	4650	—

Utilisation Factors

D1117

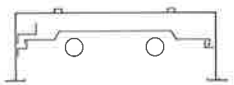


200mm wide
1 lamp

Room Reflectance C	W	F	Room Index 0,75	1,00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
,70	,50	,20	–	,48	,52	,55	,59	,61	,63	,65	,66
	,30	,20	–	,44	,49	,52	,56	,59	,61	,63	,65
	,10	,20	–	,42	,46	,49	,54	,57	,59	,62	,63
,50	,50	,20	–	,47	,51	,54	,57	,59	,61	,63	,64
	,30	,20	–	,44	,48	,51	,55	,57	,59	,61	,63
	,10	,20	–	,41	,45	,48	,53	,55	,57	,60	,61
,30	,50	,20	–	,46	,50	,52	,55	,57	,59	,60	,62
	,30	,20	–	,43	,47	,50	,53	,56	,57	,59	,60
	,10	,20	–	,41	,45	,48	,52	,54	,56	,58	,59
,00	,00	,00	–	,39	,43	,46	,50	,52	,53	,55	,57

For the lamp wattage used multiply above values by the factors given here	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	1.0	–	1,0	–	1,0	–	1.0	–	–	–

D1143



300mm wide
2 lamp

Room Reflectance C	W	F	Room Index 0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
,70	,50	,20	,46	,51	,55	,58	,62	,64	,66	,68	,69
	,30	,20	,42	,47	,52	,55	,59	,62	,63	,66	,68
	,10	,20	,39	,44	,49	,52	,56	,59	,61	,64	,66
,50	,50	,20	,45	,50	,54	,56	,60	,62	,64	,65	,67
	,30	,20	,41	,47	,51	,54	,57	,60	,62	,64	,65
	,10	,20	,39	,44	,48	,51	,55	,58	,60	,63	,64
,30	,50	,20	,44	,49	,53	,55	,58	,60	,61	,63	,64
	,30	,20	,41	,46	,50	,53	,56	,58	,60	,62	,63
	,10	,20	,39	,44	,48	,51	,54	,57	,59	,61	,62
,00	,00	,00	,37	,42	,46	,49	,52	,54	,56	,58	,59

For the lamp wattage used multiply above values by the factors given here	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	1.0	–	1.0	–	1.0	–	1.0	–	–	–

Electrical Data

Ballasts
Crompton slim section ballasts comply with the requirements of BS 2818 and have BSI Kite mark approval.

Starter Switch
The starter switch and switch base are mounted on the top side of the gear tray.

Spare Starter Switch Cat. No.	Application
S/D	2 × 18W
S/AE	18W, 36W, 58W
S/OE	70W

Power Factor Correction Capacitor
Dry film type capacitor gives required power factor correction.

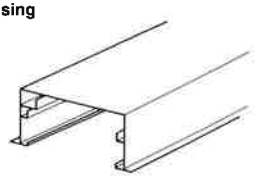
Lampholders
BSI Kite mark approved and pre-wired rotary type lampholders are fitted to the gear tray. The lamp pins are locked into position by an "insert and twist" action which provides safe and positive pin contact and lamp retention.

Electrical Data 240V 50Hz

Rated Lamp Watts	Total Input Watts	Power Factor	Line Current (amps)	Circuit Losses Watts	Third Harmonic (per phase) %
1×18	29	,93	,13	12	13
2×18	50	,91	,215	12	15
1×36	48	,93	,215	12	17
2×36	95	,93	,43	24	17
1×58	70	,89	,33	14	17
2×58	140	,89	,66	28	17
1×70	78	,90	,36	13	18
2×70	156	,90	,72	26	18

Mechanical Data

Basic Housing



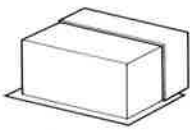
A heavy gauge steel housing press-formed in 2400mm length, for either a 200mm or 300mm finished ceiling aperture width, with the housing trim that overlaps the adjacent ceiling panels.

Each housing has a full length mains wiring cable tray, full length support for the gear tray and louvre, housing coupler and extruded aluminium trim. All finished stoved enamel white.

Housings can be coupled to form a continuous run of any required length, with make-up lengths provided to complete a specified non-module dimensional row. Specific site dimensions need to be known.

Each housing has 4×12mm diameter holes for down rod support fixings.

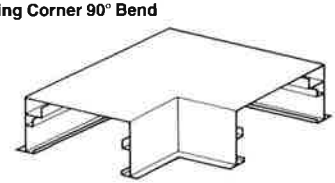
Housing End Piece



The housing end piece is complete with a coupler and mitred trim of 100mm length.

This neatly terminates a run of coupled housings.

Housing Corner 90° Bend



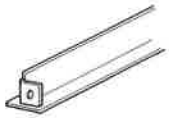
If the building configuration requires a 90° change in the housing run then a housing corner allows this.

It incorporates a cable tray in relation to the basic housing and each inner arm is 100mm long.

Refer to installation notes for further guidance on ensuring correct positional relationship of cable tray.

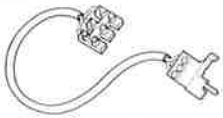
For bends greater than a 90° angle, purpose-made angle sections can be made available against specific notified angles.

Housing Cross Tee



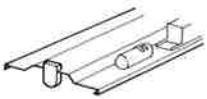
Extruded aluminium cross-tee for position between louvre and adjacent infill panel, locked in position by pressure screw action.

Mains Connector Unit



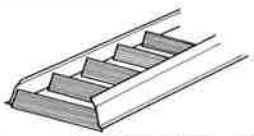
Mains Connector comprising 3-way terminal block 400mm long flying lead and 3-pin female non-reversible socket.
Terminal bore accepts up to 2×2.5mm² conductors and can be positioned on vertical edge of cable way at selected 280mm centres. Retained by push-stud into prepared hole.

Gear Trays



Formed steel trays with control gear factory-wired to "insert-twist" lampholders and terminating in a non-reversible 3-pin plug. Gear trays can be positioned anywhere along housing run and can be released and swung down without interference to adjacent assemblies.

High Efficiency Louvres



Optically designed anodised aluminium reflector/louvre assemblies for use with 26mm diameter tubes. Each louvre can be easily removed without disturbing adjacent components and has two nylon cords with easy attachment to gear tray, to permit free suspension when renewing lamps.

Infill Panels

Steel infill panels finished semi-matt white, with formed return lips to rest on housing trim and cross-tee.

Panels can be provided in various lengths to suit site requirements and where necessary panels with angled ends can be made available to cater for corner or end wall sections.

Crompton Tufflite

BSI Safety Mark Licence No. 052

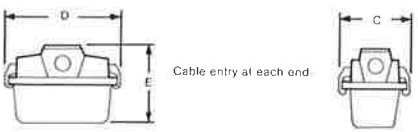
Fluorescent Lamp Luminaires for Arduous Environments

Applications

A range of luminaires manufactured from materials that have a high degree of resistance to corrosive or damp and dusty environments which can be found in a wide spectrum of industrial processes.

Dimensions

All dimensions in mm



Description

The luminaire comprises a formed housing of glass reinforced polyester resin (GRP) which does not corrode, rust or lose its colour when exposed to a significant range of atmospheres commonly occurring in general industry.

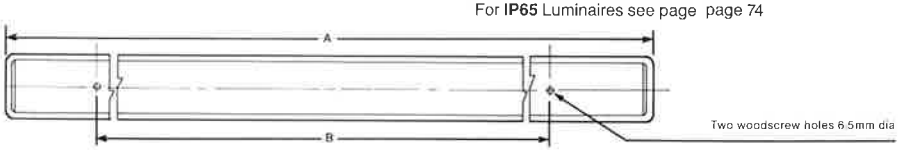
The housing accommodates a gear tray which is easily removed for in-situ bench maintenance when necessary. It contains all the switchstart control gear components and lampholders for high efficiency operation of the fluorescent lamps. Two nylon safety straps allow the gear tray to suspend freely during installation or whilst servicing.

The acrylic diffuser is held firmly against the housing by means of easy action hinge latches (see notes and illustration on page 2).

Constructed to BS4533 Section 102.1.

Classified **IP54** = Dust and splash protected
IP65 = Dust-tight and jet protected

For **IP65** Luminaires see page page 74



Catalogue Numbers

Excluding lamps which should be ordered separately.

Nominal length (m)	Lamp Watts	Catalogue Number Switch Start	Catalogue Number Electronic Start	IP Classification	Complete luminaires Weight (kg)	Dimensions mm A	B	C	D	E
0.6	1 x 18/20	TD21S	TD21E	54	3.0	678	450	106	–	120
	2 x 18/20	TD22S	TD22E	54	3.5	678	450	–	176	120
1.2	1 x 36/40	TDA41S	TDA41E	54	4.0	1313	800	111	–	114
	2 x 36/40	TDA42S	TDA42E	54	5.5	1313	800	–	182	114
1.5	1 x 58/65	TDA51S	TDA51E	54	4.5	1613	1100	111	–	114
	2 x 58/65	TDA52S	TDA52E	54	6.5	1613	1100	–	182	114
1.8	1 x 70/75	TD61S	TD61E	54	5.5	1850	1390	106	–	120
	2 x 70/75	TD62S	TD62E	54	7.5	1850	1390	–	176	120

BSI Safety Mark – Gives an independent guarantee that luminaires are type tested by the British Standards Institution and comply with BS.4533.

Photometric Data

Type	Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max.)	BZ	FFR	ACG	Luminous Area (cm²)				
									0.6m	1.2m	1.5m	1.8m	2.4m
Acrylic Diffuser	1 x 58	0.72	0.59	1.75	1.86	6	.23	2	400	800	1000	1200	–
Acrylic Diffuser	2 x 58	0.67	0.58	1.75	1.82	6	.16	2	850	1700	2100	2450	–

Utilisation Factors

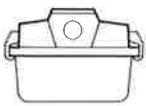
D1023

One Lamp 36W
Stippled Acrylic Closure

Room Reflectance			Room Index								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	–	.40	.45	.49	.54	.57	.60	.64	.66
	.30		–	.34	.39	.43	.48	.52	.55	.60	.62
	.30		–	.30	.35	.38	.44	.48	.51	.56	.59
.50	.50	.20	–	.37	.42	.45	.49	.53	.55	.58	.60
	.30		–	.32	.37	.40	.45	.49	.51	.55	.58
	.10		–	.28	.33	.36	.41	.45	.48	.52	.55
.30	.50	.20	–	.34	.38	.41	.45	.48	.50	.53	.55
	.30		–	.30	.34	.37	.42	.45	.47	.51	.53
	.10		–	.27	.31	.34	.39	.42	.45	.48	.51
.00	.00	.00	–	.23	.27	.30	.34	.37	.39	.42	.45

For the lamp wattage used multiply above values by the factors given here	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	1.0	.97	1.0	.97	.98	.95	.98	.95	–	–

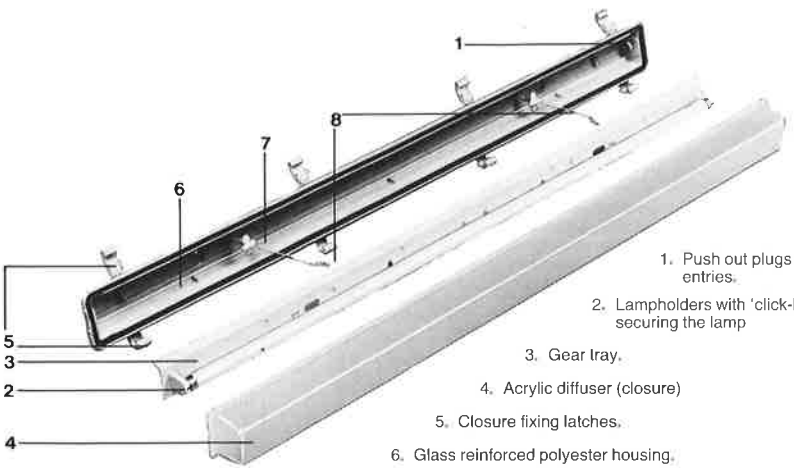
D1022



Two Lamp 58W
Stippled Acrylic Closure

Room Reflectance			Room Index								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	–	.40	.44	.48	.52	.56	.58	.61	.63
	.30		–	.35	.39	.43	.48	.51	.54	.58	.61
	.10		–	.31	.35	.39	.44	.48	.51	.55	.58
.50	.50	.20	–	.38	.42	.45	.49	.52	.54	.57	.59
	.30		–	.33	.37	.40	.45	.48	.51	.54	.56
	.10		–	.29	.34	.37	.42	.45	.48	.52	.54
.30	.50	.20	–	.35	.39	.42	.46	.48	.50	.53	.55
	.30		–	.31	.35	.38	.42	.45	.48	.51	.53
	.10		–	.28	.32	.35	.40	.43	.45	.49	.51
.00	.00	.00	–	.25	.29	.32	.36	.39	.41	.44	.46

For the lamp wattage used multiply above values by the factors given here	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	1.02	.99	1.02	.99	1.0	.97	1.0	.97	–	–

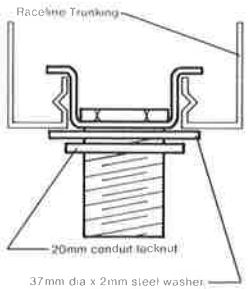


1. Push out plugs seal end cable entries.
2. Lampholders with 'click-lock' action for securing the lamp
3. Gear tray.
4. Acrylic diffuser (closure)
5. Closure fixing latches.
6. Glass reinforced polyester housing.
7. Easy gears tray removal.
8. Nylon safety straps allow suspension of gear tray.

Mechanical

The acrylic closure is seated in a gasketted recess formed around the perimeter of the housing. The two components are held firmly together by robust easy action hinge latches along both sides of the closure. To retain the ingress protection integrity of the housing all fixing and cable entry holes should be opened on site at the pre-formed positions. Any openings so formed must be appropriately sealed to maintain the luminaire IP classification. The removable gear tray, supplied complete with control gear, is formed from sheet steel and has an epoxy powder white paint finish.

Fixing Bracket For Use With Raceline Trunking
Catalogue No. A440



Electrical

Switch start control gear is fitted and wired to a 3-way fused terminal block for 240V. 50Hz mains operation within an ambient temperature range of 5°C. to 25°C.

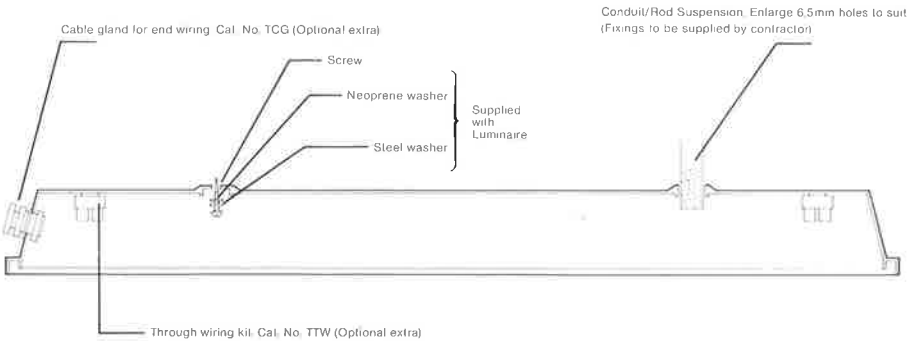
Where ambient temperatures may be lower than 5°C, but not lower than −5°C, 38mm dia. tubes should be used in order to minimise starting problems.

Installation Accessories available include:

1. 20mm plastic cable gland to accept circular cable from 8mm to 13mm in diameter.
   Catalogue No. TCG.
2. Through wiring kit comprising two 3-way terminal blocks and fixing screws for mounting on to prepared bosses in the housing.
   The terminals accept up to 2 x 2.5mm² conductors.
   Catalogue No. TTW.

Notes: These luminaires are also available with Electronic Start. When ordering, replace the suffix 'S' of the catalogue number of 'E' for electronic start.

Installation



Optional Alternative Closures - IP65 Classification
Tufflite luminaires can be supplied with prismatic control closures affording a higher degree of protection against ingress of dust and water. Catalogue information generally as detailed on page 71

Catalogue Numbers

Excluding lamps which should be ordered separately

Nominal length (m)	Lamp Watts	Switch Start Catalogue Number		Complete luminaires Weight (kg)	Dimensions mm				
		Prismatic Acrylic	Prismatic Polycarbonate		A	B	C	D	E
0.6	1 x 18/20	TPA21S	TPP21S	3.0	678	450	106	–	120
	2 x 18/20	TPA22S	TPP22S	3.5	678	450	–	176	120
1.2	1 x 36/40	TPA41S	TPP41S	4.0	1288	800	106	–	120
	2 x 36/40	TPA42S	TPP42S	5.5	1288	800	–	176	120
1.5	1 x 58/65	TPA51S	TPP51S	4.5	1588	1100	106	–	120
	2 x 58/65	TPA52S	TPP52S	6.5	1588	1100	–	176	120
1.8	1 x 70/75	TPA61S	TPP61S	5.5	1850	1390	106	–	120
	2 x 70/75	TPA62S	TPP62S	7.5	1850	1390	–	176	120

NOTE: These luminaires are also available with Electronic Start.
When ordering, replace the suffix 'S' of the catalogue number with 'E' for electronic start.

Photometric Data

Type	Lamp Watts	TLOR	DLOR	SHR (Nom.)	SHR (Max.)	BZ	FFR	ACG	Luminous Area (cm^2)				
									0.6m	1.2m	1.5m	1.8m	2.4m
Acrylic Prismatic	1 x 36	0.71	0.57	1.75	1.79	6	0.25	3	400	800	1000	1200	–
Acrylic Prismatic	2 x 36	0.65	0.55	1.75	1.82	5(5)6	0.18	3	850	1700	2100	2450	–
Polycarbonate Prismatic	1 x 36	0.68	0.54	1.75	1.79	6	0.26	3	400	800	1000	1200	–
Polycarbonate Prismatic	2 x 36	0.62	0.53	1.75	1.82	5(5)6	0.17	3	850	1700	2100	2450	–

Utilisation Factors

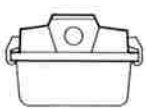
D1070

One Lamp 36W
Prismatic Acrylic Closure

Room Reflectance			Room Index								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	–	.40	.44	.48	.53	.56	.59	.62	.64
	.30		–	.34	.39	.42	.47	.51	.54	.58	.61
	.10		–	.30	.34	.38	.43	.47	.50	.55	.58
.50	.50	.20	–	.37	.41	.44	.48	.51	.53	.57	.59
	.30		–	.32	.36	.39	.44	.47	.50	.53	.56
	.10		–	.28	.32	.35	.40	.44	.47	.51	.53
.30	.50	.20	–	.34	.37	.40	.44	.47	.49	.52	.53
	.30		–	.30	.33	.36	.40	.43	.46	.49	.51
	.10		–	.26	.30	.33	.37	.41	.43	.47	.49
.00	.00	.00	–	.23	.26	.29	.33	.35	.37	.41	.43

For the lamp wattage used multiply above values by the factors given here	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	1.0	.97	1.0	.97	.98	.95	.98	.95	–	–

D1069



Two Lamp 36W
Prismatic Acrylic Closure

Room Reflectance			Room Index								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	–	.41	.45	.48	.52	.55	.57	.60	.62
	.30		–	.36	.40	.43	.48	.51	.53	.57	.59
	.10		–	.32	.36	.39	.44	.47	.50	.54	.56
.50	.50	.20	–	.38	.42	.45	.48	.51	.53	.55	.57
	.30		–	.34	.38	.41	.45	.48	.50	.53	.55
	.10		–	.31	.35	.37	.42	.45	.47	.51	.53
.30	.50	.20	–	.36	.39	.42	.45	.47	.49	.51	.53
	.30		–	.32	.36	.38	.42	.45	.47	.49	.51
	.10		–	.30	.33	.36	.40	.42	.44	.47	.49
.00	.00	.00	–	.27	.30	.32	.36	.38	.40	.43	.44

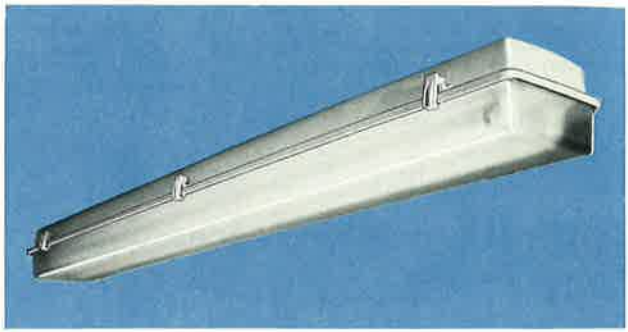
For the lamp wattage used multiply above values by the factors given here	18W	20W	36W	40W	58W	65W	70W	75W	100W	125W
	1.0	.97	1.0	.97	.98	.95	.98	.95	–	–

Crompton Zone 2

Fluorescent Lamp Luminaires BASEEFA ExN approved

Specification

BASEEFA Certified Ex 80391
ExNII (Ex)
British Standard BS4533:Part 2: Section 2.1:1976
Unrestricted Breathing
Degree of Environmental Protection IP65
Dust-tight and Jet-protected.



Application

For use in Hazardous environment areas designated Zone 2 as defined in BS 5345: Part 7:1979.

Also suited for wet or dusty environments. Luminaires classfield **IP65:** dust tight and jet protected.

The "unrestricted breathing" concept ensures retention of type 'N' protection, even under conditions of gasket failure.

Range

1.5m 65W and 1.8m 75W in one or two lamp models, plus various installation accessories.

Description

Top Housing
Glass reinforced polyester self colour grey.

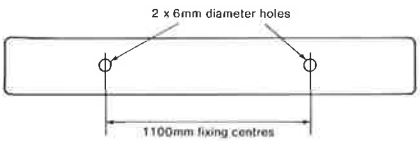
Closure
Stippled clear acrylic closure seats on to full perimeter gasket in top housing and is retained by nylon hinge – over latches along both sides.

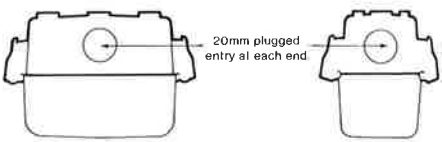
Reflector/Gear Tray
Removable steel gear tray, finished white, incorporates lamp control ballast, p.f. correction capacitor and special electronic lamp starting module.

Gear tray is removable by 'quick release' turn buckle fasteners with two nylon safety straps allowing gear tray to suspend freely during wiring installation or during servicing.

Control Gear
Electronic lamp starting module senses failed lamp and cuts off mains to lamp. It automatically resets when mains is switched off for lamp servicing.

Dimensions





Catalogue Numbers (Excluding lamps which should be ordered separately).

Nominal Length (m)	Lamp Watts	Catalogue Numbers	Dimensions (mm)			Weight (kg.)
			Length	Width	Depth	
1.5	1 x 65	ACFN 1565	1610	114	122	5.1
	2 x 65	ACFN 2656	1610	184	122	7.9
1.8	1 x 75	ACFN 1675	1874	114	122	5.2
	2 x 75	ACFN 2675	1874	184	122	8.5

Installation – Mechanical

Each luminaire has a 20mm plugged entry at each end of the housing to accept cable glands etc.

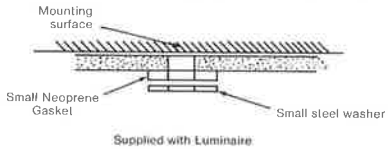
Fixing of the luminaire is possible by rod, wood screw, conduit or hook. Appropriate size holes to be drilled in the body on site at the centres indicated.

To comply with BS5345:part 7:1979, all entries must be of a standard sufficient to maintain a minimum of IP54 classification.

Included with each luminaire are two nylon washers to seal cable entry when glands are used.

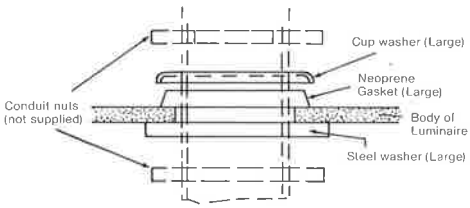
In addition, two steel and two neoprene washers are included to seal 6mm fixing holes if either bolt or woodscrew fixing is used. (see illustration below).

Woodscrew or bolt fixing to a mounting surface.

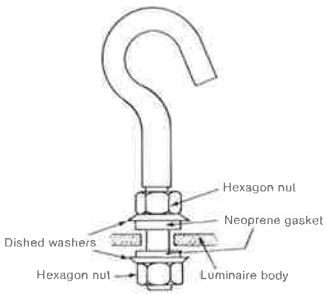


Optional Extra Fixing Accessories

Cat. No.	Description
ACF 3CS	2 x 20mm conduit entry seal pack.



ACF 3HS 2 x stainless steel hook, suspension seal pack.



ACF 3CG 20mm cable gland (not illustrated).

Installation – Electrical

All lamp control gear is factory wired to the lamp-holders and terminates in a 6-way pre-looped terminal block suitable for up to 4mm² conductors.

Additional earth stud connections at each end of the gear tray provide earthing facilities for MICC or armoured cables.

Electrical Data (240V 50Hz)

Lamp Watts	Total Input Watts	Line current (amps)	Power Factor	Ambient Temperature Range (°C)	Temperature Classification
1 x 65	75	0.34	>0.90	-5 to 40	140°C (T3)
2 x 65	148	0.72	>0.85	-5 to 35	140°C (T3)
1 x 75	90	0.42	>0.85	0 to 35	145°C (T3)
2 x 75	172	0.78	>0.90	0 to 25	155°C (T3)

Note: Temperature classifications are calculated by the method detailed in BS5501: part 1:1977.
Supplementary notes on the advantages of unrestricted breathing ExN fluorescent lamp luminaires are given on page 78

Photometric Data

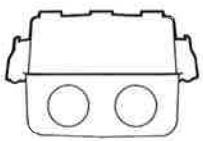
Lamp Watts	TLOR	DLOR	SHR (nom)	SHR max	BZ	Luminous Area (cm^2)
1 x 65	0.75	0.65	1.5	1.68	6	1260
2 x 65	0.69	0.63	1.5	1.62	6	2370
1 x 75	0.74	0.64	1.5	1.68	6	1460
2 x 75	0.68	0.62	1.5	1.62	6	2760

Utilisation Factors

One Lamp 75 watt
ACFN 1675

Room Reflectance			Room Index								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.10	.34	.39	.44	.47	.52	.56	.58	.62	.64
	.30		.28	.33	.38	.42	.47	.51	.54	.58	.61
	.10		.24	.29	.34	.38	.43	.47	.50	.55	.58
.50	.50	.10	.32	.37	.41	.45	.49	.52	.55	.58	.60
	.30		.27	.32	.37	.40	.45	.49	.51	.55	.58
	.10		.23	.28	.33	.36	.41	.45	.48	.52	.55
.30	.50	.10	.30	.35	.39	.42	.46	.49	.51	.55	.57
	.30		.26	.30	.35	.38	.43	.46	.49	.52	.55
	.10		.22	.27	.31	.34	.40	.43	.46	.50	.52
.70	.50	.30	.36	.42	.48	.52	.58	.62	.65	.70	.73
	.30		.29	.35	.41	.45	.51	.56	.60	.65	.68
	.10		.25	.30	.36	.40	.46	.51	.55	.59	.63
.50	.50	.30	.33	.39	.44	.48	.53	.57	.59	.63	.66
	.30		.28	.33	.38	.42	.48	.52	.55	.60	.63
	.10		.23	.28	.34	.37	.43	.48	.51	.56	.60
.30	.50	.30	.31	.36	.41	.44	.49	.52	.54	.58	.60
	.30		.26	.31	.36	.39	.44	.48	.51	.55	.57
	.10		.21	.26	.30	.34	.39	.42	.45	.49	.52
.0	.0	.0	.20	.24	.28	.31	.36	.39	.42	.45	.48

Conversion Factor – For 65 watt 1.5m lamp multiply above values by 1.01



Two Lamp 75 watt
ACFN 2675

Room Reflectance			Room Index								
C	W	F	0.75	1.0	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.10	.34	.39	.44	.47	.51	.54	.57	.60	.61
	.30		.29	.34	.39	.42	.47	.50	.53	.57	.59
	.10		.25	.30	.35	.38	.43	.47	.50	.54	.56
.50	.50	.10	.33	.37	.42	.45	.49	.52	.54	.57	.59
	.30		.28	.33	.37	.41	.45	.49	.51	.54	.57
	.10		.25	.29	.34	.37	.42	.46	.48	.52	.54
		.10									
.30	.50		.31	.36	.40	.43	.47	.49	.52	.54	.56
	.30		.27	.32	.36	.39	.44	.47	.49	.52	.54
	.10		.24	.28	.33	.36	.41	.44	.47	.50	.53
		.30									
.70	.50		.36	.42	.47	.51	.57	.61	.64	.68	.70
	.30		.30	.36	.41	.45	.51	.55	.59	.63	.66
	.10		.26	.31	.37	.41	.47	.51	.55	.58	.62
		.30									
.50	.50		.34	.39	.44	.48	.53	.56	.59	.62	.64
	.30		.29	.34	.39	.43	.48	.52	.55	.59	.61
	.10		.25	.30	.35	.39	.44	.48	.51	.56	.59
		.30									
.30	.50		.32	.37	.41	.45	.49	.52	.54	.57	.59
	.30		.28	.32	.37	.40	.45	.49	.51	.55	.57
	.10		.24	.28	.33	.36	.41	.44	.47	.51	.53
		.0									
.0	.0		.22	.26	.31	.34	.38	.41	.44	.47	.49

Conversion Factor – For 65 watt 1.5m lamp multiply above values by 1.01

Unrestricted breathing – ExN fluorescent luminaires

The traditional approach to ExN fluorescent luminaire design has been the "restricted breathing" principle. This principle requires the sealing of the luminaire to provide a barrier against the ingress of a potentially ignitable vapour/air mixture during heating and cooling cycles, thus avoiding the risk of explosion from contact of the mixture with hot internal components. "Unrestricted breathing" luminaires are not sealed, and have to be designed for safe operation under free entry of ignitable vapour/air mixtures.

An unrestricted breathing specification has been chosen for the ACFN as it offers a number of major advantages to the specifier, contractor and user. These advantages are as follows:

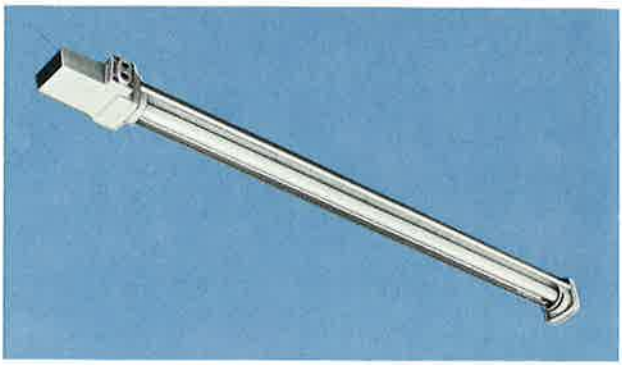
1. No requirement to use expensive Zone 2 approved cable entry glands.
2. No requirement to seal conduit tubing (though care should be taken to prevent ingress of condensation into the luminaire enclosure).
3. Failed or deteriorated diffuser gaskets are not a hazard (provided they maintain IP54 minimum)
4. Reduced maintenance requirements on all gaskets.
5. Reduced risks associated with incorrect diffuser/gasket replacement during relamping or maintenance.
6. Reduced risks associated with mechanical damage to luminaire body or diffuser.
7. Although BS5345: part 2: 1979 releases the user from obligation to retest restricted breathing luminaires in service, many maintenance engineers believe that there is a need to retest. Such a need is obviated for unrestricted breathing ACFN luminaires.

References: BS4533:part 2: section 2.1:1976
BS5345:part 2: 1979

Crompton

Calstar

Flameproof Fluorescent Luminaires for Zone 1 BASEEFA approved



Specification

BASEEFA Certified to BS 5501
Part 5 E Ex d IIB T6
Certificate No. Ex 811217

Degree of Environmental Protection IP66.

Application

A range of single and twin dust-tight jet-protected and flameproof luminaires with integral control gear for use in Zone 1 and Zone 2 areas.

Range

0.6m 20W, 1.2m 40W and 1.5m 65W 240v 50Hz
Single and Twin luminaires.

Description

The body of the luminaire is cast in an approved non-sparking zinc alloy material and incorporates a fully encapsulated choke ensuring low operating temperature and resistance to moisture penetration. The luminaire is supplied with a polycarbonate overtube as standard and has an integral reflector.

Catalogue Numbers (Excluding lamps which should be ordered separately).

Nominal Length (m)	Lamp Watts	Catalogue Numbers	Dimensions (mm)				Weight (Kg)
			Length B	Width	Depth	Fixing Centres A	
0.6	1 x 20	FLP21	835	114	130	660	10.5
0.6	2 x 20	FLP22	835	300	165	636	21.5
1.2	1 x 40	FLP41	1400	114	130	1267	14.8
1.2	2 x 40	FLP42	1440	300	165	1241	30.0
1.5	1 x 65	FLP51	1740	114	130	1565	16.5
1.5	2 x 65	FLP52	1740	300	165	1541	33.5

Installation Details

The luminaire is provided with two 20mm tapped entries, one with a removable FLP plug, the other to accept an appropriate cable gland.

Single lamp luminaire
Two mounting holes, 10mm in diameter, are provided in the top support channel (See diagram below).
The back spine is first installed and the main body is mounted on the spine with three retaining pins.

Twin lamp luminaire
Two single lamp luminaires are coupled together during manufacture with two supporting stirrups.

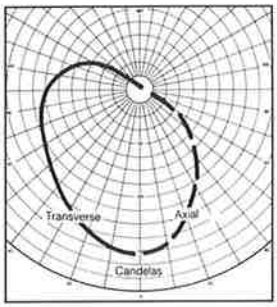
Lamp replacement
For lamp replacement, the overtube assembly is withdrawn from the choke housing and hinged downwards on to the restraint wire.

Voltage

The standard voltage is 240V 50Hz to operate quickstart control gear.
Alternative voltage options are available.

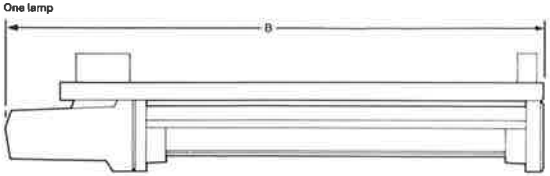
Photometric Data

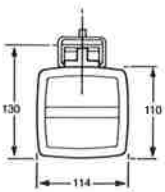
Single lamp luminaire – 1.5m 65W
(1000 lamp lumens)



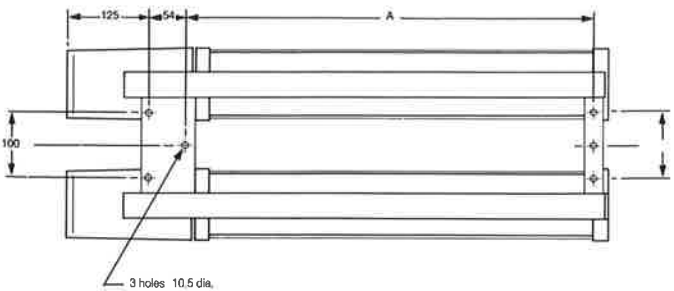
Dimensions (mm)

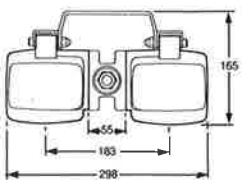
One lamp



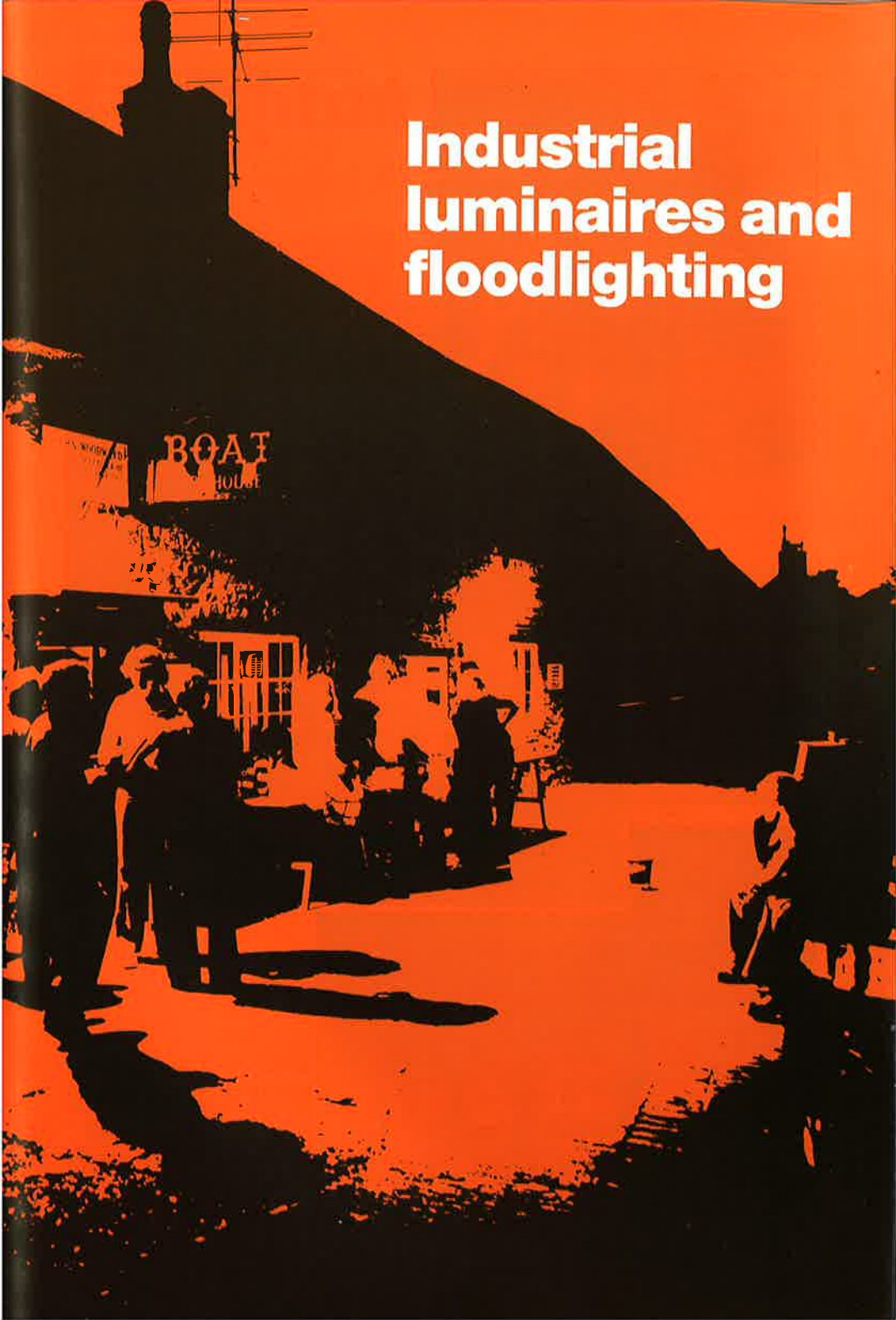


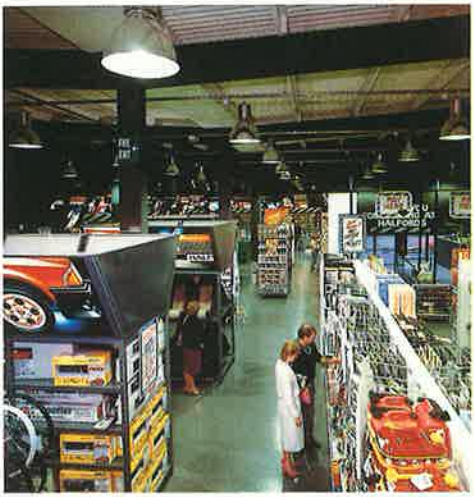
Two lamp





Industrial luminaires and floodlighting





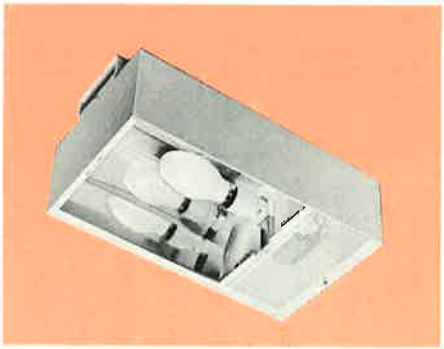
◀ 250W MBFU Pacemaker in Halfords Superstore at Perry Barr, Birmingham.

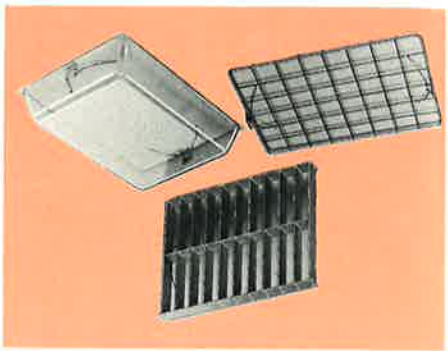
70W SON Galaxy pole-mounted floodlight for industrial security. ▶
(courtesy Plessey Co.)

◀ 250W SON Lightmaster luminaires provide energy-saving area lighting at Lex Wilkinson's Rochdale depot.

Crompton Lightmaster

MBF/U and SON Discharge Lamp Luminaire



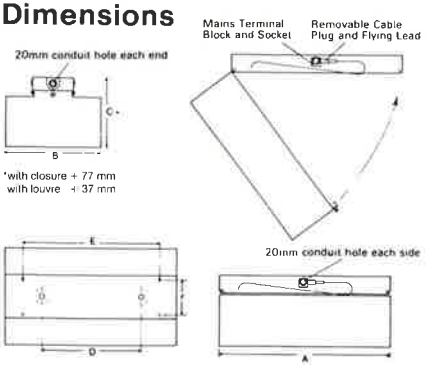


Applications

The choice of lamp types and wattages combined with selection of attachments, make the Crompton Lightmaster a most versatile luminaire, capable of satisfying the lighting needs of many industrial and commercial installations. Lightmaster can provide good quality lighting using modern high efficiency energy saving lamps, especially where buildings with lower roof lines are encountered.

Designed to BS4533, Section 102.1 1981 Classified **IP20**; for use in normal indoor conditions.

Dimensions



Description

The Crompton Lightmaster luminaire is manufactured from heavy gauge anti-rust steel, finished white epoxy base stoved enamel for use with high pressure mercury and sodium discharge lamps up to 400 watts.

It consists of three main assemblies.

1) Backplate with choice of fixing and cable entry holes plus a mains cable termination socket.
2) Main housing incorporating the anodised aluminium reflector and lampholder assembly, which can be hooked on to the back plate, swung up and screw locked into position. Includes a separate flying lead and terminating plug for insertion into the backplate socket.
3) Separate control gear tray assembly consisting of factory wired control gear.

This method of design and construction allows first fixing and mains wiring of the backplate without the need to initially handle the heavier main housing and gear tray assembly, since both can be installed and fixed with ease as a second operation.

The three standard supplementary attachments for use with the Lightmaster are the clear polycarbonate diffuser, metal louvre baffle and heavy gauge wireguard. All can be readily fixed to the main housing of the luminaire by means of tension springs inserted into slots in the top housing.

Catalogue Numbers

Excluding lamps which should be ordered separately

Lamp Watt/Type	Catalogue Numbers	Comprising		Dimensions (mm)						Weight (kg)
		Housing + Backplate	Gear Tray	A	B	C	D	E	F	
150 SON	LMS150	LMH	L150S	610	340	251	338	485	120	11.6
250 SON	LMS250	LMH	L250S							12.0
400 SON	LMS400	LMH	L400S							14.0
250MBF/U	LMM250	LMH	L250M							11.5
400MBF/U	LMM400	LMH	L400M							12.4

Attachments for Use with Above LMD: Clear Polycarbonate Diffuser LMG: Wireguard
LML: Metal Louvre Baffle

Mechanical Data

Installation Notes
B.S. box or screw fixings at centres indicated on the drawing. The backplate has 20mm conduit holes at sides and ends for cables to terminate in the socket. The socket terminals accept up to 6mm² conductors.

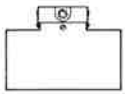
The gear tray can be installed in the main housing either at ground level or with the housing installed. The flying lead and plug from the gear tray engages in the backplate socket for final electrical connection.

Photometric Data

Lamp Watts		250	400
Total L.O.R.	=	0.70	0.71
SHR Max.	=	2.2	2.0
BZ Classification	=	3	2(4)3
Luminous Area (cm²)	=	1250	1250

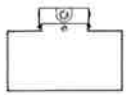
The transverse louvre attachment will modify the performance data. Guidance values available on request.

Utilisation Factors



250W
Basic Open
SHR Nom. = 2.0

Room Reflectances			Room Index								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	—	.53	.57	.60	.65	.68	.70	.73	.74
	.30		—	.48	.52	.56	.61	.65	.67	.70	.72
	.10		—	.44	.49	.53	.59	.62	.65	.68	.71
.50	.50	.20	—	.51	.55	.58	.63	.66	.68	.70	.71
	.30		—	.47	.51	.55	.60	.63	.65	.68	.70
	.10		—	.44	.48	.52	.57	.61	.63	.66	.68
.30	.50	.20	—	.50	.54	.57	.61	.64	.65	.67	.69
	.30		—	.46	.50	.54	.58	.61	.63	.66	.67
	.10		—	.44	.48	.51	.56	.60	.62	.64	.66
.00	.00	.00	—	.42	.46	.49	.54	.57	.59	.61	.63



400W
Basic Open
SHR Nom. = 2.0

.70	.50	.20	—	.55	.59	.62	.67	.70	.72	.74	.76
	.30		—	.51	.55	.58	.63	.67	.69	.72	.74
	.10		—	.47	.51	.55	.60	.64	.66	.70	.72
.50	.50	.20	—	.54	.57	.60	.65	.67	.69	.71	.73
	.30		—	.50	.54	.57	.62	.65	.67	.69	.71
	.10		—	.47	.51	.54	.59	.63	.65	.68	.70
.30	.50	.20	—	.53	.56	.59	.63	.65	.67	.69	.70
	.30		—	.49	.53	.56	.60	.63	.65	.67	.69
	.10		—	.46	.50	.53	.58	.61	.63	.66	.68
.00	.00	.00	—	.45	.48	.52	.56	.59	.60	.63	.64

Correction Factor: Wire Guard – multiply above UF's by 0.89
Clear Dish – multiply above UF's by 0.90

Electrical Data (240V 50HZ)

Lamp Type	Nominal Watts	Input Watts	Running Current Amps	Power Factor	Recommended Individual Lamp Fusing (Amps)
SON	150	170	0.9	0.9	5
	250	270	1.2	0.92	10
	400	430	2.2	0.85	15
MBF/U	250	275	1.3	0.89	10
	400	450	2.2	0.85	15

Lamps
Lightmaster SON control gear incorporates a separate electronic igniter. SON lamps that have an igniter device within the lamp envelope should not be used, as use of such lamps can lead to ballast components being damaged.

Circuit Fusing

Circuits controlling high pressure discharge lamps can momentarily experience high current at the point of arc ignition such that to avoid nuisance fusing, higher rated fuses should be used than may appear necessary from the stated running currents. For individual lamp circuits the appropriate fuse rating should be adopted.

When group switching is intended using H.R.C. fuses the following guide formula can be adopted.

$$\text{Current of discharge lamps for H.R.C. fuse} = \frac{\text{Nominal lamp wattage} \times 5}{\text{Supply volts}}$$

e.g. $\frac{250W}{240V} \times 5 = 5$ Amps, therefore number of 250W lamps per 15A fuse = 3.

There are many types of MCB's but in general they could be regarded as equal to fuses using the current rating formula above. However, it is recommended that the supplier of the MCB be consulted.

Crompton Pacemaker

Application

A range of High Bay luminaires accommodating High Pressure Sodium (SON), or Mercury Vapour (MBF/U or MBFR/U) discharge lamps ideal for the lighting of industrial, manufacturing and storage areas.

Description

Reflectors and gear housings are constructed from spun anodised aluminium.

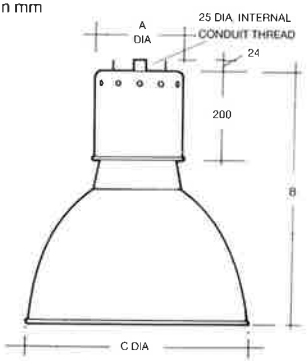
Models are available with either a parabolic reflector suitable for 250/400W SON or MBF/U lamps or a skirt reflector suitable for 250 and 400W MBFR/U lamps, which incorporate their own internal reflector.

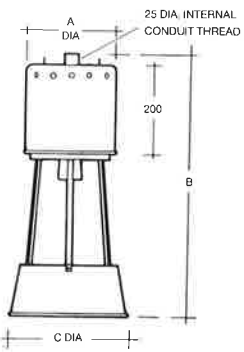
Recommended mounting heights:- MBF 4.5 – 9m
SON 6 – 15m

Made to BS4533 – 2.2 **(IP20)**
Complies with IEC 598

Dimensions

All dimensions in mm





Catalogue Numbers

(Excluding lamps which should be ordered separately).

COMPLETE CATALOGUE NO.	LAMP TYPE	LAMP RATING	RE-FLECTOR TYPE	RE-FLECTOR CAT. NO.	TOP BALLAST HOUSING CAT. NO.	BALLAST CAT. NO. (240V 50Hz)	CAP-ACITOR CAT. NO.	IGNITOR CAT. NO.	COMPLETE LUMINAIRE WEIGHT KG	DIMENSIONS (mm) A	B	C
P250SW	SON	250W	Parabolic	PW	P250S	C215	C553	C801	6.8	203	565	488
P400SW		400W	Parabolic	PW	P400S	C216	2 x C535	C801	9.0	203	565	488
P250MW	MBF/U	250W	Parabolic	PW	P250M	C213	C533	–	5.8	203	565	488
P400MW		400W	Parabolic	PW	P400M	C214	C535	–	7.3	203	565	483
P250MR	MBFR/U	250W	Skirt	PR	P250M	C213	C533	–	5.45	203	584	267
P400MR		400W	Skirt	PR	P400M	C214	C535	–	6.95	203	584	267

Accessories PWGI – wireguard for MW & SW reflectors
PRGI – wireguard for MR skirt

Photometric Data

TYPE	DLOR	ULOR	LOR	BZ	SHR MAX	LUM. AREA CM²
Parabolic reflector	0.79	0	0.79	4	1.75	1870
Skirt reflector	0.73	0.08	0.81	2	1.25	560

Utilisation Factors

SHR NOM = 1.5

SHR NOM = 1.25

Room Reflectance			Room Index								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
.70	.50	.20	.45	.53	.59	.64	.69	.74	.76	.80	.82
	.30		.39	.47	.53	.58	.64	.69	.72	.77	.80
	.10		.34	.42	.49	.54	.61	.66	.70	.73	.78
.50	.50	.20	.44	.51	.57	.61	.67	.71	.73	.76	.79
	.30		.39	.46	.52	.56	.63	.67	.70	.74	.76
	.10		.34	.41	.48	.53	.60	.65	.68	.71	.75
.30	.50	.20	.43	.49	.55	.59	.65	.68	.71	.74	.75
	.30		37	.45	.51	.56	.62	.65	.69	.72	.73
	.10		.34	.41	.47	.53	.59	.63	.66	.69	.73
.00	.00	.00	.32	.39	.45	.50	.56	.60	.63	.66	.69
.70	.50	.20	.54	.60	.64	.68	.74	.76	.78	.81	.83
	.30		.49	.54	.60	.64	.69	.73	.76	.78	.81
	.10		.45	.51	.56	.60	.66	.70	.72	.76	.78
.50	.50	.20	.52	.56	.62	.65	.68	.72	.73	.76	.77
	.30		.48	.52	.57	.60	.66	.69	.70	.74	.76
	.10		.44	.50	.55	.58	.62	.67	.69	.71	.74
.30	.50	.20	.50	.54	.58	.61	.65	.68	.69	.71	.72
	.30		.45	.51	.55	.58	.62	.65	.67	.70	.71
	.10		.43	.47	.53	.56	.60	.63	.65	.67	.69
.00	.00	.00	.40	.44	.49	.52	.55	.58	.60	.62	.63

Mechanical Data

Suspended by 25mm threaded conduit bush.
Spun aluminium ventilated gear housing.

Electrical Data

Lampholder: Ceramic E40 (GES).
Terminal block: 3-way accepting 2×2.5mm² conductors.

Lamp		Input Watts	Running Current (Amps)	Power Factor	Recommended Individual Lamp Fusing (Amps)
Type	Nominal Watts				
SON	250	270	1.2	0.92	10
	400	430	2.2	0.85	15
MBF/U	250	275	1.3	0.89	10
MBFR/U	400	450	2.2	0.85	15

Lamps
Pacemaker SON control gear incorporates a separate electronic igniter. SON lamps that have an igniter device within the lamp envelope should not be used, as use of such lamps can lead to ballast components being damaged.

Circuit Fusing

Circuits controlling high pressure discharge lamps can momentarily experience high current at the point of arc ignition such that to avoid nuisance fusing, higher rated fuses should be used than may appear necessary from the stated running currents. For individual lamp circuits the appropriate fuse rating should be adopted.

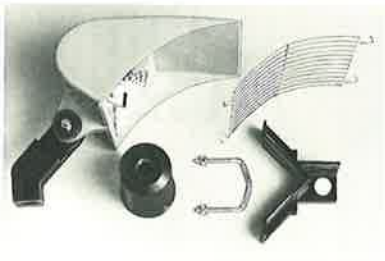
When group switching is intended using H.R.C. fuses the following guide formula can be adopted.

$$\text{Current of discharge lamps for H.R.C. fuse} = \frac{\text{Nominal lamp wattage} \times 5}{\text{Supply volts}}$$

e.g. $\frac{250W}{240V} \times 5 = 5$ Amps, therefore number of 250W lamps per 15A fuse = 3.

There are many types of MCB's but in general they could be regarded as equal to fuses using the current formula above. However, it is recommended that the supplier of the MCB be consulted.

Crompton Gem



Application

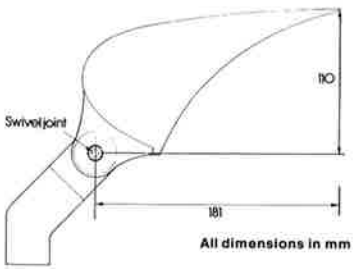
A versatile low cost area floodlight suitable for both outdoor or indoor applications, in such situations as car parks, building sites, sports and recreation areas, gardens, patios, driveways, and warehouses. Because of its simplicity and low cost it is particularly suitable for security lighting. Accessories available make Gem 2 suitable for surface or corner mounting and for horizontal or vertical pole fixing. A wire guard is available as an optional extra for additional lamp protection.

Description

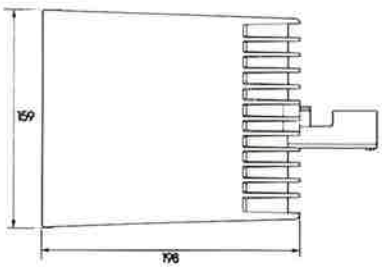
A general purpose wide angle open reflector type floodlight suitable for 300/500W linear tungsten halogen lamps. The one-piece body is formed from self-coloured yellow glass reinforced polyester resin (GRP) which does not corrode, rust or lose its colour.

The inner reflector, manufactured from anodised aluminium, effectively controls the light output and provides a well balanced spread of downward light whilst a swivel joint mounting arm allows a generous angle of movement from the horizontal downwards.

Manufactured to BS4533 Part 2.5 1971 **(IP23)** — spray protected.



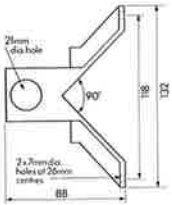
All dimensions in mm



Catalogue Numbers (Excluding lamps which should be ordered separately)

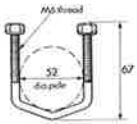
Cat. No.	Description	Weight (kg)
GEM 2X	GEM 2 floodlight	0.65
Accessories GEM 2UB	Universal bracket. Black with cable gland, for mounting on flat or corner surfaces or for horizontal or vertical pole fixing when used with GEM 2PC clamp.	0.13
GEM 2PC	Pole clamp. Zinc-pated steel. Use with universal bracket (GEM 2UB) for embracing a 51mm (2") OD pole.	0.035
GEM 2PS	Pole spigot. Black, for mounting over the end of a 51mm (2") OD pole.	0.175
GEM 2WG	Wire guard. Bright nickel plated steel clip on, for lamp protection.	0.045

GEM2UB

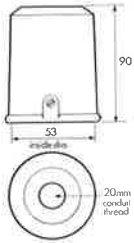


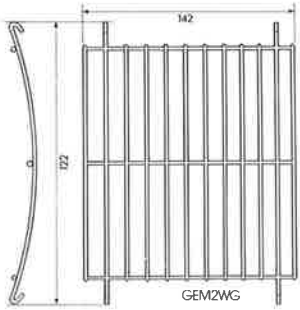
GEM2PC

(USE WITH GEM2UB)



GEM2PS





GEM2WG

Photometric Data

Peak intensity at 240V-500W: 5425 cds				
Beam spread	1/2 peak 1/10 peak	Above peak 15° 23°	Below peak 29° 74°	Azimuth ±42° ±60°
*Beam factor: 0.67				

Mechanical Data

Mounting:
Units are supplied with swivel jointed combined wiring box and mounting arm unit threaded for 20mm conduit mounting. Mounting can be effected either by direct conduit fixing, or pole mounting on a 51mm (2") OD pole using spigot for post top mounting and universal bracket and clamp for intermediate level mounting. The universal bracket can also be used for wall mounting, either on flat surfaces or corners.

Inner Reflector:
Anodised aluminium with stippled surface.

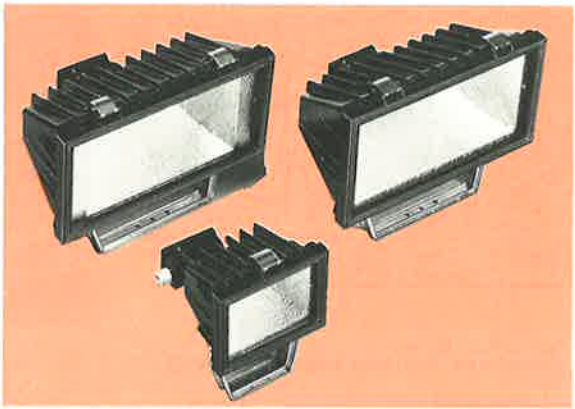
Wire Guard: (Optional)
Bright Nickel plated steel.

Electrical Data

Lampholders:
Porcelain pillar shrouds having spring loaded silver button contacts, suitable for R7S caps.

Wiring:
Heat resistant leads connect to a black injection moulded wiring chamber of acetal copolymer resin with 2 way terminal block and earth point. A gasketted aluminium cover plate effectively seals the chamber.

Crompton Guardian 2 Floodlights



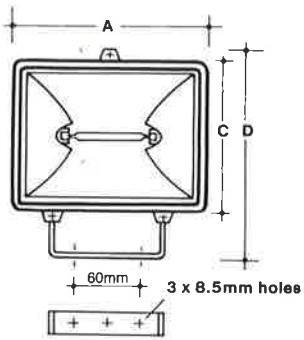
Application

A general purpose wide beam tungsten halogen floodlight suitable for security lighting, exterior industrial and public general lighting, sports and trading areas.

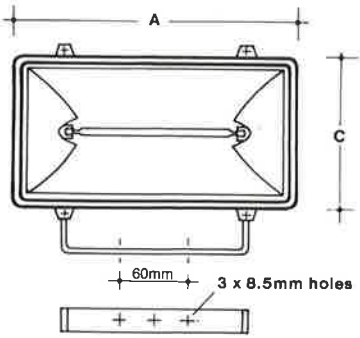
Description

A range of enclosed compact rectangular floodlights available in three different sizes suitable for 300/500W, 750/1000W or 1500W linear tungsten halogen lamps, giving a medium/wide beam distribution.

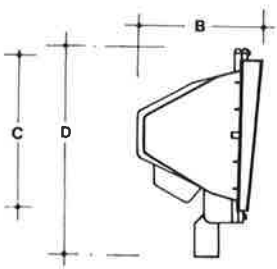
Ingress protected to **IP55** – dust and jet protected.



GT 500



GT 1000
GT 1500



GT 500
GT 1000
GT 1500

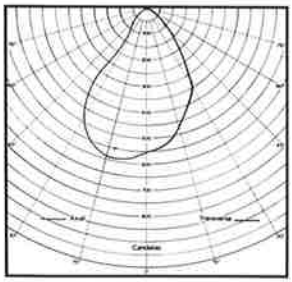
Range

Catalogue numbers exclude lamps which should be ordered separately.

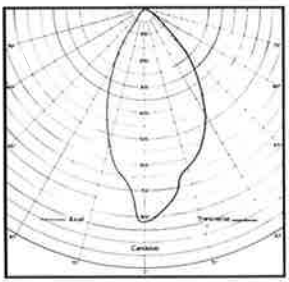
Lamp Watts	Catalogue Number	Weight (Kg)	Dimensions (mm)				Spare Front Glass Cat. No.
			Length (A)	Width (B)	Depth (C)	Height (D)	
300/500W	GT 500	1.6	187	186	147	253	AA700
750/1000W	GT 1000	4.0	398	229	224	335	AA701
1500W	GT 1500	4.2	398	229	224	335	AA701
Universal Pole Clamp	GFC4090	–	Suitable for 40mm to 90mm outside diameter poles.				

Photometric Data

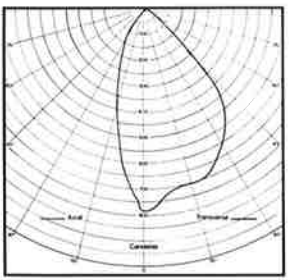
Typical Polar Curves
(Candelas per 1000 lamp lumens)
500W



Typical Polar Curves
(Candelas per 1000 lamp lumens)
1000W



Typical Polar Curves
(Candelas per 1000 lamp lumens)
1500W



Mechanical Data

Body
Diecast aluminium housing with cooling fins. Externally finished with matt black thermosetting epoxy paint. Polished hammered anodised aluminium reflector for efficient light control.

Front Glass
Hardened clear glass mounted on frame hinged to body, and sealed with silicone rubber gasket.

Installation
Supplied with adjustable galvanised steel stirrup bracket for surface fixing and orientation. Three fixing holes in stirrup as detailed on diagram.

Electrical Data

Lampholders:
Porcelain lampholders.

Wiring
Lampholders pre-wired to porcelain terminal block accepting up to 1 × 2.5mm diameter conductors, housed within weatherproof aluminium terminal box. Cable entry via cable gland of 12mm internal diameter.

Crompton Grenadier Floodlights

For GLS, MBF/U, MBTL and SON Lamps

Applications

These versatile floodlights are suitable for general purpose industrial and commercial installations e.g. security lighting for buildings, sports training areas, play area etc. Their cost also makes them attractive for temporary lighting of building sites.

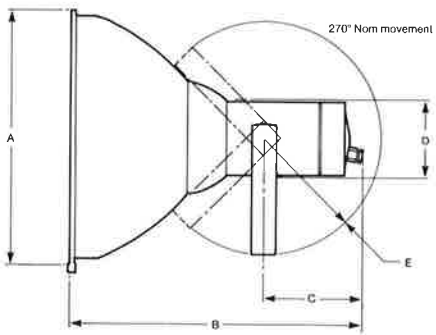
Description

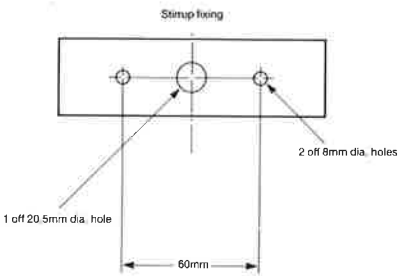
A range of four models of symmetrical beam, spun aluminium floodlights with a mounting stirrup and toughened front glass.

Classified **IP53** dust and spray-protected.

Dimensions

All dimensions in mm





Catalogue Numbers

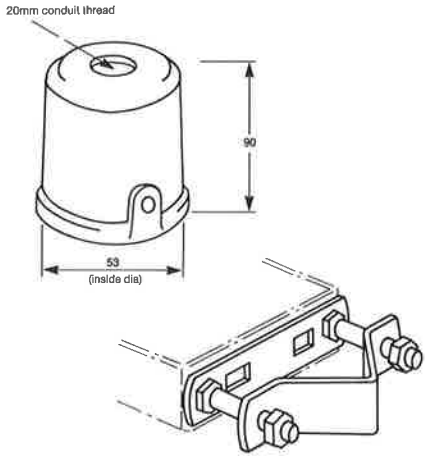
Excluding lamps which should be ordered separately

Catalogue Number	Lamp Watts and Type	Lampholder	Dimensions (mm)					Weight (kg)
			A	B	C	D	E	
GRF 80	80W MBF/U* 50W SON*	ES (E27)	225	260	95	100	175	1.33
GRF 150	100W GLS 150W GLS	BC (B22)	225	260	95	100	175	1.33
GRF 200	200W GLS 125 MBF/U* 70 SON*	ES (E27)	275	310	110	100	175	1.62
GRF 300	300W GLS 250W MBF/U* 250W MBT/L 150W SON*	GES (E40)	320	425	155	100	175	1.9

*Lamps require Control Gear. Appropriate Gear Boxes listed on pages 91/92

Accessories

Catalogue Number	Description
GEM 2PS	Pole spigot (51mm dia)
GFC 4090	Pole clamp for 40mm to 90mm poles. (Vertical only).



Mechanical Data

Body
Spun aluminium with mild steel stirrup brightened and anodised to AA15, BS1615.

Front glass
Toughened front glass retained to the body with a stainless steel ring seated on a neoprene gasket.

Mounting
Via stirrup. Pole clamp and pole spigot accessories available as optional accessories (see above).

Electrical Data

Lampholder
BC (B22), ES (E27) and GES (E40) lampholders, porcelain as standard.

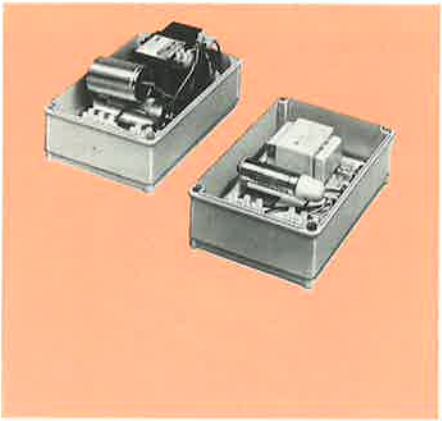
Control gear
Where required, separate control gear sets can be supplied ready wired in a weather-proof enclosure.

Wiring
The lampholder is prewired to a three way terminal block accepting up to 2.5mm^2 conductors.

Cable entry
Via a Nylon cable gland accepting 7-10.5mm diameter cable.

Crompton Gear Boxes

For MBF/U and SON Lamps



Application

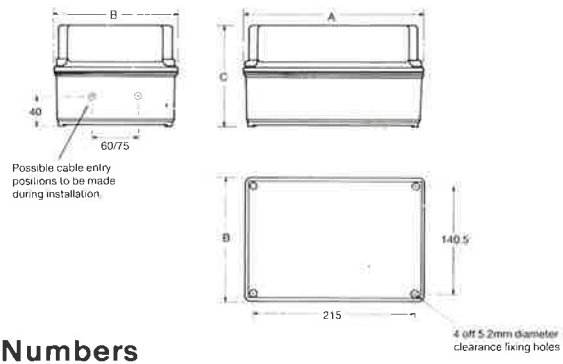
Gear Boxes for separate/remote mounting from the floodlight luminaire.

Description

Impact resistant moulded polycarbonate enclosure complete with control gear, factory wired and fitted to its own mounting plate.
All boxes are light grey self colour, double insulated and gasketted to ingress protection classification IP65.

Dimensions

All dimensions in mm



Catalogue Numbers

Excluding lamps which should be ordered separately

Catalogue Number	Lamp Watts and Type	Dimensions (mm)			Weight	Max. Ambient
		A	B	C		
GBM50	50W MBF/U	235	160	117	2.3	30
GBM80	80W MBF/U				2.4	20
GBM125	125W MBF/U				2.4	20
GBM250	250W MBF/U	235	160	167	4.4	20
GBS50	50W SON	235	160	117	2.3	30
GBS70	70W SON				2.3	25
GBS150*	150W SON*	235	160	167	4.5	25

*includes electronic igniter

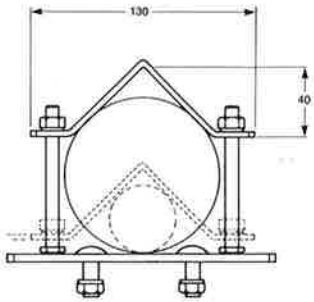
Mechanical Data

(1) For fixing to flat surfaces use the four fixing holes provided.

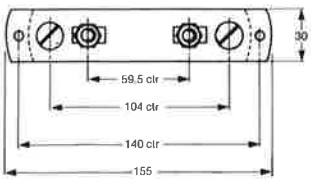
(2) The box can be strapped to a pole using pole clamp, catalogue number GFC4090 (illustrated below) which is suitable for 40-90mm diameter poles.

(3) Gear tray MUST always be mounted with ballast uppermost and terminal blocks at the bottom.

(4) Cable entries to be appropriately sealed to retain protective integrity of enclosure.



Clamp includes two M8 bolts, washers and nuts



Electrical Data

(1) Two terminal blocks are fitted at an angle to the gear tray, one for incoming mains, one outgoing to the separate floodlight luminaire(s).

(2) Bore of terminal blocks accepts up to 3 x 2.5mm^2 or 2 x 4mm^2 or 1 x 16mm^2 conductors.

(3) If mains cable has to pass adjacent to the control gear components it must have high temperature rated insulation or be protected by high temperature sleeving giving equivalent degree of protection.

Circuit Loads

MBF/U	Total Circuit Watts (Including Lamp)
50W	64
80W	92
125W	144
250W	278
SON	
50W	64
70W	85
150W	181

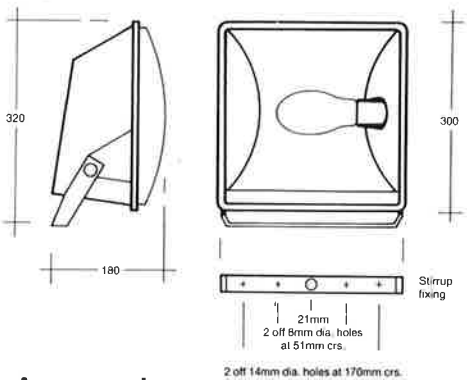
Crompton Galaxy

70 watt SON Lamp
General Purpose Floodlight

Application

Where general area lighting is required at economic levels of energy use such as all night security lighting, hotel and restaurant car parks, multiple store shopping complexes, van and lorry loading points etc. The unit has vandal resistant properties.

Dimensions (mm)



Description

An enclosed unit comprising a die-cast aluminium body incorporating lamp control gear and lampholder, factory wired to a fused terminal plug and socket, plus a specular anodised aluminium reflector. The housing interior is protected by the injection moulded clear polycarbonate lens cover which hinges up against a full perimeter gasket and is retained by two special key screws (key provided). Vertical adjustment is possible as the floodlight is mounted by pivot bolts on to a steel mounting stirrup. Horizontal adjustment is achieved using the appropriate accessories. Manufactured in compliance with BS4533:2.5 and IEC 598 for use in an ambient temperature between −25° and +40°C. Classified **IP65.** Dust right and jet protected. Class 1 earthed metalwork.

Catalogue Numbers

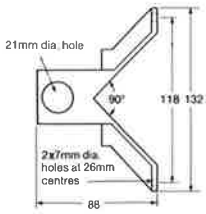
Lamp Watts	Catalogue No.	Weight (kg)
70 SON	GF70S includes lamp	4.6
80/125* MBF/U	GF80MX	4.6

*Tapped Gear to operate either lamp.

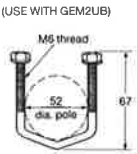
Accessories

Cat. No.	Description	Weight (kg)
GEM 2UB	Universal bracket. Black with cable gland, for mounting on flat or corner surfaces or for horizontal or vertical pole fixing when used with GEM 2PC clamp.	0.13
GEM 2PC	Pole clamp. Zinc-plated steel. Use with universal bracket (GEM 2UB) for embracing a 51mm (2") OD pole.	0.035
GEM 2PS	Pole spigot. Black, for mounting over the end of a 51mm (2") OD pole.	0.175
GFC 4090	Pole clamp for 40mm to 90mm poles (Vertical only)	—

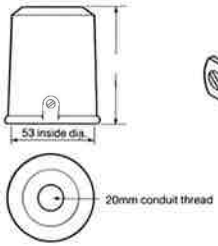
GEM2UB



GEM2PC



GEM2PS



GFC4090

Mechanical Data

Body
Die cast aluminium alloy, textured polyester bronze paint external finish, complete with factory wired ES porcelain lampholder and control gear to 5 amp fused plug and socket.
All fixed on removable gear tray.
Specular anodised aluminium reflector.

Front cover lens
Impact resistant clear polycarbonate.

Mounting stirrup
Formed steel, zinc plated, textured polyester bronze paint finish.

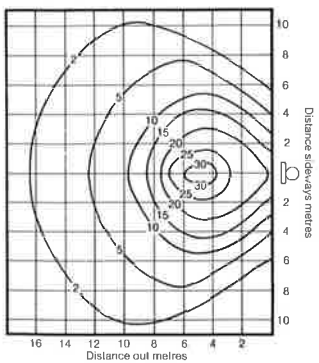
Electrical Data

70W ES cap SON lamp having its own internal igniter for 240V 50Hz mains operation within ambient temperature range of –25° to +40°C. Mains cable entry through cable gland located in the base of the housing. This gland accepts circular cable of diameters between 7 and 10mm for termination in a non-reversible socket that accepts up to 1x4mm^2 conductor.

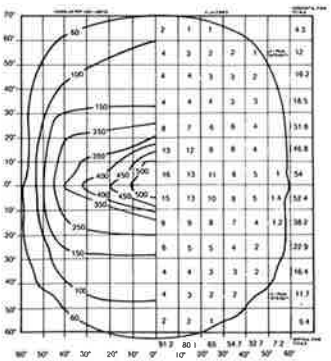
Photometric Data

Beam Angle To 1/10 Peak			Beam Angle To 1/2 Peak			Beam Factor
Vertical		Hor.	Vertical		Hor.	
Above Peak	Below Peak		Above Peak	Below Peak		
70°	63°	118°	23°	17°	86°	0.66

Typical Isolux curves for 70W SON Galaxy mounting height 5.0m. Aim 55°.



Combined Iso-Candela, Zone Flux data



Crompton Gladiator Floodlights

For: 150W to 400W SON and MBF/U Lamps
55W SOX Lamps

Application

These floodlights are designed for efficient lighting of outdoor areas such as stock yards, goods yards, service stations, car parks etc. The same luminaires may also be used for upward lighting of vertical surfaces.

Description

A totally enclosed unit constructed from fabricated aluminium with lampholder and integral control gear mounted on a detachable gear tray to operate a variety of discharge lamps up to 400W.

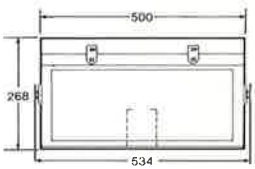
A fully gasketted extruded aluminium frame with toughened glass lens to protect the interior is hinged at the bottom and secured at the top by two special catches.

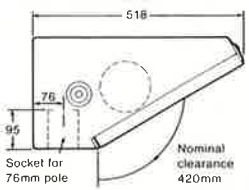
Included within the main body is a 76mm socket for pole or wall bracket spigot mounting. In addition an optional stirrup is available when the floodlight is to be mounted at ground level.

Manufactured in accordance with BS4533:2:5 and IEC 598 for use in an ambient temperature as tabulated. Classified **IP53** dust and spray protected. Class 1 earthed metalwork.

Dimensions

All dimensions in mm





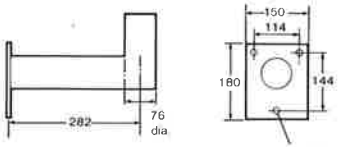
Catalogue Numbers

Excluding lamps which should be ordered separately

Catalogue Number	Lamp Watts and Type	Comprising		Weight (kg)	Ambient Temperature Range °C
		Housing	Gear Tray		
GLS150	150 SON	GLH100	GLG150S	14.0	−40
GLS250	250 SON	GLH100	GLG250S	14.4	to
GLS400	400 SON	GLH100	GLG400S	16.5	+40
GLM250	250 MBF/U	GLH100	GLG250M	13.8	−20
GLM400	400 MBF/U	GLH100	GLG400M	14.6	to
GLX055	55 SOX	GLH100	GLG055X	12.1	+40

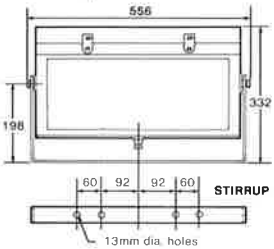
Optional Accessories

Cat. No. GLW102
A wall bracket spigot for use where poles might form an intrusion and a building wall is adjacent to the area to be lighted.



WALL BRACKET MOUNTING

Cat. No. GLC101
A steel mounted stirrup only for use when a greater range of angle adjustment is desired or when floodlighting from ground level is required. Supplied with the stirrup is a blanking plate to cover the spigot recess and a cable gland for flexible cable entry.



STIRRUP MOUNTING

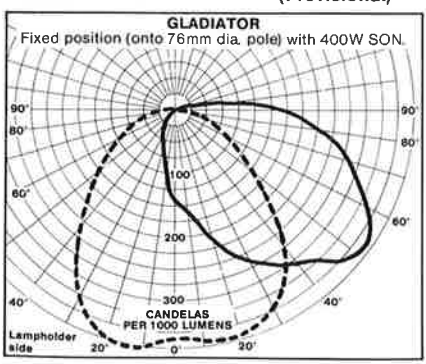
Mechanical Data

Body
Fabricated aluminium textured polyester bronze external finish. Complete with removable control gear tray and lampholder assembly wired to a 10 amp non-reversable 3-pin plug and socket. Specular anodised aluminium reflector.

Front cover lens
Gasketted toughened glass lens set in extruded aluminium frame which is secured and gasketted to the main housing by means of hinges along the lower edge and two special catches at the top.

Mounting
A 76mm integral socket is provided in the base of the luminaire for either pole or wall bracket spigot mounting.
Pivot bolts are provided at opposite ends of the luminaire body to accept an optional stirrup, the latter being supplied with a blanking plate and cable gland.

Photometric Data (Provisional)



Electrical Data

Lampholder
GES. Porcelain, for MBF/U and SON lamps.
BC Porcelain for SOX lamp.

Control Gear
Integral in housing to suit a variety of discharge lamps as shown in the table on page 1.
A separate electronic igniter is included for SON lamps.
Lamps having their own internal starting device should not be used.

Lamp Watts and Type	Circuit Load (Watts)	Power Factor	Current (Amps)
150 SON	169	0.98	0.72
250 SON or SON/T	274	0.91	1.25
400 SON or SON/T	422	0.87	2.02
250 MBF/U	268	0.85	1.32
400 MBF/U	421	0.89	1.97
55 SOX	64	0.95	0.28

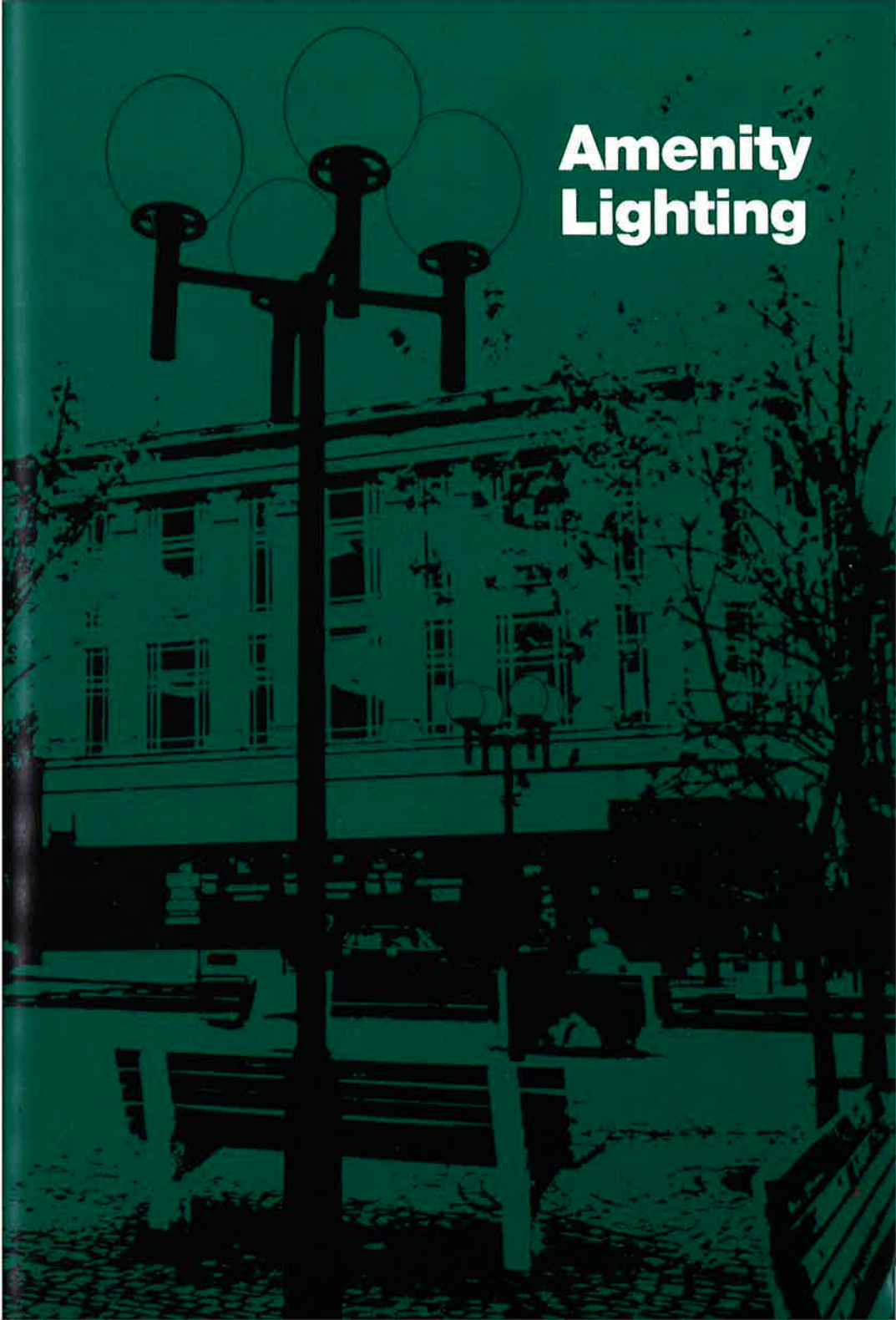
Wiring
Factory wired to 3-way 10 amp non reversable plug and socket. Mains cable entry through spigot socket in the base of the luminaire.

Beam Angle To 1/10 Peak			Beam Angle To 1/2 Peak		
Vertical		Hor.	Vertical		Hor.
Above Peak	Below Peak		Above Peak	Below Peak	
53°	82°	140°	35°	40°	90°

——— **Vertical – Peak at 53° Distribution**

- - - - **Horizontal through vertical peak Distribution**

Amenity Lighting



◀ Plaza tungsten multi-arm opal acorn lanterns.

▲ Twin-arm, column-mounted Strada amenity lighting lanterns at Granada Motorway Services, Ferrybridge.

◀ Twin-arm Strada and standard lighting bollards provide pedestrian access lighting at Ohmeda's new factory at Steeton, W. Yorkshire.

Crompton Bollard

Applications

The Bollard is an ideal unit for the illumination of pathways, car parks, shopping precincts and amenity areas to provide efficient and attractive installations without resorting to conventional, and possibly obtrusive column mounted luminaires.

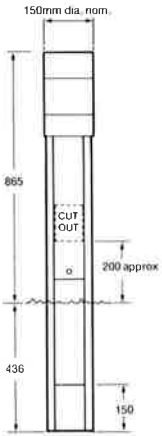
Description

The bollard unit comprises a die cast aluminium luminaire head incorporating a clear polycarbonate lens and ceramic lampholder assembly, supported on a circular extruded aluminium post which houses a heavy duty fused cut out, and, where applicable, control gear. Suitable for use with 100W GLS lamp, 50W MBF/U, 50W SON or 2 x PL9 lamp.

Constructed to BS 4533 **(IP53)**

Dimensions

All dimensions in mm

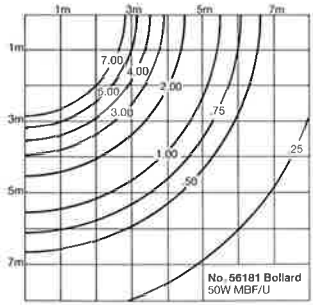


Catalogue Numbers

Excluding lamps which should be ordered separately.

Bollard			
Catalogue No.	**Lamp Watts and Type**	**Lamp Cap**	**Weight (kg)**
56180	50W SON	ES (E27)	9.2
56181	50W MBF/U	ES (E27)	9.2
56182	100W GLS	ES (E27)	7.2
56184	2 x PL9	Special	8.0

Photometric Data



Typical Isolux quarter diagrams for Bollard No. 56181.

Mechanical Data

Head
High pressure die cast aluminium alloy with neoprene gasket ensuring correct seating and effective sealing of the head to the post. The lens is constructed of injected moulded clear UV stabilised polycarbonate. External metal work etched, primed and finished textured dark grey; internal metal work zinc plated. Removal of the head is achieved by releasing the hexagonal socket cap head retaining screws and provides immediate access for re-lamping and servicing.

Post Assembly
Extruded section of aluminium alloy. External metal work etched, primed and finished textured dark grey; internal metal work zinc plated. A removable front panel, which is secured by a hexagonal socket headed screw, provides access to the wiring terminations.

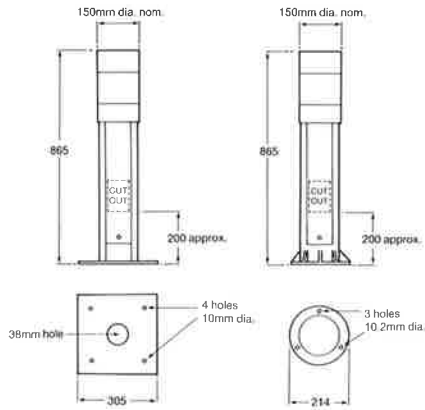
Installation
The recommended root depth is shown in the diagrams; for additional protection it is recommended that the buried portion of the post be bitumen coated before installation. Prior to bedding into soft ground, it is recommended that the flat plate, supplied complete with fixing screws, be fitted, which will restrict vertical movement of the post. This plate is not intended to provide above ground fixing to a solid surface (see options). An M8 Allen key is provided with each Bollard to release luminaire head and front access panel. To avoid unacceptable glare to car drivers the luminaire head should not be mounted more than 0.85m above adjacent road levels.

Electrical Data

Units are supplied internally pre-wired from 'cut out' terminal to lampholder; the heavy duty HRC fused 'cut out' has 4 terminals each accepting up to 25mm^2 conductors. A cut-away section at the base of the post allows cable entry below ground.

Optional Alternative Features
The Bollard can be supplied fitted with either Round or Square base plates suitable for surface fixing on to a solid foundation. Dimensional detail as shown below.

Ordering Procedure
For Round base plate models add suffix "/RB" to catalogue number.
For Square base plate models add suffix "/SB" to catalogue number.



Crompton Crownlight

Applications

The Post Crownlight provides an attractive alternative to the Bollard and creates a logical extension of ideas in the planning of exterior lighting layouts in public and private confines. The Lowland Crownlight is ideal for mounting at ground level on pre-formed plinths or parapet walls in similar locations. It can also be used as a ceiling luminaire in underpass walkways or covered ways.

Description

The Crownlight unit comprises a die cast aluminium finned luminaire head incorporating a clear poly-carbonate lens and ceramic lampholder assembly, supported on a circular extruded aluminium post which houses a heavy duty fused cut-out, and, where applicable, control gear. The Lowland Crownlight enables the luminaire unit to be mounted at ground level on pre-formed plinths.

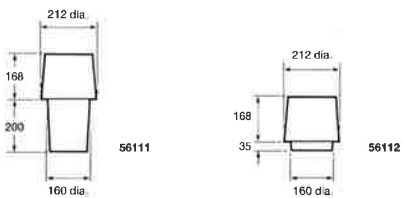
Suitable for use with 100W GLS lamp, 50W MBF/U, 50W SON or 2 x PL9 lamps.

Constructed to BS 4533 **(IP53)**

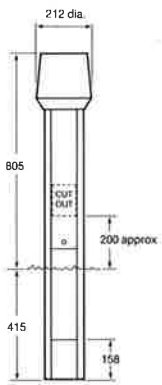
Dimensions

All dimensions in mm

Lowland Crownlights



Post Crownlight



Catalogue Numbers

Excluding lamps which should be ordered separately

Lowland Crownlight				Post Crownlight			
Catalogue No.	Lamp Watts and Type	Lamp Cap	Weight (kg)	Catalogue No.	Lamp Watts and Type	Lamp Cap	Weight (kg)
—	—	—	—	56369	50W SON	ES (E27)	9.5
56111	50W MBF/U	ES (E27)	4.8	56370	50W MBF/U	ES (E27)	9.5
56112	100W GLS	ES (E27)	2.7	56371	100W GLS	ES (E27)	7.7
—	—	—	—	56374	2 x PL9	Special	8.5

Mechanical Data

POST CROWNLIGHT

Head
High pressure die cast aluminium alloy collar permanently fixed to the post and a finned cage secured to the collar by three socket head screws. The lens is constructed of injected moulded clear UV stabilised polycarbonate. External metal work etched, primed and finished textured dark grey; internal metal work zinc plated. Removal of the head is achieved by removing the head screws and provides immediate access for re-lamping and servicing.

Post Assembly
Extruded section of aluminium alloy. External metalwork etched, primed and finished textured dark grey; internal metal work zinc plated. A removable front panel, which is secured by a hexagonal socket headed screw, provides access to the wiring terminations.

Installation
The recommended root depth is shown in the diagrams; for additional protection it is recommended that the buried portion of the post be bitumen coated before installation. Prior to bedding into soft ground it is recommended that the flat plate, supplied complete with fixing screws, be fitted, which will restrict vertical movement of the post. This plate is not intended to provide above ground fitting to a solid surface (see options). An M5 Allen key is provided with each Crownlight to release the finned cage and an M8 Allen key for the front access plate of the post type. To avoid unacceptable glare to car drivers the luminaire head should not be mounted more than 0.85m above adjacent road levels.

LOWLAND CROWNLIGHT

Construction
Consists of Crownlight head mounted on a tapered flanged cast aluminium alloy collar finished textured dark grey paint.

Installation
The flange has 3 x 6mm diameter holes equally spaced on a 180mm PCD for fixing. When installed at ground level, it is essential that the flange is approximately 12mm above the final level of the surrounding ground, to avoid the entry of water or loose earth when the head is removed for re-lamping or servicing.

Electrical Data

POST CROWNLIGHT

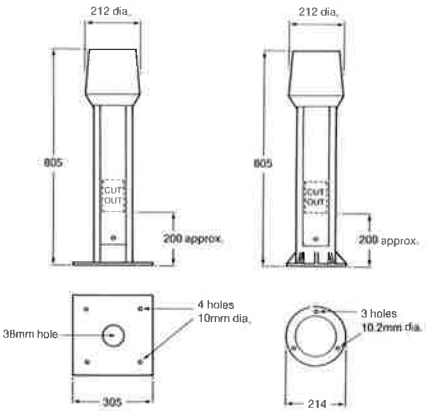
Units are supplied internally pre-wired from "cut out" terminal to lampholder; the heavy duty HRC fused "cut out" has 4 terminals each accepting up to 25mm^2 conductors. A cut-away section at the base of the post allows cable entry below ground.

LOWLAND CROWNLIGHT

The lampholder is fuse protected and pre-wired to a 2-way terminal block accepting up to 2 x 1.5mm^2 or 1 x 4mm^2 conductors. To protect the housing from ingress of water, no cable entry holes are provided, these must be drilled on site to suit the method of installation.

Optional Alternative Features
The Post Crownlight can be supplied fitted with either Round or Square base plates, suitable for surface fixing on to a solid foundation. Dimensional detail as shown below. (All dimensions in mm).

Ordering Procedure
For Round base plate models add suffix "/RB" to catalogue number.
For Square base plate models add suffix "/SB" to catalogue number.



Crompton

Plaza

Globelight Lanterns for Tungsten Lamps (GLS)

Application

These tungsten lamp globe lanterns are eminently suitable for exterior locations such as pedestrian areas, driveways and patios, gardens and town squares. A multi-arm version extends the scope and gives added interest to landscape applications.

Wall mounted globe lanterns are ideal for exterior installations having access roads or landscaped perimeters to buildings that would suffer aesthetically by the intrusion of conventional poles or columns. The use of wall brackets can also result in the saving of pole and underground cable installation costs.

Classified **IP33** : Spray protected.

Description

The lantern comprises a fabricated polycarbonate gallery for 60mm diameter pole mounting on to which three alternative shaped covers can be mounted. These high impact resistant covers are available in 'Drum' 'Acorn' and 'Spherical' shapes in a choice of two materials, 'Opal' and 'Smoke Brown'.

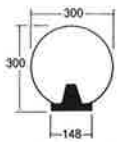
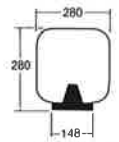
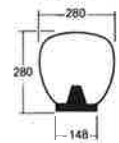
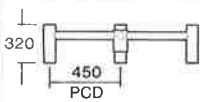
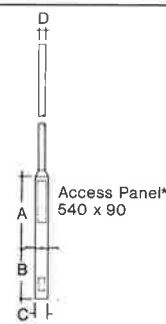
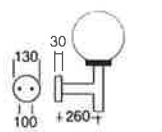
Multi-arm lantern support brackets are available for 2, 3, or 4 arm 76mm diameter column mounting.

A fabricated polycarbonate wall bracket complete with circular mounting plate and protection cover is available to accept all types of lantern.

The lantern gallery, wall bracket and multi arm support bracket are all finished matt black.

Range and Dimensions

(Catalogue Numbers exclude lamps which should be ordered separately)

Catalogue Number	Lamps	Description	Weight (kg)	Dimensions (mm)
Lantern only – to fit 60mm diameter columns				
PZ30PG	*100w G.L.S. (E.S. Cap)	300mm diameter opal polycarbonate sphere. Complete lantern including sphere, gallery and lamp holder.	0.94	
PZ30SG		As above but with transparent 'smoke brown' sphere.	0.94	
PZ28PD	*100w G.L.S. (E.S. Cap)	280mm diameter opal high impact resistant acrylic drum. Complete lantern including drum, gallery and lamp holder.	0.94	
PZ28SD		As above but with transparent 'smoke brown' drum.	0.94	
PZ28PA	*100w G.L.S. (E.S. Cap)	280mm diameter opal high impact resistant acrylic acorn. Complete lantern including acorn, gallery and lamp holder.	0.94	
PZ28SA		As above but with transparent 'smoke brown' acorn.	0.94	
	*Other lamp types may be used – details on request.			
Multi-arm support brackets for use with above lanterns. To fit 76mm diameter columns.				
PZG2		Two-arm	2.6	
PZG3		Three-arm	3.8	
PZG4		Four-arm	5.1	
Columns				
02241		4.8m (Above ground level) steel column complete with belled out base and access panel.	46.2	**Column A B C D** 02241 1000 620 140 76 PZCB26 1000 620 140 60 PZCS26 1000 620 60 60
PZCB26		2.6m (Above ground level) steel column complete with belled out base and access panel.		
PZCS26		2.6m (Above ground level) straight steel column.		*Not applicable to PZCS26
Wall brackets complete with above lanterns.				
PZW30PG		Single arm wall bracket complete with opal sphere.		
PZW30SG	100w C.L.S.	As above but with transparent smoke brown sphere.		
PZW28PD	(E.S. Cap)	As above but with opal drum	1.47	
PZW28SD		As above but with transparent smoke brown drum		
PZW28PA	Other lamp types	As above but with opal acorn		
PZW28SA	May be used – details on request	As above but with transparent smoke brown acorn		

Mechanical Data

Lantern
The lanterns have a fabricated matt black polycarbonate gallery for spigot mounting on to a 60mm diameter pole. The gallery is retained in position by means of 3 concealed screw head bolts that firmly grip the column spigot.

The lampholder assembly comprises an ES porcelain lampholder securely fitted to the gallery via a steel support strap. Lanterns incorporating the transparent 'smoke brown' covers also include a masking cone to conceal the porcelain holder.

The high impact resistant covers are secured to the gallery by a simple but effective "turn to lock" action.

The 300mm diameter spheres are constructed from polycarbonate whilst all other types are constructed from high impact resistant light stabilised acrylic.

Multi-arm support bracket
This bracket is made from heavy gauge aluminium tube, finished matt black, with an outreach of 454mm from the centre line of the lantern. For use on 76mm diameter poles only.

Wall bracket
The wall bracket comprises a circular wall mounting plate and projection arm of fabricated polycarbonate, finished matt black. The lantern is as described above.

Electrical Data

Cable entry is via the base of the lantern gallery direct to the lampholder. A cable support clamp is fitted to the base of the ES lampholder.

Lamp Types
These lanters are designed to accept 100W tungsten GLS lamps (ES) but other types of lamps can be accommodated. Details on request.

Crompton Strada

Amenity Globes For Discharge Lamps

Application

These elegant and practical exterior luminaires are suitable for a wide range of surroundings including public precinct lighting, car park areas, private roads and residential areas. The materials chosen offer a high degree of vandal resistance. Wall mounted amenity units are ideal for exterior installations having restricted access roads or landscaped perimeters to buildings that would suffer aesthetically by the intrusion of conventional poles or columns. Wall brackets can also result in the saving of pole and underground cable installation costs.

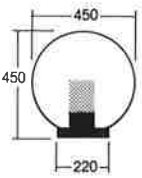
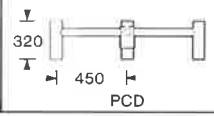
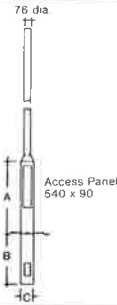
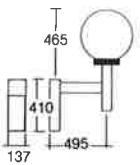
Description

One piece 450mm diameter polycarbonate spheres available in clear, smoke brown or frosted finish, supplied complete with gallery and light controlling glass refractor. They are suitable for use with 80/125W MBF/U or 70W SON lamps and available for wall bracket or column mounting. Multi-arm gantries are available for 2, 3 or 4 arm pole top mounting. Available in opal to special order, subject to minimum quantities.

Constructed to **IP23** Spray protected.

Range and Dimensions

(Catalogue Numbers exclude lamps which should be ordered separately)

Catalogue Number	Lamps	Description	Weight (kg)	Dimensions (mm)
Lantern only – to fit 76mm diameter columns				
STL45PC	All ES Cap	450mm diameter clear polycarbonate sphere. Complete lantern including sphere, gallery and refractor but excluding control gear.	4.0	
	80 watt MBF/U 125 watt MBF/U 70 watt SON			
STL45PS		As above but with 'smoke brown' polycarbonate sphere.	4.0	
STL45PF		As above but with 'frosted' polycarbonate sphere.	4.0	
Multi-arm support brackets for use with above lanterns. To fit 76mm diameter columns.				
ST2AG		Two-arm	2.6	
ST3AG		Three-arm	3.8	
ST4AG		Four-arm	5.1	
Columns				
02241		4.8m (Above ground level) steel column complete with belled out base, suitable for one or two control gear sets.	46.2	Column A B C 02241 1000 620 140 02246 1670 620 168
02246		As 02241 but with double door belled out base suitable for three or four control gear sets.	62.8	
Control gear sets for use with lanterns. For mounting in base of column.				
		Control gear sets comprise ballast and pf capacitor. Crompton 70W SON lamps have an internal ignitor. A separate ignitor device is not required.		
STG70S		70W SON (one set).	2.0	
STG80M		80W MBF/U (one set).	2.0	
STG125M		125W MBF/U (one set).	2.0	
Wall brackets complete with above lanterns and control gear.				
	All ES Cap	Fabricated aluminium alloy sections form the gear housing and arm assembly		
STW80PC STW80PS STW80PF	80w. MBF/U	Single arm wall bracket complete with 80watt MBF/U prewired control gear.	8.8	
STW125PC STW125PS STW125PF	125w. MBF/U	As above but with 125watt MBF/U control gear.	8.8	
STW70PC STW70PS STW70PF	70w. SON	As above but with 70watt SON control gear.	8.8	
Spare Spheres				
S45PC		Polycarbonate 'clear'		
S45PS		Polycarbonate 'smoke brown'		
S45PF		Polycarbonate 'frosted'		

Mechanical Data

Spheres:
Polycarbonate uv stabilised 450mm diameter spheres available in clear, smoke brown or frosted finish. Windage area 0.16m^2.

Gallery and Mounting:
A pole top mounting gallery of die cast aluminium alloy supports the lampholder and refractor assembly and has a spigot recess for 76mm diameter pole top and is locked into position by three hexagonal socket head screws.

The glass refractor gives a symmetrical light distribution and is positively located on to a spun aluminium mounting by three steel rods and this mounting is secured to the gallery by three screws through keyhole slots.

This carefully designed style of refractor assembly, completely conceals the lamp, lampholder and cable terminations and ensures a clean attractive appearance.

The spheres enclose this assembly by seating on to the gallery and are firmly retained by three specially designed swivel plates operated by socket screws accessible from beneath the gallery. External metal work is finished in polyester dark grey paint.

The E.S. lampholder supplied with each luminaire is suitable to accept an 80W or 125W MBF/U lamp or 70W SON lamp.

Multi-arm support brackets
Central spigot, designed to fit on to 76mm diameter columns.

Column:
Steel columns, manufactured in accordance with British Standard 1840-1960. The internal surfaces and root are bitumen coated and the exterior above ground level finished in red oxide primer. The control gear board is fitted behind a locked access panel.

Wall bracket:
Fabricated extruded aluminium alloy sections form the gear housing and arm assembly. Access to the control gear compartment is by means of a lockable door.
To protect the gear housing against ingress of water, no pre-formed fixing or cable entry holes are provided. These need to be drilled on site to suit requirements and should be packed with a suitable sealing compound.
External metalwork is finished in polyester dark grey paint.

Electrical Data

Control gear:
Control gear sets for each lamp are available, for mounting in column base, comprising ballast and power factor capacitor.

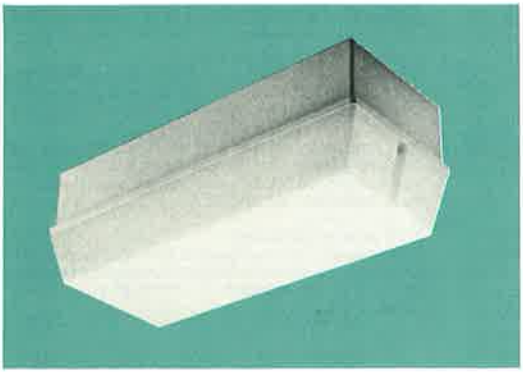
Crompton 70W SON lamps incorporate internal ignitor.

Column mounted version
Supply cables from the control gear terminate in a 3-way terminal block in the lantern gallery, the terminal capacity being sufficient to accept up to 2 x 2.5mm^2 or 1 x 6mm^2 conductors.
An optional mains cable fuseable cut-out assembly for mounting in the base of the column will accept up to 25 amp rated fuse (fuse not included). Cat. No. AFC25A.

Wall Bracket Version
All necessary control gear is included and is pre-wired to a fused terminal block which has terminal capacity to accept up to 2 x 2.5mm^2 or 1 x 6mm^2 conductors.

Crompton Albany

Fluorescent Bulkhead
For Exterior or Interior Use

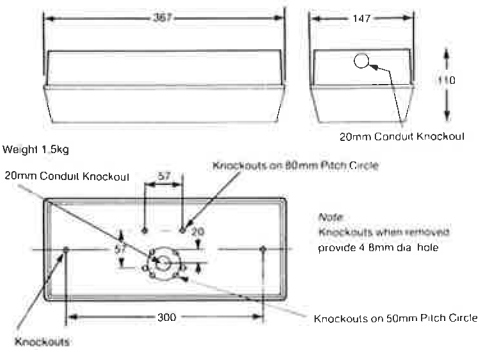


Applications

Suitable for a wide range of applications including amenity lighting of domestic, public, industrial and commercial premises.

Dimensions

All dimensions in mm



Catalogue Numbers

Excluding lamps which should be ordered separately

Complete Luminaires	Lamp Watts
AB81	1 x 8
AB82	2 x 8 Series circuit
AB82P*	2 x 8 Parallel circuit
AB83*	3 x 8
AB11*	1 x PL11

*Made to order

Description

Suitable for exterior or interior use this attractive luminaire is designed to house fluorescent tubes with lamp arrangements as detailed below.

Mechanical Data

Housing

Flame-retardant polycarbonate finished white. Full perimeter gasket **IP54.**

Diffuser

Opal, flame-retardant polycarbonate secured by two deeply recessed screws.

Gear Tray

Steel, with reflective white finish. Attached to the housing by a quickly detachable hinge at one end and locked by a captive push stud at the other.

Electrical Data

The input terminal block will accept 2 x 2.5 sq.mm. conductors and is housed on the underside of the full width gear tray.

The 2 x 8W series circuit incorporates one ballast to control the two lamps, with a starter switch for each lamp.
The 2 x 8W parallel circuit has one ballast and starter switch for each lamp. Operation of each lamp is independant of the other.
The 3 x 8W circuitry has one 2 x 8W series circuit plus 1 x 8W normal switch start circuit.

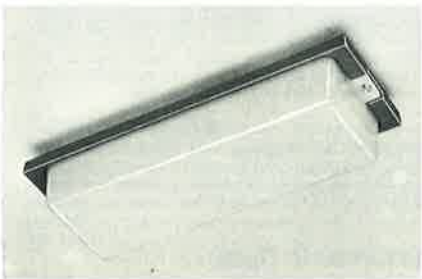
Power factor correction capacitors are not included.

Crompton

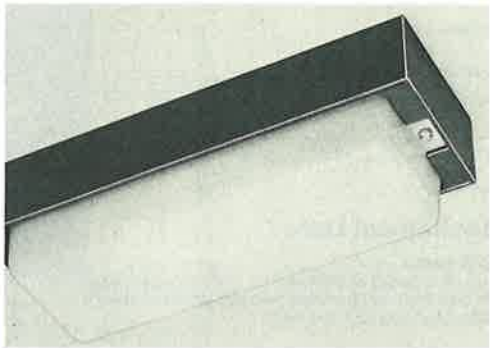
Fluorescent Bulkheads

For interior or exterior use

45008 series



56063 series



45041 series

Applications

Crompton fluorescent bulkheads are suitable for a wide range of applications including amenity lighting of public, industrial and commercial premises.

Description

Three ranges of bulkheads, each with aluminium body and opal polycarbonate diffuser.

The 45008 series has an extruded body with a cast aluminium frame attached, suitable for recessed mounting and available in two or three lamp versions for use with 8W or 13W fluorescent tubes.

The 45041 series is an aluminium extrusion suitable for surface mounting and available in two and three lamp versions for use with 8W and 13W fluorescent tubes, with two screw fixed diffuser.

The 56063 series feature die cast alloy bodies suitable for surface or semi-recessed mounting and available in two or three lamp versions for use with 8W fluorescent tubes.

Bulkheads are constructed to BS 4533 section 2.2, class 1. Classified **IP53** dust and spray protected.

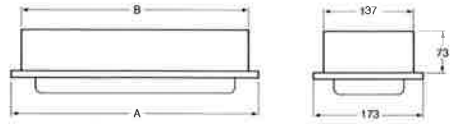
Catalogue Numbers

Excluding lamps which should be ordered separately.

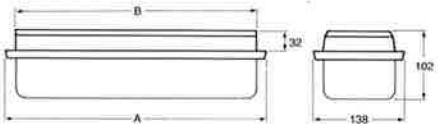
Catalogue No.	Rating	Length mm		Weight	Spare Diffuser
		A	B	(kg)	Cat. No.
45008	2 × 8W	394	364	3.5	92026
45010	2 × 13W	622	592	4.6	92027
45018	3 × 8W	394	364	3.7	92026
45020	3 × 13W	622	592	5.0	92027
45041	2 × 8W	405	—	3.4	90076
45042	3 × 8W	405	—	3.5	90076
45043	2 × 13W	621	—	4.3	92633
45044	3 × 13W	621	—	4.7	92633
56063	2 × 8W	397	350	2.8	90076
56065	3 × 8W	397	350	2.9	90076

Dimensions

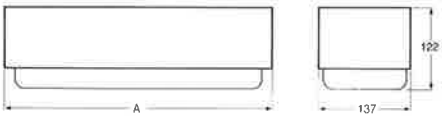
All dimensions in mm



45008 Series



56063 Series



45041 Series

Mechanical Data

45008 Series
Body of extruded aluminium with welded diecast alloy end caps and cast aluminium frame; external metal work finished textured dark grey paint.

Diffuser of opal polycarbonate clamped onto a sealing gasket within the main body of the bulkhead by means of the removable aluminium front frame. The frame is fixed by two special screws (A key provided with each bulkhead).

Suitable for recessed mounting; minimum dimensions of recess being 369mm (long) × 140mm (wide) × 73mm (deep) for the 45008 and 45018 and 597mm (long) × 140mm (wide) ×73mm (deep) for the 45010 and 45020. These need to be drilled on site to suit requirements, and should be packed with suitable sealing compound.

45041 Series
Body of extruded aluminium with welded diecast alloy end caps; external metal work finished textured dark grey paint.

Diffuser of Injection moulded impact resistant opal polycarbonate with effective sealing of body achieved by formed neoprene gasket. Diffuser is attached by two key type screws, a special key being provided with each luminaire to permit removal by authorised personnel only.

Suitable for surface mounting, no pre-pierced fixing or cable entry holes are provided. These need to be drilled on site to suit requirements and should be packed with suitable sealing compound.

56063 Series
Body of pressure diecast corrosion resistant lightweight aluminium alloy; external metal work finished textured dark grey paint.

Suitable for surface or semi-recessed mounting, minimum dimensions of recess being 355mm (long) × 100mm (wide) × 38mm (deep). Each end of the luminaire is drilled and tapped for 20mm conduit entry, and supplied with blanking plugs in position.

Diffuser of Injection moulded impact resistant opal polycarbonate with effective sealing of body achieved by formed neoprene gasket. Diffuser is attached by two key type screws, a special key being provided with each luminaire to permit removal by authorised personnel only.

Photometric Data

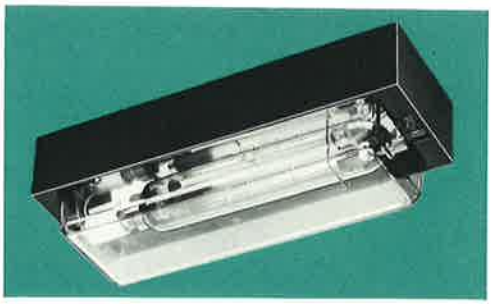
Rating	DLOR	ULOR	LOR	S/HM Nom.
2×8W	54%	7%	61%	1.5
3×8W	53%	5%	58%	1.5
2×13W	52%	17%	59%	1.5
3×13W	47%	13%	60%	1.5

Electrical Data

Control Gear:
HPF switchstart control gear as standard; separate circuits ensure that failure of one lamp does not affect another, except 3×8W version where outer tubes are wired in series — pair configuration. Gear is mounted on removable white sheet steel tray, and connected to a terminal block via a socket, which allows easy installation and removal of gear tray.

Wiring:
A fused 3 way terminal block accepting up to $3\times1.5mm^2$ or up to $1\times4mm^2$ conductors is fixed to main body.

Crompton SOX Lamp
Bulkheads



Applications

These luminaires are suitable for economical external lighting of premises by providing general lighting for safe movement of personnel and added security of the premises. They are particularly suitable for overhead covered ways or canopy lighting.

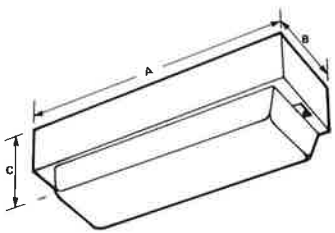
Description

These robust weather protected and vandal resistant luminaires are based on a housing fabricated from extruded aluminium section. The clear polycarbonate diffuser seats on to a neoprene gasket and retained by special keyhead captive screws.

Opal Diffusers are available as an alternative to clear. Please state preference when ordering.

Control gear to operate the SOX lamp is fitted and wired within the housing, terminating at a fused terminal block that accepts up to 2.5mm² conductor or equivalent. A polished aluminium reflector behind the lamp ensures full advantage is taken of the high light output but low power consumption of the SOX lamp.

Dimensions



Catalogue Numbers (Excluding lamps which should be ordered separately)

Catalogue Number	Type	Lamp Watts	Dimensions (mm)			Weight kg	Spare Diffuser Cat. No.
			A	B	C		
45037	Bulkhead	18	406	137	120	2.0	92636
45039	Bulkhead	35	406	137	120	2.5	

Technical Guidance Notes

Installation – Bulkhead

When vertically mounted, lampholder must be at the top. At no time must lampholder position be more than 20° below the horizontal.

To retain the integrity of the ingress protection, IP53, no fixing or cable entry holes are provided. Dimple marks at each end of the housing will assist on-site drilling of the required diameter cable entries. A back entry hole can be drilled generally where required but preferably 175mm from the lampholder end plate and 30mm to one side of the centre line for best proximity to the terminal block.

All holes that pierce the housing should be suitably sealed with a proprietary sealant.

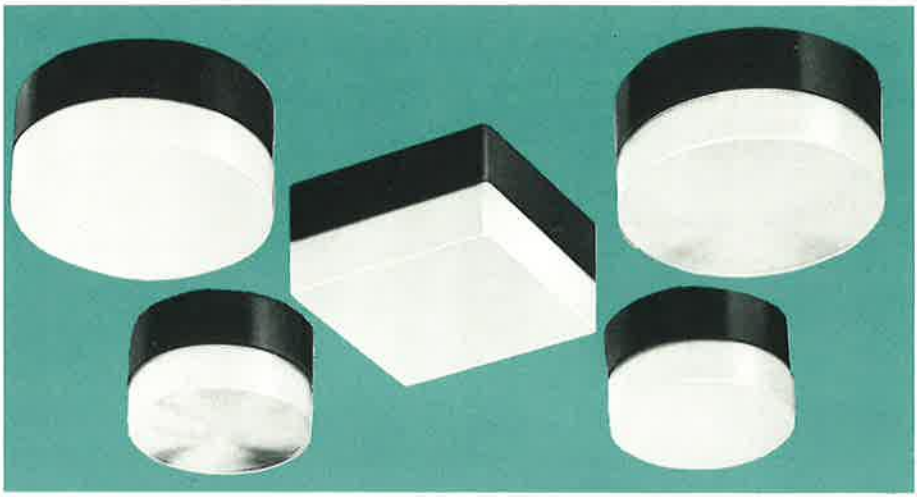
If the incoming supply cables pass adjacent to the ballast then the lengths of heat resistant sleeving supplied with each luminaire should be used to protect the conductor insulation.

Photometric Data (Provisional)
Electrical Data (240v 50Hz)

Lamp Watts	TLOR	DLOR	Input Watts	p.f.	Line Current Amps
18 35	0.74	0.71	25 48	0.95 0.92	0.12 0.22

Crompton GLS Range

For exterior or interior use



Application

The GLS range of luminaires combines low cost with high quality and are suitable for an extensive range of applications in both interior and exterior situations, including areas where impact resistance and corrosion resistance must be combined with an attractive appearance.

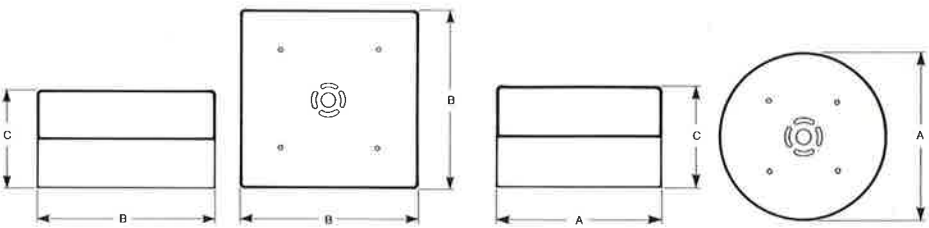
Description

A range of totally enclosed, impact resistant, non corrodable luminaires, with contrasting black polypropylene base and a choice of opal or prismatic snap fix polycarbonate diffusers. Circular or square versions are available for 75 or 100W (max) GLS lamps with BC lampholder as standard.

Manufactured to BS4533 **IP23** – rainproof.

Dimensions

All dimensions in mm.



Catalogue Numbers

Excluding lamps which should be ordered separately

Catalogue Number	Lamp Watts	Diffuser	Weight (kg)	Dimensions (mm)			
				diameter (A)	Width (B)	Depth (C)	Fixing Centres
GC75	75W	Circular opal	0.45	200	–	120	134
GC76	75W	Circular prismatic	0.52	200	–	120	134
GC100	100W	Circular opal	0.53	250	–	120	180
GC101	100W	Circular prismatic	0.59	250	–	120	180
GS100	100W	Square opal	0.60	–	230	125	185
GG5	–	BS Box gasket	–	–	–	–	–

Photometric Data

Type	DLOR	ULOR	LOR	BZ	S/Hm Nom
Opal	43%	7%	50%	5	1.5
Prismatic	51%	10%	61%	5	1.5

Mechanical Data

Body:
Injection moulded black ABS and polypropylene. An aluminium reflector is provided for increased light output, removable for mains connection.

Diffuser:
Seamless precision, moulded translucent polycarbonate, opal or prismatic, snap-on fix.

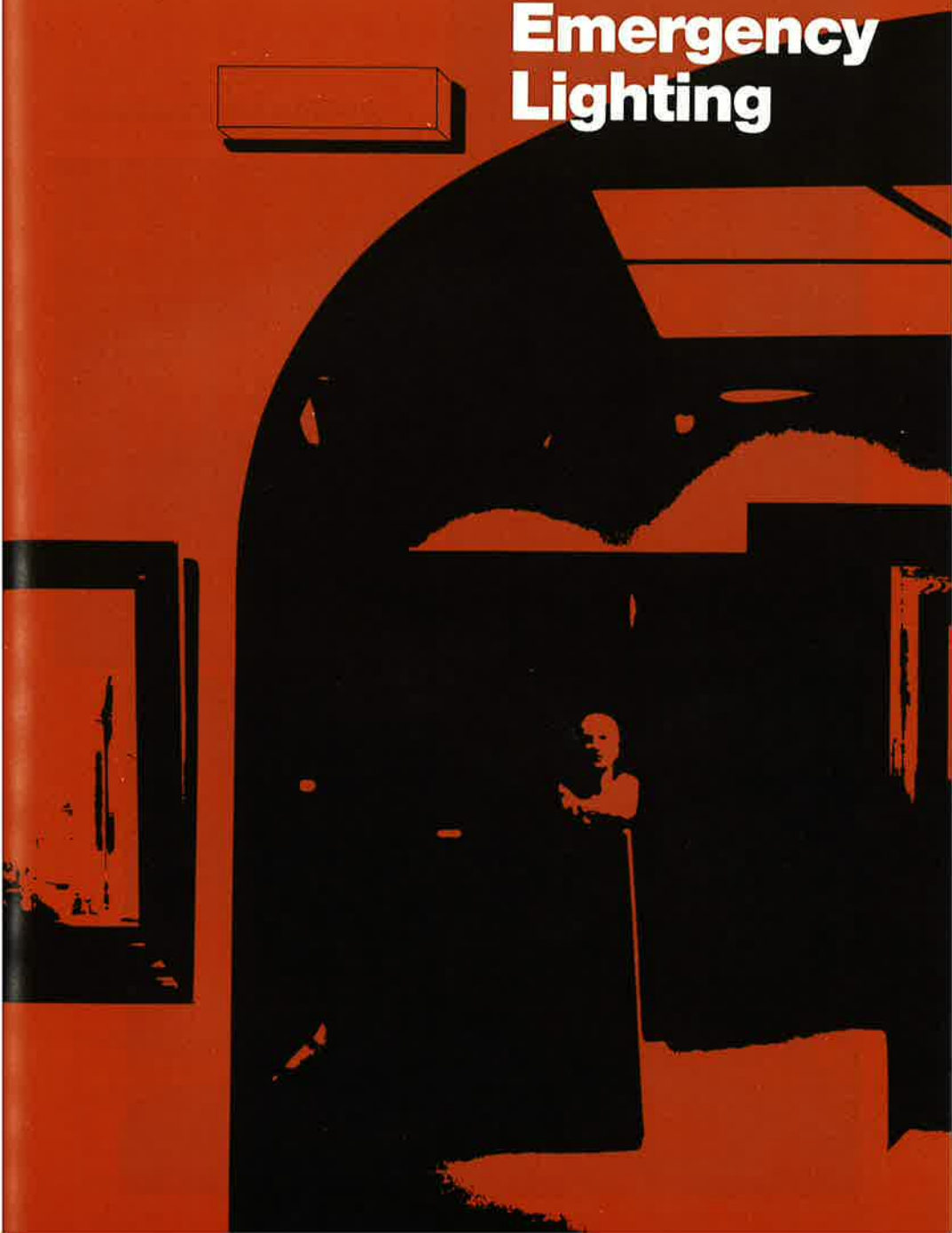
Installation:
Suitable for surface mounting on walls or ceilings, supplied with moulded fixing centres including BS box positions. When used in exposed locations, an optional gasket (Catalogue Number GG5) is available to seal body to BS box.

Electrical Data

Lampholder:
Porcelain BC lampholder as standard.

Wiring:
Galleries supplied pre-wired with heat resistant tails. An internal terminal block location is provided for use when suitably sleeved mains cables are to be connected within the housing. (The terminal block itself is not supplied with luminaire).

Emergency Lighting



◀ 8W fluorescent Albany emergency exit luminaire at Fordham Plastics Ltd., Ilkley.

▼ Emergency lighting luminaire from The Crompton Polylite range.

▼ 4W Clublite in 'Hadley's' nightclub Kingston-upon-Thames.

Crompton Polylite

ICEL approved
Emergency Lighting

For interior use
Non-maintained,
One hour or
three hour duration.

Applications

Stairways and corridors in hotels, boarding houses, industrial and commercial premises; toilets, small reception rooms.

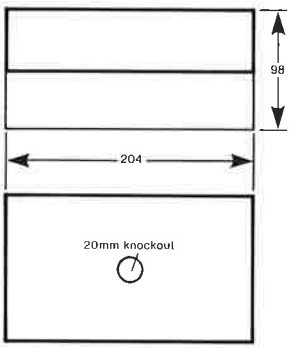
Description

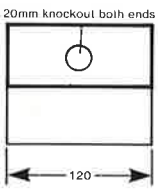
The Polylite range is admirably suited to internal installations where an easily fitted, attractive, well finished and reliable luminaire is required.

Classified **IP20**

Dimensions

All dimensions in mm





weight 1.5kg

Catalogue Numbers (Complete with lamp)

Luminaire	Catalogue Numbers			Type	Emergency Mode Duration (Hours)	Lamp Watts	Self adhesive legends (All lettering in green)	
	Complete Luminaire	Gear Tray	Battery Pack				Catalogue Numbers	Legend Description
Polylite	EP241N3B	GT41N3B	RBP24A	Non-Maintained	3	1 x 4 (Fluorescent)	E10E E10F	Exit Fire Exit

Photometric Data

Luminaire Mounting Height Above Floor (m)	Illuminance Directly Beneath Luminaire (Lux)	Minimum horizontal illuminance (Lux) along centre line between luminaires							
		0.2		0.3		0.4		0.5	
		Maximum Spacing between luminaires (m)							
		T	A	T	A	T	A	T	A
Luminaire: Polylite 1 x 4 watt fluorescent 'White' lamp EP241 N3B									
2.0	1.6	8.3	6.4	7.1	5.5	6.2	5.0	5.6	4.5
2.5	0.95	8.7	6.9	7.2	5.9	6.2	5.2	5.5	4.7
3.0	0.45	8.8	7.1	7.2	6.0	6.2	5.2	5.4	4.7

Mechanical Data

Housing
Steel – anti rust treated and finished in white epoxy resin paint.
20mm knockouts in base and at each end.

Diffuser
Opalescent flame retardant polycarbonate to BS2782. Secured by two projections into slots in housing ends.

Gear Tray
Steel with reflective white finish. Attached to housing with two screws.
Light emitting diode indicates mains on and battery charging.

Legends
Self adhesive easily applied legends are available for fixing on site.

Installation
Recommended maximum ambient temperature 25°C. If required to operate a higher temperature, we should be consulted.

Electrical Data

Battery
Sealed nickel cadmium. Recharge time 24 hours. Push on connector to gear tray.

Connections
Fused mains input terminal block in housing will accept 2 x 1.5 sq. mm. conductors. Luminaires must be connected to an unswitched mains voltage supply which may be isolated through a key switch to facilitate testing. The key should be retained by the person responsible for routine testing and maintenance.

Maintenance

Occasional re-lamping will be necessary. BS 5266 Pt. 1. 12.2.3. recommends that power failure be simulated:–

(1) For a short period once a month to check that the emergency function is operational.

(2) Every six months the tests to continue for one hour.

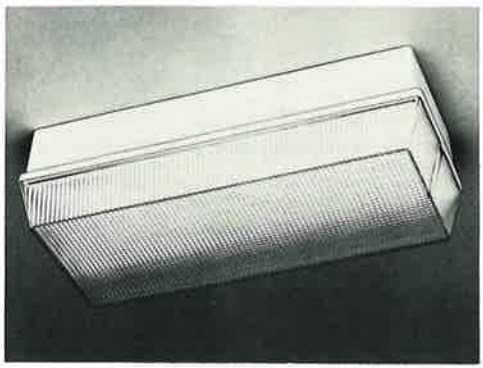
(3) Every three years tests to continue for the full duration period if over one hour unless otherwise instructed by the enforcing authority.

Packed with each luminaire are installation notes and a Maintenance Record Card giving guidance to maintenance procedures. It is recommended that a copy of the notes be passed to the person responsible for the future operation and maintenance of the installation and that the record card is retained in a safe place and appropriately completed at each test time to act as a log of the installation condition.

Crompton Albany

For Interior and Exterior use
Non-maintained
Maintained, Sustained
One hour or three hour duration

ICEL approved Emergency Lighting



IP54

IP20

Applications

Places of public entertainment and assembly. Hotels, restaurants, public houses, commercial and industrial premises, hospitals, nursing and old persons homes.

Description

The Albany Emergency range of luminaries has been designed to comply fully with the ICEL certificate of approval for self contained Emergency Lighting luminaires "ICEL 1001 1978" and is designed to meet ICEL 1002, BS 4533 Section 102-22 and IEC 598-2-22.

Its design, manufacture and performance satisfy the rigorous tests involved, giving added reassurance to the user.

With neat trim external line this attractive range uses modern solid state circuitry and technology that controls the correct monitoring of the battery charging and mains voltage sensing for fast switch-over to emergency mode operation in the event of mains failure.

The Albany Range is suitable for interior locations as pendant, surface or semi-recessed mounting. For exterior surface mounting use **IP54** model.

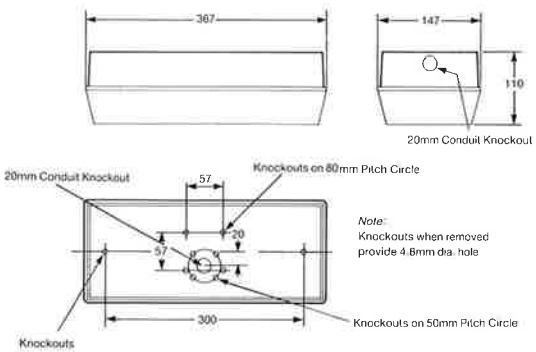
Clear self-adhesive legends are available.

Maintenance is simplified with essential spares reduced to the minimum.

These design features enable distributors to offer a comprehensive selection of emergency luminaires for a wide range of situations.

Dimensions

All dimensions in mm



Luminaire Catalogue No.	Weight including battery (kg)
EAB81M1	1.75
EAB81M3	1.75
EAB81N1	1.5
EAB81N3	1.5
EAB81S1	1.75
EAB81S3	1.75

Catalogue Numbers

Complete with lamps

Complete Luminaire	Type	Emergency Mode Duration (Hours)	Lamp Watts (max)	Self-adhesive Legends for use with EA and EAD luminaires	
				Catalogue Numbers	Legend Description
Surface Mounting				All lettering in Green	
EAB81N1	Non-maintained	1	1 x 8W	ELE	Exit
EAB81M1	Maintained	1	1 x 8W	ELER	Exit▶
EAB81S1	Sustained	1	2 x 8W*	ELEL	◀Exit
				ELX	Emergency Exit
				ELXR	Emergency Exit▶
EAB81N3	Non-maintained	3	1 x 8W	ELXL	◀Emergency Exit
EAB81M3	Maintained	3	1 x 8W	ELF	Fire Exit
EAB81S3	Sustained	3	2 x 8W*	ELEA	Exit, English/Arabic

*One lamp on mains supply. One lamp on emergency supply

Double-sided direction sign luminaire

The basic Albany housing and control gear tray assembly is used in conjunction with a separately packed deeper formed opal diffuser. The combination assembles into a double sided direction sign model for interior locations to the appropriate choice of self-adhesive legends can be applied.

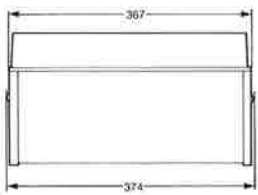
When directional arrows form part of the legend one of each arrow direction must be ordered.

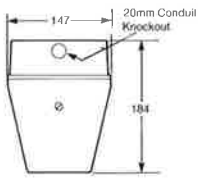
Surface Mounting, Double Sided Direction Signs						
Catalogue Numbers			Type	Emergency Mode Duration (Hours)	Lamp Watts (max)	Weight (kg) including battery
Complete Luminaires	Housing c/w Gear Tray	Diffuser# only				
EABD81N3	EABH81N3	EAD	Non-maintained	3	1 x 8	1.64
EABD81M3	EABH81M3	EAD	Maintained	3	1 x 8	1.9
EABD81S3	EABH81S3	EAD	Sustained	3	2 x 8*	1.9

Diffuser packed separately from housing

* One lamp on mains supply. One lamp on emergency supply

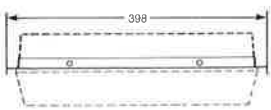
N.B. Fixing detail of housing given overleaf.

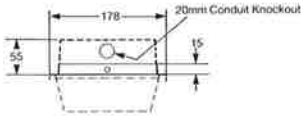




Semi-recessed models

Surface mounting luminaires can be readily adapted for semi-recesssed installation using the optional extra bezel which slips over the luminaire housing and rests on the body flange. This enables the luminaire body to be recessed into a formed aperture the edges of which are concealed by the bezel.





N.B. Fixing detail of housing given overleaf.

Minimum recommended aperture dimensions

Length	368mm
Width	148mm
Depth	60mm

Overall flange dimension

Length	398mm
Width	178mm

Bezel frame for use with above models
Catalogue number – **EAF**

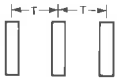
When ordering quote complete catalogue numbers.
e.g. EAB81N1/EAF
EABD81N3/EAF/Selected direction legends.

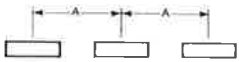
Photometric Data

The luminaire spacings tabulated to achieve the stated illuminance levels, are based on calculations that include all the required modifying service factors of luminaire and battery performance and output when used in 25°C ambient temperature as required by BS.5266 "Code of Practice for the Emergency Lighting of Premises".

Owing to the wide variety of site conditions and possible cleaning programmes, outside the equipment suppliers control, no allowance has been made for light loss due to the collection of dust and dirt on the luminaires.

Users are advised to assess the potential percentage light loss relative to site conditions and then select a proportionally higher initial minimum illuminance and related reduced spacing to compensate to achieve the advised minimum escape illuminance of 0,2 Lux at a time just prior to luminaire cleaning.





Luminaire Mounting Height above floor (m)	Illuminance Directly Beneath Luminaire (Lux)	Min. Horizontal illuminance (Lux) along centre line between luminaires							
		0,2		0,3		0,4		0,5	
		Max. spacing between luminaires (m)							
		T	A	T	A	T	A	T	A
Non-maintained 1 Hr. and 3 Hr. Emergency Mode									**D1099**
2,5	4,6	16,0	10,7	14,3	9,5	12,7	8,6	11,5	8,1
3,0	3,2	17,4	11,5	14,7	10,1	12,6	9,3	11,0	8,6
3,5	2,35	18,2	12,2	14,7	10,6	12,2	9,8	11,0	9,2
4,0	1,8	17,6	12,8	14,4	11,2	12,5	10,1	11,2	9,3
5,0	1,15	17,3	14,0	14,5	12,0	12,6	10,6	11,2	9,8
Maintained 1 Hr. and 3 Hr. Emergency Mode									**D1099**
2,5	4,2	15,6	10,7	14,0	9,2	12,3	8,3	10,7	7,8
3,0	2,9	16,8	11,2	13,9	9,8	11,6	8,9	10,3	8,3
3,5	2,15	17,6	11,8	13,5	11,8	11,7	10,4	10,6	8,7
4,0	1,65	16,8	12,5	13,4	11,0	11,9	9,7	10,8	8,9
5,0	1,05	16,6	13,6	13,6	11,6	12,0	10,2	10,8	9,3
Sustained 1 Hr. and 3 Hr. Emergency Mode									**D1100**
2,5	4,85	12,7	10,7	11,0	9,6	11,2	8,9	9,5	8,3
3,0	3,4	13,2	11,6	12,0	10,4	10,8	9,6	10,0	8,9
3,5	2,5	14,4	12,6	12,6	10,9	11,2	9,9	10,3	9,2
4,0	1,9	14,9	13,1	13,1	11,5	11,7	10,3	10,7	9,6
5,0	1,2	16,0	14,0	13,6	12,2	12,2	11,0	11,2	10,0

Mechanical Data

Housing
Polycarbonate, flame retardant, self-colour, white.

Diffuser
Prismatic flame retardant polycarbonate to BS.2782. Secured by two deeply recessed screws.

Gear Trays
Steel with reflective white finish. Attached to housing by a quickly detachable hinge at one end and locked by means of quick release captive studs at the other. This facilitates easy removal after withdrawal of the non-reversible mains plug from the input terminal block on the gear tray.
The charging circuit can fully charge a discharged battery in 24 hours.

Double-sided direction sign model
The common housing and gear tray as described above has been utilised. The end caps are of anti-rust treated steel finished in white epoxy finish. They support the opalescent flame retardant plastic diffuser on which selected self-adhesive legends can be placed.

Bezel frame for semi-recessed models
Bezel frames are of steel construction finished white. The frame is supported by the luminaire housing and requires no other fixing support.

Light emitting diode (LED)
Indicates "mains on" and battery charging.

Legends
Self-adhesive easily applied legends are available for fixing on site, 75mm high letters.

Installation

The in-service performance and photometric data shown is based on an ambient temperature of 25°C. If required to operate at a higher temperature we should be consulted.

Electrical Data

Connections
The mains supply input terminal block on the base of the housing is wired to a non-reversible socket connector and will accept 2 x 1.5 sq. mm conductors.
The unit should be connected to an unswitched mains voltage supply. In maintained and sustained mode facilities are available to switch the mains-operated lamp without affecting the emergency mode capability.

Cable entry
BS knock-out in base 20mm knock-outs in ends.
Adequate space for through wiring.

Maintenance

Occasional re-lamping will be necessary.
BS.5266 Pt. 1 12.2.3. recommends that power failures be simulated:-
(1) For a short period once a month to check that the emergency function is operational.
(2) Every six months the tests to continue for one hour.
(3) Every three years tests to continue for the full duration period if over one hour unless otherwise instructed by the enforcing authority.

More complete guidance is provided in BS.5266 Pt. 1.

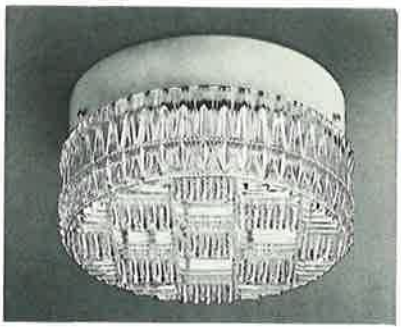
Packed with each luminaire are installation notes and a Maintenance Record Card giving guidance to maintenance procedures. It is recommended that a copy of the notes be passed to the person responsible for the future operation and maintenance of the installation and that the record card is retained in a safe place and appropriately completed at each test time to act as a log of the installation condition.

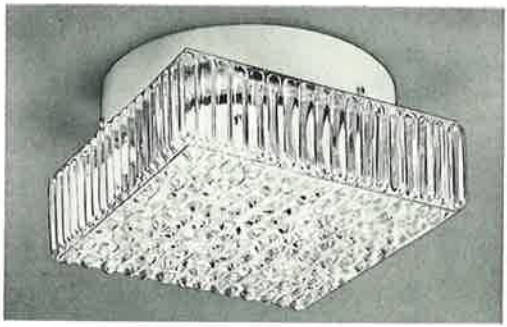
Crompton

Clublite

Decorative Emergency Lighting Luminaires

For Interior use only
Non maintained
Three hour duration
1 x 4 watt fluorescent lamp





Applications

Hotels, restaurants, clubs, nursing homes, commercial premises.

Description

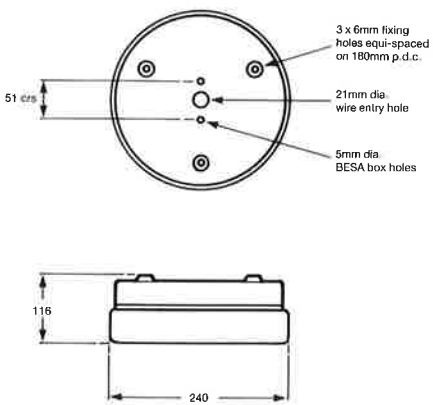
The 'Clublite' luminaire is admirably suited to interior installations where a decorative high quality luminaire is required. The white finish steel housing common to both models and moulded glass diffusers blend happily with most decorative interiors.

Dimensions

All dimensions in mm

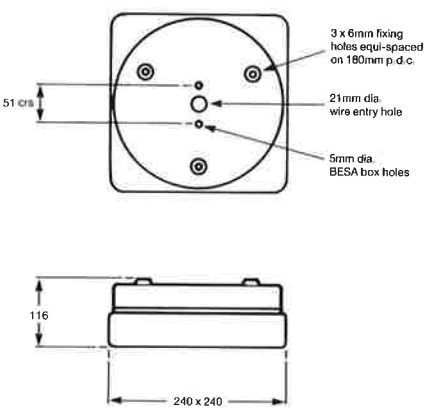
Round Model: Catalogue Number ECGR4N3

Weight (kg) 3.3

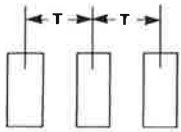


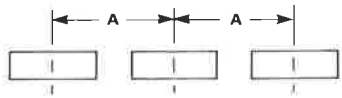
Square Model: Catalogue Number ECGS4N3

Weight (kg) 3.9



Photometric Data





ECGR4N3

D1106

Luminaire Mounting Height Above Floor (m)	Illuminance Directly Beneath Luminaire (Lux)	Minimum Horizontal Illuminance (Lux) along centre line between luminaires							
		0.2		0.3		0.4		0.5	
		Maximum Spacing Between Luminaires (m)							
		T	A	T	A	T	A	T	A
2.0	1.8	7.4	6.8	6.5	5.9	5.8	5.2	5.3	4.8
2.5	1.15	8.0	7.2	6.8	6.2	6.0	5.4	5.3	4.8
3.0	0.8	8.4	7.6	6.9	6.2	5.8	5.4	5.2	4.7

D1105

Luminaire Mounting Height Above Floor (m)	Illuminance Directly Beneath Luminaire (Lux)	Minimum Horizontal Illuminance (Lux) along centre line between luminaires							
		0.2		0.3		0.4		0.5	
		Maximum Spacing Between Luminaires (m)							
		T	A	T	A	T	A	T	A
2.0	1.85	8.0	7.2	7.0	6.4	6.1	5.7	5.6	5.2
2.5	1.2	8.6	7.7	7.2	6.8	6.3	6.0	5.7	5.4
3.0	0.8	8.8	8.1	7.4	6.9	6.4	6.1	5.7	5.4

Mechanical Data

Housing
Steel, exterior and interior finished white.

Diffuser
Moulded glass retained by screws on the outside of the housing.

Installation
Recommended maximum ambient temperature 25°C. If required to operate at a higher temperature, we should be consulted.

Gear Tray
Steel with reflective white finish. Attached to housing with two screws in keyhole slots. Light emitting diode indicates mains on and battery charging.

Electrical Data

Battery
Sealed nickel cadmium. Recharge time 24 hours Push-on connector to gear tray.

Connections
Mains terminal block in the housing will accept 2 x 1.5 sq.mm conductors.
Luminaires must be connected to an unswitched mains voltage supply which may be isolated through a key switch to facilitate testing. The key should be retained by the person responsible for routine testing and maintenance.

Maintenance

Occasional re-lamping will be necessary. BS5266 Pt. 1. 12.2.3 recommends that power failure be simulated:–
(1) For a short period once a month to check that the emergency function is operational.
(2) Every six months the tests to continue for one hour.
(3) Every three years tests to continue for the full duration period if over one hour unless otherwise instructed by the enforcing authority.

More complete guidance is provided in BS5266 Pt. 1.

Packed with each luminaire are installation notes and a Maintenance Record Card giving guidance to maintenance procedures.
It is recommended that a copy of the notes be passed to the person responsible for the future operation and maintenance of the installation and that the record card is retained in a safe place and appropriately completed at each test time to act as a log of the installation condition.

Crompton

Exit Sign

ICEL approved
Emergency Lighting

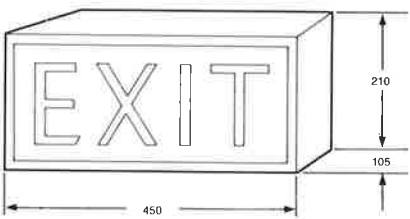
For interior use
8 watt fluorescent lamp
Three hour duration

Applications

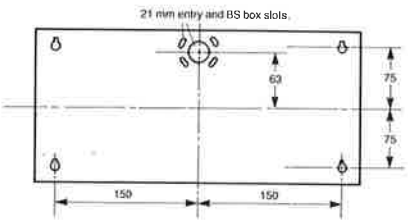
Places of public entertainment and public assembly. Hotels, restaurants, cafes, public houses, commercial and industrial premises. Hospitals and Nursing Homes.

Dimensions

All dimensions in mm.



Fixing Detail



Description

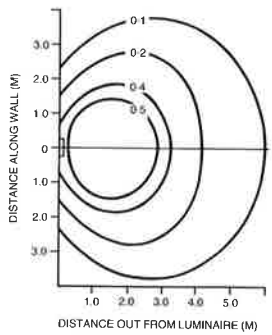
The well proportioned metal housing can be supplied with either a matt black or white external finish. The lamp components and battery pack are mounted on a gear tray, with a flying lead socket connector, which can easily be removed for maintenance. There is a choice of gear tray for 3-hour maintained, non-maintained or sustained modes. Each housing has a light emitting diode indicating "Mains Live" and "Battery Charge", which is visible externally on the underside of the body. A translucent panel in the base of the housing allows additional illuminance directly beneath the luminaire.

The standard housing accepts a range of front panels to meet various requirements. The black housing with black metal stencil 'Exit' panel is particularly suited to low ambient illuminance levels. The alternatives are opal translucent front panels of flame-retardant materials with screen printed green legends.

Classified **IP20**

Photometric Data

Diagram showing illuminance on floor at end of 3 hour duration for luminaire type EEW81M3E translucent 'EXIT' panel – maintained luminaire positioned 2.15 m above floor.



For types EEW81N3E (non-maintained) and EEW81S3E (sustained), multiply values shown by 1.1.

Composite Catalogue Numbers

Including lamps

Composite Catalogue Numbers	Description	Front Panel	Housing including Gear Tray and Battery
		Catalogue No.	Catalogue No.
Non-maintained mode – all 8 watt 3-hour duration			
EEW81N3E	White housing with opal translucent 'EXIT' panel.	EEPE	EEW81N3
EEW81N3X	White housing with opal translucent 'EMERGENCY EXIT' panel.	EEPX	
EEW81N3F	White housing with opal translucent 'FIRE EXIT' panel.	EEPF	
EEW8IN3A	White housing with opal translucent 'EXIT' panel in English and Arabic	EEPA	
Maintained mode – all 8 watt 3-hour duration			
EEW81M3E	White housing with opal translucent 'EXIT' panel.	EEPE	EEW81M3
EEW81M3X	White housing with opal translucent 'EMERGENCY EXIT' panel.	EEPX	
EEW81M3F	White housing with opal translucent 'FIRE EXIT' panel.	EEPF	
EEW8IM3A	White housing with opal translucent 'EXIT' panel in English and Arabic	EEPA	
Sustained mode – all 8 watt 3-hour duration			
EEW81S3E	White housing with opal translucent 'EXIT' panel.	EEPE	EEW81S3
EEW81S3X	White housing with opal translucent 'EMERGENCY EXIT' panel.	EEPX	
EEW81S3F	White housing with opal translucent 'FIRE EXIT' panel.	EEPF	
EEW8IS3A	White housing with opal translucent 'EXIT' panel in English and Arabic	EEPA	
Stencil Exit panel – all 8 watt 3-hour duration			
EEB81N3S	Black housing – non maintained mode.	EEPS	EEB81N3
EEB81M3S	Black housing – maintained mode	EEPS	EEB81M3
EEB8IS3S	Black housing – sustained mode	EEPS	EEB81S3

Components

The complete luminaire is assembled from two main components as shown above. These are:

(a) A housing, either black or white, containing a gear tray – maintained, non-maintained or sustained mode. Supplied complete with lamp and battery.

(b) A front legend panel.

Mechanical Data

Housing
The metal housing can be installed and wired up with the front panel easily inserted into a formed recess in the top and bottom of the housing.

Gear Tray
Steel with reflective white finish. Attached to the housing by a detachable hinge at one end and locked by means of quick release captive studs at the other. This facilitates easy removal after withdrawal of the non-reversible mains plug from the input terminal block on the gear tray.

The charging circuit can fully charge a discharged battery in 24 hours.

Installation

The In-service performance and photometric data shown is based on an ambient temperature of 25°C. If required to operate at a higher temperature, we should be consulted.

Electrical Data

Connections
The mains supply input terminal block on the base of the housing is wired to a non-reversible socket connector and will accept 2 × 1.5mm² conductors. The unit should be connected to an unswitched mains voltage supply. In Maintained and Sustained mode, facilities are available to switch the mains operated lamp without affecting the emergency mode capability.

A light emitting diode (LED) indicates "Mains On" and battery charging.

Maintenance

Occasional re-lamping will be necessary.
BS.5266 Pt.1 12.2.3. recommends that power failures be simulated:–
(1) For a short period once a month to check that the emergency function is operational.
(2) Every six months the tests to continue for one hour.
(3) Every three years tests to continue for the full duration period if over one hour unless otherwise instructed by the enforcing authority.

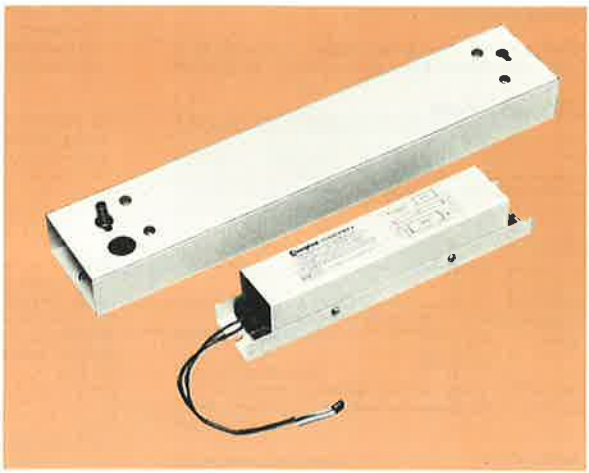
More complete guidance is provided in BS.5266 Pt. 1.

Packed with each luminaire are installation notes and a Maintenance Record Card giving guidance to maintenance procedures. It is recommended that a copy of the notes be passed to the person responsible for the future operation and maintenance of the installation and that the record card is retained in a safe place and appropriately completed at each test time to act as a log of the installation condition.

Crompton Convertex 2

Mains to Emergency Conversion Module Maintained Three hour duration

ICEL approved



ICEL
Certification Scheme
No. 1001 : 1978

BSI Test Report No. 096072

Applications

For use with most commercial and industrial fluorescent lamp luminaires either as an additional emergency lighting module or conversion of an existing mains operated lamp to provide emergency lighting in the event of mains failure.

It is preferable that this form of emergency lighting be provided factory fitted within standard Crompton luminaires when all operational factors can be allowed for.

When supplied as a separate conversion module kit for incorporation into existing luminaires, allowance should be made for the physical and thermal limitations of the various module components. (See notes below).

Operating Temperatures

All emergency lighting battery cells are temperature sensitive.

When batteries are located within the housings of certain types of mains operated fluorescent luminaires the internal temperatures may rise to most undesirable levels due to the heat from the associated control gear.

This may result in reduced battery life and lower performance.

It is strongly recommended, therefore, that before batteries are installed within a mains luminaire the advice of our local lighting sales specialist be obtained.

Description

Convertex 2 comprises:-
1. Inverter/Charger Module
2. Battery Pack

The inverter/charger module may be installed in the spine or housing of the mains luminaire (see installation notes overleaf).

The battery pack may be supplied
(a) for installation in the spine or housing of the mains luminaire where sufficient space is available and the battery cells are not exposed to high temperatures (see note below)
(b) in a metal housing for location adjacent to the converted luminaire (within 500mm).

A light emitting diode indicates 'mains live' and battery charge. This is on a flying lead ready for insertion into a hole drilled in a convenient position of the luminaire.

Convertex 2 has a low voltage cut-out to protect the battery from total discharge.

Range

Composite Cat. No.	Description
EC13	Inverter/Charger and batteries location with the luminaire.
EC13BR	Inverter/Charger and separate battery box for location adjacent to the luminaire.

Lamp Range covered: 18 - 75W (1.8m) all 3 hour duration.
Up to 100W against special enquiry.

Tube Lumen Output

	18W	20W	36W	40W	58W	65W	70W	75W
% of lamp lumens at end of duration	25	19	19	15	13	12	13	11

The above percentages include all the modifying service factors as required by BS5266 code of practice for the emergency lighting of premises to determine the illuminance level obtained at the end of duration period at the end of battery life.

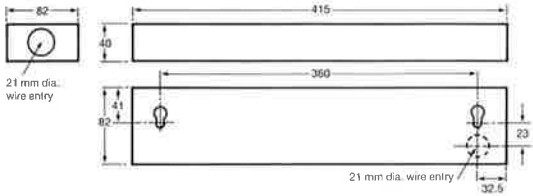
When planning, the Lighting Design Lumens (LDL) at 2000 hours burning point of the lamps to be used are normally taken and it is recommended that LDL values be used when 'maintained' mode conversion sets are used.

If 'non-maintained' mode modules are used then the 'emergency lamps' will not normally be in use. Therefore it is reasonable to take the lamp lumens value at the 100 hour burning point.

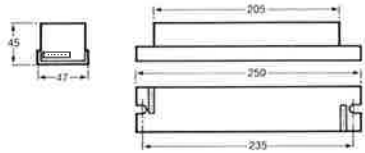
Dimensions

All dimensions in mm

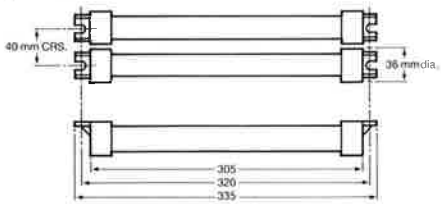
Battery Box only including batteries for separate mounting Cat. No. ECB13



Inverter/Charger Module only Cat. No. ECM13

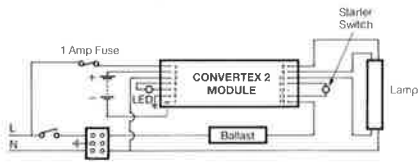


Battery Pack only Cat. No. RBP104F



NB. Battery sticks may be located end to end.

Circuit diagram for 'Maintained' Operation – Switchstart Type



Installation

The inverter charger module must be positioned at maximum distance from the luminaire ballast to achieve minimum operating temperature. Under no circumstances should the surface temperature of the module exceed 70°C, the surface battery operating temperature should never exceed 50°C.

The LED indicator may be mounted in any convenient position on the luminaire where a 10mm hole may be drilled for inside access.

If the battery box is to be fixed to the centre of the upper surface of a suspended luminaire where the ballast is in the centre area, then the battery box should be spaced 10mm from the surface of the luminaire to avoid excessive heat transfer.

Fully detailed installation instructions are included in the conversion kit package.

One Convertex 2 Module Kit is required for each lamp converted.

Crompton Emergency Lighting

There are many instances where the provision of Emergency Lighting is a legal requirement and, where not, responsible authorities and building managements are accepting the obligation of ensuring that occupants, whether employees or the general public, can reach safety with unhindered movement in the event of failure of the normal lighting.

Persons responsible for safe use of premises need to have emergency lighting equipment of acknowledged quality and reliability, which can be incorporated into a planned Emergency Lighting scheme that complies with the requirements set out in the British Standards Institution BS5266 Part 1 "Code of Practice for the Emergency Lighting of Premises".

Some important requirements are:

1. The horizontal illuminance along a centre line of an escape route must never be less than 0.2 lux.
2. The uniformity of the illuminance should be better than 40:1 when the maximum to minimum illuminance along the centre line are compared.
3. Individual luminaires should be located to avoid unacceptable glare and positioned not lower than 2m above floor level.

Crompton Parkinson Emergency Lighting luminaires provide the level of assurance and performance necessary for these objectives to be achieved.

The Emergency Luminaires illustrated and described in the preceding pages are designed and manufactured to meet the ICEL standard and have received ICEL Approval under Licence No. ICEL/L/513 following the associated mandatory independent testing and assessment of the luminaire and the on-going monitoring of production quality control.

Photometric Data

The tabulated data are derived from tests carried out by the Crompton Parkinson Photometric Laboratory, a BSI Registered Laboratory, with allowance made for the modifying service factors required by BS5266 "Code of Practice for the Emergency Lighting of Premises", to determine the illuminance level obtained at the end of the rated duration period at the end of battery life.

Owing to the wide variety of site conditions and possible cleaning programmes, which are outside the equipment suppliers control, no allowance has been made for the light loss due to the collection of dust and dirt on the luminaire.

Mode of Operation

Crompton Parkinson specialise in "self-contained" emergency luminaires, in that the emergency power supply is in the form of rechargeable batteries contained within the luminaire.

Such "self-contained" luminaires have the following advantages:

Fail Safe:
Automatic switching of battery power to the lamps in the event of mains failure.

Simple Installation:
Each luminaire is simply another point in the mains wiring, requiring connection from a "key" switched mains supply.

Extensions/Additions:
Installations of self-contained luminaires are easily extended.

Reliability:
Every luminaire is independent of any other within the installation — therefore the performance of one will not affect the operation of others.

There are three modes of operation of self-contained emergency luminaires:

Non-Maintained (N)
Lamp/s energised by battery only when mains power fails i.e. they are not alight when normal mains supply is available.

Maintained (M)
Lamps/s are energised at all material times whether powered by the mains or batteries. The same lamp/s operate on both mains and battery power.

Sustained (S)
At least two lamps within the luminaire:
(a) One lamp/s energised by the mains supply only.
(b) The other lamp/s only energised by automatic switching to the battery power in the event of mains failure.

continued . . .

Maintenance

Occasional re-lamping will be necessary. BS5266 Pt. 1. 12.2.3 recommends that power failure be simulated:

1. For a short period once a month to check that the emergency function is operational.

2. Every six months the tests to continue for one hour.

3. Every three years tests to continue for the full duration period if over one hour unless otherwise instructed by the enforcing authority.

More complete guidance is provided in BS5266 Pt. 1.

Packed with each luminaire are installation notes and a Maintenance Record Card giving guidance to maintenance procedures.

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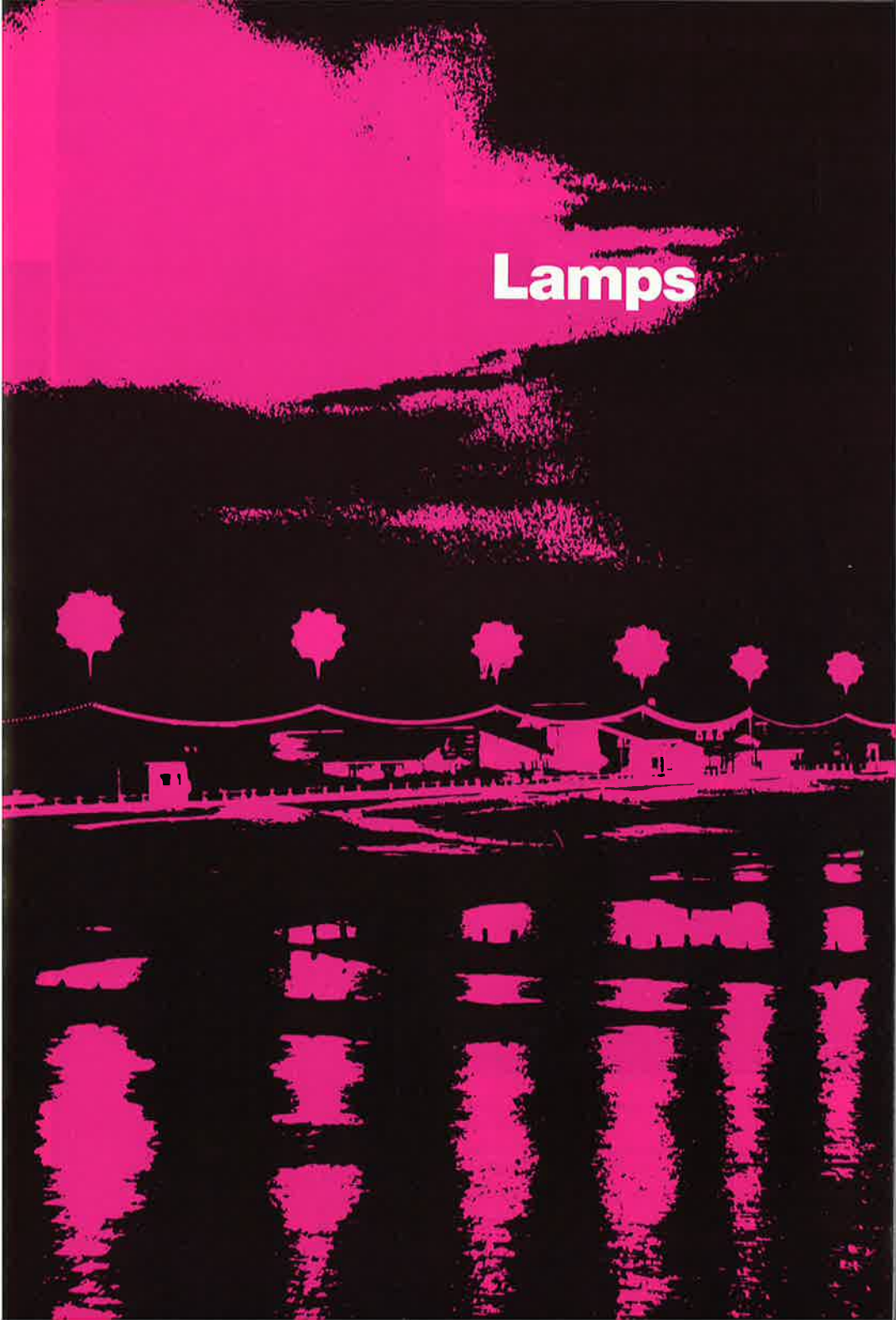
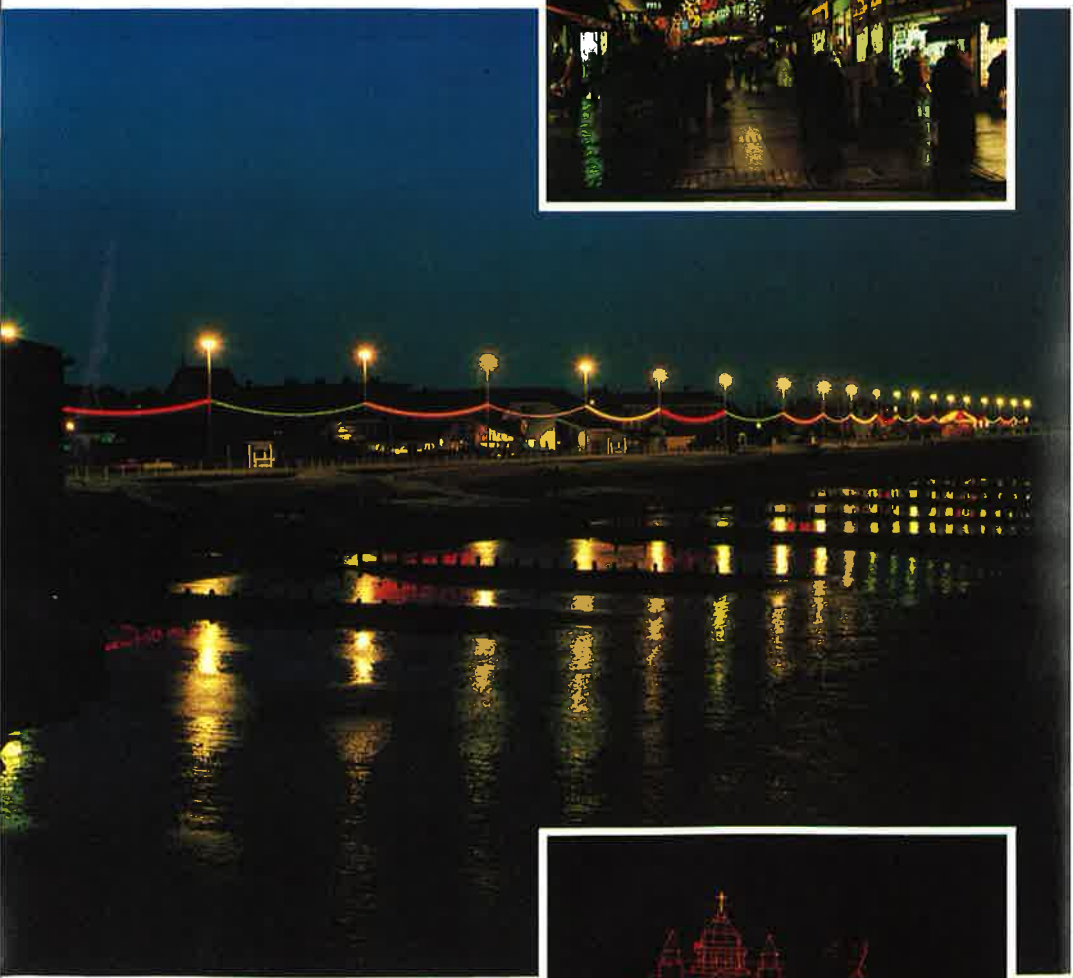

Lamps

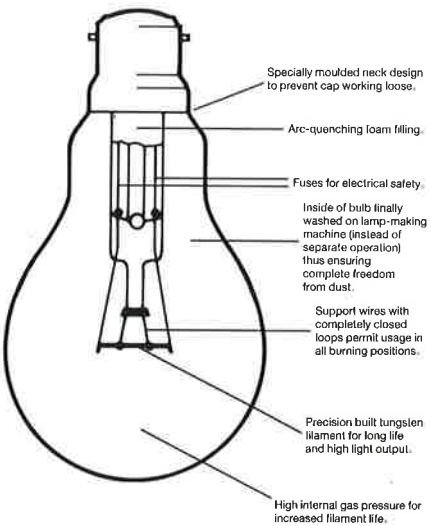
Colourglaze lamps in Leeds City Centre. ▶

▼ Crompton lamps in Seafront illuminations, Bognor Regis.



Set piece illuminations in Walsall using Crompton lamps. ▶

Crompton Tungsten Lamps



Description

Burning Position
Unless otherwise indicated lamps may be operated in any position but reduced life will be experienced in positions other than vertical cap-up.

Fuses
All Crompton Tungsten lamps over 100 volts are fitted with quench type fuses for electrical safety.

Voltage Variation Characteristics
A 10 volt increase of supply voltage on nominal supplies of 240V will cause a 40% decrease in life and a 15% increase in light output. A 10 volt decrease of the supply voltage will give an 80% increase in life with a 16% decrease in light output. The depreciation of light output during the life of a tungsten lamp is approximately 10%.

Standards
Lamps described in this catalogue comply with the following standards, where applicable.

IEC64 and **BS161** Tungsten filament lamps for general service (Batch testing)

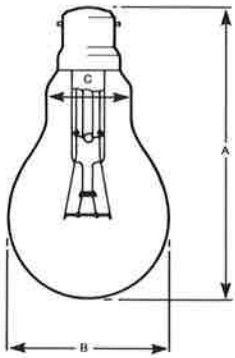
IEC64A Tungsten filament lamps for general service. Lamps with life of 2500 hours.

BS555 Tungsten filament miscellaneous electric lamps.

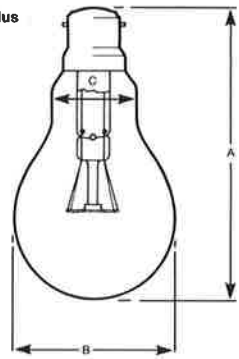
BS5101 Lamp caps and lampholders.

BS5971 Safety and Interchangeability of Tungsten Filament Lamps.

GLS



Double-Life-Plus



Dimensions

Crompton GLS lamps have a colour code on the cardboard collar which fits around the lamp cap. This permits ready identification of wattages as shown in the following table:

Lowlight – Pink
25 Watt – Yellow
40 Watt – Violet
60 Watt – Green
75 Watt – White
100 Watt – Blue
150 Watt – Orange
200 Watt – Brown

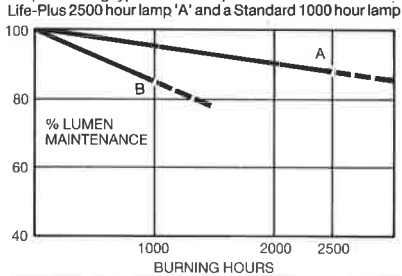
Applies to all Pearl and Clear; Mushroom and Firelamps.

As a further aid the contents labels of the outer boxes have the same colour coding to indicate wattage.

Double-Life-Plus

★ 2500 hours average life.
★ Uses no more current.
★ Good lumen maintenance.
★ Single coil.

Graph showing typical lumen depreciation curves for a Double-Life-Plus 2500 hour lamp 'A' and a Standard 1000 hour lamp 'B'.



GLS

Watts	Cap	Finish	Voltage	Pack Quantity	Dimensions (mm)			Initial Lumens at	
					A	B	C	110V	240V
15	BC	Pearl, Clear	240	25	105	60	33	—	120
25	BC, ES	Pearl	25†, 50†, 110/120, 240, 250	25	105	60	33	220	225
	BC	Clear	240						
40	BC, ES	Pearl	25, 50†, 110/120, 240, 250	25	105	60	33	440	410
		Clear	240						
60	BC, ES	Pearl	25, 50†, 110/120, 220/230, 240, 250	25	105	60	33	760	700
		Clear	240						
75	BC	Pearl	240	25	105	60	33	1000	950
100	BC, ES	Pearl	25, 50, 110/120, 240, 250†	25	105	60	33	1420	1320
		Clear	240						
150	BC, ES	Pearl, Clear◉	110/120, 240, 250	25	125	68	37	2340	2100
200	BC, ES	Pearl◉, Clear	240, 250	25	160	80	39	3250	2880
300	ES◉, GES	Clear	110/120, 240, 250	12	233	110	50	5000	4550
500	GES	Clear	110/120, 240, 250	12	233	110	50	8900	8200
1000	GES	Clear	240	6	275	130	52	19300	18400

†BC only ◉ 240V only

Double-Life Plus

25	ES	Pearl/Clear	240	25	105	60	33	—	160
40	BC, ES	Pearl	240, 250†	25	105	60	33	—	300
60	BC, ES	Pearl	240, 250†	25	105	60	33	—	530
75	ES	Pearl	240	25	105	60	33	—	800
100	BC, ES	Pearl	240, 250†	25	105	60	33	—	1050
150	BC, ES	Pearl	240, 250†	25	160	80	39	—	1800
200	ES	Clear	240	25	160	80	39	—	2500
300	GES	Clear	240	12	233	110	50	—	3900
500	GES	Clear	240	12	233	110	50	—	7100
1000	GES	Clear	240	6	275	130	52	—	15800

† BC only

Mushroom
Compact, stylish, harmonising with contemporary furniture and fittings. These lamps have coiled coil filaments and are internally coated with a white diffusing medium giving a restful light of uniform brightness.

Harlequin
Heat and weather resistant melamine lacquer on clear glass gives sparkle and colour for decorative use outdoors or indoors. Low wattage lamps in the following colours: red, amber, yellow, green and blue.

Colourglazed
Vivid colouring lasting throughout life, also highly attractive unlit as the flint hard polished surface does not collect dirt or dust. Proof against sea air, acids, alkalis, heat, sun fading, scratches and abrasions. Colours available: Red, White, Blue, Green, Yellow, Amber and Pink.

Charmlight
Provides warm light, flattering to complexions, adding richness to home furnishings and decor. Recommended for use in shops, hotels, etc.

Firelamps
Several types of lamp are available for use in electric and gas fires, the main types being Trueflame and Fireflame.

Trueflame lamps have a colourglazed finish which is flint hard and resistant to dust or dirt. Fireflame lamps have a flame colour coated bulb, the coating being a special lacquer which maintains its colour and is free from cracking or chipping throughout the life of the lamp.

Watts	Cap	Finish	Voltage	Pack Quantity	Dimensions (mm)	
					Diameter	Length
Mushroom						
40 60 100	BC	Internal White	240	25	60	100
150	BC	Internal White	240	25	75	120
Harlequin						
15 25	BC, ES	Colour Lacquer	110/120†, 200/250 110/120, 200/250	25	60	105
Colourglazed						
15* 25*	BC, ES	Colourglazed	110/120 & 200/250	25	60	105
40 60	BC	Colourglazed	200/250	25	60	105
Charmlight						
60	BC	Soft Pink Glaze	200/250	25	60	105
Firelamp						
25	BC	Trueflame 3	200/250	25	60	105
40	BC	Amber N625	200/250	25	60	105
60	BC 3 Pin BC	Fireflame	200/250	25	60	105

* 15 and 25 watt only, for external use. † Made to special order

Reflector
Clear, light diffused and coloured reflector lamps have many applications in all forms of display lighting. Colours available: Red, Blue, Yellow, Green and Amber (External finish). All in high temperature lacquers.

Low Voltage Tungsten Halogen
High efficiency lamps providing a controlled beam of light. The dichroic coating reduces most of the heat by allowing it to pass back through the reflector. A cool beam gives good, realistic colour rendering. These lamps are suitable for many display applications.

Reflector

Watts	Cap	Bulb Type	Finish	Voltage	Pack Quantity	Dimensions (mm)	
						Diameter	Length
25	SES	R50	Coloured	240/250	20	50	84
25,40	SES	R50	Clear, Light Diffused	240/250	20	50	84
40	BC, ES	R64	Coloured	240/250	20	64	104
40, 60	BC, ES	R64	Clear, Light Diffused	240/250	20	64	104
40, 60 75,100	BC, ES	R80	Coloured Clear, Light Diffused	240/250	20	80	109
75,100	BC, ES	R95	Coloured	240/250	20	95	137
75 100, 150*	BC, ES	R95	Clear, Light Diffused	240/250	20	95	137
75	BC, ES	R95	Clear, Light Diffused	110/120	20	95	137
150	BC, ES	R125	Clear†, Light Diffused	240/250	10	125	176
150	ES	R125	Clear, Light Diffused	110/120	10	125	176

* Light Diffused only † ES only

Low Voltage Tungsten Halogen – Dichroic Reflector

Watts	Cap	Beam	Voltage	Pack Quantity	Dimensions (mm)	
					Diameter	Length
20	6 x 5.3	Narrow (12°)	12	10	50	44 max
50	6 x 5.3	Medium (25°)	12	10	50	44 max
75	6 x 5.3	Wide (38°)	12	10	50	44 max

All the lamps described on pages 134 and 135 with the exception of the infra-red are suitable for use with the Crompton Spotlux and Spotrack range of decorative luminaires.

Infra-red Industrial
(Crown-Ruby or Light Diffused).
These lamps have many applications in industry for drying and baking purposes. Infra-red lamps are used extensively for pig and poultry rearing. The Ruby finish is internally applied.

Not for domestic use.

Crown Silver
Designed for use in bowl reflector display luminaires.

P A R 38 Reflector
Hard glass reflector lamps having a sealed-in parabolic reflector which, in conjunction with the lens glass, accurately controls the beam pattern, giving a very high intensity spot or flood. Made of heat resistant glass, suitable for outdoor use when fitted in a watertight lamp holder.

Colours available: Red, Green, Yellow and Blue.

P A R 56 Reflector
Similar construction to P A R 38 but a more powerful light source. P A R 56 lamps are constructed from heat-resistant glass but due to the high wattage should be protected from water splashes when used outdoors.

Watts	Cap	Bulb Type	Finish	Voltage	Pack Quantity	Dimensions (mm)	
						Diameter	Length
Infra-Red Industrial							
100	ES	R80	Light Diffused	240/250	20	80	109
150	BC, ES	R125	Light Diffused	200/250	10	125	176
150	ES	R125	Crown Ruby	200/250	10	125	176
250	BC, ES	R125	Light Diffused	200/250	10	125	176
250	ES	R125	Crown Ruby	200/250	10	125	176
275	ES	R125	Light Diffused	100/130	10	125	176
275	BC, ES	R125	Light Diffused	200/250	10	125	176
275	ES	R125	Crown Ruby	200/250	10	125	176
Crown Silvered							
40*	SES	Internal Silvered Crown	Clear	240/250	50	45	78
60	BC, ES		Clear	240/250	25	60	105
100	ES		Clear	240/250	25	68	125
100	3 PIN BC		Clear	240/250	25	68	125
PAR 38 Reflector including Wattsaver							
80	ES	Flood	Coloured	240	10	122	134
80	ES	Spot or Flood	Clear	240	10	122	134
120	ES	Spot or Flood	Clear	240	10	122	134
PAR 56 Reflector							
300	GLX16D	Spot, Medium Flood Wide Flood	Clear	240	6	179	128

* 45mm Ogive

Lowlight
For sickrooms, nurseries and other locations where subdued light or low current consumption is required.

45mm Round (Ogive)
For decorative fittings, bedhead units, etc.

Candle Plain or Twisted
Simulates the appearance of a candle flame meeting a wide variety of decorative applications, e.g. wall lights, candelabra, chandeliers and multi-arm fittings. Clear candle lamps give sparkle, enhancing crystal chandeliers and similar types of luminaire. Where a more diffused light is required, a White opal or Pearl finish is recommended.

Watts	Cap	Finish	Voltage	Pack Quantity	Dimensions (mm)	
					Diameter	Length
Lowlight						
5 - 8	BC	Pearl	200/250	10	60	105
45mm Round (Ogive)						
25	BC	Coloured	240/250	50	45	75 max.
25, 40	BC, SBC, ES SES	Opal White Clear Crown Silvered				
Candle Plain						
25, 40, 60	BC, SBC, SES	Clear, Pearl or Opal White	240/250	50	35	96 max.
Candle twisted						
25 40, 60	BC, SBC	Clear, Pearl	240/250	50	35	100

Sign
Suitable for a wide range of applications.
Colours available: Red, Green, Blue, Amber, Yellow, White and Pink.

Pilot
A small diameter lamp, useful where space is limited.

Architectural Opal
Peg caps are fitted approximately 38mm from each end: exact details on application.

Double-ended Tubular
Popular display lamp available in clear and opal finish.

Rough Service
Specially constructed to withstand severe treatment. Particularly suitable for machine lighting, hand lamps and other applications subject to vibration.

Watts	Cap	Finish	Voltage	Pack Quantity	Dimensions (mm)	
					Diameter	Length
Double-ended Tubular						
30, 60	Centre contact S15S	Clear, Opal	240/250	50	25	221 or 284
Architectural						
35	† Flat S14S peg, Round S12/16 peg.	Opal	240/250	30	25	300
53						460
60						500
75						610
110				20		920
Sign						
15	BC	Clear Coloured**	25*, 50*, 110/120	100	28	57
	SBC					63
	SES		200/250	50		
Pilot						
10	E12/21 x 13	Clear	200/250	100	20	48
	SBC					40

Watts	Cap	Finish	Voltage	Pack Quantity	Approximate Dimensions(mm)		
					Diameter	Light Centre Length	Overall Length
Rough Service							
40	BC, ES††	Clear◉ / Pearl	100/120 230/250	25	60	75	105
60							
100		Pearl			68	90	125

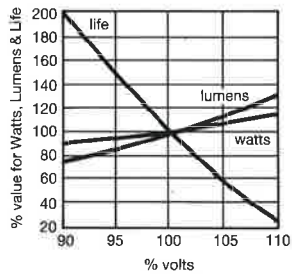
** Coloured in 200/250V only * 25,50V not available with SES † Available in 35 and 60 watt only †† ES in Pearl only
◉ Not 110/120V or 230/250 100W

Traffic Signal
Manufactured to BS555, designed for use in road traffic signals.

Tungsten Halogen M32
Also for use in road traffic signals.
Burning hours: approximately 2000.

Tungsten Halogen
A powerful light source ideal for general illumination, floodlighting and display lighting. Halogen lamps should always be handled by the ends as natural moisture from the skin can stain the quartz tube, resulting in premature failure. If the lamp is accidently handled it should be cleaned with industrial solvents. For the successful operation of these lamps a minimum wall temperature of 250°C should be maintained and the temperature of the end seals should not exceed 350°C. These conditions can only normally be met within a voltage variation of ± 10% of mid point.

Tungsten Halogen – Burning Position Horizontal
Burning hours: 2000 approx.
Finish: clear



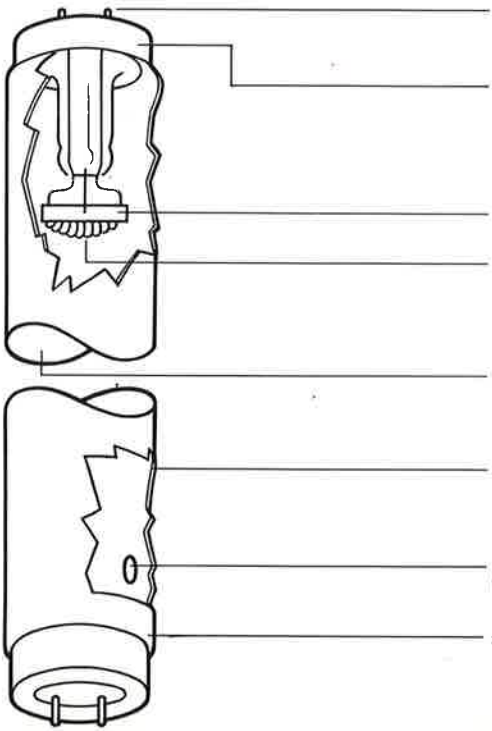
Effects of mains voltage fluctuation

Watts	Cap	Finish	Voltage	Pack Quantity	Approximate Dimensions(mm)		
					Diameter	Light Centre Length	Overall Length
Traffic Signal							
65	ES	Clear	240/250	25	60	62	106.5
Tungsten Halogen M32							
50	GY6.35	Clear	12	12	11.5	30	44

Tungsten Halogen						
Watts	Cap	Pack Quantity	Overall Dimensions (mm)		Lighting Design Lumens	
			Diameter (including tip) 240/250	Length	at 115/120V	at 220/230 at 240/250
300	R7s–15	10	16.5	118	5250	5000
500					10500	9500
750				189	—	15000
1000					22000	21000
1500				255	—	33000

Crompton Fluorescent Tubes

Features that give more light, more life ...



Welded connections for good electrical contact.

Corrosion-resistant metal cap.

Box type anode to protect cathode and reduce end blackening.

Triple Coil Cathode for emitter retention.

Correct pressure filling of pure argon (or Krypton/Argon mixture for Wattsavers) for positive starting and high light output.

Selected grain size phosphors for high efficiency.

Measured dose of high-purity mercury to last for full lamp life.

Silicone-coated for instant starting.

Specification

Crompton fluorescent tubular lamps are made in accordance with the latest edition of BS1853 in all electrical, intrinsic quality, and performance requirements.

Lighting Design Lumens
The Lighting Design Lumens quoted are the values measured at 2000hrs. and recommended as a guide when planning lighting schemes. Lumen output beyond 2,000 hours decreases by 2% to 3% per 1,000 hours use according to the colour and loading.

Colours available to suit all applications

Halophosphates

White, Colour Phosphor No. 35
High-efficiency tube of white colour for industrial and general office use. CCT 3500

Warm White, Colour Phosphor No. 29
Popular general-purpose tube having high-efficiency and warm colour. CCT 2900

Coolwhite, Colour Phosphor No. 33
High-efficiency cool colour accepted for industrial purposes where blues need to be brought out. CCT 4000

Natural, Colour Phosphor No. 25
Well-balanced colour suitable for interior lighting, blending well with sunlight. CCT 4000

De Luxe Natural,
More red than Natural and particularly good where food is concerned, e.g. restaurants and food displays, etc. CCT 3600

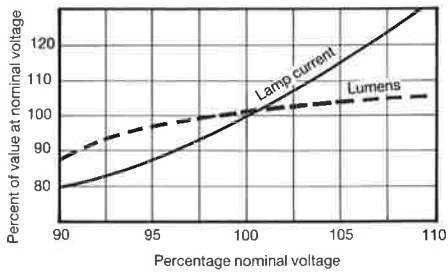
Northlight, Colour Phosphor No. 55
Matches northern overcast sky. Full spectrum lamp which has special application for accurate colour comparison. CCT 6500

Tropical Daylight
A cool high efficiency general purpose white for warm territories. CCT 6000

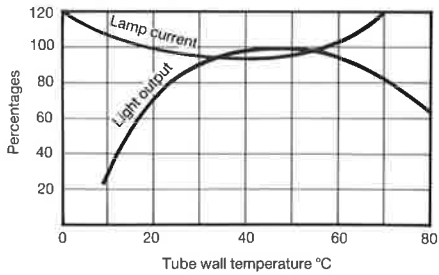
Triphosphors

Spectra 84, Colour Phosphor No. 84
Cool, high efficiency and superb colour rendering, Triphosphor type used in Wattsaver 25mm range. CCT 4000

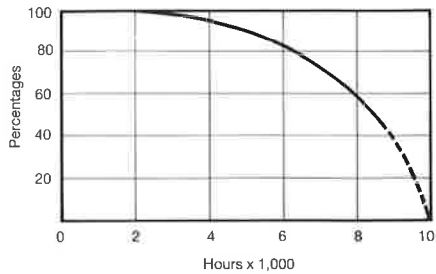
Effect of variation of mains voltage



Effect of wall temperature variation



Typical survival curve (BS 1853 burning conditions)



	Warm White	White	Coolwhite	Natural	De Luxe Natural	Northlight	Tropical Daylight	Spectra 84
Chromaticity X	0.446	0.412	0.379	0.377	0.390	0.316	0.308	0.380
co-ordinates Y	0.406	0.392	0.384	0.374	0.356	0.334	0.328	0.377
Colour temperature °K	2900	3500	4050	4000	3600	6500	6000	4000

CROMPTON FLUORESCENT TUBES

Length and Wattage	Nominal Length mm	Tube Dia. mm	Cap	Lighting Design Lumens	Colours	Pack Qty.
8ft 125W	2400	38	Bi Pin (G13)	8800 8800 8600 7000 5500 4800 6500	White Warm White Coolwhite Natural Northlight De Luxe Natural Tropical Daylight	20
8ft 100W	2400	38	Bi Pin (G13)	8000 7600	White Coolwhite	20
8ft 85W	2400	38	Bi Pin (G13)	6700 6700 6500 5000 3800 5000	White Warm White Coolwhite Natural De Luxe Natural Tropical Daylight	20
6ft 75/85W (at 75W loading)	1800	38	Bi Pin (G13)	5700 5700 5500 4000 3500 2900 4100	White Warm White Coolwhite Natural Northlight De Luxe Natural Tropical Daylight	25
6ft 70W Wattsaver	1800	26	Bi Pin (G13)	5600 5400	White Cool White	25
5ft 80W	1500	38	B.C.	4900 4900 4800	White Warm White Cool White	25
5ft 65/80W (at 65W loading)	1500	38	Bi Pin (G13)	4600 4600 4500 3500 3000 2500 3600	White Warm White Coolwhite Natural Northlight De Luxe Natural Tropical Daylight	25
5ft 58W Wattsaver	1500	26	Bi Pin (G13)	4700 4500 3200 5100	White Coolwhite Tropical Daylight Spectra 84	25
4ft 40W	1200	38	Bi Pin (G13)	2700 2700 2600 2200 1900 1500 2000	White Warm White Coolwhite Natural Northlight De Luxe Natural Tropical Daylight	25
4ft 36W Wattsaver	1200	26	Bi Pin (G13)	2800 2700 2000 3200	White Coolwhite Tropical Daylight Spectra 84	25
3ft 30W	900	25	Bi Pin (G13)	2150 2150 2100	White Warm White Coolwhite	25
2ft 40W	600	38	Bi Pin (G13)	1700	White	25
2ft 20W	600	38	Bi Pin (G13)	1000 1000 1000 900 750 600 900	White Warm White Coolwhite Natural Northlight De Luxe Natural Tropical Daylight	25
2ft 18W Wattsaver	600	26	Bi Pin (G13)	1100 1000	White Coolwhite	25

Length and Wattage	Nominal Length mm	Tube Dia. mm	Cap	Lighting Design Lumens	Colours	Pack Qty.
1½ft 15W	450	25	Bi Pin (G13)	800 700 700	White Warm White Coolwhite	25
21in 13W	525	16	Bi Pin (G5)	750 750	White Warm White	25
12in 8W	300	16	Bi Pin (G5)	400 400 400	White Warm White Coolwhite	25
9in 6W	225	16	Bi Pin (G5)	250 250	White Coolwhite	25
6in 4W	150	16	Bi Pin (G5)	125 125	White Coolwhite	25
Internal reflector tubes 8ft 125W 5ft 65/80W	 2400 1500	 38 38	 Bi Pin (G13) Bi Pin (G13)	 7700 4200	 White White	 20 25

Circular fluorescent tubes Length and Wattage	Outside Diameter mm	Tube Dia. mm	Cap	Lighting Design Lumens	Colours	Pack Qty.
16in 60W	410	32	Spec. 4 Pin (G10q)	3400	Warm White	6
16in 40W	410	32	Spec. 4 Pin (G10q)	2500	Warm White	6
12in 32W	305	32	Spec. 4 Pin (G10q)	1700	Warm White	6

Electrical Data

Electrical data for 240V tube circuits. Average performance tested at 25°C to BS2818.

Tube Size (mm)	2400	2400	1800	1800	1500	1500	1500	1200	1200	600
Diameter (mm)	38	38	38	38	38	38	38	38	38	38
Nominal tube watts	125	85	85	75	75	65	65	40	40	20**
Lamp cap	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP
Tube volts	152	120	123	127	110	110	113	104	104	58
Tube amps	0.94	0.8	0.77	0.72	0.64	0.63	0.63	0.42	0.42	0.38
Circuit type	SS	QS	SRS	SS	SRS	SS	SRS	SS	SRS	SS
Total circuit watts	137	105	96	91	90	77	77	50	52	28
Mains current amps	0.94	0.45	0.45	0.44	0.42	0.34	0.35	0.23	0.25	0.13
Total volt/amps	226	104	120	106	100	90	89	60	58	91
Lagging power factor	0.63	0.99	0.86	0.86	0.90	0.87	0.92	0.90	0.95	0.34*
Min. starting temp.	0°C	–5°C	–5°C	0°C	–5°C	0°C	–5°C	0°C	–5°C	0°C
% 3rd harmonics per phase	14	8	25	17	25	17	25	17	25	17

**Series pair 20W = 51 circuit watts (switchstart)
*Uncorrected value. Allow 0.85 if power factor capacity is fitted.

The figures below apply to Crompton Wattsaver and miniature tubes.

Tube Size (mm)	2400	1800	1500	1200	600	525	300	225	150
Diameter (mm)	38	26	26	26	26	16	16	16	16
Nominal tube watts	100	70	58	36	18	13	8	6	4
Lamp cap	BP	BP	BP	BP	BP	Min. BP	Min. BP	Min. BP	Min. BP
Average tube volts	125	128	110	102	59	98	58	45	30
Average tube amps	0.96	0.70	0.67	0.44	0.36	0.17	0.17	0.16	0.15

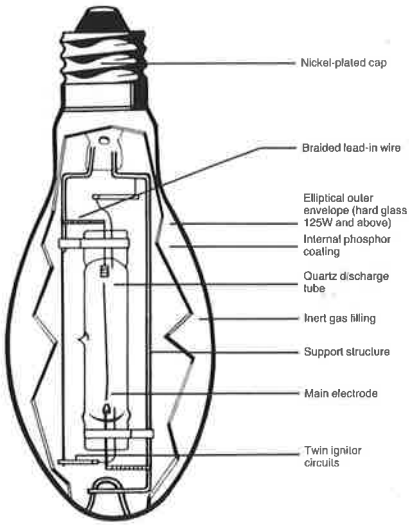
Crompton

Sodium & Mercury Discharge Lamps

A range of high efficiency discharge lamps for numerous industrial, amenity and public lighting applications.

Specification

Crompton MBF/U lamps are made to latest edition of BS3677/IEC188 in all electrical, intrinsic quality and performance requirements.



Powerlux MBF/U

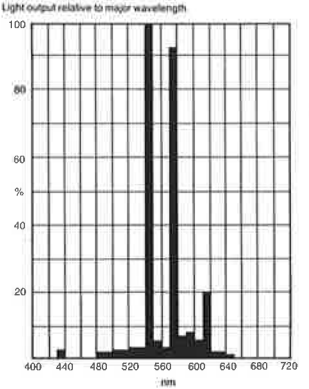
A good colour rendering mercury lamp suitable for commercial and industrial applications. Powerlux lamps have Yttrium Vanadate phosphor coating offering considerable advantages in shops, car showrooms, shopping precincts and many other commercial applications. The 125, 250, 400, 700 and 1000W types have mechanically fitted nickel-plated GES caps. They are screwed on to a pre-formed glass neck. This construction eliminates loose caps at high temperatures. Hard glass envelopes are used for 125W ratings and above.

Burning Position
Universal.

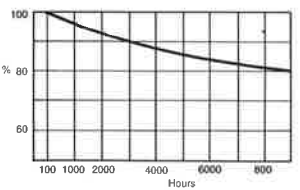
Starting
Run-up time at 80% of full light output is less than 4 minutes. During starting the lamp current is approximately 1¾ times the normal full running current. At voltages up to 250V, starting is satisfactory down to −30°C.

Voltage
Suitable for operation on 200/250V a.c. supplies with appropriate control gear.

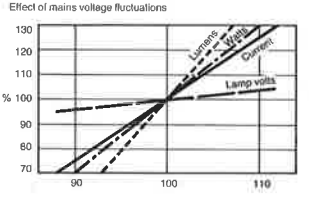
Light output relative to major wavelength



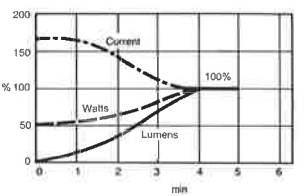
Lumen depreciation curve



Effect of mains voltage fluctuations



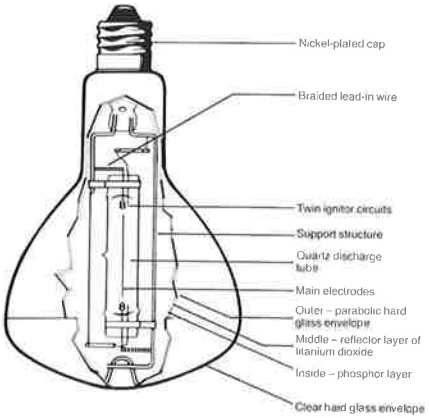
Run-up characteristics



Watts	Cap	Dimensions		Lighting Design Lumens	Lamp Volts	Lamp Current	Pack Qty.
		Overall Max. Dia. (mm)	Overall Max. Length (mm)				
50	ES	56	129	1,900	95	0.6	40
80	ES, 3PBC	71	156	3,600	115	0.80	40
125	ES, 3PBC	76	177	5,800	125	1.15	24
250	GES	91	227	12,500	135	2.13	12
400	GES	122	290	20,500	140	3.2	6
700	GES	142	329	38,500	140	5.4	6
1000	GES	167	410	50,000	145	7.5	6

Specification

Crompton MBFR/U lamps are made to latest edition of BS3677/IEC188 in all electrical, intrinsic quality and performance requirements.



Mercury Reflector MBFR/U

MBFR/U lamps are suitable for high bay locations and floodlighting. The reflective surface of titanium dioxide on the inside of the bulb is unaffected by dust collection in industrial situations. The need for dispersive reflectors or optical control systems becomes optional. The lamps have hard glass outer envelopes and are suitable for operating under exposed conditions (subject to weather-proofing of all electrical connections).

Starting

Run-up time to 80% of full light output is approximately 4 minutes. During starting, the lamp current is approximately 1¾ times normal running current. At voltages up to 250V, starting is satisfactory down to −30°C.

Burning Position

Universal, but preferred cap up.

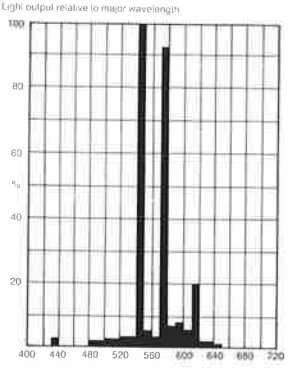
Light Output

The contour of the hard glass envelope together with the titanium dioxide reflecting layer produces the preferential distribution, shown on the light distribution graph.

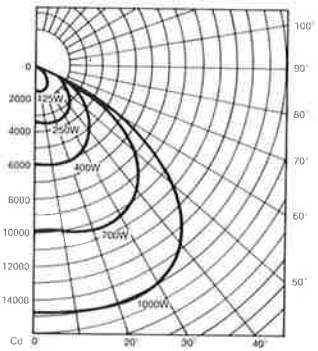
Voltage

Suitable for operation on 200/250V a.c. supplies with appropriate control gear.

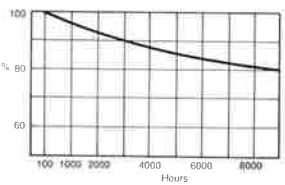
Light output relative to major wavelength



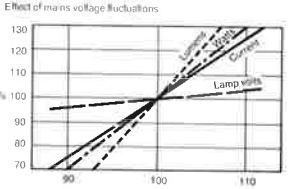
Polar Light distribution diagram



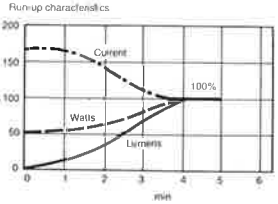
Lumen depreciation curve



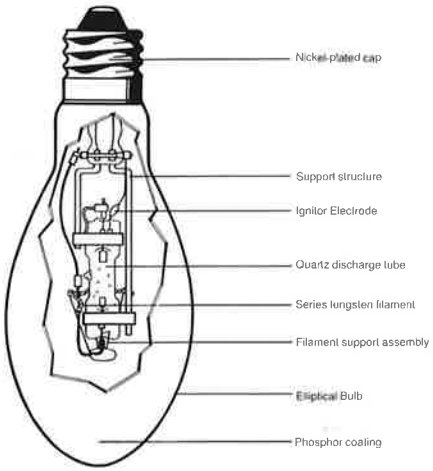
Effect of mains voltage fluctuations



Run-up characteristics



Watts	Cap	Dimensions: Overall Max. Dia. (mm)	Dimensions: Overall Max. Length (mm)	Lighting Design Lumens	Lamp Volts	Lamp Current	Pack Qty.
125	ES	126	190	4,900	125	1.15	12
250	GES	166	264	10,500	135	2.13	5
400	GES	181	304	18,000	140	3.2	5
700	GES	202	328	38,000	140	5.4	4
1000	GES	222	380	49,000	145	7.5	4



Mercury Blended MBTL/MBTF

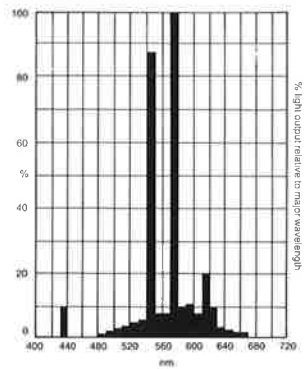
Each lamp is a combination of a mercury discharge tube and a tungsten filament. The tungsten filament provides colour correction to the output from the mercury discharge and acts as a ballast to the arc, making it possible for this lamp to operate direct from the mains supply. No control gear is required, therefore installation costs are low. With these advantages MBTL lamps are particularly suited to commercial applications. They are an excellent replacement for tungsten lamps, particularly in shop windows, entrance halls, hotels and shopping precincts. The interior surface of the outer envelope has a phosphor coating providing good colour rendering.

Burning Position
Cap Up or Cap Down ±30° for all ratings. The 250W and 500W ratings will also operate in other positions when there is a negligible fluctuation in the supply voltage.

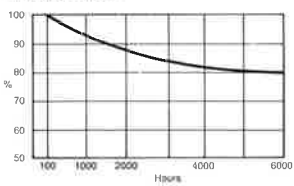
Starting
Instantaneous ignition. 3 minutes to reach full brilliance. After switching off there will be a short restarting delay of some 2 or 3 minutes.

Voltage
240/250V, 50Hz, a.c. supply.

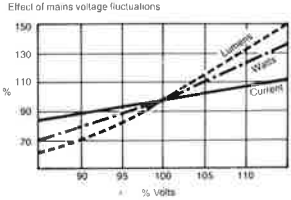
Relative spectral light distribution



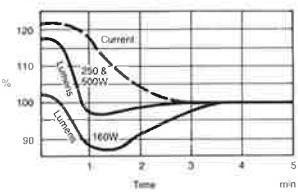
Lumen depreciation curve



Effect of mains voltage fluctuations



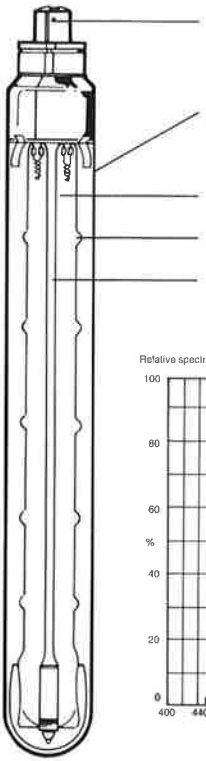
Lamp performance during starting period



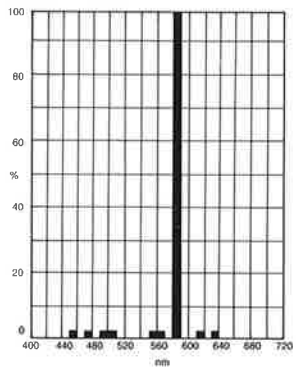
Watts	Cap	Dimensions: Overall Max. Dia. (mm)	Dimensions: Overall Max. Length (mm)	Current	Lighting Design Lumens	Pack Qty
160	ES, BC	76	177	0.70	3,100	40
250	GES	90	227	1.10	5,700	12
500	GES	122	290	2.20	14,000	6

Specification

Crompton SOX lamp are made to latest edition of BS3767/IEC192 in all electrical, intrinsic quality and performance requirements.



Relative spectral light distribution



Sodium SOX

The lamp is of integral design consisting of a U-shaped arc tube containing metallic sodium and an inert gas. The dimple formation provides cool spots to retain the sodium in place. The discharge tube is enclosed in a tubular bulb whose inside surface has a reflector coating of indium oxide. This coating acts as an infra-red reflector keeping the discharge tube temperature at an optimum for minimum input watts, thereby maintaining full efficacy. SOX lamps have an alkyde BC cap for strength and electrical safety, triple-coiled cathodes, a non-staining glass discharge tube for better lumen maintenance and a considerably higher efficacy than all previous types.

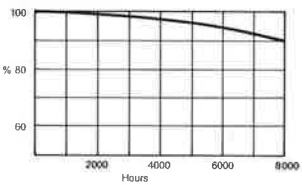
Applications
Street lighting and other installations, requiring high light output, where monochromatic light is acceptable.

Burning Position
18W, 35W and 55W cap up and horizontal ±20%. 90W, 135W and 180W horizontal ±20% only.

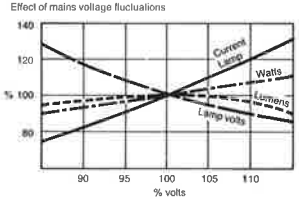
Voltage
Suitable for operation on 200/250V supplies with appropriate control gear.

Starting
Full light output is reached in approximately 15 minutes. Run-up characteristics are shown on the graph, will restart hot.
Lamps operate down to −18°C.

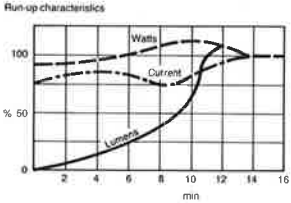
Lumen depreciation curve



Effect of mains voltage fluctuations



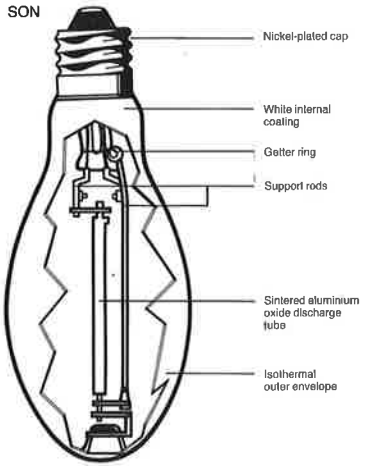
Run-up characteristics



Watts	Cap	Dimensions		Lighting Design Lumens	Lamp Volts	Lamp Current	Pack Qty.
		Overall Max. Dia. (mm)	Overall Max. Length (mm)				
18	ALKYDE BC	54	216	1,750	57	0.35	20
35		54	310	4,300	70	0.6	16
55		54	425	7,150	104	0.6	9
90		68	528	12,250	112	0.95	9
135		68	775	21,200	164	0.95	9
180		68	1120	31,500	245	0.90	9

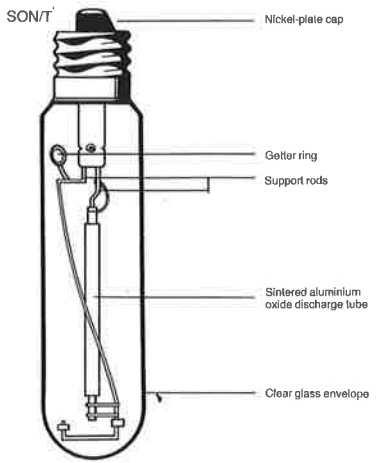
Standard & De Luxe

SON



Standard & De Luxe

SON/T



Sodium SON, SON/T, SON De Luxe & SON/T De Luxe

Standard
High pressure sodium lamps give a pleasant golden-white light, with long life, immediate starting and good colour rendition. They have an extremely high light output and are invaluable for street lighting, floodlighting, industrial high bay lighting and many other applications.

SON, SON/T De Luxe
Very high pressure sodium lamps with superior colour rendering properties. Golden white appearance but nearer to complete white as shown by the high CRI. Colour is particularly good for shop and display lighting and outdoor lighting applications. It is especially kind to complexions.

SON, SON/T De Luxe are completely interchangeable with other SON types on the ballasts, ignitors and in lanterns.

The SON/T version is still available for exact optical control.

Two types are available.
1. SON with an internally white-coated isothermal outer envelope, giving the broader spread of illumination desirable for interior lighting and similar areas.

2. SON/T of clear tubular construction, suitable for directional floodlighting of stadiums and exhibition areas where precise optical control is required.

Control Gear
Special control gear is required. The 50W and 70W have internal ignitors. 150W, 250W and 400W require external ignitors (4.5kV).

Burning Position
Universal.

Starting
Ignition within a few seconds. Takes approximately 5 minutes to warm up to full light output. May take up to 1 minute to restart when hot.

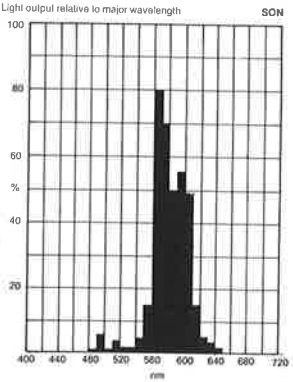
Voltage
230/250V, 50Hz, a.c. supply on correctly rated ballast. Lamps will extinguish if arc volts are caused to rise, due to temperature in close-fitting luminaires, high input voltage, or wrong ballast tapping.

CROMPTON SODIUM & MERCURY DISCHARGE LAMPS

Watts	Cap	Dimensions		Lighting Design Lumens	Lamp Volts	Lamp Current	Pack Qty.
		Overall Max. Dia. (mm)	Overall Max. Length (mm)				
SON							
50	ES	72	156	3,100	85	0.75	24
70	ES	72	156	5,500	90	1.0	24
150	GES	92	227	13,500	100	1.8	12
250	GES	92	227	24,000	100	3.0	12
400	GES	122	292	45,000	105	4.45	6
SON/T							
400	GES	48	283	46,500	100	4.0	12
SON De Luxe							
250	GES	92	227	22,000	100	3.1	10
400	GES	122	292	37,000	100	4.6	10
SON/T De Luxe							
400	GES	48	295	39,000	100	4.6	10

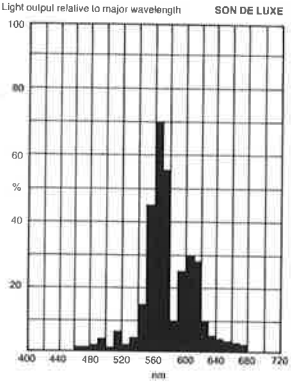
Light output relative to major wavelength

SON

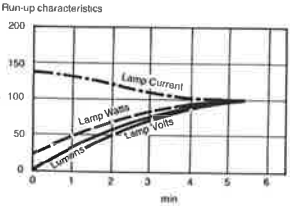


Light output relative to major wavelength

SON DE LUXE



Run-up characteristics



	Standard	De Luxe
CCT	2050K	2200K
X	520	506
Y	420	412
CRI (Ra8)	25	65

UK Sales Organisation

SOUTH EASTERN REGION

Ullswater Crescent, Marlpit Lane,
Coulsdon, Surrey CR3 2UA
Telephone: 01-668 4255
Telex: 915936

EASTERN REGION

Essex Road, Hoddesdon,
Herts EN11 0DN
Telephone: 0992 - 467100
Telex: 24495

EAST MIDLAND REGION

Poulton Drive, Daleside Road,
Nottingham NG2 4EZ
Telephone: 0602 - 866361

WEST MIDLAND REGION

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Aldridge Road, Perry Barr,
Birmingham B42 2TX
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Telex: 338313

NORTH WESTERN REGION

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Telex: 557324

SCOTLAND AND NORTHERN IRELAND

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East Kilbride, Glasgow G74 4PT
Telephone: 035-52 34831
Telex: 778442

HAWKER SIDDELEY
CROMPTON LIGHTING
CROMPTON PARKINSON LIMITED
WOODLANDS HOUSE, THE AVENUE, CLIFTONVILLE, NORTHAMPTON, NN1 5BS

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