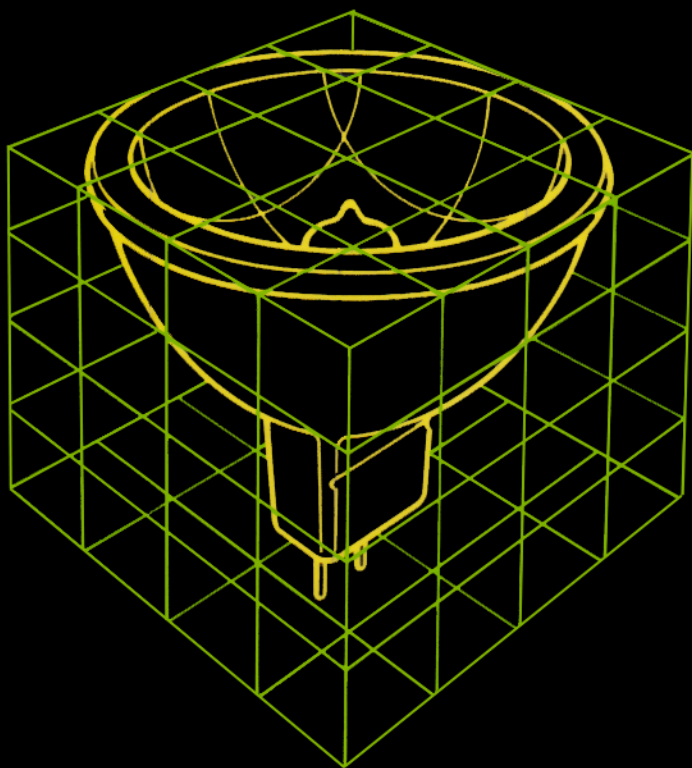


THE  
COMPREHENSIVE  
CATALOGUE  
**1987/8**



---

 **THORN EMI Lighting**

---

---

Road Lighting Numbering System	184
Alpha One Semi-Cut-off SOX	185
Alpha Three SON/MBF	185
Alpha Four SOX	186
Alpha Eight SON/MBF	187
Alpha Nine SOX	187
Beta Two SOX	188
Beta Four SON/MBF	188
Beta Five SOX/SON	189
Beta Seventy-nine SON/MBF	189
Gamma Three SON/MBF	190
Gamma Four SON/MBF Multi-lamp	190
Gamma Five SON/MBF	191
Gamma Seven SON/MBF	191
Gamma Six SON/GLS/MBF/SOX	192
Gamma Six Traditional	193
Circular bollard	193
Precinct bulkhead SON/MBF	194
Precinct Sphere SON/28W 2D	195
Photocell	196
Group A Aluminium Lighting Columns	197
Floodlighting brackets for Group A Aluminium Lighting Columns	198
Group B Leader and Lucerna Aluminium Columns	199
Group B Sheerline and Classic Aluminium Columns	200
Replacement and extension brackets for concrete columns	201
Brackets and Spigot castings for Group B columns	202
Aluminium Wall brackets and boxes	203
Tunnel Lighting	204

---

# ROAD LIGHTING NUMBERING SYSTEM

## BASIC PRINCIPLE

1. All items of road lighting equipment are catalogued with prefix Q. This automatically locates the whole range in the same section of the Comprehensive Price List for easier location. It also gives an immediate statement of equipment type.

2. Second and third digits are initial letter and number of the lantern in the range description, e.g. A3=Alpha 3, B4=Beta 4, G3 = Gamma 3 etc.

Alpha—Group A lighting, side entry.

Beta—Group B lighting, side or top entry.

Gamma—Post-top lanterns.

3. A standard vocabulary of suffix letters, indicative of type detail, with or without gear, accessories or attachments etc., is included as appropriate in the Catalogue number. See below secondary ref.

4. A system of four-digit numbers indicating no. of lamps and maximum wattage. (see below).

5. Where components making up a lantern are supplied as separate packages, each package has a Catalogue number.

6. When producing a complete luminaire Catalogue number, separate packages are indicated by an oblique stroke/. An example would be the Gamma Six lantern.

Gamma Six base casting with integral 125W QG6B1125-4

240V gear:Gamma Six 20in. dia canopy QG6W.

Gamma Six vandal resistant bowl QG6V.

The complete Gamma Six lantern becomes: QG6V/W/B1125-4

## SECONDARY REFERENCES:

B. With gear

C. Cut off

D. Acrylic bowl/diffuser/cylinder—clear or semi-obscured with or without refractor plates.

E. Support assembly

F. Small canopy

G. Glass flat or bowl—clear or refractor

H. Bowl ring (replacement items only)

I. Kolorarc (MBIF)

J. Canopy with lugs—enclosed type.

L. Lampholder/bracket assembly—GL, lampholder only

M Bowl—stippled, pinspot or special

N. High pressure sodium (SON)

O. Bowl or cylinder—opal

P. PE cell socket

S. Semi cut-off

T. Top entry

V. Vandal resistant bowl—clear, opal or prismatic

W. Large canopy or canopy and bowl now packed separately

X. Refractor ring, symmetric

Y. Refractor ring, asymmetric—glass or plastic

## SUFFIX NUMBERS—LAMPS AND WATTAGES

1028—1 x 28W

1035—1 x 35W

1050—1 x 50W

1055—1 x 55W

1070—1 x 70W

1080—1 x 80W

1090—1 x 90W

1100—1 x 100W

1125—1 x 125W

1135—1 x 135W

1140—1 x 140W

1150—1 x 150W

1200—1 x 200W

1250—1 x 250W

1400—1 x 400W

2240—2 x 600mm 40W tubes

Where more than one lamp is available for a luminaire, the largest wattage is used for the reference number.

## SUFFIX NUMBERS—CONTROL GEAR

.4—240V 50Hz

.T—Tapped (supplied tapped for 240V)

.A—Ignitor circuit

## SUFFIX NUMBERS—LAMP HOLDERS

B22—2BC

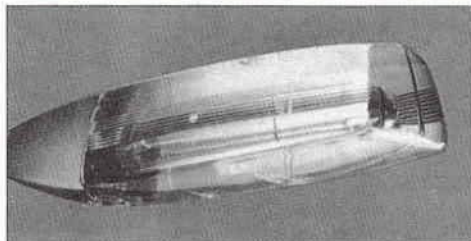
E27—ES

Mainly for reference information only.

**NOTE:** The above vocabulary is provided for reference information only. When ordering please refer to Catalogue numbers given on appropriate lantern page.

# ALPHA ONE SEMI-CUT-OFF SOX

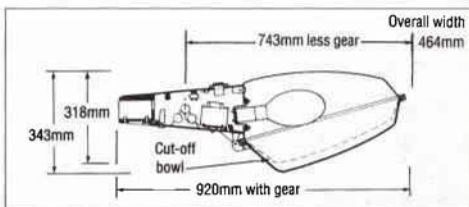
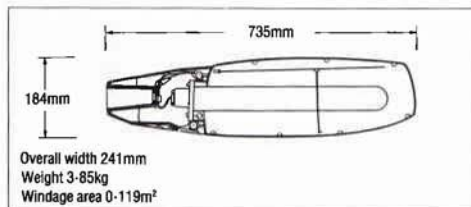
# ALPHA THREE SON/MBF



QA1 E/D 1090



QA3 D/WS 1400



## LAMPS

55W or 90W SOX.

## DISTRIBUTION

Semi Cut-off DLORL 70%

## SPECIFICATION IP23/54

To BS 4533, Safety Marked, Kite Marked, DTP and Design Council approved. IP54 optics. Die-cast aluminium alloy end support with injection moulded clear acrylic and hermetically sealed 'opticell' enclosure. Other external components are stainless steel or aluminium. Control gear is mounted remotely.

## MOUNTING

Side entry for 42mm dia. x 110mm (1 1/4 in BSP) spigot. Recommended for mounting height: nominal 6-8m. Recommended column: QCB. Average spacing/height ratio: 4:1.

## PACKAGES

End support and opticell make complete lantern.

## RANGE

Cat. no.	Description
QA1 E	End support assembly
QA1 D 1055	55W SOX opticell
QA1 D 1090	90W SOX opticell
QA1 PE	End support c/w photocell socket

Control gear/circuit data see control gear and accessories section.



QCB, QCB 1125,  
QA1 D 1090,  
QA1 E + gear

## REMOTE GEAR SEMI-CUT-OFF LANTERN

## LAMPS

400W SON-E or 400W MBF

## DISTRIBUTION

(a) Cut-off (b) Semi-cut-off

## SPECIFICATION

To BS 4533, Safety Marked, Kite Marked, DTP and Design Council approved. Aluminium canopy. Die-cast aluminium end support/gear slipper. Clear UV stabilised acrylic bowls.

## MOUNTING

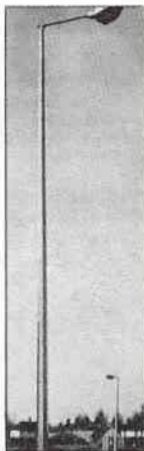
Side entry for 42mm dia. x 110mm (1 1/4 in. BSP) spigot. Recommended for mounting height: 10-12m. Recommended columns: QC10 or QC12. Average spacing/height ratio: 4.5:1 (SCO) 3:1 (CO).

## CATALOGUE NUMBER

All lanterns comprise fully assembled canopy with bowl in separate pack. For lanterns with 3 pin photocell socket add P after C or S in Catalogue number of canopy.

## BOWLS

QA3 DS	Bowl for SCO Alpha 3
QA3 DC	Bowl for CO Alpha 3

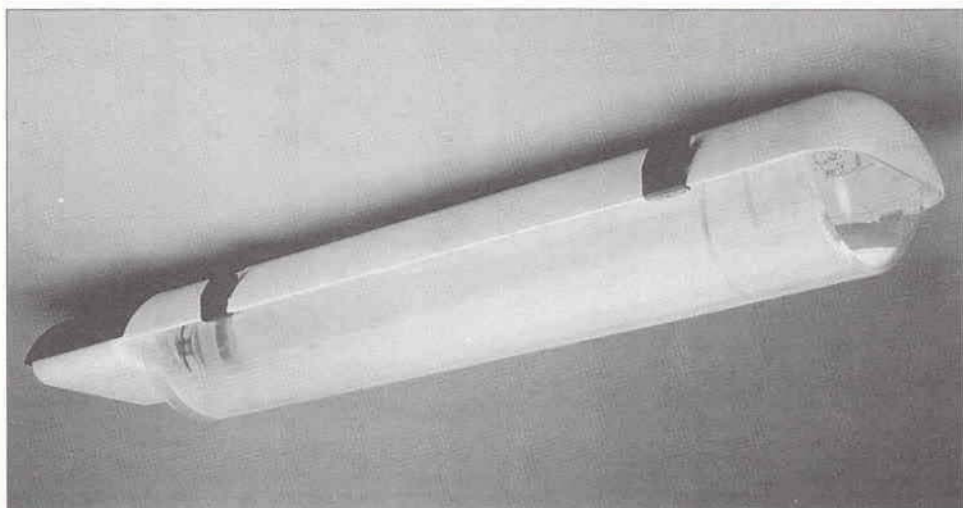


QC10, QCB 1125,  
QA3 WS 1400,  
QA3 DS + gear

## CANOPIES LESS GEAR

Cat. no.	Description	Windage area m <sup>2</sup>	Weight kg. inc. bowl
QA3 WS 1400	SCO canopy	0.17	5.44
QA3 WC 1400	CO Canopy	0.162	4.76
<b>Canopies with gear</b>			
QA3 WSB 1400-4	SCO 400W MBF	0.198	12.56
QA3 WSNB 1400-T	SCO 400W SON	0.198	14.4
QA3 WCB 1400-4	CO 400W MBF	0.189	11.88
QA3 WCNB 1400-T	CO 400W SON	0.189	13.72

Canopy and separate bowl make complete lantern. Other versions available.



QA4S 1135

**LAMPS**  
90W or 135W SOX

**SPECIFICATION** 

Complies with BS 4533 'Safety Mark'; Kitemark. Canopy moulded in glass re-inforced plastic (GRP) with aluminium ie cast spigot entry in versions for remote or integral control gear. Injection moulded acrylic bowl.

**MOUNTING**

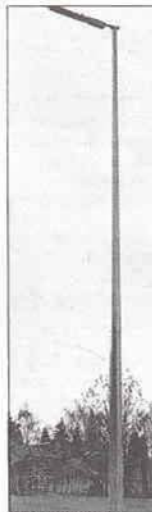
Side entry for 42mm dia. x 100mm (1 1/4 in. BSP) spigot. Recommended mounting height: 10 or 12m. Suitable columns: QC 10 and QC 12.

**PACKAGES**

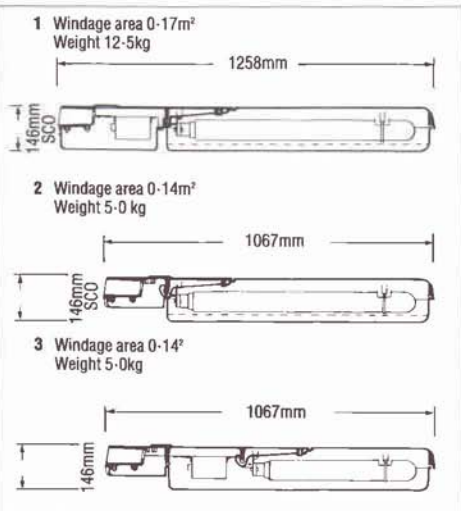
Complete lantern in one pack.

**CONTROL GEAR/CIRCUIT DATA**

See control gear and accessories section.



QC10, QCB 1075,  
QA 4SB 1135-4



**RANGE**

Cat. no.	Description	Weight kg
QA4 S 1135	Lantern, SCO c/w bowl	5.0
QA4 SB 1090-4	Lantern, SCO c/w bowl and 90W SOX gear	10.4
QA4 SB 1135-T	Lantern, SCO c/w bowl and 135W SOX gear	12.5
QA4 C 1135	Lantern, CO c/w bowl	5.0
QA4 CB 1135-T	Lantern, CO c/w bowl and 135W SOX gear	12.5

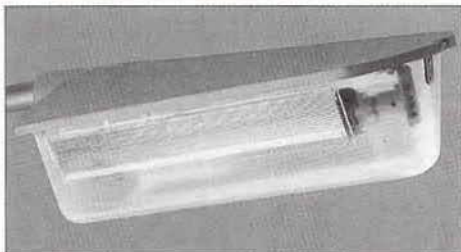
**Note:** For versions wired complete with photocell socket insert 'P' in cat. no. e.g. QA4 SP 1135.

**RANGE**

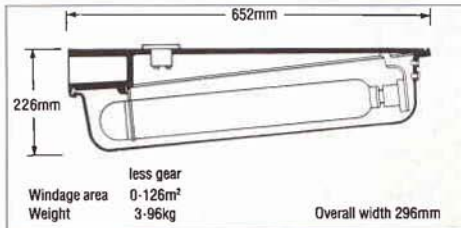
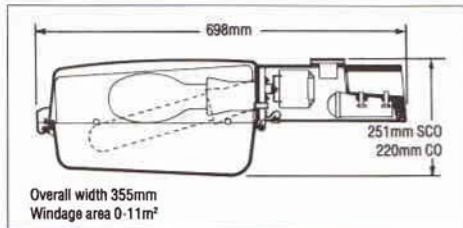
Spares	Description
QA4DS	Spare bowl SCO
QA4DC	Spare bowl CO



QA8 WNB 1150.T & QA8 DS



QA9 D/W 1090



**LAMPS**

150W or 250W SON-T  
150W or 250W SON-E  
250W MBF

**DISTRIBUTION**

Semi Cut-off DLORL 81%  
Cut-off DLORL 81%

**SPECIFICATION IP23/54 ▲**

Complies with BS 4533:2-7, Safety Marked, Kite Marked. Complete with integral control gear. Clear injection moulded acrylic bowl. Optical compartment IP54.

**MOUNTING**

Side entry for 42mm dia. x 100mm (1 1/4 in. BSP). Recommended for mounting height: 8, 10 or 12m. Suitable columns: QC8, QC 10, QC 12.

**PACKAGES**

Canopy assembly and separate bowl make complete lantern.

**CONTROL GEAR/CIRCUIT DATA**

See control gear and accessories section.



**LAMP**

90W SOX

**DISTRIBUTION**

Semi-cut-off DLORL 74%

**SPECIFICATION ▲**

To BS 4533, Safety Marked, Kite Marked, DTP approved. Aluminium alloy canopy and impact resistant bowl.

**MOUNTING**

Side entry for 42 x 100mm spigot. Recommended mounting height: 8m. Recommended column: QC8. Average spacing/height ratio:4-5:1

**PACKAGES**

Canopy assembly and separate bowl make complete lantern.

**CONTROL GEAR/CIRCUIT DATA**

See control gear and accessories section.



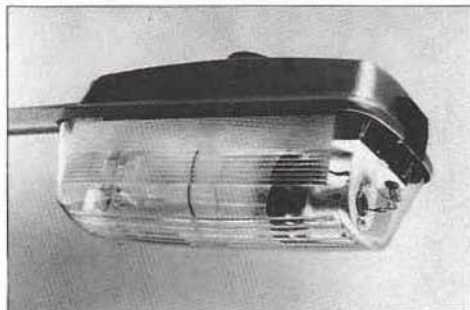
**RANGE**

Cat. no.	Description	Weight kg
QA8 WNB 1150.T	Canopy, c/w 150W SON gear SCO	8-5
QA8 WCNB 1150.T	Canopy, c/w 150W SON gear CO	8-5
QA8 WNB 1250.T	Canopy, c/w 250W SON gear SCO	9-5
QA8 WCNB 1250.T	Canopy, c/w 250W SON gear CO	9-5
QA8 WB 1250.4	Canopy, c/w 250W MBF gear SCO	9-3
QA8 WCB 1250.4	Canopy, c/w 250W MBF gear CO	9-3
QA8 DC	Bowl for Alpha 8 lantern CO	0-9
QA8 DS	Bowl for Alpha 8 lantern SCO	1-0

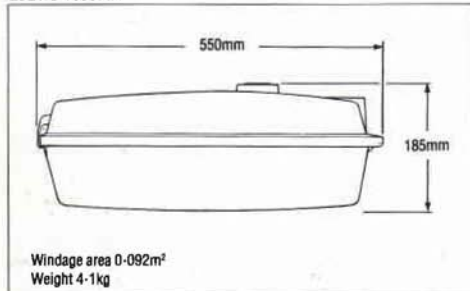
For versions wired complete with photocell socket insert 'P' in cat. no. e.g. QA8 WPNB 1150-T.

**RANGE**

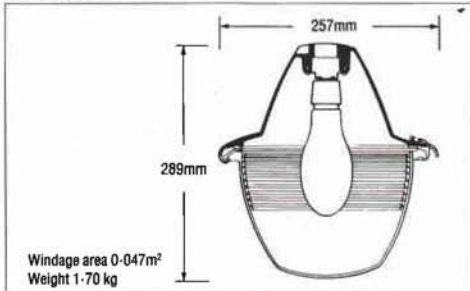
Cat. no.	Description
QA9 W 1090	Canopy assembly (less gear).
QA9 WB 1090-4	Canopy assembly (with gear).
QA9 D	Bowl for less gear lantern.
QA9 DWB	Bowl for QA9 WB 1090.
QA9 DB	Replacement bowl for obsolete QA9 B 1090.



QB2V/B 1055.4A



QB4V/1200/E27



**LAMP**  
55W SOX.

**SPECIFICATION** ▲

To BS 4533. Pressure die-cast aluminium alloy canopy/gear housing and injection moulded vandal-resistant bowl. Lanterns complete with low loss ignitor circuit. Sealed to IP54.

**MOUNTING**

Side entry for 34mm dia. x 80mm spigot. Recommended mounting height: 5m or 6m. Recommended column: QC3 with QCBS 534 bracket. Average spacing/height ratio: 6:1.

**PACKAGES**

Canopy and separate bowl make complete lantern. For lanterns with 3-pin photocell socket, add P after 2 in Catalogue number of canopy.

**CONTROL GEAR/CIRCUIT DATA**

See control gear and accessories section.

**RANGE**

Cat. no.	Description
QB2B 1055-4A	Side entry canopy with gear
QB2 V	Vandal resistant bowl

**NOTE:** SOXPAK 55 - one box containing wall bracket, photocell, lamp and Beta 2.



QC3, QCBS 534,  
QB2B 1055-4A,  
QB2V

**LAMPS**  
50W or 70W SON-E  
80W MBF

**SPECIFICATION** ▲

Aluminium alloy canopy and UV stabilised vandal resistant refractor bowl. Control gear for SON and MBF lamps mounted remotely.

**MOUNTING**

Top entry for 3/4 BSP thread x 18mm. Recommended mounting height: 5m. Recommended column: QC3 with QCBT 226 bracket. Average spacing/height ratio: 6:1.

**PACKAGES**

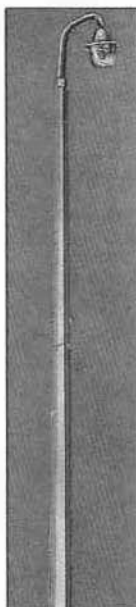
Canopy and bowl make complete lantern.

**CONTROL GEAR/CIRCUIT DATA**

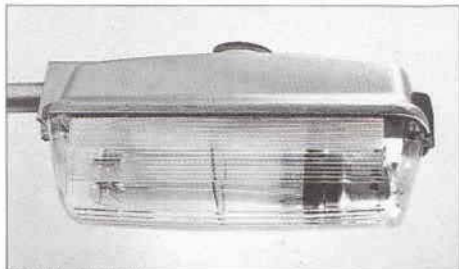
See control gear and accessories section.

**RANGE**

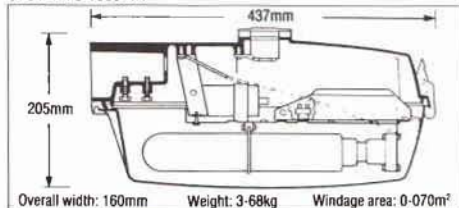
Cat. no.	Description
QB4 1200 E27	Canopy assembly
QB4 V	Vandal resistant refractor bowl
GL 1194-1	Spare lampholder (ES)



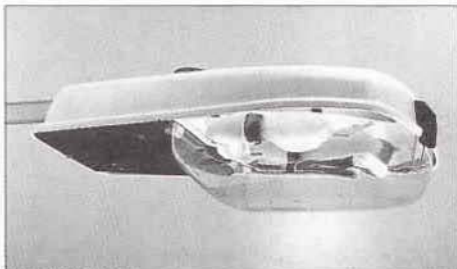
QC3, QCBT 226,  
QB4 1200, QB4V  
PLUS GEAR



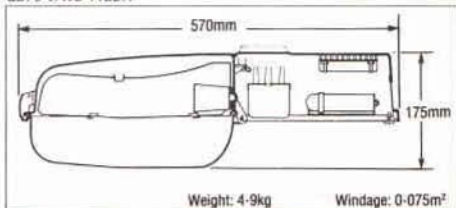
QB5V/1in B 1035.4A



Overall width: 160mm Weight: 3-68kg Windage area: 0-070m<sup>2</sup>



QB79 V/WB 1125.T



Weight: 4-9kg Windage: 0-075m<sup>2</sup>

**LAMPS**  
35W or 18W SOX  
50W SON

**SPECIFICATION ▲**

Safety Marked to BS 4533. Pressure die-cast Aluminium alloy canopy/gear housing and injection moulded vandal-resistant bowl. Sealed to IP 54. Gear can be mounted remotely. Note: 'With gear' lanterns complete with low loss ignitor circuit.

**MOUNTING**

Side entry for 34mm dia. x 80mm spigot. Top entry for 3/4 in BSP threaded. Also available to order 27mm side entry and 1in BSP top entry. Recommended mounting height: 5m. Recommended column: QC3 with QCBS 534 bracket. Average spacing/height ratio: 6:1.

**PACKAGES**

Canopy and separate bowl make complete lantern. For lanterns with 3-pin photocell socket, add P after 1in or 3/4in., in catalogue number.

**NOTE:**

SOXPAK 35: Box containing wall bracket, QB51 in PB1035.4A, QB5V, 35W SOX lamp and QP photocell.

**RANGE**

Cat. no.	Description
QB5 1in 1035	Side entry canopy (less gear)
QB5 1in B1035-4A	Side entry canopy (with gear)
QB5T 3/4in B1035-4A	Top entry canopy (with gear)
QB5 1in NB 1050-T	Side entry canopy (with 50W SON gear)
QB5V	Vandal resistant bowl

Also available as 18W version Catalogue number QB5 1in B1018-4.



**LAMPS**  
80W or 125W MBF  
50W or 70W SON

**SPECIFICATION IP23/54 ▲**

Safety Marked to BS4533. GRP canopy and injection moulded vandal resistant bowl. Control gear integral or remote. IP54 Optical compartment.

**MOUNTING**

Side entry for 34mm dia. x 110mm spigot.

**PACKAGES**

Complete lantern in one pack. For lanterns supplied with photocell socket add P after W in Catalogue no. All supplied complete with ES lampholder.

**CONTROL GEAR/CIRCUIT DATA**

See control gear and accessories section.



**RANGE**

Cat. no.	Description
QB79V WNB 1050-T	Lantern and gear for 50W SON-E
QB79V WNB 1070-T	Lantern and gear for 70W SON-E
QB79V WB 1080-4	Lantern and gear for 80W MBF
QB79V WB 1125-T	Lantern and gear for 125W MBF
QB79V W 1200	Lantern without gear for use with remote gear
QB79V	Spare vandal resistant bowl





QG3 1400



**LAMPS**

150W, 250W or 400W SON  
250W or 400W MBF

**SPECIFICATION**

Design council approved. Aluminium alloy base, stove enamelled spun aluminium canopy and opal acrylic bowl with stainless steel toggle catches. Control gear mounted remotely.

**MOUNTING**

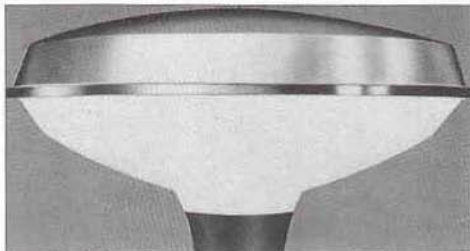
Post top mounting for 76 X 76mm spigot.  
Recommended mounting height: 8m.

**RANGE**

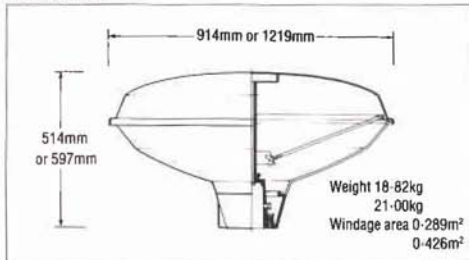
Cat. no.	Description
QG3 1400	Complete lantern
Replacement packages	
QG3 0	Opal bowl
QG3 F	Canopy assembly



QC8/QFS1  
QG3 1400 + GEAR



QG4 0/W/3400



**LAMPS**

Two or three 150W, 250W or 400W SON  
Two or three 250W or 400W MBF  
Two or three 400W MBIF

**DISTRIBUTION**

Symmetrical

**SPECIFICATION**

Design council approved. Two alternative widths of sheet aluminium canopy attached by stem to base casting assembly. Acrylic bowl. Control gear mounted remotely.

**MOUNTING**

Post top mounting for 76 X 130mm spigot.  
Recommended mounting height: 8m or 10m for 900mm lantern; 10m or 12m for 1200mm version.

Max. column diameter 113mm for a distance 300mm below spigot. Provide column with three radial pegs at this point.

Recommended column:

8m QC8G4, 10m QC10G4, 12m QC12G4

**RANGE**

Cat. no.	Description
<b>900mm version</b>	
QG4 3400	2 or 3 lamp stem assembly
QG4 F	900mm canopy
QG4 036	900mm bowl
<b>1200mm version</b>	
QG4 W3400	2 or 3 lamp stem assembly
QG4 W	1200mm canopy
QG4 0	1200mm bowl

Three packages for complete lantern.

**CONTROL GEAR/CIRCUIT DATA**

See control gear and accessories section



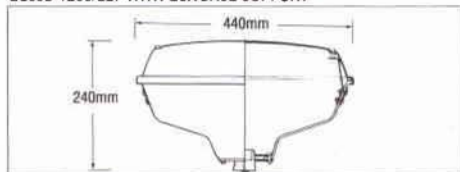
QG4W 3400, QG4W  
QG40 QC10G4

**CONTROL GEAR/CIRCUIT DATA**

See control gear and accessories section



**QG5 JD 1200/E27 WITH QCX BASE SUPPORT**



**LAMPS:** 50W or 70W SON  
80W or 125W MBF  
**DISTRIBUTION:** symmetrical

**SPECIFICATION:** Design Council approved. Acrylic enamelled spun aluminium canopy with high impact acrylic bowl. Control gear for discharge lamps mounted remotely.

**MOUNTING:** on QC3 (or other THORN EMI Group B column) with QCX base support. Recommended mounting height 5m. Alternatively on columns having 76mm x 76mm spigot using QG5 E3X3 adaptor.

**PACKAGES:** body assembly, lampholder and support casting make complete lantern.

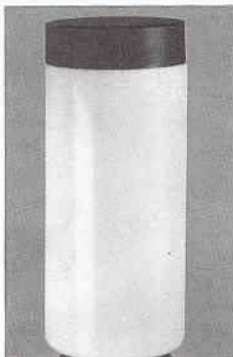
**RANGE**

Cat. no.	Description
QG5 JD1200	Body, lampholder support, and clear bowl
QG5 E3 x 3	Support casting for 76mm x 76mm spigot
QCX	Support casting for THORN EMI column
GL 1194-1	Lampholder ES (E27)

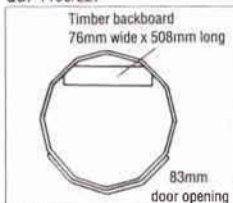
**REPLACEMENTS**

Cat. no.	Description
QG5 D	Clear bowl
QG5 J1200	Canopy

*QC3, QCX, QG5JD  
1200 PLUS  
LAMPHOLDER PLUS  
GEAR*



**QG7 1100/E27**



**SECTION THROUGH COLUMN**

Door opening length 457mm  
Depth in ground 610mm  
Cable entry 100mm x 50mm situated 305mm below ground level

**LAMPS:** 50W or 70W SON  
80W MBF

**SPECIFICATION:** Design Council approved. Aluminium alloy base casting and acrylic bowl with spun aluminium top cap. Control gear for discharge lamps mounted remotely.

**MOUNTING:** a) Pole top on QCG7 column specially designed for this lantern. Nominal column height 5m.  
b) Wall bracket QPRK 1100.

**RANGE**

Cat. no.	Description
QG7 1100 E27	Complete lantern
QCG7	Aluminium column

**REPLACEMENTS**

Cat. no.	Description
QG7 0	Spare bowl
QG7 F	Spare top cap

Complete luminaire in one pack.  
**CONTROL GEAR/CIRCUIT DATA:** See *Control gear and accessories* section.



**SECTION THROUGH LANTERN**

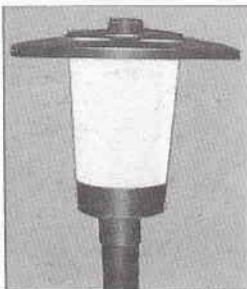


**QG7 1100 E27  
LANTERN PLUS  
GEAR ON QCG7  
COLUMN**

# GAMMA SIX SON/GLS/MBF/SOX



QG6 V/F/PNB 1070 T C/W QP









QG6 V/W/NB 1070 T



Weight: 6.79kg  
Windage area: 0.104m<sup>2</sup>



## Catalogue number combinations for complete lanterns.

BASE CASTING ASSEMBLY	CANOPIES	BOWL	REPLACEMENTS
 <p><b>QG6 1200</b> Post-top base casting assembly. Less gear</p> <p><b>QG6 B 1125.4</b> Post-top base casting assembly 125W MBF geared.</p> <p><b>QG6 B 1080.4</b> Post-top base casting assembly 80W MBF geared.</p>	 <p><b>QG6 W</b> 20in dia canopy</p>  <p><b>QG6 F</b> 10.5in dia canopy</p>	 <p><b>QG6 V</b> Vandal-resistant bowl</p>	 <p><b>GL 1085</b> 2BC lampholder</p> <p><b>GL 1194-1</b> ES lampholder</p>  <p><b>QP 1</b> Twist and lock photocell socket</p>
			<p><b>QG 6T</b> Top cap</p> <p><b>QG6T PT</b> Top cap for photocell version</p> <p><b>QG6 PT</b> Top cap for pre-1983 photocell versions having metal bridge between support rods.</p>

For lanterns requiring a photocell socket add P to base Catalogue number after QG6

### LAMPS

50W or 70W SON  
80W or 125W MBF  
35W SOX

### SPECIFICATION

Conforms to BS 4533 'Safety Mark'. Aluminium alloy case and aluminium alloy canopies with injection moulded vandal resistant bowl. Control gear for 'with gear' lanterns mounted in base castings.

### MOUNTING

Post top mounting for 76x 76mm spigot. Recommended mounting height: 5m. Recommended columns: QC3 with QCS 76 spigot.

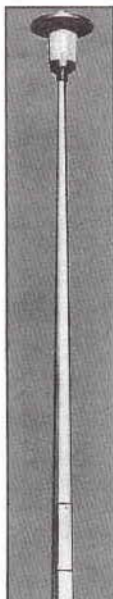
### CONTROL GEAR/CIRCUIT DATA

See control gear and accessories section.

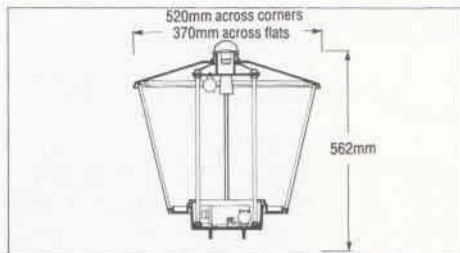
### PACKAGES AND SPARES

Cat. no.	Description
QG6 1200.E27	Base assembly less gear ES
QG6 1200.B22	Base assembly less gear BC
QG6 B 1035-4A	Base assembly with 35W SOX gear
QG6 B 1080-4	Base assembly with 80W MBF gear
QG6 B 1125-4	Base assembly with 125W MBF gear
QG6 NB 1050-T	Base assembly with 50W SON gear
QG6 NB 1070-T	Base assembly with 70W SON gear
QG6V	Bowl (vandal resistant)
QG6 W	Large canopy
QG6 F	Small canopy
GL 1085	Lampholder (2BC-B22)
GL 1194-1	Lampholder (ES-E27)

**NB:** Each lantern requires: 1) A base casting assembly, 2) A bowl, 3) A canopy. For lanterns requiring a photocell socket add letter P to base cat.no after QG6 e.g. QG6PNB 1070 T.



QC3, QCS 76,  
QG6 B 1125.4,  
QG6 W, QG6 V.



**LAMPS**

50W or 70W SON  
80W or 125W MBF to order

**SPECIFICATION**

Conforms to BS 4533 'Safety Mark'. Aluminium alloy base castings and high impact acrylic diffuser/canopy. This version of Gamma Six has slightly larger supports than others in the range.

**MOUNTING**

Post top mounting for 76mm x 76mm spigot.  
Recommended mounting height: 5m.  
Recommended columns: QC3 with QCS 76 spigot.

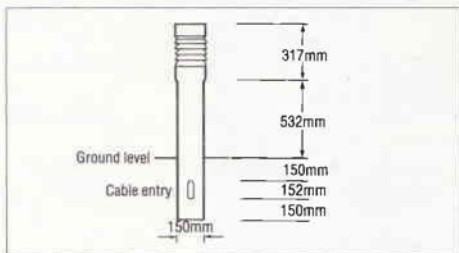
**PACKAGES**

Box contains complete luminaire, lamp and integral control gear.

**RANGE**

QG 6GNB 1050.T	Traditional Gamma Six lantern 50W lamp
QG 6GNB 1070.T	Traditional Gamma Six lantern 70W SON
QG 6GB 1080	80W MBF/U Traditional Gamma Six lantern 80W MBF
QG 6GB 1125	125W MBF/U Traditional Gamma Six lantern 125W MBF

For lanterns with socket for photocell add P after second G.



**VANDAL RESISTANT LOW LEVEL LIGHTING**

**LAMPS**

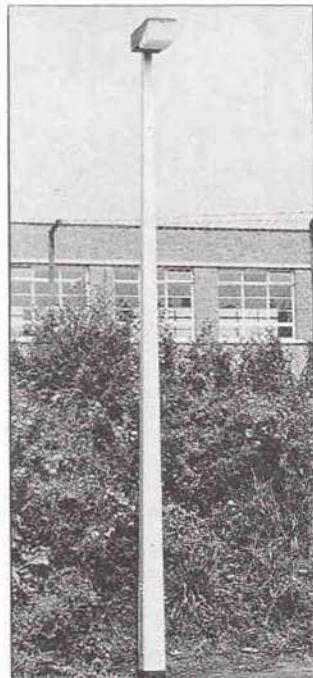
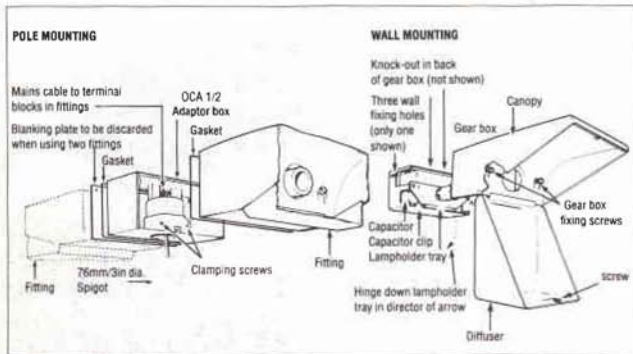
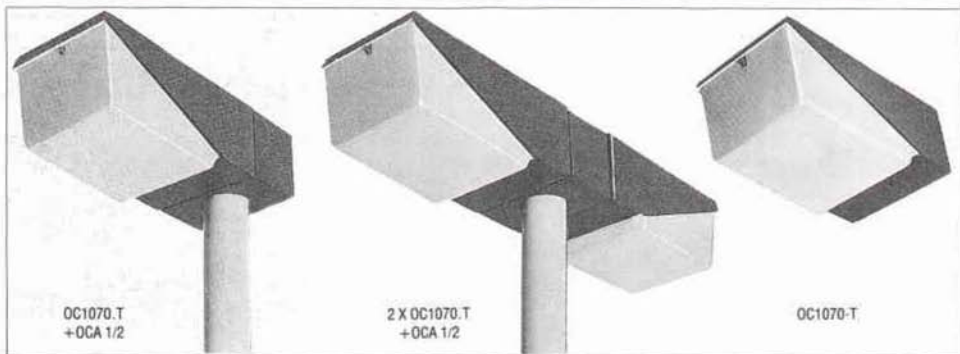
50W or 70W SON  
80W MBF

**SPECIFICATION**

Thick section robust aluminium shaft finished black polyester powder coated. Head section cast aluminium with polycarbonate louvres. Lamp additionally protected by polycarbonate sleeve. No door to be vandalised. Access for cabling and gear by removing head. Head retained by socket head screws. Gear and cable terminations compartment separated from lamp compartment by plate. Two 20mm clearance holes provided in termination bar to allow for looping cables.

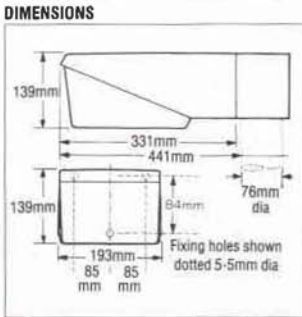
**RANGE**

P31 AM	Bollard complete excluding gear
QT NB 1070-T	Prewired gear tray for 70W SON
QT NB 1050-T	Prewired gear tray for 50W SON
QT B1080-4	Prewired gear tray for 80W MBF



**LAMPS**  
50W or 70W SON  
80W MBF

**SPECIFICATION**   
Wall mounted bulkhead luminaire with adaptor box for column mounting either singly or in pairs. Pressure die-cast aluminium canopy with integral cast reflector housing separate gear tray with 240V gear and ES lampholder. Opal vandal resistant diffuser. Complies with BS 4533 'Safety Mark'.



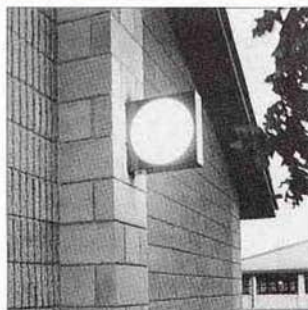
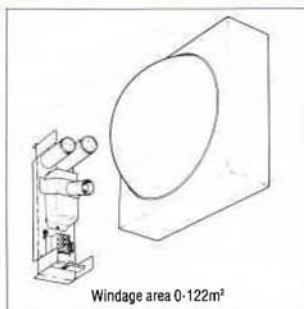
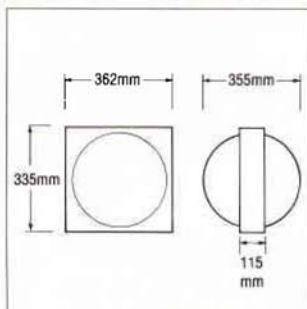
QC4, QCS 76, OCA 1/2, OC 1070-T

**POLE MOUNTING ADAPTOR**  
For one or two luminaires as shown in diagram. Blanking-off plate used only when one luminaire is installed. Recommended mounting height: 3-6m. Recommended column: QC4 or QC3 both with QCS 76 spigot and OCA 1/2.

**RANGE** Packed complete with lamp

Cat. no.	Description	Windage area m <sup>2</sup>	Weight kg
OC 1080-4	80W MBF Precinct c/w gear + lamp	0.046	4.1
OC 1070-T	70W SON Precinct c/w gear + lamp	0.046	4.9
OC 1050-T	50W SON Precinct c/w gear + lamp	0.046	4.9
OCA 1/2	Adaptor mounting		1.59
OCV	Spare vandal-resistant bowl		0.23

# PRECINCT SPHERE SON /28W 2D



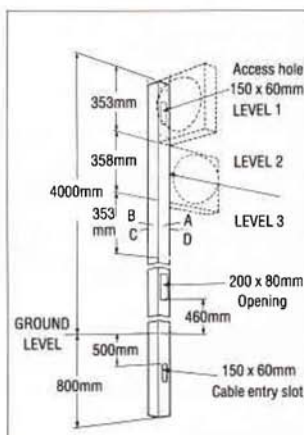
## LAMPS

50W or 70W SON, or 28W 2D. Also made to order 80W MBF.

## SPECIFICATION

Wall mounted luminaire that is also suitable for direct mounting onto special square section column. Various arrangements around the column are possible. The gear tray fits directly to the wall or column and then the injection moulded polycarbonate diffuser (white) and surround (black), which are factory fitted together, slide over the tray and are retained by special quarter turn socket head fastenings.

Matching black aluminium column available.



## RANGE Packed complete with lamp

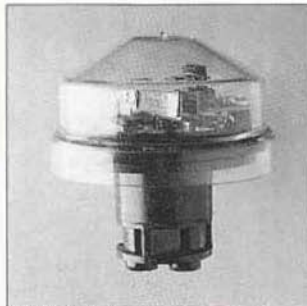
Cat. no.	Description	Weight kg
OCSN 1050	50W SON precinct sphere	4.54
OCSN 1070	70W SON precinct sphere	4.54
2D OCS 1028	28W 2D precinct sphere	3.32
QCPS 4/1†	4m above ground square section column for 1 precinct sphere.	
QCPS 4/2†	4m above ground square section column for 2 precinct spheres.	

† First numeral is height in metres, second is number of spheres to be fitted

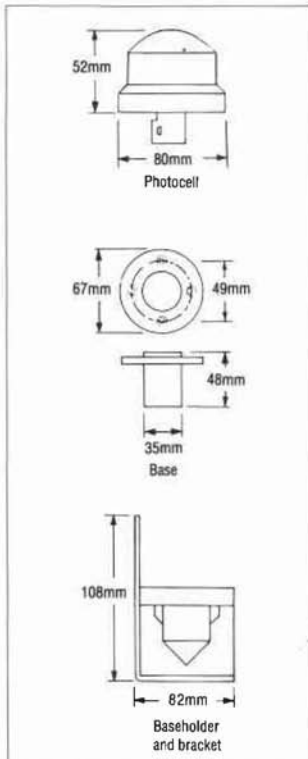
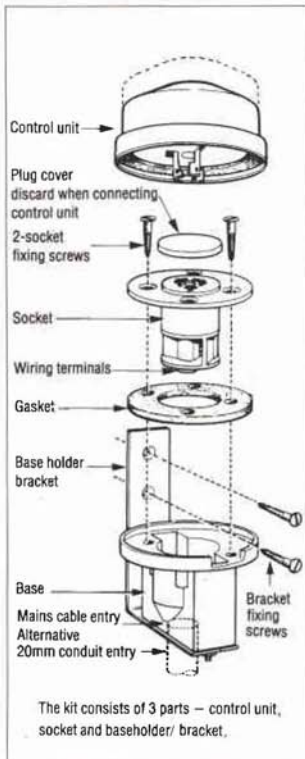
# PHOTOCELL



QPK PHOTOCELL KIT



QP PHOTOCELL



## PHOTOCELL CONTROL UNIT

This control is designed to switch a lighting load on and off automatically at dusk and dawn. This unit is pre-calibrated to switch at light levels which ensure that outdoor lighting is on when required, allowing for a 10 minute warm-up period for sodium or mercury discharge lighting. It is, however, suitable for use with all types of lighting, i.e. tungsten, fluorescent or discharge.

## PART NIGHT PHOTOCELL

Available only c/w socket and bracket, this unit additionally switches off at approx. midnight, and if still dark, on again, approx. 6 a.m. Use of dedicated integrated circuit means there is no clock requiring setting, time being calculated from dusk and dawn.

## Versions available:

- QP— Photocell. Fits directly into roadlighting luminaires that have been fitted with a NEMA type socket at the factory. This is designated by the letter 'P' in the Catalogue number of the lantern.
- QPK— Photocell kit. Photocell packed with base, baseholder and bracket for mounting on walls, fascias, etc.
- QPK PN— Part night photocell kit. As QPK but photocell contains pre-programmed integrated circuit as stated.

The calibration is fixed in the factory and is not variable. The unit switches with a ratio of 1:1.5 i.e. the switch on level is 70 lux and the switch off level is 105 lux.

## DATA

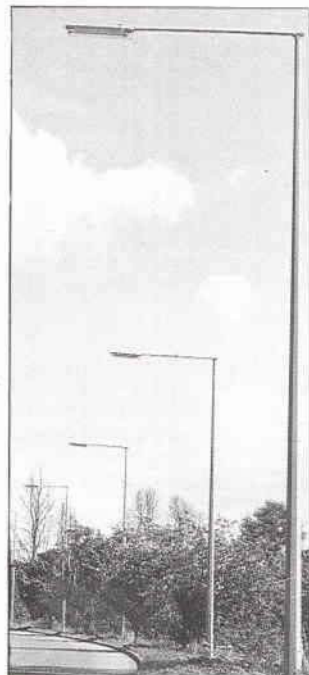
Components	Weight kg
Photocell	0.114
Base	0.064
Baseholder	0.241

Voltage:	240 volts 50Hz
Rating:	1500 VA— maximum 1000 watts discharge lighting load (note — max. 1 lamp if ignitor is in circuit)
Switch on:	70 lux
Ratio:	1:1.5

# GROUP A ALUMINIUM LIGHTING COLUMNS

## INTRODUCTION

8, 10 and 12m versions with a range of single and double outreach arm brackets for road lighting lanterns, and a number of standard mountings for floodlights. Low weight for simplified erection and increased safety. No maintenance required. Approved by the DTP. Approved by the Design Council. Designed to BS 3989.



## GENERAL COLUMN SPECIFICATIONS

### MATERIAL:

SHAFT: aluminium sheet BS 1470: NS4-H6 (Renumbered Alloy 5251).

TOP CASTING: supplied as standard welded to column top, LM6-M alloy.

OUTREACH BRACKET ARMS: aluminium tube BS 1471. Single and double arms give 5° uplift for road lighting.

BACKBOARD: Timber 914mm X 152mm

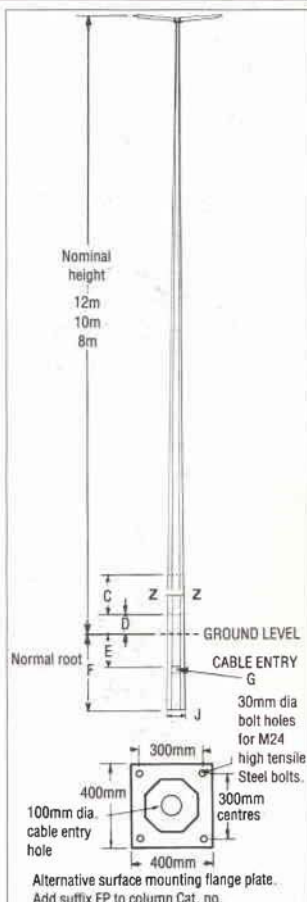
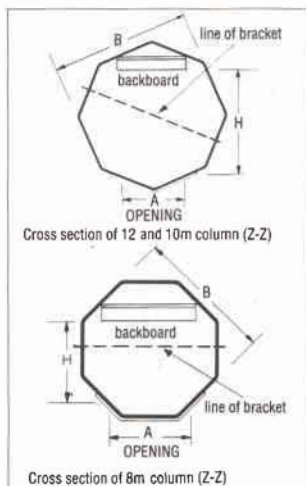
DOOR OPENING: 610mm X 130mm.

Earth connection: Stainless steel.

Column Section: Octagonal.

Spare Door Key: Catalogue no. QCKT.

Bracket arms are normally supplied with spigot 42mm dia. x 110mm. For post top lanterns, see under Floodlighting range. 8, 10 and 12m columns are delivered direct to site within mainland UK.



## COLUMN DIMENSIONS MM

Cat. no.	Nominal height	A	B	C	D	E	F	G	H	J	Wt kg
QC 12	12 metre	136	305	610	457	305	1500	152 x 76	230	375	113
QC 10	10 metre	136	249	610	457	305	1500	152 x 76	173	310	79
QC 8	8 metre	128	219	610	457	305	1219	152 x 76	130	270	62

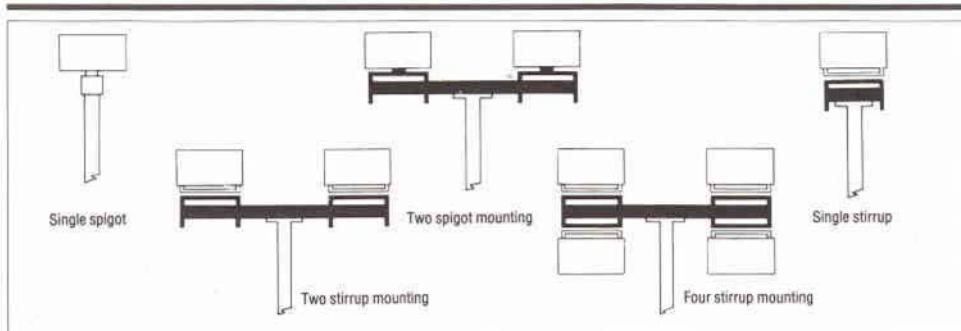
## ROADLIGHTING BRACKET ARMS All THORN EMI Roadlighting luminaires are suitable for use where marked \*

Cat. no.	Description	12m	10m	8m
QCB 1075	Single arm, 0.75m outreach	*	*	*
QCB 1125	Single arm, 1.25m outreach	*	*	*
QCB 1200	Single arm, 2.0m outreach	*	*	*
QCB 1300	Single arm, 3.0m outreach	*	*	*
QCB 2150	Double arm, 1.5m span	*	*	*
QCB 2250	Double arm, 2.5m span	*	*	*
QCB 2400	Double arm, 4.0m span	*	*	*
QCB 2500	Double arm, 5.0m span	*	*	*

When ordering state the type of lantern(s) or floodlight(s) to be used with the column and site address for direct delivery in UK (excluding N. Ireland)




# FLOODLIGHTING BRACKETS FOR GROUP A ALUMINIUM LIGHTING COLUMNS



STANDARD FLOODLIGHTING MOUNTING ARRANGEMENTS






## RANGE

	Cat. no.*	Floodlight mounting	No. of luminaires	Type	Additional items required	Column 12m	10m	8m
	QFS 1 QFS 1 A	Single spigot luminaire (a) 76 x 76mm (b) 152 x 76mm	1 1	Sunflood/Sunspot Area flood	OHA 4612 —	• •	• •	• •

Above two Catalogue nos. for specification purposes only; column will be supplied with fixing arrangement as one complete unit.

Example of order reference — QC8/QFS1A.

For those listed below, the bracket fixes to the standard road/light shaft by means of U-bolts supplied in base of shaft.

	QFS 2	Two spigot mounting luminaires	2	Area flood	—	•	•	•
	QF 1 QF 1† QF 1† QF 1	Single stirrup mounted luminaire— platform mounting to stirrup	1 1 1 1	SONPAK Haline Area flood ON 1500 flood M25J	— — OAM — —	• • • • •	• • • • •	• • • • •
	QF 2 QF 2† QF 2† QF 2†	Two stirrup mounted luminaires— platform mounting to stirrup	2 2 2 2	SONPAK Haline Area flood ON 1500 flood M 25J	— — 2 x OAM — —	• • • • •	• • • • •	• • • • •
	QF 3†	Three stirrup mounted luminaires— platform mounting to stirrup	3 3	SONPAK Haline	— —	‡	‡	‡
	QF 4†	Four stirrup mounted luminaires— platform mounting to stirrup	4	Haline	—	•	•	•

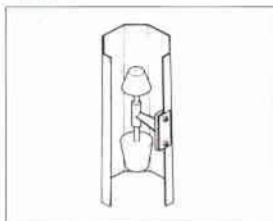
Adaptors for other floodlights not listed in the range table can be supplied to order. Special brackets are available to order for mounting up to eight Sunfloods.

\* When specifying columns for use with the floodlight arrangements listed, both column and fixing references should be given. eg. QF 4 with 12 metre column—thus QC 12/QF4.

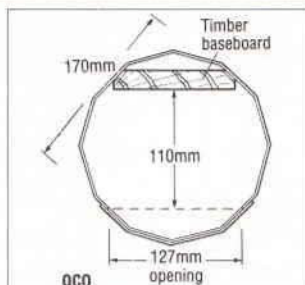
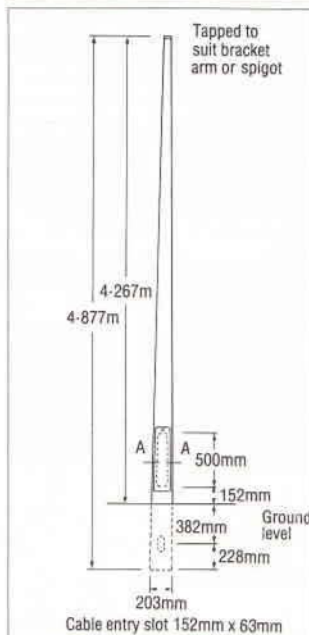
† In some cases where floodlights require separate control gear, it may be necessary to locate gear remotely from the column.  
‡ Three SONPAK 15/25 are only suitable for certain geographical areas.

## ANTI VIBRATION DAMPER

Irrespective of form, material or construction, columns in certain locations may be subject to wind induced vibration. Damage to lamps and luminaires can occur due to air turbulence generated by peculiar geographical features or building formations. While it is not possible to predict where such extreme situations may occur, any resultant vibration can be controlled with a multi-frequency damper. This device (catalogue reference QCM) is easily fitted inside the column or, if required, columns c/w fitted dampers can be supplied.



# LEADER AND LUCERNA ALUMINIUM COLUMNS



## LUCERNA COLUMN QC0

Twelve-sided section in 5251 aluminium alloy. Control gear mounted on timber baseboard in base compartment.

### CATALOGUE NUMBER

QC0	Column with tapped top casting for use with bracket or spigot
-----	---

For surface mounting versions to special order add suffix 'FP'. See overleaf for floodlighting brackets.

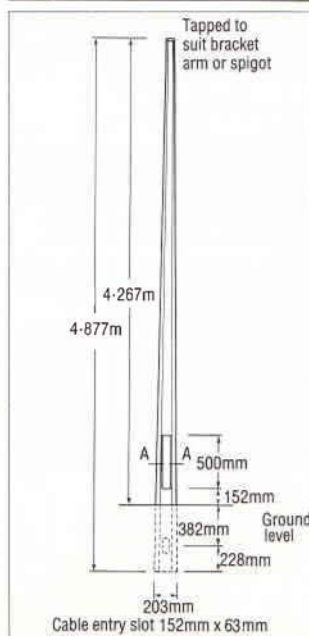
### DATA

Weight	14.5kg
--------	--------

### BASE COMPARTMENT

#### NOMINAL DIMENSIONS

Door opening	500 x 127mm
Depth	110mm
Baseboard dimensions	610 x 114mm
Clearance dimension at base of root	215mm



## LEADER COLUMN QC1

Triangular section in aluminium alloy 5251. Control gear mounted on timber baseboard in base compartment.

### CATALOGUE NUMBER

QC1	Column with tapped top casting for use with bracket or spigot
-----	---

### DATA

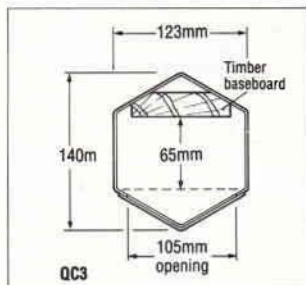
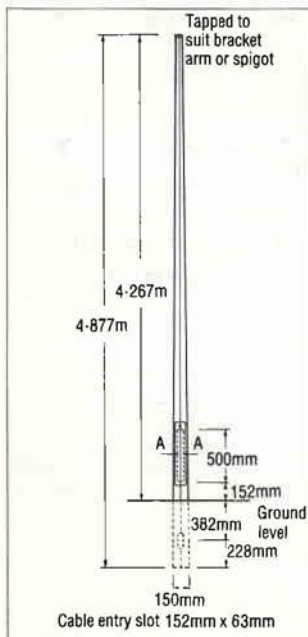
Weight	13.6kg
--------	--------

### BASE COMPARTMENT

#### NOMINAL DIMENSIONS

Door opening	500 x 90mm min.
Depth	90mm
Baseboard dimensions	609 x 67mm
Clearance dimension at base of root	185mm

# SHEERLINE AND CLASSIC ALUMINIUM COLUMNS



SECTION A - A

### SHEERLINE COLUMN QC3

Hexagonal section in aluminium alloy 5251. Control gear mounted on timber baseboard in base compartment.

BS 3989:1966

#### CATALOGUE NUMBER

QC 3	Column with tapped top casting for use with bracket or spigot
------	---

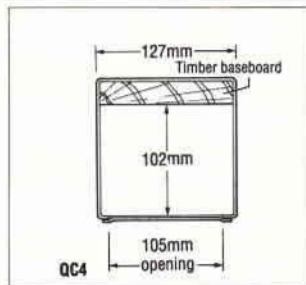
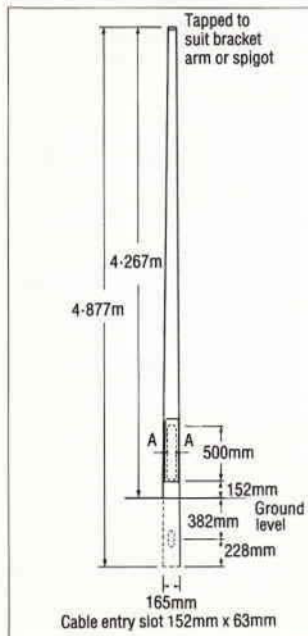
For columns with surface mounting flange plate add suffix 'FP' to Catalogue number

Weight	13.2kg
--------	--------

#### BASE COMPARTMENT

##### NOMINAL DIMENSIONS


Door opening	500 x 105mm
Depth	65mm
Baseboard dimensions	623 x 89mm
Clearance dimension at base of root	175mm



SECTION A - A

### CLASSIC COLUMN QC4

Square section in aluminium alloy 5251. Control gear mounted on timber baseboard in base compartment.

BS 3989:1966 

#### CATALOGUE NUMBER

QC 4	Column with tapped top casting for use with bracket or spigot
------	---

For columns with surface mounting flange plate add suffix 'FP' to Catalogue number.

Weight	14.5kg
--------	--------

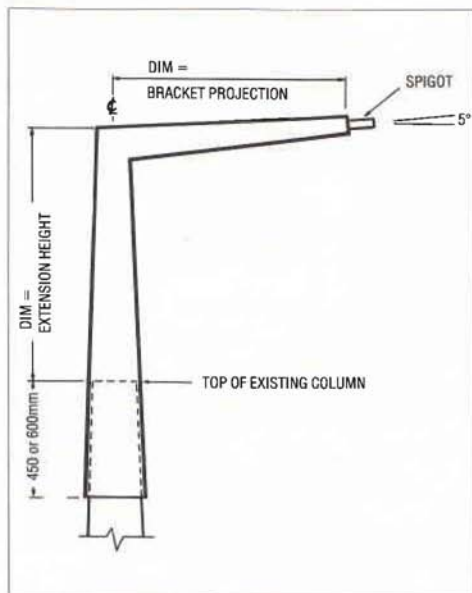
#### BASE COMPARTMENT

##### NOMINAL DIMENSIONS

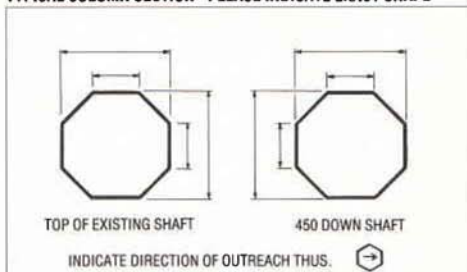
Door opening	500 x 105mm
Depth	102mm
Baseboard dimension	623 x 114mm
Clearance dimension at base of root	230mm

# REPLACEMENT AND EXTENSION BRACKETS FOR CONCRETE COLUMNS

With ageing concrete columns it is often more economical to consider replacing the bracket arm than to consider a complete new column. This is particularly true where large costs are involved in moving the underground service. THORN EMI Lighting offers a range to suit most column shafts, both replacement and extension, for use where a higher mounting height is required. They are manufactured from galvanised steel or aluminium. It is generally sufficient to quote the shaft type, mounting height and outreach required, together with weight and windage of the proposed lantern. If not sure of existing column, give the following details:

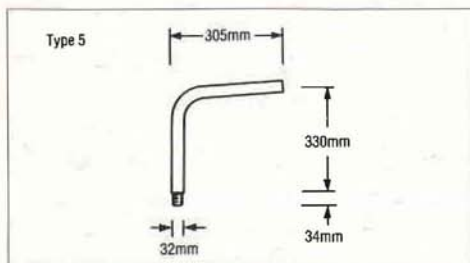
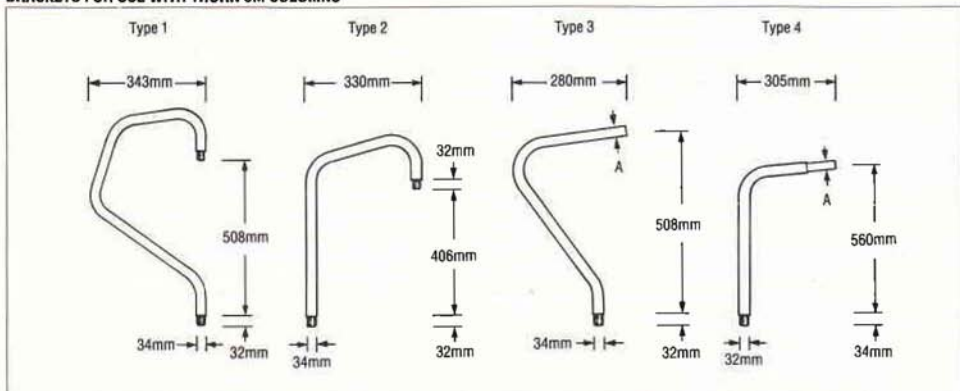


## TYPICAL COLUMN SECTION - PLEASE INDICATE EXACT SHAPE



# BRACKETS AND SPIGOT CASTINGS FOR GROUP B COLUMNS

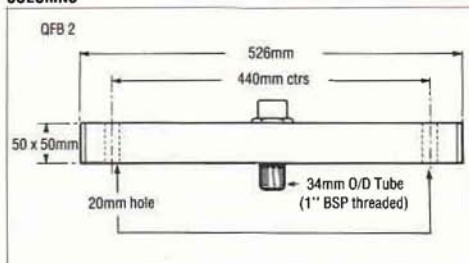
## BRACKETS FOR USE WITH THORN 5M COLUMNS



Type	Cat. no.	Dimension	A
1	QCBT 126	Threaded	26mm (3/4in BSP)
2	QCBT 226	Threaded	26mm (3/4in BSP)
3	QCBS 326		26mm
3	QCBS 334		34mm
3	QCBS 342		42mm
4	QCBS 426		26mm
4	QCBS 434		34mm
4	QCBS 442		42mm
5	QCBS 526		26mm
5	QCBS 534		34mm
5	QCBS 542		42mm

**Note:** Brackets are supplied threaded 34mm (1 in BSP) to screw into the standard column top of THORN EMI 5m aluminium columns: QC0, QC1, QC3, and QC4. Brackets can also be supplied to special order with a spigot cap to convert columns fitted with 3in x 3in spigots into bracket arm types. When ordering please quote suffix (e.g. QCBS 334/SC).

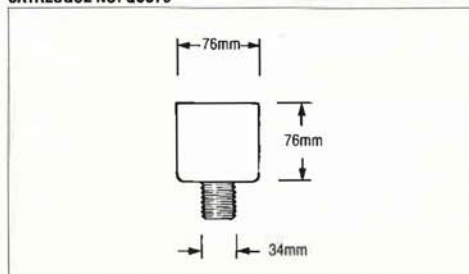
## FLOOD LIGHTING BRACKET FOR USE WITH THORN EMI 5M COLUMNS



**Note:** QFB2 - For mounting two Sunfloods on QC3, QC4 or QC0 or two Haline or two SONPAK 7 floodlights on QC0  
 QFB3C - For mounting three OT 70 or three Haline on QC0 with QCS76.

QFBOT - For mounting one SONPAK 15/25 on QC0 or one SONPAK 7 or Haline on QC0 or QC3.

## SPIGOT CASTING FOR USE WITH THORN EMI 5M COLUMNS CATALOGUE NO. QCS76



**Note:** Spigot castings are threaded 34mm (1 in BSP) to screw into the standard column top when required for post-top lantern mounting.

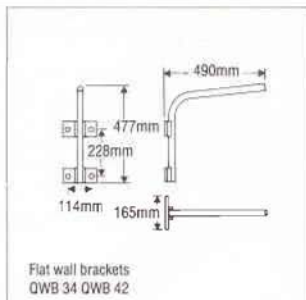
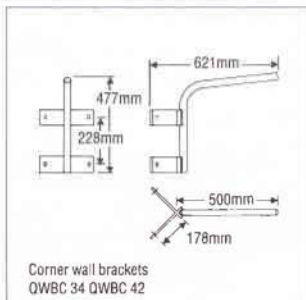
# ALUMINIUM WALL BRACKETS AND BOXES

## WALL BRACKETS

In HT9 aluminium alloy tube for flat wall or corner mounting. For 34mm or 42mm side entry lanterns.

### RANGE

Cat. no.	Description
QWB 34	Flat wall mounting for 34mm side entry
QWB 42	Flat wall mounting for 42mm side entry
QWBC 34	Corner wall mounting for 34mm side entry
QWBC 42	Corner wall mounting for 42mm side entry



## OUTDOOR LIGHTING BOX

MATERIAL: aluminium alloy NS4

BRACKETS: HE9-P extruded tube, outreach 304mm

BACKBOARD: timber 610 x 89mm

LOCK: triangular headed bolt lock

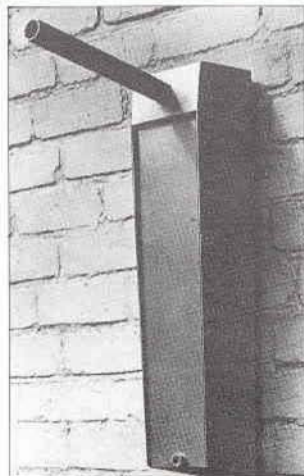
KEY: type QCKT

BASE COMPARTMENT: 533 x 102 x 99mm deep

WEIGHT: 5kg

Suitable for control gear up to and including 400W SON.

Suitable for lanterns up to and including Alpha three.



### RANGE

Cat. no.	BSP	Bracket outside Diameter	Entry
QWGB 26	3/4in	26mm	Top
QWGB 34	1in	34mm	Side
QWGB 42	1 1/4in	42mm	Side

## SPARE DOORS AND KEYS FOR THORN EMI 5M ALUMINIUM COLUMNS

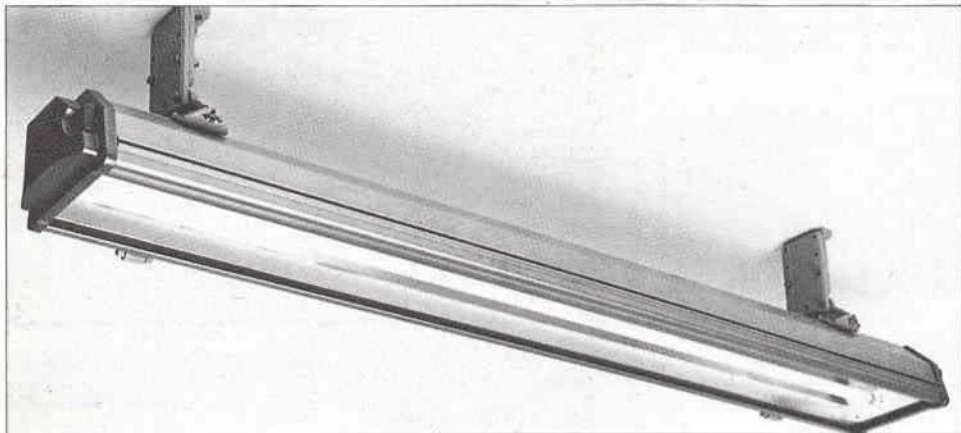
### DOORS

Column type	Replacement Door fitted with:		
	L and F lock	DZUS lock	Triangular lock
QC0	QCD0	—	QCD0T
QC1	—	QCD1	QCD1T
QC3 (or QLC3)	QLCD3	QCD3	QCD3T
QC4	QCD4	—	QCD4T

### KEYS

Cat. no.	Description
QCK	Spare key DZUS
QCK LF	Spare key for QC0 and QC4 only. Tumbler
QCKT	Spare key triangular

# TUNNEL LIGHTING



## THE PRINCIPLES OF TUNNEL LIGHTING

The main problem with a road tunnel is the effect on the driver's vision of the sudden change from daylight to tunnel surroundings. The aims of tunnel lighting are to maintain the driver's visibility during this transition and then to provide a reasonable standard of lighting in the main body or central zone of the tunnel. Thus in the entrance or threshold zone of the tunnel a very high level of lighting is required which reduces through transition zones as a driver progresses into the tunnel until the steady central zone level is reached.

It is also necessary that the lighting levels adjust automatically according to the outside ambient lighting. Thus at night a single line of fluorescent tubes throughout the tunnel is usually sufficient, but on the brightest day twin fluorescent tubes over the whole length are necessary, plus about four rows of 400W SON-T luminaires in the threshold zone. Further transition zones would require fewer SON-T luminaires.

For more detailed information on planning, installation and maintenance please contact your local THORN EMI Lighting Office.

## THORN EMI SYSTEM

THORN EMI Lighting have developed and supplied a system for lighting tunnels. The range is based on an extrusion with easily sealed removable end caps. A range of purpose designed slide in reflectors and gear trays make it suitable for mounting in different positions dependent upon tunnel design (eg cornice or central mounting) and for the various lamp types mentioned. This system also ensures the high IP rating (excess of IP65) can be maintained throughout the life of the installation, an essential feature of tunnels where cleaning is necessary to maintain illumination in the tunnel. To simplify maintenance in long rows of luminaires an easy method has been developed to drop the luminaire out of line. The luminaires are tested in accordance with BS 4533 specification in THORN EMI's BS1 approved Test House. The luminaires are approved to Ta 35°C and starting is dependent upon lamp type, -5°C for fluorescent, -20°C for SOX and -40°C for SON-T.

## CHOICE OF LIGHT SOURCE

Because each tunnel is different—in construction, dimensions, usage etc. and because different Zones require a different lighting performance it is not possible to restrict choice to a single light source. But three of the most efficient light sources available today, can between them meet these needs with high efficacy and economy of performance.

## LOW PRESSURE SODIUM LAMPS

This is the most efficient light source with luminous efficacies up to 160 lumens per watt. The lamps enjoy long life, but have a characteristic monochromatic amber appearance which gives a very poor colour rendering. Lamps conform to BS 3767 and IEC 192.

## HIGH PRESSURE SODIUM LAMPS (SON-T)

With luminous efficacies of 120 lumens per watt SON-T lamps are almost as efficient as SOX but without the drawback of monochromatic light. The colour appearance of SON-T is a golden white light. SON-T lamps are also very long lived, up to twice the life of SOX and are physically smaller. Lamps conform to IEC 662.

## PLUSLUX AND POLYLUX FLUORESCENT TUBES (MCFA).

These are a new generation of slim (26mm diameter) fluorescent tubes 7-10% more efficient than their 38mm diameter predecessors, with the PolyLux version giving excellent colour rendering due to the use of recently developed narrow band phosphors, achieving efficacies approaching 90 lumens per watt but with the same life as standard fluorescent tubes. Tubes conform to BS 1853. Fittings are suitable for either diameter.