



## C1D1 FLOOD – INTRODUCTION &amp; LOGIC



## PETROBRIGHT® LED

### FEATURES-SPECIFICATIONS

#### Applications

LED KF1L Series Explosion-proof Floods are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or Type 3 and 4X areas where wind, water, snow or high ambients can be expected. They can be used in locations made hazardous by the presence of flammable vapors or gases or combustible dusts as defined by the NEC/CEC/IECEX/ATEX & INMETRO

Typical applications include manufacturing plants, and certain chemical and petrochemical processing facilities, sewage treatment plants, off-shore and dockside installations, garages and storage facilities

#### Compliances

- UL-8750 for LED lighting
- ANSI/UL 1598A
- UL-844 Standard for lighting fixtures for hazardous locations, Class I, Division 1; Class II, Division 1; Class III
- CSA C22.2 no. 137-M1981 electric luminaires for use in hazardous locations
- Zone 1 and Zone 21 to IEC 60079-0, 60079-1, 60079-31, 60079-7 Standards
- Enclosed and gasketed
- Type 3, 4X
- IP66

#### Materials

- Body, end caps and lens frame corrosion resistant copper-free aluminum alloy with baked powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection
- All external hardware - stainless steel
- Thermal shock and impact resistant extra heavy-duty glass lens
- High temperature silicone gasketing
- Trunnion heavy gauge 316 SS

Segurança  
**N IEx**



#### LED Flood Features and Standards

Supplemental **20KA/10KV Surge Protection** is **standard** (for 120-277 VAC models)  
**10KA/10KV Surge Protection** (for 347-480 VAC)

- **Factory Sealed Construction**
- One 3/4" NPT & one M20 entry standard (see logic for other choices)
- Crisp White Light for Excellent Color Rendering – Chromaticity 5000 K (CCT); approx. 70 CRI
- Energy Savings – High lumens per watt
- LED Array Life – 100,000+ hours with 70% initial lumens
- Long Fixture Life – 50,000 - 55,000 maintenance free hours
- Instant On – Including after power interruption
- World Voltage 120 – 277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant

**Class I, Div. 1&2, Groups B,C,D**  
**Class I, Zone 1&2, Groups IIB+H2, IIA**  
**Class II, Div. 1&2, Groups EFG, Class III**  
**Enclosure Type 4X, IP66 (-50°C to +55°C)**

**CS** File LR11713

**IEC Ex Rated model (w/IEX or IEX4B suffix) Zone 1, Zone 21**

**Ex de IIB+H2 T6..T5, Gb, IP66**

**Tamb -20°C ≤ Ta ≤ +55°C; Option LT for -50°C ≤ Ta ≤ +55°C ①**

**Ex de IIB T6..T5, Gb, -50°C ≤ Ta ≤ +55°C ①**

**Ex tb IIIC T90°C Db, -50°C ≤ Ta ≤ +55°C ①**

**IECEX Certificate**

**CSA 14.0010**

**ATEX Certificate**

**SIRA14ATEX1159X**

**Patent Pending  
Fixture  
Design**



**KF1L with KFS-6  
Slipfitter mount  
on 2" pipe**



**Dark Sky Visor  
KF1L-DARK**

**Suitable for Paint  
Spray**

#### Catalog Number Logic

|                                                 | KF1L       | 125 | 30 | XX |
|-------------------------------------------------|------------|-----|----|----|
| <b>KF1L - Series Constant</b>                   |            |     |    |    |
| <b>Fixture Wattage</b>                          |            |     |    |    |
| 090 - 90W                                       | 150 - 150W |     |    |    |
| 105 - 105W                                      | 165 - 165W |     |    |    |
| 110 - 110W                                      | 195 - 195W |     |    |    |
| 125 - 125W                                      |            |     |    |    |
| <b>Voltage</b>                                  |            |     |    |    |
| 30 - 120 - 277VAC 50/60Hz                       |            |     |    |    |
| 33 - 347 - 480VAC 60Hz (90W-125W)               |            |     |    |    |
| 34 - 120-250VDC (90W-125W)                      |            |     |    |    |
| <b>Options</b>                                  |            |     |    |    |
| <b>IEX4B</b> - Four bolt termination cover      |            |     |    |    |
| <b>LT</b> - For -50°C to +55°C, IEC Zone 1      |            |     |    |    |
| <b>F</b> - Single Fuse (Not for use in Canada)  |            |     |    |    |
| <b>FF</b> - Double Fuse (Not for use in Canada) |            |     |    |    |
| <b>D20</b> - Dual M-20 Entries                  |            |     |    |    |
| <b>D25</b> - Dual M-25 Entries                  |            |     |    |    |
| <b>D75</b> - Dual 3/4" NPT                      |            |     |    |    |

**Construction/Certification Notes:**  
KF1L units are standard with one 3/4" NPT hub & one M20 hub – both plugged, with an 8-bolt factory sealed termination chamber, suitable for CID1 BCD -50°C to +55°C and IEC Zone 1 Ex de suitable for -20°C to 55°C.

Use option LT for models needing IEC Zone 1, -50°C to +55°C suitability for hydrogen.

Option IEX4B utilizes 4 terminal cover bolts for Ex de and maintains all ratings  
**EXCEPT CID1 BCD.**

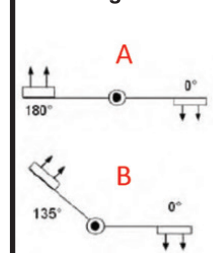
See logic for other entry options



## C1D1 FLOOD – ORDERING & TECHNICAL DATA

| ORDERING INFORMATION AND AMBIENT SUITABILITY |                |       |            |           |                  | C1D1 |      | C2D1  |                  | IEC ZONE 1 |      | IEC ZONE 21 |        | L70   |            |
|----------------------------------------------|----------------|-------|------------|-----------|------------------|------|------|-------|------------------|------------|------|-------------|--------|-------|------------|
| CATALOG NO.                                  | WEIGHT LBS./KG | WATTS | VOLTAGE    | AMPS      | DELIVERED LUMENS | 40°C | 55°C | 40°C  | 55°C             | 40°C       | 55°C | 40°C        | 55°C   | TM-21 | CALCULATED |
| KF1L09030                                    | 46.00 / 20.87  | 90    | 120-277VAC | 0.72-0.31 | 7182             | T6   | T6   | (EFG) | Limited Aiming B | T6         | T5   | 160-75      | 175-90 | 60100 | 270000     |
| KF1L09033                                    |                |       | 347-480VAC | 0.25-0.18 |                  |      |      |       |                  |            |      |             |        |       |            |
| KF1L09034                                    |                |       | 120-250VDC | 0.72-0.28 |                  |      |      |       |                  |            |      |             |        |       |            |
| KF1L10530                                    |                | 105   | 120-277VAC | 0.85-0.37 | 8362             | T6   | T6   | (EFG) | Limited Aiming B | T6         | T5   | 160-76      | 175-91 | 60100 | 270000     |
| KF1L10533                                    |                |       | 347-480VAC | 0.29-0.21 |                  |      |      |       |                  |            |      |             |        |       |            |
| KF1L10534                                    |                |       | 120-250VDC | 0.85-0.33 |                  |      |      |       |                  |            |      |             |        |       |            |
| KF1L11030                                    |                | 110   | 120-277VAC | 0.95-0.41 | 10590            | T6   | T6   | (EFG) | Limited Aiming B | T6         | T5   | 160-77      | 175-92 | 72600 | 278000     |
| KF1L11033                                    |                |       | 347-480VAC | 0.33-0.24 |                  |      |      |       |                  |            |      |             |        |       |            |
| KF1L11034                                    |                |       | 120-250VDC | 0.95-0.37 |                  |      |      |       |                  |            |      |             |        |       |            |
| KF1L12530                                    |                | 125   | 120-277VAC | 1.10-0.48 | 11590            | T6   | T6   | (EFG) | Limited Aiming B | T6         | T5   | 160-78      | 175-93 | 72600 | 278000     |
| KF1L12533                                    |                |       | 347-480VAC | 0.38-0.28 |                  |      |      |       |                  |            |      |             |        |       |            |
| KF1L12534                                    |                |       | 120-250VDC | 1.10-0.43 |                  |      |      |       |                  |            |      |             |        |       |            |
| KF1L15030                                    |                | 150   | 120-277VAC | 1.25-0.54 | 13280            | T5   | -    | -     | -                | T5         | -    | -           | -      | 60300 | 190000     |
| KF1L16530                                    |                | 165   | 120-277VAC | 1.38-0.60 | 13760            | T5   | -    | -     | -                | T5         | -    | -           | -      | 72600 | 278000     |
| KF1L19530                                    |                | 195   | 120-277VAC | 1.63-0.70 | 15707            | T5   | -    | -     | -                | T5         | -    | -           | -      | 72600 | 278000     |

### Aiming Notes



### KFL MOUNTS AND ACCESSORIES

| CATALOG NUMBER | DESCRIPTION                                                                                                    |
|----------------|----------------------------------------------------------------------------------------------------------------|
| KFS-6          | Steel Slipfitter for 2" Pipe (2-3/8" o.d.) Tenon. Slips 3.75" Over Pipe                                        |
| KFCB           | Heavy Duty Cast-Iron Crossarm Fitting for Horizontal Trunnion                                                  |
| KFWB           | Heavy Duty Wall Mount and/or Pipe Clamp Fitting Clamps 2" Pipe (2-3/8" o.d.) Through 2-1/2" Pipe (2-7/8" o.d.) |
| K4040          | Heavy Duty Steel Wall Bracket. (Must be with KFCB Crossarm Fitting)                                            |
| 4041           | Heavy Duty Steel Wall Bracket 2" Pipe (2-3/8" o.d.) Tenon Fitting                                              |
| KFLG           | Wire Guard, 316 Stainless Steel                                                                                |
| VMSC10         | 10' Stainless Steel Safety Cable with loop grip                                                                |
| KF1L-DARK      | Dark Sky Visor, White Painted Aluminum                                                                         |
| KF1L-DOOR      | Replacement Door and Lens Assembly                                                                             |



KFS-6 Slipfitter



KFCB Cross Arm Mount



4041 Tenon Fitting

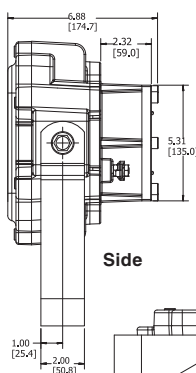
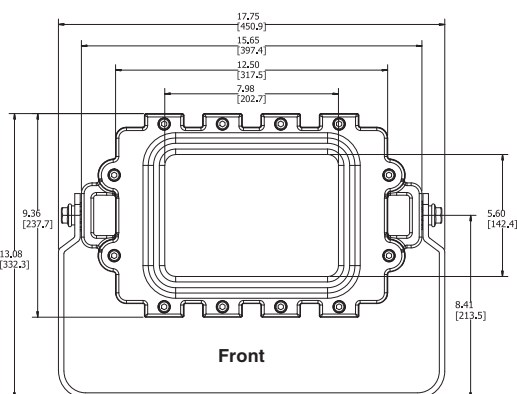


K4040 Wall Bracket

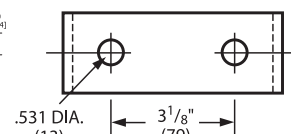
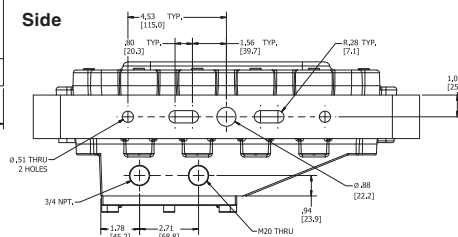


KFWB Wall/Pipe Bracket

### Dimensions



### Side



Trunnion Mounting Detail