5L

## EVFDR Series Fluorescent Luminaires

Cl. I, Div. 1, Groups C, D Cl. I, Zone 1, Group IIB Cl. II, Div. 1, Groups E, F, G Cl. III. Simultaneous Presence Marine & Wet Locations 3, 3R, 4, 4X; IP66

#### **Applications:**

- EVFDR Luminaires are suitable for wet locations and marine environments, above and below deck, where hazardous vapors, gases or dusts are present
- Ideally suited for use on offshore drilling/production platforms and on shipboard in hazardous areas
- For mounting where headroom is limited
- For hazardous areas where watertightness and corrosion resistance are required

#### **Features:**

- Exterior surfaces finished with gray epoxy enamel for corrosion resistance
- Exterior hardware stainless steel
- All joints sealed and gasketed for
- watertightness
- Vibration resistant
  - Shock mounts
  - Sockets are spring loaded for tight lamp contact connection
- Heavy duty glass lamp tubes for maximum strength and impact resistance
- All exterior materials are non-sparking
- C-type beam clamps provide quick and easy mounting
- Luminaire is adjustable 30° either side of fixture axis, allowing for control of light output
- Beam clamp support is adjustable allowing beam clamp to be located to suit structure
- Low profile luminaire height is 7<sup>13</sup>/<sub>16</sub>" with standard mounting, 11<sup>11</sup>/<sub>16</sub>" with shock mounting option – for maximum clearance where headroom is critical
- Provides cool light with natural color rendition
- Continuous and uniform illumination made possible by mounting end to end (no space needed between luminaires for relamping) – see page 1077 for relamping information
- Relamping is accomplished without tools; quarter-turn fastener allows end of luminaire to be lowered quickly; cable supports end of luminaire while relamping – both hands are free; threaded lamp tube cover provides quick and easy access to lamp and receptacle
- Reflectors can be removed or replaced with only a screwdriver
- Ballast housing readily accessible
- Minimum weight copper-free aluminum construction throughout
- Type P ballast furnished in compliance with NEC
- Standard electronic ballast for 32 watt and 40 watt rapid start



- Standard energy-efficient electromagnetic ballast (40W slimline, 60W and 110W) is standard
- Low temperature ballasts are standard on 32W T8, 40W slimline, 60W and 110W; 32 watt and 40 watt low temperature ballasts are rated for 0°F; 60 and 100 watt low temperature ballasts are rated for -20°F

# Certifications and Compliances:

- NEC and CEC:
  - Class I, Division 1, Groups C, D Class I, Zone 1, Group IIB
  - Class II, Groups E, F, G
  - Class III

Simultaneous Presence (Cl. and Cl. II)
UL Standards:

- 844 Hazardous (Classified) Locations 1598 Luminaires 1598A Marine Locations
- CSA Standards: C22.2 No. 137

#### **Standard Materials:**

- Housing copper-free aluminum
- Exposed hardware stainless steel

#### **Standard Finishes:**

- All exterior metal components gray epoxy enamel
- Reflectors white epoxy powder coat

### **Ordering Information:**

Furnished For	Hub	Line Volts	2-Lamp
Use With	Size	60 Hz.	Cat. #
32 watt, T-8 medium	3/4 "	120–277	EVFDR22029/UNV
Bi-pin 265MA lamps	3/4 "	347	EVFDR22029/347
40 watt, T-12 medium Bi-pin rapid start 430MA lamps†	3/4 " 3/4 "	110–125 277	EVFDR22082 EVFDR22087
60 watt, T-12 recessed contact, 800MA lamps	3/4 "	110–125	EVFDR22062
	3/4 "	277	EVFDR22067
110 watt, T-12 recessed contact, 1500MA lamps† 150 Hz not available.	3/4 " 3/4 "	110–125 277	EVFDR22072 EVFDR22077

#### **Options:**

Description	Suffix
• Furnished with lamps	S714
<ul> <li>Furnished with safety cable</li> </ul>	
for high vibration areas	S715
<ul> <li>Beam clamps with shock</li> </ul>	
mounts are available for ease	
of installation and resistance	
to vibration	KIT40
Beam clamps only	KIT41
Low temperature	

- Low temperature electromagnetic ballast: 40W rapid start rated 0°F...... BY
- Emergency lighting battery unit.... S799

#### Size Ranges:

• 2-lamp only

#### **Electrical Rating Ranges:**

• 32, 40, 60 and 110W

# Temperature Performance Data:

#### (Based on 40°C Ambient)

2-Lamp	Class I Class II Zone 1	Supply Wire
32, 40W	T5	75°C
60W	T5	75°C
110W	T4	90°C

**5**L

1080

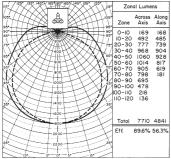
## **EVFDR Series Fluorescent Luminaires**

#### Luminaire: All EVFDR Luminaires 2-40/T-12, 2-60/T-12, 2-110/T-12

0–30

1416

Lamp:
Zonal Degrees:
Zonal Lumens:
Total Bare Lamp Lumens:



8	3600	)		
ne	ns	All data provided is	s for two 60	
55 5	Along Axis	watt, T-12 recesse		
9278045858	168 485 739 904 928 817	800MA cool white lamps (EVFDR22062). For other wattages use the following		
5 619 3 181 5		conversion factors 32W	.67	
5		40W, Rapid Start	.73	
		40W Slimline	70	

0–60

4263

0–90

5863

1

Example: Zonal lumens for EVFDR226 fixture, across the axis, for 40-50" is 1,060. Zonal lumens for EVFDR223 fixture, across the axis, is 40-50" is: 1,060 x .70 = 742

#### **Coefficient of Utilization Effective Floor Cavity Reflectance 20%**

% Reflectar Eff. Ceil.	nce Wall	Room 1	Cavity F 2	Ratio 3	4	5
	50	.735	.645	.570	.506	.452
80	30	.700	.594	.512	.442	.387
	10	.670	.551	.466	.394	.339
	50	.714	.627	.557	.494	.440
70	30	.682	.580	.501	.435	.380
	10	.653	.542	.458	.388	.334
	50	.673	.593	.528	.468	.420
50	30	.647	.554	.482	.418	.368
	10	.624	.520	.444	.378	.327
	50	.636	.562	.501	.446	.401
30	30	.616	.530	.463	.403	.354
	10	.596	.502	.430	.368	.319
-	50	.603	.533	.477	.425	.383
10	30	.585	.507	.444	.388	.343
	10	.570	.483	.416	.358	.311
0	0	.551	.465	.399	.340	.294
% Reflecta	nce	Room	Cavity F	Ratio		
Eff. Ceil.	Wall	6	7	8	9	10
	50	.408	.368	.332	.304	.266
80	30	.344	.305	.271	.243	.207
	10	.298	.262	.228	.202	.169
	50	.398	.360	.325	.297	.260
70	30	.338	.299	.267	.240	.206
	10	.293	.258	.226	.201	.168
	50	.380	.344	.311	.285	.250
50	30	.327	.289	.259	.233	.199
	10	007	050	001	107	164

.287

.364

.317

.281

.348

.306

.274

.259

10

50

30

10

50

30

10

0

.252

.328

.282

.246

.316

.274

.241

.226

.221

.299

.251

.217

.286

.244

.213

.198

.197

.274

.226

.193

.263

.220

.189

.175

0–40

2352

OW, Rapid Start	.73
OW, Slimline	.70
10W, Cool White	1.60

.164

.240

.193

.160

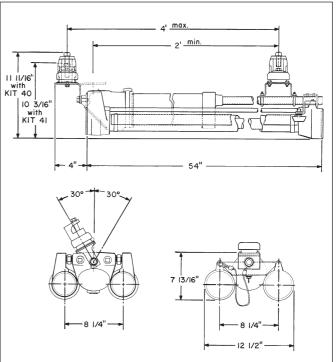
.231

.188

.157

.144

#### **Dimensions:**



5L

#### **Crouse-Hinds** by FAT-N

30

10

0