

VRS™ and DRS™ Fluorescent Luminaires

Enclosed and Gasketed. Suitable for Use in Wet Locations

32 W, 40 W and 60 W Two- and Three-Lamp Fixtures.

VRS:
Class I, Division 2, Groups A, B, C, D

DRS:
Class II, Division 1 and 2, Groups F, G
Class III

Applications

- VRS
 - Enclosed and gasketed fixtures for use where vapors, moisture, dirt or corrosive atmospheres are encountered.
 - Corrosion-resistant polyester powder coating protects against corrosive atmospheres.
- DRS
 - Dust-ignitionproof fixtures for use where ignitable amounts of dust are present from handling such products as grain, flour, sugar, starch and textiles.
 - Suitable for use in Class II and III, Division 1, classified areas.
 - Corrosion-resistant finish prolongs fixture life and retains fixtures reflectivity longer.

Features

- Choice of mountings: pendant and feed thru are standard, angle bars for chain suspension, or angle brackets (up to 45°) for wall or ceiling mounting.
- Thick 1/4" clear tempered glass lens protects against possible broken glass from lamps.
- VRS and DRS fixtures are supplied with the following ballast options:
 - Class P low energy (E) ballasts, equipped with an automatic thermally activated protective device. They offer protection against excessive voltage, internal ballast short circuiting, inadequate lamp maintenance and improper fixture application
- High-temperature nickel cadmium battery has a life expectancy of 7 to 10 years.
- Battery charger indicator light and test switch are mounted inside the enclosure and visible through the clear lens.
- Heavy duty telescoping lampholders.
- Low operating cost provides more lumens per Watt than incandescent.
- Easy cleaning one-piece, seamless welded construction virtually eliminates dust and moisture accumulation.

Standard Materials

- Reflector housings: 20-gauge steel
- Door frame: 16 gauge steel with clear glass
- Door clamps: heavy-duty plated spring steel
- Suspension hubs: 1/2" die-cast aluminum
- Lampholders: white urea plastic
- Gaskets: VRS – neoprene; DRS – fiberglass

Standard Finishes

- Reflector housings: VRS – white polyester powder coating; DRS – white polyester powder coating
- Door frame: zinc electroplate
- Door clamps, suspension hubs and lampholders: natural finish

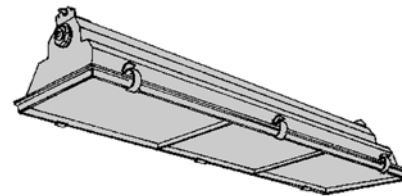
Options

- Individually fused ballast. Suffix -F.
- Emergency battery pack, Suffix -EL ①.
- Emergency battery pack capability in moments of power interruption. Luminaire automatically switches to emergency mode, keeping one lamp illuminated for a minimum of 90 minutes. When AC power is restored, battery automatically recharges in 24 hours. Initial light output is 600-700 lumens.

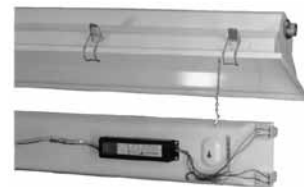


VRS Enclosed and Gasketed DRS Dust-Ignition Proof

Illustrated Features



Three plated steel latches on each side of door assure integrity of fixture for areas as classified.



Pan mounted ballast and sockets with safety chain provide quick, safe maintenance.

Certifications and Compliances

- UL Standard: UL 1598, UL 844
- UL Listed: E10794

① Fixtures with emergency ballast are not recommended where the ambient temperature may fall below 32 °F/0 °C for extended periods.

VRS™ and DRS™ Fluorescent Luminaires

Enclosed and Gasketed. Suitable for Use in Wet Locations

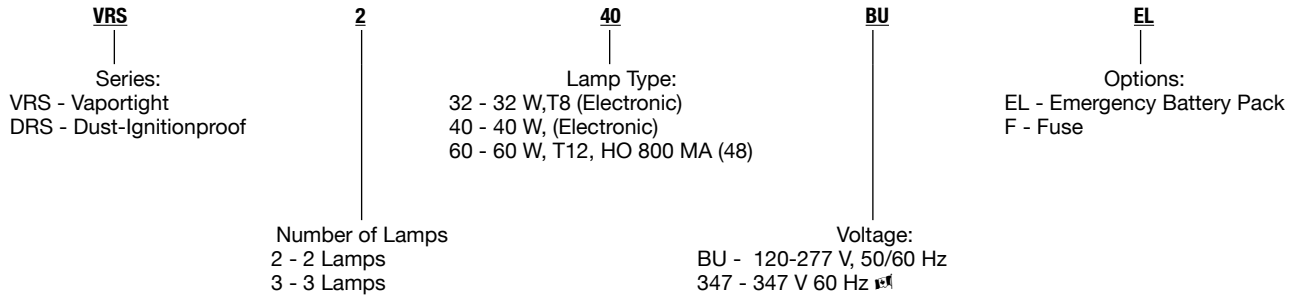
32 W, 40 W and 60 W Two- and Three-Lamp Fixtures.

VRS:
Class I, Division 2, Groups A, B, C, D

DRS:
Class II, Division 1 and 2, Groups F, G
Class III

Order using catalog numbering guide below or select catalog number from tables on following pages.

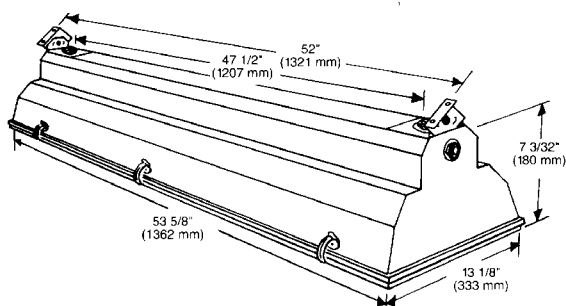
Catalog Numbering Guide For VRS And DRS Non-Metallic Fluorescent Lighting Fixtures



Technical Data: Thermal Performance of VRS and DRS Fixtures

Fixture	Quantity	Lamp		Ambient Temp °F/°C	"T" Numbers	Hazardous Classification
		Watt	Type			
VRS232	2	32	265MA-RS	104/40	T-4A	Class I, Division 2, Groups A,B,C,D
VRS332	3	32	265MA-RS	104/40	T-4A	Class I, Division 2, Groups A,B,C,D
VRS240	2	40	430MA-RS	104/40	T-4A	Class I, Division 2, Groups A,B,C,D
VRS340	3	40	430MA-RS	104/40	T-4A	Class I, Division 2, Groups A,B,C,D
VRS260	2	60	800MA-HO	77/25	T-3C	Class I, Division 2, Groups A,B,C,D
DRS232	2	32	265MA-RS	77/25	T-6	Class II, Division 1 & 2 Groups F,G
DRS332	3	32	265MA-RS	77/25	T-6	Class II, Division 1 & 2 Groups F,G
DRS240	2	40	430MA-RS	77/25	T-4	Class II, Division 1 & 2 Groups F,G
DRS340	3	40	430MA-RS	77/25	T-6	Class II, Division 1 & 2 Groups F,G
DRS260	2	60	800MA-HO	77/25	T-6	Class II, Division 1 & 2 Groups F,G

Vaportight Adjustable Hanger or Aligner – Iron Outlet Plugs



- Suitable for use in locations where equipment is exposed to the deteriorating effects of non-combustible atmospheres containing corrosive fumes, vapors, dust, smoke and/or moisture.
- Range of adjustment is 45°. Two-piece ball type cast iron body; gasket sealed at the adjustable ball joint. Maximum overall length is 53-5/8 inches. Finish is baked white paint over electroplating.
- These iron plugs are for closing tapped outlets in explosion-proof boxes. Plugs are electroplated and finished in baked aluminum paint. A socket head is provided for square wrenches.

CSA Certification Only.

VRS™ and DRS™ Fluorescent Luminaires

Enclosed and Gasketed. Suitable for Use in Wet Locations

32 W, 40 W and 60 W Two- and Three-Lamp Fixtures.

VRS:
Class I, Division 2, Groups A, B, C, D

DRS:
Class II, Division 1 and 2, Groups F, G
Class III

Number of Lamps ②	Lamp Watts	Lamp Type	Unput Volts	Freq. (Hz)	Ballast Type	Catalog Number
VRS 32 W, 40 W and 60 W Fixtures Furnished with 1/4" Clear Tempered Glass Lens ③						
2	32	T8	120-277	50/60	Electronic	VRS232BU
2	40	T12	120-277	50/60	Electronic	VRS240BU
2	60	T12	120-277	50/60	Electronic	VRS260BU
3	32	T8	120-277	50/60	Electronic	VRS332BU
3	40	T12	120-277	50/60	Electronic	VRS340BU
DRS 32 W, 40 W and 60 W Fixtures Furnished with 1/4" Clear Tempered Glass Lens						
2	32	T8	120-277	50/60	Electronic	DRS232BU
2	40	T12	120-277	50/60	Electronic	DRS240BU
2	60	T12	120-277	50/60	Electronic	DRS260BU
3	32	T8	120-277	50/60	Electronic	DRS332BU
3	40	T12	120-277	50/60	Electronic	DRS340BU

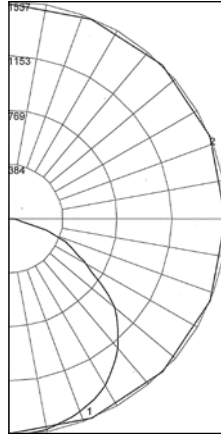
OPTIONS: Add suffix **-F** for individually fused ballast. Add suffix **-EL** for emergency battery pack. (For 50Hz with **-EL** suffix, consult factory for certifications.)
 ① Consult factory for clear high-impact acrylic lens. UL Listed for Class I, Division 2, Groups A, B, C, D; suitable for use in locations exposed to moisture or non-combustible gases.
 ② Lamps not furnished with fixture.
 ③ Low temperature ballast (-20 °F/-29 °C starting) provided as standard.

VRS™ and DRS™ Fluorescent Luminaire Photometric Data

Enclosed and Gasketed. Suitable for Use in Wet Locations

32 W, 40 W and 60 W Two- and Three-Lamp Fixtures.

Zone	Lumens	Total Luminaire Efficiency = 73.5%							
0-10	145.72	CIE Type – Direct							
10-20	421.76	<table border="1"> <thead> <tr> <th>Plane</th> <th>Spacing Criteria</th> </tr> </thead> </table>				Plane	Spacing Criteria		
Plane	Spacing Criteria								
20-30	651.35								
30-40	798.47	0-180	1.28						
40-50	824.90	90-270	1.34						
50-60	701.76	Diagonal	1.44						
60-70	498.35								
70-80	189.17	Zonal Lumen Summary							
80-90	30.32	<table border="1"> <thead> <tr> <th>Zone</th> <th>Lumens</th> <th>% Lamp</th> <th>% Fixture</th> </tr> </thead> </table>				Zone	Lumens	% Lamp	% Fixture
Zone	Lumens	% Lamp	% Fixture						
90-100	0.00	0-30	1218.83	21.0	28.6				
100-110	0.00	0-40	2017.30	34.8	47.3				
110-120	0.00	0-60	3543.96	61.1	83.2				
120-130	0.00	0-90	4261.81	73.5	100.0				
130-140	0.00	90-120	0.00	0.0	0.0				
140-150	0.00	90-130	0.00	0.0	0.0				
150-160	0.00	90-150	0.00	0.0	0.0				
160-170	0.00	90-180	0.00	0.0	0.0				
170-180	0.00	180-0	4261.81	73.5	100.0				



REPORT NUMBER: **VRS232**

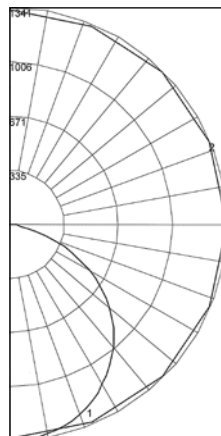
Lamps: Two 32 W Fluorescent Vaportightproof

Coefficients of Utilization – Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

% Ceiling Rcc	80	70				50				30				10				0
		70	50	30	10	70	50	30	10	50	30	10	50	30	10			
0	87	87	87	87	85	85	85	85	82	82	82	78	78	78	75	75	75	73
1	81	77	74	72	79	76	73	71	73	70	68	70	68	66	67	66	64	63
2	74	68	63	59	72	66	62	58	64	60	57	62	58	56	59	57	55	53
3	67	60	54	49	65	59	53	49	56	52	48	54	51	47	53	49	46	45
4	62	53	47	42	60	52	46	42	50	45	41	49	44	41	47	43	40	38
5	57	47	41	36	55	47	41	36	45	40	36	44	39	35	42	38	35	33
6	52	43	36	32	51	42	36	31	41	35	31	39	35	31	38	34	31	29
7	48	39	32	28	47	38	32	28	37	32	28	36	31	27	35	31	27	26
8	45	35	29	25	44	35	29	25	34	28	25	33	28	25	32	28	24	23
9	42	32	26	22	41	32	26	22	31	26	22	30	26	22	30	25	22	21
10	39	30	24	20	39	29	24	20	29	24	20	28	23	20	27	23	20	19

Zone	Lumens	Total Luminaire Efficiency = 70.1%							
0-10	126.78	CIE Type – Direct							
10-20	367.88	<table border="1"> <thead> <tr> <th>Plane</th> <th>Spacing Criteria</th> </tr> </thead> </table>				Plane	Spacing Criteria		
Plane	Spacing Criteria								
20-30	567.43								
30-40	693.10	0-180	1.28						
40-50	715.79	90-270	1.32						
50-60	620.48	Diagonal	1.42						
60-70	433.89								
70-80	163.48	Zonal Lumen Summary							
80-90	25.87	<table border="1"> <thead> <tr> <th>Zone</th> <th>Lumens</th> <th>% Lamp</th> <th>% Fixture</th> </tr> </thead> </table>				Zone	Lumens	% Lamp	% Fixture
Zone	Lumens	% Lamp	% Fixture						
90-100	0.00	0-30	1062.10	20.0	28.6				
100-110	0.00	0-40	1755.20	33.1	47.3				
110-120	0.00	0-60	3091.47	58.3	83.2				
120-130	0.00	0-90	3714.71	70.1	100.0				
130-140	0.00	90-120	0.00	0.0	0.0				
140-150	0.00	90-130	0.00	0.0	0.0				
150-160	0.00	90-150	0.00	0.0	0.0				
160-170	0.00	90-180	0.00	0.0	0.0				
170-180	0.00	180-0	3714.71	70.1	100.0				



REPORT NUMBER: **VRS240**

Lamps: Two 40 W Fluorescent Vaportightproof

Coefficients of Utilization – Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

% Ceiling Rcc	80	70				50				30				10				0
		70	50	30	10	70	50	30	10	50	30	10	50	30	10			
0	83	83	83	83	81	81	81	81	78	78	78	75	75	75	72	72	72	70
1	77	74	71	69	75	72	70	67	69	67	65	67	65	63	64	63	61	60
2	70	65	60	56	68	63	59	56	61	57	54	59	56	53	57	54	52	51
3	64	57	52	47	62	56	51	47	54	49	46	52	48	45	50	47	44	43
4	59	51	45	40	57	50	44	40	48	43	39	46	42	39	45	41	38	37
5	54	45	39	35	53	44	39	34	43	38	34	42	37	34	40	36	33	32
6	50	41	35	30	49	40	34	30	39	34	30	38	33	29	37	32	29	28
7	46	37	31	27	45	36	31	27	35	30	26	34	30	26	33	29	26	25
8	43	34	28	24	42	33	28	24	32	27	23	31	27	23	31	26	23	22
9	40	31	25	21	39	30	25	21	30	25	21	29	24	21	28	24	21	20
10	38	28	23	19	37	28	23	19	27	23	19	27	22	19	26	22	19	18