Rough Service Corner or Surface Mount Linear Fluorescent

USA / Canada / Mexico

4' Length (1.22m)
1 or 2 Lamps

VDC Series

VDS Series

FEATURES & SPECIFICATIONS

INTENDED USE

General illumination for rough service (vandal-resistant) applications. Designed for indoor and outdoor applications like corridors, walkways, pedestrian tunnels, canopies and drive-though areas. Certain airborne contaminants can diminish integrity of acrylic. See documentation for Acrylic Environmental Compatibility table for suitable uses.

ATTRIBUTES

Lens is a clear, internally frosted, UV-stabilized, injection-molded polycarbonate. Smooth exterior for easy maintenance. Lens is gasketed against moisture and contaminants. Lens is secured to housing with six stainless steel Torx® T-20 tamper-resistant screws (included).

CONSTRUCTION

Housing made from heavy-duty, 16-gauge cold-rolled steel, one-piece design for corner-mounted (VDC) or surface-mounted (VDS) applications. Housing and reinforcing members welded together for strength.

FINISH

All metal parts are painted after fabrication in white polyester powder coat for smooth, finished edges and corrosion resistance.

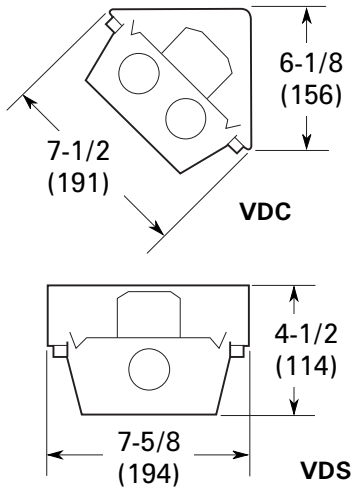
ELECTRICAL SYSTEM

Class P, high-power-factor ballast is standard. Ballast for 32W is standard cold weather with a 0°F (-18°C) starting temperature. Ballast and lampholders are secured to ballast cover to provide easy installation and maintenance. Ballast cover safety chains included.

LISTING

UL listed for damp locations (wet location option available in covered ceiling applications only). UL listed for 25°C ambient and damp location. CSA Certified or NOM Certified (see Options).

Ordering Informations: For shortest lead times, configure products using **bolded options**. Example: **VDC 2 32 MVOLT GEB10IS**



Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions in inches (mm). See documentation for more informarions.

Series (Mounting)	No. of Lamps[1]	Lamp Type[1] *(not included)*		Lens Type	Voltage
VDC Corner	**1**	**32**	32W T8 (48")	***(blank)*** Clear	**MVOLT**[2]
VDS Surface	**2**	48HO	60W T12 800mA (48")	PCLW White	120
	Not included.	28T5	28W T5 (46")		277
		54T5HO	54W T5HO (46")	*Polycarbonate*	347

Ballast		Options	
GEB10IS	T8 electronic ballast, <10% THD, instant start	EL14DW[7]	Wet location battery pack (nominal 1400 lumens)
GEB10RS[8]	T8 electronic ballast, <10% THD, programmed rapid start	WL	Wet location (covered-ceiling applications only)
GEB10PS	T5 electronic ballast, <10% THD, programmed pulse start	RIF1	Radio interference filter, one per fixture
GEB10PS90	T5HO 90° electronic ballast, <10% THD, programmed pulse start *(request availability)*	STS	Stainless steel housing, natural (SS)
GEB	T12 electronic ballast, <20% THD *(request availability)*	STSW	Stainless steel housing, white (SSW)
CW[3,4]	Cold weather ballast	AL	Aluminum housing, white
CW20[5,6]	Cold weather ballast, -20°F (-29°C) starting	CSA NOM	Certified for Canada Certified for Mexico
		GLR	Internal fast-blow fusing

NOTES:
1 Lamps are not included, please order separately.
2 Electronic ballast 120-277V only. Must specify GEB10IS.
3 Not recommended for use in ambient temperatures exceeding 40°F.
4 Not available with EL option.
5 Not available with 48HO 347V.
6 Must be specified with 48HO for cold weather.
7 Luminaires ordered with the **DW** option (Example: **EL14DW**) will bear the UL Emergency Lighting Equipment label for damp or wet locations, depending on the fixture. 900 lumens for T5HO.
8 Not available with MVOLT.

Technical Data are Subject to Change without Notice. Dimensions in inches (mm).

FEATURES & SPECIFICATIONS

INTENDED USE

General illumination for rough service (vandal-resistant) applications. Designed for indoor and outdoor applications like corridors, walkways, pedestrian tunnels, canopies and drive-though areas. **Certain airborne contaminants can diminish integrity of acrylic. See end of documentation for Acrylic Environmental Compatibility table for suitable uses.**

ATTRIBUTES

Lens is a clear, internally frosted, UV-stabilized, injection-molded polycarbonate. Smooth exterior for easy maintenance. Lens is gasketed against moisture and contaminants. Lens is secured to housing with six stainless steel Torx® T-20 tamper-resistant screws (included).

CONSTRUCTION

Housing made from heavy-duty, 16-gauge cold-rolled steel, one-piece design for corner-mounted (VDC) or surface-mounted (VDS) applications. Housing and reinforcing members welded together for strength.

FINISH

All metal parts are painted after fabrication in white polyester powder coat for smooth, finished edges and corrosion resistance.

ELECTRICAL SYSTEM

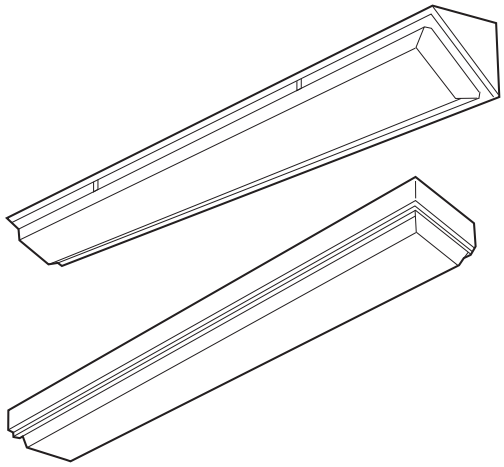
Class P, high-power-factor ballast is standard. Ballast for 32W is standard cold weather with a 0°F starting temperature. Ballast and lampholders are secured to ballast cover to provide easy installation and maintenance. Ballast cover safety chains included.

LISTING

UL listed for damp locations (wet location option available in covered ceiling applications only). UL listed for 25°C ambient and damp location. CSA Certified or NOM Certified (see Options).

Rough Service Drop-Dish Corner- or Surface-Mount

VDC/VDS



4' length
1 or 2 lamps

ORDERING INFORMATION

For shortest lead times, configure product using **standard options (shown in bold).**
Example: VDC 2 32 MVOLT GEB10IS

Series	Lamp[1]	Wattage	Lens type	Voltage
VDC	**1**	**32 32W T8 (48")**	(blank) **Clear polycarbonate**	120
VDS	**2**	48HO 60W 800mA (48")[1]	PCLW White polycarbonate	277
		28 28T5 (46")		347
		54 54T5HO (46")		**MVOLT**[2]

Options

AL	Aluminum housing
CW	Cold weather ballast[3,4]
CW20	Cold weather ballast, -20°F starting[5,6]
EL14DW	Emergency battery pack (nominal 1400 lumens)[7]
GEB10IS	**Electronic ballast, <10% THD, instant start**
GEB10RS	Electronic ballast, <10% THD, rapid start[8]
GEB10PS	Electronic ballast, <10% THD, pulse start
GLR	Internal fast-blow fusing
GMF	Internal slow-blow fusing
NLCFH	Compact fluorescent night-light (9W Max.)
RIF1	Radio interference filter, one per fixture
SS	Stainless steel housing, natural
SSW	Stainless steel housing, white
WL	Wet location (covered ceiling only)
CSA	CSA Certified
NOM	NOM Certified

Accessories

Order as separate catalog numbers.

RK1 T20BIT	Hex-base driver bit, Torx TX20, for tamper-resistant screws with center reject pin.
RK1 T20DRV	Torx TX20 screwdriver for use with tamper-resistant screws with center reject pin.

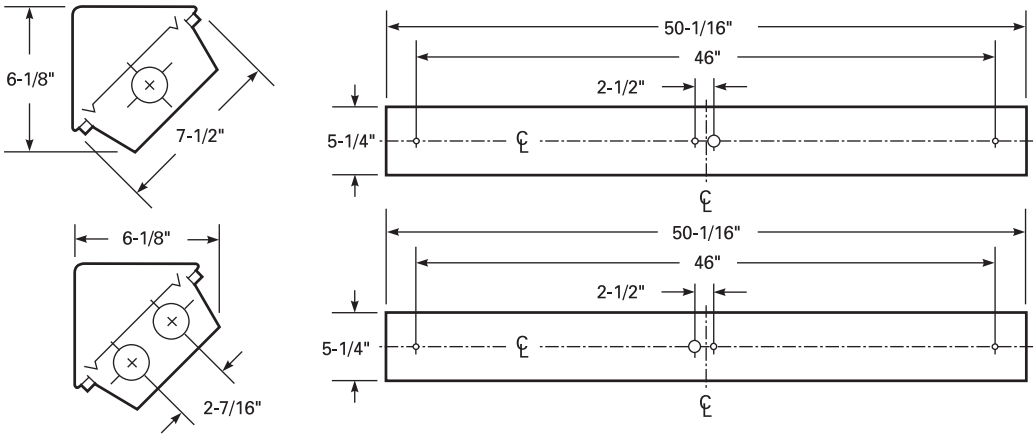
NOTES:

1 Lamps not included.
2 Electronic ballast 120-277V only. Must specify GEB10IS.
3 Not recommended for use in ambient temperatures exceeding 40°F.
4 Not available with EL option.
5 Not available with 48HO 347V.
6 Must be specified with 48HO for cold weather.
7 Luminaires ordered with the **DW** option (Example: **EL14DW**) will bear the UL Emergency Lighting Equipment label for damp or wet locations, depending on the fixture. 900 lumens for T5HO.
8 Not available with MVOLT.

VDC/VDS 4' Length

MOUNTING DATA

Six mounting holes provided in housing back. Use fasteners suitable for ceiling material. Caulk around all mounting points to maintain wet location integrity.



A = 5/16" dia. hole (6)

B = 7/8" dia. K.O.

Dimensions subject to change without notice.

PHOTOMETRICS

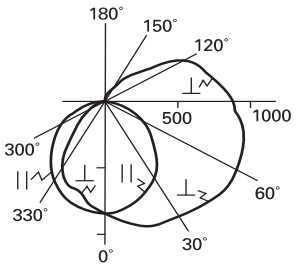
are calculated using the zonal cavity method in accordance with IESNA LM41 procedure. Floor reflectances are 20%. Full photometric data available upon request.

VDC 2 32

Report LTL 5682

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixture
0-30	374	6.5	9.3
0-40	644	11.1	16.0
0-60	1291	22.3	32.1
0-90	2228	38.4	55.4
90-180	906	15.6	22.6
0-180	3134	54.0	78.0

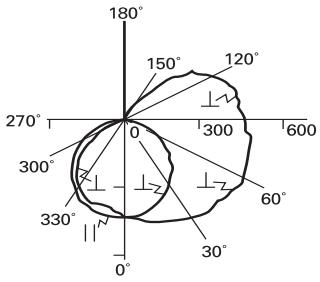


VDC 1 32

Report LTL 5669

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixture
0-30	186	6.4	8.6
0-40	320	11.0	14.7
0-60	642	22.1	29.6
0-90	1114	38.4	51.4
90-180	549	18.9	25.3
0-180	1663	57.4	76.7



VDS 2 32

Report LTL 5671

Coefficient of Utilization

Ceiling	80%			70%			50%		
Wall	70%	50%	30%	70%	50%	30%	50%	30%	10%
1	73	69	66	71	67	64	63	61	58
2	66	60	54	64	58	53	54	50	47
3	60	52	46	58	51	45	48	43	39
4	55	46	40	53	45	39	42	37	33
5	50	40	34	48	39	33	37	32	28
10	33	24	18	32	23	18	22	17	14

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixture
0-30	825	14.2	20.4
0-40	1368	23.6	33.8
0-60	2511	43.3	62.0
0-90	3709	63.9	91.6
90-180	341	5.9	8.4
0-180	4050	69.8	100.0

VDS 1 32

Report LTL 5685

Coefficient of Utilization

Ceiling	80%			70%			50%		
Wall	70%	50%	30%	70%	50%	30%	50%	30%	10%
1	78	74	70	75	71	68	67	64	61
2	70	63	57	68	61	56	57	53	49
3	64	55	48	61	53	47	50	45	40
4	58	48	41	56	47	40	44	38	34
5	53	42	35	51	41	34	39	33	28
10	35	25	18	34	24	18	23	17	14

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixture
0-30	411	14.2	18.8
0-40	681	23.5	31.1
0-60	1266	43.7	57.9
0-90	1991	68.7	91.0
90-180	198	6.8	9.0
0-180	2189	75.5	100.0

Acrylic Compatibility

Certain chemicals that may exist in end-user locations release airborne contaminants that can impact the integrity and safety of key fixture components that contain acrylic material. Immediate damage may occur such as crazing, cracking, permeation losses and mechanical failure. Products with visually noticeable deterioration have diminished integrity and must be replaced immediately with a more suitable product for the application.

This table identifies the most common chemicals and is not intended to be all-inclusive. Exposure to compounds identified as "Not Acceptable" will void all warranties associated with the product. Acrylic components should not be used in areas where these chemicals are used and where these chemicals become mists or airborne vapors. Ensure that chemical interactions are considered when selecting fixtures. For additional information please consult an authorized factory representative.

NOT ACCEPTABLE

Acetaldehyde, 100%
Acetates
Acetic Acid, Glacial, 100%
Acetic Anhydride
Acetone
Acetonitrile
Acetophenone
Acrylic Paints
Alcohol, Allyl
Alcohol, Amyl
Alcohol, Benzyl
Alcohol, Ethyl, 100%
Alcohol, Ethyl, 50%
Alcohol, Isopropyl, 100%
Alcohol, Methyl, 10%
Alcohol, Methyl, 100%
Alcohol, Methyl, 50%
Alcohol, N-Butyl
Amyl Acetate
Aniline
Aviation Fuel (100 Octane)
Benzaldehyde
Benzene
Benzoic Aldehyde
Brake Fluid
Bromine Gas
Butanol
Butraldehyde
Butyl Acetyl Ricinoleate
Butyl Stearate
Carbolic Acid
Carbon Disul de
Carbon Disulfide
Cellulose Paints
Chlorinated Hydrocarbons
Chlorinated Solvents
Chlorine Gas
Chlorophenol
Chromic Acid, 40%
Cloves
Cosmoline Removers
Cresol
Cyclohexane
Cyclohexanone
Cyclohexene
Detergent Solution
Diacetone Alcohol
Diamyl Phthalate
Dibutyl Sebacate
Diethyl Ether
Dimethyl Formamide
Dioctyl Sebacate
Dioxane
Ether
Ethyl Acetate
Ethyl Alcohol, Concentrated
Ethyl Bromide
Ethyl Butyrate
Ethylene Bromide
Ethylene Dibromide
Ethylene Oxide (Moist)
Glass Cleaners
Glycol
Hydrogen Peroxide, 28%
Hydrogen Peroxide, 3%
Iron Perchloride
Isoctane
Isopropyl Alcohol
Lacquer Thinner
Lactic Acid Butyl Ester
Mercury Chloride
Meta-Cresol
Methanol, 15%
Methanol, Concentrated
Methyl Benzoate
Methyl Chloride
Methyl Cycohexanol
Methyl Ethyl Ketone
Methyl Naphthalene
Methyl Salicyclate
Methylamine
Methylene Dichloride
Mineral Oil
Motor Fuel Mixture, with Benzene
Nail Polish
Naphtha
N-Butyric Acid, 100%
Nitric Acid, 40%
Nitric Acid, 70%
Nitrobenzene
N-Octane
Organic Solvents
Paint Removers
Paint Thinner
Perchlorethylene
Petroleum Ether (100-120C)
Phenois
Phenol, Aqueous, 5%
Phosphoric Acid, 95% @ 20C
Phthalates
Pyridine
Sodium Carbonate, 2%
Sodium Carbonate, 20%
Sodium Phosphate
Sulfur Dioxide, Liquid
Sulfuric Acid, 98%
Sulfurous Acid, Concentrated
Tincture of Iodine, 5%
Toluene
Transformer Oil
Trichloraethane
Trichloroacetic Acid
Trichloroethylene
Turpentine
Unleaded Gasoline
Vegetable Oil
Xylene

ACCEPTABLE

2-Ethylhexyl Sebacate
Acetic Acid 5%
Ammonia-based Cleaners
Ammonia Gas
Ammonium Hydroxide, 28%
Ammonium Nitrate
Ammonium Phosphate
Aniseed, Bay Leaves, Nutmeg
Anti-freeze
Beer
Bleaching Power Paste
Bleaching Powder Solution, 2%
Calcium Hypochlorite
Car Wash Detergent
Carbon Dioxide Gas
Carbon Monoxide Gas
Caustic Potash
Chlorine Based Cleaners
Chlorine, Aqueous, 2%
Citric Acid, 10%
Coffee
Cooking Oil
Cottonseed Oil
Diethylene Glycol
Epoxy Adhesives
Ethyl Alcohol, 15%
Ethylene Glycol E
Ethylene Oxide (Dry)
Ferric Chloride, Aqueous, 10%
Formaldehyde, Aqueous, 40%
Fruit Juice
Glycerol
Heptane
Hexane
Hydrochloric Acid, 38%
Kerosene
Lactic Acid
Metal Carbonates
Metal Chlorides
Metal Sulfates
Methane Gas
Milk
Milk, Chocolate
Motor Fuel Mixture, without Benzene
Motor Oil
Natural Gas
Nitric Acid, 10%
Nitrogen Dioxide Gas
Nitrogen Monoxide Gas
Olefric Carbolic Acids
Oleic Acid
Olive Oil
Oxalic Acid, 100%
Oxygen Gas
Ozone Gas
Paraffin, Medicinal
Pepper, Cinnamon, Onions
Phosphoric Acid, 10% @ 20C
Photographic Baths
Polishing Compounds
Potassium Chlorate
Potassium Cyanide
Potassium Dichromate, 10%
Potassium Hydroxide @ 20C
Potassium Permanganate
Potassium Sulfite
Power Steering Fluid
Propylene
Pure-oil Paints
Silicone Oil
Silver Nitrate
Soap Suds
Soda
Sodium Chloride, 10%
Sodium Cyanide
Sodium Fluoride
Sodium Hydroxide, 60%
Sodium Nitrate
Sodium Thiosulphate, 40%
Stearic Acid
Sulfur Dioxide, Dry Gas
Sulfuric Acid, 30%
Sulfurous Acid, 5%
Tararic Acid, 50%
Transmission Fluid
Tricresyl Phosphate
Triethyl Amine
Vinegar
Water, Mineral Water
Wax Polish
White Spirit
Whitewash
Wine