



Look No Further

Your One Stop Fluorescent Shop

FL/CFL PACKAGES

BALLASTS, LAMPHOLDERS,
LAMPS



Vossloh-Schwabe is not merely a manufacturer of top-quality components for the lighting industry, but above all makes a competent and innovative contribution to setting market trends.

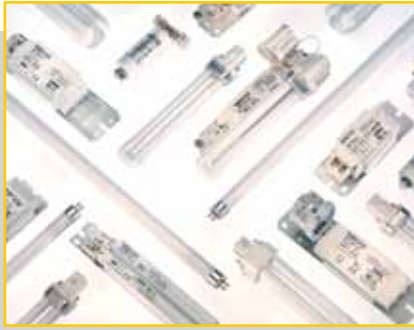
Featuring a future-proof component structure that already now satisfies both the requirements of energy-efficient lighting and European standards, VS' unique product range in fluorescent applications includes magnetic and electronic ballasts, state-of-the-art control systems (LiCS Indoor and Outdoor), lampholders and related lamps.

Employing in excess of 1,000 people in more than 20 countries, Vossloh-Schwabe is represented all over the world. As a subsidiary of the Japanese Panasonic Group, VS can draw on extensive resources for R&D as well as for international expansion activities. A highly motivated workforce, comprehensive market knowledge, profound industry expertise as well as eco-awareness and environmental responsibility show Vossloh-Schwabe to be a reliable partner for the provision of optimum and cost-effective lighting solutions.

Vossloh-Schwabe's dedication to delivering superior quality is reflected in its ISO 9001 certification.

Vossloh-Schwabe is ready to embark on a collaborative journey into an economically illuminated future.

RoHS 



ADVANTAGES OF FULL COMPONENT PACKAGES

■ BETTER COMPATIBILITY

Ideally combined and matched components with individual products to form a single functional unit.

■ LONGER SERVICE LIFE

Intelligent and versatile solutions tailored to perform efficiently.

■ ONE STOP DELIVERY

All under one roof, concerted competence results in exceptional system synergies.

■ GLOBAL PARTNER

Compatible lighting solutions with major market brands.

■ ONE AFTER-SALE INTERFACE

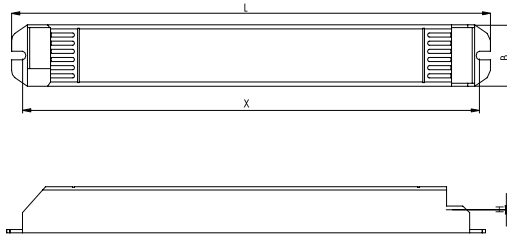
Customised and dedicated ongoing relationship provided throughout the product life cycle till end of product life.



Electronic Ballasts for T5 Linear Fluorescent Lamps

FBC – Rapid Start for T5 Lamps

Electronic built-in ballasts
 Casing: heat-resistant polyamide (black)
 Power factor: ≥ 0.95
 Push-in terminals: 0.5-1 mm²
 RFI-suppressed
 For luminaires of protection class I
 Degree of protection: IP20
 25,000 hours service life
 EOL shut down approved acc.to EN61347



Lamp				Electronic ballast							System	
Output W	Type	Base	Power consumption W	Type	Ref. No.	Voltage AC 50, 60 Hz V $\pm 10\%$	EEL	Ambient temperature t_a (°C)	Casing temperature t_c (°C)	Casing	Output W	Luminous factor %
1x14	T5	G5	1 x 13.0	FBC-114	540442	220-230	A3	-5 to 50	max. 75	K63	16.0	> 93
2x14	T5	G5	2 x 14.0	FBC-214	540430	220-230	A3	-0 to 50	max. 75	K60	32.0	> 93
1x21	T5	G5	1 x 20.0	FBC-121	540443	220-230	A3	-5 to 50	max. 75	K63	22.5	> 93
2x21	T5	G5	2 x 21.0	FBC-221	540441	220-230	A3	-5 to 50	max. 75	K62	47.0	> 93
1x28	T5	G5	1 x 27.0	FBC-128	540444	220-230	A3	-5 to 50	max. 75	K63	32.0	> 93
2x28	T5	G5	2 x 28.0	FBC-228	540440	220-230	A3	-5 to 50	max. 75	K62	62.0	> 93

T5 Lampholders

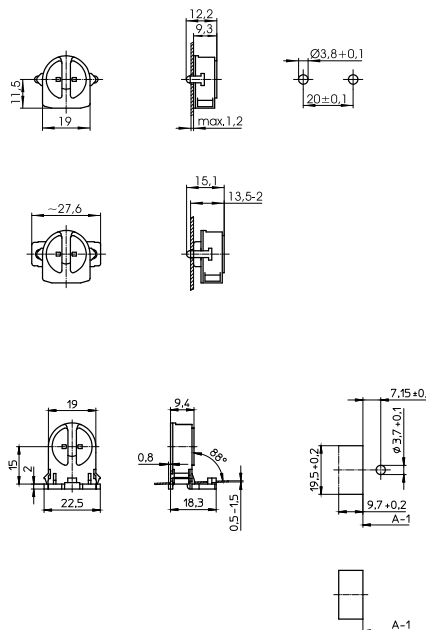
Max. permitted temperature T_m
 on the rear side of the lampholder: 110 °C

G5 built-in lampholders
 Casing: PBT GF/PC, white, rotor: PBT GF, white
 T140, nominal rating: 2/500
 Push-in twin terminals: 0.5-1 mm²
 Rear split pins for wall thickness up to 1.2 mm
 Weight: 2.9/3.3 g, unit: 1000 pcs.
 Type: 09405

Ref. No.: 505733
 Type: 09406 with glossy galvanized steel
Ref. No.: 542989

G5 push-through lampholders
 Lamp axis: 15 mm
 Casing: PBT GF/PC, white, rotor: PBT GF, white
 T140, nominal rating: 2/500
 Push-in twin terminals: 0.5-1 mm²
 Lateral fixing clips for wall thickness 0.5-1.5 mm
 Weight: 3.5/3.4 g, unit: 1000 pcs.
 Type: 09420/09421

Ref. No.: 505737 with stop
Ref. No.: 505739 without stop



T5 Lamps

T5 HE High Efficiency

Available in amber white, warm white, white and daylight

Wide variety of outputs: 14-35 W

Rated average life: 20,000 hrs.

RoHS compliant

"VS"-branded

Suitable for G5 lampholder

Lamp diameter: 16 mm

Unit: 40 pcs./carton



Lamp								
Output W	Type	Ref. No.	Colour temperature K	Voltage V	Current mA	Lumen lm	Length mm	Packaging Qty./Carton
14	T5HE-14-2700	541000	2700	82	170	1250	549	40
14	T5HE-14-3000	541001	3000	82	170	1250	549	40
14	T5HE-14-4000	541002	4000	82	170	1250	549	40
14	T5HE-14-6500	541003	6500	82	170	1150	549	40
21	T5HE-21-2700	541004	2700	123	170	2000	849	40
21	T5HE-21-3000	541005	3000	123	170	2000	849	40
21	T5HE-21-4000	541006	4000	123	170	2000	849	40
21	T5HE-21-6500	541007	6500	123	170	1900	849	40
28	T5HE-28-2700	541008	2700	167	170	2600	1149	40
28	T5HE-28-3000	541009	3000	167	170	2600	1149	40
28	T5HE-28-4000	541010	4000	167	170	2600	1149	40
28	T5HE-28-6500	541011	6500	167	170	2400	1149	40
35	T5HE-35-2700	541012	2700	209	170	3300	1449	40
35	T5HE-35-3000	541013	3000	209	170	3300	1449	40
35	T5HE-35-4000	541014	4000	209	170	3300	1449	40
35	T5HE-35-6500	541015	6500	209	170	3000	1449	40

Electronic Ballasts for T5 Linear Fluorescent Lamps

ELXc – Warm Start for T5 Lamps

Electronic built-in ballasts

Casing: metal

Power factor: ≥ 0.95

Push-in terminals: 0.5-1 mm²

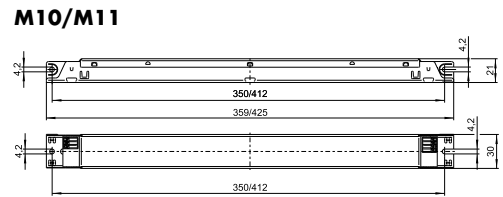
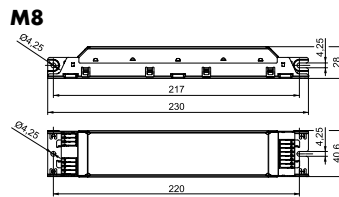
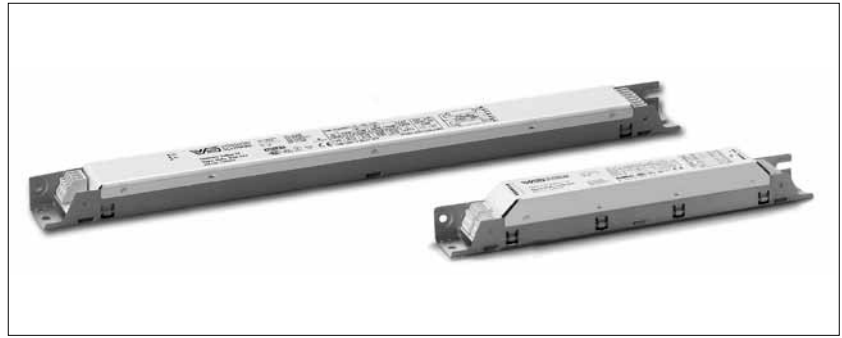
RFI-suppressed

For luminaires of protection class I

Degree of protection: IP20

For lighting systems with high switching frequency (> 5/day)

EOL shut down approved acc. to EN 61347



Lamp				Electronic ballast							System	
Output W	Type	Base	Power consumption W	Type	Ref. No.	Voltage AC 50, 60 Hz V \pm 10%	Energy efficiency	Ambient temperature t _a (°C)	Casing temperature t _c (°C)	Casing	Output W	Luminous factor %
24	T5	G5	1 x 22.5	ELXc 140.862	188140	220-240	A2 BAT	-15 to 55	max. 70	M10	27.0	114.0
2x24	T5	G5	2 x 22.5	ELXc 240.863	188616	220-240	A2 BAT	-15 to 55	max. 70	M10	51.0	107.4
3x24	T5	G5	3 x 21.5	ELXc 424.223	183039	220-240	A2 BAT	-15 to 55	max. 75	M8	76.0	98.2
4x24	T5	G5	4 x 21.5	ELXc 424.223	183039	220-240	A2 BAT	-15 to 50	max. 75	M8	96.5	98.4
39	T5	G5	1 x 38.0	ELXc 140.862	188140	220-240	A2 BAT	-15 to 55	max. 70	M10	43.0	107.0
2x39	T5	G5	2 x 38.0	ELXc 240.863	188616	220-240	A2 BAT	-15 to 55	max. 70	M10	82.0	97.9
49	T5	G5	1 x 49.0	ELXc 149.858	188095	220-240	A2 BAT	-15 to 55	max. 70	M10	54.0	102.5
2x49	T5	G5	2 x 49.0	ELXc 249.859	188617	220-240	A2 BAT	-15 to 50	max. 70	M10	113.0	106.6
54	T5	G5	1 x 54.0	ELXc 154.864	188142	220-240	A2 BAT	-15 to 55	max. 70	M10	59.0	101.1
2x54	T5	G5	2 x 54.0	ELXc 254.865	188618	220-240	A2 BAT	-15 to 50	max. 70	M10	119.0	106.0
80	T5	G5	1 x 80.0	ELXc 180.866	188144	220-240	A2 BAT	-15 to 55	max. 70	M10	87.0	97.6
2x80	T5	G5	2 x 80.0	ELXc 280.538	188619	220-240	A2 BAT	-15 to 50	max. 70	M11	175.0	97.2

T5 Lampholders

Max. permitted temperature T_m on the rear side of the lampholder: 110 °C

G5 push-through lampholders

Lamp axis: 20 mm, casing: PBT GF/PC, white,

Rotor: PBT GF, white T140, nominal rating: 2/500

Push-in twin terminals: 0.5-1 mm²

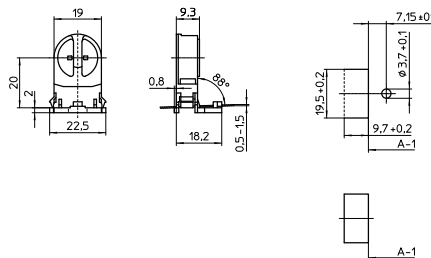
Lateral fixing clips for wall thickness 0.5-1.5 mm

Weight: 3.6 g, unit: 1000 pcs.

Type: 09422/09423

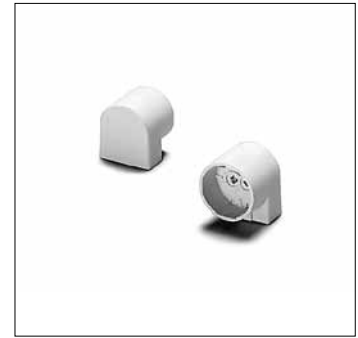
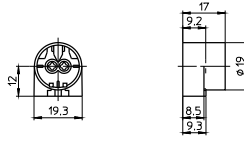
Ref. No.: 505740 with stop

Ref. No.: 505741 without stop



T5 Package – High Output

G5 lampholder
 For push-fit onto the lamp
 Casing: PBT GF, white, T130
 Nominal rating: 2/500
 Push-in twin terminals: 0.5–1 mm²
 Pin support for reliable contact
 Lamp support 109685
 Weight: 3.7 g, unit: 1000 pcs.
 Type: 09170
Ref. No.: 109686



T5 Lamps

T5 HO High Output

Available in amber white, warm white, white and daylight
 Wide variety of outputs: 24–80 W
 Rated average life: 20,000 hrs.
 RoHS compliant, "VS"-branded
 Suitable for G5 lampholder
 Lamp diameter: 16 mm



Lamp								
Output W	Type	Ref. No.	Colour temperature K	Voltage V	Current mA	Lumen lm	Length mm	Packaging Qty/ Carton
24	T5HO-24-2700	541016	2700	75	300	1750	549	40
24	T5HO-24-3000	541017	3000	75	300	1750	549	40
24	T5HO-24-4000	541018	4000	75	300	1750	549	40
24	T5HO-24-6000	541019	6500	75	300	1650	549	40
39	T5HO-39-2700	541020	2700	112	340	3100	849	40
39	T5HO-39-3000	541021	3000	112	340	3100	849	40
39	T5HO-39-4000	541022	4000	112	340	3100	849	40
39	T5HO-39-6500	541023	6500	112	340	2950	849	40
49	T5HO-49-2700	541024	2700	191	250	4300	1449	40
49	T5HO-49-3000	541025	3000	191	250	4300	1449	40
49	T5HO-49-4000	541026	4000	191	250	4300	1449	40
49	T5HO-49-6500	541027	6500	191	250	4100	1449	40
54	T5HO-54-2700	541028	2700	118	460	4900	1149	40
54	T5HO-54-3000	541029	3000	118	460	4900	1149	40
54	T5HO-54-4000	541030	4000	118	460	4900	1149	40
54	T5HO-54-6500	541031	6500	118	460	4700	1149	40
80	T5HO-80-2700	541032	2700	145	555	6250	1449	40
80	T5HO-80-3000	541033	3000	145	555	6250	1449	40
80	T5HO-80-4000	541034	4000	145	555	6250	1449	40
80	T5HO-80-6500	541035	6500	145	555	6000	1449	40

Electronic Ballasts for TC-L Compact Fluorescent Lamps

ELXc – Warm Start for TC-L Lamps

Electronic built-in ballasts

Casing: metal

Power factor: > 0.96

DC voltage

for operation: 176-264 V

for ignition: 198-264 V

(ELXc 180.866, 280.538: DC voltage cannot be reduced to 176 V)

Push-in terminals: 0.5-1 mm²

For the automatic luminaire wiring:

IDC terminals for leads H05V-U 0.5

RFI-suppressed

For luminaires of protection class I

Degree of protection: IP20

For lighting systems with

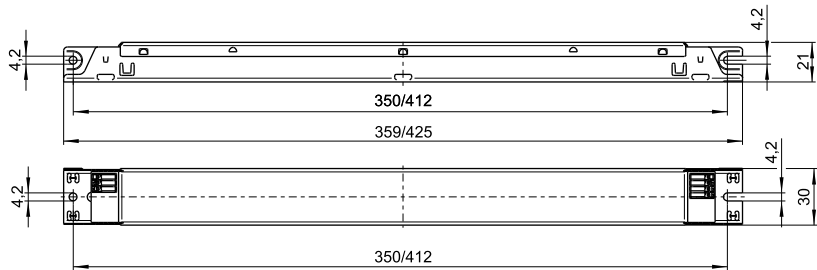
high switching frequency (> 5/day)

EOL shut down approved

acc. to EN 61347 Test 2



M10/M11



Lamp				Electronic ballast							System	
Output W	Type	Base	Power consumption W	Type	Ref. No.	Voltage AC 50, 60 Hz V±10%	Energy efficiency	Ambient temperature t _a (°C)	Casing temperature t _c (°C)	Casing	Output W	Luminous factor %
18	TC-L	2G11	1 x 16.0	ELXc 140.862	188140	220-240	A2	-15 to 55	max. 70	M10	19.0	109.0
2x18	TC-L	2G11	2 x 16.0	ELXc 240.863	188616	220-240	A2 BAT	-15 to 55	max. 70	M10	35.0	105.3
24	TC-L	2G11	1 x 22.0	ELXc 140.862	188140	220-240	A2 BAT	-15 to 55	max. 70	M10	27.0	109.0
2x24	TC-L	2G11	2 x 22.0	ELXc 240.863	188616	220-240	A2 BAT	-15 to 55	max. 70	M10	51.0	106.8
36	TC-L	2G11	1 x 32.0	ELXc 140.862	188140	220-240	A2	-15 to 55	max. 70	M10	35.0	101.0
2x36	TC-L	2G11	2 x 32.0	ELXc 240.863	188616	220-240	A2 BAT	-15 to 55	max. 70	M10	71.0	98.7
40	TC-L	2G11	1 x 40.0	ELXc 140.862	188140	220-240	A2	-15 to 55	max. 70	M10	46.0	104.0
2x40	TC-L	2G11	2 x 40.0	ELXc 240.863	188616	220-240	A2 BAT	-15 to 55	max. 70	M10	89.0	103.6
55	TC-L	2G11	1 x 55.0	ELXc 180.866	188144	220-240	A2 BAT	-15 to 55	max. 70	M10	62.0	107.3
2x55	TC-L	2G11	2 x 55.0	ELXc 254.865	188618	220-240	A2 BAT	-15 to 50	max. 70	M10	112.0	92.9
			2 x 55.0	ELXc 280.538	188619	220-240	A2 BAT	-15 to 50	max. 70	M11	120.0	100.0

TC-L Lampholders

2G11 surface-mounted lampholder

Casing: PBT GF, white, T140, nominal rating: 2/500

Push-in twin terminals: 0.5-1 mm² (lamp circuit)

Push-in terminals: 0.5-1 mm² (starter circuit)

Lateral pivots for bracket 105824

Base fixing holes for screws M4

Rear fixing holes for self-tapping screws

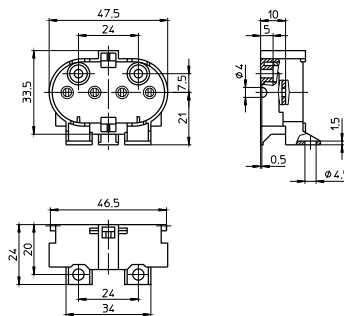
acc. to ISO 1481/7049-ST4.2.C/F

Front fixing holes for screws M3

Weight: 13.7 g, unit: 500 pcs.

Type: 36050

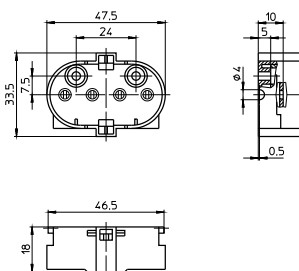
Ref. No.: 101485



TC-L Package – Compact Fluorescent – Long Tubular

2G11 surface-mounted lampholder
 Casing: PBT GF, white, T140, nominal rating: 2/500
 Push-in twin terminals: 0.5-1 mm² (lamp circuit)
 Push-in terminals: 0.5-1 mm² (starter circuit)
 Lateral pivots for bracket 105824
 Rear fixing holes for self-tapping screws
 acc. to ISO 1481/7049-ST4.2-C/F
 Front fixing holes for screws M3
 Weight: 12.7 g, unit: 500 pcs.
 Type: 36051

Ref. No.: 101489



Compact Fluorescent Lamps TC-L

TC-L Single Tube

Available in amber white, warm white and white
 Wide variety of outputs: 18-55 W
 Rated average life: 12,000 hrs.
 RoHS compliant
 "VS"-branded
 Suitable for 2G11 lampholder
 Lamp diameter: 17 mm



Lamp								
Output W	Type	Ref. No.	Colour temperature K	Voltage V	Current mA	Lumen lm	Length mm	Packaging Qty/ Carton
18	TCL-18-2700	541036	2700	58	375	1300	221	50
18	TCL-18-3000	541037	3000	58	375	1300	221	50
18	TCL-18-4000	541038	4000	58	375	1300	221	50
24	TCL-24-2700	541039	2700	87	345	1800	316	50
24	TCL-24-3000	541040	3000	87	345	1800	316	50
24	TCL-24-4000	541041	4000	87	345	1800	316	50
36	TCL-36-2700	541042	2700	106	435	2920	411	50
36	TCL-36-3000	541043	3000	106	435	2920	411	50
36	TCL-36-4000	541044	4000	106	435	2920	411	50
40	TCL-40-2700	541045	2700	126	320	3320	531	50
40	TCL-40-3000	541046	3000	126	320	3320	531	50
40	TCL-40-4000	541047	4000	126	320	3320	531	50
55	TCL-55-2700	541051	2700	101	550	4700	531	50
55	TCL-55-3000	541052	3000	101	550	4700	531	50
55	TCL-55-4000	541053	4000	101	550	4700	531	50

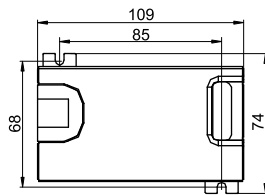
Electronic Ballasts for TC-DEL/TC-TEL Compact Fluorescent Lamps

CBC – Rapid Start for Compact

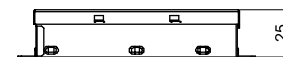
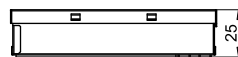
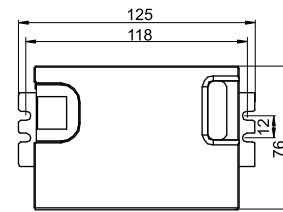
Electronic built-in ballasts
 Casing: metal, grey and white lacquered
 Power factor: ≥ 0.95
 Push-in terminals: 0.5-1 mm²
 RFI-suppressed
 THD: 17%
 For luminaires of protection class I
 Degree of protection: IP20
 25,000 hours service life
 EOL shut down approved acc. to EN 61347



M70



M71



Lamp				Electronic ballast							System	
Output W	Type	Base	Power consumption W	Type	Ref. No.	Voltage AC 50, 60 Hz V \pm 10%	Energy efficiency	Ambient temperature t _a (°C)	Casing temp. t _c (°C)	Casing	Output W	Luminous factor %
13	TC-DEL/-TEL	G24q-1/GX24q-1	1 x 13.0	CBC-113	540420	220-230	A3	-10 to 50	max. 75	M70	16.0	> 93
2x13	TC-DEL/-TEL	G24q-1/GX24q-1	2 x 13.0	CBC-213	540424	220-230	A3	-10 to 50	max. 75	M70	30.0	> 93
18	TC-DEL/-TEL	G24q-2/GX24q-2	1 x 17.0	CBC-118	540421	220-230	A3	-10 to 50	max. 75	M70	20.0	> 93
2x18	TC-DEL/-TEL	G24q-2/GX24q-2	2 x 16.5	CBC-218	540425	220-230	A3	-10 to 50	max. 75	M70	40.0	> 93
26	TC-DEL/-TEL	G24q-3/GX24q-3	1 x 24.0	CBC-126	540422	220-230	A3	-10 to 50	max. 75	M70	27.0	> 93
2x26	TC-DEL/-TEL	G24q-3/GX24q-3	2 x 24.0	CBC-226-142	540426	220-230	A3	-10 to 50	max. 75	M71	55.0	> 93
32	TC-DEL/-TEL	G24q-3/GX24q-3	1 x 32.0	CBC-132	540423	220-230	A3	-10 to 50	max. 75	M70	35.0	> 93
42	TC-DEL/-TEL	G24q-4/GX24q-4	1 x 42.0	CBC-226-142	540426	220-230	A3	-10 to 50	max. 75	M71	48.0	> 93

TC-DEL/-TEL Lampholders with Base G24q/GX24q

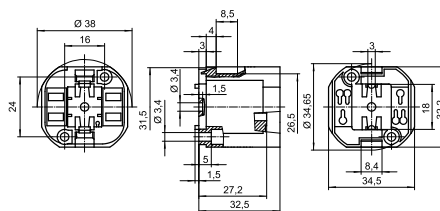
Plain Casing – Keyless Version

When mounting the lampholder it has to be considered that the TC-T and TC-TEL lamp is wider than the lampholder. When using the central hole for mounting additional depressions for anti-rotation pips have to be provided.

Push-in twin terminals: 0.5-1 mm² (lamp circuit)
 In addition for G24q, GX24q lampholders:
 push-in terminals: 0.5-1 mm² (starter circuit)

G24q, GX24q lampholder
 Nominal lamp output: 10, 13, 18, 26, 32, 42 W
 Plain casing, casing: PBT GF, white, T140
 Nominal rating: 2/500
 Rear fixing holes for self-tapping screws acc. to ISO 1481/7049-ST4.2-C/F
 Front fixing holes for screws M3
 Central fixing hole for screw M3
 Rotation stop, for cover caps
 Weight: 16.5 g, unit: 500 pcs.
 Type: 71510

Ref. No. 527738



Compact Fluorescent Lamps TC-DEL and TC-TEL

TC-DEL – Double Tube

Available in amber white, warm white and white

Wide variety of outputs: 13–26 W

Rated average life: 12,000 hrs.

RoHS compliant

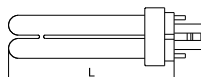
"VS"-branded

Suitable for G24q lampholder

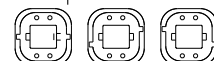
Lamp diameter: 12 mm



TC-DEL



G24q-1 -2 -3



TC-TEL – Triple Tube

Available in amber white, warm white and white

Wide variety of outputs: 26–57 W

Rated average life: 12,000 hrs.

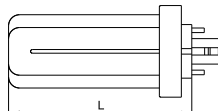
RoHS compliant

"VS"-branded

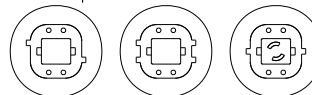
Suitable for GX24q lampholder

Lamp diameter: 12 mm

TC-TEL



GX24q-3

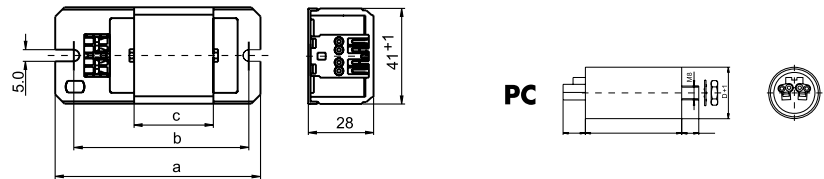
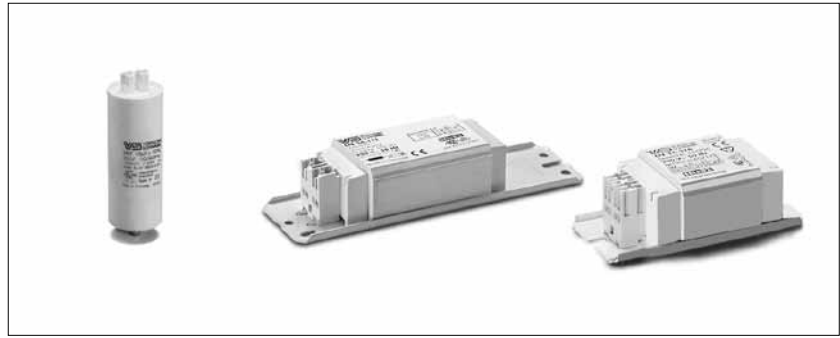


Output W	Base	Type	Ref. No.	Colour temperature K	Voltage V	Current mA	Lumen lm	Length mm	Packaging Qty./Carton
13	G24q-1	TCDEL-13-2700	541054	2700	91	175	900	112	50
13	G24q-1	TCDEL-13-3000	541055	3000	91	175	900	112	50
13	G24q-1	TCDEL-13-4000	541056	4000	91	175	900	112	50
18	G24q-2	TCDEL-18-2700	541057	2700	100	220	1200	127.5	50
18	G24q-2	TCDEL-18-3000	541058	3000	100	220	1200	127.5	50
18	G24q-2	TCDEL-18-4000	541059	4000	100	220	1200	127.5	50
26	G24q-3	TCDEL-26-2700	541060	2700	105	325	1780	147.5	50
26	G24q-3	TCDEL-26-3000	541061	3000	105	325	1780	147.5	50
26	G24q-3	TCDEL-26-4000	541062	4000	105	325	1780	147.5	50
26	GX24q-3	TCTEL-26-2700	541063	2700	105	325	1790	112	50
26	GX24q-3	TCTEL-26-3000	541064	3000	105	325	1790	112	50
26	GX24q-3	TCTEL-26-4000	541065	4000	105	325	1790	112	50
32	GX24q-3	TCTEL-32-2700	541066	2700	100	320	2400	125	50
32	GX24q-3	TCTEL-32-3000	541067	3000	100	320	2400	125	50
32	GX24q-3	TCTEL-32-4000	541068	4000	100	320	2400	125	50
42	GX24q-4	TCTEL-42-2700	541069	2700	135	320	3200	148	50
42	GX24q-4	TCTEL-42-3000	541070	3000	135	320	3200	148	50
42	GX24q-4	TCTEL-42-4000	541071	4000	135	320	3200	148	50
57	GX24q-5	TCTEL-57-2700	541072	2700	182	320	4250	179	50
57	GX24q-5	TCTEL-57-3000	541073	3000	182	320	4250	179	50
57	GX24q-5	TCTEL-57-4000	541074	4000	182	320	4250	179	50

Magnetic Packages for Compact Fluorescent Lamps 13–26 W

Standard Ballasts 28x41 mm

Vacuum-impregnated with polyester resin
 Push-in terminals for leads: 0.5–1 mm²
 For the automatic luminaire wiring:
 IDC terminals for leads H05V-U 0.5
 tw 130, Protection class I
 EN 61347 (Safety), EN 60921 (Performance)
 Parallel connected capacitors
 for 250 V, 50/60 Hz



Lamp				Ballast / Capacitor									Capacitor	
Output W	Type	Base	Current mA	Type	Ref. No.	V, Hz	a mm	b mm	c mm	Weight kg	Δt K	EEl	C _P μF	Current mA
Electromagnetic ballasts														
13	TC-D/-T	G24d-1/GX24d-1	175	LN 13.103	175921	220, 50	85	75	27	0.29	50		2.0	80
18	TC-D/-T	G24d-2/GX24d-2	220	LN 181.105	175925	220, 50	85	75	27	0.29	55		2.0	110
26	TC-D/-T	G24d-3/GX24d-3	325	L 18/20.933	535428	220, 50	150	140	45	0.49	70		3.5	140
13	TC-D/-T	G24d-1/GX24d-1	175	L 13.849	503868	230, 50	85	75	27	0.29	65	B2	2.0	80
18	TC-D/-T	G24d-2/GX24d-2	220	LN 181.850	503871	230, 50	85	75	27	0.29	65	B2	2.0	110
26	TC-D/-T	G24d-3/GX24d-3	325	LN 26.813	509502	230, 50	110	100	45	0.42	55	B2	3.5	140
13	TC-D/-T	G24d-1/GX24d-1	175	LN 13.413	164342	240, 50	85	75	34	0.32	60	B1	2.0	80
18	TC-D/-T	G24d-2/GX24d-2	220	LN 181.418	538572	240, 50	85	75	27	0.32	65	B2	2.0	110
26	TC-D/-T	G24d-3/GX24d-3	325	LN 18.102	534549	240, 50	155	130	60	0.54	60	B2	3.5	140
13	TC-D/-T	G24d-1/GX24d-1	175	L 13.235	538576	220, 60	85	75	27	0.28	50		2.0	110
18	TC-D/-T	G24d-2/GX24d-2	220	L 181.236	538577	220, 60	85	75	27	0.28	50		2.0	110
26	TC-D/-T	G24d-3/GX24d-3	325	L 18.249	538801	220, 60	150	140	34	0.32	75		3.0	160

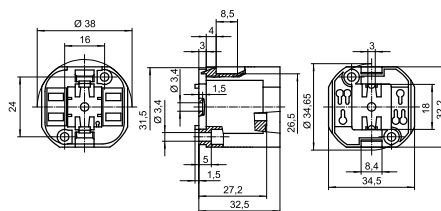
Capacity μF	Ref. No.	Temperature range °C	∅ (D) mm	Length (L) mm	Male nipple/length (mm)	Push-in twin terminals	Weight kg	Unit pcs.
Parallel connected capacitors								
2.0	500296	-40 to 85	25	57	M8x10	0.5–1 mm ²	22	530
3.0	500300	-40 to 85	25	57	M8x10	0.5–1 mm ²	22	530
3.5	500301	-40 to 85	25	57	M8x10	0.5–1 mm ²	22	530

TD-D/TC-T Lampholders with Base G24d/GX24d

Plain Casing – Keyless Version

G24d, GX24d lampholder
 Nominal lamp output: 10, 13, 18, 26, 32, 42 W
 Plain casing, casing: PBT GF, white, T140
 Nominal rating: 2/500
 Rear fixing holes for self-tapping screws
 acc. to ISO 1481/7049-ST4.2-C/F
 Front fixing holes for screws M3
 Central fixing hole for screw M3
 Rotation stop, for cover caps
 Weight: 13.2 g, unit: 500 pcs.
 Type: 71500

Ref. No. 534289



Compact Fluorescent Lamps TC-D and TC-T

TC-D – Double Tube

Available in amber white, warm white and white

Wide variety of outputs: 13–26 W

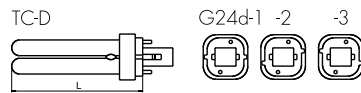
Rated average life: 12,000 hrs.

RoHS compliant

"VS"-branded

Suitable for G24d lampholder

Lamp diameter: 12 mm



Lamp									
Output W	Base	Type	Ref. No.	Colour temperature K	Voltage V	Current mA	Lumen lm	Length mm	Packaging Qty./Carton
13	G24d-1	TCD-13-2700	541075	2700	91	175	900	112	50
13	G24d-1	TCD-13-3000	541076	3000	91	175	900	112	50
13	G24d-1	TCD-13-4000	541077	4000	91	175	900	112	50
18	G24d-2	TCD-18-2700	541078	2700	100	220	1200	127.5	50
18	G24d-2	TCD-18-3000	541079	3000	100	220	1200	127.5	50
18	G24d-2	TCD-18-4000	541080	4000	100	220	1200	127.5	50
26	G24d-3	TCD-26-2700	541081	2700	105	325	1780	147.5	50
26	G24d-3	TCD-26-3000	541082	3000	105	325	1780	147.5	50
26	G24d-3	TCD-26-4000	541083	4000	105	325	1780	147.5	50

LIGHTING TECHNOLOGY PRODUCTS



D-Cube City, Korea

■ D-CUBE CITY

The brand-new D-Cube City Mall in Seoul, Korea, opened its doors at the end of August 2011. With its exceptional size and spectacular design, the latest landmark in the south-west of Seoul stands out from all other buildings in the proximity.

The complex consists of a 51-storey apartment building as well as a 42-storey mega-mall, which is home to a hotel, office space, department stores, an arts and culture centre, restaurants, relaxing green spaces, a theatre as well as a theme park for children.

A park-like outdoor area, designed with much attention to detail, is available for everyone to enjoy. The challenge of harmoniously blending traditional, Korean elements with a modern ambience was readily accepted by the architecture firm, The Jerde Partnership. The architects succeeded in creating something that really stands out from the crowd: a 6-storey indoor waterfall. The mall's "nature and culture" theme is reflected throughout the entire huge complex. Far from being another conventional shopping centre, the D-Cube City Mall is an experience in itself for young and old.

Without doubt, the lighting concept inside the mall also adds to the experience. The possibility of blending two white tones (2700 K and 4500 K) to create numerous different colour temperatures was decisive for using Vossloh-Schwabe's DualWhite AluLED modules. Warm white begins the day in the mornings, cool white takes over around midday and warm white finishes the day in the evenings. The lighting system in the complex thus mimics natural light, which mall visitors find particularly pleasant and natural.

Customer: Daesung Industrial co., LTD.

Architects: Jerde Partnership, Samwoo Architects & Engineers

Light planning: Design Luna

VS distributor: JK Lighting

Photos: Daesung Industrial co., LTD and Design Luna

■ SAGRADA FAMÍLIA, BARCELONA

As different as each of the façades of the Sagrada Família are, they do have something in common: each is supremely symbolic. Rather than merely enclose space with walls, Gaudi intended his buildings to tell stories and be an experience in themselves. Gaudi's vision is now slowly being put into practice along with a number of additional modern elements, for instance the decision to use innovative lighting technology in the form of LED spots to perfectly set off the basilica's sacral symbolism.

The interior of the basilica, which has already been completed, soars up





Sagrada Família, Spain



Warehouse, Germany

to an enormous vault supported by stone columns that branch off at the ceiling to form a lace-like canopy. At present these columns are fitted with a total of 40 luminaires, which in turn are equipped with daylight-white LED modules and matching control gear made by Vossloh-Schwabe.

Interior photos: José Tió

Consulting and luminaire design: Anoché Iluminación Arquitectónica

Glass artist: D. Fita

■ LIGHT MANAGEMENT SYSTEM FOR A WAREHOUSE

More than ever before, present-day light management is expected to be flexible, save energy and be convenient to operate. The new all-round system made by Vossloh-Schwabe, consisting of a light controller, sensor, extender and push buttons, can be programmed without needing a PC or overriding bus system. Instead, the entire lighting system is configured using the controller's integrated display screen and rotary push key.

The DALI-based system can be used to control a max. of 64 luminaires, or luminaire groups, 6 independently configurable standard buttons and up to 16 MultiSensors using a single controller. By connecting an extender, the lighting system can then be extended by up to 64 luminaires per extender. The controller can be mounted on a 35-mm mounting rail. The wireless version of the controller (LW) substantially reduces the installation work required during refurbishment and with that also reduces installation costs. Up to 16 wireless modules can be connected, each with 4 independently configurable radio buttons.

Thanks to the VS LiCS system, the energy consumed by a warehouse (1,320 m², ceiling height of 7 m) can be almost halved from approx. 20,500 kWh p.a. down to 11,500 kWh p.a. by installing 169 luminaires 1 x 49 W, a DALI-compliant electronic ballast and MultiSensors. Creating luminaire groups as well as positioning light- and motion-activated MultiSensors additionally provide the comfort and convenience of optimum light -any time you need it. If the sensor fails to register any movement, LiCS will switch the lighting system off, either in its entirety or only in certain sections, or dim it down to the specified minimum value. This removes the need to switch the lighting system on and off manually.

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Whenever an electric light goes on around the world, Vossloh-Schwabe is likely to have made a key contribution to ensuring that everything works at the flick of a switch.

Headquartered in Germany, Vossloh-Schwabe has been a member of the global Panasonic group since 2002 and counts as a technology leader within the lighting sector. Top-quality, high-performance products form the basis of the company's success.

Whether cost-effective standard components or tailor-made product developments are needed, Vossloh-Schwabe can satisfy even the most diverse market and customer requirements. Vossloh-Schwabe's extensive product portfolio covers all lighting components: electronic and magnetic ballasts, lampholders, state-of-the-art control systems (LiCS), LED systems with matching control gear units as well as OLEDs.



A member of the Panasonic group **Panasonic**

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FL/CFL Packages GB 06/2012