TrEx



... for explosion hazard environment group II, category 2 (zone 1, 21 and 2, 22).

USE

The metal light fitting with satinated tempered safety glass is suitable for environment with hazard of explosion of gases, vapours and dust for zones 1, 21 and 2,22. It meets the requirements of the European Community Directive No. 2014/34/EU. It is resistant against chemically aggressive environment, therefore it fits for industrial premises like chemical factories, plants for processing of gases and oil, power plants, army facilities, automotive factories, laboratories and other facilities of heavy and mechanical engineering. The light fitting in IP66 protection is resistant against dust and splashing water.

USE IN ENVIRONMENT WITH HAZARD OF EXPLOSION

TÜV CY 21 ATEX 0206562X	Light fitting with disconnector	Ex II 2G Ex db eb mb op is IIC T4 Gb
	Light fitting Mxh with disconnector	Ex II 2D Ex tb IIIC T68°C Db
	Light fitting without disconnector	Ex II 2G Ex eb mb op is IIC T4 Gb
	Light fitting Mxh without disconnector	Ex II 2D Ex tb IIIC T68°C Db
AR19ATEX131U	Ex battery box HM 4Ah	Ex II 2G Ex d IIC T4 Gb
TÜV CY 20 ATEX 0206368 U	Ex disconnector OT 2A-2C Ex d	Ex II 2G Ex db IIC Gb

The basic requirements for safety and health protection are secured by verification of conformity with EN 60079-0, EN 60079-7, EN 60079-18, EN 60079-1, EN 60079-28 and EN 60079-31.

ADVANTAGES

- Light fitting protection **IP66**
- High temperature resistance on a range from **t_a = -40 °C to t_a = 55 °C**
- For hazardous areas of zones 1, 21 and 2, 22
- Lifetime: 75 000 hours / L80B50 at t_a = 55°C, 110 000 hours / L70B50 at t_a = 55°C
- Cable glands: plastic ATEX M20 × 1,5, or metallic (INOX version on request)
- Wide fixing options including recessed frame for false ceiling
- Up to 45 % lower power consumption as compared to fluorescent tubes
- Constant luminous flux even at ambient temperature of -40°C
- Standard model CRI > 80: 4000 K, at request CRI > 80: 3000 K, 5000 K, 5700 K
- Optional through-wiring of up to 7 wires at reflector

TrEx

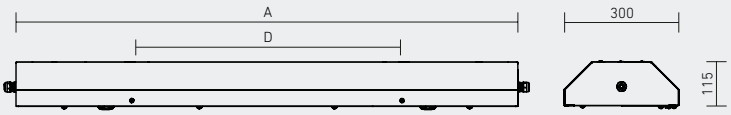


TECHNICAL DESCRIPTION

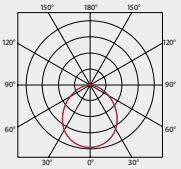
- Light fitting protection: IP66
- Minimum ambient temperature: t_a = -40 °C
- Maximum ambient temperature: t_a = 55 °C
- Ambient temperature: t_a = 0 – 40 °C (version with emergency back-up source for 3hrs; M3h)
- Maximum system efficacy: 147 lm/W
- CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 75 000 hours / L80B50 at t_a = 55 °C, 110 000 hours / L70B50 at t_a = 55°C
- Body: powder coated steel sheet RAL 9003, or INOX (AISI 304)
- Diffuser: satinated tempered safety glass
- Sealing: glued EPDM
- Cable glands: plastic ATEX M20 × 1,5, or metallic (INOX version on request)
- Terminal block: ATEX, screwless WAGO, Cable cross-section max: 4 mm^2
- Installation: the package includes suspensory eyes 2 × M6
- Electric equipment: LED modules, current driver, disconnector and Ex battery box with ATEX certificate
- The watt and lumen values can vary by ± 7,5 %

AT REQUEST

- CRI > 80: 3000 K, 5000 K, 5700 K
- Halogen-free wires
- Design modification for fixing and connecting in the false ceiling
- Diffuser: transparent tempered safety glass
- Cable glands: metal or armoured ATEX cable glands M20 × 1,5 or M25 × 1,5
- Increased number of cable entries on sides and in upper part of light fitting if recessed frame for false ceiling mounted



TrEx 1.4ft



Type	Min. and max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	System input [W]	System efficiency [lm/W]	Net weight [kg]	A [mm]	D [mm]
Light fitting without a battery system								
TrEx 1.2ft 3200/840	-40 / 55	2800	2350	19	123	8,3	730	350
TrEx 1.2ft 4400/840	-40 / 55	4000	3360	27	124	8,3	730	350
TrEx 1.4ft 6400/840	-40 / 55	5600	4700	35	134	14,6	1300	700
TrEx 1.4ft 8800/840	-40 / 55	8000	6720	50	134	14,6	1300	700
TrEx 1.5ft 8000/840	-40 / 55	7000	5880	40	147	17,3	1580	700
TrEx 1.5ft 11000/840	-40 / 55	10000	8400	59	142	17,3	1580	700
TrEx 2.2ft 6400/840	-40 / 55	5600	4700	35	134	8,9	730	350
TrEx 2.2ft 8800/840	-40 / 50	8000	6720	50	134	8,9	730	350
TrEx 2.4ft 12800/840	-40 / 55	11200	9400	67	140	16,0	1300	700
TrEx 2.4ft 17600/840	-40 / 50	16000	13440	100	134	16,0	1300	700
TrEx 2.5ft 16000/840	-40 / 55	14000	11760	80	147	18,9	1580	700
TrEx 2.5ft 22000/840	-40 / 50	20000	16800	121	138	18,9	1580	700

Type	Min. and max. ambient temperature [°C]	Emergency light fluxof light fitting 1h [lm]	Emergency light fluxof light fitting 3h [lm]	Power in standby mode [W]	Battery type	Net weight [kg]
EM emergency lighting kit						
TrEx 1.2ft 4400/840 M3h	0 / 40	990	630	2	NiCd HT	+1,3
TrEx 1.4ft 8800/840 M3h	0 / 40	790	580	2	NiCd HT	+1,3

TrEx DIS

Light fitting with disconnector

Code	Type	1F	3F	M3h	3F M3h
10339	TrEx 1.2ft 3200/840 DIS	10357	10379	x	x
10341	TrEx 1.2ft 4400/840 DIS	10358	10382	10429	10451
10342	TrEx 1.4ft 6400/840 DIS	10359	10388	x	x
10343	TrEx 1.4ft 8800/840 DIS	10361	10389	10438	10453
10346	TrEx 1.5ft 8000/840 DIS	10362	10392	x	x
10347	TrEx 1.5ft 11000/840 DIS	10363	10398	x	x
10348	TrEx 2.2ft 6400/840 DIS	10366	10399	x	x
10349	TrEx 2.2ft 8800/840 DIS	10367	10402	x	x
10351	TrEx 2.4ft 12800/840 DIS	10368	10404	x	x
10352	TrEx 2.4ft 17600/840 DIS	10369	10405	x	x
10353	TrEx 2.5ft 16000/840 DIS	10372	10406	x	x
10356	TrEx 2.5ft 22000/840 DIS	10378	10407	x	x

TrEx

Light fitting without disconnector

Code	Type	1F	3F	M3h	3F M3h
10219	TrEx 1.2ft 3200/840	10237	10253	x	x
10222	TrEx 1.2ft 4400/840	10238	10256	10298	10334
10224	TrEx 1.4ft 6400/840	10239	10257	x	x
10225	TrEx 1.4ft 8800/840	10241	10258	10302	10336
10226	TrEx 1.5ft 8000/840	10242	10259	x	x
10227	TrEx 1.5ft 11000/840	10243	10262	x	x
10228	TrEx 2.2ft 6400/840	10246	10268	x	x
10229	TrEx 2.2ft 8800/840	10247	10269	x	x
10231	TrEx 2.4ft 12800/840	10248	10272	x	x
10232	TrEx 2.4ft 17600/840	10249	10278	x	x
10233	TrEx 2.5ft 16000/840	10251	10279	x	x
10236	TrEx 2.5ft 22000/840	10252	10282	x	x

TrEx DIS INOX

Light fitting with disconnector, body steel sheet grade AISI 304

Code	Type	1F	3F	M3h	3F M3h
10519	TrEx 1.2ft 3200/840 DIS INOX	10537	10572	x	x
10521	TrEx 1.2ft 4400/840 DIS INOX	10538	10574	10616	10632
10522	TrEx 1.4ft 6400/840 DIS INOX	10539	10575	x	x
10523	TrEx 1.4ft 8800/840 DIS INOX	10542	10576	10618	10636
10526	TrEx 1.5ft 8000/840 DIS INOX	10548	10577	x	x
10527	TrEx 1.5ft 11000/840 DIS INOX	10549	10578	x	x
10528	TrEx 2.2ft 6400/840 DIS INOX	10552	10579	x	x
10529	TrEx 2.2ft 8800/840 DIS INOX	10558	10582	x	x
10531	TrEx 2.4ft 12800/840 DIS INOX	10559	10588	x	x
10532	TrEx 2.4ft 17600/840 DIS INOX	10562	10589	x	x
10533	TrEx 2.5ft 16000/840 DIS INOX	10568	10592	x	x
10536	TrEx 2.5ft 22000/840 DIS INOX	10569	10598	x	x

TrEx INOX

Light fitting without disconnector, body steel sheet grade AISI 304

Code	Type	1F	3F	M3h	3F M3h
10456	TrEx 1.2ft 3200/840 INOX	10468	10480	x	x
10457	TrEx 1.2ft 4400/840 INOX	10469	10481	10499	10512
10458	TrEx 1.4ft 6400/840 INOX	10470	10482	x	x
10459	TrEx 1.4ft 8800/840 INOX	10471	10483	10501	10516
10460	TrEx 1.5ft 8000/840 INOX	10472	10484	x	x
10461	TrEx 1.5ft 11000/840 INOX	10473	10485	x	x
10462	TrEx 2.2ft 6400/840 INOX	10474	10486	x	x
10463	TrEx 2.2ft 8800/840 INOX	10475	10487	x	x
10464	TrEx 2.4ft 12800/840 INOX	10476	10488	x	x
10465	TrEx 2.4ft 17600/840 INOX	10477	10489	x	x
10466	TrEx 2.5ft 16000/840 INOX	10478	10490	x	x
10467	TrEx 2.5ft 22000/840 INOX	10479	10491	x	x

LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F M3h 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
DIS light fitting with disconnector

CERTIFICATION

TÜV CY 21 ATEX 0206562X - TrEx, TrEx Mxh

Directive		Standards
2014/34/EU	ATEX	EN IEC 60079-0:2018
		EN 60079-1:2014
		EN 60079-7:2015
		EN 60079-18:2015
		EN 60079-28:2015
		EN 60079-31:2014
2014/35/EU	General requirements and standards	EN IEC 60598-1:2021
		EN IEC60598-2-1:2021
		EN IEC62471-7:2023
		EN IEC 55015:2019
		EN 60598-2-22:2014
		EN 61547:2009
		EN IEC 61000-3-2:12019
		EN 61000-3-3:13
2011/65/EN	RoHS	ČSN EN IEC 63000

AR19ATEX131U - Ex battery box HM4Ah

Directive		Standards
2014/34/EU	ATEX	EN IEC 60079-0:2018
		EN 60079-1:2014

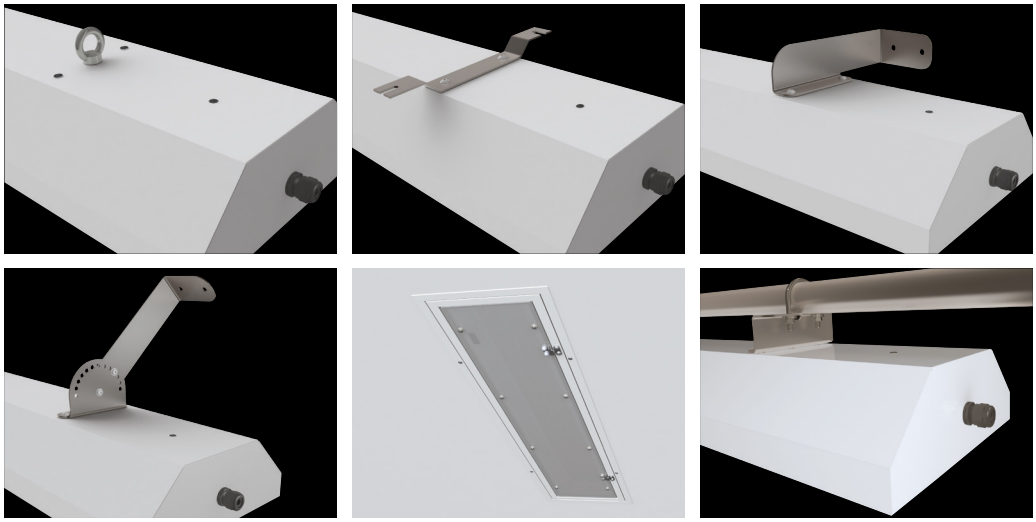
TÜV CY 20 ATEX 0206368 U - Ex disconnector OT 2A-2C Ex d

Directive		Standards
2014/34/EU	ATEX	EN IEC 60079-0:2018
		EN 60079-1:2014

	Identification of external influences	Classification of spaces	
		Identification	Establishment regulation
Hazard of explosion of flammable dust	BE3N1	ZONE 21, 22	EN 60079-17
			EN 60079-14
			EN 60079-10-2
Hazard of explosion of flammable gases and vapours	BE3N2	ZONE 1, 2	EN IEC 60079-10-1
			EN 60079-14
			EN 60079-17

LIGHT FITTING ATTACHMENT

a) Suspension eyes 2×M6 - in standard model
b) Holders directly on the ceiling
c) Side suspensions on the wall
d) Adjustable side suspensions on the wall
e) Recessed frame for false ceiling
f) Holders on tube structures



LIGHT FITTING DETAILED VIEW

TrEx





version with disconnector

