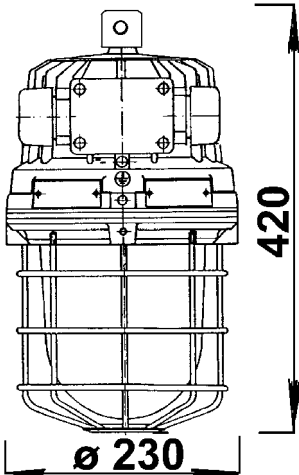


# ORION LED

Zone 1, 21 • Zone 2, 22



IP 65



**Use:** For illumination of industrial spaces (indoor, under cover and outdoor), other than mines. See specification.

**Technical description:** Luminaire consists of body, basic plate and flange with protective glass. Body and flange are made of AlSi alloy treated with polyester powder paint. Luminaire can be suspended by the help of steel pendant with eye  $\varnothing$  18 mm. The connecting area (increased safety „e“) is placed on the side of the body and equipped with connecting clamps and 2 cable glands HSK-K-Ex M25x1.5 for cables  $\varnothing$  9-16 mm. Area is enclosed with cover and sealed with silicon. There is aluminium basic plate with electro-module mounted inside the luminaire. Electro-module consists of 20 x LED CREE XP-G (luminous flux 4000 lm, lumen per watt 88 lm/W, colour temperature 3700-5000, Colour Rendering Index  $\sim$ 80, guaranteed life-time min. 50.000 hrs.) and cooling unit. Input of the luminaire is adjustable (45W/22,5W) by changing output current of the LED driver 700mA/350mA. Flange with protective glass is screwed in the body and locked with securing screw; thread shapes a rift of flameproof enclosure „d“. Protective hardened glass is resistant against mech. shock min. 7 J and is fixed in the flange; the connection is filled with polyurethane putty. The mobile steel hinge is fixed to

the flange and enables to hang up the flange during mounting and dismounting. Steel parts are galvanized and chromated. Max. section of connecting conductors 4 mm<sup>2</sup>. Three-pole connecting terminal block enables interchanging 2 phases (4-core cable). Luminaire is equipped with 2 inner and 1 outer earthing clamp for conductive connection. Luminaire is designed as through-way one, when used as the end piece there is necessary to substitute one cable gland with blinding screw V-Ex or to blind one unused cable gland with blinding plug HSK-V-Ex. The blinding parts can be delivered on order optionally. Versions K are equipped with protective guard from steel wire. Packing carton is filled with sealing polyurethane foam Instapak.

**Accessories** (on order): lampshade type 254.5021/01, holder type 4-99.7995 for immovable fixing to ceiling, holder type 338.2735 for immovable fixing to wall, blinding plug M25x1.5 type HSK-V-Ex, blinding screw M25x1.5 type V-Ex wrench M 205x2 type 3-99.6158.

**Spare parts:** (on order) protective guard 2-99.7461, flange with glass type 3-99.5722/1 or 3-99.5722K/1 (version K), cable gland HSK-K-Ex.

## Parameters:

20 x LED CREE XP-G	
Viewing angle	120°
Luminous flux	4000 lm
Lumen per watt	88 lm/W
Colour temperature	3700-5000 K
Colour Rendering Index	$\sim$ 80



591 39 03 Lampshade

 $-20^{\circ}\text{C} \leq t_a \leq +40^{\circ}\text{C}$ 

Type without protective guard	Typ with protective guard	Recommended light source	Temper. class	Weight (kg)	Cable gland	Blinding	
						screw	plug
591 39 03	591 39 03 K	20 x LED CREE XP-G 45 W/22,5 W	T6	9,5 (K - 10,0)	M 25x1,5 HSK-K-Ex 9 - 16 mm no. 1.291.2501.51	M 25x1,5 V-Ex no. 1.297.2501.50	M 25x1,5 HSK-V-Ex no. 1.296.2101.11

ATEX 94/9/EC		ČSN EN 60598-1 60598-2-1	ČSN EN 60079-0-1 60079-31	ČSN 33 2000-5.51				Carton (mm/pcs) 410 x 240 x 240 430 x 240 x 240 typ K	
		AD5	AE6	AF1, AF2, AF3	AG2	AH2			
IP 65	230 V 50 Hz	20 x LED Cree XP-G		$-20^{\circ}\text{C} \leq t_a \leq +40^{\circ}\text{C}$		BE3N1: ČSN EN 61241-14 (Zone 21, 22) BE3N2: ČSN EN 60079-14 (Zone 1, Zone 2) BE3N3: ČSN EN 33 2340 (V1, V2, V3)			

## LED FLAMEPROOF LUMINAIRE

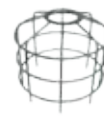
- ORION type 591 39 03

II 2G Ex de IIC T6 Gb

II 2D Ex t IIIC T 60 °C Db



591 39 03



2-99.7461



3-99.5741/1



254.5021/01



HSK-V-Ex



V-Ex



HSK-K-Ex



4-99.8103



338.2735



3-99.6158/1



# FLAMEPROOF LUMINAIRE - ORION

2G Ex de IIC T4 - T6 Gb

II 2G Ex de IIB T4 - T6 Gb

II 2D Ex t IIIC T<sub>max</sub>. surf. Db

# ORION

Zone 1, 21 • Zone 2, 22



IP 65

511 37 02  
511 37 02t

2-99.7461



3-99.5722/1



254.5021/01



HSK-V-Ex



V-Ex



V-MS-VMQ-Ex



439.2566



439.2571



439.2565



3-99.6158/1



4-99.8103



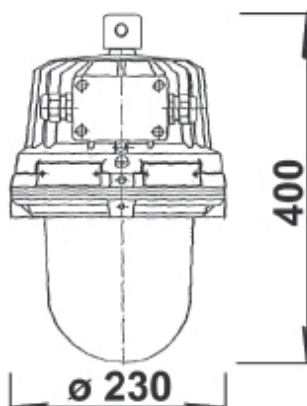
338.2735



HSK-K-Ex



HSK-M-Ex



**Use:** For illumination of industrial spaces (indoor, under cover and outdoor), other than mines. See specification.

**Technical description:** Luminaire consists from body, basic plate and flange with protective glass. Body and flange are made from AlSi alloy treated with polyester powder paint. Luminaire can be suspended by the help of steel pendant with eye  $\varnothing$  18 mm. The connecting area (increased safety „e“) is placed on the side of the body and equipped with connecting clamps and 2 cable glands HSK-K-Ex M25x1.5 for cables  $\varnothing$  9 - 16 mm (HSK-M-Ex for cables 10 - 16 mm by versions F). Area is enclosed with cover and sealed with silicon. The steel basic plate with electric parts and reflector is fixed in the body. Flange with protective glass is screwed in the body and locked with securing screw; thread shapes a rift of flameproof enclosure „d“. Protective hardened glass is resistant against mech. shock min. 7 J and is fixed in the flange; the connection is filled with polyurethane putty.

The mobile steel hinge is fixed to the flange and enables to hang up the flange during mounting or dismounting. Steel parts are galvanized and chromated. Max. section of connecting conductors 4 mm<sup>2</sup>. Three-pole connecting terminal block enables interchanging 2 phases (4-core cable). Luminaire is equipped with 2 inner and 1 outer earthing clamps for conductive connection. Luminaire is designed as through-way one, when used as the end piece there is necessary to substitute one cable gland with blinding screw V-Ex or to blind one unused cable gland with blinding plug HSK-V-Ex (for versions F: one cable gland must be replaced with blinding screw V-MS-VMQ-Ex). The blinding parts can be delivered on order optionally. Versions K are equipped with protective guard from steel wire. Packing carton is filled with sealing polyurethane foam Instapak.

**Accessories (on order):** lampshade type 254.5021/01, holder type 4-99.7995 for immovable fixing to ceiling, holder type 338.2735 for immovable fixing to wall, blinding plug M25x1.5 type HSK-V-Ex, blinding screw M25x1.5 type V-Ex (V-MS-VMQ-Ex for versions F), wrench M 205x2 type 3-99.6158/1. Optical red insert 439.2565, green 439.2566 or clear with refractor 439.2571 for signalling purposes (by types 511 37 02 or 511 37 02 K, with bulb max. 60 W only).

**Spare parts (on order):** protective guard 2-99.7461, flange with glass type 3-99.5722/1 (for basic versions and versions t), type 3-99.5722K/1 (for versions K and Kt), type 3-99.5722F/1 (for versions F), type 3-99.5722KF/1 (for versions KF), cable gland HSK-K-Ex (HSK-M-Ex for versions F and KF).

511 37 02 K  
511 37 02 Kt511 37 02 + Lampshade  
511 37 02t + Lampshade511 37 02 F  
+ Lampshade

511 37 02 KF



511 37 02 F

EcoClassic 140 W E27	PL E GLOBE 23 W E27	CLAS 200 W E27	HQL 80 W E27	NAV-E 50/I 50 W E27	HQL 125 W E27	NAV-E 110 110 W E27	NAV 70 W E27	HCL-TT 70 W E27	Bulb 60W/220V E27	DULUX EL 23 W E27	Master PL E 23 W E27	DULUX D 26 W G43-3
T HVL 160 W E27	230 V 50 Hz	DC 220 V		ČSN EN 60598-1 60598-2-1	ČSN EN 60079-0,1 60079-7	ČSN EN 60079-31	ČSN 33 2000-5.51 AD5 AE6 AF1, AF2, AF3 AG2 AH2					
Carton (mm/pcs) 410 x 240 x 240 / 1 430 x 240 x 240 / 1 K		-20 °C ≤ t ≤ +40 °C t: -20 °C ≤ t ≤ +50 °C F: -50 °C ≤ t ≤ +40 °C		BE3N1: ČSN EN 61241-14 BE3N2: ČSN EN 60079-14 BE3N3: ČSN EN 33 2340		(Zone 21, 22) (Zone 1, Zone 2) (V1, V2, V3)						



For version 541 33 04, t, F:

II 2G Ex de IIC T3-T4 Gb

II 2G Ex de IIB T4 Gb (-50°C < Tamb < +40°C)

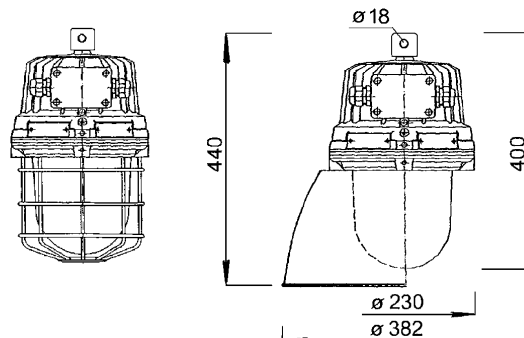
II 2D Ex IIIC T max. surface - more table Db

For version 581 04 02, t:

II 2G Ex de IIC T6 Gb

II 2D Ex t IIIC T60°C Db

II 2D Ex t IIIC T70°C Db for -20°C < Tamb < +50°C



-20°C ≤ t<sub>a</sub> ≤ +40°C

Types without protective guard	Types with protective guard	Recommended light source			Temper. class	T max. surf. (°C)	Voltage (V/Hz)	Weight (kg)	Cable gland	Blinding	
										screw	plug
511 37 02	511 37 02 K	Halogen bulb Philips	EcoClassic	140	T4	101	~ 230 / 50	8,0 / K: 8,5	M 25x1,5 HSK-K-Ex 9 - 16 mm	M 25x1,5 V-Ex	M 25x1,5 HSK-V-Ex
		Halogen bulb Philips	EcoClassic	105	T5	90					
		Halogen bulb Philips	EcoClassic	70	T6	77					
		Compact fluor. lamp Osram	Dulux EL Longlife	23	T6	59					
		Compact fluor. lamp Philips	Master PL Electronic	23	T6	63					
		Compact fluor. lamp Philips	Master PL Electronic Globe	23	T6	58					
		Bulb	CLAS	200	T4	104					
		Bulb	CLAS	150	T5	92					
		Bulb	CLAS	60-100	T6	80					
541 33 03	541 33 03 K	Mixed-light lamp	HWL	160	T5	90					
		HP mercury vapour lamp	HQL	80	T4	95					
541 33 04	541 33 04 K	HP sodium disch. lamp	NAV-E 50/I	50	T6	81	8,5 / K: 9,0	no. 1.291.2501.51	no. 1.297.2501.50	no. 1.296.2101.11	
		HP mercury vapour lamp	HQL	125	T4	121					
541 33 06	541 33 06 K	HP sodium disch. lamp	NAV-E	110	T4	99	8,0 / K: 8,5				
		HP sodium disch. lamp	NAV	70	T5	86					
581 04 02	581 04 02 K	HP metal halide lamp	HQI-E	70	T6	80					
511 37 02 S	511 37 02 KS	Compact fluor. lamp	DULUX D	26	T6	60					
		Bulb	CLAS	100	T5	81	=220 V (DC)	8,0 / K: 8,5			

-20°C ≤ t<sub>a</sub> ≤ +50°C

Types without protective guard	Types with protective guard	Recommended light source			Temper. class	T max. surf. (°C)	Voltage (V/Hz)	Weight (kg)	Cable gland	Blinding	
										screw	plug
511 37 02 t	511 37 02 Kt	Halogen bulb Philips	EcoClassic	140	T4	101	~ 230 / 50	8,0 / K: 8,5	M 25x1,5 HSK-K-Ex 9 - 16 mm	M 25x1,5 V-Ex	M 25x1,5 HSK-V-Ex
		Halogen bulb Philips	EcoClassic	105	T4	100					
		Halogen bulb Philips	EcoClassic	70	T5	87					
		Bulb	CLAS	200	T4	114					
		Bulb	CLAS	150	T4	102					
		Bulb	CLAS	60-100	T5	90					
		Mixed-light lamp	HWL	160	T4	100					
541 33 03 t	541 33 03 Kt	HP mercury vapour lamp	HQL	80	T4	105	8,5 / K: 9,0	no. 1.291.2501.51	no. 1.297.2501.50	no. 1.296.2101.11	
		HP sodium disch. lamp	NAV-E 50/I	50	T4	91					
541 33 04 t	541 33 04 Kt	HP mercury vapour lamp	HQL	125	T3	131					
		HP sodium disch. lamp	NAV-E	110	T4	109					
581 04 02 t	581 04 02 Kt	Compact fluor. lamp	DULUX D	26	T6	70					

-50°C ≤ t<sub>a</sub> ≤ +40°C

II 2G Ex de IIB T4 - T6 Gb reclassifications explosion group (B) for gas

Types without protective guard	Types with protective guard	Recommended light source			Temper. class	T max. surf. (°C)	Voltage (V/Hz)	Weight (kg)	Cable gland	Blinding	
										screw	plug
511 37 02 F	511 37 02 KF	Halogen bulb Philips	EcoClassic	140	T4	101	~ 230 / 50	8,0 / K: 8,5	M 25x1,5 HSK-M-Ex 10 - 16 mm	M 25x1,5 V-Ms-VMQ-Ex	
		Halogen bulb Philips	EcoClassic	105	T5	90					
		Halogen bulb Philips	EcoClassic	70	T6	77					
		Bulb	CLAS	200	T4	104					
		Bulb	CLAS	150	T5	92					
		Bulb	CLAS	60-100	T6	80					
		Mixed-light lamp	HWL	160	T5	90					
541 33 04 F	541 33 04 KF	HP mercury vapour lamp	HQL	125	T4	121	8,5 / K: 9,0	no. 1.640.2500.51	no. 1.199.2500.50		
		HP sodium disch. lamp	NAV-E	110	T4	99					