

# 4.6

## Ex Floodlights for high-pressure discharge lamps, series PX 04 and FLT 10

4 (Zone 1, 2, 21, 22)

### The powerful floodlights for harsh environments

Thanks to the high degree of protection IP66, the robust floodlights of the series PX 04 and FLT 10 for hazardous areas are suitable for the illumination of large areas and objects under harsh environmental conditions, such as those found in industrial, chemical and petrochemical plants, on- and offshore oil and gas production plants, pipelines, refineries and loading ramps. High-pressure discharge lamps from 70 W to 600 W provide a high illuminance level.

### PX 04 - multifunctional

The PX 04 light fitting enclosure is made of copper-free aluminium. The protective glass cover is made of scratchproof borosilicate glass; it protects the internal reflector against harmful environmental conditions.

Depending on the application, a wide beam or a narrow beam reflector can be chosen. All external screws are made of stainless steel. The easy-to-maintain electrical connection is made via a flanged-on Ex-e connection compartment. The ballast with thermal protection and a pulse ignitor with automatic shut off provides additional safety. The floodlight features an adjustable

mounting bracket that allows an optimum focussing of the light.

### FLT 10 - for Arctic conditions

Specially designed for use in areas with extremely low temperatures, the FLT 10 was developed as a version of the tried and tested PX 04 floodlight. Thanks to its highly polished aluminium reflector, the FLT 10 has a high lighting efficiency of 62%. Depending on the application, a wide beam or a narrow beam reflector can be chosen. The housing design and connections are the same as those of the PX 04. As it has been certified for ambient temperatures from -55 °C up to

+55 °C, the FLT 10 is the ideal light source for use in extreme climates.



### Features

- Floodlight for high-pressure discharge lamps
- Robust design for harsh environments
- High degree of protection IP 66
- With large Ex-e terminal compartment
- Depending on the version, large ambient temperature range from -55 °C up to +55 °C
- CU-Certificate for Eurasian Economic Community available
- Meets the highest corrosion protection and mechanical strength requirements

## Ordering details



Type	Content	Lamp / Illuminant	Reflector	Rated luminous flux <sup>1)</sup>	Weight	Metal thread	Threaded plug	Order No.
<b>PX</b>								
PX 0405	-20 °C up to +55 °C IQT - 500 W		narrow beam	10000 lm	23 kg	2 x M25	1 x M25	<b>NOR 000 115 170 209</b>
PX 0405	-20 °C up to +55 °C IQT 500 W		wide beam	10000 lm	23 kg	2 x M25	1 x M25	<b>NOR 000 115 170 309</b>
PX 0407	-20 °C up to +55 °C HIT / HST 70 W		narrow beam	5100/6000 lm	23 kg	2 x M25	1 x M25	<b>NOR 000 115 170 230</b>
PX 0415	-20 °C up to +55 °C HIT / HST 150 W		narrow beam	11000/15000 lm	31 kg	2 x M25	1 x M25	<b>NOR 000 115 170 233</b>
PX 0415	-20 °C up to +55 °C HIT / HST 150 W		wide beam	14000/15000 lm	31 kg	2 x M25	1 x M25	<b>NOR 000 115 170 333</b>
PX 0425	-20 °C up to +55 °C HIT / HST 250 W		narrow beam	19000/28000 lm	31 kg	2 x M25	1 x M25	<b>NOR 000 115 170 227</b>
PX 0425	-20 °C up to +55 °C HIT / HST 250 W		wide beam	19000/28000 lm	31 kg	2 x M25	1 x M25	<b>NOR 000 115 170 327</b>
PX 0440H	-20 °C up to +55 °C HIT 400 W		narrow beam	33000 lm	31 kg	2 x M25	1 x M25	<b>NOR 000 115 170 222</b>
PX 0440H	-20 °C up to +55 °C HIT 400 W		wide beam	33000 lm	31 kg	2 x M25	1 x M25	<b>NOR 000 115 170 322</b>
PX 0440S	-20 °C up to +55 °C HST 400 W		narrow beam	48000 lm	31 kg	2 x M25	1 x M25	<b>NOR 000 115 170 221</b>
PX 0440S	-20 °C up to +55 °C HST 400 W		wide beam	48000 lm	31 kg	2 x M25	1 x M25	<b>NOR 000 115 170 321</b>
PX 0460	-20 °C up to +55 °C HST 600 W		narrow beam	90000 lm	31 kg	2 x M25	1 x M25	<b>NOR 000 115 170 215</b>
PX 0460	-20 °C up to +55 °C HST 600 W		wide beam	90000 lm	31 kg	2 x M25	1 x M25	<b>NOR 000 115 170 315</b>



Type	Content	Lamp / Illuminant	Reflector	Rated luminous flux <sup>1)</sup>	Weight	Metal thread	Threaded plug	Order No.
<b>FLT</b>								
FLT 1007	-55°C up to +55 °C HIT / HST 70 W		wide beam	5100/6000 lm	41 kg	2 x M25	1 x M25	<b>FLT10 0 07271 W002</b>
FLT 1007	-55°C up to +55 °C HIT / HST 70 W		narrow beam	5100/6000 lm	41 kg	2 x M25	1 x M25	<b>FLT10 0 07271 N002</b>
FLT 1010	-55°C up to +55 °C HIT / HST 100 W		wide beam	10000/9000 lm	41 kg	2 x M25	1 x M25	<b>FLT10 0 10401 W002</b>
FLT 1010	-55°C up to +55 °C HIT / HST 100 W		narrow beam	10000/9000 lm	41 kg	2 x M25	1 x M25	<b>FLT10 0 10401 N002</b>
FLT 1015	-55°C up to +55 °C HIT / HST 150 W		wide beam	11000/15000 lm	41 kg	2 x M25	1 x M25	<b>FLT10 0 15401 W002</b>
FLT 1015	-55°C up to +55 °C HIT / HST 150 W		narrow beam	11000/15000 lm	41 kg	2 x M25	1 x M25	<b>FLT10 0 15401 N002</b>
FLT 1025	-55°C up to +55 °C HIT / HST 250 W		wide beam	19000/28000 lm	41 kg	2 x M25	1 x M25	<b>FLT10 0 25401 W002</b>
FLT 1025	-55°C up to +55 °C HIT / HST 250 W		narrow beam	19000/28000 lm	41 kg	2 x M25	1 x M25	<b>FLT10 0 25401 N002</b>
FLT 1040	-55°C up to +40 °C HIT 400 W		wide beam	33000 lm	41 kg	2 x M25	1 x M25	<b>FLT10 I 40401 W002</b>
FLT 1040	-55°C up to +40 °C HIT 400 W		narrow beam	33000 lm	41 kg	2 x M25	1 x M25	<b>FLT10 I 40401 N002</b>
FLT 1040	-55°C up to +40 °C HST 400 W		wide beam	48000 lm	41 kg	2 x M25	1 x M25	<b>FLT10 S 40401 W002</b>
FLT 1040	-55°C up to +40 °C HST 400 W		narrow beam	48000 lm	41 kg	2 x M25	1 x M25	<b>FLT10 S 40401 N002</b>

<sup>1)</sup> depends on used lamps

Scope of delivery without lamp and fixing accessories, if not stated otherwise.  
Metal cable glands see catalogue part 2: 2.3.12 ff

## Accessories



Type	Content	Application	OU	Order No.
SB	2 St pipe clamp Ø 48 mm up to Ø 64 mm incl. fixing screws	PX 04 / FLT 10	1	<b>NOR 000 005 170 583</b>
ATP	portable stand, painted steel	PX 04 / FLT 10 ..	1	<b>NOR 000 005 170 715</b>
PAH	horizontal steel shade, painted steel	PX 04 / FLT 10 ..	1	<b>NOR 000 005 170 608</b>
PAV	vertical steel shade, painted steel	PX 04 / FLT 10 ..	1	<b>NOR 000 005 170 591</b>
HIT 250 W	Metal halide lamp 250 W E40	PX 04 / FLT 10 ..	1	<b>CGS 323 7990 P1007</b>
HIT 400 W	Metal halide lamp 400 W E40	PX 04 / FLT 10 ..	1	<b>CGS 323 7990 P1008</b>
HST 250 W	High pressure sodium lamp 250 W E40	PX 04 / FLT 10 ..	1	<b>3 2475 900 016</b>
HST 400 W	High pressure sodium lamp 400 W E40	PX 04 / FLT 10 ..	1	<b>3 2475 900 015</b>
HST 70 W	High pressure sodium lamp 70 W E40	PX 04 / FLT 10		<b>3 1750 301 070</b>

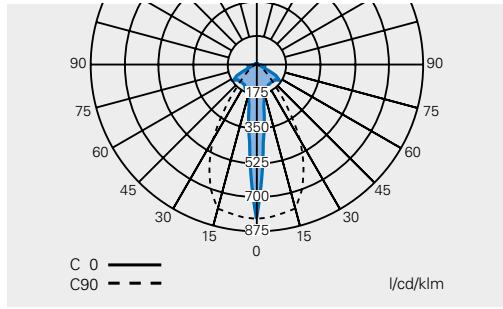
Other lamps on request

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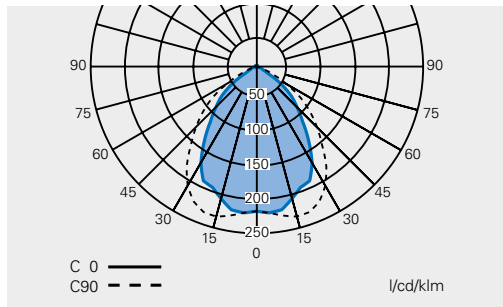
## Dimension drawing / Polar curve

PX 04 / FLT 10

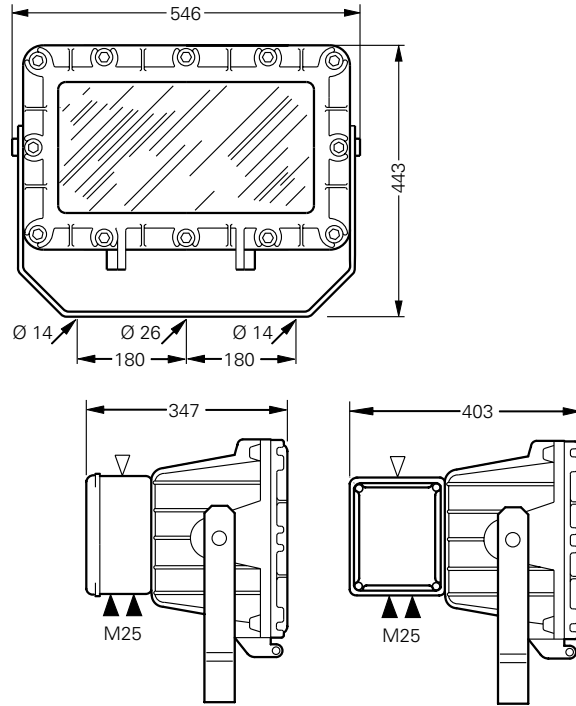
**Polar curve with narrow beam reflector**



**Polar curve with wide beam reflector**

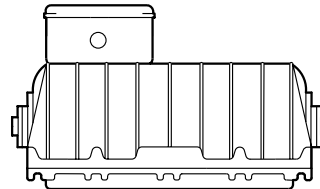


**PX 04 and FLT 10**

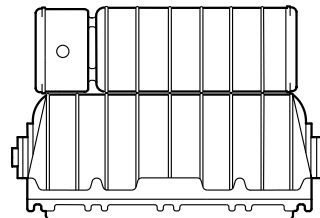


▷ optional entry, on request  
 ▶ entry

**without ballast for QT- and HME-SB-lamps**



**with ballast for all high pressure discharge lamps**



Dimensions in mm



## Technical data

4

	PX 04	FLT 10
EC-Type Examination Certificate	BVS 09 ATEX E 050 X	BVS 09 ATEX E 050 X
IECEX Certificate of Conformity	IECEX BVS-10.0009X	IECEX BVS-10.0009X
Marking accd. to 2014/34/EU	⊕ II 2G Ex d eb IIB T2-T4 <sup>1)</sup> Gb ⊕ II 2D Ex tb IIIC T85°C-T210°C <sup>1)</sup> Db	⊕ II 2G Ex de IIB T3-T4 <sup>1)</sup> Gb ⊕ II 2D Ex tb IIIC T130°C-T190°C <sup>1)</sup> Db
Marking accd. to IECEx	Ex de IIB T2-T4 Ex tD A21 IP66 T85°C - 210°C	Ex de IIB T3-T4 Ex tD A21 IP66 T130°C - 190°C
Permissible ambient temperature	-20 °C up to +55 °C	-55°C up to +55 °C
Rated voltage without control gear	≤ 250 V AC	--
Rated voltage with control gear	230 V AC	230 V AC
Frequency	50 Hz	50 Hz
Power factor cos φ	> 0.85	> 0.85
Circuit	compensated circuit	compensated circuit
Protection class	I	I
Lamp name	High pressure sodium lamp HST, Metal halide lamp HIT	High pressure sodium lamp HST, Metal halide lamp HIT
Rated luminous flux	<sup>2)</sup>	<sup>2)</sup>
Lamp cap	E40 accord. IEC 60238	E40 accord. IEC 60238
Light output ratio	62 %	60 %
Dimensions (L x W x H)	546 x 443 x 396 mm	546 x 443 x 403 mm
Connecting terminals (Ex-e)	L1, N: 2 x 4 mm <sup>2</sup> ; PE: 2 x 6 mm <sup>2</sup>	L1, N: 2 x 4 mm <sup>2</sup> ; PE: 2 x 6 mm <sup>2</sup>
Enclosure earth	2 x 6 mm <sup>2</sup>	2 x 6 mm <sup>2</sup>
Enclosure colour	grey	grey
Enclosure material	Light alloy	Light alloy
Weight	31 kg	41 kg
Cable glands / gland plates / enclosure drilling	Indirect entries (Ex-e): 2 x M25 x 1.5 thread 1 x plugged M25 screw plug	Indirect entries (Ex-e): 2 x M25 x 1.5 thread 1 x plugged M25 screw plug
Type of mounting	ceiling mounting	ceiling mounting
Degree of protection accd. to EN 60529	IP66	IP66
Protective cover / protective bowl	borosilicate glass	borosilicate glass
Reflector	polished aluminium reflector	polished aluminium reflector

<sup>1)</sup> see table page 1.4.36

<sup>2)</sup> see table luminaire data S. 1.4.36

## Additional luminaire data PX 04

Lamp	Power	Rated luminous flux <sup>1)</sup>	Temperature class II 2 G		max. surface temp. II 2 D	
			T <sub>U</sub> ≤ 40 °C	T <sub>U</sub> ≤ 55 °C	T <sub>U</sub> ≤ 40 °C	T <sub>U</sub> ≤ 55 °C
PX 0407	HS - 70 W	6000 lm	T4	T4	T85 °C	T100 °C
PX 0407	HI. - 70 W	5100 lm	T4	T4	T90 °C	T105 °C
PX 0415	HS. - 150 W	15000 lm	T4	T4	T115 °C	T130 °C
PX 0415	HI. - 150 W	11000 lm	T4	T4	T105 °C	T120 °C
PX 0425	HS. - 250 W	28000 lm	T4	T3	T130 °C	T145 °C
PX 0425	HI. - 250 W	19000 lm	T4	T3	T130 °C	T145 °C
PX 0440	HST - 400 W	48000 lm	T3	T3	T175 °C	T190 °C
PX 0440	HIT - 400 W	33000 lm	T3	T3	T170 °C	T185 °C
PX 0460	HST - 600 W	90000 lm	T3	T2	T195 °C	T210 °C
PX 0405	IQT - 500 W	10000 lm	T3	T2	T185 °C	T200 °C

<sup>1)</sup> depends on used lamps

## Additional luminaire data FLT 10

Lamp	Power	rated luminous flux <sup>1)</sup>	Temperature class II 2 G		max. surface temp. II 2 D	
			T <sub>U</sub> ≤ 40 °C	T <sub>U</sub> ≤ 55 °C	T <sub>U</sub> ≤ 40 °C	T <sub>U</sub> ≤ 55 °C
FLT 1007	HS - 70 W	6000 lm	T4	T4	T115 °C	T130 °C
FLT 1007	HI. - 70 W	5100 lm	T4	T4	T115 °C	T130 °C
FLT 1015	HS. - 150 W	15000 lm	T4	T4	T115 °C	T130 °C
FLT 1015	HI. - 150 W	11000 lm	T4	T4	T115 °C	T130 °C
FLT 1025	HS. - 250 W	28000 lm	T4	T3	T145 °C	T160 °C
FLT 1025	HI. - 250 W	19000 lm	T4	T3	T145 °C	T160 °C
FLT 1040	HST - 400 W	48000 lm	T3	--	T190 °C	--
FLT 1040	HIT - 400 W	33000 lm	T3	--	T190 °C	--

<sup>1)</sup> depends on used lamps