BOSCH

Invented for life

EX72 Explosion-protected Camera

- ▸ **UL and CSA certified for explosion protected performance**
- ▸ **Class I, II, III, Div. 1, 2, Groups B, C, D, E, F, G, T6**
- ▸ **Safe for use where explosive gases are normally present**
- ▸ **High-strength design can withstand an internal explosion**
- ▸ **Compact design with threaded flame paths for maximum safety**

The EX72 is a tough, compact, explosion-protected camera with performance optics for effective surveillance in hazardous environments such as oil and gas and chemical facilities.

The EX72 series is certified for Class I, Division 1 environments, the most stringent safety standards for explosion-protected performance. In practical terms, the Class I, Division 1 certifications signify that the EX72 series is safe for use even in environments where explosive gases are present under normal operating conditions.

The EX72 series incorporates high-strength design, featuring construction of sand-cast, copper-free aluminum strong enough to withstand an internal explosion. Threaded flame paths extinguish burning explosive gases and allow them to exit the housing harmlessly, without risking ignition in the external environment.

By meeting the rigorous requirements for Class I, Division 1 environments, the EX72 series assures safe, effective performance at less hazardous Class II and Division 2 locations.

Rated NEMA 4X for both indoor and outdoor use, the EX72 series carries a T6 temperature code, the lowest and safest rating. When combined with the optional EX72LED infra-red illuminator, the EX72 provides exceptional 24/7 surveillance. The EX72 series is easy to install into any 12 VDC or 24 VAC system, and is a safe and effective surveillance solution for hazardous locations.

Functions

Applications
- Petroleum processing facilities
- Chemical factories
- Agricultural processing plants
- Refineries
- Munitions storage
- Oil and gas plants
- Fuel storage sites
- Industrial plants
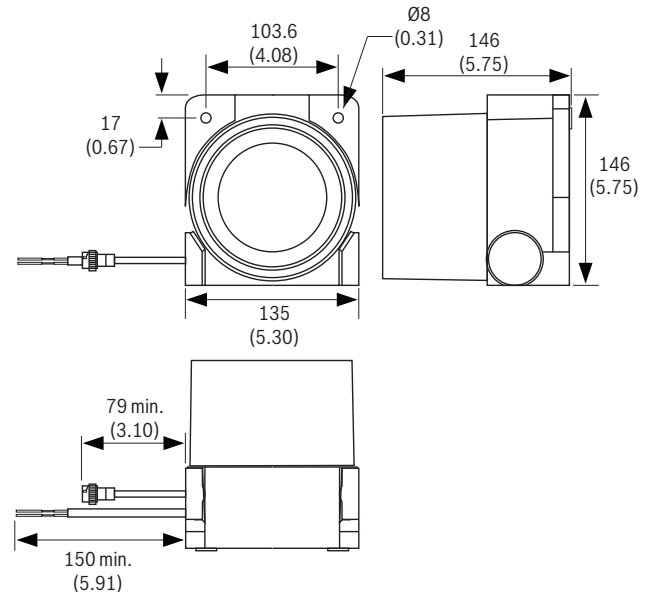- Nuclear facilities
- Pharmaceutical plants
- Aircraft hangers

Certifications and Approvals

Region	Certification	
Europe	CE	ATEX
Canada	CSA	

CSA/NRTL	LR 113310
Class	2258 / 82 - Process Control Equipment - For Hazardous Locations - Certified to US Standard
	2258 / 02 - Process Control Equipment - For Hazardous Locations
Safety	OSHA / ANSI / UL / CSA
	UL 508, 16th Edition - Industrial Control Equipment
	UL 698, 11th Edition - Industrial Control Equipment for Use in Hazardous (Classified) Locations
	UL 1203, 2nd Edition - Explosion-Proof and Dust-Ignition-Proof Elec. Eqmt for Use in Hazardous (Classified) Locations
	CSA C22.2 No.0-M1991 - General Requirements - Canadian Electrical Code Part II
	CSA C22.2 No.0.4-M1982 - Bonding and Grounding of Electrical Equipment (Protective Grounding)
	CSA C22.2 No.25-M1966 - Enclosures for Use in Class II Groups E, F and G Hazardous Locations
	CSA C22.2 No.30-M1986 - Explosion-proof Enclosures for Use in Class I Hazardous Locations
	CSA C22.2 No.94-M1991 - Special Purpose Enclosures
	CSA C22.2 No.142-M1987 - Process Control Equipment
	Class I, Division 1 and 2, Groups B, C, and D
	Class II, Division 1 and 2, Groups E, F, G
	Class III
	ATEX Ex II 2G certified - Equipment or Protective System intended for use in Potentially Explosive Atmospheres; Directive 94/9/EC
	ATEX Ex d IIC T6 certified - Equipment or Protective System intended for use in Potentially Explosive Atmospheres; Directive 94/9/EC
Operational	Temperature Code T6 (At ambient operational temperature of 40ºC, the maximum unit surface temperature will not exceed 85ºC.)
Environmental	CSA / NEMA TYPE 4X

Installation/Configuration Notes

Dimensions

mm
in.

Technical Specifications

Color Cameras

CCD	MX4 LXR Mechanical Filter	C7 High Resolution Color
Image Sensor	1/3 in LXR CCD	1/3 in Interline Super-HAD
Resolution	540 TVL color/ 540 TVL mono	500 TVL
Effective Pixels (NTSC)	768 (H) x 494 (V)	768 (H) x 494 (V)
Effective Pixels (PAL)	752 (H) x 582 (V)	768 (H) x 582 (V)
Sensitivity	0.02 lux at F1.4	2.7 lux at F1.4
S/N Ratio	Greater than 48 dB	Greater than 48 dB
Output Signal	0.45	
Gamma	On / Off selectable	
Gain Control	AGC	
Electronics Iris	1/60 to 1/100,000 (NTSC)	1/50 to 1/100,000 (PAL)
Lens	Varifocal 4 to 9 mm or 9 to 22 mm auto-iris lens	
Voltage	12 VDC or 24 VAC	
Power consumption	3.9 W (max.)	
Cabling holes	Two 3/4-inch NPT conduit entries	
Operation Temperature Range	-50 ºC to +40 ºC (-58 ºF to 104 ºF)	
Weight	1.4 kg (3.1 lbs)	
Dimensions	117 x 117 x 99 mm (4.6 x 4.6 x 3.9 in)	

Ordering Information

EX72C7V0409-N Explosion-protected Camera 1/3 in color CCD, 500 TVL, varifocal 4 to 9 mm lens, NTSC	EX72C7V0409-N
EX72C7V0409-P Explosion-protected Camera 1/3 in color CCD, 500 TVL, varifocal 4 to 9 mm lens, PAL	EX72C7V0409-P
EX72C7V0922-N Explosion-protected Camera 1/3 in color CCD, 500 TVL, varifocal 9 to 22 mm lens, NTSC	EX72C7V0922-N
EX72C7V0922-P Explosion-protected Camera 1/3 in color CCD, 500 TVL, varifocal 9 to 22 mm lens, PAL	EX72C7V0922-P
EX72MX4V0409-N Explosion-protected Camera Day/Night 1/3 in LXR, 540/540 TVL, mech filter, varifocal 4 to 9 mm lens, NTSC	EX72MX4V0409-N
EX72MX4V0409-P Explosion-protected Camera Day/Night 1/3 in LXR, 540/540 TVL, mech filter, varifocal 4 to 9 mm lens, PAL	EX72MX4V0409-P
EX72MX4V0922-N Explosion-protected Camera Day/Night 1/3 in LXR, 540/540 TVL, mech filter, varifocal 9 to 22 mm lens, NTSC	EX72MX4V0922-N
EX72MX4V0922-P Explosion-protected Camera Day/Night 1/3 in LXR, 540/540 TVL, mech filter, varifocal 9 to 22 mm lens, PAL	EX72MX4V0922-P
EX72C7V0409AT-N Explosion-protected Camera 1/3-inch color CCD, 500 TVL, varifocal 4 to 9 mm lens, NTSC, ATEX	EX72C7V0409AT-N
EX72C7V0409AT-P Explosion-protected Camera 1/3-inch color CCD, 500 TVL, varifocal 4 to 9 mm lens, PAL, ATEX	EX72C7V0409AT-P
EX72C7V0922AT-N Explosion-protected Camera 1/3-inch color CCD, 500 TVL, varifocal 9 to 22 mm lens, NTSC, ATEX	EX72C7V0922AT-N
EX72C7V0922AT-P Explosion-protected Camera 1/3-inch color CCD, 500 TVL, varifocal 9 to 22 mm lens, PAL, ATEX	EX72C7V0922AT-P
EX72MX4V0409AT-N Explosion-protected Camera Day/Night 1/3-inch LXR, 540/540 TVL, mech. filter, varifocal 4 to 9 mm lens, NTSC, ATEX	EX72MX4V0409AT-N

Ordering Information

EX72MX4V0409AT-P Explosion-protected Camera Day/Night 1/3-inch LXR, 540/540 TVL, mech. filter, varifocal 4 to 9 mm lens, PAL, ATEX	EX72MX4V0409AT-P
EX72MX4V0922AT-N Explosion-protected Camera Day/Night 1/3-inch LXR, 540/540 TVL, mech. filter, varifocal 9 to 22 mm lens, NTSC, ATEX	EX72MX4V0922AT-N
EX72MX4V0922AT-P Explosion-protected Camera Day/Night 1/3-inch LXR, 540/540 TVL, mech. filter, varifocal 9 to 22 mm lens, PAL, ATEX	EX72MX4V0922AT-P
Accessories	
EXMB.028B Cable Managed Wall Bracket Cable-managed arm bracket, black	EXMB.028B
EXMB.072B Adapter Bracket EXMB72 Adapter Bracket, Black	EXMB.072B
EXMB.015B Pole Mount Adapter Bracket Pole Mount Adapter, black	EXMB.015B
EXMB.017B Wall Mount Adapter Bracket Wall Mount Adapter, Black	EXMB.017B
EXMB.004B Ceiling and Pedestal Bracket Mounting Bracket, HD, Pan/Tilt Adjust - Ceiling Mount for EX52, EX62, black	EXMB.004B
UPA-2430-60 Power Supply 120VAC, 60Hz, 24VAC, 30VA Out	UPA-2430-60
UPA-2420-50 Power Supply 220VAC, 50Hz, 24VAC, 20VA Out	UPA-2420-50