



EXTPTZ2000 EXPLOSION PROOF THERMAL / VISUAL PTZ CAMERA

FEATURES

- Electropolished AISI 316L stainless steel explosion proof P&T head
- Certifications for use in Zone 1 and 2, Group IIC T6 (Gas), and in Zone 21 and 22, Group IIIC T85° (Dust)
- 336X256 and 640X512 Thermal Resolution
- 10x zoom (120x with digital zoom)
- Certified ONVIF, Profile S
- 25mm and 35mm Thermal Lens Options

KEY BENEFITS

- Durable, low maintenance housing
- Certified for environments with combustible dust and gases
- High quality, high definition video
- Precise zoom control
- Continuous temperature monitoring of remote assets

The EXTPTZ2000 explosion-proof PTZ camera delivers high performance thermal and visual monitoring for refineries, gas pipelines, offshore platforms, industrial processes and other industries where potentially explosive atmospheres may exist.

The camera has an integrated inspection box which simplifies the wiring and installation of the unit.

High quality imaging is made possible by the HD, 1080p, 60fps camera with 10x optical zoom. The video is transported over an IP based Ethernet network, using H.264/AVC and MJPEG compression and ONVIF Profile S compatibility.

TECHNICAL SPECIFICATIONS

SPECIFICATIONS	
GENERAL	
AISI 316 Stainless Steel	
Passivated and electropolished external surfaces	
Quick configuration and setup	
Dynamic positioning control system	
MECHANICAL	
1 3/4" NPT hole for cable glands	
Zero backlash	
Horizontal rotation: 360° continuous	
Vertical rotation: -90° to +90°	
Horizontal speed (variable): from 0.1° to 100°/s	
Tilt speed (variable) : from 0.1° to 100°/s	
Preset accuracy: 0.02°	
12mm thick tempered glass window	
Integrated Wiper	
Unit weight: 27kg (60lb)	
ELECTRICAL	
Input voltage:	
<ul style="list-style-type: none"> • 230Vac, 50/60Hz, 120W max • 24Vac, 50/60Hz, 120W max • 120Vac, 50/60Hz, 120W max 	
I/O alarm card:	
<ul style="list-style-type: none"> • Alarm inputs: 1 • Relay outputs: 1 (1A, 30Vac/60Vdc max) 	
COMMUNICATION S	
<ul style="list-style-type: none"> • RJ45, 10BASE-T/100BASE-T 	
PROTOCOLS	
<ul style="list-style-type: none"> • Video compression: H.264/AVC, MJPEG • Two independent video streams • Image resolution: from FullHD to 352x240 in 18 steps • Web Server • Communication protocol: ONVIF, Profile S 	
ENVIRONMENT	
Indoor/Outdoor	
Operating temperature -40°C (-40°F)/+60°C(+140°F)	
Relative humidity: from 10% up to 95% (no condensation)	
CERTIFICATIONS	
ATEX (EN 60079-0: 2012, EN 60079-1: 2007, EN 60079-31: 2009):	
bEx II 2 G Ex d IIC T6 Ta -40°C to +60°C Gb	
bEx II 2 D Ex tb IIIC T85°C Ta -40°C to +60°C Db	
IP66	
IECEx (IEC 60079-0: 2011, IEC 60079-1: 2007, IEC 60079-31: 2008):	
Ex d IIC T6 Ta -40°C to +60°C Gb, Ex tb IIIC T85°C Ta -40°C to +60°C Db	
IP66	
EAC EX: Ex d IIC T6 Gb X, Ex tb IIIC T85 Db X	
CNEEx (IP versions only with encoder MPEG4 - MPX...X000A): Ex d IIC T6 Gb Tamb-40~60°C, DIP A21 TA T6 Tamb-40~60°C	
INMETRO:	
Ex d IIC T6 Gb Ta -40°C a/to +60°C, Ex tb IIIC T85°C Db Ta -40°C a/to +60°C	
IP66	
cULus Listed, TYPE 4X	
UL listed for USA (only for 24Vac version):	
Class I, Zone 1, AEx d IIC T6	
Zone 21, AEx tb IIIC T85°C	
UL listed for Canada (only for 24Vac version):	
Class I, Zone 1, Ex d IIC T6 Gb	
Class II, Groups E, F and G	

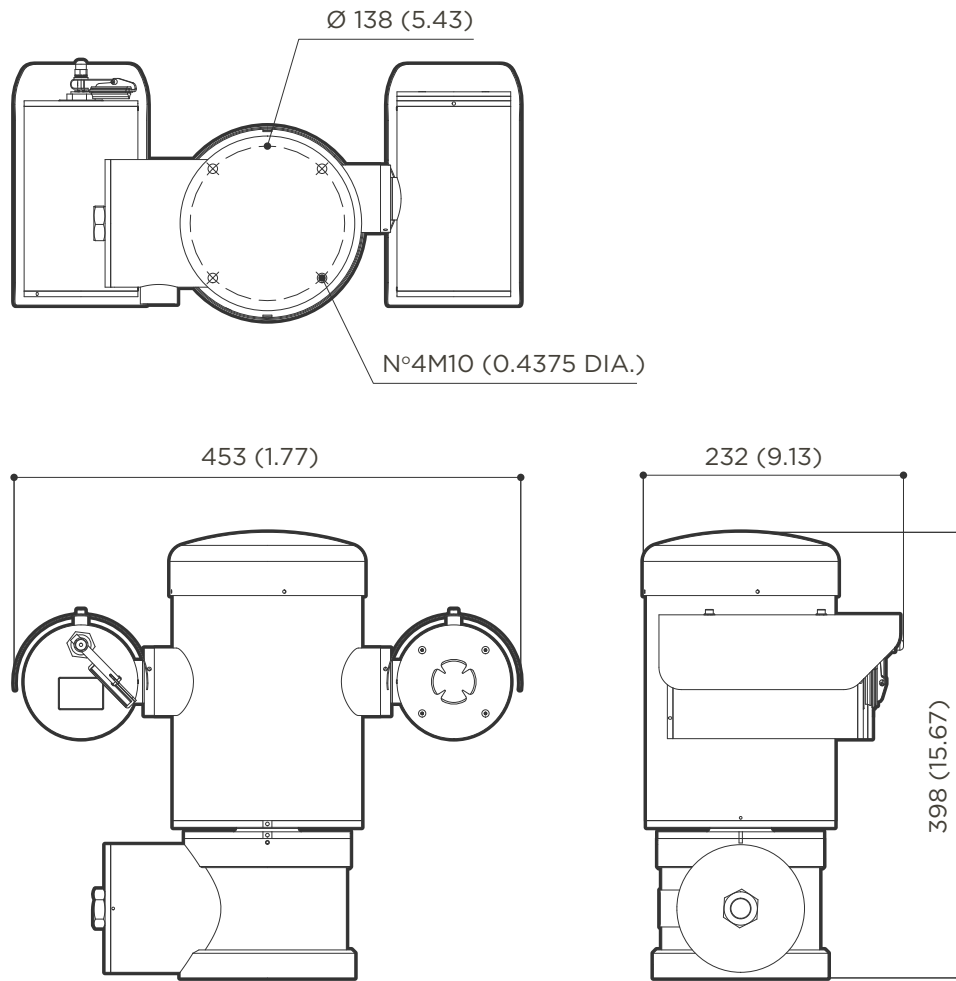
DAY/NIGHT CAMERA FEATURES				
	DAY/NIGHT 36X		DAY/NIGHT 36X	
	PAL	NTSC	PAL	NTSC
Optical zoom:	36x		28x	
Wide Dynamic Range (Fix/Auto):	✓		-	
True progressive SCAN:	✓		-	
Digital image stabilisation:	✓		36x	
White balance:	Auto, ATW, Indoor, Outdoor (Fix/Auto), Sodium Vapor Lamp (Fix/Auto)		Auto, ATW, Indoor, Outdoor (Fix/Auto), Sodium Vapor Lamp (Fix/Auto)	
High horizontal resolution:	Up to 550 TV Lines		Up to 550 TV Lines	
Day/Night (Auto ICR):	✓		✓	
Image Sensor:	1/4" EXView HAD CCD		1/4" Super HAD CCD II	
Number of effective Pixels:	~ 440 000 pixel	~ 380 000 pixel	~ 440 000 pixel	~ 380 000 pixel
Min. Color illumination (IR-Cut Filter = OFF):	1.4Lux / 1/50s 0.1 Lux / 1/3s	1.4Lux / 1/60s 0.1 Lux / 1/4s	0.25Lux / 1/50s 0.16 Lux / 1/3s	0.25Lux / 1/60s 0.16 Lux / 1/4s
"Shutter Time" automatic increase to improve the night surveillance	✓		✓	
S/N ratio:	Greater than 50dB		Greater than 50dB	
AE control:	Automatic, Shutter priority, Diaphragm priority, Brightness priority and Manual		Automatic, Shutter priority, Diaphragm priority, Brightness priority and Manual	
Back light compensation:	On/Off		On/Off	
Spherical masking (3D) of Privacy zones with automatic upgrade:	✓		✓	
Privacy Zone Masking:	On/Off (24 positions)		On/Off (24 positions)	
Maximum number of masking blocks to be displayed:	8		8	
Resolution of masking blocks:	160x120 HxV		160x120 HxV	
Masking:	Up to 15 different masking types: 14 colour types or mosaic		Up to 15 different masking types: 14 colour types or mosaic	
Focusing system:	Auto (Sensitivity: Normal, Low), Trigger PTZ, Manual		Auto (Sensitivity: Normal, Low), Trigger PTZ, Manual	
"Smart" lens control:	Automatic Lens Reset		Automatic Lens Reset	
High Zoom and Wide Horizontal Field of View Capability:	12x (336x with optical zoom)		12x (336x with optical zoom)	
Optical zoom:	36x, f=3.4 (wide) to 122.4mm (tele) / F1.6 to F4.5		28x, f=3.5 (wide) to 98mm (tele) / F1.35 to F3.7	
Digital Zoom:	12x (432x with optical zoom)		12x (336x with optical zoom)	
Angle of view (A):	57.8 degrees (wide) to 1.7 degrees (tele)		55.8 degrees (wide) to 2.1 degrees (tele)	
Minimum object distance:	320mm (12.6in) (wide) to 1500mm (59.1in) (tele)		10mm (0.4in) (wide) to 1500mm (59.1in) (tele)	
Electronic Iris Speed:	1/1 ÷ 1/10 000s		1/1 ÷ 1/10 000s	

TECHNICAL SPECIFICATIONS (CONT'D)

THERMAL CAMERAS AVAILABLE (RESOLUTION 320X256)						
	LENS 35MM		LENS 25MM		LENS 19MM	
	PAL	NTSC	PAL	NTSC	PAL	NTSC
Image sensor:	Uncooled VOx microbolometer		Uncooled VOx microbolometer		Uncooled VOx microbolometer	
Resolution:	320x256	320x240	320x256	320x240	320x256	320x240
Pixel dimensions:	25µm		25µm		25µm	
Spectral response - long wave infrared (LWIR):	from 7.5µm to 13.5µm		from 7.5µm to 13.5µm		from 7.5µm to 13.5µm	
Internal shutter (only for sensor compensation):	Video stop < 1sec.		Video stop < 1sec.		Video stop < 1sec.	
Digital Detail Enhancement (DDE):	✓		✓		✓	
Digital Zoom:	2x, 4x		2x, 4x		2x, 4x	
Image updating frequency:	8.3fps	7.5fps	8.3fps	7.5fps	8.3fps	7.5fps
Image updating high frequency:	25fps	30fps	25fps	30fps	25fps	30fps
Scene range (High Gain):	-40°C ÷ +160°C (-40°F ÷ +320°F)		-40°C ÷ +160°C (-40°F ÷ +320°F)		-40°C ÷ +160°C (-40°F ÷ +320°F)	
Scene range (Low Gain):	-40°C ÷ +550°C (-40°F ÷ +1022°F)		-40°C ÷ +550°C (-40°F ÷ +1022°F)		-40°C ÷ +550°C (-40°F ÷ +1022°F)	
Horizontal field of view:	13°		18°		24°	
Vertical field of view:	10°		14°		18°	
F-number:	F/1.2		F/1.1		F/1.25	
Thermal sensitivity (NEΔT):	< 50mK to f/1.0		< 50mK to f/1.0		< 50mK to f/1.0	
Person (detection / recognition / identification):	800m / 200m / 105m (2625 / 656 / 345ft)		590m / 148m / 75m (1935 / 486 / 246ft)		450m / 112m / 56m (1476ft / 367ft / 184ft)	
Auto (detection / recognition / identification):	2250m / 590m / 290m (7382ft / 1936ft / 951ft)		1650m / 430m / 215m (5413ft / 1411ft / 705ft)		1280m / 330m / 165m (4199ft / 1083ft / 541ft)	

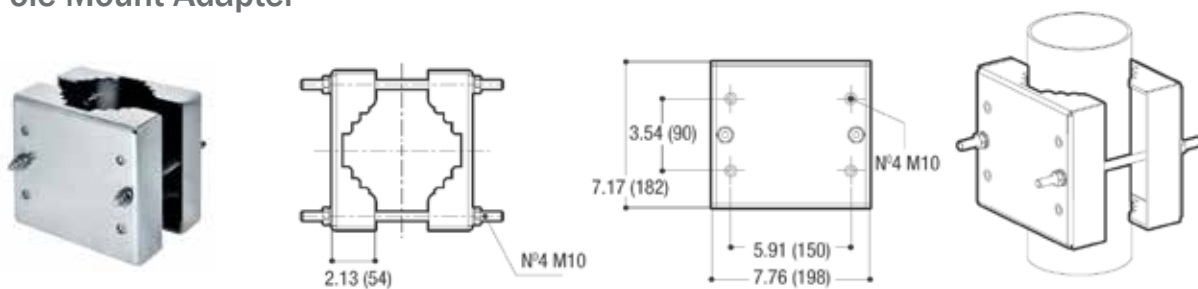
THERMAL CAMERAS AVAILABLE (RESOLUTION 640X512)					
	LENS 35MM		LENS 25MM		
	PAL	NTSC	PAL	NTSC	
Image sensor:	Uncooled VOx microbolometer		Uncooled VOx microbolometer		
Resolution:	640x512	640x480	640x512	640x480	
Pixel dimensions:	17µm		17µm		
Spectral response - long wave infrared (LWIR):	from 7.5µm to 13.5µm		from 7.5µm to 13.5µm		
Internal shutter (only for sensor compensation):	Video stop < 1sec.		Video stop < 1sec.		
Digital Detail Enhancement (DDE):	✓		✓		
Digital Zoom:	2x, 4x		2x, 4x		
Image updating frequency:	8.3fps	7.5fps	8.3fps	7.5fps	
Image updating high frequency:	25fps	30fps	25fps	30fps	
Scene range (High Gain):	-40°C ÷ +160°C (-40°F ÷ +320°F)		-40°C ÷ +160°C (-40°F ÷ +320°F)		
Scene range (Low Gain):	-40°C ÷ +550°C (-40°F ÷ +1022°F)		-40°C ÷ +550°C (-40°F ÷ +1022°F)		
Horizontal field of view:	18°		25°		
Vertical field of view:	14°		20°		
F-number:	F/1.2		F/1.1		
Thermal sensitivity (NEΔT):	< 50mK to f/1.0		< 50mK to f/1.0		
Person (detection / recognition / identification):	1140m / 280m / 142m (3740ft / 919ft / 466ft)		820m / 210m / 104m (2690 / 689 / 341ft)		
Auto (detection / recognition / identification):	3000m / 800m / 200m (9843ft / 2625ft / 656ft)		2200m / 580m / 290m (7218ft / 1903ft / 951ft)		

OVERALL DIMENSIONS Unit: mm (inch)



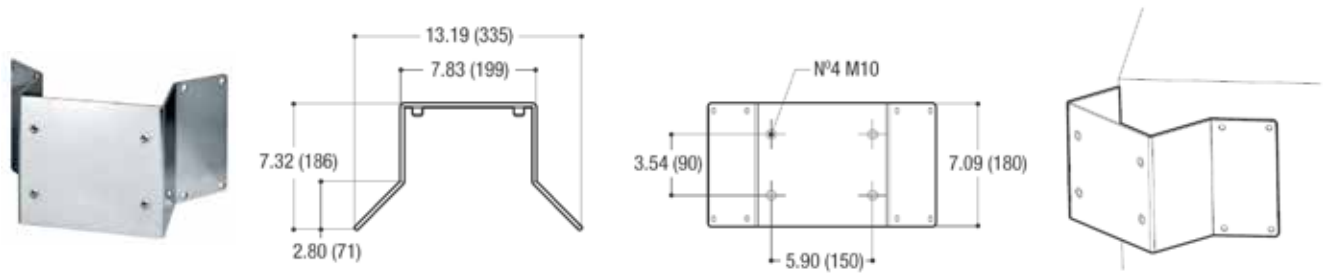
MOUNTING ACCESSORIES Unit: mm (inch)

Pole Mount Adapter



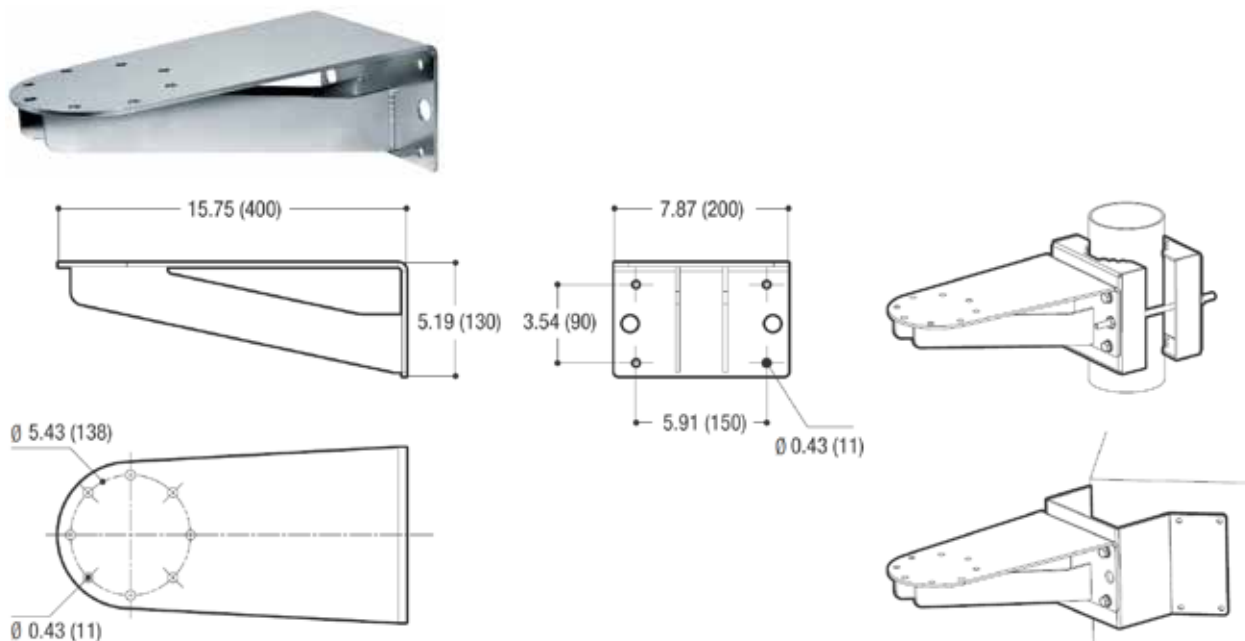
PART #	POLE MOUNT ADAPTER
EXA - MPXCOL	Made of AISI 316L electropolished stainless steel
	For pole diameters: 110-150mm (4.3 - 5.9in)
	Load Rating: 50kg (110lbs)
	Package Weight: 4.9kg (10.8lbs)
	Package Dimensions: 24x15x21.5cm (9.4x6x8.5in)

Corner Mount Adapter

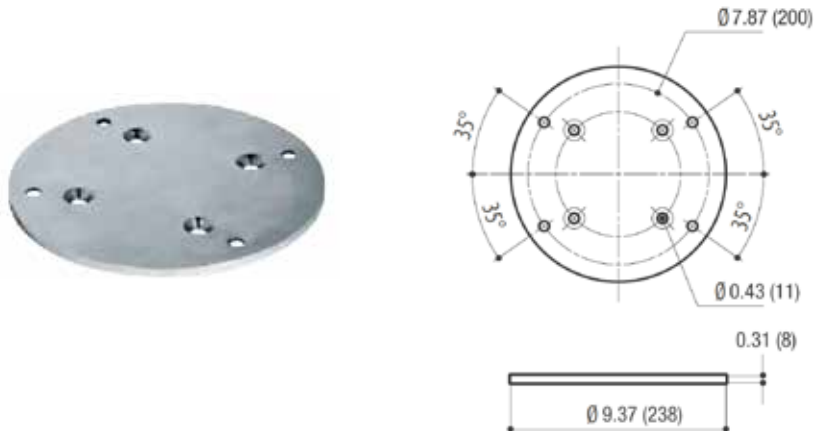


PART #	CORNER MOUNT ADAPTER
EXA - MPXCW	Made of AISI 316L electropolished stainless steel
	Load Rating: 50kg (110lbs)
	Package Weight: 4.8kg (10.6lbs)
	Package Dimensions: 36.5x25.5x26cm (14.4x10x10.2in)

Wall Mount



PART #	WALL MOUNT
EXA - MPXWBA	Made of AISI 316L electropolished stainless steel
	Load Rating: 40kg (88lbs)
	Package Weight: 6.5kg (14.3lbs)
	Package Dimensions: 58x34x22cm (23x13.4x8.7in)



PART #	CEILING OR PARAPET MOUNT
EXA - MPXWBTA	Made of AISI 316L electropolished stainless steel
	Load Rating: 40kg (88lbs)
	Package Weight: 3.2kg (7.1lbs)
	Package Dimensions: 33x27x6.5cm (13x11x2.4in)

CONFIGURATION

EXTPTZ2000	EXPLOSION PROOF, STAINLESS STEEL, VISUAL AND THERMAL PTZ CAMERA
SWI PART NUMBER	DESCRIPTION
EXTPTZ2000-230-36x-35-336x256-S	MPXT IP-based H264/AVC, AISI 316L, 230Vac, camera Day/Night 36x, thermal camera 35mm, 336X256, 7.5-8.3Hz, wiper. *
EXTPTZ2000-230-36x-25-336x256-S	MPXT IP-based H264/AVC, AISI 316L, 230Vac, camera Day/Night 36x, thermal camera 25mm, 336X256, 7.5-8.3Hz, wiper. *
EXTPTZ2000-24-36x-35-336x256-S	MPXT IP-based H264/AVC, AISI 316L, 24Vac, camera Day/Night 36x, thermal camera 35mm, 336X256, 7.5-8.3Hz, wiper. *, **
EXTPTZ2000-24-36x-25-336x256-S	MPXT IP-based H264/AVC, AISI 316L, 24Vac, camera Day/Night 36x, thermal camera 25mm, 336x220, 7.5-8.3Hz, wiper. *, **
EXTPTZ2000-120-36x-25-336x256-S	MPXT IP-based H264/AVC, AISI 316L, 120Vac, camera Day/Night 36x, thermal camera 25mm, 7.5-8.3Hz, 336X256, wiper. *
EXTPTZ2000-230-36x-35-336x256-F	MPXT IP-based H264/AVC, AISI 316L, 230Vac, camera Day/Night 36x, thermal camera 35mm, 336X256, 25-30Hz, wiper. *
EXTPTZ2000-120-36x-25-336x256-F	MPXT IP-based H264/AVC, AISI 316L, 120Vac, camera Day/Night 36x, thermal camera 25mm, 25-30Hz, 336X256, wiper. *
EXTPTZ2000-230-36x-35-640x512-S	MPXT IP-based H264/AVC, AISI 316L, 230Vac, camera Day/Night 36x, thermal camera 35mm, 640x512, 7.5-8.3Hz, wiper. *
EXTPTZ2000-230-36x-25-640x512-S	MPXT IP-based H264/AVC, AISI 316L, 230Vac, camera Day/Night 36x, thermal camera 25mm, 640x512, 7.5-8.3Hz, wiper. *

CONFIGURATION (CONT'D)

SWI PART NUMBER	DESCRIPTION
EXTPTZ2000-24-36x-35-640x512-S	MPXT IP-based H264/AVC, AISI 316L, 24Vac, camera Day/Night 36x, thermal camera 35mm, 640x512, 7.5-8.3Hz, wiper. *, **
EXTPTZ2000-24-36x-25-640x512-S	MPXT IP-based H264/AVC, AISI 316L, 24Vac, camera Day/Night 36x, thermal camera 25mm, 640x512, 7.5-8.3Hz, wiper. *, **
EXTPTZ2000-120-36x-35-640x512-S	MPXT IP-based H264/AVC, AISI 316L, 120Vac, camera Day/Night 36x, thermal camera 35mm, 7.5-8.3Hz, 640x512, wiper. *
EXTPTZ2000-120-36x-25-640x512-S	MPXT IP-based H264/AVC, AISI 316L, 120Vac, camera Day/Night 36x, thermal camera 25mm, 7.5-8.3Hz, 640x512, wiper. *
EXTPTZ2000-230-36x-35-640x512-F	MPXT IP-based H264/AVC, AISI 316L, 230Vac, camera Day/Night 36x, thermal camera 35mm, 640x512, 25-30Hz, wiper. *
EXTPTZ2000-230-36x-25-640x512-F	MPXT IP-based H264/AVC, AISI 316L, 230Vac, camera Day/Night 36x, thermal camera 25mm, 640x512, 25-30Hz, wiper. *
EXTPTZ2000-24-36x-35-640x512-F	MPXT IP-based H264/AVC, AISI 316L, 24Vac, camera Day/Night 36x, thermal camera 35mm, 640x512, 25-30Hz, wiper. *, **
EXTPTZ2000-24-36x-25-640x512-F	MPXT IP-based H264/AVC, AISI 316L, 24Vac, camera Day/Night 36x, thermal camera 25mm, 640x512, 25-30Hz, wiper. *, **
EXTPTZ2000-120-36x-35-640x512-F	MPXT IP-based H264/AVC, AISI 316L, 120Vac, camera Day/Night 36x, thermal camera 35mm, 25-30Hz, 640x512, wiper. *
EXTPTZ2000-120-36x-25-640x512-F	MPXT IP-based H264/AVC, AISI 316L, 120Vac, camera Day/Night 36x, thermal camera 25mm, 25-30Hz, 640x512, wiper. *

CERTIFICATIONS
* ATEX Ex II 2 G Ex d IIC T6 Gb Ta -40°C to +60°C Ex II 2 D Ex tb IIIC T85°C Db Ta -40°C to +60°C IP66. IECEX Ex d IIC T6 Gb Ta -40°C to +60°C Ex tb IIIC T85°C Db Ta -40°C to +60°C IP66. EAC Ex Ex d IIC T6 Gb X, Ex tb IIIC T85 Db X. INMETRO Ex d IIC T6 Gb -40°C ≤ Ta ≤ +60°C, Ex tb IIIC T85°C Db -40°C ≤ Ta ≤ +60°C IP66. KCs Ex d IIC T6, Ex tb IIIC T85°C -40°C ≤ Ta ≤ +60°C
** Model powered in 24VAC additionally to the above certifications are: UL listed for USA Class I, Zone 1, AEx d IIC T6; Zone 21, AEx tb IIIC T85°C, UL listed for Canada Class I, Zone 1, Ex d IIC T6 Gb; Class II, Groups E, F and G.

ACCESSORIES

SWI PART NUMBER	CABLING ACCESSORIES
EXA-MPXCABL4	Cabling for MPX/MPXT, 4m (157.5in) (unarmored cable and barrier cable gland): 2 Ethernet cables, 3 power supply wires, 2 coaxial video cables, 15 wires for alarms, relays and telemetry
EXA-MPXCABL10	Cabling for MPX/MPXT, 10m (394in) (unarmored cable and barrier cable gland): 2 Ethernet cables, 3 power supply wires, 2 coaxial video cables, 15 wires for alarms, relay and telemetry
EXA-MPXCABLARM4	Cabling for MPX/MPXHD, 4m (157.5in) (armoured cable and barrier cable gland): 1 Ethernet cable, 3 power supply wires, 1 coaxial video cable, 7 wires for alarms, relay and telemetry
EXA-MPXCABLARM10	Cabling for MPX/MPXHD, 10m (394in) (armoured cable and barrier cable gland): 1 Ethernet cable, 3 power supply wires, 1 coaxial video cable, 7 wires for alarms, relay and telemetry

SWI PART NUMBER	WASHER PUMP WITH STAINLESS STEEL PRESSURIZED TANK AND INTEGRATED EX-PROOF SOLENOID VALVE
EXA-WASEX2T4AT	Tank 10l with integrated pump controlled by ATEX Ex II 2 GD Exd IIC T4 Gb, Ex tb IIIC T130°C Db certified solenoid valve, delivery head up to max 20m (66ft), IN 24Vac/dc
EXA-WASEX2T4GOR	Tank 10l with integrated pump controlled by EAC Ex d IIC T4 certified solenoid valve, delivery head up to max 20m (66ft), IN 24Vac/dc
EXA-WASEX2T4IN	Tank 10l with integrated pump controlled by INMETRO Exd IIC T4 Gb IP66, Ex tb IIIC t135°C Db IP66, certified solenoid valve, delivery head up to max 20m (66ft), IN 24Vac/dc

ACCESSORIES (CONT'D)



SWI PART NUMBER	BRACKETS & ADAPTERS
EXA-MPXWBA	Wall mount bracket
EXA-MPXCOL	Pole mount adaptor
EXA-MPXWBTA	Parapet or ceiling mounting bracket
EXA-MPXCW	Corner mount adaptor

SWI PART NUMBER	CABLE GLANDS FOR EX-PROOF PRODUCTS
EXA-OCTEX3/4C	Cable gland in nickel-plated brass with gasket EX 3/4" NPT, unarmoured cable IECEX-ATEX-EAC. CSA listed for Canada and US
EXA-OCTEXA3/4C	Cable gland in nickel-plated brass with gasket EX 3/4" NPT, armoured cable IECEX-ATEX-EAC. CSA listed for Canada and US
EXA-OCTEXB3/4C	Barrier cable gland in nickel-plated brass 3/4" NPT, unarmoured cable IECEX-ATEX-EAC. CSA listed for Canada and US
EXA-OCTEXBA3/4C	Barrier cable gland in nickel-plated brass 3/4" NPT, armoured cable IECEX-ATEX-EAC. CSA listed for Canada and US
EXA-OCTEX3/4	Cable gland in nickel-plated brass with gasket EX 3/4" NPT, unarmoured cable ATEX
EXA-OCTEXA3/4	Cable gland in nickel-plated brass with gasket EX 3/4" NPT, armoured cable ATEX
EXA-OCTEXB1/2C	Barrier cable gland in nickel-plated brass EX 1/2" NPT, unarmoured cable IECEX-ATEX-EAC. CSA listed for Canada and US
EXA-OCTEX1/2C	Cable gland in nickel-plated brass EX 1/2" NPT, unarmoured cable IECEX-ATEX-EAC with gasket from 3 to 8mm (0,12 to 0,31in)
EXA-OCTEXS1/2C	Cable gland in nickel-plated brass EX 1/2" NPT, unarmoured cable IECEX-ATEX-EAC with gasket from 7.5 to 11.9mm (0,3 to 0,47in)
EXA-OCTEX1/2-3/4C	Cable glands reduction in nickel-plated brass 3/4" - 1/2" NPT IECEX-ATEX-EAC
EXA-OCTEXP3/4C	Conduit cable gland nickel-plated brass 3/4" NPT IECEX-ATEX. CSA listed for Canada and US
EXA-OEXPLUG3/4	Plug EX 3/4" NPT IECEX-ATEX-EAC



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