

# MAXIMUS MVX

## HIGH-SPEC EX-PROOF DAY/NIGHT CAMERA IN A COMPACT DESIGN



### MAIN FEATURES

In electropolished and silicon micro shot peened AISI 316L stainless steel

Certifications for use in Zones 1 and 2, IIC T5 and T6 Group (Gas) and in Zones 21 and 22, IIIC T100°C and T85°C Group (Dust)

Day/Night camera 10x, 1/3":

- High resolution: up to 550 TVLines
- Advanced image stabilizer (Stable Zoom Mode)
- Day/Night (Auto ICR: automatic removal of IR filter)

Autofocus

1 alarm input and 1 relay output

4m (13ft) / 10m (33ft) preinstalled armored multipolar cable with cable gland or, alternatively, with 4m (13ft) / 10m (33ft) cable tail

Integrated wiper

Power supply: 12-24Vdc/24Vac

### DESCRIPTION

The explosion protected MAXIMUS MVX is perfect for effective video surveillance and process control in harsh settings where the presence of gases or flammable dust can create a potentially explosive environment, a reality often found in the oil and gas industries or marine and industrial sectors.

The Day/Night high-resolution camera with sensor 1/3" and motorized zoom 10x for easier setup, ensures superior image quality even with low lighting and difficult environmental conditions.

One striking advantage offered by the MVXHD cameras is their extremely easy and secure "plug and play" installation, with multipolar wiring. These cameras arrive ready to use, avoiding the complex electrical connections that are typical of this type of device.

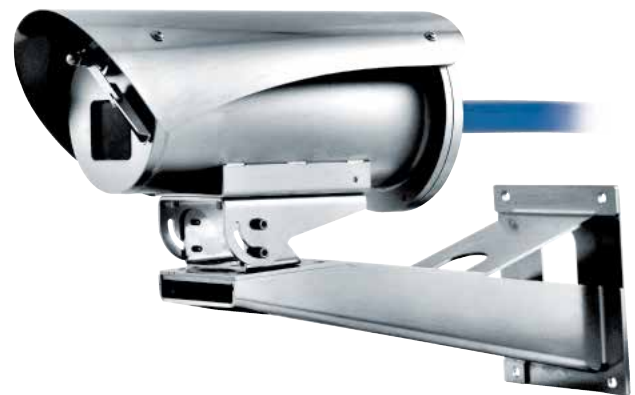
The housing is compact yet functional and is made entirely out of AISI316L stainless steel. Its resistance to corrosion is not only guaranteed, but is also enhanced by way of polishing processes.

Another important feature of the camera is the extended temperature range of -60°C to 65°C, along with a sophisticated cold start system, which allows it to operate in harsh environments as standard.

An equally noteworthy point is that the IP66/IP68 ratings guarantee the complete protection against harsh weather and the submersion in up to 5 metres of water for 2 hours. Moreover the IP69 rating allows the device to be cleaned with high pressure water jets.

These cameras come with wipers and an explosion-proof washer kit is also available, allowing for flawless, maintenance-free cleaning of the front glass.

The MAXIMUS MVX range of cameras meets every installation need, providing maximum of performance and excellent value for money.



MVX + NXWBS1



WASEX - STAINLESS STEEL WASHER PUMP WITH EX-PROOF SOLENOID VALVE FOR MAXIMUS RANGE (REF. ACCESSORIES IN TECHNICAL DATA)

**TECHNICAL DATA****GENERAL**

AISI 316L stainless steel construction  
 Electropolished and silicon micro shot peened external surfaces  
 Silicone O-ring seals  
 Plug and play  
 Cable gland with gasket Ex d 3/4"NPT and preinstalled multipolar armored cable, 4m/10m (13ft/33ft)

**MECHANICAL**

Sunshield  
 Integrated wiper  
 Unit weight: 8kg (18lb)

**HOUSING WINDOW**

Material: Thermally tempered glass

**ELECTRICAL**

Power supply/Current consumption

- 24Vac, 2.2A, 50/60Hz
- 24Vdc, 2.2A
- 12Vdc, 3.5A

I/O alarm card

- Alarm inputs: 1
- Relay outputs: 1 (1A, 30Vac/60Vdc max)

Heater (Ton 15°C±3°C (59°F±5°F), Toff 22°C±3°C (77°F±5°F))

**I/O INTERFACE**

Cable length: 200m (656ft) max

Version with integrated wiper

- Remote wiper activation: 1 input, dry contact NO

**CAMERA**

Day/Night 10x High sensitivity

White balance: Auto, ATW, Indoor, Outdoor

High horizontal resolution: Up to 530 TV Lines

Day/Night (Auto ICR)

Image Sensor: 1/3" Super HAD CCD II

Number of effective Pixels: ~ 440000 pixel (PAL); ~ 380000 pixel (NTSC)

Minimum Illumination, color (ICR-OFF):

- 0.25Lux (1/50s), 0.015Lux (1/3s), PAL
- 0.25Lux (1/60s), 0.015Lux (1/4s), NTSC

Minimum Illumination, B/W (ICR-ON):

- 0.0004Lux (1/3s), PAL
- 0.0004Lux (1/4s), NTSC

"Shutter Time" automatic increase to improve the night surveillance

S/N ratio: Greater than 50dB

AE control: Automatic, Shutter priority, Diaphragm priority, Brightness priority and Manual

Back light compensation: On/Off

Focusing system: Auto (Sensitivity: Normal, Low), Manual

"Smart" lens control: Automatic Lens Reset

**LENSES**

Optical zoom 10x, f=5.1 (wide) to 51mm (tele) / F1.8 to F2.1

Digital Zoom 12x (120x with optical zoom)

Angle of view (A): 52 degrees (wide) to 5.4 degrees (tele)

Minimum object distance: 150mm (5.9in) (wide) to 800mm (31.5in) (tele)

Electronic Iris Speed: 1/1 ÷ 1/10000s

**COMMUNICATIONS**

Serial interface

- RS-485 line, half-duplex
- Cable length: 1200m max

**PROTOCOLS**

Serial communication protocol

- PANASONIC: 9600baud, 19200baud
- PELCO D: 2400baud, 9600baud
- VIDEOTEC MACRO: 9600baud, 38400baud

**ENVIRONMENT**

Indoor/Outdoor

Environment temperature: T5: from -60°C (-76°F) up to +65°C (149°F) (versions with armoured cable) or from -50°C (-58°F) up to +65°C (149°F) (versions with cable tail)

Environment temperature: T6: from -60°C (-76°F) up to +55°C (131°F) (versions with armoured cable) or from -50°C (-58°F) up to +55°C (131°F) (versions with cable tail)

Operating temperature: from -40°C (-40°F) up to +65°C (149°F)

**CERTIFICATIONS**

ATEX (EN 60079-0: 2014, EN 60079-1: 2015, EN 60079-31: 2014):

- Ex II 2 G Ex d IIC T5 Gb
- Ex II 2 D Ex tb IIIC T100°C Db IP66/IP68  
-60°C ≤ Ta ≤ +65°C (versions with armoured cable)
- Ex II 2 G Ex d IIC T5 Gb
- Ex II 2 D Ex tb IIIC T100°C Db IP66/IP68  
-50°C ≤ Ta ≤ +65°C (versions with cable tail)
- Ex II 2 G Ex d IIC T6 Gb
- Ex II 2 D Ex tb IIIC T85°C Db IP66/IP68  
-60°C ≤ Ta ≤ +55°C (versions with armoured cable)
- Ex II 2 G Ex d IIC T6 Gb
- Ex II 2 D Ex tb IIIC T85°C Db IP66/IP68  
-50°C ≤ Ta ≤ +55°C (versions with cable tail)

IECEX (IEC 60079-0: 2011 Ed.6, IEC 60079-1: 2014-06 Ed.7, IEC 60079-31: 2013 Ed.2):

- Ex d IIC T5 Gb
- Ex tb IIIC T100°C Db IP66/IP68  
-60°C ≤ Ta ≤ +65°C (versions with armoured cable)
- Ex d IIC T5 Gb
- Ex tb IIIC T100°C Db IP66/IP68  
-50°C ≤ Ta ≤ +65°C (versions with cable tail)
- Ex d IIC T6 Gb
- Ex tb IIIC T85°C Db IP66/IP68  
-60°C ≤ Ta ≤ +55°C (versions with armoured cable)
- Ex d IIC T6 Gb
- Ex tb IIIC T85°C Db IP66/IP68  
-50°C ≤ Ta ≤ +55°C (versions with cable tail)
- IP66/IP68 (2 hours, 5m (16ft), EN/IEC60529)

INMETRO (ABNT NBR IEC 60079-0:2008 + Errata 1:2011, ABNT NBR IEC 60079-1:2009 + Errata 1:2011, ABNT NBR IEC 60079-31:2011):

- Ex d IIC T5 Gb
- Ex tb IIIC T100°C Db IP66/IP68  
-60°C ≤ Tamb ≤ +65°C (versions with armoured cable)
- Ex d IIC T5 Gb
- Ex tb IIIC T100°C Db IP66/IP68  
-50°C ≤ Tamb ≤ +65°C (versions with cable tail)
- Ex d IIC T6 Gb
- Ex tb IIIC T85°C Db IP66/IP68  
-60°C ≤ Tamb ≤ +55°C (versions with armoured cable)
- Ex d IIC T6 Gb
- Ex tb IIIC T85°C Db IP66/IP68  
-50°C ≤ Tamb ≤ +55°C (versions with cable tail)

EAC EX and ETL (pending)

TYPE 6P, TYPE 4X (UL50E)

IP69 (EN/IEC60529), housing only

**ACCESSORIES**

WASEX2T4AT	Tank 10l with integrated manual pump controlled by ATEX certified solenoid valve, delivery head up to 20m (66ft) max, IN 24Vac/Vdc
WASEX2T4GOR	Tank 10l with integrated manual pump controlled by EAC EX certified solenoid valve, delivery head up to 20m (66ft) max, IN 24Vac/Vdc
WASEX2T4IN	Tank 10l with integrated manual pump controlled by INMETRO certified solenoid valve, delivery head up to 20m (66ft) max, IN 24Vac/Vdc
OCTEXP3/4C	Conduit cable gland nickel-plated brass 3/4" NPT IECEX-ATEX-EAC EX

**BRACKETS AND ADAPTORS**

NXWBS1	AISI 316L stainless steel wall bracket with joint
MHXWFWCA	AISI316L stainless steel ball joint
NXFWBT	AISI 316L stainless steel parapet mounting bracket
NXCOL	AISI 316L stainless steel pole adapter module
NXCW	AISI 316L stainless steel corner adapter module

**PACKAGE**

Model Number	Weight	Dimensions (WxHxL)	Master carton
MVX2BOWA000A	12.5kg (28lb)	60x30x60cm (24x12x24in)	-

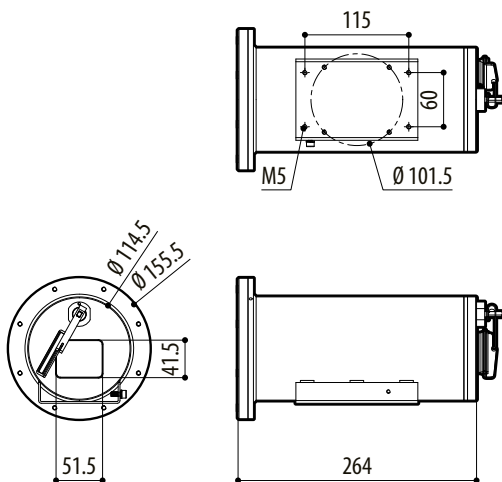
**MAXIMUS MVX - CONFIGURATION OPTIONS**

	Voltage	Camera		Connections	Video output	Models	
<b>MVX</b>	<b>2</b> 12-24Vdc/ 24Vac	<b>B0</b> Day/Night camera 10x optical zoom lens, PAL	<b>W</b> With wiper	<b>A</b> Cable gland with gasket Ex d 3/4" NPT and 4m (13ft) armored cable	<b>0</b> Analog control	<b>00</b> T5 -60°C/+65°C	<b>A</b>
		<b>K0</b> Day/Night camera 10x optical zoom lens, NTSC		<b>B</b> Cable gland with gasket Ex d 3/4" NPT and 10m (33ft) armored cable		<b>01</b> T5 -50°C/+65°C <sup>1</sup>	
				<b>F</b> 4m (13ft) cable tail		<b>02</b> T6 -60°C/+55°C	
				<b>G</b> 10m (33ft) cable tail		<b>03</b> T6 -50°C/+55°C <sup>1</sup>	

1 The versions with cable tail have a temperature range of -50°C/+65°C or -50°C/+55°C depending on the temperature class of the product.

**TECHNICAL DRAWINGS**

Sizes in millimeters.



MAXIMUS MVX

