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

TYPE 6P	TYPE 4X	IP66	IP68 IP69	WIPER	INTEGRATED CAM
PROTECTION	PROTECTION	PROTECTION	PROTECTION		

MAIN FEATURES

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)

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

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

- High resolution: up to 550 TV Lines
- 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 set

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 these 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

Cable entry: 1 hole, 3/4", NPT

Cable gland with gasket Ex d 3/4"NPT and 4m/10m (13ft/33ft) preinstalled multipolar armored cable or with 4m/10m (13ft/33ft) cable set

MECHANICAL

Sunshield, integrated wiper

Unit weight: 8kg (18lb)

HOUSING WINDOWS

Material: Thermally tempered glass

ELECTRICAL

Supply voltage/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 (72°F±5°F))

Armoured cable:
- external diameter = 18.0 ± 0.5mm
- colour blue RAL5015

Armoured cable composition:
- 1 x 3G1.5mm^2
- 1 x 7 x 0.34mm^2
- 4 x 2 x 0.22mm^2 (IP based version, cat. 5E)
- 1 x coax 75ohm RG179

Cable set composition:
- 1 x 3G2.5mm^2, rated external diameter = 8.7mm
- 1 x 7 x 0.34mm^2, rated external diameter = 6.4mm
- 4 x 2 x 0.21mm^2, (IP based version, cat. 5E), rated external diameter = 6.7mm
- 1 x coax 75 ohm RG59 (analog version), rated external diameter = 4.9mm

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

Minimum Illumination, B/W (ICR-ON):
- 0.0004lx (1/3s), PAL
- 0.0004lx (1/4s), NTSC

"Shutter Time" automatic increase to improve the night surveillance

S/N ratio: More than 50dB

AE control: Automatic, Manual, Priority Mode, Brightness, EV Compensation, Backlight Compensation, Slow AE

Back light compensation: On/Off

Focusing system: Auto (Sensitivity: normal, low), One-push AF, Manual, Infinity, Interval AF, Zoom trigger AF

"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

Configuration via OSD

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

IP based control mode
- Compression H.264/AVC and JPEG
- 2 independent video streams
- Web Server
- Compatible with ONVIF protocol, Profile S
- Cable length: 100m (328ft) max
- Ethernet IEEE 802.3 100Base-Tx connection

PROTOCOLS

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

ENVIRONMENT

Indoor/Outdoor

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

Relative Humidity 10-95% (no condensation)

VIDEOTEC VIDEO SECURITY PRODUCTS

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 set)

    ⟨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 set)

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 set)

    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 set)

    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 set)

    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 set)

EAC Ex:

    Ex II 2G Ex d IIC T5 Gb -60°C/+65°C

    Ex II 2D Ex tb IIIC T100°C Db -60°C/+65°C, IP66/IP68 (versions with armoured cable)

    Ex II 2G Ex d IIC T5 Gb -50°C/+65°C

    Ex II 2D Ex t IIIC T85°C Db -50°C/+65°C, IP66/IP68 (versions with cable set)

    Ex II 2G Ex d IIC T6 Gb -60°C/+55°C

    Ex II 2D Ex tb IIIC T85°C Db -60°C/+55°C, IP66/IP68 (versions with armoured cable)

    Ex II 2G Ex d IIC T6 Gb -50°C/+55°C

    Ex II 2D Ex t IIIC T100°C Db -50°C/+55°C, IP66/IP68 (versions with cable set)

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

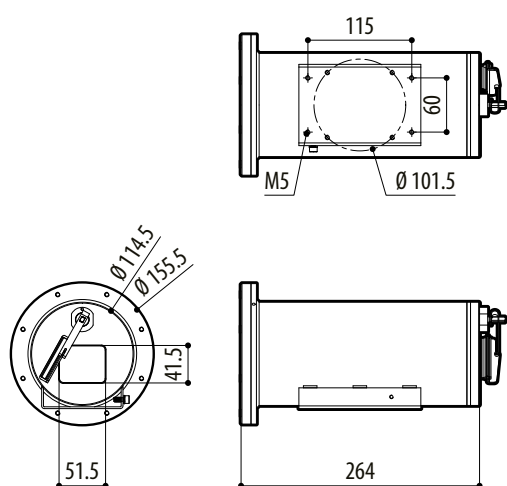|	
NXWBS1	AISI 316L stainless steel wall bracket with joint
MHXWFWCA	AISI316L stainless steel ball joint
NXFWBT	AISI 316L stainless steel parapet mounting bracket
NXCOL	AISI 316L stainless steel pole adapter module
NXCW	AISI 316L stainless steel corner adapter module

PACKAGE

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

MAXIMUS MVX - CONFIGURATION OPTIONS

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

1   *The versions with cable set have a temperature range of -50℃/+65℃ or -50℃/+55℃ depending on the temperature class of the product.*

TECHNICAL DRAWINGS

Sizes in millimeters.

MAXIMUS MVX