

Monsoon Wireless Unit Kit (AMWK)



The Angus Monsoon Wireless Units are devices used specifically to control automatic monitors together with the opening and closing of their isolation valves. The system architecture is made of a transmitter and a receiver communicate with the control system via a remote module via optical fibre. The control signals are transferred from the transmitter to the receiver in frequency which are then exchanged to the PLC located in Angus Monsoon Main Control Module (AMMCM). The available solutions allow for the receiver and the transmitter installation in safe area or hazardous area in according to ATEX or IECEx directive. For complex systems in which the standard solution may not fit the requirements, contact SA Fire Protection to discuss the detail of the desired architecture. For additional information on Main control Module where the modular system can be connected the wireless kit, please refer to the following data sheet:

Main Control Module:
AMMCM

Technical Characteristics

Transmitter:

- Nylon Housing
- Enabling push button
- Joystick for monitor upwards/ downwards / rightwards / leftwards
- Joystick or push buttons for nozzle or spreader Jet/fog
- Push Buttons for water valve
- Push buttons for foam valve
- Selector switch 1/2 for taking control in multi-installation monitors
- Battery charger
- Construction suitable for installation within:
 - Safe Area protection grade IP 65

- Classified area ATEX:
 - II 2 G Ex ib IIB T4 Gb
 - II 2 D Ex ib IIIC 135°C Db
 - I M2 Ex ib I Mb, Tamb-20°C/+55°C
- Classified area IECEx:
 - Ex ib IIB T4 Gb
 - Ex ib IIIC T135°C Db
 - Ex ib I Mb
- Portable with shoulder strap

Receiver:

- Inox or alluminium housing
- Construction suitable for installation within:
 - Safe Area protection grade IP 65
 - Classified area ATEX:
 - Supplied in JB II 2 GD Ex d IIC T6 IP66
 - Classified Area IECEx:
 - Supplied in JB Ex d IIC T6 IP66
- Power Supply:
 - 380/400/415 Vac 50Hz 3 Ph+G
 - 380/440/480 Vac 60 Hz 3 Ph+G
 - 230 Vac 50 Hz 1Ph+N+G
 - 230 Vac 60 Hz 1Ph+N+G
 - 110/120 Vac 60 Hz 1Ph+N+G
- Receiving antenna: coverage area 100 m

Support:

- Housing h=3m in galvanized carbon steel for:
 - Receiving antenna
 - Receiving Junction box
 - Sunshield
 - Fixing bolt not included
 - Natural finish

Controllable monitors:

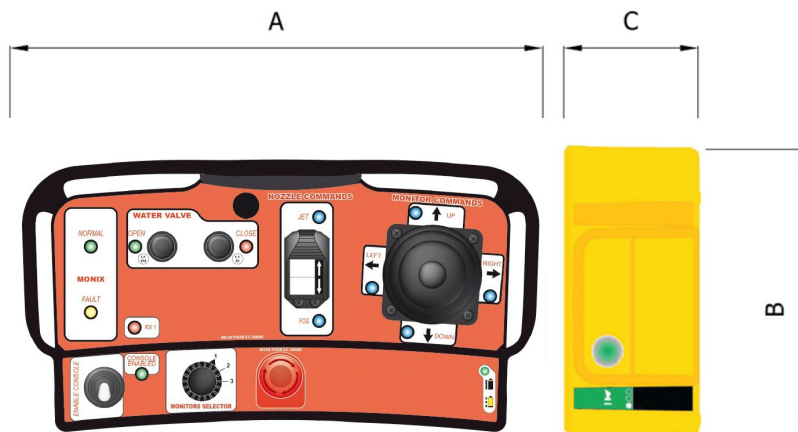
- Electric
- Electro-hydraulics
- Movements and Controls:
 - Monitor Upwards/ Downwards
 - Monitor Rightwards/ Leftwards
 - Nozzle or Spreader Jet/Fog
 - Main valve water
 - Foam Valve

(1) Valid only for IP junction box

(2) Valid only for Ex-d junction box

Monsoon Wireless Unit Kit

Wireless Unit



Installation	Console	Panel Type	Commands	Signals	Monitors	B mm (inch)	A mm (inch)	C mm (inch)	Weight Kg (Lb)
Safe Area	Wireless Kit	Transmitter	P/J	LED	1	180 (7.0)	295 (11.6)	160 (6.3)	2.3 (5.1)
					n				
Hazardous Area	Wireless Kit	Transmitter	P/J	LED	1	180 (7.0)	295 (11.6)	160 (6.3)	2.3 (5.1)
					n				

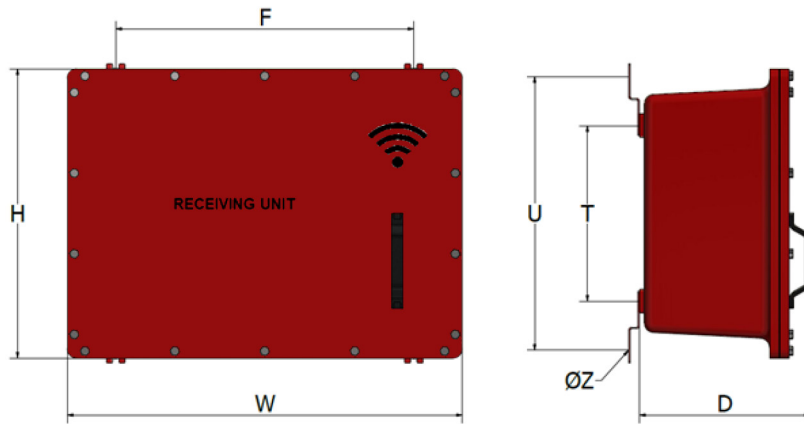
LEGEND:

P – Push Buttons; J – Joystick;

n = Max. 12 monitors

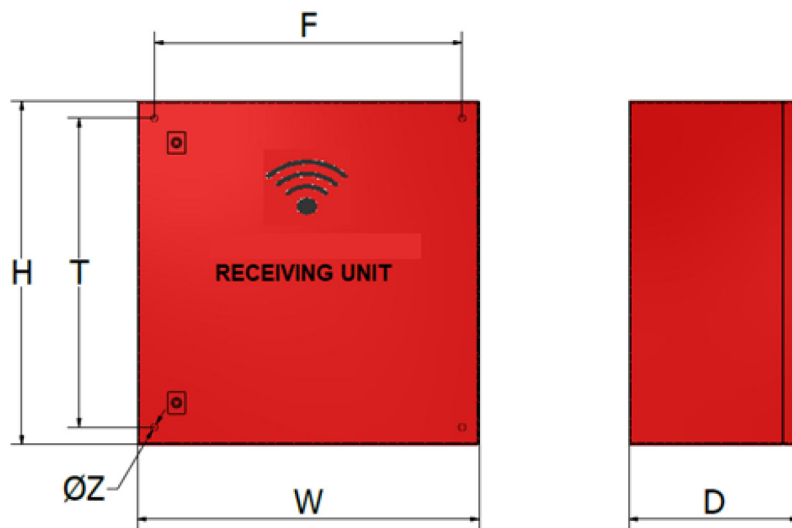
Optional

- Spare Batteries for transmitter
- Carbon steel box for transmitter and battery charger



Receiving Unit

Installation	Console	Panel Type	Material	W mm (inch)	H mm (inch)	D mm (inch)	T mm (inch)	F mm (inch)	U mm (inch)	ØZ
Hazardous Area	Wireless Kit	Receiver	Aluminium	540 (21.2)	595 (23.4)	365 (14.3)	400 (15.7)	545 (21.4)	559 (22.1)	M10
Hazardous Area	Wireless Kit	Receiver	Stainless Steel	545 (21.4)	600 (23.6)	325 (12.8)	405 (15.9)	550 (21.6)	538 (21.1)	M16



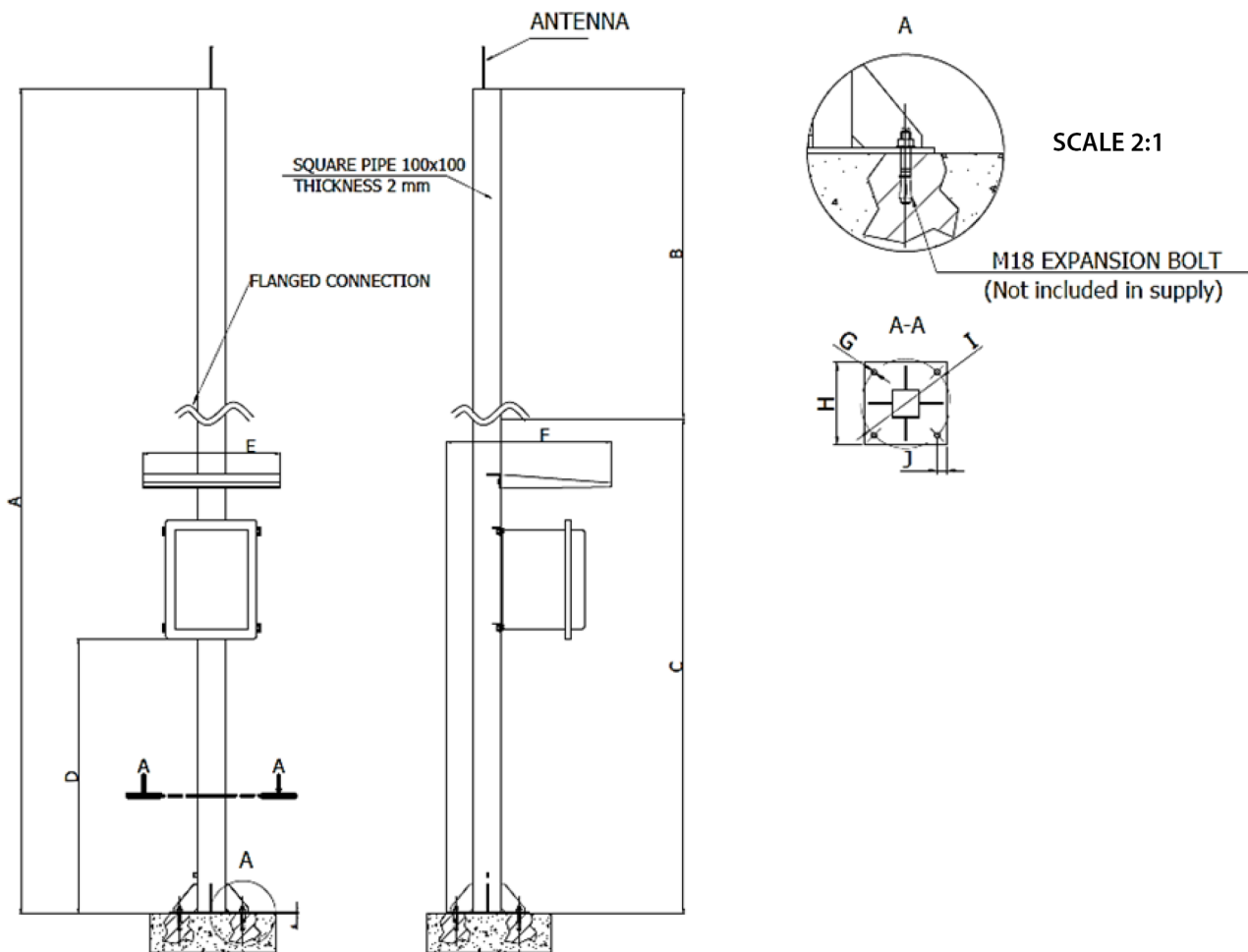
Safe Area Receiving Unit

Installation	Console	Panel Type	Material	W mm (inch)	H mm (inch)	D mm (inch)	T mm (inch)	F mm (inch)	ØZ
Safe Area	Wireless Kit	Receiver	Aluminium	400 (15.7)	400 (15.7)	200 (7.9)	330 (13.0)	330 (13.0)	M8
Safe Area	Wireless Kit	Receiver	Stainless Steel	400 (15.7)	400 (15.7)	200 (7.9)	330 (13.0)	330 (13.0)	M8



Accessories

3m Support



Installation	Console	Panel Type	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)	G mm (inch)	H mm (inch)	I mm (inch)	J mm (inch)
Safe Area / Hazardous Area	Wireless Kit Support	Receiver	3000 (118.1)	1200 (47.2)	1800 (70.8)	1000 (39.3)	500 (19.6)	600 (23.6)	Ø20 (0.78)	300 (11.8)	325 (12.7)	35 (1.4)

ELECTRO-HYDRAULIC MONITOR

Version 380/400/415 Vac 50 Hz 3Ph+G
Version 380/440/480 Vac 60 Hz 3Ph+G

Accessories

- **Signal cable 6x2x1.5mm² MOD.SC1 (Motorized Valve/Monitor Signals)**

Flexible bare copper class 5 acc. standards
 Fire resistant Mica glass tape over each conductor
 Insulation: special XLPE compound
 Internal wire colour: white – black (both numbered)
 Pairs assembly: cores twisted in pairs
 Total assembly: pairs twisted with optimal lay length
 Separator tape: Polyester tape
 Overall shield: Aluminium/polyester tape with stranded tinned copper drain wire, nominal section 0,50mm² (7x0,30mm)
 Inner sheath: special low smoke zero halogen compound
 Armour: galvanized steel wire armour, nominal wire diameter 1,6mm
 Outer sheath: special low smoke zero halogen hydrocarbon resistant compound type M1 according CEI EN 50363
 Used only in the KCE electric monitor cable kit

- **Power Cable 4G2.5mm² MOD.PC1 (Motorized Valve / Monitor Power)**

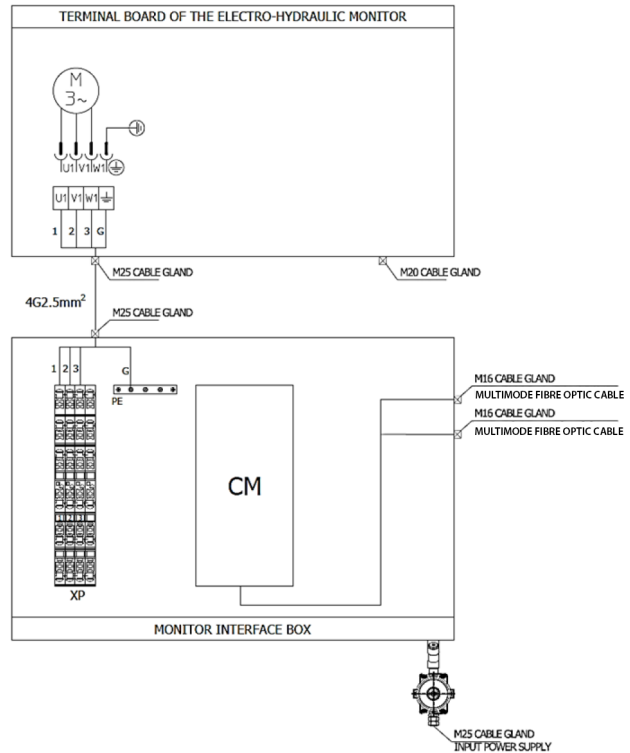
Flexible bare copper class 5 acc. standards
 Fire resistant Mica glass tape over each conductor
 Insulation: special XLPE compound
 Internal wire colour: black numbered + yellow/green
 Total assembly: cores twisted with optimal lay length
 Inner sheath: special low smoke zero halogen compound
 Armour: galvanized steel wire armour, nominal wire diameter 1,6mm
 Outer sheath: special low smoke zero halogen hydrocarbon resistant compound type M1 according CEI EN 50363
 Used in the KCE / KCH electric and electric hydraulic monitor cables kit

- **Power Cable 2x2.5mm² MOD.DP1 (Solenoid Valve)**

Flexible bare copper class 5 acc. standards
 Fire resistant Mica glass tape over each conductor
 Insulation: special XLPE compound
 Internal wire colour: black numbered + yellow/green
 Total assembly: cores twisted with optimal lay length
 Inner sheath: special low smoke zero halogen compound
 Armour: galvanized steel wire armour, nominal wire diameter 1,6mm
 Outer sheath: special low smoke zero halogen hydrocarbon resistant compound type M1 according CEI EN 50363
 Used in the KDV deluge valve cables kit

- **Power Cable 2X1.5mm² MOD.DS1 (Pressure Switch)**

Flexible bare copper class 5 acc. standards
 Fire resistant Mica glass tape over each conductor
 Insulation: special XLPE compound
 Internal wire colour: black - white
 Total assembly: cores twisted with optimal lay length
 Inner sheath: special low smoke zero halogen compound
 Armour: galvanized steel wire armour, nominal wire diameter 1,6mm
 Outer sheath: special low smoke zero halogen hydrocarbon resistant compound type M1 according CEI EN 50363
 Used in the KDV deluge valve cables kit



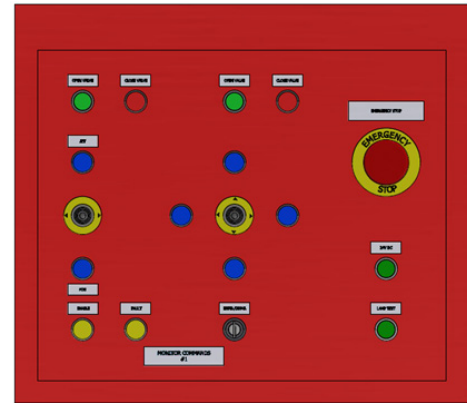
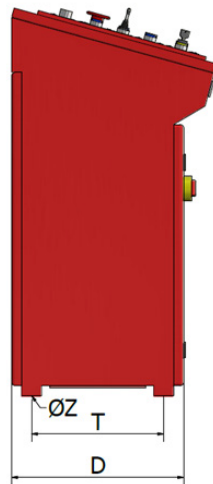
- **Power Cable 4X1.5mm² MOD.DA1 (Pressure Transmitter)**

Flexible bare copper class 5 acc. standards
 Fire resistant Mica glass tape over each conductor
 Insulation: special XLPE compound
 Internal wire colour: white – black (both numbered)
 Total assembly: cores twisted with optimal lay length
 Inner sheath: special low smoke zero halogen compound
 Armour: galvanized steel wire armour, nominal wire diameter 1,6mm
 Outer sheath: special low smoke zero halogen hydrocarbon resistant compound type M1 according CEI EN 50363.
 Used in the KDV deluge valve cables kit

- **Multimode Fibre optic cable OM3 MOD FC1**

Core: n.4 (1Tx + 1Rx + 2 Spare)
 LC Connector
 Core Diameter: 50 ± 2,5 µm
 Cladding Diameter: 125 ± 2 µm
 External Diameter: 7,0 mm
 Glass fibre for rodent protection and tensile strength
 Stripping wire: PET
 Sheath: LSZH compound (Indoor installation) or Polyethylene (Outdoor installation)
 Bending radius:(during the laying 15 cm) (installed 10 cm)
 Wavelength: 850 nm-1300 nm
 Bandwidth: ≥ 1500 MHz x km - ≥ 500 MHz x km
 Refractive index:1482 - 1477

- Cable gland in nickel-plated brass or in stainless steel suitable for armoured cable, available in metric or imperial size

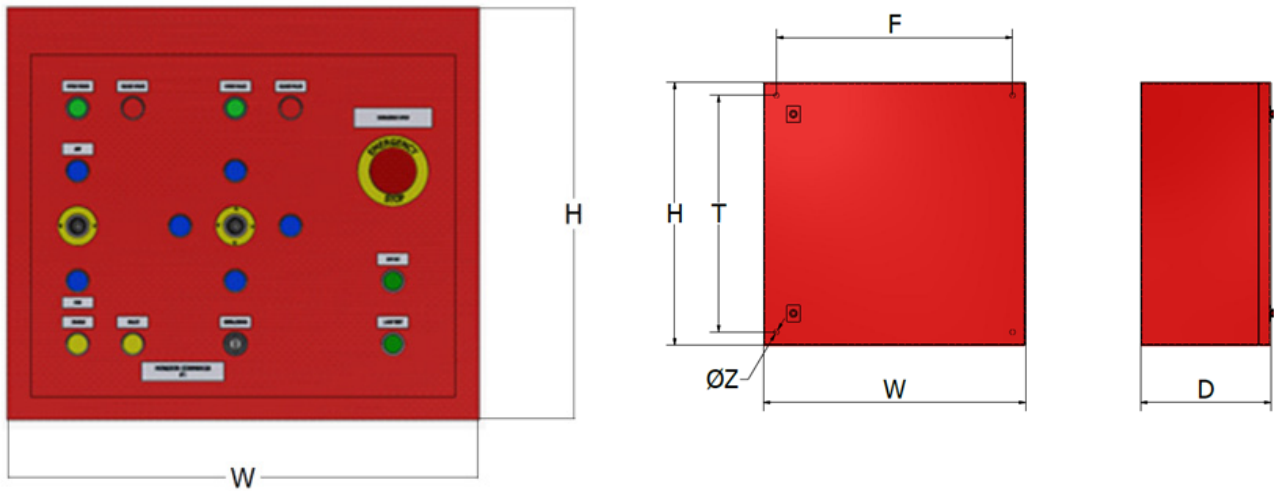


Installation	Panel Type	Controllable Monitors	W mm (inch)	H mm (inch)	D mm (inch)	T mm (inch)	F mm (inch)	ØZ mm (inch)
Safe	Main Control Module MCMS	From 2 to 128 Monitors	1200 (47.2)	1000 (39.3)	400 (15.7)	273 (10.7)	1130 (44.4)	11 (0.4)

Type	Installation	Monitor Power Supply 380÷440VAC 50/60Hz 3Ph	Monitor Power Supply 120÷230VAC 50/60Hz 1Ph+N	N°1 Deluge Valve	N°2 Deluge Valve	N°1 Motorized Valve	N°2 Motorized Valve	Material	W mm (inch)	H mm (inch)	D mm (inch)	T mm (inch)	F mm (inch)	U mm (inch)	ØZ
MIB A	Safe Area	✓	✓	✓	✗	✗	✗	Stainless Steel	545 (21.4)	600 (23.6)	325 (12.7)	405 (15.9)	550 (21.6)	538 (21.1)	M16
MIB B		✓	✓	✓	✓	✗	✗		615 (24.2)	835 (32.8)	365 (14.3)	630 (24.8)	605 (23.8)	604 (23.7)	M10
MIB C		✓	✓	✗	✗	✓	✗		615 (24.2)	835 (32.8)	365 (14.3)	630 (24.8)	605 (23.8)	604 (23.7)	M10
MIB D		✓	✗	✗	✗	✓	✓		615 (24.2)	835 (32.8)	365 (14.3)	630 (24.8)	605 (23.8)	604 (23.7)	M10
MIB A		✓	✓	✓	✗	✗	✗	Aluminium	595 (23.4)	540 (21.2)	365 (14.3)	400 (15.7)	545 (21.4)	559 (22.1)	M10
MIB B		✓	✓	✓	✓	✗	✗		610 (24.0)	835 (32.8)	365 (14.3)	630 (24.8)	605 (23.8)	604 (23.7)	M10
MIB C		✓	✓	✗	✗	✓	✗		610 (24.0)	835 (32.8)	365 (14.3)	630 (24.8)	605 (23.8)	604 (23.7)	M10
MIB D		✓	✗	✗	✗	✓	✓		610 (24.0)	835 (32.8)	365 (14.3)	630 (24.8)	605 (23.8)	604 (23.7)	M10

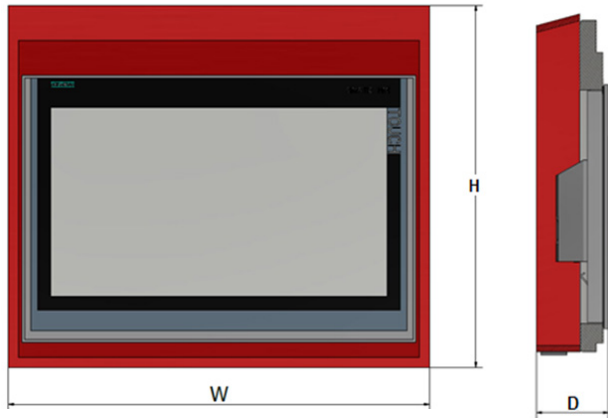
Command monitor desk solution MCMS-1

One command monitor

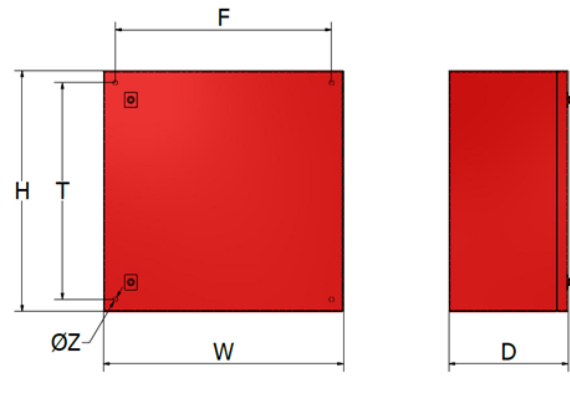


Installation	Panel Type	Controllable Monitors	W mm (inch)	H mm (inch)	D mm (inch)	T mm (inch)	F mm (inch)	ØZ mm (inch)
Safe	Desk Top	1 Monitor	960 (37.8)	635 (25)	215 (8.46)			M8
Safe	Desk Top	From 2 to 128 Monitors	1700 (66.9)	635 (25)	215 (8.46)			M8
Safe	Wall Mounted	From 2 to 128 Monitors	800 (31.5)	600 (39.3)	300 (15.7)	730 (28.7)	530 (20.8)	M8

Command monitor desk evolution solution MCMS



Control Module



Installation	Panel Type	Controllable Monitors	W mm (inch)	H mm (inch)	D mm (inch)	T mm (inch)	F mm (inch)	ØZ mm (inch)
Safe	Main Control Module MCMS Desk Evolution Solution	From 2 to 128 Monitors	960 (37.8)	635 (25)	215 (8.46)			M8
Safe	Main Control Module MCMS	From 2 to 128 Monitors	800 (31.5)	600 (39.3)	300 (15.7)	730 (28.7)	530 (20.8)	M8

Accessories

- **Multimode Fibre optic cable OM3 MOD FC001**

Core: n.4 (1Tx + 1Rx + 2 Spare)
 LC Connector
 Core Diameter: 50 ± 2,5 µm
 Cladding Diameter: 125 ± 2 µm
 External Diameter: 7,0 mm
 Glass fibre for rodent protection and tensile strength
 Stripping wire: PET
 Sheath: LSZH compound (Indoor installation) or Polyethylene (Outdoor installation)
 Bending radius:(during the laying 15 cm) (installed 10 cm)
 Wavelength: 850 nm-1300 nm
 Bandwidth: ≥ 1500 MHz x km - ≥ 500 MHz x km
 refractive index:1482 - 1477

- **Signal cable 12x1.5mm2 MOD.SM1 (Command monitor Signals)**

Flexible bare copper class 5 acc. standards
 Fire resistant Mica glass tape over each conductor
 Insulation: special XLPE compound
 Internal wire colour: white – black (both numbered)
 Total assembly: pairs twisted with optimal lay length
 Inner sheath: special low smoke zero halogen compound
 Armour: galvanized steel wire armour, nominal wire diameter 1,6mm
 Outer sheath: special low smoke zero halogen hydrocarbon resistant compound type M1 according CEI EN 50363

- Cable gland in nickel-plated brass or in stainless steel suitable for armoured cable, available in metric or imperial size

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