CHANNEL
SAFETY SYSTEMS

Apollo XP95

Analogue addressable devices
from Channel Safety Systems

apollo
PARTNER
PLUS+

Apollo XP95

Analogue addressable devices

The XP95 range of analogue addressable fire detectors is advanced in design, improved in performance and has unique features that benefit the installer and the end user.

The detectors have been carefully researched and developed by the Apollo design team and the range has undergone rigorous testing to ensure that it meets not only European and other standards but also the demands of today's high technology environments.

XP95 detectors provide an alarm facility that automatically puts an alarm flag on the data stream and reports its address when the pre-set EN54 thresholds are exceeded.

Image shows from left to right F/CHBG/IS/95, F/CHSM/P/95 & F/CHWB/95/AP

Features

- Digital Protocol for error-free transmission
- Alarm Flag for fast alarm reporting
- Alarm Address for fast location of alarm
- Automatic addressing with the patented XPERT card
- Electronics-free, easy fit base
- Ease of installation

- Wide range of compatible interface units
- Wide range of compatible panels
- Compatible with Series 65 and Discovery
- Elegant, unobtrusive design
- Wide range of products
- Great flexibility in system design

GET INTERACTIVE

Scan the code for more information on the XP95 range and the related Fire Alarm Panels

www.channelsafety.co.uk/xp95-range/

Call Points

The XP95 Manual Call Point is compliant with EN54-11. The address of each call point is set at the commissioning stage by means of a seven segment DIL switch. The device features plug and play terminal connections and a resettable element.

Features

- Plug and play terminal connections for fast wiring
- Allow wiring continuity testing before fitting
- Reports an alarm in under 0.2 seconds
- Resettable element
- Built in loop isolator
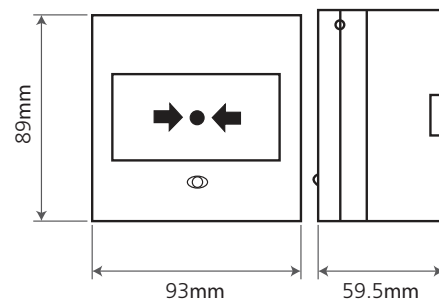
Waterproof Dimensions and Weight

- 110mm(W) x 110mm(H) x 74mm(D)
- 180g

Image shows from left to right F/CHBG/IS/95 & F/CHBG/WP/95/1

SPECIFICATIONS	
Supply Voltage	17 - 28V DC
Communications Protocol	5 - 9V peak to peak
Max. Current Consumption at 24V Quiescent	100µA
Power - Up Surge, 1 Second Typical	1mA
Alarm LED on	4mA
Operating Temperature	-20ºC to 60ºC
Humidity (no condensation)	0 - 95%
IP Rating	IP45
Weight	160g

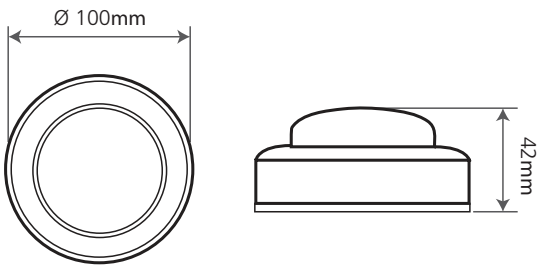| PRODUCT CODE	DESCRIPTION
F/CHBG/IS/95	Analogue addressable break glass – complete with isolator and flexible element
F/CHBG/WP/95/1	XP95 weatherproof break glass

Optical Smoke Detectors

The XP95 Optical Smoke Detector works using the light scatter principle and is ideal for applications where slow-burning or smouldering fires are likely.

Features

- Can be used for applications where standard smoke detectors are unsuitable
- Ideal environments that are dirty or smoky under normal conditions
- Ideal for use in environments with rapid temperature fluctuations such as boiler rooms
- Reduction of false alarms

Ø 100mm

42mm

PRODUCT CODE	DESCRIPTION
F/CHSM/P/95	Optical smoke monitor less base

SPECIFICATIONS	
Supply Voltage	17 - 28V DC
Quiescent Current	340µA average, 600µA peak
Power-up Surge Current	1mA
Duration of Power-up Surge Current	0.3 seconds
Operating Temperature	-20ºC to 60ºC
Storage Temperature	-30ºC to 80ºC
Alarm LED Current	4mA
Humidity	0% - 95%
IP Rating	IP23D
Weight	105g

Heat Detectors

The XP95 Heat Detectors, monitor temperature by using a single thermistor which provides a count output proportional to the external air temperature.
The XP95 range features two heat detectors, standard and high temperature. The standard heat detector is classified as an A2S device and will report an alarm at 55°C. The high temperature detector, classified as a CS device, will report an alarm at 90°C.
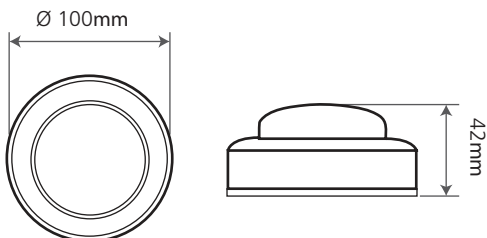
Image shows from left to right F/CHHM/95 & F/CHHM/HT/95

Features

- Ideal in environments that are dirty or smoky under natural conditions
- Well suited for warehouses, loading bays and underground carparks
- Unaffected by wind or atmospheric pressure

Ø 100mm

42mm

PRODUCT CODE	DESCRIPTION
F/CHHM/95	Heat detector 55ºC less base
F/CHHM/HT/95	High temperature 90ºC heat detector less base

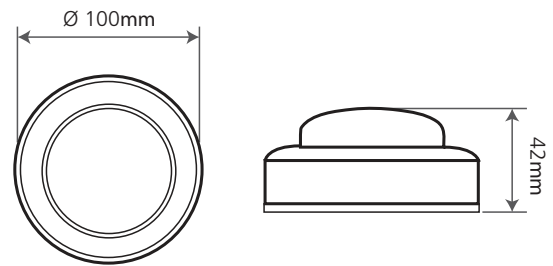| SPECIFICATIONS	
Supply Voltage	17 - 28V DC
Quiescent Current	250µA average, 500µA peak
Power-up Surge Current	1mA
Duration of Power-up Surge Current	0.3 seconds
Alarm Indicator	Red light emitting diode (LED)
Operating Temperature	-20ºC to 70ºC
Storage Temperature	-30ºC to 80ºC
Alarm LED Current	2mA
Humidity	0% - 95%
IP Rating	IP53
Weight	105g

Ionisation Detector

The XP95 Ionisation Smoke Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chambers causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

Features

- Responds well to fast-burning, flaming fires
- Designed to operate in a variety of environments
- Minimal effects from the temperature, humidity, atmospheric pressure
- Well protected against electromagnetic interference over a wide frequency range

SPECIFICATIONS	
Supply Voltage	17 - 28V DC
Quiescent Current	340µA average, 600µA peak
Power-up Surge Current	1mA
Duration of Power-up Surge Current	0.3 seconds
Operating Temperature	-20ºC to 60ºC
Storage Temperature	-30ºC to 80ºC
Alarm LED Current	4mA
Humidity	0% - 95%
IP Rating	IP23D
Weight	105g

Ø 100mm

42mm

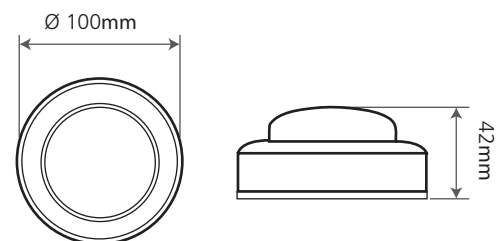| PRODUCT CODE	DESCRIPTION
F/CHSM/A/95	Ionisation smoke detector less base

Multi-Sensor Detector

The XP95 multisensor Detector contains an optical smoke sensor and a thermistor temperature sensor whose outputs are combined to give the final analogue value.
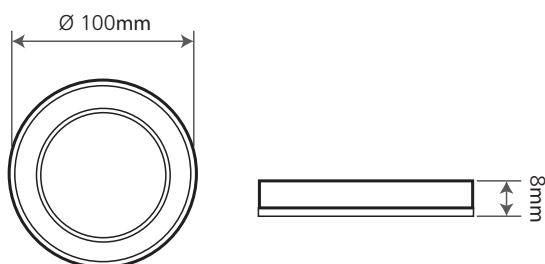
Features

- Sensitive to a wide range of fires
- Well suited for environments such as hotel bedrooms
- Unaffected by wind or atmospheric pressure

SPECIFICATIONS	
Operating Voltage Range	9-33V
Polarity	Polarity insensitive
Quiescent current @ 15V	<50µA
Alarm Current @	2-8.5V - <1.5mA
	10.5-15V - 25 ± 2mA
	18-24V - <1.5mA
	33V - <2mA
Maximum Rest Voltage	2V
Reset Time	1s
Maximum Supply Interruption	40ms
EMC	CE marked to EN50130-4
Weight	100g

Ø 100mm

42mm

PRODUCT CODE	DESCRIPTION
F/CHSM/M/95	Multi-sensor detector

Mounting Base

The Mounting Base has a "one way only" fit allowing for simple installation and maintenance. The mounting base is designed for use with the Apollo XP95 optical and ionisation smoke detectors, as well as the heat and multi-sensor units. Other Apollo devices require the XP95 mounting base to connect to the addressable fire alarm panel.

The base is a zero insertion force base with dual finger receptacles of stainless steel into which the detector terminals slide. Cable connections of up to 2.5mm diameter are made via captive cable clamps.

There are four double terminals and one single one

L1-	Line IN and OUT, double terminal
L2 +	Line IN and OUT, double terminal
+R	Remote LED positive supply, double terminal
-R	Remote LED negative supply, double terminal

The remaining single terminal is isolated and can be used to provide continuity of an earth or shield.
Universal address cards, known as XPERT cards are supplied with all bases, Pre-printed and pre-punched address cards that will save time and increase accuracy during commissioning.
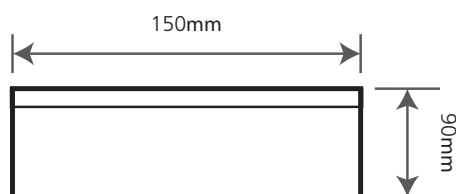
Features

- XPERT Addressing
- One way fit of detector
- Locking feature to prevent un-authorised detector removal

Ø 100mm

8mm

PRODUCT CODE	DESCRIPTION
F/BASE/95	Mounting base – series XP95

SPECIFICATIONS	
Weight	100g

Single Channel Input Output Unit

The Input/Output Unit provides a voltage-free, double pole changeover (DPCO) relay output, a single monitored switch input and an un-monitored, non-polarised opto-coupled input.

Features

- It can report fault, switch open and switch closed levels
- Three visible LED's
- Loop-Powered
- Capable of switching up to 30V at 1A
- Built in loop isolator

150mm

90mm

Depth of product
48mm

PRODUCT CODE	DESCRIPTION
F/CHIO/1/95	Single channel input/output unit complete with isolator

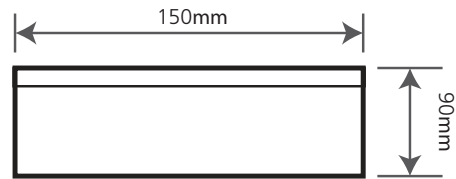| SPECIFICATIONS	
Loop Operating Voltage	17 - 28V DC
Max. Current	28V
Switch Input Monitoring Voltage (Open Circuit Condition)	9 - 11V DC
Max. Cable Resistance	50Ω
Operating Temperature	-20ºC to +70ºC
Humidity	0 - 95%
IP Rating	IP54
Weight	240g

Mains Switching Input Output Unit

The Mains Switching Input/Output Unit provides a voltage-free, single pole change-over relay output and a monitored switch input.

Features

• Supervises one or more normally-open switches connected to a single pair of cables
• Three visable LEDs
• Capable of switching 250V AC at up to 5A
• Built in loop isolator

SPECIFICATIONS	
Loop Operating Voltage	17 - 28V DC
Max. Current	2.5mA
Related Load (Resistive)	5A at 250V AC
Max. Switching Capacity	1.25kVA
Switch Input Monitoring Voltage (Open Circuit Condition)	9 - 11V DC
Max. Cable Resistance	50Ω
Operating Temperature	-20ºC to +70ºC
Humidity	0 - 95%
IP Rating	IP54
Weight	240g

150mm

90mm

Depth of product
48mm

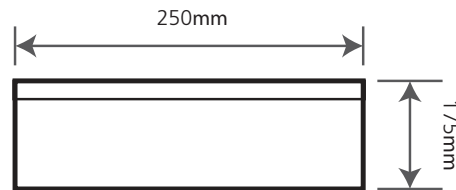| PRODUCT CODE	DESCRIPTION
F/CHIO/1/95/240	Single channel input/output unit 230V contacts 1A complete with surface mounting enclosure

Three Channel Input Output Unit

The Three Channel Input/Output Unit provides three voltage-free, single pole, changeover relay outputs and three monitored switch inputs.

Features

• Supervises one or more normally open switches on each of the three inputs
• Loop-powered
• Capable of switching up to 30V at 1A on each of the three outputs
• Built in lopp isolator

SPECIFICATIONS	
Loop Operating Voltage	17 - 28V DC
Max. Current	7.5mA
Switch Input Monitoring Voltage (Open Circuit Condition)	9 - 11V DC
Max. Cable Resistance	50Ω
Relay Output Contact Rating at 30V AC or DC	1A
Isolator Rating	0.2Ω
Max. Continuous Current	1A
Max. Switching Current	3A
Max. Load	1A @ 30V
Operating Temperature	-20ºC to +70ºC
Humidity	0 - 95%
IP Rating	IP54
Weight	240g

250mm

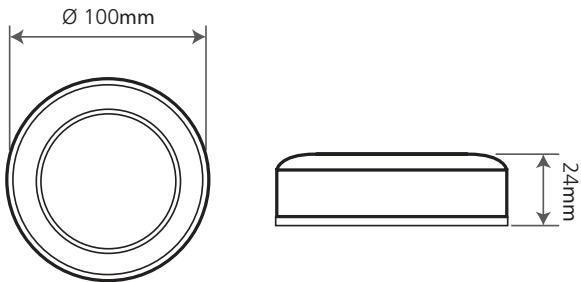175mm

Depth of product
75mm

PRODUCT CODE	DESCRIPTION
F/CHIO/3/95	Three channel input/output unit complete with isolator

Isolating Base

The Isolating Base senses and detects short-circuit faults on XP95 loops and spurs.

Features

• Up to 20 detectors or their equivalent load, may be installed between isolating bases
• High brightness LED
• Detects wiring short-circuits
• Minimises disruption from short circuits

Ø 100mm

24mm

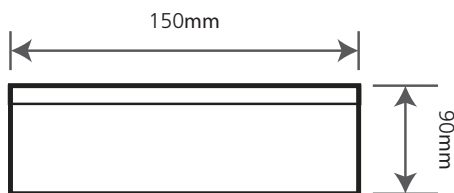| PRODUCT CODE	DESCRIPTION
F/CHIS/95/DB	Short circuit isolator with detector base

SPECIFICATIONS	
Supply Voltage Range	17 - 28V DC
Isolation Indicator	Yellow LED, lit continuously in isolation condition
Max. Current Consumption	43µA
Max. Line Current	3.0A
EMC	BS 61000-6-3
Operating Temperature	-20ºC - +60ºC
Storage Temperature	-30ºC - +80ºC
Humditiy	0 - 95%
Design Environment	Indoor use only
Weight	100g

Sounder Control Unit

The Sounder Control Unit is used to control the operation of a zone of conventional sounders and report their status to the control panel.

Features

• Allows sounders to be operated continuously or pulsed; 1 second on, 1 second off
• May be synchronised with loop sounders
• Built in loop isolator

150mm

90mm

Depth of product
48mm

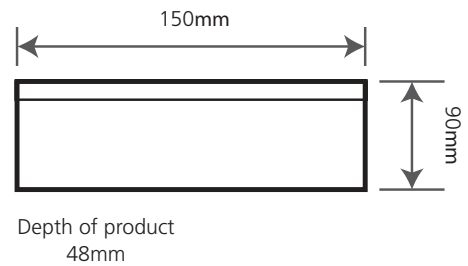| PRODUCT CODE	DESCRIPTION
F/CHSN/95	Sounder circuit controller complete with isolator

SPECIFICATIONS	
Loop Operating Voltage	17 - 28V DC
Max. Current Consumption	4.7mA
Sounder Output Monitoring Voltage	9 - 11V DC
Max. Sounder Circuit Voltage	32V DC
Maximum Load	1A @ 30V
Operating Temperature	-20ºC - +70ºC
Humidity	0 - 95%
IP Rating	IP54
Weight	240g

Switch Monitor

The Switch Monitor is designed to monitor the state of one or more single pole, volt-free contacts connected on a single pair of cables and to report the status to Apollo compatible analogue control equipment.

Features

- Four input states - 'normal', 'fault', 'pre-alarm' and 'alarm'
- Two visible LEDs
- Loop-Powered
- Built in loop isolator

SPECIFICATIONS	
Loop Operating Voltage	17 - 28V DC
Max. Current Consumption	3.6mA
Max. Continuous Current	1A
Max. Switching Current	3A
Switch Input Monitoring Voltage	9 - 11V DC
Max. Cable Resistance	50Ω
Operating Temperature	-20ºC to +70ºC
Humidity	0 - 95%
IP Rating	IP54
Weight	240g

150mm

90mm

Depth of product
48mm

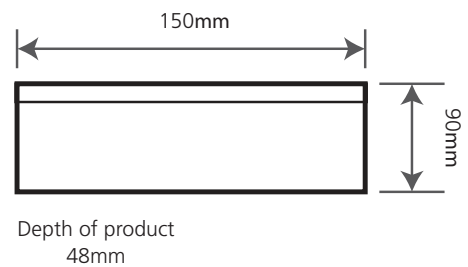| PRODUCT CODE	DESCRIPTION
F/CHSW/95	Switch monitor complete with isolator

Zone Monitor Isolator

The Zone Monitor powers and controls the operation of a zone of up to 20 Apollo XP95 looped detectors.
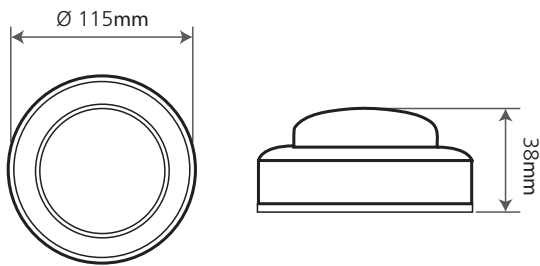
Features

- Detects wiring short-circuits
- Minimises disruption from short-circuits
- Automatic de-isolation on the short-circuit removal
- Up to 20 detectors or their equivalent load, may be installed between isolators
- Built in loop isolator

SPECIFICATIONS	
Line Voltage	17 - 28V DC
Zone Voltage	19 ± 1V
End of Line Resistor Value	5.1k ± 5% 1/3W
Stabilisation Time on Power Up	4 seconds
Max. Capacitor on Zone Terminals	50µF
Operating Temperature	-20ºC to +70ºC
Humidity	0 - 95%
IP Rating	IP54
Weight	240g

150mm

90mm

Depth of product
48mm

PRODUCT CODE	DESCRIPTION
F/CHZM/95	Zone monitoring unit complete with isolator

Loop Powered Visual Indicator

The Loop-Powered Visual Indicator is a local-area visual indicator designed for indoor use. The Visual Indicator has been developed as a supplement to sounders for use in situations where there is a risk that sounders will not be heard.
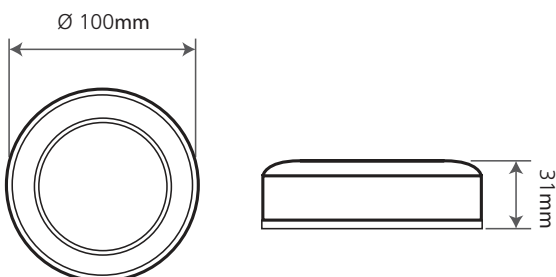
Features

- High intensity LEDs
- More reliable than xenon visual indicators
- Automatic LED check
- Lockable
- Wide angle of visibility
- Enables DDA compliance
- Synchronised flash
- Can be used with Discovery or XP95 devices

Ø 115mm

38mm

SPECIFICATIONS	
Operating Voltage	17 - 28V DC
Quiescent Current Consumption	150µA
Beacon Operated	3mA
Switch on Surge	1mA for 100ms
Operating Temperature	-20ºC - +60ºC
Flash Rate	1Hz
Humidity	0% - 95%
IP Rating	IP23D
Weight	140g

PRODUCT CODE	DESCRIPTION
F/CHBN/95	XP95 loop powered visual indicator

Visual Indicator Base

The Visual Indicator Base is a loop-powered visual indicator combined with a standard Intelligent Mounting Base. It is used to signal a fire alarm in enclosed areas. The visual indicator base can be used with either a detector fitted or with a cap as a stand-alone alarm device.

Features

- Visual indicator flash rate of once per second
- Synchronisation of visual indicator flash
- Individual and group addressing
- Unique visual indicator self-test
- Loop-powered
- Built-in Isolator
- Red or white cover cap available

Base Dimensions and Weight

- Ø 100mm x 31mm
- 109g

Cover Dimensions and Weight

- Ø 100mm x 9mm
- 20g

Ø 100mm

31mm

SPECIFICATIONS	
Operating Voltage	17 - 28V DC
Protocol Pulses	5 - 9V
Current Consumption	300µA
Operating Temperature	-20ºC - +60ºC
Humidity	0% - 95%
IP Rating	IP21D
Weight	109g

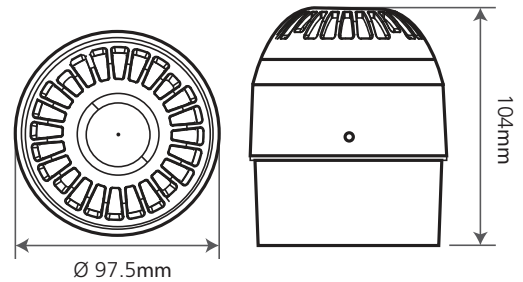| PRODUCT CODE	DESCRIPTION
F/CHBN/95/A	Visual indicator base
F/COVER/RD/1	Red cover for CHWB/BN/95/A
F/COVER/WH/1	White cover for CHWB/BN/95/A

Open Area Sounders & Indicators

The Open-Area Sounders and indicators are designed for use in open areas and can be connected to an Apollo Discovery or XP95 system.

Features

- Self-test fault monitoring
- Choice of tones on standard device: Apollo, Slow Whoop and DIN
- Two volume settings 92dB(A) and 100dB(A)
- Individual and group addressing
- Sycronisation of tones and flashes
- Built in isolator
- Loop-powered
- IP65 rated
- Red and clear lens options available for F/CHWB/BN/95/AP
- F/CHWB/95/AP is available in white

Image shows from left to right F/CHWB/95/AP & F/CHWB/BN/95/AP

SPECIFICATIONS	
Operating Voltage	17 - 28V DC
Max. Loop Current Consumption	333µA
Alarm Sounder 92/100dB (A)	5mA
Alarm Sounder Beacon	8mA
Max. Sound Output	100dB (A)
Operating Temperature	-20ºC - +60ºC
IP Rating	IP65
Weight	F/CHWB/95/AP = 225g F/CHWB/BN/95/AP = 260g

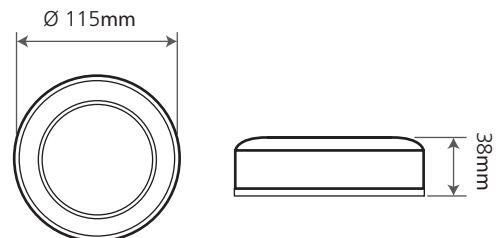| PRODUCT CODE	DESCRIPTION
F/CHWB/95/AP	Open area XP95 sounder red IP65 complete with isolator
F/CHWB/95/AP/WH	Open area XP95 sounder white IP65 complete with isolator
F/CHWB/BN/95/AP	Open area XP95 sounder indicator red IP65

Sounder Indicator Base

The Sounder Visual Indicator Base is a loop-powered sounder and visual indicator combined with a standard Intelligent Mounting Base. It is used to signal a fire alarm in enclosed areas.

Features

- Two volume ranges 55-75dB(A) and 75-91dB(A)
- Visual indicator flash rate of once per second
- Synchronisation of 'alert' and 'evacuate' tones
- Synchronisation of visual indicator flash
- Individual and group addressing
- Unique acoustic and visual indicator self-test
- Built-in Isolator

SPECIFICATIONS	
Operating Voltage	17 - 28V DC
Protocol Pulses	5 - 9V
Current Consumption	300µA
Operating Temperature	-20ºC - +60ºC
Max. Sound Output at 90º	91dB (A)
Humidity	0% - 95%
IP Rating	IP21C
Weight	160g

PRODUCT CODE	DESCRIPTION
F/CHWB/BN/95/A	Loop powered base sounder indicator – incorporates detector base
F/CHWB/BN/95/IS	Loop powered base sounder indicator – complete with loop isolator and detector base

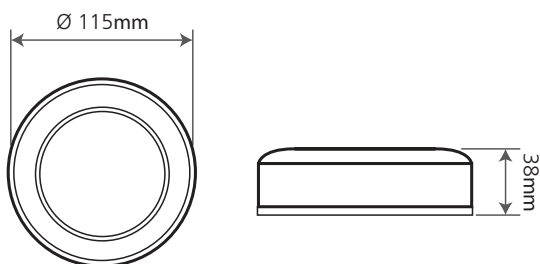www.channelsafety.co.uk ☎ 0845 884 7000 @ sales@channelsafety.co.uk

Base Sounder

The Integrated Base Sounder comprises of a base sounder with integral mounting base and is for use with Discovery or XP95 ranges. It is designed for indoor use.

Features

- Two tones
- Two volume ranges 55-75dB(A) and 75-91dB(A)
- Individual and group addressing
- Unique acoustic self-test
- Built-in isoltaor

Ø 115mm

38mm

PRODUCT CODE	DESCRIPTION
F/CHWB/IS/IN/95A	Loop powered intelligent base sounder – incorporates detector base

SPECIFICATIONS	
Operating Voltage	17 - 28V DC
Protocol Pulses	5 - 9V
Current Consumption	<1.2mA
Max. Sound Output	91dB (A)
Operating Temperature	-20ºC to 60ºC
Humidity	0% - 95%
IP Rating	IP21D
Weight	140g

Compatible Panels

Firewatch Analogue Addressable Panels

FW1001 panels are available in single or double loop, 16 to 32 zone. Full compatibility with Apollo XP95, Discovery and Hochiki ESP protocol devices.

FW9003 panels are available in 1, 2 or 5 loop. Each panel is capable of supporting Apollo XP95, Discovery, Hochiki ESP and Nittan protocol devices.

FW9004 panels are available in 1, 2 or 4 loop. Supports Apollo XP95, Discovery & Hochiki ESP protocol devices.

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- Emergency Lighting. To BS. 5266. Part 1 2011
- Nurse Call Systems
- Disabled Refuge Systems

Channel Safety Systems provide a dedicated design, supply and commissioning service for Emergency Lighting, Fire Alarm and Assistance. We offer the Contractor and Wholesaler a comprehensive service.

With over 35 years' experience working within these sectors, Channel's knowledge base is extensive and is an invaluable resource for our customers. As Industry standards are ever-changing, we make it our mission to keep abreast of regulatory and legal changes that affect our clients.

As our Project Sales Engineers and Service Engineers are based across the UK, we offer a fast and efficient service for design, site surveys, project management and all commissioning and maintenance services requirements. All our external team members are fully qualified to 'sign off' designs and Channel maintains all the relevant insurance policies which means the legal onus is on us, not the contractor.

* The design service is free on the basis of receipt of order on contract award