

# Pana40 Plus 2D / 3D Elevator Light Curtains

## Product Datasheet



## KEY FEATURES

- Complies with EN81-20 and EN81-70 legislation
- Vandal resistant fixtures designed for fast installation
- 40 parallel or 194 criss-cross beams offer protection up to a height of 1.8m
- Suitable for centre-opening and side-opening doors
- Self-drilling screw for fast, easy fixing
- 2D Light immunity to over 100,000 lux

**The Pana40 Plus safety detection system offers maximum passenger protection. The traditional 2D infra-red light curtain is also available in 3D detection to offer additional protection in the landing zone.**

Any object causing interruption of the direct beams or reflections within the 3D detection zone will trigger the system and re-open the elevator doors.

The 77X or 3D detectors can be used with all 3D versions of the Pana40Plus controller. These controllers are available in 40 or 194 beam pattern versions and for various supply voltages (AC or DC).

The system can be configured for different operating modes to suit particular installation needs. For example the '3D Timeout' mode is ideal for hospitals because the doors will only start to close if the 3D detection zone is clear and the timer has expired.

The 3D detector range is equal to approximately half the door separation. As the doors close the 3D detection zone moves inward giving increasingly sensitive protection to the door aperture.

# Detector Profiles

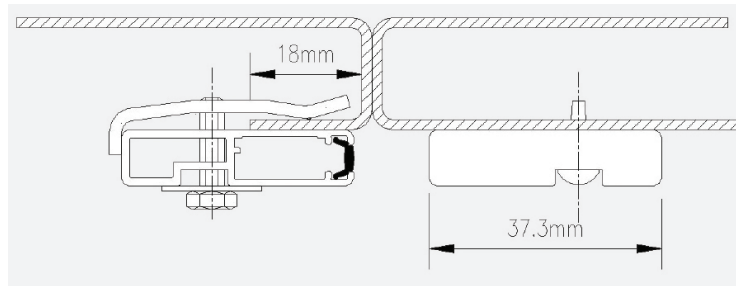


Fig 1: 743 000 Fixing Clamp and Self-Tapping Screw

## Profiles Available

### 9mm Profile [Ultra Slim]

- Suitable for virtually all lifts
- 2D or 3D Profiles (3D is 10mm)
- 40 beams/194 beams options

### 16mm Profile [Slim Line]

- Suitable for centre-opening doors with a narrow running clearance.
- 2D or 3D Profiles
- 40 beams/194 beams options

### 43mm Profile [Standard]

- Suitable for wider sill arrangements
- Pre-drilled holes
- 2D or 3D Profiles
- 40 beams/194 beams options

### 40mm Profile [Slam Post]

- Only available in 2D version 2m and 2.1m
- 40 beams/194 beams options

The Pana40 Plus detector range is suitable for both side-opening and centre-opening doors and has a wide range of profiles to suit most installations. The detectors are supplied with appropriate fixing kits for up to 5 types of installation. They are designed for fast installation with no alignment problems.

The mechanical design of the profiles ensures simple installation methods, with high impact strength and ingress protection against dust and water

The custom-designed lens used on this range optimises the beam profile and can be used with either the Pana40 Plus or Pana194 controllers to generate a 40 beam or 194 beam pattern respectively. The beams offer protection to 1.8m height to fully comply with legislation. The diagnostic LED assists Service Engineers in reducing call-out times.

### 3D Features:

- 3D 'zone' gives extended protection into the landing (See below)
- Selectable modes of 3D operation to suit various installation sites
- 3D greatly reduces the chances of passenger injury by the landing door
- 3D reduces damage to landing doors from trolleys and hospital beds
- Advanced 3D diagnostic self-check for engineers

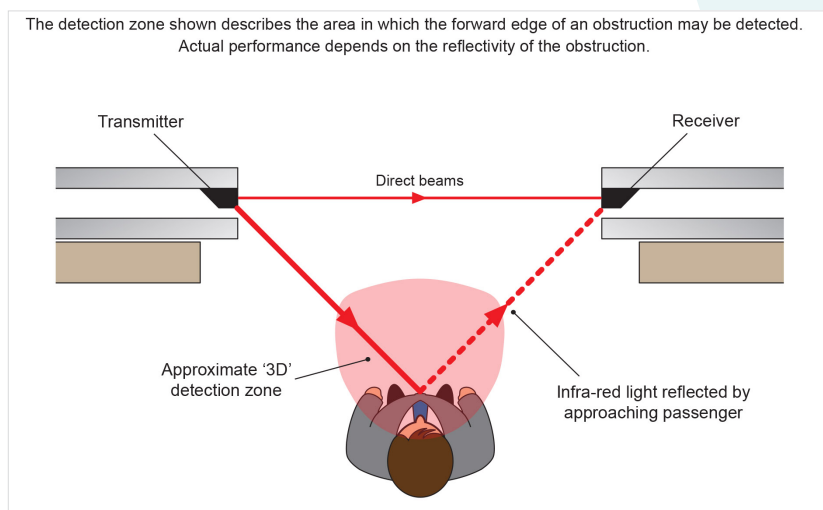


Fig 3

# Accessories

- Static Fixing Kit 616 800-010: This is necessary for installing a set of 9mm and 15mm profile detectors in a fixed position at either end of the lift car sill. See P40 Plus Detector installation guide.
- Sightguards: These are designed to fit neatly over the Pana40 Plus range detectors and are available to suit elevators with different clearances.

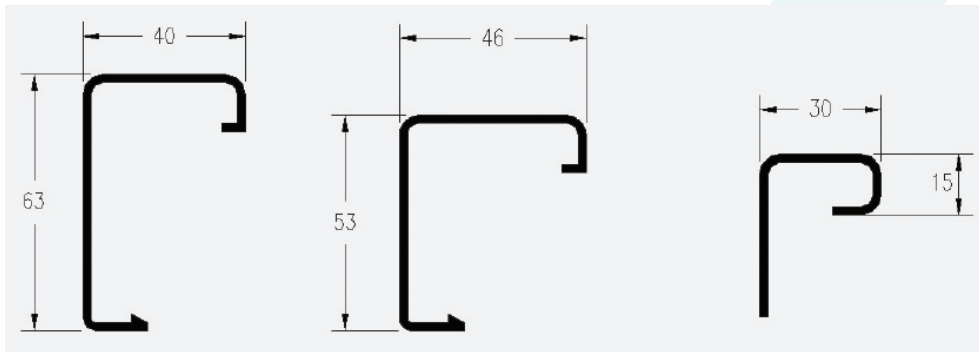


Fig 4: 007 035 40mm

Fig 5: 007 045 46mm

Fig 6: 007 065 30mm

- FingerGuards: PVC FingerGuards are available to fill the 30mm gap found on some door types.

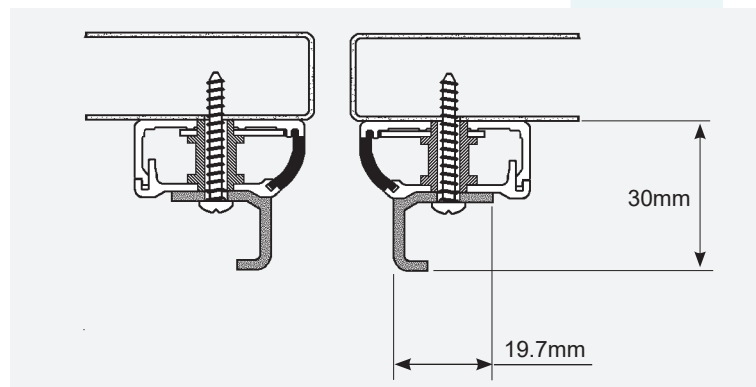


Fig 7

- IGUS Chains: The Igus Chain is a snap-open energy chain which is placed around the extension cable to protect the detector cables from clamping when installed in a dynamic installation.

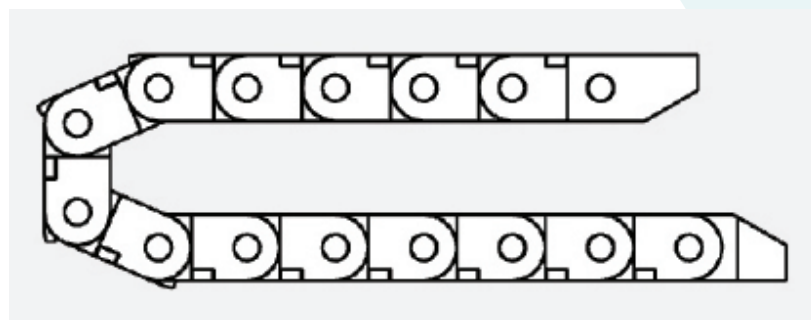


Fig 8

# Technical Specification 2D

Product	740 040 Standard	741 000 Slimline	743 000 Ultra Slim	744 010 Leading Edge	744 040 Slampost
Detector Size	43mm x 63mm x 2100mm	15.5mm x 35mm x 2000mm	9mm x 37.3mm x 2008mm	40mm x 10.7mm x 2100mm	40mm x 10.7mm x 2000mm
Detector Cable Length	750mm + 4m Extension Cables	750mm + 4m Extension Cables	750mm + 4m Extension Cables	1880mm + 4m Extension Cables	1880mm + 4m Extension Cables
Diode Spacing	45.7mm	45.7mm	45.7mm	45.7mm	
Detector Range	6m	6m	6m	4m	4m
Number of Diodes Per Detector	40	40	40	40	40m
Number of Beams Per Detector			40 Beams with Pana40+ Controller 194 Beams with Pana194+ Controller		
EMC Compliance	Emissions to EN12015:2004, Immunity to EN12016:2004				
IP Rating	IP54 as per EN60529:1991				
Vibration	20-500Hz rms 4hrs 3 axis BS2011 Pt.2.2 Fd				

# Technical Specification 3D

Product	770 040	771 000	774 000
Detector Size	43.5mm x 62.5mm x 2100mm	15.5mm x 33.5mm x 2000m	9mm x 37.3mm x 2008mm
Detector Cable Length	725mm + 4m Extension Cables	665mm + 4m Extension Cables	750mm + 4m Extension Cables
770 Detector Depth with rigid guard	63mm	-	-
2D Distance Between Bottom Beam & Bottom of Housing	20mm For 2D Light Curtain	17mm For 2D Light Curtain	20mm For 2D Light Curtain
2D Distance Between Top Beam & Bottom of Housing	1800mm 2D For Light Curtain	1800mm For 2D Light Curtain	1808mm For 2D Light Curtain
Maximum Range on 2D	6m	5.5m	5m
Maximum Range on 3D	Approx. 600mm from centre of doorway when doors are at 1200mm apart (Fig 3)		
Number of Diodes Per Detector	40	40	40
Number of Beams Per Detector	40 Beams with Pana40+ Controller 194 Beams with Pana194+ Controller		

With offices in 14 locations, we manufacture the world's most trusted solutions that have already been installed in over 200,000 lifts across Europe to ensure passenger safety and compliance. We also offer local Support Services to ensure our customers receive the help they require.

## Ordering Information 2D and 3D

2D 74X Part Numbers and Description	Fixing Kits
740 040 – Universal	2x Fixing Kits for Standard Installations & 2x Fixing Kits for Leading Edge Installations
741 000 Slimline Detectors	2x Fixing Kits
743 000 Ultraslim Detectors	2x Fixing Kits
744 020 Mixed Slampost	1x Fixing Kit for Standard Installation & 1x Fixing Kit for Slampost Installation
744 010 Leading Edge Detectors	2x Fixing Kits for Leading Edge Installations
744 040 Slampost Detectors	2x Fixing Kits for Slampost Installations

3D 77X Part Numbers & Description	Fixing Kits
770 040 – Universal	2x Fixing Kits for Standard Installations & 2x Fixing Kits for Leading Edge Installations
771 000 – Slimline Detectors	2x Fixing Kits
774 000 – Ultra Slim Detectors	2x Fixing Kits

Spares & Accessories Part Numbers	Description
015 199	4m Extension Cable
743 803	Ultraslim clamps (the fixing kit is per one side of the detector set)

*This product is designed for use in elevators with powered automatic doors where the closing energy is less than 10J in normal operation and less than 4J during de-activation of the light curtains or less as per EN81 requirements. It should be installed by qualified personnel only, therefore any use outside of this application is at the installer's own risk and should be assessed appropriately.*

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