

# Formula Systems Infra-red Safety Edges

Types FCU 0735GB01 Slimscreen Curtain of Light

FCU 0547GB01/02 Safescreen Curtain of Light

Publication Number: DO019/1000

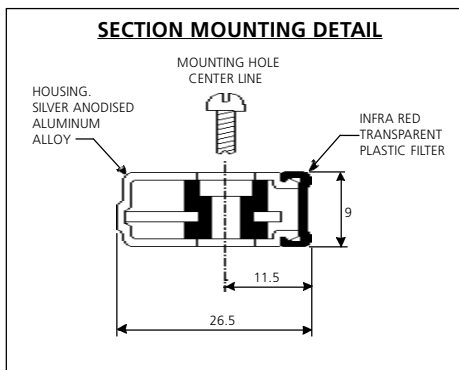
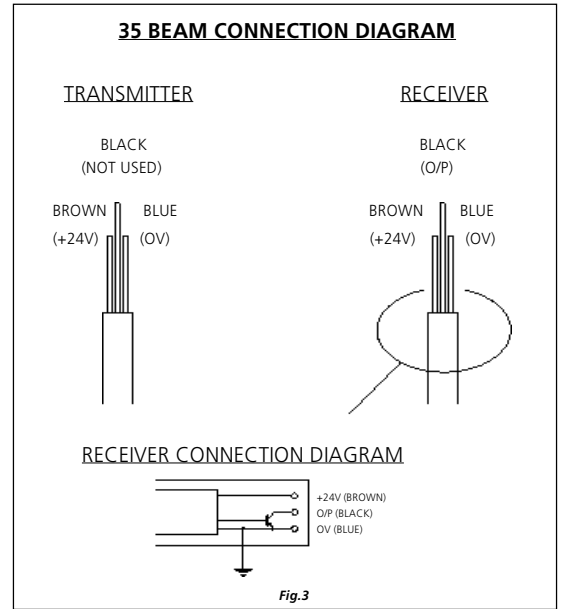
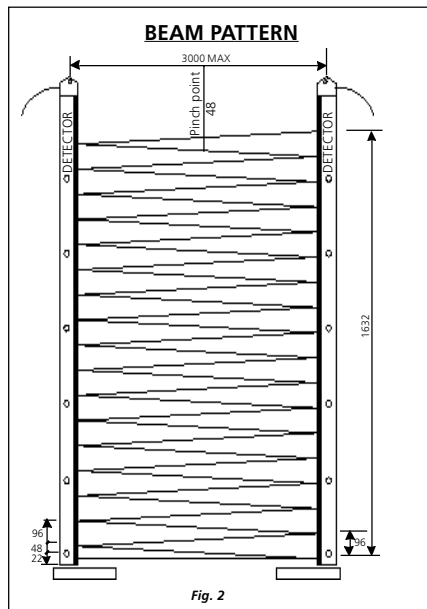
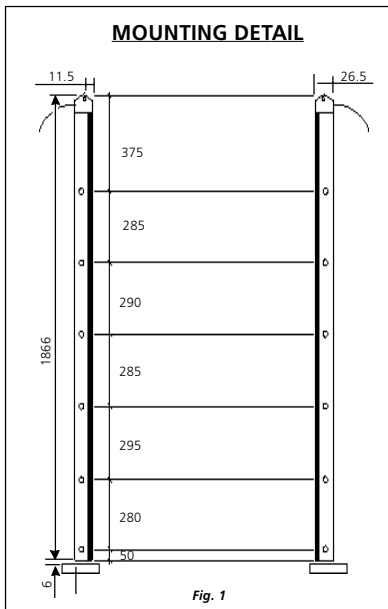


| ITEM  | FCU 0735GB01   |  | FCU 0547GB01/02   |  |
|---|--|--|---|--|
|   | DETAIL   | ADDITIONAL COMMENTS  | DETAIL  | ADDITIONAL COMMENTS  |
| <b>Number of Beams</b>  | 35 non-focused beams   | Infra-red  | 47 non-focused beams  | Infra-red  |
| <b>Number of Sensors</b>  | 18   | See beam pattern (Fig. 2)  | 24  | See beam pattern (Fig. 5)  |
| <b>Sensor Spacing</b>   | 96mm   | See beam pattern (Fig. 2)  | 75mm  | See beam pattern (Fig. 5)  |
| <b>Distance between beams at pinch point (doors closed)</b>         | 48mm   | See beam pattern (Fig. 2)  | 37.5mm  | See beam pattern (Fig. 5)  |
| <b>Unit Size</b>  | 9mm wide X 26.5mm deep X 1866mm high   |  | 30mm wide X 20mm deep X 2136mm high   |  |
| <b>Scan Type</b>  | Interleaved  |  | Interleaved   |  |
| <b>Response Time</b>  | 48 to 96 milliseconds  | Relates to point of detection in scan cycle                          | 10 to 100 milliseconds  | Relates to point of detection in scan cycle  |
| <b>Range of Detection</b>   | 1500mm Door mounted<br>3000mm Track end mounted  | Switch selected  | 1800mm Door mounted<br><br>5000mm Door mounted  | Standard range product FCU0547GB01<br><br>Long range product FCU 0547GB02  |
| <b>Light Immunity</b>   | 50,000 lux   | Visible light  | 50,000 lux  | Visible light  |
| <b>Angular Displacement</b>   | 10° (inclusive)  |  | 10° (inclusive)   |  |
| <b>Positional Mounting Tolerance (doors closed, units touching)</b> | +/- 10mm vertically<br>+/- 4mm side by side  |  | +/- 18mm vertically<br>+/- 5mm side by side   |  |
| <b>Fail Safe Conditions</b>   | Faulty cable:<br>Supply failure:   | Fail safe to open circuit faults<br>Output switch to detect state    | Faulty cable:<br>Supply failure:  | Fail safe to open circuit faults<br>Output switch to detect state  |
| <b>Operating Voltage</b>  | 24 volts d.c.  | 18 volts min 30 volts max  | 24 volts d.c.   | 16 volts min 30 volts max  |
| <b>Current Consumption</b>  | <100 mA RMS  | Total of both units  | <100 mA RMS   | Total of both units  |
| <b>Control Unit</b>   | FPS 0270 or FPS 0271<br>Universal Interface  | Not necessary when door operator permits direct connection of edges. | FPS 0270 or FPS 0271<br>Universal Interface   | Not necessary when door operator permits direct connection of edges.   |
| <b>Environmental Protection</b>                                     | Conformal coating to PCB's.  |  | Conformal coating to PCB's  |  |
| <b>Operating Temperature Range</b>                                  | 0°C to 70°C  |  | 0°C to 70°C   |  |
| <b>Storage Temperature Range</b>                                    | -40°C to +80°C   |  | -40°C to +80°C  |  |
| <b>Mounting</b>   | Seven screw positions  | See mounting detail (Fig. 1)   | Five screw positions  | See mounting detail (Fig. 4)   |
| <b>Indicators</b>   | System fault/beams obstructed  | Red LED  | Supply present<br>System fault/beams obstructed   | Green LED<br>Red LED   |
| <b>Cable Supplied</b>   | 3.4m Long  | Gebauer & Griller 'Polyflex' Supplied pre-wired to product (Fig. 3)  | Two X 4m approx of 3 core cable   | Connects to product via short fixed lead   |
| <b>Case Material</b>  | Aluminium alloy  | Silver Anodized  | Aluminium alloy   | Finished Black   |
| <b>Cover (filter)</b>   | Infra-red transparent plastic  |  | Infra-red transparent plastic   | Snap-on fixing   |
| <b>Installation Kit (supplied)</b>                                  | Instructions - 1 off<br>Cable Clips - 10 off<br>Screws M3.5 X 16mm - 26 off<br>Nuts M3.5 - 16 off<br>Washers M3.5 - 32 off<br>Washer Springs M3.5 - 42 off | Pan Head Pozi Drive  | Instructions - 1 off<br>Spacer Block - 1 off<br>Cable Clips - 6 off<br>Nytie - 3 off<br>Screws 8.32unc x 1/2" - 20 off<br>Washers - 20 off<br>Washer Spring - 20 off<br>Mounting Brackets - 2 off<br>Screws M5.0 x 10mm - 10 off<br>Washers M5.0 - 10 off<br>Cable retainer - 2 off<br>Screwdriver - 1 off<br>Drill Bit - 1 off | Hex. Flanged Head (self Tapping)<br><br>Use with Mounting Bracket<br><br>Use with Mounting Bracket<br>Optional<br>Optional<br>Optional |
| <b>Packaging Tube</b>   | 1920mm long X 75mm OD X 2Kgs   |  | 2200mm long X 100mm OD  |  |
| <b>SYSTEM MARKINGS</b>  | UL, cUL, CE (EMC)  | EN12015, EN12016   | UL, cUL, CE(EMC)  | EN12015, EN12016   |

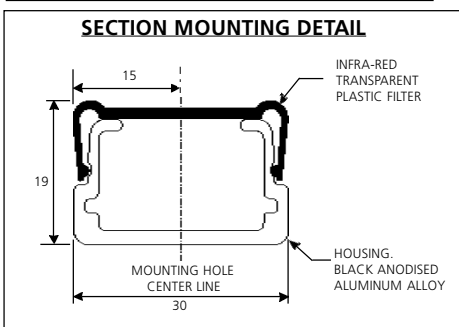
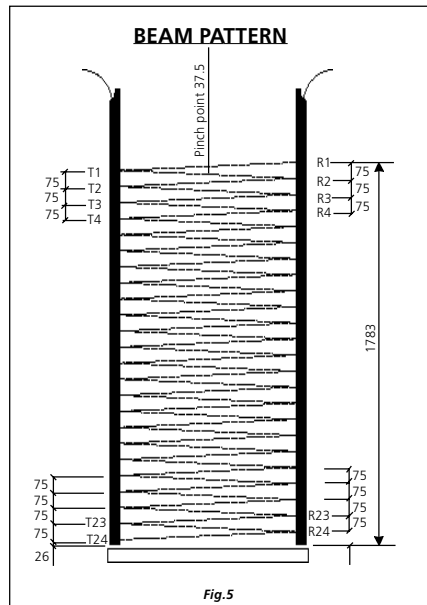
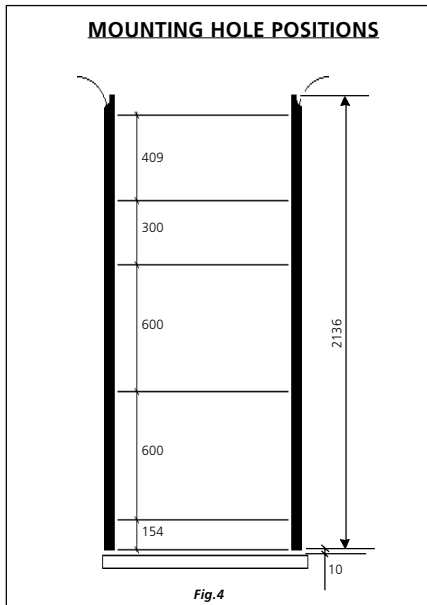
This information is for guidance only and is not intended to form the basis for contract. All dimensions in mm.

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**FCU 0735GB01 (Nominal dimensions shown in mm)**



**FCU 0547GB01/02 (Nominal dimensions shown in mm)**



**EMC Note**

These components are designed to comply with EN81 (BS5655) parts 1 and 2 for incorporation in a lift application. They meet the requirements of the EMC Regulations (EN12015 and EN12016). The installer must ensure that the inductive load connected to the relay contacts meets EMC requirements.