



# Polybar P-Gate – Technical Product Datasheet

Designed to divide vehicle & pedestrian traffic zones. An added piece of visual and physical protection at a critical workplace interface. The gate can be easily fitted to Polybar P-Bollards.

## Product Description

The P-Gate is designed to divide vehicle & pedestrian traffic zones. An added piece of visual and physical protection at a critical workplace interface. The gate can be easily fitted to Polybar P-FLEX or solid bollards and rails.

## Product Dimensions

| P-Bollard Dimensions |             |            | P-Gate Dimensions |             |                | Drilling    |            |
|----------------------|-------------|------------|-------------------|-------------|----------------|-------------|------------|
| Diameter (mm)        | Height (mm) | Rod ø (mm) | Length (mm)       | Height (mm) | Thickness (mm) | Hole ø (mm) | Depth (mm) |
| 120                  | 1000        | 30         | 1100              | 400         | 20             | 48          | 150        |

## Features & Benefits



High Resistance to Impact



Hygienic & Easy to Clean



Suitable for Food Environments



Hidden Fixing / Zero Exposed Steel



Minimum Maintenance



100% Recyclable

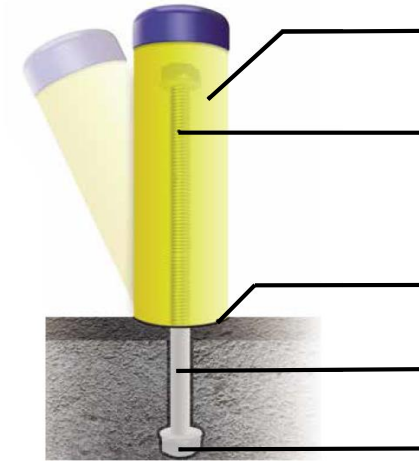


Quick Repair at Minimum Cost



Protected against UV Rays

## Material Properties (demonstrated on P-Bollard)



**High Performance Synthetic Polymer** – Offers superior protection that requires minimum maintenance.

**Threaded Rod**- Robust steel rod anchoring system with superior 'pull-out' performance, designed for fast installation and to absorb impacts while minimising concrete damage.

**Neoprene Seal** – Designed to prevent liquid ingress and zero exposed steel.

**PVC Sleeve** – Eliminates grout contacting the threaded rod to enable easy rod replacement

**Anchor nut** - guarantees durability of fixing, offering maximum resistance and easy rod replacement.

## Material Properties

| Test   | Results                |
|--|------------------------|
| Density (g/cm <sup>3</sup> ) - ISO 1183                                  | 0.95                   |
| Yield Stress (N/mm <sup>2</sup> ) - DIN EN ISO 527                       | 28                     |
| Elongation Resistance (%) - DIN EN ISO 527                               | 8                      |
| Elongation at Break (%)  | 300                    |
| Tensile E Modulus (MPa) - DIN EN ISO 527                                 | 850                    |
| Impact Strength (kJ/m <sup>2</sup> ) - DIN EN ISO 179                    | Without break          |
| Notched Impact Strength (kJ/m <sup>2</sup> ) - DIN EN ISO 179            | 50                     |
| Ball Indentation Hardness (N/mm <sup>2</sup> ) - DIN EN ISO 2039-1       | 45                     |
| Shore Hardness (N/mm <sup>2</sup> ) - D ISO 868                          | 66                     |
| Average Thermal Coefficient of Elongation (K <sup>-1</sup> ) - DIN 53752 | 1'8 . 10 <sup>-4</sup> |
| Thermal Conductivity (W/m.K) - DIN 52612                                 | 0.38                   |
| Dielectric Strength (kV/mm) - VDE 0303-21                                | 44                     |
| Surface Resistance (Ohm) - DIN IEC 167                                   | 1014                   |
| Temperature Range (°C)   | -100 to +80            |
| Chemical Resistance (Acids, Alkalis and Solvents)                        | High                   |
| Physiologically Acceptable   | Yes                    |
| Welding  | Yes                    |
| Hot Forming  | Possible               |

## Testing

|   |  |
|---|--|
| Dynamic Impact Test                         | Tested Impact Energy @ 90°<br>(Joules) |
| P-Bollard 120mm (P-Gate supporting bollard) | 17,405                                 |

17,405 Joules is the equivalent of

 X 10 Km/h  
 4.5 tonnes (6 mph)

All dynamic testing has been certified by TUV nord. Please contact Polybar for further information.



## Colours

|        |          |
|--------|----------|
| Yellow | RAL 1021 |
| Black  | RAL 9004 |

Other colours are available subject to minimum order size. Please contact Polybar for further information.



## Shipping / Freight

Fully timber crated packs are available on projects requiring delivery by sea freight shipping. Offloading & installation (unless agreed otherwise) is the responsibility of the customer.

Polybar supplies internationally. Please contact Polybar for lead times to specific locations.

## Installation

Although not the exact product, installation principles are as follows:



Drill concrete to a specified diameter using a diamond core drill.



Vacuum debris and dust to ensure a clean surface.



Mix & pour grout resin into hole.



Insert protection system, leave to set and tighten top bolt.



Fix cap.



Assembly complete.

## Further Information:

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