

# PASSIVE SAFETY

## Jerol Lighting Columns

Impact Absorbing

Corrosion Resistant

Satisfy all Relevant  
European Standards

Long Service Life

Lightweight and  
Easy to Install



Jerol  
POLES

Belysningsstolpe 8m



Jerol  
POLES  
SOLE UK DISTRIBUTOR

The Post & Column  
Company Limited  
Formerly Cheshire Coatings

## Structural Performance

The impact absorbing Jerol lighting column has a conical polymer composite shaft, which consists of two layers, an inner fibre reinforced polymer composite and an outer layer of tough polyolefin.

Two tough polyester bands run the length of the columns. These reduce the effects of column whiplash during impact.

This construction is extremely durable, being weather and UV-resistant, and service life is estimated to exceed 60 years. All the fixings are stainless steel. The columns are particularly suitable for coastal areas where marine corrosion can be a problem with conventional materials.

Columns are available as composite shafts with tubular aluminium arms or post top tubes, or as full height composite post top shafts, as detailed below.

In each case, as the shaft material is an electrical insulator, no earth bond is required.

All columns are designed and certified to fully comply with all relevant parts of BS EN 40, and the standard versions can be used in locations with a wind speed up to 27 m/s with luminaires up to 0.20 m<sup>2</sup> in windage area and weight 15 kg. Solutions for higher wind speeds or larger luminaires can be provided.

Design check certificates and data sheets are available on request.

## Passive Safety

Columns have been extensively crash tested and certified to demonstrate passive safety performance in accordance with BS EN 12767: 2000, at Helsinki Technical University.

The family of columns has been tested at impact speeds of both 100 km/h and 70 km/h, and from the results the performance classes are declared as 100:NE: 2 and 70:LE: 3.

Having NE category at 100 km/h, and LE category at 70 km/h, these columns are ideal for use in a variety of situations, whether high-speed roads, moderate speed roads, or at junctions and roundabouts. The need to stock different categories of passively safe column for different situations is avoided.

## Columns with Aluminium Arms

These columns are particularly suitable for traffic route passive safety use, where a pre-cast concrete foundation is strongly recommended, with the shaft held in position by a stainless steel pressure distribution ring and three or four adjustment screws, and cables entering through the base of the shaft rather than a cable entry slot.

This solution permits simple one-stop replacement after vehicle impact. The remains of the damaged shaft can be easily pulled from the foundation, over the cable, and a new column rapidly installed.

A snatch-plug and socket system can be provided, with the socket bonded to a length of incoming cable, when physical isolation on impact is specified.

Nominal height m 'H'	Shaft height above ground m 'L'	Diameter mm		Shaft weight * kg	Bracket projections m
		D1	D2		
5	4.0	114	78	32	Post top 1.0 vertical tube
6	4.5	147	103	51	PT; 0.5; 1.0; 1.5
8	6.5	170	103	66	PT; 0.5; 1.0; 1.5; 2.0
10	8.5	196	102	94	PT; 0.5; 1.0; 1.5; 2.0; 2.5
12	10.5	221	102	122	PT; 0.5; 1.0; 1.5; 2.0; 2.5

\* The weights shown are with the short root for use with the pre-fabricated foundation

### Bracket Arms

- Aluminium bracket arms are 60 mm diameter
- Alternative luminaire spigot connection diameters can be provided
- Brackets are available as single or double arms in the projections shown
- Intermediate sizes can be provided
- A 60 or 76 mm diameter post top tube (PT) can be provided for all nominal heights

### Root Length

- A short root is available for use with the Jerol pre-cast concrete foundation
- Standard root lengths are available for planting (800, 1000, 1200, 1500 and 1800 mm are the standard lengths, for the range from 5 m to 12 m respectively)

## Full Height Composite Post Top Columns

As an alternative, full height conical polymer composite columns with a 76 mm or 60 mm luminaire spigot connection are also available.

These conical columns have an attractive clean modern design, and are ideal for subsidiary road lighting systems.

These are provided as standard with a planted root with cable entry slot. A short root, with bottom entry for cables, can be provided for use with the Jerol pre-cast concrete foundation, as an alternative.

Nominal height m	Diameter mm		weight * kg	Root length (planted)
	D1	D2		
5	168	104	43	800
6	174	104	53	1000
8	196	104	92	1200

\* The weights shown are with standard planted root

### Doors and Base Compartments

The base compartment is 1.0 m above ground level. Doors to base compartments are manufactured from stainless steel, and have a bonded foam lining to provide a good seal, preventing the entry of dirt and moisture to the base compartment, and to provide electrical insulation. Earth bonding to the door is therefore not necessary.

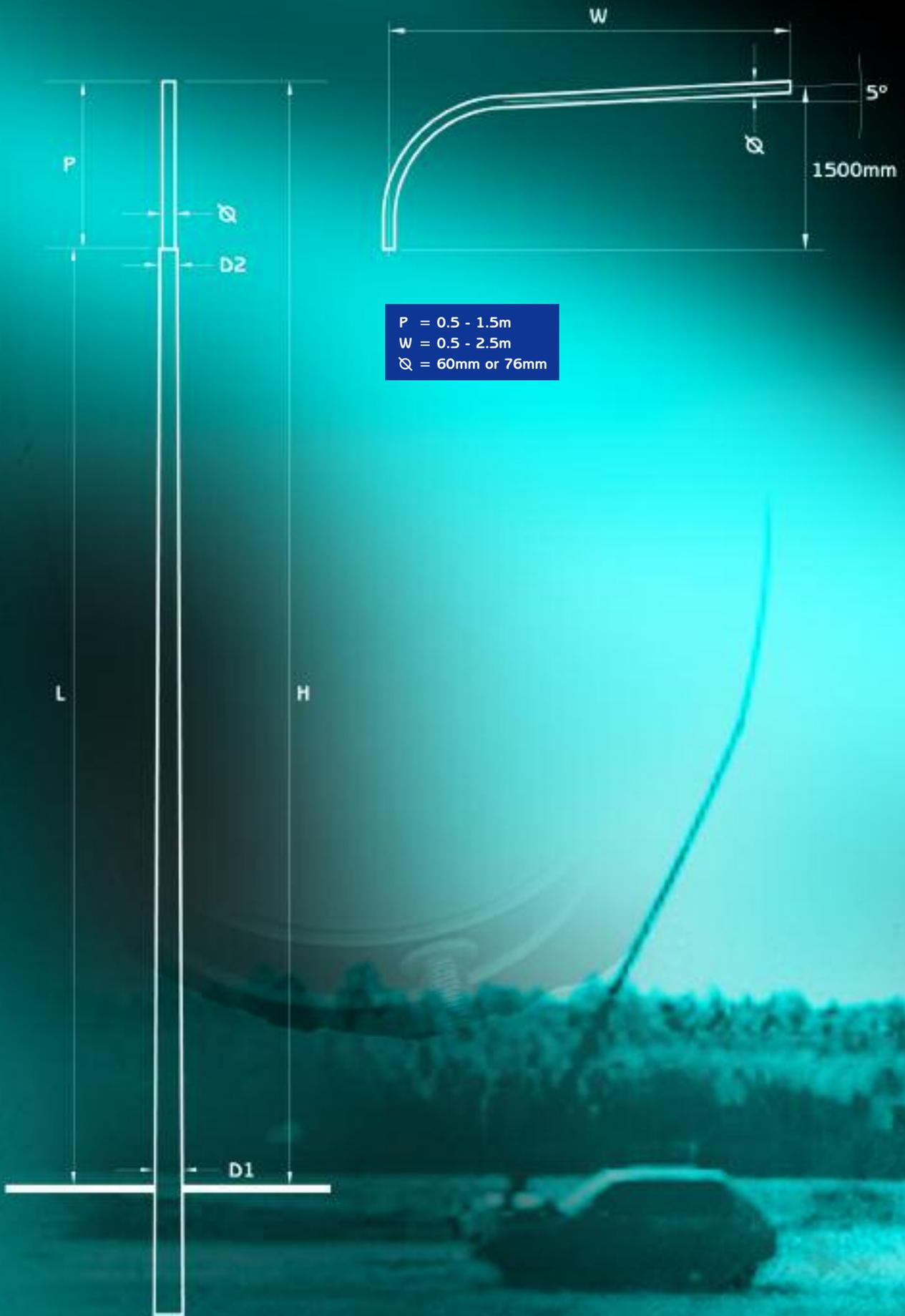
The base compartment is complete with a wooden backboard.

### Coloured Finish

The standard finish of the polyolefin coating is RAL 7023 mid grey, but any RAL colour from the Jerol colour chart can be supplied on request. The door is powder coated to the same colour as the shaft.

Aluminium bracket arms are normally supplied in natural aluminium, but can be powder coated to match a shaft colour on request.





Approved to National Highways Sector Scheme 6  
 Specialist suppliers of Sign Posts and Lighting Columns



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