Mark 1 Insulators

Designed to replace porcelain portal insulators above and below the gantry, these insulators take some of the highest loads of any insulators in railway service. They can also be used for independent registration where higher mechanical loads are being specified e.g. in tunnel applications where large support tubes require small deflection characteristics.

Specifically designed to meet the requirements of a maximum working load of 2.713kNm (528kg), insulators in this range have less than 7mm of deflection at this maximum load and have the lowest bending moment of any compatible insulator on the railway.

Malleable iron end fittings (or aluminium by request) are fully compatible with existing imperial flanges. High tensile bolts with all-metal self locking nuts and washers are supplied as applicable.

Lightweight (e.g. A686:17kg) and a low profile means that they are easy to handle and visually less obtrusive than their porcelain predecessors.

Moulded onto high strength GRP rods, these insulators utilise Henley's unique EPDM dielectric cladding. This highly successful cladding has been proven around the world from deserts to arctic environments for more than 30 years. The material has outstanding pollution and weathering performance which, coupled with its non-flammability, also makes it ideal for tunnels and stations where natural rain-washing is not possible.

- **Network Rail Approval Number PA05/1245T**
- **Network Rail Standard RT/E/S/21082**
- **Direct replacement for porcelain: hollow or solid cores**
- **Less than 7mm deflection at maximum working loading of 528kg**
- **Unique Henley EPDM cladding material**
- **Lowest profile of any cantilever insulator in its class**
- **Supplied with malleable iron end fittings (aluminium on request)**
- **Light weight (17kg with malleable iron end fittings)**

T&D

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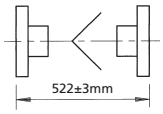
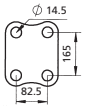
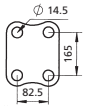
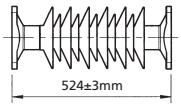
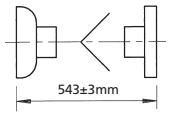
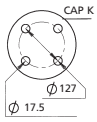
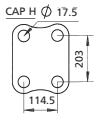
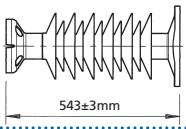
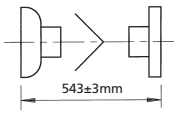
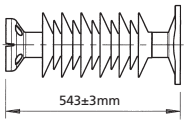
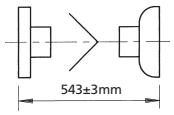
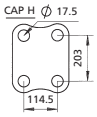
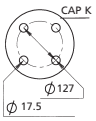
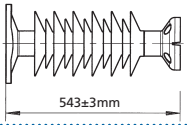
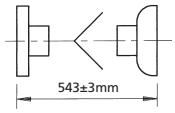
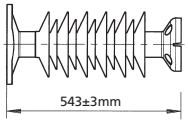
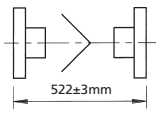
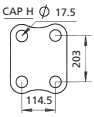
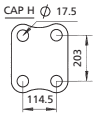
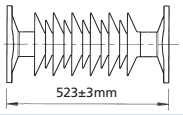
TT electronics

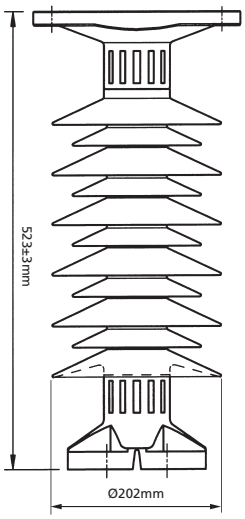
25kV AC Polymeric Railway Insulators

Product Code	Item No.	Shed Orientation	L/Hand E/F	R/Hand E/F	Type of Insulator
56145-38	A23				
56145-39	A26				
56145-40	A686				
56145-60	A27				
56145-61	A681				
56145-41	A964				

Electrical Data

Test	Value	Specification
Creepage (mm)	1423	IEC 815
Taut String (mm)	432	
Impulse Flashover (DRY)(kVp)	270	IEC 383:1983 BS137: 1982
Impulse Withstand (DRY)(kVp)	254	
AC 1 min. Flashover (DRY)(kV)	175	
AC 1 min. Withstand (DRY)(kV)	164	
AC 1 min. Flashover (WET)(kV) Vertical	141	
AC 1 min. Withstand (WET)(kV) Vertical	113	

All insulators are marked with their product code, manufacturer's identity and year/week production batch identity.



Mechanical Data

Test	Value	Specification
Min.Fail Cant. Load (kN)	30	WT Henley
Cant. Def.At Max.Cant.Working Load (mm)	8	
Min. Tensile Failing Load NM)	<100	
Min. Failing Torque (NM)	<400	

Routine Production Tests

Component	Test	Freq.	Specification
Moulded Substrate	Water Immersion/ Electrical	1%	BB.QA/P.1-A: 1988
Final Assembly	Mechanical	1%	50% SML for 1 min. 120% SML for 1 min. Pull to Fail

General Note The equipment detailed in this publication should be installed by a suitably qualified person. WT Henley Limited reserves the right to make changes in product specification without notice or liability. All information is subject to WT Henley's own data and is considered accurate at time of going to print.