

# Polymeric Tension Insulators

70kN / 20kN



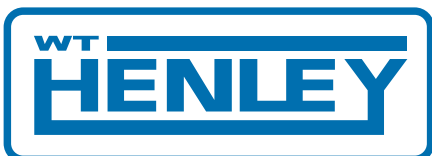
Rated at 15, 24 and 36kV, this range of polymeric insulators offers many benefits over traditional glass or porcelain insulators and includes several products which are designed to directly replace existing sets without the need to re-tension the line.

Moulded onto high strength GRP rods, these insulators utilise Henley's unique EPDM dielectric cladding material, which has given reliable service since the mid 1970's in a variety of applications including switchgear and surge arrestors, as well as tension and post insulators for power distribution and Railway use.


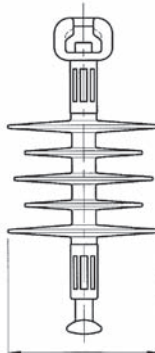

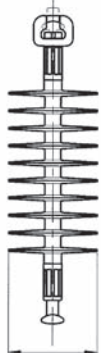
The lightweight, robust construction not only makes this range of insulators much easier to handle than conventional porcelain products, but also offers excellent impact and vandal resistance. Their smooth, compact profile also makes them less environmentally obtrusive.

Our many clients around the World can testify to the Reliability and Durability of our products. Our Tension Insulators have been installed in many Countries and in a variety of harsh environments stretching from Australia to Scandinavia, as well as by many of the Electricity Companies around the UK.

- **Lightweight construction**
- **Impact / vandal resistant**
- **Direct replacement for glass and porcelain sets available**
- **Unique cladding material with over 30 years of service history**
- **High pollution resistance**
- **A range of end fittings available (BS 3288 and others)**



# Composite Overhead Line Equipment

	 Ø99mm Shed Diameter	 Ø145mm Shed Diameter	 Ø99mm Shed Diameter	 Ø113mm Shed Diameter
<b>Product Shown</b>	<b>56145-09</b>	<b>56145-16</b>	<b>56145-18</b>	<b>56145-56</b>
Voltage rating	15kV	24kV	36kV	36kV (Extra creepage)
Creepage (mm)	465	609	943	1079
Taught String (mm)	179	224	306	323
Impulse Flashover (Dry) (kVp)	130	175	211	228
Impulse Withstand (Dry) (kVp)	125	165	200	215
AC 1 min. Flashover (Dry) (kV)	95	114	140	136
AC 1 min. Withstand (Dry) (kV)	85	105	132	128
AC 1 min. Flashover (Wet) (kV)	65	82	115	122
AC 1 min. Withstand (Wet) (kV)	55	70	104	103

Mechanical Load	End Fitting	Specification	Details	15kV	24kV	36kV	36kV Ext Creep
70kN	16 Ball – 16 Ball	BS 3288	<b>Product Code</b>	<b>56145-07</b>	<b>56145-58</b>	<b>56145-10</b>	AOR
			Coupling Length	270mm	270mm	408mm	
70kN	16 Ball – 16B Socket	BS 3288	<b>Product Code</b>	<b>56145-06</b>	<b>56145-16</b>	<b>56145-08</b>	<b>56145-56</b>
			Coupling Length	280mm A	280mm A	419mm B	419mm
70kN	16 Ball – 15/81 Open Hook	BS 3288	<b>Product Code</b>	<b>56145-17</b>	AOR	<b>56145-18</b>	AOR
			Coupling Length	318mm		470mm C	
70kN	16C Tongue – 16C Clevis	IEC 471	<b>Product Code</b>	<b>56145-13</b>	<b>56145-14</b>	<b>56145-15</b>	<b>56145-57</b>
			Coupling Length	296mm D	296mm D	434mm E	434mm
20kN	16 Ball – 4/88 Pigtail (140mm coupling)	BS 3288	<b>Product Code</b>	<b>56145-09</b>	AOR	AOR	AOR
			Coupling Length	355mm F			
20kN	16 Ball – 4/88 Pigtail (5" coupling)	BS 3288	<b>Product Code</b>	<b>56145-21</b>	AOR	AOR	AOR
			Coupling Length	349mm G			

Standard product configurations are shown. Other end fitting combinations are available on request (AOR)

Product Qualification	
Tests on Polymer Insulators	IEC 1109
Electrical Qualification	IEC 60383
Environmental Testing	IEC 1109 Annex C
Creepage Distance Ratios	IEC 815
Thermal Endurance	IEC 60216
Metalwork Protective Coating	BS EN ISO 1461
British Rail	RT/E/S/21082

Direct Replacement Opportunities	
Code	Directly Replaces:
<b>A</b>	2 discs, 140mm coupling
<b>B</b>	3 discs, 140mm coupling
<b>C</b>	3 discs, 5" coupling
<b>D</b>	2 discs, 146mm coupling
<b>E</b>	3 discs, 146mm coupling
<b>F</b>	1 disc, 140mm coupling
<b>G</b>	1 disc, 5" coupling

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**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.

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