End seal and lighted end seal

Both the E-100-E and E-100-L-E are accessible, re-entrable end seals, the E-100 without a light, the E-100-L with a signal light. Both end seals can be used with all Raychem BTV, QTVR, XTV, KTV or VPL industrial parallel heating cables. They are approved for use in hazardous areas. They are extremely rugged - made of a strong, moulded part with 4 mm wall thickness.

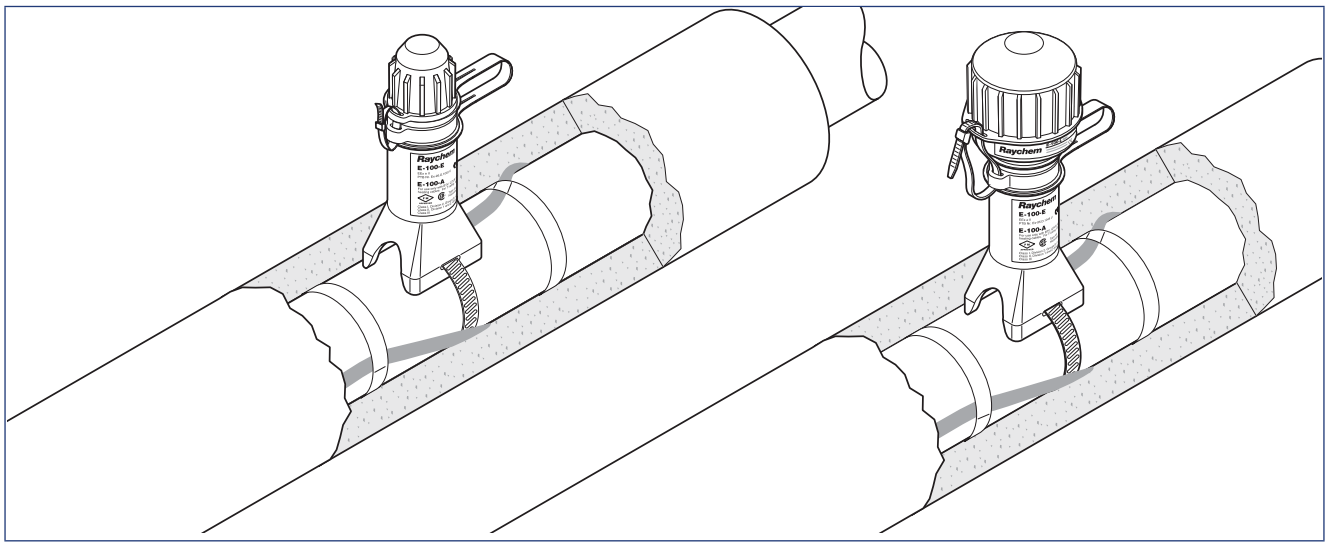
The heating cable is firmly kept in place by the integral strain relief.

Sealing is done twice. First a dry compartment for the heating cable is created, then a boot filled with a non-curing sealant (silicone free) is placed over the end of the heating cable inside the compartment.

The end seals are mounted on the pipe and project through the cladding.

The light module of the E-100-L-E uses an array of super-bright green LEDs for long life and excellent visibility from almost any angle. The robust industrial-grade electronics are encapsulated to reliably seal out moisture.

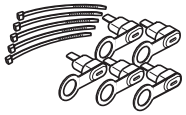
Extra sealant filled boots for the E-100-E end seal can be ordered separately.



	E-100-E	E-100-L-E
Kit contents		
	1 end seal 1 cable tie 1 polywater sachet 1 installation instruction	1 end seal with indicator light 1 cable tie 1 polywater sachet 2 spare crimps 2 crimps for VPL 1 installation instruction
Approval data		
Area of use	Hazardous or ordinary (indoors and outdoors)	
Approvals		
	PTB 09 ATEX 1060 U Ex II 2G Ex e II Ex II 2D Ex tD A21 IP66 IECEx PTB 09.0038U Ex e II Ex tD A21 IP66 Ex e II T* DNV Certificate No. E-8933 and E-8934	PTB 09 ATEX 1060 U Ex II 2G Ex e (e mb) II Ex II 2D Ex tD (tD mbD) A21 IP66 IECEx PTB 09.0038U Ex e (e mb) II Ex tD (td mbD) A21 IP66 Ex em II T* DNV Certificate No. E-8933 and E-8934

**For T-rating, see heating cable or design documentation*

This product also has all required approvals for use in Kazachstan, Russia and other countries. Contact your local Tyco Thermal Controls representative for more details.

	E-100-E	E-100-L-E
Product specifications		
Max. pipe temperature	Refer to heating cable specification (absolute maximum is 260°C)	
Max. operating voltage	480 V*	254 V
	** Extra conditions for safe use apply for voltages above 277 V. Please refer to the summary on page 170, the certificate or installation instructions for full details.*	
Ambient temperature range	–50°C to +56°C*	–40°C to +40°C
	** Extra conditions for safe use apply for ambient temperatures above +40°C. Please refer to the summary on page 170, the certificate or installation instructions for full details.*	
Min. installation temperature	–50°C	–50°C
Overall height	171 mm approx.	197 mm approx.
Outer diameter	46 mm approx. Usable with up to 100 mm thermal insulation	66 mm approx.
Ingress protection	IP66	IP66
Impact resistance	EN 60079-30-1, ≥ 7 joules	EN 60079-30-1, ≥ 7 joules
UV stability	No degradation after > 1000 h	No degradation after > 1000 h
Solvent resistance	Excellent	Excellent
Strain relief	> 250 N	> 250 N
Light source		
Type		Green LEDs
Voltage rating range		208-230 Vac, 50/60 Hz
Power consumption		< 2 W
Electromagnetic immunity/emissions		Complies with EN 50 082-2:1995, EN 50 081-1:1991
Vibration resistance		Complies with IEC 60068-2-6, 10-150 Hz, 20 m/s2
Shock resistance		Complies with IEC 60068-2-7, 50 g, 11 ms
Installation data		
Tools required	Cable knife, wire cutters, screwdriver	Cable knife, wire cutters, screwdriver, crimp tool (VIA-CTL-01), long nose pliers
Ordering details		
End seal		
Part description	E-100-E	E-100-L2-E
PN (Weight)	101255-000 (0.22 kg) Requires one pipe strap (not supplied)	726985-000 (0.63 kg) Requires one pipe strap (not supplied)
Accessories		
Small pipe adaptor	JBS- SPA, required for pipes ≤ 1" (DN 25), E 90515-000 (bag of 5 adaptors)	
Spare part		
Boot pack for E-100-E		
		
Part description	E-100-BOOT-5-PACK	
PN (Weight)	281053-000 (140 g)	
Pack size	5 sealant filled boots and 5 cable ties	

Summary of special conditions for safe use when using JBS, JBM, JBU and E-100 at ambient temperatures above +40°C or voltages above 254 Vac.

Type	Ambient temperature range and rated Voltage range	Special conditions of safe use
JBS-100-E JBM-100-E	—50°C to +40°C and/or rated voltages < 254 V	No additional requirements. Please refer to certificate.
JBS-100-L-E JBM-100-L-E	–40°C to +40°C and/or rated voltages < 254 V	No additional requirements. Please refer to certificate.
JBS-100-E JBM-100-E	–50°C to +56°C and/or rated voltages 254 V to 277 V	Additional conditions for use in environments with ambient temperatures exceeding +40°C and/ or rated voltages of 254 V • Use a power cable with continuous temperature resistance of minimum +90°C • Use a metallic power cable gland(s) (GL-33 or GL-34)
JBU-100-E	–50°C to +40°C and/or rated voltages < 254 V	Please refer to certificate
JBU-100-L-E	–40°C to +40°C and/or rated voltages < 254 V	Please refer to certificate
JBU-100-E	–50°C to +56°C and/or rated voltages 254 V to 277 V	Additional conditions for use in environments with ambient temperatures exceeding +40°C and/ or rated voltages of 254 V • Use a power cable with continuous temperature resistance of minimum +90°C • Use a metallic power cable gland(s) (GL-33 or GL-34) • Use a metallic connection kit for heating cable connection
E-100-E	–50°C to +56°C and/or rated voltages < 275 V Or < 110V for VPL1 Or < 254V for VPL2 Or < 480V for VPL4	Additional conditions for use in environments with ambient temperatures exceeding +40°C. Use metal tag plate with approval information (LAB-E-100-HT)
E-100-L-E	–40°C to +40°C and/or rated voltages < 275 V	Please refer to certificate
E-100-L-E	–40°C to +56°C	Additional conditions for use in environments with ambient temperatures up to +56°C use metal tag plate with approval information (LAB-E-100-HT)