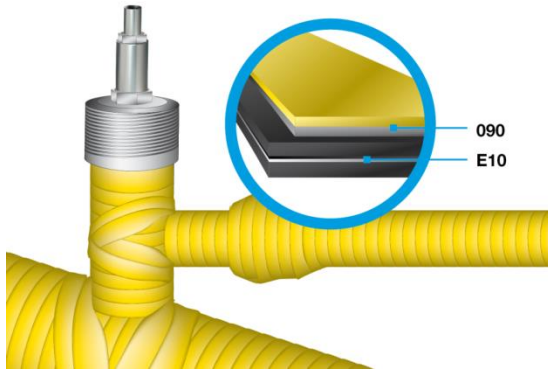


DENSOLEN[®]-E10/-090



Product information



Special advantages:

- ✓ Real co-extruded three-ply tape.
- ✓ Ideal for coatings in distribution networks.
- ✓ Outstanding formability offered by inner and outer tape.
- ✓ **B30**
EN 12068 Fulfills stress class B 30 in accordance with EN 12068.
- ✓ Approval by Gaz de France (FR) for stress class R (RV02).

Two-tape system for the field-joint coating of pipelines and pipeline components.

For a century now, DENSO Group Germany has been representing experience, quality and reliability for corrosion prevention and sealing technology. The success of the internationally leading corporation is based on the development of the "DENSO-Tape", which was already patented in 1927 as the first product worldwide for the passive corrosion prevention of pipelines. Since then, the DENSO Group Germany has been establishing and guaranteeing the highest quality standards with technically trend-setting products. Research, development and production take place exclusively in Germany. Our employees continuously implement safe and individual solutions in a personal cooperation with the customer.

Description

DENSOLEN[®]-E10/-090 is a durable corrosion prevention system for pipelines and pipeline components. DENSOLEN[®]-E10/-090 is optimized for the requirements in urban supply networks. The high flexibility and elasticity of **DENSOLEN[®]-E10** and **DENSOLEN[®]-090** permit a fast and safe application of the field-joint coating system on the pipeline components, such as T-fittings and house connection valves. The system is also ideally qualified for pipes with small nominal pipe diameter, even for tight construction site conditions. DENSOLEN[®]-E10/-090 fulfills the requirements for stress class **B 30** in accordance with EN 12068.

DENSOLEN[®]-E10/-090 has an approval by Gaz de France (France) for stress class R in accordance with the specifications RV02 (certificate No. 25).

Standard designation:

- EN 12068 – B 30



DENSOLEN[®]-E10 as inside tape, fulfills essentially the corrosion prevention of the encasement system. DENSOLEN[®]-E10 consists of a double-sided butyl rubber coating, which is applied to the PE carrier film. This three-layer design establishes an essentially gas and water tight encasement in the overlapping area of the tape through self-amalgamation of the upper and lower butyl rubber coating. The large tape

thickness of 1.0 mm permits an optimal coverage of the surface, also for uneven surfaces.

DENSOLEN[®]-090 is used as the outside tape in the encasement system. DENSOLEN[®]-090 is a flexible two-ply tape with a polyethylene outside layer and an inside butyl rubber layer, which amalgamates with the outside layer of the inside tape. DENSOLEN[®]-090 acts as mechanical protection layer for the corrosion prevention tape located on the inside.

Both **DENSOLEN[®]** tapes can be processed efficiently with the **DENSOMAT[®]** wrapping devices.

Typical product properties

Property	Unit	DENSOLEN®-E10 Typical value	DENSOLEN®-090 Typical value	Test method
Carrier film color	-	-	yellow	-
Butyl adhesive color inside	-	black	grey	-
Butyl adhesive color outside	-	black	-	-
Tape thickness	mm	≥1.0	≥0.4	ISO 4591 ASTM D1000
Carrier film thickness app.	mm	≥0.025	≥0.26	
Inside adhesive layer thickness app.	mm	≥0.5	≥0.14	
Outside adhesive layer thickness app.	mm	≥0.45	-	
Elongation at break	%	≥200	≥400	DIN 30672
Tape strength	N / cm	-	≥35	EN 12068

DENSOLEN®-E10/-090 with DENSOLEN®-HT Primer

Property	Unit	Typical value	Required value	Test method	
System design	Primer	DENSOLEN®-HT	-	-	
	Inner tape	DENSOLEN®-E10, 2 layers	-	-	
	Outer tape	DENSOLEN®-090, 2 layers	-	-	
Total thickness	mm	≥2.8	-	-	
Specific electrical insulation resistance	Ohm m ²	≥10 ¹⁰	≥10 ⁶	EN 12068	
Peel resistance +23°C (+73°F)	steel	N / cm	≥15	≥4	EN 12068
	PE factory coating	N / cm	≥10	≥2	EN 12068
Peel strength layer to layer	E10 / E10	N / cm	≥30	≥8	EN 12068
	E10 / 090	N / cm	≥20	≥8	
	090 / 090	N / cm	≥2	≥2	
Indentation resistance (residual layer thickness)	+23°C (+73°F) (1 MPa)	mm	≥1	≥0.6	EN 12068/ RV02
Impact resistance	J	≥10	≥8	EN 12068	
Cathodic disbondment resistance	mm	≤8	≤20	EN 12068	
Lap shear strength	on steel	N / cm ²	≥10	≥5	EN 12068

Ordering information and packaging

	Core diameter (mm)	Width (mm)	Tape length (m)	Tape area per roll (m ²)	Number of rolls	Content		
						Total tape area (m ²)	Total tape length (m)	App. Weight (kg)
DENSOLEN®-E10	41	30	12.5	0.375	18	6.75	225	9
		50	12.5	0.625	12	7.5	150	10
		100	12.5	1.25	6	7.5	75	10
DENSOLEN®-090	41	30	30	0.9	18	16.2	540	9
		50	30	1.5	12	18	360	10
		100	30	3.0	6	18	180	10

Additional dimensions available on request.

Storage

When stored in its original, unopened packaging, **DENSOLEN®-E10/-090** can be stored for at least 60 months after the manufacturing date.

Storage temperature: ≤ +50°C (+122°F)

Store in a dry location and do not rest anything against the front of the product.

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Our product information, our application recommendations and other product related documents are made for your convenience only.

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The user is responsible for checking the applications of the product and verifying its suitability for the intended use.

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