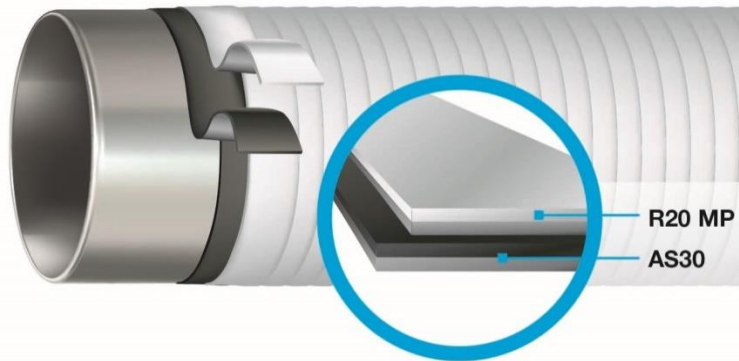


DENSOLEN®-AS30/-R20 MP



Product information



Special advantages:

- ✓ No spiral corrosion hazard as compared to a two-ply tape.
- ✓ **B50**
EN 12068 Fulfills EN 12068-B50.
- ✓ **12A-1**
ISO 21809-3 Fulfills ISO 21809-3, Type 12A-1.
- ✓ Compatible with factory coatings made of PE, PP, FBE, PU, CTE and bitumen.
- ✓ Outstanding tape elasticity and elongation at break.
- ✓ Cost-effective system with outstanding price/performance ratio.

Two-tape system for the corrosion prevention coating of metal pipes and pipelines in accordance with DIN 30672 and EN 12068.

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®-AS30/-R20 MP is a cold applied tape system for corrosion prevention of metal pipes and pipelines with outstanding economic and qualitative properties. Due to the innovative formula, the tapes grow completely together in the overlapping area and create a long-lasting hose-type encasement.

DENSOLEN®-AS30/-R20 MP fulfills the requirements of the impact resistance of class B 50 in accordance with EN 12068 and even the indentation resistance of class C 50.

DENSOLEN®-AS30/-R20 MP is basically impermeable for water vapor and oxygen and it is resistant against soil bacteria and electrolytes.

DENSOLEN®-AS30/-R20 MP is compatible with factory coatings made of PE, PP, FBE, PU, CTE and Bitumen.

The system **DENSOLEN®-AS30/-R20 MP** consists of:

■ DENSOLEN®- HT Primer

A solvent containing primer for corrosion prevention in combination with **DENSOLEN®** tapes. For the processing in hot environments, the **DENSOLEN®-MT25 Primer** can be used as an alternative. Please refer to the separate product data sheet **DENSOLEN®- Primer**.

■ DENSOLEN®-AS30

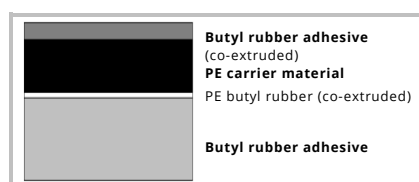
A real co-extruded 3-ply plastic tape made from stabilized polyethylene carrier materials with butyl rubber adhesive on both sides. DENSOLEN®-AS30 grows completely together in the overlapping area and creates a hose-type encasement, which

results in a reliable and durable corrosion protection.

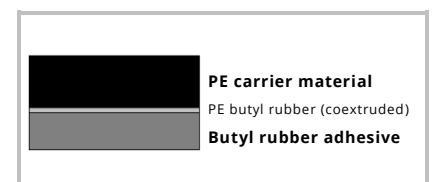
An outstanding connection between the adhesive and the carrier film is guaranteed by the co-extruded intermediate layer.

■ DENSOLEN®-R20 MP

A co-extruded two-layer plastic tape made from robust white polyethylene carrier film with a single side butyl rubber coating. An outstanding connection between the adhesive and the carrier film is achieved by the co-extruded intermediate layer. The butyl rubber adhesive layer grows completely together with the outside layer of **DENSOLEN®-AS30**.



Schematic cross section of DENSOLEN®-AS30



Schematic cross section of DENSOLEN®-R20 MP

Typical product properties

Property	Unit	DENSOLEN®-AS30 Typical value	DENSOLEN®-R20 MP Typical value	Test method
Carrier film color	-	Black	White	-
Butyl adhesive color inside	-	Gray	Black	-
Butyl adhesive color outside	-	Black	-	-
Total thickness	mm	≥ 0.5	≥ 0.5	ISO 4591 ASTM D1000
Carrier film thickness app.	mm	≥ 0.18	≥ 0.3	
Inside adhesive layer thickness app.	mm	≥ 0.24	≥ 0.2	
Outside adhesive layer thickness	mm	≥ 0.08	-	
Elongation at break	%	≥ 600	≥ 500	DIN 30672
Tensile strength	+23°C (+73°F) N / cm	≥ 65	≥ 65	EN 12068
Dielectric strength	kV / mm	≥ 40	≥ 50	ASTM D149

DENSOLEN®-AS30/-R20 MP with DENSOLEN®-HT Primer

Property	Unit	DENSOLEN®-AS30/-R20 MP Typical value		Required value	Test method		
Specific electrical insulation resistance	Ohm m ²	≥ 10 ¹¹		≥ 10 ⁶	EN 12068		
Volume resistivity	Ohm cm	≥ 10 ¹⁶		Not stated	ASTM D257		
Peel resistance metal/primer/tape	N / cm	+23°C (+73°F)	+50°C (+122°F)	≥ 4	≥ 0.4	EN 12068	
		≥ 15	≥ 2.0	Not stated	ASTM D1000		
		≥ 33	≥ 2.5				
Peel resistance layer to layer	N / cm	+23°C (+73°F)	+50°C (+122°F)	≥ 8	≥ 2	EN 12068	
		AS30 / AS30	≥ 22				≥ 4.0
		AS30 / R20 MP	≥ 22				≥ 3.5
		R20 MP / R20 MP	≥ 4				≥ 3.5
Indentation resistance - residual layer thickness for stamp load 1N / mm ² , stamp-Ø 5.65 mm	mm	+50°C (+122°F)		> 0.6	EN 12068		
		> 1.3 (fulfills class B)					
for stamp load 10 N / mm ² , stamp-Ø 1.8 mm		> 0.6 (fulfills class C)		> 0.6			
Impact resistance	J/mm	≥ 7.5 J/mm (≥ 15 J)		≥ 4	ISO 21809-3		
Cathodic disbondment resistance (radius)	mm	< 2		< 20	EN 12068		
Lap shear strength	N / cm ²	+23°C (+73°F)		5	EN 12068		
		on steel	≥ 8				
		on factory coating	≥ 8				
Water vapor permeability	g / m ² 24h	< 0.2		Not stated	ASTM E96		

DENSOLEN® tapes can be easily applied manually. The processing with the original DENSO MAT® wrapping devices is even more efficient. For DENSOLEN® tapes with width of > 50 mm, we recommend the use of the DENSO MAT® wrapping device to guarantee an excellent processing quality.

Ordering information and packaging

	Core diameter (mm)	Width [mm]	Tape length [m]	Tape area per roll (m ²)	Content per box			
					Number of rolls	Total tape area (m ²)	Total tape length (m)	App weight (kg)
DENSOLEN®-AS30	41	50	30	1.5	10	15	300	10
		100	30	3.0	5	15	150	10
		150	30	4.5	5	22.5	150	15
	78	100	70	7	3	21	210	13
		150	70	10.5	2	21	140	13
DENSOLEN®-R20 MP	41	50	30	1.5	12	18	360	11
		100	30	3.0	6	18	180	11
		150	30	4.5	6	27	180	17
	78	100	70	7	3	21	210	13
		150	70	10.5	2	21	140	13

Additional dimensions available on request.

Storage

When stored in its original, unopened packaging, DENSOLEN®-AS30/-R20 MP 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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02.2023