



First PN6 oriented pipe, intended for irrigation

Molecor has developed the first **PN6**⁽¹⁾ **oriented pipe**, the new **TR6**[®], intended for irrigation. This pipe has excellent properties and **stiffness levels superior** to other products available in the market with the same nominal pressure.

Thanks to its excellent physical and mechanical properties, upon analyzing equivalent thicknesses of **TR6**® and PVC-U **PN6** bar pipes, the former have a modulus of **elasticity 15% higher** compared to the latter, which makes the TR6 pipe exhibit higher levels of stiffness.

DN (mm)	90	110	125	140	160	200	250	315	400
Average RCE (kN/m ²)	7	7	6,5	6	5	5	5	5	5

TR6® is an **Oriented PVC** pipe with a PN6 working pressure. With the improvements provided by the molecular orientation, it achieves hydrostatic properties superior to those of PVC-U PN6.

Thanks to the orientation process, **TR6**® has a much **higher impact resistance** than traditional PVC-U pipes, **up to 2-3 times higher**.

Another of the improved characteristics of **TR6**® compared to PVC-U is its **hydraulic resistance**. Thanks to the orientation process, this pipe reaches values of **60MPa** compared to the 45MPa of PVC-U. In addition, the **fatigue behavior** of **TR6**® is **also higher**.

All **TR6**® pipes are manufactured following a strict **quality** control process that allows the detection of any imperfection that may occur in the extrusion process, guaranteeing the quality of the manufactured pipe at all times.



High impact resistance



Resistance to water hammer



Immune to corrosion

TR6® PVC-O pipes are **the most sustainable solution** on the market for **irrigation** applications, due to their **lower carbon footprint** as well as lower energy consumption throughout their useful life.





AENOR Product Certificate: n° 001/007636 according to UNE-EN 17176 n° 001/007635 according to ISO 16422



Reference	Nominal Diameter	Outside Diameter	Inside Diameter	Average Thickness	Nominal Pressure	Length (m)	Seal type
TR6090	90	90	85,2	2,4	6,3	6	Lip seal with blue
TR6110	110	110	104,1	3,0	6,3	6	PP+EPDM ring
TR6125	125	125	118,2	3,4	6,3	6	
TR6140	140	140	132,8	3,6	6,3	6	
TR6160	160	160	152,1	4,0	6,3	6	
TR6200	200	200	190,1	5,0	6,3	6	
TR6250	250	250	237,6	6,2	6,3	6	
TR6315	315	315	299,4	7,8	6,3	6	
TR6400	400	400	380,2	9,9	6,3	6	

TR6® PVC-O pipes are supplied in total lengths (including stop-marked length) of 6 meters. Inside diameters may be subject to variation according to manufacturing tolerances.

⁽¹⁾ The normal number is PN6.3 according to ISO 16422 and pipe marking. This document refers to PN6 for simplicity.



Packaging

Reference	Nominal Diameter	Length (m)	Pallets / Truck	Pipes / Pallet	m / Pallet	Pipes / Truck	m / Truck
TR6090	90	6	16	81	486	1.296	7.711
TR6110	110	6	12	76	456	912	5.472
TR6125	125	6	12	60	360	720	4.320
TR6140	140	6	12	45	270	540	3.240
TR6160	160	6	12	33	198	396	2.376
TR6200	200	6	12	23	138	276	1.656
TR6250	250	6	12	11	66	132	792
TR6315	315	6	8	13	78	104	624
TR6400	400	6	6	11	66	66	396

For other packages or lengths, please contact,

The combined height of the pallets should not exceed 2550 mm for a standard truck to be suitable. If this is exceeded, a Mega truck must be used.

The **better elastic behavior** of **TR6**® compared to PVC-U allows it to withstand large deformations of the inner diameter while immediately recovering its original shape.

The sealing gasket is composed of a PP ring and a synthetic rubber lip which makes it an integral part of the pipe, preventing it from rolling during assembly and displacement from its location, thus achieving a complete seal.



traceability



flexibility



recyclable

The TR6® pipe is manufactured with the technology developed by Molecor, which allows full traceability of the process guaranteed thanks to the M.E.S. (Manufacturing Execution System) process monitoring system with **4.0 connectivity**.

All pipes are marked to guarantee traceability:

	Marked
Manufacturing company and trademark	MOLECOR TR6®
License Number ⁽¹⁾	AENOR 🖸 001/001014
Material	PVC-O 315
Nominal diameter, min. thickness and pressure	DN-en-PN6,3
Overal service coefficient(C)	1.6
Date- Time- Batch	10/07/2025 11:50 180973
Reference standard	UNE-EN 17176 ISO 16422/

Comparison TR6® vs PVC-U TR6® PN6 bar PVC-U PN6 bar **Impact** Hydraulic Stiffness resistance Intrinsic Quality Control of Fatique orientation



rate in m/h







Easv connection light weight



over 100 years



These data may be subject to variation according to manufacturing tolerances.

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