

## TECHNICAL DATA SHEET

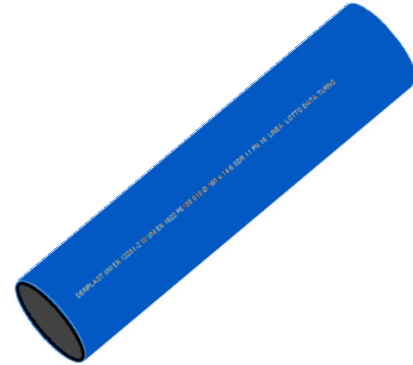
Product : High Density Polyethylene pipe

Raw material : **PE100**

Applications : Drinking water DVGW

Standard : **Ref. EN 12201-2 W**

Colour : Dual layer pipe  
Black inside with blue outside layer (TYPE 2)



Characteristics	Requirements	Test method
Density	$\geq 950 \text{ kg/m}^3$	EN ISO 1183
Hot shrinkage	$\leq 3\%$	EN ISO 2505
Resistance to internal pressure 100h/20°C/ $\sigma$ 12.0 MPa	$\geq 100 \text{ h}$	EN ISO 1167
Resistance to internal pressure 165h/80°C/ $\sigma$ 5.4 Mpa	$\geq 165 \text{ h}$	EN ISO 1167
Resistance to internal pressure 1000h/80°C/ $\sigma$ 5.0 Mpa	$\geq 1000 \text{ h}$	EN ISO 1167
Thermal Stability (O.I.T.) at 210°C	$\geq 20'$	ISO 11357-6
Carbon black content (%)	2.0 ÷ 2.5 by mass	ISO 6964
Carbon black dispersion	$\leq$ grade 3	ISO 18553
Carbon black appearance	A1 ÷ B	ISO 18553
Tensile stress at yield (50 mm/min) MPa	$\geq 19$	ISO 6259
Tensile elongation at break	$\geq 350\%$	ISO 6259
Effect on water quality	According to D.M. n. 174 of 6 <sup>th</sup> April 20004	

Optimal pressure authorized by EN 12201-2 is 25 bar with water at 20°C.  
Pressure correction factors according to the temperature of the fluid transported:

T = 20°C / F = 1.00

T = 30°C / F = 0.87

T = 40°C / F = 0.74

Other characteristic : Linear thermal expansion 0.18 ÷ 0.22 mm/m °C

### DIMENSION CHARACTERISTICS – EN ISO 312

DN (mm)	Ø EXT min (mm)	Ø EXT max (mm)	OVAL max (mm)	PN 10		PN 16	
				SDR17		SDR 11	
				Ep. Min	Ep. Max	Ep. Min	Ep. Max
20	20.0	23.3	1.2			2,0	2,3
25	25.0	25.3	1.2			2,3	2,7
32	32.0	32.3	1.3	2,0	2,3	3,0	3,4
40	40.0	40.4	1.4	2,4	2,8	3,7	4,2
50	50.0	50.4	1.5	3,0	3,4	4,6	5,2
63	36.0	63.4	1.6	3,8	4,3	5,8	6,5
75	75.0	75.5	1.8	4,5	5,1	6,8	7,6
90	90.0	90.6	1.8	5,4	6,1	8,2	9,2
110	110.0	110.7	2.2	6,6	7,4	10,0	11,1
125	125.0	125.8	2.5	7,4	8,3	11,4	12,7
140	140.0	140.9	2.8	8,3	9,3	12,7	14,1
160	160.0	161.0	3.2	9,5	10,6	14,6	16,2
180	180.0	181.1	3.6	10,7	11,9	16,4	18,2
200	200.0	201.2	4.0	11,9	13,2	18,2	20,2
225	225.0	226.4	4.5	13,4	14,9	20,5	22,7