Technical datasheet

PE 300 (Polyethylene/HD-PE)

Example of application
› fittings; pump body; container construction

Advantages	Disadvantages
› very good weldability › high surface hardness › dyed black: good UV-resistance	› bad anti-friction properties › low temperature

Basic information	Specification
Format	**round material:** 10 mm up to 700 mm available in 2 m length **Sheets:** 1 mm up to 100 m available in 2 m x 1 m

Physical properties	Standard term/Specification*	Unit	Testing method
Density	0.96	g/cm^3	ISO 1183
Moisture ingress	< 0.01	%	DIN EN ISO 62

Mechanical properties	Standard term/Specification*	Unit	Testing method
Tensile strength	22	MPa	DIN EN ISO 527
Elongation at break	> 50	%	DIN EN ISO 527
E-Module	900	MPa	DIN EN ISO 527
Notch toughness	19	kJ/m^2	ISO 179
Rochwellhardness	n.sp.	MPa	DIN EN ISO 2039

Thermal properties	Standard term/Specification*	Unit	Testing method
Thermal conductivity	0.38	W/(m·K)	DIN 52612
Linear thermal expansion coefficient based on a fixed initial length	1.8	K^{-1} · 10^{-4}	DIN 53752
	3.6	mm	At initial length of 1.000 mm and a temperature difference of 20 °C.
Max. operating temperature, long-term	80	°C	
Max. operating temperature, short-term	100	°C	
Min. operating temperature, long-term	- 50	°C	

Electrical properties	Standard term/Specification*	Unit	Testing method
Resistance	> 10^{14}	Ω·cm	DIN IEC 60093
Outer surface coefficient	10^{14}	Ω	DIN IEC 60093
Puncture resistance	47	kV/mm	DIN EN 60243

Legend
n.sp. = not specified

Should you require binding and exact values, please ask for the appropriate factory certificate. This may incur additional costs. Please note that all specifications are standard values only, which are subject to production-related fluctuations.
*Higher specification on request.

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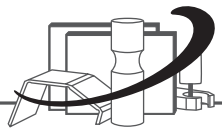

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noltewerk GmbH & Co. KG · Mergenthalerstr. 15 · 48268 Greven · t +49 (2571)16-0 · info@noltewerk.de · noltewerk.de