

PE-MDXc pipes

(physically cross-linked polyethylene pipes)

The especially flexible pipe for
heating and cooling applications

Applications:
surface regulation,
radiator connection

Special properties

- highly flexible and therefore especially easy to install; easy to adapt to demands on the construction site which results in quicker installation
- easy laying in particular when used for surface regulation
- resistant to temperature and pressure requirements in heating applications
- Oxygen tight according to DIN 4726; prevents incrustations in the heating system
- corrosion-free for reliable long service life
- high resistance to mechanical impacts, i. e. during transport and on-site
- encrustation free due to smooth surfaces; no cross-section constriction and constant flow speed
- high solvent and chemical resistance

Technical data »PE-MDXc pipes«

Test		Value	Unit	Standard
Degree of cross-linking		≥ 60	%	DIN 16894
Density	23°C	≈ 0,93	g/cm ³	DIN 16894/DIN 53479
Notch impact test according to Charpy	23°C	no failure	kJ/m ²	DIN EN ISO 179-1/2
Tensile strength	23°C	17 - 25	N/mm ²	DIN EN ISO 6259-1
Tenacity	23°C	22 - 26	N/mm ²	DIN EN ISO 6259-1
Elongation at break	23°C	350 - 600	%	DIN EN ISO 6259-1
Elastic modulus (E module)	23°C	500 - 800	N/mm ²	DIN 16894/DIN EN ISO 527-1
Stress crack resistance		no failure		ASTM D 1693
Moisture absorption		<0,01	mg (4d)	DIN EN ISO 62
Coefficient of linear expansion	0°C - 70°C	1,5 · 10 ⁻⁴	1/K	DIN 16894 / DIN 53752
Thermal conductivity		≤ 0,4	W/(K · m)	DIN 16894 / DIN EN 12664
Smallest bend radius		≥ 5 · D	mm	DIN 4724
Oxygen tightness*	40°C 80°C	≤ 0,32 ≤ 3,6	mg/(m ² · d) mg/(m ² · d)	DIN 4726 DIN 4726
Chemical resistance				DIN 8075, Beiblatt 1

* For radiator connection and surface regulation applications.
All values are guide values.

PE-MDXc pipe according to DIN 16894 · oxygen-impermeable according to DIN 4726

Application area heating							
PE-MDXc pipe measurement				operating conditions according to DIN 4724			
				Class 4		Class 5	
d _n mm	e _n mm	S- value	SDR- value	T _{max} °C	pressure bar	T _{max} °C	pressure bar
10,5	1,25	4	9	70	4	90	4
12	2	2,5	9	70	4	90	4
14	2	4	9	70	4	90	4
16	2	4	9	70	4	90	4
17	2	4	9	70	4	90	4
18	2	4	9	70	4	90	4
20	2	5	11	70	4	90	4
25	2,3	5	11	70	4	90	4

d_n = outer diameter
e_n = wall thickness
S = nominal pipe serial number according to ISO 4065
SDR = standard dimension ratio, allocation of SDR values according to DIN 16895

