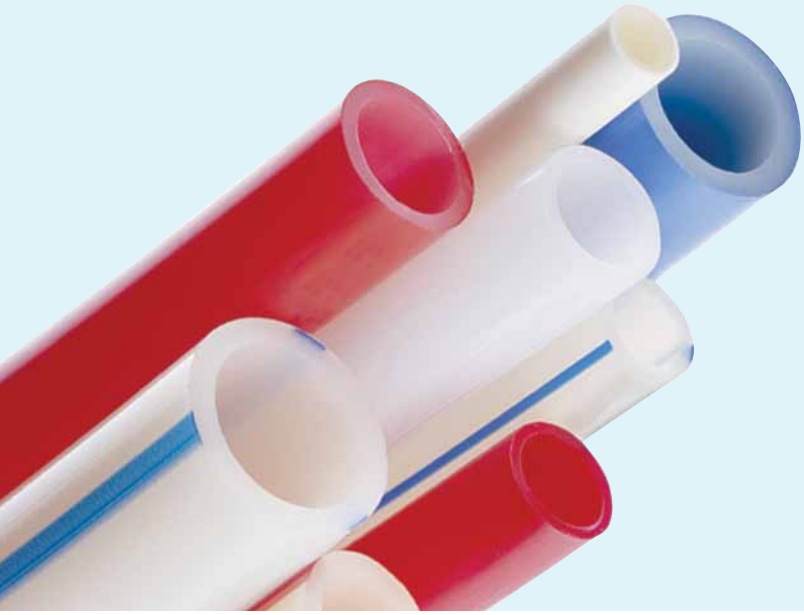
PE-HDXc pipes

(physically cross-linked polyethylene pipes)



Applications:
Tap water installations,
radiator connections and
surface regulation

Special properties

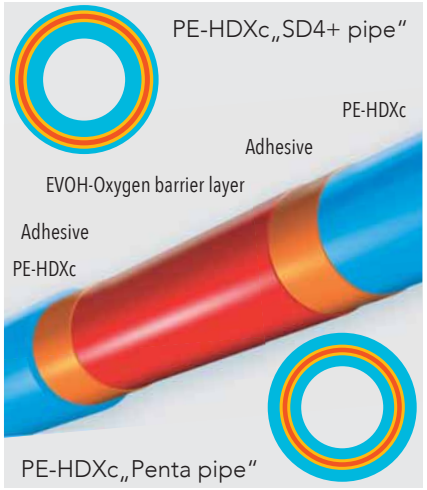
- flexible and therefore easy to install; easy to adapt to demands on the construction site which results in quicker installation
- resistant to temperature and pressure requirements in drinking water and heating applications
- Oxygen tight according to DIN 4726 in heating systems; prevents incrustations in the heating system
- corrosion-free for reliable long service life
- hygienic and material neutral, even if high pH value fluctuations in drinking water should occur
- encrustation-free due to smooth surfaces; no cross-section constriction and constant flow speed
- high resistance of PE-HDXc pipes to mechanical impacts, i.e. during transport and on-site
- high solvent and chemical resistance

HEWING

Technical data »PE-HDXc pipes«

Test		Value	Unit	Standard
degree of cross-linking	23°C	≥ 60	%	DIN 16892
density	23°C	≈ 0,94	g/cm³	DIN 16892/DIN 53479
flexural impact strength according to Charpy	23°C	no failure	kJ/m²	DIN EN ISO 179-1/2
tensile strength	23°C	24 – 30	N/mm²	DIN EN ISO 6259-1
tenacity	23°C	24 – 26	N/mm²	DIN EN ISO 6259-1
elongation at break	23°C	400 – 600	%	DIN EN ISO 6259-1
elastic modulus (Emodule)	23°C	600 – 800	N/mm²	DIN 16892/DIN EN ISO 128
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	$1,5 \cdot 10^{-4}$	1/K	DIN 16892 / DIN 53752
thermal conductivity		≤ 0,41	W/(K · m)	DIN 16892 / DIN EN 12664
smallest bend radius		≥ 5 · D	mm	DIN 4726
Oxygen tightness*	40°C 80°C	≤ 0,32 ≤ 3,6	mg/(m² · d) mg/(m² · d)	DIN 4726 DIN 4726
chemical resistance				DIN 8075, supplementary sheet 1

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



Application area tap water installation

PE-HDXc pipe measurements				operating conditions according to DIN EN ISO 15875-1			
				Class 1		Class 2	
d_n mm	e_n mm	S-value	SDR-value	T_{max} °C	pressure bar	T_{max} °C	pressure bar
12	1,8	3,2	7,4	80	10	80	10
16	2,2	3,2	7,4	80	10	80	10
20	2,8	3,2	7,4	80	10	80	10
25	3,5	3,2	7,4	80	10	80	10
32	4,4	3,2	7,4	80	10	80	10
40	5,5	3,2	7,4	80	10	80	10

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 16893 bzw. DIN EN ISO15875-2

Application area heating

PE-HDXc pipe measurements				operating conditions according to DIN EN ISO 15875-1			
				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	8	90	8
12	2	3,2	7,4	70	10	90	10
14	2	3,2	7,4	70	10	90	10
16	2	4	9	70	8	90	8
17	2	4	9	70	8	90	8
18	2	4	9	70	8	90	8
20		5	11	70	8	90	6
25	2,3	5	11	70	8	90	6

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 16893 bzw. DIN EN ISO15875-2