

Product specification:

Product range	16mm - 630mm
Pressure rating	Pn 6 to pn 16
Production unit length	16mm - 160mm (coils)
	16mm - 630 mm (12 meter bars)

Technical Specification:

Polymer data	Pe 100	Unit	Test method
Density at 23 °c	0.966	Gr/cm ³	Iso 1183
Viscosity number	360	Cm ³ /gr	Iso 1628 -3
Mfr 190 / 5 kg	0.22	Gr/ 10 min	Iso 1133
<i>Mechanical properties</i>			
Yield stress	23	Mpa	Iso 527
Elongation at yield	9	%	Iso 527
Tensile modulus	900	Mpa	Iso 527
Notched impact strength	26	Kj/m ²	Iso 179 /1ea
23° c			
20° c	13	Kj/m ²	Iso 179 /1ea
<i>Other properties</i>			
Oxidation - induction time at 210 °c	≥20	Min	En 728
Carbon black content	2.3± 0.2	%	Iso 6964
Carbon black dispersion	≥3	-----	Iso 18553
Mrs minimum required strength	>10	Mpa	Iso tr9080
Resistance to s.c.p (slow crack	>3000	H	En 33479
Propagation) 4.6 mpa 80 c notched			
Resistance to r.c.p (rapid crack	>25	Bar	Iso dis 13477
Propagation s4 test 110/10mm . 0 °c			
Elongation at break	350	%	En iso 6259
Linear thermal expansion		%	En 638
Specific thermal capacity		C -1	Astm d 696 (20-60° c)
<i>Electrical properties</i>			
Electric strength	>20	Kv/mm	Bs 2782 201 b
Volume resistively	>10 ¹³	Ω m	Bs 2782 201 a
Surface resistively	>10 ¹⁹	Ω	Bs 2782 201 a
Relative permittivity	2.6	-	Bs 2067 (1 to 20 mhz)
Loss tangent	3 x 10 ⁻⁴		Bs 2067

Dimensional characteristics HDPE PE-100
(outside diameter, wall thickness, weight/meter)

Nominal Outside Diameter od Mm	Sdr					
	Sdr 26		Sdr 17		Sdr 11	
	Nominal pressure					
	Pn 6		Pn 10		Pn 16	
	E_n	Weight / meter	E_n	Weight / meter	E_n	Weight / meter
16	---	---	---	---	---	---
20	---	---	---	---	---	---
25	---	---	---	---	---	---
32	---	---	2.0	---	2.0	0.29
40	---	---	2.4	0.31	4.2	0.45
50	2.0	0.29	3.0	0.47	5.2	0.70
63	2.5	0.48	3.8	0.76	6.5	1.10
75	2.9	0.65	4.5	1.07	7.6	1.54
90	3.5	0.93	5.4	1.53	9.2	2.23
110	4.2	1.39	6.6	2.28	11.1	3.30
125	4.8	1.80	7.4	2.90	12.7	4.27
140	5.4	2.26	8.3	3.64	14.1	5.34
160	6.2	2.95	9.5	4.75	16.2	7.00
180	5.9	3.72	10.7	6.00	18.2	8.83
200	7.7	4.60	11.9	7.39	20.2	10.90
225	8.6	5.83	13.4	9.38	22.7	13.79
250	9.6	7.20	14.8	11.48	25.1	17.03
280	10.7	9.03	16.6	14.43	28.1	21.32
315	12.1	11.42	18.7	18.27	31.6	27.04
355	13.6	14.51	21.1	23.26	35.6	34.27
400	15.3	18.42	23.7	29.40	40.1	43.53
450	17.2	23.31	26.7	37.26	45.1	55.17
500	19.1	28.78	29.7	46.05	50.1	68.04