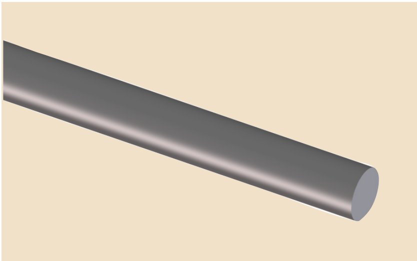
Datasheet

Bekaert

Pre-stressing wire

Long lasting solution with optimal strength



General description

The characteristics of our high strength, low relaxation PC wire comply with the prEN 10138-2 standard. All wires can be smooth or indented and coated with Zinc, Bezinal® or Bezinal®3000.

Application

Our pre-stressing wire can be used in prestressed concrete elements such as railway sleepers, precast beams, concrete masts.

Technical specifications

Steel designation		Nominal [a]				Specified			
Steel name	Steel number	Diameter [b] d mm	Tensile strength Rm MPa	Cross-sectional area [c] Sn mm2	Mass per meter [c] M g/m	Mass tolerance per meter %	Minimum breaking strength Fm kN	Maximum breaking strength Fm, max kN	Yield strength at 0.1 % elongation Fp0.1 kN
Y1570C	1.1350	5,0	1 570	19,6	153,1	±2	30,8	35,4	27,1
		6,0		28,3	221,0		44,4	54,1	39,1
		7,0		38,5	300,7		60,4	69,5	53,2
		8,0		50,3	392,8		79,0	90,9	69,5
Y1620C	1.1349	4,5	1 620	15,9	124,2	±2	25,8	29,7	22,7
		7,1		39,7	310,1		64,3	73,9	56,6
Y1670C	1.1351	4,0	1670	12,6	98,4	±2	21,0	24,2	18,5
		5,0		19,6	153,1		32,7	37,6	28,8
		5,5		23,8	185,9		39,7	45,7	34,9
		6,0		28,3	221,0		47,3	54,4	41,6
		6,5		33,2	259,3		55,4	63,7	48,8
		6,9		37,4	292,1		62,5	71,9	55,0
		7,0		38,5	300,7		64,3	73,9	56,6
		7,5		44,2	345,2		73,8	84,9	64,9
		8,0		50,3	392,8		84,0	96,6	73,9

a The standard modulus of elasticity (E) is 205 GPa (kN/mm^2)
b One % of the nominal diameter in plain wires are oval.
c The nominal mass per meter is calculated from the nominal cross-sectional area and a density of 7,81 kg/dm^3.
d Please note that the minimum load at 1% extension force only apply to 87% of the Y1570C grade wires when Ø = > 8mm. For Y1860C, 89% applies to all diameters and 88% applies to all other grades and diameters.

Steel designation		Nominal [a]				Specified			
Steel name	Steel number	Diameter [b] d mm	Tensile strength Rm MPa	Cross-sectional area [c] Sn mm2	Mass per meter [c] M g/m	Mass tolerance per meter %	Minimum breaking strength Fm kN	Maximum breaking strength Fm, max kN	Yield strength at 0.1 % elongation Fp0.1 kN
Y1770C	1.1352	4,0	1 770	12,6	98,4	±2	22,3	25,6	19,6
		4,5		15,9	124,2		28,1	32,3	24,7
		5,0		19,6	153,1		34,7	39,9	30,5
		5,5		23,8	185,9		42,1	48,4	37,0
		6,0		28,3	221,0		50,1	57,6	44,1
		7,0		38,5	300,7		68,1	78,3	59,9
Y1860C	1.1353	4,0	1 860	12,6	98,4	±2	23,4	26,9	20,8
		5,0		19,6	153,1		36,5	42,0	32,5
		6,0		28,3	221,0		52,6	60,5	46,8
		7,0		38,5	300,7		71,6	82,3	67,7

a The standard modulus of elasticity (E) is 205 GPa (kN/mm^2)
b One % of the nominal diameter in plain wires are oval.
c The nominal mass per meter is calculated from the nominal cross-sectional area and a density of 7,81 kg/dm^3.
d Please note that the minimum load at 1% extension force only apply to 87% of the Y1570C grade wires when Ø = > 8mm. For Y1860C, 89% applies to all diameters and 88% applies to all other grades and diameters.

Available packaging

Coil dimensions

Inner diameter	1 800 mm (min.)
Outer diameter	2 300 mm (max.)
Weight	1 000 - 2 000 kg

Customized packaging dimensions available upon request.

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