

PC WIRE

STANDARD		NOTATION	NOMINAL DIA.	DIAMETER TOLERANCE	CROSS SECTION AREA		NOMINAL WEIGHT		MIN. TENSILE STRENGTH	MIN. BREAKING LOAD	MIN. PROOF LOAD		REVERSE BENDS		MIN. ELONGATION	LOW RELAXATION			TIME	REMARK		
					mm. ²	TOLERANCE	kg/1000m.	TOLERANCE			0.1%	0.2%	Min Number	Radius (mm)		%	MIN YIELD STRENGTH (kN)	INITIAL FORCE AT				
	TYPE		mm.	mm.	mm. ²	TOLERANCE	kg/1000m.	TOLERANCE	(N/mm ²)	kN.	kN.	kN.	Min Number	Radius (mm)	%	(kN)	60%	70%	80%	hrs.		
ASTM A 421/ A421M -2015	-	TYPE BA	4.98	± 0.05					1655	33.6						30.2				1000	* Initial force (70% or 80%) of min. tensile strength	
			6.35	± 0.05					1655	52.4						47.2						
			7.01	± 0.05					1620	62.5						56.3						
		TYPE WA	4.88	± 0.05	-	-	-	-	1725	32.3	-	-	-	-	4.0	29.1	-	2.5% (Max.)	3.5% (Max.)			
			4.98	± 0.05					1725	33.6						30.2						
			6.35	± 0.05					1655	52.4						47.2						
7.01	± 0.05					1620	62.5							56.3								
BS 5896 :2012	1670	-	4		12.6		98.4	±2.0	1670	21.0	18.5			10					1000	* Initial force (70% or 80%) of actual breaking load		
	1770		4		12.6		98.4	±2.0	1770	22.3	19.6		4 for	10								
	1620		4.5		15.9		124.2	±2.5	1620	25.8	22.7		Plain wire	15								
	1670		5		19.6		153.1	±3.1	1670	32.7	28.8	-		15								
	1770		5		19.6		153.1	±3.1	1770	34.7	30.5		3 for	15	3.5	-	-	2.5% (Max.)			4.5% (Max.)	
	1670		6		28.3		221.0	±4.4	1670	47.3	41.6		Indented &	15								
	1770		6		28.3		221.0	±4.4	1770	50.1	44.1		Ribbed Wire	15								
1670	7		38.5		300.7	±6.0	1670	64.3	56.6			20										
JIS G 3536 :1999	-	SWPR1 and SWPD1	4	± 0.04	12.57		98.7			21.1		18.6			3.5				1000	* Initial force (70%) of min. tensile strength		
			5	± 0.05	19.64		154.0			31.9		27.9			4.0							
			6	± 0.05	28.27		222.0			44.1		38.7			4.0							
			7	± 0.05	38.48		302.0			58.3		51.0			4.5			2.5% (Max.)				
			8	± 0.06	50.27		395.0			74.0		64.2			4.5							
9	± 0.06	63.62		499.0			90.2		78.0			4.5										
AS/NZS 4672.1.2007	1670	STRESS RELIEVED WIRE	4		12.6		98.9	±2.0	1670	21.0	17.5	17.9		10					1000	* Initial force (60% , 70% or 80%) of min. breaking load		
	1770		4		12.6		98.9	±2.0	1770	22.3	18.5	19.0		10								
	1670		5		19.6		154.0	±3.1	1670	32.7	27.2	27.8		4 for	15							
	1770		5		19.6		154.0	±3.1	1770	34.7	28.8	29.5		Plain wire	15							
	1670		6		28.3		222.0	±3.7	1670	47.3	39.3	40.2			15							
	1770		6		28.3		222.0	±3.7	1770	50.1	41.6	42.6		3 for	15	3.5	-	1.0% (Max.)			2.0% (Max.)	3.0% (Max.)
	1570		7		38.5		302.0	±4.3	1570	60.4	50.1	51.3		Indented &	20							
	1470		8		50.3		395.0	±5.9	1470	72.9	60.5	62.0		Ribbed Wire	20							
	1570		8		50.3		395.0	±5.9	1570	79.0	65.6	67.1			20							
1670	8		50.3		395.0	±5.9	1670	84.0	69.7	71.4			20									
1470	9		63.6		499.0	±7.2	1470	93.5	74.8	76.7			25									
Brazil ABNT NBR 7482 2008 E for notched PC Wires	1770	CP-175	4		12.6		98.7	±2.0	1720	21.0		18.9		30					1000	Initial force 80% of breaking load		
	1770	CP-175	5		19.6		154.0	±3.1	1720	33		29.7		30			NA	NA			3.0% (Max)	
	1770	CP-175	6		28.3		222.0	±3.7	1720	47.7		40.6		30								
	1670	CP-170	7		38.5		302.0	±4.3	1668	63.3		53.8		40								
											Reduction of area		TORSION TEST									
ASTM A 648-12	1740	Stress relieve wires CLASS III	4.88	± 0.05					1530	32.5 to 36.3		35%		10								
	1650		6.35	± 0.05					1450	52.4 to 58.9		30%		8						70% of min breaking load		
	1520		7.92	± 0.05					1390	75.2 to 85.4		30%		7								