



THE SIAM INDUSTRIAL WIRE CO., LTD.

PE UNBONDED LOW RELAXATION

SPECIFICATION OF PC STRAND		NOMINAL DIAMETER	DIAMETER TOLERANCE	NOMINAL AREA	NOMINAL WEIGHT	WEIGHT TOLERANCE	PITCH	MINIMUM BREAKING LOAD	MINIMUM YIELD LOAD			MINIMUM ELONGATION	1,000-HR. RELAXATION (% MAX.)
STANDARD	GRADE	mm.	mm.	mm. ²	kg./1,000 m.	%	% Diameter	kN.	kN.			%	INITIAL LOAD (80%)
									0.1%	0.2%	1.0%		
TIS 420 - 1997	1 860	12.70	-	98.70	774	+4/-2	12-18	184.00	151.00	156.00	-	3.5	4.5 (B)
		15.20	-	139.00	1,101			259.00	212.00	220.00	-		
AS/NZS 4672 - 2007	1 870	12.70	-	98.70	774	+4/-2	12-18	184.0	151.0	156.0	-	3.5	3.5 (B)
	1 750	15.20	-	143.00	1,122			250.0	205.0	212.0	-		
	1 830	15.20	-	143.00	1,122			261.0	214.0	222.0	-		
ASTM A416 - 2006	1 725	12.70	+/-0.4	92.90	730	-	12-16	160.10	-	-	144.10	3.5	3.5 (B)
		15.20	+/-0.4	139.40	1,094	-		240.20	-	-	216.20		
	1 860	12.70	+0.65/-0.15	98.70	775	-	12-16	183.70	-	-	165.30	3.5	3.5 (B)
		15.24	+0.65/-0.15	140.00	1,102	-		260.70	-	-	234.60		
BS 5896 - 1980	Super	12.90	+0.4/-0.2	100.00	785	+4/-2	12-18	186.00	158.00	-	163.00	3.5	4.5 (B)
		15.70	+0.4/-0.2	150.00	1,180			265.0	225.0	-	233.0		
pr EN 10138 - 2004	Y1770S7	12.90	-	100.00	781	+2/-2	14-18	177.00	152.00	-	-	3.5	4.5 (A)
		15.20	-	139.00	1,086			246.00	212.00	-	-		
		15.70	-	150.00	1,172			266.0	229.0	-	-		
	Y1860S7	12.90	-	100.00	781	+2/-2	14-18	186.00	160.00	-	-	3.5	4.5 (A)
		15.20	-	139.00	1,086			259.00	223.00	-	-		
		15.70	-	150.00	1,172			279.0	240.0	-	-		
JIS G 3536 - 1999	SWPR7AL	15.20	+0.4/-0.2	138.70	1,101	+4/-2	12-18	240.00	-	204.00	-	3.5	INITIAL LOAD (70%) 2.5 (B)
	SWPR/BL	12.70	+0.4/-0.2	98.71	774	+4/-2	12-18	183.00	-	156.00	-	3.5	2.5 (B)
		15.20	+0.4/-0.2	138.70	1,101			261.00	-	222.00	-		

(A) = PERCENTAGE OF ACTUAL BREAKING LOAD

(B) = PERCENTAGE OF MINIMUM BREAKING LOAD

Standard specification of sheathing	Outside Diameter of Sheath mm. (inch.)	Thickness of Sheath mm. (inch.)	Weight of Grease g./m. (oz./ft.)	Unit weight of Tendon g./m. (lb./ft.)
12.70 mm. (1/2 inch.)	15.70 (0.62)	1.0 (0.040)	32 (0.34)	850 (0.57)
12.90 mm. (1/2 inch.)	15.90 (0.63)	1.0 (0.040)	32 (0.34)	870 (0.59)
15.20 mm. (6/10 inch.)	18.00 (0.71)	1.0 (0.040)	45 (0.48)	1,230 (0.83)
15.70 mm. (6/10 inch.)	18.20 (0.72)	1.0 (0.040)	45 (0.48)	1,280 (0.86)

Properties of plastic sheath	Testing method	Value
Tensile strength (kg./sq.cm.)	ASTM D638	350
Elongation (%)	ASTM D638	500
Stiffness (kg./sq.cm.)	ASTM D747	11000
Softening point (°C)	ASTM D1525	125
Hardness (Shore D)	ASTM D2240	64

Properties of grease	Testing method	Value
Consistency at 25 °C	ASTM D217	365
Dropping Point (°C)	ASTM D586	181
Free Alkali (%wt.)	IP 37	0
Salt Spray Test	ASTM B117	96