

# Test Ropes

available at Gigasense AB, for Calibration and Testing of **PIAB RTM** – Rope Tension Meter - in the 200 kN Tension Testing Machine

		Steel						
Rope No.)	Rope Ø (mm)	Rope construction	Wire Ø (mm)	Rope Area (mm <sup>2</sup> )	Rm minimum (N/ mm <sup>2</sup> )	Min Breaking Load (kN)	Max Test Load at PIAB (kN)	Notes
047	6.0	1x7	2.0	20.6	1380	28	11	
001	6.4	1x7	2.1	24	1170	28	11	
002	7.3	1x7	2.4	33	1240	41	16	
003	9.2	1x7	3.1	52	1300	68	27	
004	9.8	1x7	3.3	59	1340	79	31	
005	10.6	1x7	3.5	68	1320	90	36	
006	11.5	1x7	3.8	80	1320	106	42	
007	12.1	1x7	4.0	89	1320	118	47	
008	13.1	1x7	4.3	105	1300	136	54	
009	12.5	1x7	4.2	95	1730	164	65	High Tensile
010	15.3	1x7	5.1	139	1670	232	93	High Tensile
011	10.0	7x7 + Plastic cover	1.1	46	1480	68	27	Norselay
012	6.0	1x19	1.2	21	1240	26	10.5	
013	9.0	1x19	1.8	49	1280	62	25	
014	10.6	1x19	2.2	68	1280	86	34	
015	13.4	1x19	2.7	109	1280	140	56	
016	15.4	1x19	3.1	142	1310	186	74	
017	16.0	1x19	3.2	153	1320	202	81	
018	17.7	1x19	3.5	185	1300	241	96	
019	21.8	1x19	4.3	280	1340	374	149	
057	12.0	1x37 1.75		86	1350	116	46	
020	18.0	1x37	2.5	190	1200	225	90	
058	20.0	1x37	2.9	239	1200	286	114	
022	21.2	1x37	3.1	270	1280	344	137	



Rope No.)	Rope Ø (mm)	Rope construction	Wire Ø (mm)	Rope Area (mm <sup>2</sup> )	Rm minimum (N/ mm <sup>2</sup> )	Min Breaking Load (kN)	Max Test Load at PIAB (kN)	Notes
053	16.0	7x19 Python		117.3	1960	229.9	<b>91</b>	Pfeifer Python 6FV
054	18.0	7x19 Python		144.4	1960	283.1	<b>113</b>	Pfeifer Python 6FV
055	20.0	7x19 Python		175.0	1960	342.9	<b>137</b>	Pfeifer Python 6FV
056	22.0	7x19 Python		208.5	1960	408.6	<b>163</b>	Pfeifer Python 6FV
062	10.0	6x36+ core		39.3	1770	58	<b>23</b>	216 wires
042	13.0	6x36+ core		66.4	1120	74	<b>29</b>	216 wires
060	24.0	CASAR Turboplast		299	1770	455	<b>182</b>	Multicore 8 outer strands
061	16.0	8x ca19+W		135	1680	226	<b>90</b>	Multicore 8 outer strands

	<b>Stainless Steel</b>	
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201	8.5	1x12	2.2	42	1000	42 (1000)	<b>16</b>	
202	2.0	1x19	0.4	2.3	1300	3.0	<b>1.2</b>	
203	4.0	1x19	0.8	9.5	1300	12	<b>4.8</b>	
224	6.0	1x19	1.2	21.4	1000	21	<b>8.5</b>	
204	7.0	1x19	1.4	29	1300	36	<b>12</b>	
205	8.0	1x19	1.6	37	1000	37	<b>15</b>	
206	10.0	1x19	2.0	59	1000	60	<b>24</b>	
221	12.0	1x19	2.45	85.4	1000	85	<b>34</b>	
207	14.5	1x19	2.9	125	1000	127	<b>50</b>	
222	16.0	1x19	3.25	151	1000	151	<b>60</b>	
226	19.0	1x19	3.9	214	1000	214	<b>85</b>	
223	20.0	1x19	4.1	237	1000	237	<b>94</b>	

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217	8.0	7x7	0.85	28.1	1300	36.1	<b>14</b>	(6x7+IWS)
208	9.5	6x7+core	0.95	32	1000	33	<b>13</b>	(6x7+FC)
218	6.0	7x19	0.38	15	1000	15	<b>6</b>	(6x19+IWS)
219	8.0	7x19	0.50	26	1000	26	<b>10</b>	(6x19+IWS)
220	8.5	7x19	0.53	30	1000	30	<b>12</b>	(6x19+IWS)
209	12.0	7x19	0.70	59	1000	59	<b>24</b>	(6x19+IWS)
228	12.5	7x19	0.75	65	1000	65	26	(6x19+IWS)
210	12.0	1x37	1.8	86.6	1000	86	34	
211	16.0	1x37	2.4	153	1000	153	<b>61</b>	
225	18.0	1x37	2.7	194	1000	194	<b>77</b>	
212	20.0	1x37	3.0	239	1000	239	<b>95</b>	
213	24.0	1x37	3.5	344	1000	350	<b>140</b>	
227	22.0	1x61	2.5	285	1000	285	<b>114</b>	
214	26.0	1x61	3.0	424	1000	399	<b>159</b>	
228	28.0	1x61	3.2	490	1000	490	<b>196</b>	
215	30.0	1x61	3.4	540	1000	550	<b>220</b>	
216	32.0	1x91	3.0	640	1000	640	<b>256</b>	
229	36.0	1x91	3.4	825	1000	825	<b>330</b>	

## Aluminium + Steel (Al + Fe)

Rope No.)	Rope Ø (mm)	Rope construction	Wire Ø (mm)	Rope Area (mm <sup>2</sup> )	Rm minimum (N/ mm <sup>2</sup> )	Min Breaking Load (kN)	Max Test Load at PIAB (kN)	Notes
301	10.1	7xAl 1xFe	3.35	62		18	<b>7</b>	
302	14.0	7xAl 1xFe 30 (2.1)						
303	16.5	12xAl 7xFe	3.3	100 Al 60 Fe		85	<b>34</b>	
304	16.6	30xAl 7xFe	2.35 Fe 2.35 Al	130 Al 30 Fe		56	<b>22</b>	
305	32.0	42xAl 7xFe	4.4 / 2.5	565Al 32Fe		132	<b>53</b>	

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306	21.0	1x61	2.24	240					
307	23.6	Dove 26xAl 7xFe	Al3.72 Fe2.89	282.0 + 46.5		100.0	<b>19</b>	26 Al + 7 Fe	
309	21.7	26xAl 7xFe	Al-3.40 Fe-2.7	276.2		84.6	<b>33</b>	AFL-6 240	
310	15.65	26xAl 7xFe	Al-2.45 Fe-1.95	143.5		45.9	<b>18</b>	AFL-6 120	
311	12.75	12xAl 7xFe	Al-2.55 Fe-2.55	97.03		52.2	<b>21</b>	AFL-1,7 70	
312	10.74	6xAl 7xFe	Al-3.75 Fe-2.4	81.47		48	<b>19</b>	AFLs-1.5 50 (Al not Ø)	
313	11.26	6xAl 1xFe	Al-3.75 Fe-3.75	77.3		22.7	<b>9</b>	AFL-6 70	
314	14.3	Penguin 6xAl 1xFe	Al-4.77 Fe-4.77	107.2 + 17.8		37	<b>14</b>	4/0 ACSR	
315	18.3	Linnet 26xAl 7xFe	Al-2.89 Fe-2.25	170.6 + 27.8		63	<b>25</b>	336.4 ACSR	
316	23.2	Parakeet 24xAl 7xFe	Al-3.87 Fe-2.58	282.2 + 36.6		88	<b>35</b>	556.5 ACSR	
317	27.0	Tern 45xAl 7xFe	Al-3.38 Fe-2.25	403.8 + 27.83		98	<b>39</b>	795 ACSR	
318	34.2	Bittern 45xAl 7xFe	Al-4.27 Fe-2.85	644.4 + 44.6		151	<b>60</b>	1272 ACSR	
319	38.2	Lapwing 45xAl 7xFe	Al-4.78 Fe-3.18	807.8 + 55.6		187	<b>75</b>	1590 ACSR	
320	31.5	54xAl 7xFe	Al-3.50 Fe-3.50	586.9		159.8	<b>64</b>	AFL-8 525 (similar to Oliv)	
321	11.4	Quail 6xAl 1xFe	Al-3.78 Fe-3.78	67.3 11.22		23.5	<b>9.4</b>		
322	16.4	Partridge 26xAl 7xFe	Al-2.54 Fe-2.0	134.9 22.0		50.1	<b>20.0</b>		

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323	21.8	Hawk 26xAl 7xFe	Al-3.44 Fe-2.67	241.6 39.2		86.9	<b>34.7</b>	
324	28.1	Drake 26xAl 7xFe	Al-4.44 Fe-3.45	402.5 65.4		139	<b>55.7</b>	
325	9.8	1x7 Al-clad steel	3.26	56	1280	70.9	<b>28</b>	Alumoweld Guying + shielding
326	13.2	1x7 Al-clad steel	4.45	100	1150	111	<b>44</b>	Alumoweld Guying + shielding
327	19.0	1x19 Al	4.0	214	230	49	<b>19</b>	AAAC Alum
328	11.7	26xAl 7xFe	Al-1.85 Fe-1.44	69 11.4		26.3	<b>10.5</b>	DIN 48204-4/84
329	15.5	26xAl 7xFe	Al-2.44 Fe-1.90	121 19.8		44.9	<b>17.5</b>	DIN 48204-4/84

	<b>Parafil</b> Polyester cores in standard terminations	
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501								<i>discarded</i>
504								<i>discarded</i>
508								<i>discarded</i>
506	7.0	multicore fibres	-	7.97	615	4.9	<b>1.9</b>	Parafil type A
503	11.0	multicore fibres		31.8	615	19.6	<b>7.8</b>	Parafil type A
507	13.5	multicore fibres	-	55.8	615	34.3	<b>13.7</b>	Parafil type A
505	20.0	multicore fibres	-	119	615	73.6	<b>29.4</b>	Parafil type A
502	8.5	multicore fibres	-	15.3	1920	29.4	<b>11.7</b>	Parafil type F
509	11.0	multicore fibres	-	30.5	1920	58.8	<b>23.5</b>	Parafil type F
511	13.5	multicore fibres		53.5	1920	103	<b>41.0</b>	Parafil type F
510	17.0	multicore fibres		76.3	1920	147	<b>58.8</b>	Parafil type F

Copper + Steel (Cu + Fe)								
Rope No.)	Rope Ø (mm)	Rope construction	Wire Ø (mm)	Rope Area (mm <sup>2</sup> )	Rm minimum (N/ mm <sup>2</sup> )	Min Breaking Load (kN)	Max Test Load at PIAB (kN)	Notes
601	15.0	1x19 7 Cu/Fe + 12 Cu	3.0	134 Fe34 Cu100		79	<b>31.0</b>	
602	21.0	1x19 7 Cu/Fe + 12 Cu	4.2	263 Fe66 Cu197		153	<b>61.0</b>	

Copper alt. Bronze								
Rope No.)	Rope Ø (mm)	Rope construction	Wire Ø (mm)	Rope Area (mm <sup>2</sup> )	Rm minimum (N/ mm <sup>2</sup> )	Min Breaking Load (kN)	Max Test Load at PIAB (kN)	Notes
701	6.5	1x7	2.2	25.8	340	8.7	<b>3.5</b>	Cu
702	7.5	1x7	2.3	29.0	380	11.0	<b>4.4</b>	Bronze
703	7.6	1x7	2.5	35.3	360	12.4	<b>4.5</b>	Cu
704	9.5	1x7	3.0	49.5	360	17.3	<b>6.9</b>	Cu
705	12.0	1x7	3.8	80.0	300	24.0	<b>9.5</b>	Cu
706	12.8	1x7	4.0	87.0	340	29.0	<b>11.6</b>	Cu
707	14.0	1x7	4.2	96.0	360	33.0	<b>13.2</b>	Cu
709	9.5	1x19	1.9	54	360	18.8	<b>7.5</b>	
710	9.5	1x19	1.9	54	430	23	<b>9.0</b>	Bronze
711	10.6	1x19	2.1	65.8	360	23.0	<b>9.2</b>	
712	12.8	1x19	2.6	97	360	34	<b>13</b>	
713	14.0	1x19	2.9	120	320	38	<b>15</b>	
714	16.0	1x19	3.3	155	320	48	<b>18</b>	





