

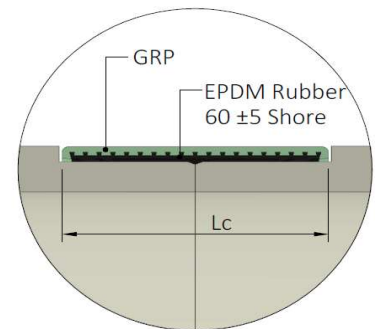
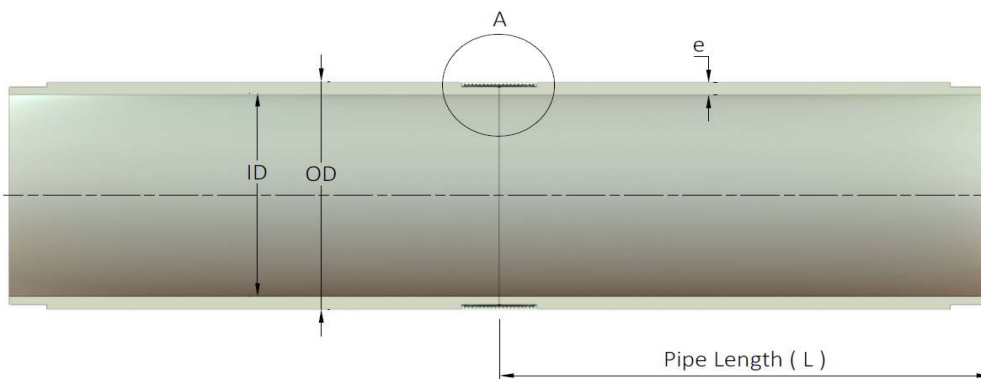
GRP JACKING DATASHEET

CONTINUOUS FILAMENT WINDING (CFW)
GLASS REINFORCED POLYESTER (GRP) ISO 25780
JOINT TYPE : FULLFACE GRP JACKING COUPLING



GRP JACKING PIPE TABLE : SN 20 000 – 80 000

OD (mm)	PIPE STIFFNESS SN (N/m ²)																										
	20 000				32 000				40 000				50 000				64 000				80 000						
	ID	e	Mass	F max	ID	e	Mass	F max	ID	e	Mass	F max	ID	e	Mass	F max	ID	e	Mass	F max	ID	e	Mass	F max			
mm	mm	kg / m	kN	mm	mm	kg / m	kN	mm	mm	kg / m	kN	mm	mm	kg / m	kN	mm	mm	kg / m	kN	mm	mm	kg / m	kN	mm	mm	kg / m	kN
345	323,0	11,0	23	11	323,0	11,0	23	11	321,8	11,6	24	24	319,4	12,8	27	50	317,2	13,9	29	74	315,2	14,9	31	96			
376	352,6	11,7	27	17	352,6	11,7	27	17	350,6	12,7	29	41	348,0	14,0	32	72	345,8	15,1	34	98	343,6	16,2	37	124			
427	404,0	11,5	30	12	400,4	13,3	35	62	398,0	14,5	38	95	395,4	15,8	41	130	392,8	17,1	44	166	390,2	18,4	47	201			
478	452,2	12,9	38	59	448,0	15,0	44	124	445,6	16,2	47	161	442,6	17,7	51	207	440,8	18,6	54	234	436,8	20,6	59	294			
515	487,2	13,9	44	98	482,8	16,1	50	171	480,0	17,5	55	217	476,8	19,1	59	270	474,6	20,2	63	305	470,4	22,3	69	374			
530	501,6	14,2	46	111	497,0	16,5	53	190	494,0	18,0	58	241	490,8	19,6	63	295	487,4	21,3	68	352	484,4	22,8	73	402			
550	520,4	14,8	50	137	515,7	17,2	57	220	513,0	18,5	62	268	509,2	20,4	68	335	505,8	22,1	73	394	502,6	23,7	78	449			
618	584,8	16,6	60	276	579,5	19,3	72	382	576,0	21,0	79	451	572,2	22,9	86	526	568,4	24,8	92	601	565,0	26,5	98	667			
650	615,0	17,5	70	277	609,0	20,5	81	403	606,0	22,0	87	466	601,8	24,1	95	553	597,8	26,1	102	635	594,0	28,0	109	713			
718	679,6	19,2	84	387	673,0	22,5	98	540	669,6	24,2	105	619	664,8	26,6	115	728	660,4	28,8	125	829	656,0	31,0	134	928			
760	718,0	21,0	97	454	712,6	23,7	110	587	708,8	25,6	118	679	703,6	28,2	130	805	699,0	30,5	140	916	694,4	32,8	150	1.026			
820	776,0	22,0	110	485	769,0	25,5	127	670	764,6	27,7	138	786	759,2	30,4	151	927	754,0	33,0	163	1.062	749,4	35,3	174	1.181			
860	814,0	23,0	121	566	806,0	27,0	141	788	802,0	29,0	151	898	796,4	31,8	165	1.052	790,8	34,6	179	1.204	785,8	37,1	192	1.340			
924	874,0	25,0	141	730	866,0	29,0	163	969	862,0	31,0	174	1.087	855,6	34,2	191	1.276	850,0	37,0	206	1.440	844,0	40,0	222	1.614			
960	908,0	26,0	153	822	900,0	30,0	175	1.070	895,0	32,5	189	1.224	889,0	35,5	206	1.408	883,0	38,5	223	1.590	877,0	41,5	239	1.771			
1.026	971,0	27,5	172	981	962,0	32,0	200	1.279	957,0	34,5	215	1.444	950,0	38,0	236	1.673	943,6	41,2	255	1.881	938,0	44,0	271	2.062			
1.099	1.040,0	29,5	198	1.196	1.030,0	34,5	231	1.552	1.025,0	37,0	247	1.728	1.017,6	40,7	270	1.987	1.011,0	44,0	292	2.217	1.004,0	47,5	314	2.459			
1.127	1.066,6	30,2	208	1.279	1.056,2	35,4	243	1.658	1.051,0	38,0	260	1.846	1.043,0	42,0	286	2.134	1.036,6	45,2	307	2.362	1.029,8	48,6	329	2.603			
1.229	1.163,0	33,0	248	1.624	1.153,0	38,0	284	2.021	1.146,0	41,5	309	2.297	1.138,0	45,5	338	2.611	1.130,2	49,4	366	2.914	1.123,0	53,0	391	3.193			
1.290	1.220,0	35,0	276	1.875	1.209,0	40,5	318	2.334	1.202,4	43,8	343	2.607	1.194,4	47,8	373	2.936	1.186,6	51,7	402	3.254	1.178,4	55,8	432	3.587			
1.348	1.275,0	36,5	301	2.094	1.264,0	42,0	344	2.573	1.257,0	45,5	372	2.876	1.248,0	50,0	408	3.263	1.240,0	54,0	439	3.605	1.231,6	58,2	471	3.961			
1.399	1.323,4	37,8	323	2.295	1.311,4	43,8	373	2.837	1.304,2	47,4	402	3.160	1.295,0	52,0	440	3.571	1.286,6	56,2	474	3.943	1.278,2	60,4	508	4.312			
1.434	1.357,0	38,5	337	2.420	1.344,0	45,0	393	3.022	1.337,0	48,5	422	3.344	1.327,6	53,2	461	3.774	1.318,8	57,6	498	4.173	1.310,0	62,0	534	4.570			
1.499	1.418,6	40,2	368	2.699	1.405,0	47,0	429	3.358	1.398,0	50,5	459	3.695	1.388,0	55,5	503	4.173	1.379,0	60,0	542	4.600	1.369,0	65,0	585	5.071			
1.536	1.453,4	41,3	388	2.413	1.439,6	48,2	450	3.098	1.432,0	52,0	485	3.472	1.422,0	57,0	529	3.962	1.412,0	62,0	574	4.448	1.402,0	67,0	618	4.931			
1.638	1.550,0	44,0	440	2.757	1.536,0	51,0	508	3.499	1.527,0	55,5	552	3.972	1.516,0	61,0	604	4.546	1.506,4	65,8	650	5.044	1.496,0	71,0	699	5.579			
1.720	1.628,0	46,0	484	3.240	1.612,0	54,0	565	4.130	1.603,2	58,4	609	4.615	1.592,0	64,0	666	5.229	1.582,0	69,0	715	5.774	1.572,0	74,0	765	6.315			
1.842	1.743,0	49,5	557	3.898	1.726,0	58,0	650	4.910	1.717,0	62,5	698	5.442	1.705,0	68,5	763	6.146	1.694,0	74,0	822	6.788	1.683,0	79,5	880	7.425			
1.944	1.839,4	52,3	621	4.476	1.822,0	61,0	721	5.569	1.812,0	66,0	778	6.193	1.800,0	72,0	846	6.937	1.787,0	78,5	920	7.737	1.774,0	85,0	992	8.531			
2.046	1.936,0	55,0	688	5.079	1.918,0	64,0	797	6.269	1.907,0	69,5	863	6.991	1.894,0	76,0	940	7.839	1.882,0	82,0	1.011	8.617	1.870,0	88,0	1.082	9.389			
2.160	2.044,0	58,0	766	5.794	2.026,0	67,0	881	7.051	2.014,0	73,0	957	7.883	2.000,0	80,0	1.045	8.847	1.987,0	86,5	1.126	9.736							
2.250	2.129,0	60,5	832	6.410	2.110,0	70,0	958	7.792	2.097,0	76,5	1.044	8.730	2.083,0	83,5	1.136	9.734	2.069,6	90,2	1.223	10.689							
2.453	2.321,0	66,0	989	6.977	2.300,0	76,5	1.142	8.642	2.286,0	83,5	1.243	9.743	2.273,0	90,0	1.336	10.760											
2.553	2.416,0	68,5	1.069	7.687	2.393,0	80,0	1.242	9.584	2.379,0	87,0	1.347	10.731	2.369,0	92,0	1.422	11.545											
2.658	2.515,0	71,5	1.161	8.531	2.493,0	82,5	1.334	10.421	2.478,0	90,0	1.451	11.700															
2.758	2.610,0	74,0	1.247	9.314	2.586,6	85,7	1.438	11.400																			
2.858	2.704,0	77,0	1.345	10.221	2.680,4	88,8	1.544	12.402																			
2.962	2.803,0	79,5	1.439	11.088																							
3.065	2.901,0	82,0	1.536	11.986																							



Lc = 148 mm (OD: 345 – 1499 mm)
Lc = 180 mm (OD: 1536 – 3065mm)

Design Assumptions:
*The nominal pressure classes are PN1 and PN6 for jacking pipes and couplings.
*The pipe lengths are 2 – 3 m. Custom lengths are available.
*Factor of Safety (for jacking load) = 3,5
*Ultimate compressive strength ≥ 85 N/m²
*Pipe thickness, weights and jacking load values are roughly calculated. All values derive from calculations and may therefore slightly vary from the finished product due to manufacturing tolerances.
*The manufacturer SUPERLIT has rights to change the technical data without notice.

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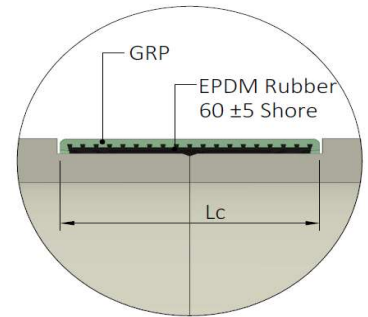
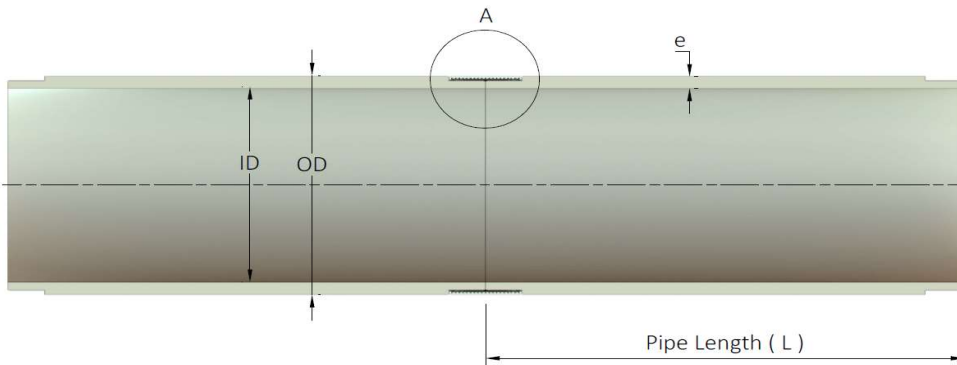
GRP JACKING DATASHEET

CONTINUOUS FILAMENT WINDING (CFW)
GLASS REINFORCED POLYESTER (GRP) ISO 25780
JOINT TYPE : FULLFACE GRP JACKING COUPLING



GRP JACKING PIPE TABLE : SN 100 000 – 1 000 000

OD (mm)	PIPE STIFFNESS SN (N/m ²)																															
	100 000				128 000				160 000				200 000				320 000				640 000				1 000 000							
	ID	e	Mass	F max	ID	e	Mass	F max	ID	e	Mass	F max	ID	e	Mass	F max	ID	e	Mass	F max	ID	e	Mass	F max	ID	e	Mass	F max				
	mm	mm	kg / m	kN	mm	mm	kg / m	kN	mm	mm	kg / m	kN	mm	mm	kg / m	kN	mm	mm	kg / m	kN	mm	mm	kg / m	kN	mm	mm	kg / m	kN	mm	mm	kg / m	kN
345	312,6	16,2	33	124	310,0	17,5	36	152	306,8	19,1	39	186	304,0	20,5	42	215	296,8	24,1	49	289												
376	340,8	17,6	40	157	338,0	19,0	43	190	334,4	20,8	46	232	331,0	22,5	50	270	323,4	26,3	58	356	311,0	32,5	70	491	301,6	37,2	79	589				
427	387,0	20,0	51	243	384,0	21,5	55	283	379,8	23,6	60	338	376,0	25,5	64	387	367,4	29,8	74	497	353,2	36,9	90	672	342,4	42,3	102	801				
478	433,2	22,4	64	348	429,6	24,2	69	401	425,0	26,5	75	469	421,0	28,5	80	527	411,2	33,4	93	667	395,4	41,3	113	885	383,4	47,3	128	1.046				
515	466,6	24,2	75	435	462,8	26,1	80	495	457,4	28,8	88	581	453,6	30,7	93	640	443,0	36,0	108	803	426,0	44,5	131	1.056	413,0	51,0	149	1.244				
530	480,4	24,8	79	468	476,4	26,8	85	534	471,2	29,4	92	618	467,0	31,5	99	686	456,0	37,0	115	860	438,4	45,8	139	1.130	425,0	52,5	157	1.329				
550	498,4	25,8	85	521	494,2	27,9	91	593	489,0	30,5	100	681	484,8	32,6	106	751	473,0	38,5	124	945	455,0	47,5	150	1.231	441,0	54,5	170	1.446				
618	560,0	29,0	107	763	555,2	31,4	116	855	549,6	34,2	125	961	544,6	36,7	134	1.055	531,6	43,2	156	1.295	511,0	53,5	190	1.664	496,0	61,0	213	1.923				
650	589,0	30,5	119	814	584,0	33,0	128	915	578,0	36,0	139	1.035	572,8	38,6	148	1.137	559,2	45,4	172	1.401	537,6	56,2	210	1.808	521,4	64,3	237	2.102				
718	651,0	33,5	144	1.040	645,2	36,4	156	1.169	638,0	40,0	170	1.328	632,8	42,6	181	1.441	617,6	50,2	211	1.767	594,0	62,0	255	2.258	576,0	71,0	288	2.619				
760	688,8	35,6	162	1.159	682,8	38,6	175	1.300	675,0	42,5	192	1.482	669,6	45,2	203	1.606	653,8	53,1	236	1.965	628,8	65,6	286	2.515	609,4	75,3	324	2.928				
820	743,0	38,5	189	1.345	736,8	41,6	203	1.502	729,2	45,4	221	1.694	722,4	48,8	236	1.863	705,4	57,3	274	2.279	678,0	71,0	334	2.930	658,0	81,0	376	3.388				
860	779,6	40,2	207	1.506	773,0	43,5	223	1.682	764,4	47,8	244	1.909	758,0	51,0	259	2.076	740,0	60,0	301	2.539	711,0	74,5	368	3.261								
924	837,2	43,4	240	1.810	830,2	46,9	258	2.010	821,6	51,2	281	2.254	814,0	55,0	300	2.467	795,0	64,5	348	2.992	764,0	80,0	424	3.821								
960	869,8	45,1	259	1.987	862,8	48,6	278	2.195	853,6	53,2	303	2.466	845,6	57,2	324	2.699	826,0	67,0	376	3.261	794,0	83,0	457	4.151								
1.026	930,0	48,0	295	2.318	922,0	52,0	318	2.572	912,0	57,0	347	2.887	904,0	61,0	370	3.136	882,4	71,8	430	3.798												
1.099	995,8	51,6	339	2.740	988,2	55,4	363	2.999	977,0	61,0	398	3.377	968,6	65,2	423	3.657	945,4	76,8	493	4.419												
1.127	1.021,2	52,9	357	2.906	1.013,0	57,0	383	3.192	1.002,0	62,5	418	3.572	992,6	67,2	447	3.894	969,4	78,8	519	4.675												
1.229	1.114,0	57,5	423	3.538	1.104,6	62,2	456	3.896	1.093,0	68,0	496	4.333	1.082,6	73,2	531	4.722																
1.290	1.169,0	60,5	467	3.966	1.160,0	65,0	500	4.325	1.147,0	71,5	547	4.840	1.136,0	77,0	587	5.271																
1.348	1.221,6	63,2	510	4.382	1.211,0	68,5	550	4.824	1.198,0	75,0	600	5.361	1.187,0	80,5	641	5.812																
1.399	1.267,8	65,6	549	4.767	1.257,0	71,0	592	5.235	1.243,0	78,0	647	5.835	1.232,0	83,5	690	6.302																
1.434	1.299,2	67,4	578	5.054	1.289,0	72,5	620	5.507	1.274,8	79,6	677	6.131	1.264,0	85,0	720	6.602																
1.499	1.359,0	70,0	628	5.539	1.348,0	75,5	675	6.050	1.333,0	83,0	738	6.740	1.321,0	89,0	788	7.287																
1.536	1.392,0	72,0	662	5.411	1.380,0	78,0	714	5.981	1.366,0	85,0	775	6.641																				
1.638	1.485,0	76,5	750	6.142	1.472,0	83,0	811	6.802	1.460,0	89,0	866	7.405																				
1.720	1.559,0	80,5	829	7.013	1.546,0	87,0	892	7.706																								
1.842	1.670,0	86,0	948	8.173																												



Detail A

Lc = 148 mm (OD: 345 – 1499 mm)
Lc = 180 mm (OD: 1536 – 3065mm)

Design Assumptions:

- *The nominal pressure classes are PN1 and PN6 for jacking pipes and couplings.
- *The pipe lengths are 2 – 3 m. Custom lengths are available.
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