List of grid rods

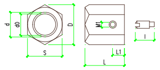
序号no	number	specification	Blanking length (mm)	Welding length (mm)	Theoretical length (mm)	bolt	sleeve	Sealing plate/cone head	Steel pipe quantity	Single weight (kg)	Total weight (kg)	remark
1	1-1	ø88.5x4	1761	1893	2121	2M24	41X40	89X70/16	12	14.68	176.1	
2	1-2	ø88.5x4	1775	1907	2121	2M24	41X40	89X70/16	16	14.80	236.7	
3	1-3	ø88.5x4	2196	2328	2542	2M24	41X40	89X70/16	4	18.30	73.2	
4	1-4	ø88.5x4	2535	2667	2918	2M24	41X40	89X70/16	4	21.13	84.5	
5	1-5	ø88.5x4	2539	2671	2918	2M24	41X40	89X70/16	28	21.16	592.6	
6	1-6	ø88.5x4	2549	2681	2918	2M24	41X40	89X70/16	32	21.25	679.9	
7	1-7	ø88.5x4	2613	2745	2973	2M24	41X40	89X70/16	16	21.78	348.5	
8	1-8	ø88.5x4	2618	2750	2964	2M24	41X40	89X70/16	4	21.82	87.3	
9	1-9	ø88.5x4	2676	2808	3059	2M24	41X40	89X70/16	8	22.31	178.4	
10	1-10	ø88.5x4	2685	2817	3059	2M24	41X40	89X70/16	24	22.38	537.1	
11	1-11	ø88.5x4	2699	2831	3059	2M24	41X40	89X70/16	22	22.50	495.0	
12	1-12	ø88.5x4	2713	2845	3059	2M24	41X40	89X70/16	4	22.61	90.5	
13	1-13	ø88.5x4	3626	3758	4000	2M24	41X40	89X70/16	157	30.22	4745.3	
14	1-14	ø88.5x4	3640	3772	4000	2M24	41X40	89X70/16	2	30.34	60.7	
15	1-15	ø88.5x4	3654	3786	4000	2M24	41X40	89X70/16	4	30.46	121.8	
16	1-16	ø88.5x4	3654	3786	4000	2M27	46X40	89X70/20	2	30.46	60.9	
17	1-17	ø88.5x4	3779	3911	4125	2M27	46X40	89X70/20	4	31.50	126.0	
18	1-18	ø88.5x4	3840	3972	4200	2M24	41X40	89X70/16	8	32.01	256.1	
19	1-19	ø88.5x4	3840	3972	4200	2M27	46X40	89X70/20	4	32.01	128.0	
20	1-20	ø88.5x4	3904	4036	4250	2M27	46X40	89X70/20	2	32.54	65.1	
21	1-21	ø88.5x4	4036	4168	4410	2M24	41X40	89X70/16	44	33.64	1480.3	
22	1-22	ø88.5x4	4040	4172	4400	2M27	46X40	89X70/20	4	33.68	134.7	
23	1-23	ø88.5x4	4040	4172	4400	2M24	41X40	89X70/16	4	33.68	134.7	
24	1-24	ø88.5x4	4050	4182	4410	2M24	41X40	89X70/16	8	33.76	270.1	
25	1-25	ø88.5x4	4054	4186	4400	2M24	41X40	89X70/16	4	33.79	135.2	
26	2-1	ø114x4	1761	1893	2121	2M24	41X40	114X70/16	4	19.11	76.4	
27	2-2	ø114x4	2699	2831	3059	2M24	41X40	114X70/16	2	29.29	58.6	
28	2-3	ø114x4	3215	3347	3608	2M30	50X45	114X70/20	4	34.89	139.5	
29	2-4	ø114x4	3229	3361	3608	2M24	41X40	114X70/16	14	35.04	490.5	
30	2-5	ø114x4	3239	3371	3608	2M24	41X40	114X70/16	18	35.15	632.6	
31	2-6	ø114x4	3339	3471	3722	2M27	46X40	114X70/20	4	36.23	144.9	
32	2-7	ø114x4	3353	3485	3722	2M24	41X40	114X70/16	4	36.38	145.5	
33	2-8	ø114x4	3362	3494	3722	2M24	41X40	114X70/16	24	36.48	875.6	
34	2-9	ø114x4	3439	3571	3808	2M24	41X40	114X70/16	4	37.32	149.3	
35	2-10	ø114x4	3454	3586	3847	2M24	41X40	114X70/16	8	37.48	299.8	
36	2-11	ø114x4	3464	3596	3847	2M24	41X40	114X70/16	18	37.59	676.6	
37	2-12	ø114x4	3468	3600	3847	2M24	41X40	114X70/16	4	37.63	150.5	
38	2-13	ø114x4	3478	3610	3847	2M24	41X40	114X70/16	12	37.74	452.9	
39	2-14	ø114x4	3519	3651	3893	2M24	41X40	114X70/16	30	38.18	1145.5	
40	2-15	ø114x4	3533	3665	3893	2M24	41X40	114X70/16	32	38.34	1226.8	
41	2-16	ø114x4	3547	3679	3893	2M24	41X40	114X70/16	2	38.49	77.0	
42	2-17	ø114x4	3563	3695	3980	2M24	41X40	114X70/16	4	38.66	154.6	
43	2-18	ø114x4	3572	3704	3955	2M24	41X40	114X70/16	4	38.76	155.0	
44	2-19	ø114x4	3586	3718	3955	2M24	41X40	114X70/16	4	38.91	155.6	
45	2-20	ø114x4	3588	3720	4000	2M24	41X40	114X70/16	8	38.93	311.5	
46	2-21	ø114x4	3595	3727	3955	2M24	41X40	114X70/16	24	39.01	936.2	
47	2-22	ø114x4	3598	3730	4000	2M24	41X40	114X70/16	12	39.04	468.5	
48	2-23	ø114x4	3606	3738	4000	2M24	41X40	114X70/16	8	39.13	313.0	
49	2-24	ø114x4	3606	3738	3980	2M24	41X40	114X70/16	6	39.13	234.8	
50	2-25	ø114x4	3608	3740	4000	2M24	41X40	114X70/16	10	39.15	391.5	
51	2-26	ø114x4	3616	3748	4000	2M30	50X45	114X70/20	3	39.24	117.7	
52	2-27	ø114x4	3621	3753	4000	2M24	41X40	114X70/16	12	39.29	471.5	
53	2-28	ø114x4	3626	3758	4000	2M24	41X40	114X70/16	105	39.35	4131.3	
54	2-29	ø114x4	3626	3758	4000	2M27	46X40	114X70/20	4	39.35	157.4	
55	2-30	ø114x4	3631	3763	4000	2M24	41X40	114X70/16	8	39.40	315.2	
56	2-31	ø114x4	3640	3772	4000	2M24	41X40	114X70/16	76	39.50	3001.8	
57	2-32	ø114x4	3654	3786	4000	2M24	41X40	114X70/16	60	39.65	2379.0	
58	2-33	ø114x4	3742	3874	4116	2M24	41X40	114X70/16	58	40.60	2355.1	
59	2-34	ø114x4	3751	3883	4125	2M24	41X40	114X70/16	2	40.70	81.4	
60	2-35	ø114x4	3756	3888	4116	2M24	41X40	114X70/16	4	40.76	163.0	

no	number	specification	Blanking length (mm)	Welding length (mm)	Theoretical length (mm)	bolt	sleeve	Sealing plate/cone head	Steel pipe quantity	Single weight (kg)	Total weight (kg)	remark
61	2-36	ø114x4	3765	3897	4125	2M24	41X40	114X70/16	8	40.85	326.8	
62	2-37	ø114x4	3765	3897	4125	2M27	46X40	114X70/20	2	40.85	81.7	
63	2-38	ø114x4	3770	3902	4227	2M24	41X40	114X70/16	2	40.91	81.8	
64	2-39	ø114x4	3770	3902	4116	2M24	41X40	114X70/16	2	40.91	81.8	
65	2-40	ø114x4	3808	3940	4200	2M24	41X40	114X70/16	4	41.32	165.3	
66	2-41	ø114x4	3812	3944	4229	2M24	41X40	114X70/16	2	41.36	82.7	
67	2-42	ø114x4	3812	3944	4206	2M24	41X40	114X70/16	4	41.36	165.5	
68	2-43	ø114x4	3828	3960	4202	2M24	41X40	114X70/16	60	41.54	2492.3	
69	2-44	ø114x4	3835	3967	4229	2M24	41X40	114X70/16	2	41.61	83.2	
70	2-45	ø114x4	3840	3972	4200	2M24	41X40	114X70/16	6	41.67	250.0	
71	2-46	ø114x4	3842	3974	4202	2M24	41X40	114X70/16	4	41.69	166.8	
72	2-47	ø114x4	3846	3978	4229	2M24	41X40	114X70/16	2	41.73	83.5	
73	2-48	ø114x4	3853	3985	4227	2M24	41X40	114X70/16	4	41.81	167.2	
74	2-49	ø114x4	3854	3986	4200	2M24	41X40	114X70/16	2	41.82	83.6	
75	2-50	ø114x4	3857	3989	4250	2M30	50X45	114X70/20	2	41.85	83.7	
76	2-51	ø114x4	3857	3989	4217	2M24	41X40	114X70/16	12	41.85	502.2	
77	2-52	ø114x4	3869	4001	4229	2M24	41X40	114X70/16	6	41.98	251.9	
78	2-53	ø114x4	3871	4003	4250	2M30	50X45	114X70/20	2	42.00	84.0	
79	2-54	ø114x4	3871	4003	4217	2M24	41X40	114X70/16	20	42.00	840.1	
80	2-55	ø114x4	3876	4008	4250	2M24	41X40	114X70/16	8	42.06	336.5	
81	2-56	ø114x4	3881	4013	4250	2M24	41X40	114X70/16	4	42.11	168.5	
82	2-57	ø114x4	3883	4015	4229	2M24	41X40	114X70/16	42	42.13	1769.7	
83	2-58	ø114x4	3890	4022	4250	2M24	41X40	114X70/16	14	42.21	590.9	
84	2-59	ø114x4	3894	4026	4250	2M30	50X45	114X70/20	4	42.25	169.0	
85	2-60	ø114x4	3904	4036	4250	2M24	41X40	114X70/16	20	42.36	847.3	
86	2-61	ø114x4	3904	4036	4250	2M27	46X40	114X70/20	10	42.36	423.6	
87	2-62	ø114x4	3941	4073	4301	2M24	41X40	114X70/16	12	42.76	513.2	
88	2-63	ø114x4	3955	4087	4301	2M24	41X40	114X70/16	20	42.92	858.3	
89	2-64	ø114x4	3992	4124	4400	2M24	41X40	114X70/16	5	43.32	216.6	
90	2-65	ø114x4	4017	4149	4400	2M24	41X40	114X70/16	8	43.59	348.7	
91	2-66	ø114x4	4026	4158	4400	2M24	41X40	114X70/16	47	43.69	2053.3	
92	2-67	ø114x4	4026	4158	4400	2M27	46X40	114X70/20	2	43.69	87.4	
93	2-68	ø114x4	4036	4168	4410	2M24	41X40	114X70/16	12	43.79	525.5	
94	2-69	ø114x4	4040	4172	4400	2M24	41X40	114X70/16	22	43.84	964.4	
95	2-70	ø114x4	4040	4172	4400	2M27	46X40	114X70/20	2	43.84	87.7	
96	2-71	ø114x4	4054	4186	4400	2M24	41X40	114X70/16	54	43.99	2375.5	
97	2-72	ø114x4	4054	4186	4400	2M27	46X40	114X70/20	4	43.99	176.0	
98	2-73	ø114x4	4096	4228	4504	2M27	46X40	114X70/20	2	44.45	88.9	
99	2-74	ø114x4	4130	4262	4504	2M24	41X40	114X70/16	2	44.81	89.6	
100	2-75	ø114x4	4144	4276	4504	2M24	41X40	114X70/16	12	44.97	539.6	
101	2-76	ø114x4	4156	4288	4530	2M24	41X40	114X70/16	56	45.10	2525.4	
102	2-77	ø114x4	4158	4290	4504	2M24	41X40	114X70/16	16	45.12	721.9	
103	2-78	ø114x4	4170	4302	4530	2M24	41X40	114X70/16	8	45.25	362.0	
104	2-79	ø114x4	4203	4335	4597	2M24	41X40	114X70/16	1	45.61	45.6	
105	2-80	ø114x4	4261	4393	4621	2M24	41X40	114X70/16	12	46.24	554.8	
106	2-81	ø114x4	4275	4407	4621	2M24	41X40	114X70/16	18	46.39	835.0	
107	2-82	ø114x4	4349	4481	4723	2M24	41X40	114X70/16	52	47.19	2453.9	
108	2-83	ø114x4	4363	4495	4723	2M24	41X40	114X70/16	12	47.34	568.1	
109	2-84	ø114x4	4440	4572	4814	2M24	41X40	114X70/16	52	48.18	2505.3	
110	2-85	ø114x4	4454	4586	4814	2M24	41X40	114X70/16	12	48.33	580.0	
111	2-86	ø114x4	4465	4597	4811	2M24	41X40	114X70/16	12	48.45	581.4	
112	2-87	ø114x4	4541	4673	4901	2M24	41X40	114X70/16	4	49.27	197.1	
113	2-88	ø114x4	4555	4687	4901	2M24	41X40	114X70/16	8	49.43	395.4	
114	2-89	ø114x4	4612	4744	4986	2M24	41X40	114X70/16	44	50.05	2202.0	
115	2-90	ø114x4	4626	4758	4986	2M24	41X40	114X70/16	20	50.20	1003.9	
116	2-91	ø114x4	4709	4841	5069	2M24	41X40	114X70/16	4	51.10	204.4	
117	2-92	ø114x4	4723	4855	5069	2M24	41X40	114X70/16	8	51.25	410.0	
118	2-93	ø114x4	4776	4908	5150	2M24	41X40	114X70/16	44	51.82	2280.3	
119	2-94	ø114x4	4790	4922	5150	2M24	41X40	114X70/16	20	51.98	1039.5	
120	2-95	ø114x4	4871	5003	5231	2M24	41X40	114X70/16	4	52.86	211.4	

no	number	specification	Blanking length (mm)	Welding length (mm)	Theoretical length (mm)	bolt	sleeve	Sealing plate/cone head	Steel pipe quantity	Single weight (kg)	Total weight (kg)	remark
121	2-96	ø114x4	4885	5017	5231	2M24	41X40	114X70/16	8	53.01	424.1	
122	2-97	ø114x4	5014	5146	5397	2M24	41X40	114X70/16	4	54.41	217.6	
123	2-98	ø114x4	5023	5155	5397	2M24	41X40	114X70/16	60	54.50	3270.3	
124	2-99	ø114x4	5100	5232	5474	2M24	41X40	114X70/16	4	55.34	221.4	
125	2-100	ø114x4	5114	5246	5474	2M24	41X40	114X70/16	8	55.49	443.9	
126	3-1	ø140x4	1699	1869	2121	2M30	50X45	140X90/20	2	22.79	45.6	
127	3-2	ø140x4	2988	3158	3386	2M27	46X40	140X90/20	2	40.09	80.2	
128	3-3	ø140x4	3143	3313	3608	2M33	55X45	140X90/20	4	42.17	168.7	
129	3-4	ø140x4	3158	3328	3608	2M33	55X45	140X90/20	2	42.37	84.7	
130	3-5	ø140x4	3168	3338	3608	2M33	55X45	140X90/20	8	42.50	340.0	
131	3-6	ø140x4	3416	3586	3847	2M27	46X40	140X90/20	6	45.83	275.0	
132	3-7	ø140x4	3430	3600	3847	2M27	46X40	140X90/20	10	46.02	460.2	
133	3-8	ø140x4	3440	3610	3847	2M27	46X40	140X90/20	6	46.15	276.9	
134	3-9	ø140x4	3568	3738	3980	2M27	46X40	140X90/20	2	47.87	95.7	
135	3-10	ø140x4	3579	3749	4000	2M27	46X40	140X90/20	1	48.02	48.0	
136	3-11	ø140x4	3588	3758	4000	2M27	46X40	140X90/20	2	48.14	96.3	
137	3-12	ø140x4	3596	3766	3980	2M27	46X40	140X90/20	2	48.24	96.5	
138	3-13	ø140x4	3602	3772	4000	2M27	46X40	140X90/20	4	48.32	193.3	
139	3-14	ø140x4	3616	3786	4000	2M27	46X40	140X90/20	4	48.51	194.0	
140	3-15	ø140x4	3747	3917	4227	2M27	46X40	140X90/20	2	50.27	100.5	
141	3-16	ø140x4	3789	3959	4250	2M36	60X55	140X90/30	4	50.83	203.3	
142	3-17	ø140x4	3809	3979	4250	2M33	55X45	140X90/20	2	51.10	102.2	
143	3-18	ø140x4	3815	3985	4227	2M27	46X40	140X90/20	4	51.18	204.7	
144	3-19	ø140x4	3819	3989	4250	2M33	55X45	140X90/20	14	51.24	717.3	
145	3-20	ø140x4	3829	3999	4227	2M27	46X40	140X90/20	2	51.37	102.7	
146	3-21	ø140x4	3831	4001	4229	2M27	46X40	140X90/20	4	51.40	205.6	
147	3-22	ø140x4	3838	4008	4250	2M27	46X40	140X90/20	2	51.49	103.0	
148	3-23	ø140x4	3845	4015	4229	2M27	46X40	140X90/20	20	51.58	1031.7	
149	3-24	ø140x4	3939	4109	4400	2M27	46X40	140X90/20	1	52.85	52.8	
150	3-25	ø140x4	3988	4158	4400	2M27	46X40	140X90/20	2	53.50	107.0	
151	3-26	ø140x4	4002	4172	4400	2M27	46X40	140X90/20	10	53.69	536.9	
152	3-27	ø140x4	4016	4186	4400	2M27	46X40	140X90/20	12	53.88	646.5	
153	3-28	ø140x4	4390	4560	4811	2M27	46X40	140X90/20	2	58.90	117.8	
154	3-29	ø140x4	4404	4574	4811	2M27	46X40	140X90/20	2	59.08	118.2	
155	3-30	ø140x4	4413	4583	4811	2M27	46X40	140X90/20	14	59.20	828.9	
156	3-31	ø140x4	4480	4650	4901	2M27	46X40	140X90/20	4	60.10	240.4	
157	3-32	ø140x4	4489	4659	4901	2M27	46X40	140X90/20	16	60.22	963.6	
158	3-33	ø140x4	4623	4793	5069	2M27	46X40	140X90/20	4	62.02	248.1	
159	3-34	ø140x4	4657	4827	5069	2M27	46X40	140X90/20	16	62.48	999.6	
160	3-35	ø140x4	4785	4955	5231	2M27	46X40	140X90/20	4	64.19	256.8	
161	3-36	ø140x4	4819	4989	5231	2M27	46X40	140X90/20	16	64.65	1034.4	
162	3-37	ø140x4	5003	5173	5474	2M30	50X45	140X90/20	2	67.12	134.2	
163	3-38	ø140x4	5028	5198	5474	2M27	46X40	140X90/20	2	67.45	134.9	
164	3-39	ø140x4	5062	5232	5474	2M27	46X40	140X90/20	16	67.91	1086.6	
165	4-1	ø140x8	2914	3084	3386	2M42	70X60	140X90/30	2	75.89	151.8	
166	4-2	ø140x8	3528	3698	4000	2M52	85X70	140X90/35	8	91.88	735.0	
167	4-3	ø140x8	3548	3718	4000	2M45	75X60	140X90/35	4	92.40	369.6	
168	4-4	ø140x8	3548	3718	4000	2M48	80X60	140X90/35	4	92.40	369.6	
169	4-5	ø140x8	3566	3736	3980	2M39	65X55	140X90/30	2	92.87	185.7	
170	4-6	ø140x8	3653	3823	4125	2M52	85X70	140X90/35	4	95.13	380.5	
171	4-7	ø140x8	3673	3843	4125	2M45	75X60	140X90/35	6	95.65	573.9	
172	4-8	ø140x8	3673	3843	4125	2M48	80X60	140X90/35	2	95.65	191.3	
173	4-9	ø140x8	3778	3948	4250	2M52	85X70	140X90/35	8	98.39	787.1	
174	4-10	ø140x8	3798	3968	4250	2M45	75X60	140X90/35	18	98.91	1780.4	
175	4-11	ø140x8	3798	3968	4250	2M48	80X60	140X90/35	14	98.91	1384.7	
176	5-1	ø159x6	1589	1819	2121	2M42	70X60	159X120/30	4	35.97	143.9	
177	5-2	ø159x6	1604	1834	2121	2M42	70X60	159X120/30	4	36.31	145.3	
178	5-3	ø159x6	1614	1844	2121	2M39	65X55	159X120/30	2	36.54	73.1	
179	5-4	ø159x6	1619	1849	2121	2M36	60X55	159X120/30	2	36.65	73.3	
180	5-5	ø159x6	1624	1854	2121	2M39	65X55	159X120/30	4	36.77	147.1	

List of Grid rods (continued)

序号	number	specification	Blanking length (mm)	Welding length (mm)	Theoretical length (mm)	bolt	sleeve	Sealing plate/cone head	Steel pipe quantity	Single weight (kg)	Total weight (kg)	remark
181	5-6	ø159x6	3043	3273	3608	2M42	70X60	159X120/30	4	68.89	275.6	
182	5-7	ø159x6	3068	3298	3608	2M39	65X55	159X120/30	4	69.46	277.8	
183	5-8	ø159x6	3068	3298	3608	2M36	60X55	159X120/30	6	69.46	416.7	
184	5-9	ø159x6	3488	3718	4000	2M42	70X60	159X120/30	6	78.97	473.8	
185	5-10	ø159x6	3489	3719	4000	2M36	60X55	159X120/30	1	78.99	79.0	
186	5-11	ø159x6	3498	3728	4000	2M36	60X55	159X120/30	1	79.19	79.2	
187	5-12	ø159x6	3506	3736	3980	2M36	60X55	159X120/30	8	79.37	635.0	
188	5-13	ø159x6	3718	3948	4229	2M36	60X55	159X120/30	4	84.17	336.7	
189	5-14	ø159x6	3719	3949	4250	2M42	70X60	159X120/30	6	84.20	505.2	
190	5-15	ø159x6	3727	3957	4229	2M36	60X55	159X120/30	8	84.38	675.0	
191	5-16	ø159x6	3729	3959	4250	2M39	65X55	159X120/30	2	84.42	168.8	
192	5-17	ø159x6	3738	3968	4250	2M42	70X60	159X120/30	6	84.63	507.8	
193	5-18	ø159x6	3739	3969	4227	2M36	60X55	159X120/30	10	84.65	846.5	
194	5-19	ø159x6	3741	3971	4229	2M36	60X55	159X120/30	20	84.69	1693.9	
195	5-20	ø159x6	3755	3985	4229	2M36	60X55	159X120/30	4	85.01	340.0	
196	5-21	ø159x6	3762	3992	4250	2M39	65X55	159X120/30	2	85.17	170.3	
197	5-22	ø159x6	3878	4108	4400	2M36	60X55	159X120/30	2	87.80	175.6	
198	5-23	ø159x6	3898	4128	4400	2M36	60X55	159X120/30	5	88.25	441.2	
199	5-24	ø159x6	3912	4142	4400	2M36	60X55	159X120/30	2	88.56	177.1	
200	5-25	ø159x6	3926	4156	4400	2M36	60X55	159X120/30	2	88.88	177.8	
201	5-26	ø159x6	4085	4315	4621	2M39	65X55	159X120/30	2	92.48	185.0	
202	5-27	ø159x6	4309	4539	4811	2M36	60X55	159X120/30	2	97.55	195.1	
203	6-1	ø159x8	3468	3698	4000	2M52	85X70	159X120/35	20	103.32	2066.3	
204	6-2	ø159x8	3482	3712	3980	2M42	70X60	159X120/30	4	103.73	414.9	
205	6-3	ø159x8	3593	3823	4125	2M52	85X70	159X120/35	12	107.04	1284.5	
206	6-4	ø159x8	3693	3923	4229	2M39	65X55	159X120/30	4	110.02	440.1	
207	6-5	ø159x8	3708	3938	4229	2M39	65X55	159X120/30	6	110.47	662.8	
208	6-6	ø159x8	3717	3947	4229	2M42	70X60	159X120/30	10	110.73	1107.3	
209	6-7	ø159x8	3718	3948	4250	2M52	85X70	159X120/35	12	110.76	1329.2	
210	6-8	ø159x8	3727	3957	4229	2M39	65X55	159X120/30	8	111.03	888.3	
211	6-9	ø159x8	3729	3959	4227	2M42	70X60	159X120/30	4	111.09	444.4	
212	6-10	ø159x8	3741	3971	4229	2M39	65X55	159X120/30	4	111.45	445.8	
213	6-11	ø159x8	3755	3985	4229	2M39	65X55	159X120/30	2	111.87	223.7	
214	6-12	ø159x8	4060	4290	4597	2M39	65X55	159X120/30	1	120.95	121.0	
215	7-1	ø159x10	3468	3698	3980	2M48	80X60	159X120/35	2	127.43	254.9	
216	7-2	ø159x10	3468	3698	3980	2M45	75X60	159X120/35	6	127.43	764.6	
217	7-3	ø159x10	3468	3698	4000	2M56	90X70	159X120/40	6	127.43	764.6	
218	7-4	ø159x10	3593	3823	4125	2M56	90X70	159X120/40	8	132.03	1056.2	
219	7-5	ø159x10	3715	3945	4227	2M45	75X60	159X120/35	8	136.51	1092.1	
220	7-6	ø159x10	3717	3947	4229	2M45	75X60	159X120/35	12	136.58	1639.0	
221	7-7	ø159x10	3717	3947	4229	2M48	80X60	159X120/35	2	136.58	273.2	
222	7-8	ø159x10	3718	3948	4250	2M56	90X70	159X120/40	4	136.62	546.5	
223	8-1	ø159x12	3697	3927	4229	2M56	90X70	159X120/40	12	160.83	1930.0	
224	9-1	ø180x12	3448	3678	3980	2M56	90X70	180X120/40	14	171.43	2400.0	
225	9-2	ø180x12	3686	3916	4227	2M56	90X70	180X120/40	2	183.26	366.5	
226	9-3	ø180x12	3695	3925	4227	2M56	90X70	180X120/40	12	183.71	2204.5	
227	9-4	ø180x12	3697	3927	4229	2M56	90X70	180X120/40	26	183.81	4779.0	
total									2588		134451.6	

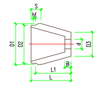


Bolt, sleeve material table (mm; Kg)

number	bolt	sleeveS	sleeveL	sleeved	[illegible]	screw	Bolt single weight	Sleeve single weight	quantity	The total weight of the bolt	The total weight of the sleeve	The total weight of screw	remark
1	M24	41	40	25	6	15	0.41	0.46	3798	1557.2	1733.0	12.6	
2	M27	46	40	28	8	15	0.58	0.58	480	278.4	276.0	2.8	
3	M30	50	45	31	8	15	0.80	0.76	38	30.4	29.0	0.2	
4	M33	55	45	34	8	17	1.00	0.93	60	60.0	55.5	0.4	
5	M36	60	55	37	10	20	1.43	1.35	162	231.7	218.2	2.0	
6	M39	65	55	40	10	24	1.80	1.58	86	154.8	136.0	1.3	
7	M42	70	60	43	10	24	2.16	2.00	100	216.0	199.7	1.5	
8	M45	75	60	46	10	24	2.66	2.29	108	287.3	247.8	1.6	
9	M48	80	60	49	10	24	3.14	2.61	48	150.7	125.4	0.7	
10	M52	85	70	53	10	24	4.00	3.43	128	512.0	439.7	1.9	
11	M56	90	70	57	10	24	5.07	3.85	168	851.8	647.3	2.5	
total									5176	4330	4108	28	

Bolt ball material list

[illegible]	[illegible]	quantity	Single weight (kg)	Total weight (kg)
ø150 (A)	8	224	13.87	3107.3
ø180 (B)	9	398	23.97	9540.5
ø200 (C)	10	31	32.88	1019.3
ø220 (D)	10	20	43.77	875.3
ø250 (E)	10	11	64.22	706.4
ø280 (F)	10	1	90.23	90.2
total		685		15339.1



Cone head material list

number	Outer diameter x length/bottom thickness	D1	t	D3	L	L1	bolt	d	B	hf	S	quantity	Single weight (kg)	Total weight (kg)	remark
1	88.5X70/16	88.5	4	60	70	64	M24	25	16	2	18	810	1.70	1377.0	
2	88.5X70/20	88.5	4	68	70	64	M27	28	20	2	18	32	1.90	60.8	
3	114X70/16	114	4	70	70	63	M24	25	16	3	18	2988	2.50	7470.0	
4	114X70/20	114	4	70	70	63	M27	28	20	3	18	60	2.50	150.0	
5	114X70/20	114	4	70	70	63	M30	31	20	3	18	30	2.50	75.0	
6	140X90/20	140	4	70	90	82	M27	28	20	3	20	388	3.75	1455.0	
7	140X90/20	140	4	70	90	82	M30	31	20	3	20	8	3.75	30.0	
8	140X90/20	140	4	70	90	82	M33	34	20	3	20	60	3.75	225.0	
9	140X90/30	140	4	70	90	82	M36	37	30	3	20	8	4.10	32.8	
10	140X90/30	140	8	100	90	82	M39	40	30	3	25	4	6.40	25.6	
11	140X90/30	140	8	100	90	82	M42	43	30	3	25	4	6.40	25.6	
12	140X90/35	140	8	100	90	82	M45	46	35	3	25	56	6.44	360.6	
13	140X90/35	140	8	100	90	82	M48	49	35	3	25	40	6.44	257.6	
14	140X90/35	140	8	100	90	82	M52	53	35	3	25	40	6.44	257.6	
15	159X120/30	159	6	100	120	112	M36	37	30	3	25	154	8.30	1278.2	
16	159X120/30	159	8	100	120	112	M39	40	30	3	25	50	8.30	415.0	
17	159X120/30	159	6	100	120	112	M39	40	30	3	25	32	8.30	265.6	
18	159X120/30	159	8	100	120	112	M42	43	30	3	25	36	8.30	298.8	
19	159X120/30	159	6	100	120	112	M42	43	30	3	25	60	8.30	498.0	
20	159X120/35	159	10	110	120	112	M45	46	35	3	25	52	9.30	483.6	
21	159X120/35	159	10	110	120	112	M48	49	35	3	25	8	9.30	74.4	
22	159X120/35	159	8	110	120	112	M52	53	35	3	25	88	9.30	818.4	
23	159X120/40	159	12	120	120	112	M56	57	40	3	25	24	10.40	249.6	
24	159X120/40	159	10	120	120	112	M56	57	40	3	25	36	10.40	374.4	
25	180X120/40	180	12	130	120	111	M56	57	40	4	40	108	14.30	1544.4	
total												5176		18103.0	