PRE-DIMENSIONING TABLE

for KRINNER Ground Screws

The figures shown in the table below are just meant for a rough pre-dimensioning to calculate a first offer. The final dimensions of the foundations have to be based on loading tests of the KRINNER Ground Screws conducted on site.

Art. Nr.	Type	Diameter Pipe [mm]	Thickn. Pipe [mm]	MRd,el Pipe [kNm]	MRd,pl Pipe [kNm]	MRd,el Flange[1)] [kNm]	Pressure [kN]	Tension [kN]	Horiz. [kN]
KSF E-Series									
25500	E140x2100-E76-100	139,7	3,6	11,140	15,980		72,50	40,00	19,50
26160	E140x1600-E76-100	139,7	3,6	11,140	15,980		54,00	30,00	15,50
25502	E140x1300-E76-100	139,7	3,6	11,140	15,980		40,00	20,00	10,50
24100	E89x1000-E60	88,9	3,6	4,314	6,290		27,00	13,50	4,50
24080	E89x800-E60	88,9	3,6	4,314	6,290		22,50	10,50	3,50
24055	E89x550-E60	88,9	3,6	4,314	6,290		18,00	8,50	2,00
KSF F-Series									
25484	F140x1600-P	139,7	3,6	11,140	15,980	3,97	54,00	30,00	15,50
25483	F140x1300-P	139,7	3,6	11,140	15,980	3,97	40,00	20,00	10,50
25490	F140x2100-M	139,7	3,6	11,140	15,980	5,72-9,66	72,50	40,00	19,50
25489	F140x1600-M	139,7	3,6	11,140	15,980	5,72-9,66	54,00	30,00	15,50
25478	F76x1600-R	76,1	3,6	3,097	4,550		35,00	21,50	8,50
25477	F76x1300-R	76,1	2,6	2,328	3,065		25,00	12,50	5,50
25476	F76x1000-R	76,1	2,6	2,328	3,065		16,50	9,50	4,50
25475	F76x800-R	76,1	2,6	2,328	3,065		13,50	7,00	3,50
KSF G-Series									
25461	G114x1300-4xM16	114,3	3,6	7,329	10,640		40,00	21,00	10,00
25460	G114x1000-4xM16	114,3	3,6	7,329	10,640		20,00	10,50	6,00
25459	G89x1300-4xM12	88,9	2,6	3,224	4,650		18,00	10,00	4,20
25458	G89x1000-4xM12	88,9	2,6	3,224	4,650		14,50	7,50	3,20
25457	G89x800-4xM12	88,9	2,6	3,224	4,650		10,50	6,00	2,50
25456	G76x2100-3xM16	76,1	3,6	3,097	4,100		45,00	32,50	11,00
25455	G76x1600-3xM16	76,1	3,6	3,097	4,100		35,00	21,50	8,50
25454	G76x1300-3xM16	76,1	3,6	3,097	4,100		25,00	12,50	5,50
24083	G76x800-4xM12	76,1	2,6	2,328	3,065		5,50	4,00	2,00
25452	G66x650-3xM8	66,0	2,0	1,363	1,970		3,00	2,00	0,75
20065	G66x650-1xM8	66,0	2,0	1,363	1,970		3,00	2,00	0,75
20055	G66x550-1xM8	66,0	2,0	1,363	1,970		2,50	1,70	0,50

PRE-DIMENSIONING TABLE

for KRINNER Ground Screws

Art. Nr.	Type	Diameter Pipe [mm]	Thickn. Pipe [mm]	MRd,el Pipe [kNm]	MRd,pl Pipe [kNm]	MRd,el Flange[1)] [kNm]	Press ure [kN]	Tensi on [kN]	Horiz. [kN]
KSF M-Series									
25403	M140x3000-M24	139,7	3,6	11,140	15,980	6,50-9,76	85,00	46,00	22,00
25400	M140x2100-M24	139,7	3,6	11,140	15,980	6,50-9,76	72,50	40,00	19,50
25358	M114x3000-M24	114,3	3,6	7,329	10,610	4,35-6,53	71,80	39,20	17,50
25352	M114x2100-M24	114,3	3,6	7,329	10,610	4,35-6,53	66,00	37,50	17,00
25351	M114x1600-M24	114,3	3,6	7,329	10,610	4,35-6,53	47,50	27,50	13,50
25350	M114x1300-M24	114,3	3,6	7,329	10,610	4,35-6,53	35,00	20,50	9,50
25308	M89x3000-M24	88,9	3,6	4,314	6,220	2,63-3,95	61,00	37,20	15,30
25302	M89x2100-M24	88,9	3,6	4,314	6,220	2,63-3,95	55,00	35,00	14,00
25301	M89x1600-M24	88,9	3,6	4,314	6,220	2,63-3,95	41,00	24,50	11,00
25300	M89x1300-M24	88,9	3,6	4,314	6,220	2,63-3,95	30,00	16,50	7,50
25211	M76x3000-M16	76,1	3,6	3,097	4,100	1,33-2,41	49,00	35,00	12,50
25204	M76x2100-M16	76,1	3,6	3,097	4,100	1,33-2,41	45,00	32,50	11,50
25203	M76x1600-M16	76,1	3,6	3,097	4,100	1,35-2,41	35,00	21,50	8,50
25202	M76x1300-M16	76,1	3,6	3,097	4,100	1,35-2,41	25,00	12,50	6,50
25201	M76x1300-M12	76,1	2,6	2,328	3,065		18,50	11,50	5,50
25205	M76x1000-M12	76,1	2,6	2,328	3,065		16,50	9,50	4,50
25200	M76x800-M12	76,1	2,6	2,328	3,065		13,50	7,00	3,50
KSF U-Series									
21066	U66x865-111	66,0	2,0	1,363			10,50	5,50	3,50
21065	U66x865-91	66,0	2,0	1,363			10,50	5,50	3,50
21062	U66x730-111	66,0	2,0	1,363			6,00	4,50	2,50
21061	U66x730-91	66,0	2,0	1,363			6,00	4,50	2,50
21063	U66x730-71	66,0	2,0	1,363			6,00	4,50	2,50
21060	U66x550-71	66,0	2,0	1,363			2,50	1,70	0,50

[1)] Depending on the number of bolts (4-12) used with the flange, different figures can be achieved.

The displayed figures oft he outer bearing capacity were tested in ground: loam, semi-solid (TL;TM).
For further technical detail please refer to our latest product catalog and our website www.schraubfundemnte.de/en.
KRINNER is not liable for any damage caused by not existent and/or deficient structural calculations.

Legend

M Moment
Rd Dimensioning figure for resistance load
el elastic figure
pl plastic figure

Information sheet pre-dimensioning table
Date: 20.01.2016