

## Load capacity tables for welded grating type SP

**Fp** Single load in kN

**Fv** Evenly distributed load In kN/m2

Conversion value from kg in kN  
10 kN = 1 ton  
1 kN = 100 kg

non-accessible area

accessible area

vehicularly accessible with truck up to 3 t. total weight

vehicularly accessible with truck up to 9 t. total weight

vehicularly accessible with truck up to 30 t. total weight

Information:  
We recommend that vehicularly accessible gratings are only ordered with 4 + 5 mm bearing bar thicknesses

The depicted values are calculated according to their maximum permitted load capacity (deflection 1/200). This is based on a load bearing surface of 200x200 mm and a bearing bar pitch of 33.33 mm.

In order to avoid trip hazards, the deflection under single loads must not exceed 4mm. (See \_\_\_\_ colored characteristic line.)

\* Span = Clearance between the layers

### Bearing bars (mm)

Span width (mm)	25 x 2		30 x 2		35 x 2		40 x 2		50 x 2		25 x 3		30 x 3		35 x 3		40 x 3		50 x 3		60 x 3		30 x 4		35 x 4		40 x 4		45 x 4		50 x 4		60 x 4	
	Fp	Fv	Fp	Fv	Fp	Fv	Fp	Fv	Fp	Fv	Fp	Fv	Fp	Fv	Fp	Fv	Fp	Fv	Fp	Fv	Fp	Fv	Fp	Fv	Fp	Fv	Fp	Fv	Fp	Fv	Fp	Fv		
300	5.35	86.37	7.64	124.37	10.31	169.29	13.36	221.11	20.56	345.48	8.02	129.56	11.46	186.56	15.46	253.93	20.04	331.66	30.84	518.22	43.66	746.24	15.28	248.75	20.62	338.57	26.73	442.22	33.57	559.68	41.12	690.96	58.21	994.99
400	3.56	48.58	5.09	69.96	6.87	95.22	8.91	124.37	13.71	194.33	5.35	72.88	7.64	104.94	10.31	142.84	13.36	186.56	20.56	291.50	29.11	419.76	10.19	139.92	13.75	190.45	17.82	248.75	22.38	314.82	27.41	388.67	38.81	559.68
500	2.67	31.09	3.82	44.77	5.15	60.94	6.68	79.60	10.28	124.37	4.01	46.64	5.73	67.16	7.73	91.41	10.02	119.40	15.42	186.56	21.83	268.65	7.64	89.55	10.31	121.89	13.36	159.20	16.78	201.48	20.56	248.75	29.11	358.20
600	2.14	21.59	3.06	31.09	4.12	42.32	5.35	55.28	8.22	86.37	3.21	32.39	4.58	46.64	6.19	63.48	8.02	82.92	12.34	129.56	17.46	186.56	6.11	62.19	8.25	84.64	10.69	110.55	13.43	139.92	16.45	172.74	23.29	248.75
700	1.78	15.86	2.55	22.84	3.44	31.09	4.45	40.61	6.85	63.46	2.67	23.80	3.82	34.27	5.15	46.64	6.68	60.92	10.28	95.18	14.55	137.06	5.09	45.69	6.87	62.19	8.91	81.22	11.19	102.80	13.71	126.91	19.40	182.75
800	1.53	11.96	2.18	17.49	2.95	23.81	3.82	31.09	5.87	48.58	2.29	17.93	3.27	26.24	4.42	35.71	5.73	46.64	8.81	72.88	12.47	104.94	4.37	34.98	5.89	47.61	7.64	62.19	9.59	78.71	11.75	97.17	16.63	139.92
900	1.33	8.40	1.91	13.82	2.58	18.81	3.34	24.57	5.14	38.39	2.00	12.60	2.87	20.73	3.87	28.21	5.01	36.85	7.71	57.58	10.92	82.92	3.82	27.64	5.15	37.62	6.68	49.14	8.39	62.19	10.28	76.77	14.55	110.55
1000	1.07	6.12	1.70	10.58	2.29	15.24	2.97	19.90	4.57	31.09	1.61	9.18	2.55	15.87	3.44	22.85	4.45	29.85	6.85	46.64	9.70	67.16	3.40	21.16	4.58	30.47	5.94	39.80	7.46	50.37	9.14	62.19	12.94	89.55
1100	0.88	4.60	1.52	7.95	2.06	12.59	2.67	16.45	4.11	25.70	1.33	6.90	2.27	11.92	3.09	18.89	4.01	24.67	6.17	38.55	8.73	55.51	3.03	15.89	4.12	25.18	5.35	32.89	6.71	41.63	8.22	51.39	11.64	74.01
1200	0.74	3.54	1.27	6.12	1.87	9.72	2.43	13.82	3.74	21.59	1.11	5.31	1.91	9.18	2.81	14.58	3.64	20.73	5.61	32.39	7.94	46.64	2.54	12.24	3.75	19.44	4.86	27.64	6.10	34.98	7.48	43.19	10.58	62.19
1300	0.63	2.79	1.08	4.81	1.70	7.65	2.23	11.41	3.43	18.40	0.95	4.18	1.62	7.22	2.55	11.47	3.34	17.12	5.14	27.60	7.28	39.74	2.16	9.63	3.40	15.29	4.45	22.83	5.59	29.81	6.85	36.80	9.70	52.99
1400	0.54	2.23	0.93	3.85	1.46	6.12	2.06	9.14	3.16	15.86	0.81	3.35	1.40	5.78	2.20	9.18	3.08	13.71	4.74	23.80	6.72	34.27	1.86	7.71	2.93	12.24	4.11	18.28	5.16	25.70	6.33	31.73	8.96	45.69
1500	0.47	1.81	0.81	3.13	1.27	4.98	1.89	7.43	2.94	13.82	0.71	2.72	1.21	4.70	1.91	7.47	2.83	11.14	4.41	20.73	6.24	29.85	1.62	6.27	2.55	9.95	3.77	14.86	4.80	21.16	5.87	27.64	8.32	39.80
1600	0.41	1.49	0.71	2.58	1.12	4.10	1.66	6.12	2.74	11.96	0.62	2.24	1.07	3.87	1.68	6.15	2.49	9.18	4.11	17.93	5.82	26.24	1.42	5.17	2.24	8.20	3.31	12.24	4.48	17.43	5.48	23.91	7.76	34.98
1700	0.37	1.25	0.63	2.15	0.99	3.42	1.47	5.10	2.57	9.97	0.55	1.87	0.94	3.23	1.48	5.13	2.20	7.66	3.86	14.95	5.46	23.24	1.26	4.31	1.98	6.84	2.93	10.21	4.14	14.53	5.14	19.94	7.28	30.99
1800	0.33	1.05	0.56	1.81	0.88	2.88	1.31	4.30	2.42	8.40	0.49	1.57	0.84	2.72	1.32	4.32	1.96	6.45	3.63	12.60	5.14	20.73	1.12	3.63	1.76	5.76	2.61	8.60	3.69	12.24	4.84	16.79	6.85	27.64
1900	0.29	0.89	0.50	1.54	0.79	2.45	1.17	3.66	2.25	7.14	0.44	1.34	0.75	2.31	1.19	3.67	1.76	5.48	3.38	10.71	4.85	18.51	1.01	3.08	1.58	4.90	2.34	7.31	3.31	10.41	4.51	14.28	6.47	24.68
2000	0.26	0.77	0.45	1.32	0.71	2.10	1.06	3.13	2.03	6.12	0.40	1.15	0.68	1.98	1.07	3.15	1.59	4.70	3.05	9.18	4.60	15.87	0.91	2.64	1.43	4.20	2.12	6.27	2.99	8.93	4.07	12.24	6.13	21.16

### Bearing bars (mm)

Span width (mm)	30 x 5		35 x 5		40 x 5		50 x 5		60 x 5	
	Fp	Fv	Fp	Fv	Fp	Fv	Fp	Fv	Fp	Fv
300	19.10	310.93	25.77	423.21	33.41	552.77	51.40	863.70	72.77	1243.73
400	12.74	174.90	17.18	238.06	22.27	310.93	34.27	485.83	48.51	699.60
500	9.55	111.94	12.89	152.36	16.70	199.00	25.70	310.93	36.38	447.74
600	7.64	77.73	10.31	105.80	13.36	138.19	20.56	215.93	29.11	310.93
700	6.37	57.11	8.59	77.73	11.14	101.53	17.13	158.64	24.26	228.44
800	5.46	43.73	7.36	59.51	9.55	77.73	14.69	121.64	20.79	174.90
900	4.78	34.55	6.44	47.02	8.35	61.42	12.85	95.97	18.19	138.19
1000	4.25	26.44	5.73	38.09	7.42	49.75	11.42	77.73	16.17	111.94
1100	3.79	19.87	5.15	31.48	6.68	41.12	10.28	64.24	14.55	92.51
1200	3.18	15.30	4.69	24.30	6.07	34.55	9.35	53.98	13.23	77.73
1300	2.70	12.04	4.25	19.11	5.57	28.53	8.57	46.00	12.13	66.23
1400	2.33	9.64	3.66	15.30	5.14	22.84	7.91	39.66	11.20	57.11
1500	2.02	7.84	3.18	12.44	4.72	18.57	7.34	34.55	10.40	49.75
1600	1.78	6.46	2.80	10.25	4.14	15.30	6.85	29.89	9.70	43.73
1700	1.57	5.38	2.47	8.55	3.67	12.76	6.43	24.92	9.10	38.73
1800	1.40	4.53	2.21	7.20	3.27	10.75	6.05	20.99	8.56	34.55
1900	1.26	3.86	1.98	6.12	2.93	9.14	5.64	17.85	8.09	30.84
2000	1.13	3.31	1.78	5.25	2.64	7.84	5.08	15.30	7.66	26.44

Bearing bar 2 mm	Bearing bar 3 mm	Bearing bar 4 mm	Bearing bar 5 mm
20x2			
25x2	25x3	25x4	25x5
30x2	30x3	30x4	30x5
35x2	35x3	35x4	35x5
40x2	40x3	40x4	40x5
45x2	45x3	45x4	45x5
50x2	50x3	50x4	50x5
60x2	60x3	60x4	60x5
Einfassung 3 mm	Einfassung 3 mm	Einfassung 4 mm	Einfassung 5 mm

Common mesh pitches					
Bearing bar		Fill bar			
20,77	x		24,0	38,1	50,8
30,15	x		24,0		50,8 76,2 101,6
34,30	x	19,25	24,0	38,1	50,8 76,2
41,45	x		24,0		50,8

The mesh clearance results from the respective mesh pitch and the material thickness used

Example:  
Pitch 34.3x38.1 / bearing bar 3 mm / fill bar 6x6 mm gives clearance of 31.3 x 32.1 - usual trade description 30x30