

Permissible load for channels with three point loads /  
Zulässige Lastwerte für Montageschiene bei drei Lasteinleitungen

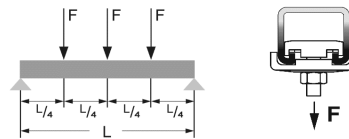


L [cm]	Type																				
	27/15/1,25	27/25/1,25	27/37/1,25	41/21/1,5	41/21/2,0	41/31/2,0	41/41/2,0	41/41/2,5	41/45/2,5	41/52/2,5	41/62/2,5	41-75/65/3,0	41-75/75/3,0	41/21/2,0 D γ)	41/41/2,0 D γ)	41/41/2,5 D γ)	41/45/2,5 D γ)	41/52/2,5 D γ)	41/62/2,5 D γ)	41-75/65/3,0 D γ)	41-75/75/3,0 D γ)
	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]
20	474	1050	1954	1102	1524	2985	4640	5450	6335	8005	10657	15044	19048	3896	13871	16580	19404	24823	33617	43016	56753
40	236	525	977	550	761	1491	2319	2723	3166	4001	5326	7519	9520	1946	6933	8286	9698	12408	16804	21501	28369
60	117	349	650	366	506	993	1544	1814	2108	2665	3548	5008	6342	1296	4619	5520	6461	8267	11198	14326	18904
80	65	239	487	259	302	743	1156	1358	1579	1996	2659	3752	4752	970	3461	4136	4842	6196	8393	10737	14169
100	41	152	389	164	192	538	923	1084	1261	1595	2124	2997	3797	774	2765	3305	3869	4952	6709	8581	11326
120	28	105	289	113	131	371	762	902	1049	1326	1767	2493	3159	643	2301	2750	3220	4122	5586	7143	9429
140	20	76	211	81	95	271	557	660	841	1134	1512	2132	2703	527	1969	2353	2755	3528	4782	6114	8073
160	14	57	160	61	71	205	424	502	641	936	1320	1861	2360	400	1720	2054	2406	3082	4179	5341	7054
180	10	44	126	47	54	160	332	393	503	736	1171	1650	2093	313	1525	1822	2134	2735	3709	4739	6261
200	8	34	100	37	42	127	266	315	404	592	944	1480	1879	250	1369	1635	1916	2458	3333	4256	5625
220	5	27	82	29	33	103	217	257	330	486	776	1317	1703	203	1241	1482	1737	2228	3024	3861	5104
240	4	22	67	23	26	84	179	213	274	404	648	1099	1556	168	1110	1324	1588	2037	2766	3530	4669
260	2	18	56	18	20	69	150	178	230	340	547	930	1355	139	940	1122	1448	1876	2548	3250	4300
280	1	14	47	14	15	57	126	150	195	290	468	794	1161	117	805	960	1241	1737	2360	3009	3983
300		11	40	11	11	48	107	127	166	248	403	685	1003	98	696	830	1074	1603	2197	2799	3708
320		9	34	8	8	39	91	108	142	214	350	594	874	83	607	723	937	1402	2054	2615	3466
340		6	29	6	5	33	78	93	122	186	305	519	766	70	532	633	822	1234	1928	2453	3253
360		5	24	4	3	27	66	79	105	162	268	456	676	59	469	558	726	1093	1789	2308	3062
380		3	20	2		22	57	68	91	141	236	402	599	50	416	494	644	973	1596	2129	2891
400		2	17			17	48	57	78	123	208	355	532	41	370	439	574	870	1432	1908	2737
420			14			13	41	49	68	108	184	315	475	34	330	391	513	781	1290	1717	2596
440			12			9	34	41	58	94	164	280	425	28	295	349	460	704	1166	1550	2404
460			9			6	28	34	49	82	145	248	381	22	265	313	414	636	1058	1404	2184
480			7			3	23	28	42	71	129	221	342	17	238	280	373	576	963	1276	1991
500			5				18	22	35	62	114	196	307	12	214	251	336	523	879	1162	1819
520			4				14	17	28	53	101	174	276	7	192	225	303	476	803	1060	1666
540			2				10	12	22	45	89	154	248	3	173	202	274	433	736	969	1530
560							6	8	17	38	78	135	223		155	181	247	395	675	888	1407
580							2	4	12	31	68	119	200		139	161	223	360	621	813	1296
600									8	25	59	103	178		124	144	201	329	571	746	1196

$\sigma_{perm} / \sigma_{zul}$ : 185 N/mm<sup>2</sup>;  $f \leq L/200$

The influence of the channel slots and the channel's dead weight are taken into account in the values.  
Calculations according RAL-GZ 655-C.

Berechnungen gemäß RAL-GZ 655-C und unter Einbezug der Eigenlasten



\*) Double channels with max. length up to 0,5 m should be connected at both ends, if bearing and point of load incidence are not on the same side.  
Bei Doppelschienen sind Kurzstücke bis 0,5 m an beiden Enden zu verbinden, falls Lagerung und Kraftangriffspunkt nicht auf gleicher Seite liegen.

\*\*) no RAL quality label  
kein Gütezeichen



Technical data for channels /  
Technische Daten der Montageschienen



Type		27/15/1,25	27/25/1,25	27/37/1,25	41/21/1,5	41/21/2,0	41/31/2,0	41/41/2,0	41/41/2,5	41/45/2,5	41/52/2,5	41/62/2,5	41-75/65/3,0	41-75/75/3,0	41/21/2,0 D 'y)	41/41/2,0 D 'y)	41/41/2,5 D 'y)	41/45/2,5 D 'y)	41/52/2,5 D 'y)	41/62/2,5 D 'y)	41-75/65/3,0 D 'y)	41-75/75/3,0 D 'y)
Section modulus / Widerstandsmoment [cm <sup>3</sup> ]	Wy	0.25	0.55	1.03	0.70	0.82	1.61	2.50	2.94	3.42	4.32	5.75	8.13	10.29	2.35	7.49	8.96	10.48	13.41	18.16	23.24	30.66
	Wz	0.64	0.95	1.31	1.71	2.11	2.90	3.65	4.39	4.76	5.39	6.29	10.27	11.41	4.22	7.30	8.79	9.52	10.78	12.59	20.54	22.83
Moment of inertia / Trägheitsmoment [cm <sup>4</sup> ]	Iy	0.20	0.72	1.97	0.78	0.92	2.55	5.21	6.17	7.85	11.43	18.08	30.67	44.30	4.94	30.73	36.73	47.18	69.75	112.63	151.10	230.02
	Iz	0.86	1.28	1.78	3.50	4.32	5.96	7.48	9.01	9.75	11.05	12.91	38.51	42.80	8.65	14.97	18.03	19.51	22.11	25.82	77.02	85.60
Radius of gyration / Trägheitsradius [cm]	iy	0.54	0.89	1.27	0.78	0.75	1.10	1.44	1.42	1.55	1.78	2.10	2.25	2.53	1.24	2.48	2.46	2.70	3.11	3.71	3.53	4.07
	iz	1.13	1.18	1.21	1.65	1.64	1.69	1.73	1.72	1.73	1.75	1.77	2.52	2.48	1.64	1.73	1.72	1.73	1.75	1.77	2.52	2.48
Cross section / Querschnitt [cm <sup>2</sup> ]		0.67	0.92	1.22	1.27	1.60	2.08	2.48	3.03	3.23	3.58	4.08	6.03	6.92	3.20	4.96	6.06	6.46	7.16	8.16	12.06	13.84
Distance / Abstand e [cm]		0.80	1.30	1.91	1.11	1.11	1.58	2.07	2.09	2.29	2.64	3.14	3.77	4.30	2.10	4.10	4.10	4.50	5.20	6.20	6.50	7.50
E modulus / E-Modul [N/mm <sup>2</sup> ]		210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000
max. point carrying moment / max. zul. Punkttrag- fähigkeit F <sub>max</sub> (Zug) [kN]		1.50	1.50	1.50	2.00	4.00	4.00	4.00	6.00	6.00	6.00	6.00	10.00	10.00	4.00	4.00	6.00	6.00	6.00	6.00	10.00	10.00
max. torsional moment / zul. Schenkeltragmoment M <sub>T</sub> [Nm]		10.00	10.00	10.00	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50

