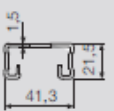

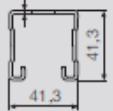
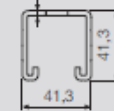
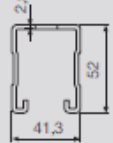
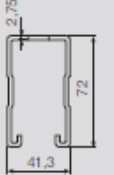
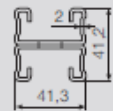
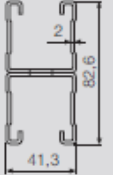
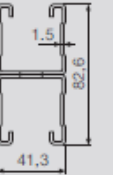
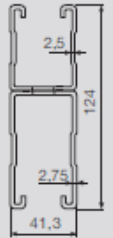
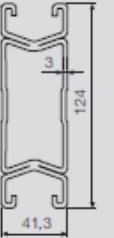
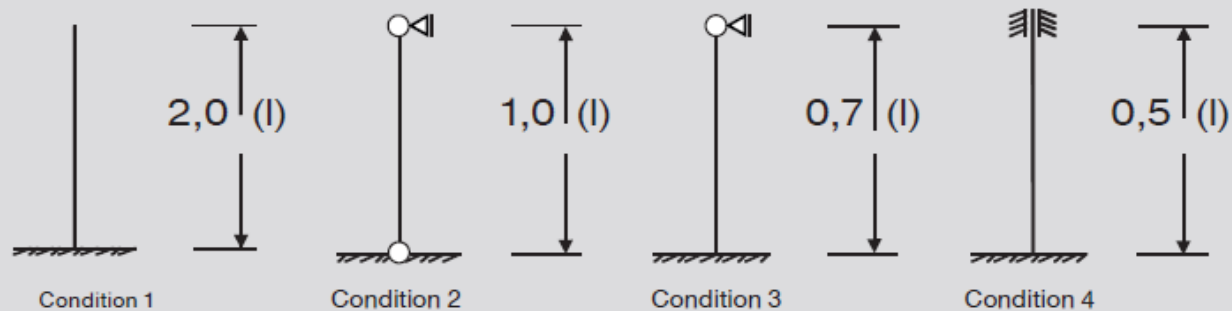


# Permissible buckling load for channel profiles MQ

• Flexural buckling certificate according to EN 1993-1-3: 2010 for C-Profiles (fully supporting cross-section)

Effective length Sk [cm]											
	New MQ-21.5 [kN]	MQ-41-L [kN]	New MQ-41 [kN]	MQ-41/3 MQ-41/3LL [kN]	MQ-52 [kN]	MQ-72 [kN]	MQ-21 D [kN]	MQ-41 D [kN]	MQ-41D-L [kN]	MQ-52-72 D [kN]	MQ-124X D [kN]
25	24.04	33.05	43.35	61.61	62.18	85.14	68.37	104.07	78.78	171.23	206.39
50	14.62	23.55	30.74	44.67	44.15	57.94	59.19	94.83	71.94	152.40	188.57
75	8.73	15.27	20.28	31.43	29.42	36.95	48.77	85.04	64.72	132.18	169.79
100	5.81	10.31	14.15	23.56	20.85	25.41	38.04	74.24	56.77	110.90	149.12
125	4.21	7.48	10.66	18.79	15.97	19.04	28.96	62.93	48.39	90.99	127.29
150	3.22	5.78	8.53	15.62	12.99	15.22	22.21	52.23	40.38	74.40	106.36
175	2.56	4.68	7.11	13.32	11.01	12.75	17.36	43.04	33.41	61.37	88.10
200	2.09	3.92	6.11	11.53	9.60	11.04	13.86	35.59	27.70	51.29	73.11
225	1.74	3.38	5.36	10.09	8.54	9.78	11.29	29.68	23.15	43.44	61.13
250	1.47	2.97	4.77	8.90	7.70	8.82	9.36	25.02	19.54	37.23	51.61
275	1.26	2.65	4.29	7.89	7.01	8.04	7.88	21.32	16.66	32.25	44.03
300	1.09	2.39	3.89	7.04	6.43	7.40	6.72	18.35	14.36	28.19	37.94

Flexural buckling:  
Rod length  $l$  (cm) / euler factor  $\beta$  / Sk (cm) effective length =  $l \cdot \beta$



•  $\gamma_{M0} = 1,4 \rightarrow F_{0}^* =$  permissible buckling load  $1,4 \cdot$  (design value)

• Bend table is only valid for centric buckling loads. The values in this table aren't allowed for offset torque/oblique position/lateral-torsional buckling and must be engineered.