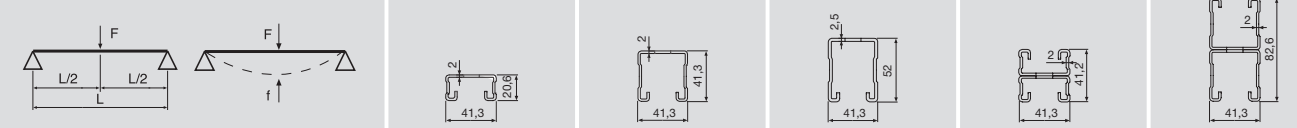


## Technical data for channel profile MQ (max. span width/deflection at single load)



load F [kN]	Max. span width L [cm] / deflection f [mm], max. L/200 at single load									
	MQ-21-RA2 MQ-21-R		MQ-41-RA2 MQ-41-R		MQ-52-R		MQ-21D-RA2 MQ-21D-R		MQ-41D-R	
	L	f	L	f	L	f	L	f	L	f
0,25	130	6	299	15	410	21	282	14	600	30
0,50	93	5	221	11	313	16	211	11	485	24
0,75	67	3	183	9	262	13	175	9	414	21
1,00	50	1	150	7	229	11	142	6	367	18
1,25	40	<1	120	4	206	10	114	4	332	17
1,50	34	<1	101	3	175	8	95	3	296	14
1,75	29	<1	86	2	150	6	82	2	257	11
2,00	25	<1	76	2	132	4	72	2	226	8
2,25	22	<1	67	1	118	3	64	1	202	7
2,50	20	<1	61	1	106	3	58	1	182	5
2,75	18	<1	55	<1	96	2	52	<1	166	5
3,00	17	<1	50	<1	88	2	48	<1	153	4
3,50	14	<1	43	<1	76	1	41	<1	131	3
4,00	12	<1	38	<1	66	1	36	<1	115	2
4,50	11	<1	34	<1	59	<1	32	<1	102	2
5,00	10	<1	30	<1	53	<1	29	<1	92	1
6,00	8	<1	25	<1	44	<1	24	<1	77	<1
7,00	7	<1	21	<1	38	<1	20	<1	66	<1
8,00	6	<1	19	<1	33	<1	18	<1	58	<1

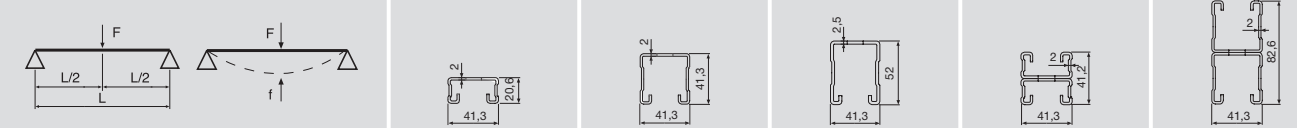
### Selection example:

- 1,0 kN (= 100 kg) should be carried by a channel with a channel span width L = 100cm (single span simply supported).

### Solution:






- Select the line with the load, F = 1,0 kN.
- The channels MQ-41-RA2 to MQ-41D-R can be used because the permissible span width (table value) is larger or equal to the required span width of L = 100cm.

## Technical data for channel profile MQ (max. load/deflection at single load)








Span width L [cm]	Max. load F [kN] / deflection f [mm], max. L/200 bei single load									
	MQ-21-RA2 MQ-21-R		MQ-41-RA2 MQ-41-R		MQ-52-R		MQ-21D-RA2 MQ-21D-R		MQ-41D-R	
	F	f	F	f	F	f	F	f	F	f
25	2,01	0,4	6,03	0,2	10,59	0,2	5,73	0,2	18,36	<0,1
50	1,01	1,4	3,03	0,7	5,32	0,6	2,88	0,8	9,23	0,4
75	0,67	3,2	2,02	1,7	3,54	1,4	1,91	1,7	6,15	0,9
100	0,43	5,0	1,51	2,9	2,65	2,4	1,43	3,0	4,61	1,6
125	0,27	6,3	1,20	4,6	2,11	3,8	1,14	4,7	3,68	2,5
150	0,18	7,5	1,00	6,7	1,76	5,5	0,94	6,8	3,06	3,5
175	0,13	8,8	0,82	8,8	1,50	7,5	0,75	8,8	2,61	4,8
200	0,09	10,0	0,62	10,0	1,30	9,8	0,56	10,0	2,27	6,3
225	0,07	11,3	0,48	11,3	1,04	11,3	0,43	11,3	2,01	8,0
250	0,05	12,5	0,38	12,5	0,83	12,5	0,34	12,5	1,80	9,9
275	0,03	13,8	0,31	13,8	0,67	13,8	0,27	13,8	1,63	12,0
300	0,02	15,0	0,25	15,0	0,55	15,0	0,21	15,0	1,48	14,3
325	-	-	0,20	16,3	0,46	16,3	0,17	16,3	1,31	16,3
350	-	-	0,17	17,5	0,38	17,5	0,13	17,5	1,11	17,5
375	-	-	0,13	18,8	0,32	18,8	0,10	18,8	0,95	18,8
400	-	-	0,11	20,0	0,27	20,0	0,08	20,0	0,82	20,0
425	-	-	0,09	21,3	0,22	21,3	0,06	21,3	0,70	21,3
450	-	-	0,07	22,5	0,19	22,5	0,04	22,5	0,61	22,5
475	-	-	0,05	23,8	0,16	23,8	0,02	23,8	0,53	23,8
500	-	-	0,04	25,0	0,13	25,0	-	-	0,46	25,0
525	-	-	0,03	26,3	0,10	26,3	-	-	0,40	26,3
550	-	-	0,01	27,5	0,08	27,5	-	-	0,34	27,5
575	-	-	-	-	0,06	28,8	-	-	0,30	28,8
600	-	-	-	-	0,04	30,0	-	-	0,25	30,0

## Technical data for bracket MQK (stainless steel)

Bracket	L (mm)	Type of load 1 Uniform	Type of load 2 Single	Type of load 3	Type of load 4	Type of load 5
		$F_1 = q \cdot i$ 				
		F1 [N]	F1 [N]	F1 [N]	F2 [N]	F3 [N]
stainless steel A4 without angle brace		HST-R M12 HUS-HR 10x105/15/35/45*	HST-R M12 HUS-HR 10x105/15/35/45*	HST-R M12 HUS-HR 10x105/15/35/45*	HST-R M12 HUS-HR 10x105/15/35/45*	HST-R M12 HUS-HR 10x105/15/35/45*
MQK-21/300 R	300	570	570	280	280	190
MQK-21/450 R	450	380	380	150	190	120
MQK-41/300 R	300	1700	1700	850	850	560
MQK-41/450 R	450	1130	1130	560	560	370
MQK-41/600 R	600	840	840	420	420	280
MQK-21 D/450 R	450	1050	1050	520	520	350
MQK-41 D/750 R	750	1600	1600	800	800	530

- \* The bearing capacity of the bracket with attachment **HST-R M12** alternative **HUS-HR 10x105** with  $h_{ef}$  min 67 mm.
- Load values are for grade  $\geq$  C20/25 concrete.
- The bracket's own weight has been considered.
- The load's apply only if the bracket is fastened away from abuilding component edge (fastenings made at component edges must be designed separately).
- Separate verification must be provided that forces are transferred to the respective base material, i.e. steel and concrete.
- The application guidelines in anchor approvals must be observed. Loading values according to approval status October 2013.
- The deflection (deformation) of L/150 was observed in all cases, this being measured ath the point of load application.

## Technical data for bracket MQK with angle brace (stainless steel)

Bracket	L (mm)	Type of load 1 Uniform	Type of load 2 Single	Type of load 3	Type of load 4	Type of load 5
		$F_1 = q \cdot i$ 				
		F1 [N]	F1 [N]	F1 [N]	F2 [N]	F3 [N]
stainless steel A4 with angle brace		HST-R M12 HUS-HR 10x105/15/35/45*	HST-R M12 HUS-HR 10x105/15/35/45*	HST-R M12 HUS-HR 10x105/15/35/45*	HST-R M12 HUS-HR 10x105/15/35/45*	HST-R M12 HUS-HR 10x105/15/35/45*
MQK-21/450 R k	450	4520	1170	420	2020	1790
MQK-41/450 R k	450	6390	3520	2440	3190	2130
MQK-41/600 R l	600	5650	2630	2740	2570	1890
MQK-21 D/450 R k	450	6380	3350	2320	3190	2120
MQK-41 D/750 R l	750	4530	4530	2260	2260	1510

- k = MQK-SK-R l = MQK-SL-R
- \* The bearing capacity of the bracket with attachment **HST-R M12** alternative **HUS-HR 10x105** with  $h_{ef}$  min 67 mm.
  - Load values are for grade  $\geq$  C20/25 concrete.
  - The bracket's own weight has been considered.
  - The load's apply only if the bracket is fastened away from abuilding component edge (fastenings made at component edges must be designed separately).
  - Separate verification must be provided that forces are transferred to the respective base material, i.e. steel and concrete.
  - The application guidelines in anchor approvals must be observed. Loading values according to approval status October 2013.
  - The deflection (deformation) of L/150 was observed in all cases, this being measured ath the point of load application.