

MIQ Technical Data Tables

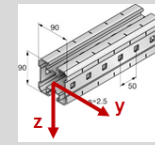
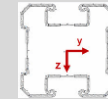
Technical data for MIQ Channel system

13/11/2015

Order description	Single loads				
	±Fx (kN)	±Fy (kN)	±Fz (kN)		
2123880 - Connector MIQC-90-HS	0.7	5.4	+10.2 -18.7		
2123881 - Connector MIQC-90-HT	0.7	5.4	+10.2 -12.4		
2119868 - Connector MIQC-90-L	3.5	3.5	6.2		
2120144 - Connector MIQC-C90 concrete	24.4	8.8	38.9		
2120270 - Connector MIQC-S90-AC steel	23.2	5	5		
2120271 - Connector MIQC-S90-AP steel	23.2	5	5		
2120272 - Connector MIQC-S90-BC steel	17.3	5	5		
2120273 - Connector MIQC-S90-BP steel	17.3	5	5		

Order description	Max loads		
	Tensile (kN)	Shear (kN)	
2120142 - T-head bolt MIQA-T	11.7	6.2	
2120274 - Wing nut MIQM-M10	8.5	3.0	
2120276 - Wing nut MIQM-M12	8.5	3.5	
2120275 - Wing nut MIQM-M16	8.5	3.5	

Technical Data for girder MIQ / cross-section values including torsion

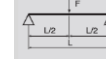


MIQ-90

Channel wall thickness	t	[mm]	2.5
Cross-sectional area	A	[mm ²]	1093.51
Channel weight		[kg/m]	8.58
Material			
Yield strength	f _{y,k}	[N/mm ²]	275
Permissible stress*	σ _{Zul}	[N/mm ²]	196.4
Thrust-modulus		[N/mm ²]	81000
Surface			
Hot-dip galvanised		[µm]	65
Cross-section values Y-axis			
Axis of gravity	e _y	[mm]	45
Moment of Inertia	I _y	[cm ⁴]	121.65
Section modulus	W _y	[cm ³]	27.03
Radius of gyration	i _y	[cm]	3.34
Cross-section values Z-axis			
Axis of gravity	e _z	[mm]	45
Moment of Inertia	I _z	[cm ⁴]	101.29
Section modulus	W _z	[cm ³]	22.51
Radius of gyration	i _z	[cm]	3.04
Data to the torsion			
Torsional moment of inertia	∑ I _t	[cm ⁴]	54.35
Torsional resistance moment	W _t = 2 x A _{Bredt} ¹⁾		9.1

¹⁾ The permissible tension results out of f_{y,k}γ_{GO} with γ=1.4.

1 single load



Span width [cm]				
	F [kN]	f [mm] ≤ L/200	F [kN]	f [mm] ≤ L/200
25	84.94	0.1	70.73	0.1
50	42.45	0.4	35.35	0.4
75	28.28	1.0	23.55	1.0
100	21.19	1.7	17.64	1.7
125	16.94	2.7	14.10	2.7
150	14.09	3.9	11.73	3.9
175	12.06	5.3	10.03	5.3
200	10.53	6.9	8.76	6.9
225	9.34	8.8	7.76	8.8
250	8.39	10.9	6.97	10.9
275	7.60	13.1	6.31	13.2
300	6.65	15.0	5.51	15.0
325	5.63	16.3	4.66	16.3
350	4.82	17.5	3.98	17.5
375	4.16	18.8	3.43	18.8
400	3.62	20.0	2.98	20.0
425	3.17	21.3	2.60	21.3
450	2.79	22.5	2.28	22.5
475	2.46	23.8	2.01	23.8
500	2.18	25.0	1.77	25.0
525	1.94	26.3	1.57	26.3
550	1.73	27.5	1.39	27.5
575	1.55	28.8	1.24	28.8
600	1.38	30.0	1.10	30.0

