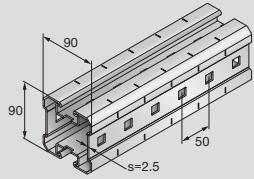
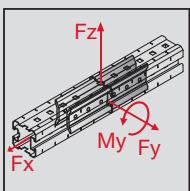
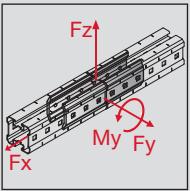


Technical data for girder MIQ / cross-section values inclusive torsion

			
			MIQ-90
Channel wall thickness	t	[mm ²]	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_{perm}	[N/mm ²]	178.6
thrust-module		[N/mm ²]	81000
Surface			
hot dip galvanized	70	[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
Permtion modulus	W_z	[cm ³]	22.51
Radius of gyration	i_z	[cm]	3.04
Data to the torsion			
torsional moment of inertia	ΣI_t	[cm ⁴]	54.35
torsional resistance moment	W_t	[cm ³]	9.1

1) The permissible tension results out of $f_{y,k}/Y_G/Q$ with $y=1.54$.

Load drawing	± Fx	± Fy	± Fz	± My
MI Side 	34.67 kN	5.0 kN	13.33 kN	1.2 kN
MIQ Side 	34.67 kN	3.33 kN	14.67 kN	1.2 kN
Load values are only valid if use in pairs. Shown load values are recommended values with partial safety factors for actions and resistance included. Design value = 1.5 * recommended value.				