MPR-Installation channels BV

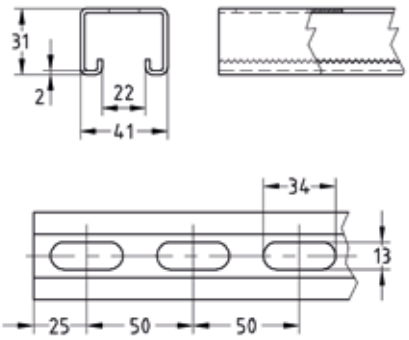
hot-dip galvanised

Application

- Fast and efficient attachment of piping and pipe routes
- Also ideal as support structure for air ducts

Your advantages

- Back perforation matched to the spacings in the bulb flats used in shipbuilding
- Meshing into the channel slot for positive-fit attachment of add-on parts
- High bending stiffness due to the cross-section design
- For secure fastening that is adjustable laterally and vertically
- For setting up structures with correctly measured static loads by means of diverse connection components
- Strong, square C-section combines compact design with optimum load-bearing capacity



Profile 41/31/2.0

Features

Profile	Length [mm]	Part no.	Sales unit	Pack unit
41/31/2.0 BV	3,000	**165780**	1	Pieces
	6,000	**165781**		

We also manufacture MPR-Installation channels BV in other material/surface variants on request. These products are manufactured to order. Minimum quantities and delivery times on request.

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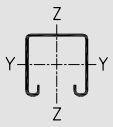
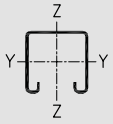
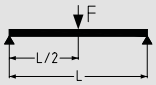
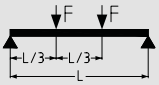
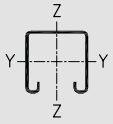
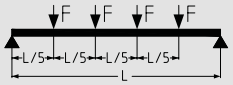
Technical data

Technical data of profile:

Features

Profile	Material	Surface	Admissible steel stress $\sigma_{adm.}$ [N/mm²]	Available threaded plates*	Profile weight [kg/m]	Profile cross-section [cm²]	Moment of inertia		Resistance moment	
							I_y [cm⁴]	I_z [cm⁴]	W_y [cm³]	W_z [cm³]
41/31/2.0 BV	S250 GD+Z	hot-dip galvanised	162	M8, M10, M12, M16	1.85	2.1	2.5906	6.0922	1.622	2.972

Load bearing capacities of profiles for bending around the y-axis [N]:

Profile	L [m]						L [m]					
	0.5	1.0	1.5	2.0	4.0	6.0	0.5	1.0	1.5	2.0	4.0	6.0
												
41/31/2.0 BV	2,101	1,044	563	304	36	-	1,573	760	331	178	21	-
												
41/31/2.0 BV	1,050	522	237	128	15	-	876	428	186	100	12	-

The determined loads apply for static loads. Calculation based on Eurocode (EC3).
The safety coefficient γ = 1.54 takes into account the partial and combination coefficients as well as the safety factor of the material.
For the given values, the permissible steel stress and the maximum permissible deflection $L_{/200}$ are not exceeded, taking the deadweight into consideration.

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Permissible buckling loads for profiles [N]:

Buckling length Lk [mm]	41/31/2.0 BV
200	34,075
300	33,007
400	31,779
500	30,439
600	28,942
700	27,255
800	25,376
900	23,345
1.000	21,247
1.100	19,183
1.200	17,238
1.300	15,463
1.400	13,877
1.500	12,477
1.600	11,251
1.700	10,178
1.800	9,239
1.900	8,417
2.000	7,694
2.100	7,057
2.200	6,493
2.300	5,992
2.400	5,546
2.500	5,146
2.600	4,788
2.700	4,465
2.800	4,173
2.900	3,909
3.000	3,669
3.100	3,450
3.200	3,250
3.300	3,067
3.400	2,898
3.500	2,743
3.600	2,601
3.700	2,469
3.800	2,346
3.900	2,233
4.000	2,127
4.100	2,029
4.200	1,938
4.300	1,852
4.400	1,772
4.500	1,697
4.600	1,627
4.700	1,561
4.800	1,499
4.900	1,441
5.000	1,385
5.100	1,333
5.200	1,284
5.300	1,238
5.400	1,194
5.500	1,152
5.600	1,113
5.700	1,075
5.800	1,039
5.900	1,005
6.000	973

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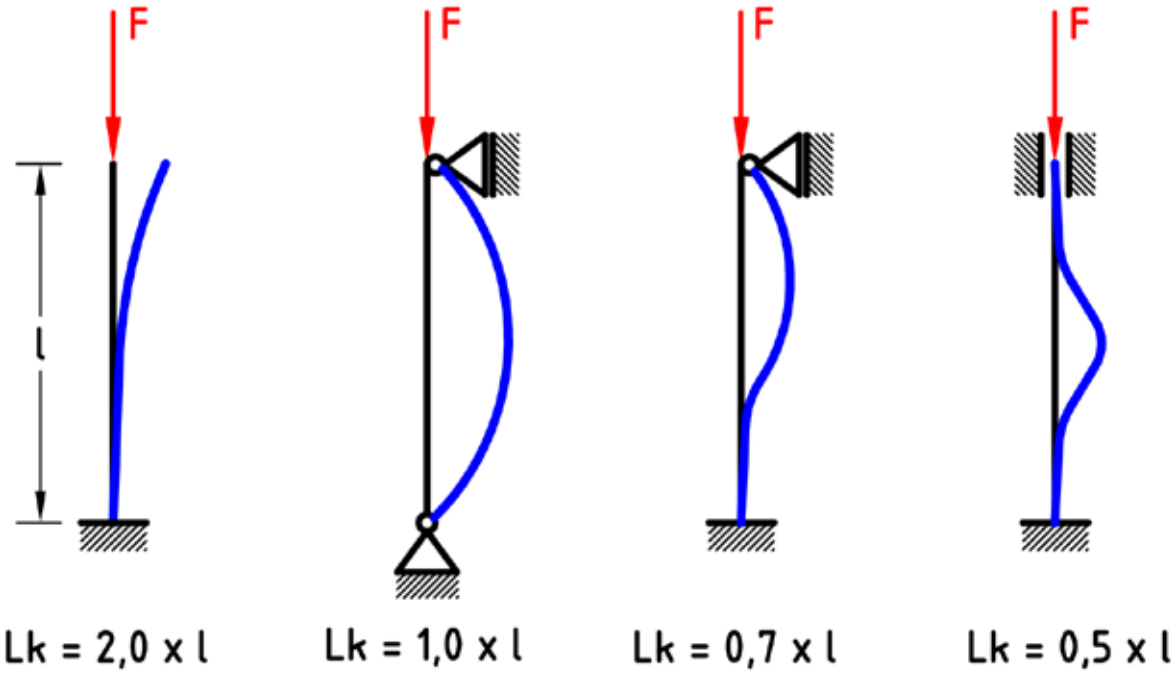
Buckling loads as per DIN EN 1993-1-1 sections 6.2 and 6.3.
The values in the table apply for fully bearing cross-sections and central load transmission!
The potentially lower slenderness parameter for buckling and lateral torsional buckling must be examined separately!

Buckling about the z-axis and the y-axis was considered.
The least favourable buckling load is documented in the table.

The safety coefficient γ = 1.54 takes into account the safety and combination coefficients as well as the safety factor of the material.

Determine the authoritative buckling length Lk depending on the storage conditions and the rod length l, as shown in the figure.
Read off the buckling load F as Lk from the table.



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