

Channel FUS

The universal and complete mounting channel system for a wide range of applications

4



3D-frame constructions



Solid frame construction

Applications

- Secure horizontal and vertical installations.
- Fast and efficient fixing of pipelines and supporting structures.
- For use in dry interior areas.

Certificates



ETA-21/0140



Advantages

- The fire inspection report in line with MLAR/EN13501 guarantees independently tested functional safety.
- The basic channel geometry allows the usage of the complete extensive range of accessories.
- The stamped serration in the channel gives the sliding nuts a secure hold for high shear loads, e.g. for vertical installation.
- Different channel wall thicknesses allow economical choices for installation.
- The scale on the mounting channels simplifies the cutting and positioning of the fixtures during the installation.

Properties

- Material: pre-galvanised steel S250GD+Z275 (material no. 1.0242) acc. to DIN EN 10346

See also:

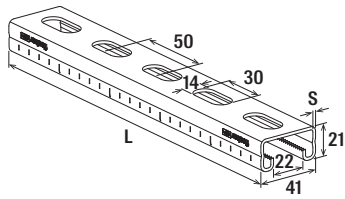
Product family Channel nut FCN Clix P
Page 154



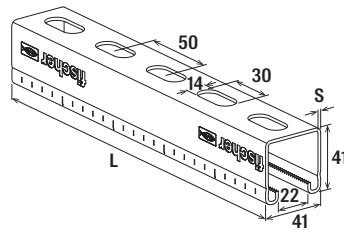
See also:

Product family Rubber inlay EMS Page
260

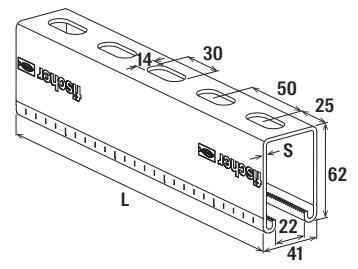




FUS 21



FUS 41



FUS 62

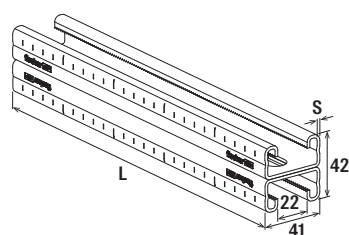
4

Technical data

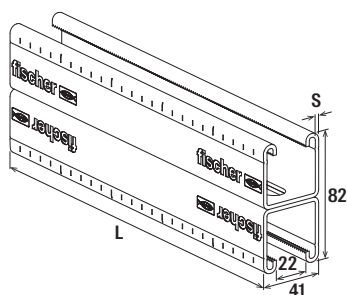
Item	Item no.	Ap- pro- val ETA	Fire test report	Length		Thickness		Sales unit
				L	[mm]	S	[mm]	
FUS 21/1,5 - 2 m	545117	●	–	2,000		1.5		1
FUS 21/1,5 - 3 m	545118	●	–	3,000		1.5		1
FUS 21/1,5 - 6 m	545119 ¹⁾	●	–	6,000		1.5		1
FUS 21/2,0 - 2 m	040391	●	–	2,000		2.0		1
FUS 21/2,0 - 3 m	097660	●	–	3,000		2.0		1
FUS 21/2,0 - 6 m	097661	●	–	6,000		2.0		1
FUS 21/2,5 - 2 m	092867	●	–	2,000		2.5		1
FUS 21/2,5 - 3 m	077349	●	–	3,000		2.5		1
FUS 21/2,5 - 6 m	077541	●	–	6,000		2.5		1
FUS 41/1,5 - 2 m	545120	●	–	2,000		1.5		1
FUS 41/1,5 - 3 m	545126	●	–	3,000		1.5		1
FUS 41/1,5 - 6 m	545127	●	–	6,000		1.5		1
FUS 41/2,0 - 2 m	040390	●	–	2,000		2.0		1
FUS 41/2,0 - 3 m	097658	●	–	3,000		2.0		1
FUS 41/2,0 - 6 m	097659	●	–	6,000		2.0		1
FUS 41/2,5 - 2 m	092295	●	Yes	2,000		2.5		1
FUS 41/2,5 - 3 m	077347	●	Yes	3,000		2.5		1
FUS 41/2,5 - 6 m	077537	●	Yes	6,000		2.5		1
FUS 62/2,5 - 6 m	504457	●	Yes	6,000		2.5		1

¹⁾ Delivery time on request.

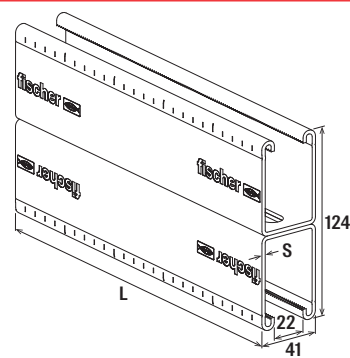
For load information under fire exposure, see chapter Basic knowledge.



FUS 21D



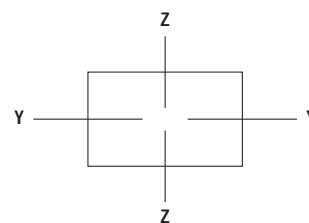
FUS 41D



FUS 62D

Technical data

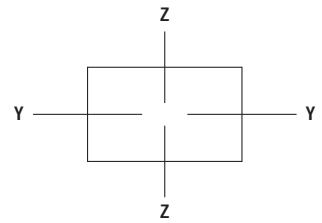
Item	Item no.	Ap- pro- val ETA	Length	Thickness	Sales unit
			L [mm]	S [mm]	
FUS 21D/2,0 - 3 m	504458	●	3,000	2.0	1
FUS 21D/2,0 - 6 m	535531	●	6,000	2.0	1
FUS 41D/2,5 - 6 m	504459	●	6,000	2.5	1
FUS 62D/2,5 - 6 m	504460	●	6,000	2.5	1



Loads

Item	Item no.	Ap- pro- val ETA	Profile weight	Channel cross section	Moment of inertia	Moment of inertia	Section modulus	Section modulus	Max. recommen- ded static load for 1m length	Max. recommen- ded static load for 2m length	Max. recommen- ded static load for 3m length	Sales unit
			[kg/m]	[cm ²]	I _y [cm ⁴]	I _z [cm ⁴]	W _y [cm ³]	W _z [cm ³]	F _{rec} [kN]	F _{rec} [kN]	F _{rec} [kN]	
FUS 21/1,5 - 2 m	545117	●	1.20	1.35	0.80	3.69	0.75	1.80	0.41	0.10	–	1
FUS 21/1,5 - 3 m	545118	●	1.20	1.35	0.80	3.69	0.75	1.80	0.41	0.10	–	1
FUS 21/1,5 - 6 m	545119 ¹⁾	●	1.20	1.35	0.80	3.69	0.75	1.80	0.41	0.10	–	1
FUS 21/2,0 - 2 m	040391	●	1.44	1.72	0.97	4.66	0.89	2.27	0.49	0.12	0.05	1
FUS 21/2,0 - 3 m	097660	●	1.44	1.72	0.97	4.66	0.89	2.27	0.49	0.12	0.05	1
FUS 21/2,0 - 6 m	097661	●	1.44	1.72	0.97	4.66	0.89	2.27	0.49	0.12	0.05	1
FUS 21/2,5 - 2 m	092867	●	1.67	1.99	1.03	5.28	0.93	2.58	0.52	0.13	–	1
FUS 21/2,5 - 3 m	077349	●	1.67	1.99	1.03	5.28	0.93	2.58	0.52	0.13	0.06	1
FUS 21/2,5 - 6 m	077541	●	1.67	1.99	1.03	5.28	0.93	2.58	0.52	0.13	0.06	1
FUS 41/1,5 - 2 m	545120	●	1.80	1.95	4.26	6.03	2.07	2.94	1.56	0.54	0.24	1
FUS 41/1,5 - 3 m	545126	●	1.80	1.95	4.26	6.03	2.07	2.94	1.56	0.54	0.24	1
FUS 41/1,5 - 6 m	545127	●	1.80	1.95	4.26	6.03	2.07	2.94	1.56	0.54	0.24	1
FUS 41/2,0 - 2 m	040390	●	2.06	2.52	5.33	7.69	2.58	3.75	1.94	0.67	0.30	1
FUS 41/2,0 - 3 m	097658	●	2.06	2.52	5.33	7.69	2.58	3.75	1.94	0.67	0.30	1
FUS 41/2,0 - 6 m	097659	●	2.06	2.52	5.33	7.69	2.58	3.75	1.94	0.67	0.30	1
FUS 41/2,5 - 2 m	092295	●	2.45	3.00	6.00	8.99	2.85	4.38	2.14	0.76	–	1
FUS 41/2,5 - 3 m	077347	●	2.45	3.00	6.00	8.99	2.85	4.38	2.14	0.76	0.34	1
FUS 41/2,5 - 6 m	077537	●	2.45	3.00	6.00	8.99	2.85	4.38	2.14	0.76	0.34	1

¹⁾ Delivery time on request.

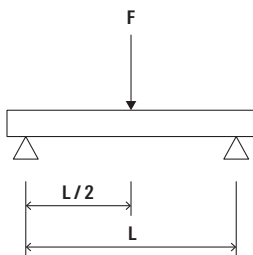


Loads

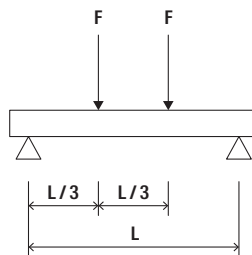
Item	Item no.	Ap- pro- val ETA	Profile weight [kg/m]	Channel cross section [cm ²]	Moment of inertia I_y [cm ⁴]	Moment of inertia I_z [cm ⁴]	Section modulus W_y [cm ³]	Section modulus W_z [cm ³]	Max. recom- ended static load for 1m length F_{rec} [kN]	Max. recomen- ded static load for 2m length F_{rec} [kN]	Max. recomen- ded static load for 3m length F_{rec} [kN]	Sales unit [pcs]
FUS 62/2,5 - 6 m	504457	●	3.27	4.05	17.70	12.90	5.62	6.29	4.22	2.10	0.99	1
FUS 21D/2,0 - 3 m	504458	●	2.87	3.44	5.49	9.31	2.61	4.54	1.96	0.69	0.31	1
FUS 21D/2,0 - 6 m	535531	●	2.87	3.44	5.49	9.31	2.61	4.54	1.96	0.69	0.31	1
FUS 41D/2,5 - 6 m	504459	●	4.89	6.00	35.01	17.90	8.76	8.78	6.58	3.28	1.96	1
FUS 62D/2,5 - 6 m	504460	●	6.55	8.09	111.00	25.80	17.90	12.58	13.45	6.72	4.47	1

¹⁾ Delivery time on request.

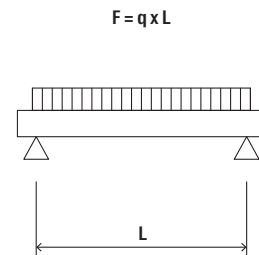
Load case 1



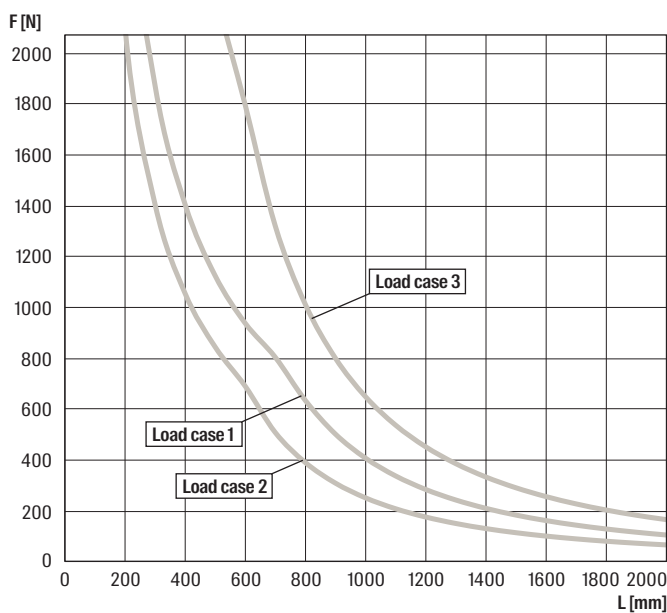
Load case 2



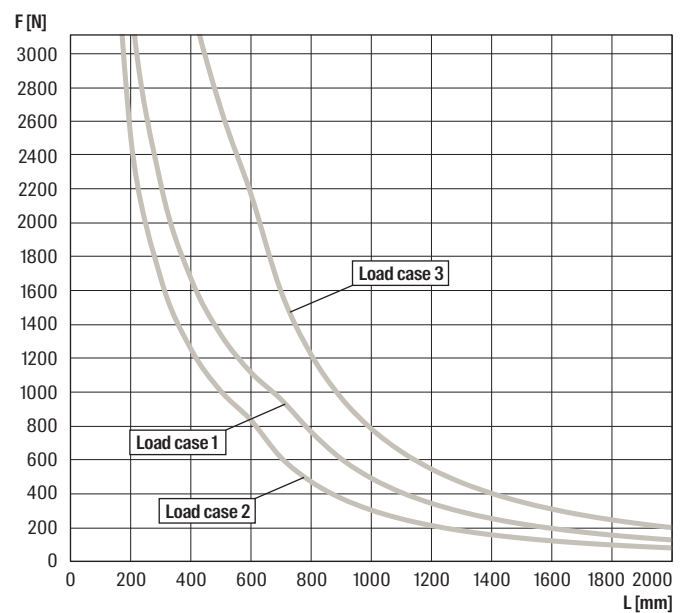
Load case 3



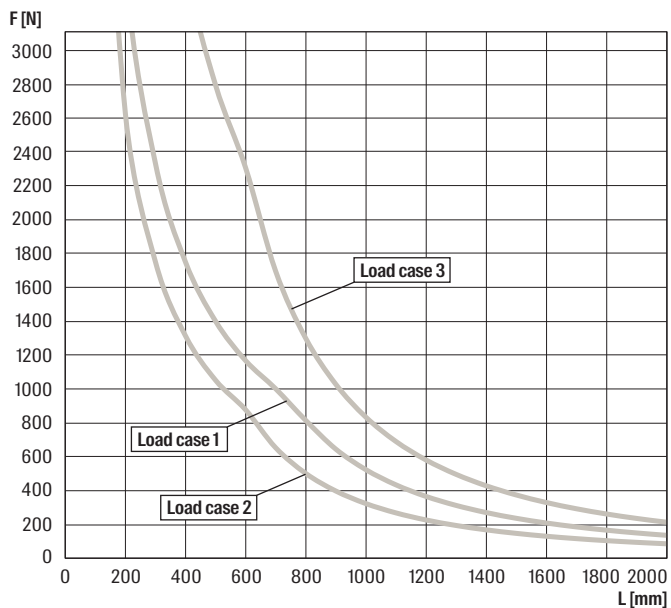
FUS 21/1,5



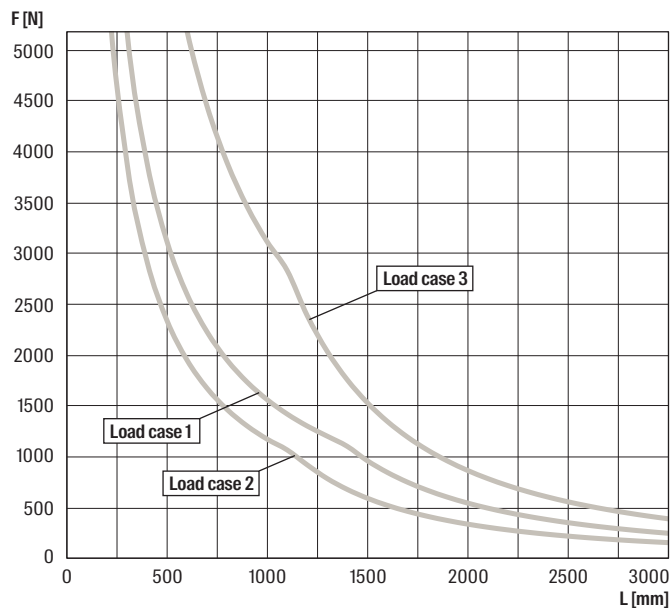
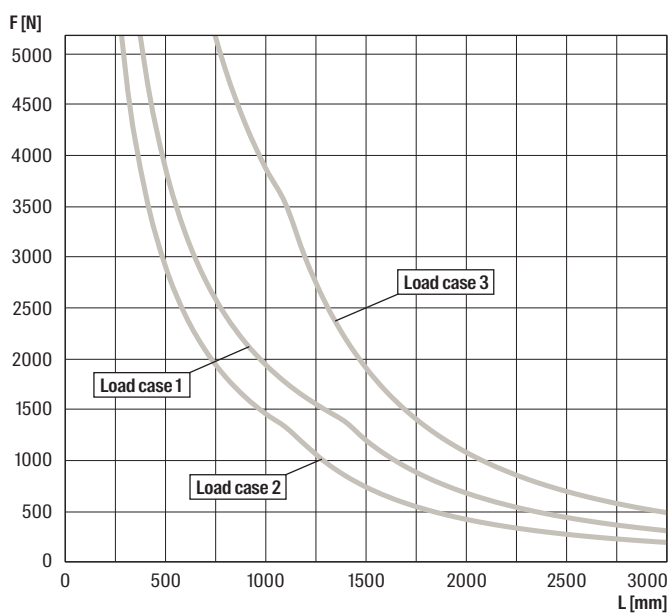
FUS 21/2,0



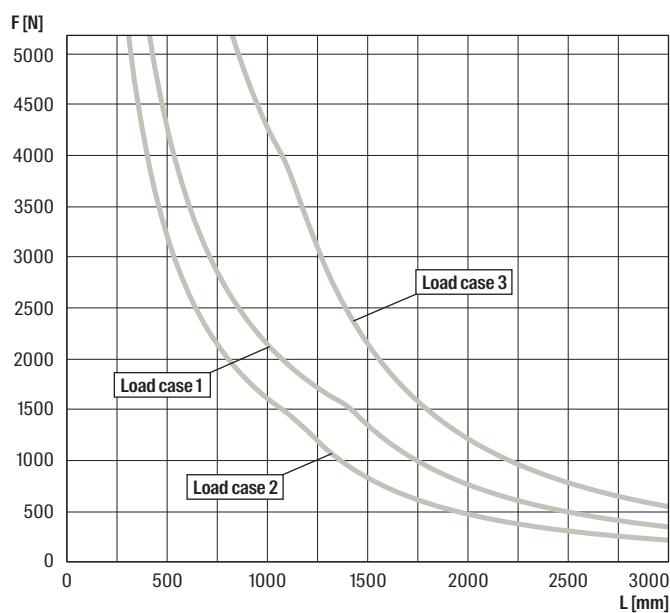
For the load curves, the permissible steel strain $\delta_{adm.} = 188$ N/mm and the maximum deflection under load $L/200$ are not exceeded. Fixings and screw fastenings must be calculated accordingly. The increased yield strength is calculated according DIN EN 1993-1-3:2010-12, sec. 3.2.2.

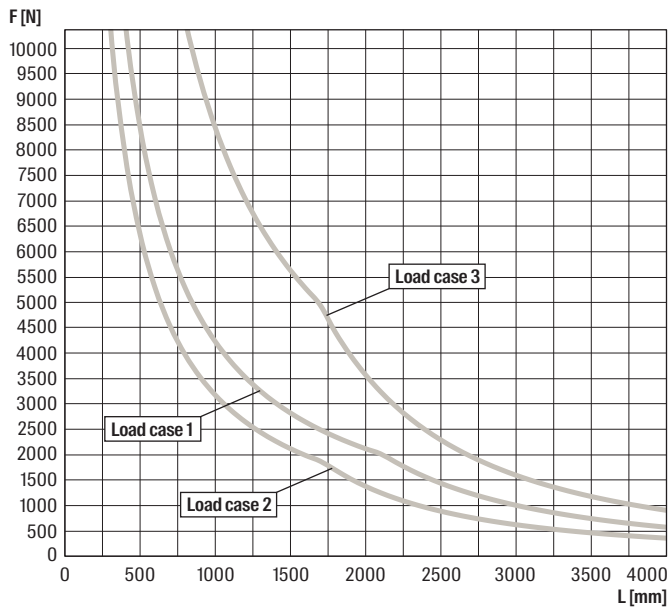
FUS 21/2,5

For the load curves, the permissible steel strain $\delta_{adm} = 188$ N/mm and the maximum deflection under load $L/200$ are not exceeded. Fixings and screw fastenings must be calculated accordingly. The increased yield strength is calculated according DIN EN 1993-1-3:2010-12, sec. 3.2.2.

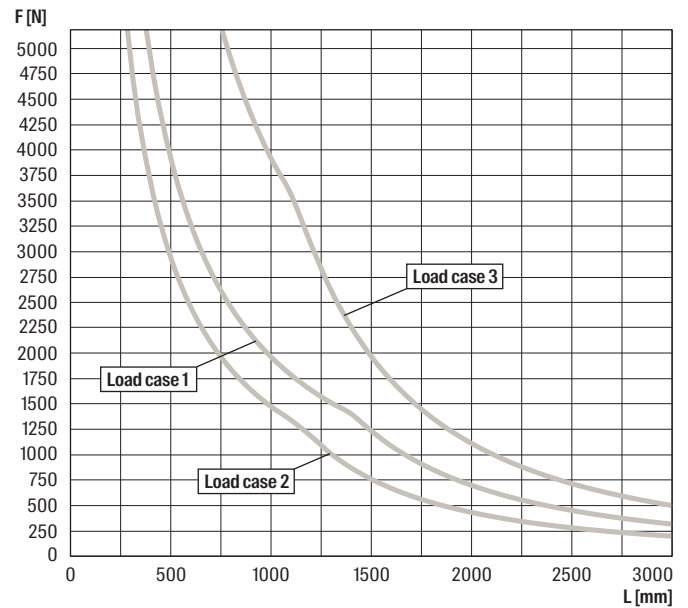
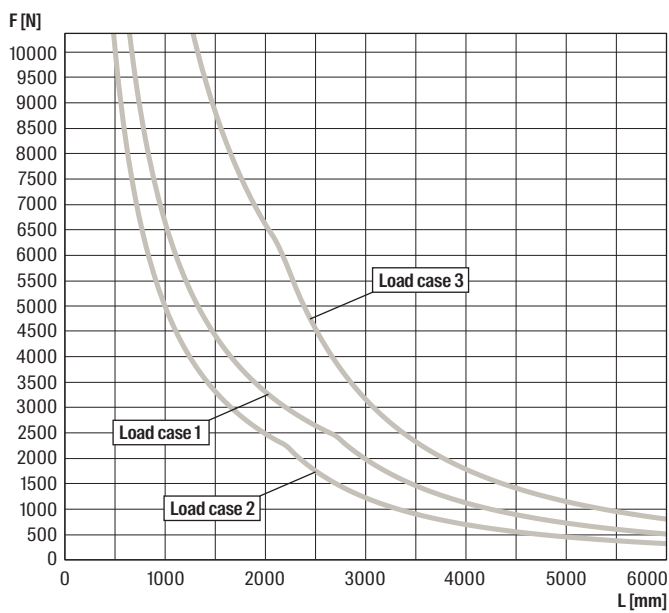
FUS 41/1,5**FUS 41/2,0**

For the load curves, the permissible steel strain $\delta_{adm} = 188$ N/mm and the maximum deflection under load $L/200$ are not exceeded. Fixings and screw fastenings must be calculated accordingly. The increased yield strength is calculated according DIN EN 1993-1-3:2010-12, sec. 3.2.2.

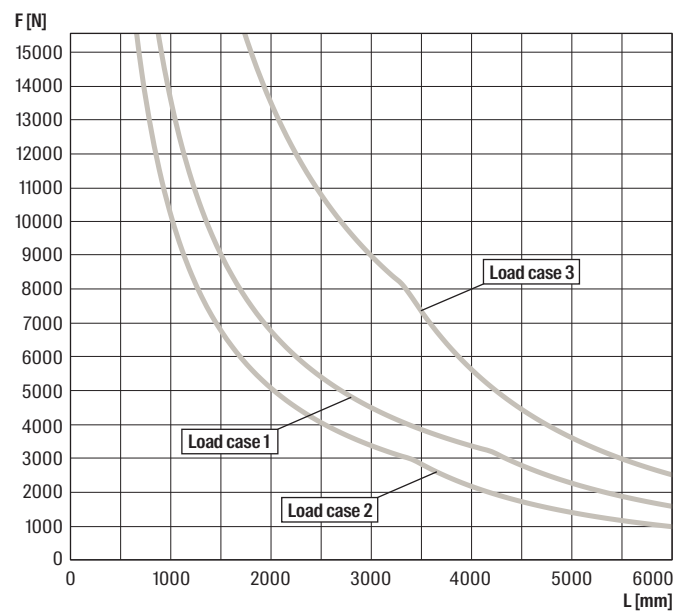
FUS 41/2,5

FUS 62/2,5

For the load curves, the permissible steel strain $\delta_{adm} = 188$ N/mm and the maximum deflection under load $L/200$ are not exceeded. Fixings and screw fastenings must be calculated accordingly. The increased yield strength is calculated according DIN EN 1993-1-3:2010-12, sec. 3.2.2.

FUS 21D/2,0**FUS 41D/2,5**

For the load curves, the permissible steel strain $\delta_{adm} = 188$ N/mm and the maximum deflection under load $L/200$ are not exceeded. Fixings and screw fastenings must be calculated accordingly. The increased yield strength is calculated according DIN EN 1993-1-3:2010-12, sec. 3.2.2.

FUS 62D/2,5

Channel system FUS hdg

The universal and complete mounting channel system for a wide range of applications



3D-frame constructions



Solid frame construction

Applications

- Creation of secure, horizontal and vertical installations
- Fast and efficient fixing of pipelines and supporting structures
- For indoor and outdoor application.

Certificates

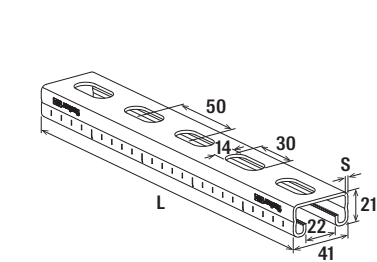


Advantages

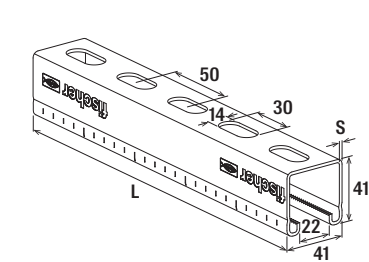
- The fire inspection report in line with MLAR/EN13501 guarantees independently tested functional safety.
- The basic channel geometry allows for the usage of the complete extensive range of accessories.
- The stamped teeth in the channel gives the sliding nuts a secure hold for high shear loads, e.g. for vertical installation.
- Different channel wall thicknesses allow for economical choices for installation.
- The scale on the mounting channels simplifies the cutting and positioning of the fixtures during installation.

Properties

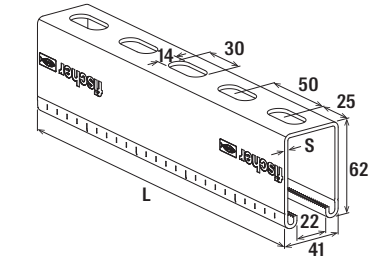
- Material: steel S235JR (material no. 1.0037) acc. to DIN EN 10025
- Zinc plating: hot-dip galvanised



FUS 21



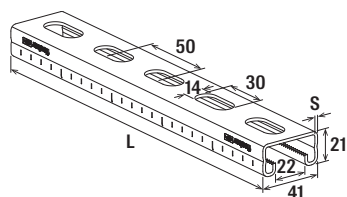
FUS 41



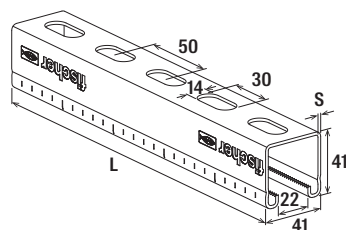
FUS 62

Technical data

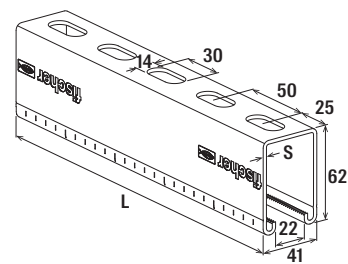
	Item no.	Fire test report	Length L [mm]	Thickness S [mm]	Sales unit [pcs]
Item					
FUS 21/2.0 - 3 m hdg	537653	–	3,000	2.0	1
FUS 41/2.0 - 3 m hdg	517426	–	3,000	2.0	1
FUS 41/2.0 - 6 m hdg	537656	–	6,000	2.0	1



FUS 21



FUS 41

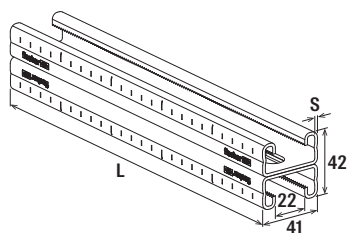


FUS 62

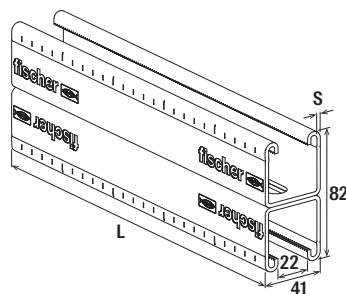
Technical data

Item	Item no.	Fire test report	Length L [mm]	Thickness S [mm]	Sales unit [pcs]
FUS 41/2.5 - 6 m hdg	537658	Yes	6,000	2.5	1
FUS 62/2.5 - 3 m hdg	517427	Yes	3,000	2.5	1
FUS 62/2.5 - 6 m hdg	517428	Yes	6,000	2.5	1

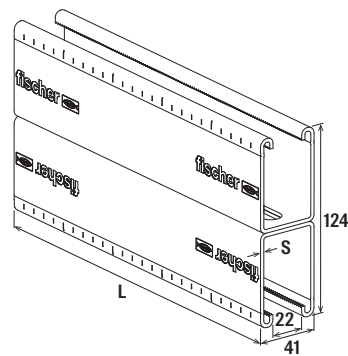
10



FUS 21D



FUS 41D

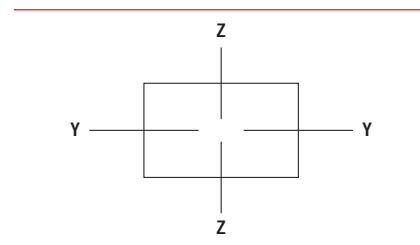


FUS 62D

Technical data

Item	Item no.	Length L [mm]	Thickness S [mm]	Sales unit [pcs]
FUS 21D/2.0 - 3 m hdg	537659	3,000	2.0	1
FUS 21D/2.0 - 6 m hdg	537661	6,000	2.0	1
FUS 41D/2.5 - 6 m hdg	537662	6,000	2.5	1
FUS 62D/2.5 - 6 m hdg	537663	6,000	2.5	1

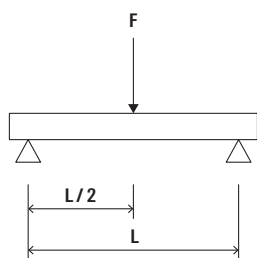
For load information under fire exposure, see chapter Basic knowledge.



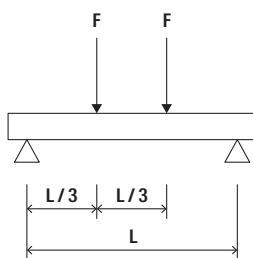
Loads

		Profile weight	Channel cross section	Moment of inertia	Moment of inertia	Section modulus	Section modulus	Max. recommended static load for 1m length	Max. recommended static load for 2m length	Max. recommended static load for 3m length	Sales unit
Item	Item no.	[kg/m]	[cm ²]	I_y [cm ⁴]	I_z [cm ⁴]	W_y [cm ³]	W_z [cm ³]	F_{rec} [kN]	F_{rec} [kN]	F_{rec} [kN]	[pcs]
FUS 21/2.0 - 3 m hdg	537653	1.44	1.72	0.97	4.66	0.89	2.27	0.49	0.12	0.05	1
FUS 41/2.0 - 3 m hdg	517426	2.06	2.52	5.33	7.69	2.58	3.75	1.94	0.67	0.30	1
FUS 41/2.0 - 6 m hdg	537656	2.06	2.52	5.33	7.69	2.58	3.75	1.94	0.67	0.30	1
FUS 41/2.5 - 6 m hdg	537658	2.45	3.00	6.00	8.99	2.85	4.38	2.14	0.76	0.34	1
FUS 62/2.5 - 3 m hdg	517427	3.27	4.05	17.70	12.90	5.62	6.29	4.22	2.10	0.99	1
FUS 62/2.5 - 6 m hdg	517428	3.27	4.05	17.70	12.90	5.62	6.29	4.22	2.10	0.99	1
FUS 21D/2.0 - 3 m hdg	537659	2.87	3.44	5.49	9.31	2.61	4.54	1.96	0.69	0.31	1
FUS 21D/2.0 - 6 m hdg	537661	2.87	3.44	5.49	9.31	2.61	4.54	1.96	0.69	0.31	1
FUS 41D/2.5 - 6 m hdg	537662	4.89	6.00	35.01	17.90	8.76	8.78	6.58	3.28	1.96	1
FUS 62D/2.5 - 6 m hdg	537663	6.55	8.09	111.00	25.80	17.90	12.58	13.45	6.72	4.47	1

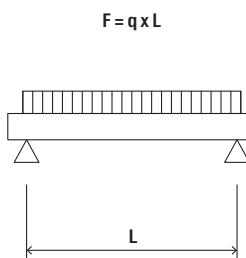
Load case 1



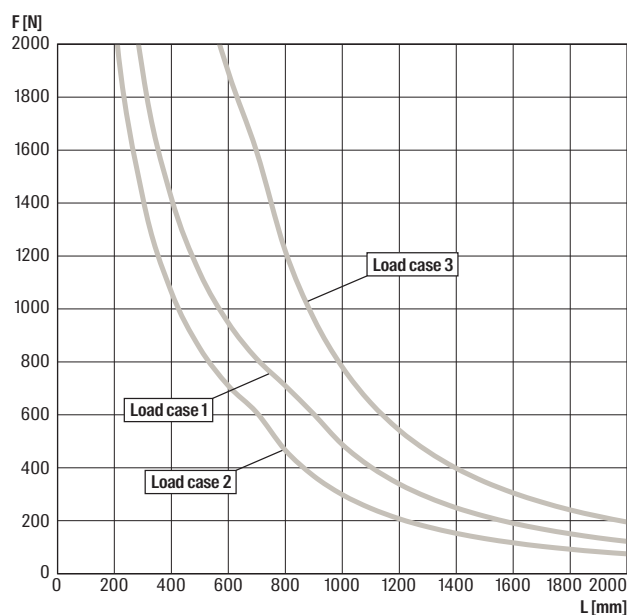
Load case 2



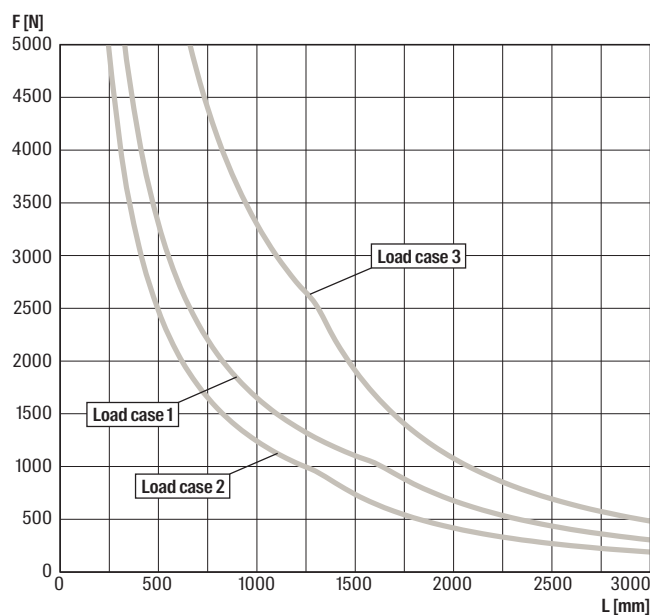
Load case 3



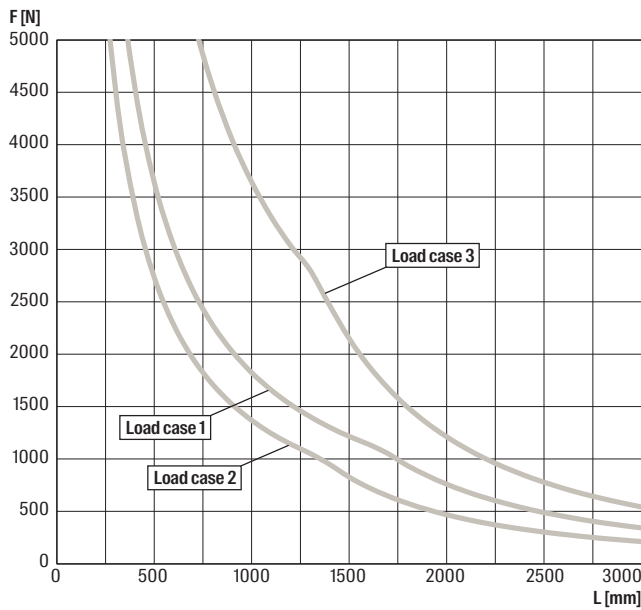
FUS fvz 21/2,0



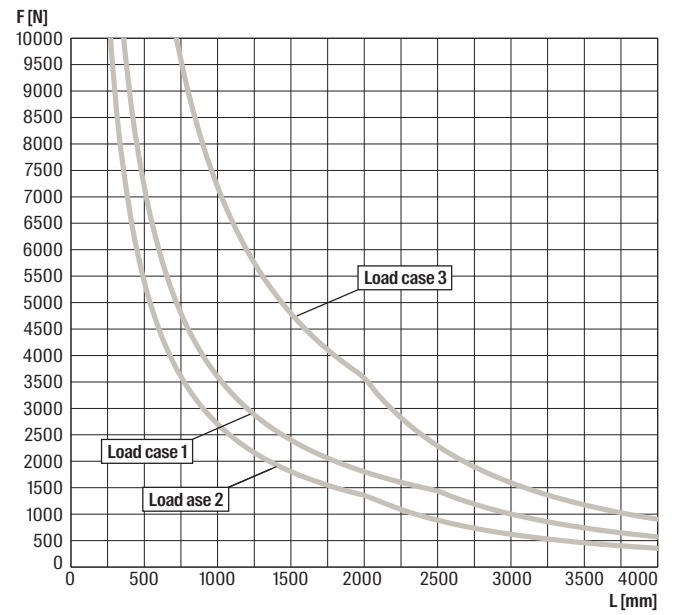
FUS fvz 41/2,0



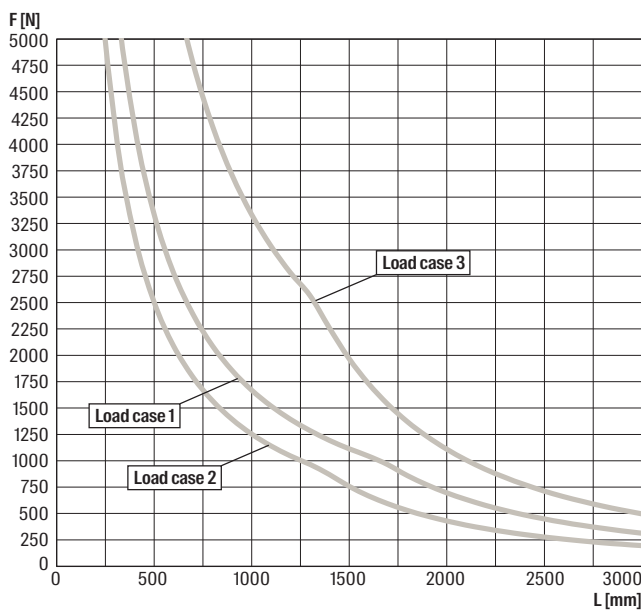
For the load curves, the permissible steel strain $\delta_{adm.} = 160$ N/mm and the maximum deflection under load $L/200$ are not exceeded. Fixings and screw fastenings must be calculated accordingly.

FUS fvz 41/2,5

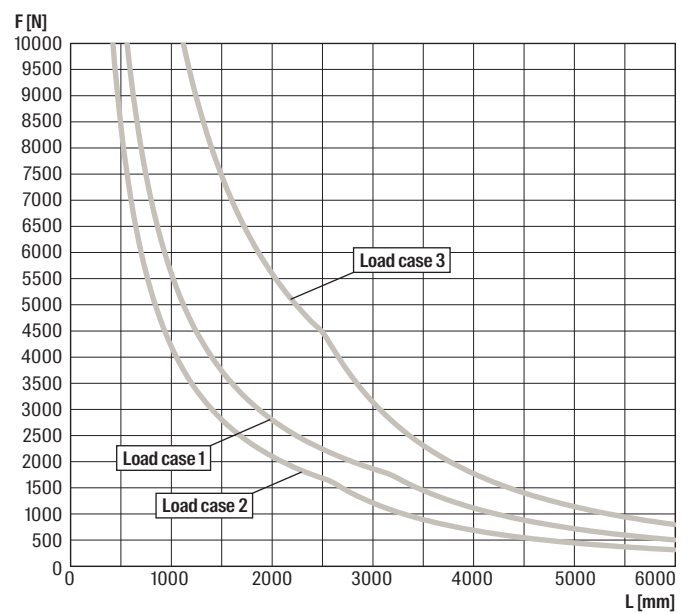
For the load curves, the permissible steel strain $\delta_{adm.} = 160$ N/mm and the maximum deflection under load $L/200$ are not exceeded. Fixings and screw fastenings must be calculated accordingly.

FUS fvz 62/2,5

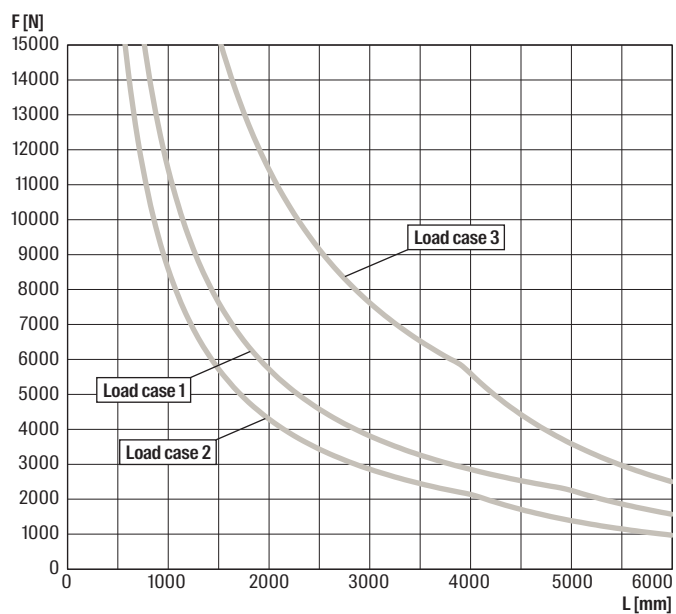
10

FUS fvz 21D/2,0

For the load curves, the permissible steel strain $\delta_{adm.} = 160$ N/mm and the maximum deflection under load $L/200$ are not exceeded. Fixings and screw fastenings must be calculated accordingly.

FUS fvz 41D/2,5

FUS fvz 62D/2,5



Bei den Belastungskurven wird die zulässige Stahlspannung $\delta_{zul} = 160 \text{ N/mm}$ sowie die maximale Durchbiegung $L/200$ nicht überschritten. Die Befestigungen Dübel, Schrauben müssen den Belastungen entsprechend ausgelegt werden.

Channel FUS A2/A4

The universal and complete mounting channel system for a wide range of applications



3D-frame constructions



Solid frame construction

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Applications

- Secure horizontal and vertical installations.
- Fast and efficient fixing of pipelines and supporting structures.
- For indoor and outdoor application and in environments with high stress to components due to corrosion.
- FUS A2: Not suitable for use in environments containing chlorine.

Certificates

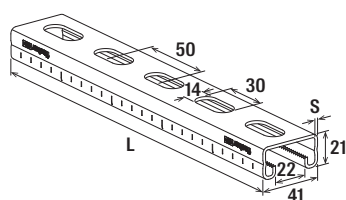


Advantages

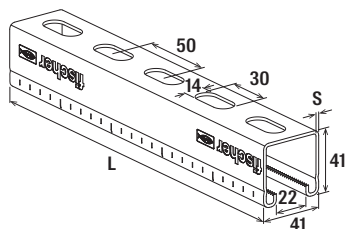
- The fire inspection report in line with MLAR/EN13501 guarantees independently tested functional safety.
- The basic channel geometry allows the usage of the complete extensive range of accessories.
- The stamped serration in the channel give the sliding nuts a secure hold for high shear loads, e.g. for vertical installation.
- Different channel wall thicknesses allow economical choices for installation.
- The scale on the mounting channels simplifies the cutting and positioning of the fixtures during the installation.

Properties

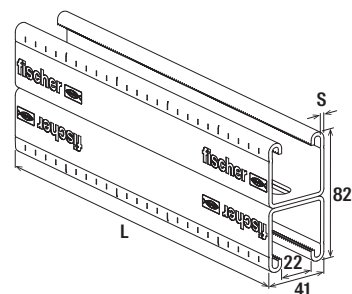
- Material: stainless steel A2 (material no. 1.4301)
- Material: stainless steel A4 (material no. 1.4404)



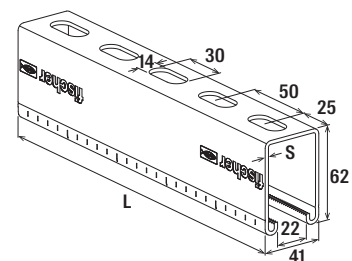
FUS 21



FUS 41



FUS 41D



FUS 62

Technical data

	Item no.	Fire test report	Length L [mm]	Thickness S [mm]	Sales unit [pcs]
Item					
FUS 21/2,0 A2 - 2 m	504466	–	2,000	2.0	1
FUS 21/2,0 A2 - 6 m	542735 ¹⁾	–	6,000	2.0	1
FUS 41/2,0 A2 - 2 m	504468	–	2,000	2.0	1
FUS 41/2,0 A2 - 6 m	542736 ¹⁾	–	6,000	2.0	1
FUS 41/2,5 A2 - 2 m	504470	Yes	2,000	2.5	1
FUS 41/2,5 A2 - 6 m	542737 ¹⁾	Yes	6,000	2.5	1
FUS 21/2,0 A4 - 2 m	504472	–	2,000	2.0	1
FUS 21/2,0 A4 - 6 m	542738 ¹⁾	–	6,000	2.0	1
FUS 41/2,0 A4 - 2 m	504474	–	2,000	2.0	1
FUS 41/2,0 A4 - 6 m	542739 ¹⁾	–	6,000	2.0	1
FUS 41/2,5 A4 - 2 m	504475	Yes	2,000	2.5	1
FUS 41/2,5 A4 - 6 m	542740 ¹⁾	Yes	6,000	2.5	1
FUS 41D/2,5 A4 - 6 m	562655	–	6,000	2.5	1
FUS 62/2,5 A4 - 6 m	557765	Yes	6,000	2.5	1

¹⁾ Delivery time on request.

For load information under fire exposure, see chapter Basic knowledge.

Loads

	Item no.	Profile weight [kg/m]	Channel cross section [cm ²]	Moment of inertia I_y [cm ⁴]	Moment of inertia I_z [cm ⁴]	Section modulus W_y [cm ³]	Section modulus W_z [cm ³]	Max. recommended static load for 1m length F_{rec} [kN]	Max. recommended static load for 2m length F_{rec} [kN]	Max. recommended static load for 3m length F_{rec} [kN]	Sales unit [pcs]
Item											
FUS 21/2,0 A2 - 2 m	504466	1.44	1.72	0.97	4.66	0.89	2.27	0.47	0.12	–	1
FUS 21/2,0 A2 - 6 m	542735 ¹⁾	1.44	1.72	0.97	4.66	0.89	2.27	0.47	0.12	0.05	1
FUS 41/2,0 A2 - 2 m	504468	2.06	2.52	5.33	7.69	2.58	3.75	1.58	0.64	–	1

¹⁾ Delivery time on request.

Loads

		Profile weight	Channel cross section	Moment of inertia	Moment of inertia	Section modulus	Section modulus	Max. recommended static load for 1m length	Max. recommended static load for 2m length	Max. recommended static load for 3m length	Sales unit
	Item no.	[kg/m]	[cm ²]	I_y [cm ⁴]	I_z [cm ⁴]	W_y [cm ³]	W_z [cm ³]	F_{rec} [kN]	F_{rec} [kN]	F_{rec} [kN]	[pcs]
Item											
FUS 41/2,0 A2 - 6 m	542736 ¹⁾	2.06	2.52	5.33	7.69	2.58	3.75	1.58	0.64	0.28	1
FUS 41/2,5 A2 - 2 m	504470	2.45	3.00	6.00	8.99	2.85	4.38	1.74	0.72	–	1
FUS 41/2,5 A2 - 6 m	542737 ¹⁾	2.45	3.00	6.00	8.99	2.85	4.38	1.74	0.72	0.32	1
FUS 21/2,0 A4 - 2 m	504472	1.44	1.72	0.97	4.66	0.89	2.27	0.47	0.12	–	1
FUS 21/2,0 A4 - 6 m	542738 ¹⁾	1.44	1.72	0.97	4.66	0.89	2.27	0.47	0.12	0.05	1
FUS 41/2,0 A4 - 2 m	504474	2.06	2.52	5.33	7.69	2.58	3.75	1.65	0.64	–	1
FUS 41/2,0 A4 - 6 m	542739 ¹⁾	2.06	2.52	5.33	7.69	2.58	3.75	1.65	0.64	0.28	1
FUS 41/2,5 A4 - 2 m	504475	2.45	3.00	6.00	8.99	2.85	4.38	1.82	0.72	–	1
FUS 41/2,5 A4 - 6 m	542740 ¹⁾	2.45	3.00	6.00	8.99	2.85	4.38	1.82	0.72	0.32	1
FUS 41D/2,5 A4 - 6 m	562655	4.89	6.00	35.01	17.90	8.76	8.78	5.60	2.79	1.85	1
FUS 62/2,5 A4 - 6 m	557765	6.55	8.09	111.00	25.80	17.90	12.58	11.45	5.72	3.80	1

¹⁾ Delivery time on request.