

## Complete and universal system of profiles for the realization of structures for the support of systems

5

FUS installation



Structures with 3D frame



Chassis for heavy loads

### APPLICATIONS

**U-shaped mounting rails** for creating safe horizontal and vertical installations.

**Fast and efficient** attachment of pipes and support structures.

### ADVANTAGES/BENEFITS

**FUS 2.5** profiles with fire resistance ratio according to MLAR/ EN13501 guarantee operational safety tested by an independent body.

**The** basic geometry of the profile allows the use of the wide range of complete accessories.

**The** knurling of the profile rail provides a secure nut hold for high shear load values. E.g. applications with vertical profiles.

**The** different thicknesses of the profile offer a cost-effective choice.

**The** centimetre scale on the mounting profiles simplifies the cutting and positioning of the elements during installation.

### CERTIFICATIONS

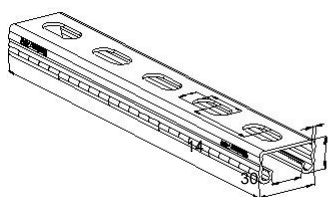


### PROPERTY

**Material** :Steel S250 GD (material no. 1.0242) according to DIN EN 10346

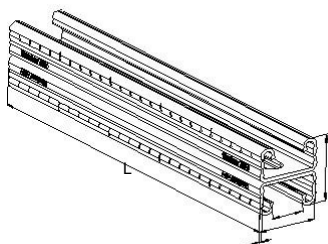
**Cold galvanizing**, min. 20 µm

## TECHNICAL DATA



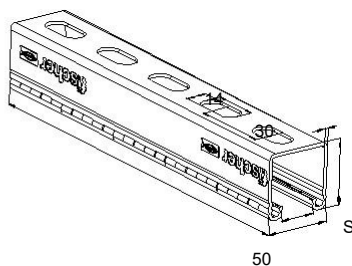
L 50  
S 21  
22  
41

**FUS 21**



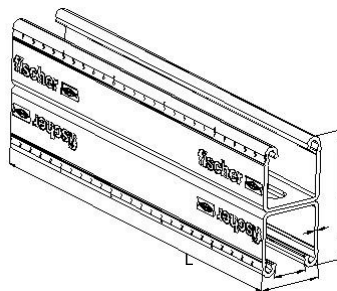
S 22  
41

**FUS 21D**



L 50  
S 41  
22

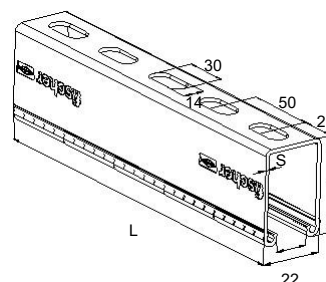
**FUS 41**



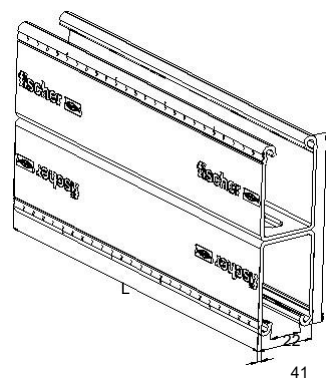
42

S 22  
41

**FUS 41D**



**FUS 62**



**FUS 62D**

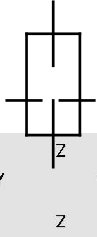
Thickness Packaging

S [mm]	Packaging [pz]
1,5	1
1,5	1
1,5	1
2	1
2	1
2,5	1
2,5	1
1,5	1
1,5	1
2	1
2	1
2,5	1
2,5	1

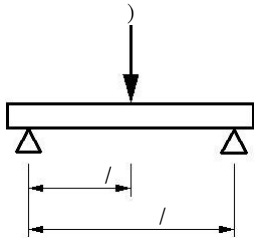
Product	Art. No	Refer to the Council	Length	
			L [mm]	S [mm]
FUS 41/21/1,5 - 2m	545117	-	2000	1,5
FUS 41/21/1,5 - 3m	545118	-	3000	1,5
FUS 41/21/1,5 - 6m	545119 ▼	-	6000	1,5
FUS 41/21/2,0 - 2 m	040391	-	2000	2
FUS 41/21/2,0 - 3 m	097660	-	3000	2
FUS 41/21/2,5 - 3 m	077349	-	3000	2,5
FUS 41/21/2,5 - 6 m	077541 ▼	-	6000	2,5
FUS 41/41/1,5 - 2m	545120	-	2000	2
FUS 41/41/1,5 - 3m	545126	-	3000	2
FUS 41/41/1,5 - 6m	545127 ▼	-	6000	2
FUS 41/41/2,0 - 2 m	040390	-	2000	2,5
FUS 41/41/2,0 - 3 m	097658	-	3000	2,5
FUS 41/41/2,0 - 6 m	097659	-	6000	2,5
FUS 41/41/2,5 - 3 m	077347	X	3000	2,5
FUS 41/41/2,5 - 6 m	077537	X	6000	2,5
FUS 41/62/2,5 - 6 m	504457	X	6000	2,5
FUS 41/21D/2,0 - 3 m	504458 ▼	-	3000	
FUS 41/41D/2,5 - 6 m	504459	-	6000	
FUS 41/62D/2,5 - 6 m	504460	-	6000	

Product available on request. Delivery times to be agreed with fischer staff.

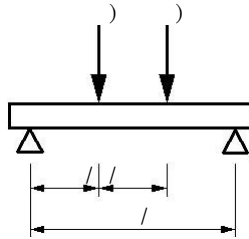
## LOADS

 <b>Product</b>	<b>Art. No</b>	Weight of	Section	Moment	Moment	Module of	Module of	Maximum load	Maximum load	Maximum load
		profile	transverse	inertia	inertia	resisting	resisting	recommended	recommended	recommended
		[kg/m]	profile	$I_y$	$I_z$	$W_y$	$W_z$	centered	centered	centered
			[cm <sup>2</sup> ]	[cm <sup>4</sup> ]	[cm <sup>4</sup> ]	[cm <sup>3</sup> ]	[cm <sup>3</sup> ]	Span 1 m	Span 2 m	Span 3 m
								$F_{racc}$	$F_{racc}$	$F_{racc}$
								[kN]	[kN]	[kN]
FUS 41/21/1,5 - 2m	545117	1,20	1,35	0,80	3,69	0,75	1,80	0,41	0,10	-
FUS 41/21/1,5 - 3m	545118	1,20	1,35	0,80	3,69	0,75	1,80	0,41	0,10	-
FUS 41/21/1,5 - 6m	545119	1,20	1,35	0,80	3,69	0,75	1,80	0,41	0,10	-
FUS 41/21/2,0 - 2 m	040391	1,44	1,72	0,97	4,66	0,89	2,27	0,49	0,12	0,05
FUS 41/21/2,0 - 3 m	097660	1,44	1,72	0,97	4,66	0,89	2,27	0,49	0,12	0,05
FUS 41/21/2,5 - 3 m	077349	1,67	1,99	1,03	5,28	0,93	2,58	0,52	0,13	0,06
FUS 41/21/2,5 - 6 m	077541	1,67	1,99	1,03	5,28	0,93	2,58	0,52	0,13	0,06
FUS 41/41/1,5 - 2m	545120	1,80	1,95	4,26	6,03	2,07	2,94	1,56	0,54	0,24
FUS 41/41/1,5 - 3m	545126	1,80	1,95	4,26	6,03	2,07	2,94	1,56	0,54	0,24
FUS 41/41/1,5 - 6m	545127	1,80	1,95	4,26	6,03	2,07	2,94	1,56	0,54	0,24
FUS 41/41/2,0 - 2 m	040390	2,06	2,52	5,33	7,69	2,58	3,75	1,94	0,67	0,30
FUS 41/41/2,0 - 3 m	097658	2,06	2,52	5,33	7,69	2,58	3,75	1,94	0,67	0,30
FUS 41/41/2,0 - 6 m	097659	2,06	2,52	5,33	7,69	2,58	3,75	1,94	0,67	0,30
FUS 41/41/2,5 - 3 m	077347	2,45	3,00	6,00	8,99	2,85	4,38	2,14	0,76	0,34
FUS 41/41/2,5 - 6 m	077537	2,45	3,00	6,00	8,99	2,85	4,38	2,14	0,76	0,34
FUS 41/62/2,5 - 6 m	504457	3,27	4,05	17,70	12,90	5,62	6,29	4,22	2,10	0,99
FUS 41/21D/2,0 - 3 m	504458	2,87	3,44	5,49	9,31	2,61	4,54	1,96	0,69	0,31
FUS 41/41D/2,5 - 6 m	504459	4,89	6,00	35,01	17,90	8,76	8,78	6,58	3,28	1,96
FUS 41/62D/2,5 - 6 m	504460	6,55	8,09	111,00	25,80	17,90	12,58	13,45	6,72	4,47

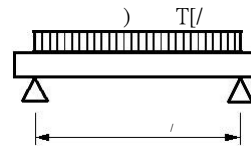
Load condition 1



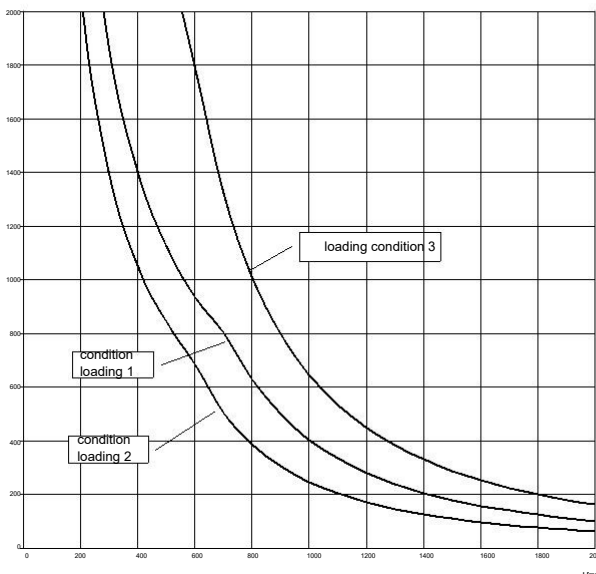
Load condition 2



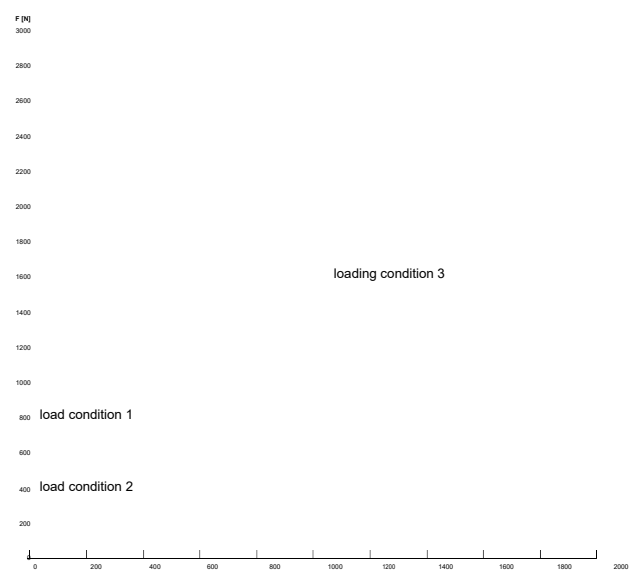
Load condition 3



FUS 21 / 1.5

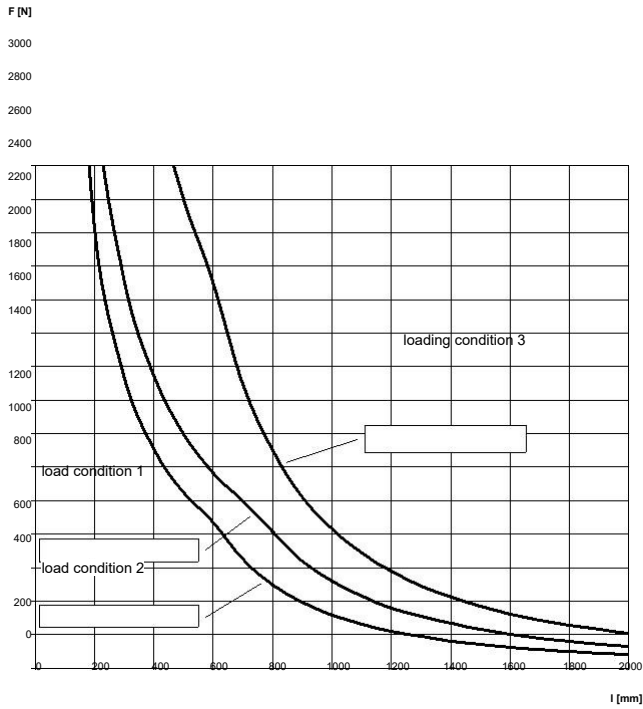


FUS 21 / 2.0

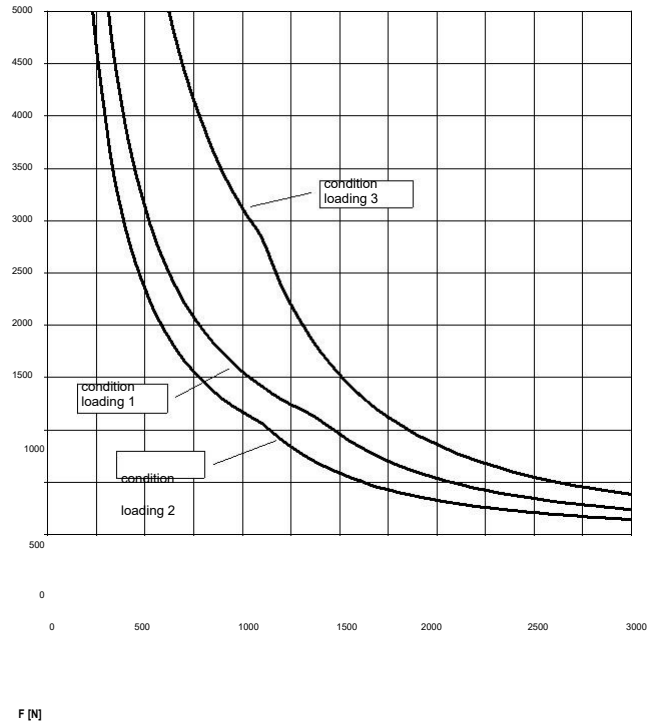


In load curves the permissible deformation of the steel  $\sigma_{adm} = 188 \text{ N/mm}^2$  and the maximum inflection under load  $L/200$  are never exceeded. Connections and fixings must be calculated accordingly. The increased yield strength is calculated according to EN 1993-1-3:2010-12, Sec. 3.2.2.

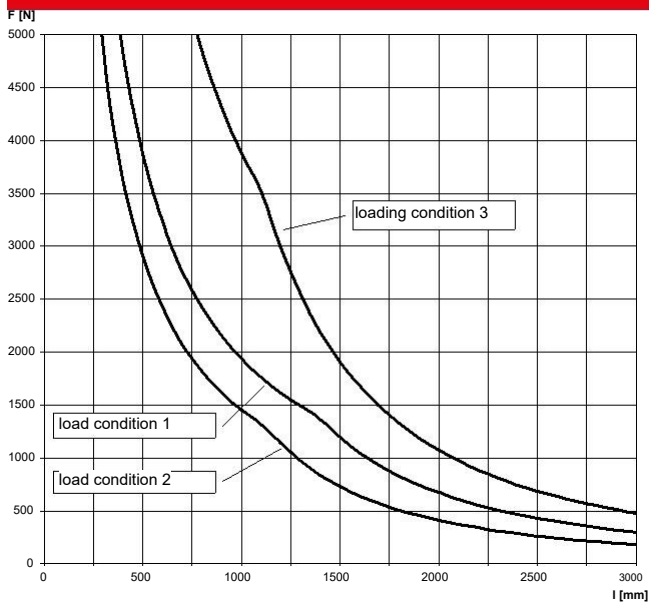
## FUS 21 / 2.5



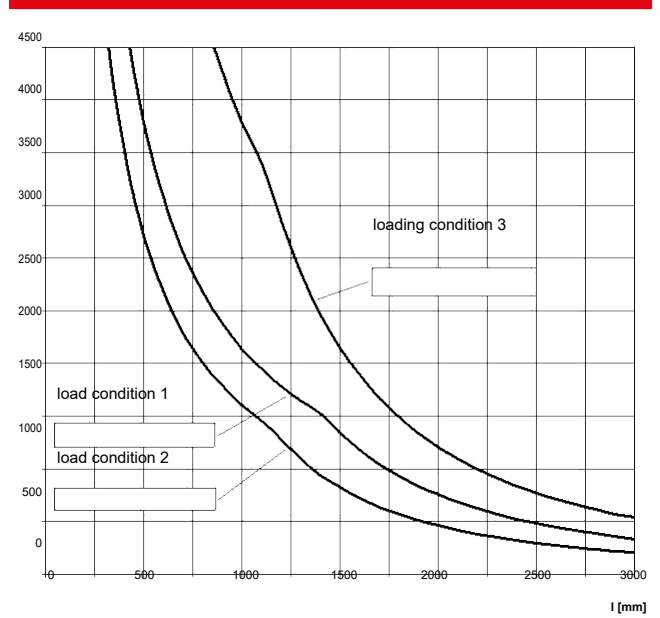
## FUS 41 / 1.5



## FUS 41 / 2.0



## FUS 41 / 1.0



## FUS 41 / 1.0

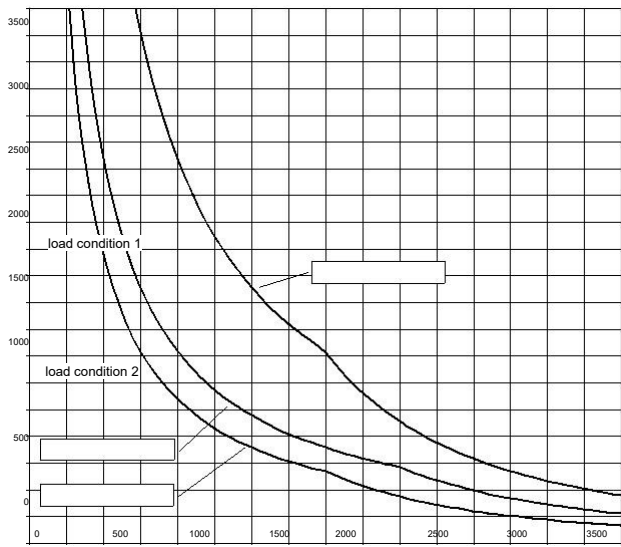


## FUS 41 / 1.0



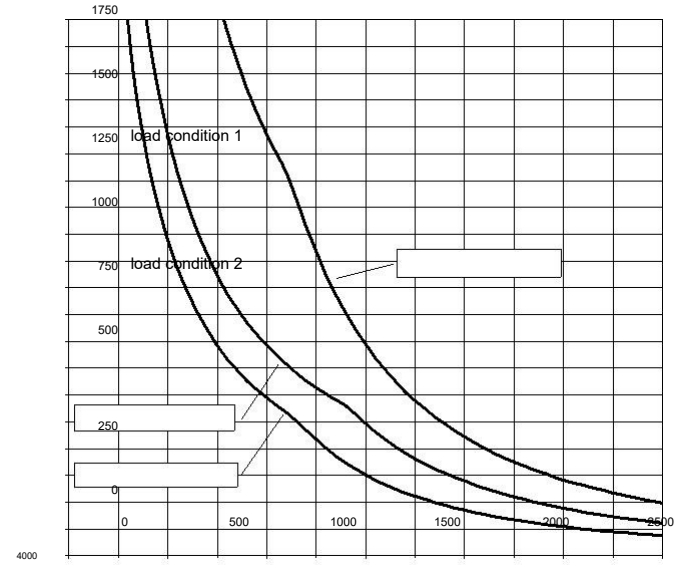
5500  
5000  
4500  
4000

carico3



2750  
2500  
2250  
2000

loading condition 3

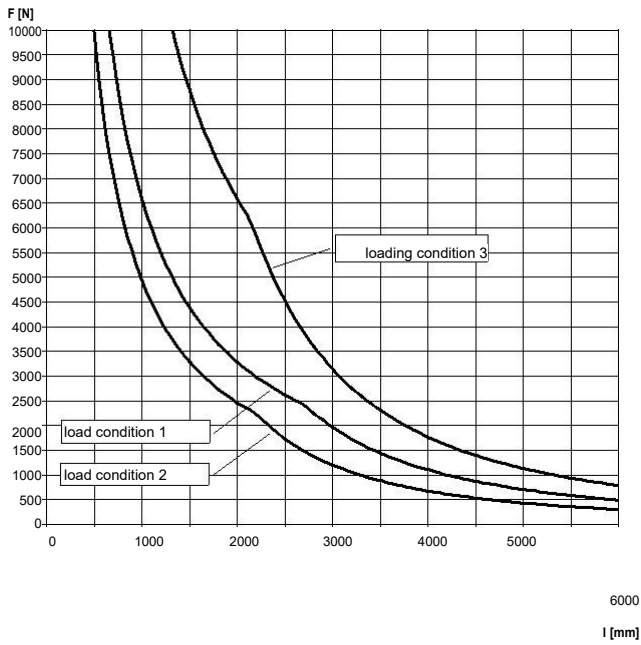


l [mm]

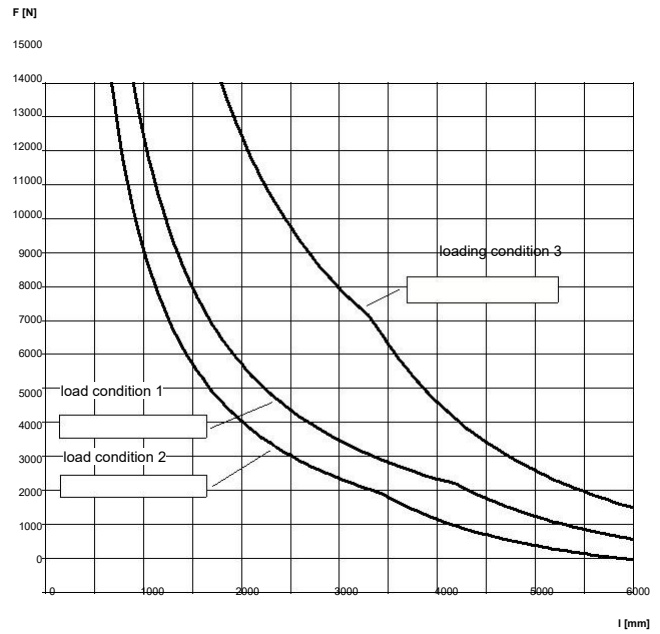
3000  
l [mm]

In load curves the permissible deformation of the steel  $\sigma_{adm} = 188 \text{ N/mm}^2$  and the maximum inflection under load  $L/200$  are never exceeded. Connections and fixings must be calculated accordingly. The increased yield strength is calculated according to EN 1993-1-3:2010-12, Sec. 3.2.2.

## FUS 41D / 2.5



## FUS 62D / 2.5



In load curves the permissible deformation of the steel  $\sigma_{adm} = 188 \text{ N/mm}^2$  and the maximum inflection under load  $L/200$  are never exceeded. Connections and fixings must be calculated accordingly. The increased yield strength is calculated according to EN 1993-1-3:2010-12, Sec. 3.2.2.

## ACCESSORIES



Cap for profiles **FEC 21 B**

Cap for profiles **FEC 41 B**

Cap for profiles **FEC 62 B**

Product	Art. No	By profile	Material	Packaging [pz]	
<b>FEC 21 B</b>	<b>077357</b>	41/21	polyethylene, black	100	
<b>FEC 41 B</b>	<b>077355</b>	41/41	polyethylene, black	100	
<b>FEC 62 B</b>	<b>505551</b>	41/62	polyethylene, black	100	

## ACCESSORIES



Product	Art. No	By profile	Length	Packaging [pz]
<b>EMS 41</b>	<b>550806</b>	all FUS profiles	6	1

