



# catalog

## Support channels

As leading manufacturer of steel profiles is a renowned market player in Europe and overseas.

The company owns high capacity storage and production facilities and prides itself on one of the most modern machine parks in Poland. The machine park comprises i.a. three “DREISTERN” production lines with multiple processing stations, including pre-

and post- punching systems.

The modern machine park and high quality material purchased from European steel works enable the production of very complicated shapes with highest qualitative characteristics and dimensional parameters.

Our special profiles are produced according to individual documentation as prepared by the customer or basing on documentation supplied by our technical department.

With our advanced technologies we have been able to automate the process of profiles branding and packaging.

MFO offers its customers highest quality products complying with strictest standards, including the EU standards. 2005 the renowned Swiss company SGS accredited by the British UKAS certified with ISO 9001.

## Support channels

### Used for:

- Light steel constructions
- Machines and technical facilities construction
- Suspended ceilings
- Mounting and installation
- Construction of ventilation and air duct systems, HVAC
- Sanitary systems
- Photovoltaic constructions

### Material used for production:

- Hot rolled black steel according to standard PN-EN 10025, PN-EN 10111
- Cold rolled steel supplied according to standard PN-EN 10130
- Hot galvanized steel for cold processing and hot galvanized construction steel according to standard PN-EN 10346
- Corrosion resistant steel according to standard PN-EN 10088

### Product range:

- Black steel support channels
  - Hot galvanized support channels
  - Hot dip galvanized support channels (according to standard PN-EN ISO 1461)
  - Support channels made from acid resistant steel
- All channels are produced according to the standard PN-EN 10162.

### Profile length:

- Standard: 2, 3, 6 m
- On demand: from 0.5 to 10 m

### Perforation system:

- Standard (according to technical drawings from the catalog)
- On individual customer demand
- Non-perforated

### We offer:

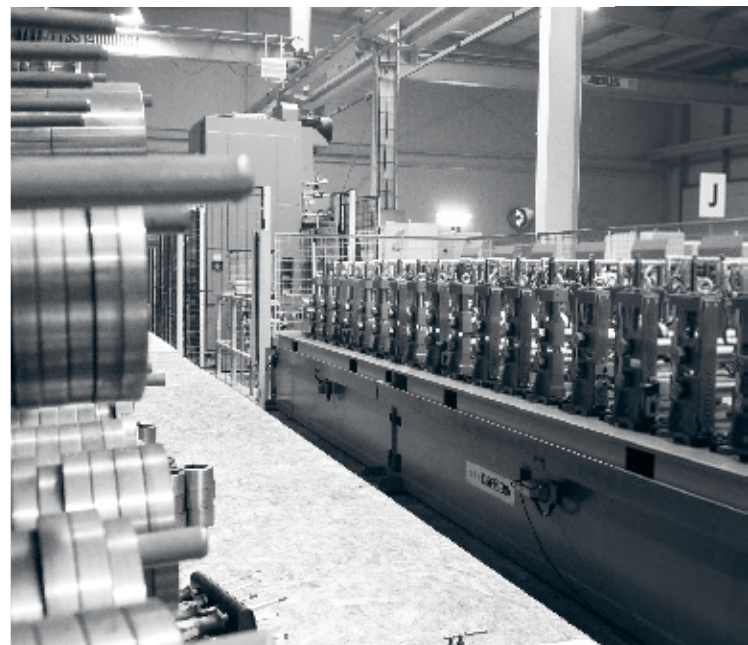
- complex commercial offer and a broad product program
- modern machine park and high quality products renowned on demanding EU-markets
- high storage capacity
- wide geographical diversification of sales both in Poland and abroad
- design consultation and product development
- competitive prices
- delivery just in time
- logistic experience in national and international transport, also maritime

The weight of the profiles as specified in catalog are theoretical, calculated according to formulas specified in applicable production standards.

All calculations have been done for nominal values and material thickness.

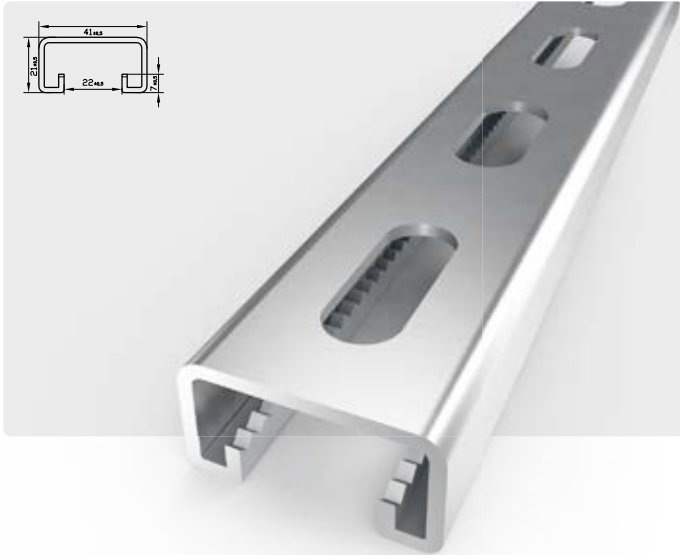
Value of steel density as used in calculations:  $7,85\text{g/cm}^3$ .

Real weights of profiles may differ by +/-10% from theoretical weights as specified in catalog.



# STRUT Channel

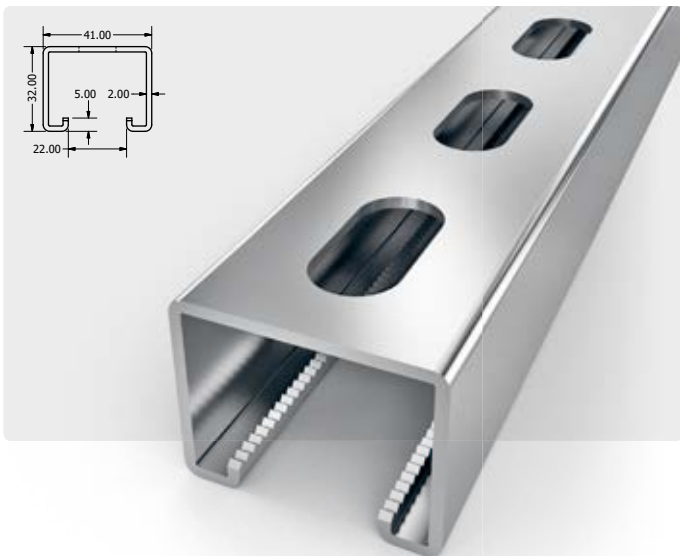
STU 41-21-7



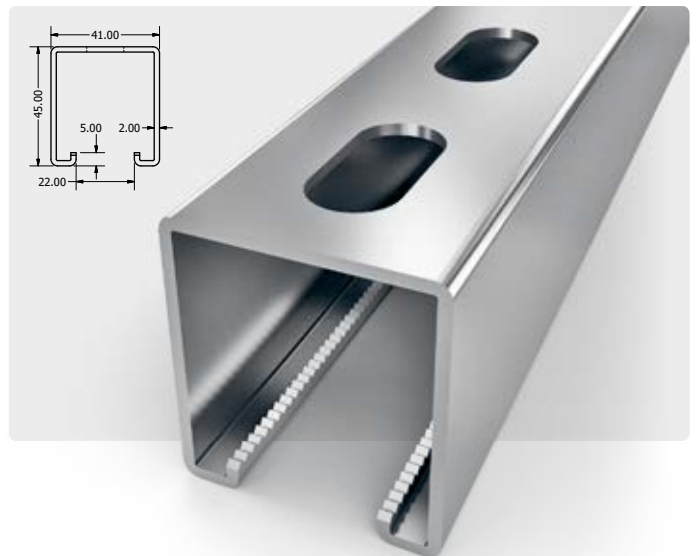
STU 41-21-7



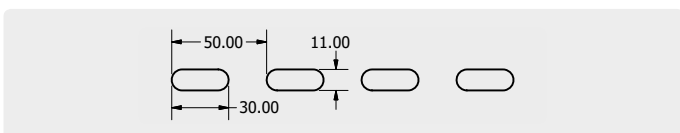
STU 41-32-5



STU 41-45-5

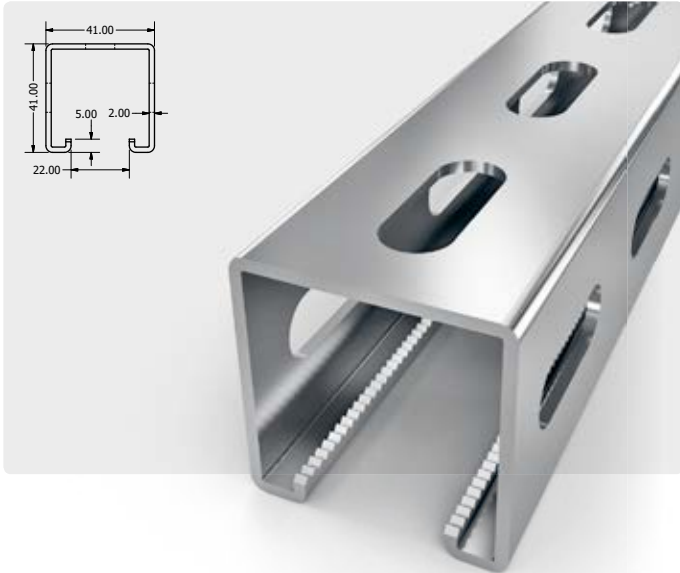


## Channel perforation



# STRUT Channel

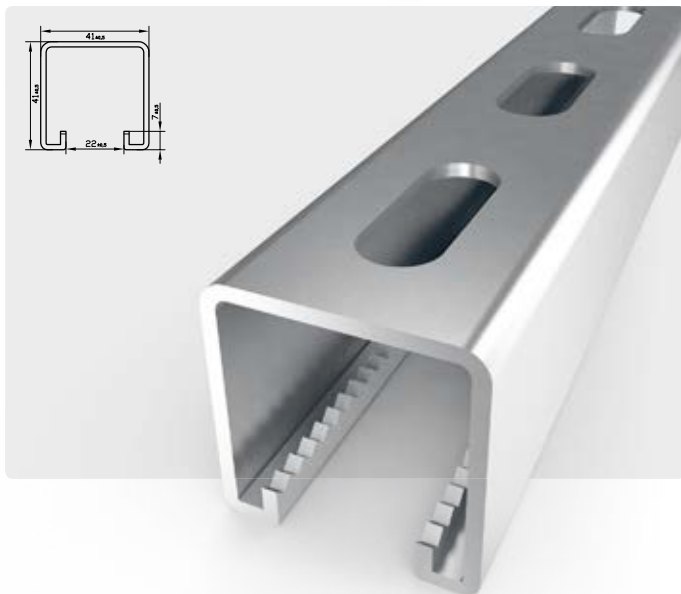
STU 41-41-5



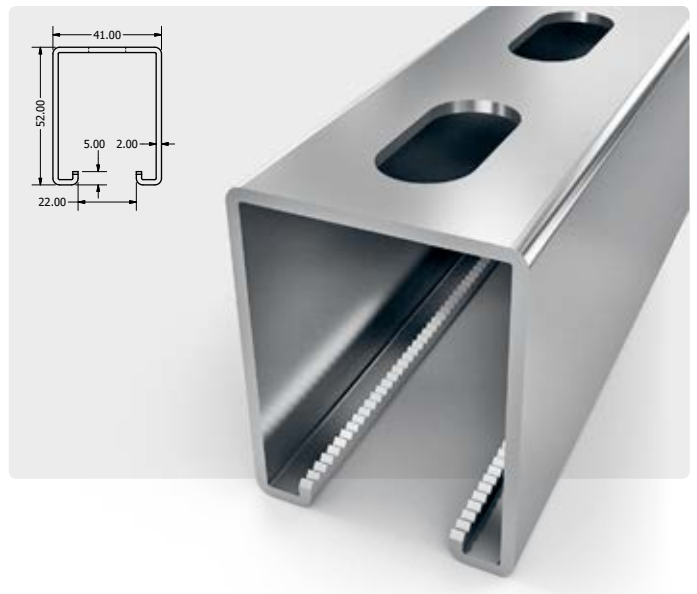
STU 41-41-7



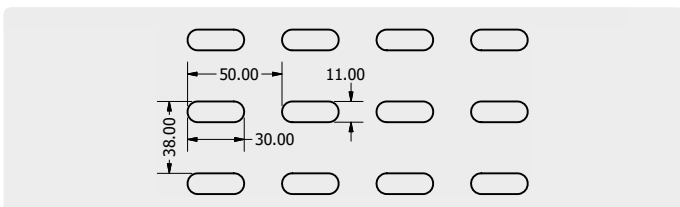
STU 41-41-7



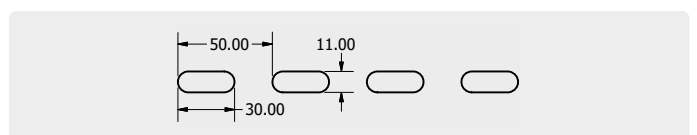
STU 41-52-7



Perforation for: STU 41-41-5

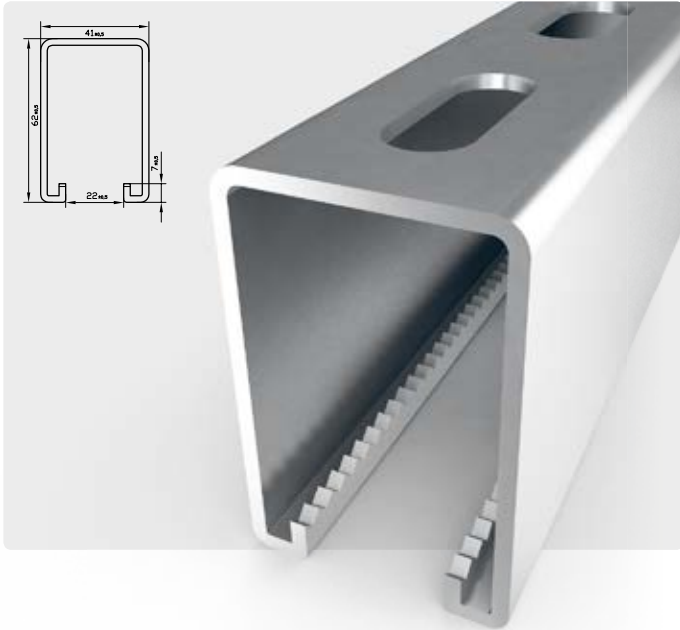


Perforation for other rails

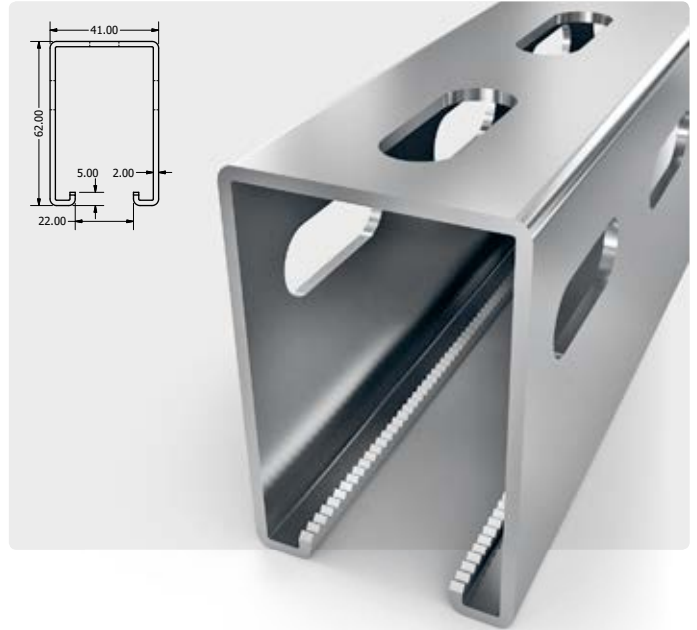


# STRUT Channel

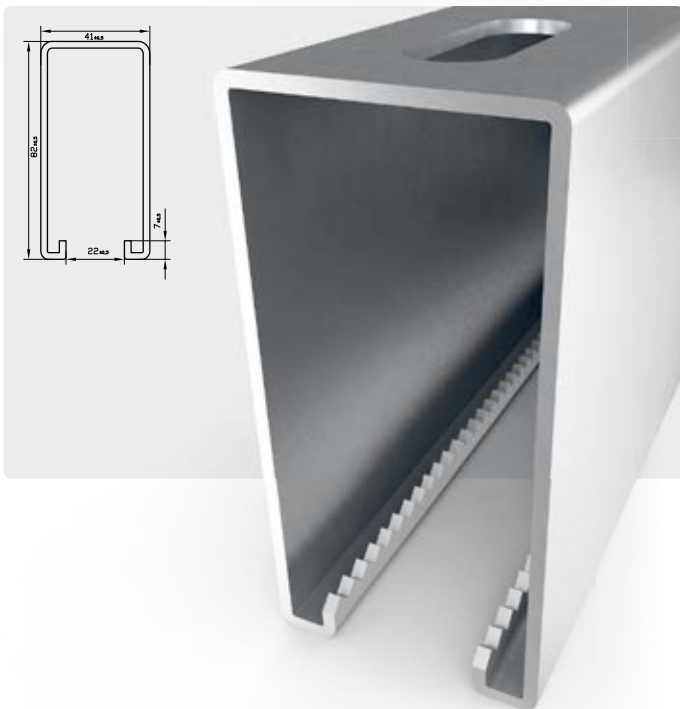
STU 41-62-7



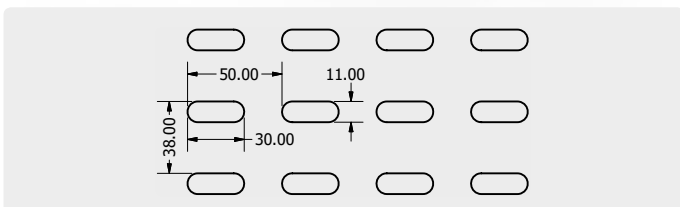
STU 41-62-5



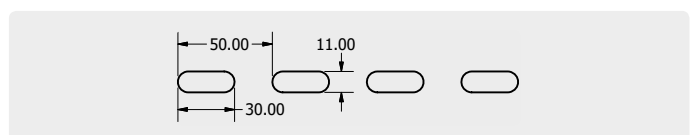
STU 41-82/83-7



Perforation for: STU 41-62-5



Perforation for other rails



# STRUT Channel

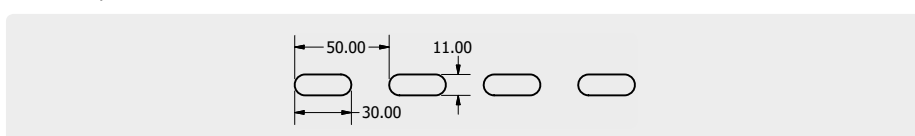
**STU 45-40-7**



**STU 45-60-7**



**Channel perforation**

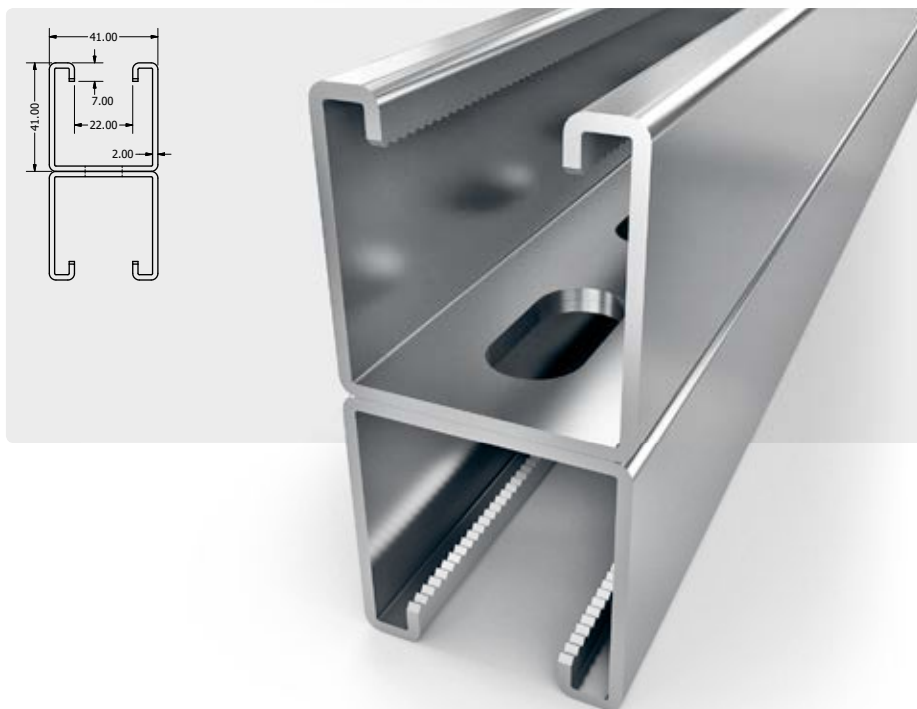


# STRUT Channel – double

STU 41-21-7



STU 41-41-7



# STRUT Channel – double

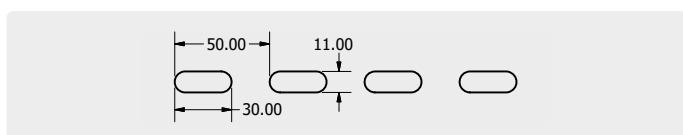
STU 41-62-7



STU 41-82-7



## Channel perforation

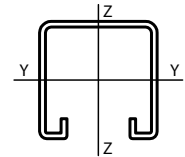




## STRUT Channel – technical data

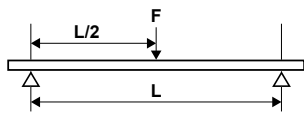
### Static calculation chart

Type	Weight	Moment of inertia cm <sup>4</sup>		Section modulus cm <sup>3</sup>	
	(kg/m)	I <sub>y</sub>	I <sub>z</sub>	W <sub>y</sub>	W <sub>z</sub>
41 x 21-1.5	1.15	0.78	3.70	0.72	1.80
41 x 41-1.5	1.65	4.46	6.20	2.12	3.00
41 x 21-2.5	1.78	1.01	5.40	0.93	2.61
41 x 41-2.5	2.61	6.26	9.30	2.97	4.50
41 x 62-2.5	3.33	18.03	13.20	5.75	6.39
41 x 82-2.5	4.08	37.31	16.89	9.00	8.18



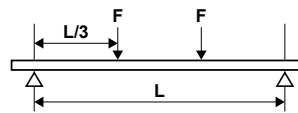
### Maximum allowable load of the construction channel

Load at 1 point



L (mm)	41 X 21		41 X 41			41 X 62	41 X 82
	1.5 mm	2.5 mm	1.5 mm	2.0 mm	2.5 mm	2.5 mm	2.5 mm
250	1,848	2,381	5,427	6,556	7,611	14,730	23,035
300	1,540	1,984	4,523	5,463	6,342	12,275	19,196
350	1,320	1,701	3,877	4,683	5,436	10,522	16,453
400	1,155	1,488	3,392	4,098	4,757	9,206	14,397
450	1,027	1,323	3,015	3,642	4,228	8,183	12,797
500	924	1,190	2,714	3,278	3,805	7,365	11,517
600	770	992	2,261	2,732	3,171	6,138	9,598
700	660	850	1,938	2,341	2,718	5,261	8,227
800	557	719	1,696	2,049	2,378	4,603	7,198
900	440	568	1,508	1,821	2,114	4,092	6,399
1,000	356	460	1,357	1,639	1,903	3,683	5,759
1,200	247	320	1,131	1,366	1,586	3,069	4,799
1,400	182	235	969	1,171	1,359	2,630	4,113
1,600	139	180	794	952	1,114	2,302	3,599
1,800	110	142	628	752	881	2,046	3,199
2,000	89	115	508	609	713	1,841	2,879
2,250	70	91	402	481	564	1,624	2,559
2,500	57	74	325	390	456	1,315	2,303
2,750	47	61	269	322	377	1,087	2,094
3,000	40	51	226	271	317	913	1,890
3,250	34	44	193	231	270	778	1,611
3,500	29	38	166	199	233	671	1,389
3,750	25	33	145	173	203	584	1,210
4,000	22	29	127	152	178	514	1,063
4,250	20	25	113	135	158	455	942
4,500	18	23	100	120	141	406	840
4,750	16	20	90	108	126	364	754
5,000	14	18	81	97	114	329	680
5,250	13	17	74	88	104	298	617
5,500	12	15	67	81	94	272	562
5,750	11	14	62	74	86	249	515
6,000	-	13	56	68	79	228	473

Equal concentrated loads at 2 points

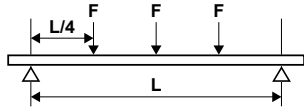


L (mm)	41 X 21		41 X 41			41 X 62	41 X 82
	1.5 mm	2.5 mm	1.5 mm	2.0 mm	2.5 mm	2.5 mm	2.5 mm
250	1,386	1,786	4,070	4,917	5,708	11,048	17,276
300	1,155	1,488	3,392	4,098	4,757	9,206	14,397
350	990	1,275	2,907	3,512	4,077	7,891	12,340
400	866	1,116	2,544	3,073	3,568	6,905	10,798
450	770	992	2,261	2,732	3,171	6,138	9,598
500	693	893	2,035	2,459	2,854	5,524	8,638
600	578	744	1,696	2,049	2,378	4,603	7,198
700	427	552	1,454	1,756	2,039	3,946	6,170
800	327	422	1,272	1,537	1,784	3,452	5,399
900	258	334	1,131	1,366	1,586	3,069	4,799
1,000	209	270	1,018	1,229	1,427	2,762	4,319
1,200	145	188	829	993	1,163	2,302	3,599
1,400	107	138	609	730	854	1,973	3,085
1,600	82	106	466	559	654	1,726	2,699
1,800	65	83	368	442	517	1,489	2,399
2,000	52	68	298	358	419	1,206	2,160
2,250	41	53	236	283	331	953	1,920
2,500	33	43	191	229	268	772	1,598
2,750	28	36	158	189	221	638	1,320
3,000	23	30	133	159	186	536	1,109
3,250	20	26	113	135	159	457	945
3,500	17	22	97	117	137	394	815
3,750	15	19	85	102	119	343	710
4,000	13	17	75	89	105	302	624
4,250	12	15	66	79	93	267	553
4,500	10	13	59	71	83	238	493
4,750	-	12	53	63	74	214	443
5,000	-	11	48	57	67	193	399
5,250	-	-	43	52	61	175	362
5,500	-	-	39	47	55	159	330
5,750	-	-	36	43	51	146	302
6,000	-	-	33	40	47	134	277

## STRUT Channel – technical data

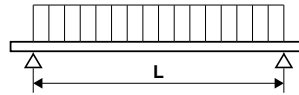
### Maximum allowable load of the construction channel

Equal concentrated loads at 3 points



L (mm)	41 x 21		41 x 41			41 x 62	41 x 82
	1.5 mm	2.5 mm	1.5 mm	2.0 mm	2.5 mm	2.5 mm	2.5 mm
250	924	1,190	2,714	3,278	3,805	7,365	11,517
300	770	992	2,261	2,732	3,171	6,138	9,598
350	660	850	1,938	2,341	2,718	5,261	8,227
400	578	744	1,696	2,049	2,378	4,603	7,198
450	513	661	1,508	1,821	2,114	4,092	6,399
500	462	595	1,357	1,639	1,903	3,683	5,759
600	385	496	1,131	1,366	1,586	3,069	4,799
700	306	396	969	1,171	1,359	2,630	4,113
800	234	303	848	1,024	1,189	2,302	3,599
900	185	239	754	911	1,057	2,046	3,199
1,000	150	194	678	820	951	1,841	2,879
1,200	104	135	565	683	793	1,534	2,399
1,400	77	99	437	524	613	1,315	2,057
1,600	59	76	335	401	469	1,151	1,800
1,800	46	60	264	317	371	1,023	1,600
2,000	38	48	214	257	300	865	1,440
2,250	30	38	169	203	237	684	1,280
2,500	24	31	137	164	192	554	1,146
2,750	20	26	113	136	159	458	947
3,000	17	22	95	114	133	385	796
3,250	14	18	81	97	114	328	678
3,500	12	16	70	84	98	283	585
3,750	11	14	61	73	85	246	509
4,000	–	12	54	64	75	216	448
4,250	–	11	47	57	67	192	397
4,500	–	–	42	51	59	171	354
4,750	–	–	38	45	53	153	317
5,000	–	–	34	41	48	138	287
5,250	–	–	31	37	44	126	260
5,500	–	–	28	34	40	114	237
5,750	–	–	26	31	36	105	217
6,000	–	–	24	29	33	96	199

Uniform load



L (mm)	41 x 21		41 x 41			41 x 62	41 x 82
	1.5 mm	2.5 mm	1.5 mm	2.0 mm	2.5 mm	2.5 mm	2.5 mm
250	3,697	4,762	10,854	13,112	15,222	29,460	46,070
300	3,081	3,968	9,045	10,927	12,685	24,550	38,391
350	2,640	3,401	7,753	9,366	10,873	21,043	32,907
400	2,310	2,976	6,784	8,195	9,514	18,413	28,794
450	2,054	2,645	6,030	7,285	8,457	16,367	25,594
500	1,848	2,381	5,427	6,556	7,611	14,730	23,035
600	1,540	1,984	4,523	5,463	6,342	12,275	19,196
700	1,163	1,503	3,877	4,683	5,436	10,522	16,453
800	891	1,151	3,392	4,098	4,757	9,206	14,397
900	704	909	3,015	3,642	4,228	8,183	12,797
1,000	570	737	2,714	3,278	3,805	7,365	11,517
1,200	396	512	2,260	2,708	3,170	6,138	9,598
1,400	291	376	1,660	1,989	2,329	5,261	8,227
1,600	223	288	1,271	1,523	1,783	4,603	7,198
1,800	176	227	1,004	1,204	1,409	4,059	6,399
2,000	143	184	814	975	1,141	3,288	5,759
2,250	113	146	643	770	902	2,598	5,119
2,500	91	118	521	624	730	2,104	4,355
2,750	75	97	430	516	604	1,739	3,599
3,000	63	82	362	433	507	1,461	3,024
3,250	54	70	308	369	432	1,245	2,577
3,500	47	60	266	318	373	1,074	2,222
3,750	41	52	231	277	325	935	1,936
4,000	36	46	203	244	285	822	1,701
4,250	32	41	180	216	253	728	1,507
4,500	28	36	161	193	225	649	1,344
4,750	25	33	144	173	202	583	1,206
5,000	23	29	130	156	183	526	1,089
5,250	21	27	118	141	166	477	988
5,500	19	24	108	129	151	435	900
5,750	17	22	98	118	138	398	823
6,000	16	20	90	108	127	365	756

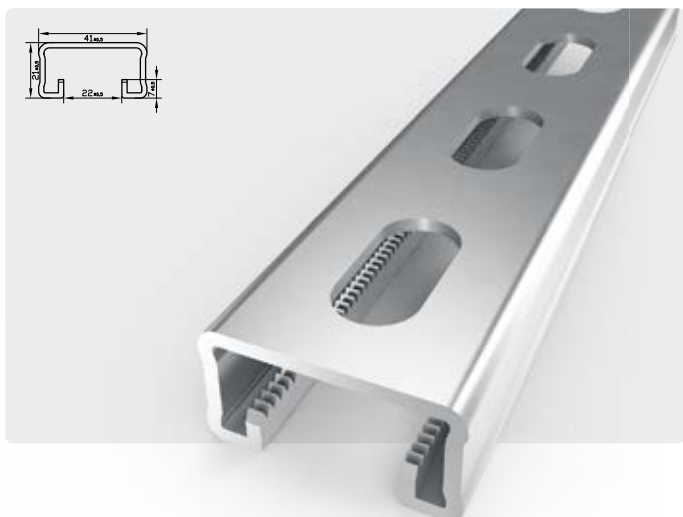
Maximum force (N) at one point.

Values indicated in charts refer only to construction channel strength.

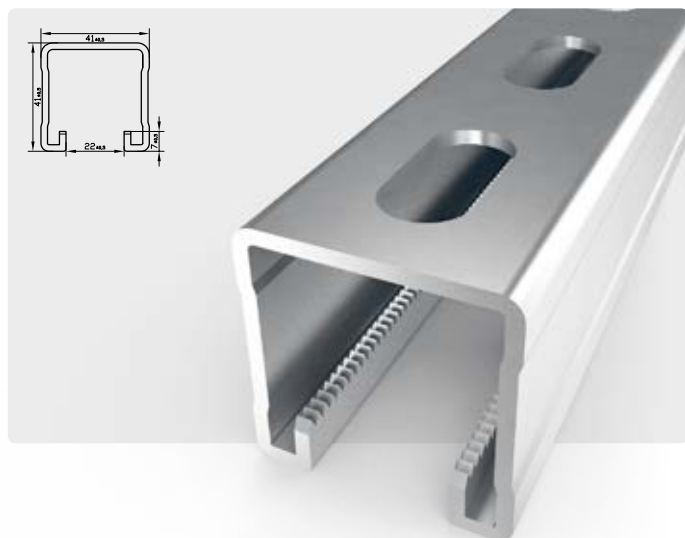
Maximal allowable load of remaining construction elements should be verified separately.

# MFO STRUT Channel

MFO STRUT Channel 41-21-7



MFO STRUT Channel 41-41-7



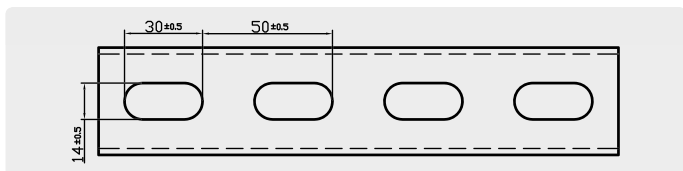
MFO STRUT Channel 41-62-7



MFO STRUT Channel 41-82/83-7



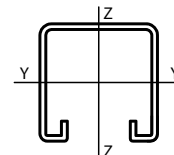
Channel perforation



## MFO STRUT Channel – technical data

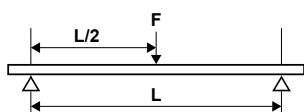
### Static calculation chart

Type	Weight	Moment of inertia cm <sup>4</sup>		Section modulus cm <sup>3</sup>	
	(kg/m)	ly	lz	Wy	Wz
41-21-2.00	1.45	0.92	4.39	0.85	2.13
41-41-2.00	2.09	5.3	7.33	2.54	3.55



### Maximum allowable load of the construction channel

Load at 1 point



L (mm)	41 X 21	41 X 41
	2.00 mm	2.00 mm
250	2.53	7.08
500	1.27	3.56
750	0.82	2.37
1,000	0.45	1.77
1,250	0.28	1.41
1,500	0.19	1.17
1,750	0.14	0.86
2,000	0.10	0.65
2,250	0.07	0.51
2,750	0.05	0.40
3,000	0.04	0.32

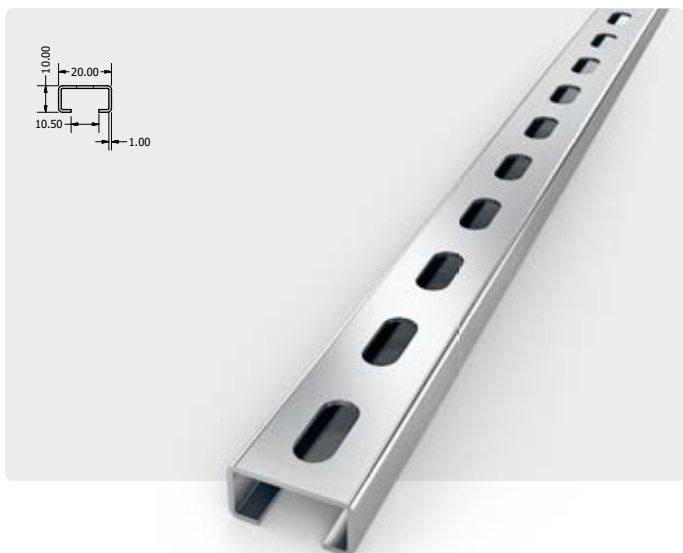
Maximum force at F(kN), deflection value F (mm), max L/200.

Values indicated in charts refer only to construction channel strength.

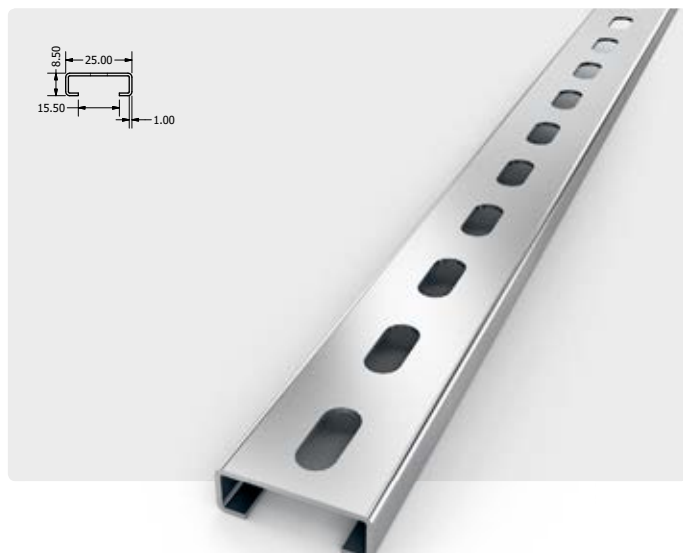
Maximal allowable load of remaining construction elements should be verified separately.

# MS Channel

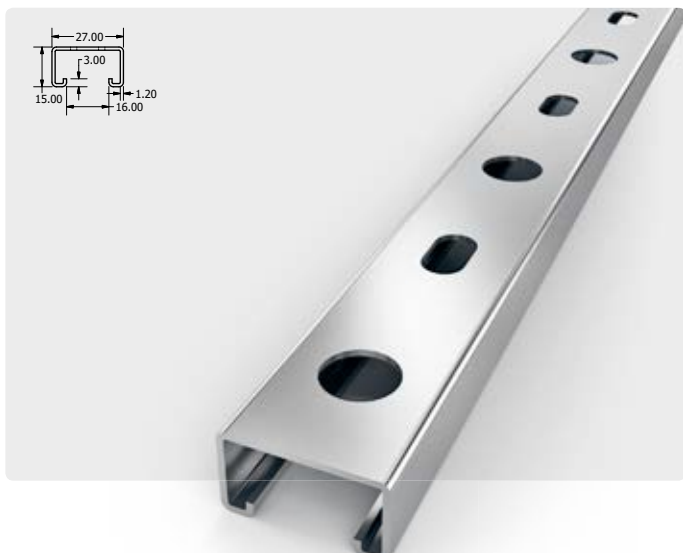
MS Channel 20-10-10,5



MS Channel 25-8,5-15,5



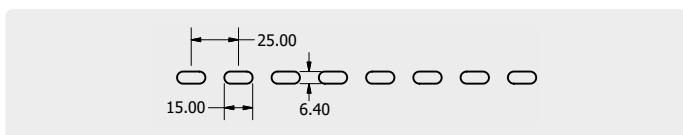
MS Channel 27-15-3



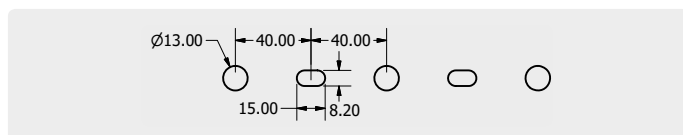
MS Channel 27-25-3



Perforation for: MS Channel 20, 25



Perforation for: MS Channel 27-15, 27-25



# MS Channel

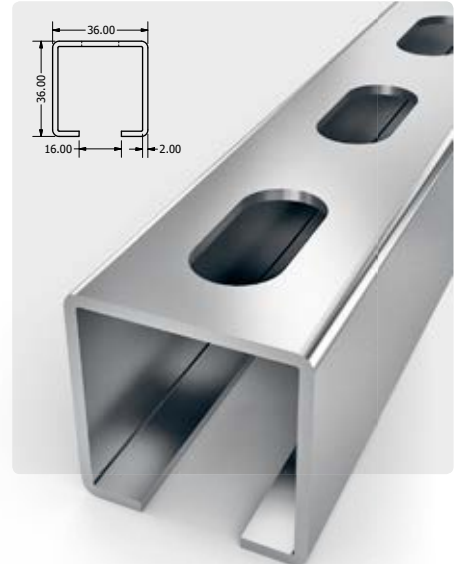
**MS Channel 30-15-15**



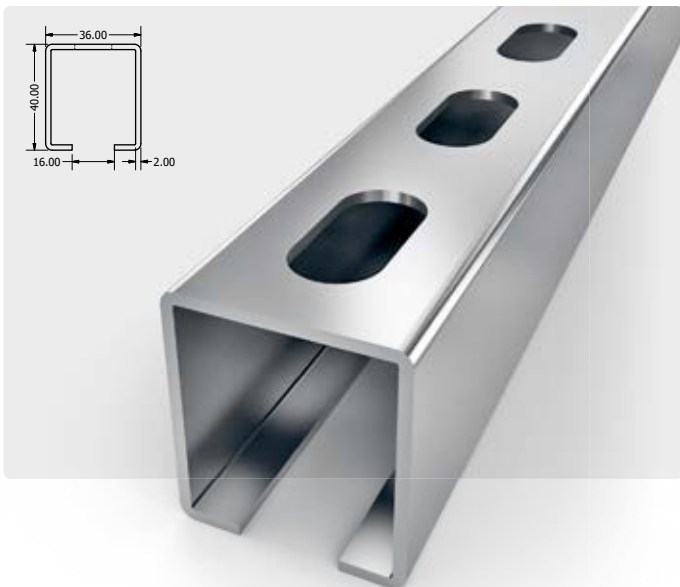
**MS Channel 35-21-16**



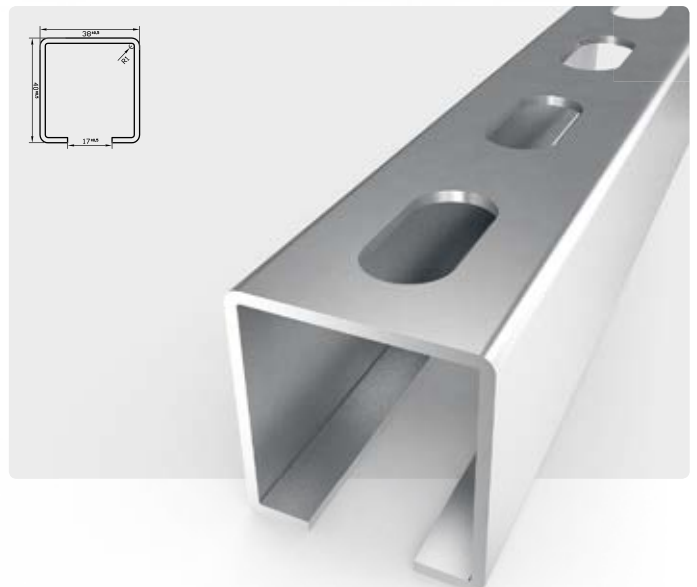
**MS Channel 36-36-16**



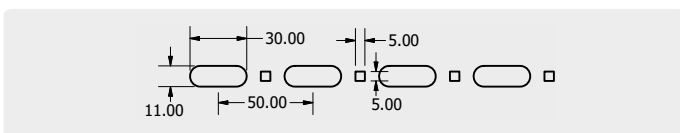
**MS Channel 36-40-16**



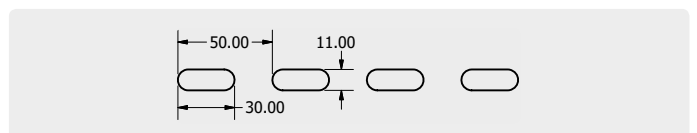
**MS Channel 38-40-17**



**Perforation for: MS Channel 30-15-15**

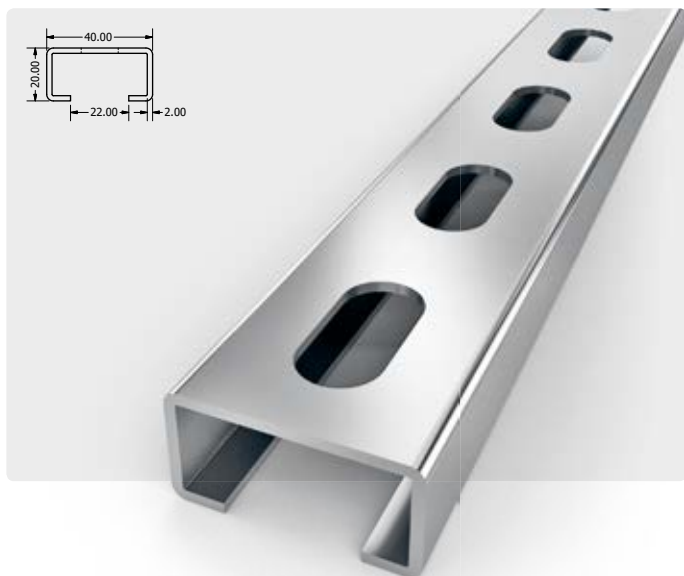


**Perforation for other rails**

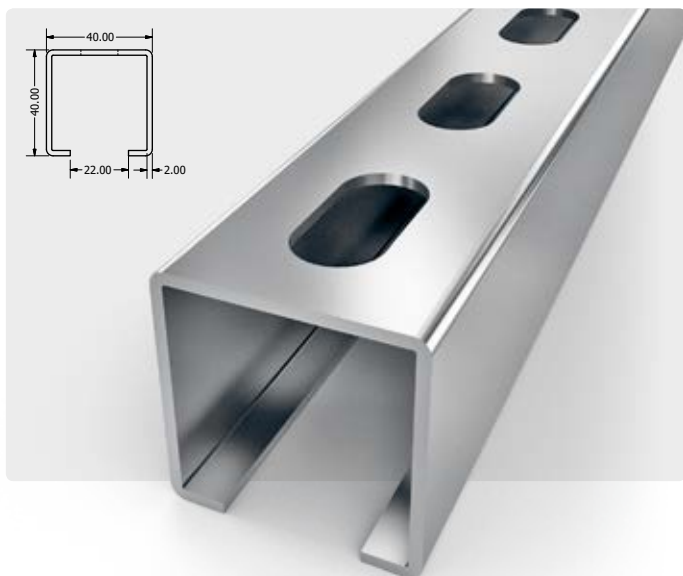


# MS Channel

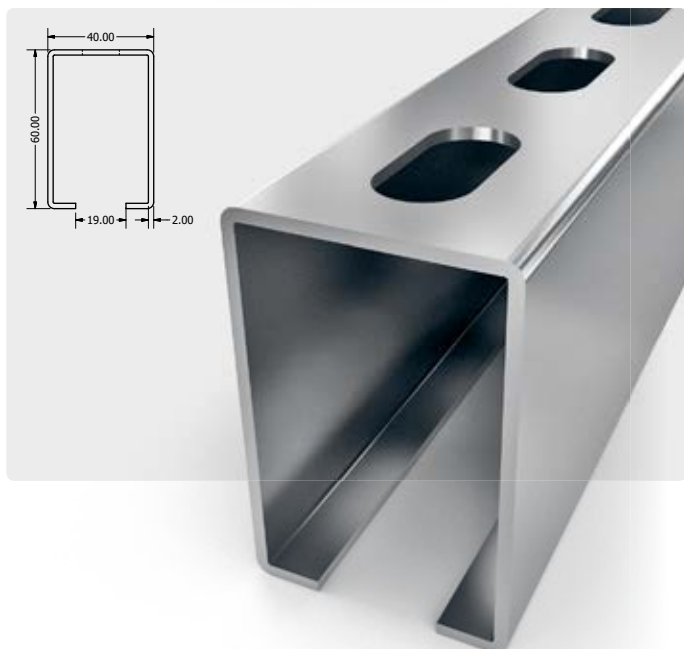
**MS Channel 40-20-22**



**MS Channel 40-40-22**



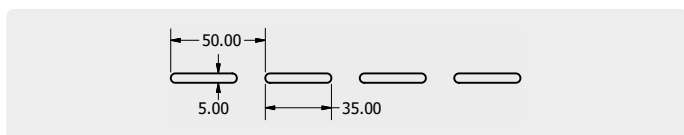
**MS Channel 40-60-17**



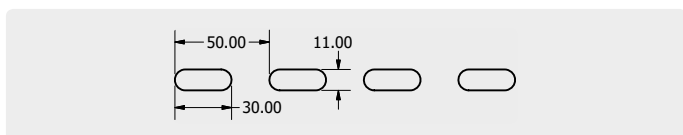
**MS Channel 40-65-9**



**Perforation for: MS Channel 40-65-9**



**Perforation for other rails**

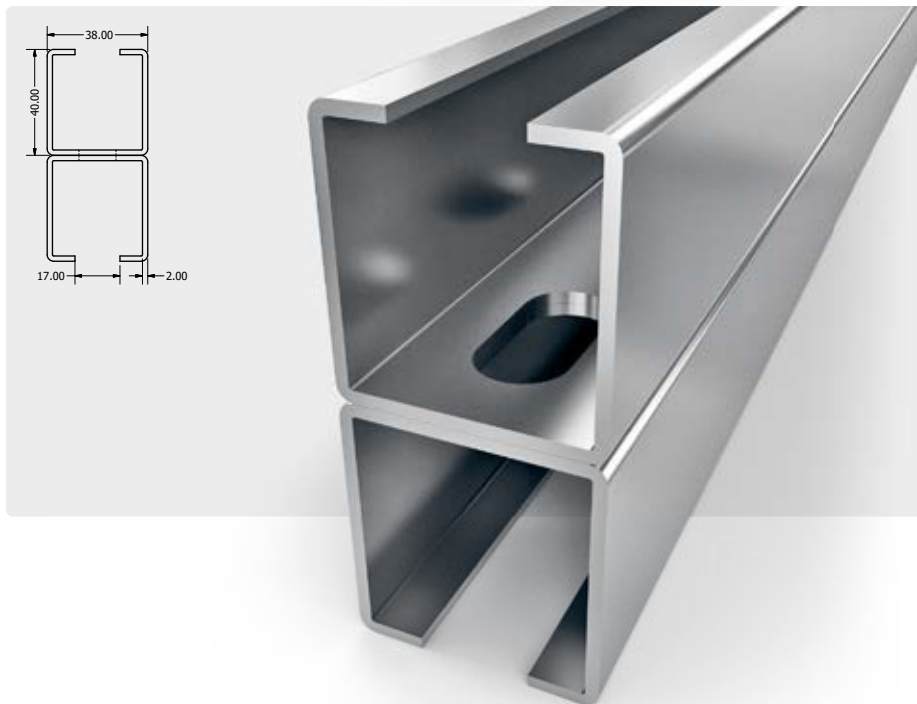


# MS Channel – double

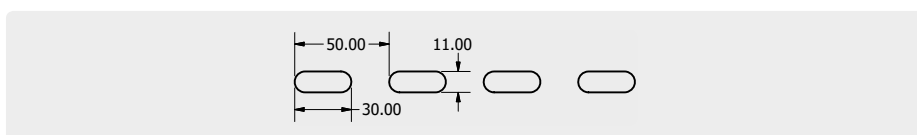
**MS Channel 28-30**



**MS Channel 38-40**



**Channel perforation**





# MFO Channel

MFO Channel 27-18-15



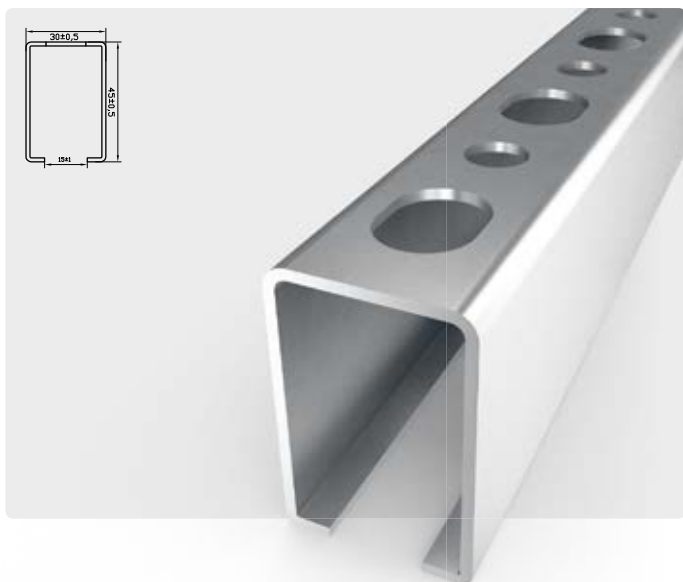
MFO Channel 30-20-15



MFO Channel 30-30-15



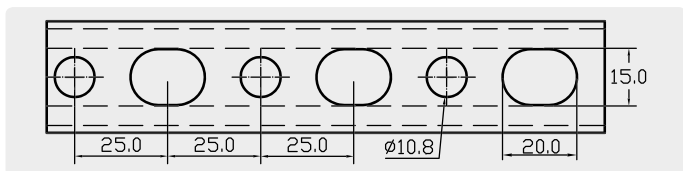
MFO Channel 30-45-15



MFO Channel 35-20-21



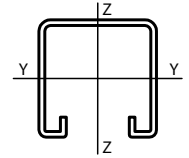
## Channel perforation



## MFO Channel – technical data

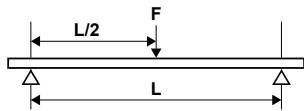
### Static calculation chart

Type	Weight (kg/m)	Moment of inertia cm <sup>4</sup>		Section modulus cm <sup>3</sup>	
		ly	lz	Wy	Wz
27 x 18-1.25	0.57	0.28	0.91	0.30	0.67
30 x 15-2.0	0.87	0.28	1.47	0.35	0.98
30 x 20-1.75	0.86	0.49	1.66	0.49	1.10
30 x 30-2.0	1.34	1.71	2.65	1.08	1.76
30 x 45-2.0	1.74	4.57	3.79	2.03	2.53



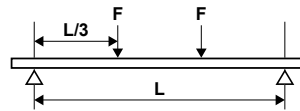
### Maximum allowable load of the construction channel

#### Load at 1 point



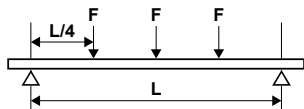
L (mm)	27 x 18 1.2 mm	30 x 15 2.0 mm	30 x 20 1.75 mm	30 x 30 2.0 mm	30 x 45 2.0 mm
500	379	449	625	1,619	2,600
1,000	130	129	223	780	1,300
1,500	67	66	114	398	928
2,000	33	32	56	195	521

#### Equal concentrated loads at 2 points



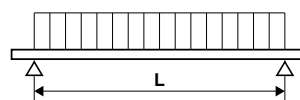
L (mm)	27 x 18 1.2 mm	30 x 15 2.0 mm	30 x 20 1.75 mm	30 x 30 2.0 mm	30 x 45 2.0 mm
500	284	303	468	1,214	1,950
1,000	77	76	131	458	975
1,500	39	39	67	234	624
2,000	19	19	33	114	306

#### Equal concentrated loads at 3 points



L (mm)	27 x 18 1.2 mm	30 x 15 2.0 mm	30 x 20 1.75 mm	30 x 30 2.0 mm	30 x 45 2.0 mm
500	189	217	312	809	1,300
1,000	55	54	94	328	650
1,500	28	28	48	168	448
2,000	14	14	23	82	219

#### Uniform load



L (mm)	27 x 18 1.2 mm	30 x 15 2.0 mm	30 x 20 1.75 mm	30 x 30 2.0 mm	30 x 45 2.0 mm
500	758	826	1,249	3,238	5,199
1,000	209	206	356	1,248	2,600
1,500	106	105	182	637	1,701
2,000	52	52	89	312	833

# Channel

**STU 28-15-2,0**



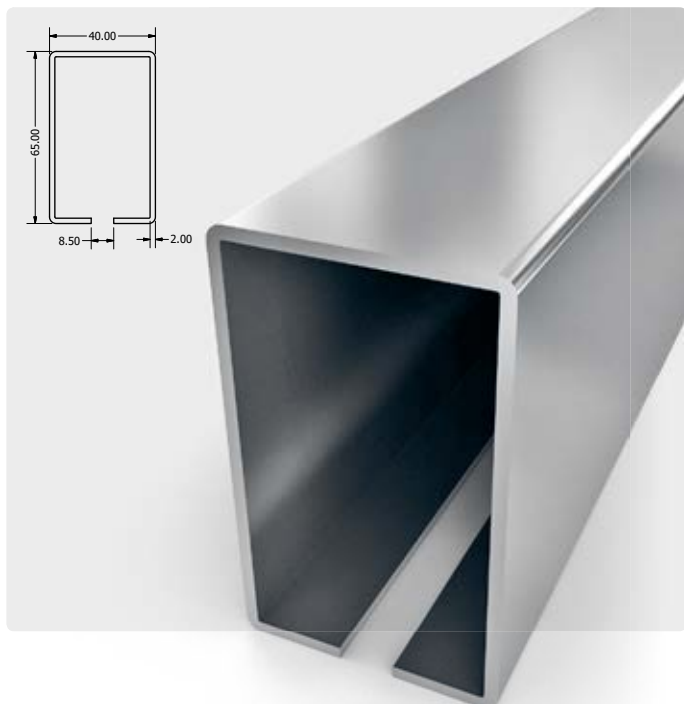
**STU 38-17-2,0**



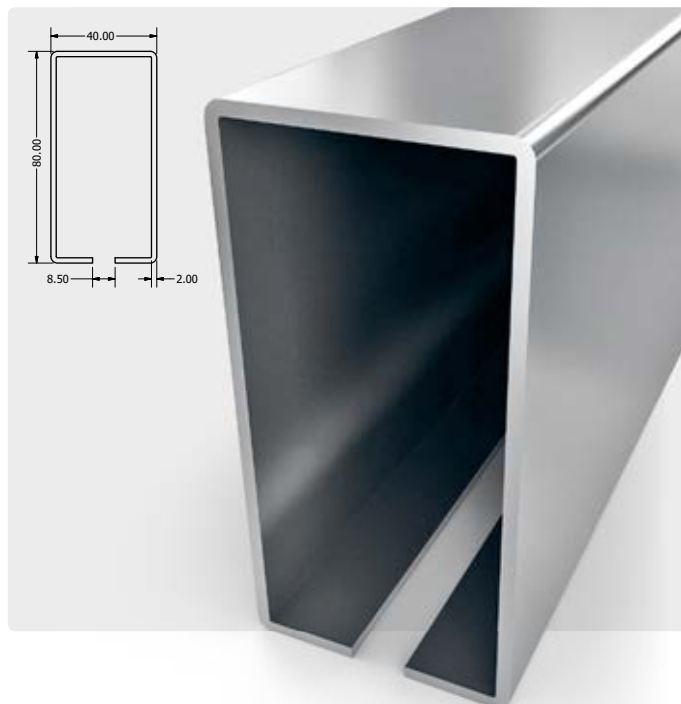
**STU 40-40-2,0**



**STU 40-65-2,0**



**STU 40-80-2,0**



mamy dobry profil

# Channel

**STU 41-21-5-2,0**



**STU 41-41-5-2,0**



**STU 40-40-6-2,0**

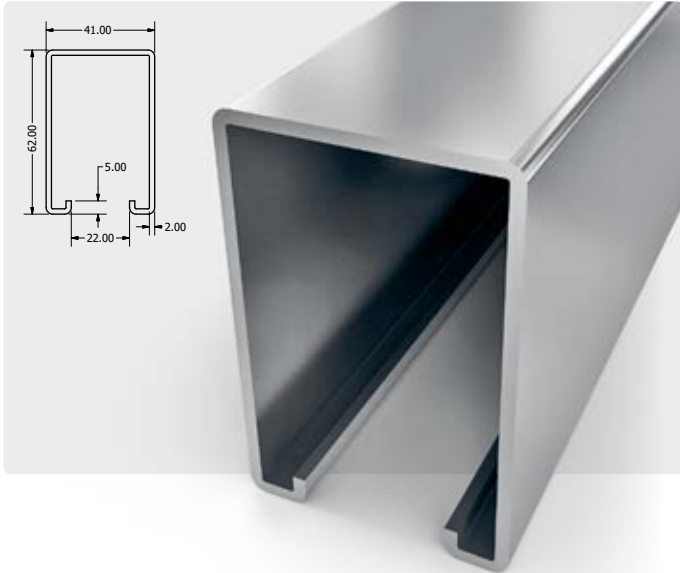


**STU 40-82-6-2,0**

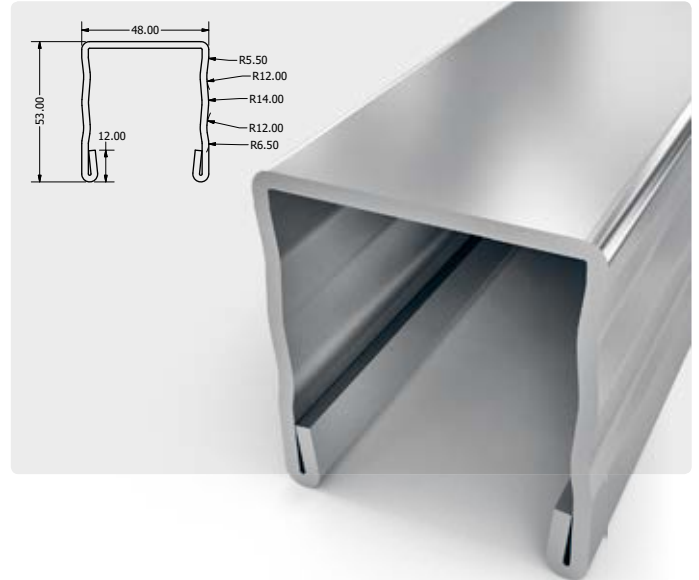


# Channel

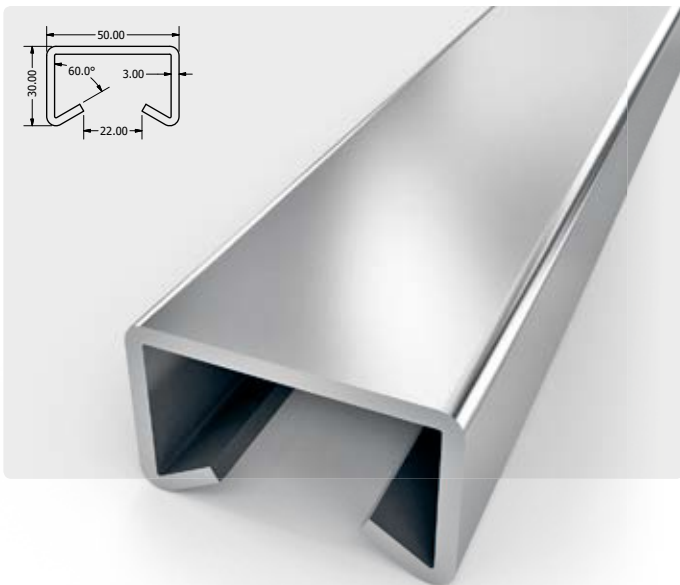
**STU 41-62-5-2,0**



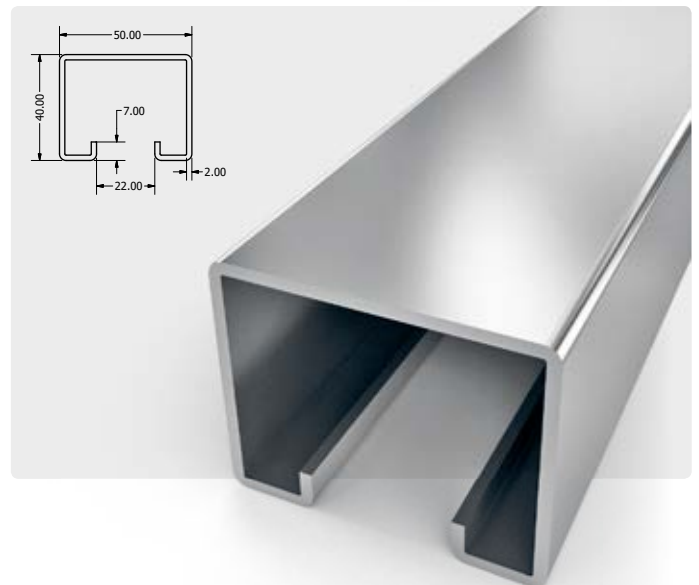
**STU 48-53**



**STU 50-30-3,0**



**STU 50-40-7-2,0**



# DIN Channel

TH35/27/7,5 non-perforated



TH35/27/7,5 perforated



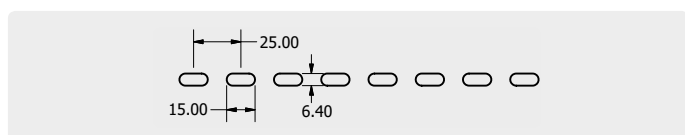
TH35/27/15 non-perforated



TH35/27/15 perforated

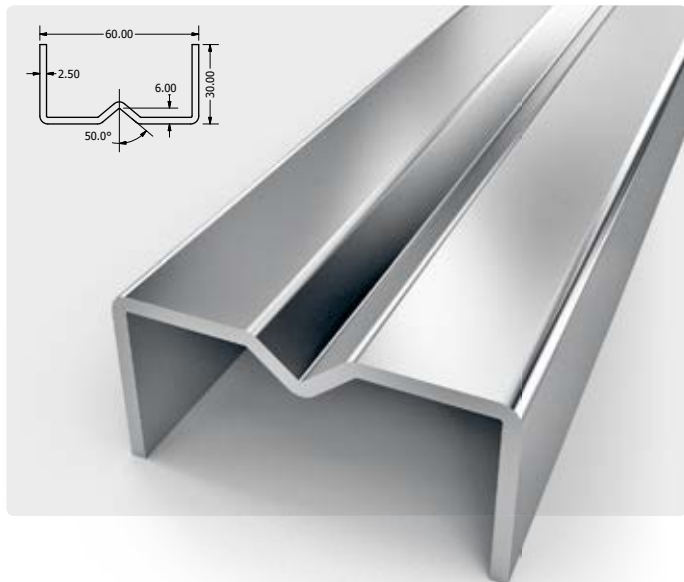


Channel perforation

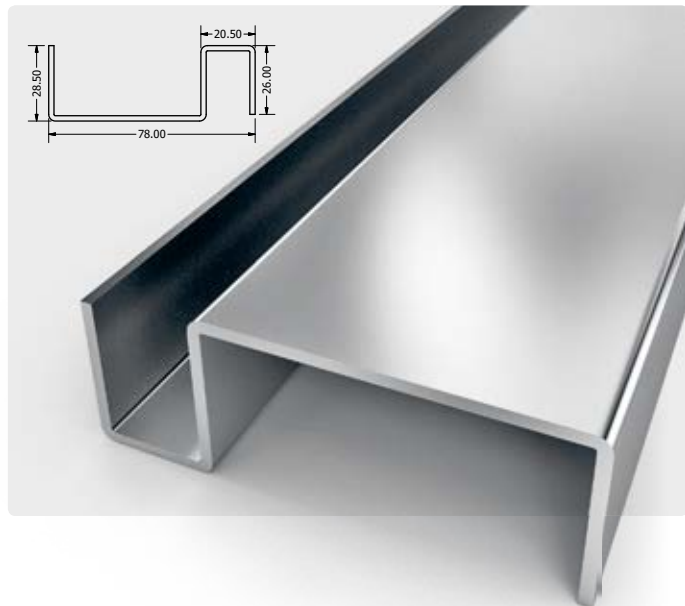


# Special channels

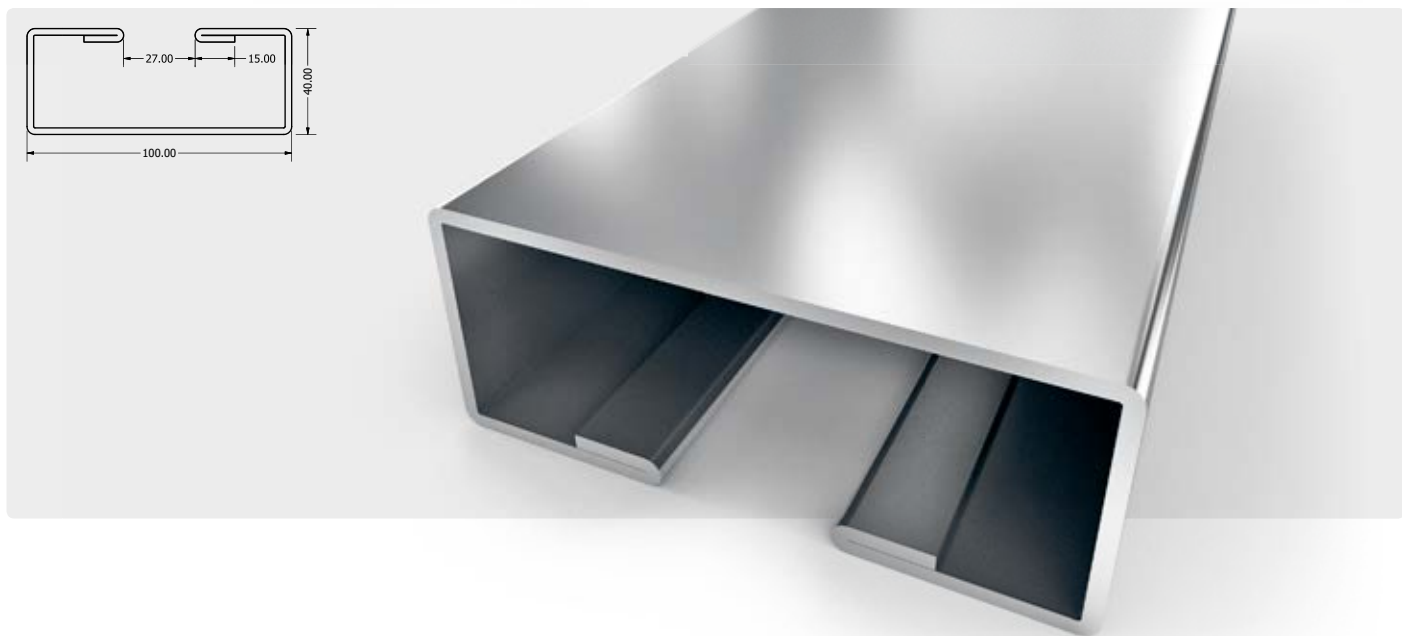
Special profiles **60-30-2,5**



Special profiles **78-28-26-2,0**



Special profiles **100-40-27-2,0**

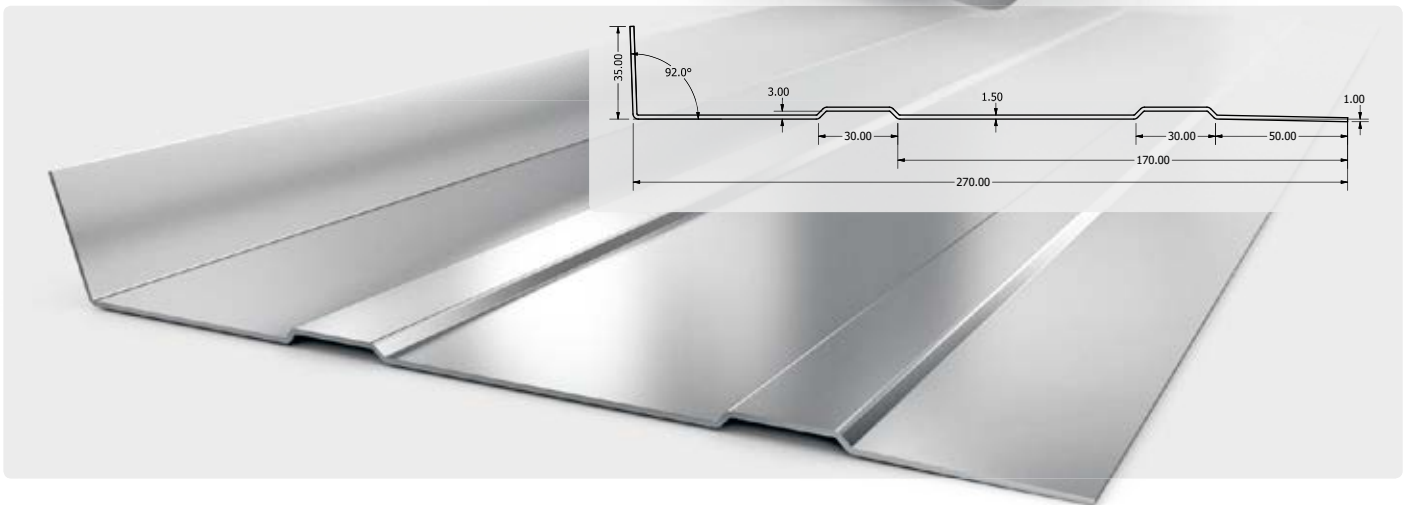


# Special channels

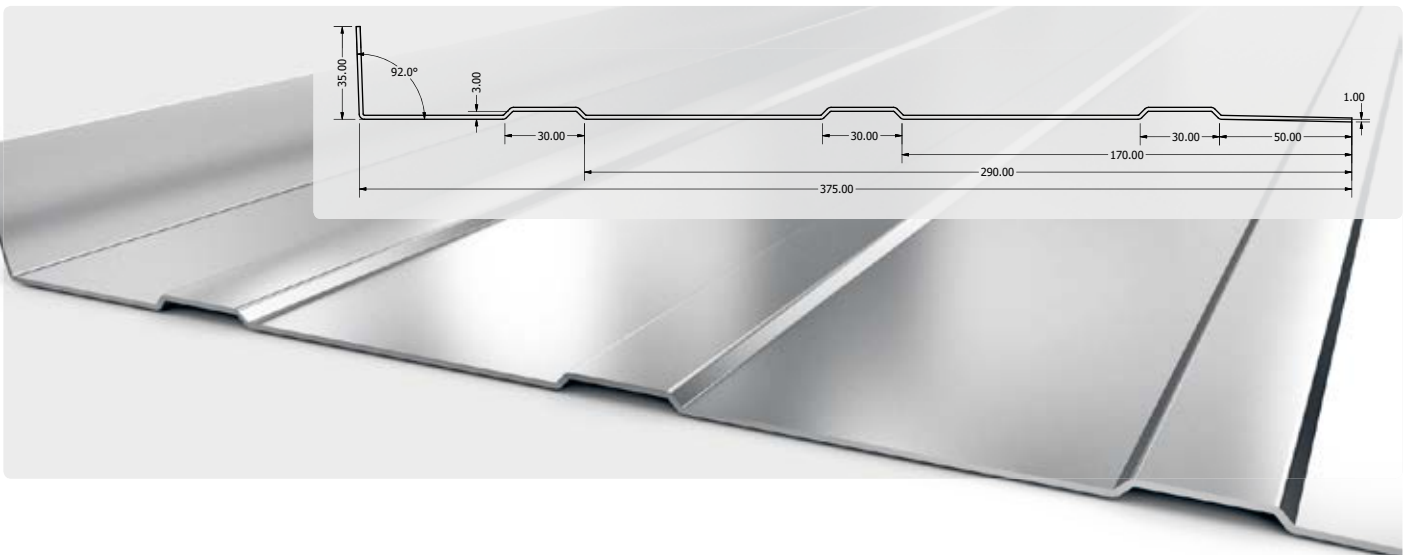
Special profiles **150-25-15-1,5**



Special profiles **270-35-1,5**



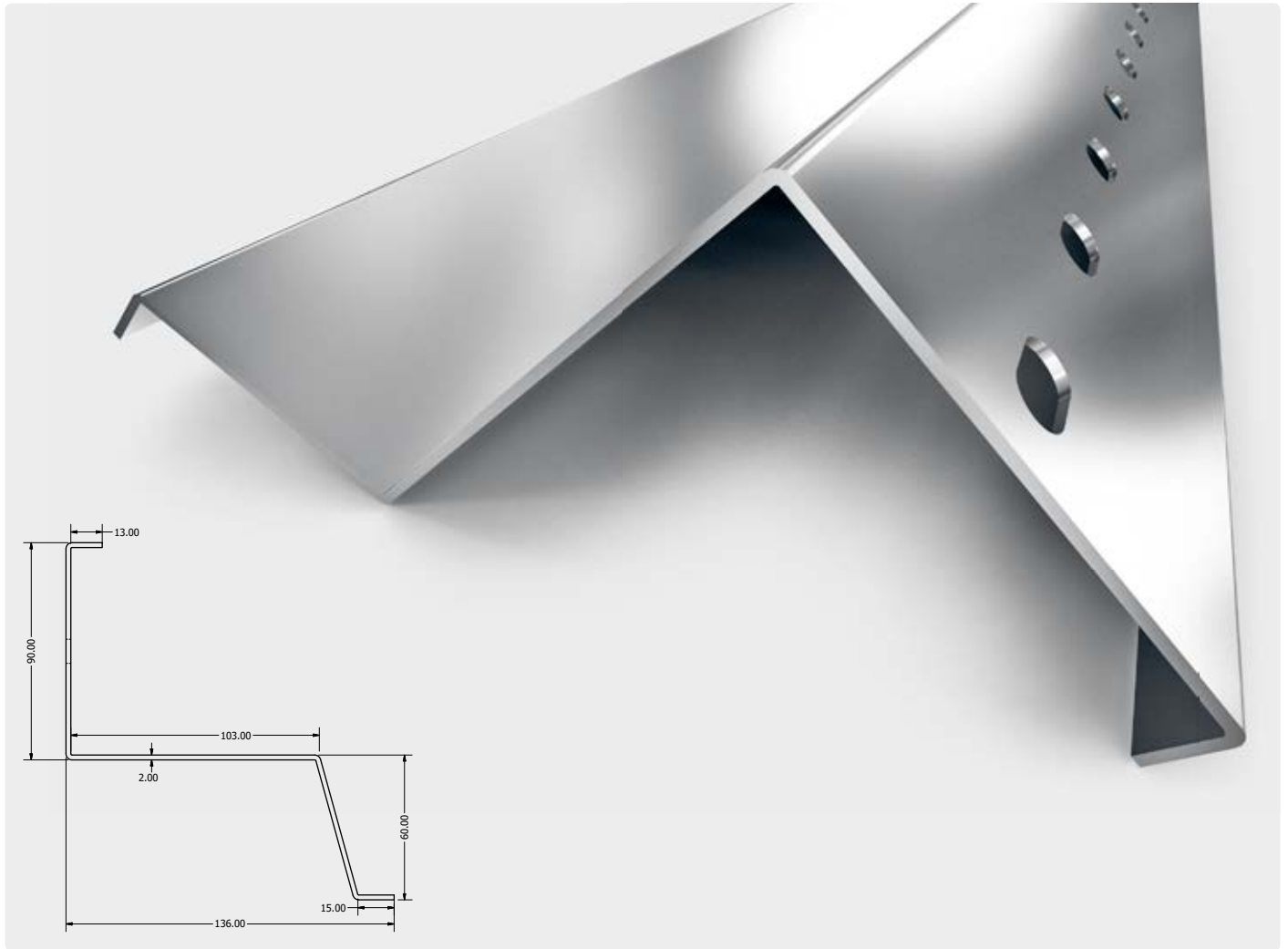
Special profiles **375-35-1,5**





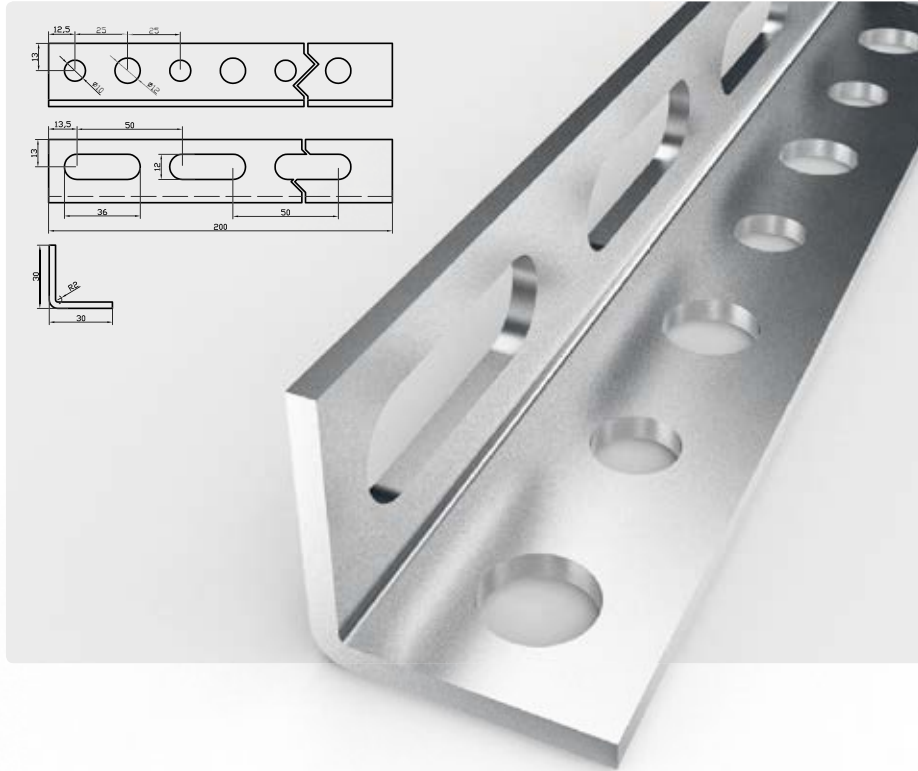
# Special channels

Special profiles **136-90-60-20-2,0**

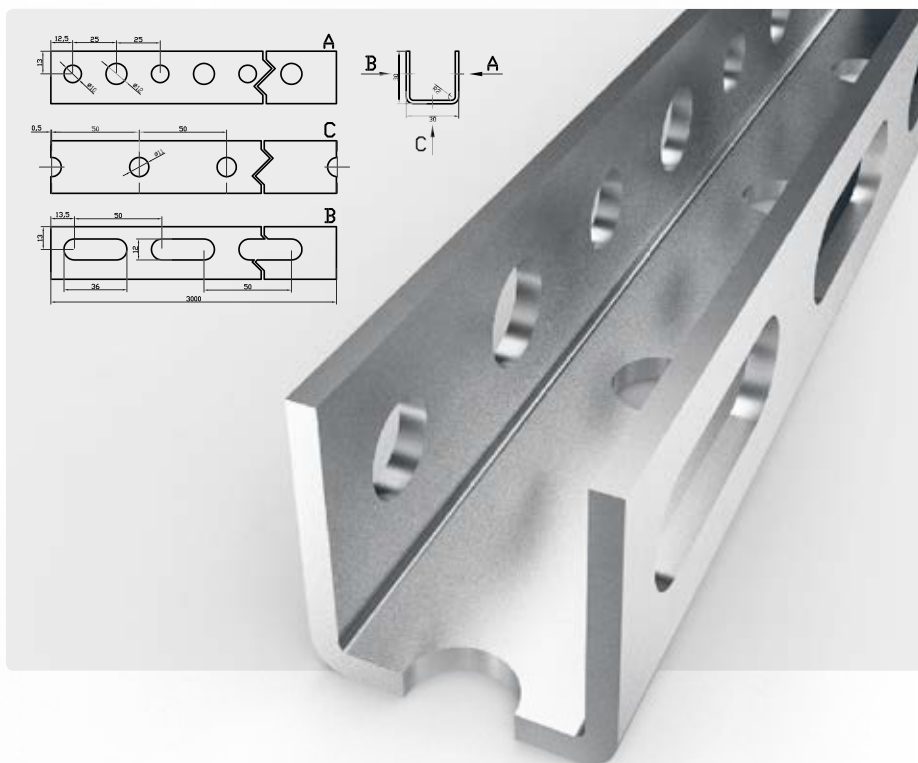


# Channel L, Channel U

Channel L 30-30



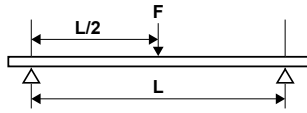
Channel U 30-30-30



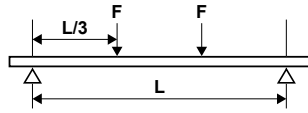
## Channel L, Channel U – technical data

### Maximum allowable load of the construction channel

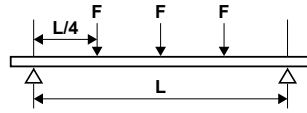
Option 1 – force F at 1 point



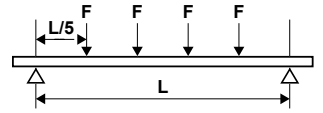
Option 2 – force F at 2 points



Option 3 – force F at 3 points



Option 4 – force F at 4 points

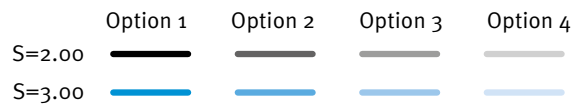
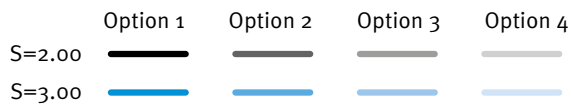
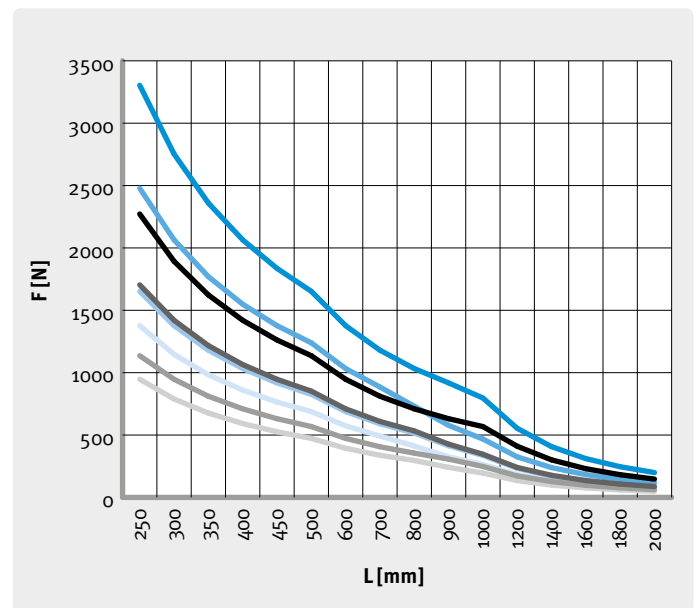
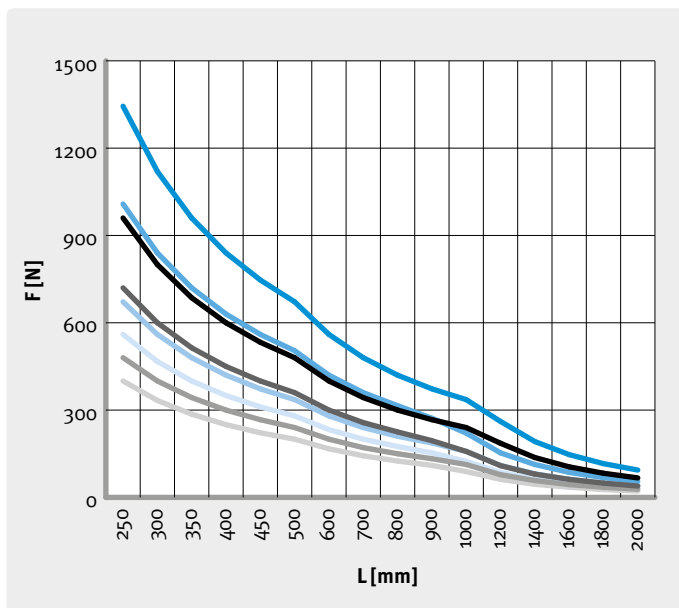


### Channel L

L [mm]	Load force F[N]							
	Option 1		Option 2		Option 3		Option 4	
	S=2	S=3	S=2	S=3	S=2	S=3	S=2	S=3
250	960	1,344	720	1008	480	672	400	560
300	800	1,120	600	840	400	560	333	467
350	686	960	514	720	343	480	286	400
400	600	840	450	630	300	420	250	350
450	533	747	400	560	267	373	222	311
500	480	672	360	504	240	336	200	280
600	400	560	300	420	200	280	167	233
700	343	480	257	360	171	240	143	200
800	300	420	225	315	150	210	125	175
900	267	373	195	272	133	187	110	153
1,000	240	336	158	221	113	158	89	124
1,200	186	261	109	153	78	110	62	86
1,400	137	192	80	113	58	81	45	63
1,600	105	147	62	86	44	62	35	49
1,800	83	116	49	68	35	49	27	38
2,000	67	94	39	55	28	40	22	31

### Channel U

L [mm]	Load force F[N]							
	Option 1		Option 2		Option 3		Option 4	
	S=2	S=3	S=2	S=3	S=2	S=3	S=2	S=3
250	2,272	3,304	1,704	2,478	1,136	1,652	947	1,377
300	1,893	2,753	1,420	2,065	947	1,377	789	1,147
350	1,623	2,360	1,217	1,770	811	1,180	676	983
400	1,420	2,065	1,065	1,549	710	1,033	592	860
450	1,262	1,836	947	1,377	631	918	526	765
500	1,136	1,652	852	1,239	568	826	473	688
600	947	1,377	710	1,033	473	688	394	574
700	811	1,180	609	885	406	590	338	492
800	710	1,033	533	731	355	516	296	412
900	631	918	427	578	307	414	241	325
1,000	568	797	346	468	248	336	195	264
1,200	410	554	240	325	172	233	135	183
1,400	301	407	177	239	127	171	99	134
1,600	230	311	135	183	97	131	76	103
1,800	182	246	107	144	77	104	60	81
2,000	147	199	87	117	62	84	49	66



# KONSOLE MS Channel

27-18-15



28-30-15



38-40-17



# KONSOLE MS Channel

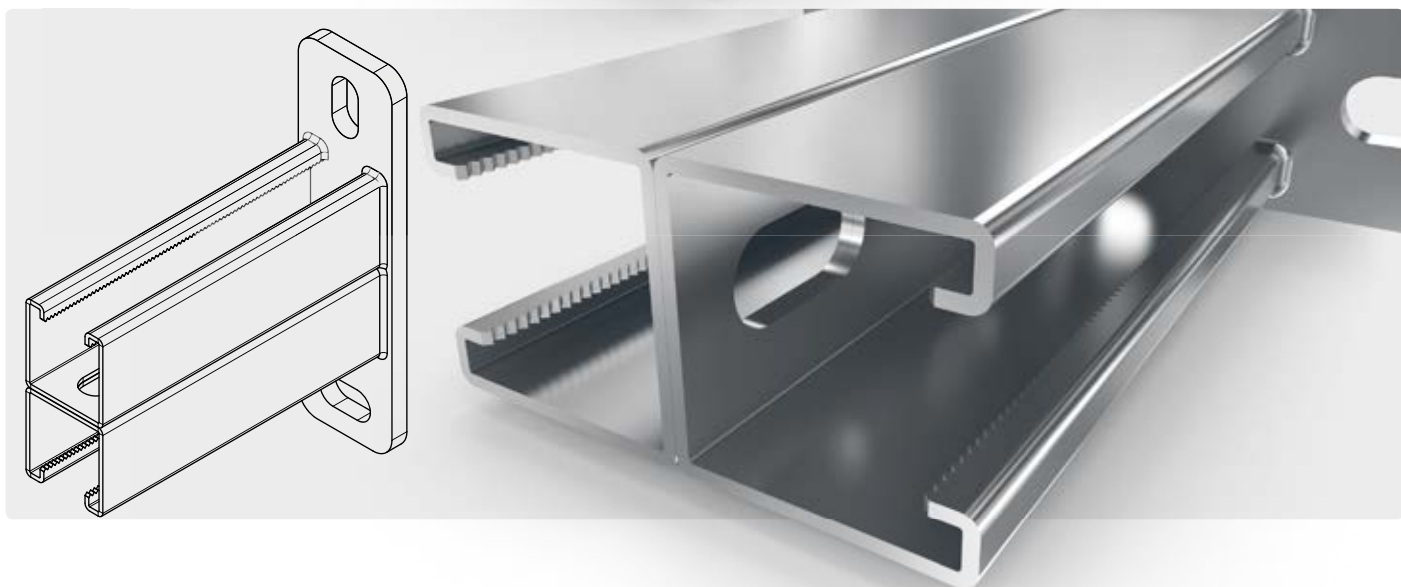
41-21-7



41-41-7

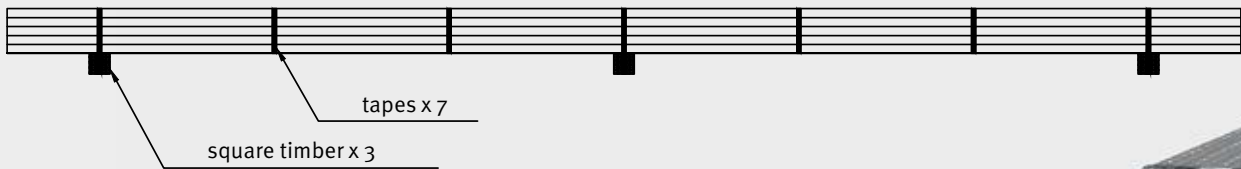


41-41-7 (podwójna)



# Product packaging

## Example of channel packaging



(5 x 5) x 2

