

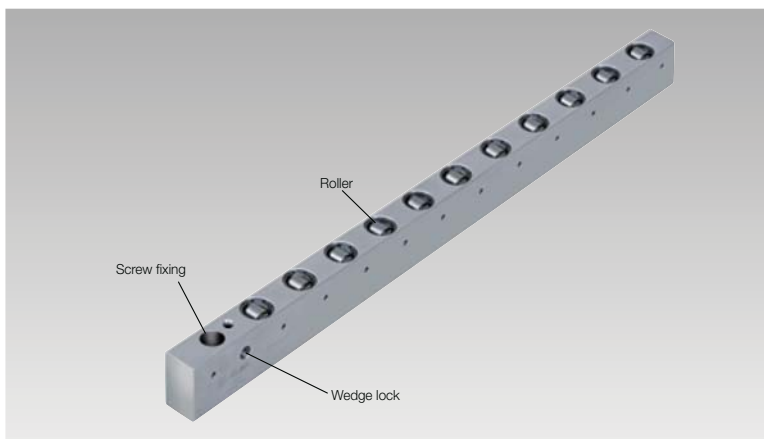


ROEMHELD
HILMA ■ STARK

Issue 11-17 E

WZ 8.18344

Roller Bars, Mechanical with spring pack loads up to 66 kN/m



Advantages

- Easy and safe die change
- No hydraulic supply required
- Variant program with many selection possibilities
- Variable length in a single piece design up to 2900
- Slot depth, roller spacing and bar length configurable for every application
- Low weight (version in aluminium)

Application

- In T-slots and rectangular slots of the press bed for easy die change without any problems
- Die change streamlining

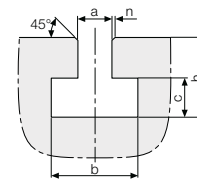
Delivery

- Roller bar
- Wedge lock (option)

Description

Roller bar with spring pack for medium loads and flexible horizontal movement of the dies. When preloaded, the rollers project over the bed level by up to 2 mm. When the die is clamped, the rollers are pressed into the bar body against the spring force until they are flush with the bed level.

T-slot tolerances as per DIN 650



Technical data

Max. load	[kN/m]	66
Roller spacing and orientation		flexible
Material of the bar		aluminium or steel
Max. temperature	[°C]	with aluminium bars: 100 with steel bars: 250
Fixing of the bar		screw fixing or wedge lock
Max. bar length*	[mm]	variable* up to 2900

* The minimum bar lengths depends on the roller spacing G with at least 3 rollers (see page 2)

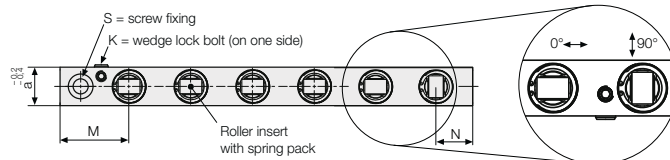
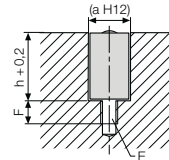
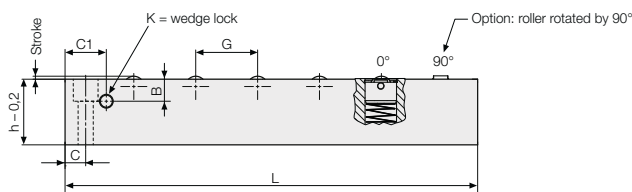
a	b	c	h min.	h max.	n max.
22 H12	37 ⁺³	16 ⁺²	38	45	1.6
28 H12	46 ⁺⁴	20 ⁺²	48	56	1.6
36 H12	56 ⁺⁴	25 ⁺³	61	71	2.5

Dimensions in mm

h_{min.} = minimum dimension as per DIN 650

Subject to modifications

Technical data • Dimensions



Roller orientation

The carrying rollers can be mounted in longitudinal direction of the roller bar (0° = standard) or in transverse direction (90°). Please specify the orientation of the carrying roller.
e.g. X = 90°

Technical data

Slot width (a)	[mm]	18	22	28	36	13/16"	1 1/16"
Slot depth min. (h)	[mm]	28.5	34.5	42	51.5	28.5	34.5
Slot depth standard (h)	[mm]	30	38	48	61	29.4	38.9
Slot depth max.** (h)	[mm]	45	55	60	75	40	58
Roller spacing G min.	[mm]	20	23	28	34	20	23
Roller spacing G standard	[mm]	30	40	45	50	30	40
Roller spacing G max.	[mm]	60	80	90	100	60	80
L min.	[mm]	*)	*)	*)	*)	*)	*)
L max.	[mm]	2900	2900	2900	2900	2900	2900
Stroke	[mm]	1	2	2	2	1	2
Load/roller	[kN]	0.6	0.9	1.4	2.4	0.6	0.9
B	[mm]	12	16	16	16	12	16
C	[mm]	10	12.5	15	20	10	12.5
C1	[mm]	10	24.5	30	35	10	24.5
E	[mm]	M6	M8	M10	M10	M6	M8
F	[mm]	11	13	15	15	11	13
M	[mm]	27.5	40	50	57.5	27.5	40
N	[mm]	12.5	15	25	27.5	12.5	15

*) L min. depends on the roller spacing G with at least 3 rollers

**) only with steel bars

EXCEL variants configurator

For the selection and configuration of the roller and ball bars, a configurator is available which can be downloaded from our website. After entering the parameters, the configurator determines the desired roller or ball bars with all technical data and the identification number of the characteristics which are identical with the order number. In addition, a drawing with all dimensions will be provided. The configurator is a Microsoft Excel file with macros.

The configurator can be downloaded at www.roemheld-gruppe.de on page:

Products/die clamping technology/die changing technology/roller, ball and conveyor bars

Link to the website:

<https://www.roemheld-gruppe.de/produkte/werkzeug-spanntechnik/werkzeugwechseltechnik/rollen-kugel-und-transportleisten.html>



Code for part numbers Variant program

Roller bars with spring pack are individually configured and manufactured depending on the application. Within the limits specified in the measurement chart, the following parameters can be selected based on a code for part numbers: **bar material, slot width, bar lengths, fixation, slot depth, roller spacing and roller orientation.**

• Bar material / operating temperature

Aluminium or steel can be selected as bar material. For operating temperatures >100 °C, a steel version is required. Depending on the temperature range, the admissible carrying force of the roller bars is reduced:

up to 100 °C: 100 % of the carrying force
>100 – 150 °C: 95 % of the carrying force
>150 – 200 °C: 70 % of the carrying force
>200 – 250 °C: 60 % of the carrying force

e.g. steel up to 200 °C with 70 % of the carrying force

• Slot width (a)

Selection from the table on page 2

e.g. a = 36 mm

• Bar lengths (L)

Depending on the roller spacing (G) and the parameter (M) results the possible bar length. Indicate the desired length (e.g. bed length) for your roller bar. Please note that a roller bar must be equipped with at least 3 rollers.

e.g. L = 1380 mm

• Fixation

K = wedge lock
S = screw fixing

e.g. screw fixing = S

• Slot depth (h)

If the slots in your application are lower than the default value, specify the corresponding dimension (up to h min.) For slots which are deeper than the default value, spacer bars can be inserted. For steel versions, specify the corresponding dimension (up to h max.).

e.g. h = 45 mm

• Roller orientation

The carrying rollers can be mounted in longitudinal direction of the roller bar (0° = standard) or in transverse direction (90°). Please specify the orientation of the carrying roller.

e.g. X = 90°

• Roller spacing (G) or load of the bar

By changing the spacing of the rollers, the load of the roller bar can be varied. Please note that the load is indicated for the full length of the bar. Therefore, both the load and the roller spacing must be selected to suit the die weight and the die supporting length. Please indicate the desired roller spacing or load of the ball bar, or the maximum die weight and the die dimensions.

e.g. G = 35 mm

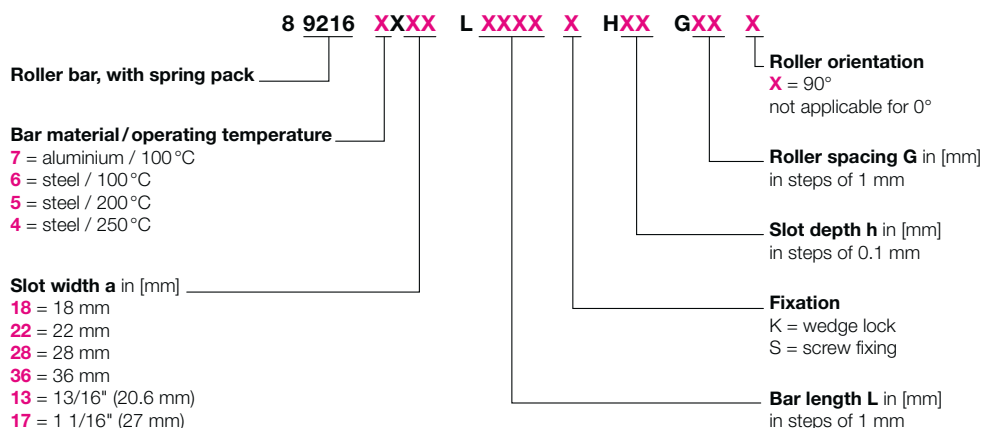
or **load per bar = 92.1 kN**

or **number of rollers = 38**

or **die weight and exterior dimensions**

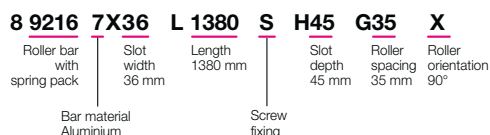
Code for part numbers

Variant program



Page 4 shows an example of the order numbers for aluminium bars with standard slot depth "h" and standard roller spacing "G".

Example of ordering



**Extract from the possible variants for roller bars
with standard slot depth "h" and roller spacing "G" and aluminium bars**

for slot width a = 18 mm

Length (L) [mm]	Load [kN]	Number of rollers	Part no.
100	1.8	3	892167018 L 100 S
130	2.4	4	892167018 L 130 S
160	3	5	892167018 L 160 S
190	3.6	6	892167018 L 190 S
250	4.8	8	892167018 L 250 S
310	6	10	892167018 L 310 S
370	7.2	12	892167018 L 370 S
430	8.4	14	892167018 L 430 S
490	9.6	16	892167018 L 490 S
550	10.8	18	892167018 L 550 S
610	12	20	892167018 L 610 S
670	13.2	22	892167018 L 670 S
730	14.4	24	892167018 L 730 S
other lengths are possible up to max. 2890			
2890	57.6	96	892167018 L 2890 S

for slot width a = 36 mm

Length (L) [mm]	Load [kN]	Number of rollers	Part no.
185	7.2	3	892167036 L 185 S
235	9.6	4	892167036 L 235 S
285	12	5	892167036 L 285 S
335	14.4	6	892167036 L 335 S
435	19.2	8	892167036 L 435 S
535	24	10	892167036 L 535 S
635	28.8	12	892167036 L 635 S
735	33.6	14	892167036 L 735 S
835	38.4	16	892167036 L 835 S
935	43.2	18	892167036 L 935 S
1035	48	20	892167036 L 1035 S
1135	52.8	22	892167036 L 1135 S
other lengths are possible up to max. 2885			
2885	136.8	57	892167036 L 2885 S

for slot width a = 22 mm

Length (L) [mm]	Load [kN]	Number of rollers	Part no.
135	2.7	3	892167022 L 135 S
175	3.6	4	892167022 L 175 S
215	4.5	5	892167022 L 215 S
255	5.4	6	892167022 L 255 S
335	7.2	8	892167022 L 335 S
415	9	10	892167022 L 415 S
495	10.8	12	892167022 L 495 S
575	12.6	14	892167022 L 575 S
655	14.4	16	892167022 L 655 S
735	16.2	18	892167022 L 735 S
815	18	20	892167022 L 815 S
895	19.8	22	892167022 L 895 S
975	21.6	24	892167022 L 975 S
1055	23.4	26	892167022 L 1055 S
1135	25.2	28	892167022 L 1135 S
1215	27	30	892167022 L 1215 S
1295	28.8	32	892167022 L 1295 S
other lengths are possible up to max. 2895			
2895	64.8	72	892167022 L 2895 S

for slot width a = 13/16"

Length (L) [mm]	Load [kN]	Number of rollers	Part no.
100	1.8	3	892167013 L 100 S
130	2.4	4	892167013 L 130 S
160	3	5	892167013 L 160 S
190	3.6	6	892167013 L 190 S
250	4.8	8	892167013 L 250 S
310	6	10	892167013 L 310 S
370	7.2	12	892167013 L 370 S
430	8.4	14	892167013 L 430 S
490	9.6	16	892167013 L 490 S
550	10.8	18	892167013 L 550 S
610	12	20	892167013 L 610 S
670	13.2	22	892167013 L 670 S
730	14.4	24	892167013 L 730 S
other lengths are possible up to max. 2890			
2890	57.6	96	892167013 L 2890 S

for slot width a = 28 mm

Length (L) [mm]	Load [kN]	Number of rollers	Part no.
165	4.2	3	892167028 L 165 S
210	5.6	4	892167028 L 210 S
255	7	5	892167028 L 255 S
300	8.4	6	892167028 L 300 S
390	11.2	8	892167028 L 390 S
480	14	10	892167028 L 480 S
570	16.8	12	892167028 L 570 S
660	19.6	14	892167028 L 660 S
750	22.4	16	892167028 L 750 S
840	25.2	18	892167028 L 840 S
930	28	20	892167028 L 930 S
1020	30.8	22	892167028 L 1020 S
other lengths are possible up to max. 2865			
2865	88.2	63	892167028 L 2865 S

for slot width a = 1 1/16"

Length (L) [mm]	Load [kN]	Number of rollers	Part no.
135	2.7	3	892167017 L 135 S
175	3.6	4	892167017 L 175 S
215	4.5	5	892167017 L 215 S
255	5.4	6	892167017 L 255 S
335	7.2	8	892167017 L 335 S
415	9	10	892167017 L 415 S
495	10.8	12	892167017 L 495 S
575	12.6	14	892167017 L 575 S
655	14.4	16	892167017 L 655 S
735	16.2	18	892167017 L 735 S
815	18	20	892167017 L 815 S
895	19.8	22	892167017 L 895 S
975	21.6	24	892167017 L 975 S
1055	23.4	26	892167017 L 1055 S
1135	25.2	28	892167017 L 1135 S
1215	27	30	892167017 L 1215 S
1295	28.8	32	892167017 L 1295 S
other lengths are possible up to max. 2895			
2895	64.8	72	892167017 L 2895 S

▼
Screw fixing = S
Wedge lock = K