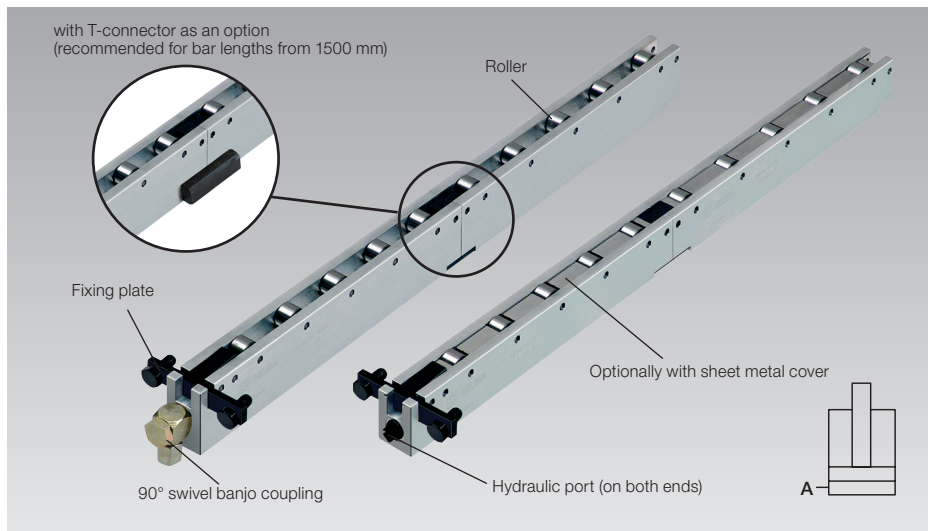




Roller Bars, Hydraulic with lifting of the bar max. load 160 kN/m, max. operating pressure 400 bar



Advantages

- Easy and safe die change
- Hydraulic lifting of the complete bar
- Very high loads
- Lengths up to 2500 mm in 250 mm long segments
- The hydraulic supply is protected inside the slot base
- Easy cleaning of the bars and rollers by open design
- 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

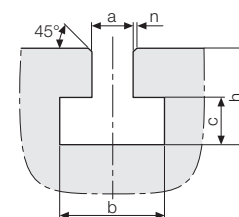
- Roller bar
- Fixing plate
- 90° swivel banjo coupling

Description

Roller bar with hydraulic lifting of the complete bar for heavy loads and linear movement of the dies.

On the underside of the roller bar, lifting pistons are provided. Pressure is applied to these pistons using hydraulic pressure generators, which lift then the complete roller bar. The die positioned on the roller bars is not in contact with the table top and can be easily moved linearly and positioned.

T-slot tolerances as per DIN 650



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

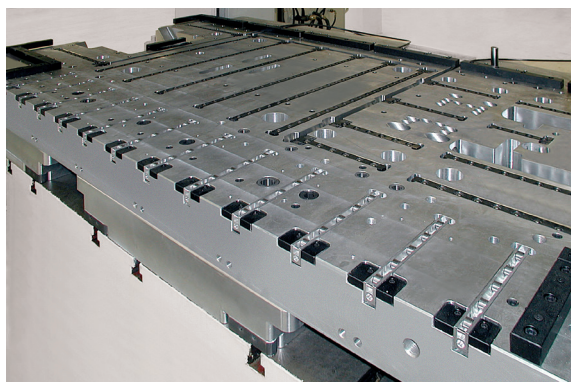
h_{min.} = minimum dimension as per DIN 650

The height of the roller bars is designed for the dimension **h_{min.}** of the slot dimension.

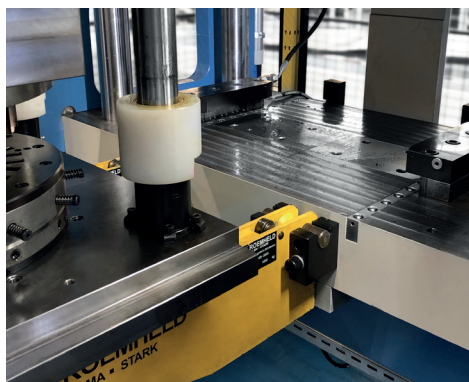
Technical data

Max. operating pressure	[bar]	400
Max. load	[kN/m]	160
Roller spacing	[mm]	50
Material of the bar		aluminium (steel on request)
Fixing of the bar		fixing plate or positioning pin
Standard lengths	[mm]	250 ... 2500
		consisting of 250 mm long segments
Intermediate lengths	[mm]	shortening of the segments in 50 mm increments

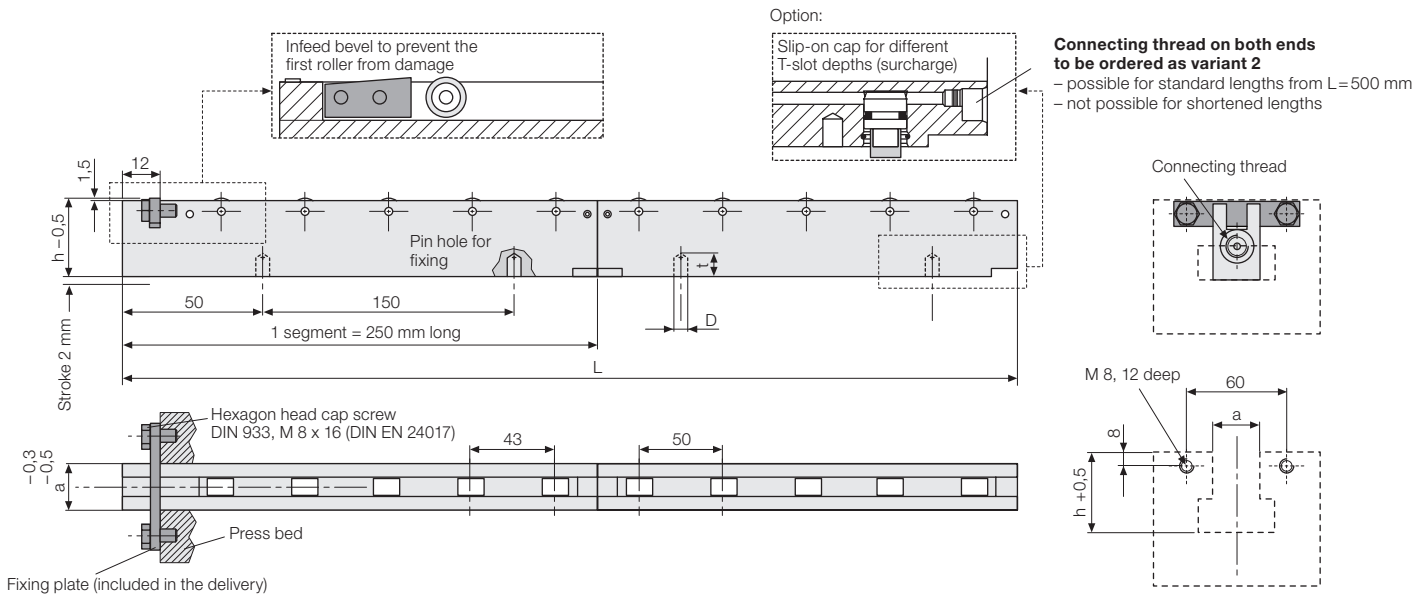
Application example



Roller bars with hydraulic lifting



Clamping bars installed in press bed and ram. Easy feeding of dies by die changing consoles and hydraulic ball bars installed in the T-slots of the press bed.



Technical data

Max. temperature 100 °C

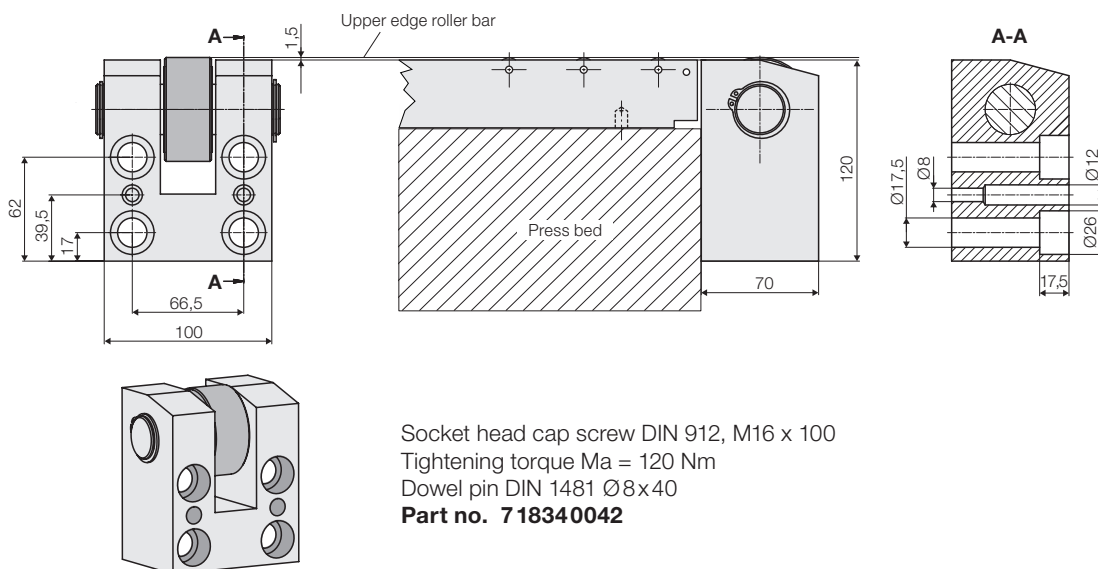
Slot width (a)	[mm]	22	28	36
Slot depth (h)	[mm]	38	48	61
Slot depth max. (h)	[mm]	45	56	71
Load/roller	[kN]	6.0	6.4	8.0
Number of rollers/segment (= 250 mm)		5	5	5
Number of pistons/segment (= 250 mm)		5	4	5
Connecting thread		G 1/8	G 1/8	G 1/4
Max. operating pressure	[bar]	400	400	400
Roller Ø x width	[mm]	16 x 12	16 x 12	19 x 12
Stroke	[mm]	2	2	2
Oil volume/segment	[cm ³]	1.54	1.60	2.00
D	[mm]	6.5	8.5	8.5
t	[mm]	9	12	12

Fixing plate and 90° swivel banjo coupling are included in the delivery.

Accessories

Infeed support

to protect the first rollers



Dimensions in [mm]

Standard lengths

Part no.

for slot width a = 22 mm

Length (L) [mm]	Load [kN] at 400 bar	Part no.
250	30	8 1834 5100
500	60	8 1834 5110
750	90	8 1834 5115
1000	120	8 1834 5120
1250	150	8 1834 5130
1500	180	8 1834 5140
1750	210	8 1834 5150
2000	240	8 1834 5160
2250	270	8 1834 5170
2500	300	8 1834 5180

for slot width a = 28 mm

Length (L) [mm]	Load [kN] at 400 bar	Part no.
250	32	8 1834 6100
500	64	8 1834 6110
750	96	8 1834 6115
1000	128	8 1834 6120
1250	160	8 1834 6130
1500	192	8 1834 6140
1750	224	8 1834 6150
2000	256	8 1834 6160
2250	288	8 1834 6170
2500	320	8 1834 6180

for slot width a = 36 mm

Length (L) [mm]	Load [kN] at 400 bar	Part no.
250	40	8 1834 7100
500	80	8 1834 7110
750	120	8 1834 7115
1000	160	8 1834 7120
1250	200	8 1834 7130
1500	240	8 1834 7140
1750	280	8 1834 7150
2000	320	8 1834 7160
2250	360	8 1834 7170
2500	400	8 1834 7180

Intermediate lengths

Possible intermediate lengths: 300 to 2450 mm. Produced by shortening of the segments in 50 mm increments.

Determination of the carrying force for intermediate lengths

for slot width a = 22 mm

Shortening by [mm]	Carrying force reduction [kN]
50	6
100	12
150	18
200	24

for slot width a = 28 mm

Shortening by [mm]	Carrying force reduction [kN]
50	8
100	16
150	16
200	24

for slot width a = 36 mm

Shortening by [mm]	Carrying force reduction [kN]
50	8
100	16
150	24
200	32

Examples for intermediate lengths of roller bar L = 500 mm

Part no.:

Add the desired length "LXXX" in mm to the part number.

for slot width a = 22 mm

Length (L) [mm]	Load [kN] at 400 bar	Example
300	36	8 1834 5110 L300
350	42	8 1834 5110 L350
400	48	8 1834 5110 L400
450	54	8 1834 5110 L450

for slot width a = 28 mm

Length (L) [mm]	Load [kN] at 400 bar	Example
300	40	8 1834 6110 L300
350	48	8 1834 6110 L350
400	48	8 1834 6110 L400
450	56	8 1834 6110 L450

for slot width a = 36 mm

Length (L) [mm]	Load [kN] at 400 bar	Example
300	48	8 1834 7 110 L300
350	56	8 1834 7 110 L350
400	64	8 1834 7 110 L400
450	72	8 1834 7 110 L450

Connecting thread on both ends: Variant "2"

- possible for standard lengths from L=500 mm
- not possible for shortened lengths

Part no.

Add "-2" to the part no. of the roller bar.

Example: 8 1834 5110-2

Special versions

Sheet metal cover

The roller bars are also available with sheet metal cover between the rollers on request.

T-connector

For bar lengths from 1500 mm, it is recommended to equip the individual segments with T-connectors (see figure on page 1). Thus, the roller bars are reinforced and the dimensional stability is increased.

Customised special versions

Different heights, lengths, strokes, roller and piston number per segment, other customised versions as well as inch versions are available on request.