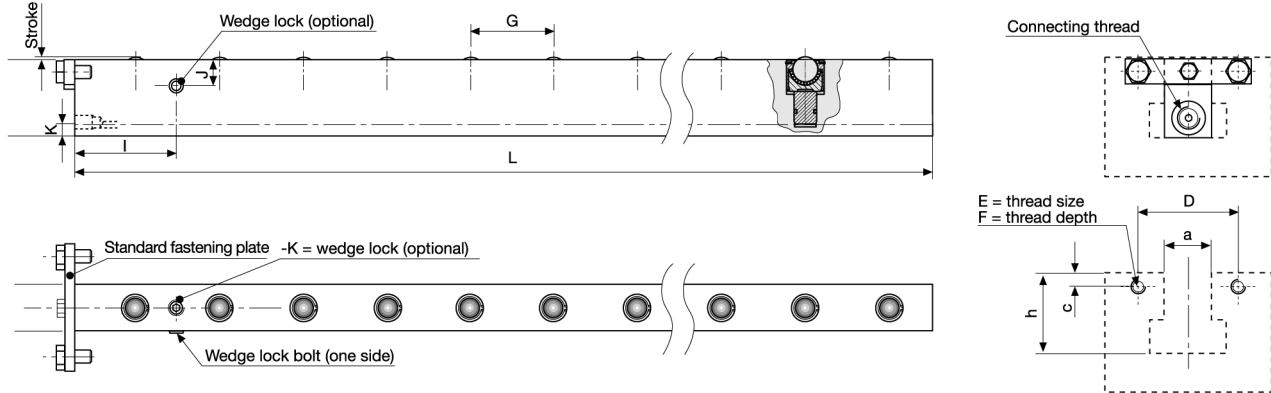


BH-Rollblocks – Rectangular Style

for ASA T-slots
hydraulic ball type



Slot (a) (in)	Height (h) (in)	Connection Port	Max. Operating pressure (psi)	Stroke (in)	C (in)	D (in)	E (mm)	F (in)	G (in)	I (in)	J (in)	K (in)
13/16	1.16	G 1/8	1,450	0.039	0.197	1.417	M5	0.59	1.18	1.46	0.47	0.30
11/16	1.53	G 1/4	1,450	0.078	0.276	1.574	M5	0.59	1.57	1.97	0.51	0.43

Application

These rollblocks are used in pairs or sets to lift the die and provide a surface of precision balls allowing the die to be easily rolled in and out during the die change process. For use in ASA B5.1-1949 T-slots specification or rectangular slots meeting the (a) and (h) dimensional requirements stated. Deeper T-slots can be shimmed to suit. Ball style rollblocks are suited for lighter loads than roller style, and in some cases require hardened wear strips to be installed on the bottom of the die to reduce tracking.

Description

The rollblock consists of a bar that is equipped by hydraulically operated supporting balls for movement both inline and transverse with the bar. Maximum operating pressure is 1,450 psi. A circuit relief valve must be provided to prevent pressure intensification caused by overloading the rollblock. See catalog SECTION I for rollblock pumps and valve packages.

Advantages

- each ball can provide both linear and transverse movement
- rollblock includes fastening plate or optional wedge lock retainer
- each ball is seated in a pre-lubricated nest of ball bearings
- rolling resistance is 2-4% of die weight

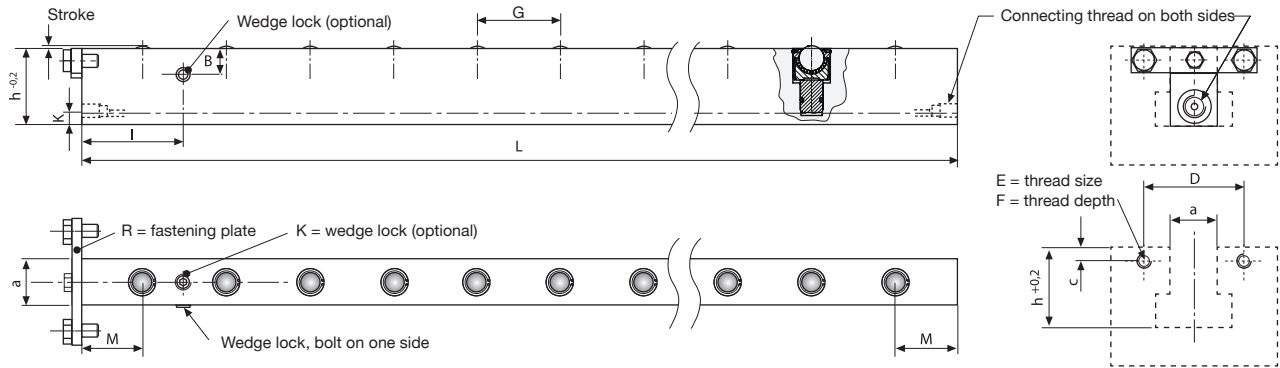
Part No.	L (in)*	Max Load Per Ball (lbs)	Max Lift Capacity (lbs)	# of Balls	T-slot Size
HCR-BH-13-4	5.31	172	688	4	13/16"
HCR-BH-13-6	7.68	172	1,032	6	13/16"
HCR-BH-13-8	10.04	172	1,376	8	13/16"
HCR-BH-13-10	12.40	172	1,720	10	13/16"
HCR-BH-13-12	14.76	172	2,064	12	13/16"
HCR-BH-13-14	17.13	172	2,408	14	13/16"
HCR-BH-13-16	19.49	172	2,752	16	13/16"
HCR-BH-13-18	21.85	172	3,096	18	13/16"
HCR-BH-13-24	28.94	172	4,128	24	13/16"
HCR-BH-13-30	36.02	172	5,160	30	13/16"
HCR-BH-13-36	43.11	172	6,192	36	13/16"
HCR-BH-13-42	50.20	172	7,224	42	13/16"
HCR-BH-13-48	57.28	172	8,256	48	13/16"
HCR-BH-17-4	7.09	247	988	4	11/16"
HCR-BH-17-6	10.24	247	1,482	6	11/16"
HCR-BH-17-8	13.39	247	1,976	8	11/16"
HCR-BH-17-10	16.54	247	2,470	10	11/16"
HCR-BH-17-12	19.69	247	2,964	12	11/16"
HCR-BH-17-14	22.83	247	3,458	14	11/16"
HCR-BH-17-16	25.98	247	3,952	16	11/16"
HCR-BH-17-18	29.13	247	4,446	18	11/16"
HCR-BH-17-24	38.58	247	5,928	24	11/16"
HCR-BH-17-30	48.03	247	7,410	30	11/16"
HCR-BH-17-36	57.48	247	8,892	36	11/16"
HCR-BH-17-42	66.93	247	10,374	42	11/16"
HCR-BH-17-48	76.38	247	11,856	48	11/16"

Standard with fastening plate, add suffix-K for optional wedge lock

*Intermediate, Metric and Longer Lengths Available

BH-Ball Hydraulic Rollblocks

for **METRIC** and ASA specials



Tmax.: 100°C Higher temperatures on request

Slot with (a)	(mm)	18	22	28	36	13/16"	11/16"
Min. slot height min. (h)	(mm)	29,5	38	42	53	29,4	37,4
Standard slot height (h)	(mm)	30	38	48	61	29,4	38,9
Ball spacing G min.	(mm)	26	32	37	43	26	32
Ball spacing G standard	(mm)	30	40	45	50	30	40
Ball spacing G max.	(mm)	60	80	90	100	60	80
L min.	(mm)	*)	*)	*)	*)	*)	*)
L max.	(mm)	2900	2900	2900	2900	2900	2900
Hub	(mm)	1	2	2	2	1	2
Load-bearing capacity ball	(kN)	0,79	1,1	1,5	2,5	0,79	1,1
Connecting thread		G1/8	G1/8	G1/4	G1/4	G1/8	G1/4
Oil consumption / ball insert	(cm ³)	0,08	0,23	0,31	0,51	0,08	0,23
B	(mm)	12	16	16	16	12	16
C	(mm)	5	7	9	10	5	7
D	(mm)	36	40	50	55	36	40
E	(mm)	M5	M5	M6	M6	M5	M5
F	(mm)	15	15	20	20	15	15
I	(mm)	35	46	51	56,5	35	46
K	(mm)	8	8,5	11	11	8	11
M	(mm)	22,5	30	32,5	35	22,5	30

*) L min. depends on the ball spacing G with at least 3 balls.

Indication of the load per ball bar; Annex K = wedge lock,

R = fastening plate

A fastening plate, a short 250 mm hose and an angular swivel type scew fitting are supplied with the ball bar.

Ordering example

8.9217.7128 L1415 K without suffix
 Ball bar, Slot Length Standard Standard
 hydraulic 28 mm 1415 mm slot ball
 height spacing
 Fastening of
 wedge lock

8.9217.7128 L1445 R H44 G60
 Ball bar, Slot Length Slot Ball
 hydraulic 28 mm 1445 mm height spacing
 44 mm 60 mm
 Fastening of
 fastening plate

Based on these parameters, we will devise the ball bar for your specific application.

Please contact us, we will be pleased to offer you advice!

Ball bar variations with hydraulic lifting (max. 100 bar)

If the appropriate ball bar for your specific application is not included in the tables of standard bars, our range of variations offers a solution. Fewer balls also means that the ball bar may be offered at a lower price.

Select the slot height, the ball spacing and the bar length to create a variation for your application.

e.g. **a = 28 mm**

e.g. **example of fastening = R**

Within the limits indicated in the table of dimensions the following parameters can be freely selected:

Slot height (h)

If, for your application, the slots are not as high as in our standard design, indicate the corresponding dimension.

If, for your application, the slots are higher than our standard design, spacer bars may be inserted.

e.g. **h = 44 mm**

Spacing of balls (G) and load-bearing capacity of the ball bar

By changing the spacing of the balls the load-bearing capacity of the ball bar may be varied. Please note that the load-bearing capacity is indicated for the full length of the ball bar. Therefore, both the load-bearing capacity and the ball spacing must be selected to suit the die weight and the die supporting length.

Please indicate the desired ball spacing or load-bearing capacity of the ball bar, or the maximum die weight and the die dimensions.

e.g. **G = 60 mm**

or **load-bearing capacity/bar = 36 kN**
 or **number of balls = 24**
 or **die weight and outside dimensions**

Length of the ball bar (L)

The possible length of the bar is obtained from the ball spacing (G) and the parameter (M).

Just indicate the theoretical length (e.g. the length of the table) for your ball bar.

Please note that a ball bar must be equipped with at least 3 balls.

*) e.g. **L = 1445 mm**

Selection of ball bars in preferred sizes: slot height "h" and ball spacing "G"

For other slot heights, lengths and load bearing capacities (or ball spacings), see range of variations page 1.

Part no.	Slot (a) (mm)	Length (L) (mm)	Max. load (kN)	Number of balls
8.9217.7118 L 105 R	18	105	2,3	3
8.9217.7118 L 135 R	18	135	3,1	4
8.9217.7118 L 165 R	18	165	3,9	5
8.9217.7118 L 195 R	18	195	4,7	6
8.9217.7118 L 255 R	18	255	6,3	8
8.9217.7118 L 315 R	18	315	7,9	10
8.9217.7118 L 375 R	18	375	9,4	12
8.9217.7118 L 435 R	18	435	11,0	14
8.9217.7118 L 495 R	18	495	12,6	16
8.9217.7118 L 555 R	18	555	14,2	18
8.9217.7118 L 615 R	18	615	15,8	20
8.9217.7118 L 675 R	18	675	17,3	22
8.9217.7118 L 735 R	18	735	18,9	24
8.9217.7118 L 795 R	18	795	20,5	26
8.9217.7118 L 855 R	18	855	22,1	28
8.9217.7118 L 915 R	18	915	23,7	30
Other intermediate lengths up to max. 2895 are possible.				
8.9217.7118 L 2895 R	18	2895	75,8	96
8.9217.7122 L 140 R	22	140	3,3	3
8.9217.7122 L 180 R	22	180	4,4	4
8.9217.7122 L 220 R	22	220	5,5	5
8.9217.7122 L 260 R	22	260	6,6	6
8.9217.7122 L 340 R	22	340	8,8	8
8.9217.7122 L 420 R	22	420	11,0	10
8.9217.7122 L 500 R	22	500	13,2	12
* 8.9217.7122 L 580 R	22	580	15,4	14
8.9217.7122 L 660 R	22	660	17,6	16
8.9217.7122 L 740 R	22	740	19,8	18
* 8.9217.7122 L 780 R	22	780	20,9	19
8.9217.7122 L 820 R	22	820	22,0	20
8.9217.7122 L 900 R	22	900	24,2	22
* 8.9217.7122 L 980 R	22	980	26,4	24
8.9217.7122 L 1060 R	22	1060	28,6	26
8.9217.7122 L 1140 R	22	1140	30,8	28
8.9217.7122 L 1220 R	22	1220	33,0	30
8.9217.7122 L 1300 R	22	1300	35,2	32
Other intermediate lengths up to max. 2900 are possible.				
8.9217.7122 L 2940 R	22	2900	79,2	72
8.9217.7128 L 155 R	28	155	4,5	3
8.9217.7128 L 200 R	28	200	6,0	4
8.9217.7128 L 245 R	28	245	7,5	5
8.9217.7128 L 290 R	28	290	9,0	6
8.9217.7128 L 380 R	28	380	12,0	8
8.9217.7128 L 470 R	28	470	15,0	10
8.9217.7128 L 560 R	28	560	18,0	12
8.9217.7128 L 650 R	28	650	21,0	14
* 8.9217.7128 L 695 R	28	695	22,5	15
8.9217.7128 L 740 R	28	740	24,0	16
8.9217.7128 L 830 R	28	830	27,0	18
8.9217.7128 L 920 R	28	920	30,0	20
* 8.9217.7128 L 965 R	28	965	31,5	21
8.9217.7128 L 1010 R	28	1010	33,0	22
8.9217.7128 L 1100 R	28	1100	36,0	24
8.9217.7128 L 1190 R	28	1190	39,0	26
8.9217.7128 L 1280 R	28	1280	42,0	28
Other intermediate lengths up to max. 2900 are possible.				
8.9217.7128 L 2945 R	28	2900	96	64

Part no.	Slot (a) (mm)	Length (L) (mm)	Max. load (kN)	Number of balls
8.9217.7136 L 170 R	36	170	7,5	3
8.9217.7136 L 220 R	36	220	10,0	4
8.9217.7136 L 270 R	36	270	12,5	5
8.9217.7136 L 320 R	36	320	15,0	6
8.9217.7136 L 420 R	36	420	20,0	8
8.9217.7136 L 520 R	36	520	25,0	10
8.9217.7136 L 620 R	36	620	30,0	12
8.9217.7136 L 720 R	36	720	35,0	14
8.9217.7136 L 820 R	36	820	40,0	16
8.9217.7136 L 920 R	36	920	45,0	18
8.9217.7136 L 1020 R	36	1020	50,0	20
8.9217.7136 L 1120 R	36	1120	55,0	22
8.9217.7136 L 1220 R	36	1220	60,0	24
8.9217.7136 L 1320 R	36	1320	65,0	26
Other intermediate lengths up to max. 2870 are possible.				
8.9217.7136 L 2920 R	36	2870	142,5	57

8.9217.7113 L 105 R	13/16"	105	2,3	3
8.9217.7113 L 135 R	13/16"	135	3,1	4
8.9217.7113 L 165 R	13/16"	165	3,9	5
8.9217.7113 L 195 R	13/16"	195	4,7	6
8.9217.7113 L 255 R	13/16"	255	6,3	8
8.9217.7113 L 315 R	13/16"	315	7,9	10
8.9217.7113 L 375 R	13/16"	375	9,4	12
8.9217.7113 L 435 R	13/16"	435	11,0	14
8.9217.7113 L 495 R	13/16"	495	12,6	16
8.9217.7113 L 555 R	13/16"	555	14,2	18
8.9217.7113 L 615 R	13/16"	615	15,8	20
8.9217.7113 L 675 R	13/16"	675	17,3	22
8.9217.7113 L 735 R	13/16"	735	18,9	24
8.9217.7113 L 795 R	13/16"	795	20,5	26
8.9217.7113 L 855 R	13/16"	855	22,1	28
8.9217.7113 L 915 R	13/16"	915	23,7	30
Other intermediate lengths up to max. 2895 are possible.				
8.9217.7113 L 2925 R	13/16"	2895	75,8	96

8.9217.7117 L 140 R	11/16"	140	3,3	3
8.9217.7117 L 180 R	11/16"	180	4,4	4
8.9217.7117 L 220 R	11/16"	220	5,5	5
8.9217.7117 L 260 R	11/16"	260	6,6	6
8.9217.7117 L 340 R	11/16"	340	8,8	8
8.9217.7117 L 420 R	11/16"	420	11,0	10
8.9217.7117 L 500 R	11/16"	500	13,2	12
8.9217.7117 L 580 R	11/16"	580	15,4	14
8.9217.7117 L 660 R	11/16"	660	17,6	16
8.9217.7117 L 740 R	11/16"	740	19,8	18
8.9217.7117 L 820 R	11/16"	820	22,0	20
8.9217.7117 L 900 R	11/16"	900	24,2	22
8.9217.7117 L 980 R	11/16"	980	26,4	24
8.9217.7117 L 1060 R	11/16"	1060	28,6	26
8.9217.7117 L 1140 R	11/16"	1140	30,8	28
8.9217.7117 L 1220 R	11/16"	1220	33,0	30
8.9217.7117 L 1300 R	11/16"	1300	35,2	32
Other intermediate lengths up to max. 2900 are possible.				
8.9217.7117 L 2940 R	11/16"	2900	79,2	72

▼
R = fastening plate
K = wedge lock

* Available at short notice

K