

Active without pressure – narrow and low (S2): The Clamping and Braking Element with spring-loaded energy storage **LB**.

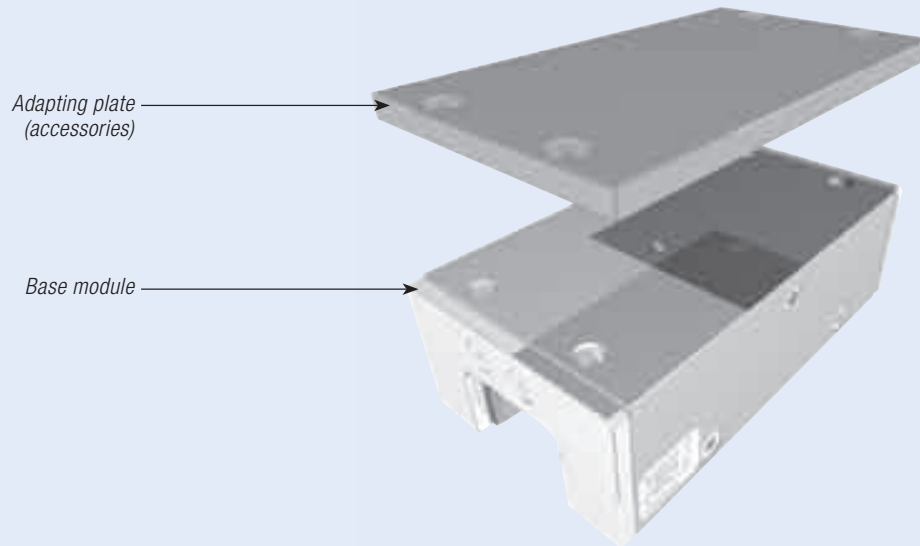
The LB series uses the housing attached to the connection design for direct spring-loaded energy storage. This enables very exact positioning and high supporting forces.

The LB series is an inexpensive clamping and braking element which is available for rail sizes 15-45. At a pneumatic opening pressure of >4 bar a holding power of up to 2,000 N is achieved.

Because of the material combination of the linear guide/contact section, the linear guide won't be damaged by the contact section.

Details on the length of the brake path to be expected can be obtained from our technical advisors. The computations are based on serial tests and our industrial experience.

LB Design



Special characteristics:

- Inexpensive
- High clamping forces
- Narrow, low construction form
- Maximum axial rigidity from direct transmission of power from connection design to guide rail
- Exact positioning
- Lower opening pressure of **> 4 bar**
- Special coating for braking
- Short reaction time

Application scenarios for LB:

- Clamping in case of pressure drop
- Emergency OFF function
- Braking for linear motors
- Fixing of vertical axes in neutral position
- Machine table clamping of work centres

Variations:

Depending on the height of the carriage, an additional adapting plate must be ordered (see table).

Connection options:

The air can be connected on both sides.

Rail manufacturer



Type of rail	Size	Type of carriage	Item number	Adapting plate ^{*1} (for height compensation)	Measure D [mm]	Measure table [page 63] ^{*2}
HSR	15	HSR..A, HSR..B	☉		24	
		HSR..R	☉		28	
	20	HSR..A, HSR..LA, HSR..B, HSR..LB, HSR..R, HSR..LR, HSR..CA, HSR..HA, HSR..CB, HSR..HB	☉		30	
		HSR..A, HSR..LA, HSR..B, HSR..LB, HSR..CA, HSR..HA, HSR..CB, HSR..HB	LBPS 2501 AS2		36	1
	30	HSR..R, HSR..LR	LBPS 2501 AS2	PLB 25-4	40	
		HSR..A, HSR..LA, HSR..B, HSR..LB, HSR..CA, HSR..HA, HSR..CB, HSR..HB	☉		42	
	35	HSR..R, HSR..LR	☉		45	
		HSR..A, HSR..LA, HSR..B, HSR..LB, HSR..CA, HSR..HA, HSR..CB, HSR..HB	☉		48	
	45	HSR..R, HSR..LR	☉		55	
		HSR..A, HSR..LA, HSR..B, HSR..LB, HSR..CA, HSR..HA, HSR..CB, HSR..HB	☉		60	
		HSR..R, HSR..LR	☉		70	
SHS	15	SHS..C, SHS..LC, SHS..V, SHS..LV	☉		24	
		SHS..R	☉		28	
	20	SHS..C, SHS..LC, SHS..V, SHS..LV	☉		30	
		SHS..C, SHS..LC, SHS..V, SHS..LV	LBPS 2501 CS2		36	1
	30	SHS..R, SHS..LR	LBPS 2501 CS2	PLB 25-4	40	
		SHS..C, SHS..LC, SHS..V, SHS..LV	☉		42	
	35	SHS..R, SHS..LR	☉		45	
		SHS..C, SHS..LC, SHS..V, SHS..LV	☉		48	
	45	SHS..R, SHS..LR	☉		55	
		SHS..C, SHS..LC, SHS..V, SHS..LV	☉		60	
		SHS..R, SHS..LR	☉		70	
SRG	15	SRG..A, SRG..V	☉		24	
		SRG..A, SRG..LA, SRG..V, SRG..LV	☉		30	
	25	SRG..C, SRG..LC	LBPS 2501 ES2		36	1
		SRG..R, SRG..LR	LBPS 2501 ES2	PLB 25-4	40	
	30	SRG..C, SRG..LC	☉		42	
		SRG..R, SRG..LR	☉		45	
	35	SRG..C, SRG..LC	☉		48	
		SRG..R, SRG..LR	☉		55	
	45	SRG..C, SRG..LC	☉		60	
		SRG..R, SRG..LR	☉		70	

Rail manufacturer



1605, 1607, 1645, 1647	15	1622, 1623, 1631, 1632, 1651, 1653, 1661, 1662, 1665, 1666	☉		24	
		1621	☉		28	
	20	1622, 1623, 1651, 1653, 1661, 1662, 1665, 1666	☉		30	
		1622, 1623, 1631, 1632, 1651, 1653, 1661, 1662, 1665, 1666	LBPS 2505 AS2		36	1
	30	1621, 1624	LBPS 2505 AS2	PLB 25-4	40	
		1622, 1623, 1631, 1632, 1651, 1653, 1661, 1662, 1665, 1666	☉		42	
	35	1621, 1624	☉		45	
		1622, 1623, 1631, 1632, 1651, 1653, 1661, 1662, 1665, 1666	☉		48	
	45	1621, 1624	☉		55	
		1622, 1623, 1651, 1653	☉		60	
		1621, 1624	☉		70	
1805, 1807	25	1851, 1853	LBPS 2505 BS2		36	1
		1821, 1824	LBPS 2505 BS2	PLB 25-4	40	
	35	1851, 1853	☉		48	
		1821, 1824	☉		55	
	45	1851, 1853	☉		60	
1821, 1824		☉		70		

^{*1} Only required for high carriage design

^{*2} Supplements the measure table and datasheet

See page 13 for part number explanation

Type of rail	Size	Type of carriage	Item number	Adapting plate ^{*1} (for height compensation)	Measure D [mm] ^{*2}	Measure table page 63)	
MR	25	MR..A, MR..B	x				
		MR..C, MR..D, MR..E	LBPS 2503 AS3	PLB 25-2	40	2	
	35	MR..A, MR..B	☉			48	
		MR..C, MR..D, MR..E	☉			55	
	45	MR..A, MR..B,	☉			60	
		MR..C, MR..D	☉			70	

Rail manufacturer



LWH	15	LWH..B, LWH..SL, LWH..M, LWHT..B, LWHT..SL, LWHT..M, LWHS..B, LWHS..SL, LWHS..M	☉			24	
		LWHD..B, LWHD..M, LWHY	☉			28	
	20	LWH..B, LWH..SL, LWH..M, LWHG, LWHT..B, LWHT..SL, LWHT..M, LWHTG, LWHS..B, LWHS..SL, LWHS..M, LWHSG, LWHY	☉			30	
		LWH..B, LWH..SL, LWH..M, LWHG, LWHT..B, LWHT..SL, LWHT..M, LWHTG, LWHS..B, LWHS..SL, LWHS..M, LWHSG	LBPS 2510 AS2			36	1
	25	LWHD..B, LWHD..M, LWHDG, LWHY	LBPS 2510 AS2	PLB 25-4		40	
		LWH..B, LWH..SL, LWH..M, LWHG, LWHT..B, LWHT..SL, LWHT..M, LWHTG, LWHS..B, LWHS..SL, LWHS..M, LWHSG	☉			42	
	30	LWHD..B, LWHD..M, LWHDG, LWHY	☉			45	
		LWH..B, LWH..M, LWHG, LWHT..B, LWHT..M, LWHTG	☉			48	
	35	LWHD..B, LWHD..M, LWHDG, LWHY	☉			55	
		LWH..B, LWH..M, LWHG, LWHT..B, LWHT..M, LWHTG	☉			60	
	45	LWHD..B, LWHD..M, LWHDG, LWHY	☉			70	
		LWE..Q, LWET..Q, LWES..Q, LWEC, LWEC..SL, LWE, LWE..SL, LWEG, LWEG..SL, LWETC, LWETC..SL, LWET, LWET..SL; LWETG, LWETG..SL, LWESC, LWESC..SL, LWES, LWES..SL, LWESG, LWESG..SL	☉			24	
20	LWE..Q, LWET..Q, LWES..Q, LWEC, LWEC..SL, LWE, LWE..SL, LWEG, LWEG..SL, LWETC, LWETC..SL, LWET, LWET..SL; LWETG, LWETG..SL, LWESC, LWESC..SL, LWES, LWES..SL, LWESG, LWESG..SL	☉			28		
	LWE..Q, LWET..Q, LWES..Q, LWEC, LWEC..SL, LWE, LWE..SL, LWEG, LWEG..SL, LWETC, LWETC..SL, LWET, LWET..SL; LWETG, LWETG..SL, LWESC, LWESC..SL, LWES, LWES..SL, LWESG, LWESG..SL	LBPS 2510 DS2			33	4	
30	LWE..Q, LWET..Q, LWES..Q, LWEC, LWEC..SL, LWE, LWE..SL, LWEG, LWEG..SL, LWETC, LWETC..SL, LWET, LWET..SL; LWETG, LWETG..SL, LWESC, LWESC..SL, LWES, LWES..SL, LWESG, LWESG..SL	☉			42		
	LWE..Q, LWET..Q, LWES..Q, LWEC, LWE, LWETC, LWET, LWESC, LWES	☉			48		
45	LWE, LWET, LWES	☉			60		
	LRXC, LRX, LRXG, LRXSC, LRXS, LRXSG	☉			24		
15	LRXDC, LRXD, LRXDG	☉			28		
	LRXC, LRX, LRXG, LRXSC, LRXS, LRXSG	☉			30		
20	LRXDC, LRXD, LRXDG	☉			34		
	LRXC, LRX, LRXG, LRXSC, LRXS, LRXSG	x			36		
25	LRXDC, LRXD, LRXDG	LBPS 2510 BS2			40	3	
	LRXC, LRX, LRXG, LRXSC, LRXS, LRXSG	☉			42		
30	LRXDC, LRXD, LRXDG	☉			45		
	LRXC, LRX, LRXG	☉			48		
35	LRXDC, LRXD, LRXDG	☉			55		
	LRXC, LRX, LRXG	☉			60		
45	LRXDC, LRXD, LRXDG	☉			70		

Rail manufacturer



LB

LRX: This table applies only for rail use without cover sheet!

^{*1} Only required for high carriage design

^{*2} Supplements the measure table and datasheet

x: not feasible

See page 13 for part number explanation

Rail manufacturer



Type of rail	Size	Type of carriage	Item number	Adapting plate ^{*1} (for height compensation)	Measure D [mm]	Measure table [page 63]
TKD (KUE)	15	KWE	⊗		24	
		KWE..-H	⊗		28	
	20	KWE, KWE..-H	⊗		30	
		KWE	⊗		36	
	25	KWE..-H	⊗		40	
		KWE	⊗		42	
	30	KWE..-H	⊗		45	
		KWE	⊗		48	
35	KWE..-H	⊗		55		
	KWE	⊗				
TKSD (KUSE)	20	KWSE, KWSE..-L, KWSE..-H, KWSE..-HL	⊗		30	
	25	KWSE, KWSE..-L	LBPS 2505 AS2		36	1
		KWSE..-H, KWSE..-HL	LBPS 2505 AS2	PLB 25-4	40	
	30	KWSE, KWSE..-L	⊗		42	
		KWSE..-H, KWSE..-HL	⊗		45	
	35	KWSE, KWSE..-L	⊗		48	
		KWSE..-H, KWSE..-HL	⊗		55	
	45	KWSE, KWSE..-L	⊗		60	
KWSE..-H, KWSE..-HL		⊗		70		
TSX - E (RUE)	25	RWU..-D, RWU..-D-L	LBPS 2505 DS2		36	1
		RWU..-D-H, RWU..-D-HL	LBPS 2505DS2	PLB 25-4	40	
	30	RWU..-E, RWU..-E-L, RWU..-E-KT-L	⊗		42	
		RWU..-E-H, RWU..-E-HL, RWU..-E-KT-HL	⊗		45	
	35	RWU..-E, RWU..-E-L, RWU..-E-KT-L	⊗		48	
		RWU..-E-H, RWU..-E-HL, RWU..-E-KT-HL	⊗		55	

Rail manufacturer

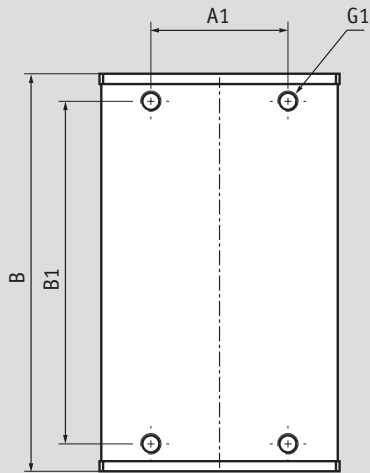
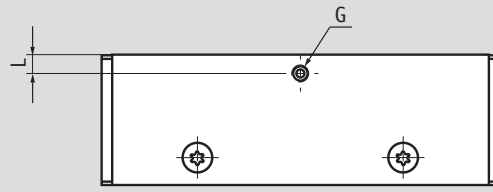
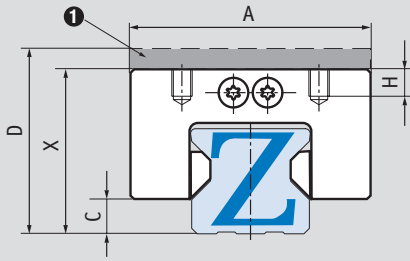


LH	15	LAH..EMZ, LAH..GMZ	⊗		24	
		LAH..ANZ, LAH..BNZ	⊗		28	
	20	LAH..EMZ, LAH..GMZ, LAH..ANZ, LAH..BNZ	⊗		30	
	25	LAH..EMZ, LAH..GMZ, LAH..ALZ, LAH..BLZ	LBPS 2504 BS2		36	1
		LAH..ANZ, LAH..BNZ	LBPS 2504 BS2	PLB 25-4	40	
	30	LAH..EMZ, LAH..GMZ, LAH..ALZ, LAH..BLZ	⊗		42	
		LAH..ANZ, LAH..BNZ	⊗		45	
	35	LAH..EMZ, LAH..GMZ, LAH..ALZ, LAH..BLZ	⊗		48	
		LAH..ANZ, LAH..BNZ	⊗		55	
	45	LAH..EMZ, LAH..GMZ	⊗		60	
LAH..ANZ, LAH..BNZ		⊗		70		
LY	15	LY..EL, LY..FL, LY..AL	⊗		24	
		LY..AN	⊗		28	
	20	LY..EL, LY..FL, LY..GL, LY..HL, LY..AL, LY..BL	⊗		30	
	25	LY..EL, LY..FL, LY..GL, LY..HL, LY..AL, LY..BL	LBPS 2504 CS2		36	1
		LY..AN, LY..BN	LBPS 2504 CS2	PLB 25-4	40	
	30	LY..EL, LY..FL, LY..GL, LY..HL, LY..AL, LY..BL	⊗		42	
		LY..AN, LY..BN	⊗		45	
	35	LY..EL, LY..FL, LY..GL, LY..HL, LY..AL, LY..BL	⊗		48	
		LY..AN, LY..BN	⊗		55	
	45	LY..EL, LY..FL, LY..GL, LY..HL, LY..AL, LY..BL	⊗		60	
LY..AN, LY..BN		⊗		70		
LA	25	LA..EL, LA..GL, LA..FL, LA..HL	LBPS 2504 DS2		36	1
		LA..AN, LA..BN	LBPS 2504 DS2	PLB 25-4	40	
	30	LA..EL, LA..GL, LA..FL, LA..HL	⊗		42	
		LA..AN, LA..BN	⊗		45	
	35	LA..EL, LA..GL, LA..FL, LA..HL, LA..AL, LA..BL	⊗		48	
		LA..AN, LA..BN	⊗		55	
	45	LA..EL, LA..GL, LA..FL, LA..HL, LA..AL, LA..BL	⊗		60	
		LA..AN, LA..BN	⊗		70	

^{*1} Only required for high carriage design

^{*2} Supplements the measure table and datasheet

See page 13 for part number explanation



Note: Consider measurement C!

G: Air connection

1 Adapting plate PLB (accessories)

LB

Measure table	Holding power [N] LB	A [mm]	A1 [mm]	B [mm]	B1 [mm]	C [mm]	X [mm]	G	G1	H [mm]	L [mm]
1	750	48	25	90	76	8,5	36	M5	M5	6	5,5
2	750	48	25	90	76	10,5	38	M5	M5	6	5,5
3	750	48	25	90	76	12,5	40	M5	M5	6	5,5
4	750	48	25	90	76	5,5	33	M5	M5	6	5,5