

## Narrow and low design (S2/S3): The pneumatic Clamping Element LKP/LKPS

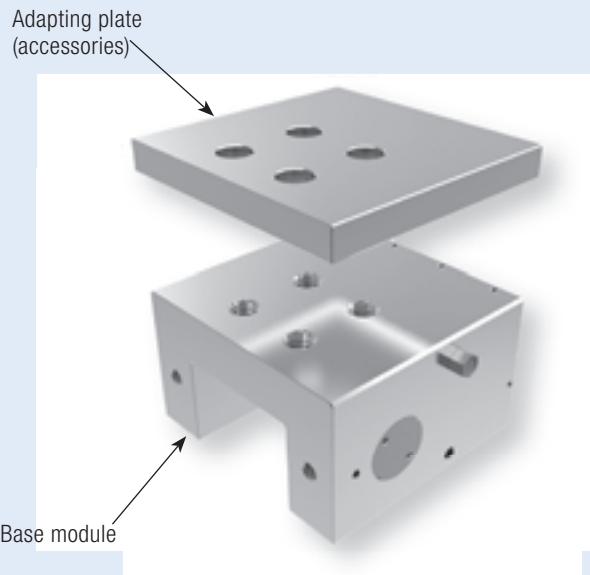
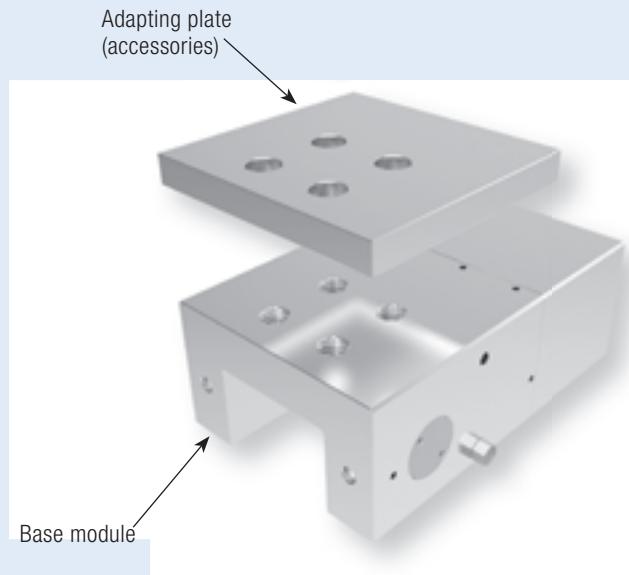
The LKP/LKPS series is set apart by the narrow and low design to DIN645-1 and the high holding forces.

The LKP/LKPS series is a low-cost clamping element available for rail sizes 15–55.

The LKP is an element that closes under pneumatic pressure.

At a pneumatic operating pressure of 6 bar, a retention force of up to 5,400 N is achieved.

The LKPS is closed by a spring-loaded energy storage and opened under the impact of air. At a pneumatic opening pressure of 5.5 bar, a retention force of up to 3,600 N is achieved.

**LKP series****LKPS series****Technical data for LKP series:**

Rail size	15-55
Holding forces	350 N-2,250 N
Min. pressure	6 bar
Max. pressure	8 bar
Spring-loaded energy storage	-
PLUS connection	-
Clamping cycles	5 mil. (B10d-value)
Braking cycles	unsuitable

**Application scenarios for LKP:**

- Clamping of machine tables
- Positioning of axes
- Fixing of vertical axes in neutral position

**Connection options for LKP/LKPS:**

The LKP/LKPS series have air connections on both sides as part of their standard equipment. This means that the air connection and the air-release filter can be moved over to the opposite side.

**Technical data for LKPS series:**

Rail size	15-55
Holding forces	250 N - 1,450 N
Min. pressure	5.5 bar
Max. pressure	8 bar
Spring-loaded energy storage	✓
PLUS connection	-
Clamping cycles	5 mil. (B10d-value)
Braking cycles	unsuitable

**Application scenarios for LKPS:**

- Clamping in case of pressure drop
- Clamping without energy requirement

**Adapting plate accessory for LKP/LKPS:**

Depending on the height of the carriage (measure D), an additional adapting plate is required (see table from page 56).

Rail manufacturer  
**THK**  
 The Mark of Linear Motion

	Type of rail	Size	Type of carriage	Item number	Adapting plate [for height compensation]	Measure D [mm] <sup>*1</sup>	Measure table [page 61]
SR, SSR		15	SR..W, SR..WM, SR..V, SR..VM, SSR..XW, SSR..XWM, SSR..XV, SSR..XVM	LKP/LKPS 1501 AS2		24	1
		20	SR..W, SR..WM, SR..V, SR..VM, SSR..XW, SSR..XWM, SSR..XV, SSR..XVM	LKP/LKPS 2001 AS2		28	3
		25	SR..W, SR..WM, SR..V, SR..VM, SSR..XW, SSR..XWM, SSR..XV, SSR..XVM	LKP/LKPS 2501 AS2		33	5
		30	SR..W, SR..WM, SR..V, SR..VM, SSR..XW, SSR..XWM	(C)		42	(C)
		35	SR..W, SR..WM, SR..V, SR..VM, SSR..XW	(C)		48	(C)
		45	SR..W	(C)		60	(C)
		55	SR..W	(C)		68	(C)
HSR		15	HSR..R, HSR..RM, HSR..YR, HSR..YRM	LKP/LKPS 1501 AS2	PLK 15-4	28	1
		20	HSR..R, HSR..RM, HSR..LR, HSR..LRM, HSR..R, HSR..YR, HSR..YRM	LKP/LKPS 2001 AS2		30	2
		25	HSR..R, HSR..RM, HSR..LR, HSR..LRM, HSR..R, HSR..YR, HSR..YRM	LKP/LKPS 2501 AS2	PLK 25-4	40	4
		30	HSR..R, HSR..RM, HSR..LR, HSR..LRM, HSR..R, HSR..YR, HSR..YRM	(C)		45	(C)
		35	HSR..R, HSR..RM, HSR..LR, HSR..LRM, HSR..R, HSR..YR, HSR..YRM	(C)		55	(C)
		45	HSR..R, HSR..LR, HSR..YR	(C)		70	(C)
		55	HSR..R, HSR..LR, HSR..YR	(C)		80	(C)
SHS		15	SHS..V, SHS..LV SHS..R	LKP/LKPS 1501 AS2		24	1
		20	SHS..V, SHS..LV	LKP/LKPS 2001 AS2	PLK 15-4	28	
		25	SHS..V, SHS..LV SHS..R, SHS..LR	LKP/LKPS 2501 AS2	PLK 25-2	36	6
		30	SHS..V, SHS..LV SHS..R, SHS..LR	(C)		42	(C)
		35	SHS..V, SHS..LV SHS..R, SHS..LR	(C)		48	(C)
		45	SHS..V, SHS..LV SHS..R, SHS..LR	(C)		60	(C)
		55	SHS..V, SHS..LV SHS..R, SHS..LR	(C)		70	(C)
SRG		15	SRG..V	LKP/LKPS 1501 AS2		24	1
		20	SRG..V, SRG..LV	LKP/LKPS 2001 AS2		30	2
		25	SRG..R, SRG..LR	LKP/LKPS 2501 AS2		40	4
		30	SRG..R, SRG..LR	(C)		45	(C)
		35	SRG..R, SRG..LR	(C)		55	(C)
		45	SRG..R, SRG..LR	(C)		70	(C)
		55	SRG..R, SRG..LR	(C)		80	(C)

Rail manufacturer  
**Rexroth**  
 Bosch Group

R1605, R1607, R1645, R1647 R2045, R2047		15	R1622, R1623, R1632, R1662, R1666, R2011 R1621	LKP/LKPS 1505 AS2		24	1
		20	R1622, R1623, R1632, R1662, R1666, R2011	LKP/LKPS 2005 AS2	PLK 15-4	28	
		25	R1622, R1623, R1632, R1662, R1666, R2011 R1621, R1624	LKP/LKPS 2505 AS2		30	2
		30	R1622, R1623, R1632, R1662, R1666, R2011 R1621, R1624	LKP/LKPS 2505 AS2	PLK 25-4	36	4
		35	R1622, R1623, R1632, R1662, R1666, R2011 R1621, R1624	(C)		45	
		45	R1622, R1623, R1621, R1624	(C)		48	(C)
		55	R1622, R1623, R1621, R1624	(C)		55	
		25	R1821, R1824	LKP/LKPS 2505 BS2	PLK 25-4	60	
		35	R1821, R1824	(C)		70	
		45	R1821, R1824	(C)		70	
		55	R1821, R1824	(C)		80	

Rail manufacturer  
**SCHNEEBERGER**

MRS		25	MRW..C, MRW..D, MRW..E	LKP/LKPS 2501 AS2	PLK 25-4	40	4
		35	MRW..C, MRW..D, MRW..E	(C)		55	(C)
		45	MRW..C, MRW..D	(C)		70	(C)
		55	MRW..C, MRW..D	(C)		80	(C)

\*<sup>1</sup> Supplements the measure table and datasheet

See page 11 for part number explanation

Type of rail	Size		Item number	[for height compensation]	Measure D [mm] <sup>*1</sup>	[page 61]
LWH	15	LWHS..B, LWHS..SL, LWHS..M LWHD..B, LWHD..M, LWHY	LKP/LKPS 1501 AS2 LKP/LKPS 1501 AS2	PLK 15-4	24 28	1
	20	LWHS..B, LWHS..SL, LWHS..M, LWHSG, LWHY	LKP/LKPS 2001 AS2		30	2
	25	LWHS..B, LWHS..SL, LWHS..M, LWHSG LWHD..B, LWHD..M, LWHDG, LWHY	LKP/LKPS 2501 AS2 LKP/LKPS 2501 AS2	PLK 25-4	36 40	4
	30	LWHS..B, LWHS..SL, LWHS..M, LWHSG LWHD..B, LWHD..M, LWHDG, LWHY	(C)		42 45	(C)
	35	LWHD..B, LWHD..M, LWHDG, LWHY	(C)		55	(C)
	45	LWHD..B, LWHD..M, LWHDG, LWHY	(C)		70	(C)
	55	LWHD..B, LWHDG, LWHY	(C)		80	(C)
MH	15	MHS MHD	LKP/LKPS 1501 AS2 LKP/LKPS 1501 AS2	PLK 15-4	24 28	1
	20	MHS, MHSG	LKP/LKPS 2001 AS2		30	2
	25	MHS, MHSG MHD, MHDG	LKP/LKPS 2501 AS2 LKP/LKPS 2501 AS2	PLK 25-4	36 40	4
	30	MHS, MHSG MHD, MHDG	(C)		42 45	(C)
	35	MHD, MHDG	(C)		55	(C)
	45	MHD, MHDG	(C)		70	(C)
LRX	15	LRXSC, LRXS, LRXSG LRXDC, LRXDC..SL, LRXD, LRXD..SL, LRXDG, LRXDG..SL	LKP/LKPS 1501 AS2 LKP/LKPS 1501 AS2	PLK 15-4	24 28	1
	20	LRXSC, LRXS, LRXSG LRXDC, LRXDC..SL, LRXD, LRXD..SL, LRXDG, LRXDG..SL	(C)		30 34	(C)
	25	LRXSC, LRXS, LRXSG LRXDC, LRXDC..SL, LRXD, LRXD..SL, LRXDG, LRXDG..SL	LKP/LKPS 2501 AS2 LKP/LKPS 2501 AS2	PLK 25-4	36 40	4
	30	LRXSC, LRXS, LRXSG LRXDC, LRXDC..SL, LRXD, LRXD..SL, LRXDG, LRXDG..SL	(C)		42 45	(C)
	35	LRXDC, LRXD, LRXDG	(C)		55	(C)
	45	LRXDC, LRXD, LRXDG	(C)		70	(C)
	55	LRXDC, LRXD, LRXDG	(C)		80	(C)
MX	15	MXSC, MXS, MXSG MXDC, MXD, MXDG	LKP/LKPS 1501 AS2 LKP/LKPS 1501 AS2	PLK 15-4	24 28	1
	20	MXSC, MXS, MXSG, MXSL MXDC, MXD, MXDG, MXDL	(C)		30 34	(C)
	25	MXSC, MXS, MXSG, MXSL MXDC, MXD, MXDG, MXDL	LKP/LKPS 2501 AS2 LKP/LKPS 2501 AS2	PLK 25-4	36 40	4
	30	MXSC, MXS, MXSG, MXSL MXDC, MXD, MXDG, MXDL	(C)		42 45	(C)
	35	MXNS, MXNSG	(C)		44	(C)
	45	MXNS, MXNSG	(C)		52	(C)
	55	MXNS, MXNSG	(C)		63	(C)
LWE	15	LWES..Q, LWESC, LWESC..SL, LWES, LWES..SL, LWESG, LWESG..SL	LKP/LKPS 1501 AS2		24	1
	20	LWES..Q, LWESC, LWESC..SL, LWES, LWES..SL, LWESG, LWESG..SL	LKP/LKPS 2001 AS2		28	3
	25	LWES..Q, LWESC, LWESC..SL, LWES, LWES..SL, LWESG, LWESG..SL	LKP/LKPS 2501 AS2		33	5
	30	LWES..Q, LWESC, LWESC..SL, LWES, LWES..SL, LWESG, LWESG..SL	(C)		42	(C)
	35	LWES..Q, LWESC, LWES	(C)		48	(C)
	45	LWES	(C)		60	(C)
ME	15	MESC, MESC..SL, MES, MES..SL, MESG, MESG..SL, MHS MHD	LKP/LKPS 1501 AS2 LKP/LKPS 1501 AS2	PLK 15-4	24 28	1
	20	MESC, MESC..SL, MES, MES..SL, MESG, MESG..SL MHS, MHSG	LKP/LKPS 2001 AS2 LKP/LKPS 2001 AS2	PLK 20-2	28 30	3
	25	MESC, MESC..SL, MES, MES..SL, MESG, MESG..SL MHS, MHSG MHD, MHDG	LKP/LKPS 2501 AS2 LKP/LKPS 2501 AS2 LKP/LKPS 2501 AS2	PLK 25-2 PLK 25-6	33 36 40	5 6
	30	MESC, MESC..SL, MES, MES..SL, MESG, MESG..SL, MHS, MHSG MHD, MHDG	(C)		42	(C)
	35	MESC, MES MHD, MHDG	(C)		48 55	(C)
	45	MES MHD, MHDG	(C)		60 70	(C)

\*<sup>1</sup> Supplements the measure table and datasheet

See page 11 for part number explanation

Rail manufacturer  
**IKO**

Rail manufacturer



	Type of rail (KUE)	Size	Type of carriage	Item number	Adapting plate [for height compensation]	Measure D [mm] <sup>*</sup>	Measure table [page 61]
TKVD (KUVE)	15	KWE..-H		⌚		28	⌚
	20	KWE..-H		LKP/LKPS 2001 AS2		30	⌚
	25	KWE..-H		LKP/LKPS 2501 AS2	PLK 25-6	40	⌚
	30	KWE..-H		⌚		45	⌚
	35	KWE..-H		⌚		55	⌚
TKSD (KUSE)	15	KWVE..-B-ESC, KWVE..-B-S		⌚		24	⌚
		KWVE..-B-H		⌚		28	⌚
	20	KWVE..-B-S, KWVE..-B-SL, KWVE..-B-H		⌚		30	⌚
		KWVE..-B-SN, KWVE..-B-SNL		⌚		27	⌚
		KWVE..-B-ESC		⌚		28	⌚
	25	KWVE..-B-S, KWVE..-B-SL, KWVE..-B-S-HS		⌚		36	⌚
		KWVE..-B-ESC		⌚		33	⌚
		KWVE..-B-H, KWVE..-B-HL, KWVE..-B-H-HS		⌚		40	⌚
	30	KWVE..-B-ESC, KWVE..-B-S, KWVE..-B-SL		⌚		42	⌚
		KWVE..-B-SN, KWVE..-B-SNL		⌚		38	⌚
		KWVE..-B-H, KWVE..-B-HL		⌚		45	⌚
LH	35	KWVE..-B-ESC, KWVE..-B-S, KWVE..-B-SL		⌚		48	⌚
		KWVE..-B-SN, KWVE..-B-SNL		⌚		44	⌚
		KWVE..-B-H, KWVE..-B-HL		⌚		55	⌚
	45	KWVE..-B-ESC, KWVE..-B-S, KWVE..-B-SL		⌚		60	⌚
		KWVE..-B-SN, KWVE..-B-SNL		⌚		52	⌚
SH		KWVE..-B-H, KWVE..-B-HL		⌚		70	⌚
	20	KWSE..-H, KWSE..-HL		LKP/LKPS 2001 AS2		30	⌚
	25	KWSE..-H, KWSE..-HL		LKP/LKPS 2501 AS2		36	⌚
	30	KWSE..-H, KWSE..-HL		⌚		42	⌚
	35	KWSE..-H, KWSE..-HL		⌚		48	⌚
LS	15	LAH..ANZ, LAH..BNZ		LKP/LKPS 1501 AS2	PLK 15-4	28	⌚
	20	LAH..ANZ, LAH..BNZ		LKP/LKPS 2001 AS2	PLK 20-2	30	⌚
	25	LAH..ALZ, LAH..BLZ		LKP/LKPS 2501 AS2		36	⌚
	30	LAH..ANZ, LAH..BNZ		LKP/LKPS 2501 AS2	PLK 25-6	40	⌚
	35	LAH..ANZ, LAH..BNZ		⌚		42	⌚
SS	15	SAH..ANZ, SAH..BNZ		LKP/LKPS 1501 AS2	PLK 15-4	28	⌚
	20	SAH..ANZ, SAH..BNZ		LKP/LKPS 2001 AS2	PLK 20-2	30	⌚
	25	SAH..ALZ, SAH..BLZ		LKP/LKPS 2501 AS2		36	⌚
	30	SAH..ANZ, SAH..BNZ		LKP/LKPS 2501 AS2	PLK 25-6	40	⌚
	35	SAH..ALZ, SAH..BLZ		⌚		42	⌚
RA	15	SAH..ANZ, SAH..BNZ		LKP/LKPS 1501 AS2		48	⌚
	20	SAH..ALZ, SAH..BLZ		LKP/LKPS 2001 AS2		55	⌚
	25	SAH..ANZ, SAH..BNZ		LKP/LKPS 2501 AS2		42	⌚
	30	SAH..ALZ, SAH..BLZ		⌚		48	⌚
	35	SAH..ANZ, SAH..BNZ		⌚		55	⌚

RA	15	RA..AL, RA..BL		⌚		24	⌚
		RA..AN, RA..BN		⌚		28	⌚
	20	RA..EM, RA..GM, RA..AN, RA..BN		⌚		30	⌚
	25	RA..AL, RA..BL		⌚		36	⌚
		RA..AN, RA..BN		⌚		40	⌚
RA	30	RA..AL, RA..BL		⌚		42	⌚
		RA..AN, RA..BN		⌚		45	⌚
	35	RA..AL, RA..BL		⌚		48	⌚
		RA..AN, RA..BN		⌚		55	⌚
	45	RA..AL, RA..BL		⌚		60	⌚
RA		RA..AN, RA..BN		⌚		70	⌚
	55	RA..AL, RA..BL		⌚		70	⌚
		RA..AN, RA..BN		⌚		80	⌚

\*<sup>1</sup> Supplements the measure table and datasheet

See page 11 for part number explanation

Type of rail	Size		Item number	[for height compensation]	Measure D [mm] <sup>*1</sup>	[page 61]
HGR..R, HGR..T	15	HGL..CA, HGH..CA, QHH..CA	LKP/LKPS 1501 AS2		24	1
	20	HGH..CA, HGH..HA, QHH..CA, QHH..HA	LKP/LKPS 1501 AS2	PLK 15-4	28	
	25	HGL..CA, HGL..HA HGH..CA, HGH..HA, QHH..CA, QHH..HA	LKP/LKPS 2501 AS2		36	4
	30	HGL..CA, HGL..HA HGH..CA, HGH..HA, QHH..CA, QHH..HA	⌚		42	⌚
	35	HGL..CA, HGL..HA HGH..CA, HGH..HA, QHH..CA, QHH..HA	⌚		48	⌚
	45	HGL..CA, HGL..HA HGH..CA, HGH..HA, QHH..CA, QHH..HA	⌚		60	⌚
	55	HGL..CA, HGL..HA HGH..CA, HGH..HA	⌚		70	⌚
			⌚		80	⌚
EGR..R, EGR..U, EGR..T	15	EGH..SA, EGH..CA, QEH..SA, QEH..CA	LKP/LKPS 1501 AS2		24	1
	20	EGH..SA, EGH..CA, QEH..SA, QEH..CA	LKP/LKPS 2001 AS2		28	3
	25	EGH..SA, EGH..CA QEH..SA, QEH..CA	⌚		33	⌚
	30	EGH..SA, EGH..CA, QEH..SA, QEH..CA	⌚		42	⌚
	35	EGH..SA, EGH..CA	⌚		48	⌚
RG..T	15	RGH..CA	⌚		28	⌚
	20	RGH..CA, RGH..HA	⌚		34	⌚
	25	RGH..CA, RGH..HA	LKP/LKPS 2501 AS2	PLK 25-4	40	4
	30	RGH..CA, RGH..HA	⌚		45	⌚
	35	RGH..CA, RGH..HA	⌚		55	⌚
	45	RGH..CA, RGH..HA	⌚		70	⌚
	55	RGH..CA, RGH..HA	⌚		80	⌚

Rail manufacturer  
**HIWIN**  
 Lineartechnologie

BG	Size		Item number		Measure D [mm] <sup>*1</sup>	[page 61]	Rail manufacturer
BG	15	BGCS..BS, BGCS..BN, BGCS..BL, BGXS..BS, BGXS..BN, BGXS..BL	LKP/LKPS 1501 AS2		24	1	<b>NTN</b> 
		BGCH..BN, BGXH..BN	LKP/LKPS 1501 AS2	PLK 15-4	28		
	20	BGCS..BS, BGCS..BN, BGXS..BS, BGXS..BN	LKP/LKPS 2001 AS2		28		
		BGCH..BN, BGCH..BL, BGXH..BN, BGXH..BL	LKP/LKPS 2001 AS2	PLK 20-2	30	3	
	25	BGCS..BS, BGCS..BN, BGXS..BS, BGXS..BN	LKP/LKPS 2501 AS2		33		
		BGCH..FN, BGCH..FL, BGCH..FE, BGCX..BN, BGCX..BL, BGCX..BE, BGXX..BN, BGXX..BL, BGXX..BE	LKP/LKPS 2501 AS2	PLK 25-2	36	6	
		BGCH..BN, BGCH..BL, BGCH..BE, BGXH..BN, BGXH..BL, BGXH..BE	LKP/LKPS 2501 AS2	PLK 25-6	40		
	30	BGCH..FN, BGCH..FL, BGCH..FE, BGCS..BS, BGCS..BN, BGCS..BL, BGCS..BE, BGXS..BS, BGXS..BN, BGXS..BL, BGXS..BE	⌚		42	⌚	
		BGCH..BN, BGCH..BL, BGCH..BE, BGXH..BN, BGXH..BL, BGXH..BE	⌚		45	⌚	
	35	BGCH..FN, BGCH..FL, BGCH..FE, BGCS..BS, BGCS..BN, BGCS..BL, BGCS..BE, BGXS..BS, BGXS..BN, BGXS..BL, BGXS..BE	⌚		48	⌚	
		BGCH..BN, BGCH..BL, BGCH..BE, BGXH..BN, BGXH..BL, BGXH..BE	⌚		55	⌚	
	45	BGCH..FN, BGCH..FL, BGCH..FE, BGCS..BN, BGCS..BL, BGCS..BE, BGXS..BN, BGXS..BL, BGXS..BE	⌚		60	⌚	
		BGCH..BN, BGCH..BL, BGCH..BE, BGXH..BN, BGXH..BL, BGXH..BE	⌚		70	⌚	
	55	BGCH..FN, BGCH..FL, BGCH..FE, BGCS..BN, BGCS..BL, BGCS..BE, BGXS..BN, BGXS..BL, BGXS..BE	⌚		70	⌚	
		BGCH..BN, BGCH..BL, BGCH..BE, BGXH..BN, BGXH..BL, BGXH..BE	⌚		80	⌚	

\*<sup>1</sup> Supplements the measure table and datasheet

See page 11 for part number explanation

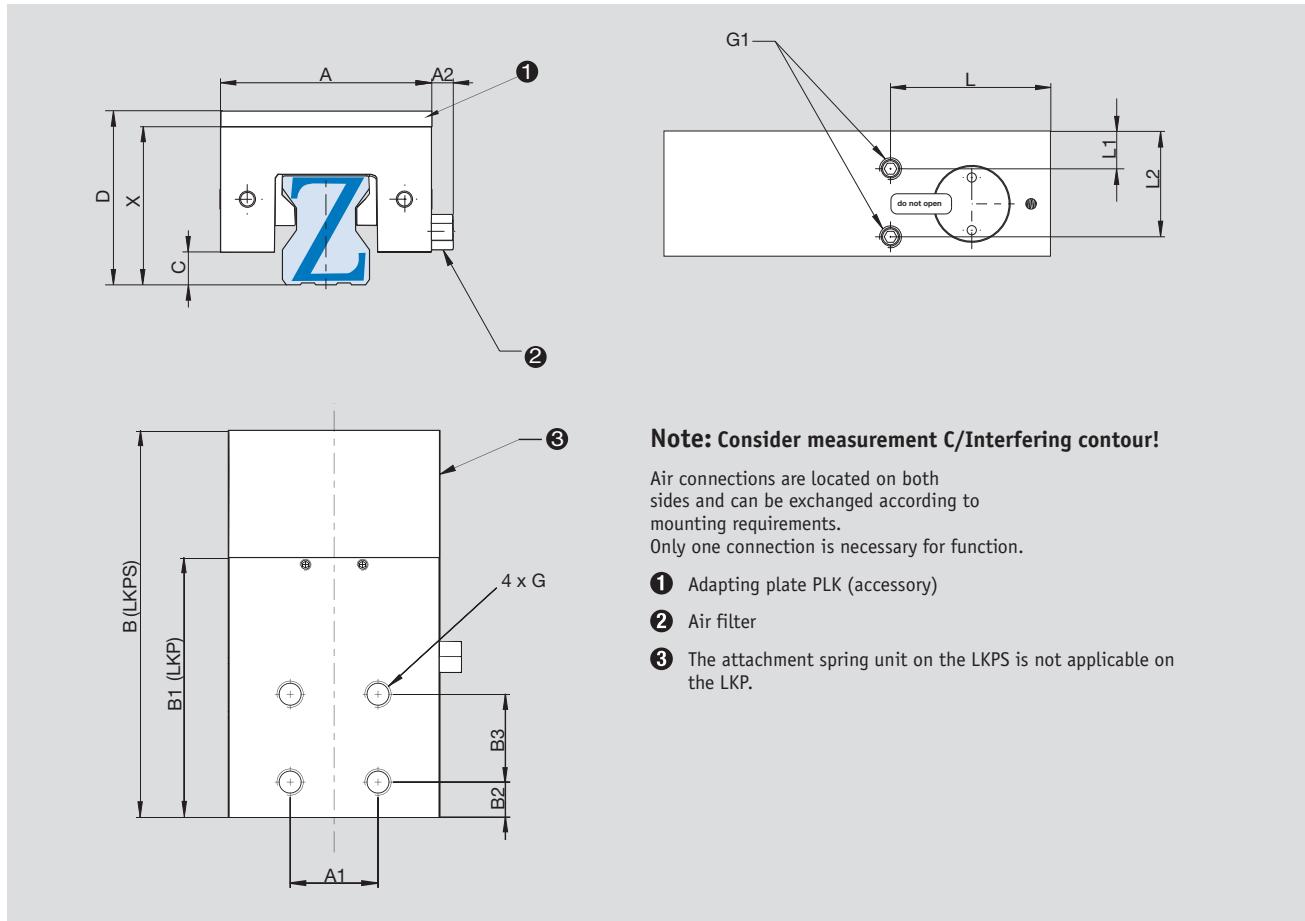
Rail manufacturer



Type of rail	Size	Type of carriage	Item number	Adapting plate [for height compensation]	Measure D [mm] <sup>*</sup>	Measure table [page 61]
LLTH, LLTH..D4, LLTH..D6	15	LLTHC..SU, LLTHC..U	LKP/LKPS 1501 AS2		24	1
		LLTHC..R	LKP/LKPS 1501 AS2	PLK 15-4	28	
	20	LLTHC..SU, LLTHC..U, LLTHC..LR	LKP/LKPS 2001 AS2	PLK 20-2	30	3
		LLTHC..SU, LLTHC..U, LLTHC..R, LLTHC..LR	LKP/LKPS 2501 AS2		36	4
	30	LLTHC..SU, LLTHC..U, LLTHC..R, LLTHC..LR	(C)		42	(C)
		LLTHC..SU, LLTHC..U, LLTHC..R, LLTHC..LR	(C)		45	(C)
	45	LLTHC..U, LLTHC..R, LLTHC..LR	(C)		55	(C)

\*<sup>1</sup> Supplements the measure table and datasheet

See page 11 for part number explanation



	Holding power [N] LKP	Holding power [N] LKPS	A [mm]	A1 [mm]	A2 [mm]	B [mm]	B1 [mm]	B2 [mm]	B3 [mm]	C [mm]	X [mm]	G	G1	L [mm]	L1 [mm]	L2 [mm]
1	550	400	34	15	-	76	49	8,5	15	3,3	24	M4/4,5	M3	31,5	4,5	17
2	850	650	44	20	-	81	52	7	20	5,5	30	M5/5,5	M3	33,5	4,5	20,5
3	850	650	44	20	-	81	52	7	20	3,5	28	M5/5,5	M3	33,5	4,5	20,5
4	1100	750	48	20	5	86	57	8	20	7,5	36	M6/6	M5	35,5	8,5	24
5	1100	750	48	20	5	86	57	8	20	4,5	33	M6/6	M5	35,5	8,5	24
6	1100	750	48	20	5	86	57	8	20	5,5	34	M6/6	M5	35,5	8,5	24