

Active without pressure – compact and powerful: The Clamping and Braking Element with spring-loaded energy storage UBPS

The UBPS series is based on a dual-effective wedge slide gear with spring-loaded energy storage for clamping and braking without pressure. This arrangement of three pistons connected inline allows the use of a stronger spring at 5.5bar. The stronger spring-loaded energy storage permits holding forces up to 9,200N. Positive fit contact sections mounted within a strong casing guarantee high axial and horizontal rigidity.

The UBPS series is designed for braking on linear guides. Because of the material combination of the linear guide/contact section, the linear guide won't be damaged by the contact section.

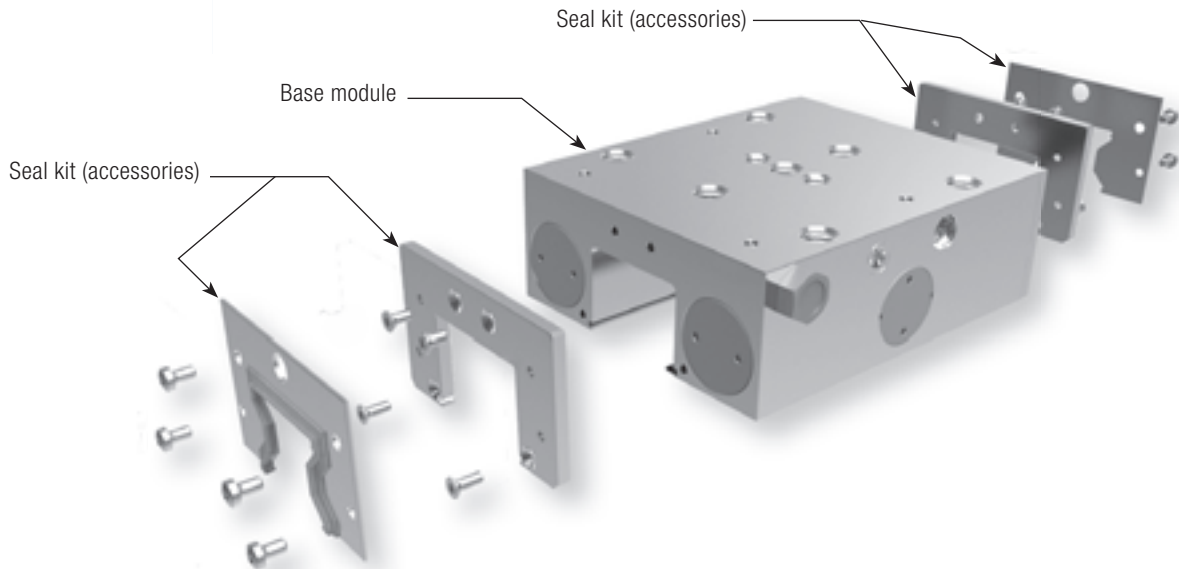
In order to exclude damage from contamination with chips (chips between contact section and linear guide), the elements can be fitted with original seals (seal kit) from the respective linear guide

manufacturer and longitudinal seals as accessories.

When used in harsh work environments or with cooling liquid, the seal kit should be used as well. In order to guarantee the lifetime of the seals, follow the corresponding instructions from the respective linear guide manufacturer.

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.

UBPS Series



Technical data for UBPS series:

Rail size	20–65
Holding forces	1,500 N–9,200 N
Min. pressure	5.5 bar
Max. pressure	8 bar
Spring-loaded energy storage	√
PLUS connection	√
Clamping cycles	5 mil. (B10d-value)*
Braking cycles	2,000

Application scenarios for UBPS:

- Clamping in case of pressure drop
- Clamping without energy requirement
- Emergency OFF function
- Braking for linear motors
- Z-axes positioning in neutral position
- Machine table clamping of work centres

Connection options for UBPS:

The basic version of the UBPS series features air connections on both sides. This means that the air connection and the air-release filter can be moved over to the opposite side.

Higher supporting forces with PLUS connection:

By using a 5/2 (overflow-free) or 5/3 valve it is possible to support the spring power with pneumatic pressure. By using the PLUS connection, the stated supporting force will be increased.

When the PLUS connection is being used the air-release filter is replaced by connecting a second pneumatic tube (see drawing). For further information, please refer to the assembly instructions or visit www.zimmer-gmbh.com.

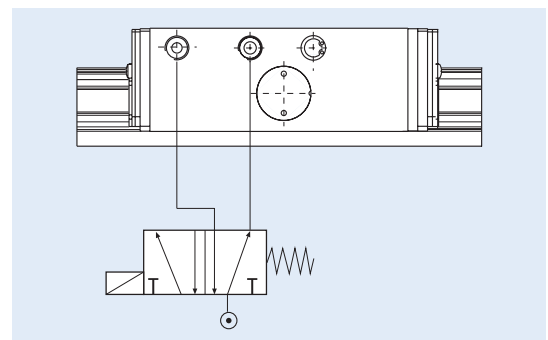
*Note: With PLUS connection, the B10d value is not achieved.

Seal kit accessories for UBPS:

Seals are recommended in harsh work environments. The element is also available with CE certification.

Adapting plate accessory for UBPS:

Depending on the height of the carriage (measure D), an additional adapting plate is required (see table from page 84).





Type of rail	Size	Type of carriage	Item number	Adapting plate (for height compensation)	Measure D [mm]	Measure D [mm] ^{*1} (page 90)
HSR	20	HSR..A, HSR..AM, HSR..LA, HSR..LAM, HSR..B, HSR..BM, HSR..LB, HSR..LBM, HSR..C, HSR..R, HSR..RM, HSR..LR, HSR..LRM, HSR..YR, HSR..YRM, HSR..CA, HSR..CAM, HSR..HA, HSR..HAM, HSR..CB, HSR..CBM, HSR..HB, HSR..HBM	☉		30	☉
	25	HSR..A, HSR..AM, HSR..LA, HSR..LAM, HSR..B, HSR..BM, HSR..LB, HSR..LBM, HSR..C, HSR..CA, HSR..CAM, HSR..HA, HSR..HAM, HSR..CB, HSR..CBM, HSR..HB, HSR..HBM	☉		36	☉
		HSR..R, HSR..RM, HSR..LR, HSR..LRM, HSR..YR, HSR..YRM	☉		40	
	30	HSR..A, HSR..AM, HSR..LA, HSR..LAM, HSR..B, HSR..BM, HSR..LB, HSR..LBM, HSR..C, HSR..CA, HSR..CAM, HSR..HA, HSR..HAM, HSR..CB, HSR..CBM, HSR..HB, HSR..HBM	UBPS 3001 AS1		42	3
		HSR..R, HSR..RM, HSR..LR, HSR..LRM, HSR..YR, HSR..YRM	UBPS 3001 AS1	PUB 30-3	45	
	35	HSR..A, HSR..AM, HSR..LA, HSR..LAM, HSR..B, HSR..BM, HSR..LB, HSR..LBM, HSR..C, HSR..CA, HSR..CAM, HSR..HA, HSR..HAM, HSR..CB, HSR..CBM, HSR..HB, HSR..HBM	UBPS 3501 AS1		48	6
		HSR..R, HSR..RM, HSR..LR, HSR..LRM, HSR..YR, HSR..YRM	UBPS 3501 AS1	PUB 35-7	55	
	45	HSR..A, HSR..LA, HSR..B, HSR..LB, HSR..CA, HSR..HA, HSR..CB, HSR..HB	UBPS 4501 AS1		60	18
		HSR..R, HSR..LR, HSR..YR	UBPS 4501 AS1	PUB 45-10	70	
	55	HSR..A, HSR..LA, HSR..B, HSR..LB, HSR..CA, HSR..HA, HSR..CB, HSR..HB	UBPS 5501 AS1L ^{*3}		70	4
		HSR..CB, HSR..HB	UBPS 5501 AS1L ^{*3}	PUBL 55-10	80	
	65	HSR..A, HSR..LA, HSR..B, HSR..LB, HSR..CA, HSR..HA, HSR..CB, HSR..HB, HSR..R, HSR..LR, HSR..YR	UBPS 6501 AS1L ^{*3}		90	8
SHS	20	SHS..C, SHS..LC, SHS..V, SHS..LV	☉		30	☉
	25	SHS..C, SHS..LC, SHS..V, SHS..LV	☉		36	☉
		SHS..R, SHS..LR	☉		40	
	30	SHS..C, SHS..LC, SHS..V, SHS..LV	UBPS 3001 CS1		42	3
		SHS..R, SHS..LR	UBPS 3001 CS1	PUB 30-3	45	
	35	SHS..C, SHS..LC, SHS..V, SHS..LV	UBPS 3501 CS1		48	6
		SHS..R, SHS..LR	UBPS 3501 CS1	PUB 35-7	55	
	45	SHS..C, SHS..LC, SHS..V, SHS..LV	UBPS 4501 CS1		60	18
		SHS..R, SHS..LR	UBPS 4501 CS1	PUB 45-10	70	
	55	SHS..C, SHS..LC, SHS..V, SHS..LV	UBPS 5501 CS1L ^{*3}		70	4
		SHS..R, SHS..LR	UBPS 5501 CS1L ^{*3}	PUBL 55-10	80	
	65	SHS..C, SHS..LC, SHS..V, SHS..LV	UBPS 6501 CS1L ^{*3}		90	8
SNR, SNS	25	SNR..R, SNR..LR, SNR..C, SNR..LC, SNS..R, SNS..LR, SNS..C, SNS..LC	☉		31	☉
	30	SNR..R, SNR..LR, SNR..C, SNR..LC, SNS..R, SNS..LR, SNS..C, SNS..LC	☉		38	☉
	35	SNR..R, SNR..LR, SNR..C, SNR..LC, SNS..R, SNS..LR, SNS..C, SNS..LC	UBPS 3501 IS1		44	7
		SNR..CH, SNR..LCH, SNS..CH, SNS..LCH	UBPS 3501 IS1	PUB 35-4	48	
		SNR..RH, SNR..LRH, SNS..RH, SNS..LRH	UBPS 3501 IS1	PUB 35-11	55	
	45	SNR..R, SNR..LR, SNR..C, SNR..LC, SNS..R, SNS..LR, SNS..C, SNS..LC	☉		52	☉
		SNR..CH, SNR..LCH, SNS..CH, SNS..LCH	☉		60	
		SNR..RH, SNR..LRH, SNS..RH, SNS..LRH	☉		70	
	55	SNR..R, SNR..LR, SNR..C, SNR..LC, SNS..R, SNS..LR, SNS..C, SNS..LC	☉		63	☉
		SNR..CH, SNR..LCH, SNS..CH, SNS..LCH	☉		70	☉
SNR..RH, SNR..LRH, SNS..RH, SNS..LRH		☉		80	☉	
65	SNR..R, SNR..LR, SNR..C, SNR..LC, SNS..R, SNS..LR, SNS..C, SNS..LC	UBPS 6501 IS1L ^{*3}		75	9	
NR, NRS	25	NR..XR, NR..XLR, NR..XA, NR..XLA, NR..XB, NR..XLB, NRS..XR, NR S..XLR, NRS..XA, NRS..XLA, NRS..XB, NRS..XLB	☉		31	☉
	30	NR..R, NR..LR, NR..A, NR..LA, NR..B, NR..LB, NRS..R, NRS..LR, NRS..A, NRS..LA, NRS..B, NRS..LB	☉		38	☉
	35	NR..R, NR..LR, NR..A, NR..LA, NR..B, NR..LB, NRS..R, NRS..LR, NRS..A, NRS..LA, NRS..B, NRS..LB	UBPS 3501 BS1		44	7
45	NR..R, NR..LR, NR..A, NR..LA, NR..B, NR..LB, NRS..R, NRS..LR, NRS..A, NRS..LA, NRS..B, NRS..LB	UBPS 4501 BS1		52	12	
65	NR..R, NR..LR, NR..A, NR..LA, NR..B, NR..LB, NRS..R, NRS..LR, NRS..A, NRS..LA, NRS..B, NRS..LB	UBPS 5501 BS1L ^{*3}		63	21	
	NR..R, NR..LR, NR..A, NR..LA, NR..B, NR..LB, NRS..R, NRS..LR, NRS..A, NRS..LA, NRS..B, NRS..LB	UBPS 6501 BS1L ^{*3}		75	9	

^{*1} Supplements the measure table and datasheet
^{*3} Long version UBPS

See page 11 for part number explanation

Type of rail	Size	Item number	(for height compensation)	Measure D [mm] ^{*1}	(page 90)	
SRG	20	SRG..A, SRG..LA, SRG..V, SRG..LV	☉	30	☉	
	25	SRG..C, SRG..LC	UBPS 2501 ES1	PUB 25-1-5	36	20
		SRG..R, SRG..LR	UBPS 2501 ES1	PUB 25-5-5	40	
	30	SRG..C, SRG..LC	UBPS 3001 ES1		42	3
		SRG..R, SRG..LR	UBPS 3001 ES1	PUB 30-3	45	
	35	SRG..C, SRG..LC	UBPS 3501 ES1		48	5
		SRG..R, SRG..LR	UBPS 3501 ES1	PUB 35-7	55	
	45	SRG..C, SRG..LC	UBPS 4501 ES1L ^{*3}		60	10
		SRG..R, SRG..LR	UBPS 4501 ES1L ^{*3}	PUBL 45-10	70	
	55	SRG..C, SRG..LC	UBPS 5501 ES1L ^{*3}		70	11
SRG..R, SRG..LR		UBPS 5501 ES1L ^{*3}	PUBL 55-10	80		
65	SRG..LC, SRG..LV	UBPS 6501 ES1L ^{*3}		90	8	

Rail manufacturer

The Mark of Linear Motion

R1605, R1606, R1607, R1608, R1645, R1647, R2045, R2047	20	R1622, R1623, R1631, R1632, R1651, R1653, R1661, R1662, R1665, R1666, R2001, R2002, R2011, R2012, R2000, R2010	☉		30	☉
	25	R1622, R1623, R1631, R1632, R1651, R1653, R1661, R1662, R1665, R1666, R2001, R2002, R2011, R2012, R2000, R2010	UBPS 2505 AS1		36	1
		R1621, R1624	UBPS 2505 AS1	PUB 25-4	40	
	30	R1622, R1623, R1631, R1632, R1651, R1653, R1661, R1662, R1665, R1666, R2001, R2002, R2011, R2012, R2000, R2010	UBPS 3005 AS1		42	2
		R1621, R1624	UBPS 3005 AS1	PUB 30-3	45	
	35	R1622, R1623, R1631, R1632, R1651, R1653, R1661, R1662, R1665, R1666, R2001, R2002, R2011, R2012, R2000, R2010	UBPS 3505 AS1		48	5
		R1621, R1624	UBPS 3505 AS1	PUB 35-7	55	
	45	R1622, R1623, R1651, R1653	UBPS 4505 AS1L ^{*3}		60	10
		R1621, R1624	UBPS 4505 AS1L ^{*3}	PUBL 45-10	70	
	55	R1622, R1623, R1651, R1653	UBPS 5505 AS1L ^{*3}		70	11
R1621, R1624		UBPS 5505 AS1L ^{*3}	PUBL 55-10	80		
65	R1622, R1623, R1651, R1653	UBPS 6505 AS1L ^{*3}		90	8	
R1805, R1806, R1807, R1808, R1845, R1846, R1847	25	R1851, R1853	UBPS 2505 BS1		36	1
		R1821, R1824	UBPS 2505 BS1	PUB 25-4	40	
	35	R1851, R1853	UBPS 3505 BS1		48	5
		R1821, R1824	UBPS 3505 BS1	PUB 35-7	55	
	45	R1851, R1853	UBPS 4505 BS1L ^{*3}		60	10
		R1821, R1824	UBPS 4505 BS1L ^{*3}	PUBL 45-10	70	
	55	R1851, R1853	UBPS 5505 BS1L ^{*3}		70	11
		R1821, R1824	UBPS 5505 BS1L ^{*3}	PUBL 55-10	80	
65	R1824, R1851, R1853	UBPS 6505 BS1L ^{*3}		90	8	

Rail manufacturer


MRS	25	MRW..A, MRW..B	UBPS 2503 AS1		36	1
		MRW..C, MRW..D, MRW..E	UBPS 2503 AS1	PUB 25-4	40	
	35	MRW..A, MRW..B	UBPS 3503 AS1		48	19
		MRW..C, MRW..D, MRW..E	UBPS 3503 AS1	PUB 35-7	55	
	45	MRW..A, MRW..B	UBPS 4503 AS1L ^{*3}		60	10
		MRW..C, MRW..D	UBPS 4503 AS1L ^{*3}	PUBL 45-10	70	
	55	MRW..A, MRW..B	UBPS 5503 AS1L ^{*3}		70	11
		MRW..C, MRW..D	UBPS 5503 AS1L ^{*3}	PUBL 55-10	80	
	65	MRW..B, MRW..D	UBPS 6503 AS1L ^{*3}		90	8

Rail manufacturer


*¹ Supplements the measure table and datasheet
*³ Long version UBPS

See page 11 for part number explanation

UBPS

Type of rail	Size	Type of carriage	Item number	Adapting plate (for height compensation)	Measure D [mm]	Measure D [mm] *1 (page 90)	
LWH	20	LWH..B, LWH..SL, LWH..M, LWHG, LWHT..B, LWHT..SL, LWHT..M, LWHTG, LWHS..B, LWHS..SL, LWHS..M, LWHSG, LWHY	☉		30	☉	
	25	LWH..B, LWH..SL, LWH..M, LWHG, LWHT..B, LWHT..SL, LWHT..M, LWHTG, LWHS..B, LWHS..SL, LWHS..M, LWHSG	☉		36	☉	
		LWHD..B, LWHD..M, LWHDG, LWHY	☉		40		
	30	LWH..B, LWH..SL, LWH..M, LWHG, LWHT..B, LWHT..SL, LWHT..M, LWHTG, LWHS..B, LWHS..SL, LWHS..M, LWHSG	UBPS 3010 AS1		42	17	
		LWHD..B, LWHD..M, LWHDG, LWHY	UBPS 3010 AS1	PUB 30-3	45		
	35	LWH..B, LWH..M, LWHG, LWHT..B, LWHT..M, LWHTG	UBPS 3510 AS1		48	6	
		LWHD..B, LWHD..M, LWHDG, LWHY	UBPS 3510 AS1	PUB 35-7	55		
	45	LWH..B, LWH..M, LWHG, LWHT..B, LWHT..M, LWHTG	UBPS 4510 AS1		60	18	
LWHD..B, LWHD..M, LWHDG, LWHY		UBPS 4510 AS1	PUB 45-10	70			
MH	20	LWH..B, LWHG, LWHT..B, LWHTG	☉		70	☉	
		LWHD..B, LWHDG, LWHY	☉		80	☉	
	65	LWH..B, LWHG, LWHT..B, LWHTG, LWHD..B, LWHDG, LWHY	☉		90	☉	
	MH	20	MH, MHG, MHT, MHTG, MHS, MHS	☉		30	☉
		25	MH, MHG, MHT, MHTG, MHS, MHS	☉		36	☉
			MHD, MHDG	☉		40	☉
		30	MH, MHG, MHT, MHTG, MHS, MHS	UBPS 3010 AS1		42	17
MHD, MHDG			UBPS 3010 AS1	PUB 30-3	45		
35		MH, MHG, MHT, MHTG	UBPS 3510 AS1		48	6	
		MHD, MHDG	UBPS 3510 AS1	PUB 35-7	55		
45		MH, MHG, MHT, MHTG	UBPS 4510 AS1		60	18	
	MHD, MHDG	UBPS 4510 AS1	PUB 45-10	70			
LRX	20	LRXC, LRX, LRXG, LRXSC, LRXS, LRXSG	☉		30	☉	
		LRXDC, LRXDC..SL, LRXD, LRXD..SL, LRXDG, LRXDG..SL	☉		34	☉	
	25	LRXC, LRX, LRXG, LRXSC, LRXS, LRXSG	UBPS 2510 BS1		36	1	
		LRXDC, LRXDC..SL, LRXD, LRXD..SL, LRXDG, LRXDG..SL	UBPS 2510 BS1	PUB 25-4	40		
	30	LRXC, LRX, LRXG, LRXSC, LRXS, LRXSG	UBPS 3010 BS1		42	2	
		LRXDC, LRXDC..SL, LRXD, LRXD..SL, LRXDG, LRXDG..SL	UBPS 3010 BS1	PUB 30-3	45		
	35	LRXC, LRX, LRXG	UBPS 3510 BS1		48	5	
		LRXDC, LRXD, LRXDG	UBPS 3510 BS1	PUB 35-7	55		
	45	LRXC, LRX, LRXG	UBPS 4510 BS1L *2		60	10	
		LRXDC, LRXD, LRXDG	UBPS 4510 BS1L *2	PUBL 45-10	70		
	55	LRXC, LRX, LRXG	UBPS 5510 BS1L *2		70	4	
		LRXDC, LRXD, LRXDG	UBPS 5510 BS1L *2	PUBL 55-10	80		
65	LRXC, LRX, LRXG, LRXDC, LRXD, LRXDG	UBPS 6510 BS1L *2		90	8		
MX	20	MXC, MX, MXG, MXL, MXSC, MXS, MXSG, MXSL	☉		30	☉	
		MXDC, MXD, MXDG, MXDL	☉		34	☉	
	25	MXC, MX, MXG, MXL, MXSC, MXS, MXSG, MXSL	UBPS 2510 BS1		36	1	
		MXDC, MXD, MXDG, MXDL	UBPS 2510 BS1	PUB 25-4	40		
	30	MXC, MX, MXG, MXL, MXSC, MXS, MXSG, MXSL	UBPS 3010 BS1		42	2	
		MXDC, MXD, MXDG, MXDL	UBPS 3010 BS1	PUB 30-3	45		
	35	MXN, MXNG, MXNS, MXNSG	x		44	x	
		MXC, MX, MXG, MXL	UBPS 3510 BS1		48	5	
	45	MXN, MXNG, MXNS, MXNSG	x		52	x	
		MXC, MX, MXG, MXL	UBPS 4510 BS1L *2		60	10	
	55	MXN, MXNG, MXNS, MXNSG	x		63	x	
		MXC, MX, MXG	UBPS 5510 BS1L *2		70	4	
65	MXC, MX, MXG	UBPS 6510 BS1L *2		90	8		
LWE	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	☉	
	25	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	☉		33	☉	
	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	UBPS 3010 DS1		42	17	
35	LWE..Q, LWET..Q, LWES..Q, LWEC, LWE, LWETC, LWET, LWESC, LWES	UBPS 3510 DS1		48	6		
45	LWE, LWET, LWES	UBPS 4510 DS1		60	18		

X: not feasible

*1 Supplements the measure table and datasheet

*2 Only for rail use without cover sheet, long version UBPS

See page 11 for part number explanation

Type of rail	Size		Item number	[for height compensation]	Measure D [mm] ^{*1}	[page 90]	
ME	20	MEC, MEC..SL, ME, ME..SL, MEG, MEG..SL, METC, METC..SL, MET, MET..SL, METG, METG..SL, MESC, MESC..SL, MES, MES..SL, MESH, MESH..SL	☉			28	☉
		MH, MHG, MHT, MHTG, MHS, MHS	☉			30	
	25	MEC, MEC..SL, ME, ME..SL, MEG, MEG..SL, METC, METC..SL, MET, MET..SL, METG, METG..SL, MESC, MESC..SL, MES, MES..SL, MESH, MESH..SL	☉			33	☉
		MH, MHG, MHT, MHTG, MHS, MHS	☉			36	
	30	MHD, MHDG				40	
		MEC, MEC..SL, ME, ME..SL, MEG, MEG..SL, METC, METC..SL, MET, MET..SL, METG, METG..SL, MESC, MESC..SL, MES, MES..SL, MESH, MESH..SL, MH, MHG, MHT, MHTG, MHS, MHS	UBPS 3010 DS1			42	17
	35	MHD, MHDG	UBPS 3010 DS1	PUB 30-3		45	
		MEC, ME, METC, MET, MESC, MES, MH, MHG, MHT, MHTG	UBPS 3510 DS1			48	6
	45	MHD, MHDG	UBPS 3510 DS1	PUB 35-7		55	
		ME, MET, MES, MH, MHG, MHT, MHTG	UBPS 4510 DS1			60	18
		UBPS 4510 DS1	PUB 45-10		70		

Rail manufacturer
I KO

TKD (KUE)	20	KWE, KWE..-H	☉			30	☉
	25	KWE	☉			36	☉
		KWE..-H	☉			40	
	30	KWE	UBPS 3002 CS1			42	3
		KWE..-H	UBPS 3002 CS1	PUB 30-3		45	
	35	KWE	☉			48	☉
KWE..-H		☉			55		
TKVD (KUEV)	20	KWVE..-B, KWVE..-B-L, KWVE..-B-S, KWVE..-B-SL, KWVE..B-H	☉			30	☉
		KWVE..-B-N, KWVE..-B-NL, KWVE..-B-SN, KWVE..-B-SNL	☉			27	
		KWVE..-B-EC, KWVE..-B-ESC	☉			28	
	25	KWVE..-B, KWVE..-B-L, KWVE..-B-S, KWVE..-B-SL, KWVE..B-HS, KWVE..B-S-HS	☉			36	☉
		KWVE..-B-EC, KWVE..-B-ESC	☉			33	
		KWVE..-B-H, KWVE..-B-HL, KWVE..B-H-HS	☉			40	
	30	KWVE..-B, KWVE..-B-EC, KWVE..-B-L, KWVE..-B-ESC, KWVE..-B-S, KWVE..-B-SL	UBPS 3002 BS1			42	3
		KWVE..-B-N, KWVE..-B-NL, KWVE..-B-SN, KWVE..-B-SNL	☉			38	☉
	35	KWVE..-B-H, KWVE..-B-HL	UBPS 3002 BS1	PUB 30-3		45	3
		KWVE..-B, KWVE..-B-EC, KWVE..-B-L, KWVE..-B-ESC, KWVE..-B-S, KWVE..-B-SL	UBPS 3502 BS1			48	19
	45	KWVE..-B-N, KWVE..-B-NL, KWVE..-B-SN, KWVE..-B-SNL	☉			44	☉
		KWVE..-B-H, KWVE..-B-HL	UBPS 3502 BS1	PUB 35-7		55	19
		KWVE..-B, KWVE..-B-EC, KWVE..-B-L, KWVE..-B-ESC, KWVE..-B-S, KWVE..-B-SL	UBPS 4502 BS1L ^{*3}			60	10
		KWVE..-B-N, KWVE..-B-NL, KWVE..-B-SN, KWVE..-B-SNL	☉			52	☉
	55	KWVE..-B-H, KWVE..-B-HL	UBPS 4502 BS1L ^{*3}	PUBL 45-10		70	10
		KWVE..-B, KWVE..-B-L, KWVE..-B-S, KWVE..-B-SL	UBPS 5502 DS1L ^{*3}			70	11
TKSD (KUSE)	20	KWSE, KWSE..-L, KWSE..-H, KWSE..-HL	☉			30	☉
	25	KWSE, KWSE..-L	☉			36	☉
		KWSE..-H, KWSE..-HL	☉			40	
	30	KWSE, KWSE..-L	UBPS 3002 AS1			42	3
		KWSE..-H, KWSE..-HL	UBPS 3002 AS1	PUB 30-3		45	
	35	KWSE, KWSE..-L	UBPS 3502 AS1			48	6
KWSE..-H, KWSE..-HL		UBPS 3502 AS1	PUB 35-7		55		
45	KWSE, KWSE..-L	UBPS 4502 AS1			60	18	
TSX-E (RUE)	25	RWU..-D-FE, RWU..-D-OE, RWU..-D-L-FE, RWU..-D-L-OE	x			36	x
		RWU..-D-H-FE, RWU..-D-H-OE, RWU..-D-HL-FE, RWU..-D-HL-OE	x			40	x
	35	RWU..-E, RWU..-E-L	UBPS 3502 DS1★			48	13
		RWU..-E-H, RWU..-E-HL	UBPS 3502 DS1★	PUB 35-7		55	
	45	RWU..-E, RWU..-E-L	UBPS 4502 DS1L ^{*2}			60	14
		RWU..-E-H, RWU..-E-HL	UBPS 4502 DS1L ^{*2}	PUBL 45-10		70	
	55	RWU..-E, RWU..-E-L	UBPS 5502 DS1L ^{*2}			70	15
		RWU..-E-H, RWU..-E-HL	UBPS 5502 DS1L ^{*2}	PUBL 55-10		80	
	65	RWU..-E, RWU..-E-L	UBPS 6502 DS1L ^{*2}			90	16
		RWU..-E-H, RWU..-E-HL	UBPS 6502 DS1L ^{*2}	PUBL 65-10		100	

Rail manufacturer



UBPS

X: not feasible

*1 Supplements the measure table and datasheet

★ PLUS connection not possible

*2 PLUS connection not possible, long version UBPS

*3 Long version UBPS

See page 11 for part number explanation

Rail manufacturer
NSK

Type of rail	Size	Type of carriage	Item number	Adapting plate (for height compensation)	Measure D [mm] ^{*1}	Measure D [mm] ^{*1} (page 90)
LH	20	LAH..EMZ, LAH..GMZ, LAH..ANZ, LAH..BNZ	☉		30	☉
	25	LAH..EMZ, LAH..GMZ, LAH..ALZ, LAH..BLZ	☉		36	☉
		LAH..ANZ, LAH..BNZ	☉		40	
	30	LAH..EMZ, LAH..GMZ, LAH..ALZ, LAH..BLZ	UBPS 3004 BS1		42	17
		LAH..ANZ, LAH..BNZ	UBPS 3004 BS1	PUB 30-3	45	
	35	LAH..EMZ, LAH..GMZ, LAH..ALZ, LAH..BLZ	UBPS 3504 BS1		48	6
		LAH..ANZ, LAH..BNZ	UBPS 3504 BS1	PUB 35-7	55	
	45	LAH..EMZ, LAH..GMZ	UBPS 4504 BS1		60	18
		LAH..ANZ, LAH..BNZ	UBPS 4504 BS1	PUB 45-10	70	
	55	LAH..EMZ, LAH..GMZ	UBPS 5504 BS1 ^{*3}		70	4
		LAH..ANZ, LAH..BNZ	UBPS 5504 BS1 ^{*3}	PUBL 55-10	80	
	65	LAH..EMZ, LAH..GMZ, LAH..ANZ, LAH..BNZ	UBPS 6504 BS1 ^{*3}		90	8
SH	20	SAH..EMZ, SAH..GMZ, SAH..ANZ, SAH..BNZ	☉		30	☉
	25	SAH..EMZ, SAH..GMZ, SAH..ALZ, SAH..BLZ	☉		36	☉
		SAH..ANZ, SAH..BNZ	☉		40	
	30	SAH..EMZ, SAH..GMZ, SAH..ALZ, SAH..BLZ	UBPS 3004 BS1		42	17
		SAH..ANZ, SAH..BNZ	UBPS 3004 BS1	PUB 30-3	45	
	35	SAH..EMZ, SAH..GMZ, SAH..ALZ, SAH..BLZ	UBPS 3504 BS1		48	6
SAH..ANZ, SAH..BNZ		UBPS 3504 BS1	PUB 35-7	55		
LS	20	LAS..JMZ, LAS..EMZ, LAS..CLZ, LAS..ALZ	☉		28	☉
	25	LAS..JMZ, LAS..EMZ, LAS..CLZ, LAS..ALZ	☉		33	☉
	30	LAS..JMZ, LAS..EMZ, LAS..CLZ, LAS..ALZ	UBPS 3004 AS1		42	17
	35	LAS..JMZ, LAS..EMZ, LAS..CLZ, LAS..ALZ	UBPS 3504 AS1		48	6
SS	20	SAS..JMZ, SAS..EMZ, SAS..CLZ, SAS..ALZ	☉		28	☉
	25	SAS..JMZ, SAS..EMZ, SAS..CLZ, SAS..ALZ	☉		33	☉
	30	SAS..JMZ, SAS..EMZ, SAS..CLZ, SAS..ALZ	UBPS 3004 AS1		42	17
	35	SAS..JMZ, SAS..EMZ, SAS..CLZ, SAS..ALZ	UBPS 3504 AS1		48	6
RA	20	RA..EM, RA..GM, RA..AN, RA..BN	☉		30	
	25	RA..AL, RA..BL, RA..EM, RA..GM	UBPS 2504 FS1		36	1
		RA..AN, RA..BN	UBPS 2504 FS1	PUB 25-4	40	
	30	RA..AL, RA..BL, RA..EM, RA..GM	UBPS 3004 FS1		42	2
		RA..AN, RA..BN	UBPS 3004 FS1	PUB 30-3	45	
	35	RA..AL, RA..BL, RA..EM, RA..GM	UBPS 3504 FS1		48	5
		RA..AN, RA..BN	UBPS 3504 FS1	PUB 35-7	55	
	45	RA..AL, RA..BL, RA..EM, RA..GM	UBPS 4504 FS1 ^{*3}		60	10
		RA..AN, RA..BN	UBPS 4504 FS1 ^{*3}	PUBL 45-10	70	
	55	RA..AL, RA..BL, RA..EM, RA..GM	UBPS 5504 FS1 ^{*3}	PUBL 55-3	70	22
		RA..AN, RA..BN	UBPS 5504 FS1 ^{*3}	PUBL 55-13	80	
	65	RA..EM, RA..GM, RA..AN, RA..BN	UBPS 6504 FS1 ^{*3}		90	8

*¹ Supplements the measure table and datasheet
*³ Long version UBPS

See page 11 for part number explanation

Type of rail	Size	Item number	[for height compensation]	Measure D [mm] ^{*1}	
HGR..R, HGR..T	20	HGW..CC, HGW..HC, HGH..CA, HGH..HA, QHW..CC, QHW..HC, QHH..CA, QHH..HA	☉	30 ☉	
	25	HGW..CC, HGW..HC, HGL..CA, HGL..HA, QHW..CC, QHW..HC	☉	36 ☉	
		HGH..CA, HGH..HA, QHH..CA, QHH..HA	☉	40	
	30	HGW..CC, HGW..HC, HGL..CA, HGL..HA, QHW..CC, QHW..HC	UBPS 3012 ES1		42 3
		HGH..CA, HGH..HA, QHH..CA, QHH..HA	UBPS 3012 ES1	PUB 30-3	45
	35	HGW..CC, HGW..HC, HGL..CA, HGL..HA, QHW..CC, QHW..HC	UBPS 3512 ES1		48 6
		HGH..CA, HGH..HA, QHH..CA, QHH..HA	UBPS 3512 ES1	PUB 35-7	55
	45	HGW..CC, HGW..HC, HGL..CA, HGL..HA, QHW..CC, QHW..HC	UBPS 4512 ES1		60 18
		HGH..CA, HGH..HA, QHH..CA, QHH..HA	UBPS 4512 ES1	PUB 45-10	70
55	HGW..CC, HGW..HC, HGL..CA, HGL..HA	X		70 X	
	HGH..CA, HGH..HA	X		80	
65	HGW..CC, HGW..HC, HGH..CA, HGH..HA	X		90 X	
EGR..R, EGR..U, EGR..T	20	EGH..SA, EGH..CA, EGW..SC, EGW..CC QEH..SA, QEH..CA, QEW..SC, QEW..CC	☉	28 ☉	
	25	EGH..SA, EGH..CA, EGW..SC, EGW..CC QEH..SA, QEH..CA, QEW..SC, QEW..CC	X	33 X	
	30	EGH..SA, EGH..CA, EGW..SC, EGW..CC QEH..SA, QEH..CA, QEW..SC, QEW..CC	☉	42 ☉	
	35	EGH..SA, EGH..CA, EGW..SC, EGW..CC	☉	48 ☉	
RG..T	20	RGW..CC, RGW..HC	☉	30 ☉	
		RGH..CA, RGH..HA	☉	34	
	25	RGW..CC, RGW..HC	UBPS 2512 FS1		36 1
		RGH..CA, RGH..HA	UBPS 2512 FS1	PUB 25-4	40
	30	RGW..CC, RGW..HC	UBPS 3012 FS1		42 2
		RGH..CA, RGH..HA	UBPS 3012 FS1	PUB 30-3	45
	35	RGW..CC, RGW..HC	UBPS 3512 FS1		48 5
		RGH..CA, RGH..HA	UBPS 3512 FS1	PUB 35-7	55
	45	RGW..CC, RGW..HC	UBPS 4512 FS1L ^{*3}		60 10
		RGH..CA, RGH..HA	UBPS 4512 FS1L ^{*3}	PUBL 45-10	70
	55	RGW..CC, RGW..HC	UBPS 5512 FS1L ^{*3}		70 11
		RGH..CA, RGH..HA	UBPS 5512 FS1L ^{*3}	PUBL 55-10	80
	65	RGW..CC, RGW..HC, RGH..CA, RGH..HA	UBPS 6512 FS1L ^{*3}		90 8

Rail manufacturer
HIWIN
Lineartechnologie

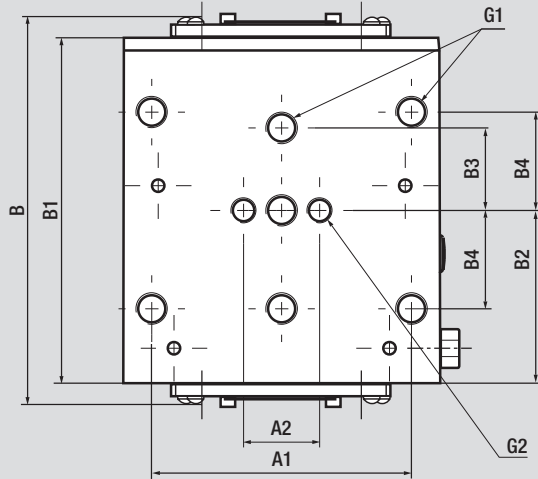
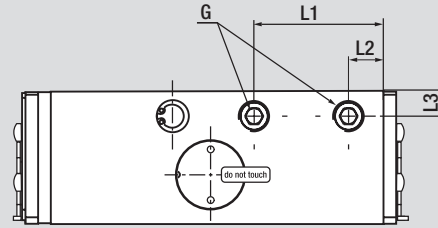
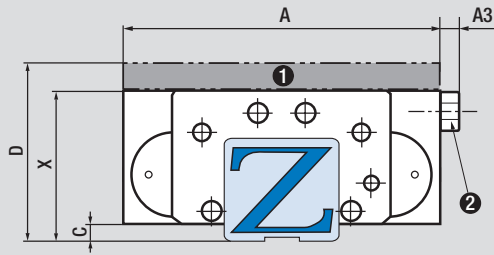
X: not feasible

^{*1} Supplements the measure table and datasheet

^{*3} Long version UBPS

See page 11 for part number explanation

UBPS



Note: Consider measurement C/Interfering contour!

Comment:

The air filter is not necessary if the PLUS-connection is being used. Air connections are located on both sides and can be exchanged according to mounting requirements. Only one connection is necessary for function.

- ❶ Adapting plate PUB (accessory)
- ❷ air filter

Measure table	Holding power [N] UBPS	Holding power [N] UBPS (PLUS)	A [mm]	A1 [mm]	A2 [mm]	A3 [mm]	B [mm]	B1 [mm]	B2 [mm]	B3 [mm]	B4 [mm]	C	X [mm]	G	G1	G2	L1 [mm]	L2 [mm]	L3 [mm]
1	1500	2200	70	57	20	5	max.136	99	49,5	20	22,5	5	36	M5	M8/7	M6/7	34,3	11	6,5
2	2500	3300	90	72	22	5	max.138	109	54,5	22	26	5	42	M5	M10/8	M8/8	40,8	11	6,5
3	1750	2250	90	72	22	5	max.138	109	54,5	22	26	5	42	M5	M10/8	M8/8	40,8	11	7
4	5200	7600	140	116	-	6	max.221	197	98,5	35	47,5	10	70	G1/8"	M14/14	M14/14	165	32	12
5	2800	3800	100	82	24	6	max.136	109	54,5	26	31	6	48	G1/8"	M10/10	M8/10	40,8	11	8
6	2500	3300	100	82	24	6	max.136	109	54,5	26	31	6	48	G1/8"	M10/10	M8/10	40,8	11	8
7	2500	3300	100	-	24	6	max.136	109	54,5	-	31	5,5	44	G1/8"	M10/10	M8/10	40,8	11	7
8	7700	9200	170	142	-	6	max.233	197	98,5	41	55	11,5	90	G1/8"	M16/20	M16/20	170	27	20
9	7700	9200	170	142	-	6	max.215	197	98,5	41	55	11	75	G1/8"	M16/14	M16/14	170	27	11
10	5200	7600	120	100	-	6	max.228	197	98,5	30	40	8	60	G1/8"	M12/12	M12/12	167	32	12
11	7700	9200	140	116	-	6	max.226	197	98,5	35	47,5	10	70	G1/8"	M14/14	M14/14	165	32	13
12	3100	3800	120	-	26	6	max.127	109	54,5	40	40	7	52	G1/8"	M12/12	M10/12	84	25	7
13	2500	-	100	82	24	6	max.129	109	54,5	26	31	6	48	G1/8"	M10/10	M8/10	40,8	11	8
14	5200	-	120	100	-	6	max.224	197	98,5	30	40	8	60	G1/8"	M12/12	M12/12	167	32	12
15	6200	-	140	116	-	6	max.223	197	98,5	35	47,5	10	70	G1/8"	M14/14	M14/14	165	32	13
16	7700	-	170	142	-	6	max.226	197	98,5	41	55	11,5	90	G1/8"	M16/20	M16/20	170	27	20
17	2150	2650	90	72	22	5	max.130	109	54,5	22	26	5	42	M5	M10/8	M8/8	40,8	11	7
18	3100	3800	120	100	26	6	max.133	109	54,5	30	40	8	60	G1/8"	M12/12	M10/12	45	26	8
19	2600	3400	100	82	24	6	max.136	109	54,5	26	31	6	48	G1/8"	M10/10	M8/10	40,8	11	8
20	1500	2200	70	57	20	5	max.136	99	49,5	20	22,5	3,5	34,5	M5	M8/7	M6/7	34,3	11	6,5
21	5200	7600	140	116	-	6	max.218	197	98,5	47,5	47,5	11	63	G1/8"	M14/12	M14/12	167	32	12
22	7700	9200	140	116	-	6	max.214	197	98,5	35	47,5	7	67	G1/8"	M14/14	M14/14	165	32	13