

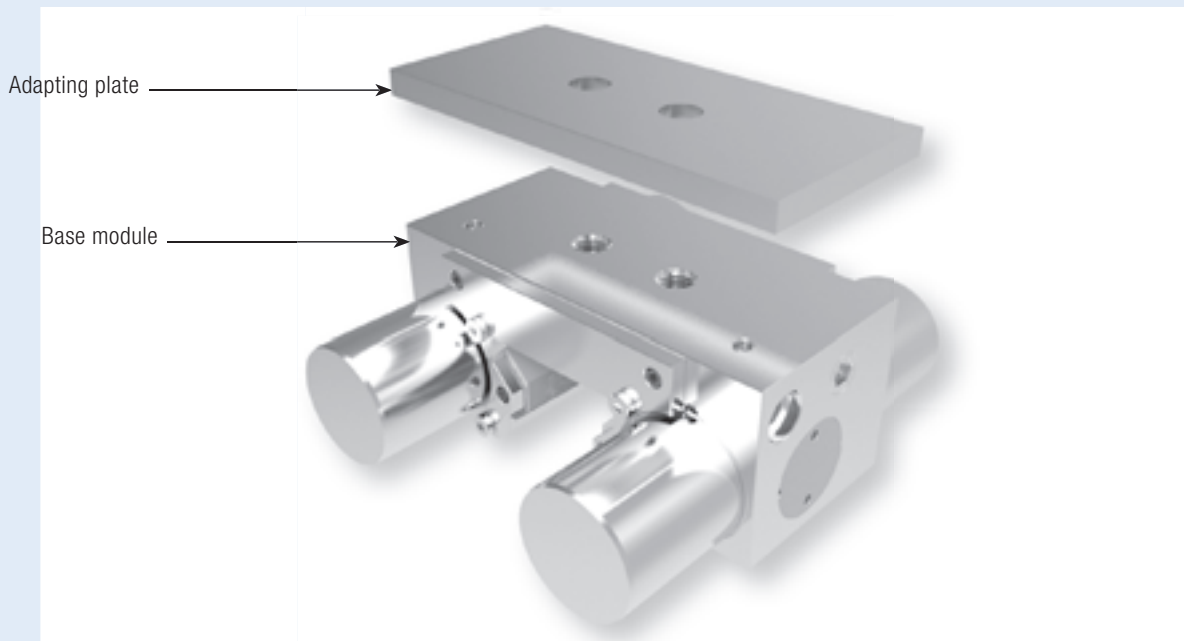
## Active without pressure: The Clamping and Braking Element including spring-loaded energy storage MBPS.

The MBPS series is based on a dual-effective wedge slide gear with spring-loaded energy storage for clamping and braking without pressure. As a specific feature it has three pistons connected inline. This arrangement allows the use of a stronger spring at 4.5 bar. The stronger spring-loaded storage permits holding forces up to 4,700 N. The MBPS 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 prevent damage from contamination with chips (chips between contact section and linear guide), the majority of elements can be fitted with original seals from the respective linear guide manufacturer as accessories. 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.

## MBPS Series



### Technical data for MBPS series:

Rail size	15–55
Holding forces	750 N–4,700 N
Min. pressure	4.5 bar
Max. pressure	8 bar
Spring-loaded energy storage	√
PLUS connection	-
Clamping cycles	5 mil. (B10d-value)
Braking cycles	2,000

### Application scenarios for MBPS:

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

### Connection options for MBPS:

The MBPS series has air connections on both sides as part of its standard equipment. This means that the air connection can be moved over to the opposite side.

**PLUS connection is not possible with the MBPS series.**

### Adapting plate accessory for MBPS:

Depending on the height of the carriage (measure D), an additional adapting plate is required (see table from page 74).



Type of rail	Size	Type of carriage	Item number	Adapting plate (for height compensation)	Measure D [mm]	Measure D [mm] *1 (page 81)
SR, SSR	15	SR..W, SR..WM, SR..V, SR..VM, SR..TB, SR..TBM, SR..SB, SR..SBM, SSR..XW, SSR..XWM, SSR..XV, SSR..XVM, SSR..XTB	MBPS 1501 GS1		24	22
	20	SR..W, SR..WM, SR..V, SR..VM, SR..TB, SR..TBM, SR..SB, SR..SBM, SSR..XW, SSR..XWM, SSR..XV, SSR..XVM, SSR..XTB	MBPS 2001 GS1		28	14
	25	SR..W, SR..WM, SR..V, SR..VM, SR..TB, SR..TBM, SR..SB, SR..SBM, SSR..XW, SSR..XWM, SSR..XV, SSR..XVM, SSR..XTB	MBPS 2501 GS1		33	13
	30	SR..W, SR..WM, SR..V, SR..VM, SR..TB, SR..TBM, SR..SB, SR..SBM, SSR..XW, SSR..XWM	MBPS 3004 BS1		42	5
	35	SR..W, SR..WM, SR..V, SR..VM, SR..TB, SR..TBM, SR..SB, SR..SBM, SSR..XW	MBPS 3501 GS1	PMB 35-4	48	17
	45	SR..W, SR..TB	⊗		60	⊗
	55	SR..W, SR..TB	⊗		68	⊗
HSR	15	HSR..A, HSR..AM, HSR..B, HSR..BM, HSR..C HSR..R, HSR..RM, HSR..YR, HSR..YRM	MBPS 1501 AS1 MBPS 1501 AS1		24 28	22
	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	MBPS 2001 AS1		30	12
	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	MBPS 2504 BS1		36	10
		HSR..R, HSR..RM, HSR..LR, HSR..LRM, HSR..YR, HSR..YRM	MBPS 2504 BS1	PMB 25-4	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	MBPS 3004 BS1		42	5
		HSR..R, HSR..RM, HSR..LR, HSR..LRM, HSR..YR, HSR..YRM	MBPS 3004 BS1	PMB 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	MBPS 3501 AS1		48	6
		HSR..R, HSR..RM, HSR..LR, HSR..LRM, HSR..YR, HSR..YRM	MBPS 3501 AS1	PMB 35-7	55	
	45	HSR..A, HSR..LA, HSR..B, HSR..LB, HSR..CA, HSR..HA, HSR..CB, HSR..HB	MBPS 4504 BS1		60	7
		HSR..R, HSR..LR, HSR..YR	MBPS 4504 BS1	PMB 45-10	70	
	55	HSR..A, HSR..LA, HSR..B, HSR..LB, HSR..CA, HSR..HA, HSR..CB, HSR..HB	MBPS 5501 AS1		70	15
		HSR..R, HSR..LR, HSR..YR	MBPS 5501 AS1	PMB 55-10-01	80	
GSR	15	GSR..T, GSR..V	⊗		20	⊗
	20	GSR..T, GSR..V	⊗		24	⊗
	25	GSR..T, GSR..V	⊗		30	⊗
	30	GSR..T	⊗		33	⊗
	35	GSR..T	⊗		38	⊗
SHS	15	SHS..C, SHS..LC, SHS..V, SHS..LV	X			X
		SHS..R	X			X
	20	SHS..C, SHS..LC, SHS..V, SHS..LV	MBPS 2001 CS1		30	12
	25	SHS..C, SHS..LC, SHS..V, SHS..LV	MBPS 2504 BS1	PMB 25-1	36	11
		SHS..R, SHS..LR	MBPS 2504 BS1	PMB 25-5	40	
	30	SHS..C, SHS..LC, SHS..V, SHS..LV	MBPS 3004 BS1		42	5
		SHS..R, SHS..LR	MBPS 3004 BS1	PMB 30-3	45	
	35	SHS..C, SHS..LC, SHS..V, SHS..LV	MBPS 3501 CS1		48	8
		SHS..R, SHS..LR	MBPS 3501 CS1	PMB 35-7	55	
	45	SHS..C, SHS..LC, SHS..V, SHS..LV	MBPS 4504 BS1	PMB 45-3	60	9
SHS..R, SHS..LR		MBPS 4504 BS1	PMB 45-13	70		
55	SHS..C, SHS..LC, SHS..V, SHS..LV	MBPS 5501 CS1		70	15	
	SHS..R, SHS..LR	MBPS 5501 CS1	PMB 55-10-01	80		
SNR, SNS	25	SNR..R, SNR..LR, SNR..C, SNR..LC, SNS..R, SNS..LR, SNS..C, SNS..LC	MBPS 2501 IS1		31	25
	30	SNR..R, SNR..LR, SNR..C, SNR..LC, SNS..R, SNS..LR, SNS..C, SNS..LC	MBPS 3004 BS1		38	26
	35	SNR..R, SNR..LR, SNR..C, SNR..LC, SNS..R, SNS..LR, SNS..C, SNS..LC	MBPS 3504 BS1		44	21
		SNR..CH, SNR..LCH, SNS..CH, SNS..LCH	MBPS 3504 BS1	PMB 35-4	48	
		SNR..RH, SNR..LRH, SNS..RH, SNS..LRH	MBPS 3504 BS1	PMB 35-11	55	
	45	SNR..R, SNR..LR, SNR..C, SNR..LC, SNS..R, SNS..LR, SNS..C, SNS..LC	MBPS 4504 BS1		52	27
		SNR..CH, SNR..LCH, SNS..CH, SNS..LCH	MBPS 4501 BS1	PMB 45-8	60	
		SNR..RH, SNR..LRH, SNS..RH, SNS..LRH	MBPS 4501 BS1	PMB 45-18	70	
55	SNR..R, SNR..LR, SNR..C, SNR..LC, SNS..R, SNS..LR, SNS..C, SNS..LC	MBPS 5501 BS1		63	30	
	SNR..CH, SNR..LCH, SNS..CH, SNS..LCH	MBPS 5501 BS1	PMB 55-7-01	70		
	SNR..RH, SNR..LRH, SNS..RH, SNS..LRH	MBPS 5501 BS1	PMB 55-17-01	80		

X: not feasible  
\*1 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 81)	
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	MBPS 3004 BS1		31	26
	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	MBPS 3504 BS1		44	21
	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	MBPS 4504 BS1		52	27
	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	MBPS 5504 BS1		63	30
	55	NR..R, NR..LR, NR..A, NR..LA, NR..B, NR..LB, NRS..R, NRS..LR, NRS..A, NRS..LA, NRS..B, NRS..LB	MBPS 5504 BS1		63	30
SRG	15	SRG..A, SRG..V	MBPS 1501 ES1		24	23
	20	SRG..A, SRG..LA, SRG..V, SRG..LV	MBPS 2001 ES1		30	12
	25	SRG..C, SRG..LC	MBPS 2501 ES1		36	1
		SRG..R, SRG..LR	MBPS 2501 ES1	PMB 25-4	40	
	30	SRG..C, SRG..LC	MBPS 3001 ES1		42	5
		SRG..R, SRG..LR	MBPS 3001 ES1	PMB 30-3	45	
	35	SRG..C, SRG..LC	MBPS 3501 ES1		48	3
		SRG..R, SRG..LR	MBPS 3501 ES1	PMB 35-7	55	
	45	SRG..C, SRG..LC	MBPS 4501 ES1		60	4
		SRG..R, SRG..LR	MBPS 4501 ES1	PMB 45-10	70	
55	SRG..C, SRG..LC	MBPS 5501 ES1	PMB 55-3	70	16	
	SRG..R, SRG..LR	MBPS 5501 ES1	PMB 55-13	80		



R1605, R1606, R1607, R1608, R1645, R1647, R2045, R2047	15	R1622, R1623, R1631, R1632, R1651, R1653, R1661, R1662, R1665, R1666, R2001, R2002, R2011, R2012, R2000, R2010	MBPS 1505 AS1		24	22
		R1621		PMB 15-4	28	
	20	R1622, R1623, R1631, R1632, R1651, R1653, R1661, R1662, R1665, R1666, R2001, R2002, R2011, R2012, R2000, R2010	MBPS 2005 AS1		30	12
		R1621, R1624	MBPS 2505 AS1	PMB 25-4	40	
	25	R1622, R1623, R1631, R1632, R1651, R1653, R1661, R1662, R1665, R1666, R2001, R2002, R2011, R2012, R2000, R2010	MBPS 2505 AS1		36	1
		R1621, R1624	MBPS 3005 AS1	PMB 30-3	45	
	30	R1622, R1623, R1631, R1632, R1651, R1653, R1661, R1662, R1665, R1666, R2001, R2002, R2011, R2012, R2000, R2010	MBPS 3005 AS1		42	2
		R1621, R1624	MBPS 3505 AS1	PMB 35-7	55	
	35	R1622, R1623, R1631, R1632, R1651, R1653, R1661, R1662, R1665, R1666, R2001, R2002, R2011, R2012, R2000, R2010	MBPS 3505 AS1		48	3
		R1621, R1624	MBPS 4505 AS1	PMB 45-10	70	
45	R1622, R1623, R1651, R1653	MBPS 4505 AS1		60	4	
	R1621, R1624	MBPS 5505 AS1	PMB 55-10	80		
55	R1622, R1623, R1651, R1653	MBPS 5505 AS1		70	18	
	R1621, R1624	MBPS 5505 AS1	PMB 55-10	80		
R1805, R1806, R1807, R1808, R1845, R1846, R1847	25	R1851, R1853	MBPS 2505 BS1		36	1
		R1821, R1824	MBPS 2505 BS1	PMB 25-4	40	
	35	R1851, R1853	MBPS 3505 BS1		48	3
		R1821, R1824	MBPS 3505 BS1	PMB 35-7	55	
	45	R1851, R1853	MBPS 4505 BS1		60	4
R1821, R1824		MBPS 4505 BS1	PMB 45-10	70		
55	R1851, R1853	MBPS 5505 BS1		70	18	
	R1821, R1824	MBPS 5505 BS1	PMB 55-10	80		



MRS	25	MRW..A, MRW..B	MBPS 2503 AS1		36	1
		MRW..C, MRW..D, MRW..E	MBPS 2503 AS1	PMB 25-4	40	
	35	MRW..A, MRW..B	MBPS 3503 AS1		48	3
		MRW..C, MRW..D, MRW..E	MBPS 3503 AS1	PMB 35-7	55	
	45	MRW..A, MRW..B	MBPS 4503 AS1		60	4
		MRW..C, MRW..D	MBPS 4503 AS1	PMB 45-10	70	
	55	MRW..A, MRW..B	MBPS 5503 AS1		70	18
		MRW..C, MRW..D	MBPS 5503 AS1	PMB 55-10	80	



\*1 Supplements the measure table and datasheet

See page 11 for part number explanation



Type of rail	Size	Type of carriage	Item number	Adapting plate (for height compensation)	Measure D [mm] *1	Measure table (page 81)
LWH	15	LWH..B, LWH..SL, LWH..M, LWHT..B, LWHT..SL, LWHT..M, LWHS..B, LWHS..SL, LWHS..M	MBPS 1504 BS1		24	22
		LWHD..B, LWHD..M, LWHY	MBPS 1504 BS1	PMB 15-4	28	
	20	LWH..B, LWH..SL, LWH..M, LWHG, LWHT..B, LWHT..SL, LWHT..M, LWHTG, LWHS..B, LWHS..SL, LWHS..M, LWHSG, LWHY	MBPS 2004 BS1-01		30	12
		LWH..B, LWH..SL, LWH..M, LWHG, LWHT..B, LWHT..SL, LWHT..M, LWHTG, LWHS..B, LWHS..SL, LWHS..M, LWHSG	MBPS 2510 AS1	PMB 25-1	36	11
	25	LWHD..B, LWHD..M, LWHDG, LWHY	MBPS 2510 AS1	PMB 25-5	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	
		LWH..B, LWHG, LWHT..B, LWHTG	MBPS 5504 BS1		70	15
	55	LWHD..B, LWHDG, LWHY	MBPS 5504 BS1	PMB 55-10-01	80	
MH	15	MH, MHT, MHS	MBPS 1504 BS1		24	22
		MHD	MBPS 1504 BS1	PMB 15-4	28	
	20	MH, MHG, MHT, MHTG, MHS, MHS	MBPS 2004 BS1-01		30	12
		MH, MHG, MHT, MHTG, MHS, MHS	MBPS 2510 AS1	PMB 25-1	36	11
	25	MHD, MHDG	MBPS 2510 AS1	PMB 25-5	40	
		MH, MHG, MHT, MHTG, MHS, MHS	☉		42	☉
	30	MHD, MHDG	☉		45	
		MH, MHG, MHT, MHTG	☉		48	☉
	35	MHD, MHDG	☉		55	
		MH, MHG, MHT, MHTG	☉		60	☉
	45	MHD, MHDG	☉		70	
		MH, MHG, MHT, MHTG	☉		70	☉
		MHD, MHDG	☉		70	
	LRX	15	LRXC, LRX, LRXG, LRXSC, LRXS, LRXSG	MBPS 1510 BS1		24
LRXDC, LRXDC..SL, LRXD, LRXD..SL, LRXDG, LRXDG..SL			MBPS 1510 BS1	PMB 15-4	28	
20		LRXC, LRX, LRXG, LRXSC, LRXS, LRXSG	MBPS 2010 BS1		30	12
		LRXDC, LRXDC..SL, LRXD, LRXD..SL, LRXDG, LRXDG..SL	MBPS 2010 BS1	PMB 20-4	34	
25		LRXC, LRX, LRXG, LRXSC, LRXS, LRXSG	MBPS 2510 BS1*2		36	1
		LRXDC, LRXDC..SL, LRXD, LRXD..SL, LRXDG, LRXDG..SL	MBPS 2510 BS1*2	PMB 25-4	40	
30		LRXC, LRX, LRXG, LRXSC, LRXS, LRXSG	MBPS 3010 BS1		42	5
		LRXDC, LRXDC..SL, LRXD, LRXD..SL, LRXDG, LRXDG..SL	MBPS 3010 BS1	PMB 30-3	45	
35		LRXC, LRX, LRXG	MBPS 3510 BS1		48	3
		LRXDC, LRXD, LRXDG	MBPS 3510 BS1	PMB 35-7	55	
45		LRXDC, LRXD, LRXDG	MBPS 4510 BS1*2		60	4
		LRXDC, LRXD, LRXDG	MBPS 4510 BS1*2	PMB 45-10	70	
55		LRXC, LRX, LRXG	MBPS 5510 BS1		70	23
		LRXDC, LRXD, LRXDG	MBPS 5510 BS1	PMB 55-14	80	
MX	15	MXC, MX, MXG, MXSC, MXS, MXSG	MBPS 1510 BS1		24	22
		MXDC, MXD, MXDG	MBPS 1510 BS1	PMB 15-4	28	
	20	MXC, MX, MXG, MXL, MXSC, MXS, MXSG, MXSL	MBPS 2010 BS1		30	12
		MXDC, MXD, MXDG, MXDL	MBPS 2010 BS1	PMB 20-4	34	
	25	MXC, MX, MXG, MXL, MXSC, MXS, MXSG, MXSL	MBPS 2510 BS1*2		36	1
		MXDC, MXD, MXDG, MXDL	MBPS 2510 BS1*2	PMB 25-4	40	
	30	MXC, MX, MXG, MXL, MXSC, MXS, MXSG, MXSL	MBPS 3010 BS1		42	5
		MXDC, MXD, MXDG, MXDL	MBPS 3010 BS1	PMB 30-3	45	
	35	MXN, MXNG, MXNS, MXNSG	X		44	X
		MXC, MX, MXG, MXL	MBPS 3510 BS1		48	3
	45	MXN, MXNG, MXNS, MXNSG	X		52	X
		MXC, MX, MXG, MXL	MBPS 4510 BS1*2		60	4
	55	MXN, MXNG, MXNS, MXNSG	X		63	X
		MXC, MX, MXG	MBPS 5510 BS1	PMB 55-4	70	31
65	MXC, MX, MXG	☉		90	☉	

X: not feasible

\*1 Supplements the measure table and datasheet

\*2 This table applies only for rail use without cover sheet!

See page 11 for part number explanation

Type of rail	Size	Item number	(for height compensation)	Measure D [mm]	*	
LWE	15	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	MBPS 1504 BS1		24	22
	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	MBPS 3004 BS1		42	5
	35	LWE..Q, LWET..Q, LWES..Q, LWEC, LWE, LWETC, LWET, LWESC, LWES	☉		48	☉
	45	LWE, LWET, LWES	☉		60	☉
ME	15	MEC, MEC..SL, ME, ME..SL, MEG, MEG..SL, METC, METC..SL, MET, MET..SL, METG, METG..SL, MESC, MESC..SL, MES, MES..SL, MESG, MESG..SL, MH, MHT, MHS	MBPS 1504 BS1		24	22
		MHD	MBPS 1504 BS1	PMB 15-4	28	
	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, MESG, MESG..SL	☉		28	☉
		MH, MHG, MHT, MHTG, MHS, MHSG	☉		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, MESG, MESG..SL	☉		33	☉
		MH, MHG, MHT, MHTG, MHS, MHSG	☉		36	
		MHD, MHDG	☉		40	
	30	MEC, MEC..SL, ME, ME..SL, MEG, MEG..SL, METC, METC..SL, MET, MET..SL, METG, METG..SL, MESC, MESC..SL, MES, MES..SL, MESG, MESG..SL, MH, MHG, MHT, MHTG, MHS, MHSG	MBPS 3004 BS1		42	5
		MHD, MHDG	MBPS 3004 BS1	PMB 30-3	45	
	35	MEC, ME, METC, MET, MESC, MES, MH, MHG, MHT, MHTG	☉		48	☉
		MHD, MHDG	☉		55	
	45	ME, MET, MES, MH, MHG, MHT, MHTG	☉		60	☉
	MHD, MHDG	☉		70		

Rail manufacturer  
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MBPS

TKD (KUE)	15	KWE	☉		24	☉
		KWE..H	☉		28	
	20	KWE, KWE..H	☉		30	☉
	25	KWE	☉		36	☉
		KWE..H	☉		40	
	30	KWE	MBPS 3004 BS1		42	5
		KWE..H	MBPS 3004 BS1	PMB 30-3	45	
35	KWE	☉		48	☉	
	KWE..H	☉		55		
TKVD (KUIE)	15	KWVE..-B, KWVE..-B-EC, KWVE..-B-ESC, KWVE..-B-S	☉		24	☉
		KWVE..-B-H	☉		28	
	20	KWVE..-B, KWVE..-B-L, KWVE..-B-S, KWVE..-B-SL, KWVE..B-H	MBPS 2002 BS1		30	12
		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	MBPS 2502 BS1	PMB 25-3	36	20
		KWVE..-B-EC, KWVE..-B-ESC	MBPS 2502 BS1		33	
		KWVE..-B-H, KWVE..-B-HL, KWVE..B-H-HS	MBPS 2502 BS1	PMB 25-7	40	
	30	KWVE..-B, KWVE..-B-EC, KWVE..-B-L, KWVE..-B-ESC, KWVE..-B-S, KWVE..-B-SL	MBPS 3002 BS1		42	2
		KWVE..-B-N, KWVE..-B-NL, KWVE..-B-SN, KWVE..-B-SNL	☉		38	☉
		KWVE..-B-H, KWVE..-B-HL	MBPS 3002 BS1	PMB 30-3	45	2
	35	KWVE..-B, KWVE..-B-EC, KWVE..-B-L, KWVE..-B-ESC, KWVE..-B-S, KWVE..-B-SL	MBPS 3502 BS1	PMB 35-4	48	21
		KWVE..-B-N, KWVE..-B-NL, KWVE..-B-SN, KWVE..-B-SNL	MBPS 3502 BS1		44	
		KWVE..-B-H, KWVE..-B-HL	MBPS 3502 BS1	PMB 35-11	55	
	45	KWVE..-B, KWVE..-B-EC, KWVE..-B-L, KWVE..-B-ESC, KWVE..-B-S, KWVE..-B-SL	MBPS 3502 BS1		60	4
	KWVE..-B-N, KWVE..-B-NL, KWVE..-B-SN, KWVE..-B-SNL	☉		52	☉	
	KWVE..-B-H, KWVE..-B-HL	MBPS 4502 BS1	PMB 45-10	70	4	
55	KWVE..-B, KWVE..-B-L, KWVE..-B-S, KWVE..-B-SL	☉		70	☉	

Rail manufacturer



\* 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]	Measure D [mm] *1 (page 81)
TKSD (KJSE)	20	KWSE, KWSE..-L, KWSE..-H, KWSE..-HL	MBPS 2002 AS1		30	12
	25	KWSE, KWSE..-L	MBPS 2502 AS1		36	10
		KWSE..-H, KWSE..-HL	MBPS 2502 AS1	PMB 25-4	40	
	30	KWSE, KWSE..-L	MBPS 3002 AS1		42	5
		KWSE..-H, KWSE..-HL	MBPS 3002 AS1	PMB 30-3	45	
	35	KWSE, KWSE..-L	MBPS 3502 AS1		48	6
KWSE..-H, KWSE..-HL		MBPS 3502 AS1	PMB 35-7	55		
45	KWSE, KWSE..-L	MBPS 3502 AS1		60	6	
TSX-E (RUE)	25	RWU..-D-FE, RWU..-D-OE, RWU..-D-L-FE, RWU..-D-L-OE	MBPS 2502 DS1		36	28
		RWU..-D-H-FE, RWU..-D-H-OE, RWU..-D-HL-FE, RWU..-D-HL-OE	MBPS 2502 DS1	PMB 25-4/01	40	
		RWU..-E, RWU..-E-L	MBPS 3502 DS1	PMB 35-2	48	29
	35	RWU..-E-H, RWU..-E-HL	MBPS 3502 DS1	PMB 35-9	55	
		RWU..-E, RWU..-E-L	MBPS 4502 DS1		60	4
	45	RWU..-E-H, RWU..-E-HL	MBPS 4502 DS1	PMB 45-10	70	
		RWU..-E, RWU..-E-L	MBPS 5502 DS1	PMB 55-3	70	19
	55	RWU..-E-H, RWU..-E-HL	MBPS 5502 DS1	PMB 55-13	80	
		RWU..-E, RWU..-E-L	MBPS 5502 DS1		80	

Rail manufacturer



LH	15	LAH..EMZ, LAH..GMZ	MBPS 1504 BS1		24	22
		LAH..ANZ, LAH..BNZ	MBPS 1504 BS1	PMB 15-4	28	
	20	LAH..EMZ, LAH..GMZ, LAH..ANZ, LAH..BNZ	MBPS 2004 BS1		30	12
		LAH..EMZ, LAH..GMZ, LAH..ALZ, LAH..BLZ	MBPS 2504 BS1		36	10
	30	LAH..ANZ, LAH..BNZ	MBPS 2504 BS1	PMB 25-4	40	
		LAH..EMZ, LAH..GMZ, LAH..ALZ, LAH..BLZ	MBPS 3004 BS1		42	5
	35	LAH..ANZ, LAH..BNZ	MBPS 3004 BS1	PMB 30-3	45	
		LAH..EMZ, LAH..GMZ, LAH..ALZ, LAH..BLZ	MBPS 3504 BS1		48	6
	45	LAH..ANZ, LAH..BNZ	MBPS 3504 BS1	PMB 35-7	55	
		LAH..EMZ, LAH..GMZ	MBPS 4504 BS1		60	7
	55	LAH..ANZ, LAH..BNZ	MBPS 4504 BS1	PMB 45-10	70	
		LAH..EMZ, LAH..GMZ	MBPS 5504 BS1		70	15
	LH	LAH..ANZ, LAH..BNZ	MBPS 5504 BS1	PMB 55-10-01	80	
		LAH..EMZ, LAH..GMZ	MBPS 5504 BS1		80	
SH	15	SAH..EMZ, SAH..GMZ	MBPS 1504 BS1		24	22
		SAH..ANZ, SAH..BNZ	MBPS 1504 BS1	PMB 15-4	28	
	20	SAH..EMZ, SAH..GMZ, SAH..ANZ, SAH..BNZ	MBPS 2004 BS1		30	12
		SAH..EMZ, SAH..GMZ, SAH..ALZ, SAH..BLZ	MBPS 2504 BS1		36	10
	30	SAH..ANZ, SAH..BNZ	MBPS 2504 BS1	PMB 25-4	40	
		SAH..EMZ, SAH..GMZ, SAH..ALZ, SAH..BLZ	MBPS 3004 BS1		42	5
35	SAH..ANZ, SAH..BNZ	MBPS 3004 BS1	PMB 30-3	45		
	SAH..EMZ, SAH..GMZ, SAH..ALZ, SAH..BLZ	MBPS 3504 BS1		48	6	
SH	SAH..ANZ, SAH..BNZ	MBPS 3504 BS1	PMB 35-7	55		
	SAH..EMZ, SAH..GMZ	MBPS 3504 BS1		55		
LS	15	LAS..JMZ, LAS..EMZ, LAS..CLZ, LAS..ALZ	MBPS 1504 BS1		24	22
	20	LAS..JMZ, LAS..EMZ, LAS..CLZ, LAS..ALZ	MBPS 1504 BS1		28	22
	25	LAS..JMZ, LAS..EMZ, LAS..CLZ, LAS..ALZ	MBPS 2504 AS1	PMB 25-1	33	24
	30	LAS..JMZ, LAS..EMZ, LAS..CLZ, LAS..ALZ	MBPS 2504 AS1		42	22
	35	LAS..JMZ, LAS..EMZ, LAS..CLZ, LAS..ALZ	MBPS 2504 AS1		48	22
SS	15	SAS..JMZ, SAS..EMZ, SAS..CLZ, SAS..ALZ	MBPS 1504 BS1		24	22
	20	SAS..JMZ, SAS..EMZ, SAS..CLZ, SAS..ALZ	MBPS 1504 BS1		28	22
	25	SAS..JMZ, SAS..EMZ, SAS..CLZ, SAS..ALZ	MBPS 2504 AS1	PMB 25-1	33	24
	30	SAS..JMZ, SAS..EMZ, SAS..CLZ, SAS..ALZ	MBPS 2504 AS1		42	22
	35	SAS..JMZ, SAS..EMZ, SAS..CLZ, SAS..ALZ	MBPS 2504 AS1		48	22
RA	15	RA..AL, RA..BL, RA..EM, RA..GM	MBPS 1504 BS1		24	22
		RA..AN, RA..BN	MBPS 1504 BS1		28	22
	20	RA..EM, RA..GM, RA..AN, RA..BN	MBPS 2004 BS1		30	12
		RA..AL, RA..BL, RA..EM, RA..GM	MBPS 2504 FS1		36	1
	25	RA..AN, RA..BN	MBPS 2504 FS1	PMB 25-4	40	
		RA..AL, RA..BL, RA..EM, RA..GM	MBPS 3004 FS1		42	2
	30	RA..AN, RA..BN	MBPS 3004 FS1	PMB 30-3	45	
		RA..AL, RA..BL, RA..EM, RA..GM	MBPS 3504 FS1		48	3
	35	RA..AN, RA..BN	MBPS 3504 FS1	PMB 35-7	55	
		RA..AL, RA..BL, RA..EM, RA..GM	MBPS 4504 FS1		60	4
	45	RA..AN, RA..BN	MBPS 4504 FS1	PMB 45-10	70	
		RA..AL, RA..BL, RA..EM, RA..GM	MBPS 5504 FS1	PMB 55-3	70	16
	55	RA..AN, RA..BN	MBPS 5504 FS1	PMB 55-13	80	
		RA..AL, RA..BL, RA..EM, RA..GM	MBPS 5504 FS1		80	

\*1 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]	*1	
HGR..R	15	HGW..CC, HGL..CA, QHW..CC	MBPS 1512 ES1		24	22
		HGH..CA, QHH..CA	MBPS 1512 ES1	PMB 15-4	28	
	20	HGW..CC, HGW..HC, HGH..CA, HGH..HA, QHW..CC, QHW..HC, QHH..CA, QHH..HA	MBPS 2012 ES1		30	12
		25	HGW..CC, HGW..HC, HGL..CA, HGL..HA, QHW..CC, QHW..HC	MBPS 2504 BS1		36
	HGH..CA, HGH..HA, QHH..CA, QHH..HA		MBPS 2504 BS1	PMB 25-4	40	
	30		HGW..CC, HGW..HC, HGL..CA, HGL..HA, QHW..CC, QHW..HC	MBPS 3004 BS1		42
		HGH..CA, HGH..HA, QHH..CA, QHH..HA	MBPS 3004 BS1	PMB 30-3	45	
		35	HGW..CC, HGW..HC, HGL..CA, HGL..HA, QHW..CC, QHW..HC	MBPS 3512 ES1		48
	HGH..CA, HGH..HA, QHH..CA, QHH..HA		MBPS 3512 ES1	PMB 35-7	55	
	45	HGW..CC, HGW..HC, HGL..CA, HGL..HA, QHW..CC, QHW..HC	MBPS 4504 BS1		60	7
		HGH..CA, HGH..HA, QHH..CA, QHH..HA	MBPS 4504 BS1	PMB 45-10	70	
		55	HGW..CC, HGW..HC, HGL..CA, HGL..HA	Ⓞ		70
	HGH..CA, HGH..HA		Ⓞ		80	
	EGR..R EGR..U EGR..T	15	EGH...SA, EGH...CA, EGW...SC, EGW...CC QEH..SA, QEH..CA, QEW..SC, QEW..CC	Ⓞ		24
20			EGH...SA, EGH...CA, EGW...SC, EGW...CC QEH..SA, QEH..CA, QEW..SC, QEW..CC	Ⓞ		28
		EGH...SA, EGH...CA, EGW...SC, EGW...CC QEH..SA, QEH..CA, QEW..SC, QEW..CC	X		33	X
		EGH...SA, EGH...CA, EGW...SC, EGW...CC QEH..SA, QEH..CA, QEW..SC, QEW..CC	MBPS 3004 BS1		42	5
35		EGH...SA, EGH...CA, EGW...SC, EGW...CC	Ⓞ			Ⓞ
RG..T	15	RGW..CC	Ⓞ		24	Ⓞ
		RGH..CA	Ⓞ		28	
	20	RGW..CC, RGW..HC	Ⓞ		30	Ⓞ
		RGH..CA, RGH..HA	Ⓞ		34	
	25	RGW..CC, RGW..HC	Ⓞ		36	Ⓞ
		RGH..CA, RGH..HA	Ⓞ		40	
	30	RGW..CC, RGW..HC	Ⓞ		42	Ⓞ
		RGH..CA, RGH..HA	Ⓞ		45	
	35	RGW..CC, RGW..HC	Ⓞ		48	Ⓞ
		RGH..CA, RGH..HA	Ⓞ		55	
	45	RGW..CC, RGW..HC	MBPS 4512 FS1		60	4
RGH..CA, RGH..HA		MBPS 4512 FS1	PMB 45-10	70		
55	RGW..CC, RGW..HC	MBPS 5501 ES1	PMB 55-3	70	16	
	RGH..CA, RGH..HA	MBPS 5501 ES1	PMB 55-13	80		

Rail manufacturer  
**HIWIN**  
Lineartechnologie

MBPS

X: not feasible

\*1 Supplements the measure table and datasheet

See page 11 for part number explanation



Rail manufacturer  
**ROLLON**

Type of rail	Size	Type of carriage	Item number	Adapting plate (for height compensation)	Measure D [mm]	Measure table (page 81)
MR	15	MRS, MRT..W, MRT..SW	☉		24	☉
		MRS..W	☉		28	
	20	MRT..W, MRT..SW	X		28	X
		MRS, MRS..L, MRS..W, MRS..LW	MBPS 2014 AS1		30	12
	25	MRT, MRT..S, MRT..W, MRT..SW, MRT..LW	☉		33	☉
		MRS, MRS..L, MRZ..W	MBPS 2504 BS1		36	10
		MRS..W, MRS..LW	MBPS 2504 BS1	PMB 25-4	40	
	30	MRS, MRS..L, MRT..W, MRT..SW, MRT..LW	MBPS 3004 BS1		42	5
		MRS..W, MRS..LW	MBPS 3004 BS1	PMB 30-3	45	
	35	MRS, MRS..L, MRT..W, MRT..SW, MRT..LW	MBPS 3514 AS1		48	6
		MRS..W, MRS..LW	MBPS 3514 AS1	PMB 35-7	55	
	45	MRS, MRS..L, MRT..W, MRT..LW	MBPS 4504 BS1		60	7
		MRS..W, MRS..LW	MBPS 4504 BS1	PMB 45-10	70	
	55	MCT..W, MCT..LW	☉		68	☉
		MCS, MCS..L	☉		70	
MCS..W, MCS..LW		☉		80		

Rail manufacturer  
**NTN** 

Type of rail	Size	Type of carriage	Item number	Adapting plate (for height compensation)	Measure D [mm]	Measure table (page 81)
BG	15	BGCH..FN, BGCH..FL, BGCS..BS, BGCS..BN, BGCS..BL, BGXH..FN, BGXH..FL, BGXS..BS, BGXS..BN, BGXS..BL	☉		24	☉
		BGCH..BN, BGXH..BN	☉		28	
	20	BGCS..BS, BGCS..BN, BGXS..BN, BGXS..BN	☉		28	☉
		BGCH..FN, BGCH..FL, BGCH..BN, BGCH..BL, BGXH..FN, BGXH..FL, BGXH..BN, BGXH..BL	☉		30	☉
	25	BGCS..BS, BGCS..BN, BGXS..BS, BGXS..BN	☉		33	☉
		BGCH..FN, BGCH..FL, BGCH..FE, BGCH..BN, BGCH..BL, BGCH..BE, BGXH..FN, BGXH..FL, BGXH..FE, BGXS..BN, BGXS..BL, BGXS..BE	MBPS 2504 BS1	PMB 25-2	36	31
		BGCH..BN, BGCH..BL, BGCH..BE, BGXH..BN, BGXH..BL, BGXH..BE	MBPS 2504 BS1	PMB 25-6	40	
	30	BGCH..FN, BGCH..FL, BGCH..FE, BGCS..BS, BGCS..BN, BGCS..BL, BGCS..BE, BGXH..FN, BGXH..FL, BGXH..FE, 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, BGXH..FN, BGXH..FL, BGXH..FE, 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, BGXH..FN, BGXH..FL, BGXH..FE, 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, BGXH..FN, BGXH..FL, BGXH..FE, BGXS..BN, BGXS..BL, BGXS..BE	MBPS 5501 CS1		70	15
		BGCH..BN, BGCH..BL, BGCH..BE, BGXH..BN, BGXH..BL, BGXH..BE	MBPS 5501 CS1	PMB 55-10-01	80	

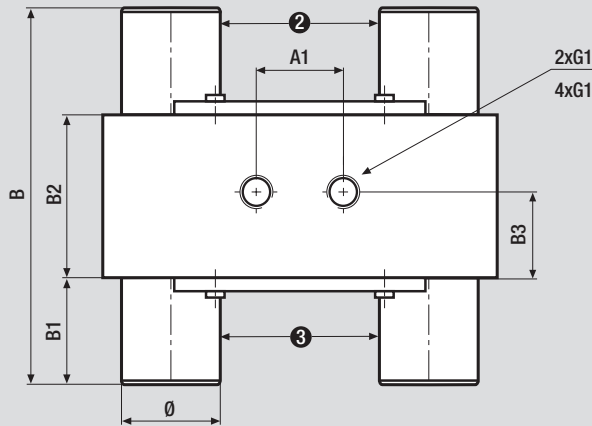
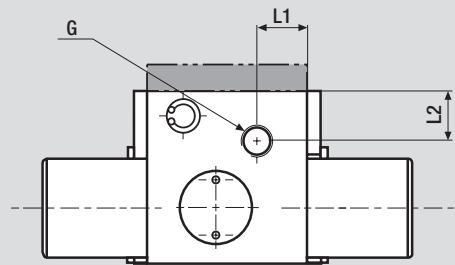
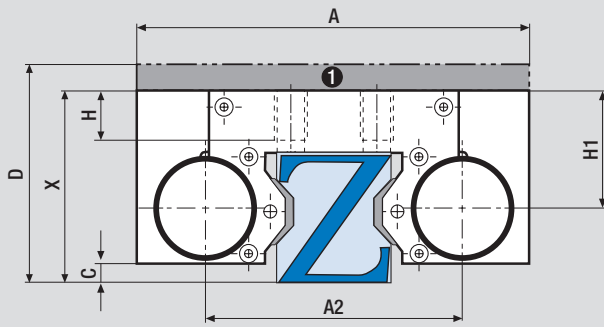
Rail manufacturer



Type of rail	Size	Type of carriage	Item number	Adapting plate (for height compensation)	Measure D [mm]	Measure table (page 81)
LLTH, LLTH..D4, LLTH..D6	15	LLTHC..SA, LLTHC..A, LLTHC..SU, LLTHC..U	☉		24	☉
		LLTHC..R	☉		28	
	20	LLTHC..SA, LLTHC..A, LLTHC..LA, LLTHC..SU, LLTHC..U, LLTHC..LR	☉		30	☉
		LLTHC..SA, LLTHC..A, LLTHC..LA, LLTHC..SU, LLTHC..U, LLTHC..LU,	☉		36	☉
	25	LLTHC..R, LLTHC..LR	☉		40	☉
		LLTHC..SA, LLTHC..A, LLTHC..LA, LLTHC..SU, LLTHC..U, LLTHC..LU,	☉		42	☉
	30	LLTHC..R, LLTHC..LR	☉		45	☉
		LLTHC..SA, LLTHC..A, LLTHC..LA, LLTHC..SU, LLTHC..U, LLTHC..LU,	☉		48	☉
	35	LLTHC..R, LLTHC..LR	☉		55	☉
		LLTHC..A, LLTHC..LA, LLTHC..U, LLTHC..LU,	☉		60	☉
	45	LLTHC..R, LLTHC..LR	☉		70	☉

X: not feasible  
\*<sup>†</sup> Supplements the measure table and datasheet

See page 11 for part number explanation



**Note: Consider measurement C/Interfering contour!**

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 PMB (accessory)
- ❷ Attachment of piston unit
- ❸ Attachment of spring unit

Measure table  
Holding power [N] MBPS

	Holding power [N]	A [mm]	A2 [mm]	B [mm]	B1 [mm]	B2 [mm]	B3 [mm]	C [mm]	X [mm]	G	G1	L1 [mm]	L2 [mm]	Ø [mm]	H [mm]	H1 [mm]	
1	1300	75	20	49	95,2	20,2	44	22	3,5	36	M5	M6	16,5	6,5	22	8	20
2	2000	90	22	58	107	29	47	23	3,5	42	M5	M8	30,5	7,2	25	9	24
3	2600	100	24	68	105,7	27,7	46	24,5	6	48	G1/8"	M8	19	9	28	10	26,5
4	3600	120	26	78,8	113,2	32,2	49	24,5	8	60	G1/8"	M10	31,1	15	30	15	35,5
5	1300	90	22	64	98,2	20,2	47	23	7	42	M5	M8	14	6,5	22	9	22,5
6	2000	100	24	70	106	29	46	24,5	9,5	48	M5	M8	19	7,2	25	9	24
7	2600	120	26	88	108,7	27,7	49	24,5	15	60	G1/8"	M10	16	8	28	14	29,5
8	2000	100	24	70	106	29	46	24,5	8	48	M5	M8	19	8,7	25	9	25,5
9	2600	120	26	88	108,7	27,7	49	24,5	12	57	G1/8"	M10	16	8	28	14	29,5
10	1200	75	20	52	94	22	44	22	6,5	36	M5	M6	16,2	5	20	8	18
11	1200	75	20	52	94	22	44	22	5,5	35	M5	M6	16,2	5	20	8	18
12	750	66	20	45,7	94	19	44	22	4,2	30	M5	M6	15,5	5,5	16	8,6	16,2
13	1000	75	20	52	94	22	44	22	5,5	33	M5	M6	33	6	20	8	16,5
14	1000	66	20	45,7	94	19	44	22	2,2	28	M5	M6	15,5	5,5	16	8,6	16,2
15	3600	140	30/30	98,8	113,2	32,2	49	9,5	13	70	G1/8"	M10	23	16	30	15	40,5
16	4700	140	38/38	97	144	41	62	12	8	67	G1/8"	M10	23	11	39	15	38
17	1700	100	24	70	106	29	46	24,5	5,5	44	M5	M8	19	7,2	25	9	24
18	4700	140	38/38	97	144	41	62	12	11	70	G1/8"	M10	23	11	39	15	38
19	3500	140	38/38	97	144	41	62	12	8	67	G1/8"	M10	23	11	39	15	38
20	1200	75	20	52	94	22	44	22	3,5	33	M5	M6	16,2	5	20	7	18
21	2000	100	24	70	106	29	46	24,5	5,5	44	M5	M8	19	7,2	25	9	24
22	750	61	15	40,8	94	19	44	22	2,5	24	M5	M5	34,5	5,3	16	7,3	11,8
23	4700	140	38/38	97	144	41	62	12	7	66	G1/8"	M10	23	11	39	15	38
24	1200	75	20	52	94	22	44	22	4,5	32	M5	M6	33	6	20	8	16,5
25	750	72	20	52	94	19	44	22	5,2	31	M5	M6	35,2	8,2	16	8,6	16,2
26	1300	90	22	64	98,2	20,2	47	23	3	38	M5	M8	14	6,5	22	9	22,5
27	2600	120	26	88	108,7	27,7	49	24,5	7	52	G1/8"	M10	16	8	28	14	29,5
28	750	70	23	48	94	19	44	22	4	36	M5	M6	15,5	10	16	8	22,5
29	2100	100	24	68	105,7	27,7	46	24,5	4	46	G1/8"	M8	19	9	28	10	26,5
30	3600	140	30/30	98,8	113,2	32,2	49	9,5	6	62	G1/8"	M10	23	16	30	15	40,5
31	1200	75	20	52	94	22	44	22	4,5	34	M5	M6	16,2	5	20	8	18