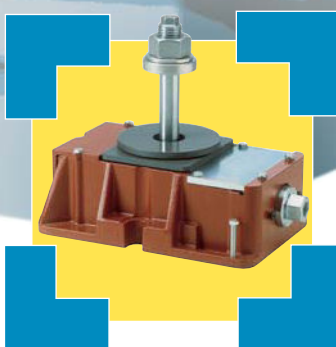


BW-Fixatoren®

Serie RK

...for the Levelling,
Adjustment and
Fixation of Machinery
and Other Heavy
Equipment

Installation Varieties and
Technical Information

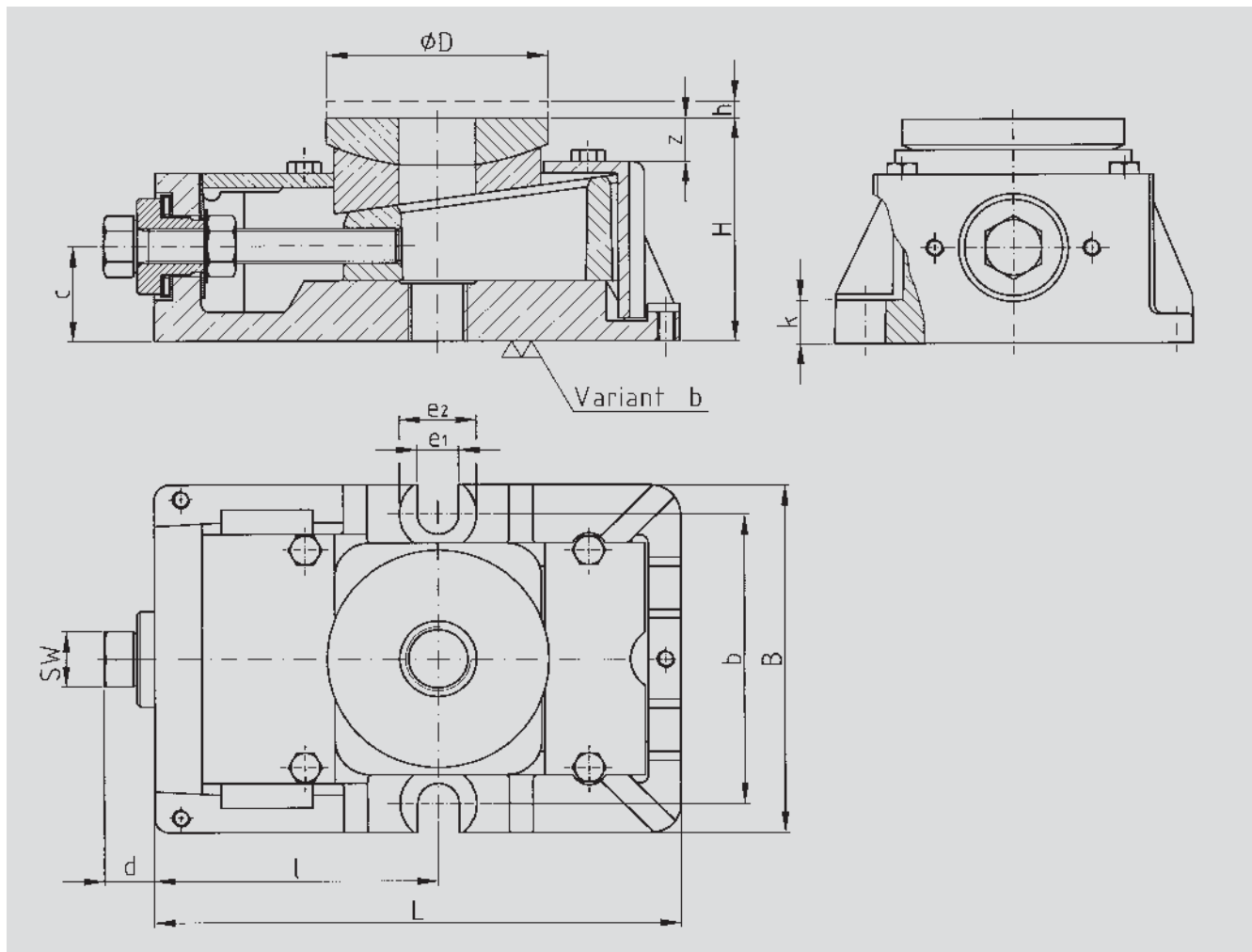


[BWF]
...the best for accuracy.

Dimensions of Serie RK

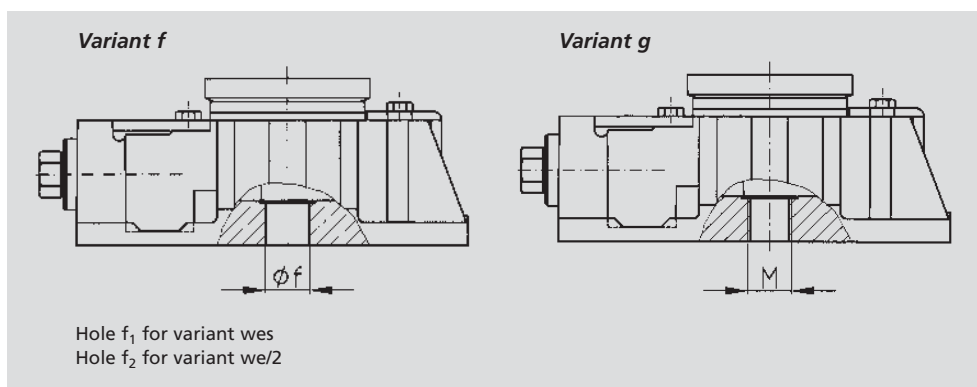


GA Basic unit



Size	L	B	H*	ϕD	SW	d	c	z	h	l	b	e1	e2	k
I	175	105	55	60	19	16	21	13	5	92	90	14	26	12
II	178	120	75	75	19	15	31	15	5	96	100	14	26	13
III	220	150	95	90	24	22	40	17	6	118	130	18	32	22
IV	275	180	115	110	30	34	49	17	8	142	160	24	38	24
V	345	230	135	150	36	34	58	20	10	180	205	28	46	34

*Height with machined bottom (Variant b)



Size	ϕf_1	ϕf_2	g
I	17	19	M12
II	21	25	M20
III	25	31	M24
IV	31	37	M30
V(M36)	37	44	M36
V(M42)	44	-	-

Size	Dim	RKI	RKII	RKIII	RKIV	RKV
Permissible maximum load ¹⁾	N	90 000	120 000	240 000	360 000	700 000
Recommended machine dead weight ²⁾	N	10 000	20 000	40 000	60 000	120 000
Spring constant in operation range ³⁾	N/μm	2 300	4 000	6 500	8 000	14 000
Torque at adjusting screw	Specific	$\frac{N \cdot m}{10^3 \text{ kg}}$	3	3	4	4,5
	Maximum	N·m	27	36	96	160
	Security	N·m	2,5-5	2,5-5	3,5-7	4-8
Vertical Adjustment per screw turn	mm	0,25	0,25	0,29	0,35	0,43
Weight of basic unit	kg	4	5,5	11,5	21	42

¹⁾ BW-Fixators® are adjustable up to this load.

²⁾ This is the standard factor for the determination of the BW-Fixator® size.

³⁾ Found by applying a changing load equal to the recommended proportional machine load. The operating range will be covered when the machine has been levelled and bound down with the anchor bolts.

Determination of BW-Fixator® size

The proportional machine load recommended is a function of the net weight of the machine divided by the number of support points (BW-Fixators®).

For machinery with sizable variations in partial weight, it is the heaviest machine load that has to be divided by the number of bearing points and the resulting BW-Fixator® size has to be used everywhere under the machine.

Formula for calculating the Resilience of BW-Fixators® Serie RK

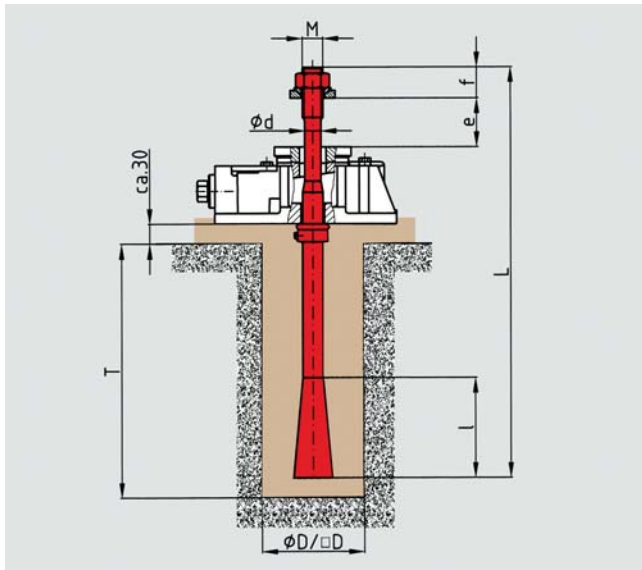
$$\Delta f[\mu m] = \frac{\Delta F}{c} = \frac{\text{Load change N}}{\text{Spring constant N}/\mu m}$$

Note:

The total of the forces a - e exerted must not exceed the permissible maximum load

- a) Proportional machine load
- b) Tensile force exerted by anchor bolt
- c) Dynamic forces
- d) Changing loads (moving machine parts or workpieces)
- e) Forces counteracting moments

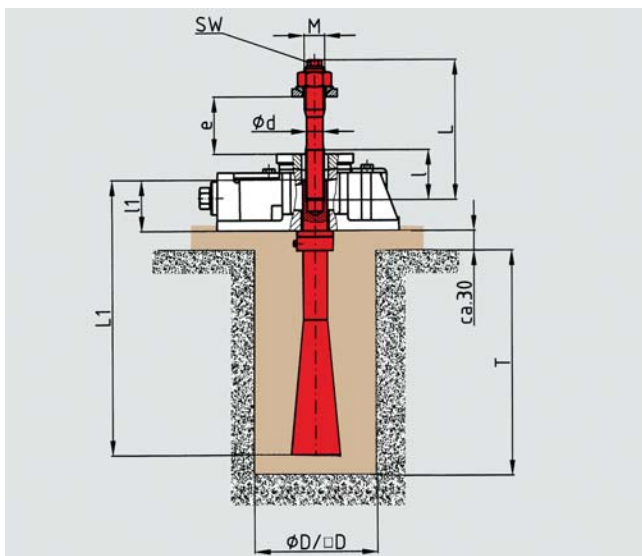
Anchor bolts and studs



we

Anchor bolt for direct connection of the machine to the foundation

RK	M	L	I	f	Ø d	e		Foundations		Clamping force max. N
						from	to	D	T	
I	M16	330	90	30	13	20	60	70	230	53 000
II	M20	400	100	40	16	20	90	80	270	81 000
III	M24	500	135	50	19	30	100	100	340	115 000
IV	M30	600	150	55	24	35	135	120	410	182 000
V	M36	800	180	65	29	40	150	150	570	265 000
	M42	1000	260	75	35	40	200	170	760	385 000



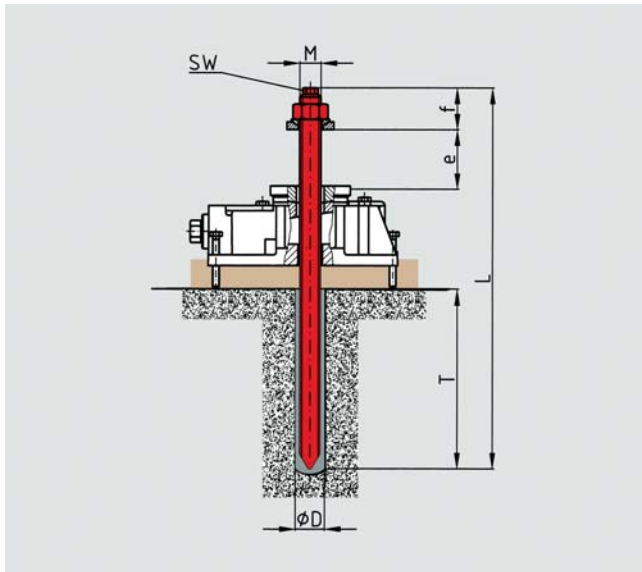
we/2

Split anchor bolt for direct connection of the machine to the foundation

Note:

Specify dimension „e”
(thickness of machine leg)
in your order

RK	M	L1	I1	Ø d	short		e		long		e		Foundations		Clamping force max. N
					L	I	from	to	L	I	from	to	D	T	
I	M16	190	39	13	130	55	20	55	155	60	60	80	80	150	53 000
II	M20	275	48	16	140	50	20	50	190	80	55	100	100	220	81 000
III	M24	360	63	19	165	60	30	60	225	90	65	120	120	290	115 000
IV	M30	450	85	24	190	70	35	70	255	110	75	135	150	360	182 000
V	M36	600	105	29	220	80	40	80	275	120	85	135	170	500	265 000

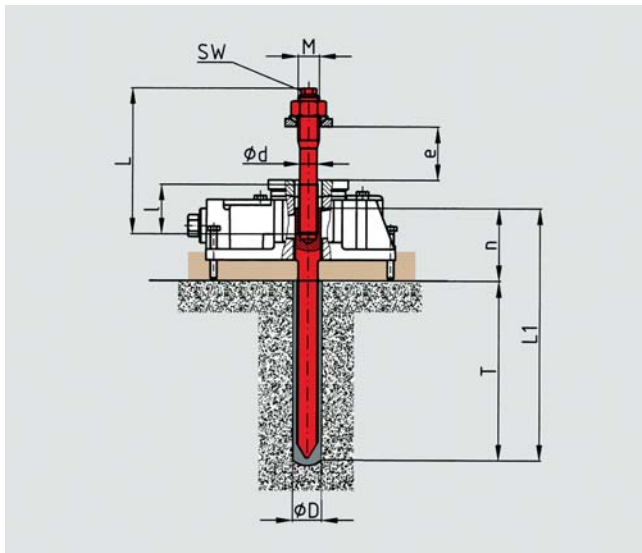


due

Resin anchor
(Capsule and stud)

RK	M	L	SW	f	e		Hole		Clamping force* max. N
					from	to	Ø D	T	
I	M16	300	10	35	20	60	18	125	15 000
II	M20	400	10	40	20	90	25	170	27 000
III	M24	450	–	50	20	70	28	210	37 000

*Concrete >= B25



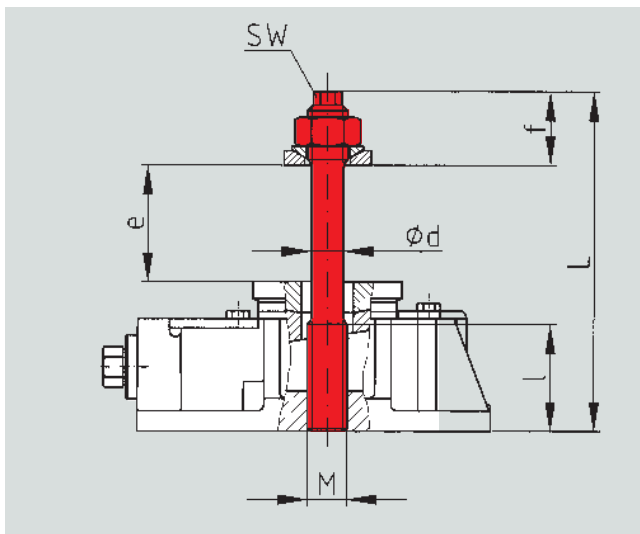
due/2

Split resin anchor
(Capsule and split stud)

Note:
Specify dimension „e“
(thickness of machine leg)
in your order

RK	M	Ø d	SW	short		e		long		e		L1	n	Hole		Clamping force* max.N
				L	I	from	to	L	I	from	to			Ø D	T	
I	M16	13	10	130	55	20	55	155	60	60	80	185	60	18	125	15 000
II	M20	16	13	140	50	20	50	190	80	55	100	240	70	25	170	27 000
III	M24	19	17	165	60	30	60	225	120	65	120	290	80	28	210	37 000

*Concrete >= B25



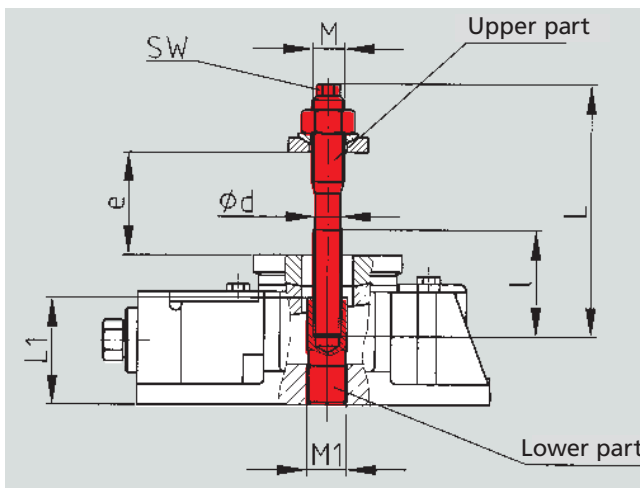
ste

Short or long stud bolt for attaching the machine to the BW-Fixator®

Note:

Specify dimension „e” (thickness of machine leg) in your order

RK	M	Ø d	SW	f	short		e		long		e		Clamping force max. N
					L	I	from	to	L	I	from	to	
I	M12	-	-	-	130	-	20	40	150	-	40	60	32 000
II	M20	16	13	40	175	55	20	55	205	55	50	85	81 000
III	M24	19	17	50	215	70	20	70	260	70	65	115	115 000
IV	M30	24	19	55	260	85	30	85	310	85	80	135	182 000
V	M36	29	24	65	315	105	40	105	360	105	100	150	265 000



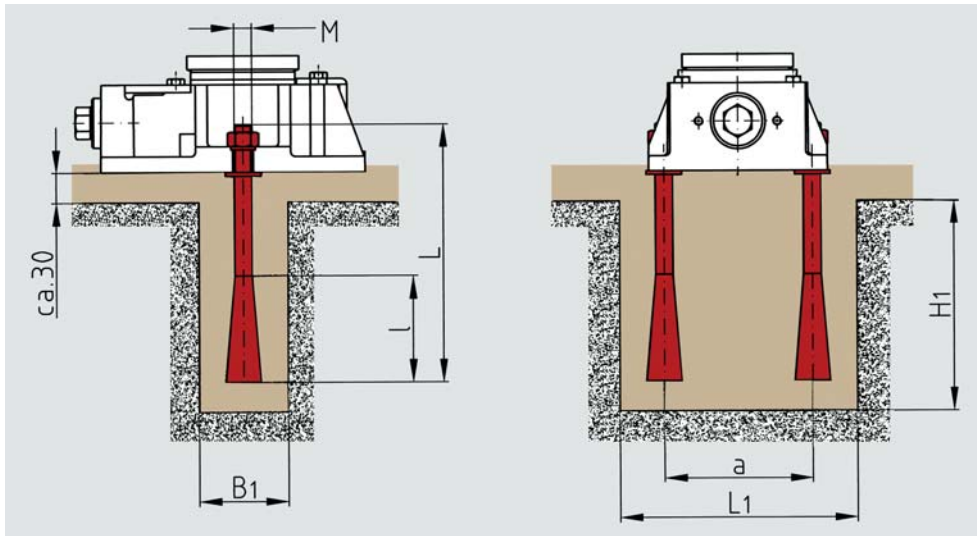
ste/2

Short or long split stud bolt for attaching the machine to the BW-Fixator®

Note:

Specify dimension „e” (thickness of machine leg) in your order

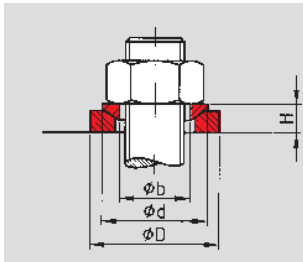
RK	M	Ø d	SW	short		e		long		e		L1	M1	Clamping force max. N
				L	I	from	to	L	I	from	to			
II	M16	13	10	130	55	20	60	155	60	65	85	55	M20	53 000
III	M20	16	13	140	50	20	50	190	80	55	100	70	M24	81 000
IV	M24	19	17	165	60	30	60	225	90	65	120	85	M30	115 000
V	M30	24	19	190	70	40	70	255	110	75	135	105	M36	182 000



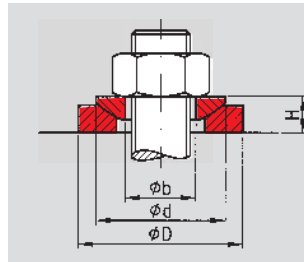
C Side anchor bolts for connecting BW-Fixator® to the foundation

RK	M	L	I	a	Foundations			Clamping force
					L1	B1	H1	max. N
I	M12	150	70	90	140	60	140	65 000
II	M12	150	70	100	160	60	140	65 000
III	M16	250	90	130	200	70	240	120 000
IV	M20	300	100	160	240	80	290	190 000
V	M24	350	135	205	305	100	350	275 000

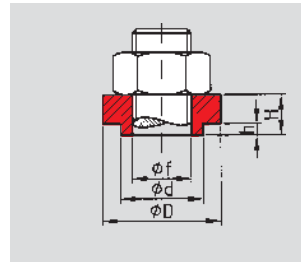
Other applications



p Spherical washer set for non-parallel bearing surfaces



r Large spherical washer set for non-parallel bearing surfaces

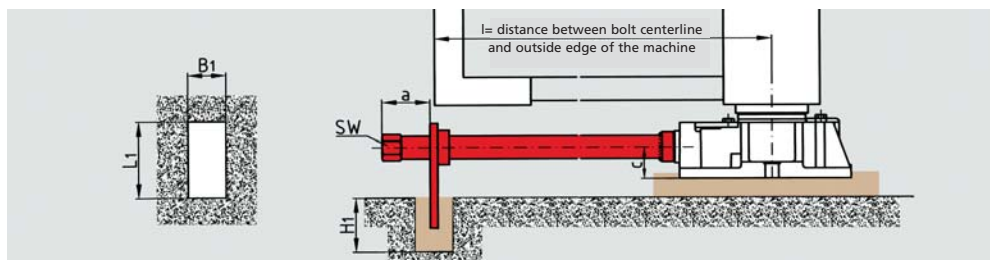


Z Foam centering bushing for the concentric location of the anchor bolts in the machine foot holes

RK	Ø D	H	Ø d	Ø b
I (M12)	40	9	30	13
I (M16)	40	9	30	17
II	44	10	36	21
III	56	13	44	25
IV	68	16	56	31
V (M36)	78	20	68	37
V (M42)	100	26	90	44

RK	Ø D	H	Ø d	Ø b
I	44	10	36	17
II	56	13	44	21
III	68	16	56	25
IV	80	16	56	31
V (M36)	100	20	68	37
V (M42)	125	26	90	44

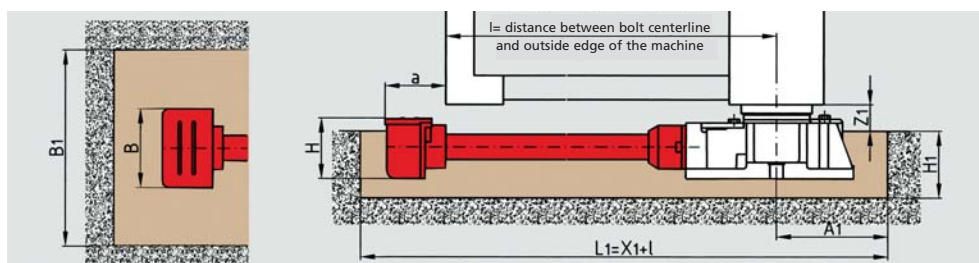
RK	Ø f	Ø D	H	Ø d	h
I	16,2	32	13	22	4
II	20,2	40	14	28	4
III	24,2	44	18	32	5
IV	30,2	54	21	42	5
V (M36)	36,3	60	26	45	6
V(M42)	42,5	70	32	56	6



RK	a	c	SW	Minimum		Foundations		
				length l	Tube	L1	B1	H1
I	50	23	22	140	24 x 4	80	40	70
II	50	33	22	140	24 x 4	80	40	70
III	50	42	22	170	24 x 4	80	40	90
IV	50	51	32	200	38 x 5	100	50	100
V	50	60	32	250	38 x 5	100	50	110

le

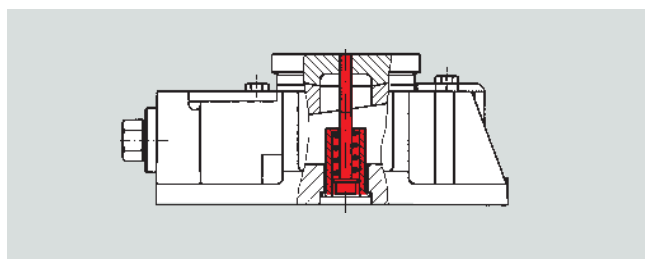
Extended set screw on BW-Fixator® arranged inwards of the machine side



RK	Minimum						Foundations		
	a	B	H	length l	A1	Z1	B1	H1	X1
I	65	81	50	140	130	20	160	70	230
II	65	92	62	140	140	25	200	80	240
III	70	92	79	180	160	30	250	100	270
IV	90	136	91	240	200	35	300	120	320
V	100	136	106	275	230	40	330	140	370

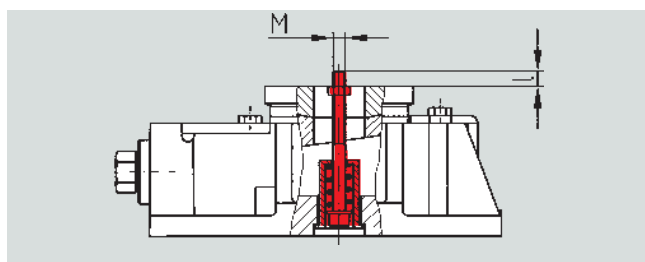
les

Extended set screw on flush-mounted BW-Fixator® arranged inwards of the machine side



mon

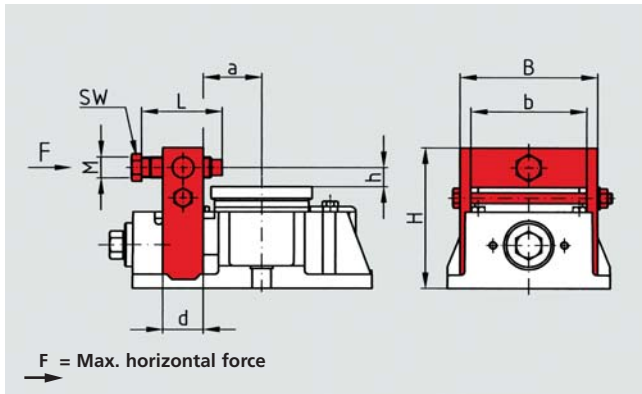
Locking system for the spherical bearing plate



RK	M	I
I	6	8
II	6	8
III	8	8
IV	8	12
V	12	12

frot

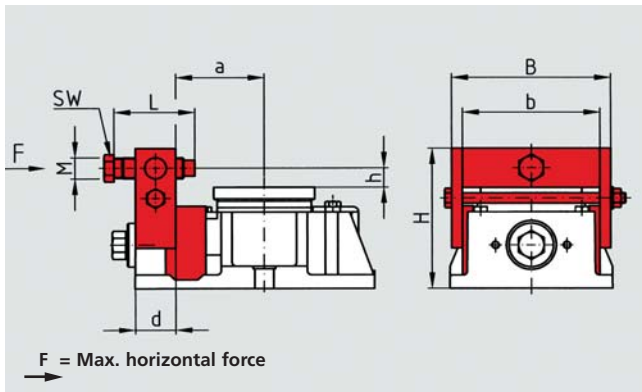
Connection for mobile arrangement



d

Lateral adjuster for adjusting machine location

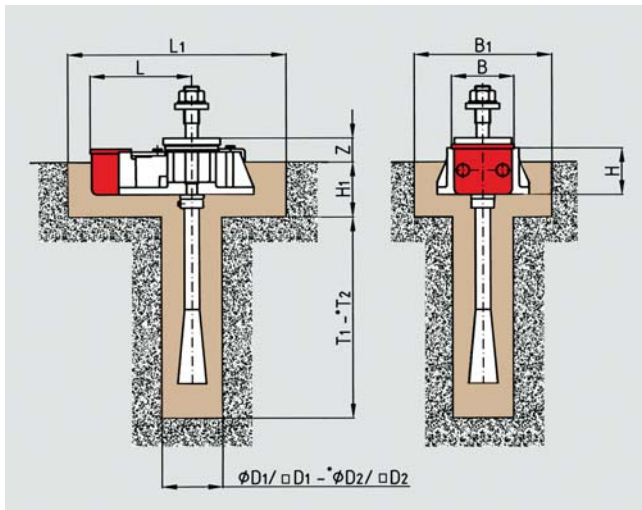
RK	M	L	SW	H	B	b	d	a	h	F N
I	M12	50	17	83	86	70	25	40	15	20 000
II	M16	60	19	106	102	86	30	43	16	25 000
III	M16	60	19	129	129	109	35	55	16	35 000
IV	M20	70	24	160	150	130	40	70	20	40 000
V	M24	80	30	192	199	175	45	90	24	60 000



dz

Offset lateral adjuster for adjusting machine location

RK	M	L	SW	H	B	b	d	a	h	F N
I	M12	50	17	83	102	86	25	57	15	20 000
II	M16	60	19	106	118	102	30	65	16	25 000
III	M16	60	19	129	149	129	35	80	16	35 000
IV	M20	70	24	160	170	150	40	100	20	40 000
V	M24	80	30	192	223	199	45	123	24	60 000



m

Set screw guard on flush mounted BW-Fixator®
Foundations at combination of variants **m** and **wes**

RK					Foundations				*Foundations 2		
	L	B	H	Z	L1	H1	B1	D1	T1	D2	T2
I	131	81	50	20	310	70	160	70	230	-	-
II	132	92	62	25	310	80	200	80	270	100	360
III	164	92	79	30	380	100	250	100	340	120	430
IV	198	136	91	35	450	120	300	120	410	150	590
V	245	136	106	40	550	140	330	150	570	170	760

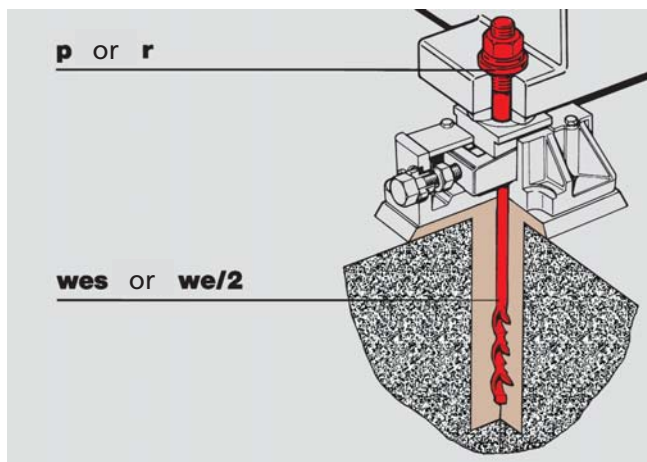
*Foundations 2 in connection with the next size of anchor bolts

Various Combinations and applications



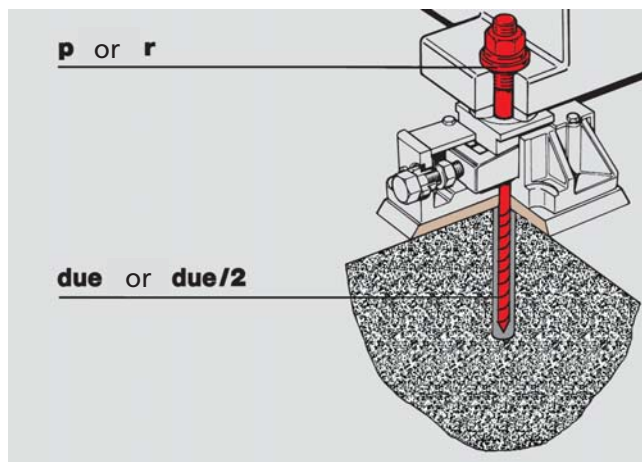
Combination 1

Order specification **RK (x*) – f · p · wes**



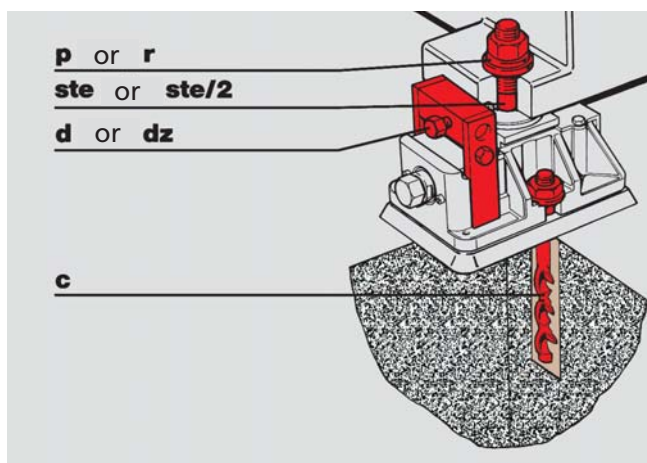
Combination 2

Order specification **RK (x*) – f · p · due**



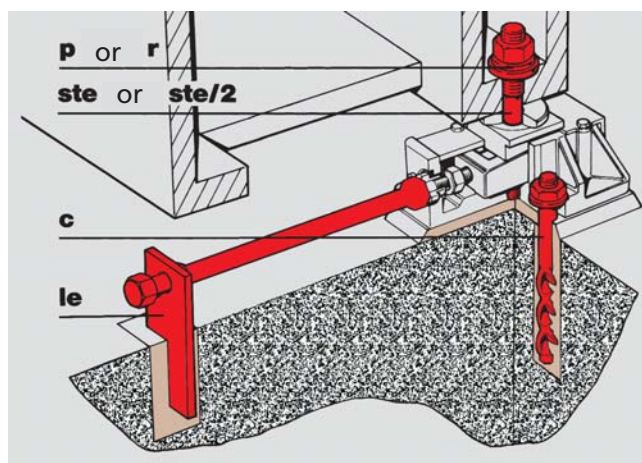
Combination 3

Order specification **RK (x*) – g · c · d · ste**



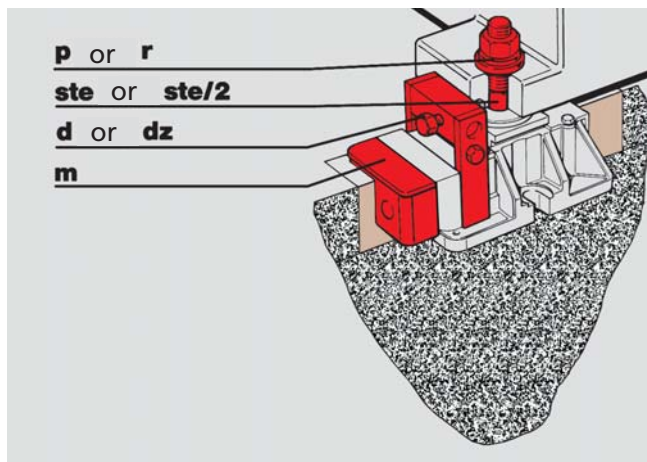
Combination 4

Order specification **RK (x*) – g · c · p · ste · le**



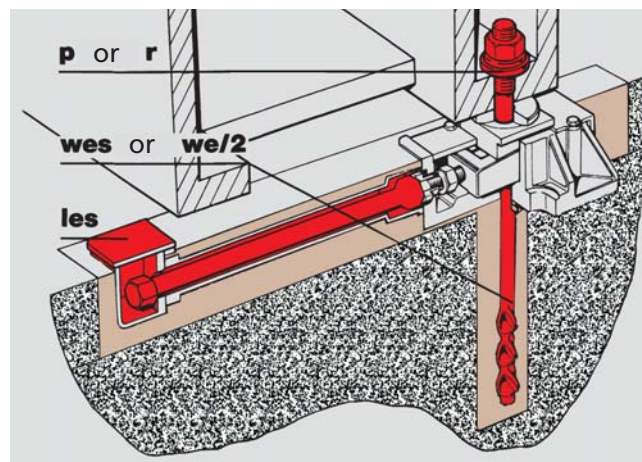
Combination 5

Order specification **RK (x*) – g · d · m · p · ste**



Combination 6

Order specification **RK (x*) – f · p · wes · les**



(x*) = size of BW-Fixator

Subject to modification without notice