UNISORB®
INSTALLATION SOLUTIONS

S FIXATOR® SYSTEM

S FIXATOR® DESCRIPTION

The Model S Fixator® is designed to complement the Model RK system. The Model S features a vertical bolt type adjustment and is used particularly in cases when leveling adjustment must be done from above where the Model RK cannot be used. Specific applications include floor plates, layout tables and similar situations.

The unit is comprised of a high density cast iron housing equipped with a captive mounted free turning adjusting and hold-down bolt combination. This high tensile bolt has at its lower half a spline shaped body structure. The upper end has a rolled thread to accept the hold-down nut, with a hex. head end for height adjustment.

The spline end section of the adjusting bolt engages with a precision matching spline pattern in the adjusting sleeve that is threaded into the base of the housing. The adjusting sleeve is guided by the upper portion of the housing to prevent lateral movement. A support plate with a precision machined concave surface mates with the convex spherical surface of the adjusting sleeve to assure equal load distribution over the entire bearing surface and compensate for any angular difference between machine and Fixator®.

An additional spherical washer set (option p) may be provided to compensate for any angular differences on the top surface of the machine bed.

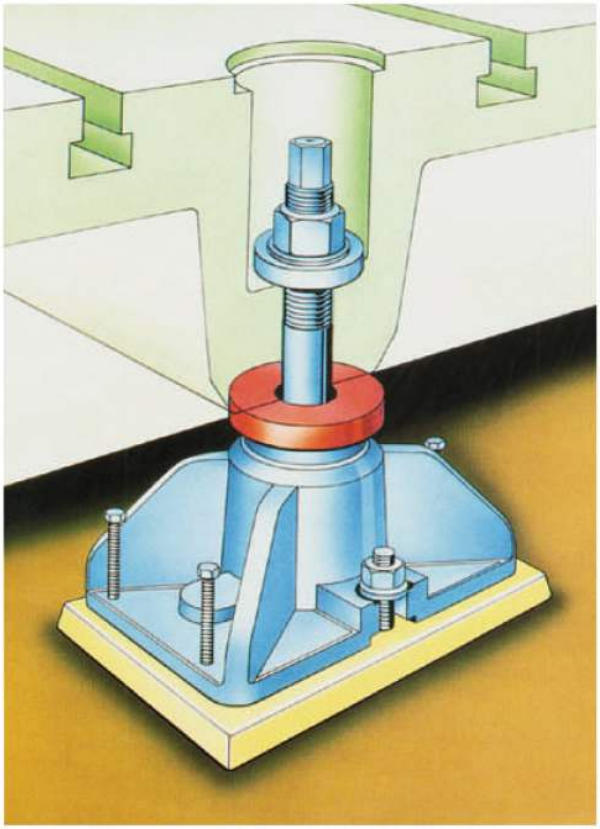
The adjusting mechanism is totally enclosed and all machined surtaces have been treated with a high pressure lubricant to reduce friction and prevent corrosion.

The Model S Fixator® may be completely embedded into the foundation as shown on page 6.

In addition, this unit is equipped with three auxiliary preleveling screws to rough level the base prior to pouring grout. When the unit is mounted on the top of a foundation, two side located anchor bolts (option c) secure the leveler to the foundation using the grouting method shown on page 6.

The leveling is accomplished by the following sequence: After securing the Model S Fixator® to the machine and foundation the upper hold-down nut is loosened and the adjustment accomplished by turning the adjusting bolt at its hex. head, thus causing vertical leveling through the movement of the inner adjustment sleeve. Afterthe leveling is completed, the hold-down nut is lightened, acting as a jam nut to prevent creeping of the inner adjusting sleeve due to vibration. See page 8 of this publication for complete installation instructions.

As an additional feature, option d cover plates are available in several outside diameters to cover and seal the access openings usually provided to accommodate the hold-down/adjusting bolt and nut mechanism, for the adjusting of the Fixator®.



4117 FELTERS ROAD, MICHIGAN CENTER, MI 49254
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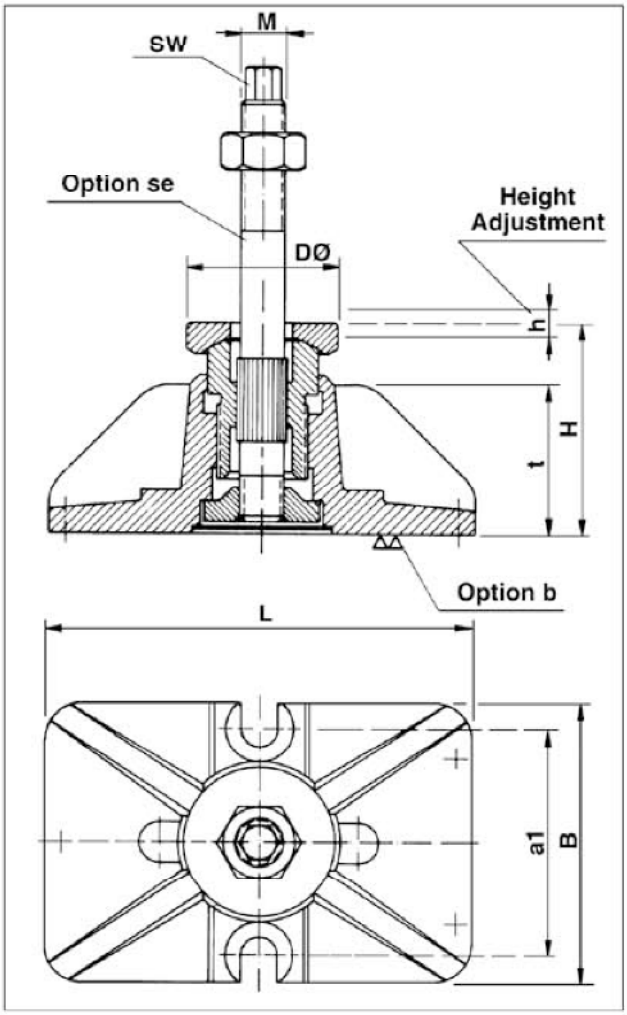
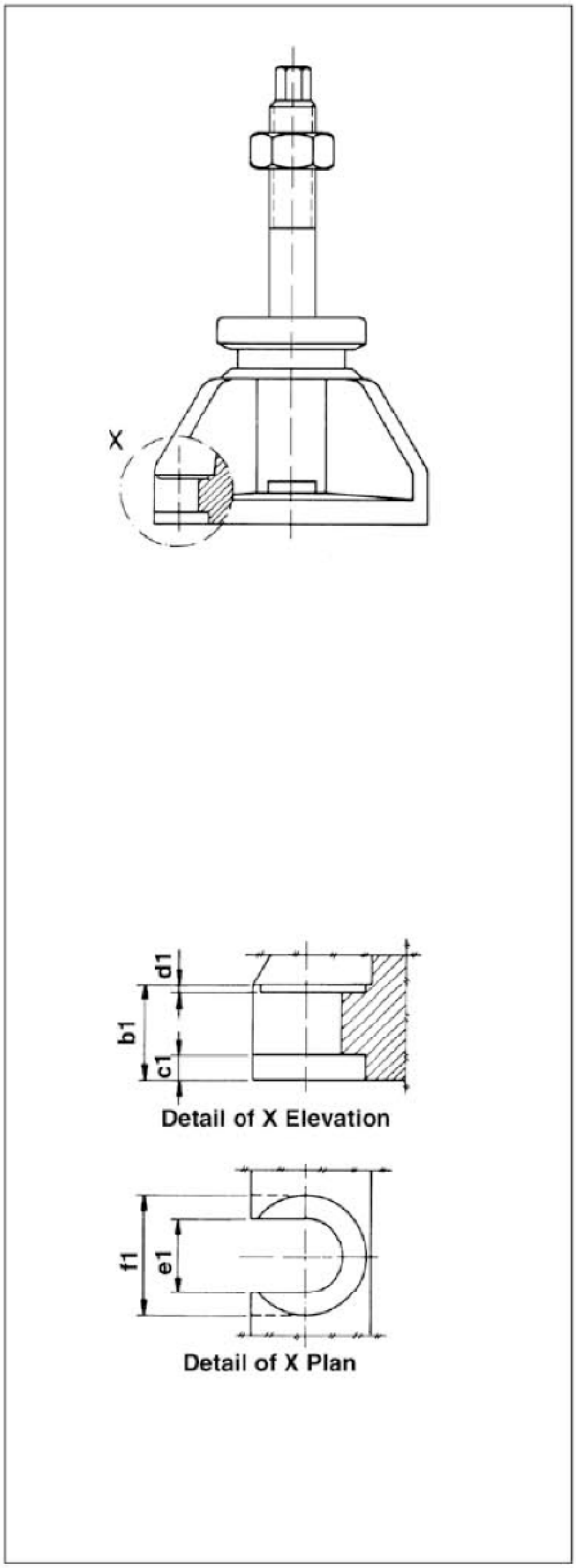
S FIXATOR® DIMENSIONS





DIMENSIONS								
SIZE S	M	L	B	H	DØ	SW	t	h
I	M16	6.61	4.13	3.15	2.24	.47	2.36	.32
II	M20	7.48	4.53	3.74	2.76	.59	2.68	.39
III	M24	8.66	5.51	4.45	3.23	.75	3.27	.47
IV	M30	11.02	7.28	5.51	3.94	.95	3.82	.63
V	M36	12.99	8.86	6.54	4.80	1.18	4.72	.79

DIMENSIONS						
SIZE S	a1	b1	c1	d1	e1	f1
I	3.47	.63	.16	—	.47	.87
II	3.94	.79	.20	.08	.55	1.02
III	4.72	.98	.24	.08	.71	1.26
IV	5.91	1.26	.32	.08	.95	1.50
V	7.09	1.50	.32	.08	1.10	1.81

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S FIXATOR® TECHNICAL SPECIFICATIONS

DESCRIPTION		DIM.	SI	SII	SIII	SIV	SV
Recomended machine dead weight per Fixator® *		Lbs.	2,200	4,400	8,800	13,000	22,000
Maximum allowable load per Fixator® **		Lbs.	20,008	26,500	53,000	80,000	133,000
Spring Constant		Lbs./In.	8,550,000	11,400,000	14,250,000	17,100,000	22,800,000
Approximate Torque Required To Turn Adjusting Screw		Ft. Lbs. / 1000 Lbs.	12	15	17	20	23
Maximum Allowable Torque On Adjusting Screw		Ft. Lbs.	90	175	350	700	1,500
Maximum Torque at the Hold Down Nut		Ft. Lbs.	45	88	176	350	700
Weight of Basic Unit		Lbs.	7.2	11.2	18.5	33.7	60.7
Maximum Tension On Anchor Bolt	Option se	Lbs.	11,650	17,820	25,300	40,040	58,300
	Option c	Lbs.	9,900	14,300	26,400	41,800	60,500

Vertical Adjustment per Screw turn: .079 inches for all sizes.

***Standard approach for determination of Fixator® size.**

****Maximum allowable is the total of the following.**

a) **Proportional Machine Load.**

b) **Tensile Force Exerted by Anchor Bolt.**

c) **Dynamic (Acceleration) Forces.**

d) **Changing Loads (moving machine parts or workpieces).**

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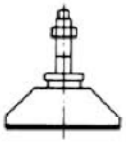
S FIXATOR® OPTIONS

Options	The basic design can be modified by the following versions to adapt it to any type of machine or building construction feature.
b 	Base surface of S FIXATORS® machined.
se 	High tensile hold-down and adjusting bolt.
p 	Spherical washer set.
r 	Oversized spherical washer set.
v 	Enlarged spherical support washer.
c 	Two side anchor bolts for securing the S FIXATORS® to the foundation.
sew 	Center anchor hold-down stud.
d 	Access opening cover.

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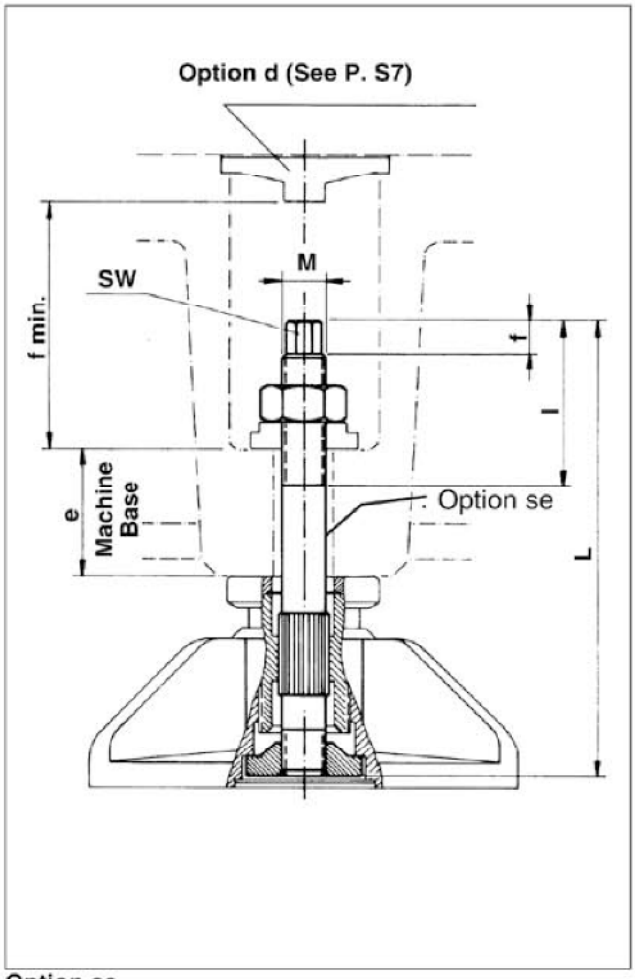
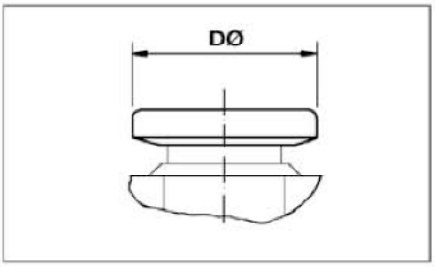
S FIXATOR® DETAILED OPTION SPECIFICATIONS NON-ANCHORED INSTALLATION

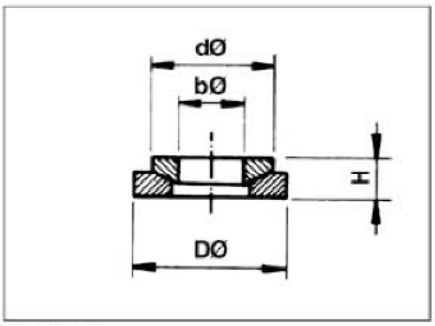


Option se

DIMENSIONS	
SIZE S	DØ
I	2.76
II	3.15
III	3.94
IV	4.72
V	5.91



Option v

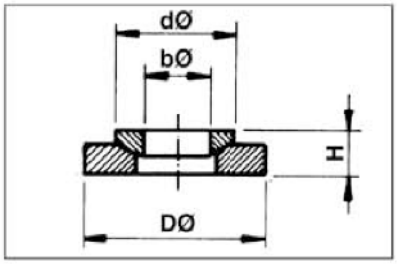


Option r

DIMENSIONS				
SIZE S	DØ	H	dØ	bØ
I	1.73	.39	1.42	.67
II	2.20	.51	1.73	.83
III	2.68	.63	2.21	.98
IV	3.07	.79	2.68	1.22
V	3.94	.79	2.68	1.46

DIMENSIONS											
SIZE S	M	l	SW	t	f	L	e from	e to	L	e from	e to
I	M16	2.56	.47	.47	3.15	6.69	.79	1.58	7.48	1.58	2.36
II	M20	2.95	.89	.59	3.54	7.28	.79	1.58	8.07	1.58	2.36
III	M24	3.54	.75	.75	4.13	9.65	1.38	2.36	10.43	2.36	3.15
IV	M30	4.33	.95	.95	4.92	12.21	2.36	3.54	—	—	—
V	M36	5.12	1.18	1.18	6.30	14.96	2.76	4.33	—	—	—

Option p



DIMENSIONS				
SIZE S	DØ	H	dØ	bØ
I	1.58	.35	1.18	.67
II	1.73	.39	1.42	.83
III	2.21	.51	1.73	.98
IV	2.68	.63	2.21	1.22
V	3.07	.79	2.68	1.46

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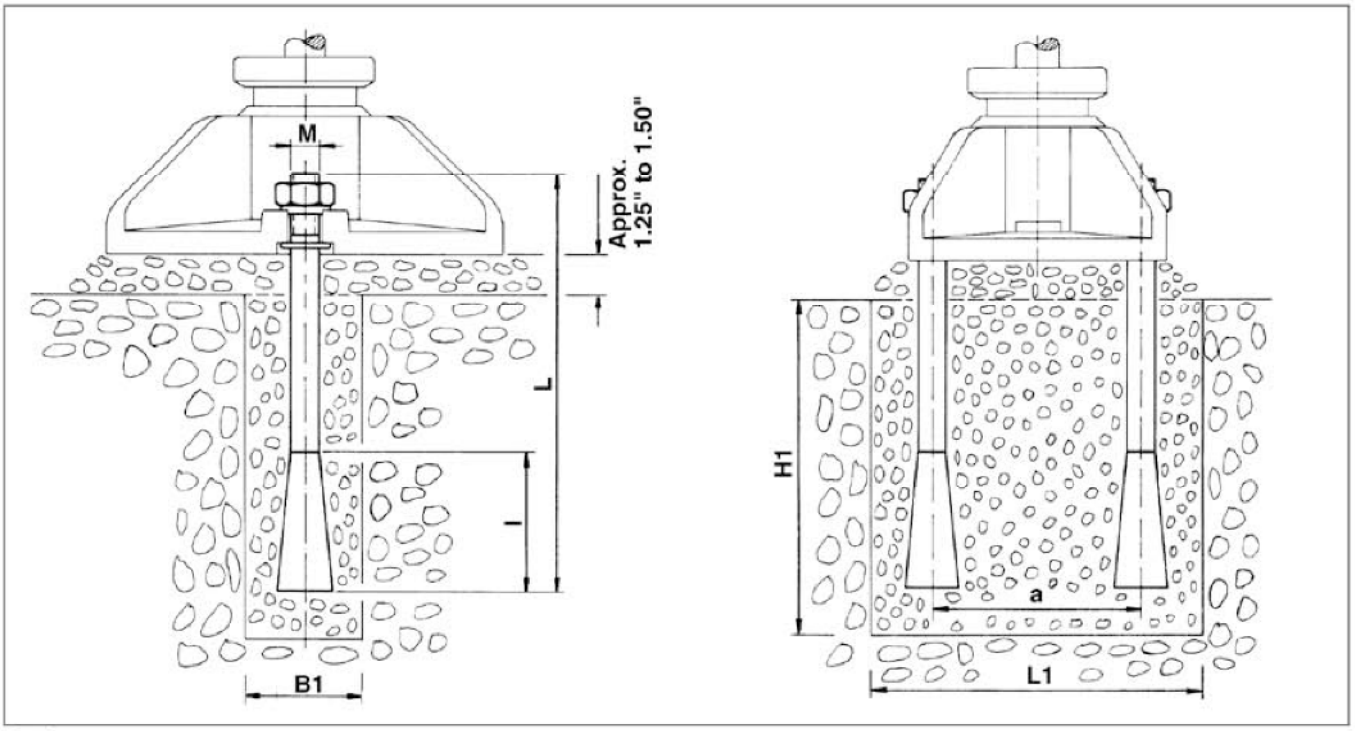
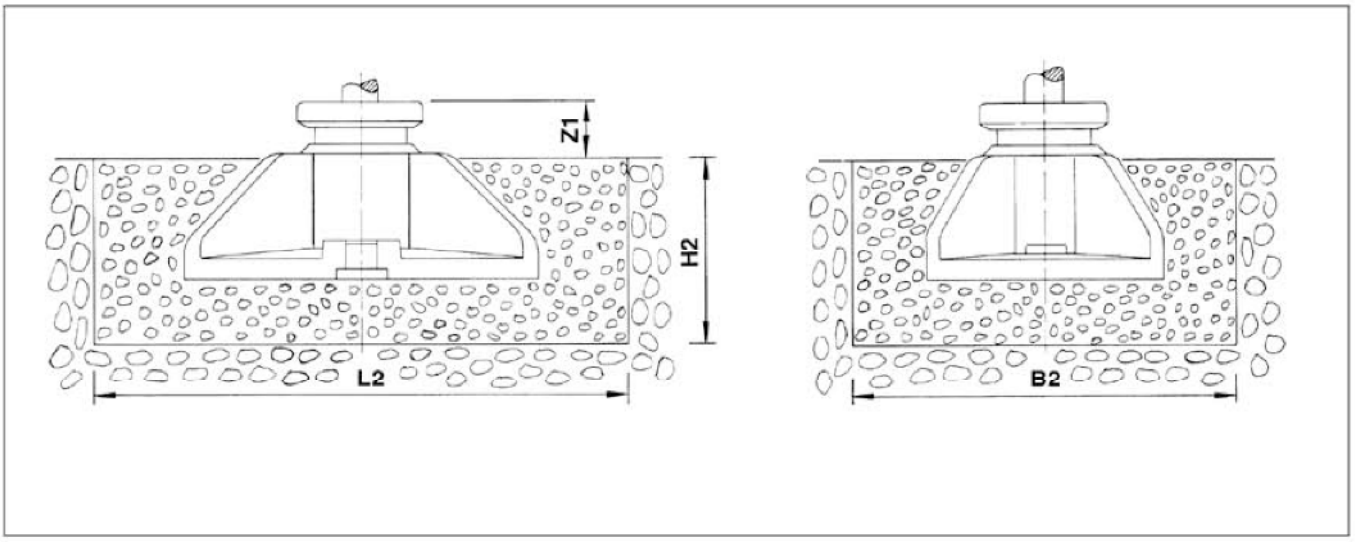
S FIXATOR® DETAILED OPTION SPECIFICATIONS ANCHORED INSTALLATION



Option c

DIMENSIONS											
SIZE S	M	L	l	a	B1	L1	H1	B2	L2	H2	Z1
I	M10	4.92	2.17	3.47	1.97	5.32	4.72	6.30	11.81	3.94	1.18
II	M12	5.91	2.76	3.94	2.36	6.30	5.51	7.87	12.99	4.33	1.38
III	M16	9.84	3.54	4.72	2.76	7.87	9.45	9.45	13.78	5.51	1.58
IV	M20	11.81	3.94	5.91	3.15	9.84	11.42	11.81	17.72	6.30	1.77
V	M24	13.78	5.32	7.09	3.94	13.78	13.78	12.60	19.69	7.48	1.97



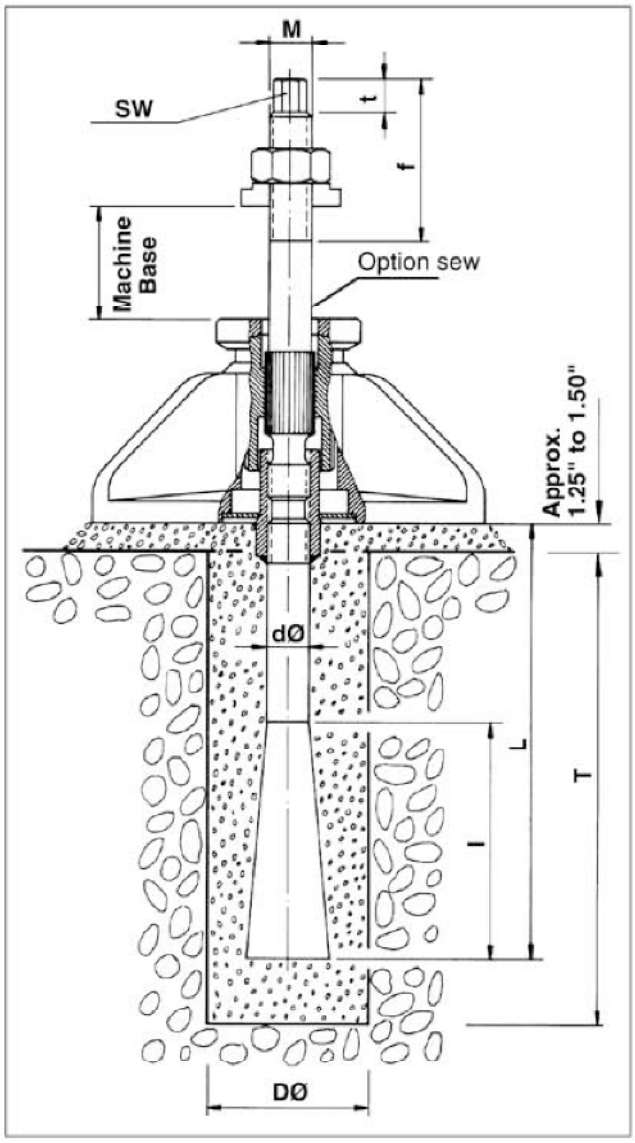
UNISORB®
INSTALLATION SOLUTIONS

S FIXATOR® DETAILED OPTION SPECIFICATIONS ANCHORED INSTALLATION

Option sew

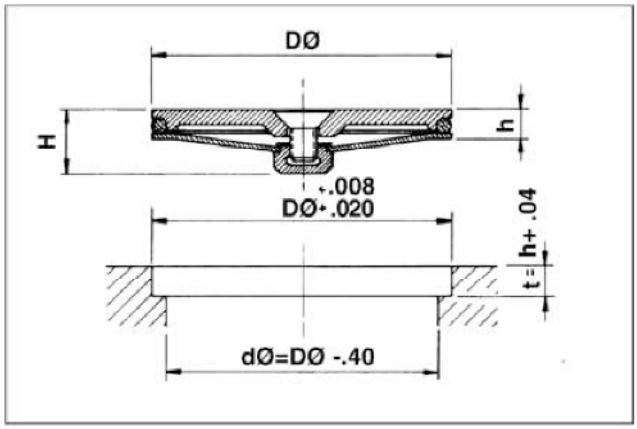
DIMENSIONS							
S	M	f	SW	t	dØ	L	l
I	M16	2.56	.47	.47	.63	5.91	3.54
II	M20	2.95	.59	.59	.79	7.87	3.94
III	M24	3.54	.75	.75	.95	10.63	5.32
IV	M30	4.33	.95	.95	1.18	12.60	5.91
V	M36	5.12	1.18	1.18	1.42	13.72	7.09

DIMENSIONS		
S	DØ	T
I	3.00	7.09
II	3.50	9.84
III	4.00	12.60
IV	5.00	14.96
V	6.00	20.47



Option d

DIMENSIONS								
D	63	80	90	110	130	150	200	250
H	1.26	1.26	1.26	1.26	1.26	1.26	1.69	1.69
h	.43	.43	.43	.43	.43	.43	.45	.45
DØ	2.48	3.15	3.54	4.33	5.12	5.91	7.87	9.84



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S FIXATOR® INSTALLATION INSTRUCTIONS

Clean the concrete foundation or floor thoroughly,

Clean the bottom surface of the machine or worktable.

The S Fixators® must be adjusted to the same height. Standard adjustment at delivery: 1/8" above the lowest point.

The S Fixators® are protected against corrosion (therefore do not grease them).

When grouting in the anchor bolts, the specifications on Page 53 of this Fixator® publication must be carefully complied with.

Attach the S Fixators® to the worktable or machine feet and lower onto temporary auxiliary wedges.

Align the worktable or machine feet by using the auxiliary wedges, making certain that dimension between the worktable or machine feet and foundation is adhered to.

Fill the grout pocket with grout.

After proper grout cure the auxiliary wedges may be removed and the worktable or machine may be aligned.

Tighten the nuts on the se hold down bolts. The installation is now complete.