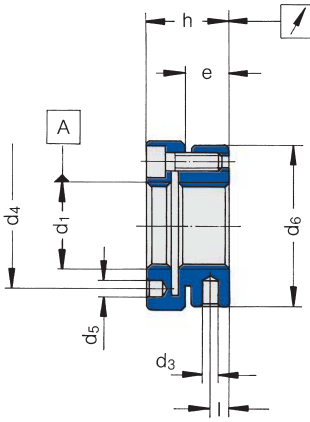
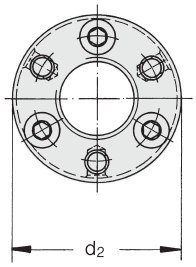
SPIETH LOCKNUTS SERIES **MSR**

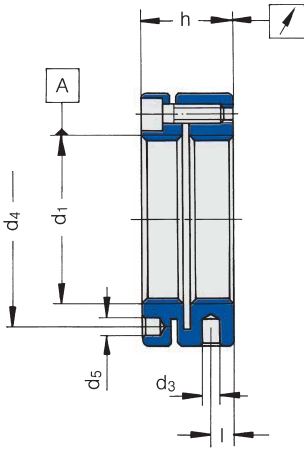


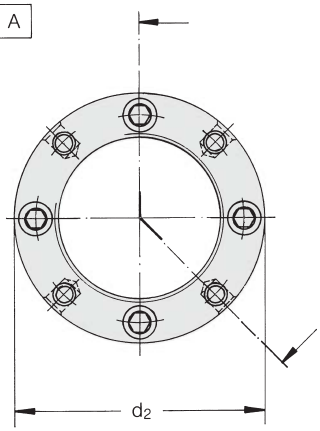


The admissible operating loads specified in the table are guideline values calculated with a safety factor of 1.6

- under static stress relative to the minimum yield point,
- under dynamic stress relative to the minimum alternate strength.

Order No.	Dimensions in mm									Clamping screws			Calculation factor	Calculation factor	Perm. axial stress		Moment of inertia
	d_1	d_2	d_3 1)	d_4	d_5 1)	d_6	h	l	e	ISO 4762	M_A	No.	A	B	dyn.	stat.	J
	ISO-5H	h11	H11		H11	h11					Nm		mm	N	kN	kN	kg cm²
MSR 10.0,75	M10x0.75	24	2.5	17	3.2	22	14	3	6.5	M3	2	3	0.672	2457	12	16	0.025
MSR 10.1	M10x1	24	2.5	17	3.2	22	15	3	6.5	M3	2	3	0.703	2457	12	15	0.027
MSR 12.1	M12x1	26	3	19	3.2	25	14	3	6.5	M3	2	3	0.819	2438	14	19	0.037
MSR 12.1,5	M12x1.5	26	3	19	3.2	25	15	3	6.5	M3	2	3	0.881	2438	13	18	0.040
MSR 14.1,5	M14x1.5	32	4	22.5	4.3	30	16	3	7	M4	2.9	3	0.997	2995	17	22	0.096
MSR 15.1	M15x1	33	4	23.5	4.3	31	16	3	7	M4	2.9	3	0.992	2984	19	25	0.108





Order No.	Dimensions in mm							Clamping screws			Calculation factor	Calculation factor	Perm. axial stress		Moment of inertia
	d_1	d_2	d_3 1)	d_4	d_5 1)	h	l	ISO 4762	M_A	No.	A	B	dyn.	stat.	J
	ISO-5H	h11	H11		H11				Nm		mm	N	kN	kN	kg cm²
MSR 16.1,5	M16x1.5	34	4	24.5	4.3	18	5	M4	2.9	4	1.112	3962	17	22	0.147
MSR 17.1	M17x1	35	4	25.5	4.3	18	5	M4	2.9	4	1.108	3947	19	25	0.164
MSR 18.1,5	M18x1.5	36	4	26.5	4.3	18	5	M4	2.9	4	1.228	3931	19	25	0.183
MSR 20.1	M20x1	40	4	30.5	4.3	18	5	M4	2.9	4	1.281	3900	22	29	0.283
MSR 20.1,5	M20x1.5	40	4	30.5	4.3	18	5	M4	2.9	4	1.344	3900	18	28	0.283
MSR 22.1,5	M22x1.5	40	4	30.5	4.3	18	5	M4	2.9	4	1.459	3869	23	32	0.270
MSR 24.1,5	M24x1.5	42	4	32.5	4.3	18	5	M4	2.9	4	1.575	3838	25	35	0.323
MSR 25.1,5	M25x1.5	45	5	36.5	4.3	20	6.5	M4	2.9	4	1.633	3822	33	47	0.488
MSR 26.1,5	M26x1.5	45	5	36.5	4.3	20	6.5	M4	2.9	4	1.690	3806	34	49	0.479
MSR 28.1,5	M28x1.5	46	5	38.5	4.3	20	6.5	M4	2.9	4	1.805	3775	36	53	0.504

Order No.	Dimensions in mm							Clamping screws			Calculation factor A	Calculation factor B	Perm. axial stress		Moment of inertia J
	d_1	d_2	d_3 [1]	d_4	d_5 [1]	h	l	ISO 4762	M_A	No.			dyn.	stat.	
	ISO-5H	h11	H11		H11				Nm		mm	N	kN	kN	kg cm²
MSR 30.1,5	M30x1.5	48	5	40.5	4.3	20	6.5	M4	2.9	4	1.921	3744	38	57	0.588
MSR 32.1,5	M32x1.5	50	5	42.5	4.3	22	7	M4	2.9	4	2.037	3713	44	64	0.743
MSR 35.1,5	M35x1.5	53	5	45.5	4.3	22	7	M4	2.9	4	2.210	3666	47	66	0.914
MSR 38.1,5	M38x1.5	58	5	48.5	4.3	22	7	M4	2.9	4	2.449	3619	50	75	1.340
MSR 40.1,5	M40x1.5	58	5	50.5	4.3	22	7	M4	2.9	4	2.500	3588	49	66	1.250
MSR 42.1,5	M42x1.5	60	5	52.5	4.3	22	7	M4	2.9	4	2.617	3557	49	66	1.410
MSR 45.1,5	M45x1.5	68	6	58	4.3	22	6.5	M4	2.9	6	2.789	5265	53	84	2.490
MSR 48.1,5	M48x1.5	68	6	59.5	4.3	25	9	M4	2.9	6	2.962	5195	70	94	2.630
MSR 50.1,5	M50x1.5	70	6	61.5	4.3	25	9	M4	2.9	6	3.079	5148	71	94	2.910
MSR 52.1,5	M52x1.5	72	6	63.5	4.3	25	9	M4	2.9	6	3.196	5101	72	96	3.210
MSR 55.1,5	M55x1.5	75	6	66.5	4.3	25	9	M4	2.9	6	3.369	5031	72	96	3.690
MSR 55.2	M55x2	75	6	66.5	4.3	25	9	M4	2.9	6	3.430	5031	78	96	3.690
MSR 58.1,5	M58x1.5	82	6	72.5	5.3	26	9	M5	6	6	3.541	8077	103	161	5.810
MSR 60.1,5	M60x1.5	84	6	74.5	5.3	26	9	M5	6	6	3.655	8001	105	163	6.320
MSR 60.2	M60x2	84	6	74.5	5.3	26	9	M5	6	6	3.718	8001	104	163	6.320
MSR 62.1,5	M62x1.5	86	6	76.5	5.3	28	10.5	M5	6	6	3.774	7925	123	186	7.330
MSR 65.1,5	M65x1.5	88	6	78.5	5.3	28	10.5	M5	6	6	3.948	7811	129	177	7.710
MSR 65.2	M65x2	88	6	78.5	5.3	28	10.5	M5	6	6	4.007	7811	127	177	7.710
MSR 68.1,5	M68x1.5	95	8	83	5.3	28	9.5	M5	6	6	4.121	7696	133	223	11.000
MSR 70.1,5	M70x1.5	95	8	85	5.3	28	9.5	M5	6	6	4.238	7620	136	203	10.500
MSR 70.2	M70x2	95	8	85	5.3	28	9.5	M5	6	6	4.297	7620	134	203	10.500
MSR 72.1,5	M72x1.5	98	8	86	6.4	28	8.5	M6	10	6	4.354	10692	124	170	11.800
MSR 75.1,5	M75x1.5	100	8	88	6.4	28	8.5	M6	10	6	4.525	10530	121	160	12.300
MSR 75.2	M75x2	100	8	88	6.4	28	8.5	M6	10	6	4.583	10530	126	160	12.300
MSR 80.2	M80x2	110	8	95	6.4	32	11	M6	10	6	4.873	10260	162	258	22.000
MSR 85.2	M85x2	115	8	100	6.4	32	11	M6	10	6	5.168	9990	170	262	25.700
MSR 90.2	M90x2	120	8	108	6.4	32	11	M6	10	6	5.453	9720	178	265	29.600
MSR 95.2	M95x2	125	8	113	6.4	32	11	M6	10	6	5.744	9450	185	268	34.000
MSR 100.2	M100x2	130	8	118	6.4	32	11	M6	10	6	6.033	9180	193	271	38.800
MSR 105.2	M105x2	135	8	123	6.4	32	11	M6	10	6	6.321	8910	203	274	44.100
MSR 110.2	M110x2	140	8	128	6.4	32	11	M6	10	6	6.616	8640	212	280	49.800
MSR 115.2	M115x2	145	8	133	6.4	36	13	M6	10	6	6.900	8370	248	329	64.200
MSR 120.2	M120x2	155	8	140	6.4	36	13	M6	10	6	7.193	8100	272	408	89.700
MSR 125.2	M125x2	160	8	148	6.4	36	13	M6	10	6	7.474	7830	281	412	99.700
MSR 130.3	M130x3	165	8	153	6.4	36	13	M6	10	6	7.895	7560	285	405	111.000
MSR 140.3	M140x3	180	10	165	6.4	36	12	M6	10	8	8.475	9360	302	476	161.000
MSR 150.3	M150x3	190	10	175	6.4	36	12	M6	10	8	9.050	8640	325	489	193.000
MSR 160.3	M160x3	205	10	185	8.4	40	14	M8	25	8	9.633	14520	377	552	301.000
MSR 170.3	M170x3	215	10	195	8.4	40	14	M8	25	8	10.213	13200	399	560	353.000
MSR 180.3	M180x3	230	10	210	8.4	40	14	M8	25	8	10.789	11880	420	648	478.000
MSR 190.3	M190x3	240	10	224	8.4	40	14	M8	25	8	11.362	10560	444	656	550.000
MSR 200.3	M200x3	245	10	229	8.4	40	14	M8	25	8	11.948	9240	467	578	545.000

[1] The number of holes corresponds to the number of clamping screws.