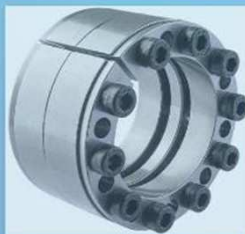
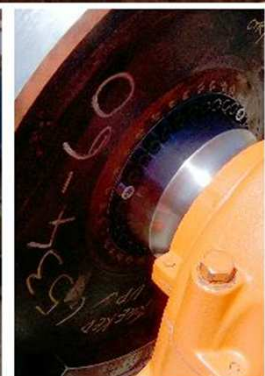




Locking Assemblies for use with Bending Load ed. 2020-ENG



MAV 2005 - MAV 2205 - MAV 4071 - MAV 1800 - MAV 4061 - MAV 1008 - MAV 1061 - MAV 6002



© 2020 MAV S.p.A. All rights reserved.
This catalogue may not be reproduced, either wholly or partly without the written authorisation of MAV S.p.A.

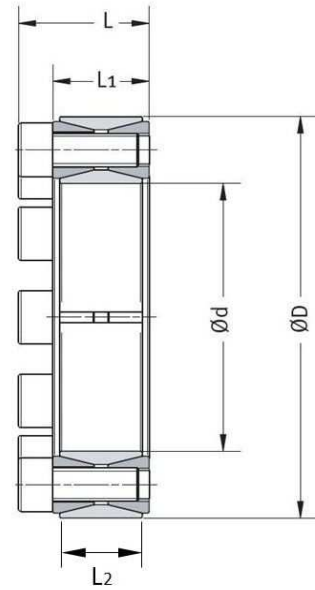
MAV S.p.A. ■ Via Venezia, 12 ■ 38049 Bosentino ■ Altopiano della Vigolana (TN) ■ Italy
Tel +39 0461 84 51 51 ■ Fax +39 0461 84 51 50 ■ www.mav.it ■ info@mav.it

Locking assembly series MAV 2005 for use with bending loads Rev.2/2018

Ma = screw's tightening torque (reduced)
 Mt = max torque capacity, without bending
 Mb max = max bending capacity, without torque
 Mt_res = remaining torque capacity, with max bending Mb
 Ps = shaft contact pressure, without bending Mb max
 Ph = hub contact pressure, without bending Mb max

Tolerances: shaft h7 to h11; hub bore H7 to H11
 Installation clearance at shaft and hub bore should be as symmetric as possible to avoid excessive deformation of the thrust rings. The difference between deviations of nominal dimensions of shaft and hub bore should not exceed IT 9 (with regard to d).

Surface finish: shaft & hub bore $0,8 \leq Ra \leq 3,2 \mu\text{m}$



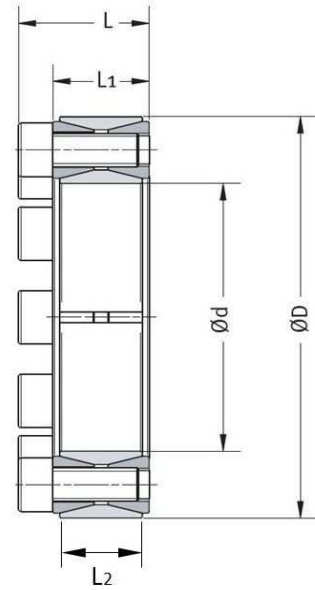
DIMENSIONS						SCREWS ISO 4762 12.9				CAPACITY			CONTACT PRESSURES	
d	x	D	L	L1	L2	bolt circle (PCD)	no.	M	Ma (red.)	Mt without Mb	Mb max without Mt	Mt_res with Mb max	Ps without Mb	Ph without Mb
[mm]		[mm]	[mm]	[mm]	[mm]	[mm]			[Nm]	[Nm]	[Nm]	[Nm]	[N/mm ²]	[N/mm ²]
18	x	47	26	20	17	34,5	8	M6 x 18	14	240	66	230	236	90
19	x	47	26	20	17	34,5	8	M6 x 18	14	260	66	250	222	90
20	x	47	26	20	17	34,5	8	M6 x 18	14	270	66	260	211	90
22	x	47	26	20	17	34,5	8	M6 x 18	14	300	66	290	190	90
24	x	50	26	20	17	37,5	9	M6 x 18	14	360	81	350	195	94
25	x	50	26	20	17	37,5	9	M6 x 18	14	370	81	360	187	94
28	x	55	26	20	17	42,5	10	M6 x 18	14	460	100	450	184	94
30	x	55	26	20	17	42,5	10	M6 x 18	14	490	100	480	171	94
32	x	60	26	20	17	47,5	12	M6 x 18	14	630	140	610	192	102
35	x	60	26	20	17	47,5	12	M6 x 18	14	680	140	670	174	102
38	x	65	26	20	17	52,5	14	M6 x 18	14	860	190	840	186	109
40	x	65	26	20	17	52,5	14	M6 x 18	14	900	190	880	177	109
42	x	75	32	24	20	60,0	12	M8 x 22	35	1.570	360	1.530	235	132
45	x	75	32	24	20	60,0	12	M8 x 22	35	1.670	360	1.630	219	132
48	x	80	32	24	20	65,0	12	M8 x 22	35	1.770	400	1.720	204	123
50	x	80	32	24	20	65,0	12	M8 x 22	35	1.840	400	1.800	196	123
55	x	85	32	24	20	70,0	14	M8 x 22	35	2.350	510	2.290	206	133
60	x	90	32	24	20	75,0	14	M8 x 22	35	2.550	560	2.490	188	125
63	x	95	32	24	20	80,0	16	M8 x 22	35	3.050	690	2.970	204	135
65	x	95	32	24	20	80,0	16	M8 x 22	35	3.140	690	3.060	197	135
70	x	110	38	28	24	90,0	14	M10 x 25	69	4.700	1.030	4.590	212	135
75	x	115	38	28	24	95,0	14	M10 x 25	69	5.010	1.100	4.890	197	128
80	x	120	38	28	24	100,0	14	M10 x 25	69	5.320	1.170	5.190	184	123
85	x	125	38	28	24	105,0	16	M10 x 25	69	6.440	1.410	6.280	197	134
90	x	130	38	28	24	110,0	16	M10 x 25	69	6.800	1.490	6.630	185	128
95	x	135	38	28	24	115,0	18	M10 x 25	69	8.040	1.760	7.840	197	139
100	x	145	45	33	26	122,5	14	M12 x 30	125	10.100	7.200	7.080	205	142
110	x	155	45	33	26	132,5	14	M12 x 30	125	11.000	7.800	7.760	186	132
120	x	165	45	33	26	142,5	16	M12 x 30	125	13.600	8.900	10.300	193	141
130	x	180	50	38	34	155,0	20	M12 x 35	125	18.400	11.200	14.600	170	123
140	x	190	50	38	34	165,0	22	M12 x 35	125	21.700	10.100	19.200	173	127
150	x	200	50	38	34	175,0	24	M12 x 35	125	25.200	8.900	23.600	175	131
160	x	210	50	38	34	185,0	26	M12 x 35	125	29.000	7.800	27.900	177	135

Locking assembly series MAV 2005 for use with bending loads Rev.2/2018

Ma = screw's tightening torque (reduced)
 Mt = max torque capacity, without bending
 Mb max = max bending capacity, without torque
 Mt_res = remaining torque capacity, with max bending Mb
 Ps = shaft contact pressure, without bending Mb max
 Ph = hub contact pressure, without bending Mb max

Tolerances: shaft h7 to h11; hub bore H7 to H11
 Installation clearance at shaft and hub bore should be as symmetric as possible to avoid excessive deformation of the thrust rings. The difference between deviations of nominal dimensions of shaft and hub bore should not exceed IT 9 (with regard to d).

Surface finish: shaft & hub bore $0,8 \leq Ra \leq 3,2 \mu\text{m}$



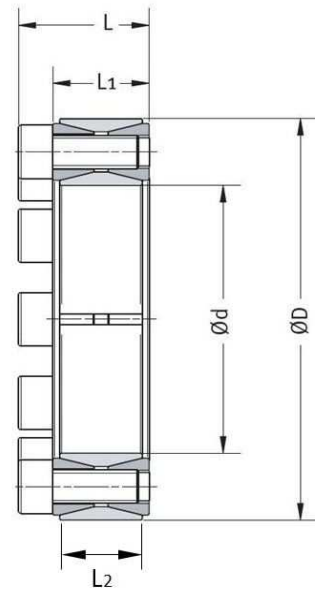
DIMENSIONS						SCREWS ISO 4762 12.9				CAPACITY			CONTACT PRESSURES	
d	x	D	L	L1	L2	bolt circle (PCD)	no.	M	Ma (red.)	Mt without Mb	Mb max without Mt	Mt_res with Mb max	Ps without Mb	Ph without Mb
[mm]		[mm]	[mm]	[mm]	[mm]	[mm]			[Nm]	[Nm]	[Nm]	[Nm]	[N/mm ²]	[N/mm ²]
170	x	225	58	44	38	197,5	22	M14 x 40	190	34.100	21.500	26.500	165	124
180	x	235	58	44	38	207,5	24	M14 x 40	190	39.200	18.800	34.400	169	129
190	x	250	66	52	46	220,0	28	M14 x 45	190	48.100	23.900	41.700	154	117
200	x	260	66	52	46	230,0	30	M14 x 45	190	54.100	21.000	49.900	156	120
220	x	285	72	56	50	252,5	26	M16 x 50	295	70.500	32.900	62.400	154	119
240	x	305	72	56	50	272,5	30	M16 x 50	295	88.000	20.400	85.600	162	128
260	x	325	72	56	50	292,5	34	M16 x 50	295	108.000	16.900	107.000	169	135
280	x	355	84	66	60	317,5	32	M18 x 60	405	132.000	38.800	126.000	149	118
300	x	375	84	66	60	337,5	36	M18 x 60	405	159.000	25.100	157.000	156	125
320	x	405	98	78	72	362,5	36	M20 x 70	580	218.000	37.200	215.000	157	124
340	x	425	98	78	72	382,5	36	M20 x 70	580	231.000	57.900	224.000	147	118
360	x	455	112	90	84	407,5	36	M22 x 80	780	299.000	75.000	289.000	146	115
380	x	475	112	90	84	427,5	36	M22 x 80	780	315.000	87.600	303.000	138	110
400	x	495	112	90	84	447,5	36	M22 x 80	780	330.000	151.000	293.000	130	105
420	x	515	112	90	84	467,5	40	M22 x 80	780	384.000	94.100	372.000	138	112
440	x	545	126	102	96	492,5	40	M24 x 90	1.000	468.000	113.000	454.000	134	108
460	x	565	126	102	96	512,5	40	M24 x 90	1.000	488.000	178.000	454.000	127	104
480	x	585	126	102	96	532,5	42	M24 x 90	1.000	533.000	168.000	506.000	128	105
500	x	605	126	102	96	552,5	44	M24 x 90	1.000	580.000	159.000	558.000	128	106
520	x	630	126	102	96	575,0	45	M24 x 90	1.000	616.000	195.000	584.000	126	104
540	x	650	126	102	96	595,0	45	M24 x 90	1.000	638.000	259.000	583.000	121	100
560	x	670	126	102	96	615,0	48	M24 x 90	1.000	704.000	213.000	671.000	124	104
580	x	690	126	102	96	635,0	50	M24 x 90	1.000	758.000	204.000	730.000	125	105
600	x	710	126	102	96	655,0	50	M24 x 90	1.000	783.000	269.000	735.000	120	102
620	x	730	126	102	96	675,0	52	M24 x 90	1.000	839.000	259.000	798.000	121	102
640	x	750	126	102	96	695,0	54	M24 x 90	1.000	898.000	250.000	862.000	121	103
660	x	770	126	102	96	715,0	56	M24 x 90	1.000	958.000	241.000	927.000	122	104
680	x	790	126	102	96	735,0	56	M24 x 90	1.000	986.000	305.000	938.000	118	101
700	x	810	126	102	96	755,0	60	M24 x 90	1.000	1.085.000	222.000	1.062.000	122	106
720	x	830	126	102	96	775,0	60	M24 x 90	1.000	1.114.000	287.000	1.076.000	119	103
740	x	850	126	102	96	795,0	62	M24 x 90	1.000	1.181.000	277.000	1.148.000	119	104
760	x	870	126	102	96	815,0	64	M24 x 90	1.000	1.250.000	268.000	1.221.000	120	104
780	x	890	126	102	96	835,0	65	M24 x 90	1.000	1.301.000	296.000	1.267.000	118	104

Locking assembly series MAV 2005 for use with bending loads Rev.2/2018

M_a = screw's tightening torque (reduced)
 M_t = max torque capacity, without bending
 $M_b \text{ max}$ = max bending capacity, without torque
 M_{t_res} = remaining torque capacity, with max bending M_b
 P_s = shaft contact pressure, without bending $M_b \text{ max}$
 P_h = hub contact pressure, without bending $M_b \text{ max}$

Tolerances: shaft h7 to h11; hub bore H7 to H11
 Installation clearance at shaft and hub bore should be as symmetric as possible to avoid excessive deformation of the thrust rings. The difference between deviations of nominal dimensions of shaft and hub bore should not exceed IT 9 (with regard to d).

Surface finish: shaft & hub bore $0,8 \leq R_a \leq 3,2 \mu\text{m}$



DIMENSIONS						SCREWS ISO 4762 12.9				CAPACITY			CONTACT PRESSURES	
d	x	D	L	L1	L2	bolt circle (PCD)	no.	M	M_a (red.)	M_t without M_b	$M_b \text{ max}$ without M_t	M_{t_res} with $M_b \text{ max}$	P_s without M_b	P_h without M_b
[mm]		[mm]	[mm]	[mm]	[mm]	[mm]			[Nm]	[Nm]	[Nm]	[Nm]	[N/mm ²]	[N/mm ²]
800	x	910	126	102	96	855,0	66	M24 x 90	1.000	1.353.000	324.000	1.314.000	117	103
820	x	930	126	102	96	875,0	68	M24 x 90	1.000	1.426.000	314.000	1.391.000	117	103
840	x	950	126	102	96	895,0	70	M24 x 90	1.000	1.502.000	305.000	1.471.000	118	104
860	x	970	126	102	96	915,0	72	M24 x 90	1.000	1.579.000	296.000	1.551.000	118	105
880	x	990	126	102	96	935,0	74	M24 x 90	1.000	1.659.000	287.000	1.634.000	118	105
900	x	1.010	126	102	96	955,0	75	M24 x 90	1.000	1.717.000	314.000	1.688.000	117	104
920	x	1.030	126	102	96	975,0	76	M24 x 90	1.000	1.776.000	342.000	1.743.000	116	104
940	x	1.050	126	102	96	995,0	78	M24 x 90	1.000	1.860.000	333.000	1.830.000	116	104
960	x	1.070	126	102	96	1.015,0	80	M24 x 90	1.000	1.945.000	323.000	1.918.000	117	105
980	x	1.090	126	102	96	1.035,0	81	M24 x 90	1.000	2.008.000	351.000	1.977.000	116	104
1.000	x	1.110	126	102	96	1.055,0	82	M24 x 90	1.000	2.072.000	379.000	2.037.000	114	103

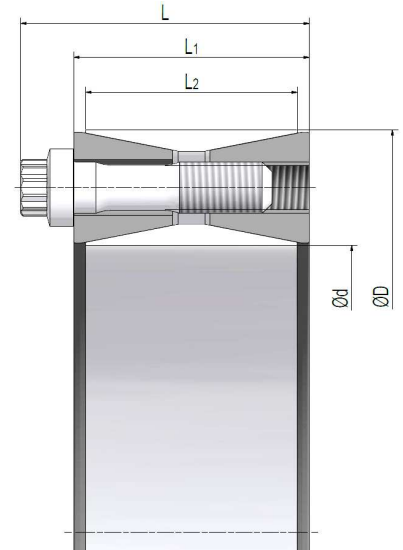
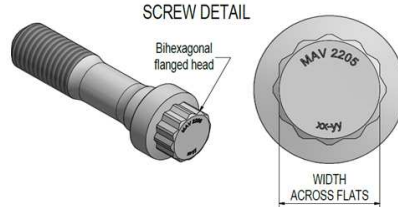
Information subject to change without prior notification, © MAV S.p.A.

Locking assembly series MAV 2205 for use with bending loads Rev.2/2020

Ma = screw's tightening torque (reduced)
 Mt = max torque capacity, without bending
 Mb max = max bending capacity, without torque
 Mt_res = remaining torque capacity, with max bending Mb
 Ps = shaft contact pressure, without bending Mb max
 Ph = hub contact pressure, without bending Mb max

Tolerances: shaft h9; hub bore H9
 Installation clearance at shaft and hub bore should be as symmetric as possible to avoid excessive deformation of the thrust rings. The difference between deviations of nominal dimensions of shaft and hub bore should not exceed IT 9 (with regard to d).

Surface finish: shaft & hub bore $0,8 \leq Ra \leq 3,2 \mu\text{m}$



DIMENSIONS						SCREWS BIHEXAGONAL FLANGED HEAD SPECIAL GRADE acc. MAV specs.					CAPACITY			CONTACT PRESSURES	
d	x	D	L	L1	L2	bolt circle (PCD)	no.	M	Ma (red.)	WIDTH ACROSS FLATS	Mt without Mb	Mb max without Mt	Mt_res with Mb max	Ps without Mb	Ph without Mb
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[Nm]	[mm]	[Nm]	[Nm]	[Nm]	[N/mm ²]	[N/mm ²]
100	x	145	45	33	26	122,5	13	M12	125	12	10.861	10.747	1.568	222	153
110	x	155	45	33	26	132,5	13	M12	125	12	11.876	11.686	2.115	200	142
120	x	165	45	33	26	142,5	15	M12	125	12	14.867	13.439	6.359	211	153
130	x	180	50	38	34	155,0	19	M12	125	12	20.299	17.112	10.920	187	135
140	x	190	50	38	34	165,0	23	M12	125	12	26.341	10.121	24.319	210	155
150	x	200	50	38	34	175,0	23	M12	125	12	28.101	15.327	23.553	195	146
160	x	210	50	38	34	185,0	25	M12	125	12	32.450	13.960	29.293	198	151
170	x	225	58	44	38	197,5	21	M14	190	14	37.767	29.261	23.878	182	138
180	x	235	58	44	38	207,5	23	M14	190	14	43.641	30.073	31.625	188	144
190	x	250	66	52	46	220,0	27	M14	190	14	53.894	38.556	37.657	172	131
200	x	260	66	52	46	230,0	28	M14	190	14	58.644	41.870	41.061	169	130
220	x	285	72	56	50	252,5	25	M16	295	16	78.716	53.228	57.990	173	133
240	x	305	72	56	50	272,5	26	M16	295	16	88.822	60.257	65.257	164	129
260	x	325	72	56	50	292,5	30	M16	295	16	110.473	51.614	97.675	173	139
280	x	355	84	66	60	317,5	29	M18	405	18	139.313	94.406	102.448	157	124
300	x	375	84	66	60	337,5	30	M18	405	18	153.747	97.244	119.087	151	121
320	x	405	98	78	72	362,5	30	M20	580	20	211.451	146.130	152.832	152	120
340	x	425	98	78	72	382,5	31	M20	580	20	231.277	150.428	175.672	147	118
360	x	455	112	90	84	407,5	32	M22	780	22	309.194	188.001	245.472	151	119
380	x	475	112	90	84	427,5	33	M22	780	22	335.435	215.716	256.872	147	117
400	x	495	112	90	84	447,5	34	M22	780	22	362.625	229.016	281.156	143	116
420	x	515	112	90	84	467,5	37	M22	780	22	413.091	206.358	357.855	148	121
440	x	545	126	102	96	492,5	37	M24	1.000	24	503.072	264.749	427.773	144	116
460	x	565	126	102	96	512,5	38	M24	1.000	24	538.655	297.901	448.780	141	115
480	x	585	126	102	96	532,5	39	M24	1.000	24	575.333	331.107	470.507	138	113
500	x	605	126	102	96	552,5	41	M24	1.000	24	628.434	319.653	541.065	139	115
520	x	630	126	102	96	575,0	42	M24	1.000	24	667.873	362.578	560.884	136	113
540	x	650	126	102	96	595,0	43	M24	1.000	24	708.401	373.454	601.967	134	112
560	x	670	126	102	96	615,0	45	M24	1.000	24	767.061	384.277	663.863	135	113
580	x	690	126	102	96	635,0	47	M24	1.000	24	827.948	372.823	739.257	136	114
600	x	710	126	102	96	655,0	48	M24	1.000	24	872.870	406.028	772.685	134	113
620	x	730	126	102	96	675,0	49	M24	1.000	24	918.871	421.896	816.289	132	112
640	x	750	126	102	96	695,0	52	M24	1.000	24	1.004.589	383.121	928.664	136	116
660	x	770	126	102	96	715,0	54	M24	1.000	24	1.073.761	371.668	1.007.386	136	117
680	x	790	126	102	96	735,0	54	M24	1.000	24	1.104.237	375.934	1.038.274	132	114
700	x	810	126	102	96	755,0	54	M24	1.000	24	1.134.657	375.944	1.070.566	128	111
720	x	830	126	102	96	775,0	54	M24	1.000	24	1.165.023	372.687	1.103.804	124	108
740	x	850	126	102	96	795,0	56	M24	1.000	24	1.239.607	386.347	1.177.863	125	109
760	x	870	126	102	96	815,0	58	M24	1.000	24	1.316.383	398.515	1.254.611	126	110
780	x	890	126	102	96	835,0	59	M24	1.000	24	1.372.088	405.240	1.310.880	125	109
800	x	910	126	102	96	855,0	60	M24	1.000	24	1.428.859	412.071	1.368.151	123	108

Locking assembly series MAV 4071 for use with bending loads Rev.2/2018

Ma = screw's tightening torque (reduced)

Mt = max torque capacity, without bending

Mb max = max bending capacity, without torque

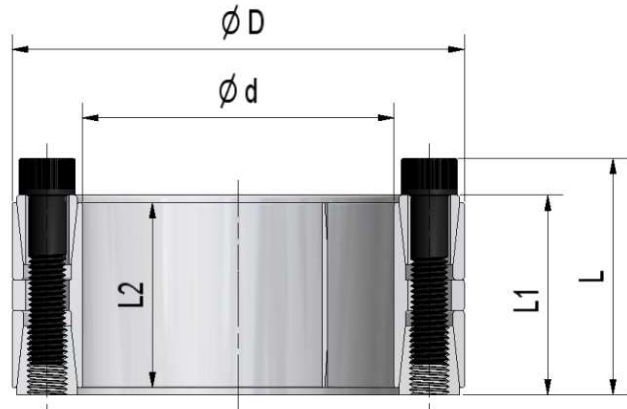
Mt_res = remaining torque capacity, with max bending Mb

Ps = shaft contact pressure, without bending Mb max

Ph = hub contact pressure, without bending Mb max

Tolerances: shaft h8; hub bore H8

Surface finish: shaft & hub bore $0,8 \leq Ra \leq 3,2 \mu m$



DIMENSIONS						SCREWS ISO 4762 12.9				CAPACITY			CONTACT PRESSURES	
d	x	D	L	L1	L2	bolt circle (PCD)	no.	M x L	Ma (red.)	Mt without Mb	Mb max without Mt	Mt_res with Mb max	Ps without Mb	Ph without Mb
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[Nm]	[Nm]	[Nm]	[Nm]	[N/mm ²]	[N/mm ²]
100	x	145	77	65	60	122,5	10	M12 x 55	115	11.412	11.314	1.492	151	104
110	x	155	77	65	60	132,5	10	M12 x 55	115	12.553	12.425	1.783	138	98
120	x	165	77	65	60	142,5	12	M12 x 55	115	16.433	16.264	2.349	151	110
130	x	180	86	74	68	155,0	15	M12 x 60	115	22.253	22.123	2.395	156	113
140	x	190	86	74	68	165,0	18	M12 x 60	115	28.757	21.819	18.732	174	128
150	x	200	86	74	68	175,0	18	M12 x 60	115	30.811	30.608	3.531	162	122
160	x	210	86	74	68	185,0	21	M12 x 60	115	38.343	22.729	30.880	177	135
170	x	225	95	81	75	197,5	18	M14 x 65	185	48.385	33.598	34.817	176	133
180	x	235	95	81	75	207,5	18	M14 x 65	185	51.231	50.246	9.996	166	127
190	x	250	108	94	88	220,0	20	M14 x 80	185	60.085	58.822	12.256	149	113
200	x	260	108	94	88	230,0	24	M14 x 80	185	75.897	31.177	69.198	170	131
220	x	285	120	104	98	252,5	18	M16 x 90	285	85.043	84.551	9.139	142	110
240	x	305	120	104	98	272,5	24	M16 x 90	285	123.699	52.656	111.932	174	137
260	x	325	120	104	98	292,5	25	M16 x 90	285	139.591	52.055	129.522	167	134
280	x	355	144	126	120	317,5	24	M18 x 110	390	175.443	125.567	122.528	148	117
300	x	375	144	126	120	337,5	25	M18 x 110	390	195.807	140.280	136.608	144	115
320	x	405	162	142	135	362,5	25	M20 x 120	550	267.813	172.661	204.725	159	126
340	x	425	162	142	135	382,5	25	M20 x 120	550	284.552	231.625	165.287	150	120
360	x	455	187	165	158	407,5	25	M22 x 130	745	369.507	293.994	223.836	139	110
380	x	475	187	165	158	427,5	25	M22 x 130	745	390.035	388.077	39.036	132	105
400	x	495	187	165	158	447,5	25	M22 x 130	745	410.563	408.485	41.253	125	101
420	x	515	187	165	158	467,5	30	M22 x 130	745	517.309	309.923	414.194	143	117
440	x	545	204	180	172	492,5	30	M24 x 150	960	636.436	414.871	482.631	148	120
460	x	565	204	180	172	512,5	30	M24 x 150	960	665.365	483.320	457.288	142	115
480	x	585	204	180	172	532,5	32	M24 x 150	960	740.580	443.822	592.858	145	119
500	x	605	204	180	172	552,5	32	M24 x 150	960	771.437	472.376	609.899	139	115
520	x	630	227	200	190	575,0	30	M27 x 160	1.440	1.011.627	611.849	805.624	153	126
540	x	650	227	200	190	595,0	30	M27 x 160	1.440	1.050.536	673.084	806.588	147	123
560	x	670	227	200	190	615,0	30	M27 x 160	1.440	1.089.445	682.359	849.280	142	119
580	x	690	227	200	190	635,0	30	M27 x 160	1.440	1.128.353	888.104	696.027	137	115
600	x	710	227	200	190	655,0	32	M27 x 160	1.440	1.245.080	796.152	957.270	142	120
620	x	730	227	200	190	675,0	32	M27 x 160	1.440	1.286.582	1.001.897	807.154	137	116
640	x	750	227	200	190	695,0	35	M27 x 160	1.440	1.452.593	649.647	1.299.225	145	124
660	x	770	227	200	190	715,0	35	M27 x 160	1.440	1.497.986	770.421	1.284.685	141	121
680	x	790	227	200	190	735,0	36	M27 x 160	1.440	1.587.477	434.428	1.526.877	141	121
700	x	810	227	200	190	755,0	36	M27 x 160	1.440	1.634.167	640.173	1.503.556	137	118
720	x	830	227	200	190	775,0	40	M27 x 160	1.440	1.867.619	643.464	1.753.270	147	128
740	x	850	227	200	190	795,0	40	M27 x 160	1.440	1.919.498	652.739	1.805.105	143	125
760	x	870	227	200	190	815,0	40	M27 x 160	1.440	1.971.376	662.014	1.856.896	140	122
780	x	890	227	200	190	835,0	40	M27 x 160	1.440	2.023.254	671.289	1.908.646	136	119
800	x	910	227	200	190	855,0	42	M27 x 160	1.440	2.178.889	775.807	2.036.095	139	123

Locking assembly series MAV 1800 for use with bending loads Rev.1/2018

Ma = screw's tightening torque

Mt = max torque capacity, without bending

Mb max = max bending capacity, without torque

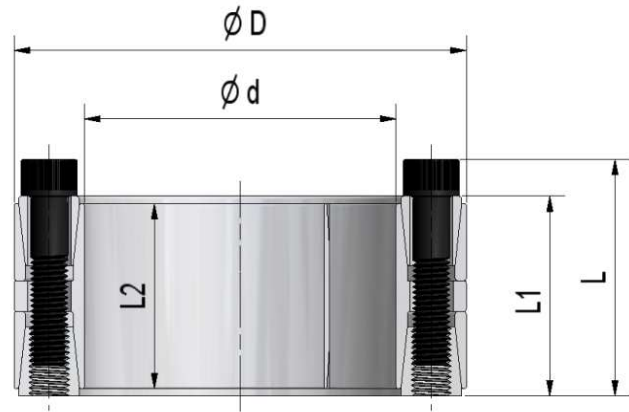
Mt_res = remaining torque capacity, with max bending Mb

Ps = shaft contact pressure, without bending Mb max

Ph = hub contact pressure, without bending Mb max

Tolerances: shaft h8; hub bore H8

Surface finish: shaft & hub bore $0,8 \leq Ra \leq 3,2 \mu\text{m}$



DIMENSIONS						SCREWS ISO 4762 12.9				CAPACITY			CONTACT PRESSURES	
d	x	D	L	L1	L2	bolt circle (PCD)	no.	M x L	Ma	Mt without Mb	Mb max without Mt	Mt_res with Mb max	Ps without Mb	Ph without Mb
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[Nm]	[Nm]	[Nm]	[Nm]	[N/mm ²]	[N/mm ²]
100	x	145	75	65	60	122,5	9	M10 x 55	83	6.699	6.663	690	87	60
110	x	155	75	65	60	132,5	10	M10 x 55	83	8.188	8.048	1.505	88	62
120	x	165	75	65	60	142,5	12	M10 x 55	83	10.718	10.656	1.153	96	70
130	x	180	84	74	68	155,0	15	M10 x 60	83	14.515	14.436	1.507	99	72
140	x	190	84	74	68	165,0	15	M10 x 60	83	15.631	15.547	1.624	92	68
150	x	200	84	74	68	175,0	16	M10 x 60	83	17.864	17.768	1.847	92	69
160	x	210	84	74	68	185,0	18	M10 x 60	83	21.437	21.324	2.199	97	74
170	x	225	93	81	75	197,5	15	M12 x 70	145	28.347	28.200	2.885	101	76
180	x	235	93	81	75	207,5	16	M12 x 70	145	32.015	31.847	3.274	101	78
190	x	250	106	94	88	220,0	18	M12 x 75	145	38.018	37.827	3.803	92	70
200	x	260	106	94	88	230,0	20	M12 x 75	145	44.465	44.242	4.456	97	75
220	x	285	116	104	98	252,5	21	M12 x 80	145	51.358	51.092	5.213	84	65
240	x	305	116	104	98	272,5	24	M12 x 80	145	64.030	63.705	6.447	88	69
260	x	325	116	104	98	292,5	27	M12 x 80	145	78.037	77.643	7.830	91	73
280	x	355	140	126	120	317,5	28	M14 x 100	230	118.879	118.275	11.964	98	77
300	x	375	140	126	120	337,5	28	M14 x 100	230	127.370	126.729	12.760	92	73
320	x	405	158	142	135	362,5	28	M16 x 110	355	184.934	183.997	18.595	107	85
340	x	425	158	142	135	382,5	28	M16 x 110	355	196.493	195.507	19.655	101	81
360	x	455	183	165	158	407,5	24	M18 x 140	485	216.242	215.157	21.637	79	63
380	x	475	183	165	158	427,5	27	M18 x 140	485	256.788	255.491	25.773	85	68
400	x	495	183	165	158	447,5	32	M18 x 140	485	320.359	318.747	32.091	95	77
420	x	515	183	165	158	467,5	32	M18 x 140	485	336.377	334.686	33.684	91	74
440	x	545	200	180	172	492,5	27	M20 x 140	690	384.216	382.283	38.488	87	71
460	x	565	200	180	172	512,5	27	M20 x 140	690	401.680	399.661	40.224	84	68
480	x	585	200	180	172	532,5	30	M20 x 140	690	465.716	463.296	47.416	89	73
500	x	605	200	180	172	552,5	30	M20 x 140	690	485.121	482.673	48.673	85	71
520	x	630	220	200	190	575,0	32	M20 x 150	690	538.161	535.445	53.998	79	66
540	x	650	220	200	190	595,0	32	M20 x 150	690	558.860	555.955	56.903	77	64
560	x	670	220	200	190	615,0	36	M20 x 150	690	652.003	648.718	65.365	83	69
580	x	690	220	200	190	635,0	36	M20 x 150	690	675.289	671.898	67.589	80	67
600	x	710	220	200	190	655,0	36	M20 x 150	690	698.575	695.068	69.905	77	65
620	x	730	220	200	190	675,0	36	M20 x 150	690	721.860	718.239	72.221	75	64
640	x	750	220	200	190	695,0	36	M20 x 150	690	745.146	726.676	164.877	73	62
660	x	770	220	200	190	715,0	40	M20 x 150	690	853.813	807.342	277.843	78	67
680	x	790	220	200	190	735,0	40	M20 x 150	690	879.687	807.341	349.354	76	65
700	x	810	220	200	190	755,0	40	M20 x 150	690	905.560	807.342	410.168	74	64
720	x	830	220	200	190	775,0	40	M20 x 150	690	931.433	807.342	464.507	72	62
740	x	850	220	200	190	795,0	42	M20 x 150	690	1.005.171	847.744	540.091	73	64
760	x	870	220	200	190	815,0	42	M20 x 150	690	1.032.338	847.745	589.110	71	62
780	x	890	220	200	190	835,0	42	M20 x 150	690	1.059.505	847.745	635.515	70	61
800	x	910	220	200	190	855,0	42	M20 x 150	690	1.086.672	847.745	679.841	68	60

Locking assembly series MAV 1008 for use with bending loads Rev.2/2018

Ma = screw's tightening torque

Mt = max torque capacity, without bending

Mb max = max bending capacity, without torque

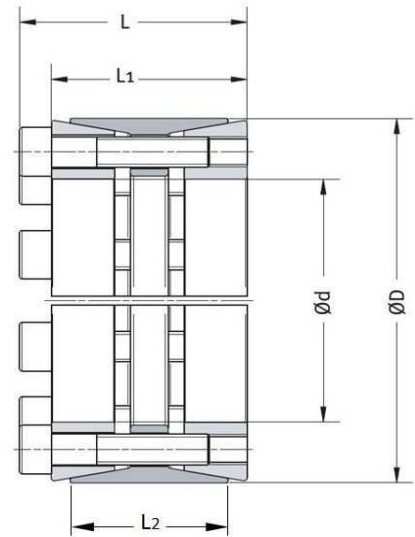
Mt_res = remaining torque capacity, with max bending Mb

Ps = shaft contact pressure, without bending Mb max

Ph = hub contact pressure, without bending Mb max

Tolerances: shaft h11; hub bore H11

Surface finish: shaft & hub bore $0,8 \leq Ra \leq 3,2 \mu\text{m}$



DIMENSIONS						SCREWS ISO 4762 12.9				CAPACITY			CONTACT PRESSURES	
d	x	D	L	L1	L2	bolt circle (PCD)	no.	M x L	Ma	Mt without Mb	Mb max without Mt	Mt_res with Mb max	Ps without Mb	Ph without Mb
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[Nm]	[Nm]	[Nm]	[Nm]	[N/mm ²]	[N/mm ²]
70	x	110	72	62	50	89	8	M10 x 50	83	7.300	2.900	6.700	197	125
75	x	115	72	62	50	94	8	M10 x 50	83	7.800	3.100	7.200	184	120
80	x	120	72	62	50	100	10	M10 x 50	83	10.400	4.200	9.500	216	144
85	x	125	72	62	50	105	10	M10 x 50	83	11.100	4.400	10.200	203	138
90	x	130	72	62	50	109	11	M10 x 50	83	12.900	5.200	11.800	211	146
95	x	135	72	62	50	113	11	M10 x 50	83	13.600	5.400	12.500	200	141
100	x	145	84	72	60	121	10	M12 x 60	145	19.400	7.800	17.800	215	148
110	x	155	84	72	60	131	10	M12 x 60	145	21.400	8.600	19.600	195	138
120	x	165	84	72	60	141	11	M12 x 60	145	25.600	10.200	23.500	197	143
130	x	180	93	81	65	152	14	M12 x 70	145	35.300	14.100	32.400	205	148
140	x	190	94	82	65	162	15	M12 x 70	145	40.800	16.300	37.400	204	151
150	x	200	94	82	65	172	15	M12 x 70	145	43.700	17.500	40.000	191	143
160	x	210	94	82	65	182	16	M12 x 70	145	49.700	19.900	45.500	191	145
170	x	225	107	93	78	194	15	M14 x 80	230	67.500	27.000	61.900	194	146
180	x	235	107	93	78	204	15	M14 x 80	230	71.500	28.600	65.500	183	140
190	x	250	119	105	88	214	16	M14 x 80	230	80.500	32.200	73.800	156	118
200	x	260	119	105	88	226	18	M14 x 80	230	105.000	42.000	96.200	183	141
220	x	285	127	111	96	247	15	M16 x 90	355	119.000	47.600	109.000	159	123
240	x	305	127	111	96	267	20	M16 x 90	355	173.000	69.200	159.000	194	153
260	x	325	127	111	96	287	21	M16 x 90	355	197.000	78.800	181.000	188	151
280	x	355	130	110	96	314	15	M20 x 90	690	237.000	94.800	217.000	217	171
300	x	375	131	111	96	334	15	M20 x 90	690	254.000	102.000	233.000	202	162
320	x	405	156	136	124	358	20	M20 x 110	690	362.000	145.000	332.000	195	154
340	x	425	156	136	124	378	20	M20 x 110	690	384.000	154.000	352.000	184	147
360	x	455	182	160	140	400	20	M22 x 130	930	499.000	200.000	457.000	170	135
380	x	475	182	160	140	420	20	M22 x 130	930	526.000	210.000	482.000	161	129
400	x	495	182	160	140	440	22	M22 x 130	930	610.000	244.000	559.000	168	136
420	x	515	182	160	140	460	24	M22 x 130	930	698.000	279.000	640.000	175	143
440	x	535	182	160	140	480	24	M22 x 130	930	731.000	292.000	670.000	167	137
460	x	555	182	160	140	500	24	M22 x 130	930	765.000	306.000	701.000	160	132
480	x	575	182	160	140	520	25	M22 x 130	930	831.000	332.000	762.000	159	133
500	x	595	182	160	140	540	25	M22 x 130	930	866.000	346.000	794.000	153	129
520	x	615	182	160	140	560	28	M22 x 130	930	1.008.000	403.000	924.000	165	139
540	x	635	182	160	140	580	28	M22 x 130	930	1.047.000	419.000	960.000	159	135
560	x	655	182	160	140	600	30	M22 x 130	930	1.164.000	466.000	1.067.000	164	140
580	x	675	182	160	140	620	30	M22 x 130	930	1.205.000	482.000	1.104.000	158	136
600	x	695	182	160	140	640	30	M22 x 130	930	1.247.000	499.000	1.143.000	153	132

Locking assembly series MAV 4061 for use with bending loads Rev.0/2018

Ma = screw's tightening torque

Mt = max torque capacity, without bending

Mb max = max bending capacity, without torque

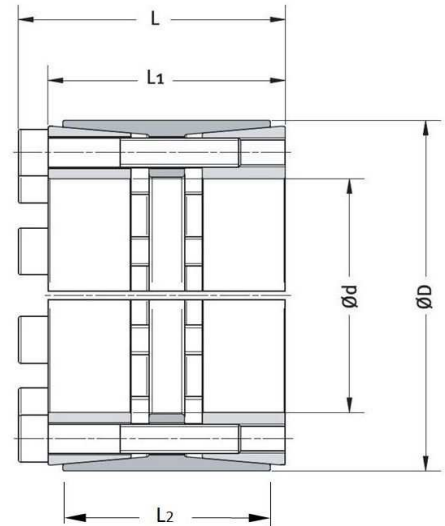
Mt_res = remaining torque capacity, with max bending Mb

Ps = shaft contact pressure, without bending Mb max

Ph = hub contact pressure, without bending Mb max

Tolerances: shaft h8; hub bore H8

Surface finish: shaft & hub bore $0,8 \leq Ra \leq 3,2 \mu\text{m}$



DIMENSIONS						SCREWS ISO 4762 12.9				CAPACITY				CONTACT PRESSURES	
d	x	D	L	L1	L2	bolt circle (PCD)	no.	M x L	Ma	Mt without Mb	Mb max without Mt	Mt_res with Mb max	Ps without Mb	Ph without Mb	
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[Nm]	[Nm]	[Nm]	[Nm]	[N/mm ²]	[N/mm ²]	
24	x	55	46	40	32	42,5	6	M6 x 35	17	800	400	690	308	134	
25	x	55	46	40	32	42,5	6	M6 x 35	17	840	420	730	295	134	
28	x	55	46	40	32	42,5	6	M6 x 35	17	940	470	810	264	134	
30	x	55	46	40	32	42,5	6	M6 x 35	17	1.000	500	870	246	134	
32	x	60	60	54	44	47	7	M6 x 45	17	1.200	600	1.040	190	101	
35	x	60	60	54	44	47	7	M6 x 45	17	1.400	700	1.210	174	101	
38	x	75	62	54	44	59	7	M8 x 45	41	2.700	1.350	2.340	296	150	
40	x	75	62	54	44	59	7	M8 x 45	41	2.900	1.450	2.510	281	150	
42	x	75	62	54	44	59	7	M8 x 45	41	3.000	1.500	2.600	268	150	
45	x	75	62	54	44	59	7	M8 x 45	41	3.200	1.600	2.770	250	150	
48	x	80	74	66	56	65	8	M8 x 55	41	4.000	2.000	3.460	207	124	
50	x	80	74	66	56	65	8	M8 x 55	41	4.100	2.050	3.550	198	124	
55	x	85	74	66	56	70	9	M8 x 55	41	5.100	2.550	4.420	203	131	
60	x	90	74	66	56	75	10	M8 x 55	41	6.200	3.100	5.370	207	138	
65	x	95	74	66	56	80	10	M8 x 55	41	6.700	3.350	5.800	191	131	
70	x	110	90	80	70	90	10	M10 x 60	83	11.800	5.900	10.200	229	145	
75	x	115	90	80	70	95	10	M10 x 60	83	12.700	6.350	11.000	213	139	
80	x	120	90	80	70	100	11	M10 x 60	83	14.900	7.450	12.900	220	147	
85	x	125	90	80	70	105	11	M10 x 60	83	15.800	7.900	13.700	207	141	
90	x	130	90	80	70	110	12	M10 x 60	83	18.200	9.100	15.800	213	148	
95	x	135	90	80	70	115	12	M10 x 60	83	19.300	9.650	16.700	202	142	
100	x	145	114	102	90	121	11	M12 x 80	145	27.700	13.900	24.000	210	145	
110	x	155	114	102	90	131	12	M12 x 80	145	33.300	16.700	28.800	209	148	
120	x	165	114	102	90	141	14	M12 x 80	145	42.400	21.200	36.700	223	162	
130	x	180	130	116	104	153	12	M14 x 90	230	53.700	26.900	46.500	201	145	
140	x	190	130	116	104	163	14	M14 x 90	230	67.400	33.700	58.400	217	160	
150	x	200	130	116	104	173	15	M14 x 90	230	77.400	38.700	67.000	217	163	
160	x	210	130	116	104	183	16	M14 x 90	230	88.100	44.100	76.300	217	166	
170	x	225	165	149	134	196	14	M16 x 110	355	111.000	55.500	96.100	186	141	
180	x	235	165	149	134	206	15	M16 x 110	355	126.000	63.000	109.000	188	144	
190	x	250	165	149	134	219	16	M16 x 110	355	142.000	71.000	123.000	190	145	
200	x	260	165	149	134	229	16	M16 x 110	355	150.000	75.000	130.000	181	139	
220	x	285	166	150	134	250	18	M16 x 110	355	185.000	92.500	160.000	185	143	
240	x	305	166	150	134	270	20	M16 x 110	355	225.000	113.000	195.000	188	148	
260	x	325	166	150	134	290	21	M16 x 110	355	256.000	128.000	222.000	182	146	

Locking assembly series MAV 4061 for use with bending loads Rev.0/2018

Ma = screw's tightening torque

Mt = max torque capacity, without bending

Mb max = max bending capacity, without torque

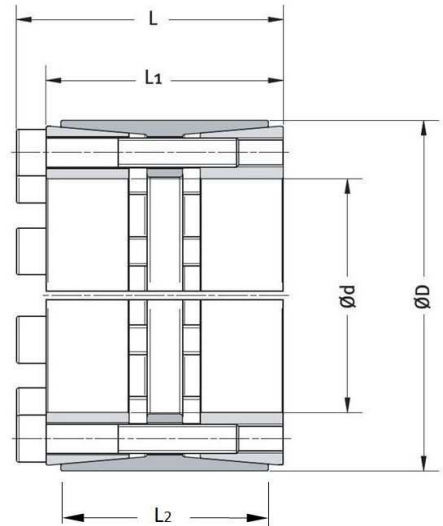
Mt_res = remaining torque capacity, with max bending Mb

Ps = shaft contact pressure, without bending Mb max

Ph = hub contact pressure, without bending Mb max

Tolerances: shaft h8; hub bore H8

Surface finish: shaft & hub bore $0,8 \leq Ra \leq 3,2 \mu\text{m}$



DIMENSIONS						SCREWS ISO 4762 12.9				CAPACITY			CONTACT PRESSURES	
d	x	D	L	L1	L2	bolt circle (PCD)	no.	M x L	Ma	Mt without Mb	Mb max without Mt	Mt_res with Mb max	Ps without Mb	Ph without Mb
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[Nm]	[Nm]	[Nm]	[Nm]	[N/mm ²]	[N/mm ²]
280	x	355	197	177	165	314	18	M20 x 130	690	370.000	185.000	320.000	190	150
300	x	375	197	177	165	334	20	M20 x 130	690	440.000	220.000	381.000	197	157
320	x	405	197	177	165	362	21	M20 x 130	690	493.000	247.000	427.000	194	153
340	x	425	197	177	165	382	22	M20 x 130	690	549.000	275.000	475.000	191	153
360	x	455	225	203	190	405	21	M22 x 150	930	680.000	340.000	589.000	183	145
380	x	475	225	203	190	425	22	M22 x 150	930	752.000	376.000	651.000	182	145
400	x	495	225	203	190	445	24	M22 x 150	930	864.000	432.000	748.000	188	152
420	x	515	225	203	190	465	24	M22 x 150	930	907.000	454.000	785.000	179	146
440	x	535	225	203	190	485	24	M22 x 150	930	950.000	475.000	823.000	171	141
460	x	555	225	203	190	505	24	M22 x 150	930	993.000	497.000	860.000	164	136
480	x	575	225	203	190	525	28	M22 x 150	930	1.209.000	605.000	1.047.000	183	153
500	x	595	225	203	190	545	28	M22 x 150	930	1.260.000	630.000	1.091.000	176	148
520	x	615	225	203	190	565	30	M22 x 150	930	1.404.000	702.000	1.216.000	181	153
540	x	635	225	203	190	585	30	M22 x 150	930	1.458.000	729.000	1.263.000	174	148
560	x	655	225	203	190	605	32	M22 x 150	930	1.613.000	807.000	1.397.000	179	153
580	x	675	225	203	190	625	32	M22 x 150	930	1.670.000	835.000	1.446.000	173	149
600	x	695	225	203	190	645	33	M22 x 150	930	1.782.000	891.000	1.543.000	173	149

Information subject to change without prior notification, © MAV S.p.A.

Locking assembly series MAV 1061 for use with bending loads Rev.0/2018

Ma = screw's tightening torque

Mt = max torque capacity, without bending

Mb max = max bending capacity, without torque

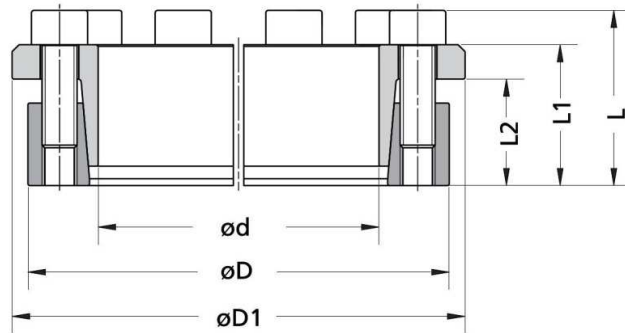
Mt_res = remaining torque capacity, with max bending Mb

Ps = shaft contact pressure, without bending Mb max

Ph = hub contact pressure, without bending Mb max

Tolerances: shaft h8; hub bore H8

Surface finish: shaft & hub bore $0,8 \leq Ra \leq 3,2 \mu\text{m}$



DIMENSIONS							SCREWS ISO 4762 12.9				CAPACITY			CONTACT PRESSURES	
d	x	D	D1	L	L1	L2	bolt circle (PCD)	no.	M x L	Ma	Mt without Mb	Mb max without Mt	Mt_res with Mb max	Ps without Mb	Ph without Mb
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[Nm]	[Nm]	[Nm]	[Nm]	[N/mm ²]	[N/mm ²]
14	x	28	32	24,5	20,5	17	23,2	4	M4 x 12	5	68	24	64	132	66
15	x	28	32	24,5	20,5	17	23,2	4	M4 x 12	5	73	26	68	123	66
16	x	32	37	25,5	21,5	18	24,5	4	M4 x 12	5	78	27	73	115	58
18	x	47	52	34,5	28,5	22,5	35	5	M6 x 20	17	250	88	230	241	92
19	x	47	52	34,5	28,5	22,5	35	5	M6 x 20	17	260	91	240	229	92
20	x	47	52	34,5	28,5	22,5	35	5	M6 x 20	17	280	98	260	217	92
22	x	47	52	34,5	28,5	22,5	35	5	M6 x 20	17	310	110	290	197	92
24	x	50	56,5	34,5	28,5	22,5	38	6	M6 x 20	17	400	140	370	217	104
25	x	50	56,5	34,5	28,5	22,5	38	6	M6 x 20	17	420	150	390	209	104
28	x	55	61,5	34,5	28,5	22,5	43	6	M6 x 20	17	470	160	440	186	95
30	x	55	61,5	34,5	28,5	22,5	43	6	M6 x 20	17	500	180	470	174	95
32	x	60	66,5	34,5	28,5	22,5	48	8	M6 x 20	17	710	250	660	217	116
35	x	60	66,5	34,5	28,5	22,5	48	8	M6 x 20	17	780	270	730	199	116
38	x	65	71,5	34,5	28,5	22,5	53	8	M6 x 20	17	850	300	800	183	107
40	x	65	71,5	34,5	28,5	22,5	53	8	M6 x 20	17	890	310	830	174	107
42	x	75	83,5	42,5	34,5	26,5	61	7	M8 x 25	41	1.510	530	1.410	227	127
45	x	75	83,5	42,5	34,5	26,5	61	7	M8 x 25	41	1.620	570	1.520	212	127
48	x	80	88,5	42,5	34,5	26,5	66	7	M8 x 25	41	1.730	610	1.620	199	119
50	x	80	88,5	42,5	34,5	26,5	66	7	M8 x 25	41	1.800	630	1.690	191	119
55	x	85	93,5	42,5	34,5	26,5	71	8	M8 x 25	41	2.260	790	2.120	198	128
60	x	90	98	42,5	34,5	26,5	76	8	M8 x 25	41	2.470	860	2.320	182	121
63	x	95	102	42,5	34,5	26,5	81	9	M8 x 25	41	2.920	1.020	2.740	195	129
65	x	95	102	42,5	34,5	26,5	81	9	M8 x 25	41	3.010	1.050	2.820	189	129
70	x	110	119	50,5	40,5	30,5	92	8	M10 x 30	83	4.730	1.660	4.430	213	136
75	x	115	124	50,5	40,5	30,5	97	8	M10 x 30	83	5.070	1.770	4.750	199	130
80	x	120	129	50,5	40,5	30,5	102	8	M10 x 30	83	5.410	1.890	5.070	187	124
85	x	125	134	50,5	40,5	30,5	107	9	M10 x 30	83	6.460	2.260	6.050	198	134
90	x	130	139	50,5	40,5	30,5	112	9	M10 x 30	83	6.840	2.390	6.410	187	129
95	x	135	144	50,5	40,5	30,5	117	10	M10 x 30	83	8.020	2.810	7.510	197	138
100	x	145	154	57	45	33	125	8	M12 x 35	145	10.100	3.540	9.460	206	142
110	x	155	164	57	45	33	135	8	M12 x 35	145	11.100	3.890	10.400	187	133
120	x	165	174	57	45	33	145	9	M12 x 35	145	13.600	4.760	12.700	193	140
130	x	180	189	69	55	41	157	9	M14 x 40	230	19.800	6.930	18.500	183	132
140	x	190	199	69	55	41	167	9	M14 x 40	230	21.400	7.490	20.000	170	125
150	x	200	209	69	55	41	177	10	M14 x 40	230	25.400	8.890	23.800	176	132
160	x	210	219	69	55	41	187	11	M14 x 40	230	29.900	10.500	28.000	182	139

Locking assembly series MAV 1061 for use with bending loads Rev.0/2018

Ma = screw's tightening torque

Mt = max torque capacity, without bending

Mb max = max bending capacity, without torque

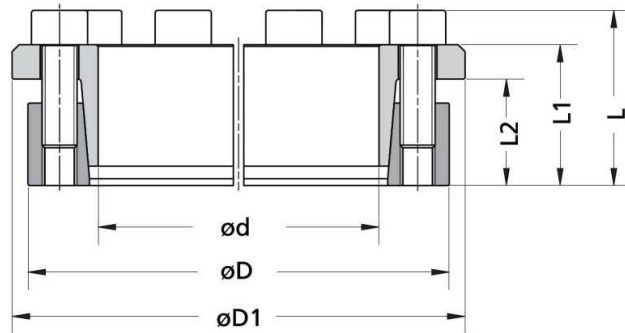
Mt_res = remaining torque capacity, with max bending Mb

Ps = shaft contact pressure, without bending Mb max

Ph = hub contact pressure, without bending Mb max

Tolerances: shaft h8; hub bore H8

Surface finish: shaft & hub bore $0,8 \leq Ra \leq 3,2 \mu\text{m}$



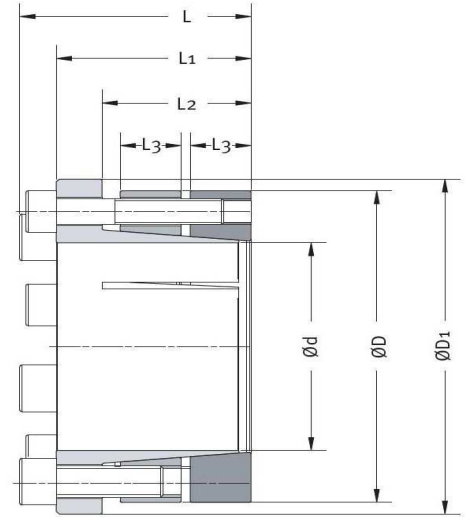
DIMENSIONS							SCREWS ISO 4762 12.9				CAPACITY			CONTACT PRESSURES	
d	x	D	D1	L	L1	L2	bolt circle (PCD)	no.	M x L	Ma	Mt without Mb	Mb max without Mt	Mt_res with Mb max	Ps without Mb	Ph without Mb
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[Nm]	[Nm]	[Nm]	[Nm]	[N/mm ²]	[N/mm ²]
170	x	225	234	79	65	51	200	12	M14 x 40	230	34.600	12.100	32.400	144	109
180	x	235	244	79	65	51	210	12	M14 x 40	230	36.600	12.800	34.300	136	104
190	x	250	259	79	65	51	225	15	M14 x 40	230	48.300	16.900	45.200	161	123
200	x	260	269	79	65	51	235	15	M14 x 40	230	50.900	17.800	47.700	153	118
220	x	285	292	89	73	57	257	12	M16 x 45	355	61.300	21.500	57.400	134	104
240	x	305	314	89	73	57	277	15	M16 x 45	355	83.600	29.300	78.300	154	121
260	x	325	334	89	73	57	297	18	M16 x 45	355	109.000	38.200	102.000	171	137
280	x	355	364	103	85	67	321	16	M18 x 50	485	126.000	44.100	118.000	142	112
300	x	375	384	103	85	67	341	18	M18 x 50	485	151.000	52.900	141.000	149	119
320	x	405	414	122	102	82	369	18	M20 x 50	690	209.000	73.200	196.000	146	116
340	x	425	434	122	102	82	389	21	M20 x 50	690	259.000	90.700	243.000	161	129
360	x	455	464	138	116	94	415	18	M22 x 60	930	292.000	102.000	274.000	139	110
380	x	475	484	138	116	94	435	21	M22 x 60	930	359.000	126.000	336.000	153	123
400	x	495	504	138	116	94	455	21	M22 x 60	930	378.000	132.000	354.000	146	118

Information subject to change without prior notification, © MAV S.p.A.

Locking assembly series MAV 6002 for use with bending loads Rev.2/2018

Ma = screw's tightening torque
 Mt = max torque capacity, without bending
 Mb max = max bending capacity, without torque
 Mt_res = remaining torque capacity, with max bending Mb
 Ps = shaft contact pressure, without bending Mb max
 Ph = hub contact pressure, without bending Mb max

Tolerances: shaft h8; hub bore H8
 Surface finish: shaft & hub bore $0,8 \leq Ra \leq 3,2 \mu\text{m}$

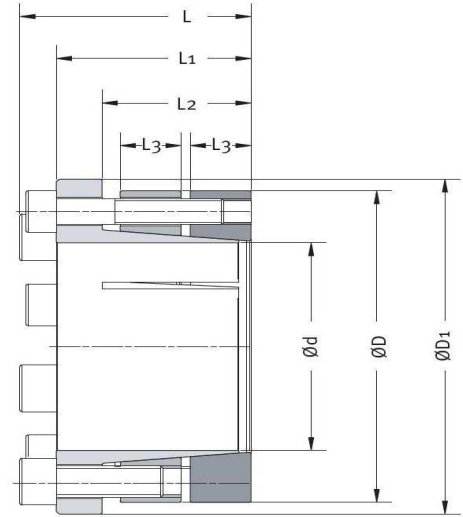


DIMENSIONS							SCREWS ISO 4762 12.9 SET 1				SCREWS ISO 4762 12.9 SET 2			CAPACITY			CONTACT PRESSURES			
d	x	D	D1	L	L1	L2	bolt circle (PCD)	no.	M x L	Ma	no.	M x L	Ma	Mt without Mb	Mb max without Mt	Mt_res with Mb max	Ps ₁ without Mb	Ph ₁ without Mb	Ps ₂ without Mb	Ph ₂ without Mb
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[Nm]			[Nm]	[Nm]	[Nm]	[Nm]	[N/mm ²]	[N/mm ²]	[N/mm ²]	[N/mm ²]
30	x	60	66	56	48	36	48	4	M8 x 25	41	4	M6 x 40	17	950	620	720	243	121	131	66
32	x	65	71	56	48	36	53	4	M8 x 25	41	5	M6 x 40	17	1.110	720	840	227	112	154	76
35	x	65	71	56	48	36	53	4	M8 x 25	41	5	M6 x 40	17	1.210	790	920	208	112	141	76
38	x	70	76	56	48	36	58	5	M8 x 25	41	5	M6 x 40	17	1.510	980	1.150	239	130	130	70
40	x	70	76	56	48	36	58	5	M8 x 25	41	5	M6 x 40	17	1.590	1.030	1.210	227	130	123	70
42	x	80	86	67	57	42	67	4	M10 x 30	83	5	M8 x 50	41	2.500	1.630	1.900	237	124	181	95
45	x	80	86	67	57	42	67	4	M10 x 30	83	5	M8 x 50	41	2.680	1.740	2.040	221	124	168	95
48	x	85	91	67	57	42	72	5	M10 x 30	83	5	M8 x 50	41	3.260	2.120	2.480	259	146	158	89
50	x	85	91	67	57	42	72	5	M10 x 30	83	5	M8 x 50	41	3.400	2.210	2.580	249	146	152	89
55	x	90	96	67	57	42	77	5	M10 x 30	83	5	M8 x 50	41	3.730	2.420	2.840	226	138	138	84
60	x	95	101	67	57	42	82	6	M10 x 30	83	6	M8 x 50	41	4.890	3.180	3.710	249	157	152	96
65	x	100	106	67	57	42	87	6	M10 x 30	83	6	M8 x 50	41	5.300	3.450	4.020	230	149	140	91
70	x	115	121	86	74	56	96	6	M12 x 40	145	6	M10 x 70	83	8.850	5.750	6.730	239	145	160	97
75	x	125	131	86	74	56	108	7	M12 x 40	145	7	M10 x 70	83	11.050	7.180	8.400	260	156	174	105
80	x	125	131	86	74	56	108	7	M12 x 40	145	7	M10 x 70	83	11.790	7.660	8.960	244	156	163	105
85	x	135	141	86	74	56	118	7	M12 x 40	145	7	M10 x 70	83	12.520	8.140	9.510	230	145	154	97
90	x	135	141	86	74	56	118	7	M12 x 40	145	7	M10 x 70	83	13.270	8.630	10.100	217	145	145	97
95	x	150	156	96	82	67	132	7	M14 x 40	230	7	M12 x 70	145	19.690	12.800	15.000	255	162	190	120
100	x	150	156	96	82	67	132	7	M14 x 40	230	7	M12 x 70	145	20.730	13.500	15.700	242	162	180	120
110	x	160	166	96	82	67	143	7	M14 x 40	230	7	M12 x 70	145	22.810	14.800	17.400	220	151	164	113
120	x	170	176	96	82	67	152	7	M14 x 40	230	7	M12 x 70	145	24.900	16.200	18.900	202	143	150	106
130	x	190	196	111	95	71	165	8	M16 x 50	355	8	M14 x 80	230	41.800	27.200	31.700	253	173	185	126
140	x	200	206	111	95	71	175	8	M16 x 50	355	8	M14 x 80	230	45.000	29.300	34.200	235	164	171	120
150	x	210	216	111	95	71	185	8	M16 x 50	355	8	M14 x 80	230	48.300	31.400	36.700	219	157	160	114
160	x	220	226	111	95	71	195	8	M16 x 50	355	8	M14 x 80	230	51.400	33.400	39.100	205	149	150	109
170	x	240	249	142	122	92	212	8	M20 x 70	690	8	M16 x 110	355	81.000	52.700	61.500	227	161	145	103
180	x	250	256	142	122	92	224	8	M20 x 70	690	8	M16 x 110	355	85.800	55.800	65.200	214	154	137	99
190	x	260	269	142	122	92	232	8	M20 x 70	690	8	M16 x 110	355	90.500	58.800	68.800	203	148	130	95
200	x	270	276	142	122	92	242	10	M20 x 70	690	10	M16 x 110	355	119.200	77.500	90.600	241	178	154	114
220	x	290	296	142	122	92	264	10	M20 x 70	690	10	M16 x 110	355	131.000	85.200	99.500	219	166	140	106
240	x	310	316	142	122	92	284	12	M20 x 70	690	12	M16 x 110	355	171.900	112.000	130.000	241	186	154	119
260	x	330	336	142	122	92	304	12	M20 x 70	690	12	M16 x 110	355	185.500	121.000	141.000	222	175	142	112

Locking assembly series MAV 6002 for use with bending loads Rev.2/2018

Ma = screw's tightening torque
 Mt = max torque capacity, without bending
 Mb max = max bending capacity, without torque
 Mt_res = remaining torque capacity, with max bending Mb
 Ps = shaft contact pressure, without bending Mb max
 Ph = hub contact pressure, without bending Mb max

Tolerances: shaft h8; hub bore H8
 Surface finish: shaft & hub bore $0,8 \leq Ra \leq 3,2 \mu\text{m}$



DIMENSIONS						SCREWS ISO 4762 12.9 SET 1				SCREWS ISO 4762 12.9 SET 2			CAPACITY			CONTACT PRESSURES				
d	x	D	D1	L	L1	L2	bolt circle (PCD)	no.	M x L	Ma	no.	M x L	Ma	Mt without Mb	Mb max without Mt	Mt_res with Mb max	Ps ₁ without Mb	Ph ₁ without Mb	Ps ₂ without Mb	Ph ₂ without Mb
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[Nm]			[Nm]	[Nm]	[Nm]	[Nm]	[N/mm ²]	[N/mm ²]	[N/mm ²]	[N/mm ²]
280	x	365	371	168	144	108	333	10	M24 x 80	1.200	10	M20 x 130	690	250.000	163.000	190.000	223	171	153	117
300	x	385	391	168	144	108	353	10	M24 x 80	1.200	10	M20 x 130	690	268.000	174.000	204.000	208	162	143	111
320	x	405	414	168	144	108	373	12	M24 x 80	1.200	12	M20 x 130	690	342.000	222.000	260.000	234	185	161	127
340	x	425	431	168	144	108	393	14	M24 x 80	1.200	14	M20 x 130	690	425.000	276.000	323.000	257	206	176	141
360	x	445	451	168	144	108	411	16	M24 x 80	1.200	16	M20 x 130	690	514.000	334.000	391.000	277	224	190	154
380	x	465	471	168	144	108	431	16	M24 x 80	1.200	16	M20 x 130	690	543.000	353.000	413.000	263	215	180	147
400	x	485	494	168	144	108	453	16	M24 x 80	1.200	16	M20 x 130	690	571.000	371.000	434.000	250	206	171	141
420	x	505	511	168	144	108	471	16	M24 x 80	1.200	16	M20 x 130	690	600.000	390.000	456.000	238	198	163	136
440	x	525	531	202	178	137	495	16	M24 x 90	1.200	16	M20 x 150	690	629.000	409.000	478.000	173	145	119	100
460	x	545	551	202	178	137	515	16	M24 x 90	1.200	16	M20 x 150	690	657.000	427.000	499.000	166	140	114	96
480	x	565	571	202	178	137	535	16	M24 x 90	1.200	16	M20 x 150	690	685.000	445.000	521.000	159	135	109	92
500	x	585	591	202	178	137	555	18	M24 x 90	1.200	18	M20 x 150	690	803.000	522.000	610.000	171	146	118	101
520	x	605	611	202	178	137	574	18	M24 x 90	1.200	18	M20 x 150	690	835.000	543.000	634.000	165	142	113	97
540	x	625	631	202	178	137	595	18	M24 x 90	1.200	18	M20 x 150	690	867.000	564.000	658.000	159	137	109	94
560	x	645	651	202	178	137	615	18	M24 x 90	1.200	18	M20 x 150	690	899.000	584.000	683.000	153	133	105	91
580	x	665	671	202	178	137	635	20	M24 x 90	1.200	20	M20 x 150	690	1.035.000	673.000	786.000	164	143	113	98
600	x	685	691	202	178	137	655	20	M24 x 90	1.200	20	M20 x 150	690	1.071.000	696.000	814.000	159	139	109	95