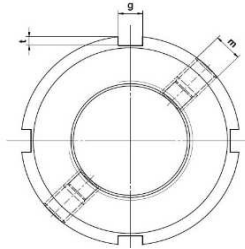
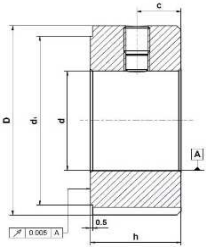
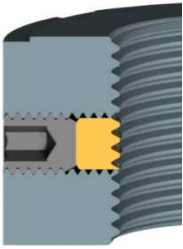


ZM

Präzisions-Spannmutter für Maschinen-Spindellagerungen
 Precision locknuts for machine spindle bearing arrangements

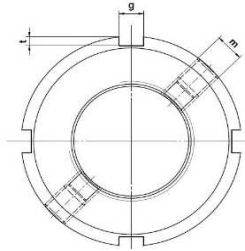
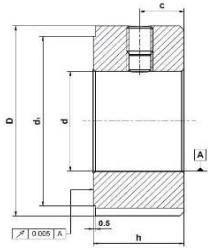
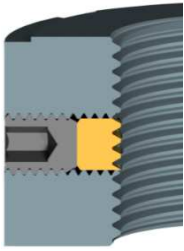


Gewinde Ø Thread Ø	...Abmessungen / ... dimensions						
	D	h	g	t	d ¹	c	m
M 06 x 0.5	16	8	3	2	12	4	M 04
M 08 x 0.75	16						
M 10 x 1	18						
M 12 x 1	22						
M 15 x 1	25						
M 17 x 1	28	10	4	2	23	5	M 05
M 20 x 1	32						
M 25 x 1	38						
M 25 x 1.5	38	12	5	2.5	33	6	M 06
M 30 x 1.5	45						
M 35 x 1.5	52						
M 40 x 1.5	58						
M 45 x 1.5	65	14	6	2.5	59	7	M 06
M 50 x 1.5	70						
M 55 x 2	75						
M 60 x 2	80	16	7	3	73	8	M 06
M 65 x 2	85						
M 70 x 2	92	18	8	3.5	85	9	M 08
M 75 x 2	98						
M 80 x 2	105						
M 85 x 2	110						
M 90 x 2	120	20	10	4	108	10	M 08
M 95 x 2	125						
M 100 x 2	130						
M 105 x 2	140	22	12	5	126	11	M 10
M 110 x 2	145						
M 115 x 2	150						
M 120 x 2	155						
M 125 x 2	160						
M 130 x 2	165	24	10	4	113	12	M 10
M 135 x 2	175						
M 140 x 2	180						
M 145 x 2	190	26	14	6	137	13	M 12
M 150 x 2	195						
M 155 x 3	200						
M 160 x 3	210						
M 165 x 3	210	28	16	7	138	14	M 12
M 170 x 3	220						
M 175 x 3	225						
M 180 x 3	230	30	18	8	148	15	M 12
M 190 x 3	240						
M 200 x 3	250						
M 200 x 3	250	32	18	8	149	16	M 12

Ausführung rechts-steigend. Links-steigend, andere Abmessungen sowie rostfreie Ausführung auf Anfrage.
 Konstruktionsänderungen vorbehalten.
 Right-hand version. Left-hand version, other sizes as well as stainless steel on request. Subject to design modifications.

ZMA

Präzisions-Spannmutter für Axial-Zylinderrollenlager
 Precision locknuts for cylindrical roller bearings

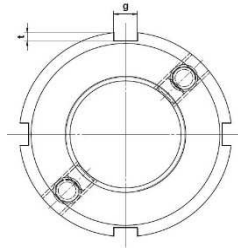
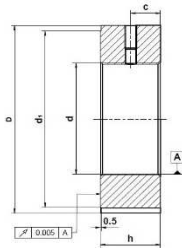
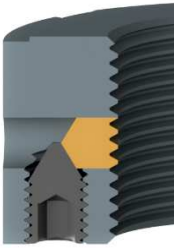


Gewinde Ø Thread Ø	...Abmessungen / ... dimensions						
	D	h	g	t	d ¹	c	m
M 15 x 1	33	16	4	2	28	8	M 05
M 17 x 1	38	20	5		33	10	
M 20 x 1	52	25			47	12.5	
M 25 x 1.5	45	20	6	2.5	40	10	M 06
	58	28			52	14	
M 30 x 1.5	52	22	5	2	47	11	
	65	30			59	15	
M 35 x 1.5	58	22	6	2.5	52	11	
	70	30			64	15	
M 40 x 1.5	62	22			56	11	
	75	30			69	15	
M 45 x 1.5	68	24	7	3	62	12	
	85	32			78	16	
M 50 x 1.5	75	25	6	2.5	68	12.5	M 08
	92	32			8	3.5	
M 55 x 2	90						
M 60 x 2	97						
M 65 x 2	105	35	10	4	102	17.5	
M 70 x 2	110				117	19	
M 75 x 2	125				146		
M 90 x 2	155	38	14	6	167	20	M 10
M 110 x 2	180						
M 130 x 2	210	40	16	7	215	21	M 12
M 150 x 2	230						

Ausführung rechts-steigend. Links-steigend, andere Abmessungen sowie rostfreie Ausführung auf Anfrage.
 Konstruktionsänderungen vorbehalten.
 Right-hand version. Left-hand version, other sizes as well as stainless steel on request. Subject to design modifications.

ZMV

Präzisions-Spanmuttern für Maschinen-Spindellagerungen
Precision locknuts for machine spindle bearing arrangements

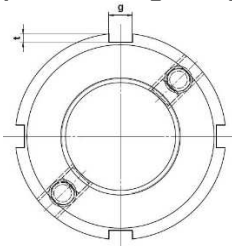
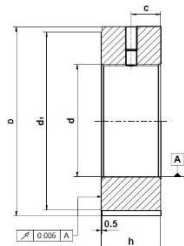
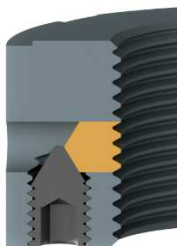


Gewinde Ø Thread Ø	...Abmessungen / ... dimensions								
	D	h	g	t	d ¹	d ²	d ³	c	m
M 17 x 1	28	15	4	2	23	22.5	3.3	10	M 04
M 20 x 1	32				27	26			
M 25 x 1.5	38	17	5	2	33	31.5	4.2	11	M 5
M 30 x 1.5	45				40	37.5			
M 35 x 1.5	52				47	43.5			
M 40 x 1.5	58	19	6	2.5	52	49	5	12	M 6
M 45 x 1.5	65				59	55			
M 50 x 1.5	70				64	60			
M 55 x 2	75	211	7	3	68	65	5	13	M 6
M 60 x 2	80				73	70			
M 65 x 2	85				78	75			
M 70 x 2	92	23	8	3.5	85	81	6.2	14	M 8
M 75 x 2	98				90	87			
M 80 x 2	105				95	93			
M 85 x 2	110	25	10	4	102	98	6.2	15	M 8
M 90 x 2	120				108	105			
M 95 x 2	125				113	110			
M 100 x 2	130	27	12	5	120	115	7.9	16	M 10
M 105 x 2	140				126	123			
M 110 x 2	145				133	128			
M 115 x 2	150	29	12	5	137	133	7.9	17	M 10
M 120 x 2	155				138	138			
M 125 x 2	160				148	143			
M 130 x 2	165	31	14	6	149	148	9.6	18	M 12
M 135 x 2	175				160	155			
M 140 x 2	180				172	168			
M 145 x 2	190	33	16	7	171	173	9.6	19	M 12
M 150 x 2	195				182	178			
M 155 x 3	200				193	185			
M 160 x 3	210	35	18	8	193	188	9.6	20	M 12
M 165 x 3	210				193	188			
M 170 x 3	220				193	195			
M 180 x 3	230	37	18	8	203	205	9.6	21	M 12
M 190 x 3	240				214	215			
M 200 x 3	250				226	225			

Ausführung rechts-steigend. Links-steigend, andere Abmessungen sowie rostfreie Ausführung auf Anfrage.
Konstruktionsänderungen vorbehalten.
Right-hand version. Left-hand version, other sizes as well as stainless steel on request. Subject to design modifications.

ZMVA

Präzisions-Spannmutter für Maschinen-Spindellagerungen
 Precision locknuts for machine spindle bearing arrangements



Gewinde Ø Thread Ø	...Abmessungen / ... dimensions								
	D	h	g	t	d ¹	d ²	d ³	c	m
M 17 x 1	38	20	5	2	33	27.5	4.2	10	M 05
M 20 x 1					47	29		12.5	
M 25 x 1.5	45	20	6	2.5	40	35	5	10	M 06
	58	28			52			14	
M 30 x 1.5	52	22	5	2	47	40	5	11	M 06
	65	30			59			15	
M 35 x 1.5	58	22	6	2.5	52	45	5	11	M 06
	70	30			64			15	
M 40 x 1.5	62	22	6	2.5	56	52	5	11	M 06
	75	30			69			15	
M 45 x 1.5	68	24	7	3	62	57	5	12	M 06
	85	32			78			16	
M 50 x 1.5	75	25	6	2.5	68	62	6.2	12.5	M 08
	92	32			8			3.5	
M 55 x 2	98		32	8		3.5	90		72
M 60 x 2	105	35			10		4	97	
M 65 x 2			110	38		14		6	102
M 70 x 2	125	40			16		7		117
M 75 x 2			155	40		18		8	146
M 90 x 2	180	42			14		6		167
M 110 x 2			210	42		16		7	205
M 130 x 2	230	42			18		8		215
M 150 x 2									

Ausführung rechts-steigend. Links-steigend, andere Abmessungen sowie rostfreie Ausführung auf Anfrage.
 Konstruktionsänderungen vorbehalten.
 Right-hand version. Left-hand version, other sizes as well as stainless steel on request. Subject to design modifications.