

## Precision Levelling Adjusters

### Ball Head Precision Adjusters MN 686.4

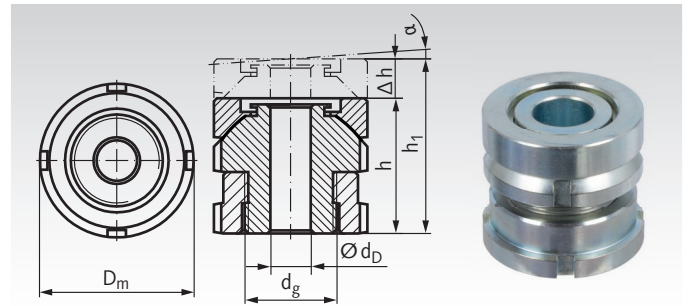
**Material:**

**Standard version:** 42CrMo4V, No. 1.7225, zinc-plated and blue passivated.

**Stainless version:** Stainless steel 1.4301 (AISI 304).



- For non-parallel surfaces up to 4° slope.
- Low overall height with short adjustment travel.
- Without lock nut.



Ordering Details: e.g.: Product No. 686 405 00, MN 686.4 15-6.6 standard

Product No. standard	Product No. stainless	Type	matching screw	h mm	h1 mm	Δh mm	D <sub>m</sub> mm	d <sub>g</sub> mm	d <sub>D</sub> mm	α approx.	F <sub>tot.</sub> * kN	F <sub>add.</sub> * kN	Weight g
686 405 00	686 994 05	MN 686.4 15-6,6	M6	22	26	4	25	M15x1,0	6,6	4°	40	30,7	62
686 410 00	686 994 10	MN 686.4 20-6,6	M6	26	31	5	32	M20x1,0	6,6	4°	65	55,7	125
686 415 00	686 994 15	MN 686.4 20-9,0	M8	26	31	5	32	M20x1,0	9,0	4°	65	48,0	120
686 420 00	686 994 20	MN 686.4 20-11,0	M10	26	31	5	32	M20x1,0	11,0	4°	65	37,9	114
686 425 00	686 994 25	MN 686.4 30-11,0	M10	34	41	7	45	M30x1,5	11,0	4°	120	92,9	325
686 430 00	686 994 30	MN 686.4 30-13,5	M12	34	41	7	45	M30x1,5	13,5	4°	120	80,4	313
686 435 00	686 994 35	MN 686.4 30-17,5	M16	34	41	7	45	M30x1,5	17,5	4°	120	45,5	288
686 440 00	686 994 40	MN 686.4 40-17,5	M16	44	53	9	58	M40x1,5	17,5	4°	210	136,0	685
686 445 00	686 994 45	MN 686.4 40-22,0	M20	44	53	9	58	M40x1,5	22,0	4°	210	90,0	637
686 450 00	686 994 50	MN 686.4 40-26,0	M24	44	53	9	58	M40x1,5	26,0	4°	210	37,0	590
686 455 00	686 994 55	MN 686.4 50-22,0	M20	50	60	10	70	M50x1,5	22,0	4°	330	210,0	1161
686 460 00	686 994 60	MN 686.4 50-26,0	M24	50	60	10	70	M50x1,5	26,0	4°	330	157,0	1098
686 465 00	686 994 65	MN 686.4 50-33,0	M30	50	60	10	70	M50x1,5	33,0	4°	330	53,0	975
686 470 00	686 994 70	MN 686.4 60-26,0	M24	56	68	12	80	M60x2,0	26,0	4°	495	322,0	1650
686 475 00	686 994 75	MN 686.4 60-33,0	M30	56	68	12	80	M60x2,0	33,0	4°	495	218,0	1510
686 480 00	686 994 80	MN 686.4 60-39,0	M36	56	68	12	80	M60x2,0	39,0	4°	495	101,0	1365

Other sizes on request.

### Ball Head Precision Adjusters MN 686.7

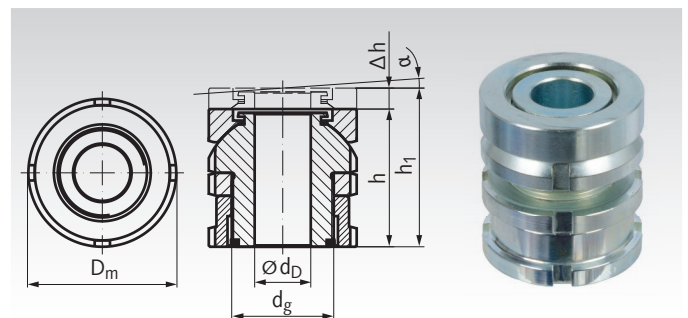
**Material:**

**Standard version:** 42CrMo4V, No. 1.7225, zinc-plated and blue passivated.

**Stainless version:** Stainless steel 1.4301 (AISI 304).



- For non-parallel surfaces up to 4° slope.
- Low overall height with short adjustment travel.
- With lock nut.



Ordering Details: e.g.: Product No. 686 705 00, MN 686.7 15-6.6 standard

Product No. standard	Product No. stainless	Type	matching screw	h mm	h1 mm	Δh mm	D <sub>m</sub> mm	d <sub>g</sub> mm	d <sub>D</sub> mm	α approx.	F <sub>tot.</sub> * kN	F <sub>add.</sub> * kN	Weight g
686 705 00	686 997 05	MN 686.7 15-6,6	M6	27	31	4	25	M15x1,0	6,6	4°	40	30,7	76
686 710 00	686 997 10	MN 686.7 20-6,6	M6	32	37	5	32	M20x1,0	6,6	4°	65	55,7	156
686 715 00	686 997 15	MN 686.7 20-9,0	M8	32	37	5	32	M20x1,0	9,0	4°	65	48,0	149
686 720 00	686 997 20	MN 686.7 20-11,0	M10	32	37	5	32	M20x1,0	11,0	4°	65	37,9	141
686 725 00	686 997 25	MN 686.7 30-11,0	M10	41	48	7	45	M30x1,5	11,0	4°	120	92,9	395
686 730 00	686 997 30	MN 686.7 30-13,5	M12	41	48	7	45	M30x1,5	13,5	4°	120	80,4	378
686 735 00	686 997 35	MN 686.7 30-17,5	M16	41	48	7	45	M30x1,5	17,5	4°	120	45,5	352
686 740 00	686 997 40	MN 686.7 40-17,5	M16	53	62	9	58	M40x1,5	17,5	4°	210	136,0	834
686 745 00	686 997 45	MN 686.7 40-22,0	M20	53	62	9	58	M40x1,5	22,0	4°	210	90,0	776
686 750 00	686 997 50	MN 686.7 40-26,0	M24	53	62	9	58	M40x1,5	26,0	4°	210	37,0	714
686 755 00	686 997 55	MN 686.7 50-22,0	M20	61	71	10	70	M50x1,5	22,0	4°	330	210,0	1438
686 760 00	686 997 60	MN 686.7 50-26,0	M24	61	71	10	70	M50x1,5	26,0	4°	330	157,0	1372
686 765 00	686 997 65	MN 686.7 50-33,0	M30	61	71	10	70	M50x1,5	33,0	4°	330	53,0	1217
686 770 00	686 997 70	MN 686.7 60-26,0	M24	67	79	12	80	M60x2,0	26,0	4°	495	322,0	1989
686 775 00	686 997 75	MN 686.7 60-33,0	M30	67	79	12	80	M60x2,0	33,0	4°	495	218,0	1833
686 780 00	686 997 80	MN 686.7 60-39,0	M36	67	79	12	80	M60x2,0	39,0	4°	495	101,0	1658

Other sizes on request.

\* Values apply to standard version. Values for stainless version, see page 766.  
 F<sub>tot.</sub> = max. load. (incl. preload from any mounting screw).  
 F<sub>add.</sub> = Load after subtracting the preload of any mounting screw.