

## Precision Levelling Adjusters

### Ball Shims MN 686.5

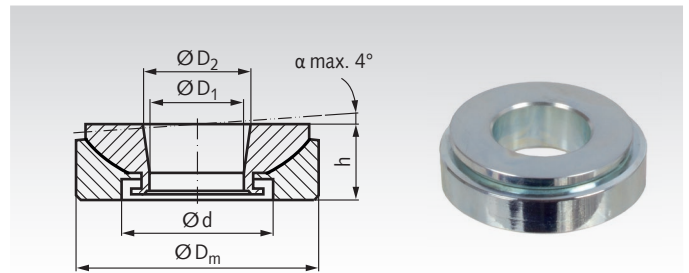
**Material:**

**Standard Version:** 42CrMo4V, Nr. 1.7225, zinc-plated and blue passivated.

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



For an angle of inclination (alpha) of up to 4°. If the angle of inclination (alpha) exceeds > 1° out of parallel, the use of an additional MN 686.5 is recommended to assure a stable support of the bolt head. See also page 765.



Ordering Details: e.g.: Product No. 686 505 00, MN 686.5 15 standard

Product No. standard	Product No. stainless	Type	suitable for	h <sup>+/-0,5</sup> mm	D <sub>m</sub> mm	D <sub>1</sub> mm	D <sub>2</sub> mm	d mm	Weight g
686 505 00	686 995 05	MN 686.5 15	M6/M8	8,0	25	8,5	9,0	15	23
686 510 00	686 995 10	MN 686.5 20	M10	10,0	32	13,0	14,0	20	44
686 515 00	686 995 15	MN 686.5 30	M16	12,5	45	20,0	21,4	30	104
686 520 00	686 995 20	MN 686.5 40	M24	16,0	58	29,0	30,5	38	215
686 525 00	686 995 25	MN 686.5 50	M30	20,0	70	36,0	38,0	48	377
686 530 00	686 995 30	MN 686.5 60	M36	20,0	80	44,0	45,8	61	462

### Spacers MN 686.D

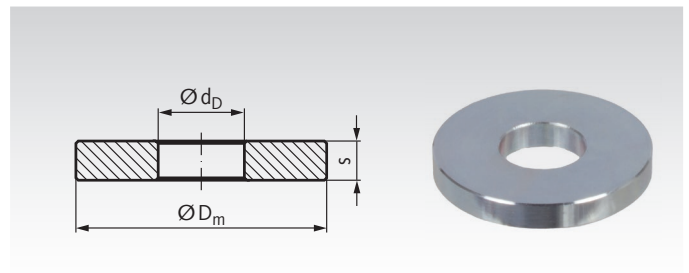
**Material:**

**Standard Version:** 42CrMo4V, Nr. 1.7225, zinc-plated and blue passivated.

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



Optional, additional spacer for height adjustment.



Ordering Details: e.g.: Product No. 686 555 00, MN 686.D 15 Standard

Product No. standard	Product No. stainless	Type	for Type MN 686.3, 686.4, 686.1, 686.2	D <sub>m</sub> mm	d <sub>D</sub> mm	s mm	Weight g
686 555 00	686 995 55	MN 686.D 15	...15-...	25	6,6	4	14
686 560 00	686 995 60	MN 686.D 20	...20-...	32	11,0	5	27
686 565 00	686 995 65	MN 686.D 30	...30-...	45	17,5	6	62
686 570 00	686 995 70	MN 686.D 40	...40-...	58	26,0	8	130
686 575 00	686 995 75	MN 686.D 50	...50-...	70	33,0	10	232
686 580 00	686 995 80	MN 686.D 60	...60-...	80	39,0	12	345

### Hook Wrenches DIN 1810 A

**Material:**

Special steel, hardened and black oxide finished.

Important: two spanner wrenches are required for mounting the precision levelling adjusters.



Ordering Details: e.g.: 2 Pieces, Product No. 653 400 25, Hook Wrenches 25-28mm

Product No.	D <sub>m</sub> Range mm	for Type (Size)	Length mm	Weight g
653 400 25	25 - 28	...15-...	136	45
653 400 30	30 - 32	...20-...	136	50
653 400 45	45 - 50	...30-...	206	155
653 400 58	58 - 62	...40-...	240	260
653 400 68	68 - 75	...50-...	240	255
653 400 80	80 - 90	...60-...	280	410
653 401 10	110 - 115 (105)	...80-...	335	745

More sizes page 670