



# ADJUSTING NUTS AND THREADED RINGS



THE SPECIALIST FOR MOTION TECHNOLOGY

Nadella adjusting locking & unlocking nuts and threaded rings are used whenever mechanisms require a precise clamping as well as a powerful and safe locking, but above all for adjusting and clamping all type of bearings. The original clamping system is constituted from a part of the threaded section of the adjusting nut or ring (threaded clamping spring). When tightening the hexagon grub screws clamping is applied with a very strong pressure onto the threaded spring which meshes perfectly into the corresponding threads of the shaft or spindle. The Nadella adjusting nuts and rings can be easily mounted, dismantled and reused without losing the precision features.

## Applications

- Power transmission and motion technology
- Adjusting and clamping all types of bearings
- Mount/release of ball bearings
- Elimination of back lash
- Securing mechanical safety devices
- Templating spring-mounted measuring systems
- Safety nuts for use in high-temperature applications
- Periodical mounting and dismantling of adjusting nuts and rings
- Assemblies subjected to vibrations
- Cyclic uneven rotation
- High and very high rotation spindle/shaft assemblies



## Application examples

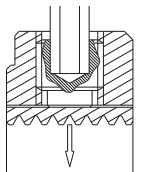
- Transmissions
- Machine-tool
- Textile machinery
- Printing industry
- Conditioning
- Special machinery
- Automotive industry
- Engine/turbine manufacturing
- Onshore and offshore industry
- Transportation
- Aeronauticals
- Marine equipment
- Nuclear industry
- Agriculture and Food industry
- Civil and military engineering
- Precision optical attachments



## Adjusting nuts types

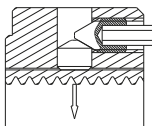
### > ADJUSTING NUT LR+LRE

LR/E -nuts are used wherever strong radial clamping is required. The radial force activated by tightening the clamping screw is transmitted to the threaded spring. The contact surface perpendicular to the thread side allows adjustment and locking of all types of bearings and other mechanical elements that require very precise tolerances. An LRE nut with 2 symmetrically opposed clamping springs at 180°, compared to LR nuts these nuts have two advantages: better balancing, which allows higher speeds, and twice the unlocking torque with the same size



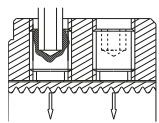
### > ADJUSTING NUT LF+LFE

LF nuts are used wherever strong radial clamping is not possible. The axial force activated by tightening the front clamping screw is transmitted to the threaded tension spring via 90° wedges. The resulting radial force acts on the clamping spring. The clamping pressure exerted on the threaded surface of the spring, enables a strong locking action. They are therefore highly recommended for fastening parts in housings or deep chambers and for mounting bearings in such places. An LFE nut equipped with 2 symmetrically opposed clamping springs at 180°, has two advantages over the LF nuts: a better balancing, which allows higher speeds. Compared to the LF nuts: better balancing, which allows higher speeds.



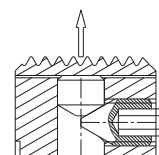
### > ADJUSTING NUT LRP

LRP nuts are used wherever heavy duty clamping for ball bearings is required. Larger nuts, symmetrical and larger screws provide an increased loosening torque as well as a much higher resistance against axial load stress. The contact surface, which is perpendicular to the threaded side, enables all types of ball screws to be adjusted and secured.



### > THREADED RING LX

The LX rings are based on the same principle as the LF nuts and are therefore ideal for fastening parts in housings or chambers. The axial force, which is activated by tightening the clamping screw, is transmitted to the tapped spring.





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## Advantages:

- Precise and powerful locking of bearings in axial positioning after assembly.
- No key slot required as for locking washers, thus saving thread deburring operation.
- No use of locking washers, thus preventing seal damage.
- Clamping and locking the adjusting nut with no loss of axial precision.
- Easy mount and release re-usable many times without loss of precision.
- Safe use under severe conditions (high-temperatures, vibrations, ...).
- Time-saving through a more simple technical design and construction of shaft-bodies and assemblies.

## Adjusting nuts sizes

LR/LRE	Thread	LF/LFE	Thread	LX	Thread	LRP	Thread
LR 1	12x1,00	LF 1	12x1,00	LX 28	25x1,50	LRP020150	20x1,50
LR 2	14x1,00	LF 2	14x1,00	LX 30	30x1,50	LRP022150	22x1,50
LR 3	15x1,00	LF 3	15x1,00	LX 32	32x1,50	LRP025150	25x1,50
LR 4	17x1,00	LF 4	17x1,00	LX 34	34x1,50	LRP030150	30x1,50
LR 5	18x1,00	LF 5	18x1,00	LX 37	37x1,50	LRP032150	32x1,50
LR 6	20x1,00	LF 6	20x1,00	LX 39	39x1,50	LRP035150	35x1,50
LR/E 7	22x1,50	LF/E 7	22x1,50	LX 40	40x1,50	LRP038150	38x1,50
LR/E 8	25x1,50	LF/E 8	25x1,50	LX 42	42x1,50	LRP040150	40x1,50
LR/E 9	30x1,50	LF/E 9	30x1,50	LX 44	44x1,50	LRP042150	42x1,50
LR/E 10	32x1,50	LF/E 10	32x1,50	LX 46	46x1,50	LRP045150	45x1,50
LR/E 11	35x1,50	LF/E 11	35x1,50	LX 47	47x1,50	LRP050150	50x1,50
LR/E 12	38x1,50	LF/E 12	38x1,50	LX 49	49x1,50	LRP055150	55x1,50
LR/E 13	40x1,50	LF/E 13	40x1,50	LX 50	50x1,50	LRP055200	55x2,00
LR/E 14	42x1,50	LF/E 14	42x1,50	LX 54	54x1,50	LRP060150	60x1,50
LR/E 15	45x1,50	LF/E 15	45x1,50	LX 57	57x1,50	LRP060200	60x2,00
LR/E 16	50x1,50	LF/E 16	50x1,50	LX 60	60x1,50	LRP065150	65x1,50
LR/E 17	52x1,50	LF/E 17	52x1,50	LX 63	63x1,50	LRP065200	65x2,00
LR/E 18	55x2,00	LF/E 18	55x2,00	LX 64	64x1,50	LRP070150	70x1,50
LR/E 19	60x2,00	LF/E 19	60x2,00	LX 67	67x1,50	LRP070200	70x2,00
LR/E 20	65x2,00	LF/E 20	65x2,00	LX 70	70x1,50	LRP075150	75x1,50
LR/E 21	70x2,00	LF/E 21	70x2,00	LX 74	74x1,50	LRP075200	75x2,00
LR/E 22	75x2,00	LF/E 22	75x2,00	LX 77	77x1,50	LRP080200	80x2,00
LR/E 23	80x2,00	LF/E 23	80x2,00	LX 80	80x1,50	LRP085200	85x2,00
LR/E 24	85x2,00	LF/E 24	85x2,00	LX 82	82x1,50	LRP90150	90x1,50
LR/E 25	90x2,00	LF/E 25	90x2,00	LX 87	87x1,50	LRP090200	90x2,00
LR/E 26	95x2,00	LF/E 26	95x2,00	LX 92	92x1,50	LRP095200	95x2,00
LR/E 27	100x2,00	LF/E 27	100x2,00	LX 97	97x1,50	LRP100200	100x2,00
LR/E 28	105x2000	LF/E 28	105x2000	LX 100	100x2,00	LRP105200	105x2,00
LR/E 29	110x2,00	LF/E 29	110x2,00	LX 102	102x2,00	LRP110200	110x2,00
LR/E 30	115x2,00	LF/E 30	115x2,00	LX 107	107x2,00	LRP115200	115x2,00
LR/E 31	120x,2,00	LF/E 31	120x,2,00	LX 112	112x2,00	LRP120200	120x2,00
LR/E 32	125x2,00	LF/E 32	125x2,00	LX 117	117x2,00	LRP125200	125x2,00
LR/E 33	130x2,00	LF/E 33	130x2,00	LX 122	122x2,00	LRP130200	130x2,00
LR/E 34	135x2,00	LF/E 34	135x2,00	LX 125	125x2,00	LRP135200	140x2,00
LR/E 35	140x2,00	LF/E 35	140x2,00	LX 127	127x2,00	LRP140200	140x2,00
LR/E 36	145x2,00	LF/E 36	145x2,00	LX 132	132x2,00	LRP145200	145x2,00
LR/E 37	150x2,00	LF/E 37	150x2,00	LX 142	142x2,00	LRP150200	150x2,00
				LX 147	147x2,00	LRP155300	155x3,00
				LX 152	152x2,00	LRP160300	160x3,00
				LX 160	160x2,00	LRP165300	165x3,00
						LRP170300	170x3,00
						LRP180300	180x3,00
						LRP190300	190x3,00
						LRP200300	200x3,00

## Contact us

You can contact us directly by writing us a message to [info@nadella.com](mailto:info@nadella.com),  
or by using the dedicated contact form in our website ( [www.nadella.com/contact](http://www.nadella.com/contact) )