GN 700 | Steel Indexing Knobs

Metric Size • With Stepless Positioning





9

Locating ring

Steel, black oxide finish

Bushing unit Steel, hardened and ground

Knurled knob housing Aluminum, black anodized finish With this adjustable knob GN 700, a shaft can be infinitely adjusted in both directions. The anti-backlash mechanism ensures the firm locking of the shaft in any position. This mechanism prevents any uncontrolled movement of the shaft. The locking action is a safety feature to prevent unwanted re-adjustments caused by backlash and vibration.

An example of application is the locking of adjustable shafts (ball/roller bearing shafts). Special graduations and markings available upon request. For technical and assembly instructions, see Indexing Knobs, page 489.

Plain Mechanisms or with Indicator Line

Part Number			d. (H.)						L
Plain, without Graduations or Numbers	With Indicator Line	d1	Bore with Keyway	d ₃	d₄ -0.2mm	d ₅	I ₁	l ₂	(see next page)
12KZ55/B	12KZ55/A	66	K12	52	55	5.5	44	9	40
14KZ55/B	14KZ55/A	(2.60)	K14	(2.05)	(2.17)	(.22)	(1.73)	(.35)	(1.57)

Mechanisms with Graduations

Part Number With Graduations 09, 20	d ₁	d₂ (H ₇) Bore with Keyway	d ₃	d₄ 0.2mm	d ₅	l ₁	I2	I ₃
12KZ55/S	66	K12	52	55	5.5	44	9	40
14KZ55/S	(2.60)	K14	(2.05)	(2.17)	(.22)	(1.73)	(.35)	(1.57)

Dimensions in: millimeters (inches)

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Specification Information



The anti-backlash mechanism which operates on the principle of a bidirectional freewheeling and antireversing basis allows the transfer of movement in both directions without backlash.

The bush is connected by the key and keyway to the revolving shaft.

Rotating knob The location ring remains static and

centrally positioned by the bushing and the two pinch rollers, fixed to the machine frame or housing by three screws.

The rotating knob with the knurled barrel is carried by the bushing. The scale ring is firmly anchored to the bushing and the driven shaft by two countersunk screws.

If the knob is repositioned, one of the follower pins – depending on the direction of rotation - pushes the pinch roller against the spring into an idling position which releases the bushing and shaft to rotate freely.

The second follower pin on the opposite side reduces the movement of its pinch roller and ensures at the same time a firm grip and forward movement of the bushing while the first pinch roller remains in an idling position. When releasing the knob, the spring will push the pinch roller back into the grip position, thus linking the bushing again with the static section.

The scale ring is connected firmly with the bushing and any readjustment of the shaft can be accurately controlled. This infinitely adjustable knob cannot, however, be used in such cases where the shaft to be adjusted runs ahead of the adjustment. The anti-backlash mechanism in this knob cannot be used as a bearing for the driven shaft.

Hints for installation:

A perfect functioning can only be guaranteed if the shaft of the machine is positioned at a perfect right angle to the contact surface of the static part.

