

EJOSYST® Modular Adjuster

Adjustment elements with individual preadjustment

EJOT®

In modern automotive design LED modules are increasingly installed in headlamps. Before the headlamps are finished and closed, these LED modules must first be aligned in the longitudinal axis during assembly. The adjustment is made with appropriate adjustment elements.

EJOT has developed an adjustment element consisting of a plastic nut and an adjusting screw. The drive of the adjustment element is on the hexagon nut and it is installed into the support frame (plastic in plastic). The LED module is connected to the spherical geometry of the screw head using a Ball Socket. The pre-setting in the plastic nut can be changed with a drive at the shaft end of the screw and the LED element can be adjusted accordingly.

Depending on the size and weight of the LED modules, different adjustment elements are used. These are differentiated for LED modules up to 400 g and up to 800 g.

Features

- Tight-fitting connection of the element in the headlamp housing
- Relaxation-free connection between adjuster and headlamp housing (support frame)
- Defined installation process
- Automated assembly
- Simple boss geometry in the add-on part
- Screw made of A2 stainless steel (no surface coating)
- Modular principle

Application areas

- Adjustment of LED modules in headlamps
- Adjustment of sensors
- Adjustment of radar modules



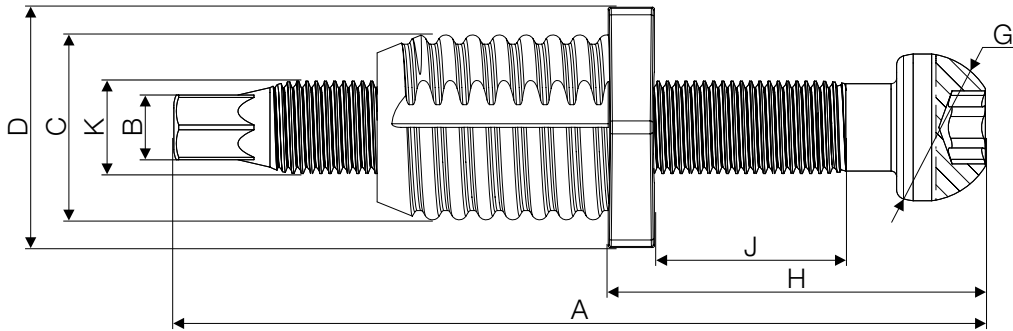
Top: Modular Adjuster 400
Below: Modular Adjuster 800



Applications in LED modules of a headlamp

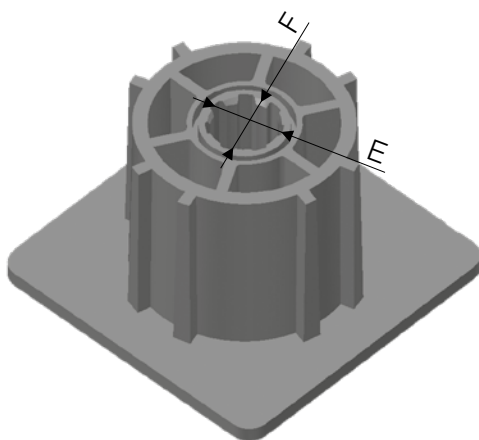


Technical information



Description	Component total length [mm]	Adjustment drive	Connection support frame (self-tapping)	Installation drive	Boss recommendation [mm]	
	A	B	C	D	E	F
Modular Adjuster 400	33.4	A/F 2.5	Special thread Ø 8	A/F 10	6.83	8.27
Modular Adjuster 800	43.9	A/F 3.5	Special thread Ø 10	A/F 13	8.90	9.60

Description	Connection Ball Socket	Pre-adjustment [mm]	Adjustment torque [Nm]		Adjusting range [mm]	Thread	Component weight [g/pc.]
	G	H			J	K	
Modular Adjuster 400	Ø 6	13.4	0.6	± 0.2	± 3	Ø 4	2.73
Modular Adjuster 800	Ø 8	20.4	1.1	± 0.3	± 6	Ø 5	7.98



Installation instructions

Installation rotation speed: $n = 4.000 \text{ rpm}$

Axial end load:

Modular Adjuster 800: $F = 115 \text{ N} \pm 15 \%$

Modular Adjuster 400: $F = 75 \text{ N} \pm 15 \%$

When installing the Modular Adjuster in the support component, it is necessary to use a position sensor.



More information at www.ejot.com/industry or please contact
Dipl.-Ing. Andreas Kind: phone: +49 36252 42-325, e-mail: akind@ejot.com