# Attachments Quadrant stays and limit switches



# For locking the blades of multileaf dampers after manual operation

Quadrant stay for the stepless adjustment and locking of multileaf dampers without an actuator. Limit switches for OPEN and/or CLOSED positions may be fitted additionally

- Micro switch with connecting cable
- Quadrant stay with position indicator
- Steel and stainless steel constructions
- Limit switches for capturing the end positions of multileaf dampers



Quadrant stay with two limit switches for JZ-LL-



Quadrant stay for JZ-AL and JZ-HL-AL



Quadrant stay and limit switches for JZ-S, JZ-S-A2, JZ-LL, JZ-HL and JZ-LL-A2

### **Attachments**

### General information

### Quadrant stays and limit switches

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#### **Application**

#### **Application**

- For multileaf dampers without an actuator
- Quadrant stay for the stepless adjustment of the blades
- Locking of the blade position after manual operation
- In dampers with only one blade (without
- linkage) the quadrant stay is also used as a travel stop when opening or closing the damper
- Limit switches for capturing the end positions (OPEN and/or CLOSED) of multileaf dampers
- Electric signals of limit switches are integrated with system control

### Schematic illustration of the quadrant stay and limit switch (steel multileaf dampers)



- ① Spring clip
- 2 Limit switch OPEN
- 3 Adjustment range for opposed blades
- 4 Adjustment range for parallel blades
- (5) Locking screw
- 6 Limit switch CLOSED

# Schematic illustration of the quadrant stay and limit switch (aluminium multileaf dampers)



### Quadrant stays and limit switches

Any attachments are to be defined with the order code of the multileaf damper.

### Quadrant stays and limit switches for multileaf dampers

Order code detail	Meaning	Limit switch	Function
Z04	Quadrant stay	_	
Z05	Quadrant stay	1	Damper blade position CLOSED
Z06	Quadrant stay	1	Damper blade position OPEN
<b>Z</b> 07	Quadrant stay	2	Damper blade positions OPEN and CLOSED

The standard constructions of multileaf dampers JZ-HL-AL and JZ-LL-AL are already fitted with a quadrant stay (Z04).

### Quadrant stays and limit switches

### **Application**

- For multileaf dampers without an actuator
- Quadrant stay for the stepless adjustment of the blades
- Locking of the blade position after manual operation
- In dampers with only one blade (without linkage) the quadrant stay is also used as a travel stop when opening or closing the damper

#### **Construction features**

Locking screw as part of the position indicator

### Quadrant stay and limit switches for JZ-P and JZ-P-A2



The quadrant stay is situated between the first two blades from the top

#### Quadrant stay for JZ-AL and JZ-HL-AL



The quadrant stay is situated on the first blade from the top (dampers with up to three blades) or on the third blade from the top (dampers with at least four blades)

- Locking screw to lock the blade position

#### **Materials and surfaces**

JZ-S, JZ-P, JZ-AL, JZ-LL, JZ-HL, JZ-LL-AL, JZ-HL-AL

 Quadrant stay and position indicator made of galvanised steel

### JZ-S-A2, JZ-P-A2, JZ-LL-A2

 Quadrant stay and position indicator made of stainless steel, material no. 1.4301

### Quadrant stay and limit switches for JZ-S, JZ-S-A2, JZ-LL, JZ-HL and JZ-LL-A2



The quadrant stay is situated between the first two blades from the top

#### Quadrant stay with two limit switches for JZ-LL-AL



The quadrant stay is situated on the first blade from the top (dampers with up to three blades) or on the third blade from the top (dampers with at least four blades)

### Quadrant stays and limit switches

#### **Application**

- Limit switches for capturing the end positions (OPEN and/or CLOSED) of multileaf dampers
- Electric signals of limit switches are integrated with system control

#### **Variants**

- Z05: Quadrant stay and limit switch for damper blade position CLOSED
- Z06: Quadrant stay and limit switch for damper blade position OPEN
- Z07: Quadrant stay and 2 limit switches for damper blade positions OPEN and CLOSED

#### **Construction features**

- The position indicator of the quadrant stay actuates the limit switch or switches
- The limit switch is clip fixed to the quadrant stay

### **Limit switch**



### Micro switch

Type of contact	1 changeover contacts
Max. switching voltage (AC)	250 V AC
Max. switching current (AC)	0.5 A
Max. switching voltage (DC)	30 V DC
Max. switching current (DC)	0.5 A
Connecting cable	$3 \times 0.34 \text{ mm}^2$ , 1 m long
IEC protection class	II (protective insulation)
Protection level	IP 66
Operating temperature	–20 to 85 °C

### Limit switch, connecting cable core identification

