

## Spring Latches

**Steel / Stainless Steel, with Chamfered Pin, for Welding**

### SPECIFICATION

#### Types

- Type **A1**: Chamfer, top
- Type **A2**: Chamfer, bottom
- Type **A3**: Chamfer, right
- Type **A4**: Chamfer, left
- Type **AU**: Unmounted

#### Guide

- Steel precision casting **ST**  
Weldable, blackened
- Stainless steel precision casting **AISI CF-8 NI**  
Weldable

#### Latch arm

- Steel precision casting  
Zinc plated, blue passivated for ST
- Stainless steel precision casting **AISI CF-8 for NI**

#### Plunger pin

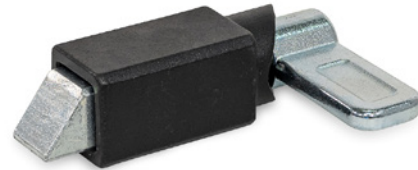
- Steel, hardened  
Zinc plated, blue passivated for ST
- Stainless steel **AISI 431**, hardened for NI

#### Socket button head screw DIN 7985

- Steel, zinc plated for ST
- Stainless steel **AISI 304** for NI

#### Compression spring

Stainless steel **AISI 316Ti**



The dimensional tolerances between plunger pin and guide are selected so that the functional reliability is guaranteed even after welding, applying a corrosion protection layer or in case of contamination. For type AU, the latching mechanism must be lubricated during installation, types A1, A2, A3 and A4 are pre-lubricated. The latching mechanism can be re-lubricated if necessary.

For fastening by welding, the unmounted type AU is particularly recommended to avoid changes to the microstructure of the material due to heating of the spring and plunger pin. In this case, the spring latch is assembled only after the surface treatment of the welded guide.

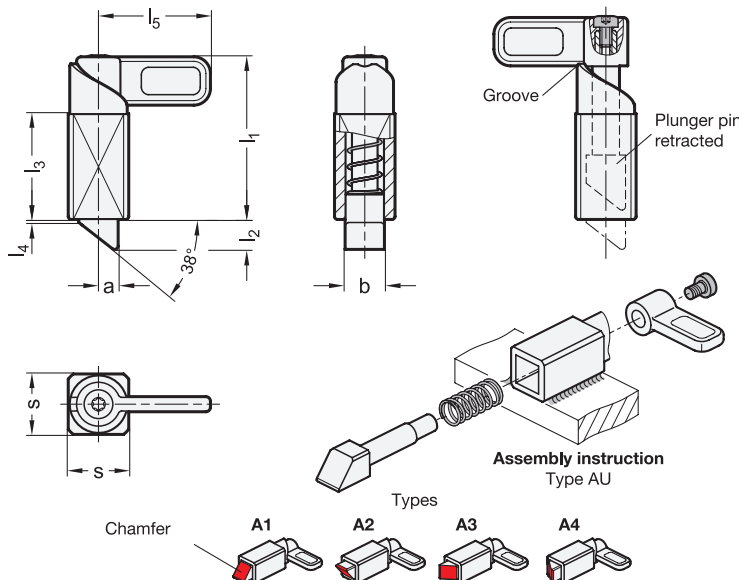
### INFORMATION

Spring latches GN 724.1 have a plunger pin with square cross-section, a latching surface on one side and a chamfer on the other. When moving in the direction of the chamfered pin, the plunger pin passes over grooves and edges, as the chamfered pin moves the plunger pin into the guide. The plunger pin automatically latches into place when moved toward the latching surface. The latching can be released by pulling the latch arm.

The notch at the upper end of the curve causes the latch to be held in place if the plunger pin needs to be kept temporarily from protruding.

### TECHNICAL INFORMATION

- Application Example (see page )
- Range of Cam Action Indexing Plungers (see page 816)
- Stainless Steel Characteristics (see page A26)



Chamfer

A1

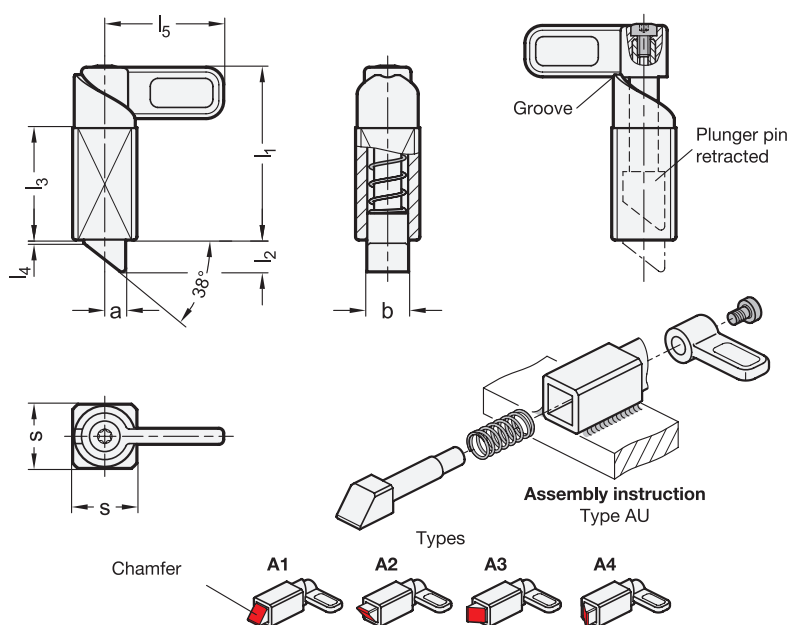
A2

A3

A4

Types

Assembly instruction  
Type AU



GN 724.1-ST

| Description          | b  | s  | a   | l1 ≈ | l2 | l3 | l4  | l5 | Spring load<br>in N ≈<br>Initial | Spring load<br>in N ≈<br>End |  |
|----------------------|----|----|-----|------|----|----|-----|----|----------------------------------|------------------------------|---------------------------------------------------------------------------------------|
| GN 724.1-13-20-A1-ST | 13 | 20 | 6.5 | 54   | 10 | 35 | 1   | 37 | 14                               | 35                           | 141                                                                                   |
| GN 724.1-13-20-A2-ST | 13 | 20 | 6.5 | 54   | 10 | 35 | 1   | 37 | 14                               | 35                           | 141                                                                                   |
| GN 724.1-13-20-A3-ST | 13 | 20 | 6.5 | 54   | 10 | 35 | 1   | 37 | 14                               | 35                           | 141                                                                                   |
| GN 724.1-13-20-A4-ST | 13 | 20 | 6.5 | 54   | 10 | 35 | 1   | 37 | 14                               | 35                           | 141                                                                                   |
| GN 724.1-13-20-AU-ST | 13 | 20 | 6.5 | 54   | 10 | 35 | 1   | 37 | 14                               | 35                           | 141                                                                                   |
| GN 724.1-20-30-A1-ST | 20 | 30 | 10  | 84   | 15 | 54 | 1.5 | 55 | 22                               | 70                           | 489                                                                                   |
| GN 724.1-20-30-A2-ST | 20 | 30 | 10  | 84   | 15 | 54 | 1.5 | 55 | 22                               | 70                           | 489                                                                                   |
| GN 724.1-20-30-A3-ST | 20 | 30 | 10  | 84   | 15 | 54 | 1.5 | 55 | 22                               | 70                           | 489                                                                                   |
| GN 724.1-20-30-A4-ST | 20 | 30 | 10  | 84   | 15 | 54 | 1.5 | 55 | 22                               | 70                           | 489                                                                                   |
| GN 724.1-20-30-AU-ST | 20 | 30 | 10  | 84   | 15 | 54 | 1.5 | 55 | 22                               | 70                           | 489                                                                                   |

GN 724.1-NI

STAINLESS STEEL

| Description          | b  | s  | a   | l1 ≈ | l2 | l3 | l4  | l5 | Spring load<br>in N ≈<br>Initial | Spring load<br>in N ≈<br>End |  |
|----------------------|----|----|-----|------|----|----|-----|----|----------------------------------|------------------------------|---------------------------------------------------------------------------------------|
| GN 724.1-13-20-A1-NI | 13 | 20 | 6.5 | 54   | 10 | 35 | 1   | 37 | 14                               | 35                           | 142                                                                                   |
| GN 724.1-13-20-A2-NI | 13 | 20 | 6.5 | 54   | 10 | 35 | 1   | 37 | 14                               | 35                           | 142                                                                                   |
| GN 724.1-13-20-A3-NI | 13 | 20 | 6.5 | 54   | 10 | 35 | 1   | 37 | 14                               | 35                           | 142                                                                                   |
| GN 724.1-13-20-A4-NI | 13 | 20 | 6.5 | 54   | 10 | 35 | 1   | 37 | 14                               | 35                           | 142                                                                                   |
| GN 724.1-13-20-AU-NI | 13 | 20 | 6.5 | 54   | 10 | 35 | 1   | 37 | 14                               | 35                           | 142                                                                                   |
| GN 724.1-20-30-A1-NI | 20 | 30 | 10  | 84   | 15 | 54 | 1.5 | 55 | 22                               | 70                           | 492                                                                                   |
| GN 724.1-20-30-A2-NI | 20 | 30 | 10  | 84   | 15 | 54 | 1.5 | 55 | 22                               | 70                           | 492                                                                                   |
| GN 724.1-20-30-A3-NI | 20 | 30 | 10  | 84   | 15 | 54 | 1.5 | 55 | 22                               | 70                           | 492                                                                                   |
| GN 724.1-20-30-A4-NI | 20 | 30 | 10  | 84   | 15 | 54 | 1.5 | 55 | 22                               | 70                           | 492                                                                                   |
| GN 724.1-20-30-AU-NI | 20 | 30 | 10  | 84   | 15 | 54 | 1.5 | 55 | 22                               | 70                           | 492                                                                                   |

