





DST

Secure and grounded.

This fastener provides grounding and is easily installed without any tools.

Page 737



“Specifically, we were able to provide our customers a solution that works in extremely confined spaces where energy chains are used. Not to mention, the assembly times have been significantly reduced.”

Ansgar Klein, edk Gelenkrohr GmbH



Shake, rattle and roll!

Many DIRAK products provide safe connections even in the event of earthquakes or vibration. Please ask us about our testing documentation.

Blind assembly made easy.

Enables quick and comfortable fastening of components.

Page 749



Captive.

DST fasteners can easily join panels together while remaining captive to one upon removal, therefore complying with the Machinery Directive 2006/42EC.

Page 732-734

DST
DIRAK-SNAP-Technology.
Simple. Secure.

Small with a big impact.

The DIRAK cage nut is small but innovative. The flexible housing allows for tool-less installation from both the front and rear of the cutout.

Page 742



Fastening Technology

Fastener

Page: 724-741

- Earthquake-proof 724, 726-728, 732-733, 737
- Vibrationsicher 724, 726-728, 732-733, 737
- Machinery directive 726-728, 732-734
- Conductive 737

Cage nuts


















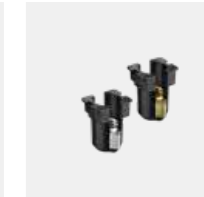



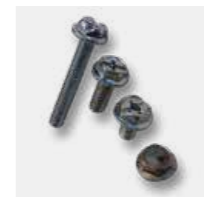
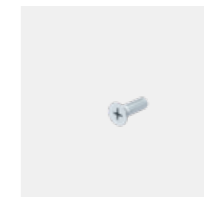
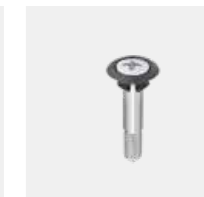


Page: 742-745

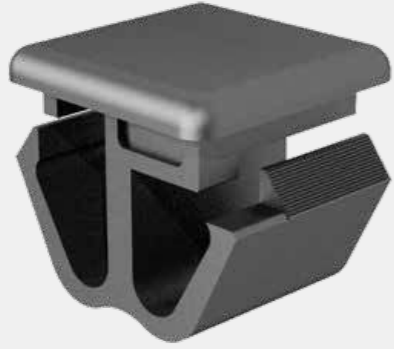
- Earthquake-proof 742-745
- Vibrationsicher 742-745
- Front mounted 742, 744-745

Screws

Page: 746-750

- IP resistant 748
- Blind assembly 749
- Anti-twist 750
- Under-head teeth 746

 724 PA Fastener □9.5 and □12.7 [1-020]	 725 DST Fastener □9.7 [1-041.01DST]	 726 DST Captive Flex-Fastener □9.5 [1-034DST]	 727 DST Captive Flex-Fastener □9.5 [1-034.01DST]	 728 DST Captive Fastener □9.5 [1-035DST]	 729 DST Fastener □9.5 [1-041.03DST]
 730 DST Fastener □9.5 without leaf spring [1-041.04DST]	 731 DST Fastener □9.5 with leaf spring [1-041.05DST]	 732 DST Captive Fastener □9.5 [1-041.06DST]	 733 DST Captive Fastener □12.7 [1-041.02DST]	 734 DST Captive Fastener □18.7 [1-041.09DST]	 735 DST Fastener 8x15 [1-040DST]
 736 DST Fastener 30x10 [1-042DST]	 737 DST Fastener 30x14 [1-043DST]	 738 DST DUAL Fastener 30x10 [1-044DST]	 739 DST Fastener 30x10 [1-046DST]	 740 DST DUAL Fastener 30x10 [1-045DST]	 742 Cage Nuts □9.5 [6-045]
 743 Cage Nuts □9.5 [6-045.01]	 744 Cage Nuts [6-045.02]	 745 Cage Nuts □12.7 [6-045.03]	 746 Serrated Screws [6-040]	 747 Countersunk Screws and Hexagon Nuts [6-041]	 748 Screw Assembly for Terminal Box Cover [6-043]
 749 Nut Plate [6-042]	 750 Tenon Blocks and Anti-Twist Protection [4-248]				



Polyamide, clip-in Fastener for □9.5 or □12.7 cutout or with 10mm gap, e.g. aluminium profiles

Advantages

- Clips into the installation cutout for simple tool-less installation.
- Audible click ensures proper secure installation.
- Vibration-proof according to DIN EN 61373.
- The square base 9.2 and 12.5 prevents the joiner from turning within the installation cutout.

Materials

Fastener: PA, black

Remarks

The (S) dimension indicates the total thickness of the sheet metal panels.



for cutout □9.7, tool-less installation

Advantages

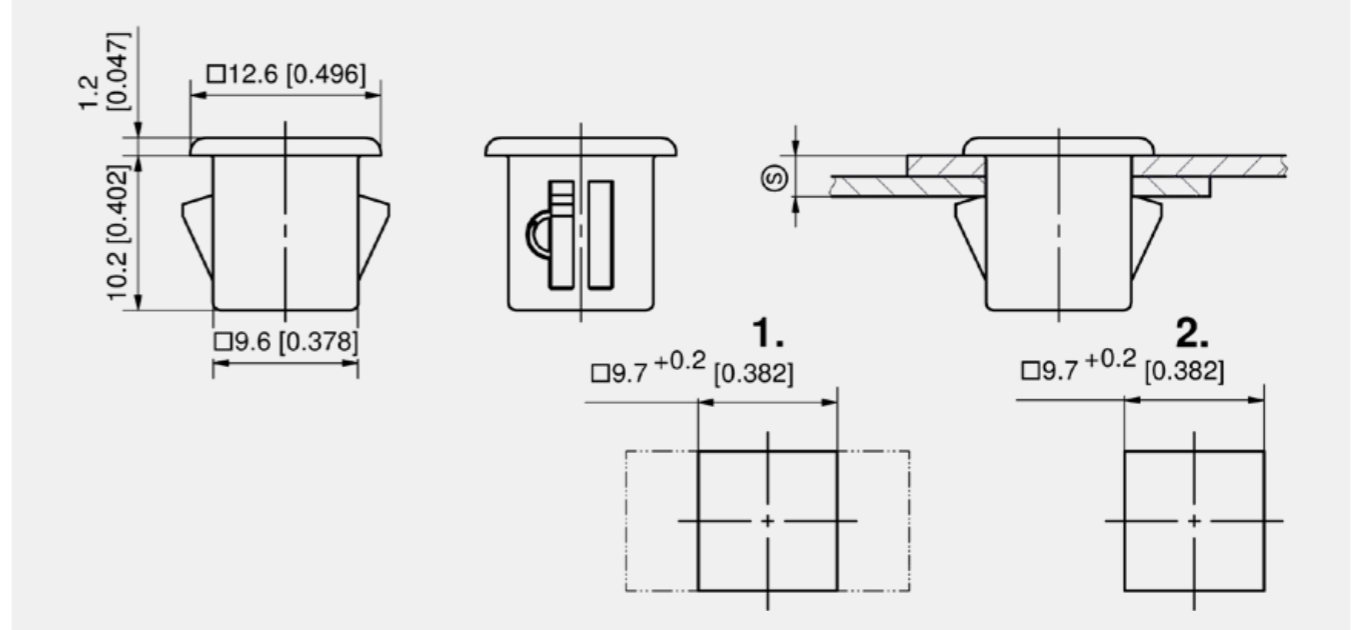
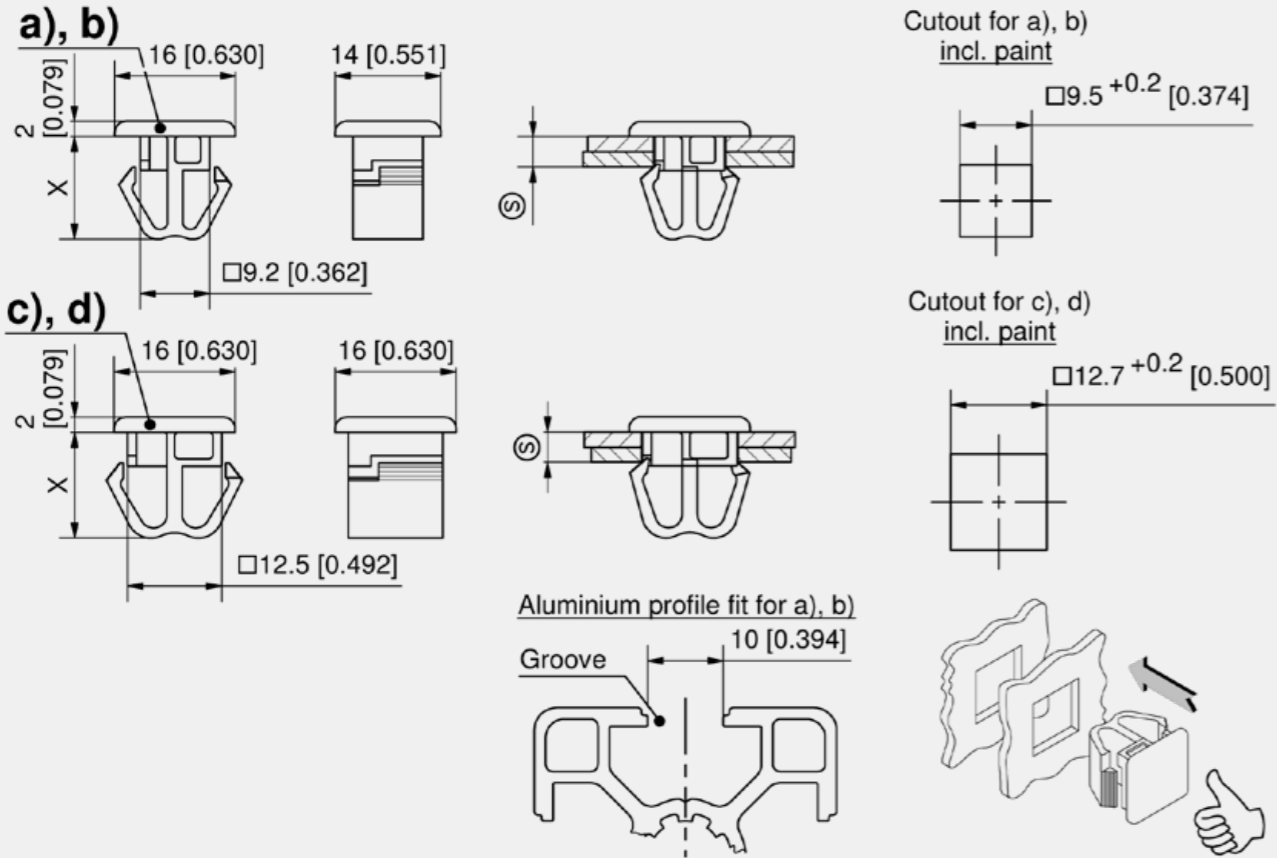
- Fastener with DIRAK-SNAP-Technology for joining flat metal sheets.
- The joining of metal sheets is achieved by pushing the Fastener into the cutouts.
- The dimension (S) always means the thickness of both sheets together.

Materials

- Housing: zinc die, untreated
- Snap wedges: sintered steel, zinc plated

Remarks

- = Cutout rear panel, also possible as ablong hole for tolerance adjustment.
- = Cutout front panel



Fastener

Part Number	Clamping range	Vibration-proof	Installation type
294-9104.00-02224	2.2 - 2.4 mm	Yes	tool-less
294-9104.00-02527	2.5 - 2.7 mm	Yes	tool-less
294-9104.00-02830	2.8 - 3.0 mm	Yes	tool-less
294-9104.00-03133	3.1 - 3.3 mm	Yes	tool-less

Fastener

	Part Number	Version	Clamping range	Dimension X	Installation type	Packaging unit
a)	214-0109.51-00000	9.5	3.0 - 3.5 mm	12.6 mm	tool-less	250 pcs.
b)	214-0109.51-10000	9.5	4.0 - 4.5 mm	13.6 mm	tool-less	250 pcs.
c)	214-0109.51-20000	12.7	3.0 - 3.5 mm	13 mm	tool-less	250 pcs.
d)	214-0109.51-30000	12.7	4.0 - 4.5 mm	14 mm	tool-less	250 pcs.



Advantages

- Captive Flex-Fastener with DIRAK-SNAP-Technology for joining of flat metal sheets and securely latching doors and covers.
- Meets machinery directive 2006/42EC.
- Eliminates the concern of losing, dropping or misplacing hardware.
- Held securely in the cutout.
- Vibration-proof according to DIN EN 61373.
- Operation by Phillips H2
- Opening by a ¼ turn of the insert.
- Self-adjusting clamping range of 0.5 - 5.5 mm.
- One-piece.

Materials

- **Housing and washer:** zinc die, chrome plated
- **Insert:** aluminium, hardened
- **Springs:** spring steel
- **SNAP wedges:** sintered steel

Remarks

Removal: By turning the screwdriver counterclockwise, the SNAP wedges (3.) are retracted. The compression spring (2.) pushes the Fastener out of the rear panel, but it remains captive in the front panel, held by the U-shaped spring (1.). (4.) Cutout rear panel, also possible as oblong hole for tolerance adjustment. (5.) Cutout front panel. The (S) dimension indicates the total thickness of the sheet metal panels.



Advantages

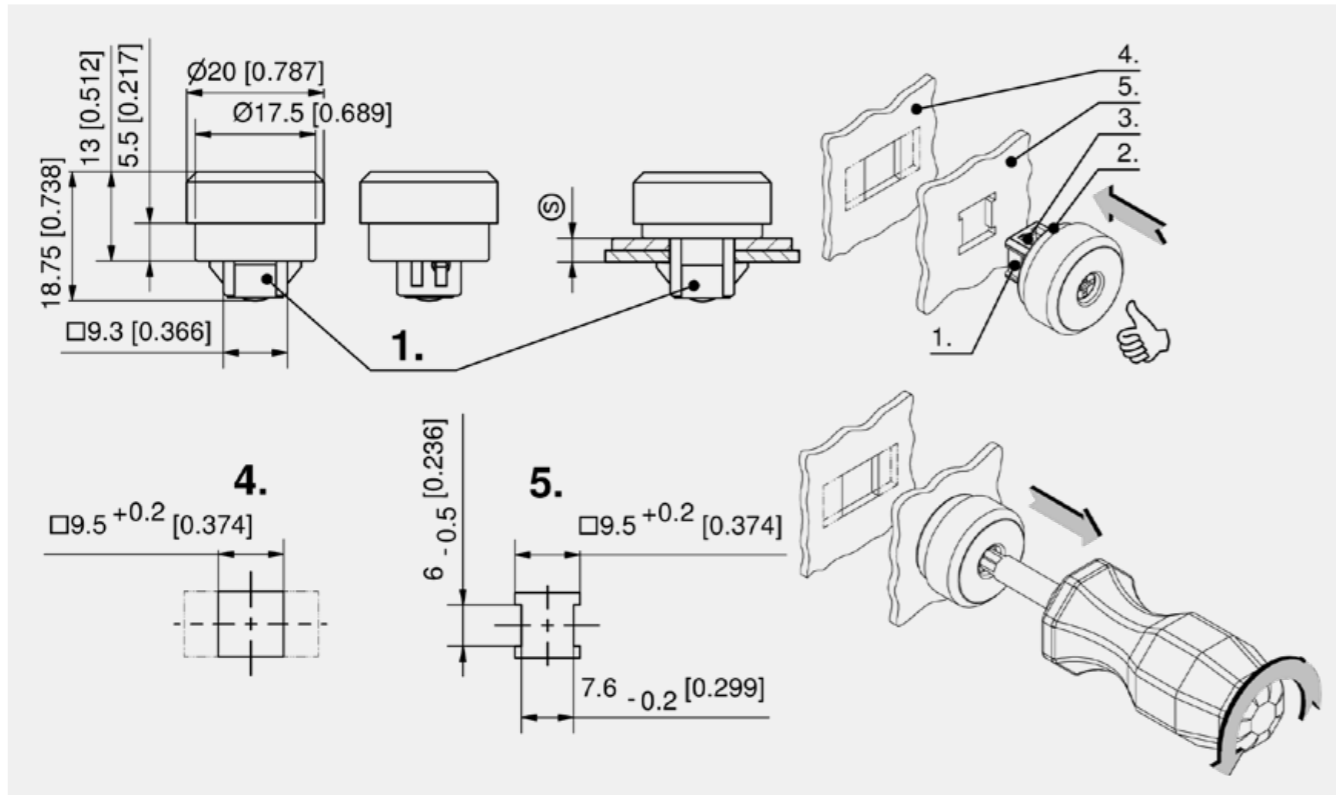
- Captive Flex-Fastener with DIRAK-SNAP-Technology for joining of flat metal sheets and securely latching doors and covers.
- Meets machinery directive 2006/42EC.
- Eliminates the concern of losing, dropping or misplacing hardware.
- Held securely in the cutout.
- Vibration-proof according to DIN EN 61373.
- Operation by handwheel.
- Opening by a ¼ turn of the insert.
- Self-adjusting clamping range of 0.5 - 5.5 mm.
- One-piece.

Materials

- **Housing and washer:** zinc die, chrome plated
- **Handwheel:** PA6, black
- **Springs:** spring steel
- **Snap wedges:** sintered steel, zinc plated

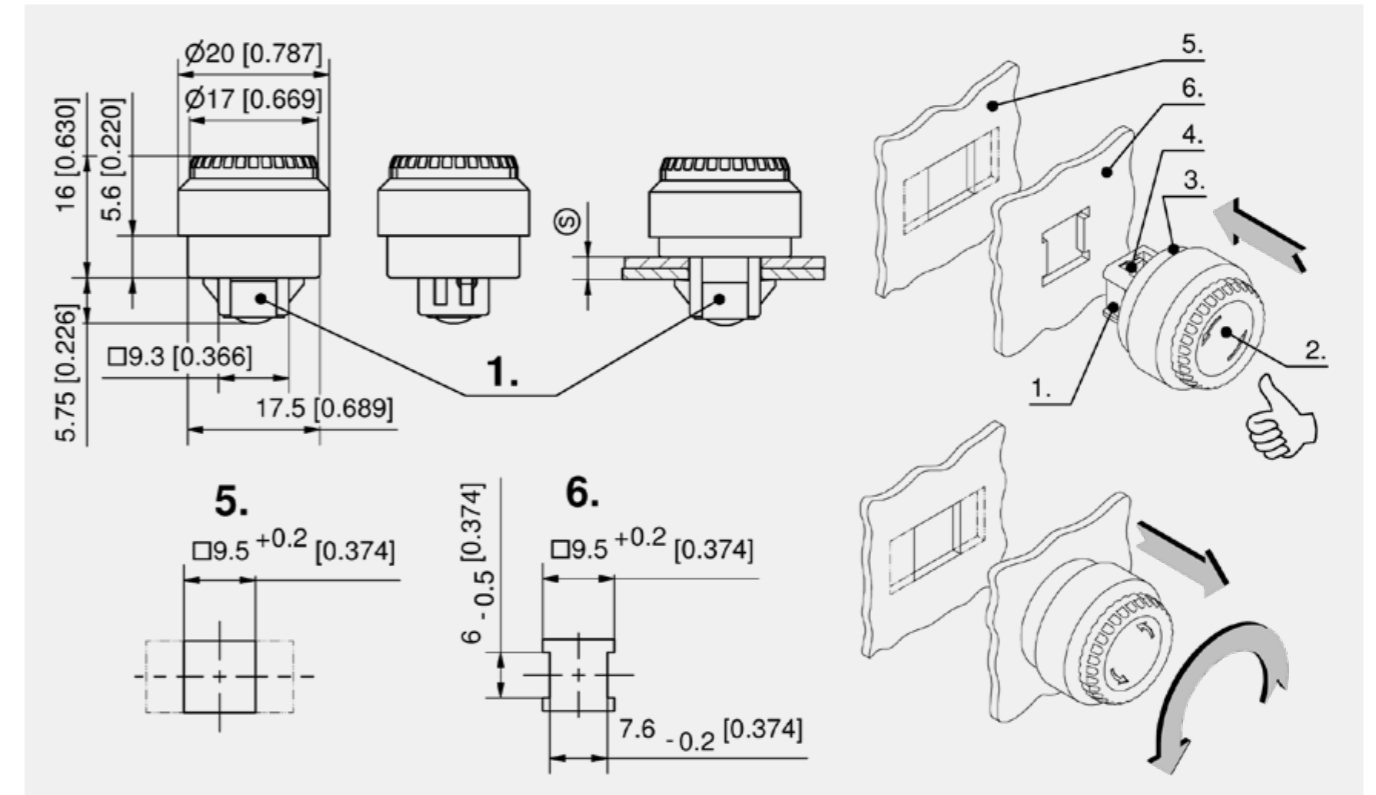
Remarks

Removal: By turning the Handwheel (2.) counterclockwise, the SNAP wedges (4.) are retracted. The leaf spring inside (3.) pushes the Fastener out of the rear panel, however, the U-shaped (1.) spring holes the Fastener captive in the front panel (6.). (5.) Cutout rear panel, also possible as oblong hole for tolerance adjustment. The (S) dimension indicates the total thickness of the sheet metal panels.



Fastener

Part Number	Insert	Clamping range	Vibration-proof	captive	Installation type
294-9302.00-00055	Phillips H2	0.5 - 5.5 mm	Yes	Yes	tool-less



Fastener

Part Number	Insert	Clamping range	Vibration-proof	captive	Installation type
294-9303.00-00055	Handwheel	0.5 - 5.5 mm	Yes	Yes	tool-less



Advantages

- Captive Flex-Fastener with DIRAK-SNAP-Technology for joining of flat metal sheets and securely latching doors and covers.
- Meets machinery directive 2006/42EC.
- Eliminates the concern of losing, dropping or misplacing hardware.
- Held securely in the cutout.
- Vibration-proof according to DIN EN 61373.
- Operation by handwheel / Phillips H2 or Torx 15.
- Opening by a ¼ turn of the insert.
- One-piece.

Materials

- **Housing:** zinc die, chrome plated or black
- **Insert:** aluminium, anodized
- **Springs:** spring steel
- **Snap wedges:** sintered steel, zinc plated

Remarks

Removal: Turning the screwdriver counterclockwise draws back the SNAP wedges (3.). The leaf spring (1.) pushes the Fastener out of the rear panel, but it remains captive in the front panel, held by the U-shaped spring (2.). (4.) Cutout rear panel, also possible as ablong hole for tolerance adjustment. (5.) Cutout front panel. The (S) dimension indicates the total thickness of the sheet metal panels.



Advantages

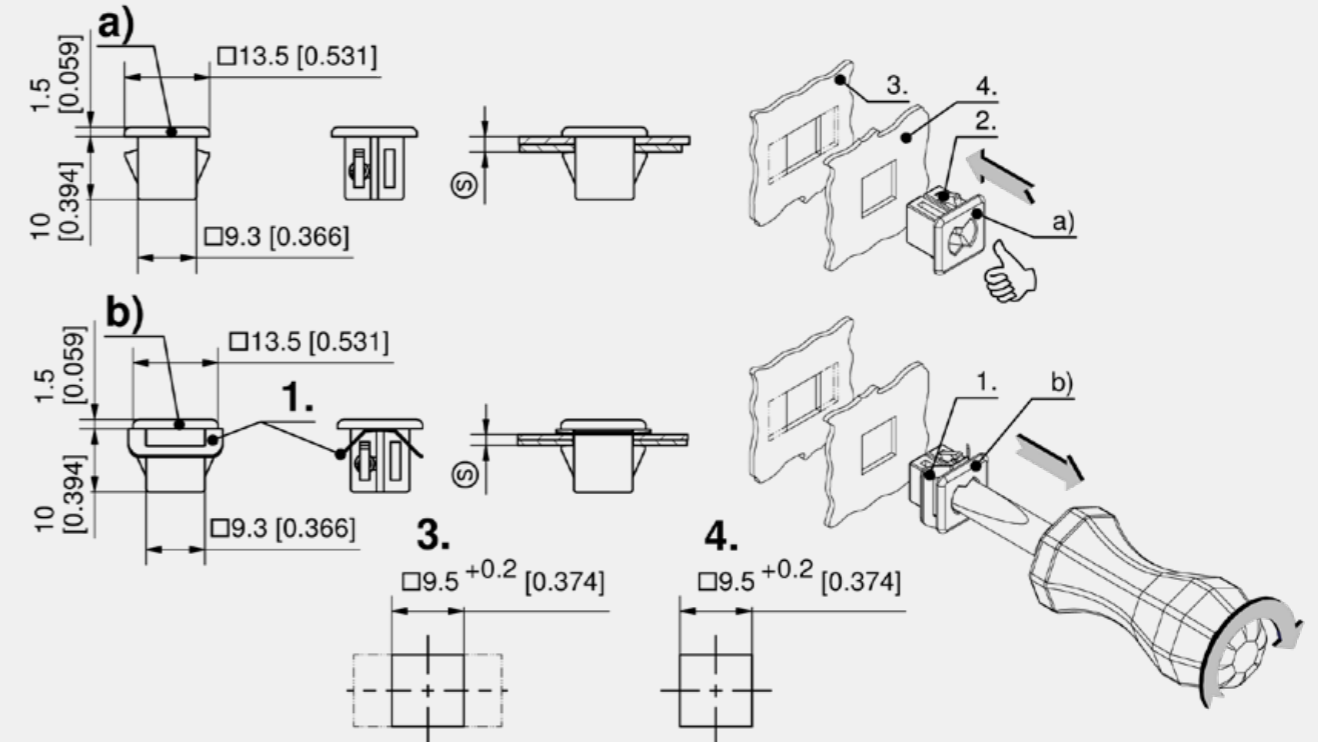
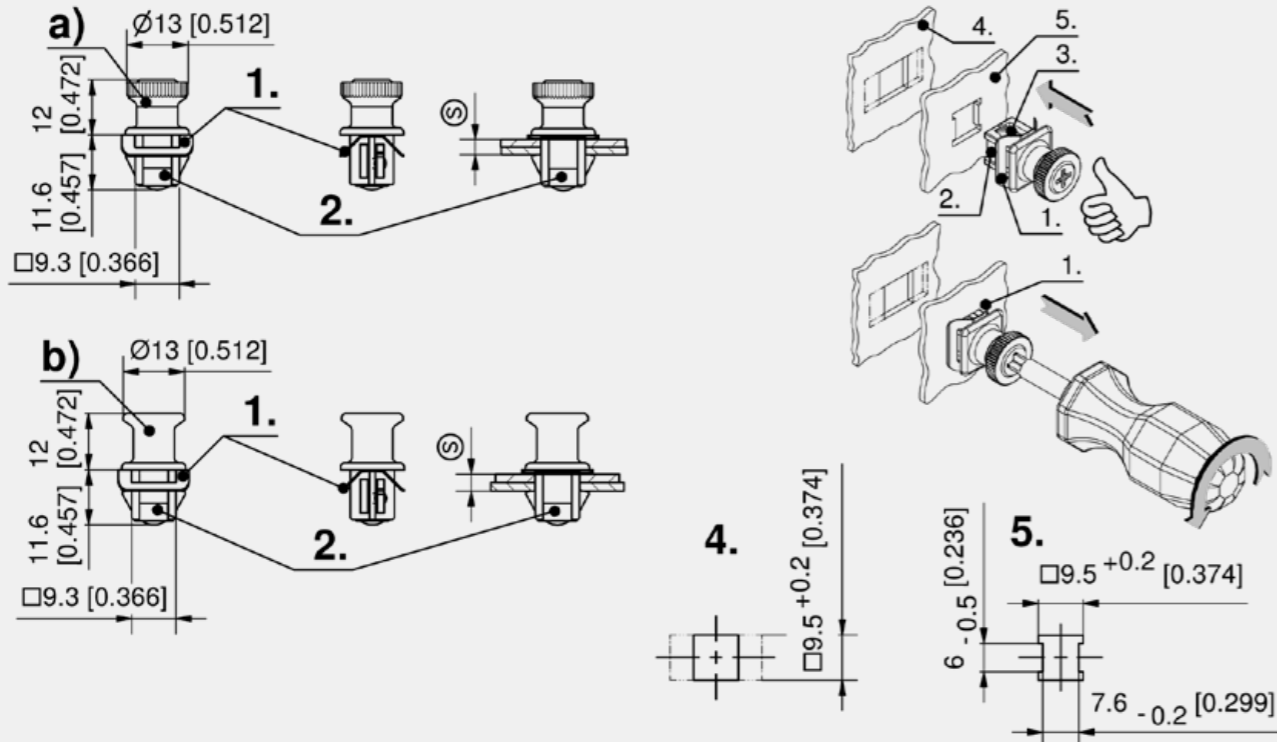
- Fastener with DIRAK-SNAP-Technology for joining sheet metal panels.
- Sheet metal panels are easily joined by manually pushing the Fastener through the panel cutout.
- This Fastener can be disengaged from the front of the panel using a flathead screwdriver.
- One-piece.

Materials

- **Housing:** zinc die, untreated
- **SNAP wedges:** sintered steel
- **Leaf spring:** stainless steel

Remarks

Removal: By turning the screwdriver clockwise, the SNAP wedges (2.) are retracted. a): The fastener can be pressed manually from the back of the sheet. b): The leaf spring (1.) pushes the fastener out of the rear panel. (3.) Cutout rear panel, also possible as ablong hole for tolerance adjustment. (4.) Cutout front panel. The (S) dimension indicates the total thickness of the sheet metal panels.

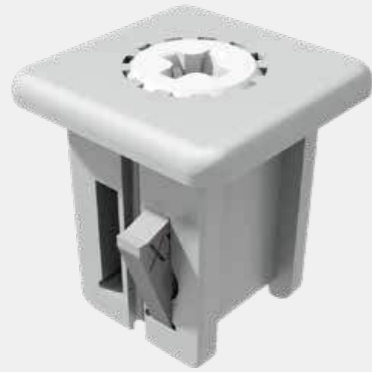


Fastener, zinc die

	Part Number	Insert	Clamping range	Surface	Vibration-proof	captive	Installation type
a)	294-9210.00-00017	Turning knob/Phillips H2	1.5 - 2.0 mm	chrome plated	Yes	Yes	tool-less
a)	294-9210.00-00026	Turning knob/Phillips H2	2.5 - 2.8 mm	chrome plated	Yes	Yes	tool-less
a)	294-9210.00-00034	Turning knob/Phillips H2	3.3 - 3.6 mm	chrome plated	Yes	Yes	tool-less
a)	294-9210.00-00042	Turning knob/Phillips H2	4.1 - 4.4 mm	chrome plated	Yes	Yes	tool-less
a)	294-9211.00-00017	Turning knob/Phillips H2	1.5 - 2.0 mm	black	Yes	Yes	tool-less
a)	294-9211.00-00026	Turning knob/Phillips H2	2.5 - 2.8 mm	black	Yes	Yes	tool-less
a)	294-9211.00-00034	Turning knob/Phillips H2	3.3 - 3.6 mm	black	Yes	Yes	tool-less
a)	294-9211.00-00042	Turning knob/Phillips H2	4.1 - 4.4 mm	black	Yes	Yes	tool-less
b)	294-9220.00-00138	Torx insert	3.7 - 4.0 mm	black	Yes	Yes	tool-less

Fastener

	Part Number	Version	Insert	Clamping range	Vibration-proof	Installation type
a)	294-9117.00-00022	without leaf spring	Slotted insert	2.0 - 2.5 mm	Yes	tool-less
a)	294-9117.00-00031	without leaf spring	Slotted insert	3.0 - 3.3 mm	Yes	tool-less
a)	294-9117.00-00035	without leaf spring	Slotted insert	3.4 - 3.7 mm	Yes	tool-less
a)	294-9117.00-00043	without leaf spring	Slotted insert	4.2 - 4.5 mm	Yes	tool-less
b)	294-9116.00-00017	with leaf spring	Slotted insert	1.5 - 2.0 mm	Yes	tool-less
b)	294-9116.00-00026	with leaf spring	Slotted insert	2.5 - 2.8 mm	Yes	tool-less
b)	294-9116.00-00030	with leaf spring	Slotted insert	2.9 - 3.2 mm	Yes	tool-less
b)	294-9116.00-00038	with leaf spring	Slotted insert	3.7 - 4.0 mm	Yes	tool-less



Advantages

- Fastener with DIRAK-SNAP-Technology for joining sheet metal panels.
- For cutout □9.5.
- Tool-less installation.
- Sheet metal panels are easily joined by manually pushing the Fastener through the panel cutout.
- This Fastener can be disengaged from the front of the panel using a Phillips H2 screwdriver.
- The (S) Dimension indicates the total thickness of the sheet metal panels.
- One piece.
- Delivery time on request!**

Materials

- Housing:** zinc die, untreated
- SNAP wedges:** sintered steel
- Insert:** Aluminium, hardened

Remarks

Removal: By turning the screwdriver counterclockwise, the SNAP wedges (1.) are retracted. The leaf spring pushes the fastener out of rear panel, however, the U-shaped spring holds the fastener captive in the front panel. (3.) Cutout rear panel, also possible as oblong hole for tolerance adjustment. (2.) Cutout front panel.



Advantages

- Fastener with DIRAK-SNAP-Technology for joining sheet metal panels.
- For cutout □9.5.
- Tool-less installation.
- Sheet metal panels are easily joined by manually pushing the Fastener through the panel cutout.
- This Fastener can be disengaged from the front of the panel using a Phillips H2 screwdriver.
- The (S) Dimension indicates the total thickness of the sheet metal panels.
- One piece.
- Delivery time on request!**

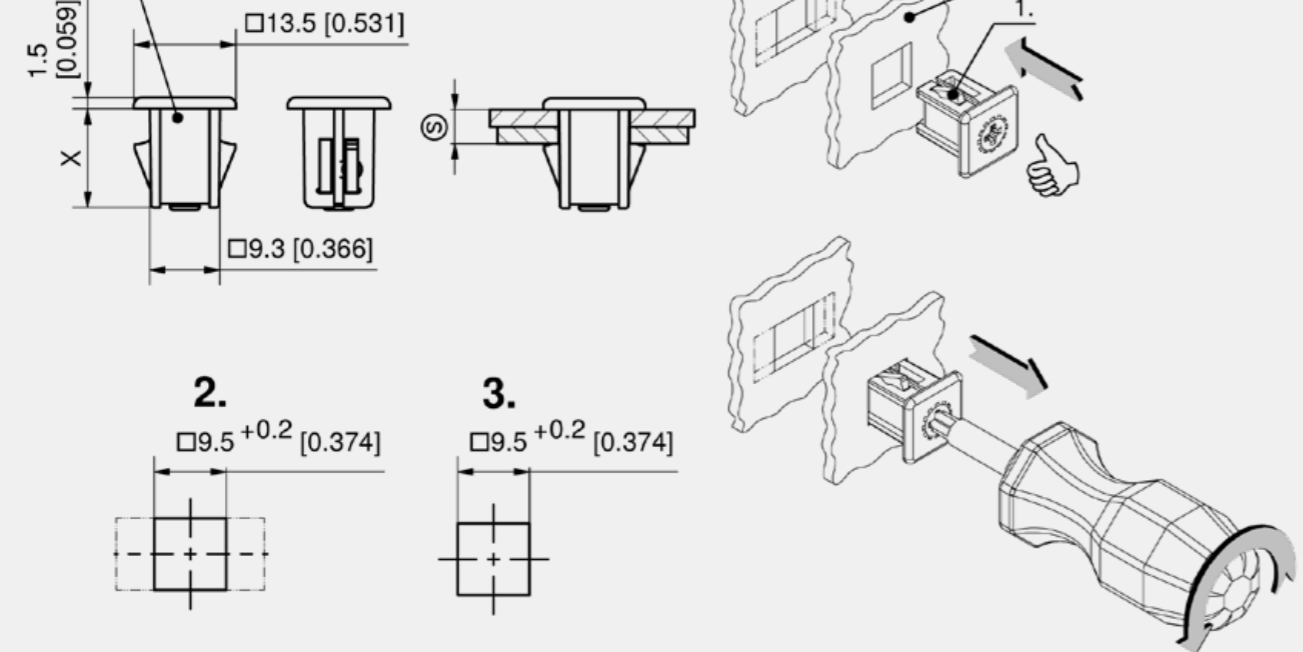
Materials

- Housing:** zinc die, untreated
- SNAP wedges:** sintered steel
- Leaf spring:** stainless steel
- Insert:** Aluminium, hardened

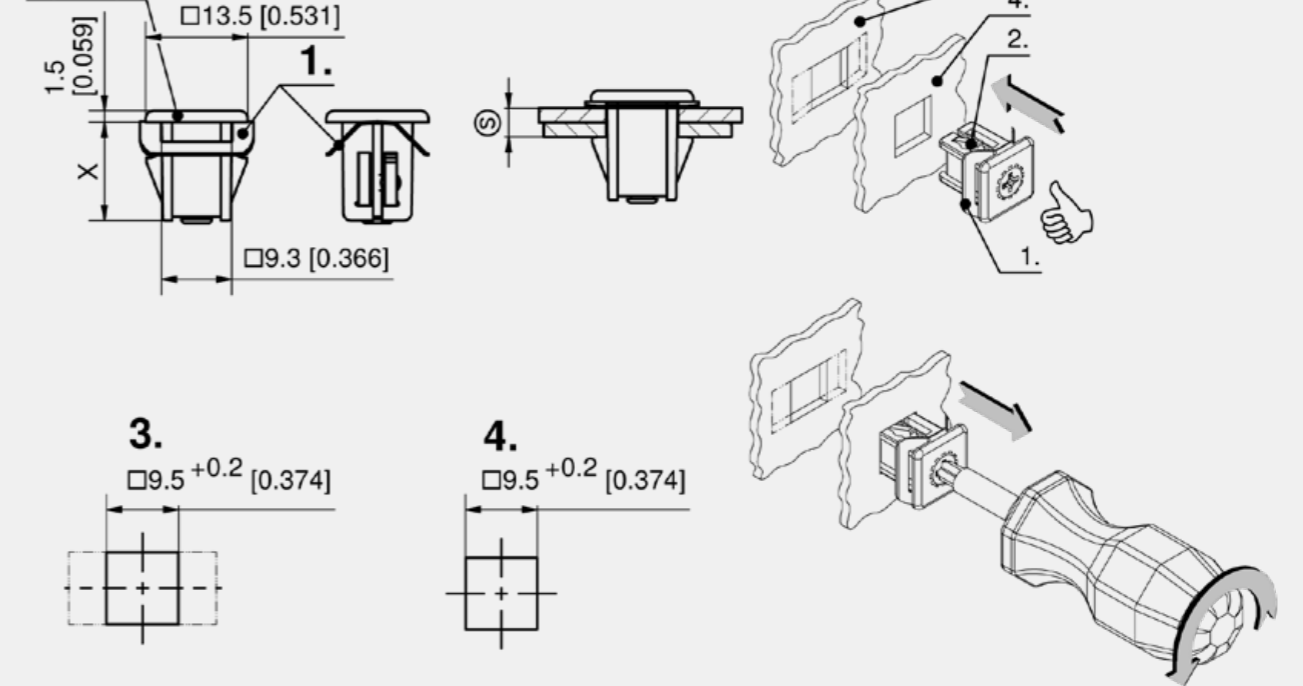
Remarks

1. = Leaf spring
2. = SNAP wedges
3. = Cutout rear panel
4. = Cutout front panel
Removal: By turning the screwdriver counterclockwise, the SNAP wedges are retracted. The leaf spring pushes the fastener out of rear panel.

a), b)



a), b)



Fastener without Leaf Spring

	Part Number	Insert	Clamping range	Dimension X	Installation type
a)	294-9114.00-00022	Phillips H2	2.0 - 2.5 mm	11 mm	tool-less
a)	294-9114.00-00031	Phillips H2	3.0 - 3.3 mm	11 mm	tool-less
a)	294-9114.00-00035	Phillips H2	3.4 - 3.7 mm	11 mm	tool-less
a)	294-9114.00-00039	Phillips H2	3.8 - 4.1 mm	11 mm	tool-less
a)	294-9114.00-00047	Phillips H2	4.6 - 4.9 mm	11 mm	tool-less
b)	294-9120.00-00042	Phillips H2	4.0 - 4.5 mm	13 mm	tool-less
b)	294-9120.00-00051	Phillips H2	5.0 - 5.3 mm	13 mm	tool-less
b)	294-9120.00-00055	Phillips H2	5.4 - 5.7 mm	13 mm	tool-less
b)	294-9120.00-00059	Phillips H2	5.8 - 6.1 mm	13 mm	tool-less
b)	294-9120.00-00067	Phillips H2	6.6 - 6.9 mm	13 mm	tool-less

Fastener with Leaf Spring

	Part Number	Insert	Clamping range	Dimension X	captive	Installation type
a)	294-9113.00-00017	Phillips H2	1.5 - 2.0 mm	11 mm	Yes	tool-less
a)	294-9113.00-00026	Phillips H2	2.5 - 2.8 mm	11 mm	Yes	tool-less
a)	294-9113.00-00030	Phillips H2	2.9 - 3.2 mm	11 mm	Yes	tool-less
a)	294-9113.00-00034	Phillips H2	3.3 - 3.6 mm	11 mm	Yes	tool-less
a)	294-9113.00-00042	Phillips H2	4.1 - 4.4 mm	11 mm	Yes	tool-less
b)	294-9119.00-00037	Phillips H2	3.5 - 4.0 mm	13 mm	Yes	tool-less
b)	294-9119.00-00046	Phillips H2	4.5 - 4.8 mm	13 mm	Yes	tool-less
b)	294-9119.00-00050	Phillips H2	4.9 - 5.2 mm	13 mm	Yes	tool-less
b)	294-9119.00-00054	Phillips H2	5.3 - 5.6 mm	13 mm	Yes	tool-less
b)	294-9119.00-00062	Phillips H2	6.1 - 6.4 mm	13 mm	Yes	tool-less



Advantages

- Captive Fastener with DIRAK-SNAP-Technology for joining of flat metal sheets and securely latching doors and covers.
- Meets machinery directive 2006/42EC.
- Eliminates the concern of losing, dropping or misplacing hardware.
- Held securely in the cutout.
- Vibration-proof according to DIN EN 61373.
- Operation by Phillips H2.
- Opening by a ¼ turn of the insert.
- Connects panels and securely latches doors and covers.
- One-piece.

Materials

- **Housing:** zinc die, untreated
- **SNAP wedges:** sintered steel
- **Insert:** aluminium, hardened
- **Springs:** spring steel

Remarks

Removal: By turning the screwdriver counterclockwise, the SNAP wedges (3.) are retracted. The leaf spring (1.) pushes the Fastener out of the rear panel, however, the U-shaped spring (2.) holds the Fastener captive in the front panel. (4.) Cutout rear panel, also possible as ablong hole for tolerance adjustment. (5.) Cutout front panel.

The (S) dimension indicates the total thickness of the sheet metal panels.



Advantages

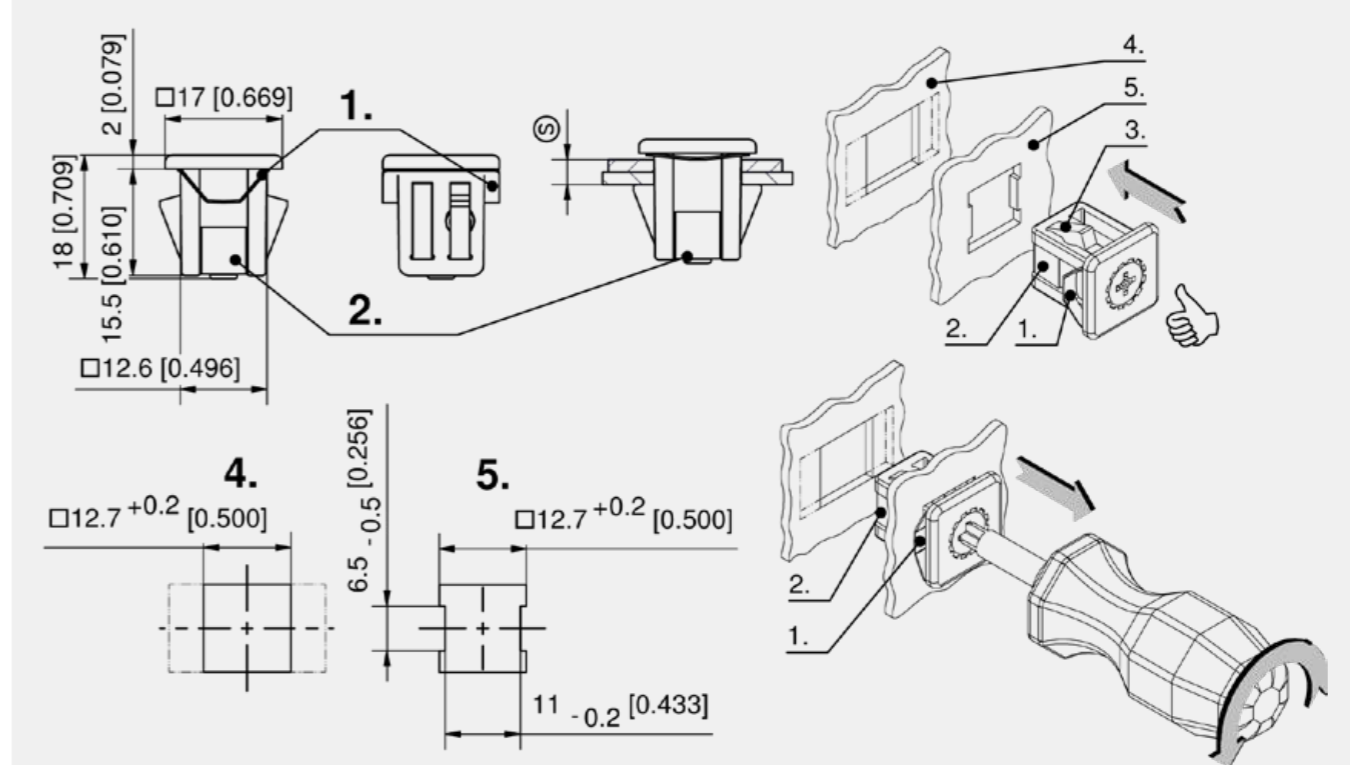
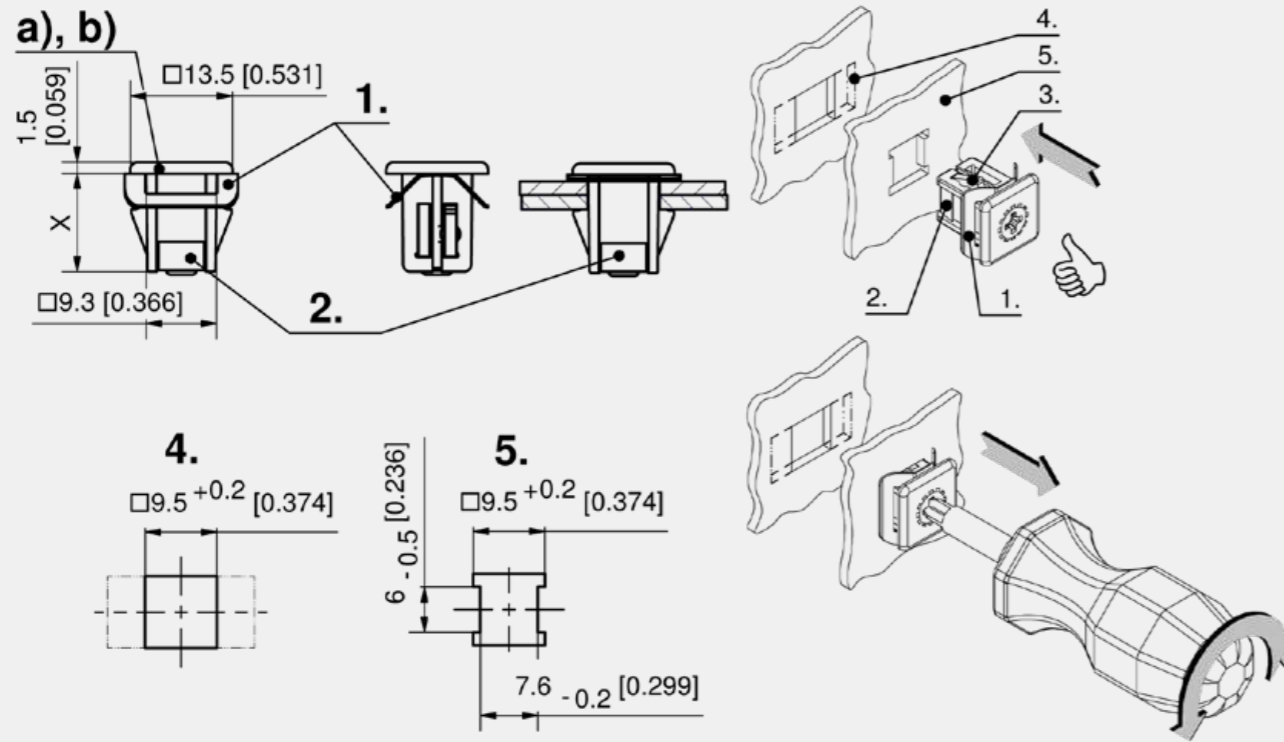
- Captive Fastener with DIRAK-SNAP-Technology for joining of flat metal sheets and securely latching doors and covers.
- Meets machinery directive 2006/42EC.
- Eliminates the concern of loosening, dropping or misplacing hardware.
- Held securely in the cutout.
- Vibration-proof according to DIN EN 61373.
- Operation by Phillips H2.
- Opening by a ¼ turn of the insert.
- One-piece.

Materials

- **Housing:** zinc die, untreated
- **Snap wedges:** sintered steel
- **Insert:** aluminum, hardened
- **Springs:** spring steel

Remarks

Removal: By turning the screwdriver counterclockwise, the SNAP wedges (3.) are retracted. The leaf spring (1.) pushes the Fastener out of the rear panel, however, the U-shaped spring holds the Fastener captive in the front panel. (4.) Cutout rear panel, can be made with along hole for tolerance adjustment. (5.) Cutout front panel. The (S) dimension indicates the total thickness of the sheet metal panels.



Fastener

	Part Number	Insert	Clamping range	Dimension X	Vibration-proof	captive	Installation type
a)	294-9112.00-00017	Phillips H2	1.5 - 2.0 mm	11 mm	Yes	Yes	tool-less
a)	294-9112.00-00026	Phillips H2	2.5 - 2.8 mm	11 mm	Yes	Yes	tool-less
a)	294-9112.00-00030	Phillips H2	2.9 - 3.2 mm	11 mm	Yes	Yes	tool-less
a)	294-9112.00-00034	Phillips H2	3.3 - 3.6 mm	11 mm	Yes	Yes	tool-less
a)	294-9112.00-00042	Phillips H2	4.1 - 4.4 mm	11 mm	Yes	Yes	tool-less
b)	294-9118.00-00037	Phillips H2	3.5 - 4.0 mm	13 mm	Yes	Yes	tool-less
b)	294-9118.00-00046	Phillips H2	4.5 - 4.8 mm	13 mm	Yes	Yes	tool-less
b)	294-9118.00-00050	Phillips H2	4.9 - 5.2 mm	13 mm	Yes	Yes	tool-less
b)	294-9118.00-00054	Phillips H2	5.3 - 5.6 mm	13 mm	Yes	Yes	tool-less
b)	294-9118.00-00062	Phillips H2	6.1 - 6.4 mm	13 mm	Yes	Yes	tool-less

Fastener

	Part Number	Insert	Clamping range	Vibration-proof	captive	Installation type
	294-9103.00-00021	Phillips H2	1.4 - 1.9 mm	Yes	Yes	tool-less
	294-9103.00-00031	Phillips H2	2.4 - 2.9 mm	Yes	Yes	tool-less
	294-9103.00-00036	Phillips H2	2.9 - 3.4 mm	Yes	Yes	tool-less
	294-9103.00-00041	Phillips H2	3.4 - 3.9 mm	Yes	Yes	tool-less
	294-9103.00-00046	Phillips H2	3.9 - 4.4 mm	Yes	Yes	tool-less
	294-9103.00-00056	Phillips H2	4.9 - 5.4 mm	Yes	Yes	tool-less
	294-9103.00-00061	Phillips H2	5.4 - 5.9 mm	Yes	Yes	tool-less
	294-9103.00-00066	Phillips H2	5.9 - 6.4 mm	Yes	Yes	tool-less



Advantages

- Captive Fastener with DIRAK-SNAP-Technology for joining of flat metal sheets and securely latching doors and covers.
- Meets machinery directive 2006/42EC.
- Eliminates the concern of losing, dropping or misplacing hardware.
- Tool-less installation.
- Pushed into the front panel (sheet thickness max. 3 mm) and permanently secured by the U-shaped spring (1.).
- Can be dismantled of the rear panel from the front with the tool for uninstallation 292-0312.83-00000.
- One-piece.
- The (S) dimension indicates the total thickness of the sheet metal panels.

Materials

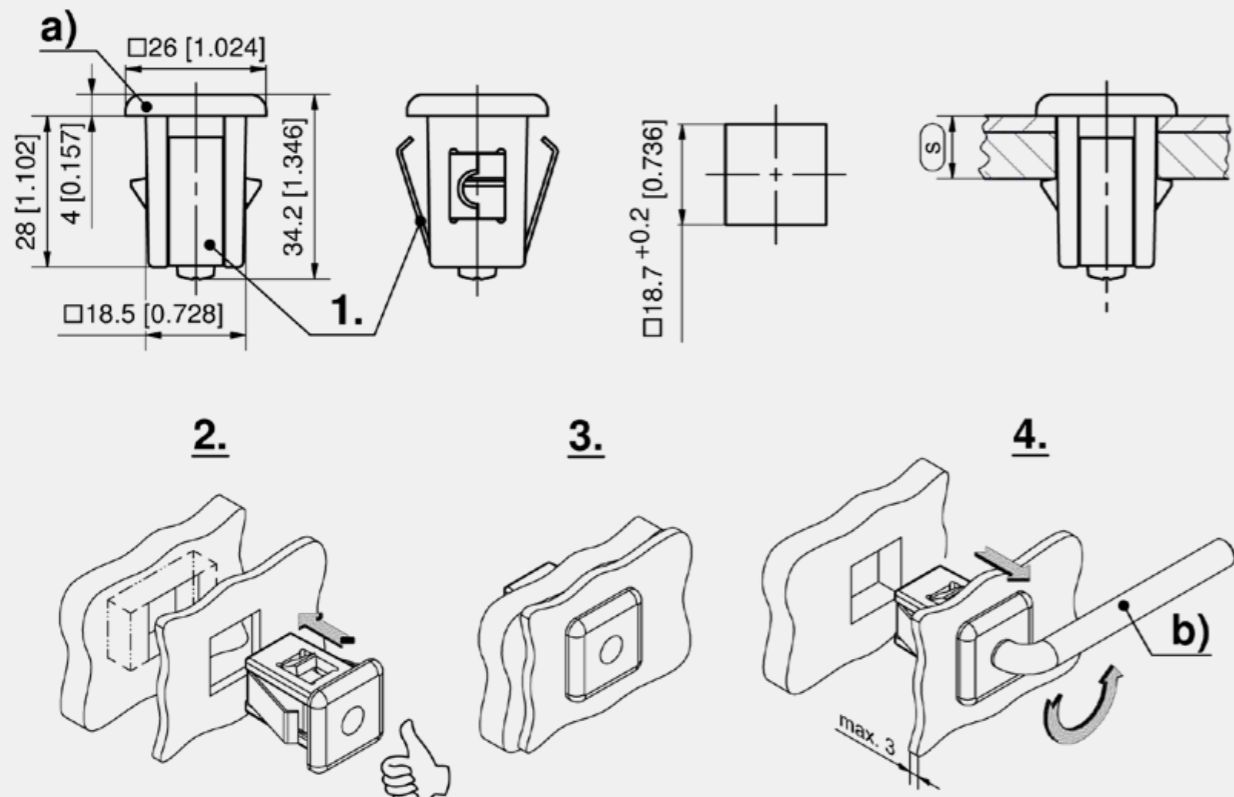
- **Housing and Snap wedges:** zinc die, zinc plated
- **U-shaped spring:** stainless steel AISI 301

Remarks

- 2. = Installation
- 3. = Installed
- 4. = Removal

Removal: By turning the tool for uninstallation counter clockwise the SNAP wedges are drawn back. The U-shaped spring holds the Fastener captive in the front panel.

Oblong hole possible in the rear panel, for tolerance adjustment.



Fastener

Part Number	Clamping range	captive	Installation type
a) 294-8004.00-00001	11.5 - 11.8 mm	Yes	tool-less

Accessories	
+	756 292-0312.83-00000 Tool for uninstallation



for cutout 8x15, tool-less installation

Advantages

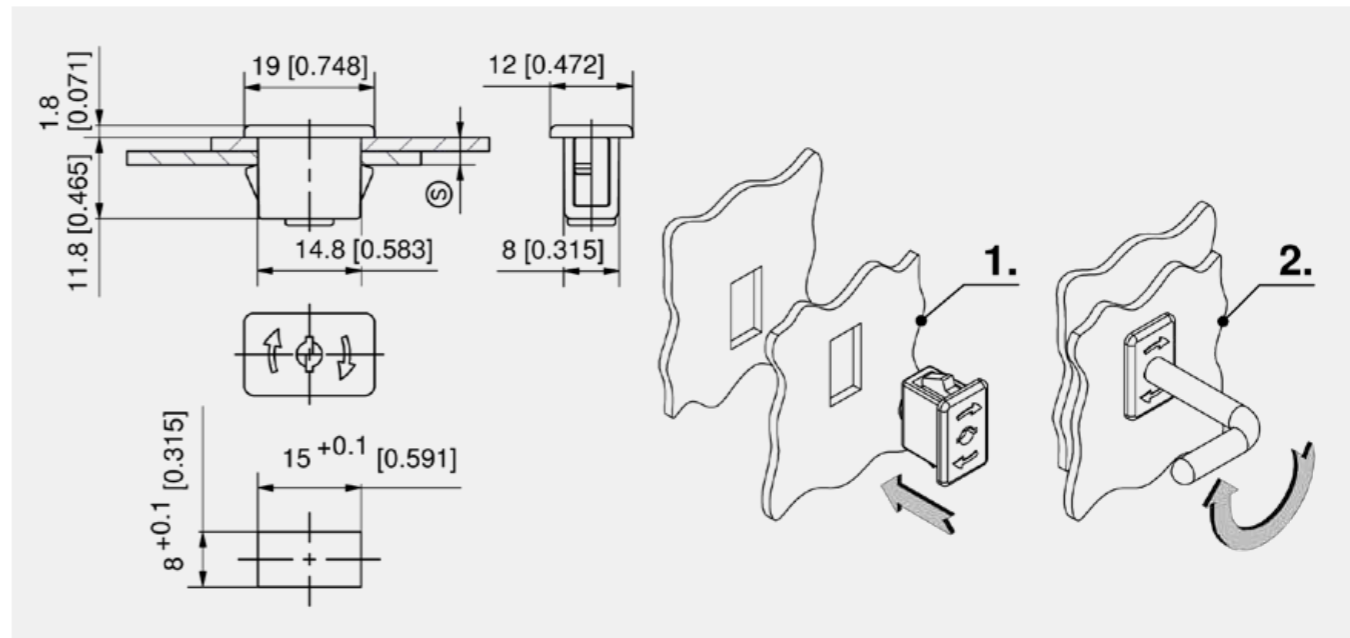
- Fastener with DIRAK-SNAP-Technology for joining flat metal sheets.
- The joining of two metal sheets is achieved by pushing the Fastener into the cutouts.
- With tool/key Part-No.: 292-0302.70 product system 6-080DST this Fastener can be disengaged both from inside and outside.
- After removal of the red plug disassembly also from the inside possible.
- The tool is captive in the open position.

Materials

- **Housing:** PA, black or light grey, RAL 7035
- **Snap wedges:** Grivory, black

Remarks

- 1. assembly
 - 2. disassembly
- The dimension (S) always means the thickness of both sheets e.g.:
- 1.5 + 1.5 = 3
 - 2.0 + 1.0 = 3
 - 2.0 + 2.0 = 4



Fastener, PA, black

Part Number	Clamping range	Vibration-proof	Installation type
294-9001.00-00015	1.5 - 1.8 mm	Yes	tool-less
294-9001.00-00020	2.0 - 2.3 mm	Yes	tool-less
294-9001.00-00030	3.0 - 3.3 mm	Yes	tool-less
294-9001.00-00040	4.0 - 4.3 mm	Yes	tool-less

Fastener, PA, Light Grey RAL 7035

Part Number	Clamping range	Vibration-proof	Installation type
294-9002.00-00015	1.5 - 1.8 mm	Yes	tool-less
294-9002.00-00020	2.0 - 2.3 mm	Yes	tool-less
294-9002.00-00030	3.0 - 3.3 mm	Yes	tool-less
294-9002.00-00040	4.0 - 4.3 mm	Yes	tool-less

Accessories	
+	756 292-0302.70-00000 Tool for uninstallation



Advantages

- Fastener with DIRAK-SNAP-Technology for joining flat metal sheets.
- For cutout 30x10.
- Tool-less installation.
- This Fastener is suitable for thicknesses of totally 8mm.
- The joining is achieved by pushing the Fastener into the cutouts.

Materials

- Housing:** zinc die, black
- Snap wedges:** sintered steel

Remarks

- Installation



Advantages

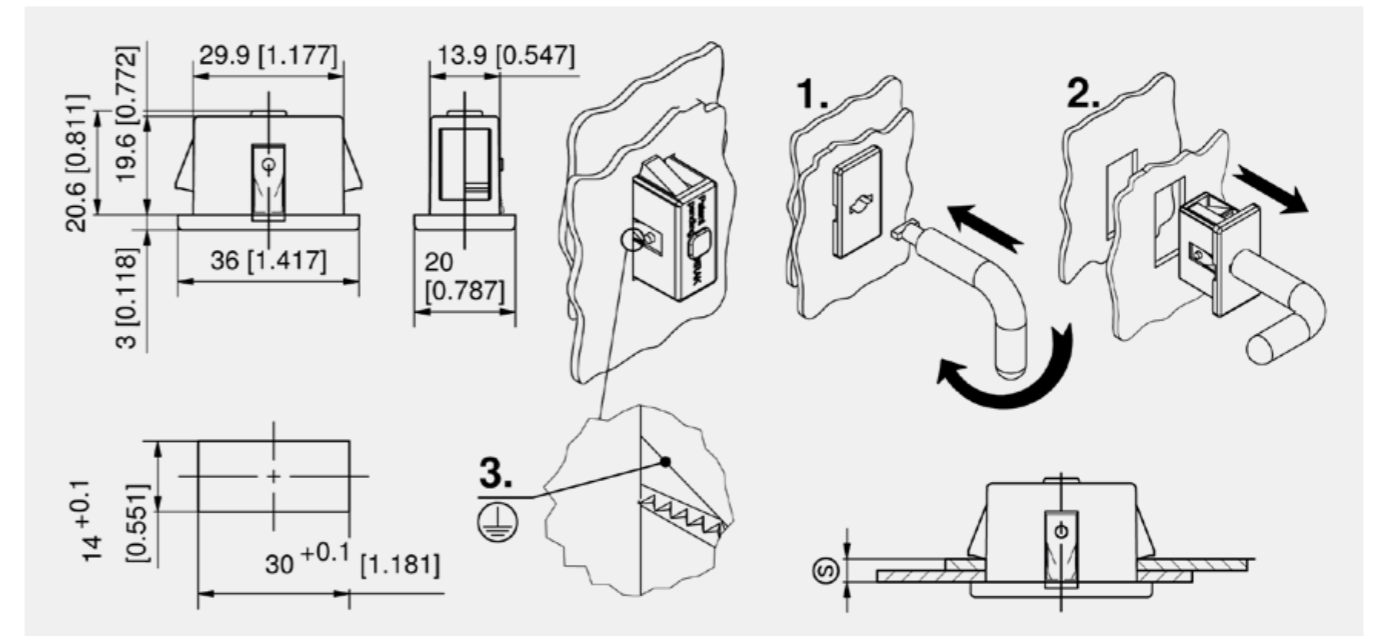
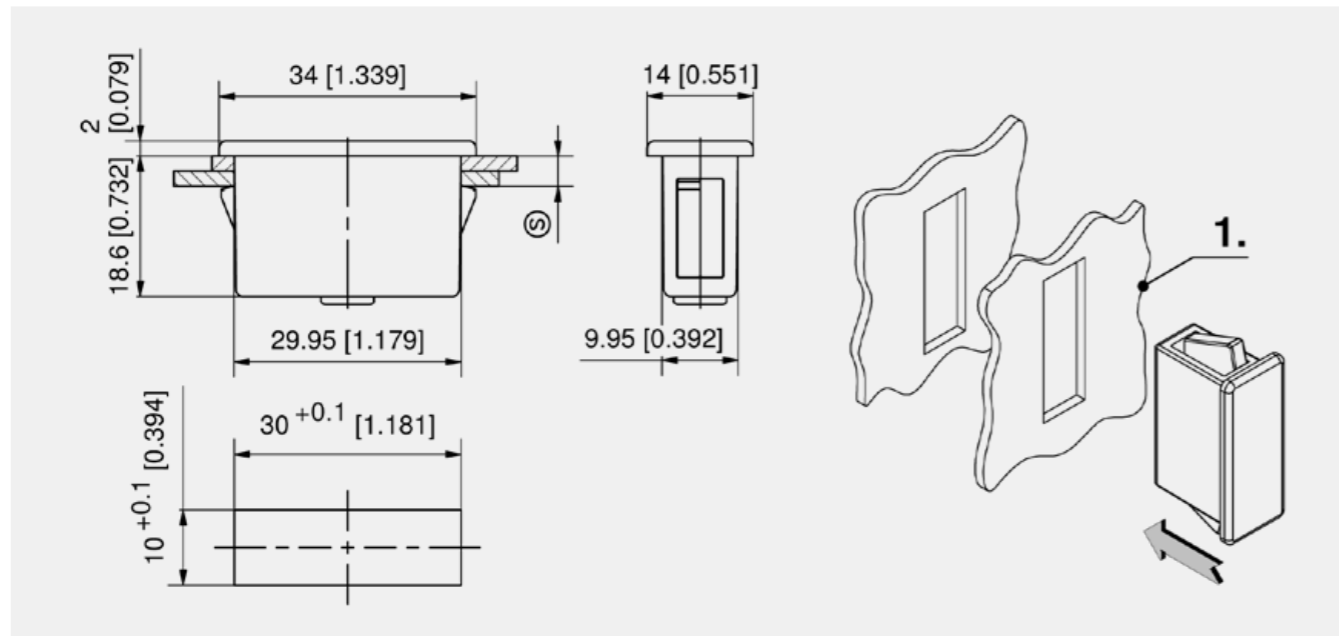
- Fastener with DIRAK-SNAP-Technology for joining flat metal sheets.
- The connection of the sheets is established via a simple clip-in into its cutout.
- The riveted grounding clip assures an electrical connection between the sheets and the fastener itself.
- Vibration-proof according to DIN EN 61373.
- The teeth of the riveted grounding clip penetrate the painted cutting edge of the cutouts as well.
- By using the tool for uninstillation 292-0311.15 a disassembly from the front is possible.

Materials

- Housing:** zinc die, black
- Snap wedges:** sintered steel
- Grounding clip:** stainless steel

Remarks

- The (S) dimension indicates the total thickness of the sheet metal panels.
- and 2. = Uninstillation
 3. Grounding clip



Fastener

Part Number	Clamping range	Vibration-proof	Installation type
294-9106.00-00040	3.7 - 4.2 mm	Yes	tool-less
294-9106.00-00045	4.2 - 4.7 mm	Yes	tool-less
294-9106.00-00050	4.7 - 5.2 mm	Yes	tool-less
294-9106.00-00055	5.2 - 5.7 mm	Yes	tool-less
294-9106.00-00060	5.7 - 6.2 mm	Yes	tool-less
294-9106.00-00080	7.7 - 8.2 mm	Yes	tool-less

Accessories	
755	292-0702.15-01030 Reinforcement plate for cutout
754	292-0401.00-03010 Cutout-cover
756	292-0306.80-02530 Tool for uninstillation

Fastener

Part Number	Clamping range	Grounding	Vibration-proof	Installation type
294-9003.00-00034	3.0 - 3.7 mm	Yes	Yes	tool-less
294-9003.00-00043	4.0 - 4.5 mm	Yes	Yes	tool-less
294-9003.00-00052	5.0 - 5.5 mm	Yes	Yes	tool-less
294-9003.00-00063	6.0 - 6.5 mm	Yes	Yes	tool-less

Accessories	
754	292-0402.00-03014 Cutout-cover
756	292-0311.15-00000 Tool for uninstillation



Advantages

- DUAL Fastener with DIRAK-SNAP-Technology for joining flat metal sheets.
- For cutout 30x10.
- Tool-less installation.
- In order to enable a tolerance compensation, one half of the housing is just 28mm long.

Materials

- **Housing:** zinc die, black or PA black
- **Snap wedges:** sintered steel

Remarks

1. Installation



Advantages

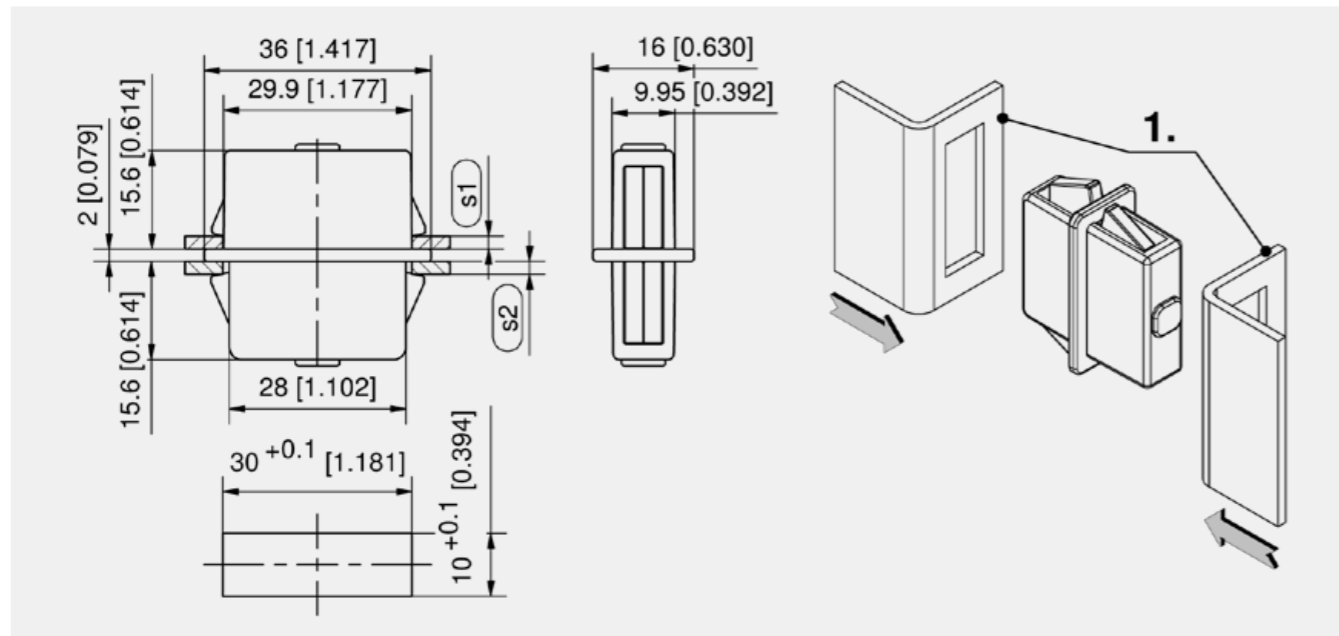
- The Fastener with DIRAK-SNAP-Technology has one fixed side and one detachable side.
- Fastening with countersunk screws M4 or wood screws.
- Clamping range 0.8-3mm.
- The width (b) of the cutout can be enlarged for adjusting.
- Pull-off forces: ~15 - 50N.
- Blind assembly in closed profiles.
- Vibration-proof.

Materials

- **Fastener:** zinc die, black
- **Snap wedges:** sintered steel

Remarks

- F = pull-off force
1. cutout for detachable side / tolerance balance
 2. e.g. sheet metal
 3. e.g. wood



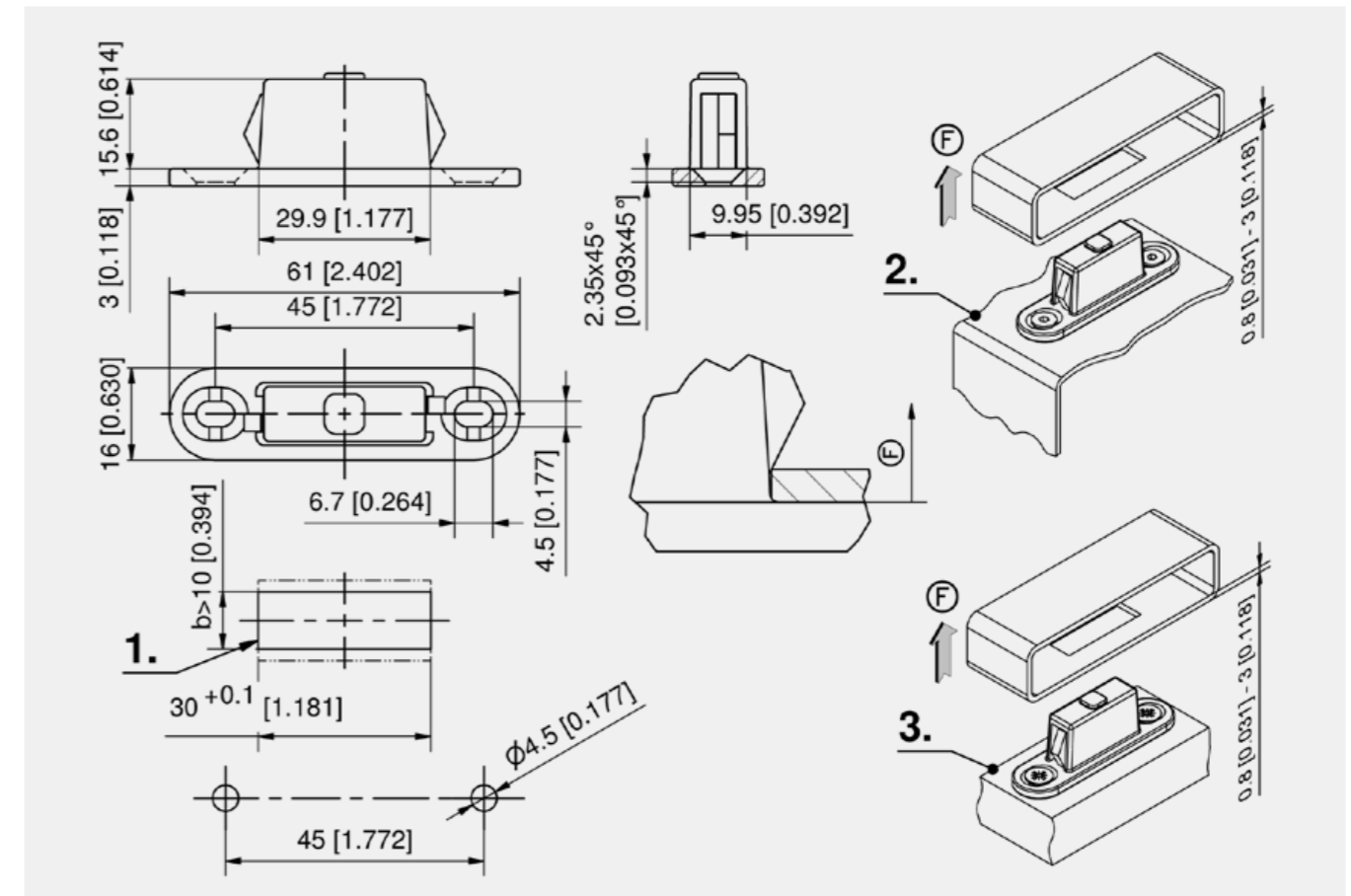
Fastener, PA, black

Part Number	Version	Clamping range	Clamping range (S) 2	Vibration-proof	Installation type
294-9102.52-10010	for fix connection	0.7 - 1.2 mm	0.7 - 1.2 mm	Yes	tool-less
294-9102.52-20020	for fix connection	1.7 - 2.2 mm	1.7 - 2.2 mm	Yes	tool-less
294-9102.52-15015	for fix connection	1.2 - 1.7 mm	1.2 - 1.7 mm	Yes	tool-less
294-9102.52-25025	for fix connection	2.2 - 2.7 mm	2.2 - 2.7 mm	Yes	tool-less
294-9102.52-30030	for fix connection	2.7 - 3.2 mm	2.7 - 3.2 mm	Yes	tool-less

Fastener, zinc die, black

Part Number	Version	Clamping range	Clamping range (S) 2	Vibration-proof	Installation type
294-9107.33-10010	for fix connection	0.7 - 1.2 mm	0.7 - 1.2 mm	Yes	tool-less
294-9107.33-15015	for fix connection	1.2 - 1.7 mm	1.2 - 1.7 mm	Yes	tool-less
294-9107.33-20020	for fix connection	1.7 - 2.2 mm	1.7 - 2.2 mm	Yes	tool-less
294-9107.33-25025	for fix connection	2.2 - 2.7 mm	2.2 - 2.7 mm	Yes	tool-less
294-9107.33-30030	for fix connection	2.7 - 3.2 mm	2.7 - 3.2 mm	Yes	tool-less

Accessories	
755	292-0702.15-01030 Reinforcement plate for cutout
754	292-0401.00-03010 Cutout-cover
756	292-0306.80-02530 Tool for uninstallation



Fastener

Part Number	Version	Pull-off force	Clamping range	Vibration-proof	Countersunk screw	Installation type
295-9002.00-00001	one detachable side	~15N	0.8 - 3.0 mm	Yes	M4	screw-on
295-9002.00-00003	one detachable side	~30N	0.8 - 3.0 mm	Yes	M4	screw-on
295-9002.00-00005	one detachable side	~50N	0.8 - 3.0 mm	Yes	M4	screw-on

Accessories	
738	1-044DST DST DUAL Fastener 30x10
740	1-045DST DST DUAL Fastener 30x10



Advantages

- The Dual Fastener with DIRAK-SNAP-Technology has one fixed side and one detachable side.
- Tool-less installation.
- Application: Joining 2 sheet metal panels.
- The DUAL Fastener keep the door in position and prevent a rattling of the door.
- The cutout for the fixed side is 30x10mm.
- For the detachable side a cut-out of 28x10mm till 30x16mm is possible depending on the possible misalignment.

Materials

- **Dual Fastener:** PA, black or zinc die, black
- **Snap wedges:** sintered steel

Remarks

1. assembled
 2. removed
 3. cutout for fixed side
 4. cutout for detachable side / tolerance balance
 5. possible misalignment of the 2 cutouts
- The sheet thicknesses (S) can be designed differently.
F = pull-off force

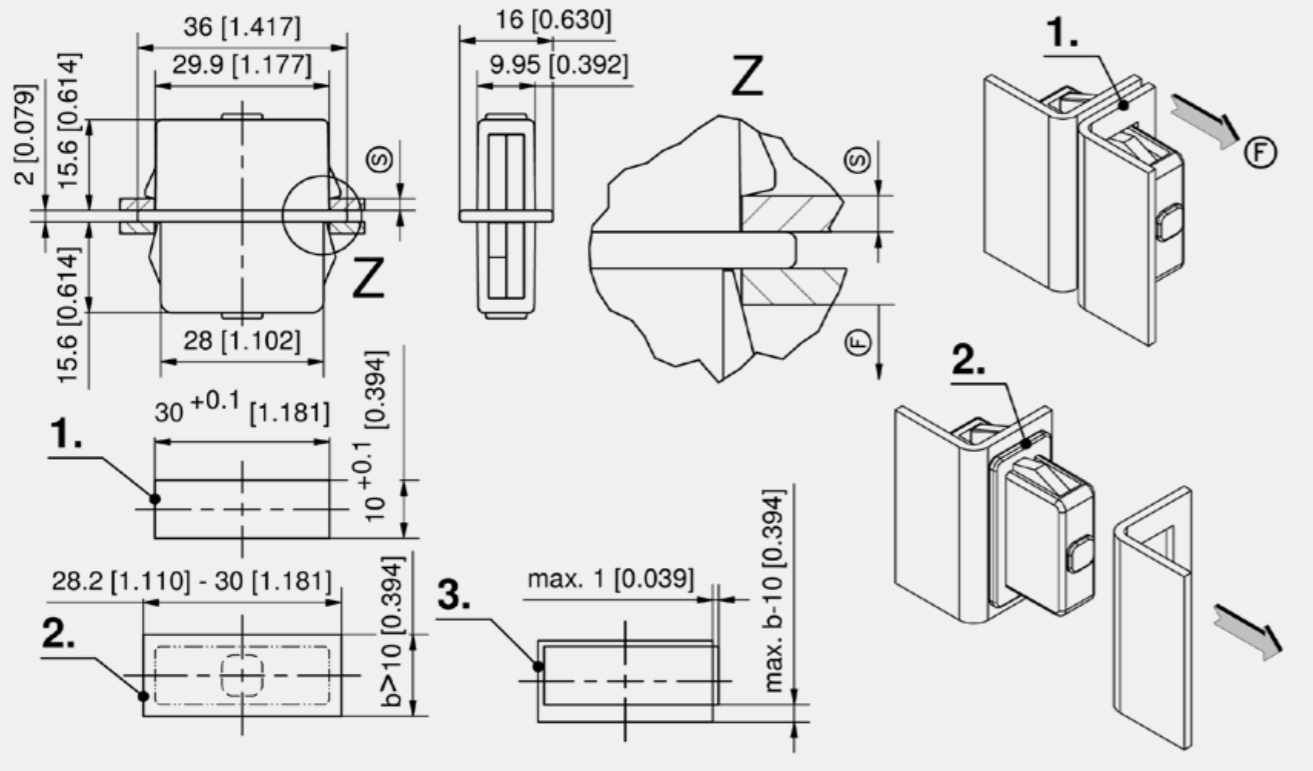
Fastener, zinc die, black

Part Number	Version	Pull-off force	Clamping range	Vibration-proof	Installation type
295-9001.33-10001	one detachable side	~15N	0.7 - 1.2 mm	Yes	tool-less
295-9001.33-10003	one detachable side	~30N	0.7 - 1.2 mm	Yes	tool-less
295-9001.33-10005	one detachable side	~50N	0.7 - 1.2 mm	Yes	tool-less
295-9001.33-15001	one detachable side	~15N	1.2 - 1.7 mm	Yes	tool-less
295-9001.33-15003	one detachable side	~30N	1.2 - 1.7 mm	Yes	tool-less
295-9001.33-15005	one detachable side	~50N	1.2 - 1.7 mm	Yes	tool-less
295-9001.33-20001	one detachable side	~15N	1.7 - 2.2 mm	Yes	tool-less
295-9001.33-20003	one detachable side	~30N	1.7 - 2.2 mm	Yes	tool-less
295-9001.33-20005	one detachable side	~50N	1.7 - 2.2 mm	Yes	tool-less
295-9001.33-25001	one detachable side	~15N	2.2 - 2.7 mm	Yes	tool-less
295-9001.33-25003	one detachable side	~30N	2.2 - 2.7 mm	Yes	tool-less
295-9001.33-25005	one detachable side	~50N	2.2 - 2.7 mm	Yes	tool-less
295-9001.33-30001	one detachable side	~15N	2.7 - 3.2 mm	Yes	tool-less
295-9001.33-30003	one detachable side	~30N	2.7 - 3.2 mm	Yes	tool-less
295-9001.33-30005	one detachable side	~50N	2.7 - 3.2 mm	Yes	tool-less

Fastener, PA, black

Part Number	Version	Pull-off force	Clamping range	Vibration-proof	Installation type
295-9001.52-10001	one detachable side	~15N	0.7 - 1.2 mm	Yes	tool-less
295-9001.52-10003	one detachable side	~30N	0.7 - 1.2 mm	Yes	tool-less
295-9001.52-10005	one detachable side	~50N	0.7 - 1.2 mm	Yes	tool-less
295-9001.52-15001	one detachable side	~15N	1.2 - 1.7 mm	Yes	tool-less
295-9001.52-15003	one detachable side	~30N	1.2 - 1.7 mm	Yes	tool-less
295-9001.52-15005	one detachable side	~50N	1.2 - 1.7 mm	Yes	tool-less
295-9001.52-20001	one detachable side	~15N	1.7 - 2.2 mm	Yes	tool-less
295-9001.52-20003	one detachable side	~30N	1.7 - 2.2 mm	Yes	tool-less
295-9001.52-20005	one detachable side	~50N	1.7 - 2.2 mm	Yes	tool-less
295-9001.52-25001	one detachable side	~15N	2.2 - 2.7 mm	Yes	tool-less
295-9001.52-25003	one detachable side	~30N	2.2 - 2.7 mm	Yes	tool-less
295-9001.52-25005	one detachable side	~50N	2.2 - 2.7 mm	Yes	tool-less
295-9001.52-30001	one detachable side	~15N	2.7 - 3.2 mm	Yes	tool-less
295-9001.52-30003	one detachable side	~30N	2.7 - 3.2 mm	Yes	tool-less
295-9001.52-30005	one detachable side	~50N	2.7 - 3.2 mm	Yes	tool-less

Accessories	
755	292-0702.15-01030 Reinforcement plate for cutout
754	292-0401.00-03010 Cutout-cover
756	292-0306.80-02530 Tool for uninstalation





Advantages

- For the secure joining of metal sheets.
- The nut is installed in the housing (cage).
- Impossible to over-twist nut and cage.
- Can be installed in the cutout without tools from the front as well as from behind.
- Cage made of PA is flexible and thus easy to install.
- Secure fit of the cage in the cutout through protruding square.
- Clamping range 1-4mm.
- For cutouts □9.5 and □9.2mm.
- Suitable for high tightening torque and high tensile forces of up to 8 nm*.
- a) + b) Configure the cage a) with the nut b).
- c) Cages and nuts are packed pre-assembled per 100 in a bag.

Materials

- **Cage:** PA, black
- **Nut:** steel, zinc plated

Remarks

1. = Cutout 9.5mm installation from the front as well as from behind.
2. = Cutout 9.2mm installation only from behind.
3. = Blind installation from the front: diagonal installation of the cage nut into the cutout, compressing of the cage ends, rotation of 45° and flush insertion into the cutout.
4. = Installation from behind: guide the head of the cage through the installation opening and attach it.
5. = Installed.
6. = Screwed.



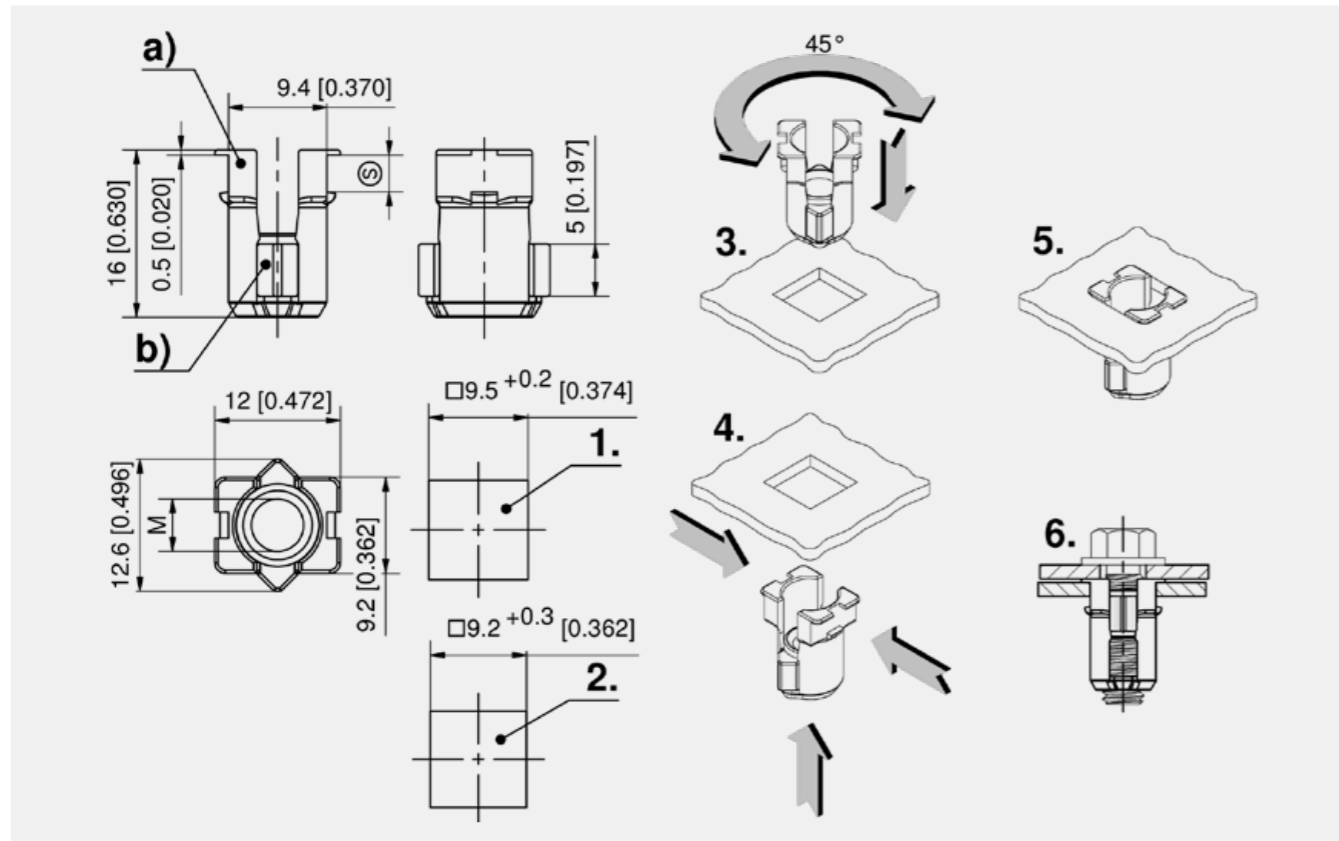
Ensures fixed connection of two metal sheets

Advantages

- Easy installation by pressing into square holes.
- Nut is moveable and adjustable in the cage until final fixing by screw.
- Vibration-proof according to DIN EN 61373.

Materials

- **Cage:** steel, zinc plated or stainless steel AISI 304
- **Nut:** steel, zinc plated or stainless steel AISI 316

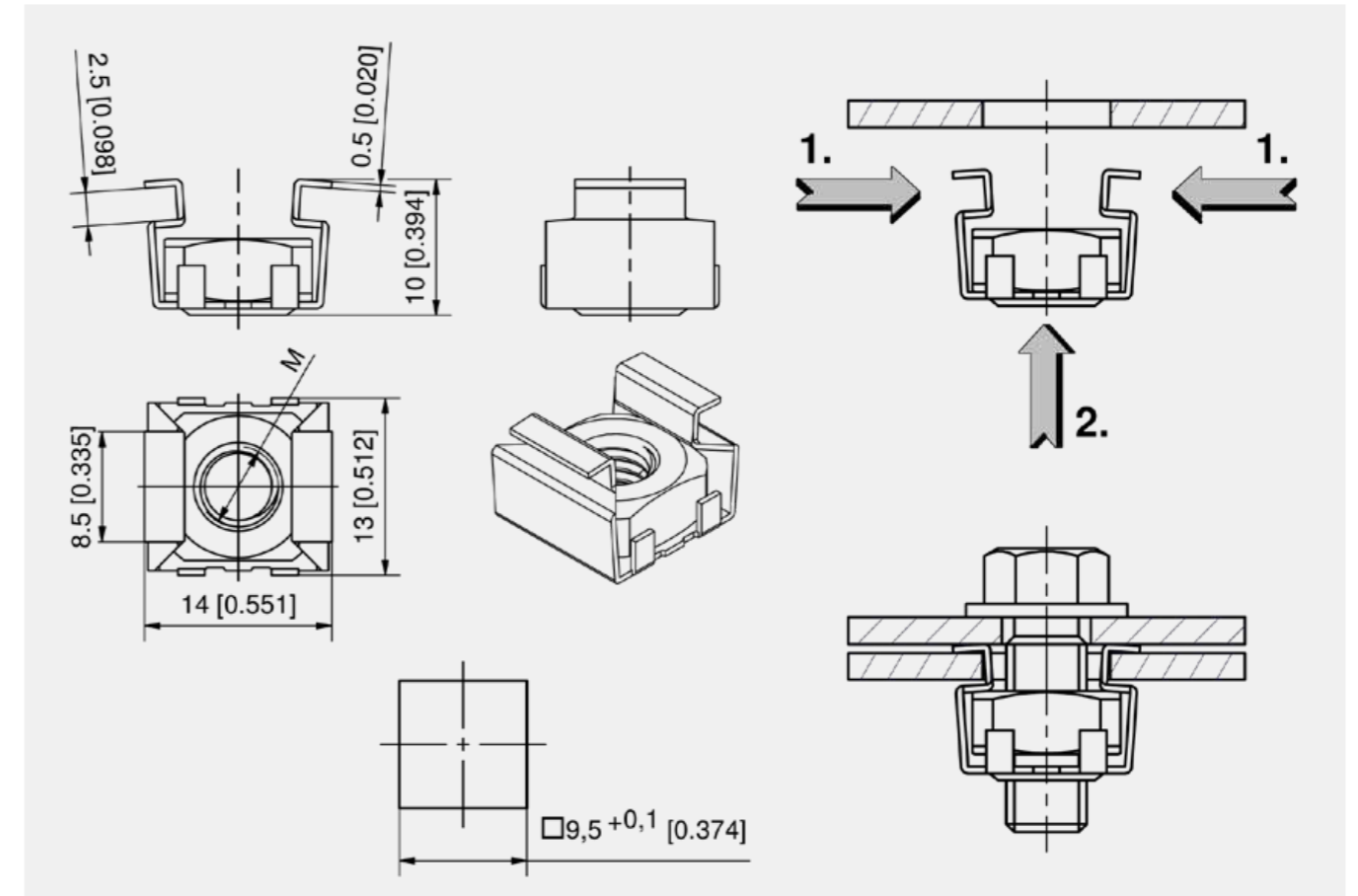


Cage nuts, unmounted

Part Number	Name	Clamping range	Material	Surface	Packaging unit
a) 203-1901.06-00095	Cage for Nut	1 - 4 mm	PA	black	2000 pcs.
b) 203-1902.15-00006	Nut M6		steel	zinc plated, white	2000 pcs.
b) 203-1902.15-00014	Nut 1/4"UNC		steel	zinc plated, yellow (Chrome VI free)	2000 pcs.

Cage nuts, pre-assembled

Part Number	Thread size	Clamping range	Material	Surface	Packaging unit
c) 203-9002.00-00000	M6	1 - 4 mm	steel	zinc plated, white	100 pcs.
c) 203-9003.00-00000	1/4" UNC	1 - 4 mm	steel	zinc plated, yellow (Chrome VI free)	100 pcs.



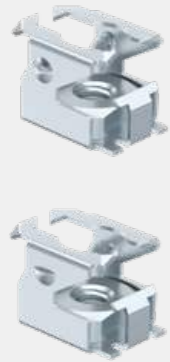
Cage Nuts

Part Number	Version	Material	Surface	Packaging unit
359-0250.06-00000	M5	steel	zinc plated	200 pcs.
353-2010.00-00000	M5	stainless steel		200 pcs.
359-0206.06-00000	M6	steel	zinc plated	200 pcs.



DIN 61373

RoHS WEEE



Ensures fixed connection of two metal sheets

Advantages

- Easy installation by pressing into square holes.
- Nut is moveable and adjustable in the cage until final fixing by screw.
- c) and d) Special design of the cage prevents from falling out of the cutout.
- Vibration-proof according to DIN EN 61373.

Materials

- **Cage and Nut:** steel, zinc plated



DIN 61373

RoHS WEEE



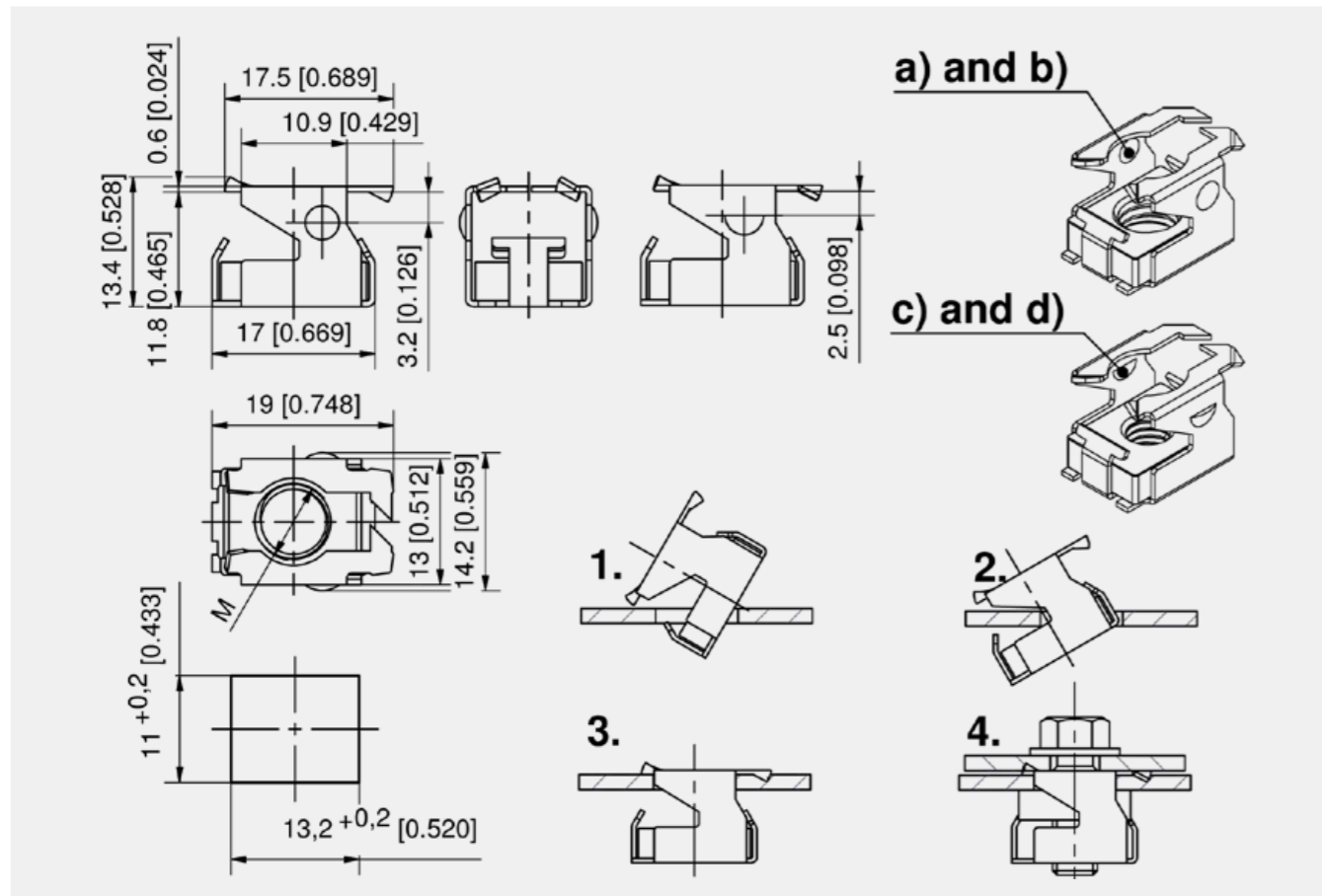
Ensures fixed connection of two metal sheets

Advantages

- Easy installation by pressing into square holes.
- Nut is moveable and adjustable in the cage until final fixing by screw.
- Special design of the cage prevents from falling out of the cutout.
- Vibration-proof according to DIN EN 61373.

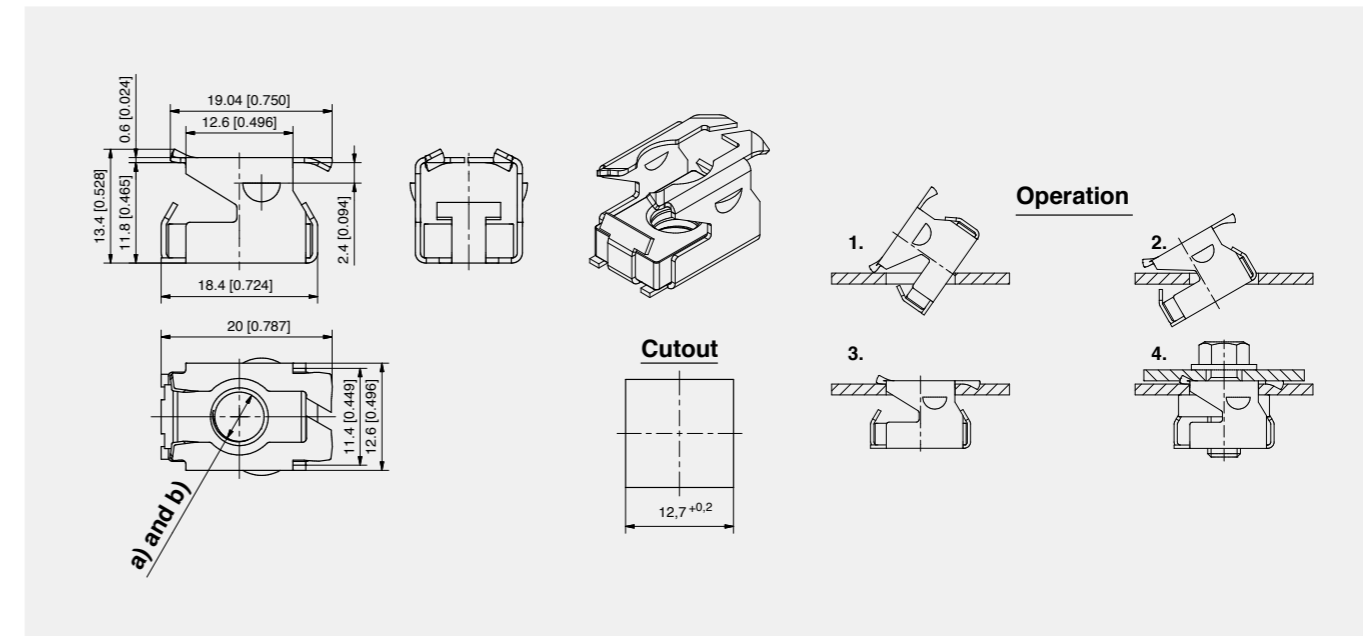
Materials

- **Cage:** steel, zinc plated
- **Nut:** steel, zinc plated



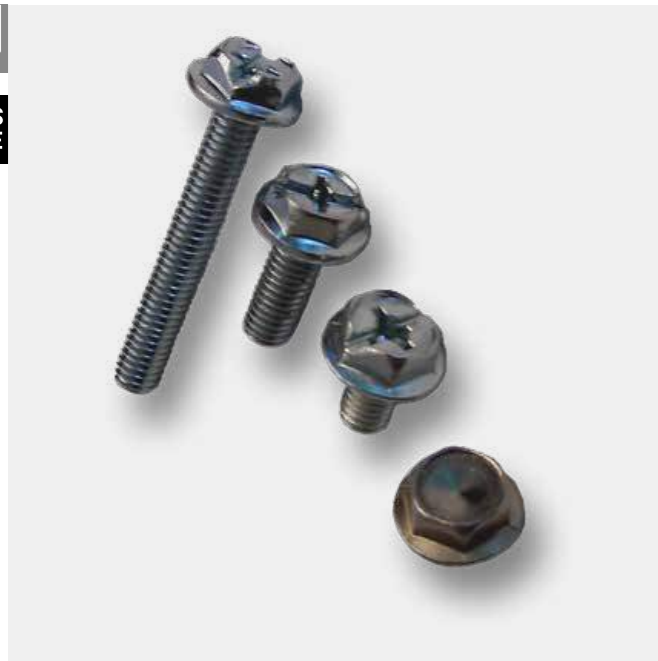
Cage Nuts

	Part Number	Version	Material	Surface	Packaging unit
a)	350-2004.00-00000	M8	steel	zinc plated	200 pcs.
b)	350-2005.00-00000	M6	steel	zinc plated	200 pcs.
c)	350-2046.00-00000	M6	steel	zinc plated	200 pcs.
d)	350-2096.00-00000	1/4-20UNC	steel	zinc plated	200 pcs.



Cage Nuts

	Part Number	Version	Material	Surface	Packaging unit
a)	350-2098.00-00000	M5	steel	zinc plated	200 pcs.
b)	350-2097.00-00000	1/4-20UNC	steel	zinc plated	200 pcs.



Advantages

- Hexagon screw with under-head serrations with Phillips/slot head.
- Versions with powder locking dot on request.

Materials

Serrated Screws: steel, zinc plated property class 5.8 or stainless steel AISI 304

Remarks

202-0606.04-00000 = only available with hexagon head.
202-0635.00-00000 = as long as stock lasts, hexagon head property class 8.8.



Serrated Screws

Part Number	*d	L	k	D	SW	Material	Surface
202-0506.00-00000	M5	6 mm	4.5 mm	10	8 mm	steel	zinc plated
202-0508.00-00000	M5	8 mm	4.5 mm	10	8 mm	steel	zinc plated
202-0606.00-00000	M6	6 mm	5.5 mm	13,5	10 mm	steel	zinc plated
202-0607.00-00000	M6	7 mm	5.5 mm	13,5	10 mm	steel	zinc plated
202-0608.00-00000	M6	8 mm	5.5 mm	13,5	10 mm	steel	zinc plated
202-0610.00-00000	M6	10 mm	5.5 mm	13,5	10 mm	steel	zinc plated
202-0616.00-00000	M6	16 mm	5.5 mm	13,5	10 mm	steel	zinc plated
202-0620.00-00000	M6	20 mm	5.5 mm	13,5	10 mm	steel	zinc plated
202-0625.00-00000	M6	25 mm	5.5 mm	13,5	10 mm	steel	zinc plated
202-0630.00-00000	M6	30 mm	5.5 mm	13,5	10 mm	steel	zinc plated
202-0635.00-00000	M6	35 mm	5.5 mm	13,5	10 mm	steel	zinc plated
202-0640.00-00000	M6	40 mm	5.5 mm	13,5	10 mm	steel	zinc plated
202-0650.00-00000	M6	50 mm	5.5 mm	13,5	10 mm	steel	zinc plated
202-0810.00-00000	M8	10 mm	7.5 mm	16,5	13 mm	steel	zinc plated
202-0606.04-00000	M6	6 mm	5.5 mm	13,5	10 mm	stainless steel AISI 301	stainless steel
202-0608.04-00000	M6	8 mm	5.5 mm	13,5	10 mm	stainless steel AISI 301	stainless steel
202-0610.04-00000	M6	10 mm	5.5 mm	13,5	10 mm	stainless steel AISI 301	stainless steel
202-0616.04-00000	M6	16 mm	5.5 mm	13,5	10 mm	stainless steel AISI 301	stainless steel

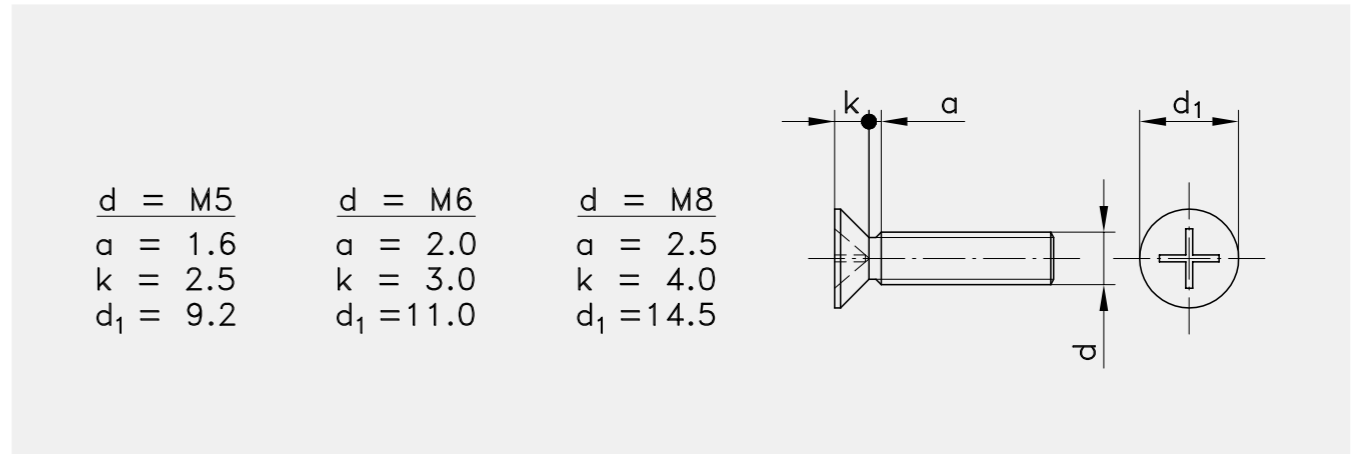


Advantages

- Countersunk machine screws according to DIN 965.
- Hex. nut according to DIN 934 and DIN 985.

Materials

Countersunk machine screws and hex. nuts: steel, zinc plated



Countersunk screw

Part Number	Dimension	Material	Surface
860-0965.00-00512	M5 x 12	steel	DIN 965 zinc plated
860-0965.00-00516	M5 x 16	steel	DIN 965 zinc plated
860-0965.00-00520	M5 x 20	steel	DIN 965 zinc plated
860-0965.00-00525	M5 x 25	steel	DIN 965 zinc plated
860-0965.00-00530	M5 x 30	steel	DIN 965 zinc plated
860-0965.00-00540	M5 x 40	steel	DIN 965 zinc plated
860-0965.00-00612	M6 x 12	steel	DIN 965 zinc plated
860-0965.00-00616	M6 x 16	steel	DIN 965 zinc plated
860-0965.00-00620	M6 x 20	steel	DIN 965 zinc plated
860-0965.00-00625	M6 x 25	steel	DIN 965 zinc plated

Hexagon nut

Part Number	Dimension	self-locking	Material	Surface	Minimum order quantity
860-0934.00-00005	M5		steel	DIN 934 8.8 zinc plated	200 pcs.
860-0934.00-00008	M8		steel	DIN 934 8.8 zinc plated	200 pcs.
860-0985.00-00005	M5	Yes	steel	DIN 985 8.8 zinc plated	200 pcs.

IP 66

RoHS WEEE



Advantages

- Screw assembly consists of raised countersunk M5x30 Phillips H2 screw and sleeve.
- Meets IP66 certification (applicable for installation example shown below with even compression of the foam/glued seal).
- Additional lengths and materials of the screw available on request.
- Captive by using O-ring 839-3770.00-00412.

Materials

- **Raised countersunk screw:** steel, zinc plated
- **Sleeve:** TPV / Santoprene

RoHS WEEE

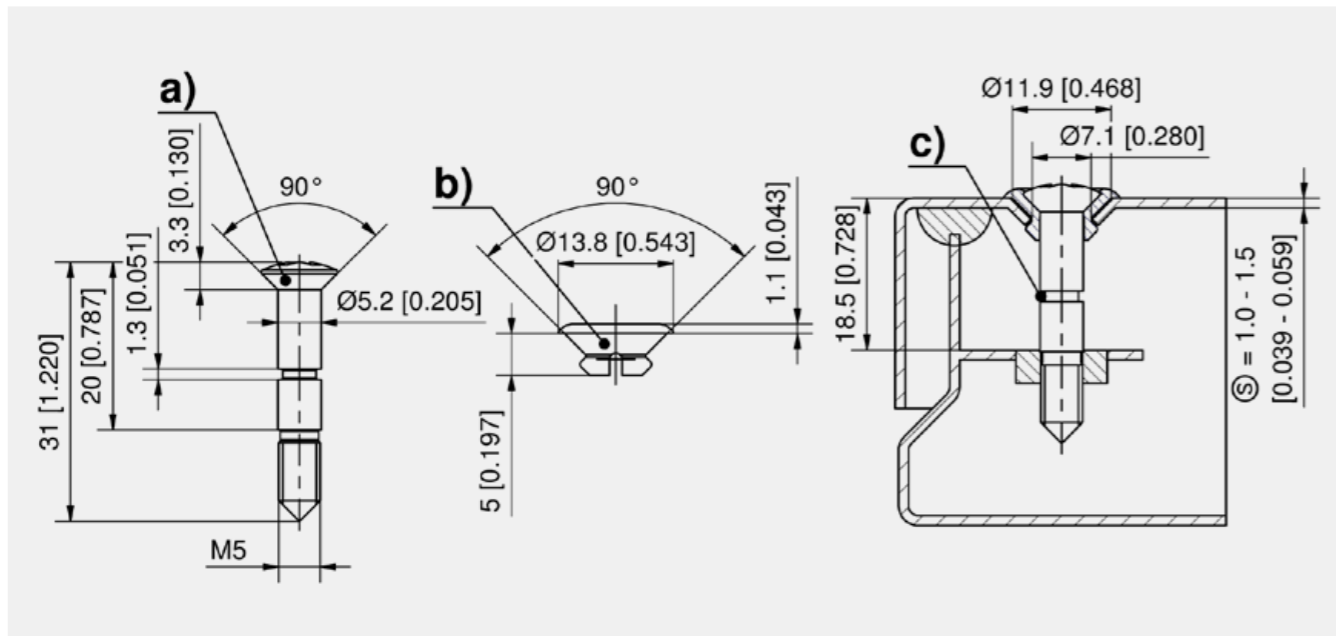


Advantages

- The nut plates have been designed to allow an easy installation of the hinges in our 218-series. Tightening the screws from the outside only.
- Elimination of the time-consuming fitting of small single nuts in often quite difficult accessible corners.
- Oversized holes/cutouts allow for horizontal and/or vertical adjusting.
- Adjustment and alignment with just one tool, only from outside.
- The teeth on all 4 corners create enough friction to simplify installation and adjusting.
- If this friction is not wanted: these teeth can also point away from the inner skin of the door/frame.

Materials

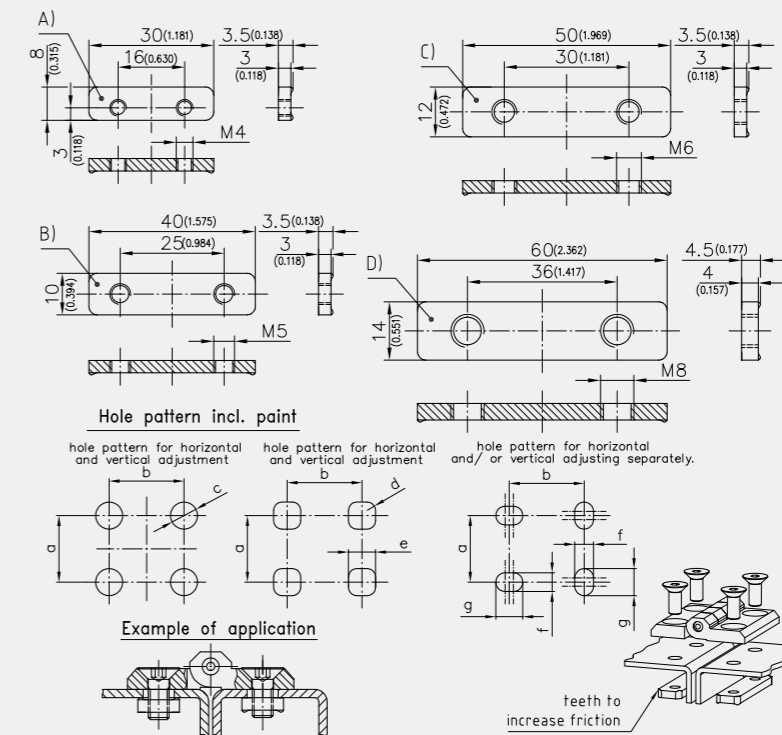
- **Nut plate:** steel, zinc plated



Screw assembly

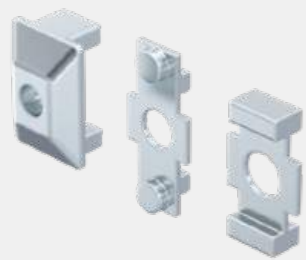
	Part Number	Version	Material	Surface
a)	202-1103.15-00530	Raised countersunk screw, M5x30	steel	zinc plated
b)	203-0655.61-00000	Sleeve	TPV Santoprene	black

Specific accessories	
c)	839-3770.00-00412 O-Ring 4 x 1,2mm



Nut Plate

	Part Number	Thread size	a	b	Ø c	Radius d	e	f	g	Material	Surface
A)	218-0907.15-00000	M4	16 mm	18 mm	6.5 mm	2.0 mm	□ 6.5	4.5 mm	6.5 mm	steel	zinc plated
B)	218-0908.15-00000	M5	25 mm	25 mm	7.5 mm	2.5 mm	□ 7.5	5.5 mm	7.5 mm	steel	zinc plated
C)	218-0909.15-00000	M6	30 mm	30 mm	8.5 mm	3 mm	□ 8.5	6.5 mm	8.5 mm	steel	zinc plated
D)	218-0910.15-00000	M8	36 mm	36 mm	10.5 mm	4 mm	□ 10.5	8.5 mm	10.5 mm	steel	zinc plated

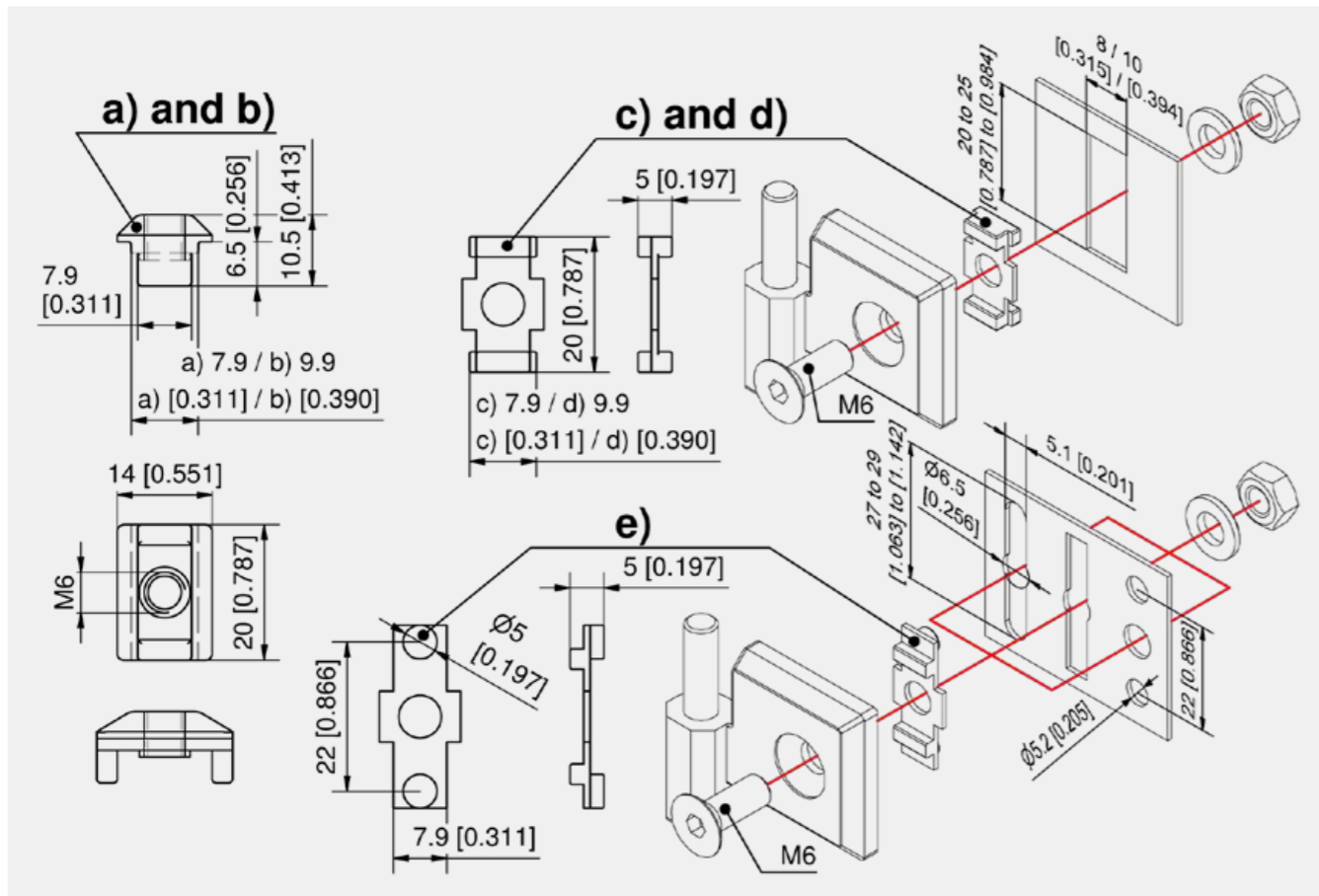


Advantages

- Also for application with hinges 4-247 and 4-247.01.
- Tenon blocks for 8 or 10mm groove.
- Fastening by M6.
- Anti-twist device for sheet metal construction.
- Horizontal or vertical application.
- Tolerance compensation possible by oblong holes.

Materials

- **Tenon blocks and Anti-twist device:** zinc die, untreated



Tenon Blocks and Anti-twist protection

	Part Number	Name	Groove width	Cutout	Thread size	Door-thickness
a)	265-1001.00-00000	Tenon blocks with anti-twist protection	8 mm	8 x 20 to 25mm	M6	0 - 3.2 mm
b)	265-1002.00-00000	Tenon blocks with anti-twist protection	10 mm	10 x 20 to 25mm	M6	0 - 3.2 mm
c)	265-1101.00-00000	Anti-twist protection for square	8 mm	8 x 20 to 25mm		
d)	265-1102.00-00000	Anti-twist protection for square	10 mm	10 x 20 to 25mm		
e)	265-1103.00-00000	Anti-twist protection for drill-holes		5.1mm		

DST Captive Flex-Fastener □9.5

See page 726