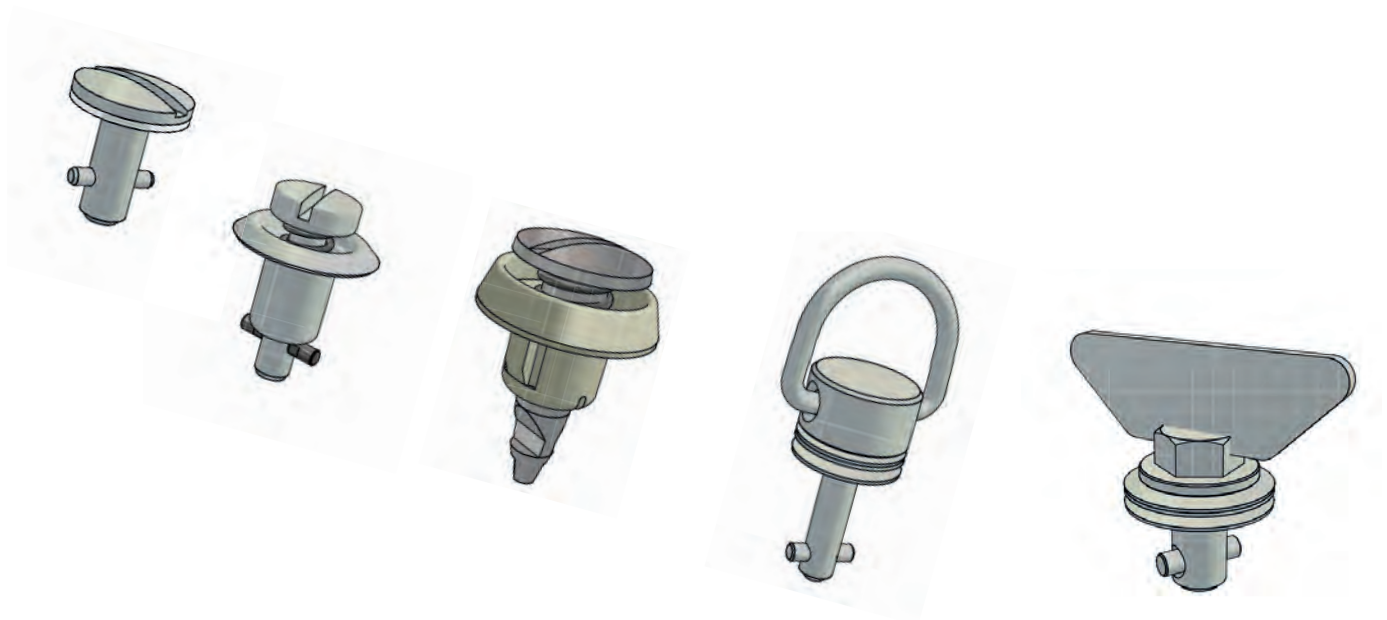


Vierteldreh-Verschlüsse



Quarter-Turn Fasteners



Haudenschild Holding AG

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CH-8852 Altendorf
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hw@hw-tec.ch
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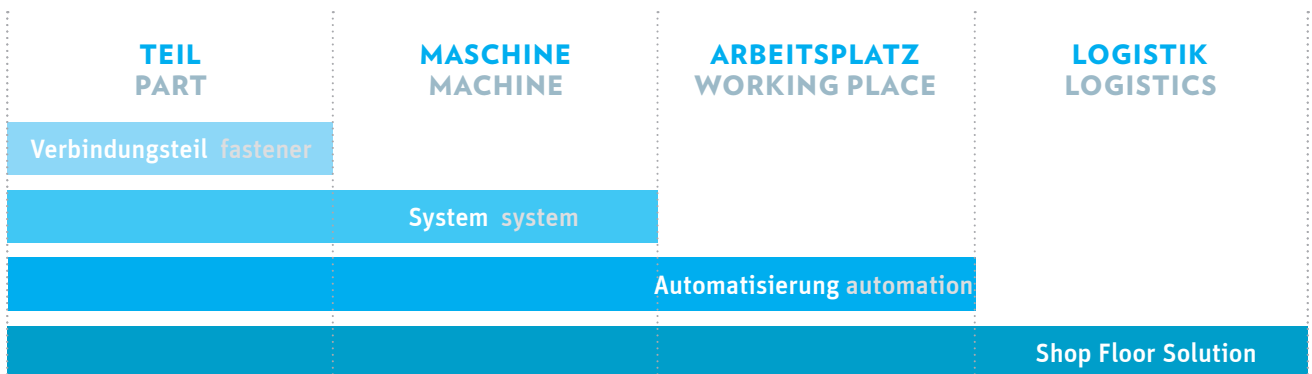
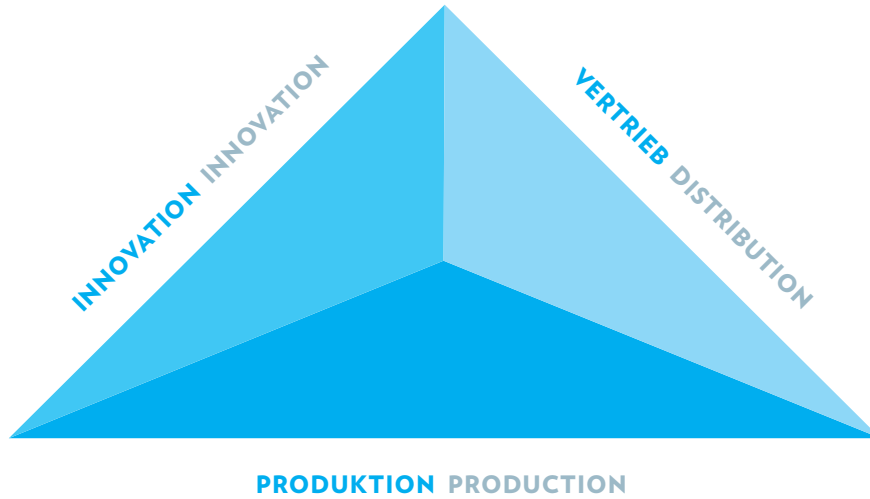
Haudenschild AG Kompetenz in Antriebstechnik

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Automotive Automotive	Kunststofftechnik Plastics
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Medizintechnik Medical technology	Holzverarbeitung Wood processing
Blechbearbeitung Metal processing	Maschinenbau Mechanical engineering

PRODUKTÜBERSICHT

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Serie 20/21	Seite 20
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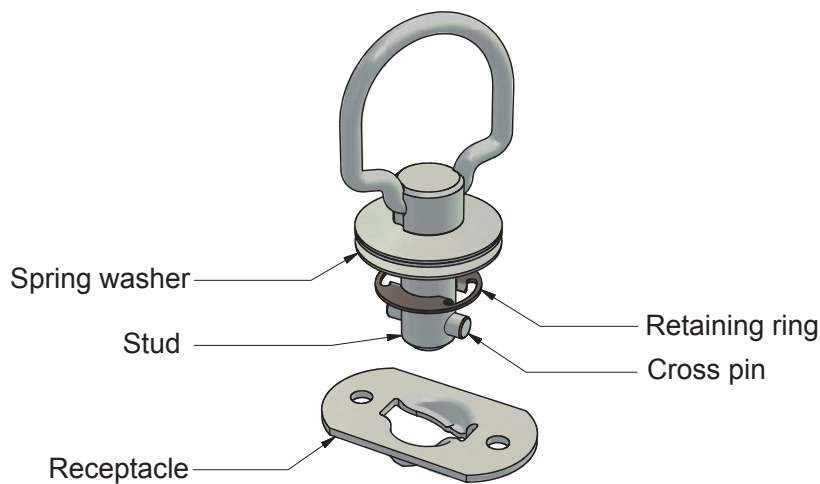
INFORMATIONEN INFORMATION

Advantages of the 1/4 turn fasteners

- Safe mechanical quick-operating fastener system
- Unlocking or locking by a quarter of a turn
- Hand or tool operated
- Service friendly, time-saving and cost cutting
- Fasteners series for any industrial applications
- Vibration-resistant

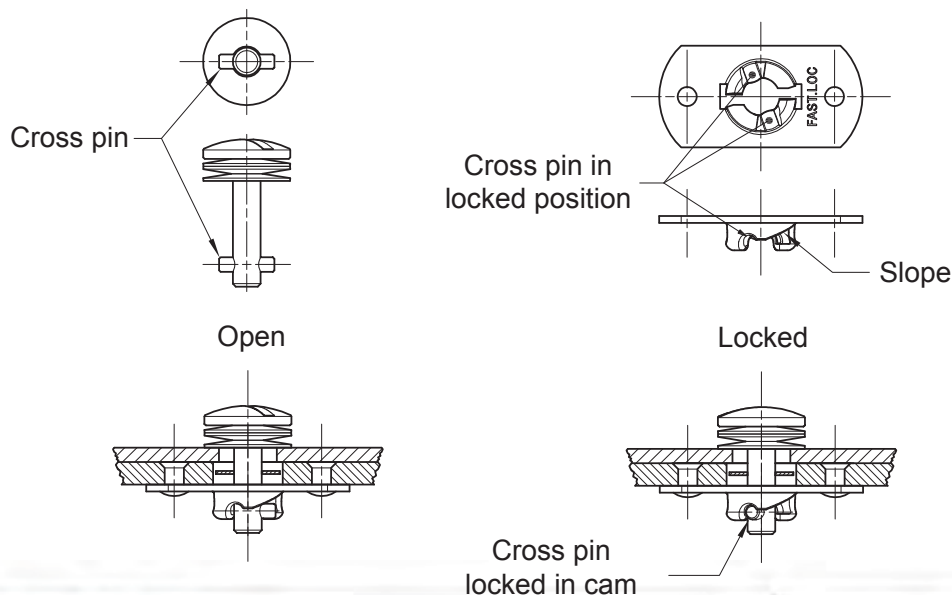
Components

- The 1/4 turn fastener consists of a stud, a retaining ring and a receptacle
- Depending upon strength, fastener size and the mounting conditions, the spring components is a part of the stud assembly or the receptacle.



How it operates

- When the fastener is closed the cross pin of the stud rides up the slope of the cam and falls into locking detents after a quarter of a turn
- Rotating the stud by 90° unlocks or locks the quick-operating fastener.



SERIE 05

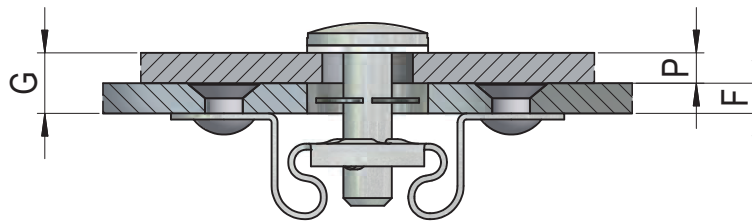
Particular features

- Max. tensile strength 670 N
- Spring loaded receptacle
- Plastic washer stud assembly to protect decorative surfaces

Selection instructions

- Select stud assembly, receptacle and retaining ring
- Determine total thickness "G"
- Select "Stud number" accordingly to "G" thickness
- Insert "Stud number" * into stud part number

Application example and determination of "G" value

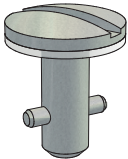
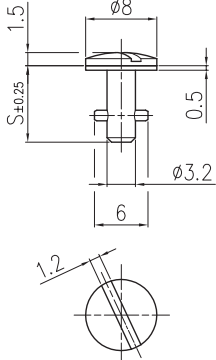
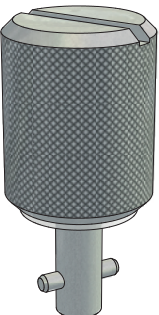
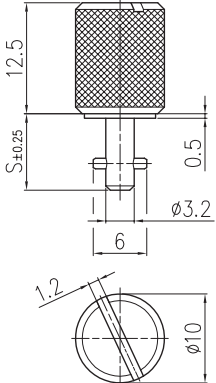
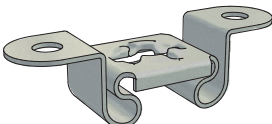
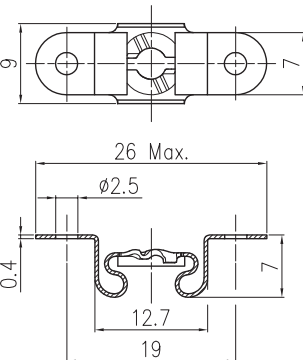

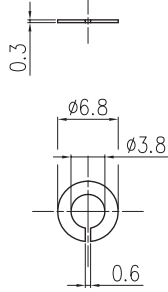


$$G = P + F$$

Stud length selection table

Total thickness G	Stud number	Total thickness G	Stud number
0,50 - 0,90	1	4,70 - 5,10	12
0,90 - 1,30	2	5,10 - 5,45	13
1,30 - 1,65	3	5,45 - 5,85	14
1,65 - 2,05	4	5,85 - 6,20	15
2,05 - 2,40	5	6,20 - 6,60	16
2,40 - 2,80	6	6,60 - 7,00	17
2,80 - 3,20	7	7,00 - 7,35	18
3,20 - 3,55	8	7,35 - 7,75	19
3,55 - 3,95	9	7,75 - 8,15	20
3,95 - 4,30	10	8,15 - 8,50	21
4,30 - 4,70	11		

SERIE 05 - VERSCHLUSSZAPFEN, HALTENOCKEN, HALTESCHEIBE STUD, RECEPTACLE, RETAINING RING

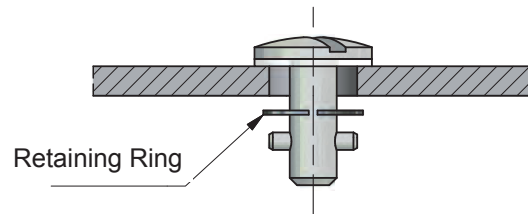
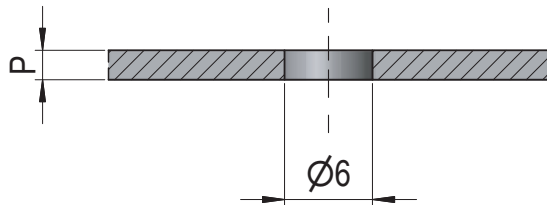
Style	Dimensions	Part number	Material/Finishing
<p>Slotted recess</p> 		<p>ST0501.*.1AZ</p> <p>ST0501.*.1BP</p> <p>Plastic washer PA6 stud assembly</p> <p>S=6,70 + (0,38 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p> <p>Stainless steel AISI303</p>
<p>Knurled knob</p> 		<p>ST0506.*.1AZ</p> <p>Plastic washer PA6 stud assembly</p> <p>S=6,70 + (0,38 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p>
<p>Rivet mounting receptacle</p> 		<p>RC0501.1AZ</p> <p>RC0501.1BP</p>	<p>Steel, zinc plated Cr6 free</p> <p>Stainless steel</p>
<p>Retaining ring</p> 		<p>AN0501.1AZ</p> <p>AN0501.1BP</p>	<p>Steel, zinc plated Cr6 free</p> <p>Stainless steel</p>

* Verschlusszapfen-Nummer siehe Tabelle Seite 4

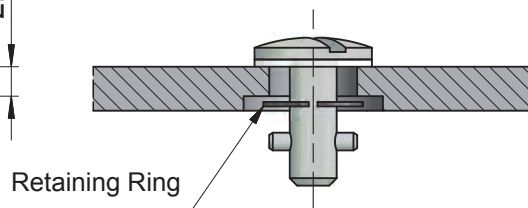
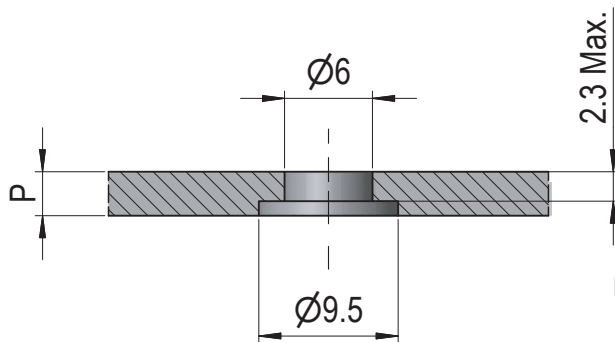
SERIE 05 - EINBAUANLEITUNG INSTALLATION INSTRUCTION

Stud

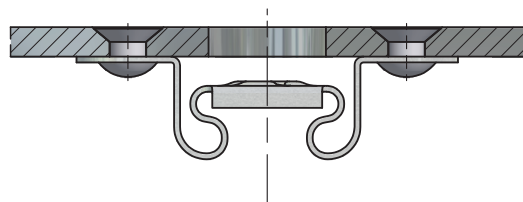
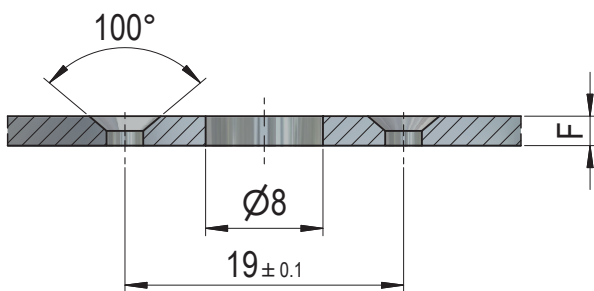
Panel thickness P up to 2,3 mm



Panel thickness P over to 2,3 mm



Receptacle



SERIE 99

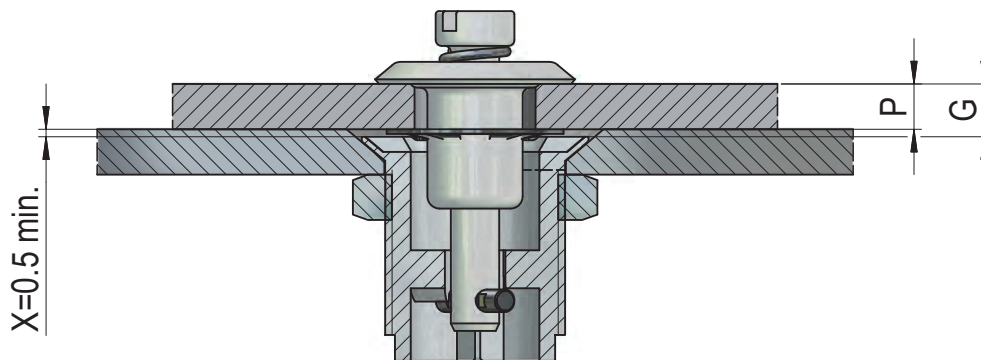
Particular features

- Max. tensile strenght 700 N
- Stud spring loaded
- Increased grip range
- Receptacles with external thread for screwing into high thickness panel or retaining nut
- Encapsulated receptacle, splash-proof

Selection instructions

- Select stud assembly, receptacle and retaining ring
- Determine total thickness "G"
- Select "Stud number" accordingly to "G" thickness
- Insert "Stud number" * into stud part number

Application example and determination of "G" value

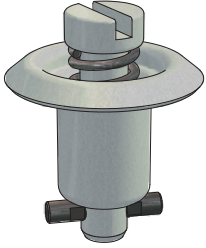
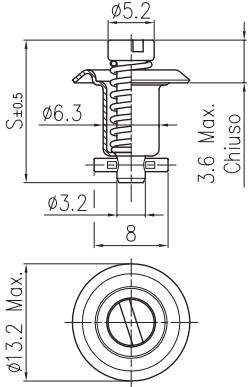
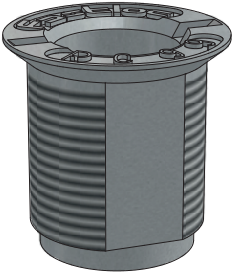
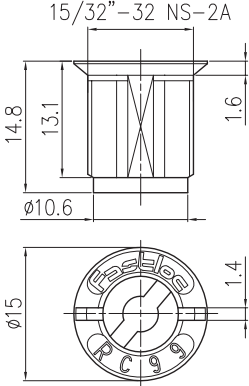
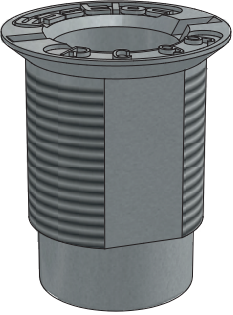
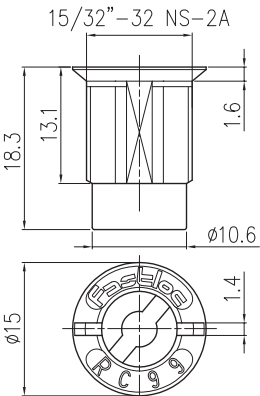

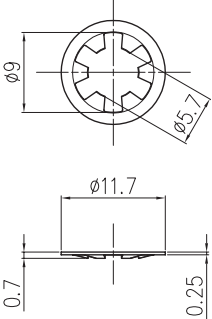


$$G=P+X$$

Stud lenght selection table

Total thickness G	Stud number
0,5 - 1,5	1
1,5 - 3,0	3
3,0 - 4,5	5
4,5 - 6,0	7
6,0 - 7,5	9
7,5 - 9,0	11
9,0 - 10,5	13
10,5 - 12,0	15
12,0 - 13,5	17
13,5 - 15,0	19

SERIE 99 - VERSCHLUSSZAPFEN, HALTENOCKEN, HALTESCHEIBE STUD, RECEPTACLE, RETAINING RING

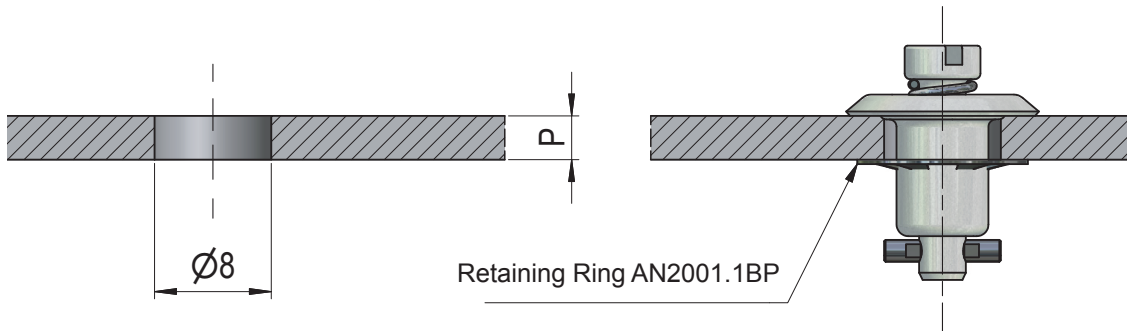
Style	Dimensions	Part number	Material/Finishing
<p>Slotted recess</p> 		<p>ST9901.*.1AZ</p> <p>S=15,5 + (0,76 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p>
<p>Open</p> 	<p>15/32" - 32 NS-2A</p> 	<p>RC9901.1AZ</p>	<p>Zinc alloy, zinc plated Cr6 free</p>
<p>Incapsulated</p> 	<p>15/32" - 32 NS-2A</p> 	<p><i>Splash-proof</i></p> <p>RC9902.1AZ</p>	<p>Zinc alloy, zinc plated Cr6 free6</p>
<p>Retaining ring</p> 		<p>AN2001.1BP</p>	<p>Stainless steel</p>

* Verschlusszapfen-Nummer siehe Tabelle Seite 7

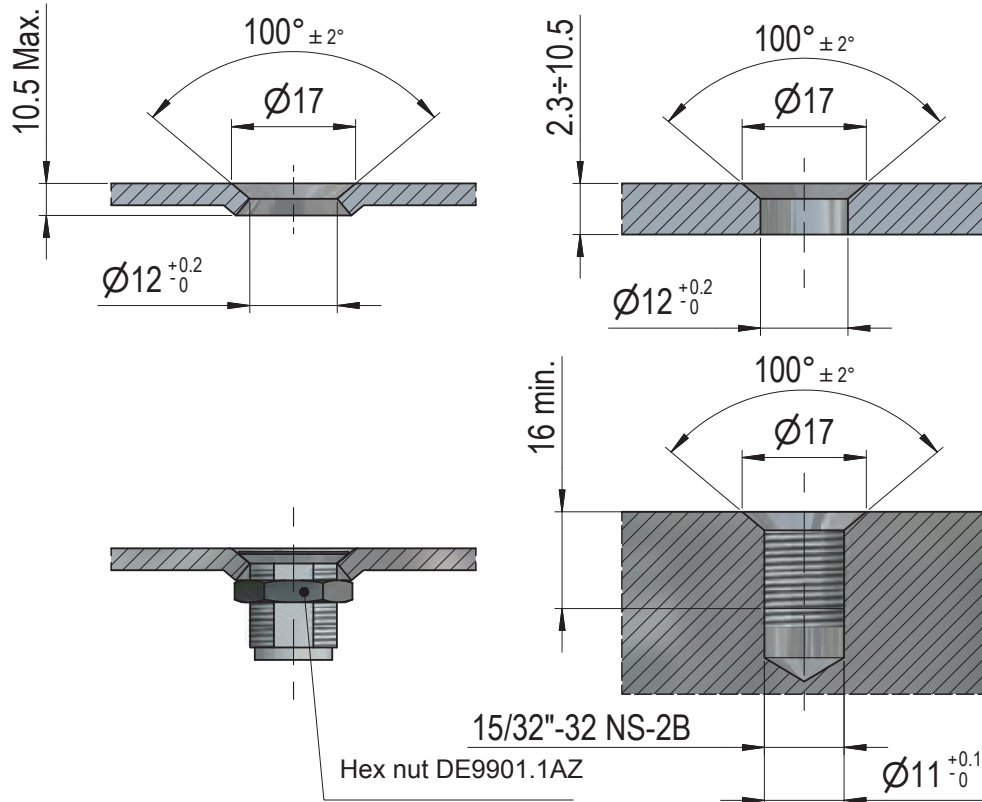
SERIE 99 - EINBAUANLEITUNG INSTALLATION INSTRUCTION

Stud

Panel thickness from 0,50 mm to 4,75 mm



Receptacle



SERIE 50

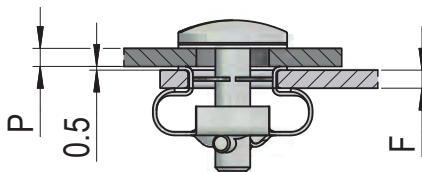
Particular features

- Max. tensile strenght 900 N
- Spring loaded receptacle
- Plastic washer stud assembly to protect decorative surfaces

Selection instructions

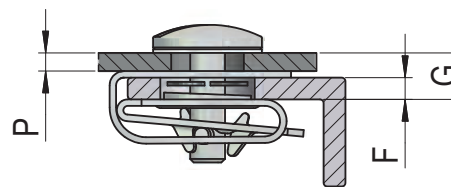
- Select stud assembly, receptacle and retaining ring
- Determine total thickness "G"
- Select "Stud number" accordingly to "G" thickness
- Insert "Stud number" * into stud part number

Application example and determination of "G" value



$$G=P$$

In conjunction with
receptacle Snap-in
RC5001.*AZ



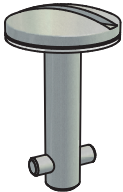
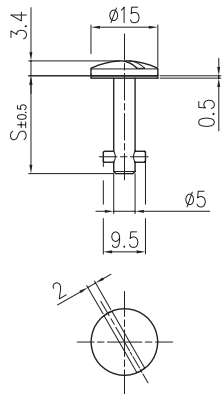
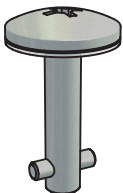
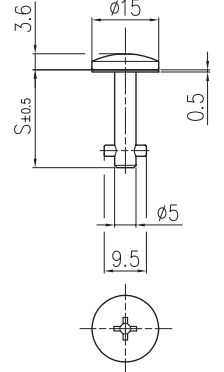

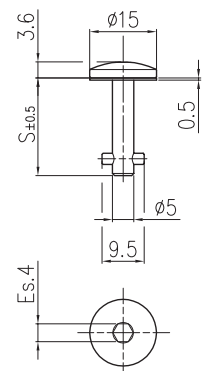
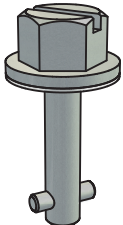
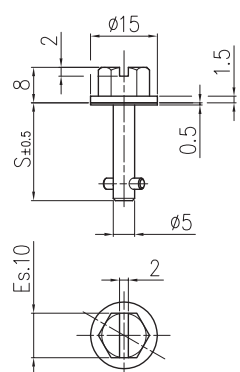
$$G=P+F$$

In conjunction with
receptacle Clip-on
RC5002.1AZ

Stud lenght selection table

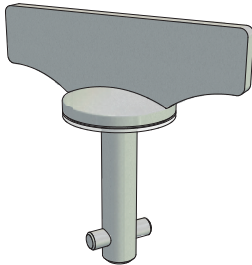
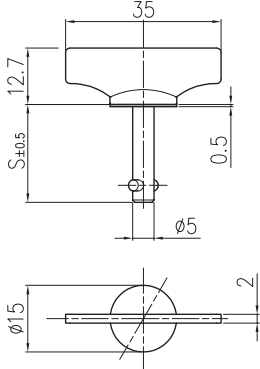
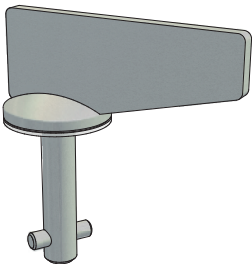
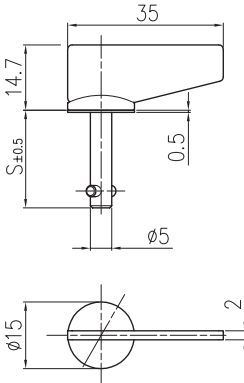
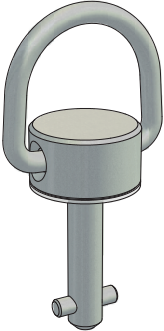
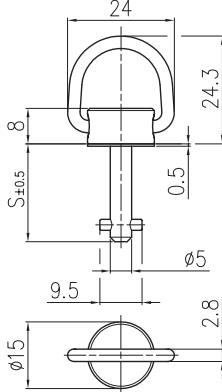
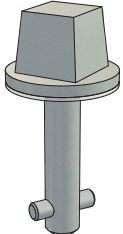
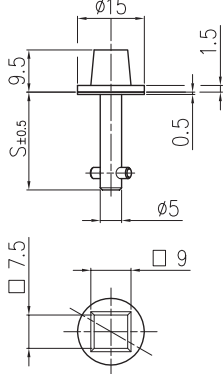
Total thickness G	Stud number with receptacle 1	Total thickness G	Stud number with receptacle 2	Total thickness G	Stud number with receptacle 3
0,50 - 1,10	5	0,50 - 1,10	7	2,30 - 2,90	5
1,10 - 1,70	6	1,10 - 1,70	8	2,90 - 3,50	6
1,70 - 2,30	7	1,70 - 2,30	9	3,50 - 4,10	7
2,30 - 2,90	8	2,30 - 2,90	10	4,10 - 4,70	8
2,90 - 3,50	9	2,90 - 3,50	11	4,70 - 5,30	9
3,50 - 4,10	10	3,50 - 4,10	12	5,30 - 5,90	10
4,10 - 4,70	11	4,10 - 4,70	13	5,90 - 6,50	11
4,70 - 5,30	12	4,70 - 5,30	14	6,50 - 7,10	12
5,30 - 5,90	13	5,30 - 5,90	15	7,10 - 7,70	13
5,90 - 6,50	14	5,90 - 6,50	16	7,70 - 8,30	14
6,50 - 7,10	15	6,50 - 7,10	17	8,30 - 8,90	15
7,10 - 7,70	16	7,10 - 7,70	18	8,90 9,50	16
7,70 - 8,30	17	7,70 - 8,30	19	9,50 - 10,10	17
8,30 - 8,90	18	8,30 - 8,90	20	10,10 - 10,70	18
8,90 9,50	19	8,90 9,50	21	10,70 - 11,30	19
9,50 - 10,10	20	9,50 - 10,10	22	11,30 - 11,90	20
10,10 - 10,70	21	10,10 - 10,70	23	11,90 - 12,50	21
10,70 - 11,30	22	10,70 - 11,30	24	12,50 - 13,10	22
11,30 - 11,90	23	11,30 - 11,90	25	13,10 - 13,70	23
11,90 - 12,50	24	11,90 - 12,50	26	13,70 - 14,30	24
12,50 - 13,10	25	12,50 - 13,10	27	14,30 - 14,90	25
13,10 - 13,70	26	13,10 - 13,70	28	14,90 - 15,50	26
13,70 - 14,30	27	13,70 - 14,30	29	15,50 - 16,10	27
14,30 - 14,90	28	14,30 - 14,90	30	16,10 - 16,70	28
14,90 - 15,50	29	14,90 - 15,50	31	16,70 - 17,30	29
15,50 - 16,10	30	15,50 - 16,10	32	17,30 - 17,90	30

SERIE 50 - VERSCHLUSSZAPFEN STUD

Style	Dimensions	Part number	Material/Finishing
<p>Slotted recess</p> 		<p>ST5001.*.1AZ</p> <p>S=11,40 + (0,6 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p> <p>Plastic washer PA6 stud assembly</p>
<p>Cross recess</p> 		<p>ST5002.*.1AZ</p> <p>S=11,40 + (0,6 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p> <p>Plastic washer PA6 stud assembly</p>
<p>Hex recess</p> 		<p>ST5018.*.1AZ</p> <p>S=11,40 + (0,6 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p> <p>Plastic washer PA6 stud assembly</p>
<p>Hex slotted recess</p> 		<p>ST5011.*.1AZ</p> <p>S=11,40 + (0,6 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p> <p>Plastic washer PA6 stud assembly</p>

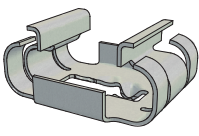
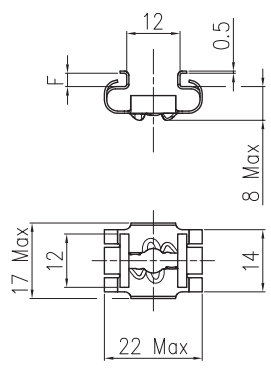
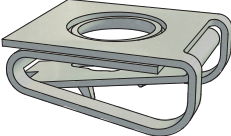
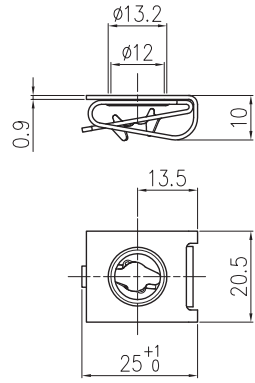

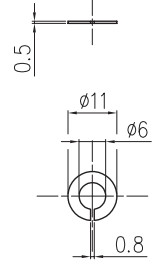
* Verschlusszapfen-Nummer siehe Tabelle Seite 10

SERIE 50 - VERSCHLUSSZAPFEN STUD

Style	Dimensions	Part number	Material/Finishing
<p>Fixed wing</p> 		<p>ST5003.*.1AZ</p> <p>S=11,40 + (0,6 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p> <p>Plastic washer PA6 stud assembly</p>
<p>Offset fixed wing</p> 		<p>ST5023.*.1AZ</p> <p>S=11,40 + (0,6 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p> <p>Plastic washer PA6 stud assembly</p>
<p>Folding bail handle</p> 		<p>ST5004.*.1AZ</p> <p>S=11,40 + (0,6 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p> <p>Plastic washer PA6 stud assembly</p>
<p>Railways special square</p> 		<p>ST5005.*.1AZ</p> <p>S=11,40 + (0,6 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p> <p>Plastic washer PA6 stud assembly</p>

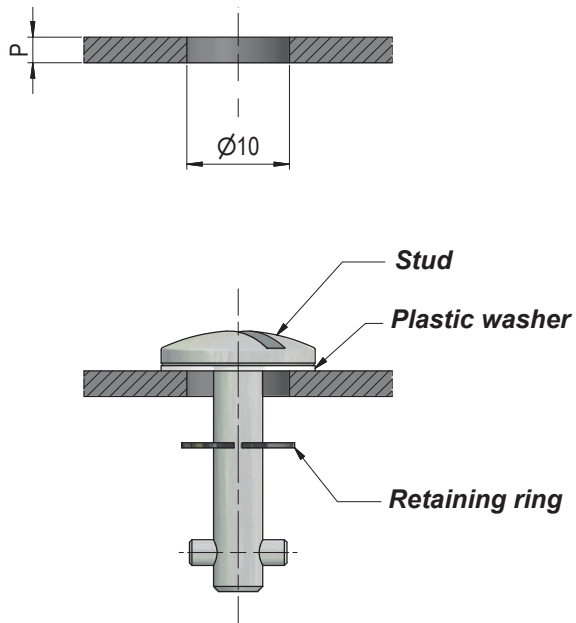
* Verschlusszapfen-Nummer siehe Tabelle Seite 10

SERIE 50 - HALTENOCKEN, HALTESCHEIBE RECEPTACLE, RETAINING RING

Style	Dimensions	Part number	Material/Finishing
Snap-in 		Thickness F = 1,0 - 2,0 Type 1 RC5001.1AZ Thickness F = 2,1 - 3,0 Type 2 RC5002.1AZ Max. tens. strenght 250 N	Steel, zinc plated Cr6 free Steel, zinc plated Cr6 free
Clip-on 		Thickness F = 0,8 - 5,6 Type 3 RC5002.1AZ	Steel, zinc plated Cr6 free
Retaining ring 		AN4001.1BP	Stainless steel

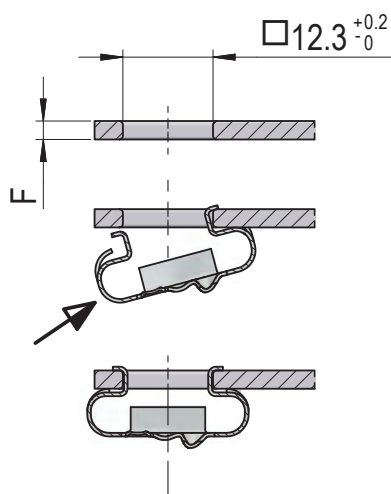
SERIE 50 - EINBAUANLEITUNG INSTALLATION INSTRUCTION

Stud

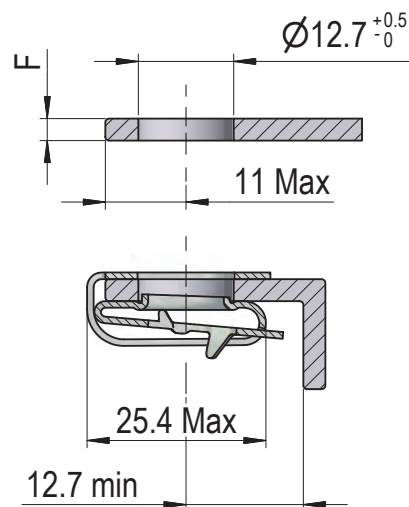


Receptacle

Snap-in
RC5001.*AZ



Clip-on
RC5002.1AZ



SERIE 60

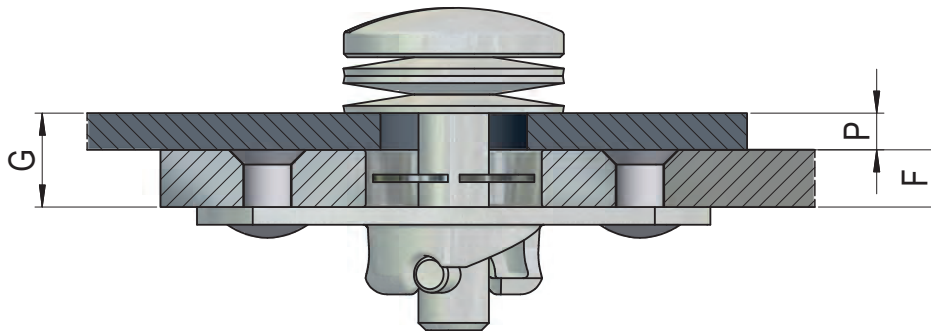
Particular features

- Max. tensile strenght 3.700 N
- Stud spring loaded
- Small-size fastener for high tensile strenght

Selection instructions

- Select stud assembly, receptacle and retaining ring
- Determine total thickness "G"
- Select "Stud number" accordingly to "G" thickness
- Insert "Stud number" * into stud part number

Application example and determination of "G" value

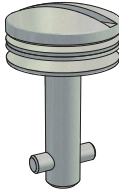
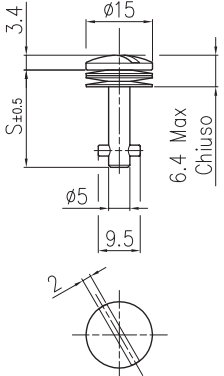
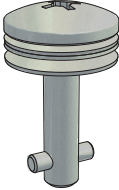
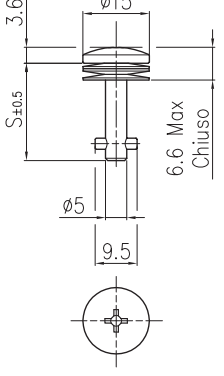
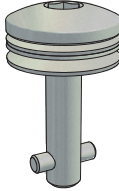
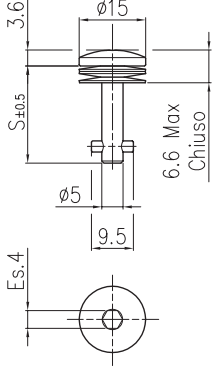
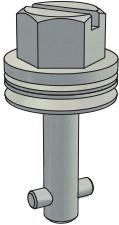
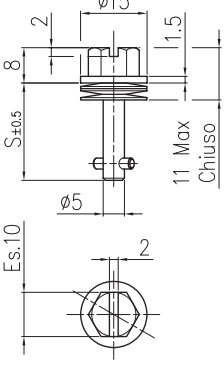


$$G = P + F$$

Stud lenght selection table

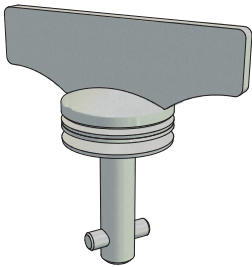
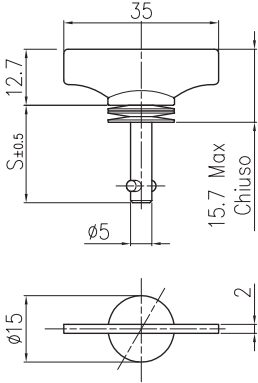
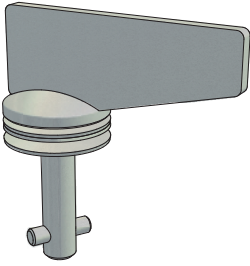
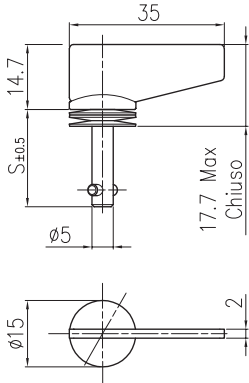
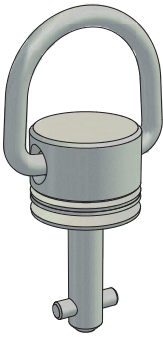
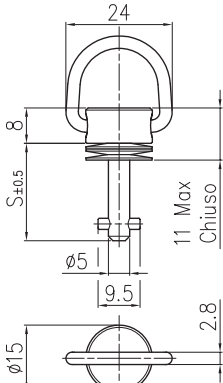
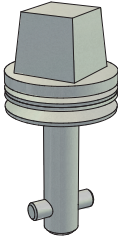
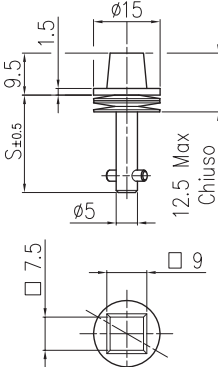
Total thickness G	Stud number	Total thickness G	Stud number
0,50 - 1,10	2	10,70 - 11,30	19
1,10 - 1,70	3	11,30 - 11,90	20
1,70 - 2,30	4	11,90 - 12,50	21
2,30 - 2,90	5	12,50 - 13,10	22
2,90 - 3,50	6	13,10 - 13,70	23
3,50 - 4,10	7	13,70 - 14,30	24
4,10 - 4,70	8	14,30 - 14,90	25
4,70 - 5,30	9	14,90 - 15,50	26
5,30 - 5,90	10	15,50 - 16,10	27
5,90 - 6,50	11	16,10 - 16,70	28
6,50 - 7,10	12	16,70 - 17,30	29
7,10 - 7,70	13	17,30 - 17,90	30
7,70 - 8,30	14	17,90 - 18,50	31
8,30 - 8,90	15	18,50 - 19,10	32
8,90 - 9,50	16	19,10 - 19,70	33
9,50 - 10,10	17	19,70 - 20,30	35
10,10 - 10,70	18	20,30 - 20,90	35

SERIE 60 - VERSCHLUSSZAPFEN STUD

Style	Dimensions	Part number	Material/Finishing
Slotted recess 		ST6001.*.1AZ ST6001.*.1BP S=11,40 + (0,6 x Stud N°)	Steel, zinc plated Cr6 free Stainless steel AISI303
Cross recess 		ST6002.*.1AZ ST6002.*.1BP S=11,40 + (0,6 x Stud N°)	Steel, zinc plated Cr6 free Stainless steel AISI303
Hex recess 		ST6018.*.1AZ ST6018.*.1BP S=11,40 + (0,6 x Stud N°)	Steel, zinc plated Cr6 free Stainless steel AISI303
Hex slotted recess 		ST6011.*.1AZ ST6011.*.1BP S=11,40 + (0,6 x Stud N°)	Steel, zinc plated Cr6 free Stainless steel AISI303

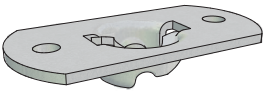
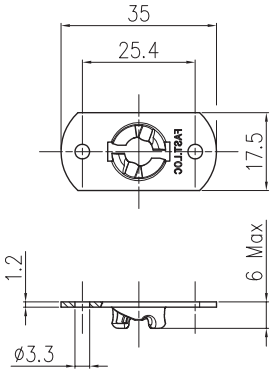
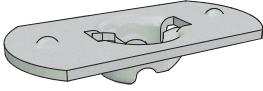
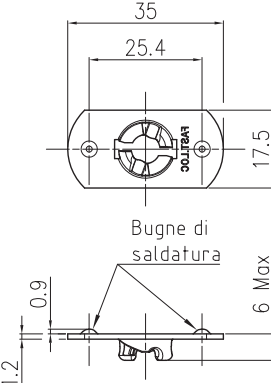

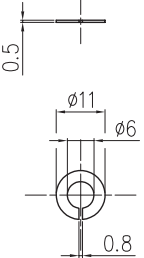
* Verschlusszapfen-Nummer siehe Tabelle Seite 15

SERIE 60 - VERSCHLUSSZAPFEN STUD

Style	Dimensions	Part number	Material/Finishing
Fixed wing 		ST6003.*.1AZ S=11,40 + (0,6 x Stud N°)	Steel, zinc plated Cr6 free
Offset fixed wing 		ST6023.*.1AZ S=11,40 + (0,6 x Stud N°)	Steel, zinc plated Cr6 free
Folding bail handle 		ST6004.*.1AZ S=11,40 + (0,6 x Stud N°)	Steel, zinc plated Cr6 free
Railways special square 		ST6005.*.1AZ ST6005.*.1BP S=11,40 + (0,6 x Stud N°)	Steel, zinc plated Cr6 free Stainless steel AISI303

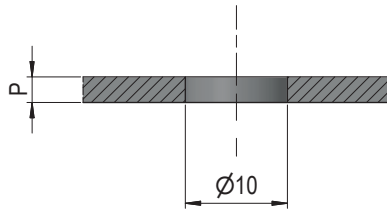
* Verschlusszapfen-Nummer siehe Tabelle Seite 15

SERIE 60 - HALTENOCKEN, HALTESCHEIBE RECEPTACLE, RETAINING RING

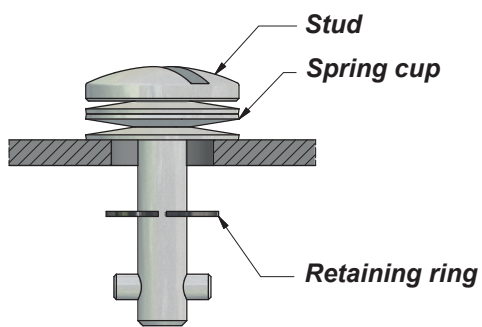
Style	Dimensions	Part number	Material/Finishing
Rivet mounting 		RC6001.1AZ RC6001.1BP	Steel, zinc plated Cr6 free Stainless steel AISI304
Weld mounting 		RC6002.1AR RC6002.1AZ RC6002.1BP	Steel uncoated, oiled Steel, zinc plated Cr6 free Stainless steel AISI304
Retaining ring 		AN4001.1BP	Stainless steel

SERIE 60 - EINBAUANLEITUNG INSTALLATION INSTRUCTION

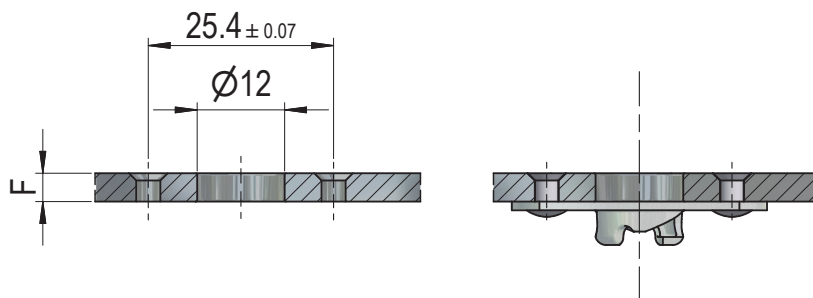
Stud



For P up to 2 mm panel thickness it is possible to install the stud without retaining ring drilling a $\text{Ø} 8$ mm hole.



Receptacle



SERIE 20/21

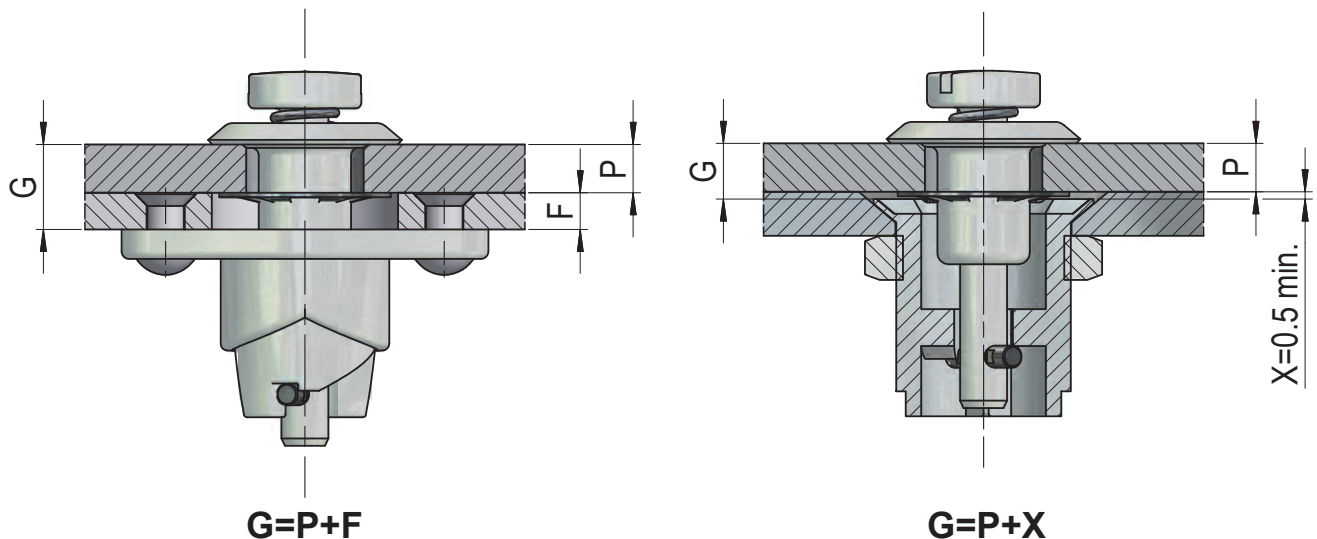
Particular features

- Max. tensile strenght 1.300 N
- Stud spring loaded
- Small-size fastener for high tensile strenght
- 2600 Series, fillister head - 2700 Series, flush head

Selection instructions

- Select stud assembly, receptacle and retaining ring
- Determine total thickness "G"
- Select "Stud number" accordingly to "G" thickness
- Insert "Stud number" * into stud part number

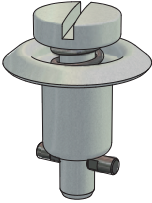
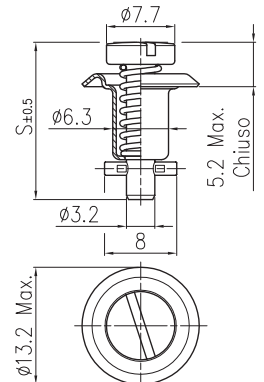
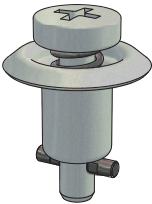
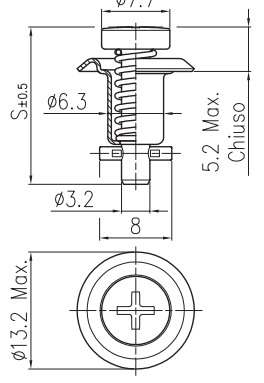
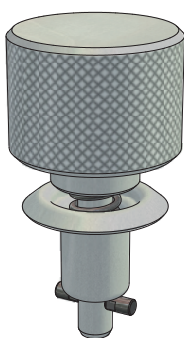
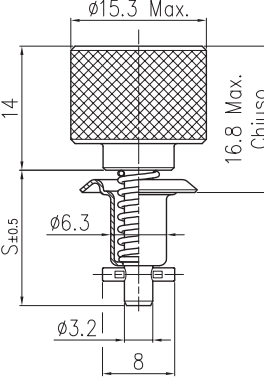
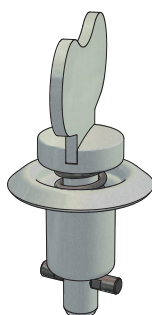
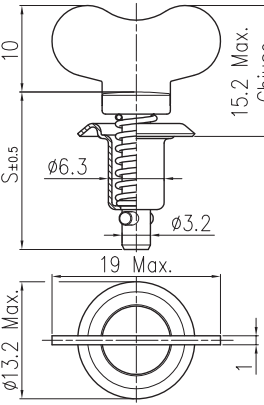
Application example and determination of "G" value



Stud lenght selection table

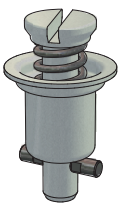
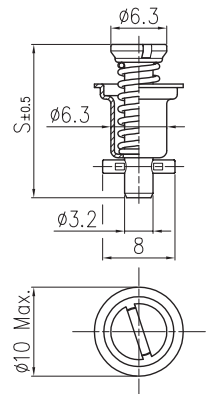
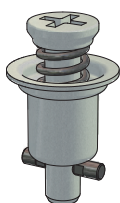
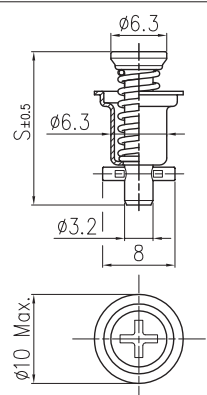
Total thickness G	Stud number with receptacle 1	Total thickness G	Stud number with receptacle 2	Total thickness G	Stud number with receptacle 3
0,75 - 1,50	1	0,75 - 1,50	2	9,90 - 10,65	1
1,50 - 2,30	2	1,50 - 2,30	3	10,65 - 11,40	2
2,30 - 3,05	3	2,30 - 3,05	4	11,40 - 12,20	3
3,05 - 3,80	4	3,05 - 3,80	5	12,20 - 12,95	4
3,80 - 4,60	5	3,80 - 4,60	6	12,95 - 13,70	5
4,60 - 5,35	6	4,60 - 5,35	7	13,70 - 14,50	6
5,35 - 6,10	7	5,35 - 6,10	8	14,50 - 15,25	7
6,10 - 6,85	8	6,10 - 6,85	9	15,25 - 16,00	8
6,85 - 7,60	9	6,85 - 7,60	10	16,00 - 16,75	9
7,60 - 8,40	10	7,60 - 8,40	11	16,75 - 17,50	10
8,40 - 9,15	11	8,40 - 9,15	12	17,50 - 18,30	11
9,15 - 9,90	12	9,15 - 9,90	13	18,30 - 19,05	12
9,90 - 10,65	13	9,90 - 10,65	14	19,05 - 19,80	13
10,65 - 11,40	14	10,65 - 11,40	15	19,80 - 20,60	14
11,40 - 12,20	15	11,40 - 12,20	16	20,60 - 21,35	15
12,20 - 12,95	16	12,20 - 12,95	17	21,35 - 22,10	16
12,95 - 13,70	17	12,95 - 13,70	18	22,10 - 22,85	17
13,70 - 14,50	18	13,70 - 14,50	19	22,85 - 23,60	18
14,50 - 15,25	19	14,50 - 15,25	20	23,60 - 24,40	19
15,25 - 16,00	20			24,40 - 25,15	20

SERIE 20 - VERSCHLUSSZAPFEN STUD

Style	Dimensions	Part number	Material/Finishing
Slotted recess 		ST2001.*.1AZ ST2001.*.1BP S=18,54+(0,76 x Stud N°)	Steel, zinc plated Cr6 free Stainless steel
Cross recess 		ST2002.*.1AZ ST2002.*.1BP S=18,54+(0,76 x Stud N°)	Steel, zinc plated Cr6 free Stainless steel
Knurled knob 		ST2006.*.1AZ ST2006.*.1AC ST2006.*.1BP S=16,76+(0,76 x Stud N°)	Steel, zinc plated Cr6 free Steel, chrome plated Stainless steel AISI303
Fixed wing 		ST2003.*.1AZ S=18,54+(0,76 x Stud N°)	Steel, zinc plated Cr6 free


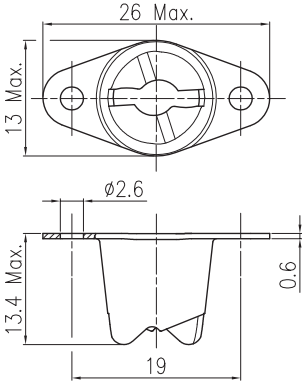
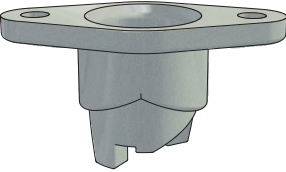
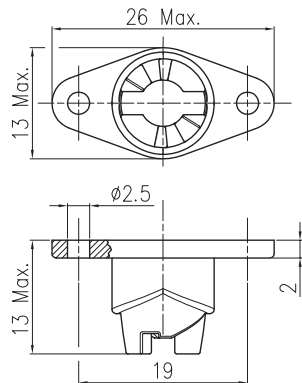
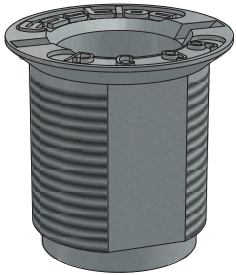
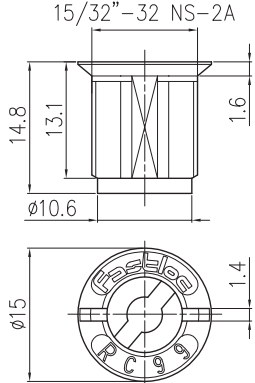
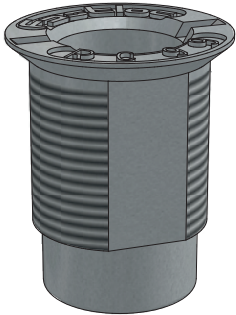
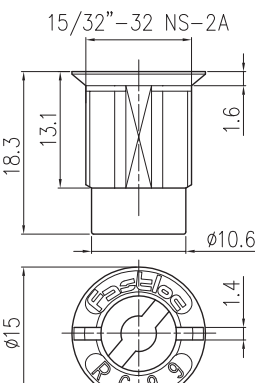
* Verschlusszapfen-Nummer siehe Tabelle Seite 20

SERIE 20 - VERSCHLUSSZAPFEN STUD

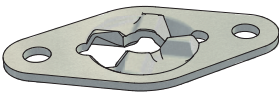
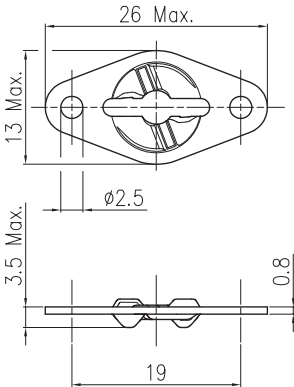
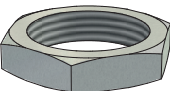
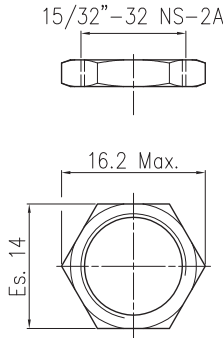

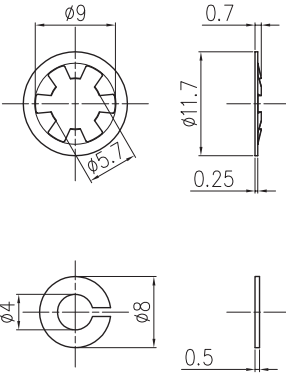
Style	Dimensions	Part number	Material/Finishing
<p>Slotted recess</p> 		<p>ST2101.*.1AZ</p> <p>ST2101.*.1BP</p> <p>S=14,73+(0,76 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p> <p>Stainless steel</p>
<p>Cross recess</p> 		<p>ST2102.*.1AZ</p> <p>S=14,73+(0,76 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p>

* Verschlusszapfen-Nummer siehe Tabelle Seite 20

SERIE 20/21 - HALTENOCKEN RECEPTACLE

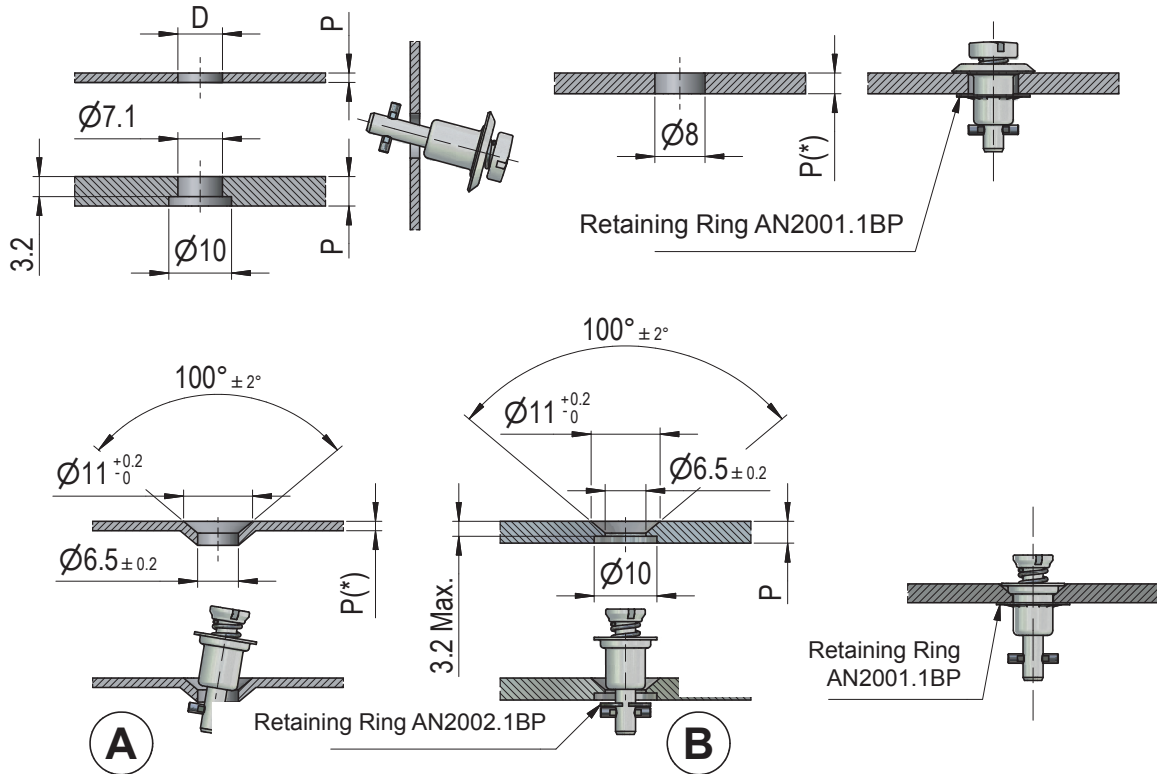
Style	Dimensions	Part number	Material/Finishing
<p>Rivet mounting</p> 		<p>Type 1 RC2002.1AZ</p>	<p>Steel, zinc plated Cr6 free</p>
<p>Rivet mounting</p> 		<p>Type 1 RC2001.1AZ</p>	<p>Bronze, zinc plated Cr6 free</p>
<p>Open</p> 		<p>Type 2 RC9901.1AZ</p>	<p>Zinc alloy, zinc plated Cr6 free</p>
<p>Incapsulated</p> 		<p>Type 2 Splah-proof RC9902.1AZ</p>	<p>Zinc alloy, zinc plated Cr6 free</p>

SERIE 20/21 - HALTENOCKEN, HALTESCHEIBE RECEPTACLE, RETAINING RING

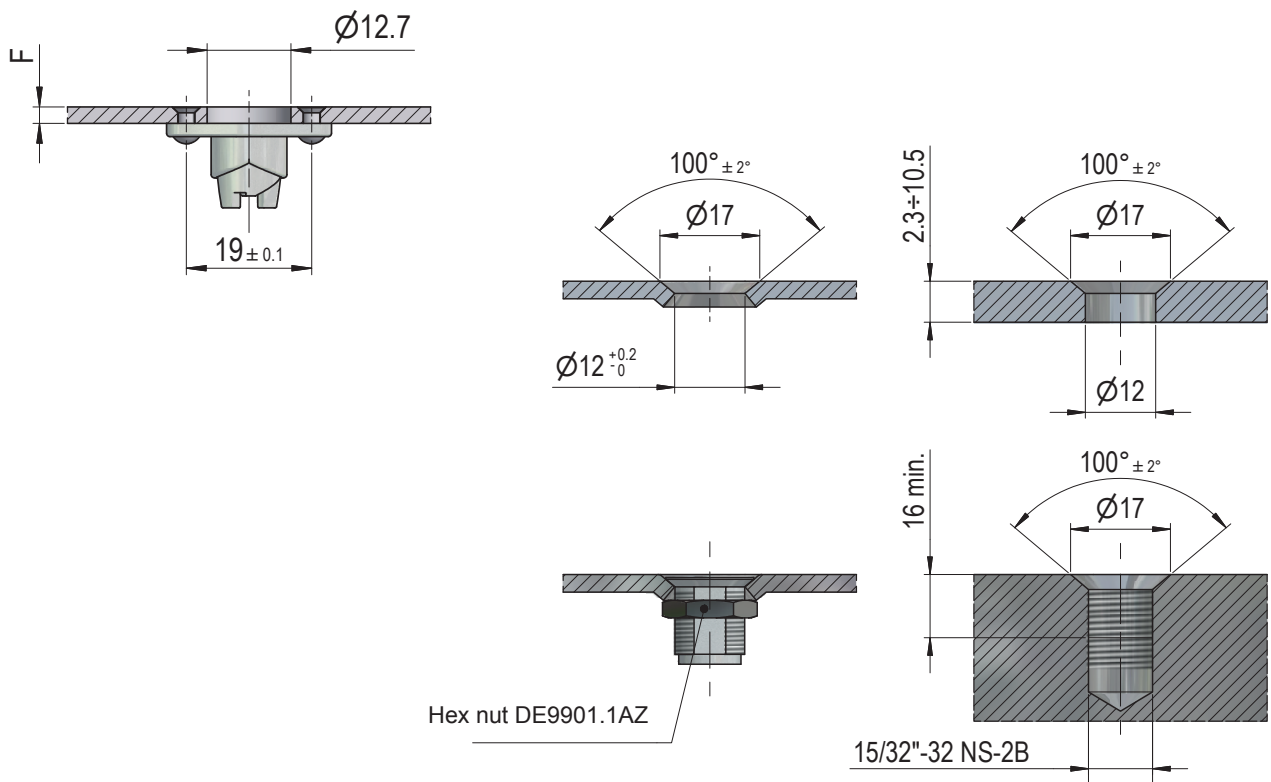
Style	Dimensions	Part number	Material/Finishing
Rivet mounting 		Tipo 3 RC2003.1AZ	Steel, zinc plated Cr6 free
Nut 		DE9901.1AZ	Steel, zinc plated Cr6 free
Retaining ring 		AN2001.1BP AN2002.1BP	Stainless steel Stainless steel

SERIE 20/21 - EINBAUANLEITUNG INSTALLATION INSTRUCTION

Stud



Receptacle



SERIE 90

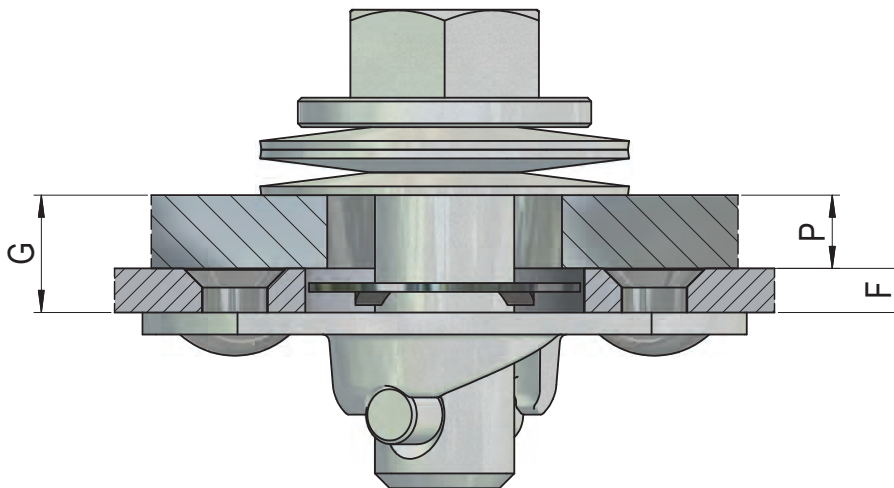
Particular features

- Max. tensile strength 10.000 N
- Stud spring loaded
- Fastener for maximum tensile strength and preload
- Wide range of styles and materials

Selection instructions

- Select stud assembly, receptacle and retaining ring
- Determine total thickness "G"
- Select "Stud number" accordingly to "G" thickness
- Insert "Stud number" * into stud part number

Application example and determination of "G" value

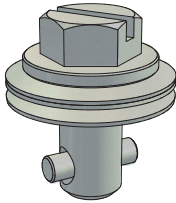
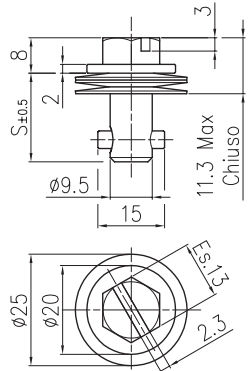
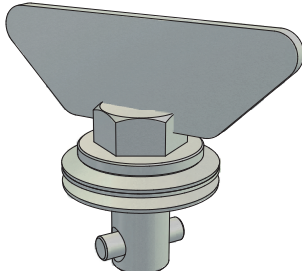
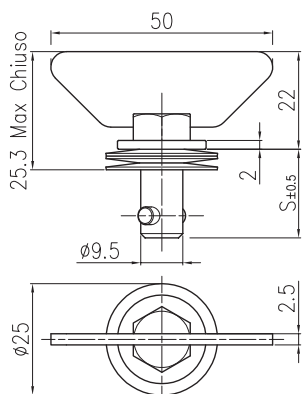
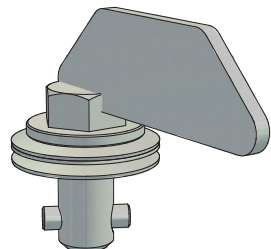
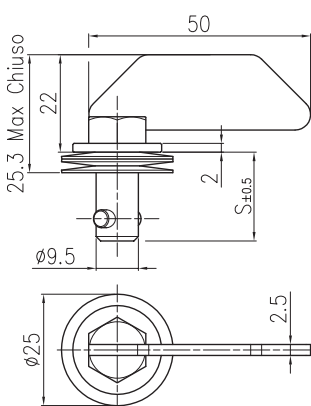
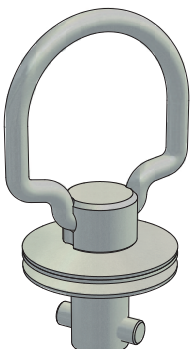
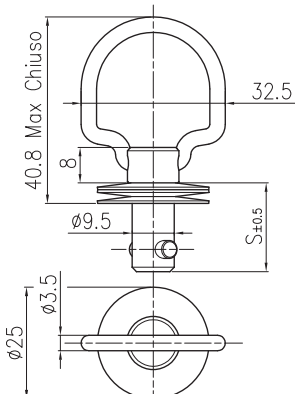


$$G = P + F$$

Stud length selection table

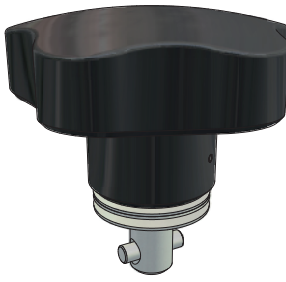
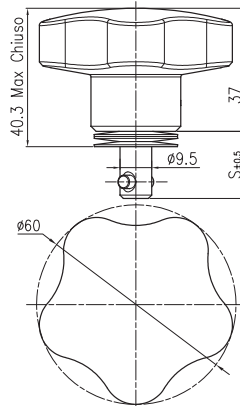
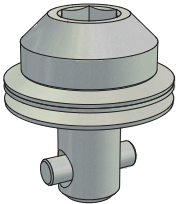
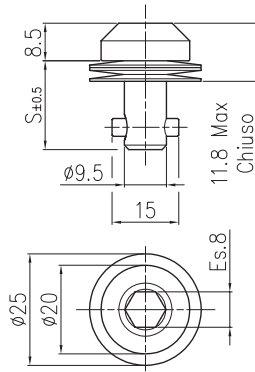
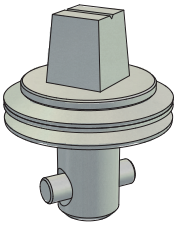
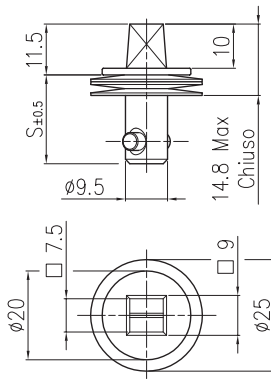
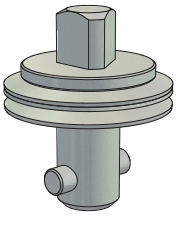
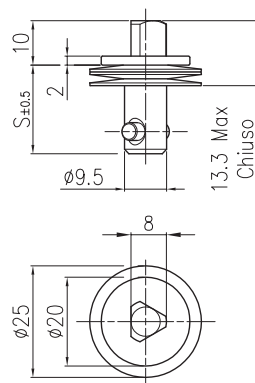
Total thickness G	Stud number	Total thickness G	Stud number	Total thickness G	Stud number
0,90 - 1,65	1	13,85 - 14,60	18	26,80 - 27,55	35
1,65 - 2,40	2	14,60 - 15,35	19	27,55 - 28,30	36
2,40 - 3,15	3	15,35 - 16,15	20	28,30 - 29,10	37
3,15 - 3,95	4	16,15 - 16,90	21	29,10 - 29,85	38
3,95 - 4,70	5	16,90 - 17,65	22	29,85 - 30,60	39
4,70 - 5,45	6	17,65 - 18,40	23	30,60 - 31,35	40
5,45 - 6,20	7	18,40 - 19,20	24	31,35 - 32,15	41
6,20 - 7,00	8	19,20 - 19,95	25	32,15 - 32,90	42
7,00 - 7,75	9	19,95 - 20,70	26	32,90 - 33,65	43
7,75 - 8,50	10	20,70 - 21,45	27	33,65 - 34,40	44
8,50 - 9,25	11	21,45 - 22,25	28	34,40 - 35,20	45
9,25 - 10,05	12	22,25 - 23,00	29	35,20 - 35,95	46
10,05 - 10,80	13	23,00 - 23,75	30	35,95 - 36,70	47
10,80 - 11,55	14	23,75 - 24,50	31	36,70 - 37,45	48
11,55 - 12,30	15	24,50 - 25,25	32	37,45 - 38,25	49
12,30 - 13,10	16	25,25 - 26,05	33	38,25 - 39,00	50
13,10 - 13,85	17	26,05 - 26,80	34		

SERIE 90 - VERSCHLUSSZAPFEN STUD

Style	Dimensions	Part number	Material/Finishing
<p>Hex slotted recess</p> 		<p>ST9001.*.1AZ</p> <p>ST9001.*.1BP</p> <p>S=16,26+(0,76 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p> <p>Stainless steel AISI303</p>
<p>Fixed wing</p> 		<p>ST9033.*.1AZ</p> <p>S=16,26+(0,76 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p>
<p>Offset fixed wing</p> 		<p>ST9043.*.1AZ</p> <p>S=16,26+(0,76 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p>
<p>Folding bail handle</p> 		<p>ST9034.*.1AZ</p> <p>S=16,26+(0,76 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p>

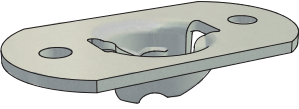
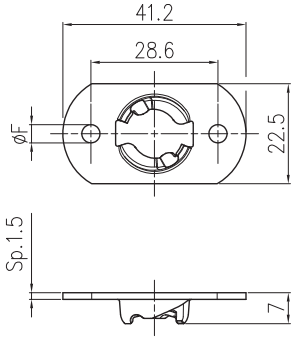
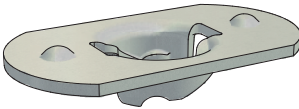
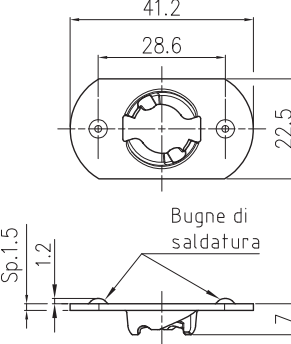

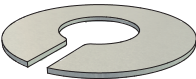
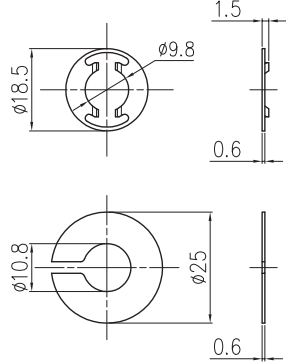
* Verschlusszapfen-Nummer siehe Tabelle Seite 26

SERIE 90 - VERSCHLUSSZAPFEN STUD

Style	Dimensions	Part number	Material/Finishing
<p>Plastic knob</p> 		<p>ST9026.*.1AZ</p> <p>ST9026.*.1BP</p> <p>S=16,26+(0,76 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p> <p>Stainless steel AISI303</p>
<p>Hex recess</p> 		<p>ST9018.*.1AZ</p> <p>ST9018.*.1BP</p> <p>S=16,26+(0,76 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p> <p>Stainless steel AISI303</p>
<p>Railways square</p> 		<p>ST9005.*.1AZ</p> <p>ST9005.*.1BP</p> <p>S=16,26+(0,76 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p> <p>Stainless steel AISI303</p>
<p>Triangle</p> 		<p>ST9017.*.1AZ</p> <p>ST9017.*.1BP</p> <p>S=16,26+(0,76 x Stud N°)</p>	<p>Steel, zinc plated Cr6 free</p> <p>Stainless steel AISI303</p>

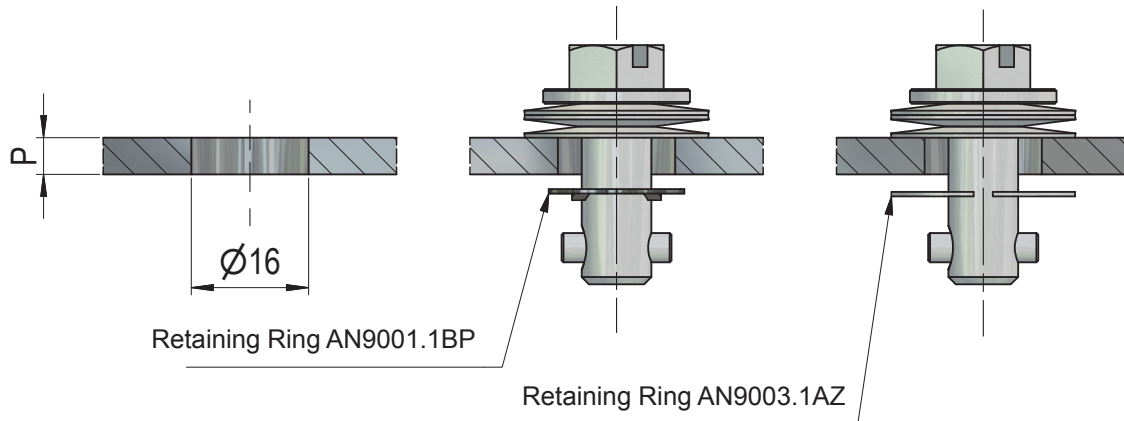
* Verschlusszapfen-Nummer siehe Tabelle Seite 26

SERIE 90 - HALTENOCKEN, HALTESCHEIBE RECEPTACLE, RETAINING RING

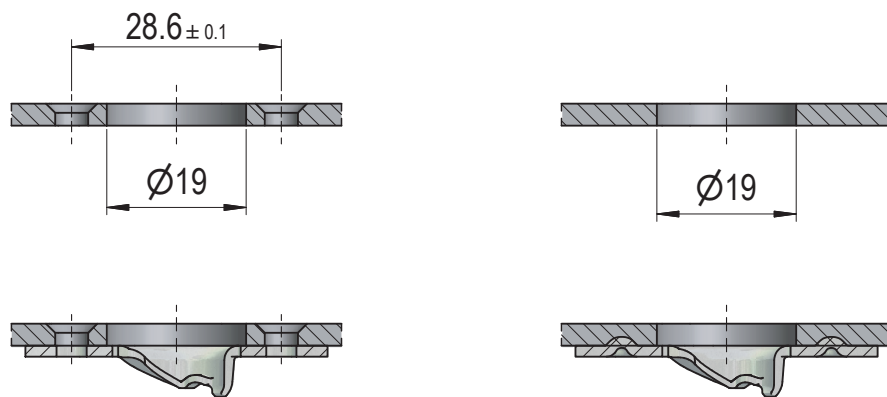
Style	Dimensions	Part number	Material/Finishing
Rivet mounting 		RC9001.1AZ fori d. 3,3 mm	Steel, zinc plated Cr6 free
		RC9001.1BP fori d. 3,3 mm	Stainless steel
		RC9001.3AZ fori d. 4,1 mm	Steel, zinc plated Cr6 free
		RC9001.3BP fori d. 4,1 mm	Stainless steel
Weld mounting 		RC9002.1AZ	Steel, zinc plated Cr6 free
		RC9002.1AR	Steel uncoated, oiled
Retaining ring  		AN9001.1BP	Stainless steel
		AN9003.1AZ	Steel, zinc plated Cr6 free

SERIE 90 - EINBAUANLEITUNG INSTALLATION INSTRUCTION

Stud



Receptacle



SERIE 76

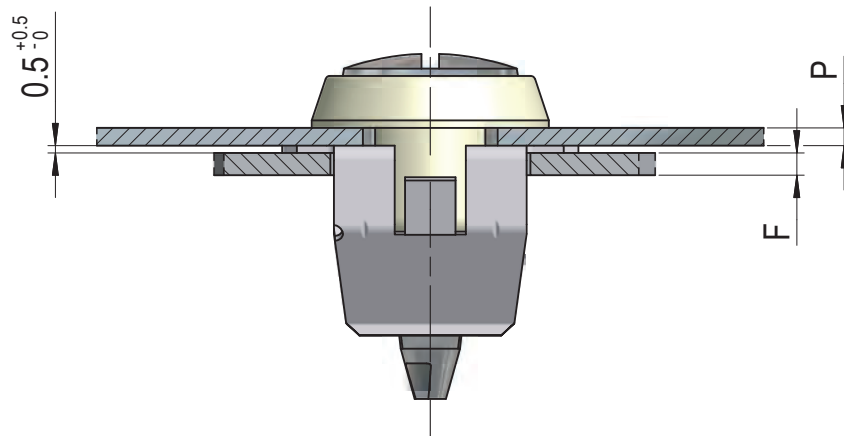
Particular features

- Max. tensile strength 1.400 N
- Stud spring loaded
- Opening by 1/4 turn - closing by a finger push
- Snap-in stud assembly (round hole) and snap-in receptacle (square hole)

Selection instructions

- Select stud assembly accordingly to thickness "P"
- Select receptacle accordingly to thickness "F"
- Select "Stud number" accordingly to "P" thickness from the table below
- Insert "Stud number" * into stud part number

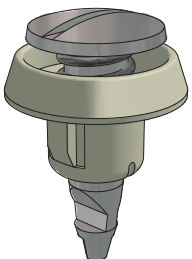
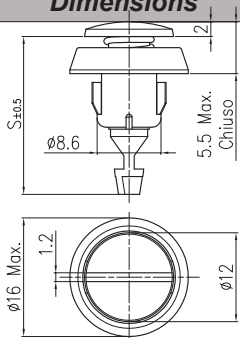
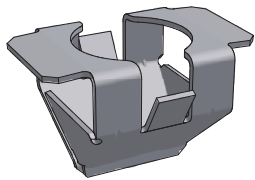
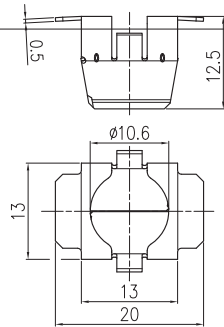
Application example and determination of thickness "P" and "F"



Stud length selection table

P thickness	Stud number
1,00 - 2,00	02
2,00 - 3,00	03
3,00 - 4,00	04
4,00 - 5,00	05

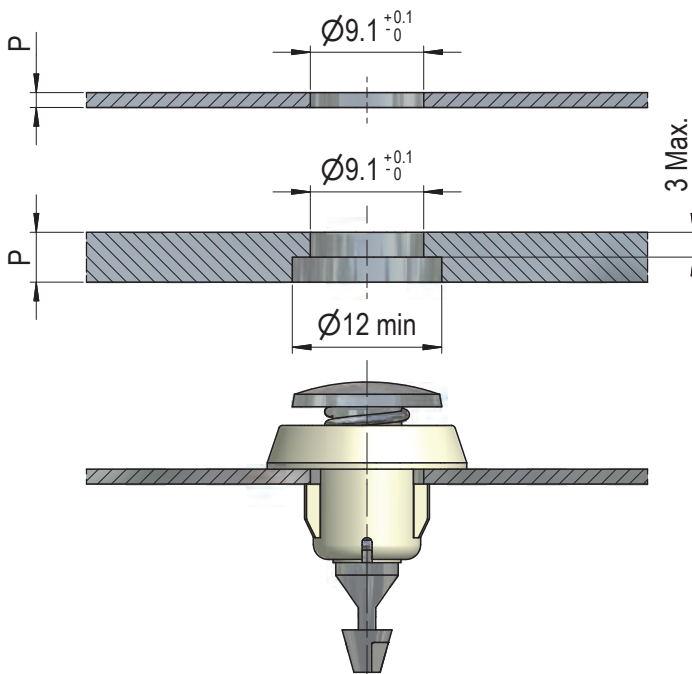
SERIE 76 - VERSCHLUSSZAPFEN, HALTENOCKEN **STUD, RECEPTACLE**

Style	Dimensions	Part number	Material/Finishing
Slotted recess 		ST7601.*.1BP	P thickness from 0,5 to 1,0
		ST7601.*.2BP	P thickness from 1,0 to 1,5
		ST7601.*.3BP	P thickness from 1,5 to 2,0
		ST7601.*.4BP	P thickness from 2,0 to 2,5
		ST7601.*.5BP	P thickness from 2,5 to 3,0
		S= 18,5 + Stud N°	Stainless steel, spring cup plastic POM
Snap-in 		RC7602.1BP	F thickness from 0,5 to 1,0
		RC7602.2BP	F thickness from 1,0 to 1,5
		RC7602.3BP	F thickness from 1,5 to 2,0
		RC7602.4BP	F thickness from 2,0 to 2,5
			Stainless steel

* Verschlusszapfen-Nummer siehe Tabelle Seite 31

SERIE 76 - EINBAUANLEITUNG INSTALLATION INSTRUCTION

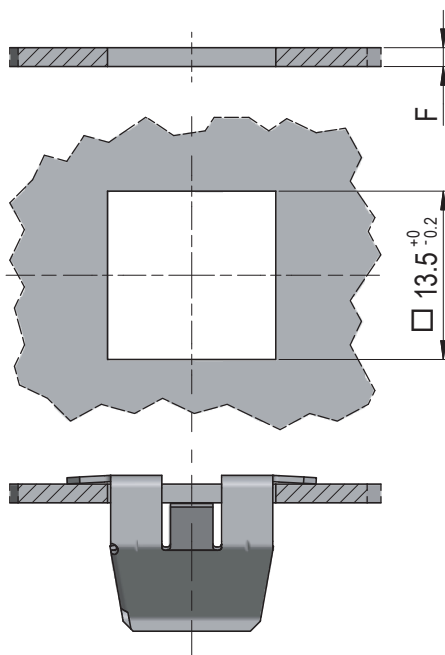
Stud



Panel thickness up to 3 mm

Panel thickness over 3 mm

Receptacle



SERIE 15

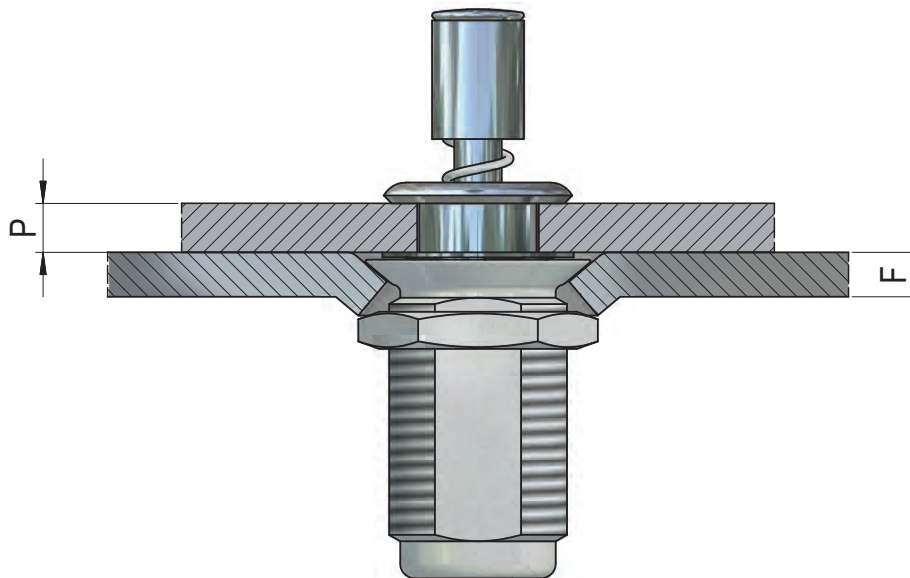
Particular features

- Max. tensile strenght 1.330 N
- Stud spring loaded
- Opening and closing by a finger push
- Receptacles with external thread for screwing into high thickness panel or retaining nut

Selection instructions

- Select "Stud number" accordingly to "P" thickness from the table below
- Insert "Stud number" * into stud part number

Application example and determination of "P" value

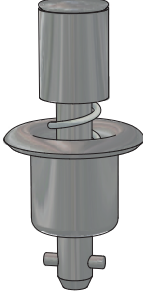
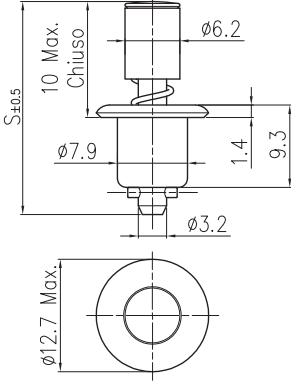
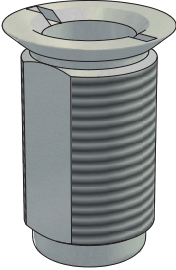
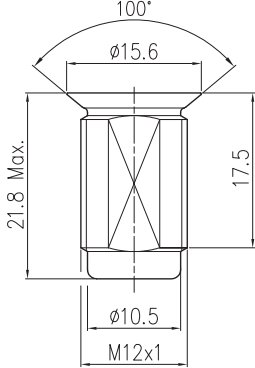
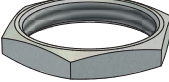
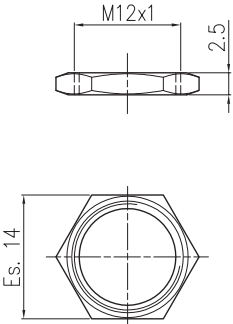

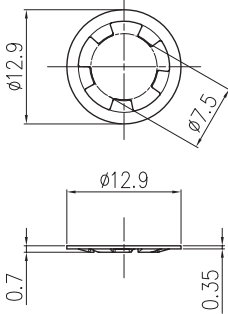


$$G=P$$

Stud lenght selection table

P thickness	Stud number
0,70 - 2,30	1
2,30 - 3,80	3
3,80 - 5,30	5
5,30 - 6,90	7
6,90 - 8,40	9
8,40 - 9,90	11
9,90 - 11,40	13
11,40 - 12,90	15

SERIE 15 - VERSCHLUSSZAPFEN, HALTENOCKEN, HALTESCHEIBE STUD, RECEPTACLE, RETAINING RING

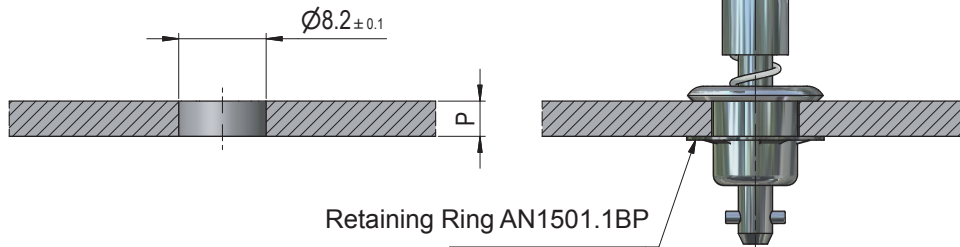
Style	Dimensions	Part number	Material/Finishing
Stud 		ST1501.*.1AD	Steel, nickel plated
Receptacle 		RC1501.1AZ	Zinc alloy, zinc plated Cr6 free
Nut 		DE1501.1AZ	Steel, zinc plated Cr6 free
Retaining ring 		AN1501.1BP	Stainless steel

* Verschlusszapfen-Nummer siehe Tabelle Seite 34

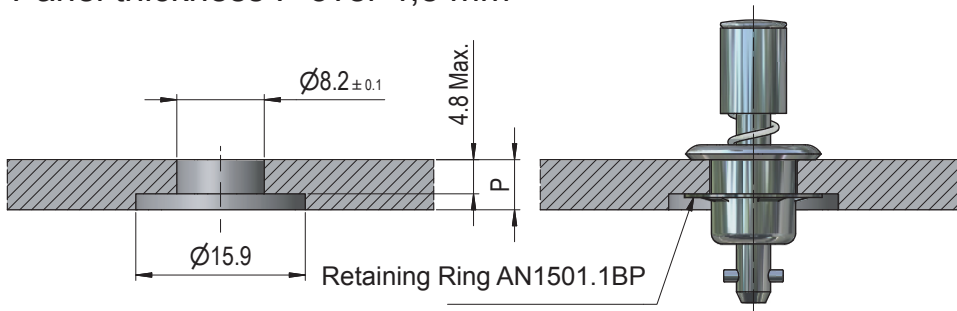
SERIE 15 - EINBAUANLEITUNG INSTALLATION INSTRUCTION

Stud

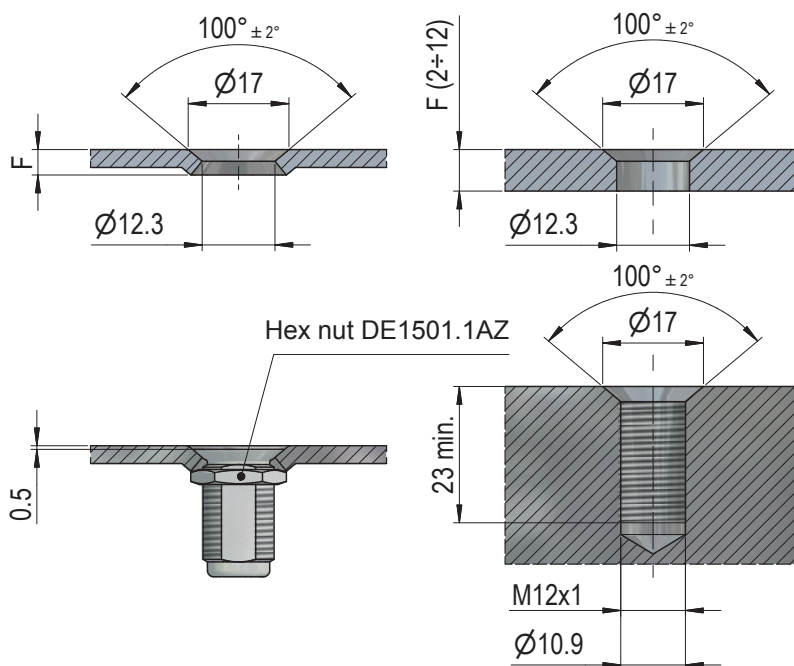
Panel thickness P up to 4,8 mm



Panel thickness P over 4,8 mm



Receptacle



SERIE 979

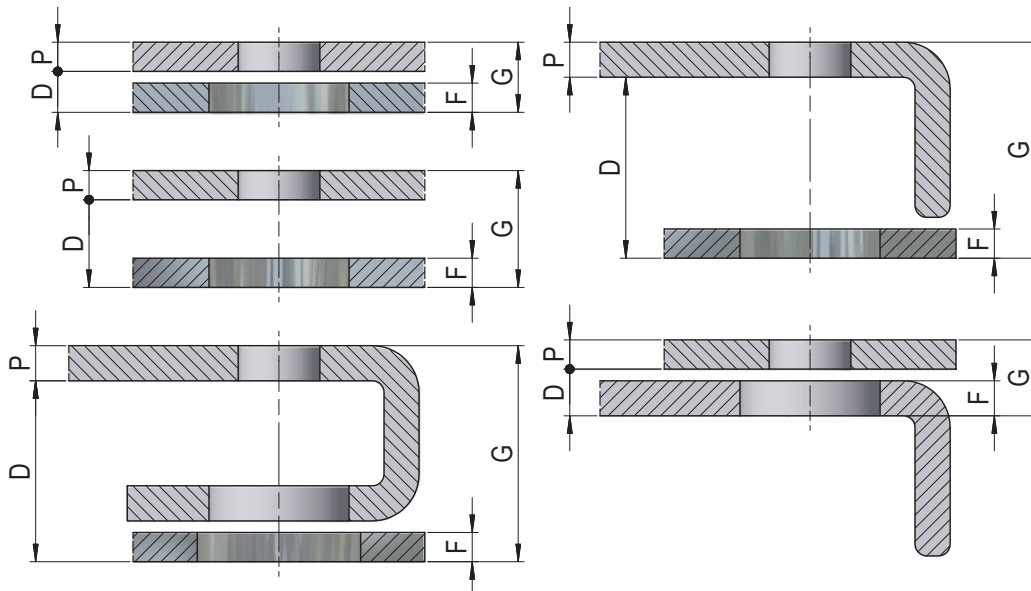
Particular features

- Opening by 1/4 turn - closing by a finger push
- Rubber retaining ring as spring component
- 2979 Series mini: Max. tensile strenght 700 N
- 1979 Series medium: Max. tensile strenght 2.500 N
- 0979 Series maxi: Max. tensile strenght 8.000 N

Selection instructions

- Select stud assembly, receptacle and retaining ring
- Determine total thickness "G"
- Select retaining ring size closest to the value obtained from the following D x 1,25
- Select "Stud number" accordingly to "G" thickness
- Insert "Stud number" * into stud part number

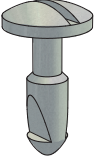
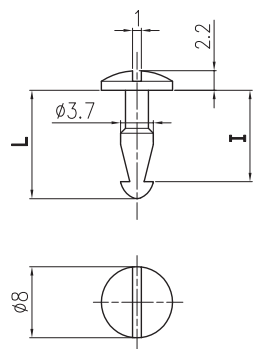

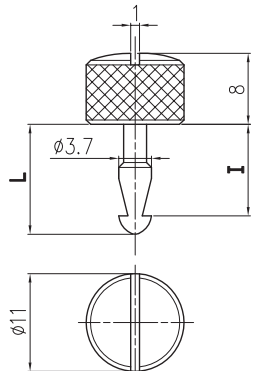

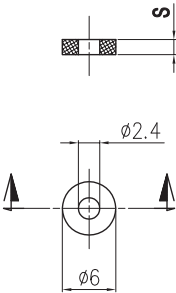
Application example and determination of "G" value



Stud lenght selection table

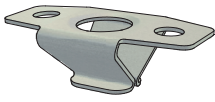
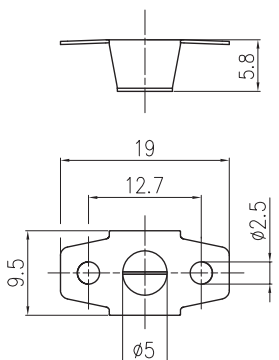
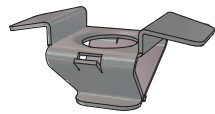
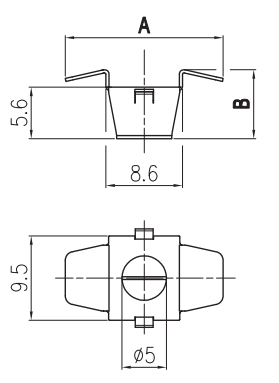
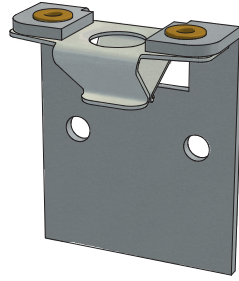
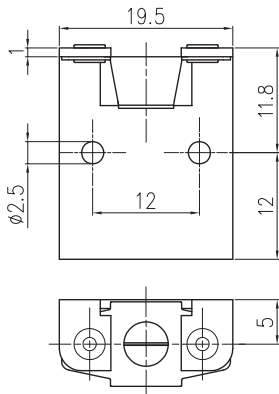
2979 SERIES MINI				1979 SERIES MEDIUM				0979 SERIES MAXI			
G max.	L	I	Stud N°	G max.	L	I	Stud N°	G max.	L	I	Stud N°
3,00	11,20	9,30	02	3,70	16,60	14,40	03	5,00	22,20	18,40	04
3,50	11,70	9,80	02.5	4,70	17,60	15,40	04	7,00	24,20	20,40	06
4,00	12,20	10,30	03	5,70	18,60	16,40	05	9,00	26,20	22,40	08
4,40	12,60	10,70	03.5	6,90	19,80	17,60	06	11,00	28,10	24,30	10
4,80	13,00	11,10	04	7,70	20,60	18,40	07	13,00	30,10	26,30	12
5,70	13,90	12,00	05	8,90	21,80	19,60	08	15,20	32,40	28,60	14
6,80	15,00	13,10	06	9,70	22,60	20,40	09	17,00	34,10	30,30	16
7,80	16,00	14,10	07	10,70	23,60	21,40	10	18,80	36,00	32,20	18
9,00	17,20	15,30	08	11,70	24,60	22,40	11	21,00	38,10	34,30	20
				12,90	25,80	23,60	12				
				14,70	27,60	25,40	14				
				16,70	29,60	27,40	16				
				18,70	31,60	29,40	18				
				20,90	33,80	31,60	20				
				22,70	35,60	33,40	22				

SERIE 2979 - VERSCHLUSSZAPFEN, HALTESCHEIBE STUD, RETAINING RING

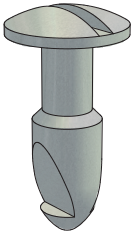
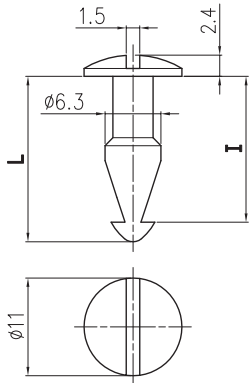
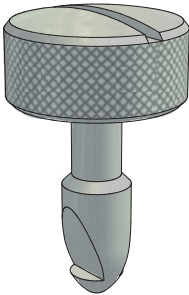
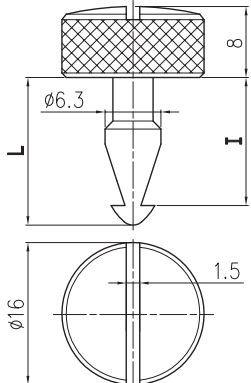

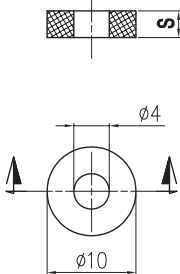
Style	Dimensions	Part number	Material/Finishing
Slotted recess 		ST.2979.08* ST.2979.08*.AZ ST.2979.08*.BP	Steel, nickel plated Steel, zinc plated Cr6 free Stainless steel
Knurled knob 		SK.2979.08* SK.2979.08*.AZ SK.2979.08*.BP	Steel, nickel plated Steel, zinc plated Cr6 free Stainless steel
Retaining ring 		GG.2979.0812 GG.2979.0817 GG.2979.0825	Neoprene S=1,2 mm NBR 70' Sh S=1,7 mm NBR 70' Sh S=2,5 mm

* Verschlusszapfen-Nummer siehe Tabelle Seite 37

SERIE 2979 - HALTENOCKEN RECEPTACLE

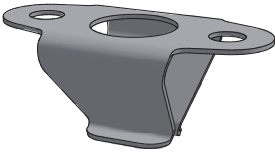
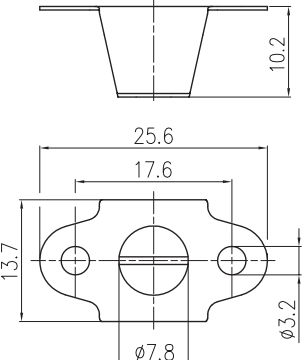
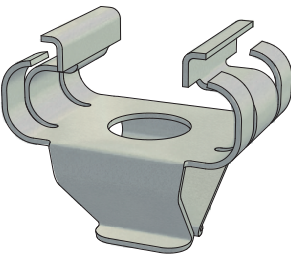
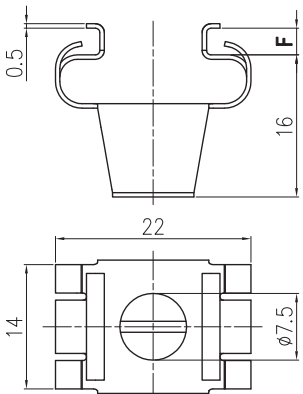
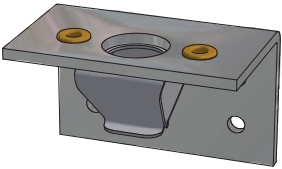
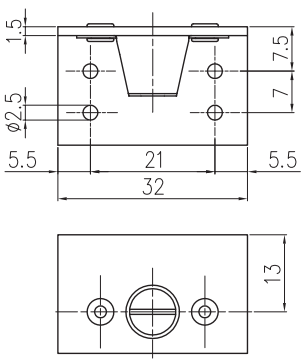
Style	Dimensions	Part number	Material/Finishing												
<p>Rivet mounting</p> 		<p>RR.2979.0800</p> <p>RR.2979.0800.BP</p>	<p>Steel, zinc plated Cr6 free</p> <p>Stainless steel</p>												
<p>Snap-in</p> 	 <table border="1" data-bbox="813 1041 1037 1198"> <thead> <tr> <th>PN</th> <th>A</th> <th>B</th> </tr> </thead> <tbody> <tr> <td>11</td> <td>34,2</td> <td>14,4</td> </tr> <tr> <td>12</td> <td>32,8</td> <td>15,3</td> </tr> <tr> <td>13</td> <td>30,2</td> <td>16,6</td> </tr> </tbody> </table>	PN	A	B	11	34,2	14,4	12	32,8	15,3	13	30,2	16,6	<p>RR.2979.0811</p> <p>RR.2979.0812</p> <p>RR.2979.0813</p>	<p>F from 0,5 to 1,0 Steel xylan black</p> <p>F from 1,0 to 1,7 Steel xylan black</p> <p>F from 1,7 to 2,4 Steel xylan black</p>
PN	A	B													
11	34,2	14,4													
12	32,8	15,3													
13	30,2	16,6													
<p>Side mounting</p> 		<p>RR.2979.0810</p>	<p>Steel, zinc plated Cr6 free</p>												

SERIE 1979 - VERSCHLUSSZAPFEN, HALTESCHEIBE STUD, RETAINING RING

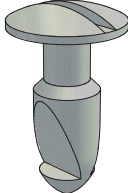
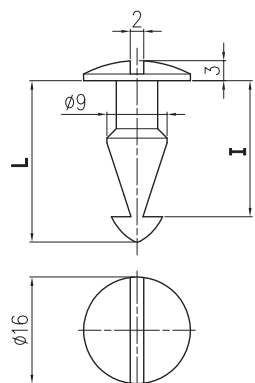
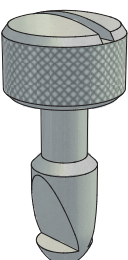
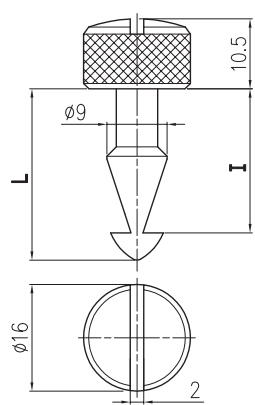

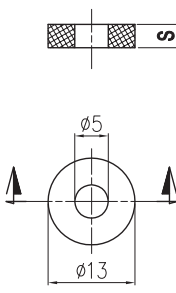
Style	Dimensions	Part number	Material/Finishing
Slotted recess 		ST.1979.11* ST.1979.11*.AZ ST.1979.11*.BP	Steel, nickel plated Steel, zinc plated Cr6 free Stainless steel
Knurled knob 		SK.1979.11* SK.1979.11*.AZ SK.1979.11*.BP	Steel, nickel plated Steel, zinc plated Cr6 free Stainless steel
Retaining ring 		GG.1979.1115 GG.1979.1120 GG.1979.1125 GG.1979.1130	Neoprene S=1,5 mm Neoprene S=2,0 mm Neoprene S=2,5 mm Neoprene S=3,0 mm

* Verschlusszapfen-Nummer siehe Tabelle Seite 37

SERIE 1979 - HALTENOCKEN RECEPTACLE

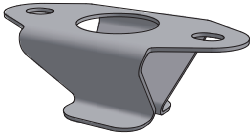
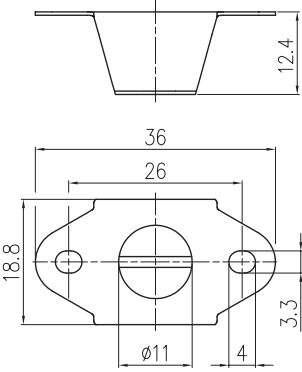
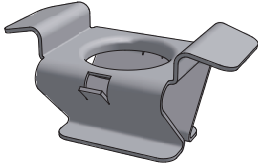
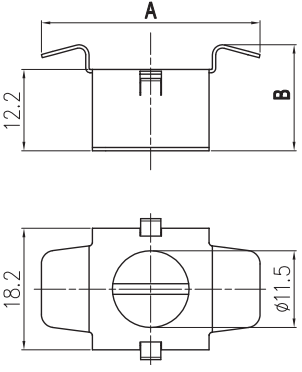
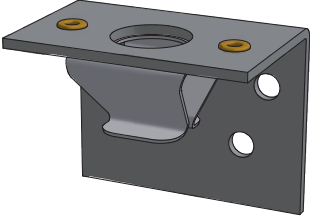
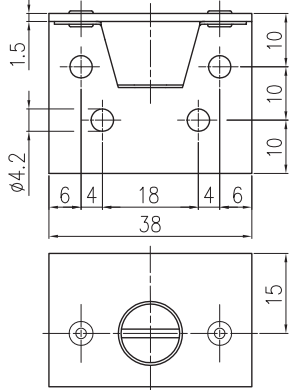
Style	Dimensions	Part number	Material/Finishing
Rivet mounting 		RR.1979.1105 RR.1979.1105.BP	Steel, zinc plated Cr6 free Stainless steel
Snap-in 		RR.1979.1150	Steel, zinc plated Cr6 free F from 1,0 to 2,1 Increase of 7 mm total thickness "G" e determine relevant "Stud number".
Side mounting 		RR.1979.1155	Steel, zinc plated Cr6 free

SERIE 0979 - VERSCHLUSSZAPFEN, HALTESCHEIBE STUD, RETAINING RING

Style	Dimensions	Part number	Material/Finishing
Slotted recess 		ST.0979.16* ST.0979.16*.AZ ST.0979.16*.BP	Steel, nickel plated Steel, zinc plated Cr6 free Stainless steel
Knurled knob 		SK.0979.16* SK.0979.16*.AZ SK.0979.16*.BP	Steel, nickel plated Steel, zinc plated Cr6 free Stainless steel
Retaining ring 		GG.0979.1615 GG.0979.1620 GG.0979.1625 GG.0979.1630 GG.0979.1640	Neoprene S=1,5 mm Neoprene S=2,0 mm Neoprene S=2,5 mm Neoprene S=3,0 mm Neoprene S=4,0 mm

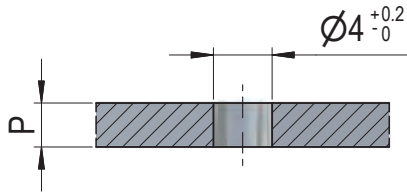
* Verschlusszapfen-Nummer siehe Tabelle Seite 37

SERIE 0979 - HALTENOCKEN RECEPTACLE

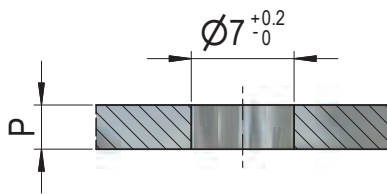
Style	Dimensions	Part number	Material/Finishing												
Rivet mounting 		RR.0979.1600	Steel, zinc plated Cr6 free												
		RR.0979.1600.BP	Stainless steel												
Snap-in 	 <table border="1" data-bbox="818 1043 1042 1205"> <thead> <tr> <th>PN</th> <th>A</th> <th>B</th> </tr> </thead> <tbody> <tr> <td>11</td> <td>18,1</td> <td>6,8</td> </tr> <tr> <td>12</td> <td>17,1</td> <td>7,2</td> </tr> <tr> <td>13</td> <td>15,8</td> <td>8,0</td> </tr> </tbody> </table>	PN	A	B	11	18,1	6,8	12	17,1	7,2	13	15,8	8,0	RR.0979.1611	F from 0,5 to 1,0 Steel xylan black
		PN	A	B											
11	18,1	6,8													
12	17,1	7,2													
13	15,8	8,0													
RR.0979.1612	F from 1,0 to 1,7 Steel xylan black														
RR.0979.1613	F from 1,7 to 2,4 Steel xylan black														
Side mounting 		RR.0979.1620	Steel, zinc plated Cr6 free												

SERIE 979 - EINBAUANLEITUNG INSTALLATION INSTRUCTION

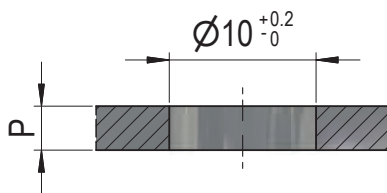
Stud



2979 SERIES

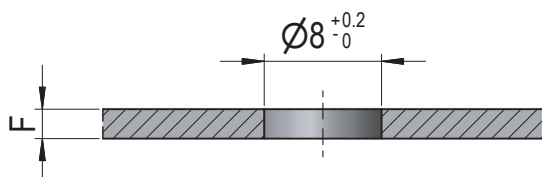


1979 SERIES

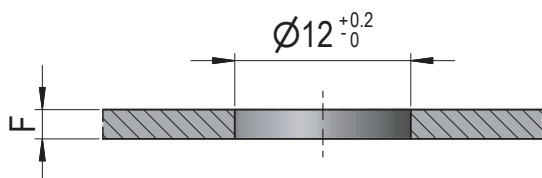
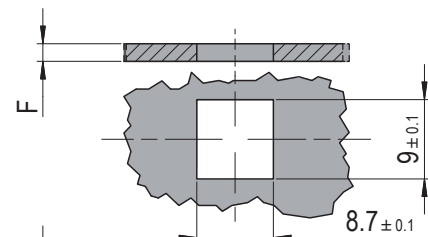


0979 SERIES

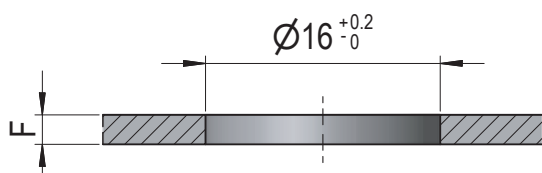
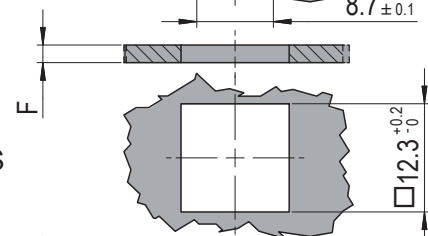
Receptacle



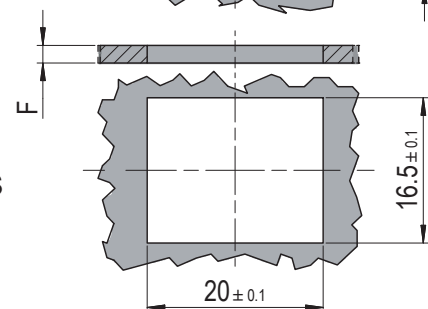
2979 SERIES



1979 SERIES



0979 SERIES





EINPRESSBEFESTIGER
SELF CLINCHING FASTENERS

BLINDNIETMUTTERN
BLIND RIVET NUTS



SCHWEISSBOLZEN
WELDING STUDS



**BLINDNIETEN, SCHLIESS-
RINGBOLZEN**
BLIND RIVETS, LOCK BOLTS



KÄFIGMUTTERN
CAGE NUTS

**EINSÄTZE UND
GEWINDETRÄGER**
**INSERTS AND
THREADED PARTS**



**GEWINDEEINSÄTZE FÜR
METALLANWENDUNGEN**
**THREAD INSERTS
FOR METALS**



LEICHTBAUBEFESTIGER
LIGHTWEIGHT FASTENERS



VERSCHLUSSELEMENTE
LOCKS

**ZENTRALSCHMIERANLAGEN,
PUMPEN UND VERTEILER**
**CENTRAL LUBRICATION SYSTEMS,
PUMPS AND DISTRIBUTERS**



DICHTSTOPFEN
SEALING PLUGS



SCHNELLKUPPLUNGEN
QUICK COUPLINGS

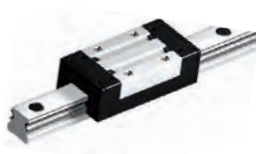


**KUPPLUNGEN UND
MASCHINENELEMENTE**
**COUPLINGS AND MACHINE
ELEMENTS**

PSG LAUFROLLENFÜHRUNG
PSG LINEARMOTION



ALUX-SCHIENENFÜHRUNG
ALUX-GUIDE RAIL



TELESKOPSCHIENEN
TELESCOPIC SLIDES



**BAUGRUPPENMONTAGE,
ENGINEERING**
**MOUNTING THE ASSEMBLY,
ENGINEERING**

**DREHTEILE,
ZEICHNUNGSTEILE**
**TURNING AND SPECIAL
DRAWING PARTS**



