

Semiconductor mounting clamps

Product catalog 2019



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Semiconductor mounting clamps

Product range overview

Selection guide

Mounting clamp		Recommended for device flange diameter	Bolt distance	Aluminium	Steel	Clamping force																	
Type	Page					mm	mm		kN	4	8	10	11	12	15	16	20	22	33	40	50	70	90
5SAC29V	4–5	172–197	290	A																			
5SAC22V	6–7	150–172	220	A																			
5SAC18V	8–11	60–150	180	A																			
5SAC15V	12–13	75–120	146	A																			
5SAC14V	14–19	60–110	140	A																			
5SAC13V	20	40–118	132		S																		
5SAC10V	22–25	60–75	102	A																			
5SAC10V	26–27	42–75	102		S																		
5SAC09V	28–29	60	85		S																		
5SAC07V	30–31	60	70		S																		
5SAC05V	32–33	42	54		S																		

Please find in the right column a quick guide explaining the composition of the standard ABB part numbers for mounting clamps.

An example of adapted standard part number is 5SAC 1890V0001, where the number 90 has changed place when compared to the standard part number.

Standard part number 5SAC 18V9020
 5S – Original drawing responsible, CHSEM
 A – Accessories
 C – Clamp
 18 – approximately 18 cm bolt distance
 V – Mechanical version
 90 – 90 kN of spring force
 20 – Version number



Technical Specification – Environmental

Ambient temperature	
Transport	-40°C to +70°C
Storage	+5°C to +40°C
Operation	+5°C to +80°C
Relative humidity	5% to 85%, no condensation allowed
Contamination levels	No conductive dust allowed
Storage	IEC60721-3-1 Class 1C2 (chemical gases) Class 1S2 (solid particles)
Transportation	IEC60721-3-2 Class 2C2 (chemical gases) Class 2S2 (solid particles)
Operation	IEC60721-3-3
(Assembled)	Class 3C1/3C2 (chemical gases) Class 3S2 (solid particles)

Aluminium mounting clamp

5SAC29V: 110 and 190 kN

—
Figure 01
5SAC29V1120

Each part number includes:
1. Leaf spring with correct clamping force indicator and pressure pad.
2. Washers
3. Label

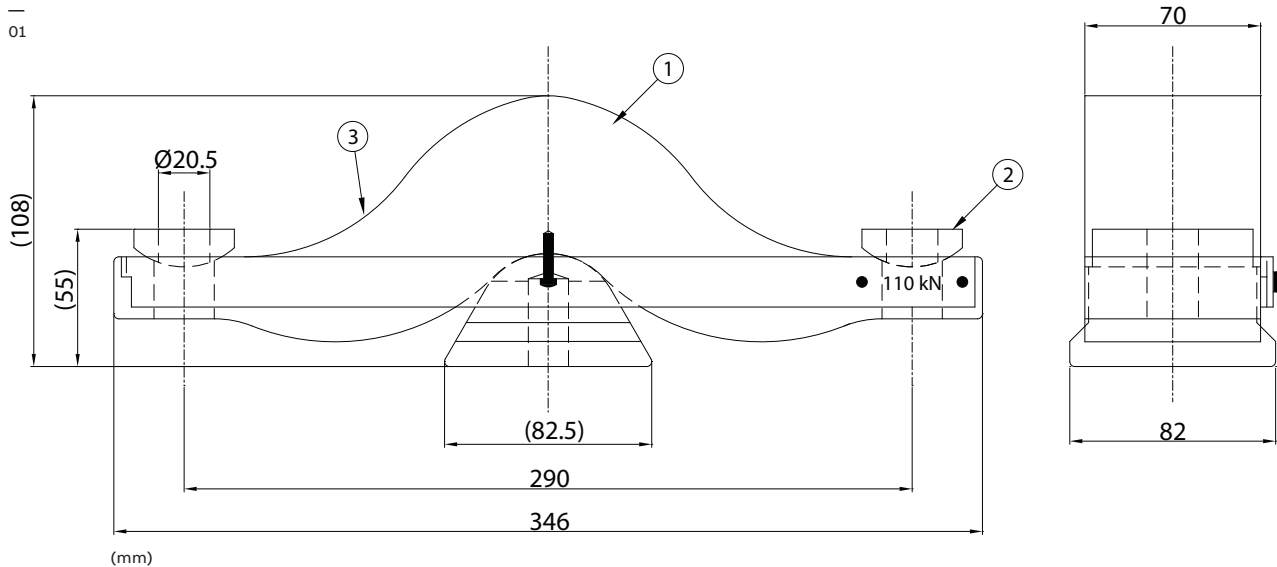
Clamping system for hockey-puck devices with flange diameter 172 to 197 mm clamping force 110 and 190 kN, in alloy EN-AW-6082-T6.

Features

- Not sensitive to magnetic fields
- Low weight
- High alloy content makes clamp exceptionally strong
- Clamping force up to 110 and 190 kN
- (-10%, +20%)
- ABB's correct clamping force indicator

5SAC29V

Type and ordering number	Bolt		Weight	F_m Clamping force	V_c Max. insulation voltage kV	V_m Voltage for partial discharge kV	T_m Max. temp for cont. operation °C	Fig.
	Length	Distance						
	mm	mm	kg	kN				
5SAC29V1120	—	290	3.6	110	—	—	80	01
5SAC29V1920	—	290	5.1	190	—	—	80	02



Aluminium mounting clamp

5SAC29V: 110 and 190 kN

Figure 02
5SAC22V1320

Each part number includes:
1. Leaf spring with correct clamping force indicator and pressure pad.
2. Washers
3. Label

PRODUCT SPECIFICATIONS

Leaf spring

Material: Aluminium EN-AW-6082

Surface treatment: Anodized nature (10µm)

Indicating spring

Material: EN-AW-6005

Surface treatment: Anodized nature (10µm)

Press piece

Material: Aluminium EN-AW-6082

Surface treatment: Anodized nature (10µm)

Washers

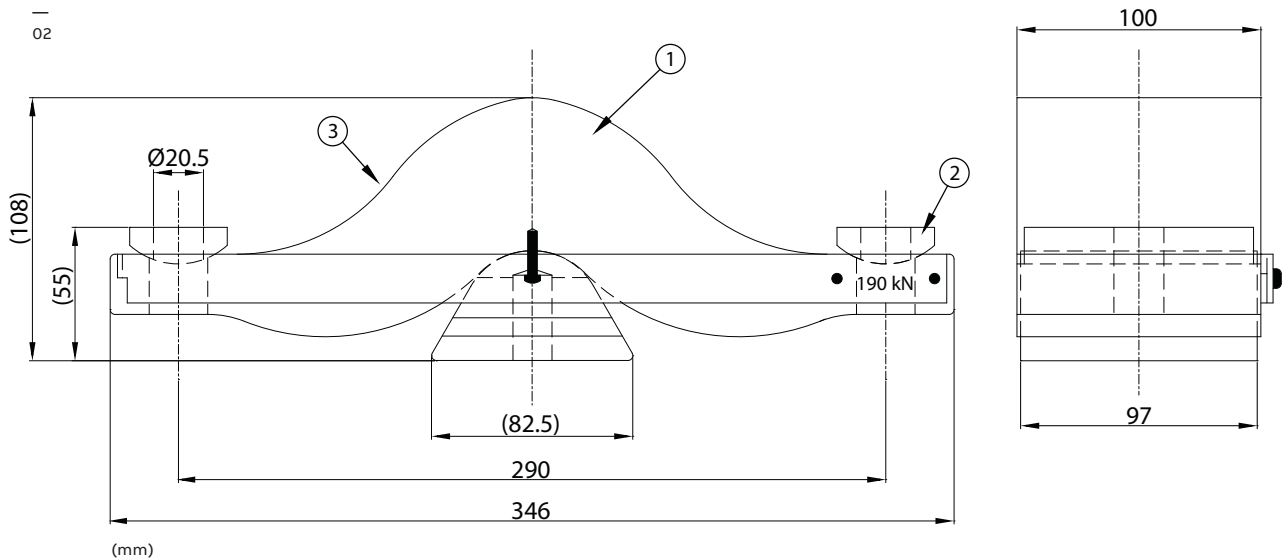
Material: Aluminium EN-AW-6082

Surface treatment: Anodized nature (10µm)

Environmental

IEC60721-3-3 set IE33, Class 3C1

Relative humidity 5 to 85%, no condensation allowed.



Aluminium mounting clamp

5SAC22V: 90 and 135 kN

—
Figure 01
5SAC22V9020

Each part number includes:
1. Leaf spring with correct clamping force indicator and pressure pad.
2. Washers
3. Label

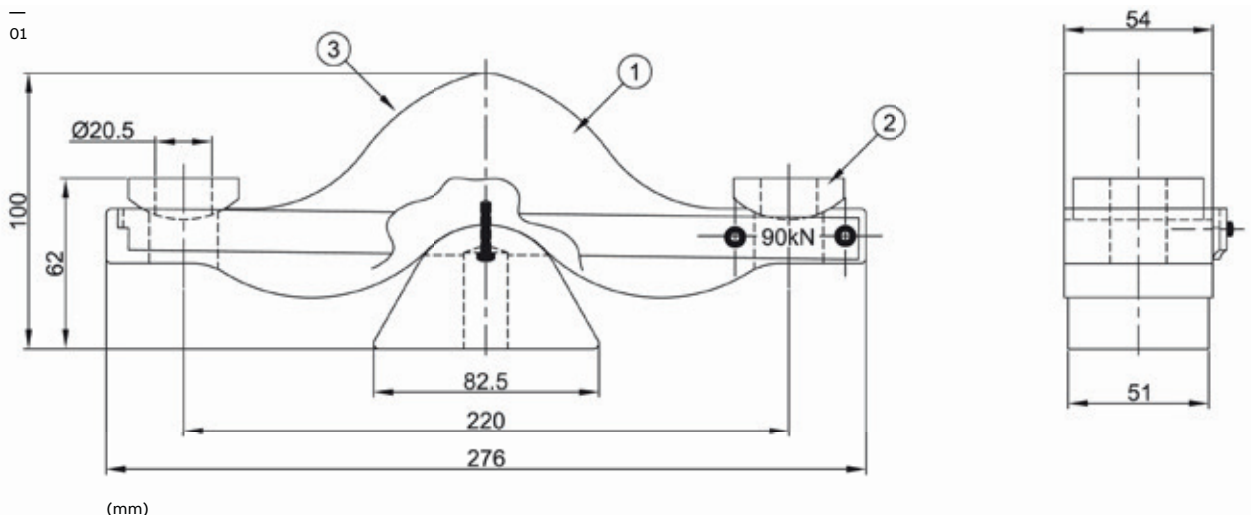
Clamping system for hockey-puck devices with flange diameter 150 to 172 mm clamping force 90 and 135 kN, in alloy EN-AW-6082-T6.

Features

- Not sensitive to magnetic fields
- Low weight
- High alloy content makes clamp exceptionally strong
- Clamping force up to 90 and 135 kN (-10%, +20%)
- ABB's correct clamping force indicator

5SAC22V

Type and ordering number	Bolt		Weight	F_m Clamping force	V_c Max. insulation voltage	V_m Voltage for partial discharge	T_m Max. temp for cont. operation	Fig.
	Length	Distance						
	mm	mm	kg	kN	kV	kV	°C	
5SAC22V9020	—	220	2.00	90	—	—	80	01
5SAC22V1320	—	220	2.74	135	—	—	80	02



Aluminium mounting clamp

5SAC22V: 90 and 135 kN

Figure 02
5SAC22V1320

Each part number includes:
1. Leaf spring with correct clamping force indicator and pressure pad.
2. Washers
3. Label

PRODUCT SPECIFICATIONS

Leaf spring

Material: Aluminium EN-AW-6082

Surface treatment: Anodized nature (10µm)

Indicating spring

Material: EN-AW-6005

Surface treatment: Anodized nature (10µm)

Press piece

Material: Aluminium EN-AW-6082

Surface treatment: Anodized nature (10µm).

Washers

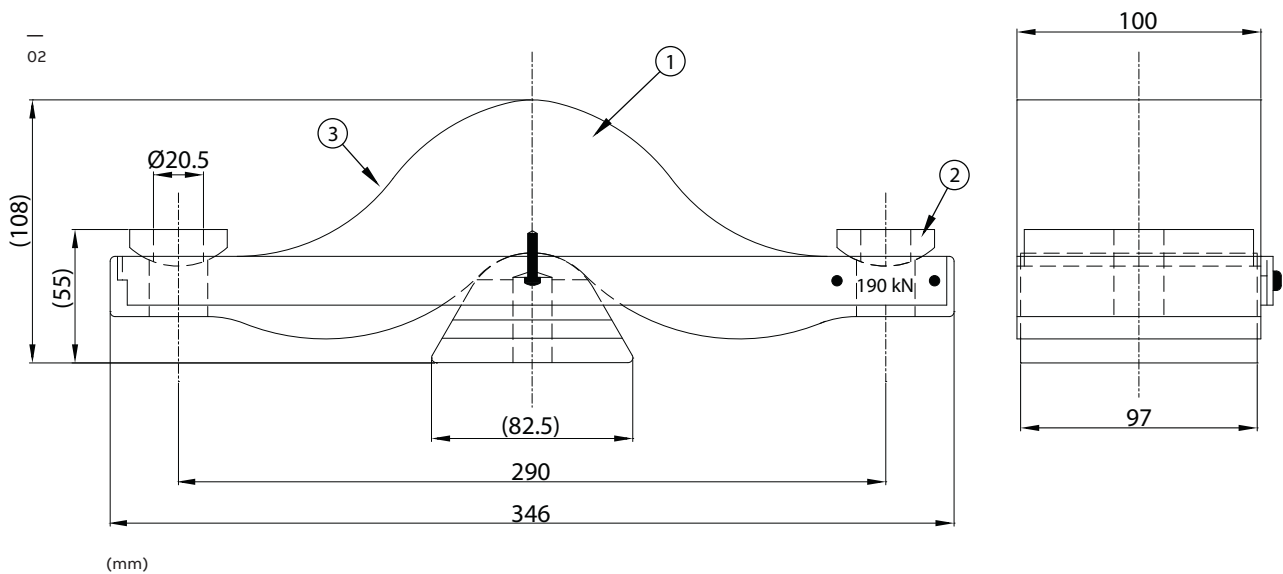
Material: Aluminium EN-AW-6082

Surface treatment: Anodized nature (10µm)

Environmental

IEC60721-3-3 set IE33, Class 3C1

Relative humidity 5 to 85%, no condensation allowed.



Aluminium mounting clamp

5SAC18V: 50, 70 and 90 kN

—
Figure 01
5SAC18V5020
5SAC18V7020
5SAC18V9020

Each part number includes:
Leaf spring with correct clamping force indicator, spring support, washers (M16) item 1 and 2 and label item 3.

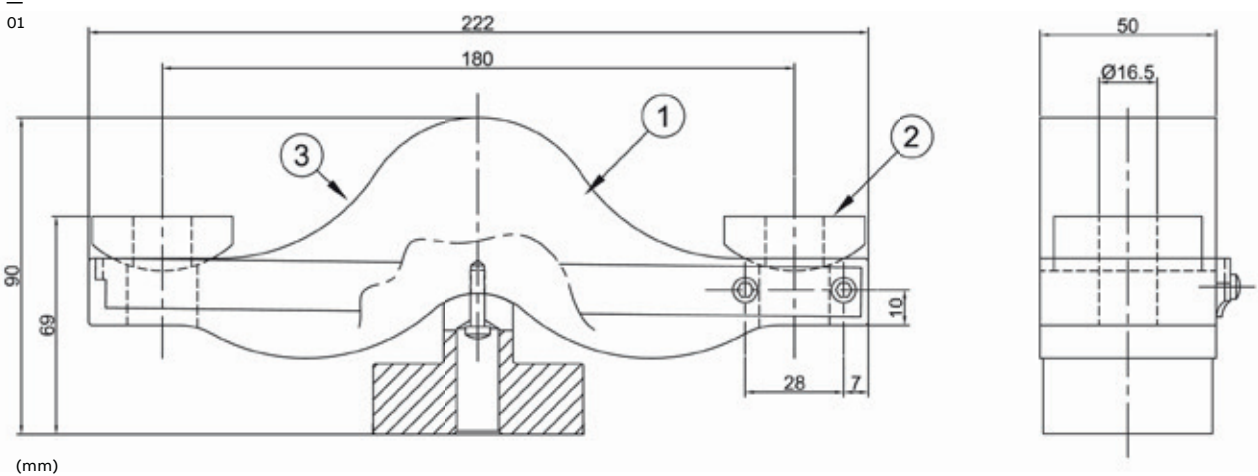
Clamping system for hockey-puck devices with flange diameter 100 to 150 mm, mounting force 50 to 90 kN in alloy EN-AW-6082-T6.

Features

- Not sensitive to magnetic fields
- Low weight
- High alloy content makes clamp exceptionally strong
- Clamping force 50, 70 and 90 kN (-10%, +20%)
- ABB's correct clamping force indicator

5SAC18V

Type and ordering number	Bolt		Weight	F_m Clamping force	V_c Max. insulation voltage	V_m Voltage for partial discharge	T_m Max. temp for cont. operation	Fig.
	Length	Distance						
	mm	mm	kg	kN	kV	kV	°C	
5SAC18V5020	—	180	1.26	50	—	—	80	01
5SAC18V7020	—	180	1.26	70	—	—	80	01
5SAC18V9020	—	180	1.26	90	—	—	80	01
5SAC18V5021	—	180	1.38	50	7.0	> 7.0	80	02
5SAC18V7021	—	180	1.38	70	7.0	> 7.0	80	02
5SAC18V9021	—	180	1.38	90	7.0	> 7.0	80	02
5SAC18V5022	—	180	1.55	50	7.0	> 7.0	80	03
5SAC18V7022	—	180	1.55	70	7.0	> 7.0	80	03
5SAC18V9022	—	180	1.55	90	7.0	> 7.0	80	03



Aluminium mounting clamp

5SAC18V: 50, 70 and 90 kN

Figure 02
5SAC18V5021
5SAC18V7021
5SAC18V9021

Each part number includes:
Leaf spring with correct clamping force indicator, spring support, washers (M16) item 1 and 2 and label item 3.
2. Pressure pad insulator item 4.

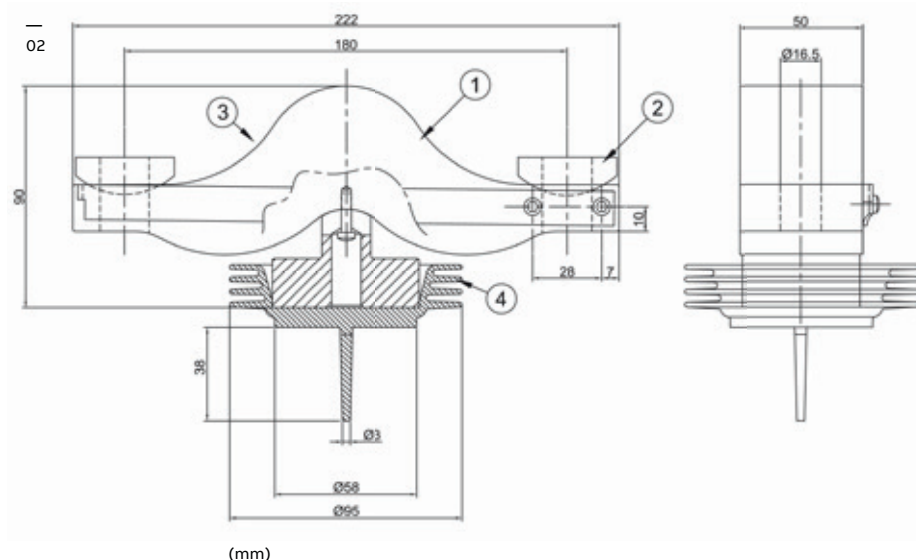
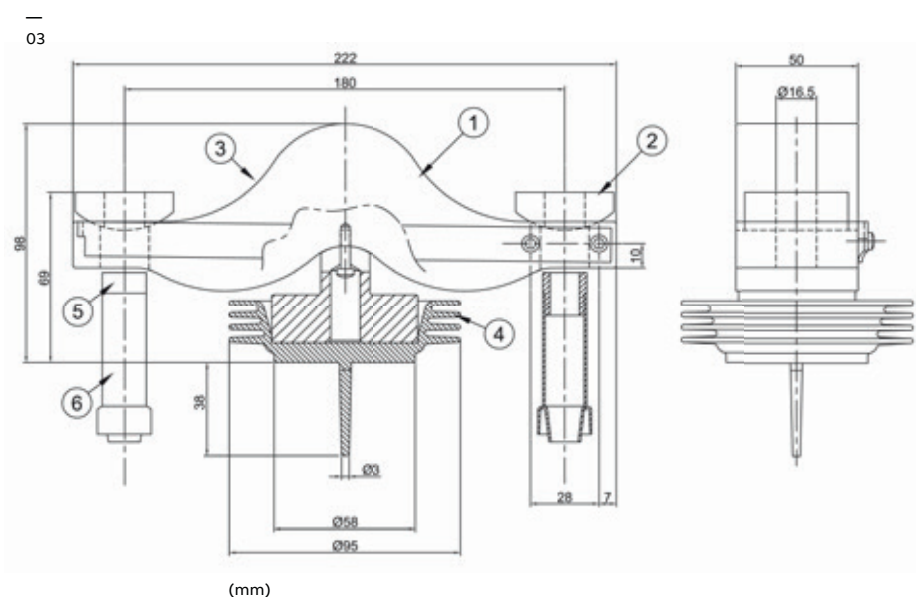


Figure 03
5SAC18V5022
5SAC18V7022
5SAC18V9022

Each part number includes:
Leaf spring with correct clamping force indicator, spring support, washers (M16) item 1 and 2 and label item 3.
2. Pressure pad insulator item 4.
3. Bolt insulators item 5 and 6.



Environmental

IEC60721-3-3 set IE33, Class 3C1.

Relative humidity 5 to 85%, no condensation allowed.

Recommendations for piece parts

Piece part	Material	Dimensions mm	Included in products
Bolt	Coated or stainless steel	M12 property class 8.8 (DIN 931)	–
Plain washer	Coated or stainless steel	17 x 45 x 3	–

Aluminium mounting clamp

5SAC18V: 20 and 40 kN

—
Figure 01
5SAC18V2010
5SAC18V4010

Each part number includes:

- Leaf spring with correct clamping force indicator.
- Pressure pad.

Clamping system for hockey-puck devices with flange diameter up to 150 mm, mounting force 20 to 40 kN.

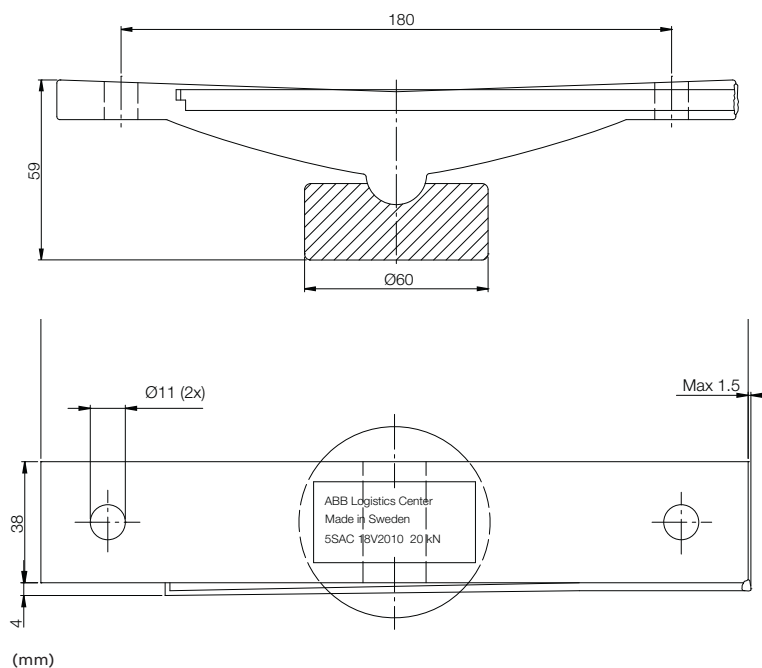
Features

- Not sensitive to magnetic fields
- Low weight
- High alloy content makes clamp exceptionally strong
- Clamping force 20 and 40 kN (-10%, +20%)
- ABB's correct clamping force indicator

5SAC18V

Type and ordering number	Bolt		Weight	F_m Clamping force	V_c Max. insulation voltage	V_m Voltage for partial discharge	T_m Max. temp for cont. operation	Fig.
	Length	Distance						
	mm	mm	kg	kN	kV	kV	°C	
5SAC18V2010	—	180	0.44	20	—	—	80	01
5SAC18V4010	—	180	0.44	40	—	—	80	01
Insulators								
2744010-3	—	—	0.11	—	7.0	> 7.0	80	02
5FSE704857V1001	—	—	0.11	—	7.0	> 7.0	80	03

—
01



Aluminium mounting clamp

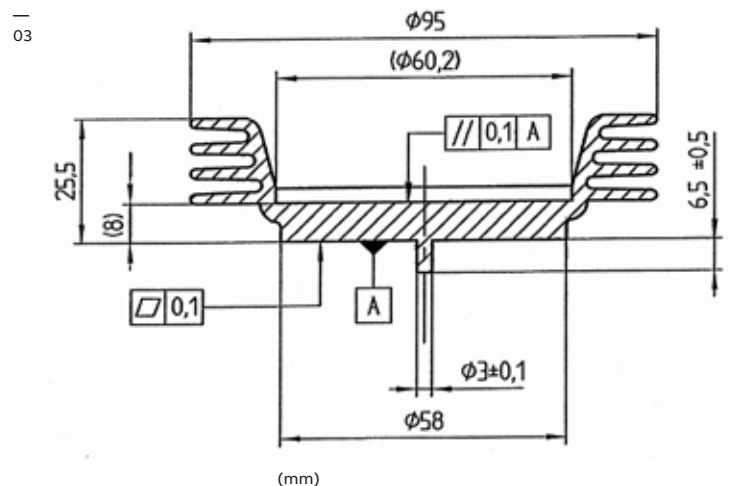
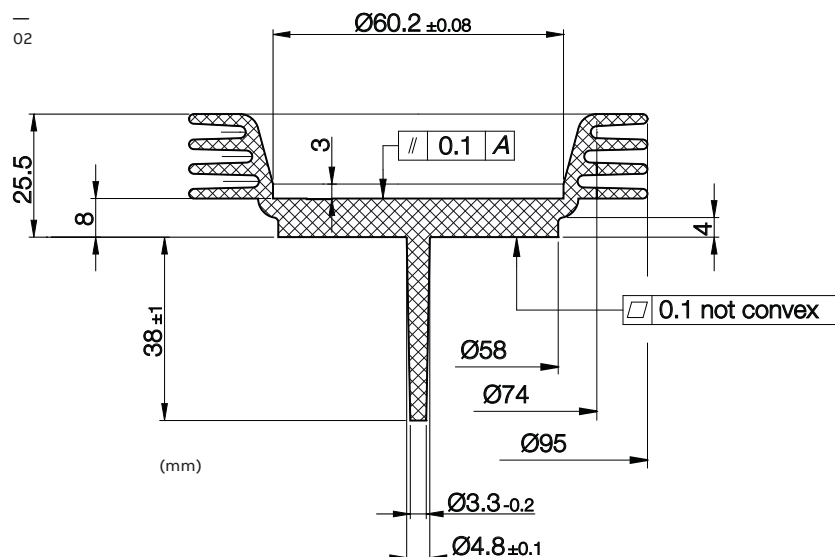
5SAC18V: 20 and 40 kN

Figure 02
2744010-3

Pressure pad insulator

Figure 03
5FSE704857V1001

Pressure pad insulator



Environmental

IEC60721-3-3 set IE33, Class 3C1.

Relative humidity 5 to 85%, no condensation allowed.

Recommendations for piece parts

Piece part	Material	Dimensions mm	Included in products
Bolt (11–20 kN)	Coated or stainless steel	M10 property class 8.8 (DIN 931)	–
Bolt (40 kN)	Coated or stainless steel	M10 property class 10.9 (DIN 931)	–
Plain washer	Coated or stainless steel	10.5 x 23 x 2	–
Disc washer	Coated or stainless steel	10.5 x 23 x 2.5 (DIN 6796)	–

Aluminium mounting clamp

5SAC15V: 20, 22, 33, 40, 50 and 70 kN

—
Figure 01
5SAC15V2010
5SAC15V2210
5SAC15V3310
5SAC15V4010
5SAC15V5010
5SAC15V7010

Each part number includes:
• Leaf spring with correct clamping force indicator.
• Pressure pad

Clamping system for hockey-puck devices with flange diameter up to 120 mm, mounting force 20 to 70 kN.

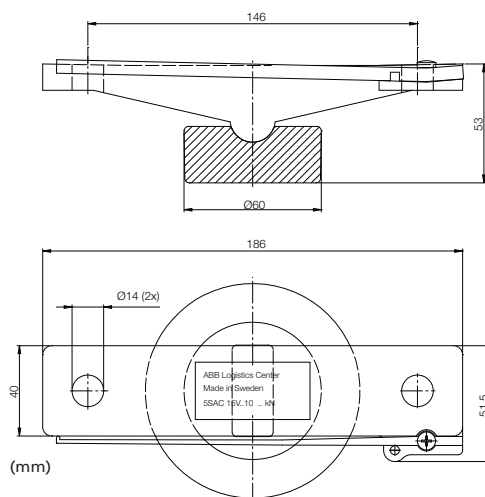
Features

- Not sensitive to magnetic fields
- Low weight
- High alloy content makes clamp exceptionally strong
- Clamping force 20, 22, 33, 40, 50 and 70 kN (-10%, +20%)
- ABB's correct clamping force indicator

5SAC15V

Type and ordering number	Bolt		Weight	F_m Clamping force	V_c Max. insulation voltage	V_m Voltage for partial discharge	T_m Max. temp for cont. operation	Fig.
	Length	Distance						
	mm	mm	kg	kN	kV	kV	°C	
5SAC15V2010	—	146	0.57	20	—	—	80	01
5SAC15V2210	—	146	0.57	22	—	—	80	01
5SAC15V3310	—	146	0.57	33	—	—	80	01
5SAC15V4010	—	146	0.57	40	—	—	80	01
5SAC15V5010	—	146	0.57	50	—	—	80	01
5SAC15V7010	—	146	0.57	70	—	—	80	01
5SAC15V2001	—	146	0.69	20	7.0	> 7.0	80	02
5SAC15V2201	—	146	0.69	22	7.0	> 7.0	80	02
5SAC15V3301	—	146	0.69	33	7.0	> 7.0	80	02
5SAC15V4001	—	146	0.69	40	7.0	> 7.0	80	02
5SAC15V5001	—	146	0.69	50	7.0	> 7.0	80	02
5SAC15V7001	—	146	0.69	70	7.0	> 7.0	80	02
5SAC15V2002	—	146	0.81	20	7.0	> 7.0	80	03
5SAC15V2202	—	146	0.81	22	7.0	> 7.0	80	03
5SAC15V3302	—	146	0.81	33	7.0	> 7.0	80	03
5SAC15V4002	—	146	0.81	40	7.0	> 7.0	80	03
5SAC15V5002	—	146	0.81	50	7.0	> 7.0	80	03
5SAC15V7002	—	146	0.81	70	7.0	> 7.0	80	03

—
01



Aluminium mounting clamp

5SAC15V: 20, 22, 33, 40, 50 and 70 kN

Figure 02

5SAC15V2001
5SAC15V2201
5SAC15V3301
5SAC15V4001
5SAC15V5001
5SAC15V7001

Each part number includes:

- Leaf spring with correct clamping force indicator.
- Pressure pad
- Pressure pad insulator

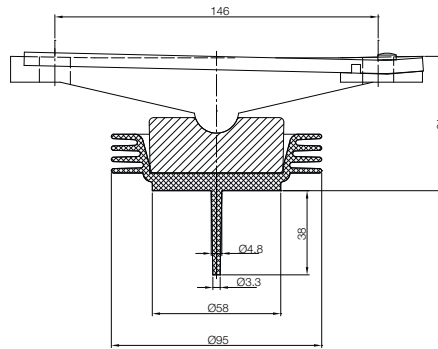
Figure 03

5SAC15V2002
5SAC15V2202
5SAC15V3302
5SAC15V4002
5SAC15V5002
5SAC15V7002

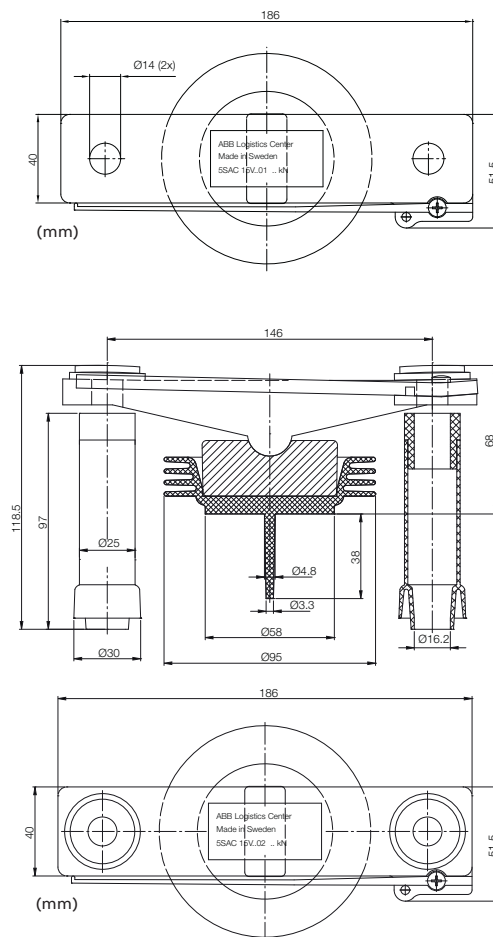
Each part number includes:

- Leaf spring with correct clamping force indicator.
- Pressure pad
- Pressure pad insulator
- Bolt insulators
- Plain washers
- Disc washers

02



03



Environmental

IEC60721-3-3 set IE33, Class 3C1.

Relative humidity 5 to 85%, no condensation allowed.

Recommendations for piece parts

Piece part	Material	Dimensions mm	Included in products
Bolt	Coated or stainless steel	M12 property class 8.8 (DIN 931)	–
Plain washer	Coated or stainless steel	13 x 34 x 3	Fig. 03
Disc washer	Coated or stainless steel	13 x 29 x 3 (DIN 6796)	Fig. 03

Aluminium mounting clamp

5SAC14V33: 33 kN

—
Figure 01
5SAC14V3310

Each part number includes:
• Leaf spring with correct clamping force indicator and pressure pad.

Clamping system for hockey-puck devices with flange diameter up to 110 mm, mounting force 33 kN.

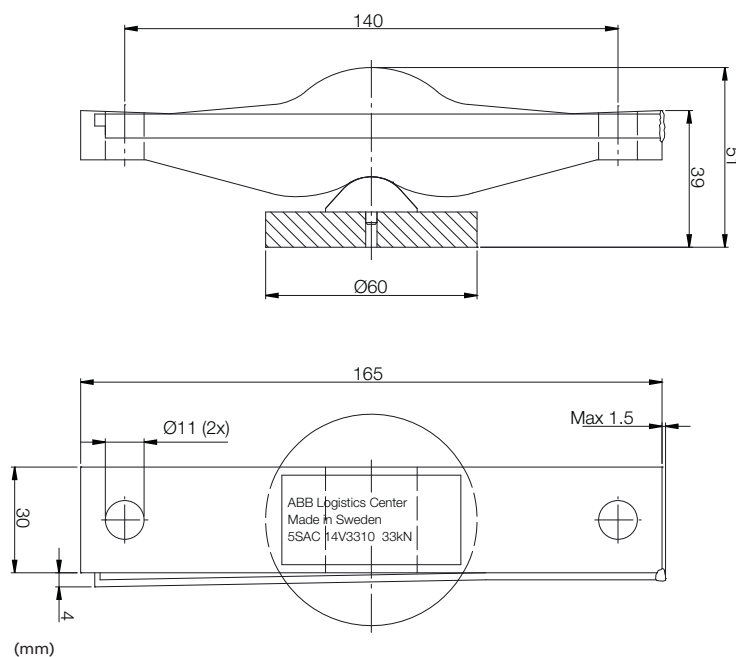
Features

- Not sensitive to magnetic fields
- Low weight
- High alloy content makes clamp exceptionally strong
- Clamping force 33 kN (-10%, +20%)
- ABB's correct clamping force indicator

5SAC14V33

Type and ordering number	Bolt		Weight	F_m Clamping force	V_c Max. insulation voltage	V_m Voltage for partial discharge	T_m Max. temp for cont. operation	Fig.
	Length	Distance						
	mm	mm	kg	kN	kV	kV	°C	
5SAC14V3310	–	140	0.53	33	–	–	80	01
5SAC14V3300	–	140	0.63	33	–	–	80	02
5SAC14V3301	140	140	0.85	33	4.8	> 4.8	80	03

—
01



Aluminium mounting clamp

5SAC14V33: 33 kN

Figure 02
5SAC14V3300

Each part number includes:

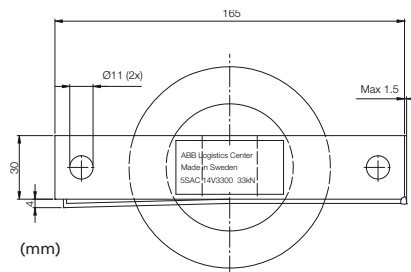
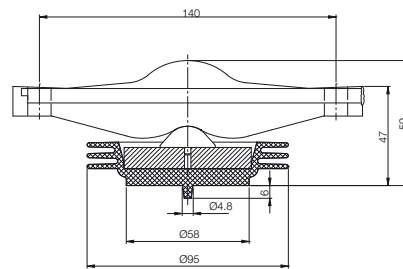
- Leaf spring with correct clamping force indicator and pressure pad.
- Pressure pad insulator

Figure 03
5SAC14V3301

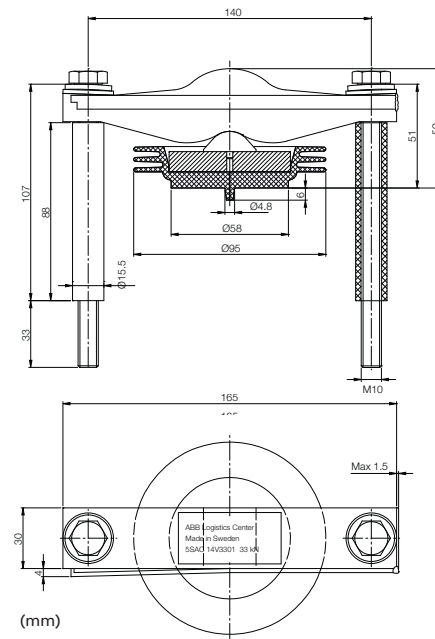
Each part number includes:

- Leaf spring with correct clamping force indicator and pressure pad.
- Pressure pad insulator
- Bolts (M10x140)
- Bolt insulators
- Plain washers
- Disc washers

02



03



Environmental

IEC60721-3-3 set IE33, Class 3C1.

Relative humidity 5 to 85%, no condensation allowed.

Recommendations for piece parts

Piece part	Material	Dimensions mm	Included in products
Bolt	Coated or stainless steel	M10 property class 8.8 (DIN 931)	Fig. 03
Plain washer	Coated or stainless steel	10.5 x 25 x 2	Fig. 03
Disc washer	Coated or stainless steel	10.5 x 23 x 2.5 (DIN 6796)	Fig. 03

Aluminium mounting clamp

5SAC14V20: 20 kN

Figure 01
5SAC14V2010

Each part number includes:
• Leaf spring with correct clamping force indicator and pressure pad.

Clamping system for hockey-puck devices with flange diameter up to 110 mm, mounting force 20 kN.

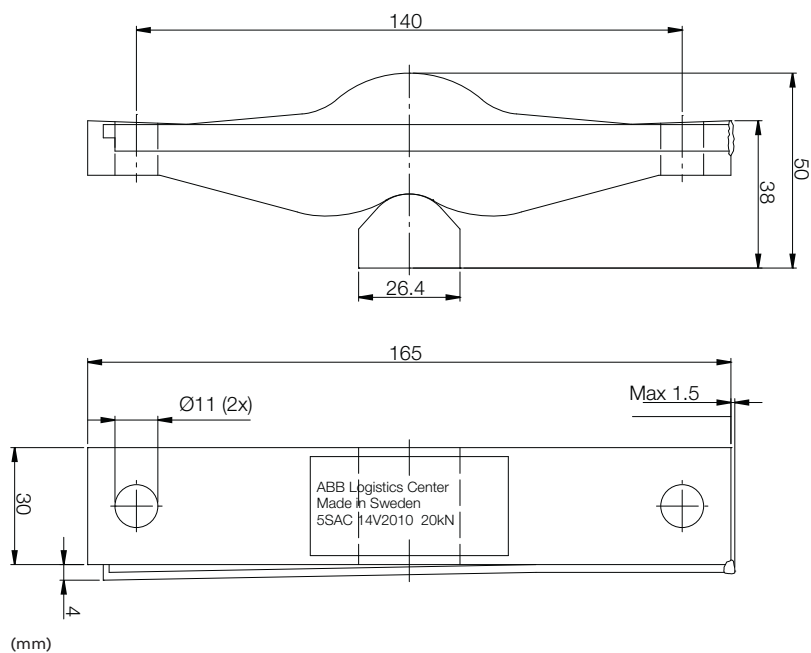
Features

- Not sensitive to magnetic fields
- Low weight
- High alloy content makes clamp exceptionally strong
- Clamping force 20 kN (-10%, +20%)
- ABB's correct clamping force indicator

5SAC14V20

Type and ordering number	Bolt		Weight	F_m Clamping force	V_c Max. insulation voltage	V_m Voltage for partial discharge	T_m Max. temp for cont. operation	Fig.
	Length	Distance						
	mm	mm	kg	kN	kV	kV	°C	
5SAC14V2010	–	140	0.34	20	–	–	80	01
5SAC14V2000	–	140	0.38	20	–	–	80	02
5SAC14V2001	140	140	0.60	20	4.8	> 4.8	80	03

01



Aluminium mounting clamp

5SAC14V20: 20 kN

Figure 02
5SAC14V2000

Each part number includes:

- Leaf spring with correct clamping force indicator and pressure pad.
- Pressure pad insulator

02

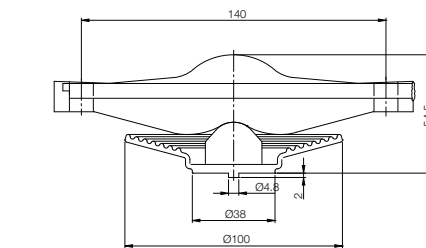
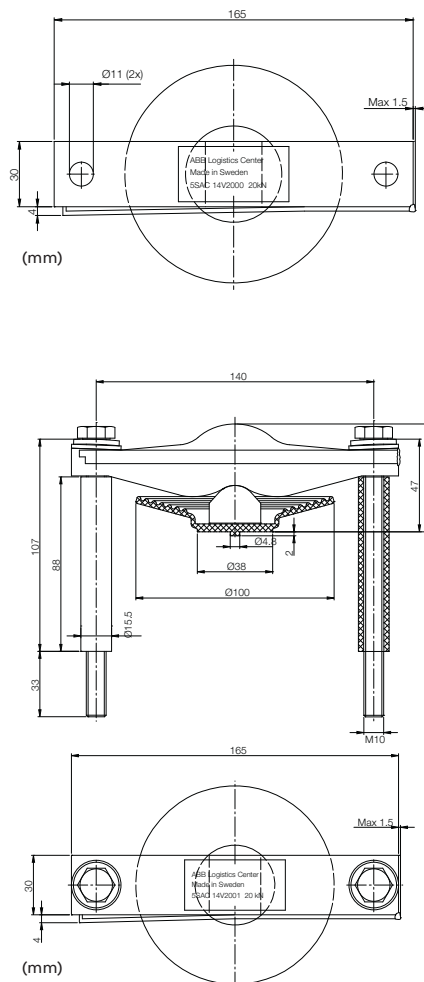


Figure 03
5SAC14V2001

Each part number includes:

- Leaf spring with correct clamping force indicator and pressure pad.
- Pressure pad insulator
- Bolts (M10x140)
- Bolt insulators
- Plain washers
- Disc washers

03



Environmental

IEC60721-3-3 set IE33, Class 3C1.

Relative humidity 5 to 85%, no condensation allowed.

Recommendations for piece parts

Piece part	Material	Dimensions mm	Included in products
Bolt	Coated or stainless steel	M10 property class 8.8 (DIN 931)	Fig. 03
Plain washer	Coated or stainless steel	10.5 x 25 x 2	Fig. 03
Disc washer	Coated or stainless steel	10.5 x 23 x 2.5 (DIN 6796)	Fig. 03

Aluminium mounting clamp

5SAC14V10: 10 kN

—
Figure 01
5SAC 14V1010

Each part number includes:
• Leaf spring with correct clamping force indicator and pressure pad.

Clamping system for hockey-puck devices with flange diameter up to 110 mm, mounting force 10 kN.

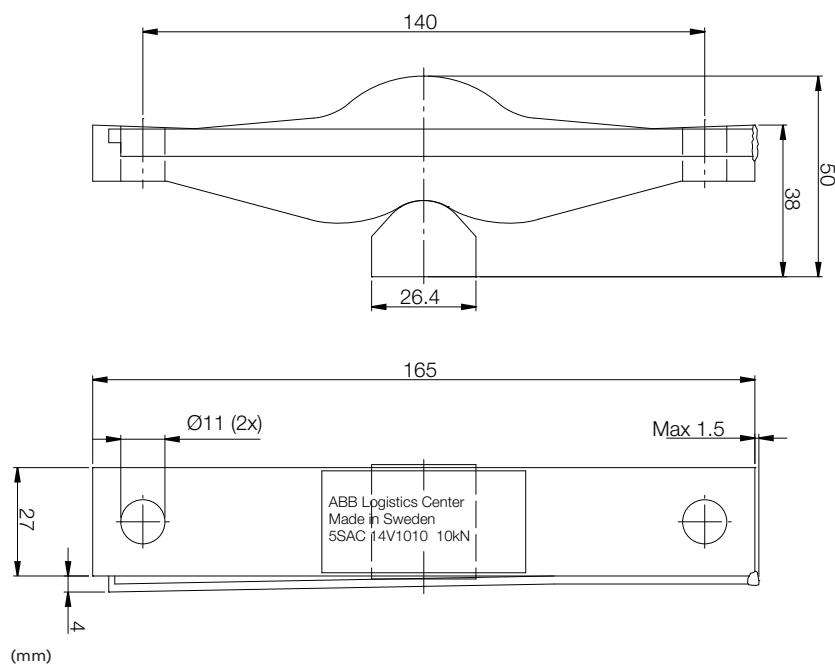
Features

- Not sensitive to magnetic fields
- Low weight
- High alloy content makes clamp exceptionally strong
- Clamping force 10 kN (-10%, +20%)
- ABB's correct clamping force indicator

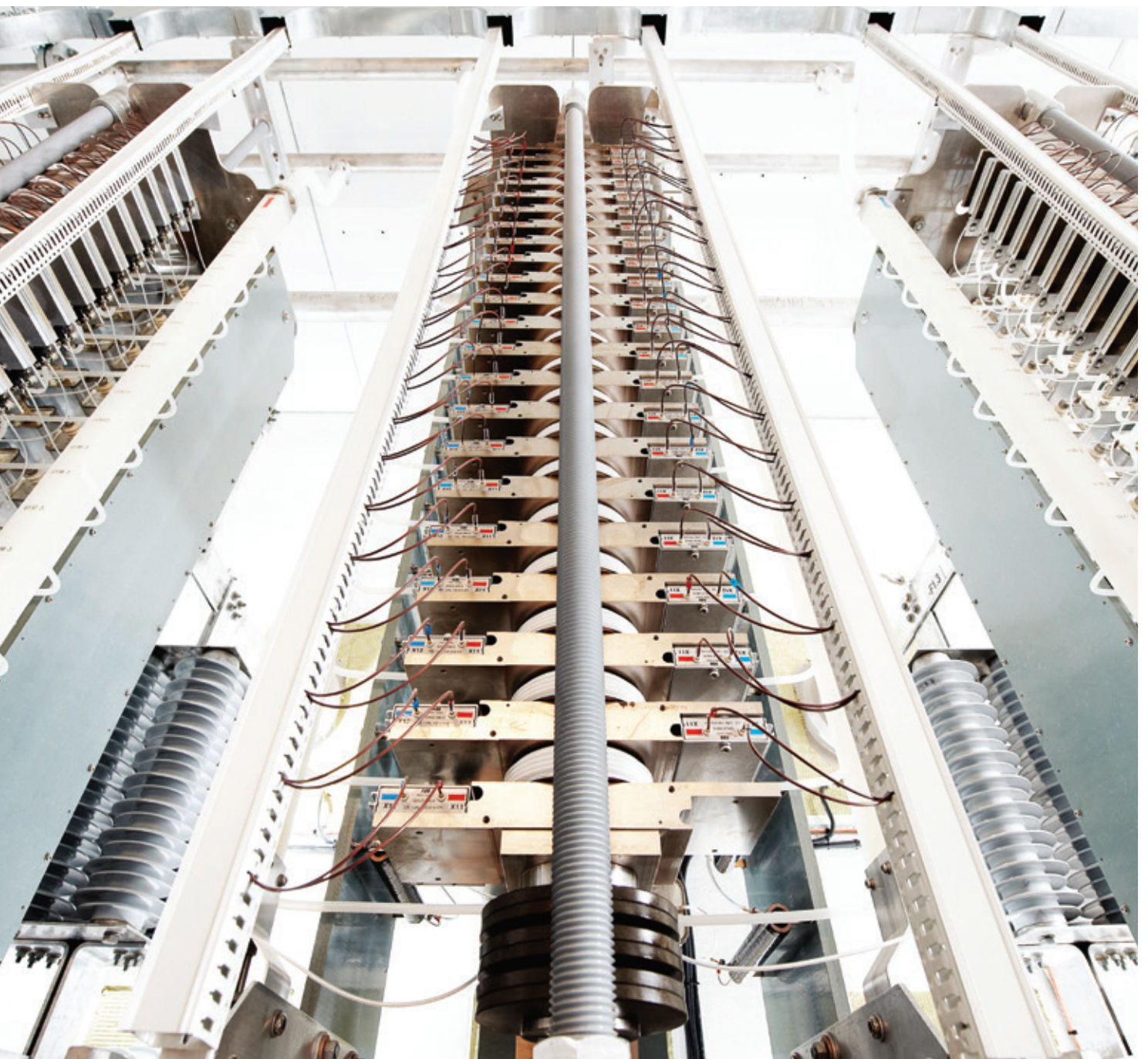
5SAC14V10

Type and ordering number	Bolt		Weight	F_m Clamping force	V_c Max. insulation voltage	V_m Voltage for partial discharge	T_m Max. temp for cont. operation	Fig.
	Length	Distance						
	mm	mm	kg	kN	kV	kV	°C	
5SAC 14V1010	–	140	0.31	10	–	–	80	01
5SAC 14V1000	–	140	0.35	10	–	–	80	02
5SAC 14V1001	140	140	0.57	10	4.8	> 4.8	80	03

—
01



Piece part	Material	Dimensions mm	Included in products
Bolt	Coated or stainless steel	M10 property class 8.8 (DIN 931)	Fig. 03
Plain washer	Coated or stainless steel	10.5 x 25 x 2	Fig. 03
Disc washer	Coated or stainless steel	10.5 x 23 x 2.5 (DIN 6796)	Fig. 03



Steel mounting clamp

5SAC13V5000: 40 and 50 kN

—
Figure 01
5SAC13V5000

Each part number includes:
• Leaf spring
• Correct clamping force indicator
• Reaction bar
• Insulator
• Bolts (M10x140)
• Spring washers

Clamping system for hockey-puck devices with flange diameter 100 to 120 mm, mounting force 40 and 50 kN.

Designed for the ABB Air Cooled Heat sink 5SAA21V3500 (YAP8-03).

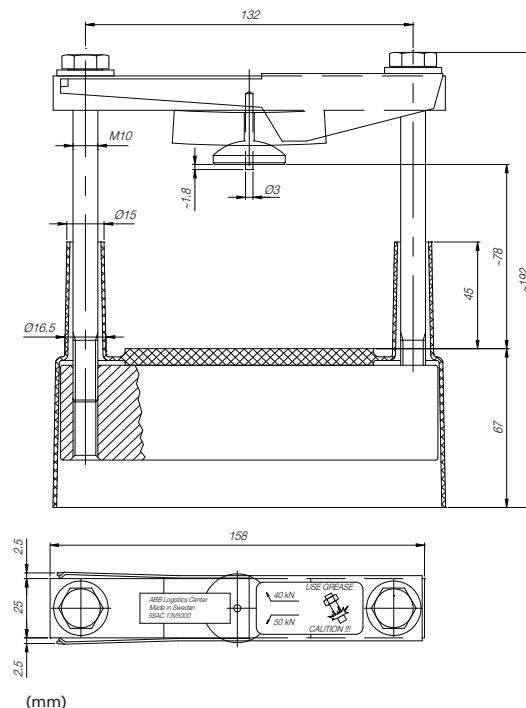
Features

- Corrosion resistant
- Clamping force 40 and 50 kN (-10%, +20%)
- ABB's correct clamping force indicator

5SAC13V5000

Type and ordering number	Bolt		Weight	F_m Clamping force	V_c Max. insulation voltage	V_m Voltage for partial discharge	T_m Max. temp for cont. operation	Fig.
	Length	Distance						
	mm	mm	kg	kN	kV	kV	°C	
5SAC13V5000	—	132	1.8	40, 50	5.4	> 5.4	125	01

—
01



Environmental

IEC60721-3-3 set IE33, Class 3C1.

Relative humidity 5 to 85%, no condensation allowed.

Recommendations for piece parts

Piece part	Material	Dimensions mm	Included in products
Bolt	Coated or stainless steel	M10 property class 10.9 (DIN 931)	Fig. 01
Spring washer	Coated or stainless steel	17 x 45 x 3	Fig. 01

Aluminium mounting clamp

5SAC10V22: 22 kN

—
Figure 01
5SAC10V2210

Each part number includes:
• Leaf spring with correct clamping force indicator.
• Pressure pad

Clamping system for hockey-puck devices with flange diameter up to 75 mm, mounting force 22 kN.

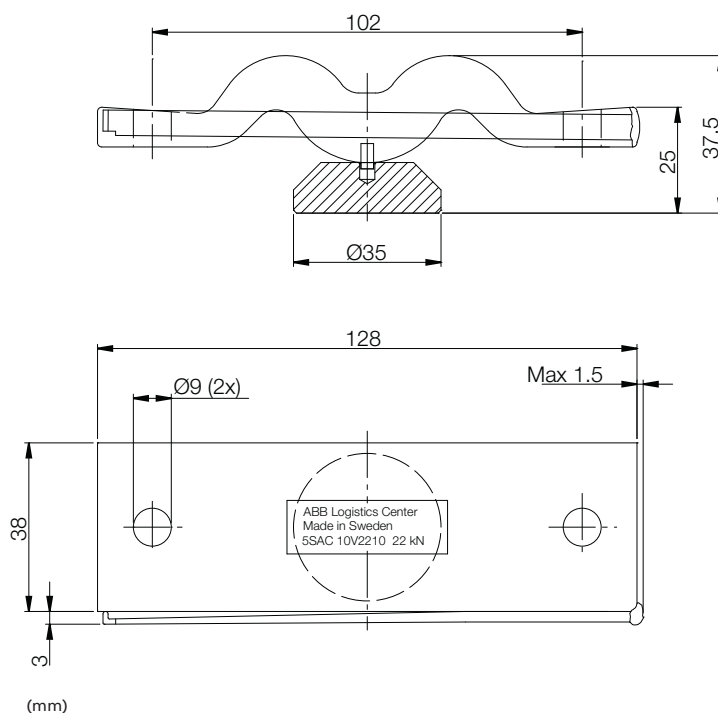
Features

- Not sensitive to magnetic fields
- Low weight
- High alloy content makes clamp exceptionally strong
- Clamping force 22 kN (-10%, +20%)
- ABB's correct clamping force indicator

5SAC10V22

Type and ordering number	Bolt		Weight	F_m Clamping force	V_c Max. insulation voltage	V_m Voltage for partial discharge	T_m Max. temp for cont. operation	Fig.
	Length	Distance						
	mm	mm	kg	kN	kV	kV	°C	
5SAC10V2210	—	102	0.20	22	—	—	80	01
5SAC10V2200	—	102	0.21	22	4.8	> 4.8	80	02
5SAC10V2201	—	102	0.32	22	4.8	> 4.8	80	03

—
01



Aluminium mounting clamp

5SAC10V22: 22 kN

Figure 02
5SAC10V2200

Each part number includes:

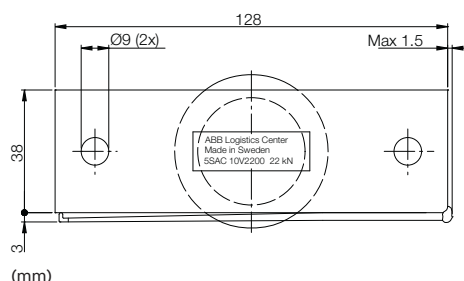
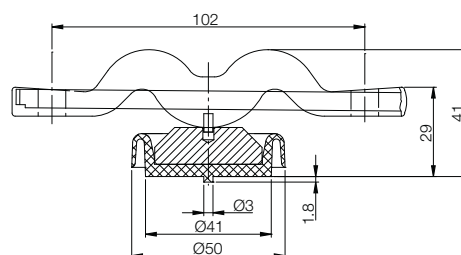
- Leaf spring with correct clamping force indicator and pressure pad.
- Pressure pad insulator

Figure 03
5SAC10V2201

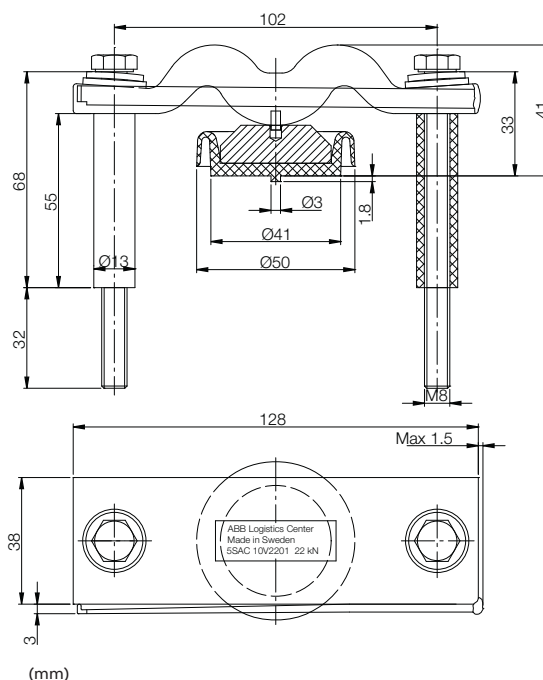
Each part number includes:

- Leaf spring with correct clamping force indicator and pressure pad.
- Pressure pad insulator
- Bolts (M8x100)
- Bolt insulators
- Plain washers
- Disc washers

02



03



Environmental

IEC60721-3-3 set IE33, Class 3C1.

Relative humidity 5 to 85%, no condensation allowed.

Recommendations for piece parts

Piece part	Material	Dimensions mm	Included in products
Bolt	Coated or stainless steel	M10 property class 8.8 (DIN 931)	Fig. 03
Plain washer	Coated or stainless steel	8.4 x 20 x 2	Fig. 03
Disc washer	Coated or stainless steel	8.4 x 18 x 2 (DIN 6796)	Fig. 03

Aluminium mounting clamp

5SAC10V10: 10 kN

—
Figure 01
5SAC10V1010

Each part number includes:
• Leaf spring with correct clamping force indicator and pressure pad.
• Pressure pad

Clamping system for hockey-puck devices with flange diameter up to 75 mm, mounting force 10 kN.

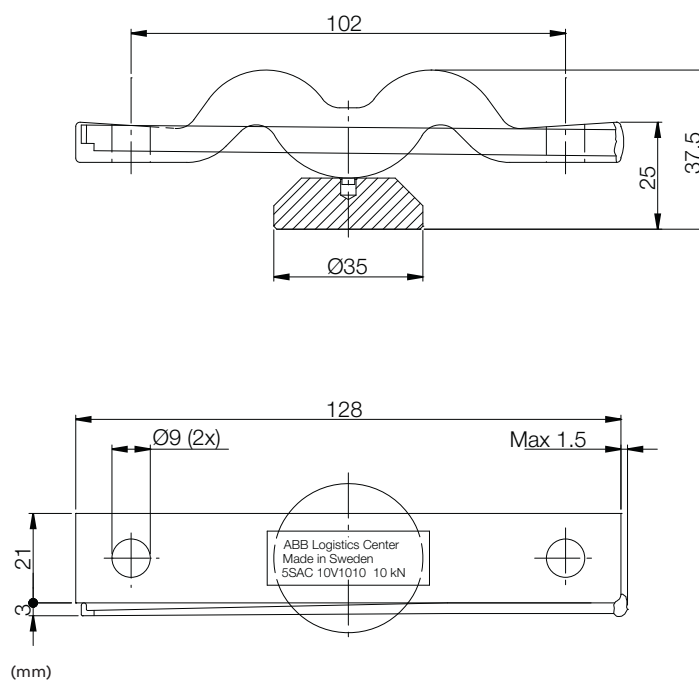
Features

- Not sensitive to magnetic fields
- Low weight
- High alloy content makes clamp exceptionally strong
- Clamping force 10 kN (-10%, +20%)
- ABB's correct clamping force indicator

5SAC10V10

Type and ordering number	Bolt		Weight	F_m Clamping force	V_c Max. insulation voltage	V_m Voltage for partial discharge	T_m Max. temp for cont. operation	Fig.
	Length	Distance						
	mm	mm	kg	kN	kV	kV	°C	
5SAC10V1010	—	102	0.12	10	—	—	80	01
5SAC10V1000	—	102	0.13	10	4.8	> 4.8	80	02
5SAC10V1001	100	102	0.24	10	4.8	> 4.8	80	03

—
01



Aluminium mounting clamp

5SAC10V10: 10 kN

Figure 02
5SAC10V1000

Each part number includes:

- Leaf spring with correct clamping force indicator and pressure pad.
- Pressure pad insulator

02

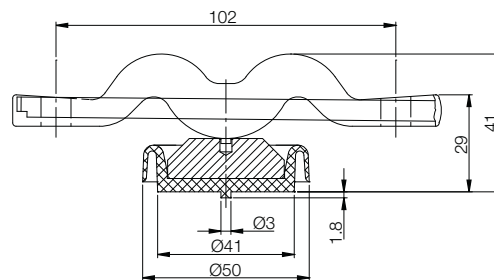
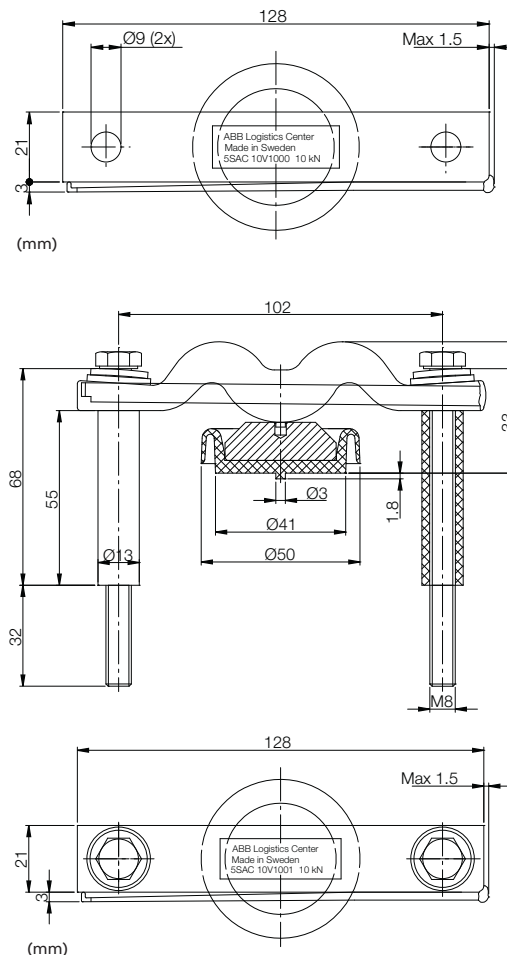


Figure 03
5SAC10V1001

Each part number includes:

- Leaf spring with correct clamping force indicator and pressure pad.
- Pressure pad insulator
- Bolts (M8x100)
- Bolt insulators
- Plain washers
- Disc washers

03



Environmental

IEC60721-3-3 set IE33, Class 3C1.

Relative humidity 5 to 85%, no condensation allowed.

Recommendations for piece parts

Piece part	Material	Dimensions mm	Included in products
Bolt	Coated or stainless steel	M8 property class 8.8 (DIN 931)	Fig. 03
Plain washer	Coated or stainless steel	8.4 x 20 x 2	Fig. 03
Disc washer	Coated or stainless steel	8.4 x 18 x 2 (DIN 6796)	Fig. 03

Steel mounting clamp

5SAC10V16: 4, 8, 12 and 16 kN

—
Figure 01
5SAC10V1610

Each part number includes:
• Leaf spring
• Correct clamping force indicator

Clamping system for hockey-puck devices with flange diameter up to 75 mm, mounting force 4 to 16 kN.

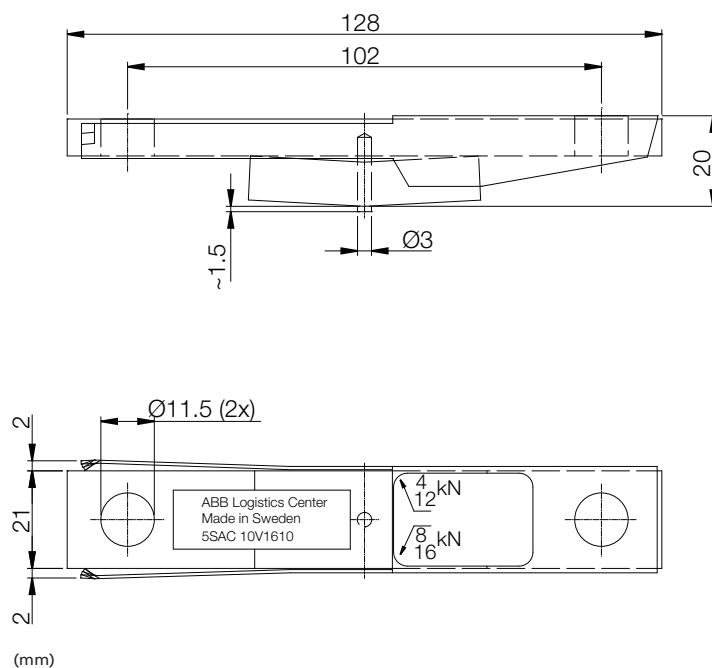
Features

- Corrosion resistant
- Clamping force 4, 8, 12 and 16 kN (-10%, +20%)
- ABB's correct clamping force indicator

5SAC10V16

Type and ordering number	Bolt		Weight	F_m Clamping force	V_c Max. insulation voltage	V_m Voltage for partial discharge	T_m Max. temp for cont. operation	Fig.
	Length	Distance						
	mm	mm	kg	kN	kV	kV	°C	
5SAC10V1610	—	102	0.09	4, 8, 12, 16	—	—	80	01
5SAC10V1600	110	102	0.40	4, 8, 12, 16	6.5	> 6.5	80	02
5SAC10V1601	120	102	0.40	4, 8, 12, 16	6.5	> 6.5	80	02

—
01



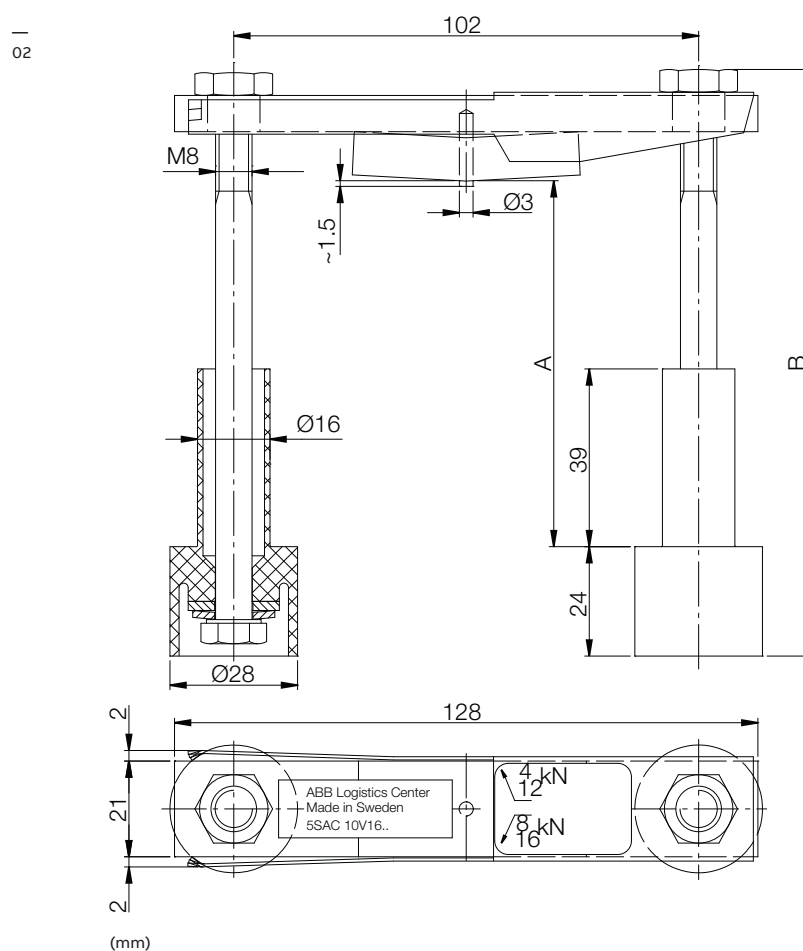
Steel mounting clamp

5SAC10V16: 4, 8, 12 and 16 kN

Figure 02
5SAC10V1600
5SAC10V1601

Each part number includes:

- Leaf spring
- Correct clamping force indicator
- Bolts and nuts
- Bolt insulators
- Plain washers
- Disc washers



Environmental

IEC60721-3-3 set IE33, Class 3C1.

Relative humidity 5 to 85%, no condensation allowed.

Recommendations for piece parts

Piece part	Material	Dimensions mm	Included in products
Bolt	Coated or stainless steel	M8 property class 8.8 (DIN 931)	Fig. 02
Plain washer	Coated or stainless steel	8.4 x 20 x 2	Fig. 02
Disc washer	Coated or stainless steel	8.4 x 18 x 2 (DIN 6796)	Fig. 02

Steel mounting clamp

5SAC09V12: 12 kN

Figure 01
5SAC09V1210

Each part number includes:
• Leaf spring with correct clamping force indicator.

Clamping system for hockey-puck devices with flange diameter up to 60 mm, mounting force 12 kN.

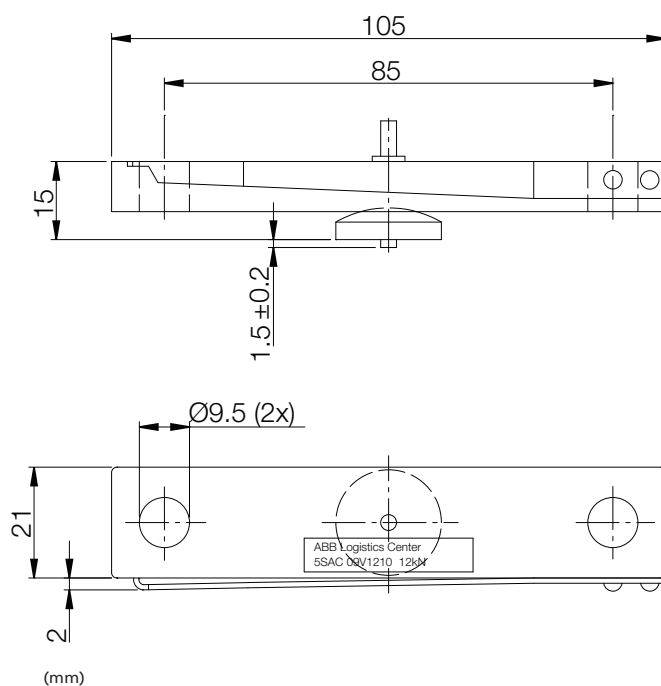
Features

- Corrosion resistant
- Clamping force 12 kN (-10%, +20%)
- ABB's correct clamping force indicator

5SAC09V12

Type and ordering number	Bolt		Weight	F_m Clamping force	V_c Max. insulation voltage kV	V_m Voltage for partial discharge kV	T_m Max. temp for cont. operation °C	Fig.
	Length	Distance						
	mm	mm	kg	kN				
5SAC09V1210	–	85	0.15	12	–	–	125	01
5SAC09V1200	–	85	0.16	12	4.8	> 4.8	125	02
5SAC09V1201	100	85	0.29	12	4.8	> 4.8	125	03

01



Steel mounting clamp

5SAC09V12: 12 kN

Figure 02
5SAC09V1200

Each part number includes:

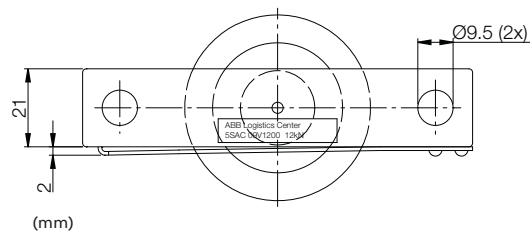
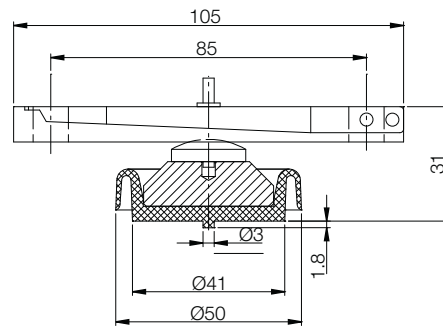
- Leaf spring with correct clamping force indicator.
- Pressure pad
- Pressure pad insulator

Figure 03
5SAC09V1201

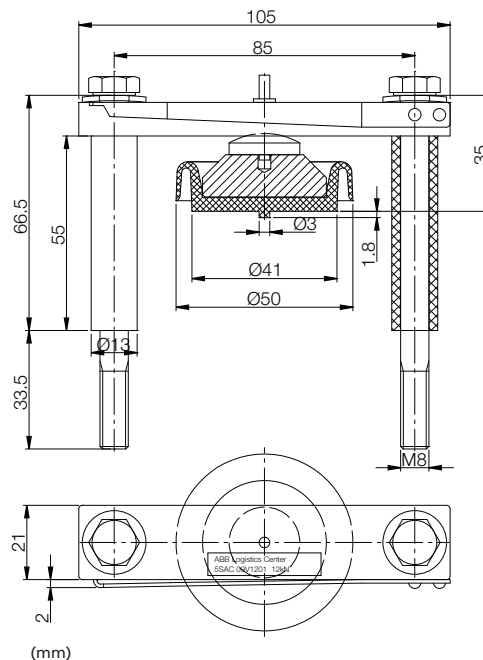
Each part number includes:

- Leaf spring with correct clamping force indicator.
- Pressure pad
- Pressure pad insulator
- Bolts (M8x100)
- Bolt insulators
- Disc washers

02



03



Environmental

IEC60721-3-3 set IE33, Class 3C1.

Relative humidity 5 to 85%, no condensation allowed.

Recommendations for piece parts

Piece part	Material	Dimensions mm	Included in products
Bolt	Coated or stainless steel	M8 property class 8.8 (DIN 931)	Fig. 03
Disc washer	Coated or stainless steel	8.4 x 18 x 2 (DIN 6796)	Fig. 03

Steel mounting clamp

5SAC07V08: 8 kN

Figure 01
5SAC07V0810

Each part number includes:

- Leaf spring with correct clamping force indicator.
- Washers

Clamping system for hockey-puck devices with flange diameter up to 60 mm, mounting force 8 kN.

Features

- Corrosion resistant
- Clamping force 8 kN (-10%, +20%)
- ABB's correct clamping force indicator

Figure 02
5SAC07V0800

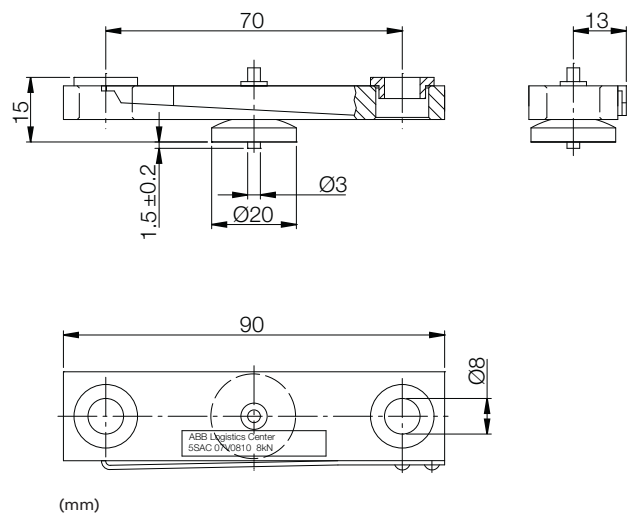
Each part number includes:

- Leaf spring with correct clamping force indicator.
- Pressure pad

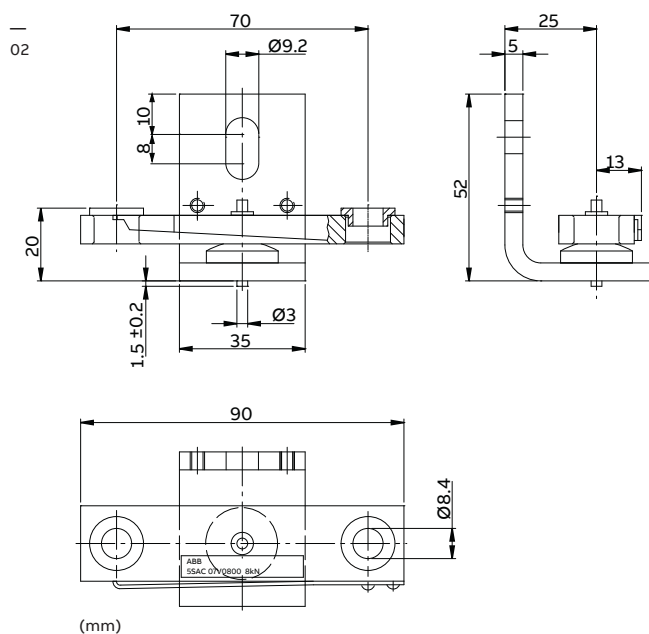
5SAC09V12

Type and ordering number	Bolt		Weight	F_m Clamping force	V_c Max. insulation voltage	V_m Voltage for partial discharge	T_m Max. temp for cont. operation	Fig.
	Length	Distance						
	mm	mm	kg	kN	kV	kV	°C	
5SAC07V0810	–	70	0.13	8	–	–	125	01
5SAC07V0800	–	70	0.27	8	–	–	125	02
5SAC07V0802	100	70	0.26	8	2.8	> 2.8	110	03
5SAC07V0803	70	70	0.36	8	2.8	> 2.8	110	04

01



02



Steel mounting clamp

5SAC07V08: 8 kN

Figure 03
5SAC07V0802

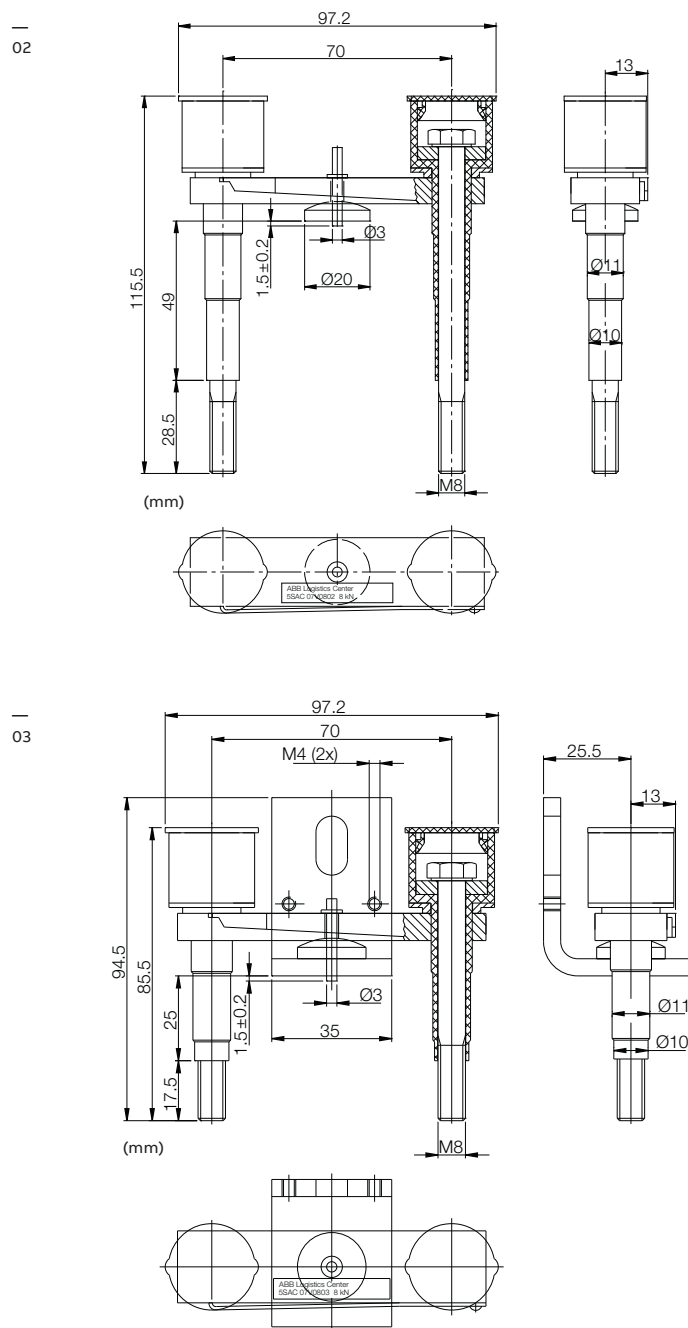
Each part number includes:

- Leaf spring with correct clamping force indicator.
- Bolts (M8x100)
- Bolt insulators
- Washers

Figure 04
5SAC07V0803

Each part number includes:

- Leaf spring with correct clamping force indicator.
- Pressure pad
- Pressure pad insulator
- Bolts (M8x70)
- Bolt insulators
- Washers



Environmental

IEC60721-3-3 set IE33, Class 3C1.

Relative humidity 5 to 85%, no condensation allowed.

Recommendations for piece parts

Piece part	Material	Dimensions mm	Included in products
Bolt	Coated or stainless steel	M8 property class 8.8 (DIN 931)	Fig. 03 and 04

Steel mounting clamp

5SAC05V: 4 and 8 kN

—
Figure 01
5SAC05V0403

Each part number includes:
• Leaf spring with correct clamping force indicator and pressure pad.
• Bolts (M6x45)
• Bolt insulators
• Washers

Clamping system for hockey-puck devices with flange diameter up to 42 mm, mounting force 4 and 8 kN.

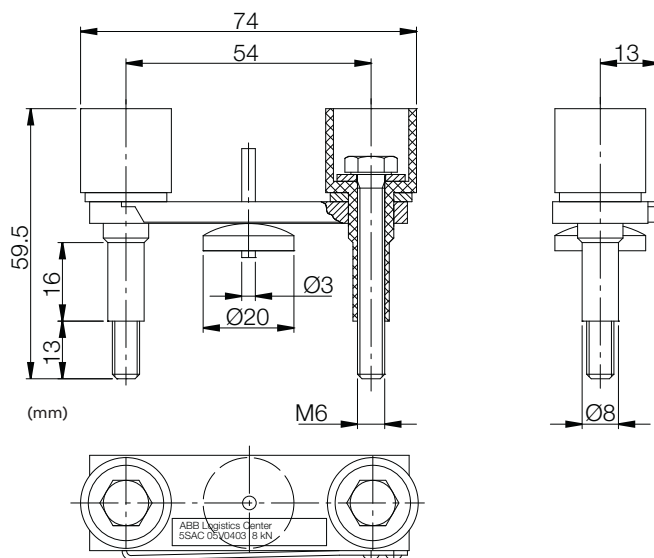
Features

- Corrosion resistant
- Clamping force 4 and 8 kN (-10%, +20%)
- ABB's correct clamping force indicator

5SAC05V

Type and ordering number	Bolt		Weight	F_m Clamping force	V_c Max. insulation voltage kV	V_m Voltage for partial discharge kV	T_m Max. temp for cont. operation °C	Fig.
	Length	Distance						
	mm	mm	kg	kN				
5SAC05V0403	45	54	0.11	4	2.2	> 2.2	110	01
5SAC0508V0001	—	54	0.20	8	2.2	> 2.2	110	02
5SAC0508V0002	—	54	0.20	8	2.2	> 2.3	110	03

—
01



Steel mounting clamp

5SAC05V: 4 and 8 kN

Figure 02
5SAC0508V0001

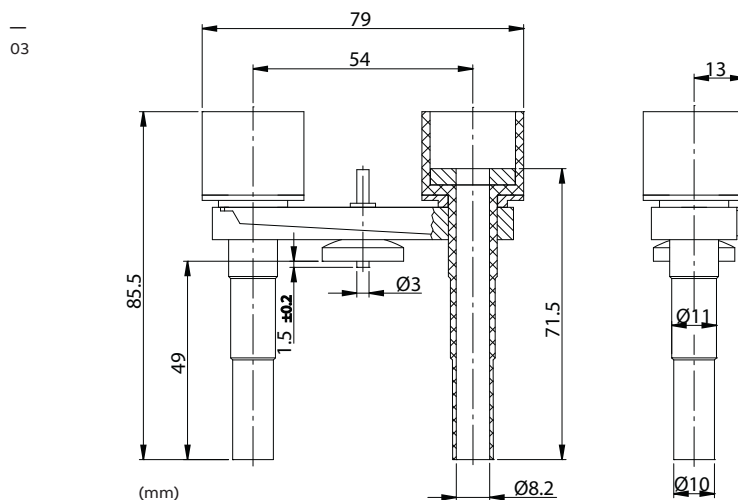
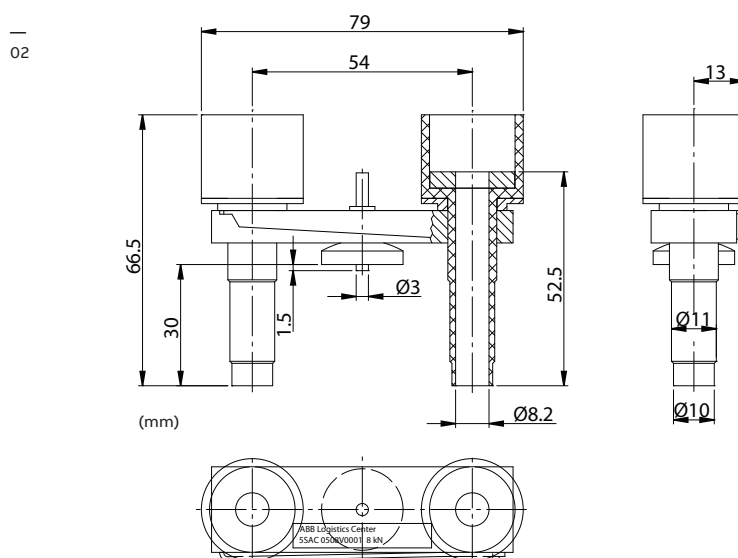
Each part number includes:

- Leaf spring with correct clamping force indicator.
- Bolt insulators

Figure 03
5SAC0508V0002

Each part number includes:

- Leaf spring with correct clamping force indicator and pressure pad.
- Bolt insulators



Environmental

IEC60721-3-3 set IE33, Class 3C1.

Relative humidity 5 to 85%, no condensation allowed.

Recommendations for piece parts

Piece part	Material	Dimensions mm	Included in products
Bolt	Coated or stainless steel	M6 property class 8.8 (DIN 931)	Fig. 01

Pressure pad insulator

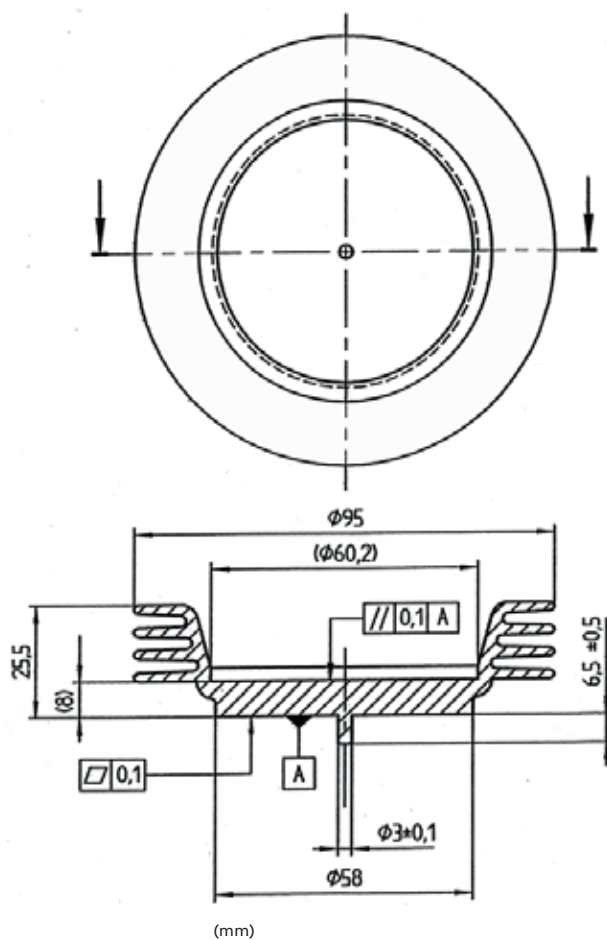
5FSE704857V1001

5FSE704857V1001

Type and ordering number	Material	V _c Max. insulation voltage kV	V _m Voltage for partial discharge kV	T _m Max. temp for cont. operation °C	Fig.
5FSE704857V1001	Ultrason E2010 G6	7.0	7.0	80	01

Figure 01

5FSE704857V1001



Aluminium reaction bar

5FSE704857-804: 220 mm

PRODUCT SPECIFICATIONS

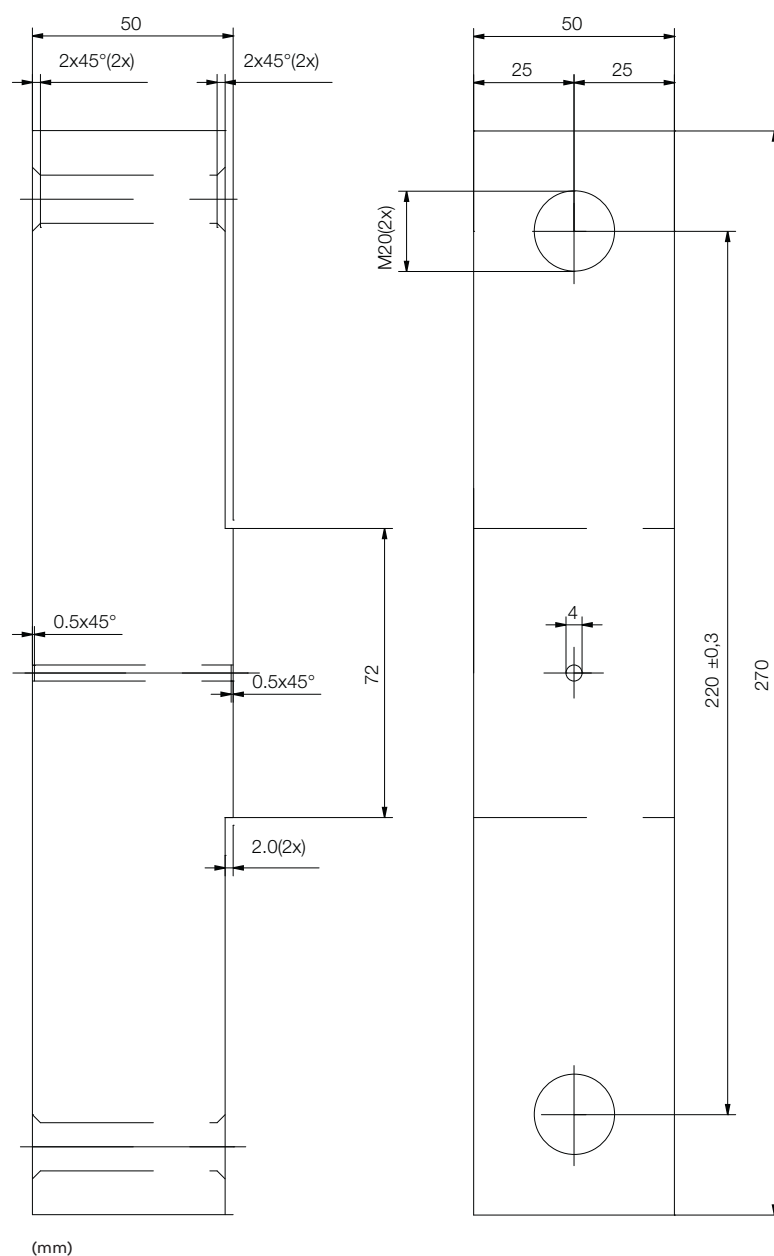
Designed for stack assemblies

Material: Aluminium alloy EN-AW-6082 T6

Surface treatment: Anodized nature (10µm)

Features

- Not sensitive to magnetic fields
- Low weight



Aluminium reaction bar

5FSE704857-801: 180 mm

PRODUCT SPECIFICATIONS

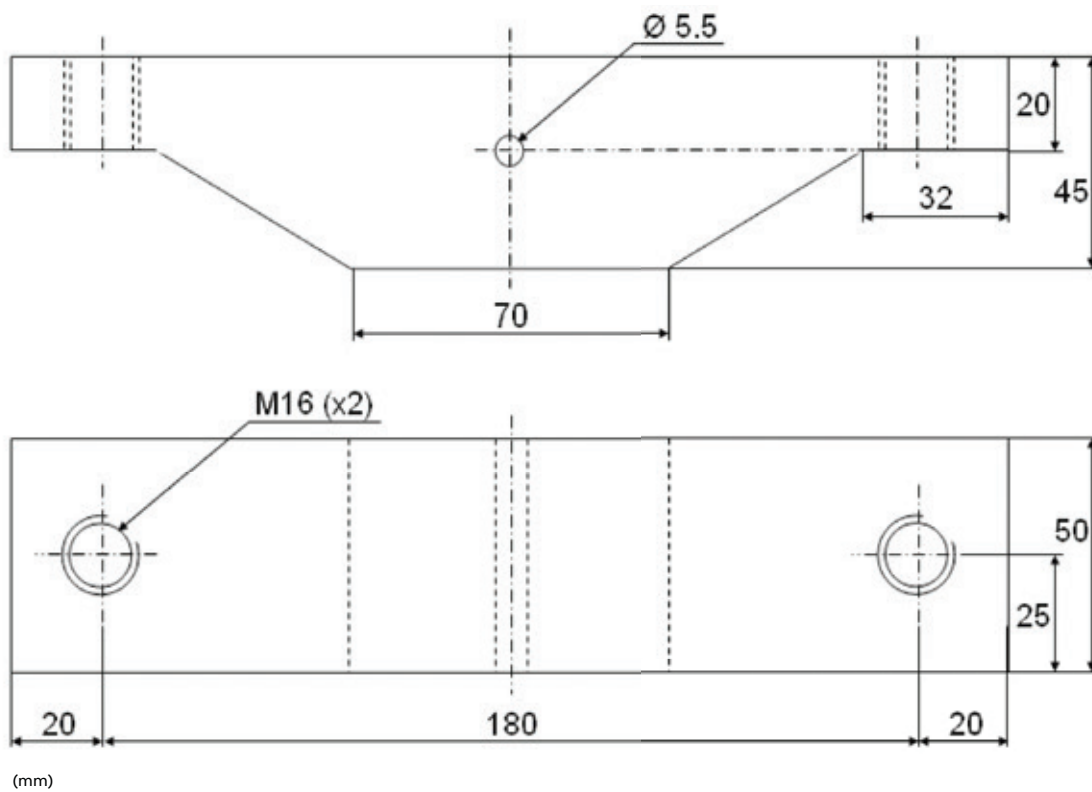
Designed for stack assemblies

Material: Aluminium alloy EN-AW-6082 T6

Surface treatment: Anodized nature (10µm)

Features

- Not sensitive to magnetic fields
- Low weight



Aluminium reaction bar

5FSE704857-802: 146 mm

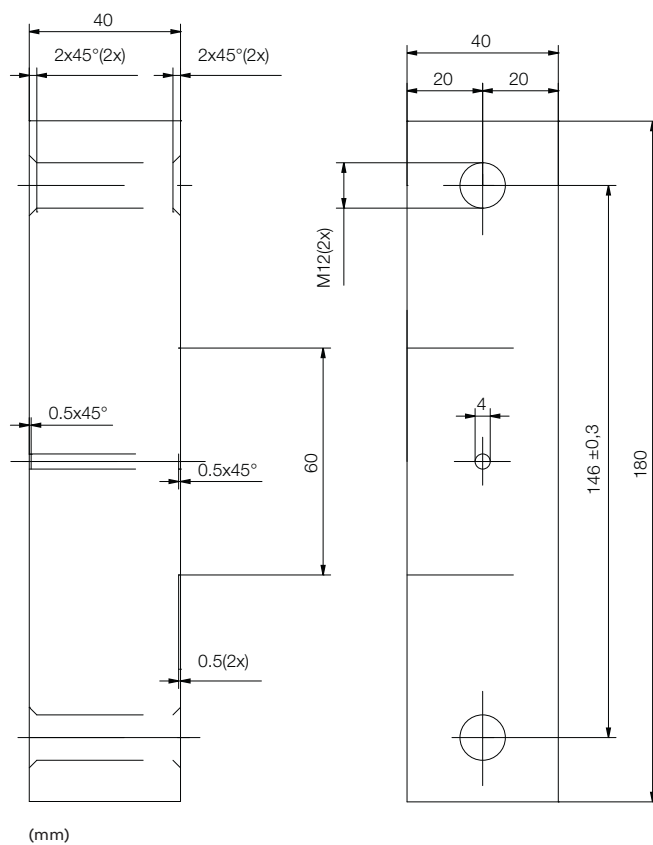
PRODUCT SPECIFICATIONS

Designed for stack assemblies

Material: Aluminium alloy EN-AW-6082 T6

Features

- Not sensitive to magnetic fields
- Low weight



Aluminium reaction bar

YK2172001-1: 140 mm

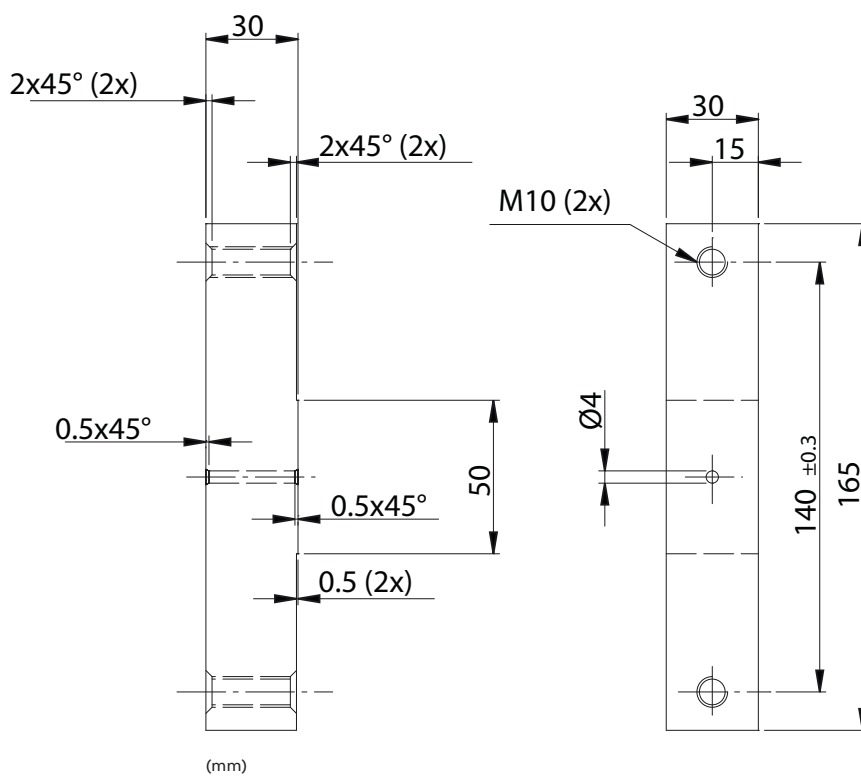
PRODUCT SPECIFICATIONS

Designed for stack assemblies

Material: Aluminium alloy EN-AW-6082 T6

Features

- Not sensitive to magnetic fields
- Low weight



Cleaning kit

Silicon oil



Cleaning kits			
Part number	Description	Contents	
5FSE70 4857-1	Complete cleaning kit for preparation of semiconductor and heatsink contact surfaces before assembly.	25 ml	Silicon oil
		60 ml	Cleaning solvent
		1 pc	Abrasive cloth
		10 pc	Lintfree paper
5FSE70 4857-A	Kit for preparation of semiconductor and heatsink contact surface before assembly. For export reasons the cleaning solvent is not included.	25 ml	Silicon oil
		1 pc	Abrasive cloth
		10 pc	Lintfree paper
5FSE70 4857-26	Silicon oil	25 ml	
5FSE70 4857-28	Silicon oil	250 ml	

Thyristor tester

YSP 50-01

The thyristor tester type YSP 50-01 meets the need for a compact, portable and low weight tool for tests of thyristors and diodes.

Features

Test voltages: V_{DRM} and V_{RRM} up to 5000 V
Test of triggering data



YSP 50-01					
Part number	Description	Type	Weight	Test voltage V_{DRM} V_{RRM}	Supply voltage
5FSE 704857-5	Thyristor tester	YSP 50-01	14.5 kg	up to 5 kV	220 V / 50 Hz
5FSE 704857-6	Thyristor tester	YSP 50-01	14.5 kg	up to 5 kV	110 V / 60 Hz
5FSE 704857-7	Test fixture	YSP 40-01	4.4 kg	10 kV	–

Worldwide distributors

Europe

Austria

ABB AG
Clemens-Holzmeister-Str. 4
1109 Wien, Austria
Tel.: +43 (1) 60109 6381
Fax: +43 (1) 60109 8600
kurt.lechner@at.abb.com

Belgium

KWx B.VBA.
Prins Boudewijnlaan 30/6
2550 Kontich, Belgium
Tel.: +32 3 450 78 00
Fax: +32 3 450 78 05
info@kwx.be www.kwx.be

Bulgaria

SIMEX-TRANS EOOD
Trakia, 3 Osvobodzenie Blvd.
Komplex SPS, Floor 3, Office 323
4023 Plovdiv, Bulgaria
Tel./Fax: +359 32 68 28 76
Mobile: +359 887 922 669
simex-trans@simex.cz

Czech Republic

TUNKR, spol. s.r.o.
Dlouhá 33
Přibyslavice
664 83 Domasov u Brna, Czech Rep.
Tel.: +420 603 221 136
Fax: +420 546 440 087
drahomir@tunkr.cz

France

ABB France
PP/PS-PPHV
16, Rue de l'Equerre - ZI des Bethunes
95310 Saint Ouen l'Aumône, France
Tel.: +33 (1) 3440 7557
Fax: +33 (1) 3440 7599
Mobile: +33 6 7016 8341
jean-francois.le_luyer@fr.abb.com

Germany

GvA Leistungselektronik GmbH
Boehringer Strasse 10 – 12
68307 Mannheim, Germany
Tel.: +49 (621) 789 9210
Fax: +49 (621) 789 9299
info@gva-leistungselektronik.de

Hungary

Budaker Ltd.
Fehérvári út 168-178 A. lph. fsz. 3
1116 Budapest, XI., Hungary
Tel.: +36 1 424 5094
Fax: +36 1 228 2291
abb@budaker.hu

Italy

ABB S.p.A.
Discrete Automation and Motion
Division
Via L. Lama 33
20099 Sesto S. Giovanni (Mi), Italy
Tel.: +39 (02) 2414 8494
Fax: +39 (02) 2414 3421
igor.tacconi@it.abb.com

Israel

ABB Technologies Ltd
Topaz Bldg., Shaar Carmel
Nahum Het str., 5
35085 Haifa, Israel
Tel.: +972 (4) 851 9237
Fax: +972 (4) 850 2112
keren.cohen@il.abb.com

Netherlands

KWx B.V.
Aston Martinlaan 41
NL-3261 NB Oud-Beijerland
Tel.: +31 186 633600
Fax: +31 186 633605
halfgeleiders@kwx.nl

Norway

Hans H. Schive AS
Undelstadlia 27
1387 Asker, Norway
Tel.: +47 66 760 500
Fax: +47 66 904 484
vidar.kristiansen@schive.no

Romania

SYSKOM 18 SRL
Calea Plevnei 139B
060011 Bucharest, Romania
Tel.: +40 21 310 2678
Fax: +40 21 316 9176
Mobile: +40 72 251 4939
george.barbalata@syscom18.com

Russia

ABB Ltd.
Obrucheva Str. 30/1, Building 2
117997 Moscow, Russia
Tel.: +7 (495) 777 2220
Fax: +7 (495) 956 6276
alexander.shkitskiy@ru.abb.com

Slovakia

ZTS Eltop, spol. s.r.o.
Mierové námestie 24
018 51 Nová Dubnica,
Slovenská republika
Tel.: +421 42 4430031
Fax: +421 42 4430031
Mobile: +421 905 349742
ztseltop@stonline.sk
www.ztseltop.sk

Spain / Portugal

Iberica Semiconductores de Potencia S.L.
c/Lugano, 35
28420 Galapagar, Madrid, Spain
Tel.: +34 (91) 849 9620
Fax: +34 (91) 188 1311
info@ibersp.com

Sweden

ABB AB
Control Technologies Service Center
72159 Västerås, Sweden
Tel.: +46 (21) 329421
Fax: +46 (21) 146537
tony.ka.anderson@se.abb.com

Switzerland

PowerParts AG
Schareggstrasse 1
5506 Mägenwil, Switzerland
Tel.: +41 (62) 896 7080
Fax: +41 (62) 896 7088
abb@powerparts.ch

Turkey

Protek Teknik Elektrik Ltd.Sti.
Okcumusa Cad.Kismet Han no:36/2
34420 Karakoy, Istanbul, Turkey
Tel.: +90 (212) 237 20 00
Direct: +90 (216) 685 10 10
Fax: +90 (212) 235 46 09
bmorkoc@protek-teknik.com.tr
www.protek-teknik.com.tr

UK

PPM Power
65 Shrivenham Hundred Bus.
Park Watchfield, Swindon SN6 8TY
Wiltshire, Great Britain
Tel.: +44 (1793) 784 389
Fax: +44 (1793) 784 391
sales@ppm.co.uk
www.ppmppower.co.uk

USA / Canada**5S Components Inc.**

630 Fifth Avenue
East McKeesport, PA 15035, USA
Tel.: +1 (412) 967 5858
Fax: +1 (412) 967 5868
info@5SComponents.com
www.5SComponents.com

**Central
& South America****Brazil**

ABB Ltda.
Av. dos Autonomistas 1496
06020 - 902 Osasco, SP, Brazil
Tel.: +55 (11) 3688 9974
Fax: +55 (11) 3688 9421
Mobile: +55 (11) 98354 6348
luis-carlos.araujo@br.abb.com

Asia Pacific**Australia, New Zealand
& South East Asia**

Si-Chip Power Technologies Ltd.
12th Floor, Rutton Jee House,
Duddel Street, Central, Hong Kong
Tel.: +61 (3) 9008 7271
Fax: +61 (3) 9646 4434
info@si-chip.com
www.si-chip.com

China

Beijing Sunking Electronic
Technology Co. Ltd.
Floor 25, No 99 Kechuang 14th street
Economic and Technology Develop-
ment Zone
101111 Beijing, China
Tel.: +86 (10) 5630 1111
Fax: +86 (10) 5630 1112
info@sunking-tech.com

India

Pankaj Electronics
A-09, Sector 67
Noida - 201303, India
Tel.: +91 (120) 248 4316
sales@pankaj.biz

Japan

Nihon Inter Electronics Corp.
Attend On Tower 10F
2-8-12, Shin-Yokohama, Kohoku-ku
Yokohama-City, Kanagawa-ken
222-0033, Japan
Tel.: +81 45 470 6082
Fax: +81 45 472 7162
p48@m2.niec.co.jp

Korea

Milim Syscon Co., Ltd
B214 Biz Center
SK n Technopark 190-1
Sangdaewon-Dong
Jungwon-Gu, Seongnam-Si
462-721 Gyeonggi-Do, Korea
Tel.: +82 (31) 776 2288/2291
Fax: +82 (31) 776 2292
hjljm@milimsys.com
www.milimsys.com

Taiwan

Industrade Co., Ltd
10 F, No. 29 -1, Section 2
Zhong Zheng East Road
Tamsui District,
25170 New Taipei City, Taiwan, R.O.C.
Tel.: +886 (2) 2809 1251
Fax: +886 (2) 2808 4990
info@industrade.com.tw
www.industrade.com.tw

Africa**South Africa**

ABB South Africa
0200 - Power Electronics
2 Lake Road, Longmeadow Business
Estate (North)
1609 Modderfontein, Gauteng,
South Africa
Tel.: +27 (10) 202 5480
Fax: +27 (11) 579 8650
Mobile: +27 (83) 703 7165
silviu.martinescu@za.abb.com



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