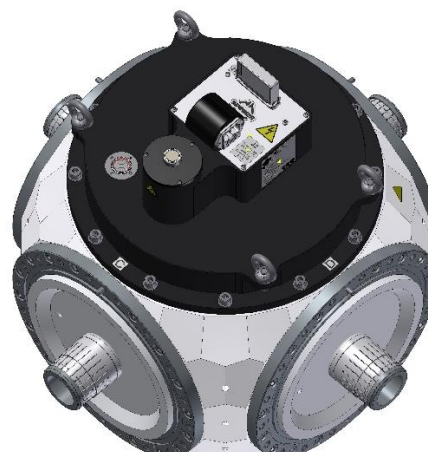


Coaxial Two Way Switch (DPDT) | BN 941964C0110



Typical illustration

Radio frequency characteristics

Interface type (4 connections)	8 3/16" RFC1)		
Characteristic impedance	75 Ω		
Frequency range	10 MHz	100 to 230 MHz	230 to 620 MHz
VSWR, max.	1.06	1.06	1.08
Isolation, min.	75 dB	75 dB	70 dB
Insertion loss, max.	0.03 dB		
Average power capability RFC2) at ambient temperature -10 to +45°C	950 kW	200 kW	120 kW
Peak voltage capability RFC2)	24 kV		

RFC1) Interface compatible to IEC, Myat, Dielectric

RFC2) Standard conditions: - Dielectric: Dry air under standard pressure at sea level (p = 1013 hPa)

- Load VSWR, max. 1.0 (no standing wave)

- No modulation, sinusoidal carrier only

Electrical and mechanical characteristics

Switch type	Two way switch, DPDT	
Actuator type	Motor drive, latching, self cutoff	
Connector J2 EMC1) for mains connection	IEC appliance inlet C14 according to IEC 60320-1	
Mains connection	L, N, PE, TN-System	
Operating	Operating voltage	95 to 140 V AC 50/60 Hz
	Operating current, typ. EMC2)	1.5 A
	Nominal fuse	F1 / F2: time-delay fuse, 2 A
Connector J1 EMC1) for control, interlock contacts and signaling	25 pole connector according to DIN 41652 / IEC 807-2	
Control	Control voltage	ES1 circuits according to EN 62368-1, 8 to 31 V DC
	Control current, typ.	12 mA at control voltage 24 V DC
	Current limiting	The circuit must be limited externally to 0.5 A
Signal contacts Interlock contacts	Lead time typ. EMC2)	500 ms (the interlock/signal contacts open 500 ms before and close 500 ms after switching of the RF contacts)
	Maximum ratings	ES1 circuits according to EN 62368-1, 42.4 V ACpk / 60 V DC / 0.5 A
	Current limiting	The circuit must be limited externally to 0.5 A

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Switching time, typ. <sup>EMC2)</sup>	3 s
Command hold time, min.	3 s (during this time, the voltage at control input must not change)
Switching frequency, max.	3 cycles per minute, max. 30 cycles per hour (6 operations per minute, max. 60 operations per hour)
Lifetime, min.	100,000 cycles (200,000 operations)
Weight, approx.	70 kg

*EMC1) Suitable US power supply cord and 25 pole mating connector included  
EMC2) At room temperature and nominal voltage 120 V AC, 60 Hz*

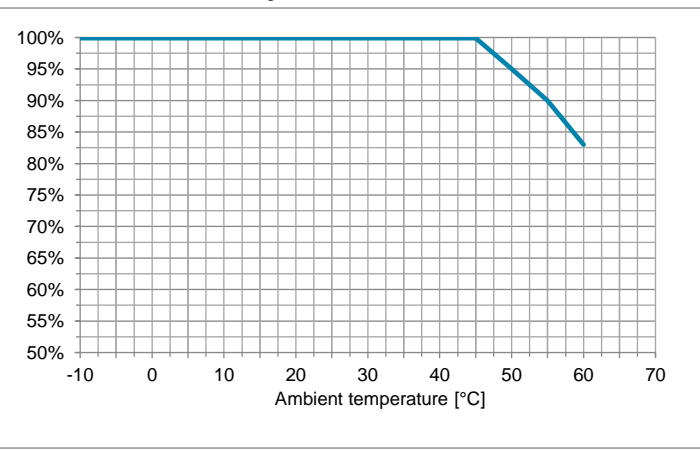
### Environmental conditions

<b>Operational conditions</b>	ETSI EN 300 019-1-3 V2.3.2 (2009-1) class 3.1 N																				
Ambient temperature <sup>EC1)</sup>	-10 to +60°C																				
Condensation	Not allowed																				
Relative humidity, max.	95%																				
Derating of input power with increasing altitude	<p>The maximum input power can be applied up to 500 m or 1600 ft above sea level unless noted otherwise in the data sheet. Above this height the maximum input power must be reduced as shown in the diagram.</p> <table border="1"> <caption>Derating of input power with increasing altitude</caption> <thead> <tr> <th>Altitude above sea level [m]</th> <th>Percentage</th> </tr> </thead> <tbody> <tr><td>0</td><td>100%</td></tr> <tr><td>500</td><td>100%</td></tr> <tr><td>1000</td><td>98%</td></tr> <tr><td>1500</td><td>96%</td></tr> <tr><td>2000</td><td>94%</td></tr> <tr><td>2500</td><td>92%</td></tr> <tr><td>3000</td><td>90%</td></tr> <tr><td>3500</td><td>88%</td></tr> <tr><td>4000</td><td>86%</td></tr> </tbody> </table>	Altitude above sea level [m]	Percentage	0	100%	500	100%	1000	98%	1500	96%	2000	94%	2500	92%	3000	90%	3500	88%	4000	86%
Altitude above sea level [m]	Percentage																				
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0	100%																				
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## Coaxial Two Way Switch (DPDT) | BN 941964C0110

<p>Derating of input power with increasing ambient temperature</p>	<p>The maximum input power can be applied up to +45°C ambient temperature unless noted otherwise in the data sheet. Above this ambient temperature the maximum input power must be reduced as shown in the diagram.</p>  <table border="1"> <caption>Derating of input power with increasing ambient temperature</caption> <thead> <tr> <th>Ambient temperature [°C]</th> <th>Input Power (%)</th> </tr> </thead> <tbody> <tr><td>-10</td><td>100</td></tr> <tr><td>0</td><td>100</td></tr> <tr><td>10</td><td>100</td></tr> <tr><td>20</td><td>100</td></tr> <tr><td>30</td><td>100</td></tr> <tr><td>40</td><td>100</td></tr> <tr><td>45</td><td>100</td></tr> <tr><td>50</td><td>95</td></tr> <tr><td>55</td><td>90</td></tr> <tr><td>60</td><td>83</td></tr> </tbody> </table>	Ambient temperature [°C]	Input Power (%)	-10	100	0	100	10	100	20	100	30	100	40	100	45	100	50	95	55	90	60	83
Ambient temperature [°C]	Input Power (%)																						
-10	100																						
0	100																						
10	100																						
20	100																						
30	100																						
40	100																						
45	100																						
50	95																						
55	90																						
60	83																						
<p>Max. altitude above sea level</p>	<p>4,000 m or 13,120 ft according to IEC EN 60664-1</p>																						
<p>Protection class</p>	<p>I according to IEC EN 61140</p>																						
<p>IP protection level</p>	<p>IP40 according to IEC EN 60529 (all interfaces terminated)</p>																						
<p>Installation position</p>	<p>Any</p>																						
<p><b>Transport conditions</b></p>	<p>ETSI EN 300 019-1-2 V2.1.4 (2003-04) class 2.2</p>																						
<p>Ambient temperature</p>	<p>-25 to +70°C</p>																						
<p>Rain, condensation, icing</p>	<p>Not allowed</p>																						
<p><b>Storage conditions</b></p>	<p>ETSI EN 300 019-1-1 V2.1.4 (2003-04) class 1.2</p>																						
<p>Ambient temperature</p>	<p>-10 to +60°C</p>																						
<p>Rain, condensation, icing</p>	<p>Not allowed</p>																						

EC1) Extended temperature range on request

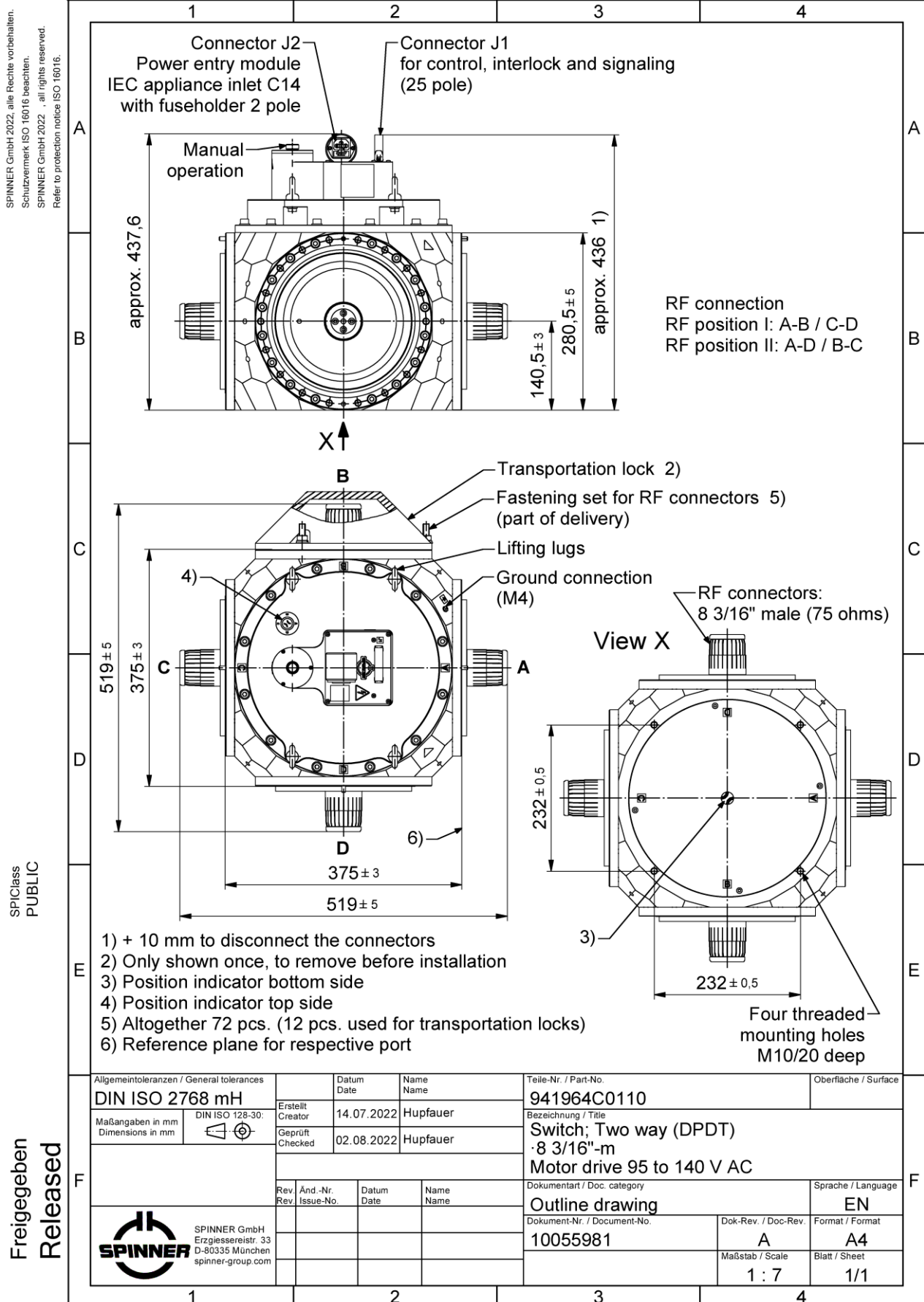
### Applicable documents

<p>Product manual</p>	<p>M36478</p>
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Coaxial Two Way Switch (DPDT) | BN 941964C0110

Outline (all dimensions in millimeter)



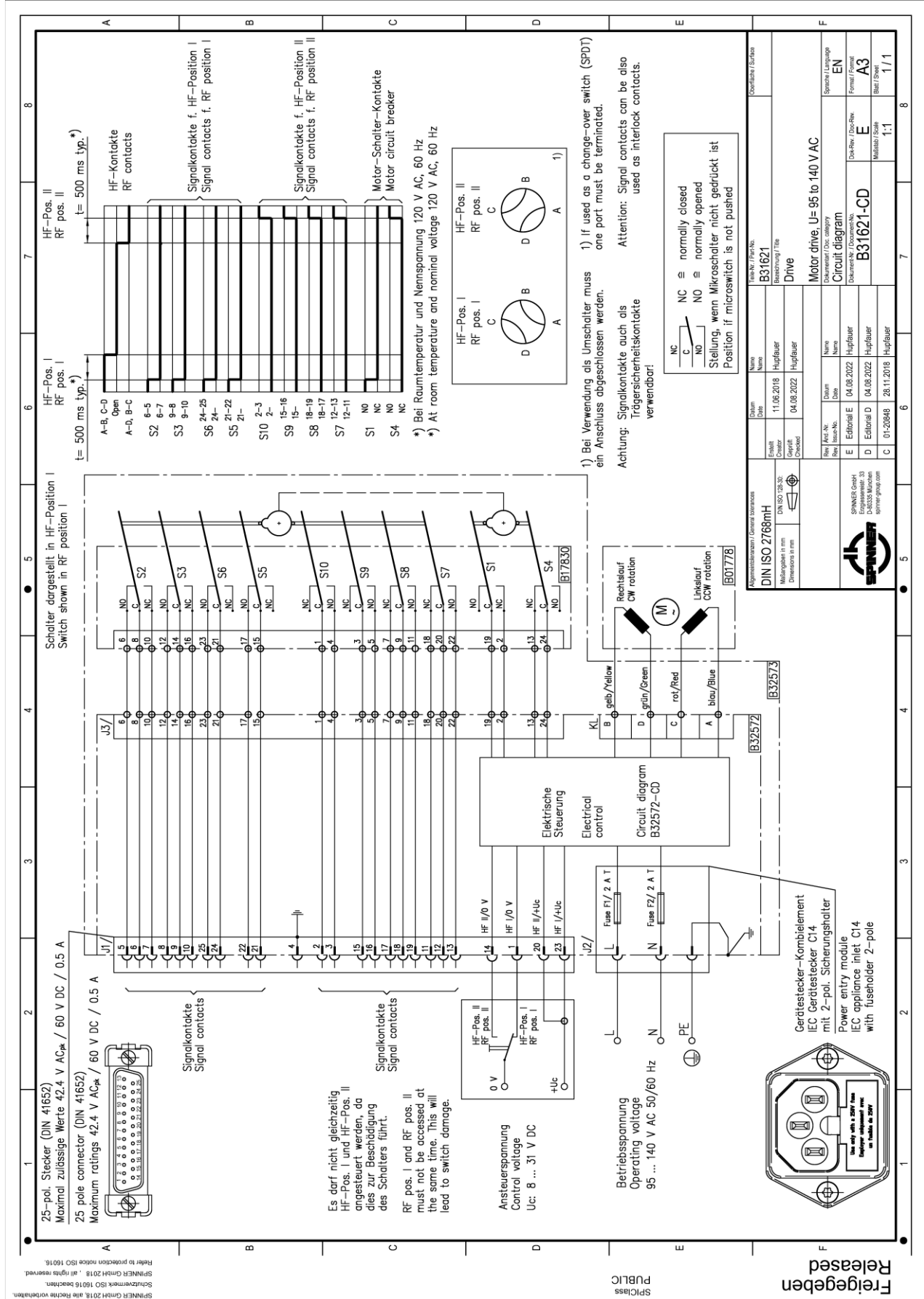
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# Coaxial Two Way Switch (DPDT) | BN 941964C0110

## Circuit diagram

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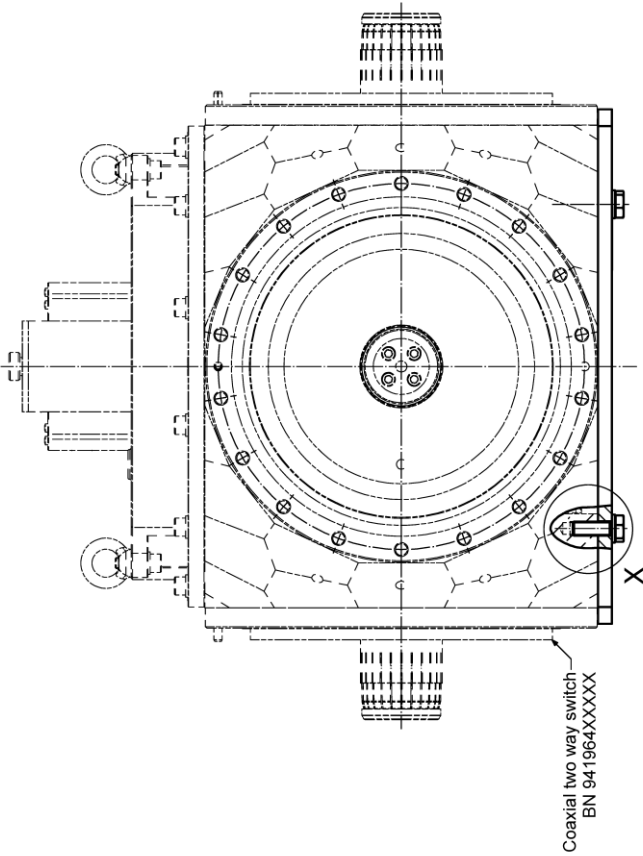
Coaxial Two Way Switch (DPDT) | BN 941964C0110

Assessories (optional)

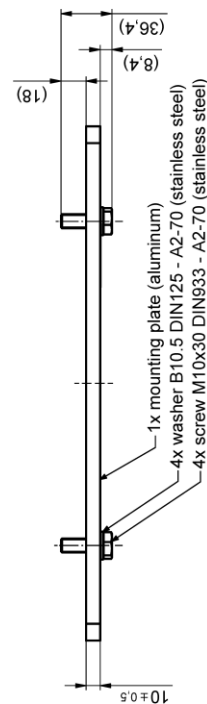
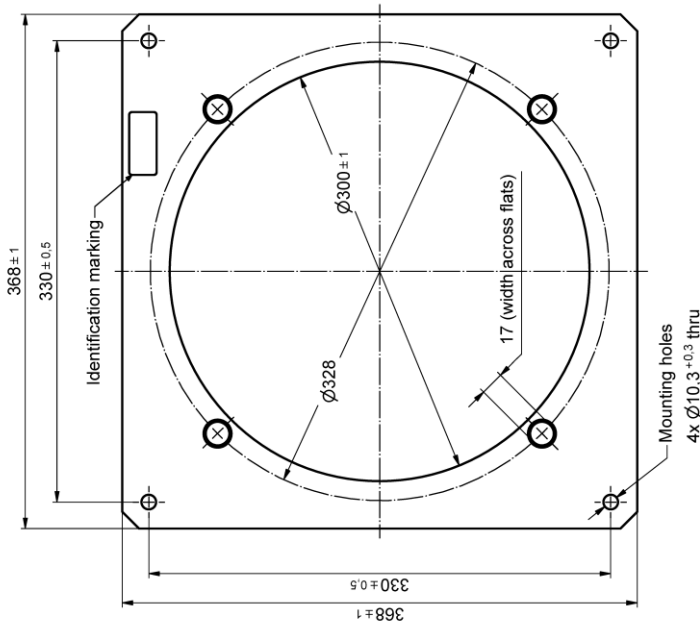
Installation kit BN 941964C3000

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Installation instructions for BN 941964C3000-installation kit:



Installation kit BN 941964C3000:



Do not use the installation kit to support additional mechanical loads.

Mittellinien / Scale: 1 : 3		Beschreibung: installation kit for coaxial two way switch (DPDT) 8 3/16" (75 Ohm)	
Projektion E Projection E	Datum: 07.08.2018 Date	Name: Hupflauer Name	Zuschlags-Nr.: 941964C3000-0E A3 Drawing No.
Erstellt: 09.08.2018 Created	Geprüft: 09.08.2018 Checked	Hersteller: Spinner GmbH Manufactured by	Blatt: 1 Sheet
Änderung: - Change		Standort: Ezzingstr. 33 Location	Anzahl: 1 Qty.
Index: - Index		D-80335 München Germany	
		Ärztliche Freigabe: 07.08.2018 Release	

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