

Coaxial Two Way Switch (DPDT) || BN 743741



Radio frequency characteristics

Interface type (4 connections)	N-f (50 Ω)	
Characteristic impedance	50 Ω	
Frequency range	0 to 1 GHz	1 to 2 GHz
VSWR, max.	1.12	1.15
Isolation, min.	70 dB	65 dB
Insertion loss, max.	0.06 dB	0.07 dB
Average power capability *	0.3 kW	0.2 kW
Peak voltage capability *	3.0 kV	

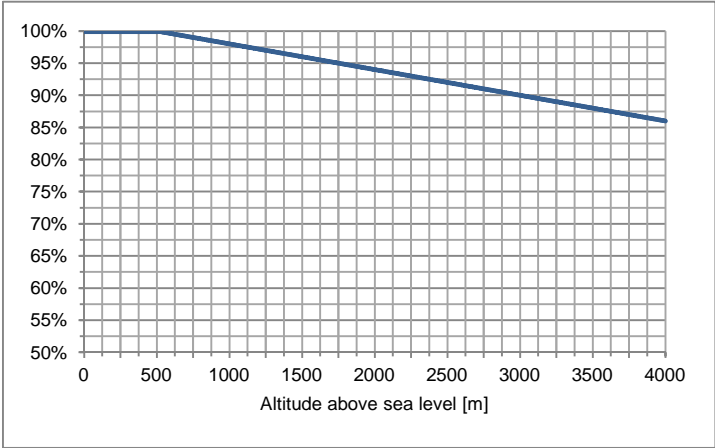
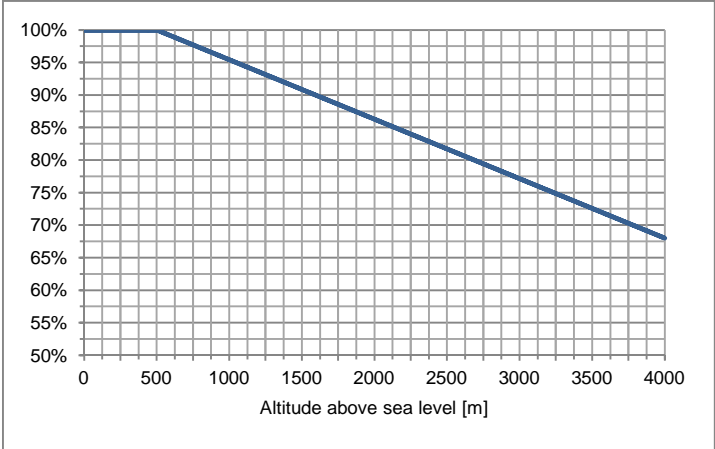
Electrical and mechanical data

Switch type	Two way switch, DPDT	
Actuator type	Solenoid drive, failsafe	
Connector J1 ** for operating voltage and signaling	6 pole connector with flat cable, L= 300 mm	
Operating	Operating voltage	24 V DC ±10%
	Current, typ. ***	0.2 A
	Duty cycle	100% (with installation in front panel min. 200 mm x 200 mm)
	Nominal fuse	The switch must be externally fused with 0.5 A time-delay by the user
Signal contacts	Maximum ratings	SELV circuits according to IEC EN 60950-1, 42.4 V ACpk / 60 V DC / 0.5 A
	Nominal fuse	The circuit must be externally limited to 0.5 A by the user
Switching time, typ.***	25 ms	
Switching frequency, max.	10 operations per minute	
Life, min.	2,000,000 operations	
Weight, approx.	0.35 kg	

Template TD-00002P

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Environmental conditions

Operational conditions	ETSI EN 300 019-1-3 V2.3.2 (2009-1) class 3.1 N																				
Ambient temperature ****	-10 to +45°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>85%</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	85%
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Protection class	III according to IEC EN 61140																				
IP protection level	IP40 according to IEC EN 60529 (all interfaces connected with appropriate gaskets)																				
Installation position	Optional																				
Transport conditions	ETSI EN 300 019-1-2 V2.1.4 (2003-04) class 2.2																				
Ambient temperature	-25 to +70°C																				
Rain, condensation, icing	Not allowed																				

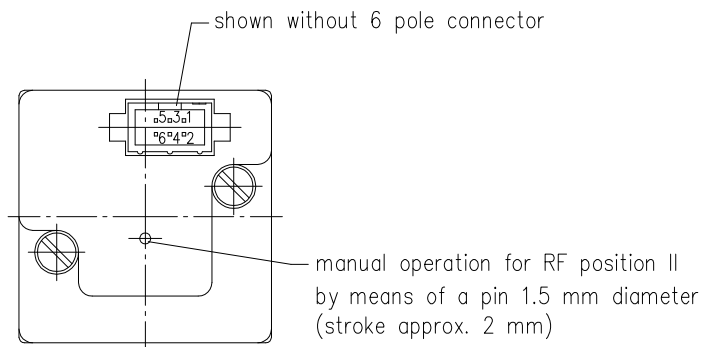
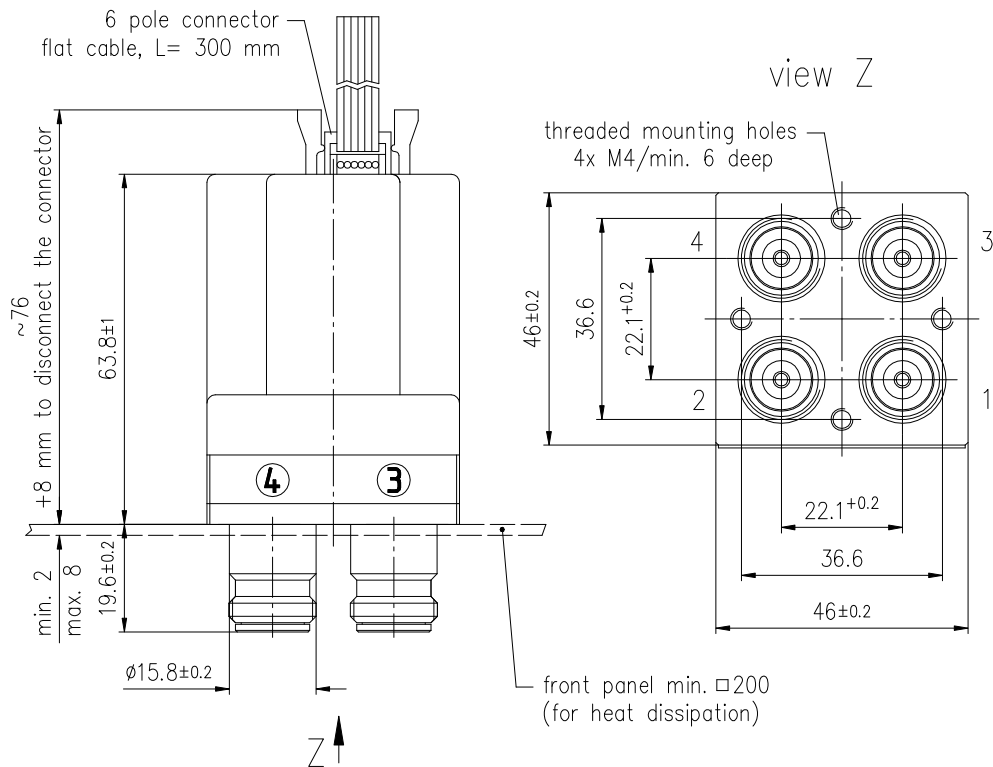
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Storage conditions	ETSI EN 300 019-1-1 V2.1.4 (2003-04) class 1.2
Ambient temperature	-10 to +45°C
Rain, condensation, icing	Not allowed

- * *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
- ** *Suitable mating connector included*
- *** *At room temperature and nominal voltage 24 V DC*
- **** *Extended temperature range on request*

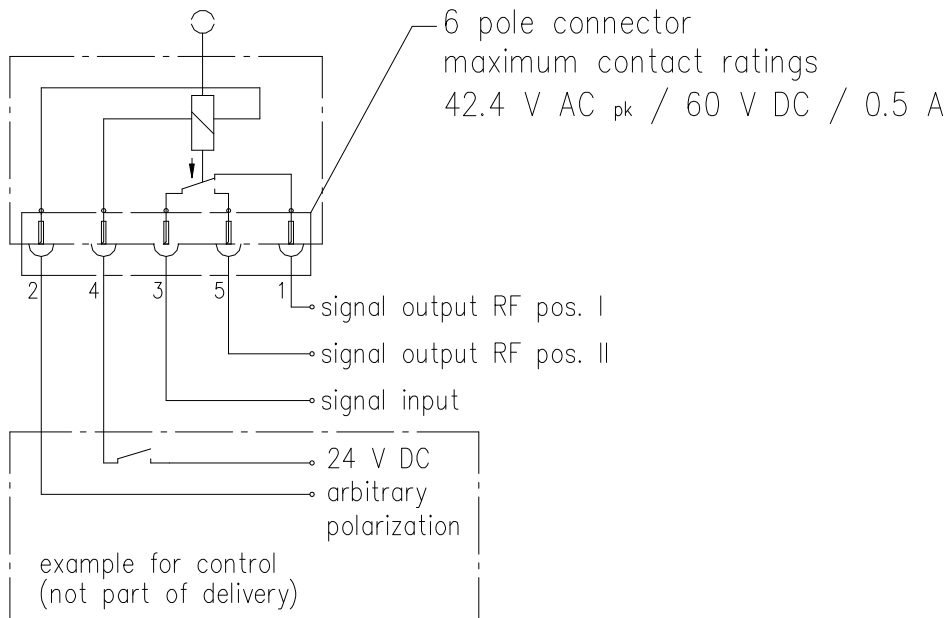
Outline (all dimensions in millimeters)



RF connection
 RF position I (no current): 1-3, 2-4
 RF position II: 1-2, 3-4

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Circuit diagram



circuit diagram shown in RF position I

RF connection

RF position I (no current): 1-3, 2-4

RF position II: 1-2, 3-4