数字式波段开关
Digital Band Switch

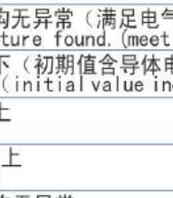
▶ 性能参数 | Performance Parameter

项目Items		条件Condition			规格Specifications
使用温度范围 Operating Temperature Range		不结冰条件 Nonfreezing			-20° C—+70° C
保存温度范围 Storage Temperature Range		不结冰条件 Nonfreezing			-40° C—+70° C
机械性能 Mechanical Performance	回转力矩 Gyroscopic Moment				0.1~0.2N.m（1~2 kgf.cm）
	端子强度 Terminal Strength				3N（300gf）
	螺丝强度 Screw Strength				2N.m（30kgf.cm）
	旋钮强度 Knob Strength				3N.m（30kgf.cm）
	耐振动性 Vibration Resistance	摆动Swing 10-55-10Hz/分；振幅1.5mm/各方向any direction/2小时hours Swing: 10-55-10Hz/min; Amplitude: 1.5mm/each direction/2 hours			外观及结构无异常（满足电气要求）No abnormal appearance and structure found.(meet electrical requirements)
电气性能 Electrical performance	接触电阻 Contact Resistance	DC+5V/1A电压降下法；1kHz＜20mV；＜50mA DC+5V/1A Voltage Drop; 1kHz＜20mV; ＜50mA			100mΩ以下（初期值含导体电阻） ＜100mΩ（initial value including conductor resistance）
	绝缘电阻 Insulation Resistance	DC250V/1分钟后 端子-端子间 DC250V/ after a minute terminal-terminal			500MΩ以上 ＞500mΩ
		DC500V/1分钟后 端子FG间 DC500V/after a minute terminal-FG			5000MΩ以上 ＞5000mΩ
	耐电压 Voltage Resistance	AC250V/1分钟后 端子-端子间 AC250V/after a minute terminal-terminal			外观及结构无异常 No abnormal appearance and structure found.
		AC750-1000V/1分钟后 端子FG间 AC750-1000V/after a minute terminal-FG			
	额定电压 Rated Voltage	负载电阻 load resistance	AC		5V 0.5A
			DC		5V 0.25A/25V 0.05A
耐久性 Durability	耐久性 Durability	1-1.2π rad/s 角速度往返 50000回 1-1.2π rad/s angular velocity 50000cycles	回转力矩 Gyroscopic Moment		对应初期值+10~30% Corresponding initial value +10~30%
			接触电阻Contact Resistance		150mΩ以下 ＜150mΩ
			绝缘电阻Insulation Resistance	DC250V/1分 DC250V/after a minute	150mΩ以上 ＞50mΩ
			耐电压Voltage Resistance	DC250V/1分 DC250V/after a minute	外观及结构无异常No abnormal appearance and structure found.
环境特性 Environmental Characteristics	耐湿性 Wet Resistance	温度：40±2℃ temperature：40±2℃ 相对湿度:90-95% relative humidity:90-95% 时间：16小时 Time：16 hours	接触电阻Contact Resistance		10mΩ以下 ＜10mΩ
			绝缘电阻Insulation Resistance	DC250V/1分 DC250V/after a minute	50mΩ以上 ＞50mΩ
			耐电压Voltage Resistance	DC250V/1分 DC250V/after a minute	外观及结构无异常No abnormal appearance and structure found.
	耐热性 Heat Resistance	温度：-70±2℃时间：16hours Temperature time：16hours	回转力矩 Gyroscopic Moment		0.1~0.2N.m（1~2 kgf.cm）
			接触电阻Contact Resistance		100mΩ以下 ＜100mΩ
	耐寒性 Cold Resistance	温度：-20±3℃时间：16hours Temperature：-20±3℃time：16 hours	回转力矩 Gyroscopic Moment		0.1~0.2N.m（1~2 kgf.cm）
			接触电阻Contact Resistance		100mΩ以下 ＜100mΩ

▶ 型号定义 | model

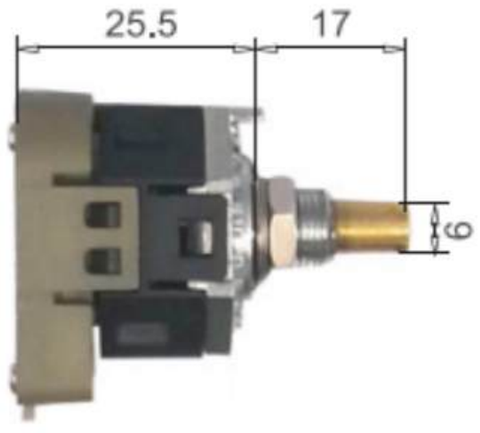
系列名称 Series Title	装配方式 Assembly Way	数字方式 Digital Model	起点设定 Starting Point Set	终点设定 End Point Set	档位角度 Gear Angle	连接方式 Connection Type	旋钮 Knob
RD							
	N:非防水中心固定 Non Waterproof Center fixed P：防水中心固定 Waterproof Center fixed	1:16进制 Hexadecimal Code 2:16进制反码Hexadecimal Anti-code 3:2进制循环码Binary Cyclic Code 4:2进制循环反码 Binary Cyclic Anti-code	*、0-	*、0-	H、13.85 J、15 N、30 L、20 S、27.69	_：无插头 _：W/o Plug CB：垂直插头 CB：Vertical Plug CS：水平插头 CS：Level Plug	A C

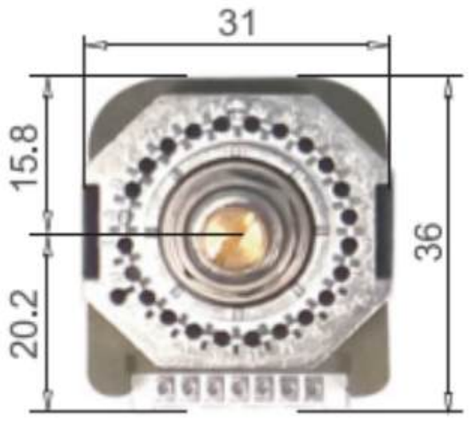
A



C

▶ 外形尺寸 | Dimensions





▶ 状态设定表 | Status Setting Table

☆ 13.85° ○ RDN01**H ○ 方式 Mode：No.01-16 进制码 01 Hexadecimal code

端子 Terminal	BIT	设定值Set Value (0~25)																								
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
A	1		●		●		●		●		●		●		●		●		●		●		●		●		●
F	2			●	●			●	●			●	●			●	●			●		●		●	●		
B	4					●	●	●	●					●	●	●	●					●	●	●	●		
E	8									●	●	●	●	●	●	●	●									●	●
C	16																	●	●	●	●	●	●	●	●	●	●
G	INH	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
D	公用 Public																										

☆ 13.85° ○ RDN02**H ○ 方式 Mode：No.02-16进制反码 02 Hexadecimal anti-code

端子 Terminal	BIT	设定值Set Value (0~25)																								
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
A	1	●		●		●		●		●		●		●		●		●		●		●		●		●	
F	2	●	●			●	●			●	●			●	●			●	●			●	●			●	●
B	4	●	●	●	●					●	●	●	●					●	●	●	●					●	●
E	8	●	●	●	●	●	●	●	●									●	●	●	●	●	●	●	●		
C	16	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										
G	INH	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
D	公用 Public																										

☆ 13.85° ○ RDN03**H ○ 方式 Mode：No.03-2进制循环反码 03-Binary Cyclic Anti-code

端子 Terminal	BIT	设定值Set Value (0~25)																								
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
A			●	●			●	●			●	●			●	●			●	●			●	●			●
F				●	●	●	●					●	●	●	●					●	●	●	●				
B						●	●	●	●	●	●	●	●									●	●	●	●	●	●
E										●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
C																		●	●	●	●	●	●	●	●	●	●
G	P		●		●		●		●		●		●		●		●		●		●		●		●		●
D	公用 Public																										

☆ 13.85° ○ RDN03**H ○ 方式 Mode：No.03-2进制循环反码 03-Binary Cyclic Anti-code

端子 Terminal	BIT	设定值Set Value (0~25)																								
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
A			●	●			●	●			●	●			●	●			●	●			●	●			●
F				●	●	●	●					●	●	●	●					●	●	●	●				
B						●	●	●	●	●	●	●	●									●	●	●	●	●	●
E										●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
C																		●	●	●	●	●	●	●	●	●	●
G	P		●		●		●		●		●		●		●		●		●		●		●		●		●
D	公用 Public																										

☆ 27° ○ RDN04**S ○ 方式 Mode：No.04-2进制循环反码04 Binary Cyclic Anti-code

27.69°

端子 Terminal	BIT	设定值Set Value (0~12)												
		00	01	02	03	04	05	06	07	08	09	10	11	12
A		●			●	●			●	●			●	●
F		●	●					●	●	●	●			
B		●	●	●	●									
E		●	●	●	●	●	●	●	●					●
C	P		●		●		●		●		●		●	
G														
D	公用 Public													

☆ 30° ○ RDN01**N ○ 方式 Mode：No.01-16 进制码 01 Hexadecimal code

端子 Terminal	BIT	设定值Set Value (0~11)											
		00	01	02	03	04	05	06	07	08	09	10	11
A	1		●		●		●		●		●		●
F	2			●	●			●	●			●	●
B	4					●	●	●	●				
E	8									●	●	●	●
C	P		●	●		●			●	●			●
G	INH	●	●	●	●	●	●	●	●	●	●	●	●
D	公用 Public												

☆ 30° ○ RDN02*N ○ 方式 Mode：No.02-16进制反码 02 Hexadecimal anti-code

端子 Terminal	BIT	设定值Set Value (0~11)											
		00	01	02	03	04	05	06	07	08	09	10	11
A	1	●		●		●		●		●		●	
F	2	●				●	●			●	●		
B	4	●	●	●	●					●	●	●	●
E	8	●	●	●	●	●	●	●	●				
C	P		●	●		●			●	●			●
G	INH	●	●	●	●	●	●	●	●	●	●	●	●
D	公用 Public												

☆ 15° ○ RDN01**J ○ 方式 Mode：No.01-16 进制码Hexadecimal Code

端子 Terminal	BIT	设定值Set Value (0~23)																							
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
A	1		●		●		●		●		●		●		●		●		●		●		●		●
F	2			●	●			●	●			●	●			●	●			●	●			●	●
B	4					●	●	●	●					●	●	●	●					●	●	●	●
E	8									●	●	●	●	●	●	●	●								
C	16																	●	●	●	●	●	●	●	●
G	INH	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
D	公用 Public																								

☆ 15° ○ RDN02**J ○ 方式 Mode：No.02-16进制反码02 Hexadecimal anti-code

端子 Terminal	BIT	设定值Set Value (0~23)																							
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
A	1	●		●		●		●		●		●		●		●		●		●		●		●	
F	2	●	●			●	●			●	●			●	●			●				●	●		
B	4	●	●	●	●					●	●	●	●					●	●	●	●				
E	8	●	●	●	●	●	●	●	●									●	●	●	●	●	●	●	●
C	16	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●								
G	INH	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
D	公用 Public																								

☆ 20° ○ RDN01**L ○ 方式 Mode：No.01-16进制码 01 Hexadecimal code

端子 Terminal	BIT	设定值Set Value (0~17)																	
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17
A	1		●		●		●		●		●		●		●		●		●
F	2			●	●			●	●			●	●			●	●		
B	4					●	●	●	●					●	●	●	●		
E	8									●	●	●	●	●	●	●	●		
C	16																	●	●
G	INH	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
D	公用 Public																		

☆ 20° ○ RDN02**L ○ 方式 Mode：No.02-16进制反码 02 Hexadecimal anti-code

端子 Terminal	BIT	设定值Set Value (0~17)																	
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17
A	1	●		●		●		●		●		●		●		●		●	
F	2	●	●			●	●			●	●			●	●			●	●
B	4	●	●	●	●					●	●	●	●					●	●
E	8	●	●	●	●	●	●	●	●									●	●
C	16	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
G	INH	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
D	公用 Public																		

☆ 20° ○ RDN03**L ○ 方式 Mode：No.03-2进制循环码 03 Binary Cyclic Code

端子 Terminal	BIT	设定值Set Value (0~17)																	
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17
A	1		●	●			●	●			●	●			●	●			●
F	2			●	●	●	●					●	●	●	●				
B	4					●	●	●	●			●	●						
E	8									●	●	●	●	●	●	●	●	●	●
C	16																	●	●
G	INH		●		●		●		●		●		●		●		●		●
D	公用 Public																		

☆15° ○ RDN03**J ○ 方式 Mode：No.03-2进制循环码 03 Binary Cyclic Code

端子 Terminal	BIT	设定值Set Value (0~23)																							
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
A			●	●			●	●			●	●			●	●			●	●			●	●	
F				●	●	●	●					●	●	●	●					●	●	●			
B						●	●	●	●	●	●	●	●									●	●	●	●
E										●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
C																		●	●	●	●	●	●	●	●
G	P		●		●		●		●				●		●		●		●		●		●		●
D	公用 Public																								

INH:禁止位端子 Inhibit Bit Terminal

P：奇偶校验位端子 Parity Check Bit Terminal

●：ON动作输出 Action Output

状态设定1 State Set 1

		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
START	起始位置 Starting Position	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
END	起始位置 Starting Position		C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B

状态设定2 State Set 2

		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
START	起始位置 Starting Position	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
END	起始位置 Starting Position		C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	A	B

状态设定3 State Set 3

		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17
START	起始位置 Starting Position	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
END	起始位置 Starting Position		C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	A	B

状态设定4 State Set 4

		00	01	02	03	04	05	06	07	08	09	10	11	12
START	起始位置 Starting Position	A	C	E	G	H	K	M	O	Q	S	U	W	Y
END	起始位置 Starting Position		C	E	G	H	K	M	O	Q	S	U	W	Y	A

状态设定5 State Set 5

		00	01	02	03	04	05	06	07	08	09	10	11
START	起始位置 Starting Position	A	C	E	G	H	K	M	O	Q	S	U	W
END	起始位置 Starting Position		C	E	G	H	K	M	O	Q	S	U	W	A

☆ 30° ○ RDN03**N ○ Mode：No.03-2进制循环反码03 Binary Cyclic Anti-code

端子 Terminal	BIT	设定值Set Value (0~11)											
		00	01	02	03	04	05	06	07	08	09	10	11
A			●	●			●	●			●	●	
F				●	●	●	●					●	●
B						●	●	●	●	●	●	●	●
E										●	●	●	●
C	P		●		●		●		●		●		●
G													
D	公用 Public												

☆ 30° ○ RDN04**N ○ Mode：No.0-2进制循环反码0 Binary Cyclic Anti-code

端子 Terminal	BIT	设定值Set Value (0~11)											
		00	01	02	03	04	05	06	07	08	09	10	11
A		●			●	●			●	●			●
F		●	●					●	●	●	●		
B		●	●	●	●								
E		●	●	●	●	●	●	●	●	●			●
C	P		●		●		●		●	●	●		●
G													
D	公用 Public												

☆ 27.69° ○ RDN01**S ○ 方式 Mode：No.01-16进制码 01 Hexadecimal codeAnti-code

端子 Terminal	BIT	设定值Set Value (0~12)												
		00	01	02	03	04	05	06	07	08	09	10	11	12
A	1		●		●		●		●		●		●	
F	2			●	●			●	●			●	●	
B	4					●	●	●	●					●
E	8									●	●	●	●	●
C	P		●	●		●			●	●			●	
G	INH	●	●	●	●	●	●	●	●	●	●	●	●	●
D	公用 Public													

☆ 27.69° ○ RDN02**S ○ 方式 Mode：No.02-16进制反码 02 Hexadecimal anti-code

端子 Terminal	BIT	设定值Set Value (0~12)												
		00	01	02	03	04	05	06	07	08	09	10	11	12
A	1	●		●		●		●		●		●		●
F	2	●	●			●	●			●	●			●
B	4	●	●	●	●					●	●	●	●	
E	8	●	●	●	●	●	●	●	●					
C	P		●	●		●		●		●			●	
G	INH	●	●	●	●	●	●	●	●	●	●	●	●	●
D	公用 Public													

☆ 27.69° ○ RDN03**S ○ 方式 Mode：No.03-2进制循环码 03 Binary Cyclic Code

端子 Terminal	BIT	设定值Set Value (0~12)												
		00	01	02	03	04	05	06	07	08	09	10	11	12
A			●	●			●	●			●	●		
F				●	●	●	●					●	●	●
B						●	●	●	●	●	●	●	●	
E										●	●	●	●	●
C	P		●		●		●		●		●		●	
G														
D	公用 Public													

☆ 30° ○ RDN011**N ○ Mode：No.011-特殊码 11-Special codeAnti-code

端子 Terminal	BIT	设定值Set Value (0~11)											
		00	01	02	03	04	05	06	07	08	09	10	11
A	1	●		●		●		●		●		●	
F	2		●	●			●	●			●	●	
B	4				●	●			●				●
E	8						●	●	●				
C	P	●	●		●			●	●			●	
G	INH	●	●	●	●	●	●	●	●	●	●	●	●
D	公用 Public												

☆ 30° ○ RDN011**N ○ Mode：No.011-特殊码 11-Special codeAnti-code

端子 Terminal	BIT	设定值Set Value (0~11)											
		00	01	02	03	04	05	06	07	08	09	10	11
A	1	●	●			●	●						
F	2								●	●	●	●	
B	4				●	●	●	●	●	●			
E	8	●					●	●	●			●	
C													
G													
D	公用 Public												

13.85° —（360° /26=13.85° ） 26接点设定Contact Set（0~25）

当波段开关全程动作时，起点位置同终点位置重合（A），使用1个设定螺丝固定的情况下，实际有效动作范围：0-24（25接点）

当波段开关全程动作时，不使用螺丝固定的情况下，实际有效动作范围：0-25（26接点）

When the band switch acts in full range, the start position and end position coincide (a).
When a set screw is fixed, the actual effective operation range is 0- 24 (25contacts).
When the band switch acts in full range without using screws, the actual effective operation range is 0-25 (26 contacts).

15° —（360° /24=15° ） 26接点设定Contact Set（0~23）

当波段开关全程动作时，起点位置同终点位置重合（A），使用1个设定螺丝固定的情况下，实际有效动作范围：0-22（23接点）

当波段开关全程动作时，不使用螺丝固定的情况下，实际有效动作范围：0-23（24接点）

When the band switch acts in full range, the start position and end position coincide (a).
When a set screw is fixed, the actual effective operation range is 0- 22(23contacts).
When the band switch acts in full range without using screws, the actual effective operation range is 0-23 (24 contacts).

20° —（360° /18=20° ） 18接点设定Contact Set（0~17）

当波段开关全程动作时，起点位置同终点位置重合（A），使用1个设定螺丝固定的情况下，实际有效动作范围：0-16（17接点）

当波段开关全程动作时，不使用螺丝固定的情况下，实际有效动作范围：0-17（18接点）

When the band switch acts in full range, the start position and end position coincide (a).
When a set screw is fixed, the actual effective operation range is 0- 16(17contacts).
When the band switch acts in full range without using screws, the actual effective operation range is 0-17 (18 contacts).

27.69° —（360° /13=27.69° ） 13接点设定Contact Set（0~12）

当波段开关全程动作时，起点位置同终点位置重合（A），使用1个设定螺丝固定的情况下，实际有效动作范围：0-11（12接点）

当波段开关全程动作时，不使用螺丝固定的情况下，实际有效动作范围：0-12（13接点）

When the band switch acts in full range, the start position and end position coincide (a).
When a set screw is fixed, the actual effective operation range is 0- 11(12contacts).
When the band switch acts in full range without using screws, the actual effective operation range is 0-12(13 contacts).

30° —（360° /12=30° ） 12接点设定Contact Set（0~11）

当波段开关全程动作时，起点位置同终点位置重合（A），使用1个设定螺丝固定的情况下，实际有效动作范围：0-10（11接点）

当波段开关全程动作时，不使用螺丝固定的情况下，实际有效动作范围：0-11（12接点）

When the band switch acts in full range, the start position and end position coincide (a).
When a set screw is fixed, the actual effective operation range is 0- 24 (25contacts).
When the band switch acts in full range without using screws, the actual effective operation range is 0-25 (26 contacts).