8BCR0005.3111A-0

1 General information

- UL/CSA listed
- Extremely flexible
- Assembled specifically for use with ACOPOSmulti drive systems and B&R servo motors
- speedtec - Innovative connector system for secure connections

2 Order data

Model number	Short description	Figure
	Resolver cables	
8BCR0005.3111A-0	ACOPOSmulti resolver cable, length 5 m, 3x 2x 0.22, 12-pin female speedtec resolver connector, 9-pin male DSUB servo connector, UL/CSA listed	

Table 1: 8BCR0005.3111A-0 - Order data

3 Technical data

Model number	8BCR0005.3111A-0
General information	
Cable cross section	3x 2x 0.22 GN
Durability	Oil resistance per DIN VDE 0281-1 (TM5) (HD 21.1 / DIN EN 60811-1-1/2-1), flame resistance per IEC 60332-1-2 [1]
Certification	E130266 cRUus AWM style 2637 90°C 30 V and CSA AWM I/II A/B 90°C 30 V, FT1 [1]
Certifications	
CE	Yes
UL	cULus E225616 Power conversion equipment
Cable construction	
Signal lines	
Quantity	6
Wire insulation	PVC
Wire colors	White/Brown, green/yellow, gray/pink
Design	Tinned copper stranded wire
Cross section	0.22 mm
Shield	No
Stranding	White with brown, green with yellow, gray with pink
Cable stranding	The 3 pairs together covered by foil shield
Complete shielding	Copper braiding, optical coverage >90% with foil shield
Outer jacket	
Material	PVC
Color	Green
Labeling	B&R 3x2x0.22 * E130266 cURus AWM STYLE 2637 * AWM I/II A/B 90°C 30 V FT1 * <Batch number> [1]
Connector	
Type	12-pin female speedtec resolver connector
Connection cycles	<500
Contacts	12
Additional connectors	9-pin male DSUB servo connector Connection cycles: <200 Contacts: 9 Degree of protection per EN 60529: IP20 when connected
Degree of protection per EN 60529	IP66/67 when connected
Electrical characteristics [1]	
Test voltage	
Wire/Wire	1.5 kV
Wire/Shield	0.8 kV
Conductor resistance	
Signal lines	≤86 Ω/km
Insulation resistance	≥20 MΩ*km
Max. current load per IEC 60364-5-52 (cable) and IEC 60512 (connector) [2]	68 A [3]

Table 2: 8BCR0005.3111A-0 - Technical data

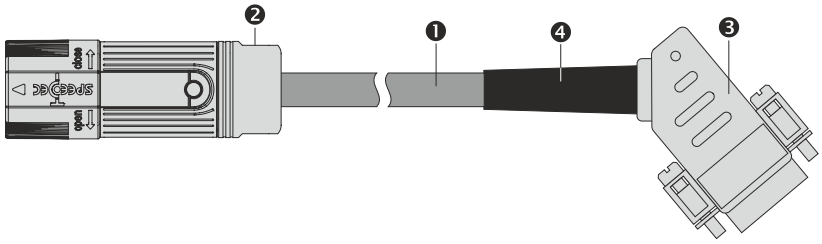
Model number	8BCR0005.3111A-0
Environmental conditions [1]	
Temperature	
Moving	-20°C to +80°C
Static	-20°C to +90°C
Mechanical characteristics [1]	
Dimensions	
Length	5 m
Diameter	6.3 mm ± 0.2 mm
Bend radius	
Single bend	≥26 mm
Moving	≥52 mm
Weight	0.3 kg

Table 2: 8BCR0005.3111A-0 - Technical data

1) Values refer to the raw cable being used.
2) Rated current at 40°C. Use at higher temperatures is possible with derating.
3) It is recommended to leave a reserve of 15%.

4 Wiring

4.1 Construction



Pos.	Description	Note
1	Encoder line	3x 2x 24 AWG
2	12-pin female circular connector	
3	DSUB housing 45°, metal-plated, 9-pin	
4	Kink protection	

Table 3: 8BCR resolver cables - Construction

4.2 Pinout

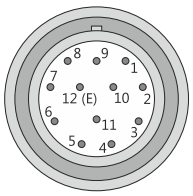
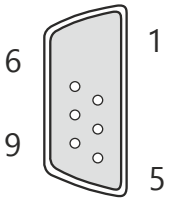
Circular connector	Pin	Description	Function	Pin	DSUB connector
	1	---			
	2	---			
	3	S4	Sine input +	3	
	4	S1	Cosine input -	4	
	5	R2	Reference output +	5	
	6	---			
	7	S2	Sine input -	7	
	8	S3	Cosine input +	8	
	9	R1	Reference output -	9	
	10	---			
	11	---			
	12	---			

Table 4: 8BCR resolver cables - Pinout

4.3 Cable diagram

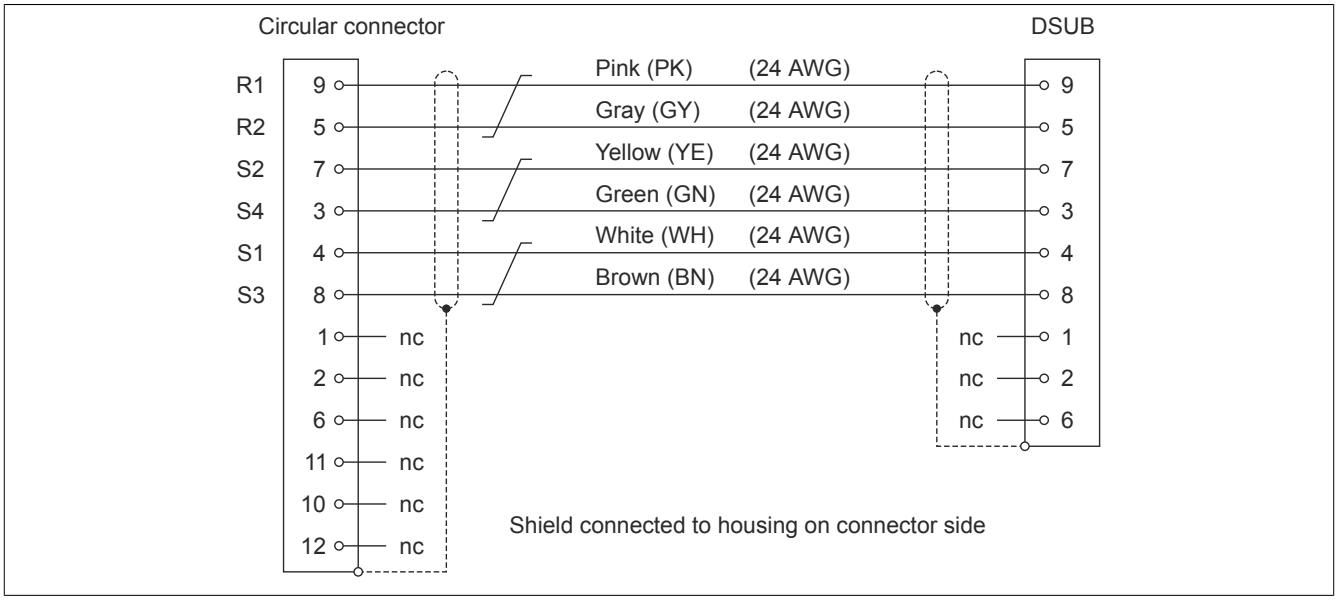


Figure 1: 8BCR resolver cables - Cable diagram