

**Motor cable ZK4500-8024-zzzz**



Plug connector	Contact	Function	Core identification	Contact	Plug connector
<p>Mating view</p>	A	U	black / 1	U	
	B	V	black / 2	V	
	C	W	black / 3	W	
	D	PE	green / yellow	PE	
	E	Temp. - / OCT -	blue	Temp. -	
	F	Screen	Screen	Screen	
	G	Brake +	black / 5	Brake +	
	H	Temp. + / OCT +	white	Temp. +	
	L	Brake -	black / 6	Brake -	

Catalog data	
Catalog text	2.5 mm <sup>2</sup> with M23-speedtec® plug, highly flexible, for drag-chain use
Servomotor	AM8x4x up to AM8x6x
Servo Drive	AX5000 (18...25 A)
Catalog description	(4x2.5mm <sup>2</sup> + (2x1.0mm <sup>2</sup> )C + (2xAWG22))

Electrical properties at 20°C	
Max. operating voltage	1000 VAC (UL)
Direct current resistance	≤ 55.0 Ω/km (AWG22) / ≤ 20.0 Ω/km (1.0 mm <sup>2</sup> ) / ≤ 7.98 Ω/km (2.5 mm <sup>2</sup> ), DIN EN 50395
Insulation resistance	≥ 500 MΩ x km, DIN EN 50395
Operating capacity at 800 Hz	score / screen ≤ 150 pF/m (2.5mm <sup>2</sup> ), EN 50289-1-5

Mechanical properties	
Outside diameter d	13.9 ± 0.4 mm
Min. bending radius	5 x d for fixed installation / 7 x d for dynamic use
Max. driven speed	240 m/min
Max. acceleration	30 m/s <sup>2</sup> (at 5 m movement)
Max. allowable travelling distance	20 m horizontal / 5 m vertical
Max. torsion	± 30°/m
Max. bending cycles	5 Mio.
Operating temperature	-20°C to +60°C
Shield optical	>85 %

Properties cable	
Material outer sheath	TPU, flame retardant, halogen free
Color	Orange, like RAL 2003
Weight	0.31 kg/m
RoHS conformity	Yes
Silicon-free	Yes
Halogen-free	DIN VDE 0472 T815
Flame resistance	IEC 60332-1-2 / UL758 cable flame test
Oil resistance outer sheath	HD 22.10 Appendix A / DIN EN60811-2-1
UL Approbation	UL758 (AWM) Style 21223 (Outer sheath) and Style 10492 (Core)

Properties motor plug	
Housing	brass, zinc diecast; nickel-plated and chromated
Connecting Nut	Brass, zinc diecast; nickel-plated
Contacts	brass gold plated
Seals	FPM/HNBR (Viton)
Clamp Ring	brass nickel-plated
Protection Type	connected: IP 65 (IEC 60529)
Mating Cycles	min. 500

Properties AX5000 plug	
Contact material	Cu-Leg
Contact surface	tin-plated
Insulator	PBT
Licence	CSA, UL 1059
RoHS conformity	yes

Motor cable extension ZK4501-8024-zzzz



Plug connector	Contact	Function	Core identification	Contact	Plug connector
<p>Mating view</p>	A	U	black / 1	A	<p>Mating view</p>
	B	V	black / 2	B	
	C	W	black / 3	C	
	D	PE	green/ yellow	D	
	E	Temp. - / OCT -	blue	E	
	F	Screen	Screen	F	
	G	Brake +	black / 5	G	
	H	Temp. + / OCT +	white	H	
	L	Brake -	black / 6	L	

Catalog data	Motor cable extension for motor cable ZK4500-8024-zzzz
Catalog text	2.5 mm <sup>2</sup> with M23-speedtec® plug, highly flexible, for drag-chain use
Servomotor	AM8x4x up to AM8x6x
Servo Drive	AX5000 (18...25 A)
Catalog description	(4x2.5mm <sup>2</sup> + (2x1.0mm <sup>2</sup> )C + (2xAWG22))

Electrical properties at 20°C	
Max. operating voltage	1000 VAC (UL)
Direct current resistance	≤ 55.0 Ω/km (AWG22) / ≤ 20.0 Ω/km (1.0 mm <sup>2</sup> ) / ≤ 7.98 Ω/km (2.5 mm <sup>2</sup> ), DIN EN 50395
Insulation resistance	≥ 500 MΩ x km, DIN EN 50395
Operating capacity at 800 Hz	score / screen ≤ 150 pF/m (2.5mm <sup>2</sup> ), EN 50289-1-5

Mechanical properties	
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Color	Orange, like RAL 2003
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RoHS conformity	Yes
Silicon-free	Yes
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Properties motor plug	
Housing	brass, zinc diecast; nickel-plated and chromated
Connecting Nut	Brass, zinc diecast; nickel-plated
Contacts	brass gold plated
Seals	FPM/HNBR (Viton)
Clamp Ring	brass nickel-plated
Protection Type	connected: IP 65 (IEC 60529)
Mating Cycles	min. 500