Specification		XX & XX-14 & CRYSTAL	EMC Series	XX-HD Series	XX-HE Series	RX Series	XX Crimp Series	convert-CON Series
Electrical								
Number of contacts		3 - 7 [1]	3	3	3	3 - 7	3	3
Contact resistance	≤ 3 mΩ	●	●	●	●	●	●	●
Insulation resistance - initial:	> 2 GΩ	●	●	●	●	●	●	●
- after damp heat test:	> 1 GΩ	●	●	●	●	●	●	●
Dielectric strength	1.5 kV dc	●	●	●	●	●	●	●
Cable shield-shell connection	choosable	●	-	●	●	●	●	●
	determined	-	capacitive	-	-	-	-	-
Shielding effectiveness	> 55 dB @ 1.3 GHz	-	●	-	-	-	-	-
Lossy ferrite bead on PIN 1		-	●	-	-	-	-	-
Rated current per contact @ 35°C								
3 pole:	16 A	●	5 A	●	●	●	1 A	●
4 pole:	10 A	●	-	-	-	●	-	-
5, 6 pole:	7.5 A	●	-	-	-	●	-	-
7 pole:	5 A	●	-	-	-	●	-	-
Capacitance between contacts								
3 pole:	≤ 4 pF	●	●	●	●	●	●	●
4, 5, 6 pole:	≤ 7 pF	●	-	-	-	●	-	-
7 pole:	≤ 9 pF	●	-	-	-	●	-	-
Rated Voltage	50 V ac	●	●	●	●	●	●	●
Mechanical								
Lifetime > 1`000 cycles		●	●	●	●	●	●	●
Insertion / withdrawal force ≤ 20 N		●	●	●	●	●	●	●
Cable O.D. range	3.5 - 8.0 mm	● [2]	●	6.0 - 8.0 mm	●	●	●	●
Max. wire size 3 pole:	2.5 mm² / AWG 14	●	AWG 20	●	●	●	-	●
4 pole:	1.5 mm² / AWG 16	●	-	-	-	●	-	-
5, 6, 7 pole:	1.0 mm² / AWG 18	●	-	-	-	●	-	-
Crimp tool: 6.5 mm Hex die (size "E" acc. to IEC 60352-2)		-	-	-	-	-	●	-
Crimp XX:	0.22 - 0.34 mm² / AWG 24 - 22	-	-	-	-	-	●	
Material								
Shell	Zinc diecast (ZnAl4Cu1)	●	●	-	●	●	●	●
	Stainless steel	-	-	-	-	-	-	-
Shell plating	gal Ni or black Cr	●	gal Ni	-	velour Cr	●	●	●
Insert	Polyamide PA 6.6 30% GR	●	●	●	PPS 40% GR	●	●	●
Contacts - female 3 pole:	Bronze (CuSn8)	●	●	●	●	●	●	●
- female 4 - 7 pole & male:	Brass (CuZn39Pb3)	●	●	●	●	●	-	-
Contact surface Silver	gal 2 µm Ag	●	-	-	-	●	●	-
Gold	gal 0.2 µm Au hard alloy over 2 µm Ni	●	●	●	●	●	-	●
Latch lock St3K32 (latch) / Ck 67 (spring)		-	-	-	-	-	-	-
	Zinc diecast (ZnAl4Cu1) / CK67 (Spring)	●	●	●	●	●	●	●
Strain-relief clamp	POM	●	●	●	●	●	●	●
Bushing	PA / PU	●	●	●	●	●	●	●
Circumferential ground spring	Bronze (CuSn6), Ni plated	-	●	-	-	-	-	-
Crimp ferrule	Brass (CuZn39Pb3), Ni plated	-	-	-	-	-	-	-
Coding ring	Polyamide PA 6 15% GR	-	-	-	-	-	-	-
Sealing jacket	EPDM	-	-	●	-	-	-	-
Securing ring	Brass (CuZn39Pb3)	-	-	-	-	-	-	-
Environmental								
Operating temperature	-30°C to +80°C	●	●	●	●	●	●	●
Flammability	UL 94 HB	●	●	●	V-0	●	●	●
Protection class	IP 40	●	●	IP 67	●	●	●	●
Solderability complies with IEC 68-2-20		●	●	●	●	●	●	●
Manufacturing Standard IEC 61076-2-103		●	●	●	●	●	●	●

[1] : XX-14, CRYSTAL: 3 pole

[2] : XX-14: Cable O.D. 8.0 - 10.0 mm

Specification		X Series	XCC Series	X-HD Series	FXS Series	FX-SPEC Series
Electrical						
Number of contacts		3 - 7	3	3 - 5	3	3
Contact resistance	≤ 3 mΩ	●	●	●	●	●
Insulation resistance - initial:	> 2 GΩ	●	●	●	●	●
- after damp heat test:	> 1 GΩ	●	●	●	●	●
Dielectric strength	1500 V dc	●	●	●	●	●
Cable shield-shell connection	choosable	●	-	●	-	●
	determined	-	crimp	-	-	-
Shielding effectiveness	> 55 dB @ 1.3 GHz	-	●	-	-	-
Lossy ferrite bead on PIN 1		-	-	-	-	-
Rated current per contact @ 35°C						
3 pole:	16 A	●	●	●	●	●
4 pole:	10 A	●	-	●	-	-
5, 6 pole:	7.5 A	●	-	●	-	-
7 pole:	5 A	●	-	-	-	-
Capacitance between contacts						
3 pole:	≤ 4 pF	●	●	●	●	●
4, 5, 6 pole:	≤ 7 pF	●	-	●	-	-
7 pole:	≤ 9 pF	●	-	-	-	-
Rated Voltage	50 V ac	●	●	●	●	●
Mechanical						
Lifetime > 1`000 cycles		●	●	●	●	●
Insertion / withdrawal force ≤ 20 N		●	●	●	●	●
Cable O.D. range	3.5 - 8.0 mm	●	5.4 - 6.2 mm	●	3.5 - 7.0 mm	●
Max. wire size 3 pole:	2.5 mm² / AWG 14	●	●	●	●	●
4 pole:	1.5 mm² / AWG 16	●	-	●	-	●
5, 6, 7 pole:	1.0 mm² / AWG 18	●	-	●	-	-
Crimp tool:	6.5 mm Hex die (size "E" acc. to IEC 60803)	-	●	-	-	-
Crimp XX:	0.22 - 0.34 mm² / AWG 24 - 22	-	-	-	-	-
Material						
Shell	Zinc diecast (ZnAl4Cu1)	●	●	female	●	●
	Stainless steel	-	-	male	-	-
Shell plating	gal Ni or black Cr	-	●	female	●	●
Insert	Polyamide PA 6.6 30% GR	●	●	●	●	●
Contacts - female 3 pole:	Bronze (CuSn8)	●	●	●	●	●
- female 4 - 7 pole & male:	Brass (CuZn39Pb3)	●	●	●	-	-
Contact surface Silver	gal 2 µm Ag	●	●	Au	●	Au
or Gold	gal 0.2 µm Au hard alloy over 2 µm Ni					
Latch lock St3K32 (latch) / Ck 67 (spring)		●	●	●	●	●
	Zinc diecast (ZnAl4Cu1)	-	-	-	-	-
Strain-relief clamp	POM	●	●	●	●	●
Bushing	PA / PU	●	●	PU	PU	●
Circumferential ground spring	Bronze (CuSn6), Ni plated	-	●	-	-	-
Crimp ferrule	Brass (CuZn39Pb3), Ni plated	-	●	-	-	-
Coding ring	Polyamide PA 6 15% GR	-	●	-	-	-
Sealing jacket	EPDM	-	-	●	-	-
Securing ring	Brass (CuZn39Pb3)	-	-	-	-	●
Environmental						
Operating temperature	-30°C to +80°C	●	●	●	●	●
Flammability	UL 94 HB	●	●	●	●	●
Protection class	IP 40	●	●	IP 65	●	●
Solderability complies with IEC 68-2-20		●	●	●	●	●
Manufacturing Standard IEC 61076-2-103		●	●	●	●	●