

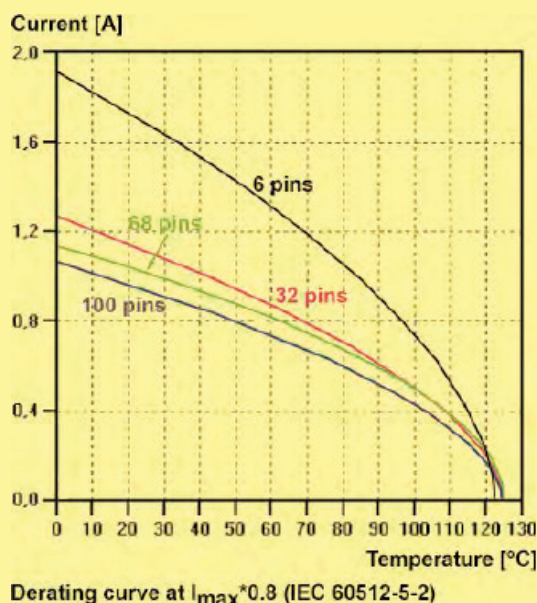
Number of contacts	6, 8, 10 ... 96, 98, 100
Connector pitch	1.27 mm x 1.27 mm [0.050" x 0.050"]
Clearance and creepage distance	
Board connectors (SMT)	min. 0.4 mm
Cable connectors (IDC)	
AWG 30/1 (solid)	min. 0.35 mm
AWG 30/7 (stranded)	min. 0.4 mm
Test voltage $U_{r.m.s.}$	500 V
Contact resistance	< 25 mΩ
Insulation resistance	> 10 GΩ
Insertion and withdrawal force	approx. 0.5 N / contact
Working temperature range	- 55 °C ... + 125 °C
The higher temperature limit includes the local ambient and heating effects of the contacts under load	
Temperature during reflow soldering (acc. to ECA/IPC/JEDEC J-STD-075 Level PSL R0)	min. 150 s > 217 °C min. 30 s > 240 °C
Electrical termination	
Board connectors	SMT (Surface Mount Technology)
Cable connectors	IDC (Insulation Displacement Connection)
Materials	
Moulding material	LCP
UL approval	UL 94-V0
CTI value (Comparative Tracking Index)	175
Contacts base material	Copper alloy
Contact surface	
Mating side	
Board connectors	Au over PdNi (acc. performance level)
Cable connectors	Au over PdNi (acc. performance level)
Termination side	
Board connectors (SMT)	Sn
Cable connectors (IDC)	Sn
Flat cable requirements for IDC connectors	
PVC flat cables:	AWG 30/1 (solid) AWG 30/7 (stranded)
PTFE flat cables:	AWG 30/1 (solid)
Insulation diameter:	min. 0.55 mm - max. 0.75 mm
Working current acc. to IEC 60512	
70 °C ambient temperature @ 80 % derating	
6 pins	1.2 A
32 pins	0.8 A
68 pins	0.75 A
100 pins	0.7 A

### Current carrying capacity

The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals.

The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60512.



### Durability

#### Performance level 1 (recommended for majority of applications)

Initial 250 mating cycles, 10 days gas test (25 °C/75 % r.h.) using H<sub>2</sub>S 10 ppb, NO<sub>2</sub> 200 ppb, CL<sub>2</sub> 10 ppb, SO<sub>2</sub> 200 ppb. Measurement of contact resistance. The remaining 250 mating cycles are subject to measurement of contact resistance and visual inspection. Visual inspection. No abrasion of the contact finish through to the base material. No functional impairment.

Part number definition: 15 .. ... 2... ...

#### Performance level 2

Initial 125 mating cycles, 4 days gas test (25 °C/75% r.h.) using H<sub>2</sub>S 10 ppb, NO<sub>2</sub> 200 ppb, CL<sub>2</sub> 10 ppb, SO<sub>2</sub> 200 ppb. Measurement of contact resistance. The remaining 125 mating cycles are subject to measurement of contact resistance and visual inspection. Visual inspection. No abrasion of the contact finish through to the base material. No functional impairment.

Part number definition: 15 .. ... 6... ...

#### Performance level S4

Defined contact surface of min. 0.06 μm Au over 0.7+0.2 μm PdNi.

Part number definition: 15 .. ... 5... ...