

# AMPHENOL AT SERIES™ SPECIFICATIONS

The connector design incorporates an integral latching system that ensures a definitive electrical and mechanical connection. Connector housings are manufactured with a thermoplastic material that is not only durable, but has excellent UV resistance, dielectric/mechanical properties and is environmentally RoHS compliant. The sealing system is comprised of a front and rear silicone, multi-sealing, perimeter against environmental ingress. Contacts are derived from quality copper alloy to ensure an electrically-reliable connection. These are suited for applications demanding higher levels of performance.

### **Performance Criteria**

CURRENT CAPACITY	No. 16, 13 amps (max)				
WIRE RANGE	No. 16, contacts will accept wire ranges of 0.5mm2 to 2.0mm2 (14-20AWG)				
TEMPERATURE	Operating temperature range: -55°c to +125°c at rated current				
DIELECTRIC VALUE	Meets or exceeds 1500 volts minimum				
FLAME RESISTANCE	All dielectric materials have a flammability rating of UL94 HB or better				
DROP TEST	Shall not become detached or loosened when placed at 750mm and dropped to concrete eight times				
SHOCK	No latch disengagement or discontinuity shall be the result when subjected to 50 g's in each of three axis (X, Y & Z)				
VIBRATION	Continued continuity without degradation to mechanical or physical attributes following vibration (max acceleration 20 g's at Sine sweep of 10–2000Hz)				
CONNECTOR TERMINAL Retention	When subjected to a direct pull, 0.5mm <sup>2</sup> to 2.0mm <sup>2</sup> achieves mini- mum pull-out force of 110 newtons				
CONNECTOR RETENTION	A mated connector subjected to a pulling force by the exiting wire bundle at 111 newtons times the number of contacts to a maximum of 444 newtons applying load for 30 seconds				
THERMAL SHOCK	Subjected to 10 cycles at -55 $^{\circ}$ c to +125 $^{\circ}$ c with no cracking, chipping or other damage detrimental to the normal operation of the connector				
INSULATION RESISTANCE	Insulation resistance at 25°C shall be greater than 20 megohms when 1000 VDC are applied				
MATING CYCLE DURABILITY	Following 100 cycles of connection engagement and disengagement, degradation either mechanical or electrical is not evident				
CONTACT MILLIVOLT DROP No. 16 contacts with 16 awg conductor – *100 millivolt drop m 13 amps test current					
ULTRAVIOLET EFFECTS	Test the mated connectors for 1000 hours per ASTM G 154 or ASTM G 153 with 20 hours UV and 4 hours of condensation for each cycle				
WATER IMMERSION	A mated connection, properly wired, placed in an oven at +125°C for 1 hour, then placed immediately in a depth of water of 1 meter for 4 hours without loss of electronic performance (IP67 RATED)				

#### **Product Material**

HOUSINGS	Thermoplastic
SEALS	Silicone Elastomer
SECONDARY LOCKS	Thermoplastic
CONTACTS	Nickel Plated













## AMPHENOL AT SERIES™ 2, 3, 4, 6, 8 & WAY CONNECTORS

Packaged sets of receptacles, plugs & wedges

CODE	PART NO. 88010264
	1 x 2 PIN RECEPTACLE (AT04-2P)
	1 x 2 PIN RECEPTACLE WEDGE
	1 x 2 PIN PLUG (AT06-2S)
	1 x 2 PIN PLUG WEDGE
	2 x SOLID CRIMP PIN CONTACTS (NICKEL)
	2 x SOLID CRIMP SOCKET CONTACTS (NICKEL)
	PART NO. 88010265
	1 x 3 PIN RECEPTACLE (AT04-3P)
	1 x 3 PIN RECEPTACLE WEDGE
	1 x 3 PIN PLUG (AT06-3S)
	1 x 3 PIN PLUG WEDGE
	3 x SOLID CRIMP PIN CONTACTS (NICKEL)
	3 x SOLID CRIMP SOCKET CONTACTS (NICKEL)
	PART NO. 88010266
	1 x 4 PIN RECEPTACLE (AT04-4P)
	1 x 4 PIN RECEPTACLE WEDGE
	1 x 4 PIN PLUG (AT06-4S)
	1 x 4 PIN PLUG WEDGE
	4 x SOLID CRIMP PIN CONTACTS (NICKEL)
	4 x SOLID CRIMP SOCKET CONTACTS (NICKEL)
C	PART NO. 88010267
	1 x 6 PIN RECEPTACLE (AT04-6P)
	1 x 6 PIN RECEPTACLE WEDGE
	1 x 6 PIN PLUG (AT06-6S)
	1 x 6 PIN PLUG WEDGE
	6 x SOLID CRIMP PIN CONTACTS (NICKEL)
	6 x SOLID CRIMP SOCKET CONTACTS (NICKEL)
	PART NO. 8801 <u>0268</u>
	1 x 8 PIN RECEPTACLE (AT04-08PA)
	1 x 8 PIN RECEPTACLE WEDGE
	1 x 8 PIN PLUG (AT06-08SA)
	1 x 8 PIN PLUG WEDGE
	8 x SOLID CRIMP PIN CONTACTS (NICKEL)
	8 x SOLID CRIMP SOCKET CONTACTS (NICKEL)
	PART NO. 8801 <u>0269</u>
	1 x 12 PIN RECEPTACLE (AT04-12PA)
	1 x 12 PIN PLUG (AT06-12SA)
	1 x 12 PIN PLUG (AT06-12SA) 1 x 12 PIN PLUG WEDGE
	1 x 12 PIN PLUG (ATO6-12SA) 1 x 12 PIN PLUG WEDGE 12 x SOLID CRIMP PIN CONTACTS (NICKEL)

## SA CONNECTORS

## AMPHENOL PIN & SOCKET CONTACTS

### Military-Style Solid Crimp

These Military-Style Solid Crimp Contacts are derived from Nickel to ensure an electrically-reliable connection. For applications demanding higher levels of performance, you can rely on our contact technology. Both Nickel and Gold contacts utilise the simple crimp-style termination, requiring no solder usage. Two sizes of contacts available. RoHS Compliant.







AMPHENOL PINS & SOCKETS

CODE	PART NO.	SIZE/TYPE	A MAX	В МАХ	C MAX	D MIN	WIRE GAUGE RANGE	RECOMM'D Strip Length	PACK QT	Y
C	88010295 (NICKEL)	16 PIN	20.6	1.67	2.61	6.4	16 & 18	6.4–7.9	100	
U	88010297 (NICKEL)	16 SOCKET	19.0	1.67	2.61	6.4	16 & 18	6.4–7.9	100	

CODE	PART NO.	SIZE/TYPE	A MAX	В МАХ	C MAX	D MIN	WIRE GAUGE RANGE	RECOMM'D Strip Length	PACK QTY
C	88010299 (NICKEL)	16 PIN	20.6	2.6	3.3	6.4	14	6.4–7.9	100
U	88010300 (NICKEL)	16 SOCKET	19.0	2.6	3.3	6.4	14	6.4–7.9	100

### **Amphenol AT Series Kit**

PART NO.	SIZE/TYPE				
PART NO.:QKAT-RK1100					
2 PIN RECEPTACLE	15				
2 PIN PLUG	15				
2 PIN RECEPTACLE WEDGE	15				
2 PIN PLUG WEDGE	15				
3 PIN RECEPTACLE	10				
3 PIN PLUG	10				
3 PIN RECEPTACLE WEDGE	10				
3 PIN PLUG WEDGE	10				
4 PIN RECEPTACLE	10				
4 PIN PLUG	10				
4 PIN RECEPTACLE WEDGE	10				
4 PIN PLUG WEDGE	10				
6 PIN RECEPTACLE	10				
6 PIN PLUG	10				
6 PIN RECEPTACLE WEDGE	10				

PART NO.	SIZE/TYPE				
PART NO.:QKAT-RK1100					
6 PIN PLUG WEDGE	10				
8 PIN RECEPTACLE	5				
8 PIN PLUG	5				
8 PIN RECEPTACLE WEDGE	5				
8 PIN PLUG WEDGE	5				
12 PIN RECEPTACLE	5				
12 PIN PLUG	5				
12 PIN RECEPTACLE WEDGE	5				
12 PIN PLUG WEDGE	5				
PIN CONTACTS SOLID CRIMP NICKEL (SIZE 16)	150				
SOCKET CONTACTS SOLID CRIMP NICKEL (SIZE 16)	150				
SEALING PLUGS (SIZE 16)	20				
CONTACT AND WEDGE REMOVAL TOOL	1				
HAND CRIMP TOOL	1				



88010298-000



**QKAT-RK1100** 

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