

Amphenol Connectors |

Description	Plugs Stock No.	Receptacles Stock No.
2-way	38170	38171
3-way	38172	38173
4-way	38174	38175
6-way	38176	38177
8-way	38178	38179
12-way	38180	38181

Wedge in Plugs Stock No.	Wedge in Receptacle Stock No.
38182	38183
38184	38185
38186	38187
38188	38189
38190	38191
38192	38193



Circuit Plug
Stock No.
38491

Amphenol connectors were designed as a high-performance, cost-effective solution to be used within the Heavy Equipment, Agricultural, Automotive, Military, Alternative Energy and other demanding interconnect architectures. The connectors contain superior environmental seals. In addition, the connectors have been developed to be completely compatible with all other existing standard products industry-wide.

- 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 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.
- Amphenol Receptacles must be used with the Amphenol Wedge locks in order to mate properly. Terminals can be interchangeable with Deutsch DT terminals.

Wire Range AWG	Socket Terminals for Plugs Stock No.	Reel Stock No.	Pin Terminals for Receptacle Stock No.	Reel Stock No.
16-18	38194	38194R	38195	38195R
14-16	38196	38196R	38197	38197R

Crimp Tool Stock No.
613

UNCONTROLLED DOCUMENT
Updated 5/27/2010



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Performance Criteria NOTE: All testing meets **SAE J2030** specifications

CONTACT SIZE 16 CURRENT CAPACITY	13 amps (max)
WIRE RANGE	14 thru 18 awg
TEMPERATURE	Operating temperature range: -55°C to +125°C at rated current
DIELECTRIC VALUE	Meets or exceeds 1500 volts minimum
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, size 14-18 achieves minimum pull-out force of 110 newtons
THERMAL SHOCK	Subjected to 10 cycles at 55°C to +125°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	16 awg conductor - *100 millivolt drop max at 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

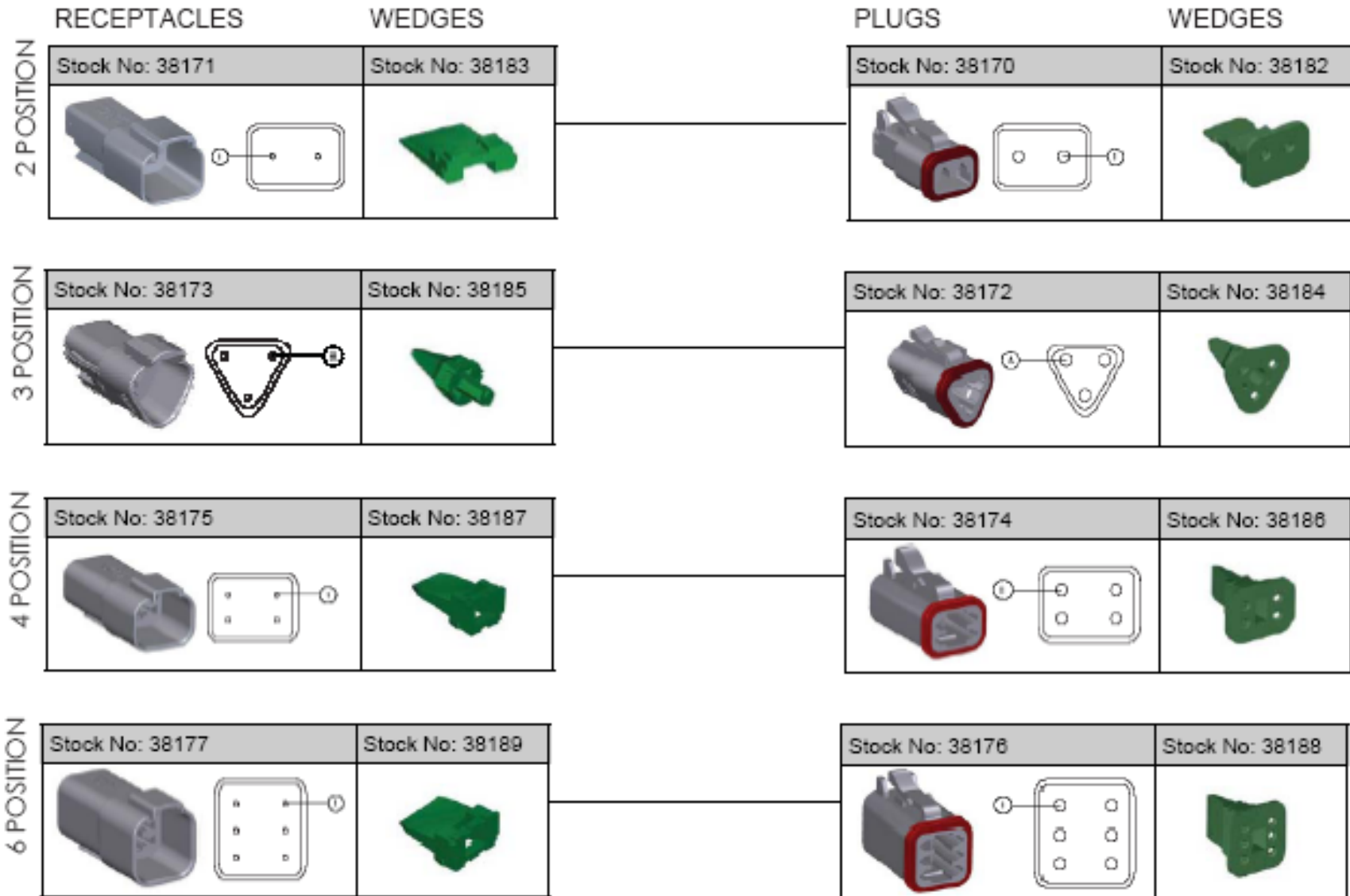
Product Material

HOUSINGS	Thermoplastic
SEALS	Silicone Elastomer
SECONDARY LOCKS	Thermoplastic
CONTACTS	Nickel Plated

Receptacles, Plugs and Wedges - 2, 3, 4 and 6 Position



Note: The views shown below are Mating Face Views



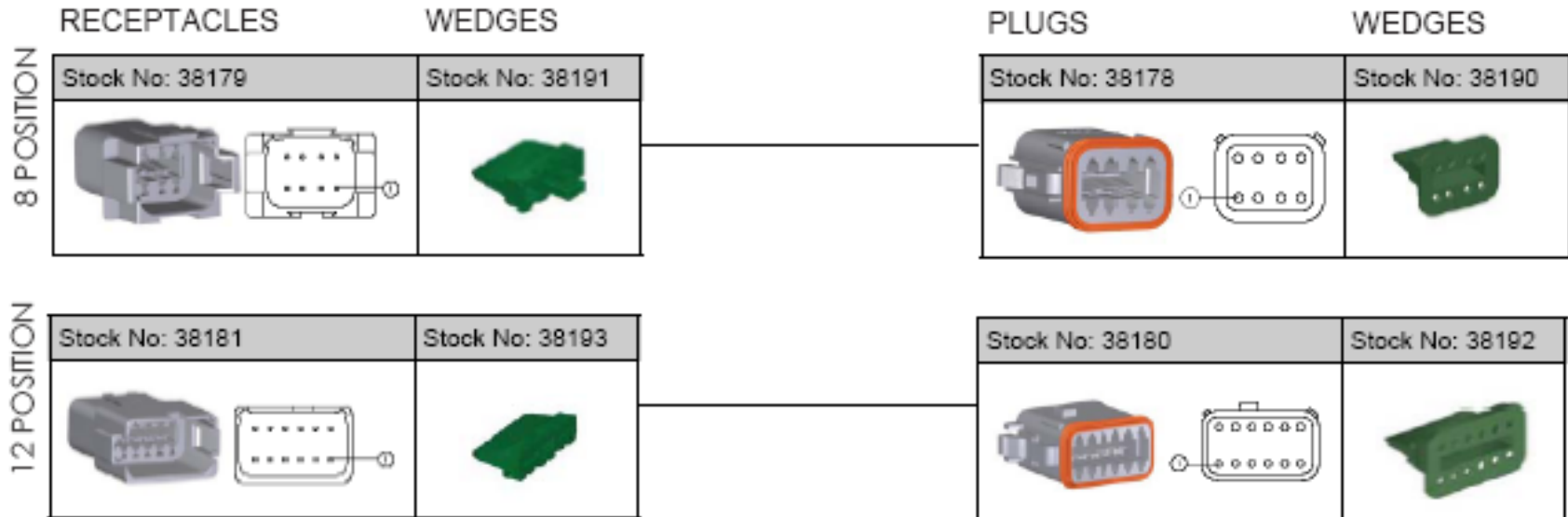
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Receptacles, Plugs and Wedges - 8 and 12 Position

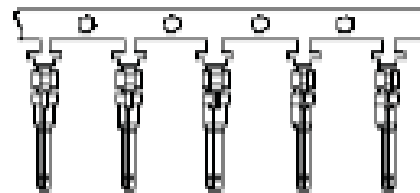


Note: The views shown below are Mating Face Views

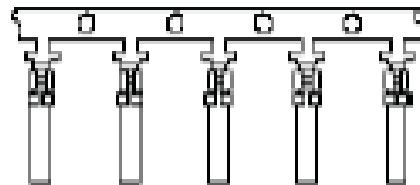


Hyperbolic Contacts: Pins and Sockets

- Longer contact life
- Lower contact resistance
- Immunity to shock and vibration
- Low insertion and extraction forces
- Contact area extends 360° around pins
- Recommended Strip Length .125 - .175
- Material: Nickel
- Contact Size 16
- Stamped & Formed



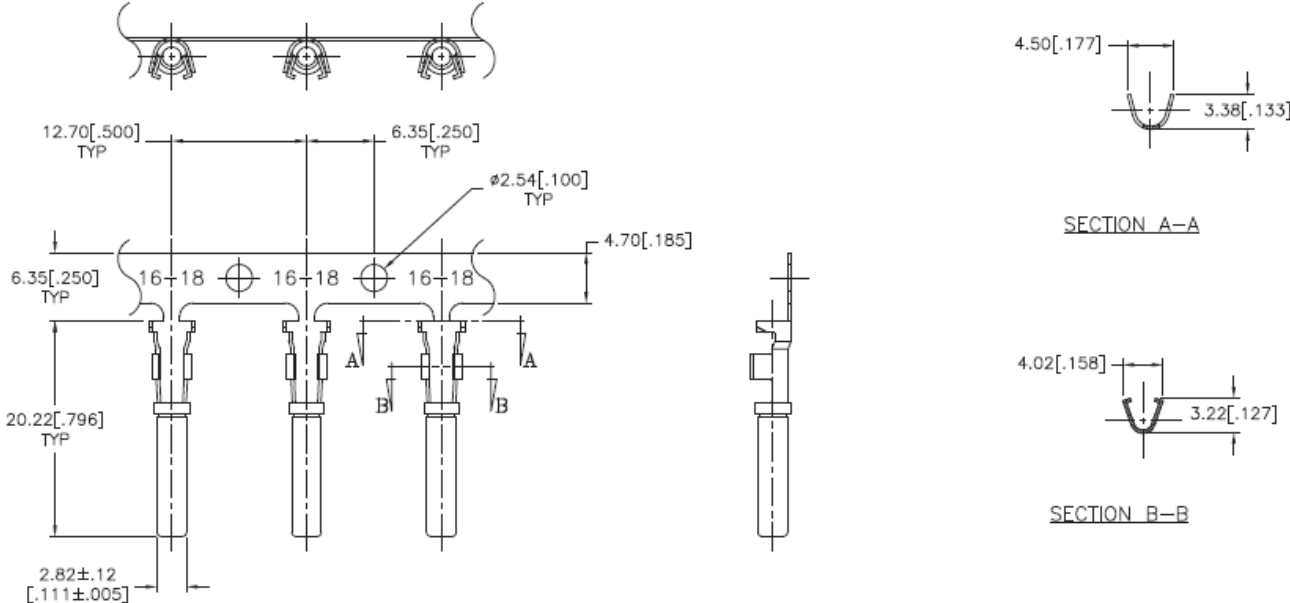
Pins: Comes in a reel, or single



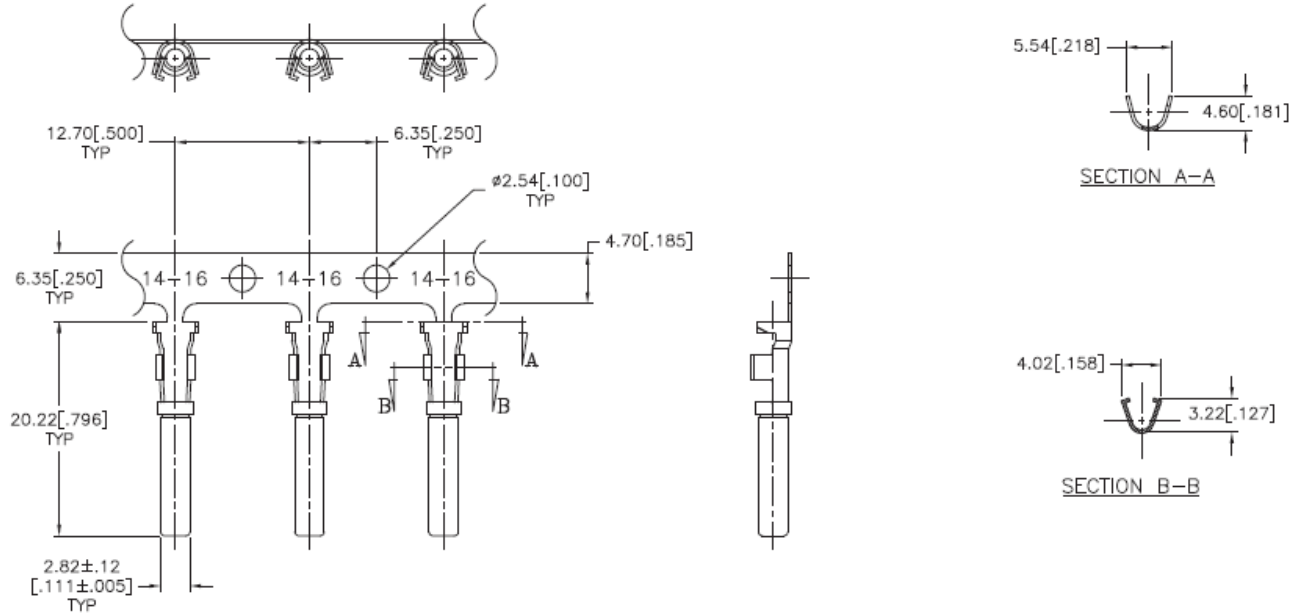
Sockets: Comes in a reel, or single

Hyperbolic Contacts: Sockets

Stock No. 38194

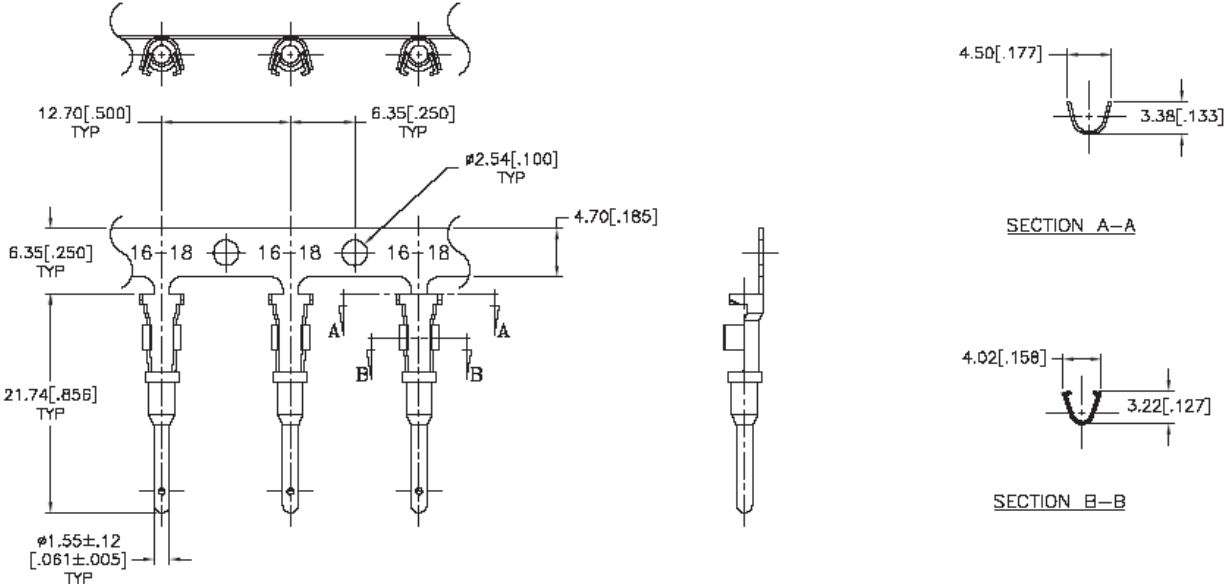


Stock No. 38196



Hyperbolic Contacts: Pin

Stock No. 38195



Stock No. 38197

