Timer Interconnection System

for the Automotive Industry

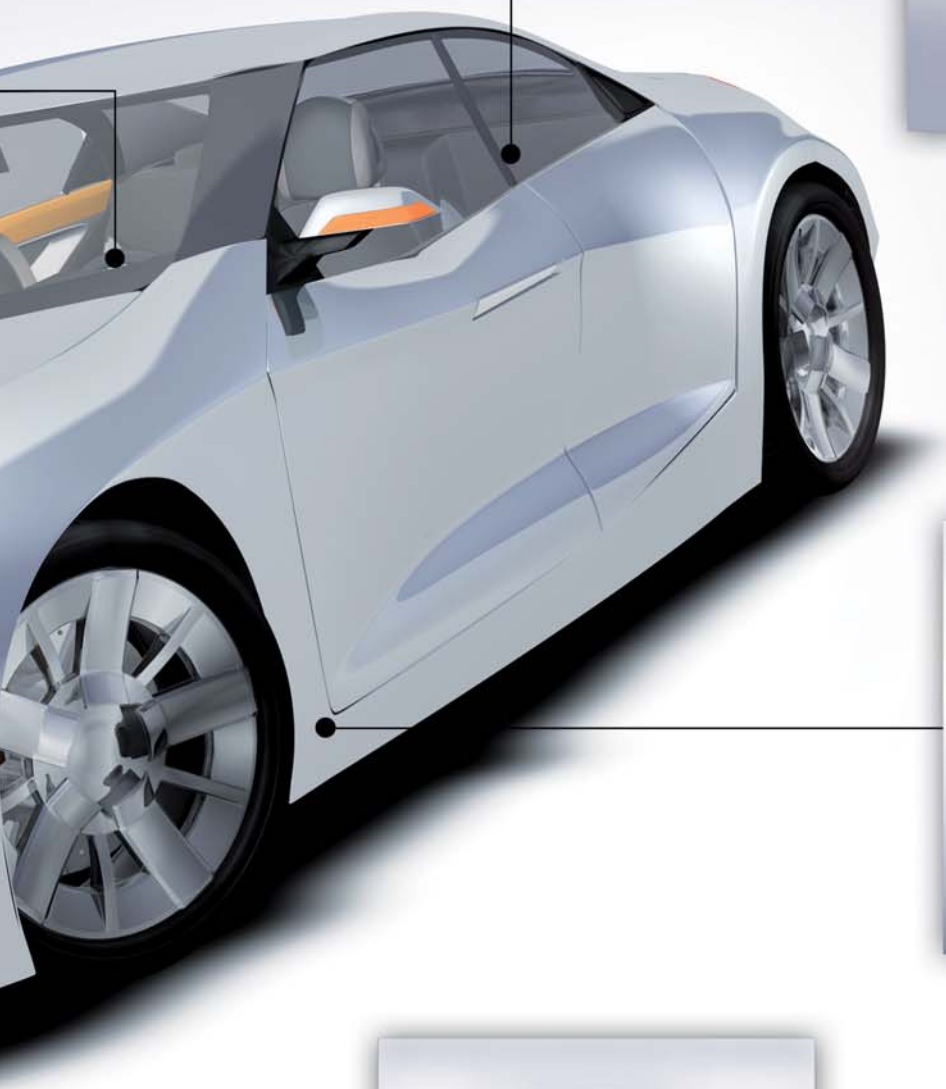
TE connectivity

AUTOMOTIVE

Driver Information

Powertrain Systems

THE 5 APPLICATION AREAS



Convenience

Safety & Security Systems

Body & Chassis Systems

INNOVATIVE TECHNOLOGIES

TE Automotive – a business segment of TE Connectivity – follows the globalization goals of our customers, speeds up the integration of new technologies and enables our customers access to our vast product portfolio and services.

TERMINALS & CONNECTORS

TE Automotive offers a broad range of high quality terminals and connectors.
Our electrical/electronic interconnection products and solutions are used to electrically and mechanically join wires and cables, printed circuit boards, integrated circuit packages and batteries. TE Automotive expanding capabilities include new copper and fiber-optic connectors, wires, cables/cable management systems that are designed to meet automotive industry demands. Our brands encompass the broadest range of connectors in the world, including high-density, high-speed designs for leading-edge communications equipment.

ALTERNATIVE POWER SYSTEMS

COMPONENTS FOR ELECTRIC VEHICLES AND INFRASTRUCTURE OF TODAY, TOMORROW AND BEYOND

TE Automotive is a leader in products for the next-generation of transportation technologies in hybrid and electric vehicles. TE Automotive is your source for high voltage power distribution, high current contact systems, high voltage connectors and special cable assemblies, high voltage relays, sensors and temperature protection devices.
As a true global player, we are supplying value from in-car applications over the charging interface up to the infrastructure and the electrical grid – everything out of one hand.

CABLE ASSEMBLY SYSTEMS

TE Automotive is your partner for special cable assemblies.
We offer research and development capabilities, prototyping, samples as well as manufacturing facilities for special cable assemblies. This includes overmold technology, semi/fully automatic manufacturing, testing equipment and appliances for handling of high volume production.

SENSORS

Contact-less measuring eliminates interference effects, wear and tear, and provides increased reliability. TE Automotive, one of the largest technology providers for the automobile industry, offers contact-less sensors for a variety of applications.

As sensor manufacturer and processing partner, TE Automotive also provides project planning support for new sensor applications, assistance in the selection of the appropriate sensor technology for the respective application, and assistance with defining the corresponding mechanical, electrical and magnetic interface.

TE Automotive has a broad electro-mechanical portfolio that includes robust housing technologies, connector systems, and temperature stable designs based on foil and cable networks. This combination of technologies and experience ensures that reliable and cost effective sensor solutions are available for all application types.

INFOTAINMENT

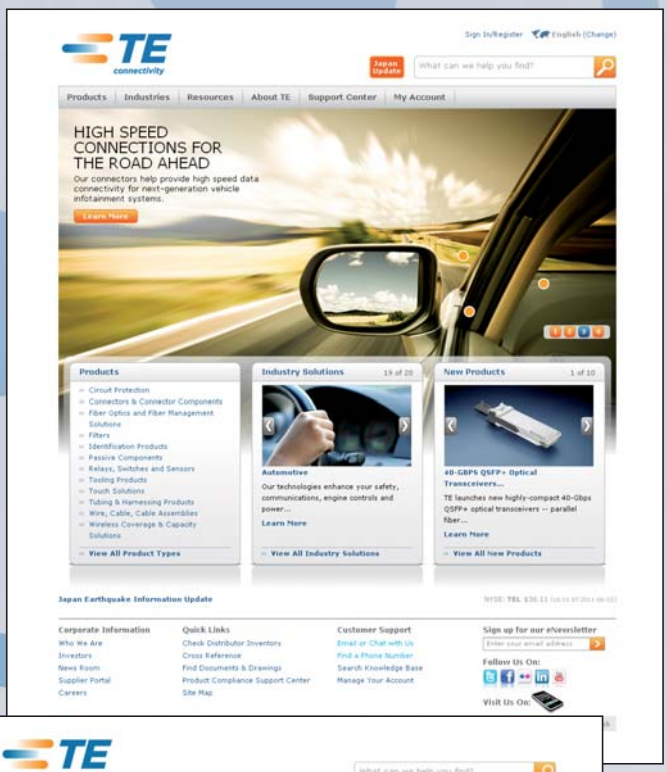
TE Automotive is the technology leader in high speed data communication in the automotive industry. TE Automotive offers high performance connectors based on optical, coaxial as well as shielded electrical cables.

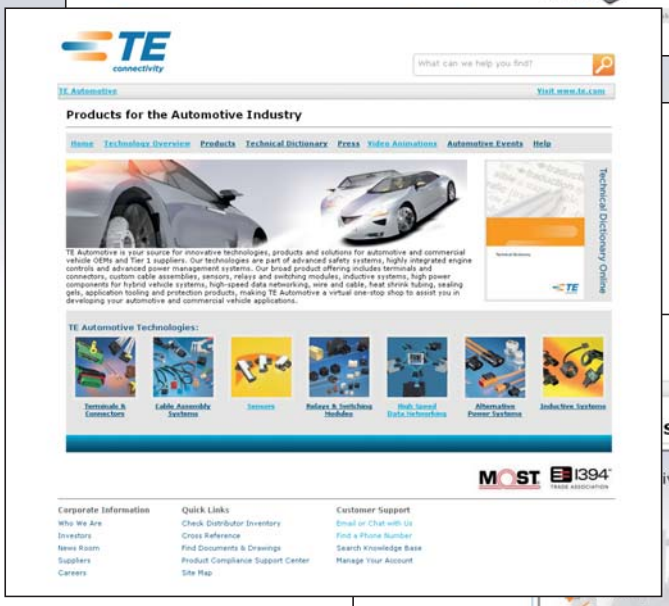
Through a deep understanding of the technical properties and requirements of signal integrity and combined with our application knowledge both in the vehicle as well as in the logistics chain, TE Automotive is well positioned to offer the right solution for all current and next generation Infotainment Systems.

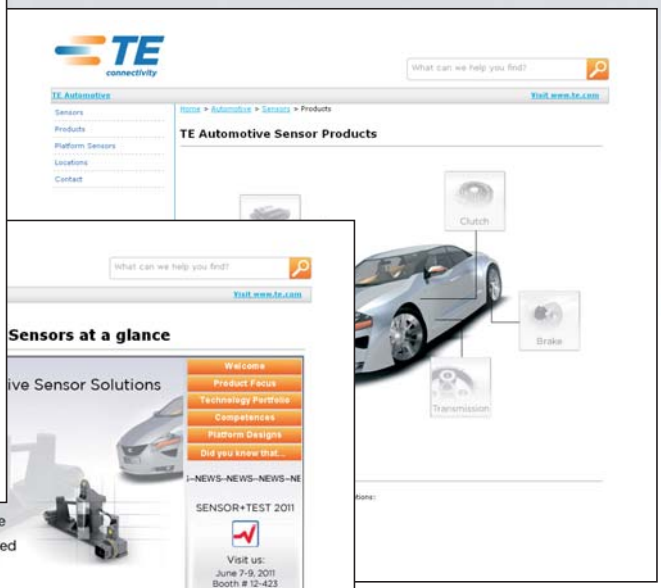
INDUCTIVE COIL SYSTEMS

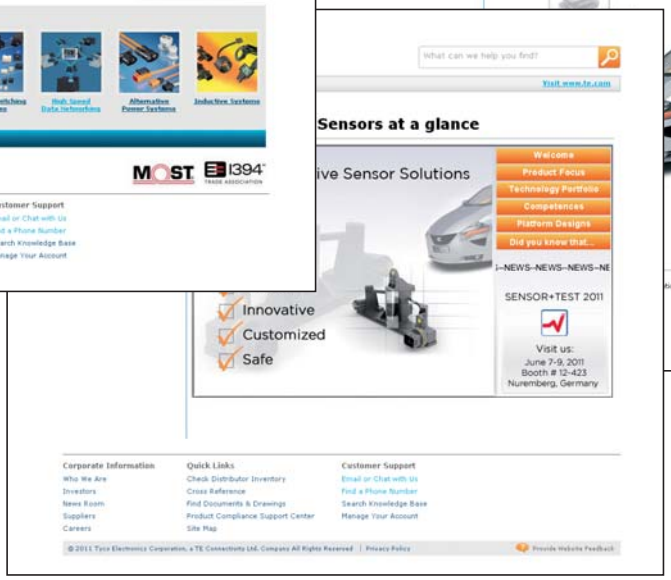
TE Automotive is your source for interconnection technologies for automotive, truck and off-highway OEMs and Tier 1 suppliers. With our global design center in Belgium and manufacturing sites in all regions, TE Automotive's Inductive Systems (ICS) group is ready to design your next-generation coil modules and provide local production support.

The ICS group maintains a leading market position in braking modules and other automotive coil applications. Through early involvement with you on your next design, TE Automotive can offer the benefits of miniaturization, design-in of platform components and optimized process flow for your standard, hybrid and E.V. project needs.









TE Automotive Online

The TE Automotive website is an innovative and interactive source for application information, product updates and technical solutions.
Please contact us at:
www.te.com/automotive

Internet

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www.te.com/automotive/most

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www.te.com/automotive/sensors
www.te.com/automotive/most

Product and Machine Literature

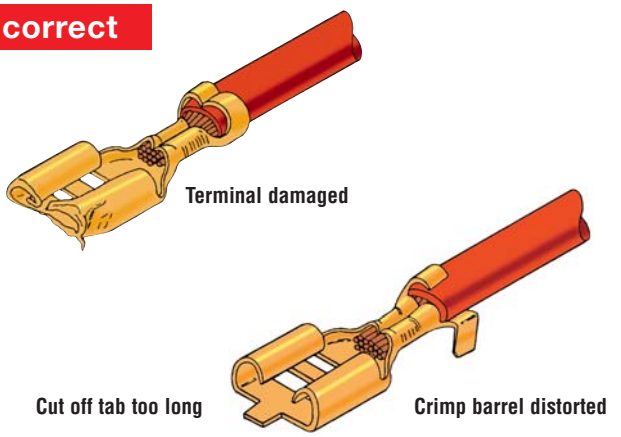
TE Automotive offers a variety of product specific catalogs, brochures and high impact flyers to help better serve you!
For more information on literature for TE Automotive, please contact your local organization or go to www.te.com/automotive

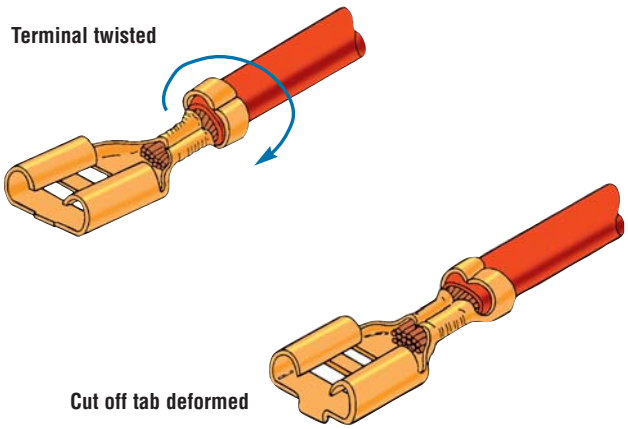
Product Information Center (PIC)

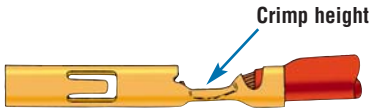
You can rely on TE Connectivity's PIC Team to provide you support for answers to your general information or technical questions in an efficient and effective manner.
To reach our PIC staff, please contact your local organization or see our Global Contacts page.
Please contact us at:
http://www.te.com/customersupport/support.asp

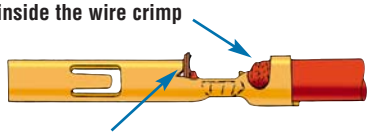
Quality Guidelines

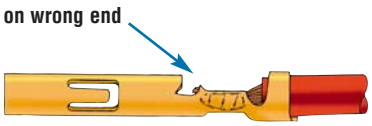
Incorrect



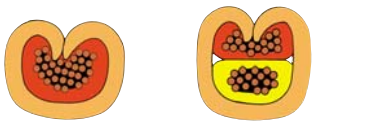








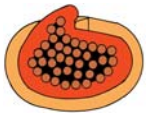
INSULATION CRIMP



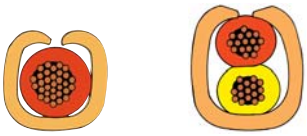
Insulation is pierced and could damage conductor

Insulation material is pierced

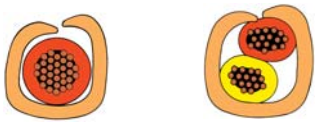
Insulation is not securely held



Insulation is over crimped



Insulation legs are not closed



Insulation is not securely held
Legs do not overlap

WIRE CRIMP

Incorrect applicator adjustment

Asymmetric crimp

Terminal feed incorrectly adjusted

Unacceptable formation excessive flash and/or cracks

Anvil and crimper not aligned or worn

Incorrect terminal/wire selection

Wire size too large

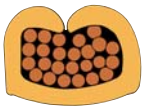
Crimp barrel does not close

Wire size too small

Legs too close to bottom of crimp. Insufficient deformation of strands, showing voids

Incorrect crimp height adjustment

Crimp height too loose



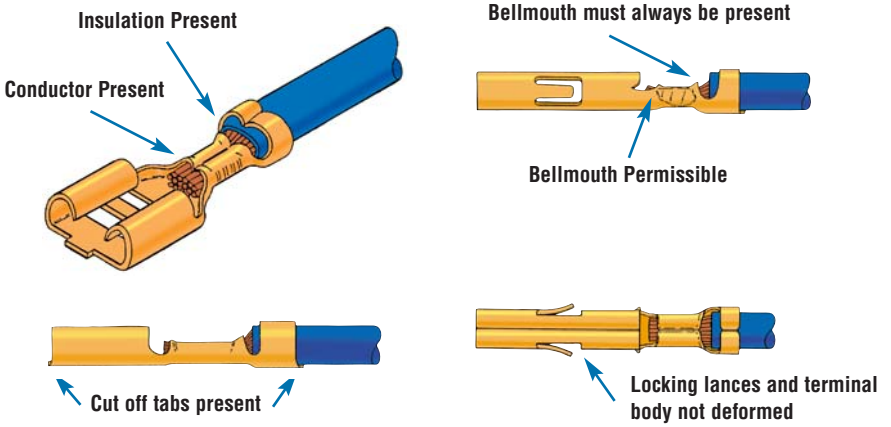
Insufficient deformation, showing voids

Crimp height too tight

Flash at under side of crimp, due to over crimping

Correct

WIRE CRIMP



Correct selection of wire, terminal and applicator

Crimp barrel is closed, legs support each other

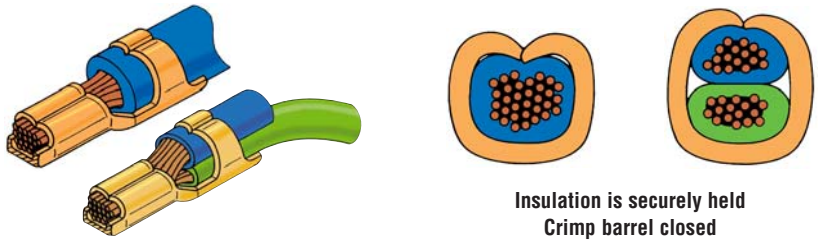
Sufficient gap between legs and bottom of crimp

All strands are equally distributed and deformed

INSULATION CRIMP

Correct Insulation Diameter, Applicator and Terminal

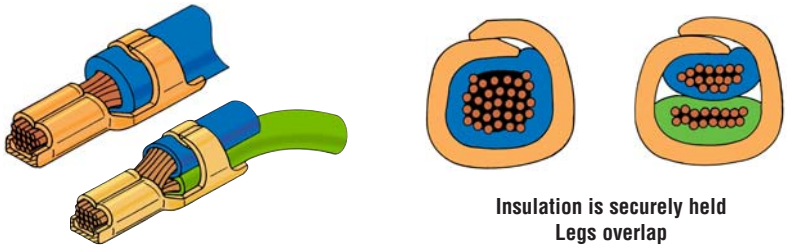
F-CRIMP



Insulation is securely held
Crimp barrel closed

For double wire applications with different size wires always place wire with smallest outer diameter in the bottom

OVERLAP CRIMP



Insulation is securely held
Legs overlap

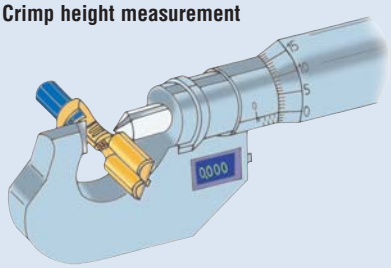
WRAP OVER CRIMP

Insulation securely held
Legs must pass each other

Test

WIRE CRIMP

Crimp height measurement



Crimp heights and tolerances

For crimp height tolerances for any given contact, please refer to the relevant application specification.

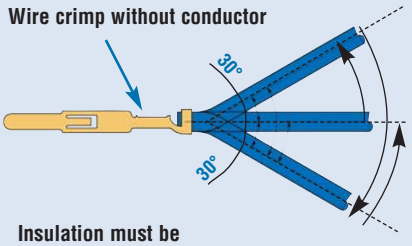
Examples:

Contact	Part No.	Wire Range (mm^2)	Tolerance (mm)	Application Spec.
MQS	962885 962886	0.2–0.5	±0.03	114-18025
JPT	927775	0.5–1.0	±0.05	114-18050
JPT	927773	1.5–2.5	±0.05	114-18050

Digital Crimp Height Micrometer
(0.001 mm increments) acc. to DIN ISO 9001
Part No. 547203-1

INSULATION CRIMP

Wire crimp without conductor



Insulation must be securely held after bend test

Restriction on the Use of Hazardous Substances (RoHS)

At TE Connectivity, we're ready to support your RoHS requirements. We've assessed more than 1.5 million end items/components for RoHS compliance, and issued new part numbers where any change was required to eliminate the restricted materials. Part numbers in this catalog are identified as:

RoHS Compliant

Part numbers in this catalog are RoHS Compliant, unless marked otherwise.

These products comply with European Union Directive 2002/95/EC as amended 1 January 2006 that restricts the use of lead, mercury, cadmium, hexavalent chromium, PBB, and PBDE in certain electrical and electronic products sold into the EU as of 1 July 2006.

Note: For purposes of this Catalog, included within the definition of RoHS Compliant are products that are clearly "Out of Scope" of the RoHS Directive such as hand tools and other non-electrical accessories.

Non-RoHS Compliant

These part numbers are identified with a "♦" symbol. These products do not comply with the material restrictions of the European Union Directive 2002/95/EC.

5 of 6 Compliant

A "●" symbol identifies these part numbers. These products do not fully comply with the European Union Directive 2002/95/EC because they contain lead in solderable interfaces (they do not contain any of the other five restricted substances above allowable limits). However, these products may be suitable for use in RoHS applications where there is an application-based exception for lead in solders, such as the server, storage, or networking infrastructure exemption.

Note: Information regarding RoHS compliance is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information provided by our suppliers. This information is subject to change. For latest compliance status, refer to our website referenced below.

Getting the Information You Need

Our comprehensive on-line RoHS Customer Support Center provides a forum to answer your questions and support your RoHS needs. A RoHS FAQ (Frequently Asked Questions) is available with links to more detailed information. You can also submit RoHS questions and receive a response within 24 hours during a normal work week. The Support Center also provides:

- Cross-Reference from Non-compliant to Compliant Products
- Ability to browse RoHS Compliant Products in our on-line catalog: http://www.te.com/commerce/alt/RohsAltHome.do
- Downloadable Technical Data Customer Information Presentation
- More detailed information regarding the definitions used above

RoHS Customer Support Center

So whatever your questions when it comes to RoHS, we've got the answers at http://www.te.com/customersupport/rohssupportcenter/

AWG Conversion Table (Average Value)

Conversion Tables

Most of the wire size ranges are mentioned in mm^2, as well as the insulation diameters which are in many cases only in mm's.

We therefore included the conversion tables on page X and page XI.

Please note that wire and insulation sizes are for guidance only.

Consult the customer drawing for precise detail.

AWG Code	Diameter (Inch)	Diameter (mm)	F (mm^2)
000000	0.5800	14.733	170.0
00000	0.5165	13.13	135.0
0000	0.4600	11.684	103.8
000	0.4096	10.40	79.0
00	0.3648	9.27	67.5
0	0.3249	8.25	53.4
1	0.2893	7.34	42.2
2	0.2576	6.55	33.7
3	0.2294	5.82	26.6
4	0.2043	5.18	21.0
5	0.1819	4.62	16.9
6	0.1620	4.115	13.25
7	0.1443	3.66	10.25
8	0.1285	3.26	8.34
9	0.1144	2.90	6.6
10	0.1019	2.59	5.27
11	0.0907	2.30	4.15
12	0.0808	2.05	3.3
13	0.0720	1.83	2.63
14	0.0641	1.63	2.08
15	0.0571	1.45	1.65
16	0.0508	1.29	1.305
17	0.0453	1.14	1.01
18	0.0403	1.02	0.79
19	0.0359	0.91	0.65
20	0.0320	0.81	0.51
21	0.0285	0.72	0.407
22	0.0253	0.64	0.32
23	0.0226	0.57	0.255
24	0.0201	0.51	0.205
25	0.0179	0.455	0.162
26	0.0159	0.40	0.125
27	0.0142	0.36	0.102
28	0.0126	0.320	0.08
29	0.0113	0.287	0.0646
30	0.0100	0.254	0.0516
31	0.0089	0.226	0.04
32	0.0080	0.203	0.0324
33	0.0071	0.180	0.0255
34	0.0063	0.160	0.02
35	0.0056	0.142	0.0158
36	0.0050	0.127	0.0127
37	0.0045	0.114	0.01
38	0.0040	0.101	0.008
39	0.0035	0.089	0.0062
40	0.0031	0.079	0.0049
41	0.0028	0.071	0.00395
42	0.0025	0.064	0.00321
43	0.0022	0.056	0.00246
44	0.00198	0.050	0.00196
45	0.00176	0.045	
46	0.00157	0.040	
47	0.00140	0.036	
48	0.00124	0.031	
49	0.00110	0.028	
50	0.00099	0.025	

Remark: Starting from 0.03 mm^2 (AWG 32) a wire can be crimped.

FLK/FLR Cable

FLK and FLR stand for German DIN (72551) abbreviations.

FLK means:

In German:
- **F**ahrzeug **L**eitung **K**unststoff

In English:
- Vehicle Cable Plastic

FLR means:

In German:
- **F**ahrzeug **L**eitung **R**eduziert

In English:
- Thin Walled Cable (reduced insulation thickness)

Conversion Table – Inch/mm

Inch	0	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0	0	0.0254	0.0508	0.0762	0.1016	0.1270	0.1524	0.1778	0.2032	0.2286
0.010	0.2540	0.2794	0.3048	0.3302	0.3556	0.3810	0.4064	0.4318	0.4572	0.4826
0.020	0.5080	0.5334	0.5588	0.5842	0.6096	0.6350	0.6604	0.6858	0.7112	0.7366
0.030	0.7620	0.7874	0.8128	0.8382	0.8636	0.8890	0.9144	0.9398	0.9652	0.9906
0.040	1.0160	1.0414	1.0668	1.0922	1.1176	1.1430	1.1684	1.1938	1.2192	1.2446
0.050	1.2700	1.2954	1.3208	1.3462	1.3716	1.3970	1.4224	1.4478	1.4732	1.4986
0.060	1.5240	1.5494	1.5748	1.6002	1.6256	1.6510	1.6764	1.7018	1.7272	1.7526
0.070	1.7780	1.8034	1.8288	1.8542	1.8796	1.9050	1.9304	1.9558	1.9812	2.0066
0.080	2.0320	2.0574	2.0828	2.1062	2.1336	2.1590	2.1844	2.2098	2.2352	2.2606
0.090	2.2860	2.3114	2.3368	2.3622	2.3876	2.4130	2.4384	2.4638	2.4892	2.5146
0.100	2.5400	2.5654	2.5908	2.6162	2.6416	2.6670	2.6924	2.7178	2.7432	2.7686
0.110	2.7940	2.8194	2.8448	2.8702	2.8956	2.9210	2.9464	2.9718	2.9972	3.0226
0.120	3.0480	3.0734	3.0988	3.1242	3.1496	3.1750	3.2004	3.2258	3.2512	3.2766
0.130	3.3020	3.3274	3.3528	3.3782	3.4036	3.4290	3.4544	3.4798	3.5052	3.5306
0.140	3.5560	3.5814	3.6068	3.6322	3.6576	3.6830	3.7084	3.7338	3.7592	3.7846
0.150	3.8100	3.8354	3.8608	3.8862	3.9116	3.9370	3.9624	3.9878	4.0132	4.0386
0.160	4.0640	4.0894	4.1148	4.1402	4.1656	4.1910	4.2164	4.2418	4.2672	4.2926
0.170	4.3180	4.3434	4.3688	4.3942	4.4196	4.4450	4.4704	4.4958	4.5212	4.5466
0.180	4.5720	4.5974	4.6228	4.6482	4.6736	4.6990	4.7244	4.7498	4.7752	4.8006
0.190	4.8260	4.8514	4.8768	4.9022	4.9276	4.9530	4.9784	5.0038	5.0292	5.0546
0.200	5.0800	5.1054	5.1308	5.1562	5.1816	5.2070	5.2324	5.2578	5.2832	5.3086
0.210	5.3340	5.3594	5.3848	5.4102	5.4356	5.4610	5.4864	5.5118	5.5372	5.5626
0.220	5.5880	5.6134	5.6388	5.6642	5.6896	5.7150	5.7404	5.7658	5.7912	5.8166
0.230	5.8420	5.8674	5.8928	5.9182	5.9436	5.9690	5.9944	6.0198	6.0452	6.0706
0.240	6.0960	6.1214	6.1468	6.1722	6.1976	6.2230	6.2484	6.2738	6.2992	6.3246
0.250	6.3500	6.3754	6.4008	6.4262	6.4516	6.4770	6.5024	6.5278	6.5532	6.5786
0.260	6.6040	6.6294	6.6548	6.6802	6.7056	6.7310	6.7564	6.7818	6.8072	6.8326
0.270	6.8580	6.8834	6.9088	6.9342	6.9596	6.9850	7.0104	7.0358	7.0612	7.0866
0.280	7.1120	7.1374	7.1628	7.1882	7.2136	7.2390	7.2644	7.2898	7.3152	7.3406
0.290	7.3660	7.3914	7.4168	7.4422	7.4676	7.4930	7.5184	7.5438	7.5692	7.5946
0.300	7.6200	7.6454	7.6708	7.6962	7.7216	7.7470	7.7724	7.7978	7.8232	7.8486
0.310	7.8740	7.8994	7.9248	7.9502	7.9756	8.0010	8.0264	8.0518	8.0772	8.1026
0.320	8.1280	8.1534	8.1788	8.2042	8.2296	8.2550	8.2804	8.3058	8.3312	8.3566
0.330	8.3820	8.4074	8.4328	8.4582	8.4836	8.5090	8.5344	8.5598	8.5852	8.6106
0.340	8.6360	8.6614	8.6868	8.7122	8.7376	8.7630	8.7884	8.8138	8.8392	8.8646
0.350	8.8900	8.9154	8.9408	8.9662	8.9916	9.0170	9.0424	9.0678	9.0932	9.1186
0.360	9.1440	9.1694	9.1948	9.2202	9.2456	9.2710	9.2964	9.3218	9.3472	9.3726
0.370	9.3980	9.4234	9.4488	9.4742	9.4996	9.5250	9.5504	9.5758	9.6012	9.6266
0.380	9.6520	9.6774	9.7028	9.7282	9.7536	9.7790	9.8044	9.8298	9.8552	9.8806
0.390	9.9060	9.9314	9.9568	9.9822	10.0076	10.0330	10.0584	10.0838	10.1092	10.1346
0.400	10.1600	10.1854	10.2108	10.2362	10.2616	10.2870	10.3124	10.3378	10.3632	10.3886
0.410	10.4140	10.4394	10.4648	10.4902	10.5156	10.5410	10.5664	10.5918	10.6172	10.6426
0.420	10.6680	10.6934	10.7188	10.7442	10.7696	10.7950	10.8204	10.8458	10.8712	10.8966
0.430	10.9220	10.9474	10.9728	10.9982	11.0236	11.0490	11.0744	11.0998	11.1252	11.1506
0.440	11.1760	11.2014	11.2268	11.2522	11.2776	11.3030	11.3284	11.3538	11.3792	11.4046
0.450	11.4300	11.4554	11.4808	11.5062	11.5316	11.5510	11.5824	11.6078	11.6332	11.6586
0.460	11.6840	11.7094	11.7348	11.7602	11.7856	11.8110	11.8364	11.8618	11.8872	11.9126
0.470	11.9380	11.9634	11.9888	12.0142	12.0396	12.0650	12.0904	12.1158	12.1412	12.1666
0.480	12.1920	12.2174	12.2428	12.2682	12.2936	12.3190	12.3444	12.3698	12.3952	12.4206
0.490	12.4460	12.4714	12.4968	12.5222	12.5476	12.5730	12.5984	12.6238	12.6492	12.6746
0.500	12.7000									
Inch	**0**	**0.001**	**0.002**	**0.003**	**0.004**	**0.005**	**0.006**	**0.007**	**0.008**	**0.009**

Conversion Table – Inch/mm (continued)

Inch	0	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	12.7000	12.7254	12.7508	12.7762	12.8016	12.8270	12.8524	12.8778	12.9032	12.9286
0.510	12.9540	12.9794	13.0048	13.0302	13.0556	13.0810	13.1064	13.1318	13.1572	13.1826
0.520	13.2080	13.2334	13.2588	13.2842	13.3096	13.3350	13.3604	13.3858	13.4112	13.4366
0.530	13.4620	13.4874	13.5128	15.5382	13.5636	13.5890	13.6144	13.6398	13.6652	13.6906
0.540	13.7160	13.7414	13.7668	13.7922	13.8176	13.8430	13.8684	13.8938	13.9192	13.9446
0.550	13.9700	13.9954	14.0208	14.0462	14.0716	14.0970	14.1224	14.1478	14.1732	14.1986
0.560	14.2240	14.2494	14.2748	14.3002	14.3256	14.3510	14.3764	14.4018	14.4272	14.4526
0.570	14.4780	14.5034	14.5288	14.5542	14.5796	14.6050	14.6304	14.6558	14.6812	14.7066
0.580	14.7320	14.7574	14.7828	14.8082	14.8336	14.8590	14.8844	14.9098	14.9352	14.9606
0.590	14.9860	15.0114	15.0368	15.0622	15.0876	15.1130	15.1384	15.1638	15.1892	15.2146
0.600	15.2400	15.2654	15.2908	15.3162	15.3416	15.3670	15.3924	15.4178	15.4432	15.4686
0.610	15.4940	15.5194	15.5448	15.5702	15.5956	15.6210	15.6464	15.6718	15.6972	15.7226
0.620	15.7480	15.7734	15.7988	15.8242	15.8496	15.8750	15.9004	15.9258	15.9512	15.9766
0.630	16.0020	16.0274	16.0528	16.0782	16.1036	16.1290	16.1544	16.1798	16.2052	16.2306
0.640	16.2560	16.2814	16.3068	16.3322	16.3576	16.3830	16.4084	16.4338	16.4592	16.4846
0.650	16.5100	16.5354	16.5608	16.5862	16.6116	16.6370	16.6624	16.6878	16.7132	16.7386
0.660	16.7640	16.7894	16.8148	16.8402	16.8656	16.8910	16.9164	16.9418	16.9672	16.9926
0.670	17.0180	17.0434	17.0688	17.0942	17.1196	17.1450	17.1704	17.1958	17.2212	17.2466
0.680	17.2720	17.2974	17.3228	17.3482	17.3736	17.3990	17.4244	17.4498	17.4752	17.5006
0.690	17.5260	17.5514	17.5768	17.6022	17.6276	17.6530	17.6784	17.7038	17.7292	17.7546
0.700	17.7800	17.8054	17.8308	17.8562	17.8816	17.9070	17.9324	17.9528	17.9832	18.0086
0.710	18.0340	18.0594	18.0848	18.1102	18.1356	18.1610	18.1864	18.2118	18.2372	18.2626
0.720	18.2880	18.3134	18.3388	18.3642	18.3896	18.4150	18.4404	18.4658	18.4912	19.5166
0.730	18.5420	18.5674	18.5928	18.6182	18.6436	18.6690	18.6944	18.7198	18.7452	18.7706
0.740	18.7960	18.8214	18.8468	18.8722	18.8976	18.9230	18.9484	18.9738	18.9992	19.0246
0.750	19.0500	19.0754	19.1008	19.1262	19.1516	19.1170	19.2024	19.2278	19.2532	19.2786
0.760	19.3040	19.3294	19.3548	19.3802	19.4056	19.4310	19.4564	19.4818	19.5072	19.5326
0.770	19.5580	19.5834	19.6088	19.6342	19.6596	19.6850	19.7104	19.7358	19.7612	19.7886
0.780	19.8120	19.8374	19.8628	19.8882	19.9136	19.9390	19.9644	19.9898	20.0152	20.0406
0.790	20.0660	20.0914	20.1168	20.1422	20.1676	20.1930	20.2184	20.2438	20.2692	20.2946
0.800	20.3200	20.3454	20.3708	20.3962	20.4216	20.4470	20.4724	20.4978	20.5232	20.5486
0.810	20.5740	20.5994	20.6248	20.6502	20.6756	20.7010	20.7264	20.7518	20.7772	20.8026
0.820	20.8280	20.8534	20.8788	20.9042	20.9296	20.9550	20.9804	21.0058	21.0312	21.0566
0.830	21.0820	21.1074	21.1328	21.1582	21.1836	21.2090	21.2344	21.2598	21.2852	21.3106
0.840	21.3360	21.3614	21.3868	21.4122	21.4376	21.4630	21.4884	21.5138	21.5392	21.5646
0.850	21.5900	21.6154	21.6408	21.6662	21.6916	21.7170	21.7424	21.7678	21.7932	21.8186
0.860	21.8440	21.8694	21.8948	21.9202	21.9456	21.9710	21.9964	22.0218	22.0472	22.0726
0.870	22.0980	22.1234	22.1488	22.1742	22.1996	22.2250	22.2504	22.2758	22.3012	22.3266
0.880	22.3520	22.3774	22.4028	22.4282	22.4536	22.4790	22.5044	22.5298	22.5552	22.5806
0.890	22.6060	22.6314	22.6568	22.6822	22.7076	22.7330	22.7584	22.7838	22.8092	22.8346
0.900	22.8600	22.8854	22.9108	22.9362	22.9616	22.9870	23.0124	23.0378	23.0632	23.0886
0.910	23.1140	23.1394	23.1648	23.1902	23.2156	23.2410	23.2664	23.2918	23.3172	23.3426
0.920	23.3680	23.3934	23.4188	23.4442	23.4696	23.4950	23.5204	23.5458	23.5712	23.5966
0.930	23.6220	23.6474	23.6728	23.6982	23.7236	23.7490	23.7744	23.7998	23.8252	23.8506
0.940	23.8760	23.9014	23.9268	23.9522	23.9776	24.0030	24.0284	24.0538	24.0792	24.1046
0.950	24.1300	24.1554	24.1808	24.2062	24.2316	24.2570	24.2824	24.3078	24.3332	24.3586
0.960	24.3840	24.4094	24.4348	24.4602	24.4856	24.5110	24.5364	24.5618	24.5812	24.6126
0.970	24.6380	24.6634	24.6888	24.7142	24.7396	24.7650	24.7904	24.8158	24.8412	24.8666
0.980	24.8920	24.9174	24.9428	24.9682	24.9936	25.0190	25.0444	25.0698	25.0952	25.1206
0.990	25.1460	25.1714	25.1968	25.2222	25.2476	25.2730	25.2984	25.3228	25.3492	25.3746
1.000	25.4000									
Inch	**0**	**0.001**	**0.002**	**0.003**	**0.004**	**0.005**	**0.006**	**0.007**	**0.008**	**0.009**


Safety & Security Systems


Convenience


Driver Information


Body & Chassis Systems

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Safety & Security Systems


Convenience


Driver Information


Body & Chassis Systems

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Housings and Connectors	Page	
Sealed Micro Timer II Housings		
Receptacle Housings	2-107–2-111	✓
Tab Housings	2-112–2-214	✓
Receptacle Housings	2-115–2-118	✓
Sealed Junior Timer Housings		
Receptacle Housings	2-119–2-124	✓
Sealed Junior Power Timer Housings		
Receptacle Housings for Contacts 18.0 mm Length	2-125–2-133	✓
Sealed Junior Timer Housings		
Receptacle Housings with Locking Spring and Seal	2-134–2-138	✓
Sealed Junior Power Timer Housings		
Receptacle Housings with Locking Spring and Seal, 2 Positions	2-139	✓
Sealed Junior Timer Housings		
Receptacle Housings with Locking Spring and Seal, 3 Positions	2-140	✓
Sealed Junior Power Timer Housings		
Receptacle Housings with Locking Spring and Seal, 3 Positions	2-141	✓
Sealed Junior Timer Housings		
Receptacle Housings with Locking Spring and Seal, 5 Positions	2-142	✓
Sealed Junior Power Timer Housings		
Receptacle Housings with Locking Spring and Seal, 5 Positions	2-143	✓
Sealed Junior Timer Housings		
Receptacle Housings with Locking Spring and Seal, 5 Positions	2-144–2-145	✓

Safety & Security Systems	Convenience	Driver Information	Body & Chassis Systems
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Safety & Security Systems


Convenience


Driver Information


Body & Chassis Systems

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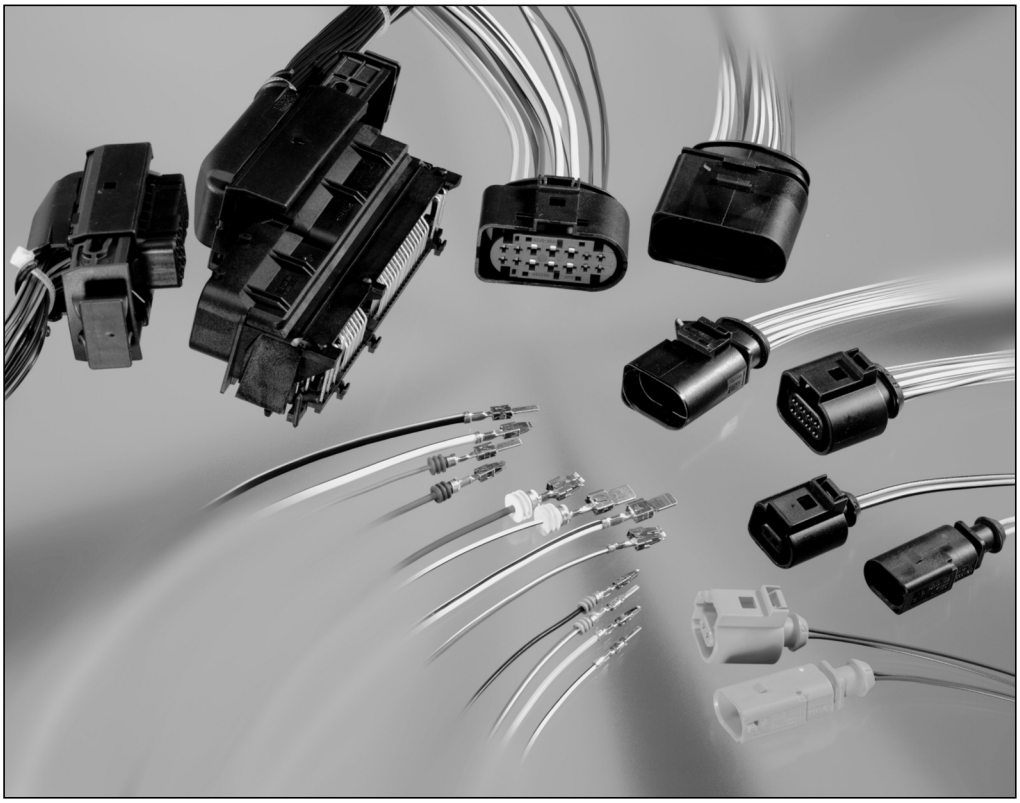
Introduction

For Decades the Timer Interconnection System has Proven its Reliability in the Automotive Industry



The comprehensive range of AMP Timer contacts are extensively used in the automotive industry.

Each contact consists of a flat receptacle, which mates with a flat tab. The receptacle has two respective four contact springs, which are independent of each other. Two-piece contacts with a steel top spring are pre-dominantly.

This two-piece contact design means that the electrical and mechanical properties are separated. One end of the contact body is either crimped to wire, or soldered to a printed circuit board. The other end of the contact body mates with the matching tab.

The contact body is responsible for the electrical characteristics, while the top spring ensures that contact force is maintained under critical circumstances and over lifetime of the contact system. Reduction in contact force due to stress relaxation at elevated temperature is thus minimized.

In addition there are usually two lances on the steel to spring. These serve to lock the contact securely into the housing.

Secondary locking of the contact in the housing can be achieved by means of the steel top spring, which usually takes the form of a box.

All versions of Timer contacts can be combined easily in one connector without renouncing secondary locking device.

Application in connectors which contacts by means of swiveling is possible.

Tabs and receptacles can be applied in both watertight and non-watertight connectors.

AMP Timer connectors are available as receptacle and tab housings (free-hanging coupling in a wiring harness) or as receptacle housings and multiple tabs (group connection). With the free-hanging coupling type the housings, with up to 100 contacts, are then secured by means of a separate locking device.

With multiway connectors the single lever method is usually employed (sequential insertion distributed along an angled path).

Using this method a single lever plug on the receptacle housing engages in one end of the multiple tab housing. The connector is then latched up to the final position.

This system is relatively tolerant as regards the positioning of the contact tabs in the housing. An additional advantage is that the contact system is, to a large degree, insensitive to crooked insertion. Even when the tabs are not straight the contact geometry ensures firm contact.

In order that the flat contact system can be employed at interfaces with signal currents of medium strengths as well as with load currents more than 70 A.

Engineering Notes

Introduction

The receptacle contact has two, respective four contact springs, which are independent of each other and a steel top spring.

All Timer contacts can be combined in one connector, same secondary locking device.

Independent of both, water-tight and non-watertight connectors, tabs and receptacle can be applied.

Within the Timer Contacts we offer to follwing types:

The Micro Timer I, II and III are contacts desigend for 1.5/1.6 mm Tab Contacts. The Junior Timer/Junior Power Timer Contacts are designed for 2.8/3.0 mm Tab Contacts.

Standard Timer and Standard Power Timer Contacts fit to 4.8/5.8 and 6.3 mm Tab Contacts. The Maxi Power Timer fits to 8.0/9.5 mm Tab Contacts.

Receptacle Contacts

Technical Features

Contact Material:
CuSn, CuFe
Cantilever Spring: Stainless Steel

Contact Finish:
pre-tin plated, gold plated

Wire Size Range:
0.2–1.5 mm² FLR
(thin walled wire)

Contact Resistance (New State):
CuSn: <5 mΩ
CuFe: <4 mΩ

Total Temperature max.:
–40 °C to +120 °C (tin plated)
–40 °C to +140 °C (gold plated)

Mating Cycles:
10 (tin plated)
100 (gold plated)

Insertion Force*:
max. 5 N (proof tab 0.8 mm thick)

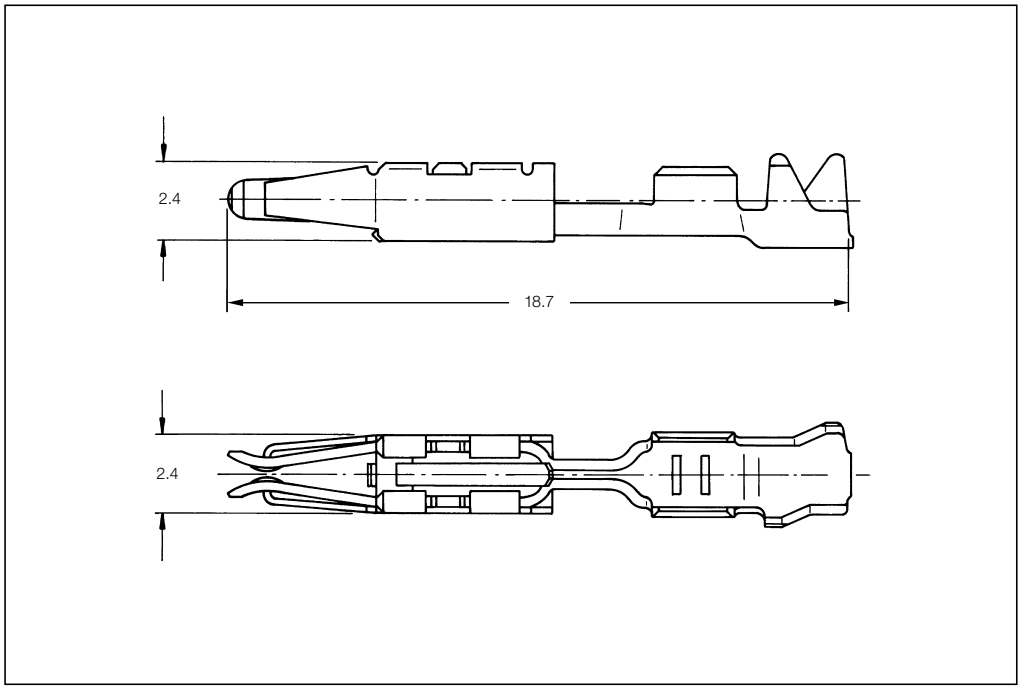
Extraction Force*:
min. 2 N (proof tab 0.8 mm thick)

Retention Force (from Housing):
– without second locking device
>25 N
– second locking device only
>100 N
depends on housing material

Dimensions of Male Contacts:
1.6 mm x 0.8 mm

Product Group Drawing:
1703333

*) Measured with an Steel Test Tab (see Product Spec. 108-18279).



Extraction Tool:
Part No. **5-1579007-5**

Product Specification:
108-18024

Application Specification:
114-18163

Max. Current in 9 Position Housing

Material	Temperature (° C)	Current Carrying Capacity (Ampere)		
		0.35 mm²	0.50 mm²	0.75 mm²
CuSn	20	3.0	5.0	8.0
	90	1.5	2.0	4.0
CuFe	20	4.0	6.0	10.0
	90	1.5	2.5	5.0

Standard Receptacle Contacts

Wire Size Range (mm²)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.2–0.5	–	1.2–1.6	-1 / -2 / -3 / -4	929950	7,500	929951	500	1528493	2063538-1
0.35–0.75	–	1.2–1.9	-1 / -2 / -3 / -4	928939	6,000	929927	1,000	on request	
0.5–1.0	–	1.4–2.1	-1 / -2 / -3 / -4 / -7 / -8	929952	6,000	929953	500	1528020	
1.0–1.5	–	1.9–2.4	-1 / -2 / -3 / -4	929954	5,000	929955	500	1528706	

*) **Material and Finish:**
xxx-1 = CuSn, pre-tin plated
xxx-2 = CuSn, gold plated
xxx-3 = CuFe, pre-tin plated
xxx-4 = CuFe, gold plated
xxx-7 = CuSn, gold plated, short-circuit execution
xxx-8 = CuFe, gold plated, short-circuit execution

◆) The pre- and suffix for the applicators depends on the applied termination equipment.

Technical Features

Contact Material:
CuSn, CuFe, CuNiSi
Cantilever Spring: Stainless Steel

Contact Finish:
pre-tin plated, gold plated

Wire Size Range:
0.2–0.5 mm² (FLR)
0.5–1.0 mm² (FLR)
1.5 mm² (FLR)

Contact Resistance (New State):
CuSn: <5 mΩ
CuFe: <4 mΩ

Total Temperature max.:
–40 °C to +120 °C (tin plated)
–40 °C to +140 °C (gold plated)

Mating Cycles:
10 (tin plated)
100 (gold plated)

Insertion Force*:
max. 4 N (proof tab 0.6 mm thick)

Extraction Force*:
min. 2 N (proof tab 0.6 mm thick)

Retention Force (from Housing):
– without second locking device
> 25 N
– second locking device only
> 100 N
depends on housing material

Dimensions of Male Contacts:
1.6 x 0.6 mm = Micro Timer II
1.6 x 0.8 mm = Micro Timer III

Modular Dimensions:
3.25 mm x 4.0 mm (smallest)

Version in Single Seal:
4.0 mm x 4.0 mm (smallest)

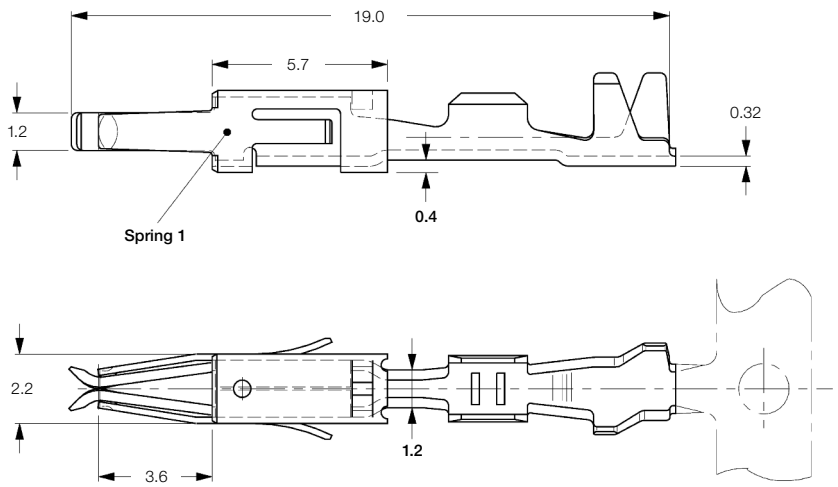
Extraction Tool:
Part No. **539960-1**

Product Group Drawings:
1355045 = Micro Timer II
1241916 = Micro Timer III

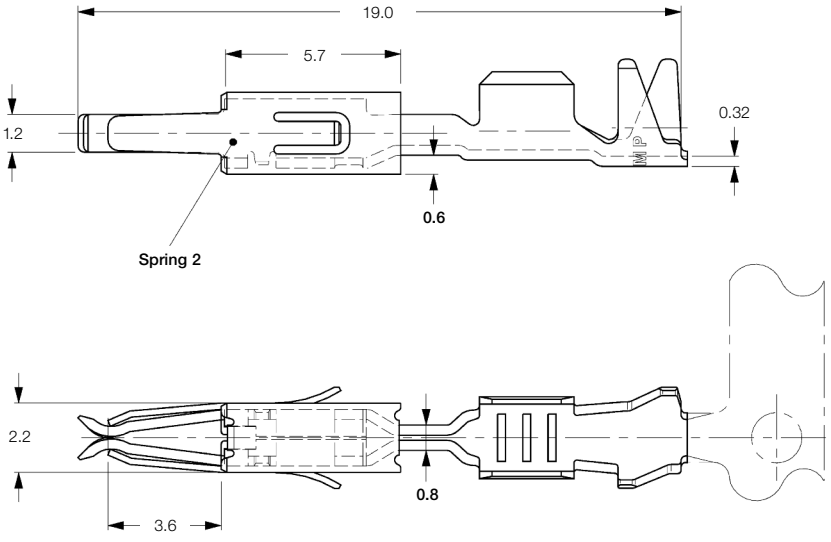
Product Specifications:
108-18055 = Micro Timer II
108-18386 = Micro Timer III

Application Specification:
114-18081

Receptacle Contact



With Modified Spring



Max. Current in 68 Position Housing

Material	Temperature (° C)	Current Carrying Capacity (Ampere)		
		0.35 mm²	0.50 mm²	0.75 mm²
CuSn	20	3.0	5.0	8.0
	90	1.5	2.0	4.0
CuFe	20	4.0	6.0	10.0
	90	1.5	2.5	5.0

*) Measured with an Steel Test Tab (see Product Spec. 108-18279).

) **Note: Micro Timer III is made for diagnosis applications.

Receptacle Contacts (continued)

Standard Receptacle Contacts

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.2–0.5	–	1.15–1.60	-1 / -2 / -3 / -4 / -5 / -6	962942 1)	7,000	962944 1)	500	1528061	2063409-1
0.5–1.0	–	1.4–2.1	-1 / -2 / -3 / -4 / -5 / -6	962943 1)	6,000	962945 1)	500	1528256	
			-1 / -2	964150 1) 3)	5,000	964151 1) 3)	500	1528096	
0.2–0.5	–	1.15–1.60	-1 / -2	965914 6)	6,000	965915 6)	500	1528061	
0.5–1.0	–	1.4–2.1	-1	968052 5)	6,000	968053 5)	500	1528256	
			-1	969022 6)	6,000	969023 6)	500	1528304	

Receptacle Contacts with Single Wire Sealing System

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.2–0.5	–	1.2–1.6	-1 / -2 / -3 / -5	962875 1)	4,000	963710 1)	500	1528281	2063265-1
0.5–1.0	–	1.4–2.1	-1 / -2 / -3 / -5 / -6	962876 1)	4,000	963711 1)	500	1528054	
1.5	–	2.2–2.4	-1	1703414	4,000	1703415	500	1528772	–

Standard Receptacle Contacts with Modified Spring

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.2–0.5	–	1.15–1.60	-2 / -3 / 4-xxx-1	964261 2)	7,500	964262 2)	500	1528091	2063409-1
0.5–1.0	–	1.4–2.1	-2 / -3 / 4-xxx-1	964263 2)	6,000	964264 2)	500	1528092	
			-2	964348 2) 3)	5,500	964349 2) 3)	500	1528096	
1.5	–	2.2–2.4	-2 / -3	1241844 2)	5,000	1241845 2)	500	1528123	–
0.2–0.5	–	1.15–1.60	-2 / 4-xxx-1	1241858 5)	7,500	1241859 5)	500	1528091	2063409-1
0.5–1.0	–	1.4–2.1	-2 / -7 / 4-xxx-1	1241860 5)	6,000	1241861 5)	500	on request	

Receptacle Contacts with Modified Spring and Single Wire Sealing System

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.2–0.5	–	1.15–1.60	-1 / -2 / -6	968045 1)	4,000	968046 1)	500	1528281	2063409-1
			-2 / -3 / -6 / 4-xxx-1	969005 2)	4,500	969019 2)	500	1528068	
0.5–1.0	–	1.4–2.1	-2 / -3 / -6 / 4-xxx-1	964274 2)	4,000	964275 2)	500	1528261	
			-1 / -2 / -6	968015 1)	4,000	968016 1)	500	1528054	
0.2–0.5	–	1.15–1.60	-2 / 4-xxx-1	1241730 5)	4,500	1241731 5)	500	1528068	
0.5–1.0	–	1.4–2.1	-2 / 4-xxx-1	1241732 5)	4,000	1241733 5)	500	1528261	

***) Material and Finish:**

xxx-1 = CuSn4, pre-tin plated
xxx-2 = CuFe2, pre-tin plated
xxx-3 = CuSn4, gold plated
xxx-4 = CuSn4, gold plated, short-circuit execution
xxx-5 = CuFe2, gold plated
xxx-6 = CuSn4, special gold plated
xxx-7 = CuNi12Zn24, plain
4-xxx-1 = CuNiSi, gold plated

Remarks:

1) = With Spring 1
2) = With Spring 1 or Spring 2
3) = For Double and Single Termination

Micro Timer III:

5) = Gap Size 0.2 mm
6) = Gap Size 0.35 mm

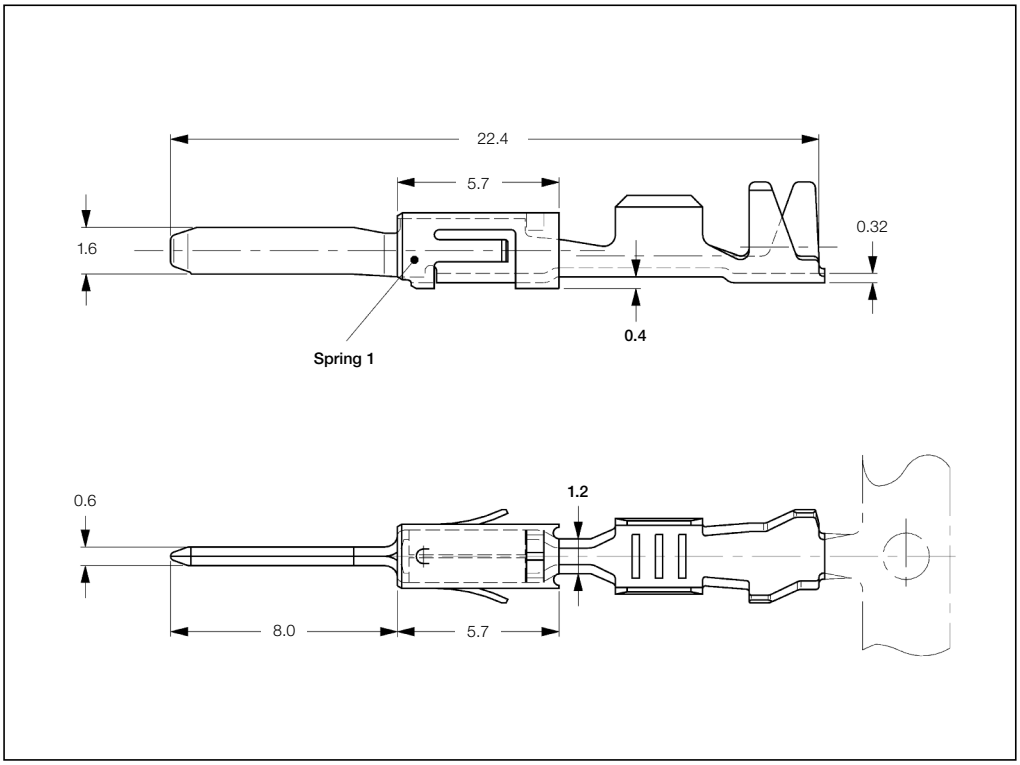
◆) The pre- and suffix for the applicators depends on the applied termination equipment.

Tabs 1.6 x 0.6 mm with Steel Top Spring, Mates with Micro Timer II

Extraction Tool:
Part No. **539960-1**

Product Specification:
108-18331

Application Specification:
114-18082



Standard Tab Contacts

Wire Size Range (mm²)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.2–0.5	–	1.15–1.60	-1 / -2 / -3	963898 1)	7,000	963899 1)	500	1528061	2063265-1
0.5–1.0	–	1.4–2.1	-1 / -2 / -3 / -4	963900 1)	6,000	963901 1)	500	1528256	

Tab Contacts with Single Wire Sealing System

Wire Size Range (mm²)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.2–0.5	–	1.15–1.60	-1 / -2 / -3	963902 1)	4,000	963903 1)	500	1528281	2063265-1
0.5–1.0	–	1.4–2.1	-1 / -2 / -3	963904 1)	4,000	963905 1)	500	1528054	

*) **Material and Finish:**
xxx-1 = CuSn4, pre-tin plated
xxx-2 = CuFe2, pre-tin plated
xxx-3 = CuSn4, gold plated
xxx-4 = CuSn4, gold plated

Remarks:
1) = With Spring 1

◆) The pre- and suffix for the applicators depends on the applied termination equipment.

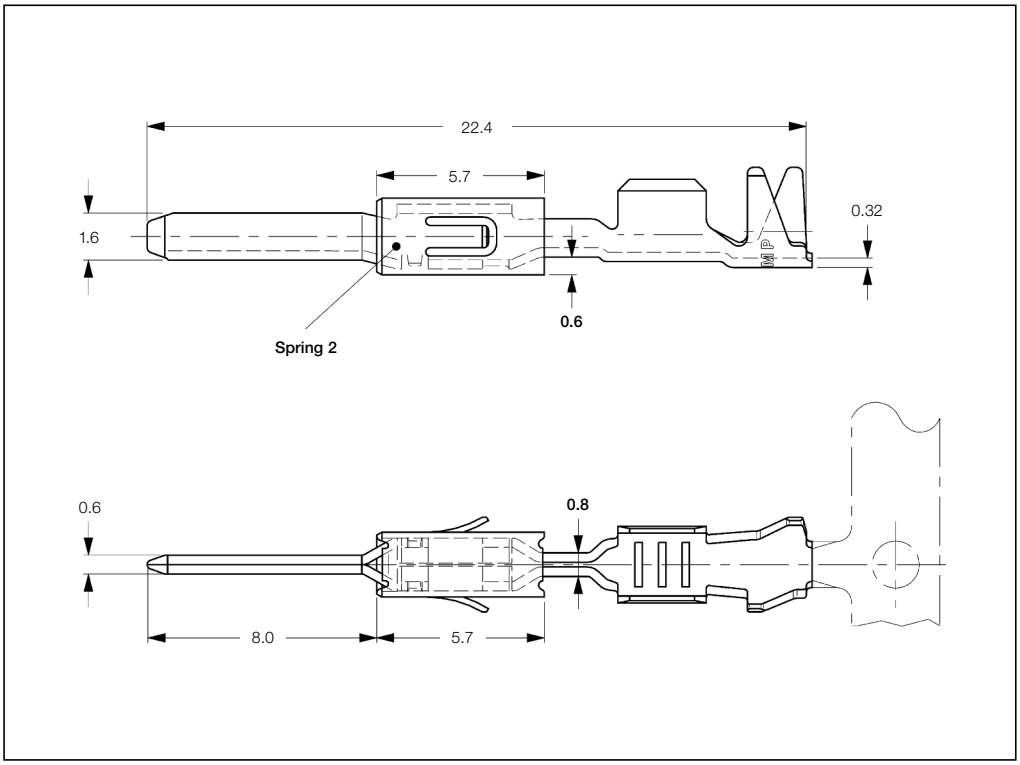
Tabs 1.6 x 0.6 mm with Modified Steel Top Spring, Mates with Micro Timer II

Extraction Tool:
Part No. **539960-1**

Product Group Drawing:
1355055

Product Specification:
108-18331

Application Specification:
114-18082



Standard Tab Contacts with Modified Spring

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.2–0.5	–	1.15–1.60	-2 / -3	964265 2)	7,500	964266 2)	500	1528091	2063409-1
0.5–1.0	–	1.4–2.1	-2 / -3	969079 2) 3)	5,500	969080 2) 3)	500	1528096	
			-1 / -2 / -3	964267 2)	6,000	964268 2)	500	1528092	
1.5	–	2.2–2.4	-1 / -2 / -3	1241846 2)	4,000	1241847 2)	500	1528123	–

Tab Contacts with Modified Spring and Single Wire Sealing System

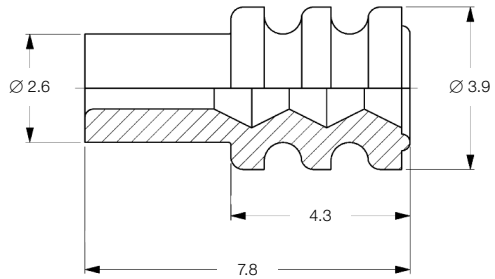
Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.2–0.5	–	1.2–1.6	-2 / -3	969028 2)	4,000	969029 2)	500	1528068	2063409-1
0.5–1.0	–	1.4–2.1	-2 / -3	964269 2)	4,000	964270 2)	500	1528261	
1.5	–	2.2–2.4	-2	1703278	4,000	1703279	500	1528579	–

*) **Material and Finish:**
xxx-1 = CuSn4, pre-tin plated
xxx-2 = CuFe2, pre-tin plated
xxx-3 = CuSn4, gold plated

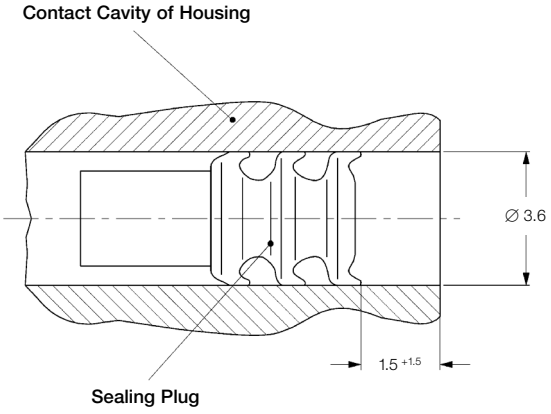
Remarks:
2) = With Spring 1 or Spring 2
3) = For Double and Single Termination

◆) The pre- and suffix for the applicators depends on the applied termination equipment.

Single Wire Seals and Sealing Plugs for Micro Timer II; Micro Timer III and 1.6 mm Tabs



Insulation Diameter (mm)	Color	Part Number	Package Quantity
0.35–0.50	Blue	1394133-1	10,000
0.9–1.2	Green	1718705-1	10,000
1.2–1.6	Red	964971-1	10,000
1.4–1.9	Gray	963530-1	10,000
1.9–2.4	Yellow	964972-1	10,000
Sealing Plug	White	963531-1	10,000
	Natural	1394132-1	10,000



Engineering Notes

Receptacle Contacts

Technical Features

Wire Size Range:
0.12–2.5 mm^2
(suitable for insulation-reduced stranded wires)

Current Carrying Capacity:
up to approx. 20 A

Insertion Force*:
approx. 8 N

Extraction Force*:
approx. 6 N

Contact Material:
CuZn or CuSn

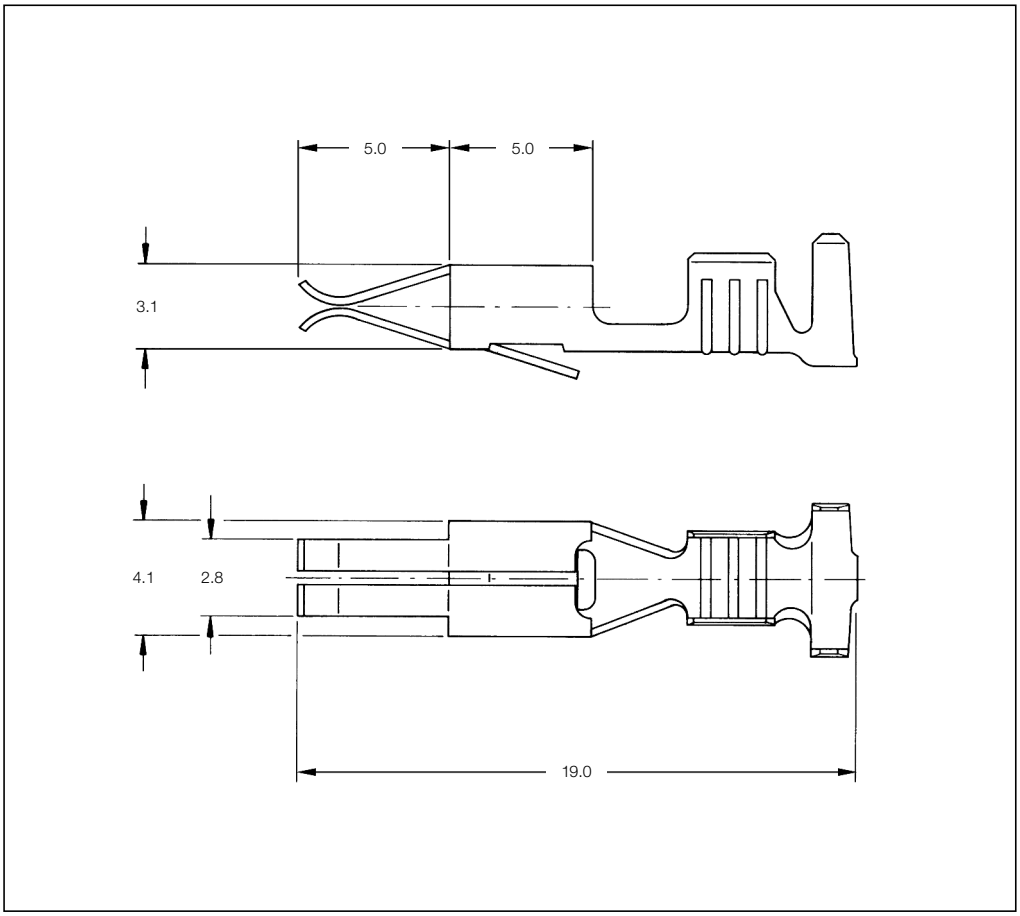
Contact Finishes:
plain, tin plated, silver plated or gold plated.

Special materials and finishes on request.

Junior Timer Contacts Fit:
Tabs according DIN 46244 (2.8 x 0.8 mm), DIN 46343, Part 1, as well as male connectors (3.0 x 0.8 mm).

Special applications on request.

Additional Technical Features on request.

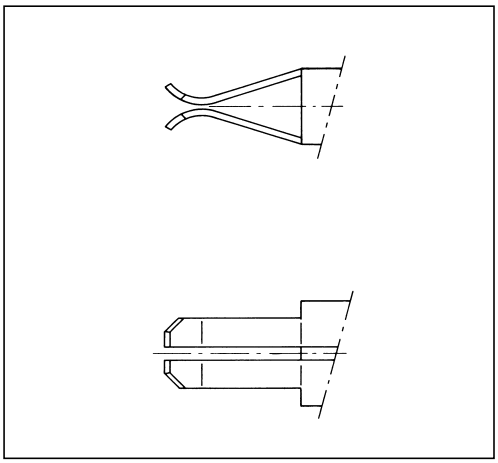


Extraction Tools:
Part No. **1-1579007-4**

Product Specification:
108-18053

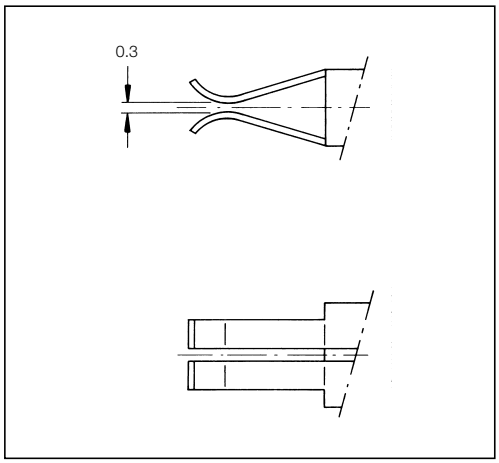
Application Specification:
114-18079

*) Measured with an Steel Test Tab (see Product Spec. 108-18279).



Junior Timer Contact – Modified –

Chamfered Springs



Junior Timer Contact – Special Version –

Gap Size = 0.3 mm

Receptacle Contacts (continued)

Junior Timer Receptacle Contacts

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.12–0.25	0.9–1.4	–	-1 **4)** / -2 **5)**	926755	5,000	926756	500	1528556	58495-1
0.5–1.0	2.0–2.7	–	-1 / -2 **1)** / -3 / -4	927863	4,000	927864	500	1426120	2063375-1
0.5–1.5	2.0–3.0	–	-1 / -2 / -3 / -4 / -6	925590	4,000	925596	500	1528548	
>1.0–2.5	2.4–3.7	—	-1 / -2 / -3 **2)** / -4 / -5 **3)**	925595	3,750	925597	500	1528456	
>1.0–2.5	2.7–3.7	–	-1 / -2 / -4	927877 ***	3,500	927878 ***	500	1426451	
0.2–0.5	–	1.2–1.6	-1 / -2 **1)** / -4	927871	5,000	927872	500	1528274	2063569-1
0.5–1.0	–	1.4–2.1	-1 / -2 **1)** / -3 / -4 / -5	927845	4,000	927846	500	1528583	2063645-1
>1.0–2.5	–	2.2–3.0	-1 / -2 / -4 / -5	927856	3,750	927857	500	1426401	
0.5–1.5	2.3–3.3	–	–	925871-1 **1)** **	4,000	925871-2 **1)** **	500	1528548	2063375-1
				925871-3 **3)** **	4,000	925871-4 **3)** **	500		
				925871-5 **7)** **	4,000	–	500		
				925871-6 **2)** **	4,000	925871-7 **2)** **	500		
				927973-1 **1)** **	4,000	927973-2 **1)** **	500		
				927973-3 **1) 6)** **	4,000	927973-4 **1) 6)** **	500		

Junior Timer Contacts with Modified Cantilever Spring

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.5–1.5	2.3–3.3	–	-1 / -2 / -5	927966	3,750	929929	500	1528548	2063375-1

***) Material and Finish:**
xxx-1 = CuZn30, pre-tin plated
xxx-2 = CuSn4, pre-tin plated
xxx-3 = CuSn4, gold plated
xxx-4 = CuZn30, pre-silver plated
xxx-5 = CuSn4, pre-silver plated
xxx-6 = CuSn4, silver plated

****) Gap Size 0.3 mm

*****) For Double and Single Termination

Remarks:
1) = CuSn4, pre-tin plated
2) = CuSn4, silver plated
3) = CuSn4, gold plated
4) = CuSn6, pre-tin plated
5) = CuSn6, gold plated
6) = with Lubricant
7) = Plain

◆) The pre- and suffix for the applicators depends on the applied termination equipment.

Technical Features

Contact Material:
CuSn, CuFe, CuNiSi
Cantilever Spring: Stainless Steel

Contact Finish:
– tin plated
– silver plated
– selective gold plated

Wire Size Range:
0.2–2.5 mm²
FLK and FLR

Contact Resistance (New State):
CuFe: <2 mΩ
CuSn: <3 mΩ

Total Temperature max.:
–40 °C to +130 °C (tin plated)
–40 °C to +140 °C (silver plated)
–40 °C to +150 °C (gold plated)

Mating Cycles:
10 (tin plated)
50 (silver plated)
100 (gold plated)

Insertion Force*:
max. 15 N

Extraction Force*:
min. 1.5 N

Retention Force:
– from housings without second locking device min. 100 N
– from housings only second locking device min. 60 N

Dimensions of Male Contacts:
2.8 mm x 0.8 mm

Centerlines (Standard/SWS):
5.0 x 5.5 mm
5.0 x 5.0 mm (Staggered)

Extraction Tool:
Part No. **1-1579007-6**

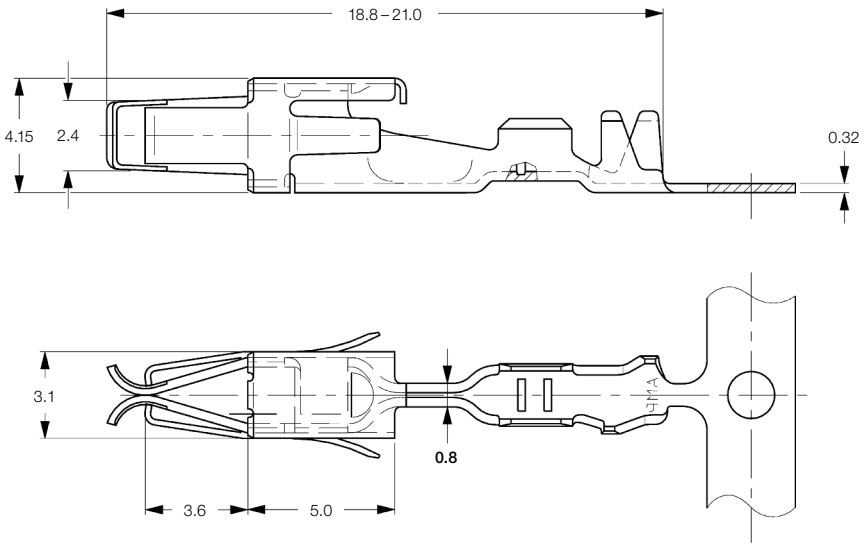
Product Group Drawing:
1355046
1355047 (Modified Spring)

Product Specification:
108-18013

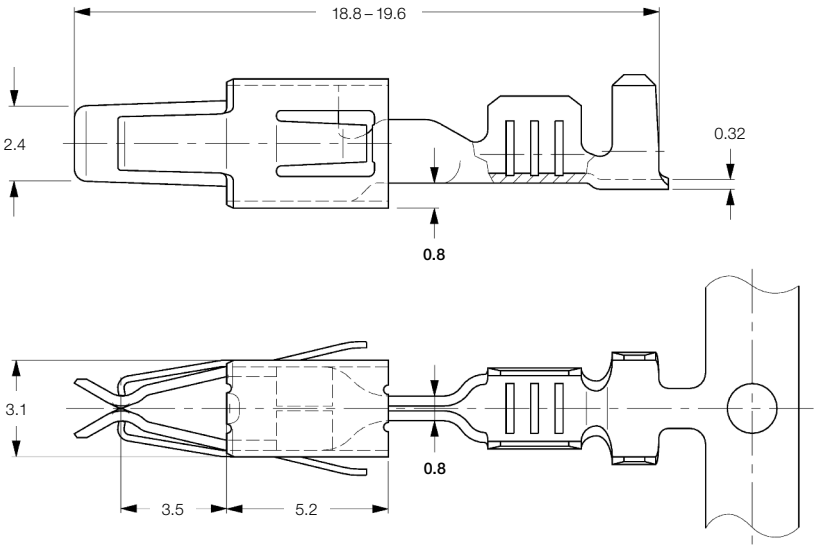
Application Specification:
114-18050

*) Measured with an Steel Test Tab (see Product Spec. 108-18279).

Receptacle Contact



With Modified Spring



Max. Current in 7 Position Housing

Material	Temperature (° C)	Current Carrying Capacity (Ampere)		
		1.0 mm²	1.5 mm²	2.5 mm²
CuSn	20	16.0	20.0	25.0
	90	7.5	9.5	12.0
CuFe	20	15.0	19.0	22.5
	90	7.0	9.0	11.0

Receptacle Contacts (continued)

Standard Receptacle Contacts (Length 18.8 mm)

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.22–0.50	1.15–2.30	–	-1 / -3 / 1-xxx-1	927778	4,000	927780	500	1528407	2063569-1
			-1	967259**	4,500	967260**	500		
			-1	969137***	4,000	969138***	500		
0.5–1.0	2.0–2.7	–	-1 / -3 / -6 / -7 / 1-xxx-1 / 2-xxx-1	927775	4,000	927783	500	1426141	2063195-1
		–	-1 / -3	928876****	4,000	–	–		
1.5–2.5	2.7–4.1	–	-1 / -3 / -6 / 1-xxx-1 / 2-xxx-1	927773	3,000	927781	500	1528385	2063195-1
0.2–0.5	–	1.0–1.6	-1 / -3 / -6 / -8 / 1-xxx-1 / 2-xxx-1	927774	4,000	927776	500	1528032	2031991-1
0.5–1.0	–	1.4–2.3	-1 / -3 / -6 / -8 / -9 / 1-xxx-1 / 2-xxx-1	927771	3,750	927779	500	1528029	2063195-1
			-1	965901***	4,000	965902***	500		
			-1*	928810**	4,000	–	–		
1.5–2.5	–	2.1–3.1	-1 / -3 / -6 / -8 / -9 / 1-xxx-1 / 2-xxx-1	927768	3,500	927777	500	1528045	2063195-1
			-1	963884**	3,500	963885**	500		
			-1	965899***	3,500	965900***	500		
0.08–0.22	1.5–1.8 Special Version		-1 / -3 / -6 / 1-xxx-1 / 2-xxx-1	963708	4,000	963777	500	on request	734414-1

Receptacle Contacts with Single Wire Sealing System (Length 18.8 mm)

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.22–0.38	1.15–1.60	–	-1 / -3 / 1-xxx-1	927772	3,700	929931	500	1528027	2031991-1
0.5–1.0	2.0–2.7	–	-1 / -3 / -6 / -8 / 1-xxx-1 / 2-xxx-1	927770	3,750	929930	500	1528006	
			-1	929280**	3,750	929281**	500	1528006	
1.5–2.5	2.7–3.0	–	-1 / -3 / -8 / 1-xxx-1 / 2-xxx-1	927766	3,750	929929	500	1528275	
0.35–0.50	–	1.15–1.60	-1 / -3 / 1-xxx-1	927772	3,700	929931	500	1528027	
0.5–1.0	–	1.4–2.1	-1 / -3 / -6 / -8 / 1-xxx-1 / 2-xxx-1	927770	3,750	929930	500	1528006	
1.5–2.5	–	2.2–3.0	-1 / -3 / -8 / 1-xxx-1 / 2-xxx-1	927766	3,750	929929	500	1528275	

*) **Material and Finish:**

- xxx-1 = CuFe, pre-tin plated
- xxx-1* = CuSn, pre-tin plated
- xxx-3 = CuSn, pre-tin plated
- xxx-6 = CuSn, selective pre-silver plated
- xxx-7 = CuFe, pre-tin plated, Special Test
- xxx-8 = CuSn, selective gold plated, Spring: gold plated
- xxx-9 = CuSn, selective gold and tin plated
- 1-xxx-1 = CuFe, selective gold plated
- 2-xxx-1 = CuSn, selective gold plated

Remarks:

- **) Gap Size 0.30 mm
- ***) Gap Size 0.65 mm
- ****) Gap Size 0.15 mm

◆) The pre- and suffix for the applicators depends on the applied termination equipment.

Receptacle Contacts (continued)

Receptacle Contacts with Single Wire Sealing System (Length 21.0 mm)

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.22-0.38	1.15-1.60	–	-1 / -3 / -6 / 1-xxx-1 / 2-xxx-1	929941	3,750	929942	500	1528027	2031991-1
0.5-1.0	2.0-2.7	–	-1 / -3 / -6 / 1-xxx-1 / 2-xxx-1	929939	3,750	929940	500	1528006	
1.5-2.5	2.7-3.0	–	-1 / -3 / -6 / 1-xxx-1 / 2-xxx-1	929937	3,700	929938	500	1528275	
0.35-0.50	–	1.15-1.60	-1 / -3 / -6 / 1-xxx-1 / 2-xxx-1	929941	3,750	929942	500	1528027	
0.5-1.0	–	1.4-2.1	-1 / -3 / -6 / 1-xxx-1 / 2-xxx-1	929939	3,750	929940	500	1528006	
1.5-2.5	–	2.2-3.0	-1 / -3 / -6 / 1-xxx-1 / 2-xxx-1	929937	3,700	929938	500	1528275	

***) Material and Finish:**

xxx-1 = CuFe, pre-tin plated
xxx-3 = CuSn, pre-tin plated
xxx-6 = CuSn, selective pre-silver plated
1-xxx-1 = CuFe, selective gold plated
2-xxx-1 = CuSn, selective gold plated

◆) The pre- and suffix for the applicators depends on the applied termination equipment.

Standard Receptacle Contacts with Modified Spring (Length 18.8 mm)

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.22–0.50	–	1.15–1.60	-1 / -2 / 1-xxx-1 / 2-xxx-1 / 4-xxx-1	964280	4,500	964279	500	1528004	2063533-1
			-1 / 4-xxx-1	1241862**	3,500	1241863**	500	on request	
0.5–1.0	–	1.4–2.1	-1 / -2 / -6 / 1-xxx-1 / 2-xxx-1 / 4-xxx-1	964284	4,000	964283***	500	1528097	
			-1 / 4-xxx-1	1241866**	3,500	1241867**	500	on request	
1.5–2.5	–	2.2–3.0	-1 / -2 / -6 / 1-xxx-1 / 2-xxx-1 / 4-xxx-1	965999	3,500	964346***	500	1528001	
			-1 / 4-xxx-1	1241870**	3,500	1241871**	500	1528001	
2.5–4.0	–	2.7–3.7	-2	1241978	2,700	1241977	500	1528202	–

Receptacle Contacts with Modified Spring and Single Wire Sealing System (Length 19.6 mm)

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.2–0.5	–	1.2–2.3	-1 / -2 / 1-xxx-1 / 2-xxx-1 / 4-xxx-1	964282	3,500	964281	500	1528025	2063435-1
			-1 / 4-xxx-1	1241864**	3,500	1241865**	500	on request	
0.5–1.0	–	1.4–2.7	-1 / -2 / 1-xxx-1 / 2-xxx-1 / 4-xxx-1	964286	3,500	964285	500	1528101	
			-1 / 4-xxx-1	1241868**	3,500	1241869**	500	on request	
1.5–2.5	–	2.2–3.0	-1 / -2 / 1-xxx-1 / 2-xxx-1 / 4-xxx-1	964273	3,500	964287	500	1528026	
			-1 / 4-xxx-1	1241872**	3,500	1241873**	500	1528026	

***) Material and Finish:**

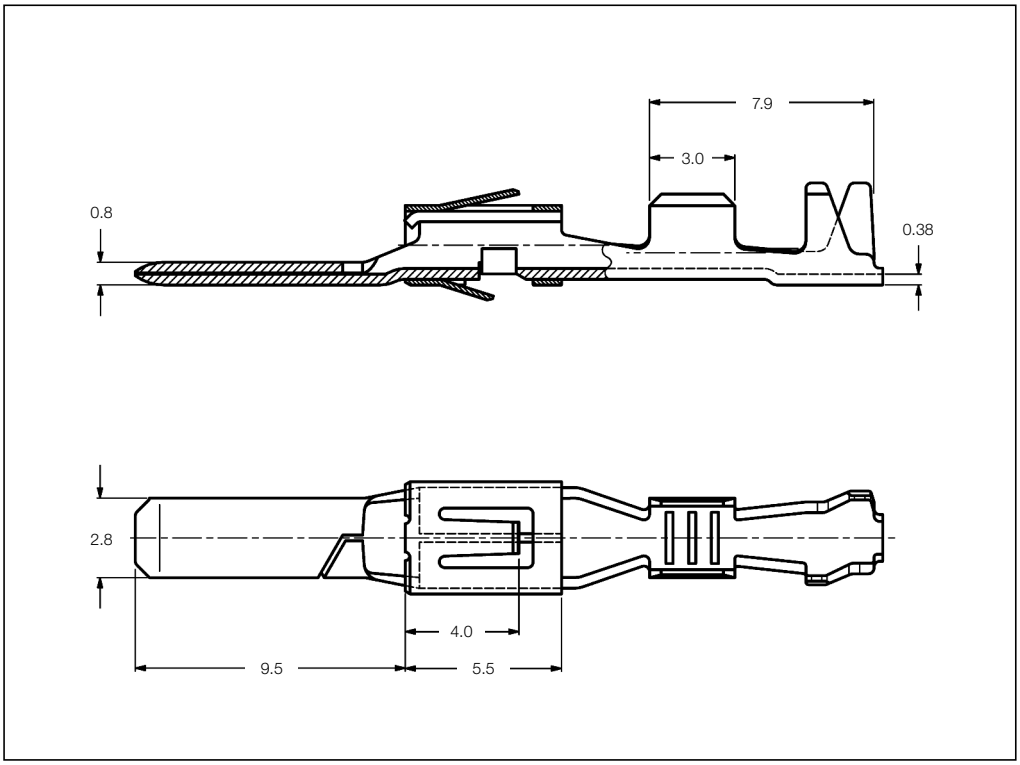
xxx-1 = CuFe, pre-tin plated
xxx-2 = CuSn, pre-tin plated
xxx-6 = CuSn, selective pre-silver plated
1-xxx-1 = CuFe, selective gold plated
2-xxx-1 = CuSn, selective gold plated
4-xxx-1 = CuNiSi, selective gold plated

Remarks:

**) Gap Size 0.3 mm
***) xxx-6 = NA yet

◆) The pre- and suffix for the applicators depends on the applied termination equipment.

Tabs 2.8 x 0.8 mm with Asymmetric Steel Top Spring, Mates with Junior Power Timer



Extraction Tool:
Part No. **2-1579007-5**

Product Specification:
108-18063

Application Specification:
114-18051

Standard Tab Contacts

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers				
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆
0.2–0.5	–	1.1–1.6	-1 / -2	962882	4,500	963813	500	1528753
0.5–1.0	–	1.4–2.1	-1 / -2	962883	4,500	963814	500	1528048
1.5–2.5	–	2.2–3.0	-1 / -2	962884	3,500	963815	500	1528729

Tab Contacts with Single Wire Sealing System

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers				
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆
0.2–0.5	–	1.2–1.6	-1 / -2	962879	4,500	963810	500	on request
0.5–1.0	–	1.4–2.1	-1 / -2 / -3	962880	2,500	963811	500	1530149
1.5–2.5	–	2.2–3.0	-1 / -2 / -3	962881	2,500	963812	500	on request

*) **Material and Finish:**
xxx-1 = CuSn, pre-tin plated
xxx-2 = CuFe, pre-tin plated
xxx-3 = CuSn, contact area gold plated

Additional Finishes on request.

◆) The pre- and suffix for the applicators depends on the applied termination equipment.

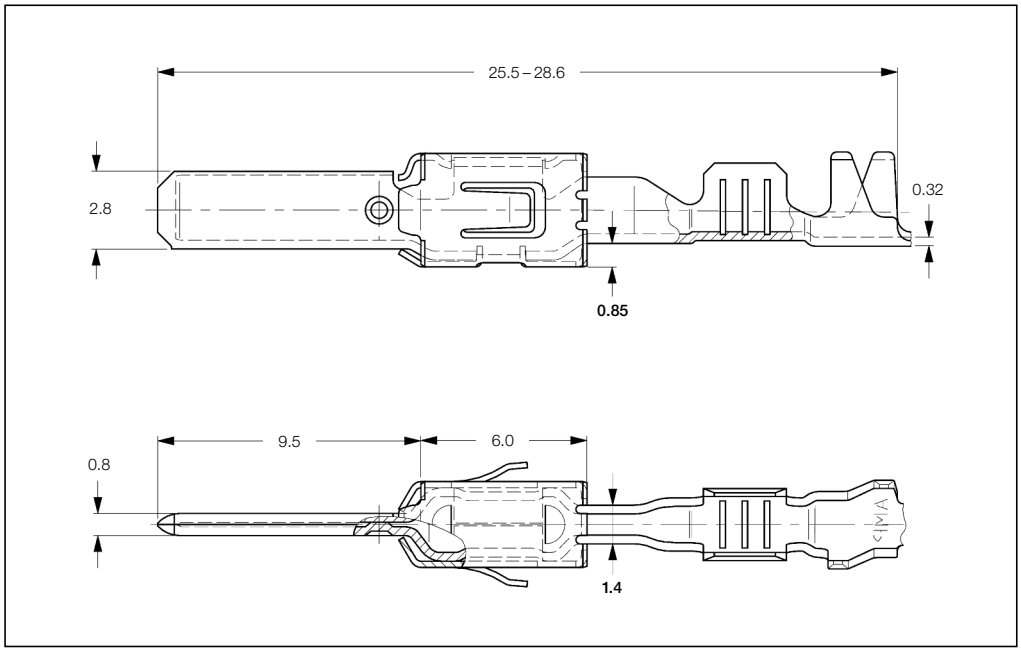
Tabs 2.8 x 0.8 mm with Steel Top Spring, Mates with Junior Power Timer

Extraction Tool:
Part No. **1-1579007-6**

Product Group Drawing:
1355052

Product Specification:
108-18063

Application Specification:
114-18051



Standard Tab Contacts

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool Complete
0.2–0.5	–	1.15–1.60	1-xxx-1 / 1-xxx-2 / 1-xxx-3 / 2-xxx-1 / 2-xxx-2 / 2-xxx-3	963860	4,000	963861	500	1528859	734538-1
0.5–1.0	–	1.4–2.0	1-xxx-1 / 1-xxx-2 / 1-xxx-3 / 2-xxx-1 / 2-xxx-2 / 2-xxx-3	962841	4,000	963745	500	1528315	2063490-1
1.5–2.5	–	2.1–2.9	1-xxx-1 / 1-xxx-2 / 1-xxx-3 / 2-xxx-1 / 2-xxx-2 / 2-xxx-3	962842	3,500	963746	500	1528305	2063490-1
1.5–2.5	2.4–3.7	–	1-xxx-1 / 1-xxx-2 / 1-xxx-3 / 2-xxx-1 / 2-xxx-2 / 2-xxx-3	962843	3,000	963747	500	on request	734417-3
4.0	–	3.4–3.7	1-xxx-1 / 1-xxx-2 / 2-xxx-1 / 2-xxx-2 / 3-xxx-1	968946	2,700	968965	500	1528430	–

Tab Contacts with Single Wire Sealing System

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool Complete
0.2–0.5	–	max. 2.1	1-xxx-1 / 1-xxx-3	965982	3,500	965983	500	1528406	734538-1
0.5–1.0	–	max. 2.1	1-xxx-1 / 1-xxx-2 / 1-xxx-3 / 2-xxx-1 / 2-xxx-2 / 2-xxx-3	962915	3,500	963748	500	1528452	2063490-1
1.5–2.5	–	max. 3.0	1-xxx-1 / 1-xxx-2 / 1-xxx-3 / 2-xxx-1 / 2-xxx-2 / 2-xxx-3	962916	3,500	963749	500	1528316	2063490-1
4.0	–	max. 3.7	1-xxx-1 / 1-xxx-2 / 2-xxx-1 / 2-xxx-2 / 3-xxx-1	968947	3,500	968966	500	1528067	–
AWG 12	GXL = max. 3.55		1-xxx-1 / 1-xxx-2	1719504	3,500	1719503	500	1852291	–

*) **Material and Finish:**
1-xxx-1 = CuSn, pre-tin plated
1-xxx-2 = CuSn, selective silver plated
1-xxx-3 = CuSn, selective gold plated
2-xxx-1 = CuFe, pre-tin plated
2-xxx-2 = CuFe, selective silver plated
2-xxx-3 = CuFe, selective gold plated
3-xxx-1 = CuSn, pre-tin plated

◆) The pre- and suffix for the applicators depends on the applied termination equipment.

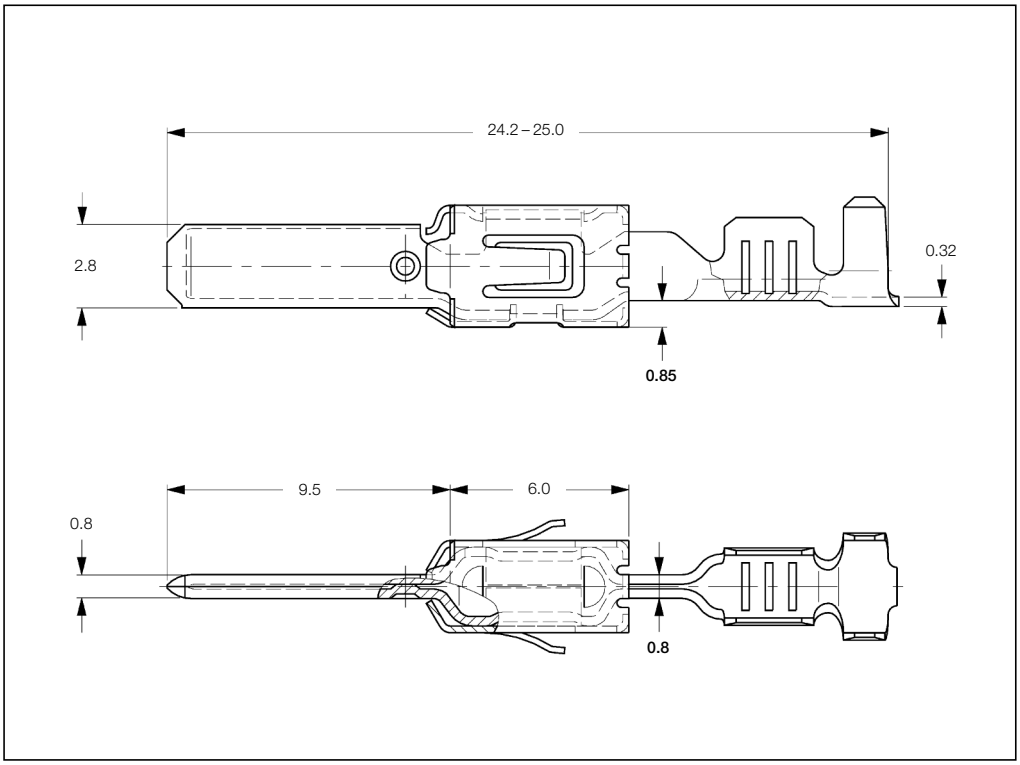
Tabs 2.8 x 0.8 mm with Modified Steel Top Spring, Mates with Junior Power Timer

Extraction Tool:
Part No. **1-1579007-6**

Product Group Drawing:
1355364

Product Specification:
108-18063

Application Specification:
114-18051



Standard Tab Contacts with Modified Spring

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.2–0.5	–	1.15–1.60	1-xxx-3 / 2-xxx-1	964292	4,000	964291	500	1528004	2063533-1
0.5–1.0	–	1.4–2.1	1-xxx-3 / 2-xxx-1 / 2-xxx-2	964294	4,000	964293	500	1528097	
1.25–2.50	–	2.2–3.0	1-xxx-3 / 2-xxx-1 / 2-xxx-2	964296	3,300	964295	500	1528001	

Tab Contacts with Modified Spring and Single Wire Sealing System

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.2–0.5	–	1.15–1.60	1-xxx-3 / 2-xxx-1	964298	3,500	964297	500	1528025	2063435-1
0.5–1.0	–	1.4–2.1	1-xxx-3 / 2-xxx-1 / 4-xxx-1	964300	3,500	964299	500	1528101	
1.25–2.50	–	2.2–3.0	1-xxx-3 / 2-xxx-1	964302	3,500	964301	500	1528026	

*) **Material and Finish:**
1-xxx-3 = CuSn, selective gold plated
2-xxx-1 = CuFe, pre-tin plated
2-xxx-2 = CuFe, selective pre-silver plated
4-xxx-1 = CuNi18Zn20, plain

◆) The pre- and suffix for the applicators depends on the applied termination equipment.

Tabs 2.8 x 0.8 mm Side Feed, Mates with Junior Power Timer

Contact Material:
CuZn, CuSn, CuNiSi

Contact Finish:
plain, pre-tin plated, silver plated, gold plated

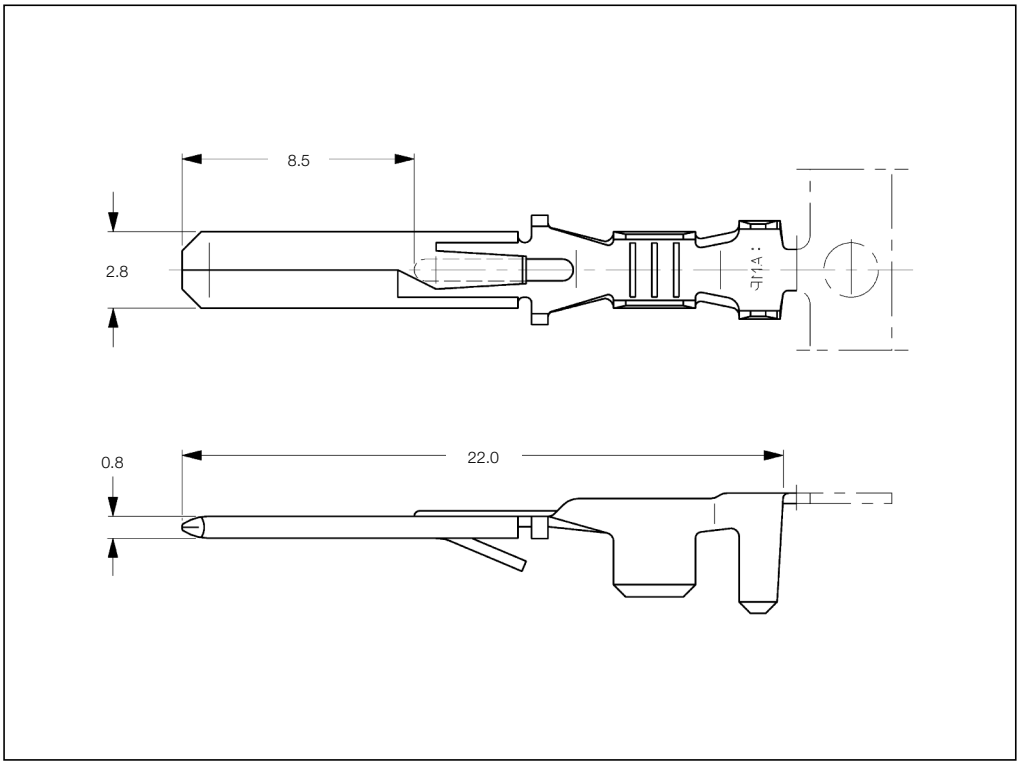
Wire Size Range:
0.2–3.0 mm² (FLR)

Extraction Tool:
Part No. **725864-1**
Part No. **1-1579007-4**

Product Group Drawing:
1670467

Product Specification:
108-18299

Application Specification:
114-18014



Tab Contacts

Wire Size Range (mm²)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.2–0.5	–	1.1–1.6	-1 / -2 / -3 / -4	964131	6,000	964140	500	1528053	2063569-1
			-1 / -2 / -3 / -4 / -5	963961**	5,000	963962**	500	1528530	1579001-2
0.5–1.0	–	1.4–2.1	-1 / -2 / -3 / -4 / -5	964132	4,000	964141	500	1238059	2063527-1
			-1 / -2 / -3 / -4 / -5	927892**	4,000	928923**	500	1426070	
			-1 / -2 / -3 / -4 / -5	928930**	4,000	928931**	500	1528384	–
>1.0–2.5	–	2.2–3.0	-1 / -2 / -3 / -4	964133	3,000	964142	500	on request	2063527-1
			-1 / -2 / -3 / -4 / -5	928781**	4,000	928794**	500	1528377	734262-1
1.5–3.0	–	2.3–3.5	-1 / -2 / -3 / -4 / -5	927893**	3,250	928924**	500	1426445	–

Tab Contacts with Single Wire Sealing System

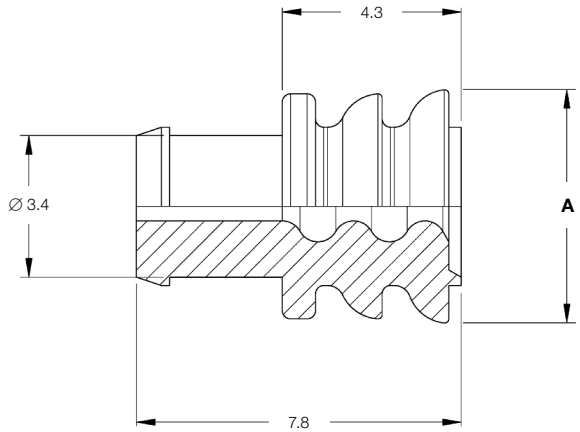
Wire Size Range (mm²)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.5–1.0	–	1.4–2.1	-1 / -2 / -3 / -4 / -5 / -6 / -7	929948**	3,500	965974**	500	on request	–
>1.0–2.5	–	2.2–3.0	-1 / -2 / -3 / -4 / -5	929949**	3,500	965975**	500	on request	–

*) **Material and Finish:**
xxx-1 = CuSn, plain
xxx-2 = CuSn, pre-tin plated
xxx-3 = CuNi, pre-tin plated
xxx-4 = CuSn, contact area gold plated
xxx-5 = CuSn, contact area silver plated
Additional Finishes on request.

) **Material and Finish:
See Product Group Drawing

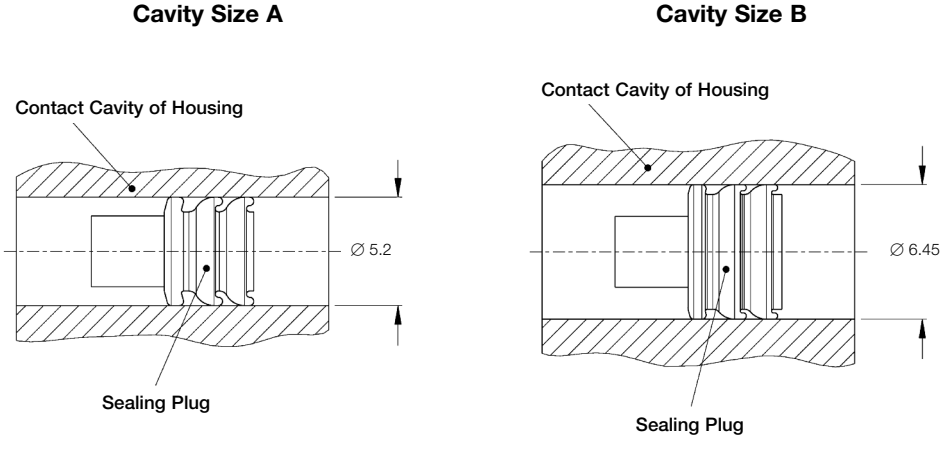
◆) The pre- and suffix for the applicators depends on the applied termination equipment.

Single Wire Seals and Sealing Plugs for Junior Power Timer and 2.8 mm Tabs (Two Cavity Diameters)

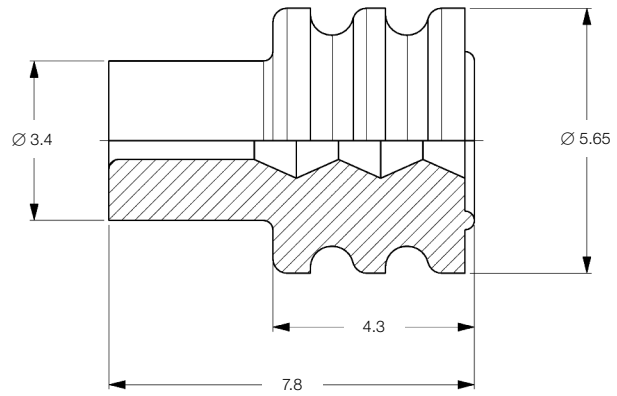


Cavity Size	Function Relevant Insulation Diameter (mm)	Example for Wire Size, FLR Insulation according ISO 6722 (mm^2)	Color	Diameter A (mm)	Part Number	Package Quantity
A	1.2–2.1	(0.35–1.00)	Blue	5.6	828904-1	1,000
					828904-2	10,000
A	2.2–3.0	(1.5–2.5)	White	5.6	828905-1	10,000
B	3.0–3.7	(2.5–4.0)	Green	7.2	828985-1	5,000
A	Sealing Plug		Natural	5.6	828922-1	10,000
B	Sealing Plug		Brown	7.2	828986-1	5,000

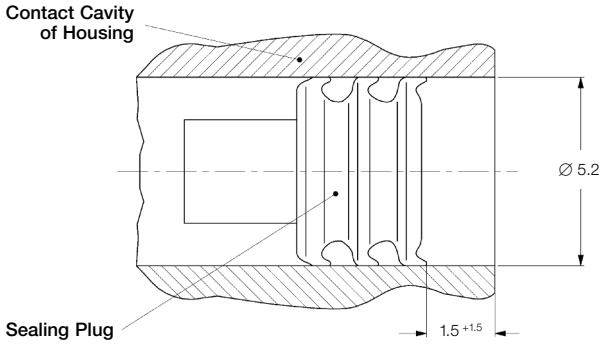
For correct use see Application Specification 114-18148.



Single Wire Seals and Sealing Plugs for Junior Power Timer and 2.8 mm Tabs (Cavity Diameter 5.2 mm)



Wire Size Range (mm^2)		Insulation Diameter (mm)	Color	Part Number	Package Quantity
FLK	FLR				
0.35	0.35–1.00	1.2–2.1	Blue	963294-1	5,000
0.5–1.0	1.5	2.0–2.7	Red-Brown	963293-1	5,000
1.5	2.5	2.7–3.0	Yellow	963292-1	5,000
–	–	Sealing Plug	Natural	828922-1	10,000
			Green	828922-2	10,000



Receptacle Contacts

Technical Features

Temperature Range:
–40 °C to +110 °C

Current Carrying Capacity:
25 A max.
(see Product Spec. 108-18054)

Wire Size Range:
0.2–2.5 mm² (suitable for insulation-reduced stranded wires)

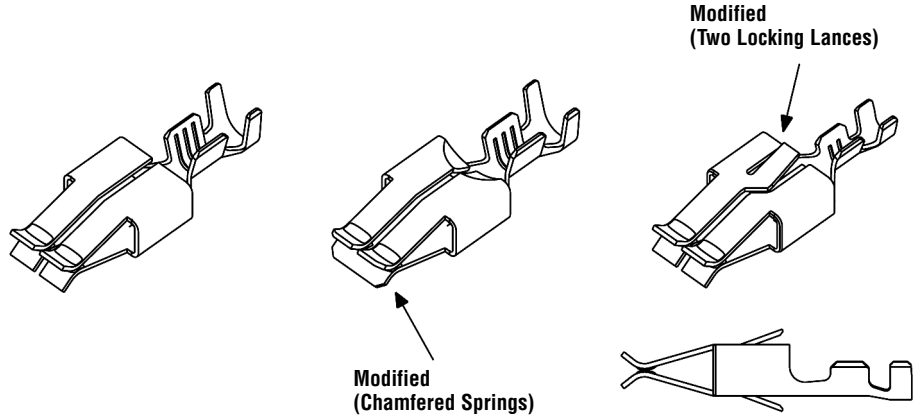
Insulation Diameter:
1.0–4.3 mm

Contact Material:
CuZn, CuSn, CuFe, CuNiSi.
Additional materials and finishes on request.

Insertion Force:
≤15 N

Extraction Force:
>8 N

Standard Timer



Dimensions of Male Contacts:
6.3 x 0.8 mm,
5.8 x 0.8 mm and
4.8 x 0.8 mm

Extraction Tool:
Part No. **1-1579007-4**

Product Specification:
108-18054

Application Specification:
114-18080

Standard Receptacle Contacts

Wire Size Range (mm²)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.2–0.5	–	1.0–1.6	-1 / -2	1823562 2)	2,500	–	–	1530543	–
			1-xxx-1 / -1 / -2	926984	3,000	926985	2,500	1528274	539744-2
0.5–1.0	–	1.4–2.3	-1 / -2 / -3	927847	2,750	927848	500	1528583	539742-2
			-1 / -2 / -3 / -4 3)	964201 2)	2,500	1241824 2)	500	1528583	539742-2
	2.0–3.3	–	-1 / -2 / -3	927865	2,500	927866	2,200	1426120	539687-2
>1.0–2.5	–	2.1–3.1	-1 / -2 / -3	927849	2,500	927850	500	1426401	539742-2
	2.7–4.0	–	-1 / -2 / -3	927879	2,000	927880	500	1426451	539687-2
0.5–1.5	2.0–3.0	–	-1 / -2 / -3	925575	2,500	925598	500	1528582	539687-2
				926005 1)	2,500	926007 1)	1,000		
1.0–2.5	2.4–3.7	–	-1 / -2 / -3	925612	2,500	925613	500	1528456	539687-2
				926006 1)	2,500	926008 1)	1,000		
			-1 / -2 / -3 3)	964202 2)	2,000	–	–	1528456	–

Standard Receptacle Contacts with Modified Chamfered Springs

Wire Size Range (mm²)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.5–1.0	–	1.4–2.3	-1 / -2 / -3	928820 1)	3,000	1241823 1)	500	1528583	539742-2
0.5–1.5	2.0–3.0	–	-1 / -2	926965 1)	2,500	927936 1)	1,000	1528252	539687-2
			-4 3)	969036 2)	2,500	–		1528252	
1.0–2.5	3.0–4.3	–	-1	926973 1)	2,500	927937 1)	500	1528456	539687-2

*) **Material and Finish:**
(except for Part Nos. **964201-4, 969036-4, 1241824-4)**
xxx-1 = CuZn, pre-tin plated
xxx-2 = CuSn, pre-tin plated
xxx-3 = CuFe, pre-tin plated
xxx-4 = CuZn, pre-tin plated, different direction of top of reel

Remarks:
1) = Reinforced Locking Lance
2) = Two Locking Lances
3) = CuNiSi, pre-tin plated

◆) The pre- and suffix for the applicators depends on the applied termination equipment.

Receptacle Contacts

Technical Features

Contact Material:
CuSn, CuFe, CuNiSi,
Cantilever Spring: Stainless Steel

Contact Finish:
tin plated, silver plated,
selective gold plated

Contact Resistance (New State):
≤2 mΩ

Total Temperature max.:
–40 °C to +130 °C (tin plated)
–40 °C to +140 °C (silver plated)
–40 °C to +150 °C (gold plated)

Mating Cycles:
10 (tin plated)
50 (silver plated)
100 (gold plated)

Insertion Force*:
max. 15 N (proof tab 0.8 mm thick)

Extraction Force*:
min. 2 N (proof tab 0.8 mm thick)

Retention Force:
– from housings without second locking device min. 120 N
– from housings only second locking device min. 60 N

Dimensions of Male Contacts:
4.8 x 0.8 mm,
5.8 x 0.8 mm,
6.3 x 0.8 mm

Modular Dimensions:
min. 6.0 x 7.5 mm

Extraction Tool:
Part No. **1-1579007-6**

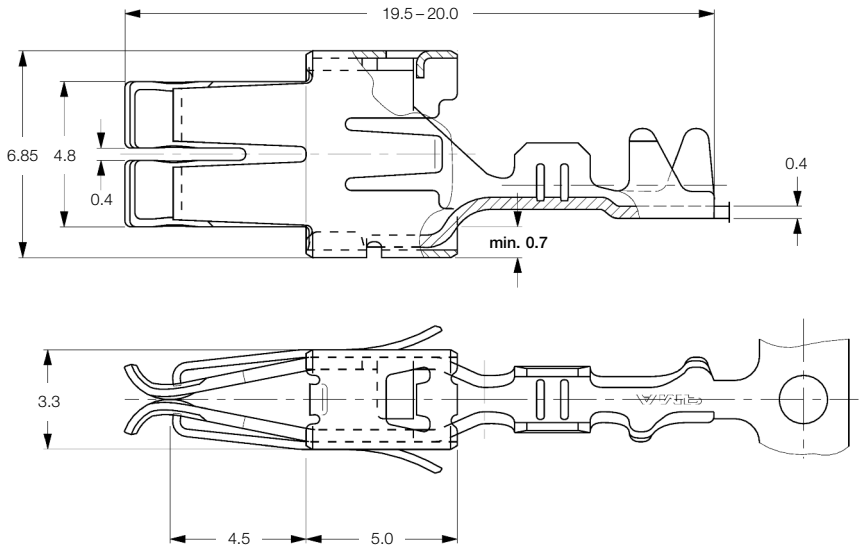
Product Group Drawing:
1355048
1355049 (Modified Spring)

Product Specification:
108-18025

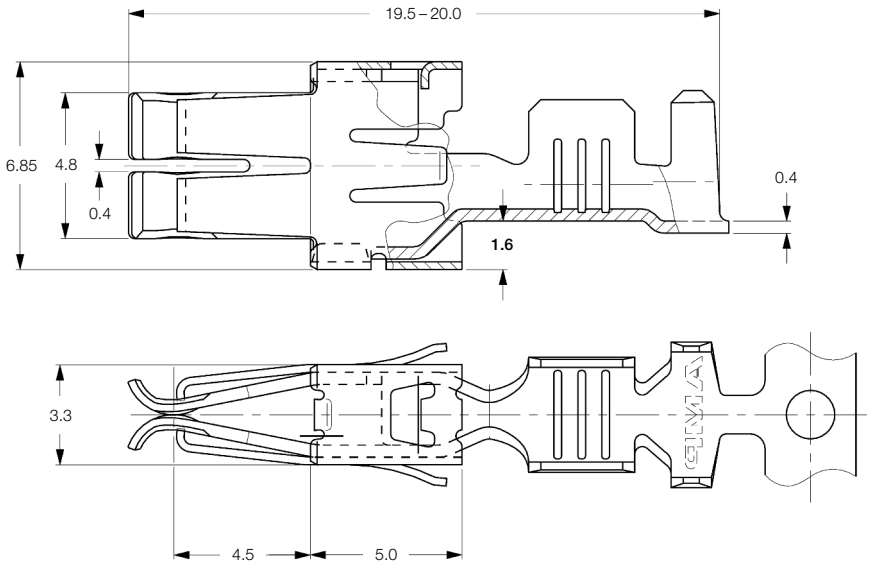
Application Specification:
114-18037

*) Measured with an Steel Test Tab (see Product Spec. 108-18279).

Receptacle Contact



With Modified Spring



Max. Current in 8 Position Housing (Fully Loaded)

Material	Temperature (° C)	Current Carrying Capacity (Ampere)			
		1.0 mm²	1.5 mm²	2.5 mm²	4.0 mm²
CuFe	20	17.5	23.0	25.5	40.0
	90	8.0	10.5	12.0	17.0
CuSn	20	16.5	20.0	23.5	35.0
	90	7.5	9.0	11.0	16.0

Receptacle Contacts (continued)

Standard Receptacle Contacts

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.2–0.5	1.15–2.3	–	-1 / -2 / -3 / -4 / -5	927839	2,300	928989	2,000	on request	2063522-1
0.5–1.0	2.0–2.7	–	-1 / -2	927827	2,300	927828	2,000	1528922	
			-2	1241834 1) 3)	2,300	1241835 1) 3)	2,000	1528922	–
> 1.0–2.5	2.7–3.7	–	-1 / -2 / -5	927833	2,000	927834	500	1528490	–
> 2.5–4.0	3.3–4.5	–	-1 / -2	927824	2,000	927825	2,000	1530010	539734-2**
> 4.0–6.0	4.0–5.2	–	-1 / -2 / -3 / -4 / -5	963709	1,500	963714	500	1528386	2-1579021-9**
			-1 / -5	1241818	1,500	1241819	500	1528386	
0.2–0.5	–	1.15–1.6	-1 / -2 / -3 / -4 / -5 / -7	927840	2,300	928990	500	1426312	–
0.5–1.0	–	1.4–2.1	-1 / -2 / -3 / -4 / -5 / -7 / 1-xxx-5	927831	2,300	927832	400	1528295	2063564-1
> 1.0–2.5	–	2.2–3.0	-1 / -2 / -3 / -4 / -5 / -6 / -7 / 1-xxx-5	927837	2,300	927838	1,500	1528095	
1.5–2.5	–	2.2–3.0	-1 / -2 / -3 / -4 / -5	964203 2)	2,300	1241826 2)	–	1528095	
> 2.5–4.0	–	2.7–3.7	-1 / -2 / -5 / 1-xxx-5	927829	2,300	927830	2,000	1528553	
1.5–3.0	3.0–3.4 Special Version		-5	1241174 1) 3)	2,000	1241175 1) 3)	–	1528476	–
1.5–3.0	3.0–3.4 Special Version		-1 / -2 / -5	964052	2,000	–	–	1528476	–
1.5–3.0	3.0–3.4 Special Version		-1 / -2 / -3 / -4 / -5	964204 2)	2,000	1241827 2)	–	1528476	539672-2**

◆) The pre- and suffix for the applicators depends on the applied termination equipment.
) Die-Set only, requires Hand Tool, Part No. **539635-1.

Receptacle Contacts with Single Wire Sealing System

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool 539635-1 with Die Set
0.2–0.5	–	1.15–1.60	-1 / -2 / -7 / 1-xxx-2 / 2-xxx-2	927826	1,600	929921	500	1426558	539736-2
0.5–1.0	–	1.4–2.1	-1 / -2 / -7 / 1-xxx-2 / 2-xxx-2	927836	1,500	929922	500	1528297	
> 1.0–2.5	–	2.2–3.0	-1 / -2 / -7 / 1-xxx-2 / 1-xxx-3 / 2-xxx-1 / 2-xxx-2	927835	1,500	929923	500	1528102	
> 2.5–4.0	–	3.4–3.7	-1 / -2 / -7 / 1-xxx-2 / 1-xxx-3 / 2-xxx-1 / 2-xxx-2	928966	1,500	929924	500	1528246	
AWG 12–10	2.05–2.59		-1	1241962	1,500	1241963	500	on request	–

◆) The pre- and suffix for the applicators depends on the applied termination equipment.

*) **Material and Finish:**

xxx-1 = CuFe, pre-tin plated
xxx-2 = CuSn, pre-tin plated
xxx-3 = CuSn, selective pre-silver plated
xxx-4 = CuSn, pre-silver plated
xxx-5 = CuFe, pre-silver plated
xxx-6 = CuFe, selective nickel plated
xxx-7 = CuFe, selective gold plated
1-xxx-2 = CuFe, selective gold-tin plated, Spring selective gold plated
1-xxx-3 = CuFe, selective gold-gold plated, Spring selective gold plated
1-xxx-4 = CuFe, selective gold-tin plated
1-xxx-5 = CuFe, pre-silver plated 3–4.5 µm
2-xxx-1 = CuSn, selective gold-gold plated, Spring selective gold plated
2-xxx-2 = CuSn, selective gold-tin plated, Spring selective gold plated
2-xxx-4 = CuSn, selective gold-tin plated, Spring selective gold plated

Remarks:

1) = Gap Size 0.20 mm
2) = Gap Size 0.15 mm
3) = With One Locking Lance

Receptacle Contacts (continued)

Standard Receptacle Contacts with Modified Spring

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.2–0.5	–	1.15–1.60	-1	964322	2,300	964321	500	1530002	2063536-1
0.5–1.0	–	1.4–2.1	-1	964324	2,300	964323	500	1528206	
>1.0–2.5	–	2.2–3.0	-1 / -5	964326	2,300	964325	500	1528095	
>2.5–4.0	–	3.4–4.7	-1 / -5	964328	2,100	964327	500	1528298	

Receptacle Contacts with Modified Spring and Single Wire Sealing System

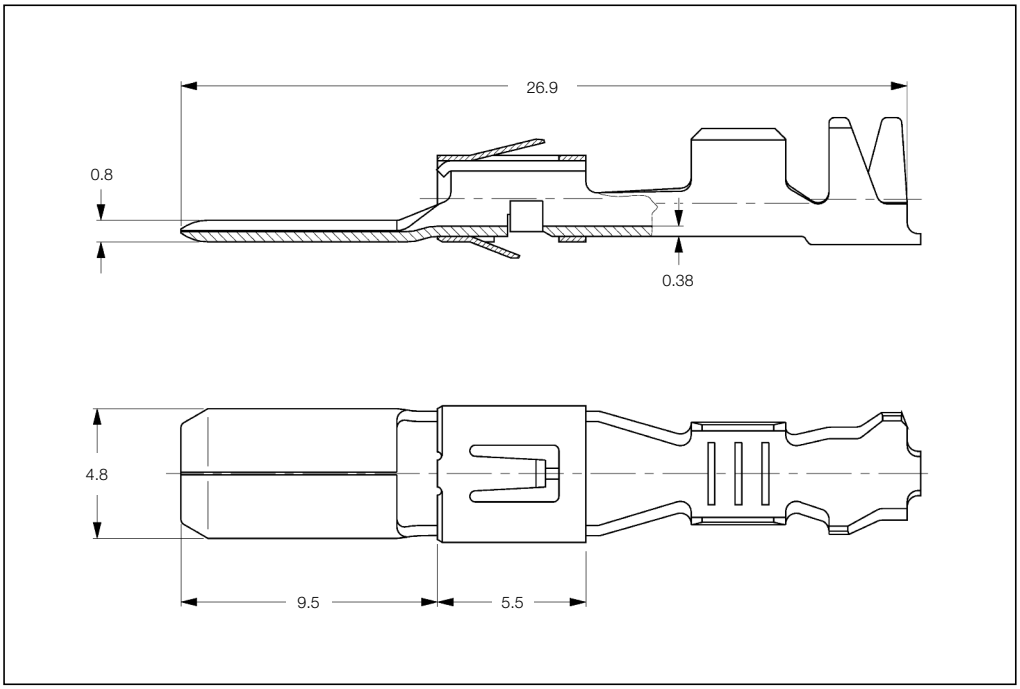
Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.5–1.0	2.3–2.7	1.4–2.1	1-xxx-1 / 1-xxx-2	964330	1,700	964329	500	1528297	2063560-1
			-1	969040	1,500	969041	500	1528342	
>1.0–2.5	3.0–3.6	2.2–3.0	-5 / 1-xxx-1 / 1-xxx-2	964332 1-964332-5	1,700	964331	500	1528102	
			-1	969042	1,500	969043	500	1528231	
>2.5–4.0	4.1–4.4	3.4–3.7	1-xxx-1 / 1-xxx-5	964334	1,500	1-964333-1	500	1528246	
			-1 / -5 / 1-xxx-5	969044	1,500	969045	500	1530003	
>1.0–2.5	–	2.2–3.0	-2 / 2-xxx-4	968035	1,500	968036	500	1528102	–
>2.5–4.0	–	3.4–3.7	-2 / 1-xxx-4 / 2-xxx-4	968037	1,500	968038	500	1528246	–
>4.0–6.0	–	3.6–5.1	1-xxx-6	1670426	–	1670427	–	on request	–

***) Material and Finish:**

xxx-1 = CuFe, pre-tin plated
xxx-2 = CuSn, pretin plated
xxx-5 = CuFe, pre-silver plated
1-xxx-1 = CuFe, pre-tin plated
1-xxx-2 = CuFe, selective gold plated
1-xxx-4 = CuFe, selective gold plated
1-xxx-5 = CuFe, pre-silver plated
1-xxx-6 = CuNiSi, Sn28M plated
2-xxx-4 = CuSn, selective gold plated

◆) The pre- and suffix for the applicators depends on the applied termination equipment.

Tabs 4.8 x 0.8 mm with Asymmetric Steel Top Spring, Mates with Standard Power Timer



Extraction Tool:
Part No. **2-1579007-5**

Product Specification:
108-18064

Application Specification:
114-18052

Standard Tab Contacts

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers				
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆
0.2–0.5	–	1.1–1.6	-1 / -2	963824	3,000	963825	500	1528753
0.5–1.0	–	1.4–2.0	-1 / -2	962903	3,000	963816	500	1528048
	2.0–2.7	–	-1 / -2	962908	2,000	963821	500	on request
>1.0–2.5	–	2.1–2.9	-1 / -2	962904	2,500	963817	500	1528729
>2.5–4.0	3.3–4.5	–	-1 / -2	962910	1,700	963823	500	on request

Tab Contacts with Single Wire Sealing System

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers				
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆
0.5–1.0	2.0–2.7	1.4–2.0	-1 / -2	962905	1,000	963818	1,200	1528873
>1.0–2.5	–	2.1–2.9	-1 / -2	962906	1,000	963819	500	on request
>2.5–4.0	3.3–4.5	–	-1 / -2	962907	1,000	963820	500	on request

*) **Material and Finish:**
xxx-1 = CuSn, pre-tin plated
xxx-2 = CuFe, pre-tin plated

◆) The pre- and suffix for the applicators depends on the applied termination equipment.

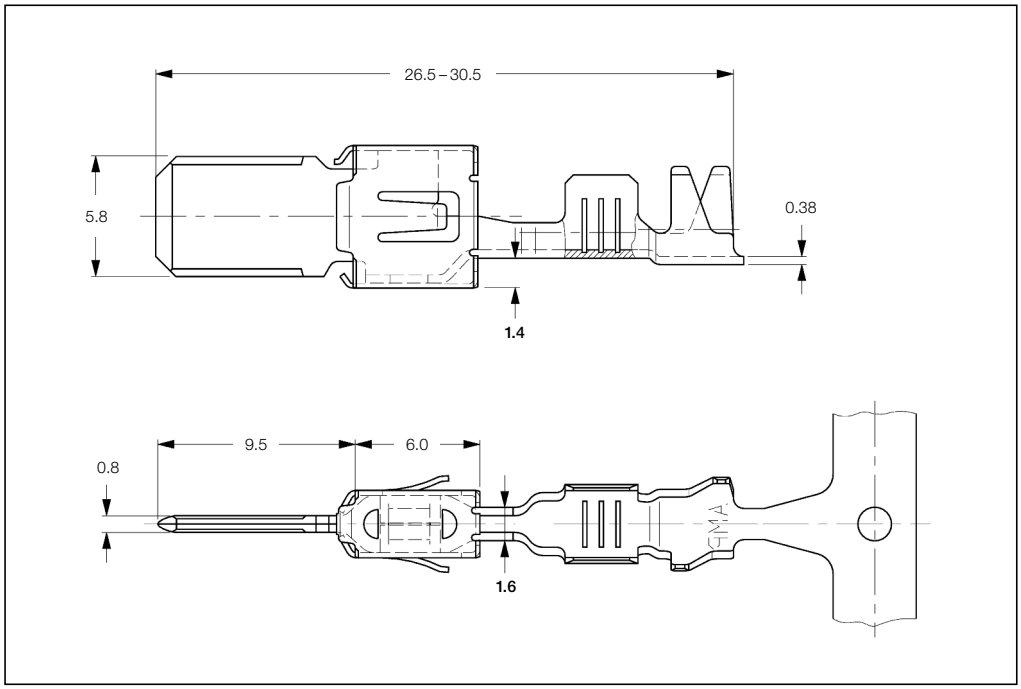
Tabs 5.8 x 0.8 mm with Steel Top Spring, Mates with Standard Power Timer

Extraction Tool:
Part No. **1-1579007-6**

Product Group Drawing:
1241895

Product Specification:
108-18064

Application Specification:
114-18052



Standard Tab Contacts

Wire Size Range (mm²)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool 539635-1 with Die Set
0.2–0.5	–	1.15–1.60	1-xxx-1 / 2-xxx-1	965984	2,000	965985	500	–	–
0.5–1.0	–	1.4–2.1	1-xxx-1 / 1-xxx-2 / 2-xxx-1 / 2-xxx-2	963734	1,700	963737	500	on request	539759-2
1.5–2.5	–	2.2–3.0	1-xxx-1 / 1-xxx-2 / 2-xxx-1 / 2-xxx-2	963735	1,800	963738	500	on request	734688-1** 539623-1** for 2.5
>2.5–4.0	–	2.7–3.7	1-xxx-1 / 1-xxx-2 / 2-xxx-1 / 2-xxx-2	963736	1,800	963739	500	on request	539623-1**
1.5–2.5	2.4–3.7	–	1-xxx-1 / 1-xxx-2 / 2-xxx-1 / 2-xxx-2	962845	1,700	963740	500	on request	539759-2
3.0–4.0	3.3–4.5	–	1-xxx-1 / 1-xxx-2 / 2-xxx-1 / 2-xxx-2	962846	1,800	963741	500	on request	
4.0–6.0	4.0–5.2	–	1-xxx-1 / 2-xxx-1	968050	1,500	968051	500	on request	–

Tab Contacts with Single Wire Sealing System

Wire Size Range (mm²)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool 539635-1 with Die Set
0.5–1.0	–	1.4–2.1	1-xxx-1 / 1-xxx-2 / 2-xxx-1 / 2-xxx-2	962917	1,500	963742	500	on request	539757-2
1.5–2.5	–	2.2–3.0	1-xxx-1 / 1-xxx-2 / 2-xxx-1 / 2-xxx-2	962918	1,500	963743	500	on request	539757-2
>2.5–4.0	–	2.7–3.7	1-xxx-1 / 1-xxx-2 / 2-xxx-1 / 2-xxx-2	962919	1,500	963744	500	on request	539757-2
4.0–6.0	–	3.6–5.1	2-xxx-2	2112966	1,500	2112965	500	1855636	–

***) Material and Finish:**
1-xxx-1 = CuSn, pre-tin plated
1-xxx-2 = CuSn, selective silver plated
2-xxx-1 = CuFe, pre-tin plated
2-xxx-2 = CuFe, selective silver plated

Remarks:
****) Hand Tool complete

◆) The pre- and suffix for the applicators depends on the applied termination equipment.

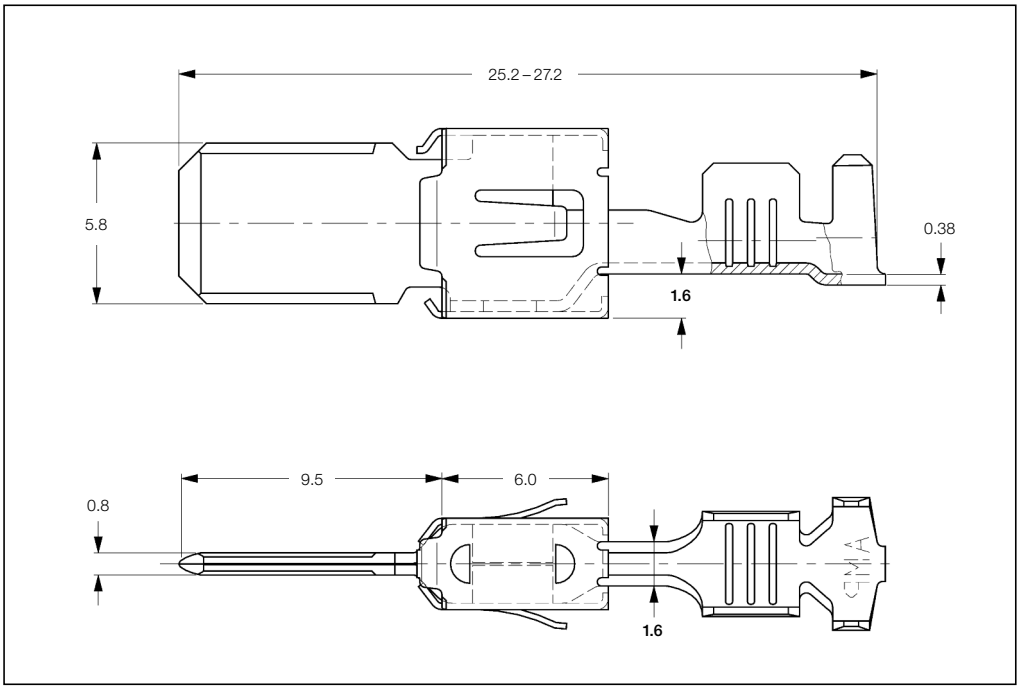
Tabs 5.8 x 0.8 mm with Modified Steel Top Spring, Mates with Standard Power Timer

Extraction Tool:
Part No. **1-1579007-6**

Product Group Drawing:
1394011

Product Specification:
108-18064

Application Specification:
114-18052



Standard Tab Contacts with Modified Spring

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.2–0.5	–	1.15–1.60	-1	969007	1,800	969008	500	1528296	2063536-1
0.5–1.0	–	1.4–2.1	-1	964304	1,800	964303	2,000	1528093	
>1.0–2.5	–	2.2–3.0	-1 / -3	964306	1,900	964305	500	1528094	
>2.5–4.0	3.3–4.5	3.4–3.7	-1	964308	1,800	964307	500	1530004	

Tab Contacts with Modified Spring and Single Wire Sealing System

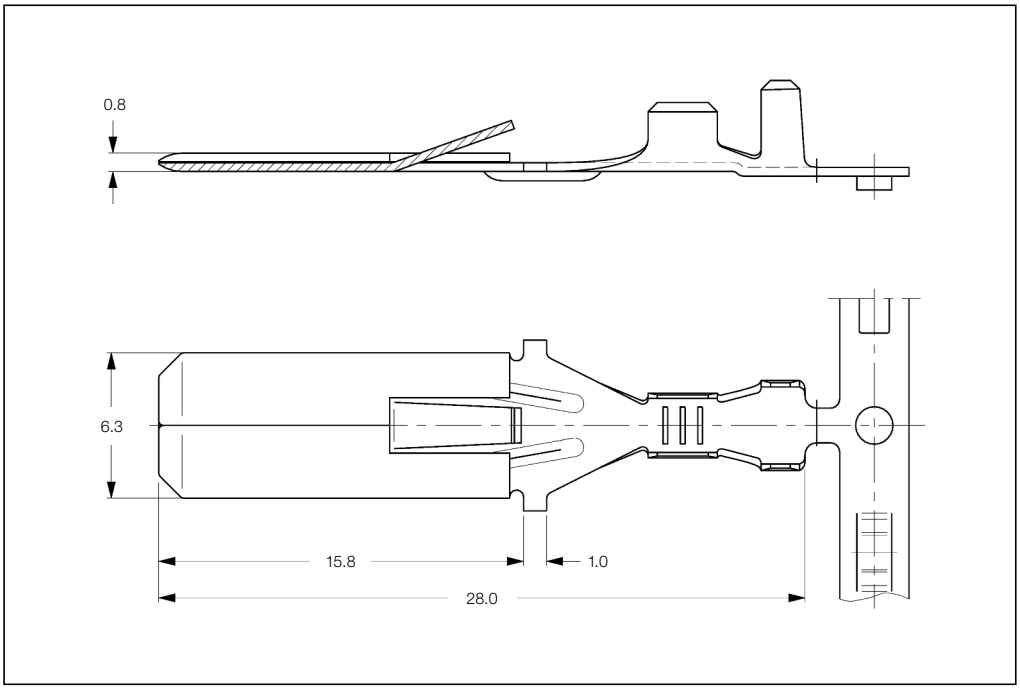
Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.5–1.0	–	1.4–2.1	-1	964310	1,500	964309	500	1528437	2063560-1
>1.0–2.5	–	2.2–3.0	-1	964312	1,400	964311	500	1528444	
>2.5–4.0	–	3.4–3.7	-1	964314	1,300	964313	500	1528439	

*) **Material and Finish:**
xxx-1 = CuFe, pre-tin plated
xxx-3 = CuSn, selective gold plated

◆) The pre- and suffix for the applicators depends on the applied termination equipment.

Tabs 6.3 x 0.8 mm Side Feed, according to DIN 46343, Mates with Standard Power Timer

Extraction Tool:
Part No. **1-1579007-4**



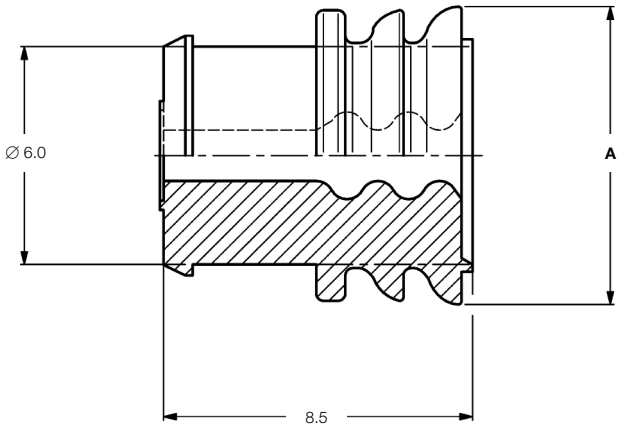
Tab Contacts Side Feed

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
0.2–0.5	–	1.15–1.60	-1 / -2	965889	3,000	965890	1,500	on request	734681-1
0.5–1.0	–	1.4–2.1	-1 / -2	963951	3,000	963952	1,500	1528051	734681-1
>1.0–2.5	–	2.2–3.0	-1 / -2	963953	2,500	963954	1,500	1426097	734682-1
			-1 / -2	963959	2,500	963960	1,500	on request	–
>2.5–4.0	–	3.3–4.5	-1 / -2	963955	2,000	963956	1,500	on request	734683-1

***) Material and Finish:**
xxx-1 = CuSn, plain
xxx-2 = CuSn, pre-tin plated

◆) The pre- and suffix for the applicators depends on the applied termination equipment.

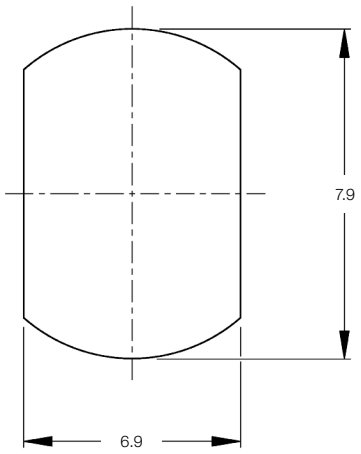
Single Wire Seals and Sealing Plugs for Standard Power Timer and 5.8 mm (4.8 mm) Tabs
(Cavity Diameter see below)



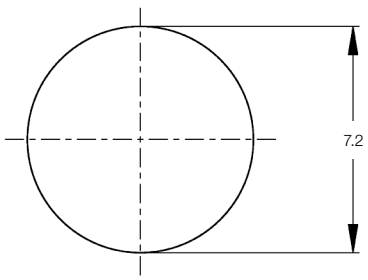
Insulation Diameter (mm)	Color	Diameter A (mm)	Part Number	Package Quantity
1.4–2.1	Blue	8.2	963243-1	2,500
2.2–3.0	White	8.2	963244-1	2,500
3.4–3.7	Yellow	8.2	963245-1	2,500
Sealing Plug	Black	8.1	100132-1	1,000

Cavity shown from Top (Contact Engaging Side)

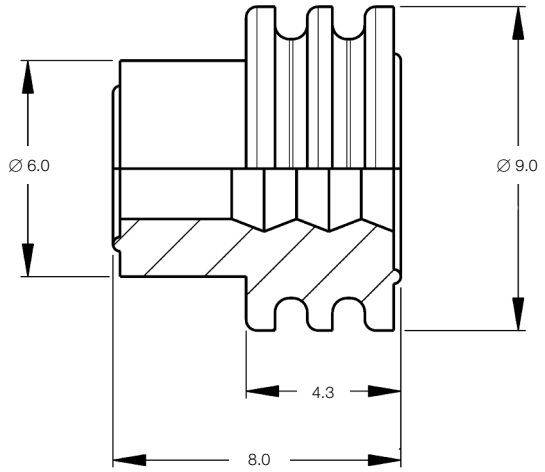
AMP MCP 6.3/4.8K
TAB 5.8 x 0.8 mm



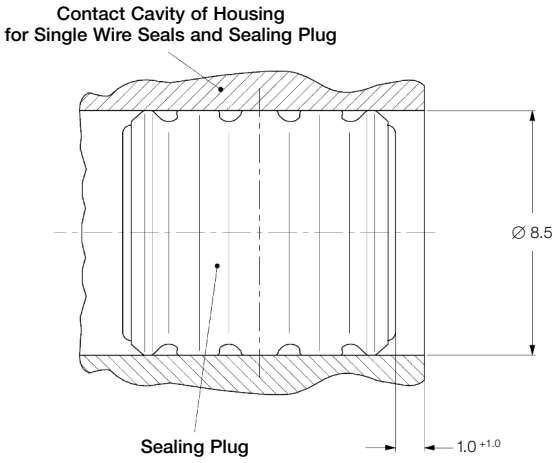
TAB 5.8 x 0.8 mm



Single Wire Seals and Sealing Plugs for Standard Power Timer and 5.8 mm (4.8 mm) Tabs (Cavity Diameter 8.5 mm)



Insulation Diameter (mm)	Color	Part Number	Package Quantity
2.0–2.7	White	1394511-1	10,000
3.4–3.7	Blue	1394512-1	10,000
4.0–4.5	Green	1719043-1	10,000
Sealing Plug	Transparent	967652-1	20,000



Engineering Notes

Receptacle Contacts

Technical Features

Contact Material:
CuNiSi,
Cantilever Spring: Stainless Steel

Contact Finish:
pre-tin plated

Wire Size Range:
> 2.5–4.0 mm²
> 4.0–6.0 mm²
6.0–10.0 mm²

Contact Resistance (New State):
< 0.3 mΩ

Total Temperature max.:
–40 °C to +130 °C (tin plated)

Mating Cycles:
10 (tin plated)

Retention Force:
– from housings without second locking device min. 150 N
– from housings only second locking device min. 100 N

Modular Dimensions

Standard Version:
min. 11.0 mm x 12.5 mm

Single Wire Seal:
16.0 mm x 16.0 mm

Single Wire Seal:
Diameter 10.0 mm in cavity with diameter 15.0 mm

Tab Dimensions:
9.5 mm x 1.2 mm and fused contacts according DIN 72581, Part 3, Form E.

Insertion Force*:
< 40 N

Extraction Force*:
> 6 N

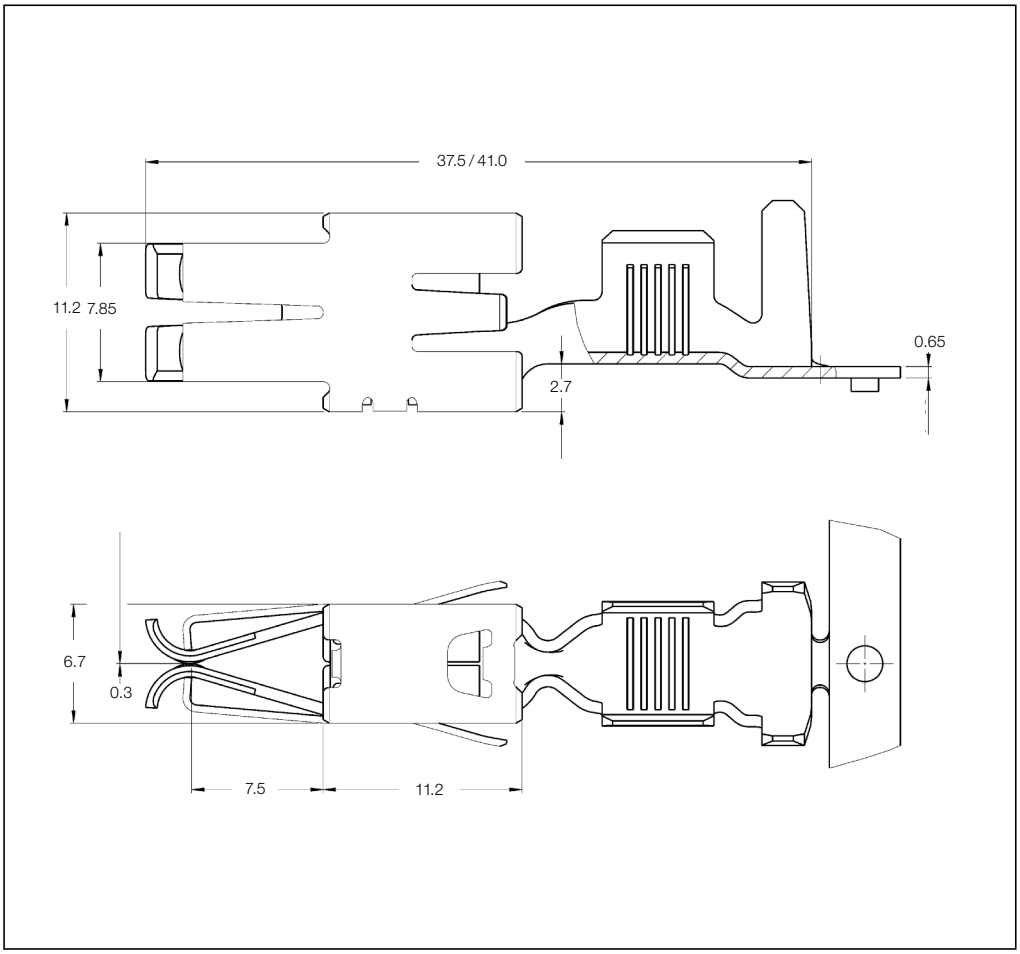
Extraction Tool:
Part No. **1-1579007-7**

Product Group Drawing:
1355050

Product Specification:
108-18047

Application Specification:
114-18075

*) Measured with an Steel Test Tab (see Product Spec. 108-18279).



Max. Current in 2 Position Housing (Fully-Loaded)

Temperature (° C)	Current Carrying Capacity (Ampere)					
	Tabs 9.5 x 1.2 mm			Maxi Littelfuse 8.0 x 0.38 mm		
	4.0 mm²	6.0 mm²	10.0 mm²	4.0 mm²	6.0 mm²	10.0 mm²
20	45.0	57.0	71.0	40.0	50.0	60.0
90	27.0	28.0	32.0	27.0	28.0	32.0

Wire Size Range (mm²)	Measured Values	
	Crimp Extraction Force	Crimp Contact Resistance
4.0	> 300 N	–
6.0	> 400 N	–
10.0	> 500 N	–
> 2.5–4.0	–	< 0.20 mΩ
4.0–6.0	–	< 0.10 mΩ
6.0–10.0	–	< 0.06 mΩ

Receptacle Contacts (continued)

Standard Receptacle Contacts (Tab 9.5 x 1.2 mm)

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
> 2.5–4.0	3.3–4.7	–	-1	962928	600	962929	500	1855533	734531-1
4.0–6.0	4.0–5.2	–	-1 / 1-xxx-6	962930	600	962931	500	1855531	734532-1
6.0–10.0	4.6–6.6	–	-1 / 1-xxx-6	962932	600	962933	500	1855534	734533-1

Receptacle Contacts with Single Wire Sealing System (Tab 9.5 x 1.2 mm)

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
> 2.5–4.0	4.6–5.3	–	-1	962934	450	962935	500	on request	–
4.0–6.0	5.8–6.6	–	-1	962936	450	962937	500	1855532	
6.0–10.0	7.1–8.1	–	-1	962938	450	962939	500	on request	

Standard Receptacle Contacts with Reduced Mating Force (Tab 9.5 x 1.2 mm)

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
4.0–6.0	4.0–5.2	–	-1 / 2-xxx-1	967228	600	967229-1	500	on request	734532-1
6.0–10.0	4.6–6.6	–	-1 / 2-xxx-1	965918	600	965921-1	500	on request	734533-1

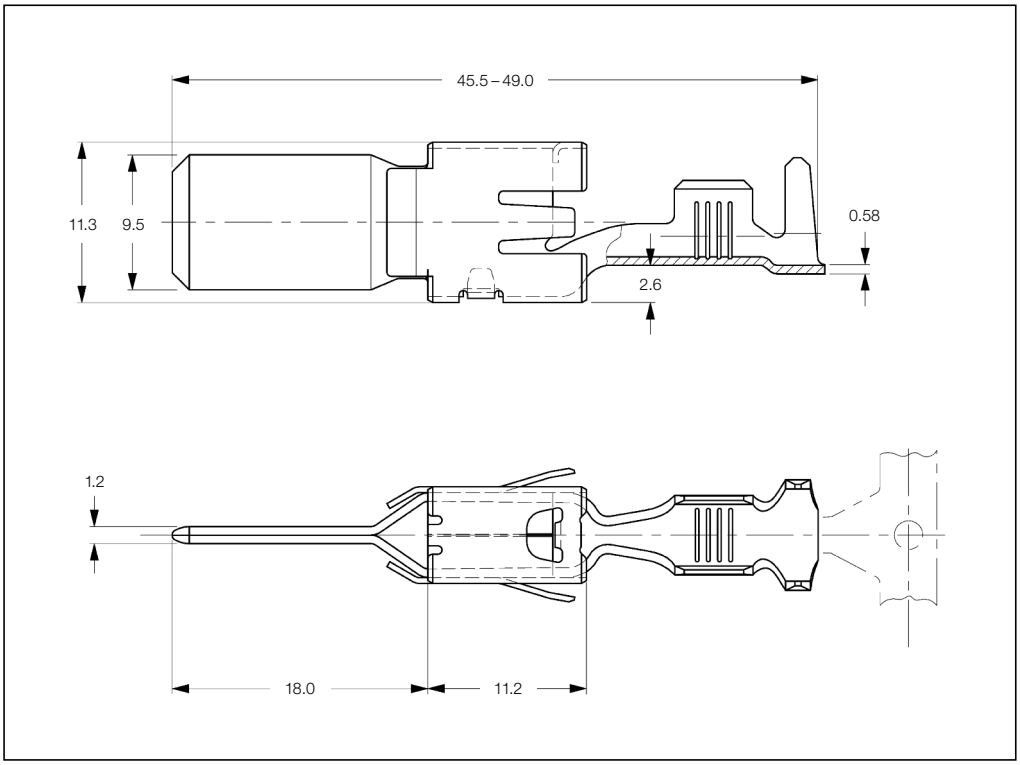
Standard Receptacle Contacts (Tab 8.0 x 1.0 mm)

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
4.0–6.0	4.0–5.2	–	1-xxx-6	1719952	600	1719951	500	on request	734532-1
6.0–10.0	4.6–6.6	–	1-xxx-6	1703008	600	1703011	500	on request	734533-1

*) **Material and Finish:**
xxx-1 = CuNiSi, pre-tin plated
1-xxx-6 = CuNiSi, Sn28M
2-xxx-1 = CuNiSi, pre-tin plated

◆) The pre- and suffix for the applicators depends on the applied termination equipment.

Tabs 9.5 x 1.2 mm with Steel Top Spring, Mates with Maxi Power Timer



Modular Dimensions

Standard Version:
min. 11.0 mm x 12.5 mm

Modular Dimensions with Single Wire Sealing System:
16.0mm x 16.0mm /
14.0mm x 16.0 mm

Extraction Tool:
Part No. **1-1579007-7**

Application Specification:
114-18076

Standard Tab Contacts

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
>2.5–4.0	3.3–4.7	–	-1 / -2	963764	530	963765	500	on request	734531-1
4.0–6.0	4.0–5.2	–	-1 / -2	963766	530	963767	500	on request	734532-1
6.0–10.0	4.7–6.6	–	-1 / -2	963768	530	963769	500	on request	734533-1

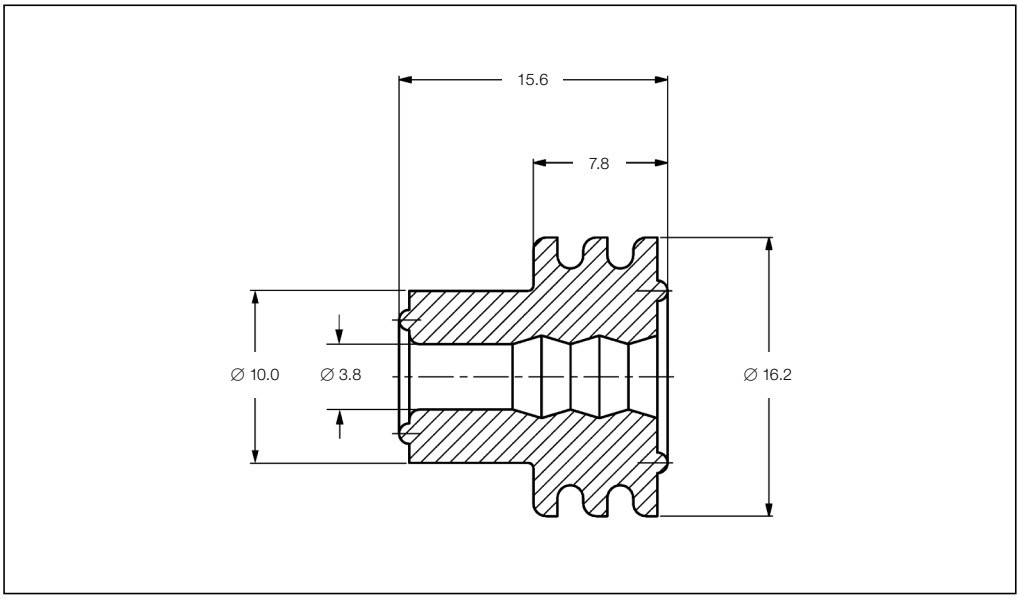
Tab Contacts with Single Wire Sealing System

Wire Size Range (mm^2)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator◆	Hand Tool
>2.5–4.0	4.0–4.5	–	-1 / -2	963770	450	963771	500	on request	–
4.0–6.0	4.7–5.3	–	-1 / -2	963772	450	963773	500	on request	–
6.0–10.0	6.2–6.6	–	-1 / -2	963774	450	963775	500	on request	–

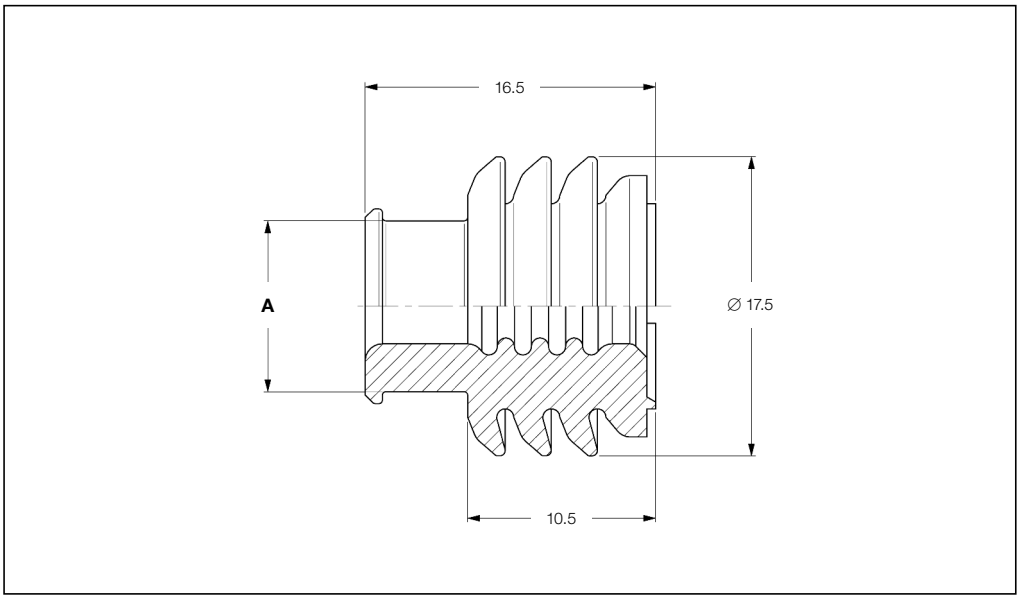
*) **Material and Finish:**
xxx-1 = CuSn, pre-tin plated
xxx-2 = CuFe, pre-tin plated
xxx-3 = CuSn0.15, pre-tin plated

◆) The pre- and suffix for the applicators depends on the applied termination equipment.

Single Wire Seals and Sealing Plugs for Maxi Power Timer Contact and 9.5 mm Tab

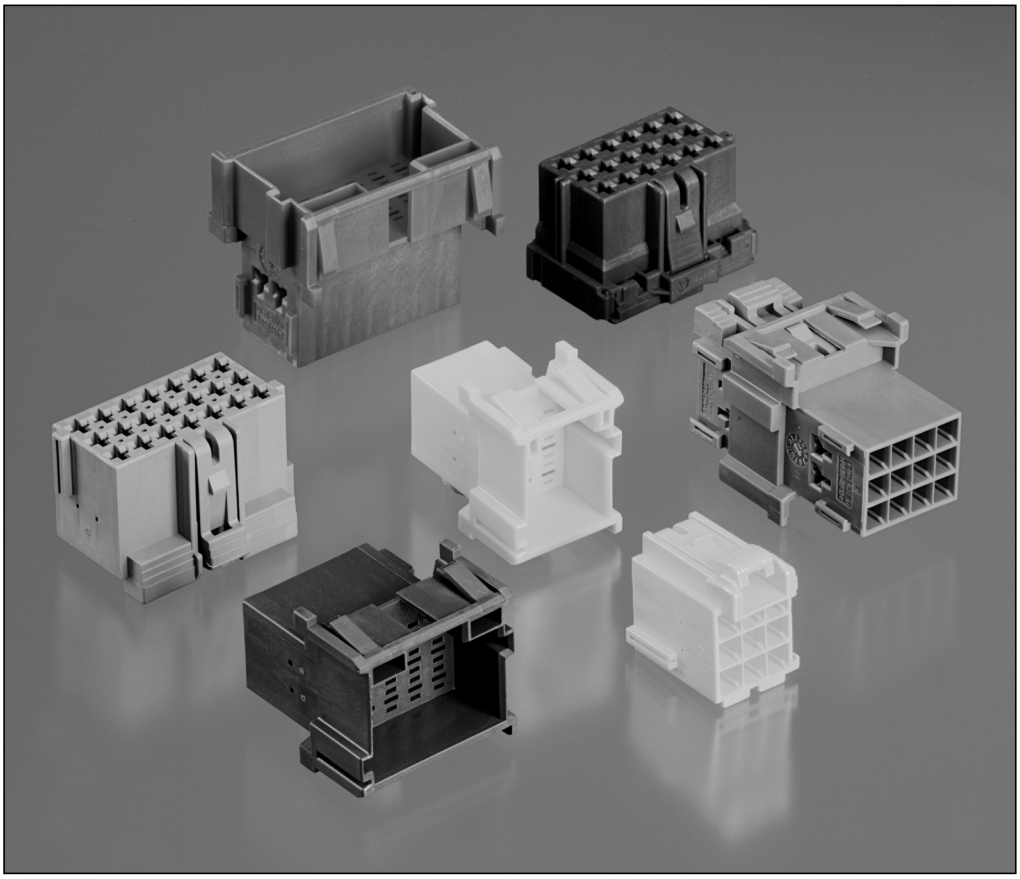


Insulation Diameter (mm)	Color	Part Number	Package Quantity
4.7–5.3	Light-Blue	1355307-1	4,000



Insulation Diameter (mm)	Color	Part Number	Package Quantity
4.6–5.2	Violet	1355437-1	4,000
5.8–6.6	Blue	1355437-2	4,000
7.1–8.1	Red	1355437-3	4,000
Sealing Plug	White	1355437-4	–

Introduction



Receptacle and tab housings are available for different applications.

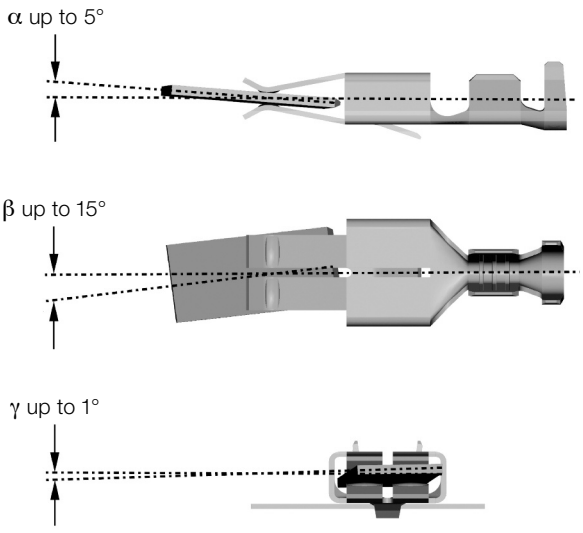
Free hanging coupling or group connection. These housings are available up to 100 contacts.

The speciality of the Timer housings is that they are suitable for high position connections up to 100 positions.

In such high position connectors a lever is uesed to provide easy mating.

A additional special advantage of the Timer contacts is its robustness against inclined mating (see picture).

Impassivity to Angular Contacting



Receptacle Housings

Technical Features

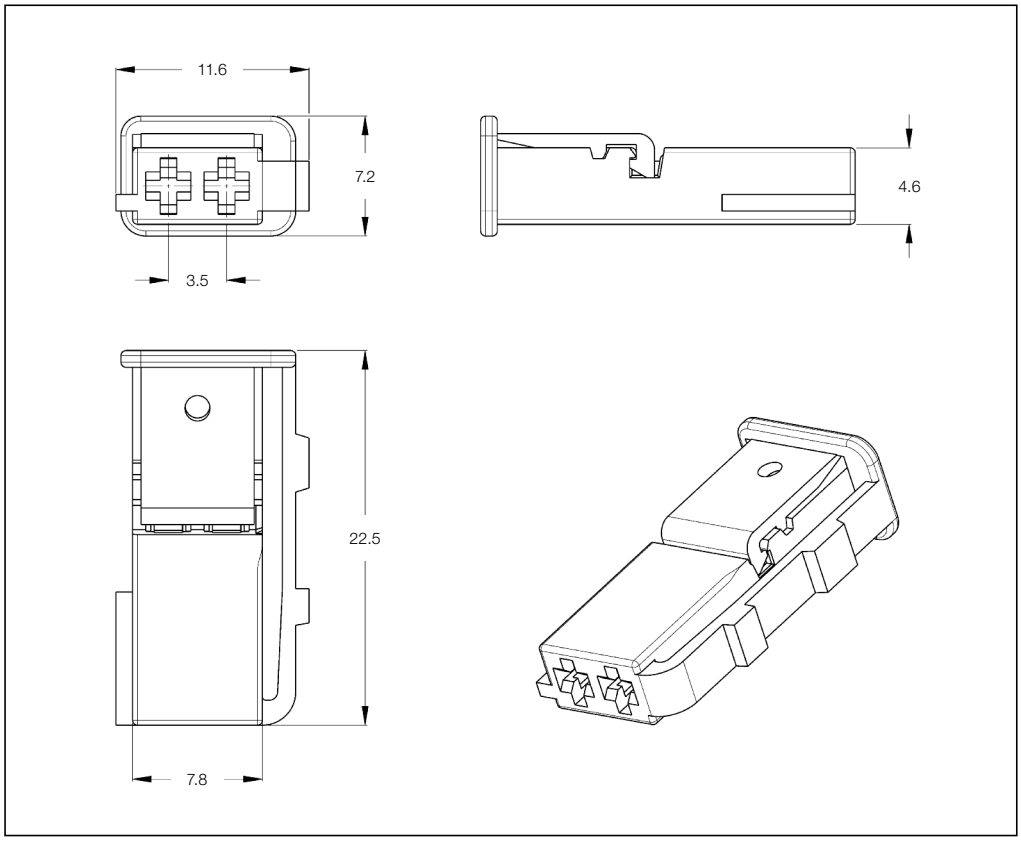
No. of Positions:
2 Position Type A

Housing Material:
PBT GF20

Wire Size Range:
0.35–1.5 mm^2

Product Specification:
108-94118

Application Specification:
114-18901



2 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
2	–	Black	1563189-1	–	–	–	1563190-1	–	–
		Natural	1563189-3				1-929103-1		

Receptacle Housings

Technical Features

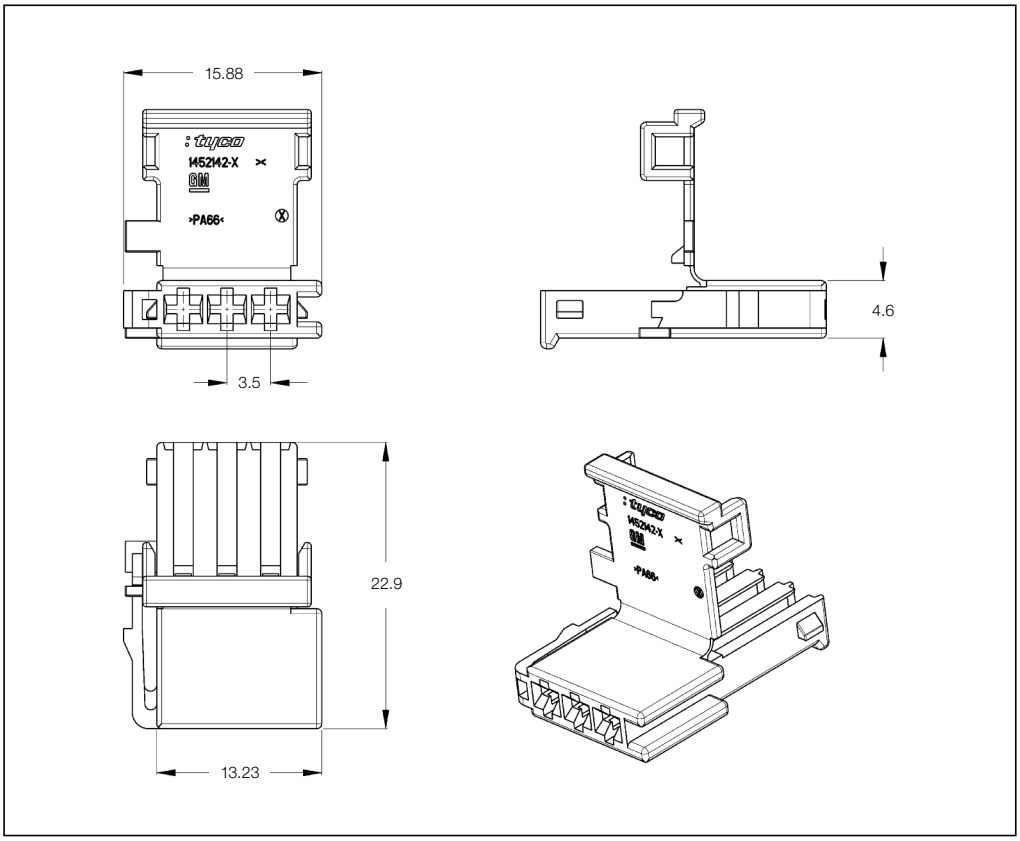
No. of Positions:
3 Position Type A

Housing Material:
PA66

Wire Size Range:
0.35–1.5 mm²

Product Specification:
108-18822

Application Specification:
114-18515



3 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
3	–	Black	1452142-1	–	–	–	3-962342-1	–	–
		Gray	1452142-2						

Tab Housings

Technical Features

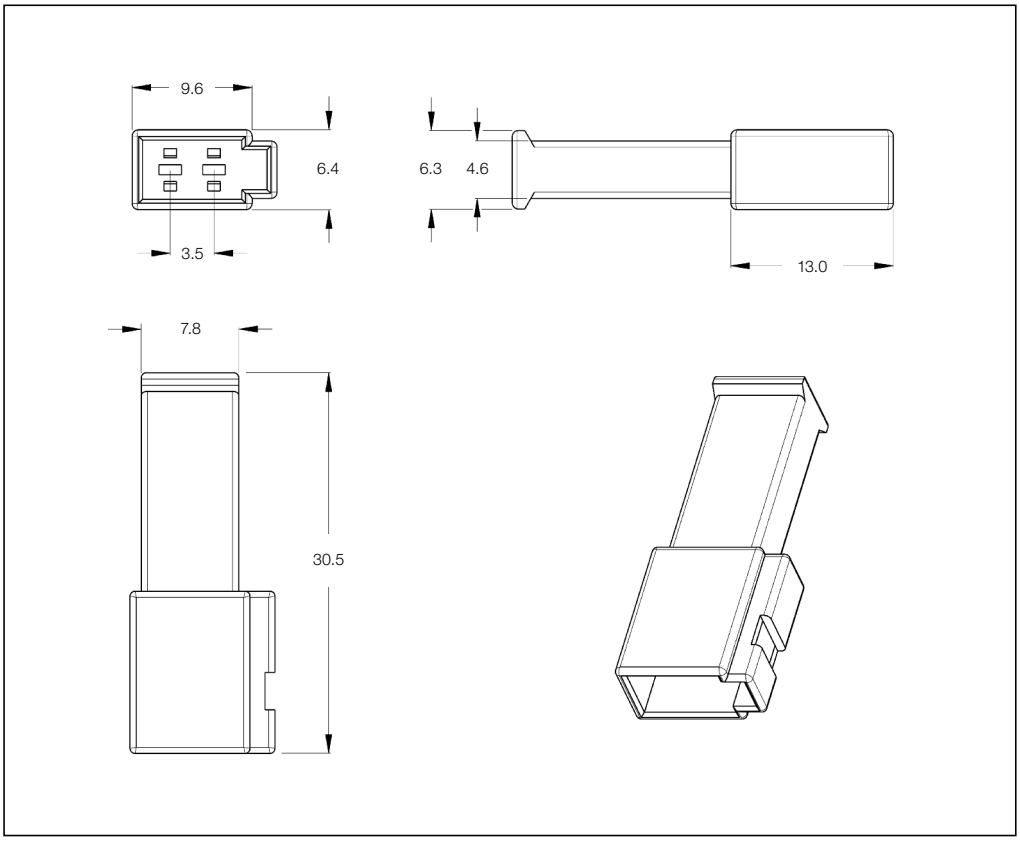
No. of Positions:
2 Positions

Housing Material:
PBT GF20

Wire Size Range:
0.35– 0.75 mm^2

Product Specification:
—

Application Specification:
—



2 Position Tab Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Tab Housing	Cover	Locking Device	Cover and Lever	Mating Receptacle Housing	Mating PCB Header Right-Angle	Vertical
2	–	Black	1-929103-1	–	–	–	1563189-3	–	–

Tab Housings

Technical Features

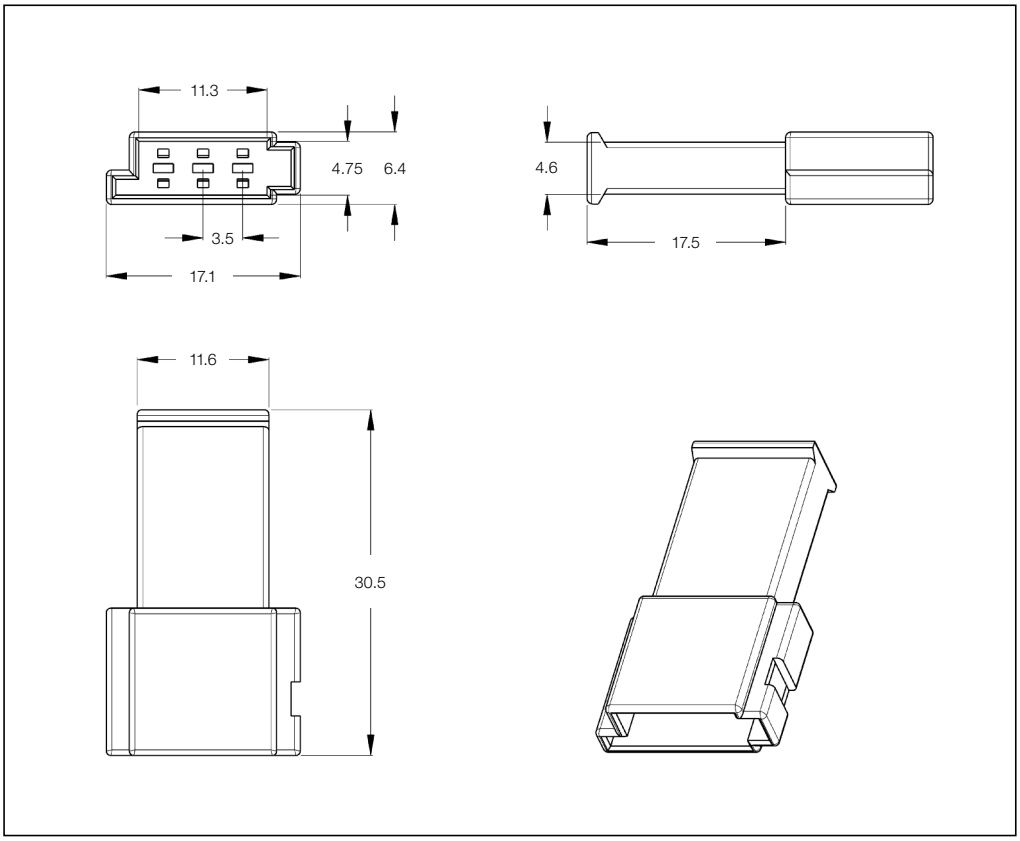
No. of Positions:
3 Positions

Housing Material:
PBT GF20

Wire Size Range:
0.3–0.75 mm^2

Product Specification:
—

Application Specification:
—



3 Position Tab Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Tab Housing	Cover	Locking Device	Cover and Lever	Mating Receptacle Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
3	A1	Black	1-962342-1	–	–	–	1452142-1	–	–
	A2	Orange	1-962342-2				1452142-1		
	B1	Gray	2-962342-1				1452142-2		
	B2	Orange	2-962342-2				1452142-2		
	N	White	3-962342-1				–		

Receptacle Housings

Technical Features

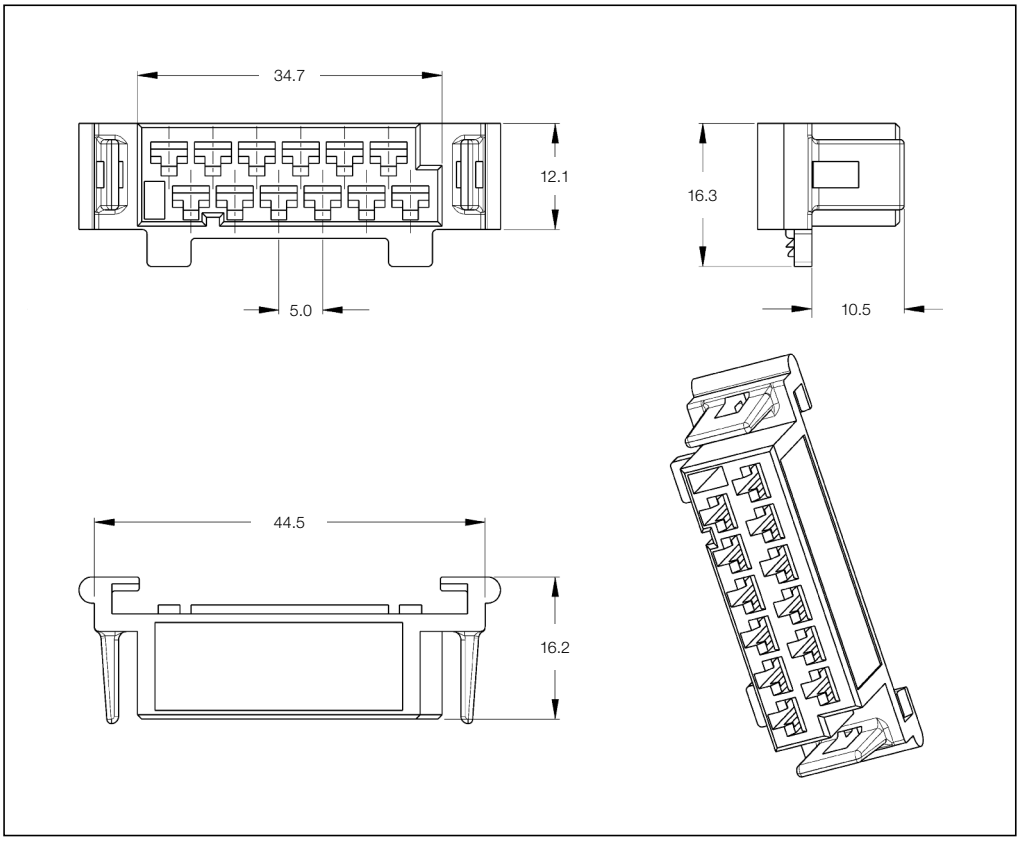
No. of Positions:
12 Positions

Housing Material:
PA66 GF13

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



12 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
12	–	Black	827603-1	–	–	–	–	827229-1/-6 See customer drawing	–
		Brown	827603-2						

Receptacle Housings

Technical Features

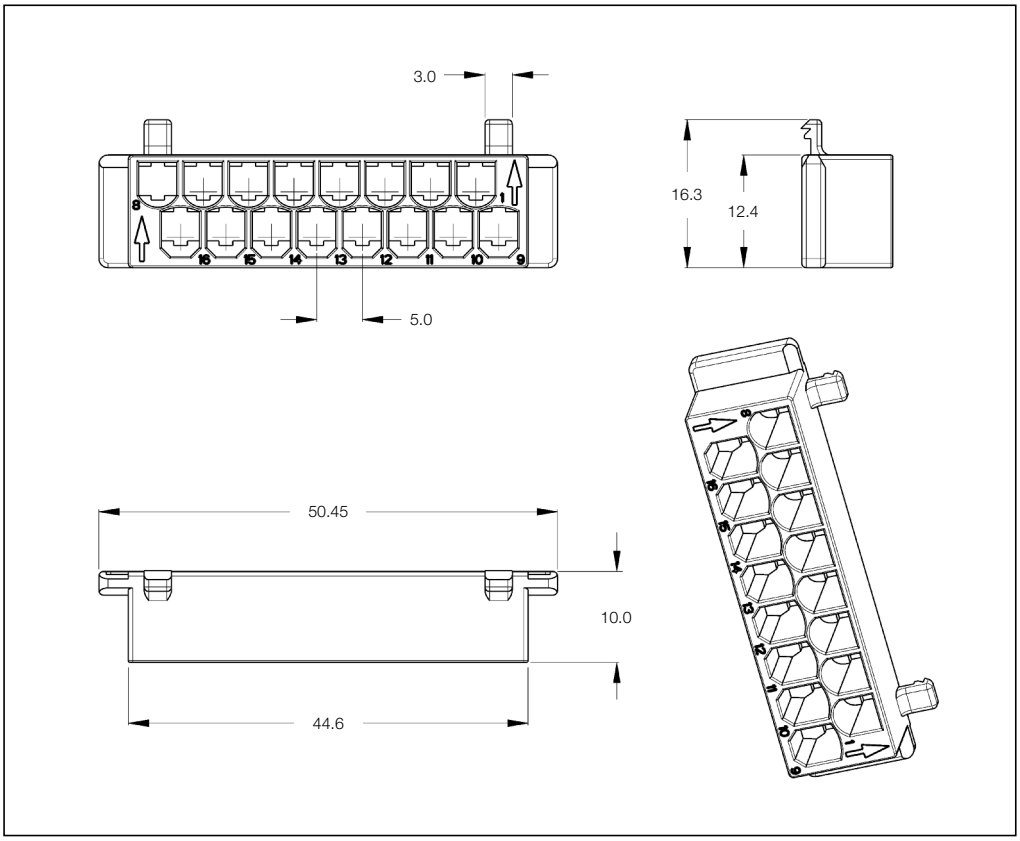
No. of Positions:
16 Positions

Housing Material:
PA66 GV13

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



16 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
16	–	Black	827584-1	–	–	–	–	827539-1	828662-1
		Yellow	827584-2					827539-2	

Receptacle Housings

Technical Features

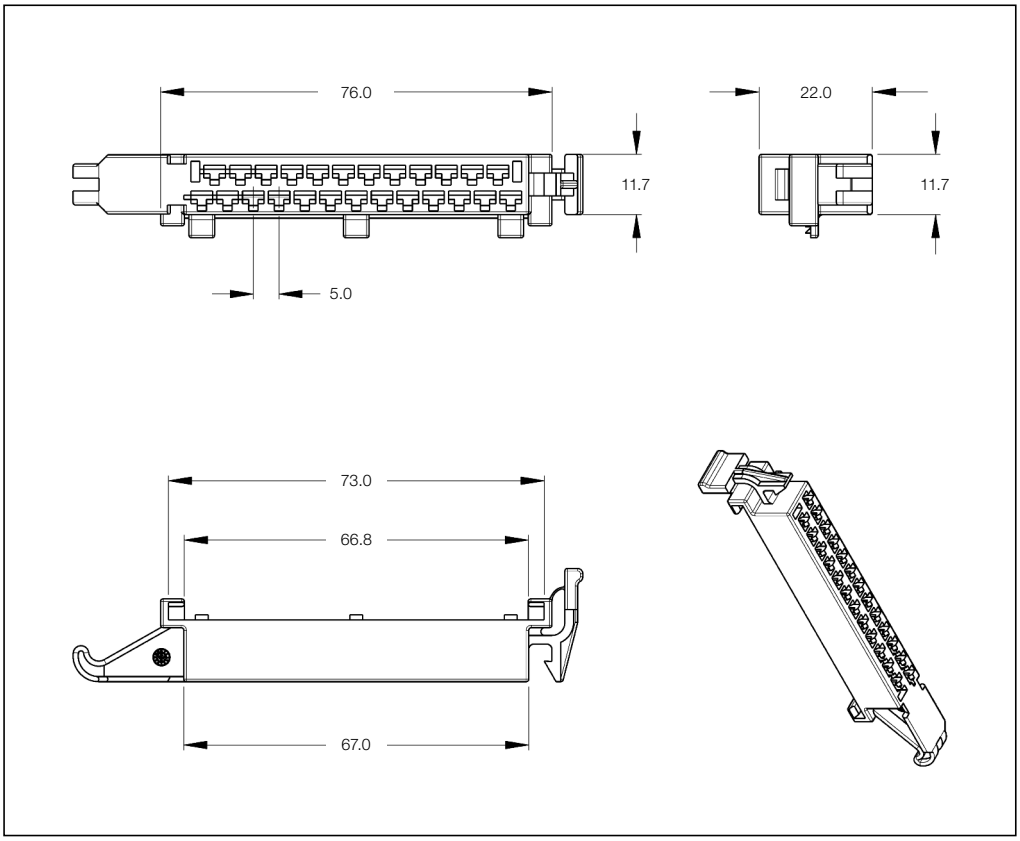
No. of Positions:
25 Positions

Housing Material:
PA66 GV13

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



25 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
25	–	Black	827534-1	–	–	–	–	827535-1/-6 1-827535-2 1-827535-3 2-827535-2 2-827535-3 See customer drawing	–

Receptacle Housings

Technical Features

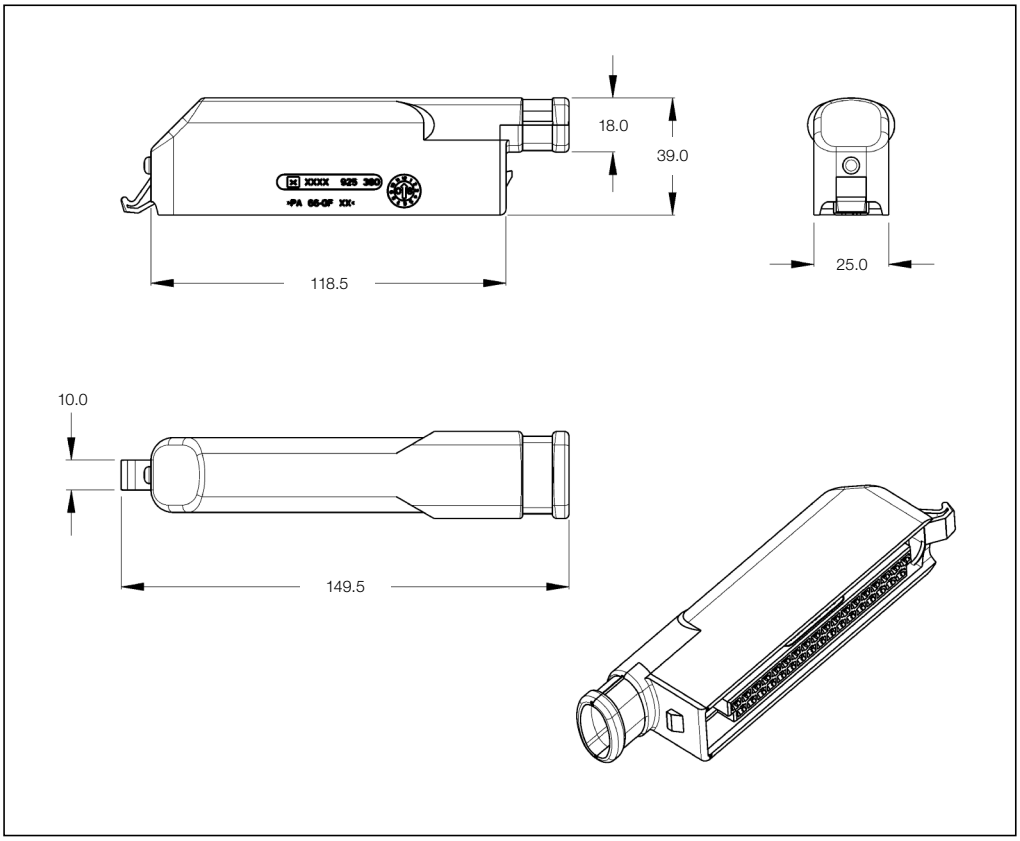
No. of Positions:
35 Positions

Housing Material:
PA66 GV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



35 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
35	–	See customer drawing	826000-1	–	–	–	–	825213-1	–
			826000-2						
			826000-3						
			826000-4						
			826000-5						
			826000-6						
			826000-7						

Receptacle Housings

Technical Features

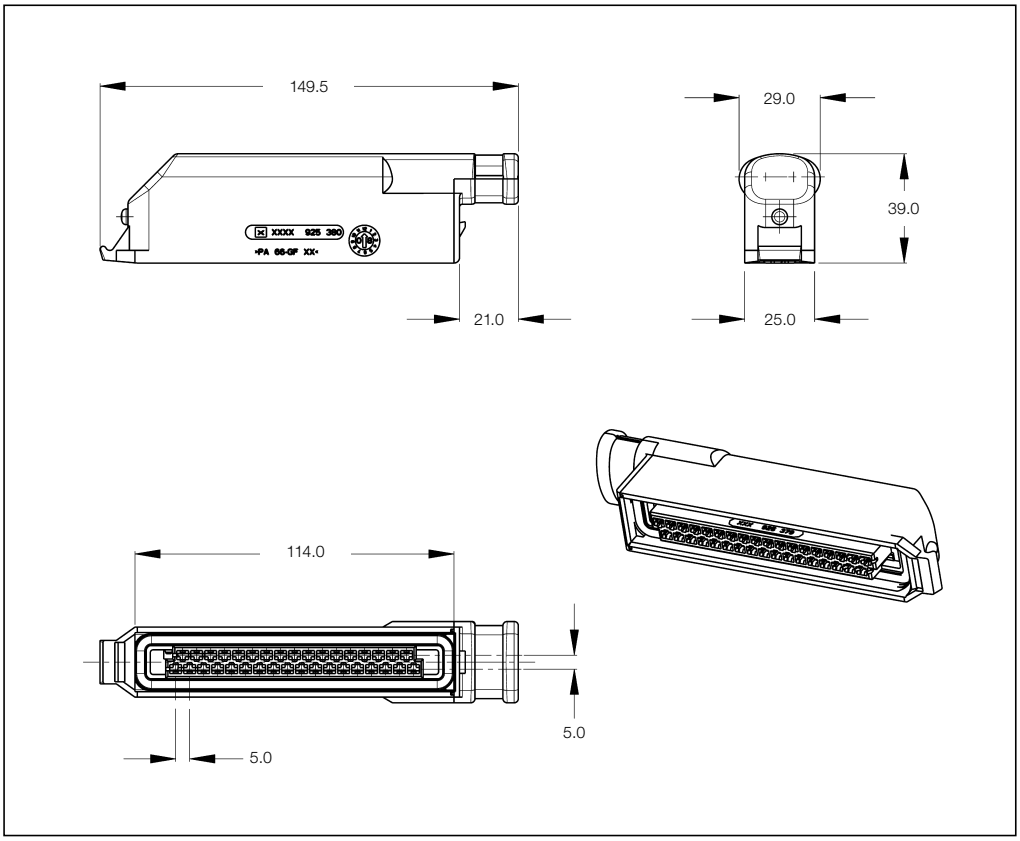
No. of Positions:
35 Positions

Housing Material:
PA66 GV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



35 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
35	–	See customer drawing	827663-4 827663-5 827663-6 827663-7	–	–	–	–	825213-1	–

Receptacle Housings

Technical Features

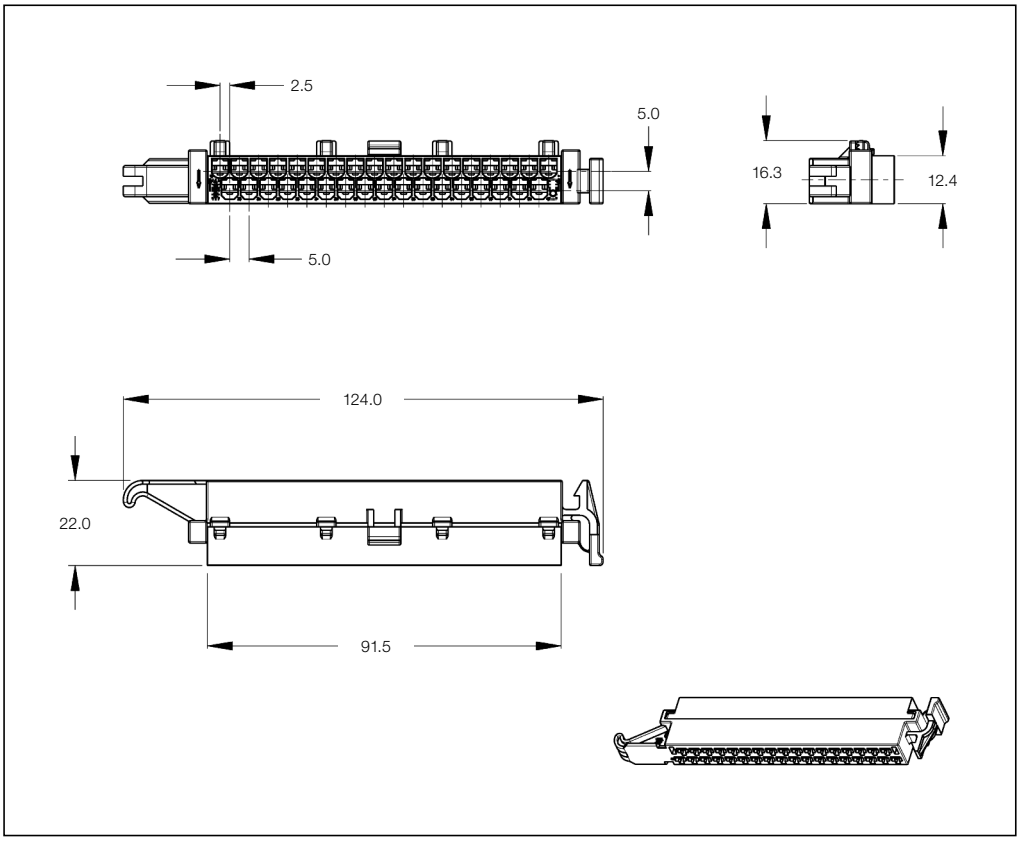
No. of Positions:
35 Positions

Housing Material:
PA66 GV13

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



35 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
35	–	Black	827667-1 827667-2	–	–	–	–	827137-1 827137-2	–

Receptacle Housings

Technical Features

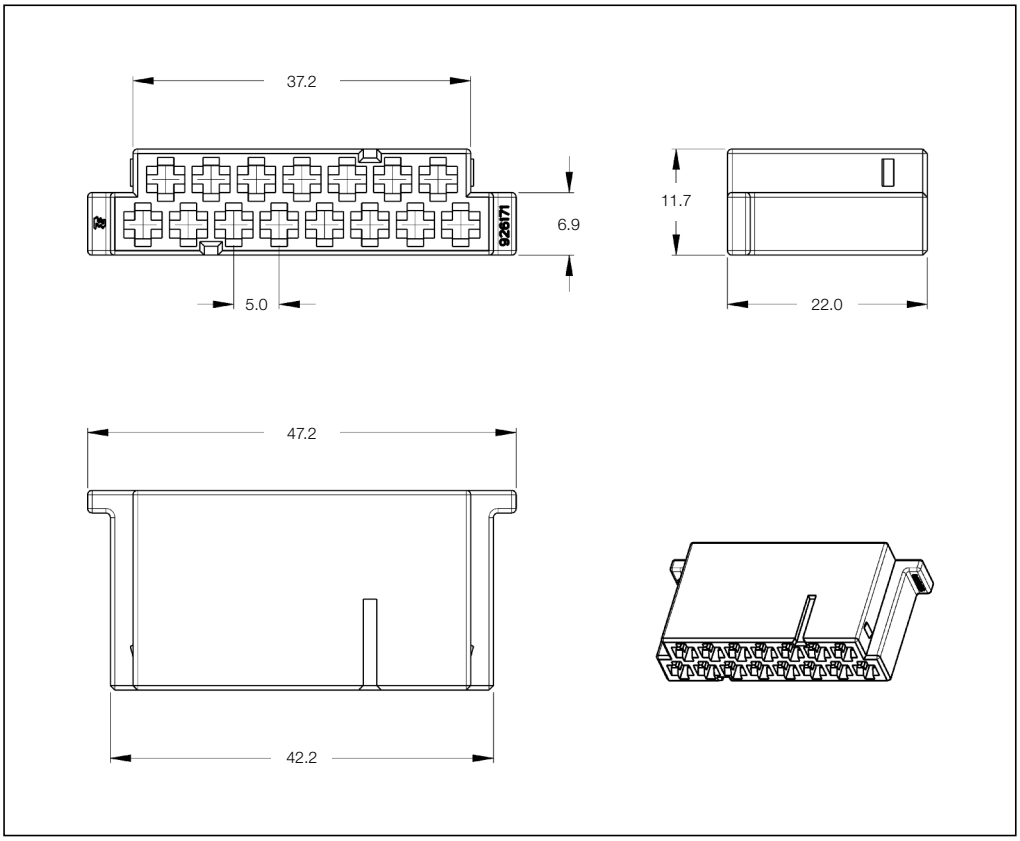
No. of Positions:
15 Positions

Housing Material:
PA66 GV13

Wire Size Range:
See customer drawing

Product Specification:
108-18053

Application Specification:
114-18079



15 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
15	–	Black	926171-1	–	–	–	–	826703-1 826703-2	827467-1
		Yellow	926171-2	–	–	–	–	–	827467-2

Receptacle Housings

Technical Features

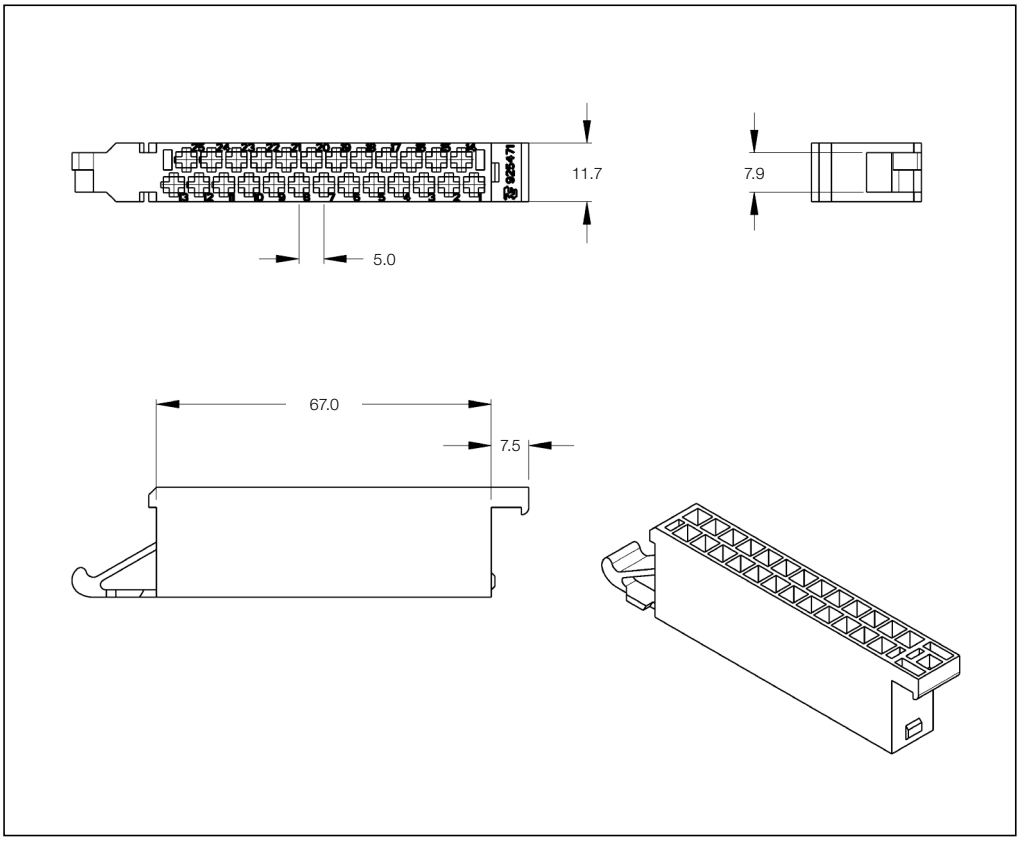
No. of Positions:
25 Positions

Housing Material:
PA66 GV13

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



25 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
25	–	Black	925470-1	–	–	–	–	826140-1	–
		Yellow	925470-2					826140-2	–
		Green	925470-3					826140-3	–
		Brown	925470-4					826140-4	–

Receptacle Housings

Technical Features

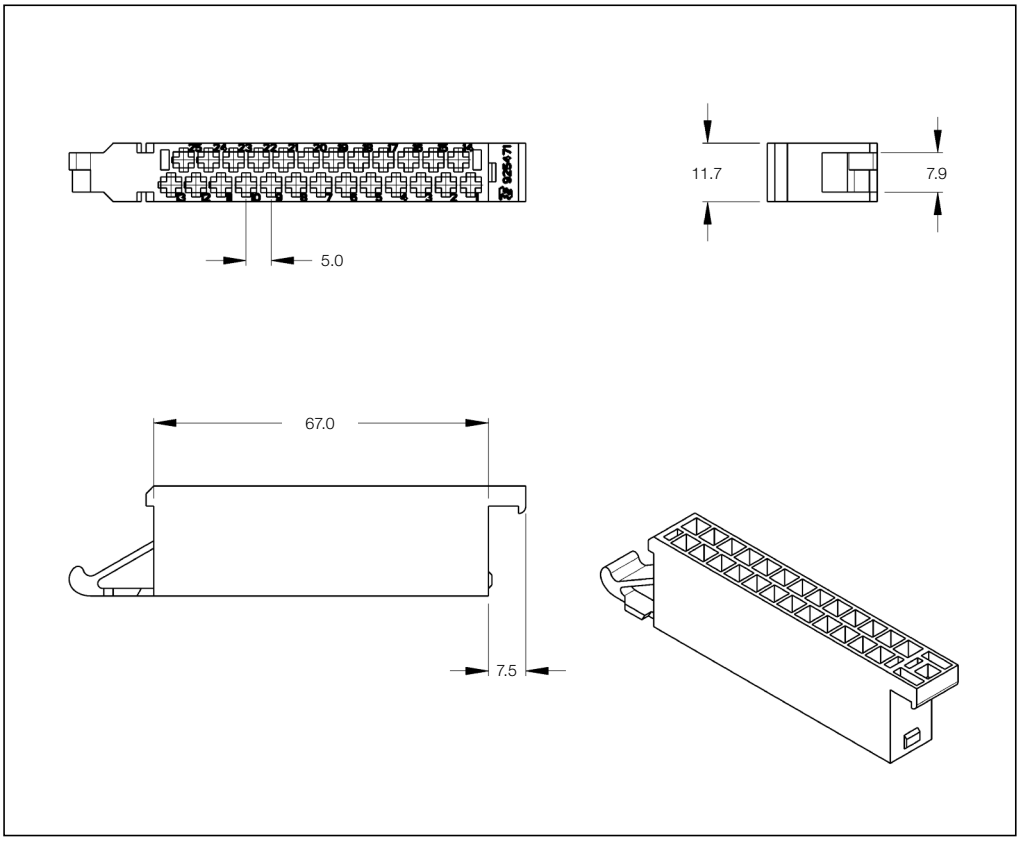
No. of Positions:
25 Positions

Housing Material:
PA66 GV13

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



25 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
25	–	Black	925471-1	–	–	–	–	826141-1 826195-1	–
		Yellow	925471-2	–	–	–	–	826141-2 826195-2	–

Receptacle Housings

Technical Features

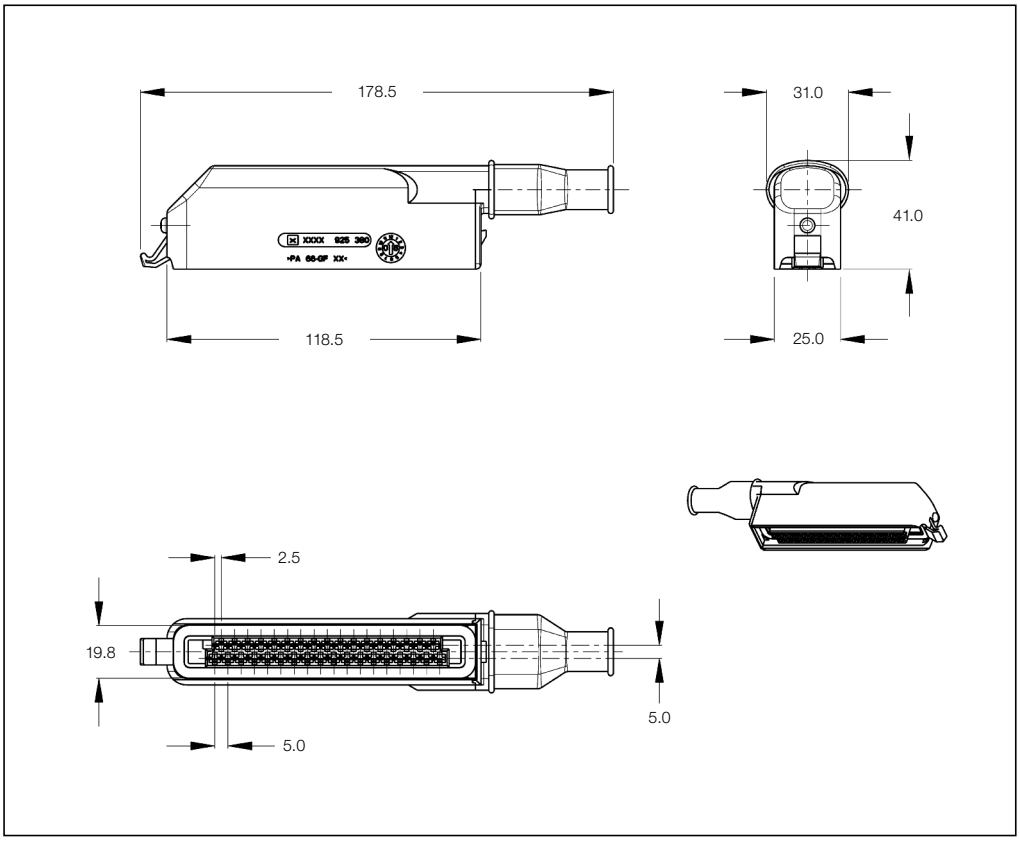
No. of Positions:
35 Positions

Housing Material:
PA66 GV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



35 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
35	–	Black	963318-1	–	–	–	–	825213-1	–

Receptacle Housings

Technical Features

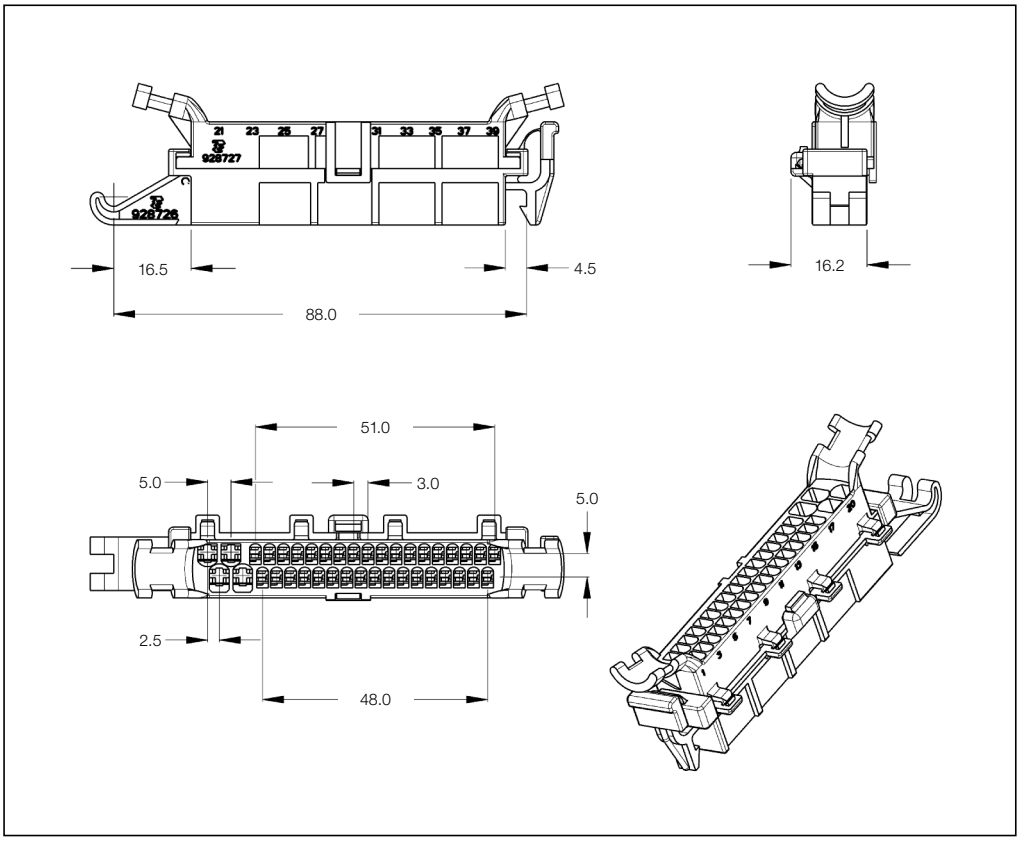
No. of Positions:
39 Positions
4 x Junior Power Timer
35 x Micro Timer II

Housing Material:
PA66 GV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—

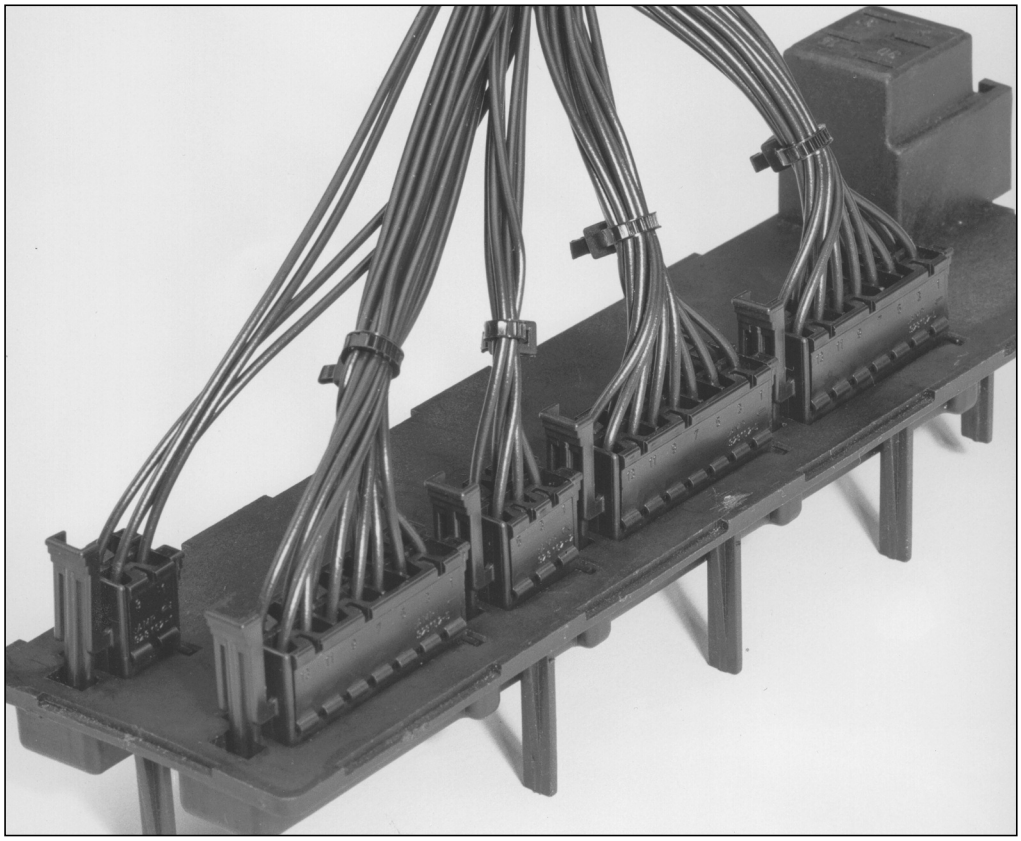


39 Position Mixed Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
39		Black	828771-1	–	–	–	–	828773-1	828772-1

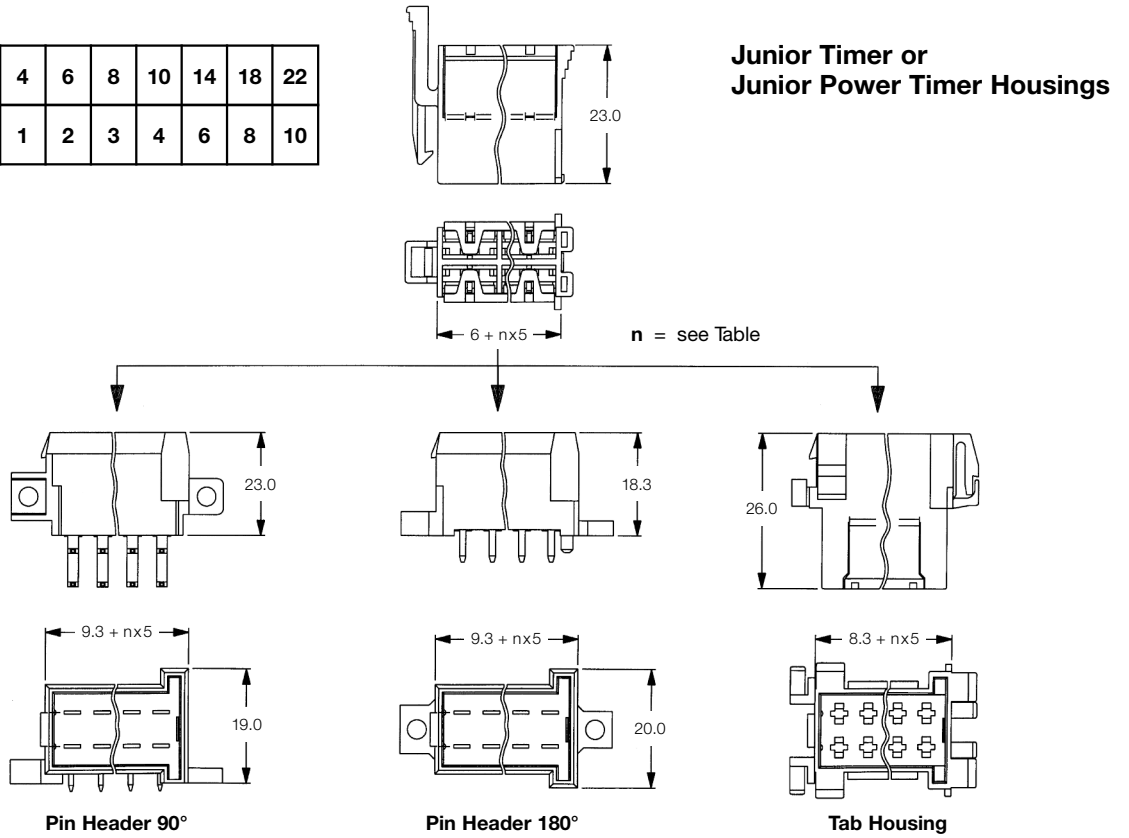
Junior Timer and Junior Power Timer Housings – 4 to 22 Positions

These unsealed Timer Housings are a complete family group. They are available in wire-to-wire as well as wire-to-pc board, right-angle and vertical applications. The tab housings are designed to lock into mounting collar.



No. of Pos.	4	6	8	10	14	18	22
n	1	2	3	4	6	8	10

Junior Timer or Junior Power Timer Housings



Pin Header 90° **Pin Header 180°** **Tab Housing**

Technical Features

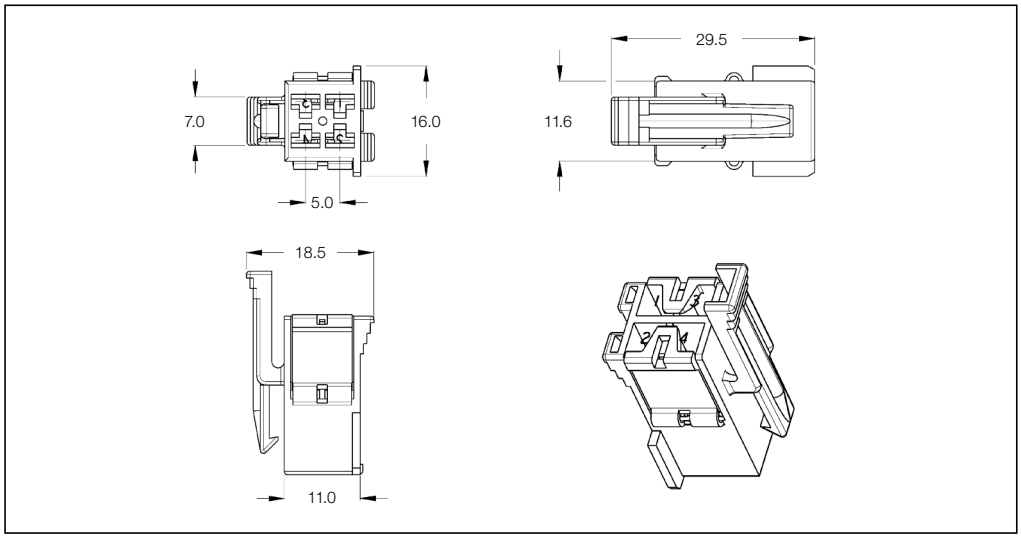
No. of Positions:
4–22 Positions

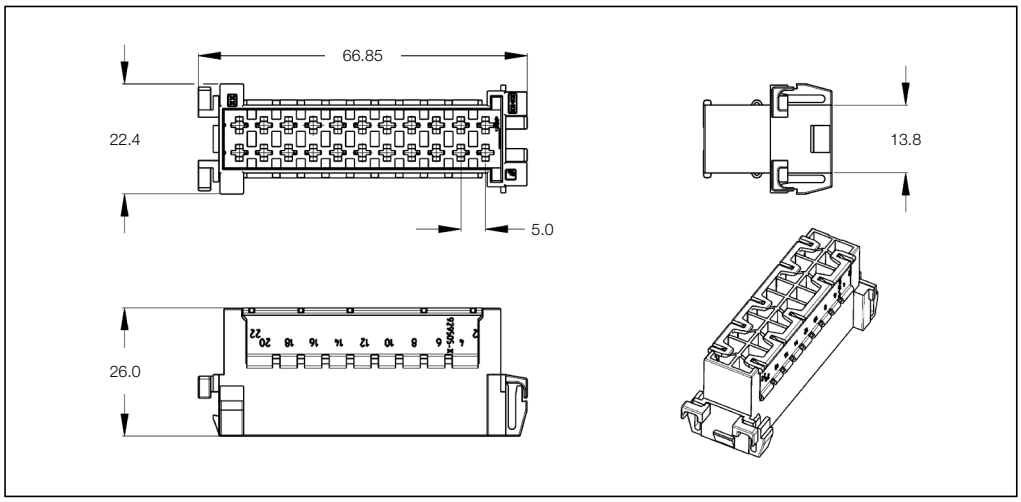
Housing Material:
PBT-V0-reinforced

Wire Size Range:
Max. 2.5 mm²

Product Specification:
—

Application Specification:
—



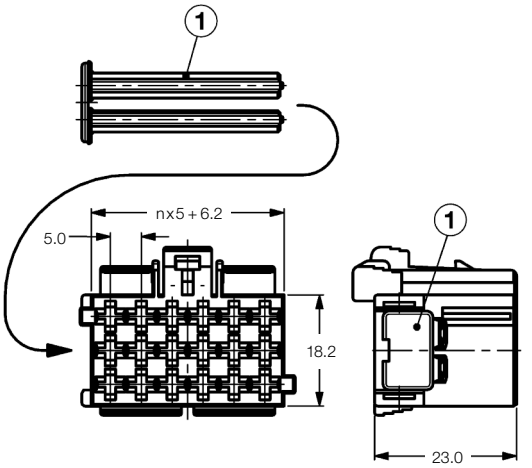


4–22 Position Receptacle and Tab Housings

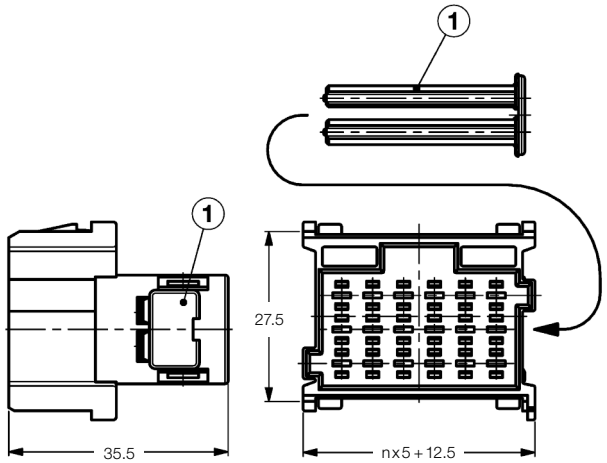
No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
4	See customer drawing	Black	929504-1	–	–	–	929505-1	828801-1	963357-6
		Natural	1-929504-1				1-929505-1	1-828801-1	–
		Green	2-929504-1				–	2-828801-1	–
6	See customer drawing	Black	929504-2				929505-2	828801-2	963357-5
		Natural	1-929504-2				1-929505-2	1-828801-2	–
8	See customer drawing	Black	929504-3				929505-3	828801-2	–
		Natural	1-929504-3				1-929505-3	–	–
10	See customer drawing	Black	929504-4				929505-4	828801-4	963357-4
		Natural	1-929504-4				1-929505-4	–	–
14	See customer drawing	Black	929504-5				929505-5	828801-5	963357-3
		Natural	1-929504-5				1-929505-5	–	–
18	See customer drawing	Black	929504-6				929505-6	828801-6	963357-2
		Natural	1-929504-6				1-929505-6	–	–
22	See customer drawing	Black	929504-7				929505-7	828801-7	963357-1
		Natural	1-929504-7				1-929505-7	1-828801-1	1-963357-1

Shown: 18 Position Connection

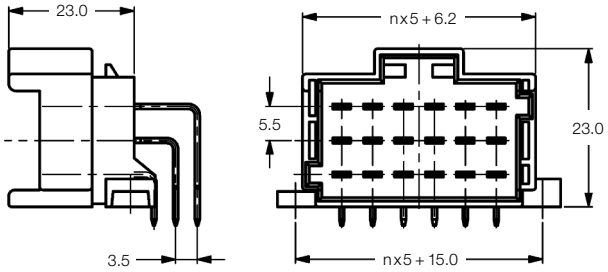
No. of Pos.	6	9	12	15	18	21
n	1	2	3	4	5	6



Junior Power Timer Housing



Tab Housing



Tab Header, 90°

1 Secondary Locking Feature (same for Junior Power Timer and Tab Housing). Optional but recommended use.

Technical Features

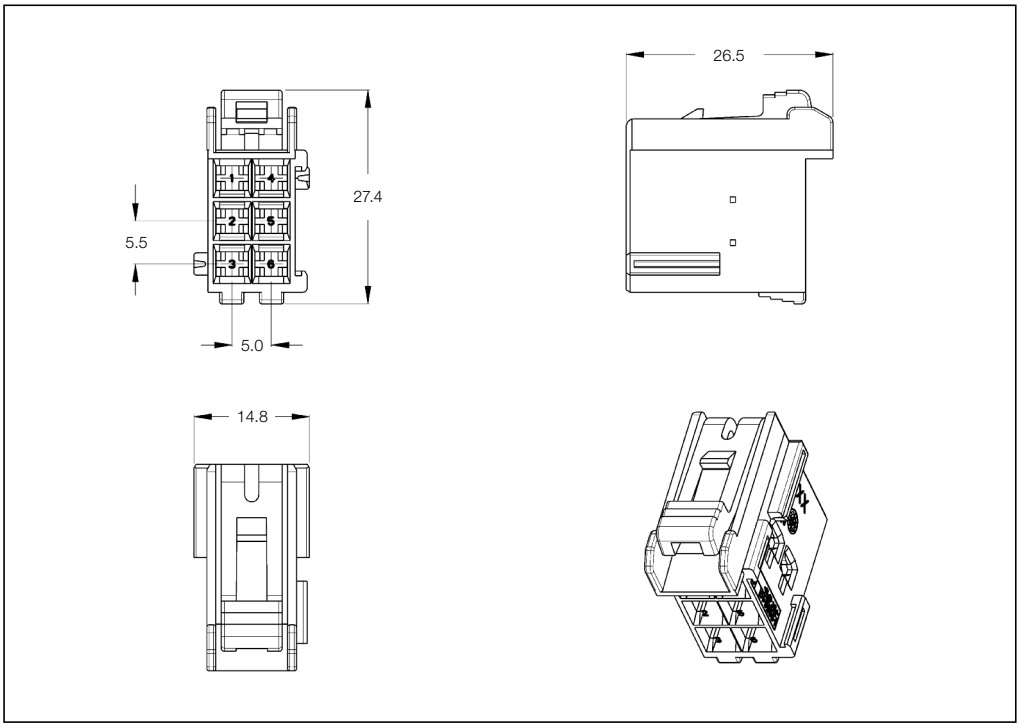
No. of Positions:
6 Positions

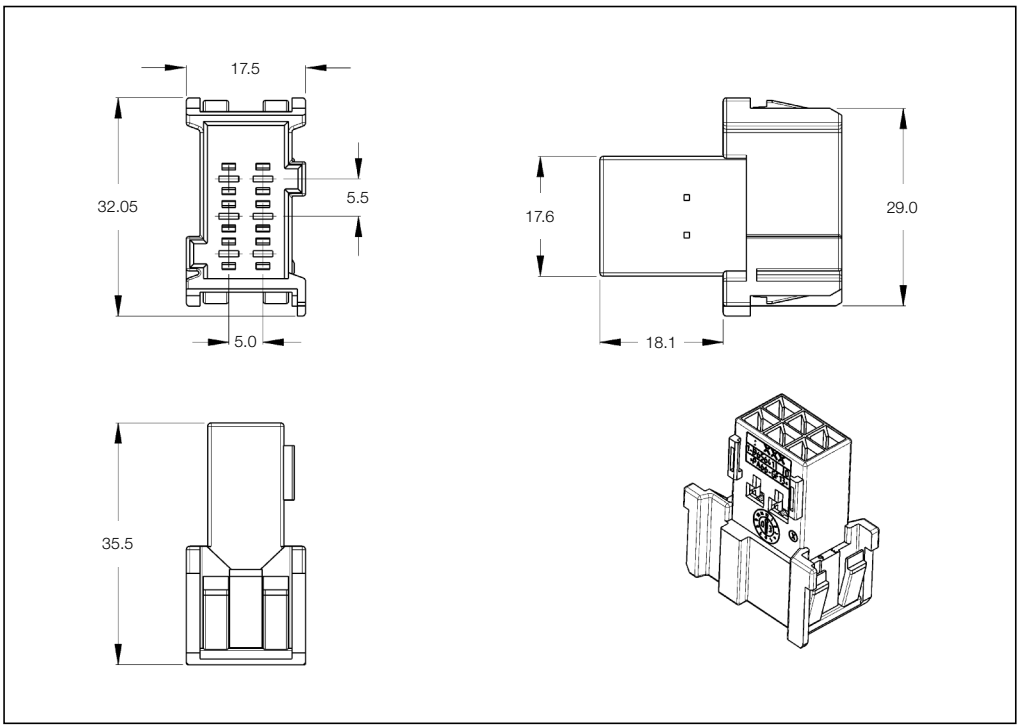
Housing Material:
PBT GF10

Wire Size Range:
Max. 2.5 mm^2

Product Specification:
—

Application Specification:
—





6 Position Unsealed Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Cover and Lever	Mating Tab Housing	2nd Locking Feature	Mating PCB Header Right-Angle	Vertical
6	See customer drawing	Blue	1-965640-1	–	–	1-965641-1	968271-1	966140-5	–

Receptacle and Tab Housings

Technical Features

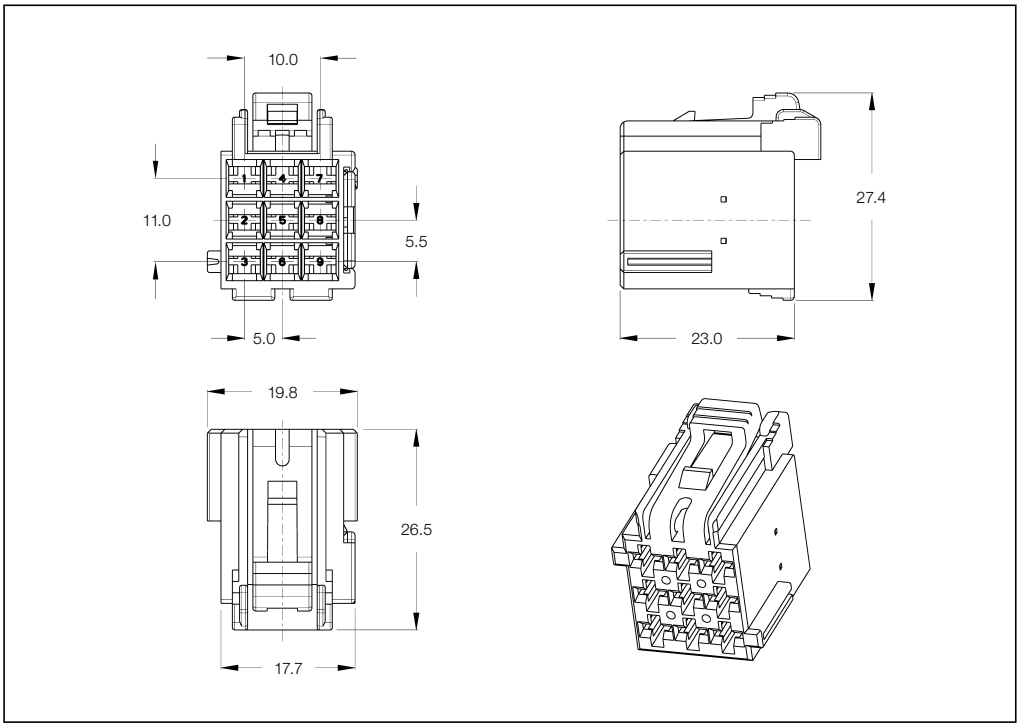
No. of Positions:
9 Positions

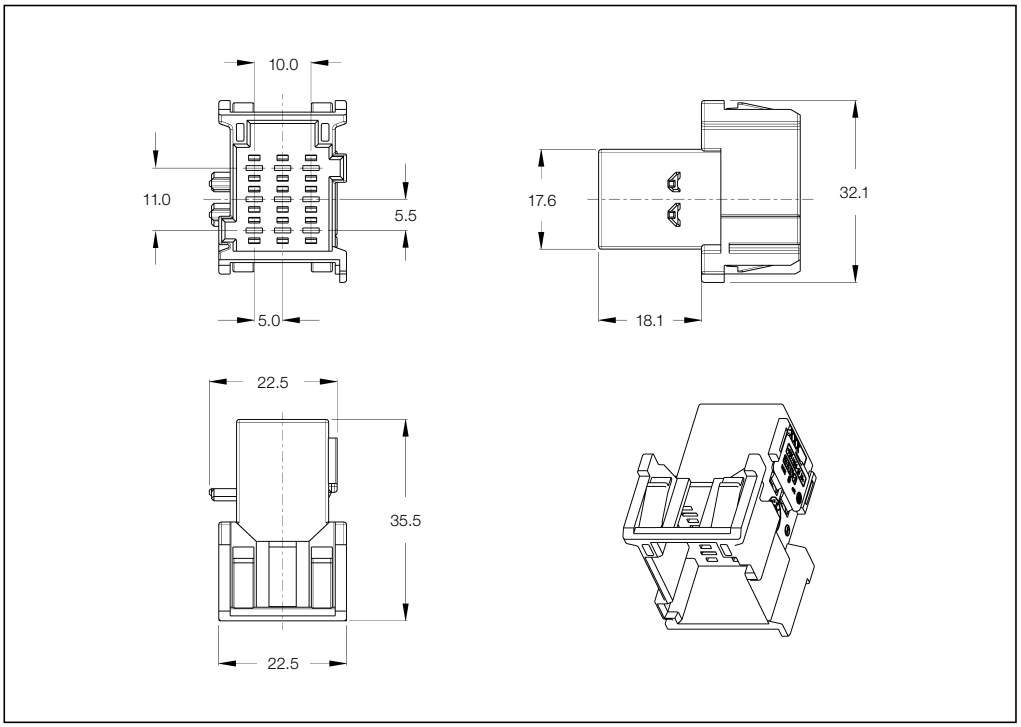
Housing Material:
PBT GF10

Wire Size Range:
Max. 2.5 mm²

Product Specification:
—

Application Specification:
—





9 Position Unsealed Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Cover and Lever	Mating Tab Housing	2nd Locking Feature	Mating PCB Header Right-Angle	Vertical
9	See customer drawing	Yellow	1-967621-1	–	–	1-967626-1	967631-1	966140-4	–

Technical Features

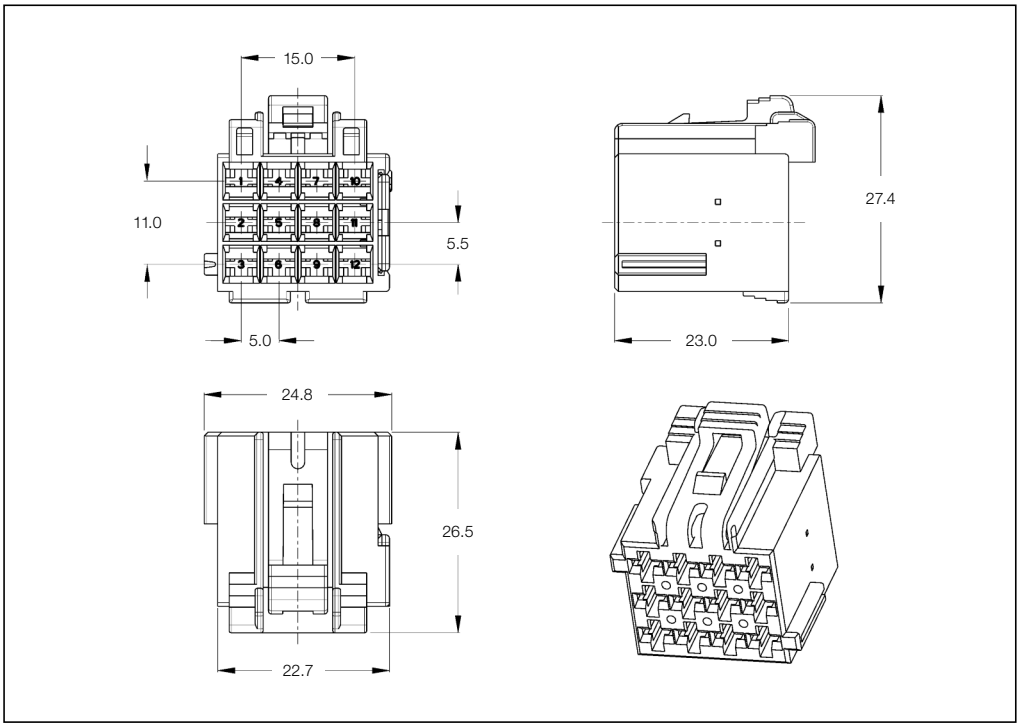
No. of Positions:
12 Positions

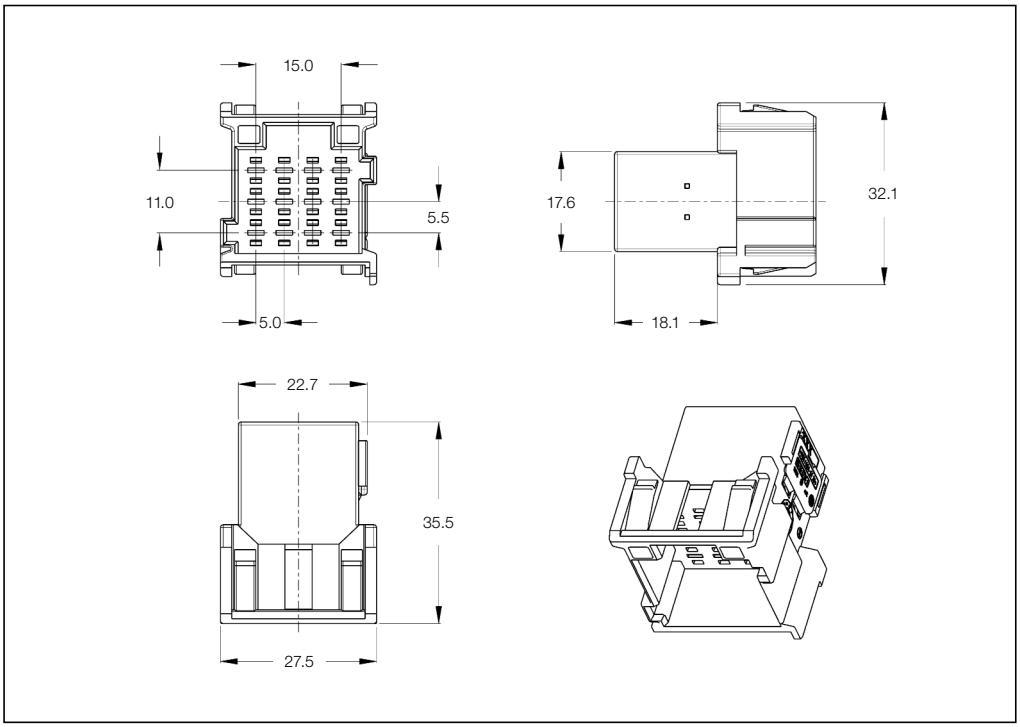
Housing Material:
PBT GF10

Wire Size Range:
Max. 2.5 mm^2

Product Specification:
—

Application Specification:
—





12 Position Unsealed Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Cover and Lever	Mating Tab Housing	2nd Locking Feature	Mating PCB Header Right-Angle	Vertical
12	See customer drawing	Green	1-967622-1	–	–	1-967627-1	967632-1	966140-3	–

Receptacle and Tab Housings

Technical Features

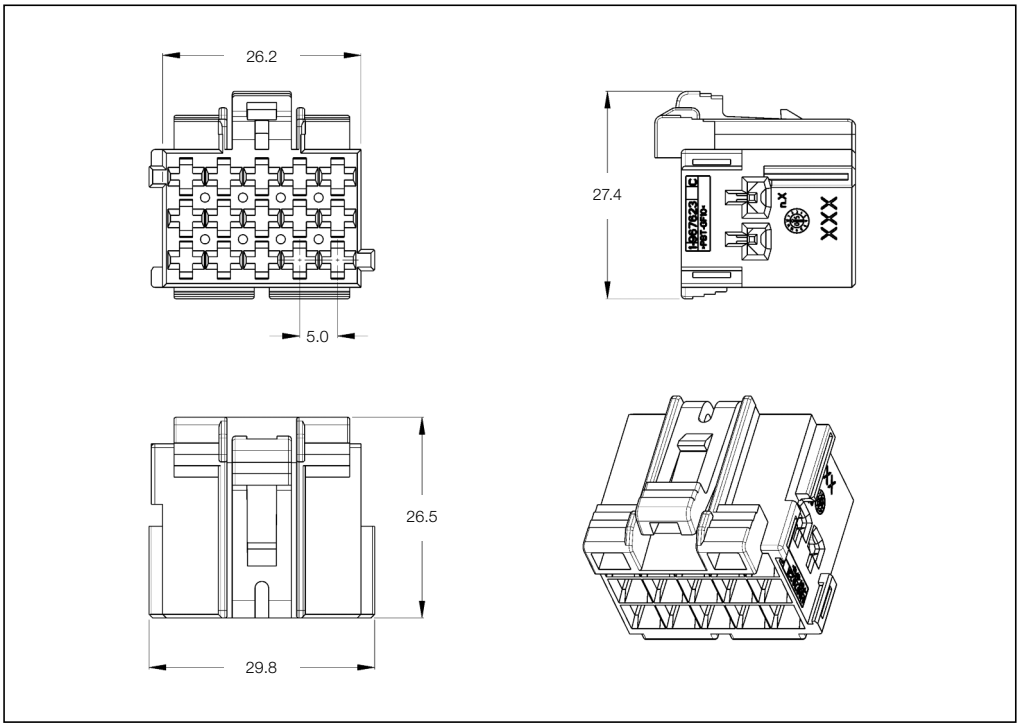
No. of Positions:
15 Positions

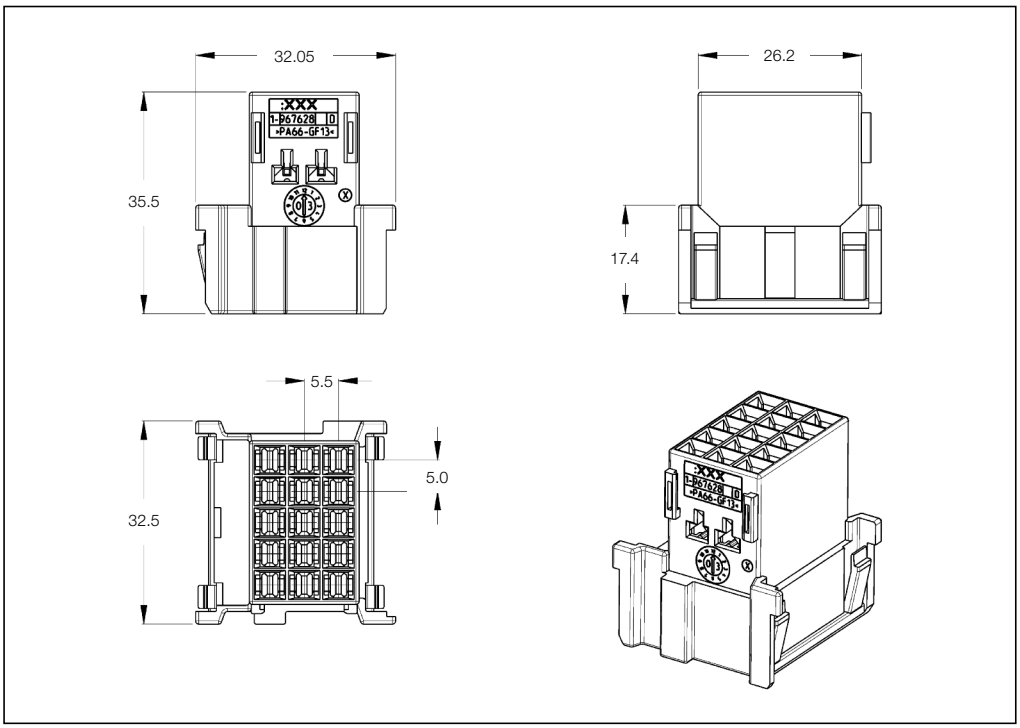
Housing Material:
PBT GF10

Wire Size Range:
Max. 2.5 mm²

Product Specification:
—

Application Specification:
—





15 Position Unsealed Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Cover and Lever	Mating Tab Housing	2nd Locking Feature	Mating PCB Header Right-Angle	Vertical
15	See customer drawing	Purple	1-967623-1	–	–	1-967628-1	967633-1	966140-2	–

Receptacle and Tab Housings

Technical Features

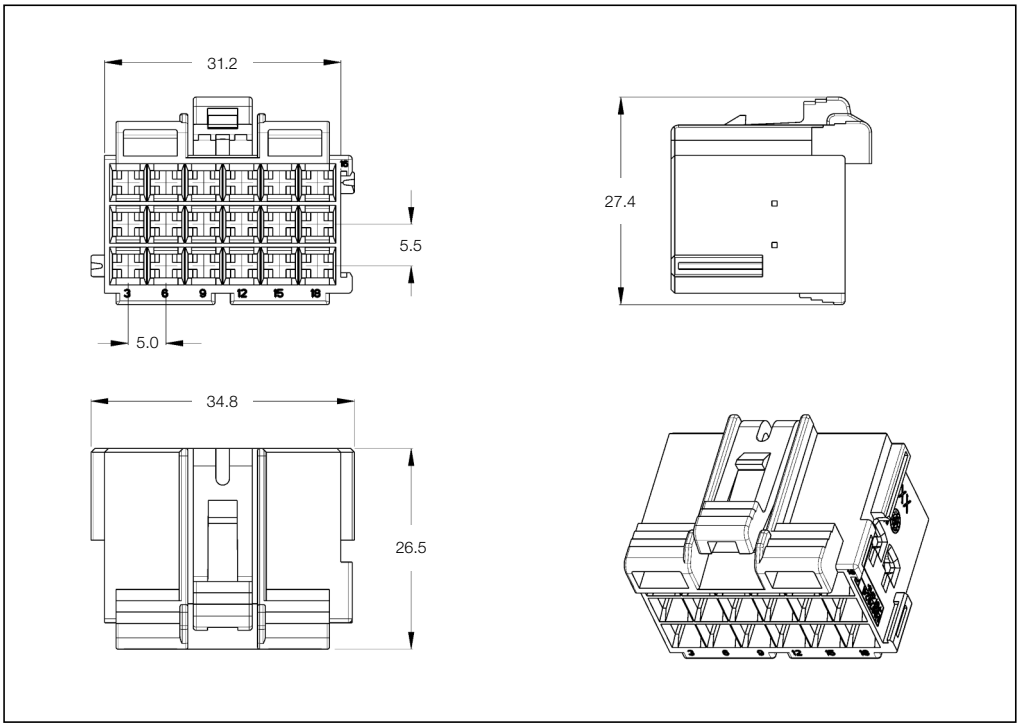
No. of Positions:
18 Positions

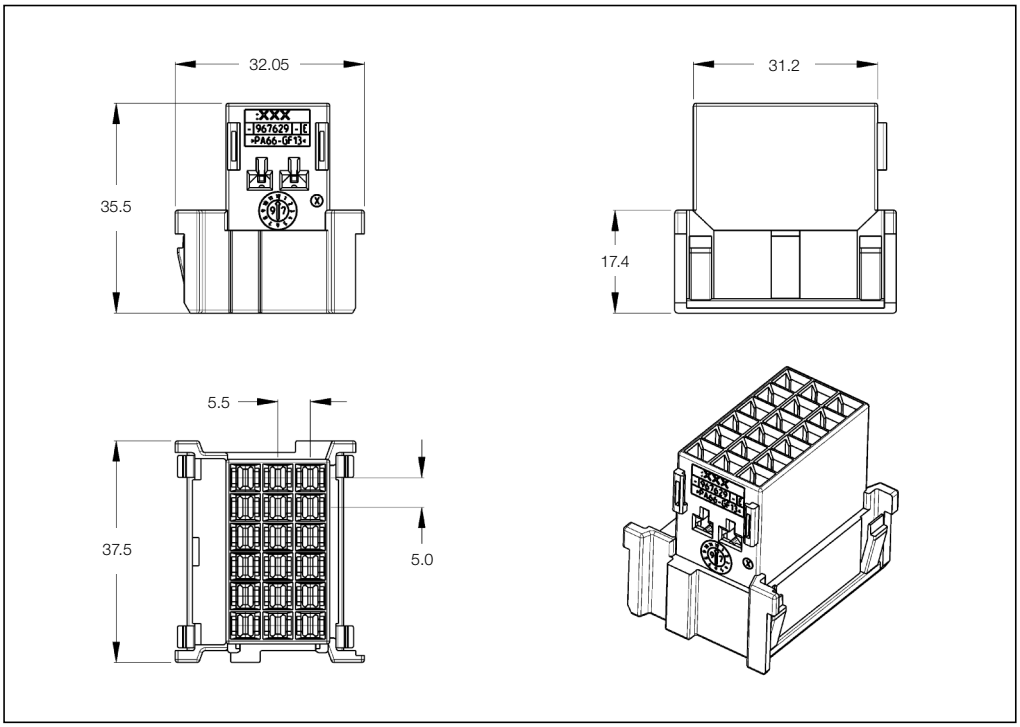
Housing Material:
PBT GF10

Wire Size Range:
Max. 2.5 mm²

Product Specification:
—

Application Specification:
—





18 Position Unsealed Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Cover and Lever	Mating Tab Housing	2nd Locking Feature	Mating PCB Header Right-Angle	Vertical
18	See customer drawing	Gray	1-967624-1	–	–	1-967629-1	967634-1	966140-1	–

Receptacle and Tab Housings

Technical Features

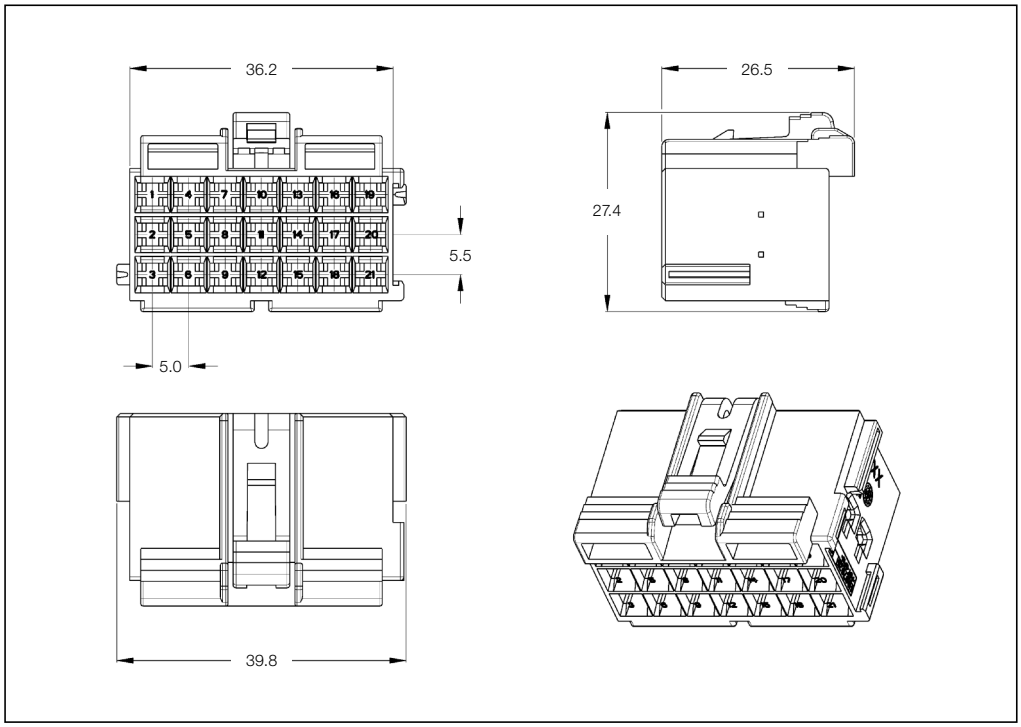
No. of Positions:
21 Positions

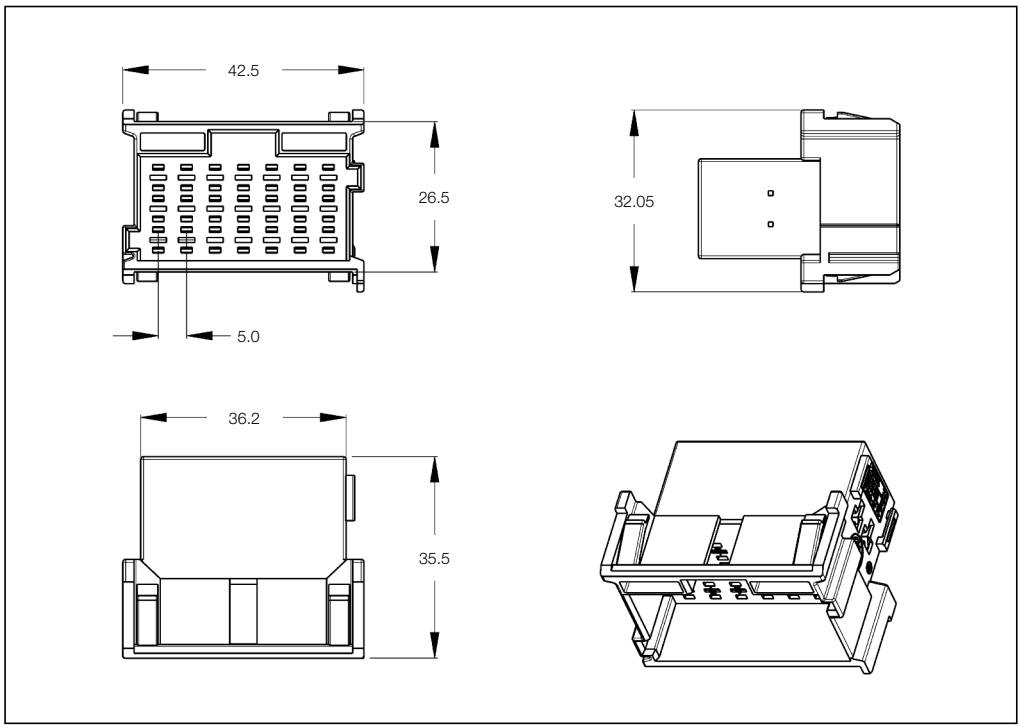
Housing Material:
PBT GF10

Wire Size Range:
Max. 2.5 mm²

Product Specification:
—

Application Specification:
—





21 Position Unsealed Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Cover and Lever	Mating Tab Housing	2nd Locking Feature	Mating PCB Header Right-Angle	Vertical
21	See customer drawing	Brown	1-967625-1	–	–	1-967630-1	967635-1	966140-6	–

Receptacle Housings

Technical Features

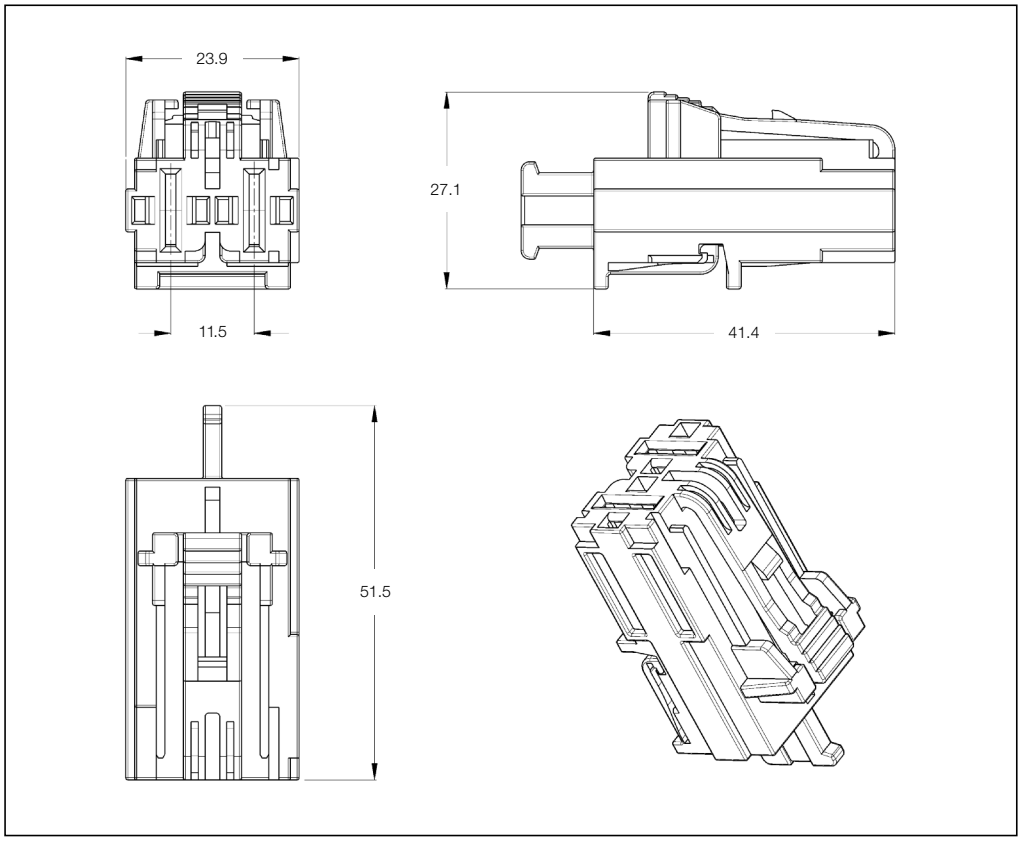
No. of Positions:
2 Positions

Housing Material:
PA66 GF30

Wire Size Range:
4.0–10.0 mm^2

Product Specification:
—

Application Specification:
—



2 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
2	A	Black	1563255-1	–	–	–	1564744-1	–	–

Receptacle Housings

Technical Features

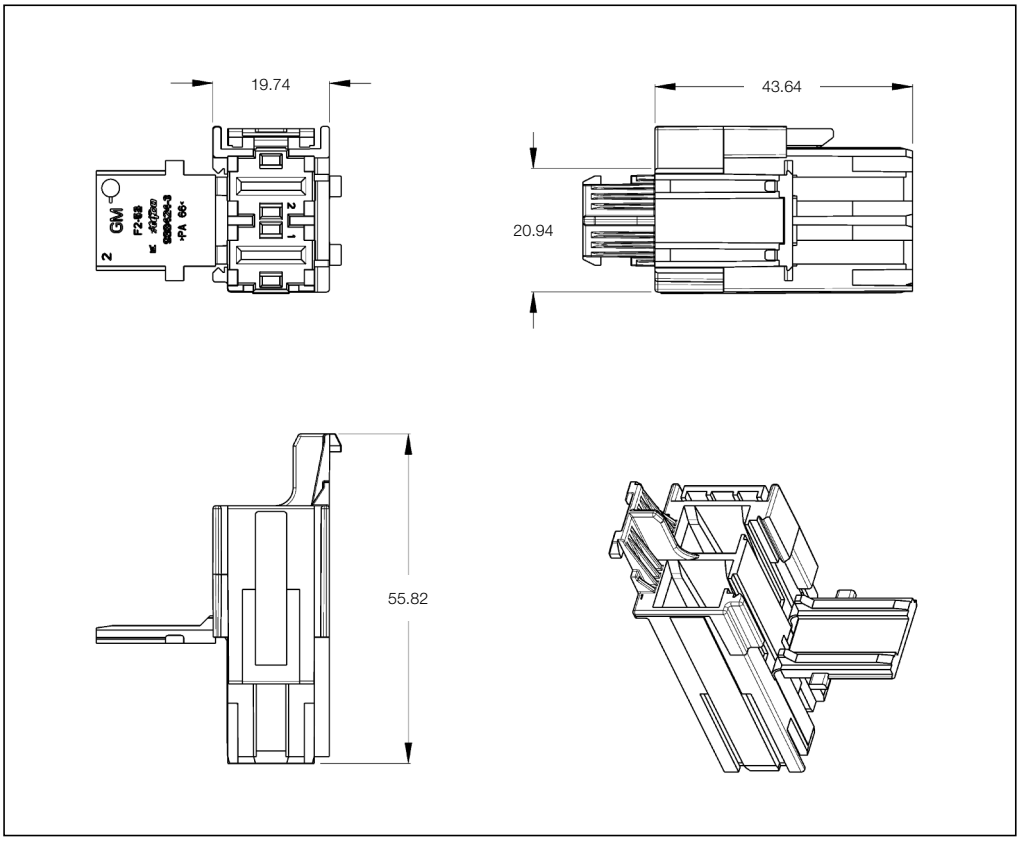
No. of Positions:
2 Positions

Housing Material:
PA66

Wire Size Range:
2.5–10.0 mm^2

Product Specification:
108-18538-1

Application Specification:
114-18185-1



2 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
2	A	Blue	968424-1	–	–	–	–	–	–
	B	Green	968424-2						
	A	Black	968424-3						

Tab Housings

Technical Features

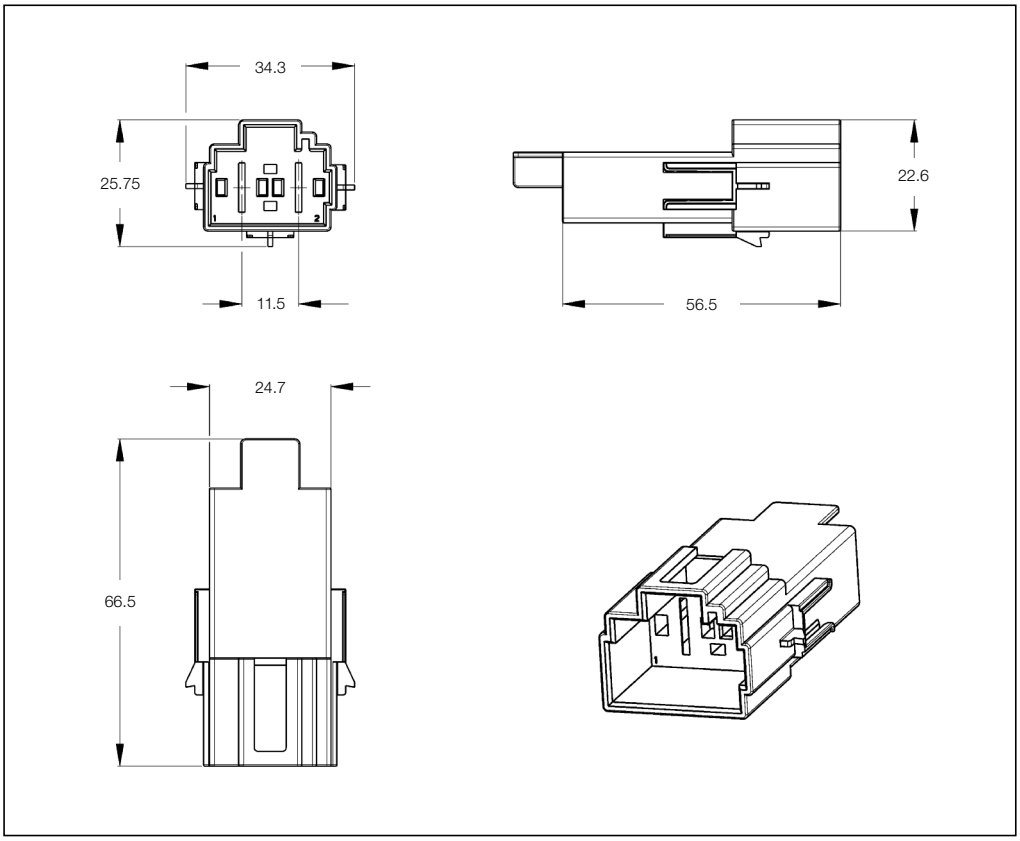
No. of Positions:
2 Positions

Housing Material:
PA66 GF30

Wire Size Range:
2.5–10.0 mm^2

Product Specification:
—

Application Specification:
—



2 Position Tab Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Tab Housing	Cover	Locking Device	Cover and Lever	Mating Receptacle Housing	Mating PCB Header Right-Angle	Vertical
2	–	Black	1564744-1	–	–	–	1563255-1	–	–

Printed Circuit Board Headers

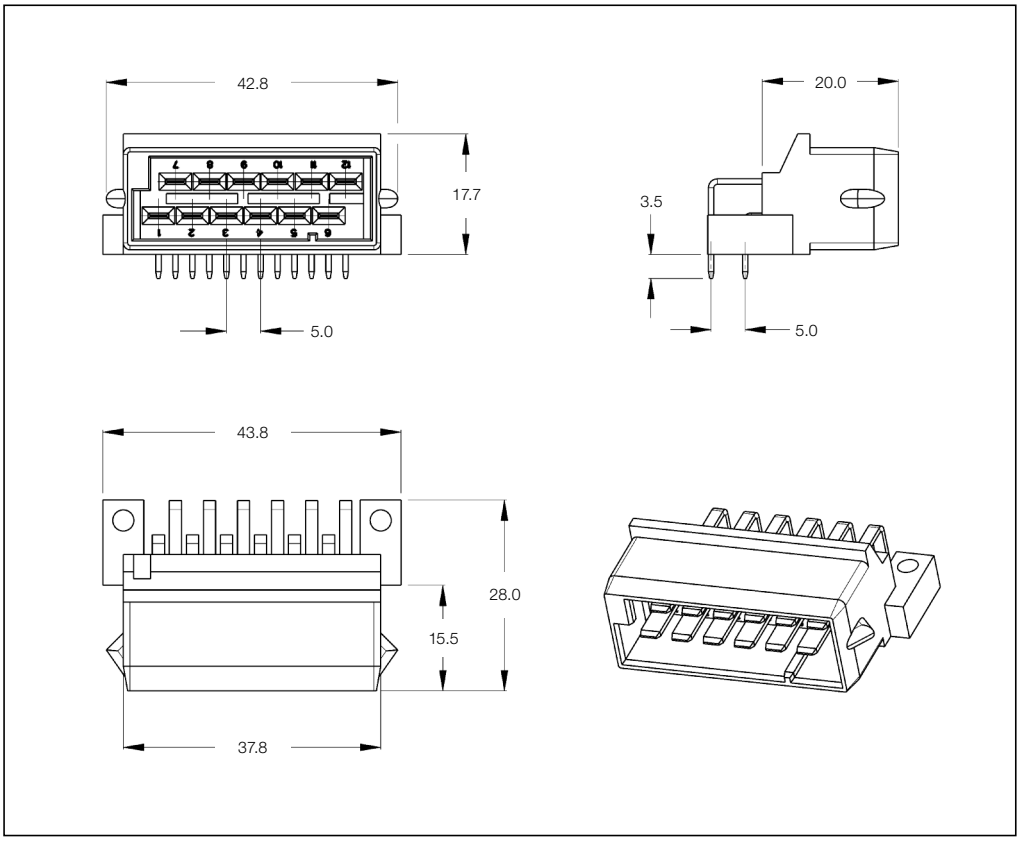
Technical Features

No. of Positions:
12 Positions

Housing Material:
PA66 GV13

Product Specification:
—

Application Specification:
—



12 Position PCB Header Double Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header		Cover	Lever	Retainer Housing	Mating Receptacle Housing
			Right-Angle	Vertical				
12	–	Black	827229-1	–	–	–	–	827603-1
		Black	827229-2	–				
		Black	827229-3	–				
		Brown	827229-4	–				
		Black	827229-5	–				827603-2
		Brown	827229-6	–				

Printed Circuit Board Headers

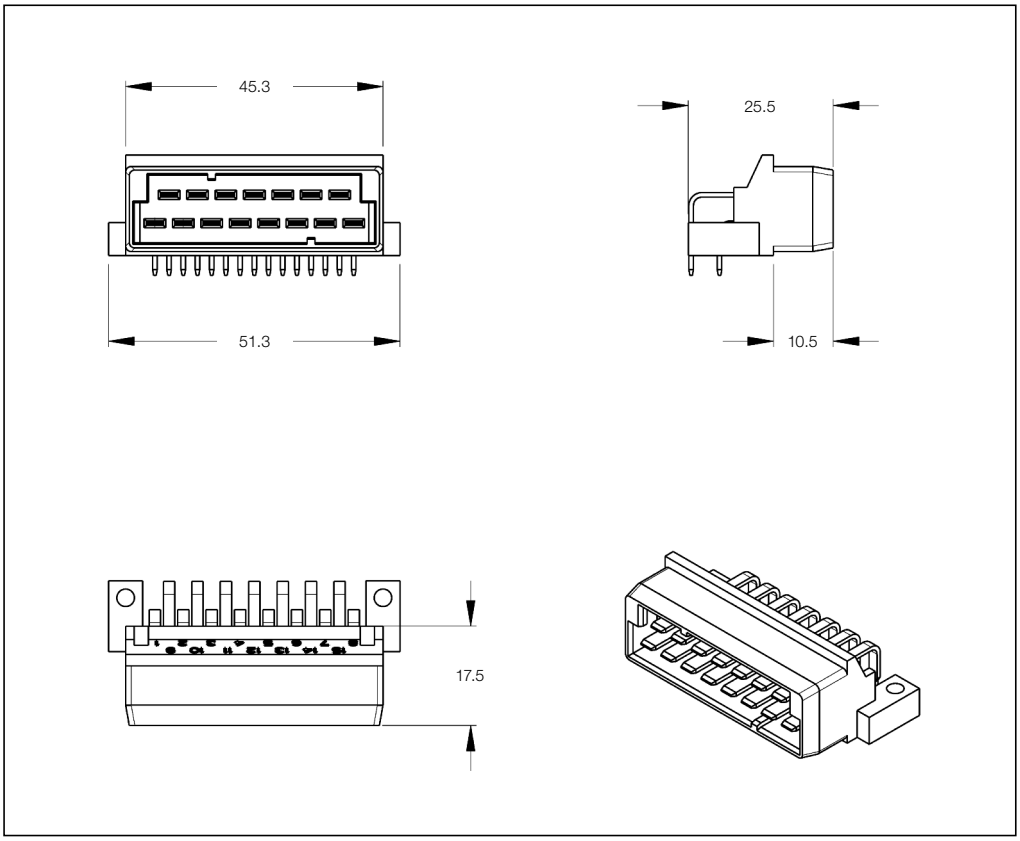
Technical Features

No. of Positions:
15 Positions

Housing Material:
PA66 GV13

Product Specification:
—

Application Specification:
—



15 Position PCB Header Double Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header		Cover	Lever	Retainer Housing	Mating Receptacle Housing
			Right-Angle	Vertical				
15	–	Black	826703-1	–	–	–	–	926171-1
		Black	826703-2	–				926171-2

Printed Circuit Board Headers

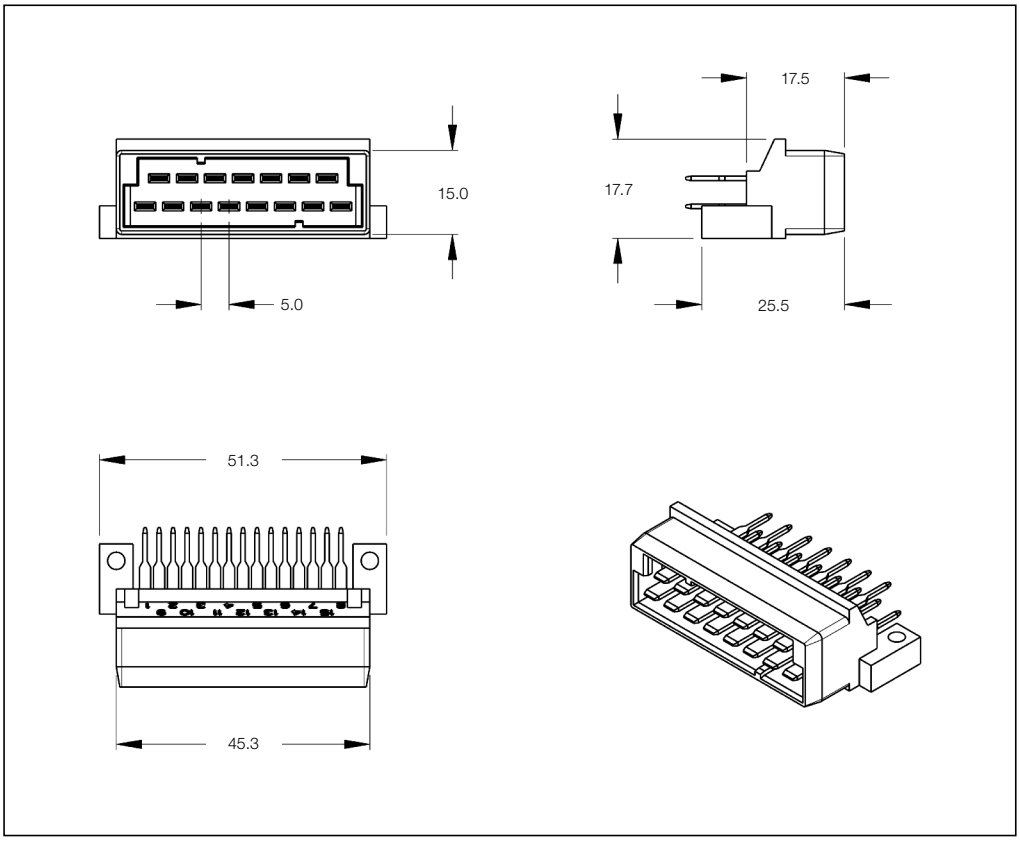
Technical Features

No. of Positions:
15 Positions

Housing Material:
PA66 GV13

Product Specification:
—

Application Specification:
—



15 Position PCB Header Double Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header		Cover	Lever	Retainer Housing	Mating Receptacle Housing
			Right-Angle	Vertical				
15	–	Black	–	827467-1	–	–	–	926171-1 926171-2

Printed Circuit Board Headers

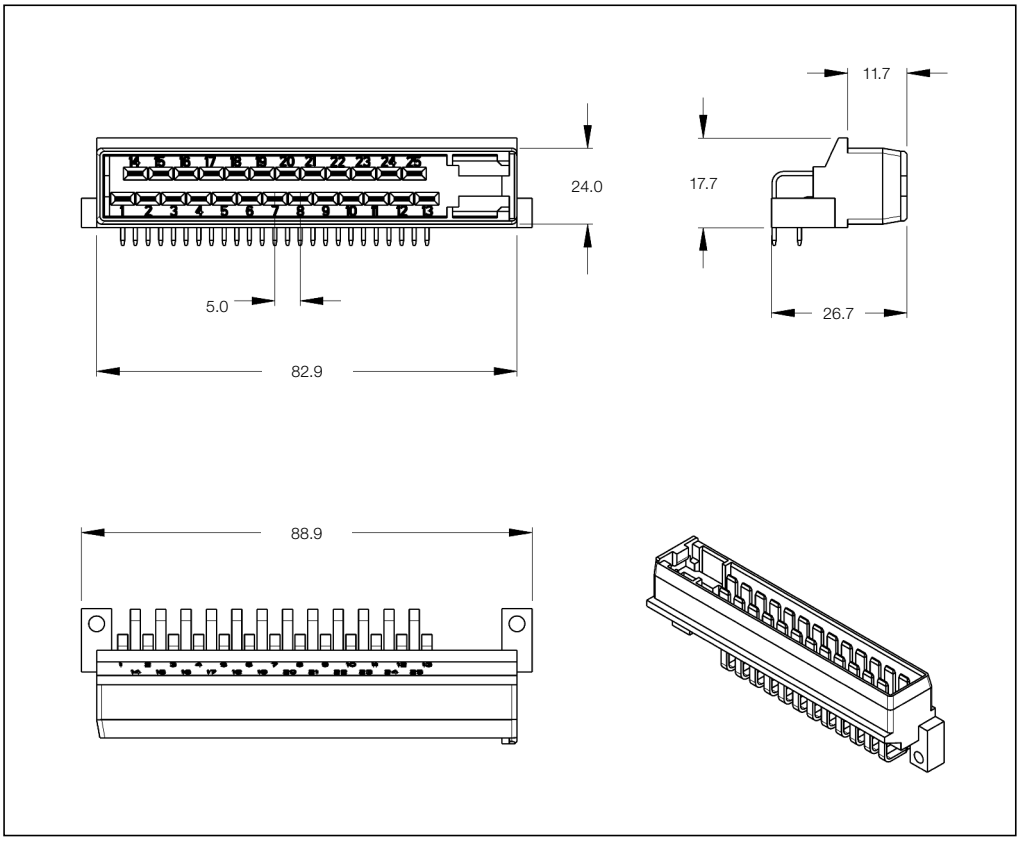
Technical Features

No. of Positions:
25 Positions

Housing Material:
PA66 GV13

Product Specification:
—

Application Specification:
—



25 Position PCB Header Double Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header		Cover	Lever	Retainer Housing	Mating Receptacle Housing
			Right-Angle	Vertical				
25	–	Black	826140-1	–	–	–	–	925470-1
		Yellow	826140-2	–				925470-2
		Green	826140-3	–				925470-3
		Brown	826140-4	–				925470-4
		Black	826140-5	–				–

Printed Circuit Board Headers

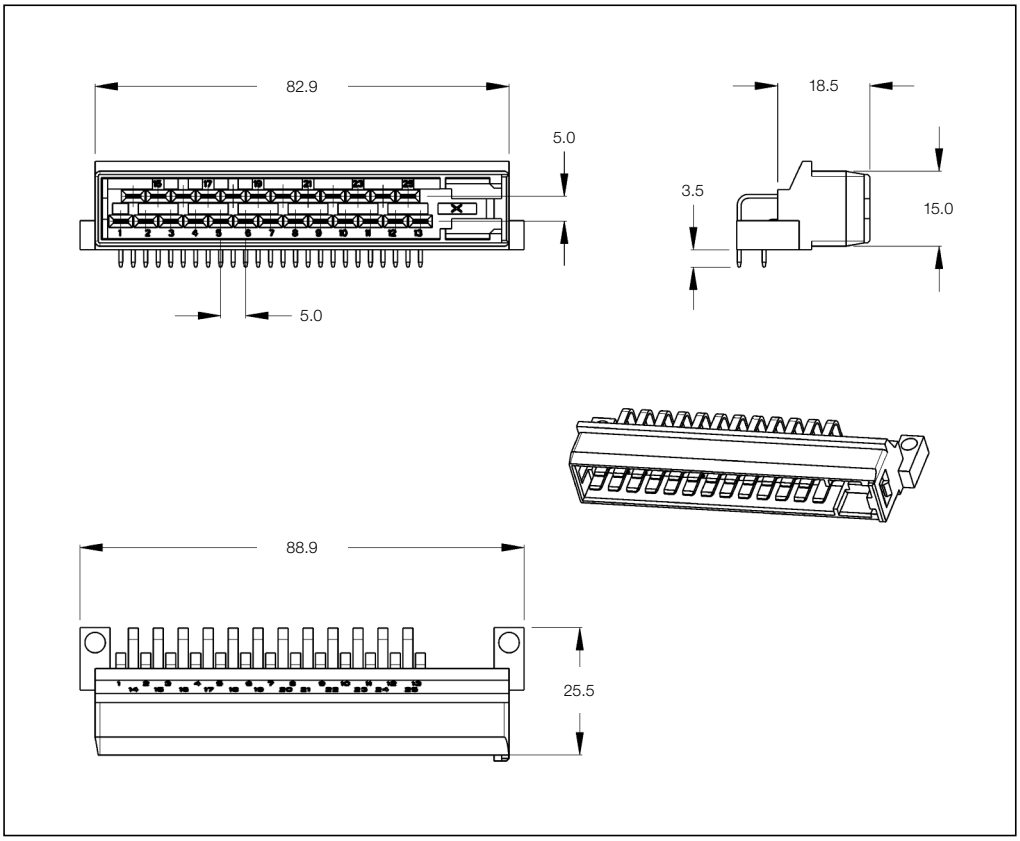
Technical Features

No. of Positions:
25 Positions

Housing Material:
PA66 GV13

Product Specification:
—

Application Specification:
—



25 Position PCB Header Double Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header Right-Angle	PCB Header Vertical	Cover	Lever	Retainer Housing	Mating Receptacle Housing
25	–	Black	826141-1	–	–	–	–	925471-1
		Yellow	826141-2	–				
		Black	826141-3	–				925471-2
		Yellow	826141-4	–				

Printed Circuit Board Headers

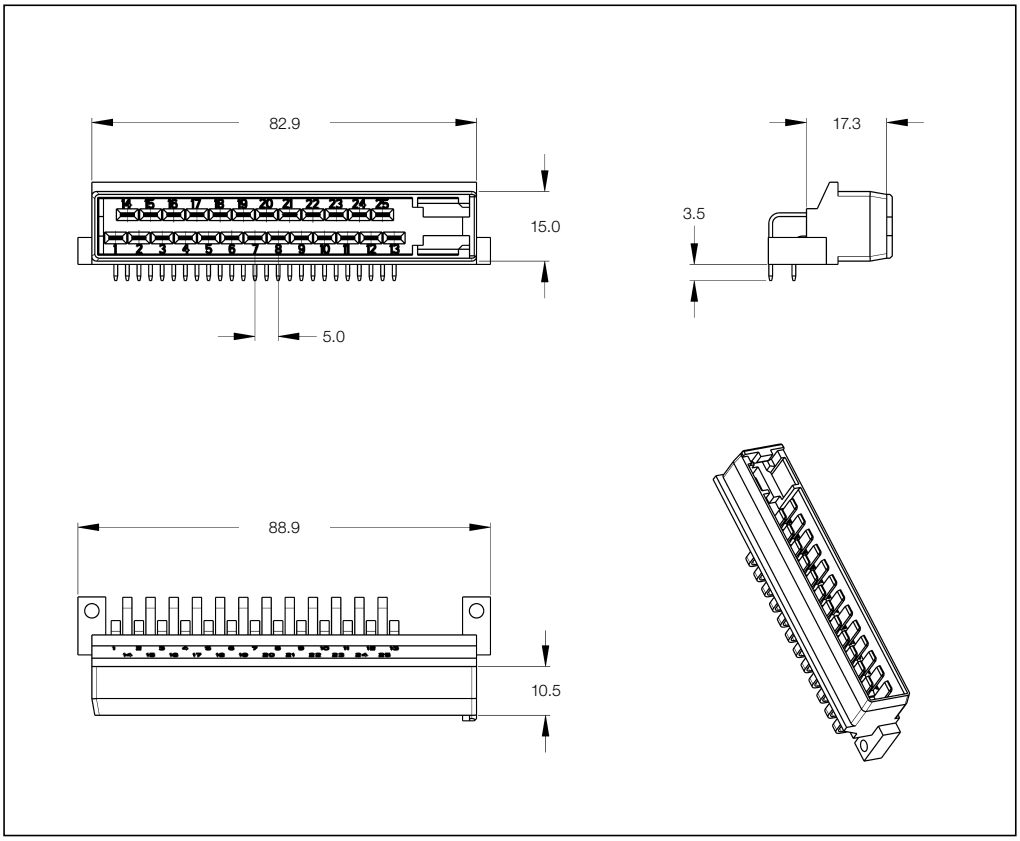
Technical Features

No. of Positions:
25 Positions

Housing Material:
PA66 GV13

Product Specification:
—

Application Specification:
—



25 Position PCB Header Double Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header		Cover	Lever	Retainer Housing	Mating Receptacle Housing
			Right-Angle	Vertical				
25	–	Black	826195-1	–	–	–	–	925471-1
		Yellow	826195-2	–				925471-2

Printed Circuit Board Headers

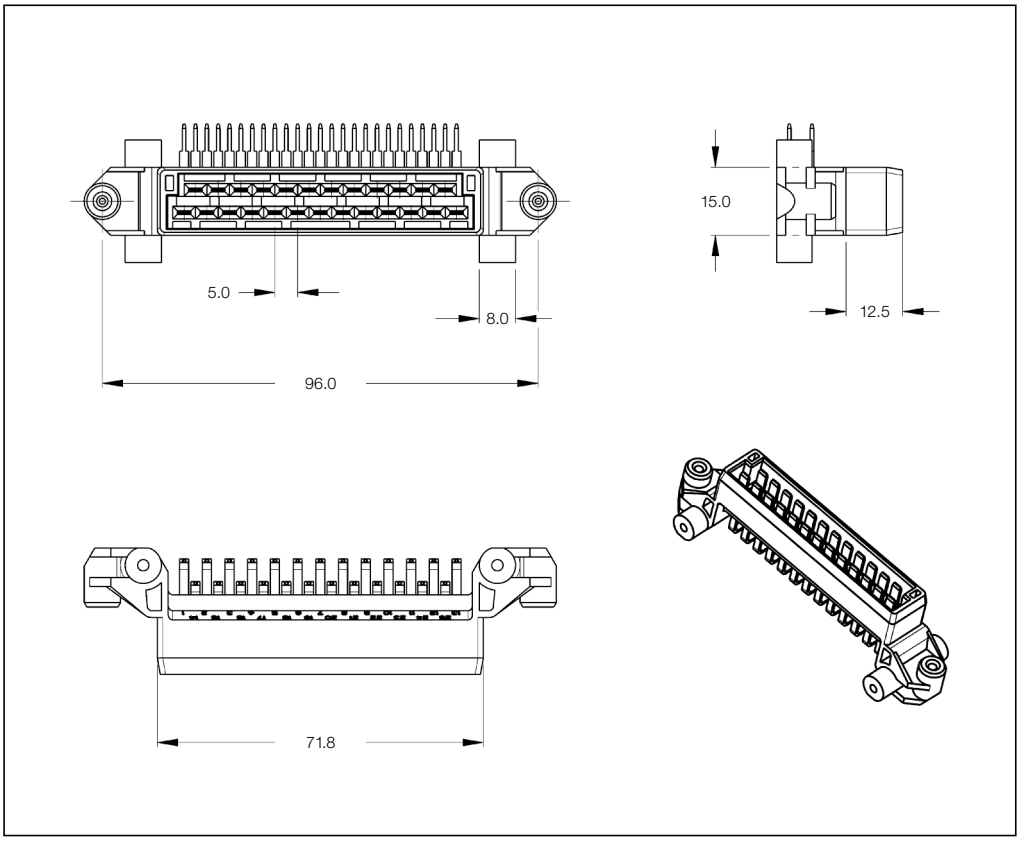
Technical Features

No. of Positions:
25 Positions

Housing Material:
PA66 GV13

Product Specification:
—

Application Specification:
—



25 Position PCB Header Double Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header		Cover	Lever	Retainer Housing	Mating Receptacle Housing
			Right-Angle	Vertical				
25	–	Black	–	827050-1	–	–	–	827249-1/-6 963317-1 963325-1

Printed Circuit Board Headers

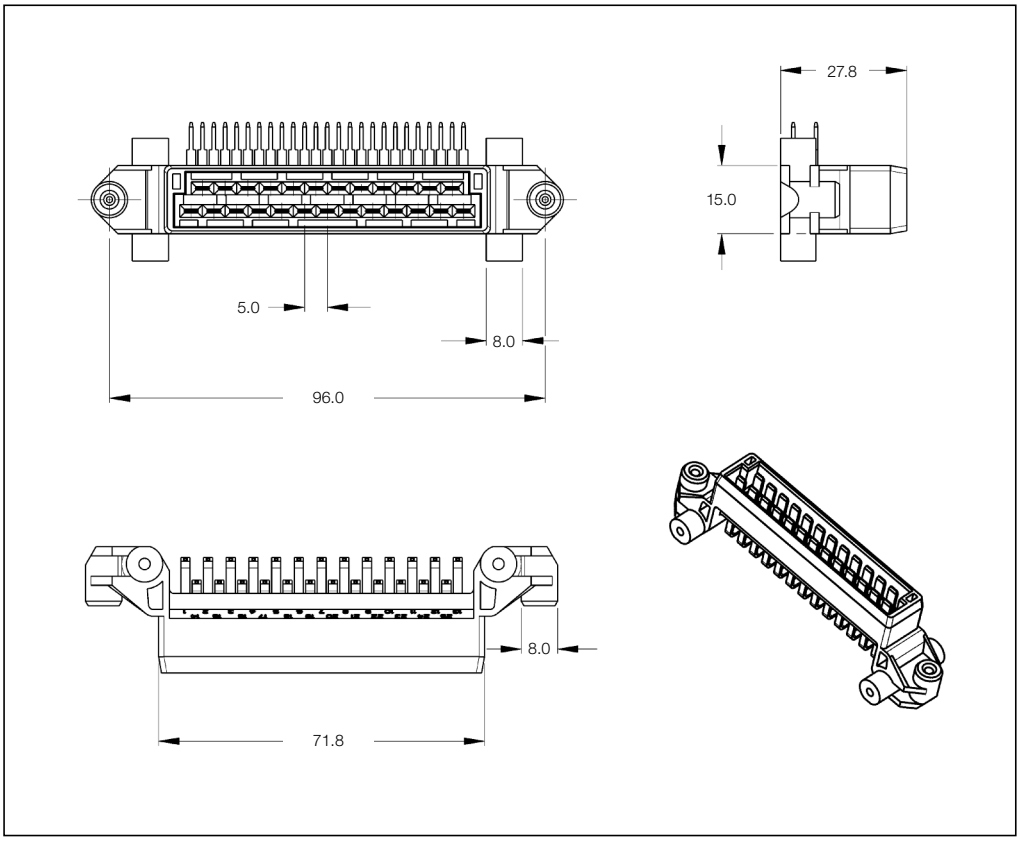
Technical Features

No. of Positions:
25 Positions

Housing Material:
PA66 GV13

Product Specification:
—

Application Specification:
—



25 Position PCB Header Double Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header		Cover	Lever	Retainer Housing	Mating Receptacle Housing
			Right-Angle	Vertical				
25	–	Black	827019-1	–	–	–	–	827249-1/-6 963317-1 963325-1

Printed Circuit Board Headers

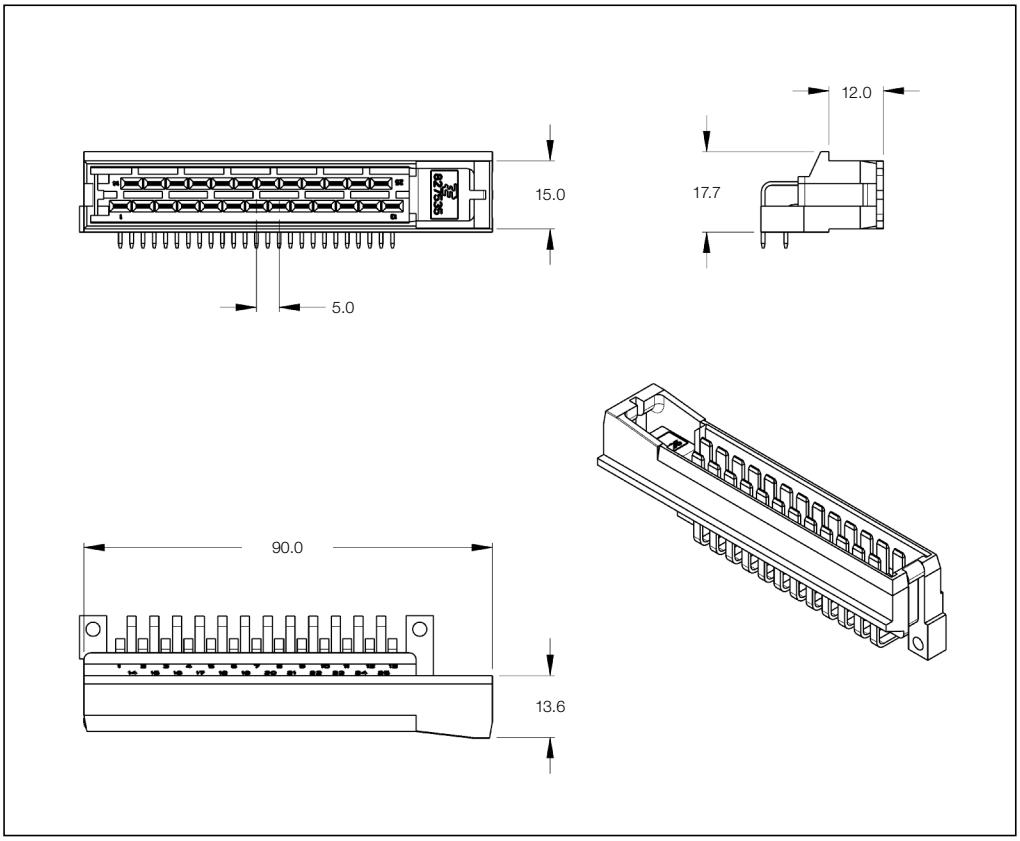
Technical Features

No. of Positions:
25 Positions

Housing Material:
PA66 GV13

Product Specification:
—

Application Specification:
—



25 Position PCB Header Double Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header Right-Angle	PCB Header Vertical	Cover	Lever	Retainer Housing	Mating Receptacle Housing
25	–	See customer drawing	827535-1/-6	–	–	–	–	827534-1
			1-827535-2	–				
			1-827535-3	–				
			2-827535-2	–				
			2-827535-3	–				
			2-827535-4	–				

Printed Circuit Board Headers

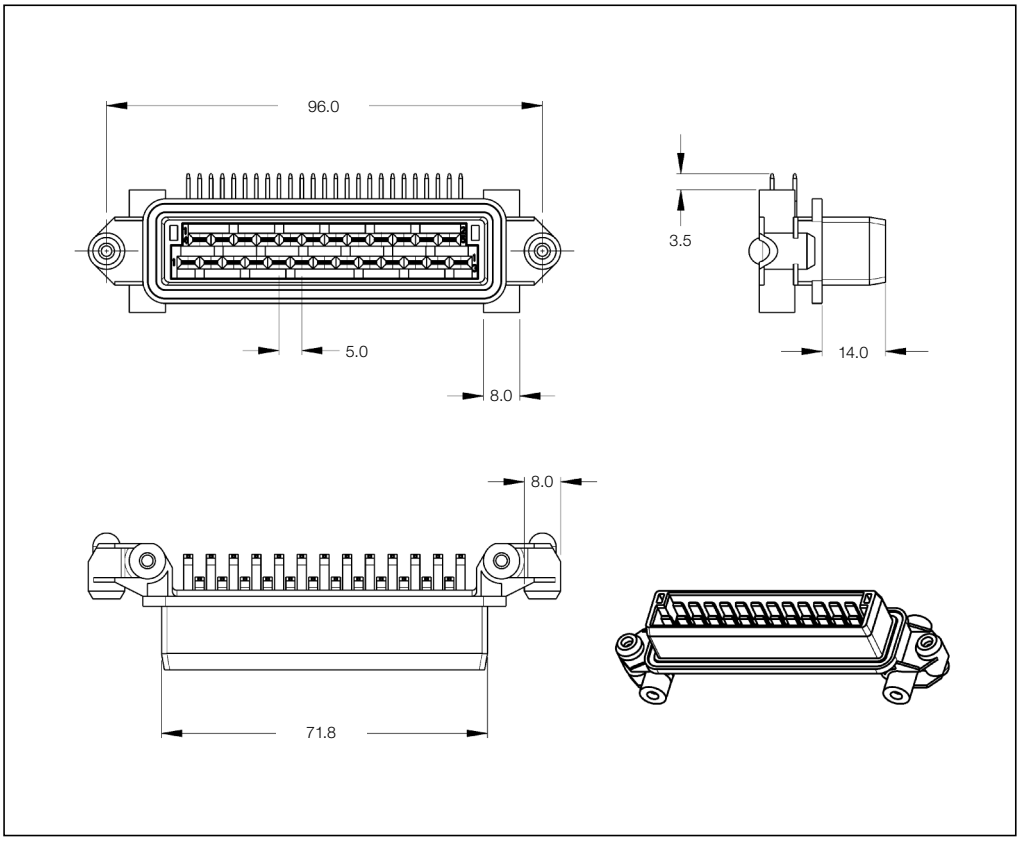
Technical Features

No. of Positions:
25 Positions

Housing Material:
PA66 GV13

Product Specification:
—

Application Specification:
—



25 Position PCB Header Double Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header		Cover	Lever	Retainer Housing	Mating Receptacle Housing
			Right-Angle	Vertical				
25	–	Black	828661-1	–	–	–	–	827249-1/-6 963317-1 963325-1

Printed Circuit Board Headers

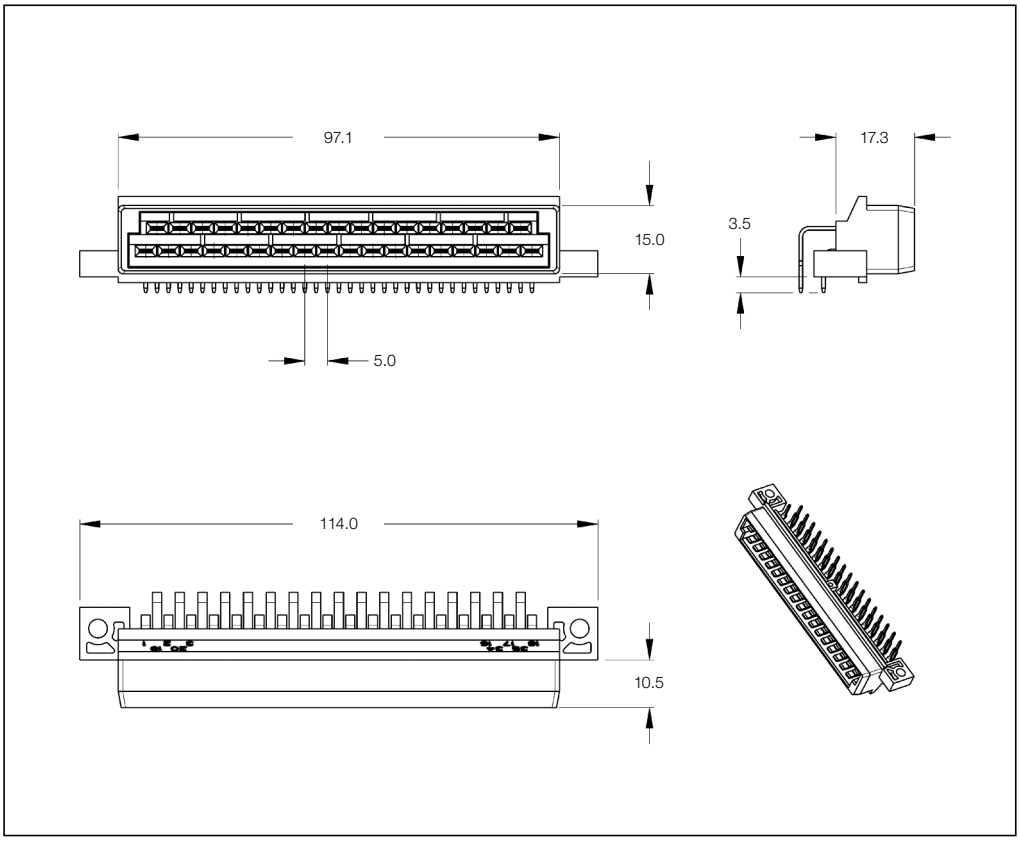
Technical Features

No. of Positions:
35 Positions

Housing Material:
PA66 GV13

Product Specification:
—

Application Specification:
—



35 Position PCB Header Double Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header		Cover	Lever	Retainer Housing	Mating Receptacle Housing
			Right-Angle	Vertical				
								826000-1/-7
								963318-1
								827663-4/-7
35	–	Black	825213-1	–	–	–	–	827257-1/-9
								1-827257-1/-4
								1-827257-6/-8
								828632-1

Printed Circuit Board Headers

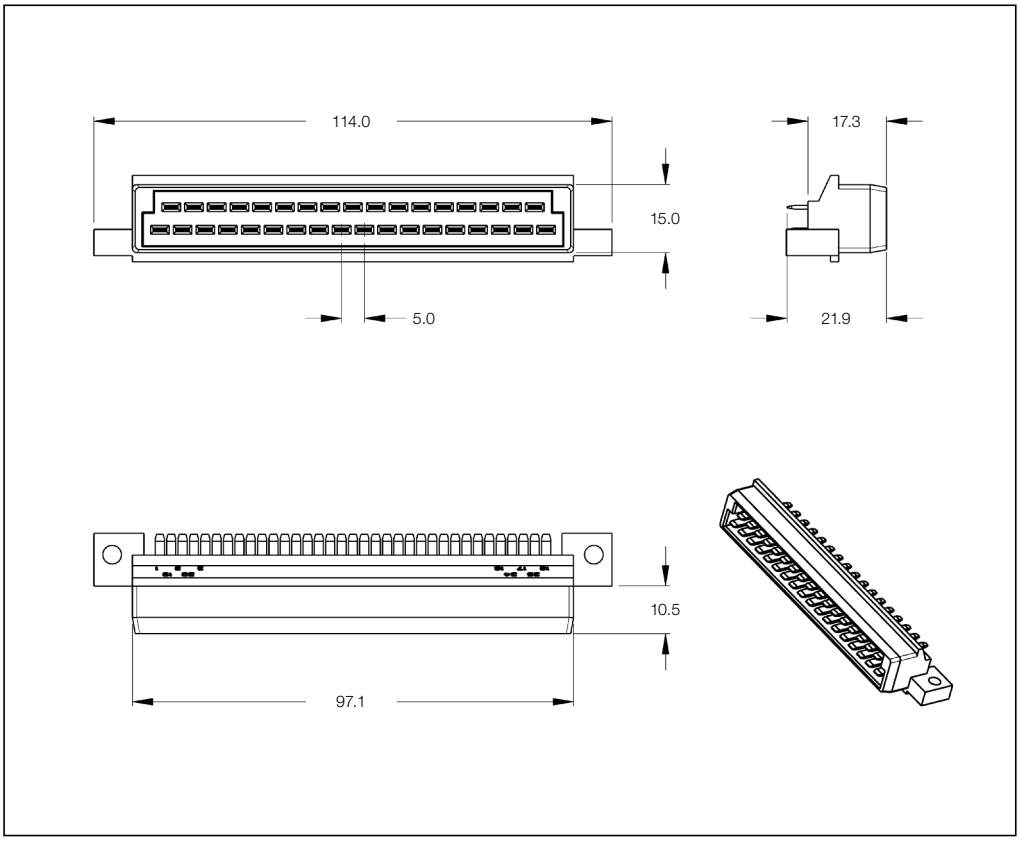
Technical Features

No. of Positions:
35 Positions

Housing Material:
PA66 GV13

Product Specification:
—

Application Specification:
—



35 Position PCB Header Double Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header		Cover	Lever	Retainer Housing	Mating Receptacle Housing
			Right-Angle	Vertical				
35	–	Black	–	827254-1	–	–	–	826000-1/-7 963318-1 827663-4/-7 827257-1/-9 1-827257-1/-4 1-827257-6/-8 828632-1

Printed Circuit Board Headers

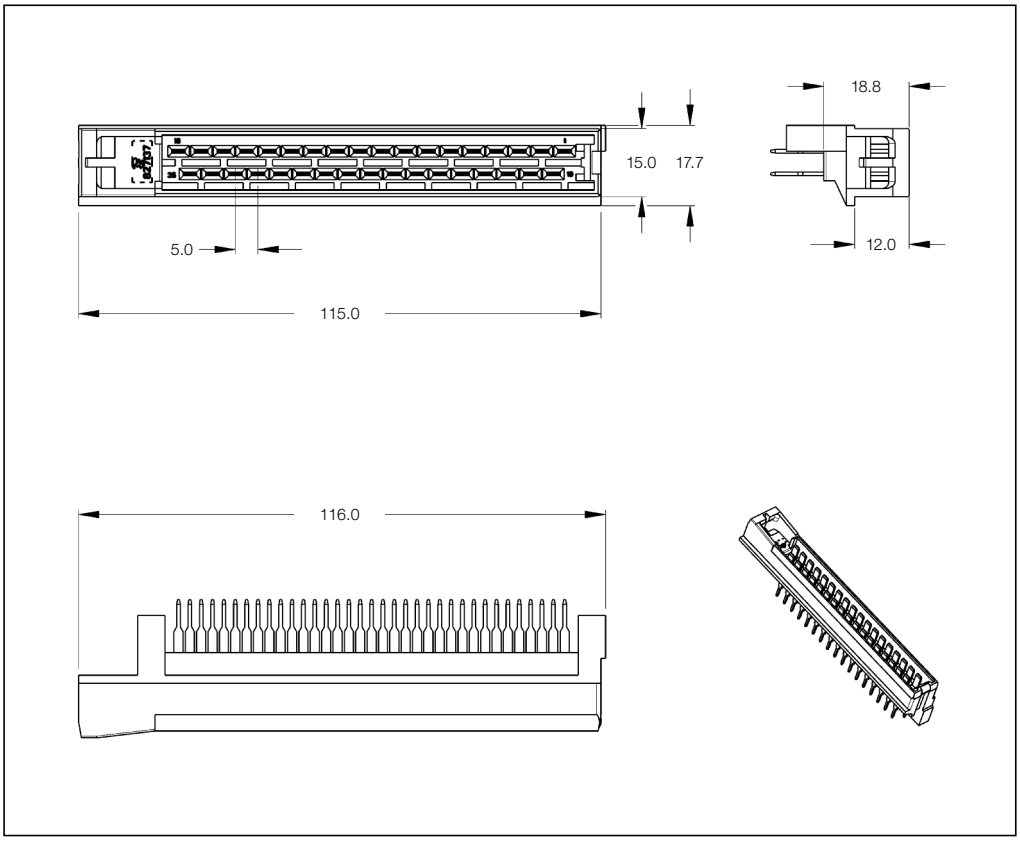
Technical Features

No. of Positions:
35 Positions

Housing Material:
PA66 GV13

Product Specification:
—

Application Specification:
—



35 Position PCB Header Double Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header		Cover	Lever	Retainer Housing	Mating Receptacle Housing
			Right-Angle	Vertical				
35	–	Black	827439-1	–	–	–	–	827667-1 827667-2

Printed Circuit Board Headers

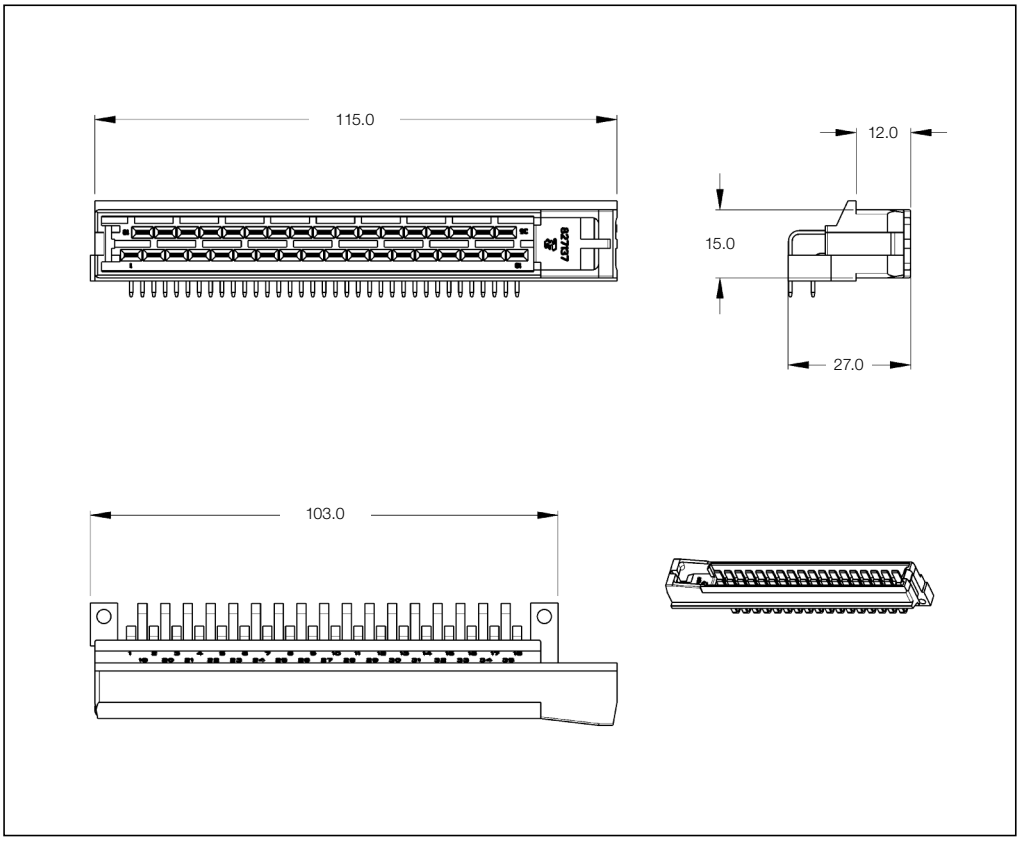
Technical Features

No. of Positions:
35 Positions

Housing Material:
PA66 GV13

Product Specification:
—

Application Specification:
—



35 Position PCB Header Double Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header Right-Angle	PCB Header Vertical	Cover	Lever	Retainer Housing	Mating Receptacle Housing
35	–	Black	827137-1	–	–	–	–	827667-1
		Gray	827137-2	–				827667-2

Printed Circuit Board Headers

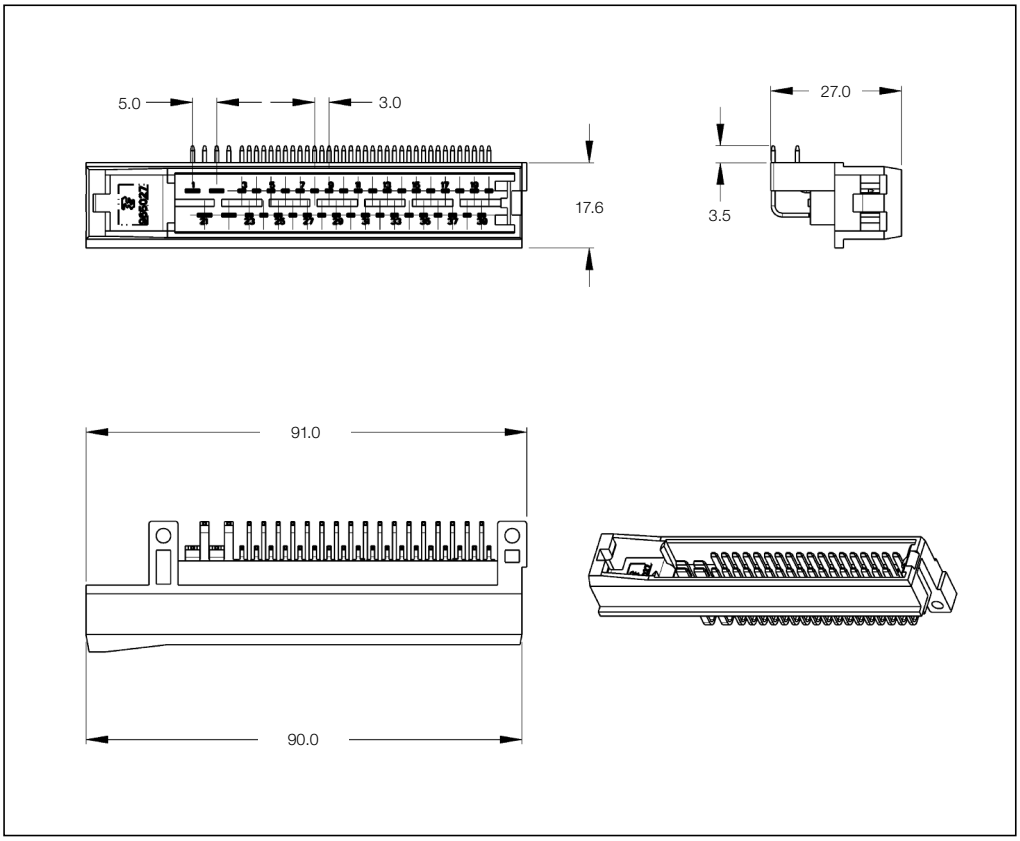
Technical Features

No. of Positions:
39 Positions

Housing Material:
PA66 GV13

Product Specification:
—

Application Specification:
—



39 Position PCB Header Double Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header		Cover	Lever	Retainer Housing	Mating Receptacle Housing
			Right-Angle	Vertical				
39	–	Black	963578-1	–	–	–	–	828771-1
		Black	963578-2	–				

Printed Circuit Board Headers

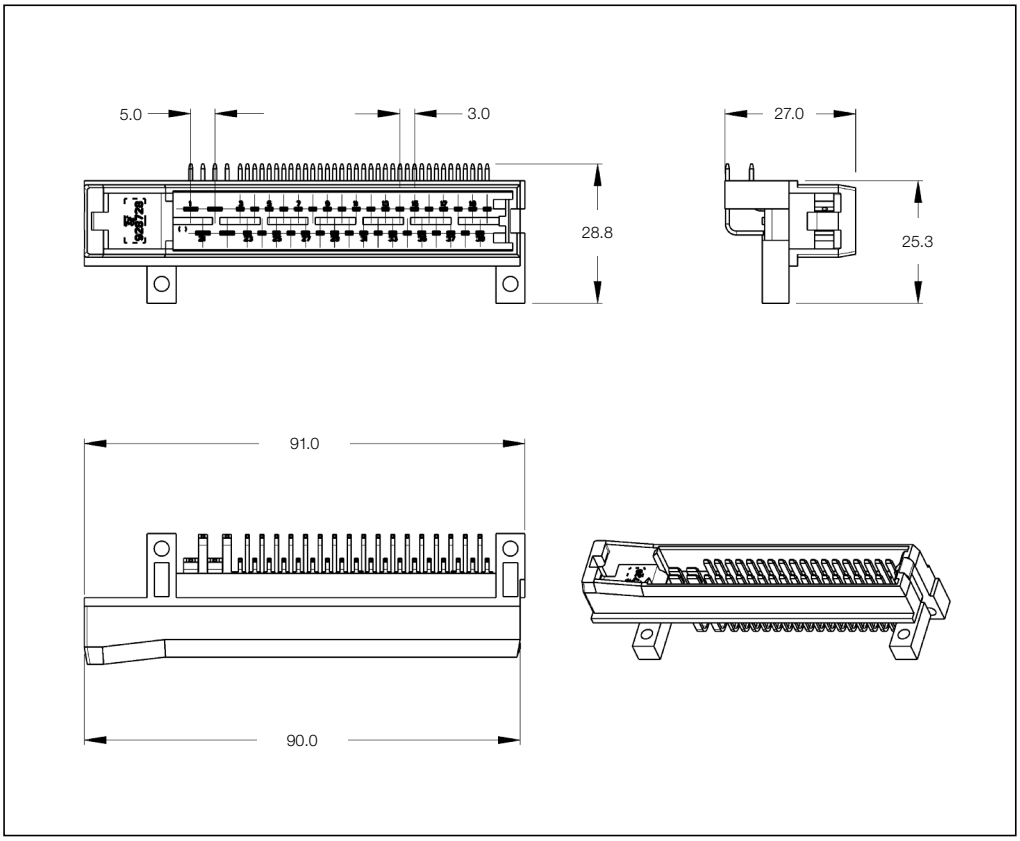
Technical Features

No. of Positions:
39 Positions

Housing Material:
PA66 GV35

Product Specification:
—

Application Specification:
—



39 Position PCB Header Double Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header Right-Angle	PCB Header Vertical	Cover	Lever	Retainer Housing	Mating Receptacle Housing
39	–	Black	828773-1	–	–	–	–	828771-1
			828773-2	–				
			828773-3	–				

Printed Circuit Board Headers

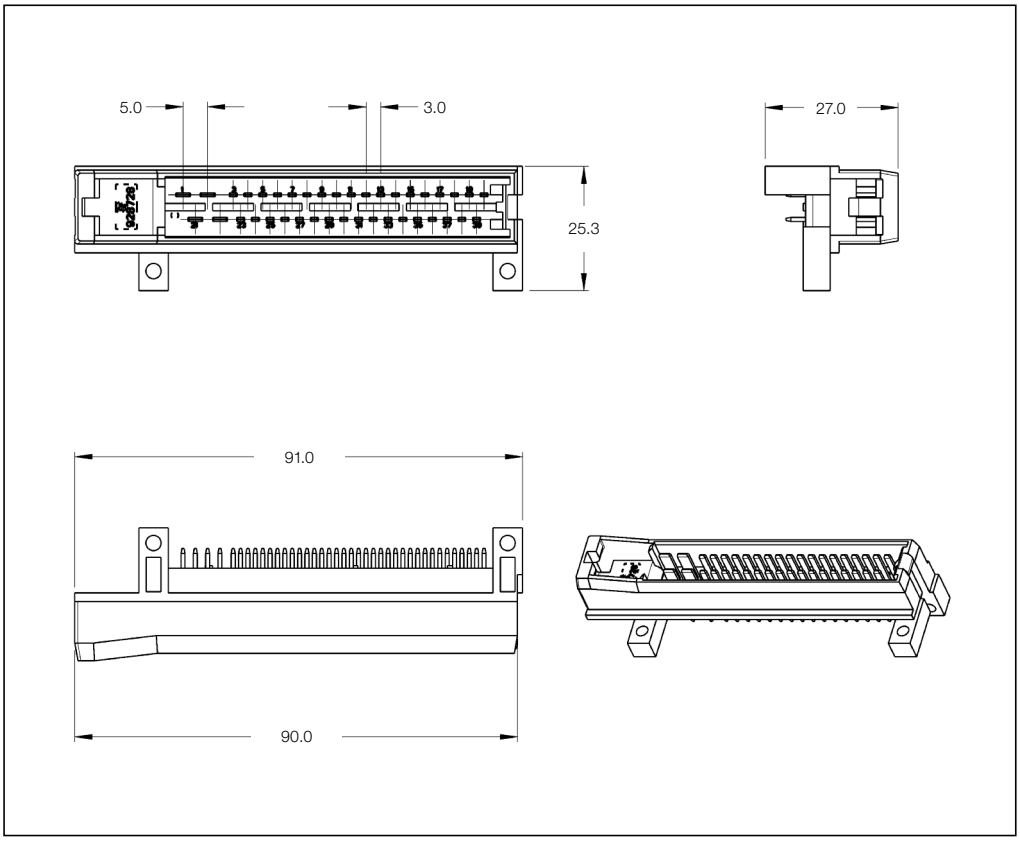
Technical Features

No. of Positions:
39 Positions

Housing Material:
PA66 GV35

Product Specification:
—

Application Specification:
—



39 Position PCB Header Double Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header		Cover	Lever	Retainer Housing	Mating Receptacle Housing
			Right-Angle	Vertical				
39	–	Black	–	828772-2	–	–	–	828771-1

Printed Circuit Board Headers

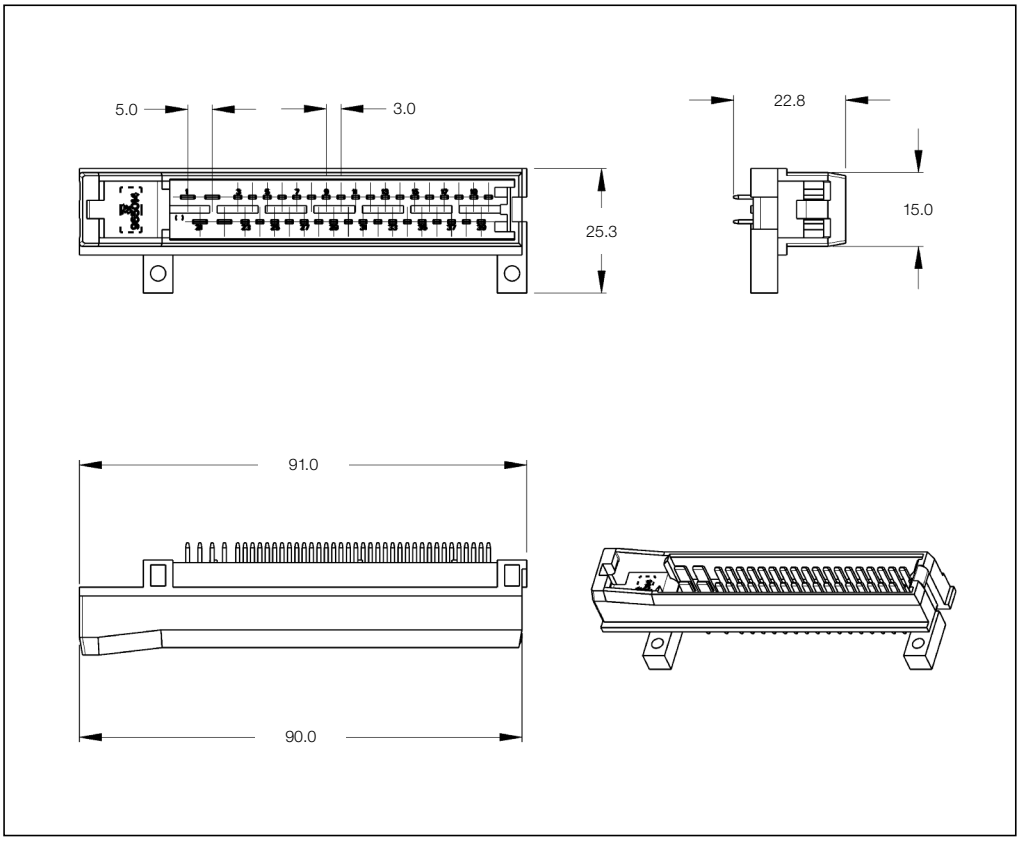
Technical Features

No. of Positions:
39 Positions

Housing Material:
PA66 GV13

Product Specification:
—

Application Specification:
—



39 Position PCB Header Double Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header		Cover	Lever	Retainer Housing	Mating Receptacle Housing
			Right-Angle	Vertical				
39	–	Black	–	963574-1	–	–	–	828771-1

Printed Circuit Board Headers

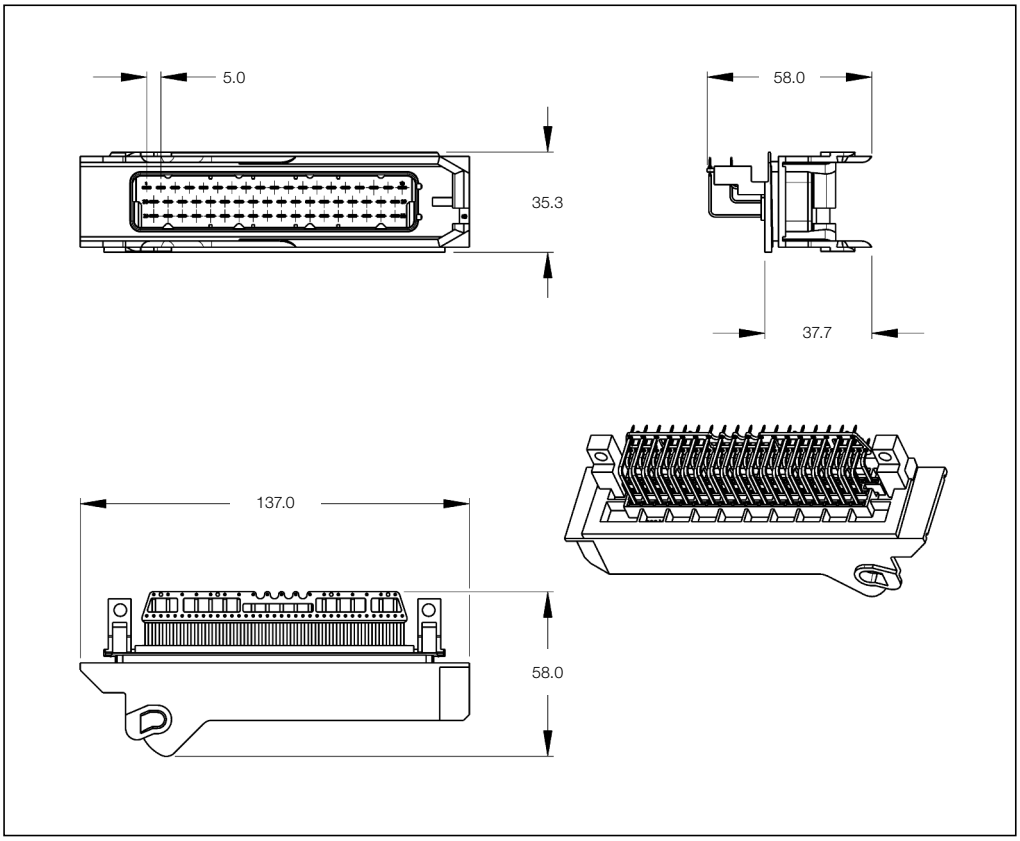
Technical Features

No. of Positions:
55 Positions

Housing Material:
PA66 GV35

Product Specification:
—

Application Specification:
—



55 Position PCB Header Double and Triple Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header		Cover	Lever	Retainer Housing	Mating Receptacle Housing
			Right-Angle	Vertical				
55	8	Black	963063-1	–	–	–	–	963534-1
								963534-2
	7	Black	963063-2	–				963534-3
								1-963534-1

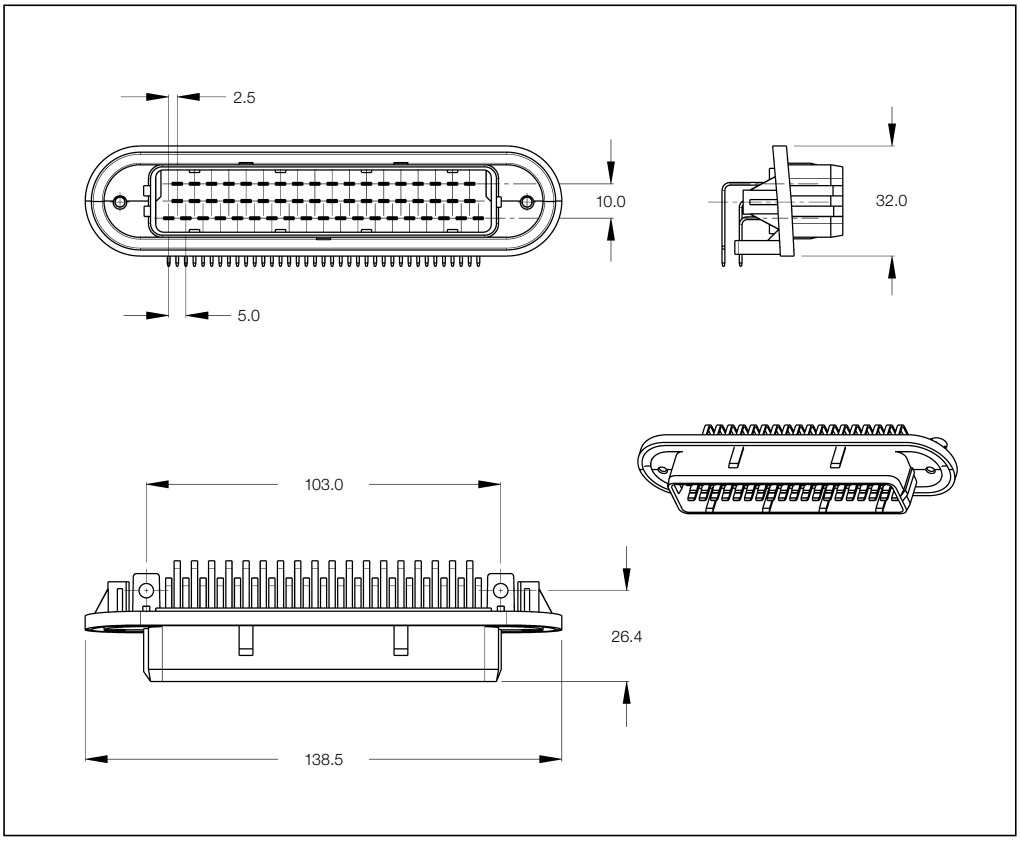
Technical Features

No. of Positions:
55 Positions

Housing Material:
PA66 GF20

Product Specification:
—

Application Specification:
—



55 Position PCB Header Double and Triple Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header		Cover	Lever	Retainer Housing	Mating Receptacle Housing
			Right-Angle	Vertical				
55	8	Black	142723-1	–	–	–	–	963534-1
								963534-2
	7	Black	142723-2	–				963534-3
								1-963534-1

Printed Circuit Board Headers

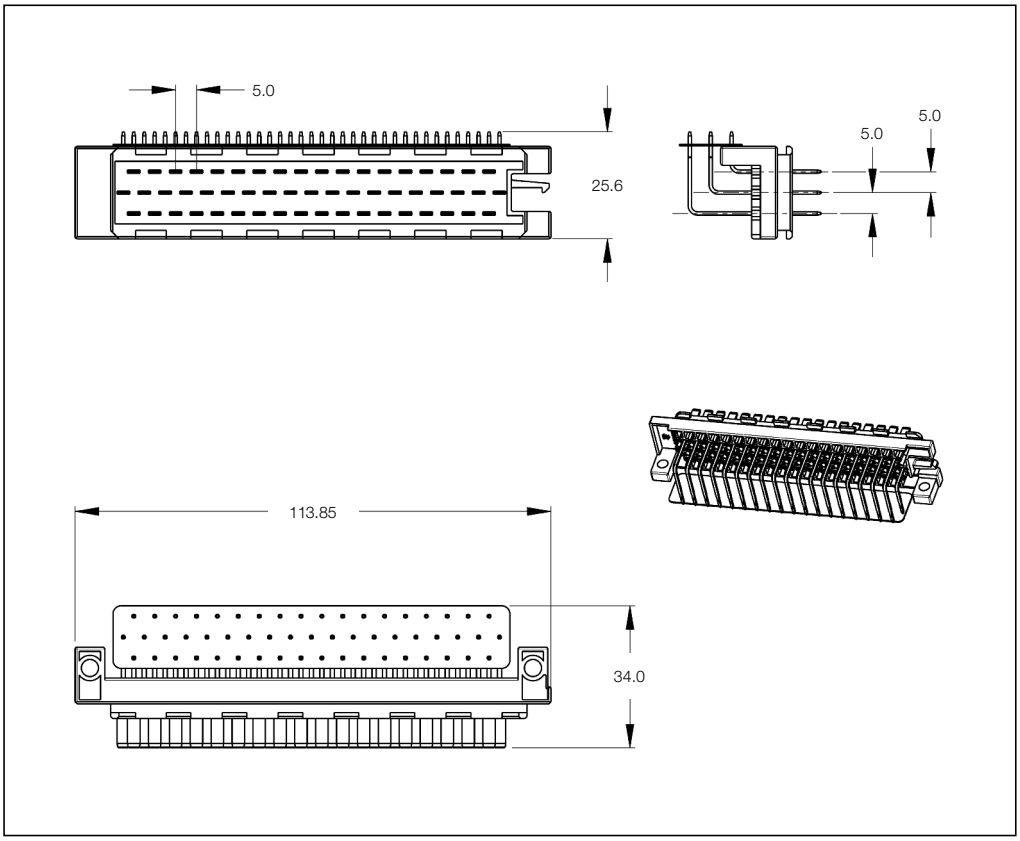
Technical Features

No. of Positions:
55 Positions

Housing Material:
PA66 GF20

Product Specification:
—

Application Specification:
—



55 Position PCB Header Double and Triple Row

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			PCB Header		Cover	Lever	Retainer Housing	Mating Receptacle Housing
			Right-Angle	Vertical				
55	–	Black	963042-2	–	–	–	–	963041-1

Receptacle Housings

Technical Features

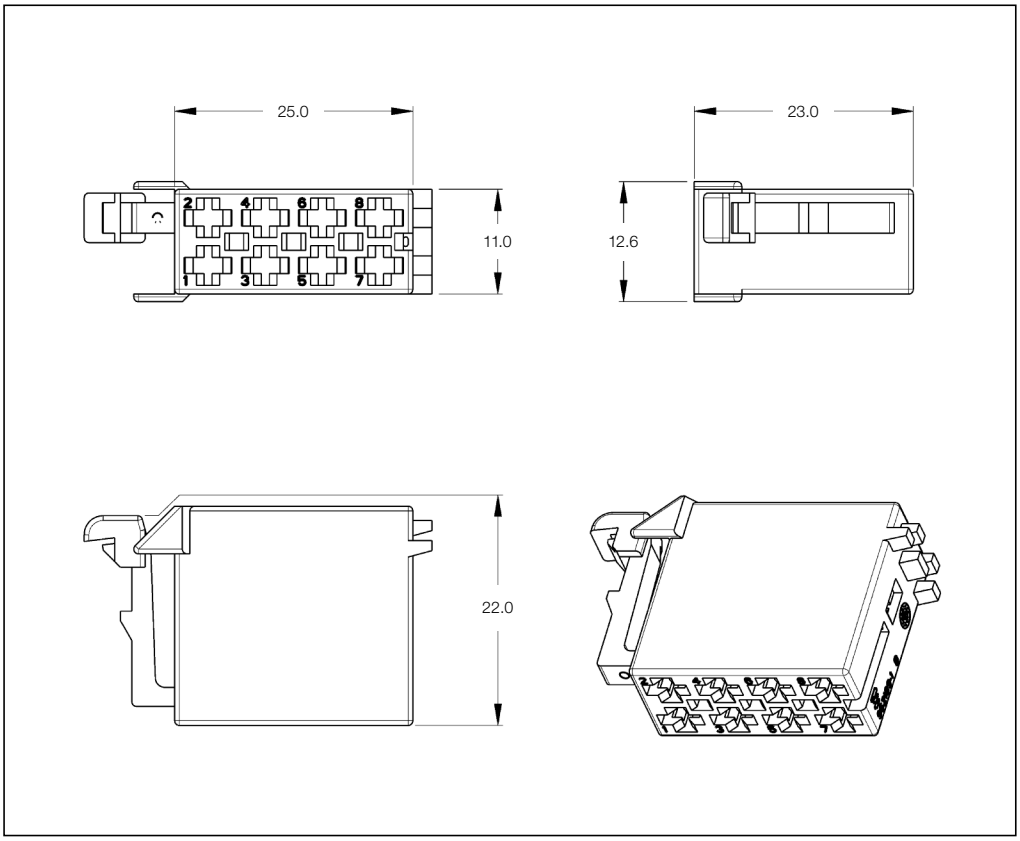
No. of Positions:
8 Position Type A

Housing Material:
PBT

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
—

Application Specification:
—



8 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
8	–	Black	962189-1	–	–	–	106455-3	–	–

Receptacle Housings

Technical Features

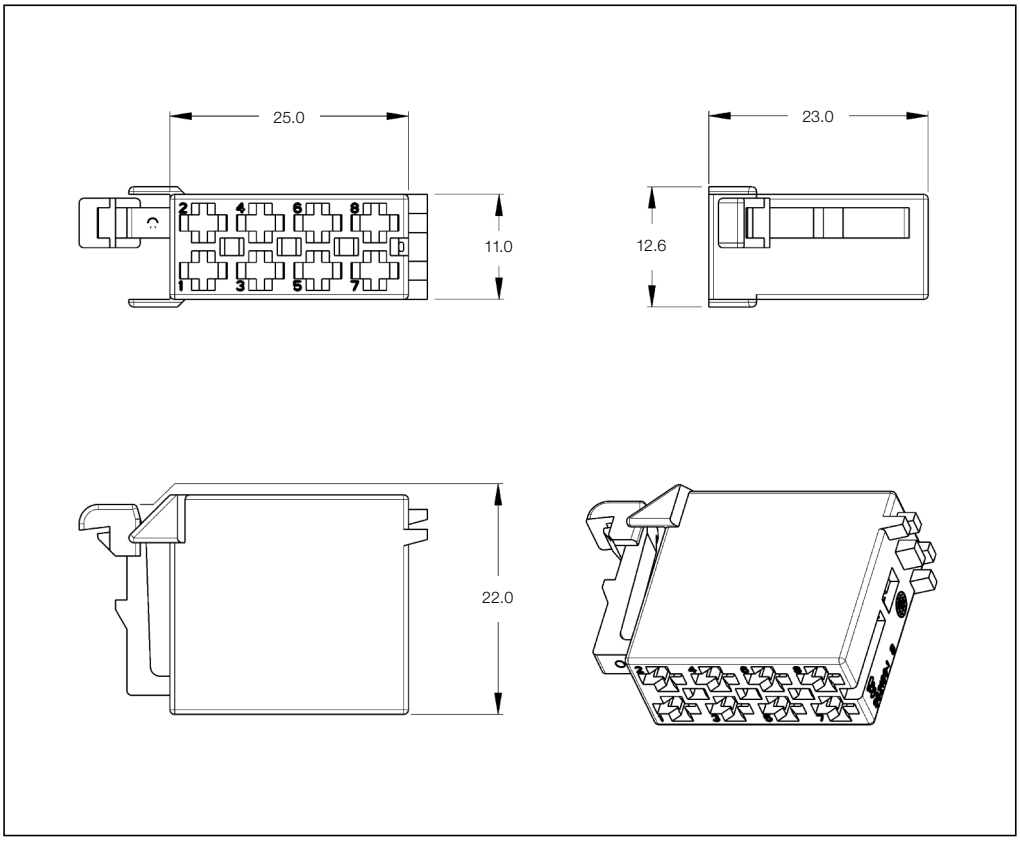
No. of Positions:
8 Position Type A
with Secondary Locking

Housing Material:
PBT

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
—

Application Specification:
—



8 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
8	–	Black	963120-1	–	–	–	106455-3	–	–

Receptacle Housings

Technical Features

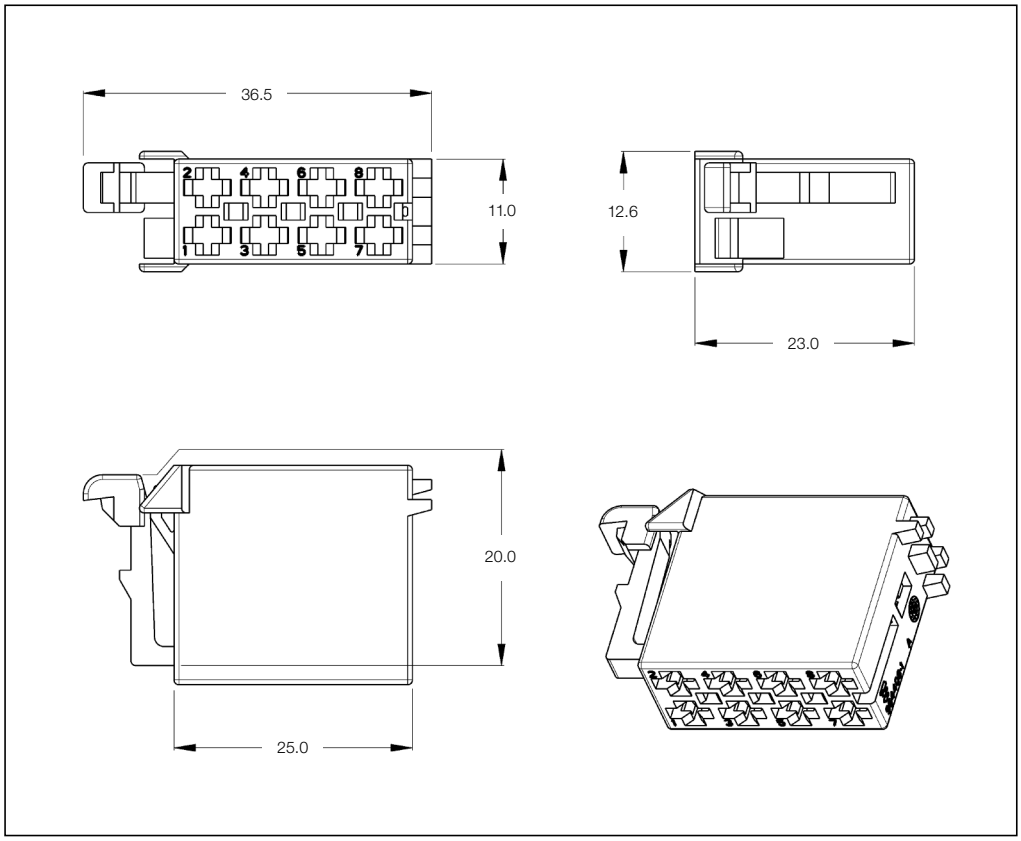
No. of Positions:
8 Position Type A
with Different Clips

Housing Material:
PA66

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
—

Application Specification:
—



8 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
8	–	Black	964408-1	–	–	–	106455-3	–	–

Receptacle Housings

Technical Features

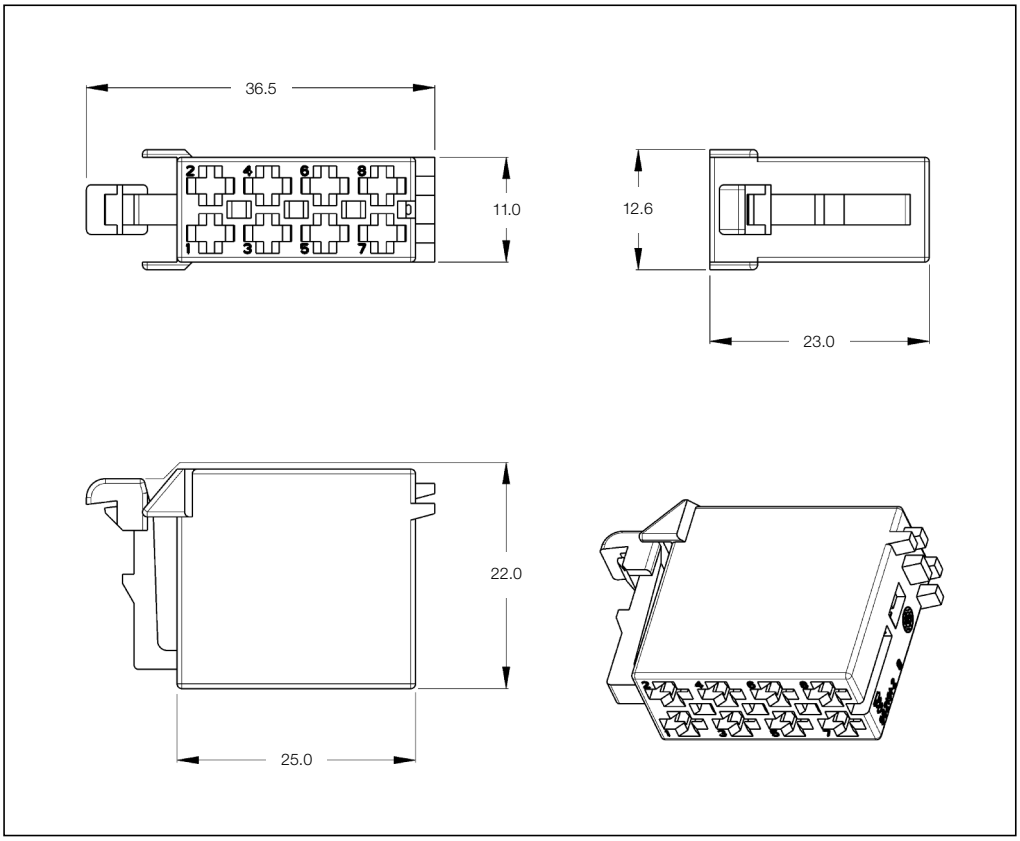
No. of Positions:
8 Position Type B

Housing Material:
PA66

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
—

Application Specification:
—



8 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
8	–	Black	962191-1	–	–	–	106455-3	–	–

Receptacle Housings

Technical Features

No. of Positions:
8 Position Type B
with Secondary Locking

Housing Material:
PA66

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
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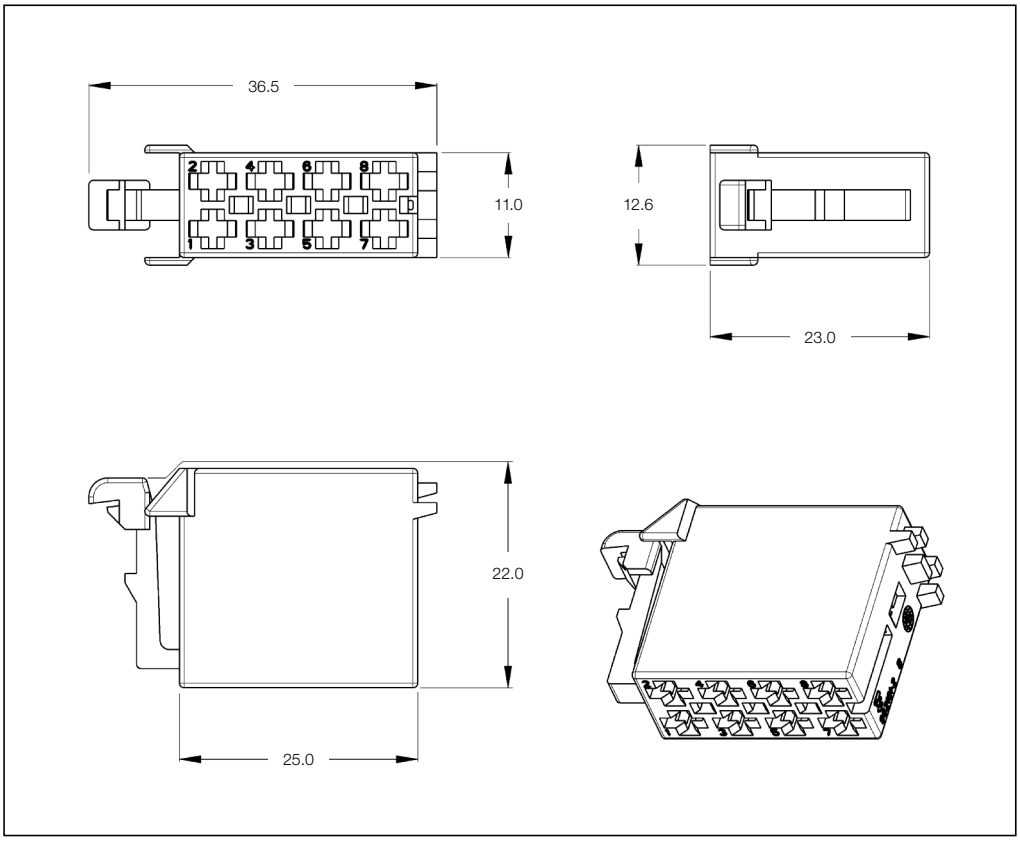
Application Specification:
—



8 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
8	–	Black	963121-1	–	–	–	106455-3	–	–

Receptacle Housings

Technical Features

No. of Positions:
8 Position Type B
with Differents Clips

Housing Material:
PA66

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
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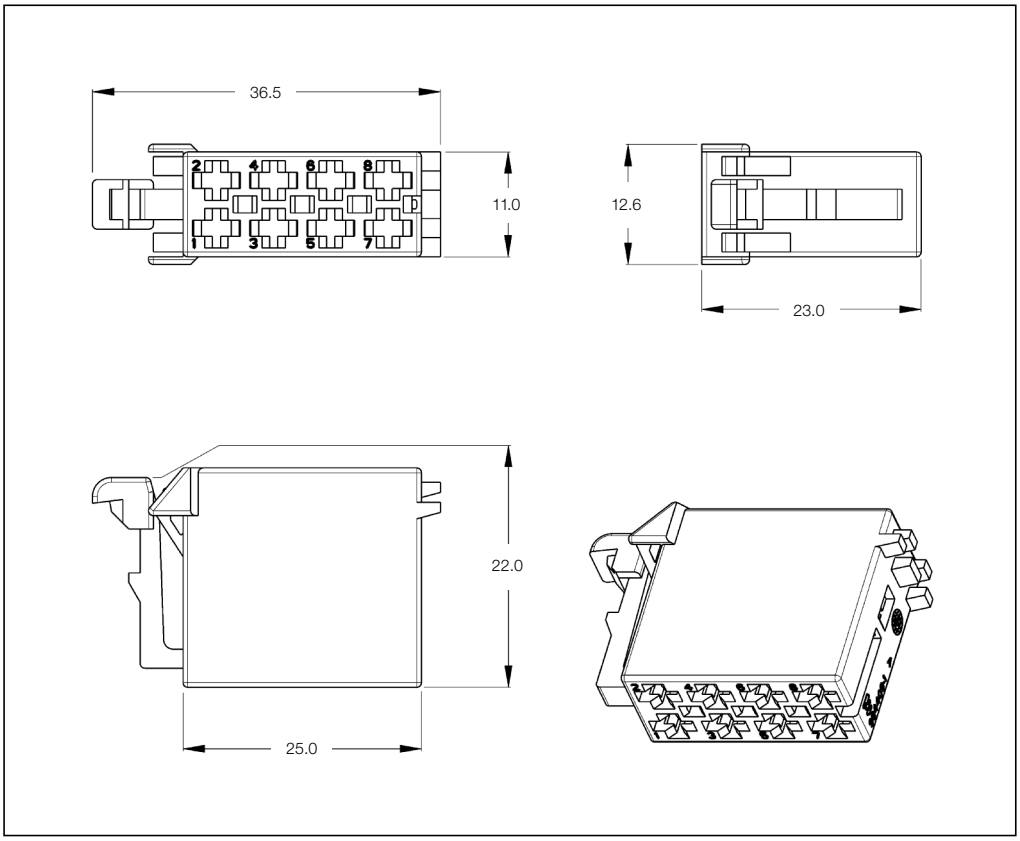
Application Specification:
—



8 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
8	–	Black	964409-1	–	–	–	106455-3	–	–

Receptacle Housings

Technical Features

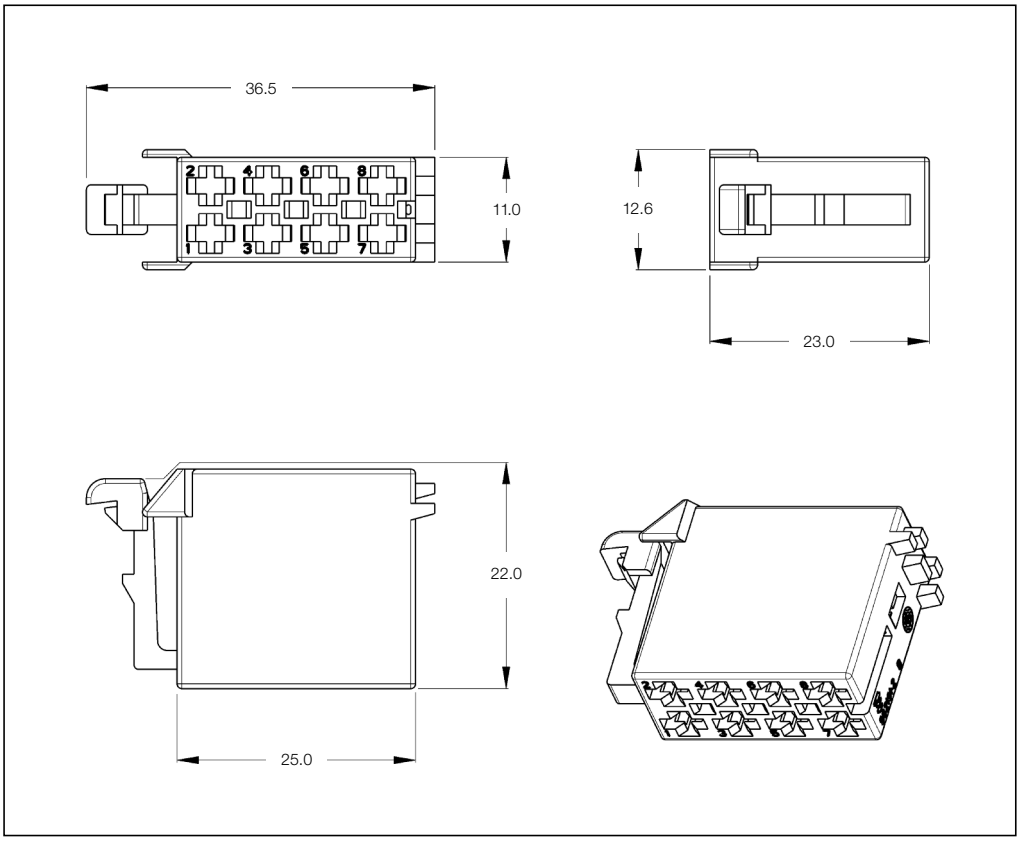
No. of Positions:
8 Position Type C

Housing Material:
PA66

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
—

Application Specification:
—



8 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
8	–	Black	962191-1	–	–	–	106456-1	–	–

Receptacle Housings

Technical Features

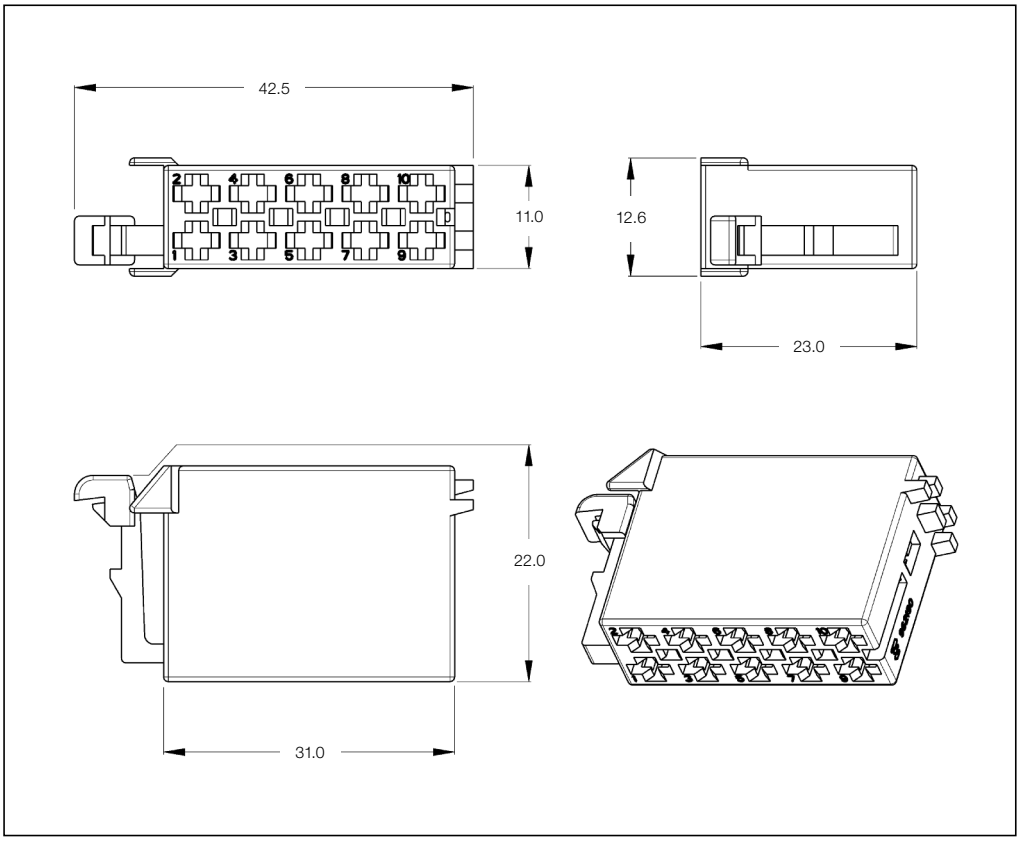
No. of Positions:
10 Position Type C
with Secondary Locking

Housing Material:
PA66

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
—

Application Specification:
—



10 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
10	–	Black	963122-1	–	–	–	106456-1	–	–

Receptacle Housings

Technical Features

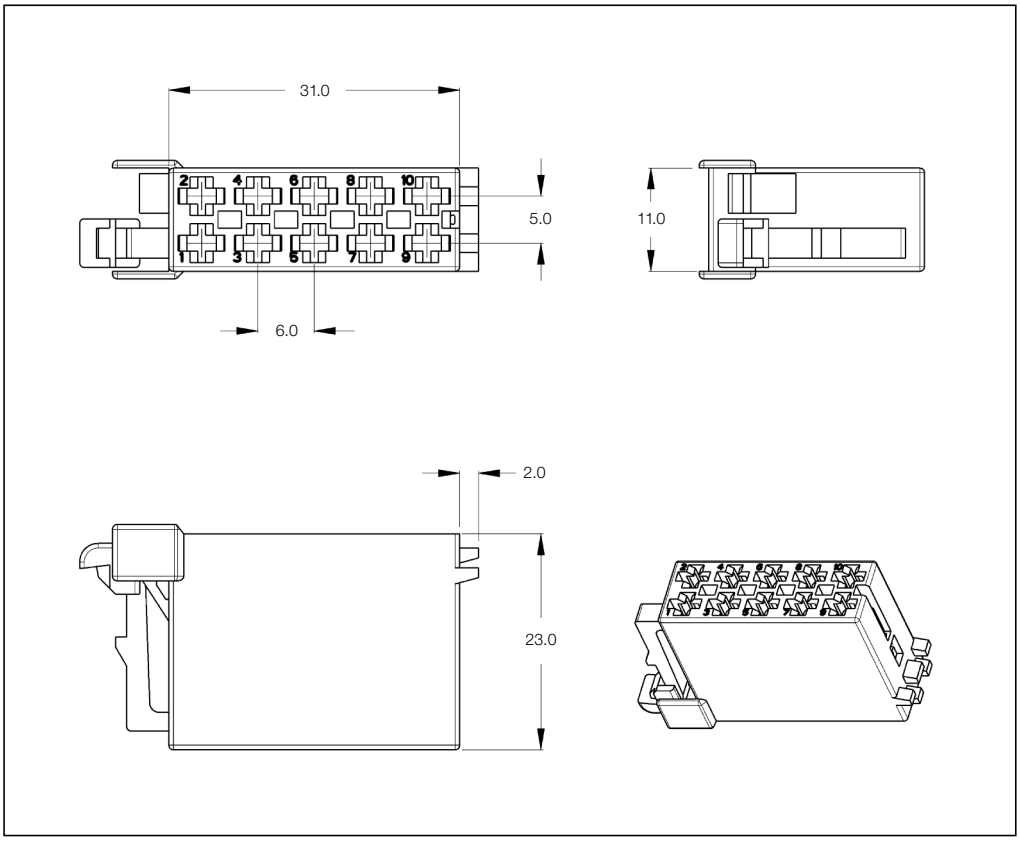
No. of Positions:
10 Position Type B
with Differents Clips

Housing Material:
PA66

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
—

Application Specification:
—



10 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
10	–	Black	964410-1	–	–	–	106456-1	–	–

Tab Housings

Technical Features

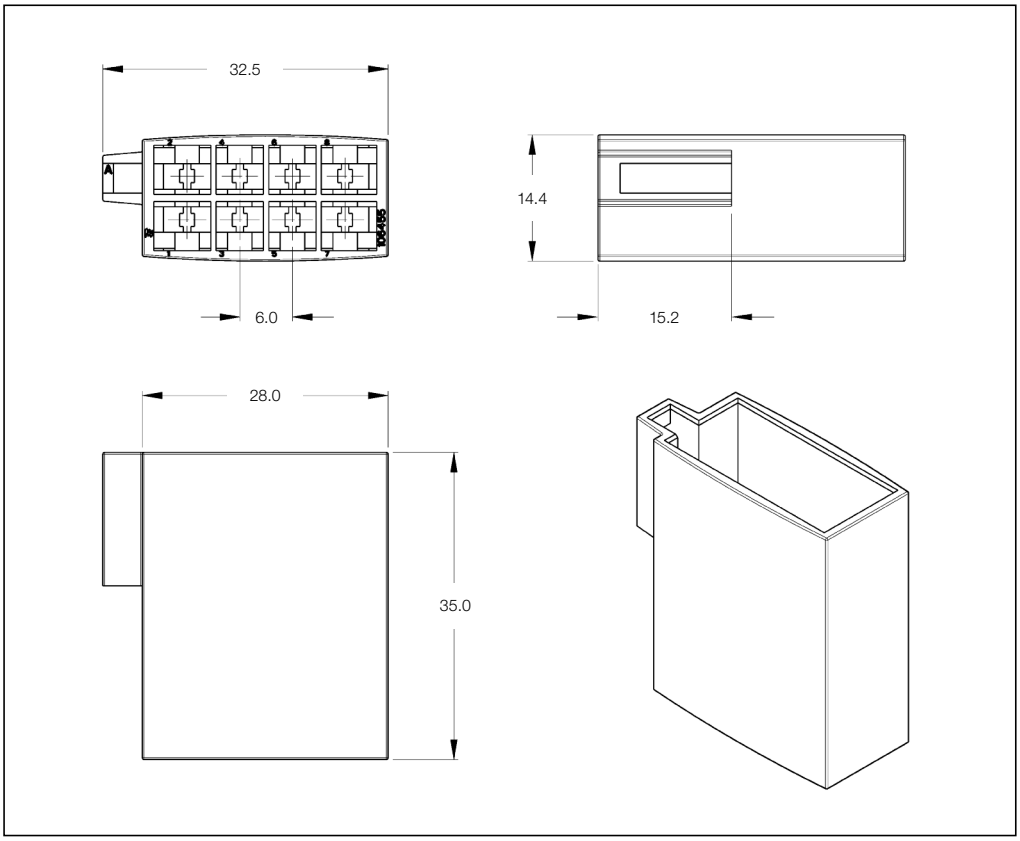
No. of Positions:
8 Position Type A + B

Housing Material:
PBT

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
—

Application Specification:
—



8 Position Tab Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers: Tab Housing	Cover	Locking Device	Cover and Lever	Mating Receptacle Housing	Mating PCB Header: Right-Angle	Mating PCB Header: Vertical
8	–	Gray	106455-3	–	–	–	962120-1	–	–
							962189-1		
							962191-1		
							963121-1		
		Brown	106455-4				964408-1		
							964409-1		

Technical Features

No. of Positions:
10 Position Type C

Housing Material:
PBT

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
—

Application Specification:
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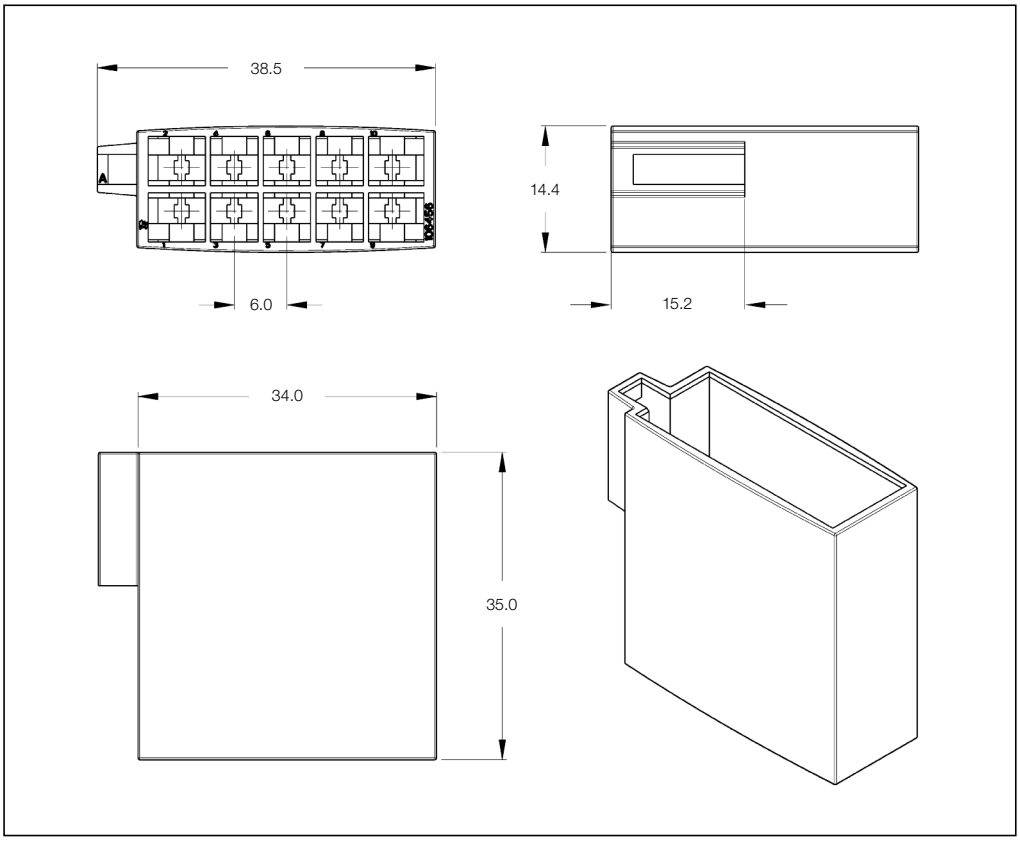


10 Position Tab Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Tab Housing	Cover	Locking Device	Cover and Lever	Mating Receptacle Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
10	–	Black	106456-1	–	–	–	962190-1 963122-1 964410-1	–	–

Receptacle Housings

Technical Features

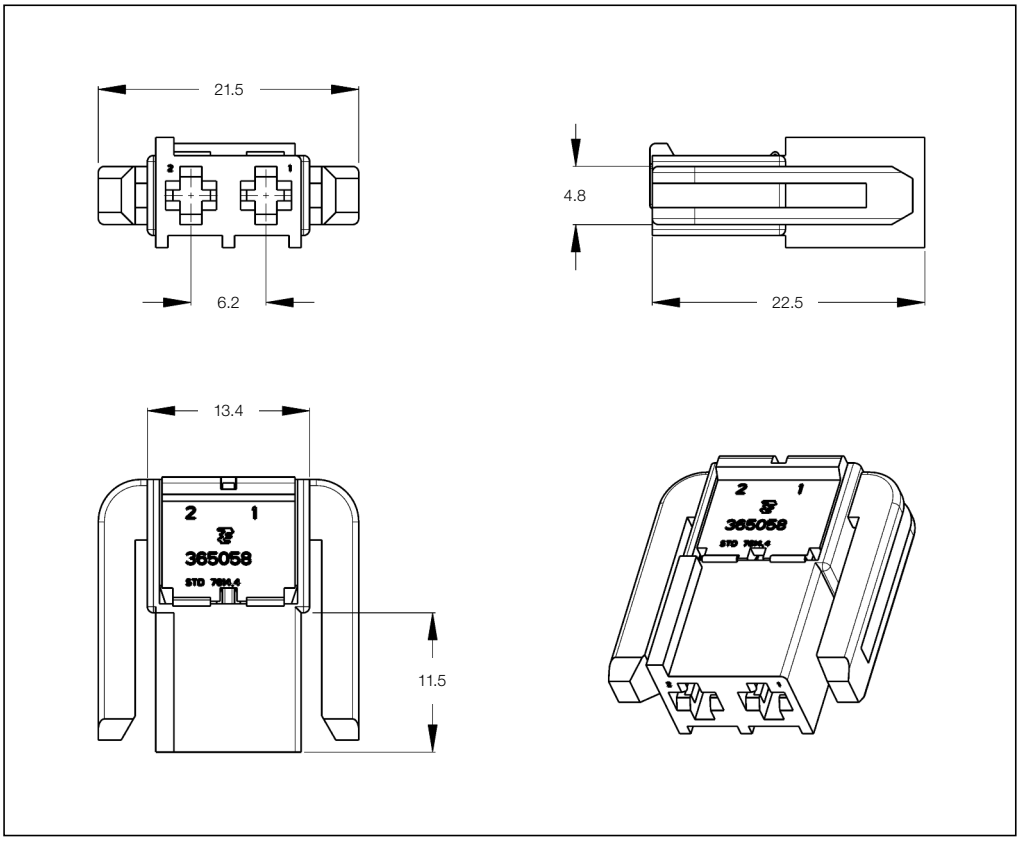
No. of Positions:
2 Position
Junior Power Timer

Housing Material:
PA66

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
—

Application Specification:
—



2 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
2	1	Natural	365058-1	–	–	–	365057-1	–	–
	2	Gray	365058-2				365057-2		
	3	Black	365058-3				365057-3		
	4	Yellow	365058-4				365057-4		

Receptacle Housings

Technical Features

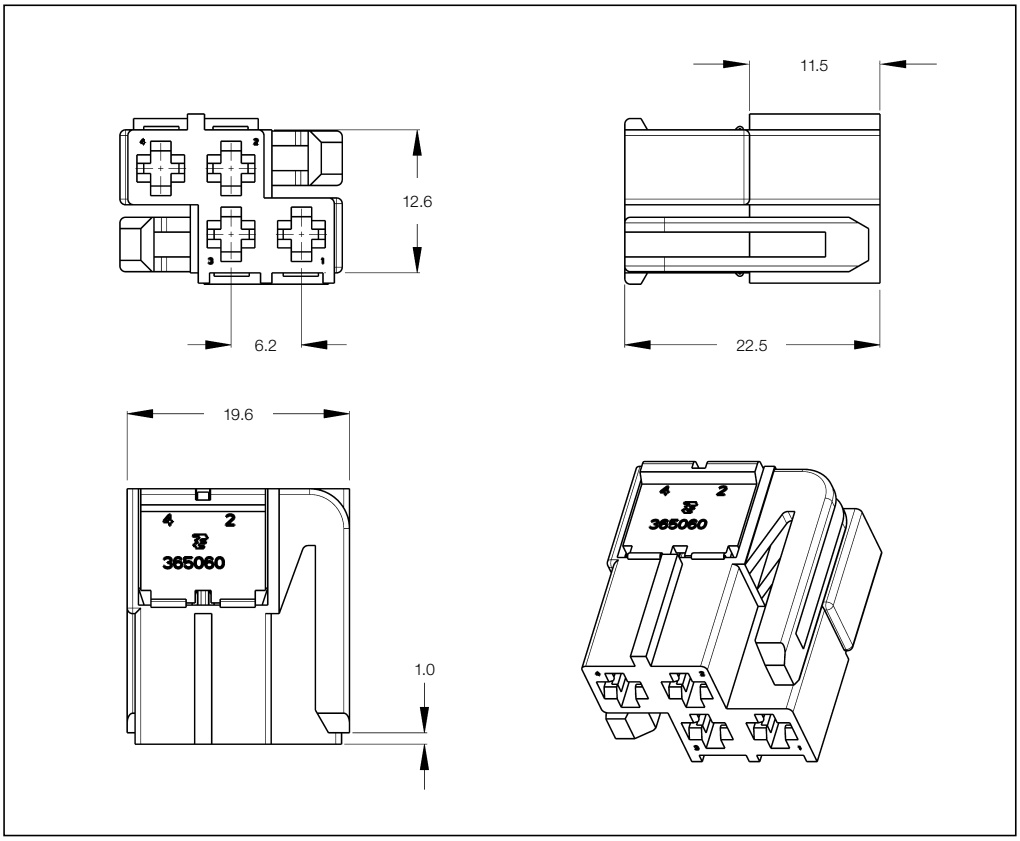
No. of Positions:
4 Position
Junior Power Timer

Housing Material:
PA66

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
—

Application Specification:
—



4 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
4	1	Natural	365060-1	–	–	–	365059-1	–	–
	2	Gray	365060-2				365059-2		
	3	Black	365060-3				365059-3		
	4	Yellow	365060-4				365059-4		

Receptacle Housings

Technical Features

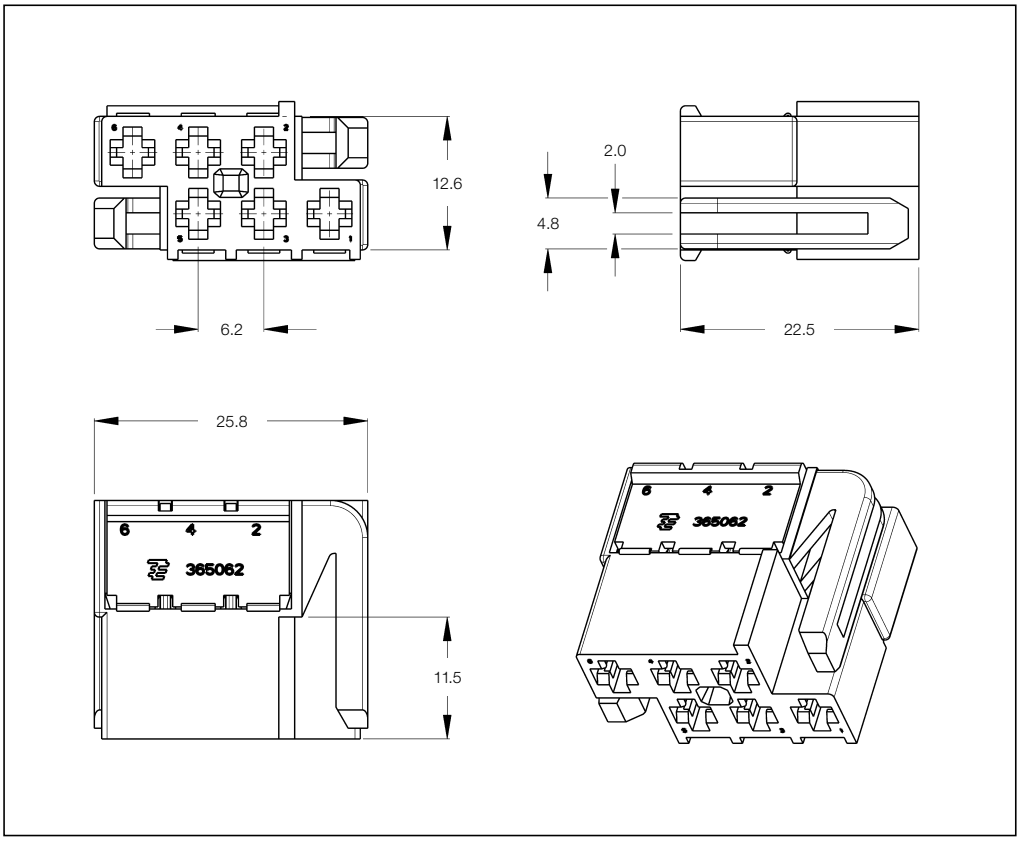
No. of Positions:
6 Position
Junior Power Timer

Housing Material:
PA66

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
—

Application Specification:
—



6 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
6	1	Natural	365062-1	–	–	–	365061-1	–	–
	2	Gray	365062-2				365061-2		
	3	Black	365062-3				365061-3		
	4	Yellow	365062-4				365061-4		

Receptacle Housings

Technical Features

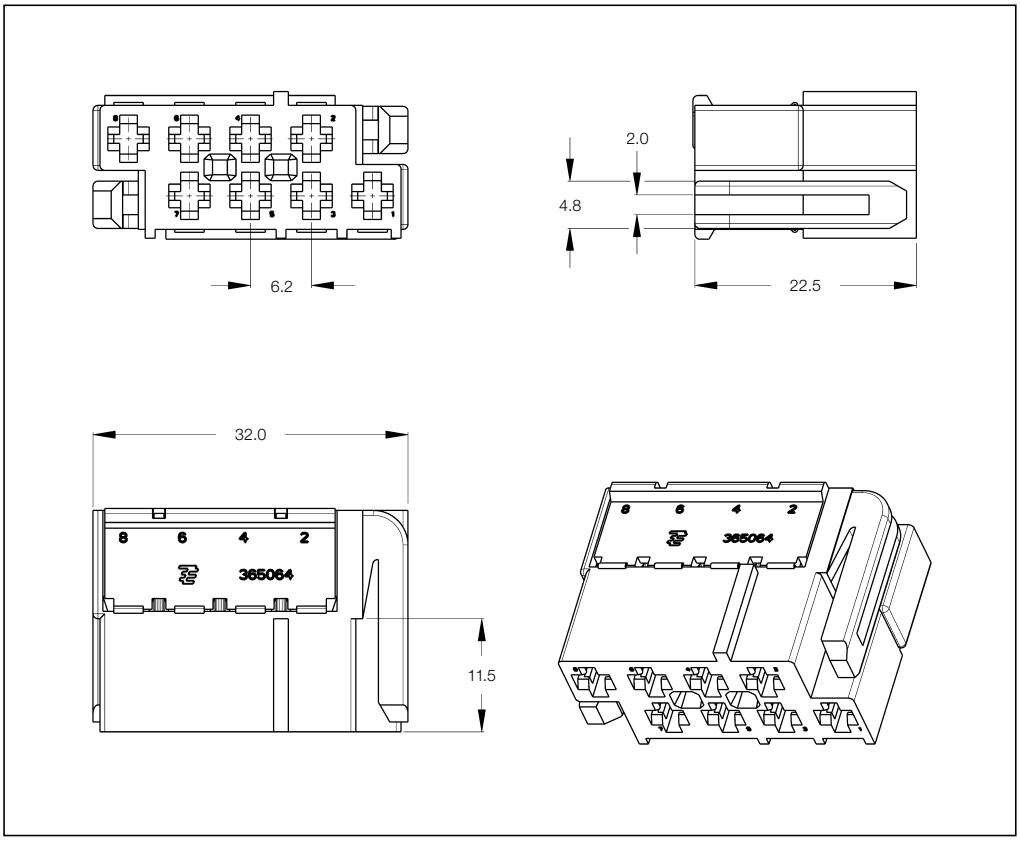
No. of Positions:
8 Position
Junior Power Timer

Housing Material:
PA66

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
—

Application Specification:
—



8 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
8	1	Natural	365064-1	–	–	–	365063-1	–	–
	2	Gray	365064-2				365063-2		
	3	Black	365064-3				365063-3		
	4	Yellow	365064-4				365063-4		

Receptacle Housings

Technical Features

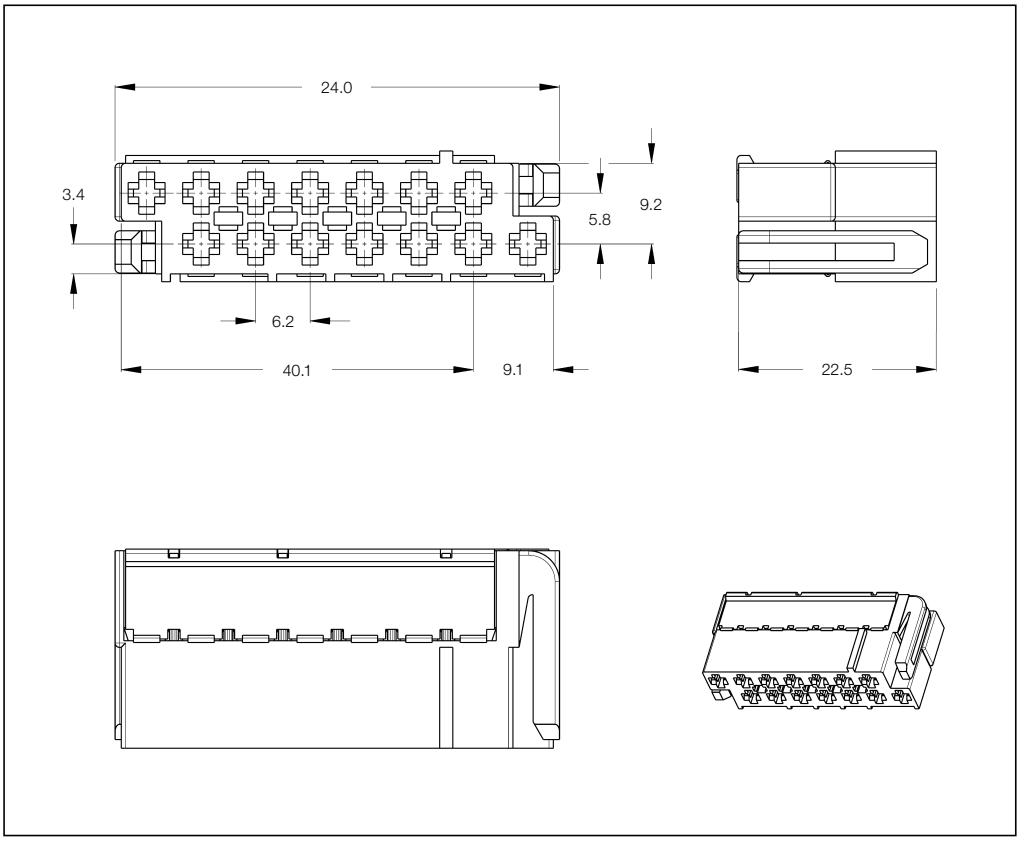
No. of Positions:
14 Position
Junior Power Timer

Housing Material:
PA66

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
—

Application Specification:
—



14 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
14	1	Natural	365066-1	–	–	–	365065-1	–	–
	2	Gray	365066-2				365065-2		
	3	Black	365066-3				365065-3		
	4	Yellow	365066-4				365065-4		

Tab Housings

Technical Features

No. of Positions:
2 Position
Junior Power Timer

Housing Material:
PA66

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
—

Application Specification:
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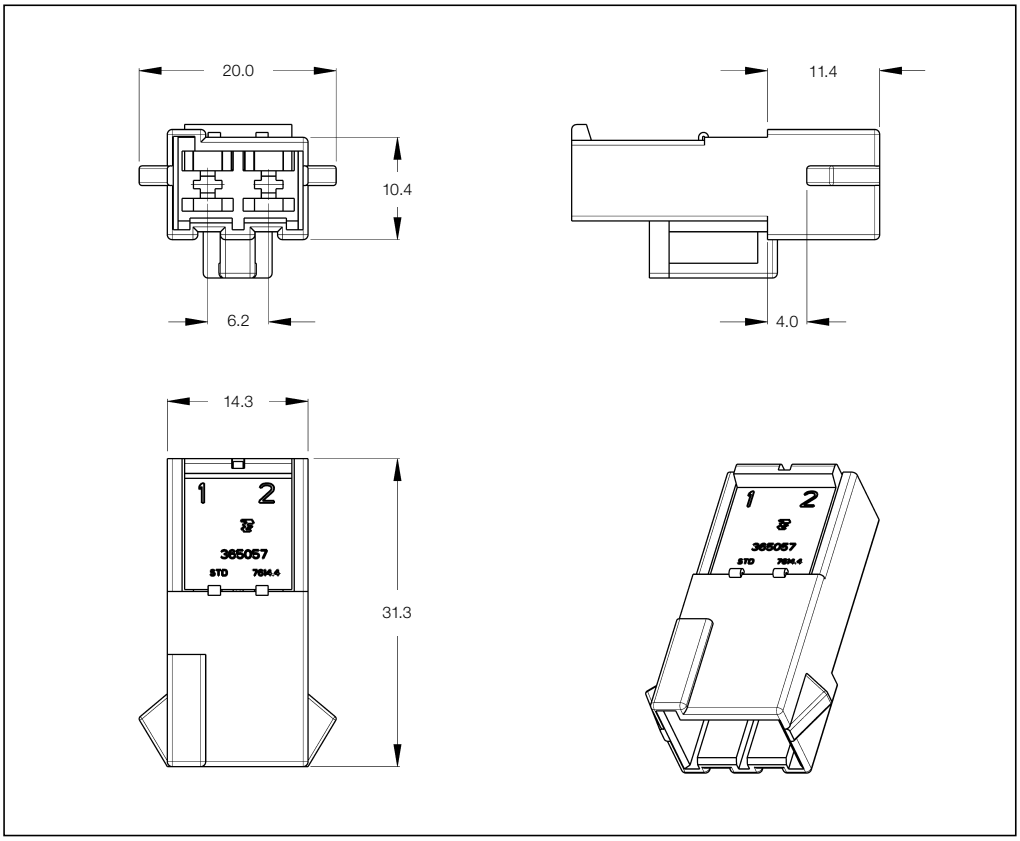


2 Position Tab Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Tab Housing	Cover	Locking Device	Cover and Lever	Mating Receptacle Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
2	1	Natural	365057-1	–	–	–	365058-1	–	–
	2	Gray	365057-2				365058-2		
	3	Black	365057-3				365058-3		
	4	Yellow	365057-4				365058-4		

Tab Housings

Technical Features

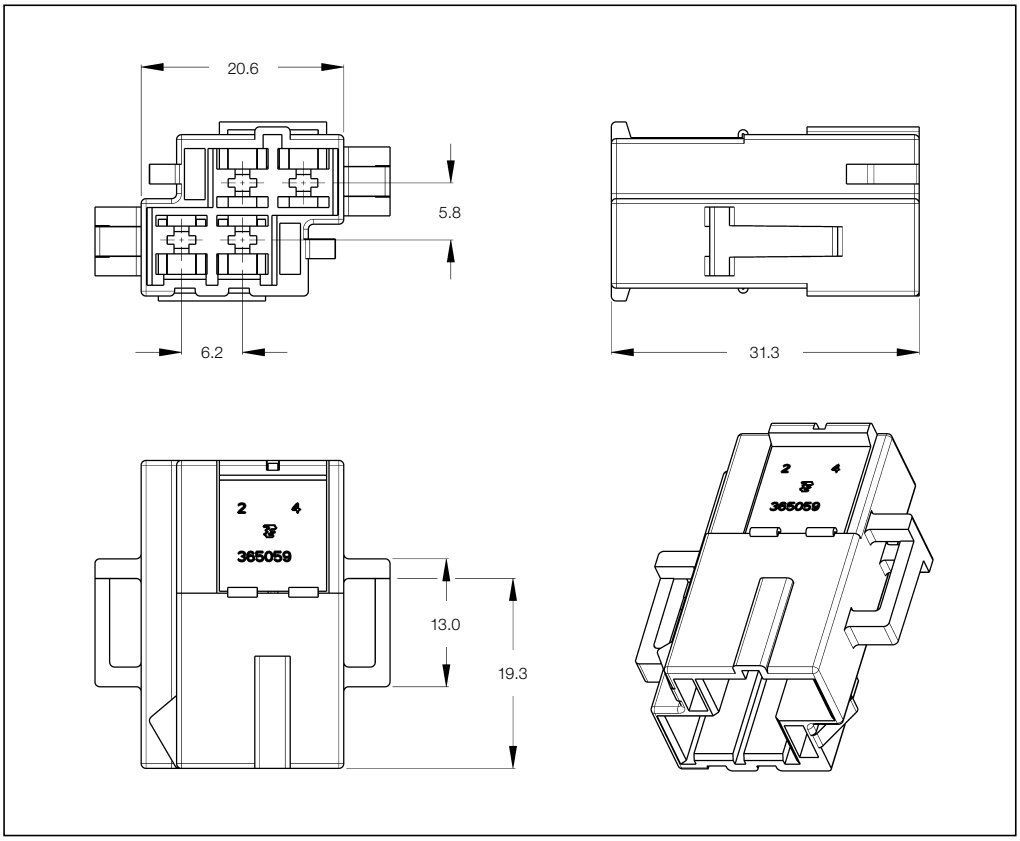
No. of Positions:
4 Position
Junior Power Timer

Housing Material:
PA66

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
—

Application Specification:
—



4 Position Tab Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Tab Housing	Cover	Locking Device	Cover and Lever	Mating Receptacle Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
4	1	Natural	365059-1	–	–	–	365060-1	–	–
	2	Gray	365059-2				365060-2		
	3	Black	365059-3				365060-3		
	4	Yellow	365059-4				365060-4		

Tab Housings

Technical Features

No. of Positions:
6 Position
Junior Power Timer

Housing Material:
PA66

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
—

Application Specification:
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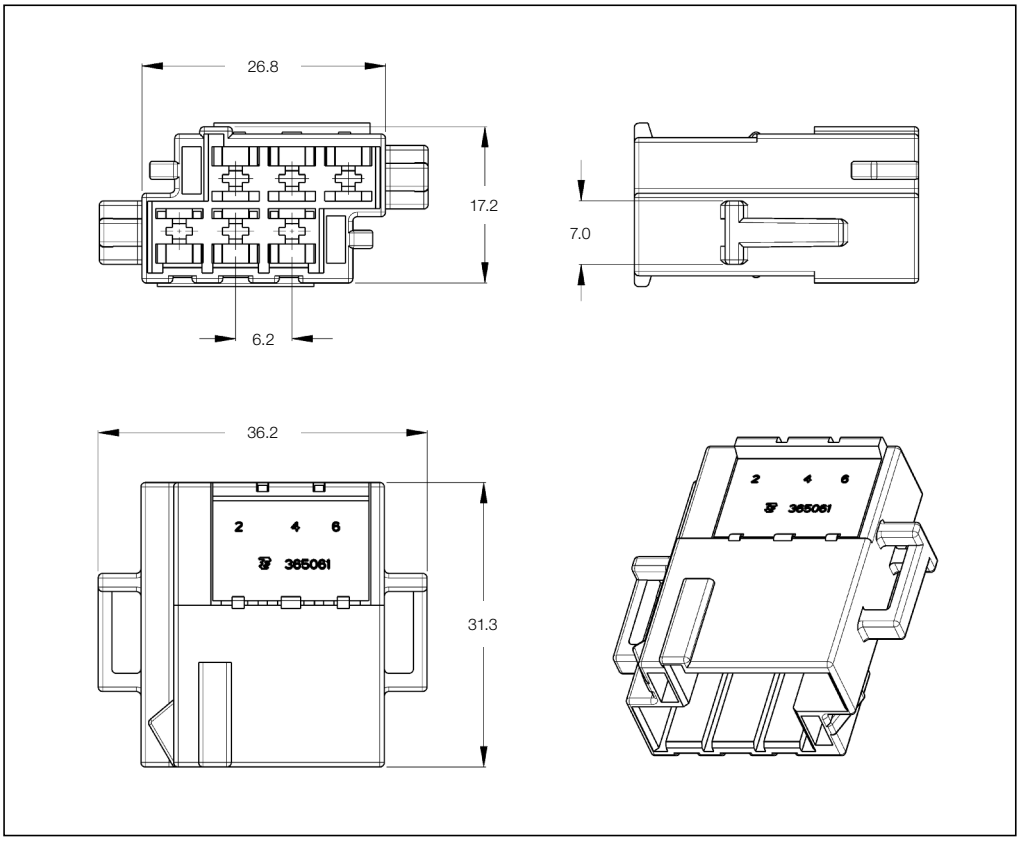


6 Position Tab Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Tab Housing	Cover	Locking Device	Cover and Lever	Mating Receptacle Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
6	1	Natural	365061-1	–	–	–	365062-1	–	–
	2	Gray	365061-2				365062-2		
	3	Black	365061-3				365062-3		
	4	Yellow	365061-4				365062-4		

Tab Housings

Technical Features

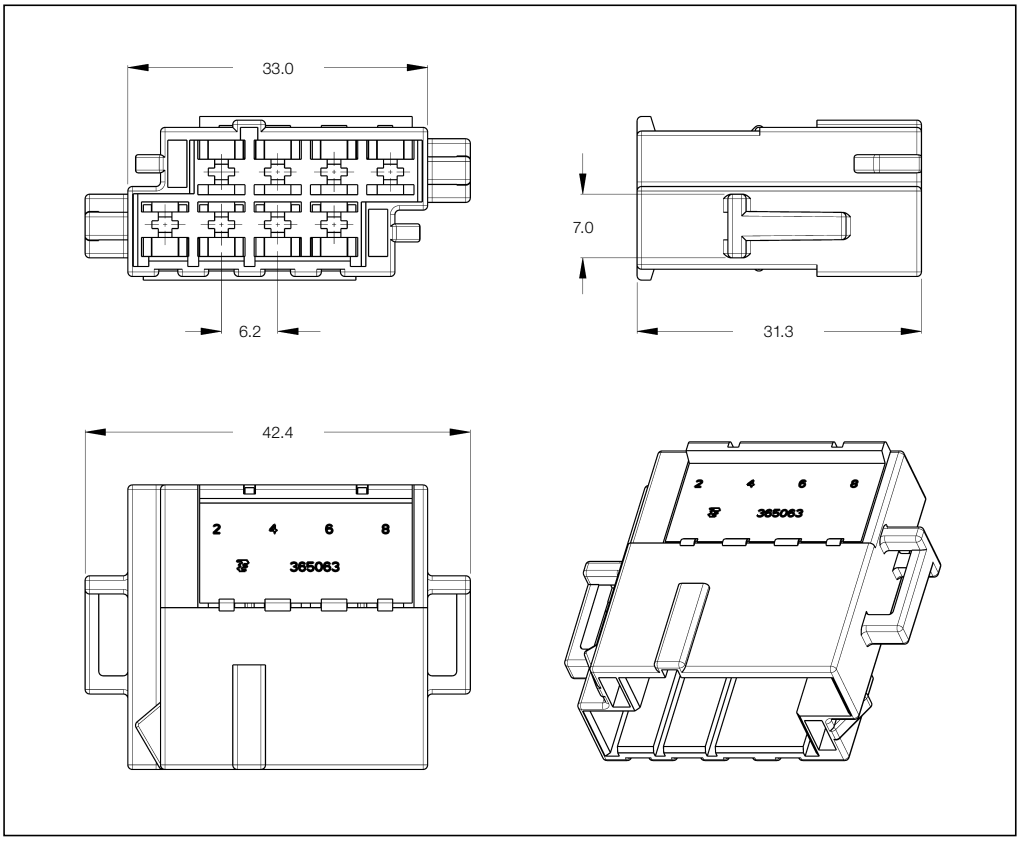
No. of Positions:
8 Position
Junior Power Timer

Housing Material:
PA66

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
—

Application Specification:
—



8 Position Tab Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Tab Housing	Cover	Locking Device	Cover and Lever	Mating Receptacle Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
8	1	Natural	365063-1	–	–	–	365064-1	–	–
	2	Gray	365063-2				365064-2		
	3	Black	365063-3				365064-3		
	4	Yellow	365063-4				365064-4		

Tab Housings

Technical Features

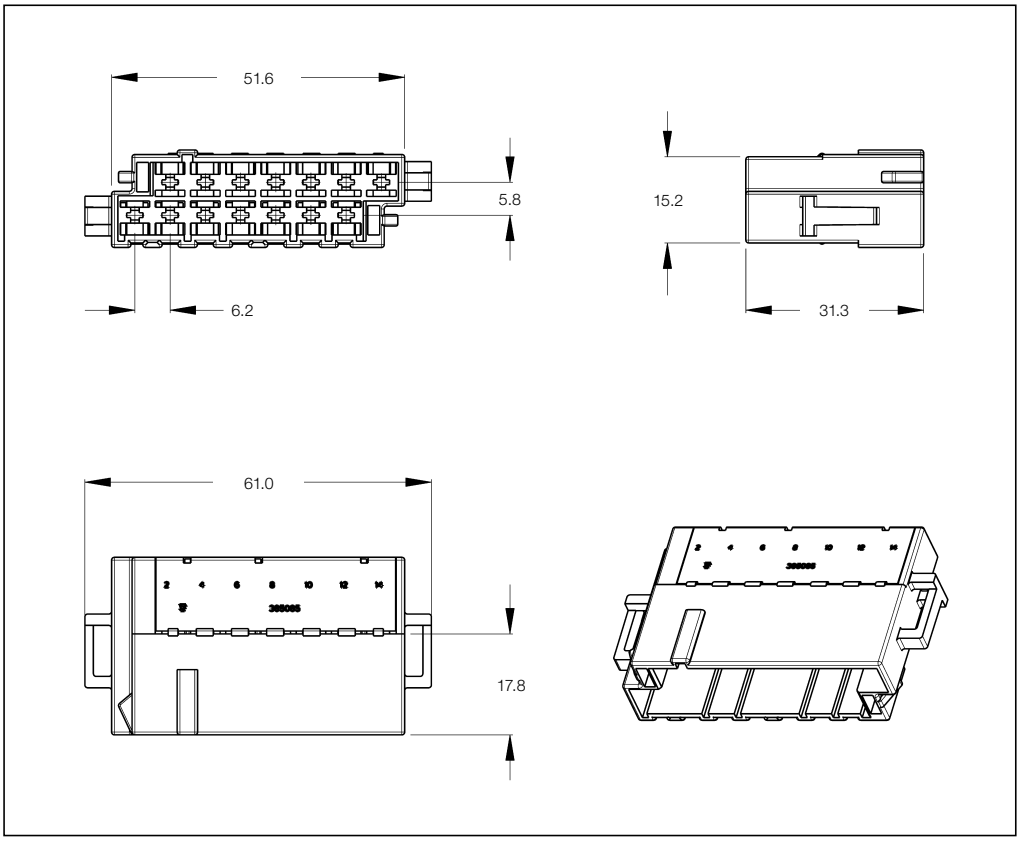
No. of Positions:
14 Position
Junior Power Timer

Housing Material:
PA66

Wire Size Range:
0.2–2.5 mm^2

Product Specification:
—

Application Specification:
—



14 Position Tab Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Tab Housing	Cover	Locking Device	Cover and Lever	Mating Receptacle Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
14	1	Natural	365065-1	–	–	–	365066-1	–	–
	2	Gray	365065-2				365066-2		
	3	Black	365065-3				365066-3		
	4	Yellow	365065-4				365066-4		

Receptacle Housings

Technical Features

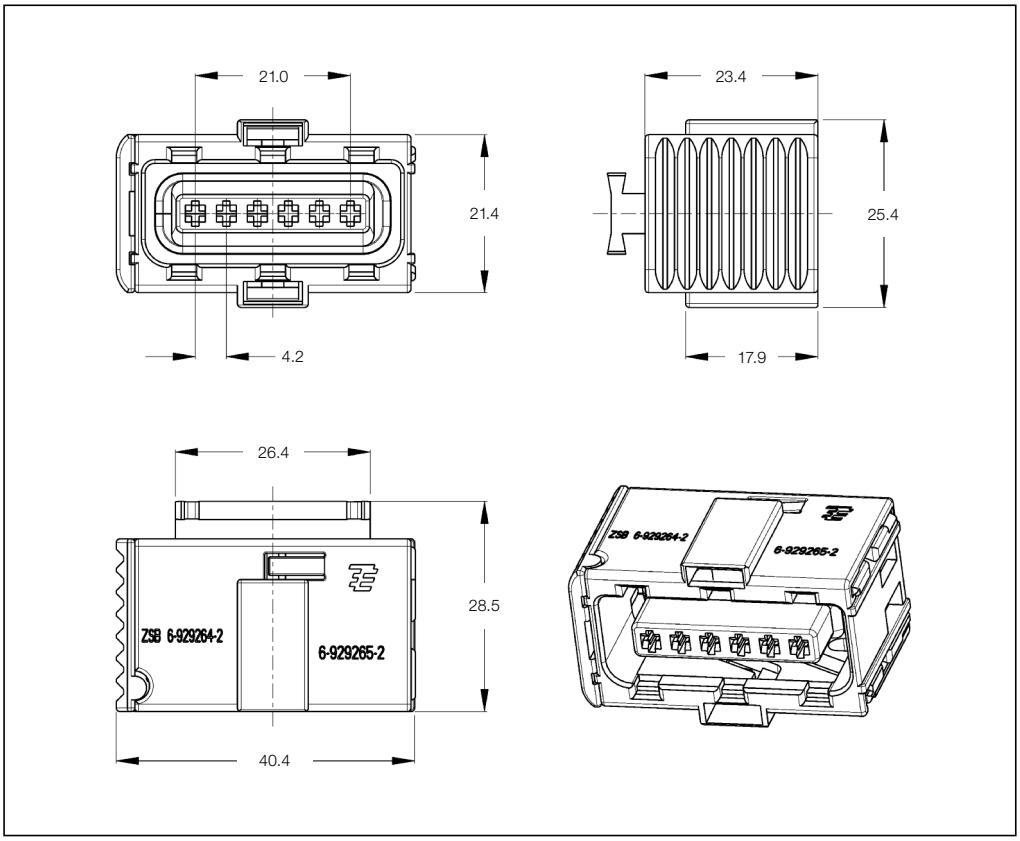
No. of Positions:
6 Position Assy

Housing Material:
PA66 GF30

Wire Size Range:
0.5–1.0 mm^2

Product Specification:
108-18633

Application Specification:
114-18272



6 Position Receptacle Housings with Slide

No. of Pos.	Keying Options	Housing Color	Part Numbers							
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Retainer Housing	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
6	–	Black	6-929264-2	–	–	–	–	–	–	–

Receptacle Housings

Technical Features

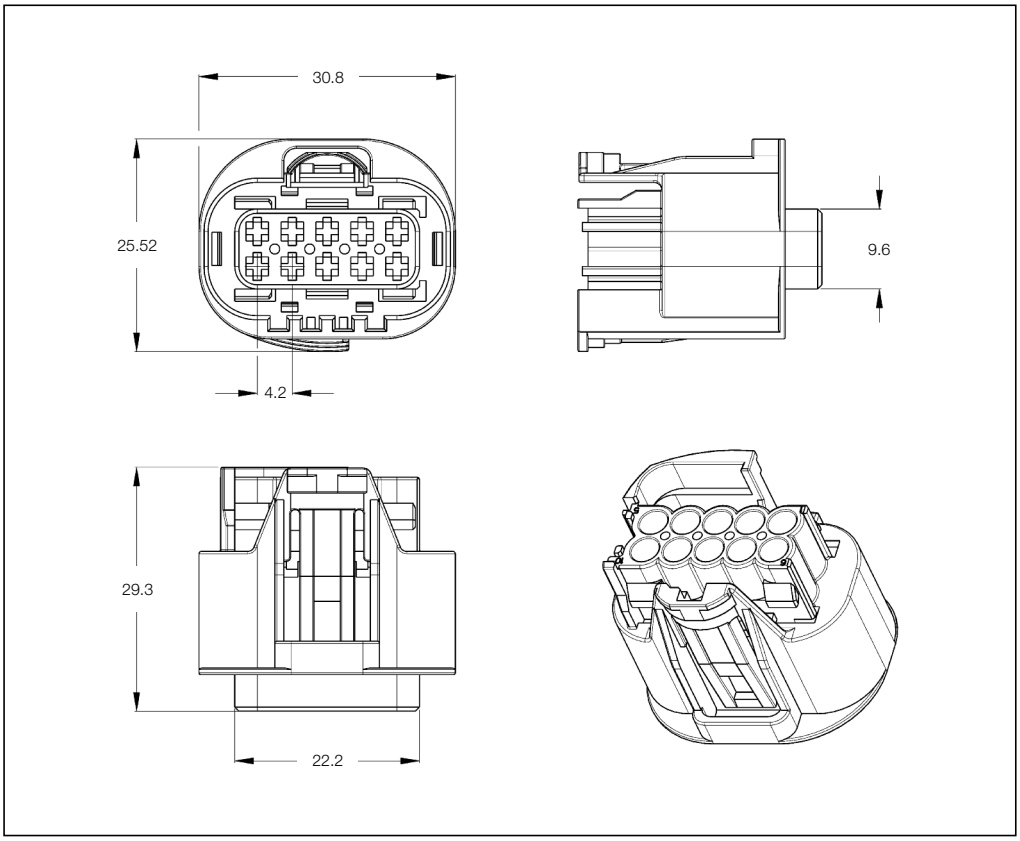
No. of Positions:
10 Position Assy

Housing Material:
PBT GF20

Wire Size Range:
0.2 – 1.0 mm^2

Product Specification:
108-18816-1

Application Specification:
114-18485-1



10 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers							
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Retainer Housing	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
10	–	Black	1452545-1	–	–	–	–	1452546-1	–	–

Receptacle Housings

Technical Features

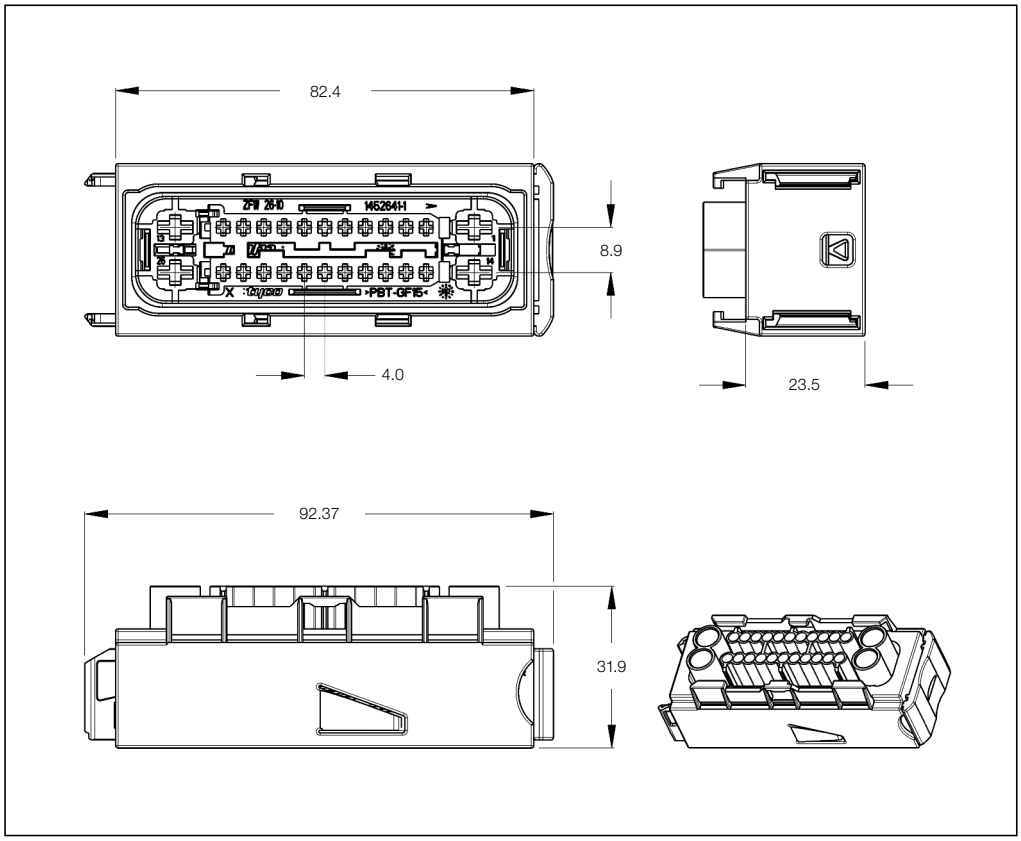
No. of Positions:
22 + 4 Position
Micro Timer II + Standard
Power Timer Assy with Slide

Housing Material:
PBT GF15

Wire Size Range:
MTII: 0.35–1.0 mm^2
SPT: 0.50–4.0 mm^2

Product Specification:
108-18792-1

Application Specification:
114-18480-1



22 + 4 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers							
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Retainer Housing	Mating Pin Housing	Mating PCB Header Right-Angle	Vertical
22 + 4	–	Black	1452643-1	1452644-1	–	–	–	–	–	–

Receptacle Housings

Technical Features

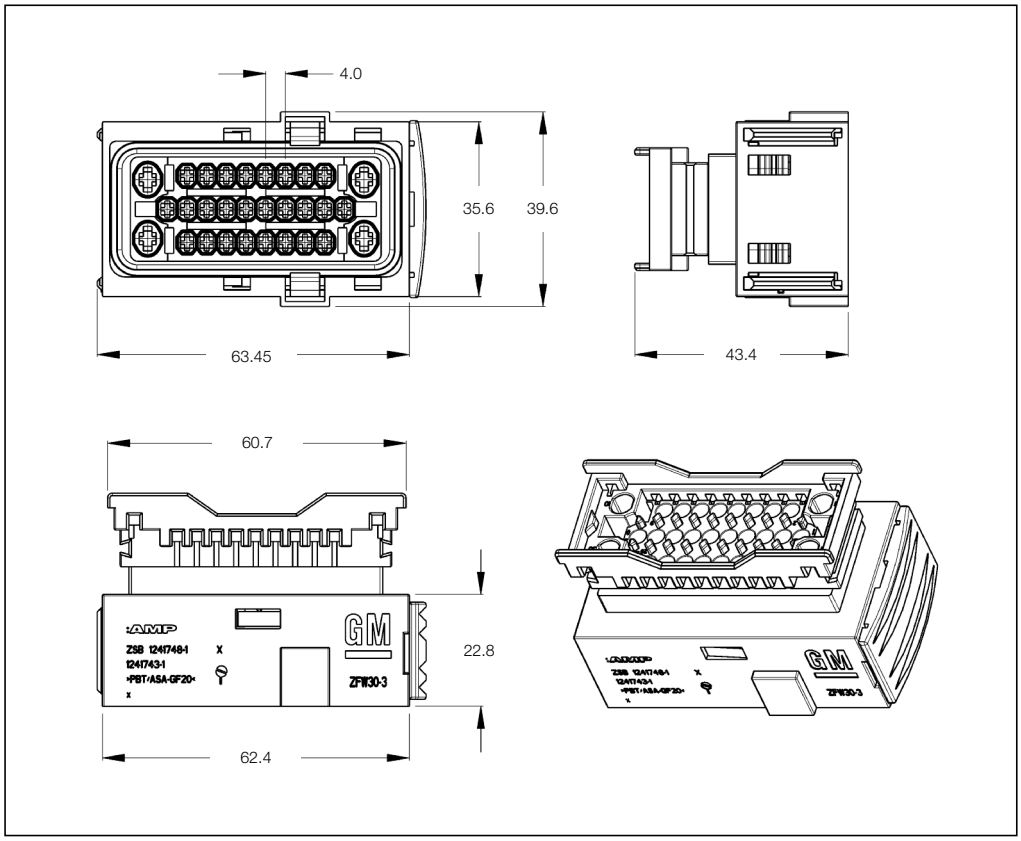
No. of Positions:
30 Position
Micro Timer II + Junior
Power Timer with Slide

Housing Material:
PBT GF20

Wire Size Range:
MTII: 0.5–1.0 mm^2
JPT: 0.5–2.5 mm^2

Product Specification:
108-18672-1

Application Specification:
114-18315-1



30 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers							
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Retainer Housing	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
30	–	Black	1241748-1	1241747-1	–	–	–	1355883-1	–	–

Receptacle Housings

Technical Features

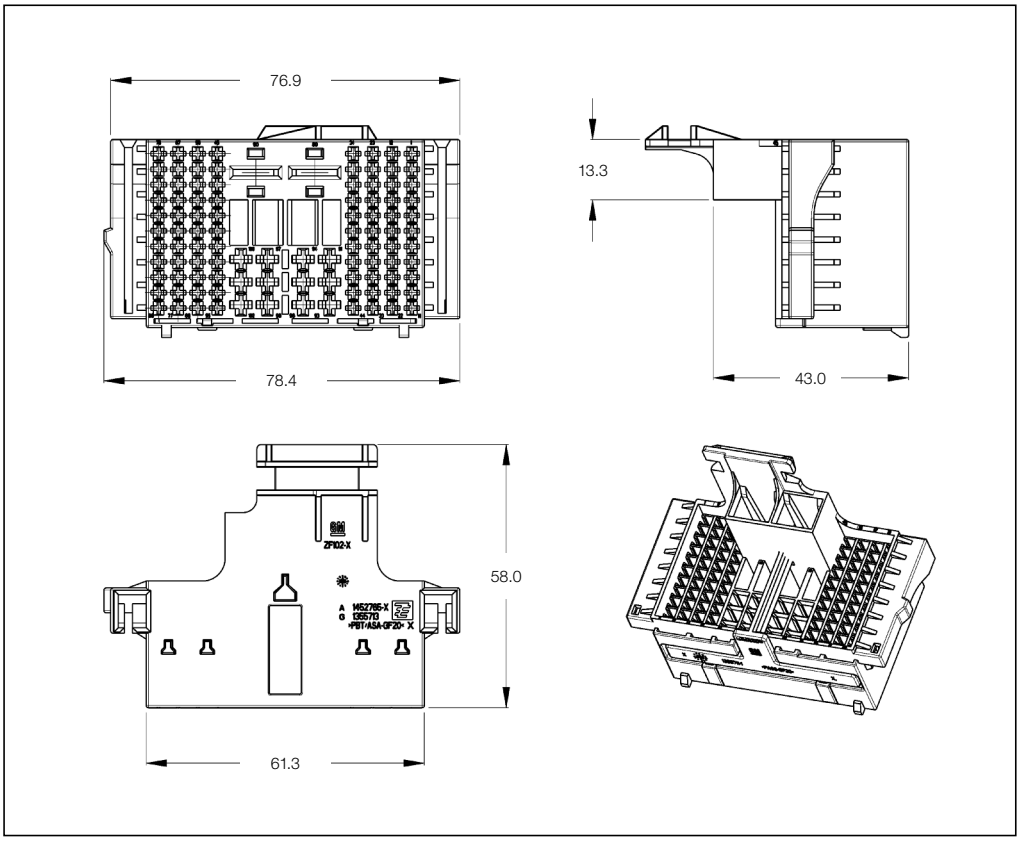
No. of Positions:
102 Position
Micro Timer II + Junior
Power Timer +
Maxi Power Timer

Housing Material:
PBT GF20

Wire Size Range:
MTII: 0.2–1.0 mm^2
SPT: 0.2–2.5 mm^2
MPT: 2.5–10.0 mm^2

Product Specification:
108-18931

Application Specification:
114-18634



102 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers							
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Retainer Housing	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
102	–	Black	1452765-1	–	–	–	1355711-1	1452764-1	–	–

Tab Housings

Technical Features

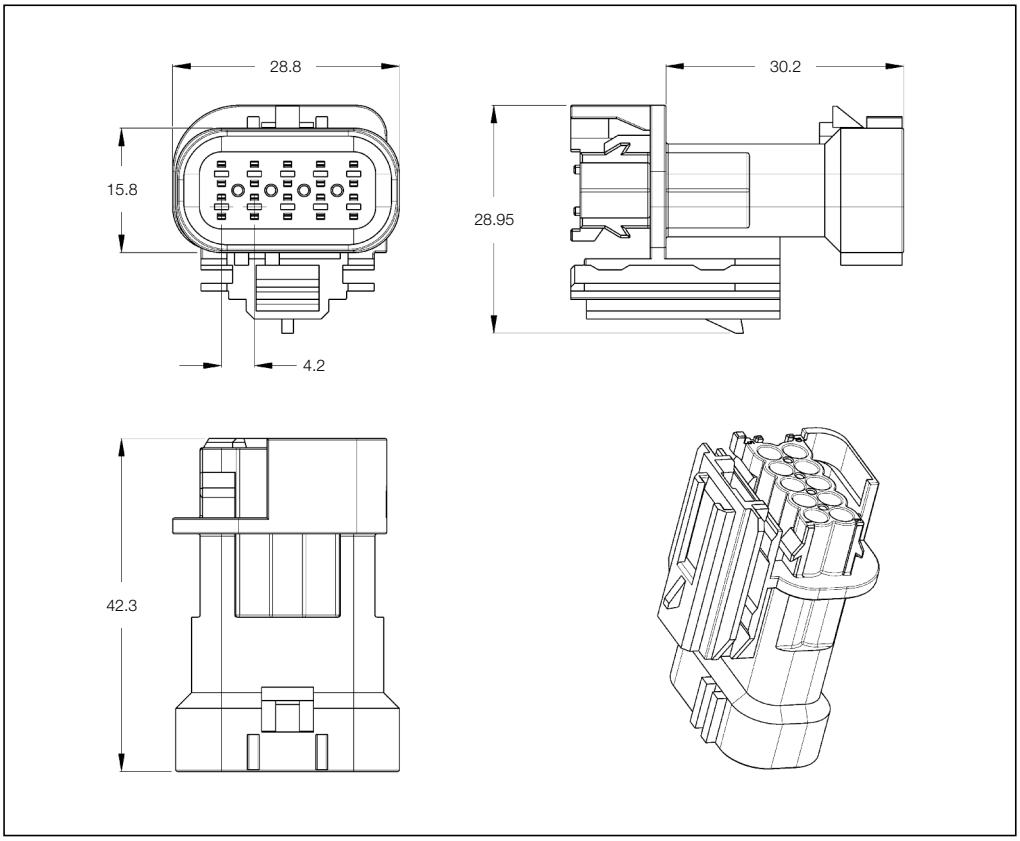
No. of Positions:
10 Positions

Housing Material:
PBT GF20

Wire Size Range:
0.2–1.0 mm^2

Product Specification:
108-18816-1

Application Specification:
114-18485-1



10 Position Tab Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			Tab Housing	Cover	Locking Device	Cover and Lever	Retainer Housing	Mating Receptacle Housing
10	–	Black	1452546-1	–	–	–	–	1452545-1

Tab Housings

Technical Features

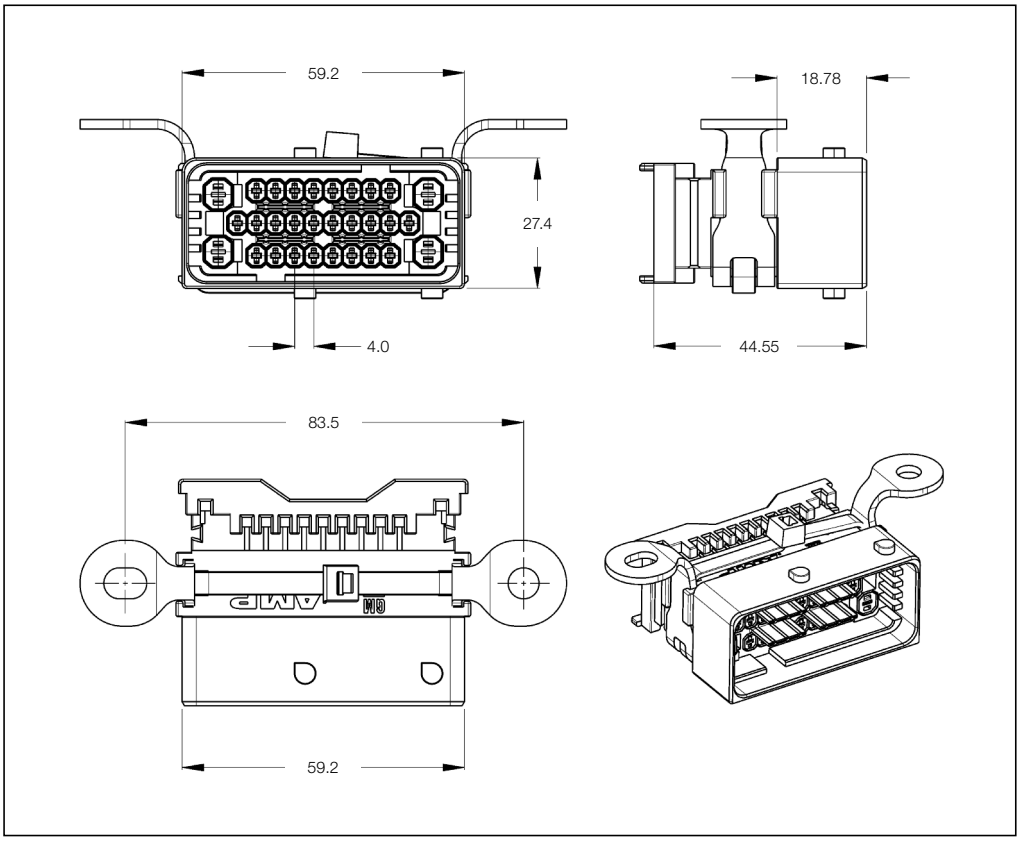
No. of Positions:
30 Position
Micro Timer II + Junior
Power Timer with Slide

Housing Material:
PBT GF20

Wire Size Range:
See customer drawing

Product Specification:
108-18672-1

Application Specification:
114-18315-1



30 Position Mixed Tab Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			Tab Housing	Cover	Locking Device	Cover and Lever	Retainer Housing	Mating Receptacle Housing
30	–	Black	1355883-1	–	–	–	–	1241748-1

Tab Housings

Technical Features

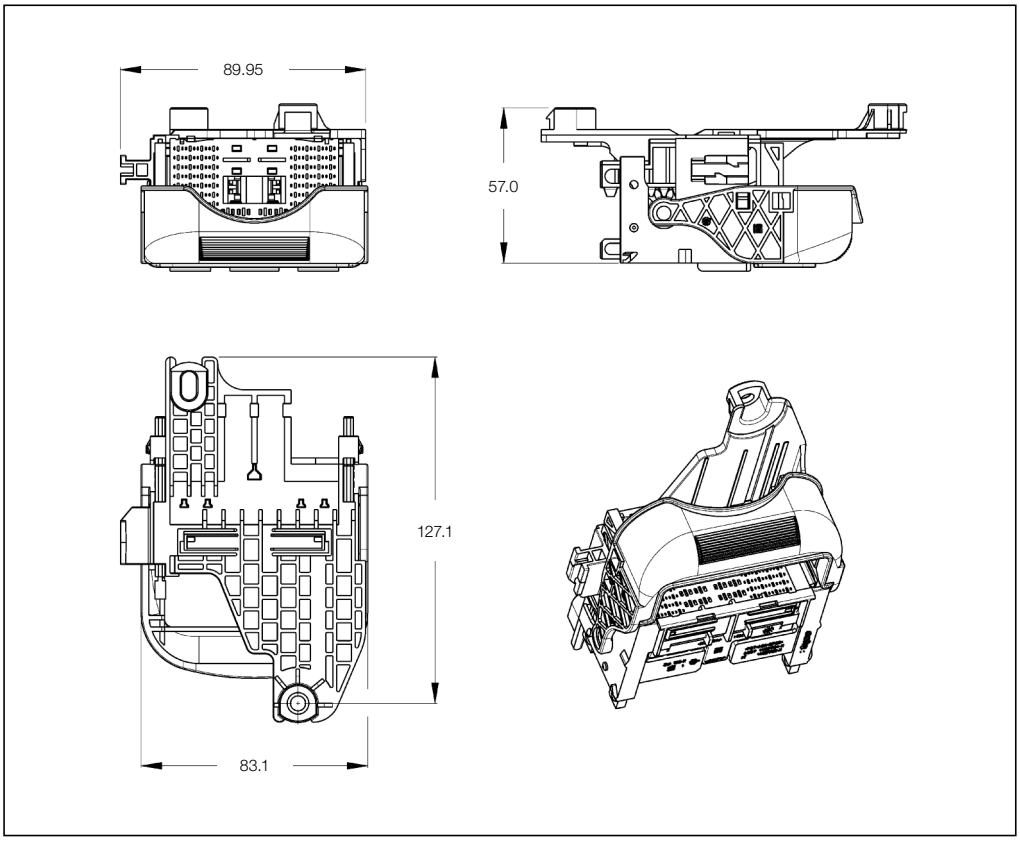
No. of Positions:
102 Position
Micro Timer II + Junior Power Timer +
Maxi Power Timer

Housing Material:
PBT GF20

Wire Size Range:
See customer drawing

Product Specification:
108-18931

Application Specification:
114-18634



102 Position Mixed Tab Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			Tab Housing	Cover	Locking Device	Cover and Lever	Retainer Housing	Mating Receptacle Housing
102	–	Black	1452764-1	–	–	–	1355709-1	1452765-1

Receptacle Housings

Technical Features

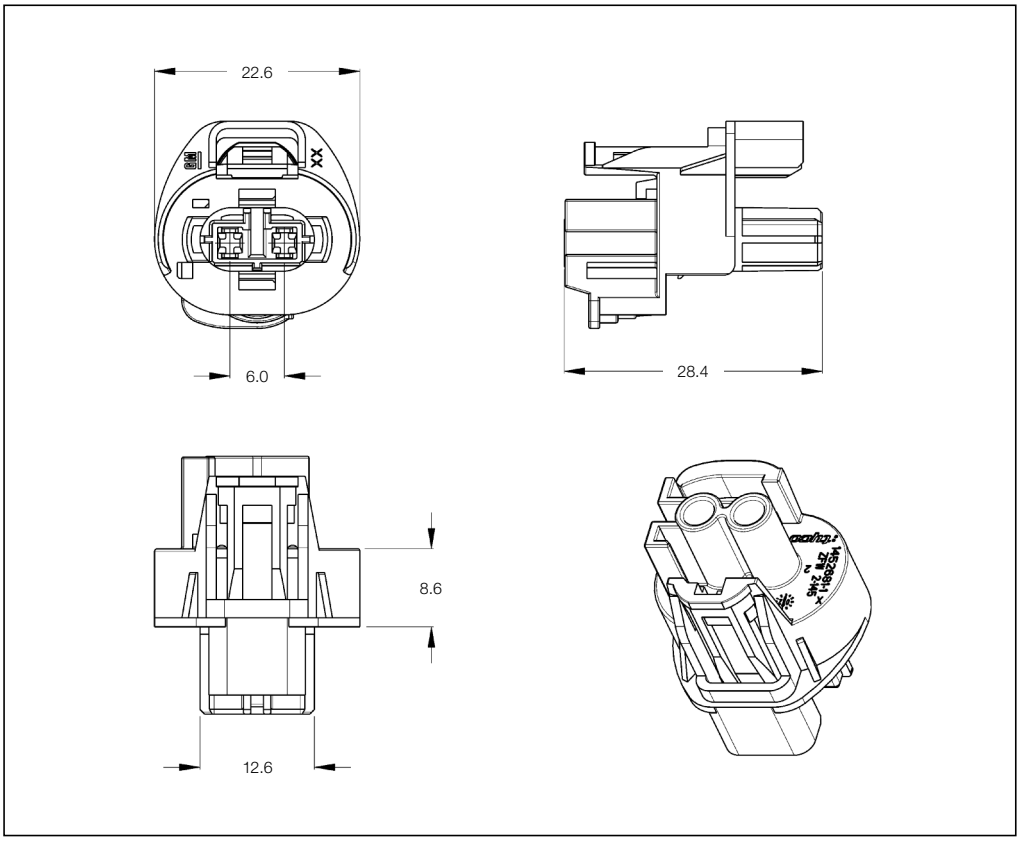
No. of Positions:
2 Position Assy

Housing Material:
PBT GF20

Wire Size Range:
0.5–1.0 mm^2

Product Specification:
108-18872-1

Application Specification:
114-18564-1



2 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers							
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Retainer Housing	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
2	–	Black	1452680-1	–	1452679-1	–	–	–	–	–

Receptacle Housings

Technical Features

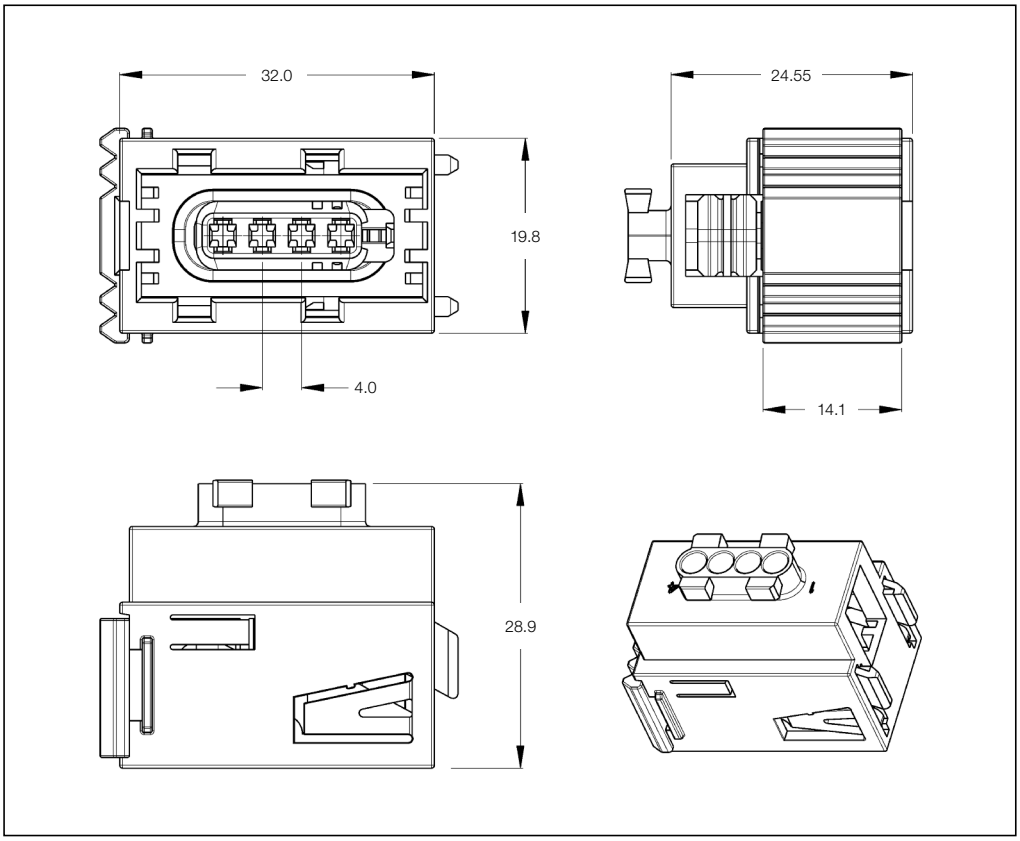
No. of Positions:
4 Positions

Housing Material:
PBT GF30

Wire Size Range:
0.35–0.5 mm^2

Product Specification:
108-18664

Application Specification:
114-18308



4 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers							
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Retainer Housing	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
4	–	Black	6-1355678-1	–	–	–	–	–	–	–

Receptacle Housings

Technical Features

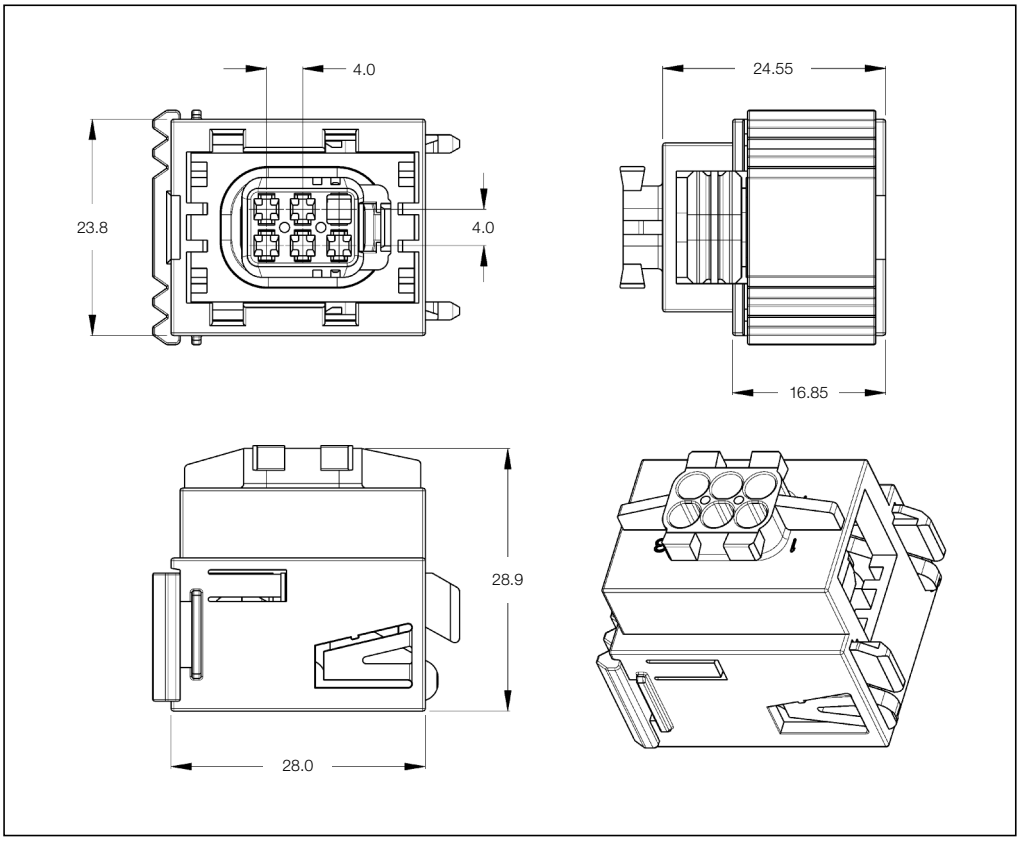
No. of Positions:
6 Positions

Housing Material:
PBT GF30

Wire Size Range:
0.35 – 0.5 mm^2

Product Specification:
108-18664

Application Specification:
114-18308



6 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers							
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Retainer Housing	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
6	–	Black	6-1355683-1	–	–	–	–	–	–	–

Receptacle Housings

Technical Features

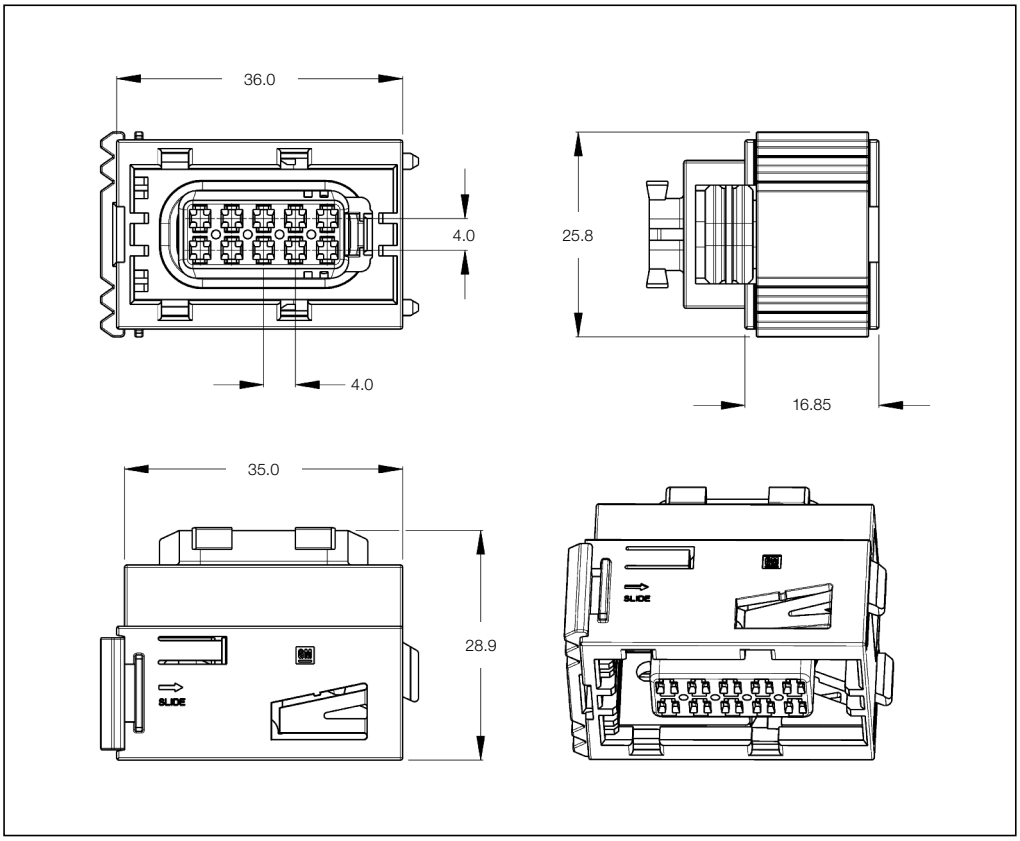
No. of Positions:
10 Positions

Housing Material:
PBT GF30

Wire Size Range:
0.35–0.5 mm^2

Product Specification:
108-18664

Application Specification:
114-18308



10 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers							
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Retainer Housing	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
10	–	Black	6-1355688-1	–	–	–	–	–	–	–

Receptacle Housings

Technical Features

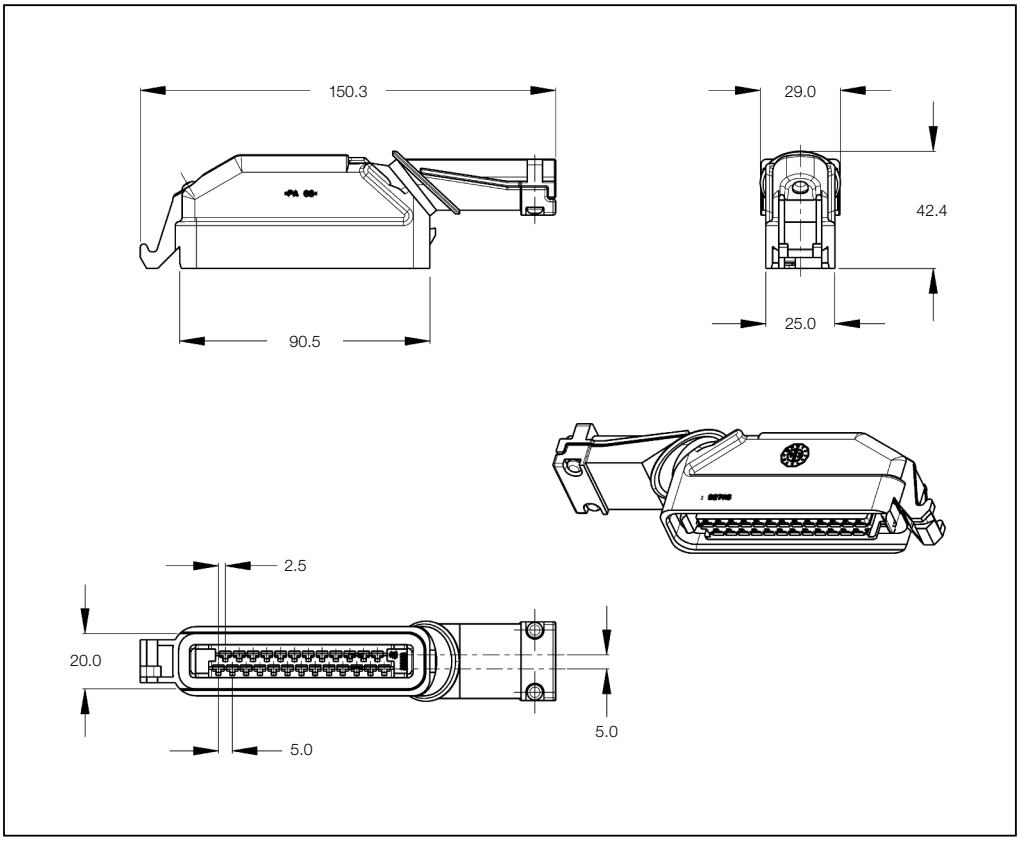
No. of Positions:
25 Positions

Housing Material:
PA66 GV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



25 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
25		See customer drawing	827249-1	–	–	–	–	827050-1 (left) 827019-1 (right)	–
			827249-2						
			827249-3						
			827249-4						
			827249-5						
			827249-6						

Receptacle Housings

Technical Features

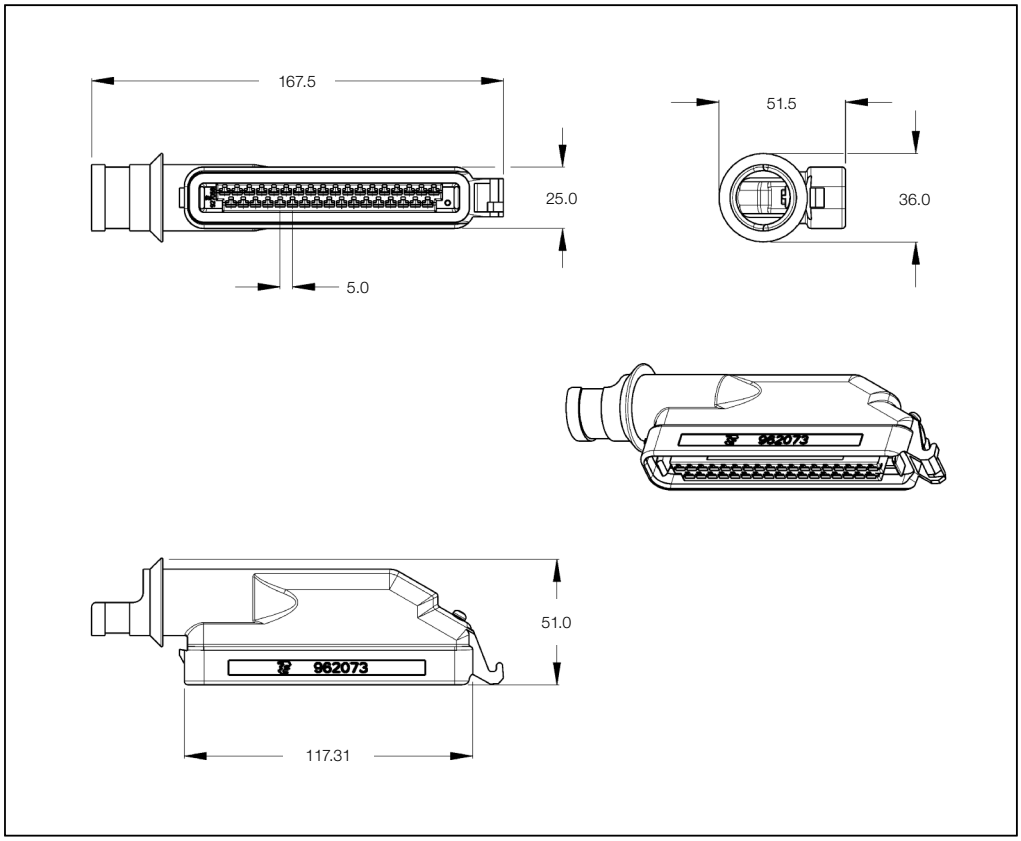
No. of Positions:
35 Positions

Housing Material:
PA66 GV30

Wire Size Range:
max. 25 mm^2 FLR

Product Specification:
—

Application Specification:
—



35 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
35	–	Black	963062-1*	–	–	–	–	825213-1	–

*) **Rubber Boot:** Part No. **826779-1** (must be ordered separately)

Receptacle Housings

Technical Features

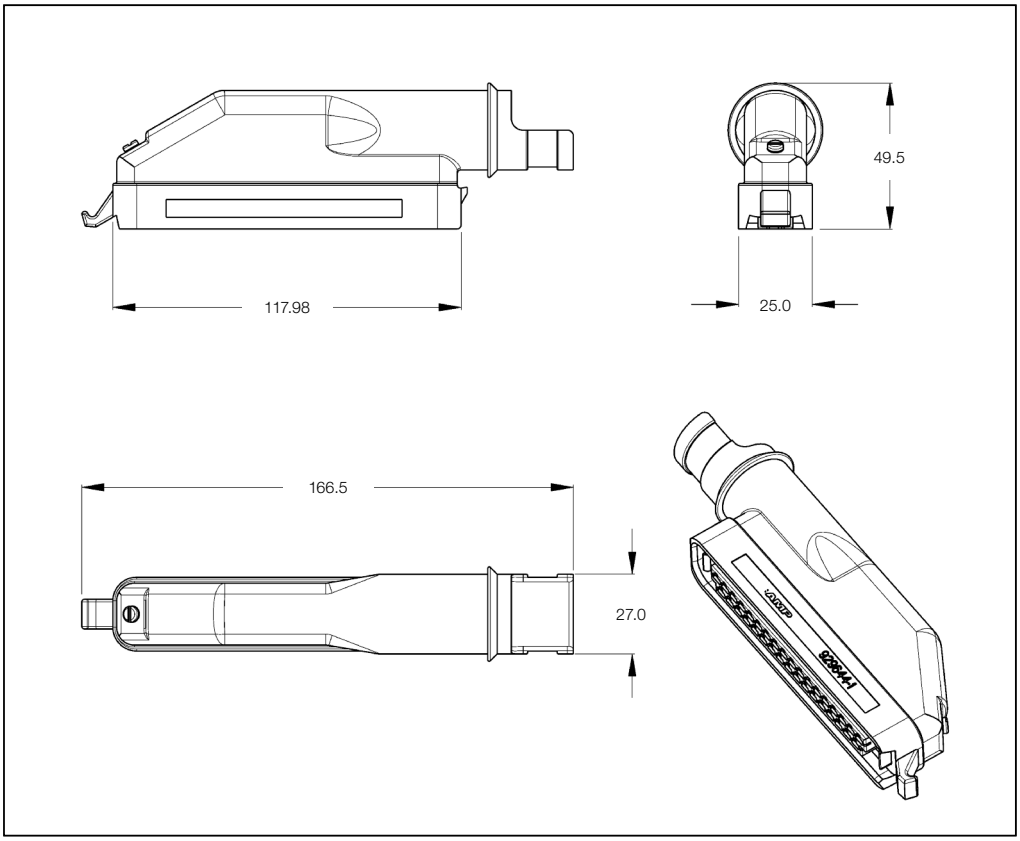
No. of Positions:
35 Positions

Housing Material:
PA66 GV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



35 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
35	–	Black	828880-1*	–	–	–	–	825213-1	–

*) **Rubber Boot:** Part No. **826779-1** (must be ordered separately)

Receptacle Housings

Technical Features

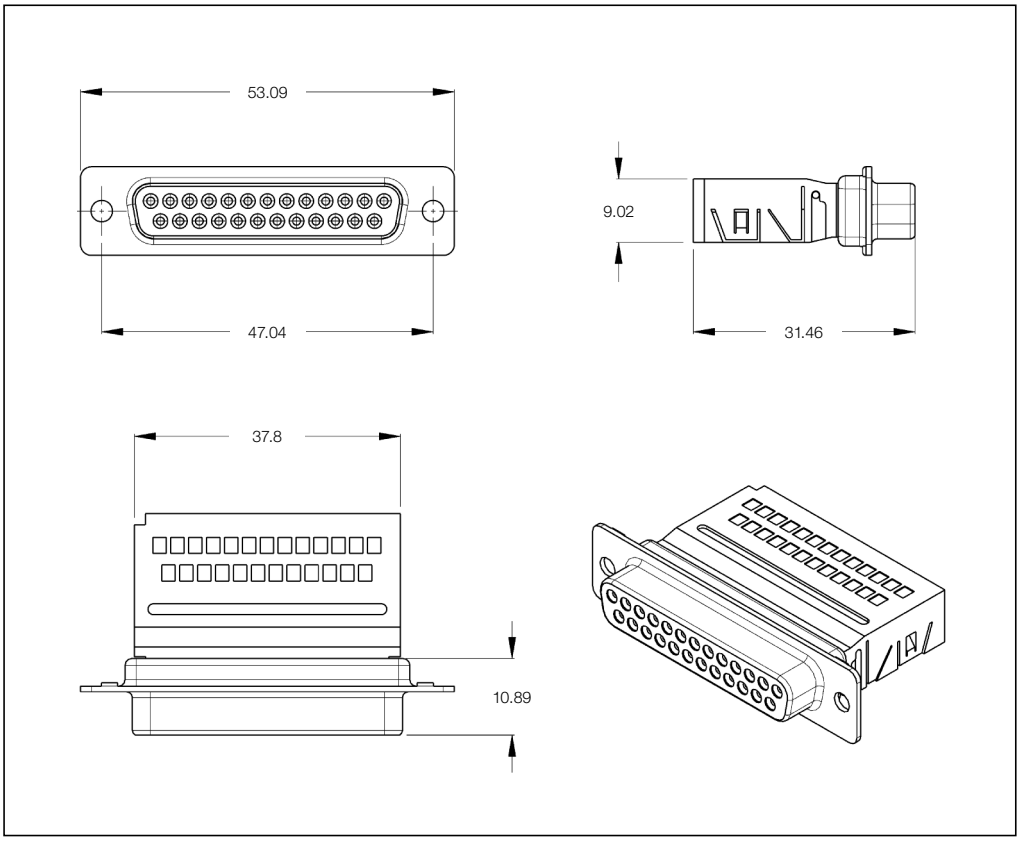
No. of Positions:
35 Positions

Housing Material:
PA66 GV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



35 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
35	–	See customer drawing	827257-1/-9*	–	–	–	–	825213-1	–
			1-827257-1/-4*						
			1-827257-6/-8*						

*) **Rubber Boot:** Part No. **826779-1** (must be ordered separately)

Receptacle Housings

Technical Features

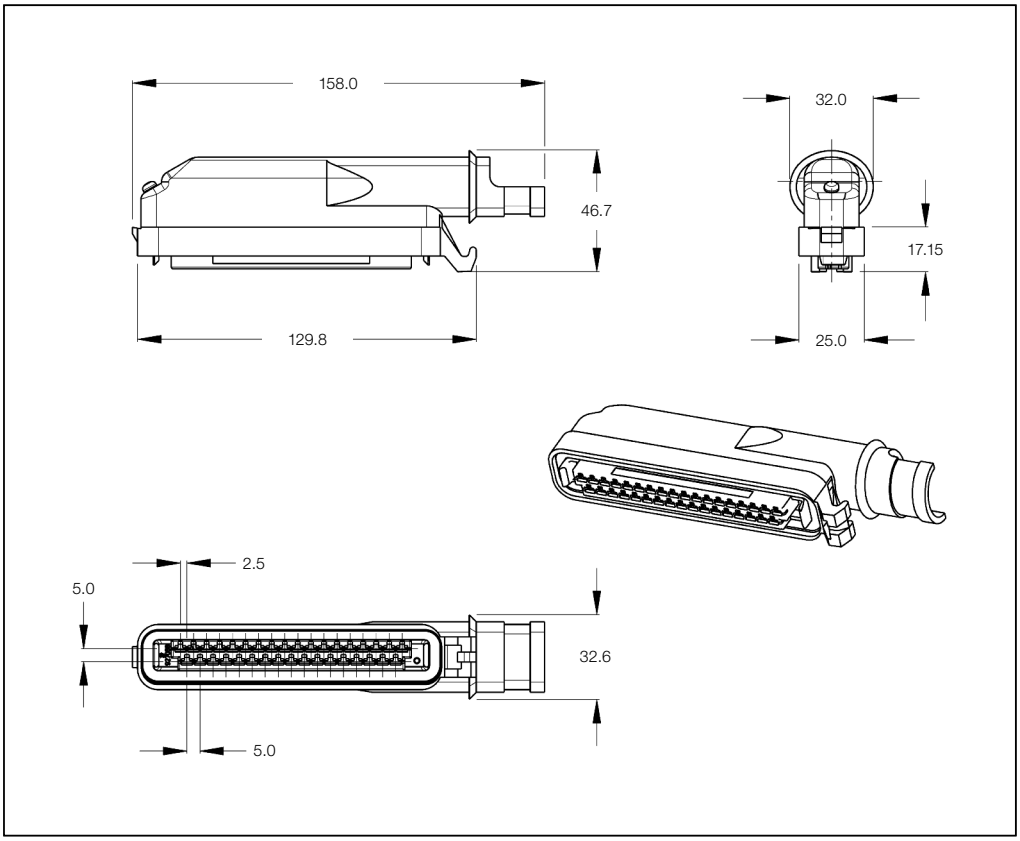
No. of Positions:
35 Positions

Housing Material:
PA66 GV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



35 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
35	–	Black	828632-1*	–	–	–	–	825213-1	–

*) **Rubber Boot:** Part No. **826779-1** (must be ordered separately)

Receptacle Housings

Technical Features

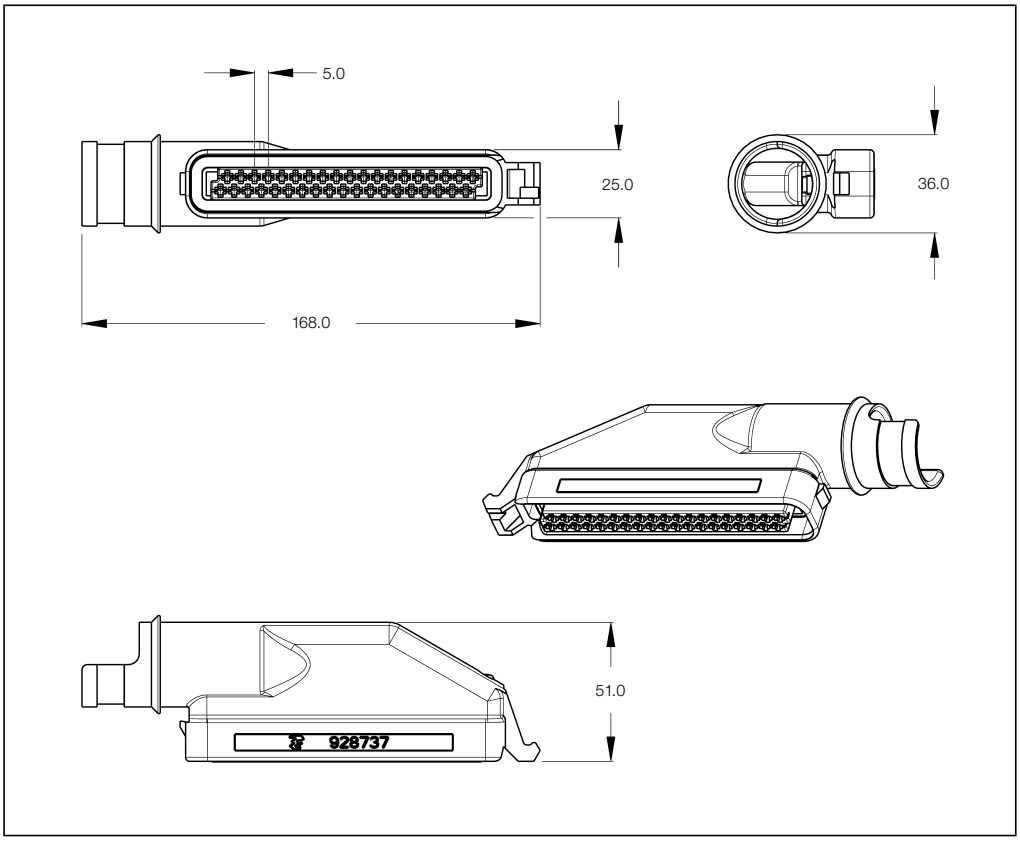
No. of Positions:
38 Positions

Housing Material:
PA66 GV13

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



38 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
38	–	See customer drawing	828808-1 828808-2 828808-3	–	–	–	–	–	–

Receptacle Housings for Contacts 18.0 mm Length

Technical Features

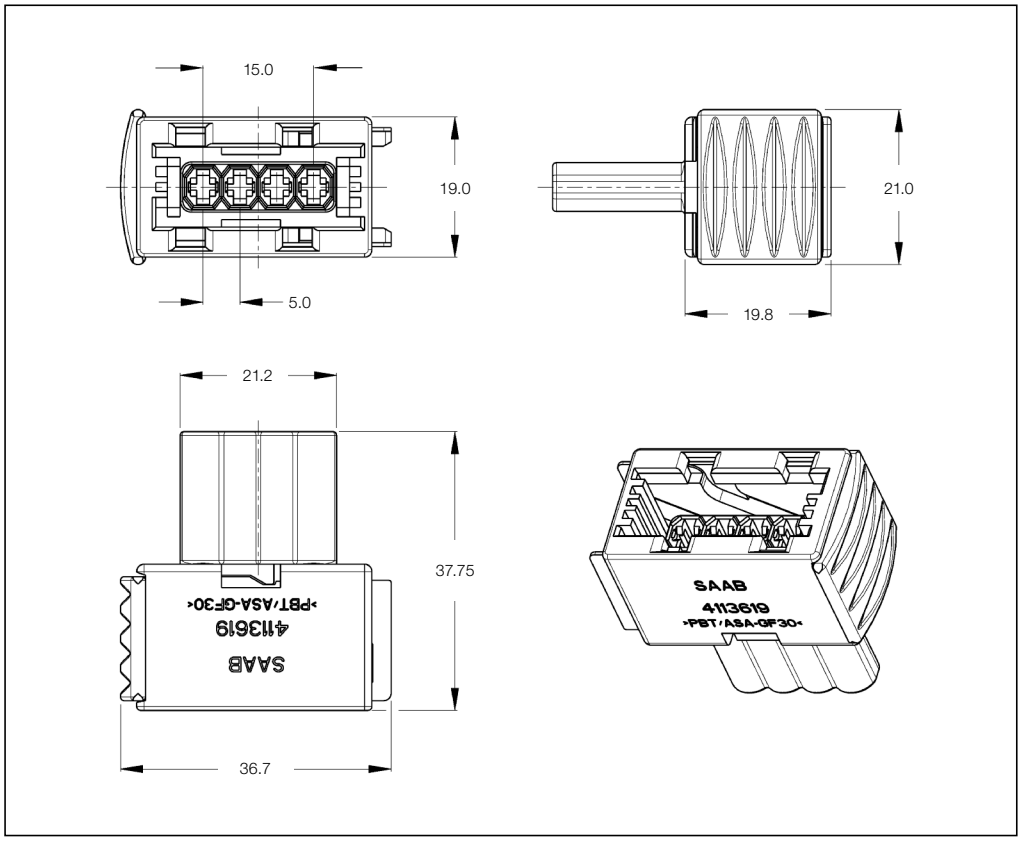
No. of Positions:
4 Positions

Housing Material:
PBT ASA GF30

Wire Size Range:
max. 2.5 mm^2

Product Specification:
108-18102

Application Specification:
114-18175-2



4 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
4	A1	Black	1-963207-1	–	–	–	1-962340-1	–	–
	D1	Brown	4-963207-1	–	–	–	962341-1	–	–

Receptacle Housings for Contacts 18.0 mm Length

Technical Features

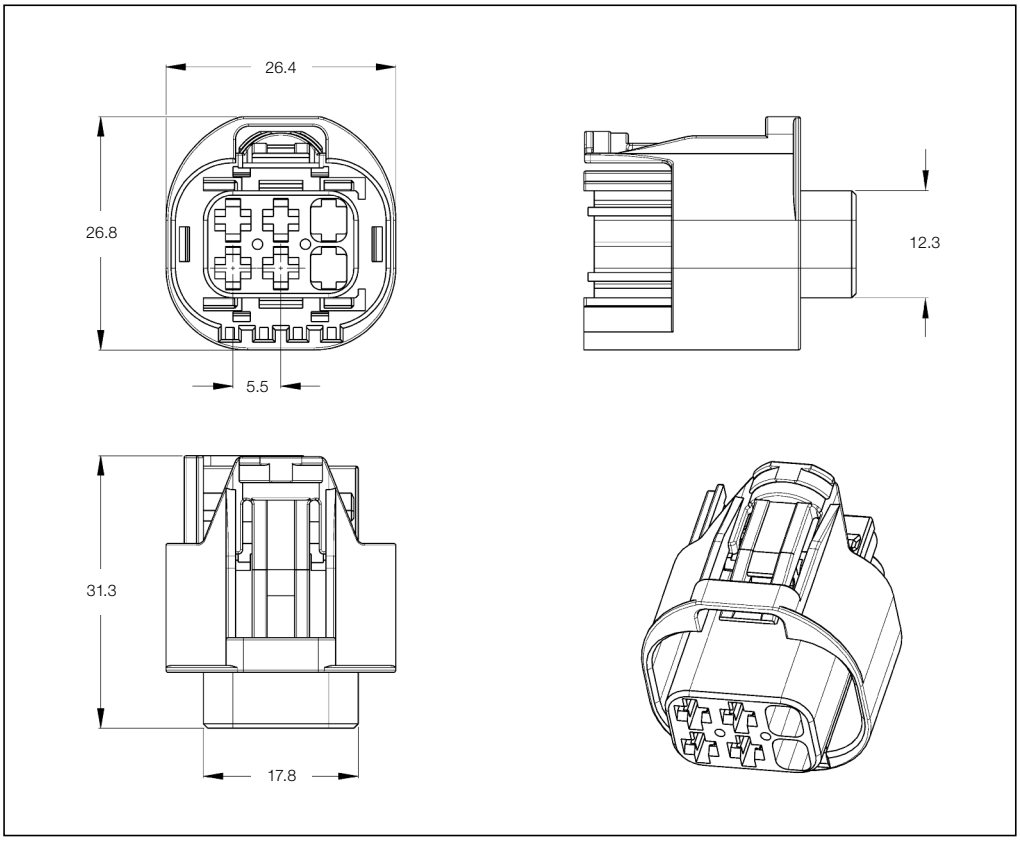
No. of Positions:
4 Positions

Housing Material:
PBT GF20

Wire Size Range:
2.5–2.5 mm^2

Product Specification:
108-18793

Application Specification:
114-18485



4 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
4	A	Black	1452327-1 1452327-2	–	–	–	1452324-1 1452324-2	–	–

Receptacle Housings for Contacts 18.0 mm Length

Technical Features

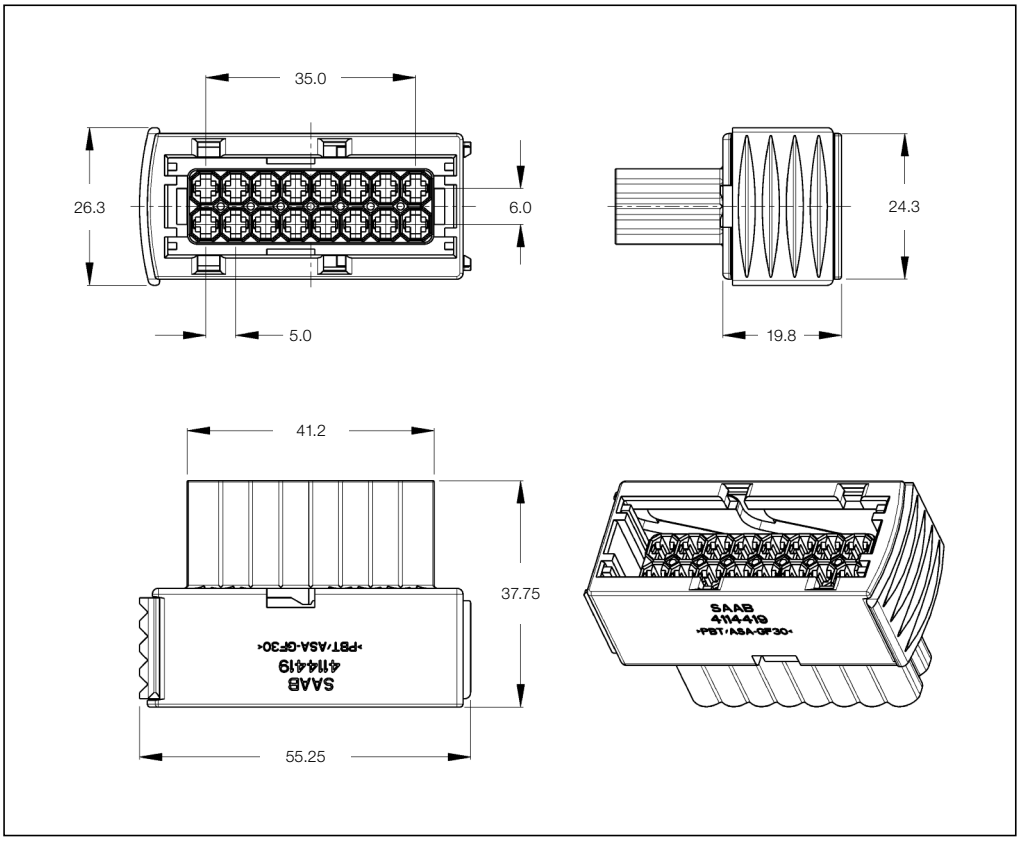
No. of Positions:
16 Positions

Housing Material:
PBT ASA GF30

Wire Size Range:
0.35–2.5 mm^2

Product Specification:
108-18102

Application Specification:
114-18175



16 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
16	A1	Black	1-963217-1	–	–	–	–	–	–
	B1	Brown	2-963217-1						

Receptacle Housings for Contacts 18.0 mm Length

Technical Features

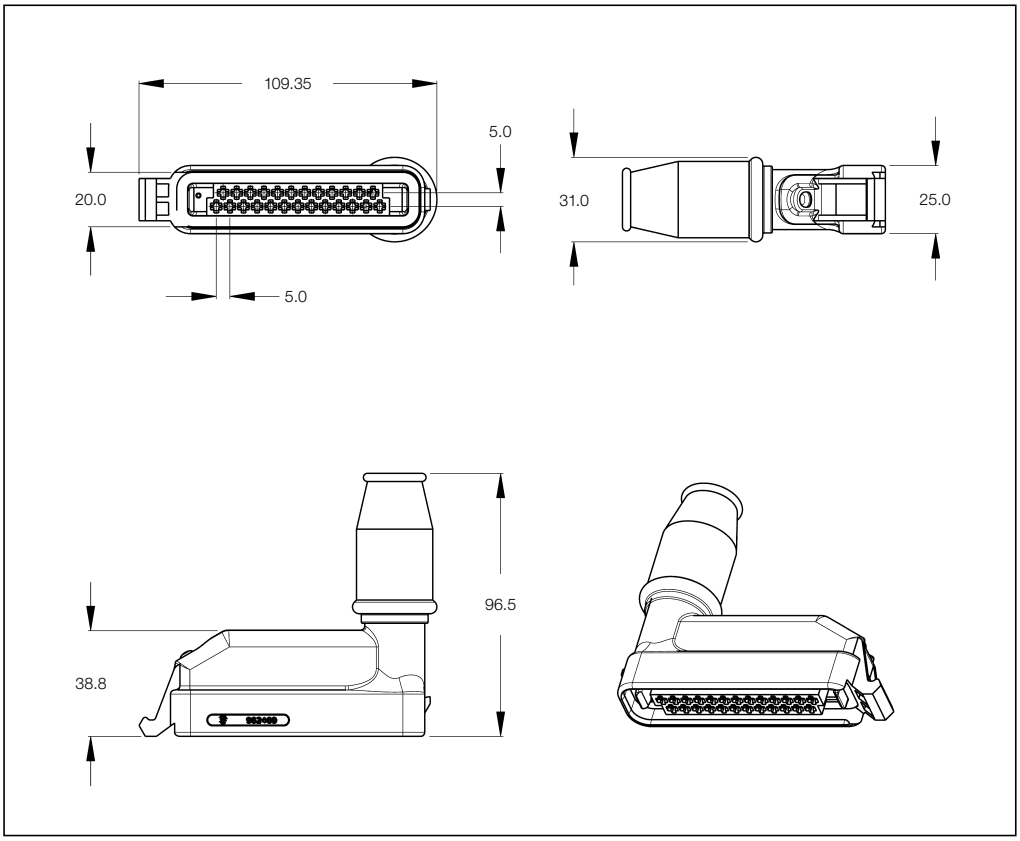
No. of Positions:
25 Positions

Housing Material:
PA66 GV13

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



25 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
25	–	Black	963325-1 with rubber boots	–	–	–	–	827050-1 (left) 827019-1 (right)	–

Receptacle Housings for Contacts 18.0 mm Length

Technical Features

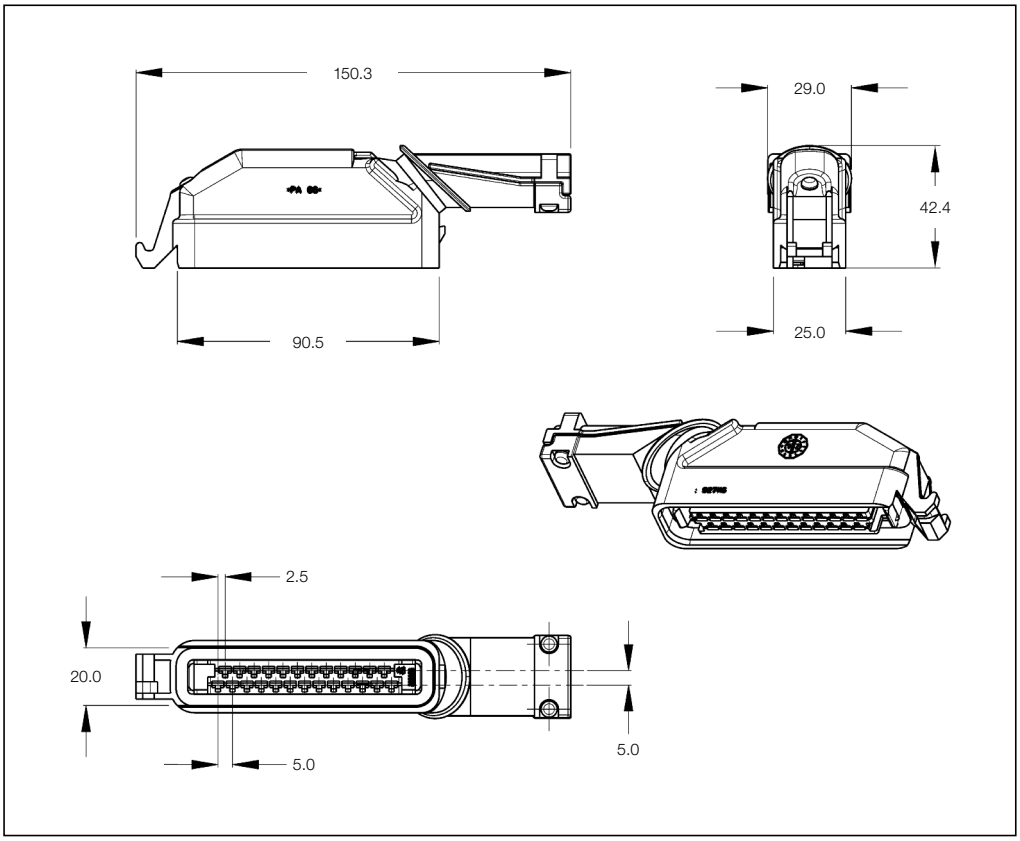
No. of Positions:
25 Positions

Housing Material:
PA66 GV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



25 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
25	–	Black	963317-1	–	–	–	–	827050-1 (left) 827019-1 (right)	–

Receptacle Housings for Contacts 18.0 mm Length

Technical Features

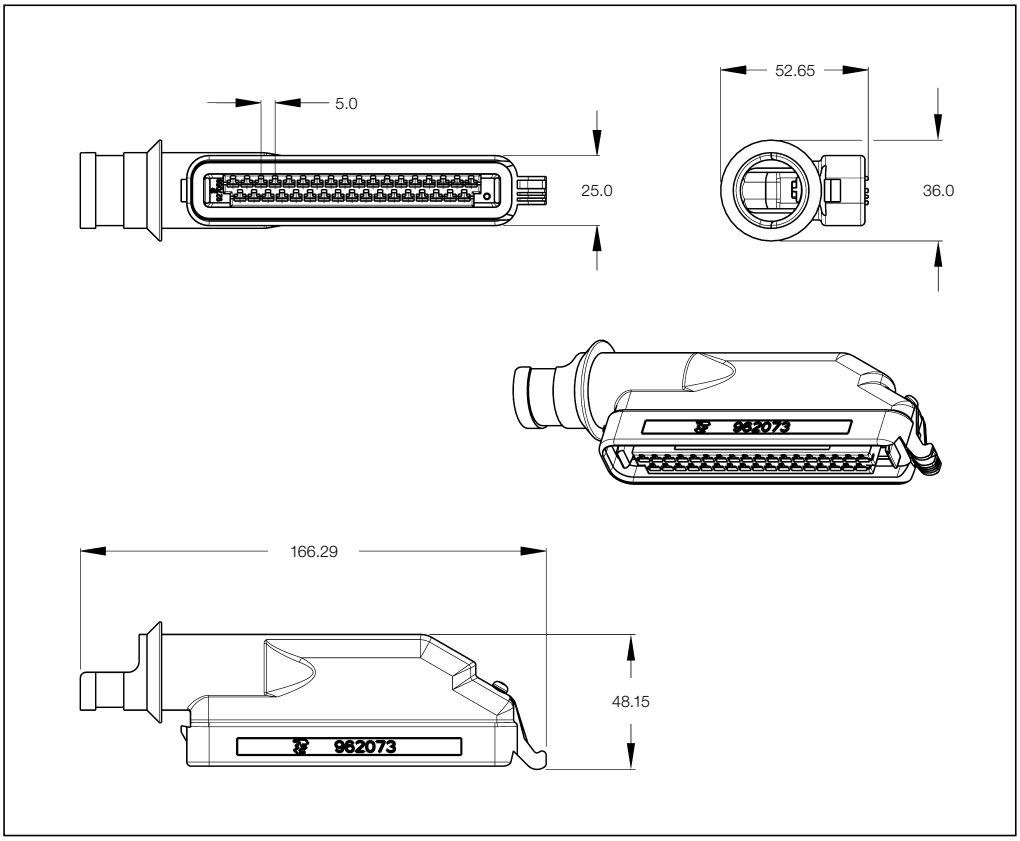
No. of Positions:
35 Positions

Housing Material:
PA66 GV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



35 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
35	–	Black	963059-1*	–	–	–	–	825213-1	–

*) **Rubber Boot:** Part No. **826779-1** (must be ordered separately)

Receptacle Housings for Contacts 18.0 mm Length

Technical Features

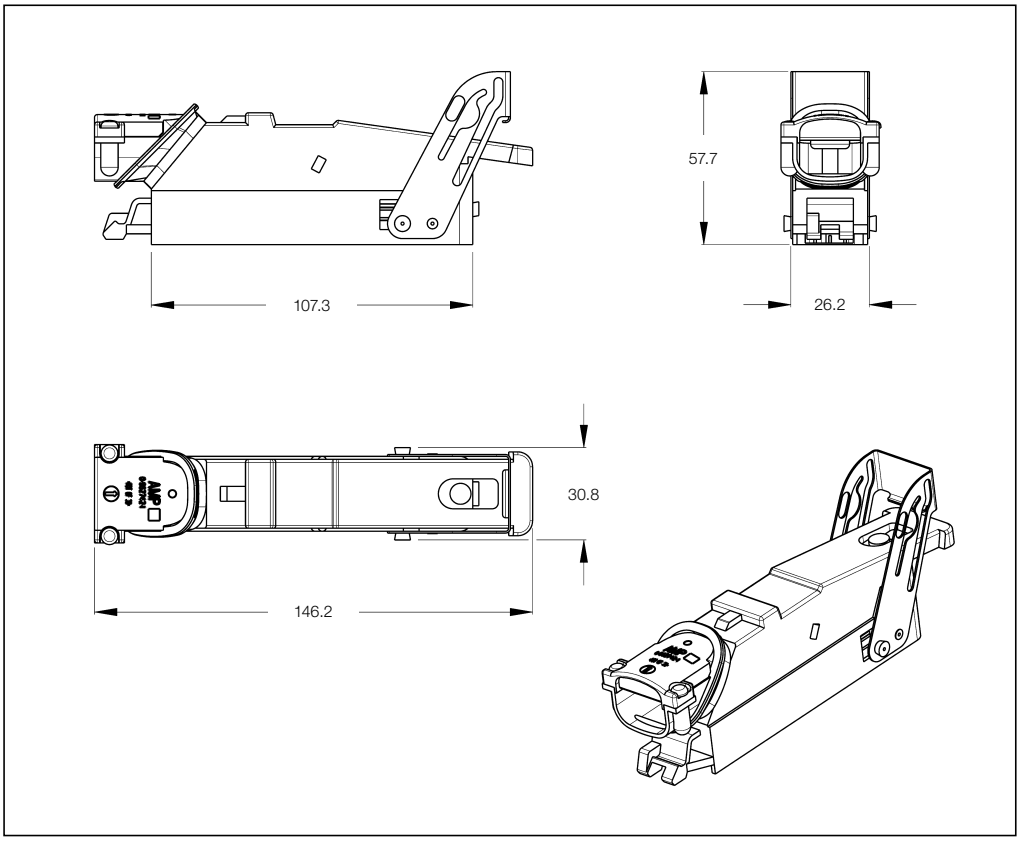
No. of Positions:
55 Positions

Housing Material:
PA66 GV13

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



55 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
55	See customer drawing	See customer drawing	963534-1 963534-2 963534-3 1-963534-1	–	–	–	–	963063-1 142723-2 142719-2	–

Receptacle Housings for Contacts 18.0 mm Length

Technical Features

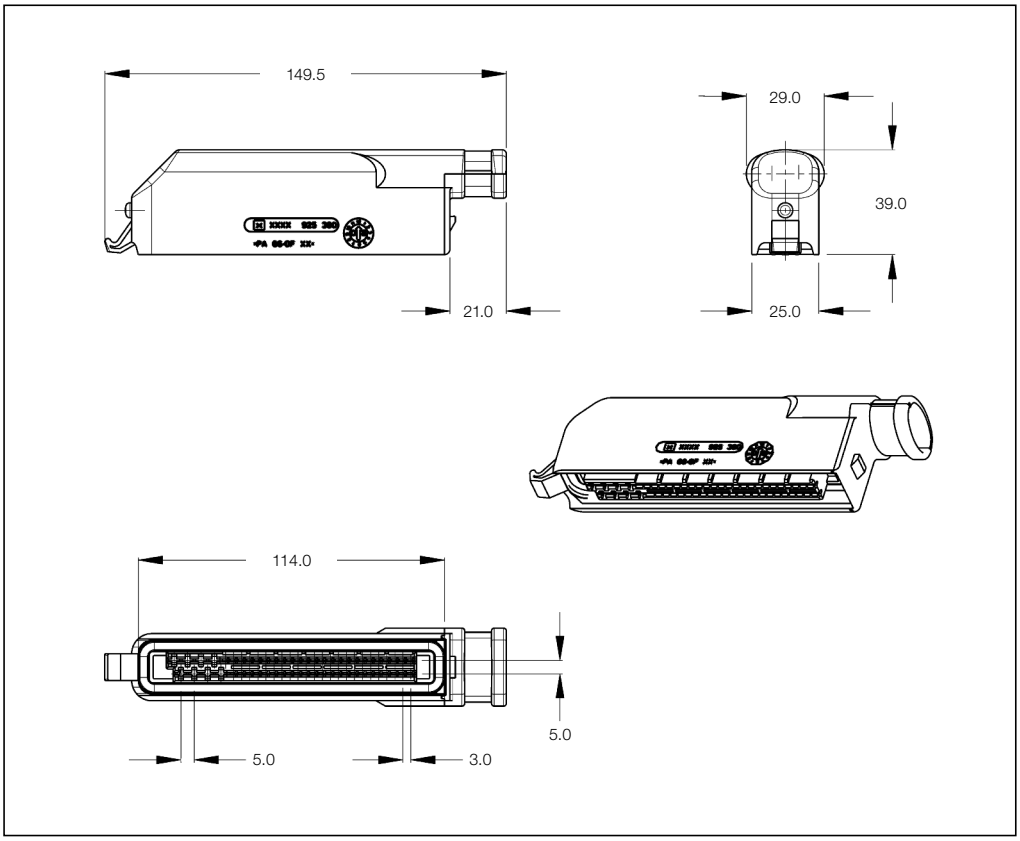
No. of Positions:
55 Position
8 x Junior Power Timer
47 x Micro Timer II

Housing Material:
PA66 GV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



55 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
55	–	Black	828761-1	–	–	–	–	828773-1	–

Receptacle Housings for Contacts 18.0 mm Length

Technical Features

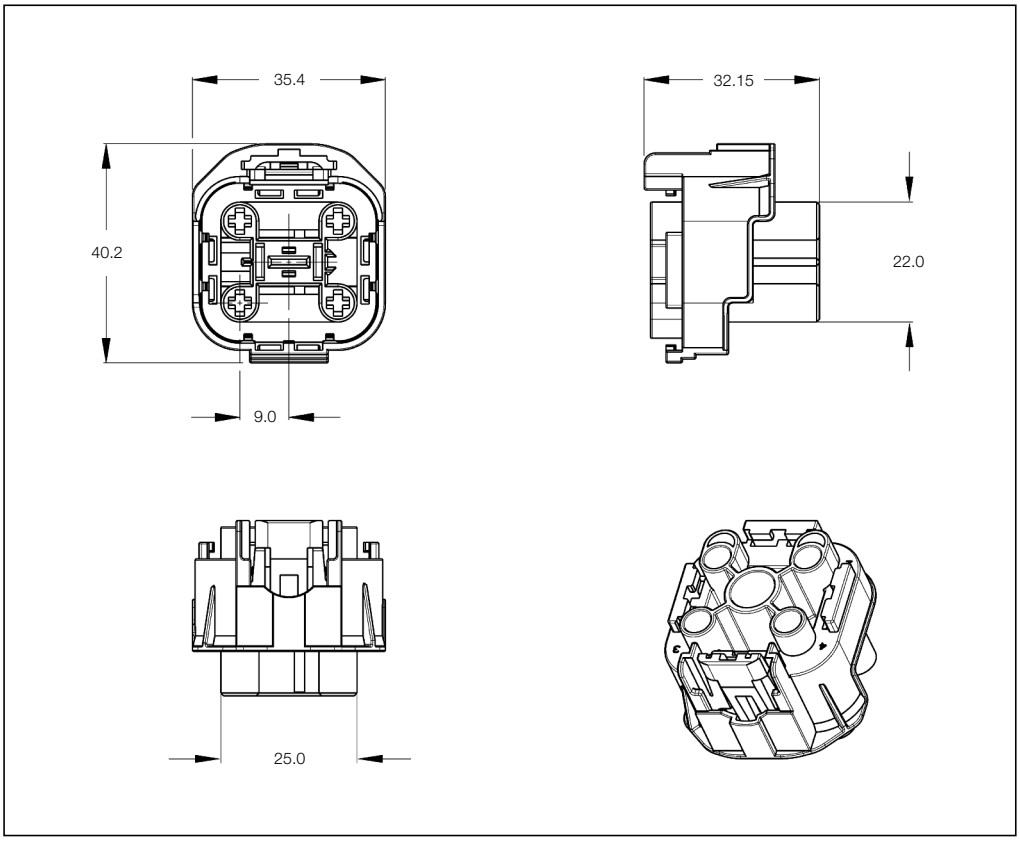
No. of Positions:
4 Position Junior Power Timer
1 Position AMP MCP 6.3

Housing Material:
PBT GF20

Wire Size Range:
JPT: 0.35–2.5 mm^2
AMP MCP 6.3: 1.0–6.0 mm^2

Product Specification:
108-18974

Application Specification:
114-18686



4 Position Mixed Junior Power Timer / AMP MCP 6.3 Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers							
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Retainer Housing	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
4	A	Black	1718878-1	–	–	–	1718879-1	–	–	–

Receptacle Housings with Locking Spring and Seal

Technical Features

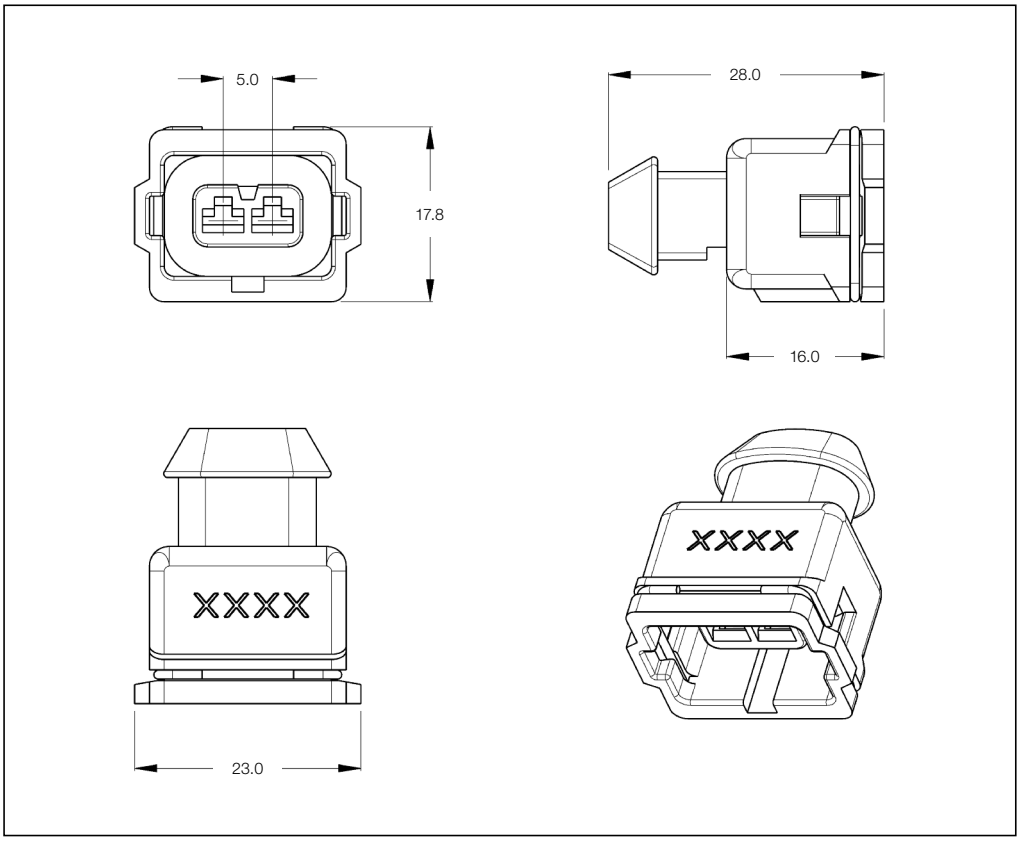
No. of Positions:
2 Position Type A

Housing Material:
PA66 GV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



2 Position Junior Timer Receptacle Housings, Type A

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
2	–	See customer drawing	826008-1/-3 826008-5/-8 1-826008-1/-3 1-826008-5/-8	–	–	–	106462-1	–	–

Receptacle Housings with Locking Spring and Seal

Technical Features

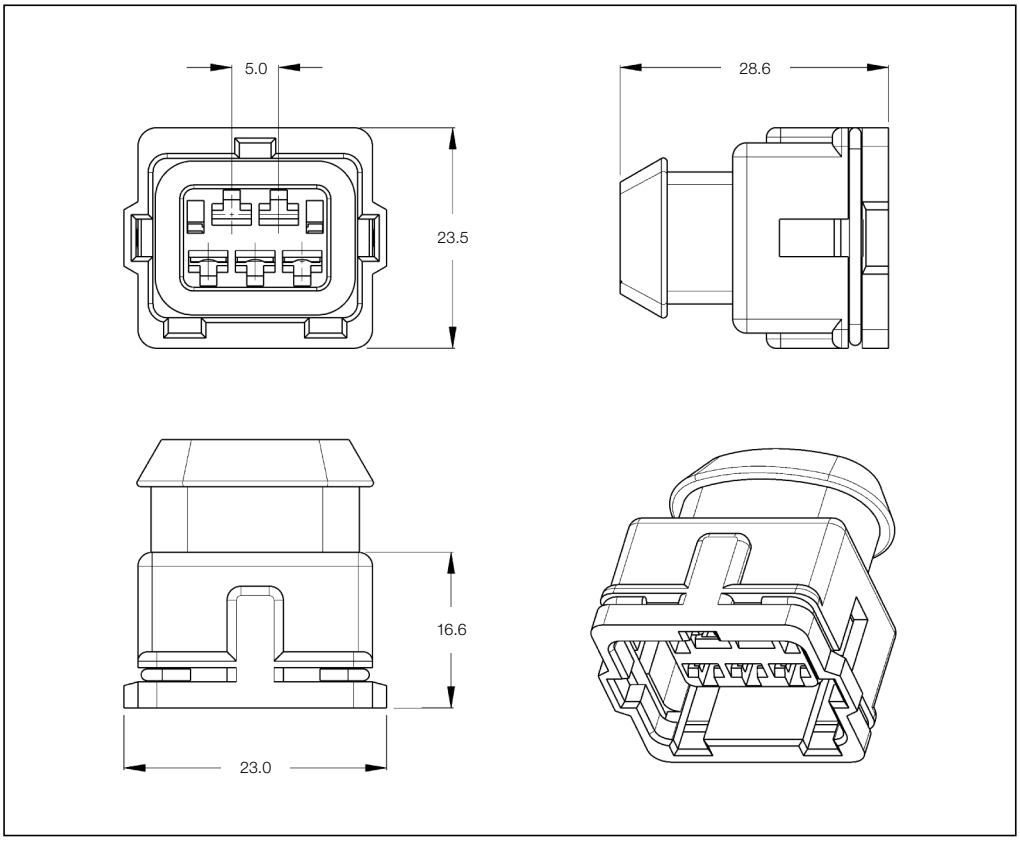
No. of Positions:
5 Position Type A

Housing Material:
PA66 GV13

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



5 Position Junior Timer Receptacle Housings, Type A

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
5	–	Black	827656-1	–	–	–	106462-1	–	–

Receptacle Housings with Locking Spring and Seal

Technical Features

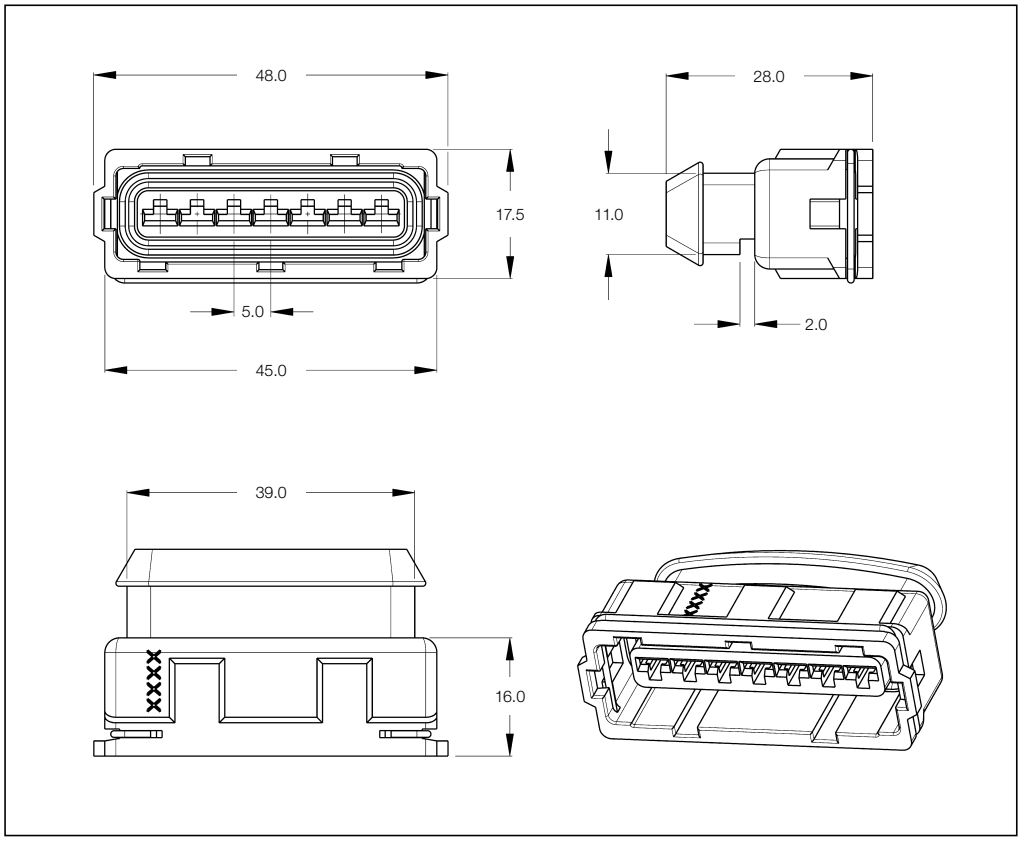
No. of Positions:
7 Position Type A

Housing Material:
PA66 GV13

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



7 Position Junior Timer Receptacle Housings, Type A

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
7	–	Black	827216-1 827216-2	–	–	–	–	–	–

Receptacle Housings with Locking Spring and Seal

Technical Features

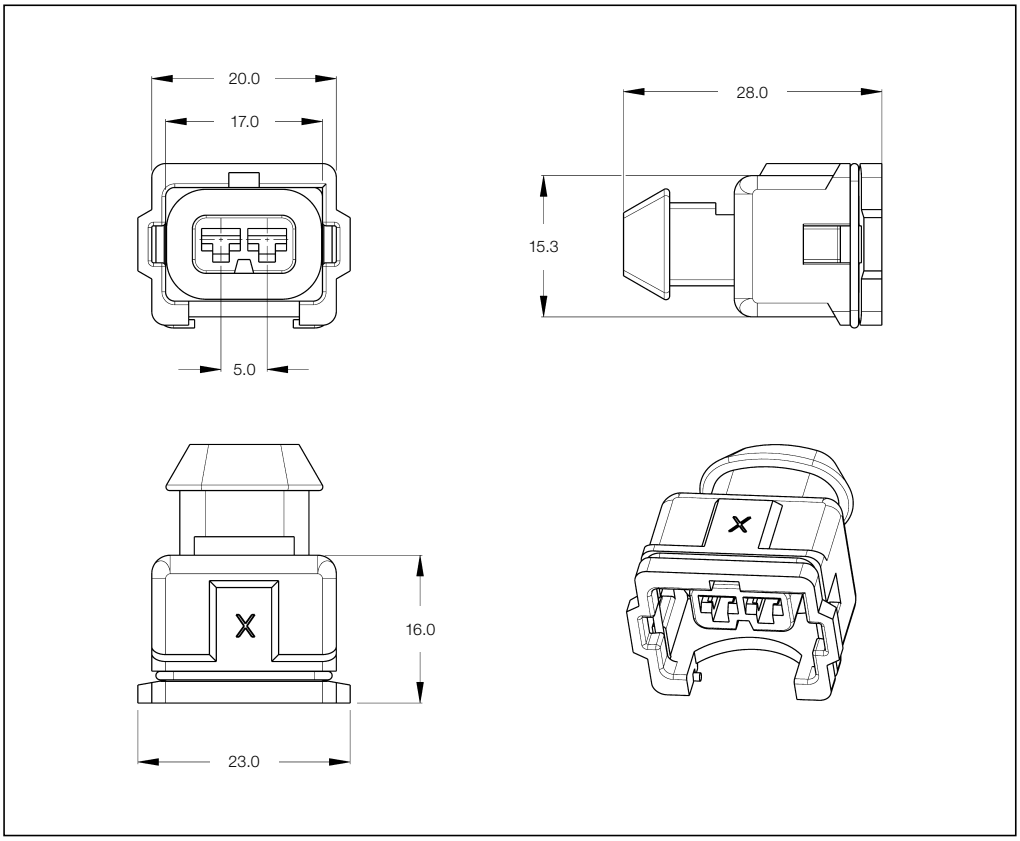
No. of Positions:
2 Position Type B

Housing Material:
PA66 GV13

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



2 Position Junior Timer Receptacle Housings, Type B

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
2	–	See customer drawing	825414-0/-6	–	–	–	–	106462-1	–
			1-825414-0/-3						
			1-825414-5/-6						
			2-825414-0/-3						
			2-825414-5/-6						
			3-825414-0/-3						
			3-825414-5/-6						

Receptacle Housings with Locking Spring and Seal

Technical Features

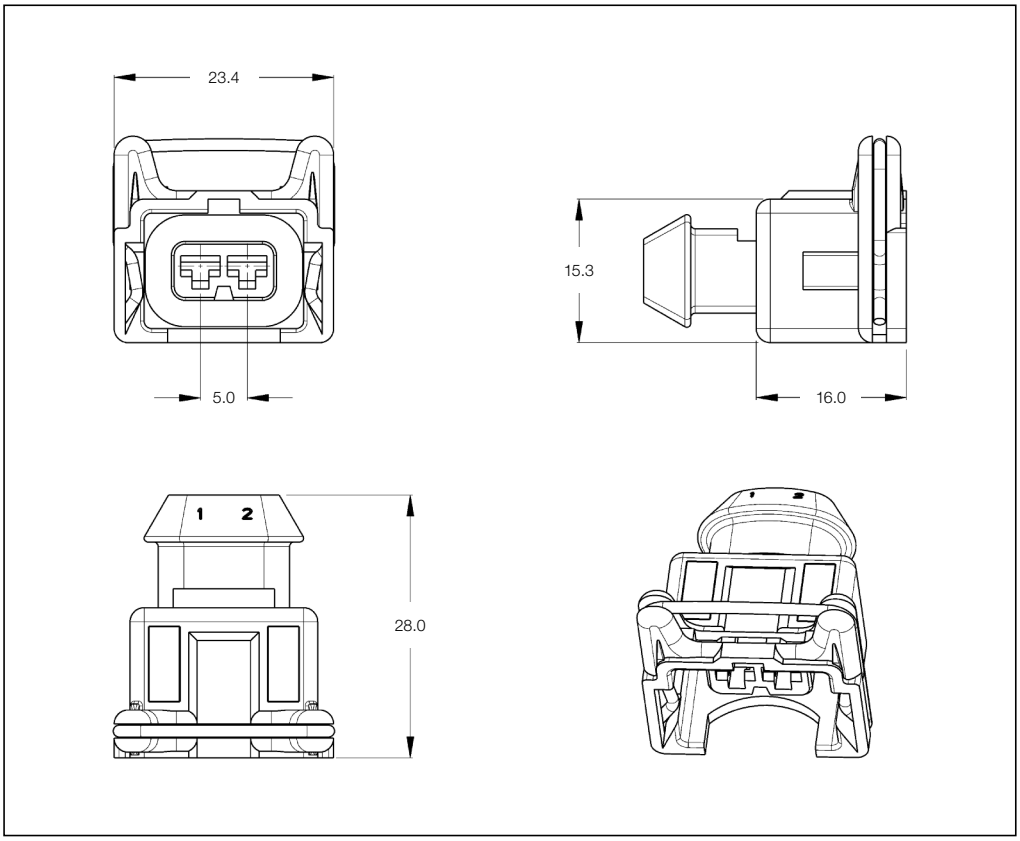
No. of Positions:
2 Position Type C

Housing Material:
PA66 GV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



2 Position Junior Timer Receptacle Housings, Type C

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
2	–	Natural	827551-1	–	–	–	106462-1	–	–
		Gray	827551-2						
		Black	827551-3						
		Brown	827551-4						
		Blue	827551-5						
		Green	827551-6						
		Red	827551-7						
		Yellow	827551-8						

Receptacle Housings with Locking Spring and Seal

Technical Features

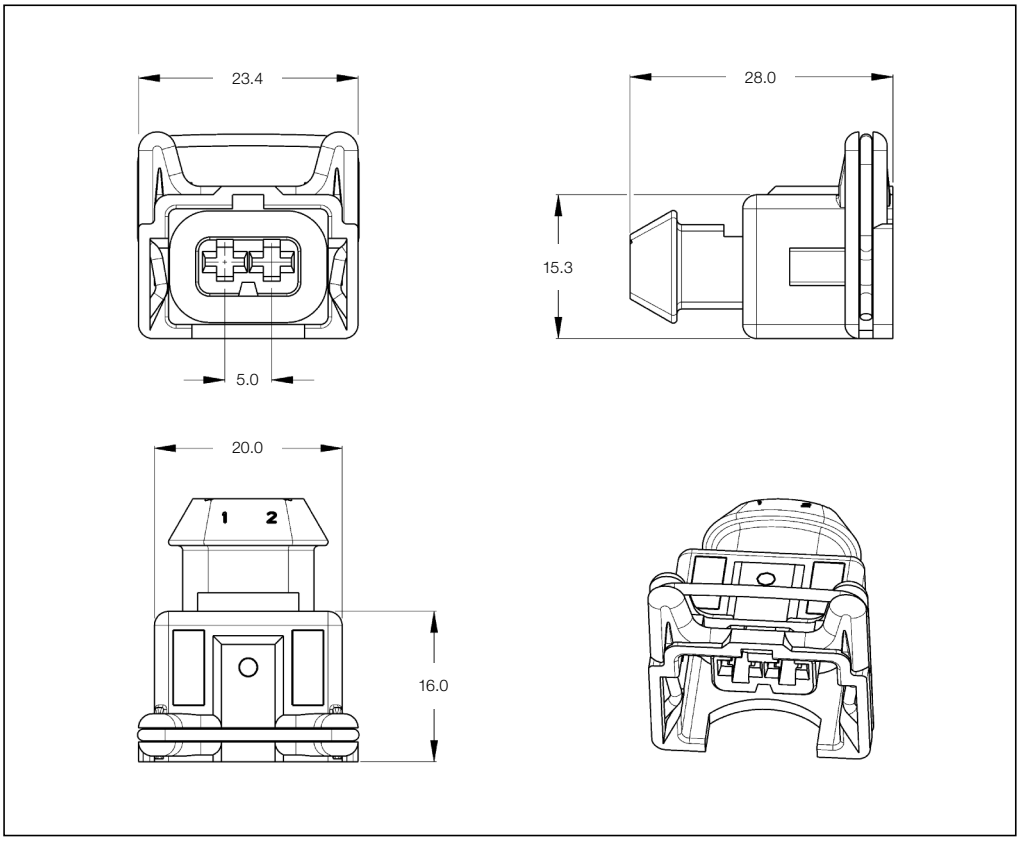
No. of Positions:
2 Position Type C

Housing Material:
PA66 GV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



2 Position Junior Power Timer Receptacle Housings, Type C

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
2	–	Natural	828657-1	–	–	–	–	–	–
		Gray	828657-2						
		Black	828657-3						
		Brown	828657-4						
		Blue	828657-5						
		Green	828657-6						
		Red	828657-7						
		Yellow	828657-8						

Receptacle Housings with Locking Spring and Seal

Technical Features

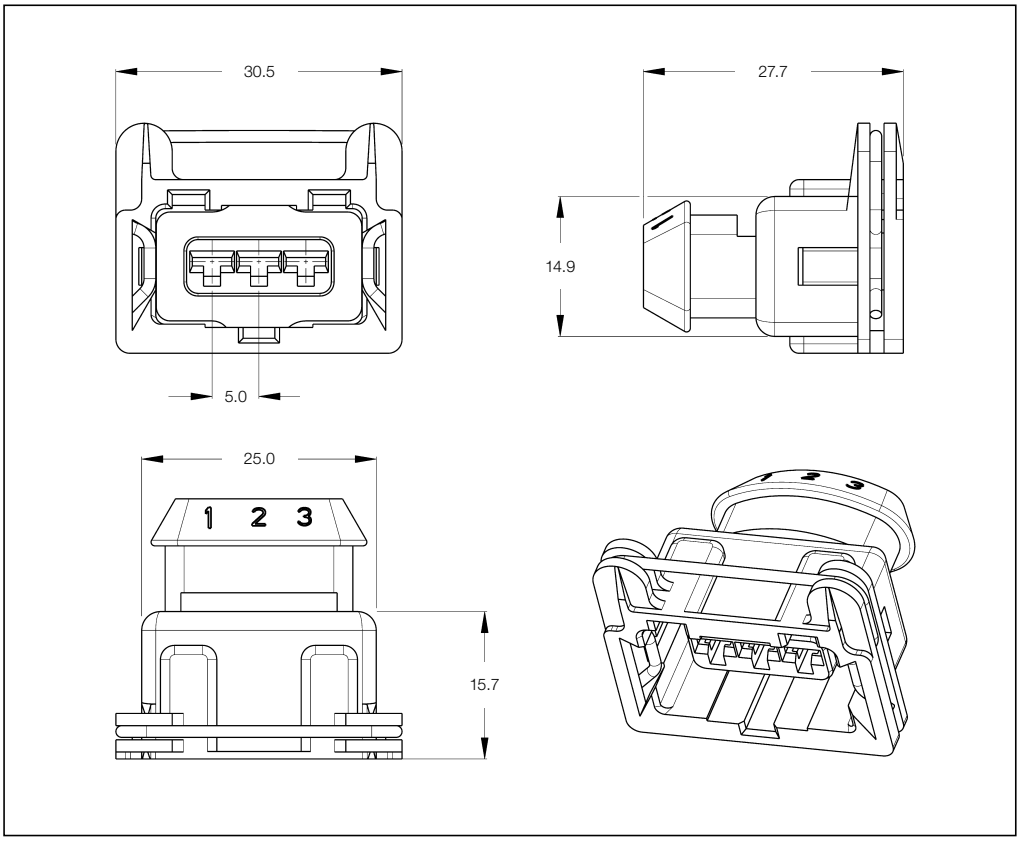
No. of Positions:
3 Position Type C

Housing Material:
PA66 GV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



3 Position Junior Timer Receptacle Housings, Type C

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
3	–	Black	1-827578-1	–	–	–	–	–	–
		Gray	1-827578-2						
		White	1-827578-3						
		Green	1-827578-4						

Receptacle Housings with Locking Spring and Seal

Technical Features

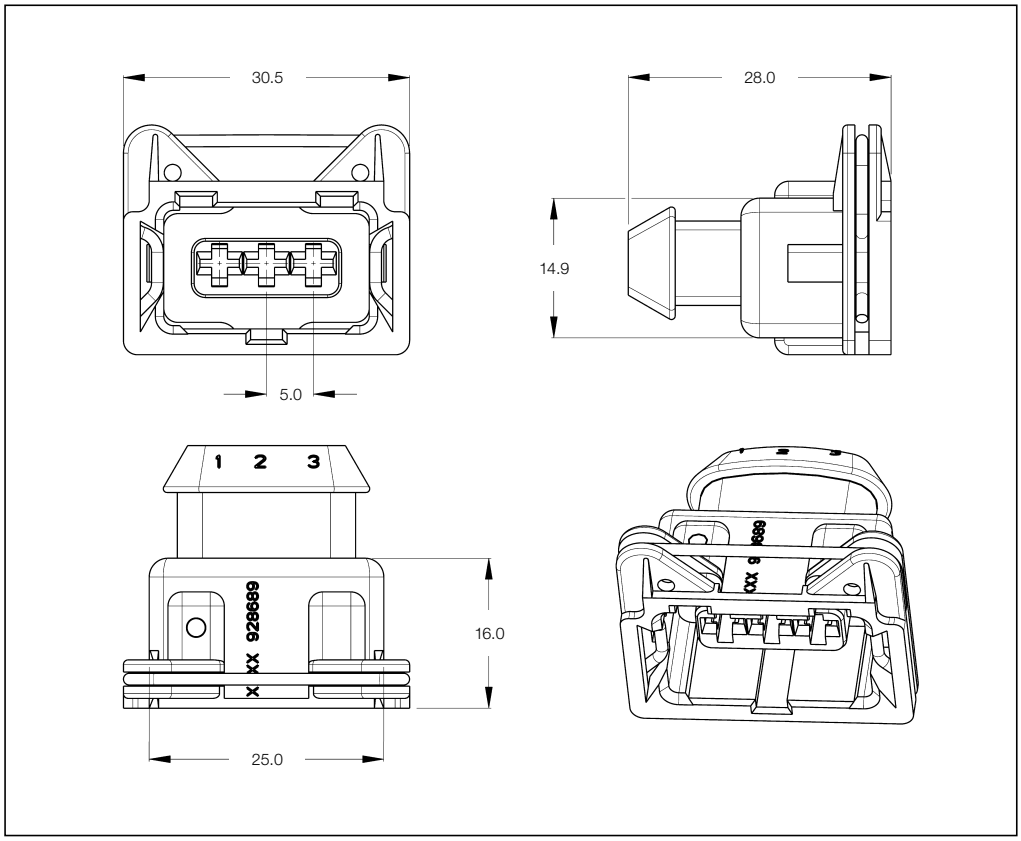
No. of Positions:
3 Position Type C

Housing Material:
PA66 GV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



3 Position Junior Power Timer Receptacle Housings, Type C

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
3	–	White	828748-1	–	–	–	–	–	–
		Gray	828748-2						
		Black	828748-3						
		Brown	828748-4						
		Blue	828748-5						
		Green	828748-6						
		Red	828748-7						
		Yellow	828748-8						

Receptacle Housings with Locking Spring and Seal

Technical Features

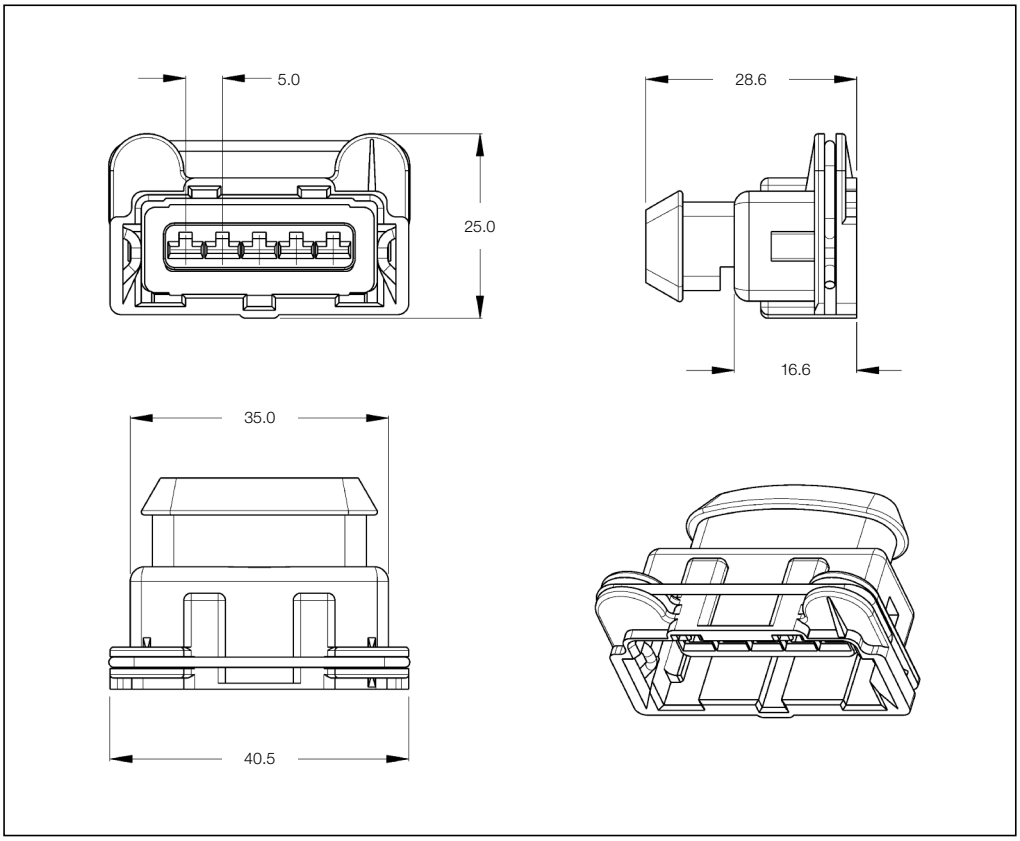
No. of Positions:
5 Position Type C

Housing Material:
PA66 GV13

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



5 Position Junior Timer Receptacle Housings, Type C

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
5	–	Black	827579-1	–	–	–	–	–	–

Receptacle Housings with Locking Spring and Seal

Technical Features

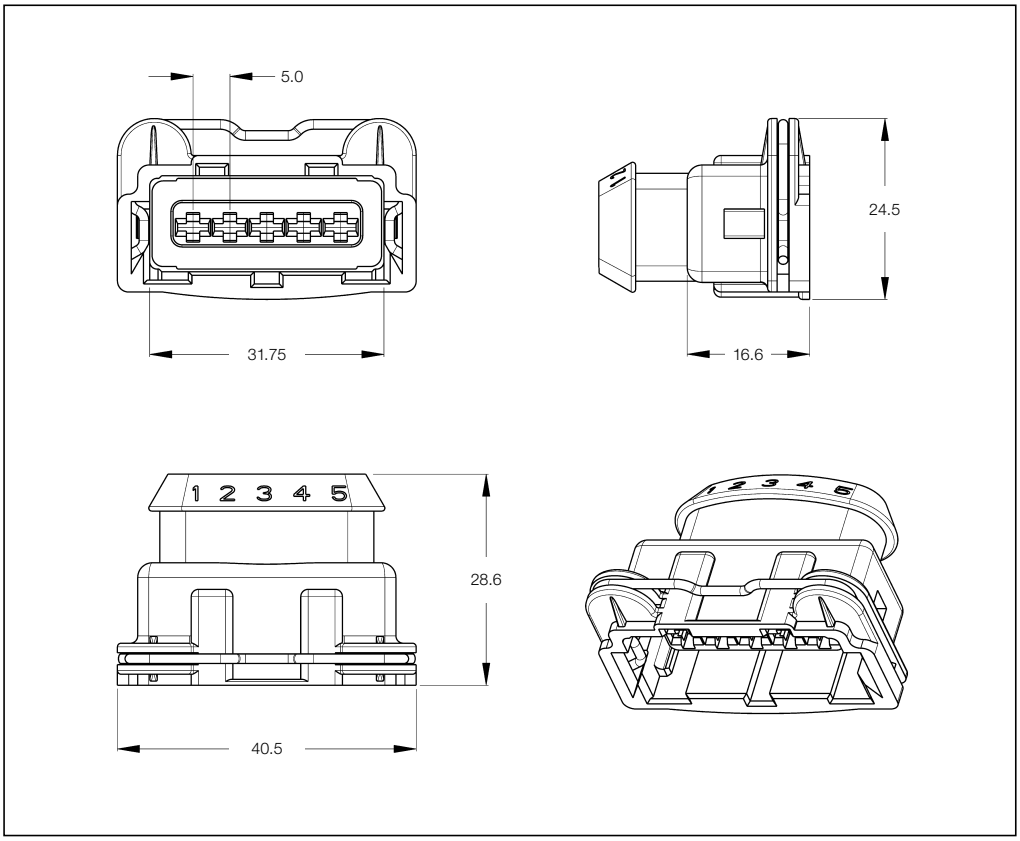
No. of Positions:
5 Position Type C

Housing Material:
PA66 GV13

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



5 Position Junior Power Timer Receptacle Housings, Type C

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
5	–	Black	963013-1	–	–	–	–	–	–
		Natural	963013-2						

Receptacle Housings with Locking Spring and Seal

Technical Features

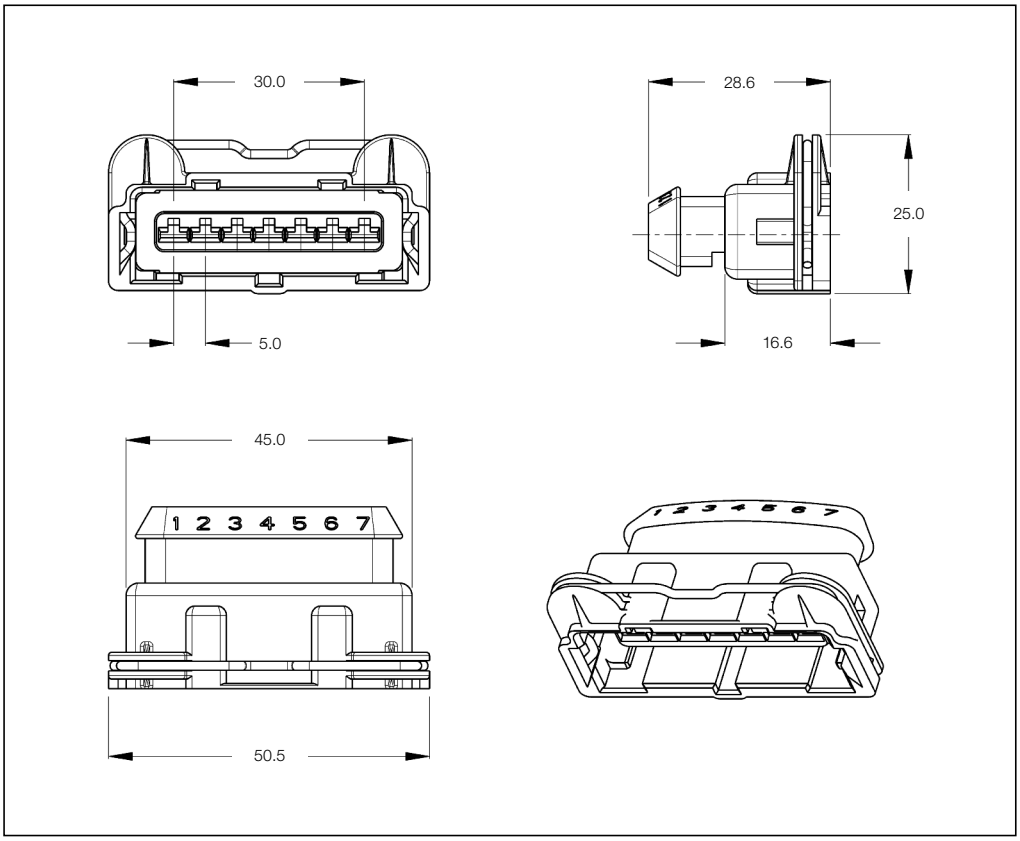
No. of Positions:
5 Position Type C

Housing Material:
PA66 GV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



5 Position Junior Timer Receptacle Housings, Type C

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
5	–	Black	827580-1	–	–	–	–	–	–
		Gray	827580-2						

Receptacle Housings with Locking Spring and Seal

Technical Features

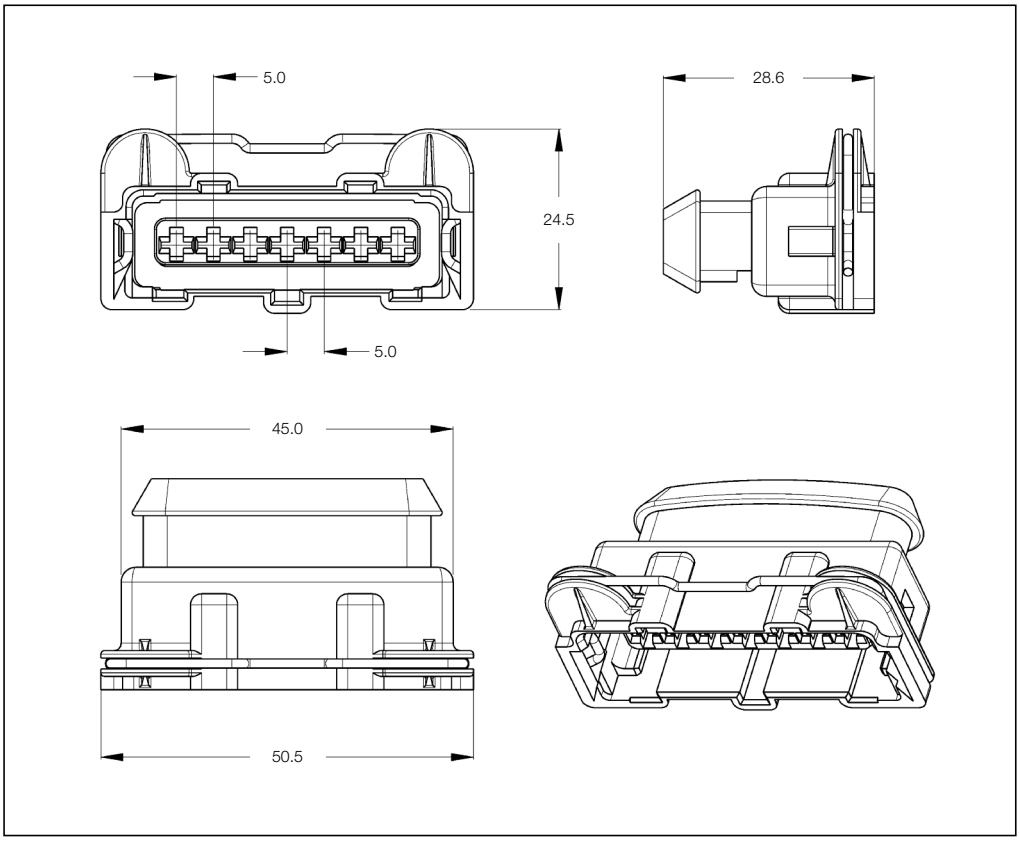
No. of Positions:
5 Position Type C

Housing Material:
PA66 GV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



5 Position Junior Timer Receptacle Housings, Type C

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
5	–	Black	827572-1	–	–	–	–	–	827405-1

Receptacle Housings for Contacts 18.0 mm Length

Technical Features

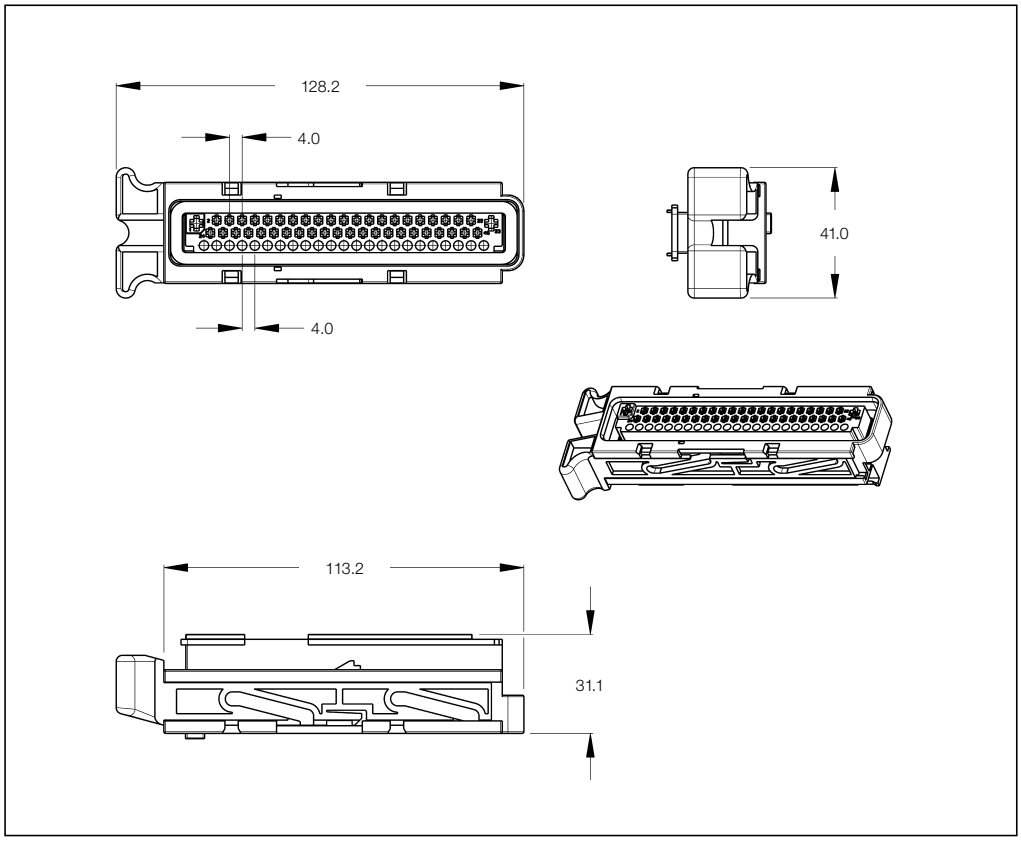
No. of Positions:
45 Position
for Aggregate Applications

Housing Material:
PA66 GF

Wire Size Range:
MTII: 0.2–1.0 mm^2
JPT: 0.2–2.5 mm^2

Product Specification:
—

Application Specification:
—



45 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
45	–	Black	963599-1	965052-1	–	–	–	3-963358-1 1-962519-1	–

Receptacle Housings for Contacts 18.0 mm Length

Technical Features

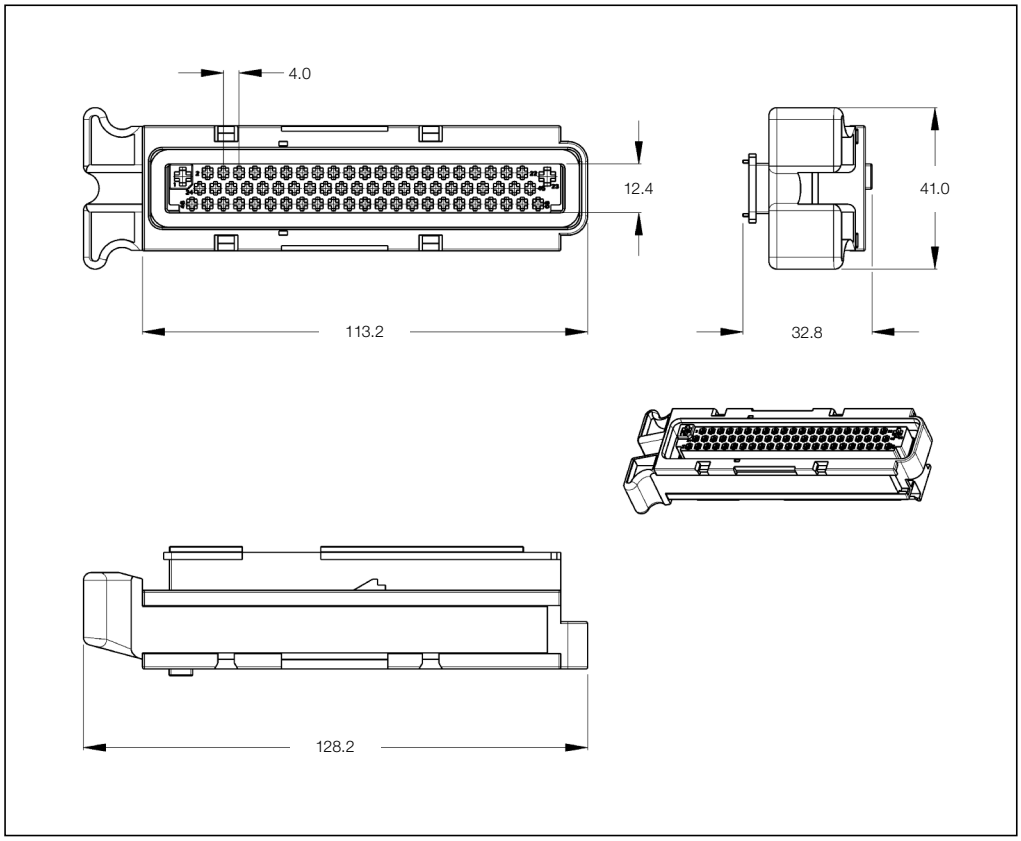
No. of Positions:
68 Position
for Aggregate Applications

Housing Material:
PA66 GF30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



68 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
68	–	Black	963598-1	965052-1	–	–	–	–	–

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

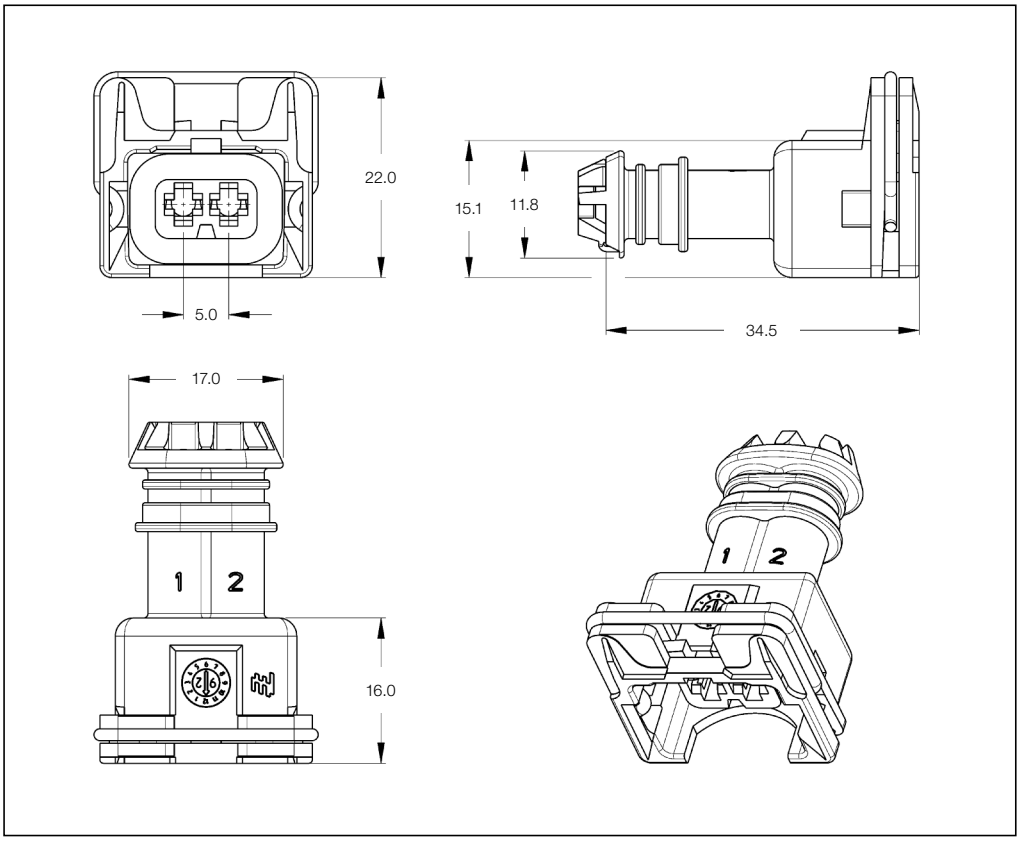
No. of Positions:
2 Position Type A
for Aggregate Applications

Housing Material:
PA66 GF

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



2 Position Receptacle Housings, Type A

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
2	–	Black	282762-1	–	–	–	106462-1	–	–
		Gray	282762-2						
		Natural	282762-3						
		Green	282762-4						
		Blue	282762-5						
		Brown	282762-6						
		Yellow	282762-7						
		Red	282762-8						

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

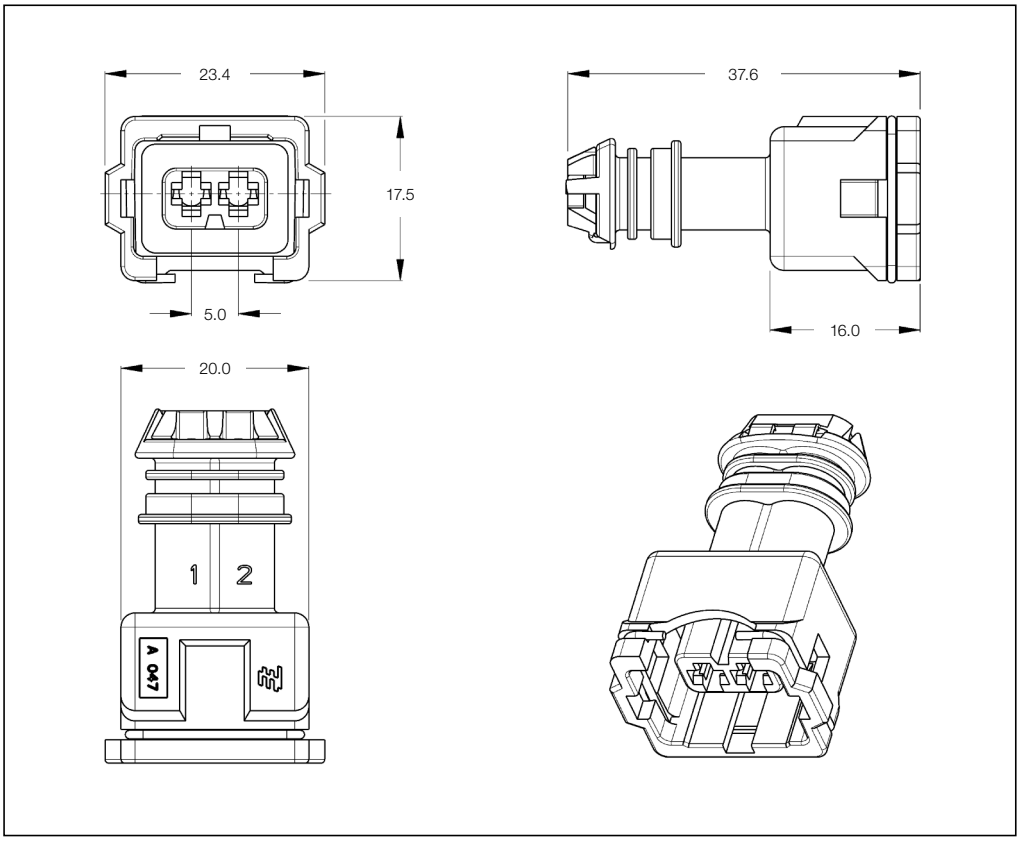
No. of Positions:
2 Position Type A
for Aggregate Applications

Housing Material:
PA66 GF

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



2 Position Receptacle Housings, Type A

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
2	–	Black	282190-1	–	–	–	106462-1	–	–
		Gray	282190-2						
		Natural	282190-3						
		Green	282190-4						
		Blue	282190-5						
		Brown	282190-6						
		Yellow	282190-7						
		Red	282190-8						

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

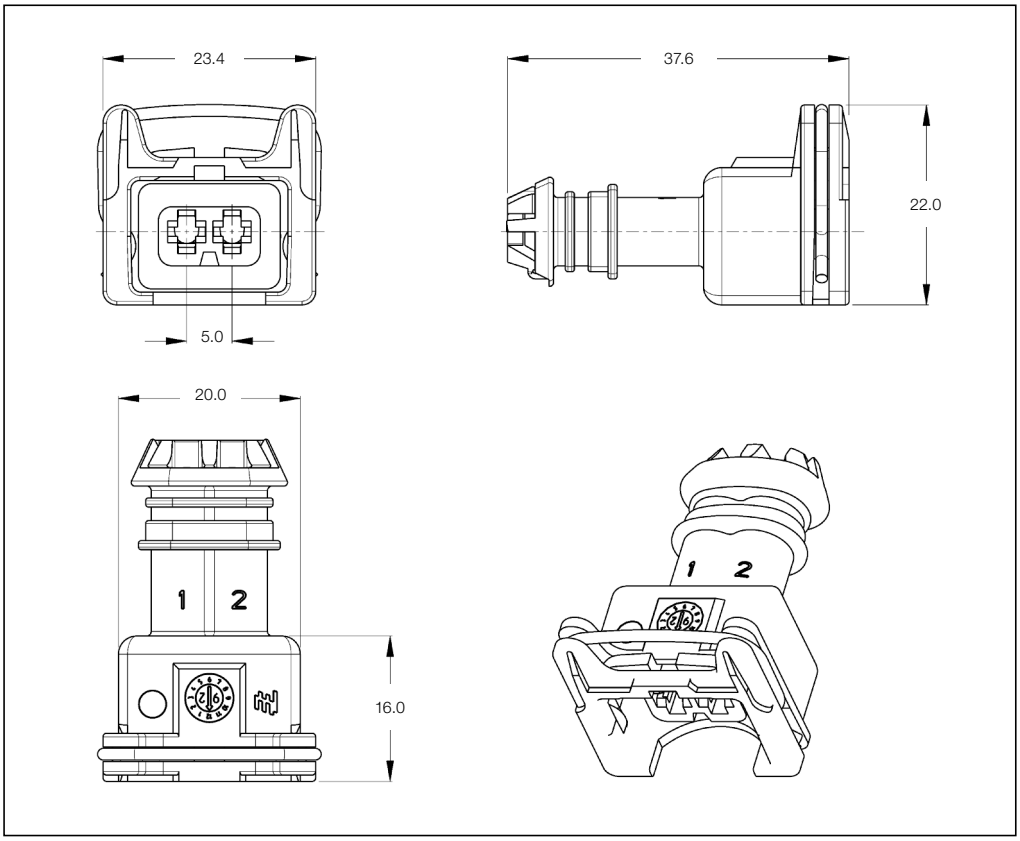
No. of Positions:
2 Position Type B
for Aggregate Applications

Housing Material:
PA66 GF

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



2 Position Receptacle Housings, Type B

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
2	–	Black	282189-1	–	–	–	106462-1	–	–
		Gray	282189-2						
		Natural	282189-3						
		Green	282189-4						
		Blue	282189-5						
		Brown	282189-6						
		Yellow	282189-7						
		Red	282189-8						

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

No. of Positions:
2 Position Type C
for Aggregate Applications

Housing Material:
PBT GF15

Wire Size Range:
See customer drawing

Product Specification:
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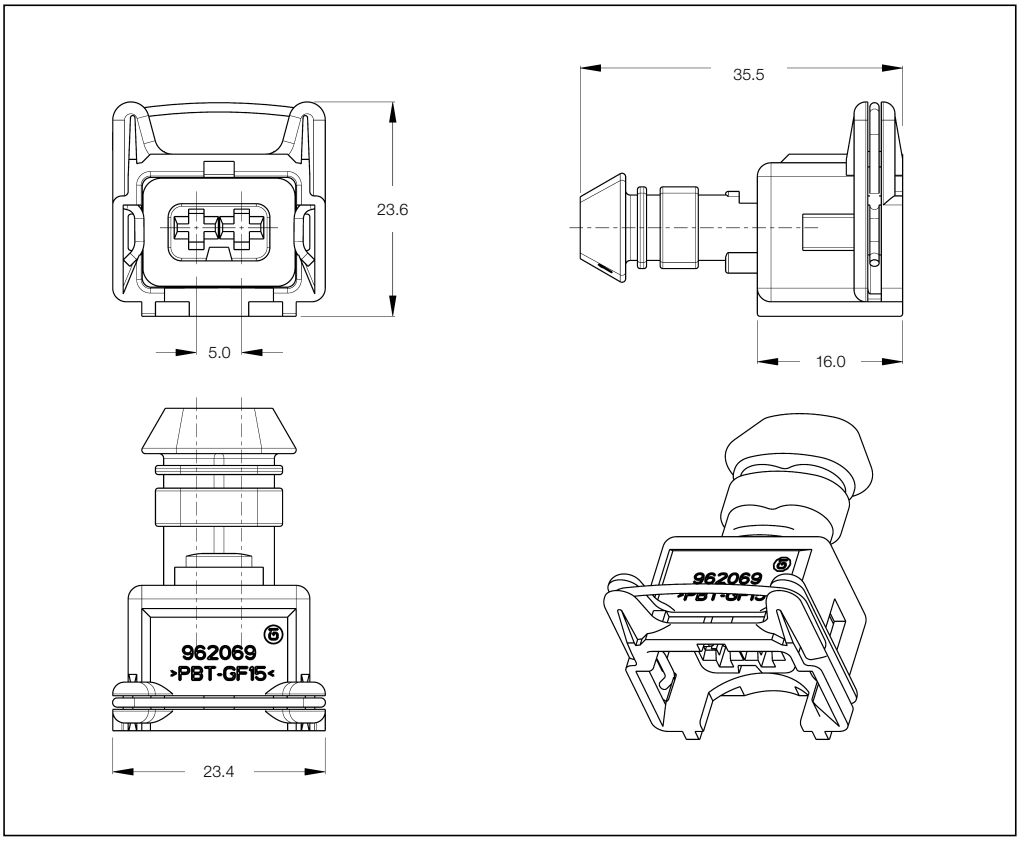
Application Specification:
—



2 Position Receptacle Housings, Type C

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
2	–	Blue	963040-1	–	–	–	106462-1	–	–
		Gray	963040-2						
		Black	963040-3						

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

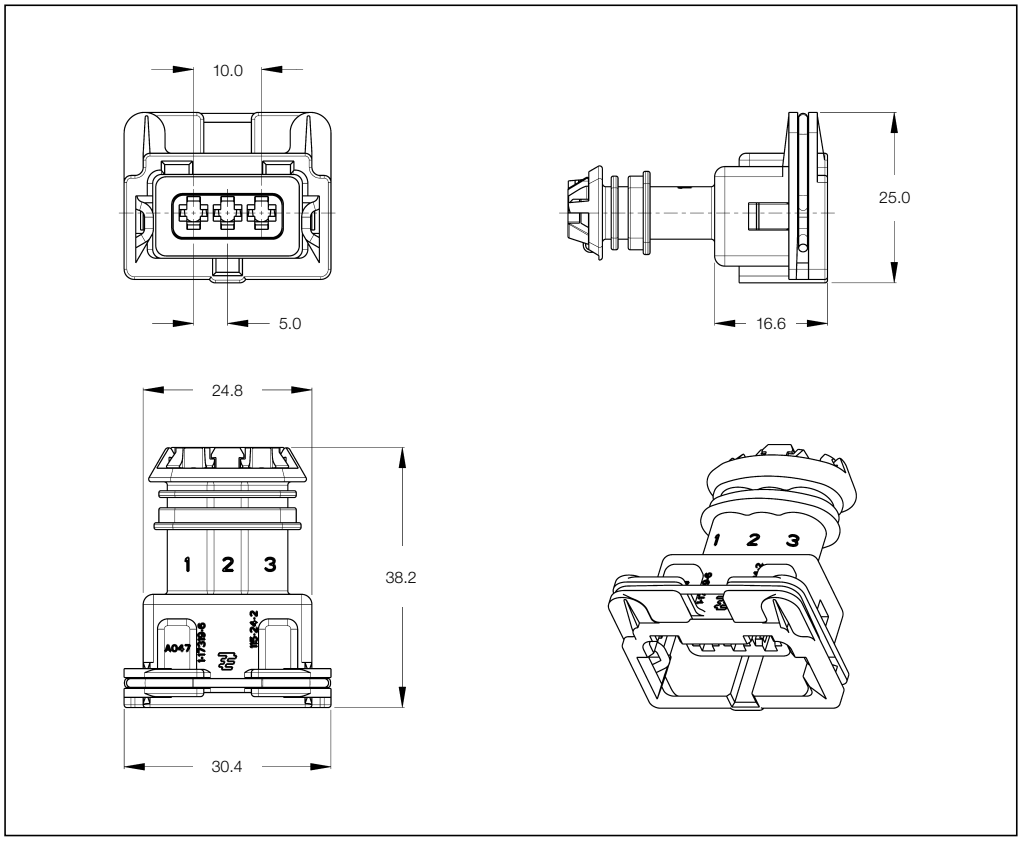
No. of Positions:
3 Position Type B
for Aggregate Applications

Housing Material:
PA66 GF

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



3 Position Receptacle Housings, Type B

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
3	–	Black	282729-1	–	–	–	–	–	–
		Gray	282729-2						
		Natural	282729-3						
		Green	282729-4						
		Blue	282729-5						
		Brown	282729-6						

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

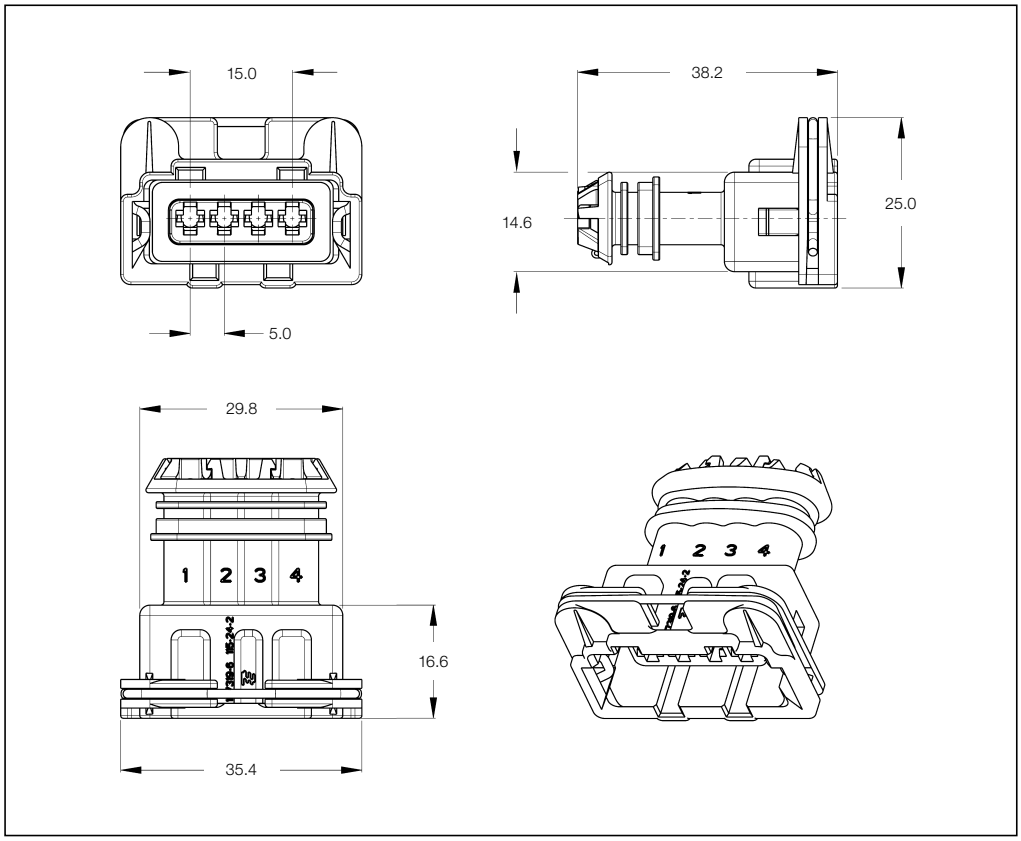
No. of Positions:
4 Position Type B
for Aggregate Applications

Housing Material:
PA66 GF

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



4 Position Receptacle Housings, Type B

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
4	–	Black	282764-1	–	–	–	–	–	–
		Gray	282764-2						

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

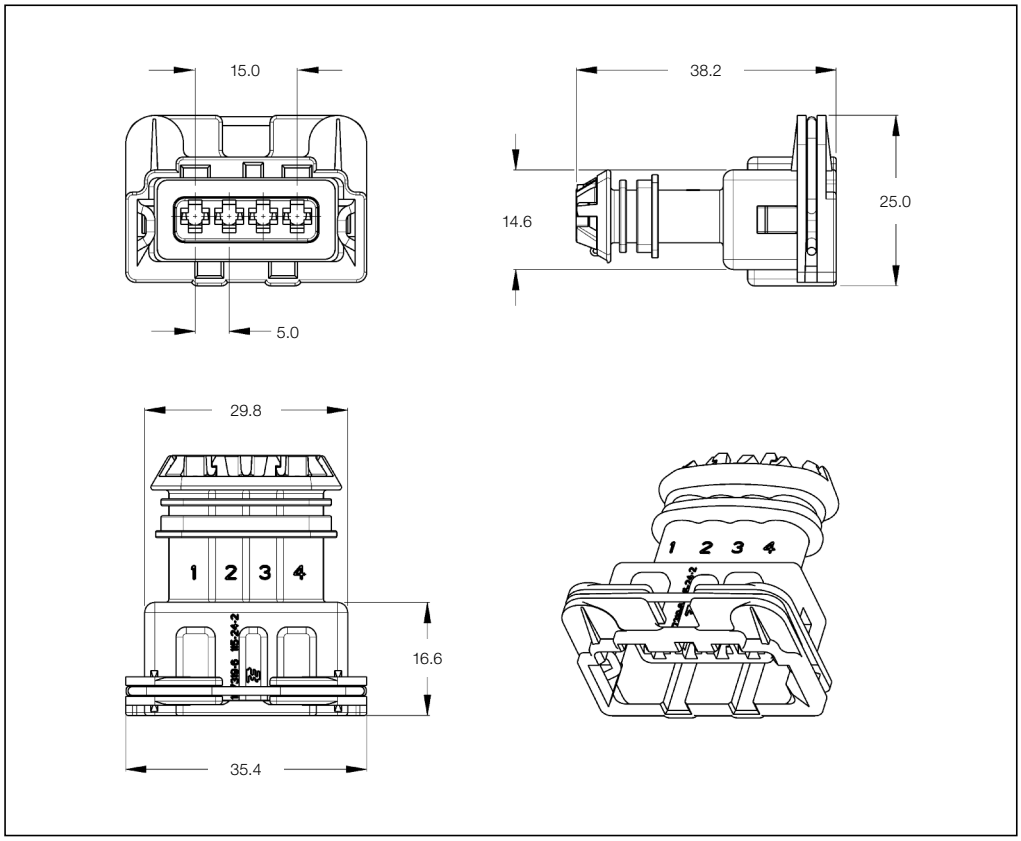
No. of Positions:
4 Position Type B
for Aggregate Applications

Housing Material:
PA66 GF

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



4 Position Receptacle Housings, Type B

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
4	–	Gray	282765-1	–	–	–	–	–	–

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

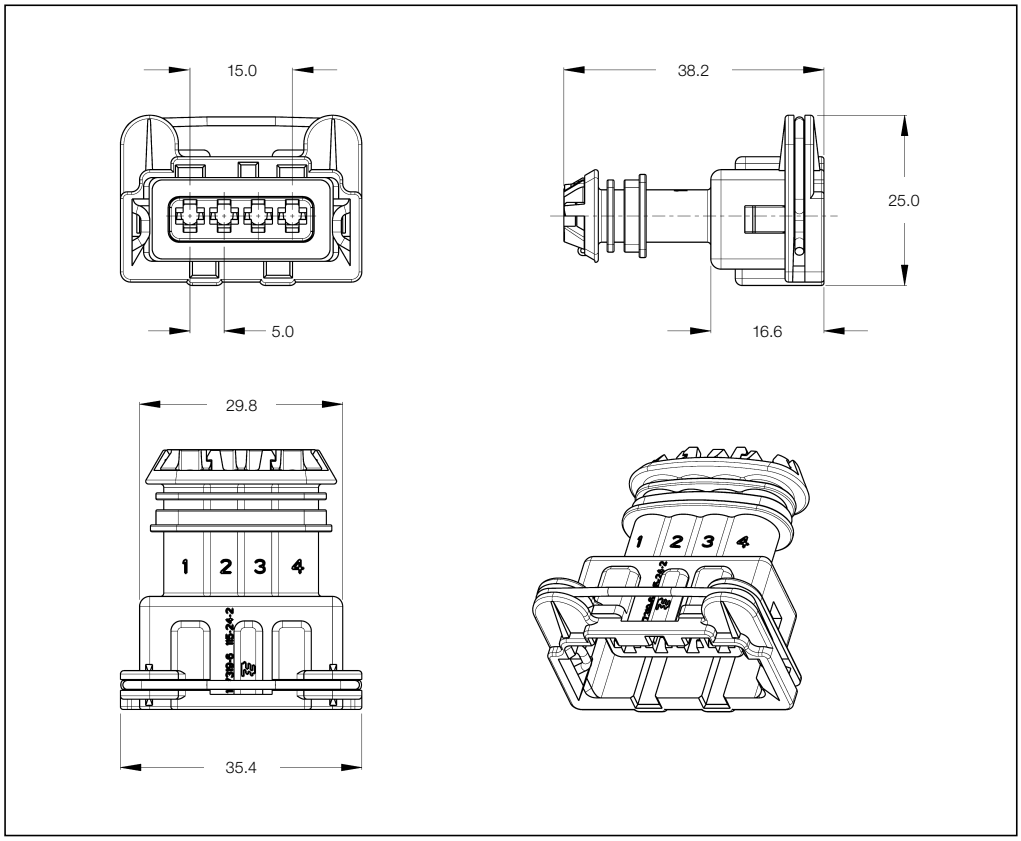
No. of Positions:
4 Position Type C
for Aggregate Applications

Housing Material:
PA66 GF

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



4 Position Receptacle Housings, Type C

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
4	–	Gray	282342-1	–	–	–	–	–	–

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

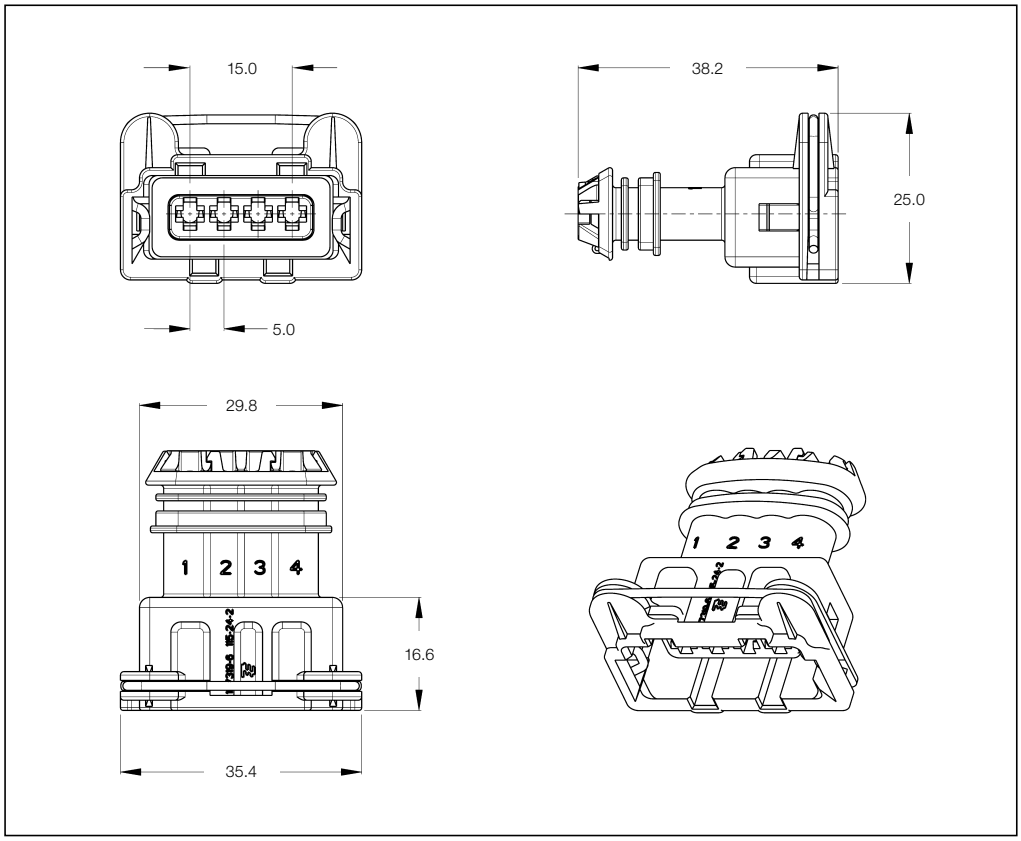
No. of Positions:
4 Position Type C
for Aggregate Applications

Housing Material:
PA66 GF

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



4 Position Receptacle Housings, Type C

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
4	–	Black	282192-1	–	–	–	–	–	–
		Gray	282192-2						

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

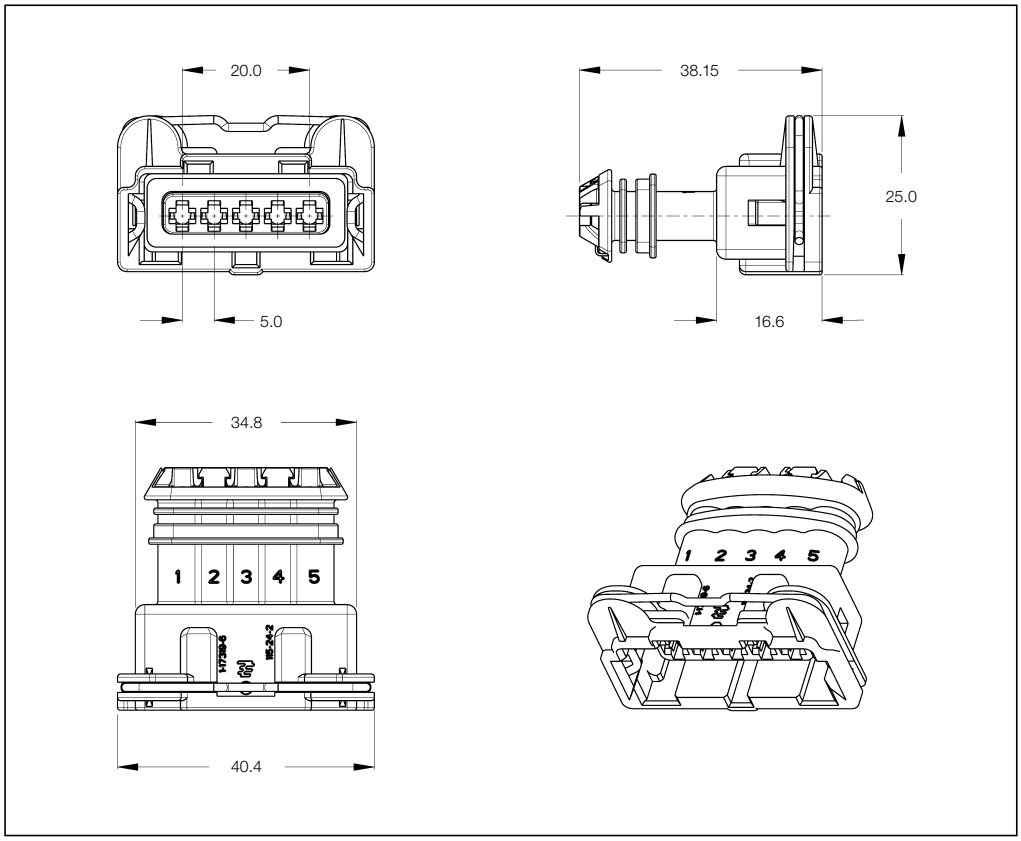
No. of Positions:
5 Position Type C
for Aggregate Applications

Housing Material:
PA66 GF

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



5 Position Receptacle Housings, Type C

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
5	–	Black	282193-1	–	–	–	–	–	–
		Gray	282193-2						

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

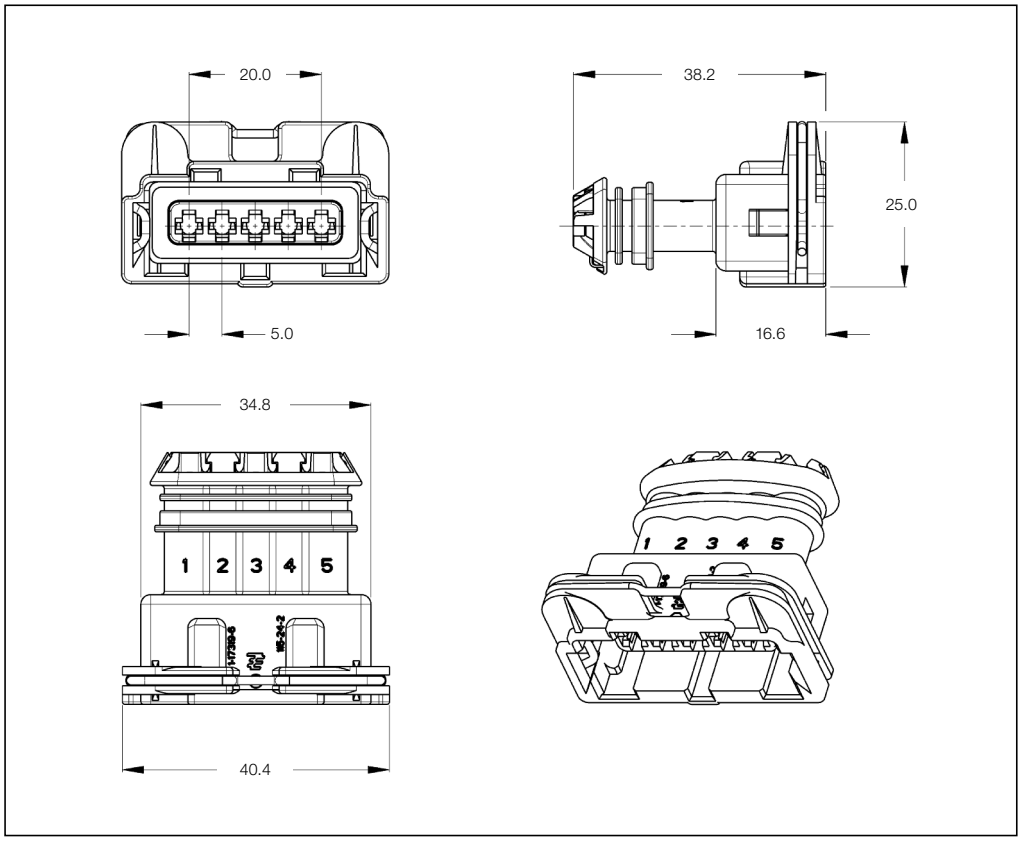
No. of Positions:
5 Position Type B
for Aggregate Applications

Housing Material:
PA66 GF

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



5 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
5	–	Black	282766-1	–	–	–	–	–	–
		Gray	282766-2						

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

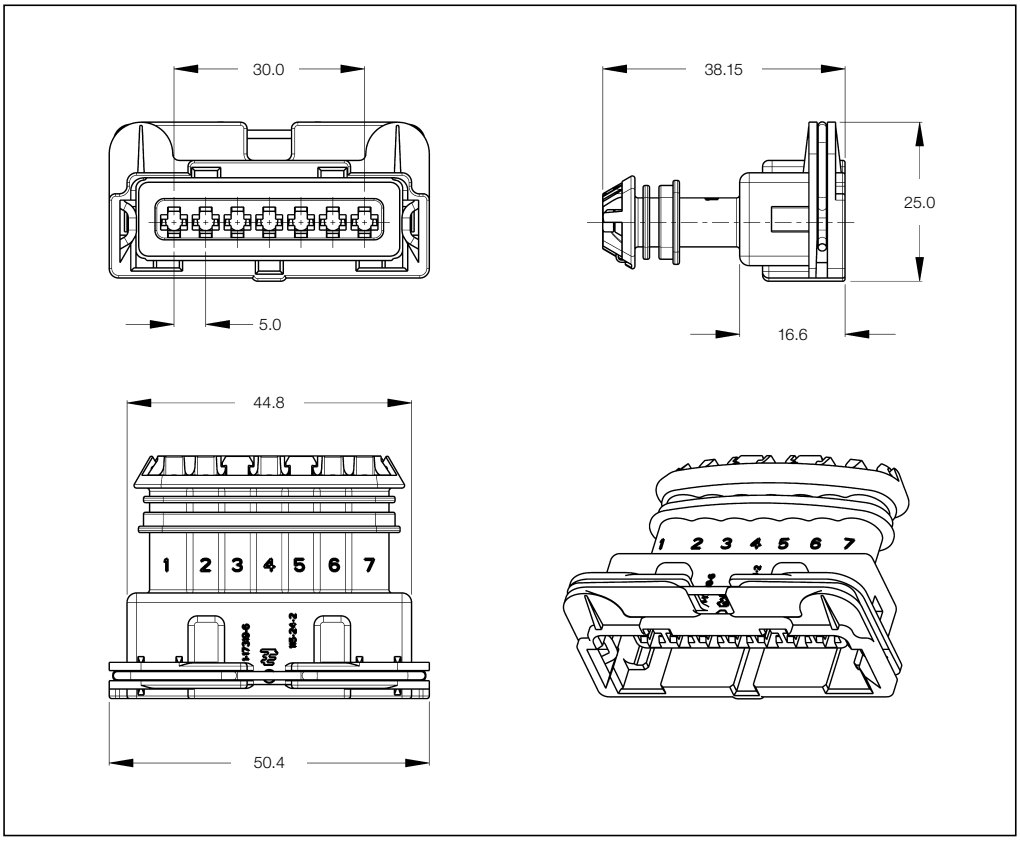
No. of Positions:
7 Position
for Aggregate Applications

Housing Material:
PA66 GF

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



7 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
7	–	Black	282768-1	–	–	–	–	–	–
		Gray	282768-2						

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

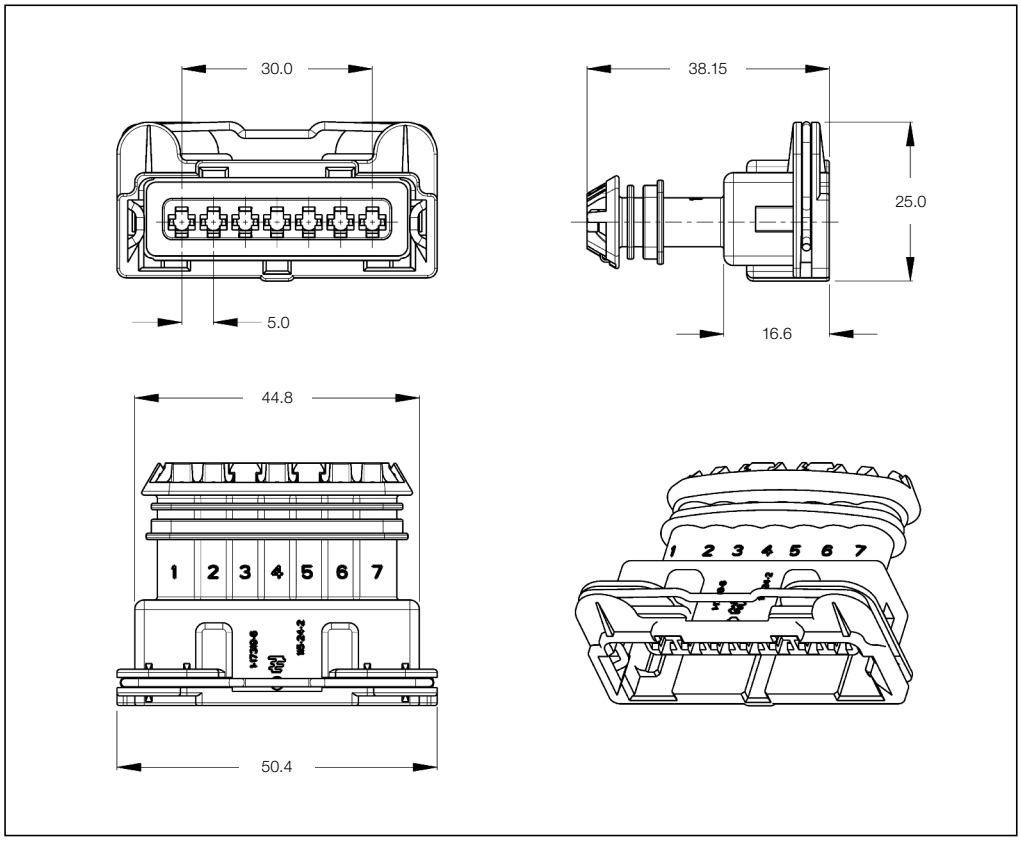
No. of Positions:
7 Position
for Aggregate Applications

Housing Material:
PA66 GF

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



7 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
7	–	Black	282194-1	–	–	–	–	–	–
		Gray	282194-2						

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

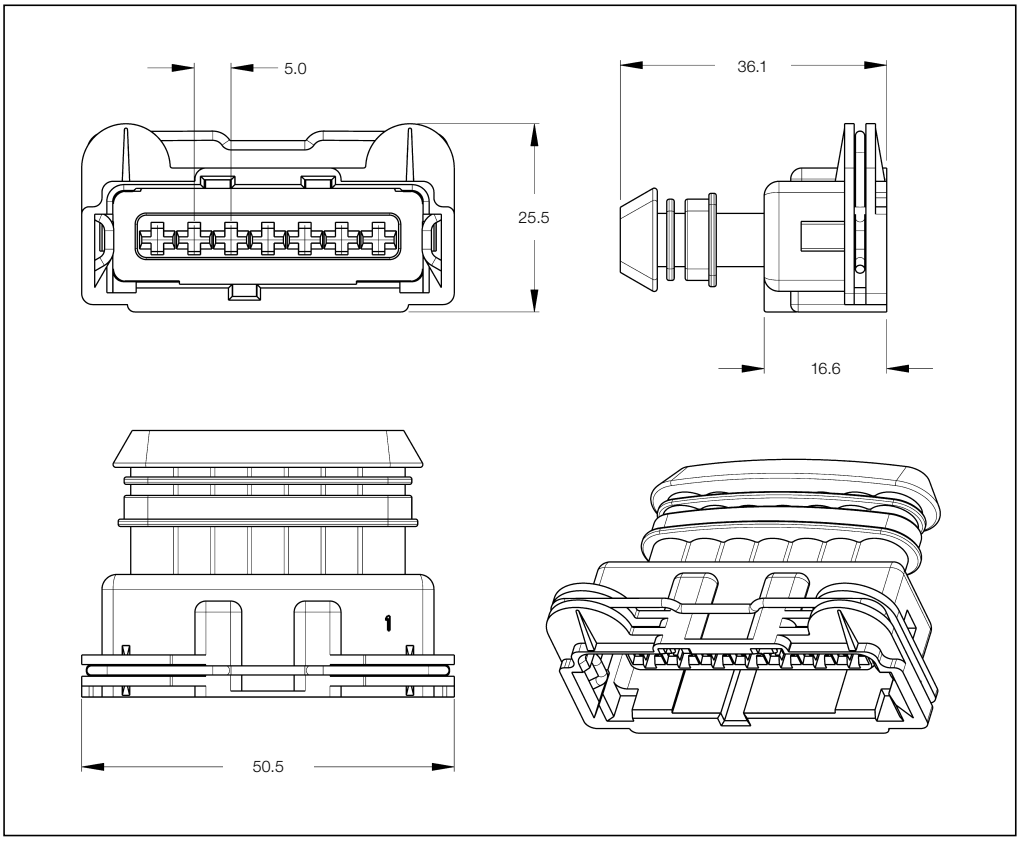
No. of Positions:
7 Position
for Aggregate Applications

Housing Material:
PBTP GFV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



7 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
7	–	Natural	828919-0	–	–	–	–	–	–
		Gray	828919-1						
		Black	828919-2						
		Brown	828919-3						
		Blue	828919-4						
		Gray	828919-5						

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

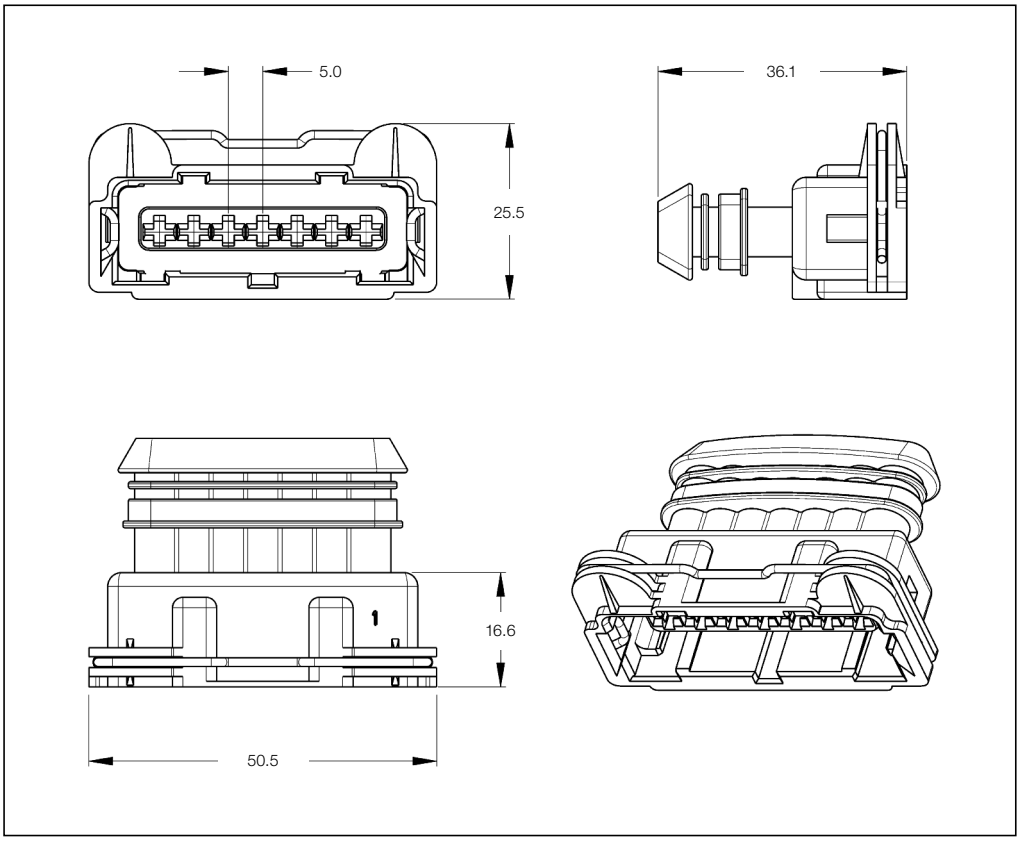
No. of Positions:
7 Position
for Aggregate Applications

Housing Material:
PBTP GFV30

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



7 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
7	–	Natural	828918-0	–	–	–	–	–	–
		Gray	828918-1						
		Black	828918-2						
		Brown	828918-3						
		Blue	828918-4						
		Green	828918-5						

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

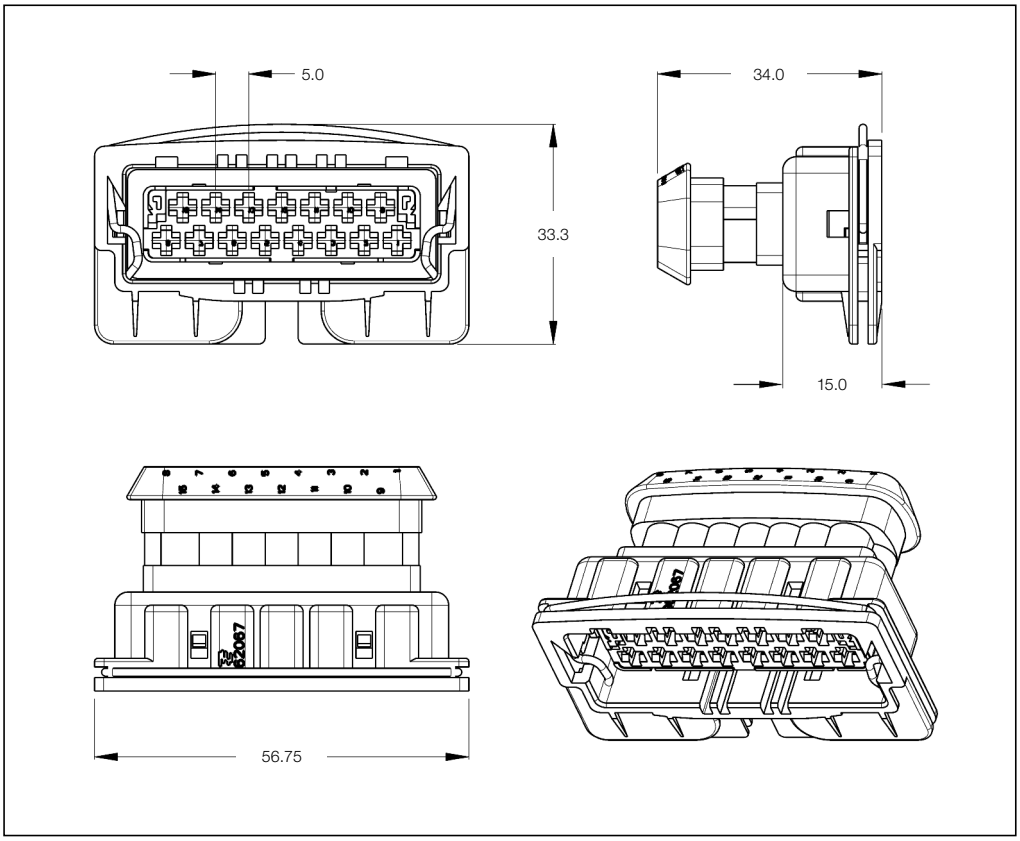
No. of Positions:
15 Position
for Aggregate Applications

Housing Material:
PBTP GV15

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



15 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
15	–	Black	963039-1	–	–	–	963035-1	–	–
		Gray	963039-2						

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

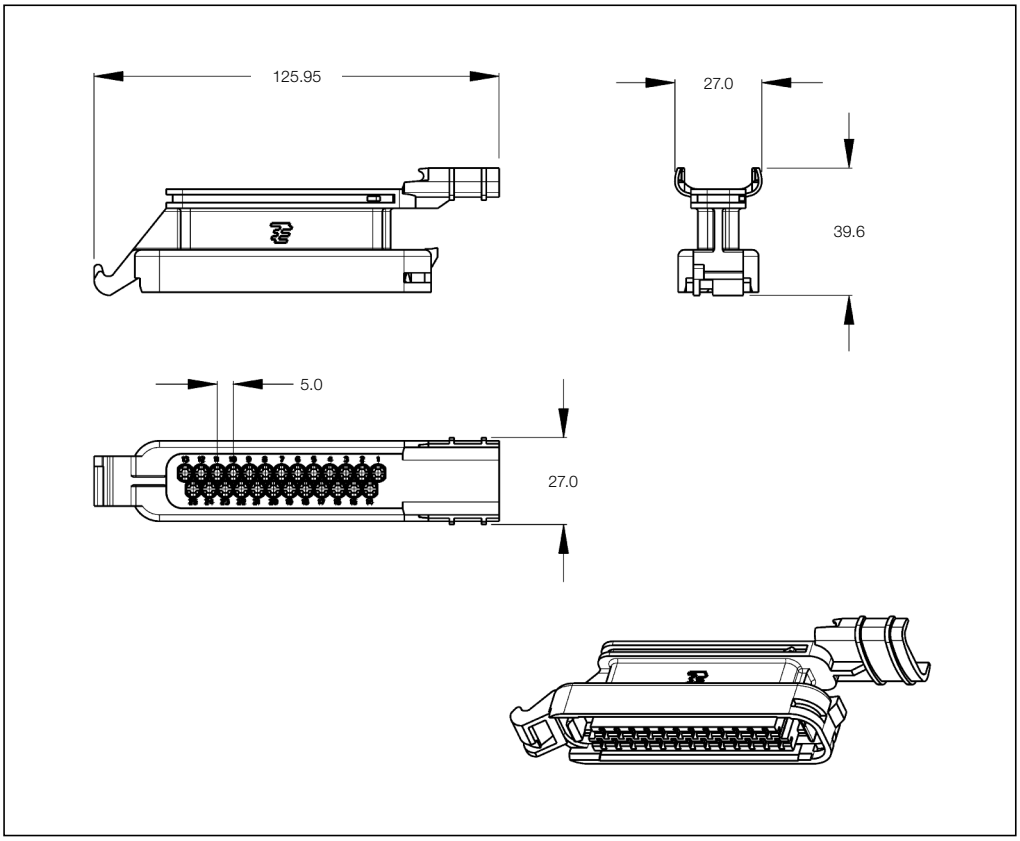
No. of Positions:
25 Position
for Aggregate Applications

Housing Material:
PA66 GF

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



25 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
25	–	Black	281810-1	281812-1	–	–	–	827050-1	–
		Gray	281810-2						

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

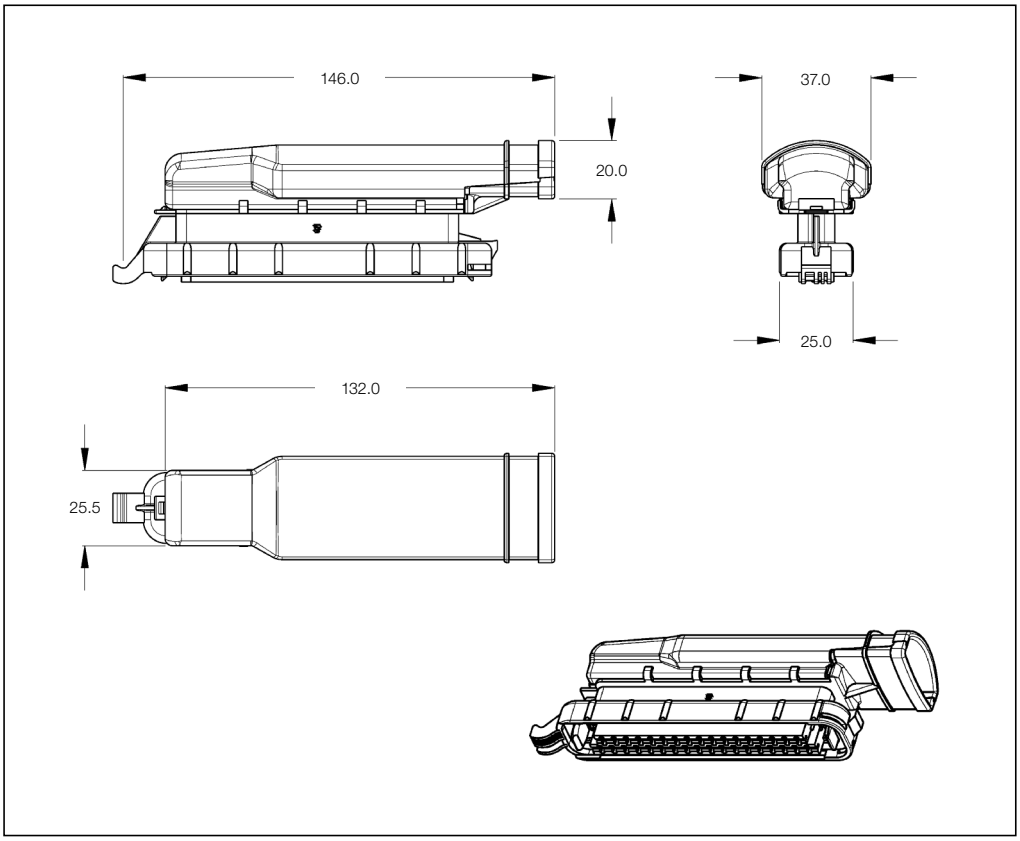
No. of Positions:
35 Position
for Aggregate Applications

Housing Material:
PA66 GF

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



35 Position Receptacle Housings, Standard Version

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
35	–	Black	282195-2	281812-1	–	–	–	825213-1	827254-1

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

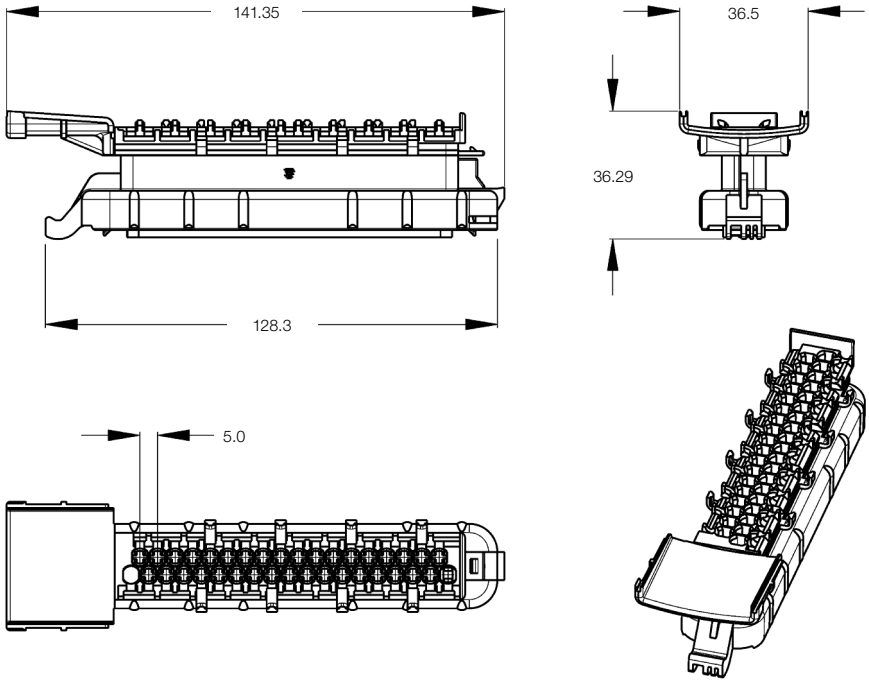
No. of Positions:
35 Position
for Aggregate Applications

Housing Material:
PA66 GF

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



35 Position Receptacle Housings, Opposite Cable Exit

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
35	–	Black	282197-2	–	–	–	–	825213-1	827254-1

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

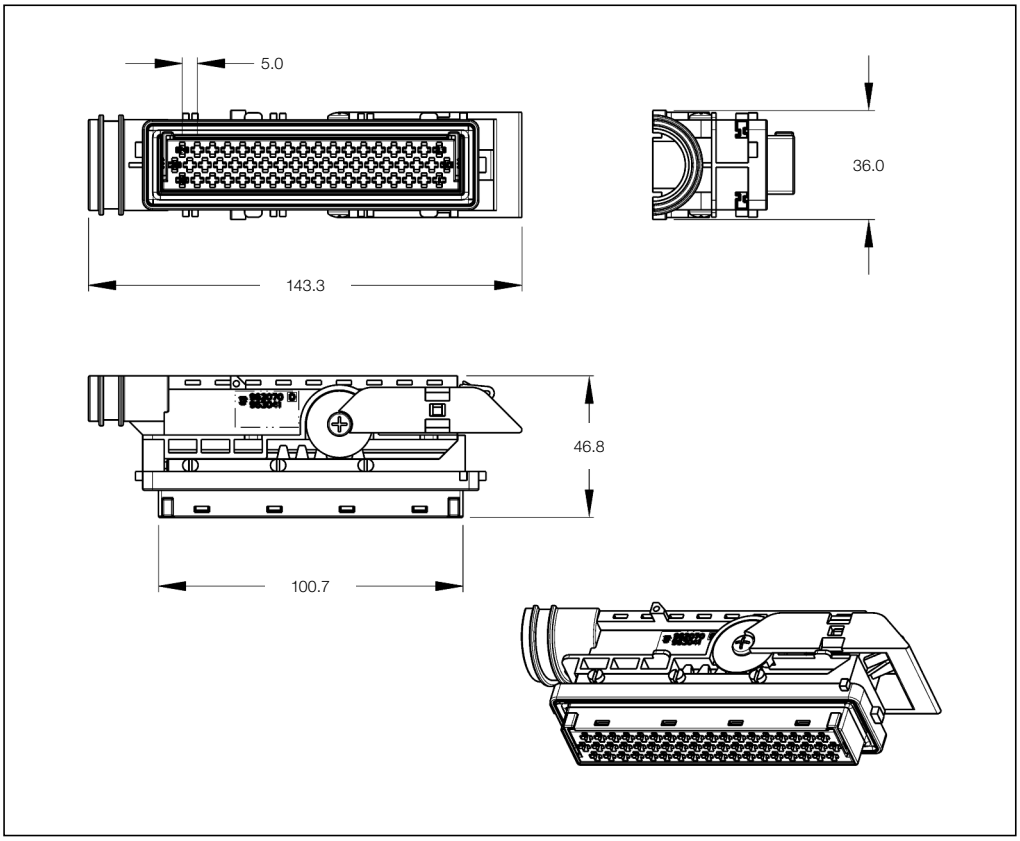
No. of Positions:
55 Position
for Aggregate Applications

Housing Material:
PBT GF15

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



55 Position Receptacle Housings, Opposite Cable Exit

No. of Pos.	Keying Options	Housing Color	Part Numbers						
			Receptacle Housing	Cover	Locking Device	Cover and Lever	Mating Tab Housing	Mating PCB Header Right-Angle	Vertical
55	–	Black	963041-1	962071-1	–	–	–	963042-2	–

Tab Housings for Contacts 21.0 mm Length

Technical Features

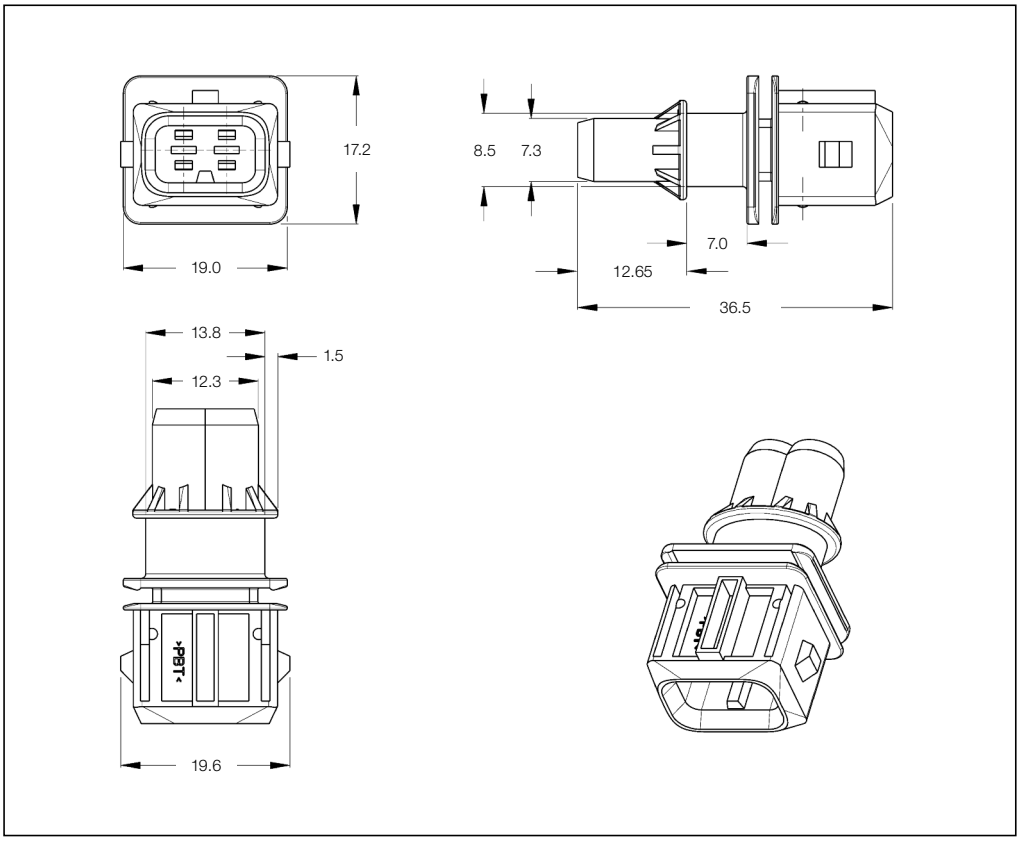
No. of Positions:
2 Position
for Aggregate Applications

Housing Material:
PBT

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



2 Position Tab Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			Tab Housing	Cover	Locking Device	Cover and Lever	Retainer Housing	Mating Receptacle Housing
2	–	Black	106462-1	–	–	–	–	282762-1/-8
								282190-1/-8
								282189-1/-8
								963040-1/-3

Tab Housings for Contacts 21.0 mm Length

Technical Features

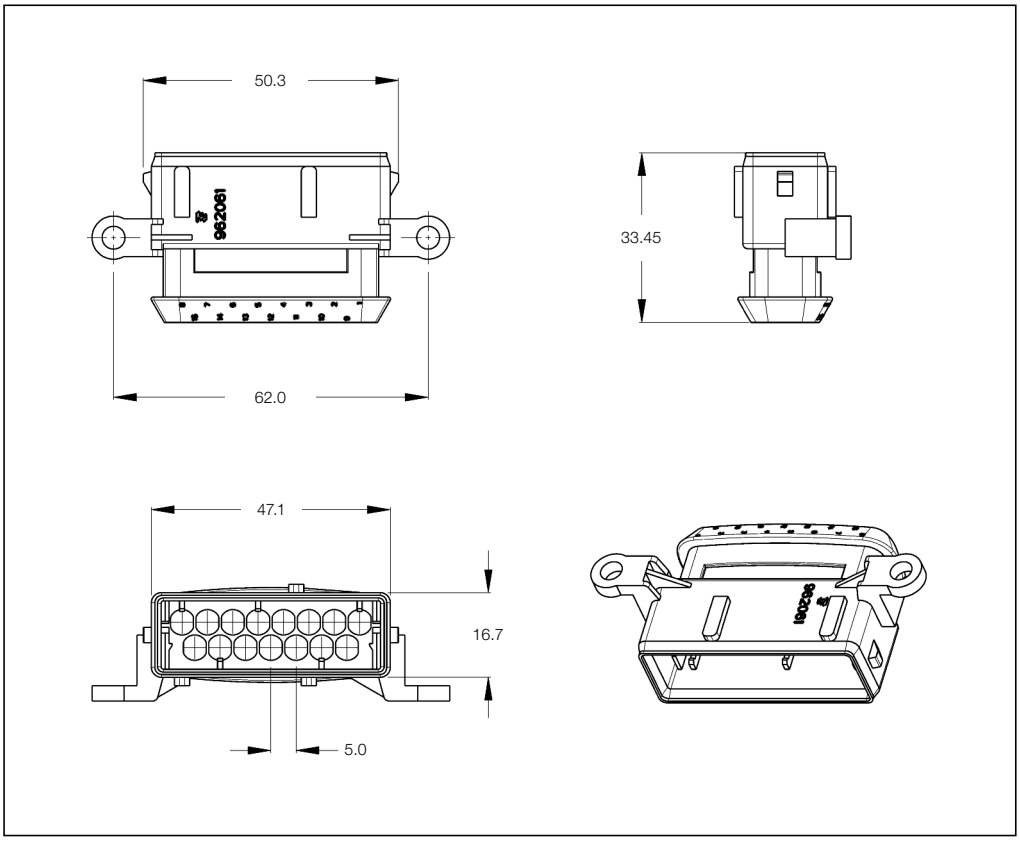
No. of Positions:
15 Position
for Aggregate Applications

Housing Material:
PBTP GV10

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
—



15 Position Tab Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			Tab Housing	Cover	Locking Device	Cover and Lever	Retainer Housing	Mating Receptacle Housing
15	–	Gray	963035-1	–	–	–	–	963039-1
		Black	963035-2					963035-2
		Black	963035-3					–

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

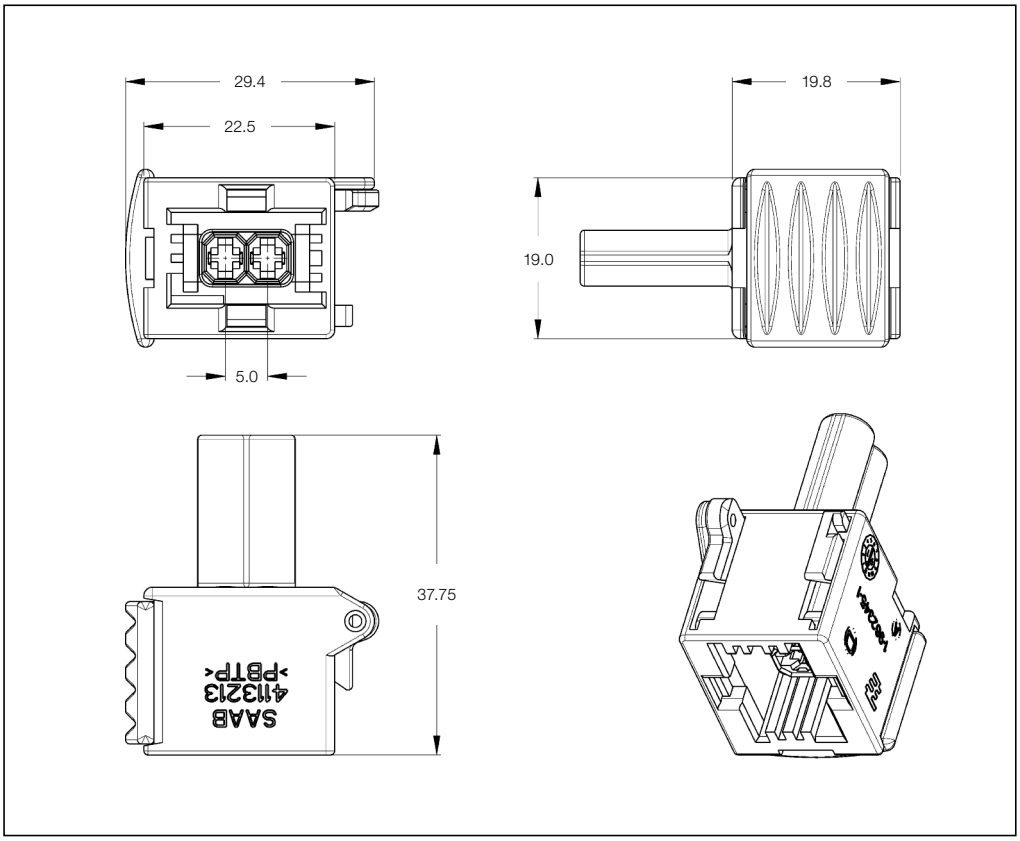
No. of Positions:
4 Positions

Housing Material:
PBT GFV30

Wire Size Range:
See customer drawing

Product Specification:
108-18102

Application Specification:
114-18175



4 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			Receptacle Housing	Cover	Mating Tab Housing	Facial Sealing	Mating PCB Header Right-Angle	Vertical
4	A1	Black	1-967239-1	–	1-965421-1	–	–	–
	B1	Gray	2-967239-1	–	2-965421-1	963209-1	–	–
	C1	Gray	3-967239-1	–	–	–	–	–

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

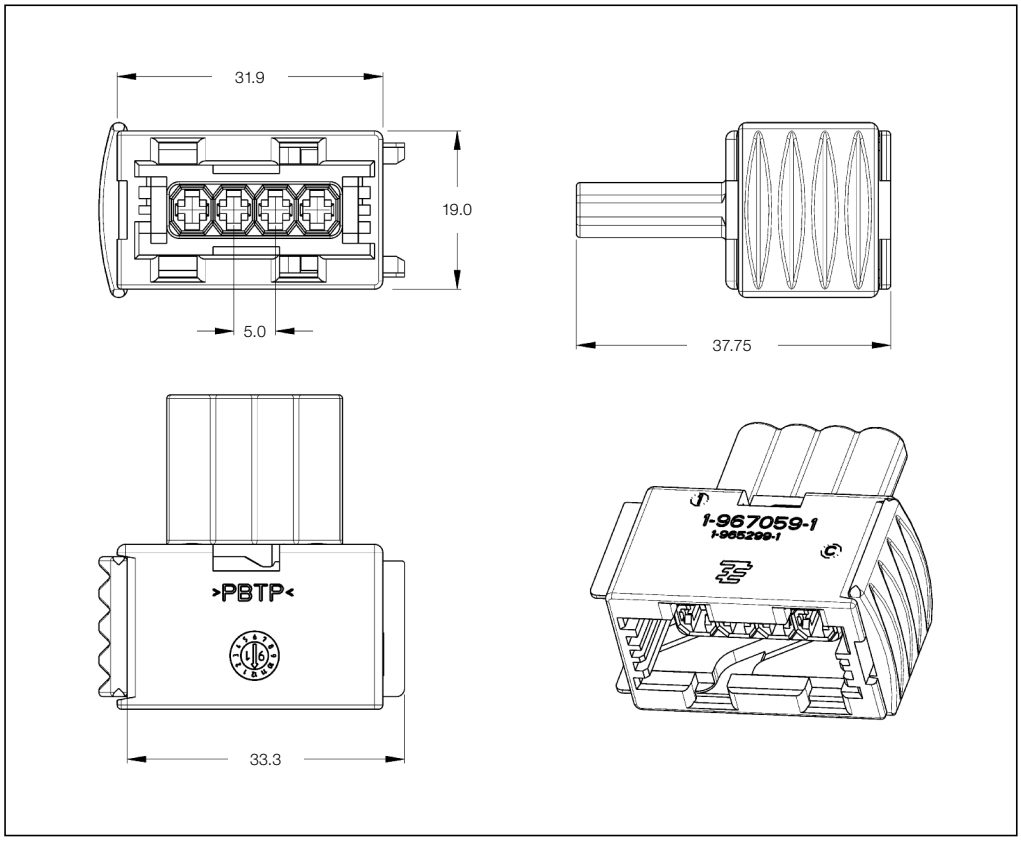
No. of Positions:
4 Positions

Housing Material:
PBT GV30

Wire Size Range:
See customer drawing

Product Specification:
108-18102

Application Specification:
114-18175



4 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			Receptacle Housing	Cover	Mating Tab Housing	Facial Sealing	Mating PCB Header Right-Angle	Vertical
4	A	Black	1-967059-1	–	1-965261-1	–	–	–
	B	Gray	2-967059-1	–	2-965261-1	963208-1	–	–
	C	Blue	3-967059-1	–	3-965261-1	–	–	–

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

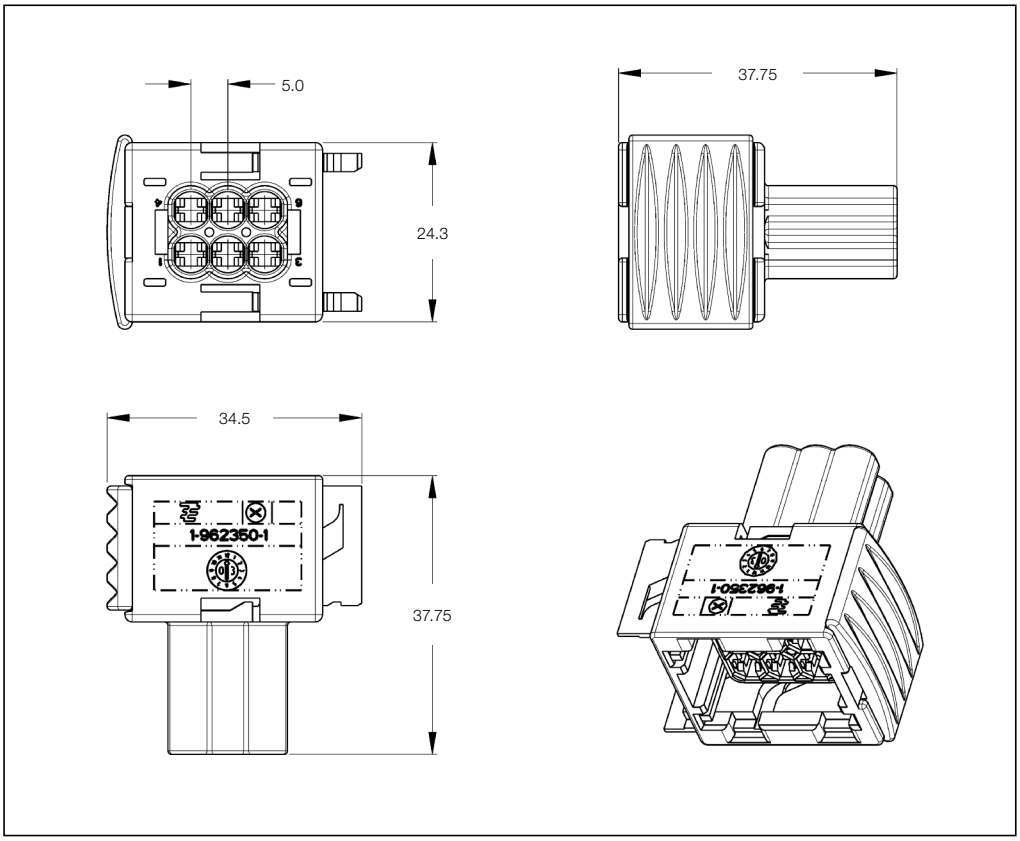
No. of Positions:
6 Positions

Housing Material:
PBT ASA GF30

Wire Size Range:
See customer drawing

Product Specification:
108-18102

Application Specification:
114-18175



6 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			Receptacle Housing	Cover	Mating Tab Housing	Facial Sealing	Mating PCB Header Right-Angle	Vertical
6	A1	Black	1-967241-1	–	1-965426-1	963205-1	1-963211-1 (A1)	–
	B1	White	5-967241-1	–	–	–	2-963211-1 (B1)	–
	–	–	–	–	–	–	3-963211-1 (C1)	–
	–	–	–	–	–	–	4-963211-1 (D1)	–
	–	–	–	–	–	–	5-963211-1 (Neutral)	–

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

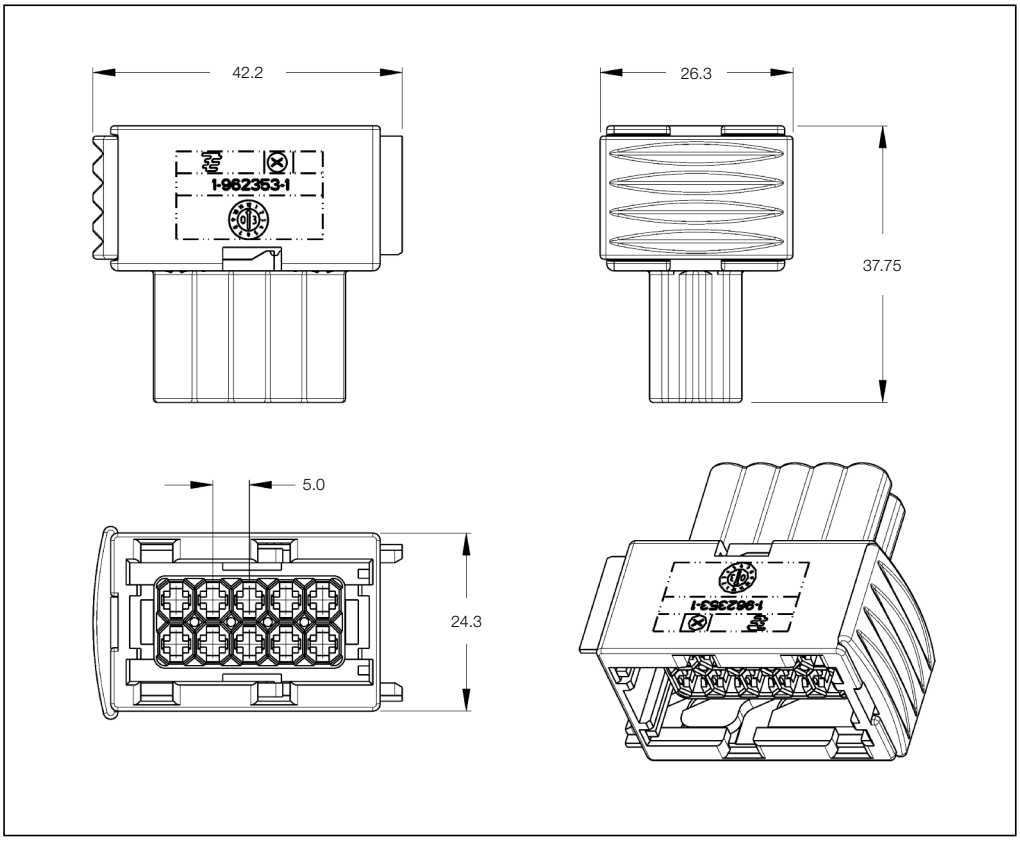
No. of Positions:
10 Positions

Housing Material:
PBT ASA GF30

Wire Size Range:
See customer drawing

Product Specification:
108-18102

Application Specification:
114-18175



10 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			Receptacle Housing	Cover	Mating Tab Housing	Facial Sealing	Mating PCB Header Right-Angle	Vertical
10	A1	Black	1-967240-1	–	1-965423-1	963213-1	1-967601-1	–

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

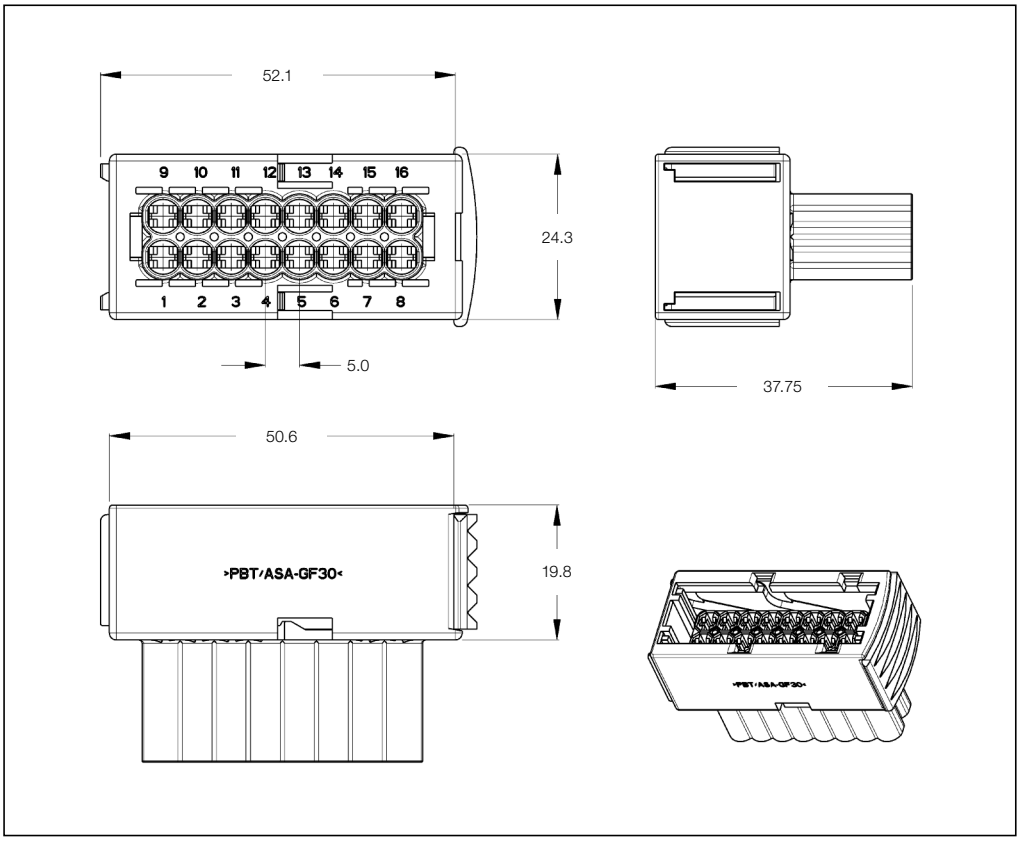
No. of Positions:
16 Positions

Housing Material:
PBT ASA GF30

Wire Size Range:
See customer drawing

Product Specification:
108-18102

Application Specification:
114-18175



16 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			Receptacle Housing	Cover	Mating Tab Housing	Facial Sealing	Mating PCB Header Right-Angle	Vertical
16	–	Black	1-967242-1	–	1-964449-1	963216-1	1-963215-1 (A1)	–
							2-963215-1 (B1)	–
							3-963215-1 (C1)	–
							4-963215-1 (D1)	–
							5-963215-1 (Neutral)	–

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

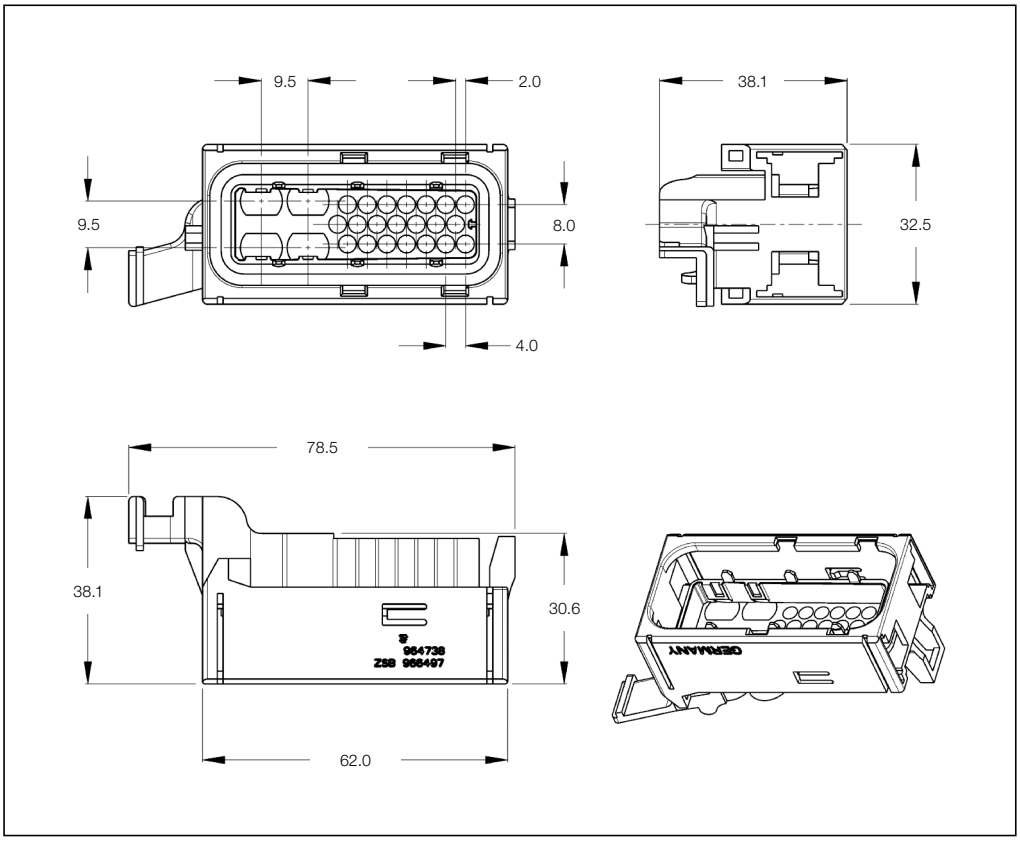
No. of Positions:
25 Positions

Housing Material:
PBT GF10

Wire Size Range:
See customer drawing

Product Specification:
—

Application Specification:
114-18175



25 Position Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			Receptacle Housing	Cover	Mating Tab Housing	Facial Sealing	Mating PCB Header Right-Angle	Vertical
25	–	Black	964769-1	964738-1	–	–	–	–

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

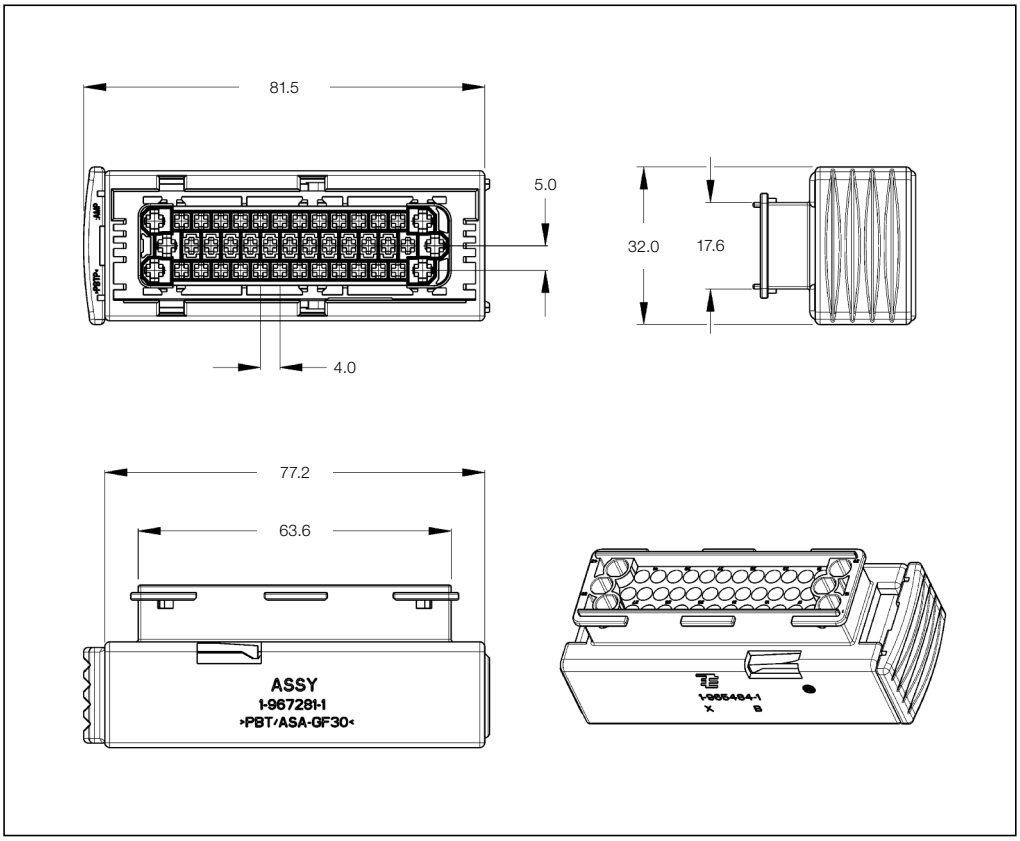
No. of Positions:
42 Position
6 x Junior PowerTimer
36 x Micro Timer II

Housing Material:
PBT GF30

Wire Size Range:
0.5–2.5 mm^2

Product Specification:
—

Application Specification:
—



42 Position Mixed Receptacle Housings

No. of Pos.	Keying Options	Housing Color	Part Numbers					
			Receptacle Housing	Cover	Mating Tab Housing	Facial Sealing	Mating PCB Header Right-Angle	Vertical
42	–	Black	1-967281-1	–	–	963225-1	1-967280-1	–

Receptacle Housings for Contacts 21.0 mm Length

Technical Features

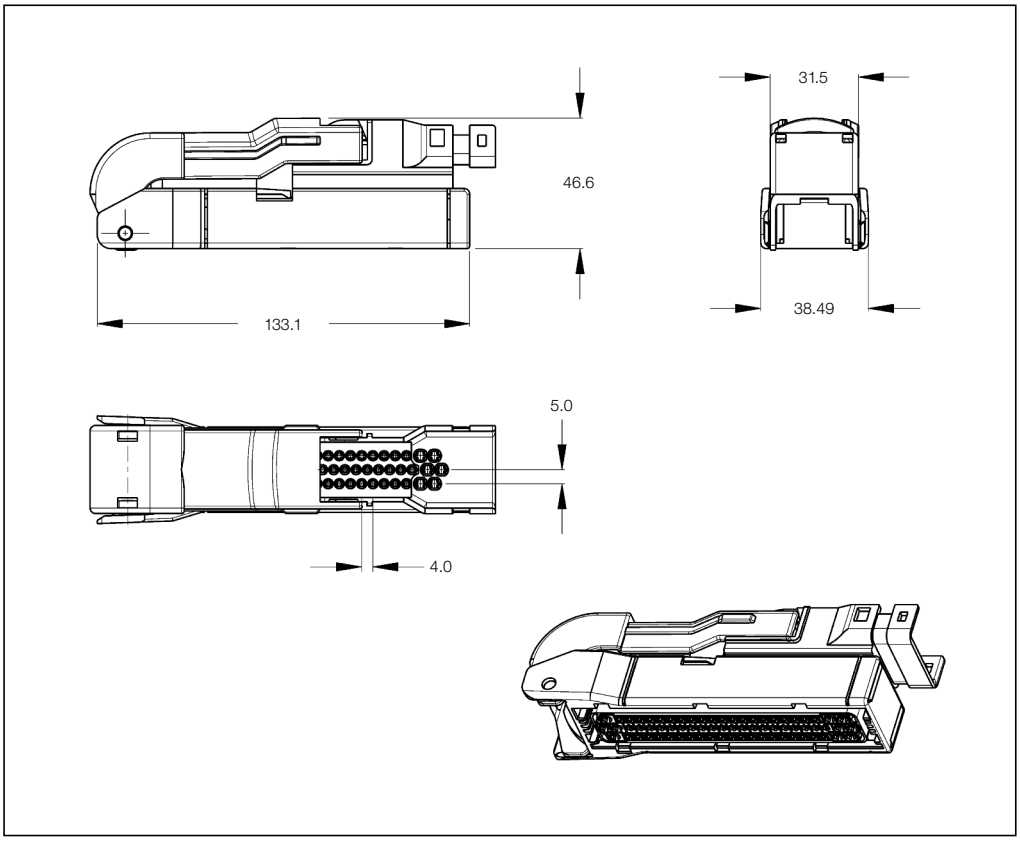
No. of Positions:
70 Position
10 x Junior PowerTimer
60 x Micro Timer II

Housing Material:
PBT GF30

Wire Size Range:
0.5–2.5 mm^2

Product Specification:
—

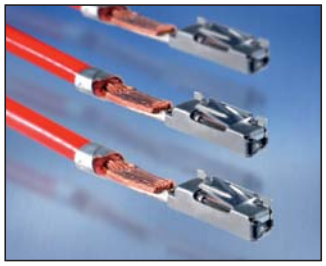
Application Specification:
—



70 Position Mixed Receptacle Housings

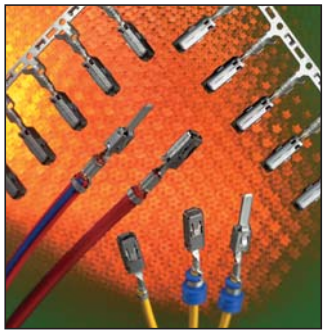
No. of Pos.	Keying Options	Housing Color	Part Numbers					
			Receptacle Housing	Cover	Mating Tab Housing	Facial Sealing	Mating PCB Header Right-Angle	Vertical
70	–	Black	1-968879-1	–	–	963361-1	1-963484-1	–

Engineering Notes



The TE Connectivity Application Tooling group is dedicated to providing high quality equipment options to meet all levels of your connector product specifications. We are also able to provide a broad range of equipment for other manufacturer's products.

Our equipment range is vast and unmatched by others operating in the same industry segments, as is our global presence and support network in the form of field service engineers and product managers. You will see from browsing this catalog; we supply everything from simple hand tools to the most complex automated systems – you name it, we supply it!



Equipment is segregated into two categories:

Generic Equipment

Where we can supply you with sufficient information referenced by Part Number such that you can identify and order what you need yourself.

Specialized Equipment

Where you will need help from our specialist product managers to identify what's just right for your application.

Finding Equipment Online

Powerful search functions are available to identify appropriate tooling:

- Applicators — www.tooling.te.com/europe/applicator.asp
- Hand Tools — www.tooling.te.com/europe/handtools.asp

Pin Insertion Machine

TE Connectivity Insertion Machine platforms combined with performance enhancing accessories provide the flexibility to meet a wide range of customer requirements in the manufacturing of printed circuit boards.

Our goal is to provide the optimal solution for the production needs of our customers.
Our representatives can help you select the optimal machine configuration. The benefit to you is a low cost investment that more than your requirements of output and quality.

TE Connectivity Field Service is available to service and support the machines to help maximize uptime.
Our full line of Insertion Machines have been designed to deliver highest quality and maximum performance within their range of applications.

P 100
Pin Insertion Machine

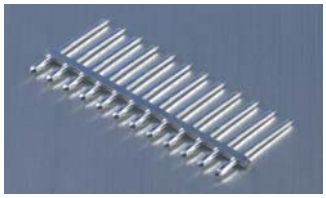
The P 100 is a semi-automatic machine and the newest addition to the line of TE Connectivity pin insertion systems. Designed and manufactured with a focus on mid-volume level production, the P 100 machine provides a broad range of features at a very competitive price.
With the ability to apply both TE Connectivity and other manufacturer's products, the P 100 machine does not limit your production to "TE Connectivity only" applications and provides flexibility to address both current and future tooling needs.

The P 100 machine uses a pneumatic power unit together with product specific "quick change" tooling packs.
The Insertion heads can be supplied with a rotary insertion finger that can apply products at different angles without decreasing the insertion rate.

The tooling packs can be exchanged within 30 minutes to meet your full range of application requirements.
The operator interface is an easy to use touch-screen which allows simple programming and automatic setup.

For more detailed information please visit our websites:
www.tooling.te.com • www.tooling.te.com/europe • www.tooling.te.com/china

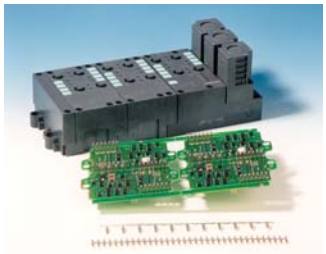
P 200 Semi-Automatic Bench Machine for PCB Processing



The P 200 semi-automatic bench machine positions manual loaded PCBs under an installed tool. The tool may be a solder head, a camera for automatic inspection, or an insertion head for the application of TE Connectivity products. Insertion tools for TE Connectivity products are composed of an insertion head (upper tooling), an anvil (lower tooling) and a product feeding mechanism.

These tools are product specific and the PCB holder interface is designed according to the customer application.
A rotary insertion finger allows the insertion of pins at different angles. Because of simple mechanical and electrical interface, other tools can easily be integrated into the machine. The excellent performance of a multi-tasking control system allows easy programming and operation of the machine.

P 300 Fully-Automatic Machine for PCB Processing



For the automatic assembly of printed circuit boards, the basic P 300 fully-automatic machine is equipped with a product specific insertion head. A speciality is the rotary insertion finger which allows the products to be inserted in different angles of rotation.
A stepper-motor driven XY table positions the printed circuit boards under the insertion head. The control and monitoring of the insertion process is carried out by a multi-tasking control unit.
There are three possibilities for programming the machines: off-line on a connected PC, by entering coordinates on the control panel of the machine or by converting CAD data.
A series of options also allows the P 300 fully-automatic machine to be adapted to the most varied manufacturing tasks.

For more detailed information please visit our websites:
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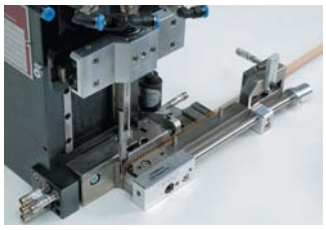
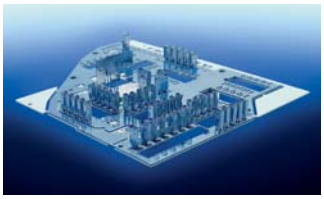
P 350 Fully-Automatic Insertion Machine for High Volumes



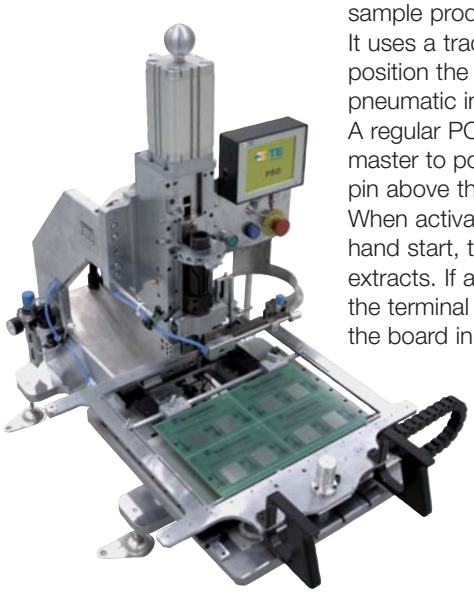
The P 350 is a fully-automatic insertion machine with the ability to handle a large variety of TE Connectivity terminals as well as customer specific terminals. A standard P 350 machine comes with 3 base insertion tools mounted onto an automatic tool changer. The tool changer can take up to 4 insertion tools/support tools. These base tools can easily be equipped with existing or customer specific conversion kits for a large range of terminals.
All heads are equipped with rotary insertion fingers to allow the insertion of terminals at different angles without the need to rotate the board.
The PCB transfer belts enable the machine to be incorporated into an automatic production line.
A standard Insertion Force Monitoring system allows for real-time force monitoring for 100% quality assurance for each press-fit terminal. Its operator interface has been designed for easy use and provides the insertion force and a variety of production data to be collected at an open interface. With a maximum insertion rate of 4.5 cycles per second we provide a production capacity which is difficult to match in the market place. The programmable insertion of two 0.63 mm pins per cycle doubles the output.

Single Pin Repair Station

A loose-piece pin or tab is placed in the product specific insertion finger of the arbor press, the PCB is placed on the support anvil and the pin or tab is manually pressed into the board.



P 50 Manual Bench Insertion Machine



The P 50 Insertion machine is a manual operated bench machine for low volume production, repair work and sample production.
It uses a trader slide to position the PCB under the pneumatic insertion head.
A regular PCB is used as master to position the indexing pin above the insertion hole.
When activating the two hand start, the indexing pin extracts. If a hole is detected, the terminal is inserted into the board in production.

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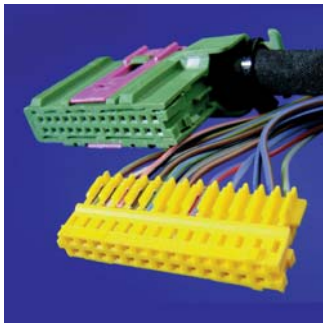
IWS 188 IDC Workstation

The IDC workstation produces electrical connections for harness assemblies specifically intended for the use within dashboard applications in the automotive industry. The proven insulation displacement technology ensures a high level of reliability.
The software allows the production of different harness configurations featuring up to 11 connectors. The work-station is compatible with IDC connectors with a 2.54 mm and a 3.5 mm pitch. It is intended for medium to large volume production.

MT-E2 F Semi-Automatic Machine



The development of this termination machine was necessary to be able to process high cavity-count female connectors in IDC technology. The new multi-cavity motor-control interface connectors are used in damp areas in cars and must be completely water-proof, hence the use of a family seal over the insulation displacement contacts.
The pitch of the cavities in the family seal corresponds to that of the connectors with their insulation displacement contacts.
The cavities in the family seal are closed by a membrane. An integrated programm controlled unit pierces the membrane, prior to the IDC termination.

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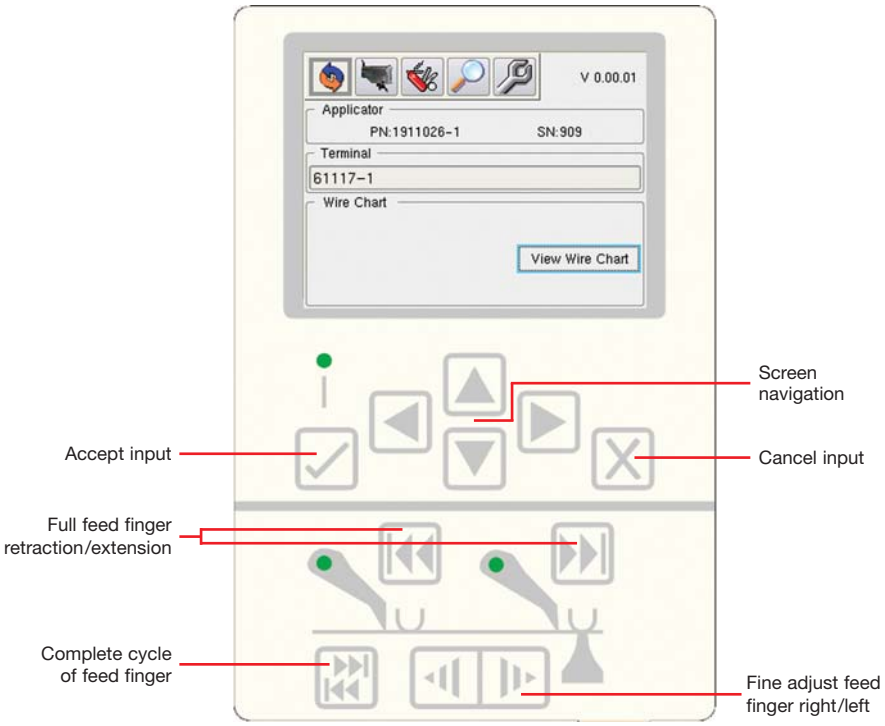
Precision Controller

The new Precision Controller provides an upgrade path for already installed equipment. By installing the Precision Controller onto a bench terminator or a Komax Gamma 333 PC lead maker, the System III-FA Applicator can be used. An integrated LCD screen allows the user to view the information contained on the iButton™ data module and the controller also allows the operator to accurately position the terminal feed and make fine adjustments.

iButton is a trademark of Maxim Integrated Products, Inc.

From the Precision Controller keypad, you can:

- Make fine feed adjustments
- Save the feed adjustments that were just made, or cancel them
- Perform full retraction or extension of the feed finger
- Perform a complete cycle of the feed finger



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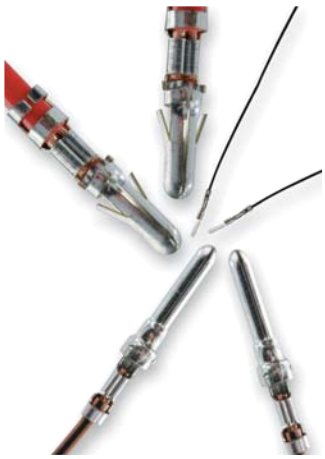
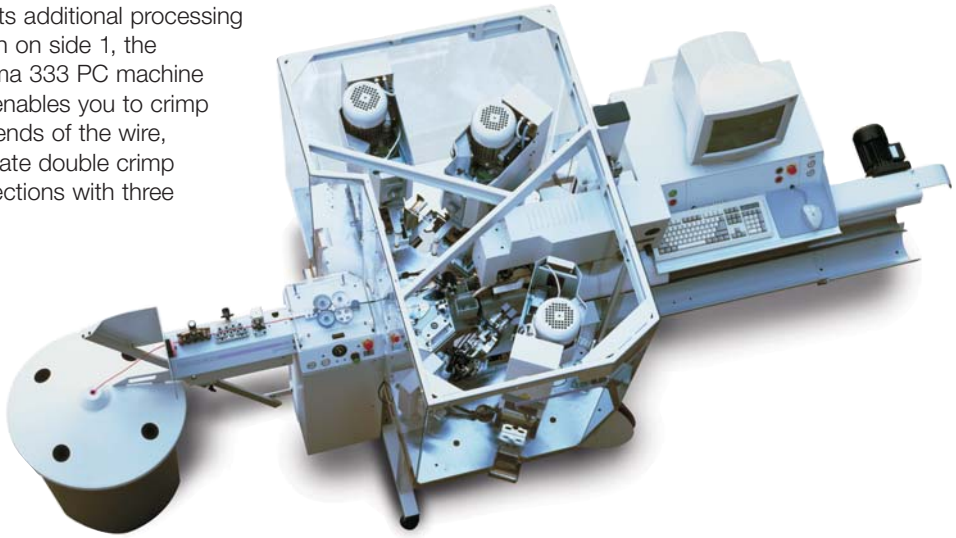
Gamma 255 Lead Maker Processing of Small Wire Sizes

The Gamma 255 Lead Maker is a flexible fully-automatic crimping machine for efficient wire processing. It processes cross sections in a range from 0.013 mm^2 up to 2.5 mm^2 in excellent quality. The entire cross section is processed using programmable, highly dynamic servo-drives and V stripping blades. As part of its standard equipment, the machine has a pre-feeder, splice, wire-end and knot detection, as well as two wire straightening units.



Gamma 333 PC Lead Maker Flexible Wire Processing

Ultra short conversion times, additional applications and a user-friendly interface with multiple-language capability. The Gamma 333 PC machine makes it all possible!
With its additional processing station on side 1, the Gamma 333 PC machine now enables you to crimp both ends of the wire, to create double crimp connections with three different contacts, to carry out one-ended seal application, tinning or ink-jet marking. In addition, process monitoring is integrated to ensure that the wire is cut to length and stripped perfectly to specification and that quality control is optimized.



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Alpha 355/355 S Lead Makers

The Alpha 355 and 355 S are four Station Lead Makers. The dual channel cutting head allows for a large range of wire sizes without blade changes. The drive unit for the cutting head is positioned beneath the wire line to give the machine an uncluttered and ergonomic design.

All processing stations are readily accessible through the vertically opening safety covers. Applicators, terminal reels and other parts for specific applications can be changed without tools.

Controls are positioned locally, allowing the corresponding machine functions to be triggered during set-up. All setting and adjustment procedures can be controlled from the TopWin™ user software in over 20 different languages.

Alpha 356 Multi-Functional Fully-Automatic Crimping Machine

The Alpha 356 fully-automatic crimping machine has room for up to seven processing stations. A wide variety of configurations are possible, in fact, almost any combination of crimping, seal loading, fluxing/tinning, twisting, fitting with insulating sleeves and end sleeves for strands as well as bulk turned contacts and customer-specific processes.
The Alpha 356 is designed for using the broadest selection of different processing modules, including special customer-specific modules.

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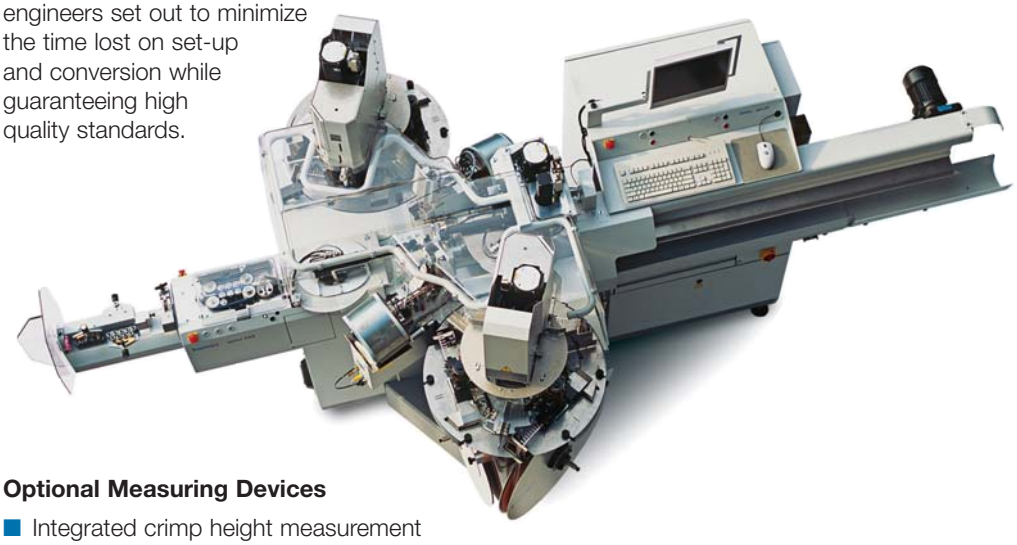
Alpha 358 Fully-Automatic Crimping Machine

The Alpha 358 fully-automatic crimping machine is designed for two-sided crimping and seal loading and sets new standards in the processing of long cables. Cables up to 35 meters (27.34 yards) in length can now be processed at high speed on a machine just four meters (4.37 yards) long. Coiling and binding cables directly in the fully-automatic crimping machine frees up substantial space and offers considerable quality advantages.

Alpha 455 Fully-Automatic Crimping Machine

The Alpha 455 crimping machine is designed especially for just-in-time production. Downtimes become crucial for companies that produce relatively small production batches requiring frequent conversions of the machine. With the Alpha 455 machine, engineers set out to minimize the time lost on set-up and conversion while guaranteeing high quality standards.

The mci 722R is the product that guarantees the efficient set-up of the fully-automatic Alpha 455 crimping machine. This innovative new rotary press table was specially developed for the Alpha 455 machine and allows the latter to be converted while production is still going on. The tools and terminals for the next two jobs are set-up while the current batch is still being produced.



Optional Measuring Devices

- Integrated crimp height measurement
- Integrated measurement of pull-out force
- Integrated referencing of wire lengths

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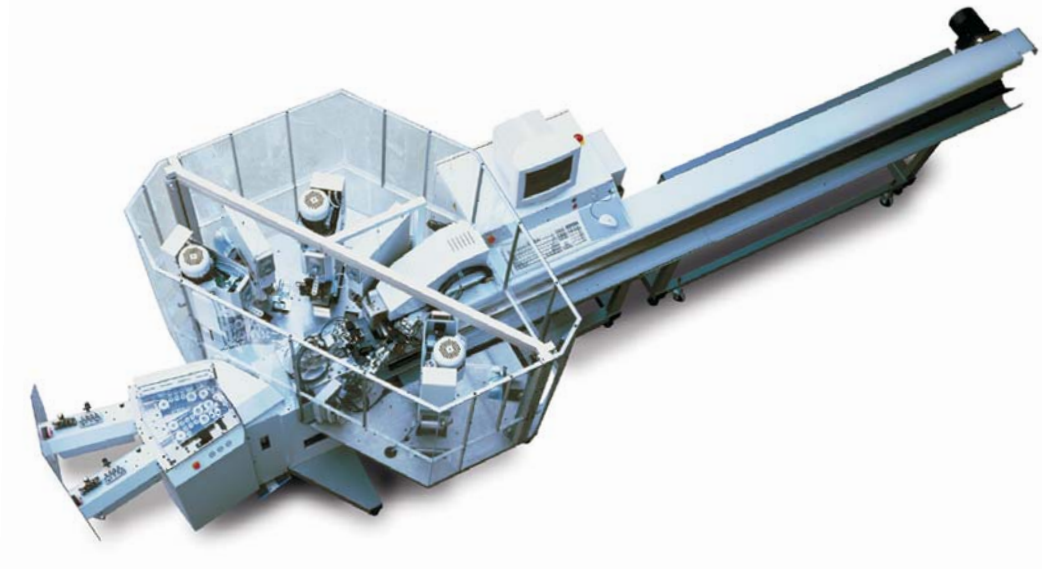
Alpha 477 Lead Maker Double Crimp Connections with Two Different Wires

The Alpha 477 machine allows the processing of a wide variety of wire combinations from a double crimp up to three different contacts, two different seals and two different wire sections.

The arrangement of six processing stations plus a double gripper unit make for highly diverse processing possibilities. As a result, the Alpha 477 machine can grow and expand to meet your future needs.

Individual wires with cross section of 0.22 mm^2 up to 4 mm^2 can be processed. The maximum total cross sections of a double crimp can be as large as 6 mm^2.



Alpha 488 Lead Maker Processing of Twisted Pairs

The Alpha 488 machine was designed for the economical processing of twisted pairs, consistently combining as it does state of the art technology with proven system elements like TopWin™ user-interface, the mci 712 or mci 722 crimp module.

The Alpha 488 machine creates fully processed twisted pairs from endless wire. This automatic twisting machine can accommodate wires with cross sections of 2 x 0.22 mm^2 to 2 x 2.5 mm^2. Four stations on side 1 and two on side 2 make for flexible processing possibilities such as double-ended seal application and crimping.

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Zeta 633/633 L Fully-Automatic Crimping Machine

The Zeta 633 and 633 L are highly flexible fully-automatic crimping machines for just-in time production. The flexible machine concept creates an almost unlimited number of possibilities for handling small jobs or wire sequences. The operator is able to reduce the required material change-overs and interruptions in production to a minimum.

The Zeta 633 crimping machine is ready to accom-modate five crimping presses and the 633L-Version can handle up to eight, for even more flexibility. Both Zetas can be used as stand alone machines with a bundler, as a basic machine for the block loader Zeta 651, Zeta 655 and Zeta 656 as well as for machines with an extension.

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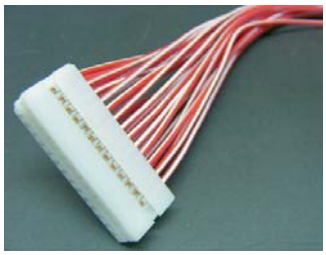
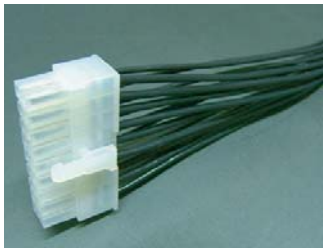
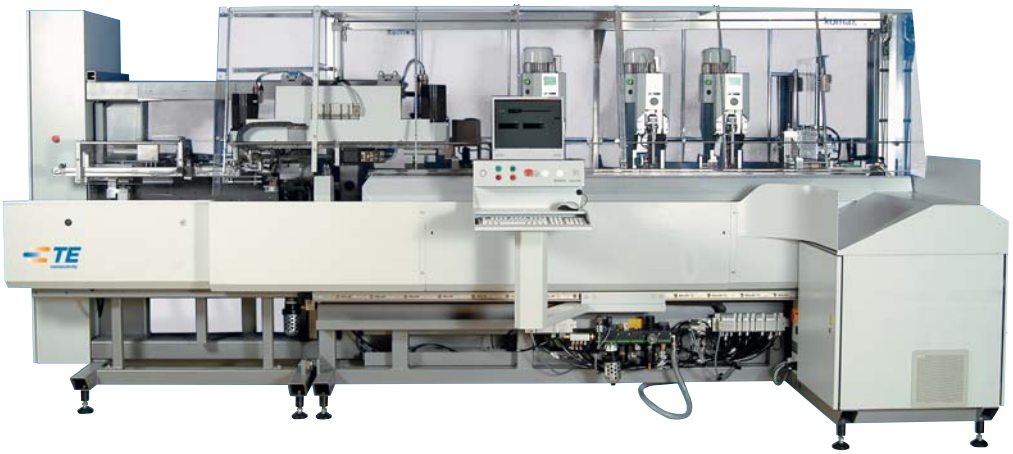
Zeta 651 Single End Block Loader

The Zeta 651 is the economical solution for the production of harnesses with single sided insertion in housings with one or two rows. This machine is especially characterized by a high degree of automation and the reliable insertion process.

The machine is used in combination with the flexible Zeta 633 base machine. By pre-centering the contacts, a reliable and precise insertion is guaranteed. By means of centering grippers, the contact can be centered and optionally rotated. The housings are feeded automatically and can be refilled without any process interruption. An integrated force sensor performs force monitoring throughout the entire insertion process and enables a high insertion quality. Operation of the Zeta 651 is via the slide console of the Zeta 633 with the user software TopWin™.







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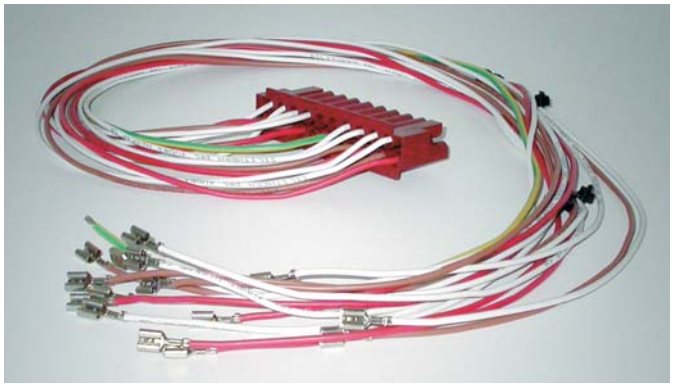
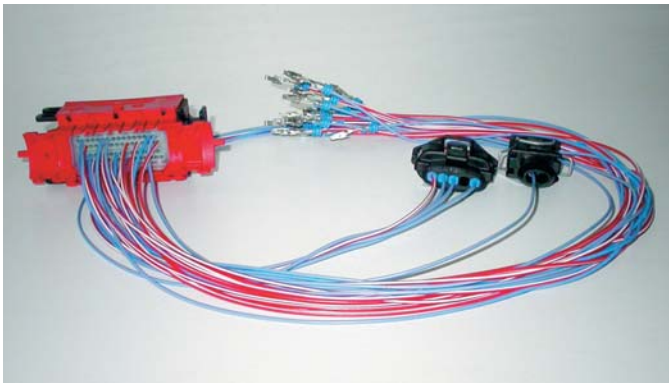
Zeta 655 / 656 Lead Maker Double End Block Loader

The Zeta 655/656 Lead Maker is the flexible solution for single and double-sided housing insertion. This machine is characterized by a high degree of automation and a reliable insertion process. The precise force sensor monitors the entire insertion process to guarantee seamless, integrated process monitoring as regards collisions, loading force and contact locking. The innovative quick change pallet system can replace the harness specific insertion application and convert to another harness. The Zeta 655/ Zeta 656 operates via the slide console of the Zeta 633 using TopWin™ software. The software automatically calculates the order of loading within a wire harness to make the set-up of new harnesses as simple as possible.
The fully-automatic Zeta 656 manufactures harnesses featuring conductor cross sections of 0.13 mm^2 and miniaturized housings with a pitch of 1.25 mm, doing so reliably and at high speeds.





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Ocean Series of Applicators

Why a new Applicator Design?

We standardized our applicator offerings to provide global design consistency and to offer you the ultimate flexibility with choices in feeding options.

The Ocean Applicators are designed so that all feed options are interchangeable with the common base applicator. Our pneumatic and mechanical feed options have been completely re-designed.

They offer finer and more precise terminal positioning along with quicker adjustability while being much more user friendly. The interchangeability also makes it possible to upgrade to System III technology.

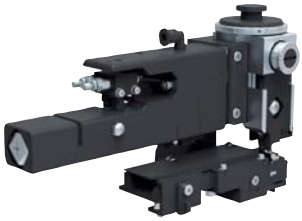
Advantages of the Ocean Applicators

- One applicator platform — modular family design
  - Two styles with three feed options: Mechanical, Pneumatic and Servo
- Same wire crimper, insulation crimper and anvil used on both applicator styles
- Open architecture allows for design flexibility
- Featuring a re-designed ram to housing interface for improved alignment and crimp consistency
- Finer incremental crimp height adjustment
- Improved and simpler adjustments on all feed units
- Simple and tool-less wire and insulation crimp height adjustments
  - Fine Wire crimp height adjustment
    Range = 0–1.5 mm
    Total Increments = 0.01 mm
  - Insulation Adjustment

Range (mm)	Step Size (mm)
3.30	0.19
1.70	0.10
0.85	0.05

  - Insulation step sizes are selected based on terminal application requirements
- Feed Types – Improved and simpler adjustments on all feed units
  - Mechanical – Micro-Feed Adjustments for forward and back strokes
  - Pneumatic – Incremental Adjustments
    - 0.04 mm forward terminal position
    - 0.08 mm back stroke adjustment
  - Servo – Push button terminal adjustments in 0.03 mm increments

Atlantic-Style SF Mechanical



Atlantic-Style SF Pneumatic

Atlantic-Style SF Servo

Pacific-Style Side-Feed Mechanical Applicator

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Applicator Wear Parts

Applicator Wear Parts Stocking Programm

To ensure the support of our installed Applicator base, we have established a stocking programm for wear parts.

Subsequently, all crimpers and anvils for your applicator are normally available ex stock, ensuring the shortest possible lead times.

Wear Tooling to Apply Stainless Steel Contacts

The application of nickel plated stainless steel terminals has always been a problem with regard to the uptime of the crimp tooling. We have developed crimpers and anvils, using special base materials and surface treatments in the crimp area. These have enabled us to significantly increased the tool life and thus reduce the applied cost of these products.

If you are experiencing specific wear problems in your production, please contact your TE Connectivity Service representative.

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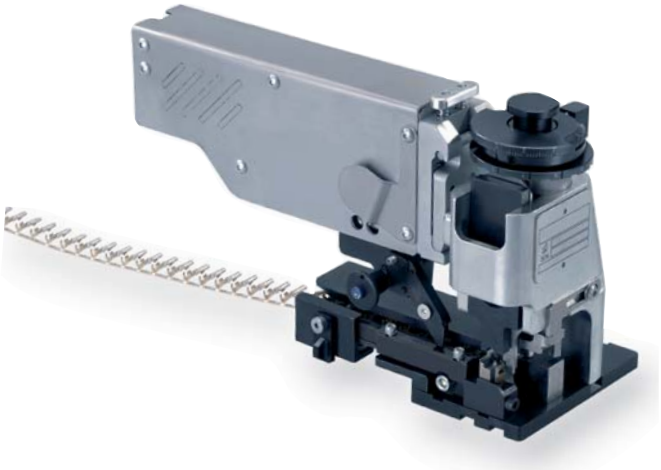
System III Applicator with Feeder

Flexible and efficient termination of single and double wire applications, self-adjustment of the feeder and optimum quality of wire termination are the main features of our new applicator – the System III Applicator.
All crimp-related data, which are specific for the applicator and the terminal to be crimped, are contained in an iButton™, being part of the applicator.
The main feature of the System III concept is a separate electrical feeder – which is communicating with the applicator iButton on one hand and the terminator and leadmaker on the other hand – and an automatical interaction between applicator and terminator.
Once the applicator is mounted onto the press and as soon as the electrical feeder (being permanently connected to the terminator) is locked onto the applicator, the applicator iButton data are read out and transmitted to the terminator via the feeder.
Then the terminator automatically adjusts its crimp height and the feeder its feeding parameters – according to the terminal wire combination to be crimped.



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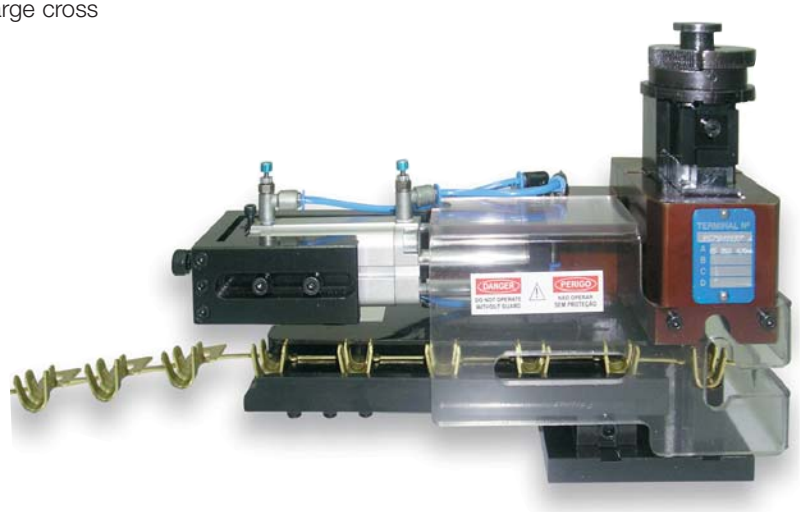
Applicator for Large Wire Sizes

For processing of large contacts, eg. for battery terminals, we offer heavy and solidly built tools, which are extremely precise in repetitive work for end-feed and side-feed contacts with large cross sections.
A pneumatically driven feed which is efficient and precisely adjustable, as well as a specially robust crimping unit, produce reliable connections which are extremely stable over the long term.



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AMP 3K/40 and AMP 5K/40 Terminators

Based on the field proven Model “G” Terminator, the AMP 3K/40 and AMP 5K/40 Terminators are the latest in a series of machines for wire termination using reeled terminals.

The AMP 3K/40 Terminator provides 13 kN (3,000 lb) crimp force and is capable of crimping approx. 2.5 mm^2 (14 AWG) wire size.

The AMP 5K/40 Terminator provides 22 kN (5,000 lb) crimp force and is capable of crimping approx. 6.0 mm^2 (10 AWG) wire size.

As value oriented Terminators, the AMP 3K/40 and AMP 5K/40 are designed for customers that require the increased output and quality of a semi-automatic machine at a competitive price.

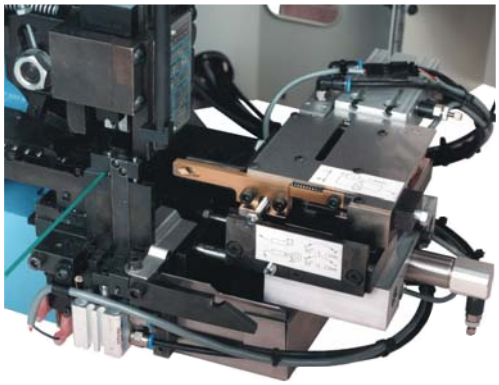
A wide range of optional equipment is available to meet your specific application requirements.

Stripping Module

The stripping module is compatible with AMP 3K/40 and 5K/40 terminators. A quick and flexible working process is supported by good accessibility to module adjustment and wire positioning. The stripping module was designed to produce good quality even used in the most harsh circumstances.

Following features characterize the stripping module

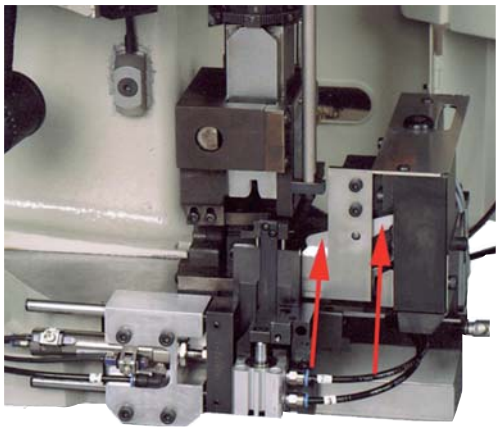
- Pre-selection Crimp only / Strip only / Strip and Crimp
- Jog Mode
- Pneumatic removal of insulation scraps



Defective Crimp Cutter (DCC) and Carrier Scrap Chopper (CSC)

When the CQM detects a bad crimp, the DCC unit will cut off the defective terminal. The wire will be cut close to the terminal.

- All DCC units are equipped with a Carrier Scrap Chopper (CSC).
- The DCC and/or CSC units can be easily hinged out of the way to allow easy access to change applicators.
- DCC provides more consistent wire placement accuracy capability due to the use of the grip jaws, compared to hand placing the wire in a terminator.
- DCC provides a scrap collection bin. It works with AWG 32-12 side-feed and end-feed HDM Style Applicators.



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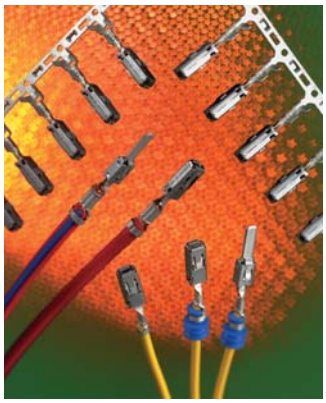
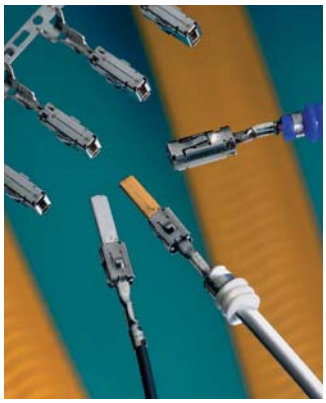
SC15 Stripper Crimper





The pneumatically and electrically driven SC15 crimping machine is a particularly efficient and operator friendly crimping machine with outstanding repetitive precision, which satisfies the highest requirements. It can be adjusted to the specific requirements of any given contact/cable connection.

If you

- want to strip a cable composed of many wires down to only 13 mm,
- would like to then insulate these single wires at 2 mm to 6 mm and thereby
- cover a wire size area of from 0.09 mm^2 to 4 mm^2 then with the Stripper Crimper SC15 machine you have made the right decision.

Further features are:

- Automatic bare wire recognition
- Crimp force monitoring
- Remote diagnoses via serial interfacespecific requirements of any given contact/cable connection.

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Crimp Quality Monitor II (CQM II)

Simply put, crimp height measurement is the best non-destructive way to ensure the quality of a crimped terminal. A proper crimp height ensures the mechanical and electrical properties of the crimp meeting the stringent application specifications designed by the terminal engineer.

Crimp Height is one of five different process analysis methods featured in the new TE Crimp Quality Monitor II (CQM II). The CQM II uses five different analysis methods to provide flexibility and ensure quality crimps are produced and faulty crimps are detected.

New easy to use, intuitive menus along with enhanced monitoring and graphing lead the improved feature set of the CQM II.

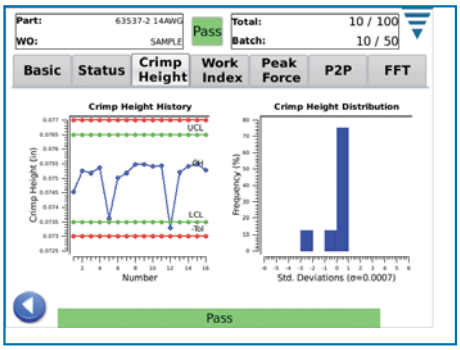
Another major enhancement is the ability to use CQM II on non-TE terminators. This new unit can standardize and provide TE Crimp Quality monitoring across your production area by being versatile, precise and convenient.

- Real-time monitoring of every crimp
- Effective for monitoring the crimp of open barrel, uninsulated contacts and terminals.
- Calculation of actual crimp height and real-time graphic display
- Touch screen graphical user interface
- Multiple language support
- Power: 100–240 VAC, 50/60 Hz, 1.5 Amps (max)
- Engineered and manufactured using processe independently certified to internationally recognized quality standards

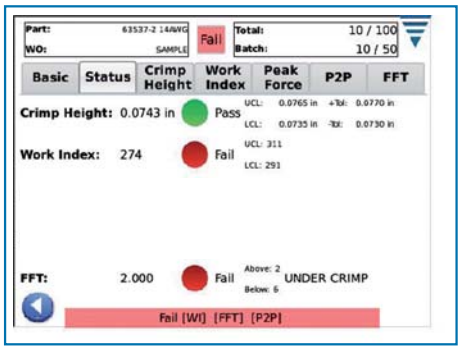
- Dimensions

Host Module:
170 mm (6.7″) Width x
126 mm (5.0″) Deepth x
58 mm (2.3″) Height

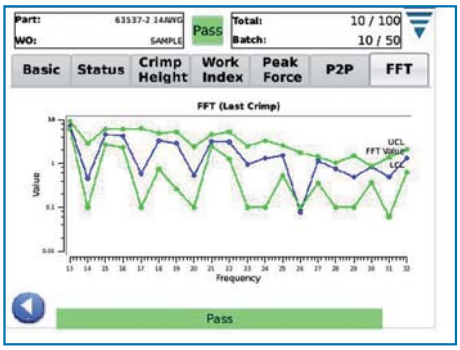
Data Acquisition Module:
172.5 mm (6.7″) Width x
101 mm (4.0″) Deepth x
48.4 mm (1.9″) Height



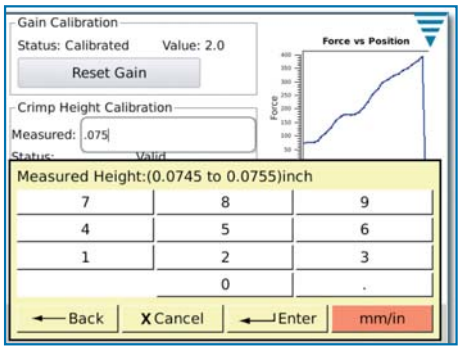
Production Crimp Height



Basic Analysis Monitoring



Fast Fourier Transform



Crimp Height Entry

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BT 752 Stripping, Sealing and Crimping Machine

The BT 752 crimping machine delivers three processes in a single device: stripping, seal loading and crimping.

Reliability and top production performance coupled with the user friendly TopTouch interface are the features that make this semi-automatic device such a compelling product. The BT 752 crimping machine is an economical alternative to fully-automatic machines.

BT 711 Crimp Module

The BT 711 machine is a crimp module for the most demanding applications.

The module produces 20 kN, enough force to crimp wires up to 6 mm^2 in size, and is dimensioned to be compatible with all standard commercial crimping tools.

Options

- SC-11 Stripper
- Bad Terminal Cutter

Accessory

- CFA Calibration Unit

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BT 722 Bench Top Press

The BT 722 Bench Top Press is used for the manual crimping of contacts. The BT 722 Press is operated from a touch screen.
The new TopTouch user interface allows jobs to be set-up quickly and easily. Even during production set-up, the machine operator is prompted to conduct quality measurements. Following the input of the calculated values in the user interface, the crimp height is automatically corrected.
This prevents errors arising from the manual setting of the crimp height.
Only one crimp is needed for referencing the integrated crimp force monitoring. This reduces waste material consumption and minimizes set-up time. The quality values measured during production are saved and can therefore always be called up later.
This ensures traceable quality at all times.
The programmable DigiStripper (option) is an ideal accessory to the BT 722 Bench Top Press. This can be set-up without any mechanical adjustment. Thanks to the functions zero cut and pull back, as well as the pre-programmable cutting depth, the perfect stripping is ensured.

Gauge for Presses

In order to help you to ensure that our applicators are placed correctly in the presses we recommend this press gauge. It is possible to have a misalignment between the center of the applicator and the terminator due to the way they mount in the terminator. If this happens, a side load is applied to the applicator which can lead to pre-mature wear and/or quality problems with the crimped terminals.
The use of the gauge is simple: You install the press gauge into the press like an applicator. Then you unlock the gauge head, on which is mounted a gauge ring.
A spring in the gauge is now pressing the gauge head upwards. The gauge ring should now fit easily into the press head. If this is not the case the applicator ram would not be in a centred position and the mounting plate of the press has to be adjusted.
The special design of the press gauge base plate allows free access to the press mounting plate fixing screws.

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CRIMPMATIC 970 and 971 Crimp Presses for Reeled or Loose-Piece Terminals

Both machine versions permit the cost effective manufacturing of crimp connections with a high production efficiency. The CRIMPMATIC 970 machines are cabable of processing wires of up to approx. 16 mm^2 (AWG 5), depending on the terminal stock thickness.

- Compact, space-saving design
- Compatible with MQC Applicators
- Step mode during set-up

The CRIMPMATIC 971 machine is capable of processing wires of up to approx. 50 mm^2 (AWG 0), depending on the terminal stock thickness. The machines can be equipped with a quick change device for power crimp tools.
MQC Applicators with a lower dead center of 135.78 mm can be mounted by means of an adapter plate. These machines can be utilized as manual work stations and can be integrated into fully-automatic processing lines.

The terminator as shown is a manual work station CRIMPMATIC 971. The unit can be supplied with or without crimp process monitoring, or it maybe retrofitted later.

Options are available upon request

- Crimp force monitoring
- Paper spooler
- Adapter plate for MQC Applicator

Applicators

- Especially designed for larger wire sizes
- Pneumatic feed
- Can be used with both crimp presses CRIMPMATIC 970 and CRIMPMATIC 971

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AT-SC Pneumatic Safety Crimping Press

This pneumatic crimping machine features a newly developed safety mechanism, and is designed to crimp connections up to 50.0 mm^2 depending on the terminal design.
By means of a fitted safety valve, crimping is not released where the size of the opening between the impact surfaces of the dies exceeds 5.9 mm.

Consequently, there is no need to specify any safety covers to protect the operator. The use of a safety double foot pedal simplifies the operation while increasing productivity. This also allows the hands to remain free to insert the contacts and conductors.

AT-55 Universal Pneumatic Crimping Press

This pneumatic crimping machine was designed for crimping insulated and non-insulated terminals from 0.14 mm^2 to 120.0 mm^2 depending on the terminal.

With the additional of an optional cutting unit, the AT-55 crimping machine is able to cut ribbon cable up to a width of 30.0 mm as well as copper conductors up to max. 28.0 mm diameter .

This series is equipped with a battery cycle counter. Safety guards allow crimp terminals up to a diameter of 25.0 mm. Larger terminals can be applied upon request.

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AT-66 Hydraulic Crimping Machine

The AT-66 hydraulic crimping machine features an extremely compact design resulting in low space requirement. The hydraulic power is provided by a separate hydraulic unit with main switch, power distribution and pump.

Our latest development offers possibilities for various applications with a crimp force of 150 kN and an open operating space of 100.0 mm in height.
Typical applications are the crimping of terminals and connectors. This machine can be easily used for wire sizes from 0.14 mm^2 up to 300.0 mm^2. A key operated switch protects the basic and operation data.
It permits adapting and safe-guarding the particular procedure for the application. The fitted memory module allows 250 different programs to be stored.

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StripCrimp PP3 Stripping and Crimping Machine

Extremely fast stripping and crimping of wires down to a wire cross section of 0.012 mm^2, minimum strip lengths and a most compact overall design are the special features of StripCrimp PP3 machine, which is controlled and powered pneumatically.

To ensure the required precision, the PP3 machine incorporates a toggle press, allows adjustable wire zero-cutting and can be equipped with an optional crimp force monitoring system in order that optimum crimp quality is assured.

User-friendly design, fine adjust of stripping and crimping parameters and easy-to-handle wear part change are key features of the PP3 machine as well as a small footprint and compact size allowing it to be used in many working areas.

We offer a PP3 solution for end-feed and side-feed terminals, de-reeling from right to left or from left to right.

Efficient after sales support includes a ready availability of wear parts.

CoaxStrip 5300 Programmable Coaxial Cable Stripping Machine

The CoaxStrip 5300 machine is a semi-automatic, programmable multi-step stripping unit for coaxial, triaxial, multi-conductor cable and single conductor wire.

This benchtop unit can easily process coaxial and triaxial cables up to 7 mm (0.276") outer diameter and strips lengths up to 30 mm (1.18").

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AT-ST Cable Strip and Twist Machine

The AVG 0160 is a stripping and twisting machine for wires with insulation such as PVC, Teflon™, Silicon, Fiberglass, Rubber etc. The machine can cover a wire size range from 0.03 mm^2 up to 6 mm^2 with an adjustable stripping length from 0.5 mm up to 29 mm. The machine utilizes rotary stripping blades for a smooth, 360° cutting of the insulation. The blades are made out of a special tool steel for longevity. Optionally available is a spring kit for tighter twisting of the strands suitable for additional tinning operation.

Teflon is a trademark of E.I. DuPont de Nemours and Co.

JacketStrip 8400 Jacket Stripping Machine

The JacketStrip 8400 stripping machine enables automatic jacket stripping of round cables up to 26 mm in diameter and a stripping length of 200 mm. After the cable jacket has been cut, the piece of insulation is removed using a strong electric motor (full/partial or window strip can be selected). Pneumatically operated clamping jaws guarantee optimal cable retention during the stripping process. Waste insulation material is automatically ejected. All functions of the machine are electronically monitored and diagnosed by means of a LCD display.

UniStrip 2015/2100 Stripping Machines

The pneumatically operated stripping machine UniStrip 2015 excels with a compact design, fast cycle times and infinite settings for conductor diameters, stripping and pull-off lengths. The UniStrip 2015 stripping machine primarily processes stranded wires and single wires. Due to the minimal distance between the acrylic safety cover and the stripping blades, this machine can perform stripping on extreme short cables. The UniStrip 2100 is an electrically driven stripping machine. Ease of operation, fast cycle times, a powerful yet silent motor drive as well as a vast cable processing range are the main features of this machine.

UniStrip 2500 Stripping Machine

This pneumatically driven stripping machine comes standard with V-blades, the optimum solution for any ordinary stripping of stranded wire with no blade changeover necessary. Through the use of special blades, the range of applications can be expanded to include flat ribbon cable, double-stranded wire, thin multistranded wire or demanding (though, delicate, thin) isolations. The adjustable way-back prevents the conductor from being damaged during the stripping process.

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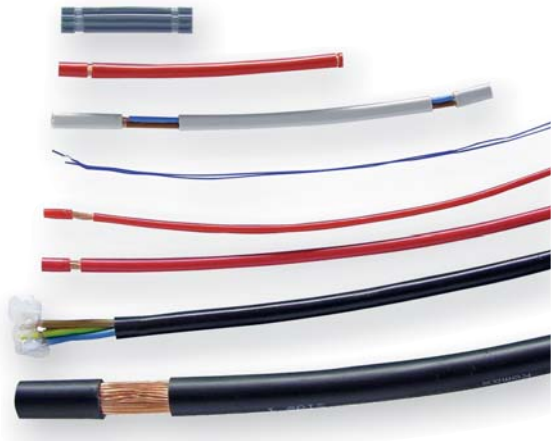
Kappa Cut and Strip Family

The Kappa family strippers are ideal for cutting individual and special wires to length and stripping them. They can strip in sections, allowing them to strip even extremely long length in perfect quality. The machines cover an extraordinarily broad range of cross sections.

Kappa 310, 320, 321, 330 and 350 strippers support a variety of processing options such as wire marking with hot-stamp or ink jet markers. Hot stamp marking can even be done on the Kappa 310 stripper, the entry-level model.

New Kappa Generation:

- Dynamic, flexible cutting and stripping unit
- New intelligent sensors
- New electronic and software
- Optional TopWin™ connection



TopWin is a trademark of Komax AG

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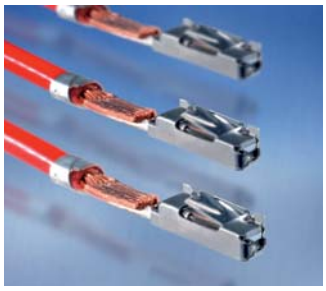
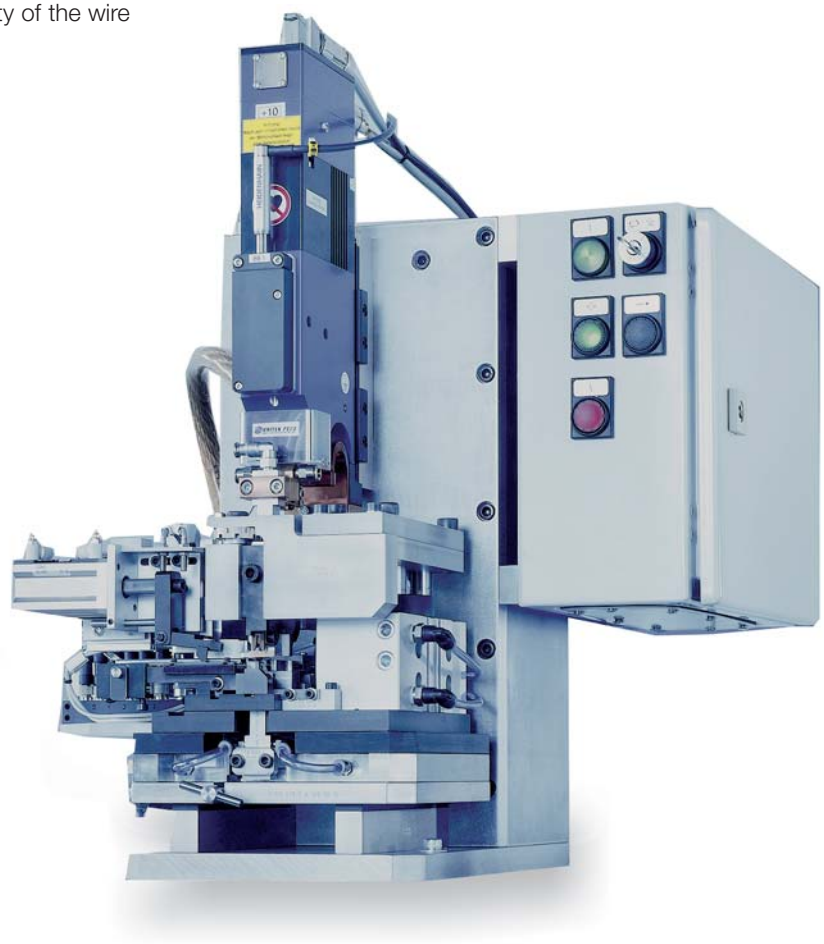
Resistance Welding Module

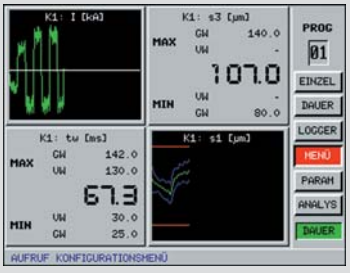


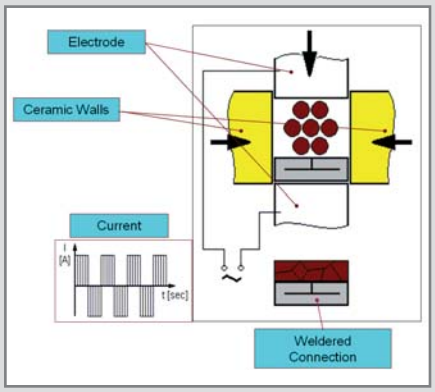
TE Connectivity offers semi- and fully-automatic modules for resistance compact welding of terminals. This resistance welding process allows us to achieve minimum transitional resistance between conductor and contact, higher current capacity and long-term stability of the wire termination.

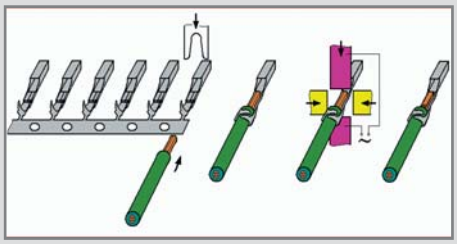
In this process, the bundle of strands in the conductor is condensed into a block by side-mounted ceramic plates. After this the strand bundle is welded to the contact by the introduction of a powerful current via an electrode.

Typical features of the resistance welding unit offered by TE Connectivity are a very short cycle time, a long electrode life time, a fully-automatical parameter setting process and the recording of all process relevant data.









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Lambda 9100 POF Fully-Automatic Processing of MOST™ Leads

For processing large quantities of plastic optical fibers (POF) with low human recourses, TE Connectivity offers the fully-automatic machine Lambda 9100 POF. All processing steps – from feeding and preparation to testing and deposition – are fully-automatic. Functions like length measurement, integrated marker software and monitored laser welding are available and guarantee consistently high quality.

To ensure gentle handling, the fiber ends are held fixed throughout the process so that no uncontrollable bending radius occurs. The Lead Maker is equipped with a Dual Laser Module.

MOST™ Sets

The MOST™ Sets are simple and inexpensive solutions for repair work in the workshop. To meet your requirements we offer several different versions of Sets. The basic version is equipped with two hand tools. One for stripping and cutting of POF, another one for crimping of POF and an additional spare cutting unit. A further version contains such items as a 20 meters POF, some male and female contacts and one position inline couplings. Other accessories are available in different equipment versions.

MOST is a trademark of SMSC Europe GmbH

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MOST™ Measuring Devices

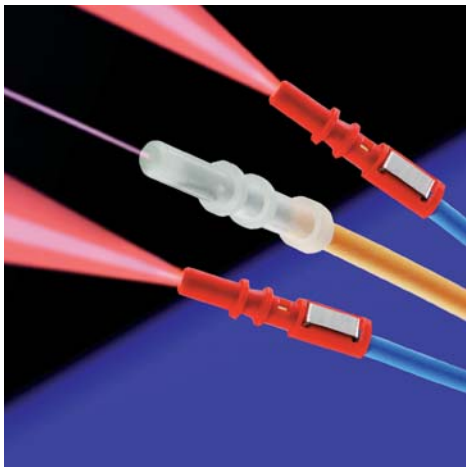
These devices measure the position of the prepared end of the optical fibers relative to the reference point of the insert extremely accurately. The result is displayed clearly by means of the digital read out. The digital display can be zeroed by means of the setting gauge.

A special Digital Crimp Height Micrometer verifies the crimp height of metal inserts. Two opposed probe tips measure the crimp height of the inserts across the diameter.

Tooling and Equipment for Glass Fiber Optics (GOF/PCS) for Automotive

In the future Glass Fiber will be used in the automobile industry. To keep pace with this trend TE Connectivity is developing process equip-ment for the manufacture of GOF and PCS leads. Developments are based on experience gained in processing plastic and glass fiber for NETCONNECT communication technology products. With both GOF and PCS the primary obstacle in the process is to achieve a high quality fiber end surface. The goal of our develop-ment is to process the PCS fiber end with a Laser Module.

Further process involve joining a connector to the fiber end with a Laser welding Module. The manufacture of the GOF fiber end faces involves additional process of heat forming and polishing. A Laser Module is used finally to accomplish optical connector assembly.



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SDE Standard Die Envelope

SDE die system is a flexible approach to crimp tooling that allows the use of the same dies with tooling across a range of application platforms. A large selection of die options are already available for crimping a broad range of terminals and wire sizes.

Many die sets have multiple cavities for crimping more than one wire or terminal size and we can provide custom designs where volumes permit.

SDE Crimp Tools

SDE dies are interchangeable in tools from portable hand tools (manually or battery-powered) to pneumatic hand tools and electric bench terminators.

It's a family of tools that you can take from bench to production or into the field, without the need for different dies to fit each kind of tool.

You can rely on SDE dies to provide for your long term needs because of our commitment to continued development of dies and the tool range.

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IDC Hand Tools

IDC or Insulation Displacement Crimping is based on an entirely different concept to conventional crimping and requires these special types of tool.

We provide a large range of tools for connector families like:

- MQS Connectors,
- AMP DUOPLUG,
- AMP MONO-SHAPE and
- AMP multifitting

and usually based on the well proven Pistol Grip tools, featuring connector holding fixtures that crimp and index one pitch at a time.

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Hand Tool Kits

TE Connectivity provides standard kits that contain the necessary equipment to carry out specific tasks to the highest professional standards.

We can also provide custom kits for volume requirements containing only tools, or a combination of tools and terminals tailored to your specific requirements.

Please visit our tooling website to view our online hand tool catalog for standard kits, or find your local contact to discuss custom kits.

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Hand Tool Kits

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Insertion and Extraction Tools

Insertion and Extraction Tools are used for inserting discrete terminals into connector housings or removing them, without causing damage to either the terminals or housings.

Our new standard design features a comfortable handle and snap-in/out protective cover that allows users to stow the business end of the tool to help protect from inadvertent personal injury when the tools are not in use.

Many different design types currently exist for our vast terminal product range, which we continue to convert. If you would like the tool you use converted to the new design, want a custom kit or tools in this design for other manufacturers products – contact us, and where volumes permit we will be pleased to provide you with a quotation for your requirement.

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FFC Hand Tool

The very easy-to-handle 10 position hand tool allows variable settings for both the foil stop and foil guide. A correct and repeatable crimp process is achieved by an integrated ratchet mechanism. A FFC hand tool case can be built up around your particular application requirements.

The tool allows crimp connections to be made between foil and 1 to 10 position MQS terminals. The crimp height is set for 70 mm thick foil.

FFC Termination Machine for Flexible Sensor Foil

The Termination Machine is an electrical driven semi-automatic assembly machine that uses different applicators to terminate reel-feed FFC contacts to manually supplied FFC cables. The machine terminates a predefined number of contacts to the supplied cable end.

TE Connectivity products FFC MQS, FFC AMPMODU .100, Junior Timer, AMPMODU .50 and soldered contacts are compatible.

- Quick-change of applicator
- Alignment of the cable is realized in the machine
- Interchangeable applicators available for different products
- Number of pins can be programmed (max. 38 mm with pitch 2.54 mm)
- Pitch 1.27 mm up to 5.08 mm can be programmed
- Individual wire positions can be skipped
- Operator friendly interface via touch screen
- Integrated crimp force monitoring by CQM (optional)

FFC Applicator

The FFC Applicator is designed for FFC and FPC terminations. It is normally delivered with a special TE Connectivity crimp machine, but is also compatible with standard presses (press stroke 40 mm), if a wire feed is supplied.

The adjustment of the crimp height is similar to other TE Connectivity crimp applicators. All wear parts are easy to change.

The FFC Applicator is available for different TE Connectivity contacts, such as:

- FFC MQS,
- FFC Junior Timer,
- FFC AMPMODU .100,
- FFC AMPMODU .050,
- FFC Card Edge,
- FFC ACTION PIN and
- FFC Soldering Pin.

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Assembly Machine to Connect FFC and PCB

This machine has been specially designed to connect a Flexible Printed Sensor with a PCB by using an ACTION PIN FFC Contact. The Flexible Printed Sensor and the PCB are manually loaded into the machine. After the cycle has been started, the insertion head is positioned above the first insertion position.

The pre-formed contact is cut off the carrier strip and gets simultaneously inserted into the PCB and crimped to the Flexible Printed Sensor.

Several contacts form the complete connection between the sensor and the PCB. The force, required to insert the ACTION PIN contact with the PCB, is monitored by a force sensor.

To accommodate two types of PCBs, the PCB holder is positioned by pneumatic cylinders. The desired position is selected via the operator interface.

FFC/FPC Machine

The FFC/FPC bench machine creates electrical connections between TE Connectivity FFC terminals and flexible flat cables. Thanks to its adaptable circuit fixture the machine is simple and easy to load.

Prior to initializing a crimp cycle, the vision system establishes the precise location of the first conductor track. A positional correction is effected as appropriate.

The equipment combines the functions of terminal feed, cutting the product off the carrier strip, crimping and chopping of the carrier strip. An integrated crimp force monitor ensures high quality crimp connections.

An optional faulty crimp cut-off device prevents the further use of defect circuits.

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MAG-MATE and SIAMEZE Inserter Mark II with PLC

TE Connectivity magnet wire terminations are a perfect connecting alternative to all soldering techniques used in a lead-free environment.

Special knowledge is required to design a mass manufacturing line for insulation displacement crimps on thin lacquerd insulated wires with high yield. Design aspects of the terminal, the cavity and the machine all need to be harmonized.

With the Inserter Mark II TE Connectivity can offer an economic solution especially for the application of MAG-MATE and SIAMEZE terminals.

MAG-MATE Inserter Mark II with PLC and Insertion Force Control

This advanced insertion machine provides the features of the MAG-MATE Inserter Mark II with an additional force distance control system. The machine is designed to apply multiple different contacts and will be customized according to the customer or product specific requirement.

The contacts can be used as single contacts or in strip form (bridge function adjusted “on-the-fly”). A gauge is available to check the adjusted insertion force and to recalibrate the insertion force control sensor.

Pneumatic Insertion Tool for MAG-MATE Terminals

The pneumatic tool for MAG-MATE terminals features a rotary insertion finger to facilitate different insertion angles. This tool is designed for use in TE Connectivity standard insertion machines such as P 200 and P 300 but can also be integrated into customized production lines or assembly cells.

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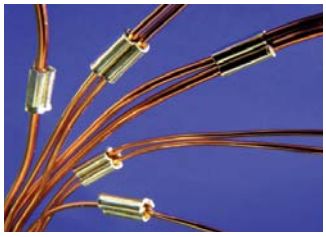
AMPLIVAR Terminator for Parallel and End Connections

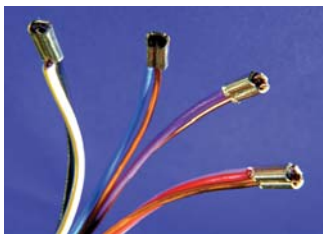


The machine was especially developed for processing magnet wire connections. Different versions for end-feed and side-feed contacts are available. The design takes into account that the motor windings and coils can be supplied directly to the connectors. The exposed crimp position permits precise handling. In case of end connections the projecting magnet wires are cut off. AMPLIVAR Splices and Terminals are specifically designed to terminate magnet wires or in combination with standard solid or stranded wire. In a one-step operation the magnet wire is automatically multiple ring stripped of its insulation as it is forced into the serrations during the precisely controlled crimping operation.

As many as three magnet wires can be terminated, simultaneously in one splice. Nearly the entire AMPLIVAR splice program can be applied with this machine in combination with suitable applicators.

The comprehensive range of manufacturing possibilities demands a specific machine and applicator combination.

APT IIIA and APT IIE AMPLIVAR Product Terminators



APT semi-automatic bench machines are available in two versions: the APT IIIA machine with automatic precision adjustment controlled by the Crimp Quality Monitor (CQM) and the APT IIE machine with manual precision adustment. To apply a splice or contact, simply place the wires in the target area and depress the foot switch. The machine automatically shears the splice or contact from the strip, crimps it, shears off excess wire, and advances the next splice or contact into position. With CQM, the APT IIIA machine assists in achieving 6-sigma processing capability.

For operations with multiple wire sizes, the APT IIIA machine provides programmable sequencing of different crimp-height settings, and it can store up to 2000 different programms of 7 different settings each.

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Press-Fit Systems

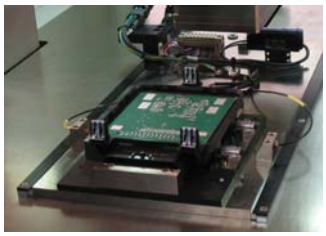
TE Connectivity offers a complete line of manual and automatic servo-electric driven presses for the application of press-fit connectors.
Each unit is PC controlled and incorporates force feedback through load cells. The servo-electric drive can precisely control applied force, speed and travel without the “spring” effect common in pneumatic and hydraulic presses.
Finally, force and SPC data for every connector pressed is stored and can be retrieved for 100% traceability of all boards produced.

This system minimizes costly scrap by assuring that the minimum force is reached, maximum force is not exceeded and the connector is gently seated to the required height.

CSP 3T Servo-Electric Press

The SEP 3T is a servo-electric press to apply PCBs onto compliant pin connectors and housings. The system provides control and monitoring of the press cycle force, distance and speed to meet the quality and traceability essential in the safety and control applications where these components are typically used. Optional Pin Penetration Sensing (PPS) tooling can verify the correct penetration of every pin through the PCB.

PCBs are manually loaded onto the connector/housing and placed in specific support fixtures. When the press cycle is initiated by the operator, the product is shuttled into the CSP 3T and pressed to the required force and/or height.



A key feature of the CSP press system is an automatic shuttle that positions the PCB and housing/connector stack up underneath the upper insertion tool.

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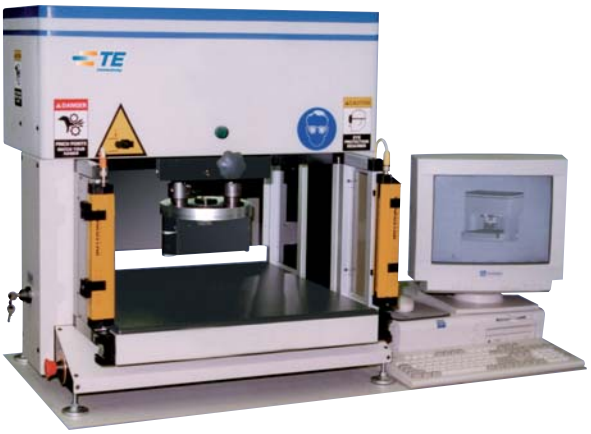
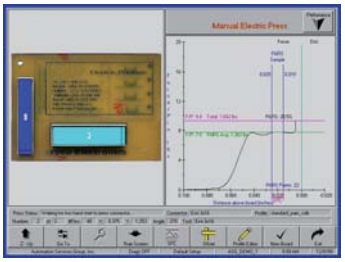
CBP-3T/5T Bench Manual Electric Press

The benchtop press with midrange board handling and pressing capacities utilizes PC control and servo-electric drive system. Pressing capacities of 27 kN [3 tons] and 44 kN [5 tons] allow for a wide range of applications on boards up to 460 mm x 610 mm [18" x 24"]. These features and a compact footprint make this a powerful, versatile and portable press for PCB construction.



The run time screen provides complete operator interface and feedback.



CMP 6T/CMP 12T Manual Electric Press

A self-contained press on wheels that can easily be relocated almost anywhere on the production floor. The same PC controlled servo-electric drive system as the CBP units is used to provide a precise and repeatable pressing system to lower overall applied cost.

With up to 107 kN [12 tons] of pressing capacity and board handling up to 910 mm x 1220 mm [36" x 48"] on the CMP-12T machine, the CMP press line is perfectly positioned to handle almost any press-fit application with midrange volumes.

For more detailed information please visit our websites:
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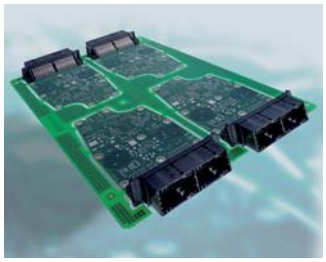
CAP 6T Automatic Electric Press

The CAP-6T Automatic Electric Press is the newest addition to the successful TE Connectivity servo press line. It provides the proven force control capabilities and quality assurance of the line in an automatic press. The automatic pressing capabilities of the CAP-6T Press provide the end user with greater control and simplified processing to help improve quality, lower rework and prevent rejects. This provides users with lower true applied cost and higher end profits.

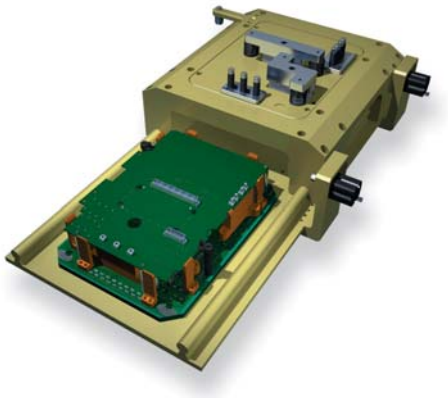
The CAP-6T Press was designed to apply compliant pin connectors to a wide range of PCBs. It is fully capable of handling the most demanding applications today from daughter cards to mid-planes to back-planes.

With board capacity up to 760 mm x 910 mm [30" x 36"] and a press force up to 53 kN [6 tons], the CAP-6T Press is focused at all but the largest board applications. The CAP-6T Press can also hold up to 12 insertion tools and uses a lower support fixture.

CSM 5T Connector Seating Machine



PCB and connectors are loaded manually into fixtures. When started, the machine checks the correct loading of the connectors before placing the connectors onto the PCB. The tool then moves under the press ram where the connectors get pressed one after the other onto the PCB. The CBP-5T servo-electric press is used to seat the PCB which provides a force-distance check to guarantee quality production.



A special tooling plate allows the sequential pressing of a number of different pre-loaded connectors. An intermediate plate, positioned between the PCB with its pre-positioned connectors and the flat rock press ram contains the connector specific press tools. For each connector a force distance curve is available after completion.

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PCB Depanelling Systems

TE Connectivity knows the total applied cost of your product is almost at its highest when the PCB is separated from the panel.
Protect the time and investment that has been applied to your product by using a gentle, safe and effective depanelling equipment solutions offered by TE Connectivity.

TE Connectivity offers equipment solutions including the 2016AT Singulation Press, SmartRouter Singulation Machine, SAR-1000-B/D, SAR-1400-L Laser Depanelling and ILR-2000 Automatic In-Line Routing Machines.

All of our equipment solutions offer effective and safe depanelling for your products. Depanelling induced stress is simply unacceptable in today's competitive market.

GAS SAR-1000-B and SAR-1000-D Depanelling Machines

The GAS SAR-1000-B and SAR-1000-D depanelling systems for printed circuit boards and bare boards offers a largely automated process for depanelling by milling and/or sawing.

The GAS depanelling systems SAR-1000-B and SAR-1000-D offer the following outstanding features:

- Very fast and precise linear motor axes for all three directions of movements (X, Y and Z)
- Fast shuttle system with short changing time <4 seconds
- Large milling area
- Flexible milling brush holder – no additional down-holding device required
- Technics tool kit including
- Broken tool control
- Automatic and continuous bit control for different levels
- Tool diameter monitoring
- Production data processing system
- Depanelling speed with disc up to 20 m/min.

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Electrical Test Equipment for the Automotive Industry

Specialized wire harness testing for the automotive subcontracting industry is based on high volume requirements and incorporates the automatic inspection of non-electrical parameters.

To this aim well thought out adaptation systems are the key factor providing a fast, reliable and user-friendly test environment.
Test benches and adaptation systems from TSK Prüfsysteme GmbH benefit from 25 years of experience in this market. TE Connectivity is the world-wide distribution partner of TSK and can provide a large variety of harness and functional test systems to it's customers.

TSK Cable Test and Function Test

Small stand alone cable testers like the CT30 at an attractive price level already offer the full range of electrical standard testing for up to 512 internal test points.
In combination with the powerful CS WIN software even more complex test programs can be created by using programmable I/O's and applied statistical functions.

Larger harnesses will use one of the many different test system types which basically provide a standard grid to implement TSK's adaptation modules.

The function test systems are designed for more complex end-of-line tests on complete subassemblies, like cockpits, automotive doors, relay boxes and control units.

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Application Tooling Global Field Service Organization

TE Connectivity provides Global Field Service support on our application tooling. Field Specialists are located across every continent to provide timely response to customer needs.

In addition to installation, warranty and repair service, TE Connectivity Field Specialists can help you with equipment choices, training of maintenance and operation personnel, troubleshooting assistance and spare parts. Service contracts to cover all your application equipment needs are also available.

We have implemented a service management tool that provides standardization of reporting that gives us the ability to continuously improve our global service organization. Throughout the year we educate our field service engineers on the latest industry technologies and equipment.

See for yourselves the advantages of our professional consultation and individual services. Our qualified service teams are ready to assist you.

Service Offerings

Standard Service
Includes troubleshooting problems, making repairs, and/or installing parts.

Equipment Installations
Providing installation, set-up and training of application equipment at the time of delivery.

Training
Providing Customers with practical training programs addressing machine operation, set-up, maintenance, inspection, and connector application. Training programs can be scheduled at the Customer's site or at a TE Connectivity training center. A training certificate will be issued upon the completion of each formal training course.

We are proud to be able to offer a comprehensive range of customer training programs.

The following are some of the standard training programs we offer:

- The Fundamentals of Crimp Technology, 4901
- The Proper Handling of Crimping Applicators, 4902
- Crimping Training Program, 4903 (combination of 4901 and 4902)
- The Proper Handling of Crimping Hand Tools, 4904
- FFC Crimp Technology, 4906
- Fundamentals of Crimping Technology for Machine Operators, 4907
- Magnet Wire Connection Technology, 4910
- Advanced Seminar on Crimping Quality, 4911
- Advanced Seminar on Crimp Force Monitoring, 4912
- Advanced Cross Sectioning – Photos, 4913
- MAG-MATE Module, Pneumatic, 4914
- Insulation Displacement Technology, 4930

Service Contracts
Preventive Maintenance and/or Inspection Calibration

Provides service for periodic visits to perform Preventive Maintenance and/or Inspection Calibration Service on Hand Tools, Applicators, Bench and Automatic Equipment.

Comprehensive Service
Provides for a specified number of Field Specialist visits. A visit can be used for services such as standard service, installation, set-up and training for all application equipment, preventive maintenance and/or inspection calibration, spare parts management, equipment process evaluation and technical assistance on application tooling and/or product related problems or concerns.

"A customized service / training contract ensures equipment optimization"

Short Term Rental of Crimping Applicators
Applicators are being increasingly required at short notice for a limited period. This may include pre-production runs, prototype series, and the subsequent production of single part requirement or simply small series production. It is often uneconomical to purchase a crimp tool or to rent it on a long-term basis, when it is only required for a few weeks in the year. Our short-term rental service has applicators readily available for you, which you can return when complete with your rental period.

Your local TE Connectivity representative will gladly inform you about the availability of an appropriate applicator for your specific need.

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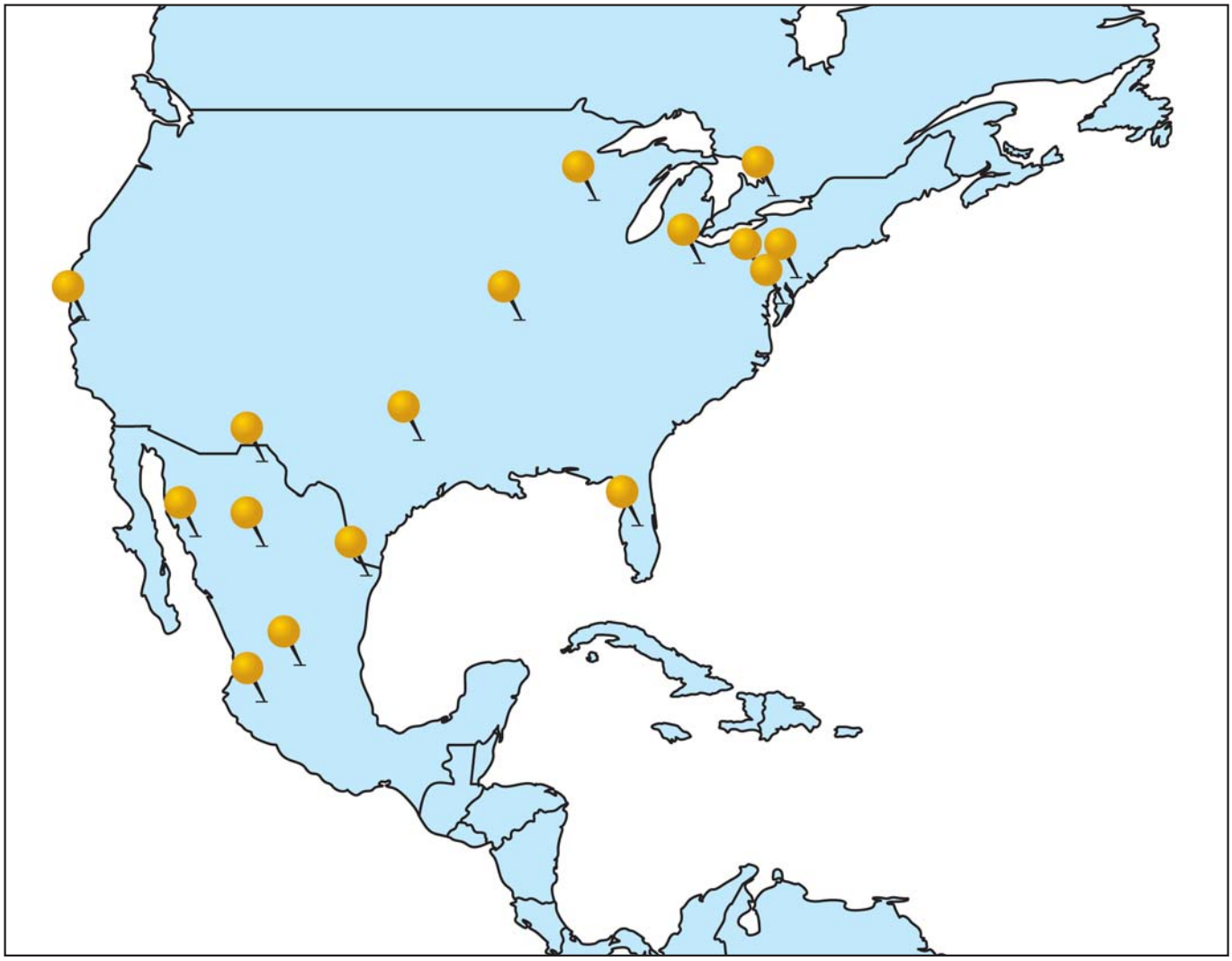
Application Tooling Americas Field Service Locations



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Minnesota
Missouri
New Jersey
Ohio
Pennsylvania
Texas

Mexico:
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Guadalajara
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Reynosa

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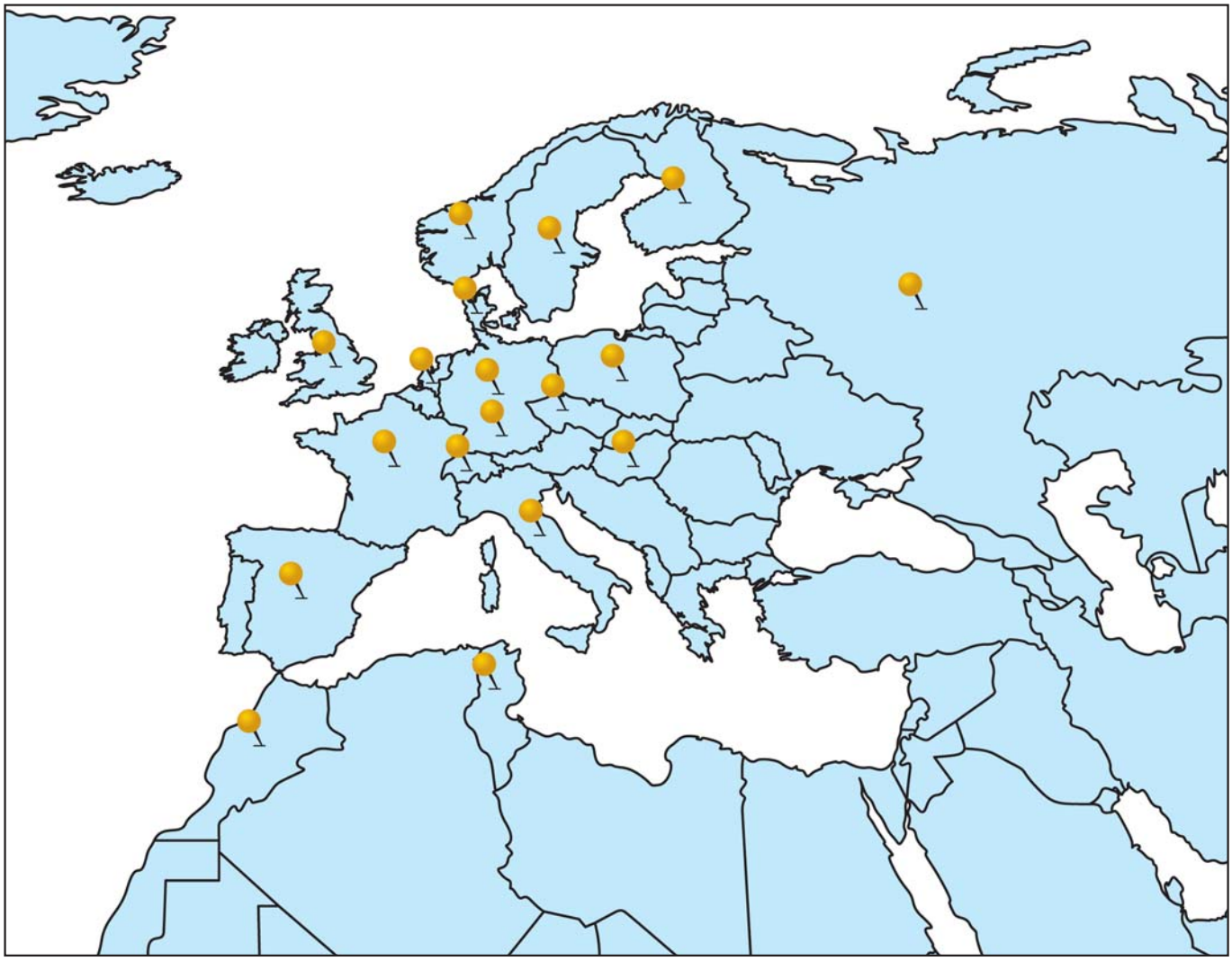
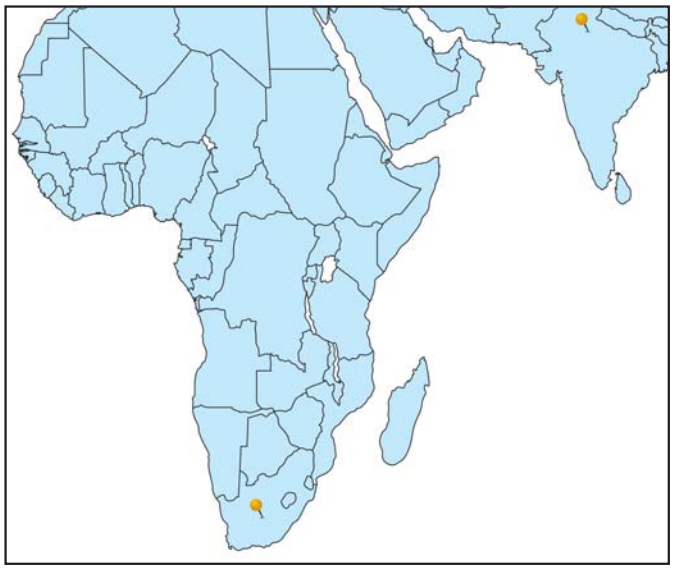
Application Tooling EMEA Field Service Locations





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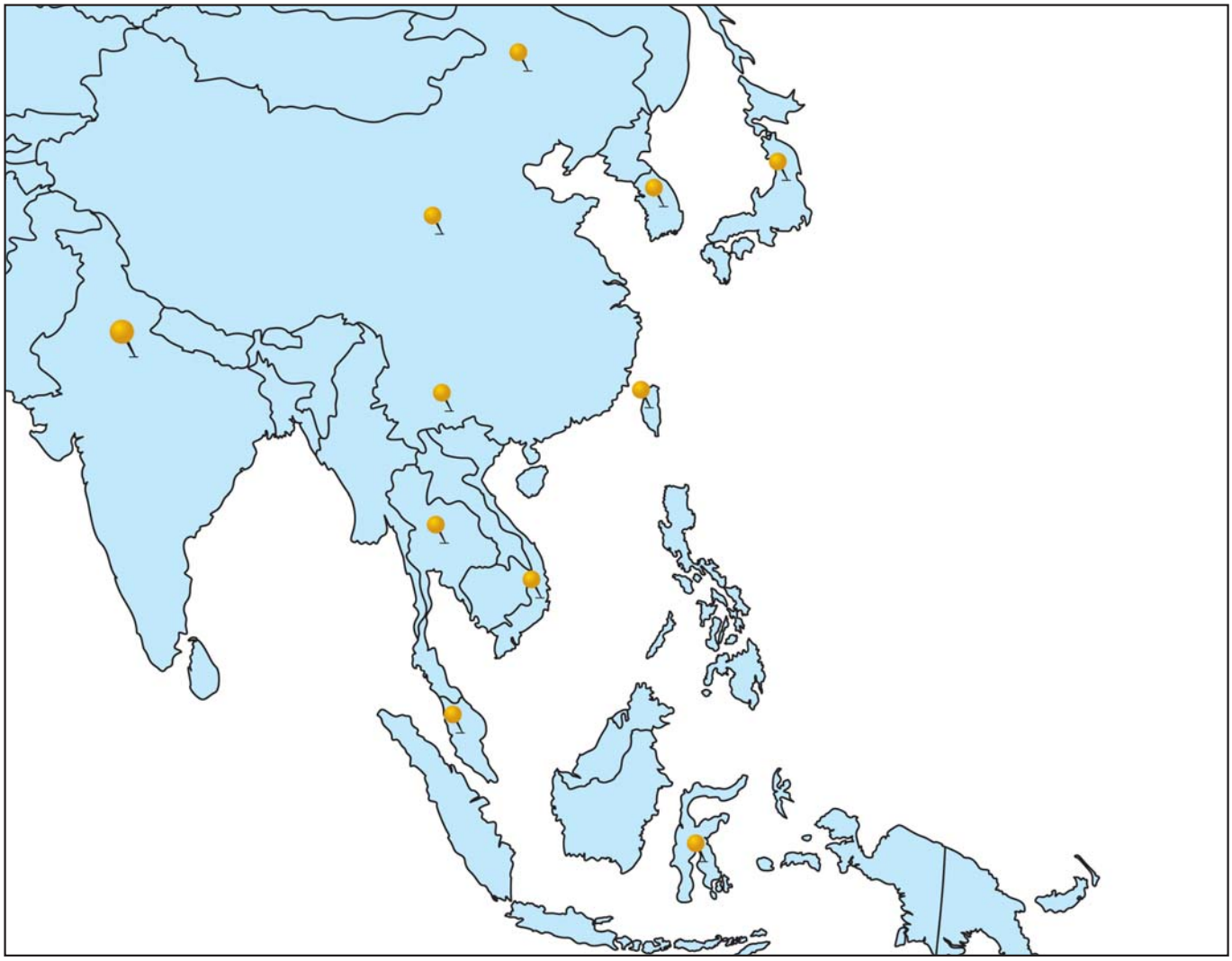
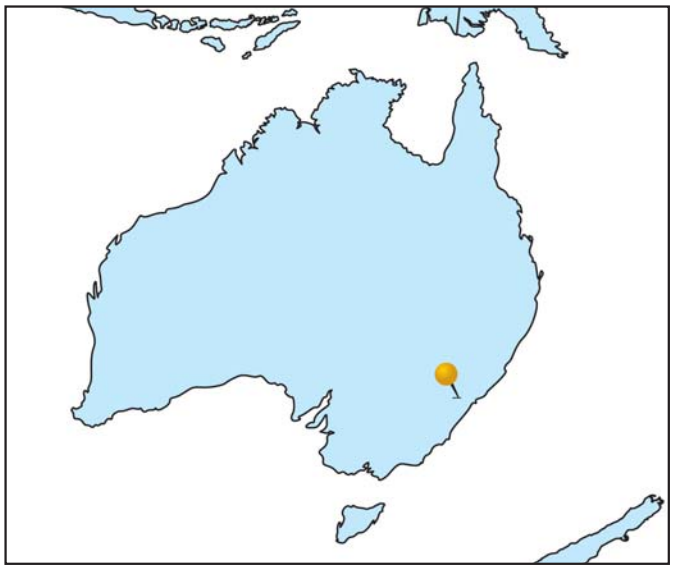
Application Tooling Asia Pacific Field Service Locations





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