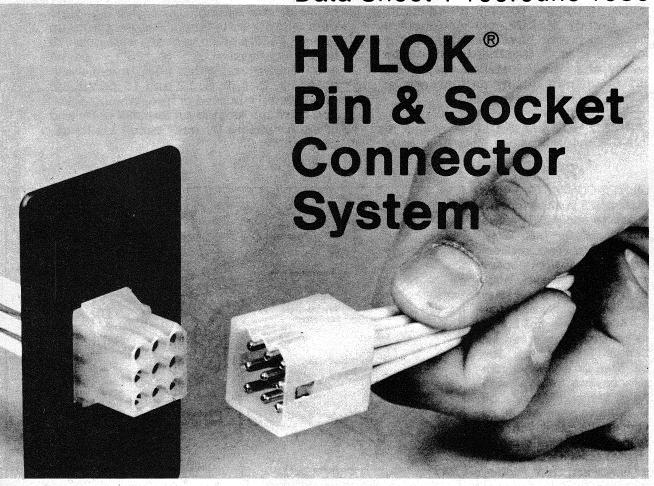
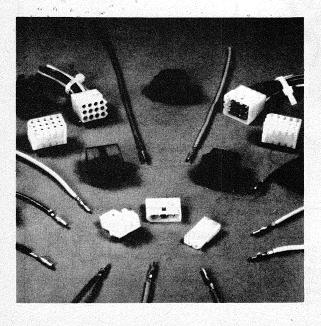
TERMAC

PRODUCT SPECIFICATIONS

Data Sheet T-100. June 1980





- Housings, contacts and tooling are totally matched and system engineered for low cost and high reliability.
- Available for both free-hanging and panelmount applications in 2, 3, 4, 6, 9, 12 and 15 circuit sizes.
- Smooth-nose pins and bell-mouth sockets for easy, positive mating.
- Matched application tooling for every production need.
- Recognized under the Component Program of Underwriters' Laboratories, Inc. and Canadian Standards Association.

HYLOK CONNECTORS: system engineered for maximum efficiency and lowest installed costs.

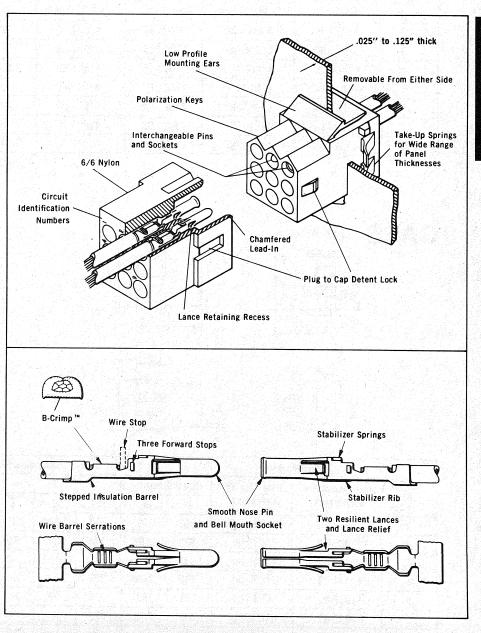
Contacts. Housings. Tooling. All elements of the Burndy HYLOK pin and socket connector system have been integrally engineered to work together for maximum efficiency and lowest installed costs. This results in uniform quality and savings at virtually every step of assembly.

POLARIZED HOUSINGS:* Made of tough, flexible 6/6 nylon. Positive Polarizing keys

eliminate mis-mating. Low profile mounting ears simplify installation. Resilient take-up springs secure housing over a wide range of panel thicknesses (.025" to .125")... permit easy removal from either side of panel. Available in 2, 3, 4, 6, 9, 12 and 15 positions; either panel mounted or free hanging. Position numbers located on terminal entry end of each housing for easy circuit identification.

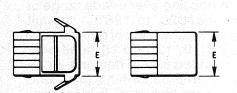
STABILIZED CONTACTS: 3-point stabilizer and 3 positive forward stops assure accurate, precise contact "float" for fast, easy, smooth mating. Two resilient locking lances with a relief space or "window" around each lance permit free movement for easy insertion and trouble-free extraction. Accurately positioned "stops" assure proper contact location in the housing. The smooth-nose pin and bell-mouth socket provide easy, Stepped mating. insulation barrel reduces wire strain by positioning the insulation diameter in line with the contact. Wire barrel serrations break up oxide films and give added strength to the crimp. Insertion and extraction tools are available to easily install or remove pins and sockets.

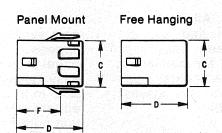
MATCHED INSTALLATION TOÓLING: The rugged and reliable Burndy UTM (Semi-automatic bench press) and crimp mechanism utilize the Burndy B-crimp, and a wire stop assures consistently accurate wire positioning. For high-volume production, ask about the latest TERMAC innovations in automated machinery. TERMAC maintains a trained staff of field service engineers to provide full field service.

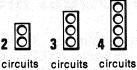


HYLOK Pin & Socket Connectors: Specifications and ordering data

PLUGS













15

circuits

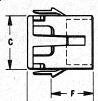
circuits

circuits

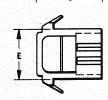
		Catalog Number						in Inches		
Number	Panel Mountable	Panel Mountable	Free Hanging	Free Hanging	Panel Cu	itout*		Hous	ing	
of Circuits	Detent Lock	w/o Detent Lock	Detent Lock	w/o Detent Lock	Α	В	C	D	E	F
2	41000-00	41001-00	41002-00	41003-00	.725	.312	.536	1.008	.250	.630
3	41004-00	41005-00	41006-00	41007-00	.840	.312	.670	1.008	.236	.630
4	41008-00	41009-00	41010-00	41011-00	1.038	.312	.863	1.008	.236	.630
- 6	41012-00	41013-00	41014-00	41015-00	.600	.725	.434	1.008	.632	.630
9	41016-00	41017-00	41018-00	41019-00	.828	.725	.666	1.008	.627	.630
12	41020-00	41021-00	41022-00	41023-00	1.050	.725	.870	1.008	.632	.630
15	41024-00	41025-00	41026-00	41027-00	1,240	.725	1.066	1.008	.632	.630

^{* ± .005&}quot;

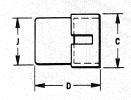
CAPS

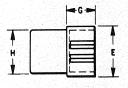


Panel Mount

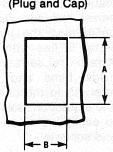


Free Hanging





Panel Cutout (Plug and Cap)

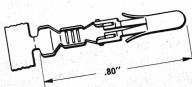


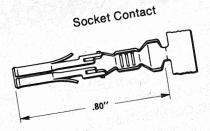
.125" Maximum Panel Thickness See Plug and Cap Dimensions Tables

	Catalog Number					Dimens	ions in Ir	iches			
Number	Panel Mountable	Free Hanging	Panel (cutout*				Housing			
of Circuits	Detent Lock	Detent Lock	A	В	Č	D	E	F	6	H	J
2	41028-00	41029-00	.800	.375	.639	1.000	.352	.600	.420	.260	.639
3	41030-00	41031-00	.933	.375	.773	1.000	.338	.600	.420	.248	.773
4	41032-00	41033-00	1.131	.375	.971	1.000	.338	.600	.420	.250	.971
6	41034-00	41035-00	.695	.760	.536	1.000	.734	.600	.420	.642	.448
9 .	41036-00	41037-00	.937	.760	.770	1.000	.734	.600	.420	.638	.674
12	41038-00	41039-00	1.155	.760	.970	1.000	.734	.600	.420	.642	.882
15	41040-00	41041-00	1.343	.760	1.169	1.000	.734	.600	.420	.642	1.077

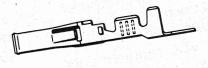
NTACTS .093" SIZE

Pin Contact









Reeled Conta	ct A	Wire accommodation Insulation Diameter	Material and Finish	Crimp Mechanism for UTM Machine CM06G1	Hand Tool Y14MTR
Catalog Number Catalo	Der AWG Socket AWG 21061-02 24-20 21062-02 20-16 21063-02 20-14	.070 .040 .130 .090 .160	.010 Pretinned Brass	CM06 CM06G2	Y14MTR





Universal Terminating Machine — Operator Assist

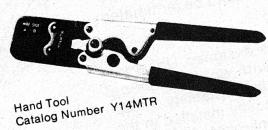
The UTM-OA semi-automatic terminator features an "operator-assist" safety shield that increases production while protecting the operator's hand from the crimping mechanism. Reduces operator training time, reject rates and costs. This new machine has a sturdy, welded-steel frame, yet weighs only 255 pounds. Overall height of 25" permits flexibility in selection of production-line placement. Accommodates #14 to #26 AWG wire sizes. The machine has a dependable, long-life roller clutch and a rugged, five-ton steel press that assures maximum deflection under load. Meets all OSHA requirements.



Insertion Tool (for small gauge wires) Catalog Number RTM20D29



Extraction Tool
Catalog Number RX14D5



inted in USA OM/6/80

UNIVERSAL HYLOK CONNECTORS

TERMAC's Universal HYLOK Connectors offer a dependable and economical way to combine multiple-lead connections for worldwide application in the computer, office equipment and appliance industries. These connectors are designed for 600-volt applications and meet VDE requirements for 380-volt applications.

Universal HYLOK housings are totally polarized for accurate plug-to-cap mating, and the pins and sockets can be interchanged in the plug or the cap for a variety of keying combinations. The plug and cap feature positive-locking housings so the connectors cannot be accidently disconnected in free-hanging or panel-mount applications.

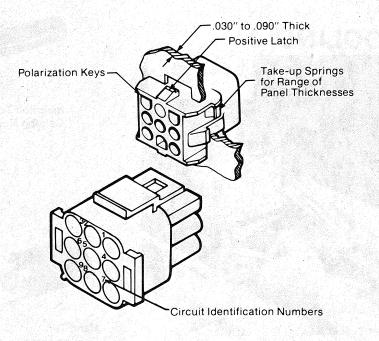
The housings are made of resilient 6/6 nylon and are available in 94V-2 natural color. Universal HYLOK housings also come in 94V-0 flame-retardant material.

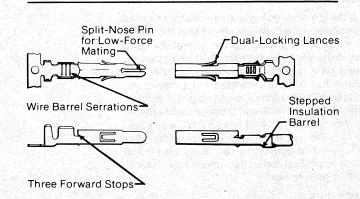
TERMAC offers these connectors in circuit sizes 2, 3, 4, 6, 9, 12 and 15. The housing entries are numbered so circuits can be easily identified, and the rear-entry cavities allow two wires to be terminated with a single contact.

TERMAC engineers designed Universal HYLOK contacts with double-locking lances to ensure maximum stability. These contacts can be manually installed in the housings and require only one tool (Burndy's #86000) to remove both pins and sockets. Because the installed contacts are completely enclosed in the housing, they eliminate the possibility of shock yet allow either half to have hot leads.

Pre-tin brass or pre-tin phosphor bronze contacts, rated to 15 amperes, are available for wire sizes #20 to #14 AWG. TERMAC supplies these contacts in strip form for automatic termination or loose-piece form for hand crimping with Burndy's hand tool #Y14MTR.

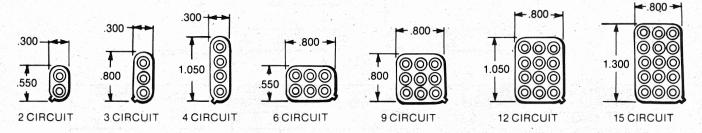
TERMAC's line of installation machinery, including the UTM, UTM-OA and the UTM-AT, provides high-volume production and low installed costs, making Universal HYLOK a complete, low-cost connector system.



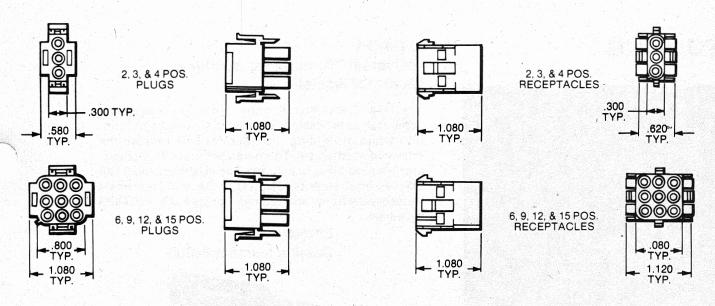


RACK & PANEL

UNIVERSAL HYLOK Pin & Socket Connectors: Specifications and ordering data

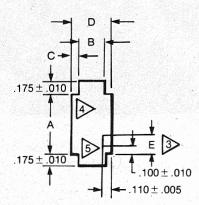


CIRCUIT CONFIGURATIONS. DIMENSIONS SHOWN DO NOT INCLUDE LOCKING LATCHES AND MOUNTING FEATURES.



	HOUS	SING PART NUMB	ERS .	
NO. OF	PL	UG	RECEP	TACLE
CIRCUITS	94V-2 NYLON	94V-0 NYLON	94V-2 NYLON	94V-0 NYLON
2 3 4 6 9 12 15	UHP 201 UHP 301 UHP 401 UHP 601 UHP 901 UHP 1201 UHP 1501	UHP 200 UHP 300 UHP 400 UHP 600 UHP 900 UHP 1200 UHP 1500	UHR 201 UHR 301 UHR 401 UHR 601 UHR 901 UHR 1201 UHR 1501	UHR 200 UHR 300 UHR 400 UHR 600 UHR 900 UHR 1200 UHR 1500

	RECEPTACLE HOUSING PANEL CUTOUT					
NO. OF CIRCUITS	A ± .005	B ± .010	C ± .010	D ± .005	E ± .010	
2 3 4 6 9 12 15	.565 .815 1.065 .565 .815 1.065 1.315	.340 .340 .340 .480 .480 .480	.095 .095 .095 .275 .275 .275 .275	.530 .530 .530 1.030 1.030 1.030	.250 .250 .250 .250 .250 .250 .350 .350	



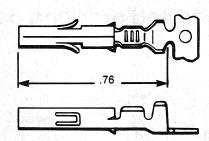
NOTES:

- 1. .030-.090 PANEL THICKNESS.
- 2. THE RECEPTACLE MUST ENTER CUTOUT IN SAME DIRECTION AS THE PUNCH.
- 3>POLARIZATION TAB OPTIONAL
- LOCATION OF #1 CIRCUIT WHEN POLARIZING 6,9,12, and 15 POSITION RECEPTACLES.
- 5 LOCATION OF #1 CIRCUIT WHEN POLARIZING 2,3, AND 4 POSITION RECEPTACLES.

CONTACTS

Pin Contact





LOOSE PIECE Part number		REE Part n		MATERIAL	FINISH	ACCOMM	RE ODATION	HAND	IMA FOR UTM
PIN	SOCKET	PIN	SOCKET	.012 THICK	AWG	INS. DIA.	TOOL	MACHINE	
UHM 2210	UHC 1210	UHM 2200	UHC 1200	BRASS					
UHM 2211	UHC 1211	UHM 2201	UHC 1201	PHOS. BRONZE	PRE-TIN	20-14	.130 MAX.	Y14MTR	91600-1-035

TOOLING



UTM-OA Universal Terminating Machine Operator Assist

The UTM-OA semi-automatic terminator features an "operator-assist" safety shield that increases production while protecting the operator's hand from the crimping mechanism. This new machine reduces operator training time, reject rates and costs and meets all OSHA requirements. The UTM-OA machine has a welded-steel frame and accommodates #14 to #26 AWG wire sizes.

Extraction Tool Catalog Number 86000



Hand Tool Catalog Number Y14MTR

QIKMATE, in a word, is "versatility". More than just a connector, it is a highly costeffective system approach to solving interconnect problems. That system includes a whole family of connector bodies all designed to accommodate the "Trim Trio" contacts. "Trim Trio" power and signal contacts are available in stamped and formed, machined and sub-miniature coax for maximum flexibility, dependability and ease of assembly. Any combination of the contacts can be used interchangeably in any position in either half of the connector. The same contacts are also used in other connector bodies making up the Trim Trio Interconnection System, including Miniature Round and Hyfen Rectangular connectors.*

QIKMATE housing and TRIM TRIO contacts provide the additional advantage of standardization resulting in simplified paperwork, reduced inventory, faster assembly and uniform quality control. In addition, there is also the advantage of universal installation tooling and simplified operator training.

Designed to meet or exceed international safety and performance specifications, QIKMATE is the choice of many multinational corporations who recognize the superiority of the QIKMATE, TRIM-TRIO combination.

*for additional information see BURNDY publication CG-116

PERFORMANCE CHARACTERISTICS

CHARACTERISTICS	PERFORMANCE	
Operating Temperature	-67°F to +221°F (-55°C to +105°C)	
Insulating Resistance	5000 megohms at 500 volts D.C.	
Test potential (1 min. Duration) at sea level	2000 volts A.C.	
Contact retention in connector (min.)	10 pounds (44.48 N)	
Connector Mating forces		
	2 position 1.0 pounds (4.45 N)	
	3 position 1.5 pounds (6.67 N)	
	4 position 2.0 pounds (8.90 N)	
	6 position 3.0 pounds (13.34 N)	
	9 position 4.5 pounds (20.02 N)	
	12 position 6.0 pounds (26.69 N)	
	15 position 7.5 pounds (33.36 N)	
	18 position 9.0 pounds (40.03 N)	
	24 position 12.0 pounds (53.38 N)	
	36 position 18.0 pounds (80.06 N)	
lumidity (240 hrs. at 40°C, 90-95% R.H.)	Meets insulation resistance and test voltage requirements	
/ibration (Per MIL-STD 202 Method 204)	No cracking of dielectric and test voltage requirements	
	of current greater than 10 microseconds	
Shock (Per MIL-STD-202B Method 213 Cond. A.)	No cracking of dielectric or lessoning of the state of th	
	No cracking of dielectric or loosening of contacts, no discontinuity	
Ourability	of current greater than 10 microseconds	
Vorking Voltage	Shall withstand 500 matings and unmatings	
Material Material	750 Volts (see notes 3 & 4)	
	NYLON — Per MIL-M-20693A UL94V-2	
lotes: 1. This connector will accommodate wire insulation up to 165 may	Color: black (STD.)	

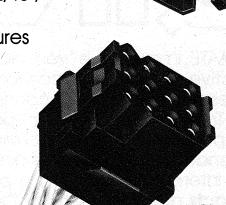
1. This connector will accommodate wire insulation up to .165 max. dia

Contact designations shown appear on both mating face and wire face connector
 U.L. recognized—File No. E 31151.

CSA Certified-File I R 3015

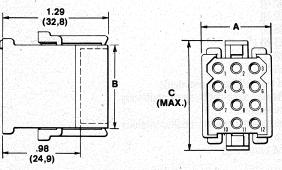
STANDARD CONNECTORS

Panelmount QIKMATE is available in 2, 3, 4, 6, 9, 12, 15, 18, 24 and 36 positions. Intended for use in panel thicknesses of .O3O to.O9O, the receptacle features positive housing retention and quickly snaps into the prepared cut-out in the mounting panel. Should removal be necessary, it is accomplished by depressing the molded-in latches of the receptacle.

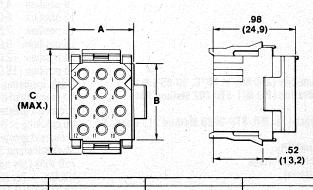


All D	imens	ions:	in.
			(mm)

and the second	PLUG	3		
Number of Contacts	Catalog No.	A	В	C (Max.)
2	SMS2P-1	.59 (15,0)	.33 (8,4)	.70 (17,8)
3	SMS3P-1	.73 (18,5)	.33 (8,4)	.70 (17,8)
4	SMS4P-1	.93 (23,6)	.33 (8,4)	.70 (17,8)
6	SMS6P-1	.73 (18,5)	.53 (13,5)	.90 (22,9)
9	SMS9P-1	.73 (18,5)	.73 (18,5)	1.10 (27,9)
12	SMS12P-1	.73 (18,5)	.93 (23,6)	1.30 (33,0)
15	SMS15P-1	.73 (18,5)	1.13 (28,7)	1.50 (38,1)
18	SMS18P-1	.73 (18,5)	1.33 (33,8)	1.70 (43,2)
24	SMS24P-1	.93 (23,6)	1.33 (33,8)	1.70 (43,2)
36 .	SMS36P-1	1.93 (49,0)	.93 (23,6)	1.30 (33,0)

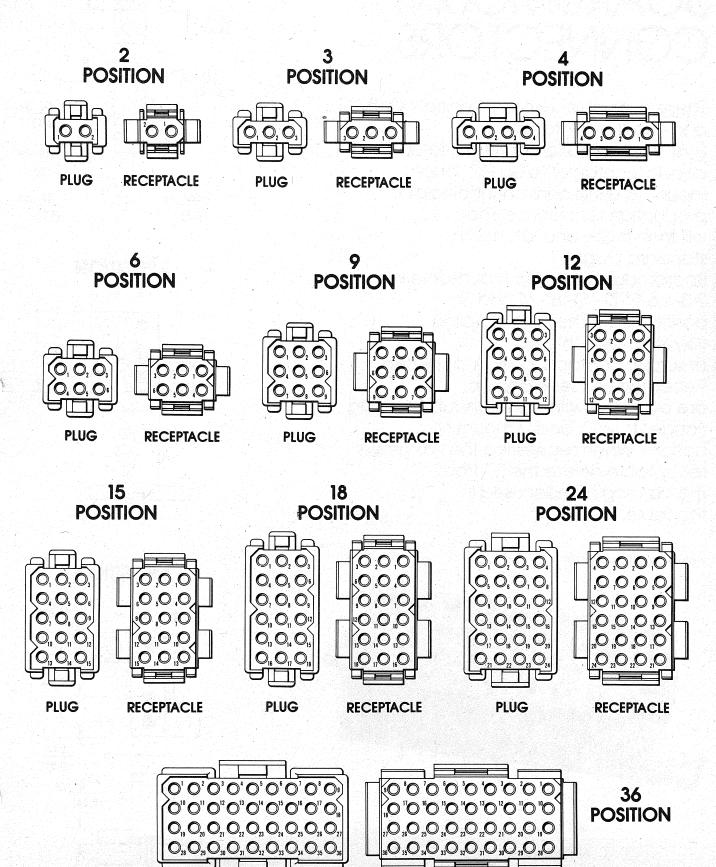


NI	RECEPTA			
Number of Contacts	Catalog No.	A	В	C (Max
2	SMS2R-1	.43 (10,9)	.23 (5,8)	.60 (15,2)
3	SMS3R-1	.63 (16,0)	.23 (5,8)	.60 (15,2)
4	SMS4R-1	.83 (21,1)	.23 (5,8)	.60 (15,2)
6	SMS6R-1	.63 (16,0)	.43 (10,9)	.80 (20,3)
9	SMS9R-1	.63 (16,0)	.63 (16,0)	1.00 (25,4)
12	SMS12R-1	.63 (16,0)	.83 (21,1)	1.20 (30,5)
15	SMS15R-1	.63 (16,0)	1.03 (26,2)	1.40 (35,6)
18	SMS18R-1	.63 (16,0)	1.23 (31,2)	1.60 (40,6)
24	SMS24R-1	.83 (21,1)	1.23 (31,2)	1.60 (40,6)
36	SMS36R-1	1.83 (46,5)	.83 (21,1)	1.20 (30,5)



RACK & PANEL

CONTACT IDENTIFICATION



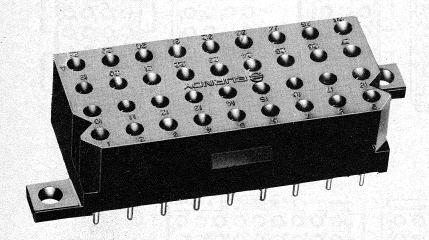
PLUG

RECEPTACLE

P. C. BOARDMOUNT CONNECTORS

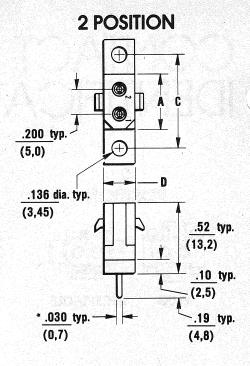
These special receptacles enable QIKMATE and Trim Trio contacts (with the exception of subminiature coaxial contacts) to be P.C. board mounted using conventional solder production techniques. They will then mate and latch with standard plugs. Boardmount QIKMATE is available in 2-3-4-6-9*-12-15*-18*-24 and 36 position sizes. They are supplied fully loaded with pin or socket contacts, gold or tin plated. Receptacles sizes 6 and up, are available with and without mounting flanges for P.C. board mounting options. When requesting the flangeless receptacle delete the "E" from the catalog number used in the table.

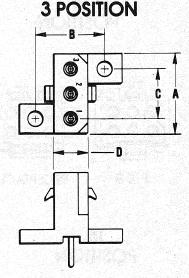
*supplied with pin contacts only.

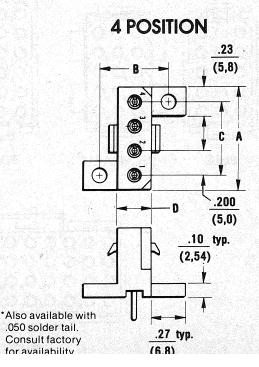


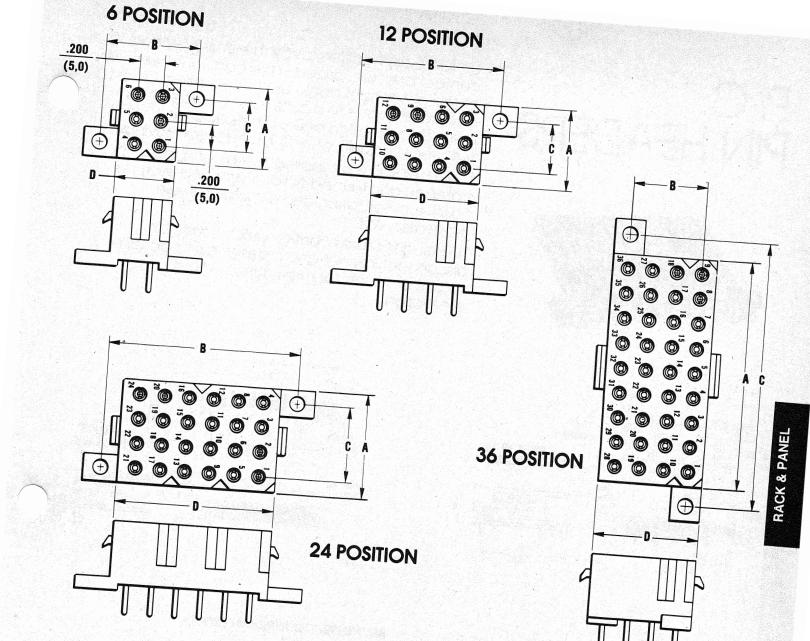
Max. Boardmount Current Rating — 5 amps.

All Dimensions: in. (mm)







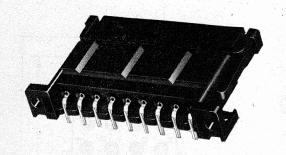


Number of Contacts	Catalog Number		Also transfer to		T
2	SMS2RE-3/4	<u> </u>	В	C	
3		.43 (10,9)	(Not applicable)	.75 (19,1)	D
4	SMS3RE-3/4	.63 (16,0)	.55 (14,0)	The state of the s	.23 (5,8
	SMS4RE-3/4	.83 (21,1)		.40 (10,2)	.23 (5,8
6	SMS6RE-3/4	.63 (16,0)	.55 (14,0)	.60 (15,2)	.23 (5,8)
12	SMS12RE-3/4		.75 (19,0)	.40 (10,2)	.43 (10,9
24	SMS24RE-3/4	.63 (16,0)	1.15 (29,2)	.40 (10,2)	ENGLISHED THE PLANT
36	SMS36RE-3/4	.83 (21,1)	1.55 (39,4)	.60 (15,2)	.83 (21,1)
All BOARDMAN	OINIOUNE-3/4	1.83 (46,5)		Carlos Anna Carlos Carl	1.23 (31,2
, DOWUDINIOU	NT Housings except 2, 3 and 4	position, are available	/-	2.15 (54,6)	.83 (21,1)

How to order	. , o and 4 position, are available w/
Si	MS <u>R/RE</u> 3/4
No. of Contacts—	I T T
R = w/o mounting ears—	Contact plating (see table)
RE = with mounting ears	3 = Supplied with socket contacts
	4 = Supplied with pin contacts

DI ATI	PLATING TABLE			
PLATING SUFFIX	DESCRIPTION			
TK6	TIN-ALLOY PREPLATED			
D70	TYPE D70 PER BURNDY SPEC. F450: .000005 MIN. GOLD OVER .000075 MIN. NICKEL	STO PLATING		
S2	.000050 MIN. GOLD OVER .000200 MIN. NICKEL	+		
64	.000050 MIN. GOLD OVER .000075 MIN. NICKEL	ECTIVE PLATING		
	.000030 MIN. GOLD OVER			

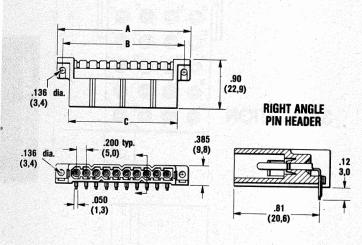
P. C. PIN HEADERS

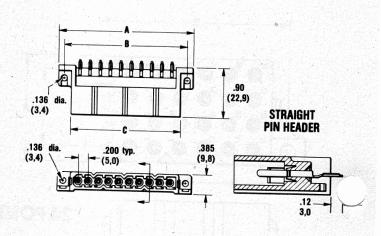


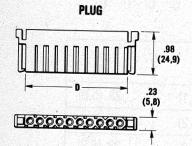
QIKMATE Pin headers, available in 3-4-6-9 and 10 contact positions, provides the additional versatility of straight or right angle board mounting. Offered as an alternative to stacked connectors, the inline contact design of the pin header provides the user with significant P.C. board space savings. The receptacle is supplied pre-assembled with stamped and formed pin contacts and features positive polarization and a molded-in pin protection skirt.

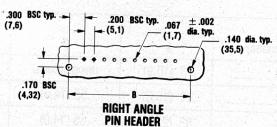
The plug features positive quick connect/ disconnect latches and is designed to accept socket contacts for maximum contact protection.

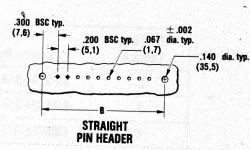
RECOMMENDED P.C. BOARD HOLE LAYOUT









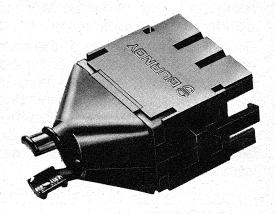


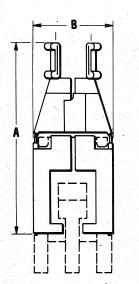
CATALOG NUMBER							
SOCKET	BOARD MOUNT HEADER		NO. OF	Dimensions			
PLUG	RIGHT ANGLE	STRAIGHT	POSITIONS	A	В	С	D
SMS3P-3	SMS3PH-3TK6	SMS3PH-4TK6	3	1.23 (31,2)	1.00 (25,4)	.76 (19,3)	.63 (16,0)
SMS4P-3	SMS4PH-3TK6	SMS4PH-4TK6	4	1.43 (36,3)	1.20 (30,4)	.96 (24,4)	.83 (21,1)
SMS6P-3	SMS6PH-3TK6	SMS6PH-4TK6	6	1.83 (46,5)	1.60 (40,6)	1.36 (34,5)	1.23 (31,2)
SMS9P-3	SMS9PH-3TK6	SMS9PH-4TK6	9	2.43 (61,7)	2.20 (55,9)	1.96 (49,8)	1.83 (46,5)
SMS10P-3	SMS10PH-3TK6	SMS10PH-4TK6	10		2.40 (61,0)		2.03 (51,6)

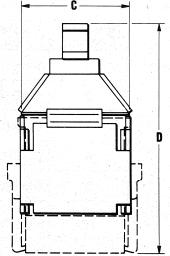
RACK & PANEL

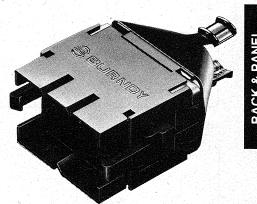
STRAIN RELIEF HOODS

Strain relief hoods are available for all standard plugs. The hoods consist of identical halves that snap into position on the plug and are secured in place with a cable tie drawn tightly around the cable entry collar. Catalog numbers designate a complete hood (2 halves). The cable tie is not included.









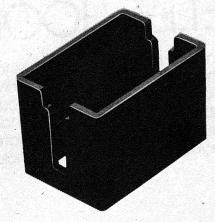
QIKMATE Contact Position Catalog No.		VALIDA	Recommended	Dimensions			
	Wire Bundle (Max.)	UNIRAP Cable tie	A	В	C	D (max.)	
2	SMS2H-1	.33 (8,4)	TF-4	1.82 (46,2)	.66 (16,7)	.42 (10,6)	2.22 (56,3)
3	SMS3H-1	.33 (8,4)	TF-4	1.82 (46,2)	.76 (19,3)	.42 (10,6)	2.22 (56,3)
4	SMS4H-1	.39 (9,9)	TF-4	1.82 (46,2)	.96 (24,3)	.42 (10,6)	2.22 (56,3)
6	SMS6H-1	.32 (8,1)	TF-4	1.82 (46,2)	.76 (19,3)	.62 (15,7)	2.22 (56,3)
9	SMS9H-1	.36 (9,1)	TF-5	1.78 (45,2)	.76 (19,3)	.82 (20,8)	2.18 (55,3)
12	SMS12H-1	.400 (10,2)	TF-5	1.78 (45,2)	.76 (19,3)	1.02 (25,9)	2.18 (55,3)
15	SMS15H-1	.435 (10,9)	TF-5	1.98 (50,2)	.76 (19,3)	1.22 (30,9)	2.38 (60,4)
18	SMS18H-1	.465 (11,7)	TF-5	1.98 (50,2)	.76 (19,3)	1.42 (36,0)	2.38 (60,4)
24	SMS24H-1	.50 (12,7)	TF-5	1.99 (50,5)	.96 (24,3)	1.42 (36,0)	2.39 (60,7)
36	SMS36H-1	.62 (15,7)	TF-5	2.28 (57,9)	1.96 (49,7)	1.02 (25,9)	2.68 (68,0)

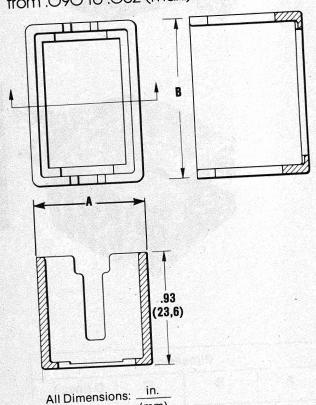
All Dimensions:

PIN PROTECTION SHROUDS

When pins are inserted into the panelmount receptacle half of the QIKMATE connector, an optional pin protection shroud can be installed.

The shroud is mounted at the same time as the receptacle by holding the shroud against the mating side of the panel with both cut-outs lined up. The receptacle is then inserted in place, trapping the shroud between the receptacle and panel. The use of the pin protection shroud reduces the allowable thickness of the panel from .090 to .062 (max.).





Number of Contacts	Catalog Number	A	В	
2	SMS2CSB1	.78 (19,8)		
3	SMS3CSB1	.92 (23,4)	.74 (18,8)	
4	SMS4CSB1	1.12 (28,4)		
6	SMS6CSB1		.94 (23,9)	
9	SMS9CSB1	02	1.14 (29.0)	
12	SMS12CSB1	.92 (23,4)	1.34 (34,0)	
15	SMS15CSB1		1.54 (39,1)	
18	SMS18CSB1		1.74 (44,2)	
24	SMS24CSB1	1.12 (28,4)	1.74 (44,2	
36	SMS36CSB1	213	1.34	

DISCRIMINATING PINS

Discriminating pins are non-conductive plastic contacts. Inserted into unfilled contact holes, they permit mating only with QIKMATE connectors having a corresponding vacant contact position.

Discriminating pins are available in quantities of 5. When ordering, please quote catalog number SMSPKB1-5PK.

For the P.C. boardmount, a polarizing sleeve that slips over the fixed pin is also available. When requesting sleeves, please quote catalog number SMSPKB-2.

