
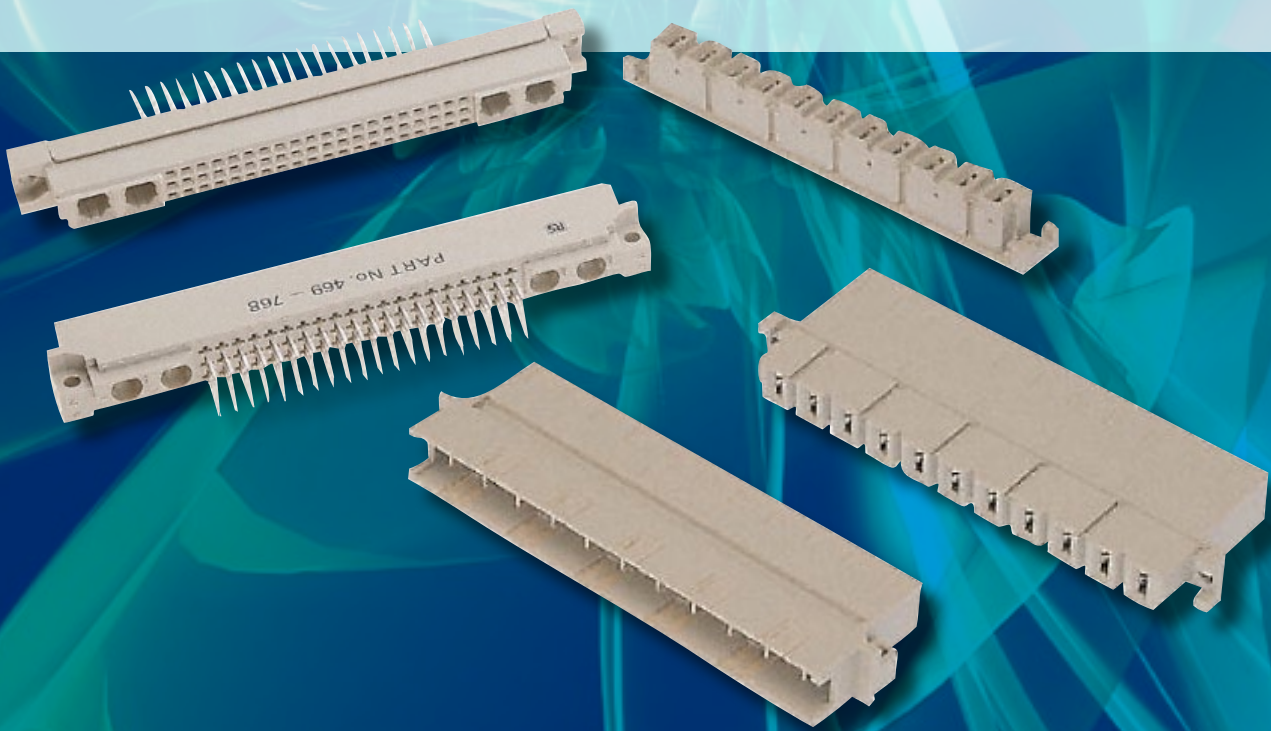


# VEROTEC

Electronics Packaging

- 
- Standard Products
  - System Integration
  - Contract Manufacture



**Connectors to  
DIN 41612**

## CONNECTORS CONFORMING TO DIN 41612

Verotec maintains a range of connectors that conform to the DIN 41612 norm and some that could be termed enhanced standard developed from customers special requirements.

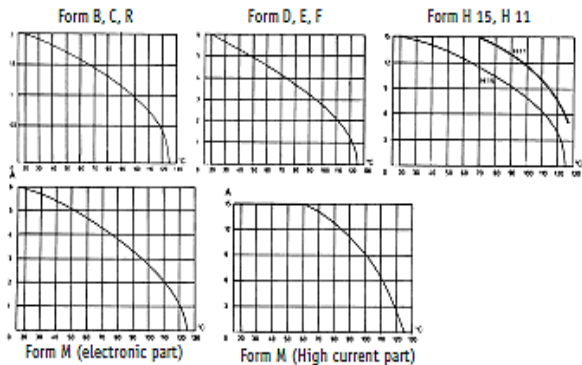
## CONNECTOR QUALIFICATION

Verotec connectors conform to DIN 41612, Part 5 with regard to their nominal values, claims and testing.

Performance class	Mating cycles	Surfaces	Gas test
1	500	Contact area gold plated Termination Tin plated	10 days
*2	400	Contact area gold plated Termination Tin plated	4 days
3	50	Contact area gold plated Termination Tin plated	—

\* Verotec connectors in general meet performance class 2: Life span 400 mating cycles. 200 cycles, then 4 days of gas testing. Measurement of the resistance. 200 mating cycles followed by visual inspection. No degradation from surface material through to the sub-material, and no lessening of functionality.

## RATING CURVES. (OPERATING CURRENT/AMBIENT TEMPERATURE)



## VDE 0110 b/2.79, Table 4

Minimum values of air and creepage distances in mm  
Reference voltages (to Table 1) upto:

DC Voltage	V	15	36	75	150	300	450	600
AC voltage (rms)	V	12	30	60	125	250	380	500
Insulation group Ao	L	0,06	0,1	0,15	0,25	0,5	0,8	1,1
	a	0,1	0,15	0,2	0,35	0,7	1,1	1,5
Insulation group A	L	0,15	0,2	0,25	0,4	0,8	1,2	1,6
	a	0,2	0,25	0,35	0,5	1	1,5	2
Insulation group B	L	0,4	0,5	0,7	1	1,6	2,4	3
	a	0,6	0,8	1	1,3	2	3	4
	b	0,8	1	1,3	2	3	4	5,5
Insulation group C	L	0,8	1	1,2	1,6	2,5	3,5	4,5
	a	1,2	1,5	1,7	2,2	3	4,5	6
	b	1,7	2	2,3	3	4	6	8
Insulation group D	L	1,6	1,8	2	2,5	3,5	5	6,5
	a	2,3	2,6	3	3,5	5	7	9
	b	3,2	3,5	4	5	7,5	10	13

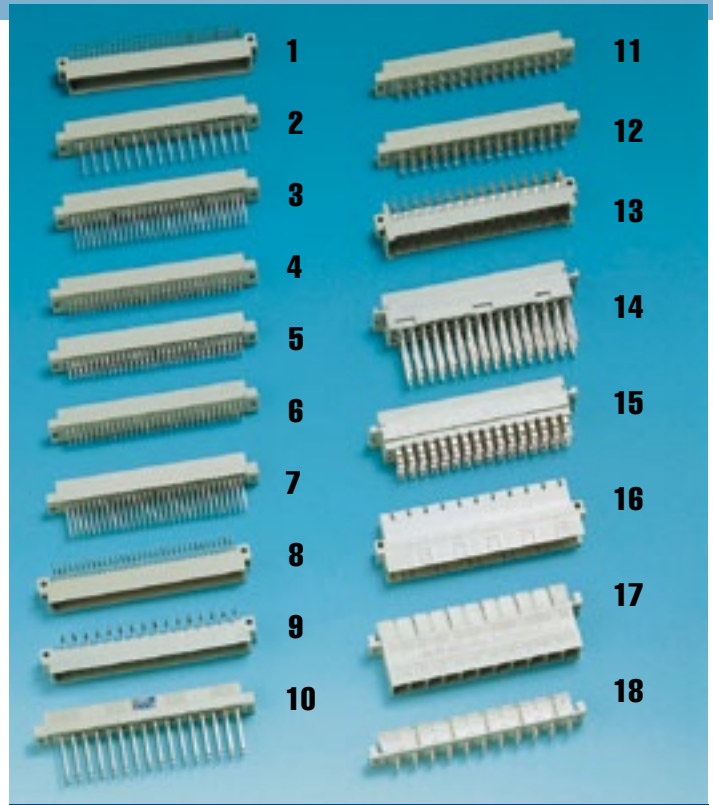
L = Air distance a , b = Creep distance as Table 3

## VDE 0110 b/z.79, table Creeping current strength

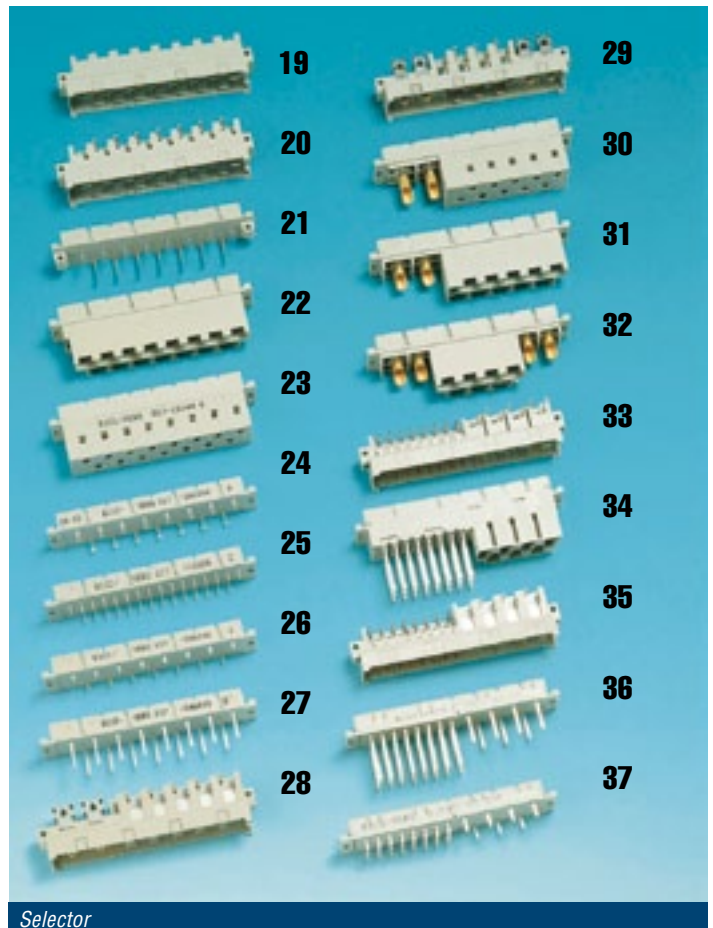
Creeping current strength1) (Minimum value)	Creeping-distances2) without ribs with ribs ( 8a)	
	b	a + b 2
KB 100	b	a + b 2
KB 380	a + b 2	a
KB 600	a	a

1) DIN 53480/VDE 0303

2) For insulation group Ao and A generally creepage-distance a



Selector



Selector

## HEAVY DUTY CONNECTOR CODING DEVICE

This coding device is suitable for use with DIN 41612 types B, C & D connectors. It will prevent incorrect board insertion and costly miss-mating. The device is manufactured from zinc alloy to BS 1004A and offers a very strong polarizing feature that is easy and quick to assemble.

### ORDERING INFORMATION

Description	Order code
Compatible connectors B, C and D, 10 kits per pack	<b>41-24324G</b>

An alternative coding device is available in red plastic.

	Order code
B,C and D, 10 kits per pack	<b>17-2856E</b>

### ORDERING INFORMATION

Type	Order code	DIN description	*POS.	Description	class
3 ROW FORM C male 64/96	<b>17-2876</b>	C64M - C1A	8	Dip solder, angled. Contacts: full rows A & C	2
3 ROW FORM C male 96/96	<b>17-2622</b>	C96M - C1A	1	Dip solder, angled. Contacts: full rows A, B & C	2
3 ROW FORM C female 32/96	<b>17-2875</b>	C32F - C1H	2	Wire wrap. Contacts: even numbers rows A & C	2
3 ROW FORM C female 64/96	<b>17-2874</b>	C64F - C1H	3	Wire wrap. Contacts: full rows A & C	2
3 ROW FORM C female 64/96	<b>17-2624</b>	C64F - C1D	4	Dip solder. Contacts: full rows A & C	2
3 ROW FORM C female 64/96	<b>17-2625</b>	C64F - C1W	5	Solder eyelet. Contacts: full rows A & C	2
3 ROW FORM C female 96/96	<b>17-2479</b>	C96F - C1D	6	Dip solder. Contacts: full rows A, B & C	2
3 ROW FORM C female 96/96	<b>17-2626</b>	C96F - C1H	7	Wire wrap. Contacts: full rows A, B & C	2
2 ROW FORM D male 32 way	<b>17-2873</b>	D32M - C1A	9	Dip solder, angled. Contacts: full rows A & C	2
2 ROW FORM D female 32 way	<b>17-2872</b>	D32F - C1H	10	Wire wrap. Contacts: full rows A & C	2
2 ROW FORM D female 32 way	<b>17-10720</b>	D32F - C1D	11	Dip solder. Contacts: full rows A & C	2
2 ROW FORM D female 32 way	<b>17-10110</b>	D32F - C1W	12	Solder eyelet. Contacts: full rows A & C	2
3 ROW FORM F male 48 way	<b>17-2631</b>	F48M - C1A	13	Dip solder, angled. Contacts: full rows B, D & Z	2
3 ROW FORM F female 48 way	<b>17-2636</b>	F48F - C1H	14	Wire wrap. Contacts: full rows B, D & Z	2
3 ROW FORM F female 48 way	<b>17-45497</b>	F48F - C1W	15	Solder eyelet. Contacts: full rows B, D & Z	2
FORM H male, 11 way *	<b>17-10112</b>	H11M - C2A	16	Faston/dip solder, angled, LP 32**	1
FORM H female, 11 way *	<b>17-10113</b>	H11F - C2S	17	Faston 6.3 x 0.8mm	1
FORM H female, 11 way *	<b>17-10137</b>	H11F - C2S	18	Dip solder, 2 per contact	1
FORM H male 15 way *	<b>17-10210</b>	H15M - C2G	19	Faston 6.3 x 0.8mm, LPZ32**	1
FORM H male 15 way *	<b>17-10493</b>	H15M - C2A	20	Dip solder, angled, LPZ32**	1
FORM H female 15 way *	<b>17-10223</b>	H15F - C2D-90°	21	Dip solder, angled	1
FORM H female 15 way *	<b>17-10115</b>	H15F - C2S	22	Faston	1
FORM H female 15 way *	<b>17-10144</b>	H15F - C2Sr	23	Screw connection	1
FORM H female 15 way *	<b>17-46844</b>	H15F - C2W	24	Solder eyelet	1
FORM H female 15 way *	<b>17-10224</b>	H15F - C2D	25	Dip solder, 2 per contact	1
FORM H female 15 way *	<b>17-46842</b>	H15F - C2D	26	Solder, 4mm long	1
FORM H female 15 way *	<b>17-46843</b>	H15F - C2D	27	Solder, 13mm long	1
FORM H 15 male 10 + 2 way*	<b>17-10038</b>	H15M - 10WVZ	28	32+2 HA/W 28 10 Angled dip solder/faston + 2 dip solder/screw,LPZ32**	
FORM H 15 male 7 + 4 way*	<b>17-10235</b>	H15M - 7WVZ	29	32+4 HA/W 29 2 + 2 dip solder/screw + 7 angled dip solder/faston	
FORM H 15 female, 10 + 2 way *	<b>17-10039</b>	H 15 F 10 SR+2 HA/L	30	10 screw, 2 solder	1
FORM H 15 female, 10 + 2 way *	<b>17-10138</b>	H 15 F 10 FA+2 HA/L	31	10 faston, 2 solder	1
FORM H 15 female, 7 + 4 way *	<b>17-10236</b>	H 15 F 7 FA+4 HA/L	32	2 solder, 7 faston, 2 solder	1
FORM M male mixed 24 + 7 way *	<b>17-24311</b>	Male mixed, form M	33	Dip solder, angled 24 + 7, LPZ32**	2
FORM M female mixed 24 + 7 way *	<b>17-24312</b>	Female mixed, form M	34	24 wire wrap, 7 faston	2
FORM M male mixed 24 + 7 way *	<b>17-10225</b>	Male mixed, form M	35	Dip solder, angled. 24 + 7 Dip solder/faston, LPZ32**	2
FORM M female 24 + 7 way *	<b>17-10227</b>	Female mixed, form M	37	24 + 7 Dip solder	2

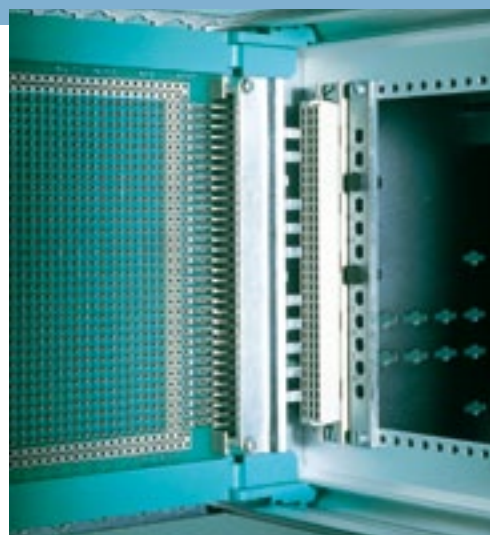
= Denotes minimum order quantity, please contact our sales office.

\* With integrated polarisation \*\* Leading pin position

Use coding wedge 17-10234 (Pk 10)

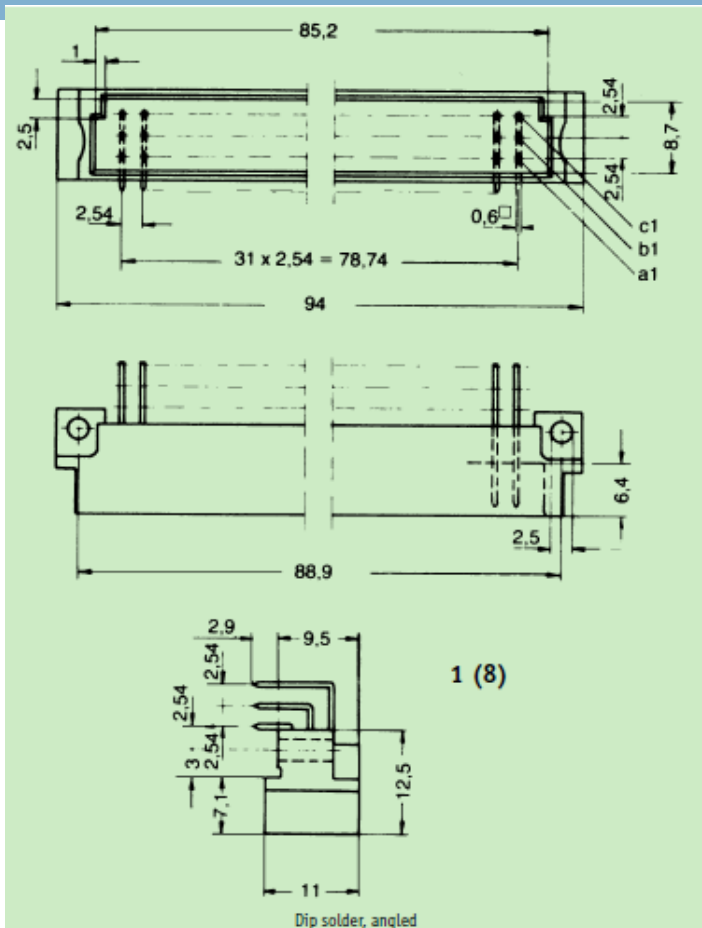
Use coding wedge 17-10064 (Pk 10)

Order coding keys separately



## 3 ROW FORM C MALE 64/96, 96/96

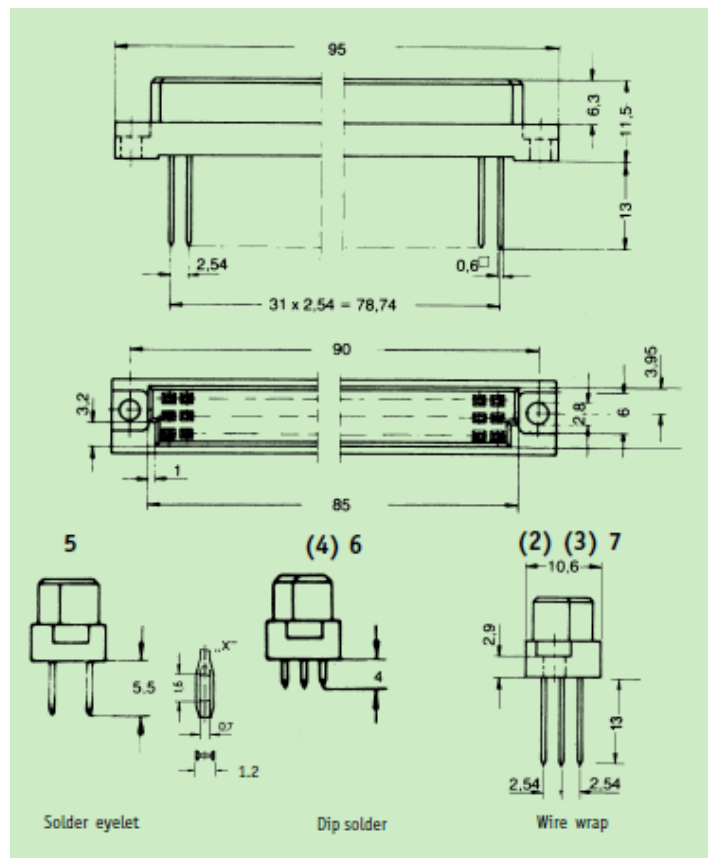
- Angled dip solder terminations
  - Rows on 2,54mm pitch
  - For PCBs with nominal thickness of 1.6mm
  - Height of 11mm
  - Selectively hard gold plated contacts which ensure a reliable contact at high connection forces
  - Discrimination notches prevent incorrect connection
- ★ Position No's. 8 & 1



3 Row form C (male 64/96, 96/96)

## 3 ROW FORM C FEMALE 32/96, 64/96, 96/96

- Wire wrap, solder eyelet or dip solder terminations
  - Three rows
  - Selectively gold plated contacts, zinc plated terminations
- ★ Position No's. 2 to 7



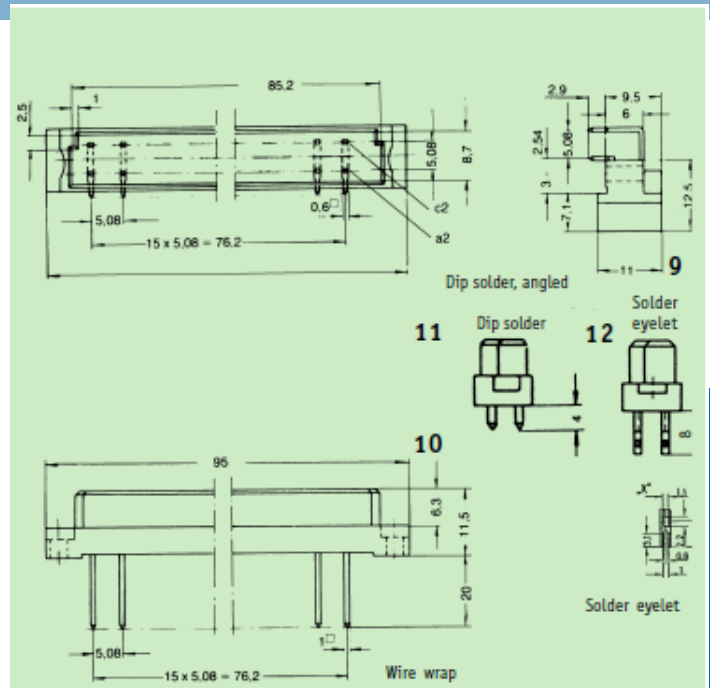
3 Row form C (female 64/96, 96/96)

## 2 ROW FORM D

### MALE 32 WAY

### FEMALE 32 WAY

- Two rows, inter-row spacing 5.08mm
- Angled dip solder, Wire-wrap, solder eyelet or dip solder terminations
- Height 11mm
- Discrimination notches in the housing prevent incorrect connection
- Coding for connector construction forms are available
- Selectively gold plated contacts, zinc plated terminations
- ★ Positions 9 to 12



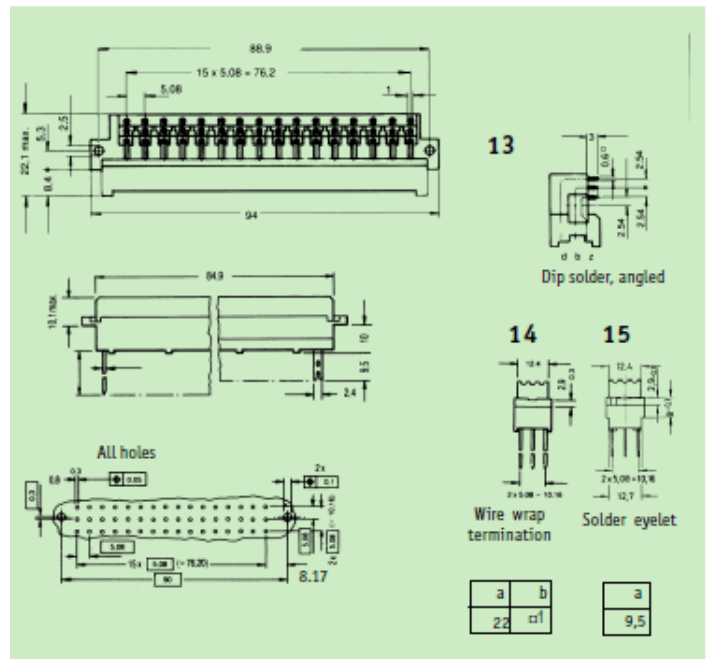
2 Row form D (male and female 32 way)

## 3 ROW FORM F

### MALE 48 WAY

### FEMALE 48 WAY

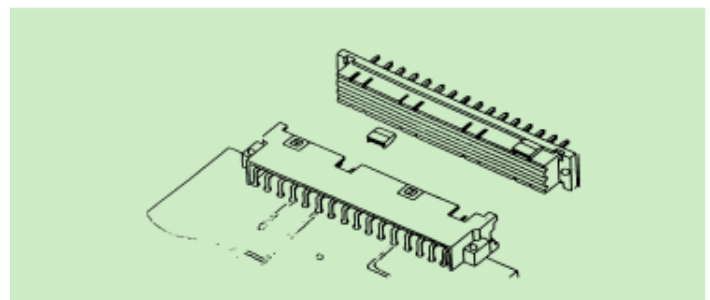
- Three rows, inter-row spacing 3.81mm
- Connectors with higher insulation to VDE 0110 Group C 380V/450V
- Operating current 4.0A at 70°C
- Angled dip solder, solder eyelet or wire wrap terminations on 5.08mm matrix
- Selectively gold plated contacts, zinc plated dip solder terminations
- For PCBs with a nominal thickness of 1.6mm
- Discrimination notches prevent incorrect connection
- Selectively gold plated contacts, zinc plated solder or wire wrap terminations
- Higher insulation body, to VDE 0110 Group C 380V / 450 V
- Solder termination 1mm square
- ★ Positions 13 to 15



3 Row form F (male and female 48 way)

## CONNECTORS WITH INTEGRATED POLARISATION

Many of the following connectors can be polarised without loss of contact. Coding wedges, which should be ordered separately, are fitted to the female. The corresponding break-out feature is removed from the mating male.



Connectors with integrated polarisation

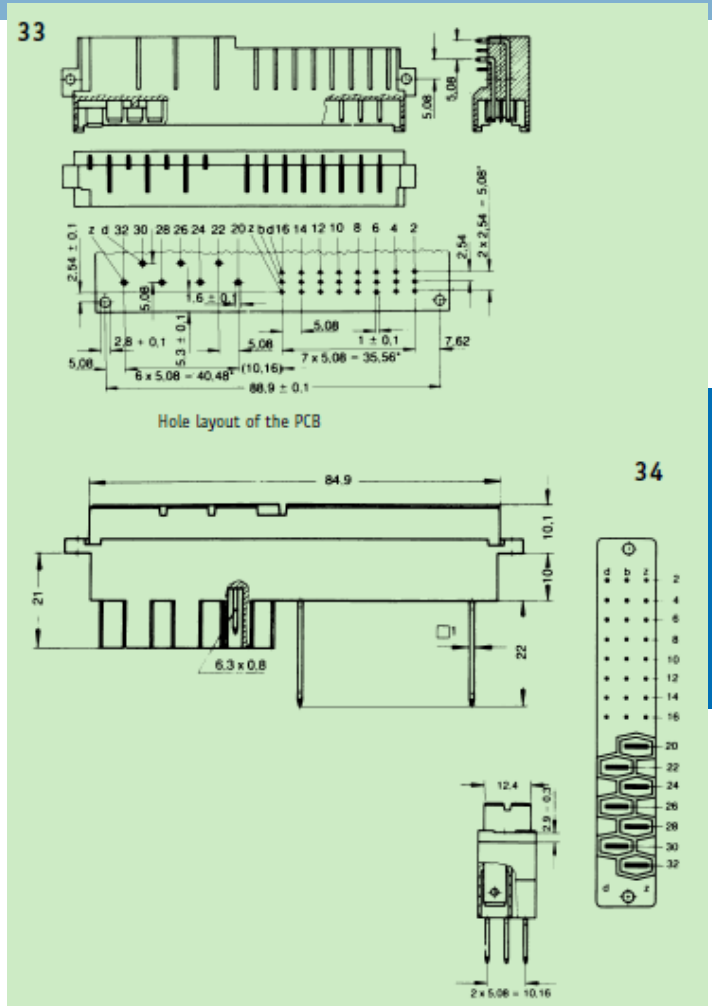


## FORM M

MALE AND FEMALE MIXED 24 + 7 WAY

- Mixed connector with two separated areas for electronic and heavy current wiring
- Electronic wiring on 24 contacts (first mate last break contact z24)
- Heavy current wiring on 7 contacts (first mate last break contact z32)
- Selectively gold plated and zinc plated angled terminations for automatic dip solder (Electronic contacts)

★ Positions 33 & 34



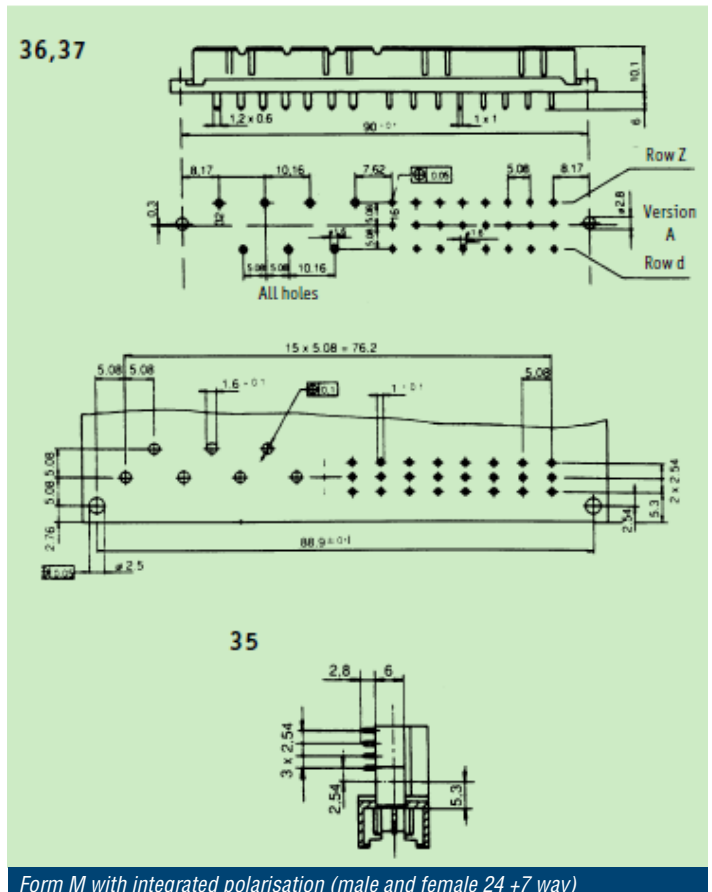
Form M (male and female mixed 24 + 7 way)

## FORM M

WITH INTEGRATED POLARISATION MALE AND FEMALE 24+7 WAY

- 24 electronic and 7 heavy current (15A)
- First mate, last break contacts in both areas
- Dip solder and wire wrap (22mm x 1□) terminations
- Coding without loss of contacts
- 8 coding positions = max 70 combinations
- Selectively gold plated contacts in the electronic area and silver plating in the heavy current section give excellent contact performance

★ Positions 35 to 37



Form M with integrated polarisation (male and female 24 + 7 way)

