



TDPX filter connectors are used primarily on commercial and military aircraft for radio and instrumentation equipment and are available in single thru four gang version with standard ARINC shells and polarizing posts. They are interchangeable with the standard DPX connectors are available in 9 contact arrangements.

## Performance and Material Specifications

### MATERIALS AND FINISHES

Description	Material	Finish
Shell	Aluminum alloy	Cadmium plate (yellow chromate)
Contacts	Copper alloy	Gold over suitable underplate
Insulator	High grade plastic	none
Interfacial and Peripheral Seals	Neoprene rubber	none
Ground Spring	Beryllium copper	Gold plate
Polarizing Posts	Stainless steel	Passivate

### ELECTRICAL

Contacts Size	22		20, 16 & 22		16 & 20
Available Filter	Low Freq.	Mid Freq.	Std. Freq.	High Freq.	Low Freq.
Catalog Reference	L	M	T	H	L
Voltage Rating	200 VDC - 120 VAC rms 400 Hz				
Current Rating (Amp DC)	5 amp	7.5 amp - size #20, 20 amp - size #16		20 amp	
Insulation Resistance, 2 min. electrification time max. at 25° C and 100 VDC	5,000 megohms minimum @ 100 VDC				
DWV, sea level, with 500 microamps max. charge/discharge current	300 VDC	500 VDC		500 VDC	
Capacitance at 1 KHz, 0.1 V rms picofarads	32,000	8,000	3,000	850	32,000
	45,000	12,000	5,000	1,300	45,000
Attenuation per MIL-STD-220 at 25° C with no applied voltage or current.	Freq. MHz		Attenuation (dB)		
	0.1	2 min.	-	-	2 min.
	1	15 min.	2 min.	-	15 min.
	2	20 min.	5 min.	2 min.	20 min.
	10	35 min.	20 min.	12 min.	35 min.
	100	60 min.	55 min.	50 min.	60 min.
500 to 10,000	60 min.	60 min.	55 min.	50 min.	60 min.
Filter Type	Pi	Pi	Pi	Pi	Pi

## How to Order - Single Gang

TDPX E B - 57 L 34 P - 00 01

FILTER SERIES PREFIX

ENVIRONMENTAL

SHELL STYLE

CONTACT ARRANGEMENT

CAPACITANCE INDICATOR

SHELL TYPE

CONTACT TYPE

MODIFICATION

POLARIZING POSITION

### FILTER SERIES PREFIX

TDPX - Single gang

### ENVIRONMENTAL

E - For interfacial (pin)  
Delete for standard

### SHELL STYLE

B - Polarized ARINC B shell (preferred)  
D - DPXA flange (less polarizing posts)

### CONTACT ARRANGEMENT

See page 35.

### CAPACITANCE INDICATOR

L - Low Frequency  
M - Mid Frequency  
T - Standard Frequency  
Note: Use of "T" omitted in past nomenclature.  
H - High Frequency  
N - No filters this gang. Standard DPX insert assembly.

### SHELL TYPE

33 - Male (plug)  
34 - Female (receptacle)

### CONTACT TYPE

P-Pin; S-Socket

### MODIFICATION

TDPXD  
None  
TDPXB  
03 - Mounting holes countersunk 100° to .230 (5.84) dia.  
23 - With floating eyelets.  
Consult factory.

### POLARIZING POSITION

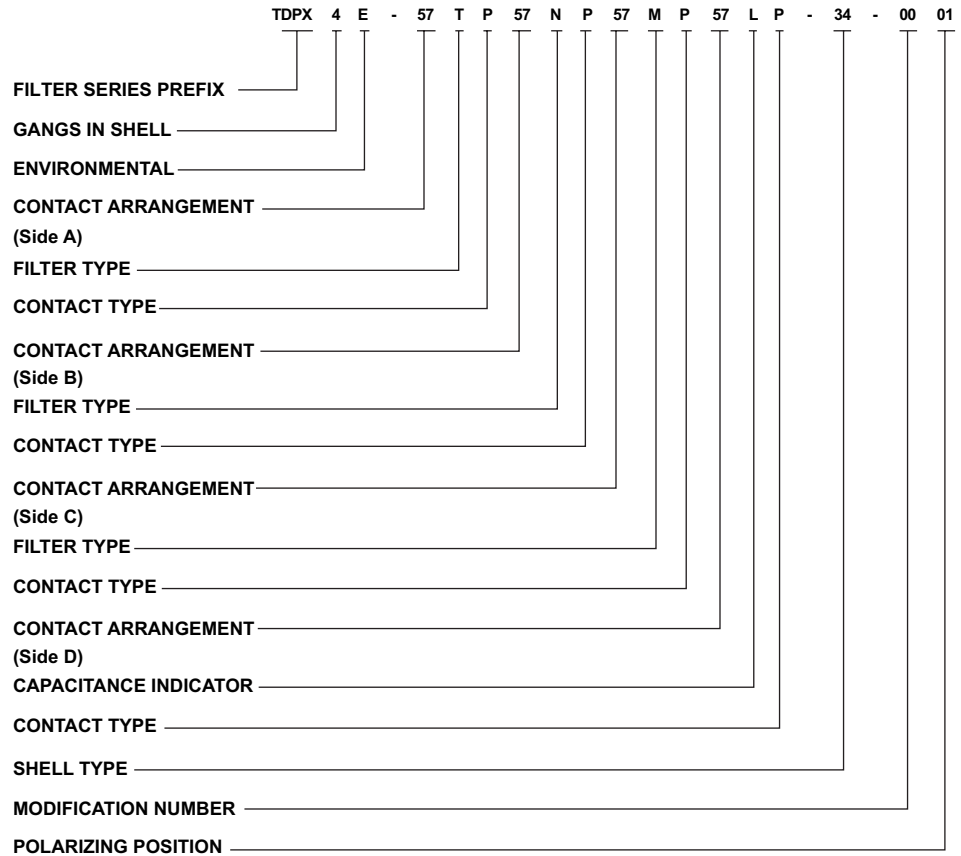
See pages 35-36.



Dimensions shown in inch (mm)  
Specifications and dimensions subject to change

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How to Order - Multiple Gang



**FILTER SERIES PREFIX**

TDPX - DPX series with solder termination.

**GANGS IN SHELL**

2, 3, and 4 gang

**ENVIRONMENTAL**

E - For interfacial (pin)  
Delete for standard.

**CONTACT ARRANGEMENT**

See page 31 for applicable arrangements. Please specify each arrangement number as indicated in ordering nomenclature for 2, 3, or 4 gang.

**CAPACITANCE INDICATOR (Each gang, as desired)\***

L - Low Frequency  
M - Mid Frequency  
T - Standard Frequency  
Note: Use of "T" omitted in past nomenclature  
H - High Frequency  
N - No filter this gang. Standard DPX insert assembly.

**CONTACT TYPE**

P for pin; S for socket. Designation follows each arrangement as ordered for 2, 3, or 4 gang versions. (Printed circuit contact/termination is available. Consult factory for specifications.)

**SHELL TYPE**

33B for male (ARINC B)  
34B for female (ARINC B)  
33 for male  
34 for female

Note: ARINC B specified for DPX2 only.

**POLARIZING POSITION (see pages 35-36)**

The last two digits in the four-digit dash number refer to the polarizing post position. When the last two digits are omitted, the polarizing posts will be assembled in position 01, but the position number is not stamped on the connector. This allows the customer to position the posts themselves and then stamp the appropriate number on the shell. If the last two digits are 00, the polarizing posts are deleted.

**MODIFICATION NUMBERS**

- 0001 indicates standard design for all styles.

**TDPX2-33B:**

- 0301 - Mounting holes .120 dia.  
Countersunk 100° to .230 dia.

**TDPX2-34:**

- 0101 - With #4-40 clinch nuts in mounting holes.

**TDPX3-34:**

- 0101 - With 6 #4-40 clinch nuts in mounting holes.

**TDPX4-34:**

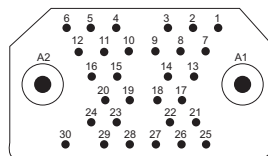
- 0101 - With 10 #4-40 clinch nuts in mounting holes.

Dimensions shown in inch (mm)  
Specifications and dimensions subject to change

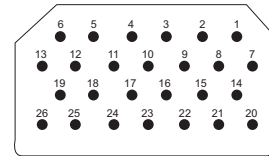


Contact Arrangements

Arrangement No.  
No. of Contacts & Wire Size

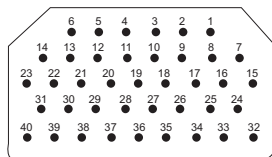


**32C2**  
30 #20, 2 coax

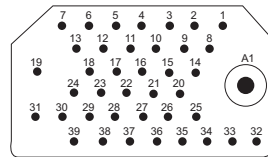


**26**  
26 #16

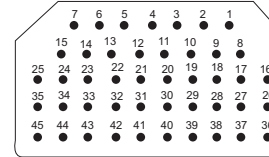
Arrangement No.  
No. of Contacts & Wire Size



**40**  
40 #20

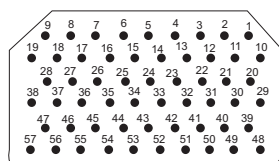


**40C1**  
39 #20, 1 coax

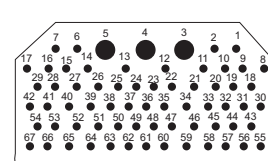


**45**  
45 #20

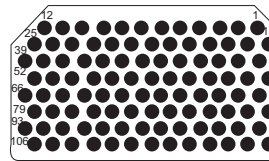
Arrangement No.  
No. of Contacts & Wire Size



**57**  
57 #20



**67**  
64 #20, 3 #16



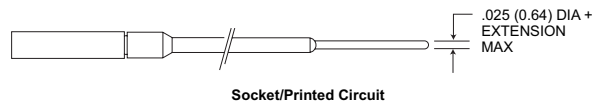
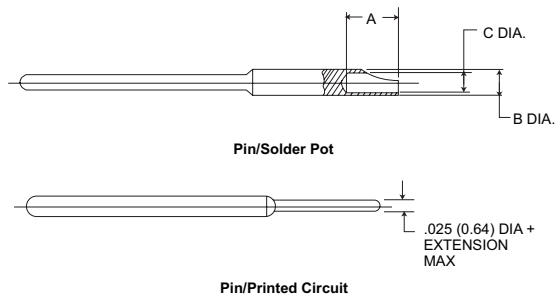
**106\***  
106 #22

NOTE: Consult factory for part numbers for special combinations of filter, group contacts and power contacts, and for availability of filter socket contacts, for each contact arrangement.

Contacts - Pin and Socket

Standard Contact Terminations

Finish: Gold plate per MIL-G-45204, Type 1, Class 1, over nickel plate per QQ-N-290.



Contact Size	A	B	C	PC Tail Extension Max.
20	.125 (3.18)	.065 (1.65)	.048 (1.22)	.200 (5.08), .285 (7.24), .375 (9.52)
	.110 (2.79)	.061 (1.55)	.043 (1.09)	
16	.170 (4.32)	.103 (2.62)	.078 (1.98)	.200 (5.08), .285 (7.24), .375 (9.52)
	.150 (3.81)	.097 (2.46)	.069 (1.75)	
22	.115 (2.92)	.005 (1.40)	.040 (1.02)	.200 (5.08), .285 (7.24), .375 (9.52)
	.095 (2.41)	.051 (1.30)	.036 (0.91)	



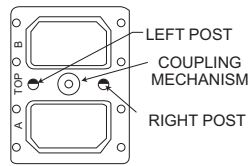
Dimensions shown in inch (mm)  
Specifications and dimensions subject to change

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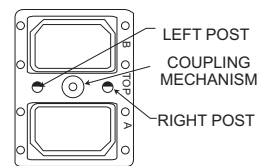
## Polarization

### Two Post Type

**DPX2-33F  
or 33M**



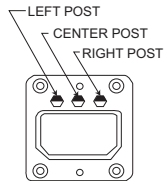
**DPX2-34F  
or 34M**



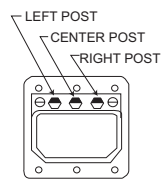
### Face View of Engaging End

### Three Post Type

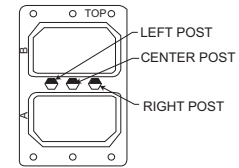
**DPXB-33**



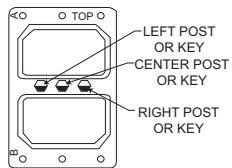
**DPXB-34**



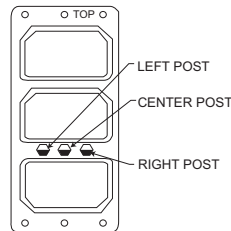
**DPX2-33A or 33B**



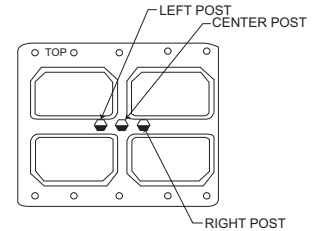
**DPX2-34A or 34B**



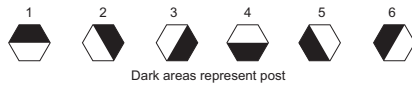
**DPX3-33**



**DPX4-33**



### Positions



Dark areas represent post

### Two Post Type

33 PLUG MALE SHELL						34 RECEPTACLE FEMALE SHELL					
Position	Left Post	Right Post	Position	Left Post	Right Post	Position	Left Post	Right Post	Position	Left Post	Right Post
01	4	4	09	3	3	01	1	1	09	2	2
02	5	4	10	4	2	02	1	6	10	3	1
03	6	4	11	2	2	03	1	5	11	3	3
04	2	4	12	3	2	04	1	3	12	3	2
05	3	4	13	2	1	05	1	2	13	4	3
06	4	3	14	3	1	06	2	1	14	4	2
07	5	3	15	2	6	07	2	6	15	5	3
08	2	3				08	2	3			

### Three Post Type

PLUG SHELL				RECEPTACLE SHELL							
Position	Left Post	Center Post	Right Post	Position	Left Post	Center Post	Right Post	Position	Left Post	Center Post	Right Post
01	1	1	1	51	3	2	5	01	4	4	4
02	2	1	1	52	4	2	5	02	4	4	3
03	3	1	1	53	5	2	5	03	4	4	2
04	4	1	1	54	6	2	5	04	4	4	1
05	5	1	1	55	1	2	4	05	4	4	6
06	6	1	1	56	2	2	4	06	4	4	5
07	1	1	6	57	3	2	4	07	5	4	4
08	2	1	6	58	4	2	4	08	5	4	3
09	3	1	6	59	5	2	4	09	5	4	2
10	4	1	6	60	6	2	4	10	5	4	1
11	5	1	6	61	1	2	3	11	5	4	6
12	6	1	6	62	2	2	3	12	5	4	5
13	1	1	5	63	3	2	3	13	6	4	4
14	2	1	5	64	4	2	3	14	6	4	3
15	3	1	5	65	5	2	3	15	6	4	2
16	4	1	5	66	6	2	3	16	6	4	1
17	5	1	5	67	1	2	2	17	6	4	6
18	6	1	5	68	2	2	2	18	6	4	5
19	1	1	4	69	3	2	2	19	1	4	4
20	2	1	4	70	4	2	2	20	1	4	3
21	3	1	4	71	5	2	2	21	1	4	2
22	4	1	4	72	6	2	2	22	1	4	1
23	5	1	4	73	1	3	1	23	1	4	6
24	6	1	4	74	2	3	1	24	1	4	5
25	1	1	3	75	3	3	1	25	2	4	4
26	2	1	3	76	4	3	1	26	2	4	3
27	3	1	3	77	5	3	1	27	2	4	2
28	4	1	3	78	6	3	1	28	2	4	1
29	5	1	3	79	1	3	6	29	2	4	6
30	6	1	3	80	2	3	6	30	2	4	5
31	1	1	2	81	3	3	6	31	3	4	4
32	2	1	2	82	4	3	6	32	3	4	3
33	3	1	2	83	5	3	6	33	3	4	2
34	4	1	2	84	6	3	6	34	3	4	1
35	5	1	2	85	1	3	5	35	3	4	6
36	6	1	2	86	2	3	5	36	3	4	5
37	1	2	1	87	3	3	5	37	4	3	4
38	2	2	1	88	4	3	5	38	4	3	3
39	3	2	1	89	5	3	5	39	4	3	2
40	4	2	1	90	6	3	5	40	4	3	1
41	5	2	1	91	1	3	4	41	4	3	6
42	6	2	1	92	2	3	4	42	4	3	5
43	1	2	6	93	3	3	4	43	5	3	4
44	2	2	6	94	4	3	4	44	5	3	3
45	3	2	6	95	5	3	4	45	5	3	2
46	4	2	6	96	6	3	4	46	5	3	1
47	5	2	6	97	1	3	3	47	5	3	6
48	6	2	6	98	2	3	3	48	5	3	5
49	1	2	5	99	3	3	3	49	6	3	4
50	2	2	5					50	6	3	3

The last two digits in the DPX nomenclature (ex: DPXB-8-33B-0014) refer to the polarizing post position. When the last two digits are omitted it means the polarizing posts will not be assembled and position number is not stamped on the connector. This allows the customer to position the posts themselves and then stamp the appropriate number on the shell. If the last two digits are made 00 it means the polarizing posts are deleted.

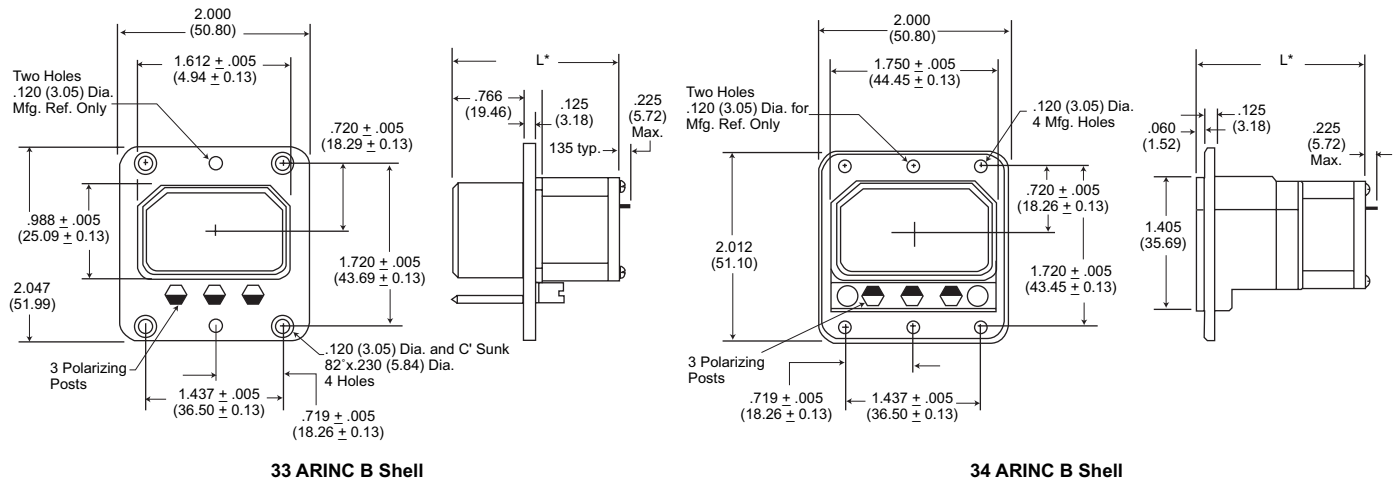


Dimensions shown in inch (mm)  
Specifications and dimensions subject to change

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Single Gang

TDPXB

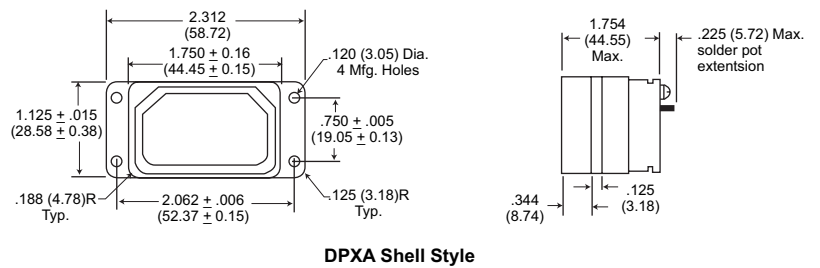


33 ARINC B Shell

34 ARINC B Shell

\* This length varies between the limits of 1.750 (44.45) and 1.437 (36.25) depending on the particular construction as determined by contact arrangement.

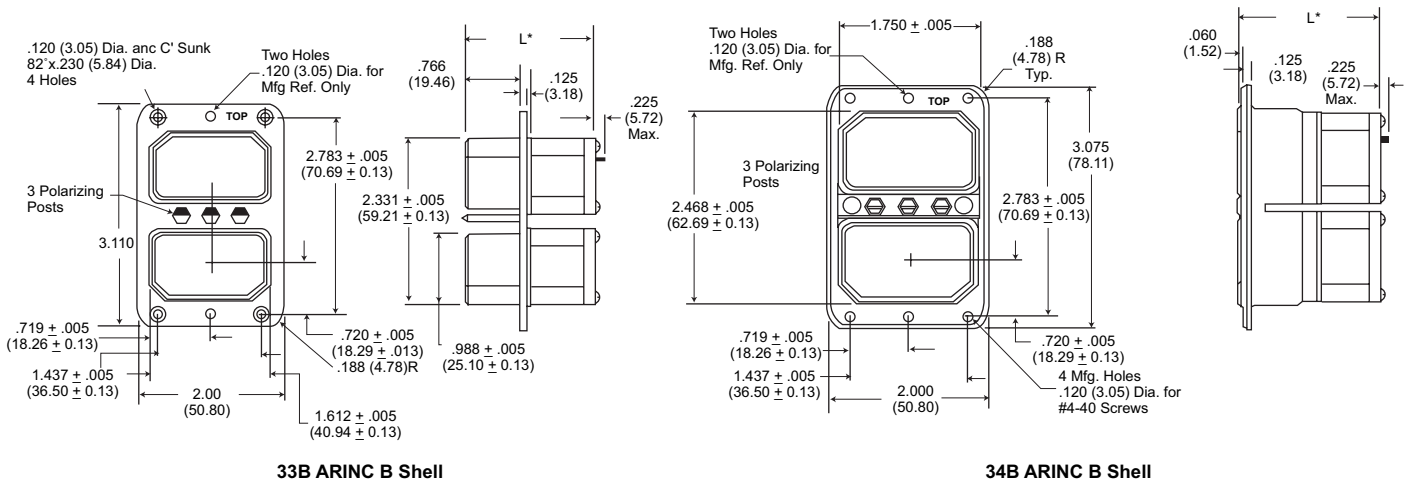
TDPXD



DPXA Shell Style

Two Gang

TDPX2



33B ARINC B Shell

34B ARINC B Shell

\* This length varies between the limits of 1.750 (44.45) and 1.437 (36.25) depending on the particular construction as determined by contact arrangement.

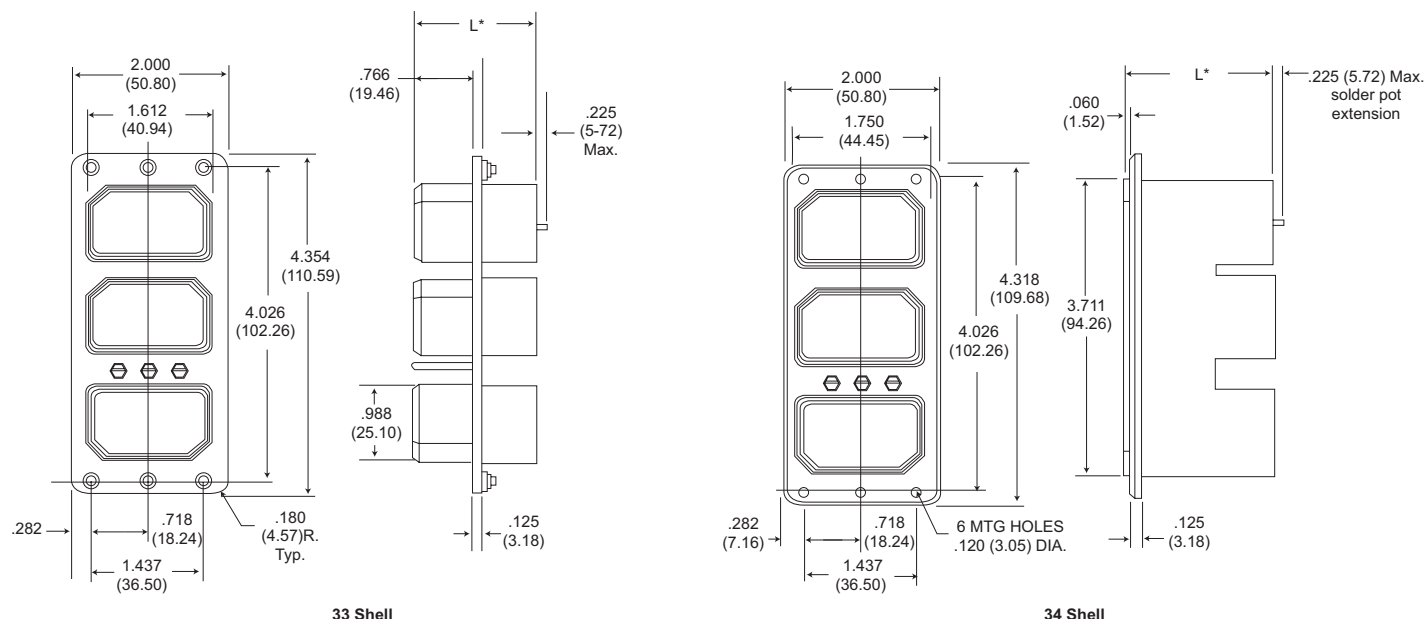
Dimensions shown in inch (mm)  
Specifications and dimensions subject to change

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Three Gang

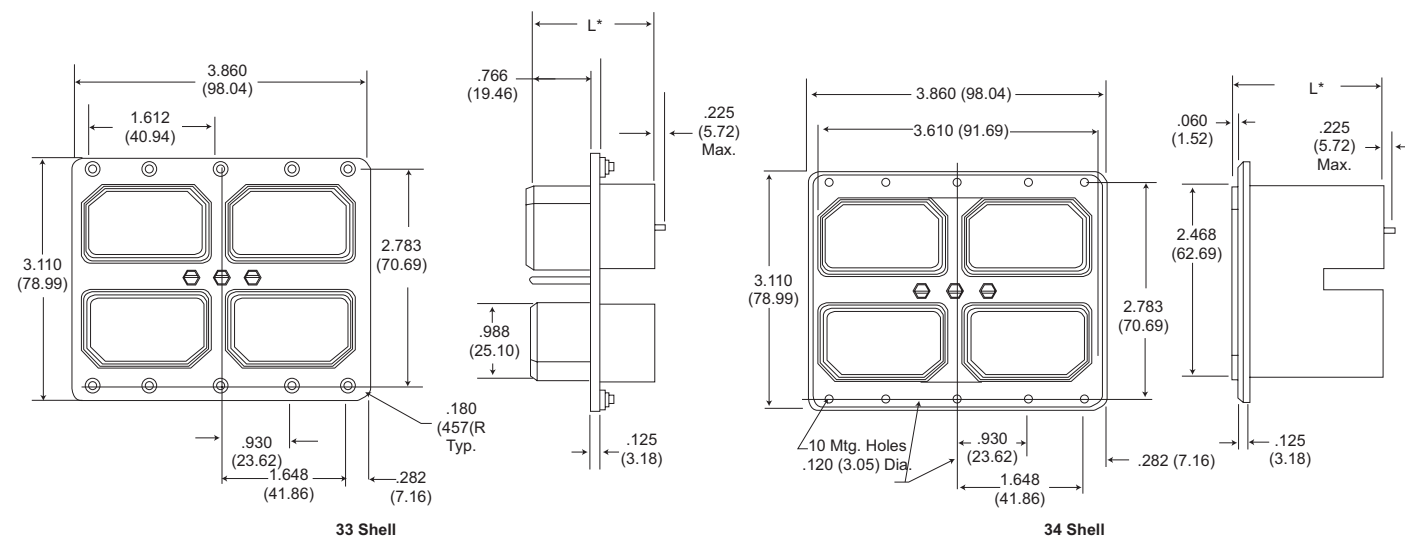
TDPX3



\* This length varies between the limits of 1.750 an 1.437 depending upon particular construction as determined by contact arrangement.

Four Gang

TDPX4



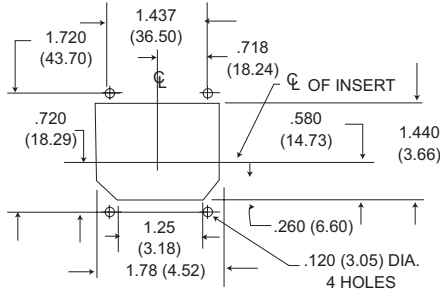
\* This length varies between the limits of 44.45 an 36.25 depending upon particular construction as determined by contact arrangement.

Panel Cutouts - Page 40.

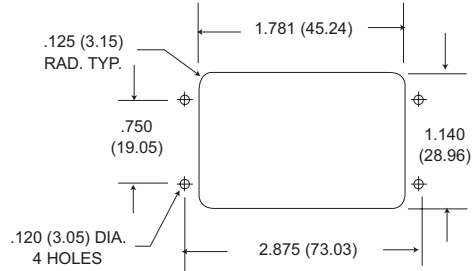


Panel Cutouts

TDPXB and TDPXD

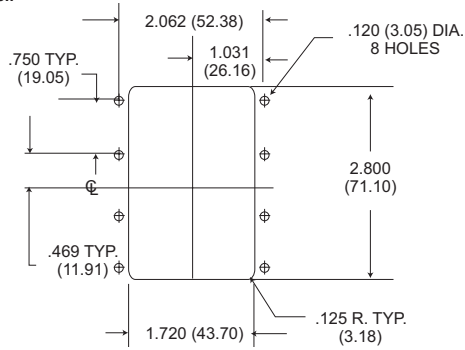


- 34 REAR MOUNT  
TDPXB

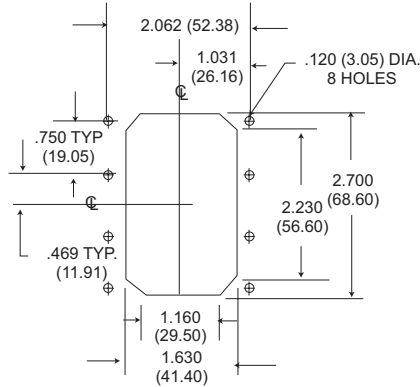


TDPXD

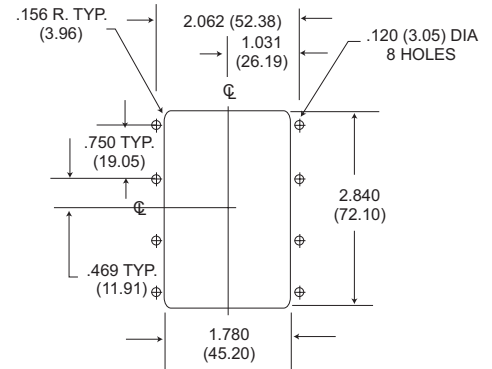
TDPX2  
Standard Shell



- 33 FRONT MOUNT

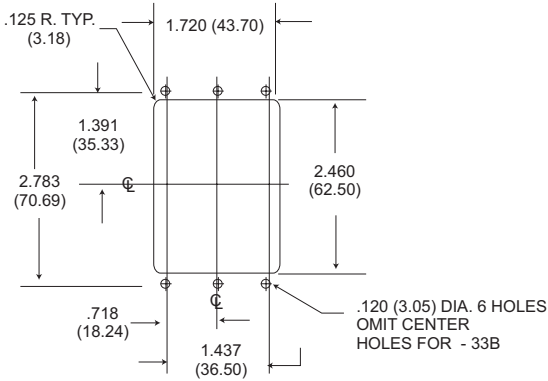


- 33 REAR MOUNT

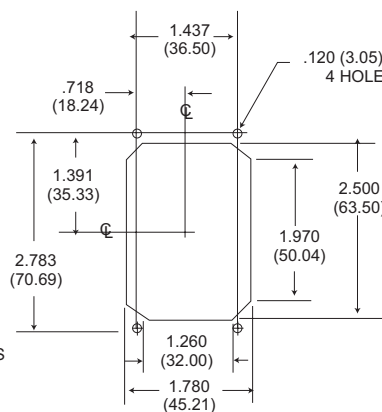


- 34 FRONT  
OR REAR MOUNT

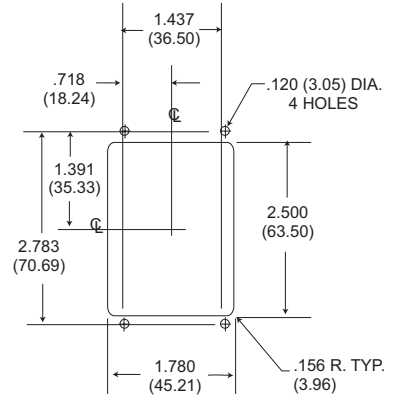
TDPX2-ARINC 'B' Shell



-33B FRONT MOUNT

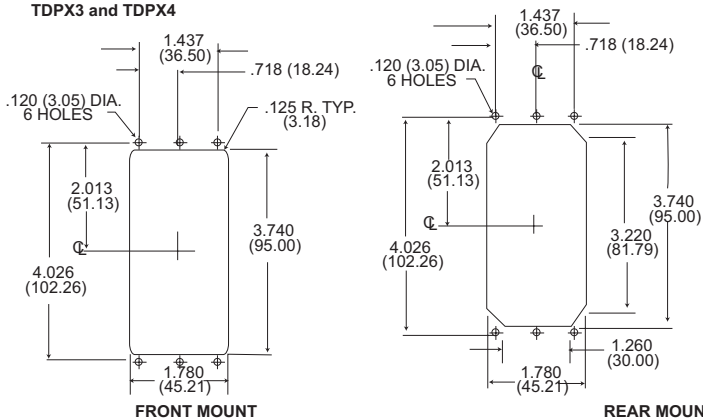


- 34B REAR MOUNT



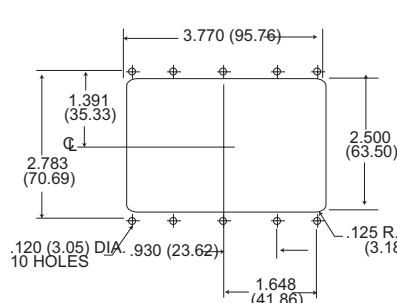
- 34B FRONT MOUNT

TDPX3 and TDPX4

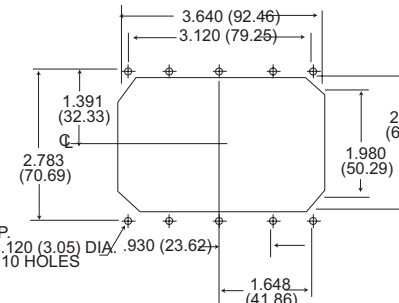


FRONT MOUNT

REAR MOUNT



FRONT MOUNT



REAR MOUNT