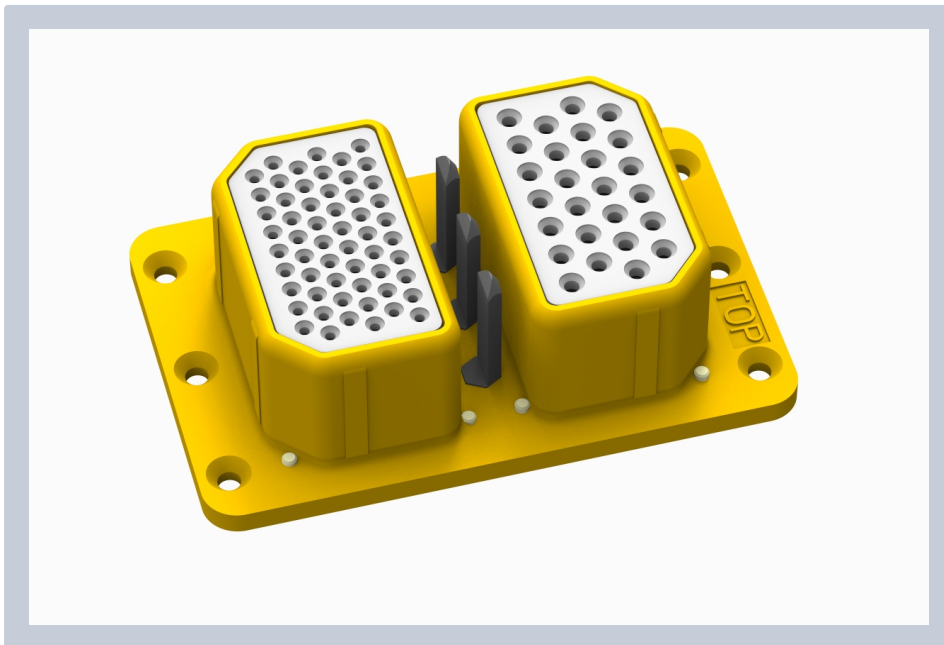


# RECTANGULAR CONNECTORS PER ARINC 404 RM-RME SERIES

Connectors with wide range of shell configurations/modifications, contact arrangements and contacts to meet ARINC 404 Specification and MIL-C-81659. The descriptive part numbering scheme described on page 3 can be used for ordering.



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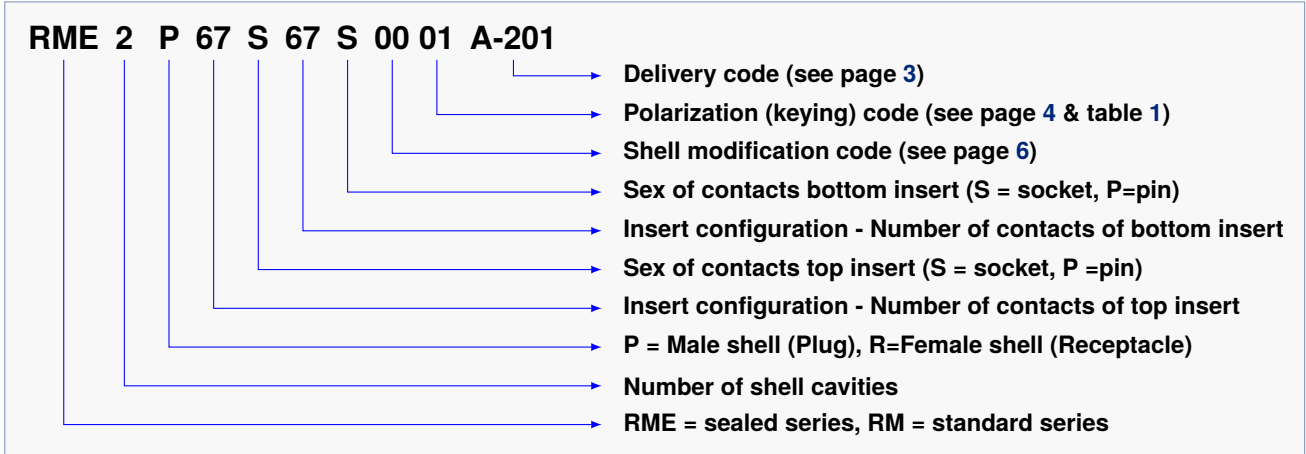
# 1 TECHNICAL FEATURES

MATERIALS	ELECTRICAL	MECHANICAL ENVIRONMENTAL
<p><b>Shells:</b></p> <ul style="list-style-type: none"> <li>Aluminium alloy, cadmium plated.</li> </ul> <p><b>Insert Retention Plates:</b></p> <ul style="list-style-type: none"> <li>Aluminum alloy, anodized.</li> <li>Stainless steel, passivated ((RA, RE series)</li> </ul> <p><b>Screws and washers:</b></p> <ul style="list-style-type: none"> <li>Stainless steel, passivated.</li> </ul> <p><b>Inserts</b></p> <ul style="list-style-type: none"> <li>Epoxy</li> </ul> <p><b>Seals:</b></p> <ul style="list-style-type: none"> <li>Fluoro-silicone rubber.</li> </ul> <p><b>Keying hardware:</b></p> <ul style="list-style-type: none"> <li>Stainless steel, passivated.</li> </ul>	<p><b>Insulation Resistance:</b></p> <ul style="list-style-type: none"> <li>5000 MΩ</li> </ul> <p><b>Dielectric Withstanding Voltage:</b></p> <ul style="list-style-type: none"> <li>400 V to 1500 V, depending on arrangement</li> </ul> <p><b>Contact Current Rating</b></p> <ul style="list-style-type: none"> <li>5 A for contacts #22 (0,3 mm<sup>2</sup> to 0,4 mm<sup>2</sup>)</li> <li>7,5 A for contacts #20 (0,5 mm<sup>2</sup> to 0,6 mm<sup>2</sup>)</li> <li>13 A for contacts #16 (1,25 mm<sup>2</sup> to 1,4 mm<sup>2</sup>)</li> <li>23 A for contacts #12 (3 mm<sup>2</sup>)</li> </ul>	<p><b>Temperature Range:</b></p> <ul style="list-style-type: none"> <li>-65 °C to 125 °C</li> </ul> <p><b>Contact Retention:</b></p> <ul style="list-style-type: none"> <li>Size 22: 67 N</li> <li>Size 20: 89 N</li> <li>Size 16: 92 N</li> <li>Size 12: 134 N</li> </ul> <p><b>Durability:</b></p> <ul style="list-style-type: none"> <li>500 mating &amp; unmating cycles</li> </ul> <p><b>Vibrations:</b></p> <ul style="list-style-type: none"> <li>MIL-STD-1344, Method 2005, Condition IV</li> </ul> <p><b>Salt Spray:</b></p> <ul style="list-style-type: none"> <li>MIL-STD-1344, Method 1001, Condition B</li> </ul>

## 2 OVERVIEW OF RM-RME SERIES

### 2.1 DESCRIPTIVE PART NUMBER

The descriptive part numbering system is shown below:



*Note: The white spaces between the digits are added here for clarity, but are not to be used in actual descriptive part numbers.*

*When less components are described, the corresponding digits and spaces are left out of the descriptive part number, as shown in the following examples (descriptive part numbers shall be written as shown on the right side):*

**RME 1R 106P 0201 A-200**

**RME1R106P0201A-200**

**RME 2P 32C2S 57S 4602 A-200**

**RME2P32C2S57S4602A-200**

**RM 3P 33C4S 33C4S 33C4S 0005 A-200**

**RM3P33C4S33C4S33C4S0005A-200**

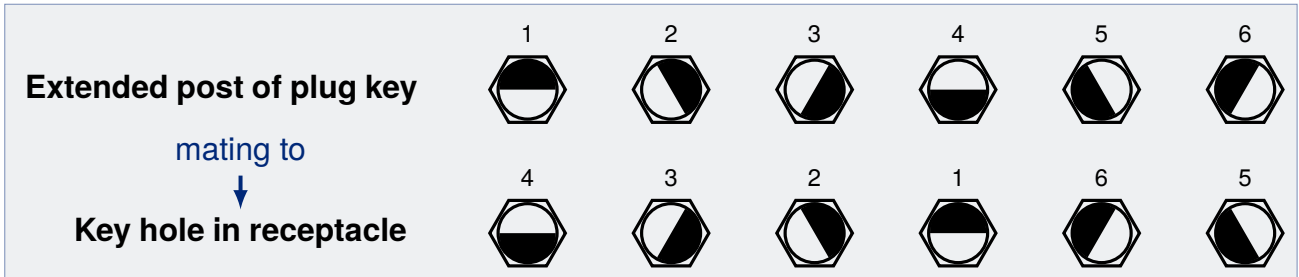
### 2.2 DELIVERY CODE

This three digit suffix at the end of the descriptive part number defines the delivery option. The coaxial contacts must always be ordered separately. The most current codes are shown below:

- A-200 Connector and contacts delivered in a plastic tube.
- A-201 Connector only, crimp contacts **not** supplied.
- A-202 Connector and polarizing keys supplied but not mounted, contacts **not** supplied.
- A-204 Connector and contacts supplied with 3% contacts extra per insert and contact type.
- A-206 Connector, contacts, and polarizing keys supplied but not mounted.

### 2.3 POLARIZATION (KEYING) CODE

The polarization is obtained by a combination of three hexagonal keys featuring a notch cooperating with semi-cylindrical socket counterparts. Each key and each socket counterpart can be mounted in 6 angular positions. The total number of combinations is 99, and the corresponding code is found in table 1, page 5.



On the drawing, the dark area is the male section, while the white area is the female section. The keys are identified from left to right, (**L**eft, **C**enter, **R**ight) the connector being seen with the "TOP" identifier placed on the top.

**Table 1: Polarization (keying) code.**

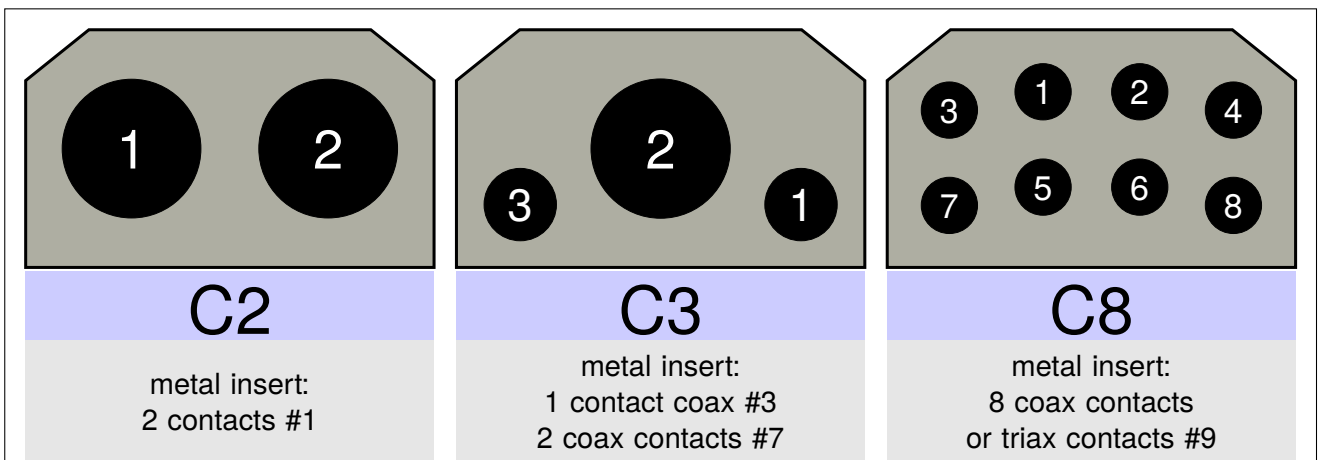
Male side			Female side			Male side			Female side						
Code	L	C	R	Code	L	C	R	Code	L	C	R	Code	L	C	R
00	—	—	—	00	—	—	—	50	2	2	5	50	6	3	3
01	1	1	1	01	4	4	4	51	3	2	5	51	6	3	2
02	2	1	1	02	4	4	3	52	4	2	5	52	6	3	1
03	3	1	1	03	4	4	2	53	5	2	5	53	6	3	6
04	4	1	1	04	4	4	1	54	6	2	5	54	6	3	5
05	5	1	1	05	4	4	6	55	1	2	4	55	1	3	4
06	6	1	6	06	4	4	5	56	2	2	4	56	1	3	3
07	1	1	6	07	5	4	4	57	3	2	4	57	1	3	2
08	2	1	6	08	5	4	3	58	4	2	4	58	1	3	1
09	3	1	6	09	5	4	2	59	5	2	4	59	1	3	6
10	4	1	6	10	5	4	1	60	6	2	4	60	1	3	5
11	5	1	6	11	5	4	6	61	1	2	3	61	2	3	4
12	6	1	6	12	5	4	5	62	2	2	3	62	2	3	3
13	1	1	5	13	6	4	4	63	3	2	3	63	2	3	2
14	2	1	5	14	6	4	3	64	4	2	3	64	2	3	1
15	3	1	5	15	6	4	2	65	5	2	3	65	2	3	6
16	4	1	5	16	6	4	1	66	6	2	3	66	2	3	5
17	5	1	5	17	6	4	6	67	1	2	2	67	3	3	4
18	6	1	4	18	6	4	5	68	2	2	2	68	3	3	3
19	1	1	4	19	1	4	4	69	3	2	2	69	3	3	2
20	2	1	4	20	1	4	3	70	4	2	2	70	3	3	1
21	3	1	4	21	1	4	2	71	5	2	2	71	3	3	6
22	4	1	4	22	1	4	1	72	6	2	2	72	3	3	5
23	5	1	4	23	1	4	6	73	1	3	1	73	4	2	4
24	6	1	3	24	1	4	5	74	2	3	1	74	4	2	3
25	1	1	3	25	2	4	4	75	3	3	1	75	4	2	2
26	2	1	3	26	2	4	3	76	4	3	1	76	4	2	1
27	3	1	3	27	2	4	2	77	5	3	1	77	4	2	6
28	4	1	3	28	2	4	1	78	6	3	1	78	4	2	5
29	5	1	3	29	2	4	6	79	1	3	6	79	5	2	4
30	6	1	2	30	2	4	5	80	2	3	6	80	5	2	3
31	1	1	2	31	3	4	4	81	3	3	6	81	5	2	2
32	2	1	2	32	3	4	3	82	4	3	6	82	5	2	1
33	3	1	2	33	3	4	2	83	5	3	6	83	5	2	6
34	4	1	2	34	3	4	1	84	6	3	6	84	5	2	5
35	5	1	2	35	3	4	6	85	1	3	5	85	6	2	4
36	6	2	2	36	3	4	5	86	2	3	5	86	6	2	3
37	1	2	1	37	4	3	4	87	3	3	5	87	6	2	2
38	2	2	1	38	4	3	3	88	4	3	5	88	6	2	1
39	3	2	1	39	4	3	2	89	5	3	5	89	6	2	6
40	4	2	1	40	4	3	1	90	6	3	5	90	6	2	5
41	5	2	1	41	4	3	6	91	1	3	4	91	1	2	4
42	6	2	6	42	4	3	5	92	2	3	4	92	1	2	3
43	1	2	6	43	5	3	4	93	3	3	4	93	1	2	2
44	2	2	6	44	5	3	3	94	4	3	4	94	1	2	1
45	3	2	6	45	5	3	2	95	5	3	4	95	1	2	6
46	4	2	6	46	5	3	1	96	6	3	4	96	1	2	5
47	5	2	6	47	5	3	6	97	1	3	3	97	2	2	4
48	6	2	6	48	5	3	5	98	2	3	3	98	2	2	3
49	1	2	5	49	6	3	4	99	3	3	3	99	2	2	2

## 2.4 SHELL MODIFICATION CODE

Code	Characteristics	Remarks
00	6 mounting holes diameter 3 mm	Rec. shell
25	4 mounting holes diameter 3,96 mm	Rec. shell
46	4 mounting holes diameter 4,8 mm	Plug & Rec. shells
23-323	4 mounting holes diameter 4,6 mm	Replaced by code 46
72	4 mounting holes diameter 4,8 mm + two mounting tabs	Male & Rec. RME shells
00	6 mounting holes diameter 3 mm, 4 countersunk at 82°	Plug shell
03	6 mounting holes diameter 3 mm, 4 countersunk at 100°	Plug & Rec. shells
26	4 mounting holes diameter 3 mm, 4 countersunk at 82°	Rec. shell
76	4 mounting holes diameter 3,3 mm, 4 countersunk at 90°	–
77	2 central mounting holes 3 mm, 4 countersunk at 90°	–
12	4 slots at 5,33 mm	Rec. shell
12	4 slots at 6,02 mm	Rec. shell
01	4 rivetted self locking nuts 4-40 UNC-38	Male and Rec. RM series only
79	4 rivetted self locking nuts M3	–
02	2 threaded tabs for cover fixing	–
04	4 holes dia 3 mm countersunk at 100° + two mounting tabs	RM & RME series
23	3 floating bushings diameter 3 mm	–
29	6 floating bushings diameter 3 mm	–
33	4 floating bushings embedded diameter 3 mm	–
78	4 floating bushings threaded M2,5	–
71	4 floating bushings and two tabs holding the cover	RME series only

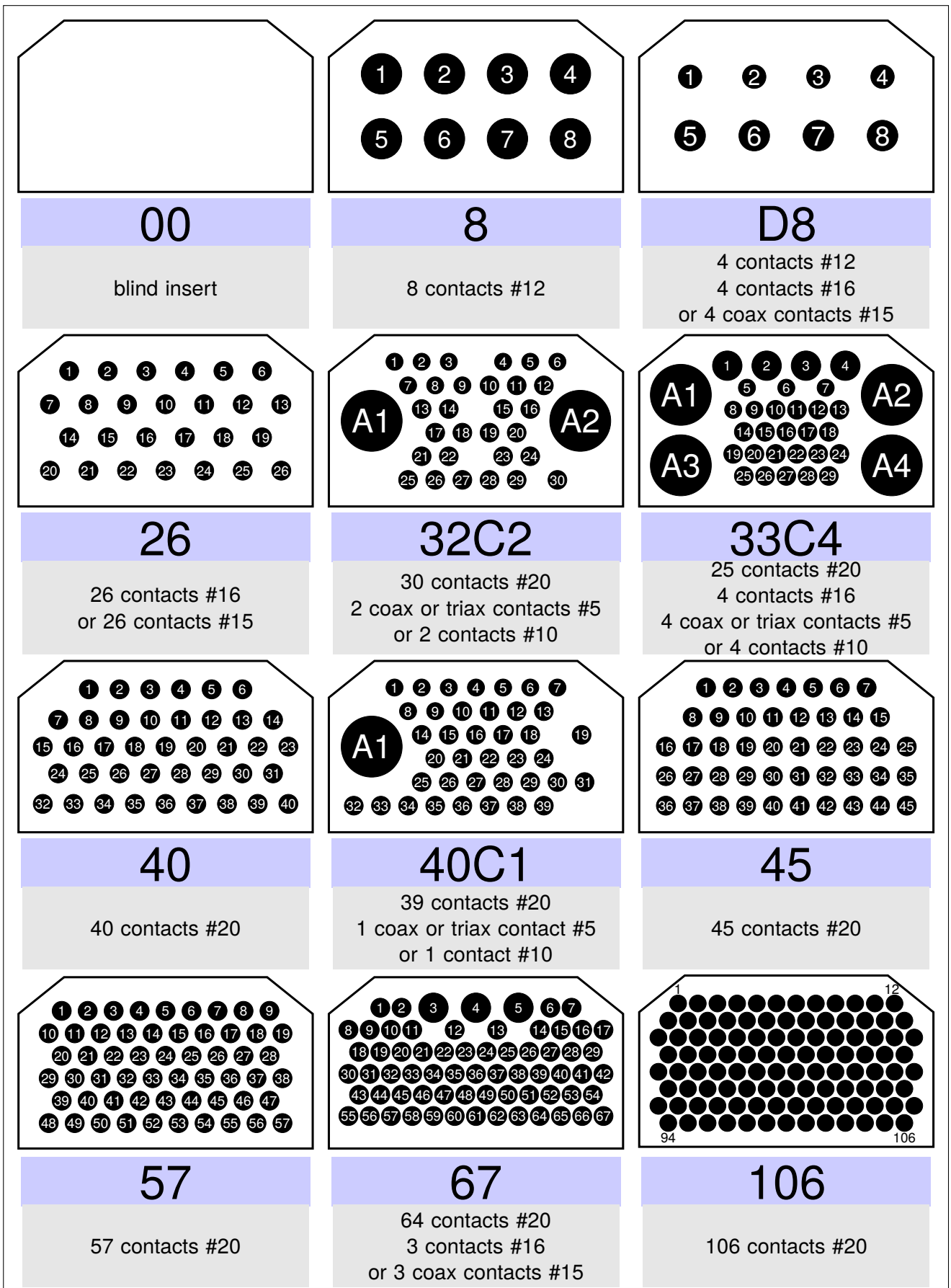
## 2.5 INSERT CONFIGURATION

### 2.5.1 SPECIAL INSERTS



*Note: cavity numbering shown on mating face of receptacle insert and rear face of plug insert.*

## 2.5.2 STANDARD INSERTS



Note: cavity numbering shown on mating face of receptacle insert and rear face of plug insert.