

EV Series Shell Keying

Alternate key positions should be used to avoid cross-mating of connectors with the same (or similar) insert pattern that are in close proximity to one another, such as on a high-density control panel. A plug with a given key position will only mate with a receptacle with the same number.



For example, receptacle "N" will only mate with plug "N," and a second receptacle with a "6" keying will only mate with the "6" cable plug. In this manner, cross-mating of similar connectors by accident becomes impossible. ■

EV Series Alternate Rotations

Alternate rotations of the insert are also available in the EV Series but should only be used as replacements for old designs. New designs should use shell keying. Alternate rotations were used as another option to avoid cross-mating of connectors with the same (or similar) insert pattern that are installed closely to one another. Just as with key positions, a plug with a given rotation number will only mate with a receptacle with the same number. The diagram below offers an example of alternate rotations. The centerline of the shell in the normal or "N" rotation matches the centerline of the master keyway. In the alternate rotations (1, 2, 3, 4, 5) the insert rotates relative to the centerline of the keyway. E° in the diagram and corresponding table describes the centerline for normal and the number of degrees away from center for each alternate rotation. Socket inserts are rotated clockwise; pin inserts are rotated counter-clockwise. ■

Alternate Keying Positions

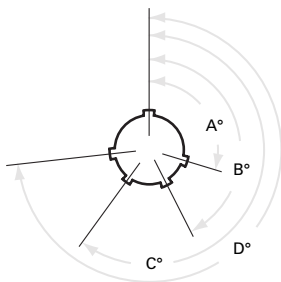
Shell Size	Keyway Arrangement	A°	B°	C°	D°
8 to 24	N	105°	140°	215°	265°
	6	102°	132°	248°	320°
8 & 10	7	80°	118°	230°	312°
	8	35°	140°	205°	275°
	9	64°	155°	234°	304°
10 only	Y*	25°	115°	220°	270°
12, 14, 16, 18, 20, 22, 24, & 28	6	18°	149°	192°	259°
	7	92°	152°	222°	342°
	8	84°	152°	204°	334°
	9	24°	135°	199°	240°

* Position Y supersedes inactive positions 10 and Z designations. Ref. MIL-STD-1554.

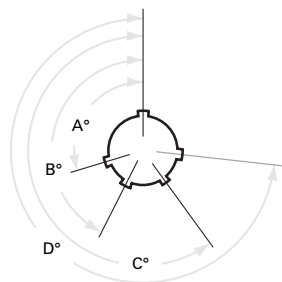
Alternate Rotations of Insert

Shell Size	Rotation	Insert Position E°
8 & 10	N	0°
	1	10°
	2	20°
	3	30°
	4	40°
	5	50°
12, 14, 16, 18, 20, 22, & 24	N	0°
	1	10°
	2	20°
	3	30°
	4	40°
	5	50°

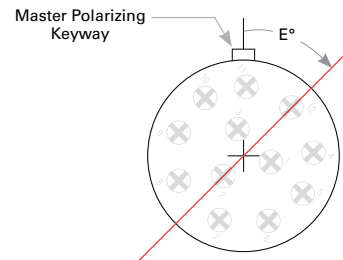
Positions 1-5 are inactive for new designs per MIL-STD-1554.



Plug
(front face shown)



Receptacle
(front face shown)



Socket insert shown
(pin insert is opposite)