

**Aerospace series**  
**Connectors, optical, circular**  
**Part 002: General**

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## 1 Scope

This standard specifies the general over view of optical circular connector family.

## 2 Normative references

This Airbus Standard incorporates by dated or undated reference provisions from other publications. All normative references cited at the appropriate places in the text are listed hereafter. For dated references, subsequent amendments to or revisions of any these publications apply to this Airbus Standard only when incorporated in it by amendment of revision. For undated references, the latest issue of the publication referred to shall be applied.

ABS1213-001	Aerospace series - Connectors, optical, circular - Part 001: Technical specification
ABS1213-003	Aerospace series - Connectors, optical, circular - Part 003: Plug with male insert
ABS1213-004	Aerospace series - Connectors, optical, circular - Part 004: Receptacle with female insert
ABS1213-005	Aerospace series - Connectors, optical, circular - Part 005: Dummy receptacle
ABS1213-006	Aerospace series - Connectors, optical, circular - Part 006: Filler plug
ABS1379-003	Aerospace series – Contact, optical, for connectors ARINC404, ARINC600, EN3545, ABS1213-003, ABS1213-004, ABS1340, ABS1343, ABS1426, ABS1427 and ABS1054

## 3 Requirements

### 3.1 Configuration, dimensions, tolerances and mass

The configuration, dimensions, tolerances and mass shall be in accordance with the product standards of the ABS1213-003 to ABS1213-006.

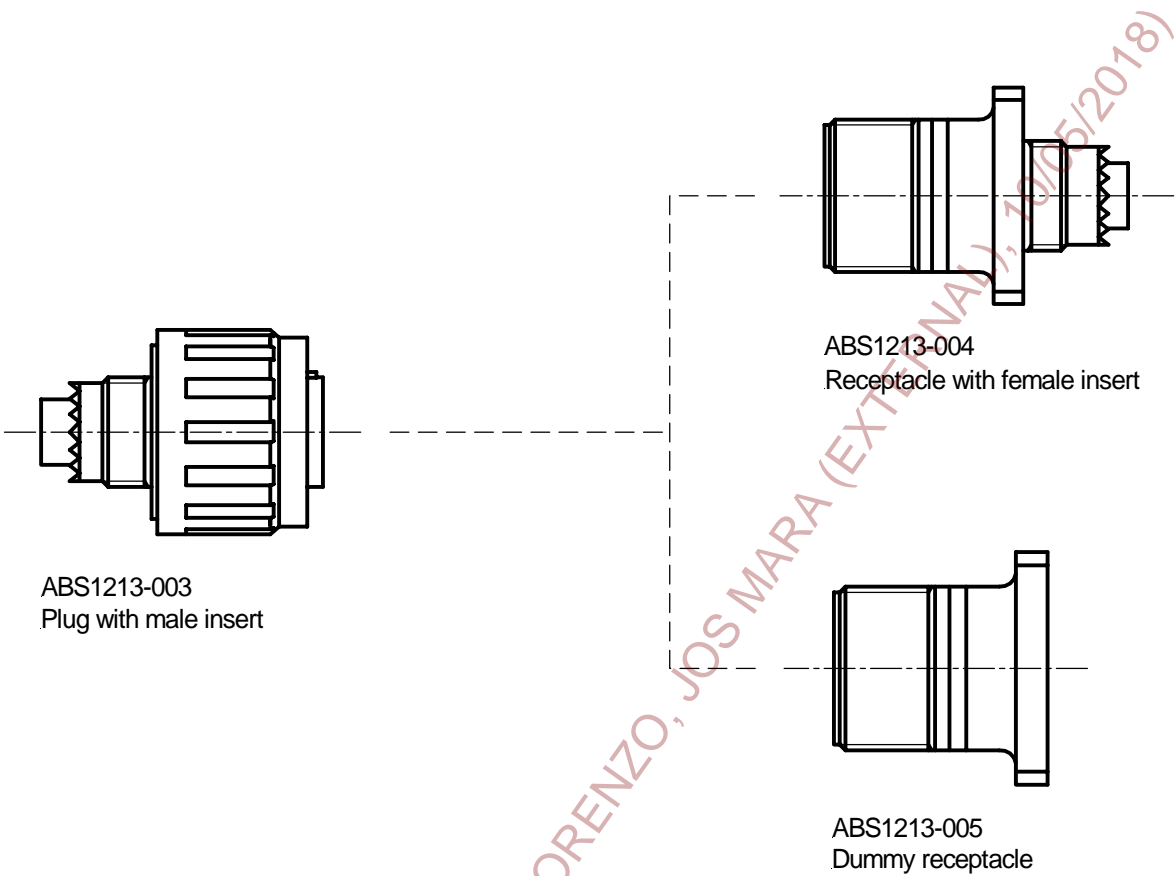


Figure 1: Overview of the optical circular connector family

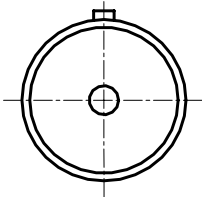
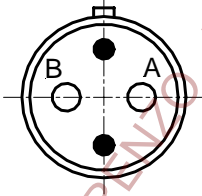
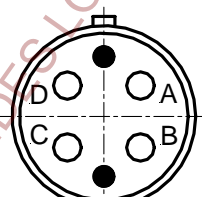
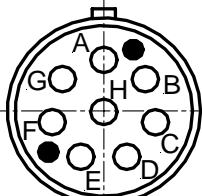
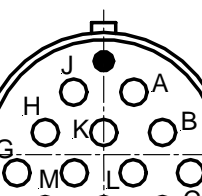
Table 1: Type code

Type code	Standard number	Description
P	ABS1213-003	Plug with male insert
S	ABS1213-004	Receptacle with female insert
S	ABS1213-005	Dummy receptacle
F	ABS1213-006	Filler plug, female
M		Filler plug, male

### 3.2 Contact layout

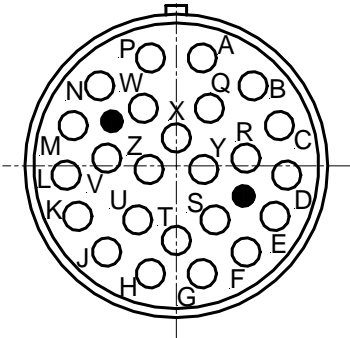
See table 2.

Table 2: Contact layout

Shell size code	Contact layout code	Layout (Front face plug side)	Optical contacts ABS1379-003 or Filler plugs ABS1213-006	Adjusting pin
09	01		1	-
11	02		2	2
13	04		4	2
19	08		8	2
21	12		12	2

(continued)

Table 2: Contact layout (concluded)

Shell size code	Contact layout code	Layout (Front face plug side)	Optical contacts ABS1379-003 or Filler plugs ABS1213-006	Adjusting pin
25	24		24	2
<div><div>○</div> Optical contacts or filler plugs</div> <div><div>●</div> Adjusting pins</div>				

### 3.3 Polarization

The following figure and table indicates, for each shell and contact position, the possible angular orientations of the insert in relation to the main shell positioning keyway or key.

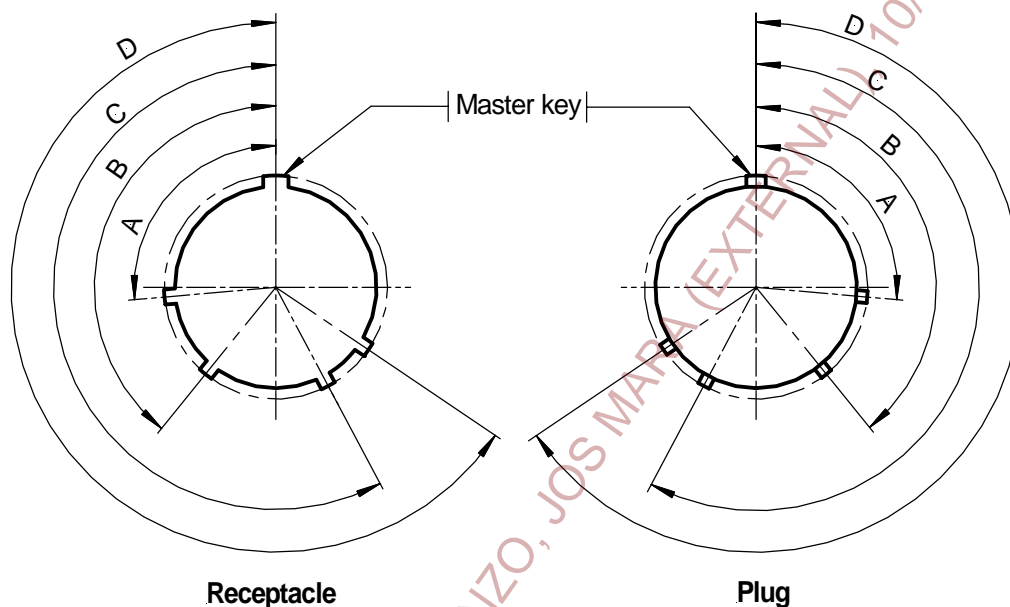


Figure 2: Polarization

Table 3: Polarization

(Angles in degree)

Shell size code	Polarization code	Location position			
		A	B	C	D
09	N	105	140	215	265
	A	102	132	248	320
	B	80	118	230	312
	C	35	140	205	275
	D	64	155	234	304
	E	91	131	197	240
11 and 13	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
	E	51	141	184	242
19, 21 and 25	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272

**RECORD OF REVISIONS**

Issue	Clause modified	Description of modification
1 09/05		New Standard
2 07/06	Chapter 2 Chapter 3.2 Chapter 3.3	Template updated. Normative references: The title of ABS1379-003 updated. Table 2: Shell size code 09 added. Table 3: Shell size code 09 added.