*Indian Standard***CONTINUOUS (PIANO) HINGES —
SPECIFICATION***(Third Revision)***1 SCOPE**

This standard lays down the requirements for continuous (piano) hinges.

2 REFERENCES

The Indian Standards listed in Annex A are necessary adjuncts to this standard.

3 MATERIALS

Materials used for the manufacture of continuous (piano) hinges shall comply with the requirements given in Table 1.

4 DIMENSIONS AND TOLERANCES

Dimensions of Types I, II, III and IV continuous (piano) hinges and permissible tolerances on the dimensions shall conform to those specified in Fig. 1, 2 and 3.

5 MANUFACTURE

5.1 Hinges shall be well made and the hole for the hinge pin shall be central and square to the knuckles.

5.2 Knuckles

The sides of the knuckles shall be straight and at right angle to the flap. The movement of hinge shall be free and easy and working shall not have any play or shake.

5.3 Pins

The hinge pin shall be of mild steel in the case of mild steel hinges. The hinge pin shall be of mild steel (galvanized) or aluminium alloy in the case of aluminium alloy hinges. The aluminium alloy hinge pin shall be hard anodized to a minimum thickness of 0.025 mm and sealed with oil wax or lanolin. The hinge pin shall fit in the knuckle firmly so as not to allow any play or shake and shall allow easy movement of hinge, but shall not cause looseness.

5.4 Screw Holes

All screw holes shall be clean and countersunk suitably for screws conforming to IS 6760 : 1972.

6 FINISH

Mild steel hinges shall be protected with anti-corrosive treatment, such as bright polished, chromium plated or oxidized finish. Aluminium hinges shall be anodized and the quality of anodized finish shall not be less than that of Grade AC 10 of IS 1868 : 1982.

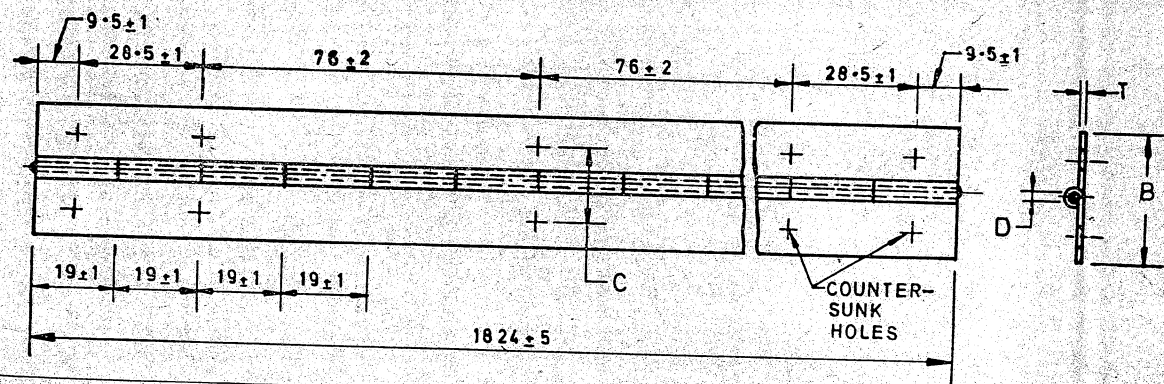
7 MARKING

7.1 Each hinges shall be clearly and permanently marked with indication of source of manufacture.

7.2 Each hinge may also be marked with the Standard Mark.

Table 1 Requirements of Materials for Continuous (Piano) Hinges

SI No.	Name of Component	Material	Suitable Grade in Relevant Indian Standard
(1)	(2)	(3)	(4)
i)	Flap	a) Mild steel sheet b) Aluminium alloy sheet c) Cold rolled low carbon steel sheets	Grade 0 of IS 1079 : 1988 19 000 H2 or 31 000 H2 of IS 737 : 1986 Grade D of IS 513 : 1986
ii)	Pin	a) Mild steel sheet b) Aluminium alloy sheet	IS 280 : 1978 having minimum tensile strength of 400 MPa 64 430 WP of IS 739 : 1977



Nominal Size	B	C	Pin Dia, D	T	Csk Screw No.	Examples of Uses	Type
25	25 ± 1	15 ± 1.5	2.00	0.8 to 1.0	3	Light fixtures like Electrical Panels in Railway Coaches	I
30	30 ± 1	18 ± 1.5	2.00	0.8 to 1.0	3		
35	35 ± 1	20 ± 1.5	2.50	0.8 to 1.5	5	Cup Board and light flush doors	II
40	40 ± 1	22 ± 1.5	2.50	0.8 to 1.5	5		
50	50 ± 1	27 ± 1.5	2.80	0.8 to 1.5	5		

NOTES

All dimensions in millimetres.

- Length other than this where required by the purchaser should be in multiples of 304.
- The minimum distance of screw holes from the end of flap.

Nominal Size

25

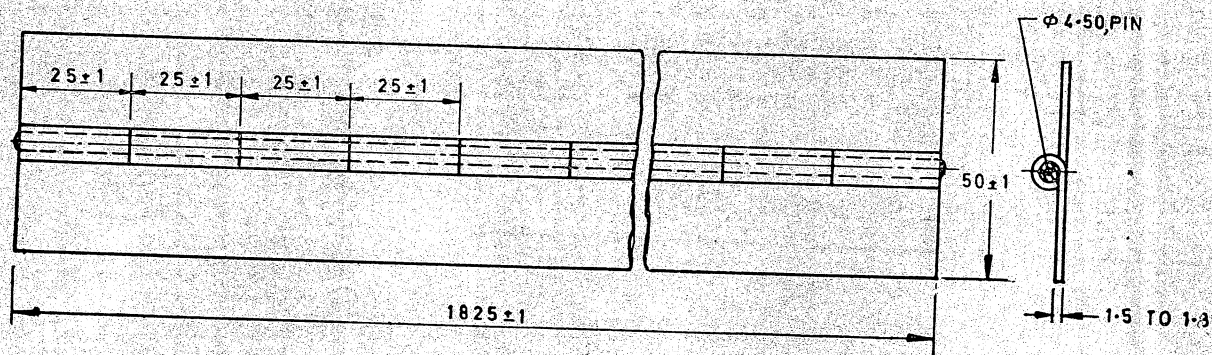
30

Distance

2.0

3.5

FIG. 1 CONTINUOUS (PIANO) HINGES TYPES I AND II



NOTES

All dimensions in millimetres.

- Can be supplied with/without holes subject to special agreement with indication of holes diameter, counter sinking, hole position and length.
- For heavy duty purposes like engine bonnet covers in vehicles.

FIG. 2 CONTINUOUS (PIANO) HINGES TYPE III; 50 mm NOMINAL SIZE