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# INTERNATIONAL STANDARD 5625

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

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## Shipbuilding — Welded bulkhead pieces with flanges for steel pipework — PN 6, PN 10 and PN 16

*Construction navale — Passages de cloison ou de ponts à brides réalisés par soudage pour tuyauteries en acier — PN 6, PN 10 et PN 16*

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**Descriptors :** shipbuilding, pipelines, pressure pipes, pipe fittings, connections for welding, bulkheads, dimensions.

## FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 5625 was developed by Technical Committee ISO/TC 8, *Shipbuilding*, and was circulated to the member bodies in April 1977.

It has been approved by the member bodies of the following countries :

Australia	France	Norway
Austria	Germany	Philippines
Belgium	India	Romania
Brazil	Italy	Spain
Bulgaria	Japan	Turkey
Chile	Korea, Dem. P. Rep. of	United Kingdom
Czechoslovakia	Korea, Rep. of	Yugoslavia
Finland	Netherlands	

The member bodies of the following countries expressed disapproval of the document on technical grounds :

Poland  
U.S.S.R.

## Shipbuilding — Welded bulkhead pieces with flanges for steel pipework — PN 6, PN 10 and PN 16

### 1 SCOPE

This International Standard specifies the main manufacturing dimensions of welded bulkhead pieces with flanges used in shipbuilding.

It also specifies the corresponding openings to be provided in bulkheads and decks.

### 2 FIELD OF APPLICATION

This International Standard concerns exclusively those pieces fabricated and attached by welding, to be used with flanges in accordance with ISO 2084 for pressure ratings PN 6, PN 10 or PN 16.

It does not specify the type of flange, the welding details, or the radii of butt-welding bends.

NOTE — Users of this International Standard should note that while observing the requirements of this International Standard they should at the same time ensure compliance with such statutory requirements, rules and regulations as may be applicable to the individual ship concerned.

### 3 REFERENCE

ISO 2084, *Pipeline flanges for general use — Metric series — Mating dimensions.*

### 4 TYPES

Figures 1 and 2 define standardized types :

- type A;
- type B.

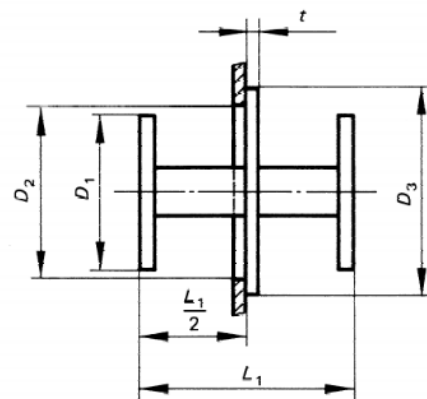
#### 4.1 Type A

Type A is used where pipe connection is achieved using flanges on both sides of the bulkhead or deck (see figure 1).

#### 4.2 Type B

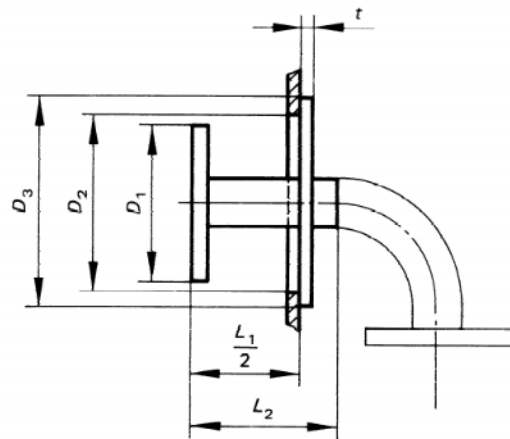
Type B is used where pipe connection is achieved using a flange on one side of the bulkhead or deck and a weld on the other side, whether a straight pipe or a butt-welding bend is used.

The type represented in figure 2 is assembled with a butt-welding bend for illustration purposes.



For dimension  $D_1$ , see ISO 2084

FIGURE 1 — Type A



For dimension  $D_1$ , see ISO 2084.

FIGURE 2 — Type B

5 MATING DIMENSIONS

The required mating and mounting dimensions are specified in figures 1 and 2, and are given in the table.

- number of this International Standard : ISO 5625;
- nominal pressure;
- nominal size;
- type (A or B).

6 DESIGNATION

Bulkhead pieces conforming to this International Standard shall be designated by the following indications, in the order given :

*Example :* Bulkhead piece for nominal pressure PN 16, nominal size 250 – type B

**Bulkhead piece ISO 5625 – 16-250 – B**

TABLE

Dimensions in millimetres

DN	L <sub>1</sub>	L <sub>2</sub>	t min.	PN 6		PN 10		PN 16	
				D <sub>2</sub>	D <sub>3</sub>	D <sub>2</sub>	D <sub>3</sub>	D <sub>2</sub>	D <sub>3</sub>
15	200	160	12	85	135			100	150
20	200	160	12	95	145			110	160
25	200	160	12	105	155			120	170
32	220	175	12	125	175			145	195
40	220	175	12	135	185			155	205
50	250	200	14	145	195	see PN 16	see PN 16	170	220
65	250	200	14	165	215			190	240
80	250	200	14	195	245			205	255
100	250	200	14	215	265			225	275
125	250	200	16	245	295			255	305
150	300	220	16	270	320			290	340
175	300	220	16	300	350			320	370
200	300	220	16	325	375	345	395	345	395
250	300	220	16	380	430	400	450	410	460
300	350	250	20	445	505	450	510	465	525
350	350	250	20	495	555	510	570	525	585
400	360	250	20	545	605	570	630	585	645
450	380	260	20	600	660	620	680	645	705
500	400	270	20	650	720	675	745	720	790

NOTE – When bulkheads or deckheads are required to be insulated, the quality and the thickness of the insulating material will vary according to the temperature involved. The dimensions L<sub>1</sub> and L<sub>2</sub> will be required to be increased accordingly to accommodate the insulating material which will be used. The sleeve, collar and weld filler materials shall be selected with regard to the temperature in the adjacent spaces and the transmitted fluid.