

2. **Reference standards** The following standards form part of this standard when quoted herein. The latest edition (including supplements) of these standards shall be applied.

JIS B 0207	Metric coarse screw threads
JIS B 2238	General rules for steel pipe flanges
JIS B 2401	O-rings
JIS F 7102	Shipbuilding - Piping system in machinery space - Application of gaskets and packing
JIS F 7200	Shipbuilding - General rules for inspection of strainers
JIS F 7202	Shipbuilding - Duplex oil strainers
JIS F 7207	Shipbuilding - Oil strainer - Application for wire gauze
JIS G 3101	Rolled steel for general structure
JIS G 3505	Low carbon steel wire rods
JIS G 3506	High carbon steel wire rods
JIS G 4051	Carbon steel for machine structural use
JIS G 4309	Stainless steel wires
JIS G 4801	Spring steel
JIS G 5501	Gray iron castings
JIS G 5502	Spheroidal graphite iron castings
JIS H 3250	Copper and copper alloy rods and bars
JIS H 3260	Copper and copper alloy wires
JIS H 5120	Bronze castings

3. **Type** The strainers shall be classified into types S, LA and LB according to the direction of flow, and types F, M and D according to the casting material of strainer body and the material of O-ring, and also types HB and FB according to the type of cover. Service combinations of strainers and applicable size in diameter shall be as given in **Table 1**.

Table 1 Type

Type	Direction of flow		
S	Outlet and inlet stand in line		
LA	Outlet turns leftwards as viewed from inlet		
LB	Outlet turns rightwards as viewed from inlet		

Type	Casting material of body	Material of O-ring	Applicable size in diameter
F	FC200	JIS B 2401-Class 1-A	25A - 300A
M	FC200	JIS B 2401-Class 4-D	25A - 300A
D	FCD400-15	JIS B 2401-Class 4-D	25A - 100A

Type	Type of cover	Size in diameter
HB	Hanger bridge type	25A - 300A
FB	Flange-bolted type	200A - 300A

4. **Pressure rating** The relationship between the fluid condition of strainers and maximum working pressure shall be as given in Table 2.

Table 2 Pressure rating

Kind of fluid	Fluid temperature				Maximum working pressure
	60°C or less	80°C or less	100°C or less	150°C or less	
Fuel oil	F Type	D Type			0.5 MPa
Lubricating oil	F Type		M Type	D Type	

Remark: D Type or M Type may be used under the conditions for using F Type. D Type may be used under the conditions for using M Type.

5. **Construction, shape and dimensions** The construction, shape and dimensions of strainers shall be as shown in Attached Fig. 1, Fig. 3 and Fig. 5, and the permissible dimensional deviation of the thickness "a" of the body shall be +15/-10%. When the calculated dimensional deviation is less than 1 mm, the permissible dimensional deviation shall be 1 mm. It is recommended that sufficient attention be paid to the construction and the assembly of strainers with gauze wires of 250 mesh or 50 mm or less.

6. **Materials** The materials of strainers shall be as follows.

- The materials of body and cover shall be as shown in Attached Fig. 2, Attached Fig. 4 and Attached Fig. 6.
- The materials for other parts shall be as shown in Attached Fig. 2, Attached Fig. 4 and Attached Fig. 6.

7. **Tests and inspection** Strainers shall be inspected for the following items, a) through e) in accordance with the requirements of JIS F 7200.

- Material inspection**
- Visual inspection**
- Dimensional inspection**
- Assembly inspection**
- Hydraulic inspection** The hydraulic inspection shall be carried out at the test pressure of 0.75 MPa.

8. **Designation** Strainers shall be designated by title, symbol, or JIS number, nominal dia, and type.

Example 1: For a strainer with a nominal diameter of 25, type S for a fuel oil temperature of 60°C or less.

- Marine simplex oil strainer 25 S - F
- FFT25S-F (FFT signifies marine simplex oil strainer), 25, nominal diameter, S, flow direction, and F, material of O-ring).
- JIS 7209-25S-F

Example 2: For a strainer with a nominal diameter of 50, Type LA for an oil temperature of 150°C or less

- a) Marine simplex oil strainer 50LA-D
- b) FFT50LA-D (FFT signifies marine simplex oil strainer, 50, nominal diameter, LA, flow direction, D, materials of strainer body and O-ring)
- c) JIS F 7209-50LA-D

Example 3: For a strainer with a nominal diameter 250, Type LB for lubricating oil at a temperature of 80°C or less, and the cover is bolted to flange

- a) Marine simplex oil strainer 250LB F-FB
- b) FFT250LB-F-FB (FFT signifies marine simplex oil strainer, 250, nominal diameter, LB, flow direction, F, materials of strainer body and O-ring, and FB, flange-bolted.
- c) JIS F 7209-250LB-FB

9. Marking

9.1 The following particulars shall be marked on the surface of the cover or the strainer body.

- a) Nominal diameter **Example:** 50
- b) Materials of O-ring and strainer body castings
- c) Manufacturer's name or abbreviated trade name

9.2 The following particulars shall be marked on the body surface of the strainer.

- a) Arrow mark showing the direction of flow on the inlet flange, outlet flange or the body.
- b) Year and month of manufacture