# MANUAL Strainer AL 87-10

# **General precautions**

**a. Material selection:** The possibility of material deterioration in service and the need for periodic inspections is depended on the contained fluid. Carbide phase conversion to graphite, oxidation of ferrite materials, decrease in ductility of carbon steels at low temperature (even in applications above 29°C) are among those items. The user is requested to take attention or consideration to determine the suitability of material in their application.

**b. Pressure temperature rating:** The pressure temperature rating is considered for static pressure. Please refer to P & T rating section on for working precaution. The allowable temperature is between 20°C and 160°C, do not exceed the temperature range to avoid danger accident happen.

**c. Fluid thermal expansion:** Fluid closed in the pipeline may occur excessive pressure subject to a temperature increase. User is recommended to prevent that the pressure in the strainer will not exceed that allowed pressure, by means of piping design, installation, or operation procedure.

**d.** Do not disassembly when bearing pressure. Valve is not equipped with pressure access device. User should check it by other method through its piping system.

e. Do not touch the valve surface on high temperature.

**f.** Not allowed for unstable fluid, otherwise specified with catogory III in Declaration of conformity or/and in this user manual.

# **Product description**

### Y-Strainer

**a.** Strainer in which the obturator movement is linear and, in the seating area, at right angle to the direction of flow.

**b.** The Y-Strainer are used on media, e.g. sewage and wastewater, where the media has solid matter volume of more than 5%, a free flow is required for operational safety reason.

### Product specification

This operation manual cover the scope of product specifications are as following:

PN	S.E.P.	Category I	Category II
40	DN 8, 10, 15, 20, 25	DN 32, 40, 50	DN 65,80



# Technical standard or code applied

Items	Standard / Codes
Product Designation	prEN 12516-1/3
Pressure Temperature Rating	prEN 125161-1
Connection (Thread type)	DIN 259, DIN 2999, BS21
Testing	prEN 12266-1
Material	EN 10213-4

# **Pressure temperature ratings**

Followings are the general rating charts for non shock fluid service for Y-Strainers distinguished by nominal pressure and seating materials.

Temperature °C	Working pressure bar
RT	38,8
50	36,9
100	33,2
150	29,9
160	29,4

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# Installation

## Cleaning

Prior to pipe connection, remove sand, mud, molten spatter deposits and any other foreign materials from the interior of the pipes to be connected to the valve.

## Thread Cutting

Care should be taken not to thread cut the pipes excessively. Care should be taken not to over tighten the pipe connected to the strainer. Prior to pipe connection, remove all foreign material deposits, such as mud, rust, oil and swarf, from the thread cut portion of the pipe.

## Valve Installation

Remove any swarf from the thread cut portion of the pipe, then wrap with Teflon tap, or apply a thin coat of an appropriate liquid sealant (pipe compound), to that portion. The liquid sealant should be selected with due consideration to the kind and temperature of the fluid, and must be applied on the thread of the pipe.

When a screwed end strainer will be connected to the pipe, be sure to hold the pipe in the pipe vice and screw the strainer onto it. In this case, always apply the wrench to the connected end of the strainer.

#### Hanger Inspection

Proper installation and maintenance of the pipe hangers are essential for the proper functioning of the strainer installed. The strainer and adjoining pipes should always be kept in a straight line.

## Operation

Generally, the Y-strainer used as a normal pipeline, with filter. The filter out object will store up in the drain area. User should decide the drain out time interval depend on his usage.

## Dangers of inappropiate use

Never use the product exceed its allowed condition, such as pressure, temperature and fluid. In the case of any inappropriate use, the product was damage however there is no signal occurs immediately. User shall change the product to avoid danger in the future.

# Maintenance

### **Maintenance frequency**

The maintenance frequency is determined upon the application of strainer. User shall consider the maintenance time interval depend on the kinds of fluid, flow velocity, high pressure and high temperature effect etc.

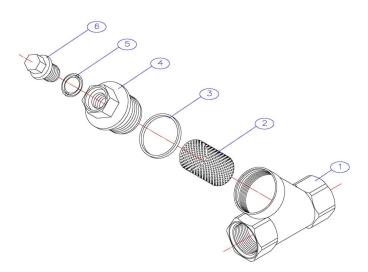
### Disassembly

I. The user should check the service kit of this strainer. Order service kit from Axel Larsson.

**2.** To dismantle the valve, please refer to the procedure and drawings as mentioned below.

#### Assembly

For assembly process, it takes the opposite way of dismantle process. Then, do pressure test and leakage test in according to prEN 12266-1, P10, P11 and P12.



No	Part	Specification	Qty
I	Body	CF8M	1
2	Screen (12 mesh)	316	I
3	Gasket packing	PTFE	I
4	Bonnet	CF8M	1
5	Plug gasket	PTFE	1
6	Plug	CF8M	1

## II.Torque data

DN	Body & Cap Kgf-cm
8	29-39
10	29-39
15	39-49
20	49-59
25	59-69
32	69-78
40	69-78
50	78-88
65	98-118
80	118-147



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