YSD-1, 2, 3 / 1, 2, 3R Type Intelligent Suction Diffuser

Features

- Structure to verify whether internal screen need cleaning.
- Quick-changeable hinge structure enable quick cleaning of the screen.
- Built-in magnet protects the pump & pipeline from damage caused by iron content & welding slags.
- Maximized pump efficiency & little pressure loss by outlet side located vane.

YSD-1, 2, 3 Type

YSD-1, 2, 3R Type

Specitications

Type		YSD-1,1R	YSD-2, 2R	YSD-3,3R
Applicable fluid		Water, Liquid		
Applicable pressure		Maximum 1.0MPa	Maximum 2.0MPa	Maximum 3.0MPa
Fluid temperature		Maximum 80°C	Maximum 120°C	Maximum 120°C
End connection		KS 10K FF FLANGED	KS 20K RF FLANGED	KS 30K RF FLANGED
Materials	Body	GC200	GCD450	SCPH2
	스크린	STS304		
	GASKET	NBR, EPDM	EPDM	
	DRAIN PLUG	SS400, GC200		
Hydraulic test pressure		1.5MPa	3.0MPa	4.5MPa

Categorization of types

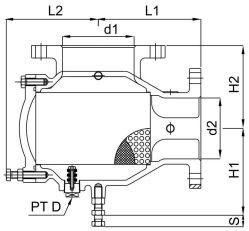
Category	Main functions
YSD-1, YSD-2, YSD-3	Suction diffuser + Built-in magnet + Pressure loss measuring device (Standard)
YSD-1R, YSD-2R, YSD-3R	Suction diffuser + Intelligent element

Dimensions

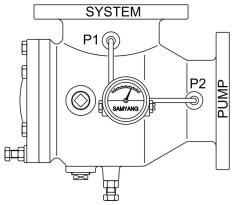
(mm)

SYSTEM(d1)	PUMP(d2)	L1	L2	H1	H2	S	PT D
50A	50A	113	78	110	78	10	3/8
65A	65A	125	89	115	121	10	3/8
80A	80A	144	109	124	140	10	1/2
	65A	144	109	124	140	10	1/2
100A	100A	180	164	150	160	12	3/4
	80A	180	164	150	160	12	3/4
	65A	180	164	150	160	12	3/4
125A	125A	215	192	175	181	12	1
	100A	180	163	150	160	12	3/4
	80A	180	163	150	160	12	3/4
	65A	180	163	150	160	12	3/4
150A	150A	250	224	205	212	14	1
	125A	215	193	175	181	12	1
	100A	215	193	175	181	12	1
200A	200A	320	285	260	274	17	1 1/4
	150A	250	223	205	216	14	1
	125A	233(235)	227	205	219	14	1
	100A	255	227	205	219	14	1
250A	250A	360	330	310	323	18	1 1/4
	200A	320	280	260	274	17	1 1/4
	150A	320	280	260	274	17	1 1/4
300A	300A	410	372	360	392	23	1 1/2
	250A	360	332	310	323	18	1 1/4
	200A	398	332	310	323	18	1 1/4
	150A	408(410)	334	306(310)	329	18	1 1/4
350A	350A	480	421	390(400)	421	23	2
	300A	410	372	360	392	23	1 1/2
	250A	360	331	310	323	18	1 1/4
400A	400A	560	484	450(460)	471	23	2
	350A	560	484	450(460)	471	23	2
	300A	520	422	390	425	23	2
	250A	536(540)	422	390(400)	425	23	2
	200A	561(565)	422	390(400)	425	23	2
450A	450A	638	550	510(520)	535	28	2
	400A	640(650)	558	510(520)	538	25	2
	350A	670(676)	558	510(520)	538	25	2
500A	500A	630(640)	557	520(530)	537	25	2
	450A	630(640)	557	520(530)	537	25	2
	400A	640(650)	557	520(530)	537	25	2
	350A	670(676)	557	520(530)	537	25	2

Dimensions drawing



FLANGED TYPE



FLANGED TYPE(STANDARD)

Data / Intelligent Control Check Valve, Suction Diffuer

Items that becom unnecessary or can be saved with control check valve installation

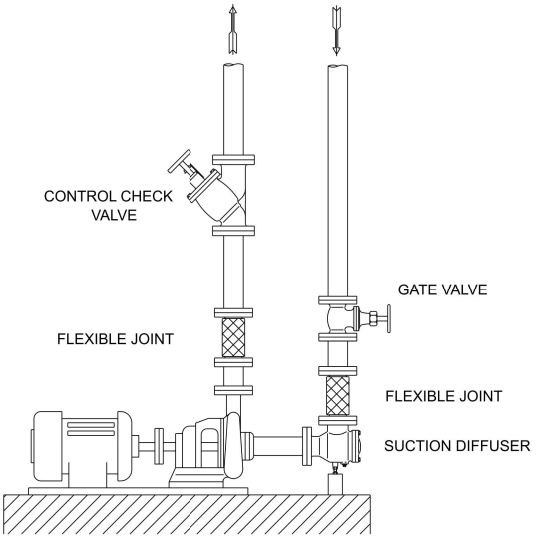
1. Check Valve
2. Gate Valve
3. Balancing Valve
4. Relief Valve
5. Flange
6. Gasket, Bolt, Nut
7. Reduced construction time
8. Reduced labor costs, etc.

Cautions for installation

1. It can be installed on a horizontal or vertical pipeline.
2. Install a flexible joint to prevent damage to the pipeline resulting from pump vibration.
3. Install after checking the direction of the fluid's flow (arrow).
4. Use a spanner or the handle to open the valve and operate the pump.
5. If there is a bypass valve attached, operate after closing the external ball valve.)

Information required when placing an order

1. MODEL
2. Type of fluid
3. Maximum running pressure (kgf/cm^{2}g)
4. Maximum temperature used (℃)
5. Pump's discharge pipeline diameter (mm)
6. Maximum flow (m^3/hr or LPM)
7. Other options



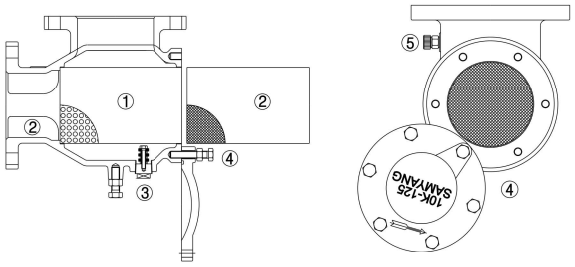
Piping method using control check valves

Items that become unnecessary or can be saved with suction diffuser installation

1. Reduced pipe on the inlet side
2. Reducing elbow
3. Strainer
4. Flange (2 each)
5. Gasket, bolt, nut
6. Pipe support
7. Reduced labor costs
8. Reduced construction time

Test operation tips

1. The valve is in a closed state when delivered to the customer.(Indicator says 0%)
2. After installation, open the valve by loosening the square part of the stem that protrudes towards the cover part or the handle towards the left (counterclockwise direction)
3. The opening degree can be checked through the indicator that is attached to the cover.
4. It is recommended to maintain the opening degree at 100%. Controlling the pump's discharge amount by adjusting the opening degree leads to pump overload. This is why the opening degree should not be adjusted unless in special cases.
5. Install a pressure gauge on the outlet side of the valve to check for leakage. (If the outlet pressure drops when the pump is not in operation or the fluid is not flowing, it means that there is leakage.)



How to clean the screen and remove the wire and wire mesh net

1. Sufficiently flush the inside of the pipeline after opening all valves.
2. Close the gate valve in front of the suction diffuser.
3. Open the drain plug ③ in the lower part of the main body to completely withdraw water and remove foreign substances.
4. Disassemble the bolts on the cover and open the cover by turning it based on the hinge ④.
5. Open the screen ① simultaneously.
6. Remove the wire mesh net ② located outside the screen.
7. Clean the screen ①, and assemble in reverse order.