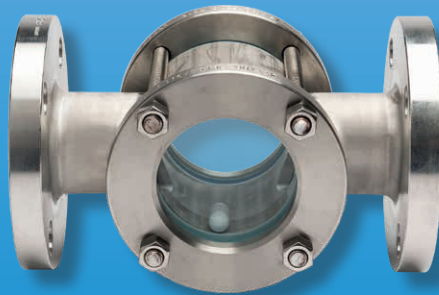
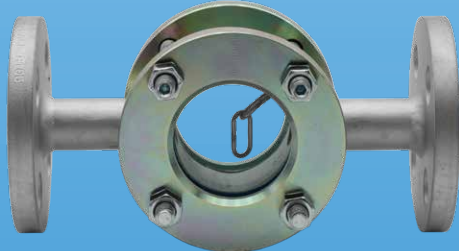
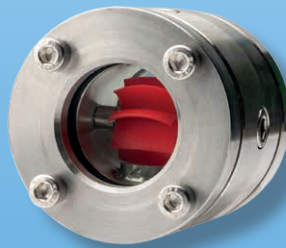
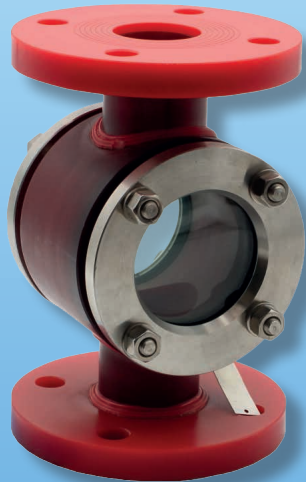


# Sight Glass Flow Indicator



measuring  
•  
monitoring  
•  
analyzing

DAI



- Connection:  
1/2" ... 3" NPT, 1/2" ... 6" ANSI
- $p_{max}$ : 580 PSI;  $t_{max}$ : 500°F
- Materials:  
Carbon Steel, Stainless Steel,  
PVC, PP, PVDF
- Internal Indicators:  
Rotor, Ball, Flap, Chain, None



KOBOLD companies worldwide:

AUSTRALIA, AUSTRIA, BELGIUM, BULGARIA, CANADA, CHINA, CZECHIA, FRANCE, GERMANY, GREAT BRITAIN, HUNGARY, INDIA, INDONESIA, ITALY, MALAYSIA, MEXICO, NETHERLANDS, PERU, POLAND, REPUBLIC OF KOREA, RUSSIA, SPAIN, SWITZERLAND, THAILAND, TUNISIA, TURKEY, USA, VIETNAM

KOBOLD Instruments, Inc.  
1801 Parkway View Drive  
Pittsburgh, PA 15205  
Main Office:  
1.800.998.1020  
1.412.788.4890  
info@koboldusa.com  
www.koboldusa.com



## Sight Glass Flow Indicator Model DAI

### Model without visual internals

Free passage visual flow indicator for horizontal and vertical mounting. Made in metallic and plastic materials. The plastic type is available up to size 3" and for operating pressures as per the tables "Pressure Derating Curve with Temperature for PVC/PP/PVDF".

### Model with fixed flap

Visual flow indicator with fixed paddle to create vortex in the passage of the fluid and improve the visibility of the flow. This model is not available in plastic. Only for vertical mounting.

### Model with chain

Visual flow indicator with chain to further improve the visibility of flow. This model is not available in plastic. Only for horizontal mounting.

### Model with ball

This model has a ball made of PTFE. It is suitable for horizontal and vertical mounting. Made in metallic and plastic materials. The plastic type is available up to size 3" and for operating pressures as per the tables "Pressure Derating Curve with Temperature for PVC/PP/PVDF".

### Model with rotor

This model has a rotor made of 316 SS (standard) or PTFE (by request). This model is not available in plastic and is suitable for horizontal and vertical mounting.

### Order Details for Metal Models (Example: DAI- C N 5 50 G N 0 0)

Model	Material	Connection	Connection Type	Connection Size	Gasket
DAI-..	..C.. = Carbon Steel ..S.. = Stainless Steel	..N.. = NPT Female	..5.. = NPT Thread Connection, 360 PSI max. ..4 <sup>1)</sup> .. = NPT Thread Connection, 580 PSI max.	..15.. = 1/2" ..20.. = 3/4" ..25.. = 1"	..G.. = Graphite (Standard) ..T.. = PTFE (Optional)
		..F.. = Flange	..N.. = Flange acc. ASME Class 150, 232 PSI max. (Sealing surface: RF) ..M <sup>1)</sup> .. = Flange acc. ASME Class 300, 580 PSI max. (Sealing surface: RF)	..40.. = 1-1/2" ..50.. = 2" ..65.. = 2-1/2" ..80.. = 3" ..1H.. = 4" (Flange Only) ..1F.. = 6" (Flange Only)	

Sight Glass	Internal Indicators	Options
..N.. = Soda Lime Glass up to 300°F (Standard) ..B.. = Borosilicate Glass up to 500°F	..0.. = None ..R.. = 316 SS Rotor for Liquids ..B <sup>4)</sup> .. = PTFE Ball (Temperature Limit: -22...392°F) ..F <sup>2)</sup> .. = Flap 316 SS, Fixed at 45° ..K <sup>3)</sup> .. = Chain 316 SS Hanging	..0 = Without ..M = Material Certificate 3.1 (Order as separate line item with code DOK-FR03A) ..Y = Special (Specify in clear text)

<sup>1)</sup> Only up to size 2"    <sup>2)</sup> Vertical flow, up only    <sup>3)</sup> Horizontal flow only    <sup>4)</sup> Only up to size 3"

### Order Details for Plastic Models (Example: DAI- V N 6 15 V N 0 0)

Model	Material	Connection	Connection Type	Connection Size	Gasket
DAI-..	..V <sup>1)</sup> .. = PVC ..P <sup>1)</sup> .. = PP ..D <sup>1)</sup> .. = PVDF	..N.. = NPT Female	..6.. = NPT Thread Connection, 87 PSI max.	..15.. = 1/2" ..20.. = 3/4" ..25.. = 1"	..V.. = FKM
		..F.. = Flange	..L.. = Flange acc. ASME Class 150, 87 PSI max. (Sealing surface: FF)	..40.. = 1-1/2" ..50.. = 2" ..65.. = 2-1/2" ..80.. = 3"	

Sight Glass	Internal Indicators	Options
..N.. = Soda Lime Glass up to 300°F	..0.. = None ..B.. = PTFE Ball	..0 = Without ..Y = Special (Specify in clear text)

<sup>1)</sup> Pressure rating limited to 87 PSI (See tables Pressure Derating Curve with Temperature for PVC/PP/PVDF)

**Materials / Mounting Position**

	DAI-C	DAI-S	DAI-V	DAI-P	DAI-D
<b>Housing</b>	Carbon steel	316 SS/316L SS	PVC	PP	PVDF
<b>Cover Plates</b>	Carbon steel	316 SS/316L SS			
<b>Sight Glass</b>	Soda-lime glass DIN 8902 (up to 300 °F); option: borosilicate glass DIN 7080 (up to 500 °F) only for metal models				
<b>Screws</b>	Zinc plated steel	stainless steel			
<b>Gasket</b>	See table 'Order Details'				
<b>Rotor</b>	316 SS (or PTFE - optional by special request - consult factory)		Not available		
<b>Mounting Position</b>	Universal for models with rotor, ball, or none / vertical for models with flap / horizontal for models with chain				
<b>Operating Pressure*</b>	See table 'Order Details'				
<b>Operating Temperature</b>	14...300°F (500°F with borosilicate glass)	-320...300°F (500°F with borosilicate glass)	32...140°F*	14...176°F*	14...284°F*

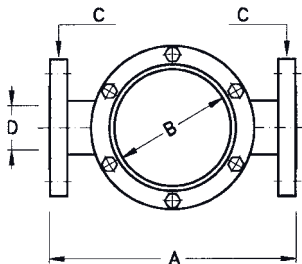
\* See tables Pressure Derating Curve with Temperature for PVC/PP/PVDF

**Dimensions / Weights**

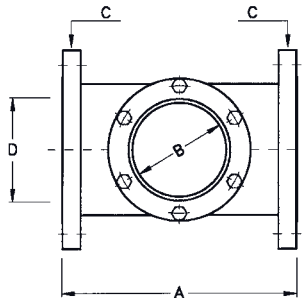
**Flanged Versions**

Standard "Dimension C" flange ANSI 150 RF (ANSI 300 RF available upon request)

1/2" ... 3" Connections



4" and 6" Connections

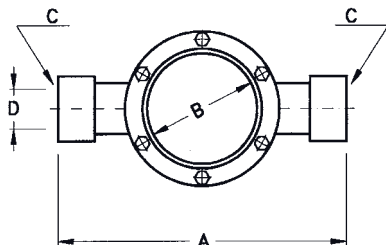


Size	A	B	D (ANSI)	Approx. Weight <sup>1)</sup> (lb)	Approx. Weight <sup>2)</sup> (lb)
1/2"	7.09"	1.85"	1/2"	5.5	3.3
3/4"	7.09"	1.85"	3/4"	6.6	4.4
1"	7.09"	1.85"	1"	7.7	5.5
1-1/2"	9.45"	3.15"	1 1/2"	18	7.7
2"	9.45"	3.15"	2"	20	8.8
2-1/2"	11.02"	3.54"	2 1/2"	33	14.3
3"	11.42"	3.54"	3"	36	15.4
4"	9.84"	3.07"	4"	41	-
6"	11.81"	4.72"	6"	56	-

<sup>1)</sup> Refers to metal models  
<sup>2)</sup> Refers to plastic models

**Threaded Versions (2-1/2" and 3" Connections)**

Standard "Dimension C" NPT threaded connections



Size	A	B	D	Approx. Weight <sup>1)</sup> (lb)	Approx. Weight <sup>2)</sup> (lb)
2-1/2"	13.78"	3.54"	2 1/2"	26.4	24
3"	3.54"	3.54"	3"	30	28

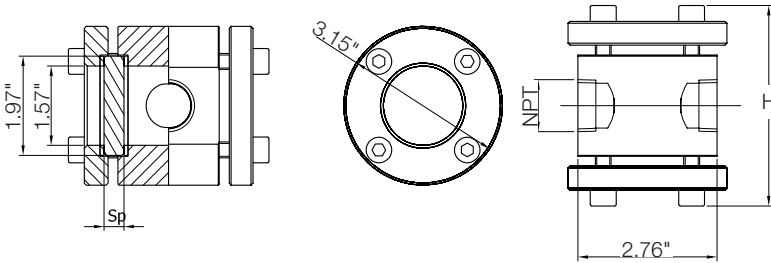
<sup>1)</sup> Refers to metal models (360 PSI max.)  
<sup>2)</sup> Refers to plastic models



## Sight Glass Flow Indicator Model DAI

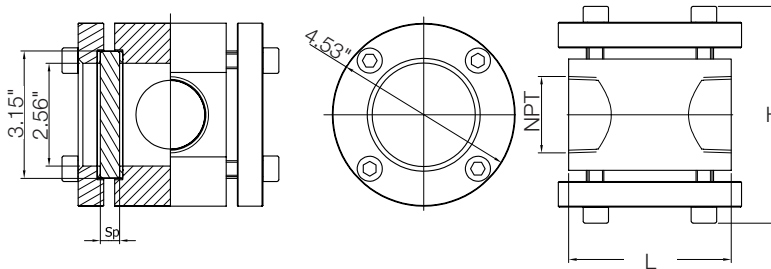
### Dimensions/Weights (continued)

#### Threaded Versions (For material codes C/S with threaded connections 1/2"...1")



Pressure Rating	Connection	Sp	H	Approx. Weight (lb)
360 PSI	1/2"	0.39"	3.94"	6.6
	3/4"			6.6
	1"			6.6
580 PSI	1/2"	10.47"	4.33"	6.6
	3/4"			6.6
	1"			6.6

#### Threaded Versions (For material codes C/S with threaded connections 1-1/2"...2")



Pressure Rating	Conn.	Sp	L	H	Approx. Weight (lb)
360 PSI	1-1/2"	0.59"	4.02"	5.91"	12.1
	2"		3.70"	5.91"	14.3
580 PSI	1-1/2"	0.79"	4.02"	6.30"	13.2
	2"		3.70"	6.30"	15.4

### Pressure Derating Curves with Temperature

#### PVDF

Temperature	Max. Pressure
14...50 °F	101.5 PSI
68 °F	94.3 PSI
86 °F	87.0 PSI
104 °F	82.7 PSI
122 °F	75.4 PSI
140 °F	72.5 PSI
158 °F	58.0 PSI
176 °F	50.8 PSI
194 °F	46.4 PSI
212 °F	43.5 PSI
230 °F	36.3 PSI
248 °F	29.0 PSI
266 °F	21.8 PSI
284 °F	14.5 PSI

#### PP

Temperature	Max. Pressure
14...50 °F	101.5 PSI
68 °F	87.0 PSI
86 °F	72.5 PSI
104 °F	65.3 PSI
122 °F	50.8 PSI
140 °F	43.5 PSI
158 °F	34.8 PSI
176 °F	20.3 PSI

#### PVC

Temperature	Max. Pressure
32...68 °F	87.0 PSI
86 °F	72.5 PSI
104 °F	58.0 PSI
122 °F	31.9 PSI
140 °F	21.8 PSI