

## Sight Glasses



- SGN sight glass is used on the liquid piping of the refrigeration and air conditioning unit to indicate the flow condition of the refrigerant, water cut of the refrigerant and lubricant oil flow condition of the oil return piping on the oil separator.
- SGN sight glass is equipped with one moisture indicator, which will change color to indicate the water cut in the refrigerant.
- The modified PTFE sealing is used in SGN sight glass, which is applicable to various refrigerants and oils with perfect sealing performance.
- The structure of the SGN sight glass is an explosion-proof press fit and the viewing glass is clear and safety.

### Features

- Be applicable to HCFC/HFC refrigerants.
- Indicate high water cut in system if any.
- Indicate no overcooling in refrigerant liquid.
- Indicate insufficient charging of refrigerant if any.
- Both welded and threaded connections are available.

### Technical Parameters :

Applicable Refrigerant : HCFC and HFC  
 Applicable Medium Temperature : -40°C ~ +80°C  
 Max. Operating Pressure : 3,5MPa  
 Max. Allowable Pressure : 4,5MPa  
 Yearly Leakage of Refrigerant : ≤2g R22/a

### Correlation between Water Cut and Color

	Water Cut (ppm)					
	25°C			43°C		
	Green/DRY	Medium Color	Yellow/WET	Green/DRY	Medium Color	Yellow/WET
R22 / R502	<30	30 ~ 126	>120	<50	50 ~ 200	>200
HFC - 134a	<30	30 ~ 100	>100	<45	45 ~ 170	>170
R404a	<20	20 ~ 70	>70	<25	25 ~ 100	>100
R407c	<30	30 ~ 140	>140	<60	60 ~ 225	>225
R507	<15	15 ~ 60	>60	<30	30 ~ 110	>110

### Specification

MODEL		SIZE
Welded Connection	Threaded Connection	
SGN - 1/4 ODF	SGN - 1/4 SAE	1/4 ( $\phi$ 6 )
SGN - 3/8 ODF	SGN - 3/8 SAE	3/8 ( $\phi$ 10 )
SGN - 1/2 ODF	SGN - 1/2 SAE	1/2 ( $\phi$ 12 )
SGN - 5/8 ODF	SGN - 5/8 SAE	5/8 ( $\phi$ 16 )
SGN - 3/4 ODF	SGN - 3/4 SAE	3/4 ( $\phi$ 19 )
SGN - 7/8 ODF	---	7/8 ( $\phi$ 22 )

### Structure

MODEL	CONNECTION	A (mm)	$\Phi$ B (mm)	C (mm)	$\Phi$ D (mm)	H (mm)	L <sub>1</sub> (mm)	L (mm)	THREAD M
SGN - 1/4	ODF	10	27	14	6.35	24	8	101	---
	SAE	--	--	--	--	24	--	59.5	7/16 - 20UNF
SGN - 3/8	ODF	10	27	14	9.52	24	9	119	---
	SAE	--	--	--	--	30	--	70	5/8 - 18UNF
SGN - 1/2	ODF	12	27	17.5	12.7	28.5	12	146	---
	SAE	--	--	--	--	29	--	70	3/4 - 16UNF
SGN - 5/8	ODF	12	27	20.5	15.8	29.5	12	146	---
	SAE	--	--	--	--	31	--	80	7/8 - 14UNF
SGN - 3/4	ODF	16	32	27	19.05	37	14	173	---
SGN - 7/8	ODF	16	32	27	22.2	37	19	173	---

