

PRESSURE MEASUREMENT FILM

PRESCALE

[MONO-SHEET TYPE FOR SUPER HIGH PRESSURE]

① LINE UP

Six types of Prescale are supplied according to pressure level. Select appropriate Prescale.

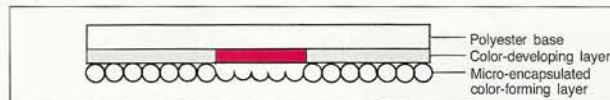
type	Film type	Pressure range[MPa]						Product size W(mm)×L(m)		
		0.2	0.5	0.6	2.5	10	50		130	300
Two-sheet type	Ultra Super Low Pressure(LLW)	[0.2-0.5]								270×5
	Super Low Pressure(LLW)	[0.5-0.6]								270×6
	Low Pressure(LW)	[0.6-2.5]								270×12
	Medium Pressure(MW)	[2.5-10]								270×12
Mono-sheet type	Medium Pressure(MS)	[10-50]								270×12
	High Pressure(HS)	[50-130]								270×12
	Super High Pressure(HHS)	[130-300]								270×12

* Film type W:Two-sheet
S:Mono-sheet

② STRUCTURE AND HOW IT WORKS

Structure

There are two types of Prescale; Two-sheet type and Mono-sheet type.
Mono-sheet type is composed of polyester base on which the color-developing material is coated, with the micro-encapsulated color forming material layered on top.



How it works

When pressure is applied, the microcapsules are broken and the color-forming material reacts with the color-developing material to make red color. The microcapsules are designed to break according to the pressure so the color density corresponds to the pressure.

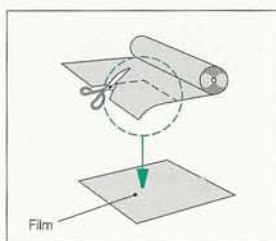
③ PROPERTIES

Precision	±10% or less (measured by densitometer at 23°C/73.4°F, 65% RH)
Recommended temperature range	15°C~30°C(59°F~86°F)
Recommended humidity range	35%RH~70%RH

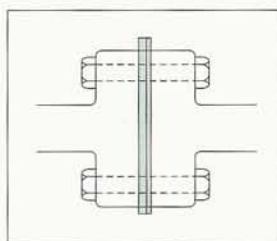
④ HOW TO USE

MONO-sheet type (Medium & High & Super High pressure: MS & HS HHS)

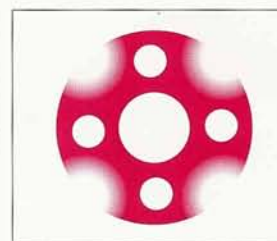
Cut Prescale in a black poly sack appropriately. Insert the Prescale where you want to measure pressure. Apply pressure. Red patches appear on the films and the color density changes according to pressure level. Take out the film and check the pressure distribution.



(1) Cut the Prescale Film into the required shape.



(2) Insert cut Prescale Film into area to be measured and apply pressure.



(3) Remove film and observe pressure distribution.

MONO-SHEET TYPE FOR SUPER HIGH PRESSURE

STANDARD CONTINUOUS PRESSURE CHART

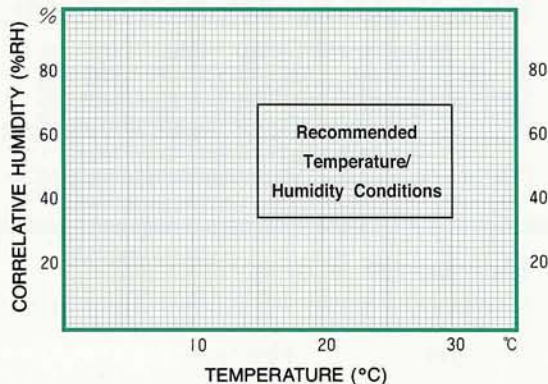
Measurement pressure range: 130–300MPa

• Pressure application conditions

Time to reach the pressure to be measured: 2 min.

Time of retention at the pressure to be measured: 2 min.

GRAPH OF TEMPERATURE/ HUMIDITY CONDITIONS



Check if the temperature and humidity meet with the conditions above when the pressure is applied.

STANDARD COLOR SAMPLE

