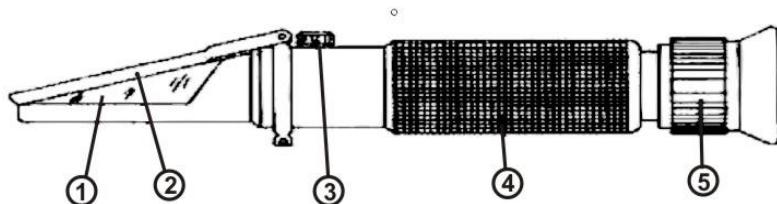


# 刻度式糖鹽度計操作說明書

適合型號：BR32T、BR62T、BR90T、SA10T、SA28T、AL80、SO25、CF18

## 一、部位名稱及圖形



1. 積鏡 prism
2. 積鏡蓋子 cover plate
3. 零點調整螺栓 zero correct screw
4. 光學系統管路 mirror tube
5. 焦距調整鈕 focus adjuster

## 二、操作步驟：

1. 將折射計末端稜鏡①瞄準光亮的方向，旋轉焦距調整鈕⑤直到標線字體清晰為止。

2. 零點調整：

### ● BR32T、SA10T、SA28T、AL80、SO25、CF18

打開稜鏡蓋子②，滴入1~2滴純水在稜鏡①上，蓋上蓋子並輕壓（注意不要有氣泡），然後用零點調整起子旋轉零點調整螺栓③，使明暗分界線落在零點線上即完成零點校正。

### ● 中濃度的型號如：BR62T

以飽和氯化鈉溶液取代純水進行上述步驟，並調整零點在29.9% (15°C)、29.6% (20°C)、29.2% (25°C)。

### ● 高濃度的型號如：BR90T

以附件之標準塊取代純水，加入一滴曲光油至標準塊的亮面及霧面上（寬面），將塗油的亮面緊貼稜鏡（請勿蓋上蓋子），旋轉零點螺栓③使明暗的分界線落在78.8%。

3. 測試：打開稜鏡蓋子②，用拭鏡紙清潔稜鏡表面，滴入1~2滴待測液，蓋上蓋子並輕壓（注意不要有氣泡），讀取明暗的分界線所在的刻度，即為溶液的濃度。

4. 測量完後應以溼紗布清潔稜鏡蓋子及表面，待乾後再妥善存放。

## 三、維護及注意事項

1. 零點校正液和待測樣品應在相同的溫度下操作，若溫度變化大則零點校正須重做一次。

2. 折射計使用完畢後，請以乾淨拭鏡紙清潔鏡面，勿在水龍頭下沖洗以免水滲入光學系統中。

## 四、附件

1. 滴管 x 1

2. 零點調整起子 x 1

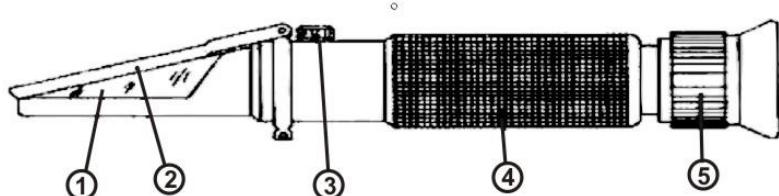
※溫度補償：若溫度非20°C時，測試值會稍微受到影響，以下是溫度補償對照表（10°C~30°C），用以修正。

Temper- ature °C	Measured Value %																	
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85
Subtract from the measured value																		
10	0.52	0.58	0.59	0.61	0.64	0.67	0.69	0.71	0.72	0.74	0.74	0.74	0.75	0.76	0.77	-	-	-
11	0.48	0.51	0.54	0.55	0.58	0.61	0.63	0.65	0.65	0.67	0.67	0.67	0.68	0.68	0.69	-	-	-
12	0.44	0.47	0.49	0.50	0.52	0.55	0.57	0.58	0.58	0.60	0.60	0.60	0.61	0.61	0.61	-	-	-
13	0.39	0.42	0.43	0.44	0.45	0.49	0.50	0.51	0.51	0.53	0.53	0.53	0.53	0.53	0.53	-	-	-
14	0.35	0.37	0.38	0.39	0.40	0.42	0.43	0.44	0.44	0.45	0.45	0.45	0.45	0.45	0.46	-	-	-
15	0.29	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.37	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.37	0.37
16	0.24	0.25	0.26	0.27	0.28	0.28	0.29	0.30	0.30	0.31	0.31	0.31	0.31	0.31	0.31	0.30	0.30	0.30
17	0.18	0.19	0.20	0.20	0.21	0.21	0.22	0.22	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.22
18	0.12	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
19	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07
Add to the measured value																		
21	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07	
22	0.13	0.14	0.14	0.14	0.14	0.15	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.15	0.15
23	0.20	0.21	0.21	0.22	0.22	0.23	0.23	0.23	0.24	0.24	0.24	0.24	0.23	0.23	0.23	0.23	0.23	0.22
24	0.27	0.28	0.29	0.29	0.30	0.30	0.31	0.31	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.30	0.30	0.30
25	0.34	0.35	0.36	0.37	0.38	0.38	0.39	0.39	0.40	0.40	0.40	0.40	0.39	0.39	0.39	0.38	0.37	
26	0.42	0.43	0.44	0.45	0.46	0.46	0.47	0.47	0.48	0.48	0.48	0.48	0.47	0.47	0.46	0.46	0.45	
27	0.50	0.51	0.52	0.53	0.54	0.55	0.55	0.56	0.56	0.56	0.56	0.56	0.55	0.55	0.54	0.53	0.52	
28	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.64	0.64	0.65	0.65	0.64	0.64	0.64	0.63	0.62	0.61	0.60
29	0.66	0.67	0.68	0.69	0.70	0.71	0.72	0.73	0.73	0.73	0.73	0.72	0.72	0.71	0.70	0.69	0.68	
30	0.74	0.75	0.77	0.78	0.79	0.80	0.81	0.81	0.82	0.81	0.81	0.80	0.79	0.78	0.77	0.75		

# Hand-Held Refractometer Operating Instructions

MODEL : BR32T、BR62T、BR90T、SA10T、SA28T、AL80、SO25、CF18

## I. Part



1. Prism
2. Cover plate
3. Zero correct screw
4. Mirror tube
5. Focus adjuster

## II. OPERATING PROCEDURE

1. Take the prism (1) end of refractometer towards the bright light and turn focus adjuster (5) clockwise or counterclockwise until the reticule can be seen clearly.
2. Zero adjustment
  - for **BR32、SA10T、SA28T、AL80、SO25、CF18**  
Lift the cover plate (2) up, drop 1 ~ 2 drops of pure water on the prism. Cover the plate and press it lightly and make sure there's no bubbles. Adjusts the zero correct screw (3) to match zero boundaries between bright and dark side coincide with the null line.
  - for **BR62T**  
Replace pure water with saturated sodium chloride solution as zero standard. The refractive indexes of the saturated sodium chloride solution which refractive indexes are 29.9% (15°C), 29.6% (20°C), 29.2% (25°C).
  - for **BR90T**  
Drop 1 drop of dioptric oil on the bright and matte surface of the reference block. Lift the cover plate (2) up, put the bright side of reference block on the surface of the prism and fix it. (Do NOT cover the cover plate.) Turn and adjust the zero correct screw (3) to have the bright/dark boundary located at the Brix 78.8% reference line.
3. Measurement: Lift the cover plate (2) up, clean surface of prism with tissue paper, then drop 1~2 drops of solution for measurement and make sure there's no bubbles. Cover the plate, press it lightly, then read the corresponding scale, where the bright/dark boundary located, scale reading brix of sample.
4. After measurement, clean and wipe the surface of prism and cover plate with wet tissue paper. Please store the refractometer well after it is dry.

## III. MAINTENANCE

1. The temperature of zeroing standard should be the same with ambient temperature. If ambient temperature varies greatly, zeroing should be done again.
2. Never flush the refractometer, to prevent water from draining into the pipe of refractometer.
3. It should be kept in the dry, clean and non-corrosiveness environment.
4. Do not touch and scratch optical surfaces.
5. Do not shock strongly during transportation.

※**TEMPERATURE COMPENSATION:** The measuring results will be affected slightly when temperature is not at 20°C, temperature correction table listed below used for temperature compensation.

Tempe- rature °C	Measured Value %																	
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85
Subtract from the measured value																		
10	0.52	0.58	0.59	0.61	0.64	0.67	0.69	0.71	0.72	0.74	0.74	0.74	0.75	0.76	0.77	-	-	-
11	0.48	0.51	0.54	0.55	0.58	0.61	0.63	0.65	0.65	0.67	0.67	0.67	0.68	0.68	0.69	-	-	-
12	0.44	0.47	0.49	0.50	0.52	0.55	0.57	0.58	0.58	0.60	0.60	0.60	0.60	0.61	0.61	-	-	-
13	0.39	0.42	0.43	0.44	0.45	0.49	0.50	0.51	0.51	0.53	0.53	0.53	0.53	0.53	0.53	-	-	-
14	0.35	0.37	0.38	0.39	0.40	0.42	0.43	0.44	0.44	0.45	0.45	0.45	0.45	0.45	0.46	-	-	-
15	0.29	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.37	0.38	0.38	0.38	0.38	0.38	0.38	0.37	0.37	0.37
16	0.24	0.25	0.26	0.27	0.28	0.28	0.29	0.30	0.30	0.30	0.31	0.31	0.31	0.31	0.31	0.30	0.30	0.30
17	0.18	0.19	0.20	0.20	0.21	0.21	0.22	0.22	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.22
18	0.12	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
19	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07
Add to the measured value																		
21	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07	
22	0.13	0.14	0.14	0.14	0.14	0.15	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.15	
23	0.20	0.21	0.21	0.22	0.22	0.23	0.23	0.23	0.23	0.24	0.24	0.24	0.24	0.23	0.23	0.23	0.22	
24	0.27	0.28	0.29	0.29	0.30	0.30	0.31	0.31	0.31	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.30	0.30
25	0.34	0.35	0.36	0.37	0.38	0.38	0.39	0.39	0.40	0.40	0.40	0.40	0.40	0.39	0.39	0.39	0.38	0.37
26	0.42	0.43	0.44	0.45	0.46	0.46	0.47	0.47	0.48	0.48	0.48	0.48	0.48	0.47	0.47	0.46	0.46	0.45
27	0.50	0.51	0.52	0.53	0.54	0.55	0.55	0.56	0.56	0.56	0.56	0.56	0.56	0.55	0.55	0.54	0.53	0.52
28	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.64	0.64	0.65	0.65	0.64	0.64	0.64	0.63	0.62	0.61	0.60
29	0.66	0.67	0.68	0.69	0.70	0.71	0.72	0.73	0.73	0.73	0.73	0.73	0.72	0.72	0.71	0.70	0.69	0.68
30	0.74	0.75	0.77	0.78	0.79	0.80	0.81	0.81	0.82	0.81	0.81	0.80	0.79	0.78	0.77	0.75		