



JAB



Calibration Laboratory
Accreditation
Certificate



Accreditation No. RCL00350

COSMO INSTRUMENTS CO., LTD.
Cosmo Group Calibration Laboratory

**2974-23, Ishikawacho, Hachioji-shi, Tokyo, 192-0032
Japan**

meets the following criteria. On the basis of this, Japan Accreditation Board (JAB) grants accreditation to the said calibration laboratory.

Applicable accreditation criteria	: JIS Q 17025:2005 (ISO/IEC 17025:2005)
Scope of accreditation	: Mechanical (As described in the appendix)
Premises covered by accreditation	: As described in the appendix.
Expiry date of accreditation	: July 31, 2021

Revised (6)	October 11, 2018
Renewed (2)	July 25, 2017
Initial accreditation	July 31, 2009

T. Oda, Chairman
Laboratory Accreditation Committee

Y. Mizuka, President
Japan Accreditation Board



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Type of Laboratory	Calibration Laboratory
Name of Laboratory	COSMO INSTRUMENTS CO., LTD. Cosmo Group Calibration Laboratory
Address	2974-23, Ishikawacho, Hachioji-shi, Tokyo, 192-0032 Japan

1) Premises on which calibration activities are performed

Name of Premises	COSMO INSTRUMENTS CO., LTD. Cosmo Group Calibration Laboratory	
Address of Premises	Postal Code	192-0032
	Address	2974-23, Ishikawacho, Hachioji-shi, Tokyo, Japan
Calibration service at permanent facilities or on site calibration service	<input checked="" type="checkbox"/> Calibration service at permanent facilities <input type="checkbox"/> On site calibration service	

Scope of Accreditation

CODE OF CLASSIFICATION, QUANTITY MEASURAND / CALIBRATION ITEM	RANGE OF CALIBRATION	EXPANDED UNCERTAINTY ¹⁾	CALIBRATION PROCEDURE, REMARKS
M14 Mechanical	1 mL/min to 10 mL/min	0.58 %	CCC-02-1001 (Internal instructions)
M14.5 Flow rate Gas flow meter (dry air) Gas flow rate	20 mL/min to 200 mL/min	0.58 %	
Gas flow meter (dry air) Gas flow rate	10 mL/min to 100 mL/min	0.31 %	CCC-02-1002 (Internal instructions)
Gas flow meter (dry air) Gas flow rate	0.1 L/min to 10 L/min 10 L/min to 20 L/min 20 L/min to 50 L/min 50 L/min to 115 L/min	0.31 % 0.32 % 0.34 % 0.36 %	CCC-02-1003 (Internal instructions)
Gas flow meter (dry air) Gas flow rate	1 mL/min to 10 mL/min 0.01 L/min to 10 L/min 10 L/min to 20 L/min 20 L/min to 50 L/min 50 L/min to 115 L/min	0.65 % 0.38 % 0.38 % 0.38 % 0.40 %	CCC-02-1004 (Internal instructions)



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Address	2974-23, Ishikawacho, Hachioji-shi, Tokyo, 192-0032 Japan

CODE OF CLASSIFICATION, QUANTITY MEASURAND / CALIBRATION ITEM	RANGE OF CALIBRATION	EXPANDED UNCERTAINTY ¹⁾	CALIBRATION PROCEDURE, REMARKS
	40 L/min to 500 L/min	0.56 %	
Gas flow meter (dry air)	70 L/min to 200 L/min 140 L/min to 500 L/min	0.54 % 0.54 %	CCC-02-1005 (Internal instructions)
M14 Mechanical M14.14 Pressure Digital pressure gauge Differential pressure gauge	0.001 kPa to 10 kPa	1.3 Pa	CCC-02-01 (Internal instructions)
Digital pressure gauge Differential pressure gauge	0.001 kPa to 10 kPa	1.6 Pa	CCC-02-02 (Internal instructions)
Digital pressure gauge Gas gauge pressure	1.0 kPa to 10 kPa 10 kPa to 100 kPa	1.3 Pa 1.8 Pa, 0.005 % whichever larger	CCC-02-03 (Internal instructions)
Digital pressure gauge Gas gauge pressure	20 kPa to 200 kPa 200 kPa to 2000 kPa	30 Pa 33 Pa, 0.005 % whichever larger	CCC-02-04 (Internal instructions)
Digital pressure gauge Gas gauge pressure	-10 kPa to -0.01 kPa 0.001 kPa to 10 kPa	1.8 Pa 1.6 Pa	CCC-02-07 (Internal instructions)

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CODE OF CLASSIFICATION, QUANTITY MEASURAND / CALIBRATION ITEM	RANGE OF CALIBRATION	EXPANDED UNCERTAINTY ¹⁾	CALIBRATION PROCEDURE, REMARKS
Digital pressure gauge Gas gauge pressure	20 kPa to 200 kPa 200 kPa to 2000 kPa	40 Pa 52 Pa, 0.007 % whichever larger	CCC-02-14 (Internal instructions)
Digital pressure gauge Gas gauge pressure	-90 kPa to -10 kPa -20 kPa to -2 kPa 1.0 kPa to 20 kPa 10 kPa to 100 kPa	12 Pa 4.4 Pa 3 Pa 3 Pa, 0.007 % whichever larger	CCC-02-08 (Internal instructions)
Digital pressure gauge Gas absolute pressure	20 kPa to 500 kPa 501 kPa to 700 kPa	0.03 kPa 0.05 kPa	CCC-02-09 (Internal instructions)
Digital pressure gauge Gas absolute pressure	900 hPa to 1100 hPa	0.05 hPa	CCC-02-06 (Internal instructions)
Digital pressure gauge Liquid pressure gauge	1 MPa to 50 MPa	0.0022 MPa, 0.012 % whichever larger	CCC-02-05 (Internal instructions)
Air Leak Tester Gas gauge pressure	25 Pa to 1000 Pa 0.25 kPa to 10 kPa	4 Pa 18 Pa	CCC-02-15 (Internal instructions)



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CODE OF CLASSIFICATION, QUANTITY MEASURAND / CALIBRATION ITEM	RANGE OF CALIBRATION	EXPANDED UNCERTAINTY ¹⁾	CALIBRATION PROCEDURE, REMARKS
Bourdon tube pressure gauge Gas gauge pressure	1 kPa to 20 kPa	0.4 kPa	CCC-02-17 (Internal instructions)
	10 kPa to 100 kPa	1 kPa	
	40 kPa to 200 kPa	1.8 kPa	
	100 kPa to 1000 kPa	8 kPa	
	200 kPa to 2000 kPa	25 kPa	
Digital pressure gauge (Pressure SW) Gas gauge pressure	-90 kPa to -10 kPa	0.7 kPa	CCC-02-16 (Internal instructions)
	10 kPa to 100 kPa	0.6 kPa	
	100 kPa to 1000 kPa	5 kPa	
	-90 kPa to -10 kPa	0.6 kPa	
	1 MPa to 2 MPa	0.012 MPa	

¹⁾ Information on the coverage factor

- $k=2$: level of confidence of approximately 95 %
- coverage factor obtained from the effective degrees of freedom that defines a level of confidence of 95 %, based on the t -distribution
- others ()

(NOTE)



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1) Premises on which calibration activities are performed

Name of Premises	COSMO INSTRUMENTS CO., LTD. Cosmo Group Calibration Laboratory	
Address of Premises	Postal Code	192-0032
	Address	2974-23, Ishikawacho, Hachioji-shi, Tokyo, Japan
Calibration service at permanent facilities or on site calibration service	<input type="checkbox"/> Calibration service at permanent facilities <input checked="" type="checkbox"/> On site calibration service	

Scope of Accreditation

CODE OF CLASSIFICATION, QUANTITY MEASURAND / CALIBRATION ITEM	RANGE OF CALIBRATION	EXPANDED UNCERTAINTY (APPROXIMATELY 95 % COVERAGE PROBABILITY, $k = 2$)	CALIBRATION PROCEDURE, REMARKS
M14 Mechanical	1 mL/min to 25 mL/min	0.69 %	CCC-02-1006 (Internal instructions, On site calibration service)
M14.5 Flow rate	0.01 L/min to 10 L/min	0.50 %	
Gas flow meter(dry air)	10 L/min to 20 L/min	0.50 %	
Gas flow rate	40 L/min to 200 L/min	0.60 %	
M14 Mechanical	25 Pa to 1000 Pa	6 Pa	CCC-02-18 (Internal instructions, On site calibration service)
M14.14 Pressure	0.25 kPa to 10 kPa	24 Pa	
Air Leak Tester			
Gas gauge pressure			
Bourdon tube pressure gauge	1 kPa to 20 kPa	0.4 kPa	CCC-02-18 (Internal instructions, On site calibration service)
Gas gauge pressure	10 kPa to 100 kPa	1 kPa	
	40 kPa to 200 kPa	2 kPa	
	100 kPa to 1000 kPa	8 kPa	
	200 kPa to 2000 kPa	25 kPa	
	-90 kPa to -10 kPa	1 kPa	

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CODE OF CLASSIFICATION, QUANTITY MEASURAND / CALIBRATION ITEM	RANGE OF CALIBRATION	EXPANDED UNCERTAINTY (APPROXIMATELY 95 % COVERAGE PROBABILITY, $k = 2$)	CALIBRATION PROCEDURE, REMARKS
Digital pressure gauge (Pressure SW)	10 kPa to 100 kPa	0.8 kPa	CCC-02-18 (Internal instructions, On site calibration service)
Gas gauge pressure	100 kPa to 1000 kPa	6 kPa	
	-90 kPa to -10 kPa 1 MPa to 2 MPa	0.8 kPa 0.012 MPa	
Digital pressure gauge	25 Pa to 1000 Pa	4 Pa	CCC-02-25(Internal instructions, On site calibration service)
Gas gauge pressure	-1000 Pa to -25 Pa	4 Pa	
	1 kPa to 20 kPa	0.004 kPa	
	-20 kPa to -2 kPa	0.006 kPa	
	20 kPa to 200 kPa 200 kPa to 2000 kPa	0.4 kPa 0.4 kPa	
Digital pressure gauge	900 hPa to 1100 hPa	0.5 hPa	CCC-02-25(Internal instructions, On site calibration service)
Gas absolute pressure	-90 kPa to -10 kPa	0.3 kPa	
¹⁾ Information on the coverage factor	<input type="checkbox"/> $k = 2$; level of confidence of approximately 95 % <input checked="" type="checkbox"/> coverage factor obtained from the effective degrees of freedom that defines a level of confidence of 95 %, based on the t -distribution <input type="checkbox"/> others ()		
(NOTE)			

Japan Accreditation Board