

Name of Accreditation Program	JCSS Accreditation Program
Accreditation No.	JCSS0080
Date of Initial Accreditation	2005-12-26
Latest Date of Issue	2017-12-25
Name and Address of Accredited Organization	Quality Assurance Department, Manufacturing, Nagano Keiki Co., Ltd. 1150, Akiwa, Ueda-shi, Nagano 386-8501, Japan JCN 7010801008721
Inquiry Point	Measurement Standard Section Tel: +81-268-22-7535      FAX: +81-268-23-6186
Accreditation Standards	ISO/IEC 17025:2005 (Calibration)
Accreditation Scope	As attached

\*JCN: Japan Corporate Number

General Field of Calibration: Pressure

Date of Initial Accreditation of the Field: 2005-12-26

Permanent Laboratory/On-site Calibration: Permanent LaboratoryCalibration and Measurement Capabilities

Calibration Procedures# and Type of Instruments/Materials to be calibrated		Range		Expanded Uncertainty (Level of Confidence Approximately 95 %)
Pressure Gauge	Pressure Balance	Gas Absolute Pressure	From 10 kPa up to 40 kPa	2.4 Pa
			More than 40 kPa up to 100 kPa	$(0.029P + 1.24)$ Pa*1
			More than 100 kPa up to 350 kPa	$(0.039P + 2.1)$ Pa*1
		Gas Gauge Pressure	From 0.01 MPa less than 0.03 MPa	The larger one of the two 0.0032 % or 0.55 Pa
			From 0.03 MPa less than 0.1 MPa	0.0030 %
			From 0.1 MPa up to 0.35 MPa	0.0028 %
			More than 0.35 MPa less than 2 MPa	The larger one of the two 0.0038 % or 24 Pa
			From 2 MPa up to 7 MPa	0.0034 %
			From 0.2 MPa less than 1 MPa	0.34 kPa
		Liquid Gauge Pressure	From 1 MPa less than 7 MPa	The larger one of the two 0.0050 % or 0.24 kPa
			From 7 MPa up to 20 MPa	0.0044 %
			More than 20 MPa up to 100 MPa	0.0050 %
	More than 100 MPa up to 200 MPa		0.0065 %	
	More than 200 MPa up to 500 MPa		$(0.000018P + 0.0038)\%$ *2	
	Pressure Gauges (Digital Pressure Gauges)	Gas Absolute Pressure	From 5 kPa up to 40 kPa	2.8 Pa
			More than 40 kPa less than 60 kPa	3.3 Pa
			From 60 kPa up to 350 kPa	$(0.031P + 1.55)$ Pa*1
		Gas Gauge Pressure	From -80 kPa up to -0.04 MPa	15 Pa
			More than -0.04 kPa up to -0.01 MPa	16 Pa
			From 0.01 MPa up to 0.02 MPa	0.0017 kPa
			More than 0.02 MPa less than 0.1 MPa	$(0.020P + 0.0013)$ kPa *2
			From 0.1 MPa up to 0.15 MPa	0.006 kPa
			More than 0.15 MPa up to 0.2 MPa	0.007 kPa
More than 0.2 MPa up to 0.3 MPa			0.013 kPa	
More than 0.3 MPa up to 0.5 MPa			0.019 kPa	
More than 0.5 MPa up to 0.7 MPa	0.024 kPa			
More than 0.7 MPa up to 7 MPa	$(0.031P + 0.0072)$ kPa *2			

		Differential Pressure	From 5 Pa up to 500 Pa	0.08 Pa *3	
			More than 500 Pa up to 1000 Pa	0.085 Pa *3	
			More than 1 kPa up to 2.5 kPa	0.18 Pa *3	
			More than 2.5 kPa up to 10 kPa	$(0.026P + 0.115)$ Pa *1*3	
			More than 10 kPa up to 130 kPa	$(0.027P + 1.1)$ Pa *1*3	
			More than 130 kPa up to 200 kPa	16 Pa *3	
		Liquid Gauge Pressure	From 1 MPa up to 2 MPa	0.24 kPa	
			More than 2 MPa up to 4 MPa	0.26 kPa	
			More than 4 MPa up to 7 MPa	$(0.03P + 0.14)$ kPa *2	
			More than 7 MPa up to 20 MPa	$(0.045P + 0.1)$ kPa *2	
			More than 20 MPa up to 100 MPa	$(0.05P + 0.15)$ kPa *2	
			More than 100 MPa up to 200 MPa	$(0.08P - 2.9)$ kPa *2	
		Mechanical Type Pressure Gauges	Gas Absolute Pressure	From 5 kPa up to 100 kPa	25 Pa
				More than 100 kPa up to 350 kPa	65 Pa
	Gas Gauge Pressure		From -80 kPa up to -10 kPa	24 Pa	
			From 10 kPa up to 0.1 MPa	12 Pa	
			More than 0.1 MPa up to 0.2 MPa	24 Pa	
			More than 0.2 MPa up to 0.4 MPa	60 Pa	
			More than 0.4 MPa up to 1 MPa	0.12 kPa	
			More than 1 MPa up to 2 MPa	0.24 kPa	
			More than 2 MPa up to 3.5 MPa	0.6 kPa	
			More than 3.5 MPa up to 7 MPa	2.6 kPa	
	Differential Pressure		From 0.01 MPa up to 0.06 kPa	20 Pa *3	
			More than 0.06 MPa up to 0.1 MPa	22 Pa *3	
			More than 0.1 MPa up to 0.15 MPa	44 Pa *3	
			More than 0.15 MPa up to 0.2 MPa	46 Pa *3	
	Liquid Gauge Pressure		From 1 MPa up to 3.5 MPa	0.65 kPa	
			More than 3.5 MPa up to 5 MPa	1.1 kPa	
		More than 5 MPa up to 10 MPa	2.2 kPa		
		More than 10 MPa up to 25 MPa	6.0 kPa		
More than 25 MPa up to 35 MPa		6.5 kPa			
More than 35 MPa up to 50 MPa		12 kPa			
More than 50 MPa up to 70 MPa		13 kPa			
More than 70 MPa up to 100 MPa		32 kPa			
More than 100 MPa up to 200 MPa		60 kPa			
More than 200 MPa up to 500 MPa	130 kPa				

#All Calibration Procedures are in-house procedures developed by this laboratory.

\*1:  $P$  is calibration pressure. (kPa)

\*2:  $P$  is calibration pressure. (MPa)

\*3: Line Pressure is from 95 kPa abs up to 150 kPa abs.