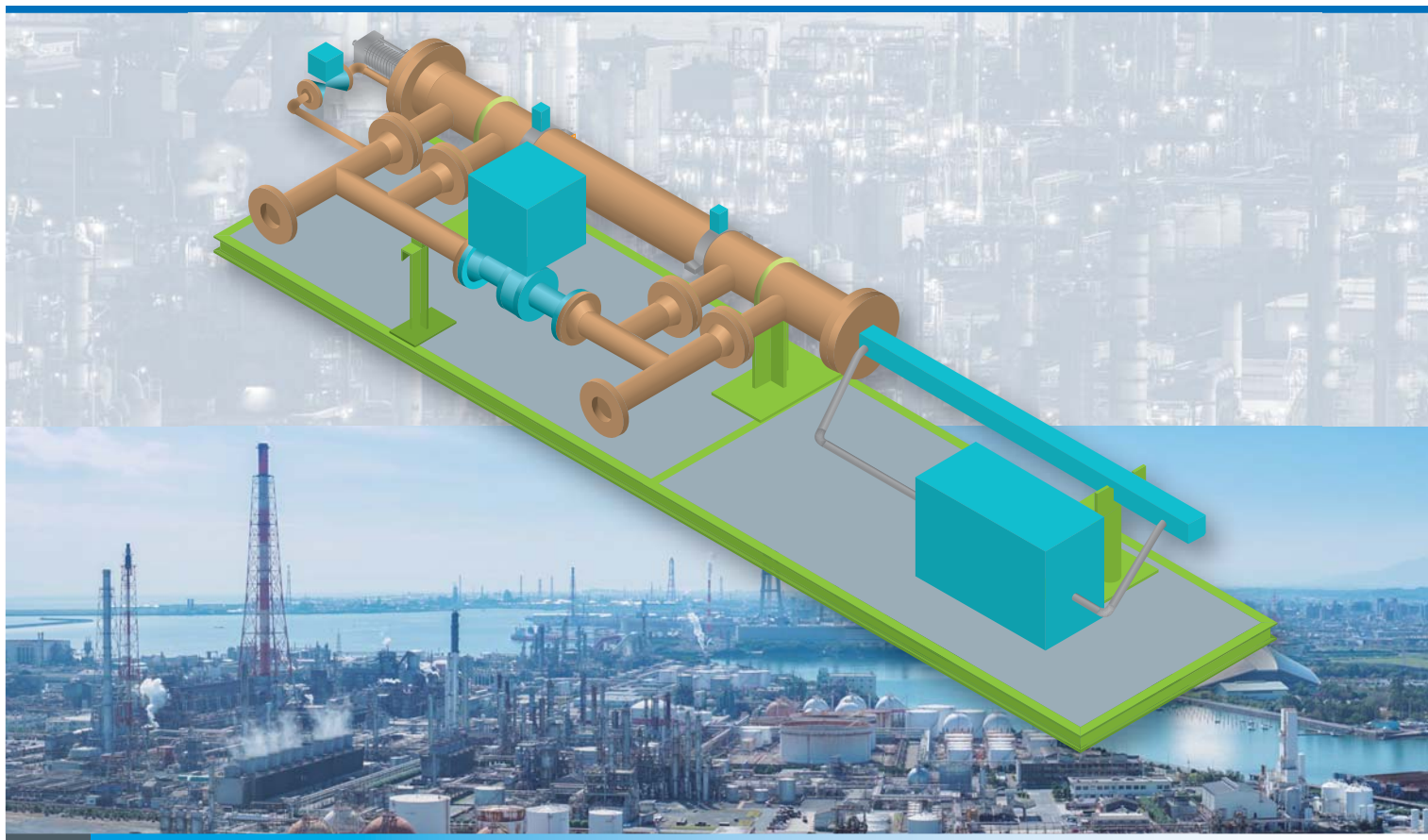




# SVP

## Small Volume Prover



It is important that the original accuracy of a flowmeter is maintained as long as the flowmeter is in operation. To achieve this, periodical meter proving must be conducted. This applies to every other flowmeter, as well as flowmeters that are legally obligated to be proved periodically. We produce various types of meter proving equipment by utilizing our manufacturing technology and know-how obtained by having proving facilities as the production plant.

#### ■ FEATURES

1. Compact design allows space-saving and transportability.
2. The latest electronics technology allows precise time measurement and pulse counting as well as highly accurate and efficient proving which requires less volume and flow pulse compared to conventional provers.
3. Computerized control enables complete automation, rationalization, and labor-saving.
4. Online central control is available.

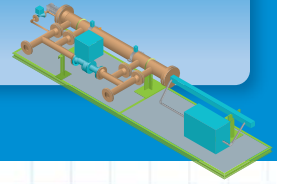
Ever-increasing prices of petroleum/chemical products



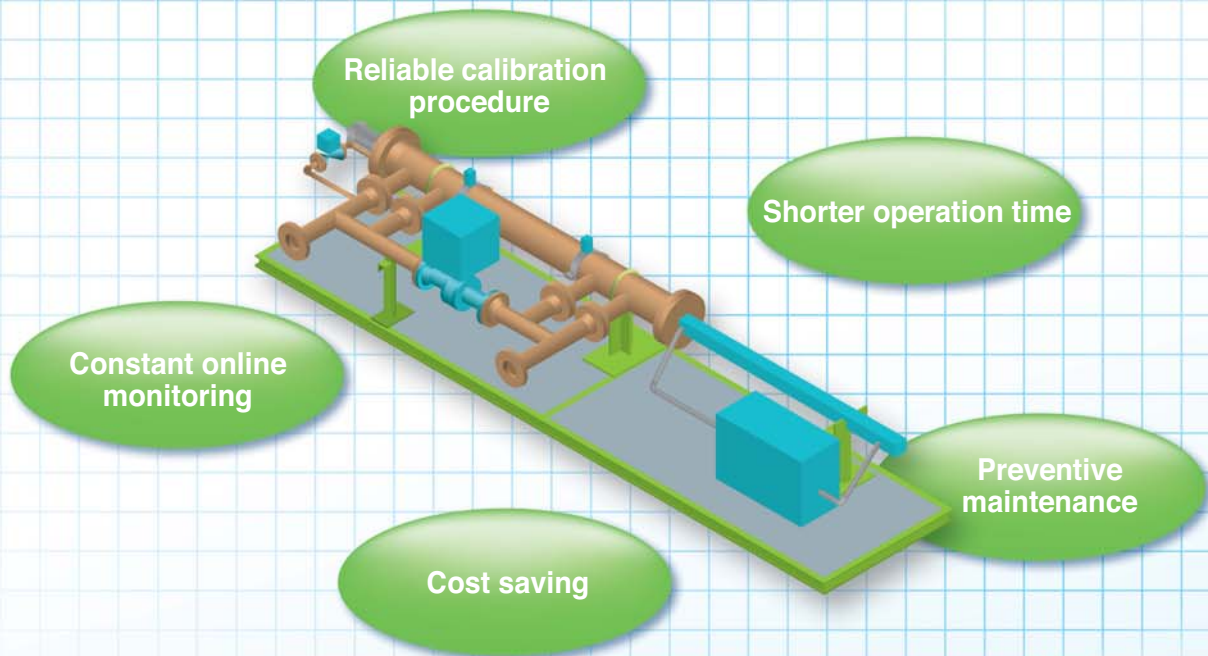
Demand for improved meter accuracy, especially for flowmeters used for custody transfer



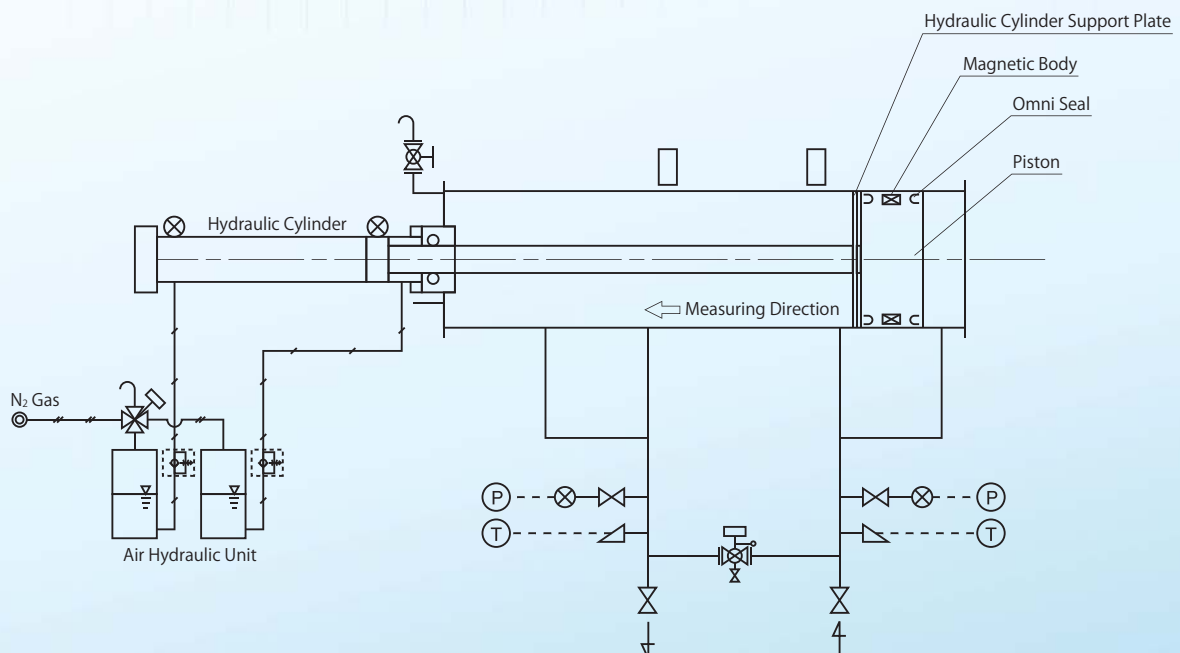
Demand for improved accuracy of meter error calibration



**The small volume prover is developed based on our unique idea and newest technology that completely changes the procedure of on-site meter error calibration.**



### SYSTEM DIAGRAM

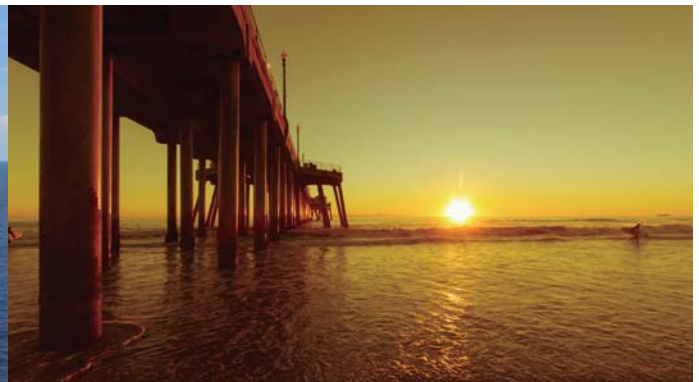


## APPLICATIONS

High accuracy with repeatability of 0.02%: suitable for custody transfer at petroleum complexes, etc.

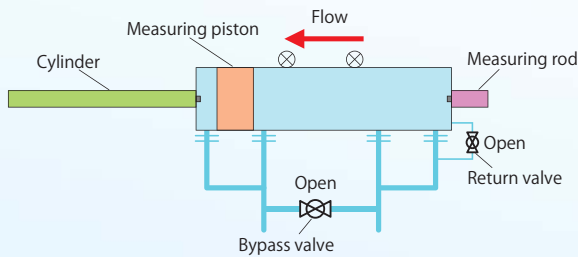


Transportable structure: suitable for use in locations where fixed installation is difficult such as piers.

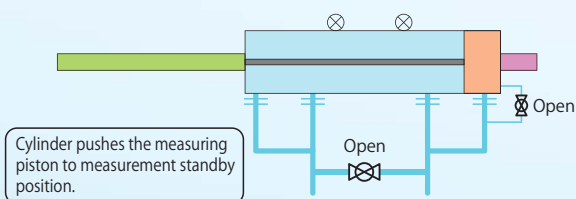


## OPERATION EXPLANATION

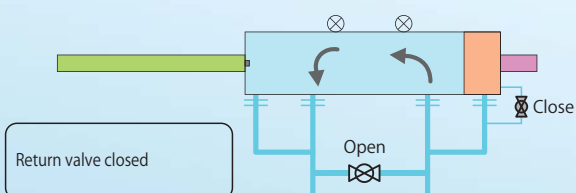
### STEP0 HOME POSITION



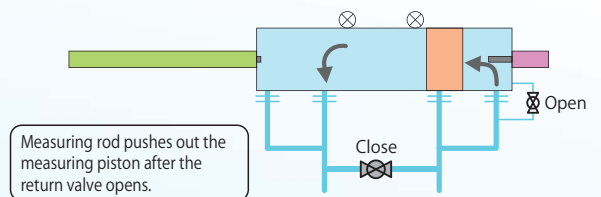
### STEP1 Measuring Preparation 1



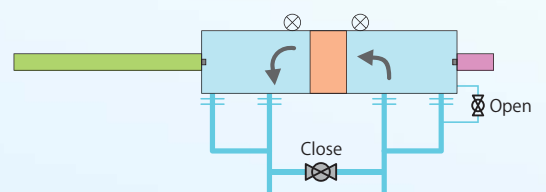
### STEP2 Measuring Preparation 2



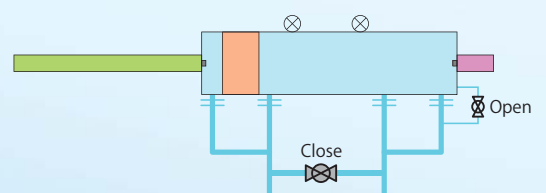
### STEP3 Measuring Start



### STEP4 Measuring in progress



### STEP5 End of measurement



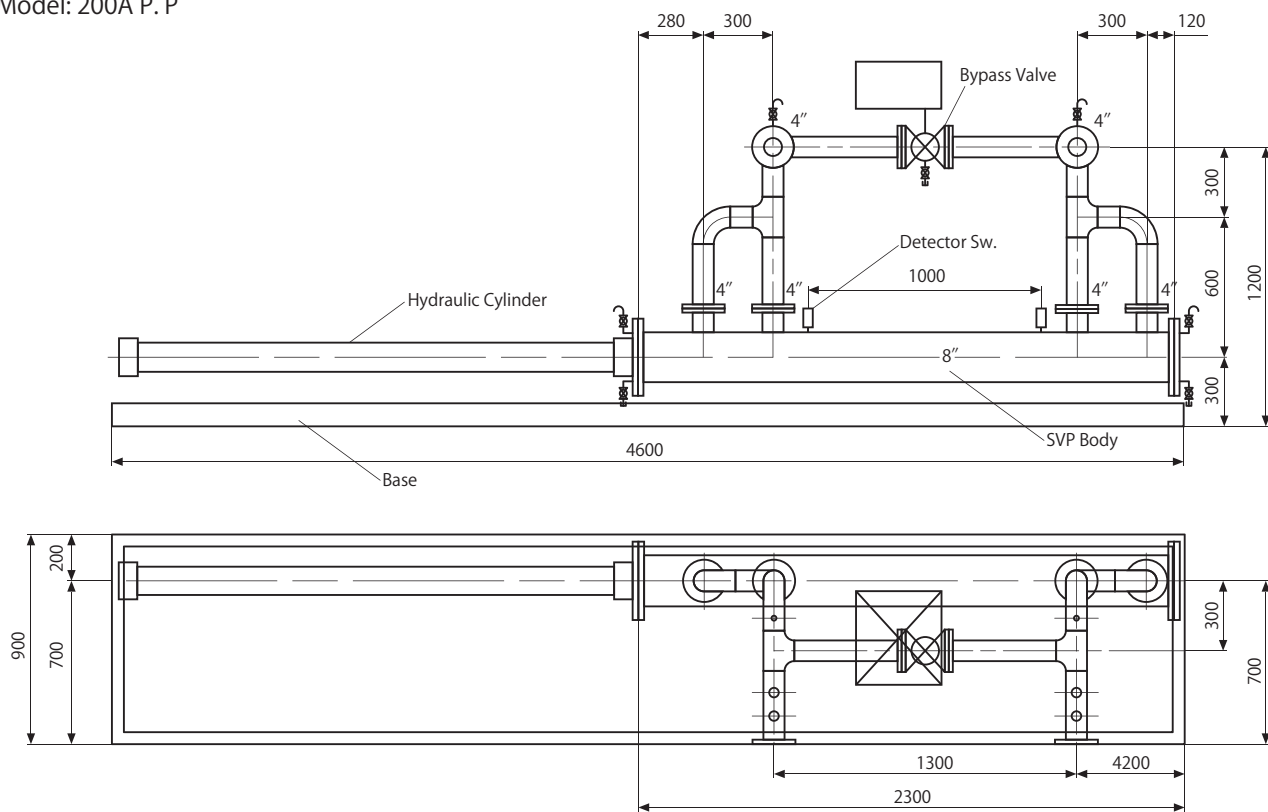


## GENERAL SPECIFICATIONS

Item	Description				
Model	100A P.P.	200A P.P.	300A P.P.	500A P.P.	
Nominal size (mm)	100	200	300	485	
Reference volume (Liter)	3.9	31.4	106	462	
Maximum flow rate (m <sup>3</sup> /h)	40	170	370	1000	
Minimum flow rate (m <sup>3</sup> /h)	0.04	0.17	0.37	1	
Diameter	Connection	2" (50A)	4" (100A)	8" (200A)	14" (350A)
	Pipe	2", S/80	4", S/40	8", S/40	14", S/40
Pressure rating	ANSI 300#				
Operating temperature range	-10 to +60°C				
Press. difference at measurement	Max. 0.05MPa				
Detector	1 mark, 2 sensors (magnetic)				
Major parts materials	Body	SUS316			
	Bypass	SUS304 or STPG			
	Measuring piston	Aluminum			
	Piston seal	Carbon filled Teflon			
	Return cylinder	SUS304			
Cylinder drive	Hydraulic (air-hydro unit)				
Repeatability	Within 0.02%				
Explosionproof standard	ATEX II 1G Ex ia IIC T6				
Approx. dimension (mm)	*	4600×900×1500	*	*	
Approx. weight (kg)	*	*	*	*	

## OUTLINE DIMENSIONS

Model: 200A P.P



The specification as of June, 2015 is stated in this catalog. Specifications and design are subject to change without notice.

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