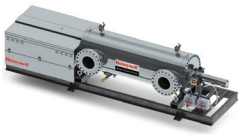
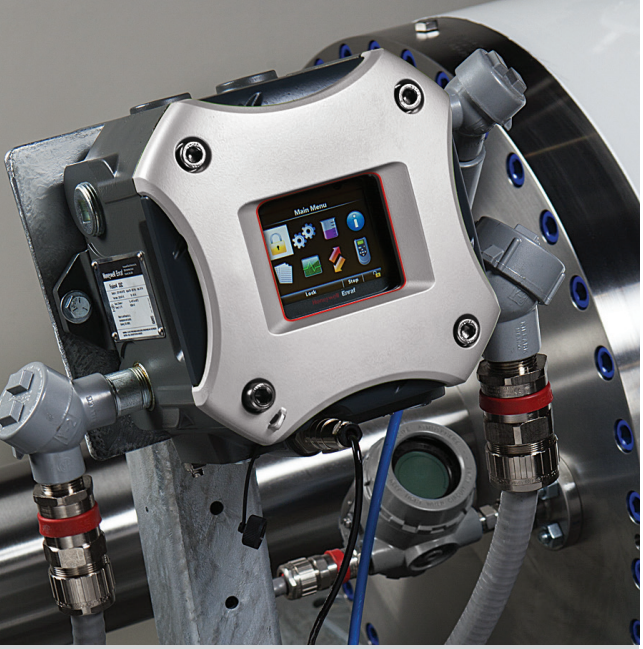
Honeywell
THE POWER OF CONNECTED

Connected Plant



ENRAF® SMALL VOLUME PROVER

Meets the most stringent repeatability requirements for meter proving



The small volume prover (SVP) meets the most stringent uncertainty requirements for meter proving to provide consistent results in every onshore or offshore environment. With repeatability equal to or exceeding 0.02% and unparalleled reliability, the SVP is the first choice for proving positive displacement (PD), turbine, ultrasonic and coriolis flow meters.

Global Experience. Locally Applied.

How the SVP Compares

Small Volume Provers alone overcome the disadvantages and problems with existing proving solutions for establishing flow metering accuracy in custody transfer applications:

- Master meters, while less expensive to purchase, require flow calibration and their tendency to drift increases system uncertainty. A smaller turndown ratio than the SVP also means that covering the same range of flow rates requires several master meters of different sizes, increasing ownership and maintenance costs.
- Pipe provers, once the market standard, are now known for low turndown ratios, frequent maintenance requirements and very large footprints. Contractors and systems integrators often ignore potential for longer-term issues around maintenance, safety and repeatability. Over time these can make pipe provers an inefficient solution, poorly adapted for changing process requirements.
- Seraphin can provers, common in downstream rail and truck terminals, are extremely limited in size and flow rates, and require the interruption of the flow to perform the meter proving. Portable SVPs, meanwhile, eliminate open air handling of hydrocarbons, and avoid any product disposal concerns because proving is done in line; They offer a faster, safer alternative. And the battery-powered model is a popular replacement.

A Proven History of Continuous Improvement

With its founding principle in double chronometry established in 1964, the SVP has a track record of more than half a century, combined with decades of continuous improvements for ever more versatile, more reliable and more user-friendly proving solutions.

Honeywell Enraf's latest SVP draws on this experience and a deep domain knowledge for the best solution yet, leading the way in design, quality and manufacturing with a rage of improvements:

- Alignment upgrades on the drive system
- Ekonol® or Carbon filled PTFE seals providing unrivalled chemical compatibility and seal integrity
- A portable handheld controller, the Local Access Device (LAD), to access and control all SVP controller functions in the field
- An innovative design for greater strength for large provers
- A new SVP Controller, offering a 3.5", 6-line, multifunction display for real-time visual monitoring and control of the operation, as well as data logging, full text error messaging, diagnostics and water draw control functions.

Field-proven, Honeywell Enraf's SVP uses a precision-machined, stainless steel smooth bore cylinder and measurement piston with an integral bypass valve to minimize flow stream disturbance. It ensures constant proving results with a repeatability equal to or exceeding the industry standard of 0.02%, making it the perfect choice for all stationary, portable or offshore applications. It maintains optimum performance over a wide range of conditions, including high and low temperatures, high pressures, and many types of fluids.

The Honeywell Enraf Small Volume Prover can be used for all types of flow meters, including PD, Turbine, Coriolis and Ultrasonic meters.

Honeywell's SVP is designed from the ground-up to provide the most precise, reliable and user-friendly proving solution available. Unique features set it apart from the competition.

An intuitive user interface with easy-to-read LCD color display provides information on piston position, motor status, error status, cycle value, prover date and sweep time. The handheld Local Access Device (LAD), meanwhile, offers a menu-driven display for complete programming of system settings and optional data display, including a programmable motor stop delay, prover cycle counter, sweep time display, multiple readable alarms, alarm acknowledgement and clearing, and water draw functionality.

Electromechanical piston return through our patented electromechanical chain drive system offers a much better longevity than other materials. During proving runs, the piston follows the flow stream in full freedom for minimal effect on the flow stream and improved repeatability even for low flow rates and light products. A drive assembly aligned and completely secured in the factory, prevents any misalignment that could become the cause of a failure for the optical switches.

Enhanced poppet valve and piston seal designs minimize resistance to the flow stream, decreasing the need for traction, motor power consumption and stress on mechanical components. No adjustment of the poppet valve is required even with large pressure changes in the system.

Exceptional corrosion resistance results from a hard chrome lined measurement cylinder, and use of 304L or 316L stainless steel for all wetted parts such as the flow tube, the entire piston assembly and the end flanges. Whether facing external corrosion in offshore applications or internal corrosion such as pitting or stress cracking corrosion, the SVP is built to last.

Compliant with most stringent international standards and certifications for both mechanical and electrical components, SVPs are ready to use globally:

- Mechanical requirements are met with components designed in accordance with API MPMS Chapter 4.2 and OIML R119. All prover materials meet ASTM, ANSI piping and fittings, ASME pressure containment design, CRN for Canada and PED for Europe requirements.
- Electrical components meet global requirements, including CSA-us, ATEX and IECEx electrical certification.
- Pressure containing welds are welded by a certified welder as per ASME BPV code section IX.
- Our prover calibration laboratory is VSL accredited, with calibration instruments traceable to NIST standards.

Suitable for a wide range of working conditions, the SVP maintains optimum performance even in high and low ambient temperatures, at high pressures and across a wide range of fluid types including liquid gas, fine chemicals, and crude oil. Flow rate rangeability is better than 1200:1, and the SVP is equally suitable for volumetric and mass meter proving.

Easy to maintain, the SVP offers easy access to internal parts and seals. With a piston supported at both ends by the double-shaft, it does not need to be mounted vertically, eliminating the need for machinery to lower the prover to the horizontal position or to disconnect process piping. As the drive alignment is factory secured, and there are no hydraulics or pneumatics systems, the maintenance operations are reduced to the minimum, for significant savings over time.

Extend your SVP lifetime by sending aged provers back to the factory to be refurbished and upgraded to the latest design. Honeywell Enraf's engineering review determines which main components (shafts, tube, piston etc) can be reused and delivers a refurbished prover complete with factory warranty at a fraction of the cost and in a fraction of the time compared to a new prover. Increasing the useful life of the asset and decreasing the total cost of ownership will ensure you get the very best return on your investment.

Model Selection

Our model selection guide makes choosing the right model of prover for the right application easy. Just provide the minimum required information:

- Maximum flow rate
- Pressure, temperature, fluid requirements
- Electrical approvals and power supply type
- Extra corrosion resistance needs
- Mobile (trailer mounted model requirements and options, including flexible hoses, swivel and/or hydraulic arms)

Available models are described in the technical data section.

A Field-proven Operating Principle

In the stand-by mode the SVP piston is downstream and stationary. The piston's inner flow-through valve is open (slightly upstream of the main piston body), allowing product to flow freely through the prover's measurement cylinder without significant pressure loss.

When the operator starts a proving run (Figure 1), the proving computer signals the SVP Controller to engage the motor to draw the piston assembly to the upstream start position. The piston is then released by the chain driven return mechanism, allowing it to travel freely downstream with the fluid. As the piston is released, the flow through valve closes with assistance of a spring (Figure 2), synchronizing the piston velocity with the fluid velocity as it travels through the smooth-bore section of the prover body with minimal effect on the flow stream.

Two precision optical switches are mounted externally on the switch bar above the piston drive shaft to measure the travel time of the piston. With fast response times (5×10^{-6} sec), these are reliable and repeatable, showing a maximum deviation of ±0.0005% on repeatability of linear measurement. The first optical switch is actuated by a flag attached to the external piston shaft a short run after it is released, indicating the start of the timing sequence to the computer. The second optical switch is located downstream on the switch bar, allowing the flag to actuate the switch at the end of the calibrated displaced volume. At the same time, the controller sends a signal to the proving computer to stop the timing sequence.

Technical specifications

Unidirectional type piston prover, repeatability 0.02%, according to API MPMS Chapter 4.2.

Model Type	Displaced Volume U.S. Gallons	Max Flow Barrels per hour (BPH)	Max Flow U.S. Gallons per minute (GPM)	Max Flow Cubic meters per hour (m^3/h)
05	5	715	500	114
15	20	2140	1498	340
25	20	3570	2499	568
35	25	5000	3500	795
50	40	7200	5040	1145
85	75	12500	8750	1987
120	120	17500	12249	2782

After passing the end volume switch, the piston shaft is stopped by a mechanical stop. Product flow continues to push the perimeter of the piston further downstream, opening the flow through valve, again allowing continued flow with minimal disturbance to the process condition. The proving computer will continue to signal the SVP Controller to start the motor run to engage the timing sequence until sufficient passes are completed within the repeatability and uncertainty specified for the flow meter.

Combining the pulses interpolation, the pressure and temperature information, and the double chronometry algorithm, the flow computer will then calculate the meter factor to be applied to the flow meter, and verify the repeatability of the proving runs.

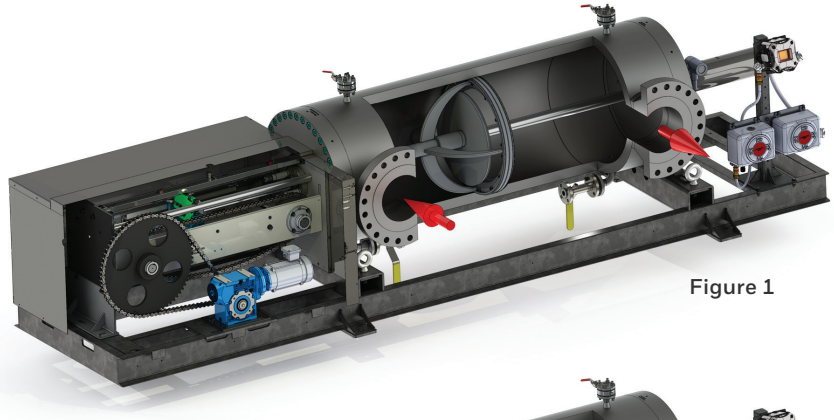


Figure 1

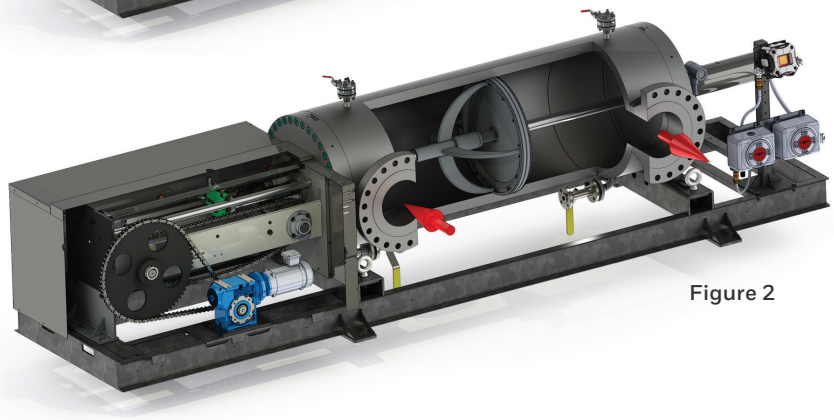
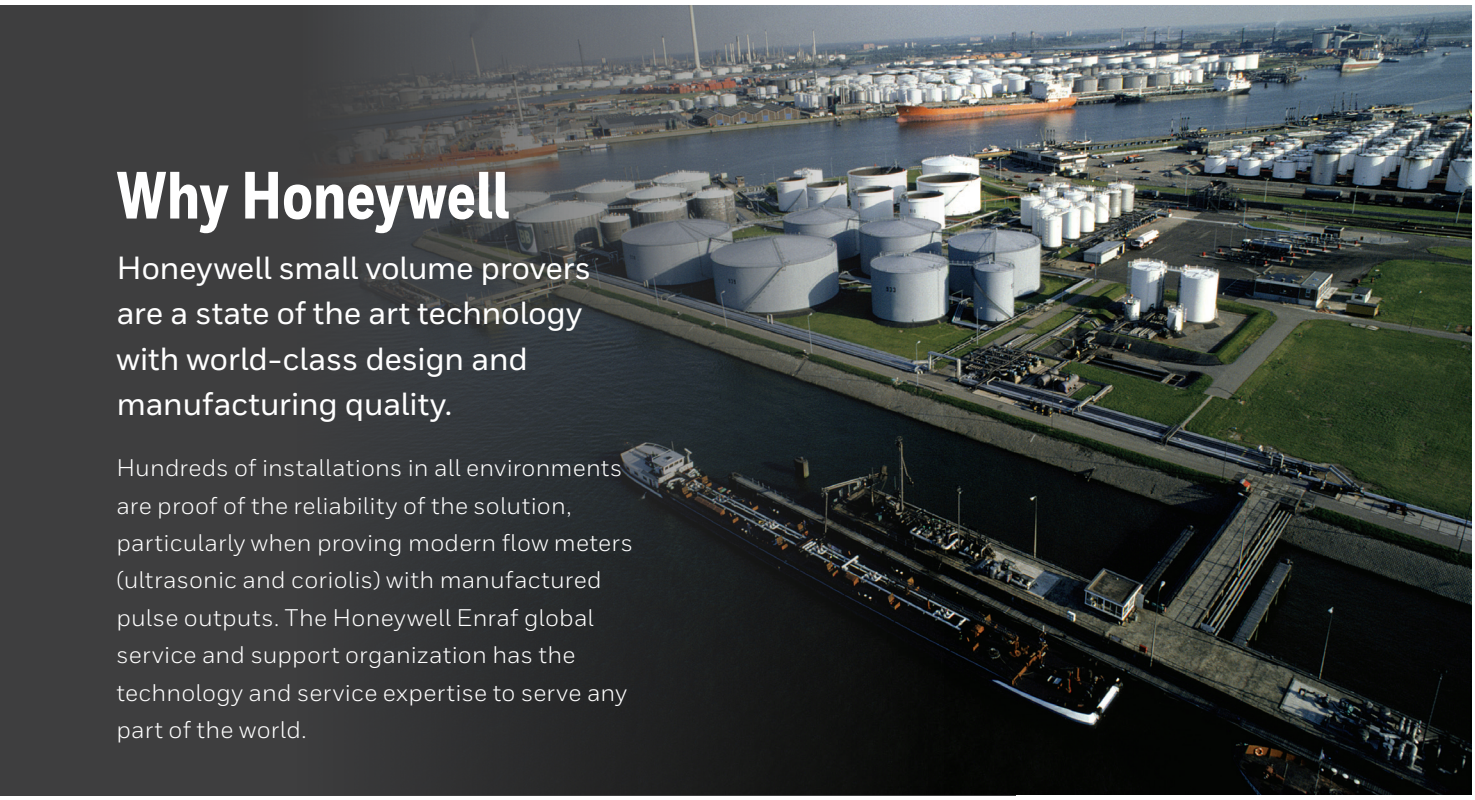


Figure 2



Why Honeywell

Honeywell small volume provers are a state of the art technology with world-class design and manufacturing quality.

Hundreds of installations in all environments are proof of the reliability of the solution, particularly when proving modern flow meters (ultrasonic and coriolis) with manufactured pulse outputs. The Honeywell Enraf global service and support organization has the technology and service expertise to serve any part of the world.

Operations

The prover controller is equipped with a full color display. Key process variables, alarms and device status can be displayed. Local configuration and maintenance are possible by the way of an intrinsically safe handheld device.

Materials

Material of process fluid wetted parts: AISI 304/304L (UNS30400/UNS30403) stainless steel or AISI 316/316L (UNS31600/UNS31603) stainless steel. Offshore provers use 316 Stainless Steel for wetted parts and for drive end mechanical components (chains, bars, sprockets etc).

Prover skid coating: Galvanized to ASTM123 specification for adverse atmospheric conditions.

Material of seals: Standard Ekonol® filled PTFE seal or Carbon Fiber Reinforced PTFE seal (for crude oil applications).

Junction boxes: Marine grade aluminum or AISI 316 stainless steel.

Flow tube finish: Stainless steel brushed or white paint.

Tubing size, connections, threads: US customary units/sizes.

Safety Ratings in Hazardous Areas

The SVP is designed to operate continuously and reliably within its domain of ambient temperature.

Safety Rating in Hazardus Areas	Ambient Temperature Range
CSA-us Class I, Div.1, Group D T2C *	-40 °C to +40 °C (-40 °F to 104 °F)
CSA-us Class I, Div.1, Group C T3B *	-40 °C to +40 °C (-40 °F to 104 °F)
ATEX II 2 (1) G Ex d [ia Ga] IIB T4 (T3) Gb, II 2 G c IIB T4 (T3)	-40 °C to +40 °C (-40 °F to 104 °F) -20 °C to +60 °C (-4 °F to 140 °F)
IECEx, Ex d [ia] IIB T4 Gb	-40 °C to +40 °C (-40 °F to 104 °F) -20 °C to +60 °C (-4 °F to 140 °F)

** Not available on offshore provers*

Technical Specifications

Traditionally, micro-processor based flow meters have been considered as difficult to prove with small volume provers, due to irregularities in the pulses, and sensitivity to the closing of the poppet valve. The common countermeasure, in compliance to API MPMS chapter 4.2, has been to specify Provers of larger size. Which meant, at constant size, "de-rate" the maximum flow rate usable with Ultrasonic and Coriolis flow meters.

In recent years, flow meter manufacturers have brought several improvements in the performance of the meters, putting electronic meters on par with mechanical ones. The maximum flow rate usable with these new generation meters depends on its pulse quality, its damping factor and response time. Consult the flow meter manufacturer for information on maximum flow rates.

Lifting and Positioning

Mounted horizontally to the steel skid base.The prover is equipped with four lifting lugs and four anchor points.

Trailer: Ball and hitch or goose-neck trailer including mounting of SVP. Power supply of the trailer itself is 24 Vdc (Prover power may be AC or DC as required). The trailer comes with a USA-DOT road license. Includes level jacks, electric running lights, spare tire, electric brakes, toolbox (empty).

Environmental Conditions

Ingress Protection(IP) rating: IP56
Relative humidity: 5% to 95% non-condensing

Drains and Vents

Vent and drain at top and bottom of the barrel or flow tube.

Drains: Ball valves flanged 1" or 1.5" ANSI, class matching in- and outlet rating.

Vents: 1/2" ball valves class 3000. RF connection flanges used for vents & drains.

Fluid Types

Crude oil, hydrocarbons, fine chemicals, liquid gases, condensates, water.
Fluid temperature: -40 °C to +80 °C (-40 °F to 176 °F)
Pressure drop: <= 10 psig (using water as process fluid)

Pressure and Temperature Measurements

Two temperature transmitters with 4-wire high precision RTDs and one pressure transmitter mounted on prover, plumbed and wired to a common junction box. Calibrated temperature transmitter range to customer's specifications. Pressure transmitter calibrated for the appropriate range. Pressure and temperature transmitters are of smart design and explosion proof rated with 4-20 mA output and digital displays.

Operating Temperature and Motor Voltages

CSA-us	005	015	025	035	050	085	120
24 V_{dc}	Y	Y	Y	Y			
120 V_{ac}, 60 Hz	Y^1	Y^1	Y^1	Y^1	Y^1		
220 V_{ac}, 60 Hz	Y^1	Y^1	Y^1	Y^1	Y^1	Y^1	
220/240 V_{ac}, 60 Hz, 3 phase	Y	Y	Y	Y	Y	Y	Y
460/480 V_{ac}, 60 Hz, 3 phase	Y	Y	Y	Y	Y	Y	Y
Motor Power	0.5 HP	1 HP	1 HP	1 HP	1 HP	2 HP	5 HP

Y - Available from -40 °C to +40 °C (-40 °F to 104 °F)
Y 1 - Only available from -20 °C to +40 °C (-4 °F to 104 °F)

ATEX or IECEx	005	015	025	035	050	085	120
24 V_{dc}	Z^2	Z^2	Z^2	Z^2			
220 V_{ac}, 50 Hz	Z	Z	Z	Z	Z		
220/240 V_{ac}, 50 Hz, 3 phase	Z^1	Z^1	Z^1	Z^1	Z^1	Z^1	
380/400/415 V_{ac}, 50 Hz, 3 phase	Z	Z	Z	Z	Z	Z	Z
460/480 V_{ac}, 60 Hz, 3 phase	Z	Z	Z	Z	Z	Z	Z
690 V_{ac}, 60 Hz, 3 phase						Z	Z
Motor Power	0.5 HP	1 HP	1 HP	1 HP	1 HP	2 HP	5 HP

Z - Available -20 °C to +60 °C (-4 °F to 140 °F) or -40 °C to +40 °C (-40 °F to 104 °F)
Z^1 - Only available -20 °C to +60 °C (-4 °F to 140 °F)
Z^2 - Only ATEX, no IECEx available

ANSI B16.5 Flange Rating

Class 150, 300, 600, 900, 1500 RF, or class 150, 300, 600, 900, 1500 RJ connection flanges.

ANSI B16.5 Flange Rating	Pressure Rating Up to 100 °F	
Class 150	275 psi	19 bar
Class 300	720 psi	49 bar
Class 600	1440 psi	99 bar
Class 900	2160 psi	148 bar
Class 1500	3600 psi	248 bar

Note: All pressure containing welds welded per ASME section IX by certified welder.

Note: All pressure containing welds NDT tested per ANSI B31.3.

Documentation (Supplied on CD):

- Drawings (outline, frame mounting, service clearance)
- Honeywell Enraf SVP Operation and Service Manual
- Hydrostatic pressure test certificate
- Ground bond and dielectric strength test certificates
- Seal leak detection test certificate
- Certificate of calibration using gravimetric method (or if requested volumetric method)
- Flow tube material certificate
- Major wetted parts material certificates
- Hazardous electrical component certificate
- Instrument calibration certificates (includes weights, thermometers, PI-tape, pressure gauge, ID micrometer, transmitters and ground bond testing)
- Specification worksheet
- Certificate of origin
- Conformity and quality certificate
- Transmitter Manuals
- Welder performance qualifications (WPQ)
- Welding procedure specifications (WPS)

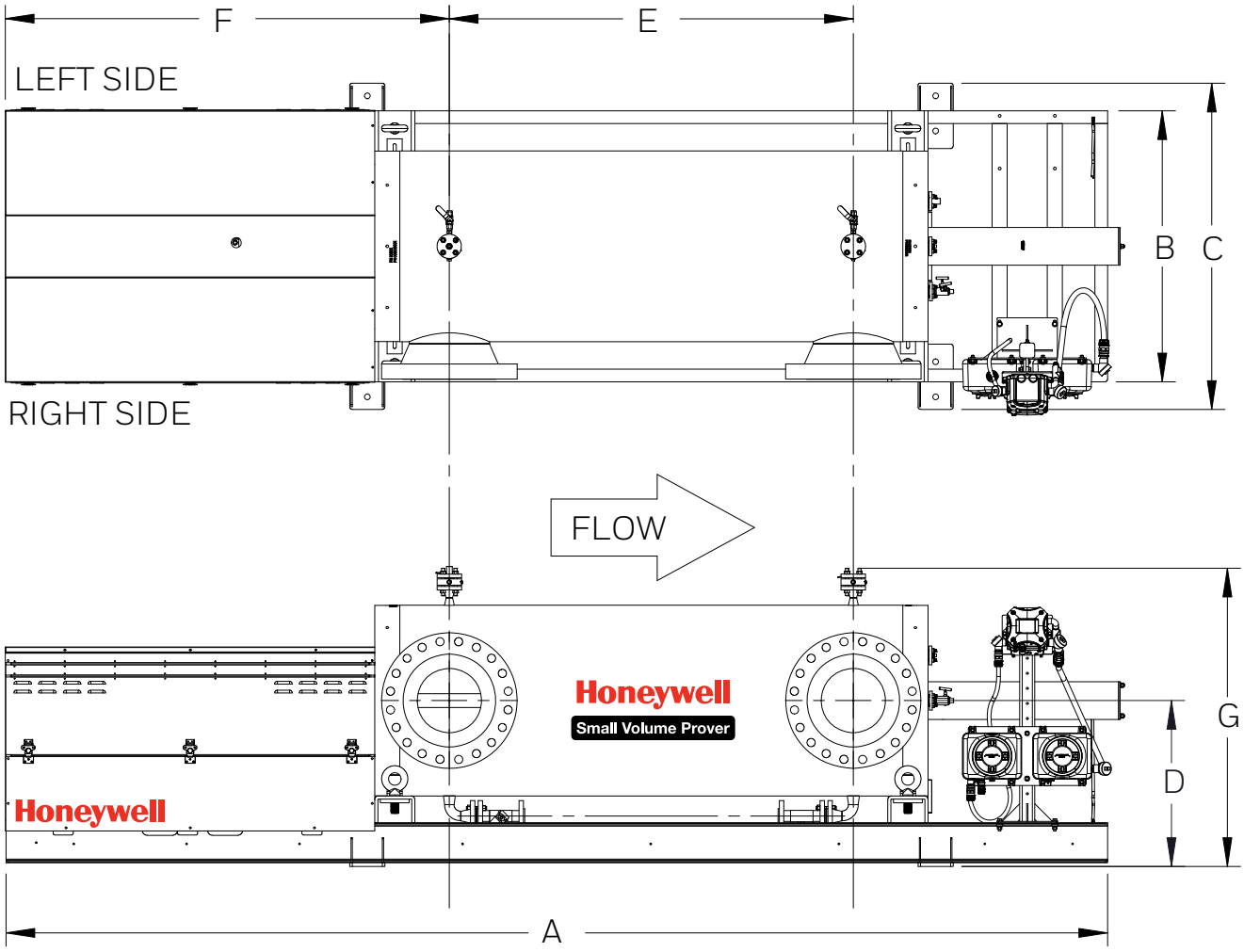
Options

- Extra optical switch
  - This switch reduces the volume signal to a lower displaced volume to reduce the calibration runtime on low flow rates. The smaller stroke volume is selected via a menu option. Position of the third optical switch depends on the application: Please contact your nearest sales office.
- Nitrogen purge system
  - The purge covers consist of both a cover on the downstream shaft and a cover for the drive end and are needed to prevent icing of the shaft that can occur when the product temperature is below 0 °C (32 °F) when in operation. Covers are made of stainless steel and will have O-ring sealing. The kit includes a pressure relief valve. The drive end will also be purged via a purge control system. Purge system may be manual or automatic, but the automatic purge is not available below -20 °C (-4 °F) ambient temperature.
- High temperature insulation
  - This option is for applications on process fluid temperatures above 60 °C (140°F). It consist of two parts:
    1. An insulation plate between the drive unit and flow tube.
    2. An insulation jacket for the flow tube. This is model-dependent and not suited for tracing.
  - For low temperature applications the insulation plate is a minimum requirement to protect the drive end.
- Additional puller (models 35, 85 or 120)
  - Models 35, 85 or 120 come with one puller as standard on the chain drive pulling system. Adding an additional puller decreases the idle time between runs and increases the frequency of the proving runs.
- Carbon fiber reinforced seal
  - Standard seals are made of Ekonol® filled PTFE. For crude oil applications it is advisable to use carbon-reinforced seals to increase their lifetime.
- Controller location
  - On the standard design the controller is facing right, as on the pictures. For constrained spaces it is possible to locate the controller facing left.
- Controller power supply
  - The SVP controller can be supplied in AC (100-240 Vac, Single Phase) or 24 VDC version. 70 Watt service recommended.
- Temperature and pressure transmitters
  - The prover is delivered as standard with Honeywell Smart transmitters ST800 and STT 250. Other brands, or delivery without transmitters, are available on request.
- PED (Pressure Equipment Directive) 97/23/EC, Europe models
  - Testing & material certificates can be provided according to PED Directive. Material certificates will be according to ISO EN10204: 2004 3.1 or ISO EN10204: 2004 2.2
- PMI (positive material identification) on welds and pressurized parts
  - Positive material identification on welds and pressurized parts will be performed according API 587 on the parts as these enter the factory
- NACE ISO 15156 (MR-0175)
  - NACE MR-0175 conformity for wetted and pressurized parts (for use in corrosive environments in oil and gas production).
- Volumetric water draw
  - The standard factory test is volumetric water draw by gravimetric calibration (API MPMS Chapter 4.9.4). On request the factory can calibrate the prover with volumetric method water draw according to API MPMS 4.9.2.
- Leak detection instrumentation
  - All provers come with a pressurization tool. The Leak detection instrumentation kit consists of a differential pressure gauge for checking seal leakage.
- Water draw kit
  - Consists of a solenoid valve assembly: Refer to manual for further explanation.
- Water draw instrumentation kit
  - Consists of high accuracy temperature and pressure transmitters (NIST traceable): Refer to manual for further explanation. Available in US customary or metric version.

Recommended Spare Parts

On request the prover is delivered with a standard set of spare parts covering 2 years' common needs:

- Two spare detector switches
- One set of main shaft seals
- Motor stop switch
- Motor relay



Dimension Description	Model	005 ANSI 600	015 ANSI 150	025 ANSI 150	035 ANSI 150	050 ANSI 150	085 ANSI 150	120 ANSI 150
Length	A	2756 (108.5")	4089 (161.0")	4089 (161.0")	4089 (161.0")	4572 (180.0")	5258 (207.0")	5576 (219.5")
Width at Frame	B	813 (32.0")	986 (38.8")	986 (38.8")	1092 (43.0")	1245 (49.0")	1448 (57.0")	1549 (61.0")
Width at Feet	C	947 (37.3")	1118 (44.0")	1118 (44.0")	1227 (48.3")	1378 (54.3")	1588 (62.5")	1702 (67.0")
Inlet & Outlet Height	D	424 (16.7")	513 (20.2")	513 (20.2")	565 (22.3")	673 (26.5")	756 (29.8")	840 (33.1")
Inlet & Outlet Separation	E	780 (30.7")	1369 (53.9")	1369 (53.9")	1299 (51.2")	1473 (58.0")	1930 (76.0")	2045 (80.5")
Inlet Distance from End	F	955 (37.6")	1499 (59.0")	1499 (59.0")	1534 (60.4")	1873 (73.7")	2106 (82.9")	2244 (88.4")
Highest Point	G	1207 (47.5")	1257 (49.5")	1257 (49.5")	1257 (49.5")	1308 (51.5")	1316 (51.8")	1481 (58.3")
Inlet & Outlet Flange Size		3"	6"	6"	8"	8"	12"	16"
Prover Weight		544 Kg (1200 lb)	1588 Kg (3500 lb)	1973 Kg (4350 lb)	2381 Kg (5250 lb)	3561 Kg (7850 lb)	5670 Kg (12500 lb)	6577 kg (14500 lb)

Note: Dimensions mm (inch). Weight kg (pound). Dimensions and Weight are indicative, without trailer, and correspond to the lowest pressure rating.

Identification Code

Model

- S Standard Configuration*
- P Portable Applications (Supplied with trailer)*
- O Offshore and Marine, Coastal and Ship Application

Key Number Model

- 005 Volume 5 Gallons, Max. Flow 715 BPH, 500 GPM, 114 m^3/h
- 015 Volume 20 Gallons, Max. Flow 2140 BPH, 1498 GPM, 340 m^3/h
- 025 Volume 20 Gallons, Max. Flow 3570 BPH, 2499 GPM, 568 m^3/h
- 035 Volume 25 Gallons, Max. Flow 5000 BPH, 3500 GPM, 795 m^3/h
- 050 Volume 40 Gallons, Max. Flow 7200 BPH, 5040 GPM, 1145 m^3/h
- 085 Volume 75 Gallons, Max. Flow 12500 BPH, 8750 GPM, 1987 m^3/h
- 120 Volume 120 Gallons, Max. Flow 17500 BPH, 12249 GPM, 2782 m^3/h

Table 1: Basic Configuration

Table 1.1 Process Fluid Wetted Parts

- C AISI 304/304L (UNS30400/UNS30403) Stainless Steel
- E AISI 316/316L (UNS31600/UNS31603) Stainless Steel

Table 1.2 ANSI B16.5 Flange Rating

- 1A Class 150 RF Connection Flanges*
- 2B Class 300 RF Connection Flanges*
- 3C Class 600 RF Connection Flanges
- 4D Class 900 RF Connection Flanges
- 4F Class 1500 RF Connection Flanges
- 5D Class 900 RJ Connection Flanges
- 6A Class 150 RJ Connection Flanges
- 7B Class 300 RJ Connection Flanges
- 8C Class 600 RJ Connection Flanges
- 9F Class 1500 RJ Connection Flanges

Table 1.3 Inlet and Outlet Configuration

- 00 Inlet Both Sides and Outlet Flange Left Side
- 01 Inlet and Outlet Flanges Opposite - Inlet Right Side*
- 02 Inlet and Outlet Flanges Same Side - Right Side*
- 03 Inlet and Outlet Flanges 90°, Inlet on Right Side and Outlet on Top
- 04 Inlet and Outlet Flanges Same Side - Left Side*
- 05 Inlet and Outlet Flanges Both Sides - Double Set
- 06 Inlet and Outlet Flanges Both on Top*
- 07 Inlet and Outlet Flanges Opposite - Inlet Left Side*
- 08 Inlet Flanges both Sides and Outlet on Top
- 09 Inlet Flange on Top and Outlet on Left
- 11 Inlet Flange on Top and Outlet on Right
- 12 Inlet Outlet 90 Degrees, Inlet Left Side, Outlet on Top
- 13 Inlet on Right, Outlet on Left, Outlet on Top
- 14 Inlet and Outlet Flanges Both at Bottom

Table 1.4 Motor Voltage

- D 24 V_{dc}
- A 120 V_{ac}, 60 Hz*
- G 120 V_{ac}, 50 Hz
- B 220 V_{ac}, 60 Hz
- C 220 V_{ac}, 50 Hz*
- H 220/240 V_{ac}, 60 Hz, 3 Phase*
- N 220/240 V_{ac}, 50 Hz, 3 Phase
- R 380/400/415 V_{ac}, 60 Hz, 3 Phase
- L 380/400/415 V_{ac}, 50 Hz, 3 Phase
- E 460/480 V_{ac}, 60 Hz, 3 Phase*
- O 460/480 V_{ac}, 50 Hz, 3 Phase
- W 690 V_{ac}, 60 Hz, 3 Phase

Table 1.5 Safety Ratings (Hazardous Areas)

- 3 CSA-us Class I, Div.1, Group D T2C*
- 4 CSA-us Class I, Div.1, Group C T3B
- 5 ATEX II 2 (1) G Ex d [ia Ga] IIB T4 (T3) Gb, II 2 G c IIB T4 (T3)*
- 6 IECEx, Ex d [ia] IIB T4 Gb

Table 1.6 Flow Tube Finish

- A Stainless Steel—Brushed*
- B Painted (White)*

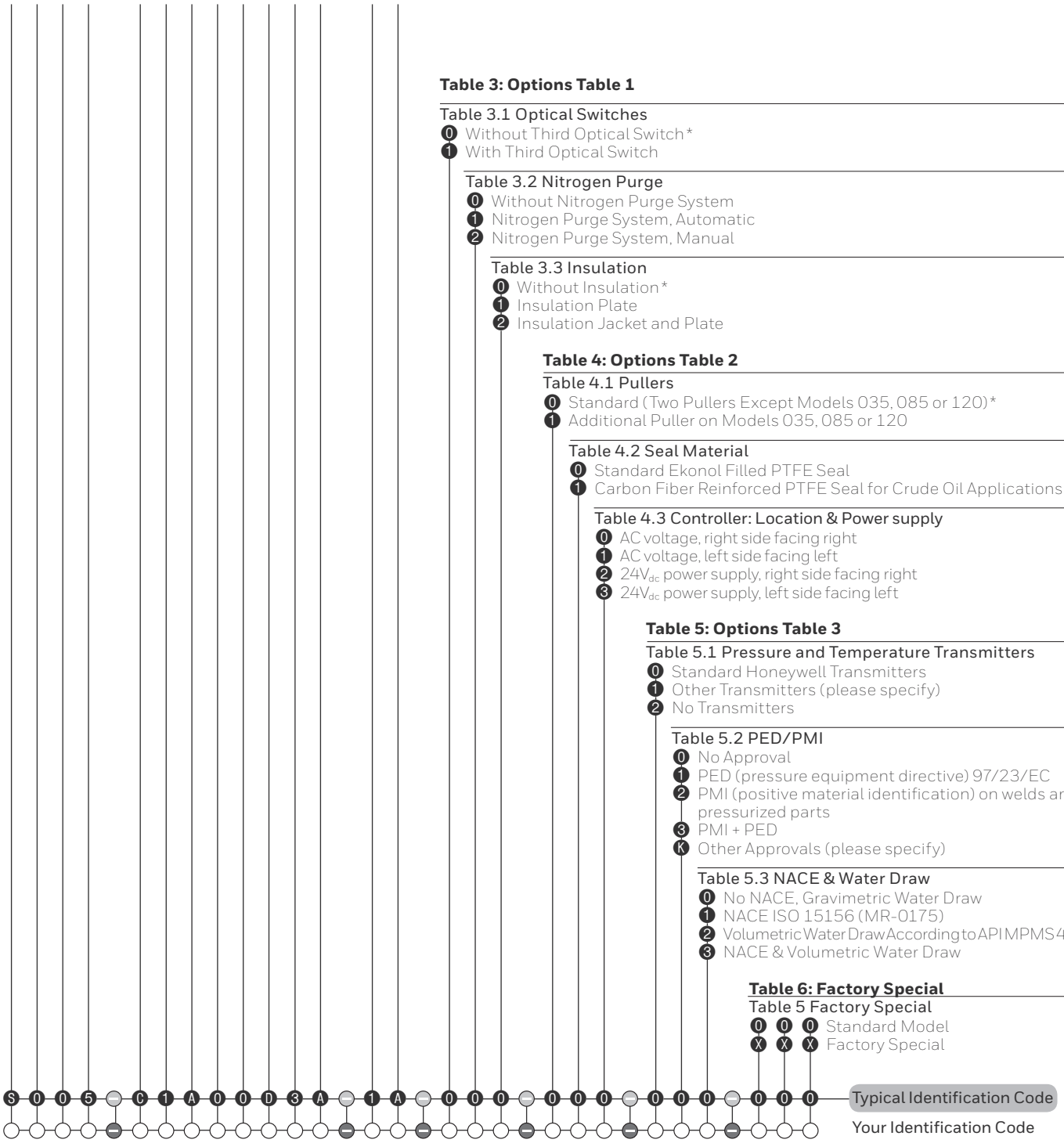
Table 2: Temperature Rating

Table 2.1 Ambiant Temperature

- 1 Low Ambient Range (-40 °C to +40 °C) (-40 °F to 104 °F)*
- 2 High Ambient Range (-20 °C to +60 °C) (-4 °F to 140 °F)*
- 3 Middle Range (-20 °C to +40 °C) (-4 °F to 104 °F)

Table 2.2 Process Temperature

- A Standard (-40 °C to +80 °C) (-40 °F to 176 °F)*



Note: Not all options are available on all models; consult the Model Selection Guide for the latest list of options and compatibilities.

Note: * Reduced delivery times.

For More Information
To learn more about Terminal Operation Solutions, visit www.honeywellprocess.com/terminals or contact your Honeywell account manager.

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