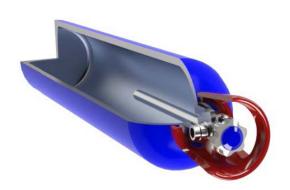


20 LTR GAS CYLINDER, UN, TPED, DOT (PENDING) Project



Proserv's single ended 20 Ltr Aluminimum gas cylinder is the sampling industry standard where large volume surface separator gas samples are required during well testing. The Cylinder is suitable for use in any ambient condition to be expected outdoor, subject to the specified temperature limitations, including offshore platforms, onshore terminals and sites in tropical areas.

- Universally transportable cylinder
- Single valve design with dual 1/4" NPT female ports which enable transfer of liquid gas or vapor gas, assisted by one valve port being equipped with
- Dual Port Design valve also fitted with a PRD
- Quick filling of liquified gas by releasing cylinder head pressure through additional vapor port
- Ability to remove liquids by inverting cylinder



Technical Specification			
Part number	A0016837		
Net volume	20,000cc (20L)		Approved for use within the European union
Operating temperature	-20 to 95 °C (-4 °F to 203 °F)	Complies with	under the following Directive: 2010/35/EU (TPED)
Design temperature	-20 °C to 95 °C (-4 °F to 203 °F)		UN Approval Certification DOT Approval Pending
Transport temperature	65 °C (149 °F) (Max)		
Maximum working pressure	193 bar(g) (2,800 psi) at 65 °C (max) 170 bar(g) (2,465 psi) at 95 °C		
Material	Cylinder: Aluminium alloy AA 6061 T6 grade Valves: 316L stainless steel compliant to NACE MR-0175	-	 UN 1075 Petroleum gases, liquefied UN 1965 Hydrocarbon gas mixture, liquefied, n.o.s. (not otherwise specified) UN 1053 Compressed gas, toxic, flammable, n.o.s. UN 1954 Compressed gas, flammable, n.o.s. UN 1971 Natural gas, compressed UN 1006 Argon compressed
Net weight	27 kg		
Dimensions (OD x L)	204 x 1080 mm		
Fusible Burst Disc Plug (PRD)	200-220 Bar (2900-3200) @ 100°C	Service	
Option	Transportation box		 UN 1016 Carbon monoxide compressed UN 1046 Helium compressed
Standard documentation	 Proserv Certificate of Conformity Hydrostatic Test Certificate Declaration of Conformance TPED & UN User instructions User spare parts list 	-	 UN 1049 Hydrogen, Compressed. UN 1066 Nitrogen, compressed Gas mixtures: only when in compliance with the appropriate Transport of Dangerous Goods Regulations; (see references)

ProLight 690 bar PED/DOT



The Prolight Sample Cylinder is designed for the collection of hydrocarbon Liquid & Gas Group 1 samples requiring analysis in the laboratory and subsequent storage. Threaded end caps inclusive of o-ring and back up ring sealing arrangement at either end of the cylinder creates a robust and reliable design, which is field proven.

- Light weight titanium cylinder construction
- Autoclave Engineers valves
- Valve inlet and outlet ports: 1/8" AE W125
- Flushing connection on inlet valve



Part number	See table below		within the European union under the following Directiv	
Design temperature	-20°C to +177°C	2014/68/EU (PED)		
D:	690 Bar (10,000psi) @ 93°C	1 ' '	sportation within the USA US Special Permit:	
Design pressure	668 Bar (9,700psi) @ 177°C	US DOT SP-1540	4	
	Cylinder Body: Titanium Grade 5	Design codes: gen	nerally, in accordance with PD 5500	
	End Caps: Titanium Grade 2		UN 1954 Compressed gas, flammable, n.o.s	
Material	Piston: Titanium Grade 2		UN 1964 Hydrocarbon gas mixture, compressed	
	Mixing Ball: Stainless Steel 316		n.o.s.	
	Valves: Stainless Steel 316		UN 1965 Hydrocarbon gas mixtures, liquefied, n.o.s.	
Net weight	See table below	1	UN 1053 Hydrogen sulphide (H2S)	
	Cylinder length include valves = see table		UN 3161 Liquefied gas, flammable, n.o.s.	
Dimensions (OD x L)	Cylinder OD = 72mm	Service		
Differsions (OD x L)	Cylinder OD for 2500cc cylinder ONLY = 100mm		UN 1971, UN 1972 Natural gas with methane content	
	100111111		UN 1066 Nitrogen, compressed	
	Hydrostatic test certificate, with 3rd		UN 1267 Petroleum crude oil	
	party endorsement, complete with 3rd party inspection release note		UN 1075 Petroleum gases, liquefied or liquefied petroleum gas	
	Copy of 2014/68/EU PED EC D of C		UN 1006 Argon compressed	
	Material Certification to EN 10204: 3.1 for pressure retaining components		UN 1953 Compressed gas, toxic, flammable, n.o.s.	
Option	Other type of connections available on request		Formation water: water with dissolved salts in various quantities compositions	
Ортоп	Ti Gr 6246 for Cylinder body (NACE MR)		Certificate of conformity	
	0175/ISO 15156 compliant)		Hydrostatic test certificate	
	Alternative valves material		User instructions	
	Alternative O-ring seal material	Standard	User spare parts list	
	Transportation Box (DOT Requirement)	documentation	Authorised Inspectors Certificate of	
	Australian Standards Certification on		Conformance to DOT SP-15404	
	request		Copy of DOT SP-15404	

Cylinder Speci	Cylinder Specification Cylinder Specification					
Part number	Description	Volume	Weight	Dimension (overall length including valves)		
002990	Prolight, 690 Bar, 640cc, PED, DOT	640 cc	5.7 kg	497 mm		
066530	Prolight, 690 Bar, 300cc, PED/DOT	300 сс	4.4 kg	332 mm		
017774	Prolight, 690 Bar, 1000cc, PED/DOT	1,000 сс	7.1 kg	660 mm		
203251	Prolight, 690 Bar, 2500 cc, PED. C/W carry handle & Brackets	2,500 cc	19 kg	903 mm		
028039	Prolight, 690 Bar, 640cc, PED	640 cc	5.7 kg	497 mm		
205511	Prolight, 690 Bar, 1000cc, PED	1,000 сс	7.1 kg	660 mm		
205512	Prolight, 690 Bar, 300cc, PED	300 сс	4.4 kg	332 mm		
076557	Prolight, 690 Bar, 640cc, PED, SilcoNert Coated	640 cc	5.7 kg	497 mm		

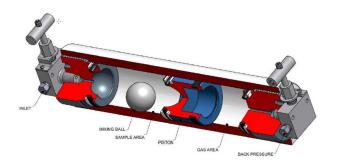
ProLight Ti-690-100-MB, TPED



The ProLight flow through cylinder is used for collecting gas or fluid samples.

- Light weight single piston sample receiver

- Internal mixing ball Autoclave engineers valves Outlet port: 1/8" AE W125









Technical Specification			
Part number	Ti-690-100 MB	Code	• EN 1964-3
GA-drawing	3CA-030	Applied directive	• TPED 2010/35/EU
Net volume	981 cc		UN 1267 petroleum crude oil
Design temperature	-20 °C to +177 °C		UN 1075 petroleum gases, liquified
MAWP	690 bar g @ 177 °C		 UN 1954 compressed gasses, flammable, n.o.s. UN 1971 natural gas, compressed
Material	Cylinder: ASTM B348 Gr. 5 End caps: ASTM B348 Gr. 2 Piston: ASTM B348 Gr. 2 Mixing ball: ASTM A479 316	Service	 UN 1066 nitrogen, compressed UN 1964 hydrocarbon gas mixture UN 1965 hydrocarbon gas mixture liquefied, n.o.s UN 1053 hydrogen sulphide
Net weight	7.2 kg		UN 3161 liquefied gas, flammable, n.o.s
Dimensions	(TL x W x H) 653 x 72 x 114,5 (open) T = 610		UN 1953 compressed gas, toxic, flammable, n.o.s Formation water
	OD = Ø72		Hydrostatic pressure test certificate
Option	Other kinds of connections available Also available in sizes 300cc & 640cc NACE Compliant (MR 0175) in titanium grade 6246	Standard	 Users guide Declaration of Conformity Material cert. EN 10204 3.1 on pressure retaining parts Transport box

ProLight 690 bar 640 cc, NACE, PED, DOT



The Prolight sample cylinder is designed for the collection of hydrocarbon liquid and Gas Group 1 samples requiring analysis in the laboratory and subsequent storage. Threaded end caps inclusive of o-ring and back up ring sealing arrangement at either end of the cylinder creates a robust and reliable design, which is field proven. Cylinder is compliant with ANSI/NACE MR0175/ISO 15156.

- Light weight titanium cylinder construction
- Autoclave Engineers valves
- Inlet valve: alloy 625
- Valve inlet and outlet ports: 1/8" AE W125
- Flushing connection on inlet valve



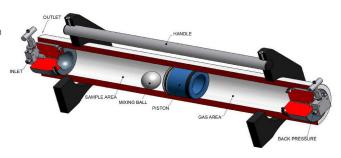
Technical Specification				
Part number	054265			
Net volume	629 сс	Approved for use within the European union under the following Directive: 2014/68/EU (PED) Approved for Transportation within the USA US Special Permit: US DOT SP-15404 Australian Standard AS 2030 - WAP 23930 Design codes: Generally in accordance with PD 5500		
Design temperature	-20 °C to +177 °C			
Design pressure	690 bar, 10,000 psi @ 93 °C 668 bar, 9,700 psi @ 177 °C			
Material	Cyl body: titanium 6246 End caps: titanium grade 2 Piston: titanium grade 2 Mixing ball: stainless steel 316 Inlet valve: alloy 625 Outlet valve: stainless steel 316	UN 1954 compressed gas, flammable, n.c. UN 1964 hydrocarbon gas mixture, compressed, n.o.s.		
Net weight	5.7 kg		UN 1965 hydrocarbon gas mixtures, liquefied,	
Dimensions	Cyl length incl valves 497 mm Cyl body length 444 mm Cyl OD 72mm	UN 1971, UN 1972 natural gas with content UN 1066 nitrogen, compressed UN 1267 petroleum crude oil UN 1075 petroleum gases, liquefie petroleum gas UN 1006 argon compressed UN 1953 compressed gas, toxic, flan.o.s.		
Standard documentation	Certificate of conformity Hydrostatic test certificate User instructions User spare parts list Authorised Inspectors Certificate of Conformance to DOT SP-15404 Copy of DOT SP-15404 Australian Standards test certificate Australian Standards design registration document		 UN 1066 nitrogen, compressed UN 1267 petroleum crude oil UN 1075 petroleum gases, liquefied or liquefied petroleum gas UN 1006 argon compressed UN 1953 compressed gas, toxic, flammable, n.o.s. - Formation water: water with dissolved salts in 	
Option	Transportation Box (DOT Requirement) Alternative connection types, valve material and o-ring seal material available on request	Optional documentation	Hydrostatic test certificate, with 3rd party endorsement, complete with 3rd party inspection release note. Copy of 2014/68/EU PED EC D of C. Material Certification to BS EN 10204: 3.1 for pressure retaining components.	

ProLight Ti-690-400-MB



The ProLight sample receiver is a portable single piston sample receiver with an internal mixing ball, double product inlet connections and one back pressure connection. The double inlet connection is suitable as flush connection. Connections are furnished with mini-valves with 1/8 inch AE W125.

- Lightweight single piston sample receiver
- Internal mixing ball
- Autoclave Engineers valves
 Outlet port: 1/8 inch AE W125









Technical Specification			
Part number	Ti-690-400-MB	Code	EN 13445-3
GA-drawing	3CA-031	Applied directive	2014/68/EU (PED)
Net volume	4,001 cc	directive	
Design temperature	-20 °C to +149 °C		UN 1267 petroleum crude oil
MAWP	690 bar g @ 149 °C		UN 1075 petroleum gases, liquefied
Material	Cylinder: ASTM B348 Gr. 5 End caps: ASTM B348 Gr. 2 Piston: ASTM B348 Gr. 2 Mixing ball: ASTM A479 316	Service	 UN 1954 compressed gasses, flammable, n.o.s. UN 1971 natural gas, compressed UN 1066 nitrogen, compressed UN 1964 hydrocarbon gas mixture UN 1965 hydrocarbon gas mixture liquefied,
Net weight	26.5 kg		n.o.s • UN 3161 liquefied gas, flammable, n.o.s
Dimensions	(TL x W x H) 1,293 x 180 x 210 mm T = 1,250 mm OD = Ø100		UN 1953 compressed gas, toxic, flammable, n.o.s Formation water
Option	Material cert. EN 10204 3.1 on pressure retaining parts Transport box Other kinds of connections available	Standard documentation	 Hydrostatic pressure test certificate endorsed by 3rd party Users guide Declaration of Conformity



Inconel 625 10K, PED



The sample cylinder N625 is designed for the collection of hydrocarbon liquids and gas group 1 samples requiring analysis in the laboratory and subsequent storage. Threaded end caps and piston inclusive of o-ring and back up ring sealing arrangement within the cylinder creates a robust and reliable design, which is field proven.

- Inconel 625 corrosion resistant material
- Autoclave Engineers valves
- Valve inlet / outlet ports: 1/8" AE W125
- Carry handle (removable)



Technical Spe	cification					
Part number Net volume Design tempe	erature	See table below See table below -29°C to +149°C	Approved for use within the European union under the following Directive: 2014/68/EU (PED) Design codes: Generally in accordance with PD 5500			
Design press	ure	10000 psi (690 Bar) @ -29°C to +93C 9800 psi (676 Bar) @ +149°C		• UN 196	 UN 1954 Compressed gas, flammable, n.o.s UN 1964 Hydrocarbon gas mixture, compressed, n.o.s. UN 1965 Hydrocarbon gas mixtures, liquefin.o.s. UN 1053 Hydrogen Sulphide (H2S) UN 3161 Liquefied Gas, flammable, n.o.s. UN 1971, UN 1972 Natural gas with methar content UN 1066 Nitrogen, compressed UN 1267 Petroleum crude oil UN 1075 Petroleum gases, liquefied or liquefied petroleum gas UN 1006 Argon compressed UN 1953 Compressed gas, toxic, flammable 	
Material Net weight		Cylinder Body: Alloy 625 End Caps: Alloy 625 Piston: Alloy 625 Inlet Valve: Alloy 625 Outlet Valve: Stainless Steel 316 Mixing Ball: Hastelloy C276 Adapter: 6MO See table below	Service	 UN 196 n.o.s. UN 105 UN 316 UN 197 content UN 106 UN 126 UN 107 liquefie UN 100 		
Dimensions		See table below Hydrostatic test certificate, with 3rd		Formati	n.o.s. • Formation water: water with dissolved salt: various quantities compositions	
Option		 Hydrostatic test certificate, with 3rd party endorsement, complete with 3rd party inspection release note Copy of PED 2014/68/EU Declaration of Conformity Material Certification to EN 10204: 3.1 for pressure retaining components 	Standard documentatio	Certificate of conformity Hydrostatic test certificate		•
Cylinder Spec	ification					
Part number	Descriptio	on		Volume	Weight	Dimension (overall length including valves)
185518	Sample Cy	rlinder, Piston, N625, 10000 psi, 300 cc, PED		300 сс	10.7 Kg	375 mm
185519	+ ' '	vlinder, Piston, N625, 10000 psi, 640 cc, PED		640 сс	14.2 Kg	534 mm
185520	85520 Sample Cylinder, Piston, N625, 10000 psi, 1000 cc, PED			1,000 cc 18.4 Kg 705 mm		705 mm

Type 5 10K, 700 cc, PED, DOT, TC, AS



The Type 5 (10K) sample cylinder is designed specifically for the task of housing samples transferred from the Proserv downhole sampler, for transportation to the analysis laboratory and subsequent storage. This transportable sampling cylinder is of piston type with two end caps, sealed with double O rings and back-up rings.

- Single piston sample receiver, with internal mixing ball
- Evacuation port on sample side of cylinder
- Autoclave Engineer needle valves fitted
- Valve inlet / outlet ports: 1/4" NPT female
- Valve protection guards fitted



Technical Specification				
Part number	850669-700	A	and the first of the state of the fall of the state of th	
Net volume	700 cc	 Approved for use within the European union under the following Directive: 2014/68/EU (PED) Approved for Transportation within the USA US Special Permit: - US DOT SP-12116 Transport Canada: TC-SU9269 Australian Standard AS 2030: WAP 23931 Design codes: Generally in accordance with PD 5500 		
Design temperature	-20 °C to +150 °C			
Design pressure	10,000 psi (690 bar)			
Material	Cylinder and end caps: 17-4PH St. Stl. (AISI 630) in NACE MR0175 Condition Piston and Mixing Device: 316 St. Stl. (AISI 316) in NACE MR0175 Condition			
Net weight	17.5 kg (empty) 18.2 kg (pre-charged water/glycol)		 UN 1066 - Nitrogen, compressed UN 1075 - Petroleum Gases, Liquefied or Liquefied Petroleum Gases 	
Dimensions	Overall length 693 mm Cylinder OD 89 mm	Service	UN 1267 - Petroleum Crude Oil UN 1953 - Compressed Gas, Toxic, Flammable,	
Option	Transportation Box (DOT Requirement) 500cc and 1000cc cylinder volumes available		n.o.s. UN 1954 - Compressed Gas, Flammable, n.o.s. UN 1964 - Hydrocarbon gases mixtures, compressed, n.o.s.	
	Proserv Certificate of Conformity Hydrostatic Test Certificate Authorised Inspectors Certificate of Conformance to DOT SP-12116 and TC Equivalency Certificate SU9269		UN 1965 - Hydrocarbon gases mixtures, Liquefied, n.o.s. UN 1971 - Methane, Compressed or Natural Gas, Compressed)	
Standard documentation	Copy of DOT SP-12116 Copy of TC-SU9269 User Instructions User spare parts list Australian Standards Test Certificate Australian Standards Design Registration Document.	Optional documentation	 Hydrostatic Test Certificate, with 3rd party endorsement complete with 3rd party inspection release note Material Certification to EN 10204: 3.1 for main pressure retaining components Copy of PED 2014/68/EU Declaration of Conformity 	

Type 5 15K, 700 cc, PED, DOT, TC, AS



The Type 5 (15K) sample cylinder was designed specifically for receiving samples transferred from the Proserv downhole sampler and production surface samples, for transportation to the analysis laboratory and subsequent storage. This transportable sampling cylinder is of piston type with two end caps, sealed with double 'O' rings and back-up rings.

- Single piston sample receiver, with internal mixing ball
- Evacuation port on sample side of cylinder
- Autoclave Engineer needle valves
- Valve inlet / outlet ports: 1/4" A.E. medium pressure female
- Valve protection guards fitted



Technical Specification				
Part number	850870-700	Approved for use within the European union under the following Directive: 2014/68/EU (PED) Approved for Transportation within the USA under US Special Permit US DOT SP-12116 Transport Canada: TC Equivalency Certificate SU9269 Australian Standard AS 2030: WAP 24116 Design codes: Generally in accordance with PD 5500		
Net volume	700 cc			
Design temperature	-20 °C to +200 °C			
Design pressure	15,000 psi (1,034 bar)	UN 1066 - Nitrogen, compressed UN 1075 - Petroleum Gases, Liquefied or		
Material	Cylinder and End caps: 17-4PH St. Stl. (AISI 630) in NACE MR0175 condition Piston and Mixing Device: 316 St. Stl. (AISI 316) in NACE MR0175 Condition	Liquefied Petroleum Gases UN 1267 - Petroleum Crude Oil UN 1953 - Compressed Gas, Toxic, Flammable, n.o.s.		
Net weight	21.2 kg (empty) 21.9 kg (pre-charged water/glycol)	Service • UN 1954 - Compressed Gas, Flammable, n.o.s. • UN 1964 - Hydrocarbon gases mixtures, compressed, n.o.s.		
Dimensions	Overall length 719 mm Cylinder OD 90 mm (28.3" X 3.6")	 UN 1965 - Hydrocarbon gases mixtures, Liquefied, n.o.s. UN 1971 / UN 1972 - Methane, Compressed or 		
Option	500cc and 1000cc volume options available Transportation Box (DOT requirement)	Natural Gas, Compressed • Proserv Certificate of Conformity		
Optional documentation	Hydrostatic Certificate, with 3rd party endorsement with 3rd party inspection release note Material Certification to EN 10204: 3.1 or 3.2 for main pressure retaining components Copy of PED 2014/68/EU Declaration of Conformity	Hydrostatic Test Certificate Authorised Inspectors Certificate of Conformance to DOT SP-12116 and TC Equivalency Certificate SU9269 Copy of DOT SP-12116 Copy of TC-SU9269 User instructions User spare parts list Australian Standards Test Certificate Australian Standard Design registration Document		

Type 5 15K, 100 cc, 500cc & 1,250cc, PED, DOT



The Type 5 (15K) sample cylinder is designed for the collection of group 1 hydrocarbon liquids and gas samples, for transportation to the analysis laboratory and subsequent storage. This transportable sampling cylinder is of piston type with two end caps, sealed with double 'O' rings and back-up rings, and reliable proven design in the oil & gas industry.

- Single piston sample receiver, with internal mixing ball
- Integrated evacuation port on the sample side of the cylinder
- Integral Autoclave Engineers Valves for superior control
- Valve inlet / outlet ports: 1/4" A.E. medium pressure female
- Valve protection guards fitted



Technical Specification				
Part number	See table below	Approved for use within the European union under the following Directive: PED 2014/68/EU Approved for Transportation within the USA under US Special Perm		
Net volume	See table below			
Design temperature	-20 °C to +200 °C	DOT SP-12116		-dansa with DD EEOO
Design pressure	15,000 psi (1034 Bar)	Design codes: Generally in accordance with PD 5500		
Material	Cylinder and End Caps: 17-4PH St. Stl. (AISI 630) (ANSI/NACE MR0175 ISO 15156) - Piston and Mixing Device: 316 St. Stl. (AISI 316) (ANSI/NACE MR0175 ISO 15156) - Valves: Hastelloy C-276 Wetted Parts	 UN 1066 Nitrogen compressed UN 1006 Argon compressed UN 1075 Petroleum gases, liquefie liquefied petroleum gas UN 1267 Petroleum crude oil UN 1953 Compressed gas, toxic flancos. UN 1053 Hydrogen Sulphide (H2S) 		Argon compressed Petroleum gases, liquefied or Petroleum gas Petroleum crude oil Compressed gas, toxic flammable
Net weight	See table below	UN 1954Compressed gas, flamma	ompressed gas, flammable, n.o.s	
Dimensions	Overall Length = see table below O.D = 91mm (3.6")	 UN 1964Hydrocarbon gas mixt compressed, n.o.s. UN 1965 Hydrocarbon gas mix 		
Option	- Transportation Box (DOT requirement)		n.o.s. • UN 1971 N	Vatural gas with methane content
Optional documentation	Hydrostatic Test Certificate, complete with 3rd Party endorsement, and 3rd Party Inspection Release Note Material Certification to EN 10204: 3.1 for pressure retaining components Copy of PED 2014/68/EU Declaration of Conformity	Standard documentation	Hydrostati Authorised Conforman	
Cylinder options				
Part number	Description	Volume	Weight	Approximate dimension (overall length including valves)
188992	Type 5 15K, Cylinder, 1250 cc, PED/DOT	1250 сс	25.2 Kg	893 mm
198652	Type 5 15K, Cylinder, 500 cc, PED/DOT	500 сс	18.4 Kg	630 mm
198653	Type 5 15K, Cylinder, 100 cc, PED/DOT	100 сс	14.4 Kg	490 mm

Type 6 10K, 700 cc, PED, DOT, TC



The Type 6 (10K) cylinder is designed specifically for the task of housing samples transferred from the Proserv downhole sampler, for transportation to the analysis laboratory and subsequent storage.

- Single piston sample receiver, with internal vortex ring mixing device
- Single phase nitrogen reservoir
- Evacuation port on sample side of cylinder
- Valve inlet/outlet ports: nitrogen reservoir 1/4 inch AE medium pressure female
- Sample and precharge: 1/4 inch NPT female



Technical Specification				
Part number	850409-700	Approved for use and transport within, and across borders, in Europe, USA and Canada under the following European Directives, US Special Permit and Transport Canada Equivalency Certificate: • 2014/68/EU (PED) • US DOT SP-12116 • TC Equivalency Certificate SU9269		
Net volume	700 cc fluid and 100 cc nitrogen			
Design temperature	- 20 °C to +150 °C			
Design pressure	10,000 psi (690 bar)			
Material	Cylinder and end caps: 17-4PH St. Stl. (AISI 630) in NACE MR0175 Condition piston and mixing device: 316 St. Stl.(AISI 316) in NACE MR0175 Condition		 UN 1066 - nitrogen, compressed UN 1075 - petroleum gases, liquefied or liquefied petroleum gases UN 1267 - petroleum crude oil 	
Net weight	22 kg (empty) 22.7 kg (pre-charged water/glycol)	Service	 UN 1953 - compressed gas, toxic, flammable, NOS UN 1954 - compressed gas, flammable, NOS 	
Dimensions	Cylinder length 720 mm Cylinder OD 89 mm Length with guards 810 mm		 UN 1964 - Hydrocarbon gases mixtures, compressed, NOS UN 1965 - hydrocarbon gases mixtures, liquefied, NOS 	
	Hydrostatic certificate, with third party endorsement		UN 1971 - methane, compressed or natural gas, compressed	
Option	 Third party inspection release note Material Certification to EN 10204: 3.1 or 3.2 for main pressure retaining components 500 cc and 1,000 cc volume options available. Transportation box for compliance with DOT 	Standard documentation	 Hydrostatic certificate Authorised Inspectors Certificate of Conformance to DOT SP-12116 and TC Equivalency Certificate SU9269 Copy of DOT SP-12116 User instructions and user spare parts list 	

Type 6 15K, 700 cc, PED, DOT, TC, AS



The Type 6 (15K) cylinder is a high-pressure, high-temperature single phase sample cylinder, designed for the collection of group 1 hydrocarbon liquids and gas samples. A nitrogen charged chamber maintains pressure and representative samples during transportation to the laboratory for analysis and subsequent storage. The Type 6 (15K) cylinder has a reliable field proven design with multiple years' service in the oil and gas industry.

- Internal Vortex ring for sample agitation
- Integral Autoclave Engineers valves for superior control
- Valve inlet / outlet ports, 1/4" A.E. Medium pressure female
- Integrated evacuation port on the sample side of the cylinder
- Minimal dead volume
- Single-phase pressure compensation
- Valve protection guards fitted



Technical Specification		
Part number	850852-700	Approved for use within the European union under the following Directive: - 2014/68/EU (PED) Approved for Transportation within the USA under US Special
Net volume	700 cc fluid and 100 cc nitrogen	Permit: - US DOT SP-12116 Transport Canada: - TC Equivalency Certificate SU9269 Australian Standard AS 2030: - WAP 24095 Design codes: Generally in accordance with PD 5500
Design temperature	-20 °C to +200 °C	UN 1954 Compressed gas, flammable, n.o.s
Design pressure	15,000 psi (1034 bar)	UN 1964 Hydrocarbon gas mixture, compressed, n.o.s. UN 1965 Hydrocarbon gas mixtures, liquefie n.o.s.
Material	Cylinder Body: 17-4PH Stainless Steel (ANSI/NACE MR0175 ISO 15156) - Nitrogen End Cap: 17-4PH Stainless Steel (ANSI/NACE MR0175 ISO 15156) - Piston & Vortex Ring: 316 St. Stl. (AISI 316) in NACE MR0175 Condition - Valve: Hastelloy C-276 wetted parts	UN 1053 Hydrogen Sulphide (H2S) UN 3161 Liquefied Gas, flammable, n.o.s. UN 1971, UN 1972 Natural gas with methand content UN 1066 Nitrogen, compressed UN 1267 Petroleum crude oil UN 1075 Petroleum gases, liquefied or
Net weight	Approx. 24 Kg (empty)	liquefied petroleum gas UN 1006 Argon compressed UN 1953 Compressed gas, toxic, flammable,
Dimensions	Cylinder length 720 mm Cylinder OD 91 mm Length with guards 820 mm	n.o.s. Proserv Certificate of Conformity Hydrostatic Test Certificate
Option	Transportation Box (DOT requirement)	Authorised Inspectors Certificate of Conformance to DOT SP-12116 and TC Equivalency Certificate SU9269
Optional documentation	Hydrostatic test certificate, with 3rd party endorsement, complete with 3rd party inspection release note Copy of PED 2014/68/EU Declaration of Conformity Material Certification to EN 10204: 3.1 for pressure retaining components	Standard documentation Copy of DOT SP-12116 Copy of TC-SU9269 User instructions User spare parts list Australian Standards Test Certificate Australian Standards Design registration Document

Type 6 15K, 700 cc, Severe Service PED, DOT



The Type 6 (15K) cylinder is a high-pressure, high-temperature single phase sample cylinder, designed for the collection of group 1 hydrocarbon liquids and gas samples. A nitrogen charged chamber maintains pressure and representative samples during transportation to the laboratory for analysis and subsequent storage. The Type 6 (15K) cylinder is ideal for harsh environments (H2S), due to the material of manufacture, and has a reliable field proven design with multiple years' service in the oil and gas industry.

- Corrosion resistant alloy construction
- Internal vortex ring for sample agitation
- Integral Autoclave Engineers valves for superior control
- Valve inlet / outlet ports, 1/4" A.E. medium pressure female
- Integrated evacuation port on the sample side of the cylinder
- Minimal dead volume
- Single-phase pressure compensation
- Valve protection guards fitted

Technical Specification				
Part number	099161	Approved for use within the European Union under Directive: - 2014/68/EU (PED)		
Net volume	700 cc fluid and 100 cc nitrogen charge	Approved for Transportation within the USA under DOT Special Permit: US DOT SP-15404 Design codes: Generally in accordance with PD 5500		
Design temperature	-20 °C to +200 °C			
Design pressure	15,000 psi (1034 bar)	Design codes: deficially in accordance with PD 3300		
Material	Cylinder Body: Inconel 725 (ANSI/NACE MR0175 ISO 15156) - Nitrogen End Cap: 17-4PH Stainless Steel (ANSI/NACE MR0175 ISO 15156) - Piston & Vortex Ring: Inconel 625 (ANSI/NACE MR0175 ISO 15156) - Valve: Hastelloy C-276 wetted parts	 UN 1954 Compressed gas, flammable, n.o.s UN 1964 Hydrocarbon gas mixture, compressed, n.o.s. UN 1965 Hydrocarbon gas mixtures, liquefied n.o.s. UN 1053 Hydrogen Sulphide (H2S) UN 3161 Liquefied Gas, flammable, n.o.s. 		
Net weight	Approx 24 kg (empty)	Service • UN 1971, UN 1972 Natural gas with methane		
Dimensions	Cylinder length 720 mm Cylinder OD 91 mm Length with guards 820 mm	UN 1066 Nitrogen, compressed UN 1267 Petroleum crude oil UN 1075 Petroleum gases, liquefied or		
Option	Hydrostatic test certificate, with 3rd party endorsement, complete with 3rd party inspection release note Copy of PED 2014/68/EU Declaration of Conformity Material Certification to EN 10204: 3.1 for pressure retaining components Transportation Box (DOT Requirement)	liquefied petroleum gas UN 1006 Argon compressed UN 1953 Compressed gas, toxic, flammable, n.o.s.		
		Standard documentation		

Type 8 10K Cylinder, 6000 cc, PED



The Type 8 10K sample cylinder was designed specifically for receiving hydrocarbon liquid & gas group 1 samples for laboratory analysis work and subsequent storage. This sampling cylinder is of a piston type with two end caps, which are sealed by double 'O' rings and back-up rings

- Anti-tamper valves
- Large volume 6 litre
- Valve connections, 1/4" NPT (f) inlet and outlet
- Internal mixing ball



Technical Specification				
Part number	180833, 180130 (excludes valves)	Approved for use within the European union under the following		
Net volume	6000 cc	Directive: 2014/68/EU (PED) • Design codes: Generally in accordance with PD 5500		
Design temperature	-20 °C to +150 °C			
Design pressure	10,000 psi (690 bar)	UN 1954 Compressed gas, flammable, n.o.s		
Material	Cylinder Body & Screwed Ring: 17-4 PH St. Stl. In the NACE ANSI MR0175/ISO 15156 condition End Caps & Piston: 316 St. Stl. In the NACE ANSI MR0175/ISO 15156 condition	UN 1964 Hydrocarbon gas mixture, compressed, n.o.s. UN 1965 Hydrocarbon gas mixtures, liquefie n.o.s. UN 1971, UN 1972 Natural gas with methane content		
Net weight	130 Kg	Service • UN 1066 Nitrogen, compressed • UN 1267 Petroleum crude oil		
Dimensions	Overall Length: 865 mm Cylinder O.D: 191 mm	UN 1075 Petroleum gases, liquefied or liquefied petroleum gas		
Options	5000 cc option available	UN 1953 Compressed gas, toxic, flammable, n.o.s.	,	
	Hydrostatic Test Certificate, with 3rd party endorsement, complete with 3rd party inspection release note	Formation water: water with dissolved salts various quantities compositions	in	
Optional documentation	Copy of PED 2014/68/EU Declaration of Conformity Material Certification to EN 10204: 3.1 for pressure retaining components	Certificate of Conformity Hydrostatic Test Certificate Ocumentation User Instructions User Spare Parts List		

Sample Cylinder, Multiphase, 20K, PED, DOT



Prosery's 20000 psi sample cylinder is a piston type sample receiver suitable for capture, transportation and subsequent storage of high-pressure hydrocarbon samples. The cylinder is designed for containment of conventional multiphase samples and can be utilised in a laboratory for fluid analysis and large volume recombination studies.

- Large volume capacity
- Designed in accordance with PED 2014/68/EU
- DOT approval under SP-20681
- Materials complaint to ANSI/NACE MR0175/ISO 15156
- Inconel construction, suitable for severe service
- Fluids recombination vessel
- Suitable for long term storage



Technical specification				
Part number	208453 (2000 cc), 208459 (1500 cc) 208460 (1000 cc), 208461 (700 cc)	Approved for use under the following directive/Permit - 2014/6 • DOT Special Permit SP-20681		ne following directive/Permit - 2014/68/EU (PEC
Net volume	See table below			2-20681
Design temperature	-29°C to +177°C			T
MAWP	20000 psi (1379 Bar) @ -29°C to +93°C 19200 psi (1324 Bar) @ +177°C	Service Standard documentation		 UN 1006 - Argon, Compressed UN 1075 - Petroleum gases, liquefied or liquefied petroleum gases, liquefied or liquefied petroleum gases UN 1267 - Petroleum crude oil UN 1953 - Compressed gas, toxic, flammable, n.o.s. UN 3161 - Liquefied gas, Flammable, N.O.S UN 1954 - Compressed gas, flammable, n.o.s. UN 1964 - Hydrocarbon gases mixtures, compressed, n.o.s. UN 1965 - Hydrocarbon gases mixtures, liquefied, n.o.s. UN 1971 / UN 1972 - Methane, compressed or natural gas
Material	Cylinder and End Caps: Inconel 725 (UNS N07725) in ANSI/NACE MR0175/ ISO 15156 Sample Piston and Vortex Ring: Inconel 625 (UNS N06625) in ANSI/NACE MR0175/ISO 15156 Condition Nitrogen Piston: Stainless Steel 316 (UNS S31600) Valve Body: Nibron Valve Stem: MP35N (UNS R30035)			
Net weight	See table below			
Dimensions	See table below			
Optional documentation	 3rd party Inspection Release Note Hydrostatic certificate, with 3rd party endorsement PED Declaration of Conformity Material certification to EN 10204: Type 3.1 for main pressure retaining components 			UN 1053 - Hydrogen sulfide Hydrostatic Pressure Test Certificate User Instructions & User spare parts list Authorised Inspectors Certificate of Conformance to DOT SP-20681
Cylinder options				
Net volume	Net weight		Dimensions	
2000cc Cylinder Volume	33kg (empty) 35kg (pre-charged water/glycol)		Cylinder Length = 992mm, Cylinder OD = 88.9mm	
1500cc Cylinder Volume	28kg (empty) 29.5kg (pre-charged water/glycol)		Cylinder Length = 817mm, Cylinder OD = 88.9mm	
1000cc Cylinder Volume	23kg (empty) 24kg (pre-charged water/glycol)		Cylinder Length = 640mm, Cylinder OD = 88.9mm	
700cc Cylinder Volume	20kg (empty) 20.7kg (pre-charged water/glycol)		Cylinder Length = 534mm, Cylinder OD = 88.9mm	

Sample Cylinder, Single Phase, 20K, PED, DOT



Proserv's 20,000 psi sample cylinder is a piston type sample receiver suitable for capture, transportation and subsequent storage of high-pressure representative production fluid samples. The cylinder is designed for containment of conventional single phase samples and can be utilised in a laboratory for fluid analysis and large volume recombination studies.

- Large volume capacity
- Designed in accordance with PED 2014/68/EU
- DOT approval under SP-20681
- Materials complaint to ANSI/NACE MR0175/ISO 15156
- Inconel construction, suitable for severe service
- Fluids recombination vessel



Technical specification					
Part number		00 сс), 208465 (1500 сс) 00 сс), 208462 (700 сс)	Approved for use under the following directive/Permit • 2014/68/EU (PED) • DOT Special Permit SP-20681		
Net volume	See table be	low			
MAWP		379 Bar) @ -29°C to +93°C 324 Bar) @ +177°C			
Design temperature	-29°C to +17	7°C]	UN 1006 - Argon, Compressed	
Material	(ÚNS N0772 ISO 15156 Sample Pisto 625 (UNS NO	End Caps: Inconel 725 5) in ANSI/NACE MR0175/ on and Vortex Ring: Inconel 16625) in ANSI/NACE 0 15156 Condition		 UN 1066 - Nitrogen, compressed UN 1075 - Petroleum gases, liquefied or liquefied petroleum gases UN 1267 - Petroleum crude oil UN 1953 - Compressed gas, toxic, flammable, n.o.s. 	
	Nitrogen Pis (UNS S3160 Valve Body: I	ton: Stainless Steel 316 0)	Service	 UN 3161 - Liquefied gas, Flammable, n.o. UN 1954 - Compressed gas, flammable, n.o.s. UN 1964 - Hydrocarbon gases mixtures, compressed, n.o.s. UN 1965 - Hydrocarbon gases mixtures, liquefied, n.o.s. UN 1971 / UN 1972 - Methane, 	
Net weight	See table be	low			
Dimensions	See table be	low			
	Hydrostatic	3rd party Inspection Release Note Hydrostatic Pressure Test Certificate,		compressed or natural gas • UN 1053 - Hydrogen sulfide	
Optional certification	with 3rd party endorsement PED Declaration of Conformity Material certification to EN 10204: Type 3.1 for main pressure retaining components		Standard documentation	 Hydrostatic Pressure Test Certificate User Instructions & User spare parts list Authorised Inspectors Certificate of Conformance to DOT SP-20681 	
Cylinder options					
Net volume		Net weight		Dimensions	
2000cc Cylinder Volume & 500cc Nitrogen		46kg (empty) 48kg (pre-charged water/glycol)		Cylinder Length = 1340mm, Cylinder OD = 88.9mm	
1500cc Cylinder Volume & 500cc Nitrogen		42kg (empty) 43.5kg (pre-charged water/glycol)		Cylinder Length = 1167mm, Cylinder OD = 88.9mm	
1000cc Cylinder Volume & 300cc Nitrogen		35kg (empty) 36kg (pre-charged water/glycol)		Cylinder Length = 926mm, Cylinder OD = 88.9mm	
700cc Cylinder Volume & 300cc Nitrogen		32kg (empty) 32.7kg (pre-charged water/glycol)		Cylinder Length = 818mm, Cylinder OD = 88.9mm	



Subsea Cylinder, Single Phase, 20K, PED, DOT



Proserv's subsea sampling cylinder has been designed to capture representative production fluid samples from a subsea environment, allowing for transportation directly to a fluid analysis laboratory without the requirement for fluid transfer. This reduces associated risk or sample loss / contamination, maintains sample integrity, limits the dangers associated with high pressure hydrocarbon transfer and reduces onsite equipment and personnel time during subsea sampling operations.

- Large volume capacity
- Designed in accordance with PED 2014/68/EU
- DOT approval under SP-20681
- Valves qualified to API 6A-PR2
- Materials complaint to ANSI/NACE MR0175/ISO 15156
- Inconel construction, suitable for severe service
- Eliminates need for transfer of sampled fluid in field



Technical specification				
Part number	,	cc), 171112 (1500 cc) cc), 153439 (700 cc)	Approved for use under the following directive/Permit 2014/68/EU (PED) DOT Special Permit SP-20681	
Net volume	See table belo	W		
MAWP	1 1	79 Bar) @ -29°C to +93°C 24 Bar) @ +177°C	Standard	Hydrostatic Pressure Test Certificate User Instructions & User spare parts list Authorised Inspectors Certificate of Conformance to DOT SP-20681 UN 1006 - Argon, Compressed UN 1075 - Petroleum gases, liquefied or liquefied petroleum gases UN 1267 - Petroleum crude oil UN 1953 - Compressed gas, toxic, flammable, n.o.s. UN 3161 - Liquefied gas, Flammable, N.O.S UN 1954 - Compressed gas, flammable, n.o.s. UN 1965 - Hydrocarbon gases mixtures, compressed, n.o.s.
Design temperature	-29 °C to 177 °	°C	certification	
Material	(ÚNS N07725 ISO 15156 AP Sample Piston 625 (UNS N06 MR0175/ISO Nitrogen Pisto (UNS S31600) Valve Body: Ni		Service	
Net weight	See table belo	W		
Dimensions	See table belo	W		
Water depth (maximum)	3,000 m			
Optional certification	3rd party Inspection Release Note - Hydrostatic Pressure Test Certificate, with 3rd party endorsement - PED Declaration of Conformity - Material certification to EN 10204: Type 3.1 for main pressure retaining components - API 17D Hyperbaric test (3000 m) 3rd party witness			liquefied, n.o.s. UN 1971 / UN 1972 - Methane, compressed of natural gas UN 1053 - Hydrogen sulfide
			Standard documentation	 Hydrostatic test certificate API-6A PR2 Proserv certificate User instruction and user spare parts list Hyperbaric test (3000 m) third party witness
Cylinder options				
Net volume		Net weight		Dimensions
2000cc Cylinder Volume & 50	Occ Nitrogen	46kg (empty) 48kg (pre-charged water/glycol)		Cylinder Length = 1340mm, Cylinder OD = 88.9mi
1500cc Cylinder Volume & 500cc Nitrogen		42kg (empty) 43.5kg (pre-charged water/glycol)		Cylinder Length = 1167mm, Cylinder OD = 88.9mi
1000cc Cylinder Volume & 300cc Nitrogen		35kg (empty) 36kg (pre-charged water/glycol)		Cylinder Length = 926mm, Cylinder OD = 88.9mm
700cc Cylinder Volume & 300cc Nitrogen		32kg (empty) 32.7kg (pre-charged water/glycol)		Cylinder Length = 818mm, Cylinder OD = 88.9mm

