



Bladder Accumulators Datasheets

BESPOKE ACCUMULATORS AVAILABLE UPON REQUEST

**CONTACT QHP LTD FOR MORE INFORMATION:
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Bladder Accumulators

We offer fully repairable bladder type accumulators in a wide variety of sizes from 1 litre to 57 litres. We also offer protective internal and external coatings or corrosion resistant materials as required.

Our standard bladder accumulators are manufactured to international standards up to pressures of 690 bar (10,000 PSI) as standard (see our Design Standards section for more information). The components for this large range of Accumulators are usually carried in stock.

Bespoke units are available upon request to cope with low/high temperatures, aggressive fluids, or high flow rates, again many components will be carried in stock.

STANDARD BLADDER TYPE HYDRAULIC ACCUMULATORS:

- 1 to 57 Litre Nominal Capacity
- Chrome Molybdenum Steel
- Stainless Steel or Carbon Steel Connections available
- MaWP of 420 Bar & 690 Bar Standard Vessels
- BSEN 14359 Design Standard
- PED 2014/68/EU Certified (CE Marked)
- Non standard options are available
- ASME VIII Division 1 with the option for U Stamp and National Board Registration
- AS1210 Australian Pressure Vessel Standard
- Others available on request

DESIGN STANDARDS

QHP can design and manufacture to the following standards:

- BSEN 14359 (British/European Accumulator Code)
- ASME VIII Division 1 (U Code Stamp available)
- AS1210 (Australian Pressure Vessel Code)

QHP CAN ALSO OFFER THE FOLLOWING APPROVALS:

- PED 2014/68/EU (European Pressure Equipment Directive)
- ATEX 2014/34/EU
- Lloyds Register
- NB (National Board)
- DNV GL (Det Norske Veritas)
- ABS (American Bureau of Shipping)
- USCG (US Coast Guard)
- BV (Bureau Veritas)
- CRN (Canadian Registration Number)
- Australian Design Registration for all Australian States.
- SELO for China
- DOSH for Malaysia
- NR13 for Brazil
- 3A Marking for Serbia



SPECIFICATION:

Standard Pressure Oil & Gas Bladder Accumulator

- Capacity: 1 to 50 Litre
- Shell Material: Chromium Molybdenum Alloy Steel
- Connection Material: Stainless Steel
- Gas Connection: 1/4" BSP Male Gas Valve (316 Stainless Steel)
- Fluid Connection: See Table Below
- Maximum Working Pressure: 420 Bar
- Design Pressure: 420 Bar
- Hydrostatic Test Pressure: 600.6 Bar
- Metallic Design Temperature: -40°C to +80°C (Standard)
- Elastomeric Operating Temperature: Various Elastomers Available
- Design Code: BS EN 14359
- Approval: PED 2014/68/EU
- Dimensions & Weight: See Table Below

BLADDER & ELASTOMER:

- Available In A Range Of Elastomers To Suit Operating Conditions

FLUSHING:

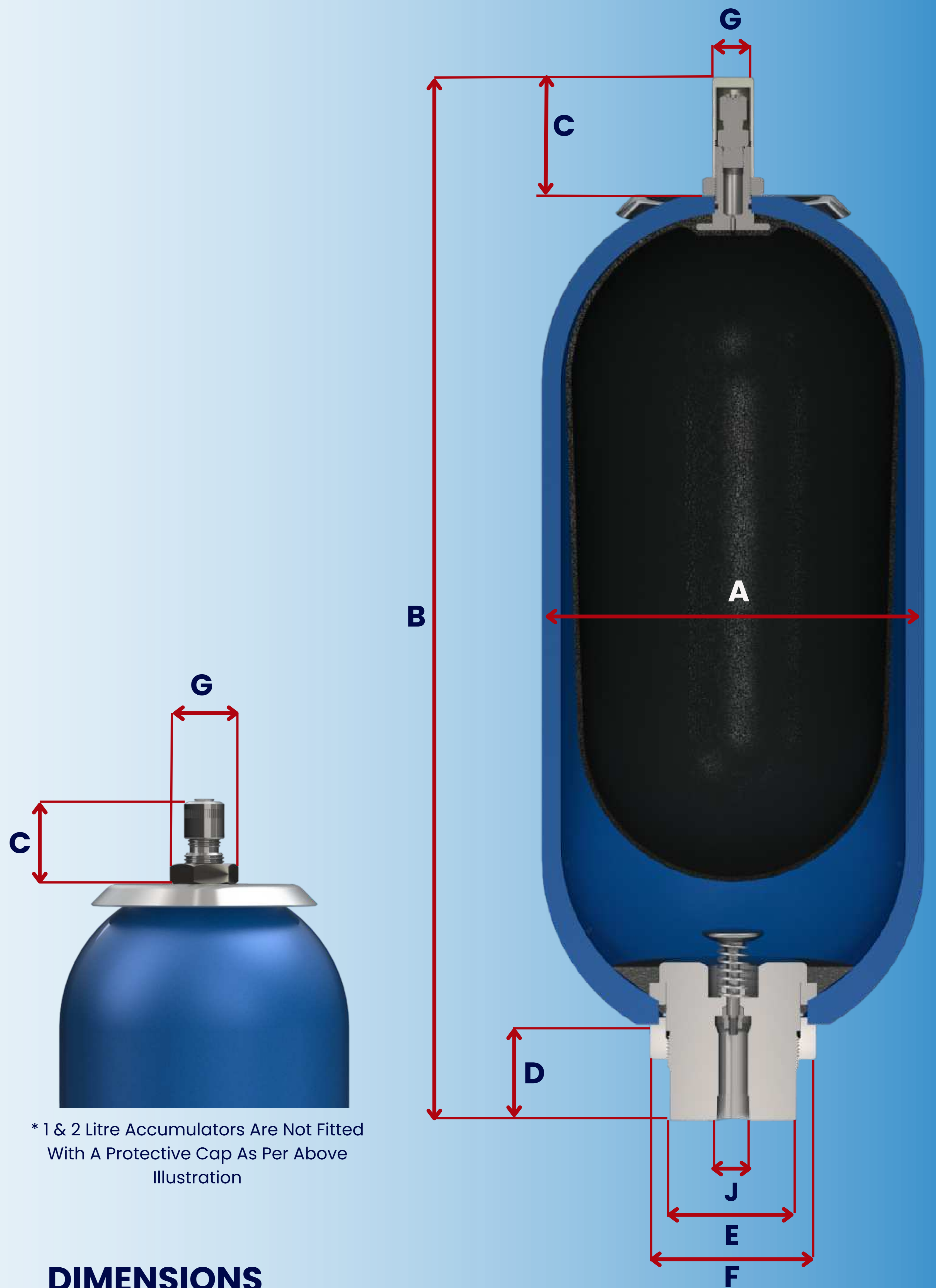
- SAE AS4059 Class 6B-F or NAS 1638 Available
- Medium: Water Glycols & Mineral Oils

EXTERNAL COATING:

- Special Offshore Topside Paint Specifications Available Upon Request
 - Norsok M501 System Coatings
- Material Certification:
- BS EN 10204-3.1 For Major Pressure Retaining Components
 - C of C, D of C & Process Certification

ACCESSORIES AVAILABLE:

- Clamps & Brackets (Carbon & Stainless Steel)
 - Fluid Side Safety Blocks (Optional relief valves)
 - Portable Charging Sets
 - Internal Electroless Nickel Plating (ENP)
- Permanent Charging Blocks:
- 1/4" BSP Gas Valve Connection
 - Burst Disc (Option)
 - Various Connections Available



DIMENSIONS

Nominal Capacity (Litres)	Gas Volume (Litres)	Weight (kg)	ø A (mm)	B Max. (mm)	C (mm)	D (mm)	ø E (mm)	ø F (mm)	ø G* (mm)	J (NPT)
1.00	1.25	4.5	114	290	29	65	45	63	27	1/2"
2.00	2.25	11	114	440	29	65	45	63	27	1/2"
4.00	3.75	13	170	420	70	55	60	79	25	1/2"
10.00	9.25	45	229	550	70	60	76	100	25	1/2"
20.00	18.75	65	229	852	70	60	76	100	25	1/2"
25.00	25.75	85	229	1130	70	60	76	100	25	1/2"
35.00	35.25	100	229	1380	70	60	76	100	25	1/2"
50.00	49.25	135	229	1895	65	60	76	100	63.5	1/2"

SPECIFICATION:

High Pressure Oil & Gas Bladder Accumulator

- Capacity: 10 to 50 Litre
- Shell Material: Chromium Molybdenum Alloy Steel Connection Material: Stainless Steel
- Gas Connection: ¼" BSP Male Gas Valve (316 Stainless Steel)
- Fluid Connection: See Table Below
- Maximum Working Pressure: 690 Bar
- Design Pressure: 690 Bar
- Hydrostatic Test Pressure: 986.7 Bar
- Metallic Design Temperature: -40°C to +80°C (Standard)
- Elastomeric Operating Temperature: Various Elastomers Available
- Design Code: BS EN 14359
- Approval: PED 2014/68/EU
- Dimensions & Weight: See Table Below

BLADDER & ELASTOMER:

- Available In A Range Of Elastomers To Suit Operating Conditions

FLUSHING:

- SAE AS4059 Class 6B-F or NAS 1638 Available
- Medium: Water Glycols & Mineral Oils

EXTERNAL COATING:

- Special Offshore Topside Paint Specifications Available Upon Request
- Norsok M501 System Coatings

MATERIAL CERTIFICATION:

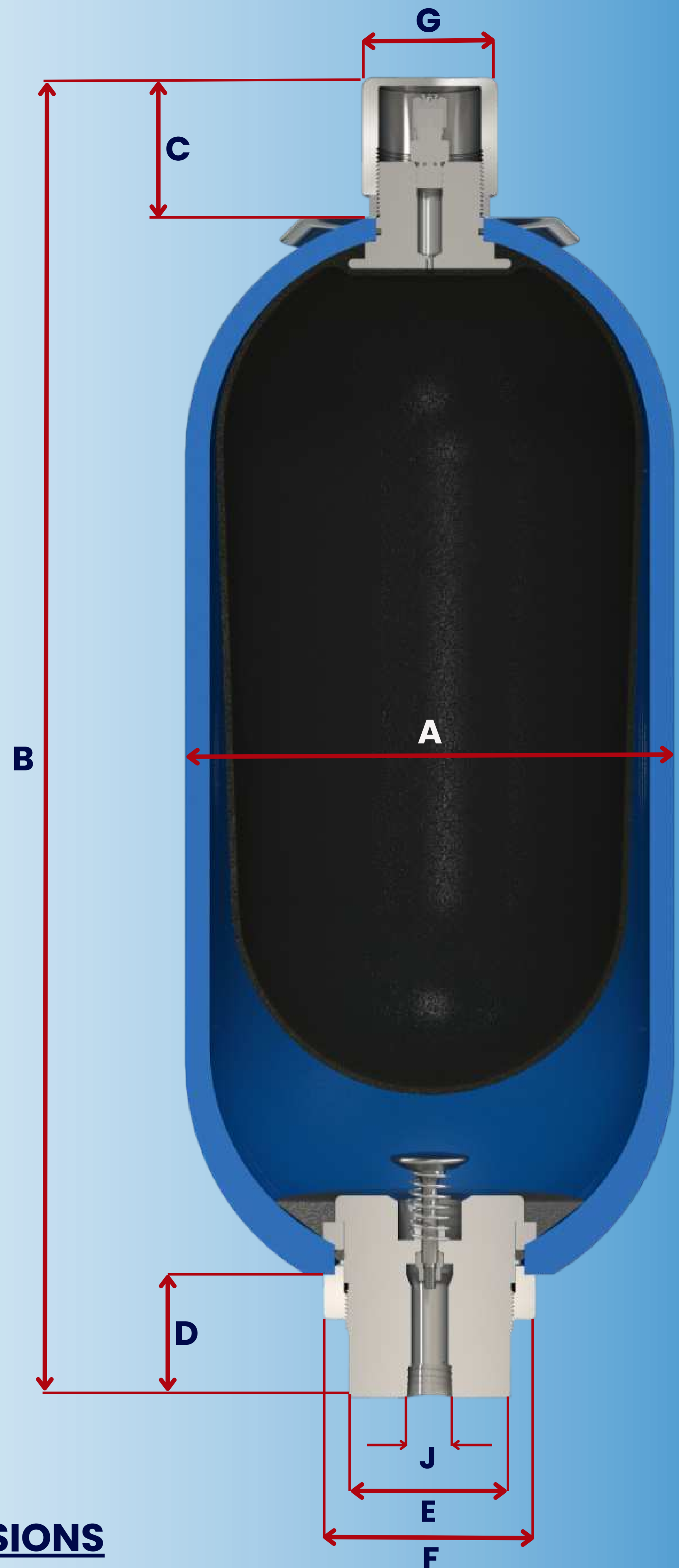
- BS EN 10204-3.1 For Major Pressure Retaining Components
- C of C, D of C & Process Certification

ACCESSORIES AVAILABLE:

- Clamps & Brackets (Carbon & Stainless Steel)
- Fluid Side Safety Blocks (Optional relief valves)
- Portable Charging Sets
- Internal Electroless Nickel Plating (ENP)

PERMANENT CHARGING BLOCKS:

- ¼" BSP Gas Valve Connection
- Burst Disc (Option)
- Various Connections Available



DIMENSIONS

Nominal Capacity (Litres)	Gas Volume (Litres)	Weight (kg)	ø A (mm)	B Max. (mm)	C (mm)	D (mm)	ø E (mm)	ø F (mm)	ø G (mm)	J (NPT)
10.00	9.25	65	245	553	65	63	81	105	63.5	1/2"
20.00	18.75	95	245	858	65	63	81	105	63.5	1/2"
35.00	35.25	155	245	1383	65	63	81	105	63.5	1/2"
50.00	49.25	210	245	1888	65	63	81	105	63.5	1/2"

SPECIFICATION:

Standard Pressure Industrial Bladder Accumulator

- Capacity: 1 to 50 Litre
- Shell Material: Chromium Molybdenum Alloy Steel
- Connection Material: Carbon (Up To 345 Bar) Or Stainless Steel (Up To 420 Bar)
- Gas Connection: 1/4" BSP Male Gas Valve (316 Stainless Steel)
- Fluid Connection: See Table Below
- Maximum Working Pressure: 345/420 Bar
- Design Pressure: 345/420 Bar
- Hydrostatic Test Pressure: 493.35/600.6 Bar
- Metallic Design Temperature: -40°C to +80°C (Standard)
- Elastomeric Operating Temperature: Various Elastomers Available
- Design Code: BS EN 14359
- Approval: PED 2014/68/EU
- Dimensions & Weight: See Table Below

BLADDER & ELASTOMER:

- Available In A Range Of Elastomers To Suit Operating Conditions

FLUSHING:

- SAE AS4059 Class 6B-F or NAS 1638 Available
- Medium: Water Glycols & Mineral Oils

EXTERNAL COATING:

- Special Offshore Topside Paint Specifications Available Upon Request
- Norsok M501 System Coatings

MATERIAL CERTIFICATION:

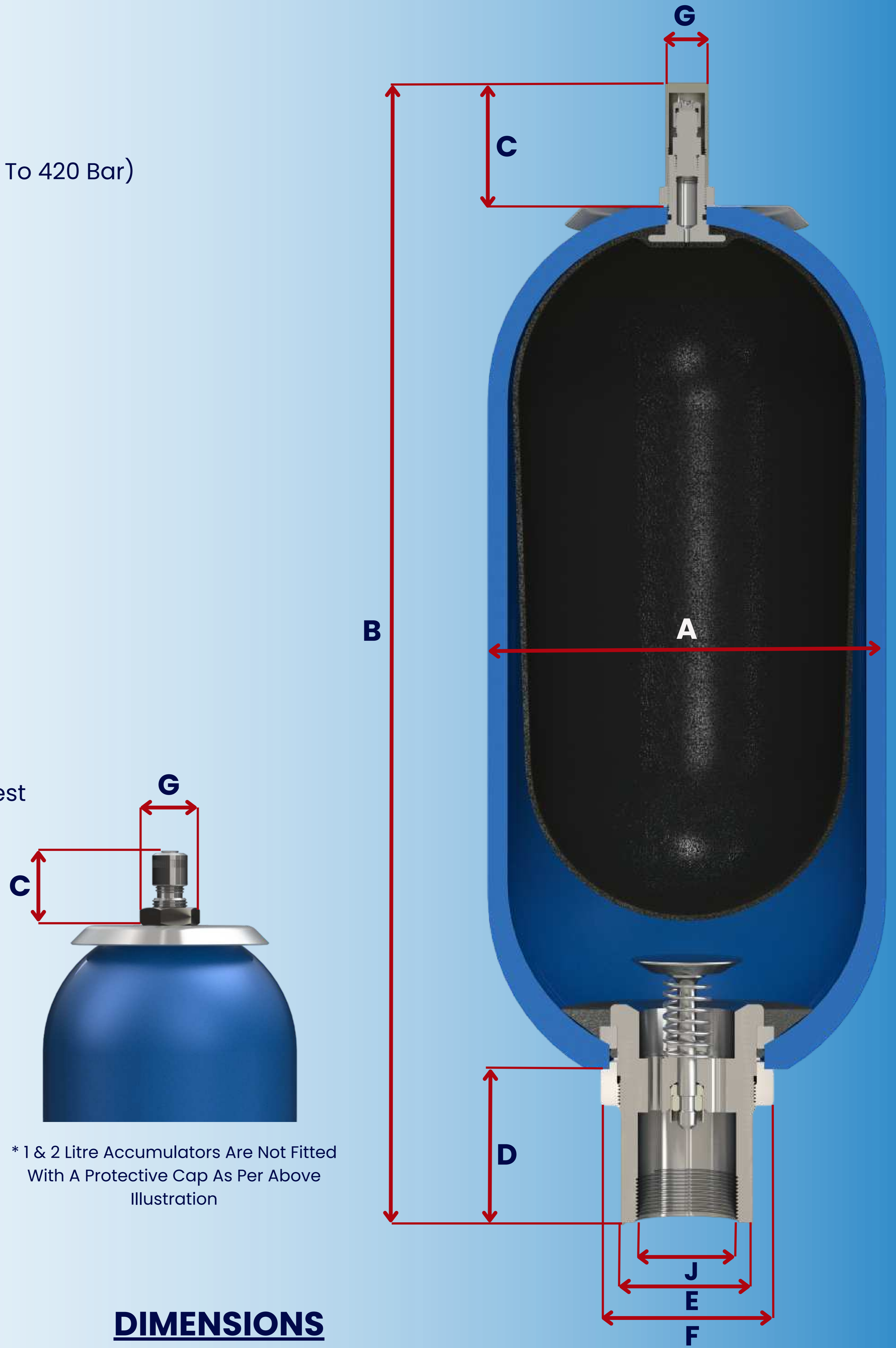
- BS EN 10204-3.1 For Major Pressure Retaining Components
- C of C, D of C & Process Certification

ACCESSORIES AVAILABLE:

- Clamps & Brackets (Carbon & Stainless Steel)
- Fluid Side Safety Blocks (Optional relief valves)
- Portable Charging Sets
- Internal Electroless Nickel Plating (ENP)

PERMANENT CHARGING BLOCKS:

- 1/4" BSP Gas Valve Connection
- Burst Disc (Option)
- Various Connections Available



DIMENSIONS

Nominal Capacity (Litres)	Gas Volume (Litres)	Weight (kg)	ø A (mm)	B Max. (mm)	C (mm)	D (mm)	ø E (mm)	ø F (mm)	ø G* (mm)	J (BSP)
1.00	1.25	4.5	114	290	29	65	45	63	27	1"
2.00	2.25	11	114	440	29	65	45	63	27	1"
4.00	3.75	13	170	450	70	90	60	79	25	1 1/4"
10.00	9.25	45	229	595/580	70	105	76	100	25	2"
20.00	18.75	65	229	897/882	70	105	76	100	25	2"
25.00	25.75	85	229	1175/1160	70	105	76	100	25	2"
35.00	35.25	100	229	1425/1410	70	105	76	100	25	2"
50.00	49.25	135	229	1940/1925	65	105	76	100	63.5	2"

SPECIFICATION:

3,000/4,000 PSI ASME VIII Division 1 (U Stamped) Bladder Accumulator

- Capacity: 10 to 57 Litre (2.5 to 15 US Gallon)
- Shell Material: Chromium Molybdenum Alloy Steel
- Connection Material: Stainless Steel
- Gas Connection: ¼" BSP Male Gas Valve (316 Stainless Steel)
- Fluid Connection: See Table Below (Others Available Upon Request)
- Maximum Working Pressure: 3,000 PSI/4,000 PSI (Appendix 22)
- Design Pressure: 3,000 PSI/4,000 PSI (Appendix 22)
- Hydrostatic Test Pressure: Design Pressure x 1.5
- Metallic Design Temperature: -40°C to +93°C (Standard)
- Elastomeric Operating Temperature: Various Elastomers Available
- Design Code: ASME VIII Division 1
- Approval: U Stamp
- Dimensions & Weight: See Table Below

BLADDER & ELASTOMER:

- Available In A Range Of Elastomers To Suit Operating Conditions

FLUSHING:

- SAE AS4059 Class 6B-F or NAS 1638 Available
- Medium: Water Glycols & Mineral Oils

EXTERNAL COATING:

- Special Offshore Topside Paint Specifications Available Upon Request
- Norsok M501 System Coatings

MATERIAL CERTIFICATION:

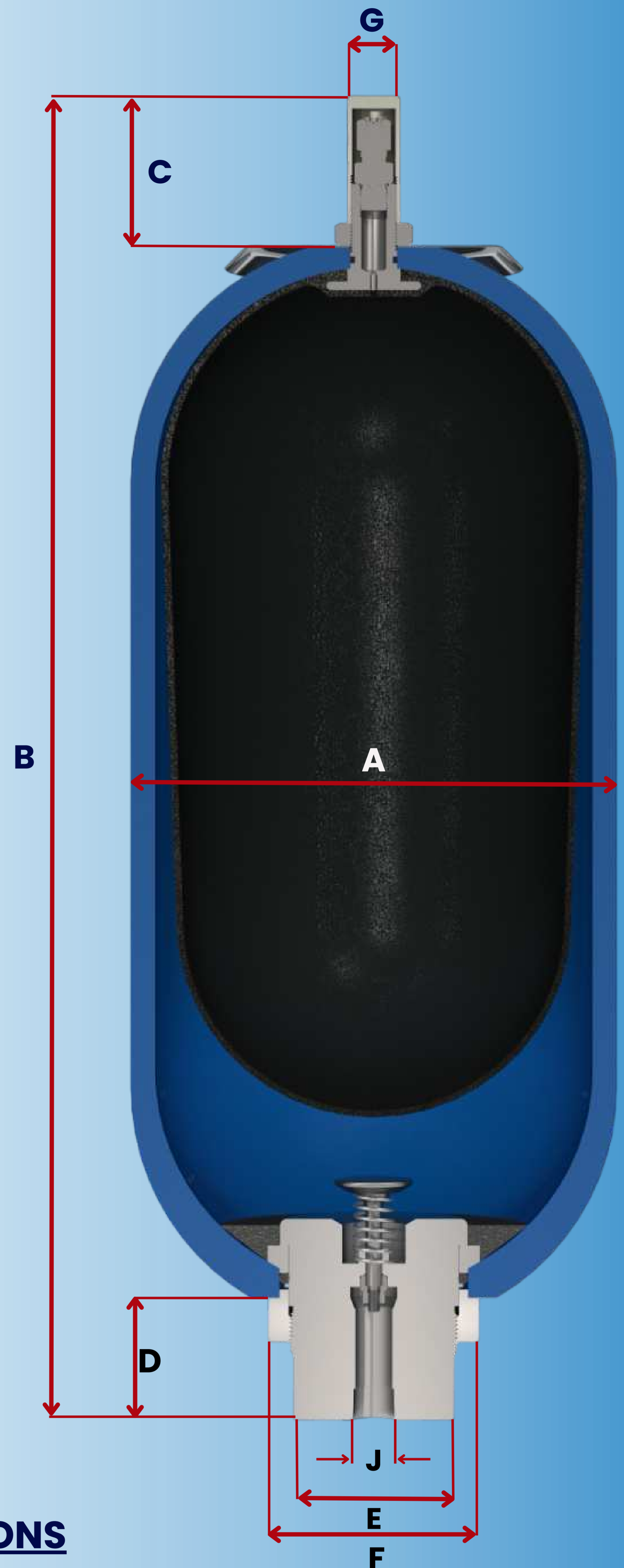
- BS EN 10204-3.1 For Major Pressure Retaining Components
- C of C, ASME U1A Form & Process Certification

ACCESSORIES AVAILABLE:

- Clamps & Brackets (Carbon & Stainless Steel)
- Fluid Side Safety Blocks (Optional relief valves)
- Portable Charging Sets
- Internal Electroless Nickel Plating (ENP)

PERMANENT CHARGING BLOCKS:

- ¼" BSP Gas Valve Connection
- Burst Disc (Option)
- Various Connections Available



DIMENSIONS

Nominal Capacity (Litres)	Gas Volume (Litres)	Weight (kg)	ø A (mm)	B Max. (mm)	C (mm)	D (mm)	ø E (mm)	ø F (mm)	ø G (mm)	J (NPT)
10.00	9.25	45	229	542	70	60	76	100	25	1/2"
20.00	18.75	65	229	854	70	60	76	100	25	1/2"
35.00	35.25	100	229	1390	70	60	76	100	25	1/2"
50.00	49.25	135	229	1894	70	60	76	100	25	1/2"
57.00	54.5	140	229	1975	70	60	76	100	25	1/2"

SPECIFICATION:

6666 PSI ASME VIII Division 1 (U Stamped) Bladder Accumulator

- Capacity: 10 to 57 Litre (2.5 to 15 US Gallon)
- Shell Material: Chromium Molybdenum Alloy Steel
- Connection Material: Stainless Steel
- Gas Connection: ¼" BSP Male Gas Valve (316 Stainless Steel)
- Fluid Connection: See Table Below (Others Available Upon Request)
- Maximum Working Pressure: 6666 PSI
- Design Pressure: 6666 PSI
- Hydrostatic Test Pressure: Design Pressure x 1.5
- Metallic Design Temperature: -40°C to +93°C (Standard)
- Elastomeric Operating Temperature: Various Elastomers Available
- Design Code: ASME VIII Division 1
- Approval: U Stamp
- Dimensions & Weight: See Table Below

BLADDER & ELASTOMER:

- Available In A Range Of Elastomers To Suit Operating Conditions

FLUSHING:

- SAE AS4059 Class 6B-F or NAS 1638 Available
- Medium: Water Glycols & Mineral Oils

EXTERNAL COATING:

- Special Offshore Topside Paint Specifications Available Upon Request
- Norsok M501 System Coatings

MATERIAL CERTIFICATION:

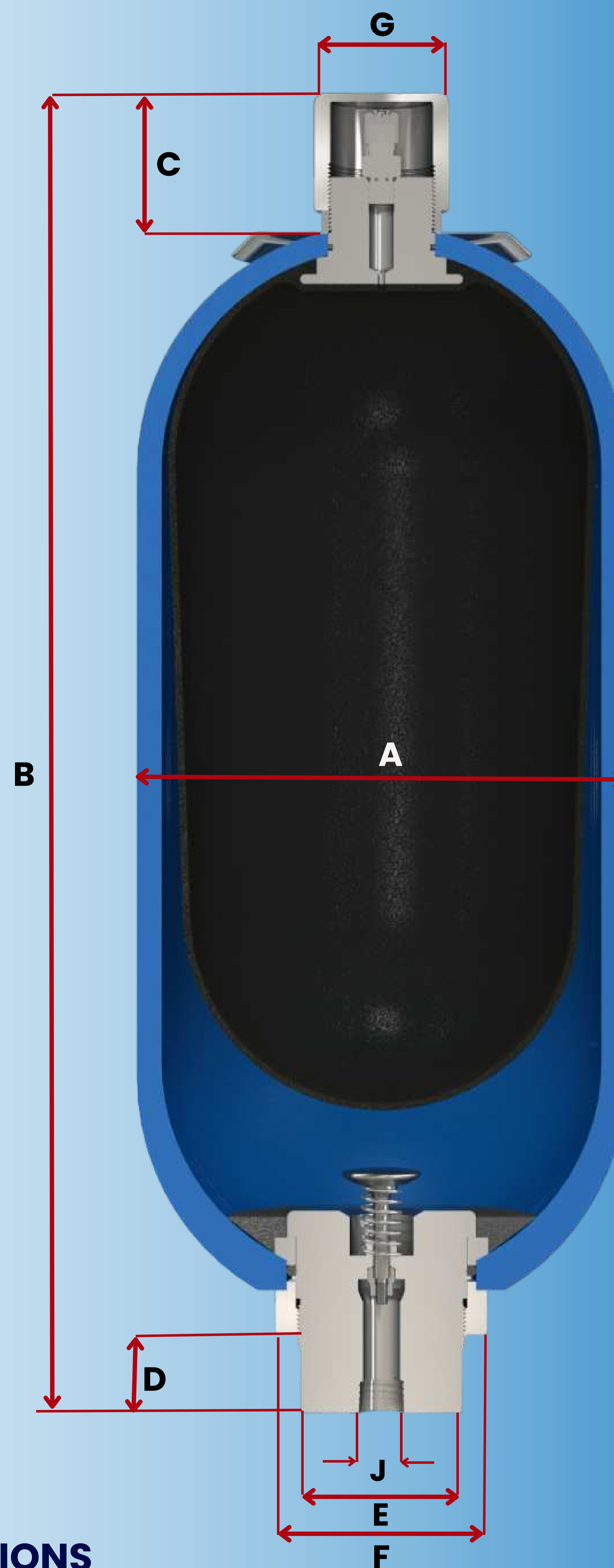
- BS EN 10204-3.1 For Major Pressure Retaining Components
- C of C, ASME U1A Form & Process Certification

ACCESSORIES AVAILABLE:

- Clamps & Brackets (Carbon & Stainless Steel)
- Fluid Side Safety Blocks (Optional relief valves)
- Portable Charging Sets
- Internal Electroless Nickel Plating (ENP)

PERMANENT CHARGING BLOCKS:

- ¼" BSP Gas Valve Connection
- Burst Disc (Option)
- Various Connections Available



DIMENSIONS

Nominal Capacity (Litres)	Gas Volume (Litres)	Weight (kg)	ø A (mm)	B Max. (mm)	C (mm)	D (mm)	ø E (mm)	ø F (mm)	ø G (mm)	J (NPT)
10.00	9.25	75	245	560	65	63	76	100	63.5	1/2"
20.00	18.75	105	245	865	65	63	76	100	63.5	1/2"
35.00	35.25	165	245	1395	65	63	76	100	63.5	1/2"
50.00	49.25	220	245	1900	65	63	76	100	63.5	1/2"
57.00	54.5	245	245	1980	65	63	76	100	63.5	1/2"

SPECIFICATION:

10000 PSI ASME VIII Division 1 (U Stamped) Bladder Accumulator

- Capacity: 10 to 57 Litre (2.5 to 15 US Gallon)
- Shell Material: Chromium Molybdenum Alloy Steel
- Connection Material: Stainless Steel
- Gas Connection: ¼" BSP Male Gas Valve (316 Stainless Steel)
- Fluid Connection: See Table Below (Others Available Upon Request)
- Maximum Working Pressure: 10000 PSI
- Design Pressure: 10000 PSI
- Hydrostatic Test Pressure: Design Pressure x 1.5
- Metallic Design Temperature: -40°C to +93°C (Standard)
- Elastomeric Operating Temperature: Various Elastomers Available
- Design Code: ASME VIII Division 1
- Approval: U Stamp
- Dimensions & Weight: See Table Below

BLADDER & ELASTOMER:

- Available In A Range Of Elastomers To Suit Operating Conditions

FLUSHING:

- SAE AS4059 Class 6B-F or NAS 1638 Available
- Medium: Water Glycols & Mineral Oils

EXTERNAL COATING:

- Special Offshore Topside Paint Specifications Available Upon Request
- Norsok M501 System Coatings

MATERIAL CERTIFICATION:

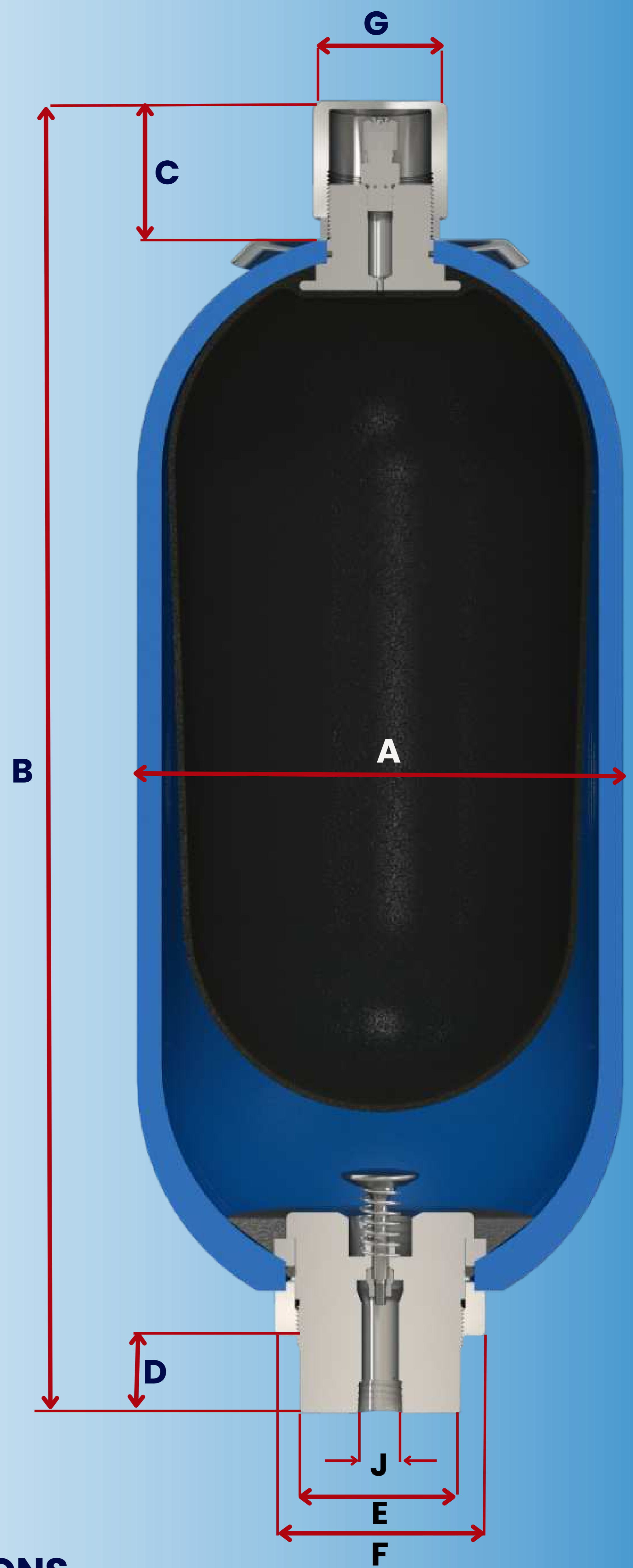
- BS EN 10204-3.1 For Major Pressure Retaining Components
- C of C, UIA Form & Process Certification

ACCESSORIES AVAILABLE:

- Clamps & Brackets (Carbon & Stainless Steel)
- Fluid Side Safety Blocks (Optional relief valves)
- Portable Charging Sets
- Internal Electroless Nickel Plating (ENP)

PERMANENT CHARGING BLOCKS:

- ¼" BSP Gas Valve Connection
- Burst Disc (Option)
- Various Connections Available



DIMENSIONS

Nominal Capacity (Litres)	Gas Volume (Litres)	Weight (kg)	ø A (mm)	B Max. (mm)	C (mm)	D (mm)	ø E (mm)	ø F (mm)	ø G (mm)	J (NPT)
10.00	9.25	100	265/267	587	95	58	76	100	70	1/2"
20.00	18.75	160	265/267	905	95	58	76	100	70	1/2"
35.00	35.25	255	265/267	1429	95	58	76	100	70	1/2"
50.00	49.25	350	265/267	1943	95	58	76	100	70	1/2"
57.00	54.5	360	265/267	2000	95	58	76	100	70	1/2"