



Accumulators, Accessories and Spares

HY10-7000/OT rev2 - EN

Effective August 1st, 2016

aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



ENGINEERING YOUR SUCCESS.

Table of Contents

Chinese Accumulator Catalogue 2016	Table of Contents	2
	I Introduction	3
	I How to Size?	4
	I General Information Accumulators	5-8
I Bladder Accumulators Low Pressure	I EBV Series: How to order a Low Pressure Accumulator	9
	I EBV Series 0,5 to 200 Litres, 40, 50 and 80 bar, (PED CE,SELO Approved)	10-13
I Bladder Accumulators High Pressure	I EHV Series: General Information Bladder Accumulator	14
	I EHV Series: How to order a Bladder Accumulator	15
	I EHV Series 1 - 10 Litres, 250-350 bar (GB/T20663)	16-17
	I EHV-DA Series 10-160Litres, 250&330bar High Flow,(GB/T20663)	18-21
	I EHV-H Series 10 - 57Litres, 250bar, Very High Flow, (GB/T20663)	22-23
	I EHV Series 2.5 - 10 Litres, 350 bar, Flanged Fluid Port (GB/T20663)	24-25
	I EHV-DA Series 10 - 57 Litres, 250 and 330 bar, High Flow, Flanged Fluid Port (GB/T20663)	26-29
	I EHV Series 0,5 - 10 Litres, 350 bar, (PED CE)	30-31
	I EHV Series 1 - 20 Litres, 480 & 690 bar, (PED CE)	32-35
	I EHV-DA Series 10 - 57 Litres, 330 bar, High Flow, (PED CE)	36-37
	I EHV-H Series 10 - 57 Litres, 330 bar, Very High Flow, (PED CE)	38-39
	I EHV Series 2.5 - 10 Litres, 350 bar, Flanged Fluid Port, (PED CE)	40-41
	I EHV-DA Series 10 - 57 Litres, 330 bar, High Flow, Flanged Fluid Port, (PED CE)	42-43
	I EHV-DA Series 10 - 57 Litres, 3000 psi, High Flow (ASME)	44-45
	I EHV-DA Series 10 - 57 Litres, 5000 psi, High Flow (ASME)	46-47
I Regulations & Protections	I Regulation Table EBV and EHV	48-49
	I Corrosion Protection Bladder Accumulators	50
	I Bladder Materials and Types	51
I Diaphragm Accumulators	I General Information Diaphragm Accumulator	52
	I ELM Series: How to order a Diaphragm Accumulator	53
	I ELM Series 0.075 to 3.5 Litres, 140 - 350 bar	54-57
	I ELM Series 0.075 to 3.5 Litres, 140 - 350 bar, Low Temperature	58-61
I Piston Accumulators	I General Information Piston Accumulator	62
	I EHP Series: How to order a Piston Accumulators	63
	I EHP Series 1.0 to 350 Litres, 250-350bar	64-79
	I Regulations for EHP Piston Accumulators	80-81
	I A Series 250-350 bar Pistion Accumulator	82-83
	I A Series: How to order a Piston Accumulator	84-85
	I ACP Series 260-275bar 0.02-8 Litres	86-87
	I ACP Series: How to order a Piston Accumulator	88-89
I Attenuators	I General Information Attenuators	90
	I SH Series: How to order a Attenuator	91
	I SH Series 350 bar	92-93
I Accessories	I Clamps, Support Brackets & Mounting Frames	94-97
	I Charging Sets	98-101
	I Adaptors EHV	102
	I Safety Blocks	103-113
	I Gas Bottles	114-115

Introduction

Solutions developed by Parker Olaer are used in a large number of industrial sectors: aeronautics, chemistry, defence, mining, railway construction, Formula 1, machine tools, agriculture, oil and gas, metallurgy, renewable energies, etc.

This variety of applications requires extensive knowledge of the products and their major components, particularly the bladder. In order to reinforce its position, Parker Olaer is the co-owner of its main bladder supplier. For either a standard application or designing solutions for a specific requirement,

Parker Olaer engineers have the experience in elastomers and knowledge of the latest technological developments in metal and composite shells. This allows Parker Olaer to propose reduced weight accumulators and other design innovations.

We provide cost effective solutions based upon our customer's needs. Parker Olaer utilises comprehensive tools and resources including an applications database, CAD/CAM, finite element analysis, reliability studies and simulation software which enable us to optimise design and performance.

Olaer ACDAP Tianjin (China)

Founded in 2005, Olaer Tianjin is the Bladder Accumulator Center of Expertise in Eastern Asia region. Olaer Tianjin focus on High Speed Machinery, Mobile, Marine, Oil & Gas, Power Generation, Hybrid, Mining, Process, Industrial.



Manufacture:

- High Pressure and Low Pressure Bladder Accumulators up to 200 litres.
- Piston Accumulators up to 350 bar, up to 540 mm bore size.
- Bladder and Piston Accumulators for Mobile, Industrial, Wind-power, Water, Off-shore, Oil & Gas and Marine Applications.
- Diaphragm Accumulator up to 3.5 litres for Mobile and Industrial Applications.
- Attenuators
- Bladder Accumulator Batteries and Piston Accumulator with Gas Bottles.

Olaer Tianjin is "CE" module B and D certified, "SELO" certified. Olaer Tianjin manufactures Accumulators with multi approvals such as PED, ASME, GB, AS1210, NR13, DOSH, GOST.... For Marine Applications, Olaer Tianjin manufactures accumulators with Marine Type Approvals such as ABS, DNV, CCS, LR, BV..

Parker ACDAP Tianjin (China)

Established in 2005, Parker Hannifin Hydraulic (Tianjin) is the Piston Accumulator Center of Expertise in Eastern Asia region. Parker Hannifin Tianjin Focus on piston accumulators for industry & mobile markets .



Manufacture:

- PA Series Piston Accumulators up to 350 bar, up to 300 mm bore size.
- ACP Series Crimped Piston Accumulators up to 345 bar, up to 100 mm bore size.

Parker Hannifin Hydraulic (Tianjin) design, manufacture and supply Piston accumulators with SELO (China) and PED (CE) approvals.

Olaer ACDAP Bangalore (India)

30 year history, focus on Oil & Gas, Industrial, Chemical & Process Industries, Windmill and Mobile market developments.



Manufacture:

- High Pressure and Low Pressure Bladder and Piston Accumulators for Mobile, Industrial, Oil & Gas Applications.
- Piston Accumulators up to 350 bar, up to 350 mm bore size.
- Stainless Steel Bladder & Piston Accumulators for Oil & Gas with ASME Approvals.
- Pulsation Dampers in full Stainless Steel construction for chemical & Process industries.
- Diaphragm Accumulator up to 3.5 litres for Mobile and Industrial Applications.
- Flexible Separators.
- Bladder Accumulator Batteries and Piston Accumulator with Gas Bottles.
- Safety Blocks - Carbon Steel & Stainless Steel.

Parker Olaer India design, manufacture and supply accumulators as per Customer requirement including CE Certified.

Parker ACDAP Woodonga & Olaer ACDAP Sydney (NSW, Australia)

49 years history, Parker Hannifin Hydraulic Australia & Olaer Australia are the Piston and Bladder Accumulator Center of Expertise for the Australasia Region. Parker Hannifin Hydraulic and Olaer focus on Mining, Oil & Gas, Industrial and Mobile markets.



Manufacture:

- High Pressure Bladder Accumulator up to 200 ltr designed approved to Australian Workcover.
- Top Repairable Bladder Accumulators design approved to Australian Workcover.
- Diaphragm Accumulators up to 3.5 litres design approved to AS1210 for Mobile and Industrial Applications
- Piston Accumulators AS1210 and ASME approved, up to 210 bar, 2" to 6" Bore Size, 1 to 38 litres, Steel or Plated for water Service (Other size & pressure available on request)
- Hydran-Cushion Series 100 to 2000 litres, 16 Bar Water Surge Bladder Tanks for Oil & Gas and Mining Sectors
- Pulsation Dampers in Polypropylene and full Stainless Steel construction for chemical applications designed to PD5500 with CE approval and design approved to AS1210 on request.
- Bladder and Piston Accumulators for Wind-power, Water, Off-shore, Oil & Gas Applications
- Batteries of Accumulators

Parker Hannifin Hydraulic Australia and Olaer Australia design, manufacture and supply accumulators as per AS1210, PD5500, EN14359, AD2000 & ASME Standards. Marine certifications such as ABS and DNV are also available.

How to size?

Parker Olaer has developed very sophisticated simulation software to optimize accumulator sizing recommendations. The behaviour of accumulators used in applications such as pulsation dampening, surge alleviation, thermal expansion and energy storage can be simulated. Our software can be downloaded from our website www.parker.com/ACDE. You may also contact your local Parker Olaer office for sizing assistance.

The graph is useful to estimate the size of an accumulator used to store or deliver a specific volume of liquid within a given pressure range. These curves are the graphic representation of an adiabatic cycle (fast cycling rate - $N = 1.4$ perfect gas assumption) or isothermal cycle for an accumulator working at 20°C with a Pre-charge $P_0 = 0,9 P_1$.

They do not take into consideration the real gas compression correction factor, the real adiabatic coefficient and the polytropic rate of the application. Depending on the application data, the influence of these factors may be significant, and require that some calculations adjustments be made. The Parker Olaer simulation software takes all these factors into account.

Sizing of an accumulator to be installed in the following example conditions:

P2 : Maximum available pressure : 210 Bar

P1 : Minimum working pressure : 100 Bar

P0 : Nitrogen Pre-charge : 90 Bar

ΔV : Volume to be stored : 14L

Condition : Isothermal (No temperature variation)

A/Compression ration $\alpha = P_2/P_1 = 210/100 = 2,1$

B/From the value 2,1 on the α axis, draw a vertical line that intersects the isothermal reference curve in A.

C/From the value 14 on the ΔV axis, draw a vertical line. The intersection point of this line with the horizontal line meeting A indicates a required accumulator size of 32 L.

Calculation of the volume drawn off from an accumulator.

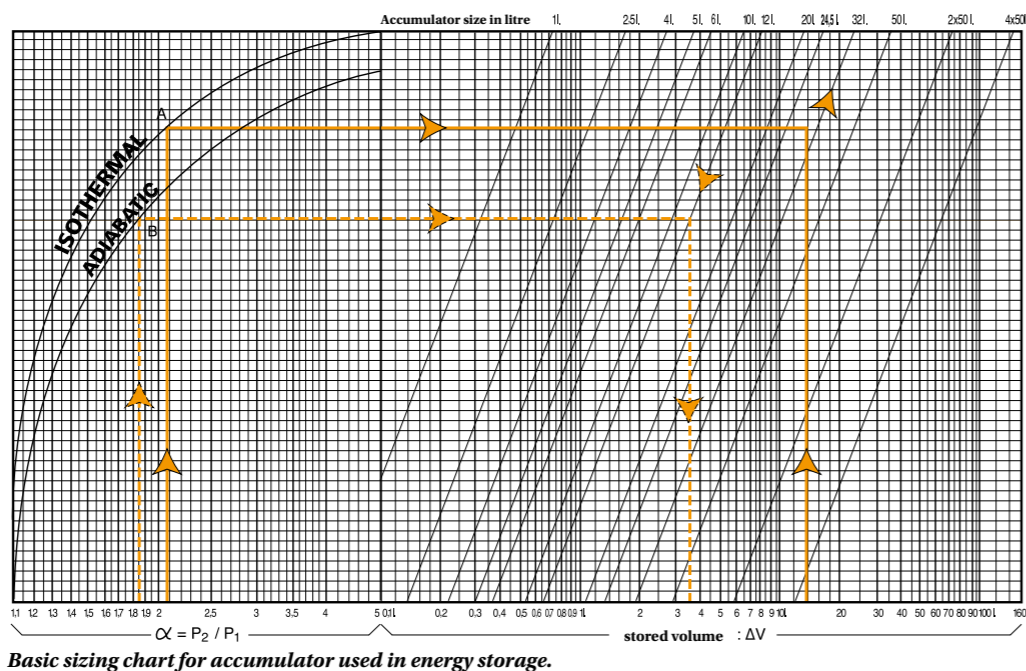
Accumulator size = 12 L

P2 = 185 Bar; P1 = 100 Bar;

P0 = 90 Bar; Adiabatic condition

$\alpha = P_2/P_1 = 185/100 = 1,85$

ΔV : 3,5 litres



***Reminder**

Isothermal: The transformation is said to be isothermal when the compression or expansion of the gas occurs at a rate slow enough to allow a good thermal exchange, allowing the gas to remain at constant temperature.

Adiabatic: The transformation is said to be adiabatic when the cycle is quick and does not allow a temperature exchange with the ambient media.

General Information Accumulators

Olaer, pioneer of high pressure equipment, was founded in 1938 by Jean Mercier. Using his experience, passion for research and extensive knowledge of hydraulics in the demanding field of aeronautics, Mr. Mercier engineered the first gas loaded bladder accumulator. This has led to Olaer becoming the indisputable international leader in this field.

This variety of applications requires extensive knowledge of the products and their major components, particularly the bladder. In order to reinforce its position, Olaer is the co-owner of its main bladder supplier. For either a standard application or designing solutions for a specific requirement, Parker Olaer engineers have the experience in elastomers and knowledge of the latest technological developments in metal and composite shells. This allows Parker Olaer to propose reduced weight accumulators and other design innovations.

We provide cost effective solutions based upon our customer's needs. Parker Olaer utilizes comprehensive tools and resources including an applications database, CAD/CAM, finite element analysis, reliability studies and simulation software which enable us to optimize design and performance.



Operation

The Olaer gas loaded accumulator is an essential component for the optimum operation of a hydraulic circuit. In hydraulic circuits, the accumulator enables:

- An energy reserve which is instantaneously available to the system
- Compensation of pressure fluctuations and spikes.
- Pump pulsation dampening

Advantages/Your benefits

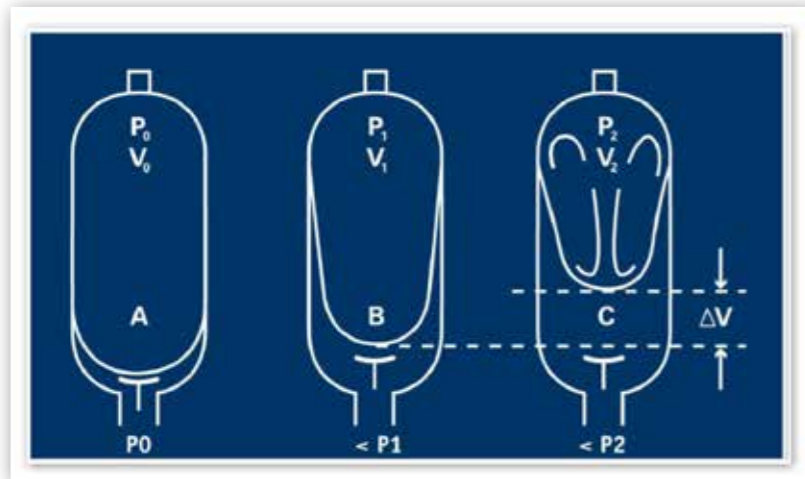
The gas loaded bladder accumulators provide major advantages in terms of the energy output of the device and maintenance of the installation:

- **Reduction in working costs**
 - Reduces installed electrical power
 - Significant energy saving
- **Increase lifetime of equipment**
 - Reduces pulsations
 - Protects against pressure peaks
- **Reduction in maintenance cost**
 - Reduces wear of hydraulic components
 - Requires minimum maintenance of the installation

Operating principle

Operation of the Olaer gas loaded bladder accumulator is based on the considerable difference in compressibility between a gas and a liquid, enabling a large quantity of energy to be stored in an extremely compact form. This enables a liquid under pressure to be accumulated, stored and recovered at any time.

Its special design allows the bladder (the strategic component) to compress the gas and usually form into three lobes in order for the accumulator to store, then to deliver the fluid under pressure, as required.



V0 = Capacity in nitrogen of the accumulator
V1 = Gas volume at the minimum hydraulic pressure
V2 = Gas volume at the maximum hydraulic pressure
 ΔV = Returned and/or stored volume of working fluid between P1 and P2
P0 = Initial preload of the accumulator
P1 = Gas pressure at the minimum hydraulic pressure
P2 = Gas pressure at the maximum hydraulic pressure

A - Bladder in the Pre-charge position, which means that the accumulator only contains nitrogen. The anti-extrusion system closes the hydraulic orifice which prevents the destruction of the bladder. In low pressure accumulators the bladder rests against the grid.

B - Position at the minimum operating pressure. There must be a certain amount of fluid between the bladder and the hydraulic orifice, such that the anti-extrusion system does not close the hydraulic orifice.

C - Position at the maximum operating pressure. The volume difference between the minimum and maximum positions of the operating pressures represents the working fluid quantity.

Maximum pressure differential (P2/P0): 4:1

Technical Characteristics

The accumulator comprises of a pressure vessel including valve stem device, a rubber bladder and an anti-extrusion system.

- Shell material options include alloyed steel, stainless steel, aluminium, titanium and composites.
- Various bladder materials available which are compatible with a range of fluids and temperatures.
- Different anti-extrusion systems can be used for specific applications (fluidport assembly for high pressure, grid for low pressure, or button).

Taking into account the different needs of various applications, Parker Olaer proposes different protections external and/or internal: Bare metal, nickel plating, epoxy paint, PTFE, Rilsan® and phenolic coating. This extensive range enables us to offer accumulators operating from - 50 to +150°C with pressures of up to 1500 Bar and capacities of up to 575 litres.

As the market leader in bladder type accumulators, Parker Olaer has participated in the development of the EN 14359:2006 standard, which specifies the material, design, manufacturing, fatigue tests, safety devices and documentation (including the instruction manual), for pressure accumulators and gas bottles for hydraulic applications.



Different elastomer options

Parker Olaer can offer many different elastomer options depending on the application where the product is used. Two of the most important parameters for deciding the rubber compound to be used is:

1. The minimum and maximum operating temperature of the system.
2. The fluid type in the system.

The most common bladder for hydraulic systems with mineral oil is Nitrile (also called NBR or Buna). A host of other rubbers such as Butyl, Hydrin®, Viton® or EPDM and more are available. Please contact your local Parker Olaer office for your specific application.

Also, be sure to note that even if you change the bladder to one with particularly high or low temperature characteristics, the pressure vessel temperature range (TS) does not change. Check that the operating temperature range of the new chosen bladder is included in the temperature range of the pressure vessel.

Regulations and Approvals

Parker Olaer designs and manufactures gas loaded accumulators for use in all countries, as well as other industry specific approvals including oil & gas, naval and nuclear. The main regulations in force are PED for European market, ASME for US market and SELO for Chinese market.

As a service, Parker Olaer can recommend the appropriate regulations applicable if customers know the country where the accumulator will be installed.

When operating in dangerous and explosive environments, Parker Olaer has designed an ATEX Group II cat. 2 and 3 range of accumulators.

Some of these regulations call for the use of safety devices to protect the accumulator against over pressure. Solutions may include hydraulic safety blocks, relief valves or gas side safety devices such as burst discs and fuse plugs.

Parker Olaer has designed and proposed a complete range of safety devices suitable for the applicable regulations.

To meet the needs of our customers, Parker Olaer can supply accumulators with multiple approvals.

With regard to environmental concerns Parker Olaer's product range complies with REACH regulations.



Top Repairable accumulators

This accumulator type can be serviced from both the fluid side or the gas side. The design utilizes many standard accumulator parts, but is unique in that it does not have to be removed from the system in order to change the bladder. This can in many applications be a great advantage. The gas end adaptor mechanically locks to prevent disassembly under pressure.



High flow bladder accumulators

Parker Olaer has several versions of bladder accumulators for high flow applications, depending on how high the flow requirements will be. The first step up from our standard is a high flow version with a 2" fluid port, where the internal geometrics of the port body and poppet valve are specifically designed for that purpose. The next step is a 2 1/2" fluid port which will provide even higher flows. For ultimate demands a 4 1/2" fluid port can also be provided.

Please note that the last two solutions require shells with larger openings, and are not always available in all shell sizes. Parker Olaer can tailor make the different parts to suit your technical needs.



Transfer barrier

This range is a special adaptation of the bladder accumulator, with a pipe connected to the gas side of the accumulator. The most common application is to use the transfer accumulator in energy storage applications. The accumulator is connected to an additional volume of nitrogen, for example a gas cylinder. This increases the total volume of the system. Such systems are often mounted together in a battery or rack type installation.

A Transfer Barrier Accumulator can also be used to separate two liquids or a gas and liquid. It is usually a question of separating two liquids, one of which is aggressive or contaminated. To limit the number of parts in contact with the aggressive liquid, it is common practice to put the aggressive fluid inside the bladder and therefore connect on what is normally the gas side.

Dependant upon the accumulator volume, the displaced volume must not exceed 80% of the volume of the transfer accumulator.

EBV Series: How to order a low pressure accumulator

Technical Characteristics

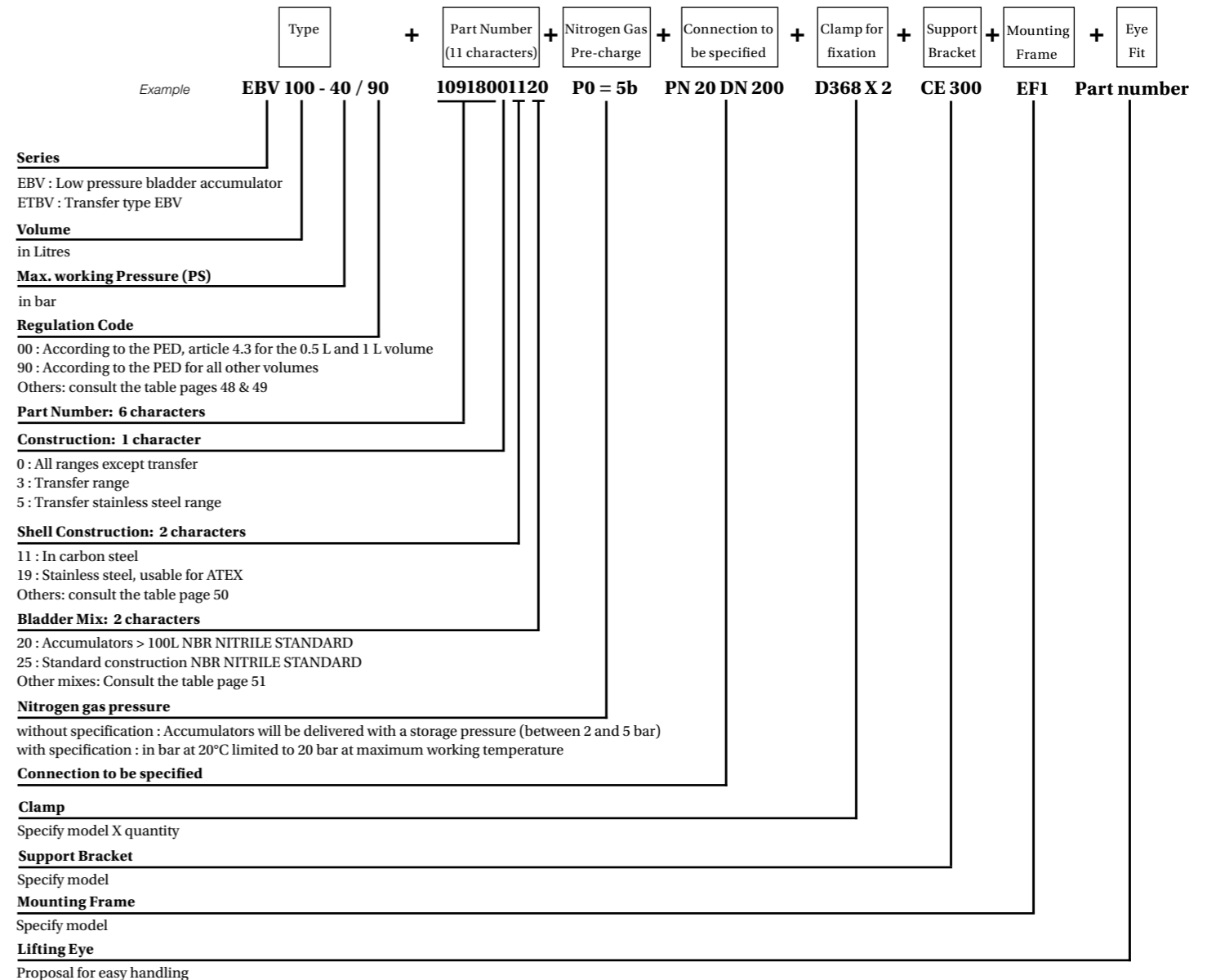
The accumulator comprises a forged or welded steel shell, a rubber bladder and anti-extrusion system.

- Shell material options include alloyed steel, stainless steel, aluminium, titanium and composites.
- Various bladder materials available which are compatible with a range of fluids and temperatures.
- Anti-extrusion system; perforated bushing.

Taking into account the different needs of various applications, Parker Olaer offers different protections external and/or internal: Bare metal, nickel plating, epoxy paint, PTFE, Rilsan® and phenolic

coating. This extensive range enables us to offer accumulators operating from - 40 to +130°C with pressures of up to 80 Bar and capacities of up to 575 litres. ATEX versions are also available for some accumulators in fluid groups 1 or 2 as per Article 9 section 2.1 and 2.2 of PED.

As the market leader in bladder type accumulators, Parker Olaer has participated in the development of the EN 14359:2006 standard, which specifies the material, design, manufacturing, fatigue tests, safety devices and documentation (including the instruction manual), for pressure accumulators and gas bottles for hydraulic applications.

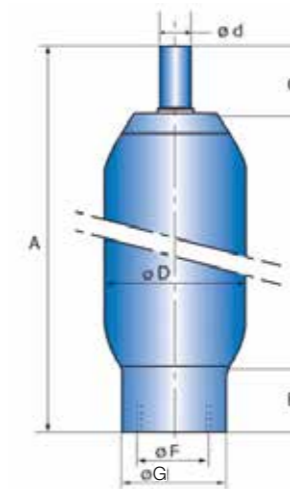
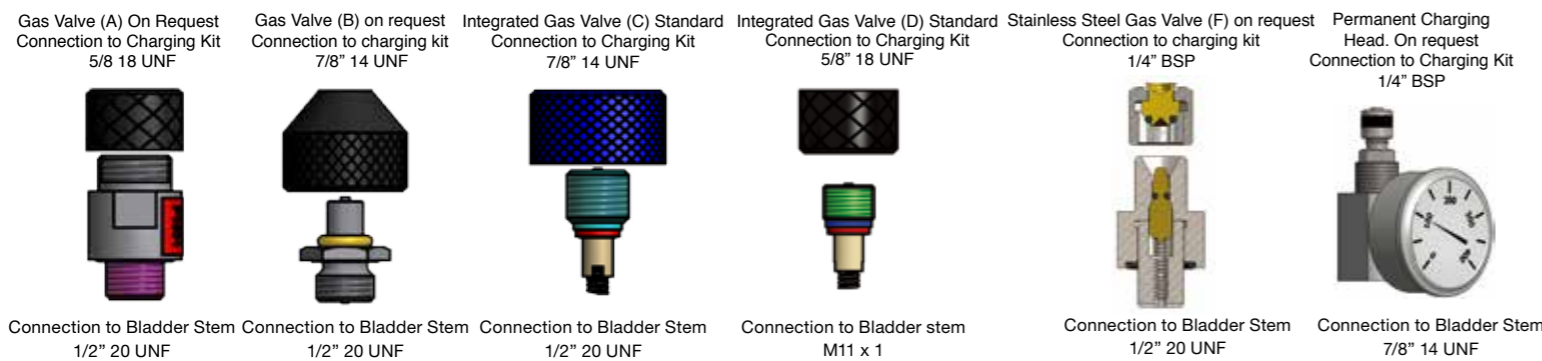


EBV Series 40, 50 & 80 bar, 0.5 to 200 Litres

Standard version (**Carbon Steel** shell/NBR mix) for mineral oils temperature from - 15° up to 100°C
 Stainless Steel Shell available on request
 According to PED 2014/68/EU, Fluid Group 2, SELO Approved
Part numbers, Accessories, Dimensions

Type Part number	Valve model see drawing	Pre-charge 1 - 20 bar	Adaptor Threaded Part number	Flange		Clamps Model (quantity) Part number	Support Bracket Model Part number	Lifting Eye on gas side Model Part number	Complete Repair Kit Model Part number	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Weight kg	O-ring ø int x ø tore	Dimensions in mm						
				Model Part number	Model Part number										A max height	B	C	øD max	ød	G connection	øH
EBV 0.5-50/85* 11209901125	D	751052	G 1" cyl 04557000223	-	-	E95 (1) 20250803648	-	-	KIT EBV 0.5-50/85 19002900225	EBV 0.5-50/85*	0.5	50	3	54 x 3	245	52	28	90	16	G2" cyl.	68
EBV 1-80/85* 11031001125	C	751053	G 1" cyl 04557000223	1½" ANSI 150 lbs 04542000123	1½" ANSI 300 lbs 04524100123	E114 (1) 20251003648	CE 89 20151903620	-	KIT EBV 1-80/85 19044300225	EBV 1-80/85*	1	80	5	54 x 3	310	47	66	116	22.5	G2" cyl.	68
EBV 2.5-80/88 11031101125	C	751054	G 1" cyl 04557000223	1½" ANSI 150 lbs 04542000123	1½" ANSI 300 lbs 04524100123	E114 (2) 20251003648	CE 89 20151903620	-	KIT EBV 2.5-80/88 19044400225	EBV 2.5-80/88	2.3	80	10	54 x 3	484	47	66	116	22.5	G2" cyl.	68
EBV 5-80/88 11231201125	C	751056	G 1" cyl 04557000223	1½" ANSI 150 lbs 04542000123	1½" ANSI 300 lbs 04524100123	E114 (2) 20251003648	CE 89 20151903620	-	KIT EBV 5-80/88 19044500225	EBV 5-80/88	5	80	17	54 x 3	867	47	66	116	22.5	G2" cyl.	68
EBV 10-40/BF 11211001125	A	751057	G 2" cyl 04570300223	4" ANSI 150 lbs 04500300123	4" ANSI 300 lbs 04520800123	D215 (2) 20251403648	CE 159A 20109003620	10912700200	KIT EBV 10-40/BF 19043900225	EBV 10-40/BF	10	40	13	96 x 4	454	51	75	212	22.5	G3½" cyl.	120
EBV 20-40/BF 11211101125	A	751058	G 2" cyl 04570300223	4" ANSI 150 lbs 04500300123	4" ANSI 300 lbs 04520800123	D215 (2) 20251403648	CE 159A 20109003620	10912700200	KIT EBV 20-40/BF 19044000225	EBV 20-40/BF	18	40	22	96 x 4	776	51	75	212	22.5	G3½" cyl.	120
EBV 32-40/BF 11211401125	A	751059	G 2" cyl 04570300223	4" ANSI 150 lbs 04500300123	4" ANSI 300 lbs 04520800123	D215 (2) 20251403648	CE 159A 20109003620	10912700200	KIT EBV 32-40/BF 19044100225	EBV 32-40/BF	34	40	37	96 x 4	1307	51	75	212	22.5	G3½" cyl.	120
EBV 50-40/BF 11211501125	A	751060	G 2" cyl 04570300223	4" ANSI 150 lbs 04500300123	4" ANSI 300 lbs 04520800123	D215 (2) 20251403648	CE 159A 20109003620	10912700200	KIT EBV 50-40/BF 19054700225	EBV 50-40/BF	50	40	51	96 x 4	1829	51	75	212	22.5	G3½" cyl.	120
EBV 100-20/BF 11212201125	A	751061	-	8" ANSI 150 lbs 04500800123	8" ANSI 300 lbs 04500900123	D368 (2) 20127403625	CE 300 20150800100	-	KIT EBV 100-40/BF 19044600220	EBV 100-20/BF	90	40	124	196.21 x 5.33	1317	158	93	371	80	M205x3	224
EBV 200-20/BF 11212301120	A	751062	-	8" ANSI 150 lbs 04500800123	8" ANSI 300 lbs 04500900123	D368 (2) 20127403625	CE 300 20150800100	-	KIT EBV 200-40/BF 19044700220	EBV 200-20/BF	207	40	215	196.21 x 5.33	2529	158	93	371	80	M205x3	224

* according to the PED, article 4.3



Accumulators are delivered with the nitrogen pre-charge 3 bar.
 The charging pressure for low pressure accumulators must never exceed 20 bar at the maximum operating temperature.

Above dimensions are in mm and are subject to manufacturing tolerances.

Adaptors EBV Carbon Steel

Accumulator model	Connection of accumulator ø F gas cyl.	Connection ø I gas cyl.	Part Number	Shape	J/Flats	K	O-ring & Back-up Ring
EBV 0,5 to 5 Litres 50 & 80 Bar	2"	1"	04557000223	A	-	13	A. O-Ring 54 x 3
		Blind	04502400223	A	65	13	O-Ring 54 x 3
EBV 10 to 50 Litres 40 Bar	3 1/2"	2"	04570300223	A	112	20	O-Ring 96 x 4
		Blind	04500500223	A	112	20	O-Ring 96 x 4
EBV 100 to 200 Litres 20 Bar	M205 x 3	2"	04565600223	A	-	(1)	O-Ring 196,21 x 5,33
		Blind	04500600223	A	-	(1)	O-Ring 196,21 x 5,33

(1) 2 holes dia 8,5 x 10

Adaptors EBV Stainless Steel

Accumulator model	Connection of accumulator ø F gas cyl.	Connection ø I gas cyl.	Part Number	Shape	J/Flats	K	O-ring & Back-up Ring
EBV 0,5 to 5 Litres 50 & 80 Bar	2"	1"	04557001423	A	-	13	A. O-Ring 54 x 3
		Blind	04502401423	A	65	13	O-Ring 54 x 3
EBV 10 to 50 Litres 40 Bar	3 1/2"	2"	04570301423	A	112	20	O-Ring 96 x 4
		Blind	04500501423	A	112	20	O-Ring 96 x 4
EBV 100 to 200 Litres 20 Bar	M205 x 3	2"	04565601423	A	-	(1)	O-Ring 196,21 x 5,33
		Blind	04500601423	A	-	(1)	O-Ring 196,21 x 5,33

(1) 2 holes dia 8,5 x 10

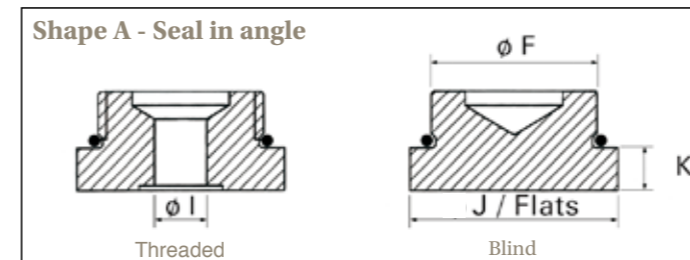
Flanges EBV Carbon Steel

Accumulator model	Connection of accumulator ø G gas cyl.	Flange Model	Part Number	K
EBV 1 to 5 Litres 80 Bar	2"	1 1/2" ANSI 150 lbs	04542000123	22
		1 1/2" ANSI 300 lbs	04524100123	25
EBV 10 to 50 Litres 40 Bar	3 1/2"	4" ANSI 150 lbs	04500300123	28
		4" ANSI 300 lbs	04520800123	37
EBV 100 to 200 Litres 20 Bar	M205 x 3	8" ANSI 150 lbs	04500800123	142
		8" ANSI 300 lbs	04500900123	151

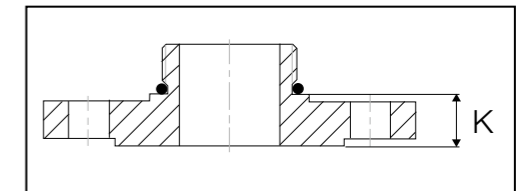
Flanges EBV Stainless Steel

Accumulator model	Connection of accumulator ø G gas cyl.	Flange Model	Part Number	K
EBV 1 to 5 Litres 80 Bar	2"	1 1/2" ANSI 150 lbs	04542001423	22
		1 1/2" ANSI 300 lbs	04524101423	25
EBV 10 to 50 Litres 40 Bar	3 1/2"	4" ANSI 150 lbs	04500301423	28
		4" ANSI 300 lbs	04520801423	37
EBV 100 to 200 Litres 20 Bar	M205 x 3	8" ANSI 150 lbs	04500801423	142
		8" ANSI 300 lbs	04500901423	151

Adaptors EBV



Flanges EBV



These accessories are designed to perfectly fit Parker Olaer accumulators. They meet the latest regulations and are compliant with the CETOP standard.

EHV Series: General Information Bladder Accumulators

Operation of the OLAER gas loaded bladder accumulator is based on the considerable difference in compressibility between a gas and a liquid, enabling a large quantity of energy to be stored in an extremely compact form. This enables a liquid under pressure to be accumulated, stored and recovered at any time.

Its special design allows the bladder (the strategic component) to compress the gas and usually form into three lobes in order for the accumulator to store, then to deliver the fluid under pressure, as required.

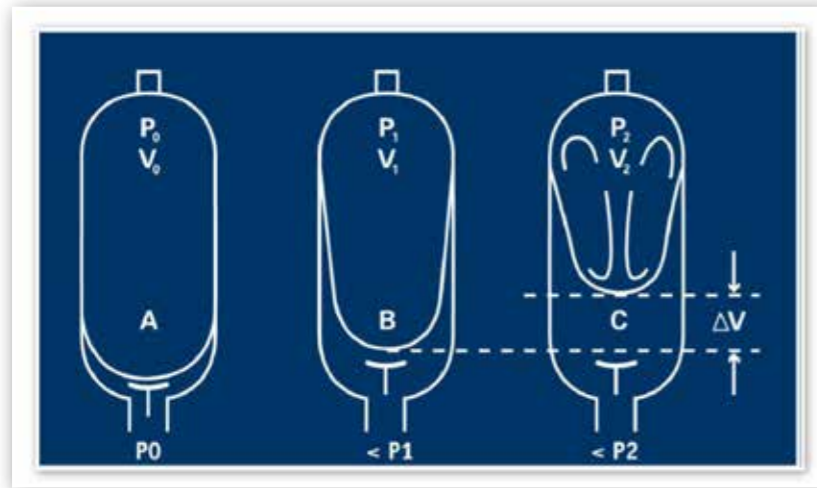
The OLAER gas loaded accumulator is an essential component for the optimum operation of a hydraulic circuit. In hydraulic circuits, the accumulator enables:

- An energy reserve which is instantaneously available to the system
- Compensation of pressure fluctuations and spikes.
- Pump pulsation dampening

The accumulator comprises of a pressure vessel, a rubber bladder and an anti-extrusion system. Shell material options include alloyed steel, stainless steel, aluminium, titanium and composites. Various bladder materials available which are compatible with a range of fluids and temperatures. Different anti-extrusion systems can be used for specific applications (fluidport assembly for high pressure, grid for low pressure, or button).

Taking into account the different needs of various applications, Olaer proposes different protections external and/or internal: Bare metal, nickel plating, epoxy paint, PTFE, Rilsan® and phenolic coating. This extensive range enables us to offer accumulators operating from - 50 to +150°C with pressures of up to 1500 Bar and capacities of up to 575 litres.

As the market leader in bladder type accumulators, Olaer has participated in the development of the EN 14359:2006 standard, which specifies the material, design, manufacturing, tests, safety devices and documentation (including the instruction manual), for pressure accumulators and gas bottles for hydraulic applications.



A - Bladder in the Pre-charge position, which means that the accumulator only contains nitrogen. The anti-extrusion system closes the hydraulic orifice which prevents the destruction of the bladder. In low pressure accumulators the bladder rests against the grid.

B - Position at the minimum operating pressure. There must be a certain amount of fluid between the bladder and the hydraulic orifice, such that the anti-extrusion system does not close the hydraulic orifice.

C - Position at the maximum operating pressure. The volume difference between the minimum and maximum positions of the operating pressures represents the working fluid quantity.

- V₀** = Capacity in nitrogen of the accumulator
- V₁** = Gas volume at the minimum hydraulic pressure
- V₂** = Gas volume at the maximum hydraulic pressure
- ΔV** = Returned and/or stored volume of working fluid between P₁ and P₂
- P₀** = Initial preload of the accumulator
- P₁** = Gas pressure at the minimum hydraulic pressure
- P₂** = Gas pressure at the maximum hydraulic pressure

EHV Series: How to order a high pressure accumulator

Technical Characteristics

The accumulator comprises a forged steel shell, a rubber bladder and a fluid port assembly.

- Shell material options include alloyed steel, stainless steel, aluminium, titanium and composites.
- Various bladder materials available which are compatible with a range of fluids and temperatures.
- Anti-extrusion system; fluidport assembly for high pressure.

Bare metal, nickel plating, epoxy paint, PTFE, Rilsan® and phenolic coating. This extensive range enables us to offer accumulators operating from - 50 to +150°C with pressures of up to 690 Bar and capacities of up to 57 litres.

As the market leader in bladder type accumulators, Parker Olaer has participated in the development of the EN 14359:2006 standard, which specifies the material, design, manufacturing, fatigue tests, safety devices and documentation (including the instruction manual), for pressure accumulators and gas bottles for hydraulic applications.

Taking into account the different needs of various applications, Parker Olaer offers different protections external and/or internal:

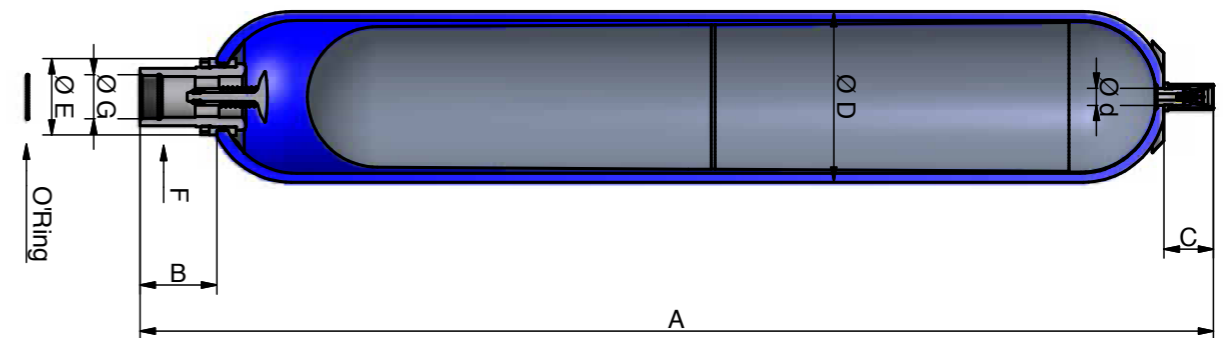
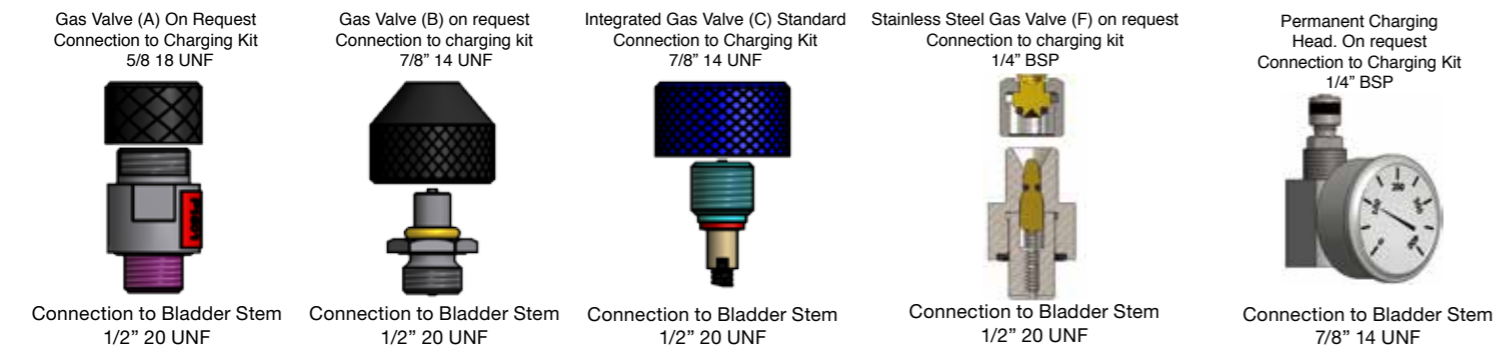
	Type	Part Number (11 characters)	Nitrogen Gas Pre-charge	Connection to be specified	Clamp for fixation	Support Bracket	Mounting Frame	Eye Fit
<i>Example</i>	EHV 32 - 330 / 90	11008001125	P0 = 200b	G 1"	D226 X 2	CE 300	EF1	Part number
Series	EHV: High pressure bladder accumulator EHVF: EHV with Flange ETHV: Transfer type EHV							
Volume in Litres	32							
Max. working Pressure (PS) in bar	330							
Regulation Code	90							
Part Number: 6 characters	11008001125							
Construction: 1 character	1							
Shell Construction: 2 characters	11							
Bladder Mix: 2 characters	20							
Nitrogen gas Pressure	200b							
Connection to be specified	G 1"							
Clamp	D226 X 2							
Support Bracket	CE 300							
Mounting Frame	EF1							
Lifting Eye	Part number							

EHV Series 250-350 bar, 1 to 10 Litres According to GB/T20663

Standard Version (Carbon Steel shell/NBR mix) for mineral oils temperature from - 15° up to 80°C
 According to **GB/T20663**
 Part numbers, Accessories Dimensions

Type Part number	Valve model see drawing	Pre-charge			Adaptor Threaded Part number	Clamps Model (quantity) Part number	Support Bracket Model Part number	Mounting Frame Model Part number	Lifting Eye Model Part number	Complete Repair Kit Model Part number	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm							
		1 - 109 bar	110 - 209 bar	210 - 300 bar													A max height	B	C	øD max	ød	øE	F on flats	G connection
EHV 1-350/AB 11067601125	C	751001	751030	751045	G 3/8" cyl 04556400223	E114 (1) 20251003648	CE 89 20151903620	-	-	KIT EHV 1-350/AB 19029700225	EHV 1-350/AB	1	350	240	6	7/8" 14 UNF	330	54	66	116	22.5	50	32	G 3/4"
EHV 2.5-250/AB 11214301125	C	751002	751031	751046	G 3/4" cyl 04555200223	E114 (2) 20251003648	CE 89 20151903620	-	-	KIT EHV 2.5-250/88 19036500225	EHV 2.5-250/AB	2.4	250	450	11	7/8" 14 UNF	549	66	66	116	22.5	68	50	G 1 1/4"
EHV 4-350/AB 11067701125	C	751012	751020	751035	G 3/4" cyl 04555200223	E168 (1) 20251303648	CE108 20118703620	EF1 20217500125	-	KIT EHV 4-350/AB 19029900225	EHV 4-350/AB	3.7	350	450	15	7/8" 14 UNF	434	65	66	170	22.5	68	50	G 1 1/4"
EHV 5-250/AB 11214401125	C	751003	751032	751047	G 3/4" cyl 04555200223	E114 (2) 20251003648	CE 89 20151903620	-	-	KIT EHV 5-250/88 19036700225	EHV 5-250/AB	5	250	450	17	7/8" 14 UNF	898	66	66	116	22.5	68	50	G 1 1/4"
EHV 6-350/AB 11067801125	C	751015	751021	751036	G 3/4" cyl 04555200223	E168 (2) 20251303648	CE108 20118703620	EF1 20217500125	-	KIT EHV 6-350/AB 19030100225	EHV 6-350/AB	6	350	450	20	7/8" 14 UNF	560	65	66	170	22.5	68	50	G 1 1/4"
EHV 10-350/AB 11067901125	C	751004	751022	751037	G 3/4" cyl 04555200223	E168 (2) 20251303648	CE108 20118703620	EF1 20217500125	10912700200	KIT EHV 10-350/AB 19030200225	EHV 10-350/AB	10	350	450	31	7/8" 14 UNF	825	65	66	170	22.5	68	50	G 1 1/4"

/AB = in compliance with GB/T20663



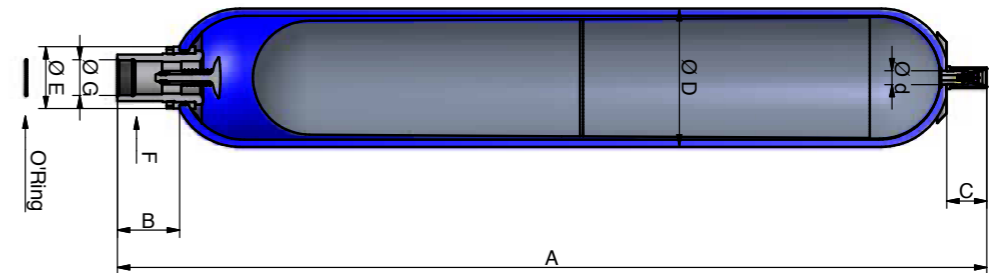
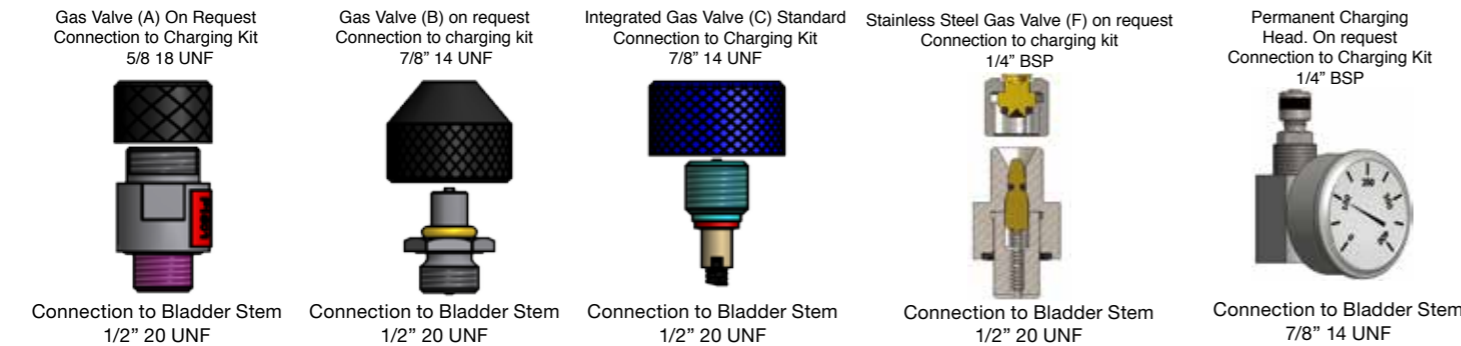
EHV-DA Series 250 bar, 10 to 160 Litres

High Flow fluid port, 1200 l/min

According to GB/T20663

Standard version (Carbon Steel shell/NBR mix) for mineral oils temperature from - 15° up to 80°C
 High Flow Fluid Port, 1200 L/min, According to GB/T20663
 Part numbers, Accessories Dimensions

Type Part number	Valve model see drawing	Pre-charge		Adaptor	Clamps	Support Bracket	Mounting Frame	Lifting Eye	Complete Repair Kit	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm								
		1 - 109 bar	110 - 209 bar	Threaded Part number	Model (quantity) Part number	Model Part number	Model Part number	Model Part number	Model Part number							A max height	B	C	øD max	ød	øE	F on flats	G connection	
EHV 10-250/AB 11068001125	C	751016	751023	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		10912700200	KIT EHV 10-250/AB 19052300225	EHV 10-250/AB	9.2	250	1200	31	7/8" 14 UNF	587	103	66	226	22.5	101	70	G 2"
EHV 12-250/AB 11068101125	C	751016	751023	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		10912700200	KIT EHV 12-250/AB 19052400225	EHV 12-250/AB	11	250	1200	36	7/8" 14 UNF	687	103	66	226	22.5	101	70	G 2"
EHV 20-250/AB 11068201125	C	751005	751024	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		10912700200	KIT EHV 20-250/AB 19052500225	EHV 20-250/AB	17.8	250	1200	49	7/8" 14 UNF	897	103	66	226	22.5	101	70	G 2"
EHV24.5-250/AB 11068301125	C	751017	751025	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		10912700200	KIT EHV 24.5-250/AB 19052600225	EHV 24.5-250/AB	22.5	250	1200	56	7/8" 14 UNF	1032	103	66	226	22.5	101	70	G 2"
EHV 32-250/AB 11068401125	C	751006	751026	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		10912700200	KIT EHV 32-250/AB 19052700225	EHV 32-250/AB	32	250	1200	81	7/8" 14 UNF	1420	103	66	226	22.5	101	70	G 2"
EHV 42-250/AB 11214501125	C	751212	751213	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		10912700200	KIT EHV 42-250/AB 19031900225	EHV 42-250/AB	42	250	1200	87	7/8" 14 UNF	1562	103	66	226	22.5	101	70	G 2"
EHV 50-250/AB 11068501125	C	751007	751027	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		10912700200	KIT EHV 50-250/AB 19032000225	EHV 50-250/AB	48.5	250	1200	110	7/8" 14 UNF	1936	103	66	226	22.5	101	70	G 2"
EHV 57-250/AB 11214601125	C	751215	751216	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		10912700200	KIT EHV 57-250/AB 19032200225	EHV 57-250/AB	53	250	1200	116	7/8" 14 UNF	2032	103	66	226	22.5	101	70	G 2"
EHV 100-250/AB 11214701125	A	751215	751216	on request	on request	on request	on request	on request	on request	KIT EHV 100-250/AB	EHV 100-250/AB	100	250	1800	242	5/8" 18 UNF	1691	100	75	356	51	125	90	G 2"1/2
EHV 150-250/AB 11214801125	A	751215	751216	on request	on request	on request	on request	on request	on request	KIT EHV 150-250/AB	EHV 150-250/AB	150	250	1800	342	5/8" 18 UNF	2325	100	75	356	51	125	90	G 2"1/2



Above dimensions are in mm and are subject to manufacturing tolerances.

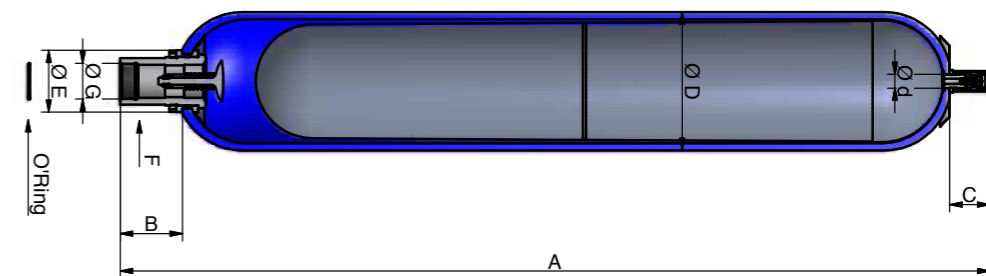
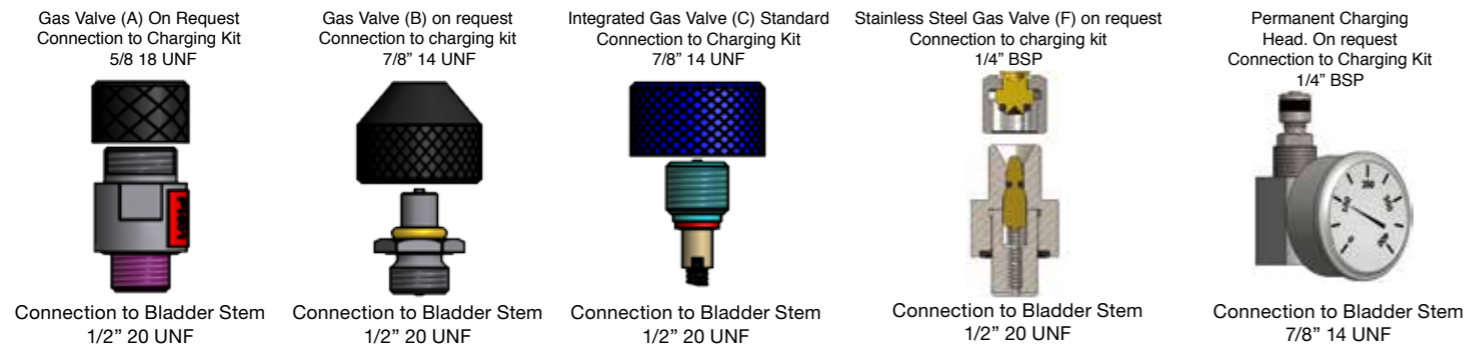
EHV-DA Series 330 bar, 10 to 160 Litres

High Flow fluid port, 1200 l/min

According to GB/T20663

Standard version (Carbon Steel shell/NBR mix) for mineral oils temperature from - 15° up to 80°C
 High Flow Fluid Port, 1200 L/min, According to GB/T20663
 Part numbers, Accessories Dimensions

Type Part number	Valve model see drawing	Pre-charge			Adaptor Threaded Part number	Clamps Model (quantity) Part number	Support Bracket Model Part number	Mounting Frame Model Part number	Lifting Eye Model Part number	Complete Repair Kit Model Part number	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm							
		1 - 109 bar	110 - 209 bar	210 - 300 bar													A max height	B	C	øD max	ød	øE	F on flats	G connection
EHV 10-330/AB 11068601125	C	751016	751023	751038	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125	10912700200	KIT EHV 10-330/AB 19052300225	EHV 10-330/AB	9.2	330	1200	36	7/8" 14 UNF	585	103	66	232	22.5	101	70	G 2"
EHV 12-330/AB 11068701125	C	751016	751023	751038	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125	10912700200	KIT EHV 12-330/AB 19052400225	EHV 12-330/AB	11	330	1200	43	7/8" 14 UNF	685	103	66	232	22.5	101	70	G 2"
EHV 20-330/AB 11068801125	C	751005	751024	751039	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125	10912700200	KIT EHV 20-330/AB 19052500225	EHV 20-330/AB	17.8	330	1200	61	7/8" 14 UNF	895	103	66	232	22.5	101	70	G 2"
EHV24.5-330/AB 11068901125	C	751017	751025	751040	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125	10912700200	KIT EHV 24.5-330/AB 19052600225	EHV 24.5-330/AB	22.5	330	1200	66	7/8" 14 UNF	1030	103	66	232	22.5	101	70	G 2"
EHV 32-330/AB 11069001125	C	751006	751026	751041	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125	10912700200	KIT EHV 32-330/AB 19052700225	EHV 32-330/AB	32	330	1200	99	7/8" 14 UNF	1420	103	66	232	22.5	101	70	G 2"
EHV 42-330/AB 11214901125	C	751212	751213	751214	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125	10912700200	KIT EHV 42-330/AB 19031900225	EHV 42-330/AB	42	330	1200	110	7/8" 14 UNF	1562	103	66	232	22.5	101	70	G 2"
EHV 50-330/AB 11069101125	C	751007	751027	751042	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125	10912700200	KIT EHV 50-330/AB 19032000225	EHV 50-330/AB	48.5	330	1200	126	7/8" 14 UNF	1943	103	66	232	22.5	101	70	G 2"
EHV 57-330/AB 11215001125	C	751215	751216	751217	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125	10912700200	KIT EHV 57-330/AB 19032200225	EHV 57-330/AB	53	330	1200	134	7/8" 14 UNF	2038	103	66	232	22.5	101	70	G 2"
EHV100-330/AB 11215101125	A	751215	751216	751217	on request	on request	on request	on request	on request	KIT EHV 100-330/AB	EHV 100-330/AB	100	330	1800	272	5/8" 18 UNF	1691	100	75	356	51	125	90	G 2"1/2
EHV150-330/AB 11215201125	A	751215	751216	751217	on request	on request	on request	on request	on request	KIT EHV 150-330/AB	EHV 150-330/AB	150	330	1800	377	5/8" 18 UNF	2325	100	75	356	51	125	90	G 2"1/2



Above dimensions are in mm and are subject to manufacturing tolerances.

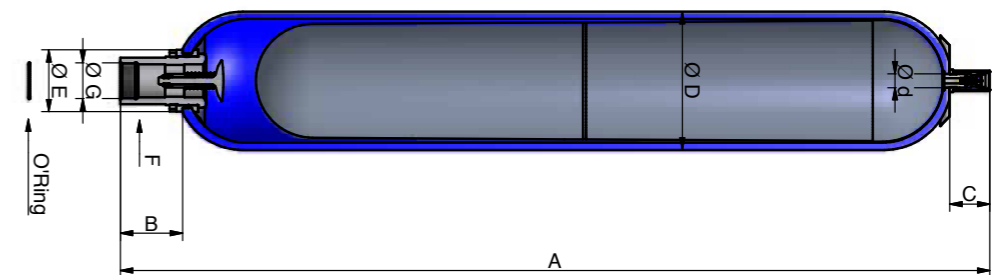
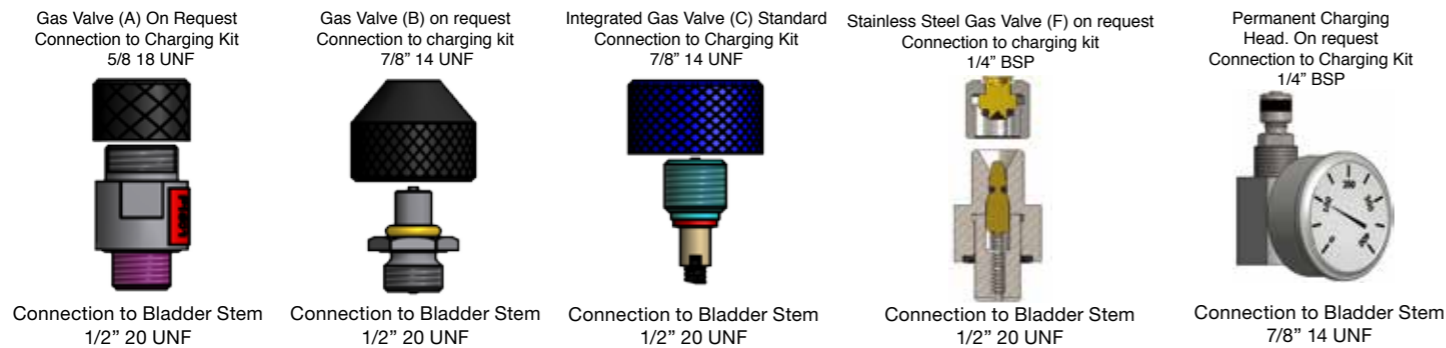
EHV-H Series 250 bar, 10 to 57 Litres

Very High Flow fluid port, 1800 l/min

According to GB/T20663

Standard version (Carbon Steel shell/NBR mix) for mineral oils temperature from - 15° up to 80°C
 High Flow Fluid Port, 1800 L/min, According to GB/T20663
 Part numbers, Accessories Dimensions

Type Part number	Valve model see drawing	Pre-charge		Adaptor Threaded Part number	Clamps Model (quantity) Part number	Support Bracket Model Part number	Mounting Frame Model Part number	Lifting Eye Model Part number	Complete Repair Kit Model Part number	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm								
		1 - 109 bar	110 - 209 bar													A max height	B	C	øD max	ød	øE	F on flats	G connection	
EHV 10-250H/AB 11215301125	C	751016	751023	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		10912700200	KIT EHV 10-250H/AB on request	EHV 10-250H/AB	9.2	250	1800	31	7/8" 14 UNF	587	105	66	226	22.5	125	90	G 2"1/2
EHV 12-250H/AB 11215401125	C	751016	751023	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		10912700200	KIT EHV 12-250H/AB on request	EHV 12-250H/AB	11	250	1800	36	7/8" 14 UNF	687	105	66	226	22.5	125	90	G 2"1/2
EHV 20-250H/AB 11215501125	C	751005	751024	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		10912700200	KIT EHV 20-250H/AB on request	EHV 20-250H/AB	17.8	250	1800	49	7/8" 14 UNF	897	105	66	226	22.5	125	90	G 2"1/2
EHV24.5-250H/AB 11215601125	C	751017	751025	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		10912700200	KIT EHV 24.5-250H/AB on request	EHV 24.5-250H/AB	22.5	250	1800	56	7/8" 14 UNF	1032	105	66	226	22.5	125	90	G 2"1/2
EHV 32-250HAB 11215701125	C	751006	751026	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		10912700200	KIT EHV 32-250H/AB on request	EHV 32-250H/AB	32	250	1800	81	7/8" 14 UNF	1420	105	66	226	22.5	125	90	G 2"1/2
EHV 42-250H/AB 11215801125	C	751212	751213	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		10912700200	KIT EHV 42-250H/AB on request	EHV 42-250H/AB	42	250	1800	87	7/8" 14 UNF	1562	105	66	226	22.5	125	90	G 2"1/2
EHV 50-250H/AB 11215901125	C	751007	751027	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		10912700200	KIT EHV 50-250H/AB on request	EHV 50-250H/AB	48.5	250	1800	110	7/8" 14 UNF	1936	105	66	226	22.5	125	90	G 2"1/2
EHV 57-250H/AB 11216001125	C	751215	751216	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		10912700200	KIT EHV 57-250H/AB on request	EHV 57-250H/AB	53	250	1800	116	7/8" 14 UNF	2032	105	66	226	22.5	125	90	G 2"1/2



Above dimensions are in mm and are subject to manufacturing tolerances.

EHV Series 250-350 BAR, 2.5 to 10 Litres

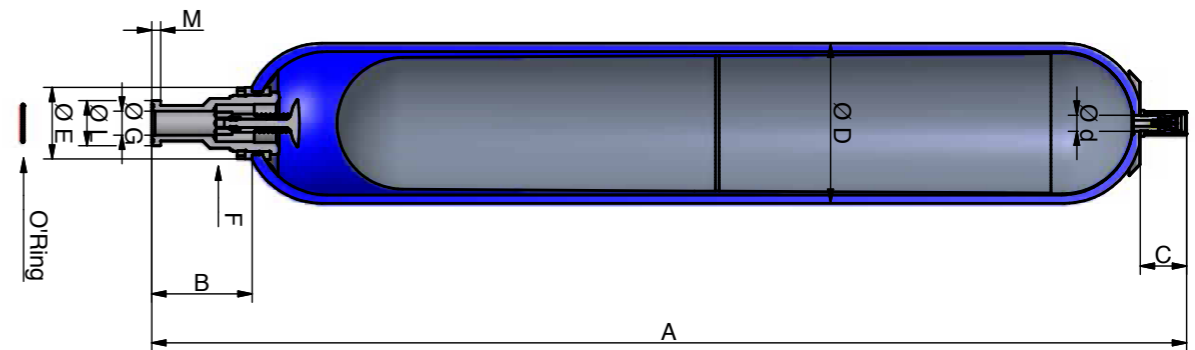
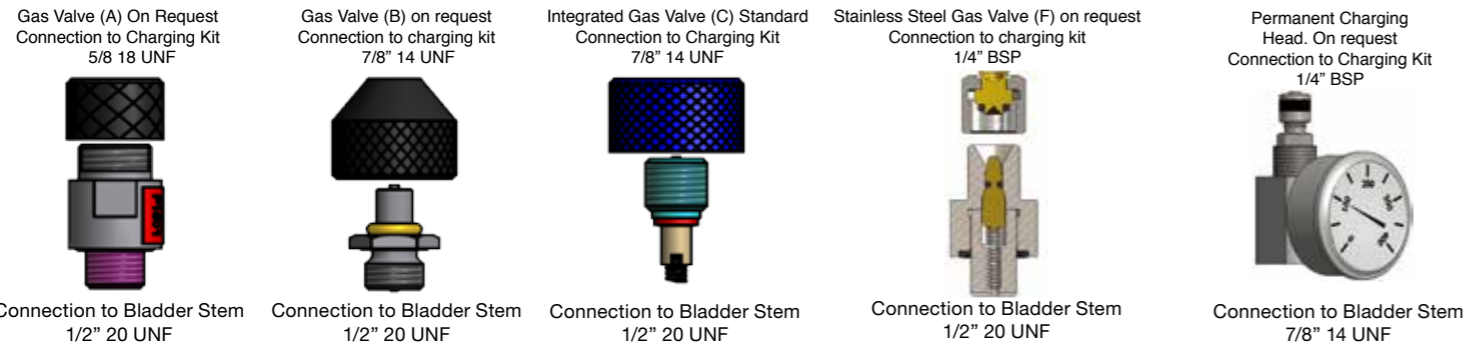
According to GB/T20633

Flanged Fluid Port

Standard Version (Steel shell/NBR mix) for mineral oils temperature from - 15° up to 80°C
 According to GB/T20663
 Part numbers, Accessories Dimensions

Type Part number	Valve Model see drawing	Pre-charge			Flange Type Part number	Clamps Model (quantity) Part number	Support Bracket Model Part number	Mounting Frame Model Part number	Lifting Eye Model Part number	Complete Repair Kit Model Part number	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm									
		1 - 109 bar	110 - 209 bar	210 - 300 bar													A max height	B	C	øD max	ød	øE	F on flats	øG	øL Max	M
EHV 2.5-250/AB 11216101125	C	751002	751031	751046	BR 400-25 35132600123	E114 (2) 20251003648	CE89 20151903620	-	10912700200	KIT EHV 2.5-250/AB 19035300225	EHV 2.5-250/AB	2.4	250	450	11	7/8" 14 UNF	595	111	66	116	22.5	68	50	22	47.9	9.5
EHV 4-350/AB 11162101125	C	751012	751020	751035	BR 400-25 35132600123	E168 (1) 20251303648	CE108 20118703620	EF1 20217500125	10912700200	KIT EHV 4-350/AB 19035400225	EHV 4-350/AB	3.7	350	450	15	7/8" 14 UNF	480	110	66	170	22.5	68	50	22	47.9	9.5
EHV 5-250/AB 11162201125	C	751003	751032	751047	BR 400-25 35132600123	E114 (2) 20251003648	CE89 20151903620	-	10912700200	KIT EHV 5-250/AB 19035500225	EHV 5-250/AB	5	250	450	17	7/8" 14 UNF	944	111	66	116	22.5	68	50	22	47.9	9.5
EHV 6-350/AB 11162301125	C	751015	751021	751036	BR 400-25 35132600123	E168 (1) 20251303648	CE108 20118703620	EF1 20217500125	10912700200	KIT EHV 6-350/AB 19035600225	EHV 6-350/AB	6	350	450	20	7/8" 14 UNF	606	110	66	170	22.5	68	50	22	47.9	9.5
EHV 10-350/AB 11162401125	C	751004	751022	751037	BR 400-25 35132600123	E168 (2) 20251303648	CE108 20118703620	EF1 20217500125	10912700200	KIT EHV 10-350/AB 19035700225	EHV 10-350/AB	10	350	450	31	7/8" 14 UNF	871	110	66	170	22.5	68	50	22	47.9	9.5

Note: Connection (norme ISO 6162): 1" SAE 6000 PSI.



EHV-DA Series 250 BAR, 10 to 57 Litres

According to GB/T20663

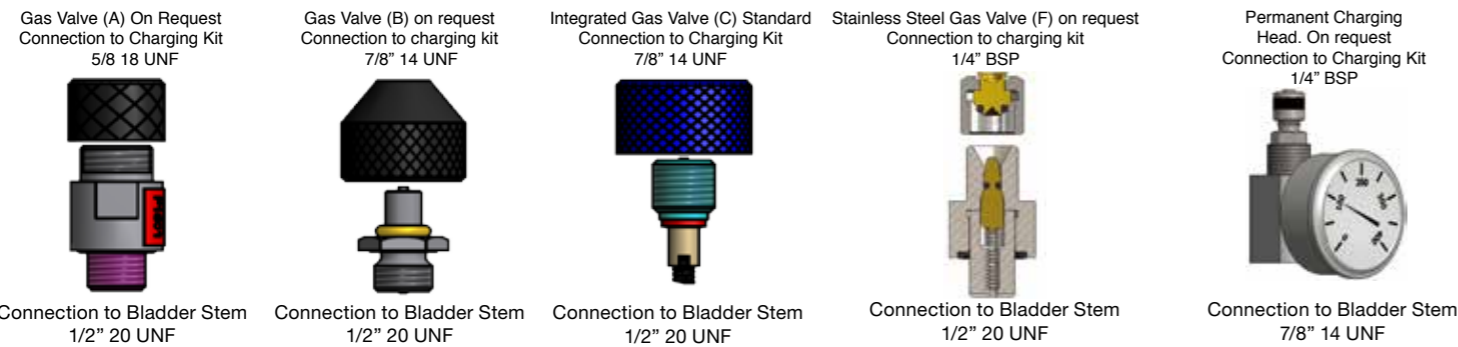
High Flow fluid port, 1200 l/min

Flanged Fluid Port

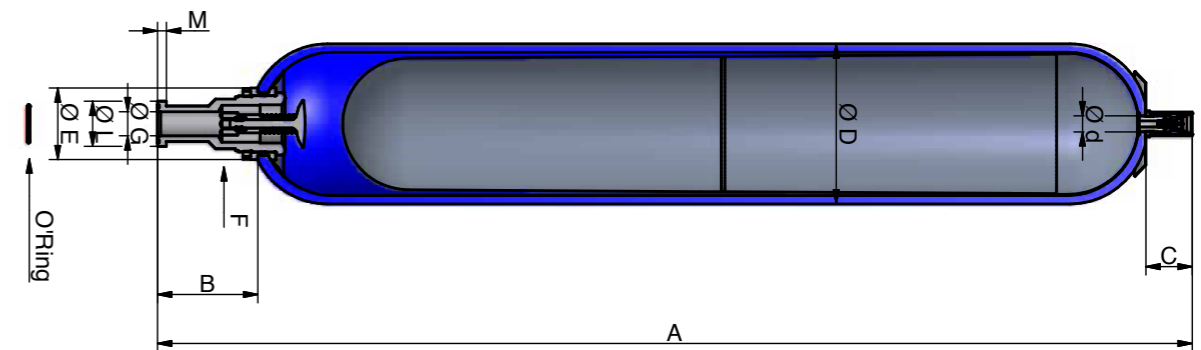
Standard Version (Steel shell/NBR mix) for mineral oils temperature from - 15° up to 80°C
 According to GB/T20663
 Part numbers, Accessories Dimensions

Type	Valve Model see drawing	Pre-charge		Flange	Clamps	Support Bracket	Mounting Frame	Lifting Eye	Complete Repair Kit	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm										
		1 - 109 bar	110 - 209 bar													Type Part number	Model (quantity) Part number	Model Part number	Model Part number	Model Part number	Model Part number	A max height	B	C	øD max	ød
EHV 10-250/AB 11069201125	C	751016	751023	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF2 20217600125		10912700200	KIT EHV 10-250/AB 19032300225	EHV 10-250/AB	9.2	250	1200	31	7/8"14 UNF	625	143	66	226	22.5	101	34	70	63.8	12.5
EHV 12-250/AB 11069301125	C	751016	751023	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF2 20217600125		10912700200	KIT EHV 12-250/AB 19032400225	EHV 12-250/AB	11	250	1200	36	7/8"14 UNF	725	143	66	226	22.5	101	34	70	63.8	12.5
EHV 20-250/AB 11069401125	C	751005	751024	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF2 20217600125		10912700200	KIT EHV 20-250/AB 19032500225	EHV 20-250/AB	17.8	250	1200	49	7/8"14 UNF	935	143	66	226	22.5	101	34	70	63.8	12.5
EHV24.5-250/AB 11069501125	C	751017	751025	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF2 20217600125		10912700200	KIT EHV 24.5-250/AB 19032600225	EHV24.5-250/AB	22.5	250	1200	56	7/8"14 UNF	1070	143	66	226	22.5	101	34	70	63.8	12.5
EHV 32-250/AB 11069601125	C	751006	751026	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF3 20217700125		10912700200	KIT EHV 32-250/AB 19032700225	EHV 32-250/AB	32	250	1200	81	7/8"14 UNF	1460	143	66	226	22.5	101	34	70	63.8	12.5
EHV 42-250/AB 11216201125	C	751212	751213	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF3 20217700125		10912700200	KIT EHV 42-250/AB 19032800225	EHV 42-250/AB	42	250	1200	87	7/8"14 UNF	1602	143	66	226	22.5	101	34	70	63.8	12.5
EHV 50-250/AB 11069701125	C	751007	751027	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF3 20217700125		10912700200	KIT EHV 50-250/AB 19032900225	EHV 50-250/AB	48.5	250	1200	110	7/8"14 UNF	1983	143	66	226	22.5	101	34	70	63.8	12.5
EHV 57-250/AB 11216301125	C	751215	751216	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF3 20217700125		10912700200	KIT EHV 57-250/AB 19033100225	EHV 57-250/AB	53	250	1200	116	7/8"14 UNF	2072	143	66	226	22.5	101	34	70	63.8	12.5

Note: Connection (norme ISO 6162): 1" 1/2 SAE 6000 PSI. & 2" SAE 3000 Psi available on request.



Accumulators are delivered with the nitrogen Pre-charge 3 bar.



EHV-DA Series 330 BAR, 10 to 57 Litres

According to GB/T20663

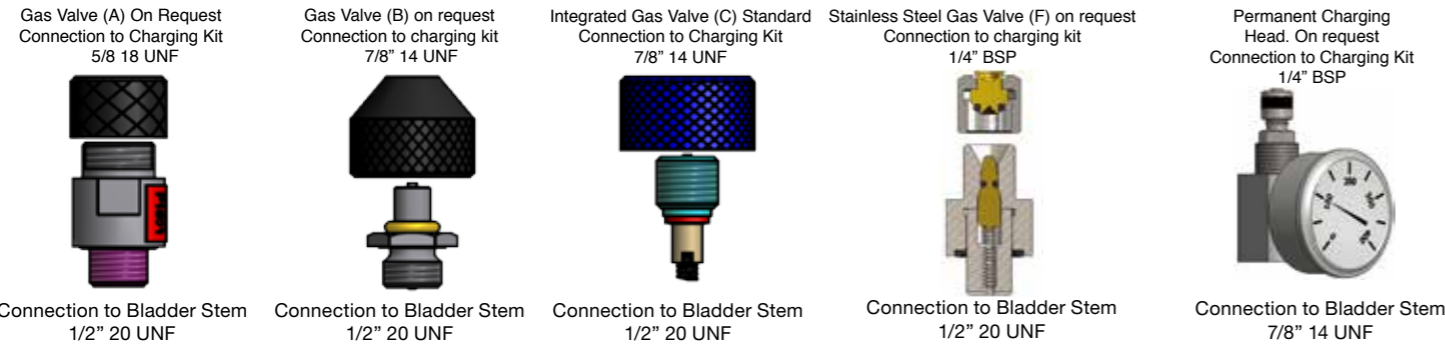
High Flow fluid port, 1200 l/min

Flanged Fluid Port

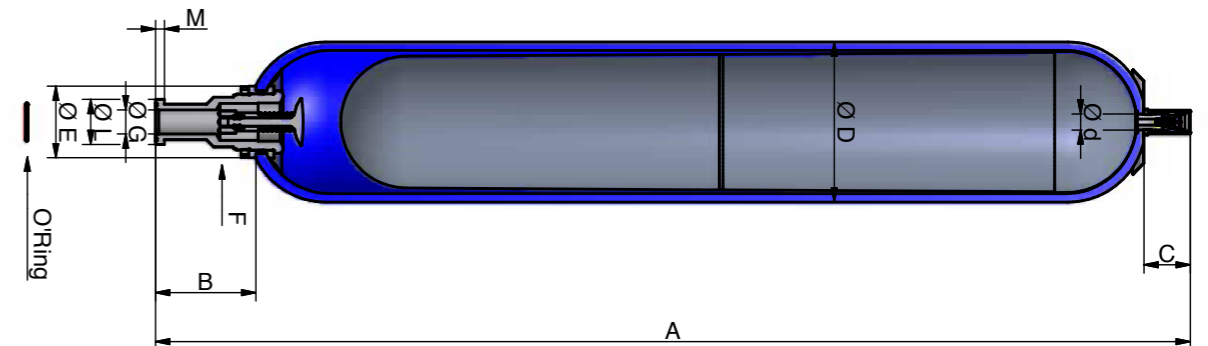
Standard Version (Steel shell/NBR mix) for mineral oils temperature from - 15° up to 80°C
 According to GB/T20663
 Part numbers, Accessories Dimensions

Type Part number	Valve Model see drawing	Pre-charge			Flange Type Part number	Clamps Model (quantity) Part number	Support Bracket Model Part number	Mounting Frame Model Part number	Lifting Eye Model Part number	Complete Repair Kit Model Part number	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm									
		1 - 109 bar	110 - 209 bar	210 - 300 bar													A max height	B	C	øD max	ød	øE	øG connection	F on flats	øL	M
EHV 10-330/AB 11069801125	C	751016	751023	751038	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF2 20217600125	10912700200	KIT EHV 10-330/AB 19032300225	EHV 10-330/AB	9.2	330	1200	37	7/8" 14 UNF	625	143	66	232	22.5	101	34	70	63.8	12.5
EHV 12-330/AB 11069901125	C	751016	751023	751038	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF2 20217600125	10912700200	KIT EHV 12-330/AB 19032400225	EHV 12-330/AB	11	330	1200	43	7/8" 14 UNF	725	143	66	232	22.5	101	34	70	63.8	12.5
EHV 20-330/AB 11070001125	C	751005	751024	751039	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF2 20217600125	10912700200	KIT EHV 20-330/AB 19032500225	EHV 20-330/AB	17.8	330	1200	62	7/8" 14 UNF	935	143	66	232	22.5	101	34	70	63.8	12.5
EHV24.5-330/AB 11070101125	C	751017	751025	751040	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF2 20217600125	10912700200	KIT EHV 24.5-330/AB 19032600226	EHV24.5-330/AB	22.5	330	1200	67	7/8" 14 UNF	1070	143	66	232	22.5	101	34	70	63.8	12.5
EHV 32-330/AB 11070301125	C	751006	751026	751041	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF3 20217700125	10912700200	KIT EHV 32-330/AB 19032700225	EHV 32-330/AB	32	330	1200	100	7/8" 14 UNF	1460	143	66	232	22.5	101	34	70	63.8	12.5
EHV 42-330/AB 11216401125	C	751212	751213	751214	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF3 20217700125	10912700200	KIT EHV 50-330/AB 19032800225	EHV 42-330/AB	42	330	1200	115	7/8" 14 UNF	1700	143	66	232	22.5	101	34	70	63.8	12.5
EHV 50-330/AB 11070401125	C	751007	751027	751042	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF3 20217700125	10912700200	KIT EHV 50-330/AB 19032900225	EHV 50-330/AB	48.5	330	1200	127	7/8" 14 UNF	1983	143	66	232	22.5	101	34	70	63.8	12.5
EHV 57-330/AB 11216501125	C	751215	751216	751217	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF3 20217700125	10912700200	KIT EHV 57-330/AB 19033100225	EHV 57-330/AB	53	330	1200	140	7/8" 14 UNF	2072	143	66	232	22.5	101	34	70	63.8	12.5

Note: Connection (norme ISO 6162): 1" 1/2 SAE 6000 PSI. & 2" SAE 6000 Psi available on request.



Accumulators are delivered with the nitrogen Pre-charge 3 bar.

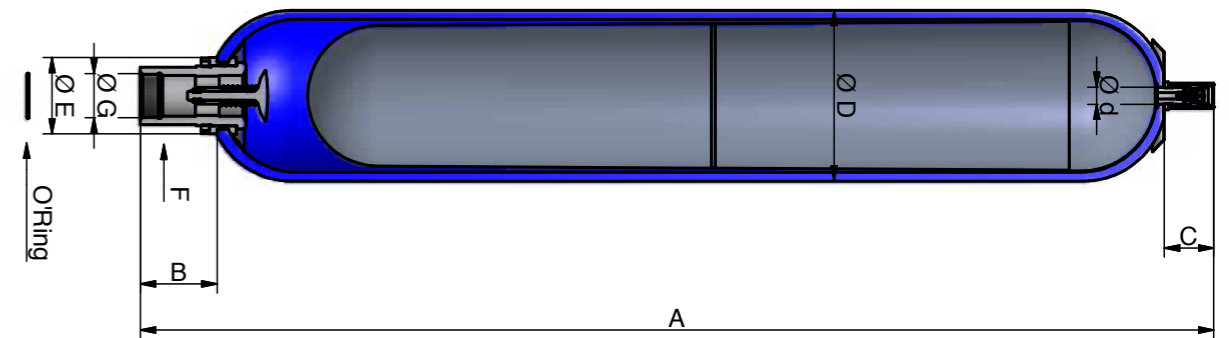
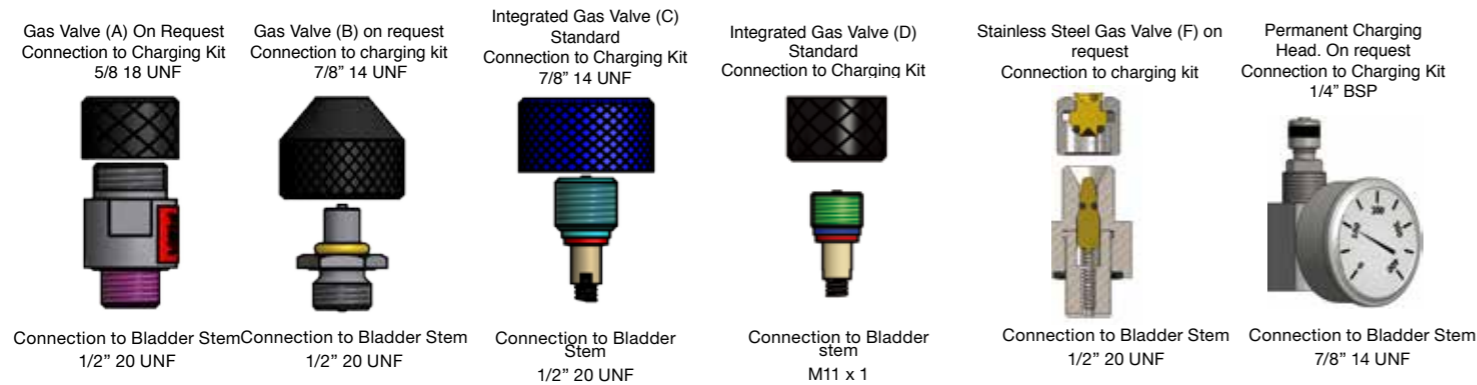


EHV Series 350 bar, 0.5 to 10 Litres

Standard Version (Carbon Steel shell/NBR mix) for mineral oils temperature from - 15° up to 80°C
 According to PED 2014/68/EU, EN 14359 Fluid Group 2 & **AD2000 Design Code**
 Part numbers, Accessories Dimensions

Type	Valve model see drawing	Pre-charge			Adaptor	Clamps	Support Bracket	Mounting Frame	Lifting Eye	Complete Repair Kit	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm							
		1 - 109 bar	110 - 209 bar	210 - 300 bar													Threaded Part number	Model (quantity) Part number	Model Part number	Model Part number	Model Part number	Model Part number	A max height	B
EHV 0.5-350/00*	D	751000	751029	751044	G 3/8" cyl 04556400223	E95 (1) 20250803648	CE 89 20151903620	-	-	KIT EHV 1-350/00 19001000220	EHV 0.5-350/00*	0.6	350	240	2.7	5/8" 18 UNF	259	54	28	91	16	50	32	G 3/4"
EHV 1-350/00*	A	751001	751030	751045	G 3/8" cyl 04556400223	E114 (1) 20251003648	CE 89 20151903620	-	-	KIT EHV 1-350/00 19029700225	EHV 1-350/00*	1	350	240	6	7/8" 14 UNF	330	54	66	116	22.5	50	32	G 3/4"
EHV 1.6-350/90	C	751014	751019	751034	G 3/8" cyl 04556400223	E114 (1) 20251003648	CE 89 20151903620	-	-	KIT EHV 1.6-350/90 19060700225	EHV 1.6-350/90	1.6	350	240	8	7/8" 14 UNF	442	54	66	116	22.5	50	32	G 3/4"
EHV 2.5-350/90	C	751002	751031	751046	G 3/4" cyl** 04555200223	E114 (2) 20251003648	CE 89 20151903620	-	-	KIT EHV 2.5-350/90 19029800225	EHV 2.5-350/90	2.4	350	450	11	7/8" 14 UNF	549	66	66	116	22.5	68	50	G 1 1/4"
EHV 4-350/90	C	751012	751020	751035	G 3/4" cyl** 04555200223	E168 (1) 20251303648	CE108 20118703620	EF1 20217500125	-	KIT EHV 4-350/90 19029900225	EHV 4-350/90	3.7	350	450	15	7/8" 14 UNF	434	65	66	170	22.5	68	50	G 1 1/4"
EHV 5-350/90	C	751003	751032	751047	G 3/4" cyl** 04555200223	E114 (2) 20251003648	CE 89 20151903620	-	-	KIT EHV 5-350/90 19030000225	EHV 5-350/90	5	350	450	17	7/8" 14 UNF	898	66	66	116	22.5	68	50	G 1 1/4"
EHV 6-350/90	C	751015	751021	751036	G 3/4" cyl** 04555200223	E168 (2) 20251303648	CE108 20118703620	EF1 20217500125	-	KIT EHV 6-350/90 19030100225	EHV 6-350/90	6	350	450	20	7/8" 14 UNF	560	65	66	170	22.5	68	50	G 1 1/4"
EHV 10-350/90	C	751004	751022	751037	G 3/4" cyl** 04555200223	E168 (2) 20251303648	CE108 20118703620	EF1 20217500125	10912700200	KIT EHV 10-350/90 19030200225	EHV 10-350/90	10	350	450	31	7/8" 14 UNF	825	65	66	170	22.5	68	50	G 1 1/4"

* according to the PED, article 4.3
 ** For more adaptor options see page 102.



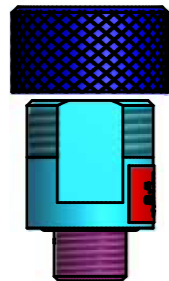
Above dimensions are in mm and are subject to manufacturing tolerances.

EHV Series 480 BAR, 10 to 20 Litres

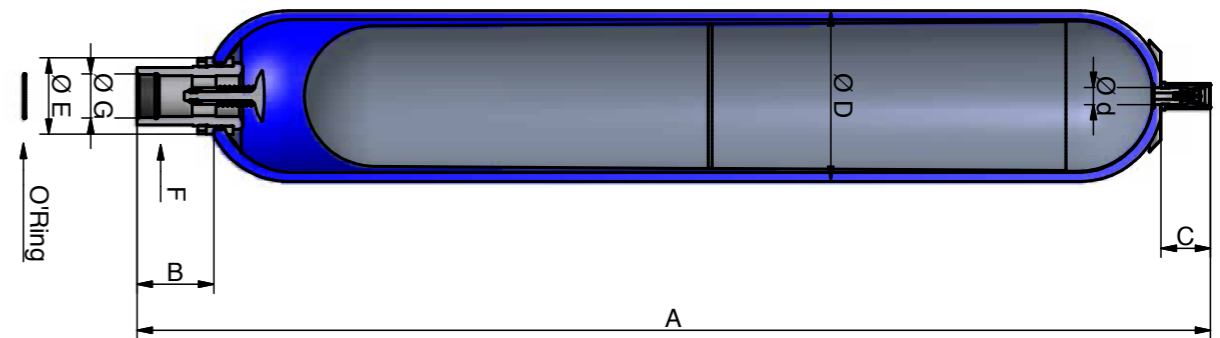
Standard Version (Steel shell/NBR mix) for mineral oils temperature from - 15° up to 80°C
 According to PED 2014/68/EU, EN 14359 Fluid Group 2
 Part numbers, Accessories Dimensions

Type	Pre-charge			Adaptor	Clamps	Support Bracket	Mounting Frame	Lifting Eye	Complete Repair Kit	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm							
	1 - 109 bar	110 - 209 bar	210 - 300 bar	Threaded Part number	Model (quantity) Part number	Model Part number	Model Part number	Model Part number	Model Part number							A max height	B	C	øD max	ød	øE	F on flats	G connection
EHV 10-480/90 10949901125	751016	751023	751038	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125	10912700200	KIT EHV 10-480/90 19055702525	EHV 10-480/90	9.2	480	900	33	7/8" 14 UNF	593	103	74	228	22.5	101	70	G 2"
EHV 12-480/90 10950001125	751016	751023	751038	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125	10912700200	KIT EHV 12-480/90 19063002525	EHV 12-480/90	11	480	900	43	7/8" 14 UNF	693	103	74	228	22.5	101	70	G 2"
EHV 20-480/90 10950101125	751005	751024	751039	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125	10912700200	KIT EHV 20-480/90 19050002525	EHV 20-480/90	17.8	480	900	63	7/8" 14 UNF	903	103	74	228	22.5	101	70	G 2"

Gas Valve (E) Standard
 Connection to Charging Kit
 7/8" 14 UNF



Connection to Bladder Stem
 1/2" 20 UNF



Above dimensions are in mm and are subject to manufacturing tolerances.

EHV Series 690 BAR, 1 to 5 Litres

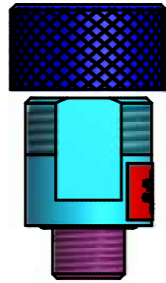
Standard Version (Carbon Steel shell/NBR mix) for mineral oils temperature from - 15° up to 80°C
 According to PED 2014/68/EU, AD 2000 Fluid Group 2
 Part numbers, Accessories Dimensions

Type Part number	Pre-charge			Adaptor Threaded Part number	Clamps Model (quantity) Part number	Support Bracket Model Part number	Lifting Eye Model Part number	Complete Repair Kit Model Part number	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Dimensions in mm							
	1 - 109 bar	110 - 209 bar	210 - 300 bar											A max height	B	C	øD max	ød	øE	F on flats	G connection**
EHV 1-690/00* 10910101125	751001	751030	751045	G 1/2" cyl 04570400223	E114 (1) 20251003648	CE89 20151903620		KIT EHV 1- 690/00 19043500225	EHV 1-690/00*	1.1	690	360	8.9	376	68	69	122	22.5	68	45	G 1"
EHV 2.5-690/90 10910201125	751002	751031	751046	G 1/2" cyl 04570400223	E114 (2) 20251003648	CE89 20151903620		KIT EHV 2.5-690/90 19043600225	EHV 2.5-690/90	2.4	690	360	15	551	68	69	122	22.5	68	45	G 1"
EHV 5-690/90 10910301125	751003	751032	751047	G 1/2" cyl 04570400223	E114 (2) 20251003648	CE89 20151903620		KIT EHV 5-690/90 19043700225	EHV 5-690/90	5	690	360	29	900	68	69	122	22.5	68	45	G 1"

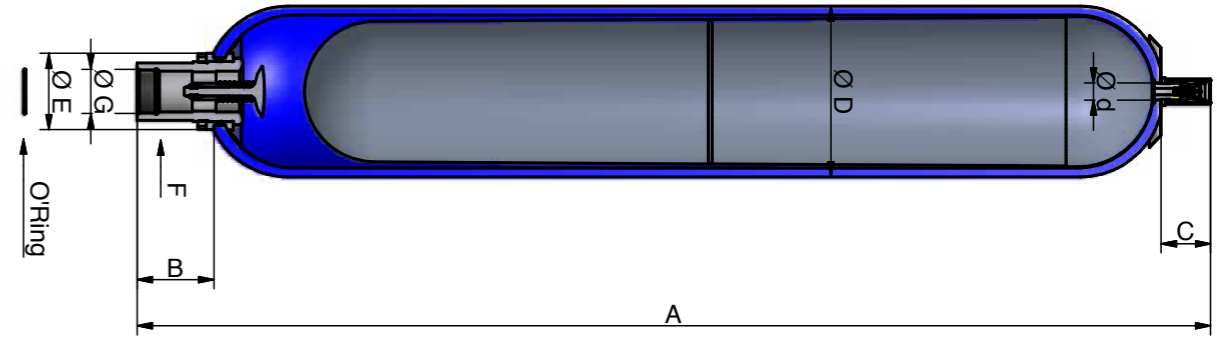
* according to the PED, article 4.3

** Requires a special adaptor

Gas Valve (E) Standard
 Connection to Charging Kit
 7/8" 14 UNF



Connection to Bladder Stem
 1/2" 20 UNF



Accumulators are delivered with the nitrogen Pre-charge 3 bar.

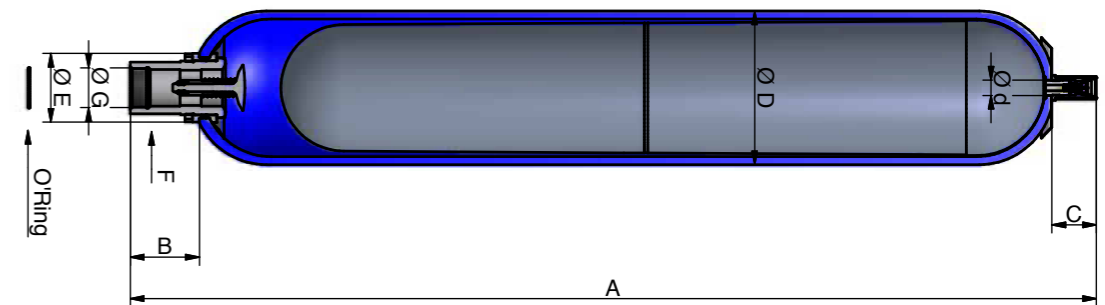
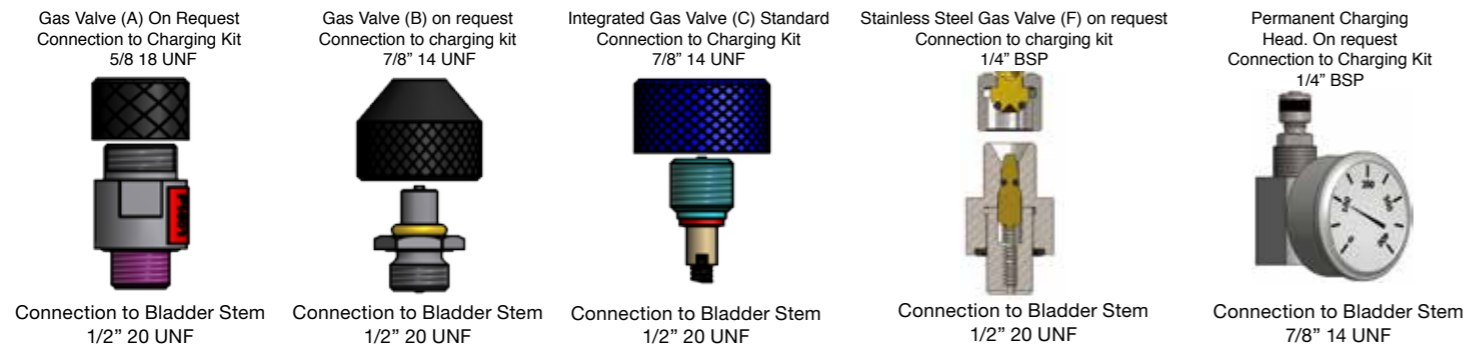
Above dimensions are in mm and are subject to manufacturing tolerances.

EHV-DA Series 330 bar, 10 to 57 Litres

High Flow fluid port, 1200 l/min

Standard version (Carbon Steel shell/NBR mix) for mineral oils temperature from - 15° up to 80°C
 High Flow Fluid Port, 1200 L/min, According to PED 2014/68/EU, AD2000 Design Code
 Part numbers, Accessories Dimensions

Type Part number	Valve model see drawing	Pre-charge			Adaptor Threaded Part number	Clamps Model (quantity) Part number	Support Bracket Model Part number	Mounting Frame Model Part number	Lifting Eye Model Part number	Complete Repair Kit Model Part number	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm							
		1 - 109 bar	110 - 209 bar	210 - 300 bar													A max height	B	C	øD max	ød	øE	F on flats	G connection
EHV 10-330/90 10874801125 11007601125	A C	751016	751023	751038	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		KIT EHV 10-330/90 19028900225 19052300225	EHV 10-330/90	9.2	330	1200	31	5/8" 18 UNF 7/8" 14 UNF	587	103	66	226	22.5	101	70	G 2"
EHV 12-330/90 10874901125 11007701125	A C	751016	751023	751038	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		KIT EHV 12-330/90 19032100225 19052400225	EHV 12-330/90	11	330	1200	36	5/8" 18 UNF 7/8" 14 UNF	687	103	66	226	22.5	101	70	G 2"
EHV 20-330/90 10846301125 11007801125	A C	751005	751024	751039	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		KIT EHV 20-330/90 19029000225 19052500225	EHV 20-330/90	17.8	330	1200	49	5/8" 18 UNF 7/8" 14 UNF	897	103	66	226	22.5	101	70	G 2"
EHV24.5-330/90 10875001125 11007901125	A C	751017	751025	751040	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		KIT EHV 24.5-330/90 19029400225 19052600225	EHV 24.5-330/90	22.5	330	1200	56	5/8" 18 UNF 7/8" 14 UNF	1032	103	66	226	22.5	101	70	G 2"
EHV 32-330/90 10846501125 11008001125	A C	751006	751026	751041	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		KIT EHV 32-330/90 19029100225 19052700225	EHV 32-330/90	32	330	1200	81	5/8" 18 UNF 7/8" 14 UNF	1420	103	66	226	22.5	101	70	G 2"
EHV 42-330/90 11145201125 11079301125	A C	751212	751213	751214	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		KIT EHV 42-330/90 19060800225 19031900225	EHV 42-330/90	42	330	1200	87	5/8" 18 UNF 7/8" 14 UNF	1562	103	66	226	22.5	101	70	G 2"
EHV 50-330/90 11091501125 11079401125	A C	751007	751027	751042	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		KIT EHV 50-330/90 19054100225 19032000225	EHV 50-330/90	48.5	330	1200	110	5/8" 18 UNF 7/8" 14 UNF	1936	103	66	226	22.5	101	70	G 2"
EHV 57-330/90 11145401125 11079501125	A C	751215	751216	751217	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		KIT EHV 57-330/90 19060900225 19032200225	EHV 57-330/90	53	330	1200	116	5/8" 18 UNF 7/8" 14 UNF	2032	103	66	226	22.5	101	70	G 2"



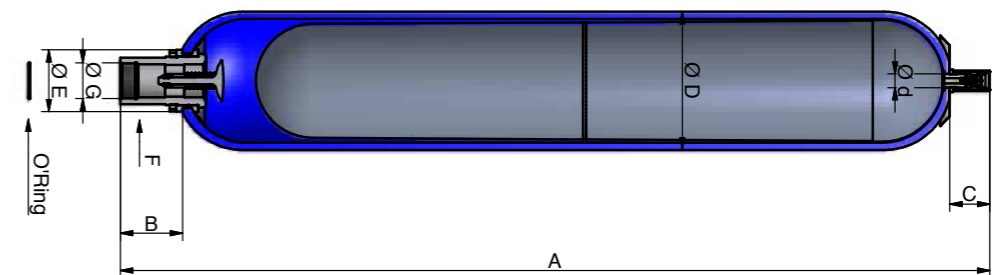
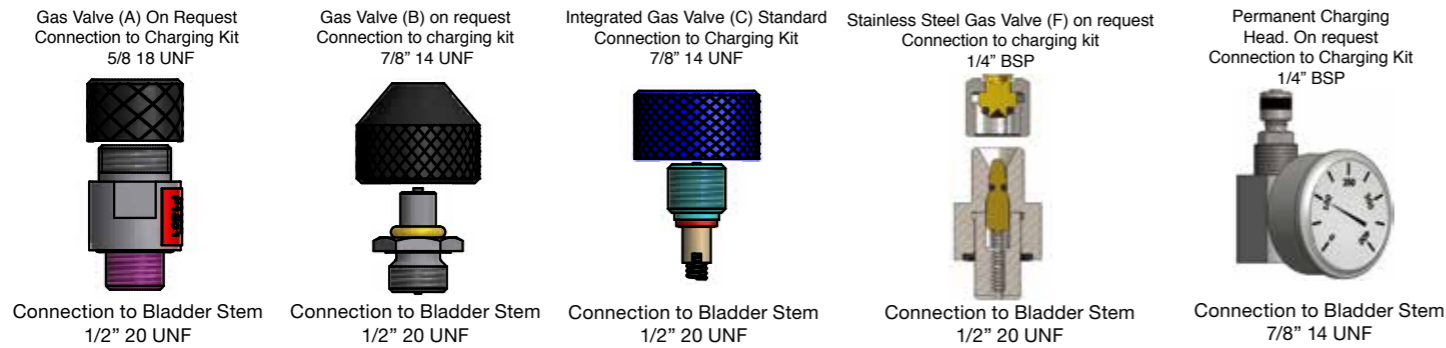
Above dimensions are in mm and are subject to manufacturing tolerances.

EHV-H Series 330 bar, 10 to 57 Litres

Very High Flow fluid port, 1800 l/min

Standard version (Carbon Steel shell/NBR mix) for mineral oils temperature from - 15° up to 80°C
 High Flow Fluid Port, 1800 L/min,
 According to PED 2014/68/EU, **AD2000 Design Code**
 Part numbers, Accessories Dimensions

Type Part number	Valve model see drawing	Pre-charge		Adaptor	Clamps	Support Bracket	Mounting Frame	Lifting Eye	Complete Repair Kit	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm							
		1 - 109 bar	110 - 209 bar	Threaded Part number	Model (quantity) Part number	Model Part number	Model Part number	Model Part number	Model Part number							A max height	B	C	øD max	ød	øE	F on flats	G connection
EHV 10-330H/90 11223001125	C	751016	751023	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		10912700200 KIT EHV 10-330H/90	EHV 10-330H/90	9.2	250	1800	31	7/8" 14 UNF	587	105	66	226	22.5	125	90	G 2"1/2
EHV 12-330H/90 11223101125	C	751016	751023	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		10912700200 KIT EHV 12-330H/90	EHV 12-330H/90	11	250	1800	36	7/8" 14 UNF	687	105	66	226	22.5	125	90	G 2"1/2
EHV 20-330H/90 11223201125	C	751005	751024	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		10912700200 KIT EHV 20-330H/90	EHV 20-330H/90	17.8	250	1800	49	7/8" 14 UNF	897	105	66	226	22.5	125	90	G 2"1/2
EHV24.5-330H/90 11223301125	C	751017	751025	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		10912700200 KIT EHV 24.5-330H/90	EHV 24.5-330H/90	22.5	250	1800	56	7/8" 14 UNF	1032	105	66	226	22.5	125	90	G 2"1/2
EHV 32-330H/90 11223401125	C	751006	751026	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		10912700200 KIT EHV 32-330H/90	EHV 32-330H/90	32	250	1800	81	7/8" 14 UNF	1420	105	66	226	22.5	125	90	G 2"1/2
EHV 42-330H/90 11223501125	C	751212	751213	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		10912700200 KIT EHV 42-330H/90	EHV 42-330H/90	42	250	1800	87	7/8" 14 UNF	1562	105	66	226	22.5	125	90	G 2"1/2
EHV 50-330H/90 11223601125	C	751007	751027	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		10912700200 KIT EHV 50-330H/90	EHV 50-330H/90	48.5	250	1800	110	7/8" 14 UNF	1936	105	66	226	22.5	125	90	G 2"1/2
EHV 57-330H/90 11223701125	C	751215	751216	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		10912700200 KIT EHV 57-330H/90	EHV 57-330H/90	53	250	1800	116	7/8" 14 UNF	2032	105	66	226	22.5	125	90	G 2"1/2



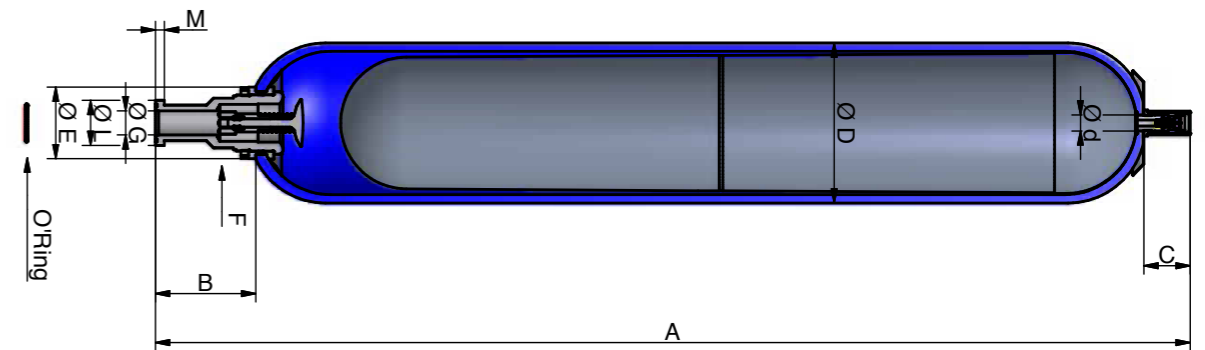
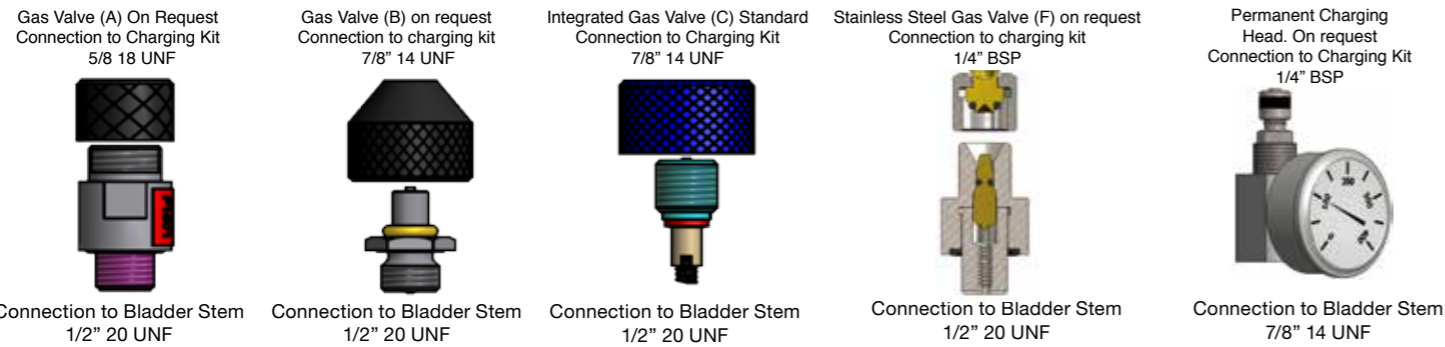
Above dimensions are in mm and are subject to manufacturing tolerances.

EHVF Series 350 BAR, 2.5 to 10 Litres Flanged Fluid Port

Standard Version (Steel shell/NBR mix) for mineral oils temperature from - 15° up to 80°C
 According to PED 2014/68/EU, **AD2000 Design Code**
 Part numbers, Accessories Dimensions

Type Part number	Valve Model see drawing	Pre-charge			Flange Type Part number	Clamps Model(quantity) Part number	Support Bracket Model Part number	Mounting Frame Model Part number	Lifting Eye Model Part number	Complete Repair Kit Model Part number	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm									
		1 - 109 bar	110 - 209 bar	210 - 300 bar													A max height	B	C	øD max	ød	øE	F on flats	øG	øL Max	M
EHVF 2.5-350/90 10861501125	C	751002	751031	751046	BR 400-25 35132600123	E114 (2) 20251003648	CE89 20151903620	-	10912700200	KIT EHVF 2.5-350/90 19035300225	EHVF 2.5-350/90	2.4	350	450	11	7/8" 14 UNF	595	111	66	116	22.5	68	50	22	47.9	9.5
EHVF 4-350/90 10857601125	C	751012	751020	751035	BR 400-25 35132600123	E168 (1) 20251303648	CE108 20118703620	EF1 20217500125	10912700200	KIT EHVF 4-350/90 19035400225	EHVF 4-350/90	3.7	350	450	15	7/8" 14 UNF	480	110	66	170	22.5	68	50	22	47.9	9.5
EHVF 5-350/90 10861601125	C	751003	751032	751047	BR 400-25 35132600123	E114 (2) 20251003648	CE89 20151903620	-	10912700200	KIT EHVF 5-350/90 19035500225	EHVF 5-350/90	5	350	450	17	7/8" 14 UNF	944	111	66	116	22.5	68	50	22	47.9	9.5
EHVF 6-350/90 10857701125	C	751015	751021	751036	BR 400-25 35132600123	E168 (1) 20251303648	CE108 20118703620	EF1 20217500125	10912700200	KIT EHVF 6-350/90 19035600225	EHVF 6-350/90	6	350	450	20	7/8" 14 UNF	606	110	66	170	22.5	68	50	22	47.9	9.5
EHVF 10-350/90 10859901125	C	751004	751022	751037	BR 400-25 35132600123	E168 (2) 20251303648	CE108 20118703620	EF1 20217500125	10912700200	KIT EHVF 10-350/90 19035700225	EHVF 10-350/90	10	350	450	31	7/8" 14 UNF	871	110	66	170	22.5	68	50	22	47.9	9.5

Note: Connection (norme ISO 6162): 1" SAE 6000 PSI.



Above dimensions are in mm and are subject to manufacturing tolerances.

EHVF-DA Series 330 BAR, 10 to 57 Litres

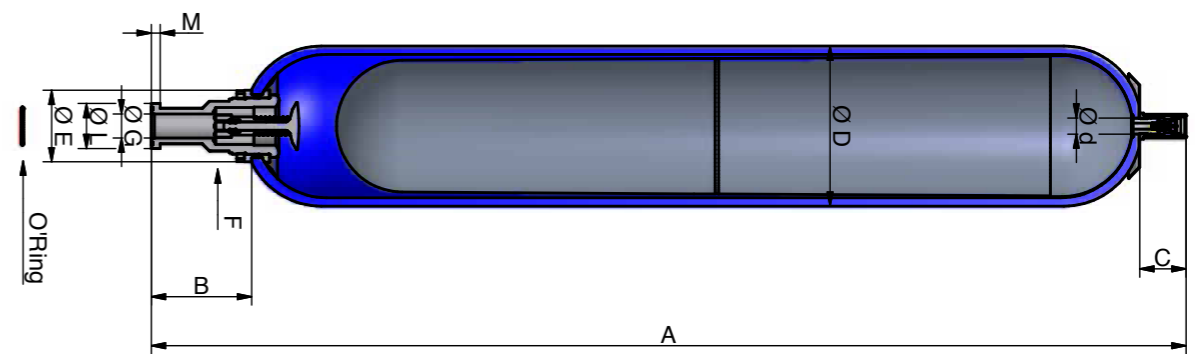
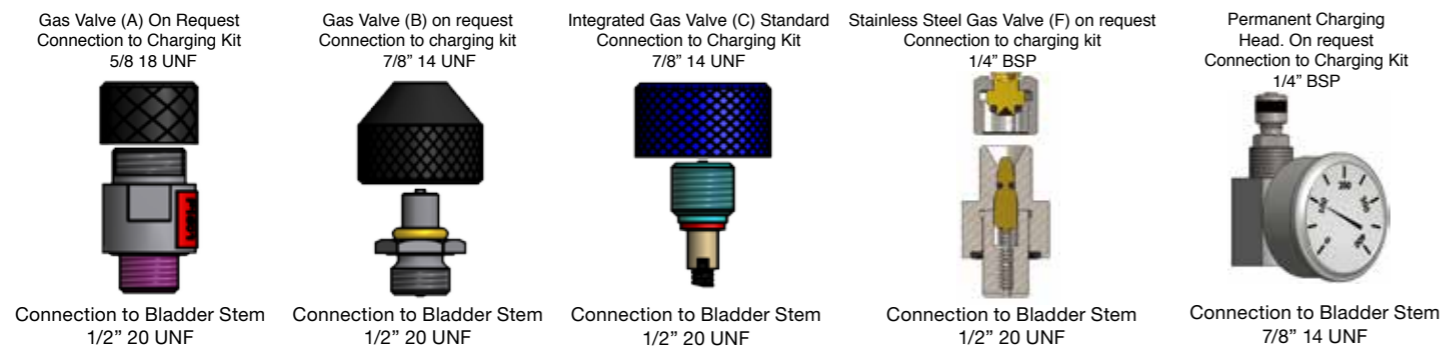
High Flow fluid port, 1200 l/min

Flanged Fluid Port

Standard Version (Steel shell/NBR mix) for mineral oils temperature from - 15° up to 80°C
 According to PED 2014/68/EU, **AD2000 Design Code**
 Part numbers, Accessories Dimensions

Type Part number	Valve Model see drawing	Pre-charge			Flange Type Part number	Clamps Model (quantity) Part number	Support Bracket Model Part number	Mounting Frame Model Part number	Lifting Eye Model Part number	Complete Repair Kit Model Part number	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm									
		1 - 109 bar	110 - 209 bar	210 - 300 bar													A max height	B	C	øD max	ød	øE	øG connection	F on flats	øL	M
EHVF 10-330/90 11217101125	C	751016	751023	751038	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF2 20217600125	10912700200	KIT EHVF 10-330/90 19032300225	EHVF 10-330/90	9.2	330	1200	31	7/8"14 UNF	627	143	66	226	22.5	101	34	70	63.8	12.5
EHVF 12-330/90 11217201125	C	751016	751023	751038	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF2 20217600125	10912700200	KIT EHVF 12-330/90 19032400225	EHVF 12-330/90	11	330	1200	36	7/8"14 UNF	727	143	66	226	22.5	101	34	70	63.8	12.5
EHVF 20-330/90 11217301125	C	751005	751024	751039	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF2 20217600125	10912700200	KIT EHVF 20-330/90 19032500225	EHVF 20-330/90	17.8	330	1200	49	7/8"14 UNF	937	143	66	226	22.5	101	34	70	63.8	12.5
EHVF24.5-330/90 11217401125	C	751017	751025	751040	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF2 20217600125	10912700200	KIT EHVF 24.5-330/90 19032600225	EHVF24.5-330/90	22.5	330	1200	56	7/8"14 UNF	1072	143	66	226	22.5	101	34	70	63.8	12.5
EHVF 32-330/90 11217501125	C	751006	751026	751041	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF3 20217700125	10912700200	KIT EHVF 32-330/90 19032700225	EHVF 32-330/90	32	330	1200	81	7/8"14 UNF	1460	143	66	226	22.5	101	34	70	63.8	12.5
EHVF 42-330/90 11217601125	C	751212	751213	751214	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF3 20217700125	10912700200	KIT EHVF 42-330/90 19032800225	EHVF 42-330/90	42	330	1200	87	7/8"14 UNF	1602	143	66	226	22.5	101	34	70	63.8	12.5
EHVF 50-330/90 11217701125	C	751007	751027	751042	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF3 20217700125	10912700200	KIT EHVF 50-330/90 19032900225	EHVF 50-330/90	48.5	330	1200	110	7/8"14 UNF	1976	143	66	226	22.5	101	34	70	63.8	12.5
EHVF 57-330/90 11217801125	C	751215	751216	751217	BR 400-38 35132400123	D226 (2) 20251503648	CE 159A 20109003620	EF3 20217700125	10912700200	KIT EHVF 57-330/90 19033100225	EHVF 57-330/90	53	330	1200	116	7/8"14 UNF	2072	143	66	226	22.5	101	34	70	63.8	12.5

Note: Connection (norme ISO 6162): 1" 1/2 SAE 6000 PSI



Accumulators are delivered with the nitrogen Pre-charge 3 bar.

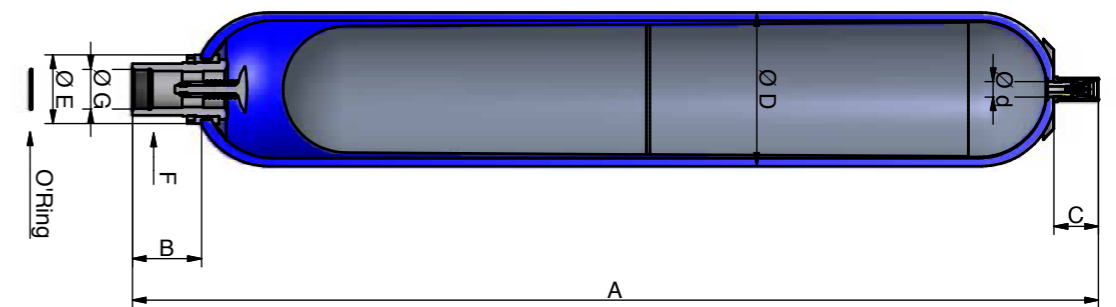
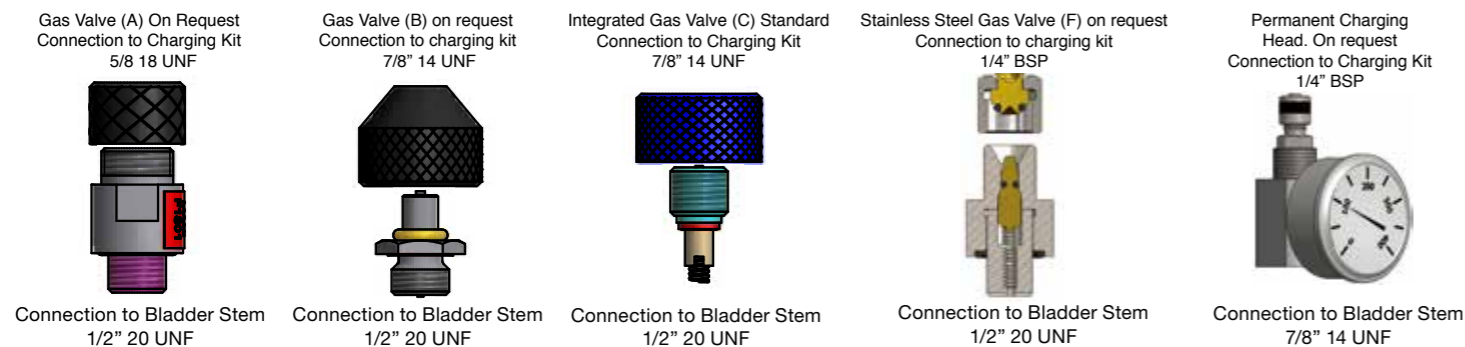
Above dimensions are in mm and are subject to manufacturing tolerances.

EHV-DA Series 3000psi, 10 to 57 Litres

High Flow fluid port, 1200 l/min

Standard version (Carbon Steel shell/NBR mix) for mineral oils temperature from - 15° up to 80°C
 High Flow Fluid Port, 1200 L/min, According to ASME VIII div1
 Part numbers, Accessories Dimensions

Type Part number	Valve model see drawing	Pre-charge		Adaptor Threaded Part number	Clamps Model (quantity) Part number	Support Bracket Model Part number	Mounting Frame Model Part number	Lifting Eye Model Part number	Complete Repair Kit Model Part number	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm							
		1 - 109 bar	110 - 209 bar													A max height	B	C	øD max	ød	øE	F on flats	G connection
EHV 10-207/48 11223801125	C	751016	751023	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		10912700200 KIT EHV 10-207/48	EHV 10-207/48	9.2	207	1200	36	7/8" 14 UNF	585	103	66	226	22.5	101	70	G 2"
EHV 12-207/48 11223901125	C	751016	751023	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		10912700200 KIT EHV 12-207/48	EHV 12-207/48	11	207	1200	43	7/8" 14 UNF	685	103	66	226	22.5	101	70	G 2"
EHV 20-207/48 11230001125	C	751005	751024	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		10912700200 KIT EHV 20-207/48	EHV 20-207/48	17.8	207	1200	61	7/8" 14 UNF	895	103	66	226	22.5	101	70	G 2"
EHV24.5-207/48 11230101125	C	751017	751025	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF2 20217600125		10912700200 KIT EHV 24.5-207/48	EHV 24.5-207/48	22.5	207	1200	66	7/8" 14 UNF	1030	103	66	226	22.5	101	70	G 2"
EHV 32-207/48 11230201125	C	751006	751026	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		10912700200 KIT EHV 32-207/48	EHV 32-207/48	32	207	1200	99	7/8" 14 UNF	1420	103	66	226	22.5	101	70	G 2"
EHV 42-207/48 11230301125	C	751212	751213	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		10912700200 KIT EHV 42-207/48	EHV 42-207/48	42	207	1200	110	7/8" 14 UNF	1562	103	66	226	22.5	101	70	G 2"
EHV 50-207/48 11230401125	C	751007	751027	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		10912700200 KIT EHV 50-207/48	EHV 50-207/48	48.5	207	1200	126	7/8" 14 UNF	1943	103	66	226	22.5	101	70	G 2"
EHV 57-207/48 11230501125	C	751215	751216	G 1" cyl 04557000223	D226 (2) 20251503648	CE159A 20109003620	EF3 20217700125		10912700200 KIT EHV 57-207/48	EHV 57-207/48	53	207	1200	134	7/8" 14 UNF	2038	103	66	226	22.5	101	70	G 2"



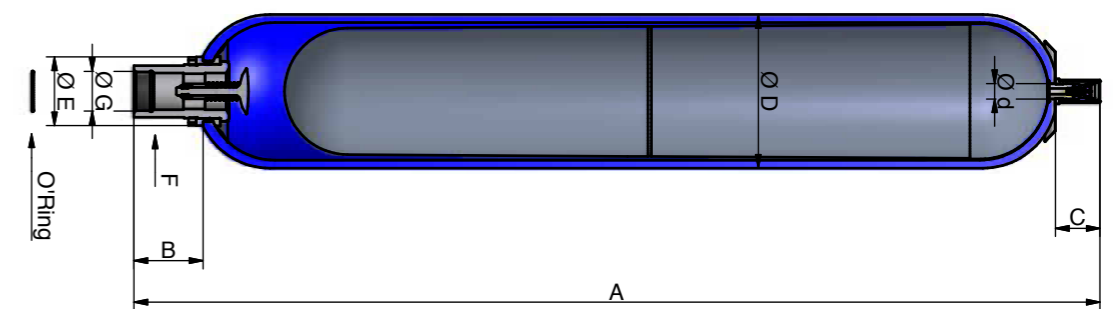
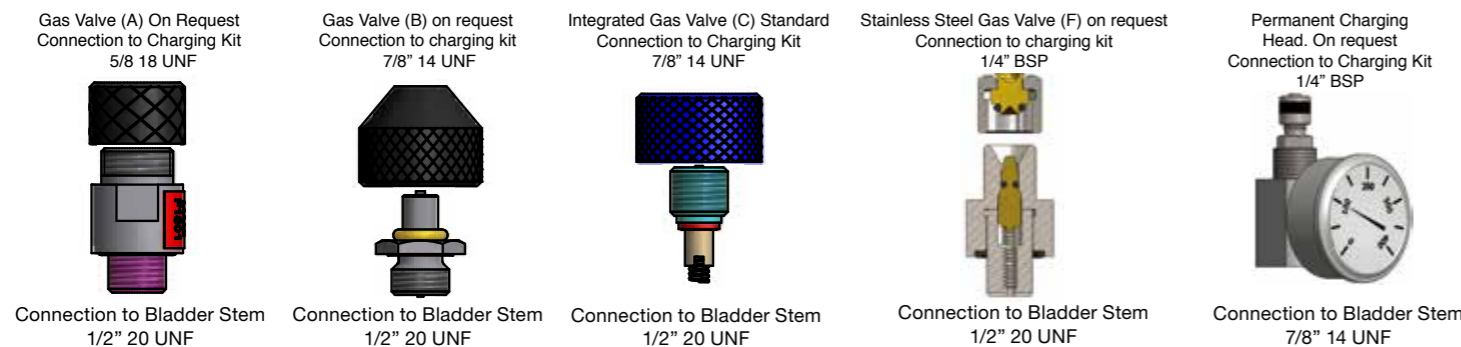
Above dimensions are in mm and are subject to manufacturing tolerances.

EHV-DA Series 5000psi, 10 to 57 Litres

High Flow fluid port, 1200 l/min

Standard version (Carbon Steel shell/NBR mix) for mineral oils temperature from - 15° up to 80°C
 High Flow Fluid Port, 1200 L/min, According to ASME VIII div1
 Part numbers, Accessories Dimensions

Type Part number	Valve model see drawing	Pre-charge		Adaptor Threaded Part number	Clamps Model (quantity) Part number	Support Bracket Model Part number	Mounting Frame Model Part number	Lifting Eye Model Part number	Complete Repair Kit Model Part number	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm								
		1 - 109 bar	110 - 209 bar													A max height	B	C	øD max	ød	øE	F on flats	G connection	
EHV 10-345/48 11230601125	C	751016	751023	G 1" cyl 04557000223	On request	CE159A 20109003620	EF2 20217600125		10912700200	KIT EHV 10-345/48	EHV 10-345/48	9.2	345	1200	39	7/8" 14 UNF	585	103	66	235	22.5	101	70	G 2"
EHV 12-345/48 11230701125	C	751016	751023	G 1" cyl 04557000223	On request	CE159A 20109003620	EF2 20217600125		10912700200	KIT EHV 12-345/48	EHV 12-345/48	11	345	1200	46	7/8" 14 UNF	685	103	66	235	22.5	101	70	G 2"
EHV 20-345/48 11230801125	C	751005	751024	G 1" cyl 04557000223	On request	CE159A 20109003620	EF2 20217600125		10912700200	KIT EHV 20-345/48	EHV 20-345/48	17.8	345	1200	65	7/8" 14 UNF	895	103	66	235	22.5	101	70	G 2"
EHV24.5-345/48 11230901125	C	751017	751025	G 1" cyl 04557000223	On request	CE159A 20109003620	EF2 20217600125		10912700200	KIT EHV 24.5-345/48	EHV 24.5-345/48	22.5	345	1200	77	7/8" 14 UNF	1030	103	66	235	22.5	101	70	G 2"
EHV 32-345/48 11231001125	C	751006	751026	G 1" cyl 04557000223	On request	CE159A 20109003620	EF3 20217700125		10912700200	KIT EHV 32-345/48	EHV 32-345/48	32	345	1200	110	7/8" 14 UNF	1420	103	66	235	22.5	101	70	G 2"
EHV 42-345/48 11222701125	C	751212	751213	G 1" cyl 04557000223	On request	CE159A 20109003620	EF3 20217700125		10912700200	KIT EHV 42-345/48	EHV 42-345/48	42	345	1200	120	7/8" 14 UNF	1562	103	66	235	22.5	101	70	G 2"
EHV 50-345/48 11222801125	C	751007	751027	G 1" cyl 04557000223	On request	CE159A 20109003620	EF3 20217700125		10912700200	KIT EHV 50-345/48	EHV 50-345/48	48.5	345	1200	150	7/8" 14 UNF	1943	103	66	235	22.5	101	70	G 2"
EHV 57-345/48 11222901125	C	751215	751216	G 1" cyl 04557000223	On request	CE159A 20109003620	EF3 20217700125		10912700200	KIT EHV 57-345/48	EHV 57-345/48	53	345	1200	160	7/8" 14 UNF	2038	103	66	235	22.5	101	70	G 2"



Above dimensions are in mm and are subject to manufacturing tolerances.

Regulations for High and Low pressure Bladder Accumulators

Regulations available from Parker Olaer.

Designation	EUROPE				USA		CHINA		CANADA		AUSTRALIA			BRASIL		RUSSIA		MARINE - OFFSHORE				Designation	
	/90	/90	/90	Max. Working Pressure bar	/15 /48	Max. Working Pressure Psi (bar)	/88	/AB	Max. Working Pressure bar	/92	Max. Working Pressure Psi (bar)	/83 /91	/79	Max. Working Pressure bar	/AA /AE /AM	Max. Working Pressure bar	/71 /AU	Max. Working Pressure bar	/24	/11	/23		Max. Working Pressure bar
Models*	CE Fluid Group 2	CE Fluid Group 1	ATEX EX		ASME VIII div 1		SELO	GB/T20663		CRN		AS1210	Australian Workcover Design Approved		NR13		CUTR		DNV Mobile ships	Bureau Veritas Marine	ABS American Bureau of Shipping		Models*
EBV 0.5 L	x	x	x	40											x	40							EBV 0.5 L
EBV 0.5 L	x	x	x	50											x	50							EBV 0.5 L
EBV 1 to 5 L	x	x	x	40			x	40							x	40							EBV 1 to 5 L
EBV 1 to 5 L	x	x	x	80			x	80							x	80							EBV 1 to 5 L
EBV 10 to 50 L	x	x		16											x	16							EBV 10 to 50 L
EBV 10 to 50 L	x	x	x	40	On request	580 (40)									x	40							EBV 10 to 50 L
EBV 100 to 200 L	x	x		16											x	16							EBV 100 to 200 L
EBV 100 to 200 L	x	x	x	20			x	20							x	20							EBV 100 to 200 L
EBV 100 to 200 L	x	x	x	40			x	40							x	40							EBV 100 to 200 L
EBV 100 to 200 L	x	x		50											x	50							EBV 100 to 200 L
EBV 100 to 575 L	x	x	x	8											x	8							EBV 100 to 575 L
EBV 100 to 575 L	x	x		10											x	10							EBV 100 to 575 L
EBV 100 to 575 L	x	x		15											x	15							EBV 100 to 575 L
EBV 100 to 575 L	x	x	x	16											x	16							EBV 100 to 575 L
EBV 100 to 575 L	x	x	x	20											x	20							EBV 100 to 575 L
EBV 100 to 575 L	x	x	x	40											x	40							EBV 100 to 575 L
EHV 0,5L	x	x	x	350			x	350							x	350			x		x	350	EHV 0,5L
EHV 1 to 5 L	x	x	x	300			x	300							x	300							EHV 1 to 5 L
EHV 1 to 5 L	x	x	x	350			x	350				On request	x	350					x		x	350	EHV 1 to 5 L
EHV 1 to 5 L	x	x	x	690			x	690							x	690							EHV 1 to 5 L
EHV 2.5L to 5 L	x	x	x	120			x	120							x	120							EHV 2.5L to 5 L
EHV 4 - 6 - 10 L	x	x	x	210			x	210					x	350									EHV 4 - 6 - 10 L
EHV 4 - 6 - 10 L	x	x	x	350	On request	4000 (276 Bar)	x	x	350			On request		320					x		x	350	EHV 4 - 6 - 10 L
EHV 4 to 60 L					On request	5000 (345 Bar)									x	345							EHV 4 to 60 L
EHV 4 to 60 L					On request	6000 (413 Bar)									x	413							EHV 4 to 60 L
EHV 10 to 42 L					On request	3000 (207 Bar)				x	3000 (207 Bar)				x	207							EHV 10 to 42 L
EHV 10 to 42 L					On request	3600 (248 Bar)				x	3600 (248 Bar)				x	248							EHV 10 to 42 L
EHV 10 to 42 L					On request	4000 (276 Bar)				x	4000 (276 Bar)				x	276							EHV 10 to 42 L
EHV 10 to 50 L	x	x	x	690			x	690							x	690							EHV 10 to 50 L
EHV 10 to 57 L					On request	3600 (248 Bar)						On request		248									EHV 10 to 57 L
EHV 10 to 57 L					On request	4000 (276 Bar)						On request		276									EHV 10 to 57 L
EHV 10 to 57 L	x	x		480			x	480				On request		480									EHV 10 to 57 L
EHV 10 to 60 L	x	x	x	300	On request	3000 (207 Bar)	x	300							x	300							EHV 10 to 60 L
EHV 10 to 60 L	x	x	x	330	On request	3600 (248 Bar)	x	x	330				x	330									EHV 10 to 60 L
EHV 10 to 60 L	x	x	x	480			x	480							x	480							EHV 10 to 60 L
EHV 50 to 57L					On request	3000 (207 Bar)				x	3000 (207 Bar)				x	207							EHV 50 to 57L
EHV 50 to 57 L					On request	3600 (248 Bar)				x	3600 (248 Bar)				x	248							EHV 50 to 57 L
EHV 50 to 57 L					On request	4000 (276 Bar)				x	4000 (276 Bar)		x	x		276							EHV 50 to 57 L
EHV 100 to 200 L	x	x		300	On request	3600 (248 Bar)	x	x	330						x	300							EHV 100 to 200 L
EHVF 2.5 to 10 L	x	x		350			x	x	350						x	350							EHVF 2.5 to 10 L
EHVF 10 to 50 L	x	x		250			x	x	250						x	330							EHVF 10 to 50 L
EHVF 10 to 50 L	x	x		330			x	x	330				x	330									EHVF 10 to 50 L

Multi Approvals are possible

Codification	Regulation
90 EX	CE+ATEX
94	CE+ASME
88	CE+SELO
86	CE+ASME+SELO
AC	CE+GB/T20663

For others regulations contact Parker Olaer.

This table is giving an indication of approval availability for the range of products. Availability is to be confirmed for each approval, in particular the pressure rating and the allowable working temperatures.

Corrosion protection Bladder Accumulators

Protections available from Parker Olaer. Additional options for standard for bladder accumulators.

Calculation Example

	Base Price	Add for change of protection	Total cost for this special
Complete Accumulator: 4 liter complete accumulator with protection Rilsan 86	x (from page 20)	x	x

	EPOXY 80 microns	NICKEL PLATING 50 microns	RILSAN® 200-300 microns		TEFLON 15-25 microns
Valve Stem, Fluid port, Anti Extrusion Ring and Protection Cap	Internal Stainless Steel	Internal/External Stainless Steel	Internal/External Stainless Steel	Internal/External Standard Steel	Internal Stainless Steel
Codes	20	50	84	86	80
Volume	All prices below are in addition (on top of) the standard construction carbon steel 11 on top of the complete base, accumulator cost when ordered complete as a bladder accumulator with special characteristics.				
0,2	x	x	x	x	x
0,5	x	x	x	x	x
1	x	x	x	x	x
1,6	x	x	x	x	x
2,5	x	x	x	x	x
4	x	x	x	x	x
5	x	x	x	x	x
6	x	x	x	x	x
10 (DIA 170)	x	x	x	x	x
10 (DIA 226)	x	x	x	x	x
12	x	x	x	x	x
20	x	x	x	x	x
24,5	x	x	x	x	x
32	x	x	x	x	x
42	x	x	x	x	x
50	x	x	x	x	x
57	x	x	x	x	x
100	x	x	x	x	x
200	x	x	x	x	x

Depending on your application, fluid and the environment in which you install your systems/equipment, Parker can offer a variety of internal and external shell coatings for your bladder accumulator. Please contact our technical support or your local accumulator expert if you are uncertain what you may require or for more details on the various coatings.

Bladder Materials and Types

Bladder mixes available from Parker Olaer. Additional options over standard for bladder accumulators series EHV/EBV.

Calculation Example EHV

	Base Price	add for change of mix	Total cost for this special
Complete Accumulator: 4 liter complete accumulator with mix 80 (viton) bladder	x (from page 20)	x	x
Spare Bladder Kit: 4 liter spare bladder mix 80 (viton) bladder	x (from page 20)	x	x

	Standard Bladder	For other bladder mixes as spare parts, start with the cost for NBR, Mix 25 and add the adder prices listed below. For complete accumulators with special bladders, start with the base cost of a standard accumulators and then add the additional cost listed below.								
Mix Number	Mix 25	Mix 02	Mix 10	Mix 20	Mix 30	Mix 35	Mix 37	Mix 40	Mix 47	Mix 80
Mix Name	Standard NBR (Nitrile)	Hydrin C	Low Temp Nitrile	Heavy Duty Nitrile	Low Nitrile Permeability	High Temp Nitrile	Extreme Low Temp Nitrile	Butyl	EPDM	Viton
Max Temp °C	100	115	70	110	115	130	110	120	120	140
Min Temp °C	- 20	- 32	- 28	- 6	- 5	0	- 59	- 15	- 40	-20
Typical Fluid	Mineral Oil	Mineral Oil	Mineral Oil	Mineral Oil	Mineral Oil + Special fuels (not unleaded gasoline)	Mineral Oil	Consult Parker Olaer regarding fluid and application	Water based fluids	Phosphate esters	Aggressive fluids
Volume	All prices below are in addition (on top of) the base Mix 25 bladder kit cost(spares) or on top of the complete base, Mix 25 accumulator cost when ordered complete as a bladder accumulator with special bladder mix.									
0,2	Standard, no extra costs.	x	x		x	x	x	x	x	x
0,5		x	x	x	x	x	x	x	x	x
1		x	x	x	x	x	x	x	x	x
1,6		x	x	x	x	x	x	x	x	x
2,5		x	x	x	x	x	x	x	x	x
4		x	x	x	x	x	x	x	x	x
5		x	x	x	x	x	x	x	x	x
6		x	x	x	x	x	x	x	x	x
10 (DIA 170)		x	x	x	x	x	x	x	x	x
10 (DIA 226)		x	x	x	x	x	x	x	x	x
12		x	x	x	x	x	x	x	x	x
20		x	x	x	x	x	x	x	x	x
24,5		x	x	x	x	x	x	x	x	x
32		x	x	x	x	x	x	x	x	x
42		x	x	x	x	x	x	x	x	x
50		x	x	x	x	x	x	x	x	x
57	x	x	x	x	x	x	x	x	x	
100*	x	x		x	x	x	x	x	x	x
200*	x	x		x	x	x	x	x	x	x

* Accumulators 100 & 200 Litres Standard Nitrile Mix 20

General Information Diaphragm Accumulator

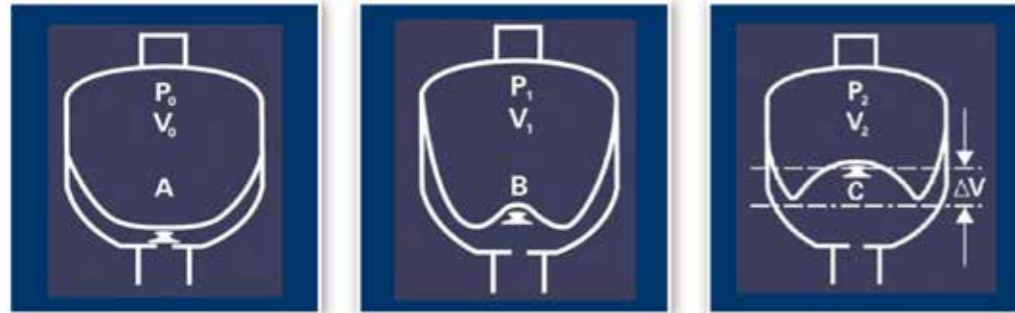
Operation of the Olaer gas loaded diaphragm accumulator is based on the considerable difference in compressibility between a gas and a liquid, enabling a large quantity of energy to be stored in an extremely compact form. This enables a liquid under pressure to be accumulated, stored and recovered at any time.

The adaptation of a hydraulic shock absorber made up of a diaphragm accumulator improves driver comfort and offers immediate response times when driving over obstacles and the same flexibility for variable operating conditions.
 0 < speed < 50 kph
 3.5 < load variation < 100%
 Identical flexibility depending on your use.

The same EC pressure directive (PED) compliant accumulator can be used in over 35 destination countries, thus facilitating their free movement.

The technical characteristics are as follows:
 Minimum/maximum temperature allowable (° Celsius) :
 -20/+80 for standard nitrile elastomers for models between 0.5≤V≤1.4 Litre
 -10/+80 for standard nitrile elastomers for models ≥2 Litre and ≤0.32Litre
 -35/+80 for hydrin elastomers

Materials : carbon steel or stainless steel, nitrile or hydrin diaphragm, for other constructions: consult Parker Olaer.



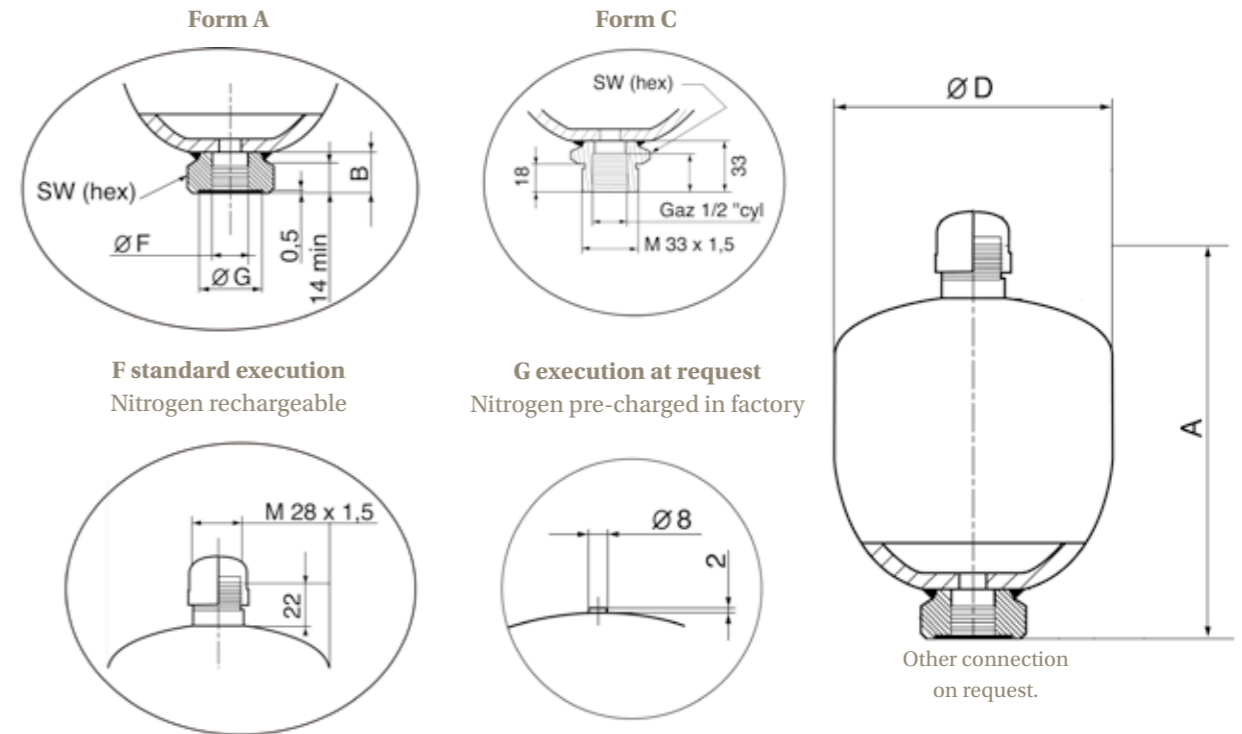
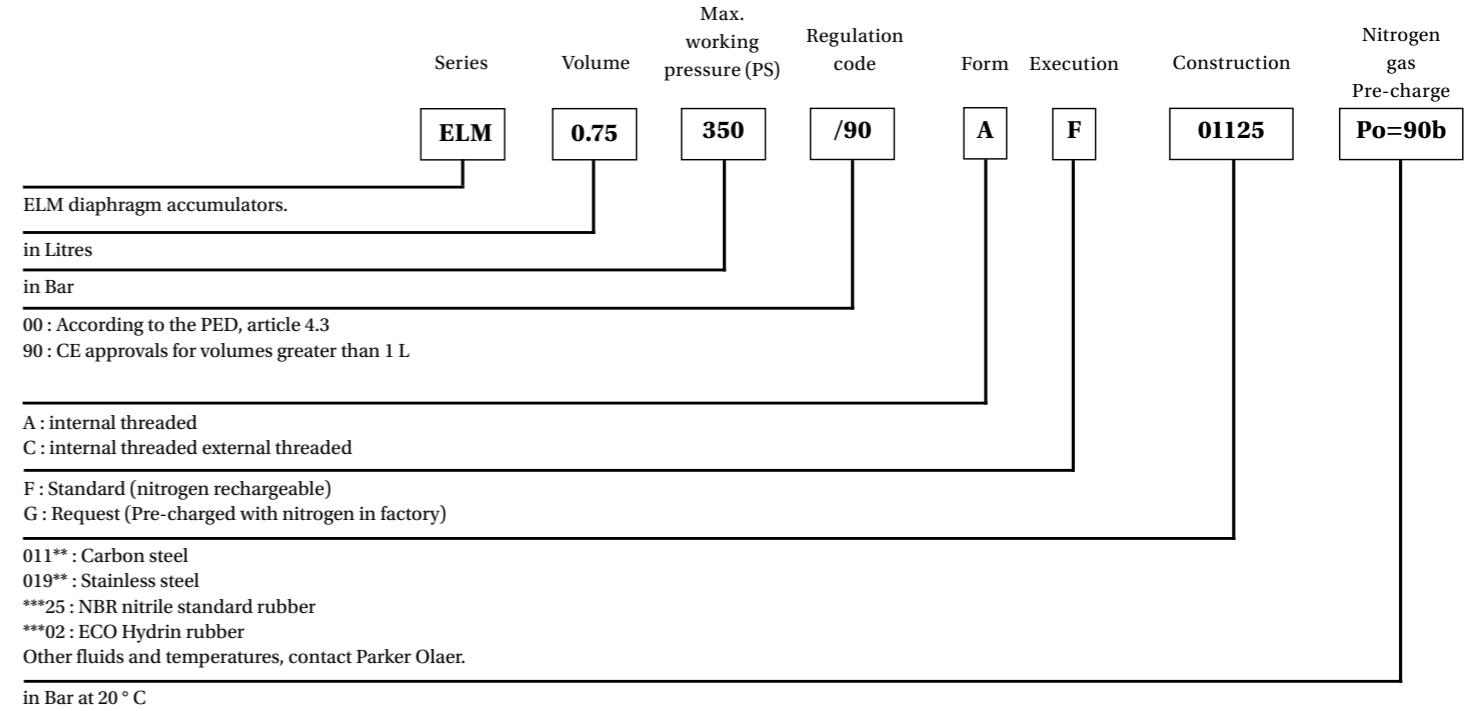
- V0** = Capacity in nitrogen of the accumulator
- V1** = Gas volume at the minimum hydraulic pressure
- V2** = Gas volume at the maximum hydraulic pressure
- ΔV** = Returned and/or stored volume of working fluid between P1 and P2
- P0** = Initial preload of the accumulator
- P1** = Gas pressure at the minimum hydraulic pressure
- P2** = Gas pressure at the maximum hydraulic pressure

A - The diaphragm is in the Pre-charge position, which means that it is only filled with nitrogen. The knob closes the hydraulic orifice and prevents the destruction of the diaphragm.

B - Position at the minimum operating pressure : there must be a certain amount of fluid between the diaphragm and the hydraulic orifice, such that the knob does not close the hydraulic orifice. Thus, P0 must always be < P1.

C - Position at the maximum operating pressure: the volume change ΔV between the minimum and maximum positions of the operating pressures represents the fluid quantity stored.

ELM Series: How to order a Diaphragm accumulator



ELM Series 140 - 350 BAR, 0.075 to 1.4 Litres

Standard Version (steel casing/mix NBR) for mineral oils temperature from - 20° up to 80°C
 According to PED 2014/68/EU, Fluid Group 2
 Part numbers, Accessories Dimensions

Type Part number	Pre-charge	Clamps	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Execution form	Max. Pre-charge bar	Max compression in bar ratio P2/P0	Max Pressure amplitude P2/P1	Weight kg	Dimensions in mm					Oilport		Lock Nut type
	1 - 130 bar	Model (quantity) Part number									A max Height	B	SW	D	G	F	H	
ELM 0.075-250/00/AF* 10849201125	751013	-	ELM 0.075-250/00/AF*	0.075	250	AF	130	8	210	0.7	112	22	32	64	29	G½	-	-
ELM 0.16-250/00/AF* 10849301125	751013	-	ELM 0.16-250/00/AF*	0.16	250	AF	130	6	210	1	120	20	32	75	29	G½	-	-
ELM 0.32-210/00/AF* 10986601125	751000	E95 (1) 20250803648	ELM 0.32-210/0/AF*	0.32	210	AF	130	8	140	1.4	134	20	32	93	29	G½	-	-
ELM 0.5-210/00/AF* 10849501125	751000	E106 (1) 20250903648	ELM 0.5-210/00/AF*	0.50	210	AF	130	8	175	2	153	22	41	106	34	G½	-	-
ELM 0.5-210/00/CF* 10849601125	751000	E106 (1) 20250903648	ELM 0.5-210/00/CF*	0.50	210	CF	130	8	175	2	163	22	41	106	-	G½	M33x1.5	M33
ELM 0.75-210/00/AF* 10849701125	751010	E114 (1) 20251003648	ELM 0.75-210/00/AF*	0.75	210	AF	130	8	175	2.6	166	22	41	122	34	G½	-	-
ELM 0.75-210/00/CF* 10849801125	751010	E114 (1) 20251003648	ELM 0.75-210/00/CF*	0.75	210	CF	130	8	175	2.6	177	33	41	122	-	G½	M33x1.5	M33
ELM 0.75-350/00/AF* 10931801125	751010	E136 (1) 20251103648	ELM 0.75-350/00/AF*	0.75	350	AF	130	8	150	4	168	18	41	133	34	G½	-	-
ELM 0.75-350/00/CF* 10931901125	751010	E136 (1) 20251303648	ELM 0.75-350/00/CF*	0.75	350	CF	130	8	150	4	184	18	41	133	-	G½	M33x1.5	M33
ELM 1 - 210/00/AF* 10984701125	751001	E136 (1) 20251103648	ELM 1-210/00/AF*	1	210	AF	130	8	170	3.5	180	22	41	136	34	G½	-	-
ELM 1 - 210/00/CF* 10984801125	751001	E136 (1) 20251103648	ELM 1-210/00/CF*	1	210	CF	130	8	170	3.5	191	33	41	136	-	G½	M33x1.5	M33
ELM 1.4 - 140/90/AF 10850201125	751014	E155 (1) 20251203648	ELM 1.4-140/90/AF	1.40	140	AF	130	8	120	4.1	191	22	41	148	34	G½	-	-
ELM 1.4 - 140/90/CF 10850301125	751014	E155 (1) 20251203648	ELM 1.4-140/90/CF	1.40	140	CF	130	8	120	4.1	202	33	41	148	-	G½	M33x1.5	M33
ELM 1.4 - 210/90/AF 10996501125	751014	E155 (1) 20251203648	ELM 1.4-210/90/AF	1.40	210	AF	130	8	120	4.2	191	22	41	148	34	G½	-	-
ELM 1.4 - 210/90/CF 10996601125	751014	E155 (1) 20251203648	ELM 1.4-210/90/CF	1.40	210	CF	130	8	120	4.2	202	33	41	148	-	G½	M33x1.5	M33

* According to the PED, article 4.3



Above dimensions are in mm and are subject to manufacturing tolerances.

ELM Series 160 - 350 BAR, 0.75 to 3.5 Litres

Standard Version (steel casing mix NBR) for mineral oils and for volume 1.4 L temperature from - 20° up to 80°C
 for volume ≥ 2 L temperature from - 10°C up to 80°C. According to PED 2014/68/EU, Fluid Group 2

Part numbers, Accessories Dimensions

Type Part number	Pre-charge 1 to 109 bar	Clamps Model (quantity) Part number	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Execution form	Max. Pre-charge bar	Max compression in bar ratio P2/P0	Max Pressure amplitude P2/P1	Weight kg	Dimensions in mm						Oilport		Lock Nut type
											A max Height	B	SW	D	G	F	H		
ELM 1.4 - 250/90/AF 11013201125	751014	E155 (1) 20251203648	ELM 1.4-250/90/AF	1.40	250*	AF	130	8	140	5.5	199	22	41	155	34	G½	-	-	
ELM 1.4 - 250/90/CF 11013301125	751014	E155 (1) 20251203648	ELM 1.4-250/90/CF	1.40	250*	CF	130	8	140	5.5	209	33	41	155	-	G½	M33x1.5	M33	
ELM 1.4 - 350/90/AF 10932101125	751014	E155 (1) 20251203648	ELM 1.4-350/90/AF	1.40	350	AF	130	8	150	7	199	20	41	160	34	G½	-	-	
ELM 1.4 - 350/90/CF 10932201125	751014	E155 (1) 20251203648	ELM 1.4-350/90/CF	1.40	350	CF	130	8	150	7	220	20	41	160	-	G½	M33x1.5	M33	
ELM 2 - 100/90/AF 10850401125	751014	E155 (1) 20251203648	ELM 2-100/90/AF	2	100	AF	130	8	80	3.5	240	22	41	144	34	G½	-	-	
ELM 2 - 250/90/AF 11013401125	751014	E155 (1) 20251203648	ELM 2-250/90/AF	2	250**	AF	130	8	140	9.5	251	22	41	155	33	G¾	-	-	
ELM 2 - 350/90/AF 11006001125	751014	E180 (1) 20243203625	ELM 2-350/90/AF	2	350	AF	130	8	200	9.5	219	22	55	180	34	G¾	-	-	
ELM 2 - 350/90/CF 11006101125	751014	E180 (1) 20243203625	ELM 2-350/90/CF	2	350	CF	130	8	200	9.5	240	22	55	180	-	G¾	M45x1.5	M45	
ELM 2.8 - 250/90/AF 10887901125	751002	E168 (1) 20251303648	ELM 2.8-250/90/AF	2.80	250***	AF	130	6	140	10	268	21	41	174	34	G¾	-	-	
ELM 2.8 - 350/90/AF 10975801125	751002	E180 (1) 20243203625	ELM 2.8-350/90/AF	2.80	350	AF	130	6	200	14.3	264	21	55	180	34	G¾	-	-	
ELM 2.8 - 350/90/CF 10975901125	751002	E180 (1) 20243203625	ELM 2.8-350/90/CF	2.80	350	CF	130	6	200	14.3	285	21	55	180	-	G¾	M45x1.5	M45	
ELM 3.5 - 250/90/AF 10850501125	751012	E168 (1) 20251303648	ELM 3.5-250/90/AF	3.50	250****	AF	130	4	140	11	307	21	41	174	33	G¾	-	-	
ELM 3.5 - 350/90/AF 10984901125	751012	E180 (1) 20243203625	ELM 3.5-350/90/AF	3.50	350	AF	130	4	200	16	304	21	55	180	34	G¾	-	-	
ELM 3.5 - 350/90/CF 10985001125	751012	E180 (1) 20243203625	ELM 3.5-350/90/CF	3.50	350	CF	130	4	200	16	325	21	55	180	-	G¾	M45x1.5	M45	
ELM 0.75-160/00/CF ¹⁾ 10854901925	751010	E136 (1) ¹⁾	ELM 0.75-160/00/CF ¹⁾	0.75	160	CF	130	8	120	2.6	176	33	41	121	-	G½	-	-	

¹⁾ According to PED, article 4.3 and stainless steel construction

* = 177 Bar as per AS1210
 ** = 240 Bar as per AS1210
 *** = 185 Bar as per AS1210
 **** = 187 Bar as per AS1210



Above dimensions are in mm and are subject to manufacturing tolerances.

ELM Series 140 - 350 BAR, 0.075 to 1.4 Litres

ECO Version (steel casing/mix ECO) for mineral oils temperature from - 35°C up to 80°C
 According to PED 2014/68/EU, Fluid Group 2 and SELO
 Part numbers, Accessories Dimensions

Type Part number	Pre-charge	Clamps	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Execution form	Max. Pre-charge bar	Max compression in bar ratio P2/P0	Max Pressure amplitude P2/P1	Weight kg	Dimensions in mm					Oilport		Lock Nut type
	1 - 109 bar	Model (quantity) Part number									A max Height	B	SW	D	G	F	H	
ELM 0.075-250/00/AF* 10849201102	751013	-	ELM 0.075-250/00/AF*	0.075	250	AF	130	8	210	0.7	112	22	32	64	29	G½	-	-
ELM 0.16-250/00/AF* 10849301102	751013	-	ELM 0.16-250/00/AF*	0.16	250	AF	130	6	210	1	120	20	32	75	29	G½	-	-
ELM 0.32-210/00/AF* 10986601102	751000	E95 (1) 20250803648	ELM 0.32-210/00/AF*	0.32	210	AF	130	8	140	1.4	134	20	32	93	29	G½	-	-
ELM 0.5-210/00/AF* 10849501102	751000	E106 (1) 20250903648	ELM 0.5-210/00/AF*	0.50	210	AF	130	8	175	2	153	22	41	106	34	G½	-	-
ELM 0.5-210/00/CF* 10849601102	751000	E106 (1) 20250903648	ELM 0.5-210/00/CF*	0.50	210	CF	130	8	175	2	163	22	41	106	-	G½	M33x1.5	M33
ELM 0.75-210/00/AF* 10849701102	751010	E114 (1) 20251003648	ELM 0.75-210/00/AF*	0.75	210	AF	130	8	175	2.6	166	22	41	122	34	G½	-	-
ELM 0.75-210/00/CF* 10849801102	751010	E114 (1) 20251003648	ELM 0.75-210/00/CF*	0.75	210	CF	130	8	175	2.6	177	33	41	122	-	G½	M33x1.5	M33
ELM 0.75-350/00/AF* 10931801102	751010	E114 (1) 20251003648	ELM 0.75-350/00/AF*	0.75	350	AF	130	8	150	4	168	18	41	133	34	G½	-	-
ELM 0.75-350/00/CF* 10931901102	751010	E114 (1) 20251003648	ELM 0.75-350/00/CF*	0.75	350	CF	130	8	150	4	184	18	41	133	-	G½	M33x1.5	M33
ELM 1-210/00/AF* 10984701102	751001	E136 (1) 20251103648	ELM 1-210/00/AF*	1	210	AF	130	8	170	3.5	180	22	41	136	34	G½	-	-
ELM 1-210/00/CF* 10984801102	751001	E136 (1) 20251103648	ELM 1-210/00/CF*	1	210	CF	130	8	170	3.5	191	33	41	136	-	G½	M33x1.5	M33
ELM 1.4-140/90/AF 10850201102	751014	E155 (1) 20251203648	ELM 1.4-140/90/AF	1.40	140	AF	130	8	120	4.1	191	22	41	148	34	G½	-	-
ELM 1.4-140/90/CF 10850301102	751014	E155 (1) 20251203648	ELM 1.4-140/90/CF	1.40	140	CF	130	8	120	4.1	202	33	41	148	-	G½	M33x1.5	M33
ELM 1.4-210/90/AF 10996501102	751014	E155 (1) 20251203648	ELM 1.4-210/90/AF	1.40	210	AF	130	8	120	4.2	191	22	41	148	34	G½	-	-
ELM 1.4-210/90/CF 10996601102	751014	E155 (1) 20251203648	ELM 1.4-210/90/CF	1.40	210	CF	130	8	120	4.2	202	33	41	148	-	G½	M33x1.5	M33

* according to the PED, article 4.3



Above dimensions are in mm and are subject to manufacturing tolerances.

ELM Series 250 - 350 BAR, 1.4 to 3.5 Litres

ECO Version (steel casing/mix ECO) for mineral oils temperature from - 35°C up to 80°C
 According to PED 2014/68/EU, Fluid Group 2
 Part numbers, Accessories Dimensions

Type Part number	Pre-charge 1 to 109 bar	Clamps Model (quantity) Part number	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Execution form	Max. Pre-charge bar	Max compression in bar ratio P2/P0	Max Pressure amplitude P2/P1	Weight kg	Dimensions in mm					Oilport		Lock Nut type
											A max Height	B	SW	D	G	F	H	
ELM 1.4-250/90/AF 11013201102	751014	E155 (1) 20251203648	ELM 1.4-250/90/AF	1.40	250*	AF	130	8	140	5.5	199	22	41	155	34	G½	-	-
ELM 1.4-250/88/CF 11013301102	751014	E155 (1) 20251203648	ELM 1.4-250/90/CF	1.40	250*	CF	130	8	140	5.5	209	33	41	155	-	G½	M33x1.5	M33
ELM 1.4-350/90/AF 10932101102	751014	E155 (1) 20251203648	ELM 1.4-350/90/AF	1.40	350	AF	130	8	150	7	199	20	41	160	34	G½	-	-
ELM 1.4-350/90/CF 10932201102	751014	E155 (1) 20251203648	ELM 1.4-350/90/CF	1.40	350	CF	130	8	150	7	220	20	41	160	-	G½	M33x1.5	M33
ELM 2-100/90/AF 10850401102	751014	E155 (1) 20251203648	ELM 2-100/90/AF	2	100	AF	130	8	80	3.5	240	22	41	144	34	G½	-	-
ELM 2-250/90/AF 11013401102	751014	E155 (1) 20251203648	ELM 2-250/90/AF	2	250**	AF	130	8	140	9.5	251	22	41	155	33	G¾	-	-
ELM 2-350/90/AF 11006001102	751014	E180 (1) 20243203625	ELM 2-350/90/AF	2	350	AF	130	8	200	9.5	219	22	55	180	34	G¾	-	-
ELM 2-350/90/CF 11006101102	751014	E180 (1) 20243203625	ELM 2-350/90/CF	2	350	CF	130	8	200	9.5	240	22	55	180	-	G¾	M45x1.5	M45
ELM 2.8-250/90/AF 10887901102	751002	E168 (1) 20251303648	ELM 2.8-250/90/AF	2.80	250***	AF	130	6	140	10	268	21	41	174	34	G¾	-	-
ELM 2.8-350/90/AF 10975801102	751002	E180 (1) 20243203625	ELM 2.8-350/90/AF	2.80	350	AF	130	6	200	14.3	264	21	55	180	34	G¾	-	-
ELM 2.8-350/90/CF 10975901102	751002	E180 (1) 20243203625	ELM 2.8-350/90/CF	2.80	350	CF	130	6	200	14.3	285	21	55	180	-	G¾	M45x1.5	M45
ELM 3.5-250/90/AF 10850501102	751012	E168 (1) 20251303648	ELM 3.5-250/90/AF	3.50	250****	AF	130	4	140	11	307	21	41	174	33	G¾	-	-
ELM 3.5-350/90/AF 10984901102	751012	E180 (1) 20243203625	ELM 3.5-350/90/AF	3.50	350	AF	130	4	200	16	304	21	55	180	34	G¾	-	-
ELM 3.5-350/90/CF 10985001102	751012	E180 (1) 20243203625	ELM 3.5-350/90/CF	3.50	350	CF	130	4	200	16	325	21	55	180	-	G¾	M45x1.5	M45

* = 177 Bar as per AS1210
 ** = 240 Bar as per AS1210
 *** = 185 Bar as per AS1210
 **** = 187 Bar as per AS1210



Above dimensions are in mm and are subject to manufacturing tolerances.

General Information Piston Accumulators

Operation of the Parker Olaer gas loaded piston accumulator is based on the considerable difference in compressibility between a gas and a liquid, enabling a large quantity of energy to be stored in an extremely compact form. This enables a liquid under pressure to be accumulated, stored and recovered at any time. When fluid under pressure enters the fluid side of the accumulator, the piston is pushed towards the gas side and the Nitrogen gas is compressed. Parker Olaer piston accumulators can be supplied with a large variety of seals suitable for high and low pressures and temperatures as well as special fluids. This is part of the flexibility of the Piston Accumulator, materials in all components can be chosen to best fit the application.

Technical Characteristics

The accumulator comprises of a pressure vessel, a piston and its seals.

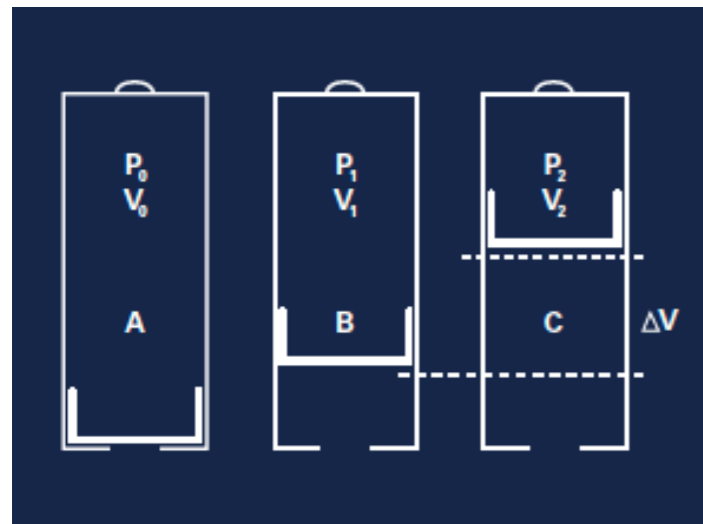
- Shell material options include standard carbon steel, alloyed steel, stainless steel, aluminium, titanium and composites. The main requirement is that the material is suitable and approved for use in pressure vessels.
- For most standard industrial and mobile systems the piston is made from light weight aluminium. To improve resistance to certain fluids, this is sometimes anodized. In special

applications, the pistons are made from the same material as the pressure vessel. In some special applications, Parker Olaer piston accumulators can also be supplied with pistons made from composite materials.

- The sealing systems in the piston accumulator are the key working components, and also where we have focused resources selecting the correct type and material. Depending on the customer application, our engineers will choose the most optimum solution.

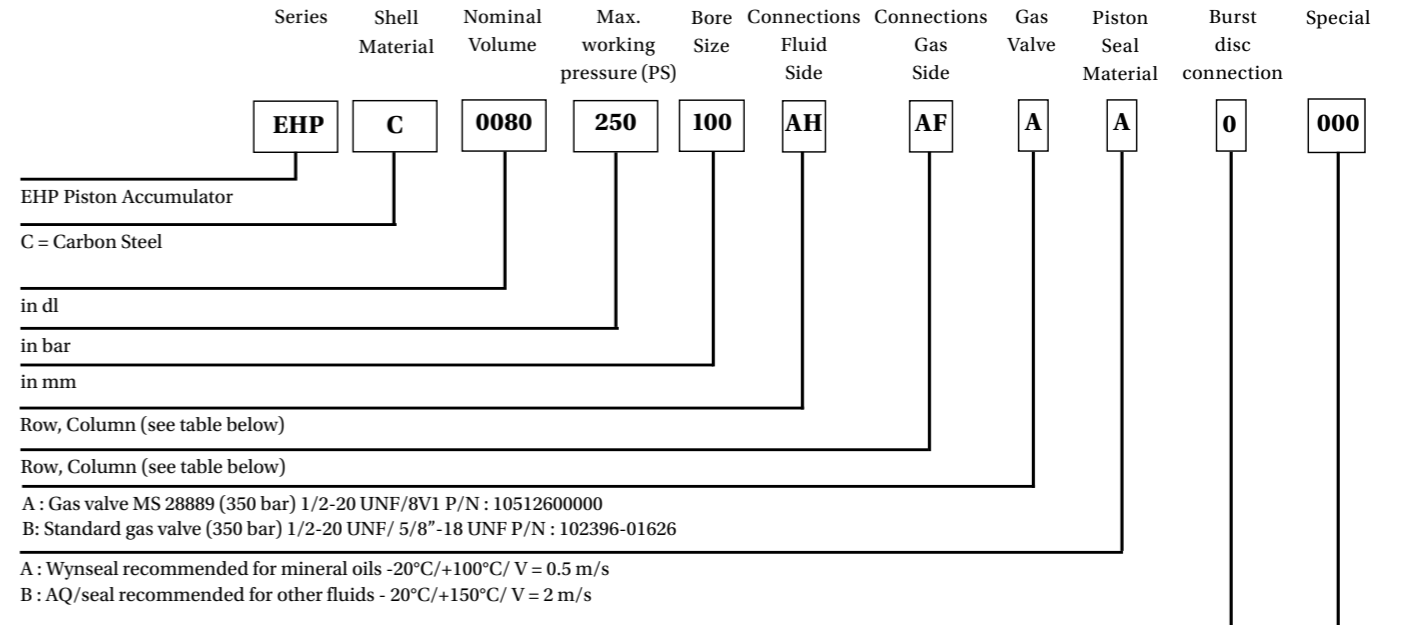
Taking into account the different needs of various applications, Parker proposes different corrosion protections external and/or internal: Bare metal, electroless nickel plating, standard primer, epoxy paint etc. This extensive range enables us to offer accumulators operating from - 45 to +200°C with pressures of up to 3000 Bar and capacities in excess of 1000 litres.

As one of few global companies in the piston accumulator market, Parker Olaer has participated in the development of the EN 14359:2006 standard, which specifies the material, design, manufacturing, tests, safety devices and documentation (including the instruction manual), for pressure accumulators and gas bottles for hydraulic applications.



V0 = Capacity in nitrogen of the accumulator
V1 = Gas volume at the minimum hydraulic pressure
V2 = Gas volume at the maximum hydraulic pressure
 ΔV = Returned and/or stored volume between P1 and P2
P0 = Initial preload of the accumulator
P1 = Gas pressure at the minimum hydraulic pressure
P2 = Gas pressure at the maximum hydraulic pressure

EHP Series: How to order a Piston Accumulator



Code	Burst Disc	Size
0	Without burst disc, no connection	
A	275 Bar/80°C	G 1/4"
B	385 Bar/80°C	G 1/4"
C	230 Bar/80°C	G 1/4"
D	250 Bar/80°C	G 1/4"
E	300 Bar/80°C	G 1/4"
F	420 Bar/80°C	G 1/4"
K	230 Bar/80°C	
L	275 Bar/80°C	
M	385 Bar/80°C	
N	without burst disc. Plugged connection	NPT 1/4"
P	without burst disc. Plugged connection	G 1/4"
R	300 Bar/80°C	
X	Special	

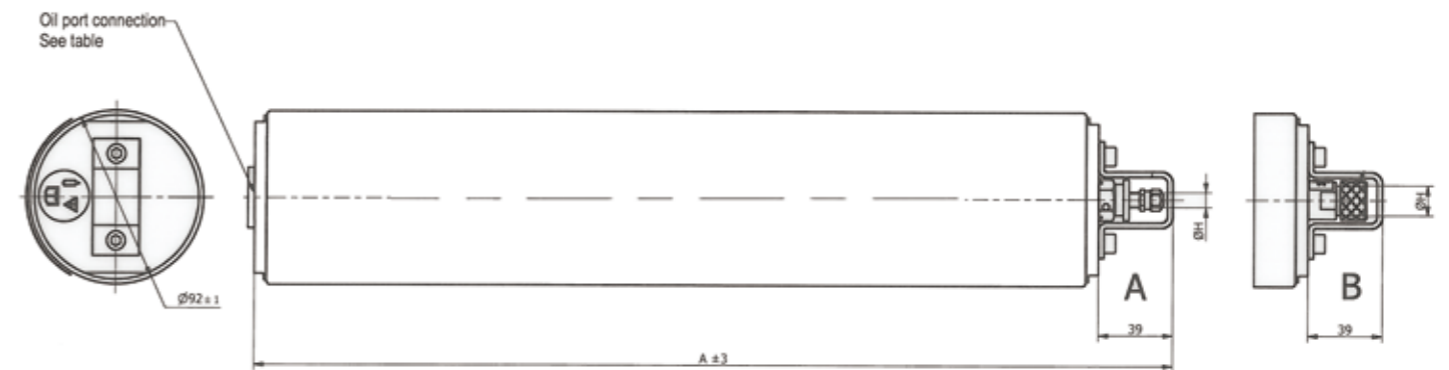
000 = Precharge designation (example: 010=10bar)
 00Z = Special : to be defining on the order

Specification	A	B	C	D	E	F	G	H	I	K	L	M	N
Thread to ISO228-1 (G)	G1/8"-28	G1/4"-19	G3/8"-19	G1/2"-14	G5/8"-14	G3/4"-14	G7/8"-14	G1"-11	G 1 1/4"-11	G1 1/2"-11	G2"-11	G2 1/2"-11	G3"-11
SAE Flange (ISO 6162)	1/2" 210 Bar	3/4" 210 Bar	1" 210 Bar	1 1/4" 210 Bar	1 1/2" 210 Bar	2" 210 Bar	2 1/2" ca 175 Bar	3" ca 140 Bar					
SAE Flange	1/2" 3000 psi	3/4" 3000 psi	1" 3000 psi	1 1/4" 3000 psi	1 1/2" 3000 psi	2" 3000 psi	2 1/2" 3000 psi	3" 3000 psi					
SAE Port (UN)	#5 1/2"-20	#6 9/16"-18	#8 3/4"-16	#10 7/8"-14	#12 1 1/16"-12	#16 1 5/16"-12	#20 1 5/8"-12	#24 1 7/8"-12	#32 2 1/2"-12				
Metric (ISO 6149-1)	M10 x 1	M12 x 1,5	M14 x 1,5	M18 x 1,5	M22 x 1,5	M27 x 2	M33 x 2	M42 x 2	M48 x 2				

EHP Series 250 bar, 1 to 4 Litres, Ø 80

Standard version (Carbon steel) for mineral oils,
Part numbers, Dimensions
Most common configurations

Type Part number	Pre-charge			Wynseal Piston Kit	Without burst disc. Plugged connection	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Dia Bore	Max Flow Rate lt/min	Allowable Temperature °C	Weight kg	A max height	External øD max	Oil port connection	V m/s
	1 - 109 bar	110 - 209 bar	210 - 300 bar	Part number	Model Part number											
EHP-C-0010-250-080-AF00AA000 (1) 90XX-0701-AF00-AA000	751001	751030	751045	9782-080-003	-	EHP-C-0010-250-080-AF00AA000 (1)	1	250	80	151	-20/+80	14.4	785	92	G 3/4"	0,5
EHP-C-0010-250-080-AF00AAP00 (1) 90XX-0701-AF00-AAP00	751001	751030	751045	9782-080-003	Consult Division	EHP-C-0010-250-080-AF00AAP00 (1)	1	250	80	151	-20/+80	14.4	785	92	G 3/4"	0,5
EHP-C-0020-250-080-AB00AA000 (2) 90XX-1001-AB00-AA000	751002	751031	751046	9782-080-003	-	EHP-C-0020-250-080-AB00AA000	2	250	80	151	-20/+80	11.9	586	92	G 1/4"	0,5
EHP-C-0020-250-080-AF00AA000 (2) 90XX-1001-AF00-AA000	751002	751031	751046	9782-080-003	-	EHP-C-0020-250-080-AF00AA000	2	250	80	151	-20/+80	11.9	586	92	G 3/4"	0,5
EHP-C-0020-250-080-AF00AAP00 (2) 90XX-1001-AF00-AAP00	751002	751031	751046	9782-080-003	Consult Division	EHP-C-0020-250-080-AF00AAP00	2	250	80	151	-20/+80	11.9	586	92	G 3/4"	0,5
EHP-C-0030-250-080-AF00AA000 (2) 90XX-1301-AF00-AA000	751002	751031	751046	9782-080-003	-	EHP-C-0030-250-080-AF00AA000	3	250	80	151	-20/+80	14.4	785	92	G 3/4"	0,5
EHP-C-0040-250-080-AF00AA000 (2) 90XX-1601-AF00-AA000	751012	751020	751035	9782-080-003	-	EHP-C-0040-250-080-AF00AA000	4	250	80	151	-20/+80	16.9	984	92	G 3/4"	0,5



Above dimensions are in mm and are subject to manufacturing tolerances.

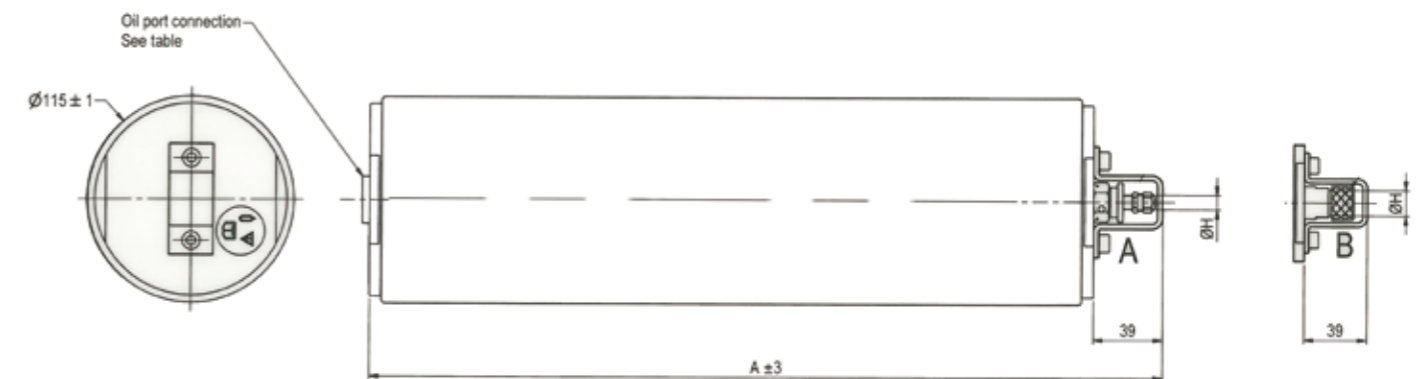
EHP Series 250 bar, 2 to 10 Litres, Ø 100

Standard version (Carbon steel) for mineral oils

Part numbers, Dimensions

Most common configurations

Type Part number	Pre-charge			Wynseal Piston Kit	Without burst disc. Plugged connection	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Dia Bore	Max Flow Rate lt/min	Allowable Temperature °C	Weight kg	A max height	External øD max	Oil port connection	V m/s
	1 - 109 bar	110 - 209 bar	210 - 300 bar	Part number	Model Part number											
EHP-C-0020-250-100-AD00AA000 (1) 90XX-1002-AD00-AA000	751002	751031	751046	9782-100-001	-	EHP-C-0020-250-100-AD00AA000 (1)	2	250	100	236	-20/+80	15.2	441	115	G 1/2"	0,5
EHP-C-0020-250-100-AF00AA000 (1) 90XX-1002-AF00-AA000	751002	751031	751046	9782-100-001	-	EHP-C-0020-250-100-AF00AA000 (1)	2	250	100	236	-20/+80	15.2	441	115	G 3/4"	0,5
EHP-C-0040-250-100-AD00AA000 (1) 90XX-1602-AD00-AA000	751012	751020	751035	9782-100-001	-	EHP-C-0040-250-100-AD00AA000 (1)	4	250	100	236	-20/+80	20.2	696	115	G 1/2"	0,5
EHP-C-0040-250-100-AF00AA000 (1) 90XX-1602-AF00-AA000	751012	751020	751035	9782-100-001	-	EHP-C-0040-250-100-AF00AA000 (1)	4	250	100	236	-20/+80	20.2	696	115	G 3/4"	0,5
EHP-C-0040-250-100-DF00AA000 (1) 90XX-1602-DF00-AA000	751015	751020	751035	9782-100-001	-	EHP-C-0040-250-100-DF00AA000 (1)	4	250	100	236	-20/+80	20.2	696	115	#16 1 5/16"	0,5
EHP-C-0060-250-100-AF00AA000 (2) 90XX-1902-AF00-AA000	751015	751021	751036	9782-100-001	-	EHP-C-0060-250-100-AF00AA000 (2)	6	250	100	236	-20/+80	25.3	951	115	G 3/4"	0,5
EHP-C-0060-250-100-AH00AA000 (2) 90XX-1902-AH00-AA000	751015	751021	751036	9782-100-001	-	EHP-C-0060-250-100-AH00AA000 (2)	6	250	100	236	-20/+80	25.3	951	115	G 1"	0,5
EHP-C-0080-250-100-AF00AA000 (2) 90XX-2002-AF00-AA000	751004	751022	751037	9782-100-001	-	EHP-C-0080-250-100-AF00AA000 (2)	8	250	100	236	-20/+80	30.3	1205	115	G 3/4"	0,5
EHP-C-0080-250-100-AH00AAP00 (2) 90XX-2002-AH00-AAP00	751004	751022	751037	9782-100-001	Consult Division	EHP-C-0080-250-100-AH00AAP00 (2)	8	250	100	236	-20/+80	30.3	1205	115	G 1"	0,5
EHP-C-0100-250-100-AH00AA000 (2) 90XX-2102-AH00-AA000	751004	751022	751037	9782-100-001	-	EHP-C-0100-250-100-AH00AA000 (2)	10	250	100	236	-20/+80	35.3	1460	115	G 1"	0,5
EHP-C-0100-250-100-AH00AAP00 (2) 90XX-2102-AH00-AAP00	751004	751022	751037	9782-100-001	Consult Division	EHP-C-0100-250-100-AH00AAP00 (2)	10	250	100	236	-20/+80	35.3	1460	115	G 1"	0,5

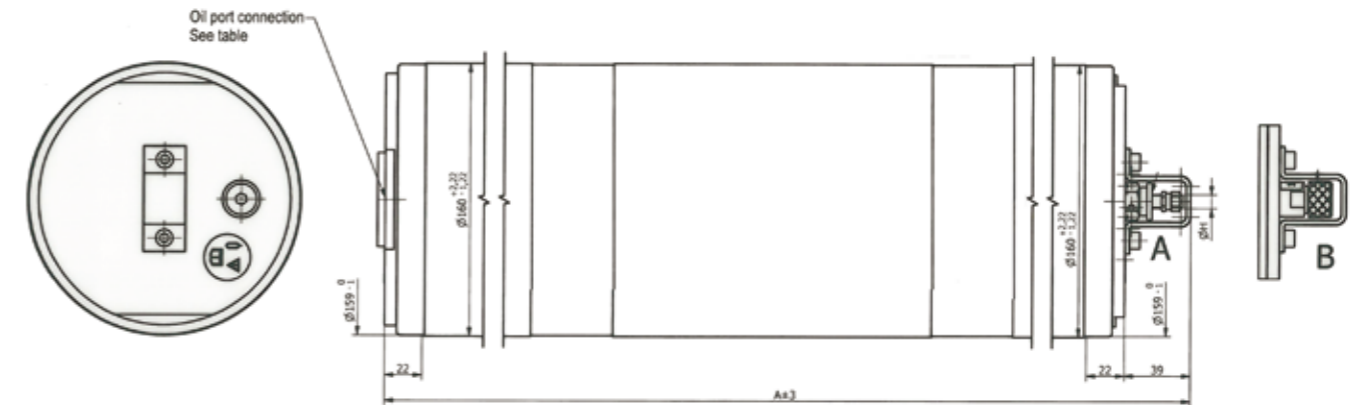


Above dimensions are in mm and are subject to manufacturing tolerances.

EHP Series 250 bar, 4 to 25 Litres, Ø 140

Standard version (Carbon steel) for mineral oils,
Part numbers, Dimensions
Most common configurations

Type Part number	Pre-charge			Wynseal Piston Kit	Without burst disc. Plugged connection	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Dia Bore	Max Flow Rate lt/min	Allowable Temperature °C	Weight kg	A max height	External øD max	Oil port connection	V m/s
	1 - 109 bar	110 - 209 bar	210 - 300 bar	Part number	Model Part number											
EHP-C-0040-250-140-AKAFABP00 (1) 90XX-1604-AKAF-ABP00	751012	751020	751036	AQ seal 9782-140-185	Consult Division	EHP-C-0040-250-140-AKAFABP00 (1)	4	250	140	1846	-20/+150	35.2	470	160	G 1 1/2"	2
EHP-C-0060-250-140-AKAFABP00 (2) 90XX-1904-AKAF-ABP00	751015	751020	751036	AQ seal 9782-140-185	Consult Division	EHP-C-0060-250-140-AKAFABP00 (2)	6	250	140	1846	-20/+150	39.9	600	160	G 1 1/2"	2
EHP-C-0080-250-140-AKAFABP00 (2) 90XX-2004-AKAF-ABP00	751004	751022	751037	AQ seal 9782-140-185	Consult Division	EHP-C-0080-250-140-AKAFABP00 (2)	8	250	140	1846	-20/+150	44.7	730	160	G 1 1/2"	2
EHP-C-0060-250-140-AKAF AAP00 (2) 90XX-1904-AKAF-AAP00	751015	751020	751036	Wynseal 9782-140-001	Consult Division	EHP-C-0060-250-140-AKAF AAP00 (2)	6	250	140	462	-20/+80	39.9	600	160	G 1 1/2"	0.5
EHP-C-0080-250-140-AKAF AAP00 (2) 90XX-2004-AKAF-AAP00	751004	751022	751037	Wynseal 9782-140-001	Consult Division	EHP-C-0080-250-140-AKAF AAP00 (2)	8	250	140	462	-20/+80	44.7	730	160	G 1 1/2"	0.5
EHP-C-0100-250-140-AKAF AAP00 (2) 90XX-2104-AKAF-AAP00	751004	751022	751037	Wynseal 9782-140-001	Consult Division	EHP-C-0100-250-140-AKAF AAP00 (2)	10	250	140	462	-20/+80	49.5	860	160	G 1 1/2"	0.5
EHP-C-0150-250-140-AKAF AAP00 (3) 90XX-2304-AKAF-AAP00	751004	751022	751037	Wynseal 9782-140-001	Consult Division	EHP-C-0150-250-140-AKAF AAP00 (3)	15	250	140	462	-20/+80	61.5	1185	160	G 1 1/2"	0.5
EHP-C-0200-250-140-AKAF AAP00 (3) 90XX-2604-AKAF-AAP00	751004	751022	751037	Wynseal 9782-140-001	Consult Division	EHP-C-0200-250-140-AKAF AAP00 (3)	20	250	140	462	-20/+80	72.8	1509	160	G 1 1/2"	0.5
EHP-C-0150-250-140-AF00AA000 (3) 90XX-2304-AF00-AA000	751004	751022	751037	Wynseal 9782-140-001	-	EHP-C-0150-250-140-AF00AA000 (3)	15	250	140	462	-20/+80	61.5	1185	160	G 3/4"	0.5

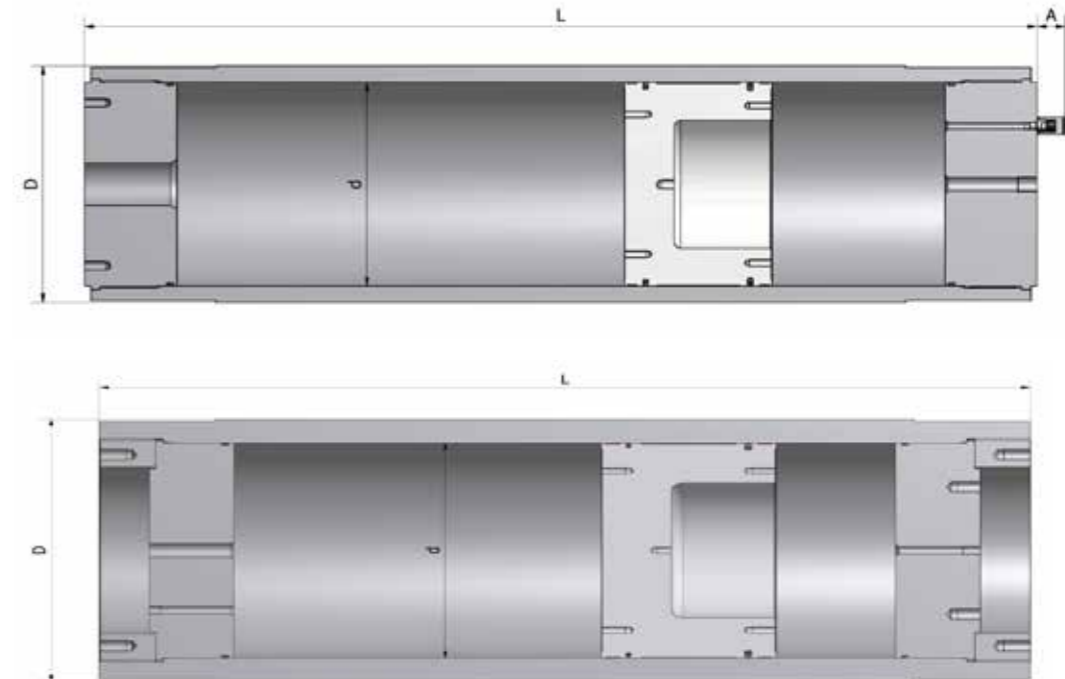


Above dimensions are in mm and are subject to manufacturing tolerances.

EHP Series 250 bar, 8 to 50 Litres, Ø 180

Standard version (**Carbon Steel** shell/seals for mineral oils) temperature from - 20° up to 100°C. Suitable for Mineral based hydraulic fluids, Vegetable oils, Water Glycols. For other fluids please contact Parker Olaer.
Part numbers, Dimensions

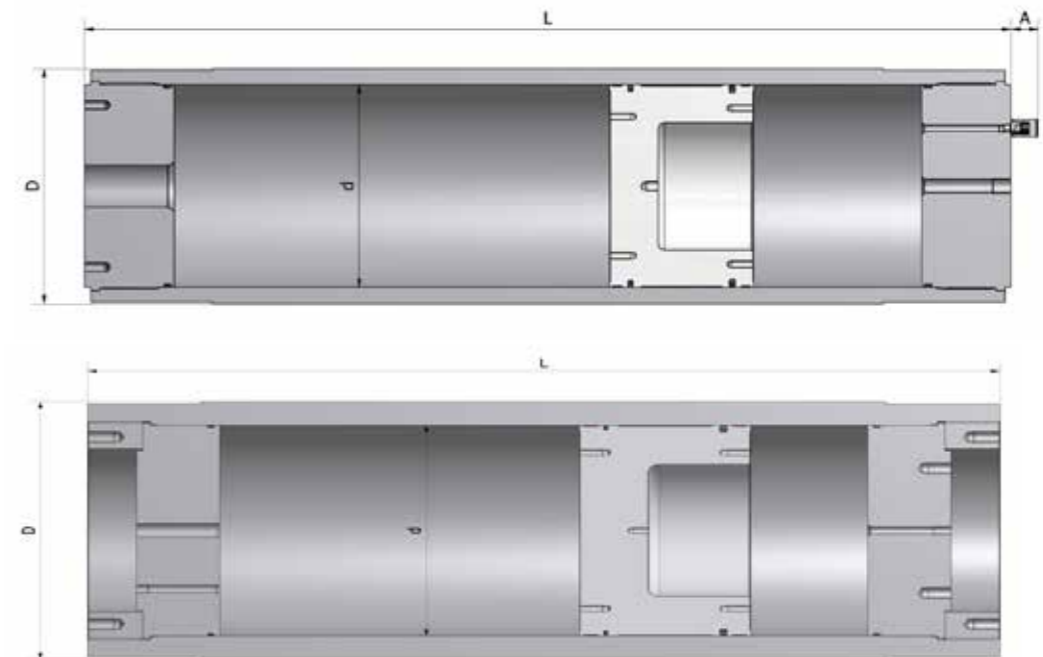
Type	Part number	Range	Effective Gas vol. Litres	Design P bar	Weight kg	L mm	D mm	d mm	Max Fluid opening	Seal Kit
EHP-C-0080-250-180-AHAFBAP00	90XX-2002-AHAF-BAP00	EHP C 0080/250/180	8	250	110	622	219.1	180	G1"	8220000000011
EHP-C-0100-250-180-AHAFBAP00	90XX-2102-AHAF-BAP00	EHP C 0100/250/180	10	250	120	700	219.1	180	G1"	8220000000011
EHP-C-0150-250-180-AHAFBAP00	90XX-2302-AHAF-BAP00	EHP C 0150/250/180	15	250	135	896	219.1	180	G1"	8220000000011
EHP-C-0200-250-180-AHAFBAP00	90XX-2602-AHAF-BAP00	EHP C 0200/250/180	20	250	160	1095	219.1	180	G1"	8220000000011
EHP-C-0300-250-180-AHAFBAP00	90XX-2802-AHAF-BAP00	EHP C 0300/250/180	30	250	190	1485	219.1	180	G1"	8220000000011
EHP-C-0400-250-180-AHAFBAP00	90XX-2902-AHAF-BAP00	EHP C 0400/250/180	40	250	230	1880	219.1	180	G1"	8220000000011
EHP-C-0500-250-180-AHAFBAP00	90XX-3002-AHAF-BAP00	EHP C 0500/250/180	50	250	270	2275	219.1	180	G1"	8220000000011



EHP Series 250 bar, 25 to 200 Litres, Ø 250

Standard version (**Carbon Steel** shell/seals for mineral oils) temperature from - 20° up to 100°C. Suitable for Mineral based hydraulic fluids, Vegetable oils, Water Glycols. For other fluids please contact Parker Olaer.
Part numbers, Dimensions

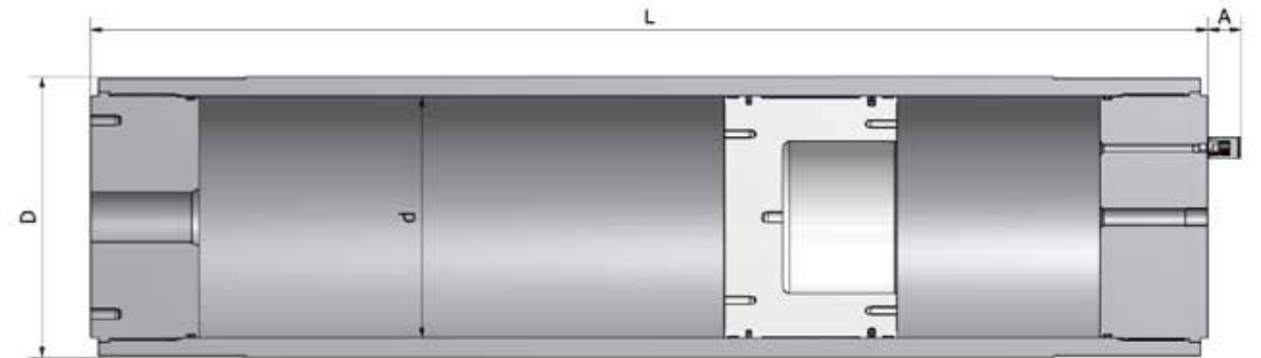
Type	Part number	Range	Effective Gas vol. Litres	Design P bar	Weight kg	L mm	D mm	d mm	Std Fluid opening	A mm	Seal Kit
EHP-C-0250-250-250-ALAFBAP00	90XX-2702-ALAF-BAP00	EHP C 0250-250-250	25	250	260	891	298.5	250	G2"	45	8220000000003
EHP-C-0300-250-250-ALAFBAP00	90XX-2802-ALAF-BAP00	EHP C 0300-250-250	30	250	275	992	298.5	250	G2"	45	8220000000003
EHP-C-0400-250-250-ALAFBAP00	90XX-2902-ALAF-BAP00	EHP C 0400-250-250	40	250	310	1196	298.5	250	G2"	45	8220000000003
EHP-C-0500-250-250-ALAFBAP00	90XX-3002-ALAF-BAP00	EHP C 0500-250-250	50	250	345	1401	298.5	250	G2"	45	8220000000003
EHP-C-0600-250-250-ALAFBAP00	90XX-3202-ALAF-BAP00	EHP C 0600-250-250	60	250	375	1606	298.5	250	G2"	45	8220000000003
EHP-C-0700-250-250-ALAFBAP00	90XX-3402-ALAF-BAP00	EHP C 0700-250-250	70	250	410	1811	298.5	250	G2"	45	8220000000003
EHP-C-0800-250-250-ALAFBAP00	90XX-5102-ALAF-BAP00	EHP C 0800-250-250	80	250	445	2011	298.5	250	G2"	45	8220000000003
EHP-C-0900-250-250-ALAFBAP00	90XX-5202-ALAF-BAP00	EHP C 0900-250-250	90	250	475	2216	298.5	250	G2"	45	8220000000003
EHP-C-1000-250-250-ALAFBAP00	90XX-3502-ALAF-BAP00	EHP C 1000-250-250	100	250	510	2421	298.5	250	G2"	45	8220000000003
EHP-C-2000-250-250-ALAFBAP00	90XX-3702-ALAF-BAP00	EHP C 2000-250-250	200	250	660	4458	298.5	250	G2"	45	8220000000003



EHP Series 350 bar, 8 to 50 Litres, Ø 180

Standard version (**Carbon Steel** shell/seals for mineral oils) temperature from - 20° up to 100°C. Suitable for Mineral based hydraulic fluids, Vegetable oils, Water Glycols. For other fluids please contact Parker Olaer
Part numbers, Dimensions

Type	Part number	Type	Effective Gas vol. Litres	Design P bar	Weight kg	L mm	D mm	d mm	Max Fluid opening	Seal Kit
EHP C 0080-350-180	On Request	EHP C 0080-350-180	8	350	130	646	229	180	G2"	8220000000011
EHP C 0100-350-180	On Request	EHP C 0100-350-180	10	350	140	724	229	180	G2"	8220000000011
EHP C 0150-350-180	On Request	EHP C 0150-350-180	15	350	165	920	229	180	G2"	8220000000011
EHP C 0200-350-180	On Request	EHP C 0200-350-180	20	350	185	1116	229	180	G2"	8220000000011
EHP C 0300-350-180	On Request	EHP C 0300-350-180	30	350	235	1510	229	180	G2"	8220000000011
EHP C 0400-350-180	On Request	EHP C 0400-350-180	40	350	285	1902	229	180	G2"	8220000000011
EHP C 0500-350-180	On Request	EHP C 0500-350-180	50	350	335	2295	229	180	G2"	8220000000011

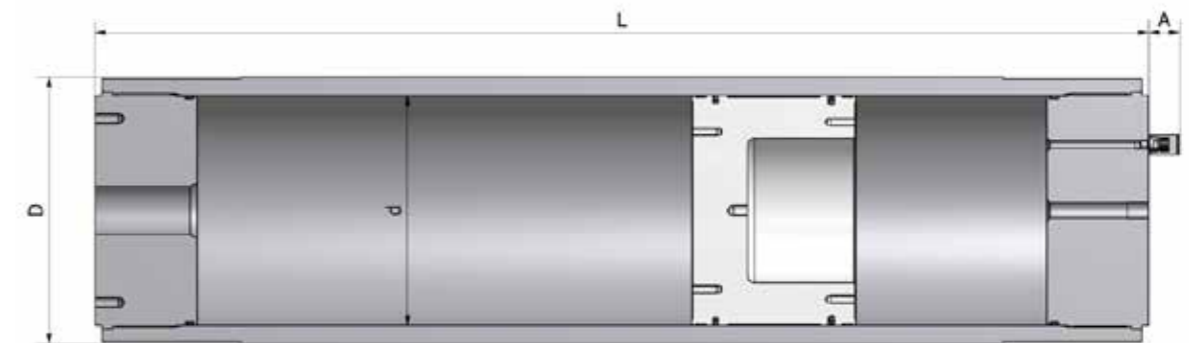


EHP Series 350 bar, 25 to 200 Litres, Ø 250

Standard version (**Carbon Steel** shell/seals for mineral oils) temperature from - 20° up to 100°C. Suitable for Mineral based hydraulic fluids, Vegetable oils, Water Glycols. For other fluids please contact Parker Olaer.

Part numbers, Dimensions

Type	Part number	Type	Effective Gas vol. Litres	Design P bar	Weight kg	L mm	D mm	d mm	Std Fluid opening	A mm	Seal Kit
EHP C 0250-350-250	On Request	EHP C 0250-350-250	25	350	355	914	323.8	250	G2"	45	8220000000003
EHP C 0300-350-250	On Request	EHP C 0300-350-250	30	350	380	1016	323.8	250	G2"	45	8220000000003
EHP C 0400-350-250	On Request	EHP C 0400-350-250	40	350	435	1220	323.8	250	G2"	45	8220000000003
EHP C 0500-350-250	On Request	EHP C 0500-350-250	50	350	485	1423	323.8	250	G2"	45	8220000000003
EHP C 0600-350-250	On Request	EHP C 0600-350-250	60	350	510	1627	323.8	250	G2"	45	8220000000003
EHP C 0700-350-250	On Request	EHP C 0700-350-250	70	350	595	1830	323.8	250	G2"	45	8220000000003
EHP C 0800-350-250	On Request	EHP C 0800-350-250	80	350	645	2035	323.8	250	G2"	45	8220000000003
EHP C 0900-350-250	On Request	EHP C 0900-350-250	90	350	700	2238	323.8	250	G2"	45	8220000000003
EHP C 0950-350-250	On Request	EHP C 0950-350-250	95	350	725	2340	323.8	250	G2"	45	8220000000003
EHP C 1000-350-250	On Request	EHP C 1000-350-250	100	350	750	2442	323.8	250	G2"	45	8220000000003

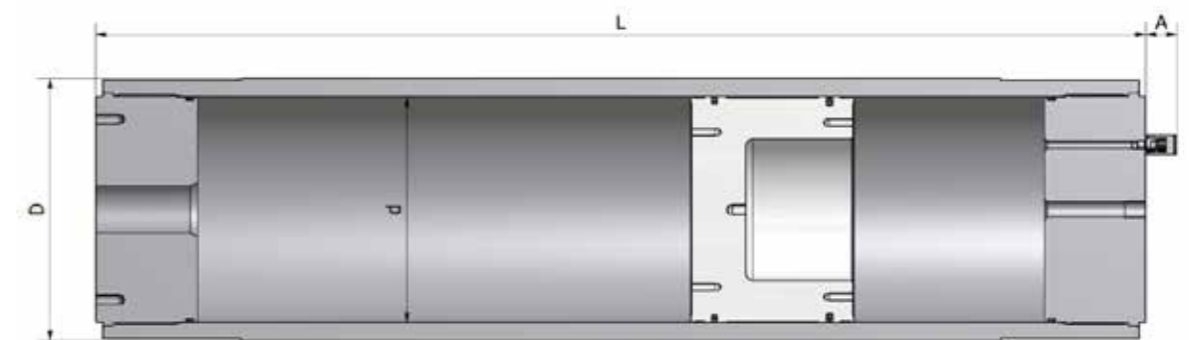


EHP Series 350 bar, 30 to 350 Litres, Ø 350

Standard version (**Carbon Steel** shell/seals for mineral oils) temperature from - 20° up to 100°C. Suitable for Mineral based hydraulic fluids, Vegetable oils, Water Glycols. For other fluids please contact Parker Olaer.

Part numbers, Dimensions

Type	Part number	Type	Effective Gas vol. Litres	Design P bar	Weight kg	L mm	D mm	d mm	Max Fluid opening	Seal Kit
EHP C 0300/350/350	On Request	EHP C 0300/350/350	30	350	775	842	457.2	350	G5"	8220000000002
EHP C 0400/350/350	On Request	EHP C 0400/350/350	40	350	830	946	457.2	350	G5"	8220000000002
EHP C 0500/350/350	On Request	EHP C 0500/350/350	50	350	885	1050	457.2	350	G5"	8220000000002
EHP C 0600/350/350	On Request	EHP C 0600/350/350	60	350	940	1154	457.2	350	G5"	8220000000002
EHP C 0700/350/350	On Request	EHP C 0700/350/350	70	350	995	1259	457.2	350	G5"	8220000000002
EHP C 0800/350/350	On Request	EHP C 0800/350/350	80	350	1050	1362	457.2	350	G5"	8220000000002
EHP C 0900/350/350	On Request	EHP C 0900/350/350	90	350	1110	1466	457.2	350	G5"	8220000000002
EHP C 1000/350/350	On Request	EHP C 1000/350/350	100	350	1165	1570	457.2	350	G5"	8220000000002
EHP C 1500/350/350	On Request	EHP C 1500/350/350	150	350	1440	2090	457.2	350	G5"	8220000000002
EHP C 2000/350/350	On Request	EHP C 2000/350/350	200	350	1720	2610	457.2	350	G5"	8220000000002
EHP C 2500/350/350	On Request	EHP C 2500/350/350	250	350	1995	3130	457.2	350	G5"	8220000000002
EHP C 3000/350/350	On Request	EHP C 3000/350/350	300	350	2275	3650	457.2	350	G5"	8220000000002
EHP C 3500/350/350	On Request	EHP C 3500/350/350	350	350	2550	4170	457.2	350	G5"	8220000000002



A Series 250 - 350 Bar Piston Accumulator

Design Features and Specifications

Threaded Design

Piston type accumulators are designed with compact, rugged steel shell and caps. The steel shell allows heat to dissipate effectively. The bore is micro-finished for extended seal life. The threaded caps allow for easy repair and seal replacement.

The piston seal consists of a unique, five-bladed V-O-ring with back-up washers. This design eliminates seal roll-over and ensures total separation of fluid and gas under the most severe operating conditions.

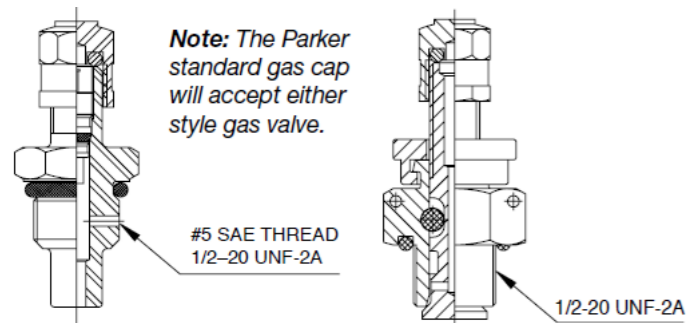
The V-O-ring also holds full pressure throughout long idle periods between cycles, providing dependable, full pressure storage of hydraulic energy. It ensures safe, reliable absorption of pressure peaks. The piston seal design helps to prevent sudden failure of the accumulator.

The V-O-ring seals are available in a wide variety of compounds to cover a broad range of fluids and operating temperature ranges.



The lightweight piston design allows fast response to reduce shock in rapid cycling applications. The dish profile of the piston provides extra gas capacity and greater useable volume of fluid.

Two types of gas valves are available on piston accumulators and gas bottles. Units with 3" thru 6" bores, are offered with a cored gas valve cartridge (ISO-4570-8V1) as standard. All 7" thru 12" bore units are supplied with a heavy-duty, high-pressure, poppet-type gas valve cartridge (L07689000K) as standard.



L07688000*

L07689000*

Actual Bore Sizes & Maximum Flow Rates

Nominal Bore Size	Actual Bore Size		Max. Recommended Flow*	
	(inch)	(mm)	GPM	LPM
3	3.00	76.20	220	834
4	4.03	102.4	397	1504
6	5.78	146.9	818	3096
7	7.00	177.8	1199	4538
9	9.00	228.6	1982	7502
12	11.88	301.6	3450	13061

*Note: Based on 120 in/sec maximum piston speed, port & fitting size will become limiting factors for most applications.

Seal Material Options

Seal Code	Polymer	**Recommended Operating Temperature Range	General Application and Compatibility*
K	Buna-Nitrile	-29°C to 74°C	Standard Compound - Compatible with most mineral oil-based fluids
E	Fluorocarbon Elastomer	-23°C to 121°C	Compatible with most mineral oil-based fluids at higher temperatures and some exotic fluids
D	Ethylene Propylene	-40°C to 121°C	Compatible with most phosphate ester fluids and some synthetic fluids
H	Hydrogenated Nitrile	-32°C to 160°C	Compatible with most oil-based and biodegradable fluids, maintains sealing effectiveness at a wide range of temperatures
Q	Low Temp. Nitrile	-43°C to 71°C	Compatible with most mineral oil-based fluids and maintains sealing effectiveness at low temperatures

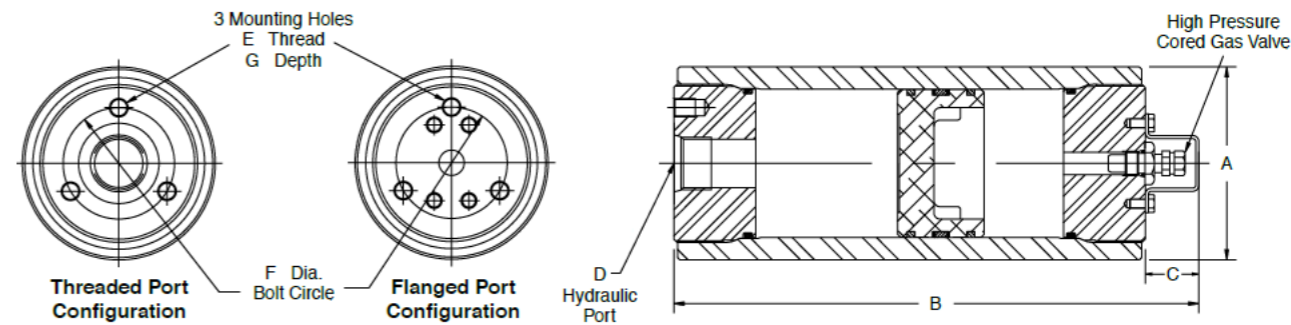
* Consult local distributor or factory for fluid compatibility information.

** The temperatures listed indicate the operating temperature range of the seals, not the accumulator.

A Series 250 - 350 Bar Piston Accumulator

Models, Capacities & Dimensions

Threaded Design



* See page 85 for standard & optional ports

Type	Code	Bore Size	Fluid Volume L	Gas Volume L	250Bar		350Bar		C	E		F	G	250Bar	350Bar
					A	B	A	B		Metric	SAE			Weight kg	Weight kg
		CUIN.			mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	kg
A3	0029	3 inch. 80 mm	0.48	0.56	90	260	95	260	29	M10	3/8-24 UNF	60	15	6.5	9.6
	0058		0.95	1.03		364		364						8.1	12.5
	0090		1.47	1.56		481		481						9.8	15.7
	0116		1.90	1.98		573		573						11.1	18.3
	0183		2.84	3.08		814		814						14.6	25.0
A4	0058	4 inch. 100 mm	0.95	1.11	121	295	127	306	29	M12	1/2-20 UNF	82	18	13.0	19.4
	0116		1.90	2.06		411		422						15.9	24.6
	0231		3.79	3.95		640		651						21.8	34.9
	0347		5.69	5.85		871		883						27.6	45.4
	0578		9.47	9.64		1330		1341						39.3	66.2
A6	0231	6 inch. 150 mm	3.79	4.36	175	441	179	487	29	M12	1/2-20 UNF	110	22	37.8	57.9
	0347		5.69	6.26		557		600						43.9	67.3
	0578		9.47	10.00		778		824						56.3	86.0
	0924		15.10	15.70		1113		1159						74.7	114.0
	1155		18.90	19.50		1337		1383						87.0	133.0
	1733		28.40	29.00		1896		1941						117.8	180.0
	2310		37.90	38.40		2454		2500						148.5	227.0
A7	0578	7 inch. 180 mm	9.47	10.40	206	692	231	-	41	M16	5/8-18 UNF	150	24	76.9	-
	1155		18.90	19.80		1073		1080						103.0	175.0
	1733		28.40	29.30		1454		1461						129.0	226.0
	2310		37.90	38.80		1835		1842						154.0	277.0
	3465		56.80	57.70		2597		2604						206.0	380.0
	5775		94.60	95.50		4121		-						309.0	-
A9	2310	9 inch. 230 mm	37.90	39.30	280	1238	299	1289	41	M20	3/4-16 UNF	182	29	270.0	377.0
	3465		56.80	58.30		1700		1751						344.0	483.0
	4620		75.70	77.20		2161		2213						417.0	589.0
	5775		94.60	96.20		2622		2673						491.0	695.0
	6930		114.00	115.10		3083		3135						565.0	801.0
A12	5775	12 inch. 300 mm	94.60	97.90	365	1715	-	-	41	M20 X6	7/8-9 UNC X6	230	38	606.0	-
	6930		114.00	117.00		1938		-						676.0	-
	9240		151.00	155.00		2512		-						816.0	-
	11550		189.00	193.00		3038		-						956.0	-

A Series: How to order a Piston Accumulator

Series	Nominal Bore size	Approval Type	Options	Capacity (litres)	Design Pressure	Design Number	Seal Compound	Hydraulic Port	Gas Port
A	4	NC	-	0347	L	2	K	-	-

A Series Piston Accumulator

Code	Nominal Bore Size
3	3 inch 80 mm
4	4 inch 100 mm
6	6 inch 150 mm
7	7 inch 180 mm
9	9 inch 230 mm
12	12 inch 300 mm

Code	Options
NC	SELO Approved ¹
EC	CE Approved
Blank	Cored-type gas valve (standard) ²
W	Cored-type gas valve + water service
F	Cored-type gas valve + safety fuse
G	Cored-type gas valve + water service + safety fuse
M	Poppet-type gas valve
L	Poppet-type gas valve + water service
P	Poppet-type gas valve + safety fuse
R	Poppet-type gas valve + water service + safety fuse

Code	Capacity (Litre)	Code	Capacity
0029	0.48 - A3 Only	0924	15.10 - A6 & A7
0058	0.95 - A3 & A4	1155	18.90 - A6 & A7
0090	1.47 - A3 & A4	1733	28.40 - A6 & A7
0116	1.90 - A3 & A4	2310	37.90 - A6, A7 & A9
0183	3.00 - A3 & A4	3465	56.80 - A7 & A9
0231	3.79 - A4 & A6	5775	94.60 - A7, A9 & A12
0347	5.69 - A4 & A6	6930	114.00 - A9 & A12
0578	9.47 - A4, A6 & A7	9240	151.00 - A12 Only
		11550	189.00 - A12 Only

Code	Design Pressure ³
L	250 bar
H	350 bar

Code	Design Number
2	Metric mounting + BSPP ports (Standard)
1	Inch mounting + SAE ports
3	Special ports
###	Specials (Parker assigned number)

Code	Seal Compound
K	Nitrile (NBR) (Standard)
E	Fluorocarbon Elastomer (FPM)
H	Hydrogenated nitrile (HNBR)
D	Ethylene Propylene (EPR)
J	Carboxilated nitrile (XNBR)
Q	Low temperature nitrile
S	Special - please specify

Blank	Standard Port (See next page)
XX	Optional Ports (See next page)

¹ Other approvals are available to order - please consult Parker.

² Where a gas port is specified, no gas valve will be supplied.

³ For other pressure ratings, please consult Parker.

A Series: How to order a Piston Accumulator

Standard Ports & Optional Ports

Standard Ports

Bore Size	Standard Ports - 250bar			
	Metric Models		SAE Models	
	BSPP Port	Metric Flange	SAE Port	SAE Flange
3	1	-	#12	-
4	1	-	#20	-
6	1-1/2	-	#24	-
7	-	2" ISO6162	#32	2" Code 62

Bore Size	Standard Ports - 350bar			
	Metric Models		SAE Models	
	BSPP Port	Metric Flange	SAE Port	SAE Flange
3	3/4	-	#12	-
4	1	-	#16	-
6	1	-	#16	-
7	-	2" ISO6162	-	2" Code 62

Optional Ports & Codes - 250 Bar

BSPP			Metric / ISO 6149-1				SAE			Flange			
Port Size	Port Code	Min. Bore Size	Port Size	Port Code		Min. Bore Size	Port Size	Port Code	Min. Bore Size	Port Code		Min. Bore Size	
				Metric	ISO 6149-1					SAE Code62	ISO 6162		
3/8"	RA	3"	M14	GA	YA	3"	#5	TA	3"	1/2"	PT	MT	3"
1/2"	RB	3"	M18	GB	YB	3"	#6	TB	3"	3/4"	PU	MU	3"
3/4"	RC	3"	M22	GC	YC	3"	#8	TC	3"	1"	PV	MV	3"
1"	RD	3"	M27	GD	YD	3"	#10	TI	3"	1 1/4"	PW	MW	3"
1 1/4"	RE	3"	M33	GE	YE	3"	#12	TD	3"	1 1/2"	PJ	MJ	4"
1 1/2"	RF	4"	M42	GF	YF	4"	#16	TE	3"	2"	PL	ML	6"
2"	RG	4"	-	-	-	-	#20	TF	3"	2 1/2"	PM	MM	6"

Optional Ports & Codes - 350 Bar

BSPP			Metric / ISO 6149-1				SAE			Flange			
Port Size	Port Code	Min. Bore Size	Port Size	Port Code		Min. Bore Size	Port Size	Port Code	Min. Bore Size	Port Code		Min. Bore Size	
				Metric	ISO 6149-1					SAE Code62	ISO 6162		
3/8"	RA	3"	M14	GA	YA	3"	#5	TA	3"	3/4"	PF	MF	4"
1/2"	RB	3"	M18	GB	YB	3"	#6	TB	3"	1"	PG	MG	4"
3/4"	RC	3"	M22	GC	YC	3"	#8	TC	3"	1 1/4"	PH	MH	4"
1"	RD	3"	M27	GD	YD	3"	#10	TI	3"	1 1/2"	PP	MP	6"
1 1/4"	RE	3"	M33	GE	YE	3"	#12	TD	3"	2"	PQ	MQ	6"
1 1/2"	RF	4"	M42	GF	YF	4"	#16	TE	3"	2 1/2"	PR	MR	7"
2"	RG	4"	-	-	-	-	-	-	-	3"	PS	MS	9"

ACP Series 260 - 345 Bar, 0.02 to 8 Litres

Design Features and Specifications

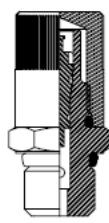
Crimp Technology

Key advantages of the ACP Series:

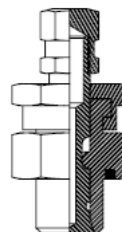
1. High-strength, compact steel shell and cap material. Steel shell allows heat to dissipate effectively and is micro-finished for extended seal life.
2. Lightweight piston design allows for fast response to reduce system shock in rapid cycling applications.
- 2a. Piston seal's unique, five-bladed V-O-ring with backup washers eliminates seal roll-over and ensures total separation of fluid and gas (40 mm size incorporates a T-seal with energized PTFE piston ring).
- 2b. PTFE glide rings eliminate metal-to-metal contact between tube and piston, reducing wear and extending service life.
3. Patented crimped design provides high-strength coupling of caps to steel tube plus superior fatigue life versus welded type connections.
4. "Schrader" style gas valve is standard on all ACP accumulators for ease of precharging. (Pre-charged accumulators are available featuring specially designed threaded plug and no gas valve option.)
5. Gas valve cap protects valve and serves as secondary seal. Knurled cap design allows easy installation without tools.
6. Port types are available in a wide range of female sizes in both SAE and BSPP styles.
7. Higher working-pressure ratings (260Bar, 270Bar, 345Bar) meet more applications with fewer sizes needed.

Gas Valves Options

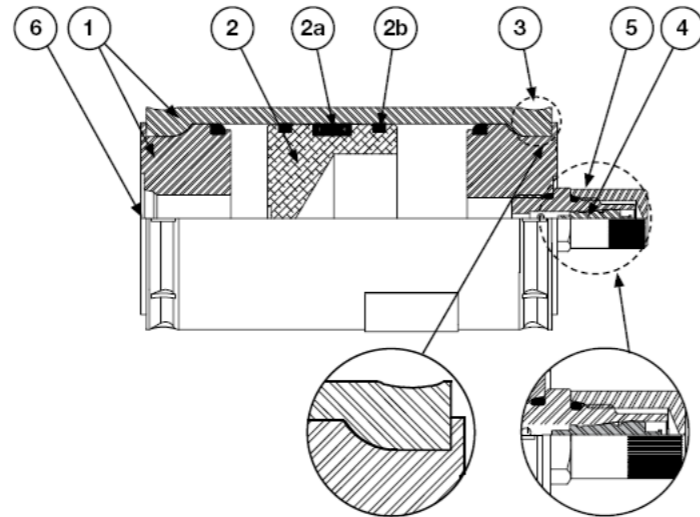
ACP Series accumulators are available either with the industry-standard "Schrader" style gas valve for ease of precharging or poppet style valve (L07689000*).



870636H00Q



L07689000*



Actual Bore Sizes & Maximum Flow Rates

Nominal Bore Size (mm)	Actual Bore Size		Max. Recommended Flow*	
	(inch)	(mm)	GPM	LPM
40	1.50	38.20	55	209
50	2.02	51.44	100	380
80	3.00	76.20	220	834
100	4.03	102.4	397	1504

*Note: Based on 120 in/sec maximum piston speed, port & fitting size will become limiting factors for most applications.



ACP Series 260 - 345 Bar, 0.02 to 8 Litres

Models, Capacities & Dimensions

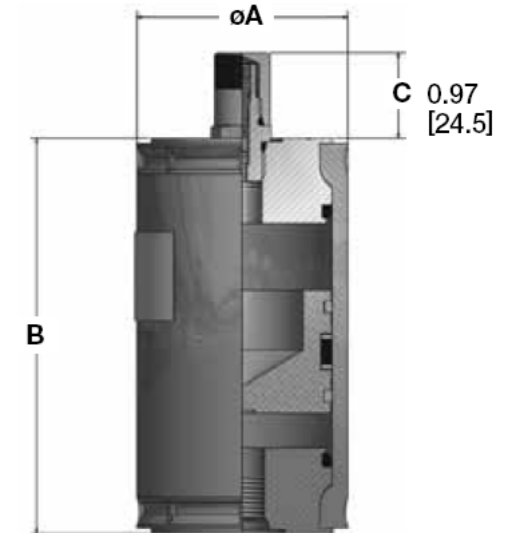
Crimp Technology

260 Bar (ACP04 Only)

275 Bar (ACP05, ACP08 & ACP10)

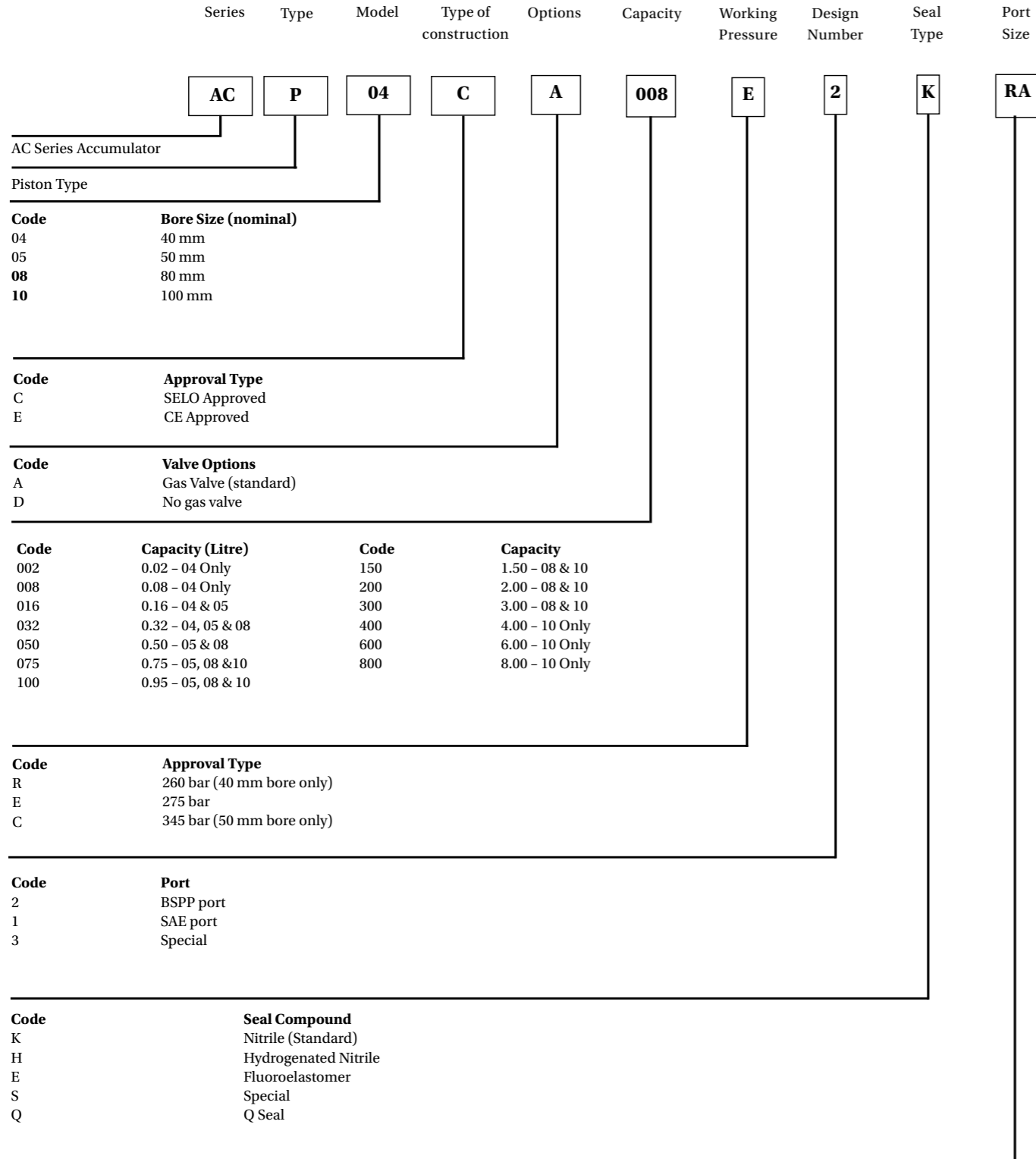
345 Bar (ACP05 Only)

Crimped Piston Accumulator with Gas Valve



Type	Capacity Code	Bore Size	Fluid Volume	Gas Volume	Design Pressure (Bar)	ØA	B	Weight
	Litre		L	L		mm	mm	kg
ACP04	002	1.5 inch. 40 mm	0.02	0.02	260	44.1	76.6	0.91
	008		0.08	0.08			129.2	0.91
	016		0.15	0.16			199.2	0.91
	032		0.31	0.32			339.3	1.36
ACP05	008	2 inch. 50 mm	0.06	0.08	275	60.3	113.5	1.81
	016		0.14	0.16			151.9	1.81
	032		0.30	0.32			228.9	2.27
	050		0.48	0.50			315.7	2.72
	075		0.73	0.75			435.9	2.27
ACP08	100	3 inch. 80mm	0.93	0.95	275	90.4	532.1	4.08
	032		0.25	0.32			171.0	4.99
	050		0.43	0.50			210.5	5.90
	075		0.68	0.75			265.4	6.35
	100		0.88	0.95			309.3	7.26
	150		1.43	1.50			430.0	9.07
ACP10	200	4 inch 100 mm	1.93	2.00	275	120.9	539.7	10.43
	300		2.93	3.00			759.2	13.61
	075		0.59	0.75			215.2	11.34
	100		0.79	0.95			239.5	11.79
	150		1.34	1.50			306.4	13.61
	200		1.84	2.00			367.2	14.97
	300		2.84	3.00			488.7	18.14
	400		3.84	4.00			610.3	21.31
600	5.84	6.00	853.4	27.21				
800	7.84	8.00	1,096.6	33.56				

ACP Series: How to order a Piston Accumulator



See next page for standard and optional ports

ACP Series: How to order a Piston Accumulator

Standard Ports & Optional Ports

Standard Ports

Model	Standard Ports - 250bar	
	BSPP Port	SAE Port
ACP04	3/8	#6
ACP05	3/4	#8
ACP08	1	#10
ACP10	1	#12

Optional Ports & Codes - 250 Bar

Port Size	BSPP		SAE		
	Port Code	Min. Bore Size	Port Size	Port Code	Min. Bore Size
3/8"	RA	04	#6	TB	04
1/2"	RB	04	#8	TC	05
3/4"	RC	05	#10	TI	05
1"	RD	08	#12	TD	05
-	-	-	#16	TE	08

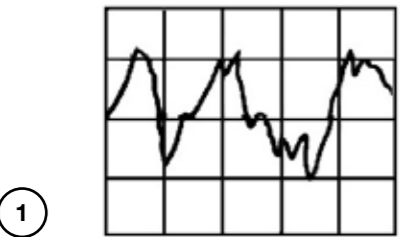
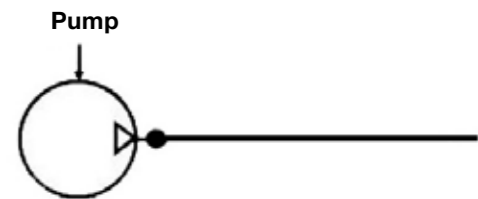
General information Attenuators

To attenuate the pressure pulses by at least 20 dB over a wide frequency range, Olaer produces high-frequency hydraulic attenuators with models ranging from 170 to 3000 Hz, in addition to its range of accumulators (up to 300 Hz).

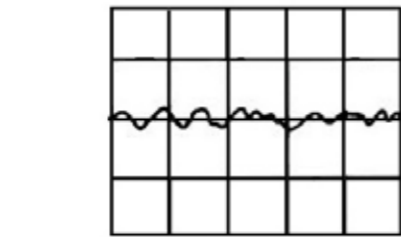
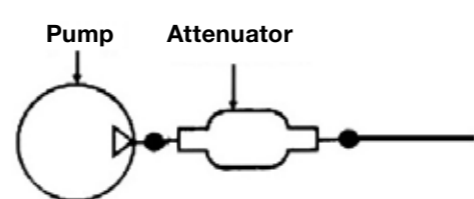
The performance obtained with the attenuators reduces very substantially the fluctuations of high-frequency hydraulic pressure (see diagrams 1 and 2).

Curves 3 and 4 show firstly a typical attenuation curve (in dB) specific to each model of muffler, indicating the attenuation levels of the pressure pulses as a function, of the frequencies to be filtered, and secondly an example of the amplitude spectra of a pump with and without a muffler, which reduces the pulses from 217 dB to 190 dB.

Without Hydraulic Attenuators

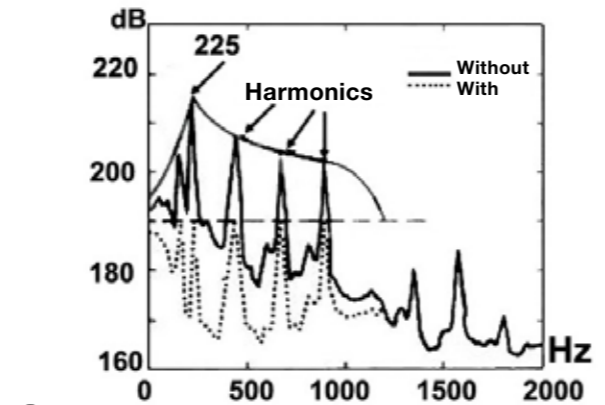
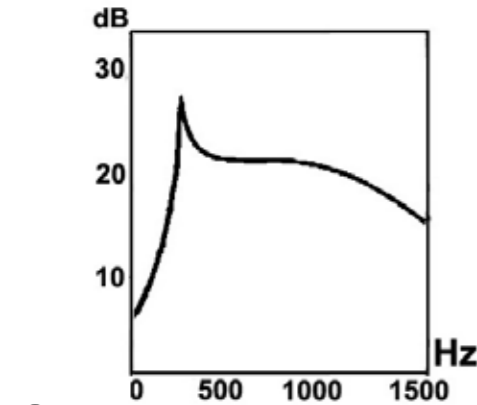


With Hydraulic Attenuators



1

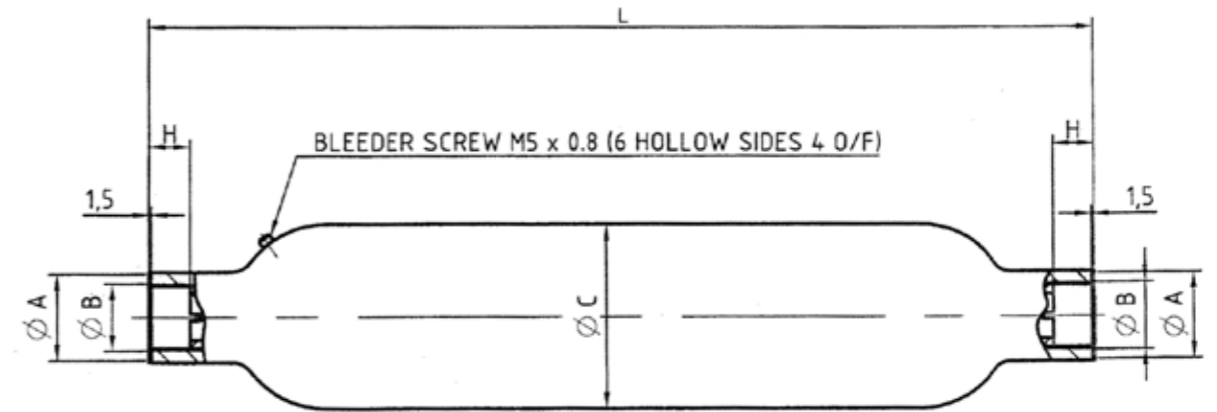
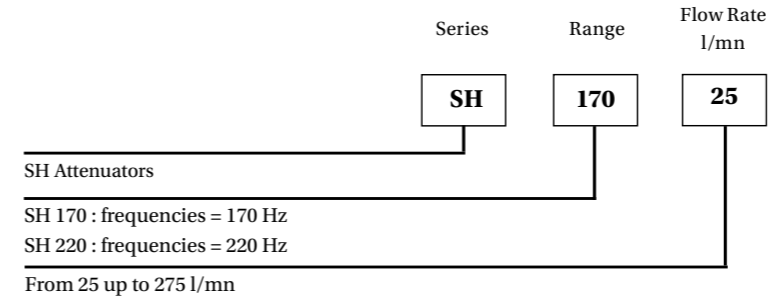
2



3

4

SH Series: How to order a Attenuator



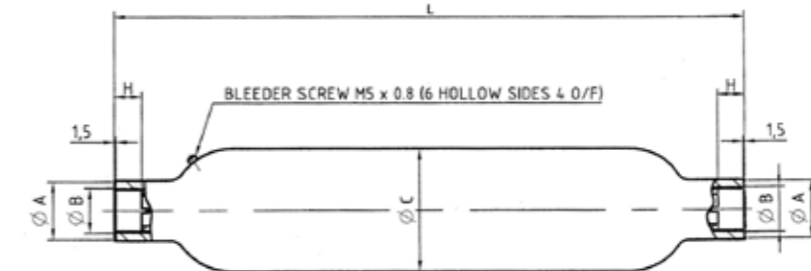
Attenuators SH Series 350 bar

Standard version (Carbon Steel shell) for allowable temperature from - 40° up to 175°C

According to PED 2014/68/EU. Fluid group 2

Part numbers, Accessories, Dimensions

Type	Part number	Clamps		Type	Volume Litres	Max. Working pressure (PS) bar	Max Flow Rate lt/min	Weight kg	Dimensions in mm				
		Model (quantity)							L max Height	øA for Bonded Seal	øB Gas Cyl.	øc	H mini
		Part number											
SH 170-25	60045400100	E95 20250803648		SH 170-25	1.5	350	25	5.8	462	35.3	3/4"	90	18
SH 170-50	60045500100	E95 20250803648		SH 170-50	2.2	350	50	7.3	590	35.3	3/4"	90	18
SH 170-75	60045100100	E114 20251003648		SH 170-75	3.4	350	75	12	597	54	1 1/4"	114	22
SH 170-100	60044900100	E114 20251003648		SH 170-100	3.4	350	100	12	597	54	1 1/4"	114	22
SH 170-125	60045000100	E114 20251003648		SH 170-125	4.6	350	125	15	749	54	1 1/4"	114	22
SH 170-175	60044600100	E114 20251003648		SH 170-175	4.6	350	170	15	749	54	1 1/4"	114	22
SH 170-275	60045200100	E114 20251003648		SH 170-275	4.6	350	275	15	749	54	1 1/4"	114	22
SH 220-25	60045300100	E95 20250803648		SH 220-25	1.2	350	25	5.2	386	35.3	3/4"	90	18
SH 220-50	60043800100	E95 20250803648		SH 220-50	1.5	350	50	5.8	462	35.3	3/4"	90	18
SH 220-75	60045600100	E95 20250803648		SH 220-75	1.5	350	75	5.8	462	35.3	3/4"	90	18
SH 220-100	60045700100	E95 20250803648		SH 220-100	2.2	350	100	7.4	590	35.3	3/4"	90	18
SH 220-125	60045800100	E95 20250803648		SH 220-125	2.2	350	125	7.4	590	35.3	3/4"	90	18
SH 220-175	60044700100	E114 20251003648		SH 220-175	3.4	350	175	12	597	54	1 1/4"	114	22
SH 220-275	60044500100	E114 20251003648		SH 220-275	3.4	350	275	12	597	54	1 1/4"	114	22

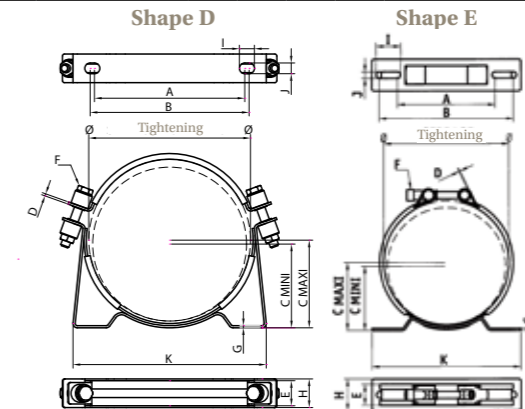


Clamps

Clamps : Steel with zinc plated protection, Rubber EPDM (Version 48), Rubber NBR Nitrile (Version 25)
Stainless Steel on request. For Accumulator working in Dynamic Application such as rotating, please contact
Parker Olaer for special clamps and support brackets.

Part numbers, Dimensions

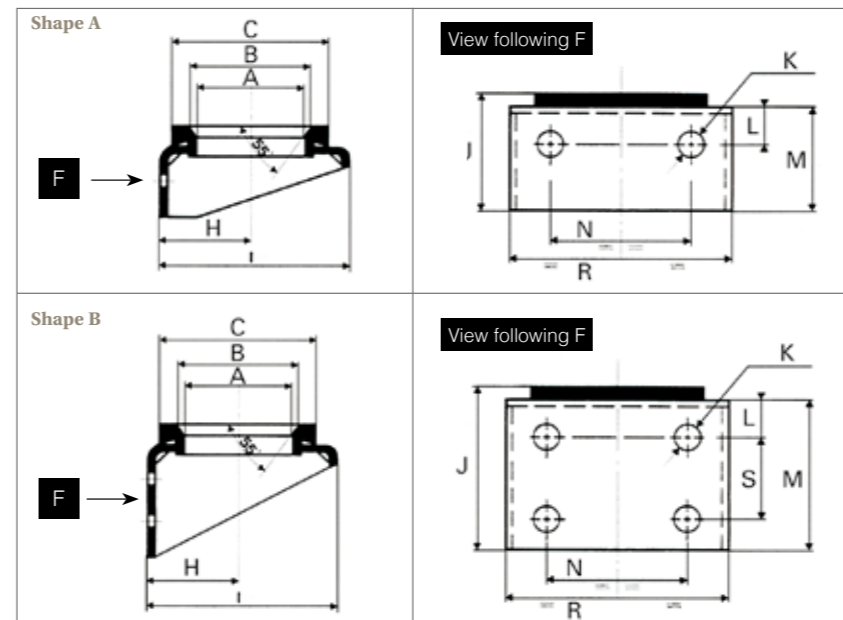
Type Part number	Design	RECOMMENDED Min to Max TIGHTENING ϕ mm	Type	Dimensions in mm													Recommended tightening torque N.m	Recommended max allowable weight if vertical equipment kg	Recommended max allowable weight if horizontal equipment kg
				A	B	C		D	E	F	G	H	I	J	K				
						Min	Max												
A56 20149203625	E	54 to 56	A56	92	102	36	36	3	37	M10x80	3	31	14	9	134	7	10	30	
E95 20250803648	E	87 to 97	E95	88	140	61.5	66.5	1.5	28	M8x75	3	40	35	9	155	7	30	90	
E106 20250903648	E	99 to 109	E106	88	140	68	73	1.5	28	M8x75	3	40	35	9	155	7	30	90	
E114 20251003648	E	112 to 124	E114	88	140	73	78	1.5	28	M8x75	3	40	35	9	155	7	30	90	
E136 20251103648	E	128 to 138	E136	88	140	80	85	1.5	28	M8x75	3	40	35	9	155	7	30	90	
E155 20251203648	E	146 to 157	E155	137	189	81	86.5	1.7	30	M10x80	3	45	35	9	210	10.5	60	60	
E160 20259003648	E	155 to 165	E160	137	189	86.88	91.88	1.7	32	M10x80	3	45	35	9	210	10.5	60	60	
E168 20251303648	E	166 to 176	E168	137	189	92	96	1.7	30	M10x80	3	45	35	9	210	10.5	60	60	
E180 20243203625	E	178 to 184	E180	137	189	97	100	2	35	M10x80	4	65	35	9	210	10.5	60	60	
D215 20251403648	D	215 to 219	D215	210	222	123	125	3	36	M12x70	3	40	21	15	266	9	65	110	
D226 20251503648	D	219 to 226	D226	210	222	119	122.5	3	35	M12x80	3	40	21	15	270	11	75	150	
D368 20127403625	D	363 to 368	D368	334	346	198.5	201	3	36	M12x75	3	50	21	15	420	11	50	80	



Support Brackets

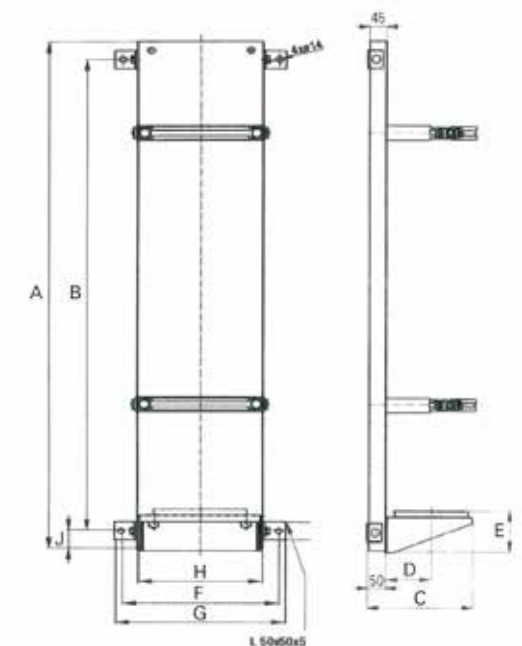
For Accumulator working in Dynamic Application such as rotating, please contact Parker Olaer for special clamps and support brackets.

Type	Models	Type	Design	Dimensions in mm													Weight in kg
				A	B	C	H	I	J	K	L	M	N	R	S		
CE89 20151903620	Accumulators 1 to 5 Litres	CE89	A	89	101	125	73	140	75	13	25	60	75	130	-	0.8	
CE108 20118703620	EHV 4 & 6 & 10 Litres	CE108	A	108	120	150	92	175	95	17	25	80	160	210	-	1.5	
CE159A 20109003620	Accumulators 10 to 50 Litres < 550 Bar	CE159A	B	159	170	200	123	235	115	17	25	100	200	260	40	2.5	



Mounting Frames

Type	For Models EHV	Type	Dimensions in mm									
			A	B	C	D	E	F	G	H	J	
EF1 20217500125	EHV 4 & 6 & 10 Litres	EF1	670	570	225	92	96	340	370	270	50	
EF2 20217600125	EHV 10 & 12 & 20 & 24.5 Litres	EF2	670	570	285	123	115	340	370	270	50	
EF3 20217700125	EHV 32 & 50 Litres	EF3	1405	1300	285	123	115	340	370	270	55	



Charging Set VGU

The charging set VGU is an indispensable instrument for the verification, pressurization and nitrogen bleeding of most of the hydraulic accumulators available on the market. The standard set is delivered in a storage case containing the following:

- VGU universal tester and pressurizer (end M28 x 1.50).
- Pressure gauge kit from 0 to 25 bar.
- Pressure gauge kit from 0 to 250 bar.
- Connection adapters for inflation valves (7/8" - 5/8" - 8V1 - M28 x 1.50).
- High pressure hose, 2.5 m long, for connecting to a nitrogen source.
- Hexagon socket screw key 6mm.
- Jackets of replacement joints.
- Operating instruction in French, English, German.



Note: On request, the following options are available:

- Pressure gauge kits with different scale divisions: 63mm with glycerol bath back end G1/4" cyl. equipped with direct gear for Minimes® connection. Scale divisions 0-10, 0-25, 0-100, 0-400, with accuracy class 1.6%.
- High pressure hose of different length with adapters for nitrogen bottles from various countries (specify country), at each end with a female swivel coupling G1/4" for connecting to the inflation port.

Maximum working pressure: limited by the maximum operating pressure of the installed hydraulic system, pressure limited to **400 bar** in any case.

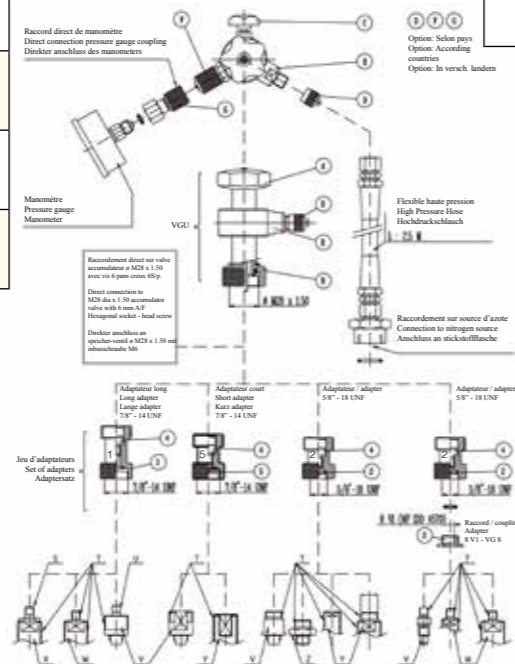
Type	Spare Parts	
	High Pressure Hose	Spare Part Kits
	Type	Type
Part number	Part number	Part number
VGU/F.25/250.7.TS2.3	TS2 (France & China)	
20214122723	20214800000	10774100023
VGU/F.25/250.7.TS3.3	TS3 (Germany)	
20214122733	20228000000	10774100023
VGU/F.25/250.7.TS8.3	TS8 (Italy)	
20214122783	20217200000	10774100023
VGU/F.25/250.7.TS9.3	TS9 (Netherlands)	
20214122793	20227300000	10774100023
VGU/F.25/400.7.TS2.3	TS2 (France & China)	
20214139723	20214800000	10774100023
VGU/F.25/400.7.TS3.3	TS3 (Germany)	
20214139733	20228000000	10774100023
VGU/F.25/400.7.TS8.3	TS8 (Italy)	
20214139783	20217200000	10774100023
VGU/F.25/400.7.TS9.3	TS9 (Netherlands)	
20214139793	20227300000	10774100023

Spare Parts Gauge Kit VGU

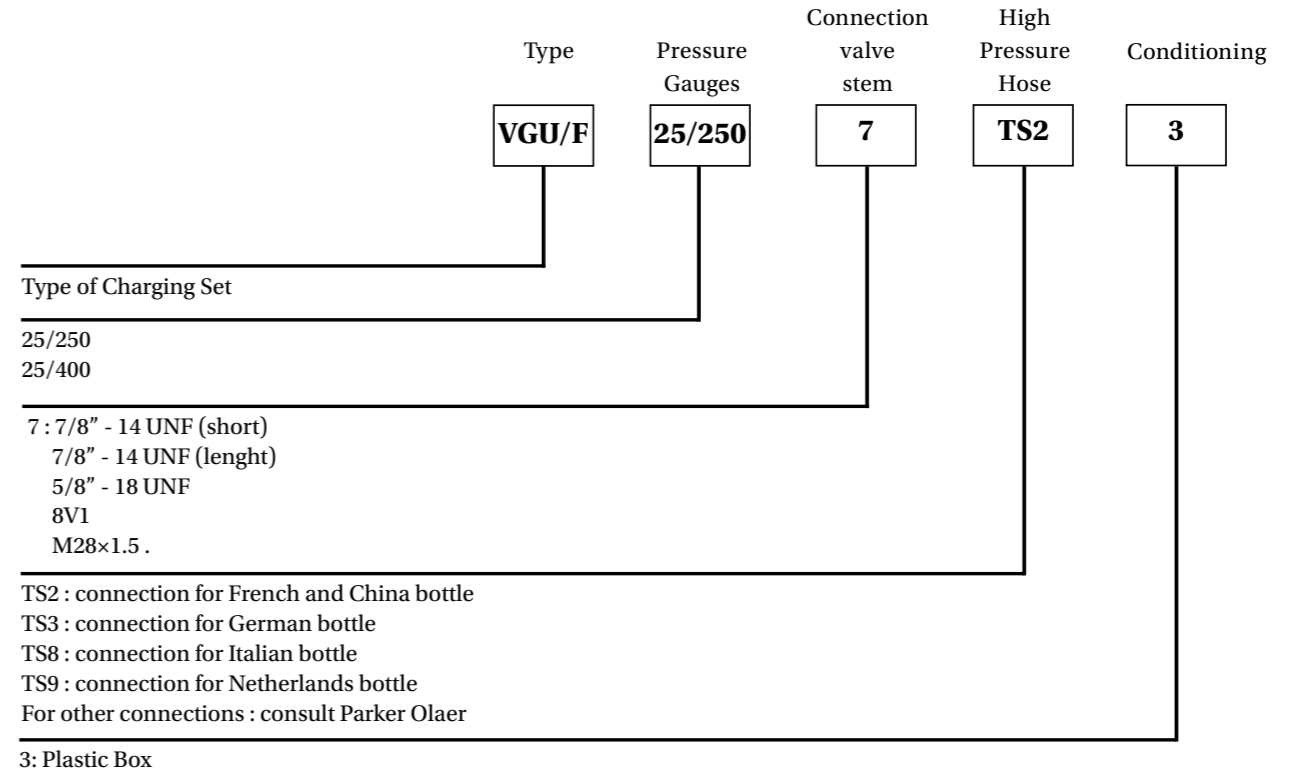
Type
Part number
0 to 25 bar
00090300000
0 to 250 bar
00090500000
0 to 400 bar
00090600000

Spare Parts Adaptors VGU

Type
Part number
Adaptor 7/8" - 14 UNF
20212700223
Adaptor 5/8" - 18 UNF
20213000223
Coupling 8 V1
20214000200
Adaptor 7/8" - 14 UNF
20213500223
Adaptor 1/4" cyl
20221100220



How to order a VGU Charging Set



Charging Set VG3

The charging set VG3 is an indispensable instrument for the verification, pressurization and nitrogen bleeding of the hydraulic accumulators. The standard set is delivered in a storage case containing the following:

- pressure gauge with standardized graduations in bar
- vent valve
- 3 connection adapters for charging valves. (7/8" - 5/8" - 8V1).
- High pressure hose, 2.5 m length, in standard, maximum working pressure 400 Bar. This hose is fitted at each end with a female swivel coupling G 1/4" BSP for connecting to the inflation port. It can be connected to a commercial nitrogen bottles, in this case add an adapter on one end view model in the country. For the other destinations consult Parker Olaer.
- Operating instruction french/english version

Note: On request, the following options are available :

- Pressure gauge with different scale divisions : 63 mm with glycerol bath back end G1/4" BSP equipped with direct gear for minimess® connection. To scale divisions 0-10,0-25,0-100,0-400, with accuracy class 1.6%.
- High pressure hose of different length with adapters for nitrogen bottles from various countries are available (specify country)

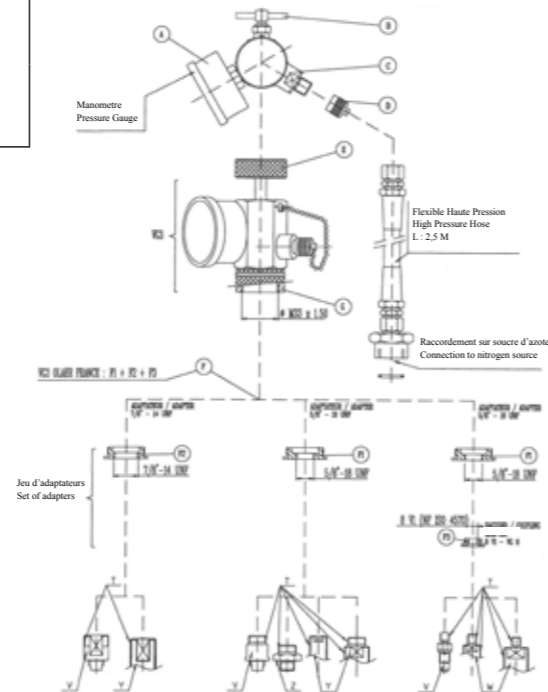
Maximum working pressure: limited by the maximum operating pressure of the installed hydraulic system, pressure limited to 400 bar in any case.



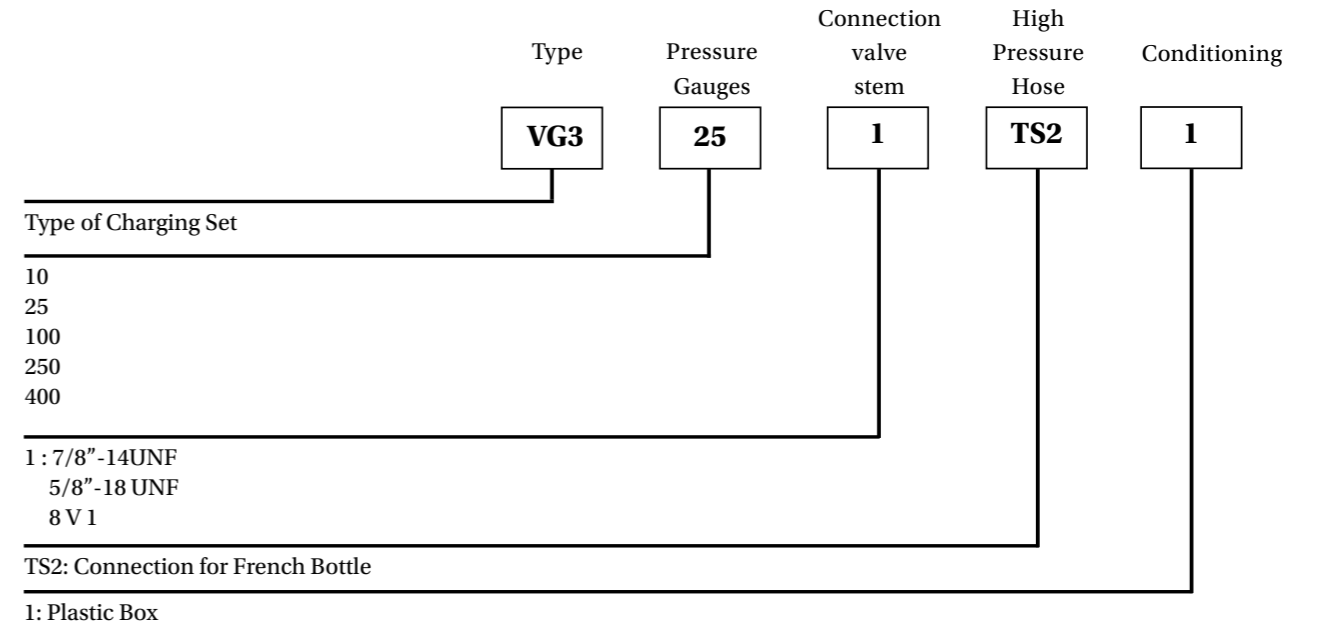
Type	Spare Parts		
	Gauge Kit	High Pressure Hose	Spare Part Kits
Part number	Type	Type	Type
	Part number	Part number	Part number
VG3 6 1 TS2 1	0 to 6 bar	20214800000	10529500033
20138101121	00077000000		
VG3 10 1 TS2 1	0 to 10 bar		
20138102121	00077100000		
VG3 25 1 TS3 1	0 to 25 bar		
20138103131	00077200000		
VG3 100 1 TS2 1	0 to 100 bar		
20138104121	00077300000		
VG3 250 1 TS2 1	0 to 250 bar		
20138105121	00077400000		
VG3 400 1 TS2 1	0 to 400 bar		
20138106121	00077500000		

Spare Parts Adaptors VG3

Type
Part number
Adaptor 5/8" - 18 UNF
20138300200
Adaptor 7/8" - 14 UNF
20202004700
Coupling 8 V1
10232700200

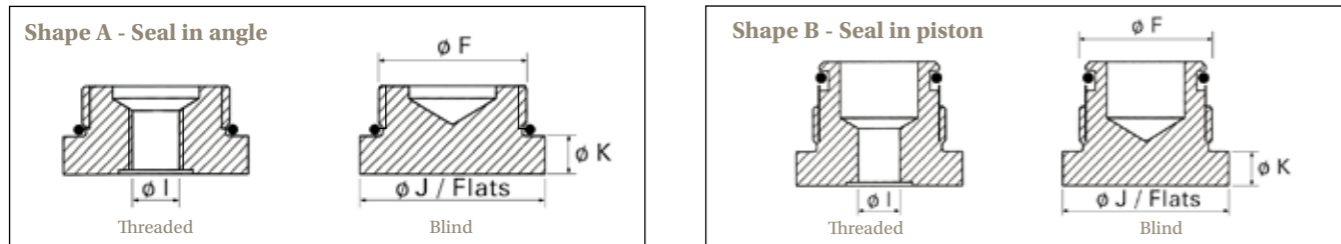


How to order a VG3 Charging Set



Adaptors EHV

Accumulator model	Connection of accumulator ϕ F gas cyl.	Connection of fitting ϕ l gas cyl.	Shape	J/Flats	K	O-Ring & Back-up ring
EHV 0.5 & 1 & 1.6 Litres 350 Bar	3/4"	3/8" Blind	A/B A/B	- 32	8	A.O-Ring 21.3 x 2.4 B. O-Ring 16.9 x 2.7
EHV 2.5 to 10 Litres 350 Bar	1 1/4"	3/4" Blind	A/B A/B	50	10	A. O-Ring 36.2 x 3 B. O-Ring 30 x 3
EHV 0.2 Litres 350 Bar	1/2"	1/4" Blind	A A	27	8	O-Ring 18 x 2
EHV 1 to 5 Litres 690 Bar	1"	1/2" Blind	B B	41	10	A. BU R 22 x 28 x 0.69 x 2 B. O-Ring 21.3 x 3.6
EHV 10 to 50 Litres 330/480 Bar	2"	1" Blind	A/B A/B	65	13	A. O-Ring 54 x 3 B. O-Ring 48 x 3
EHV 10 to 50 Litres 690 Bar	2"	1" Blind	B B	65	15	O-Ring 43.82 x 5.33 BU R 45 x 54 x 0.85 x 2



These accessories are designed to perfectly fit Parker Olaer accumulators. They meet the latest regulations and are compliant with the CETOP standard.

Safety Blocks

Parker Olaer has developed a complete range of decompressing and isolating blocks (sizes 10 to 50) to answer all standard and special applications.

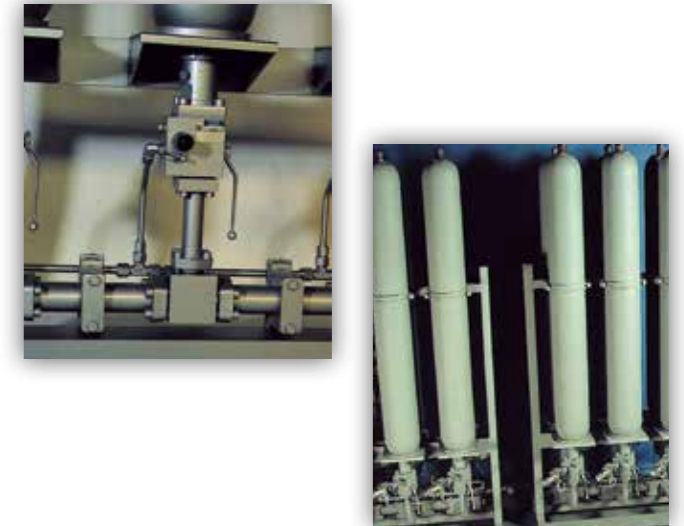
These blocks are in conformity with the European Directive on the equipment under pressure (97/23), these appliances have been designed to group together in a single compact unit all the components necessary for the correct operation of a hydraulic system equipped with hydropneumatic accumulators.

The basic block consists of :

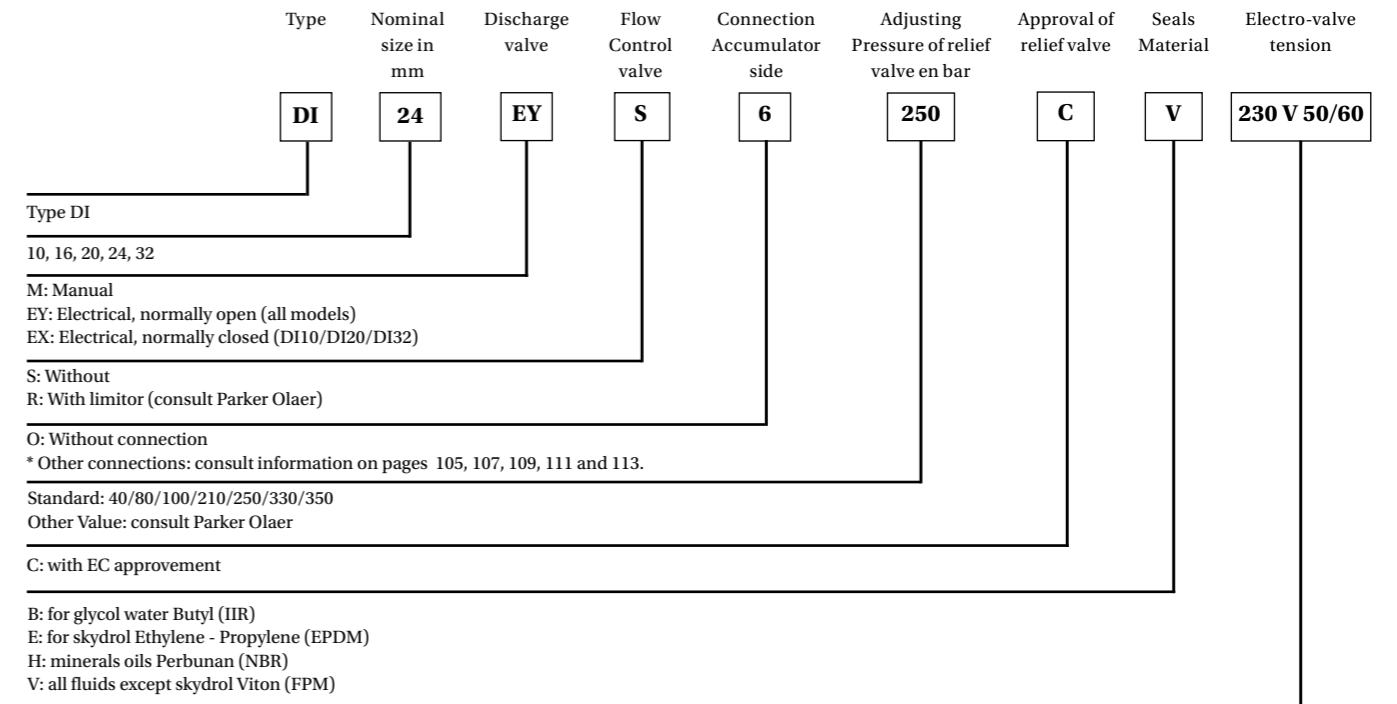
- Isolating valve to isolate the accumulator from the circuit for all the blocks except from model DI 10 where it also ensures the decompression function.
- A drain valve for decompressing the accumulator for all models (except DI 10)
- A pressure limiting valve EC with poppet calibrated generally to the maximum service pressure of the accumulator (under no circumstances must this appliance be used to protect the hydraulic pump)
- Pressure tapping port (M)

In the E version, the basic block, to decompress the accumulator, can be equipped with an electro-valve :

- 2 ways 2 positions (DI 10/DI 20/DI 32) cartridge type.
- 3 ways 2 positions (DI 16/DI 24) with impact of connection according to DIN 24340 Form A, ISO 4401 and CETOP RP 121 H.



DI Series: How to order a Safety Block



00: without electro-valve
24VDC
230V50/60
Other tensions: consult Parker Olaer

Safety Block DI 10

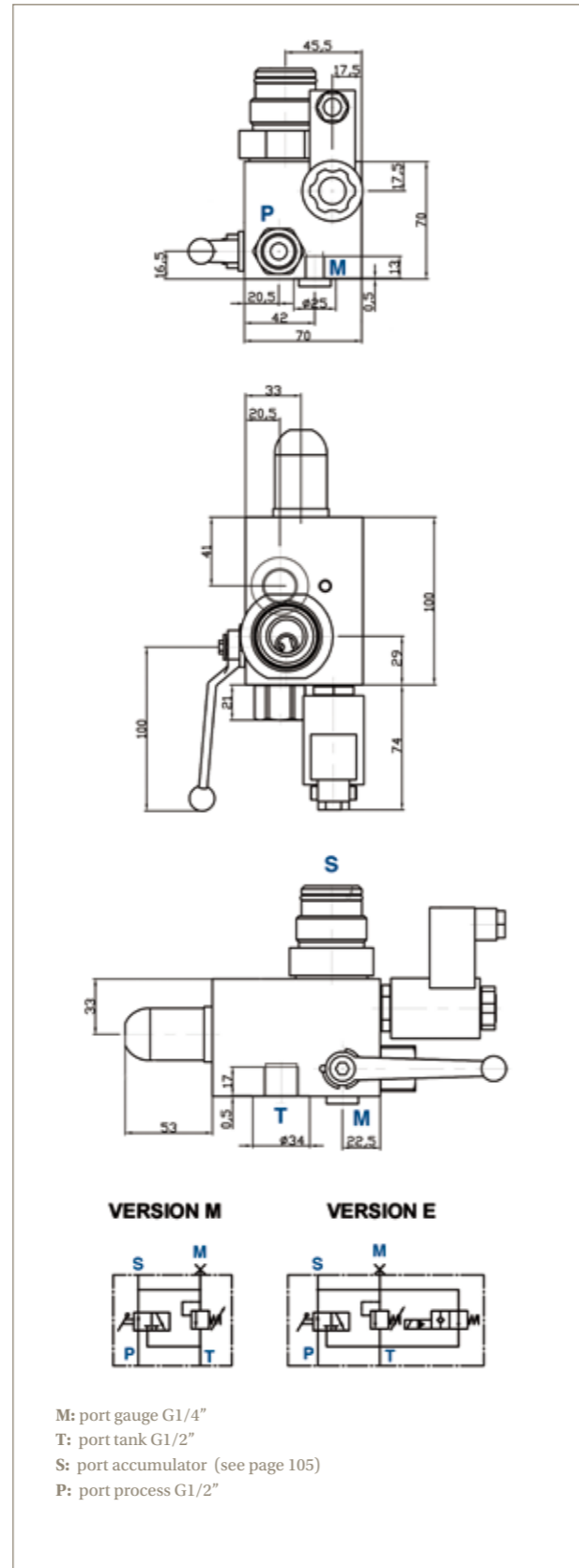
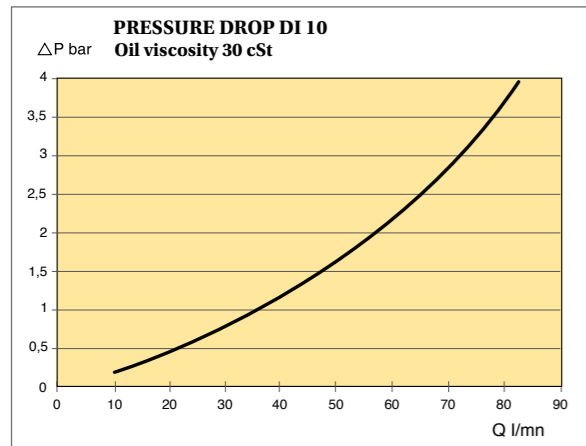
TECHNICAL DATA DI 10

- **Size:** Nominal diameter : 10 mm
- **Maxi working pressure:** Manual version : 400 bar
Electrical version : 350 bar
- **Weight without connector:** Manual version : 3,5 kg
Electrical version : 4 kg
- **Materials:** Carbon steel
According with the fluids of group 2 (PED)
- **Temperature:** Manual version : - 10°C à + 70°C
Electrical version : - 10°C à + 60°C (ambient temperature)
- **Electrical datas:** DC : 24 V
AC : 230 V-50/60 Hz
Standard protection : IP 65
Standard connector : DIN 43650
- **Connection accumulator side:** See page 75
- **Pressure / return connector of circuit:** See hydraulic drawing
- **Valve of limitation of pressure EC (nominal dia):** 10 mm
- **Flow:** Consult the diagram

DI 10 500 B MANUAL VERSION

- **Size:** Nominal diameter : 10 mm
- **Maxi working pressure:** Manual version : 500 bar
For all specific dimensions consult Parker Olaer
- Version M

- M:** port gauge G1/4"
- T:** port tank G1/2"
- S:** port accumulator (See page 105)
- P:** port process G1/2"



Above dimensions are in mm and are subject to manufacturing tolerances.

Safety Block DI 10 Manual Version

Standard version (Carbon steel, rings NBR) temperature -10°C up to 70°C Maximum working pressure : 400 Bar
According to PED 2014/68/EU

Part numbers

Connecting to accumulator	Type	Part number
EHV 0.5 to 1.6 L G3/4*	DI10MS/2/350CH *	35172112Y01
EHV 10 to 50 L G2"	DI10MS/3/330CH *	35172113J01
ELM G1/2"	DI10MS/4/100CH	35172114D01
ELM G1/2"	DI10MS/4/140CH	35172114Q01
ELM G1/2"	DI10MS/4/210CH	35172114G01
ELM G1/2"	DI10MS/4/250CH	35172114H01
ELM G1/2"	DI10MS/4/330CH	35172114J01
ELM G1/2"	DI10MS/4/350CH	35172114Y01
ELM 0,32-210 G1/2"	DI10MS/5/210CH	35172115G01
ELM 0,075-250/0,16-250 G1/2"	DI10MS/5/250CH	35172115H01
ELM G3/4"	DI10MS/6/100CH	35172116D01
ELM G3/4"	DI10MS/6/140CH	35172116Q01
ELM G3/4"	DI10MS/6/210CH	35172116G01
ELM G3/4"	DI10MS/6/250CH	35172116H01
ELM G3/4"	DI10MS/6/330CH	35172116J01
ELM G3/4"	DI10MS/6/350CH	35172116Y01

* without electro-valve

Safety Block DI 10 Electrical Version

Standard version (Carbon steel, rings NBR) temperature -10°C up to 60°C Maximum working pressure : 350 Bar
According to PED 2014/68/EU

Part numbers

Connecting to accumulator	With Electro-valve tension 24VDC		With Electro-valve tension 230V50/60	
	Type	Part number	Type	Part number
EHV 2.5 to 10 L (long) G1 1/4*	DI10EYS/1/350CH24VCC	35172131Y21	DI10EYS/1/350CH230V50/60	35172131Y61
EHV 0.5 to 1.6 L G3/4*	DI10EYS/2/350CH24VCC	35172132Y21	DI10EYS/2/350CH230V50/60	35172132Y61
ELM G1/2"	DI10EYS/4/100CH24VCC	35172134D21	DI10EYS/4/100CH230V50/60	35172134D61
ELM G1/2"	DI10EYS/4/140CH24VCC	35172134Q21	DI10EYS/4/140CH230V50/60	35172134Q61
ELM G1/2"	DI10EYS/4/210CH24VCC	35172134G21	DI10EYS/4/210CH230V50/60	35172134G61
ELM G1/2"	DI10EYS/4/250CH24VCC	35172134H21	DI10EYS/4/250CH230V50/60	35172134H61
ELM G1/2"	DI10EYS/4/330CH24VCC	35172134J21	DI10EYS/4/330CH230V50/60	35172134J61
ELM G1/2"	DI10EYS/4/350CH24VCC	35172134Y21	DI10EYS/4/350CH230V50/60	35172134Y61
ELM 0.32 to 210 G1/2"	DI10EYS/5/210CH24VCC	35172135G21	DI10EYS/5/210CH230V50/60	35172135G61
ELM 0.075 to 250/0.16 to 250 G1/2"	DI10EYS/5/250CH24VCC	35172135H21	DI10EYS/5/250CH230V50/60	35172135H61
ELM G3/4"	DI10EYS/6/100CH24VCC	35172136D21	DI10EYS/6/100CH230V50/60	35172136D61
ELM G3/4"	DI10EYS/6/140CH24VCC	35172136Q21	DI10EYS/6/140CH230V50/60	35172136Q61
ELM G3/4"	DI10EYS/6/210CH24VCC	35172136G21	DI10EYS/6/210CH230V50/60	35172136G61
ELM G3/4"	DI10EYS/6/250CH24VCC	35172136H21	DI10EYS/6/250CH230V50/60	35172136H61
ELM G3/4"	DI10EYS/6/330CH24VCC	35172136J21	DI10EYS/6/330CH230V50/60	35172136J61
ELM G3/4"	DI10EYS/6/350CH24VCC	35172136Y21	DI10EYS/6/350CH230V50/60	35172136Y61

Options or Accessories

Type	Characteristics	Part number
RELIEF VALVE CE	100 BAR	35045931002
RELIEF VALVE CE	140 BAR	35045931402
RELIEF VALVE CE	210 BAR	35045932102
RELIEF VALVE CE	250 BAR	35045932502
RELIEF VALVE CE	330 BAR	35045933302
RELIEF VALVE CE	350 BAR	35045933502

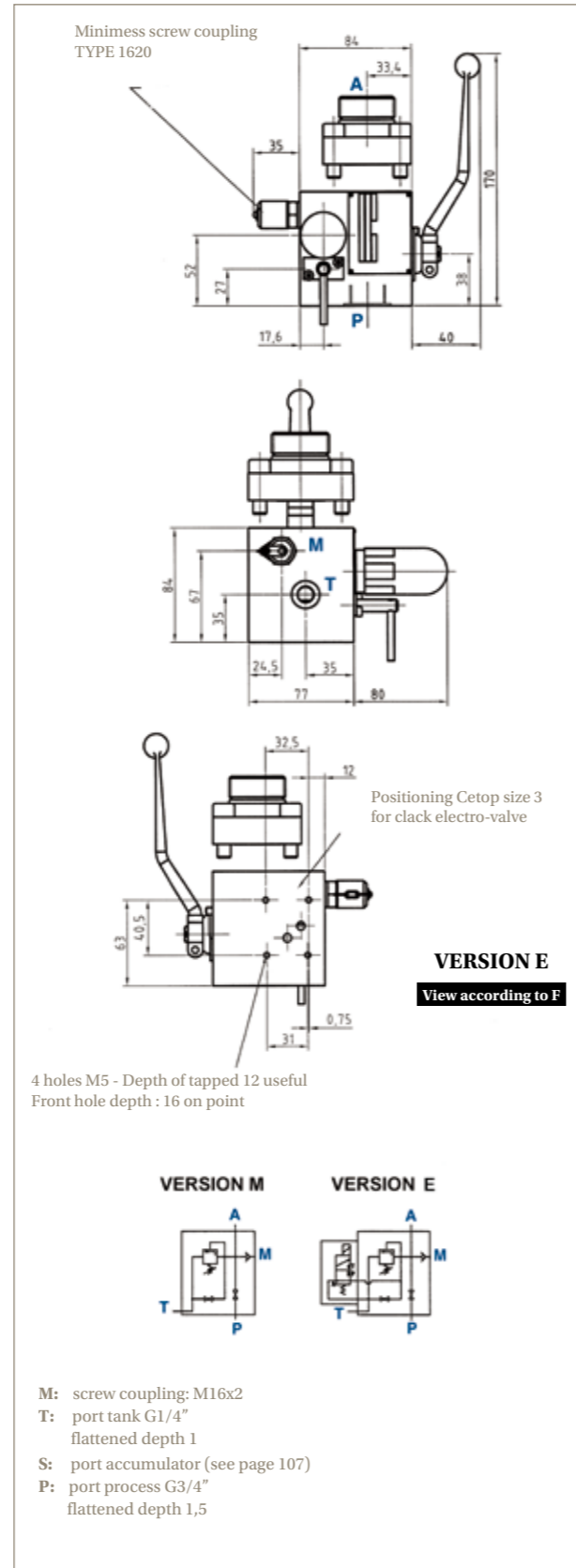
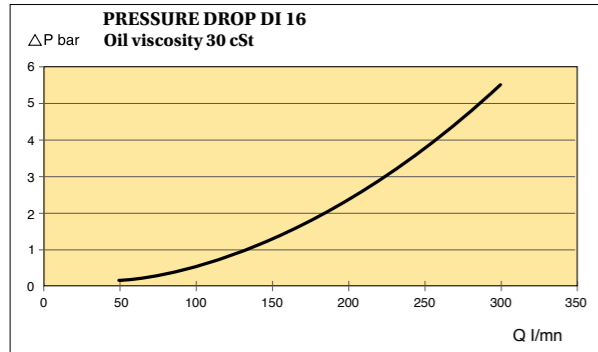


Safety Block DI 16

TECHNICAL DATA DI 16

- **Size:** Nominal diameter : 16 mm
- **Maxi working pressure:** Manual version : 350 bar
Electrical version : 350 bar
- **Weight without connector:** Manual version : 4,3 kg
Electrical version : 5,8 kg
- **Materials:** Carbon steel
According with the fluids of group 2 (PED)
- **Temperature:** Manual version : - 15°C à + 80°C
Electrical version : - 15°C à + 60°C (ambient temperature)
- **Electrical datas:** DC : 24 V
AC : 230 V-50/60 Hz
Standard protection : IP 65
Standard connector : DIN 43650
- **Connection accumulator side:** See page 107
- **Pressure / return connector of circuit:** See hydraulic drawing
- **Valve of limitation of pressure EC (nominal dia):** 6 mm
- **Flow:** Consult the diagram

Possibility of assembly of a flow control valve on the block consult us.



Above dimensions are in mm and are subject to manufacturing tolerances.

Safety Block DI 16 Manual Version

Standard version (Carbon steel, rings NBR) temperature -15°C up to 80°C Maximum working pressure : 350 Bar
According to PED 2014/68/EU

Part numbers

Connecting to accumulator	Type	Part number
EHV 0,5 up to 1,6 L G3/4"	DI16MS/2/210 CV	35128812G02
EHV 0,5 up to 1,6 L G3/4"	DI16MS/2/250 CV	35128812H02
EHV 0,5 up to 1,6 L G3/4"	DI16MS/2/330 CV	35128812J02
EHV 0,5 up to 1,6 L G3/4"	DI16MS/2/350 CV	35128812Y02
EHV 2,5 up to 10 L G1"1/4	DI16MS/1/210 CV	35128811G02
EHV 2,5 up to 10 L G1"1/4	DI16MS/1/250 CV	35128811H02
EHV 2,5 up to 10 L G1"1/4	DI16MS/1/330 CV *	35128811J02
EHV 2,5 up to 10 L G1"1/4	DI16MS/1/350 CV *	35128811Y02
EHV 10 up to 50 L G2"	DI16MS/3/210 CV	35128813G02
EHV 10 up to 50 L G2"	DI16MS/3/250 CV	35128813H02
EHV 10 up to 50 L G2"	DI16MS/3/330 CV *	35128813J02
EHV 10 up to 50 L G2"	DI16MS/3/350 CV	35128813Y02

* without electro-valve

Safety Block DI 16 Electrical Version

Standard version (Carbon steel, rings FKM) temperature -15°C up to 60°C Maximum working pressure : 350 Bar
According to PED 2014/68/EU

Part numbers

Connecting to accumulator	With Electro-valve tension 24VDC	
	Type	Part number
EHV 0,5 up to 1,6 L G3/4"	DI16EYS/2/210 CV24VCC	35128832G02
EHV 0,5 up to 1,6 L G3/4"	DI16EYS/2/250 CV24VCC	35128832H02
EHV 0,5 up to 1,6 L G3/4"	DI16EYS/2/330 CV24VCC	35128832J02
EHV 0,5 up to 1,6 L G3/4"	DI16EYS/2/350 CV24VCC	35128832Y02
EHV 2,5 up to 10 L G1"1/4	DI16EYS/1/210 CV24VCC	35128831G02
EHV 2,5 up to 10 L G1"1/4	DI16EYS/1/250 CV24VCC	35128831H02
EHV 2,5 up to 10 L G1"1/4	DI16EYS/1/330 CV24VCC	35128831J02
EHV 2,5 up to 10 L G1"1/4	DI16EYS/1/350 CV24VCC	35128831Y02
EHV 10 up to 50 L G2"	DI16EYS/3/210 CV24VCC	35128833G02
EHV 10 up to 50 L G2"	DI16EYS/3/250 CV24VCC	35128833H02
EHV 10 up to 50 L G2"	DI16EYS/3/330 CV24VCC	35128833J02
EHV 10 up to 50 L G2"	DI16EYS/3/350 CV24VCC	35128833Y02

Options or Accessories

Type	Electro valve tension	Part number
ELECTRO-VALVE T3	24 VCC	35157700281
ELECTRO-VALVE T3	110/120VA 50/60 Hz	35157800281
ELECTRO-VALVE T3	220/230VA 50/60 Hz	35157900281
REGULATION BLOCK	R16	35141800281
FLANGE M 3/4" GAS CYL Connection Accumulator Side		35054100281
FLANGE M 1"1/4 GAS CYL Connection Accumulator Side		35054200281
FLANGE M 2" GAS CYL Connection Accumulator Side		35103500281
RELIEF VALVE CE	210	35045732102
RELIEF VALVE CE	250	35045732502
RELIEF VALVE CE	330	35045733302
RELIEF VALVE CE	350	35045733502

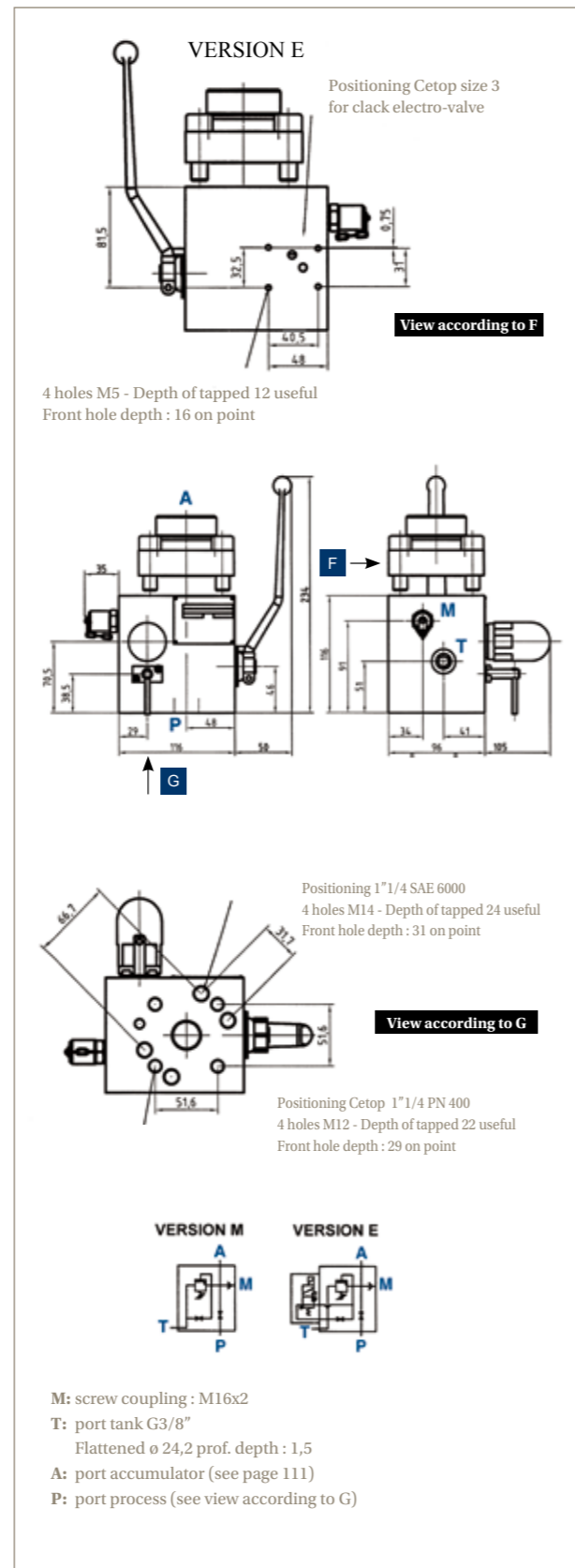
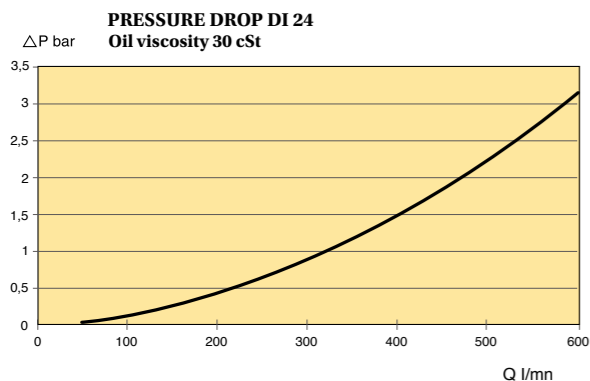


Safety Block DI 24

TECHNICAL DATA DI 24

- **Size:** Nominal diameter : 24 mm
- **Maxi working pressure:** Manual version : 350 bar
Electrical version : 350 bar
- **Weight without connector:** Manual version : 9,5 kg
Electrical version : 11 kg
- **Materials:** Carbon steel
- **Temperature:** Manual version : - 15°C à + 80°C
Electrical version : - 15°C à + 60°C (ambient temperature)
- **Electrical datas:** DC : 24 V
AC : 230 V-50/60 Hz
Standard protection : IP 65
Standard connector : DIN 43650
- **Connection accumulator side:** See page 111
- **Pressure / return connector of circuit:** See hydraulic drawing
- **Valve of limitation of pressure EC (nominal dia):** 10 mm
- **Flow:** Consult the diagram

Possibility of assembly of a flow control valve on the block consult us.



Above dimensions are in mm and are subject to manufacturing tolerances.

Safety Block DI 24 Manual Version

Standard version (Carbon steel, rings FKM) temperature -15°C up to 80°C Maximum working pressure : 350 Bar
According to PED 2014/68/EU

Part numbers

Connecting to accumulator	Type	Part number
EHV 2,5 up to 10 L G1"1/4	DI24MS/1/330CV	35129011J02
EHV 2,5 up to 10 L G1"1/4	DI24MS/1/350CV	35129011Y02
EHV 10 up to 50 L G2"	DI24MS/3/210CV	35129013G02
EHV 10 up to 50 L G2"	DI24MS/3/250CV *	35129013H02
EHV 10 up to 50 L G2"	DI24MS/3/330CV *	35129013J02
ACCU PISTON 10 up to 50 L G2"&EBV 100 and 200 L	Consult Parker Olaer	

* without electro-valve

Safety Block DI 24 Electrical Version

Standard version (Carbon steel, rings FKM) temperature -15°C up to 60°C Maximum working pressure : 350 Bar
According to PED 2014/68/EU

Part numbers

Connecting to accumulator	With Electro-valve tension 24VDC	
	Type	Part number
EHV 2,5 up to 10 L G1"1/4	DI24EYS/1/210CV24VCC	35129031G02
EHV 2,5 up to 10 L G1"1/4	DI24EYS/1/250CV24VCC	35129031H02
EHV 2,5 up to 10 L G1"1/4	DI24EYS/1/330CV24VCC	35129031J02
EHV 2,5 up to 10 L G1"1/4	DI24EYS/1/350CV24VCC	35129031Y02
EHV 10 up to 50 L G2"	DI24EYS/3/210CV24VCC	35129033G02
EHV 10 up to 50 L G2"	DI24EYS/3/250CV24VCC	35129033H02
EHV 10 up to 50 L G2"	DI24EYS/3/330CV24VCC	35129033J02
PISTON ACCUMULATOR 10 up to 50 L G2"&EBV 100 and 200 L	Consult Parker Olaer	

Options or Accessories

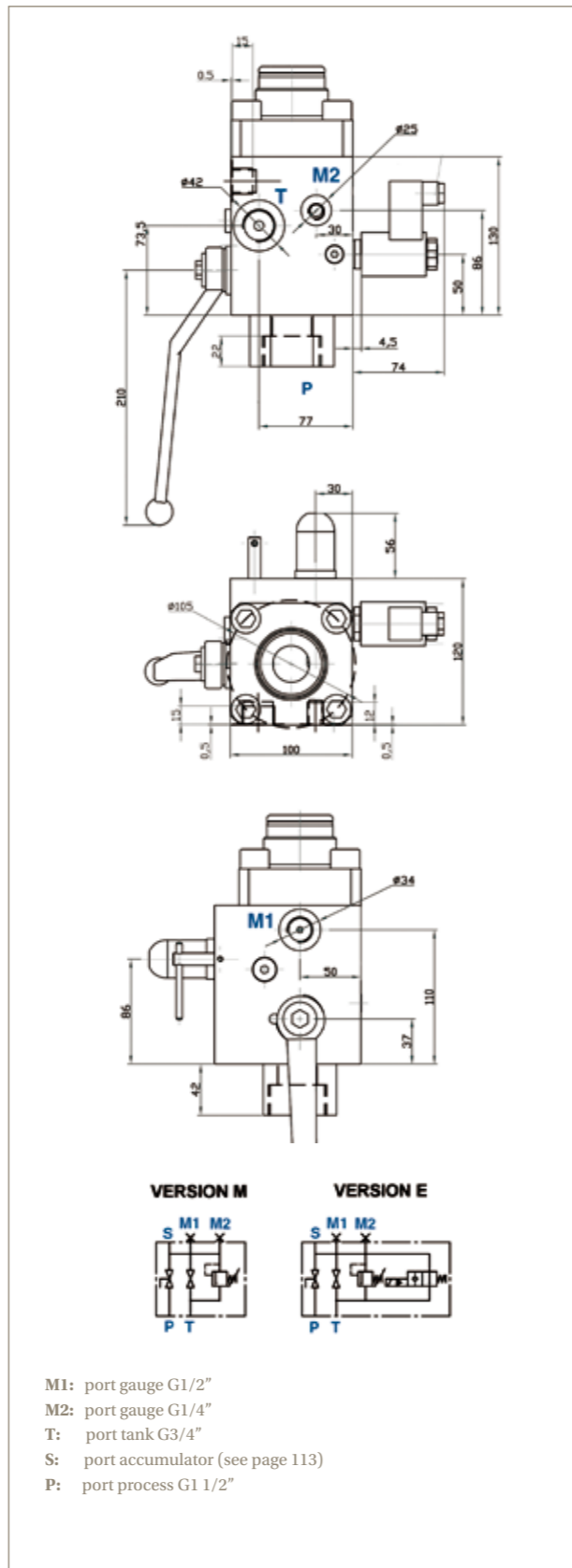
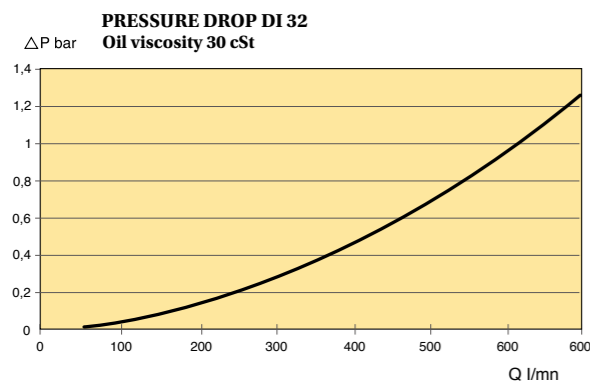
Type	Electro valve tension	Part number
ELECTRO-VALVE T3	24 VCC	35157700281
ELECTRO-VALVE T3	110/120 V 50/60 Hz	35157800281
ELECTRO-VALVE T3	220/230 V 50/60 Hz	35157900281
REGULATION BLOCK	R24	35067500281
FLANGE M 1"1/4 GAZ CYL CONNECTION ACCUMULATOR SIDE		10436600281
FLANGE M 2" GAZ CYL CONNECTION ACCUMULATOR SIDE		35037500281
RELIEF VALVE CE	210 BAR	35045932102
RELIEF VALVE CE	250 BAR	35045932502
RELIEF VALVE CE	330 BAR	35045933302
RELIEF VALVE CE	350 BAR	35045933502



Safety Block DI32

TECHNICAL DATA DI 32

- **Size:** Nominal diameter : 32 mm
- **Maxi working pressure:** Manual version : 400 bar
Electrical version : 350 bar
According with the fluids of group 2 (PED)
- **Weight without connector:** Manual version : 11,7 kg
Electrical version : 12,2 kg
- **Materials:** Carbon steel
- **Temperature:** Manual version : - 10°C à + 70°C
Electrical version : - 10°C à + 60°C (ambient temperature)
- **Electrical datas:** DC : 24 V
AC : 230 V-50/60 Hz
Standard protection : IP 65
Standard connector : DIN 43650
- **Connection accumulator side:** See page 113
- **Pressure / return connector of circuit:** See hydraulic drawing
- **Valve of limitation of pressure EC (nominal dia):** 10 mm
- **Flow:** Consult the diagram



Above dimensions are in mm and are subject to manufacturing tolerances.

Safety Block DI 32 Manual Version

Standard version (Carbon steel, rings NBR) temperature -10°C up to 70°C Maximum working pressure : 400 Bar
According to PED 2014/68/EU, EN 14359 Fluid Group 2

Part numbers

Connecting to accumulator	Type	Part number
EHV 2,5 up to 10 L G1"1/4	DI32MS/1/210CH	35172311G01
EHV 2,5 up to 10 L G1"1/4	DI32MS/1/250CH	35172311H01
EHV 2,5 up to 10 L G1"1/4	DI32MS/1/330CH	35172311J01
EHV 2,5 up to 10 L G1"1/4	DI32MS/1/350CH	35172311Y01
EHV 10 up to 50 L G2"	DI32MS/3/210CH	35172313G01
EHV 10 up to 50 L G2"	DI32MS/3/250CH	35172313H01
EHV 10 up to 50 L G2"	DI32MS/3/330CH	35172313J01

Safety Block DI 32 Electrical Version

Standard version (Carbon steel, rings NBR) temperature -10°C up to 60°C Maximum working pressure : 350 Bar
According to PED 2014/68/EU, EN 14359 Fluid Group 2

Part numbers

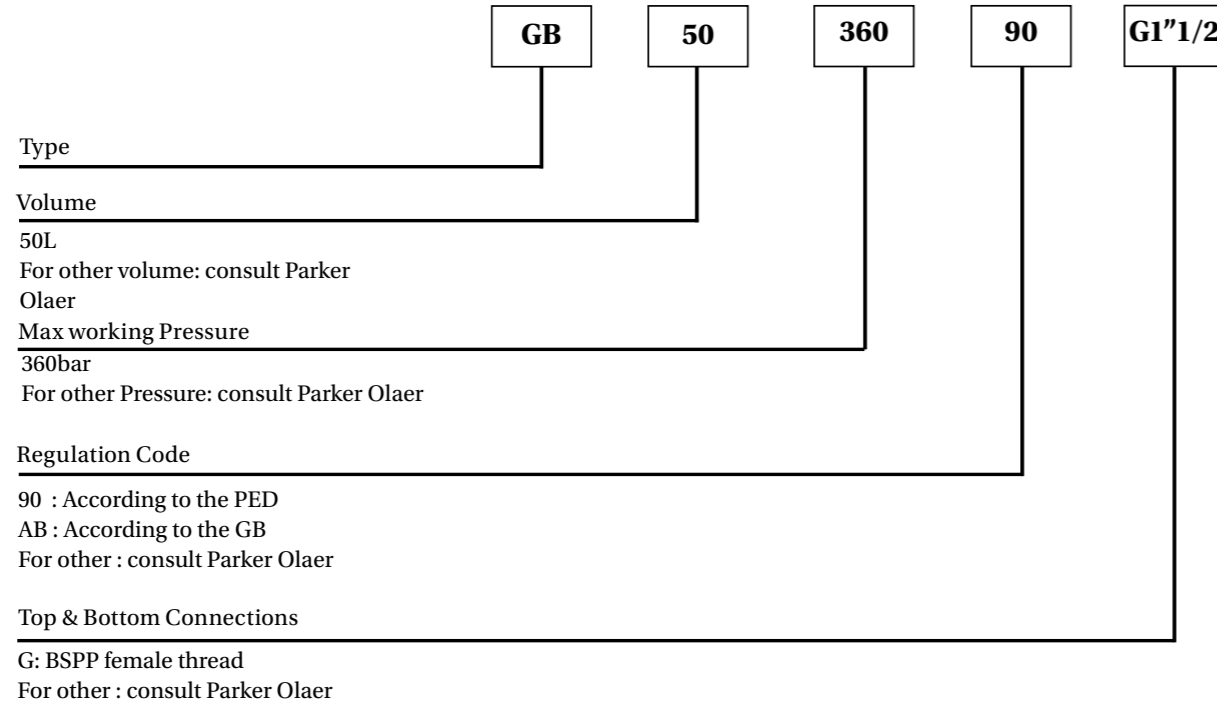
Connecting to accumulator	With Electro-valve tension 24VDC		With Electro-valve other tensions	
	Type	Part number	Type	Part number
EHV 2,5 up to 10 L G1"1/4	DI32EYS/1/210CH24VCC	35172331G21	DI32EYS/1/210CH230V50/60	35172331G61
EHV 2,5 up to 10 L G1"1/4	DI32EYS/1/250CH24VCC	35172331H21	DI32EYS/1/250CH230V50/60	35172331H61
EHV 2,5 up to 10 L G1"1/4	DI32EYS/1/330CH24VCC	35172331J21	DI32EYS/1/330CH230V50/60	35172331J61
EHV 2,5 up to 10 L G1"1/4	DI32EYS/1/350CH24VCC	35172331Y21	DI32EYS/1/350CH230V50/60	35172331Y61
EHV 10 up to 50 L G2"	DI32EYS/3/210CH24VCC	35172333G21	DI32EYS/3/210CH230V50/60	35172333G61
EHV 10 up to 50 L G2"	DI32EYS/3/250CH24VCC	35172333H21	DI32EYS/3/250CH230V50/60	35172333H61
EHV 10 up to 50 L G2"	DI32EYS/3/330CH24VCC	35172333J21	DI32EYS/3/330CH230V50/60	35172333J61

Options or Accessories

Type	Characteristics	Part number
RELIEF VALVE CE	210 BAR	35045932102
RELIEF VALVE CE	250 BAR	35142012502
RELIEF VALVE CE	330 BAR	35142013302
RELIEF VALVE CE	350 BAR	35045933502



How to order a Gas Bottle



Standard version (**Carbon Steel** shell), temperature from -40° up to 80°C
According to PED 2014/68/EU, Fluid Group 2
Part numbers, Dimensions

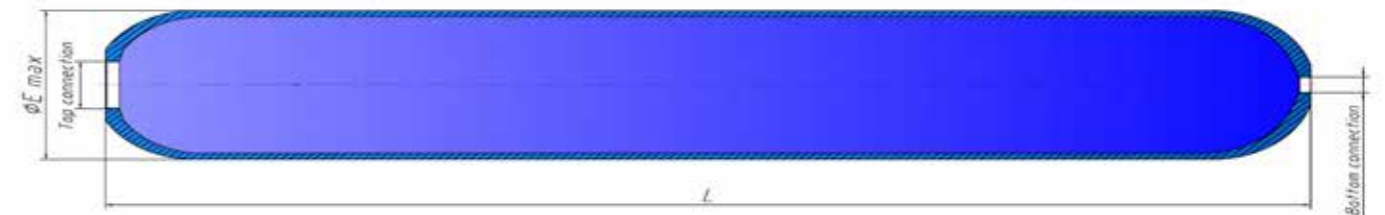
Type	Effective Gas vol. Litres	Design P bar	Weight kg	L (mm) ± 25	øE max (mm)	Top Connection	Bottom Connection
GB 50-360/90* on request	50	360	95	1700	223	G 1 1/2***	G 3/4***

* other type please consult Parker Olaer
** other dimensions please consult Parker Olaer

Standard version (Carbon Steel shell), temperature from -15° up to 80°C
According to GB/T 20663
Part numbers, Dimensions

Type	Effective Gas vol. Litres	Design P bar	Weight kg	L (mm) ± 15	øE max (mm)	Top Connection	Bottom Connection
GB 50-250/AB* on request	50	250	130	1620	223	G 1 1/2***	G 3/4***
GB 50-330/AB* on request	50	330	150	1620	229	G 1 1/2***	G 3/4***

* other type please consult Parker Olaer
** other dimensions please consult Parker Olaer



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