



Accumulators, Accessories and Spares

Effective August 1st, 2019

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



ENGINEERING YOUR SUCCESS.

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Solutions developed by 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, Olaer is the co-owner of its main bladder supplier. For either a standard application or designing solutions for a specific requirement, Olaer engineers have the experience in elastomers and knowledge of the latest technological developments in metal and composite shells. This allows Olaer to propose reduced weight accumulators and other design innovations.

Parker Hannifin hydraulics (Tianjin) co., LTD. Was founded in April, 2005 by Parker Hannifin, a world-class American fluid transmission manufacturer. Parker hannifin corporation is a world-class manufacturing company dedicated to providing first-class products and customer services. As one of the top 500 companies of the New York stock exchange, motion control is distributed in more than 1000 industrial and aviation fields. Parker hannifin corporation is the only manufacturer of hydraulic, pneumatic and electromechanical motion control solutions. The company has the largest distribution network in its field, with over 7,500 distributors serving 400,000 customers worldwide.

Parker hannifin acquired OLAER group in 2012 and created the accumulator division.

- High pressure and low pressure capsule accumulator, maximum volume 200L
- Piston accumulator, Max pressure 350 bar, Max inner diameter 540mm
- It is used in the fields of construction machinery, industry, wind power, water conservancy, ocean, oil and gas and ship
- Diaphragm accumulator used in construction machinery, wind power and industry, with maximum volume of 3.5l
- Accumulator accessories, including integrated valve blocks, inflatable tools, clamps, supports, joints, etc
- Capsule type accumulator station or piston type accumulator with auxiliary cylinder type accumulator station



PARKER accumulator has the European CE standard B mode certificate and D mode certificate, the People's Republic of China special equipment manufacturing license and other qualifications. Our company can provide a variety of certified products, including European CE, American ASME, Chinese GB, Australian AS1210, Brazil NR13, Malaysia DOSH, Russia CUTR and so on. At the same time, for Marine and Marine applications, we can provide ABS in the United States, DNV in Norway, CCS in China, LR in Britain, BV in France and other common classification society certifications.

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.

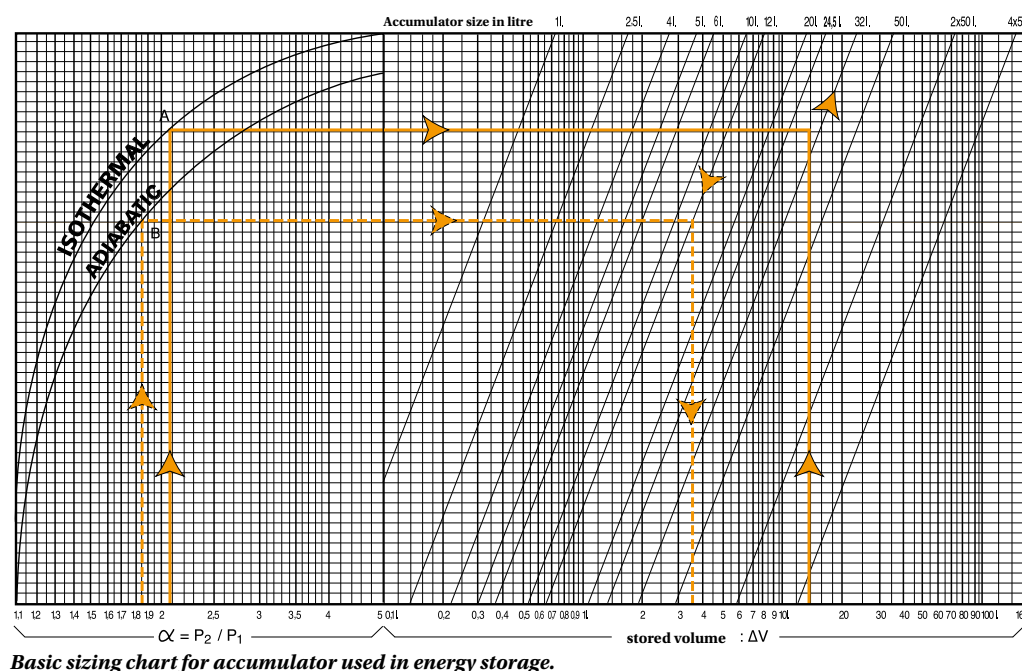
Accumulator size = 12 L

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.

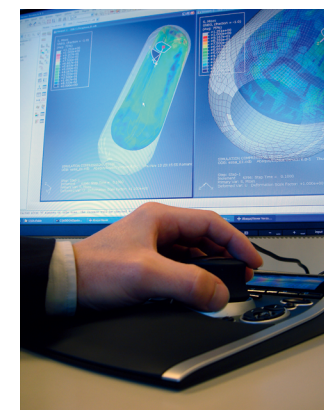
Adiabatic: The transformation is said to be adiabatic when the cycle is quick and does not allow a temperature exchange with the ambient media.

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 lead 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:

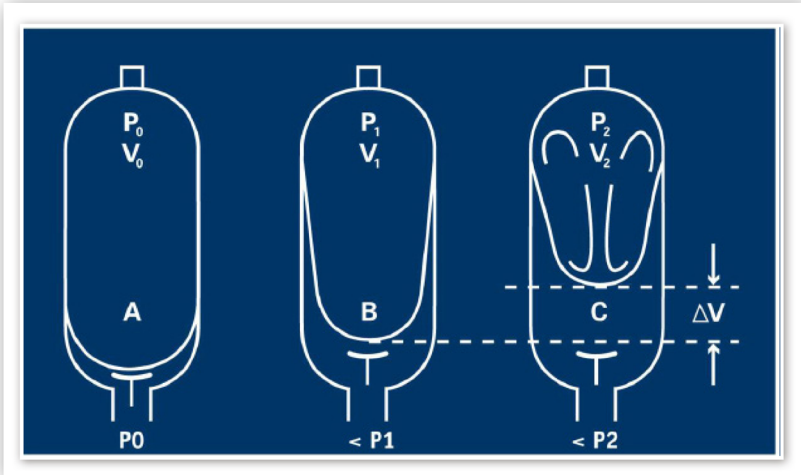
- **Reduction in working costs**
 - Reduces installed electrical power
 - Significant energy saving
- **Increase lifetime of equipment**
 - Reduces pulsations
 - Protects against pressure peaks
- **Reduction in maintenance cost**
 - Reduces wear of hydraulic components
 - Requires minimum maintenance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

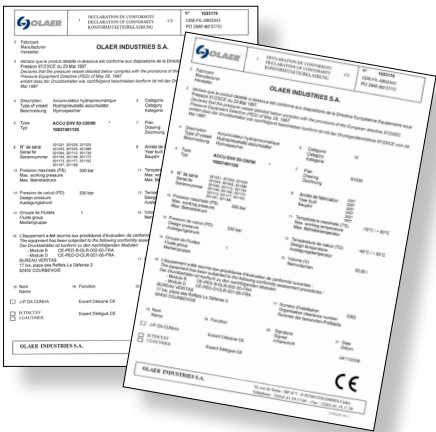
When operating in dangerous and explosive environments, Parker Olaer has designed an ATEX Group II cat. 2 and 3 range of accumulators.

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.



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.

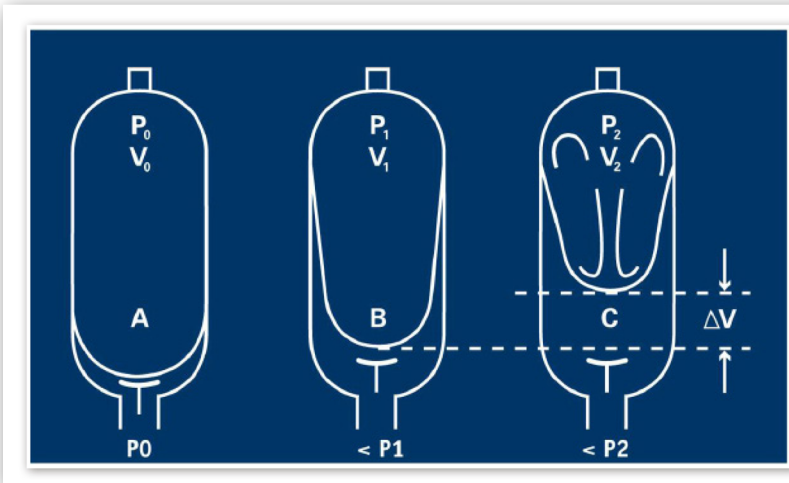
The OLAER gas loaded accumulator is an essential component for the optimum operation of a hydraulic circuit. In hydraulic circuits, the accumulator enables:

- 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.

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 - 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.

Example Type Nitrogen Gas Pre-charge

EHV 32 - 330 / 90 01125 P0 = 200B

Series	
EHV: High pressure bladder accumulator EHVF: EHV with Flange	
Volume	
in Litres	
Max. working Pressure (PS)	
in bar	
Regulation Code	
00 : According to the PED, article 4.3 for the 0.5 L and 1 L volume 90 : According to the PED for all other volumes Others: consult the table pages 46& 47	
Construction: 1 character	
0 : All ranges except transfer 3 : Transfer range 5 : Transfer stainless steel range	
Shell Construction: 2 characters	
11 : In carbon steel 19 : Stainless steel, usable for ATEX Others: consult the table page 50	
Bladder Mix: 2 characters	
20 : Accumulators > 100L NBR NITRILE STANDARD 25 : Standard construction NBR NITRILE STANDARD Other mixes: Consult the table page 49	
Nitrogen gas pressure	
without specification : Accumulators will be delivered with a storage pressure (between 2 and 5 bar) with specification : in bar at 20°C limited to 20 bar at maximum working temperature	

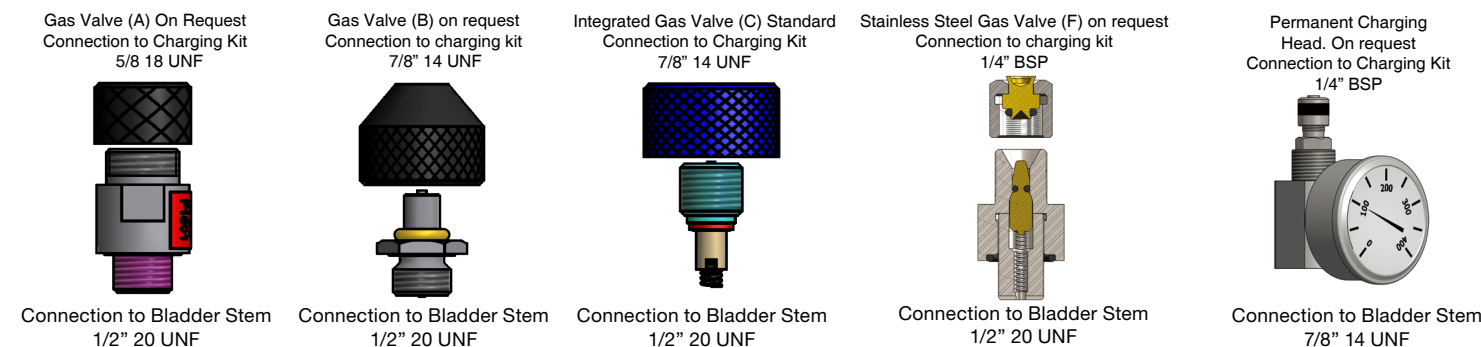
EHV Series 250-350 bar, 1 to 10 Litres

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	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm							
						A max height	B	C	øD max	ød	øE	F on flats	G connection
EHV 1-350/AB 11067601125	1	350	240	6	7/8" 14 UNF	330	54	66	116	22.5	50	32	G ¾"
EHV 2.5-250/AB 11214301125	2.4	350	450	11	7/8" 14 UNF	549	66	66	116	22.5	68	50	G 1 ¼"
EHV 4-350/AB 11067701125	3.7	350	450	15	7/8" 14 UNF	434	65	66	170	22.5	68	50	G 1 ¼"
EHV 5-250/AB 11214401125	5	350	450	17	7/8" 14 UNF	898	66	66	116	22.5	68	50	G 1 ¼"
EHV 6-350/AB 11067801125	6	350	450	20	7/8" 14 UNF	560	65	66	170	22.5	68	50	G 1 ¼"
EHV 10-350/AB 11067901125	10	350	450	31	7/8" 14 UNF	825	65	66	170	22.5	68	50	G 1 ¼"

/AB = in compliance with GB/T20663



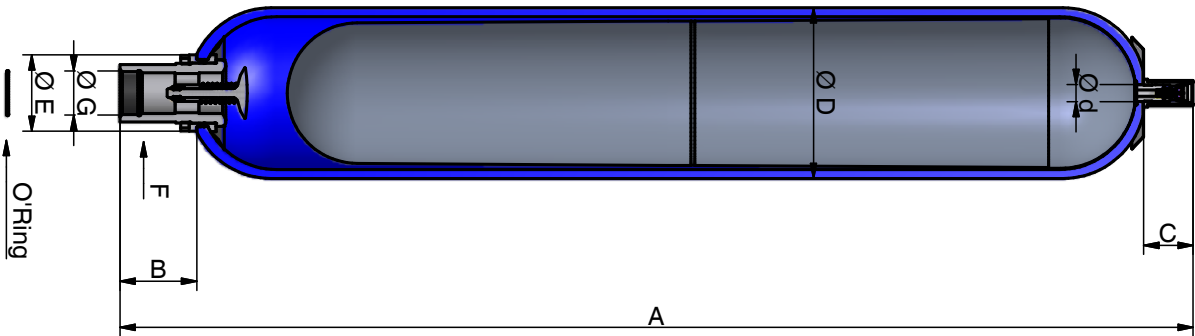
EHV-DA Series 250 bar, 10 to 150 Litres

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	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm							
						A max height	B	C	øD max	ød	øE	F on flats	G connection
EHV 10-250/AB 11068001125	9.2	250	1200	31	7/8" 14 UNF	587	103	66	226	22.5	101	70	G 2"
EHV 12-250/AB 11068101125	11	250	1200	36	7/8" 14 UNF	687	103	66	226	22.5	101	70	G 2"
EHV 20-250/AB 11068201125	17.8	250	1200	49	7/8" 14 UNF	897	103	66	226	22.5	101	70	G 2"
EHV24.5-250/AB 11068301125	22.5	250	1200	56	7/8" 14 UNF	1032	103	66	226	22.5	101	70	G 2"
EHV 32-250/AB 11068401125	32	250	1200	81	7/8" 14 UNF	1420	103	66	226	22.5	101	70	G 2"
EHV 42-250/AB 11214501125	42	250	1200	87	7/8" 14 UNF	1562	103	66	226	22.5	101	70	G 2"
EHV 50-250/AB 11068501125	48.5	250	1200	110	7/8" 14 UNF	1936	103	66	226	22.5	101	70	G 2"
EHV 57-250/AB 11214601125	53	250	1200	116	7/8" 14 UNF	2032	103	66	226	22.5	101	70	G 2"
EHV 100-250/AB 11214701125	100	250	1700	242	5/8" 18 UNF	1691	100	75	356	51	125	90	G 2"1/2
EHV 150-250/AB 11214801125	150	250	1700	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.

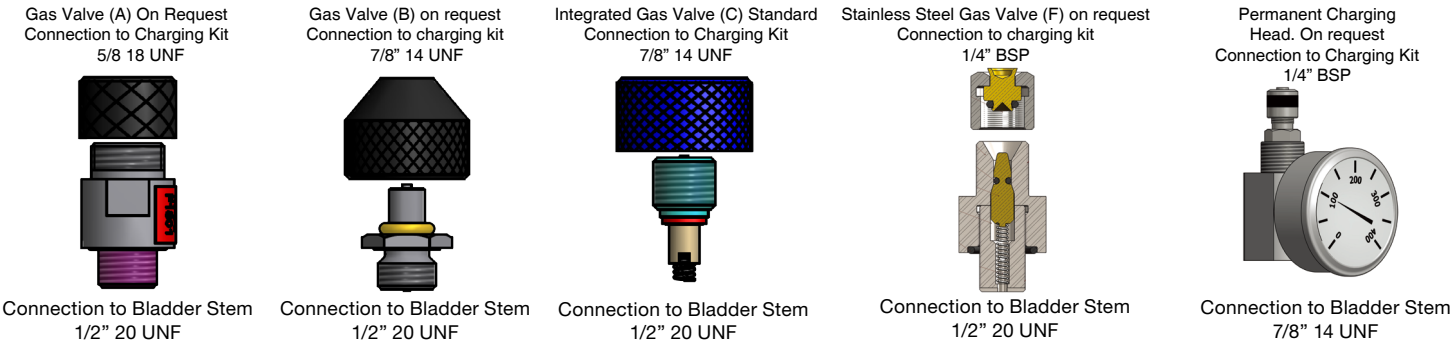
EHV-DA Series 330 bar, 10 to 150 Litres

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	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm							
						A max height	B	C	øD max	ød	øE	F on flats	G connection
EHV 10-330/AB 11068601125	9.2	330	1200	36	7/8" 14 UNF	585	103	66	232	22.5	101	70	G 2"
EHV 12-330/AB 11068701125	11	330	1200	43	7/8" 14 UNF	685	103	66	232	22.5	101	70	G 2"
EHV 20-330/AB 11068801125	17.8	330	1200	61	7/8" 14 UNF	895	103	66	232	22.5	101	70	G 2"
EHV24.5-330/AB 11068901125	22.5	330	1200	66	7/8" 14 UNF	1030	103	66	232	22.5	101	70	G 2"
EHV 32-330/AB 11069001125	32	330	1200	99	7/8" 14 UNF	1420	103	66	232	22.5	101	70	G 2"
EHV 42-330/AB 11214901125	42	330	1200	110	7/8" 14 UNF	1562	103	66	232	22.5	101	70	G 2"
EHV 50-330/AB 11069101125	48.5	330	1200	126	7/8" 14 UNF	1943	103	66	232	22.5	101	70	G 2"
EHV 57-330/AB 11215001125	53	330	1200	134	7/8" 14 UNF	2038	103	66	232	22.5	101	70	G 2"
EHV 100-330/AB 11215101125	100	330	1800	272	5/8" 18 UNF	1691	100	75	356	51	125	90	G 2"1/2
EHV 150-330/AB 11215201125	150	330	1800	377	5/8" 18 UNF	2325	100	75	356	51	125	90	G 2"1/2



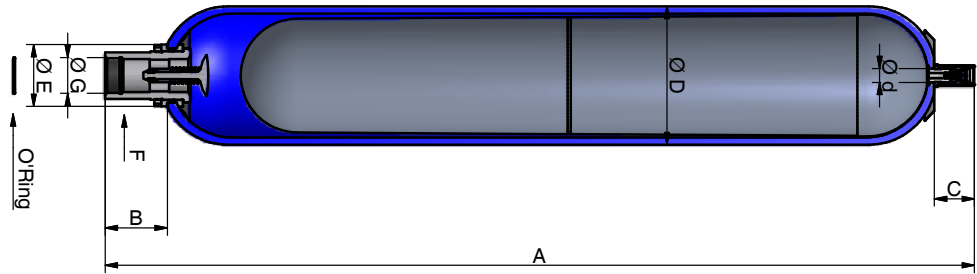
EHV-H Series 250 bar, 10 to 57 Litres

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	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm							
						A max height	B	C	øD max	ød	øE	F on flats	G connection
EHV 10-250H/AB 11215301125	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	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	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	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	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	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	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	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 250-350 BAR, 2.5 to 10 Litres

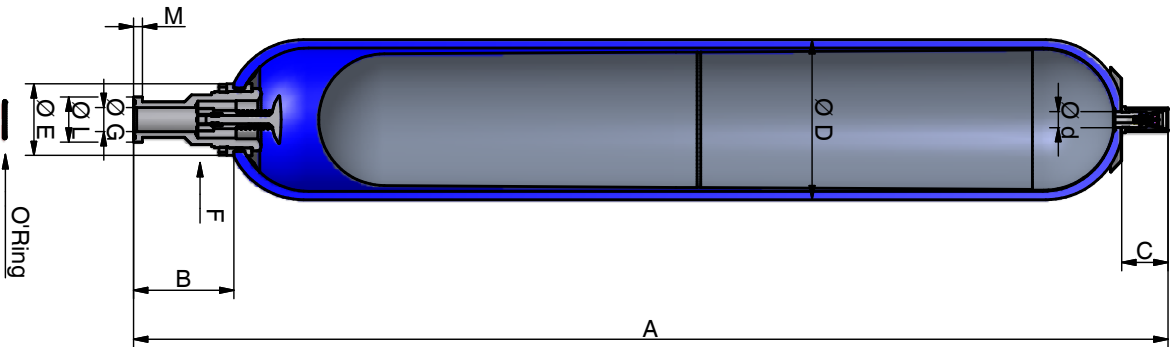
According to GB/T20633

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	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm									
						A max height	B	C	øD max	ød	øE	F on flats	øG	øL	M
EHVF 2.5-250/AB 11216101125	2.4	250	450	11	7/8" 14 UNF	595	111	66	116	22.5	68	50	22	47.9	9.5
EHVF 4-350/AB 11162101125	3.7	350	450	15	7/8" 14 UNF	480	110	66	170	22.5	68	50	22	47.9	9.5
EHVF 5-250/AB 11162201125	5	250	450	17	7/8" 14 UNF	944	111	66	116	22.5	68	50	22	47.9	9.5
EHVF 6-350/AB 11162301125	6	350	450	20	7/8" 14 UNF	606	110	66	170	22.5	68	50	22	47.9	9.5
EHVF 10-350/AB 11162401125	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.



EHVF Series 250 BAR, 10 to 57 Litres

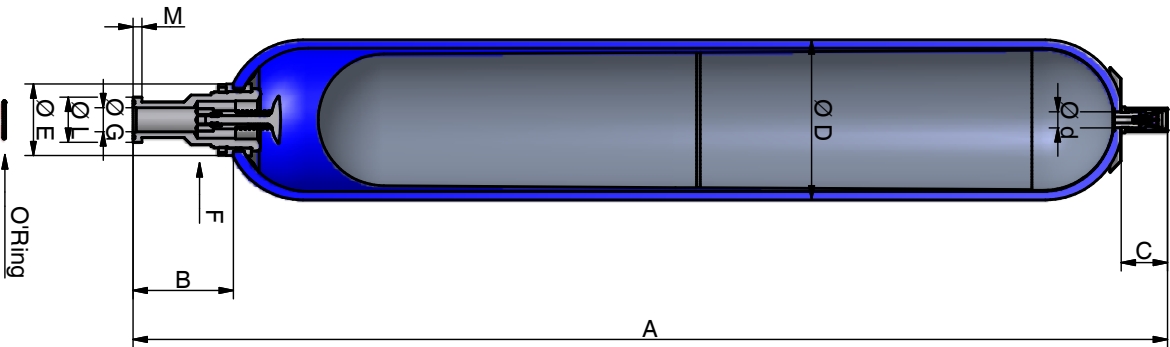
According to GB/T20663

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 Part number	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm									
						A max height	B	C	øD max	ød	øE	F on flats	øG	øL	M
EHVF 10-250/AB 11069201125	9.2	250	1200	31	7/8"14 UNF	625	143	66	226	22.5	101	34	70	63.8	12.5
EHVF 12-250/AB 11069301125	11	250	1200	36	7/8"14 UNF	725	143	66	226	22.5	101	34	70	63.8	12.5
EHVF 20-250/AB 11069401125	17.8	250	1200	49	7/8"14 UNF	935	143	66	226	22.5	101	34	70	63.8	12.5
EHVF24.5-250/AB 11069501125	22.5	250	1200	56	7/8"14 UNF	1070	143	66	226	22.5	101	34	70	63.8	12.5
EHVF 32-250/AB 11069601125	32	250	1200	81	7/8"14 UNF	1460	143	66	226	22.5	101	34	70	63.8	12.5
EHVF 42-250/AB 11216201125	42	250	1200	87	7/8"14 UNF	1602	143	66	226	22.5	101	34	70	63.8	12.5
EHVF 50-250/AB 11069701125	48.5	250	1200	110	7/8"14 UNF	1983	143	66	226	22.5	101	34	70	63.8	12.5
EHVF 57-250/AB 11216301125	53	250	1200	116	7/8"14 UNF	2072	143	66	226	22.5	101	34	70	63.8	12.5



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

EHVF Series 330 BAR, 10 to 57 Litres

According to GB/T20663

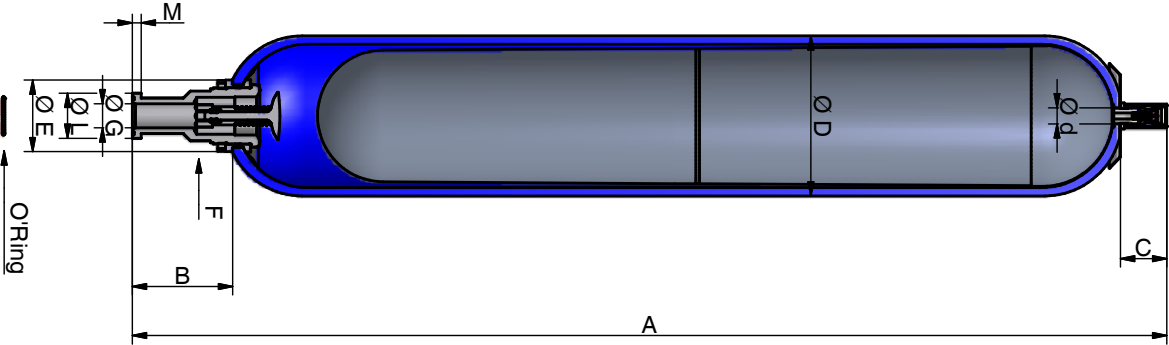
High Flow fluid port, 1200 l/min

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	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm									
						A max height	B	C	øD max	ød	øE	F on flats	øG	øL max	M
EHVF 10-330/AB 11069801125	9.2	330	1200	37	7/8" 14 UNF	625	143	66	232	22.5	101	34	70	63.8	12.5
EHVF 12-330/AB 11069901125	11	330	1200	43	7/8" 14 UNF	725	143	66	232	22.5	101	34	70	63.8	12.5
EHVF 20-330/AB 11070001125	17.8	330	1200	62	7/8" 14 UNF	935	143	66	232	22.5	101	34	70	63.8	12.5
EHVF24.5-330/ AB 11070101125	22.5	330	1200	67	7/8" 14 UNF	1070	143	66	232	22.5	101	34	70	63.8	12.5
EHVF 32-330/AB 11070301125	32	330	1200	100	7/8" 14 UNF	1460	143	66	232	22.5	101	34	70	63.8	12.5
EHVF 42-330/AB 11216401125	42	330	1200	115	7/8" 14 UNF	1700	143	66	232	22.5	101	34	70	63.8	12.5
EHVF 50-330/AB 11070401125	48.5	330	1200	127	7/8" 14 UNF	1983	143	66	232	22.5	101	34	70	63.8	12.5
EHVF 57-330/AB 11216501125	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.



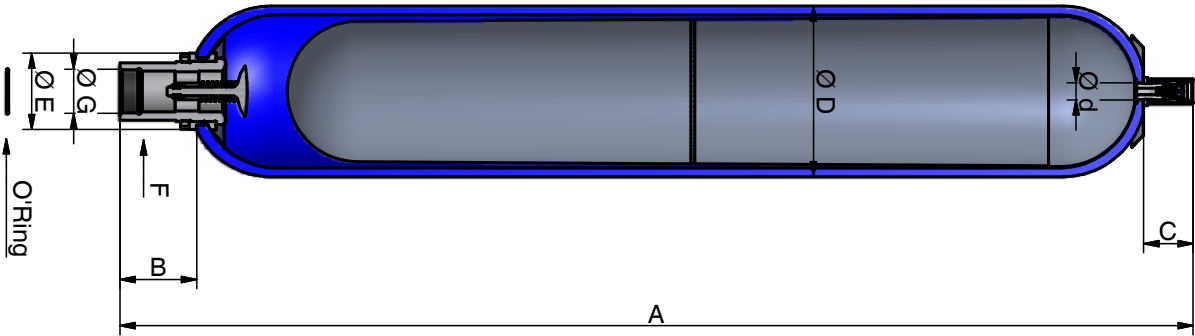
Accumulators are delivered with the nitrogen Pre-charge 3 bar.

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 Part number	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm							
						A max height	B	C	øD max	ød	øE	F on flats	G connection
EHV 0.5-350/00* 10876401125	0.6	350	240	2.7	5/8" 18 UNF	259	54	28	91	16	50	32	G ¾"
EHV 1-350/90 10845601125	1	350	240	6	7/8" 14 UNF	330	54	66	116	22.5	50	32	G ¾"
EHV 1.6-350/90 10998301125	1.6	350	240	8	7/8" 14 UNF	442	54	66	116	22.5	50	32	G ¾"
EHV 2.5-350/90 10866601125	2.4	350	450	11	7/8" 14 UNF	549	66	66	116	22.5	68	50	G 1 ¼"
EHV 4-350/90 10845401125	3.7	350	450	15	7/8" 14 UNF	434	65	66	170	22.5	68	50	G 1 ¼"
EHV 5-350/90 10861201125	5	350	450	17	7/8" 14 UNF	898	66	66	116	22.5	68	50	G 1 ¼"
EHV 6-350/90 10857401125	6	350	450	20	7/8" 14 UNF	560	65	66	170	22.5	68	50	G 1 ¼"
EHV 10-350/90 10859701125	10	350	450	31	7/8" 14 UNF	825	65	66	170	22.5	68	50	G 1 ¼"

* according to the PED, article 3.3
** For more adaptor options see page 70.



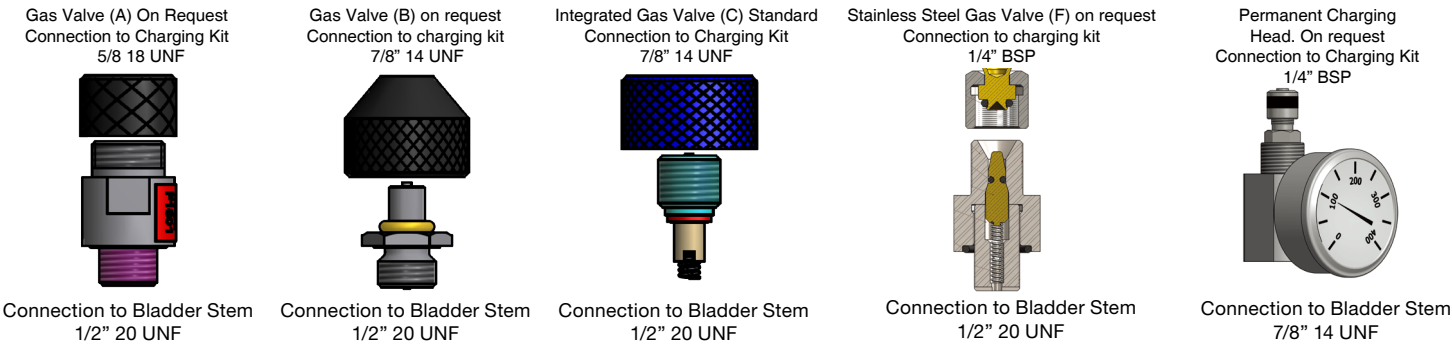
Above dimensions are in mm and are subject to manufacturing tolerances.

EHV 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	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm							
						A max height	B	C	øD max	ød	øE	F on flats	G connection
EHV 10-330/90 11007601125	9.2	330	1200	31	7/8" 14 UNF	587	103	66	226	22.5	101	70	G 2"
EHV 12-330/90 11007701125	11	330	1200	36	7/8" 14 UNF	687	103	66	226	22.5	101	70	G 2"
EHV 20-330/90 11007801125	17.8	330	1200	49	7/8" 14 UNF	897	103	66	226	22.5	101	70	G 2"
EHV24.5-330/90 11007901125	22.5	330	1200	56	7/8" 14 UNF	1032	103	66	226	22.5	101	70	G 2"
EHV 32-330/90 11008001125	32	330	1200	81	7/8" 14 UNF	1420	103	66	226	22.5	101	70	G 2"
EHV 42-330/90 11079301125	42	330	1200	87	7/8" 14 UNF	1562	103	66	226	22.5	101	70	G 2"
EHV 50-330/90 11079401125	48.5	330	1200	110	7/8" 14 UNF	1936	103	66	226	22.5	101	70	G 2"
EHV 57-330/90 11079501125	53	330	1200	116	7/8" 14 UNF	2032	103	66	226	22.5	101	70	G 2"

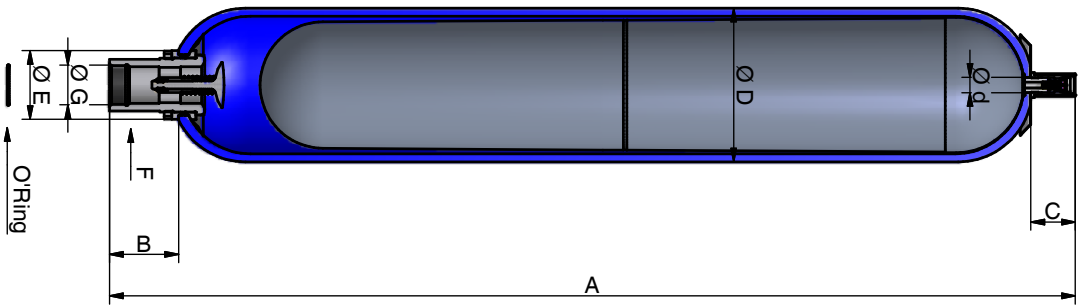


EHV-H Series 330 bar, 10 to 57 Litres

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	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm							
						A max height	B	C	øD max	ød	øE	F on flats	G connection
EHV 10-330H/90 11223001125	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	11	250	1800	36	7/8" 14 UNF	687	105	66	226	22.5	125	90	G 2"1/2
EHV 20-330H/90 11315501125	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	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 11315701125	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	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	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	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.

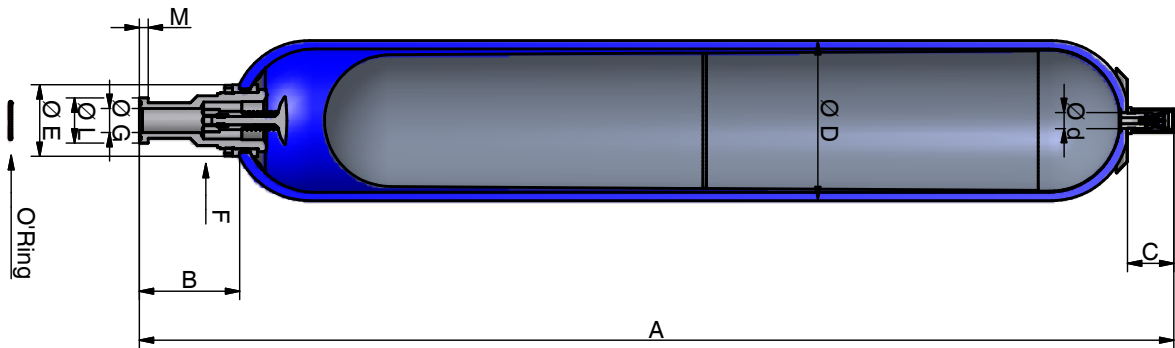
EHVF Series 350 BAR, 2.5 to 10 Litres

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	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm									
						A max height	B	C	øD max	ød	øE	F on flats	øG	øL	M
EHVF 2.5-350/90 11216601125	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 11216701125	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 11216801125	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 11216901125	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 11217001125	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.



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

EHVF Series 330 BAR, 10 to 57 Litres

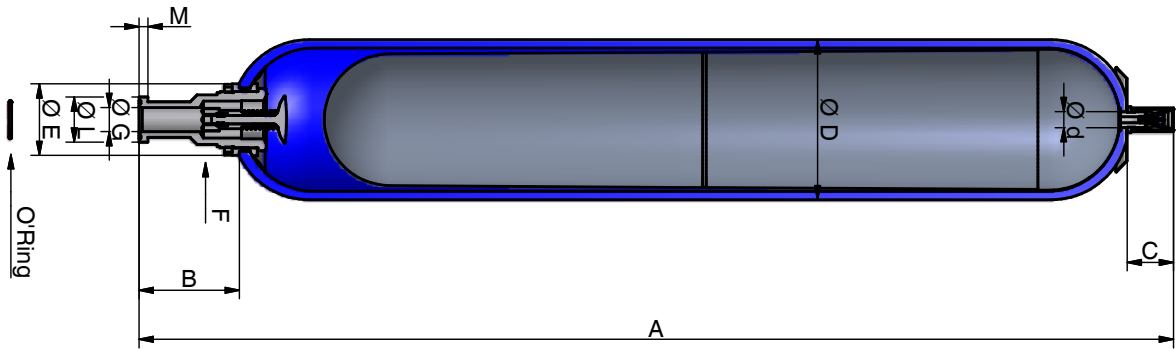
High Flow fluid port, 1200 l/min

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	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm									
						A max height	B	C	øD max	ød	øE	F on flats	øG	øL	M
EHVF 10-330/90 11217101125	9.2	330	900	31	7/8"14 UNF	627	143	66	226	22.5	101	34	70	63.8	12.5
EHVF 12-330/90 11217201125	11	330	900	36	7/8"14 UNF	727	143	66	226	22.5	101	34	70	63.8	12.5
EHVF 20-330/90 11217301125	17.8	330	900	49	7/8"14 UNF	937	143	66	226	22.5	101	34	70	63.8	12.5
EHVF24.5-330/90 11217401125	22.5	330	900	56	7/8"14 UNF	1072	143	66	226	22.5	101	34	70	63.8	12.5
EHVF 32-330/90 11217501125	32	330	900	81	7/8"14 UNF	1460	143	66	226	22.5	101	34	70	63.8	12.5
EHVF 42-330/90 11217601125	42	330	900	87	7/8"14 UNF	1602	143	66	226	22.5	101	34	70	63.8	12.5
EHVF 50-330/90 11217701125	48.5	330	900	110	7/8"14 UNF	1976	143	66	226	22.5	101	34	70	63.8	12.5
EHVF 57-330/90 11217801125	53	330	900	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



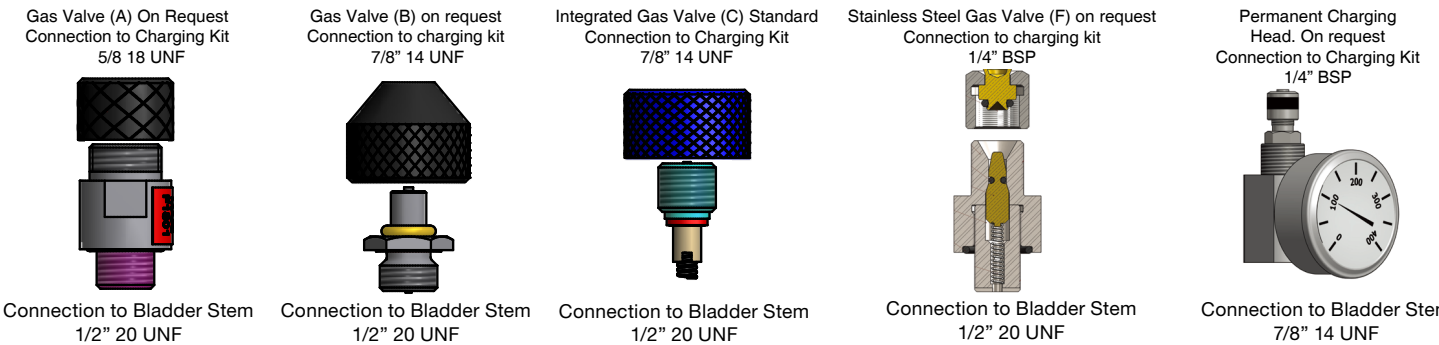
Above dimensions are in mm and are subject to manufacturing tolerances.

EHV 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	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm							
						A max height	B	C	øD max	ød	øE	F on flats	G connection
EHV 10-207/48 10811001125	9.2	207	1200	36	7/8" 14 UNF	585	103	66	226	22.5	101	70	G 2"
EHV 12-207/48 11223901125	11	207	1200	43	7/8" 14 UNF	685	103	66	226	22.5	101	70	G 2"
EHV 20-207/48 11230001125	17.8	207	1200	61	7/8" 14 UNF	895	103	66	226	22.5	101	70	G 2"
EHV24.5-207/48 11230101125	22.5	207	1200	66	7/8" 14 UNF	1030	103	66	226	22.5	101	70	G 2"
EHV 32-207/48 11230201125	32	207	1200	99	7/8" 14 UNF	1420	103	66	226	22.5	101	70	G 2"
EHV 42-207/48 11230301125	42	207	1200	110	7/8" 14 UNF	1562	103	66	226	22.5	101	70	G 2"
EHV 50-207/48 11230401125	48.5	207	1200	126	7/8" 14 UNF	1943	103	66	226	22.5	101	70	G 2"
EHV 57-207/48 11230501125	53	207	1200	134	7/8" 14 UNF	2038	103	66	226	22.5	101	70	G 2"

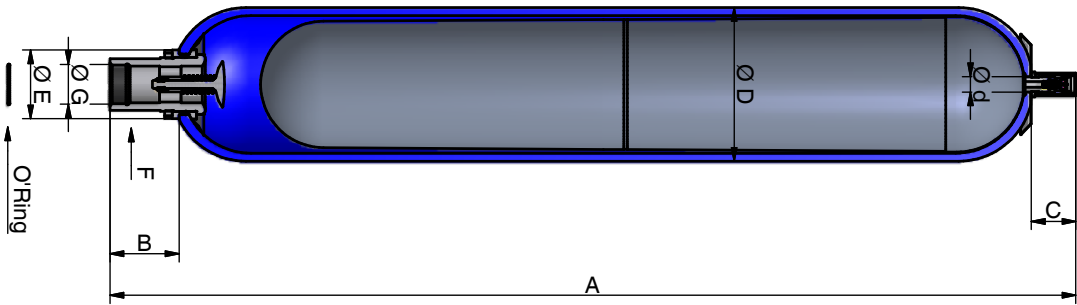


EHV Series 5000psi, 10 to 57 Litres

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	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Max Flow Rate l/min	Weight kg	Gas connection	Dimensions in mm							
						A max height	B	C	øD max	ød	øE	F on flats	G connection
EHV 10-345/48 11230601125	9.2	345	1200	39	7/8" 14 UNF	585	103	66	235	22.5	101	70	G 2"
EHV 12-345/48 11230701125	11	345	1200	46	7/8" 14 UNF	685	103	66	235	22.5	101	70	G 2"
EHV 20-345/48 11230801125	17.8	345	1200	65	7/8" 14 UNF	895	103	66	235	22.5	101	70	G 2"
EHV24.5-345/48 11230901125	22.5	345	1200	77	7/8" 14 UNF	1030	103	66	235	22.5	101	70	G 2"
EHV 32-345/48 11231001125	32	345	1200	110	7/8" 14 UNF	1420	103	66	235	22.5	101	70	G 2"
EHV 42-345/48 11222701125	42	345	1200	120	7/8" 14 UNF	1562	103	66	235	22.5	101	70	G 2"
EHV 50-345/48 11222801125	48.5	345	1200	150	7/8" 14 UNF	1943	103	66	235	22.5	101	70	G 2"
EHV 57-345/48 11222901125	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.

Type	Clamps	Support Bracket	Mounting Frame	Lifting Eye	Complete Repair Kit
	Model (quantity)	Model	Model	Model	Model
	Part number	Part number	Part number	Part number	Part number
EHV 1-350/AB 01125 EHV 1-350/90 01125	E114 (1) 20251003648	CE 89 20151903620	-	-	19029700225
EHV 2.5-250/AB 01125 EHV 2.5-250/90 01125	E114 (2)	CE 89	-	-	19036500225
EHVF 2.5-250/AB 01125 EHVF 2.5-250/90 01125	20251003648	20151903620			19035300225
EHV 4-350/AB 01125 EHV 4-350/90 01125	E168 (1)	CE108	EF1	-	19029900225
EHVF 4-350/AB 01125 EHVF 4-350/90 01125	20251303648	20118703620	20217500125		19035400225
EHV 5-250/AB 01125 EHV 5-250/90 01125	E114 (2)	CE 89	-	-	19036700225
EHVF 5-250/AB 01125	20251003648	20151903620			19035500225
EHV 6-350/AB 01125 EHV 6-350/90 01125	E168 (2)	CE108	EF1		19030100225
EHVF 6-350/AB 01125 EHVF 6-350/90 01125	20251303648		20217500125		19035600225
EHV 10-350/AB 01125 EHV 10-350/90 01125	E168 (2)	CE108	EF1		19030200225
EHVF 10-350/AB 01125 EHVF 10-350/90 01125	20251303648		20217500125		19035700225
EHV 10-250/AB EHV 10-330/AB EHV 10-330/90 EHV 10-207/48 EHV 10-345/48 01125	D226 (2)	CE159A	EF2		19052300225
EHVF 10-250/AB EHV 10-330/AB EHV 10-330/90	20251503648	20109003620	20217600125	10912700200	19032300225
EHV 12-250/AB EHV 12-330/AB EHV 12-330/90 EHV 12-207/48 EHV 12-345/48 01125	D226 (2)	CE159A	EF2		19052400225
EHVF 12-250/AB EHV 12-330/AB EHV 12-330/90	20251503648	20109003620	20217600125	10912700200	19032400225
EHV 20-250/AB EHV 20-330/AB EHV 20-330/90 EHV 20-207/48 EHV 20-345/48 01125	D226 (2)	CE159A	EF2		19052500225
EHVF 20-250/AB EHV 20-330/AB EHV 20-330/90	20251503648	20109003620	20217600125	10912700200	19032500225
EHV 24.5-250/AB EHV 24.5-330/AB EHV 24.5-330/90 EHV 24.5-207/48 EHV 25.5-345/48 01125	D226 (2)	CE159A	EF2		19052600225
EHVF 24.5-250/AB EHV 24.5-330/AB EHV 24.5-330/90	20251503648	20109003620	20217600125	10912700200	19032600225
EHV 32-250/AB EHV 32-330/AB EHV 32-330/90 EHV 32-207/48 EHV 32-345/48 01125	D226 (2)	CE159A	EF3		19052700225
EHVF 32-250/AB EHV 32-330/AB EHV 32-330/90	20251503648	20109003620	20217700125	10912700200	19032700225
EHV 42-250/AB EHV 42-330/AB EHV 42-330/90 EHV 42-207/48 EHV 42-345/48 01125	D226 (2)	CE159A	EF3		19031900225
EHVF 42-250/AB EHV 42-330/AB EHV 42-330/90	20251503648	20109003620	20217700125	10912700200	19032800225
EHV 50-250/AB EHV 50-330/AB EHV 50-330/90 EHV 50-207/48 EHV 50-345/48 01125	D226 (2)	CE159A	EF3		19032000225
EHVF 50-250/AB EHV 50-330/AB EHV 50-330/90	20251503648	20109003620	20217700125	10912700200	19032900225
EHV 57-250/AB EHV 57-330/AB EHV 57-330/90 EHV 57-207/48 EHV 57-345/48 01125	D226 (2)	CE159A	EF3		19032200225
EHVF 57-250/AB EHV 57-330/AB EHV 57-330/90	20251503648	20109003620	20217700125	10912700200	19033100225

Bladder Materials and Types

Bladder mixes available from Parker Olaer. Additionnal 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
2,5		x	x	x	x	x	x	x	x	x
4		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
12		x	x	x	x	x	x	x	x	x
20		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
42			x	x	x	x	x	x	x	x
50			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
200*		x	x		x	x	x	x	x	x

* Accumulators 100 & 200 Litres Standard Nitrile Mix 20

DAK Diaphragm accumulator basic information

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.

Diaphragm accumulator is widely used in construction machinery, wind power generation, chemical equipment, agricultural machinery and other fields

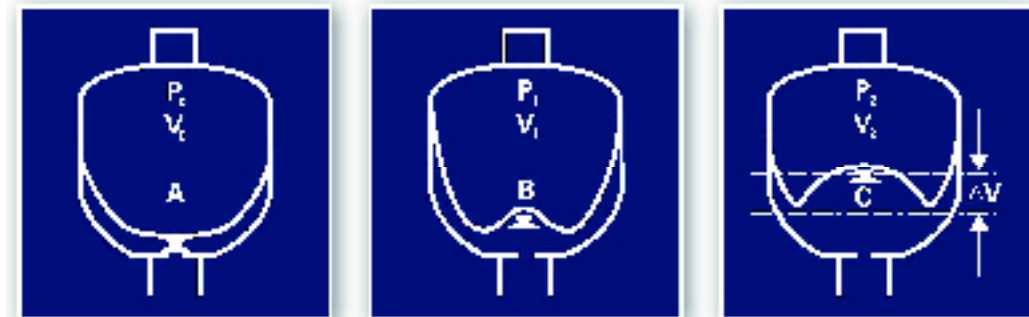
The same EC pressure directive (PED) compliant accumulator can be used in over 35 destination countries, thus facilitating their free movement.

The technical characteristics are as follows:

Minimum/maximum temperature allowable (° C) :

- 20/+90 for standard nitrile elastomers
- 40/+120 for hydrin elastomers

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



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 Δ V between the minimum and maximum positions of the operating pressures represents the fluid quantity stored.

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

DAK series: How do I order diaphragm accumulators

Series

DAK

-

Volume

075

-

Max. working pressure

350

-

Regulation code

00

-

Form

A

-

Execution

F

-

Construction

1125

-

Nitrogen gas Pre-charge

P000

DAK Series		
007 0.075L	100	1L
016 0.016L	140	1.4L
032 0.32L	200	2L
050 0.5L	280	2.8L
075 0.75L	350	3.5L

Bar

00 : According to the PED, article 3.3

90 : CE approvals for volumes greater than 1 L

A : G1/2 internal threaded

B : G3/4 internal threaded external threaded

C : G1/2 internal threaded+M33X1.5 external threaded

D : G3/4 internal threaded+M45X1.5 external threaded

F : Standard (nitrogen rechargeable)

11** :Carbon steel

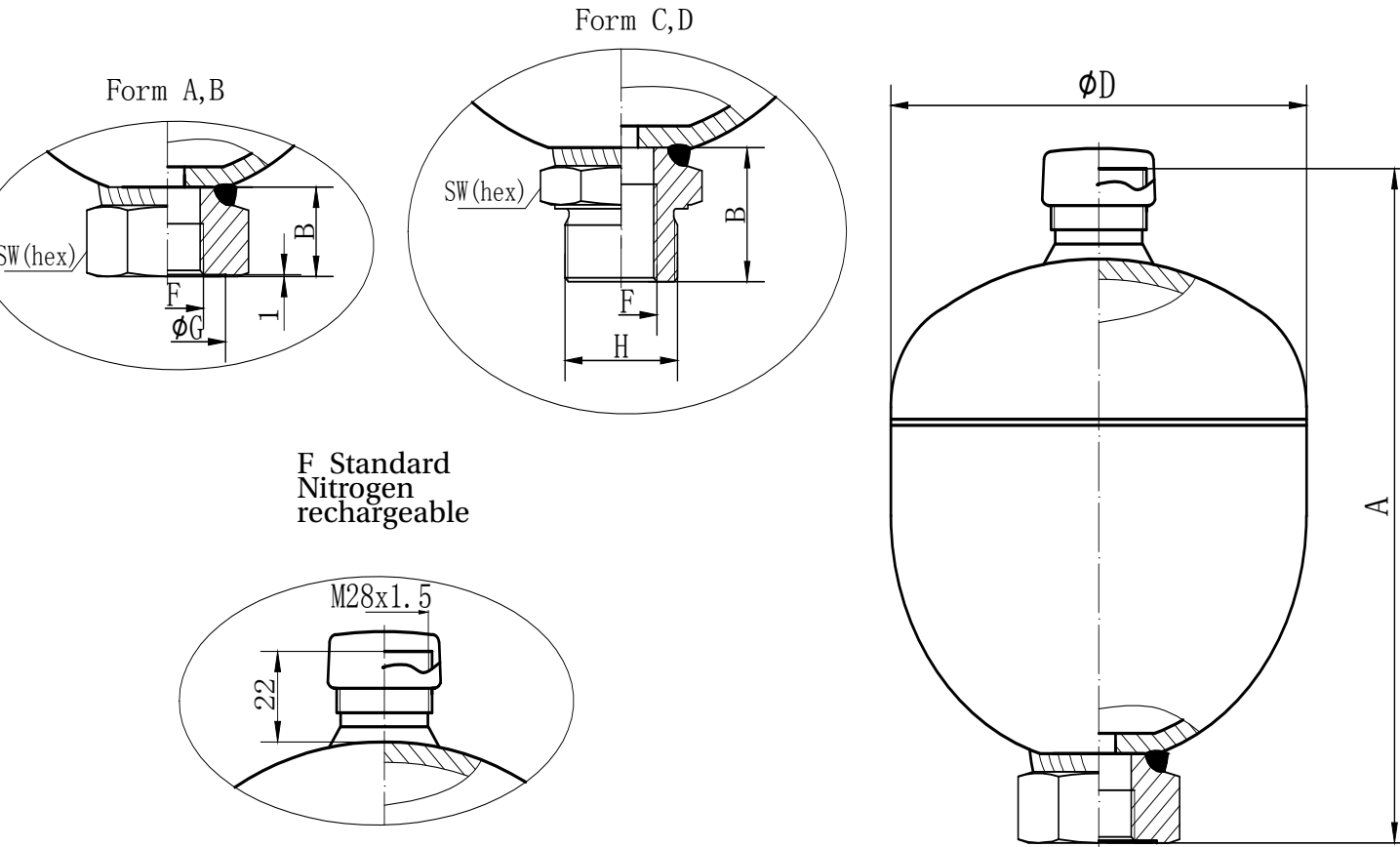
19** : Stainless steel

***25 : NBR nitrile standard rubber

***02 : ECO Hydrin rubber

Other fluids and temperatures, contact Parker Olaer.

in Bar at 20 ° C



DAK Series 140 - 350 BAR, 0.075 to 1.4 Litres

Standard Version (steel casing/mix NBR) for mineral oils temperature from - 20° up to 90°C
ECO Version (steel casing/mix ECO) for mineral oils temperature from - 40°C up to 120°C
According to PED 2014/68/EU, Fluid Group 2

Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Clamps	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Execution form	Max compression in bar ratio P2/P0	Weight kg	Dimensions in mm					Oilport		Lock Nut type
			Model (quantity)							A max Height	B	SW	D	G	F	H	
			Part number														
DAK-007-25000AF*	0.075	250	-	DAK-007-25000AF*	0.075	250	AF	8	0.76	109.5	19.5	32	64	29	G½	-	-
DAK-016-25000AF*	0.16	250	-	DAK-016-25000AF*	0.16	250	AF	8	0.97	120	19.5	32	74.4	29	G½	-	-
DAK-032-21000AF*	0.32	210	E95 (1) 20250803648	DAK-032-21000AF*	0.32	210	AF	8	1.38	140.2	19.5	32	93	29	G½	-	-
DAK-050-21000AF*	0.5	210	E106 (1) 20250903648	DAK-050-21000AF*	0.5	210	AF	8	1.7	151.5	21	41	105	34	G½	-	-
DAK-050-21000CF*	0.5	210	E106 (1) 20250903648	DAK-050-21000CF*	0.5	210	CF	8	1.8	170.5	40	41	105	-	G½	M33x1.5	M33
DAK-075-21000AF*	0.75	210	E114 (1) 20251003648	DAK-075-21000AF*	0.75	210	AF	8	2.57	167.5	21	41	121.2	34	G½	-	-
DAK-075-21000CF*	0.75	210	E114 (1) 20251003648	DAK-075-21000CF*	0.75	210	CF	8	2.76	186.5	40	41	121.2	-	G½	M33x1.5	M33
DAK-075-35000AF*	0.75	350	E136 (1) 20251103648	DAK-075-35000AF*	0.75	350	AF	8	4.8	179.5	21	41	133.2	34	G½	-	-
DAK-075-35000CF*	0.75	350	E136 (1) 20251303648	DAK-075-35000CF*	0.75	350	CF	8	4.9	198.5	40	41	133.2	-	G½	M33x1.5	M33
DAK-100-21000AF*	1	210	E136 (1) 20251103648	DAK-100-21000AF*	1	210	AF	6	3.89	178	21	41	136	34	G½	-	-
DAK-100-21000CF*	1	210	E136 (1) 20251103648	DAK-100-21000CF*	1	210	CF	6	3.99	197	40	41	136	-	G½	M33x1.5	M33
DAK-140-14090AF	1.4	140	E155 (1) 20251203648	DAK-140-14090AF	1.4	140	AF	6	4.86	200	21	41	149.6	34	G½	-	-
DAK-140-21090AF	1.4	210	E155 (1) 20251203648	DAK-140-21090AF	1.4	210	AF	6	4.86	200	21	41	149.6	34	G½	-	-
DAK-140-21090CF	1.4	210	E155 (1) 20251203648	DAK-140-21090CF	1.4	210	CF	6	4.96	219	40	41	149.6	-	G½	M33x1.5	M33

* 依据PED第4-3条
* according to the PED, article 3.3

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

DAK Series 100 - 350 BAR, 1.4 to 3.5 Litres

Standard Version (steel casing/mix NBR) for mineral oils temperature from - 20° up to 90°C
ECO Version (steel casing/mix ECO) for mineral oils temperature from - 40°C up to 120°C
According to PED 2014/68/EU, Fluid Group 2

Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Clamps	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Execution form	Max compression in bar ratio P2/P0	Weight kg	Dimensions in mm					Oilport		
			Model (quantity)														
			Part number							A max Height	B	SW	D	G	F	H	
DAK-140-25090AF	1.4	250	E155 (1) 20251203648	DAK-140-25090AF	1.4	250	AF	6	4.86	200	21	41	149.6	34	G½	-	-
DAK-140-25090CF	1.4	250	E155 (1) 20251203648	DAK-140-25090CF	1.4	250	CF	6	4.96	219	40	41	149.6	-	G½	M33x1.5	M33
DAK-140-35090AF	1.4	350	E160 (1) 20251203648	DAK-140-35090AF	1.4	350	AF	6	7	208	21	41	157.6	34	G½	-	-
DAK-140-35090CF	1.4	350	E160 (1) 20251203648	DAK-140-35090CF	1.4	350	CF	6	7.14	227	40	41	157.6	-	G½	M33x1.5	M33
DAK-200-10090AF	2	100	E168 (1) 20251203648	DAK-200-10090AF	2	100	AF	6	6.72	219	21	41	166	34	G½	-	-
DAK-200-25090BF	2	250	E1168 (1) 20251203648	DAK-200-25090BF	2	250	BF	6	6.72	219	21	41	166	34	G¾	-	-
DAK-200-35090BF	2	350	E168 (1) 20251203648	DAK-200-35090BF	2	350	BF	6	9.5	227	21	41	174	34	G¾	-	-
DAK-200-35090DF	2	350	E168 (1) 20251203648	DAK-200-35090DF	2	350	DF	6	9.74	246	40	55	174	-	G¾	M45x1.5	M45
DAK-280-25090BF	2.8	250	E168 (1) 20251303648	DAK-280-25090BF	2.8	250	BF	4	10.8	266	21	41	174	34	G¾	-	-
DAK-280-35090BF	2.8	350	E168 (1) 20243203625	DAK-280-35090BF	2.8	350	BF	4	10.8	266	21	41	174	34	G¾	-	-
DAK-280-35090DF	2.8	350	E168 (1) 20243203625	DAK-280-35090DF	2.8	350	DF	4	11.04	285	40	55	174	-	G¾	M45x1.5	M45
DAK-350-25090BF	3.5	250	E168 (1) 20251303648	DAK-350-25090BF	3.5	250	BF	4	13.48	308	21	41	174	34	G¾	-	-
DAK-350-35090BF	3.5	350	E168 (1) 20243203625	DAK-350-35090BF	3.5	350	BF	4	13.48	308	21	41	174	34	G¾	-	-
DAK-350-35090DF	3.5	350	E168 (1) 20243203625	DAK-350-35090DF	3.5	350	DF	4	13.72	327	40	55	174	-	G¾	M45x1.5	M45

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

DA Diaphragm accumulator basic information

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.

Diaphragm accumulator is widely used in construction machinery, wind power generation, chemical equipment, agricultural machinery and other fields

DA welding diaphragm accumulators are divided into nitrogen rechargeable and nitrogen pre-charged in factory .

Nitrogen rechargeable accumulator, the structure of which is shown in form F

Nitrogen pre-charged in factoryaccumulator, structure of which is shown in form G.

DA welding diaphragm accumulator’s material, design, manufacture and performance comply with GB 20663

The technical characteristics are as follows:

Minimum/maximum temperature allowable (° C) :

- 20/+80 for standard nitrile elastomers
- 40/+120 for hydrin elastomers

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

DA series: How do I order diaphragm accumulators

Series

DA

-

Volume

075

-

Max. working pressure

350

-

Regulation code

AB

-

Form

A

-

Execution

F

-

Construction

1125

-

Nitrogen gas Pre-charge

P000

DA Series		
007 0.075L	100	1L
016 0.016L	140	1.4L
032 0.32L	200	2L
050 0.5L	280	2.8L
075 0.75L	350	3.5L

Bar

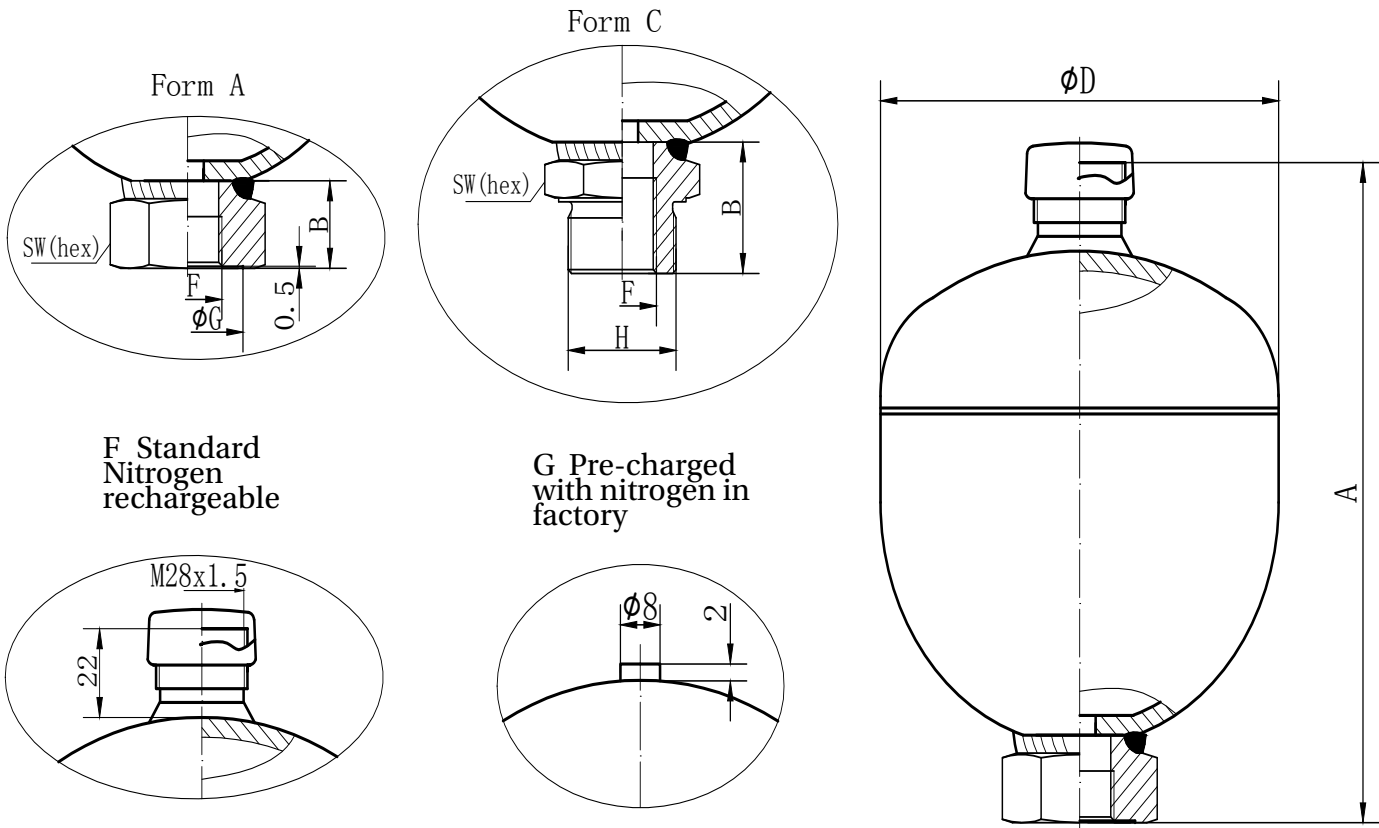
AB : According to GB20663

A : internal threaded
C : internal threaded+external threaded

F : Standard (nitrogen rechargeable)
G : Request (Pre-charged with nitrogen in factory)

11** : Carbon steel
19** : Stainless steel
***25 : NBR nitrile standard rubber
***02 : ECO Hydrin rubber
Other fluids and temperatures, contact Parker Olaer.

in Bar at 20 ° C
When there is no pre-charged , omit this slightly



DA 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
ECO Version (steel casing/mix ECO) for mineral oils temperature from - 40°C up to 120°C

Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Clamps	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Execution form	Max compression in bar ratio P2/P0	Weight kg	Dimensions in mm					Oilport		Lock Nut type
			Model (quantity)														
			Part number							A max Height	B	SW	D	G	F	H	
DA-007-250ABAF	0.075	250	-	DA-007-250ABAF	0.075	250	AF	8	0.8	110.5	20	32	66	29	G½	-	-
DA-016-250ABAF	0.16	250	-	DA-016-250ABAF	0.16	250	AF	6	1	123.5	20	32	76	29	G½	-	-
DA-032-210ABAF	0.32	210	E95 (1) 20250803648	DA-032-210ABAF	0.32	210	AF	8	1.5	139	20	32	95	29	G½	-	-
DA-050-210ABAF	0.5	210	E106 (1) 20250903648	DA-050-210ABAF	0.5	210	AF	8	2.65	152.5	22	41	103	34	G½	-	-
DA-050-210ABCF	0.5	210	E106 (1) 20250903648	DA-050-210ABCF	0.5	210	CF	8	2.65	165.5	35	41	103	-	G½	M33x1.5	M33
DA-075-210ABAF	0.75	210	E114 (1) 20251003648	DA-075-210ABAF	0.75	210	AF	8	3.6	176.1	22	41	122	34	G½	-	-
DA-075-210ABCF	0.75	210	E114 (1) 20251003648	DA-075-210ABCF	0.75	210	CF	8	3.7	189.1	35	41	122	-	G½	M33x1.5	M33
DA-075-350ABAF	0.75	350	-	DA-075-350ABAF	0.75	350	AF	8	4.1	180.1	22	41	126	34	G½	-	-
DA-075-350ABCF	0.75	350	-	DA-075-350ABCF	0.75	350	CF	8	4.15	193.1	35	41	126	-	G½	M33x1.5	M33
DA-100-210ABAF	1	210	E136 (1) 20251103648	DA-100-210ABAF	1	210	AF	8	4	179	22	41	136	34	G½	-	-
DA-100-210ABCF	1	210	E136 (1) 20251103648	DA-100-210ABCF	1	210	CF	8	4.1	192	35	41	136	-	G½	M33x1.5	M33
DA-140-210ABAF	1.4	210	E155 (1) 20251203648	DA-140-210ABAF	1.4	210	AF	8	6.3	207.1	22	41	152	34	G½	-	-
DA-140-210ABCF	1.4	210	E155 (1) 20251203648	DA-140-210ABCF	1.4	210	CF	8	6.4	220.1	35	41	152	-	G½	M33x1.5	M33
DA-140-330ABAF	1.4	330	E160 (1) 20251203648	DA-140-330ABAF	1.4	330	AF	8	8.5	213.1	22	41	158	34	G½	-	-

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

DA Series 100 - 350 BAR, 1.4 to 3.5 Litres

Standard Version (steel casing/mix NBR) for mineral oils temperature from - 20° up to 80°C
ECO Version (steel casing/mix ECO) for mineral oils temperature from - 40°C up to 120°C

Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Clamps	Type	Effective Gas vol. Litres	Max. Working pressure (PS) bar	Execution form	Max compression in bar ratio P2/P0	Weight kg	Dimensions in mm					Oilport		
			Model (quantity)														
			Part number							A max Height	B	SW	D	G	F	H	
DA-140-250ABAF	1.4	250	E160 (1) 20251203648	DA-140-250ABAF	1.4	250	AF	8	8.5	213.1	22	41	158	34	G½	-	-
DA-140-250ABCF	1.4	250	E160 (1) 20251203648	DA-140-250ABCF	1.4	250	CF	8	8.6	226.1	35	41	158	-	G½	M33x1.5	M33
DA-140-350ABAF	1.4	350	E160 (1) 20251203648	DA-140-350ABAF	1.4	350	AF	8	8.5	213.1	22	41	158	34	G½	-	-
DA-140-350ABCF	1.4	350	E160 (1) 20251203648	DA-140-350ABCF	1.4	350	CF	8	8.6	226.1	35	41	158	-	G½	M33x1.5	M33
DA-200-100ABAF	2	100	E160 (1) 20251203648	DA-200-100ABAF	2	100	AF	8	8.15	230	22	41	160	34	G½	-	-
DA-200-250ABAF	2	250	E168 (1) 20251203648	DA-200-250ABAF	2	250	AF	8	9.5	242	22	41	172	33	G¾	-	-
DA-200-350ABAF	2	350	E168 (1) 20251203648	DA-200-350ABAF	2	350	AF	8	9.5	242	22	41	172	33	G¾	-	-
DA-200-350ABCF	2	350	E168 (1) 20251203648	DA-200-350ABCF	2	350	CF	8	9.8	262	42	55	172	-	G¾	M45x1.5	M45
DA-280-250ABAF	2.8	250	E168 (1) 20251303648	DA-280-250ABAF	2.8	250	AF	4	11	268	22	41	172	33	G¾	-	-
DA-280-350ABAF	2.8	350	E168 (1) 20243203625	DA-280-350ABAF	2.8	350	AF	4	11	268	22	41	172	33	G¾	-	-
DA-280-350ABCF	2.8	350	E168 (1) 20243203625	DA-280-350ABCF	2.8	350	CF	4	11.3	288	42	55	172	-	G¾	M45x1.5	M45
DA-350-250ABAF	3.5	250	E168 (1) 20251303648	DA-350-250ABAF	3.5	250	AF	4	12.5	321	22	41	172	33	G¾	-	-
DA-350-350ABAF	3.5	350	E168 (1) 20243203625	DA-350-350ABAF	3.5	350	AF	4	12.5	321	22	41	172	33	G¾	-	-
DA-350-350ABCF	3.5	350	E168 (1) 20243203625	DA-350-350ABCF	3.5	350	CF	4	12.8	341	42	55	172	-	G¾	M45x1.5	M45

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

DAK series and DA series replacement

European diaphragm accumulator comparison table

Type	NBR	NBR		Type	NBR	NBR
Part number	DAK Series Part number	DA Series Part number		Part number	DAK Series Part number	DA Series Part number
ELM 0.075-250/00/AF 01125 10849201125	DAK-007-25000AF1125P000	DA-007-250ABAF1125		ELM 1.4 - 250/90/AF 01125 11013201125	DAK-140-25090AF1125P000	DA-140-250ABAF1125
ELM 0.16-250/00/AF 01125 10849301125	DAK-016-25000AF1125P000	DA-016-250ABAF1125		ELM 1.4 - 250/90/CF 01125 11013301125	DAK-140-25090CF1125P000	DA-140-250ABCF1125
ELM 0.32-210/00/AF 01125 10986601125	DAK-032-21000AF1125P000	DA-032-210ABAF1125		ELM 1.4 - 350/90/AF 01125 10932101125	DAK-140-35090AF1125P000	DA-140-350ABAF1125
ELM 0.5-210/00/AF 01125 10849501125	DAK-050-21000AF1125P000	DA-050-210ABAF1125		ELM 1.4 - 350/90/CF 01125 10932201125	DAK-140-35090CF1125P000	DA-140-350ABCF1125
ELM 0.5-210/00/CF 01125 10849601125	DAK-050-21000CF1125P000	DA-050-210ABCF1125		ELM 2 - 100/90/AF 01125 10850401125	DAK-200-10090AF1125P000	DA-200-100ABAF1125
ELM 0.75-210/00/AF 01125 10849701125	DAK-075-21000AF1125P000	DA-075-210ABAF1125		ELM 2 - 250/90/AF 01125 11013401125	DAK-200-25090BF1125P000	DA-200-250ABAF1125
ELM 0.75-210/00/CF 01125 10849801125	DAK-075-21000CF1125P000	DA-075-210ABCF1125		ELM 2 - 350/90/AF 01125 11006001125	DAK-200-35090BF1125P000	DA-200-350ABAF1125
ELM 0.75-350/00/AF 01125 10931801125	DAK-075-35000AF1125P000	DA-075-350ABAF1125		ELM 2 - 350/90/CF 01125 11006101125	DAK-200-35090DF1125P000	DA-200-350ABCF1125
ELM 0.75-350/00/CF 01125 10931901125	DAK-075-35000CF1125P000	DA-075-350ABCF1125		ELM 2.8 - 250/90/AF 01125 10887901125	DAK-280-25090BF1125P000	DA-280-250ABAF1125
ELM 1 - 210/00/AF 01125 10984701125	DAK-100-21000AF1125P000	DA-100-210ABAF1125		ELM 2.8 - 350/90/AF 01125 10975801125	DAK-280-35090BF1125P000	DA-280-350ABAF1125
ELM 1 - 210/00/CF 01125 10984801125	DAK-100-21000CF1125P000	DA-100-210ABCF1125		ELM 2.8 - 350/90/CF 01125 10975901125	DAK-280-35090DF1125P000	DA-280-350ABCF1125
ELM 1.4 - 140/90/AF 01125 10850201125	DAK-140-14090AF1125P000	DA-140-210ABAF1125		ELM 3.5 - 250/90/AF 01125 10850501125	DAK-350-25090BF1125P000	DA-350-250ABAF1125
ELM 1.4 - 140/90/CF 01125 10850301125	DAK-140-21090AF1125P000	DA-140-210ABAF1125		ELM 3.5 - 350/90/AF 01125 10984901125	DAK-350-35090BF1125P000	DA-350-350ABAF1125
ELM 1.4 - 210/90/AF 01125 10996501125	DAK-140-21090AF1125P000	DA-140-210ABAF1125		ELM 3.5 - 350/90/CF 01125 10985001125	DAK-350-35090DF1125P000	DA-350-350ABCF1125

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

DAK series and DA series replacement

European diaphragm accumulator comparison table

Type Part number	ECO	ECO		Type Part number	ECO	ECO
	DAK Series Part number	DA Series Part number			DAK Series Part number	DA Series Part number
ELM 0.075-250/00/AF 01102 10849201102	DAK-007-25000AF1102P000	DA-007-250ABAF1102		ELM 1.4 - 250/90/AF 01102 11013201102	DAK-140-25090AF1102P000	DA-140-250ABAF1102
ELM 0.16-250/00/AF 01102 10849301102	DAK-016-25000AF1102P000	DA-016-250ABAF1125		ELM 1.4 - 250/90/CF 01102 11013301102	DAK-140-25090CF1102P000	DA-140-250ABCF1102
ELM 0.32-210/00/AF 01102 10986601102	DAK-032-21000AF1102P000	DA-032-210ABAF1102		ELM 1.4 - 350/90/AF 01102 10932101102	DAK-140-35090AF1102P000	DA-140-350ABAF1102
ELM 0.5-210/00/AF 01102 10849501102	DAK-050-21000AF1102P000	DA-050-210ABAF1102		ELM 1.4 - 350/90/CF 01102 10932201102	DAK-140-35090CF1102P000	DA-140-350ABCF1102
ELM 0.5-210/00/CF 01102 10849601102	DAK-050-21000CF1102P000	DA-050-210ABCF1102		ELM 2 - 100/90/AF 01102 10850401102	DAK-200-10090AF1102P000	DA-200-100ABAF1102
ELM 0.75-210/00/AF 01102 10849701102	DAK-075-21000AF1102P000	DA-075-210ABAF1102		ELM 2 - 250/90/AF 01102 11013401102	DAK-200-25090BF1102P000	DA-200-250ABAF1102
ELM 0.75-210/00/CF 01102 10849801102	DAK-075-21000CF1102P000	DA-075-210ABCF1102		ELM 2 - 350/90/AF 01102 11006001102	DAK-200-35090BF1102P000	DA-200-350ABAF1102
ELM 0.75-350/00/AF 01102 10931801102	DAK-075-35000AF1102P000	DA-075-350ABAF1102		ELM 2 - 350/90/CF 01102 11006101102	DAK-200-35090DF1102P000	DA-200-350ABCF1102
ELM 0.75-350/00/CF 01102 10931901102	DAK-075-35000CF1102P000	DA-075-350ABCF1102		ELM 2.8 - 250/90/AF 01102 10887901102	DAK-280-25090BF1102P000	DA-280-250ABAF1102
ELM 1 - 210/00/AF 01102 10984701102	DAK-100-21000AF1102P000	DA-100-210ABAF1102		ELM 2.8 - 350/90/AF 01102 10975801102	DAK-280-35090BF1102P000	DA-280-350ABAF1102
ELM 1 - 210/00/CF 01102 10984801102	DAK-100-21000CF1102P000	DA-100-210ABCF1102		ELM 2.8 - 350/90/CF 01102 10975901102	DAK-280-35090DF1102P000	DA-280-350ABCF1102
ELM 1.4 - 140/90/AF 01102 10850201102	DAK-140-14090AF1102P000	DA-140-210ABAF1102		ELM 3.5 - 250/90/AF 01102 10850501102	DAK-350-25090BF1102P000	DA-350-250ABAF1102
ELM 1.4 - 140/90/CF 01102 10850301125	DAK-140-21090CF1102P000	DA-140-210ABCF1102		ELM 3.5 - 350/90/AF 01102 10984901102	DAK-350-35090BF1102P000	DA-350-350ABAF1102
ELM 1.4 - 210/90/AF 01102 10996501102	DAK-140-21090AF1102P000	DA-140-210ABAF1102		ELM 3.5 - 350/90/CF 01102 10985001102	DAK-350-35090DF1102P000	DA-350-350ABCF1102

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.

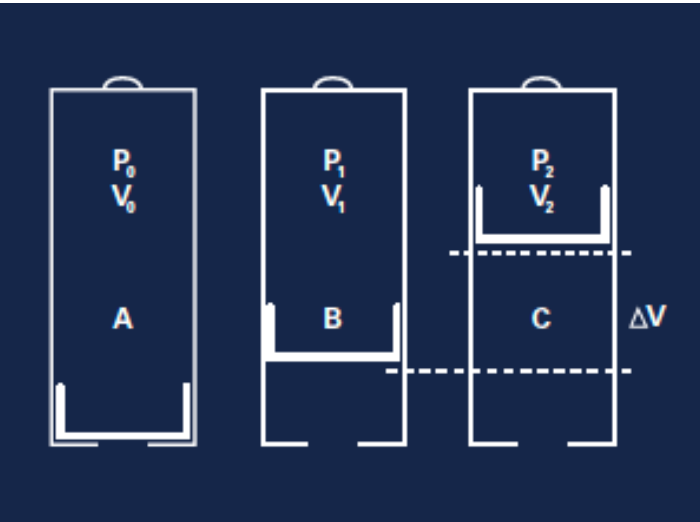
Technical Characteristics

- 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

Series

Shell Material

Nominal Volume

Max. working pressure (PS)

Bore Size

Connections Fluid Side

Connections Gas Side

Gas Valve

Piston Seal Material

Regulations

Burst disc connection

Special

EHP

C

0080

250

100

AH

AF

B

B

90

0

000

EHP Piston Accumulator

C = Carbon Steel

in dl

in bar

in mm

Row, Column (see table below)

Row, Column (see table below)

B: Standard gas valve (350 bar) 1/2-20 UNF/ 5/8"-18 UNF P/N : 102396-01626

B : NBR seal - 30°C/+110°C/ V = 2 m/s

C : FPM seal - 25°C/+200°C/ V = 2 m/s

E : EPDM seal - 40°C/+150°C/ V = 2 m/s

G : low temp NBR seal - 50°C/+110°C/ V = 2 m/s

Blank: GB

90: CE

48: ASME

Code	Burst Disc	Size
0	Without burst disc, no connection	
A	275 Bar/80°C	G 1/4"

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)	A	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)	B	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 (Code61)	C	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)	D	#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)	E	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				

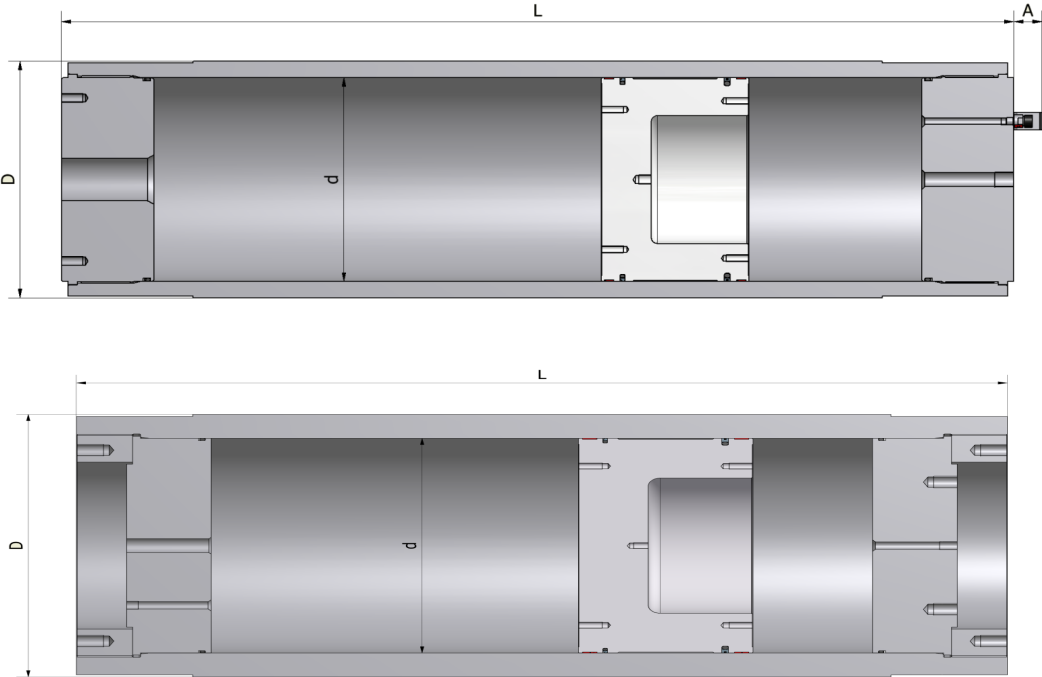
Specification	M	N	P	Q	R	S	U
SAE Flange (ISO 6162-2)	B	1/2" 420 Bar	3/4" 420 Bar	1" 420 Bar	1 1/4" 420 Bar	1 1/2" 420 Bar	2" 420 Bar
SAE Flange (Code62)	C	1/2" 6000 psi	3/4" 6000 psi	1" 6000 psi	1 1/4" 6000 psi	1 1/2" 6000 psi	2" 6000 psi

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

xx in PN is regulations
GB; AB
CE: 90
ASME: 48

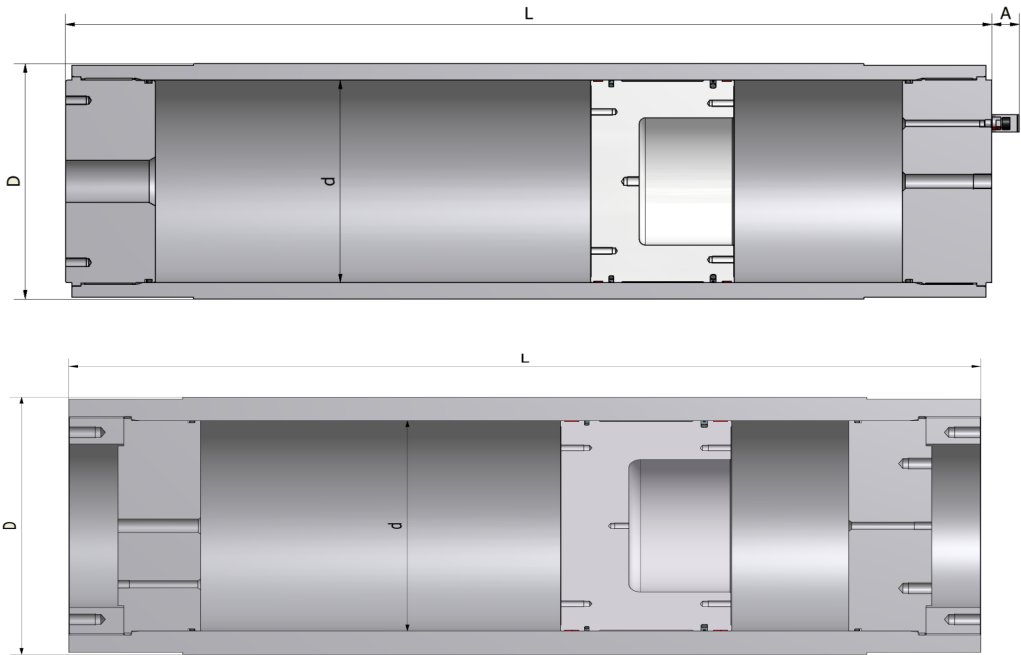


EHP Series 250 bar, 25 to 200 Litres, Ø 250

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

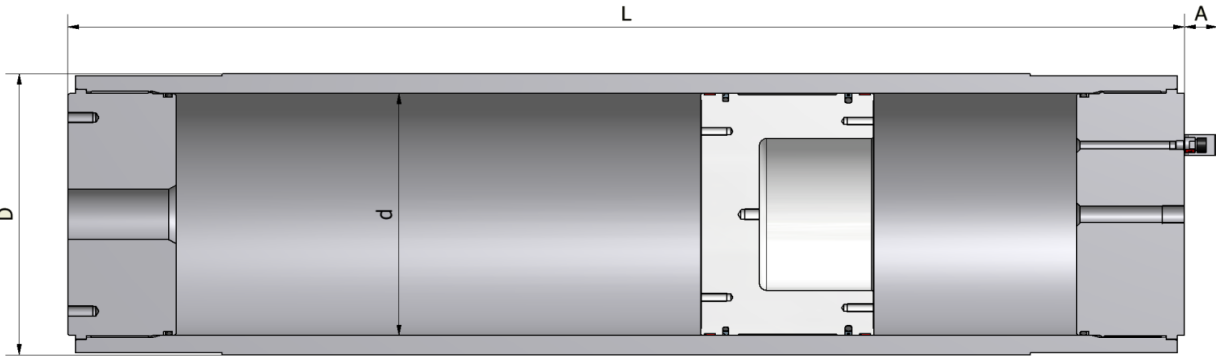
xx in PN is regulations
GB; AB
CE: 90
ASME: 48



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

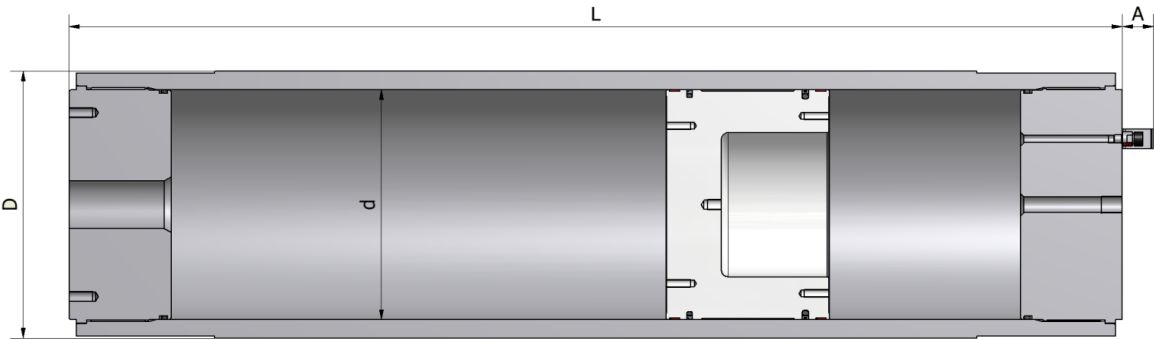
Type	Part number		Type	Effective Gas vol. Litres	Design P bar	Weight kg	L mm	D mm	d mm	Max Fluid opening	Seal Kit
EHP C 0080-350-180	On Request		EHP C 0080-350-180	8	350	130	646	229	180	G2"	8220000000011
EHP C 0100-350-180	On Request		EHP C 0100-350-180	10	350	140	724	229	180	G2"	8220000000011
EHP C 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

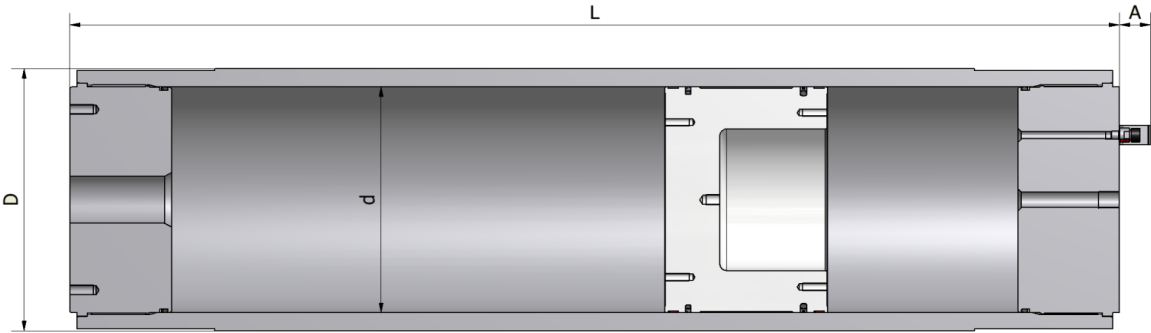
Type	Part number		Type	Effective Gas vol. Litres	Design P bar	Weight kg	L mm	D mm	d mm	Std Fluid opening	A mm	Seal Kit
EHP C 0250-350-250	On Request		EHP C 0250-350-250	25	350	355	914	323.8	250	G2"	45	8220000000003
EHP C 0300-350-250	On Request		EHP C 0300-350-250	30	350	380	1016	323.8	250	G2"	45	8220000000003
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



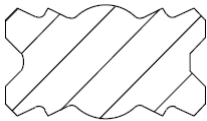
A Series 250 - 350 Bar Piston Accumulator

Design Features and Specifications

Threaded Design

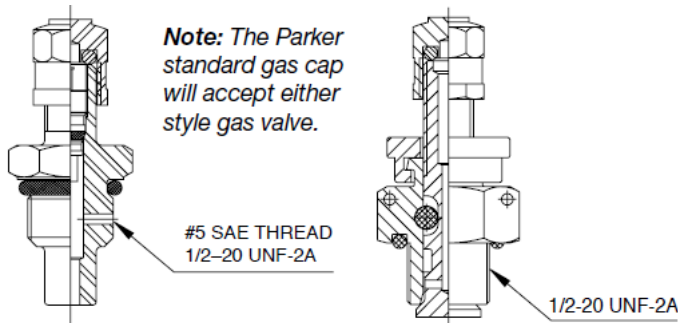
Piston type accumulators are designed with compact, rugged steel shell and caps. The steel shell allows heat to dissipate effectively. The bore is micro-finished for extended seal life. The threaded caps allow for easy repair and seal replacement.

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 dishd 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

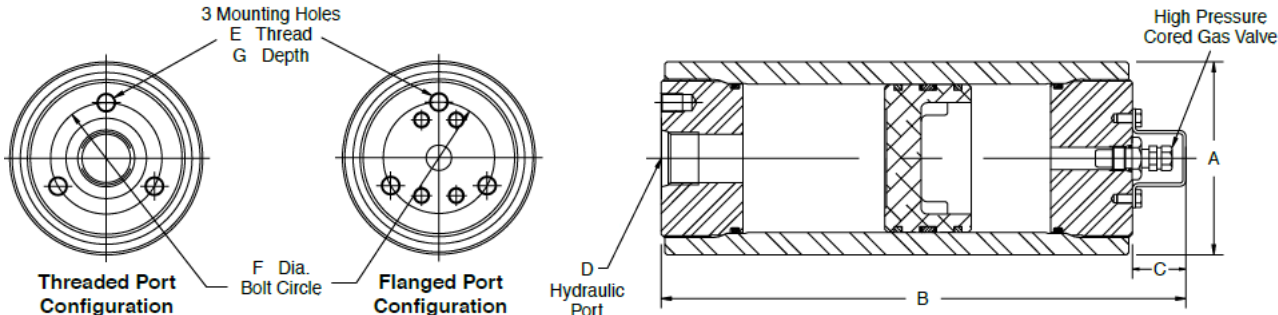
Seal Code	Polymer	**Recommended Operating Temperature Range	General Application and Compatibility*
K	Buna-Nitrile	-29°C to 74°C	Standard Compound - Compatible with most mineral oil-based fluids
E	Fluorocarbon Elastomer	-23°C to 121°C	Compatible with most mineral oil-based fluids at higher temperatures 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



Type	Code	Bore Size	Fluid Volume	Gas Volume	250Bar		350Bar		C	E		F	G	250Bar	350Bar
					A	B	A	B						Weight	Weight
					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		3.00	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
A7	1733	7 inch. 180 mm	28.40	29.00	206	1896	231	1941	41	M16	5/8-18 UNF	150	24	117.8	180.0
	2310		37.90	38.40		2454		2500						148.5	227.0
	0578		9.47	10.40		692		-						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	180 mm	37.90	38.80	206	1835	231	1842	41	M16	5/8-18 UNF	150	24	154.0	277.0
	3465		56.80	57.70		2597		2604						206.0	380.0
	5775		94.60	95.50		4121		-						309.0	-

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

33 inch80 mm

44 inch100 mm

66 inch150 mm

77 inch180 mm

99 inch230 mm

1212 inch300 mm

NC

SELO Approved¹

EC

CE + SELO Approved

LC

ASME Approved stamp 7" & up.

Code

Options

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

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

Capacity (Litre)

11550

189.00 – A12 Only

Code

Design Pressure³

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	3/4	-	#12	-
4	1	-	#20	-
6	1	-	#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 Szie	Port Size	Port Code		Min. Bore Size
				Metric	ISO 6149-1						SAE Code61	ISO 6162-1	
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	4"
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 Szie	Port Size	Port Code		Min. Bore Size
				Metric	ISO 6149-1						SAE Code62	ISO 6162-2	
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

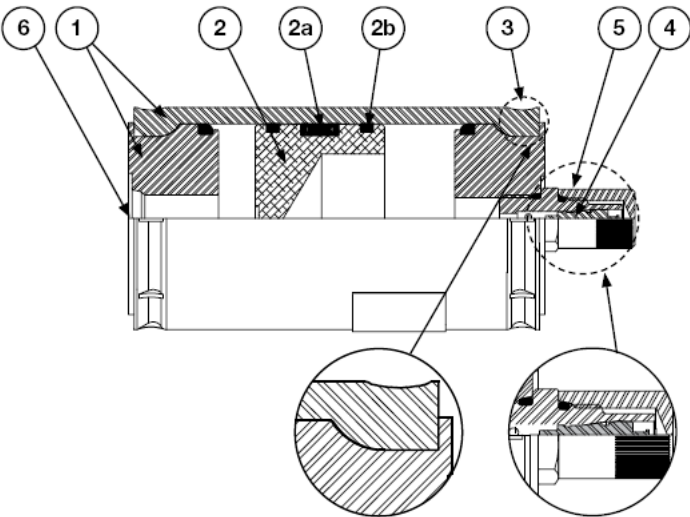
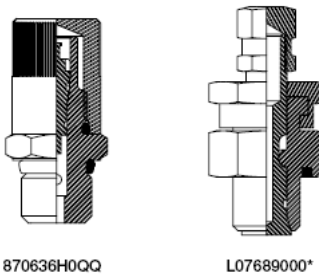
Crimp Technology

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 "Shrader" style gas valve for ease of precharging or poppet style valve (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

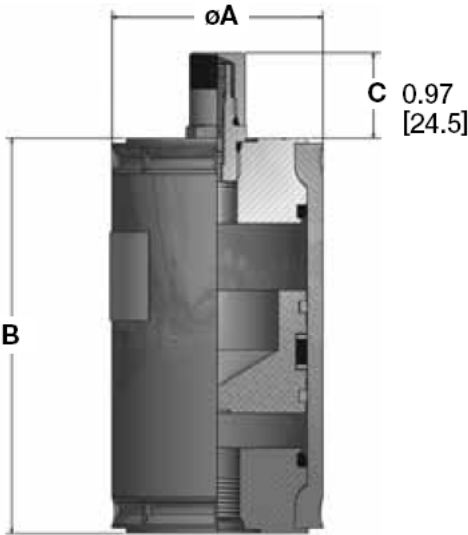
Crimp Technology

260 Bar (ACP04 Only)

275 Bar (ACP05, ACP08 & ACP10)

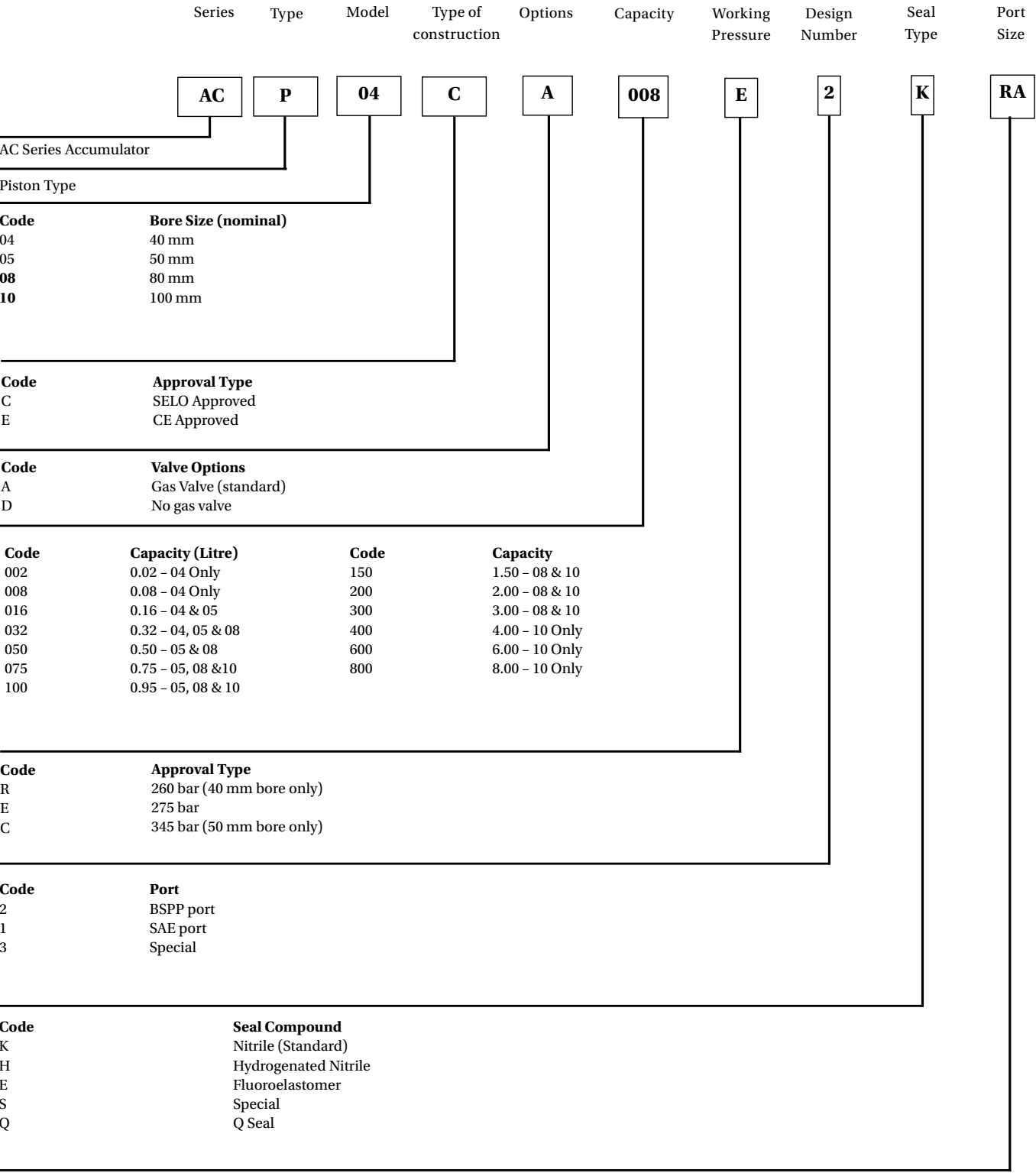
345 Bar (ACP05 Only)

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

BSPP			SAE		
Port Size	Port Code	Min. Bore Size	Port Size	Port Code	Min. Bore Szie
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

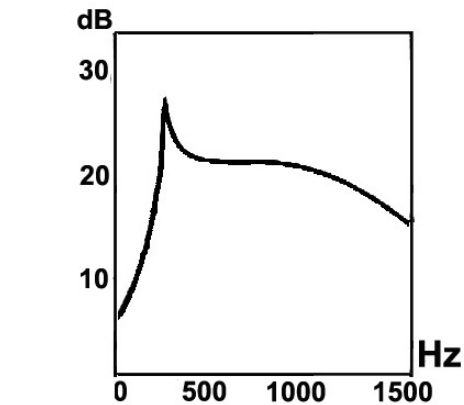
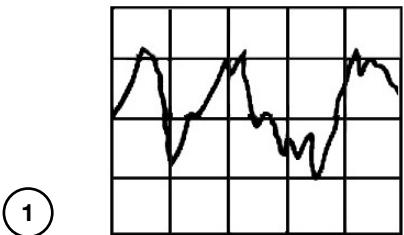
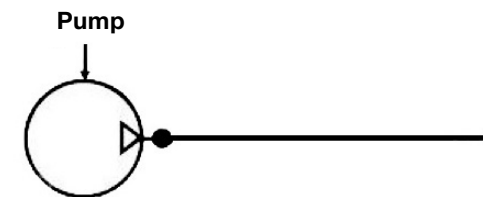
General information Attenuators

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).

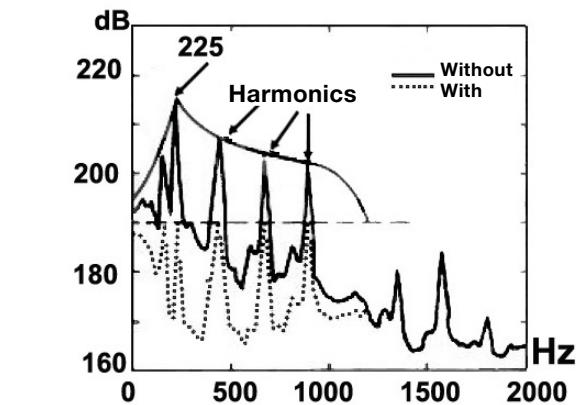
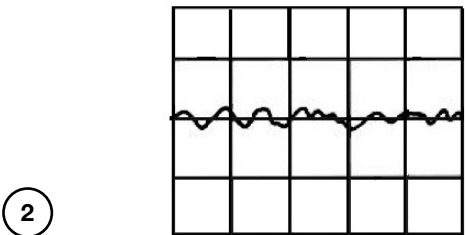
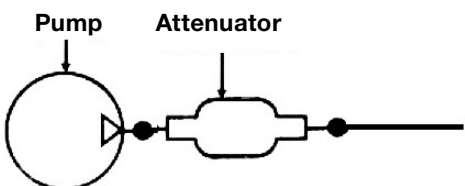
The performance obtained with the attenuators reduces very substantially the fluctuations of high-frequency hydraulic pressure (see diagrams 1 and 2).

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.

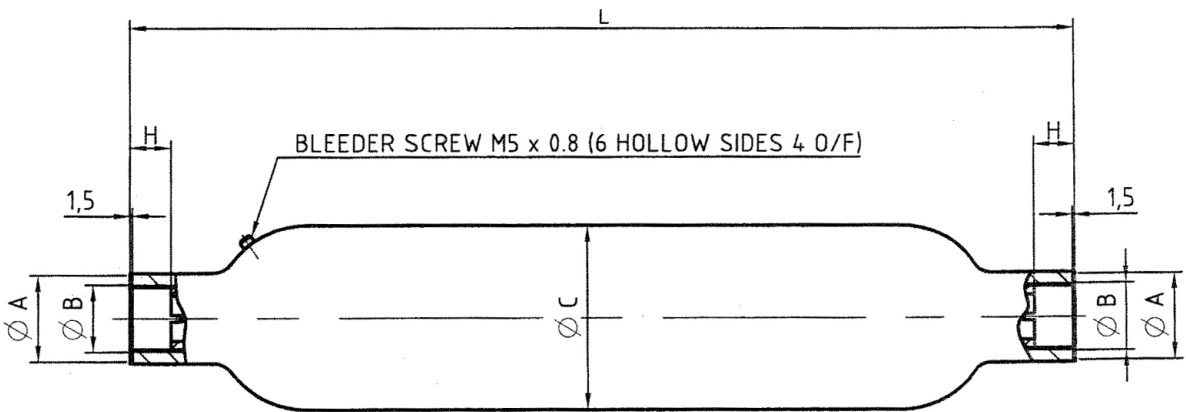
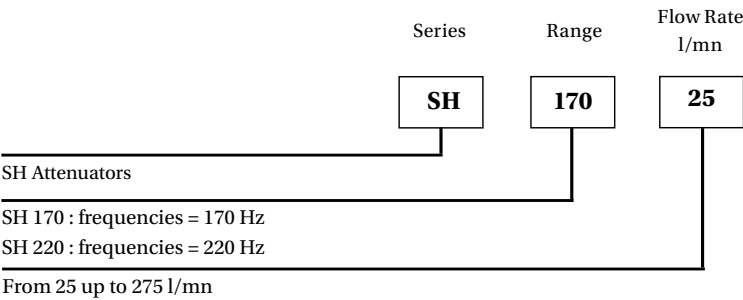
Without Hydraulic Attenuators



With Hydraulic Attenuators



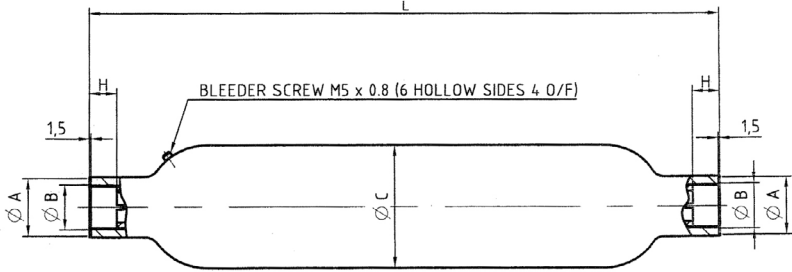
SH Series: How to order a Attenuator



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

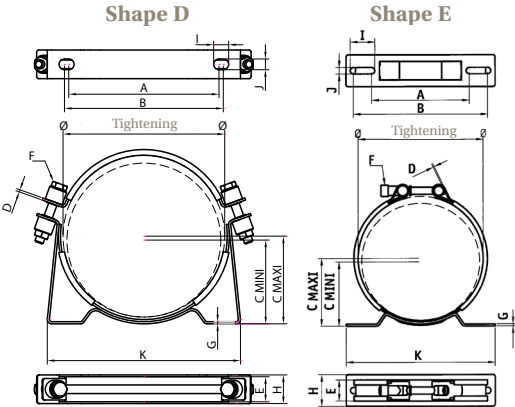
Type	Part number	Clamps		Type	Volume Litres	Max. Working pressure (PS) bar	Max Flow Rate lt/min	Weight kg	Dimensions in mm				
		Model (quantity)							L max Height	øA for Bonded Seal	øB Gas Cyl.	øc	H mini
		Part number											
SH 170-25	60045400100	E95 20250803648		SH 170-25	1.5	350	25	5.8	462	35.3	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

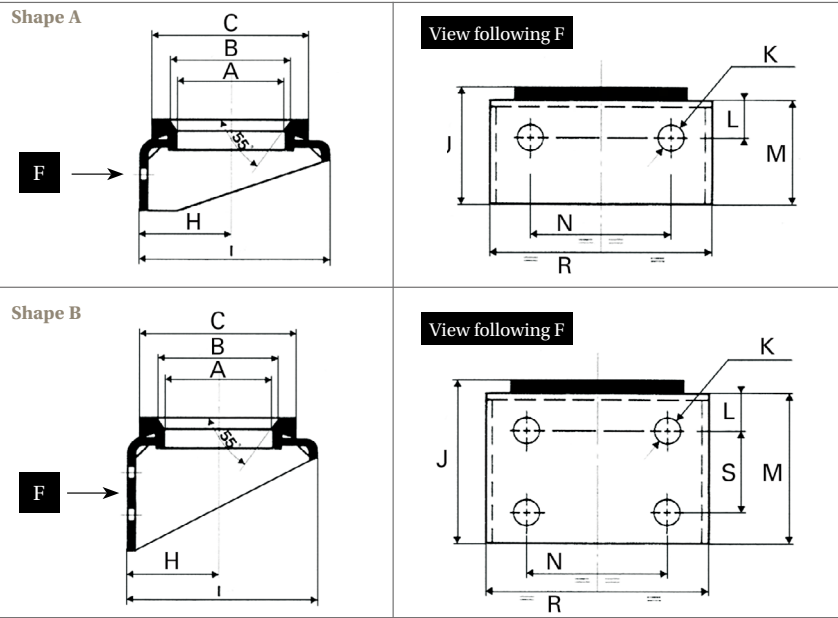
Type Part number	Design	RECOMMENDED Min to Max TIGHTENING ϕ mm		Type	Dimensions in mm												Recommended tightening torque N.m	Recommended max allowable weight if vertical equipment kg	Recommended max allowable weight if horizontal equipment kg
					A	B	C		D	E	F	G	H	I	J	K			
							Min	Max											
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

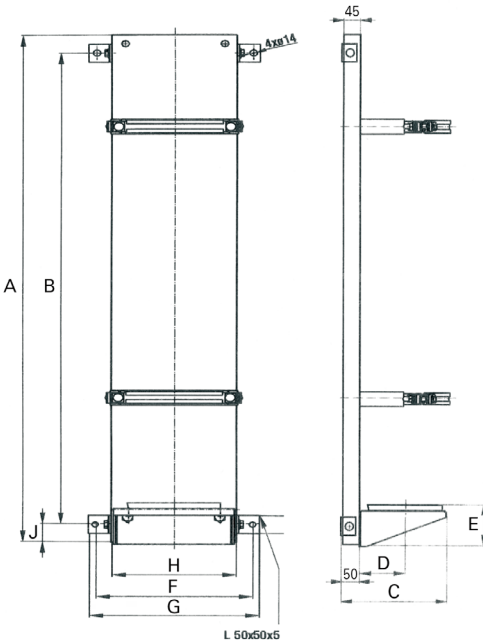
For Accumulator working in Dynamic Application such as rotating, please contact Parker Olaer for special clamps and support brackets.

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	J
EF1 20217500125	EHV 4 & 6 & 10 Litres		EF1	670	570	225	92	96	340	370	50
EF2 20217600125	EHV 10 & 12 & 20 & 24.5 Litres		EF2	670	570	285	123	115	340	370	50
EF3 20217700125	EHV 32 & 50 Litres		EF3	1405	1300	285	123	115	340	370	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.

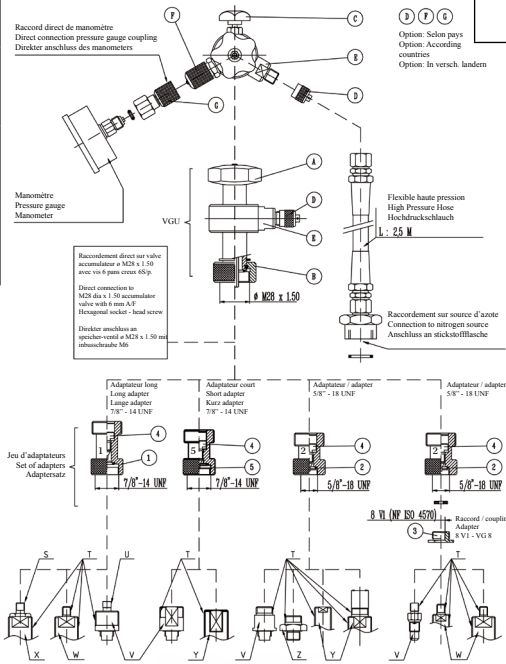
Type	Spare Parts	
	High Pressure Hose	Spare Part Kits
	Type	Type
Part number	Part number	Part number
VGU/F.25/250.7.TS2.3	TS2 (France & China)	
20214122723	20214800000	10774100023
VGU/F.25/250.7.TS3.3	TS3 (Germany)	
20214122733	20228000000	10774100023
VGU/F.25/250.7.TS8.3	TS8 (Italy)	
20214122783	20217200000	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

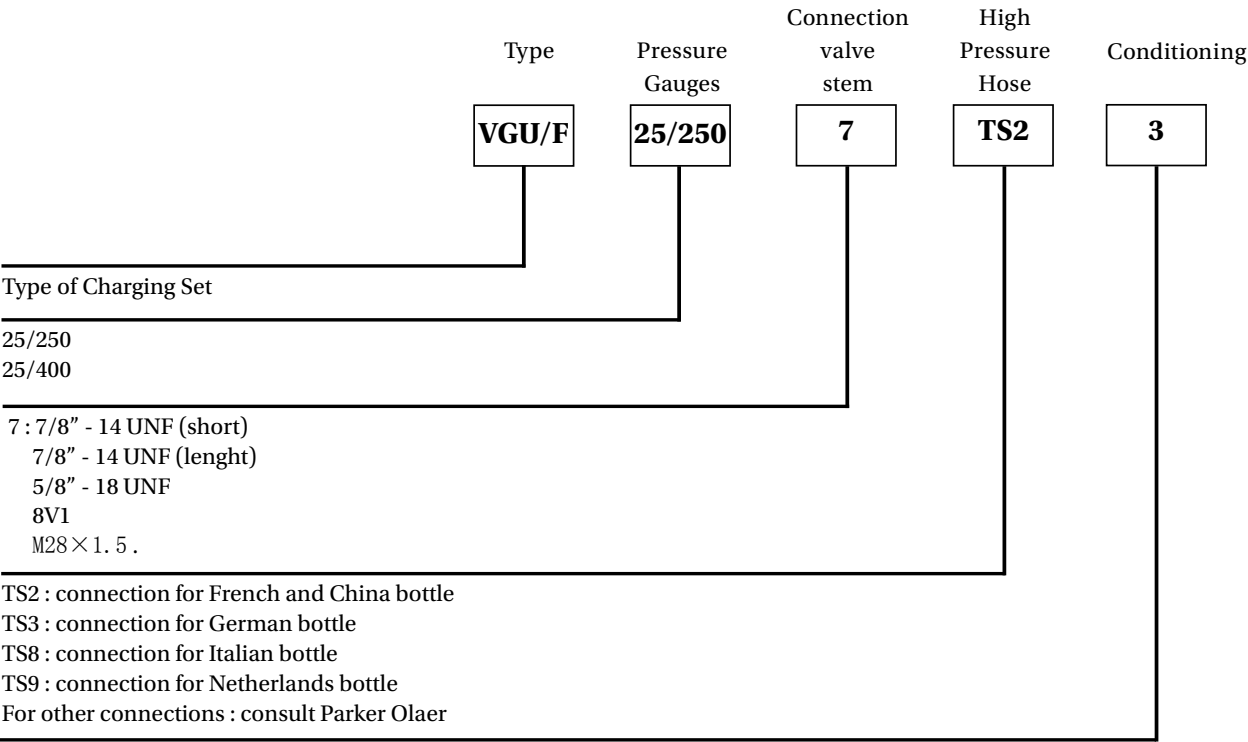
Type
Part number
0 to 25 bar
00090300000
0 to 250 bar
00090500000
0 to 400 bar
00090600000

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



TS2 : connection for French and China bottle
TS3 : connection for German bottle
TS8 : connection for Italian bottle
TS9 : connection for Netherlands bottle
For other connections : consult Parker Olaer

3: Plastic Box

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:

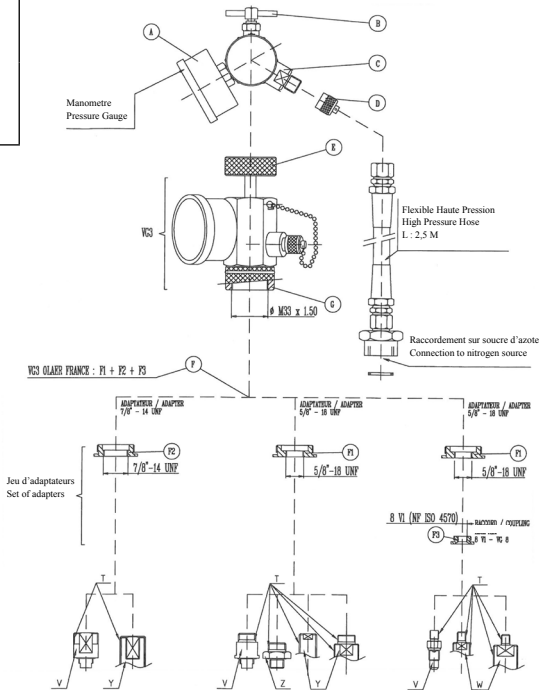
- pressure gauge with standardized graduations in bar
 - vent valve
 - 3 connection adapters for charging valves. (7/8" - 5/8" - 8V1).
 - High pressure hose, 2.5 m length, in standard, maximum working pressure 400 Bar. This hose is fitted at each end with a female swivel coupling G 1/4" BSP for connecting 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.

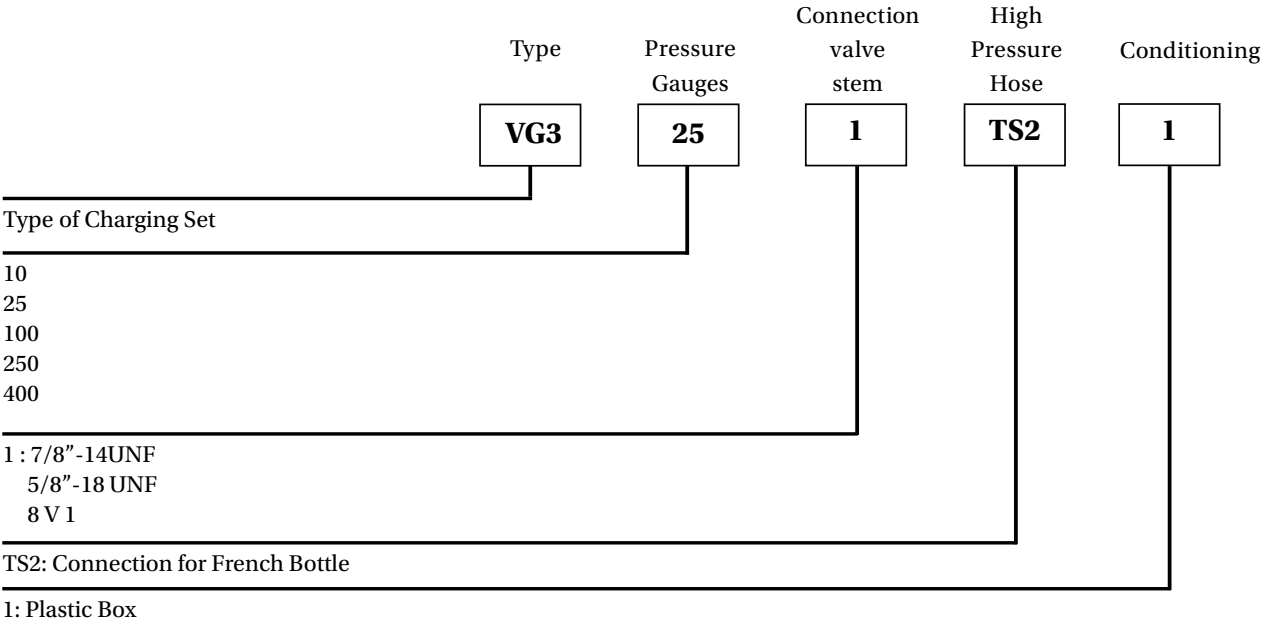
Type	Spare Parts		
	Gauge Kit	High Pressure Hose	Spare Part Kits
	Type	Type	Type
Part number	Part number	Part number	Part number
VG3 6 1 TS2 1	0 to 6 bar	20214800000	10529500033
20138101121	00077000000		
VG3 10 1 TS2 1	0 to 10 bar		
20138102121	00077100000		
VG3 25 1 TS3 1	0 to 25 bar		
20138103131	00077200000		
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

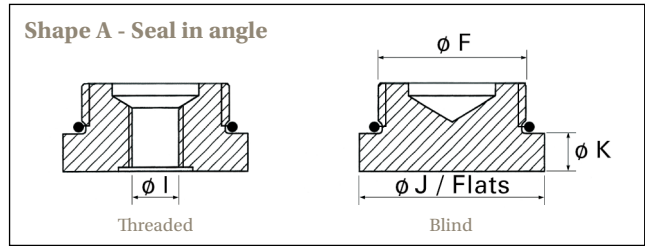


How to order a VG3 Charging Set



Adaptors EHV

Accumulator model	Connection of accumulator ø F gas cyl.	Connection of fitting ø 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.

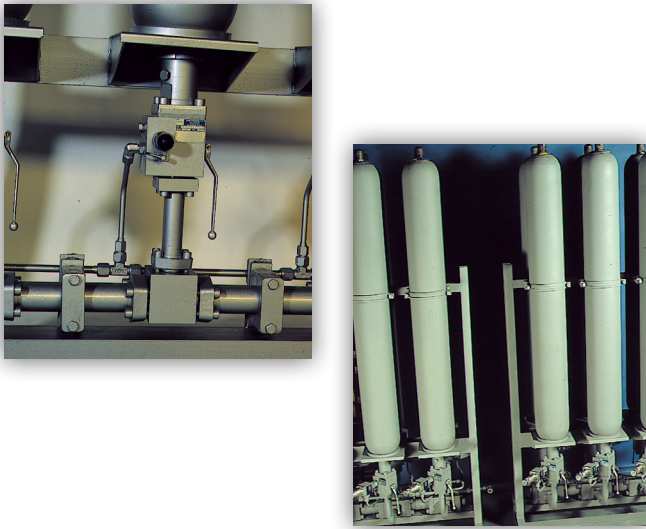
These blocks are in conformity with the European Directive on the equipment under pressure (97/23), these appliances have been designed to group together in a single compact unit all the components necessary for the correct operation of a hydraulic system equipped with hydropneumatic accumulators.

The basic block consists of :

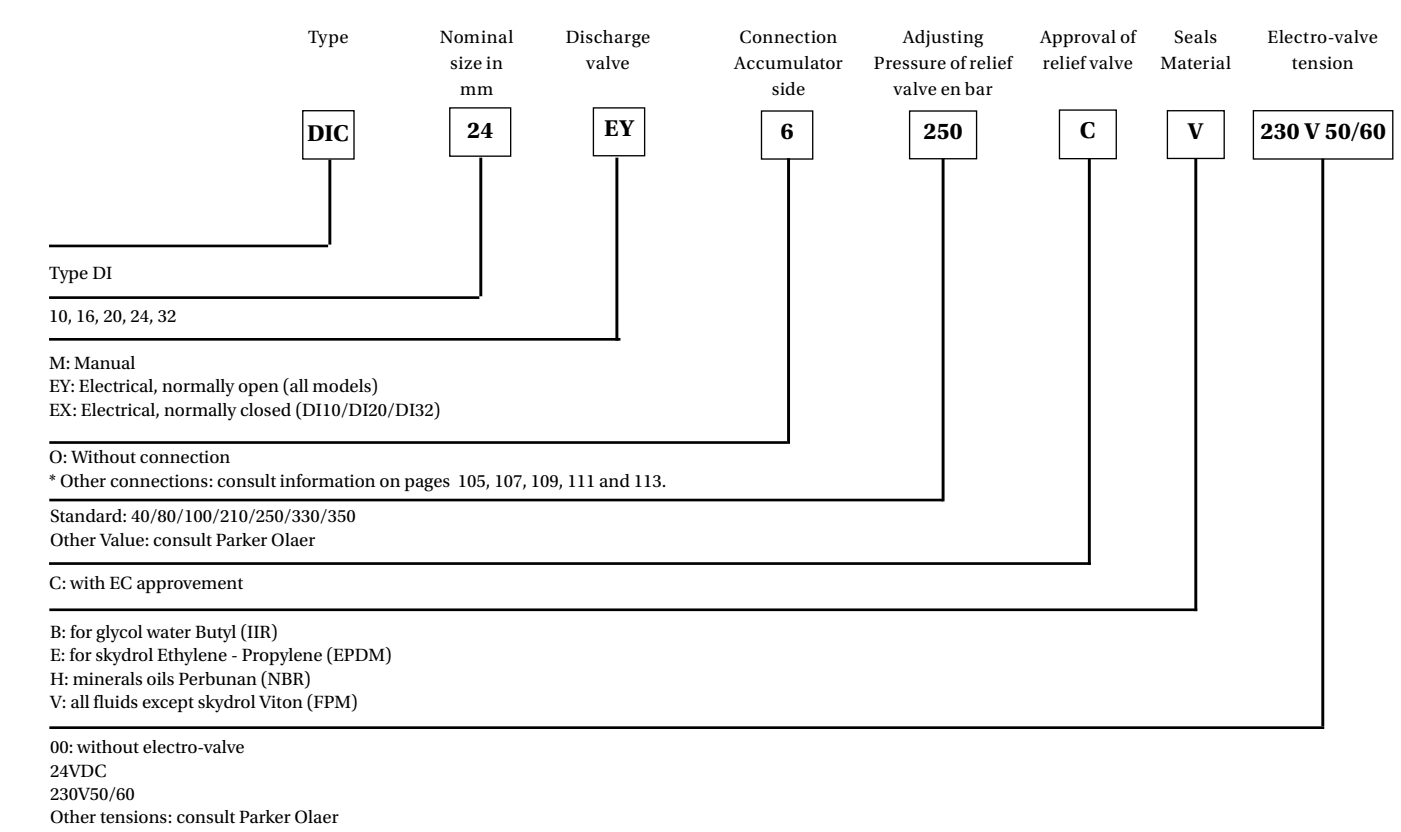
- Isolating valve to isolate the accumulator from the circuit for all the blocks except from model DI 10 where it also ensures the decompression function.
- A drain valve for decompressing the accumulator for all models (except DI 10)
- A pressure limiting valve EC with poppet calibrated generally to 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.



DIC Series: How to order a Safety Block

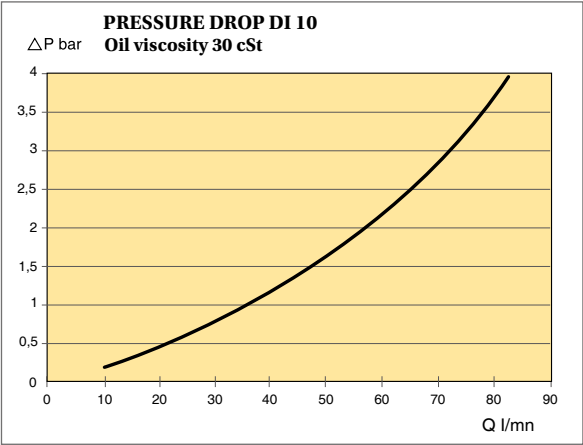


Safety Block DIC 10

TECHNICAL DATA DI 10

- **Size:** Nominal diameter : 10 mm
- **Maxi working pressure:** Manual version : 350 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

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 DIC 10 Manual Version

Standard version (Carbon steel, rings NBR) temperature -10°C up to 70°C Maximum working pressure : 400 Bar

Part numbers

Connecting to accumulator	Type	Part number
EHV 0.5 to 1.6 L G3/4"	DIC10M/2/350CH *	35172112Y01C
EHV 10 to 50 L G2"	DIC10M/3/330CH *	35172113J01C
ELM G1/2"	DIC10M/4/100CH	35172114D01C
ELM G1/2"	DIC10M/4/140CH	35172114Q01C
ELM G1/2"	DIC10M/4/210CH	35172114G01C
ELM G1/2"	DIC10M/4/250CH	35172114H01C
ELM G1/2"	DIC10M/4/330CH	35172114J01C
ELM G1/2"	DIC10M/4/350CH	35172114Y01C
ELM 0,32-210 G1/2"	DIC10M/5/210CH	35172115G01C
ELM 0,075-250/0,16-250 G1/2"	DIC10M/5/250CH	35172115H01C
ELM G3/4"	DIC10M/6/100CH	35172116D01C
ELM G3/4"	DIC10M/6/140CH	35172116Q01C
ELM G3/4"	DIC10M/6/210CH	35172116G01C
ELM G3/4"	DIC10M/6/250CH	35172116H01C
ELM G3/4"	DIC10M/6/330CH	35172116J01C
ELM G3/4"	DIC10M/6/350CH	35172116Y01C

* without electro-valve

Safety Block DIC 10 Electrical Version

Standard version (Carbon steel, rings NBR) temperature -10°C up to 60°C Maximum working pressure : 350 Bar

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"	DIC10EY/1/350CH24VCC	35172131Y21C	DIC10EY/1/350CH230V50/60	35172131Y61C
EHV 0.5 to 1.6 L G3/4"	DIC10EY/2/350CH24VCC	35172132Y21C	DIC10EY/2/350CH230V50/60	35172132Y61C
ELM G1/2"	DIC10EY/4/100CH24VCC	35172134D21C	DIC10EY/4/100CH230V50/60	35172134D61C
ELM G1/2"	DIC10EY/4/140CH24VCC	35172134Q21C	DIC10EY/4/140CH230V50/60	35172134Q61C
ELM G1/2"	DIC10EY/4/210CH24VCC	35172134G21C	DIC10EY/4/210CH230V50/60	35172134G61C
ELM G1/2"	DIC10EY/4/250CH24VCC	35172134H21C	DIC10EY/4/250CH230V50/60	35172134H61C
ELM G1/2"	DIC10EY/4/330CH24VCC	35172134J21C	DIC10EY/4/330CH230V50/60	35172134J61C
ELM G1/2"	DIC10EY/4/350CH24VCC	35172134Y21C	DIC10EY/4/350CH230V50/60	35172134Y61C
ELM 0.32 to 210 G1/2"	DIC10EY/5/210CH24VCC	35172135G21C	DIC10EY/5/210CH230V50/60	35172135G61C
ELM 0.075 to 250/0.16 to 250 G1/2"	DIC10EY/5/250CH24VCC	35172135H21C	DIC10EY/5/250CH230V50/60	35172135H61C
ELM G3/4"	DIC10EY/6/100CH24VCC	35172136D21C	DIC10EY/6/100CH230V50/60	35172136D61C
ELM G3/4"	DIC10EY/6/140CH24VCC	35172136Q21C	DIC10EY/6/140CH230V50/60	35172136Q61C
ELM G3/4"	DIC10EY/6/210CH24VCC	35172136G21C	DIC10EY/6/210CH230V50/60	35172136G61C
ELM G3/4"	DIC10EY/6/250CH24VCC	35172136H21C	DIC10EY/6/250CH230V50/60	35172136H61C
ELM G3/4"	DIC10EY/6/330CH24VCC	35172136J21C	DIC10EY/6/330CH230V50/60	35172136J61C
ELM G3/4"	DIC10EY/6/350CH24VCC	35172136Y21C	DIC10EY/6/350CH230V50/60	35172136Y61C

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

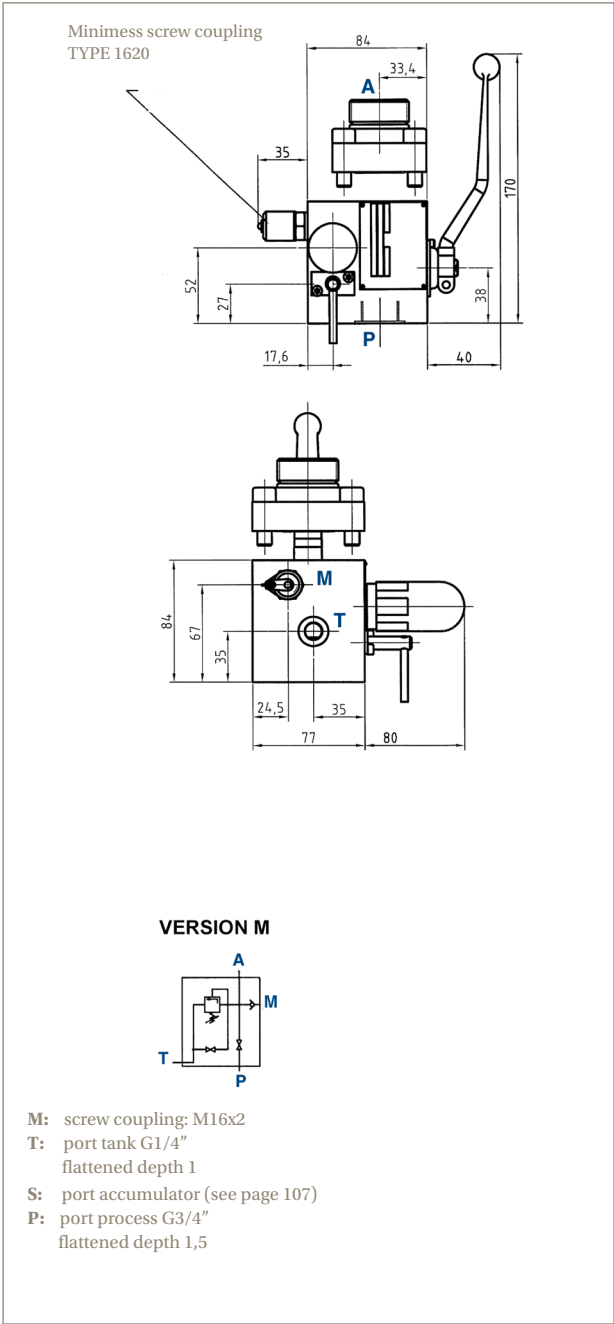
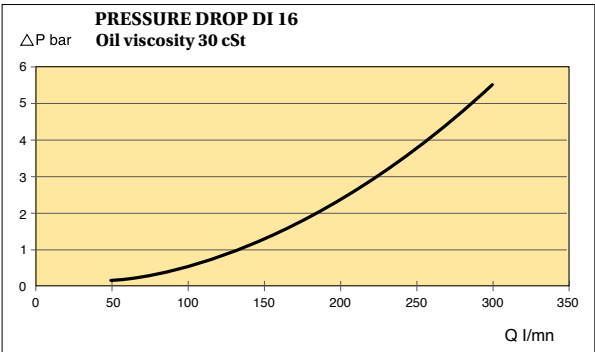


Safety Block DIC 16

TECHNICAL DATA DI 16

- **Size:** Nominal diameter : 16 mm
- **Maxi working pressure:** Manual version : 350 bar
- **Weight without connector:** Manual version : 4,3 kg
- **Materials:** Carbon steel
According with the fluids of group 2 (PED)
- **Temperature:** Manual version : - 15°C à + 80°C
- **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 DIC 16 Manual Version

Standard version (Carbon steel, rings NBR) temperature -15°C up to 80°C Maximum working pressure : 350 Bar

Part numbers

Connecting to accumulator	Type	Part number
EHV 0,5 up to 1,6 L G3/4"	DIC16M/2/210 CV	35128812G02C
EHV 0,5 up to 1,6 L G3/4"	DIC16M/2/250 CV	35128812H02C
EHV 0,5 up to 1,6 L G3/4"	DIC16M/2/330 CV	35128812J02C
EHV 0,5 up to 1,6 L G3/4"	DIC16M/2/350 CV	35128812Y02C
EHV 2,5 up to 10 L G1"1/4	DIC16M/1/210 CV	35128811G02C
EHV 2,5 up to 10 L G1"1/4	DIC16M/1/250 CV	35128811H02C
EHV 2,5 up to 10 L G1"1/4	DIC16M/1/330 CV	35128811J02C
EHV 2,5 up to 10 L G1"1/4	DIC16M/1/350 CV	35128811Y02C
EHV 10 up to 50 L G2"	DIC16M/3/210 CV	35128813G02C
EHV 10 up to 50 L G2"	DIC16M/3/250 CV	35128813H02C
EHV 10 up to 50 L G2"	DIC16M/3/330 CV	35128813J02C
EHV 10 up to 50 L G2"	DIC16M/3/350 CV	35128813Y02C

Options or Accessories

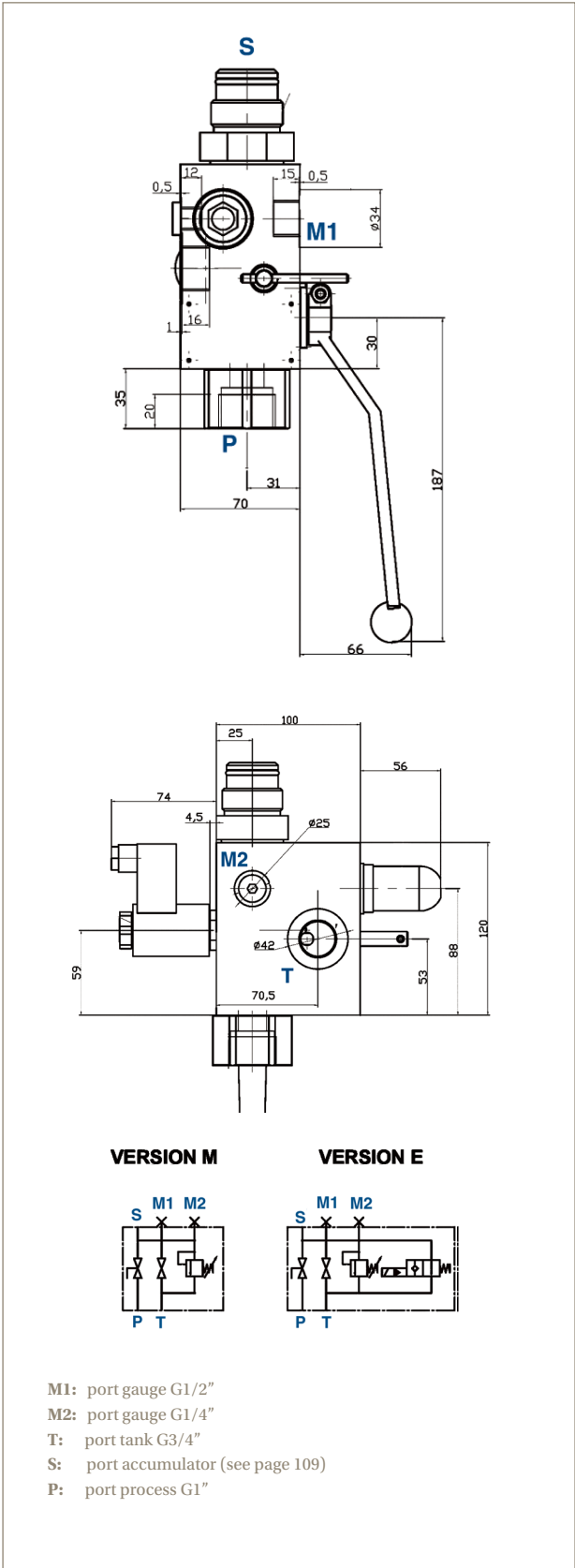
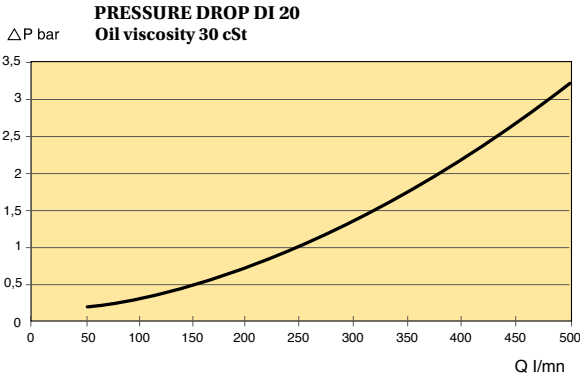
Type	Electro valve tension	Part number
FLANGE M 3/4" GAS CYL Connection Accumulator Side		35054100281
FLANGE M 1"1/4 GAS CYL Connection Accumulator Side		35054200281
FLANGE M 2" GAS CYL Connection Accumulator Side		35103500281
RELIEF VALVE CE	210	35045732102
RELIEF VALVE CE	250	35045732502
RELIEF VALVE CE	330	35045733302
RELIEF VALVE CE	350	35045733502



Safety Block DIC 20

TECHNICAL DATA DI 20

- **Size:** Nominal diameter : 20 mm
- **Maxi working pressure:** Manual version : 400 bar
Electrical version : 350 bar
- **Weight without connector:** Manual version : 6,4 kg
Electrical version : 6,9 kg
- **Materials:** Carbon steel
According with the fluids of group 2 (PED)
- **Temperature:** Manual version : - 15°C à + 70°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 109
- **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 DIC 20 Manual Version

Standard version (Carbon steel, rings NBR) temperature -10°C up to 70°C Maximum working pressure : 400 Bar

Part numbers

Connecting to accumulator	Type	Part number
EHV 2,5 up to 10 L G1"1/4	DIC20M/1/350CH	35172211Y01C
EHV 10 up to 50 L G2"	DIC20M/3/330CH	35172213J01C

Safety Block DIC 20 Electrical Version

Standard version (Carbon steel, rings NBR) temperature -10°C up to 60°C Maximum working pressure : 350 Bar

Part numbers

Connecting to accumulator	With Electro-valve tension 24VDC		With Electro-valve tension 230V5/60	
	Type	Part number	Type	Part number
EHV 2,5 up to 10 L G1"1/4	DIC20EY/1/350CH24VCC	35172231Y21C	DIC20EY/1/350CH230V50/60	35172231Y61C
EHV 10 up to 50 L G2"	DIC20EY/3/210CH24VCC	35172233G21C	DIC20EY/3/210CH230V50/60	35172233G61C
EHV 10 up to 50 L G2"	DIC20EY/3/250CH24VCC	35172233H21C	DIC20EY/3/250CH230V50/60	35172233H61C
EHV 10 up to 50 L G2"	DIC20EY/3/330CH24VCC	35172233J21C	DIC20EY/3/330CH230V50/60	35172233J61C
EHV 10 up to 50 L G2"	DIC20EY/3/350CH24VCC	35172233Y21C	DIC20EY/3/350CH230V50/60	35172233Y61C

Options or Accessories

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

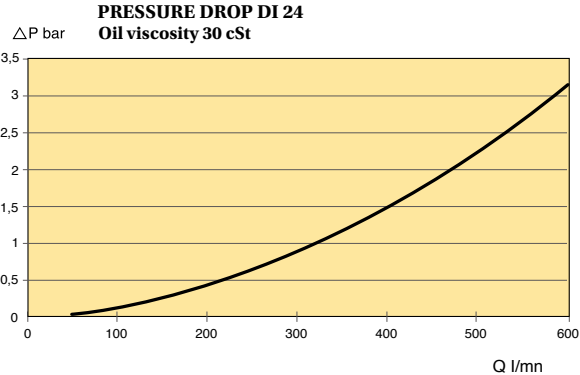
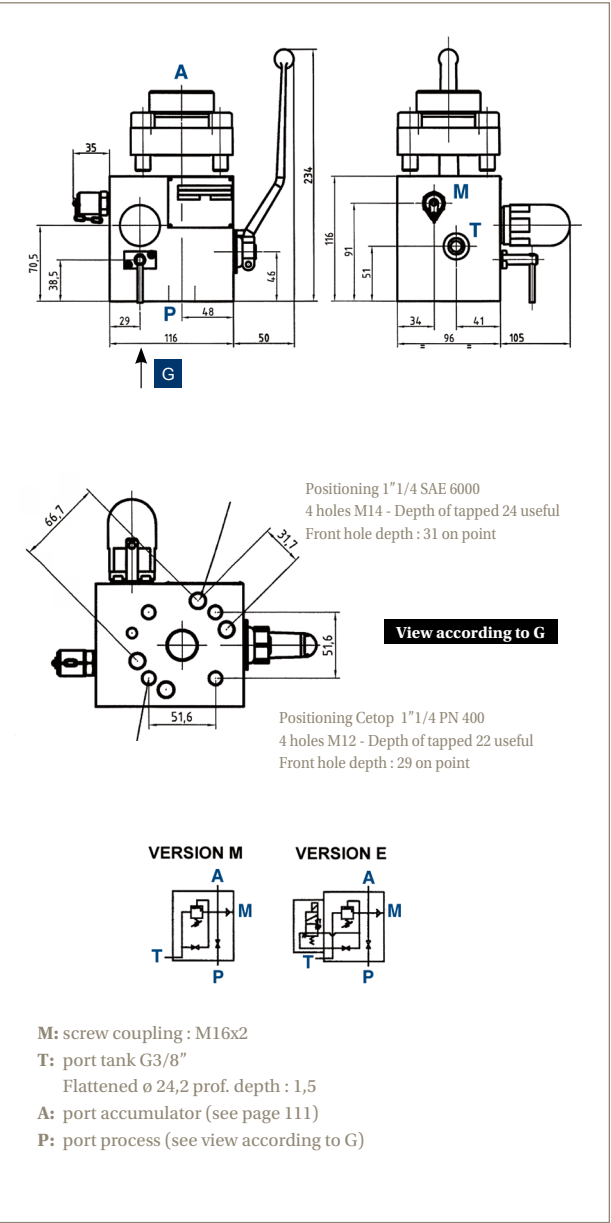


Safety Block DIC 24

TECHNICAL DATA DI 24

- **Size:** Nominal diameter : 24 mm
- **Maxi working pressure:** Manual version : 350 bar
- **Weight without connector:** Manual version : 9,5 kg
- **Materials:** Carbon steel
- **Temperature:** Manual version : - 15°C à + 80°C
- **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 DIC 24 Manual Version

Standard version (Carbon steel, rings FKM) temperature -15°C up to 80°C Maximum working pressure : 350 Bar

Part numbers

Connecting to accumulator	Type	Part number
EHV 2,5 up to 10 L G1"1/4	DIC24M/1/330CV	35129011J02C
EHV 2,5 up to 10 L G1"1/4	DIC24M/1/350CV	35129011Y02C
EHV 10 up to 50 L G2"	DIC24M/3/210CV	35129013G02C
EHV 10 up to 50 L G2"	DIC24M/3/250CV	35129013H02C
EHV 10 up to 50 L G2"	DIC24M/3/330CV	35129013J02C
ACCU PISTON 10 up to 50 L G2"&EBV 100 and 200 L	Consult Parker Olaer	

Options or Accessories

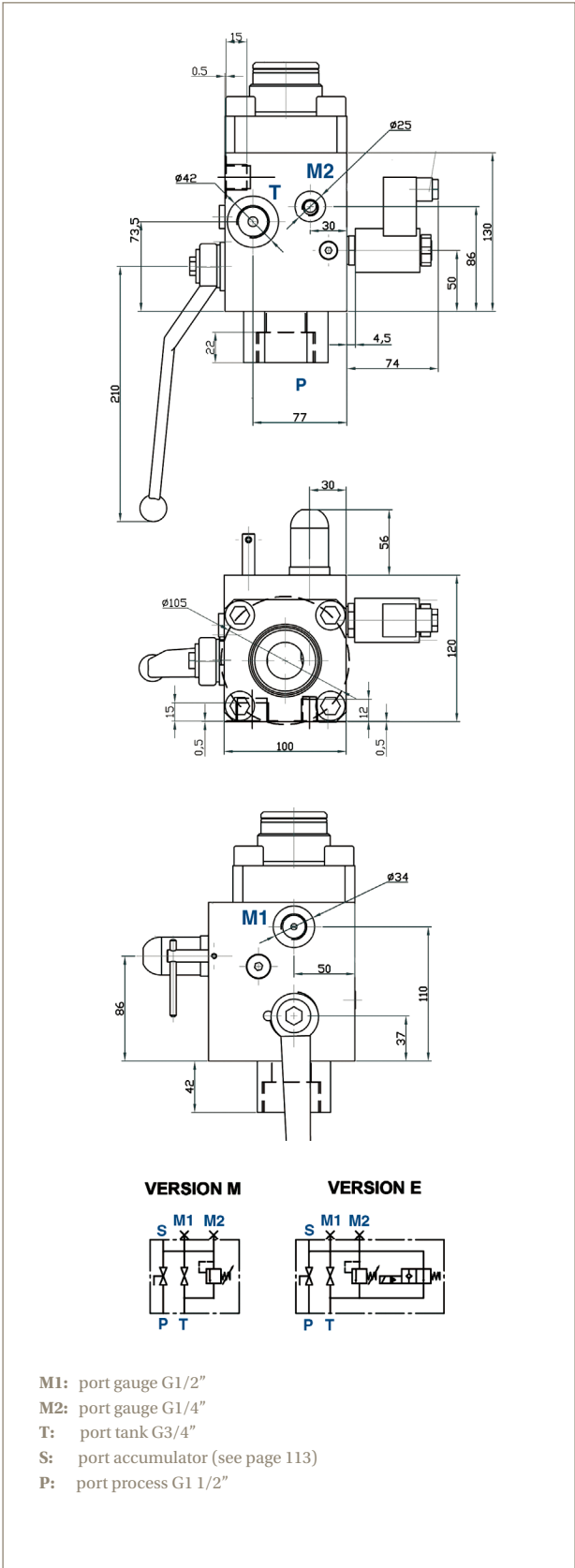
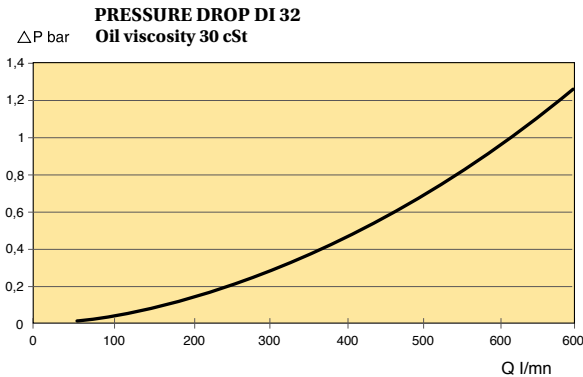
Type	Electro valve tension	Part number
FLANGE M 1"1/4 GAZ CYL CONNECTION ACCUMULATOR SIDE		10436600281
FLANGE M 2" GAZ CYL CONNECTION ACCUMULATOR SIDE		35037500281
RELIEF VALVE CE	210 BAR	35045932102
RELIEF VALVE CE	250 BAR	35045932502
RELIEF VALVE CE	330 BAR	35045933302
RELIEF VALVE CE	350 BAR	35045933502



Safety Block DIC 32

TECHNICAL DATA DI 32

- **Size:** Nominal diameter : 32 mm
- **Maxi working pressure:** Manual version : 350 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 DIC 32 Manual Version

Standard version (Carbon steel, rings NBR) temperature -10°C up to 70°C Maximum working pressure : 400 Bar

Part numbers

Connecting to accumulator	Type	Part number
EHV 2,5 up to 10 L G1"1/4	DIC32M/1/210CH	35172311G01
EHV 2,5 up to 10 L G1"1/4	DIC32M/1/250CH	35172311H01
EHV 2,5 up to 10 L G1"1/4	DIC32M/1/330CH	35172311J01
EHV 2,5 up to 10 L G1"1/4	DIC32M/1/350CH	35172311Y01
EHV 10 up to 50 L G2"	DIC32M/3/210CH	35172313G01
EHV 10 up to 50 L G2"	DIC32M/3/250CH	35172313H01
EHV 10 up to 50 L G2"	DIC32M/3/330CH	35172313J01

Safety Block DIC 32 Electrical Version

Standard version (Carbon steel, rings NBR) temperature -10°C up to 60°C Maximum working pressure : 350 Bar

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	DIC32EY/1/210CH24VCC	35172331G21	DIC32EY/1/210CH230V50/60	35172331G61C
EHV 2,5 up to 10 L G1"1/4	DIC32EY/1/250CH24VCC	35172331H21	DIC32EY/1/250CH230V50/60	35172331H61C
EHV 2,5 up to 10 L G1"1/4	DIC32EY/1/330CH24VCC	35172331J21	DIC32EY/1/330CH230V50/60	35172331J61C
EHV 2,5 up to 10 L G1"1/4	DIC32EY/1/350CH24VCC	35172331Y21	DIC32EY/1/350CH230V50/60	35172331Y61C
EHV 10 up to 50 L G2"	DIC32EY/3/210CH24VCC	35172333G21	DIC32EY/3/210CH230V50/60	35172333G61C
EHV 10 up to 50 L G2"	DIC32EY/3/250CH24VCC	35172333H21	DIC32EY/3/250CH230V50/60	35172333H61C
EHV 10 up to 50 L G2"	DIC32EY/3/330CH24VCC	35172333J21	DIC32EY/3/330CH230V50/60	35172333J61C

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



Parker Worldwide

Europe, Middle East, Africa

AE – United Arab Emirates, Dubai
Tel: +971 4 8127100
parker.me@parker.com

AT – Austria, Wiener Neustadt
Tel: +43 (0)2622 23501-0
parker.austria@parker.com

AT – Eastern Europe, Wiener Neustadt
Tel: +43 (0)2622 23501 900
parker.easteurope@parker.com

AZ – Azerbaijan, Baku
Tel: +994 50 22 33 458
parker.azerbaijan@parker.com

BE/LU – Belgium, Nivelles
Tel: +32 (0)67 280 900
parker.belgium@parker.com

BY – Belarus, Minsk
Tel: +375 17 209 9399
parker.belarus@parker.com

CH – Switzerland, Etoy
Tel: +41 (0)21 821 87 00
parker.switzerland@parker.com

CZ – Czech Republic, Klecany
Tel: +420 284 083 111
parker.czechrepublic@parker.com

DE – Germany, Kaarst
Tel: +49 (0)2131 4016 0
parker.germany@parker.com

DK – Denmark, Ballerup
Tel: +45 43 56 04 00
parker.denmark@parker.com

ES – Spain, Madrid
Tel: +34 902 330 001
parker.spain@parker.com

FI – Finland, Vantaa
Tel: +358 (0)20 753 2500
parker.finland@parker.com

FR – France, Contamine s/Arve
Tel: +33 (0)4 50 25 80 25
parker.france@parker.com

GR – Greece, Athens
Tel: +30 210 933 6450
parker.greece@parker.com

HU – Hungary, Budaoers
Tel: +36 23 885 470
parker.hungary@parker.com

IE – Ireland, Dublin
Tel: +353 (0)1 466 6370
parker.ireland@parker.com

IT – Italy, Corsico (MI)
Tel: +39 02 45 19 21
parker.italy@parker.com

KZ – Kazakhstan, Almaty
Tel: +7 7273 561 000

parker.easteurope@parker.com

NL – The Netherlands, Oldenzaal
Tel: +31 (0)541 585 000
parker.nl@parker.com

NO – Norway, Asker
Tel: +47 66 75 34 00
parker.norway@parker.com

PL – Poland, Warsaw
Tel: +48 (0)22 573 24 00
parker.poland@parker.com

PT – Portugal, Leca da Palmeira
Tel: +351 22 999 7360
parker.portugal@parker.com

RO – Romania, Bucharest
Tel: +40 21 252 1382
parker.romania@parker.com

RU – Russia, Moscow
Tel: +7 495 645-2156
parker.russia@parker.com

SE – Sweden, Spånga
Tel: +46 (0)8 59 79 50 00
parker.sweden@parker.com

SK – Slovakia, Banská Bystrica
Tel: +421 484 162 252
parker.slovakia@parker.com

SL – Slovenia, Novo Mesto
Tel: +386 7 337 6650
parker.slovenia@parker.com

TR – Turkey, Istanbul
Tel: +90 216 4997081
parker.turkey@parker.com

UA – Ukraine, Kiev
Tel: +380 44 494 2731
parker.ukraine@parker.com

UK – United Kingdom, Warwick
Tel: +44 (0)1926 317 878
parker.uk@parker.com

ZA – South Africa, Kempton Park
Tel: +27 (0)11 961 0700
parker.southafrica@parker.com

North America

CA – Canada, Milton, Ontario
Tel: +1 905 693 3000

US – USA, Cleveland (industrial)
Tel: +1 216 896 3000

US – USA, Elk Grove Village (mobile)
Tel: +1 847 258 6200

South America

AR – Argentina, Buenos Aires
Tel: +54 3327 44 4129

BR – Brazil, Cachoeirinha RS
Tel: +55 51 3470 9144

CL – Chile, Santiago
Tel: +56 2 623 1216

MX – Mexico, Apodaca
Tel: +52 81 8156 6000

Asia Pacific

AU – Australia, Castle Hill
Tel: +61 (0)2-9634 7777

EN – China, Shanghai
Tel: +86 21 2899 5000

EN – China, Tianjin
Tel: +86 22 2388 9096

HK – Hong Kong
Tel: +852 2428 8008

IN – India, Mumbai
Tel: +91 22 6513 7081-85

IN – India, Bangalore
Tel: +91 80 2843 7690/91

JP – Japan, Fujisawa
Tel: +81 (0)4 6635 3050

KR – South Korea, Seoul
Tel: +82 2 559 0400

MY – Malaysia, Shah Alam
Tel: +60 3 7849 0800

NZ – New Zealand, Mt Wellington
Tel: +64 9 574 1744

SG – Singapore
Tel: +65 6887 6300

TH – Thailand, Bangkok
Tel: +662 717 8140

TW – Taiwan, Taipei
Tel: +886 2 2298 8987

China

派克汉尼汾流体传动产品（上海）有限公司
Tel: +86 21 2899 5000

北京办事处
Tel: +86 10 6561 0520

广州办事处
Tel: +86 20 3212 1688

成都办事处
Tel: +86 28 6180 6800

大连办事处
Tel: +86 411 3964 6768

长沙服务中心
Tel: +86 731 453 0210

西安办事处
Tel: +86 29 6851 8950

