



HENNLICH



MATERIAL

- Bladder- and seal material: NBR, FPM and EPDM
- Pressure vessel material:
Steel (St)
Stainless Steel wetted Parts (S)
complete Stainless Steel (SS)
Steel nickel plated (St-NP)

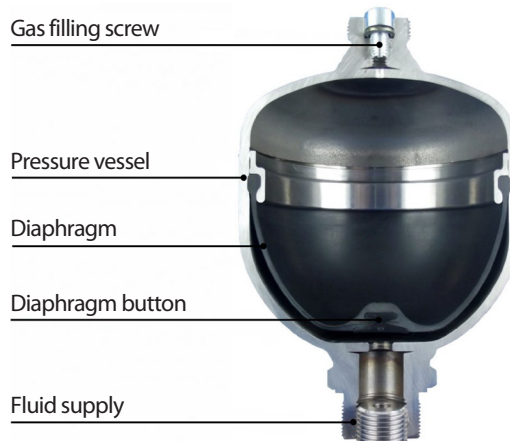
SPECIFICATIONS

Type	Operating Pressure PB max. [bar]	Precharge [bar]	Operating Temperatur max. [°C]	Volume [l]	Material Bladder/ Pressure vessel	Connection Fluid	Diameter [mm]	Height [mm]	Weight [kg]	Connection Gas
709608	200	f(PB)	80	0,075	NBR / S	3/8" GIG	64	90	0,7	M28x1,5
707050	330	f(PB)	80	0,1	NBR / St-NP	M18x1,5 IG	78	139	2,1	5/8" UNF
703401	210	f(PB)	80	0,16	NBR / St	1/2" NPT AG	75	140	1	M28x1,5
703400	210	f(PB)	80	0,16	NBR / St	3/8" NPT AG	75	140	1	M28x1,5
703403	200	f(PB)	80	0,16	NBR / S	1/2" NPT AG	75	140	1	M28x1,5
703404	200	f(PB)	80	0,16	NBR / S	3/8" NPT AG	75	140	1	M28x1,5
703402	200	f(PB)	80	0,16	NBR / S	3/4" NPT AG	75	140	1	M28x1,5
703407	180	f(PB)	80	0,16	NBR / SS	3/8" NPT AG	75	140	1	M28x1,5
703406	180	f(PB)	80	0,16	NBR / SS	1/2" NPT AG	75	140	1	M28x1,5
703408	180	f(PB)	80	0,16	FPM / SS	1/2" NPT AG	75	140	1	M28x1,5
703418	160	f(PB)	80	0,32	NBR / SS	1/2" NPT AG	94	136	1,5	M28x1,5
704740	160	f(PB)	80	0,32	NBR / SS	3/4" NPT AG	94	136	1,5	M28x1,5
050400	400	f(PB)	100	0,45	NBR / S	3/8" GIG	114	184	2,8	M16x2
703974 (G)	150	f(PB)	130	0,5	EPDM / SS	1/2" NPT (1/2" G) IG	117	177	3,8	5/8" UNF
703414	200	f(PB)	80	0,75	NBR / S	1" NPT AG	125	200	3	M28x1,5
703415	140	f(PB)	80	0,75	NBR / SS	1" NPT AG	125	200	3	M28x1,5
703416	140	f(PB)	80	0,75	FPM / SS	1" NPT AG	125	200	3	M28x1,5
703411	100	f(PB)	80	2	NBR / S	1 1/4" NPT AG	170	230	5,5	M28x1,5
703412	100	f(PB)	80	2	NBR / SS	1 1/4" NPT AG	170	230	5,5	M28x1,5

DESIGN

The pulsation dampener consists of a pressure chamber with a connection thread on the fluid side. The separation of the gas and the fluid is carried out by a diaphragm inserted in advance. There is a diaphragm button in the bottom of the diaphragm to prevent the destruction from the diaphragm when the vessel is completely discharged. The diaphragm accumulator can be refilled by means of a gas filling screw. The fluid supply is available in different versions.

Replacement of the diaphragm is not possible!





INSTRUCTION- AND MAINTENANCE MANUAL

OPERATION

Pulsations dampeners are hydrostatic devices which can store defined energy and transmit it to the hydraulic system on demand. Therefore they are also called hydraulic accumulators.

Fluids have only a very little compressibility, however, gases have a good compressibility. The working principle of all gasloaded hydraulic accumulators is based on this difference. When charging a defined gas volume under pressure with a higher fluid pressure, the gas volume is reduced at rising fluid pressure and the gas pressure rises with increasing fluid pressure. When the fluid pressure drops, the fluid is forced back in to the respective circuit because of the effort of the gas to extend until the pressure is balanced again.

GENERAL

The diaphragm accumulators (pulation dampeners) are subject to the Pressure Equipment Directive 2014/68/EU.

The operator is responsible for adhering to the existing regulations. The documentation supplied with the appliance must be kept in a safe place. It must be made available to any expert carrying out regular maintenance tests.

Bevor commissioning the equipment, the gas chamber must be filled to the prescribed pressure level.

⚠ CAUTION:

Only use nitrogen, oxygen or air mean the equipment could explode!

TRANSPORT / STORAGE

Transportation must be carried out in such a way that no impact points or indentations may occur on the diaphragm accumulator. If the unit is to be stored for a fairly long time, the gas pressure must be tested once again (cf General).

For transport, the relevant rules and regulations on the transport of pressure vessels must be observed!

COMMISSIONING

The commissioning process should only be carried out by trained personnel. The technical conditions for the diaphragm accumulator (operating excess pressure, pressure fluctuation band, operating temperature and operating liquid) must be observed.

The diaphragm accumulator must be mounted in such a way that stability is guaranteed even if operational vibrations occur or the pipeline is broken. Tests prior to commissioning and regular maintenance tests must be carried out in line with national regulations.

SAFETY DEVICE

The equipment, installation and operation of pressurised appliances is standarddised in the national regulations.

These require the following safety equipment:

- A device to prevent excess pressure
e.g. safety valve (certified design)
- Pressure-balancing device
- Pressure gauge
- Inspection pressure gauge connection
- Shut-off device

The safety valve may not also be used for regulating purposes.

MAINTENANCE

The maintenance tasks on the diaphragm accumulator are restricted to checking the gas pressure. It is not possible to replace the diaphragm. The fluid pressure in the diaphragm accumulator must be completely relieved before the removal of any parts or the gas pressure is tested. The gas pressure must be checked using a suitable filling and testing device. We recommend that a check is made **after the first week** following initial commissioning of the equipment. If no loss of gas is measurable, the 2nd check should take place **after 3 months**. If the gas pressure remains constant, checks can be carried out on an annual basis.

In addition to the gas pressure pressure, the safety device, fittings, pipe connections and the accumulator fixtures must be checked.

Welding, soldering or any mechanical work may not be carried out on the diaphragm accumulator. The welding points must be checked after 500.000 cycles have been reached.