



Filters . Accumulators  
an ISO 9001 Company

### General

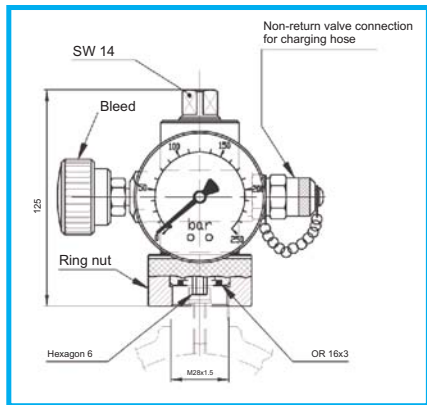
Used for charging of welded Diaphragm Accumulators (type : AMW) with gas as well as pressure checking and adjustment. When charging, the nitrogen bottles must be capable of delivering pressure higher than the desired accumulator gas pressure.

### Construction

**Standard version** comprises  
Valve body complete with ring nut connection to accumulator gas valve, pressure gauge, bleed and non return snap-in connection.  
High pressure hose complete with connections.  
Two pressure gauges (HP & LP)  
Set of spare gaskets.  
Carrying case.  
Adaptor to connect to nitrogen bottle.

### Important Note :

Accumulator connection - M28x1.5



## Pre-Loading & Checking Set, Type-PCM



### Technical Features

Max. Working pressure : 400 Bar.  
Accumulator Connection : M28 x 1.5  
Bottle Connection : Standard - 5/8" BSP (Internal)  
Pressure gauges : Ø63. Connection - 1/4" BSP(M)  
LP - 70 kg/cm<sup>2</sup>.  
HP - 280 kg/cm<sup>2</sup>  
Weight : 1.8 kg (carrying case included)

### Identification Code

PCM	280/70	-	-	-
Type	Pressure Gauges (full scale bar)	Connection to Accumulator	Connection to Bottle	Hose (Mtrs)
PCM (Pre-Loading & Checking)	280/70 (Standard) On request HP - 400-350-210-140 LP - 35-20-10-7	- = M28 x 1.5	- = 5/8" BSP(M)	- = 2 Mtrs. (Std) On request 1.5-2.5-4 Mtrs.

**EPE** EPE PROCESS FILTERS & ACCUMULATORS PVT LTD  
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Note : Technical specifications are subject to change.

Catalogue Ref. : EPE/PCM/001

## General

It is important to keep gas pressure in the accumulator constant and it should therefore be checked periodically by means of **Pre-loading & Checking Unit (PCM)**.

The same equipment is used for re-inflating the bladder after serving or replacement.

Connection is made by a special minimess hose to the dry nitrogen bottle with an adaptor.

## Pressure Checks

This is a simple operation, the correct procedure is as follows:

- \* **Isolate** the Accumulator from the system and reduce the liquid **pressure to Zero**.
- \* Remove the protective and sealing caps from the gas valve.
- \* Prior to mounting the PC unit ensure that Valve Knob "A" is **unscrewed**, Bleed Valve "B" is **closed** and Non-Return Valve "C" is **screwed tight**.
- \* Attach PC unit to the gas-fill valve by means of Ring Nut "D".
- \* Screw Valve Knob "A" to a point where pressure is registered.

If the pressure is OK remove the PC Kit as follows:

- \* Unscrew the Valve Knob "A".
- \* Open the Bleed Valve "B" and unscrew the Ring Nut "D".

## Pressure reduction

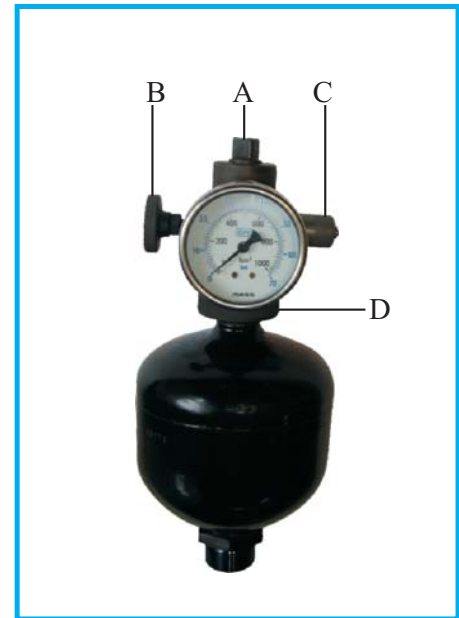
- \* Fit PC Unit as described above.
- \* Reduce the nitrogen pressure by opening Bleed Valve "B" **slowly** while the Valve Knob "A" is screwed in until the correct pressure is registered on the gauge.

## Increase or reset pre-charge pressure

If it is necessary to fill, or to increase the gas pressure, proceed as follows:

- \* Fit the PC unit as described above.
- \* Fit the bottle adaptor to the nitrogen cylinder.
- \* Connect the minimess hose between the cylinder and the non-return valve "C".
- \* **Slowly** open the valve on the cylinder until the gauge registers a pressure slightly higher than the one desired, then **shut**.
- \* Unscrew Knob "A" and reduce the pressure on PC Kit to Zero by means of the Bleed Valve "B".
- \* Disconnect the hose from the non-return valve and replace cap.
- \* Close the Bleed Valve "B" and wait approximately 5 mins. for the temperature to stabilise.
- \* Screw Valve Knob "A" until the pressure can be read. This should be slightly higher than the desired pressure.
- \* Adjust by means of the Bleed Valve "B" & remove the filling unit.
- \* Use soapy water test for leaks.
- \* Replace the valve cover and protection caps.

The Accumulator is now precharged as per the requirement.



## WARNING

It is recommended that the gas line is fitted with a safety relief valve when charging accumulators with shell ratings of less than Nitrogen Cylinder pressure.

## Note :

Standard equipment PCM-280/70 is supplied with two pressure gauges : the high pressure gauge (280 bar) is used for charging and for checking pre-charge pressures higher than 50 bar.

The low pressure gauge (70 bar) is used for pre-charge pressures lower than 50 bar.

**ONLY NITROGEN MUST BE USED FOR CHARGING. AIR OR OXYGEN COULD CAUSE AN EXPLOSION.**