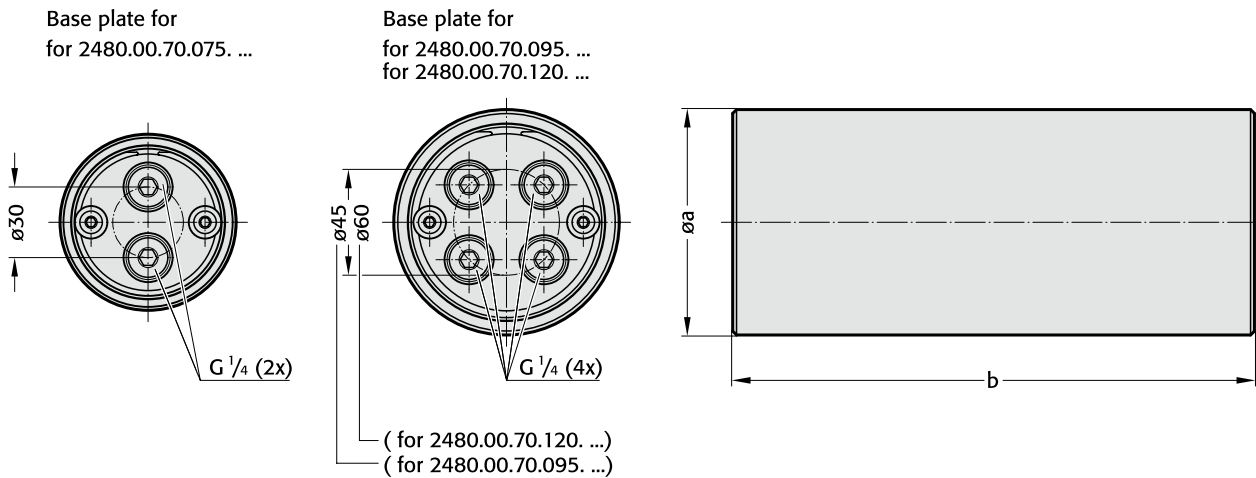


# PRESSURE RESERVOIR FOR REDUCED PRESSURE RISE

2480.00.70.



## Description:

The pressure reservoir and its base plates are manufactured from the same high grade steel as FIBRO gas springs. The advantage of including a pressure reservoir in the system is that in operation the gas pressure rises to a lesser extent. Apart from the purely technical pressure factors, a reduced pressure rise is beneficial to the service life of the system.

## Function:

The pressure reservoir has two or four mounting holes with G<sup>1</sup>/<sub>4</sub>" at both sides, which are designed for connection to the control fitting or gas spring.

## Note:

If a pressure reservoir is to be installed, we recommend the 24°-cone-system, which ensures that the gas flow is not inhibited. Mounting clamps should be ordered separately. At least 2 are required for each pressure reservoir, see following pages.

## 2480.00.70. Pressure reservoir

Order No.	Volume in l [litres]	Ø a	b
2480.00.70.075.0170	0,25	75	170
2480.00.70.075.0250	0,50	75	250
2480.00.70.075.0410	1,0	75	410
2480.00.70.095.0300	1,0	95	300
2480.00.70.095.0500	2,0	95	500
2480.00.70.095.0700	3,0	95	700
2480.00.70.095.0900	4,0	95	900
2480.00.70.120.0360	2,0	120	360
2480.00.70.120.0615	4,0	120	615
2480.00.70.120.1125	8,0	120	1125

## Ordering Code (example):

Pressure reservoir	=	2480.00.70.
Øa = 75 mm	=	075.
b = 170 mm	=	0170
Order No.	=	2480.00.70.075.0170

Gas spring size/daN	Piston rod surface/dm <sup>2</sup>
.00500	0,031
.00750	0,049
.01500	0,102
.03000	0,196
.05000	0,332
.07500	0,503
.10000	0,709

## Calculating the isothermic increase in pressure\*

(\*by approximation)

Pressure build-up =		$\frac{V_a + (n \times V_g^{1})}{V_a + (n \times (V_g^{1}) - \text{Hub} \times A)}$
V <sub>a</sub>	[l]	Volume of pressure reservoir, see table
V <sub>g</sub> <sup>1)</sup>	[l]	Gas volume of gas springs, corresponding spring type 1) Note: For the design, gas volume of the spring type, please contact FIBRO!
Stroke	[dm]	Stroke length of gas springs, corresponding to spring type
A	[dm <sup>2</sup> ]	Piston surface of gas springs, see table
n		Number of gas springs

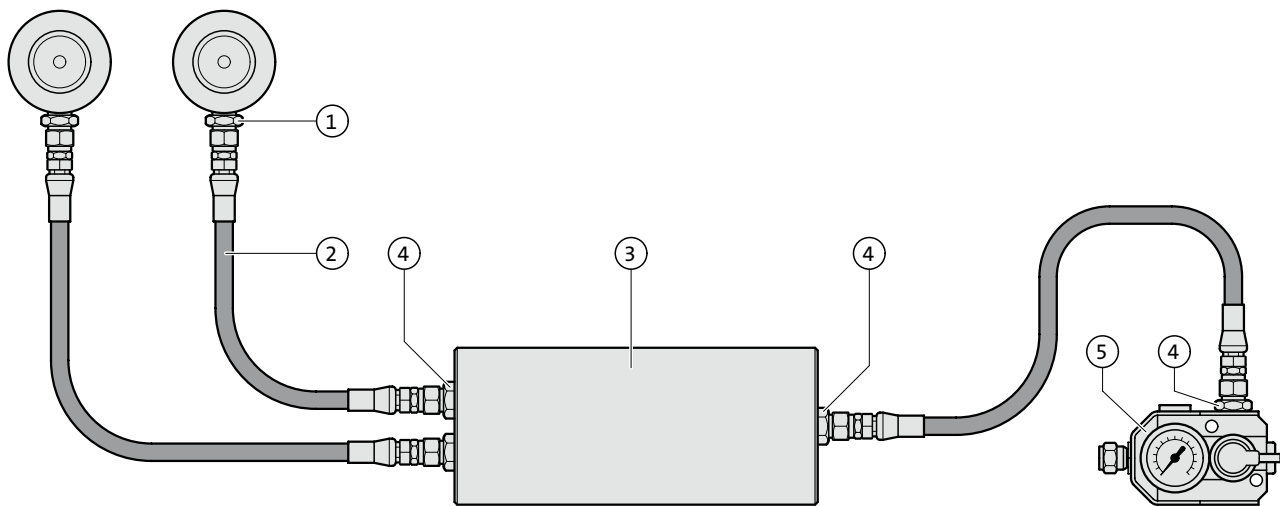
## Calculation example:

10 gas springs, type 2480.13.05000.050 with a travel of 50 mm (0,5 dm) are connected to a system with an 8 litres pressure reservoir.

$$\text{Pressure build-up} = \frac{8 \text{ l} + (10 \times 0,51 \text{ l})}{8 \text{ l} + (10 \times (0,51 \text{ l} - 0,5 \text{ dm} \times 0,332 \text{ dm}^2))} = 1,145$$

PRESSURE RESERVOIR FOR REDUCED PRESSURE RISE

2480.00.70. Installation example: 24° cone hose system



Item No.	Quantity	Description	Order No.
1	2	Screw connection G1/8 G1/8	2480.00.26.03
2	3	24°-cone-hose	2480.00.25.01.□ □ □
3	1	Pressure reservoir	2480.00.70. □ □ □ □ □ □
4	4	Screw connection G1/4	2480.00.26.04
5	1	Control fitting	2480.00.31.01