# $\overline{SOMATEC^{\scriptscriptstyle (\!\scriptscriptstyle \otimes\!\!\mid\!)}}$ Komponenten für den Maschinenbau

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## **Pressure booster, pneumatic** Hydraulic, single action

Transmission ratio, 1:39 Maximum operating pressure: 351 bar

### Our pressure booster offers the following advantages:

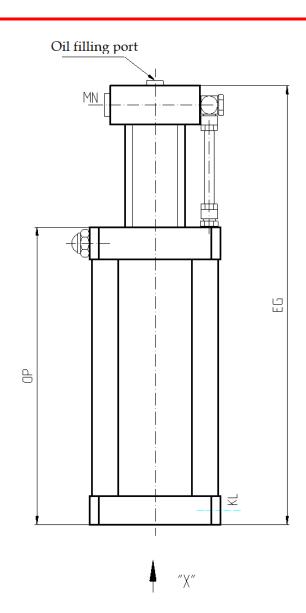
- Large oil reserves, which means a high degree of operational safety
- Easy-to-use application; you just need a 3/2 way valve for operation.
- a quick-exhaust valve is recommended on the booster, however, for faster operation.
- Low air consumption because the return stroke is carried out using spring force.
- All moving parts are made of frictionless and corrosion-resistant or
- corrosion-protected materials. Ahead, the cover and the intermediate cover are made of anodized aluminium, and hard-coded aluminium profile tubes are used for the piping.
- Delivery is in the filled state. The only thing that needs to be replaced is a lock screw for the exhaust filter.

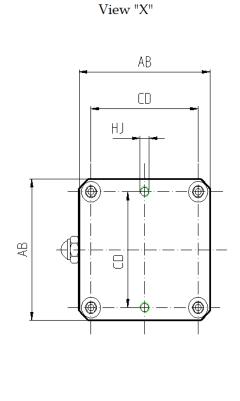
### Principle behind the pressure booster:

The pressure booster converts compressed air from the AC power into hydraulic pressure. This allows many punching and clamping problems to be solved without major expense that would otherwise be nearly impossible to solve!

Our pressure intensifiers are suitable for hydraulic oils based on mineral oils. Further media on request. In no way suitable are media which cause corrosion, such as water.







	Air connection		Pressure output						
Model	KL	pcs.	MN	pcs.	AB	CD	EG	HJ	OP
DU 100	R 1/4	1	R 1/4	1	110	90 ± 0,1	360	M 8	230
DU 125	R 3/8	1	R 1/4	2	140	90 ± 0,1	410	M 8	257

#### **Attention**:

Only hydraulic high-pressure hoses may be used for hydraulic connection. The inside diameter of the hydraulic hose should not exceed 6 mm and should not be any longer than absolutely necessary. The entire system must be carefully ventilated in order to ensure optimum operation.

The amount of oil required per stroke is calculated as follows:

The number of cylinders x piston surface area x stroke

	Maximum	Boost ratio	Air distribution	Oil quantity	Oil reserve
	air pressure		at 6 bar	/ stroke	
	(bar)		(NI/stroke)	(ccm)	(ccm)
DU 100	9	1:39	6,87	23	141
DU 125	9	1:39	12,54	37	290

Page 4 Technical modifications reserved

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## Pressure booster, pneumatic hydraulic, double-acting

Our pressure intensifiers are also available in doubleacting version (DW):

Double-acting refers exclusively to the air cylinder: this is, instead of a spring, also driven with air to its basic position. This increases compared to the standard versions with spring return, the life, since the risk of spring breakage is no longer present.

To control the double-acting pressure booster, a 5/2-way valve is required.

All variants are (on request) also available with a larger oil volume (in terms of working area); However, for technical reasons only in double acting.

To reduce the air consumption, the return stroke of the double-acting intensifier can be operated at a lower pressure (1 - 3 bar).

If desired, the intensifier can also be equipped with a signal piston up to a piston Ø 125 mm to query individual piston positions!



Our pressure intensifier DU 125 double-acting is also in the special version -"Installation position horizontal" available.

	Maximum air pressure.	Boost ratio	Air distribution (NI / stroke)		Oil quantity / stroke	Oil reserve
	(bar)	i	Forward stroke 6 bar	Return stroke 3 bar	(ccm)	(ccm)
DU 125	9	1:39	14,0	7,8	51	351
DU 125	9	1:39	19,76	11,0	70	555
DU 125	9	1:39	30,67	17,1	110	942
DU 125	6	1 : 61	12,28	6,9	26	290