MAXIMATOR®

HIGH PRESSURE TECHNOLOGY
HYDRAULICS
PNEUMATICS
TESTING
EQUIPMENT





Air Amplifiers

Applications and Design

MAXIMATOR®



MAXIMATOR PLV series Air Amplifiers are suitable for the compression of pressurised air or nitrogen. The units are capable of increasing normal pressures of 4 bar or 6 bar to the desired final pressures. The PLV Air Amplifiers are operated with normal shop air and are provided with a variety of amplification ratios.

All PLV Air Amplifiers can be supplied with an air control unit comprising a filter, pressure regulator with pressure gauge and an air shut-off valve.

The desired operating pressure can be preset by means of the air control unit in correspondence with the different pressure ratios.

We can offer you a choice between a standard PLV Air Amplifier Station or a customised solution.





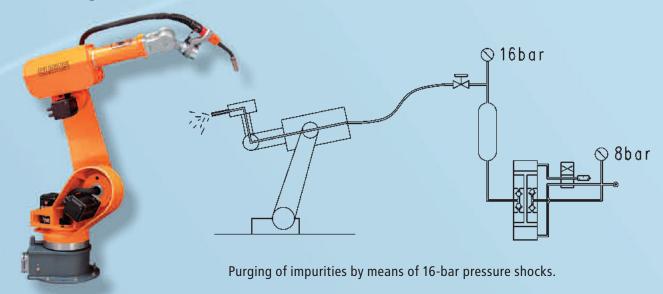








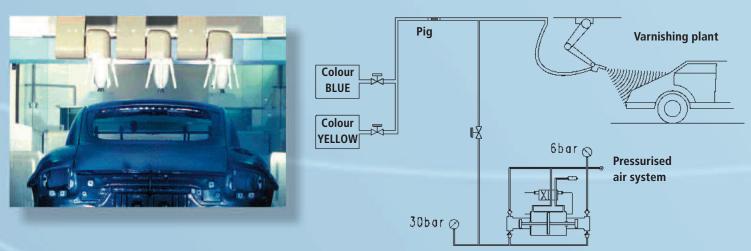
Burner cleaning



Automotive sector

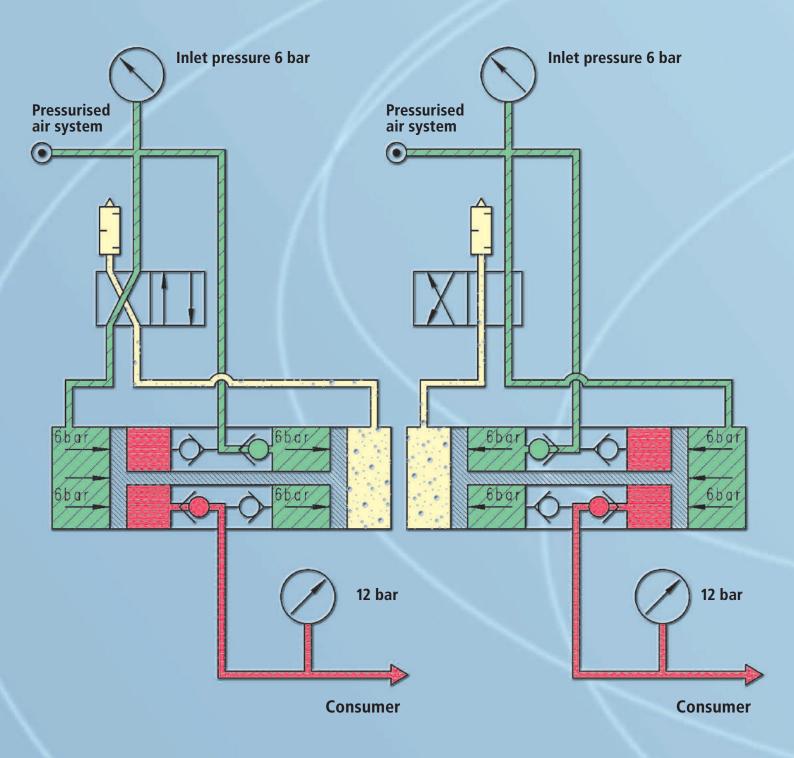


Cleaning of varnishing systems (pigging)



The dyes are forced back into the tanks by means of a pressurised air-driven pig.





The compressed air from the standard air system is compressed to the desired higher final pressure.

This is a simple, safe and economic mode of operation.

Thus, expenditures for an in-house high-pressure system or a separate decentralised compressor plant can be saved.

The benefits of this design are:

- Selected pressure boosting upstream of individual consumers.
- Zero energy consumption after final pressure is attained.
- No electrical installations are required.

Air Amplifier GPLV 2 1200 I_N/min*

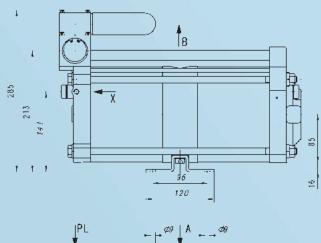


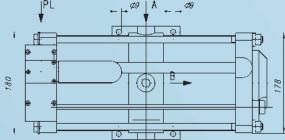
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The benefits of the GPLV2 design are:

- Selected pressure boosting upstream of individual consumers.
- Zero energy consumption after final pressure is attained.
- No electrical installations are required, i.e. suitable for use in explosion-proof areas





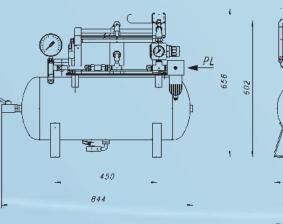


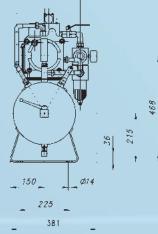
The benefits of the GPLV 2-Station are:

 Pressure pulsation rates lower than compared to units without air receivers.

 Any air consumption peaks are compensated by the air receiver volume reserve.

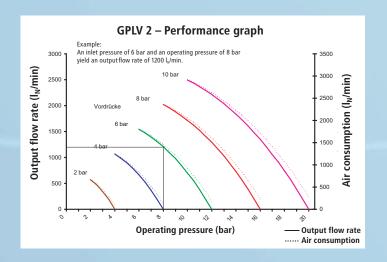
• Operating pressure can be adjusted by means of a reducing regulator.





Туре	GPLV 2
Pressure ratio (i)	1:2
Air drive pressure (p_{ι}) in bar	1 – 10
Max. discharge pressure (p _B) in bar	20 (16)1)
Max. noise level	79 dB(A)
Max. operating temperature (T) in °C	60
Air drive connection	BSP 3/4"
Inlet connection	BSP 1/2"
Outlet connection	BSP 1/2"
Net weight in kg	20.5
(Station) net weight in kg	49.0

^{*} at inlet pressure 6 bar and operating pressure 8 bar and 50 % operating time



¹⁾ Limited by pressure vessel rating

Air Amplifier SPLV 2 960 l_N/min*

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The benefits of the SPLV2 design are:

- Selected pressure boosting upstream of individual consumers.
- Zero energy consumption after final pressure is attained.
- No electrical installations are required, i.e. suitable for use in explosion-proof areas.

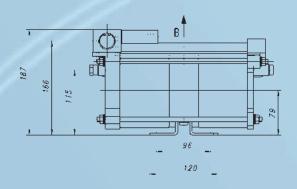


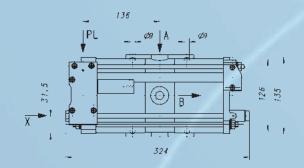
The benefits of the SPLV 2-Station are:

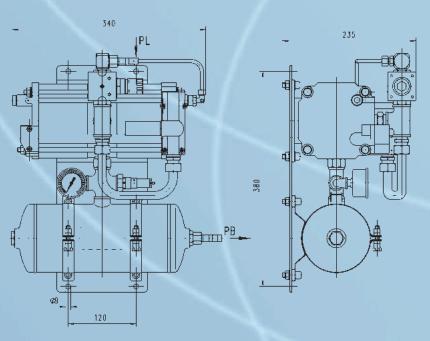
- Pressure pulsation rates lower than compared to units without air receiver.
- Any air consumption peaks are compensated by the air receiver volume reserve.
- Operating pressure can be adjusted by means of a reducing regulator.

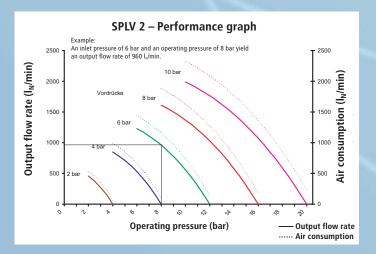
Туре	SPLV 2
Pressure ratio (i)	1:2
Air drive pressure (p_L) in bar	1 – 10
Max. discharge pressure (p _B) in bar	20 (16)1)
Max. noise level	79 dB(A)
Max. operating temperature (T) in °C	60
Air drive connection	BSP 1/2"
Inlet connection	BSP 1/2"
Outlet connection	BSP 1/2"
Net weight in kg	8.5
(Station) net weight in kg	16.0

- * at inlet pressure 6 bar and operating pressure 8 bar and 50 % operating time
- 1) Limited by pressure vessel rating









Air Amplifier MPLV 2 580 l_N/min*



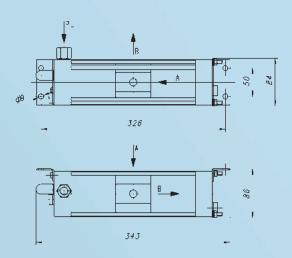


The benefits of the MPLV 2 design are:

• Selected pressure boosting upstream of individual consumers.

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- Zero energy consumption after final pressure is attained.
- No electrical installations are required, i.e. suitable for use in explosion-proof areas.





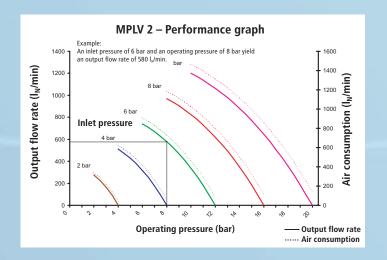
The benefits of the MPLV 2-Station are:

- Pressure pulsation rates lower than compared to units without air receiver
- Any air consumption peaks are compensated by the air receiver volume reserve.
- Operating pressure can be adjusted by means of a reducing regulator.

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Туре	MPLV 2
Pressure ratio (i)	1:2
Air drive pressure ($p_{\scriptscriptstyle L}$) in bar	1 – 10
Max. discharge pressure (p _B) in bar	20 (16)¹
Max. noise level	79 dB(A)
Max. operating temperature (T) in °C	60
Air drive connection	BSP 3/8"
Inlet connection	BSP 3/8"
Outlet connection	BSP 3/8"
Net weight in kg	3.3
(Station) net weight in kg	13.0

- * at inlet pressure 6 bar and operating pressure 8 bar and 50 % operating time
- 1) Limited by pressure vessel rating



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The benefits of the SPLV 3 design are:

- Selected pressure boosting upstream of individual consumers.
- Zero energy consumption after final pressure is attained.
- No electrical installations are required, i.e. suitable for use in explosion-proof areas



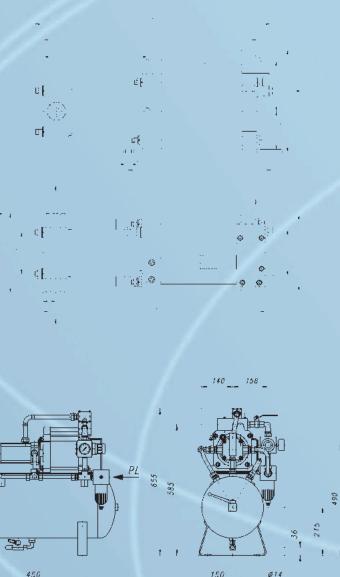
The benefits of the SPLV 3-Station are:

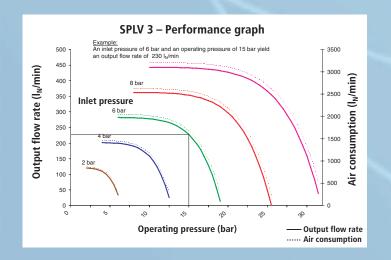
- Pressure pulsation rates lower than compared to units without air receivers.
- Any air consumption peaks are compensated by the air receiver volume reserve.
- Operating pressure can be adjusted by means of a reducing regulator.

Technical data:

Туре	SPLV 3
Pressure ratio (i)	1:3,2
Air drive pressure (p_L) in bar	1 – 10
Max. discharge pressure (p _B) in bar	32 (16)¹
Max. noise level	79 dB(A)
Max. operating temperature (T) in °C	60
Air drive connection	BSP 1/2"
Inlet connection	BSP 1/2"
Outlet connection	BSP 1/2"
Net weight in kg	8.5
(Station) net weight in kg	16.0

- * at inlet pressure 6 bar and operating pressure 8 bar and 50 % operating time
- 1) Limited by pressure vessel rating





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Air Amplifier MPLV 4 50 l_N/min*



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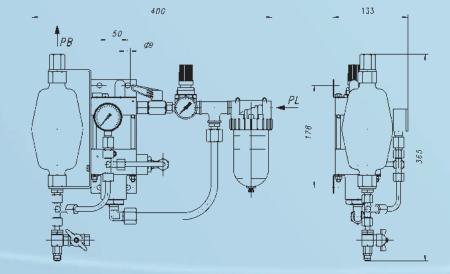
The benefits of the MPLV 4 design are:

- Selected pressure boosting upstream of individual consumers.
- Zero energy consumption after final pressure is attained.
- No electrical installations are required,
 i.e. suitable for use in explosion-proof areas.



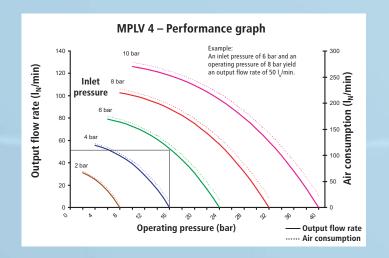
The benefits of the MPLV 4-Station are:

- Pressure pulsation rates lower than compared to units without air receiver.
- Any air consumption peaks are compensated by the air receiver volume reserve.
- Operating pressure can be adjusted by means of a reducing regulator.



Туре	MPLV 4
Pressure ratio (i)	1:4
Air drive pressure (p_{ι}) in bar	2 – 10
Max. discharge pressure (p _B) in bar	32 (16) ¹
Max. noise level	79 dB(A)
Max. operating temperature (T) in °C	60
Air drive connection	BSP 3/8"
Inlet connection	BSP 3/8"
Outlet connection	BSP 1/2"
Net weight in kg	2.2
(Station) net weight in kg	5.3

- * at inlet pressure 6 bar and operating pressure 16 bar and 50 % operating time
- 1) Limited by pressure vessel rating

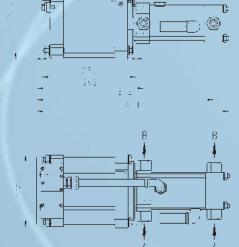


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The benefits of the GPLV5 design are:

- Selected pressure boosting upstream of individual consumers.
- Zero energy consumption after final pressure is attained.
- No electrical installations are required, i.e. suitable for use in explosion-proof areas





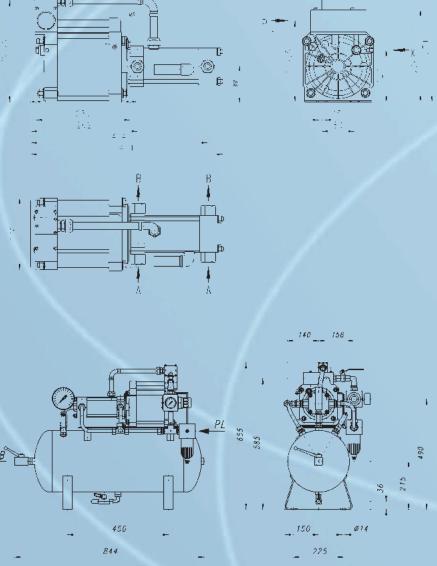


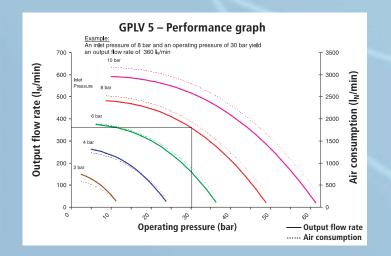
- Pressure pulsation rates lower than compared to units without air receivers.
- Any air consumption peaks are compensated by the air receiver volume reserve.
- Operating pressure can be adjusted by means of a reducing regulator.



Туре	GPLV 5
Pressure ratio (i)	1:5
Air drive pressure (p _L) in bar	1 – 10
Max. discharge pressure (p _B) ¹⁾ i	n bar 60 (40) ²⁾
Max. noise level	79 dB(A)
Max. operating temperature (T) in °C 60
Air drive connection	BSP 3/4"
Inlet connection	BSP 1/2"
Outlet connection	BSP 1/2"
Net weight in kg	20.5
(Station) net weight in kg	49.0

- * at inlet pressure 6 bar and operating pressure 8 bar and 50 % operating time
- 1) Formula 5 x $p_L + p_A$
- 2) Limited by pressure vessel rating



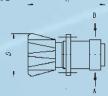


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Accessories



Pressure regulators

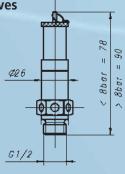


Control range bar	Inlet pressure bar	Medium	Connections	Material	Item N°
0.5-25	40	Air / N ₂	1/4" BSP	Brass	3300.3538
0.5-25	40	Air / N ₂	1/2" BSP	Brass	3300.3635
0.5-50	50	Air / N ₂	1/4" BSP	Brass	3300.5636
0.5-50	50	Air / N ₂	1/2" BSP	Brass	3300.5637

Air pilot switches A 203 P2 vB7 NC A P2 vB7 HP connection 1/4" BSP

Adjustment range bar		NO Item N° (Normally open)	NC Item N° (Normally closed)		
	10-30	3630.1451	3630.1619		
	30-100	3630.1435	3630.1617		

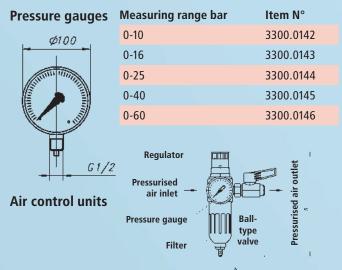
Safety relief valves



Relief pressure bar	Item N° 1/4" BSP	Item N° 1/2" BSP
5.0	3610.2587	3620.2515
6.0	3610.2589	3620.2690
8.0	3610.2592	3620.4214
16.0	3620.3033	3620.2695
40.0	3610.2594	3620.3688

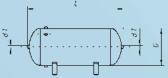
Other relief pressures upon request.

All safety valves are accompanied by a TÜV testing authority certificate.



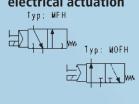
PLV type	Order	Dime	ensior	is –	° -	Item N°
		Н	W	P _{LIN}	$\mathbf{p}_{\scriptscriptstyle LOUT}$	
MPLV	C1	173	94	1/4" BSP	3/8" BSP	3300.0279
SPLV	C1.5	200	112	3/8" BSP	1/2" BSP	3300.0127
GPLV	C2	240	315	1/2" BSP	3/4" BSP	3300.0280

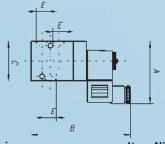
Pressurised-air receivers



Allowed operating pressure bar	Volume capacity litres	L	Diam.	d1	Item N°
40	0.75	210	90	BSP 1/4"	3610.1636
16	3	315	125	BSP 1/2"	3630.0910
16	20	650	206	BSP 1/2"	3200.0129
16	40	750	276	BSP 1/2"	3300.0456
21	40	750	276	BSP 1/2"	3300.0457
40	40	750	276	BSP 1/2"	3300.3571
16	100	900	400	BSP1 1/2"	3300.1963

Pneumatic valves, electrical actuation





Туре	Dime	nsions	in mm			Item N°
	Α	В	C	D	E	
MFH-3-1/8	71.0	113.0	45.0	26.0	BSP 1/8"	3300.0416
MOFH-3-1/8	71.0	113.0	45.0	26.0	BSP 1/8"	3300.2080
MFH-3-1/4	73.5	128.0	50.0	30.4	BSP 1/4"	3610.2304
MOFH-3-1/4	73.5	128.0	50.0	30.4	BSP 1/4"	3610.2411
MFH-3-1/2	88.5	167.0	80.0	52.0	BSP 1/2"	3300.1296
MOFH-3-1/2	88.5	167.0	80.0	52.0	BSP 1/2"	3300.2074
Solenoid valve	id valve coil 24 V DC					3610.2402
Solenoid valve	230 V	AC			3610.2305	

MAXIMATOR®











Your Representative:

High-pressure pumps for oil, water, emulsions

- Minimum maintenance, explosion-proof
- Low energy consumption
- Max. operating pressures 5,500 bar

Test benches for pressure, bursting pressure and pulse tests

- Expansion hoses, tubing
- Valves, fittings, bolted unions
- Pressure gauges, pressure-operated switches
- Pressure transducers, vessels
- Special test benches

Gas boosters up to 1,500 bar

- For pressurising nitrogen, oxygen, noble gases
- Simple handling
- Explosion-proof due to pressurised air drive
- Max. operating pressures 1,500 bar

Gas assist systems

- Compressor stations with pneumatic, electrical or hydraulic drive
- Control modules with 1, 2 or 4 valves
- Compressor-control module combinations
- Pressurised air / N₂ up to max. 500 bar

High pressure valves, fittings and tubing

- Stainless steel components in excellent workmanship
- Temperature range 250 °C to + 650 °C
- Max. operating pressures 10,500 bar



Factory

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