MAXIMATOR®

HIGH PRESSURE TECHNOLOGY

HYDRAULICS

PNEUMATICS

TESTING EQUIPMENT









50 bar (725 psi)

500 bar (7,250 psi)

1,500 bar (21,750 psi)

MAXIMATOR GmbH

Gas Boosters

MAXIMATOR®

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MAXIMATOR®



C.E.O. Henning Willig

MAXIMATOR is one of the worldwide leading manufacturers of air driven liquid pumps, air amplifiers, gas boosters, high pressure valves, fittings and tubing as well as associated products like pressure switches and further components for applications in high pressure technology.

All our systems and units comply with the applicable **UVV [accident prevention]** regulations, the **European Machine**, **Pressure Equipment** and **ATEX Directives** and, upon request, also conform to **NACE** specifications.

Our strict quality guidelines are certified to **ISO 9001**.

To ensure the continuation of future developments we are working in close cooperation with our customers, material and component suppliers, universities as well as with public and private organisations.



Nordhausen factory

We employ more than 220 qualified and highly-motivated staff members in our production centres in Zorge and Nordhausen.

We aim to offer the best customer service from our four technical offices in Germany, our qualified partner companies and representations located all over the world.



Zorge factory



Locations and technical sales offices in Germany

- **Pressure intensification of liquids and gases**



Air driven liquid pumps
Operating pressures to 5,500 bar (79,750 psi)



Air amplifiers
- Operating pressures to 40 bar (580 psi)
- Selective amplification of shop air

Packaged pump systems for oil, water and other liquids for the following applications:
- Tool hydraulics
- Clamping hydraulics
- Water hydraulics



Valves, fittings, tubing for high pressure technology
- Stainless steel design in high manufacturing quality
- Temperature range from –250°C (-418°F) to +650°C (1,202°F) for liquids and gases
- Operating pressures to max. 10,500 bar (152,250 psi)



Test benches and pressure generating systems
- Static pressure, burst pressure and pulse testing
- Leak and functional testing
- Autofrettage

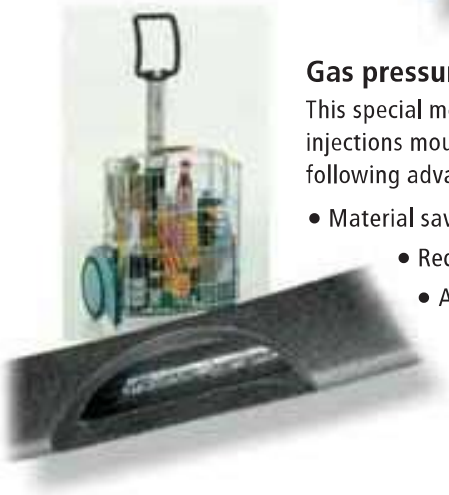


MAXIMATOR®

Compressors, testing and regulating systems

- Centralised supply for gas assist systems
- Testing and regulating systems for shop air and gases
- Complete systems to fill air bag gas cartridges





Gas pressure method

This special method is used in plastics injections moulding and provides the following advantages

- Material savings of up to 50%
- Reduction of locking pressures
- Avoidance of sink marks

We are in a position to test your product for you in the following fields:

...Design

- Constructional design recommendations
- Scientific development

...Serial production

- Production supporting tests
- Capacity extension at short notice

Diesel injection technology



Hose industry



Test benches for static pressure tests, burst tests and pulse tests:

- Hoses of all types
- Valves, fittings, gland assemblies
- Pressure gauges, pressure switches
- Pressure transducers, accumulators
- Coolers and air conditioning systems
- Diesel injection systems





On- and Offshore Solutions

Specifically for the Oil and Gas industry we have developed a range of standard units which are suitable for these applications.

Features

The units are protected against mechanical and environmental damage by using a stainless steel frame which also helps with transportation of the unit. The control and operation elements are ergonomically mounted into a control panel.



Available options

- Stroke counter
- Chart recorder
- Pressure switch
- Safety valve

Please ask for our brochure „On and Offshore Solutions".

Complete solutions for high pressure technology



Design and development, manufacturing, commissioning, servicing, repair, training

In-house testing service on most modern machines:

- Static pressure testing
- Burst tests
- Fatigue tests

Process consult for

- Testing procedure
- Gas assisted process
- Mould design





Service

MAXIMATOR Mobile Service – Testing at your location with our test equipment

The MAXIMATOR Mobile Service is available to perform testing at your site and provides the following service:

- Maintenance of compressor stations and control modules
- Pressure generation with mobile systems
- Inspection and calibration of measuring instruments
- Installation of tube lines and ring circuits

Scope of applications

MAXIMATOR®

The **MAXIMATOR** high pressure boosters are suitable for the oil free compression of gases and air. Industrial gases like Argon, Helium, Hydrogen and Nitrogen can be compressed to operating pressures of 1,500 bar (21,750 psi), Oxygen to 350 bar (5,075 psi).

Air driven boosters are an efficient alternative instead of electrically driven products and can be used in explosion-proof areas .

As a result of the wide range of models it is possible to select the optimum booster for each application.

Single stage, double acting or two stage boosters or a combination of these models can be used to achieve different operating pressures and flow capacities.



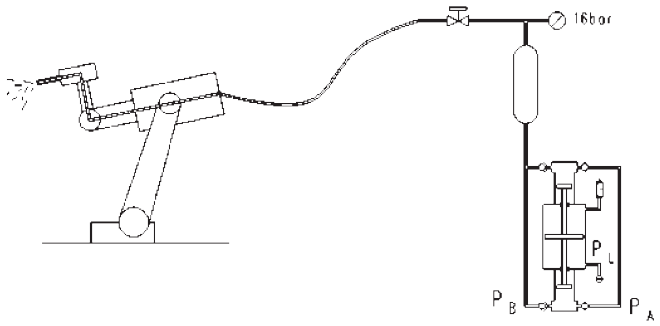




- Pressure test with gas
- Gas transfer
- Gas recovery
- Charging of nitrogen accumulators
- Supply for isolating gas systems
- Gas assisted injection moulding
- CO_2 foaming
- Transfer of oxygen cylinders
- Charging of breathing air bottles
- Leak test

Cleaning of burner systems

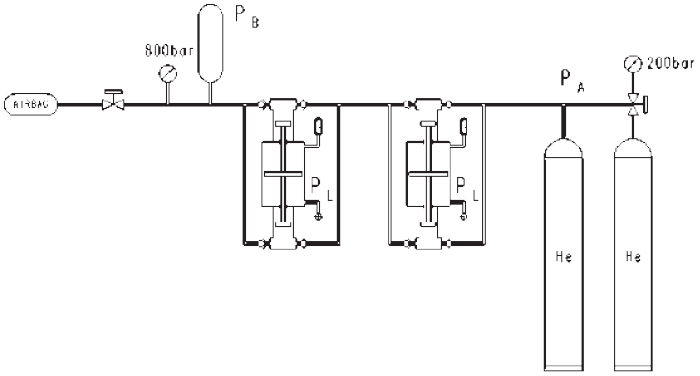




Blowing out contaminations through pressure blasting at 16 bar (232 psi)

Airbag systems

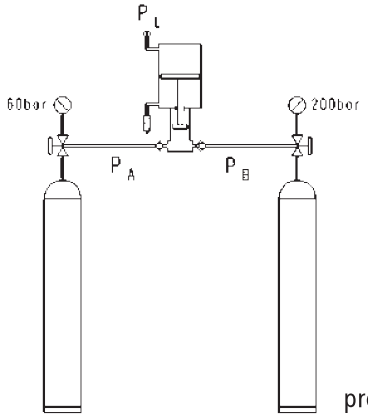




Charging of airbag systems with Helium to 800 bar (11,600 psi)

Cylinder charging

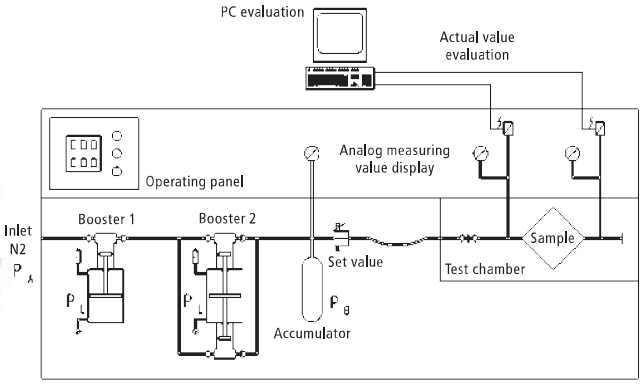




Use remaining pressure for recharging

Pressure test



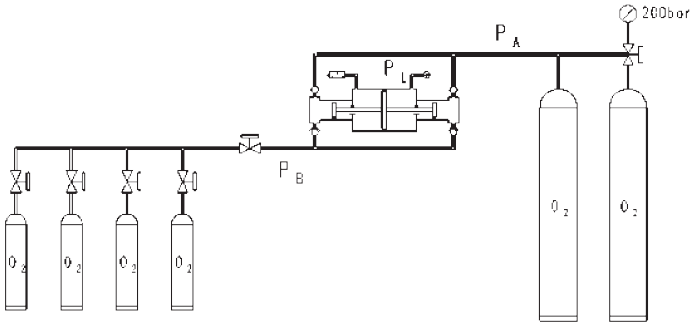


Leak test with high gas pressure

MAXIMATOR®

Life-guard service

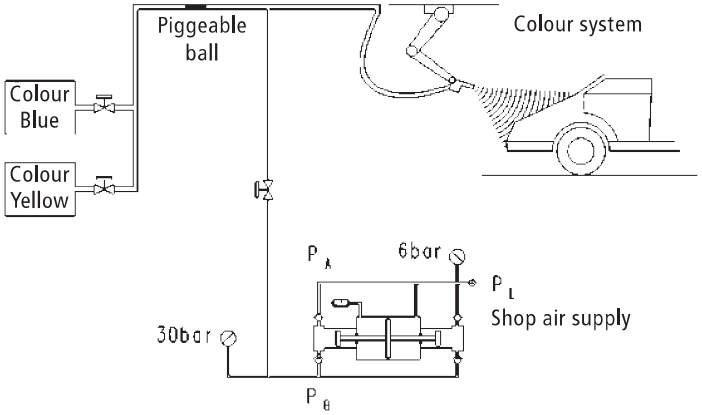




Transfer of oxygen in small cylinders

Colour changing systems

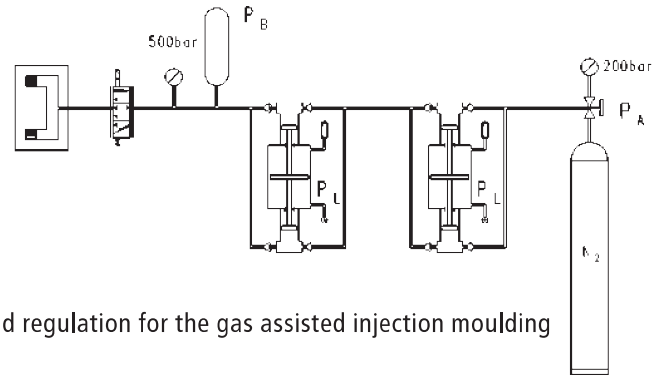




The colour will be returned into the tank through a piggeable ball which is charged with pressure

Plastic industry

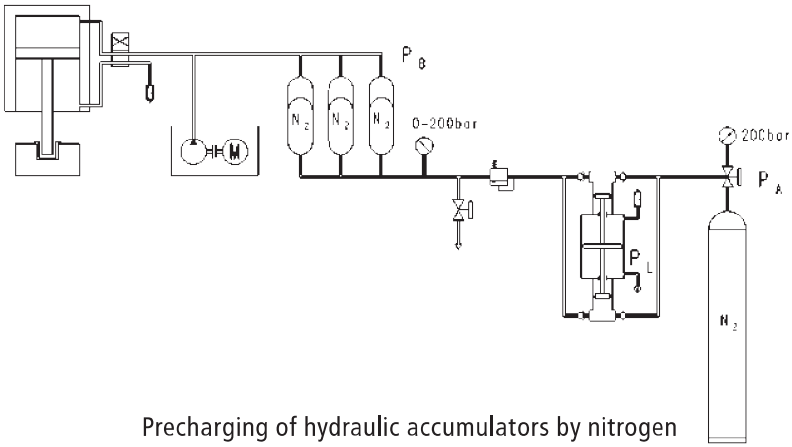




Compression of gas and regulation for the gas assisted injection moulding

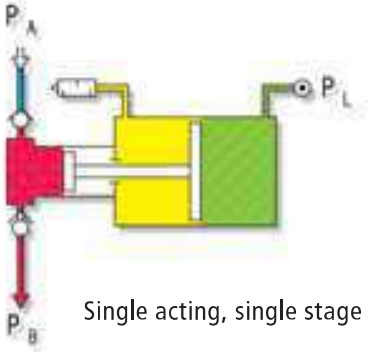
Forming



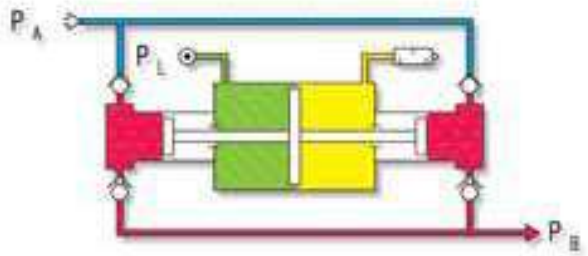


Precharging of hydraulic accumulators by nitrogen

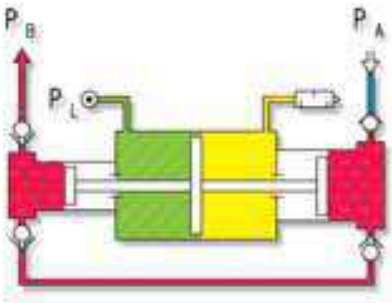
Boosters with one air drive head



Single acting, single stage (e.g. DLE15-1)

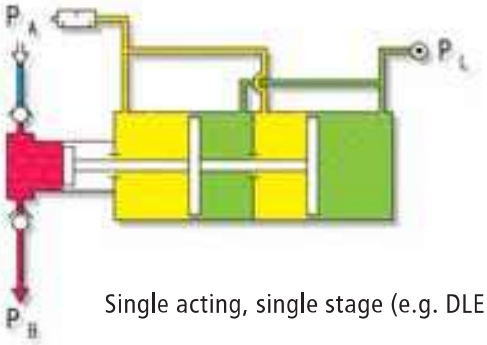


Double acting, single stage (e.g. DLE15)

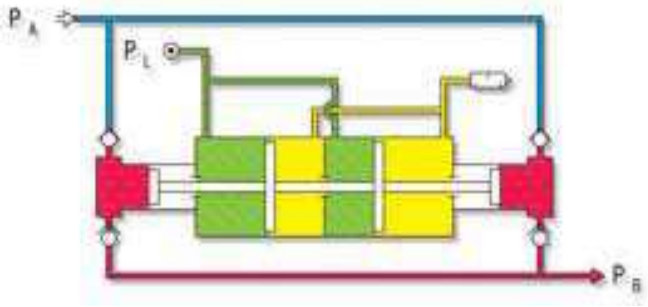


Double acting, two stages (e.g. DLE15-75)

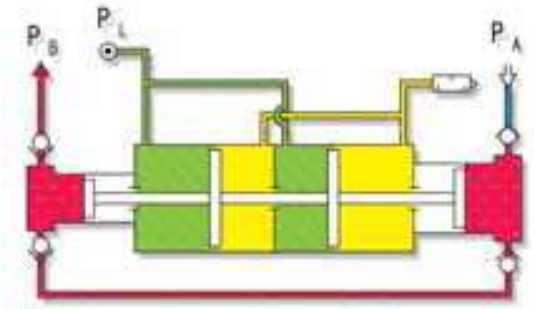
Boosters with two air drive heads



Single acting, single stage (e.g. DLE15-1-2)



Double acting, single stage (e.g. DLE15-2))



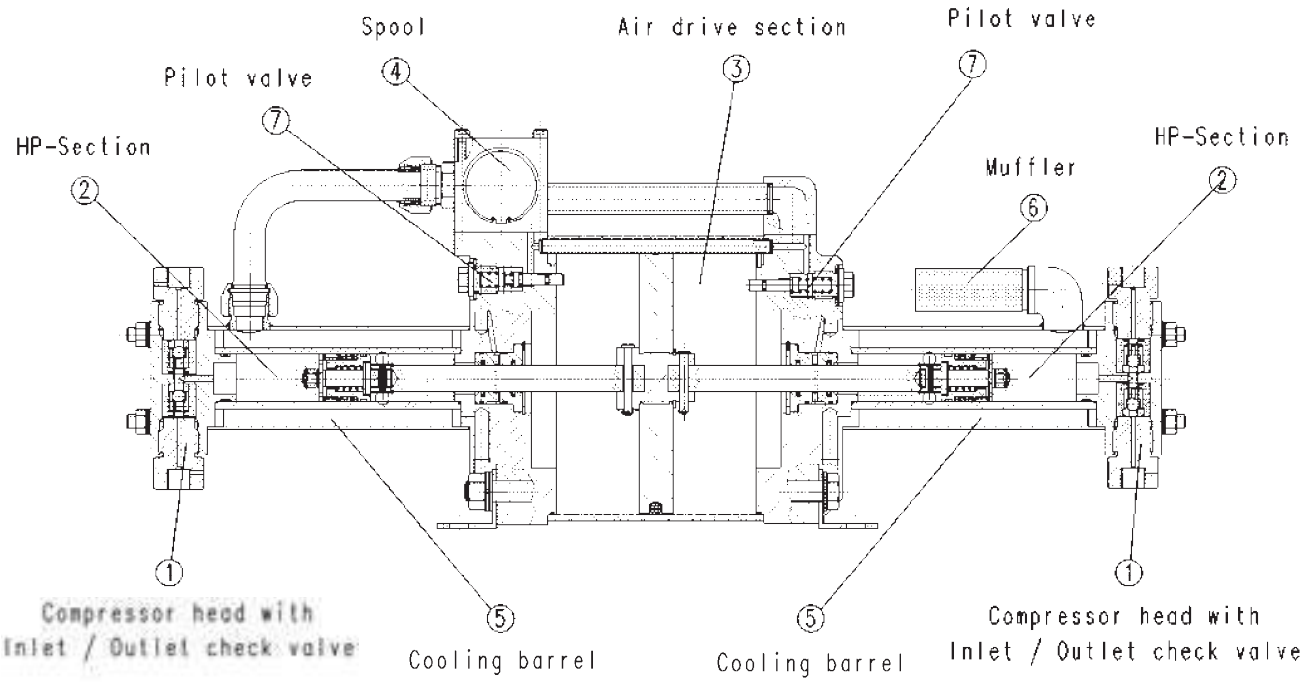
Double acting, two stages (e.g. DLE15-75-2)

P_L Air drive — P_A inlet pressure
P_B outlet pressure — exhaust air

Type coding

DLE XX - XX - X XX - X

- Special design
  C = CO_2 service
  S = Oxygen service
- Connections: Gas inlet / Gas outlet
  G = BSP = Standard
  U = High pressure (9/16-18UNF) = Option
  N = NPT = Option
- Without = 1 Air drive head
  2 = 2 Air drive heads
- Model



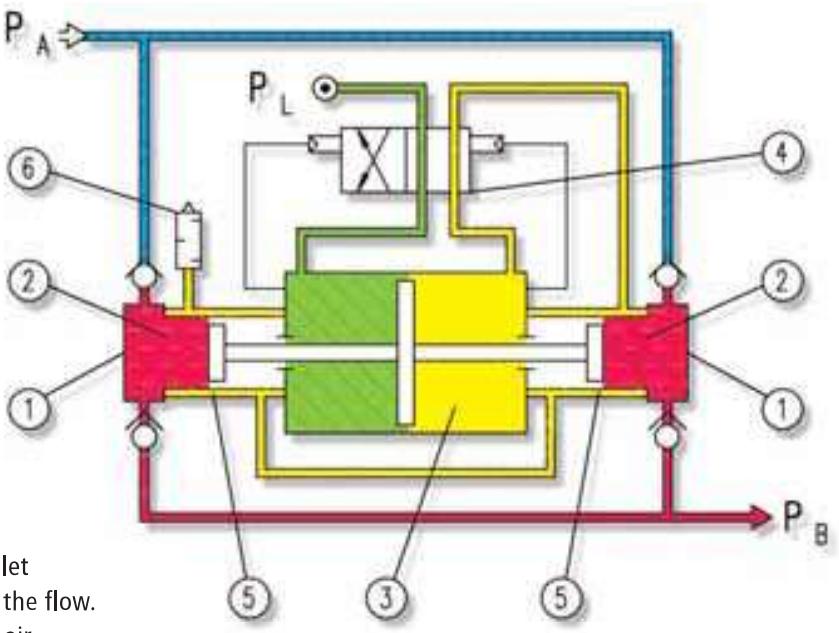
The **MAXIMATOR** boosters' operating principle is similar to a pressure intensifier. A large air piston is charged with low pressure (air piston (3)) and works on a small area with high pressure (hp piston (2)). The continuous operation is achieved by a pilot operated 4/2 way valve (spool (4)). The spool leads the drive air alternately on the upper and bottom surface of the air piston.

The spool is piloted through two 2/2 way valves (pilot valves (7)) which are mechanically actuated through the air piston in its end positions.

The pilot valves charge and discharge the spool chamber.

The hp piston supported by the check valves (inlet check valve and outlet check valve (1)) delivers the flow. The outlet pressure is directly related to the set air drive pressure.

According to the formulas indicated in the table with technical features of the boosters, the static end pressure can be calculated. At this pressure a force balance between drive section and gas section is achieved. The booster stalls when this end pressure is reached, and does not consume any further air.



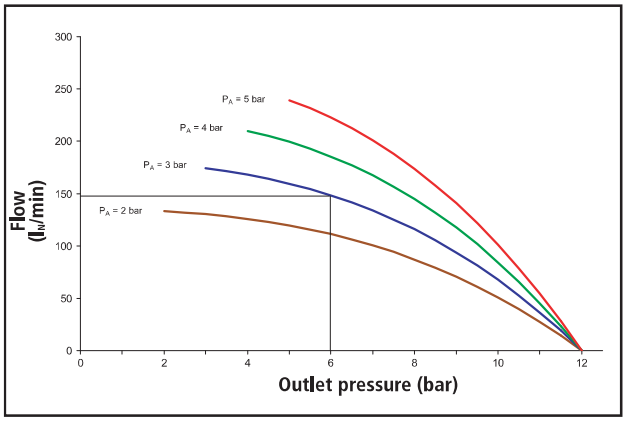
A pressure drop at the high pressure side or a pressure increase at the drive side starts the booster automatically until the force balance is achieved again.

Additionally the **MAXIMATOR** boosters can be switched on and off automatically through **MAXIMATOR** air pilot switches, contact gauges or external control devices.

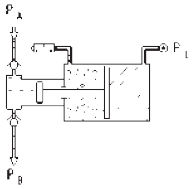
Model: DLE2-1

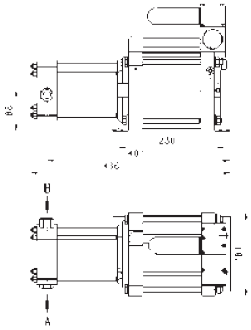
Flow: 150 l_N/min (5.3 SCFM)

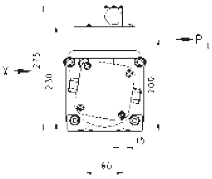
at inlet pressure of 3 bar (43 psi), outlet pressure of 6 bar (87 psi) and air drive pressure of 6 bar (87 psi)











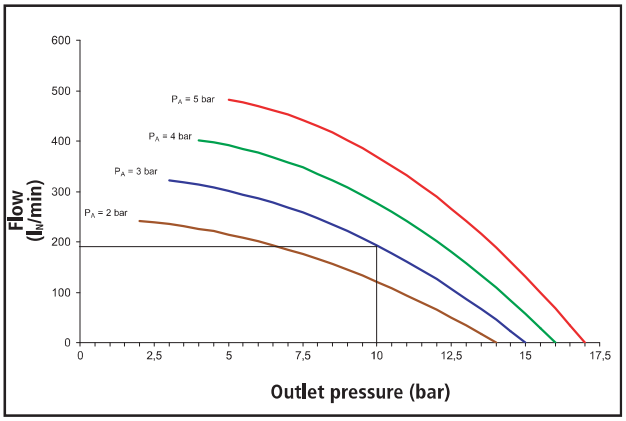
- small dimension
- price attractive solution

Technical features	DLE 2-1
Pressure ratio	1:2
Max. compression ratio	1:10
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	0
Max. gas inlet pressure pA in bar (psi)	20 (290)
Max. permitted outlet pressure pB in bar (psi)	20 (290)
Formula to calculate gas outlet pressure pB	2 X pL
Displacement volume in cm³ (in³)	922 (56.26)
Air drive pA in bar (psi)	1-10
Air consumption in l_N/min (SCFM)	400-1,980 (14.1–69.9)
Connection: Gas inlet	1/2 BSP
Connection: Gas outlet	1/2 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	15
Material of gas section	Stainless steel/aluminium

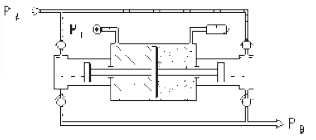
Model: DLE2

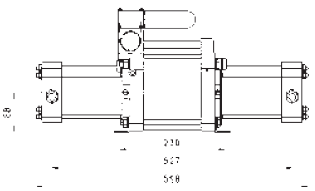
Flow: 190 l_N/min (6.7 SCFM)

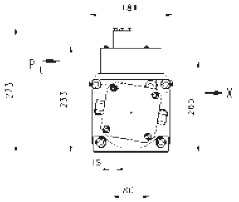
at an inlet pressure of 3 bar (43 psi), outlet pressure of 10 bar (145 psi) and air drive pressure of 6 bar (87 psi)

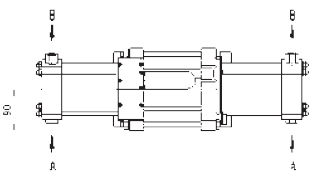












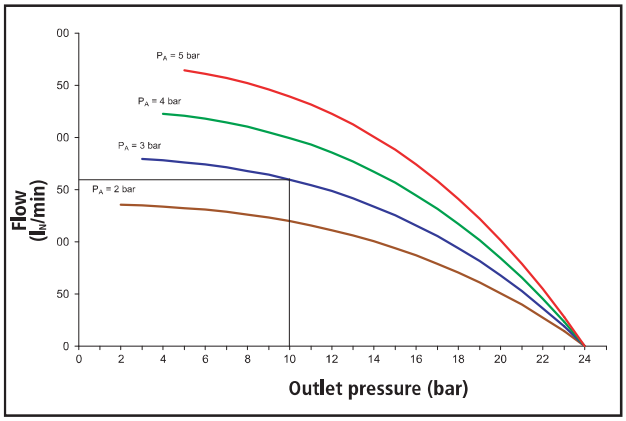
- large displacement volume
- less pulsation

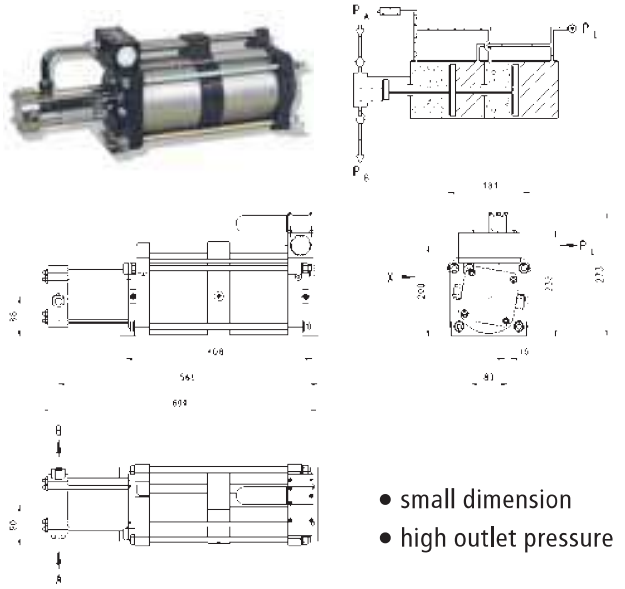
Technical features	DLE 2
Pressure ratio	1:2
Max. compression ratio	1:10
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	0
Max. gas inlet pressure pA in bar (psi)	40 (580)
Max. permitted outlet pressure pB in bar (psi)	40 (580)
Formula to calculate gas outlet pressure pB	2 X pL + pA
Displacement volume in cm³ (in³)	1,844 (112.52)
Air drive pA in bar (psi)	1-10
Air consumption in l_N/min (SCFM)	400-1,980 (14.1–69.9)
Connection: Gas inlet	1/2 BSP
Connection: Gas outlet	1/2 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	20
Material of gas section	Stainless steel/aluminium

Model: DLE 2-1-2

Flow: 160 l_N/min (5.65 SCFM)

at inlet pressure of 3 bar (43psi) outlet pressure of 10 bar (145 psi) and air drive pressure of 6 bar (87 psi)





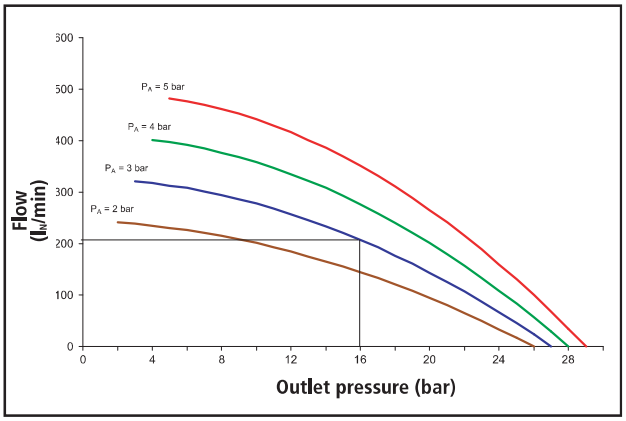
- small dimension
- high outlet pressure

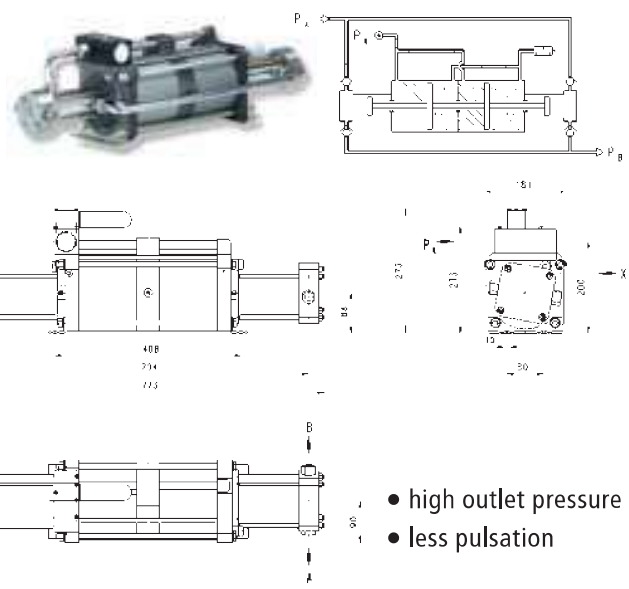
Technical features	DLE 2-1-2
Pressure ratio	1:4
Max. compression ratio	1:10
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	0
Max. gas inlet pressure pA in bar (psi)	40 (580)
Max. permitted outlet pressure pB in bar (psi)	40 (580)
Formula to calculate gas outlet pressure pB	4 X pL
Displacement volume in cm^3 (in^3)	922 (56.26)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	600-2,400 (21.2-84.8)
Connection: Gas inlet	1/2 BSP
Connection: Gas outlet	1/2 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	22
Material of gas section	Stainless steel/aluminium

Model: DLE 2-2

Flow: 190 l_N/min (6.7 SCFM)

at an inlet pressure of 3 bar (43 psi), outlet pressure of 16 bar (232 psi) and air drive pressure of 6 bar (87 psi)



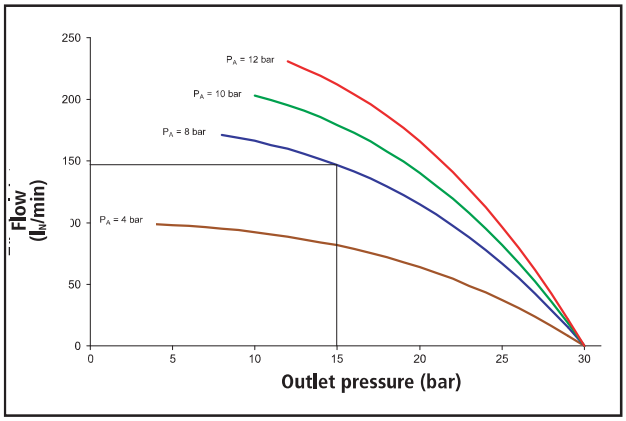


- high outlet pressure
- less pulsation

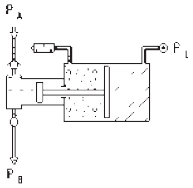
Technical features	DLE 2-2
Pressure ratio	1:4
Max. compression ratio	1:10
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	0
Max. gas inlet pressure pA in bar (psi)	40 (580)
Max. permitted outlet pressure pB in bar (psi)	40 (580)
Formula to calculate gas outlet pressure pB	4 X pL + pA
Displacement volume in cm^3 (in^3)	1,844 (112.53)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	600-2,400 (21.2-84.8)
Connection: Gas inlet	1/2 BSP
Connection: Gas outlet	1/2 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	25
Material of gas section	Stainless steel/aluminium

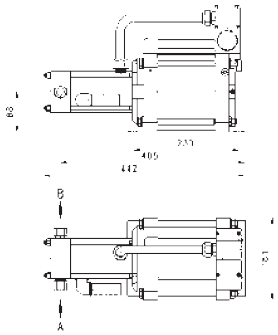
Model: DLE 5-1

Flow: 145 l_N/min (5.12 SCFM)
at inlet pressure of 8 bar (116 psi) outlet pressure of 15 bar (217 psi) and air drive pressure of 6 bar (87 psi)





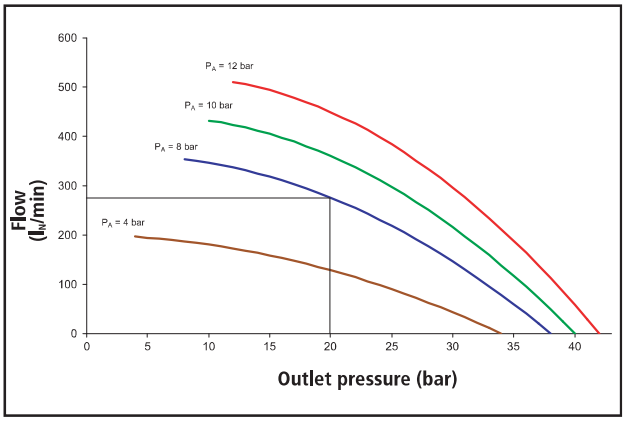




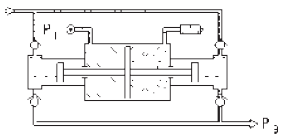
- compact desigh
- price attractive solution

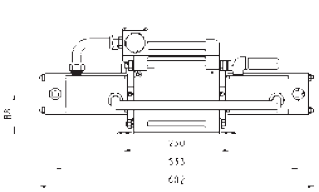
Model: DLE 5

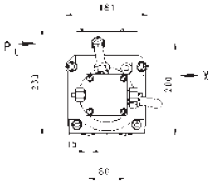
Flow: 280 l_N/min (9.89 SCFM) at an inlet pressure of 8 bar (116 psi), bar and an outlet pressure of 20 bar (290 psi) and air drive pressure of 6 bar (87 psi)

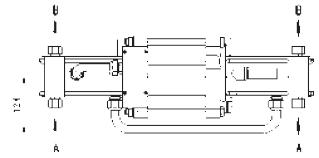












- high flow rate
- less pulsation

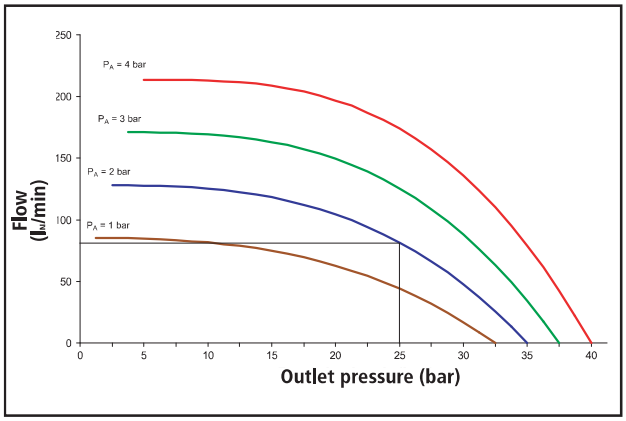
Technical features	DLE 5-1
Pressure ratio	1:5
Max. compression ratio	1:15
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	2 (29)
Max. gas inlet pressure pA in bar (psi)	50 (725)
Max. permitted outlet pressure pB in bar (psi)	50 (725)
Formula to calculate gas outlet pressure pB	5 X pL
Displacement volume in cm^3 (in^3)	373 (22.76)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	400-1,980 (14.13-69.92)
Connection: Gas inlet	1/2 BSP
Connection: Gas outlet	1/2 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	15
Material of gas section	Stainless steel/aluminium

Technical features	DLE 5
Pressure ratio	1:5
Max. compression ratio	1:15
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	2 (29)
Max. gas inlet pressure pA in bar (psi)	100 (1,450)
Max. permitted outlet pressure pB in bar (psi)	100 (1,450)
Formula to calculate gas outlet pressure pB	5 X pL + pA
Displacement volume in cm^3 (in^3)	746 (45.52)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	400-1,980 (14.13-69.92)
Connection: Gas inlet	1/2 BSP
Connection: Gas outlet	1/2 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	20
Material of gas section	Stainless steel/aluminium

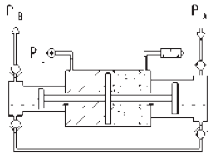
Model: DLE 2-5

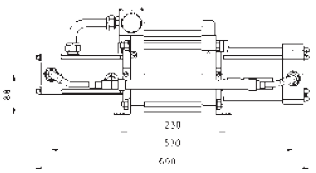
Flow: 80 l_N/min (2.82 SCFM)

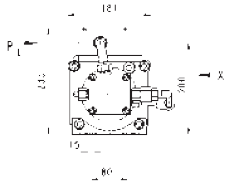
at inlet pressure of 2 bar (29 psi) outlet pressure of 25 bar (362 psi) and air drive pressure of 6 bar (87 psi)

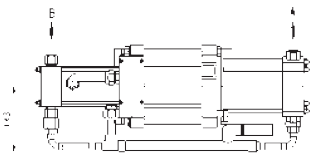












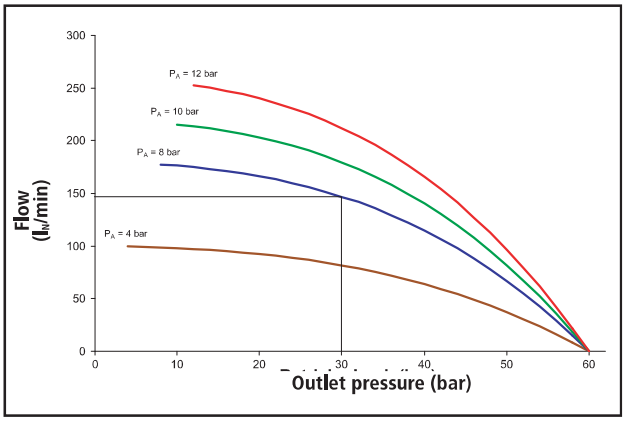
- high flow rate
- low inlet pressure

Technical features	DLE 2-5
Pressure ratio	1:5 / 1:5
Max. compression ratio	1:25
Stage ratio	1:2.5
Min. gas inlet pressure pA in bar (psi)	0
Max. gas inlet pressure pA in bar (psi)	0.8 X pL
Max. permitted outlet pressure pB in bar (psi)	100 (1,450)
Formula to calculate gas outlet pressure pB	5 X pL + 2.5 X pA
Displacement volume in cm^3 (in^3)	922 (0.03)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	400-1,980 (14.13-69.92)
Connection: Gas inlet	1/2 BSP
Connection: Gas outlet	1/2 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	20
Material of gas section	Stainless steel/aluminium

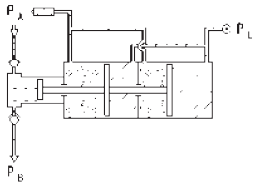
Model: DLE 5-1-2

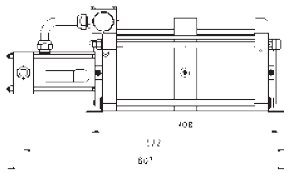
Flow: 145 l_N/min (5.12 SCFM)

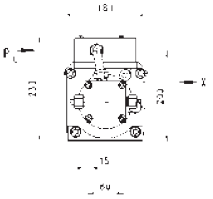
at an inlet pressure of 8 bar (116 psi), outlet pressure of 30 bar (435 psi) and air drive pressure of 6 bar (87 psi)

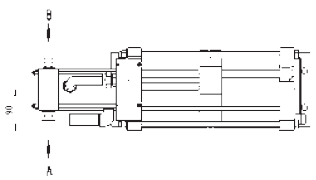












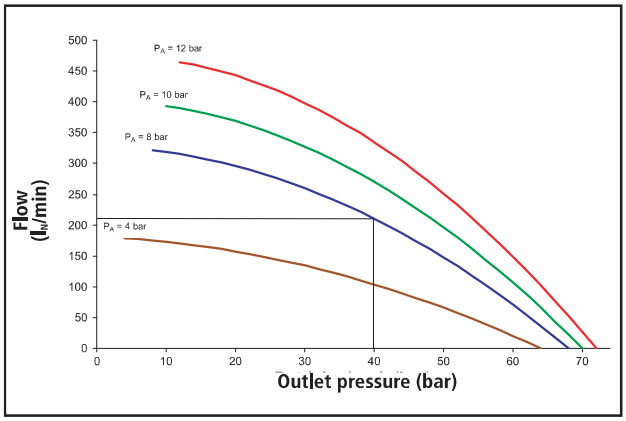
- high inlet pressure
- high outlet pressure

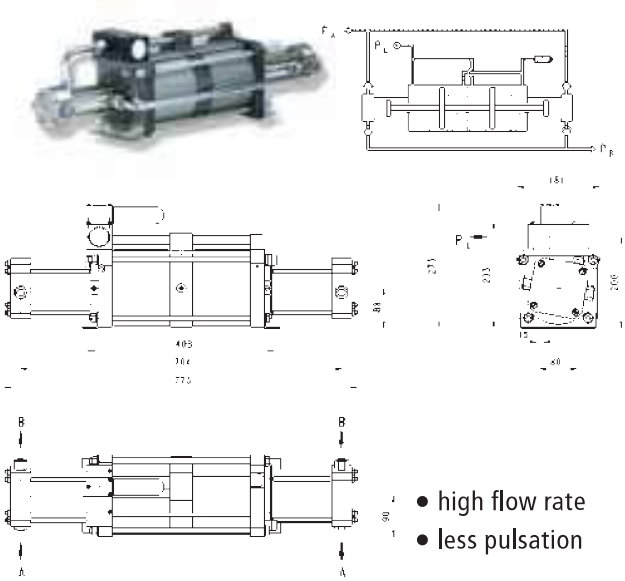
Technical features	DLE 5-1-2
Pressure ratio	1:10
Max. compression ratio	1:15
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	4 (58)
Max. gas inlet pressure pA in bar (psi)	100 (1,450)
Max. permitted outlet pressure pB in bar (psi)	100 (1,450)
Formula to calculate gas outlet pressure pB	10 X pL
Displacement volume in cm^3 (in^3)	373 (0.01)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	400-1,980 (14.13-69.92)
Connection: Gas inlet	1/2 BSP
Connection: Gas outlet	1/2 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	22
Material of gas section	Stainless steel/aluminium

Model: DLE 5-2

Flow: 210 l_N/min (7.41 SCFM)

at inlet pressure of 8 bar (116 psi) outlet pressure of 40 bar (580 psi) and air drive pressure of 6 bar (87 psi)





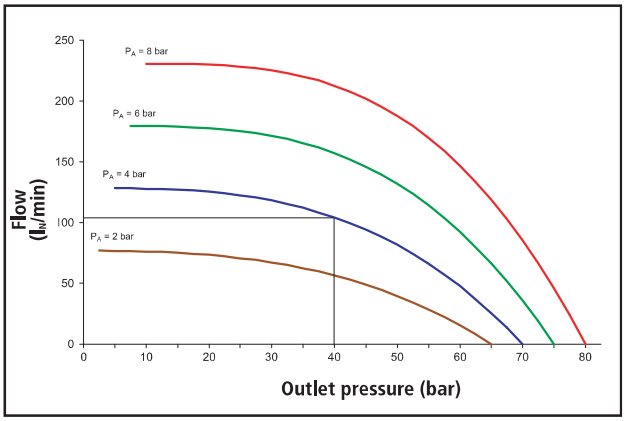
- high flow rate
- less pulsation

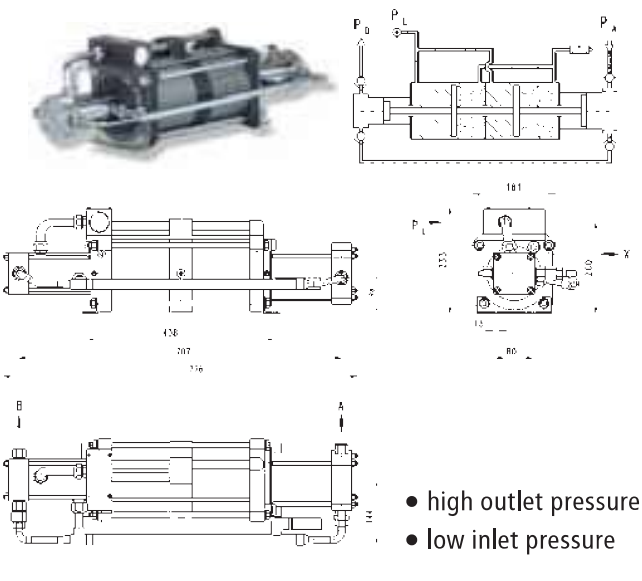
Technical features	DLE 5-2
Pressure ratio	1:10
Max. compression ratio	1:15
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	4 (58)
Max. gas inlet pressure pA in bar (psi)	100 (1,450)
Max. permitted outlet pressure pB in bar (psi)	100 (1,450)
Formula to calculate gas outlet pressure pB	10 X pL + pA
Displacement volume in cm^3 (in^3)	746 (45.52)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	600-2,400 (21.2-84.8)
Connection: Gas inlet	1/2 BSP
Connection: Gas outlet	1/2 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	25
Material of gas section	Stainless steel/aluminium

Model: DLE 2-5-2

Flow: 104 l_N/min (3.67 SCFM)

at an inlet pressure of 4 bar (58 psi), outlet pressure of 40 bar (580 psi) and air drive pressure of 6 bar (87 psi)





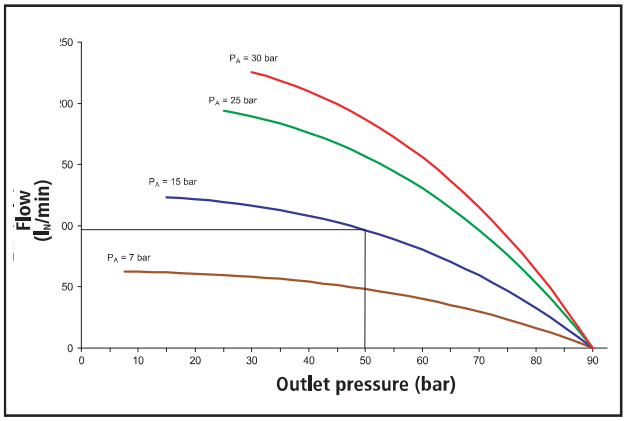
- high outlet pressure
- low inlet pressure

Technical features	DLE 2-5-2
Pressure ratio	1:4 / 1:10
Max. compression ratio	1:25
Stage ratio	1:2.5
Min. gas inlet pressure pA in bar (psi)	0
Max. gas inlet pressure pA in bar (psi)	1.6 X pL
Max. permitted outlet pressure pB in bar (psi)	100 (1,450)
Formula to calculate gas outlet pressure pB	10 X pL + 2.5 pA
Displacement volume in cm^3 (in^3)	922 (56.26)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	600-2,400 (21.2-84.8)
Connection: Gas inlet	1/2 BSP
Connection: Gas outlet	1/2 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	25
Material of gas section	Stainless steel/aluminium

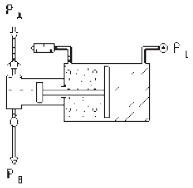
Model: DLE 15-1

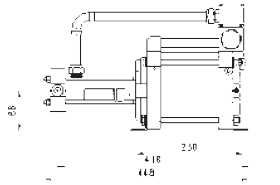
Flow: 95 l_N/min (3.35 SCFM)

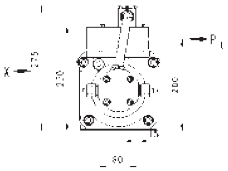
at inlet pressure of 15 bar (217 psi) and outlet pressure of 50 bar (725 psi), air drive pressure of 6 bar (87 psi)

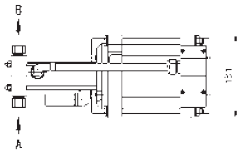












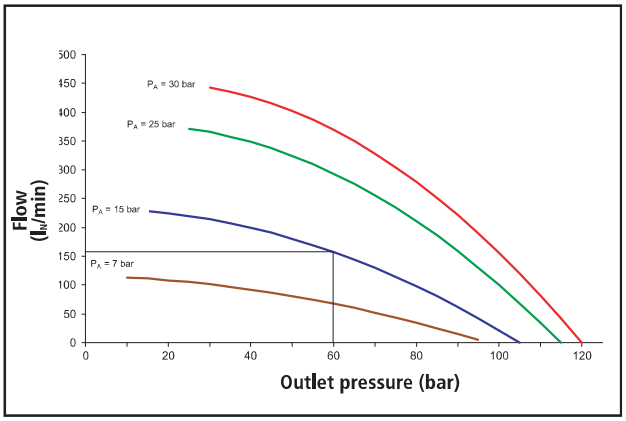
- compact design
- price attractive solution

Technical features	DLE 15-1
Pressure ratio	1:15
Max. compression ratio	1:20
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	7 (101)
Max. gas inlet pressure pA in bar (psi)	150 (2,175)
Max. permitted outlet pressure pB in bar (psi)	150 (2,175)
Formula to calculate gas outlet pressure pB	15 X pL
Displacement volume in cm³ (in³)	122 (7.44)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	400-1,980 (14.13-69.92)
Connection: Gas inlet	1/4 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	13
Material of gas section	Stainless steel

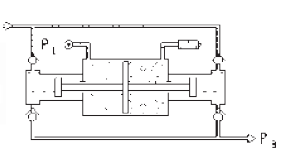
Model: DLE 15

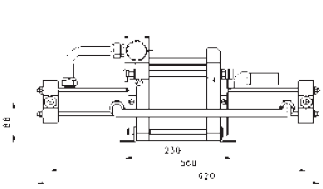
Flow: 160 l_N/min (5.65 SCFM)

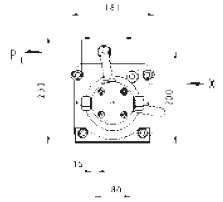
at an inlet pressure of 15 bar (217 psi) and outlet pressure of 60 bar (870 psi), air drive pressure of 6 bar (87 psi)

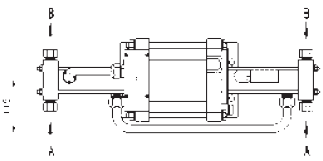












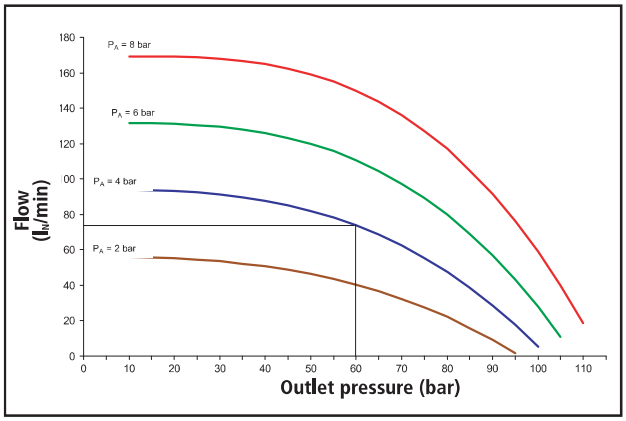
- large displacement volume
- less pulsation

Technical features	DLE 15
Pressure ratio	1:15
Max. compression ratio	1:20
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	7 (101)
Max. gas inlet pressure pA in bar (psi)	300 (4,350)
Max. permitted outlet pressure pB in bar (psi)	300 (4,350)
Formula to calculate gas outlet pressure pB	15 X pL + pA
Displacement volume in cm³ (in³)	244 (14.88)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	400-1,980 (14.13-69.92)
Connection: Gas inlet	1/4 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	18
Material of gas section	Stainless steel

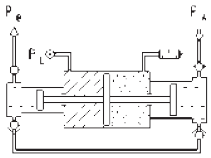
Model: DLE 5-15

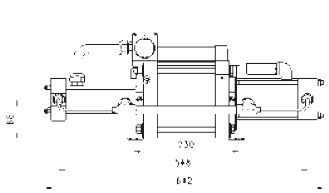
Flow: 75 l_N/min (2.64 SCFM)

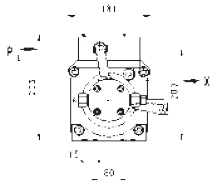
at inlet pressure of 4 bar (58 psi) and outlet pressure of 60 bar (870 psi), air drive pressure of 6 bar (87 psi)

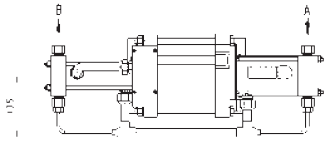












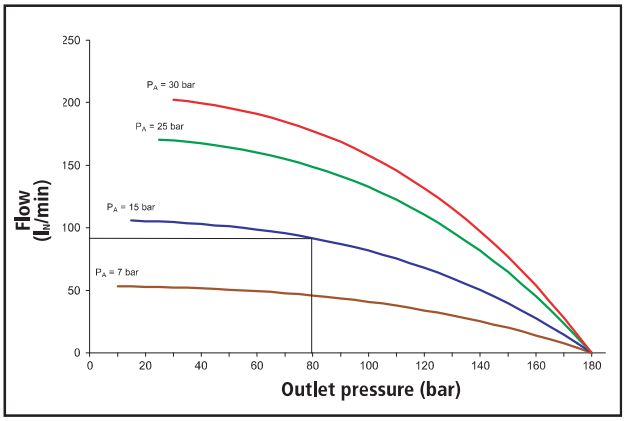
- high flow rate
- low inlet pressure

Technical features	DLE 5-15
Pressure ratio	1:5 / 1:15
Max. compression ratio	1:45
Stage ratio	1:3
Min. gas inlet pressure pA in bar (psi)	2 (29)
Max. gas inlet pressure pA in bar (psi)	1,6 X pL
Max. permitted outlet pressure pB in bar (psi)	300 (4,350)
Formula to calculate gas outlet pressure pB	15 X pL + 3 X pA
Displacement volume in cm^3 (in^3)	373 (22.76)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	400-1,980 (14.13-69.92)
Connection: Gas inlet	1/2 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	19
Material of gas section	Stainless steel/aluminium

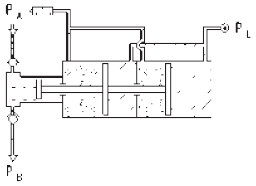
Model: DLE 15-1-2

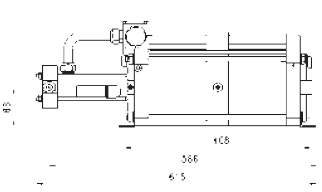
Flow: 90 l_N/min (3.17 SCFM)

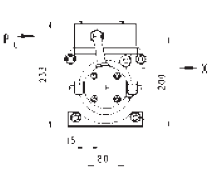
at an inlet pressure of 15 bar (217 psi) and outlet pressure of 80 bar (1,160 psi), air drive pressure of 6 bar (87 psi)

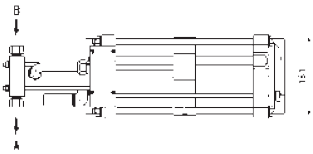












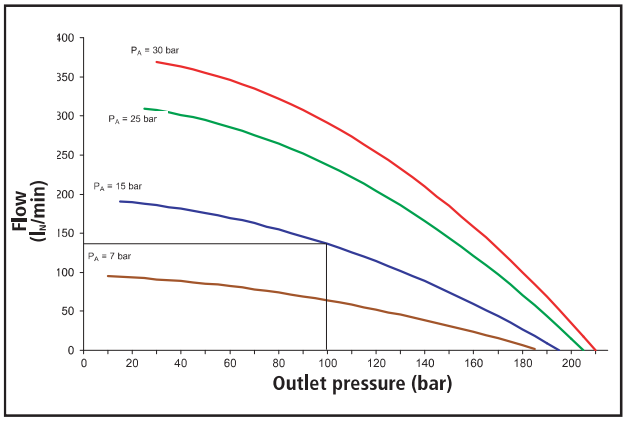
- large pressure ratio
- compact design

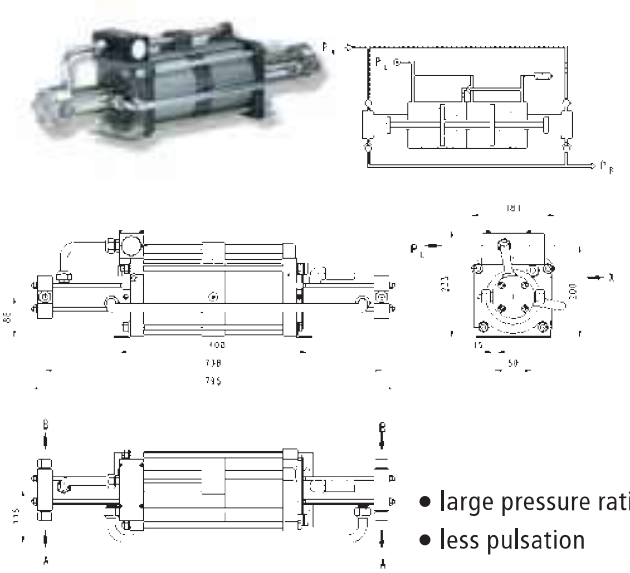
Technical features	DLE 15-1-2
Pressure ratio	1:30
Max. compression ratio	1:20
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	10 (145)
Max. gas inlet pressure pA in bar (psi)	300 (4,350)
Max. permitted outlet pressure pB in bar (psi)	300 (4,350)
Formula to calculate gas outlet pressure pB	30 X pL
Displacement volume in cm^3 (in^3)	122 (7.44)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	400-1,980 (14.13-69.92)
Connection: Gas inlet	1/4 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	20
Material of gas section	Stainless steel

Model: DLE 15-2

Flow: 130 l_N/min (4.59 SCFM)

at inlet pressure of 15 bar (217 psi), outlet pressure of 100 bar (1,450 psi) and air drive pressure of 6 bar (87 psi)





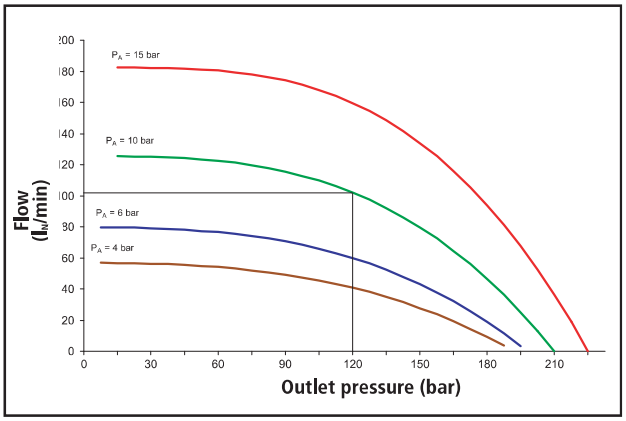
- large pressure ratio
- less pulsation

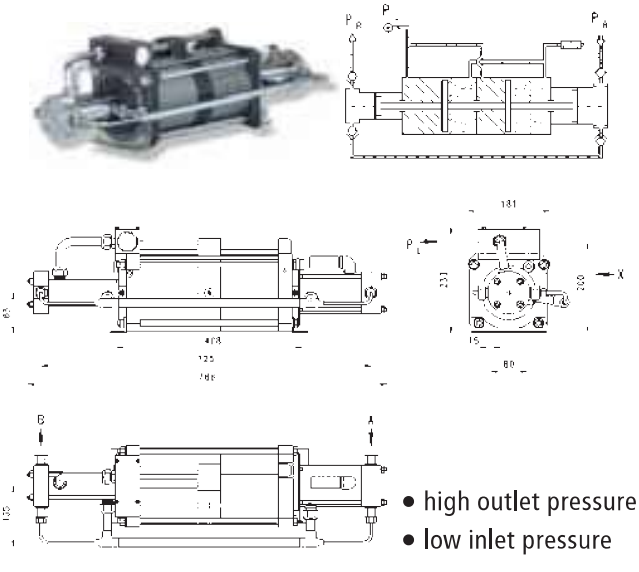
Technical features	DLE 15-2
Pressure ratio	1:30
Max. compression ratio	1:20
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	10 (145)
Max. gas inlet pressure pA in bar (psi)	300 (4,350)
Max. permitted outlet pressure pB in bar (psi)	300 (4,350)
Formula to calculate gas outlet pressure pB	30 X pL + pA
Displacement volume in cm^3 (in^3)	244 (14.88)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	600-2,400 (21.2-84.8)
Connection: Gas inlet	1/4 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	23
Material of gas section	Stainless steel

Model: DLE 5-15-2

Flow: 102 l_N/min (3.6 SCFM)

at an inlet pressure of 10 bar (145 psi), outlet pressure of 120 bar (1,740 psi) and air drive pressure of 6 bar (87 psi)





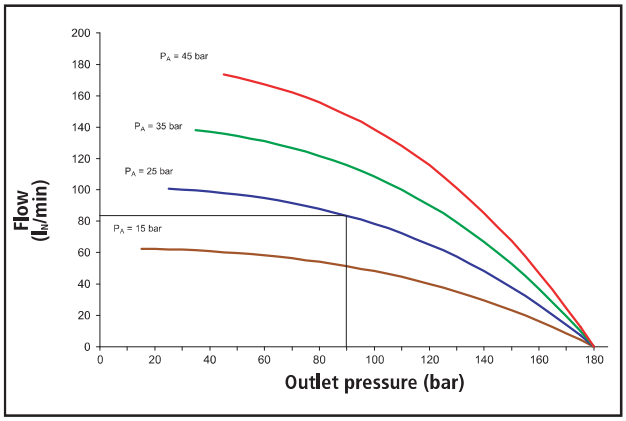
- high outlet pressure
- low inlet pressure

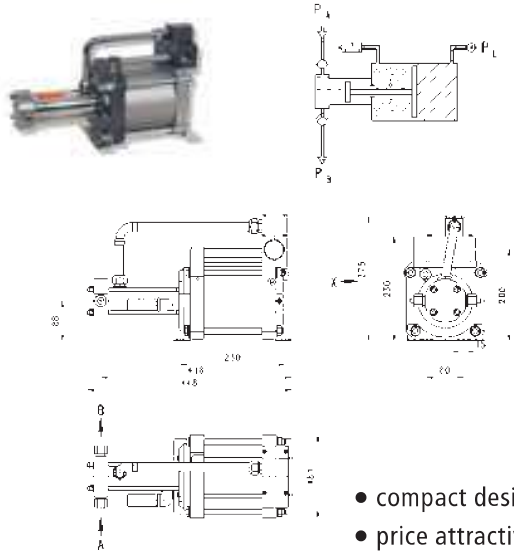
Technische Daten	DLE 5-15-2
Pressure ratio	1:10 / 1:30
Max. compression ratio	1:45
Stage ratio	1:3
Min. gas inlet pressure pA in bar (psi)	2 (29)
Max. gas inlet pressure pA in bar (psi)	3,2 X pL
Max. permitted outlet pressure pB in bar (psi)	300 (4,350)
Formula to calculate gas outlet pressure pB	30 X pL + 3 X pA
Displacement volume in cm^3 (in^3)	373 (22.76)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	600-2,400 (21.2-84.8)
Connection: Gas inlet	1/2 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	24
Material of gas section	Stainless steel/aluminium

Model: DLE 30-1

Flow: 82 l_N/min (2.89 SCFM)

at inlet pressure of 25 bar (362 psi), outlet pressure of 82 bar (1,189 psi) and air drive pressure of 6 bar (87 psi)





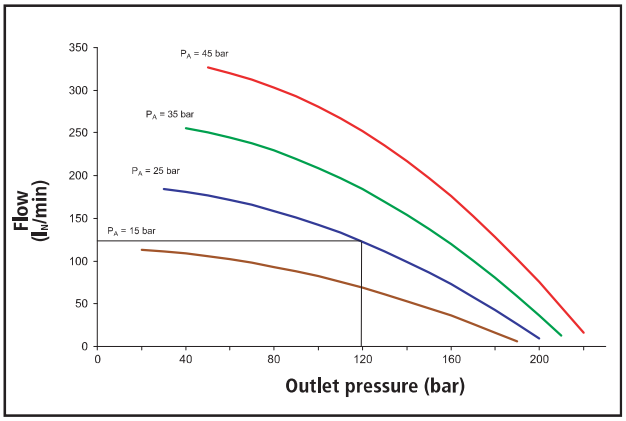
- compact design
- price attractive solution

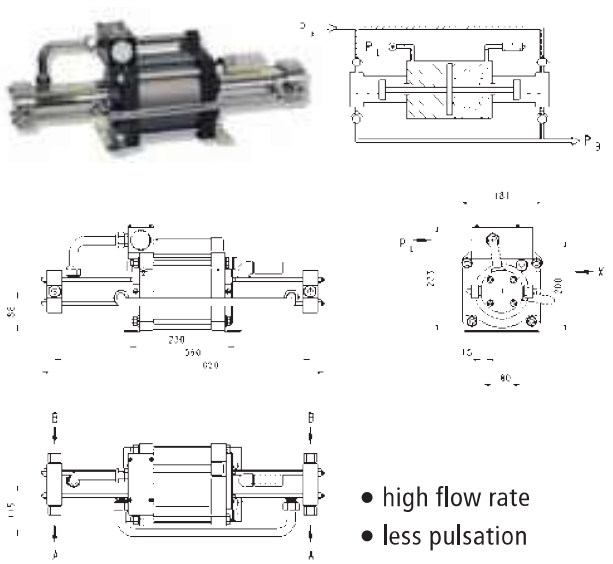
Technical features	DLE 30-1
Pressure ratio	1:30
Max. compression ratio	1:20
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	15 (217)
Max. gas inlet pressure pA in bar (psi)	300 (4,350)
Max. permitted outlet pressure pB in bar (psi)	300 (4,350)
Formula to calculate gas outlet pressure pB	30 X pL
Displacement volume in cm^3 (in^3)	60 (3.66)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	400-1,980 (14.13-69.92)
Connection: Gas inlet	1/4 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	13
Material of gas section	Stainless steel

Model: DLE 30

Flow: 125 l_N/min (4.41 SCFM)

at an inlet pressure of 25 bar (362 psi), outlet pressure of 120 bar (1,740 psi) and air drive pressure of 6 bar (87 psi)





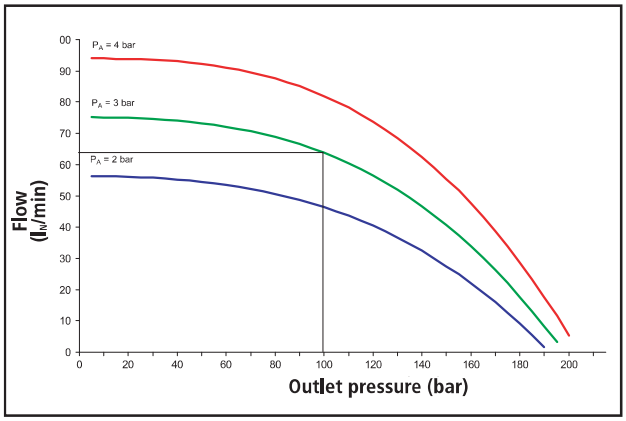
- high flow rate
- less pulsation

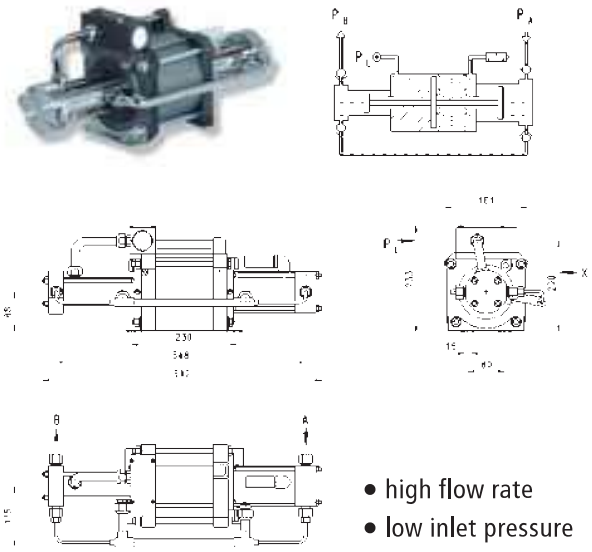
Technical features	DLE 30
Pressure ratio	1:30
Max. compression ratio	1:20
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	15 (217)
Max. gas inlet pressure pA in bar (psi)	600 (8,700)
Max. permitted outlet pressure pB in bar (psi)	600 (8,700)
Formula to calculate gas outlet pressure pB	30 X pL + pA
Displacement volume in cm^3 (in^3)	110
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	400-1,980 (14.13-69.92)
Connection: Gas inlet	1/4 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	18
Material of gas section	Stainless steel

Model: DLE 5-30

Flow: 63 l_N/min (2.22 SCFM)

at inlet pressure of 3 bar (43 psi), outlet pressure of 100 bar (1,450 psi) and air drive pressure of 6 bar (87 psi)





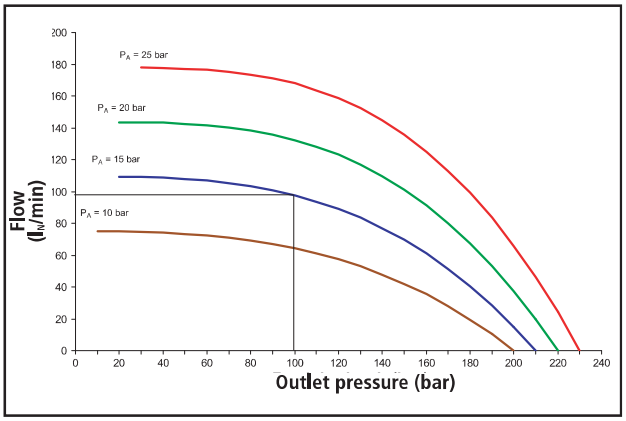
- high flow rate
- low inlet pressure

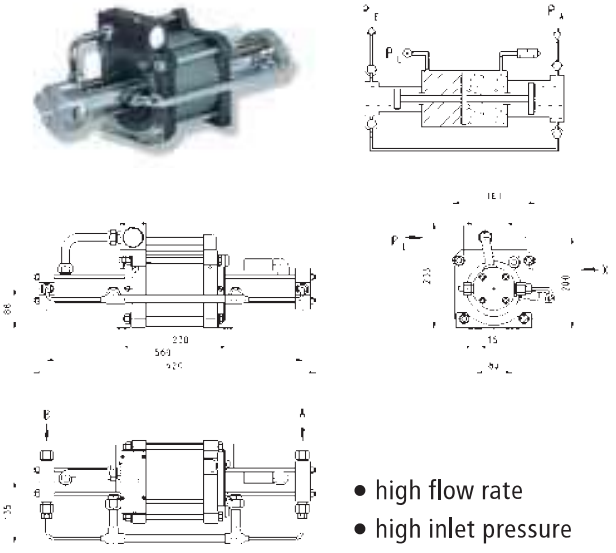
Technical features	DLE 5-30
Pressure ratio	1:5 / 1:30
Max. compression ratio	1:90
Stage ratio	1:6
Min. gas inlet pressure pA in bar (psi)	2 (29)
Max. gas inlet pressure pA in bar (psi)	0,5 X pL
Max. permitted outlet pressure pB in bar (psi)	600 (8,700)
Formula to calculate gas outlet pressure pB	30 X pL + 6 X pA
Displacement volume in cm^3 (in^3)	373 (22.76)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	400-1,980 (14.13-69.92)
Connection: Gas inlet	1/2 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	19
Material of gas section	Stainless steel/aluminium

Model: DLE 15-30

Flow: 98 l_N/min (3.46 SCFM)

at an inlet pressure of 15 bar (217 psi), outlet pressure of 100 bar (1,450 psi) and air drive pressure of 6 bar (87 psi)





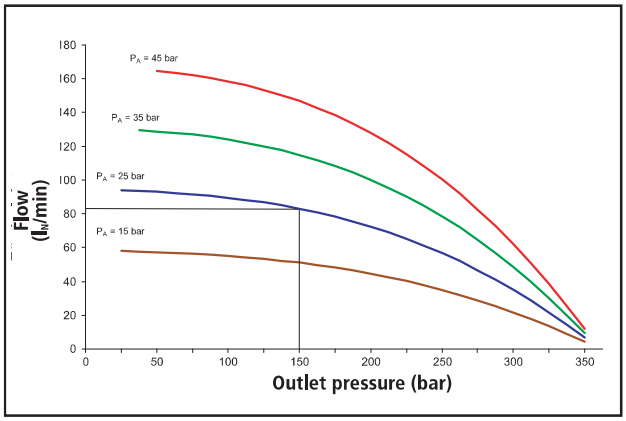
- high flow rate
- high inlet pressure

Technical features	DLE 15-30
Pressure ratio	1:5 / 1:30
Max. compression ratio	1:40
Stage ratio	1:2
Min. gas inlet pressure pA in bar (psi)	7 (101)
Max. gas inlet pressure pA in bar (psi)	7,5 X pL
Max. permitted outlet pressure pB in bar (psi)	600 (8,700)
Formula to calculate gas outlet pressure pB	30 X pL + 2 X pA
Displacement volume in cm^3 (in^3)	122 (7.44)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	400-1,980 (14.13-69.92)
Connection: Gas inlet	1/4 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	19
Material of gas section	Stainless steel

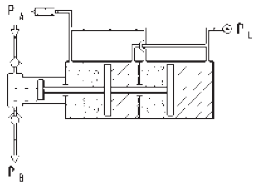
Model: DLE 30-1-2

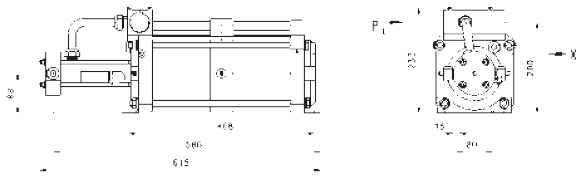
Flow: 82 l_N/min (2.89 SCFM)

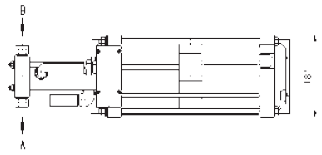
at inlet pressure of 25 bar (362 psi) and outlet pressure of 150 bar (2,175 psi), air drive pressure of 6 bar (87 psi)











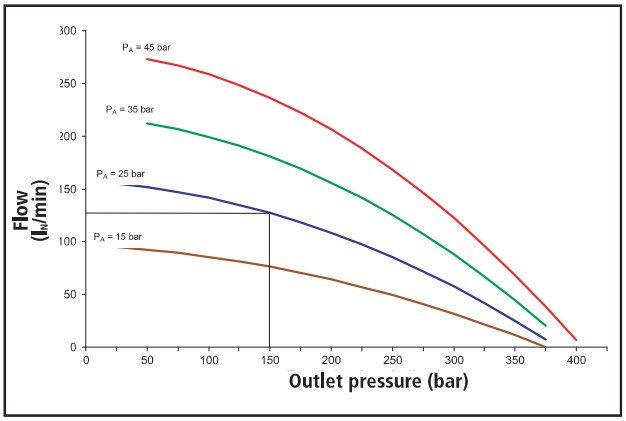
- high compression
- compact design

Technical features	DLE 30-1-2
Pressure ratio	1:60
Max. compression ratio	1:20
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	20 (290)
Max. gas inlet pressure pA in bar (psi)	600 (8,700)
Max. permitted outlet pressure pB in bar (psi)	600 (8,700)
Formula to calculate gas outlet pressure pB	60 X pL
Displacement volume in cm^3 (in^3)	60 (3.66)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	600-2,400 (21.2-84.8)
Connection: Gas inlet	1/4 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	20
Material of gas section	Stainless steel

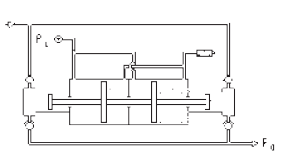
Model: DLE 30-2

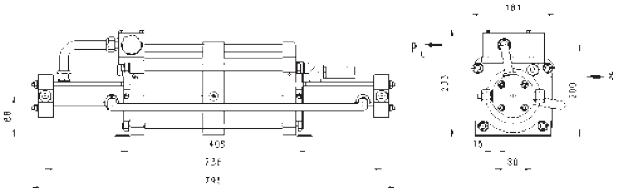
Flow: 125 l_N/min (4.41 SCFM)

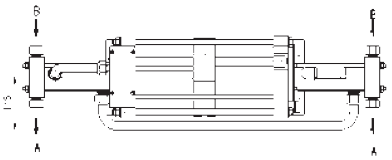
at an inlet pressure of 25 bar (362 psi) and outlet pressure of 150 bar (2,175 psi), air drive pressure of 6 bar (87 psi)











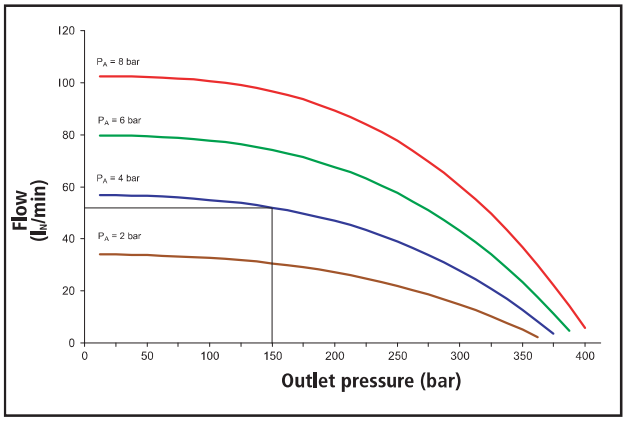
- high compression
- high flow rate

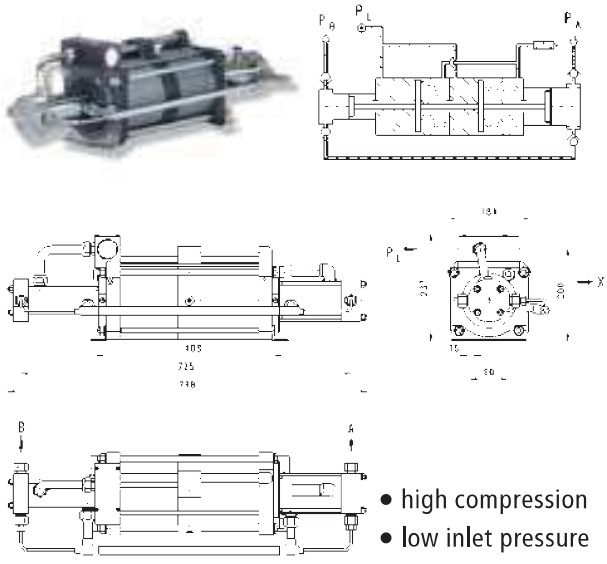
Technical features	DLE 30-2
Pressure ratio	1:60
Max. compression ratio	1:20
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	20 (290)
Max. gas inlet pressure pA in bar (psi)	600 (8,700)
Max. permitted outlet pressure pB in bar (psi)	600 (8,700)
Formula to calculate gas outlet pressure pB	60 X pL + pA
Displacement volume in cm^3 (in^3)	120 (7.32)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	600-2,400 (21.2-84.8)
Connection: Gas inlet	1/4 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	23
Material of gas section	Stainless steel

Model: DLE 5-30-2

Flow: 52 l_N/min (1.83 SCFM)

at inlet pressure of 4 bar (58 psi) and outlet pressure of 150 bar (2,175 psi), air drive pressure of 6 bar (87 psi)





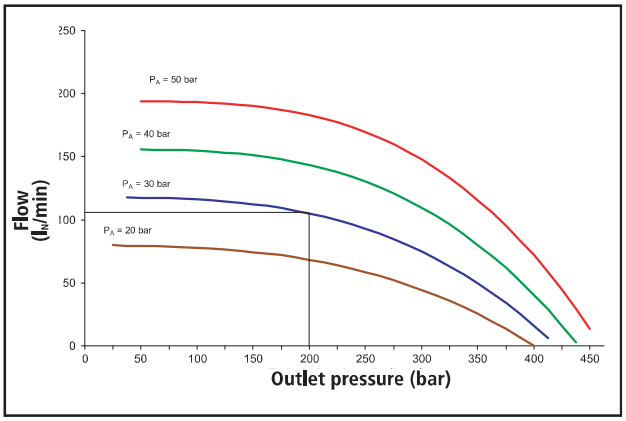
- high compression
- low inlet pressure

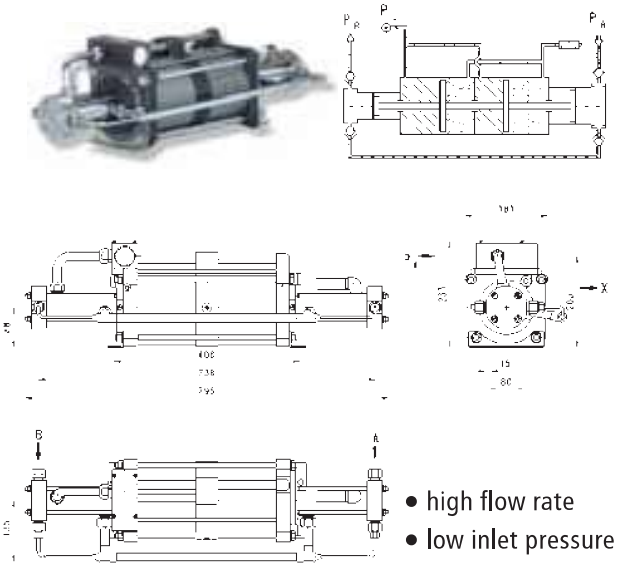
Technical features	DLE 5-30-2
Pressure ratio	1:10 / 1:60
Max. compression ratio	1:90
Stage ratio	1:6
Min. gas inlet pressure pA in bar (psi)	2 (29)
Max. gas inlet pressure pA in bar (psi)	1 X pL
Max. permitted outlet pressure pB in bar (psi)	600 (8,700)
Formula to calculate gas outlet pressure pB	60 X pL + 6 X pA
Displacement volume in cm^3 (in^3)	373 (22.76)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	600-2,400 (21.2-84.8)
Connection: Gas inlet	1/2 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	24
Material of gas section	Stainless steel/aluminium

Model: DLE 15-30-2

Flow: 105 l_N/min (3.7 SCFM)

at an inlet pressure of 30 bar (435 psi) and outlet pressure of 200 bar (2,900 psi), air drive pressure of 6 bar (87 psi)



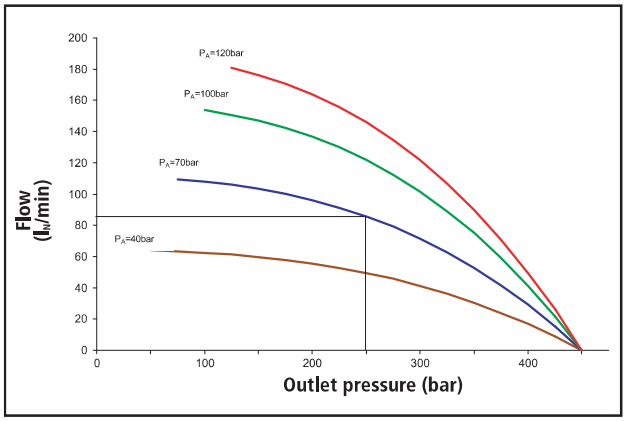


- high flow rate
- low inlet pressure

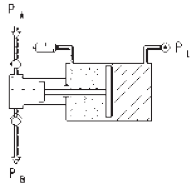
Technical features	DLE 15-30-2
Pressure ratio	1:30 / 1:60
Max. compression ratio	1:40
Stage ratio	1:2
Min. gas inlet pressure pA in bar (psi)	7 (101)
Max. gas inlet pressure pA in bar (psi)	15 X pL
Max. permitted outlet pressure pB in bar (psi)	600 (8,700)
Formula to calculate gas outlet pressure pB	60 X pL + 2 X pA
Displacement volume in cm^3 (in^3)	122 (7.44)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	600-2,400 (21.2-84.8)
Connection: Gas inlet	1/4 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	24
Material of gas section	Stainless steel

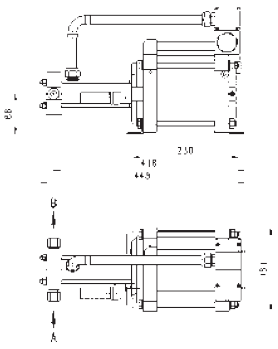
Model: DLE 75-1

Flow: 85 l_N/min (2.29 SCFM)
at inlet pressure of 70 bar (1,015 psi) and outlet pressure of 240 bar (3,480 psi), air drive pressure of 6 bar (87 psi)







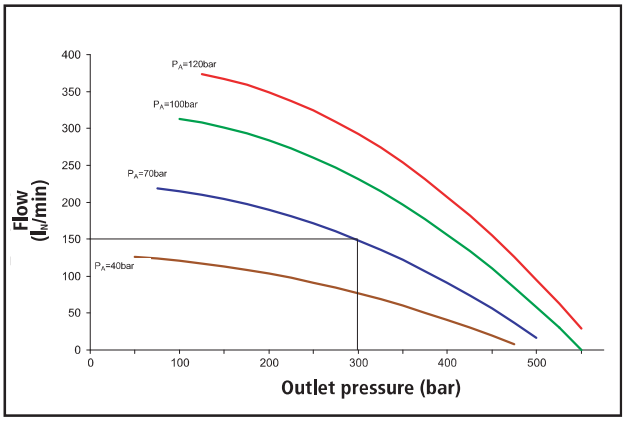


- compact design
- price attractive solution

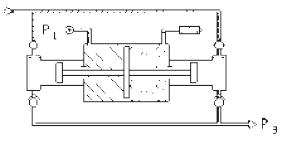
Technical features	DLE 75-1
Pressure ratio	1:75
Max. compression ratio	1:20
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	35 (507)
Max. gas inlet pressure pA in bar (psi)	750 (10,875)
Max. permitted outlet pressure pB in bar (psi)	750 (10,875)
Formula to calculate gas outlet pressure pB	75 X pL
Displacement volume in cm³ (in³)	25 (1.52)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	400-1,980 (14.13-69.92)
Connection: Gas inlet	1/4 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	13
Material of gas section	Stainless steel

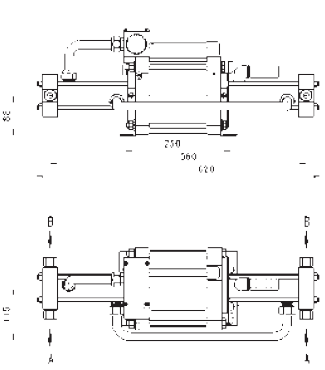
Model: DLE 75

Flow: 150 l_N/min (5.29) at an inlet pressure of 70 bar (1,015 psi) and outlet pressure of 300 bar (4,350 psi), air drive pressure of 6 bar (87 psi)









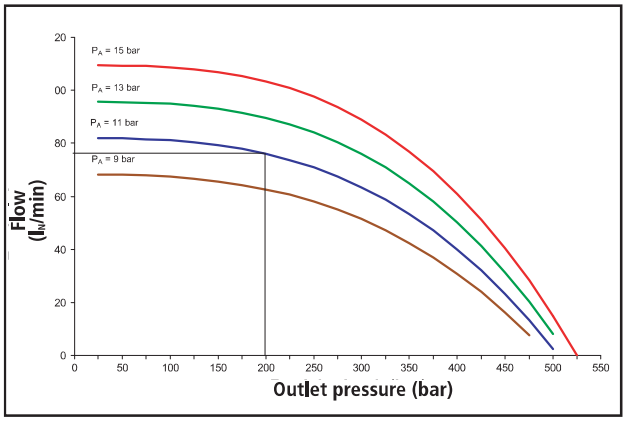
- large displacement volume
- less pulsation

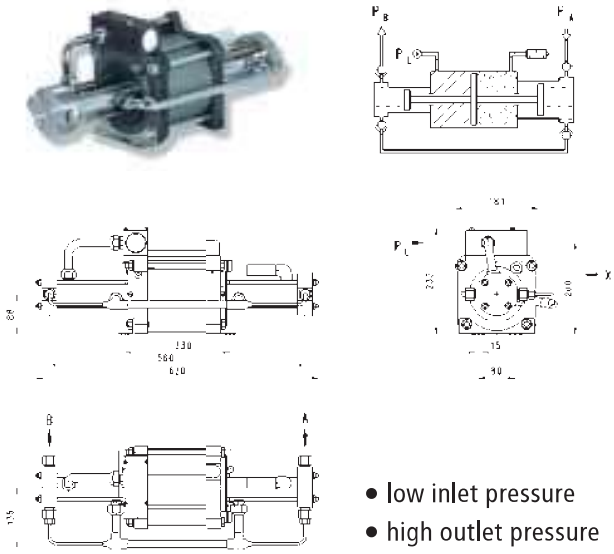
Technical features	DLE 75
Pressure ratio	1:75
Max. compression ratio	1:20
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	35 (507)
Max. gas inlet pressure pA in bar (psi)	1,500 (21,750)
Max. permitted outlet pressure pB in bar (psi)	1,500 (21,750)
Formula to calculate gas outlet pressure pB	75 X pL + pA
Displacement volume in cm³ (in³)	50 (3.05)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	400-1,980 (14.13-69.92)
Connection: Gas inlet	1/4 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	18
Material of gas section	Stainless steel

Model: DLE 15-75

Flow: 75 l_N/min (2.64 SCFM)

at inlet pressure of 11 bar (159 psi) and outlet pressure of 200 bar (2,900 psi), air drive pressure of 6 bar (87 psi)





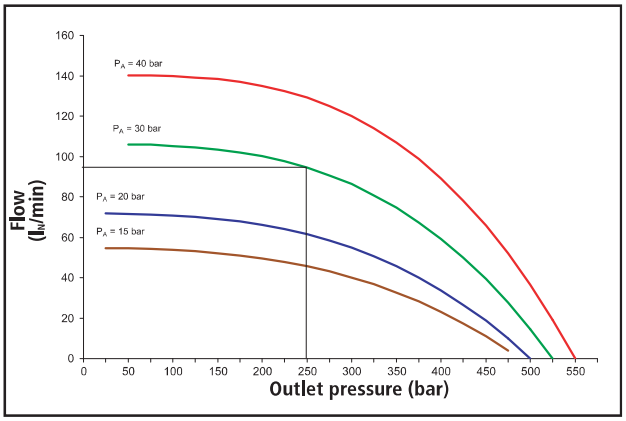
- low inlet pressure
- high outlet pressure

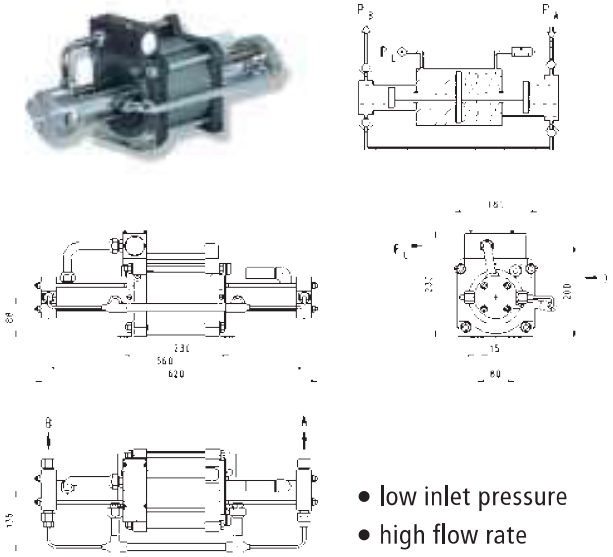
Technical features	DLE 15-75
Pressure ratio	1:15 / 1:75
Max. compression ratio	1:100
Stage ratio	1:5
Min. gas inlet pressure pA in bar (psi)	7 (101)
Max. gas inlet pressure pA in bar (psi)	2,5 X pL
Max. permitted outlet pressure pB in bar (psi)	1,500 (21,750)
Formula to calculate gas outlet pressure pB	75 X pL + 5 X pA
Displacement volume in cm^3 (in^3)	122 (7.44)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	400-1,980 (14.13-69.92)
Connection: Gas inlet	1/4 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	19
Material of gas section	Stainless steel

Model: DLE 30-75

Flow: 95 l_N/min (3.35 SCFM)

at an inlet pressure of 30 bar (435 psi) and outlet pressure of 250 bar (3,625 psi), air drive pressure of 6 bar (87 psi)



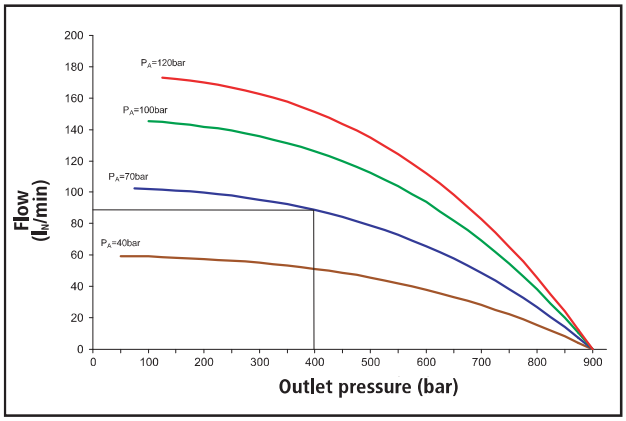


- low inlet pressure
- high flow rate

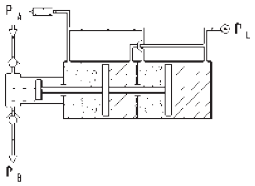
Technical features	DLE 30-75
Pressure ratio	1:30 / 1:75
Max. compression ratio	1:50
Stage ratio	1:2.5
Min. gas inlet pressure pA in bar (psi)	15 (217)
Max. gas inlet pressure pA in bar (psi)	12 X pL
Max. permitted outlet pressure pB in bar (psi)	1,500 (21,750)
Formula to calculate gas outlet pressure pB	75 X pL + 2.5 X pA
Displacement volume in cm^3 (in^3)	60 (3.66)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	400-1,980 (14.13-69.92)
Connection: Gas inlet	1/4 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	19
Material of gas section	Stainless steel

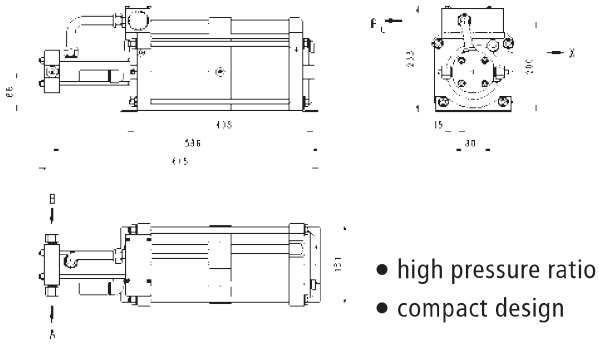
Model: DLE 75-1-2

Flow: 90 l_N/min (3.17 SCFM)
at inlet pressure of 70 bar (1,015 psi) and outlet pressure of 400 bar (5,800 psi), air drive pressure of 6 bar (87 psi)







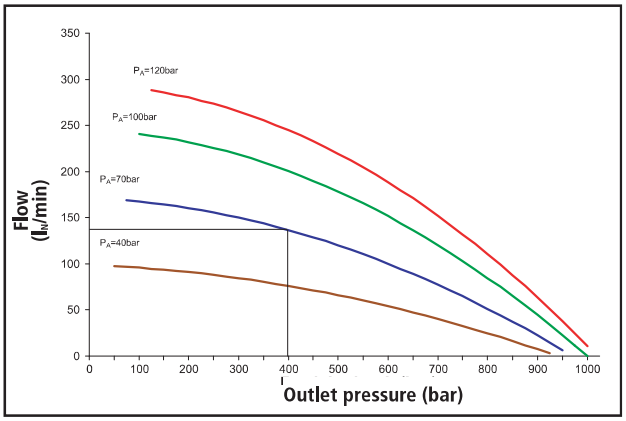


- high pressure ratio
- compact design

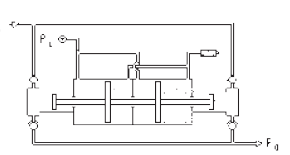
Technical features	DLE 75-1-2
Pressure ratio	1:150
Max. compression ratio	1:20
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	45 (652)
Max. gas inlet pressure pA in bar (psi)	1,500 (21,750)
Max. permitted outlet pressure pB in bar (psi)	1,500 (21,750)
Formula to calculate gas outlet pressure pB	150 X pL
Displacement volume in cm^3 (in^3)	25 (1.52)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	600-2,400 (21.2-84.8)
Connection: Gas inlet	1/4 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	20
Material of gas section	Stainless steel

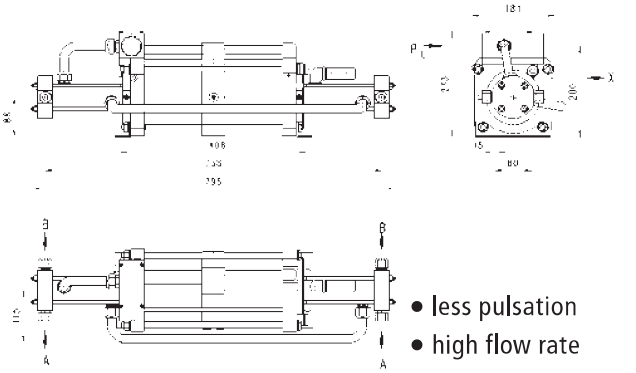
Model: DLE 75-2

Flow: 130 l_N/min (4.59 SCFM) at an inlet pressure of 70 bar (1,015 psi) and outlet pressure of 400 bar (5,800 psi), air drive pressure of 6 bar (87 psi)









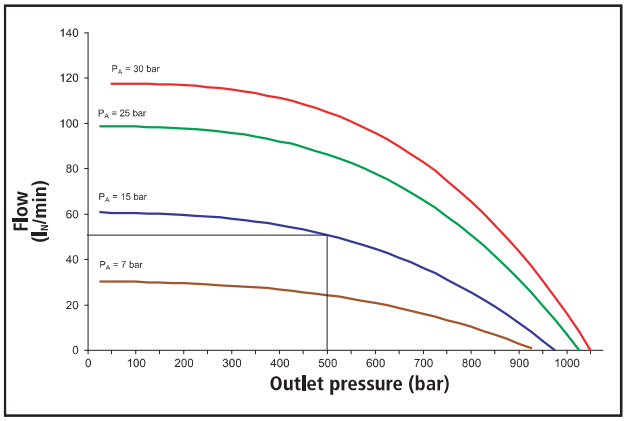
- less pulsation
- high flow rate

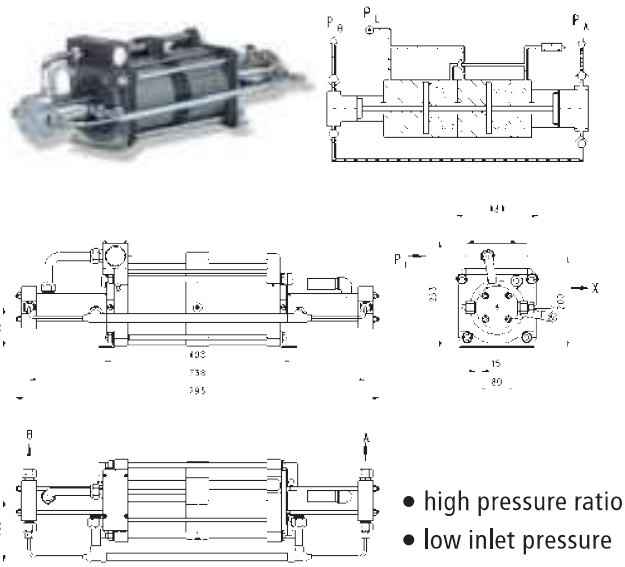
Technical features	DLE 75-2
Pressure ratio	1:150
Max. compression ratio	1:20
Stage ratio	–
Min. gas inlet pressure pA in bar (psi)	45 (652)
Max. gas inlet pressure pA in bar (psi)	1,500 (21,750)
Max. permitted outlet pressure pB in bar (psi)	1,500 (21,750)
Formula to calculate gas outlet pressure pB	150 X pL + pA
Displacement volume in cm^3 (in^3)	50 (3.05)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	600-2,400 (21.2-84.8)
Connection: Gas inlet	1/4 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	23
Material of gas section	Stainless steel

Model: DLE 15-75-2

Flow: 50 l_N/min (1.76 SCFM)

at inlet pressure of 15 bar (217 psi) and outlet pressure of 500 bar (7,250 psi), air drive pressure of 6 bar (87 psi)





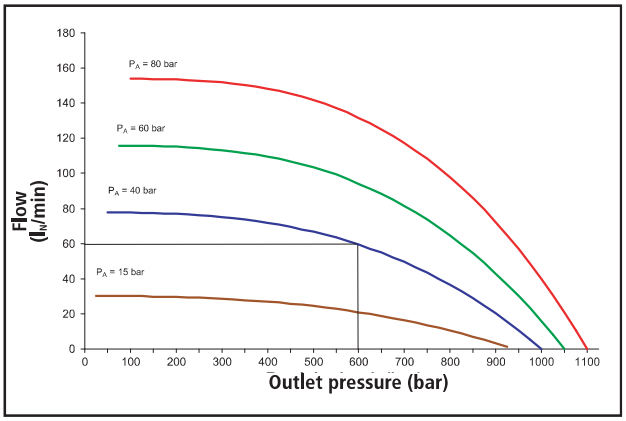
- high pressure ratio
- low inlet pressure

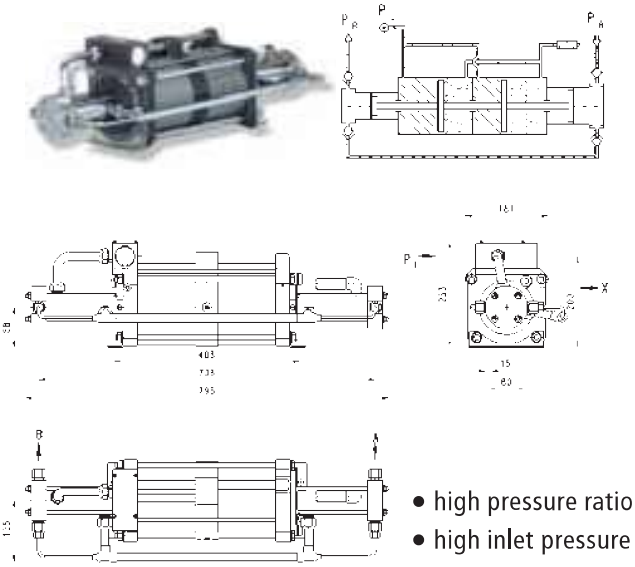
Technical features	DLE 15-75-2
Pressure ratio	1:30 / 1:150
Max. compression ratio	1:100
Stage ratio	1:5
Min. gas inlet pressure pA in bar (psi)	7 (101)
Max. gas inlet pressure pA in bar (psi)	5 X pL
Max. permitted outlet pressure pB in bar (psi)	1,500 (21,750)
Formula to calculate gas outlet pressure pB	150 X pL + 5 X pA
Displacement volume in cm^3 (in^3)	122 (7.44)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	600-2,400 (21.2-84.8)
Connection: Gas inlet	1/4 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	24
Material of gas section	Stainless steel

Model: DLE 30-75-2

Flow: 60 l_N/min (2.11 SCFM)

at an inlet pressure of 40 bar (580 psi) and outlet pressure of 600 bar (8,700 psi), air drive pressure of 6 bar (87 psi)





- high pressure ratio
- high inlet pressure

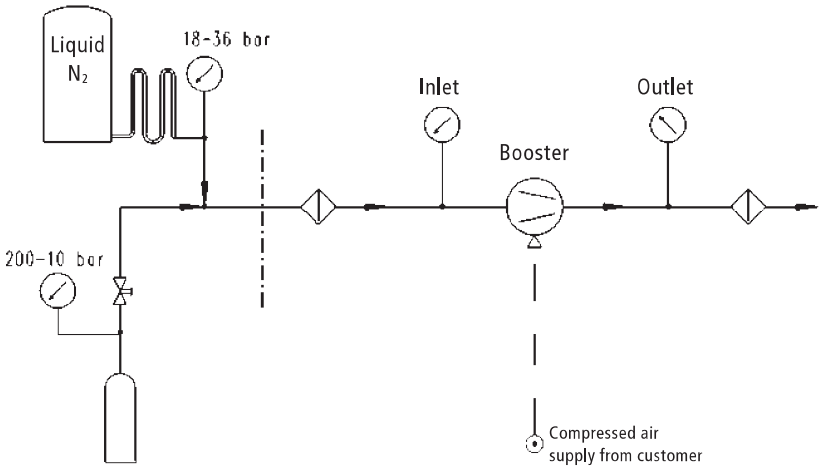
Technical features	DLE 30-75-2
Pressure ratio	1:60 / 1:150
Max. compression ratio	1:50
Stage ratio	1:2.5
Min. gas inlet pressure pA in bar (psi)	15 (217)
Max. gas inlet pressure pA in bar (psi)	24 X pL
Max. permitted outlet pressure pB in bar (psi)	1,500 (21,750)
Formula to calculate gas outlet pressure pB	150 X pL + 2.5 X pA
Displacement volume in cm^3 (in^3)	60 (3.66)
Air drive pA in bar (psi)	1-10 (14.5-145)
Air consumption in l_N/min (SCFM)	600-2,400 (21.2-84.8)
Connection: Gas inlet	1/4 BSP
Connection: Gas outlet	1/4 BSP
Connection: Drive air	3/4 BSP
Net weight (kg)	24
Material of gas section	Stainless steel

Model VP/70/700/35

- Wide range of application
- Compact design
- Portable unit
- Easy to operate
- Oil and lubrication free compression
- Dry running
- No electrical auxiliary energy is needed



This booster station is designed for a wide range of application. I. e. pressure tests can be realized, gas cylinders filled or accumulators recharged.
To operate this system, the gas inlet, the gas outlet and the drive air have to be connected. Other installations are not necessary. Since the components are reduced to a minimum, an easy and reliable operation can be guaranteed.



Technical features

Outlet pressure	75 – 700 bar (1,087 – 10,150 psi)
Flow capacity at an inlet pressure of 10 bar (145 psi)	70 l_N/min (2.47 SCFM) at 200 bar (2,900 psi) outlet pressure
Flow capacity at an inlet pressure of 15 bar (217 psi)	103 l_N/min (3.63 SCFM) at 200 bar (2,900 psi) outlet pressure
Time of operation	50 %
Gas inlet pressure	7 – 35 bar (101 – 507 psi), but max. 3.5*air drive pL
Air drive pressure	1 – 10 bar (14.5 – 145 psi)
Air consumption	400 – 1,980 l_N/min (14.13 – 69.92 SCFM)
Connection: Gas inlet	1/2 BSP
Connection: Gas outlet	1/4 BSP
Connection: Air drive	1/2 BSP
Panel	Stainless steel
Dimensions (W x D x H)	850 X 410 X 410 mm
Net weight	28 kg

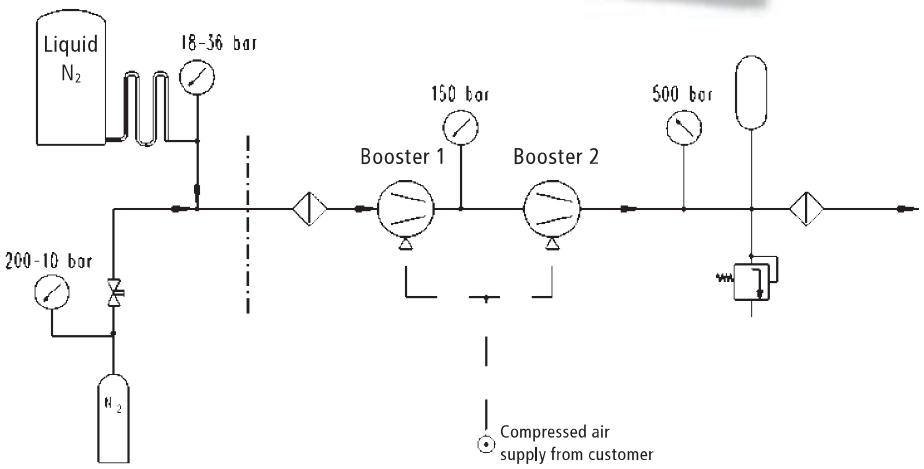
MAXIMATOR®

Model VP/120/500/300

- Wide range of application
- Compact design
- Mobile system
- Automatic operation
- Oil and lubrication free compression
- Dry running



This booster station is an individually operating, air driven booster station in compact design.
The booster delivers continuously into a storage tank and guarantees that the pressure inside of the receiver is always between the set limit values.
Due to the design of this system the gas cylinder can be emptied down to 10 bar and the gas volume used in an optimum way. Through the integrated pilot switches, regulator and safety relief elements, an automatic operation without a continuous observation would be possible.



Technical features

Outlet pressure	20 – 500 bar (290 – 7,250 psi), adjustable through pressure reducer
Flow capacity at an inlet pressure of 18 bar (261 psi)	120 l_N/min (4.23 SCFM)
Flow capacity at an inlet pressure of 300 bar (4,350 psi)	400 l_N/min (14.12 SCFM)
Time of operation	50 %
Nitrogen inlet	M16 X 1.5 (Ermeto 8S)
Nitrogen outlet pressure	M16 X 1.5 (Ermeto 8S)
Nitrogen accumulator	5 liter / 550 bar (7,975 psi)
Nitrogen inlet pressure (from vaporiser)	20 – 36 bar (290 – 522 psi)
Nitrogen cylinder supply	10 – 300 bar (145 – 4,350 psi)
Connection: Nitrogen cylinder (2 pces.)	W 24.32 X 1/14 200 bar (2,900 psi) / 300 bar (4,350 psi)
Air drive pressure	4 – 10 bar (58 – 145 psi)
Connection: Air drive	3/4 BSP
Air consumption	400 – 1980 l_N/min (14.13-69.92 SCFM)
Cabinet	Steel, coloured, on castors
Dimensions (W x D x H)	720 X 560 X 1,230 mm
Net weight (packed weight)	211 kg (315 kg)

Model VH/400/500R

- High flow rate
- Automatic operation
- Oil and lubrication free compression
- Dry running

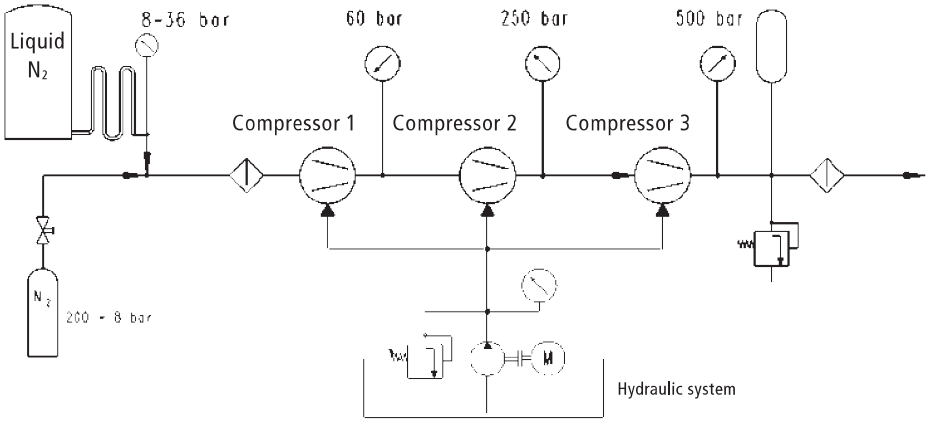


This compressor station is an independently working, hydraulic driven system which compresses the gases in three stages, and integrated hydraulic system.

The individual compressor stages are operated through proportional valves, in this way a silent operation at a low sound emission can be realized.

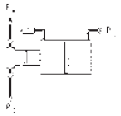
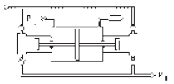
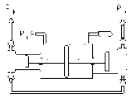
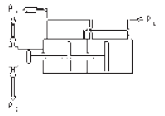
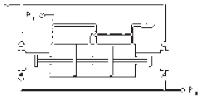
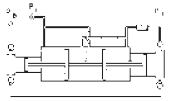
The compressor delivers a continuous flow into a storage tank and thus ensures that the pressure inside this tank is always within the adjustable limiting values.

The required pressures can be freely set in the operating panel.



Technical features

Outlet pressure	200 – 500 bar (2,900 – 7,250 psi), variable
Flow at 14 bar (203 psi) inlet pressure	400 l_N/min (14.12 SCFM)
Gas inlet	M16 X 1.5 (Ermeto 8S)
Gas outlet	M16 X 1.5 (Ermeto 8S)
High pressure accumulator	10 liter / 550 bar (7,975 psi)
Gas inlet (i. e. from the vaporiser)	8 – 36 bar (116 – 522 psi)
Cooling water connection	3/4 BSP 0.8 m^3/h (28.25 SCFM/h) / T inlet = 14° C (57°C)
Power supply	max. 22 kW
Supply from gas cylinders	10 – 300 bar (145 – 4,350 psi)
Cabinet	Coloured steel
Dimensions (W x D x H)	2,180 X 1,000 X 1,900 mm
Net weight	1,600 kg

Type	Pressure ratio i (i_1 / i_2)	Com-pression ratio*	Suction pressure Min pA		Max		Max. outlet pressure pB		Formula for max. end pressure in bar (psi)	Displacement volume per double stroke		Max cycle frequency	Connections Inlet*	Outlet	Max. operating pressure	Weight kg	
			bar	psi	bar	psi	bar	psi		cm^3	cu.in	1/min			°C		
DLE 2-1	1 : 2	1 : 10	0	0	20	290	20	290	2*pL	922	56.26	100	1/2 BSP	1/2 BSP	60	15	
DLE 5-1	1 : 5	1 : 15	2	29	50	725	50	725	5*pL	373	22.76	110	1/2 BSP	1/2 BSP	60	15	
DLE 15-1	1 : 15	1 : 20	7	102	150	2,175	150	2,175	15*pL	122	7.44	130	1/4 BSP	1/4 BSP	100	13	
DLE 30-1	1 : 30	1 : 20	15	218	300	4,350	300	4,350	30*pL	60	3.66	130	1/4 BSP	1/4 BSP	100	13	
DLE 75-1	1 : 75	1 : 20	35	508	750	10,875	750	10,875	75*pL	25	1.53	130	1/4 BSP	1/4 BSP	100	13	
DLE 2	1 : 2	1 : 10	0	0	40	580	40	580	2*pL + pA	1844	112.53	90	1/2 BSP	1/2 BSP	60	20	
DLE 5	1 : 5	1 : 15	2	29	100	1,450	100	1,450	5*pL + pA	746	45.52	110	1/2 BSP	1/2 BSP	60	20	
DLE 15	1 : 15	1 : 20	7	102	300	4,350	300	4,350	15*pL + pA	244	14.89	120	1/4 BSP	1/4 BSP	100	18	
DLE 30	1 : 30	1 : 20	15	218	600	8,700	600	8,700	30*pL + pA	120	7.32	120	1/4 BSP	1/4 BSP	100	18	
DLE 75	1 : 75	1 : 20	35	508	1,500	21,750	1,500	21,750	75*pL + pA	50	3.05	130	1/4 BSP	1/4 BSP	100	18	
DLE 2-5	1:2 / 1:5	1 : 25	0	0	0.8*PL		100	1,450	5*pL + 2.5*pA	922	56.26	100	1/2 BSP	1/2 BSP	60	20	
DLE 5-15	1:5 / 1:15	1 : 45	2	29	1,6*PL		300	4,350	15*pL + 3*pA	373	22.76	110	1/2 BSP	1/4 BSP	100	19	
DLE 5-30	1:5 / 1:30	1 : 90	2	29	0,5*PL		600	8,700	30*pL + 6*pA	373	22.76	110	1/2 BSP	1/4 BSP	100	19	
DLE 15-30	1:15 / 1:30	1 : 40	7	102	7,5*PL		600	8,700	30*pL + 2*pA	122	7.44	120	1/4 BSP	1/4 BSP	100	19	
DLE 15-75	1:15 / 1:75	1 : 100	7	102	2,5*PL		1,500	21,750	75*pL + 5*pA	122	7.44	120	1/4 BSP	1/4 BSP	100	19	
DLE 30-75	1:30 / 1:75	1 : 50	15	218	12*PL		1,500	21,750	75*pL + 2.5*pA	60	3.66	120	1/4 BSP	1/4 BSP	100	19	
DLE 2-1-2	1 : 4	1 : 10	0	0	40	580	40	580	4*pL	922	56.26	100	1/2 BSP	1/2 BSP	60	22	
DLE 5-1-2	1 : 10	1 : 15	4	58	100	1,450	100	1,450	10*pL	373	22.76	110	1/2 BSP	1/2 BSP	60	22	
DLE 15-1-2	1 : 30	1 : 20	10	145	300	4,350	300	4,350	30*pL	122	7.44	110	1/4 BSP	1/4 BSP	100	20	
DLE 30-1-2	1 : 60	1 : 20	20	290	600	7,250	600	8,700	60*pL	60	3.66	120	1/4 BSP	1/4 BSP	100	20	
DLE 75-1-2	1 : 150	1 : 20	45	653	1,500	21,750	1,500	21,750	150*pL	25	1.53	120	1/4 BSP	1/4 BSP	100	20	
DLE 2-2	1 : 4	1 : 1	0	0	40	580	40	580	4*pL + pA	1844	112.53	90	1/2 BSP	1/2 BSP	60	25	
DLE 5-2	1 : 10	1 : 15	4	58	100	1,450	100	1,450	10*pL + pA	746	45.52	100	1/2 BSP	1/2 BSP	60	25	
DLE 15-2	1 : 30	1 : 20	10	145	300	4,350	300	4,350	30*pL + pA	244	14.89	100	1/4 BSP	1/4 BSP	100	23	
DLE 30-2	1 : 60	1 : 20	20	290	600	8,700	600	8,700	60*pL + pA	120	7.32	100	1/4 BSP	1/4 BSP	100	23	
DLE 75-2	1 : 150	1 : 20	45	653	1,500	21,750	1,500	21,750	150*pL + pA	50	3.05	100	1/4 BSP	1/4 BSP	100	23	
DLE 2- 5-2	1:4 / 1:10	1 : 25	0	0	1.6*PL		100	1,450	10*pL + 2.5*pA	922	56.26	90	1/2 BSP	1/2 BSP	60	25	
DLE 5-15-2	1:10 / 1:30	1 : 45	2	29	3,2*PL		300	4,350	30*pL + 3*pA	373	22.76	100	1/2 BSP	1/4 BSP	100	24	
DLE 5-30-2	1:10 / 1:60	1 : 90	2	29	1*PL		600	8,700	60*pL + 6*pA	373	22.76	100	1/2 BSP	1/4 BSP	100	24	
DLE 15-30-2	1:30 / 1:60	1 : 40	7	102	15*PL		600	8,700	60*pL + 2*pA	122	7.44	100	1/4 BSP	1/4 BSP	100	24	
DLE 15-75-2	1:30 / 1:150	1 : 100	7	102	5*PL		1,500	21,750	150*pL + 5*pA	122	7.44	100	1/4 BSP	1/4 BSP	100	24	
DLE 30-75-2	1:60 / 1:150	1 : 50	15	218	24*PL		1,500	21,750	150*pL + 2.5*pA	60	3.66	100	1/4 BSP	1/4 BSP	100	24	

*Compression ratio = Outlet pressure / Suction pressure
Abbreviations: pL = Air drive; pA = Suction pressure; pB = Outlet pressure

The maximum permitted outlet pressure is 60 to 100°C. Cooling by water is available as an option. The maximum stroke frequency is at 90 to 100 cycles per minute for 50% duty cycle. Suction pressures lower than the indicated "pA min" are not permitted and can cause dammages on the unit.

MAXIMATOR®



High-pressure pumps for different liquids (oil, water, emulsion etc.)

- easy to maintain, ex-proof
- low energy consumption
- operating pressures up to max. 5,500 bar



Air Amplifiers

- For increasing air pressure
- Specific air pressure amplification to suit your requirements
- Connection to electrical supply not necessary
- Operating pressure max. 40 bar



Special Test Benches

- Static pressure test
- Bursting pressure test
- Impulse pressure test
- Hoses, pipes, valves, hydraulic components can be tested



Gas Assist Injection Systems

- Compressor stations with pneumatic, electric or hydraulic drive
- Control modules with 2, 4 or 8 valves
- Control modules with integrated booster station
- External core pull control systems



High Pressure Valves, Fittings, Tubing

- Stainless steel design
- Temperatures from -250° C to +650° C for liquids and gases
- Maximum outlet pressures up to 10,500 bar

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1475.0494 | 1000 DSB 04/2007