

AIR DRIVEN Gas Boosters & Systems

SINGLE ACTING - SINGLE STAGE

PRESSURES UP TO 10,875 psi



DOUBLE ACTING- SINGLE STAGE

PRESSURES UP TO 21,750 psi



TWO STAGE

PRESSURES UP TO 21,750 psi



DOUBLE AIR HEAD - SINGLE AND TWO STAGE

PRESSURES UP TO 21,750 and 30,000 psi



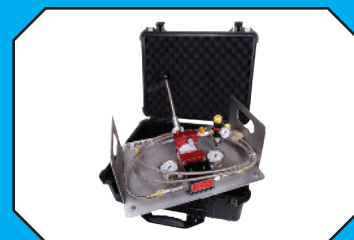
DOUBLE ACTING-TWO STAGE TRIPLE AIR HEAD

PRESSURES UP TO 36,000 psi



REBREATHER OXYGEN BOOSTERS GAS BOTTLE MOUNTED CHARGING SYSTEMS

PRESSURES UP TO 4,060 psi



HPT CUSTOM DESIGNED Power Packs, Pump Skids, Portable Test Carts and Test Benches





HPT was founded in 2008 to serve as the USA's West Coast distributor for **Maximator®** liquid pumps, gas boosters, air amplifiers and high pressure valves, fittings and tubing.

Gas Boosters

AIR DRIVEN FROM 30 PSI TO 36,000 PSI

Maximator® gas boosters are an excellent alternative to high pressure stationary type compressors. These boosters offer a compact, lightweight design that requires no electrical power, thereby providing a more flexible and efficient source for delivering high pressure gas.

Maximator® gas boosters will compress gases such as nitrogen and argon up to 36,000 psi, while oxygen can be compressed up to 5,000 psi using special seals and cleaning procedures. A wide variety of other gases can be compressed including hydrogen, natural gas, ethylene, nitrous oxide, neon, carbon dioxide, carbon monoxide and breathing air. Consult HPT for special seals, venting, or cleaning requirements for these gases.

In applications where high output pressures are required and the gas supply pressure is low **Maximator®** gas boosters can be operated in series. HPT supplies these booster combinations in 2, 3 or 4 stage arrangements as complete packages. To achieve higher gas flows, two or more boosters can work in parallel as a unit. Consult HPT for more information on these special applications.

Features

- Pressures to 36,000 psi for most gases and 5,000 psi for oxygen
- Easy to install and operate
- Compact, lightweight design
- Single or double acting and two stage models
- Double air head available in single and two stage boosters
- No electrical power required
- Requires no high pressure seal lubrication
- Boosters are contaminant free
- Units can be operated in series or parallel
- Variety of pressure and compression ratios available

ACCESSORIES

Air Pilot Pressure Switches



- Air pilot pressure switches are pressure sensing devices with an air valve, used to turn air driven gas boosters, liquid pumps and air amplifiers on/off at a desired set pressure by controlling a pneumatic signal to the unit's air pilot control feature.
- Units can operate at their maximum drive air pressure, achieving desired outlet set pressure as rapidly as possible.
- Switch resets in approximately 10% drop in set pressure, for the controlled unit restart.
- Externally adjustable under pressure
- Normally Open switches close upon reaching set pressure (typically used to stop on pressure increase when the desired high pressure is achieved).
- Normally Closed switches open upon reaching set pressure (typically used to stop unit on pressure decrease, such as low bottle supply pressure).
- Standard materials: aluminum body (316 stainless steel optional), 440B piston, PTFE/Turcon/Buna-N seals, 303 SS gland.

Air Pilot model generator

APS-.....-.....-.....-.....

Switch Position

NO - Normally Open
NC - Normally Closed

Special versions

O2 - Cleaned for oxygen service, 316 stainless steel body
SS - 316 stainless steel body

Connections (Air ports are 1/8" BSPP)

4B - 1/4" BSPP with outer seal
4P - 1/4" FNPT
4M - 1/4" Medium pressure coned and threaded

Pressure Ranges

10-30 - between 10 and 30 bar (145-435 psi)
30-100 - between 30 and 100 bar (435 - 1450 psi)
100-300 - between 100 and 300 bar (1450 - 4350 psi)
150-400 - between 150 and 400 bar (2175-5800 psi)
300-1000 - between 300 and 1000 bar (4350-14,500 psi)

Typically stocked switches

APS-10-30-4P-NO
APS-10-30-4P-NC
APS-30-100-4P-NO
APS-30-100-4P-NC
APS-100-300-4P-NO
APS-100-300-4P-NC
APS-300-1000-4P-NO
APS-300-1000-4P-NC
APS-10-30-4B-O2-NO
APS-100-300-4B-O2-NC

Relief Valve MT10RV



- Proportional style relief valve, externally adjustable from 1,000 to 10,000 psi
- 316 stainless steel construction with nylon soft seat and PTFE/EPDM seals
- Connections: Inlet (2) 1/4" FNPT, Outlet vent (1) 1/4" FNPT
- Orifice at seat is 0.07" diameter
- Gas or liquid service, in-line or clamp mounting
- Typically stock, same day shipment

Air Control Packages



- Engineered package of a filter, regulator, gauge, ball valve, pilot port connection as required and necessary fittings, ready for use on the following products:
 - ▣ ACM for all PPO, PP and PPSF pumps and MPLV2 air amplifiers
 - ▣ AC for all S pumps
 - ▣ ACP for all L, LSF pumps, DLE gas boosters, and DLA and GPLV2 amplifiers
 - ▣ ACG for all GX pumps

Gas Receivers



- HPT designed Alloy Steel pressure vessel, nickel plated inside and out
- 10,000 psi working pressure rated at room temperature
- Connections are 1/4" high pressure coned and threaded at each end
- Single ended closure with Viton seals
 - ▣ REC-36S is 36 in³ volume, 2 1/2" OD x 21" OAL
 - ▣ REC-66S is 66 in³ volume, 2 1/2" OD x 33" OAL

| STYLE | CATALOG NUMBER | PRESSURE RATIO | COMPRESSION RATIO | SUPPLY PRESSURE (PSI) | | | |
|--|----------------|----------------|-------------------|-----------------------|--------|---------|--|
| | | | | MIN.* | MIN.** | MAX. | |
| SINGLE ACTING SINGLE STAGE | DLE2-1 | 2:1 | 10:1 | 0 | 30 | 290 | |
| | DLE5-1 | 5:1 | 15:1 | 30 | 50 | 725 | |
| | DLE15-1 | 15:1 | 20:1 | 100 | 110 | 2,175 | |
| | DLE30-1 | 30:1 | 20:1 | 220 | 220 | 4,350 | |
| | DLE75-1 | 75:1 | 20:1 | 500 | 550 | 10,875 | |
| DOUBLE ACTING SINGLE STAGE | DLE2 | 2:1 | 10:1 | 0 | 290 | 580 | |
| | DLE5 | 5:1 | 15:1 | 30 | 725 | 1,450 | |
| | DLE15 | 15:1 | 20:1 | 100 | 2,175 | 4,350 | |
| | DLE30 | 30:1 | 20:1 | 220 | 4,350 | 8,700 | |
| | DLE75 | 75:1 | 20:1 | 500 | 10,875 | 21,750 | |
| DOUBLE ACTING SINGLE STAGE DOUBLE AIR HEAD | DLE2-2 | 4:1 | 10:1 | 0 | 60 | 580 | |
| | DLE5-2 | 10:1 | 15:1 | 30 | 100 | 1,450 | |
| | DLE15-2 | 30:1 | 20:1 | 145 | 220 | 4,350 | |
| | DLE30-2 | 60:1 | 20:1 | 290 | 440 | 8,700 | |
| | DLE75-2 | 150:1 | 20:1 | 650 | 1,100 | 21,750 | |
| HIGH FLOW DOUBLE ACTING SINGLE STAGE DOUBLE AIR HEAD | 8DLE3 | 3.3:1 | 15:1 | 0 | 100 | 580 | |
| | 8DLE6 | 6.6:1 | 15:1 | 0 | 50 | 580 | |
| DOUBLE ACTING TWO STAGE | DLE2-5 | 5:1 | 25:1 | 0 | 116 | 0.8xPa | |
| | DLE5-15 | 15:1 | 45:1 | 30 | 232 | 1.6xPa | |
| | DLE5-30 | 30:1 | 90:1 | 30 | 75 | 0.5xPa | |
| | DLE15-30 | 30:1 | 40:1 | 100 | 1,088 | 7.5xPa | |
| | DLE15-75 | 75:1 | 100:1 | 100 | 363 | 2.5xPa | |
| | DLE30-75 | 75:1 | 50:1 | 220 | 1,740 | 12.0xPa | |
| DOUBLE ACTING TWO STAGE DOUBLE AIR HEAD | DLE2-5-2 | 10:1 | 25:1 | 0 | 232 | 1.6xPa | |
| | DLE5-15-2 | 30:1 | 45:1 | 30 | 100 | 3.2xPa | |
| | DLE5-30-2 | 60:1 | 90:1 | 30 | 100 | 1.0xPa | |
| | DLE15-30-2 | 60:1 | 40:1 | 100 | 220 | 15xPa | |
| | DLE15-75-2 | 150:1 | 100:1 | 100 | 220 | 5.0xPa | |
| | DLE30-75-2 | 150:1 | 50:1 | 220 | 440 | 40.0xPa | |
| | DLE30-75-2-25 | 150:1 | 50:1 | 220 | 1300 | 24.0xPa | |
| | DLE30-75-2-30 | 150:1 | 50:1 | 220 | 3300 | 40.0xPa | |
| DOUBLE ACTING TWO STAGE TRIPLE AIR HEAD | DLE30-75-3-36 | 225:1 | 50:1 | 435 | 1,350 | 30.0xPa | |

NOTE:

*=Minimum required for basic operation

**= Minimum required to achieve maximum outlet pressure with 145 psi drive air

Pa=Drive air pressure, 145 psi maximum, 15 psi minimum

Ps = Gas supply (suction) pressure

The 9/16"-18 is a 1/4" O.D. tubing, high pressure coned and threaded connection

Stall pressure must not be allowed to exceed outlet pressure rating.

Compression ratio is the minimum required ratio of outlet pressure/supply pressure.

Adapter (15A4H4P) is available to convert the 9/16"-18 connection to 1/4"FNPT. Order separately. Maximum working pressure: 15,000 psi

Contact HPT for arrangement and installation drawings.

DIMENSIONS (inches)

| | OUTLET PRESSURE (PSI) MAX. | STALL PRESSURE | CONNECTIONS | | MAX. FREQ. STROKES/MIN. | DISPL PER DOUBLE STROKE (IN.3) | MAX. TEMP. F | WEIGHT (LBS.) |
|--|-------------------------------|-------------------|-------------|------------|----------------------------|--------------------------------------|-----------------|------------------|
| | | | INLET | OUTLET | | | | |
| | 290 | 2Pa | 1 | 3/4 | 100 | 56.2 | 140 | 34 |
| | 725 | 5Pa | 3/8 | 3/8 | 110 | 22.7 | 140 | |
| | 2,175 | 15Pa | 1/4 | 1/4 | 130 | 7.4 | 210 | 29 |
| | 4,350 | 30Pa | 1/4 | 1/4 | 130 | 3.6 | 210 | |
| | 10,875 | 75Pa | 9/16" - 18 | 9/16" - 18 | 130 | 1.5 | 210 | |
| | 580 | 2Pa+Ps | 1 | 3/4 | 90 | 112.5 | 140 | 45 |
| | 1,450 | 5Pa+Ps | 3/8 | 3/8 | 110 | 45.5 | 140 | |
| | 4,350 | 15Pa+Ps | 1/4 | 1/4 | 120 | 14.8 | 210 | 40 |
| | 8,700 | 30Pa+Ps | 1/4 | 1/4 | 120 | 7.3 | 210 | |
| | 21,750 | 75Pa+Ps | 9/16" - 18 | 9/16" - 18 | 120 | 3.0 | 210 | |
| | 580 | 4Pa+Ps | 1 | 3/4 | 90 | 112.5 | 140 | 55 |
| | 1,450 | 10Pa+Ps | 3/8 | 3/8 | 100 | 45.5 | 140 | |
| | 4,350 | 30Pa+Ps | 1/4 | 1/4 | 100 | 14.8 | 210 | 51 |
| | 8,700 | 60Pa+Ps | 1/4 | 1/4 | 100 | 7.3 | 210 | |
| | 21,750 | 150Pa+Ps | 9/16" - 18 | 9/16" - 18 | 100 | 3.0 | 210 | |
| | 580 | 3.3Pa+Ps | 1/2 | 1/2 | 80 | 250 | 210 | 121 |
| | 580 | 6.6Pa+Ps | 1/2 | 1/2 | 80 | 125 | 210 | |
| | 1,015 | 5Pa+2.5Ps | 1 | 3/8 | 100 | 56.2 | 140 | 45 |
| | 2,871 | 15Pa+3Ps | 3/8 | 1/4 | 110 | 22.7 | 210 | 42 |
| | 4,785 | 30Pa+6Ps | 3/8 | 1/4 | 110 | 22.7 | 210 | |
| | 6,525 | 30Pa+2Ps | 1/4 | 1/4 | 120 | 7.4 | 210 | |
| | 12,687 | 75Pa+5Ps | 1/4 | 9/16" - 18 | 120 | 7.4 | 210 | |
| | 15,225 | 75Pa+2.5Ps | 1/4 | 9/16" - 18 | 120 | 3.6 | 210 | |
| | 1,450 | 10Pa+2.5Ps | 1 | 3/8 | 90 | 56.2 | 140 | 55 |
| | 4,350 | 30Pa+3Ps | 3/8 | 1/4 | 100 | 22.7 | 210 | 53 |
| | 8,700 | 60Pa+6Ps | 3/8 | 1/4 | 100 | 22.7 | 210 | |
| | 8,700 | 60Pa+2Ps | 1/4 | 1/4 | 100 | 7.4 | 210 | |
| | 21,750 | 150Pa+5Ps | 1/4 | 9/16" - 18 | 100 | 7.4 | 210 | |
| | 21,750 | 150Pa+2.5Ps | 1/4 | 9/16" - 18 | 100 | 3.6 | 210 | |
| | 25,000 | 150Pa+2.5Ps | 9/16"-18 | 9/16" - 18 | 110 | 3.6 | 210 | 56 |
| | 30,000 | 150Pa+2.5Ps | 9/16"-18 | 9/16" - 18 | 110 | 3.6 | 210 | |
| | 36,000 | 225Pa+2.5Ps | 9/16"-18 | 9/16"-18 | 110 | 3.6 | 210 | 56 |

FLOW CHART

AIR DRIVEN FROM 30 PSI TO 36,000 PSI

Pa - Drive air pressure (psi)
 PS = Gas supply pressure (psi)
 Po = Gas outlet pressure (psi)
 F = Gas flow (SCFM)

| CATALOG NUMBER | Pa - 90 psi | | |
|----------------|-------------|-------|-------|
| | Ps | Po | F |
| DLE2-1 | 60 | 90 | 6.68 |
| | 60 | 120 | 5.29 |
| | 90 | 120 | 7.44 |
| | 90 | 150 | 4.35 |
| DLE5-1 | 80 | 200 | 3.94 |
| | 80 | 350 | 2.17 |
| | 120 | 200 | 5.58 |
| | 120 | 350 | 3.06 |
| DLE15-1 | 250 | 500 | 4.62 |
| | 250 | 1,000 | 2.69 |
| | 500 | 500 | 8.82 |
| | 500 | 1,000 | 5.26 |
| DLE30-1 | 500 | 1,500 | 3.74 |
| | 500 | 2,500 | 0.92 |
| | 1,000 | 1,500 | 7.41 |
| | 1,000 | 2,500 | 1.77 |
| DLE75-1 | 750 | 3,000 | 2.51 |
| | 750 | 5,000 | 1.55 |
| | 1,500 | 3,000 | 5.00 |
| | 1,500 | 5,000 | 3.08 |
| DLE2 | 60 | 120 | 12.10 |
| | 60 | 200 | 5.00 |
| | 90 | 150 | 17.00 |
| | 90 | 250 | 3.85 |
| DLE5 | 80 | 250 | 7.22 |
| | 80 | 450 | 2.60 |
| | 120 | 250 | 11.00 |
| | 120 | 500 | 3.23 |
| DLE15 | 250 | 500 | 8.50 |
| | 250 | 1,250 | 4.14 |
| | 500 | 750 | 16.70 |
| | 500 | 1,500 | 8.00 |
| DLE30 | 500 | 1,000 | 8.28 |
| | 500 | 3,000 | 1.08 |
| | 1,250 | 1,500 | 21.30 |
| | 1,250 | 3,000 | 11.40 |
| DLE75 | 750 | 1,000 | 5.98 |
| | 750 | 5,000 | 3.13 |
| | 1,500 | 2,000 | 11.10 |
| | 1,500 | 6,000 | 5.68 |
| DLE2-2 | 80 | 200 | 15.5 |
| | 80 | 350 | 7.3 |
| | 120 | 200 | 23.9 |
| | 120 | 350 | 14.1 |

| CATALOG NUMBER | Pa - 90 psi | | |
|----------------|-------------|--------|-------|
| | Ps | Po | F |
| DLE5-2 | 125 | 500 | 9.3 |
| | 125 | 750 | 5.7 |
| | 250 | 1000 | 6.3 |
| | 500 | 1250 | 12.2 |
| DLE15-2 | 500 | 1,000 | 13.80 |
| | 500 | 3,000 | 1.88 |
| | 1,250 | 1,500 | 35.50 |
| | 1,250 | 3,000 | 19.10 |
| DLE30-2 | 750 | 1,000 | 10.90 |
| | 750 | 5,000 | 3.74 |
| | 1,500 | 2,000 | 21.30 |
| | 1,500 | 6,000 | 5.91 |
| DLE75-2 | 1,000 | 2,000 | 5.73 |
| | 1,000 | 10,000 | 2.95 |
| | 1,500 | 2,000 | 8.68 |
| | 1,500 | 12,500 | 2.61 |
| DLE2-5 | 35 | 100 | 5.10 |
| | 35 | 400 | 3.03 |
| | 70 | 100 | 8.71 |
| | 70 | 500 | 4.85 |
| DLE5-15 | 60 | 100 | 3.38 |
| | 60 | 1,000 | 2.38 |
| | 120 | 250 | 6.10 |
| | 120 | 1,500 | 2.07 |
| DLE5-30 | 30 | 100 | 1.98 |
| | 30 | 2,250 | 0.96 |
| | 45 | 100 | 2.71 |
| | 45 | 2,500 | 1.05 |
| DLE15-30 | 150 | 250 | 2.71 |
| | 150 | 2,250 | 1.51 |
| | 220 | 500 | 3.86 |
| | 220 | 2,500 | 1.90 |
| DLE15-75 | 150 | 250 | 2.72 |
| | 150 | 5,000 | 1.83 |
| | 220 | 500 | 3.88 |
| | 220 | 6,000 | 2.16 |
| DLE30-75 | 250 | 500 | 2.18 |
| | 250 | 6,000 | 0.95 |
| | 1,000 | 1,500 | 8.40 |
| | 1,000 | 7,500 | 4.55 |
| DLE2-5-2 | 60 | 500 | 4.2 |
| | 60 | 1000 | 0.6 |
| | 120 | 750 | 6.8 |
| | 120 | 1000 | 4.0 |

| CATALOG NUMBER | Pa - 90 psi | | |
|----------------------------|-------------|--------|------|
| | Ps | Po | F |
| DLE5-15-2 | 150 | 1000 | 4.4 |
| | 150 | 2250 | 2.9 |
| | 250 | 3000 | 2.7 |
| | 500 | 4000 | 2.6 |
| DLE5-30-2 | 60 | 200 | 2.04 |
| | 60 | 4,000 | 1.27 |
| | 80 | 200 | 2.61 |
| | 80 | 5,000 | 0.94 |
| DLE15-30-2 | 250 | 500 | 2.43 |
| | 250 | 4,000 | 1.58 |
| | 1,000 | 1,500 | 9.35 |
| | 1,000 | 5,000 | 7.21 |
| DLE15-75-2 | 250 | 500 | 2.43 |
| | 250 | 10,000 | 1.58 |
| | 400 | 750 | 3.81 |
| | 400 | 12,500 | 1.78 |
| DLE30-75-2 | 500 | 1,000 | 2.36 |
| | 500 | 10,000 | 1.55 |
| | 1,500 | 2,000 | 6.98 |
| | 1,500 | 15,000 | 2.58 |
| DLE30-75-2-25 | 1,750 | 10,000 | 7.1 |
| | 1,750 | 15,000 | 3.9 |
| | 3,000 | 15,000 | 9.9 |
| | 3,000 | 20,000 | 2.5 |
| DLE30-75-2-30 Pa - 145 psi | 3,500 | 20,000 | 14.1 |
| | 3,500 | 30,000 | 3.5 |
| | 5,000 | 20,000 | 21.9 |
| | 5,000 | 30,000 | 14.1 |
| DLE30-75-3-36 Pa - 120 psi | 2,320 | 25,000 | 4.4 |
| | 2,320 | 30,000 | 2.1 |
| | 3,480 | 25,000 | 7.9 |
| | 3,480 | 30,000 | 5.3 |
| 8 DLE 3 | 100 | 250 | 49.2 |
| | 100 | 350 | 22.6 |
| | 200 | 350 | 92.2 |
| | 200 | 450 | 42.4 |
| 8 DLE 6 | 100 | 250 | 29.6 |
| | 100 | 450 | 22.3 |
| | 200 | 450 | 50.5 |
| | 200 | 550 | 41.8 |

Note:

- Drive air pressure operating range is 15-145 psi. Flows above are with 90 psi air drive, unless noted.
- Drive air flow requirements are up to 70 SCFM per air head, and up to 280 SCFM (total) for 8DLE models. Reduced air drive flow will produce lower gas flow.
- Drive air should be filtered to between 5µ and 40µ and have a dew point between 0°F and 50°F.
- Consult HPT for performance values on specific application parameters.

Gas Booster Systems

HPT gas booster systems provide a compact, portable source for increasing gas pressures. These air driven booster systems are shipped assembled and fully tested, ready for turn-key installation. As with standard boosters, the gas booster systems require no electrical power, providing safe and economical operation.

Gas booster systems are capable of compressing most gases including nitrogen, argon, helium and hydrogen up to 36,000 psi. Systems feature special seals and cleaning can pressurize oxygen to 5,000 psi. All HPT systems for use with hazardous gases are modified to ensure vent ports are piped to a common vent connection.



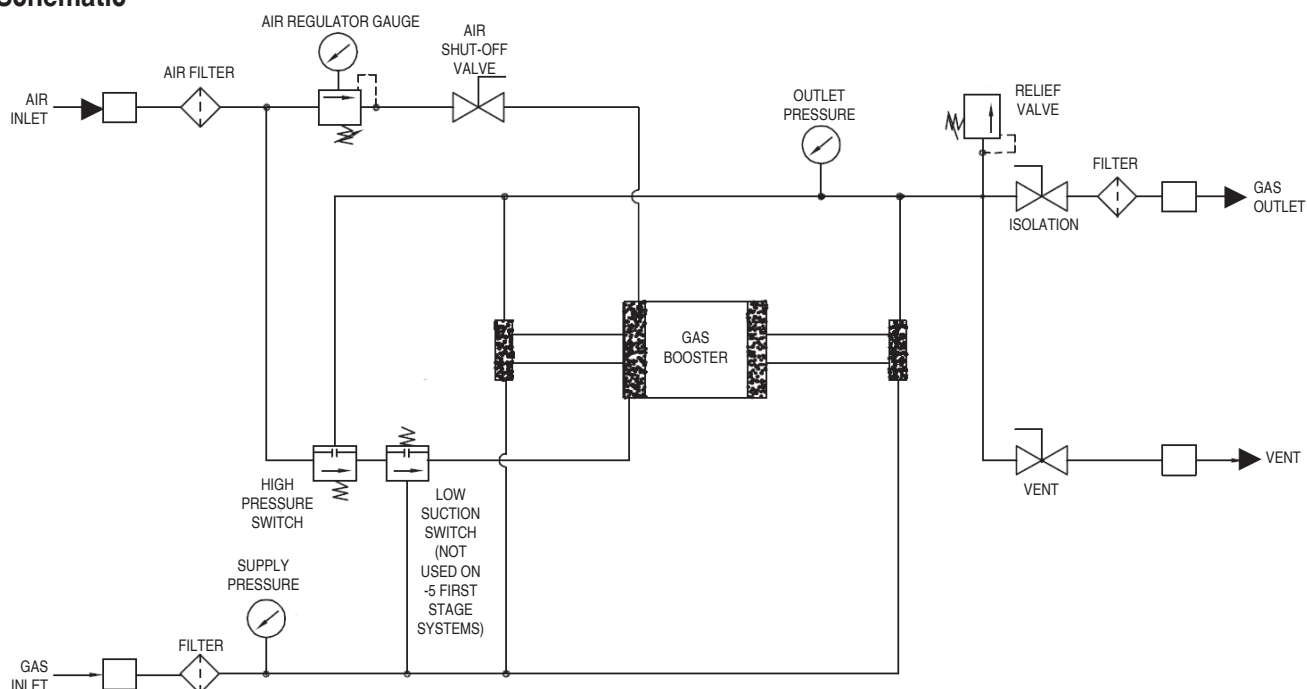
| SYSTEM CATALOG NUMBER | | | GAS BOOSTER TYPE | SYSTEM RATING (PSI) | MINIMUM SUCTION PRESSURE | DIMENSIONS DP X HG X LG | WEIGHT |
|-----------------------|----------------|--------------|------------------|---------------------|--------------------------|-------------------------|--------|
| INERT GAS | HAZARDOUS GAS | OXYGEN GAS | | | | | |
| MTIG3-30 | MTHG3-30 | MTO2-3-30 | DLE30 | 3,000 | 220 | 16" X 23" X 28" | 120 |
| MTIG3-5-30 | MTHG3-5-30 | MTO2-3-5-30 | DLE5-30 | 3,000 | 30 | 16" X 23" X 28" | 120 |
| MTIG5-75 | MTHG5-75 | MTO2-5-75 | DLE75 | 5,000 | 500 | 16" X 23" X 28" | 120 |
| MTIG5-15-75 | MTHG5-15-75 | MTO2-5-15-75 | DLE15-75 | 5,000 | 100 | 16" X 23" X 28" | 120 |
| MTIG10-75-2 | MTHG10-75-2 | N/A | DLE75-2 | 10,000 | 650 | 16" X 23" X 38" | 150 |
| MTIG10-30-75-2 | MTHG10-30-75-2 | N/A | DLE30-75-2 | 10,000 | 220 | 16" X 23" X 38" | 150 |
| MTIG15-30-75-2 | N/A | N/A | DLE30-75-2 | 15,000 | 220 | 16" X 23" X 38" | 150 |

- NOTE:**
1. Various other gas booster models can be used to best fit your specific application.
 2. Schematic shown is the standard system. Other options may be added or removed as required.
 3. The hazardous gas systems have all vent ports plumbed to a common discharge port. This port must be plumbed to a safe vent area.
 4. The oxygen systems have all components cleaned for oxygen service.
 5. For higher flow rates and/or multiple stages, more than one booster may be used in the system.

Applications

- Leak testing of pressure components
- Low pressure gas reclaim from storage bottles
- Gas charging accumulators
- Pressurizing gas cylinders and shock absorbers
- Breathing air systems for scuba and fire department SCBA tanks
- Boosting gas pressures from nitrogen and oxygen generators
- Gas assist injection molding
- Boosting gas pressures from vaporized liquid source

Flow Schematic



Oxygen Gas Booster Systems

Small, lightweight and economical, HPT oxygen gas booster packages are ideal for aircraft and bottle filling applications. Requires only an air source for power (70 psi minimum) and an oxygen supply bottle that can be used to as low as 100 psi. These booster packages will achieve up to 2,000 psi outlet pressure. Single and double acting boosters are available to meet flow requirements.

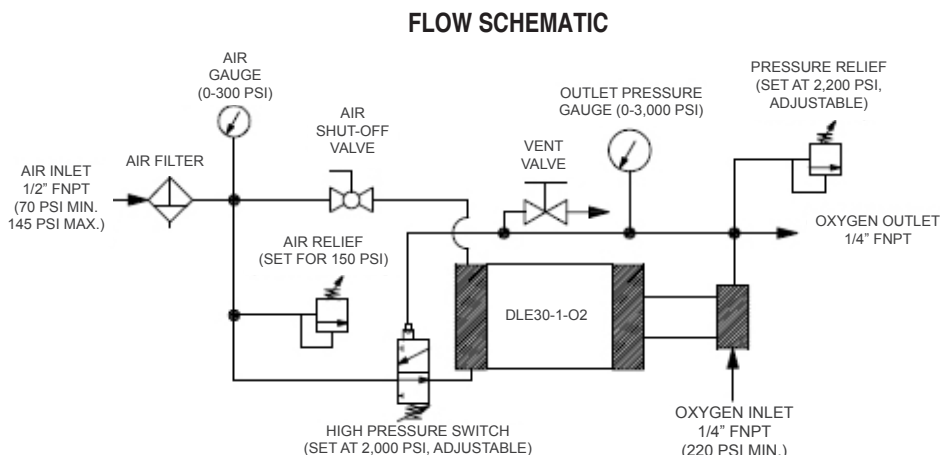
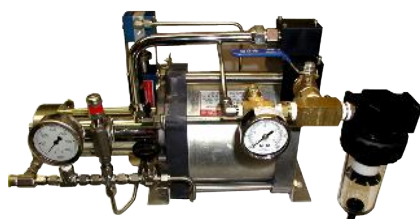


Features

- All stainless steel components, cleaned for oxygen service
- Contaminant free operation with complete separation and isolation between the oxygen and air drive sections
- No electrical power required, only a 70 psi shop air source
- Automatic shut-off at desired outlet pressure for unattended operation
- Safety relief devices and pressure gauges included on both gas and air sides
- Manual vent valve for venting gas pressure prior to disconnecting outlet line
- Drive air filter and shut-off ball valve to manually stop booster
- Drive air connection is 1/2" FNPT
- Oxygen gas inlet and outlet connections are 1/4" FNPT
- All components are mounted to the booster and tested prior to shipment

SINGLE ACTING OXYGEN BOOSTER PACKAGE

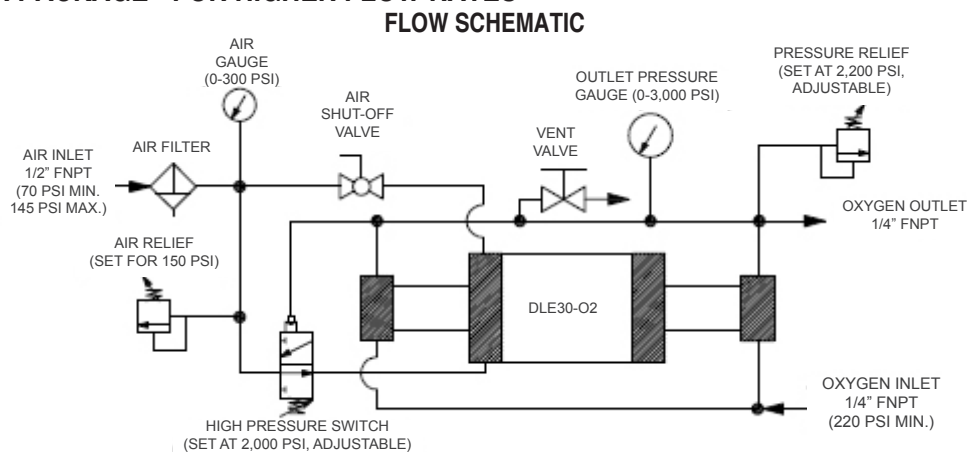
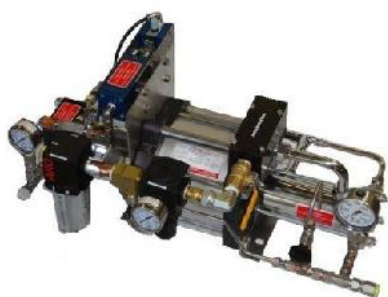
MT02-2-DLE30-1



This package is 21" LG x 15" HG and weighs approximately 44 lbs.

DOUBLE ACTING OXYGEN BOOSTER PACKAGE - FOR HIGHER FLOW RATES

MT02-2-DLE30



This package is 25" LG x 10" HG and weighs approximately 54 lbs.

ROB22 (-HL) Rebreather Oxygen Booster

The Maximator® ROB rebreather oxygen booster is specifically designed for use in the sport diving field. This compact compressed air or hand driven oxygen booster provides a rugged and reliable means of recharging rebreather size tanks. The ROB Oxygen Booster is also available as a portable package stored in a sturdy plastic waterproof case.

ROB boosters:

- Are lightweight and portable
- Ideal for installing in a Pelican Case
- Finned Gas Barrel for efficient gas cooling
- Oxygen Cleaned
- Can be driven from either compressed air or from bottle supply

Wetted materials of construction:

Seal package: Filled Teflon (PTFE) Viton

- Pump Body: 316L SS
- Piston: 440 SS
- Fittings: 316 SS

Approximate Dimensions:

- Height: 8"
- Depth: 4 ½"
- Width: 4 ½"
- Side inlet/outlet: Standard

Optional Accessory:

- ACP - Air control package consisting of a filter, regulator with gauge, shut-off valve and required fittings.
- Optional hand lever operation: HL



Technical Data:

| | |
|--|----------------|
| Air drive pressure: | 14.5 - 145 psi |
| Maximum Outlet Pressure at air drive of 145 psi: | 4,060 psi |
| Pressure Ratio: | 1:28 |
| Displacement per cycle: | 0.28 (In³) |

Connections:

| | |
|--------------------------------|----------------|
| Inlet: | ¼" NPT |
| Outlet: | ¼" NPT |
| Air Drive: | ¼" NPT |
| Maximum operating temperature: | 140° F |
| Net Weight: | 9 lbs. |
| Maximum operating temperature: | 140° F / 60° C |

Nitrogen Gas Booster Systems

HPT nitrogen gas booster packages offer an economical method of boosting nitrogen (or other select gases or air) gas pressure up to 4,400 psi. The package features a compact and lightweight arrangement that is turn-key and fully tested. No electrical power required, only a 75 psi shop air source is needed. Single and double acting boosters are available to meet flow rate requirements.

Applications

- “Pop Floats” or tire filling
- Pressurizing shock struts
- Charging hydraulic accumulators
- Gas reclaim from bottles
- Boosting pressures from nitrogen generators
- Boosting pressures from vaporized liquid nitrogen

Features

- Shop air driven units shown below.
- For high pressure nitrogen driven option add -DASR to model number
- Nitrogen drive units include a high pressure regulator with gauge, a gas supply pressure switch to stop booster when supply bottle pressure is too low, and a dry air spool modification on the booster for longer service life. These units can also be driven on shop air pressures.
- All packages include:
 - contaminant free operation with complete separation and isolation between the gas and air drive sections
 - automatic shut-off at desired outlet pressure for unattended operation
 - safety relief valves and gauges on gas and air/nitrogen sides
 - drive air/nitrogen shut-off ball valve to manually stop booster
 - manual vent valve for venting gas pressure prior to disconnecting outlet line

SINGLE ACTING NITROGEN BOOSTER PACKAGES

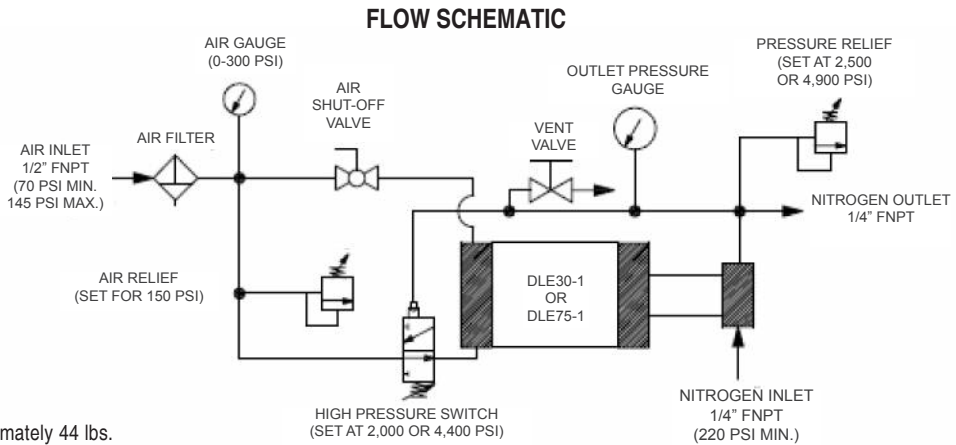
MTNB3-DLE30-1 - to 2,200 psi

MTNB4-DLE75-1 - to 4,400 psi



Air drive unit shown. Nitrogen drive unit available.

This package is 21" LG x 15" HG and weighs approximately 44 lbs.



DOUBLE ACTING NITROGEN BOOSTER PACKAGES - FOR HIGHER FLOW RATES

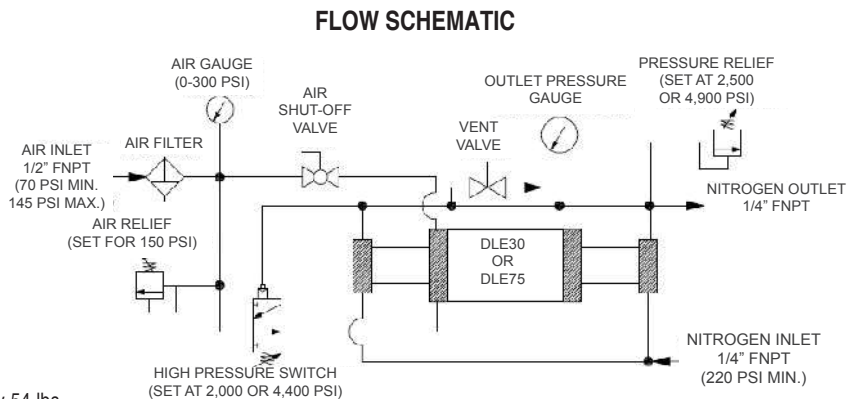
MTNB3-DLE30 - to 2,200 psi

MTNB4-DLE75 - to 4,400 psi



Air drive unit shown. Nitrogen drive unit available.

This package is 25" LG x 10" HG and weighs approximately 54 lbs.



Gas Bottle Mounted Charging System

Engineered to provide compact and portable high pressure gas solutions

MTBGN4-DLE30-1 FOR NITROGEN SERVICE

MTBGO4-DLE30-1 FOR OXYGEN SERVICE



Suitable for industrial
gas charging applications

Bottle and Bottle Cart not included

Features:

- Low cost, fast shipment, ready to use
- CGA connection and hose included
- Gas inlet pressure to 3,000 psig
- Gas outlet pressure to 4,350 psig
- Adjustable 1,450-4,350 psig automatic shut-off switch
- Completely portable nitrogen driven nitrogen gas booster
- Oxygen system requires air or nitrogen drive gas

Benefits:

- Easy to connect and operate
- Compact construction style
- Lightweight and easy to transport
- No risk from heat, flame or spark
- One source drives and feeds the booster station



GAS BOTTLE MOUNTED BOOSTER PERFORMANCE EXAMPLE:

Booster drive pressure: 140 psig

Vessel volume: 218 cubic inches

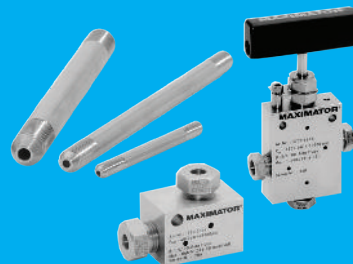
Vessel start pressure = 800 ps

| Gas Supply Pressure | Vessel Final Pressure | HPT time to fill | Brand "H" time to fill |
|---------------------|-----------------------|------------------|------------------------|
| 1500 | 2000 | 0:20 | 0:53 |
| 1250 | 2000 | 0:35 | 1:41 |
| 1000 | 2000 | 0:58 | 3:25 |
| 800 | 1300 | 0:35 | 4:20 |

OTHER PRODUCTS

Valves, Fittings & Tubing

- Highest quality for superior product performance
- Standard metals of stainless steel
- Pressures to 152,000 PSI



Air Amplifiers & Systems

- Air driven to 4,350 PSI
- Deliver increased air pressure to shop floor equipment and work stations
- Require no electrical power
- Single or double acting models



Liquid Pumps & Systems

- Air driven to 60,000 PSI
- Economic hydraulic power
- Interchangeable with other leading pumps
- Require no electrical power
- Variety of sizes and styles to suit your application



Repair Service Available

- Guaranteed quality workmanship
- Cost effective quick turnaround
- Use original manufacture parts
- Factory support



All technical and dimensional information subject to change.

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