Nitrogen Generators for Retail Tyre and Industrial Applications

A HORNGROUP BRAND

www.pclairtechnology.com
Nitrogen Generators for Retail Tyre and Industrial Applications

The NEXUS N72 is a BRAND NEW mobile Nitrogen generation and gas delivery cart "Made in Sheffield", UK.

This compact and innovative system combines PCL's world renowned digital pressure control technology with modern membrane nitrogen generation technology to deliver high purity Nitrogen to the desired application quickly and quietly. The N72 NEXUS supersedes the NEXUS range with modern features and offers real end-user benefits.

KEY FEATURES

- 5-year warranty on Nitrogen generation membrane**
- Modern membrane Nitrogen generation technology
- PCL digital pressure controlling software built-in
- Smallest and lightest 'like for like' system on the market
- Re-chargeable battery powered (mains option available)
- PCL best-in-class Nitrogen 'purge-and-fill' function
- All common Nitrogen applications covered (+/- 97%)
- 12v 7 amp battery and charge indicator
- Nitrogen purity test port

** Subject to annual filter element changes

KEY BENEFITS

- Long lasting peace of mind for your capital investment
- Compact, fast, very quiet and no moving parts
- Calibrated, traceable accuracy and safety from the pre-set inflator
- Allows for flexible movement & positioning in the workspace
- No trailing cables, can be used anywhere with an air source
- Converts air filled vessels (e.g. tyres) up to 95% pure Nitrogen
- Flexible and versatile system
- Long lasting 20h of continuous use & only 2h recharge time
- Provable high purity Nitrogen delivery

Comparison with other systems on the market

<table>
<thead>
<tr>
<th>SPECIFICATION</th>
<th>N72</th>
<th>NEXUS</th>
<th>COMMON PSA SYSTEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size (m)</td>
<td>1.03 x 0.5 x 0.6</td>
<td>1.36 x 0.6 x 0.47</td>
<td>circa 1.36 x 0.6 x 0.47</td>
</tr>
<tr>
<td>Weight</td>
<td>50-70 kg</td>
<td>155 kg</td>
<td>150 kg +</td>
</tr>
<tr>
<td>Power Supply</td>
<td>12v 7 amp battery</td>
<td>230v/110v mains</td>
<td>230v/110v mains</td>
</tr>
<tr>
<td>Warranty</td>
<td>5 years **</td>
<td>12 months</td>
<td>12 months</td>
</tr>
<tr>
<td>Noise Level (dBA)</td>
<td>65</td>
<td>80+</td>
<td>80+</td>
</tr>
<tr>
<td>Applications</td>
<td>Car, LC, HC</td>
<td>Car, LC, EM</td>
<td>Car, LC</td>
</tr>
<tr>
<td>N2 Conversion</td>
<td>2 x 10% purge &amp; fill</td>
<td>2 x 10% purge &amp; fill</td>
<td>1 x 10% 1 x 50% purge &amp; fill</td>
</tr>
<tr>
<td>Country of Origin</td>
<td>UK</td>
<td>China</td>
<td>China</td>
</tr>
<tr>
<td>Spares</td>
<td>Full range</td>
<td>Limited</td>
<td>Limited</td>
</tr>
<tr>
<td>Max Pressure</td>
<td>145 psi / 10 bar</td>
<td>145 psi / 10 bar</td>
<td>145 psi / 10 bar</td>
</tr>
<tr>
<td>Approvals</td>
<td>France (Spain, Portugal TBC)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* Mains power options available

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TECHNICAL SPECIFICATION

Temperature Range
- Operating: 0°c to 40°c
- Storage: -40°c to 70°c

Electrical Interface
- 12v battery powered: 7 amp
- Rechargeable from mains power (110v or 230v)

Cabinet Dimensions
- Height: 1029 mm
- Width: 535 mm
- Depth: 647 mm
- Weight: 50-70 kg (depending on model)

Accuracy
- To +/- 0.5% of full scale reading
- (Exceeds EN12645:2014 Standard)

Max Inflation Set Pressure
- 145 psi /10 bar / 999 kPa

NO.  EXAMPLE APPLICATION (RETAIL TYRE)  PART NO.  MAX FLOW RATE  MINIMUM INPUT
1 1 x Car tyre  N72SAGC1  50 l/min (1.77 cfm)  8 bar / 5.3 cfm
2 4 x Car / van tyres / 2 x motorcycle tyres  N72SAIC24  83 l/min (2.94 cfm)  8 bar / 8.8 cfm
3 1 x Light commercial tyre  N72SAGC2  83 l/min (2.94 cfm)  8 bar / 8.8 cfm
4 4 x Light commercial tyres  N72SAIC34  167 l/min (5.89 cfm)  10 bar / 17.7 cfm
5 1 x Truck tyre  N72SAGC3  167 l/min (5.89 cfm)  10 bar / 17.7 cfm
6 4 x Multiple truck tyre  Contact PCL  Contact PCL
7 EM/OTR tyres  Contact PCL  Contact PCL

NO.  EXAMPLE APPLICATION (NON TYRE)  PART NO.  MAX FLOW RATE  MINIMUM INPUT
1 Low flow and pressure purging of electrics +/- 3% O2  N72SAGC1  50 l/min (1.77 cfm)  8 bar / 5.3 cfm
2 Low / medium flow & pressure purging of electrics +/- 3% O2  N72SAGC2  83 l/min (2.94 cfm)  8 bar / 8.8 cfm
3 Feeding small nitrogen storage vessel <1000L +/- 3% O2  N72SAGC3  167 l/min (5.89 cfm)  10 bar / 17.7 cfm
4 Feeding bulk nitrogen storage vessel +/- 3% O2  Contact PCL  Contact PCL

NO.  ACCESSORIES / SPARES  PART NO.
1 Nitrogen percentage analyser  N2A001
2 Replacement oxygen sensor for N2A001  N2AS001
3 Spares for N72 range  Contact PCL

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Why Nitrogen?

• **Reduce pressure loss**
  Nitrogen has a larger molecular structure than oxygen so it migrates through the rubber tyre wall much slower and reduces the speed of pressure loss.

• **Reduce unwanted pressure changes**
  Nitrogen is a dry gas which reduces energy build up inside the tyre on long journeys. This prevents unwanted pressure increases and uneven tyre wear.

• **Reduce tyre and wheel rim wear**
  Nitrogen is a dry gas which means it doesn’t oxidise or react with materials it comes into contact with such as the inner tyre wall and inner wheel rim.

• **Reduced Fire Hazard**
  Fire needs Oxygen. By removing this and replacing with completely inert Nitrogen you are removing the potential for tyre fires in hazardous environments.

How can inflating with Nitrogen benefit the road user?

• **Reduce fuel consumption**
  By reducing the migration of gas through a tyre it will stay inflated correctly for longer. This prevents extra rolling resistance on the engine and subsequent increase in fuel use.

• **Reduce Tyre Wear**
  Tyres that stay inflated to the correct pressure for longer will last for an extended period. If the correct amount of rubber is in contact with road surface the tyre tread will wear at a much slower rate.

How can offering Nitrogen inflation benefit the tyre service provider?

• **Increase profits**
  Average charge is £1.50 per tyre - pays back the cost of a Nitrogen generator very quickly then all revenue is PROFIT.

• **Increase customer retention**
  Offer free Nitrogen top-ups for life once customer has paid for a conversion and keep them coming back!

All orders are subject to our standard terms and conditions – available on request. In line with our continuous improvement programme, we reserve the right to amend or revise the specification of our products without prior notice. Published August 2018. E. & O.E.