Axles with independent and electronically controlled suspension

A new integrated system of independent suspension with position control. A revolutionary system (patented by Carraro) which marks a radical development in the four-wheel drive market by ensuring the absorption of stresses induced in the vehicle by the condition of the terrain. The wheels, independently supported by a double wishbone, maintain the vehicle’s set up even on rough terrain, while the hydropneumatic suspension provides a damping effect with wide load variation. A range of axles with integrated and independent suspension which is completely interchangeable with the traditional type and does not require any modification to the chassis or transmission shaft.

- Range from 70 to 185 HP
- Suspension range +/- 45 mm
- Max pressure of control system 180 bar
- Electronic control integrated in valve unit
- Improved grip (+70% vs. rigid axle at sprung mass frequency)
- Improved damping capacity
- Self-trimming function
- Suspension lock up

Better handling

Precision steering

Higher cross-country speeds

- Greater productivity
- Greater comfort
- Greater safety
### Axles with independent and electronically controlled suspension

<table>
<thead>
<tr>
<th>Model</th>
<th>A Overall width (mm)</th>
<th>B Flange to flange (mm)</th>
<th>δ Max. steering angle (°)</th>
<th>C Hub spigot diameter (mm)</th>
<th>D Wheel studs P.C.D. (mm)</th>
<th>E Wheel studs size</th>
<th>F Susp. wheel travel (mm)</th>
<th>α King-pin angle</th>
<th>β Camber angle</th>
<th>φ Caster angle</th>
<th>Peak torque (Nm)</th>
<th>Dynamic load capacity (N)</th>
<th>Static load capacity (N)</th>
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<td>60000</td>
<td>75000</td>
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</tbody>
</table>

Information are to be considered indicative

Control unit: main dimensions

Limited slip differential lock
“Ball-type” lim-slip differential lock (Carraro patent)
100% mechanical (hydraulic actuation) differential lock
Differential lock with multidisc wet clutch
Wet brakes
Waterproof seals

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