Compact design
The WD wheel drive consists of an extremely short unit of wheel, integrated planetary gearbox and bearing. The combination with Nanotec’s motors and controllers results in compact systems that simplify the development and optimization of self-propelled systems, such as service robots or AGVs. The wheel is available in a number of diameters and with different mounting flanges.

- Space-saving design
- Withstands high radial loads
- 6 different wheel diameters
- With or without mounting bracket
- Few components minimize cabling effort

Maximum flexibility
The wheel drives of the WD series can be combined with a wide range of motors, brakes and rotary encoders, and can be ordered with or without mounting bracket. Among others, Nanotec’s DFA90 external rotor motor with integrated encoder is perfectly matched to the wheel drive. The total installation length of this combination is just 121.5 mm.

Custom solutions
The wheel drive has a standard reduction of 1:16. Customized gear reductions are available on request. All other components can also be combined individually, and, thus, be optimally adapted to every application.
Motor brake for dynamic stops

Two variants
The WD wheel drives are also available with a premounted motor brake for applications that require repeated and dynamic braking. BRAKE-BWA-1.3-8-DYN is designed for a reduction ratio of 11, and BRAKE-BWA-0.8-8-DYN is designed for reduction ratios of 16 and 20. They are intended for a rated power of 9.2 W and 2,500 braking operations.

<table>
<thead>
<tr>
<th>BRAKE-BWA-0.8-8-DYN</th>
<th>BRAKE-BWA-1.3-8-DYN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. holding torque</td>
<td>0.8 Nm</td>
</tr>
<tr>
<td>Max. dynamic torque</td>
<td>2.1 Nm</td>
</tr>
<tr>
<td>Rated power</td>
<td>9.2 W</td>
</tr>
<tr>
<td>Operating voltage</td>
<td>24 VDC</td>
</tr>
<tr>
<td>Max. running time</td>
<td>70 ms</td>
</tr>
<tr>
<td>Number of dyn. braking operations</td>
<td>2,500</td>
</tr>
</tbody>
</table>

Two variants
Both brakes are enclosed in a housing that protects them against environmental influences and penetration by foreign objects. They can be combined with motors with flange size NEMA 23/24 and 80 mm as well as motors of the DFA90 series.

Please contact our sales team if you have questions regarding a specific application or you would like to request a quote for a wheel drive with brake.

Nanotec Electronic GmbH & Co. KG
Kapellenstraße 6, 85622 Feldkirchen, Germany
T +49 (0)89 900 686-0
F +49 (0)89 900 686-50
info@nanotec.de
www.nanotec.com