



## Diverter wheels

### Application / Challenges

Diverter wheels are powered conveyor elements that change the direction in which goods flow in a conveying system.

The combination of relatively high speeds, the weight of the moving goods and diversion angles of up to 90° mean that the wheels are exposed to huge forces. What's more, significant reciprocal abrasion is produced when the drive belt and the wheel come into contact.

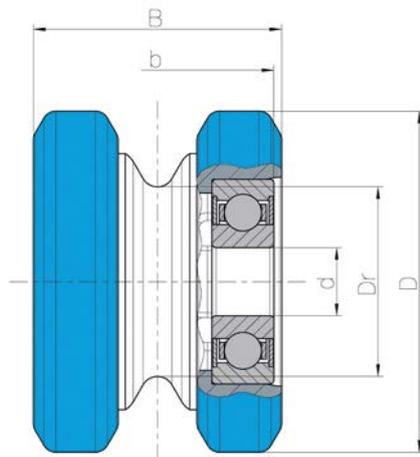


## Solution and materials

faigle diverter wheels feature a multi-component construction, comprising a polyamide hub and two thermoplastic polyurethane (TPU) tyres, with a metal ring serving as the liner.

We use a very stiff hub made from carbon-fibre-reinforced polyamide to enhance the wheel's load-bearing capacity. Elastic but also robust, TPU tyres provide optimum grip and high abrasion resistance. The tyres are securely welded onto the hub and remain firmly in place despite the strong axial forces exerted on the wheel. The metal insert provides an ideal mating surface for the round belt, so it protects both the wheel and the belt against wear.

All of the materials used can be supplied with electroconductive properties, which means any electrostatic build-up is discharged.



## Customer Benefits

- ✓ Secure welding between running surface and hub improves operating reliability
- ✓ Optimum coefficient of friction delivers reliable diversion
- ✓ Outstanding abrasion resistance extends service life
- ✓ Electroconductive materials eradicate electrostatic build-up
- ✓ Extremely cost-effective thanks to efficient production using injection moulding
- ✓ Lower installation costs thanks to delivery of assemblies including shaft and circlips

## Specifications

D	35 – 70 mm
Dr	20 – 50mm
B	35 – 70mm
d	6 – 25mm
b	20 – 70mm
Tyre hardness:	75 – 95 Shore A
Load capacity:	100 – 500 N
Speed:	1.5 – 2.5 m/s