



Applications and challenges

Together with the ball bearing, the bearing shield and housing form a unit that maintains the conveyor wheel's position on the stationary shaft.

This unit is pressure-bonded with the conveyor wheel tube. The conveyor wheels can reach speeds of up to 2m/s, repeatedly braking and accelerating again. The bearing shield protects the ball bearing against external influences, preventing significant build-ups of dirt as well as mechanical damage. The shield is fitted on the inner ring of the ball bearing, joining it to the wheel shaft.

The housing is snapped on over the outer ring of the ball bearing and forms the connection with the wheel tube. Reliable protection against electrostatic build-up is vital for conveyor wheels.



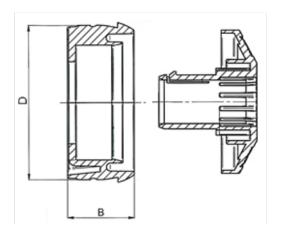


Solution and materials

faigle has developed a solution that safely discharges electrostatic build-up directly through the plastic parts. There is no need for metal discharge elements such as brushes or copper thread. The bearing shield is available in a wide range of colours.

The volume resistance achieved is similar to that of electroconductive materials (10_4 – $10^7~\Omega m$). faigle's extensive experience shows that the conductivity of the plastic parts remains stable throughout their service lives.

The materials used score highly in terms of mechanical load-bearing capacity and impact strength.



Customer Benefits

Safe discharge of electrostatic build-up

Retains conductive properties over many years

Bearing shield available in large selection of colours

 Available for delivery as separate parts, or fully assembled including ball bearing

Specifications

D 40 – 80mm

B 15 – 50mm

Volume resistivity: $10^4 - 10^7 \Omega m$