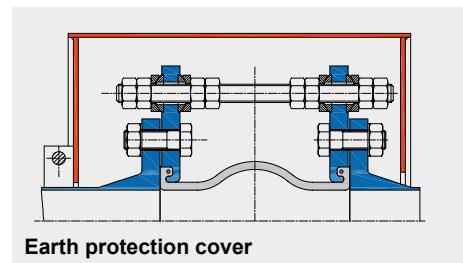


WILLBRANDT Accessories

Earth protection cover

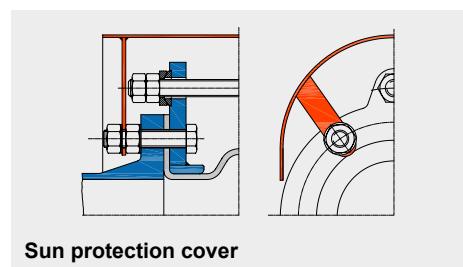
The earth protection cover is necessary when rubber expansion joints are installed in the ground and the bellow must be protected from direct contact with sand. The earth protection cover allows the expansion joint to retain its mobility so that it can absorb building subsidence and pipe displacements. The cover is manufactured in two parts so that it can be fitted after the expansion joint has been completely installed. It is attached to one side of the pipework, preferably on the non-moving side.



Earth protection cover

Sun protection cover

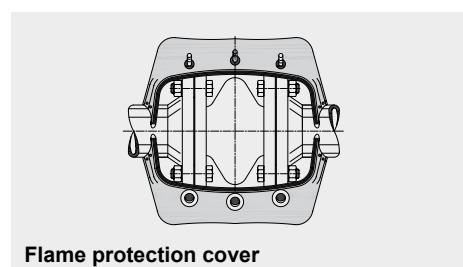
It is used wherever strong sunlight is to be expected, to prevent hardening (aging). The cover is manufactured as a single piece with $\frac{3}{4}$ circumference. Fastening can be done directly with the flange connection bolts. It is important to ensure that longer bolts than usual are used for fastening the cover, as an additional locknut needs to be accommodated. The covers are made from stainless steel 1.4301, with other materials available on request.



Sun protection cover

Flame protection cover

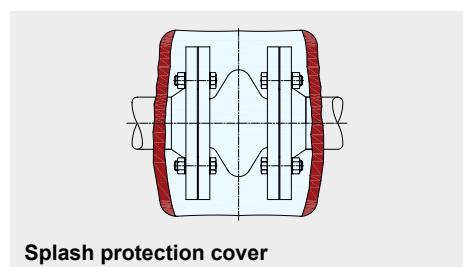
The flame protection cover is used where open fire is to be expected in order to protect the system. The main area of application is the engine room of ships. The cover is supplied in one piece with a resealable opening. After final installation of the expansion joint, it is placed around the expansion joint and the mating flanges and closed.



Flame protection cover

Splash protection cover (acid-resistant)

The splash protection cover should be used where hot and/or aggressive media are conveyed and personal protection is required. The cover is preferably made of PTFE and can be fitted with a viewing window and a drain valve. The cover is designed so that the expansion joint can be completely fitted first. The cover is placed around the expansion joint in the shape of a jacket and closed.



Splash protection cover

Adapter disc

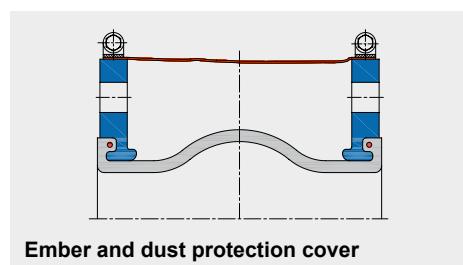
A adapter disc made of steel is used if the inside diameter of the sealing surface of the counter flange is larger than that of the rubber bellow (please refer to the table Rubber bellow sealing profiles on page 101). This may be the case when using crimped flanges or slip-on flanges. An additional seal between the counter flange and the adapter disc is necessary.



Adapter disc

Ember and dust protection

This is a simple protective band made of aluminium-glass fabric, which is intended to prevent hot ash or embers falling down and damaging the expansion joint during heavy-duty operation, e.g. in steelworks. It is also intended to prevent heavy soiling between the bellow and flange, which can lead to excessive abrasion during movement. The dust protection cover is supplied as a sleeve and attached to the flange using hose clamps. All covers are designed in such a way that the freedom of movement of the expansion joints is not restricted.



Ember and dust protection cover