

DRUM BRAKE OPTIONS



M 1501 272 E-EN-2001-01

LINING WEAR COMPENSATOR DEVICE

The purpose of this device is to compensate for the wear of brake linings. With correct adjustment, the wear compensator will maintain an almost constant reserve stroke. Inspection of reserve stroke is necessary even with a correct adjustment of wear compensator, especially during commissioning and the initial time of commercial operation.

MODE OF OPERATION

assumption: the wear compensator is correctly adjusted according to our manual. When opening and closing the brake, the position of the drive pin (70.9) remains unchanged, until the reserve stroke of the thruster is reduced due to the wear of the linings. Upon decrease of reserve stroke, the adjusting bolt (72) will contact the drive pin (70.9) when closing the brake. The drive pin is rotated counter clock-wise by a certain angle. The sliding ring (70.7) is rotated by the same degree as the drive pin. The threaded sleeve (70.4) does not move because the back stop needle bearing (70.5) is rotating free in counter clock-wise direction. With the subsequent release of the brake, the edge of the drive pin drilling will contact and rotate the drive pin and the sliding ring in

clock-wise direction. When rotated clock-wise, the back stop needle bearing is locked and transfers the rotation onto the threaded sleeve. When rotating the threaded sleeve, the tension rod

(57) is screwed into the wear compensator, reducing the distance between the two brake arms, ergo between the lining surfaces. Thus, the reserve stroke is increased. Depending on the amount of wear per brake application, the wear compensator may need several operating cycles, until the initial reserve stroke level is reached again. At this point, the drive pin will touch the adjusting bolt and the drilling for drive pin respectively when opening and closing the brake, however, there is not further rotation of the drive pin. If the initial reserve stroke level should not be reached again, a re-adjustment of wear compensator is required. If the reserve stroke level should be continuously reduced in spite of having re-adjusted the wear compensator, the wear rate per stop exceeds the compensating capacity of the wear compensator and an additional manual wear compensation is required. The quadring seals (70.6) avoid any dust or dirt to enter into the system and they generate sufficient friction to protect the device from vibrations.

