

Perko® concealed door closer (R1/R2)

May 2004

- Suitable for latched 1/2 hour and 1 hour fire doors up to 50.8 kg
- Concealed - improved aesthetics
- reduced vandalism opportunities
- Fire tested - incorporated in doors that were successfully fire tested to BS 476: Part 22: 1987; does not affect latched 1/2 hour and 1 hour fire door integrity
- Durability - manufactured under ISO 9001: 2000 Quality System; tested to withstand 500,000 open and close cycles
- Minimal maintenance required
- Full technical back up available

GENERAL

Description A door closer for light or medium weight internal doors. Designed to be completely concealed when the door is closed, and compact enough to be unobtrusive when the door is open. The closer comprises a small chain anchored at one end to either a rounded or rectangular end plate (R1 + R2) which is screwed to the door jamb and connected at the other end to a spring contained within a steel cylinder which is fitted into the butt stile of the door. The spring is compressed when the door is opened, and its extension when the door is released acts through the chain to pull the door closed again. The Perko is British designed, developed and manufactured.

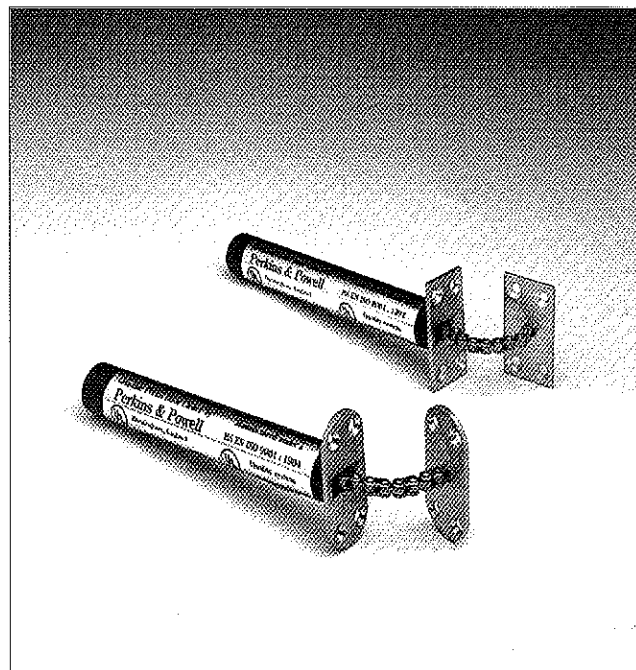
Applications To provide automatic closure of light and medium weight internal doors weighing up to 50.8 kg, except those fitted with rising butt hinges, Parliament or projecting hinges or where limited air displacement conditions exist. The distance between the centres of two fixing plates must not exceed 45 mm when the door is opened to its maximum. Should this distance be exceeded, eg through the use of wide-knuckled hinges, a door stop should be fitted at the appropriate distance. Suitable for use on latched 1/2 hour and 1 hour fire-resisting doors subject to approval by appropriate fire authorities. The Perko was incorporated in doors that were successfully subjected to fire tests by the Warrington Fire Research Centre to BS 476: Part 22: 1987. At the end of the tests the integrity of the doors in the vicinity of the closers was maintained. A copy of the report is available on request. Restricted ventilation or ill-fitting door seals can affect the performance of the Perko as with other closers.

Authority The Perko is manufactured under a ISO 9001:2000 Quality System. The closer also has UL and cUL approval and its listing control number is 85R6.

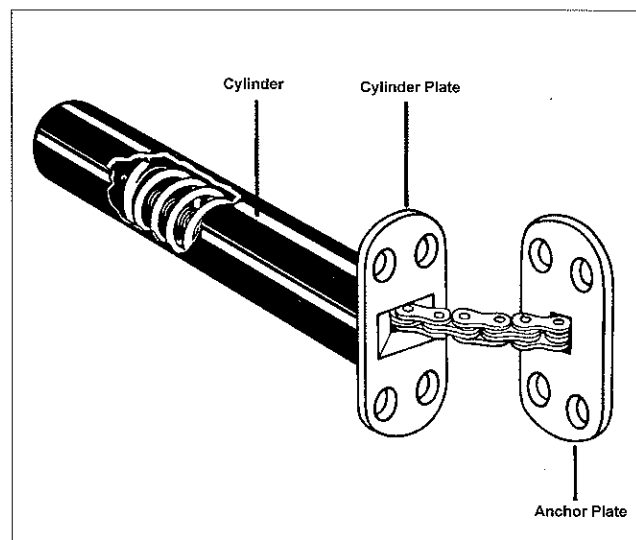
DESCRIPTION

Composition, manufacture The closer comprises a steel cylinder fitted at one end with a brass anchor plate and containing a spiral steel spring. One end of a plate-link chain which is terminated by a threaded shank passes through an aperture in the fixing plate and through the spring, and retains the spring at the open end of the cylinder with a steel nut screwed to the shank. The other end of the chain is pin-pointed to a second brass anchor plate. The chains have withstood breaking loads of 0.214 metric tonnes. Each anchor plate has four countersunk holes for screw-fixing: brass-plated screws are provided with the closer. The design is patented and registered: British patent number 8320013.

Shape The shape of the closer is illustrated (2).



(1) Perko door closer with either oval or rectangular anchor plates



(2) Construction of door closer

Dimensions Oval brass anchor plates are 55 mm high x 25 mm wide x 2.4 mm thick. The original rectangular anchor plates are still available, these are 51 mm high x 25 mm wide x 2.4 mm thick. The steel cylinder is 22 mm outside diameter and 142 mm long excluding the thickness of the cylinder anchor plate.