



## DISCONNECTOR DRIVES



# DISCONNECTOR DRIVE FUNCTION



The disconnector drive is intended for remote controlling of disconnectors or disconnecting switches on the tram, t-bus and railway lines. It is an essential part of the overhead contact system, where it enables to disconnect given contact sections, bridge or short-circuit them in case of failure or for purpose of maintenance.

It is compatible with all commonly supplied disconnectors.



## TYPES OF DISCONNECTOR DRIVES

The drives are divided in two categories - manual and motor driven. Elektroline offers various adjustments of the motor drives, e.g. termination element of the operating rod, lockability, electrical connection, etc.

Manual drives differ according to the used type of the handle.

			clevis	shaft	bows	material	stroke*	weight
manual drives		Manual disconnector drive - handle (Bz)			●	BzAl		8 kg
		Manual disconnector drive - handle (HDG)			●	HDG		
		Manual disconnector drive - handle with a lock (StSt)			●	StSt	200 mm	5 kg
		Manual disconnector drive - handle on the wall (HEB) HDG			●	HDG		
		Manual disconnector drive incl. box on the mast			●	HDG		10 kg
motor drives	24 V DC	Disconnector motor drive 24 V DC (PT)		●				
		Disconnector motor drive 24 V DC 3-modes of operation (PT)		●				
	90 V DC	Disconnector motor drive 90 V DC		●				
	110 V DC	Disconnector motor drive 110 V AC		●			190 mm	
	230 V AC	Disconnector motor drive 230 V AC 3-wire	●					22 kg
		Disconnector motor drive 230 V AC 5-wire (PT)		●				
		Disconnector motor drive 230 V AC 5-wire (Railway)	●				140 mm	
		Disconnector motor drive 230 V AC 4-wire (Railway)	●				190 mm	
		Disconnector motor drive MP16	●				220 mm	

\* Adjustable range of the stroke is 140 - 250 mm

The drive has a narrow, modern profile, allowing its placement into a HEB or central pole, where it does not interfere with the vehicle envelope profile. The drive can be mounted on any type of pole - round, braced, polygonal, etc. Controlled devices are connected to the drives by the operating rods.

The box and the case of the drive are made of non-flammable material.

Tubes for the adapter of rods are plastic. The rods are made of galvanized steel or fiber-glass (insulated) with Ø 27 mm. Range of the adjustable drive extension for the terminal switches is from 140 to 250 mm.



# INDIVIDUAL MOTOR DRIVE COMPONENTS

Lock of the motor drive cover.

2

Optional



Lock cylinder  
FAB + key



Lock + T-handle

Various designs of the screw terminal.

1

Plastic tubes protecting the motor shaft. The shaft is electrically insulated from the termination element.

4

Dismantlable cover of the drive enables easy maintenance.

3

Termination for the disconnecter rod connection.

5

A linear electric motor is the principal functional unit of the drive.

6

Mechanical terminal switches limit the motor drive stroke.

7

Handle for manual (emergency) control.

8

Location of the handle inside the drive



Terminal switch of the cover will send a message to the personnel if the cover is removed.

9

Optional



Clevis with outer thread



Shaft with inner thread

The most important feature of the drive is a powerful linear motor along with the terminal switches of positions and a sensor for indication of the removed cover.

For safety reasons, the motor is blocked when the cover is removed. In order to shift it for maintenance, it is necessary to unblock it. The connecting screw terminal is located in the bottom part.



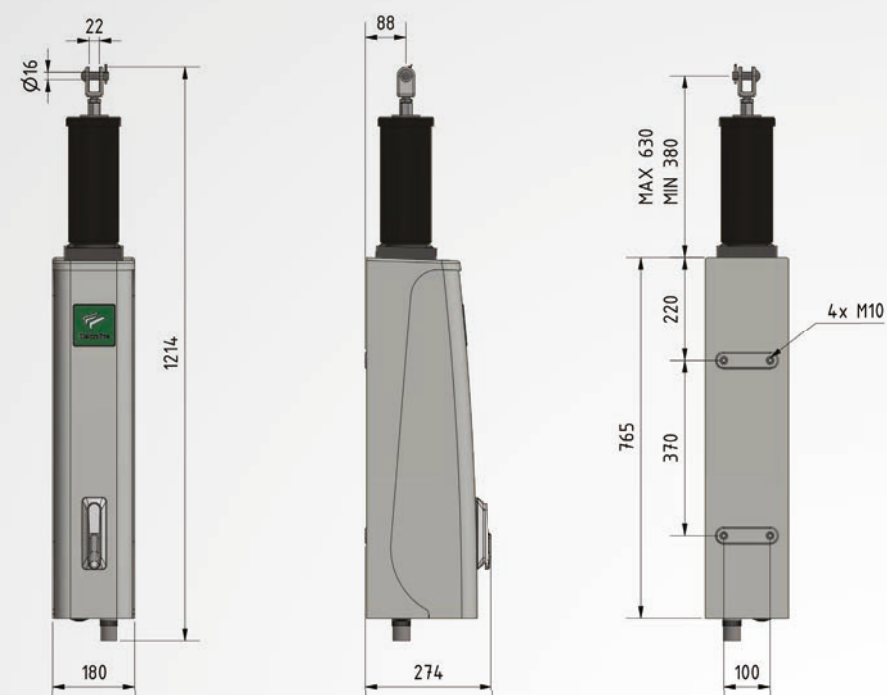
If necessary, the motor drive can be controlled manually with a handle.

The standard colour design is in grey (RAL 7035). It can be made also in other RAL shades at customer's request.

The lockable door mechanism, connecting rod adapter or bushing of the connecting cable can be modified too.



## BASIC DIMENSIONS



## TECHNICAL SPECIFICATION

Total maximum weight of the drive is 25 kg. Minimum service life is 20 000 cycles. Standard stroke is 190 mm, adjustable up to 250 mm. Stroke speed is 37 mm/s.

This product complies with the following tests:

Maximum load test  
(225 kg) - given by the  
manufacturer



IP55



Protection class



Thermal load:  
-25° - +65° (given  
by the manufac-  
turer)



Mechanical durability  
(cyclic test) - given by  
the manufacturer

**EMC**

EMC (for AC a DC) - EN  
50121-5

## MANUAL OPERATING DRIVES



Manual operating mechanism is designed for easily accessible places or where remote control is not required. The undeniable advantage is the low price and maintenance-free operation. Like the motor drives, they can be mounted both on poles or a wall.

This type of drive is more commonly used for urban contact systems because the distance between disconnectors is shorter than for the railway drives.



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