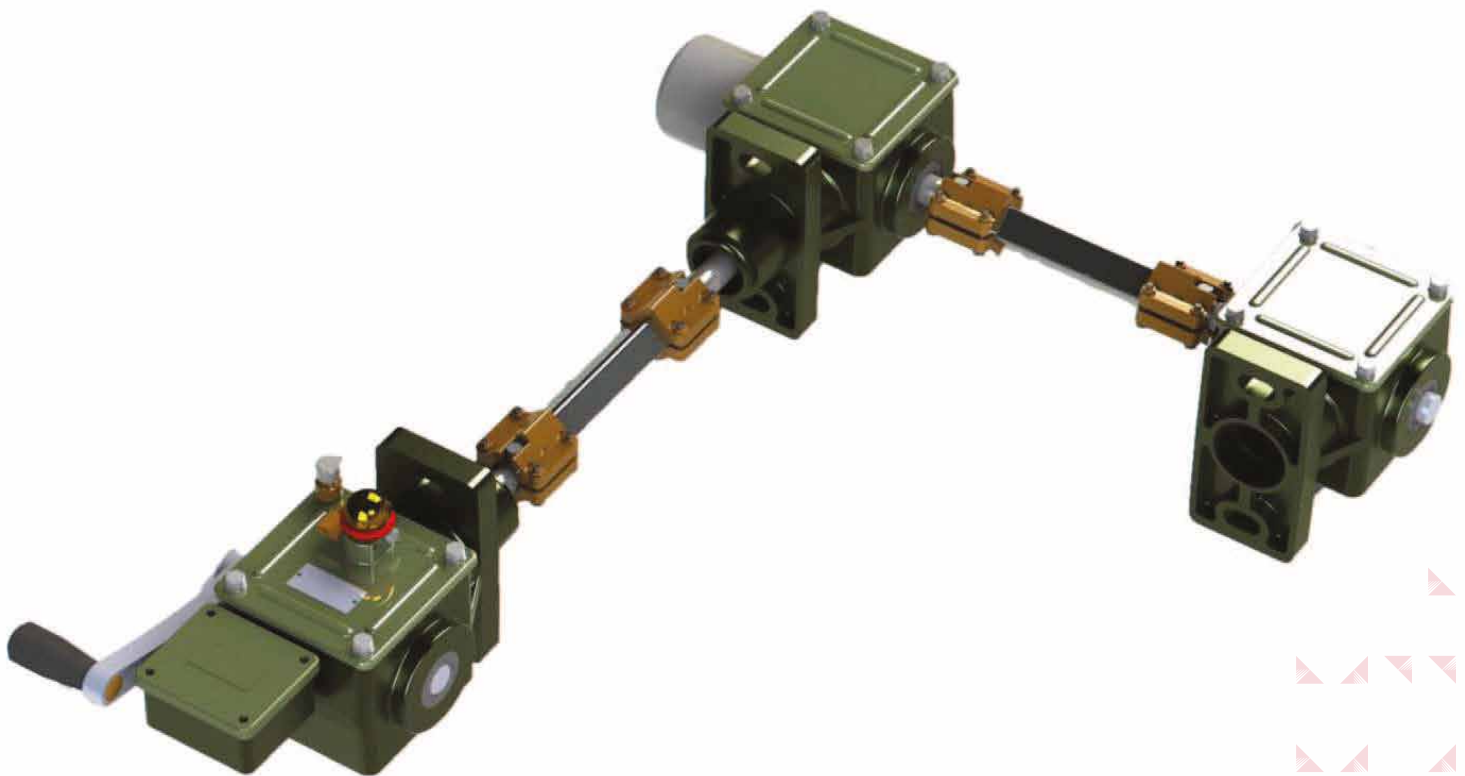


**MP**  
**metsonpower**  
TRANSFORMER ACCESSORIES

**REMOTE CONTROL SYSTEM**



PLN.03.018

CODE NO: 71120 (120A.)

CODE NO: 72400 / 800 (400/800A.)

CODE NO: 731000 (1000A.)

## 1. GENERAL

This system is designed to operate the tap changer from a designated distance by means of a triple gearing system, manually.

MRCS Remote Control Systems are used for tap changers 120-800A

## 2. OPERATION PRINCIPLE OF THE SYSTEM

The operation principle of the system depends on a conical gearing system. In order to obtain a single position displacement in tap changer, the angular proportions are calculated for gears so that when handle is turned three times the tap changers changes one position.

The system is designed so that it will lock at every position.

Moreover in order to make the system more reliable a mechanical locking device is added.

20 kgf is enough to operate the system. Do not apply more than this value and do not force the system to change position beyond the first and the last positions.

If requested, a switch system can be added to your system to avoid the usage of the tap changer off-position. This system triggers the switch when the position of the changer is not changed properly and cuts off the voltage.

## 3. MATERIAL SPECIFICATIONS

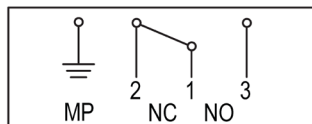
The system is designed according to IP 54 protection class and the bodies are protected against environmental conditions. The external parts are either painted or CrNi plated.

## 4. CONDITIONS TO BE QUOTED WHEN ORDERING

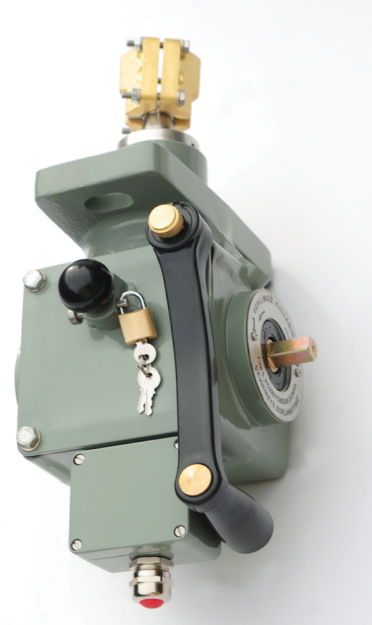
When ordering please quote the code number of the tap changer, the dimensions L, A, B and the thickness dimension e. Also state which of the following directions is desired.

n → 1  
1 → n

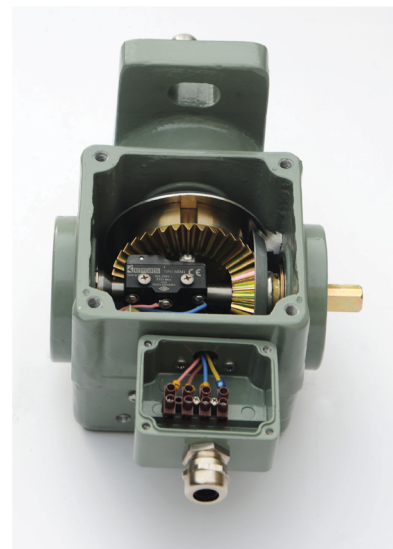
Connection schema of the optional switch system.



Body Part No. 2 and 3

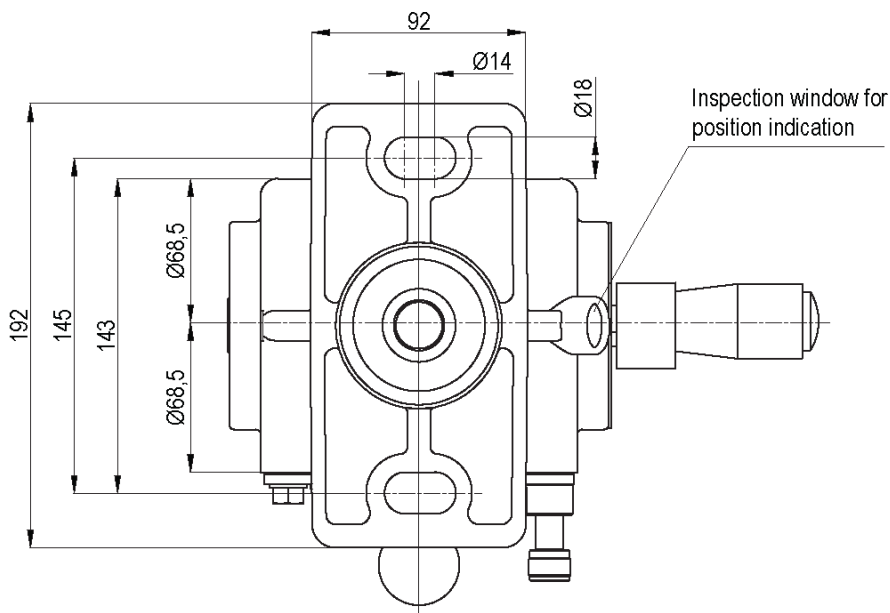
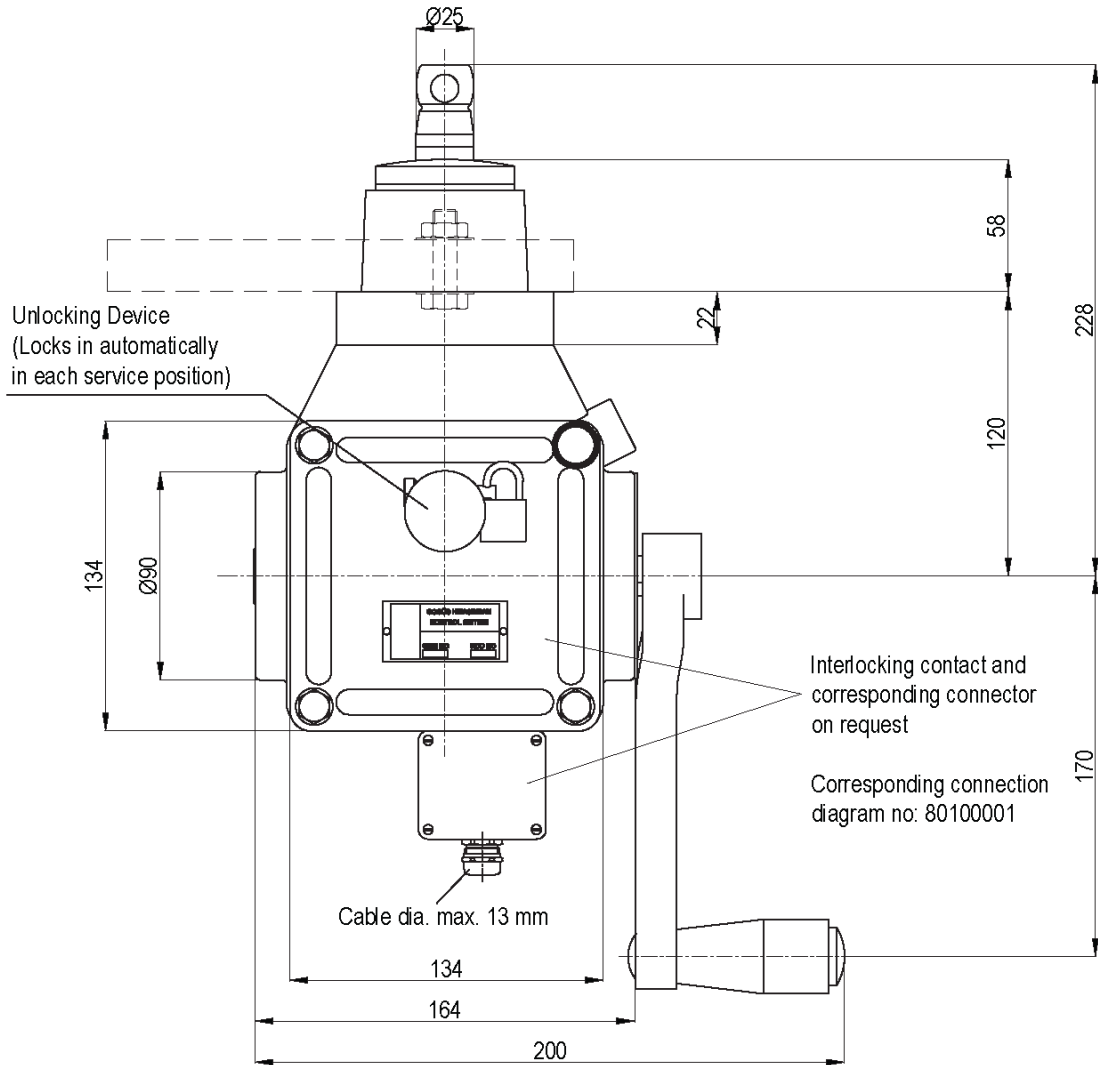


Body Part No-1

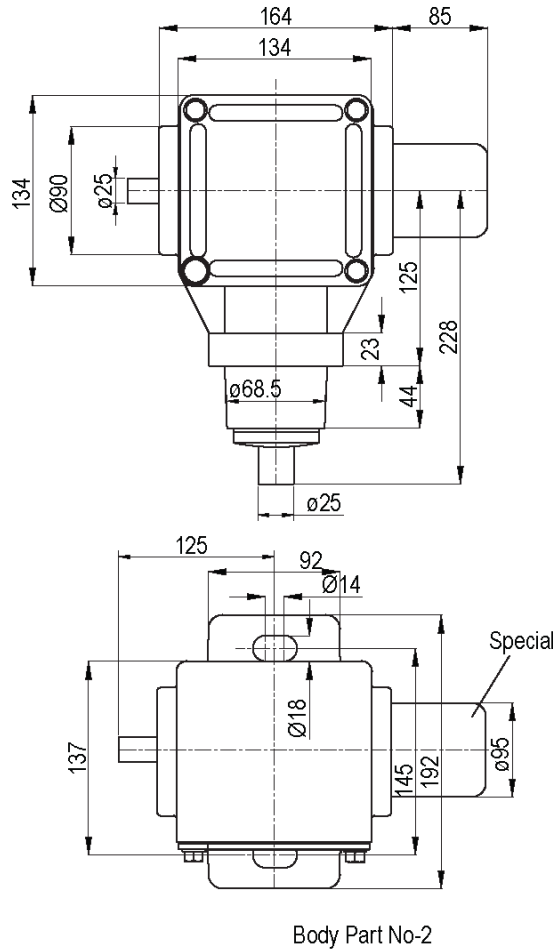


Body Part No-1





Body Part No-1



ASSEMBLY INSTRUCTIONS FOR REMOTE CONTROL SYSTEM

1. Adjust your tap changer to the middle position. Ex: If the tap changer has 3 positions adjust it to 2nd position. If it has 5 positions adjust it to 3rd position. Assemble the tap changer to your transformer.
2. Assemble the part (3) to the tap changer's shaft. Fix this body to the transformer with the help of 2 M16 nuts.
3. Mount the parts (1) and (2) to the transformer with M16 nuts. While mounting the bodies, pay attention to the perpendicularity of the axis on which the bodies lie.
4. Adjust the part (1) to the middle position of the tap changer and block it.
5. Join the parts (1) and (2) with the help of connection shafts.
6. If there is any eccentricity problem between coupling axes while making the shaft connections of the parts (2) and (3) ;
  - a. Remove the oil seal on the entrance gear of the part (3).
  - b. Remove the ring on the bearing.
  - c. Hit the gear shaft which is an extension of the entrance shaft without damaging the gear, and take the gear out.
  - d. Adjust the gear fixing key with respect to the key slot on the connection bar, assemble the gear back to its place and remount the oil seal and the ring.
7. Combine the bodies (2) and (3) with the help of connection couplings and keys.
8. There is a special mechanical locking system on the part (2). This locking system prevents the tap changer position to be changed beyond the first and last positions. It is pre-adjusted to the middle position of the tap changer and fixed with locking nuts. The tap changer is to be assembled as described in item-1 so as to ensure the proper operation of this locking device.