


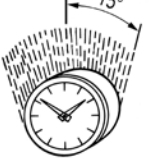

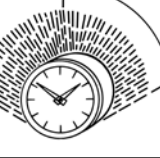






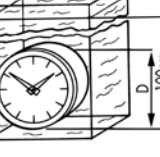
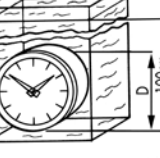


# IP PROTECTION CLASSIFICATION FOR CASES

According to International Standard IEC 529 (see note below)

Symbol	1st digit Protection against intrusion of external particle matter.			2nd digit Protection against penetration of liquids.		
	IP	0		No protection.	0	
1			Protection against ingress of large solid foreign bodies, Ø larger than 50 mm (hands)	1		Protection against drops of condensed water falling vertically.
2			Protection against ingress of medium size solid foreign bodies, Ø larger than 12 mm (fingers)	2		Protection against drops of liquid falling at an angle equal to or smaller than 15° with respect to the vertical.
3			Protection against ingress of small solid foreign bodies, Ø larger than 2.5 mm (tools, wires).	3		Protection against drops of liquid falling at an angle equal to or smaller than 60° with respect to the vertical.
4			Protection against ingress of small solid foreign bodies, Ø larger than 1 mm (tools, wires).	4		Protection against liquid splashed from any direction.
5			Protection against harmful deposits of dust, which cannot enter in an amount sufficient to interfere with satisfactory operation.	5		Protection against water jets projected by a nozzle from any direction.
6			Complete protection against ingress of dust.	6		Protection against water from heavy sea on ship's decks.
				7		Protection against immersion in water under stated conditions of pressure and time.
				8		Protection against indefinite immersion in water under stated conditions of pressure.

As a specification for cases of rotary controls does not exist, we refer to International Standard IEC 529 for protection classification of cases for electrical machines, devices or materials.