Encoder Products Company uses the international standard IP Code, International Protection Marking, IEC standard 60529, for specifying the sealing qualities of our units. The chart below explains what the different numerical designations define. Note that the designations build on the previous ones; that is, an IP69K rating means that unit is also protected against everything that a unit rated IP68, IP67, IP66, etc., is protected against.

EPC encoders offer the following sealing designations on our encoders:

**IP50**: Unit is not entirely protected from ingress of dust, but not enough dust can enter the unit to interfere with the unit’s function. Unit is not protected from water/moisture.

All IP designations of IP60 or higher are protected completely against dust ingress; i.e., “dust-tight”.

**IP64**: Dust-tight. Protected against water sprays from all directions, with limited ingress permitted.

**IP65**: Dust-tight. Protected against low-pressure jets of water in all directions, with limited ingress permitted.

**IP66**: Dust-tight. Protected against strong-pressure jets of water in all directions, with limited ingress permitted.

**IP67**: Dust-tight. Protected against water immersion between 15 cm and 1 m for a duration of 30 minutes.

**IP69K**: Dust-tight. Protected against continuous immersion in water, and Protected against close-range, high pressure, high temperature spray downs.

For help determining which IP rating is right for the encoder in your application, contact our Technical Services Department at techsupport@encoder.com or call us at 1-800-366-5412.

1 See http://www.iec.ch/ for testing standards.