

# IP (Ingress Protection) Ratings Chart



## SOLIDS

### LEVEL Ingress Protection

<b>0</b>	No protection
<b>1</b>	Protection against a solid object >50 mm, such as a hand.
<b>2</b>	Protection against a solid object >12.5 mm, such as a finger.
<b>3</b>	Protection against a solid object >2.5 mm, such as a screwdriver.
<b>4</b>	Protection against a solid object >1 mm, such as a wire.
<b>5</b>	Dust Proof. Dust must not penetrate to an extent that equipment operation or safety are impaired.
<b>6</b>	Dust tight. No ingress of dust.



## LIQUIDS

### LEVEL Ingress Protection

<b>0</b>	No protection
<b>1</b>	Protection against vertical dripping water. 10 minutes at a rate of 1 mm / min.
<b>2</b>	Protection against diagonally falling water (up to 15°). 10 minutes at a rate of 1 mm / min.
<b>3</b>	Protection against diagonally falling water (up to 60°) spray. 5 minutes at 0.7 LPM @ 80-100kPa.
<b>4</b>	Protection against water splashed from all directions. 5 minutes @ 10 LPM at 80-100kPa.
<b>5</b>	Protection against a 6.3mm water nozzle. 3 minutes @12.5 LPM at 30 kPa at a distance of 3 m.
<b>6</b>	Protection against a 12.5 mm water nozzle. 3 minutes @100 LPM at 100 kPa at a distance of 3 m.
<b>7</b>	Protection against submersion. 30 minutes at a depth up to 1 m.
<b>8</b>	Protection against continuous submersion. Depths up to 3 m.
<b>9K*</b>	Protection against powerful, high-temperature water jets: <ul style="list-style-type: none"> <li>▪ Water jet @ 0, 30, 60 &amp; 90° for 30 seconds each</li> <li>▪ Distance: 100 - 150 mm</li> <li>▪ Water Volume: 14 - 16 LPM</li> <li>▪ Water Temp: 176°F</li> <li>▪ Water Pressure: 80 - 100 bar</li> </ul>



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\*Per DIN 40050 part 9