

## IP Rating Chart

IP Number	First Digit-Refers to SOLIDS	Second Digit - Refers to LIQUIDS
<b>IP00</b>	Not protected from solids	Not protected from liquids
<b>IP01</b>	Not protected from solids	Protected from condensation
<b>IP02</b>	Not protected from solids	Protected from water spray less than 15 degrees from vertical
<b>IP03</b>	Not protected from solids	Protected from water spray less than 60 degrees from vertical
<b>IP04</b>	Not protected from solids	Protected from water spray in any direction
<b>IP05</b>	Not protected from solids	Protected from low pressure water jets from any direction
<b>IP06</b>	Not protected from solids	Protected from high pressure water jets from any direction
<b>IP07</b>	Not protected from solids	Protected from immersion between 15 centimeters and 1 meter in depth
<b>IP08</b>	Not protected from solids	Protected from long term immersion up to a specified pressure
<b>IP10</b>	Protected from touch by hands greater than 50 millimeters	Not protected from liquids
<b>IP11</b>	Protected from touch by hands greater than 50 millimeters	Not protected from condensation
<b>IP12</b>	Protected from touch by hands greater than 50 millimeters	Protected from water spray less than 15 degrees from vertical
<b>IP13</b>	Protected from touch by hands greater than 50 millimeters	Protected from water spray less than 60 degrees from vertical
<b>IP14</b>	Protected from touch by hands greater than 50 millimeters	Protected from water spray in any direction
<b>IP15</b>	Protected from touch by hands greater than 50 millimeters	Protected from low pressure water jets from any direction
<b>IP16</b>	Protected from touch by hands greater than 50 millimeters	Protected from high pressure water jets from any direction
IP Number Continued	First Digit-Refers to SOLIDS	Second Digit - Refers to LIQUIDS
<b>IP17</b>	Protected from touch by hands greater than 50 millimeters	Protected from immersion between 15 centimeters and 1 meter in depth
<b>IP18</b>	Protected from touch by hands greater than 50 millimeters	Protected from long term immersion up to a specified pressure
<b>IP20</b>	Protected from touch by hands greater than 12 millimeters	Not protected from liquids
<b>IP21</b>	Protected from touch by hands greater than 12 millimeters	Protected from condensation
<b>IP22</b>	Protected from touch by hands greater than 12 millimeters	Protected from water spray less than 15 degrees from vertical
<b>IP23</b>	Protected from touch by hands greater than 12 millimeters	Protected from water spray less than 60 degrees from vertical
<b>IP24</b>	Protected from touch by hands greater than 12 millimeters	Protected from water spray in any direction
<b>IP25</b>	Protected from touch by hands greater than 12 millimeters	Protected from low pressure water jets from any direction
<b>IP26</b>	Protected from touch by hands greater than 12 millimeters	Protected from high pressure water jets from any direction
<b>IP27</b>	Protected from touch by hands greater than 12 millimeters	Protected from immersion between 15 centimeters and 1 meter in depth
<b>IP28</b>	Protected from touch by hands greater than 12 millimeters	Protected from long term immersion up to a specified pressure
<b>IP30</b>	Protected from touch by hands greater than 2.5 millimeters	Not protected from liquids

**Continued Next Page**

<b>IP31</b>	Protected from touch by hands greater than 2.5 millimeters	Protected from condensation
<b>IP32</b>	Protected from touch by hands greater than 2.5 millimeters	Protected from water spray less than 15 degrees from vertical
<b>IP33</b>	Protected from touch by hands greater than 2.5 millimeters	Protected from water spray less than 60 degrees from vertical
<b>IP34</b>	Protected from touch by hands greater than 2.5 millimeters	Protected from water spray in any direction
<b>IP35</b>	Protected from touch by hands greater than 2.5 millimeters	Protected from low pressure water jets from any direction
<b>IP36</b>	Protected from touch by hands greater than 2.5 millimeters	Protected from high pressure water jets from any direction
<b>IP37</b>	Protected from touch by hands greater than 2.5 millimeters	Protected from immersion between 15 centimeters and 1 meter in depth
<b>IP38</b>	Protected from touch by hands greater than 2.5 millimeters	Protected from long term immersion up to a specified pressure
<b>IP40</b>	Protected from touch by hands greater than 1 millimeter	Not protected from liquids
<b>IP41</b>	Protected from touch by hands greater than 1 millimeter	Protected from condensation
<b>IP42</b>	Protected from touch by hands greater than 1 millimeter	Protected from water spray less than 15 degrees from vertical
<b>IP44</b>	Protected from touch by hands greater than 1 millimeter	Protected from water spray in any direction
<b>IP45</b>	Protected from touch by hands greater than 1 millimeter	Protected from low pressure water jets from any direction
<b>IP46</b>	Protected from touch by hands greater than 1 millimeter	Protected from high pressure water jets from any direction
<b>IP47</b>	Protected from touch by hands greater than 1 millimeter	Protected from immersion between 15 centimeters and 1 meter in depth
<b>IP48</b>	Protected from touch by hands greater than 1 millimeter	Protected from long term immersion up to a specified pressure
<b>IP50</b>	Protected from limited dust ingress	Not protected from liquids
<b>IP51</b>	Protected from limited dust ingress	Protected from condensation
<b>IP52</b>	Protected from limited dust ingress	Protected from water spray less than 15 degrees from vertical
<b>IP53</b>	Protected from limited dust ingress	Protected from water spray less than 60 degrees from vertical
<b>IP54</b>	Protected from limited dust ingress	Protected from water spray in any direction
<b>IP55</b>	Protected from limited dust ingress	Protected from low pressure water jets from any direction
<b>IP56</b>	Protected from limited dust ingress	Protected from high pressure water jets from any direction
<b>IP57</b>	Protected from limited dust ingress	Protected from immersion between 15 centimeters and 1 meter in depth
<b>IP58</b>	Protected from limited dust ingress	Protected from long term immersion up to a specified pressure
<b>IP60</b>	Protected from total dust ingress	Not protected from liquids
<b>IP61</b>	Protected from total dust ingress	Protected from condensation
<b>IP62</b>	Protected from total dust ingress	Protected from water spray less than 15 degrees from vertical
<b>IP63</b>	Protected from total dust ingress	Protected from water spray less than 60 degrees from vertical
<b>IP64</b>	Protected from total dust ingress	Protected from water spray in any direction
<b>IP65</b>	Protected from total dust ingress	Protected from low pressure water jets from any direction
<b>IP66</b>	Protected from total dust ingress	Protected from high pressure water jets from any direction
<b>IP67</b>	Protected from total dust ingress	Protected from immersion between 15 centimeters and 1 meter in depth
<b>IP68</b>	Protected from total dust ingress	Protected from long term immersion up to a specified pressure
<b>IP69K</b>	Protected from total dust ingress	Protected from steam jet cleaning