

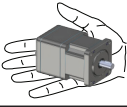

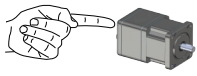


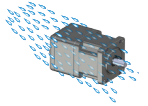

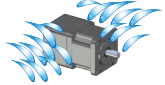
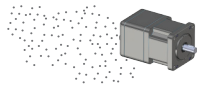
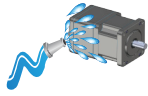
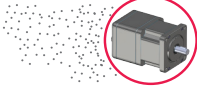

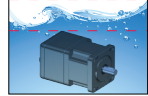
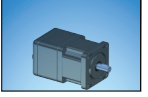

IP RATING REFERENCE			
FIRST DIGITAL: Ingress of solid objects	Sample	SECOND DIGIT: Ingress of liquids	Sample
0	No protection	0	No protection
1	Protected against solid objects over 50 mm (e.g., hands, large tools). 	1	Protected against vertically falling drops of water or condensation. 
2	Protected against solid objects over 12.5 mm (e.g., hands, large tools). 	2	Protected against falling drops of water at up to a 15° angle from normal orientation. 
3	Protected against solid objects over 2.5 mm (e.g., wire, small tools). 	3	Protected against water spray from any direction at up to a 60° angle from normal orientation. 
4	Protected against solid objects over 1.0 mm (e.g., wires). 	4	Protected against water splash from any direction. 
5	Limited protection against dust ingress (no harmful deposit). 	5	Protected against low pressure water jets from any direction. Limited ingress permitted. 
6	Totally protected against dust ingress. 	6	Protected against high pressure water jets from any direction. Limited ingress permitted. 
<p>Example: SM23165M-IP65 (NEMA 23)</p> <p>The two digits represent different forms of environmental influence:</p> <ul style="list-style-type: none"> • The second digit represents protection against ingress of liquids. • The first digit represents protection against ingress of solid objects. 		7	Protected against short periods of immersion in water 1m deep for up to 30 minutes. 
<p>IP 6 5</p>		8	Protected against long periods of immersion in water. Motors are hermetically sealed. 
<p>NOTE: Moog Animatics currently manufacturers certain products rated up to IP67. Please contact Moog Animatics for details.</p>		9K	Protected against very high pressure, high temperature jet/steam cleaning. 

Figure 1: IP Rating Reference

Refer to the previous figure. For gentle washdown environments, specified components will need an IP54 or higher rating. With an IP5X or IP6X, the first digit means that the electrical enclosures are dust protected or dust tight, respectively.

NOTE: The IP rating system is only used for water and non-caustic liquids.

The first digit is important because in a washdown environment, production may be exposed to solid particulates that cannot remain on the machines over long periods of time. This could include fine wood, powder, metal or paper particulates, feather pieces from poultry processing or food debris, and byproduct from food processing and packaging facilities.