

IP RATING Chart

IP Ratings are represented by combining the first and second digits of the following columns.



The Automation Experts.

1st Digit - SOLID

Protected against a solid object greater than 50mm, such as a hand.

Protected against a solid object greater than 12.5mm, such as a finger or similar objects.

Protected against a solid object greater than 2.5mm, such as a tool, thick wire, etc.

Protected against a solid object greater than 1mm, such as most wires, screws, etc.

Dust Protected. Prevents ingress of dust sufficient to cause harm.

Dust Tight. No ingress of dust; complete protection against contact.

Example:

IP **67**

Dust Tight. No ingress of dust; complete protection against contact.

&

Protected against the effects of temporary submersion in water (30 minutes at 3 feet).

2nd Digit - LIQUID

1

Protected against dripping water (vertical falling drops).

2

Protected against vertically dripping water when tilted at an angle up to 15° from its normal position.

3

Protected against water falling as a spray at any angle up to 60° from the vertical

4

Protected against water splashing from any angle.

5

Protected against water jets (6.3mm nozzle) from any angle.

6

Protected against powerful water jets (12.5mm nozzle) from any angle.

7

Protected against the effects of temporary submersion in water (30 minutes at 3 feet).

8

Protected against the effects of permanent submersion in water (up to 13 feet).

9

Protected against close-range high pressure, high temperature spray downs.



BALLUFF

Pro-face

SCHMERSAL

KOLLMORGEN

MAC

phd
SOLUTIONS FOR INDUSTRIAL AUTOMATION

QC Industries

Hygienic

WASHDOWN

Solutions

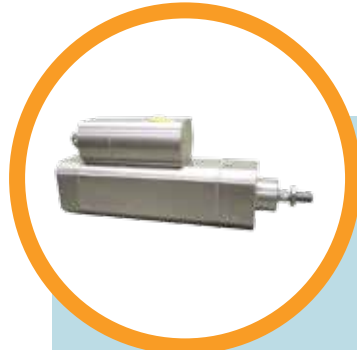
Hygienic Washdown Solutions from NEFF allow for more efficient maintenance and cleaning, reduced downtime, increased OEE of the manufacturing line and decreased possibility of devastating product recalls.

The Automation Experts at NEFF can help you find the right solution to meet your toughest hygienic requirements.



MOTORS

Designed for food contact and splash zones, the AKMH reduces cleaning time and maintenance, thus directly contributing to higher overall OEE for machines.



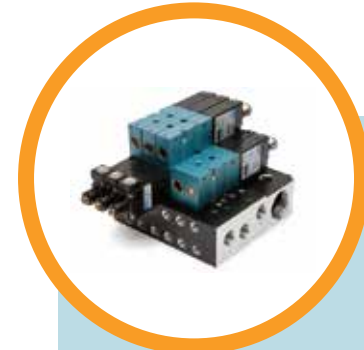
CYLINDERS

Complete stainless steel cylinder with stainless steel cover. Valve attached to cylinder. Stainless steel cover protects the valve from caustic washdown



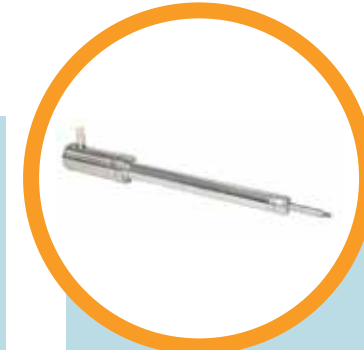
GEARBOXES

With IP66/IP67 and IP69K ingress protection, these gearheads eliminate the need for additional components such as enclosures, shielding or mechanical transmissions.



PNEUMATICS

MAC Valves are designed to perform in harsh operating environments where conditions include wide ranging temperatures, washdown, severe vibration and poor air quality.



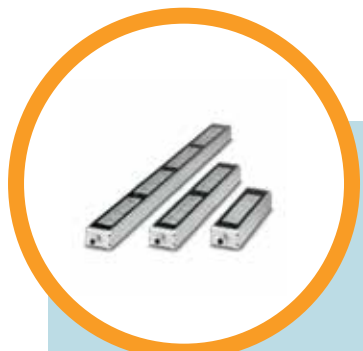
ACTUATORS

These performance electric cylinders are designed for food processing and packaging equipment utilized in high pressure/high temperature washdown and clean-in-place (CIP) environments.



SENSORS

Complete line of photoelectric, inductive, pressure and linear position sensors. Manufactured out of corrosion resistant stainless steel for harsh washdown environments.



MACHINE LIGHTS

For machine and system types which place the strictest demands on the degree of protection of the installed components, this class 200 version with IP69 protection is the ideal solution.



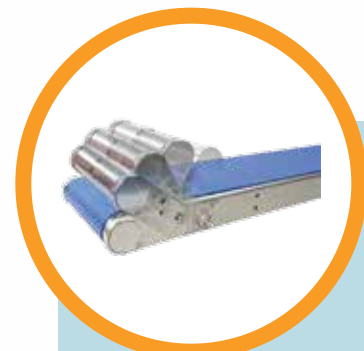
OPERATOR PANELS

Corrosion-resistant panel covers offer extended product lifetime for use in harsh environments. Stainless steel components, gaskets and fasteners add to durability.



PUSH BUTTONS

These IP69K rated pushbuttons have special design features that make the devices suitable for food processing, pharmaceutical, and medical applications.



CONVEYORS

The HydroClean sanitary food grade conveyors are designed for quick and effective sanitation and protection from contamination. Pull-pin tool-less belt. FDA & USDA approved.

