OMRON

Products designed for harsh washdown environments

Stainless steel and IP67/IP69K rated products for specialty applications

- Engineered for sanitary, hygienic and aseptic environments
- Solutions for food, beverage, pharmaceutical and life sciences applications
- Conforms to FDA and USDA, Ecolab and IEC specifications

Omron delivers the perfect mix of harsh washdown solutions ensuring product and operations integrity

There is increasing scrutiny being placed on product integrity issues. Public, media and regulatory attention has focused on the sanitary practices of production facilities, with almost no industry being exempt. The potential costs of recalls, fines and long-term brand damage is compelling producers to take additional steps to ensure consumer wellbeing.

Intensified washdown practices including greater frequency with higher wash pressures and temperatures and more concentrated chemical applications call for equipment and solutions specifically designed to withstand these types of processes.

Omron offers 80+ years of expertise and experience as the single source supplier of industrial automation solutions for harsh washdown environments and specialty applications.

From sensing and vision to industrial components, robotics, safety and even connectivity, our solutions meet today's regulatory requirements and protect both consumers and brand reputation.

FRESH PRODUCE

MEAT PROCESSING

Serving your industry

Omron has the preferred product lineup for leading companies in meat/poultry and seafood processing, dairy, ice cream, frozen foods, fruits and vegetables, beverages, personal care, pharmaceutical, medical device manufacturing, clinical/in vitro, and many more.

PHARMACEUTICALS

Stay ahead with Omron

- More efficient maintenance and cleaning
- Reduces downtime
- Increases OEE
- Decreases possibility of product recalls
- Maintains code compliance

DAIRY PROCESSING

Sensing | Proximity Sensors

E2E NEXT

CLICK HERE
to learn more

- Four times the sensing range prevents unexpected downtime and ensures operation in environments with dust, water and oil with ratings of IP67/IP69K/IP67G in stainless steel and brass housings.

E2A

CLICK HERE
to learn more

- Cylindrical brass housing features IP67 and IP69K for the highest water protection, high vibration and temperature change resistance and high electromagnetic noise immunity.

E2A3

CLICK HERE
to learn more

- Triple sensing distance for flush mounting requirements with stainless steel and brass housing as well as IP67 and IP69K for enhanced protection from harsh environments.

E2EH

CLICK HERE
to learn more

- Extreme heat (up to 120℃) and detergent resistant inductive sensors in cylindrical stainless steel housing provide reliable metal object or machine part detection.

Connector Cordsets

Y92E-SERIES

CLICK HERE
to learn more

- Compatible with Omron's chemical resistant photoelectric and inductive proximity sensors the series offers models rated IP67/IP68/IP69K for a complete washdown and detergent resistant sensing solution.

IO-Link Connectivity

GX-ILM IO-LINK

CLICK HERE
to learn more

- IO-Link master unit with IP67 protection for watery and dusty environments.

Photoelectric Sensors

E3AS-F / E3AS-L

CLICK HERE
to learn more
E3AS-F

CLICK HERE
to learn more
E3AS-L

- Laser welded stainless steel construction enables IP69K and IP67G ratings and Ecolab certification for detergent resistance while an antifouling coating prevents build-up on the lens from water droplets, oil and dust.

E3FA/E3RA / E3FB/E3RB

CLICK HERE
to learn more
E3FA

CLICK HERE
to learn more
E3FB

- Reliable, stable sensing in a robust M18 barrel housing rated at IP67 and IP69K that can withstand high-pressure cleaning for demanding applications.

E3FC

CLICK HERE
to learn more

- Compact, hygienic sensor in an M18 form factor designed with high grade, hermetically sealed stainless steel housing for high temperature and high pressure cleaning applications and proven to resist corrosion from industrial detergents and disinfectants.

E3ZM / E3ZM-B / E3ZM-C / E3ZM-V
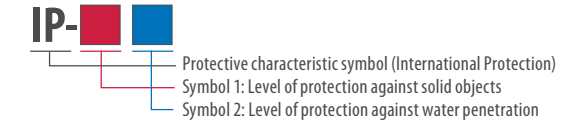

CLICK HERE
to learn more

- High-temperature, high pressure square sensor designed with food grade 316L stainless steel housing to resist alkaline and acid-based corrosive chemical detergents commonly found in IP69K compliant environments.

E3S-DB

CLICK HERE
to learn more

- Reliable detection of transparent objects in harsh environments, the construction is IP69K compliant and can withstand high temperatures and high water pressures and is Ecolab certified for food and beverage applications.

IP Rating Reference Guide

Ingress protection classifies and rates the degree of protection provided against intrusion, dust, accidental contact and water.

IEC (International Electrotechnical Commission)

Standards (IEC60529:2001)

Level		Amount of protection
0		No protection.
1	12.5 mm dia.	Solid objects 50 mm or larger in diameter (hand, etc.) do not penetrate.
2	12.5 mm dia.	Solid objects 12.5 mm or larger in diameter do not penetrate.
3	2.5 mm	Wires or other solid objects 2.5 mm or larger in diameter do not penetrate.
4	1 mm	Wires or other solid objects 1 mm or larger in diameter do not penetrate.
5		An amount of dust sufficient to interfere with normal operation of the device or create a safety problem does not enter.
6		Dust does not enter.

IP- ▢▢
Protective characteristic symbol (International Protection)
Symbol 1: Level of protection against solid objects
Symbol 2: Level of protection against water penetration

Level		Amount of protection	Test procedure
0	No special protection.	No protection against water penetration.	No test.
1		Suffers no damaging effects from vertically dripping water.	Placed under vertically dripping water from a drip-ping tester for 10 minutes.
2		Suffers no damaging effects from water dripping no more than 15° out of plumb.	Placed at an inclination of 15° under dripping water from a dripping tester for 10 minutes (2.5 minutes in each direction).
3		Suffers no damaging effects from water sprayed from an angle up to 60° from plumb.	Using the tester at right, the device is sprayed from each side up to an angle of 60° from plumb for 10 minutes).
4		Suffers no damaging effects from water sprayed from all directions.	Using the tester at right, the device is sprayed from all directions for 10 minutes.
5		Suffers no damaging effects from and direct jet spray from all directions.	Using the tester at right, each square meter of the case is sprayed from all directions for 1 minute, for a total of at least 3 minutes.
6		Suffers no damaging effects from strong and direct jet spray from all directions.	Using the tester at right, each square meter of the case is sprayed from all directions for 1 minute, for a total of at least 3 minutes.
7		Water does not penetrate when the device is submerged for a specified amount of time at a specified pressure.	The device is submerged for 10 minutes at depth of 1 m in water (if the height of the device is less than 850 mm).
8		The device can be used on a regular basis under water.	Decided by the manufacturer and the user of the device.
9K		Protected against high temperature.	High pressure water and steam.

IP69K according to DIN 40050-9

The IP69K test according to DIN 40050-9 is intended to simulate high pressure / steam cleaning. During the test 14 to 16 l/min water at 80°C is sprayed onto the sensor from different angles with 8 to 10 MPa (80 to 100 bar). The nozzle is held 10 to 15 cm from the tested device at angles shown for 30 seconds each. The test device sits on a turntable that rotates once every 12 s (5 rpm).
The sensor may not suffer any damaging effects from high pressure water in appearance and functionality.
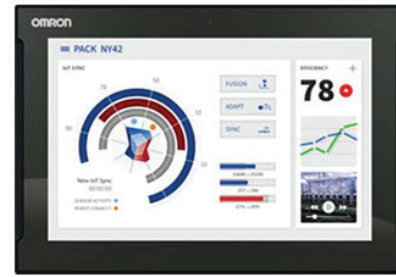
Control | Industrial PC (IPC)

NYP

CLICK HERE
to learn more

- Rugged package of industrial PC and 19" monitor with FDA-approved nickel-plated bezel for mounting on panel or on machine in harsh environments.

Industrial PC Monitor

NYM

CLICK HERE
to learn more

- 19" display and touch interface with an FDA-approved nickel-plated bezel for washdown reliability in industrial environments.

Rope Pull Emergency Stop Switches

ER6022-SS

CLICK HERE
to learn more

- 316 stainless steel die-cast housing and hardware rated IP67 with NEMA 6 enclosure withstands harsh washdowns and cold applications to -40° C.

Emergency Stop Pushbutton Switches

A22NE-P / A22NE-PD

CLICK HERE
to learn more

- IP69K rated with rubber cover resists washdown temperatures of up to 80°C and high pressure sprays from 80 to 100 BAR in environments that require frequent, washdowns.

Safety | Door Switches

D40R

CLICK HERE
to learn more

- RFID non-contact switch is IP69k rated for high-pressure clean-in-place washdowns and resists most chemicals used in industrial environments.

D40P

CLICK HERE
to learn more

- Hall-effect coded magnet non-contact switch operates behind stainless steel fittings with IP69K models suitable for the hygienic demands of high-pressure cleaning and CIP/SIP processes.

Auto-ID | RFID Readers and Tags

V680S

CLICK HERE
to learn more

- Compliant with worldwide radio regulations and durable, IP67 rated to withstand high temperature cleanings without dismounting makes this system ideal for harsh environments..

V680-SERIES RF TAGS

CLICK HERE
to learn more

- Optimally designed to use with V680S series of readers/writers and molded by PPS resin for IP68 superior oil and chemical resistance and clean-in-place washdowns.

D40-ML

CLICK HERE
to learn more

- Clean-in-place magnetic locking switch with RFID housed in stainless steel and IP69K rated for industrial machine guarding applications.

Light Curtains

F3SG-SRA / F3SG-SRB

CLICK HERE
to learn more

- Certified to global safety standards and built with a robust seal to achieve an IP67G rating for water and oil resistance along with an IP69K model (coming soon) for high-pressure washdown applications.

Smart Cameras

FHV7

CLICK HERE
to learn more

- Rugged design intended for harsh environments with high vibration and exposure to regular washdowns with IP67 waterproof housing and connector options.

MICROHAWK F430

CLICK HERE
to learn more

- Inspection, code and character reading all in one compact system and IP67 rated for powerful performance in wet environments.

Barcode Readers

OMRON

MICROHAWK V430

- Ultra compact, lightweight and rated IP67 to solve challenging barcode reading applications even in tough environments.

HS-360X

- Ultra-rugged direct park mark (DPM) handheld wired or wireless scanner with IP67 rated enclosure is resistant to many industrial fluids and chemicals.

Vision Systems

FH

- Camera enclosures for washdown environments available.

Robotics | Parallel Robots

QUATTRO™

- Robust components and design make this robot USDA-accepted for meat and poultry processing as well as primary food handling and the only 4-arm model in the world which operates with superior speed and stability.

SYSMAC DELTA

- Ideal for the food and beverage, pharmaceutical and healthcare industries the IP69K rated pick-and-place system in made with stainless steel for washdown environments.

Omron Automation Americas headquarters | Chicago, IL USA | 847.843.7900 | 800.556.6766 | automation.omron.com

Omron Canada, Inc. head office
Toronto, ON, Canada | 416.286.6465 | 866.986.6766 | automation.omron.com

Omron Electronics de Mexico head office
Ciudad de México | 52.55.5901.4300 | 01.800.386.6766 | mela@omron.com

Omron Electronics de Mexico sales office
San Pedro Garza García, NL | 81.12.53.7392 | 01.800.386.6766 | mela@omron.com

Omron Electronics de Mexico sales office
Eugenio Garza Sada,León, Gto | 01.800.386.6766 | mela@omron.com

Omron Electrônica do Brasil LTDA head office
São Paulo, SP, Brasil | 55.11.2101.6300 | omron.com.br

Omron Argentina sales office
Buenos Aires, Argentina | +54.11.4521.8630 | +54.11.4523.8483 | mela@omron.com

Other Omron Latin America sales
+54.11.4521.8630 | +54.11.4523.8483 | mela@omron.com

Authorized Distributor:

Controllers and I/O
Machine Automation Controllers (MAC) | Motion Controllers
Programmable Logic Controllers (PLC) | Temperature Controllers | Remote I/O

Robotics
Industrial Robots | Mobile Robots

Operator Interfaces
Human Machine Interface (HMI)

Motion and Drives
Machine Automation Controllers (MAC) | Motion Controllers | Servo Systems
Frequency Inverters

Vision, Measurement and Identification
Vision Sensors and Systems | Measurement Sensors | Auto Identification Systems

Sensing
Photoelectric Sensors | Fiber-Optic Sensors | Proximity Sensors
Rotary Encoders | Ultrasonic Sensors

Safety
Safety Light Curtains | Safety Laser Scanners | Programmable Safety Systems
Safety Mats and Edges | Safety Door Switches | Emergency Stop Devices
Safety Switches and Operator Controls | Safety Monitoring/Force-guided Relays

Control Components
Power Supplies | Timers | Counters | Programmable Relays
Digital Panel Meters | Monitoring Products

Switches and Relays
Limit Switches | Pushbutton Switches | Electromechanical Relays
Solid State Relays

Software
Programming and Configuration | Runtime