

Limit Switches

Omron Limit Switches are electromechanical switches operated by the motion of a machine part or presence of an object

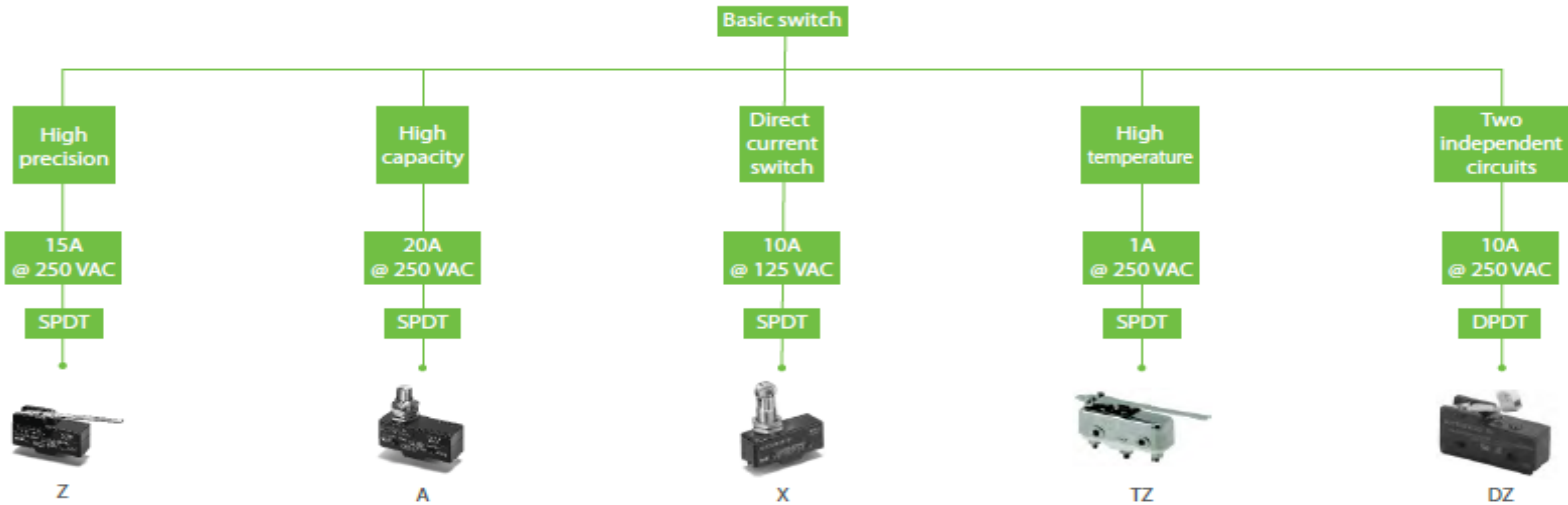
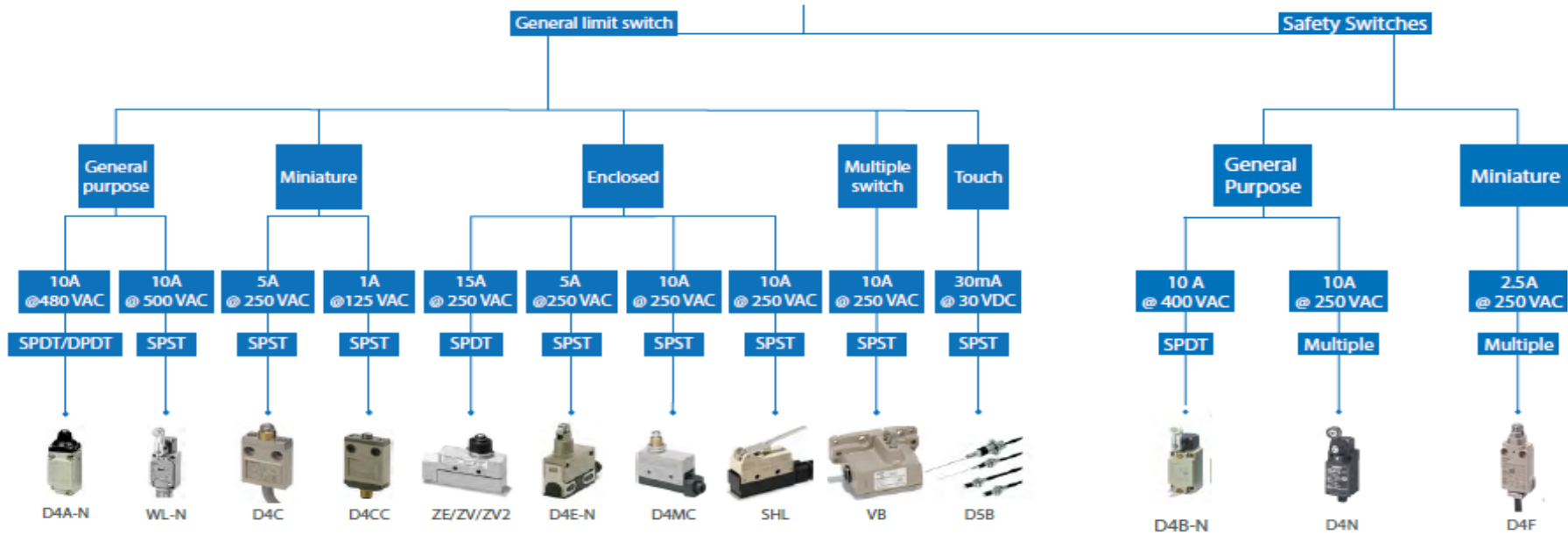




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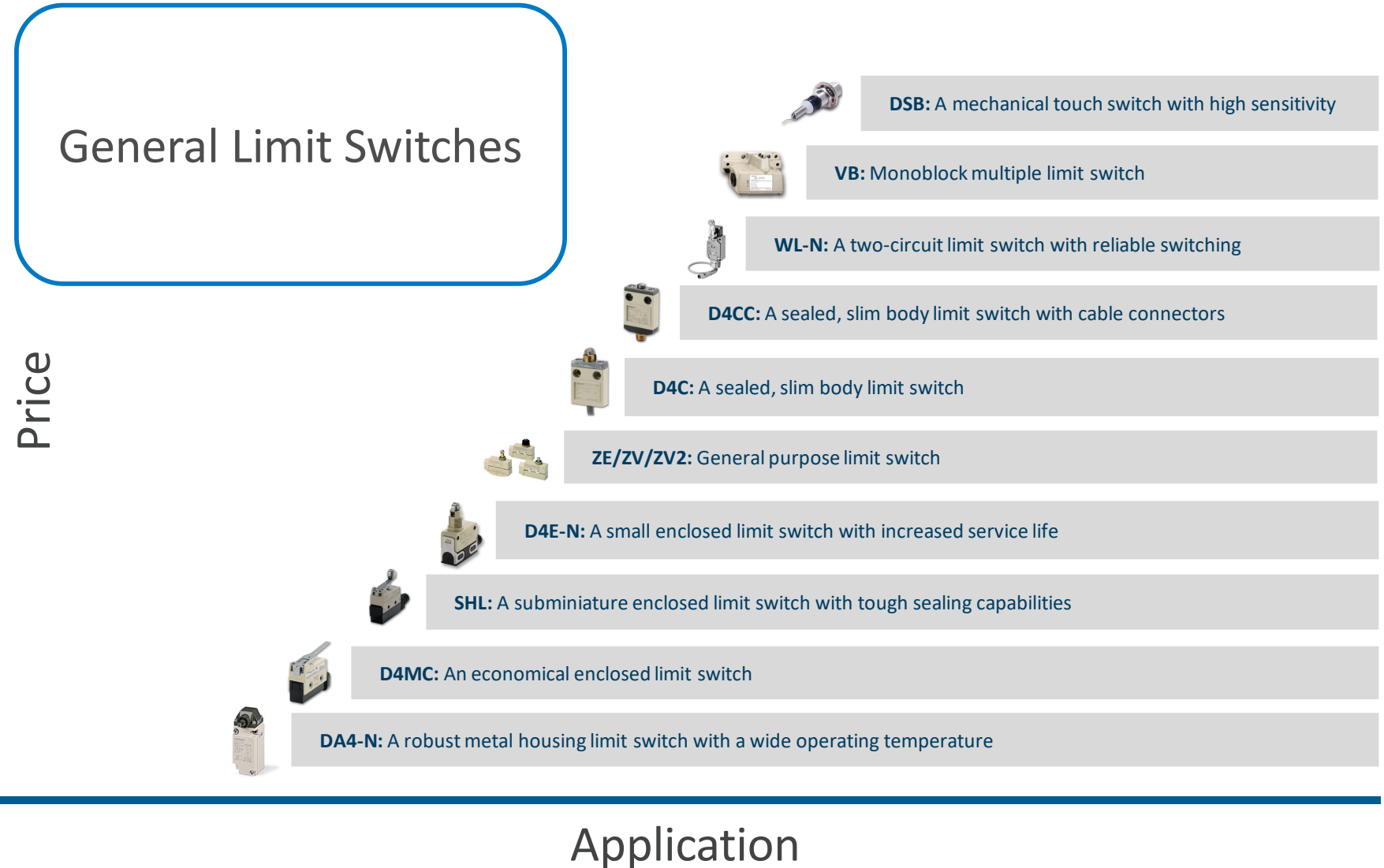
What type of switch is required?



Omron's General Limit Switch Portfolio

Making
Limit
Switches for
over 60
years!

Omron General Limit Switches





D4A-N: Robust Metal Housing Limit Switch With a Wide Operating Temp

Specifications:

- 29.4 mm x 59.5 mm mounting hole pattern
- Wide operating temperature of -40°C/F- 100°C/212°F
- Variety of head shapes including Roller Lever, Plunger, Flexible Rod, and Fork Lock Lever Switches
- DPDT, double-break models available for complex operations
- Approved by UL, CSA, and CCC
- Available LED operation indicator
- IP67 rated



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Affordable limit switch



D4MC: An Economical Enclosed Limit Switch

Specifications:

- 24.5 mm mounting hole pattern
- High Repeatability and Durability of 10 Million Operations Minimum
- Panel mount versions have the same operating position as Z Basic Switch
- Suitable for applications demanding higher mechanical strength
- Resin molded terminal versions are available
- Approved by UL, CSA, and CCC



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Economical Enclosed
Limit Switch



SHL: Subminiature Enclosed Limit Switch With Tough Sealing Capabilities

Specifications:

- 16.5 mm mounting hole pattern
- Incorporates a switch with a durable coil spring
- Compact and uses a single basic switch for applications where strength is required
- Models for microloads and models with operation indicators added to series
- Terminal protective cover can be switched to wire cable from either the left or right
- Sealing characteristics that meet IEC IP67 degree of protection

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The Most Compact
Enclosed Limit Switch



D4E-N: A Small Enclosed Limit Switch With Increased Service Life

Specifications:

- 33 mm mounting hole pattern
- Flat springs with an improved lever ratio
- Protection Cover protects the switch from dust and oil
- Plunger incorporates a tough seal cap that lasts for a long time
- One touch connector eliminates need for tedious wiring operations
- Minute load model with gold cladding is optimal for electronic control
- Molded terminal types with operating indicator lamps for screw terminals



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Small Enclosed Limit
Switch



ZE/ZV/ZV2: General Purpose Enclosed Limit Switch

Specifications:

- 25.4 mm mounting hole pattern
- Z model switches have high durability and high breaking capacity
- X model switches have magnetic blowout
- Three mounting methods (side, base, and diagonal side)
- Terminals face the front when the cover is removed for easy connection
- Switches with ground terminals have CE marking
- Approved by UL, CSA, and CCC



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Enclosed limit switch
with high breaking
capacity



D4C: Miniature Sealed Slim Body Limit Switch

Specifications:

- 25 mm mounting hole pattern
- Slim 16 mm thick body
- Offered in a variety of actuators
- Available with LED operation indicators
- Prewired and weather-resistant models available
- Standard models come with 3 m or 5 m cables with VCTF oil-resistance cables
- Triple-sealed construction
- IP67 rated



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Slim 16mm Enclosed
Limit Switch



D4CC: Miniature Sealed Slim Body Limit Switch With Cable Connectors

Specifications:

- 25 mm mounting hole pattern
- Slim 16 mm thick body
- Offered in a variety of actuators
- Available with LED operation indicators
- Uses cable connectors for easy switch replacement
- IP67 rated



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Slim 16mm Enclosed
Limit Switch With Cable
Connectors



WL-N: A Two Circuit Limit Switch With Reliable Switching

Specifications:

- 30.2 mm x 58.7 mm mounting hole pattern
- Wide variety of head shapes
- Environment resistant models for harsh environments
- Available LED operation indicators
- Available pre-wired
- Available with 2 m and 5 m I/O cables with M12 connectors
- IP67 rated



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Highly Reliable Limit
Switch



VB: Monoblock Multiple Limit Switch

Specifications:

- Good for sequential control of a variety of engineering machines and belt conveyor lines
- Multiple mounting hole positions available
- Available in 2,3,4,5,6 plunger models
- Built-in oil filter shuts out oil and water
- Mechanical life of 5,000,000 operations
- Ground terminal models are approved by EN and IEC and bear the CE marking
- IP67 rated



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Limit Switch For
Sequential Control



DSB: A Mechanical Touch Switch With High Sensitivity

Specifications:

- High-sensitivity mechanical touch switch
- Detects objects in multiple directions and operates with slight force
- Movement differential of 0.01mm assures high accuracy of detection
- Gold-plated contacts capable of switching micro current/voltage load
- Highly resistant to dust, fine particles, water or oil splashes
- IP67 Rated



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Excellent Limit Switch
For Robotic Applications

Omron's Safety Limit Switch Portfolio

Making
Limit
Switches for
over 60
years!

Safety Limit Switches

Price



D4N: Ideal for mechanical position detection in safety applications



D4F: Extra slim housing and high sensitivity safety limit switch for demanding applications



D4B-N: Safety Limit Switch with a robust housing and metal body that's ideal for harsh environments

Application

Omron Safety Limit Switches



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Versatile Safety Limit
Switch

D4N: Ideal For Mechanical Position Detection in Safety Applications

Specifications:

- 22 mm x 47 mm mounting hole pattern
- Slow-action models with MBB contacts are available
- M12-connector models are also available, saving on labor and simplifying replacement
- Standardized gold-clad contacts provide high contact reliability
- Conforms to EN115-1, EN81-1, and EN81-2
- Certified standards: UL, EN (TÜV), and CCC
- Conforms to ISO 14119



D4F: Extra Slim Housing and High Sensitivity Safety Limit Switch

Specifications:

- Smallest class of safety limit switches
- High-sensitivity switches
- Four contacts in either 2NC + 2NO or 4NC versions
- Direct opening mechanism
- Roller or plunger actuators
- Pre-wired versions
- IP67 Rated (EN60947-5-1)
- Certified standards: UL, EN (TÜV), and CC



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Safety Limit Switch With
High Sensitivity



D4B-N: Robust Housing and Metal Body Ideal For Harsh Environments

Specifications:

- Rugged metal housing and extended mechanical switching lifetime
- Terminal block for direct wiring
- Snap-action contact with certified direct opening operation
- Equipped with a mechanism that indicates the applicable operating zone
- Head seal structure rated for TÜV: IEC IP67, UL: NEMA 3, 4, 4X, 6P, and 13
- Wide operating temperature: -40 to 80°C
- Models with gold-plated contacts to enable handling micro loads
- Certified standards: UL, CSA, EN (TÜV), and CCC



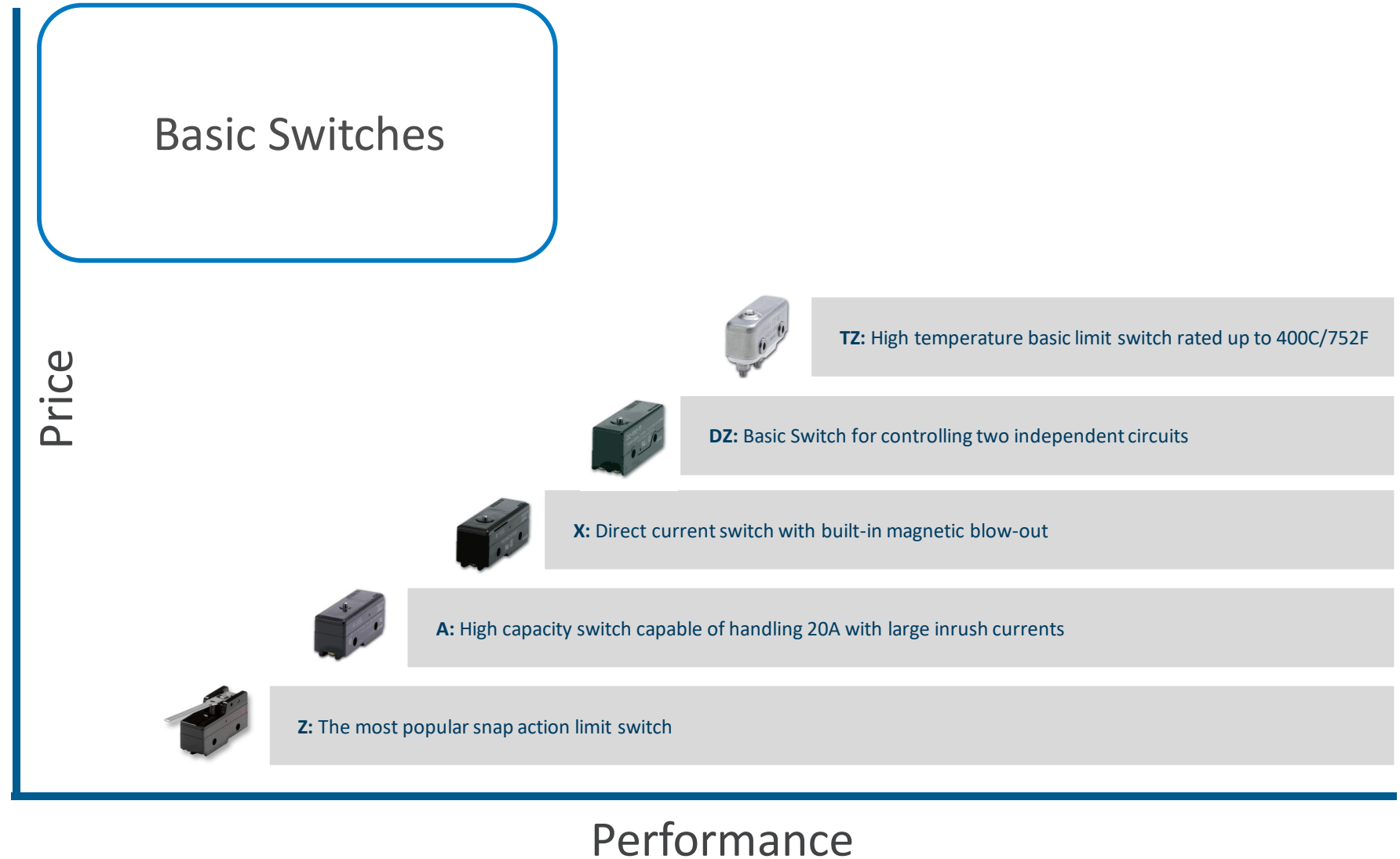
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Safety Limit Switch For
Harsh Environments

Omron's Basic Limit Switch Portfolio

Making
Switches for
over 60
years!

Omron Basic Limit Switches





TZ: High Temperature Basic Limit Switch

Specifications:

- Temperature range of 65°C/-85°F to 400°C/752°F
- 25.4 mm mounting hole pattern
- Incorporates a ceramic insulator, cobalt-alloy spring, and special alloy contact, ensuring high contact reliability at high ambient temperature
- Offered in a variety of actuators including pin plunger, hinge lever and roller lever
- Electrical Operations Minimum: 50,000 operations
- Inrush Current: Up to 9 A at NC, Up to 4.5 A at NO
- Mechanical Operations: 60 operations/minute max
- Rated Load: 1 A at 250 VAC
- Switch Type: SPDT



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High Temperature Basic
Limit Switch



DZ: Basic Switch For Controlling Two Independent Circuits

Specifications:

- Ideal for switching circuits operating on two voltages and for controlling two independent circuits
- 25.4 mm mounting hole pattern
- Offered in a variety of actuators including pin plunger, hinge lever and roller lever
- Interchangeable with OMRON Z Basic Switches
- Electrical Operations Minimum: 500,000 operations
- Inrush Current: Up to 30 A at NC, Up to 15 A at NO
- Mechanical Operations: 240 operations/minute max
- Rated Load: 10 A at 250 VAC
- Switch Type: DPDT



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Basic Switch For Two Independent Circuits



X: Direct Current Switch With Built-in Magnetic Blow-out

Specifications:

- 25.4 mm mounting hole pattern.
- Offered in a variety of actuators such as pin plunger, hinge lever and roller lever
- Electrical Operations Minimum: 100,000 operations
- Inrush current: Up to 30 A at NC, Up to 15 A at NO
- Mechanical Operations: 240 operations/minute max
- Rated Load: 10 A at 125 VDC/VAC
- Switch Type: SPDT



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Direct Current Basic
Switch



A: High Capacity Switch Capable of Handling 20A With Large Inrush Currents

Specifications:

- 25.4 mm mounting hole pattern
- Offered in a variety of actuators such as pin plunger, hinge lever and roller lever
- Electrical Operations Minimum: 500,000 operations
- Inrush Current: Up to 75 A
- Mechanical Operations: 240 operations/minute max
- Rated Load: 20 A at 250 VAC
- Switch Type: SPDT

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High Capacity Basic
Switch



Z: The most popular snap action limit switch

Specifications:

- Omron's best selling limit switch for several decades
- High precision with up to 15A switching capacity
- 25.4 mm mounting hole pattern
- Wide range of variations in contact form: basic, split-contact, maintained-contact, and adjustable contact gap
- Offered in a variety of actuators
- Drip proof protection models available
- Molded terminals available
- High sensitivity models available
- Switch Type: SPDT



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High Precision Basic
Switch

Omron Limit Switches

Omron is Your Trusted Partner for Industrial
Automation Limit Switches

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