

ASABE/ISO 3767-1:2016 APR2017 (R2022)

Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays — Part 1: Common symbols



**American Society of
Agricultural and Biological Engineers**

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Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays — Part 1: Common symbols

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This standard was reviewed and approved for adoption by the ASABE Ergonomics, Safety, and Health Internal Standards Development and Power and Machinery Agricultural Machinery Symbols, Displays, and Management Technical subcommittees. Adoption of ISO 3767-1:1998 by ASABE and approval as an American National Standard May 2006; editorial revision and reaffirmed January 2011; reaffirmed January 2016; replaced with adoption of ISO 3767-1:2016 April 2017; reaffirmed March 2022.

Keywords: Control, Displays, Operators, Symbols

0 Foreword

0.1 ASABE/ISO 3767-1:2016 APR2017, Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays — Part 1: Common symbols, is an adoption without modification of the identically titled ISO standard ISO 3767-1:2016, Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays — Part 1: Common symbols.

0.2 ASABE/ISO 3767-1:2016 APR2017 standardizes symbols for use on operator controls and other displays applicable to multiple types of agricultural tractors and machinery, forestry machinery, and powered lawn and garden equipment.

NOTE 1 ISO 3767-2 covers symbols for agricultural tractors and machinery. ISO 3767-3 covers symbols for powered lawn and garden equipment. ISO 3767-4 covers symbols for forestry machinery. ISO 3767-5 covers symbols for manual portable forestry machines.

NOTE 2 ISO 7000 and IEC 60417 can be consulted for additional internationally standardized symbols of potential relevance to agricultural tractors and machinery, forestry machinery, and powered lawn and garden equipment.

0.3 Three normative references are listed in ISO 3767-1:2016. These references have been reviewed and accepted as part of the adoption of the ISO document in ASABE/ISO 3767-1:2016.

0.4 This standard has been approved as an American National standard by ANSI (American National Standard Institute). The original content of ISO 3767-1:2016 was based on ASABE standard ASAE S304.

0.5 Attention is drawn to ASAE S304 and ASABE/ISO 3767-2:2016, which include additional symbols not found in this identical adoption that have been determined to be suitable for use.

0.6 Section 4.16 of ISO 3767-1 states the symbols shown are presented within marks that delimit the corners of the 75 mm square basic pattern from IEC 80416-1. Corner marks are not part of the symbol, but are provided

to ensure consistent presentation of all symbol graphics. To meet ASABE format and publication limits the symbols size was adjusted for the publication of ASABE/ ISO 3767-1:2016.

Text of ISO 3767-1:2016, Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays — Part 1: Common symbols, follows.

IMPORTANT — The electronic file of this document contains colours which are considered to be useful for the correct understanding of the document. Users should therefore consider printing this document using a colour printer.

1 Scope

This document standardizes symbols for use on operator controls and other displays applicable to multiple types of agricultural tractors and machinery, forestry machinery, and powered lawn and garden equipment.

NOTE 1: ISO 3767-2 covers symbols for agricultural tractors and machinery. ISO 3767-3 covers symbols for powered lawn and garden equipment. ISO 3767-4 covers symbols for forestry machinery. ISO 3767-5 covers symbols for manual portable forestry machines.

NOTE 2: ISO 7000 and IEC 60417 can be consulted for additional internationally standardized symbols of potential relevance to agricultural tractors and machinery, forestry machinery, and powered lawn and garden equipment.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 80416-1, Basic principles for graphical symbols for use on equipment — Part 1: Creation of graphical symbols for registration

ISO 80416-2, Basic principles for graphical symbols for use on equipment — Part 2: Form and use of arrows

IEC 80416-3, Basic principles for graphical symbols for use on equipment — Part 3: Guidelines for the application of graphical symbols

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at <http://www.electropedia.org/>

— ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

symbol

graphical symbol

visually perceptible figure used to transmit information independent of language

Note 1 to entry: It may be produced by drawing, printing or other means. Letters, numerals and mathematical symbols may be used as symbols or symbol elements. For some specific applications, groups of letters (for example, AUTO, STOP) are used as symbols or symbol elements.

Note 2 to entry: Letters and numerals are not registered by ISO/TC 145/SC 3 or published in ISO 7000 unless they are symbol elements embedded in graphical symbols.

3.2

icon

digital display icon

digitized (pixelated) representation of a graphical symbol, usually used on a reconfigurable electronic display screen or graphical user interface (GUI)

Note 1 to entry: A single symbol can be represented by multiple icons, each of a different size, pixel count or colorization.

4 General

4.1 Except where indicated in subsequent clauses, symbols shall be used as shown in this document.

4.2 Selected symbols, which are shown in outline form in this document, may be filled in actual use for enhanced clarity of reproduction and improved visual perception by the operator, except as otherwise specified for individual symbols, and in accordance with IEC 80416-3.

4.3 Limitations inherent in some reproduction and display technologies can require increased line width or other minor modifications of symbols. Such modifications are allowed, provided that the symbol remains conceptually unchanged in its basic graphical elements and is easily discernible by the operator.

4.4 To improve the appearance and perceptibility of a graphical symbol, or to coordinate with the design of the equipment to which it is applied, it can be necessary to modify the symbol as indicated in IEC 80416-3 (for example, to change the line width or to round the corners of the symbol). Such modifications are allowed, provided that the essential perceptible characteristics of the symbol are maintained.

4.5 For actual use, all symbols shall be reproduced large enough to be easily discernible by the operator. Follow IEC 80416-1 for the proper sizing of symbols. Symbols grouped together in a display or on a set of controls should be scaled to the same degree relative to the corner marks of the symbol original as shown in this document in order to maintain the correct visual relationship among the symbols. Symbols shall be used in the orientation shown in this document, unless rotation or mirror imaging is specifically allowed for individual symbols.

4.6 Most symbols are constructed using a building block approach in which various symbols and symbol elements are combined in a logical manner to produce a new symbol.

4.7 In some cases, symbols may be used in conjunction, without being combined into a composite symbol, to convey the same meaning as the composite symbol.

4.8 Symbols are generally intended to replace a word or words with a graphical image that has the same meaning for all operators, regardless of their native language. However, the use of a graphical symbol to identify a control or display does not preclude the use of words in conjunction with that control or display.

4.9 If a symbol shows a machine or parts of a machine from a side view, a machine moving from right to left across the symbol area shall be assumed. If a symbol shows a machine or parts of a machine from an overhead view, a machine moving from bottom to top across the symbol area shall be assumed.

4.10 Symbols on controls and displays shall have a good contrast to their background. A white or lightcoloured symbol on a black or dark-coloured background is preferred for most controls. Displays may use either a white or light-coloured symbol on a black or dark-coloured background or a black or darkcoloured symbol on a white or light-coloured background, depending upon which alternative provides the best visual perception. When a

symbol image is reversed (for example, from black-on-white to white-on-black or vice versa) this reversal shall be done for the entire symbol.

4.11 If symbols are cast, moulded, embossed or stamped into a surface, the symbols shall be visually distinct from that surface without dependence on colour.

4.12 Symbols shall be located on or adjacent to the control or display that is being identified. Where more than one symbol is required for a control, the symbols shall be located in relation to the control such that movement of the control towards the symbols shall effect the function depicted by that symbol.

4.13 Arrows used in symbols shall conform to the requirements of ISO 80416-2. IEC 80416-1 shall be consulted for the general principles for creating symbol originals. IEC 80416-3 should be consulted for guidelines for the application of symbols.

4.14 ISO/IEC registration numbers are shown for symbols which are registered in ISO 7000 or IEC 60417.

NOTE: Symbol originals are approved and registered either by ISO/TC 145/SC 3 and published in ISO 7000 or by IEC/SC 3C and published in IEC 60417. In some cases, modified or application symbols, rather than the registered symbol originals, are standardized in this document.

4.15 When letters or numerals are used in a symbol, the font shown shall not be considered definitive. Other fonts may be used so long as the letters and numerals remain legible.

4.16 Symbols in this document are shown within marks that delimit the corners of the 75 mm square basic pattern from IEC 80416-1. Corner marks are not part of the symbol, but are provided to ensure consistent presentation of all symbol graphics.

5 Colour

5.1 When used on illuminated displays, the following colours shall have the meanings indicated:

- red denotes a failure, serious malfunction or operating condition that requires immediate attention;
- yellow or amber denotes a condition outside normal operating limits;
- green denotes a normal operating condition.

5.2 In addition, certain colours shall be used for specific applications:

- blue is used for the high beam, upper beam display (see 15.1);
- red is used for the hazard warning display and for the hazard warning control (see 15.6);
- green is used for the turn signal display (see 15.10).

5.3 If colour is used on or in association with symbols for heating and cooling systems, the colour red shall be used to indicate hot and the colour blue shall be used to indicate cold.

6 Development of new symbols

6.1 Prior to developing a new symbol, a search should be conducted for previously standardized symbols with the same or similar meaning to what is needed. ISO 7000 and IEC 60417 (both available in database form) are compilations of internationally standardized symbols which can be useful both for finding appropriate symbols that do not appear in ISO 3767 and for generating concepts that can be used in the development of new symbols.

6.2 New symbols shall be developed in accordance with the principles of Annex A of this document. IEC 80416-1 should be consulted for general principles for the creation of symbols. Arrows shall be in accordance with ISO 80416-2. Different arrow forms have different meanings according to ISO 80416-2. Care should be taken to use the correct arrow form. Following the guidelines of Annex A of this document makes possible the development of symbols appropriate in graphical form and content for international standardization and ISO 7000 registration.

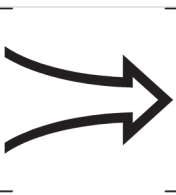
6.3 Symbols proposed for standardization in this document shall include a short explanation of the function or expected use of the symbol.

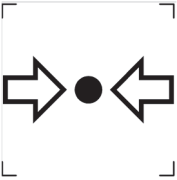
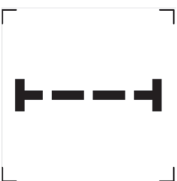
NOTE: IEC 80416-1 uses the term “description” for this type of information and provides guidelines for writing descriptions for symbols intended for standardization in ISO 7000 or IEC 60417. The descriptions for symbols standardized in this document can serve as examples.

7 Adaptation of symbols as digital display icons

Symbols can be adapted for use as digital display icons on visual display units, reconfigurable displays or other electronic displays. Such adaptations should follow the principles of ISO 80416-4. Special care should be taken to ensure that digital display icons preserve the visual impression of the symbol from which the icon is adapted. The same principles regarding use of colour with symbols apply to the use of colour with digital display icons.

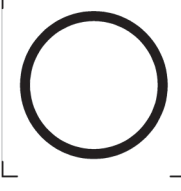
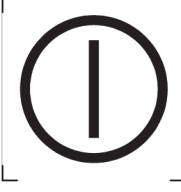
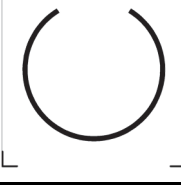
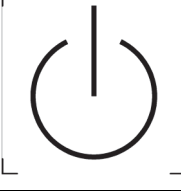
8 Base symbols

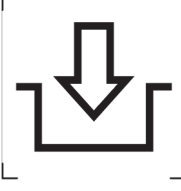
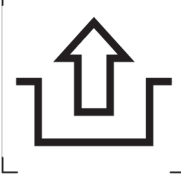
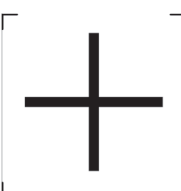
No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
8.1		Oil; fluid To indicate oil or other non-water-base fluid. Use as a symbol element in combination with other symbols to indicate specified types of oil. This symbol may be used when the type of oil or fluid is not specified.	Application of ISO 7000-1056
8.2		Water; coolant; water-base fluid To indicate water, coolant or other water-base fluid. Use as a symbol element in combination with other symbols to indicate specified types of water-base fluid. This symbol may be used when the type of water-base fluid is not specified.	Application of ISO 7000-0536
8.3		Intake air; air flow through To indicate intake air. To indicate air flow into or through a tube or pipe. This symbol shall be used in outline.	Application of ISO 7000-1604
8.4		Exhaust gas To indicate exhaust gas. To indicate air flow out of a tube or pipe. This symbol shall be used filled.	ISO 7000-1605

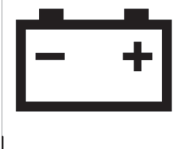
No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
8.5		Pressure To indicate pressure in general. Use as a symbol element in combination with other symbols to indicate the type of material that is under pressure. The filled circle may be deleted and an appropriate symbol inserted between the arrows.	ISO 7000-1701
8.6		Level indicator To identify the control that adjusts the amount of level of material in a container. To indicate the level of, for example, a liquid in a container. Use as a symbol element in combination with other symbols to indicate the type of material whose quantity is measured. The line at the right of the symbol may be deleted and an appropriate symbol inserted.	Application of ISO 7000-0159
8.7		Filter To indicate a filter for liquid or gas. Use as a symbol element in combination with other symbols to indicate the type of material that is filtered.	ISO 7000-1369
8.8		Temperature To indicate temperature or a function associated with temperature.	ISO 7000-0034
8.9		Malfunction, general; failure To indicate that a component or function has failed or malfunctioned. Use as a symbol element in combination with other symbols to indicate the component or function that has failed or malfunctioned.	ISO 7000-1603B
8.10		Mass; weight To indicate mass. To identify a function related to mass. ISO 7000-1321A and ISO 7000-1321B are alternative symbols with the same meaning.	Application of ISO 7000-1321A
8.11			ISO 7000-1321B

No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
8.12		Air, general To indicate air in general. To indicate a function related to air in general.	Application of ISO 7000-0537

9 General symbols

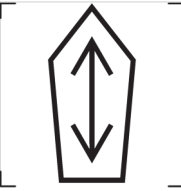
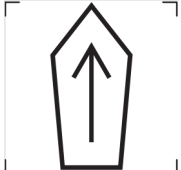
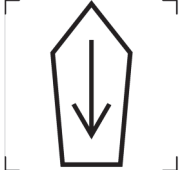
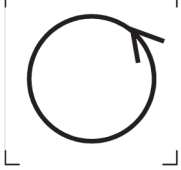
No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.1		On; start To identify the control that starts a function or operation. To identify the control that enables a function or operation to be engaged or activated. Use independently or in conjunction with other symbols. Do not use as a graphical element with the meaning “on; start” within a combined symbol (see 4.6 and 4.7).	Application of IEC 60417-5007
9.2		Off; stop To identify the control that stops a function or operation. To identify the control that disables a function or operation to be engaged or activated. Use independently or in conjunction with other symbols. Do not use as a graphical element with the meaning “on; start” within a combined symbol (see 4.6 and 4.7).	Application of IEC 60417-5008
9.3		On and off To identify the control that, depending on its position or last activation, starts or stops a function or operation. Use independently or in conjunction with other symbols. Do not use as a graphical element with the meaning “on and off” within a combined symbol (see 4.6 and 4.7).	Application of IEC 60417-5010
9.4		Ready To indicate that the machine or equipment or function is ready for operation.	ISO 7000-1140
9.5		Stand-by To identify the control by which part of the equipment is switched on in order to bring the component or function into the stand-by condition.	IEC 60417-5009

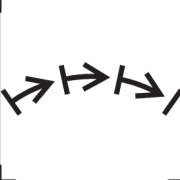
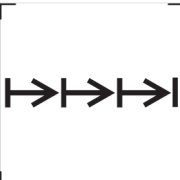
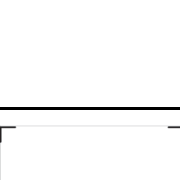
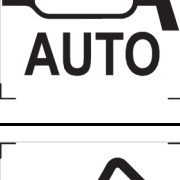
No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.6		Engage To identify the control that effects the engagement of two machine parts or elements, or the activation of a mechanical function. To indicate the engagement function. This symbol may be rotated 90° or 180° for a clearer visual representation.	Application of ISO 7000-0022
9.7		Disengage To identify the control that effects the disengagement of two machine parts or elements, or the deactivation of a mechanical function. To indicate the disengagement function. This symbol may be rotated 90° or 180° for a clearer visual representation.	Application of ISO 7000-0023
9.8		Plus; increase; positive polarity To identify the positive terminals of equipment which is used with or generates direct current. To indicate that a quantity is increasing or the direction of control movement that increases a quantity.	Application of IEC 60417-5005
9.9		Minus; decrease; negative polarity To identify the negative terminals of equipment which is used with or generates direct current. To indicate that a quantity is decreasing or the direction of control movement that decreases a quantity.	Application of IEC 60417-5006
9.10		Lock To identify the location of a lock. To identify the control that effects a locking function. To indicate that the component or function is in its locked state. ISO 7000-1656 and IEC 60417-5569 are alternative symbols with the same meaning.	ISO 7000-1656
9.11			Application of IEC 60417-5569

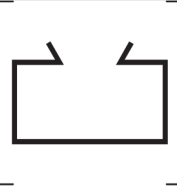
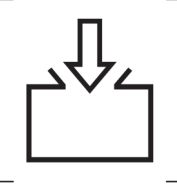
No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.12		Unlock To identify the control that effects an unlocking function. To indicate that the component or function is in its unlocked state. ISO 7000-3305 and IEC 60417-5570 are alternative symbols with the same meaning.	ISO 7000-3305
9.13			Application of IEC 60417-5570
9.14		Horn To identify the control for the horn.	ISO 7000-0244
9.15		Battery charging condition To indicate whether the battery is charging. To indicate the operational status of the battery. When displayed on a red background, this symbol indicates that the battery has reached a low level of charge.	ISO 7000-0247
9.16		Battery disconnect; battery shut-off To identify the control that disconnects the battery from the electrical system. To indicate that the battery has been disconnected.	ISO 7000:2063
9.17		Battery fluid level To indicate the battery fluid level. To identify the battery fluid fill point.	ISO 7000-2455
9.18		Battery, failure To indicate that the battery has failed or malfunctioned.	Application of ISO 7000-2456

No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.19		Clock; time switch; timer To identify clock or timer functions. To identify the control that activates a clock, time switch or timer. To identify the control that allows setting of time and date on electronic displays.	IEC 60417-5184
9.20		Clock, malfunction To indicate that the clock has malfunctioned.	ISO 7000-3395
9.21		Hourmeter; elapsed operating hours To indicate the number of hours that the machine or component has been operating. To indicate the operating interval at which service or maintenance functions should be performed. Use as a symbol element to indicate a quantity per hour.	ISO 7000-1366
9.22			Application of ISO 7000-1366
9.23		Volume, empty To indicate that the container is empty. To identify the empty reading or indicator position on the display or container.	ISO 7000-1563
9.24		Volume, half-full To indicate that the container is half-full. To identify the half-full reading or indicator position on the display or container.	ISO 7000-1564
9.25		Volume, full To indicate that the container is full. To identify the full reading or indicator position on the display or container.	ISO 7000-1565

No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.26		Control lever operating direction, dual-direction To indicate that the control operates in two directions. To indicate the directions in which the control moves. This symbol may be rotated to indicate the angle of control operation in two directions. Place appropriate symbols at arrowheads to indicate the action effected by movement of the control.	ISO 7000-1436
9.27		Control lever operating direction, multiple-direction To indicate that the control operates in multiple directions, generally forward-rearward and left-right. To indicate the directions in which the control moves. Place appropriate symbols at arrowheads to indicate the action effected by movement of the control.	ISO 7000-1703
9.28		Joystick control mode To identify the control that places the machine, equipment or function in joystick control mode. To indicate that the machine, equipment or function is in joystick control mode.	ISO 7000-3192
9.29		Joystick control, lock To identify the control or control position that deactivates the joystick control and thereby locks out the functionality of the control. To indicate that the joystick control is in the locked condition.	ISO 7000-3306
9.30		Joystick control, off or not available To indicate that the joystick control is not functional.	ISO 7000-3307
9.31		Pull switch, switch position pulled out; pull to activate To identify a control that is activated by pulling out. To indicate that the pull switch is pulled out (activated).	ISO 7000-1154
9.32		Pull switch, switch position pushed in; push to deactivate To identify a control that is deactivated by pushing in. To indicate that the pull switch is pushed in (deactivated).	ISO 7000-1155

No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.33		Forward or rearward movement, general To identify the control or control that moves the machine in a forward or rearward direction. To indicate that the machine is moving forward or rearward. Use this symbol when identification of the machine type is not required or when an appropriate machine representation is not available.	ISO 7000-3517
9.34		Forward movement, general To identify the control or control that moves the machine in a forward direction. To indicate that the machine is moving forward. Use this symbol when identification of the machine type is not required or when an appropriate machine representation is not available.	ISO 7000-0775
9.35		Rearward movement, general To identify the control that moves the machine in a rearward direction. To indicate that the machine is moving rearward. Use this symbol when identification of the machine type is not required. Use this symbol when identification of the machine type is not required or when an appropriate machine representation is not available.	ISO 7000-0776
9.36		Clockwise rotation To identify clockwise rotational movement.	ISO 7000-0258
9.37		Anti-clockwise rotation To identify anti-clockwise rotational movement.	ISO 7000-0937
9.38		Direction of continuous rotation, clockwise To indicate continuous clockwise rotational movement.	ISO 7000-0440
9.39		Direction of continuous rotation, anti-clockwise To indicate continuous anti-clockwise rotational movement.	ISO 7000-0941

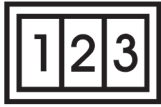
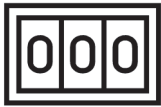
No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.40		Direction of interrupted rotation, clockwise To indicate interrupted clockwise rotational movement.	ISO 7000-0942
9.41		Direction of interrupted rotation, anti-clockwise To indicate interrupted anti-clockwise rotational movement.	ISO 7000-0943
9.42		Rotary repeated positioning To identify the control that activates repeated positioning in a rotary direction.	ISO 7000-0436
9.43		Rectilinear repeated positioning To identify the control that activates repeated positioning in a rectilinear direction.	ISO 7000-0254
9.44		Grease lubrication point; lubricate with grease; grease lubrication To identify the locations on a machine or equipment which should be lubricated with grease. To identify the container for grease. To indicate the need for service with grease. This symbol may be combined with ISO 7000-1366 (see 9.21 and 9.22) to indicate service intervals for components lubricated with grease.	ISO 7000-0787
9.45		Grease lubrication system, automatic operation mode To identify the automatic grease lubrication system. To identify the fill point for the automatic grease lubrication system. To indicate the operational status of the automatic grease lubrication system.	ISO 7000-3396
9.46		Oil lubrication point; lubricate with oil; lubricating oil To identify the locations on a machine or equipment which should be lubricated with oil. To indicate the need for service with oil. This symbol may be combined with ISO 7000-1366 (see 9.21 and 9.22) to indicate service intervals for components lubricated with oil.	Application of ISO 7000-0391

No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.47		Lift point To identify the locations on a machine where a lifting device can be attached.	ISO 7000-1368
9.48		Tow point; retrieval point To identify the locations on a machine where a towing or retrieval device can be attached. This symbol may be mirror-imaged to indicate the locations on a machine where a towing or retrieval device can be attached for rearward towing or retrieval.	ISO 7000-2686
9.49		Jack support point; central support To identify the locations on a machine where a lifting jack or support device can be used. This symbol shall be used filled.	ISO 7000-0542
9.50		Tie down point To indicate the locations on a machine or equipment which are to be used to secure the machine (for example, to a trailer) or to prevent equipment from moving during transport.	ISO 7000-2069
9.51		Reservoir To identify a reservoir. The type of reservoir may be indicated by a symbol to represent the material contained in the reservoir.	ISO 7000-0359
9.52		Filling To indicate the filling of the container. This symbol does not specify the material with which the container is being filled.	ISO 7000-0028
9.53		Draining; emptying To indicate the draining or emptying of the container. This symbol does not specify the material which is being drained or emptied.	ISO 7000-0029
9.54		Read operator's manual To indicate that the operator's manual should be consulted. To identify the location where the operator's manual is stored.	ISO 7000-0790

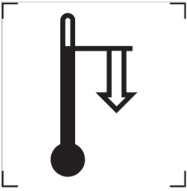
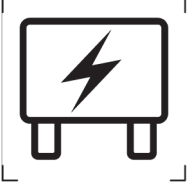
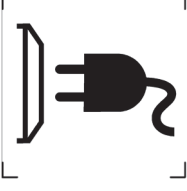
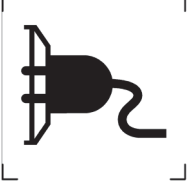
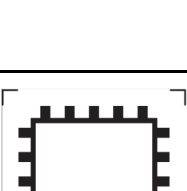
No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.55		Service indicator; read technical manual To indicate that the technical manual should be consulted. To identify the location where the technical manual is stored. To indicate that the machine or equipment requires service. To identify the control used to select diagnostic options or to display diagnostic codes.	ISO 7000-1659
9.56		Cup holder To identify the location of the cup holder.	ISO 7000-2583
9.57		Dipstick To identify the equipment used to determine the level of fluid by inserting the equipment into a specified location, withdrawing the equipment and examining the mark left by the residual fluid. To identify the dipstick location. This symbol does not specify the fluid that is measured by the dipstick.	ISO 7000-1318
9.58		Moving machine alarm; rearward moving machine alarm To identify the control that sounds an alarm to alert persons when the machine is moving rearward. To indicate the operational status of the rearward moving machine alarm.	ISO 7000-2104
9.59		Moving machine alarm, cancel; rearward moving machine alarm, cancel To identify the control that cancels or switches off the rearward moving machine alarm.	ISO 7000-2240
9.60		Radar sensor To identify the control for the radar sensor. To indicate that data (for example, to determine machine ground speed) have been obtained using radar.	Application of ISO 7000-2241
9.61		Satellite reception mode, general To identify the control that enables the equipment to receive satellite broadcasting transmissions. To indicate that the equipment is in the satellite reception mode.	IEC 60417-5464

No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.62		Global positioning system (GPS); global navigation satellite system (GNSS) To indicate that data (for example, to determine machine ground speed) have been obtained using one of the global satellite navigation systems. To identify the control for the satellite navigation sensor. To indicate the operational status of the satellite navigation sensor. The abbreviations GNSS or GPS may be used in addition to or as alternatives to this symbol.	ISO 7000-3599
9.63		Wireless communication To identify the control that enables or activates wireless communications. To indicate the operational status of the wireless communications function.	ISO 7000-3600
9.64		Latitude and longitude To identify the control that sets the current or default latitude and longitude. To indicate latitude and longitude.	ISO 7000-3193
9.65		Aerial; antenna To identify the aerial (antenna). This symbol should be used unless it is essential to specify the type of aerial (antenna).	IEC 60417-5039
9.66		Urgent alert indicator To indicate a condition that requires immediate attention by the operator. Use as an “urgent alert” indicator to call attention to another (already existing) symbol.	ISO 7000-2301
9.67		Information alert To indicate that one or more functions or systems on the machine or equipment are operating outside normal parameters in such a way as to require that the operator be alerted, but not necessarily to require active attention or monitoring of the function or system.	ISO 7000-2760
9.68		When displayed in colour, this symbol shall be displayed in blue, preferably with blue outer border, white inner border, blue background and white letter (see 9.68). This symbol is registered in ISO 7000 with the title “product information; information point” and a different description. May be used in combination with ISO 7000-2813 (see 9.69 and 9.70) and ISO 7000-3308 (see 9.71 and 9.72).	Application of ISO 7000-2760

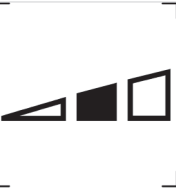
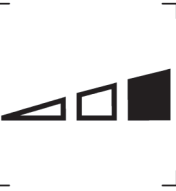
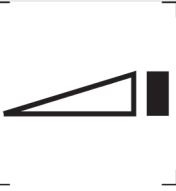
No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.69		Operator alert To indicate that one or more functions or systems on the machine or equipment are operating outside normal parameters in such a way as to require attention or further monitoring of the function or system, but not necessarily to require stopping the machine or equipment.	ISO 7000-2813
9.70		When displayed in colour, this symbol shall be displayed in yellow, preferably with black outline diamond and black exclamation mark on a yellow background. The yellow background may be extended beyond the limit of the black outline diamond (see 9.70). Do not use this symbol for alerting to personal safety hazards. May be used in combination with ISO 7000-2760 (see 9.67 and 9.68) and ISO 7000-3308 (see 9.71 and 9.72).	Application of ISO 7000-2813
9.71		Stop operation To instruct the operator to stop the machine or equipment as soon as possible and to switch off the engine or perform a requested action before any further operation is attempted. To indicate that one or more functions or systems on the machine or equipment are operating outside normal parameters in such a way as to require stopping the machine or equipment.	ISO 7000-3308
9.72		When displayed in colour, this symbol shall be displayed in red with red outer border, white inner border, red background and white letters (see 9.72). May be used in combination with ISO 7000-2760 (see 9.67 and 9.68) and ISO 7000-2813 (see 9.69 and 9.70).	Application of ISO 7000-3308
9.73		Manual control; manual operation; manual start To identify the control that activates manual control. To indicate that the function is in manual control mode. Use as a symbol element in a combined symbol or in conjunction with a function symbol to indicate manual operating mode. ISO 7000-0096 and ISO 7000-2684 are alternative symbols with the same meaning.	ISO 7000-0096
9.74		ISO 7000-2684 may be rotated 90° clockwise. Rotated symbol may be mirror-imaged. Symbol ISO 7000-2684 is registered with the title “manual activation control”.	ISO 7000-2684
9.75		Automatic operation; automatic start To identify the control that selects the automatic mode for a function. To identify the control that activates automatic control. To indicate that the function is in automatic control mode. Use as a symbol element in a combined symbol or in conjunction with a function symbol to indicate automatic operating mode.	Groups of letters used as symbols are not registered.

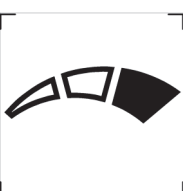
No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.76		Counter To indicate a counting function. To indicate the count of a quantity produced in the current job or time interval since the last reset.	Application of ISO 7000-0695
9.77		Counter reset To identify the control that sets the count in the counter to zero. To identify the control that sets the value of a measured or displayed quantity to zero.	ISO 7000-2750
9.78		Roadway travel mode To identify the control that brings the machine to a condition where it can travel on public roadways. To indicate that the machine is set up for travel on public roadways.	ISO 7000-2310
9.79		Roadway travel mode, cancel To identify the control that takes the machine to a condition where it should not travel on public roadways. To indicate that the machine is not set up for travel on public roadways.	Negation of ISO 7000-2310
9.80		Fast operation To indicate the fast setting of an operating range. To identify the control for fast operation. To identify the control direction of movement that increases speed of operation. This symbol shall be used filled.	ISO 7000-2810
9.81		Intermediate speed operation To indicate the intermediate speed setting of an operating range. To identify the control for intermediate speed operation. This symbol shall be used in outline. Use this symbol only in combination with ISO 7000-2810 (see 9.80) and ISO 7000-2811 (see 9.82).	Application of ISO 7000-2810
9.82		Slow operation To indicate the slow setting of an operating range. To identify the control for slow operation. To identify the control direction of movement that decreases speed of operation. This symbol shall be used filled.	ISO 7000-2811

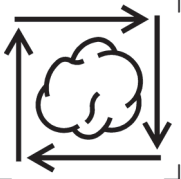
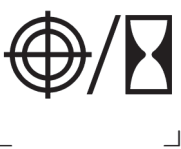
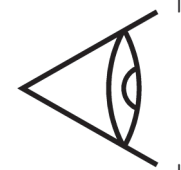
No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.83		Very slow operation; creeper gear To indicate the very slow setting off an operating range. To identify the control direction of movement that decreases speed of operation to its slowest setting. To identify the creeper gear of the transmission. To indicate that the transmission is operating in its creeper gear. This symbol shall be used filled.	ISO 7000-2812
9.84		Temperature, high To identify the high temperature position of a control. To indicate that the temperature is at a high level. Colour may be red to signify warm or hot temperatures.	ISO 7000-3397
9.85		Temperature, low To identify the low temperature position of a control. To indicate that the temperature is at a low level. Colour may be blue to signify cool or cold temperatures.	ISO 7000-3398
9.86		Temperature limit To identify the control that sets the maximum and minimum temperature limits. To indicate the maximum and minimum temperature limits. The temperature values may be shown adjacent to the symbol, preferably with the minimum temperature on the left side and the maximum temperature on the right side.	ISO 7000-0632
9.87		Upper temperature limit; maximum temperature To identify the control that sets the maximum temperature limit. To indicate the maximum temperature limit. The temperature value may be shown adjacent to the symbol, preferably on the right side.	ISO 7000-0533
9.88		Lower temperature limit; minimum temperature To identify the control that sets the minimum temperature limit. To indicate the minimum temperature limit. The temperature value may be shown adjacent to the symbol, preferably on the left side.	ISO 7000-0534
9.89		Temperature, increasing To indicate an increase in temperature. To identify the control that causes the temperature to increase.	ISO 7000-0035

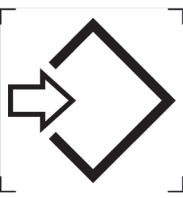
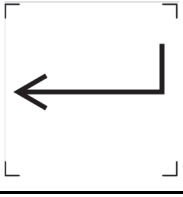
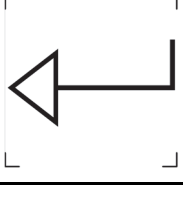
No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.90		Temperature, decreasing To indicate a decrease in temperature. To identify the control that causes the temperature to decrease.	ISO 7000-0036
9.91		Temperature control To identify the control that adjusts or regulates the temperature.	ISO 7000-0175
9.92		Fuse box access To identify the fuse box. To identify the location of the fuse box.	ISO 7000-2567
9.93		External electrical connection, enable To identify the location for connecting the electrical power for an external electrical component. To identify the control that enables the external electrical connection. To indicate that the external electrical connection is enabled.	ISO 7000-3601
9.94		External electrical connection, connected To indicate that the external electrical component is connected.	ISO 7000-3602
9.95		Limited performance mode; limp home mode To indicate that the machine is in an operating condition that allows it to be driven but not to do work. To indicate that the machine has taken action to reduce electrical power consumption. Convenience functions with high energy demand (for example, air conditioning) are likely to have their performance degraded first. Machine performance functions may also be altered to conserve electrical energy.	Application of ISO 7000-2639
9.96		Electronic control unit (ECU), general To identify the computer or microchip that collects data on the performance of machine systems, controls their operations or adjusts operating conditions in response to inputs. This symbol does not specify the machine components or functions. For specific machine systems, components or functions, add a symbol element to identify the system, component or function. For example, see ISO 7000-3417 in 10.70 and ISO 7000-3442 in 11.26.	ISO 7000-3603

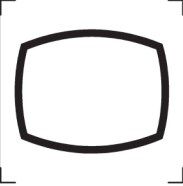
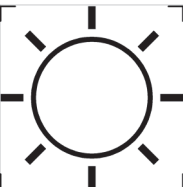
No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.97		Smart key To indicate that a smart key is required to start or operate the machine or equipment. Use an orange indicator to communicate that a smart key is not detected. The indicator is illuminated orange when an attempt is made to start the machine or equipment without a smart key being detected.	Application of ISO 7000-2849
9.98		Fire extinguisher To identify the fire extinguisher or its location. To identify the control for the fire extinguisher. To indicate the operational status of the fire extinguisher.	ISO 7000-3309
9.99		Variability, linear adjustment To indicate continuous variability of a quantity. To identify the control by means of which a quantity is continuously increased or decreased. The controlled quantity increases with the size of the graphical element. Use when the variable quantity is adjusted by linear movement of the control. This symbol on a control button means a continuous increase in quantity. Its mirror image means a continuous decrease in quantity.	Application of IEC 60417-5004
9.100		Variability in steps, linear adjustment To indicate variability of a quantity in discrete steps. To identify the control by means of which a quantity is increased or decreased in discrete steps. The controlled quantity increases with the size of the graphical element. Use when the variable quantity is adjusted by linear movement of the control. This symbol on a control button means a stepwise increase in quantity. Its mirror image means a stepwise decrease in quantity. Use in conjunction with IEC 60417-5005 for increase (see 9.8) and IEC 60417-5006 for decrease (see 9.9).	IEC 60417-5181
9.101		Variability in steps, linear adjustment, lowest setting To indicate the lowest setting for variability of a quantity in discrete steps. To identify the control by means of which a quantity is set at the lowest of several discrete steps. The controlled quantity increases with the size of the graphical element. Use when the variable quantity is adjusted by linear movement of the control.	Application of IEC 60417-5181

No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.102		Variability in steps, linear adjustment, middle setting To indicate the medium setting for variability of a quantity in discrete steps. To identify the control by means of which a quantity is set at the middle of several discrete steps. The controlled quantity increases with the size of the graphical element. Use when the variable quantity is adjusted by linear movement of the control.	Application of IEC 60417-5181
9.103		Variability in steps, linear adjustment, highest setting To indicate the highest setting for variability of a quantity in discrete steps. To identify the control by means of which a quantity is set at the highest of several discrete steps. The controlled quantity increases with the size of the graphical element. Use when the variable quantity is adjusted by linear movement of the control.	Application of IEC 60417-5181
9.104		Continuous variability, linear adjustment, with maximum step To indicate continuous variability of a quantity with an additional maximum step. To identify the control by means of which a quantity is increased or decreased. The maximum value can be temporarily switched on by an additional operation. The controlled quantity increases with the size of the graphical element; the maximum step is filled. Use when the variable quantity is adjusted by linear movement of the control.	IEC 60417-5183
9.105		Variability, rotational adjustment To indicate continuous variability of a quantity. To identify the control by means of which a quantity is continuously increased or decreased. The controlled quantity increases with the size of the graphical element. Use when the variable quantity is adjusted by rotary movement of the control.	ISO 7000-1364
9.106		Variability in steps, rotational adjustment To indicate variability of a quantity in discrete steps. To identify the control by means of which a quantity is increased or decreased in discrete steps. The controlled quantity increases with the size of the graphical element. Use when the variable quantity is adjusted by rotary movement of the control. Use in conjunction with IEC 60417-5005 for increase (see 9.8) and IEC 60417-5006 for decrease (see 9.9). Radius of this symbol can be adjusted according to the radius of the control.	ISO 7000-2164

No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.107		Variability in steps, rotational adjustment, lowest setting To indicate the lowest setting for variability of a quantity in discrete steps. To identify the control by means of which a quantity is set at the lowest of several discrete steps. The controlled quantity increases with the size of the graphical element. Use when the variable quantity is adjusted by rotary movement of the control. Radius of this symbol can be adjusted according to the radius of the control.	Application of ISO 7000-2164
9.108		Variability in steps, rotational adjustment, medium setting To indicate the medium setting for variability of a quantity in discrete steps. To identify the control by means of which a quantity is set at the middle of several discrete steps. The controlled quantity increases with the size of the graphical element. Use when the variable quantity is adjusted by rotary movement of the control. Radius of this symbol can be adjusted according to the radius of the control.	Application of ISO 7000-2164
9.109		Variability in steps, rotational adjustment, highest setting To indicate the highest setting for variability of a quantity in discrete steps. To identify the control by means of which a quantity is set at the highest of several discrete steps. The controlled quantity increases with the size of the graphical element. Use when the variable quantity is adjusted by rotary movement of the control. Radius of this symbol can be adjusted according to the radius of the control.	Application of ISO 7000-2164
9.110		Continuous variability, rotational adjustment, with maximum step To indicate continuous variability of a quantity with an additional maximum step. To identify the control by means of which a quantity is increased or decreased. The maximum value can be temporarily switched on by an additional operation. The controlled quantity increases with the size of the graphical element; the maximum step is filled. Use when the variable quantity is adjusted by rotary movement of the control. Radius of this symbol can be adjusted according to the radius of the control.	IEC 60417-6020

No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.111		Manual cleaning To indicate that manual cleaning is required. To instruct that a part or component should be cleaned manually.	ISO 7000-0423
9.112		Automatic cleaning To identify the control that activates the automatic cleaning system or automatic cleaning cycle. To indicate that the automatic cleaning cycle is underway. To indicate the operational status of the automatic cleaning system.	ISO 7000-0424
9.113		Target; target rate To identify the control that sets the target rate. To indicate the intended or specified quantity. This symbol does not specify the material to which the target rate applies. Symbol may be simplified at small size reproduction by removing the inner circle.	ISO 7000-3310
9.114		Target rate per area To identify the control that sets the target rate per unit of area. To indicate the target rate (quantity) per unit of area. This symbol does not specify the material to which the target rate applies. Symbol may be simplified at small size reproduction by removing the inner circle.	ISO 7000-3311
9.115		Target rate per hour To identify the control that sets the target rate per hour. To indicate the target rate (quantity) per hour. This symbol does not specify the material to which the target rate applies. Symbol may be simplified at small size reproduction by removing the inner circle.	ISO 7000-3312
9.116		Examine; check To indicate an examination. To instruct that a part, component or process should be examined or checked.	ISO 7000-0421
9.117		Check system; update system To indicate that the system needs to be checked or updated.	ISO 7000-3518

No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.118		Acknowledgement; acceptance To indicate that the function is complete or ready to proceed to the next step. To indicate acknowledgement or acceptance of the message or information.	Application of ISO 7000-0422
9.119		Assistance; query To identify the control that activates an assistance (help) screen or display window.	Application of ISO 7000-0435
9.120		Enter data To identify the control that sends data or a message to the current application. To identify the “enter data” control on electronic performance monitors. Arrow shall be used in outline. ISO 7000-0651A (see 9.121) and ISO 7000-0651B (see 9.122) are alternatives to ISO 7000-1025.	Application of ISO 7000-1025
9.121		Enter To identify the control that enters data and moves the cursor to a new line. ISO 7000-0651A and ISO 7000-0651B are alternative symbols with the same meaning. ISO 7000-0651A and ISO 7000-0651B are alternatives to ISO 7000-1025 (see 9.120).	ISO 7000-0651A
9.122			ISO 7000-0651B
9.123		Save entered data To identify the control that saves data that was previously entered into the application. Arrow shall be used filled.	ISO 7000-2167
9.124		Cancel; negation, general To identify the control that cancels the current operation. To indicate that the identified function is switched off or not available. This symbol is one of the two methods to negate the meaning of a symbol according to IEC 80416-1. The single diagonal bar is the other method to negate the meaning of a symbol. (For example, see ISO 7000-2240 in 9.59.)	Application of IEC 60417-6287

No.	Graphical Symbol	Symbol Title and Description	ISO/IEC Registration Number
9.125		Reset To identify the control that returns the machine mode to a previously determined operating condition or resets the content of an electronic file.	Application of ISO 7000-1027
9.126		Monitor; display screen To identify the control that selects video mode. To identify a display screen. To indicate the operational status of the display or video monitor. A series of display screens may be numbered or otherwise identified for subsequent reference. Use as a symbol element in combination with other symbols to indicate video functions.	Application of IEC 60417-5049
9.127		Colour monitor; colour display To identify the control that selects colour video mode. To identify a colour display screen. To indicate the operational status of the colour display or colour video monitor. If this symbol is reproduced in colour, the colours of the filled circles shall be red (lower left), blue (top) and green (lower right).	Application of IEC 60417-5050
9.128		Use this symbol only when it is necessary to differentiate between monochrome and colour monitors or displays; otherwise, use IEC 60417-5049 (see 9.126).	Application of IEC 60417-5050
9.129		Brightness; daylight visibility conditions; day mode To identify the control that adjusts the brightness on a display screen. To identify the control that selects the brightness of the display screen appropriate to daylight visibility conditions. To indicate that the display screen brightness is adjusted to daylight visibility conditions.	IEC 60417-5056
9.130		Contrast To identify the control that adjusts the contrast between light and dark images on the display screen.	IEC 60417-5057
9.131		Brightness and contrast To identify the control that adjusts both brightness and contrast on the display screen.	IEC 60417-5435