

# LP100 series

## Low profile miniature trackball

Distinctive features and specifications



- 1" ball diameter
- Panel mount design
- Available in black or backlit illumination
- Several protocol options
- Additional button strips available
- Environmental Protection Classification (IP Rating): contact factory

### MECHANICAL

- Ball Diameter: 1.00" (25.40mm)
- Ball Rotation: Continuous in all directions
- Tracking Force: 15g (0.35oz)
- Weight: 33.5g (1.18oz)
- Life Cycle (ball rotations): 5 million
- Operating Temperature: -40°C to +85°C (-40°F to +185°F)

### PROTOCOL OPTIONS AND ELECTRICAL SPECIFICATIONS

- USB: Input: 4.00V – 5.25V @ 25mA max (+30mA for backlit illumination option)  
Output: USB 1.1
- PS/2 (2/3BTN PS/2): Input: 5.00V @ 25mA max (+30mA for backlit illumination option)  
Output: CMOS/TTL
- Quadrature: Input: 5.00V @ 30mA max (+30mA for backlit illumination option)  
Output: Quadrature Waveforms

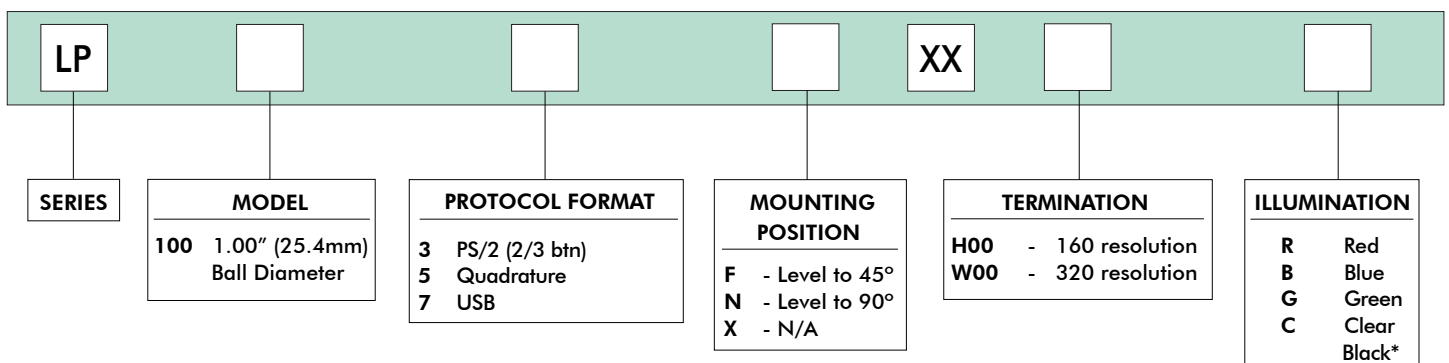
### CONFIGURATION OPTIONS

- LED backlighting: Red, Blue, Green or Clear through a translucent Thermostat resin ball
- Additional pushbutton switch: Two, three or four\* buttons (\* USB only) – see Button Strips
- Connector cables
- Conformally coated PCB

### MOUNTING OPTIONS

- 180° horizontal to 90° vertical – please specify when ordering.

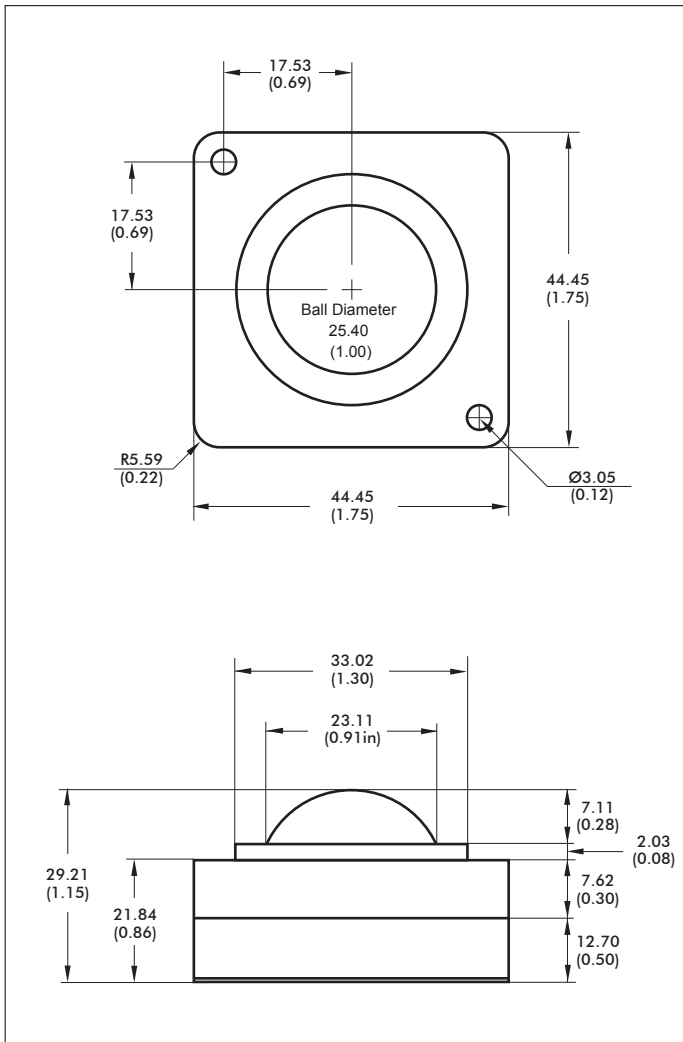
NOTE: All values are nominal.



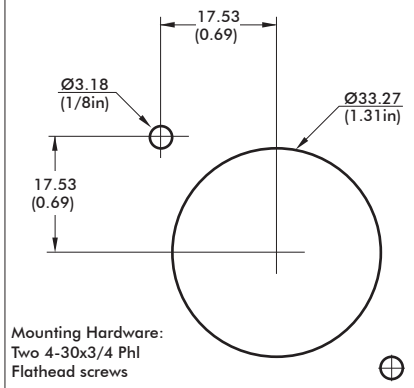
\*Non-illuminated

# LP100 series

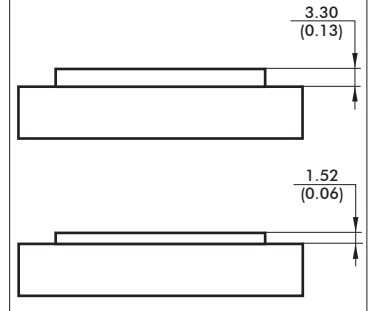
## Low profile miniature trackball



### MOUNTING CUTOUT DIMENSIONS



### OTHER AVAILABLE PANEL DIMENSIONS\*

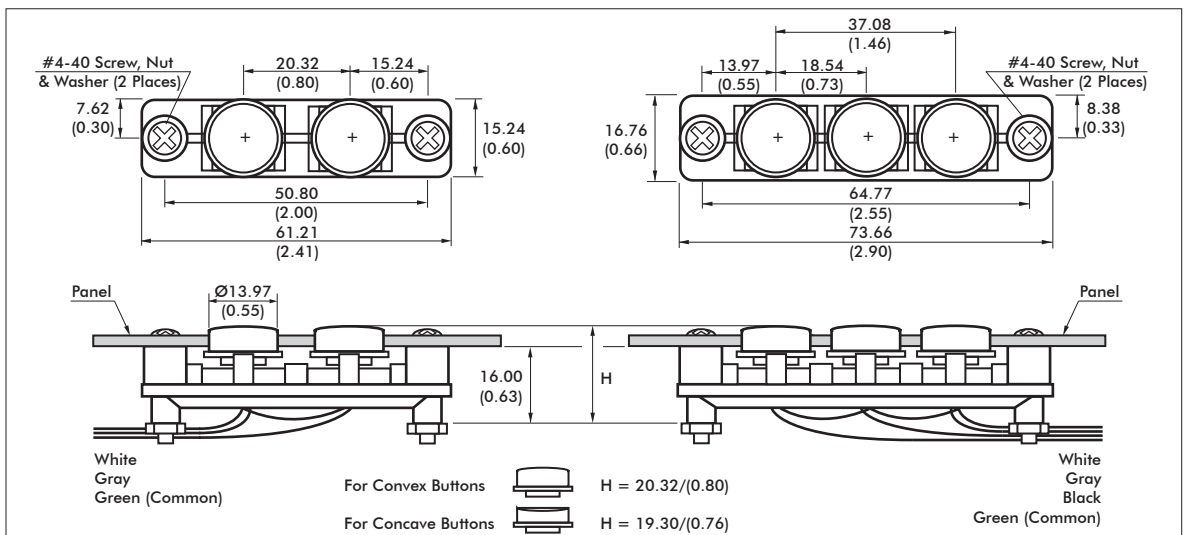


### NOTES:

All dimensions are in mm/(inch).  
\* Please specify panel thickness with your order.

### BUTTON STRIP FEATURES

- Two, three, or four\* (\*USB only) buttons
- Tactile feedback
- Normally open momentary contact switch
- 5 million lifecycles rating at 500mA at 12VDC
- Black or gray button caps
- Choice of convex or concave design



NOTE: All dimensions are in mm/(inch).

Note: The company reserves the right to change specifications without notice.

# LP150 series

## Low profile trackball

Distinctive features and specifications



- 1.5" ball diameter
- Panel mount design
- Available in black or backlit illumination
- Several protocol options
- Additional button strips available
- Environmental Protection Classification (IP Rating): contact factory

### MECHANICAL

- Ball Diameter: 1.50" (38.10mm)
- Ball Rotation: Continuous in all directions
- Tracking Force: 10g (0.35oz)
- Weight: 118.5.5g (4.18oz)
- Life Cycle (ball rotations): 5 million
- Operating Temperature: -40°C to +85°C (-40°F to +185°F)

### CONFIGURATION OPTIONS

- LED backlighting: Red, Blue, Green or Clear through a translucent Thermostat resin ball
- Additional pushbutton switch: Two, three or four\* buttons (\* USB only) – see Button Strips
- Connector cables
- Conformally coated PCB

### PROTOCOL OPTIONS AND ELECTRICAL SPECIFICATIONS

- USB: Input: 4.00V – 5.25V @ 25mA max (+30mA for backlit illumination option)  
Output: USB 1.1
- PS/2 (2/3BTN PS/2): Input: 5.00V @ 25mA max (+30mA for backlit illumination option)  
Output: CMOS/TTL
- Microsoft Serial\*: Input: DTR/RTS @ 14 mA max (+30mA for backlit illumination option)  
Output: RS-232, Serial
- Quadrature: Input: 5.00V @ 30mA max (+30mA for backlit illumination option)  
Output: Quadrature Waveforms
- Sun Workstation: Input: 5.00V @ 30mA max (+30mA for backlit illumination option)  
(Mouse Systems Serial) Output: CMOS/TTL

### MOUNTING OPTIONS

- 180° horizontal to 90° vertical – please specify when ordering.

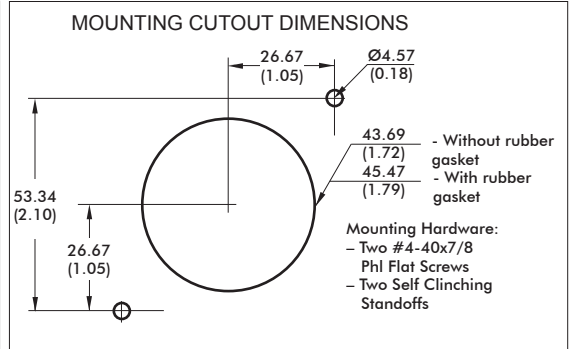
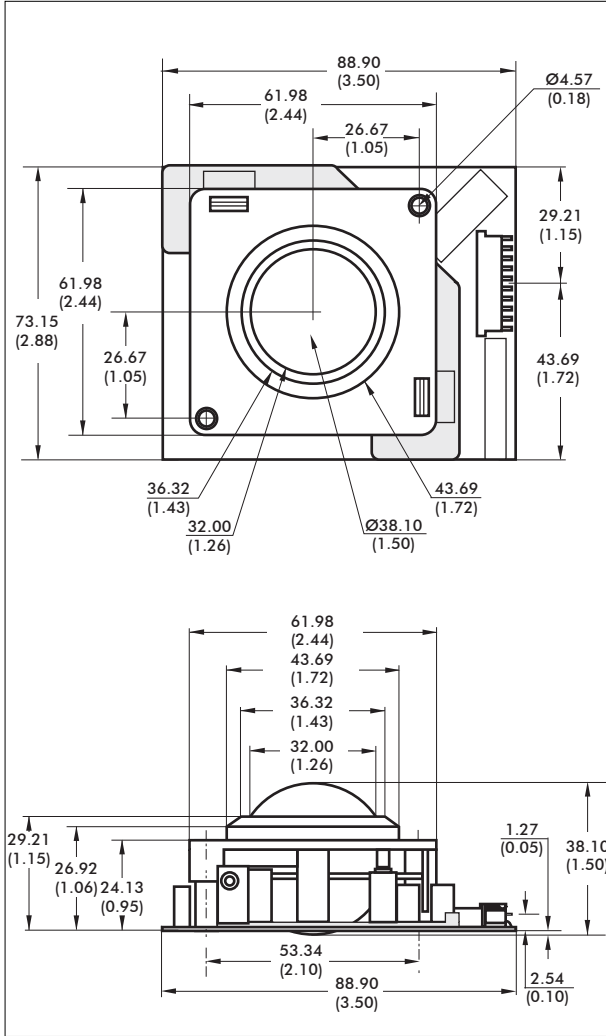
NOTE: \* = Microsoft Serial Interface requires a 5V supply for the LED backlighting option.  
All values are nominal.

SERIES	MODEL	PROTOCOL FORMAT	MOUNTING POSITION	RESOLUTION	POWER REQUIREMENT	ILLUMINATION
LP	150 1.50" Diameter (38.1mm)	1 Microsoft (2 btn Serial) 3 PS/2 (2/3 btn) 5 Quadrature 6 SUN Workstations 7 USB	F - Level to 45° N - Level to 90° X - N/A	10 - 120 resolution 20 - 240 resolution 30 - 480 resolution	V00 5V Regulated R00 RS-232* (DTR & RTS)	R Red B Blue G Green C Clear Black*

\*Microsoft Protocol only \*Non-illuminated

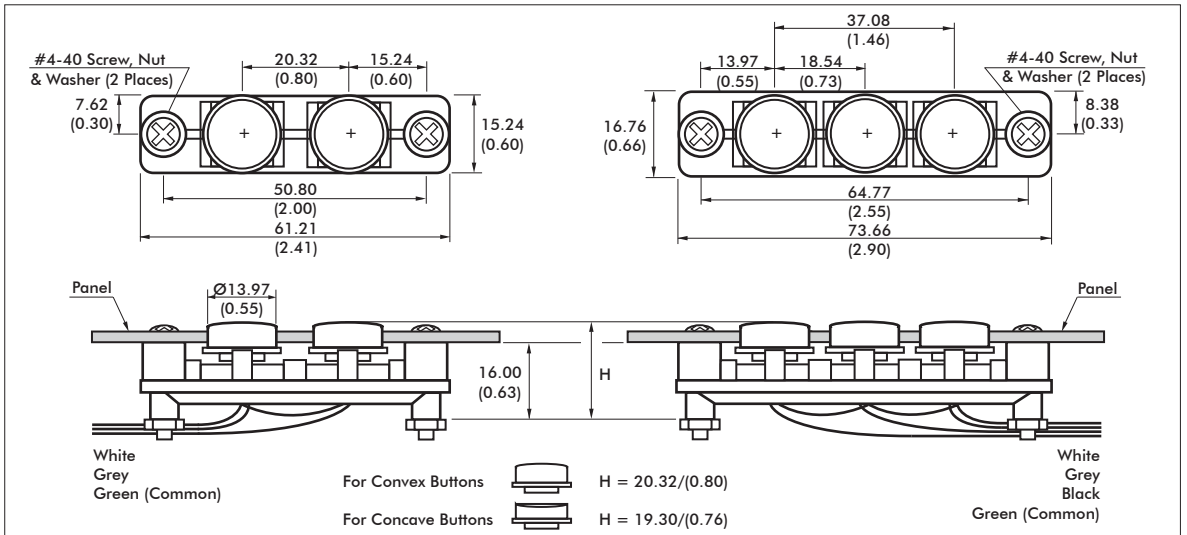
# LP150 series

## Low profile trackball



### BUTTON STRIP FEATURES

- Two, three, or four\* (\*USB only) buttons
- Tactile feedback
- Normally open momentary contact switch
- 5 million lifecycles rating at 500mA at 12VDC
- Black or gray button caps
- Choice of convex or concave design



NOTE: All dimensions are in mm/(inch).

Note: The company reserves the right to change specifications without notice.

# P200 series

## Panel mount trackball

Distinctive features and specifications



- 2" ball diameter
- Panel mount design
- Available in black or backlit illumination
- Several protocol options
- Additional button strips available
- Environmental Protection Classification (IP Rating): contact factory

MECHANICAL
<ul style="list-style-type: none"> <li>• Ball Diameter: 2.00" (50.80mm)</li> <li>• Ball Rotation: Continuous in all directions</li> <li>• Tracking Force: 10g (0.35oz)</li> <li>• Weight: 257.5g (9.07oz)</li> <li>• Life Cycle (ball rotations): 5 million</li> <li>• Operating Temperature: -40°C to +85°C (-40°F to +185°F)</li> </ul>

CONFIGURATION OPTIONS
<ul style="list-style-type: none"> <li>• LED backlighting: Red, Blue, Green or Clear through a translucent Thermostat resin ball</li> <li>• Additional pushbutton switch: Two, three or four* buttons (* USB only) – see Button Strips</li> <li>• Connector cables</li> <li>• Conformally coated PCB</li> </ul>

PROTOCOL OPTIONS AND ELECTRICAL SPECIFICATIONS
<ul style="list-style-type: none"> <li>• <b>USB:</b> Input: 4.00V – 5.25V @ 25mA max (+30mA for backlit illumination option) Output: USB 1.1</li> <li>• <b>PS/2 (2/3BTN PS/2):</b> Input: 5.00V @ 25mA max (+30mA for backlit illumination option) Output: CMOS/TTL</li> <li>• <b>Microsoft Serial*:</b> Input: DTR/RTS @ 14 mA max (+30mA for backlit illumination option) Output: RS-232, Serial</li> <li>• <b>Quadrature:</b> Input: 5.00V @ 30mA max (+30mA for backlit illumination option) Output: Quadrature Waveforms</li> <li>• <b>Sun Workstation:</b> Input: 5.00V @ 30mA max (Mouse Systems Serial) (+30mA for backlit illumination option) Output: CMOS/TTL</li> </ul>

MOUNTING OPTIONS
<ul style="list-style-type: none"> <li>• 180° horizontal to 90° vertical – please specify when ordering.</li> </ul>

NOTE: \* = Microsoft Serial Interface requires a 5V supply for the LED backlighting option.  
All values are nominal.

Series	Model	Protocol Format	Mounting Position	Resolution	Power Requirement	Illumination
P	200 2.00" (50.8mm) Ball Diameter	1 Microsoft (2 btn Serial) 3 PS/2 (2/3 btn) 5 Quadrature 6 SUN Workstations 7 USB	F - Level to 45° N - Level to 90° X - N/A	10 - 160 resolution 20 - 320 resolution 30 - 640 resolution	V00 5V Regulated R00 RS-232* (DTR & RTS)	R Red B Blue G Green C Clear Black*

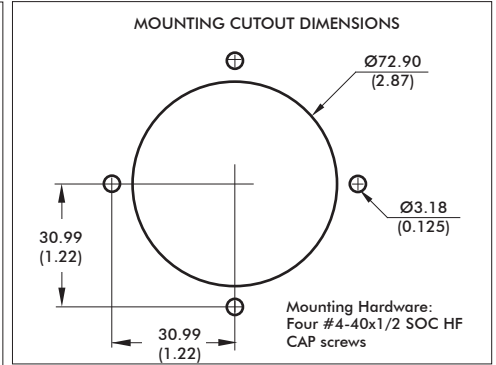
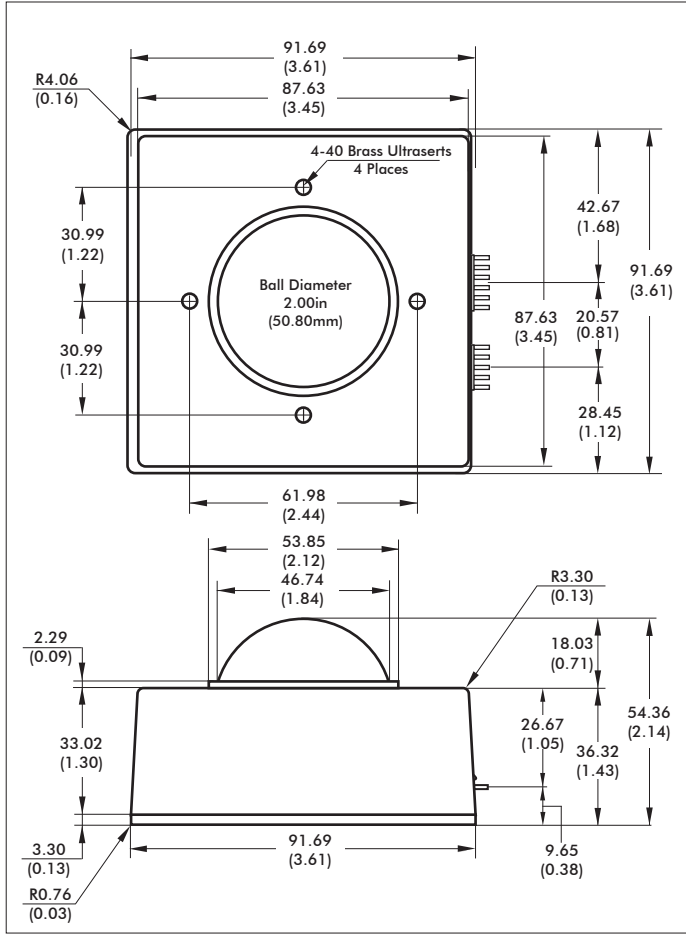
\*Microsoft Protocol only

\*Non-illuminated

Note: The company reserves the right to change specifications without notice.

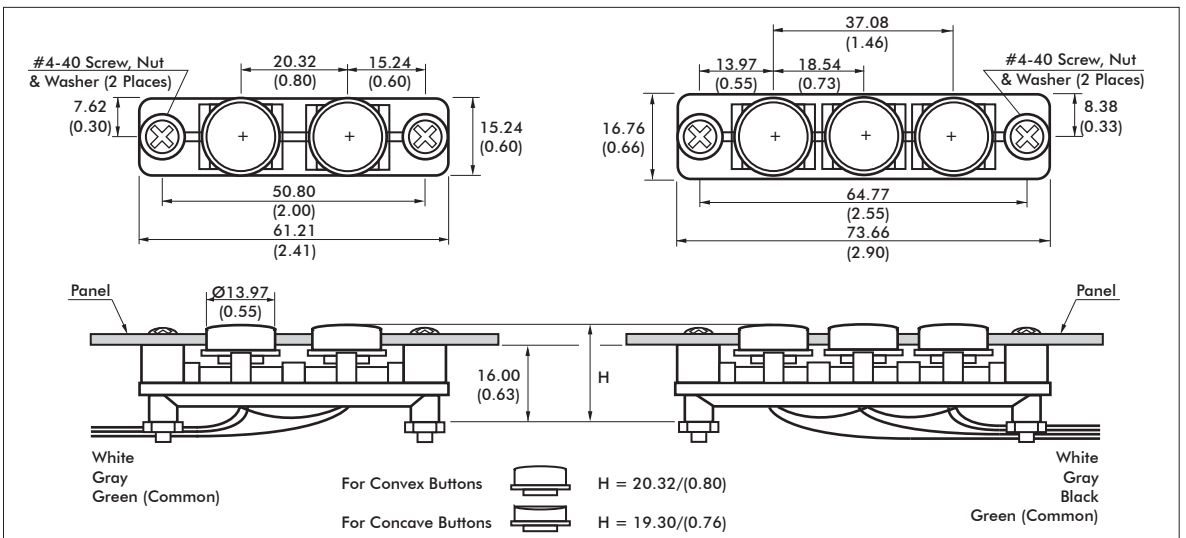
# P200 series

## Low profile trackball



### BUTTON STRIP FEATURES

- Two, three, or four\* (\*USB only) buttons
- Tactile feedback
- Normally open momentary contact switch
- 5 million lifecycles rating at 500mA at 12VDC
- Black or gray button caps
- Choice of convex or concave design



NOTE: All dimensions are in mm/(inch)

Note: The company reserves the right to change specifications without notice.

## Данный компонент на территории Российской Федерации

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<http://moschip.ru/get-element>

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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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