

EXPLORER Performance

Quality performance at the right price





EXPLORER Performance

Invest Small, Save Big

In today's manufacturing, demand for increasing product quality continues to grow. To meet this demand and remain competitive, manufacturers are replacing manual inspection methods with automated measurement.

Of course, cost is a key consideration when making these investments. It's crucial that the inspection solution is not only cost-effective but offers further savings on the factory floor.

EXPLORER Performance is a coordinate measuring machine (CMM) that combines reliable, accurate dimensional inspection with cost reduction throughout the quality process.

By offering certified quality free from human error, EXPLORER Performance cuts the risk of rejected parts. The CMM also reduces scrap by enabling users to identify wear in tooling using SPC analysis. Cycle times are enhanced, and labour costs are reduced as operators can complete work away from the CMM while it runs routines automatically. In addition, users can ensure the system is being used at full capacity with the HxGN SFx | Asset Management tool.

EXPLORER Performance isn't just a small investment. It's a compact solution offering a small footprint to optimise your floorspace, designed to perform in higher temperature and humidity ranges.

Although the CMM is designed for smaller budgets, EXPLORER Performance goes beyond the essentials of quality assurance to push your inspection productivity further, with optimised accuracy, dynamics, and robustness.

HH-AS-T is not available on EXPLORER Performance 05.07.05 + HP-S-X1S configuration. Only HH-A-T5 is available.

Explorer Performance 05.07.05 specifications

| Models | MPE(μm), L(mm) | | | | | | | | | | Max. 3D Speed (mm/s) | Max. 3D Accel (mm/s ²) |
|----------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------------------|-------------------------|---------------------|-----------------------|----------------------|------------------------------------|
| | HP-T/HP-TM | | HP-THD | | HP-S-X1S/X1C* | | | HP-S-X1S/X1C* + X.μ kit | | | | |
| | MPEE ⁽¹⁾ | MPEP ⁽²⁾ | MPEE ⁽¹⁾ | MPEP ⁽²⁾ | MPEE ⁽¹⁾ | MPEP ⁽²⁾ | MPETHP ⁽³⁾ | MPEE ⁽¹⁾ | MPEP ⁽²⁾ | MPETHP ⁽³⁾ | | |
| 05.07.05 | 2.4+3.3L/1000 | 2.4 | 2.2+3.3L/1000 | 2.2 | 1.9+3.3L/1000 | 1.9 | 2.9/50 | 1.7+3.3L/1000 | 1.7 | 2.9/50 | 520 | 1100 |

(1) MPEE according to ISO 10360-2: 2001

(2) MPEP according to ISO 10360-2: 2001

(3) MPETHP/T according to ISO 10360-4: 2000

(4) * : HP-S-X1C as request

(5) HH-AS-T is not available on EXPLORER Performance 05.07.05 + HP-S-X1S configuration. Only HH-A-T5 is available

Performance data are valid if the following specifications are met:

- Temperature range: 18 - 22°C;

- Max. air temperature variation: 1°C/h - 2°C/24h;

- Max. gradient in space: 1°C/m

- Relative humidity: 25% - 75%

Probe configuration for performance test:

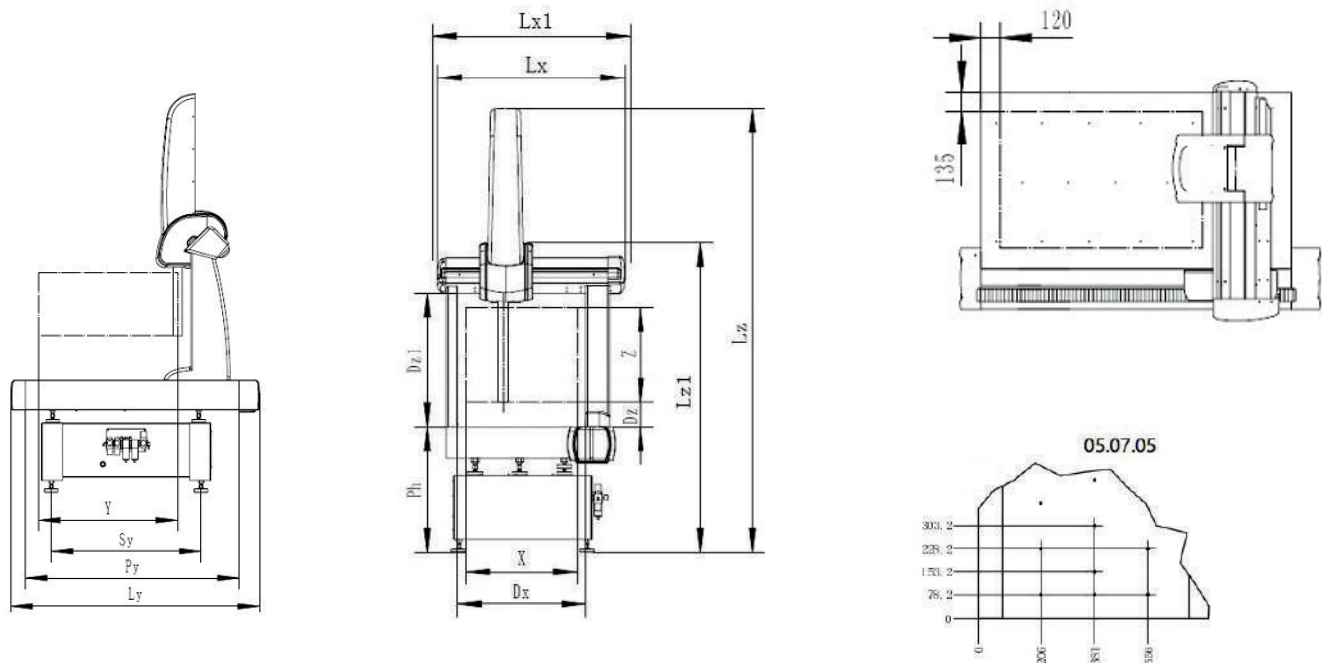
- HP-T/HP-TM: standard measuring force, stylus length 10 mm, tip diameter 4 mm

- HP-THD: standard measuring force, stylus length 10 mm, tip diameter 4 mm

- HP-S-X1/HP-S-X1S/HP-S-X1H/HP-S-X1C: stylus length 50 mm, tip diameter 5 mm

- HP-S-X3: stylus length 60 mm, tip diameter 4 mm

Explorer performance 05.07.05 strokes, dimensions and weights



| Models | Strokes (mm) | | | Overall Dimensions (mm) | | | | | Daylights (mm) | | | Max. Part Weight (kg) | CMM Weight (kg) |
|----------|--------------|-----|-----|-------------------------|------|------|------|------|----------------|-----|-----|-----------------------|-----------------|
| | X | Y | Z | Lx | Ly | Lz | Lx1 | Lz1 | Dx | Dz | Dz1 | | |
| 05.07.05 | 500 | 700 | 500 | 999 | 1445 | 2562 | 1100 | 1890 | 633 | 130 | 680 | 227 | 655 |

Technical characteristics

Mechanical Frame

X and Z: granite construction

Y: integral dovetail guideways, machined into the table

Operating Environment

Temperature range: 10 - 45 °C

Relative humidity: 90%, non-condensing

Sliding system

Air bearing on all axes

Surface plate

Material: granite

Part locking: threaded inserts M8 x 1.25

Thermal compensation

Linear: 18 - 22 °C

Ram Counterbalance

Pneumatic, adjustable

Measuring system

METALLUR linear scales

System resolution: 0.005μm

Air supply

Minimum air supply pressure: 6 bar

Air consumption: 90NL/min

Power

Voltage: 220 V/50Hz

Explorer Performance 06.XX.06,08.XX.06 specifications

| Models | MPE(μm), L(mm) | | | | | | | | | | Max.3D Speed (mm/s) | Max. 3D Accel (mm/s ²) |
|----------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------------------|---------------------------|---------------------|-----------------------|---------------------|------------------------------------|
| | HP-T/HP-TM | | HP-THD | | HP-S-X1/HP-S-X3 | | | HP-S-X1/HP-S-X3 + X.μ kit | | | | |
| | MPEE ⁽¹⁾ | MPEP ⁽²⁾ | MPEE ⁽¹⁾ | MPEP ⁽²⁾ | MPEE ⁽¹⁾ | MPEP ⁽²⁾ | MPETHP ⁽³⁾ | MPEE ⁽¹⁾ | MPEP ⁽²⁾ | MPETHP ⁽³⁾ | | |
| 06.XX.06 | 2.4+3.3L/1000 | 2.4 | 2.2+3.3L/1000 | 2.2 | 1.9+3.3L/1000 | 1.9 | 3.0/68 | 1.7+3.3L/1000 | 1.7 | 3.0/68 | 520 | 1730 |
| 08.XX.06 | 2.5+3.3L/1000 | 2.5 | 2.3+3.3L/1000 | 2.3 | 2.0+3.3L/1000 | 2.0 | 3.5/68 | 1.8+3.3L/1000 | 1.8 | 3.5/68 | 520 | 1730 |

(1) MPEE according to ISO 10360-2: 2001

(2) MPEP according to ISO 10360-2: 2001

(3) MPETHP/T according to ISO 10360-4: 2000

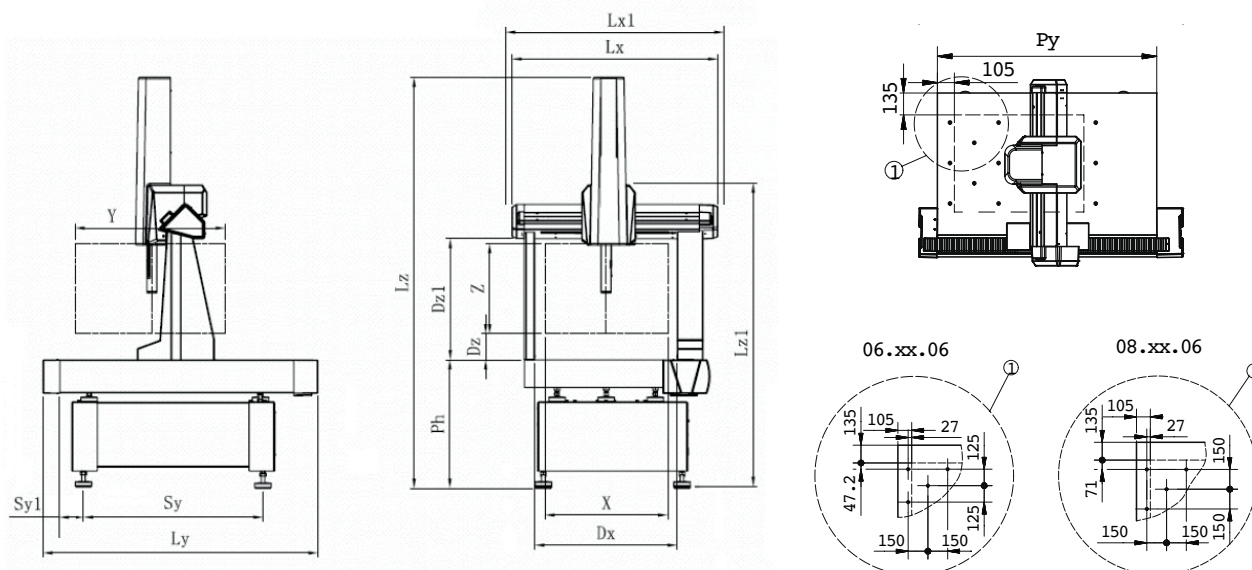
Performance data are valid if the following specifications are met:

- Temperature range: 18 - 22°C;
- Max. air temperature variation: 1°C/h - 2°C/24h;
- Max. gradient in space: 1°C/m
- Relative humidity: 25% - 75%

Probe configuration for performance test:

- HP-T/HP-TM: standard measuring force, stylus length 10 mm, tip diameter 4 mm
- HP-THD: standard measuring force, stylus length 10 mm, tip diameter 4 mm
- HP-S-X1/HP-S-X1S/HP-S-X1H/HP-S-X1C: stylus length 50 mm, tip diameter 5 mm
- HP-S-X3: stylus length 60 mm, tip diameter 4 mm

Explorer performance 06.XX.06,08.XX.06 strokes, dimensions and weights



| Models | Strokes (mm) | | | Overall Dimensions (mm) | | | | | Daylights (mm) | | | Max.Part Weight (kg) | CMM Weight (kg) |
|----------|--------------|------|-----|-------------------------|------|------|------|------|----------------|-----|-----|----------------------|-----------------|
| | X | Y | Z | Lx | Ly | Lz | Lx1 | Lz1 | Dx | Dz | Dz1 | | |
| 06.08.06 | 600 | 800 | 600 | 1150 | 1623 | 2638 | 1250 | 1980 | 734 | 144 | 794 | 300 | 730 |
| 06.10.06 | 600 | 1000 | 600 | 1150 | 1823 | 2658 | 1250 | 1980 | 743 | 144 | 794 | 300 | 890 |
| 08.10.06 | 800 | 1000 | 600 | 1350 | 1823 | 2658 | 1450 | 2050 | 934 | 144 | 794 | 500 | 1074 |
| 08.12.06 | 800 | 1200 | 600 | 1350 | 2023 | 2658 | 1450 | 2050 | 934 | 144 | 794 | 500 | 1196 |

Technical characteristics

Mechanical Frame

X and Z: micromachined anodised light alloy extrusion

Y: integral dovetail guideways, machined into the table

Operating Environment

Temperature range: 10 - 45 °C

Relative humidity: 90%, non-condensing

Sliding system

Air bearing on all axes

Surface plate

Material: granite

Part locking: threaded inserts M8 x 1.25

Thermal compensation

Linear: 18 - 22 °C

Ram Counterbalance

Pneumatic, adjustable

Measuring system

METALLUR linear scales

System resolution: 0.005μm

Air supply

Minimum air supply pressure: 6 bar

Air consumption: 90NL/min

Power

Voltage: 220 V/50Hz

Explorer Performance 12.XX.10 specifications

| Models | MPE(μm), L(mm) | | | | | | | | | | Max. 3D Speed (mm/s) | Max. 3D Accel (mm/s ²) |
|----------|-----------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------------------|--------------------------------|---------------------|-----------------------|----------------------|------------------------------------|
| | HP-T/HP-TM | | HP-THD | | HP-S-X1/HP-S-X3 | | | HP-S-X1/HP-S-X3 + X. μ kit | | | | |
| | MPEE ⁽¹⁾ | MPEP ⁽²⁾ | MPEE ⁽¹⁾ | MPEP ⁽²⁾ | MPEE ⁽¹⁾ | MPEP ⁽²⁾ | MPETHP ⁽³⁾ | MPEE ⁽¹⁾ | MPEP ⁽²⁾ | MPETHP ⁽³⁾ | | |
| 12.15.10 | 3.0+3.3L/1000 | 3.0 | 2.8+3.3L/1000 | 2.8 | 2.6+3.3L/1000 | 2.6 | 5.0/68 | 2.4+3.3L/1000 | 2.4 | 5.0/68 | 433 | 1000 |
| 12.22.10 | 3.0+3.3L/1000 | 3.0 | 2.8+3.3L/1000 | 2.8 | 2.6+3.3L/1000 | 2.6 | 5.0/68 | 2.4+3.3L/1000 | 2.4 | 5.0/68 | 433 | 1000 |
| 12.30.10 | 3.0+3.3L/1000 | 3.0 | 2.8+3.3L/1000 | 2.8 | 2.6+3.3L/1000 | 2.6 | 5.0/68 | 2.4+3.3L/1000 | 2.4 | 5.0/68 | 433 | 1000 |

- (1) MPEE according to ISO 10360-2: 2001
 (2) MPEP according to ISO 10360-2: 2001
 (3) MPETHP/T according to ISO 10360-4: 2000

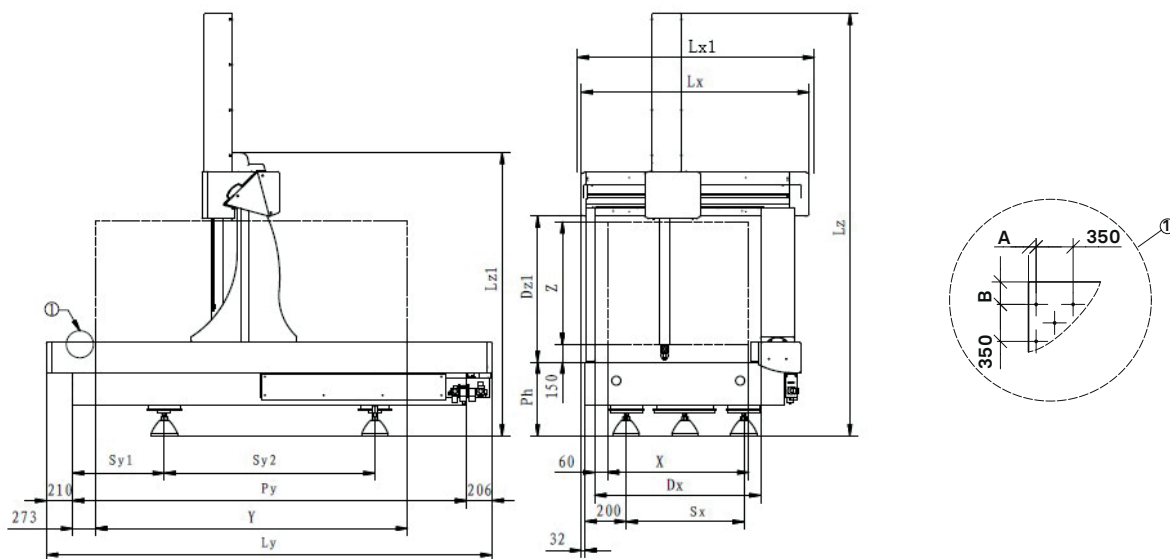
Performance data are valid if the following specifications are met:

- Temperature range: 18 - 22°C;
- Max. air temperature variation: 1°C/h - 2°C/24h;
- Max. gradient in space: 1°C/m
- Relative humidity: 25% - 75%

Probe configuration for performance test:

- HP-T/HP-TM: standard measuring force, stylus length 10 mm, tip diameter 4 mm
- HP-THD: standard measuring force, stylus length 10 mm, tip diameter 4 mm
- HP-S-X1/HP-S-X1S/HP-S-X1H/HP-S-X1C: stylus length 50 mm, tip diameter 5 mm
- HP-S-X3: stylus length 60 mm, tip diameter 4 mm

Explorer performance 12.XX.10 strokes, dimensions and weights



| Models | Strokes (mm) | | | Overall Dimensions (mm) | | | | | Daylights (mm) | | | Max. Part Weight (kg) | CMM Weight (kg) |
|----------|--------------|------|------|-------------------------|------|------|------|------|----------------|-----|------|-----------------------|-----------------|
| | X | Y | Z | Lx | Ly | Lz | Lx1 | Lz1 | Dx | Dz | Dz1 | | |
| 12.15.10 | 1200 | 1500 | 1000 | 1838 | 2896 | 3407 | 1900 | 2037 | 1339 | 150 | 1173 | 1800 | 3792 |
| 12.22.10 | 1200 | 2200 | 1000 | 1838 | 3596 | 3407 | 1900 | 2282 | 1339 | 150 | 1173 | 2250 | 5696 |
| 12.30.10 | 1200 | 3000 | 1000 | 1838 | 4396 | 3407 | 1900 | 2307 | 1339 | 150 | 1173 | 2250 | 7637 |

Technical characteristics

Mechanical Frame

X and Z: micromachined anodised light alloy extrusion

Y: integral dovetail guideways, machined into the table

Operating Environment

Temperature range: 10 - 45 °C

Relative humidity: 90%, non-condensing

Sliding system

Air bearing on all axes

Surface plate

Material: granite

Part locking: threaded inserts M8 x 1.25

Thermal compensation

Linear: 18 - 22 °C

Ram Counterbalance

Pneumatic, adjustable

Measuring system

METALLUR linear scales

System resolution: 0.005 μm

Air supply

Minimum air supply pressure: 6 bar

Air consumption: 90NL/min

Power

Voltage: 220 V/50Hz



Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's Manufacturing Intelligence division provides solutions that utilise data from design and engineering, production and metrology to make manufacturing smarter. For more information, visit hexagonmi.com.

Learn more about Hexagon (Nasdaq Stockholm: HEXA B) at hexagon.com and follow us [@HexagonAB](https://twitter.com/HexagonAB).