HEXAGON

Data Sheet

GLOBAL S


EPS

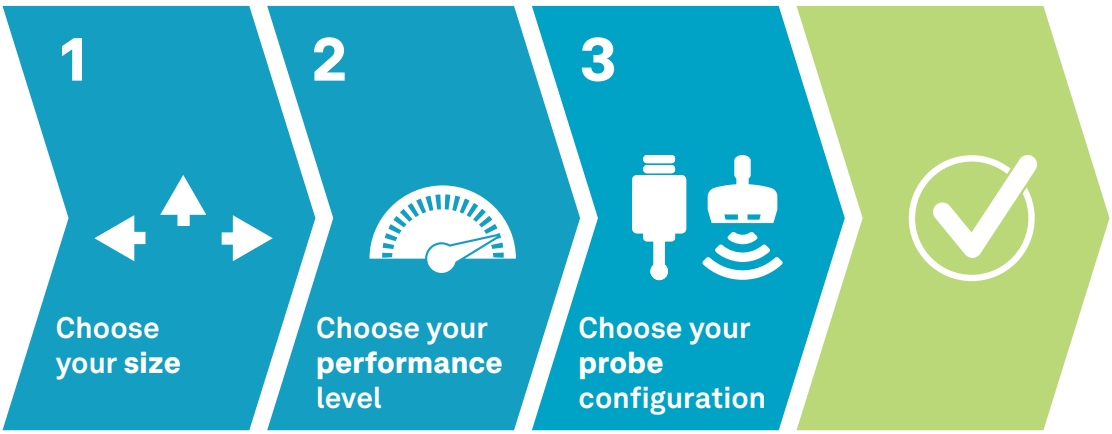
GLOBAL S

The coordinate measuring machine that pushes productivity further

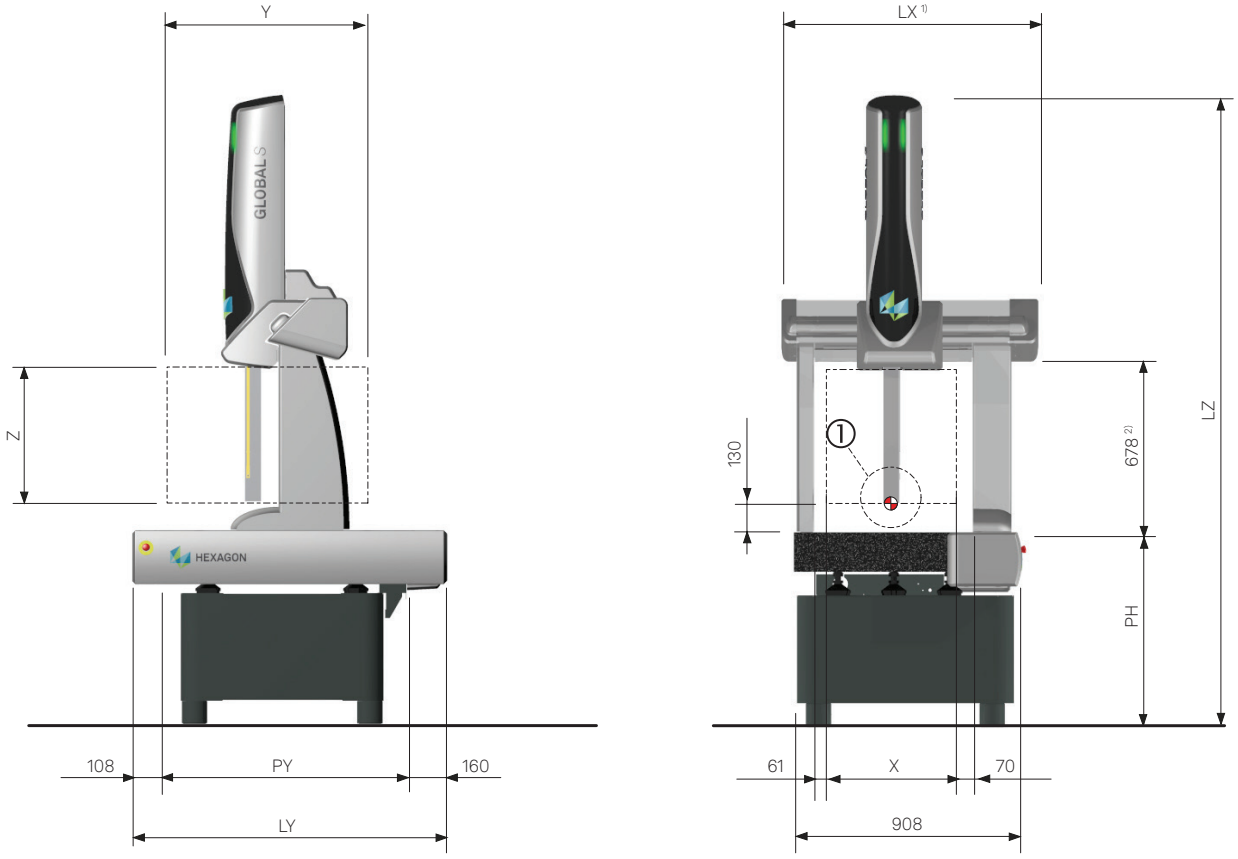
The GLOBAL S coordinate measuring machine (CMM) series from Hexagon Manufacturing Intelligence combines smart technologies delivering superior measurement performance and enhanced productivity for the unique needs of any production environment. Designed by Pininfarina and powered by Hexagon's Enhanced Productivity Series (EPS) concept, GLOBAL S brings together enhanced technologies to form an optimal measurement solution with three performance levels: Green, Blue and Chrome, to suit the requirements of any application.

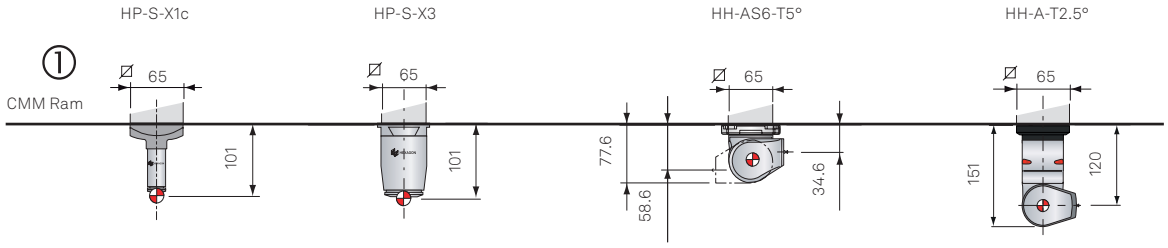
EPS machines offer customers the option to select their main productivity driver and configure the CMM for throughput, precision, flexibility or shop floor capability. The CMM range also supports fully-customised setups to ensure that GLOBAL S is universally applicable and drives continuous productivity improvements.

GLOBAL S– How to choose the right system



GLOBAL S 05.YY.05: Overall dimensions

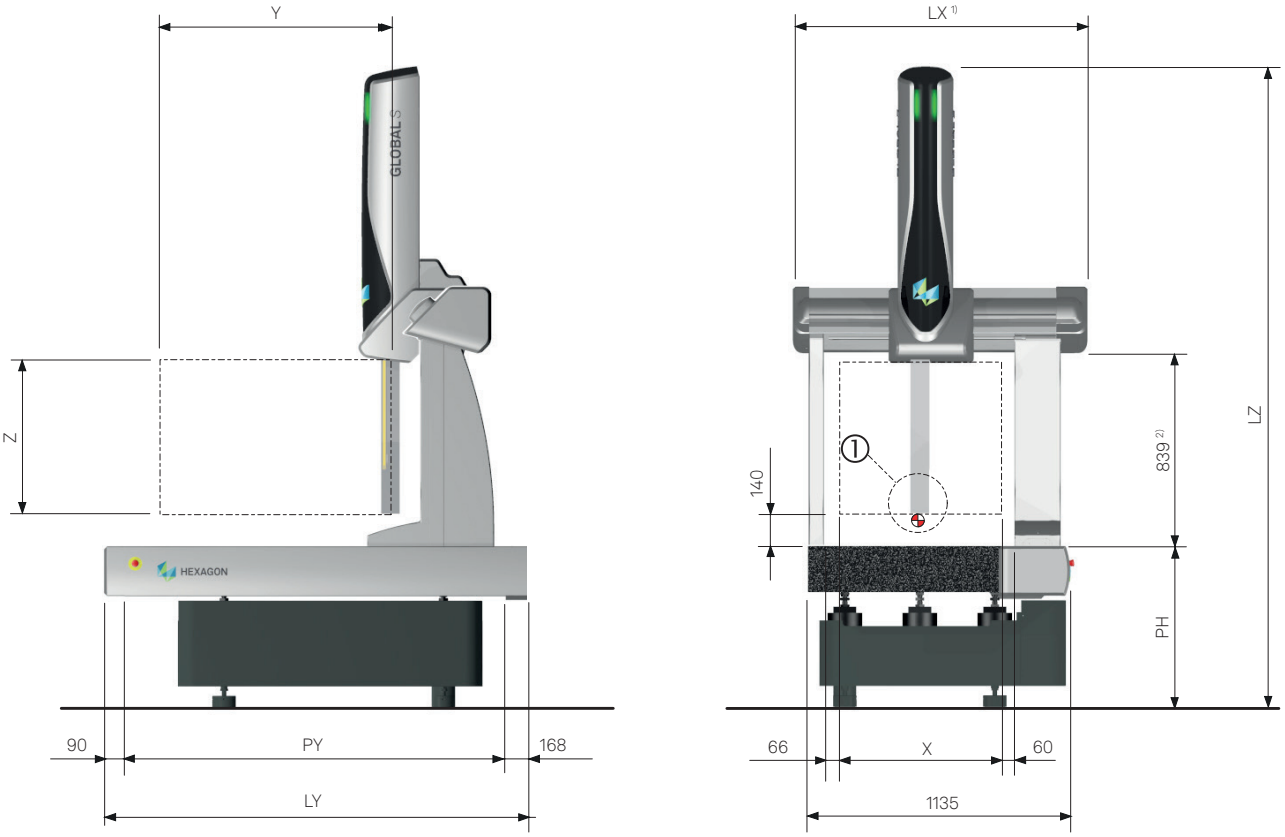


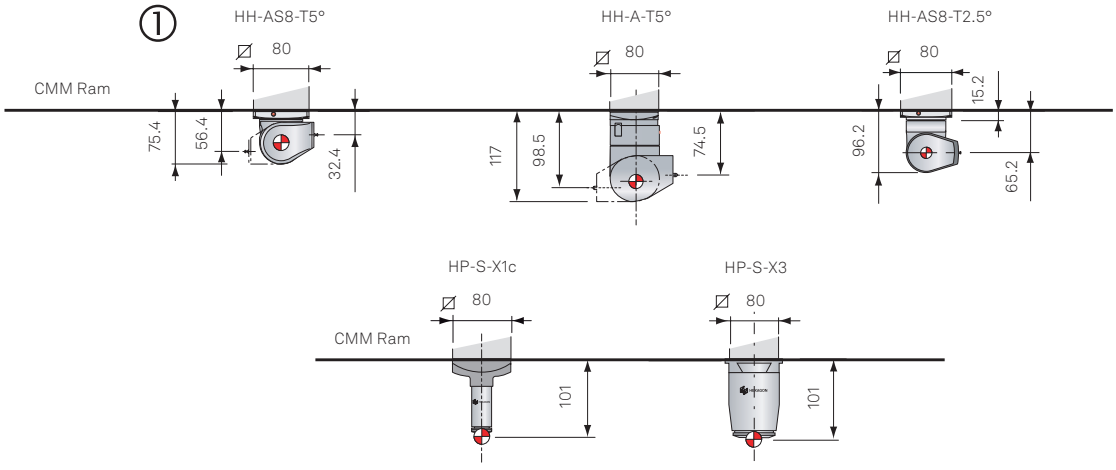


Models	Measuring Range (mm)			Overall Dimensions (mm)			Surface Plate (mm)		Max. Part Weight (kg)	CMM Weight approx. (kg)
	X	Y	Z	LX 1)	LY	LZ	PH	PY		
05.05.05	500	500	500	1024	1255	2540	800	990	230	510
05.07.05	500	700	500	1024	1455	2540	800	1190	230	625

1) With Shop Floor bellows: LX + 21 mm
2) With Shop Floor bellows: 649 mm

GLOBAL S 07.YY.05 and 07.10.07: Overall dimensions

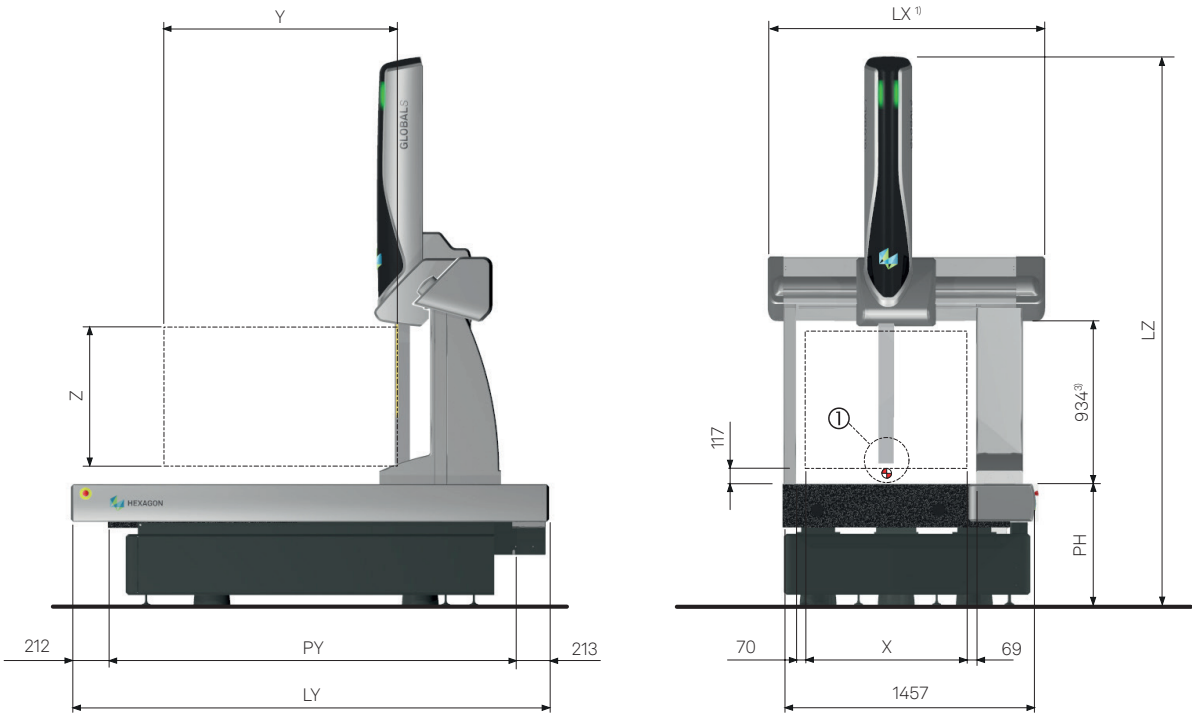


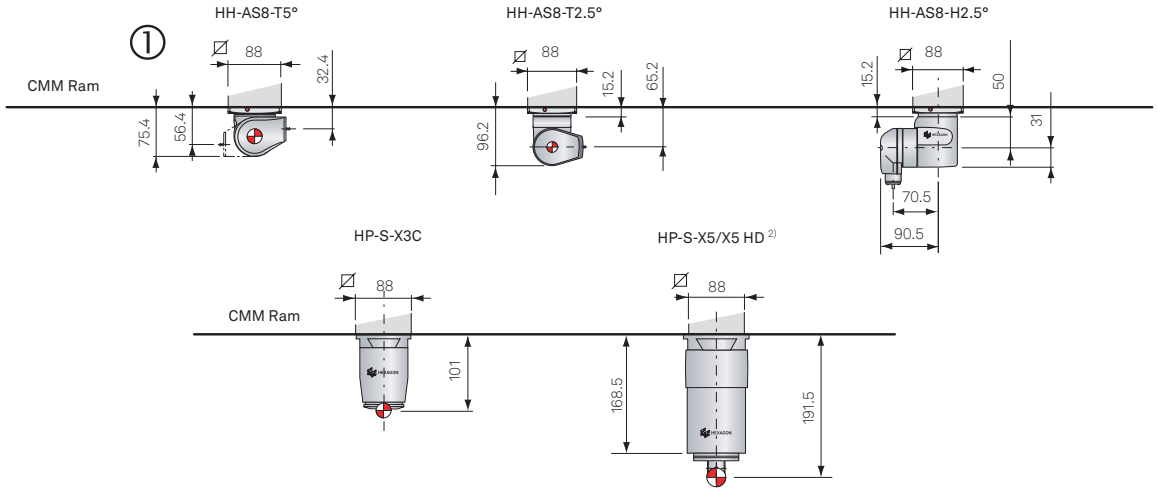


Model	Measuring Range (mm)			Overall Dimensions (mm)			Surface Plate (mm)		Max. Part Weight (kg)	CMM Weight approx. (kg)
	X	Y	Z	LX 1)	LY	LZ	PH	PY		
07.07.05	700	700	500	1277	1608	2438	680	1350	900	960
07.10.05	700	1000	500	1277	1908	2458	700	1650	900	1245
07.10.07	700	1000	660	1277	1908	2777	700	1650	900	1265

1) With Shop Floor bellows: LX + 12 mm
2) With Shop Floor bellows: 796 mm
3) GLOBAL S 07.YY.05 - With Shop Floor bellows: 639 mm
4) GLOBAL S 07.YY.07 - With Shop Floor bellows: 796 mm

GLOBAL S 09.YY.08: Overall dimensions



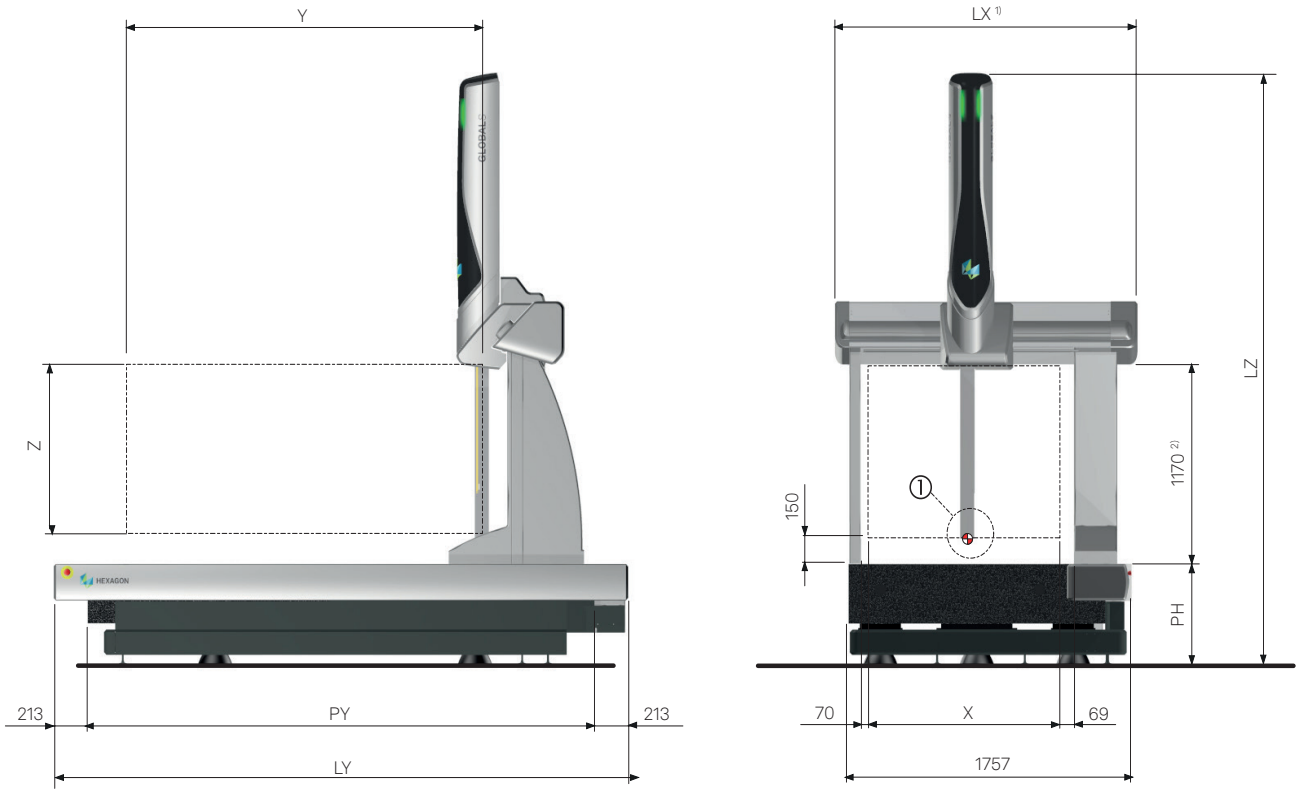


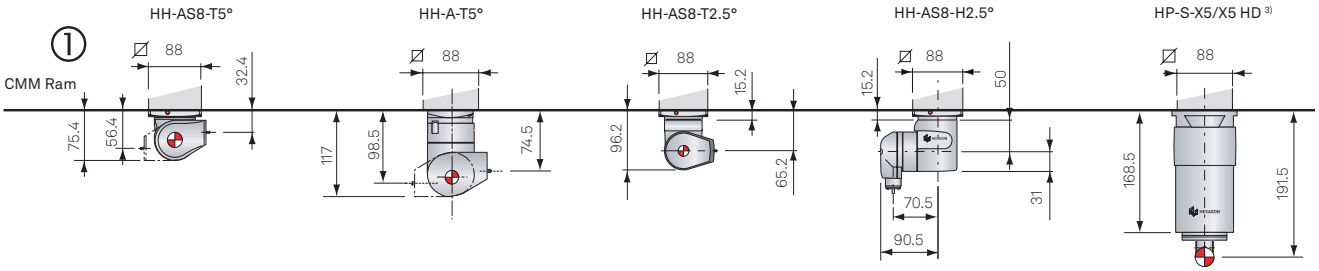
Models	Measuring Range (mm)			Overall Dimensions (mm)			Surface Plate (mm)		Max. Part Weight (kg)	CMM Weight approx. (kg)
	X	Y	Z4)	LX 1)	LY	LZ	PH	PY		
09.12.08	900	1200	800	1598	2455	3150	700	2030	1300	2215
09.15.08	900	1500	800	1598	2755	3150	700	2330	1500	2455
09.20.08	900	2000	800	1598	3255	3150	700	2830	1800	2855

1) With shop floor bellows: LX + 16 mm
2) GLOBAL S blue and chrome
3) With Shop Floor bellows: 923 mm
4) With HP-S-X5/H5HD probe head, Z travel = 730 mm
5) Overall system height can be reduced by 120 mm using shorter pedestals. Please specify at time of order

Note: All models are available with reduced total machine height: LZ-120 mm

GLOBAL S 12.YY.10: Overall dimensions

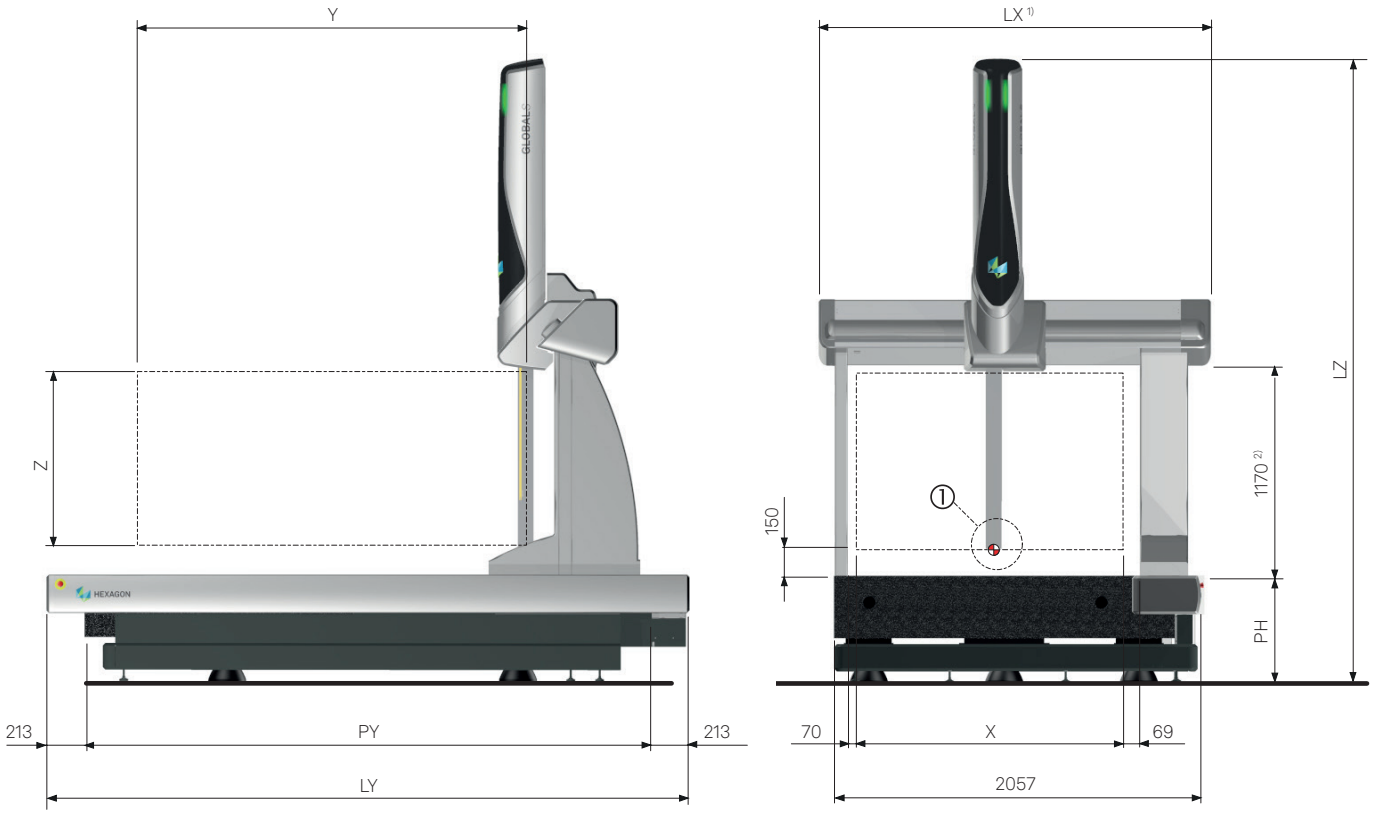


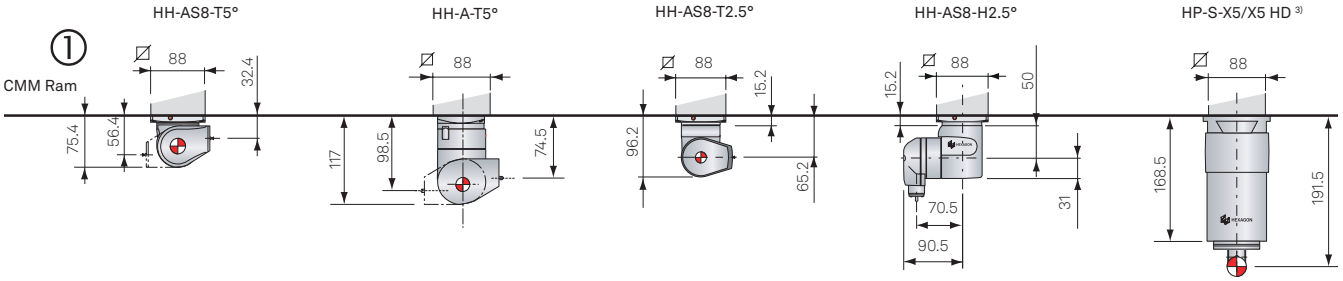


Models	Measuring Range (mm)			Overall Dimensions (mm)			Surface Plate (mm)		Max. Part Weight (kg)	CMM Weight approx. (kg)
	X	Y	Z4)	LX 1)	LY	LZ	PH	PY		
12.15.10	1200	1500	1000	1898	2905	3513	625	2480	1800	3850
12.22.10	1200	2200	1000	1898	3605	3488	600	3180	2250	5750
12.30.10	1200	3000	1000	1898	4405	3513	625	3980	2250	7650

1) With Shop Floor bellows: LX + 17 mm
2) With Shop Floor bellows: 1162 mm
3) GLOBAL S Blue and Chrome
4) With HP-S-X5/X5HD probe head, Z travel = 970 mm
5) Overall system height can be reduced by 140mm using shorter pedestals. Please specify at time of order

GLOBAL S 15.YY.10: Overall dimensions





Models	Measuring Range (mm)			Overall Dimensions (mm)			Surface Plate (mm)		Max. Part Weight (kg)	CMM Weight approx. (kg)
	X	Y	Z4)	LX 1)	LY	LZ	PH	PY		
15.22.10	1500	2200	1000	2198	3605	3488	600	3180	2250	6700
15.30.10	1200	2200	1000	1898	3605	3488	600	3180	2250	5750

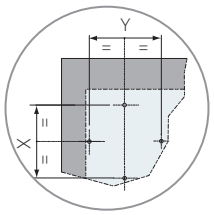
1) With Shop Floor bellows: LX + 17 mm
2) With Shop Floor bellows: 1162 mm
3) GLOBAL S Blue and Chrome
4) With HP-S-X5/X5 HD probe heads, Z travel = 970 mm
5) Overall system height can be reduced by 48 mm using shorter pedestals. Please specify at time of order

GLOBAL S: Minimum door opening requirements

Standard Size Frames	Machine maximum overall dimensions Width (mm)	Height [1] (mm)
5.5.5 - 5.7.5	1095	1490
07.07.05 - 07.10.05	1340	1475
07.10.07 [2]	1340	1655
9.12.8 - 9.15.8 - 9.20.8	1665	2065
12.15.10 - 12.22.10 - 12.30.10	1965	2305
15.22.10 - 15.30.10	2265	2305

[1] Minimum Height is listed w/o the CMM stand for Global 05.YY.05, 07.YY.05 and 07.YY.07 series and w/o pedestals for the Global 09.YY.08 thru 15.YY.10 series
Dimensions shown are from the highest point at the top of the CMM to the lowest point on the CMM as in shipped condition
Dimensions shown do not include lifting equipment
Dimensions shown are with 25 mm minimum clearance all around

GLOBAL S: Technical characteristics

Mechanical Frame		X: Micromachined anodized light alloy extrusion Y: Integral dovetail guideways, machined into the table Z: Micromachined anodized light alloy extrusion		
Surface Plate		Material: Granite Flatness: according to DIN 876/III Part Locking: threaded inserts M8 x 1.25 Diagonally staggered hole pattern: GLOBAL S 05.YY.05: X = 350 mm; Y= 150 mm GLOBAL S 07.YY.07: X = 300 mm; Y= 300 mm GLOBAL S from 09.YY.08: X = 350 mm; Y= 350 mm 		
Sliding System		Air bearings on all axes		
Measuring System		METALLUR® linear scales. System Resolution: 0.005 µm		
Temperature Compensation		Extended temperature 16 - 26 °C: Multi-sensor technology Shop floor temperature 15 - 30°C: Structural multi-sensor technology		
Ram Counterbalance		Pneumatic, adjustable		
Controller		DC800 or DC800 I/O Ready, IP54	DC800 or DC800 I/O Ready, IP54	DC 241, IP54
Supply Requirements	Power	100/120/220/240 V ± 10% - 50/60 Hz - 1.6 KVA		
	Air	0.5 MPa minimum - Class 4 according to ISO 8573/1		
Consumption	Power	0.5 KVAh	0.5 KVAh	0.35 KVAh
	Air	70 Nl/min (for 05.YY.05); 90 Nl/min (for all other models)		
Operating Specifications		Ambient temperature: 10 °C - 40 °C Relative humidity: 20% - 90 % non-condensing		

GLOBAL S: Specifications

Scanning probe heads HP-S-X1C, HP-S-X5/X3/X1c Articulating head with HP-S-X1 scanning probe	05.YY.05	07.YY.05	07.YY.07	09.YY.08	12.YY.10	15.YY.10
MPE *(E0/E150)* [1] - (18 °C - 22 °C)	1.4 + L/333	1.3 + L/333	1.3 + L/333	1.3 + L/333	2.0 + L/333	2.1 + L/333
MPE *(E0/E150)* [1] - (16 °C - 26 °C)	1.6 + L/222	1.5 + L/250	1.5 + L/250	1.6 + L/250	2.4 + L/200	2.5 + L/200
MPE *(E0/E150)* [1] - (16 °C - 26 °C) [4]	1.6 + L/222	1.3 + L/294	1.3 + L/294	1.3 + L/285	2.0 + L/277	2.1 + L/250
MPE *(E0/E150)* [1] - (15 °C - 30 °C) [4]	1.8 + L/143	1.3 + L/263	1.3 + L/263	1.3 + L/256	2.0 + L/250	2.1 + L/182
MPL *(R0)*	1.2	1.2	1.2	1.2	1.7	1.7
MPE *(PFTU)*	1.4	1.4	1.4	1.3	1.7	1.8
MPE *(THP)*/MPT *(τ)* - High accuracy [2]	2.1/30	2.0/30	2.0/30	2.0/35	2.5/35	2.9/35
MPE *(THP)*/MPT *(τ)* - High throughput [2]	2.1/30	2.0/30	2.0/30	2.3/25	3.5/25	3.5/25
MPE *(THN)*/MPT *(τ)* - Non-predefined path [2]	2.1/50	2.0/50	2.0/50	2.0/50	2.0/50	2.9/50
RONt (MZCI) [3]	1.4	1.4	1.4	1.4	1.7	1.8
MPE *(E0/E150)* [1] - (18 °C - 22 °C)	1.4 + L/333	1.4 + L/333	1.4 + L/333	1.4 + L/333	2.1 + L/333	2.2+L/333
MPE *(E0/E150)* [1] - (16 °C - 26 °C)	1.6 + L/222	1.6 + L/250	1.6 + L/250	1.7 + L/250	2.5 + L/200	2.5 + L/200
MPE *(E0/E150)* [1] - (16 °C - 26 °C) [4]	1.6 + L/222	1.4 + L/294	1.4 + L/294	1.4 + L/285	2.1 + L/277	2.2 + L/250
MPE *(E0/E150)* [1] - (15 °C - 30 °C) [4]	1.8 + L/143	1.4 + L/263	1.4 + L/263	1.4 + L/256	2.1 + L/250	2.2 + L/182
MPL *(R0)*	1.2	1.2	1.2	1.2	1.7	1.8
MPE *(PFTU)*	1.4	1.4	1.4	1.4	1.8	2.0
MPE *(THP)*/MPT *(τ)* [2]	2.5/45	2.5/45	2.5/45	2.5/45	3.1/45	3.5/45
MPE *(E0/E150)* [1] - (18 °C - 22 °C)	1.5 + L/333	1.5 + L/333	1.5 + L/333	1.8 + L/333	2.4 + L/333	–
MPE *(E0/E150)* [1] - (16 °C - 26 °C)	1.7 + L/222	1.7 + L/250	1.7 + L/250	2.1 + L/250	2.8 + L/200	–
MPE *(E0/E150)* [1] - (16 °C - 26 °C) [4]	1.7 + L/222	1.5 + L/294	1.5 + L/294	1,8 + L/285	2,4 + L/277	–
MPE *(E0/E150)* [1] - (15 °C - 30 °C) [4]	1.9 + L/143	1.5 + L/263	1.5 + L/263	1,8 + L/256	2,4 + L/250	–
MPL *(R0)*	1.4	1.4	1.4	1.7	1.9	–
MPE *(PFTU)*	1.6	1.6	1.6	1.8	2.4	–
MPE *(THP)*/MPT *(τ)* [2]	2.9/45	2.9/45	2.9/45	2.9/45	4.0/45	–

Chrome Performance Level Blue Performance Level Green Performance Level

Max. Permissible Error MPE (µm) and Max. Permissible Limit MPL (µm) according to ISO 10360-2:2009:
- Volumetric length measuring error: MPE *(E0/E150)*
- Repeatability range: MPL *(R0)*

Max. Permissible Error MPE (µm) according to ISO 10360-5:2010:
- Single stylus form error: MPE(PFTU)

Max. Permissible Error MPE (µm) and Max. Permissible Time MPT (s) according to ISO 10360-4: 2000:
- Single stylus form error, scanning: MPE(THP)/MPT(τ)
- Single stylus form error, scanning - Non-predefined path: MPE(THN)/MPT(t)

ISO 12181-1: 2011 (VDI/VDE 2617 part 2.2): Form measurement error (µm): RONt (MZCI)

Probe Configuration:
- HP-S-X5/3C: stylus length 60 mm, tip diameter 5 mm
- HP-S-X1/X1C: stylus length 50 mm, tip diameter 5 mm

[1] MPE *(E0/E150)* specifications are to be formally understood as MPE *(E0/E150)** for the case where non-normal CTE material calibrated test lengths are used. Length unit measure (L) in mm.
[2] MPE *(THP/THN)* and MPT(τ): test sphere placed in the centre of measuring volume
[3] RONt test on Ø 50 mm (2 in) ring gauge. Ring axis parallel to machine vertical axis, gauge placed in the centre of measuring volume
[4] For Shop Floor packages only.

GLOBAL S: Specifications

Articulating head with HP-THD / TP200 high precision trigger probe	05.YY.05	07.YY.05	07.YY.07	09.YY.08	12.YY.10	15.YY.10
MPE *(E0/E150)* [1] - (18 °C - 22 °C)	–	1.7 + L/333	1.7 + L/333	1.7 + L/333	2.4 +L /333	2.5 + L/333
MPE *(E0/E150)* [1] - (16 °C - 26 °C)	–	1.9 + L/250	1.9 + L/250	1.9 + L/250	2.7 + L/200	2.8 + L/200
MPE *(E0/E150)* [1] - (16 °C - 26 °C) [4]	–	1.7 + L/294	1.7 + L/294	1.7 + L/285	2.1 + L/277	2.5 + L/250
MPE *(E0/E150)* [1] - (15 °C - 30 °C) [4]	–	1.7 + L/263	1.7 + L/263	1.7 + L/256	2.1 + L/250	2.5 + /182
MPL *(R0)*	–	1.7	1.7	1.7	2.7	2.8
MPE *(PFTU)*	–	1.7	1.7	1.7	2.2	2.2
MPE *(E0/E150)* [1] - (18 °C - 22 °C)	1.7 + L/333	1.7 + L/333	1.7 + L/333	1.9 + L/333	2.5 + L/333	2.5 + L/333
MPE *(E0/E150)* [1] - (16 °C - 26 °C)	1.9 + L/222	1.9 + L/250	1.9 + L/250	2.1 + L/250	2.8 + L/200	2.8 + L/200
MPE *(E0/E150)* [1] - (16 °C - 26 °C) [2]	1.9 + L/222	1.7 + L/294	1.7 + L/294	1.9 + L/285	2.5 + L/277	2.5 + L/250
MPE *(E0/E150)* [1] - (15 °C - 30 °C) [2]	2.1 + L/143	1.7 + L/263	1.7 + L/263	1.9 + L/256	2.5 + L/250	2.5 + L/182
MPL *(R0)*	1.9	1.9	1.9	2.1	2.7	2.8
MPE *(PFTU)*	1.9	1.9	1.9	1.9	2.2	2.2
MPE *(E0/E150)* [1] - (18 °C - 22 °C)	1.7 + L/333	1.7 + L/333	1.7 + L/333	1.9 + L/333	2.5 + L/333	–
MPE *(E0/E150)* [1] - (16 °C - 26 °C)	1.9 + L/222	1.9 + L/250	1.9 + L/250	2.1 + L/250	2.8 + L/200	–
MPE *(E0/E150)* [1] - (16 °C - 26 °C) [2]	2.2 + L/222	1.7 + L/294	1.7 + L/294	1.9 + L/285	2.5 + L/277	–
MPE *(E0/E150)* [1] - (15 °C - 30 °C) [2]	2.4 + L/143	1.7 + L/263	1.7 + L/263	1.9 + L/256	2.5 + L/250	–
MPL *(R0)*	1.9	1.9	1.9	2.1	2.7	–
MPE *(PFTU)*	1.9	1.9	1.9	1.9	2.5	–

Articulating head with HP-TM trigger probe.	05.YY.05	07.YY.05	07.YY.07	09.YY.08	12.YY.10	15.YY.10
MPE *(E0/E150)* [1] - (18 °C - 22 °C)	1.9 + L/333	1.9 + L/333	1.9 + L/333	2.1 + L/333	2.7 + L/333	–
MPE *(E0/E150)* [1] - (16 °C - 26 °C)	2.2 + L/222	2.2 + L/250	2.2 + L/250	2.4 + L/250	3.1 + L/200	–
MPE *(E0/E150)* [1] - (16 °C - 26 °C) [2]	2.2 + L/222	1.9 + L/294	1.9 + L/294	2.1 + L/285	2.7+ L/277	–
MPE *(E0/E150)* [1] - (15 °C - 30 °C) [2]	2.4 + L/143	1.9 + L/263	1.9 + L/263	2.1 + L/256	2.7+ L/250	–
MPL *(R0)*	1.9	1.9	1.9	2.1	2.7	–
MPE *(PFTU)*	2.0	2.0	2.0	2.0	2.6	–
MPE *(E0/E150)* [1] - (18 °C - 22 °C)	1.9 + L/333	1.9 + L/333	1.9 + L/333	2.1 + L/333	2.7 + L/333	–
MPE *(E0/E150)* [1] - (16 °C - 26 °C)	2.2 + L/222	2.2 + L/250	2.2 + L/250	2.4 + L/250	3.1 + L/200	–
MPE *(E0/E150)* [1] - (16 °C - 26 °C) [2]	2.2 + L/222	1.9 + L/294	1.9 + L/294	2.1 + L/285	2.7 + L/277	–
MPE *(E0/E150)* [1] - (15 °C - 30 °C) [2]	2.4 + L/143	1.9 + L/263	1.9 + L/263	2.1 + L/256	2.7 + L/250	–
MPL *(R0)*	1.9	1.9	1.9	2.1	2.7	–
MPE *(PFTU)*	2.0	2.0	2.0	2.0	2.7	–

Chrome Performance Level Blue Performance Level Green Performance Level

Max. Permissible Error MPE (µm) and Max. Permissible Limit MPL (µm) according to ISO 10360-2:2009:
- Volumetric length measuring error: MPE *(E0/E150)*
- Repeatability range: MPL *(R0)*

Max. Permissible Error MPE (µm) according to ISO 10360-5:2010:
- Single stylus form error: MPE(PFTU)

Probe Configuration:
- HP-THD: Standard force module, stylus length 10 mm, tip diameter 4 mm
- TP200: Standard force module, stylus length 10 mm, tip diameter 4 mm
- HP-TM: Standard Force Module, stylus length 10 mm, tip diameter 4 mm

[1] MPE *(E0/E150)* specifications are to be formally understood as MPE *(E0/E150)** for the case where non-normal CTE material calibrated test lengths are used. Length unit measure (L) in mm.
[2] For Shop Floor packages only

GLOBAL S: Non contact sensors specifications




	HH-A/HP-L-5.8 [1]	HH-A/HP-L-10.6 [2]	HH-A/HP-L-20.8 [2]	HH-A/HP-C-Ve [5]
[3] Probing Form Error	22 µm	22 µm	25 µm	–
Point Spacing	53 µm	30 - 60 µm	13 - 50 µm	–
Lines per second (max.)	40 Hz	53 Hz	100 Hz	–
[4] $P_{F2D,MPE}$	–	–	–	10 µm
[4] $P_{FD2D,MPE}$	–	–	–	6 µm
[4] $E_{UV,MPE}$	–	–	–	4 + 2L µm

Chrome Performance Level Blue Performance Level Green Performance Level

[1] Some restrictions to workpiece size and machine configuration may apply when used on GLOBAL S 05.YY.05
[2] From GLOBAL S 07.YY.07. Some restrictions to workpiece size and machine configuration may apply when used on GLOBAL S 07.YY.07
[3] Maximum Permissible Probing Form Error $P_{Form.Sph.1x25:Tr:ODS,MPE}$ according to ISO10360-8:2013. Values are including expanded measurement uncertainty according ISO/TS 17865:2016. Measured using a manufacturer supplied sphere- and plane artefact, each calibrated by an independent accredited lab.
[4] According to ISO10360-7:2011
[5] Not available on GLOBAL S Chrome

GLOBAL S: throughput and dynamics

	Max. probing frequency (with scanning probes)	Max. 3D Speed mm/s	Max. 3D Acceleration mm/s² [7]
High Dynamics [6]	1000 point/s	860	4300
GLOBAL S 15.YY.10	1000 point/s	860	2590
Standard Dynamics			
GLOBAL S 05.YY.05 to 09.YY.08	1000 point/s	510	1700
GLOBAL S 12.YY.10	1000 point/s	430	1000

Chrome Performance Level Blue Performance Level Green Performance Level

[6] Dynamics reduction may apply to meet specific customer and/or local safety requirements
[7] Acceleration reduction may apply with pneumatic dampers configuration

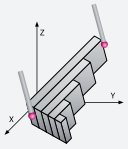
GLOBAL S: temperature specifications

	Lab Temperature	Extended Temperature	Shop Floor Temperature
Ambient temperature	18 °C ÷ 22 °C	16 °C ÷ 26 °C	15 °C ÷ 30 °C
Max. air temperature variation	1 °C/h - 2 °C/24h	1 °C/h - 5 °C/24h	1 °C/h - 5 °C/24h 2 °C/h - 10 °C/24h[8]
Max. gradient in space	1 °C/m	1 °C/m	1 °C/m

[8] Accuracy specifications for this temperature range are available on request

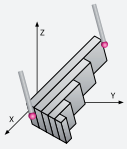
Performance verification

MPE(*E0*) : maximum permissible error of length measurement



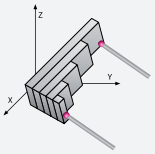
5 gauges have to be measured 3 times with one probing at each end, in 7 different directions.
All measuring results must be within MPE*(E0)*.

MPL(*R0*): maximum permissible limit of the repeatability range



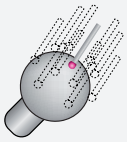
Extreme value of the repeatability range of the length measurement error, calculated by three repeated measurements on each size for a total of 35 values. The 35 repeatability range results must be within MPL*(R0)*.

MPE(*E150*): maximum permissible error of length measurement



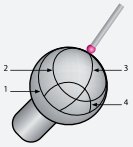
5 length gauges have to be measured 3 times in the YZ- or XZ plane with opposite styli, mounted 150 mm off the Z spindle axis. All measuring results must be within MPE*(E150)*.

MPE(*PFTU*) : maximum permissible single stylus form error



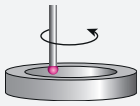
A precision sphere has to be measured with 25 probings. *PFTU* is the range of all radii. The range of all radii must be within MPE*(PFTU)*.

Maximum permissible scanning probing error



MPE(*THP*)/MPT(τ) : A precision sphere has to be scanned with 4 defined lines. THP is the range of all radii with the predefined path.
MPE(*THN*)/MPT(τ): A precision sphere has to be scanned with 4 defined lines. THN is the range of all radii with the non-predefined path. The range of all radii and the scanning time must be within MPE*(THP/THN)* and MPT(τ).

RONt (MZCI) maximum permissible form measurement error (2D)



A ring gauge is measured in scanning mode, with high points density. The range of radial distances from two concentric circles enclosing the roundness profile and having the least radial separation, is then evaluated. The range of radial distances must be within RONt.

GLOBAL S: Manufacturing facilities

Standard size frames	China	Italy	USA
5.5.5	x	•	•
5.7.5	•	•	•
7.7.5 - 7.10.5	x	•	x
7.10.7	•	•	•
9.12.8 - 9.15.8 - 9.20.8	•	•	•
12.15.10 - 12.22.10 - 12.30.10	•	•	•
15.22.10 - 15.30.10	•	x	•

• Available x Unavailable

NOTE: ISO 10360-2 test with maximum part weight performed as an option upon request only.

Probe heads and sensors



Technical Characteristics	HP-S-X1C	HP-S-X3C	HP-S-X5/X5 HD
Overtravel range	± 2 mm in all axes	± 1.25 mm in all axes	± 2 mm in all axes
Stylus joint	M3	M5	M5
Max. stylus weight	33 g	150 g	500 g / 650 g
Max. stylus length	Vertical: up to 225 mm Horizontal: up to 100 mm	360 mm	500 mm / 800 mm



Technical Characteristics	HH-AS and HH-A-T5° Indexable Probe Head	HH-AS8 and HH-A-T2.5° Indexable Probe Head	HH-AS8-H2.5° Indexable Probe Head
Angular rotation	A axis: +90° / -115° B axis: ±180°	A axis: ±105° B axis: ±180°	A axis: ±180° B axis: ±180°
Angular rotation step	5°	2.5°	2.5°
Max. applied torque	0.6 Nm	1.4 Nm	1.7 Nm
Max. extensions length	300 mm	450 mm	750 mm



Technical Characteristics	HP-L-5.8	HP-L-10.6	HP-L-20.8
Laser	Visible blue, class 2	Visible red, class 2	Visible red, class 2
Standoff and depth of FOV	140 ± 40 mm	170 ± 30 mm	180 ± 40 mm
Line-Width at mid-field of view	47 mm	24, 60, 124 mm user selectable	25, 51, 63, 130, 220 mm user selectable
Ambient light immunity of the sensor	5 000 lx	40 000 lx	40 000 lx
Protection against dust and water	All HP-L Sensors: IP64 (IEC 60529) (except for warm-up connection)		
Sensor size L x W x H	116 x 62 x 86.5 mm	134 x 72 x 60 mm	137 x 76 x 85 mm

Technical Characteristics	HP-C-VE
Nominal FOV size	6.5 mm x 5 mm
Nominal pixel size	approx. 8.5 µm
Optical magnification	x 0.73
Working distance	75 mm
Ring light configuration	2 rings, each with 4 sectors. 1 LED per sector on the inner ring, 2 LED per sector on the outer ring
Sensor size Ø x L	max. Ø 75 mm x 137.5 mm (with TKJ mount)

Probe head configurations

	05.YY.05	07.YY.05	07.YY.07	09.YY.08	12.YY.10	15.YY.10
HP-S-X3C	x	✓	✓	•	•	•
HP-S-X5	x	x	x	✓	✓	•
HP-S-X5 HD	x	x	x	•	•	✓
HH-A-T 5°	•	•	•	x	•	•
HH-AS-T 5°	✓	•	•	•	•	•
HH-A-T 2.5°	•	•	•	•	•	•
HH-AS-T 2.5°	x	✓	✓	✓	✓	•
HH-AS-H 2.5°	x	x	x	•	•	✓
HP-S-X1C	•	•	•	•	•	•
HP-S-X3C	✓	✓	✓	•	•	•
HP-S-X5	x	x	x	✓	✓	✓
HP-S-X5 HD	x	•	x	•	•	•
HH-A-T 5°	•	•	•	x	•	•
HH-AS-T 5°	✓	•	•	•	•	•
HH-A-T 2.5°	•	•	•	•	•	•
HH-AS-T 2.5°	x	✓	✓	✓	✓	•
HH-AS-H 2.5°	x	x	x	•	•	✓
HP-S-X1C	•	•	•	•	•	x
HP-S-X3C	✓	✓	✓	✓	✓	x
HP-S-X5	x	x	x	x	x	x
HP-S-X5 HD	x	x	x	x	x	x
HH-A-T 5°	•	•	•	x	•	x
HH-AS-T 5°	✓	✓	✓	✓	✓	x
HH-A-T 2.5°	•	•	•	•	•	x
HH-AS-T 2.5°	x	•	•	•	•	x
HH-AS-H 2.5°	x	x	x	•	•	x

Chrome Performance Level Blue Performance Level Green Performance Level

• Available x Unavailable ✓ Recommended

HEXAGON

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.

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