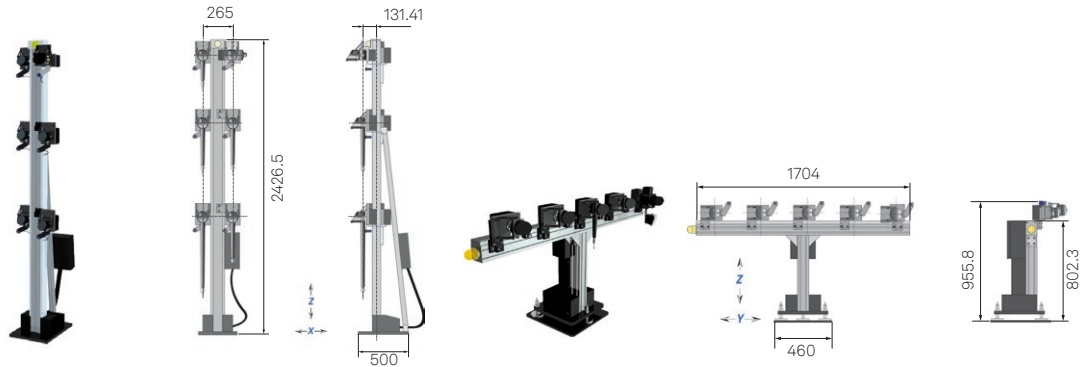


Probe changer rack HR-ACW-AC



The HR-ACW-AC probe changer rack, in combination with the HH-ACW-43MW probe head, enables automatic repeatable exchange of all Hexagon adapters/extensions during execution of the measuring program. The modular concept of the changer rack allows for configuration of a number of stations.

The rack is available for horizontal or vertical arm CMMs. It can be equipped with a programmable logic controller (PLC), which is used to automatically identify if slots are free or filled.

Changer rack for horizontal arm CMM					
	Part no.	Part description	Weight	Ports	Variation
Horizontal arm CMM	G32631100	Stand of HR-ACW-AC	80 kg	Max. 8	
	G32631201	Station for HH-ACW-43MW adapter and extensions			Without PLC
	G32451600	Station for HH-ACW-3AA adapter with warm up function ARM1			Without PLC
	G32451700	Station for HH-ACW-3AA adapter with warm up function ARM2			Without PLC
	G32435901	Station for HH-ACW-43MW adapter and extensions			With PLC
	G32451200	Station for HH-ACW-3AA adapter with warm up function ARM1			With PLC
	G32451300	Station for HH-ACW-3AA adapter with warm up function ARM2			With PLC

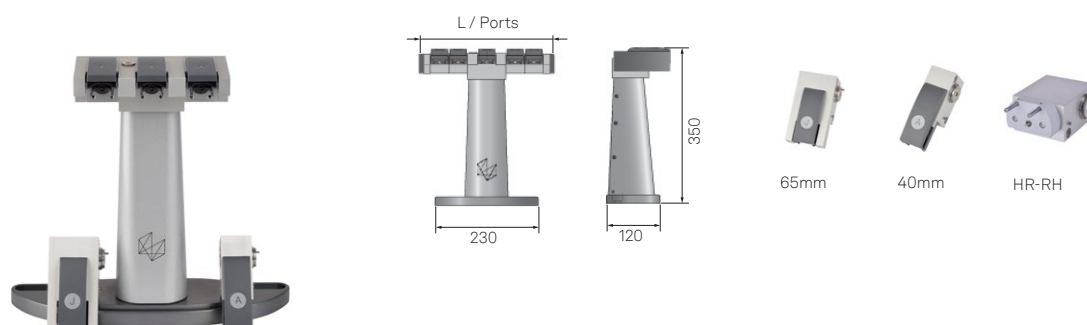
* Air supply requirements: > 0.45MPa < 1.0MPa (rated working pressure)

Changer rack for vertical arm CMM					
	Part no.	Part description		Ports	Variation
Vertical arm CMM	G32432900	Stand for HR-ACW-AC*		Max. 5	Without PLC
	G32633000	Station for HH-ACW-43MW adapter and Extensions			Without PLC
	G32633100	Station for HH-ACW-3AA adapter with warm up function			Without PLC
	G32436900	Stand for HR-ACW-AC*		Max. 5	With PLC
	G32437300	Station for HH-ACW-43MW adapter and extensions			With PLC
	G32439500	Station for HH-ACW-3AA adapter with warm up function			With PLC

* Air supply requirements: > 0.45MPa < 1.0MPa (rated working pressure)

Probe changer rack

HR-R

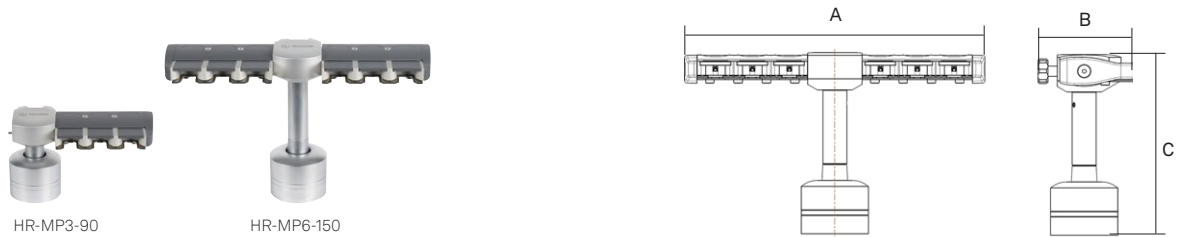


Saving time and increasing flexibility, the HR-R is an automatic probe changer rack that uses Hexagon's unique TKJ connector to exchange probes and extensions to and from the HH-A-T series of probe heads. The probe exchange is performed both quickly and accurately with no need for requalification. The HR-R is modular and can be easily customised to suit any application.

	Part No.	Part description	Ports	L (mm)	H (mm)
Probe changer rack	03939110	HR-R3 with adjustable feet	3	220	350
	03939111	HR-R5 with adjustable feet	5	304	350
	03939112	HR-R9 with adjustable feet	9	472	350
	03939483	HR-MP-A3 + HR-R adapter	Additional 3 ports		
	03939091	HR-RA-40	Additional active port	40	
	03939092	HR-RA-65	Additional active port (for HP-C-VE, HP-L, HP-S-X3T)	65	
	03969370	Rising block			100
	03969371	Rising block			500
	052901	Adjustable feet			
	03939093	HR-RH Module	Module for HA-HT and HA-HM Adapter		
	M00-114-134-000		3 styli exchange ports for HP-S-X1		

Probe module changer rack

HR-MP

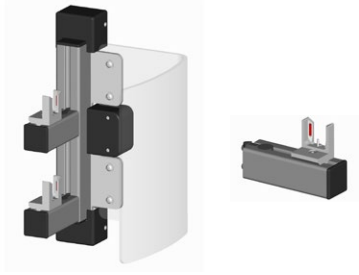


The HR-MP is a passive probe module changer rack that enables the fast interchange of probe modules or styli configuration during measuring cycles, guided directly by the CMM measuring software. Its modular design means it easily adapts to user needs. In addition to carrying between three and six ports, its base can be extended to a maximum height of 250 mm and it is compatible with HP-THD and HP-TM touch trigger probes, as well as HP-S-X1 scanning sensors. The rack can also be removed and placed on machine tables without the need for recalibration.

An optional module can be combined with the HR-R probe changer rack to enable the interchange of equipment without adding an extra rack to the CMM.

	HR-MP3-90	HR-MP6-90	HR-MP6-150
HR-MP Probe Module and Styli Changer Rack			
Part no.	03939480	03939481	03939482
Number of Modules	3 ports	6 ports	6 ports
Height C** (mm)	88	88	148
Width A(mm)	150	245	245
Depth B(mm)	78	78	78
Recommended module change speed	10mm/s		
Max. module changer speed	100mm/s		
Max. entry speed into the rack	800 mm/s		
Crash protection	Yes	Yes	Yes
Overtravel (X- / Y-axis)	20 mm	20 mm	20 mm
Overtravel (Z-axis)	10 mm	10 mm	10 mm
Alignment precision (X- / Y-axis)	± 250µm		
Alignment precision (Z-axis)	± 150µm		

Styli changer rack for scanning probes HP-S-X1H/S HR-X1-TR



Driving significant cycle time reductions, the HR-X1-TR is attached vertically on the guideway support of the machine and moves with the moving portal of the machine. Unlike a styli changer rack fixed to the base of the machine, the measurement volume isn't reduced with this vertical rack.

The HR-X1-TR can be used together with HP-S-X1S or HP-S-X1H scanning probes. The HR-X1-TR is available with different sizes of magazine strips.

	Part no.	Part description	Z-axis	Max. ports
Racks	M00-398-201-000	HR-X1-TR	300	2
	M00-295-201-000		600	4
	M00-304-201-000		700	4
	M00-304-201-000		900	5
	M00-304-201-200	Styli port		
	M00-398-201-200	Styli port for machine 543		

Styli changer rack for scanning probes HP-S-X1C/H/S and HP-S-X3

HR-X



The styli changer rack HR-X saves time and reduces manual interventions by enabling quick changes of styli configurations within a measuring program. The HR-X is suitable for Hexagon Reference and GLOBAL coordinate measuring machines in a range of sizes. Depending on probe and the conditions, there are different ports available.

	Part no.	Size CMM	Width (mm)	Height (mm)	Compatibility		
					HP-S-X1H HP-S-X1S	HP-S-X1C	HP-S-X3
Racks	M00-1087-010-000	5.4.3	400	195	✓	(✓)	-
	M00-1087-012-000	5.4.3	400	295	-	✓	✓
	M00-1087-015-000	7.5.5	400	295	✓	✓	✓
	M00-1087-020-000	7.7.5	700	295	✓	✓	(✓)
	M00-1087-022-000	7.7.5	700	395	(✓)	(✓)	✓
	M00-1087-020-000	10.7.6	700	295	✓	✓	(✓)
	M00-1087-022-000	10.7.6	700	395	(✓)	(✓)	✓
	M00-1087-030-000	15.9.7	900	295	✓	✓	(✓)
	M00-1087-032-000	15.9.7	900	395	(✓)	(✓)	✓
	M00-1087-035-000	20.9.7	900	295	✓	✓	(✓)
	M00-1087-037-000	20.9.7	900	395	(✓)	(✓)	✓
	M00-1087-040-000	xx.12.10	1200	395	✓	✓	✓

(✓) represents an alternatively selectable stylus rack

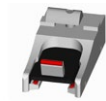
Stylus changer ports or stylus clamping/holders are not included in any styli changer rack and have to be ordered additionally.

Styli changer rack ports for HP-S-X1 and HP-S-X3

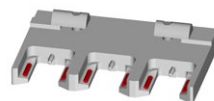
HR-X



M00-114-113-000
Styli port



M00-114-167-000
Styli port shopfloor



M00-114-213-000 Styli
port triple



M00-114-109-000
Styli receptacle

Depending on the size of the scanning probe and the ambient conditions, there are different ports for the styli changer rack HR-X.

	Max. styli changer ports	HP-X1-P	HP-X1-P-SF	HP-X1-3P	HP-X3-P
	Part no.	M00-114-113-000	M00-114-167-000	M00-114-213-000	M00-114-109-000
Styli changer rack ports	M00-1087-010-000	9	9	3	-
	M00-1087-012-000	9	9	3	6
	M00-1087-015-000	9	9	3	5
	M00-1087-020-000	17	17	5	9
	M00-1087-022-000	17	17	5	9
	M00-1087-030-000	22	22	7	12
	M00-1087-032-000	22	22	7	12
	M00-1087-035-000	22	22	7	12
	M00-1087-037-000	22	22	7	12
	M00-1087-040-000	29	29	9	17

Styli changer rack and extension rack for scanning probe HP-S-X5

HR-XS | HR-XS-EX



The styli changer rack HR-XS (main rack) allows for fast change of styli configurations within a measuring program. The styli changer rack HR-XS is suitable for Hexagon Reference and GLOBAL coordinate measuring machines (depending on the size of the CMM).

Increasing measuring flexibility, the HR-XS-EX extension rack allows for an additional three ports. An already installed styli changer rack HR-XS is required for the use of the extension rack.

	HR-XS Main rack	HR-XS-EX Extension rack	Size CMM Reference / GLOBAL CMMs
Racks	M00-1087-110-000	M00-1087-115-000	10.76
	M00-1087-120-000	M00-1087-125-000	15.9.7
	M00-1087-130-000	M00-1087-135-000	20.9.7
	M00-1087-140-000	M00-1087-145-000	xx.12.10

Styli changer rack ports

HR-XS -P | HR-XS-P-X



M00-153-285-000



M00-153-286-000

Different styli ports can be used for the HR-XS styli changer rack to cater for different scanning probes and the user's desired position for the styli changer rack.

	Scanning probe HP-S-X5	Size CMM		HR-XS-P	HR-XS-P-X
		Width (mm)	Hight (mm)	M00-153-285-000	M00-153-286-000
Styli changer rack ports				Max. stylus changer ports Styli receptacle in Y	Styli receptacle in X
	M00-1087-110-000	700	415	8	6
	M00-1087-115-000	700	155	8	-
	M00-1087-120-000	900	515	11	8
	M00-1087-125-000	900	155	11	-
	M00-1087-130-000	900	515	11	8
	M00-1087-135-000	900	155	11	-
	M00-1087-140-000	1200	515	14	10
M00-1087-040-000	1200	155	14	-	