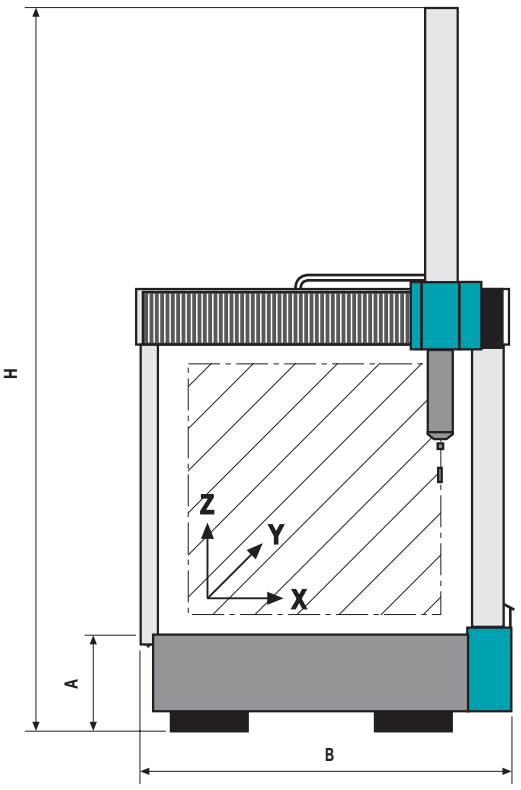
# 3–COORDINATE MEASURING MACHINES

## System RH, Nr. 132

Roller bearing, horizontal

The RH 132 bridge type coordinate measuring machine features machine tool grade high accuracy linear guide ways in the X and Y axis, Z axis finely tuned pre-loaded roller bearings provide minimum friction and operational wear. The Z axis counterbalance is obtained through a pneumatic cylinder capable to hold the Z ram in any position. X and Y axis guide systems are protected by bellows. The cast iron base plate is finely machined to DIN 876/2. Optional special design with anti vibration dampers on request.




## Technical features

| | | | RH 2016 | | | RH 2020 | | |
|---|---|---|---|---|---|---|---|---|
| Measuring ranges | x-axis | mm | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 |
| | y-axis | mm | 3000 | 4000 | 5000 | 3000 | 4000 | 5000 |
| | z-axis | mm | 1600 | 1600 | 1600 | 2000 | 2000 | 2000 |
| Usable base plate area: | | | | | | | | |
| length | | mm | 4500 | 5500 | 6500 | 4500 | 5500 | 6500 |
| width | | mm | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 |
| Rail thickness | | mm | 450 | 450 | 450 | 450 | 450 | 450 |
| Work table heigth (A) | | mm | 600 | 600 | 600 | 600 | 600 | 600 |
| Overall dimensions: | length (L) | mm | 4610 | 5720 | 6800 | 4640 | 5720 | 6800 |
| | width (B) | mm | 2890 | 2890 | 2890 | 2890 | 2890 | 2890 |
| | heigth (H) | mm | 4850 | 4850 | 4850 | 5650 | 5650 | 5650 |
| Weigth | | kg | 11000 | 13000 | 15000 | 11500 | 13500 | 15500 |
| Max. weigth of workpiece | | kg | 4000 | 5000 | 6000 | 4000 | 5000 | 6000 |
| Air pressure min. 6 bar<br>Air consumption | | Nl/min | | 50 | | | 50 | |
| Power supply | | | | 115/230 V, 60/50 Hz | | | 115/230 V, 60/50 Hz | |
| Power consumption | | max. VA | | 2000 | | | 2000 | |
| Temperature range*<br>Max. gradient | | | | 20°C ± 2K<br>1K/4h, 0,5 K/m | | | 20°C ± 2K<br>1K/4h, 0,5K/m | |
| Measuring system | | | | incremental-scales | | | incremental-scales | |
| Resolution | | mm | | 0,0005 | | | 0,0005 | |
| Measuring uncertainty acc. to VDI 2617 | | | | | | | | |
| Standard accuracy<br>Linear uncertainty | | $U_1$= | | 18 + (L/100) µm | | | 22 + (L/100) µm | |
| Volumetric uncertainty | | $U_3$= | | 25 + (L/80) µm | | | 30 + (L/80) µm | |
| Order No. | | | 132.4.110 | 132.4.111 | 132.4.112 | 132.4.120 | 132.4.121 | 132.4.122 |
| High accuracy<br>Linear uncertainty | | $U_1$= | | 12 + (L/120) µm | | | 150 + (L/120) µm | |
| Volumetric uncertainty | | $U_3$= | | 17 + (L/100) µm | | | 20 + (L/100) µm | |
| Order No. | | | 132.5.110 | 132.5.111 | 132.5.112 | 132.5.120 | 132.5.121 | 132.5.122 |

*with manual temperature compensation