



Collimators for Cardiology and Angiography

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Features and benefits

Siemens Healthineers Collimators for Cardiology and Angiography

Product description

The purpose of the collimator is to limit the radiation beam emerging from the X-ray tube assembly onto the size of the object to be displayed.

- All collimator parameters can be set remote controlled.
- Rectangular format can be adjusted in a wide range and is endless rotatable.
- For image quality optimization, semitransparent wedge filter(s) can be set and free positioned (1 at MFD, 3 at LFD)
- For optimizing radiation quality, five different Cu-filter can be selected.
- Integrated collision detection ensures safe workflow even at very close object distances.



- Optimized outer shape for steep angulations.
- Internal collimator rotation avoids any punching risk and enables perfect hygienic design.
- The collimators have an interface for DAP chamber.

Technical data

	MFD	LFD
Collimation		
Minimum field size [mm]*	≤ 38 × 38	≤ 38 × 38
Maximum field size [mm]*	335 × 335	400 × 400
Position accuracy	< 0.35% of the SID	< 0.35% of the SID
Collimation rotation [°]	360 (endless)	360 (endless)
Rotation speed [°/s]	25	25
Additional filtration		
Available filters [mm]	0.8Al – 0.1Cu – 0.2Cu – 0.3Cu – 0.6Cu – 0.9Cu	0.8Al – 0.1Cu – 0.2Cu – 0.3Cu – 0.6Cu – 0.9Cu

* SID = 100 cm, SFD = 80 mm

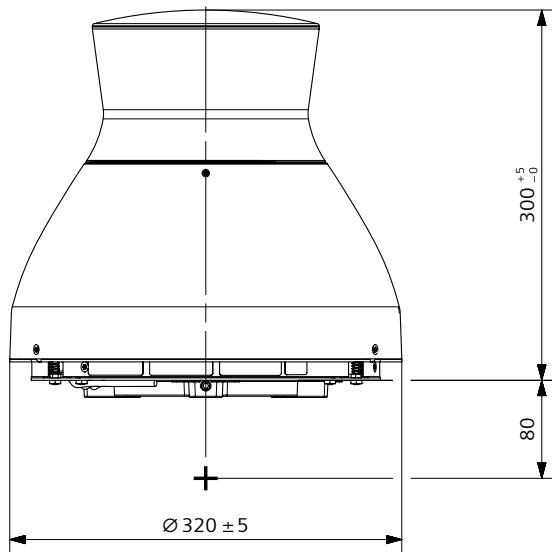
	MFD	LFD
Semitransparent wedge filter		
Number of filter blades	1	3
Rotation [°]	360 (endless)	360 (endless)
Translation [mm]*	>335 × 335	>400 × 400
Wedge shape	Symmetric wedge	1 symmetric wedge, 2 asymmetric wedges
Radiological properties		
Inherent filtration	≤0.4 mm Al/75 kV	≤0.4 mm Al/75 kV
Leakage radiation	<0.5 mGy/h (at 125 kV/28 mA)	<0.65 mGy/h (at 125 kV/28 mA)
Radiation shielding	125 kV	
Mechanical interfaces		
Flange to tube assembly	Diameter: 136 mm, thickness: 2 mm (LFD: with additional adapter)	
Source flange distance	80 mm	
Collision detection	Uniaxial	Multiaxial
Electrical interface		
Power supply VDC input voltage [V]	24 ^{+20%} / _{-15%}	24 ^{+20%} / _{-15%}
Max. VDC input current [A]	3.0	4.3
Data interface	CANopen DS402	
Weight of unit [kg]	11 ± 2	≤ 16.9
Dimensions (L × W × H) [mm]	320 × 320 × 234 (with small spacer)	402 × 402 × 220 (with small spacer)
Quality standards	NRTL, DHHS	
Ambient conditions		
Transport		
Temperature	-40 °C to +70 °C	
Relative humidity	10% to 95%	
Operating		
Temperature	+10 °C to +40 °C	
Relative humidity	20% to 75%	
Barometric pressure	700 hPa to 1060 hPa	
Service	Maintenance-free	

* SID = 100 cm, SFD = 80 mm

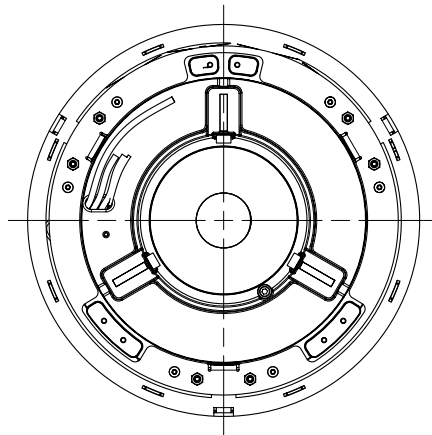
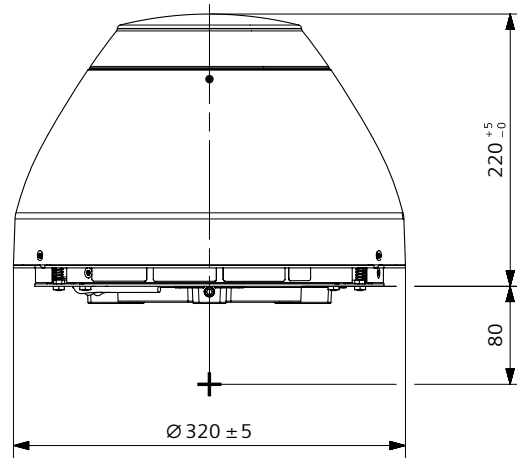
Dimensions

Model MFD

With Spacer 380



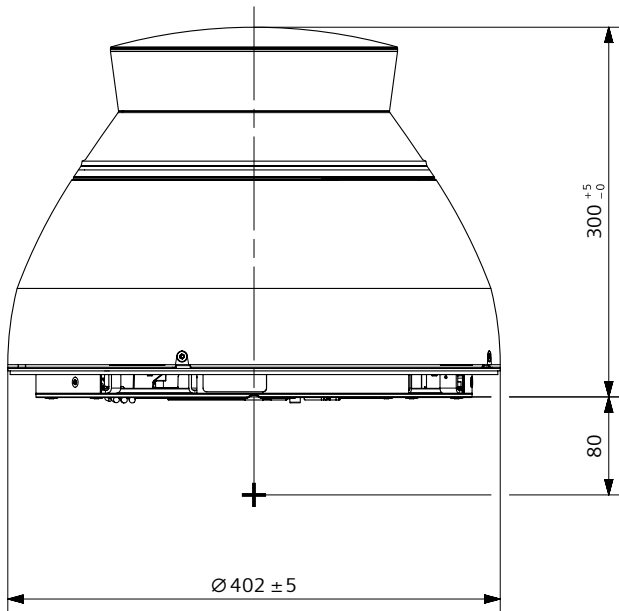
With Spacer 300



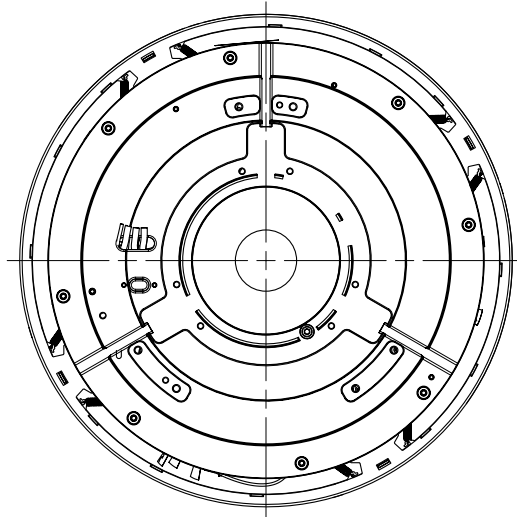
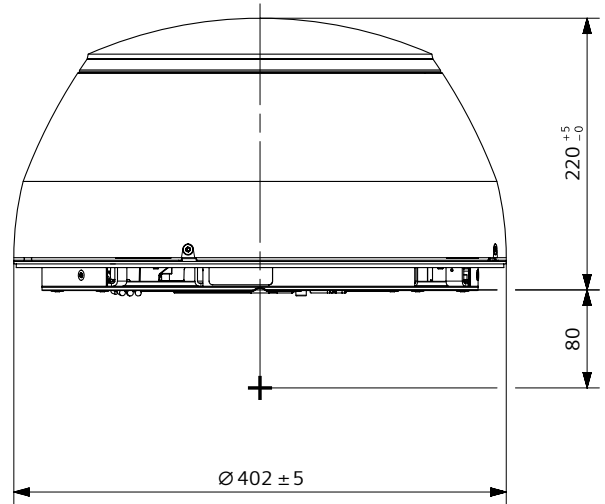
*Dimensions are given in mm.
All dimensions are approximate.*

Model LFD

With Spacer 380



With Spacer 300



Dimensions are given in mm.
All dimensions are approximate.

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