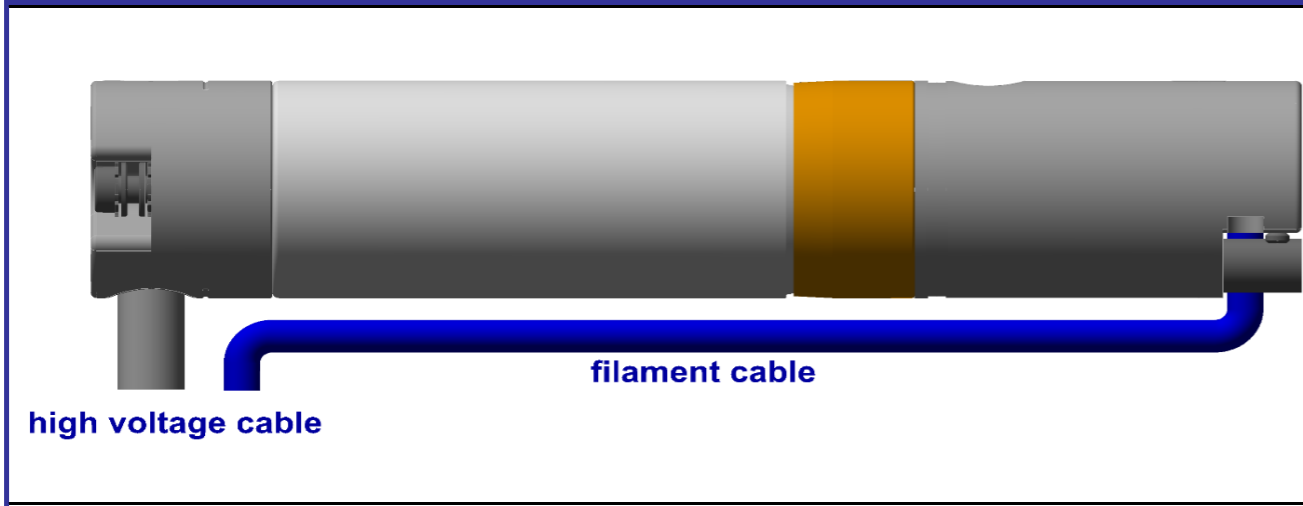
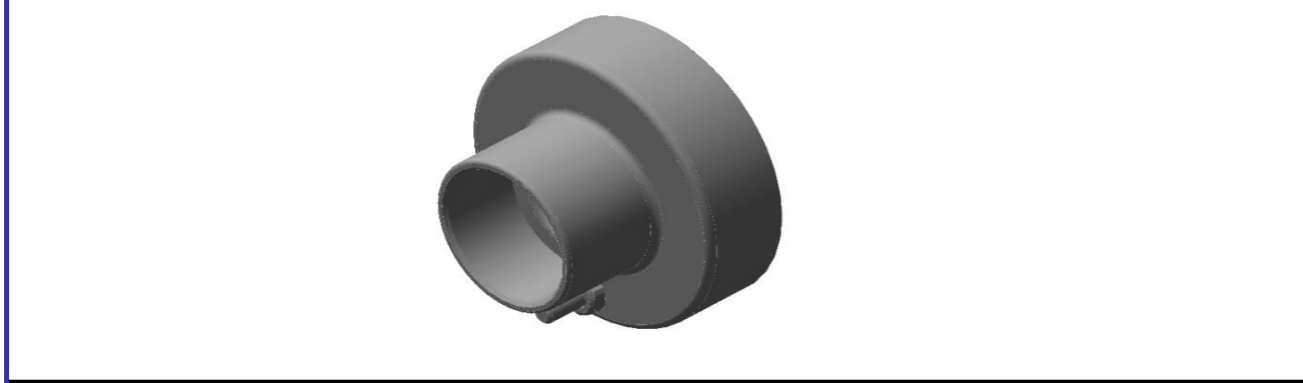


Beispielwerte	
Hochspannung:	max. 65 kV
Leistung:	10 - 50 W
Länge:	145 mm
Targetmaterial:	Cu/Cr/Rh/Mo/W
Targetwinkel	6°/12°
Ausstrahlwinkel:	18°, 60°x10°
Brennfleck:	20 - 500 µm

Zubehör



Consisting of:	Description	Price
1 m Mammoflex	cable included	0,00 €
1 m heating cable		
Beschreibung		
The high voltage cable (Mammoflex) and the filament cable of 1 m length is in the tube price included. The high voltage cable is glued in the high-voltage ceramic insulator and therefore required little maintenance only.		
Difference cable lengths are charge with a one-time fee of 15€ plus 25€ per running meter high-voltage and filament cable. The maximum cable length is 5 m.		

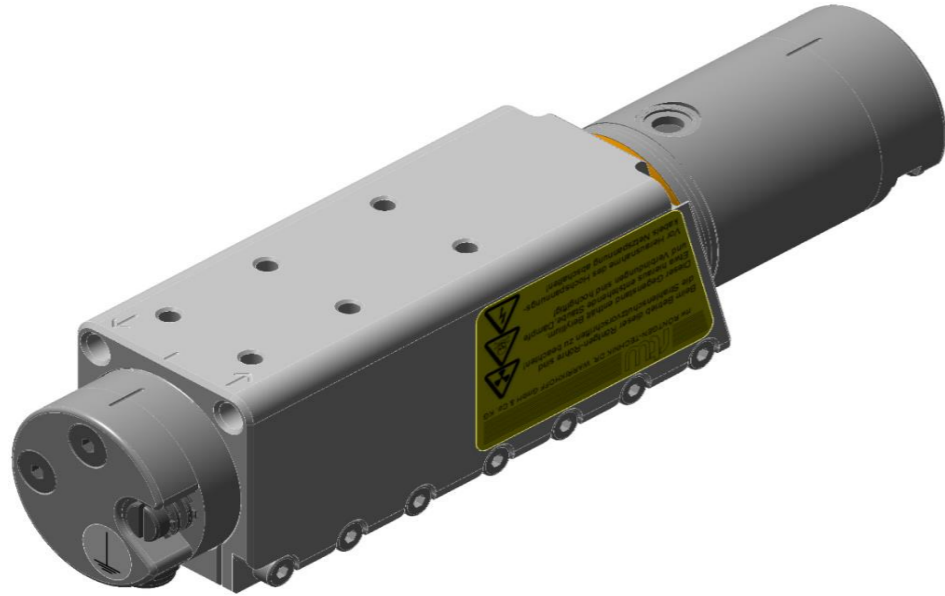


Consisting of:	Description	Price
1425	Cable flange (straight)	25,00 €
Description		
Should there be the requirement for a cable running straight out from the tube body, we can offer this with the cable flange (straight), identification no. 1425 at additional costs.		



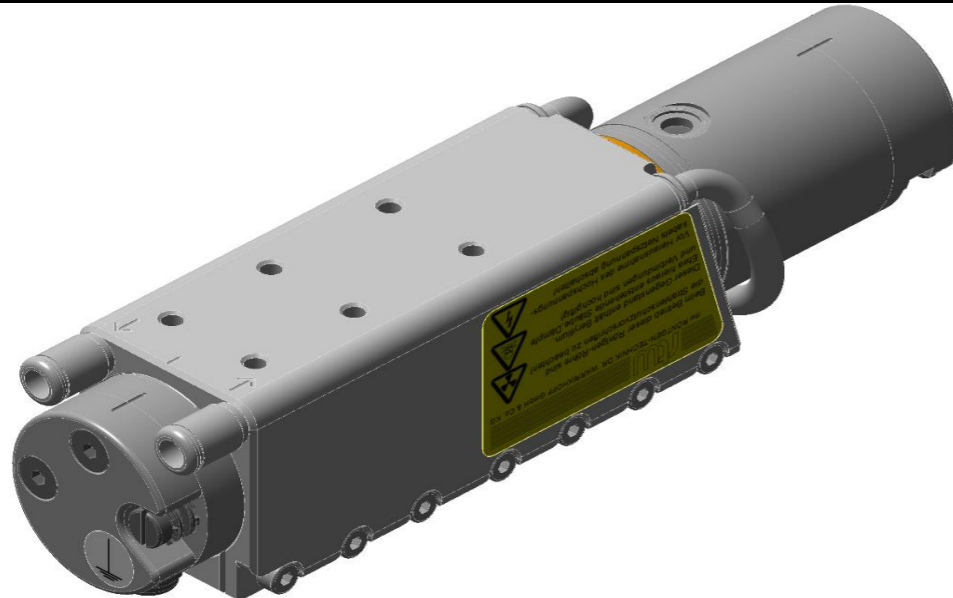
Consisting of:	Description	Price
2614	Filament cable connection 90°	0,00 €
Description		
The filament cable is running 90° out of the tube holder. Should there be the requirement for a cable running straight out from the tube holder, we can offer this at quotation.		

Set 1



Consisting of:	Description	Price
3575	Tube holder anode modified for cooling by conduction	205,00 €
2614		
2810	Description	
3371	The tube holder will be assembled directly on the ceramic insulator itself. In this way the MCBI can be clamped and can be mounted on the OEM equipment easily. The holder is designed to allow the benefit of conduction cooling. The assembly holes allow optimized positioning. The holder is made of pure copper to support the best heat transfer and the utmost best cooling.	
3372		
3443		

Set 2

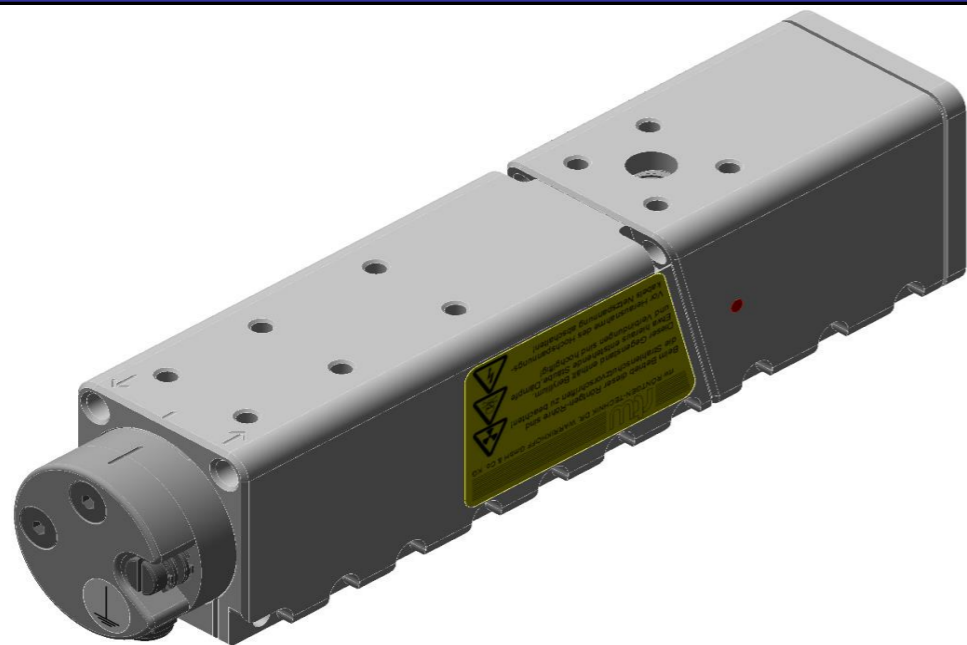


Consisting of:	Description	Price
3575	Tube holder anode modified for connection to a water cooling circuit	275,00 €
3282		
3283		
2810	Description	
3371	With this modification the holder is equipped with a fully integrated water cooling circuit. The water connections are equipped with fittings to connect on heat exchangers. Cooling the X-ray tube by water gives the best results for good cooling and for high temperature stability needed for precise measurement applications.	
3372		
3443		

Set 3

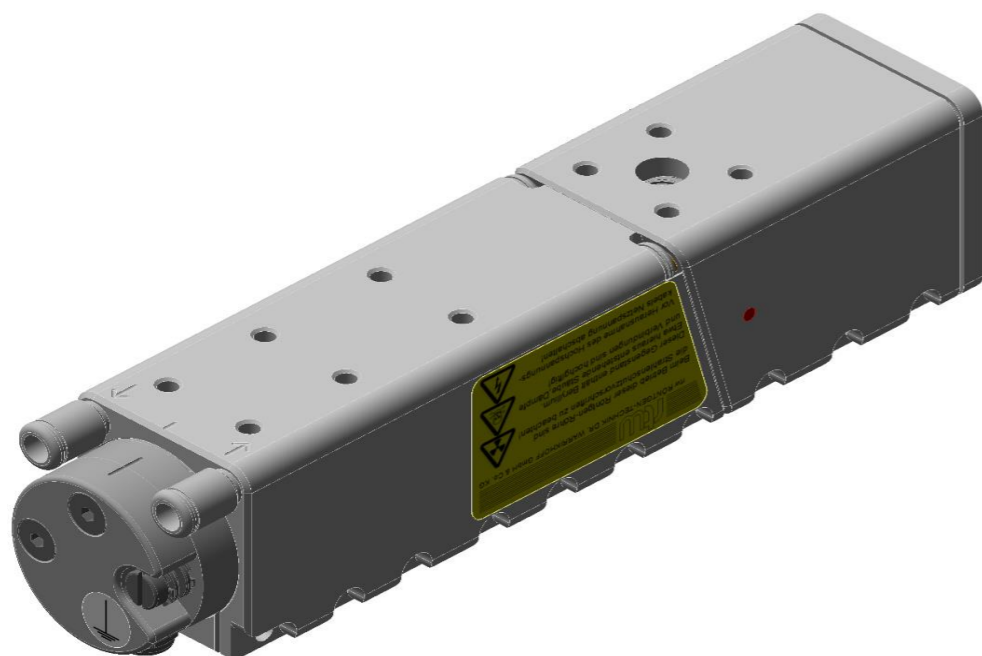
Consisting of:	Description	Price
	Tube holder anode modified for cooling with CPU cooler with air fan	not available
	Description	
	With this modification the holder is equipped with a standard CPU cooler with air fan. Cooling the X-ray tube with air can be a very efficient and light weight solution. Different air fans and coolers, like the arctic freezer, can be used. The speed of the fan and heat sensors will control a sufficient cooling and will prevent an overheat of the tube.	

Set 4



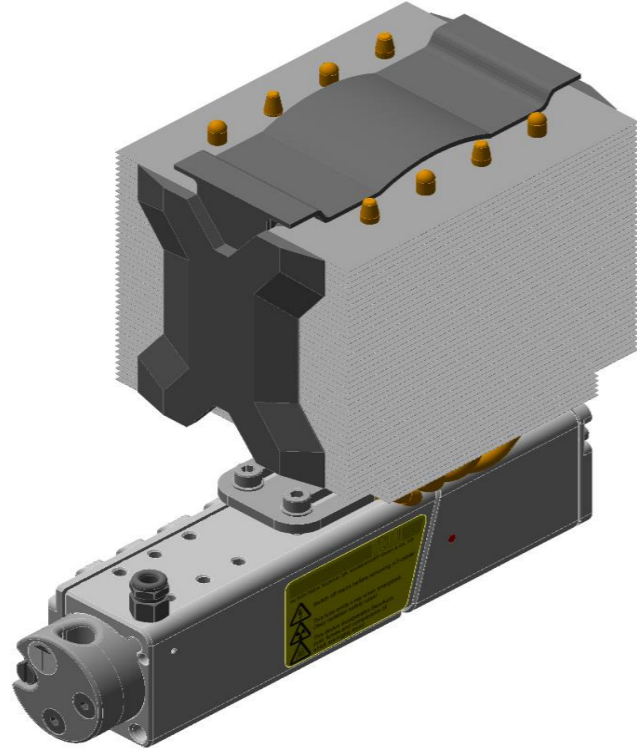
Consisting of:	Description	Price
3575	Tube holder anode and tube holder cathode modified for cooling by conduction	447,00 €
3250		
3256		
2810	Description	
3371	This extension of the holder on the cathode side allows not only to cool down the anode as well as the cathode, moreover the whole X-ray radiation protection is given. The X-ray tube holder is made out of pure copper and will support water cooling or air cooling or conduction cooling. The factory mounting threads enable the customer for precise positioning and assembling of X-ray shutters or X-ray optics. The two tubes holder weights of about 880g.	
3372		
3446		
3362		
3363		
3401		

Set 5



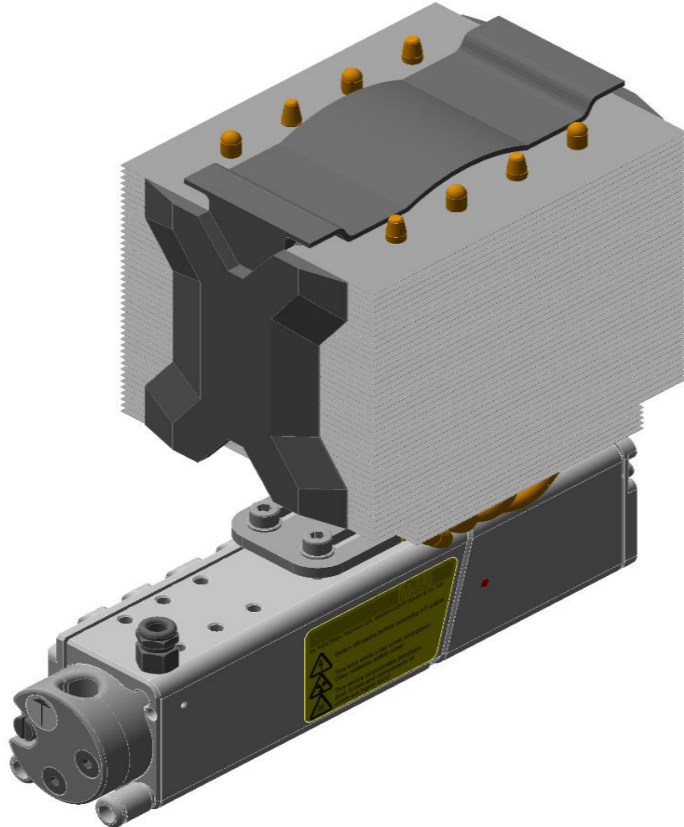
Consisting of:	Description	Price
3575	Tube holder anode and tube holder cathode modified for connection to a water cooling circuit	475,00 €
3250		
3256		
3282		
3365	Description	
3366	This device enables our OEM partner to cool down the cathode additionally with water. By doing that the cathode can work on a constant temperature and high stable X-ray emission in short- and long term can be achieved.	
2614		
2810		
3371		
3372		
3446		
3362		
3363		
3401		
3116		

Set 6



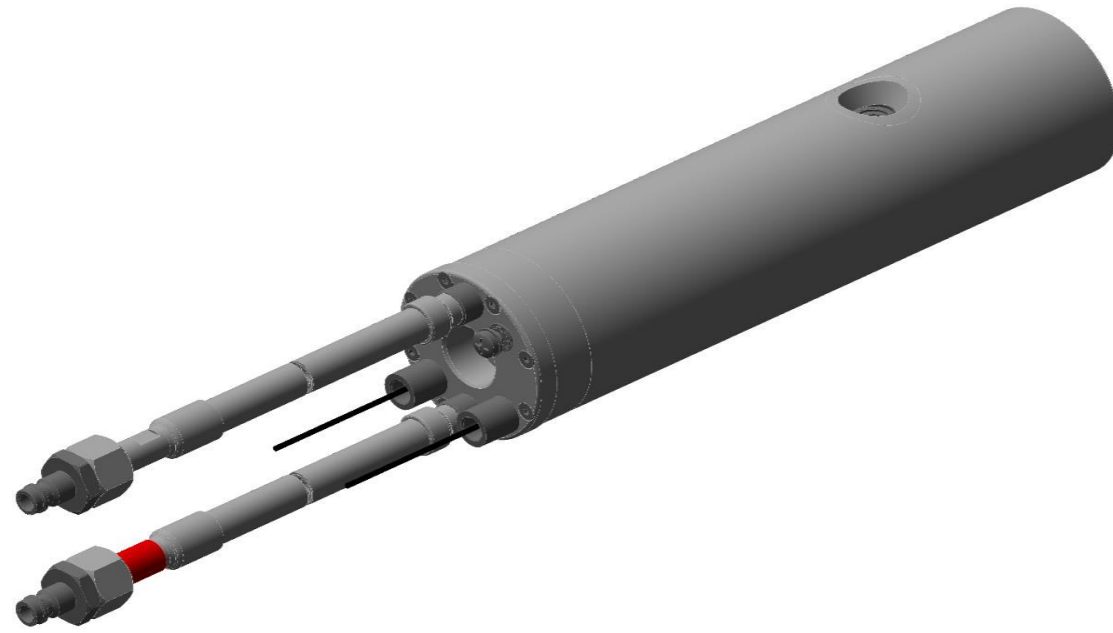
Consisting of:	Description	Price
3575	Tube holder anode and tube holder cathode modified for cooling with CPU cooler with air fan	552,00 €
3250		
3256		
3389		
	Description	
2810	By adding the cathode holder to the assembly the scattered radiation is reduced and the radiation protection as well as the cooling of the cathode for stable X-ray emission is achieved. Furthermore the cooling performance can be improved when a second cooling device on the cathode is added too. If the customer likes to add a custom-designed cooling device he can use set 4. This set provides several assembly holes for mounting the desired device.	
3371		
3372		
3446		
3362		
3363		
3401		

Set 7



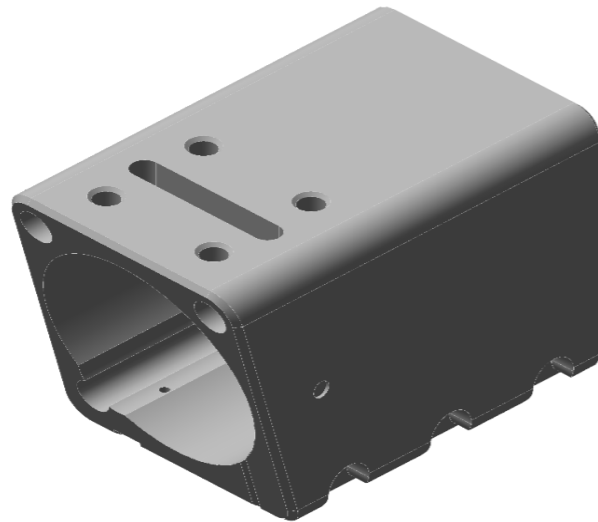
Consisting of:	Description	Price
3575	Tube holder anode and tube holder cathode modified for air- or water cooling	582,00 €
3250		
3256		
3282		
3365	Description	
3366	This fully equipped set provides a wide variety of cooling methods. If conduction cooling may be sufficient in laboratory, additional air forced cooling enables higher power. If ambient temperature rises, a water cooling system will cool down the X-ray tube to the required safe values. All 3 cooling methods can be driven together or separately upon desire.	
3389		
2810		
3371		
3372		
3446		
3362		
3363		
3401		

Set 8



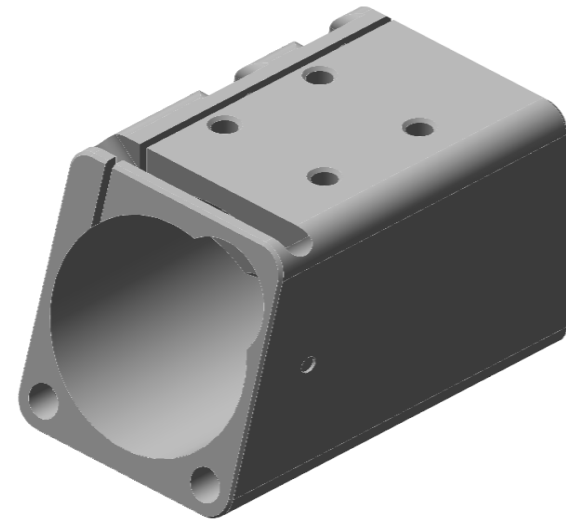
Consisting of:	Description	Price
3677 - Bleimantel	water cooler with X-ray radiation protection	524,00 €
3678 - Magnetfeld-Abschirmung		
	Description	
	The round envelope is made out of a cooling part and an x-ray radiation protection part. An addition magnetic field protection can be added.	

Zusatz 2



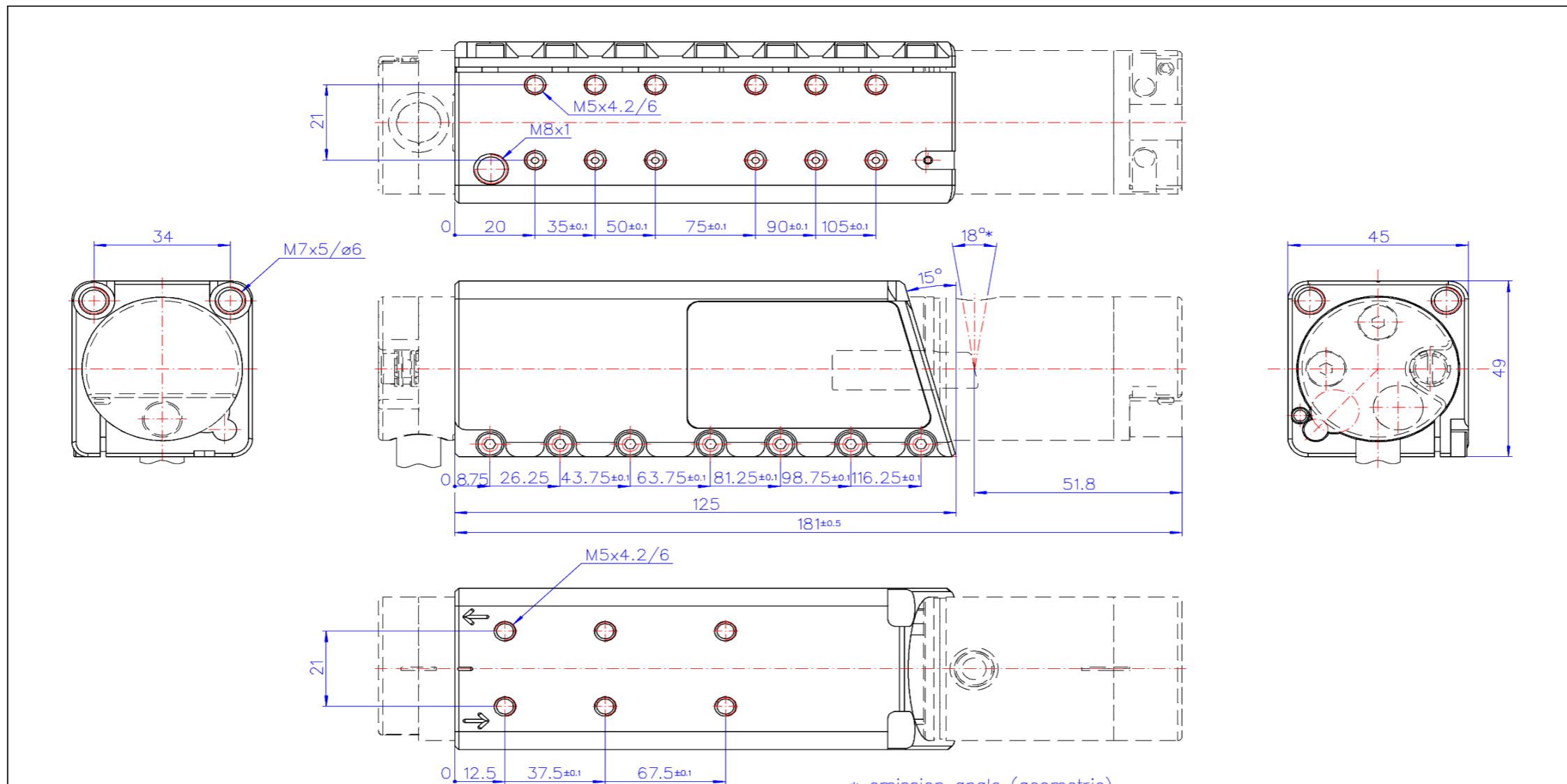
Consisting of:	Description	Price
3564	Tube holder cathode with beam angle 60° x 10°	55,00 €
	Description	
	Thr tube holder 60°x10° extends the emission angle to a fan beam of 60°x10°.	
	The holder must be choose with any set out of this list. We charge the add on only.	

Zusatz 3



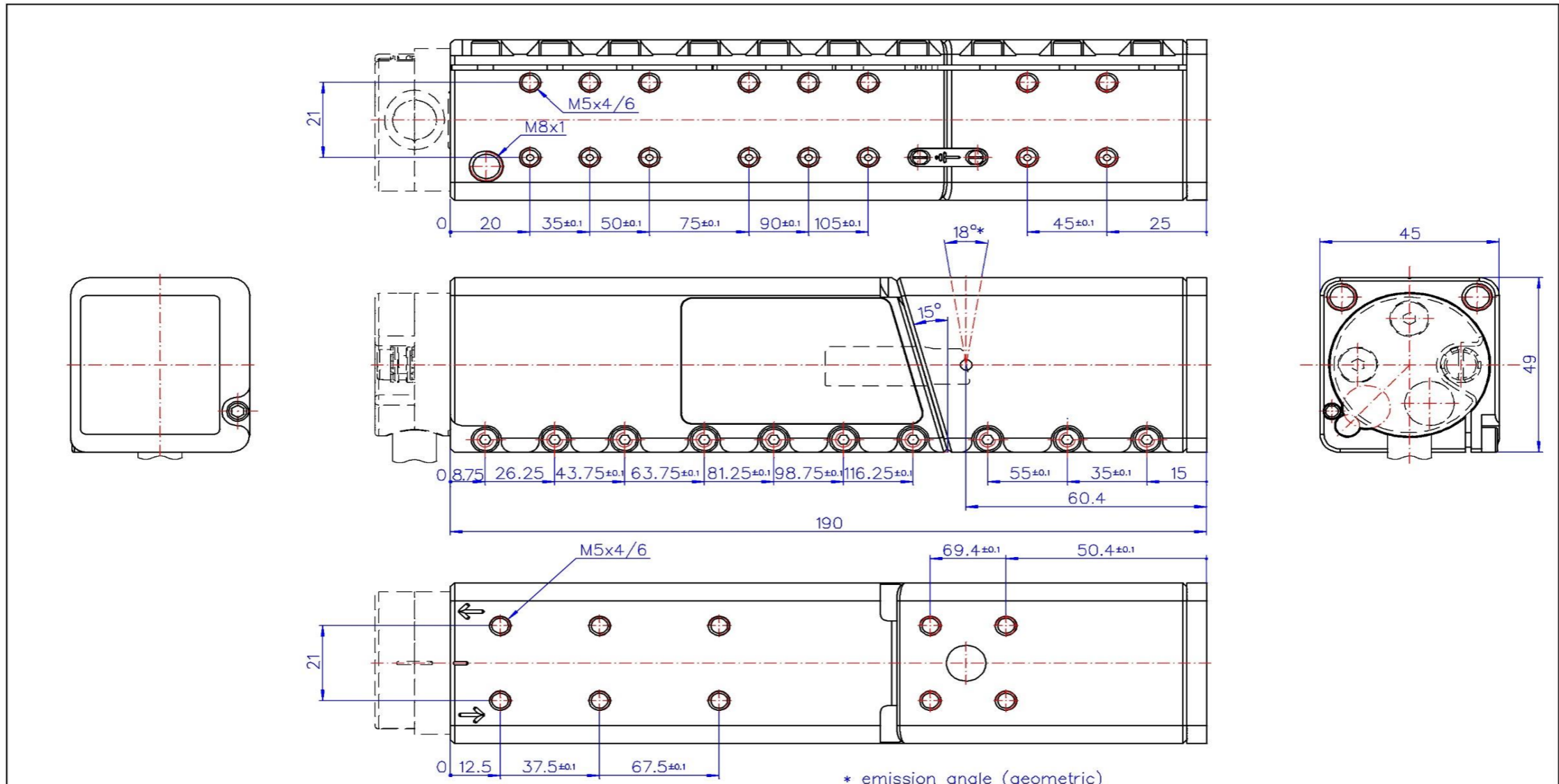
Consisting of:	Description	Price
3565	Tube holder cathode with beam angle 90° x 10°	93,00 €
	Description	
	Thr tube holder 90°x10° extends the emission angle to a fan beam of 90°x10°.	
	The holder must be choose with any set out of this list. We charge the add on only.	

Drawings



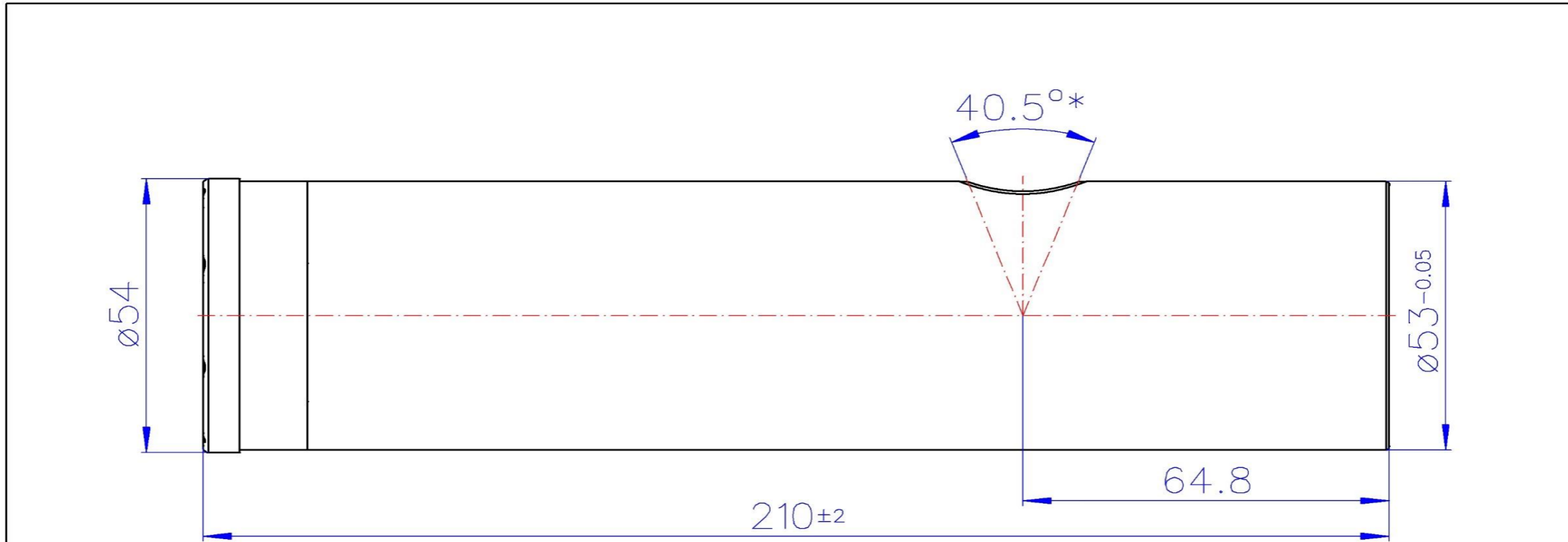
* emission angle (geometric)

(Verwendungsbereich)	Allgemeintoleranz DIN 2768-f	Maßstab 1:1 (Werkstoff:)	
	Datum	Name	
	Bearb. 10.02.16	JU	
	Gepr.		
	Freig.		
		Halter Anode	
		Zusammenstellung	
Zust.	Änderung	Datum	Name




* emission angle (geometric)

(Verwendungsbereich)	Allgemeintoleranz DIN 2768-f	Maßstab 1:1 (Werkstoff:)	
	Datum 11.05.16	Name JU	Halter Anode
	Gepr.		
	Freig.		
		Zusammenstellung	
Zust.	Änderung	Datum	Name



* emission angle (geometric)

(Verwendungsbereich)		Allgemeintoleranz		Maßstab 1:1	
MCBI 65		DIN 2768-f		(Werkstoff:) ---	
			Datum	Name	Wasserkühler mit Strahlenschutz
		Bearb.	26.08.15	JU	
		Gepr.			
		Freig.			
				 rtw RÖNTGEN-TECHNIK DR. WARRIKHOFF GmbH & Co. KG	
Zust.	Änderung	Datum	Name	Datenblatt	