

Viewports for Optical Applications

AluVaC® Precision Optics

Precision made of Aluminum – lightweight, not magnetizable and CF knife edges in approved **AluVaC®** quality.

Configurable viewport with coatings for near UV to medium IR range.

- CF knife edges in approved **AluVaC®** quality
- N-BK7, fused silica and crystal optics with various VAR and BBAR coatings
- Not magnetizable

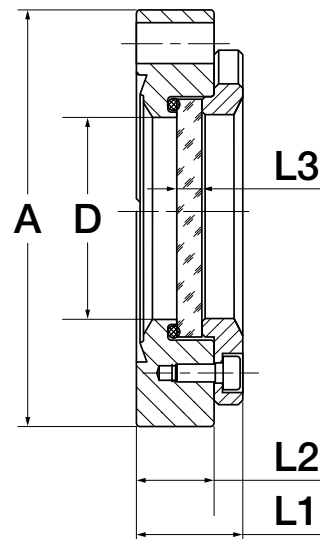


Technical Data

- | | |
|------------------------------|-----------------------------|
| ■ View Diameter | 34 mm |
| ■ Spectral Ranges | UV-VIS, VIS, VIS-IR, IR |
| ■ Coatings | uncoated, VAR and BBAR |
| ■ Flatness | Down to $\lambda/10$ |
| ■ Surface Finish (S/D) | Down to 20-10 |
| ■ Flange Types | DN40CF |
| ■ Flange Material | Aluminum EN AW-6XXX |
| ■ Max. Operation Temperature | 120 °C |
| ■ Max. Heating/Cooling Rate | 3 K/min |
| ■ Helium Leak Rate | $5 \cdot 10^{-10}$ mbar·l/s |

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Dimensions	
A	70 mm
D	34 mm
L1	18 mm
L2	13 mm
L3	4 mm



Ordering text:

VP	CF40	1	-	E	-	2	-	X	1.6	-	AL
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Example: VPCF40UVQ-E-AR250-700-X1.6-AL

Order code position

1
2

Property

- Optical material
- Coating according to table

Options

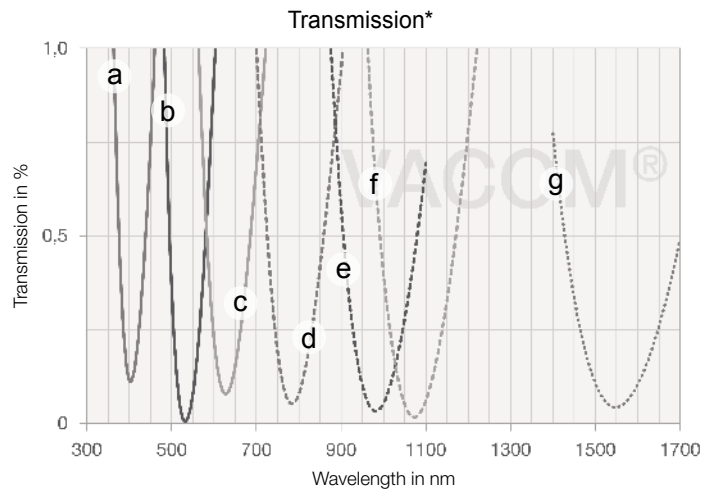
- B, UVQ, ZNS, ZNSE, GE

Viewports for Optical Applications

AluVaC® Precision Optics

Configurable **AluVaC®** Viewports for Laser Applications

The optic fits perfectly to your application due to its high-quality processing.
The viewports are qualified for challenging laser applications thanks to minimal scattering and distortion.



Optical Material	Surface Finish			Coating		Laser damage threshold (for 10 ns, 10 Hz)	
	Flatness	S/D	Parallelism				
Borosilicate N-BK7	$\lambda/4$	60/40	$\leq 1'$	a	405 nm	$R_{avg} < 0,25\%$	$> 1 \text{ J/cm}^2$
				b	532 nm		
				c	633 nm		
				d	785 nm		
				e	980 nm		
				f	1064 nm		
				g	1550 nm		

* The graph represents the coating properties in general. Deviations at the product are valid. Only the written-out specs are mandatory.

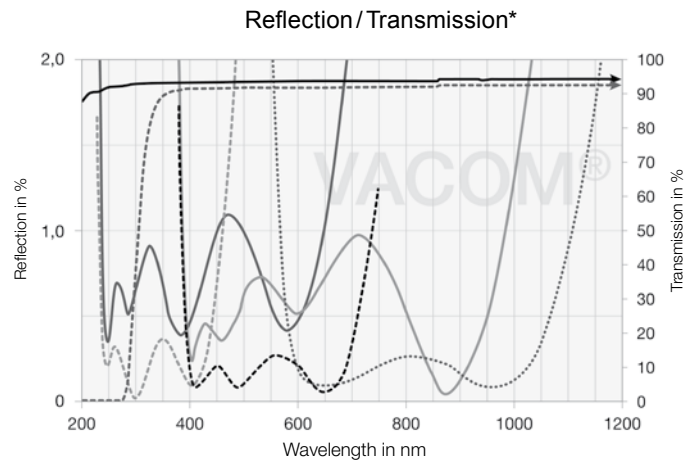
Viewports for Optical Applications

AluVaC® Precision Optics

Configurable AluVaC® Viewports for UV-VIS Applications

The standard AluVaC® Precision Optics is available with a selection of established AR-coatings from UV to NIR.

The high-quality optics allow an outstanding transmission quality of optical signals into your vacuum chamber.



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Optical Material	Surface Finish			Coating	
	Flatness	S/D	Parallelism		
Borosilicate N-BK7	$\lambda/4$	60/40	< 1'	-----	uncoated
				-----	425 – 675 nm
				=====	400 – 1000 nm
				600 – 1050 nm
Fused Silica	$\lambda/10$	20/10	< 5"	=====	uncoated
				-----	250 – 425 nm
				=====	250 – 700 nm
				=====	400 – 1000 nm
				600 – 1050 nm

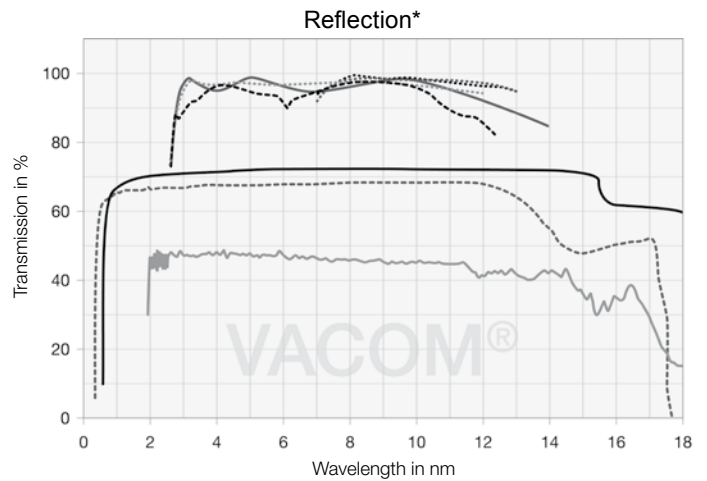
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Viewports for Optical Applications

AluVaC® Precision Optics

Configurable **AluVaC®** Viewports for Wide Range Applications

The wide-range series offers a great variety of crystals for applications in the IR spectrum (e. g. thermographic metrology) and materials with a high transmission from UV to IR such as Calcium- and Barium fluoride.



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Optical Material	Surface Finish			Coating
	Flatness	S/D	Parallelism	
Germanium	$\lambda/10 @ 10.6 \mu\text{m}$	60/40	$< 1'$	uncoated
				3 – 5 μm
				3 – 12 μm
				8 – 12 μm
Zinc selenide	$\lambda/10 @ 10.6 \mu\text{m}$	60/40	$< 1'$	uncoated
				3 – 12 μm
				8 – 12 μm
Zinc sulfide	$\lambda/10 @ 10.6 \mu\text{m}$	60/40	$< 1'$	uncoated
				3 – 12 μm

* The graph represents the coating properties in general. Deviations at the product are valid. Only the written-out specs are mandatory.