

## ALL METAL UHV ANGLE VALVES

**SMALL SIZES**  
**BELLOWS SEALED**  
**ALL METAL**  
**MOUNTING IN ANY POSITION**  
**BAKEABLE AT 450°C**

The VACUO all metal right angle valves have been designed for best conductance and minimum size for easy installation in any attitude. Well suited for system requiring high reliability and low outgassing in ultra high vacuum applications, these valves are realized in stainless steel 316L with gold coated Cu OFHC pad. Standard features include welded bellows stem seals and UHV surface treatment to achieve very low outgassing. These lines of valves are manually operated and are flanged CF16, CF40, CF63 and CF100. Other flanges are on request. The valves open against pressure of 5 bar both sides.

### BODY MATERIAL

316L Stainless steel

### MANUAL ACTUATOR

Self-locking hand wheel

### SEALING MATERIAL

Plate : Silver coated Cu OFHC

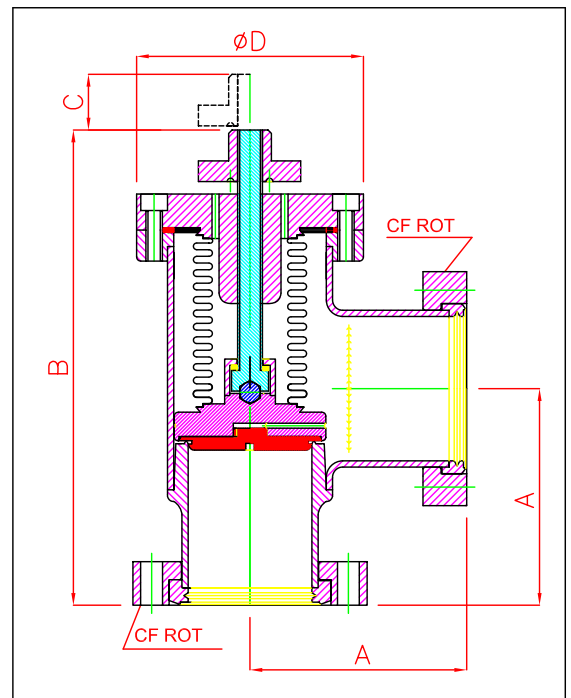
Bonnet : Cu OFHC

### FEEDTHROUGH

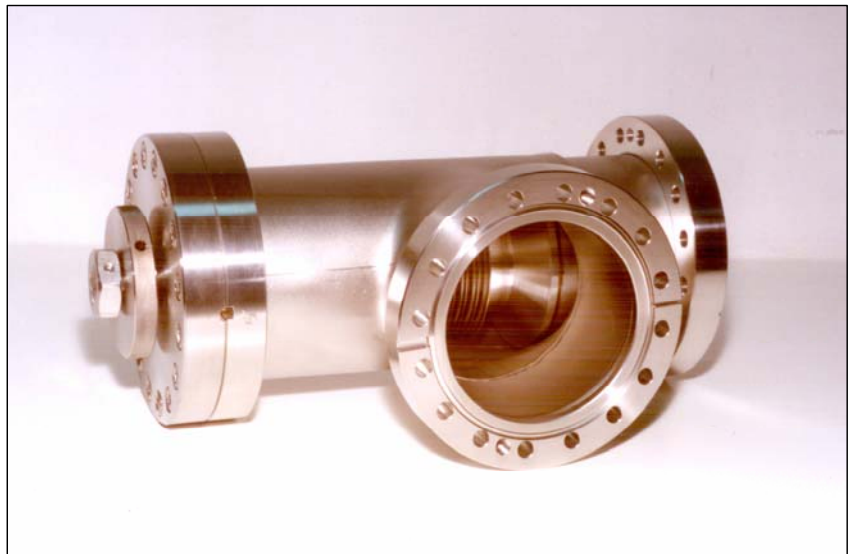
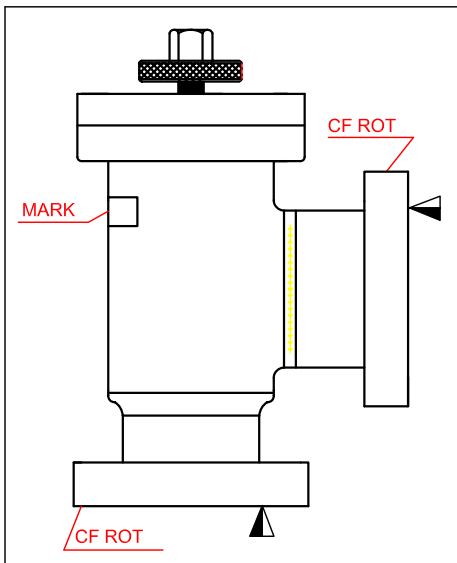
Stainless steel

### DIMENSIONS

DN (nominal ID)	CF flanges	A	B	C	D
16	CF16	38	101	13	55
40	CF40	63	166	22	70
63	CF63	105	230	27	110
100	CF100	135	318	80	140



## SPECIFICATIONS



## TECHNICAL DATA

Manually operated valve	model	TV101-CF16	TV102-CF40	TV103-CF63	TV104-CF100
Connection flange		CF16	CF16	CF16	CF16
Drive square socket		24mm	24mm	30mm	41mm
Conductance for molecular flow	l/s	8	40	145	400
Dinamic tightness	mbar l/s	$10^{-11}$	$10^{-11}$	$10^{-11}$	$10^{-11}$
Pressure range from	mbar	$10^{-12}$	$10^{-12}$	$10^{-12}$	$10^{-12}$
to (at room temperature)	bar	6	5	5	2
Bakeout temperature	°C	450	450	450	450
open valve in vacuum	°C	350	350	350	350
closed					
Weight	Kg	0.4	2.7	6.6	14
Material housing,bellows valve plate seal		AISI 316L Stainless steel Silver coated OFHC Cu OFHC Cu			
Operating position		Any			
Operation		Manual with dynamometric spanner			
Opening		Both side to atmospheres			

## ORDERING DATA

Valve	TV101	TV102	TV103	TV104
Tool set <sup>(1)</sup>	TV111	TV112	TV113	TV114
Spare part : silver coated pad	TV121	TV122	TV123	TV124

(1) The tool set includes a socket wrench for the drive, the tool for replacing the pad and thread lubricant