

---

---

**Vacuum technology — Right-angle  
valve — Dimensions and interfaces for  
pneumatic actuator**

*Technique du vide — Vanne d'équerre — Dimensions et interfaces  
pour actionneur pneumatique*



**COPYRIGHT PROTECTED DOCUMENT**

below or ISO's member body in the country of the requester.

CP 401 • Ch. de Blandonnet 8

Contents

F  
P  
1 S  
2 N  
3 O  
4 T  
5 R  
B

## Foreword

*V*

— the normative references have been updated.

## Introduction



# Vacuum technology — Right-angle valve — Dimensions and interfaces for pneumatic actuator

## 1 Scope

## 2 Normative references

*Vacuum technology — Dimensions of non-knife edge flanges*

*Vacuum technology — Dimensions of clamped-type quick-release couplings*

*Vacuum technology — Dimensions of knife-edge flanges*

## 3 Terms and definitions

- ISO Online browsing platform: <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

## 4 Requirements

4

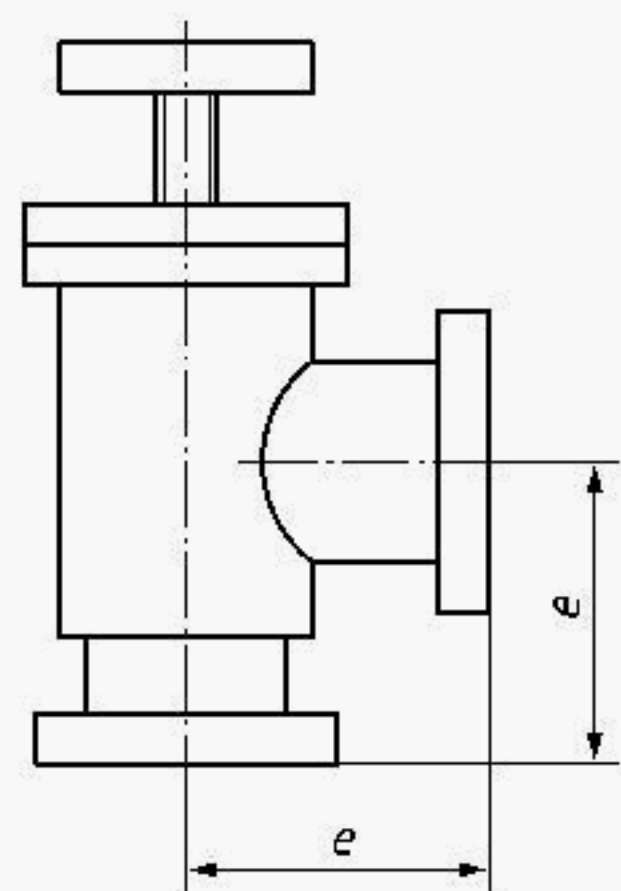
.

### 4.2 F

## 5 Interface for pneumatic actuator

thread size and unit (e.g. “mm”, “inch”) of inlet and outlet for the pneumatic actuator should be indicated on the user's manual and/or valve body (e.g. “Rc 1/4”, “1/8 NPT”);

indicated (e.g. “d.c. 24 V/2 A, a.c. 250 V/20 mA/50-60 Hz”).



**Key**  
e edge dimension

Figure 1 — Right-angle valve

Table 1 — Dimensions for valves with non knife-edge flanges

Dimensions in millimetres

Nominal bore	Edge dimension, <i>e</i>		Flanges specified in		Perpendicularity tolerance for the two flange faces specified in					
	Dimensions	Tolerance	ISO 2861	ISO 1609	ISO 2861	ISO 1609				
10	30	±1,5	applicable	not applicable	±2°	not applicable				
16	40									
25	50									
40	65									
63	88	±4 <sup>a</sup>	not applicable <sup>c</sup>	applicable	not applicable <sup>c</sup>	±0°30'				
100	108									
160	138									
200	178									
250	208									
<sup>a</sup> ±1,5 is preferable.										
<sup>b</sup> ±2 is preferable.										
<sup>c</sup> There are no corresponding flanges in ISO 2861 over nominal bore 63.										

Table 2 — Dimensions for valves with knife edge flanges

Dimensions in millimetres

Nominal bore	Edge dimension, <i>e</i>		Perpendicularity tolerance for the two flange faces
	Dimensions	Tolerance	
16	38	±1,5	±1°
40	63		
63	105		
100	135	±2	±0°30'
160	167		
200	203		



## Bibliography

- [1] ISO 3, *Preferred numbers — Series of preferred numbers*
- [2] ISO 9803-1, *Vacuum technology — Mounting dimensions of pipeline fittings — Part 1: Non knife-edge flange type*
- [3] ISO 9803-2, *Vacuum technology — Mounting dimensions of pipeline fittings — Part 2: Knife-edge flange type*

