

GAS DOSING VALVES, SERIES 21.1

For introducing a controlled, reproducible flow of gas into a vacuum chamber.



Coarse gas dosing valve

Fine gas dosing valve

Controls wide range of flow

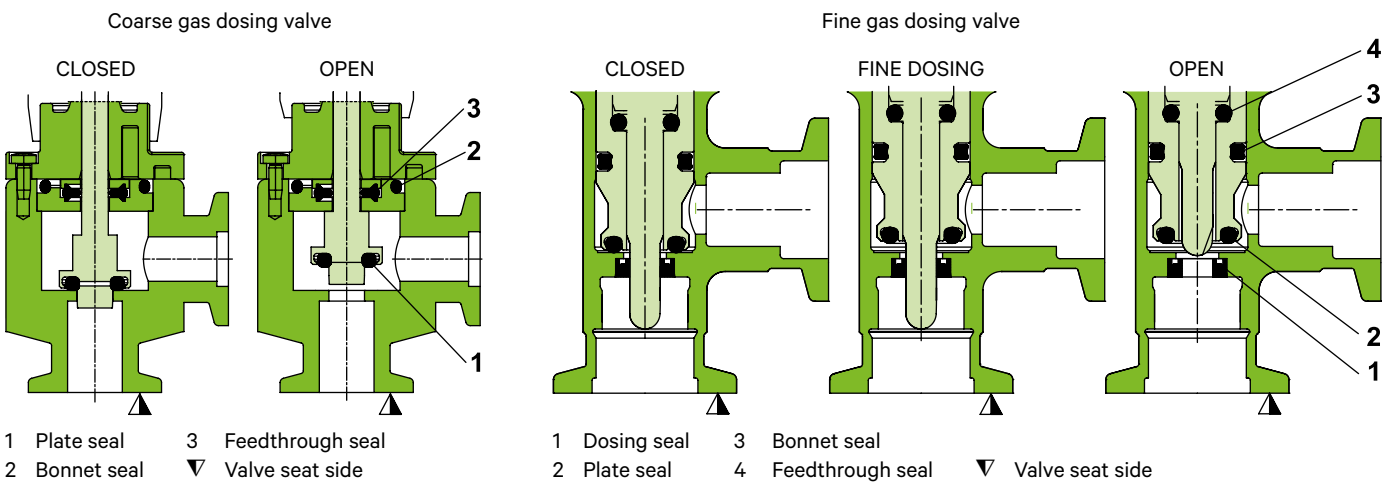
Integrated shut-off valve

Closing without losing flow setting

MAIN FEATURES

Size	coarse gas dosing valve: DN 10 mm (3/8") fine gas dosing valve: DN 16 mm (5/8")
Actuator	manual with handwheel
Body material	coarse gas dosing valve: aluminum fine gas dosing valve: stainless steel
Standard flanges	ISO-KF

FUNCTIONAL PRINCIPLE



TECHNICAL DATA

		Coarse gas dosing valve	Fine gas dosing valve
Leak rate	Valve body, valve seat	$1 \cdot 10^{-8}$ mbar l/s ⁻¹	$< 1 \cdot 10^{-9}$ mbar l/s ⁻¹
Pressure range		$1 \cdot 10^{-7}$ mbar to 4 bar (abs)	$1 \cdot 10^{-8}$ mbar to 2.5 bar (abs)
Gas flow, controllable		min. 40 mbar l/s max. 1700 mbar l/s	min. $5 \cdot 10^{-6}$ mbar l/s max. 1000 mbar l/s
Dead volume		–	0.032 cm ³
Temperature		Bakeout ≤ 100 °C	Operating ≤ 80 °C Bakeout ≤ 100 °C
Material	Valve body Actuator Dosing sleeve	EN AW-6082 T6 Plastic (POM) –	AISI 304 (1.4301) Plastic (POM) fluoropolymer
Seal		FKM (Viton®)	FKM (Viton®)
Mounting position		any	any
Weight		0.2 kg / 0.44 lbs	0.4 kg / 0.88 lbs

ORDERING INFORMATION

Valve with manual actuator
handwheel

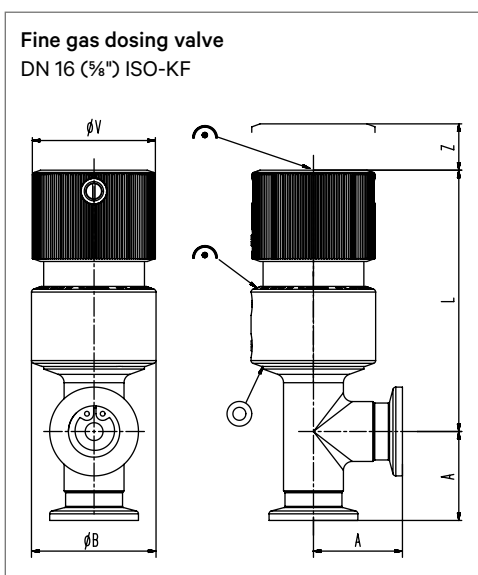
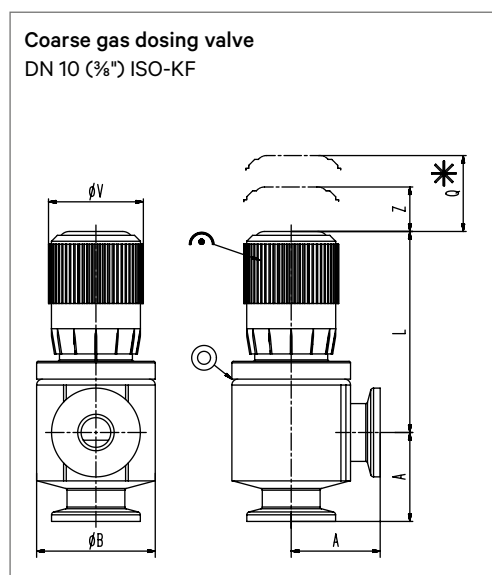
DN		Ordering numbers	
mm	inch	Coarse gas dosing valve	Fine gas dosing valve
10	$\frac{3}{8}$	21120-KA01	–
16	$\frac{5}{8}$	–	21124-KE0X

ACCESSORIES

Filter vacuum side for fine gas dosing valve:

- 590 mbar l/s, Ordering number 575928
- 1250 mbar l/s, Ordering number 576040

DIMENSIONS



		Coarse gas dosing valve	Fine gas dosing valve
DN	mm inch	10 $\frac{3}{8}$	16 $\frac{5}{8}$
A	mm inch	30 1.18	30 1.18
øB	mm inch	40 1.57	42 1.65
L	mm inch	66 2.60	87.50 3.44
Q	mm inch	34 1.34	–
øV	mm inch	32 1.26	42 1.65
Z	mm inch	5.50 0.20	12.50 0.49

- * Required for dismantling
- ⊙ Mechanical position indication
- ⊙ Leak detection hole