

# BRV Backing/Roughing Valve



Edwards backing/roughing valves with ISO NW roughing and forepump terminations feature manual or pneumatic actuation. They combine the function of separate backing/roughing valves in one integral 3 port unit.

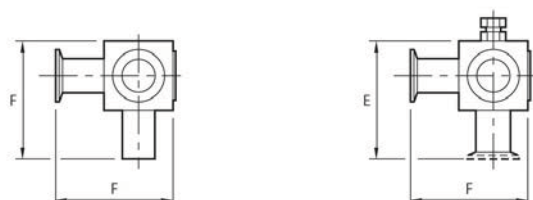
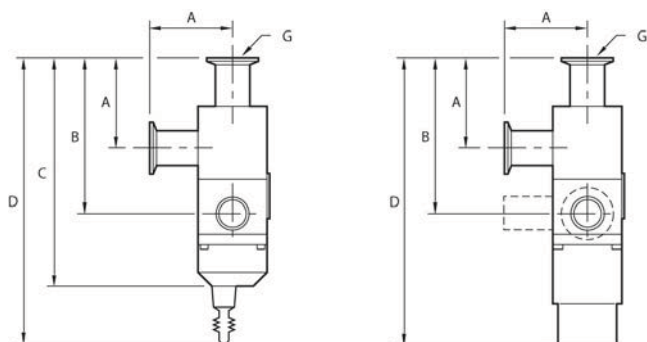
A flexible neoprene connector is supplied for the backing connection. The roughing and forepump ports terminate in the appropriate NW termination.



## Features & Benefits

- Easy to operate - both ports closed position
- Long life - 100,000 operations or more
- Position indicator on pneumatic valve
- Leak tight to better than  $10^{-9}$  mbar  $l s^{-1} / 8 \times 10^{-10}$  Torr  $l s^{-1}$

## Dimensions



(mm)	A	B	C	D	E	F	G
BRV10K	30	90	134	169	52.5	49	NW10
BRV10PK	30	90	-	198	52.5	49	NW10
BRV25K	50	98	155	195	82	75	NW25
BRV25PK	50	98	-	203	82	75	NW25

(inches)	A	B	C	D	E	F	G
BRV10K	1.17	3.51	5.23	6.59	2.05	1.91	NW10
BRV10PK	1.17	3.51	-	7.72	2.05	1.91	NW10
BRV25K	1.95	3.82	6.05	7.61	3.2	2.93	NW25
BRV25PK	1.95	3.82	-	7.92	3.2	2.93	NW25

## Applications

The valves have been designed particularly for the Diffstak<sup>®</sup> pumping systems, but have applications where a compact change-over valve is required in the pressure range  $10^{-7}$  - 2000 mbar /  $8 \times 10^{-8}$  - 1500 Torr.

## Ordering Information

Product Description	Order No.
BRV10K, Manual Operation	C32103000
BRV10PK Backing/Roughing Valve Pneumatic Operation	C32104000
BRV25K Backing/Roughing Valve, Manual Operation	C32303000
BRV25PK Backing/Roughing Valve, Pneumatic Operation	C32304000
BRV25PK Backing/Roughing Valve, Pneumatic Operation, In-line Flanges	C32304900
BRV25PK Backing/Roughing Valve, Pneumatic Operation, All NW25 Flanges	C32303500

Accessories & Spares	Order No.
NW10 Flexible Sleeve For 15mm OD Tube	C26501002
NW25 Flexible Sleeve For 28mm OD Tube	C26501004
O Ring Viton 1119 Pk 2	H02106119
O Ring Viton 0215 Pk 5	H02106025
O Ring Viton 024 Pk 5	H02106261
O Ring Viton Vit 031 Pk 2	H02106262
5 Port Lightweight Electropneumatic Control Valve 24V a.c.	B28703030
5 Port Lightweight Electropneumatic Control Valve 24V d.c.	B28703055
5 Port Lightweight Electropneumatic Control Valve 110V a.c.	B28703031
5 Port Lightweight Electropneumatic Control Valve 230V a.c.	B28703032

## Technical Data

### Construction materials

Body and pneumatic cylinder	HE 30TF aluminum
Lever and bonnet (manual)	Glass reinforced plastic
Operating shaft/valve seat	Stainless steel
Body seals, port seals, shaft seal 'O' ring	Fluoroelastomer

### Leak rate

Overall	$< 10^{-9}$ mbar ls <sup>-1</sup> / $< 8 \times 10^{-10}$ Torr l s <sup>-1</sup>
Across ports	$< 10^{-9}$ mbar ls <sup>-1</sup> / $< 8 \times 10^{-10}$ Torr l s <sup>-1</sup>
NW coupling	$< 10^{-9}$ mbar ls <sup>-1</sup> / $< 8 \times 10^{-10}$ Torr l s <sup>-1</sup>
Operating pressure range	$10^{-7}$ - 2100 mbar / $8 \times 10^{-8}$ - 1575 Torr

### Max baking temperature

Pneumatic	70 °C
Manual	90 °C
Reliability (MTTF)	100000 cycles
Recommended air pressure	2.8 - 4.2 bar / 40.6 - 61 psi
Maximum air pressure	7.0 bar / 102 psi
Minimum air pressure	2.4 bar / 35 psi
Air connections	1/8 in BSP, for 6 mm Ø plastic or copper tube
Microswitch rating	24 V 1.5 A a.c. or d.c.
Weight	
BRV10K	350g / 12oz
BRV10PK	380g / 13oz
BRV25K	860g / 30oz
BRV25PK	900g / 31.7oz