

FEATURES

- The EN air/oil exchanger, specially designed for type AD differential action valves, ensures smooth and regular movement of the valve plunger to avoid waterhammer effect in certain applications.
- It can be supplied pre-installed on a valve or separately for fitting on-site to any valve in service.

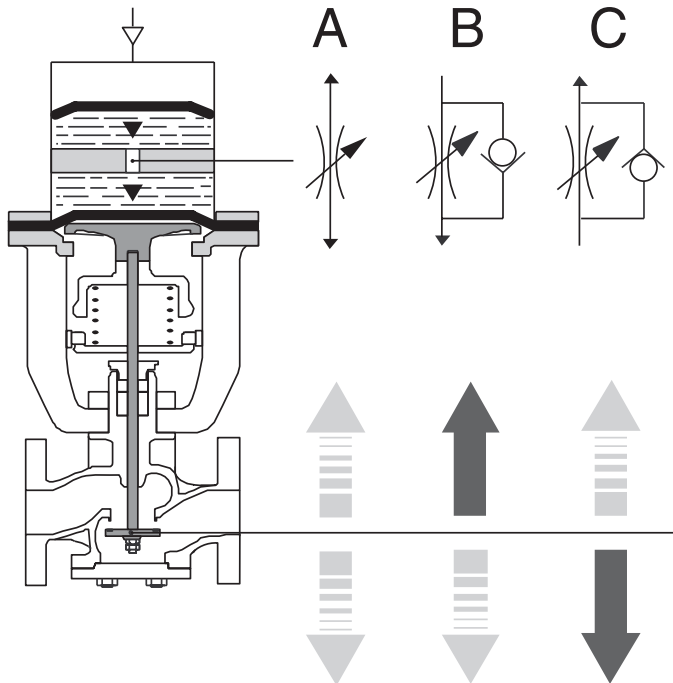
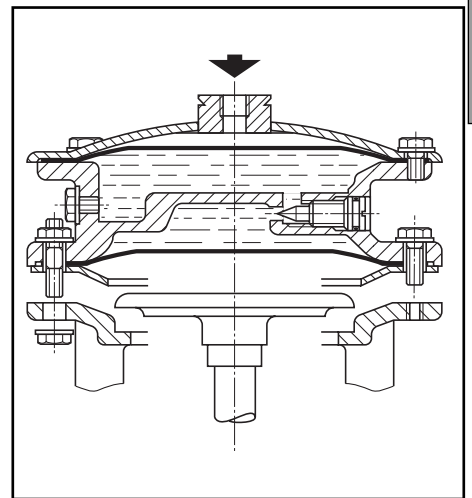
OPERATION

Compressed air enters via the central boss in the upper dome. The resulting force is transmitted to the plunger of the valve by the flow of oil at a controlled rate through a needle valve, ensuring smooth action.

Depending on the function required, three operating modes are available:

- Mode "A"** Bi-directional with damping in both directions. The descent time must not exceed 20 seconds.
- Mode "B"** Uni-directional, downward movement damped.
- Mode "C"** Uni-directional, upward movement damped.

The letter indicates the mode.



GENERAL

control fluid (*)	temperature range	diaphragms (*)
air, filtered	+5°C to +50°C	PA-reinforced synthetic rubber

Maximum pilot pressure	10 bar [1 bar =100 kPa]
Recommended oil	Non-detergent, without aggressive additives
Ambient temperature range	-5°C to +50°C
Maximum viscosity	20 to 50 cSt (mm ² /s) at 50°C

CONSTRUCTION

Pilot port G 1/4

MATERIALS IN CONTACT WITH FLUID

(*) Ensure that the compatibility of the fluids in contact with the materials is verified

Body	Cast iron
Domes (upper/lower)	Cast iron
Diaphragms ⁽¹⁾	PA-reinforced synthetic rubber

⁽¹⁾ The upper diaphragm is designed to prevent the risk of emulsion formation by separating the oil from the control air.

SPECIFICATIONS

DN valve orifice size PN16-PN25	average capacity (litres)	yoke	mode	catalogue number		reference
				air/oil exchanger installed on valve ⁽²⁾	air/oil exchanger sold separately	
15 ⁽¹⁾ - 20 ⁽¹⁾ 25 - 32	0,215	NB	A	335505	21800005	ENB
			B	335506	21800006	
			C	335507	21800007	
40 - 50	0,500	NC	A	335508	21800008	ENC
			B	335509	21800009	
			C	335510	21800010	
65 - 80	1,250	ND	A	335511	21800011	END
			B	335512	21800012	
			C	335513	21800013	
100	2,650	NE	A	335514	21800014	ENE
			B	335515	21800015	
			C	335516	21800016	

⁽¹⁾ Yoke offset on 15 and 20 dia. PN16 and PN25 valves.

⁽²⁾ Number to be added to the catalogue number of the valve, see "ordering examples".

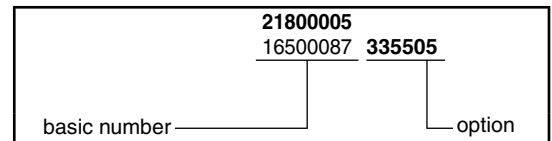
OPTIONS AND ACCESSORIES

- Ambient temperature -20°C

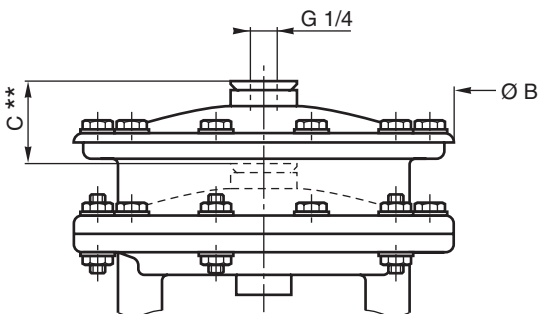
INSTALLATION

- Installed on type AD valves in vertical position
- **Do not pressurise the air/oil exchanger before installation is completed**
- Adjustment screw and drain screw incorporated in the air/oil exchanger body
- The air/oil exchanger is filled with oil, even when supplied as a separate part
- Pipe connection identifier is G = G (ISO 228/1)
- Installation/maintenance instructions are included with each valve

ORDERING EXAMPLES:



DIMENSIONS (mm), WEIGHT (kg)



reference	ØB	C**	weight
ENB	156	47	2,4
ENC	200	52	3,6
END	250	76	7,6
ENE	336	81	14,4

** Additional dimension to be added to dimension C of a standard valve.

Note: The air/oil exchanger cannot be fitted with a manual operator.