

## 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

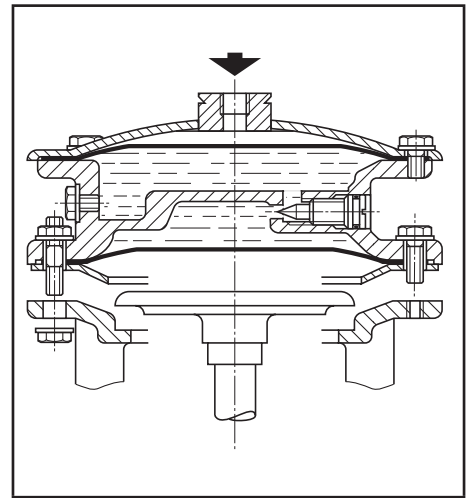
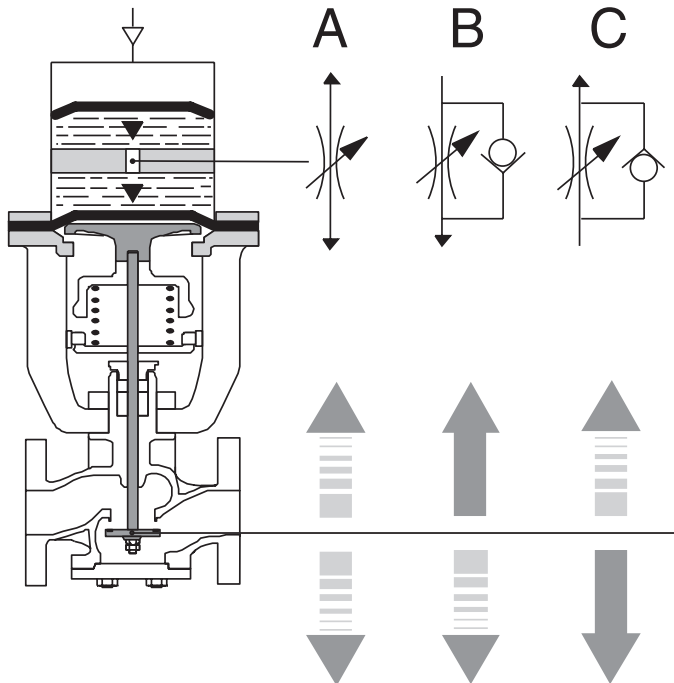
## OPERATION

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

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

## CONSTRUCTION

**Pilot connection** G 1/4

## MATERIALS IN CONTACT WITH FLUID

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

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

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

**SPECIFICATIONS**

DN	average capacity (liters)	yoke	mode	catalogue number		reference
				air/oil exchanger installed on valve <sup>(2)</sup>	air/oil exchanger sold separately	
15 <sup>(1)</sup> - 20 <sup>(1)</sup> 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	

<sup>(1)</sup> Yoke offset on 15 and 20 dia. PN16 and PN25 valves.

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

**OPTIONS AND ACCESSORIES**

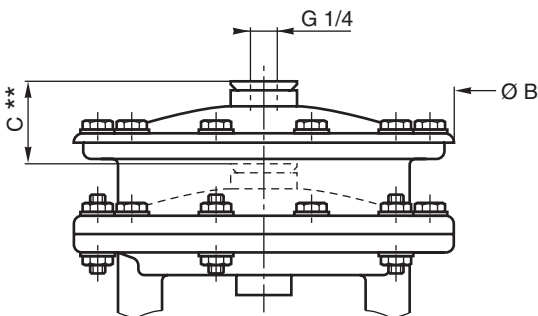
- Ambient temperature -20°C

**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:**

	21800005		16500087	335505
basic number				options

**DIMENSIONS (mm), WEIGHT (kg)**


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

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

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