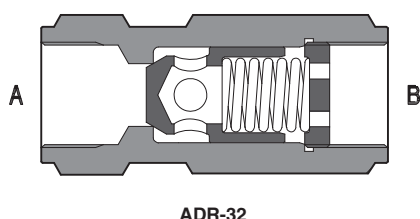
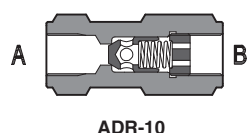


## Check valves type **ADR**

in-line mounting - from G 1/4" to G 1 1/4" threaded ports



ADR are direct operated check valves for in-line mounting available with port size from 1/4" to 1 1/4" GAS.

Cartridge designed to operate in hydraulic systems with hydraulic mineral oil or synthetic fluid having similar lubricating characteristics.

Flow up to **500 l/min**  
Pressure up to **400 bar**

### 1 MODEL CODE

|                                 |   |           |   |                    |               |   |                                                                      |
|---------------------------------|---|-----------|---|--------------------|---------------|---|----------------------------------------------------------------------|
| <b>ADR</b>                      | - | <b>10</b> | / | <b>4</b>           | <b>**</b>     | / | <b>**</b>                                                            |
| Check valve<br>in-line mounting |   |           |   |                    | Series number |   | Fluid temperature:<br>- = -20°C ÷ +80°C<br><b>BT</b> = -40°C ÷ +80°C |
| Size/threaded connections:      |   |           |   | Cracking pressure: |               |   |                                                                      |
| <b>06</b> = G 1/4"              |   |           |   | - = 0,5 bar        |               |   |                                                                      |
| <b>10</b> = G 3/8"              |   |           |   | <b>/2</b> = 2 bar  |               |   |                                                                      |
| <b>15</b> = G 1/2"              |   |           |   | <b>/4</b> = 4 bar  |               |   |                                                                      |
| <b>20</b> = G 3/4"              |   |           |   | <b>/8</b> = 8 bar  |               |   |                                                                      |
| <b>25</b> = G 1"                |   |           |   |                    |               |   |                                                                      |
| <b>32</b> = G 1 1/4"            |   |           |   |                    |               |   |                                                                      |

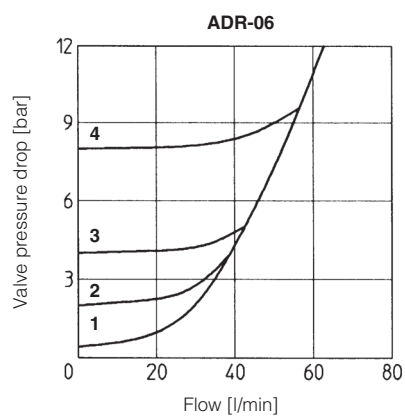
### 2 HYDRAULIC CHARACTERISTICS

|                              |                                                                                      |               |               |               |               |               |
|------------------------------|--------------------------------------------------------------------------------------|---------------|---------------|---------------|---------------|---------------|
| Hydraulic symbol             |  |               |               |               |               |               |
| Valve model                  | <b>ADR-06</b>                                                                        | <b>ADR-10</b> | <b>ADR-15</b> | <b>ADR-20</b> | <b>ADR-25</b> | <b>ADR-32</b> |
| Max recommended flow [l/min] | 40                                                                                   | 80            | 150           | 300           | 360           | 500           |
| Max pressure [bar]           | 400                                                                                  |               |               | 350           |               |               |

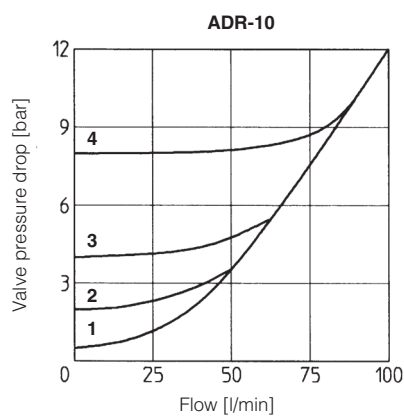
### 3 MAIN CHARACTERISTICS, SEALS AND FLUIDS - for other fluids not included in below table, consult our technical office

|                               |                                                                                                                                  |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Assembly position             | Any position                                                                                                                     |
| Compliance                    | RoHS Directive 2011/65/EU as last update by 2015/65/EU<br>REACH Regulation (EC) n°1907/2006                                      |
| Fluid                         | Hydraulic oil as per DIN 51524 ... 535;                                                                                          |
| Fluid temperature             | Standard version = -20°C ÷ +80°C<br>BT option = -40°C ÷ +80°C                                                                    |
| Recommended viscosity         | 15÷100 mm²/s - max allowed range 2,8 ÷ 500 mm²/s                                                                                 |
| Max fluid contamination level | ISO4406 class 20/18/15 NAS1638 class 9, see also filter section at <a href="http://www.atos.com">www.atos.com</a> or KTF catalog |
| Flow direction                | As shown in the symbol at section <b>2</b>                                                                                       |
| Rated flow                    | See diagrams Q/Δp at section <b>4</b>                                                                                            |

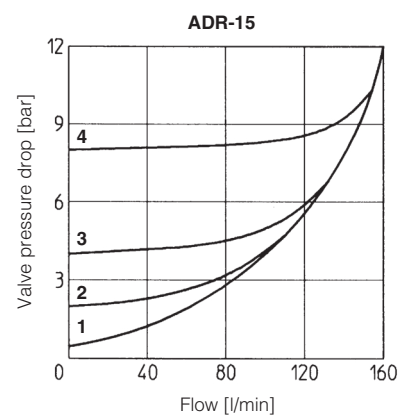
#### 4 FLOW VERSUS PRESSURE DROP DIAGRAMS Based on based on mineral oil ISO VG 46 at 50°C



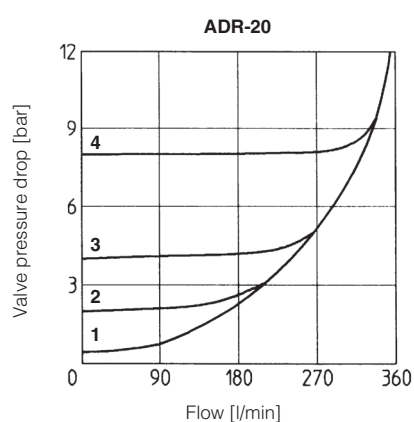
1 = ADR-06  
2 = ADR-06/2  
3 = ADR-06/4  
4 = ADR-06/8



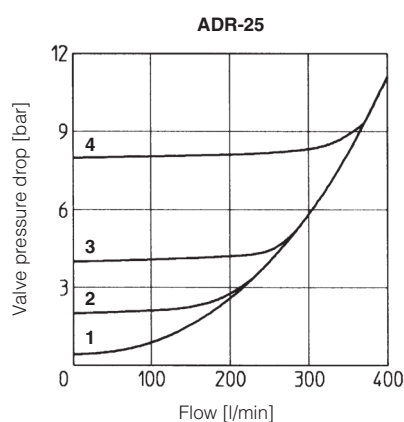
1 = ADR-10  
2 = ADR-10/2  
3 = ADR-10/4  
4 = ADR-10/8



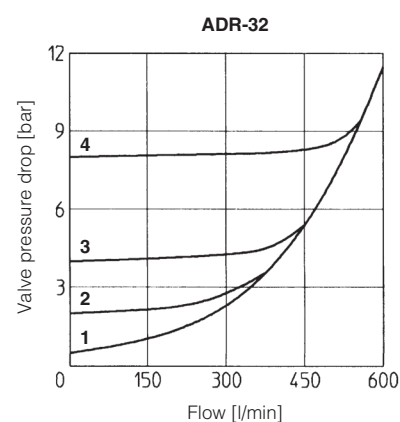
1 = ADR-15  
2 = ADR-15/2  
3 = ADR-15/4  
4 = ADR-15/8



1 = ADR-20  
2 = ADR-20/2  
3 = ADR-20/4  
4 = ADR-20/8

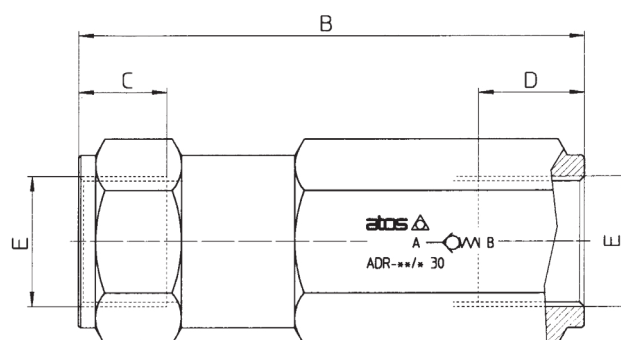
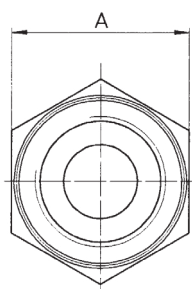


1 = ADR-25  
2 = ADR-25/2  
3 = ADR-25/4  
4 = ADR-25/8



1 = ADR-32  
2 = ADR-32/2  
3 = ADR-32/4  
4 = ADR-32/8

#### 5 DIMENSIONS [mm]



| Model    | A  | B     | C  | D    | E        | Mass [kg] |
|----------|----|-------|----|------|----------|-----------|
| ADR - 06 | 22 | 67    | 12 | 13   | G 1/4"   | 0,2       |
| ADR - 10 | 27 | 70    | 12 | 13   | G 3/8"   | 0,4       |
| ADR - 15 | 32 | 82,5  | 14 | 17   | G 1/2"   | 0,6       |
| ADR - 20 | 36 | 102,5 | 16 | 21,5 | G 3/4"   | 0,9       |
| ADR - 25 | 46 | 120   | 18 | 24,5 | G 1"     | 2,1       |
| ADR - 32 | 55 | 137,5 | 20 | 23   | G 1 1/4" | 2,5       |