

Part number:

**HYDROMA**  
HYDRAULICKÉ SYSTÉMY

**HIDROMA**  
SYSTEMS  
UKŁADY HYDRAULICZNE

**HYDROMA**  
ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

Pilot operated check,  
pilot to open  
Common cavity, Size 10

VSOA-10A

04.33.10 - X - 85 - Z

**RE 18319-35**

Edition: 05.2021

Replaces: 09.2019



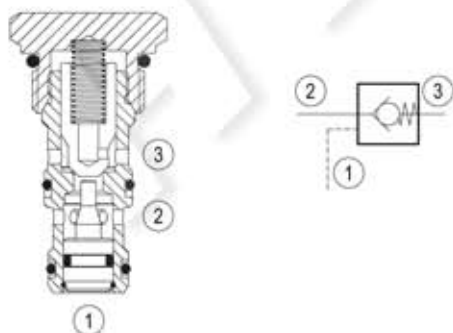
#### Description

When pressure at 2 rises above the spring bias pressure, the poppet is pushed from its seat and flow is allowed from 2 to 3. The valve is normally closed (checked) from 3 to 2. When sufficient pilot pressure is present at port 1, the pilot piston acts to push the poppet from its seat and flow is allowed from 3 to 2. Precision machining and hardening processes allow virtually leak-free performance in the checked condition. In case of valve application in redundancy systems it is especially recommended to use version with sealed pilot piston.

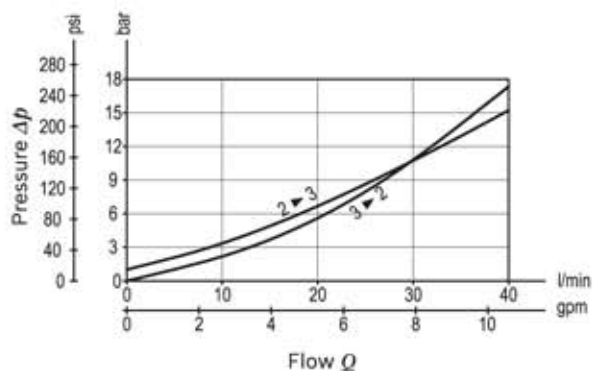
#### Technical data

|   |   |
|---|---|
| Max. operating pressure                   | 350 bar (5000 psi)  |
| Max. flow                                 | 40 l/min. (11 gpm)  |
| Pilot ratio                               | 3:1   |
| Max. internal leakage                     | 5 drops/min.  |
| Fluid temperature range                   | -30 to 100 °C (-22 to 212 °F)   |
| Installation torque                       | 41 - 47 Nm (30 - 35 ft-lbs)   |
| Weight                                    | 0.11 kg (0.24 lbs)  |
| Cavity                                    | CA-10A-3N (see data sheet 18325-70)   |
| Lines bodies and standard assemblies      | Please refer to section "Hydraulic integrated circuit" or consult factory                                   |
| Seal kit <sup>1)</sup>                    | Code: RG10A3010530100<br>material no: R930000990  |
| Fluids                                    | Mineral-based or synthetics with lubricating properties at viscosities of 5 to 800 mm <sup>2</sup> /s (cSt) |
| Recommended degree of fluid contamination | Nominal value max. 10µm (NAS 8) / ISO 4406 19/17/14   |
| Installation position                     | No restrictions   |
| Other Technical Data                      | See data sheet 18350-50   |

<sup>1)</sup> Only external seals for 10 valves



#### Characteristic curve



Ordering code

|          |   |    |   |    |   |
|----------|---|----|---|----|---|
| 04.33.10 | X | 85 | Z | 00 | * |
|----------|---|----|---|----|---|

Pilot operated check, pilot to open

O-Ring on pilot piston

00 No O-Ring

10 With O-Ring (only for Z=03 and Z=14)

85 Common cavity, Size 10

Series 0/A to L  
unchanged performances and dimensions

Version and options standard

| SPRINGS |                                |
|---------|--------------------------------|
|         | Cracking pressure<br>bar (psi) |
| 00      | 1 (15)                         |
| 03      | 3.5 (51)                       |
| 14      | 14 (203)                       |

Preferred types

| Type            | Material number | Type            | Material number |
|-----------------|-----------------|-----------------|-----------------|
| 043310008500000 | R901117416      | 043310108503000 | R901117421      |
| 043310008503000 | R901117420      | 043310108514000 | R930000989      |
| 043310008514000 | R930000988      |                 |                 |

Dimensions

