



# VR\*-I

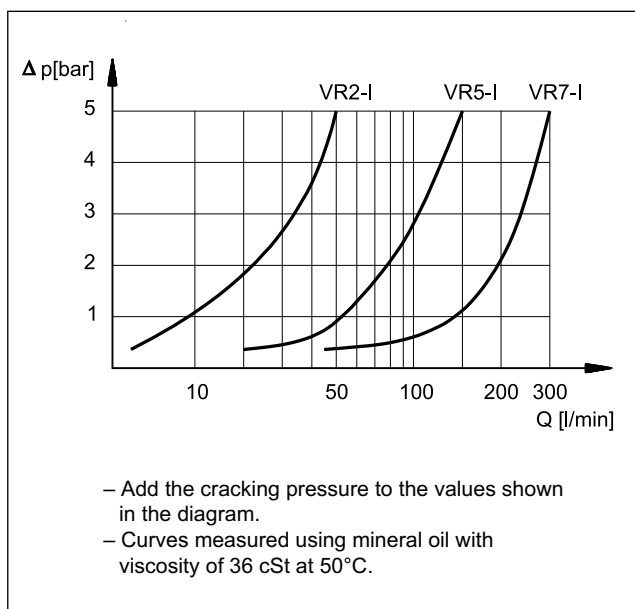
## CHECK VALVES

### SERIES 32

#### CARTRIDGE TYPE

**p** max (see table of performances)  
**Q** max (see table of performances)

#### PRESSURE DROPS $\Delta p$ -Q



#### OPERATING PRINCIPLE

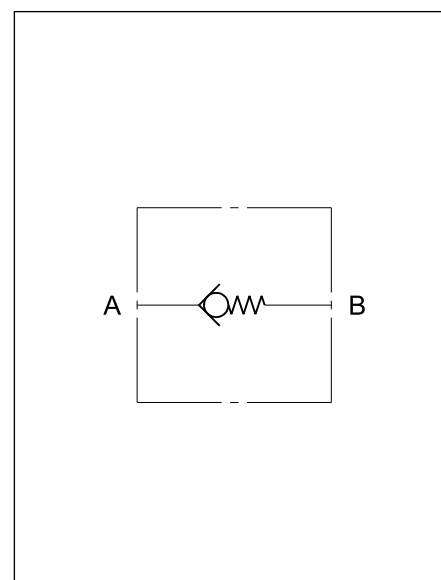
- VR\*-I valves are one-way check valves cartridge type construction and can be used in blocks or panels.
- In rest conditions, the valve poppet, which is a cone on edge seal type, is kept closed by a spring with fixed setting.
- The poppet opens when the pressure in the intake line "A" exceeds the set value of the spring, added to any pressure in the outlet line "B".
- Available in three sizes for flow rates of up to 300 l/min and with three different cracking pressures.

#### PERFORMANCES

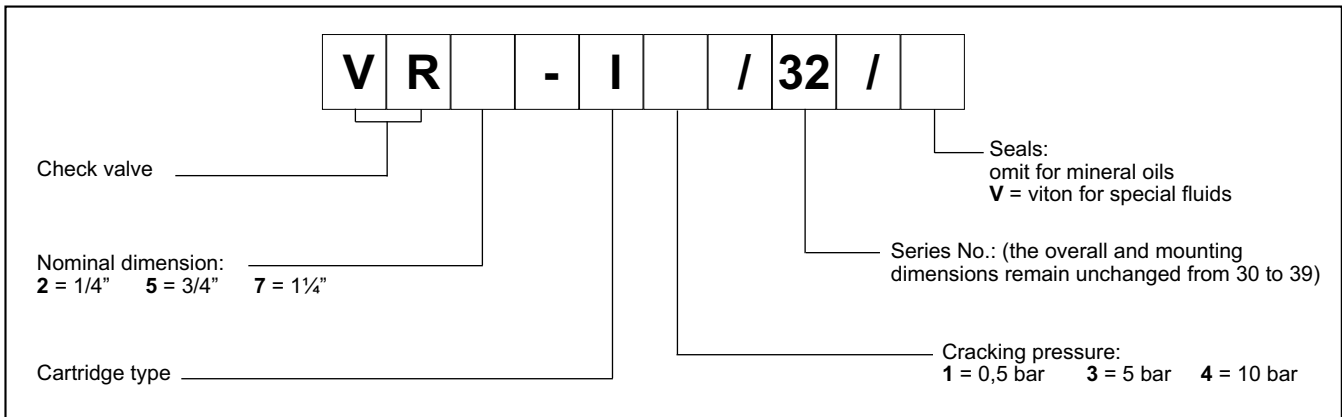
valve code	nominal dimension	maximum flow rate [l/min]	mass [kg]	max operating pressure [bar]	
				continuous	peak
VR 2- I	1/4"	50	0,1	320	320
VR 5- I	3/4"	150	0,2	250	320
VR 7- I	1 1/4"	300	0,8		

Ambient temperature range	°C	-20 / +60
Fluid temperature range	°C	-20 / +80
Fluid viscosity range	cSt	10 + 400
Fluid contamination degree	according to ISO 4406:1999 class 20/18/15	
Recommended viscosity	cSt	25

#### HYDRAULIC SYMBOL



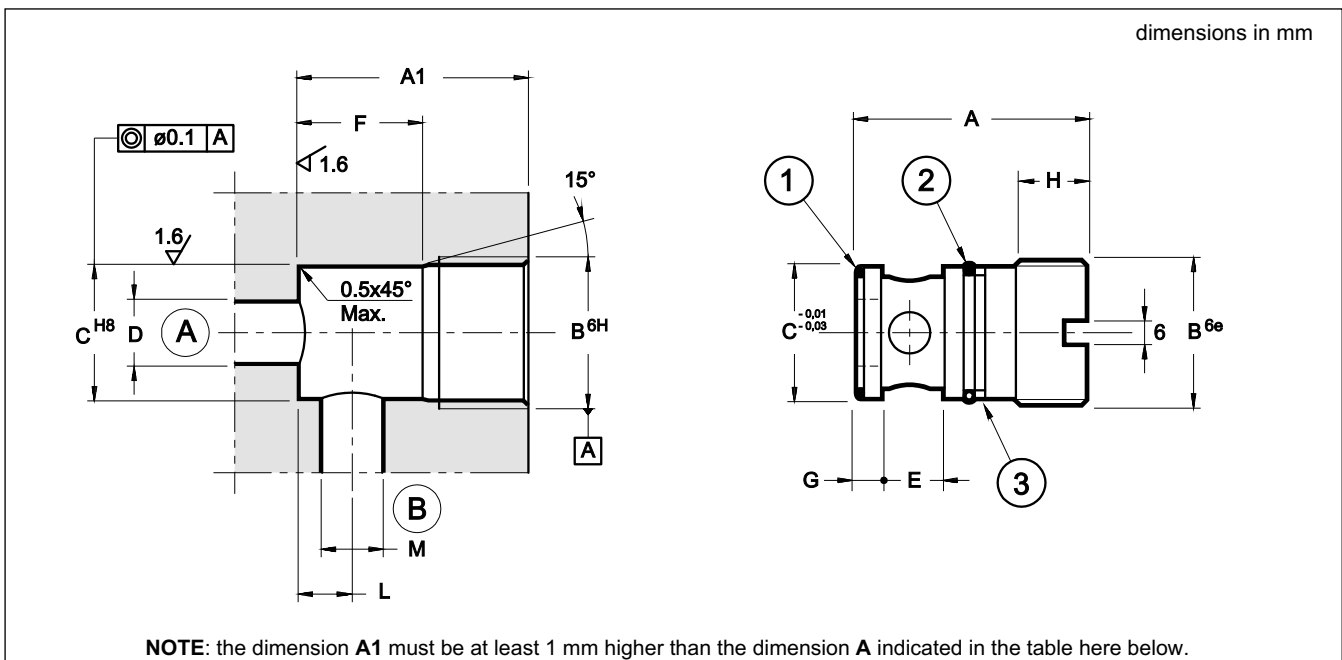
### 1 - IDENTIFICATION CODE



### 2 - HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals. For fluids HFDR type (phosphate esters) use FPM seals (code V). For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department. Using fluids at temperatures higher than 80 °C causes a faster degradation of the fluid and of the seals characteristics. The fluid must be preserved in its physical and chemical characteristics.

### 3 - OVERALL AND MOUNTING DIMENSIONS



	A	B	ØC	ØD max	E	F	G	H	L	ØM max	1	2	3	tightening torque
<b>VR 2 - I</b>	41	M24x1,5	22	9	10	22	4	14	9	9	OR 119 (15.08x2.62)	OR 3068 (17.13x2.62)	Parbak 8-115	25 Nm
<b>VR 5 - I</b>	43	M30x1,5	27	15	13,5	26	4,5	12	11	12	OR 3081 (20.24x2.62) 90 Shore	OR 2093 (23.52x1.78)	Parbak 8-021	50 Nm
<b>VR 7 - I</b>	72	M45x2	41	21	20	40	7,5	22	16,5	16	OR 3137 (34.60x2.62)	OR 4137 (34.52x3.53) 90 Shore	Parbak 8-220	80 Nm



**VSK\***  
**SHUTTLE VALVE**  
**SERIES 10**

**CARTRIDGE TYPE**

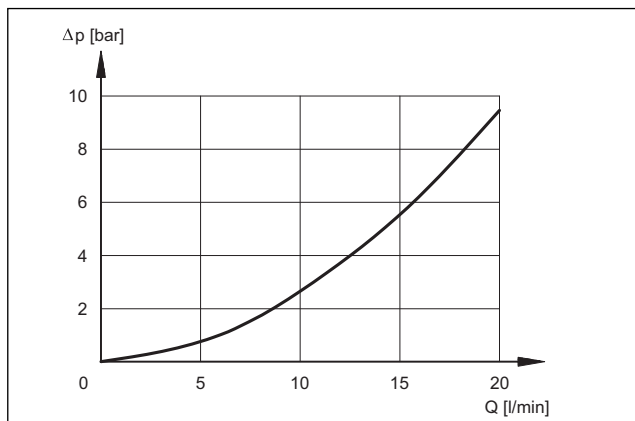
**p** max **350** bar

**Q** max (see table of performances)

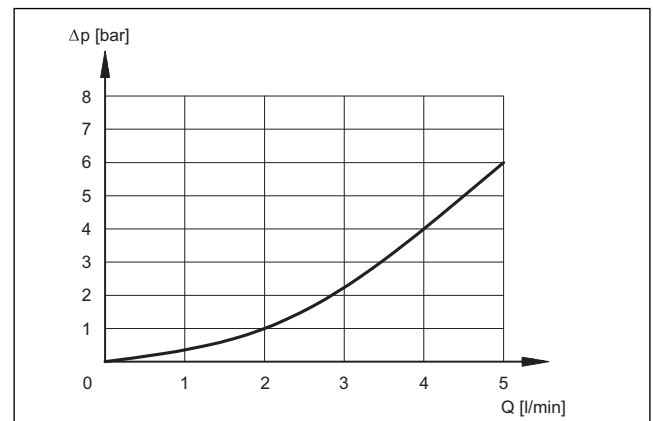
**OPERATING PRINCIPLE**

- The VSK\* valves are shuttle type, cartridge version and it can be used in panels and blocks.
- The valve select the higher pressure signal between “1” and “3” through the output port “2”
- The VSK1 reaches flows up to 20 l/min.
- The VSK2 is a shuttle valve for pilot signals up to a 3 l/min flows.

**VSK1 PRESSURE DROPS  $\Delta p$ -Q**



**VSK2 PRESSURE DROPS  $\Delta p$ -Q**

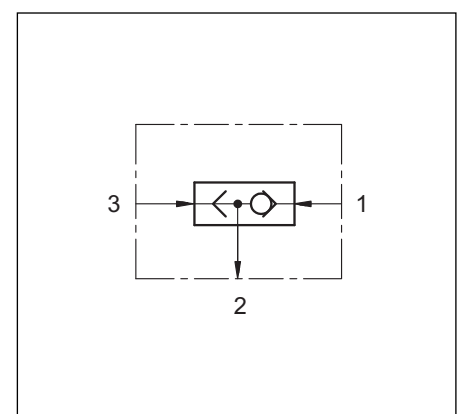


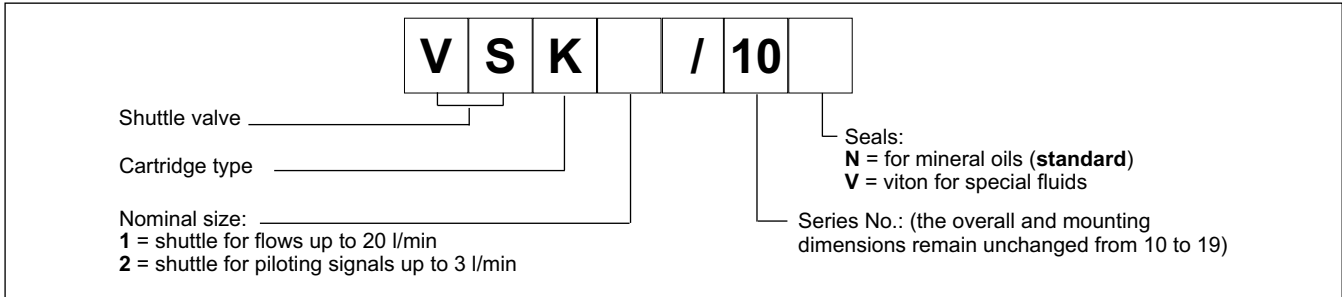
**PERFORMANCES**

valve	max flow [l/min]	mass [kg]
<b>VSK1</b>	20	0,013
<b>VSK2</b>	3	0,013

Ambient temperature range	°C	-20 / +60
Fluid temperature range	°C	-20 / +80
Fluid viscosity range	cSt	10 ÷ 400
Fluid contamination degree	According to ISO 4406:1999 class 20/18/15	
Recommended viscosity	cSt	25

**HYDRAULIC SYMBOL**



**1 - IDENTIFICATION CODE**

**2 - HYDRAULIC FLUIDS**

Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals (code N). For fluids HFDR type (phosphate esters) use FPM seals (code V). For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department. Using fluids at temperatures higher than 80 °C causes a faster degradation of the fluid and of the seals characteristics. The fluid must be preserved in its physical and chemical characteristics.

**3 - OVERALL AND MOUNTING DIMENSIONS**
