Part number:

HYDROMA
HYDRAULICKÉ SYSTÉMY

HIDROMA SISTEMS
UKŁADY HYDRAULICZNE

HYDROMA
ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ



VR*-I

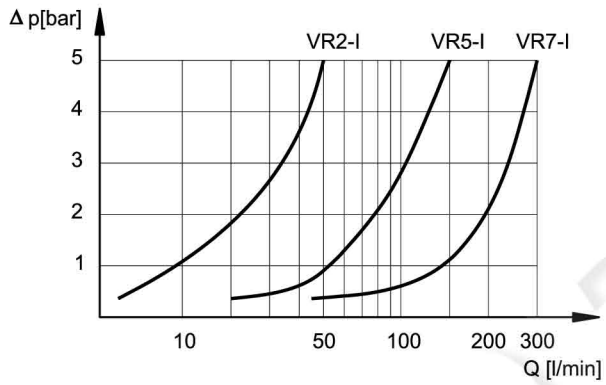
CHECK VALVES

SERIES 32

CARTRIDGE TYPE

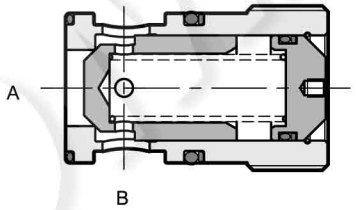
p max (see table of performances)
Q max (see table of performances)

PRESSURE DROPS ΔP-Q



– Add the cracking pressure to the values shown in the diagram.
– Curves measured using mineral oil with viscosity of 36 cSt at 50 °C.

OPERATING PRINCIPLE



— VR*-I valves are one-way check valves with spring, cartridge type, that 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 at the inlet port “A” exceeds the set value of the spring, additional to any pressure in the outlet port “B”.
— Available in three sizes for flow rates of up to 300 l/min. Three cracking pressures values available.
— The zinc-nickel finishing treatment makes the VR*-I suitable to withstand exposure to salt spray for 600 hours. (value established according to UNI EN ISO 9227 and UNI EN ISO 10289)

PERFORMANCES

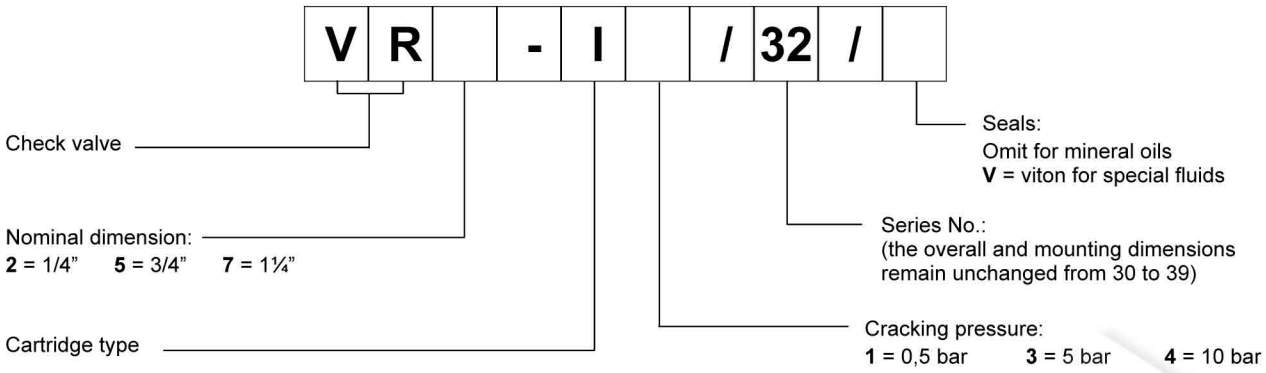
valve code	nominal dimension	maximum flow rate [l/min]	mass [kg]	max operating pressure [bar]	
				continuous	peak
VR2-I	1/4”	50	0,1	320	320
VR5-I	3/4”	150	0,2	250	320
VR7-I	1¼”	300	0,8		

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
Surface finishing	zinc-nickel surface treatment	

HYDRAULIC SYMBOL



1 - IDENTIFICATION CODE



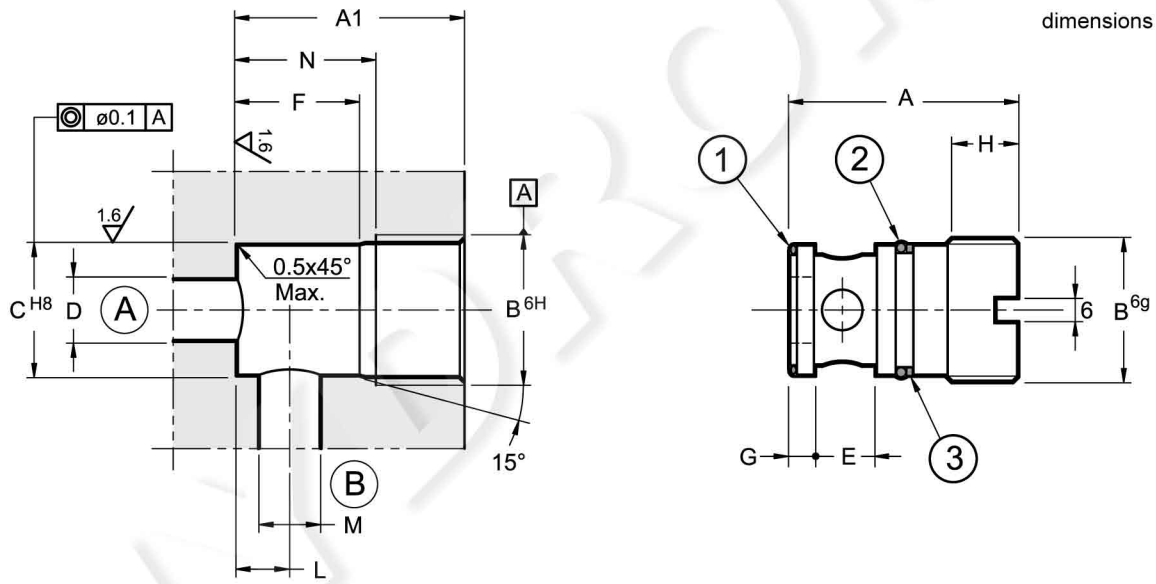
2 - HYDRAULIC FLUIDS

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

dimensions in mm



NOTE: the dimension **A1** must be at least 1 mm higher than the dimension **A** indicated in the table here below.

	A	B	ØC	ØD max	E	F	G	H	L	ØM max	N	1	2	3	tightening torque
VR2-I	41	M24x1,5	22	9	10	22	4	14	9	9	26	OR 119 (15.08x2.62) 70 Sh	OR 3068 (17.13x2.62) 70 Sh	Parbak 8-115	25 Nm
VR5-I	43	M30x1,5	27	15	13,5	26	4,5	12,5	11	12	30	OR 3081 (20.24x2.62) 90 Sh	OR 2093 (23.52x1.78) 70 Sh	Parbak 8-021	50 Nm
VR7-I	72	M45x2	41	21	20	40	7,5	22	16,5	16	49	OR 3137 (34.60x2.62) 70 Sh	OR 4137 (34.52x3.53) 90 Sh	Parbak 8-220	80 Nm