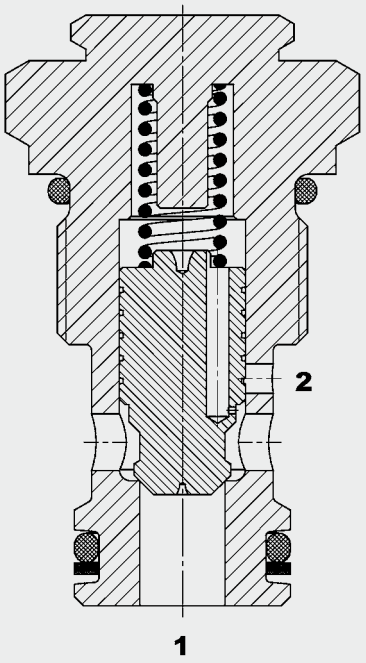
Up to 100 bar
Up to 350 l/min

Check Valve
Poppet Type
Metric Cartridge – 350 bar
RVM10120-51

FUNCTION



The RVM06020-51 is a direct-acting, spring-loaded, poppet check valve.

When there is no flow through the valve, the spring holds the cone poppet in the closed position and therefore shuts off port 2 from port 1. The valve opens when the pressure at port 1 is higher than the pressure at port 2, including the pressure created by the spring force.

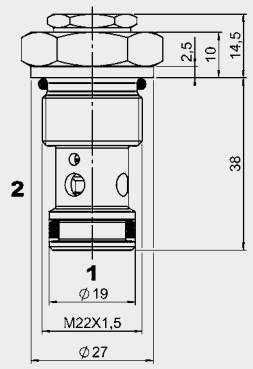
FEATURES

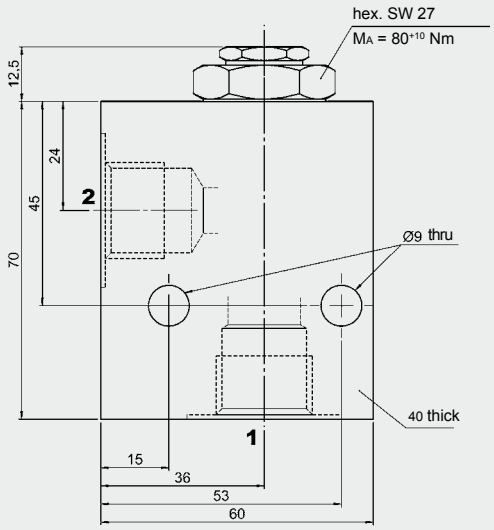
- High performance version for high cycle rate
- Main application is to prevent uncontrolled movement or creeping of loaded cylinders and also to shut-off sections of the system
- External surfaces zinc-plated
- Hardened and ground valve components to ensure minimal wear and extended service life
- Improved wear resistance, achieved by a guided and dampened piston

SPECIFICATIONS

Operating pressure:	max. 350 bar	
Nominal flow:	max. 100 l/min	
Internal leakage:	leakage-free (max. 5 drops ≙ 0,25 cm³/min at 350 bar)	
Cracking pressure:	0.5 bar (others on request)	
Media operating temperature range:	min. -30 °C to max. +100 °C	
Ambient temperature range:	min. -30 °C to max. +100 °C	
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2	
Viscosity range:	min. 2.8 mm²/s to max. 800 mm²/s	
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner	
$MTTF_d$:	150 years (see "Conditions and instructions for valves" in brochure 5.300)	
Installation:	No orientation restrictions	
Material:	Valve body:	free-cutting steel
	Poppet:	hardened and ground steel
	Seals:	NBR (standard) FKM (optional, media temperature range -20 °C to +120 °C)
	Back-up rings:	PTFE
Cavity:	10120	
Weight:	0.12 kg	

DIMENSIONS

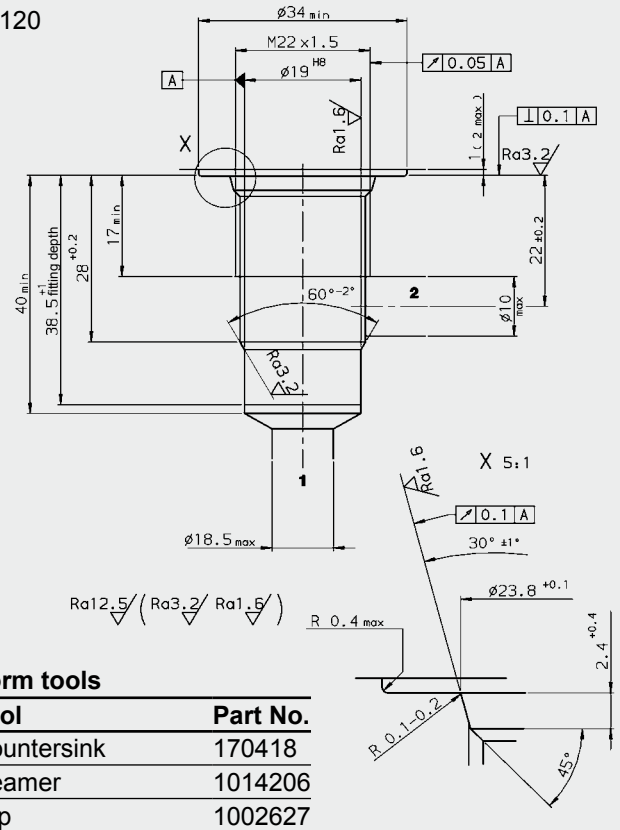




millimeter
subject to technical modifications

CAVITY

10120



Form tools

Tool	Part No.
Countersink	170418
Reamer	1014206
Tap	1002627
Plug gauge	169394

millimeter
subject to technical modifications

MODEL CODE

RVM 10120 – 51 – C – N – 0.5

Basic model
Check valve, metric

Cavity
10120 = 2-way cavity

Type
51 = poppet, optimized for high cycle rate

Body and ports
C = cartridge

Seals
N = NBR (standard)
V = FKM (optional)

Cracking pressure
0.5 = 0.5 bar
Others on request

Standard models

Model code	Part No.
RVM10120-51-C-N-0.5	3420466

Standard in-line bodies

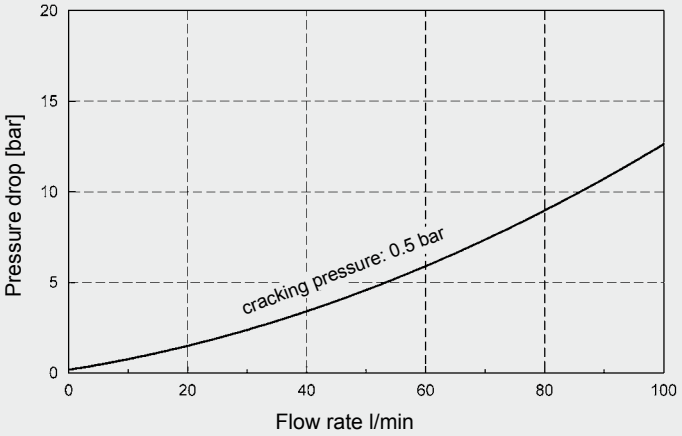
Code	Part No.	Material	Ports	Pressure
R10120-01X-01	395234	Steel, zinc-plated	G 1/2	420 bar
R10120-01X-02	395235	Steel, zinc-plated	M22x1.5	420 bar

Seal kits

Code	Material	Part No.
SEAL KIT 10120-NBR	NBR	3382346
SEAL KIT 10120-FKM	FKM	3178281

PERFORMANCE

Measured at ν = 34 mm²/s, T_{oil} = 46 °C



Note

The information in this brochure relates to the operating conditions and applications described. For applications or operating conditions not described, please contact the relevant technical department.
Subject to technical modifications.

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