

Throttle check valve 500

Type SDRVM

NG 4
up to 25 l/min

Features

- Adjustable while under pressure
- High-precision control
- Bi-directional flow

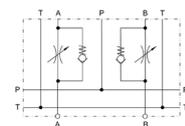


Design

- In manifolds
- External housing corrosion-free material
- The valve setting can be locked by a counter nut

Applications

The throttle check valve SDRMV is a part of the 500+ serie and consists of adjustable throttle valves SDM and check valves RVM (size G1/4), which are integrated in a valve block. Depending on the closing direction of the check valve is a throttling of the flow in one direction and a low-loss flow through the check valve in the other direction. Herewith it is possible to set the speed of the cylinder or motor into the requested direction. The throttle check valve is located between a seated valve and the cylinder or motor. Various versions are shown below in the different symbols.



Technical data

Hydraulic fluid	mineral oil according to DIN 51524 (other fluids on request)	
Fluid temperature range	-20 to 80 °C	
Ambient temperature range	-30 to 50 °C	
Viscosity range	5 to 420 mm ² /s	
Porting	NG 4	
Max. operating pressure port 1	700 bar	
Max. operating pressure port 2	700 bar	
Max. flow rate	25 l/min	
Pressure loss	at 12 l/min (fully open) and 32 mm ² /s:	35 bar
	at 25 l/min (fully open) and 32 mm ² /s:	155 bar
Filtration (recommendation)	Class 17/15/12 according to ISO/DIN 4406	
Materials	Manifold:	corrosion-free material
	Cartridge body:	hardened corrosion-free steel
	Check valve housing:	hardened corrosion-free steel
	Supporting ring:	PTSM

Key sheet

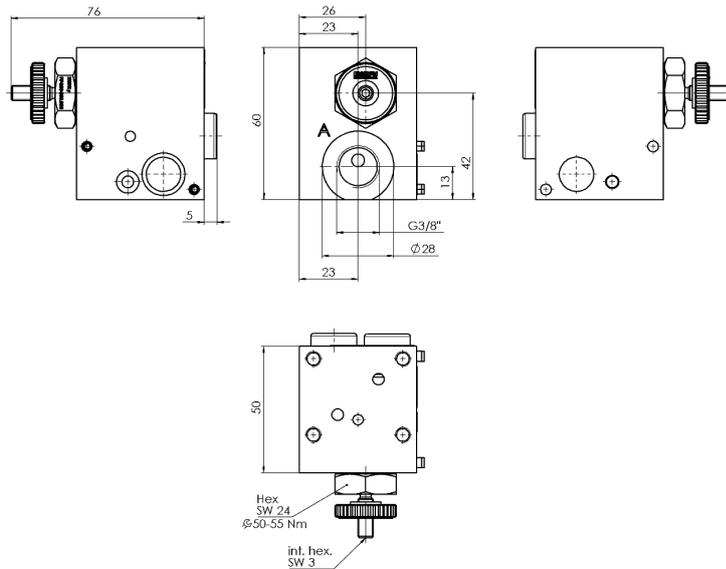
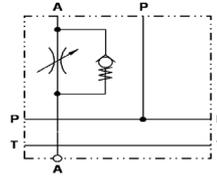
Example	SDRV	M	-	4B	-	G1/4ABR43	-	V	-	A		00
Throttle check valve												Special design 01 ... 99 (00 for standard)
Type 500+												
Nominal size 4 Connection Bieri ...B												Part index Please leave blank (small letters a-d; different letters do not effect interchangeability)
Design in manifold for valve bank G1/4ABR43 G1/4, Throttle A and B, from working port to 4/3 seated valve G3/8ABR43 G3/8, Throttle A and B, from working port to 4/3 seated valve G1/4ABV43 G1/4, Throttle A and B, from seated valve 4/3 to working port G3/8ABV43 G3/8, Throttle A and B, from seated valve 4/3 to working port G1/4ABR42 G1/4, Throttle A and B, from working port to 4/2 seated valve G3/8ABR42 G3/8, Throttle A and B, from working port to 4/2 seated valve G1/4ABV42 G1/4, Throttle A and B, from seated valve 4/2 to working port G3/8ABV42 G3/8, Throttle A and B, from seated valve 4/2 to working port G1/4AR33 G1/4, Throttle A, from working port to 3/3 to seated valve G3/8AR33 G3/8, Throttle A, from working port to 3/3 to seated valve G1/4AV33 G1/4, Throttle A, from 3/3 seated valve to working port G3/8AV33 G3/8, Throttle A, from 3/3 seated valve to working port G1/4AR32 G1/4, Throttle A, from working port to 3/2 seated valve G3/8AR32 G3/8, Throttle A, from working port to 3/2 seated valve G1/4AV32 G1/4, Throttle A, from 3/2 seated valve to working port G3/8AV32 G3/8, Throttle A, from 3/2 seated valve to working port												
Seals V (FPM) other materials on request												Desing revision Capital letters A-Z; identical letters equal same connecting dimensions

Product information

**In manifold for valve bank with
 2/2-way seated valve**

Typ	Arikelnummer
SDRVM-4B-G3/8AR22-V-A*00	4140132

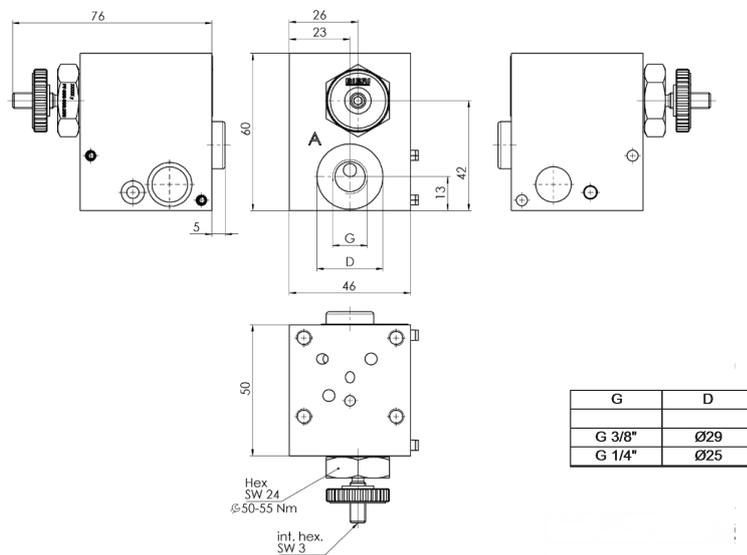
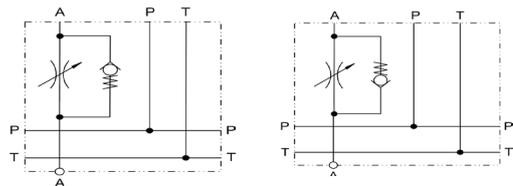
Hydrauli schematics



**In manifold for valve bank with
 3/2-way seated valve**

Type	Part number
SDRVM-4B-G1/4AR32-V-A*00	3831322
SDRVM-4B-G3/8AR32-V-A*00	3831323
SDRVM-4B-G1/4AV32-V-A*00	3831324
SDRVM-4B-G3/8AV32-V-A*00	3831335

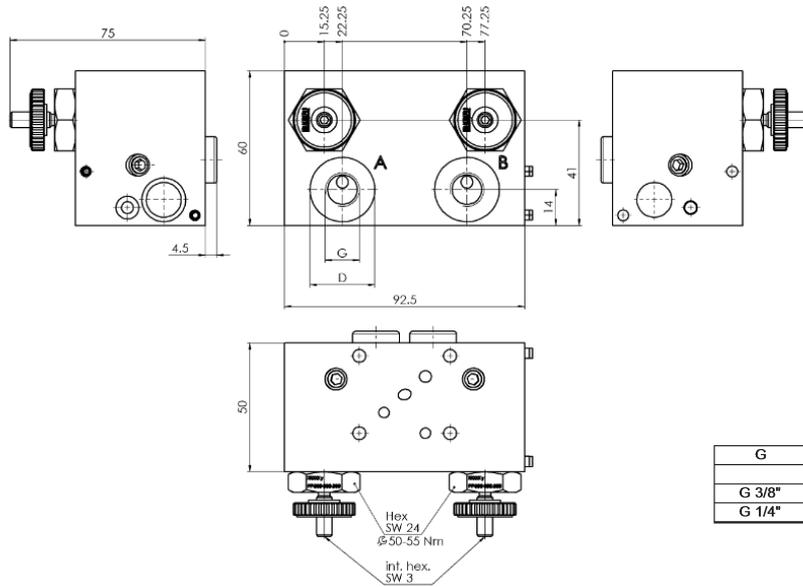
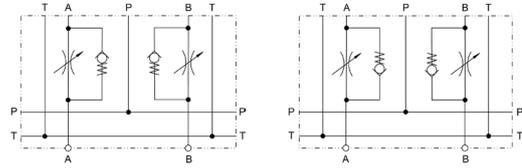
Hydrauli schematics



**In manifold for valve bank with
 4/2-way seated valve**

Type	Article number
SDRVM-4B-G1/4ABR42-V-A*00	3831302
SDRVM-4B-G3/8ABR42-V-A*00	3831304
SDRVM-4B-G1/4ABV42-V-A*00	3831315
SDRVM-4B-G3/8ABV42-V-A*00	3831316

Hydraulic schematics



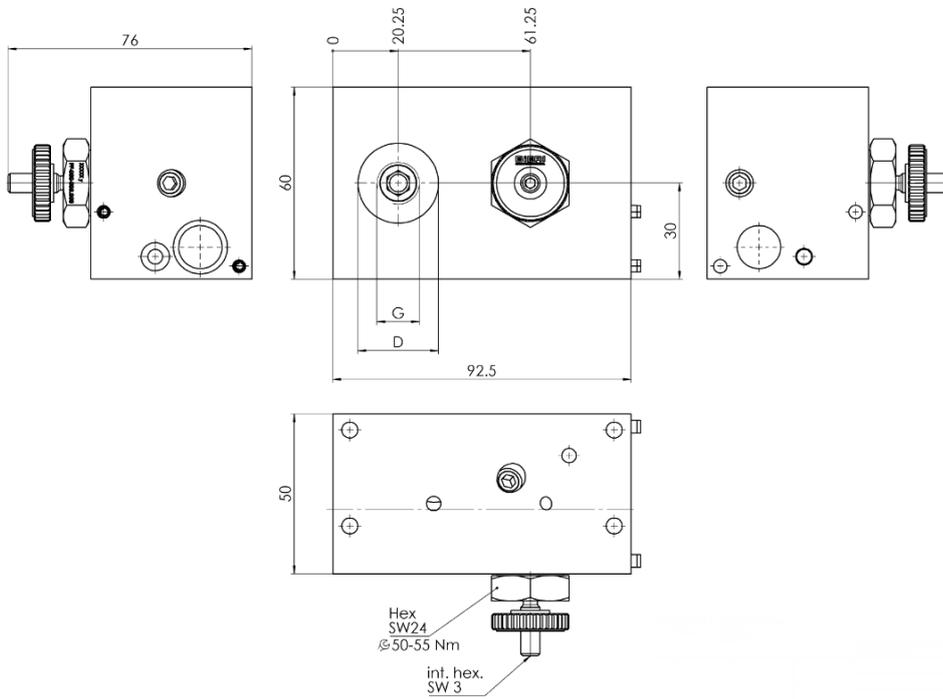
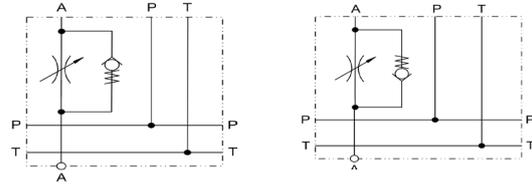
Type SDRVM

NG 4
up to 25 l/min

**In manifold for valve bank with
3/3-way seated valve**

Type	Part number
SDRVM-4B-G1/4AR33-V-A*00	3831318
SDRVM-4B-G3/8AR33-V-A*00	3831319
SDRVM-4B-G1/4AV33-V-A*00	3831320
SDRVM-4B-G3/8AV33-V-A*00	3831321

Hydraulic schematics

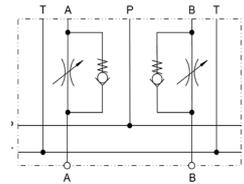
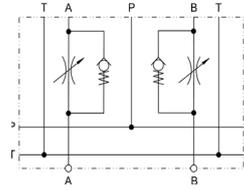


G	D
G 3/8"	Ø29
G 1/4"	Ø25

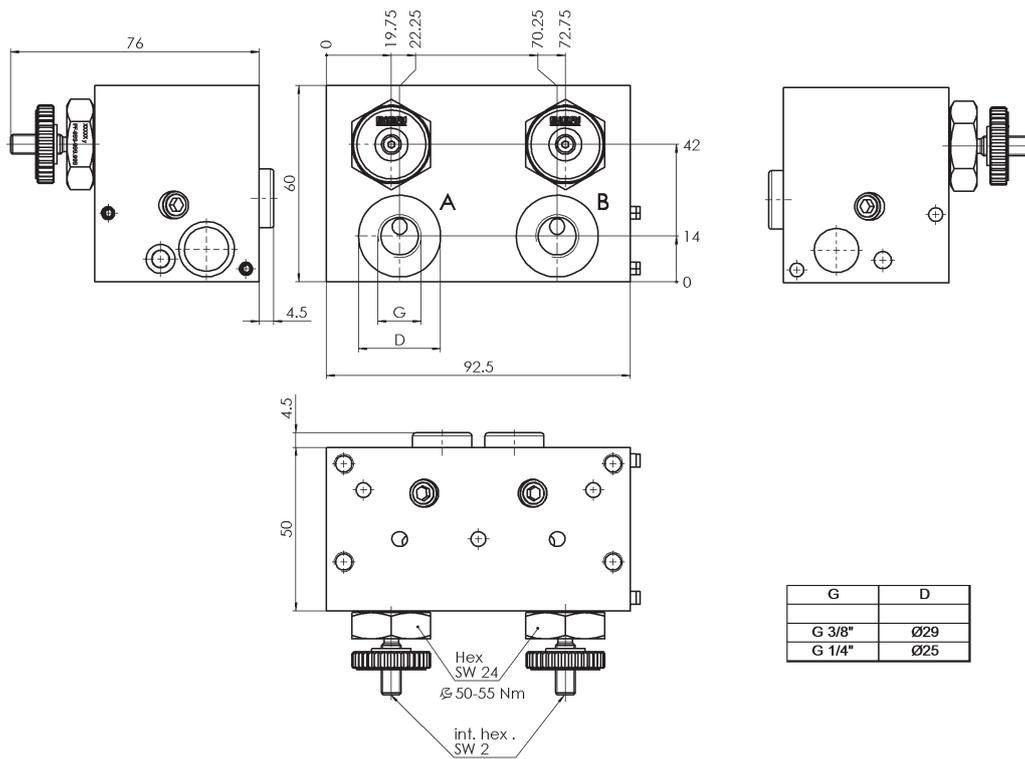
**In manifold for valve bank with
 4/3-way seated valve**

Hydraulic schematics

Type	Part number
SDRVM-4B-G1/4ABR43-V-A*00	3831297
SDRVM-4B-G3/8ABR43-V-A*00	3831299
SDRVM-4B-G1/4ABV43-V-A*00	3831300
SDRVM-4B-G3/8ABV43-V-A*00	3831301



Dimensional drawing



Pressure loss chart for check valve RVM

Screw-in thread	Version	Max. flow rate l/min	Pressure loss at max. flow rate
G1/4	A	25	3 bar
G1/4	R	20	8 bar

Characteristics Δp (Q) (fully open)

