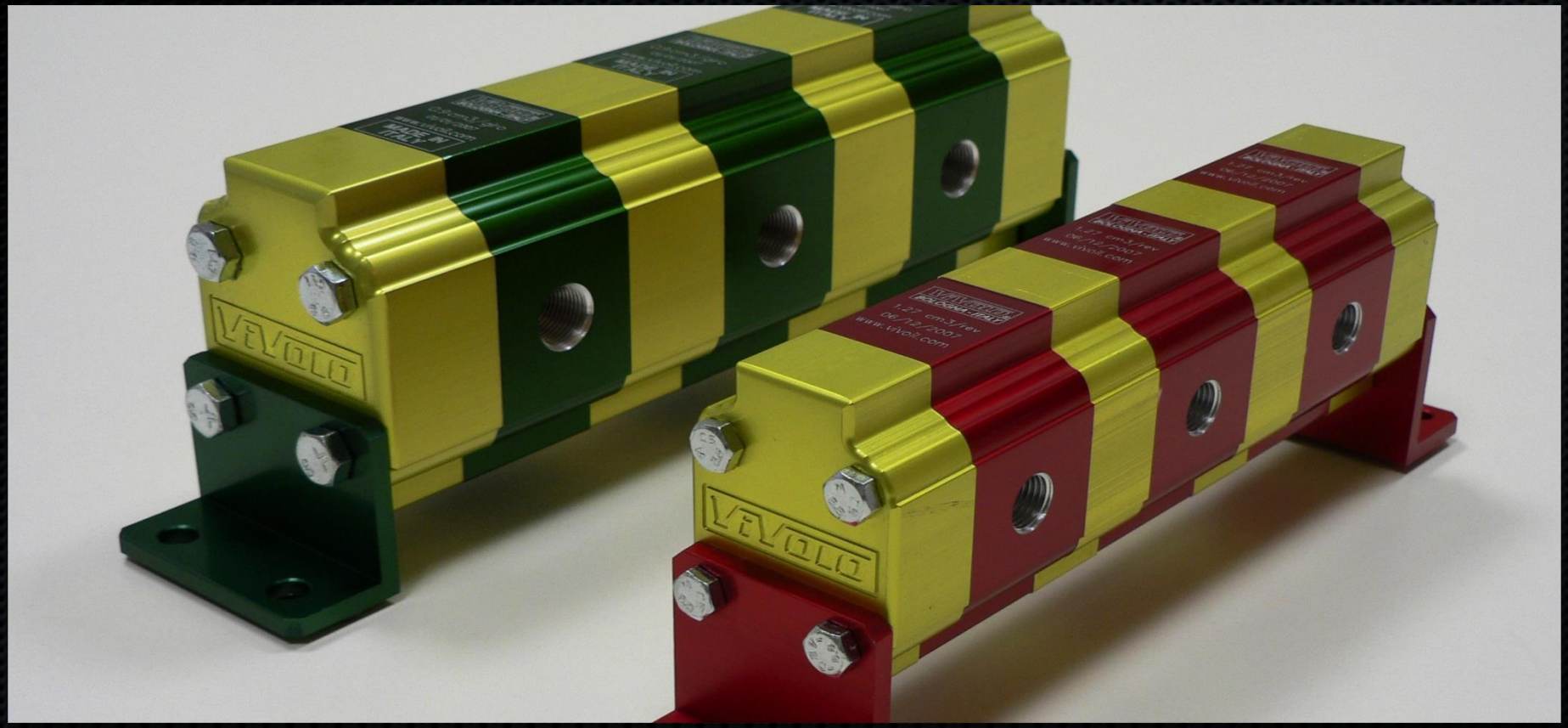


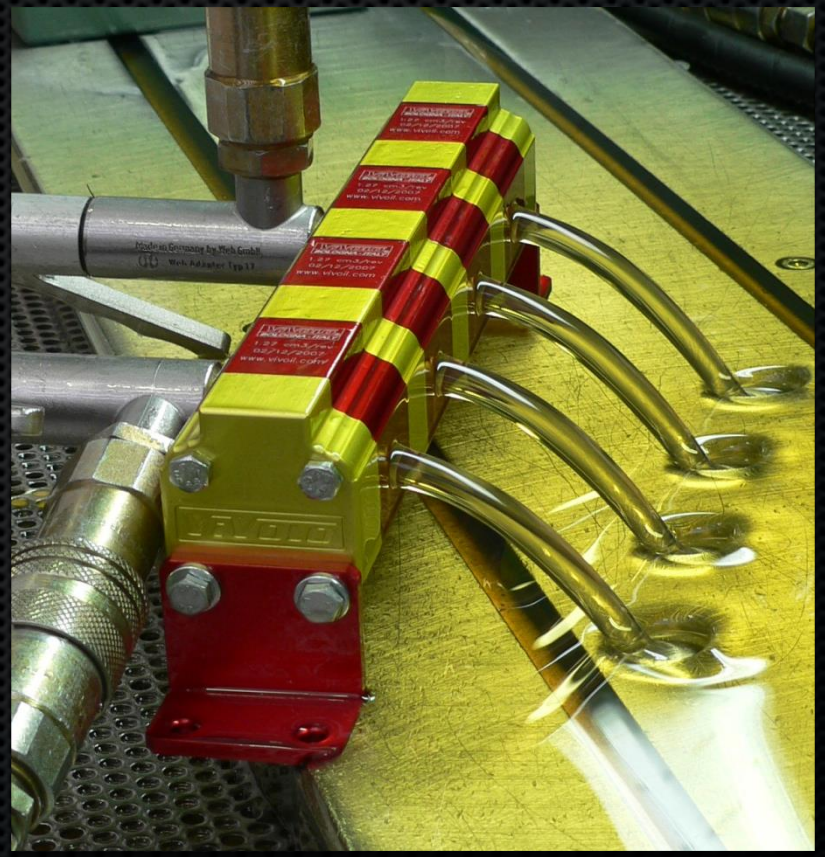
FLOW DIVIDERS

ViVOLO

General Training

What is a flow divider?

A way to distribute precisely an oil flow.



Where are they used?

- Flow partition
- Flow combination
- Pressure Amplifier

Product Range

Group 0
(0.17, 0.25, 0.45, 0.57, 0.76, 0.98, 1.27, 1.52, 2.30 cc)

Group 1
(0.9, 1.2, 1.7, 2.2, 2.6, 3.2, 3.8, 4.3, 4.9, 5.9, 6.5, 7.8, 9.8 cc)

Group 2
(4, 6, 9, 11, 14, 17, 19, 22, 26, 30, 34, 40 cc)

Group 3
(15, 18, 21, 27, 32, 38, 43, 47, 54, 64, 70, 74, 90 cc)

Different Versions

- No valve RV – D
- Single Valve RV - S
  Phase correction for all element in the opening direction
- Multiple valve RV - V
  One valve for each element
  phase correction on both direction

Codierungssystem

Familie	Typologie	Anzahl Elemente	Ventil Typologie	Hubraum Codifizierung
9R	D (No Valve)	XX	-	XX
	S (Single Valve)		X	
	V (Multiple Valve – Anti Cavitation Valve)		X	

Example:

3 Elements Flow Divider 2.2 cc single valve (70-210 bar)

9R S 03 D 20

Special Versions

- **Motors**

  One motor element to help during the starting phase
  (useful with single action cylinders without load)

- **External Shaft**

  On the last element an external shaft

  (useful to connect flow rate measurement or rpm)

- **Different Dimensional Groups Elements**

How to choose a flow divider ?

First Step: Displacement

INLET FLOW RATE/N° ELEMENT = SINGLE ELEM. FLOW RATE
SINGLE ELEMENT FLOW RATE/2000 = DISPLACEMENT

Second Step: Pressure

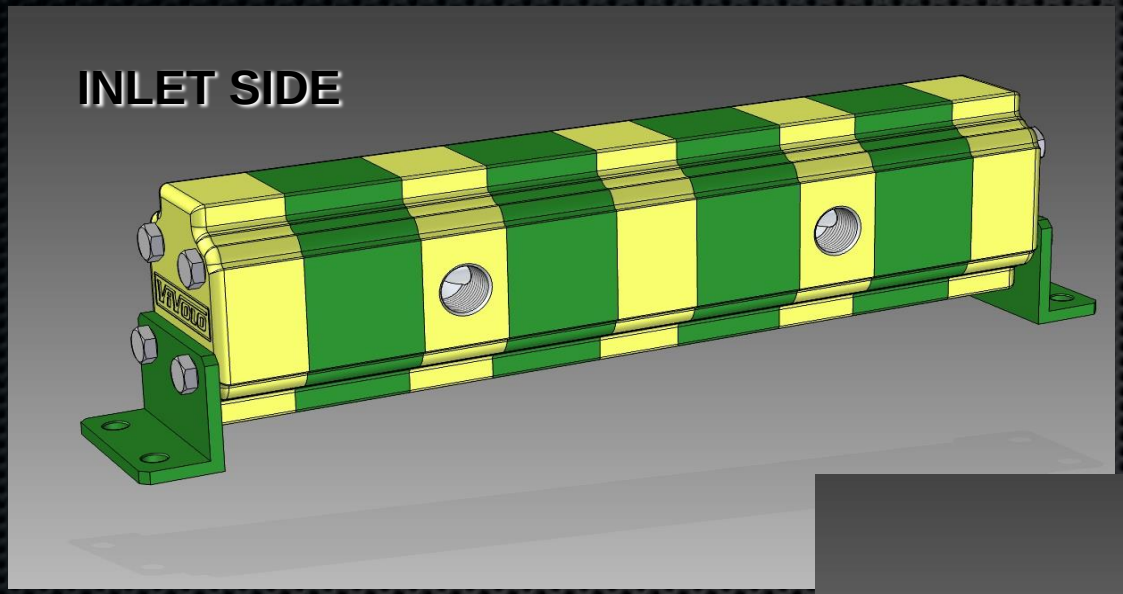
Check if the working pressure is accept.

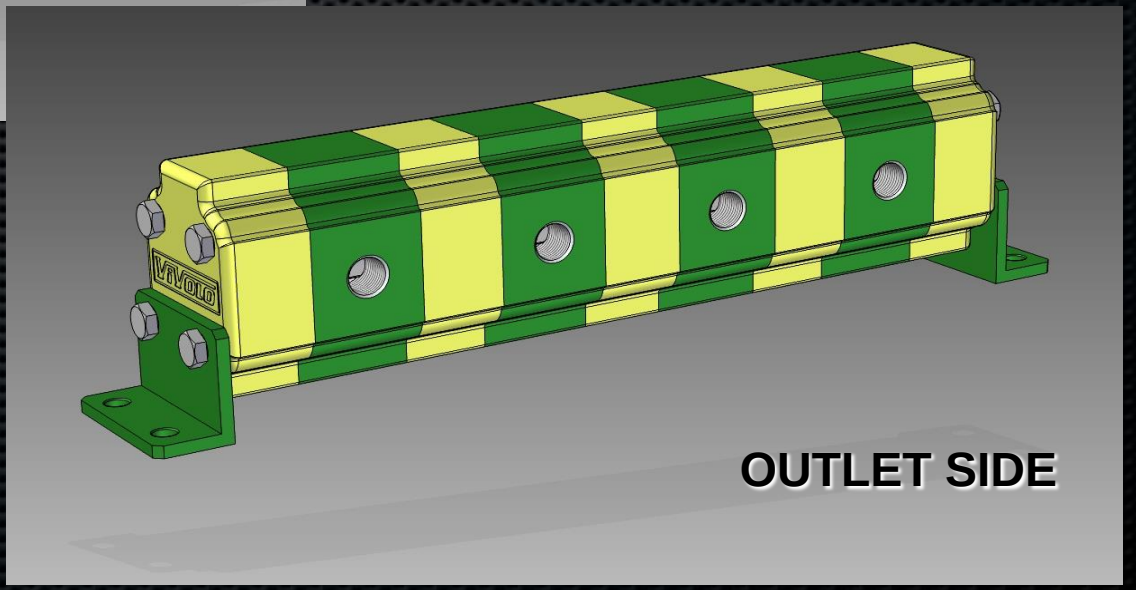
Thrid Step: Flow Divider Typology (Serie D, S, V)

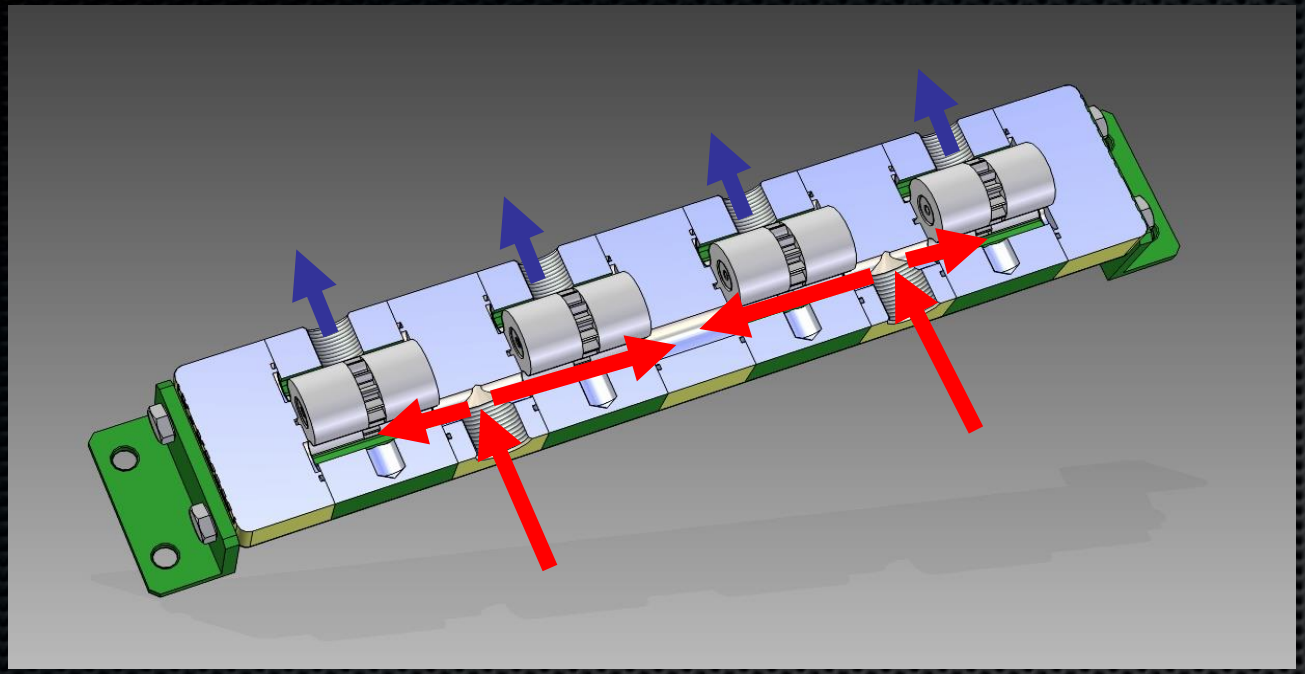
Forth Step: Internal or External rain (Serie S, V)

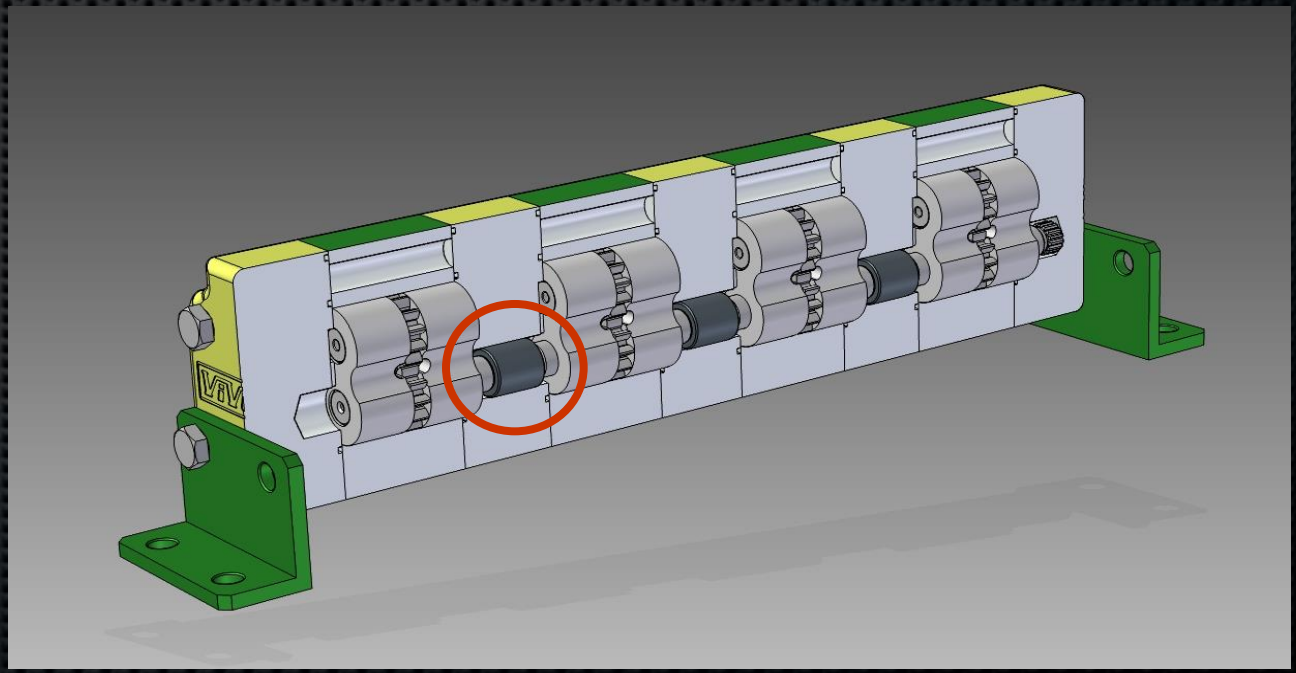
How is made a flow divider:

RV - D



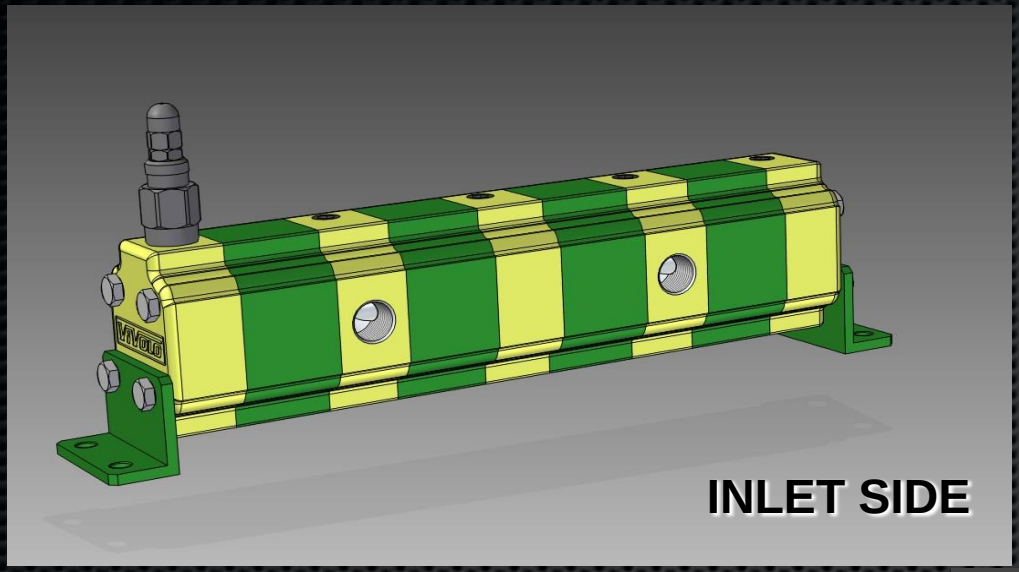


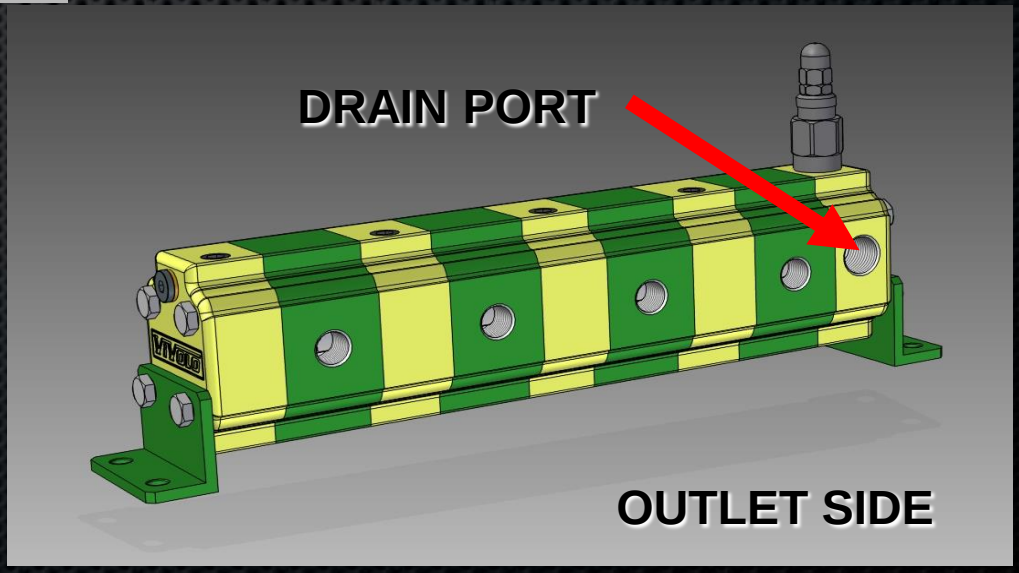




RV - D

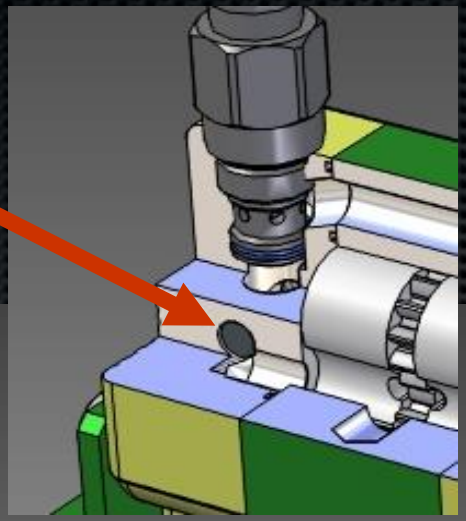
RV - S

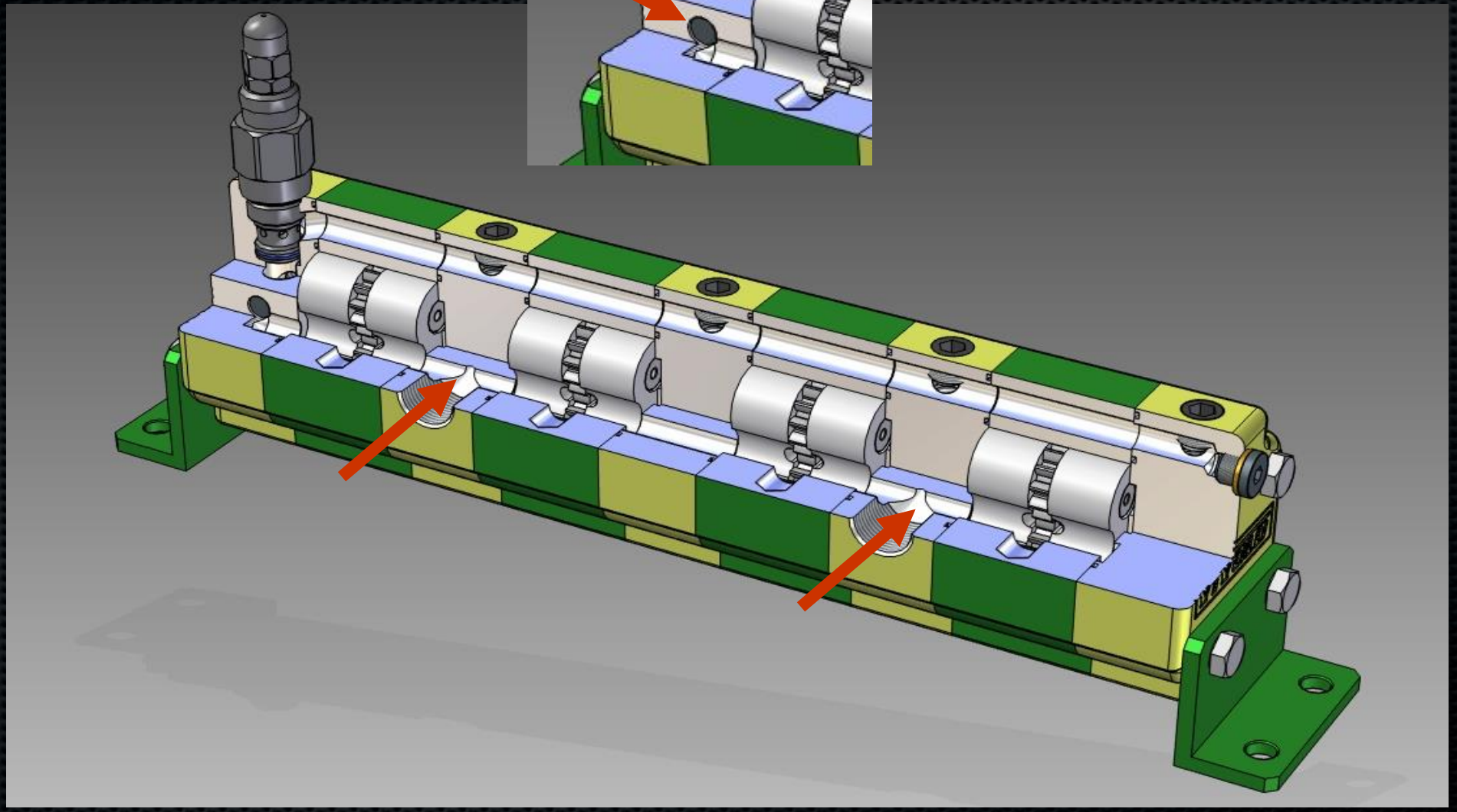




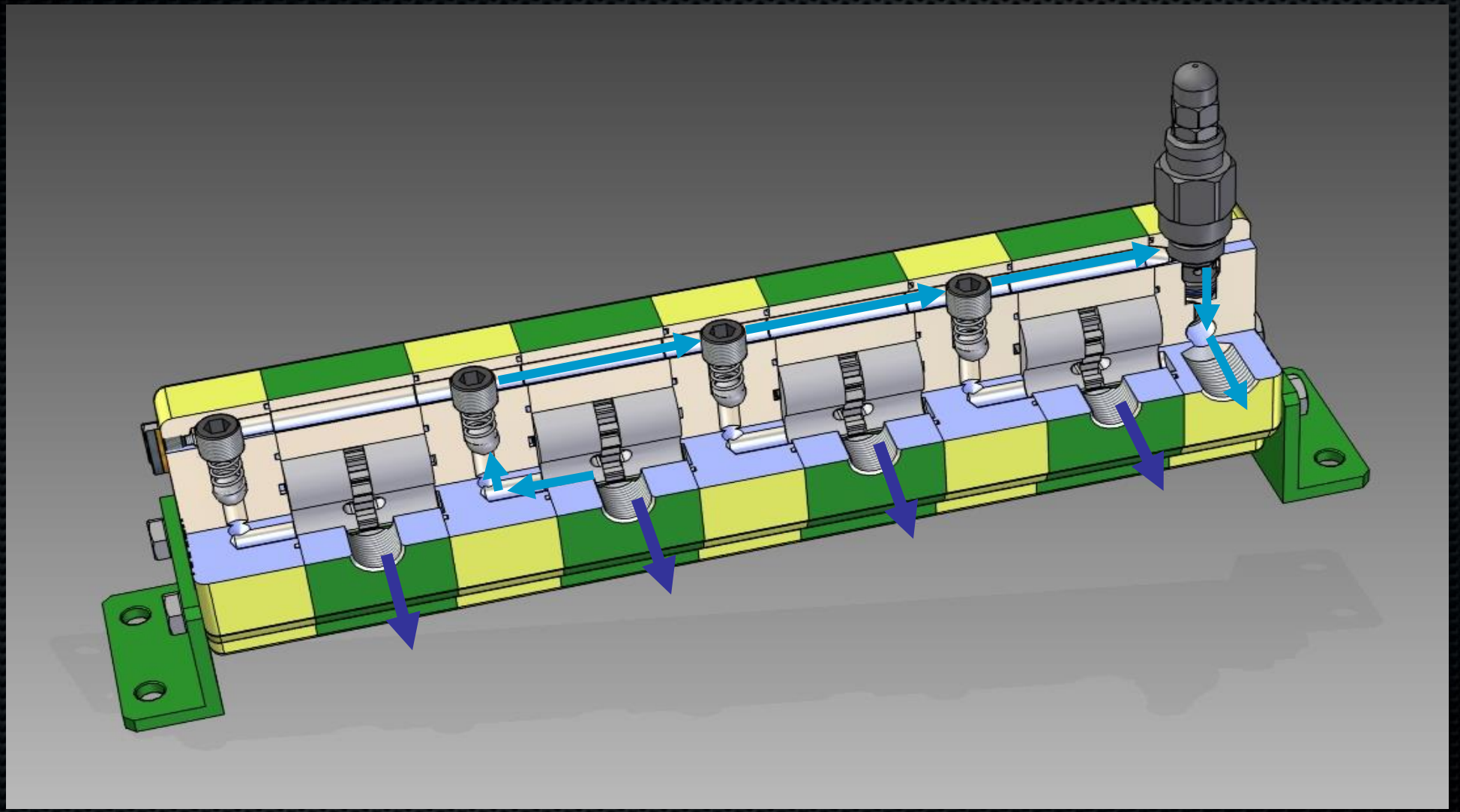
RV - S

INTERN
DRAIN

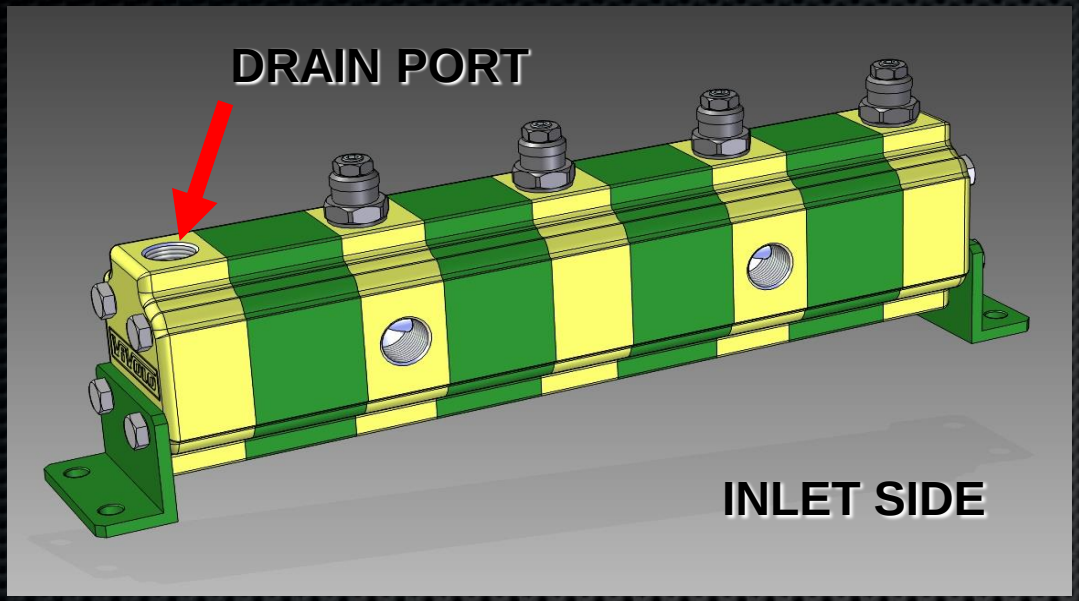


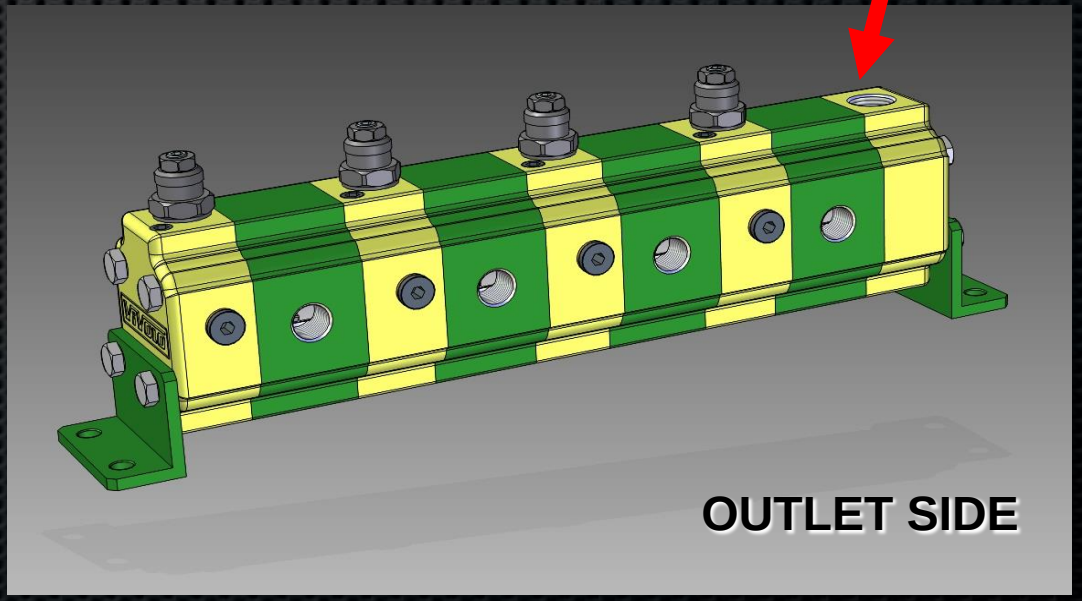


RV - S

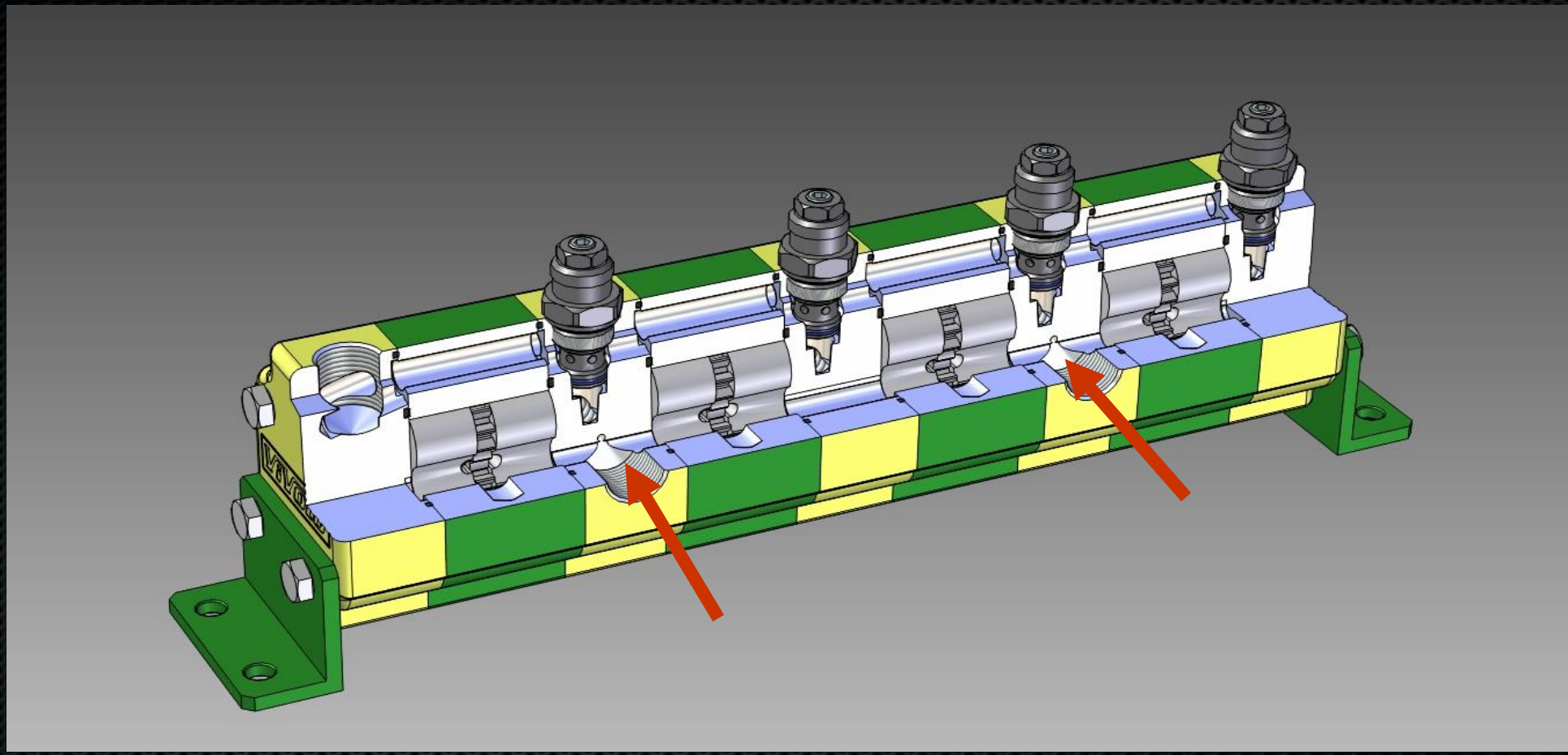


RV - V

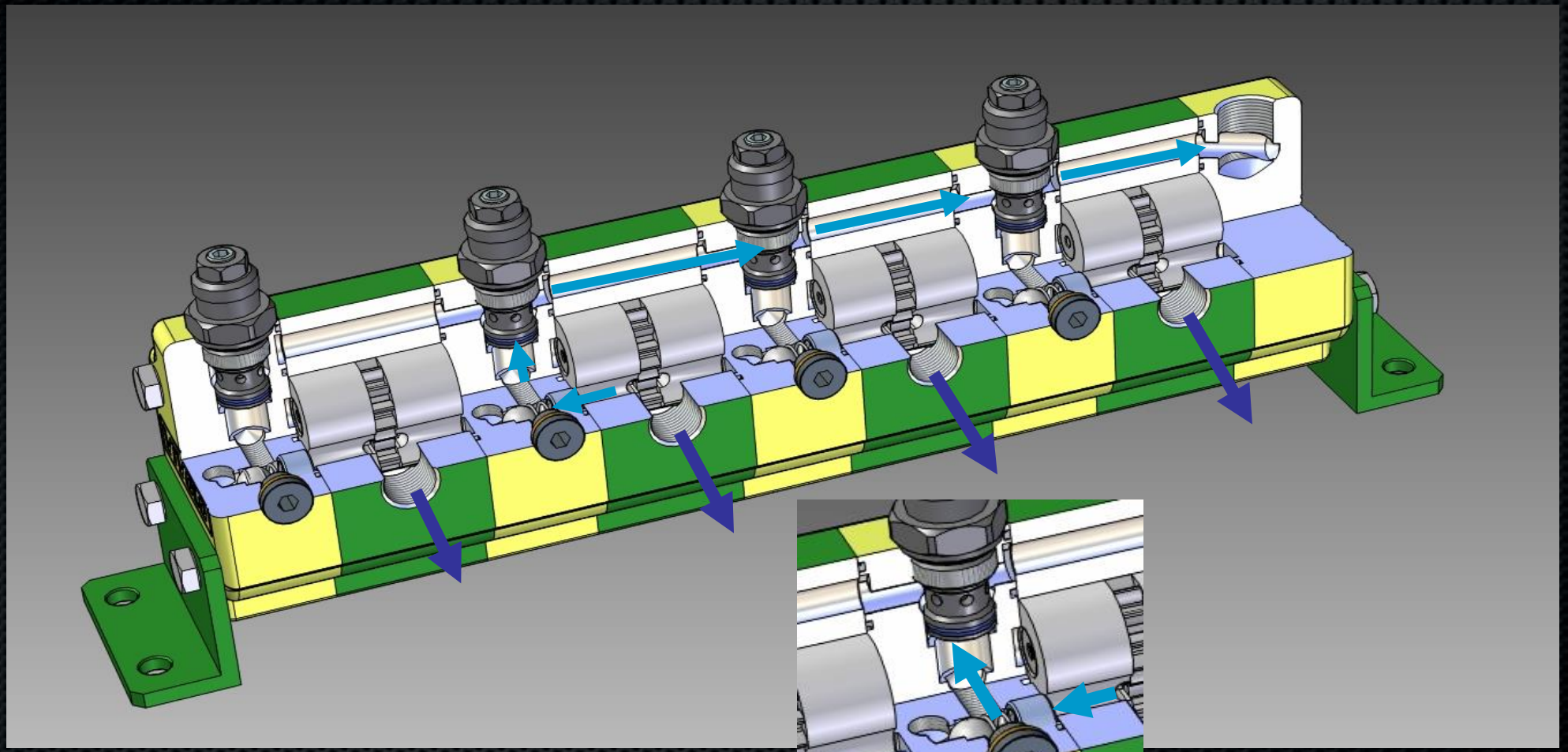




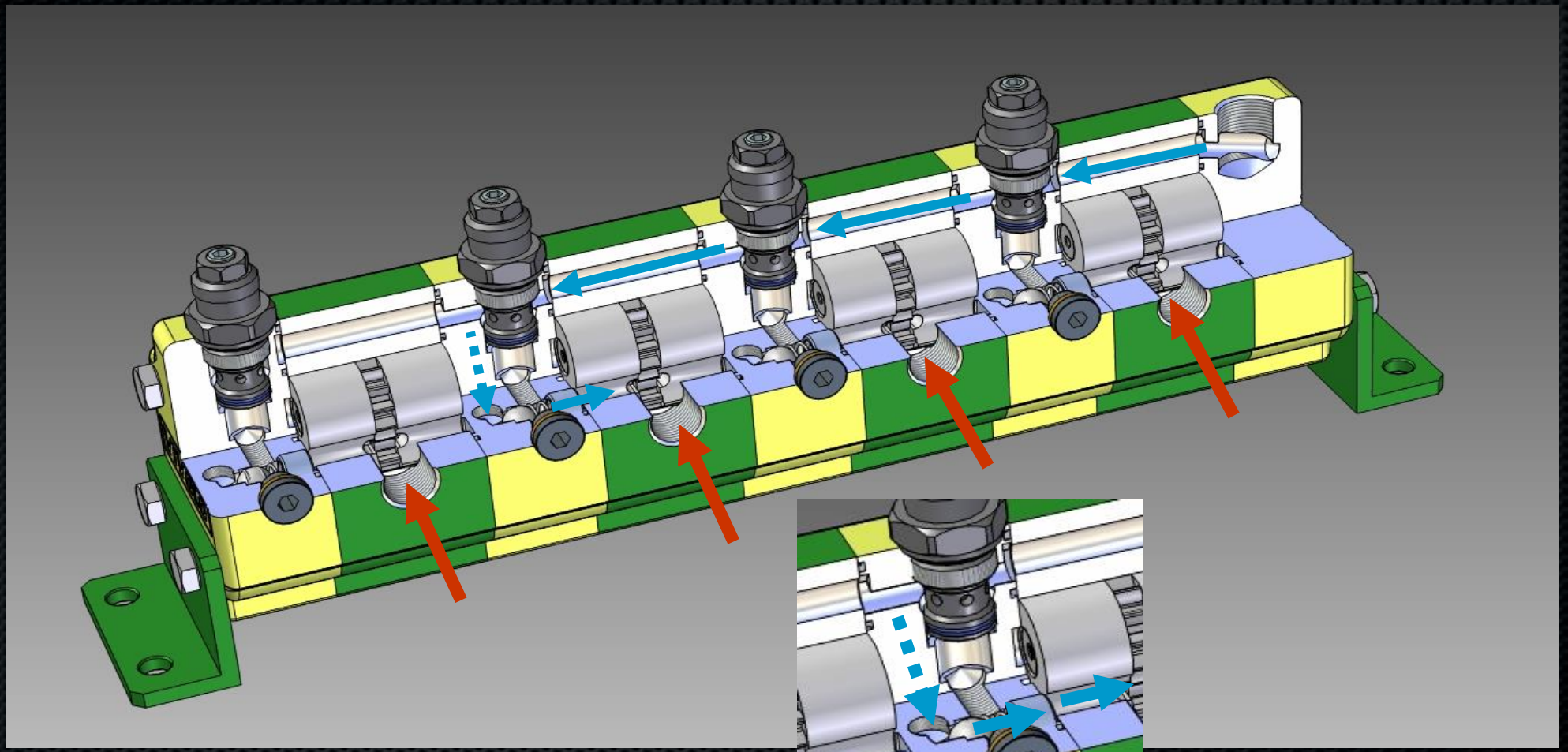
RV - V

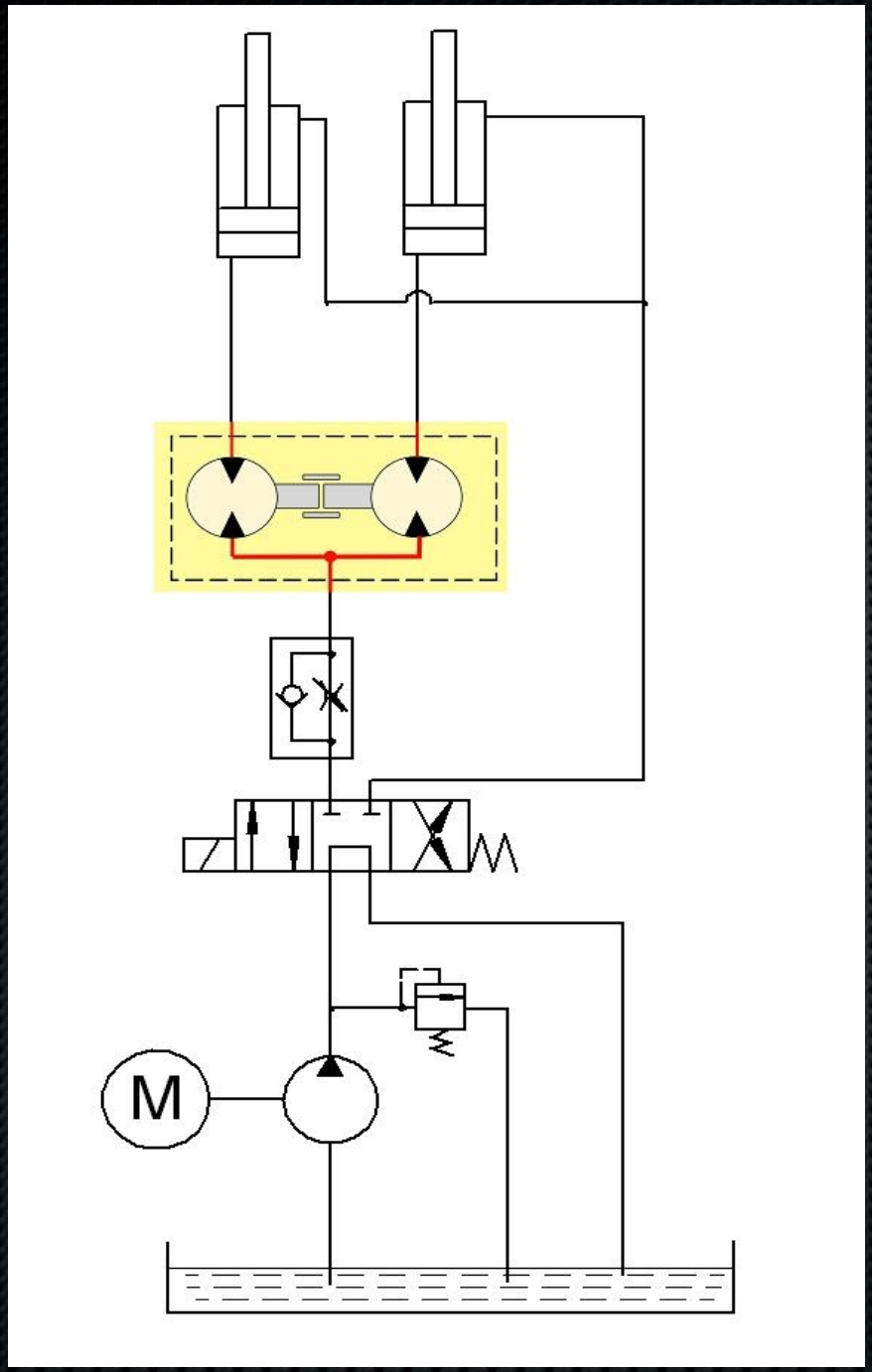


RV - V

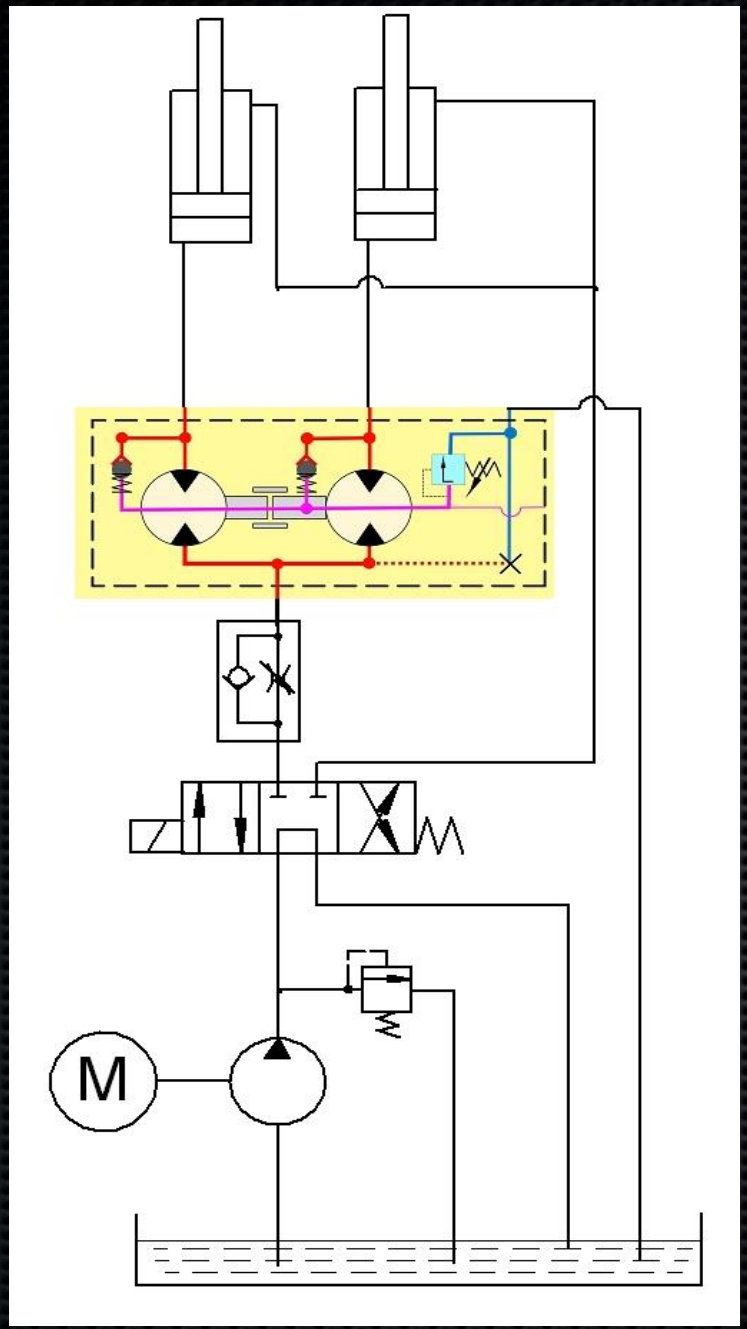


RV - V



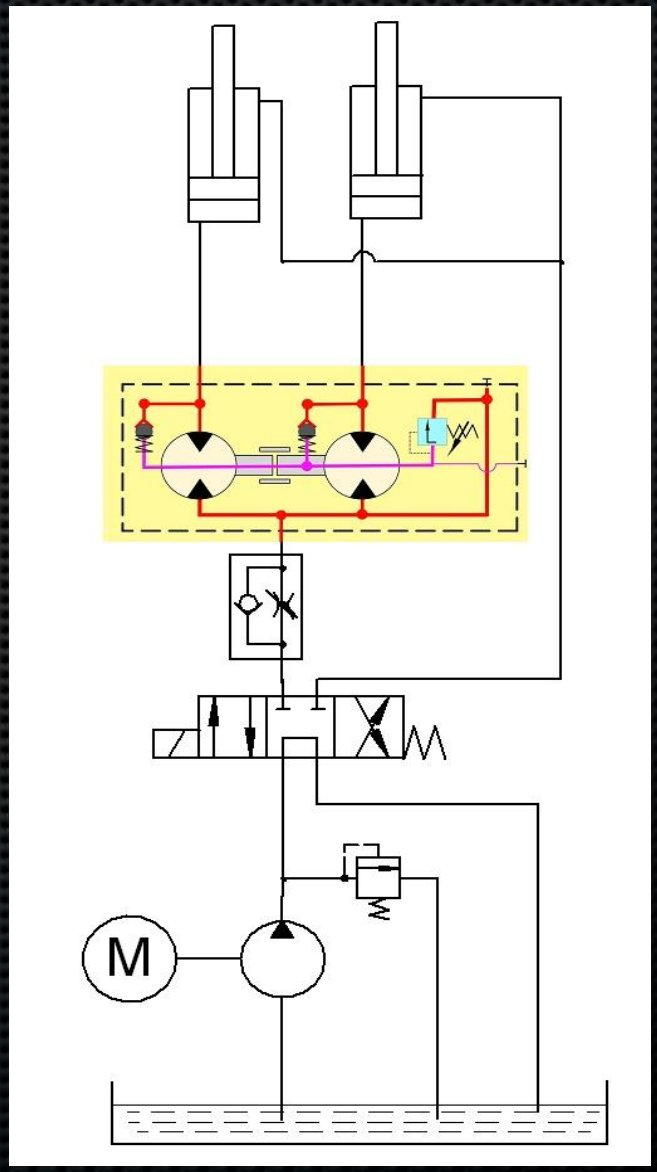


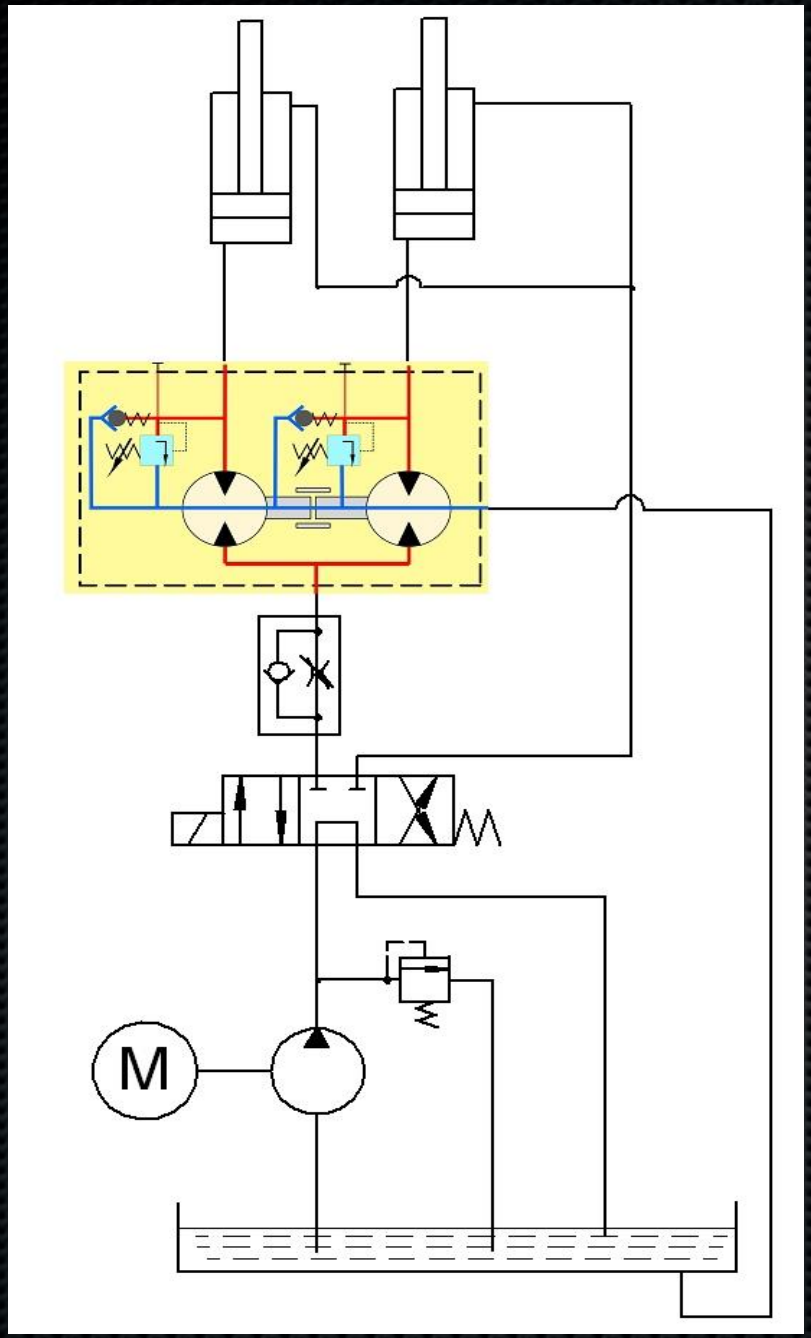
EX. HYDRAULIK SCHEME
RV - D



EX. HYDRAULIK SCHEME
RV – S
EXTERNAL DRAIN

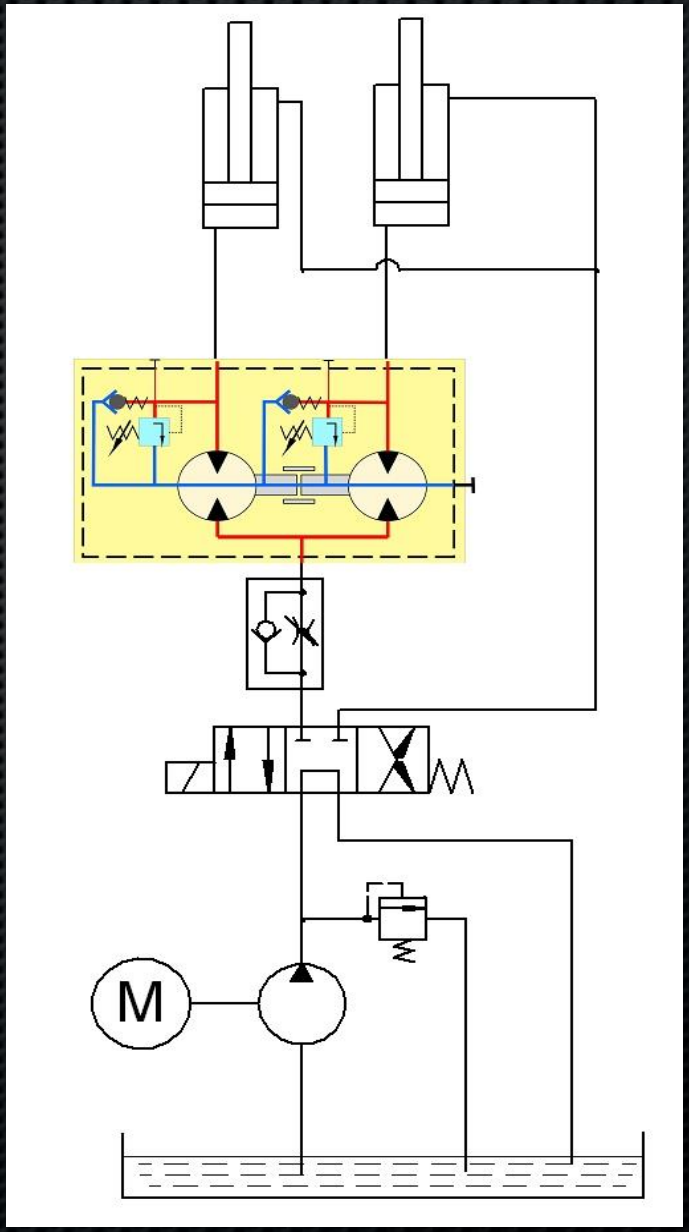
EX. HYDRAULIK SCHEME
RV – S
INTERNAL DRAIN



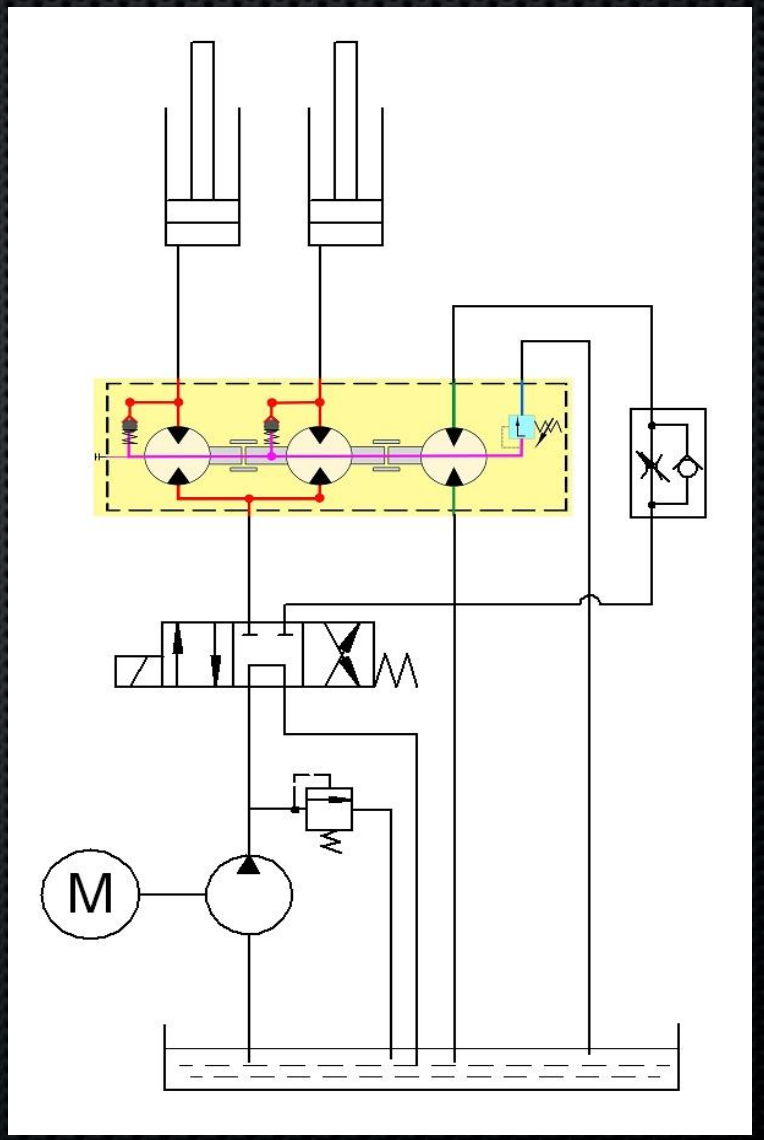


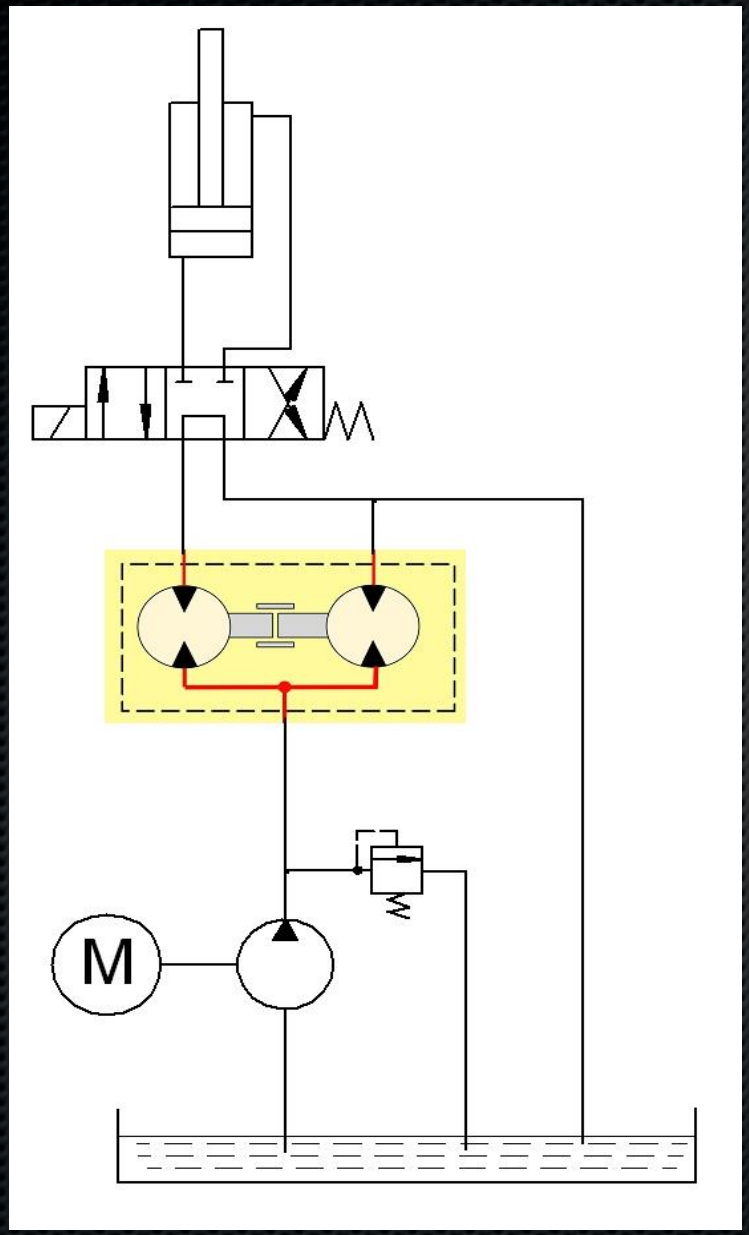
EX. HYDRAULIK SCHEME
RV – V
EXTERNAL DRAIN

EX. HYDRAULIK SCHEME
RV – V
INTERNAL DRAIN



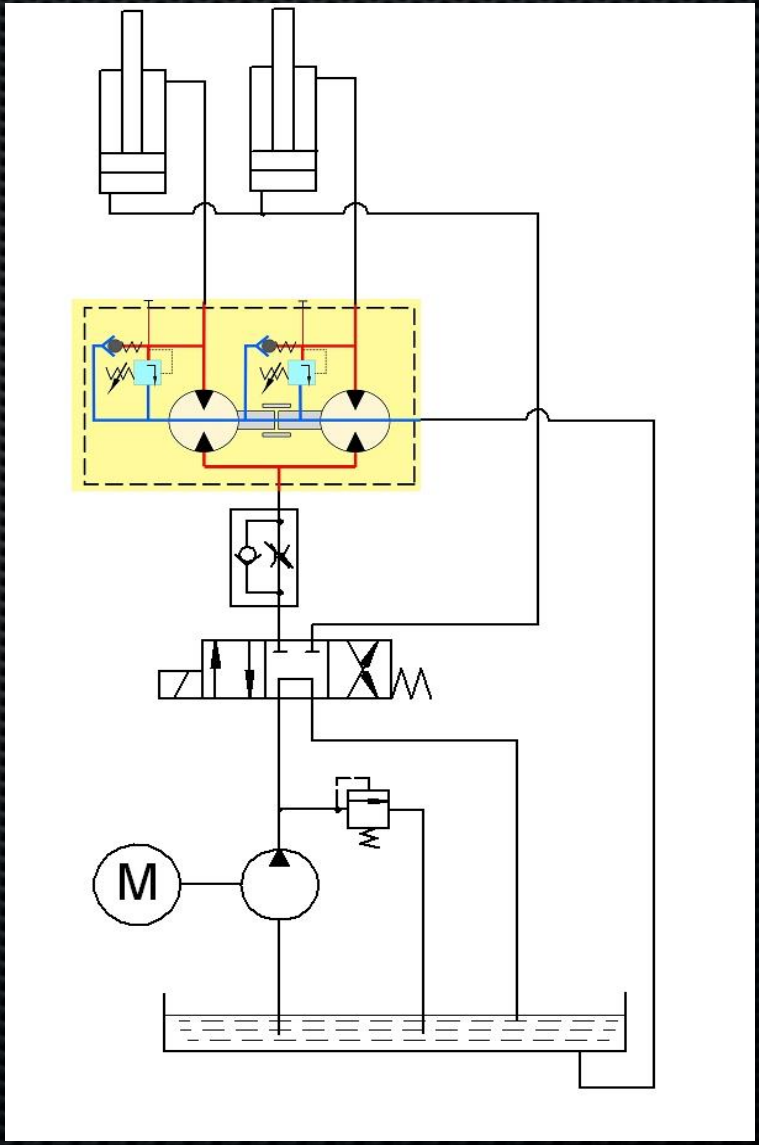
EX. HYDRAULIK SCHEME
FLOW DIVIDER WITH MOTOR





EX. HYDRAULIK SCHEME PRESSURE APLIFIER

EX. HYDRAULIK SCHEME FLOW DIVIDER INLET ON THE OPPOSITE SIDE OF THE CYLINDER



Frequent mistakes

- **Wrong flow rate division**
  High pressure difference between the use: Up to 30 bar – Max 3%
  Wrong Valve Adjustment
  Wrong plant valve Adjustment
  Air inside the circuit

- **Oil Leakage**
  Sealing extrusion usually caused by pressure peaks.

- **Wrong realignment**
  Air inside the circuit – Wrong plant valve adjustment

- **Plant positioning (Serie V)**
  Under the tank level.

Attenction:

- Un assembling the flow divider has to be done by expert personal.

A wrong screw tightening can cause wrong functionality

- Higher speed means higher precision, but but even higher noise level and pressure lost.

Lower speed means lower noise level, but even lower precision