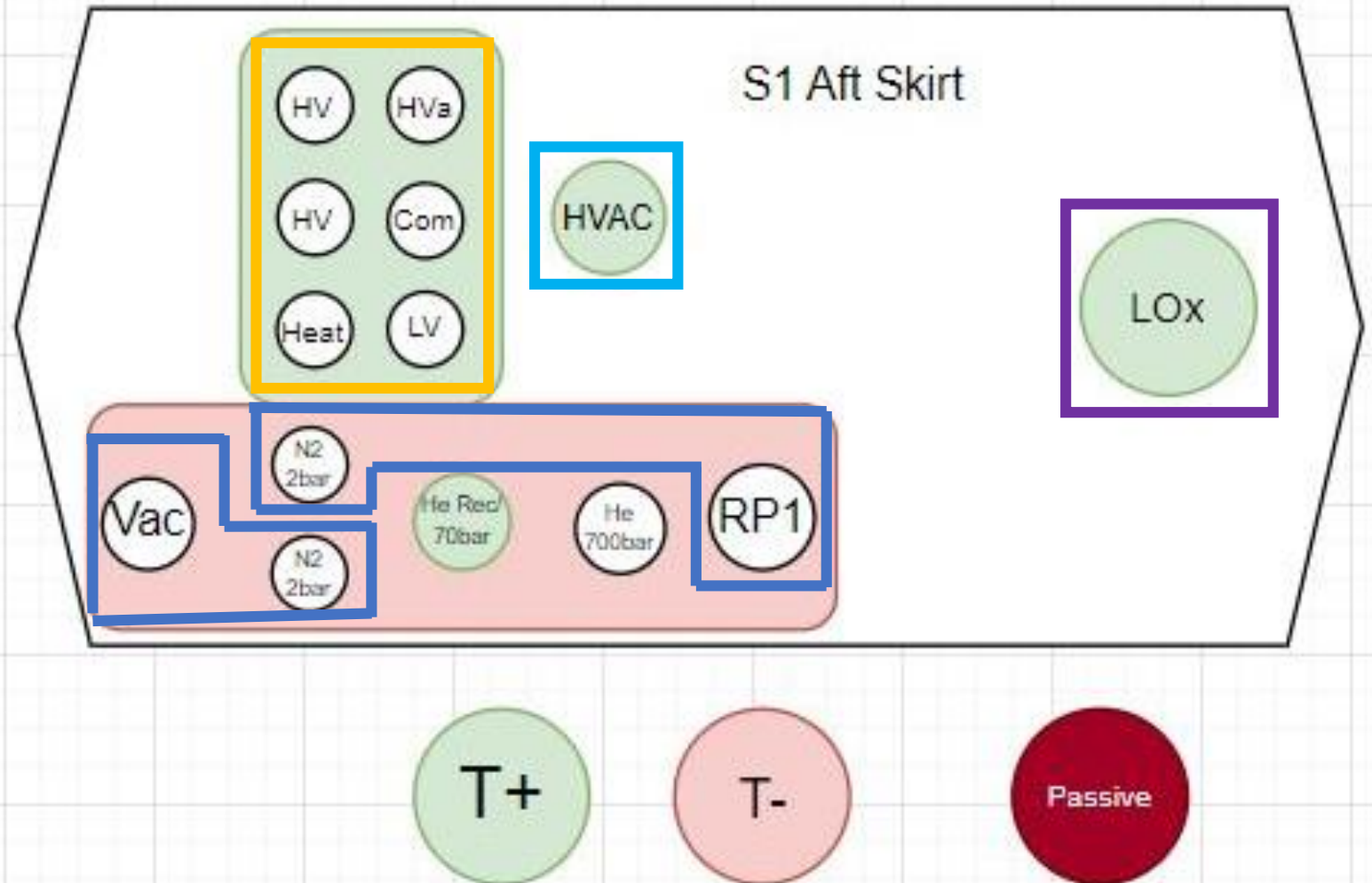
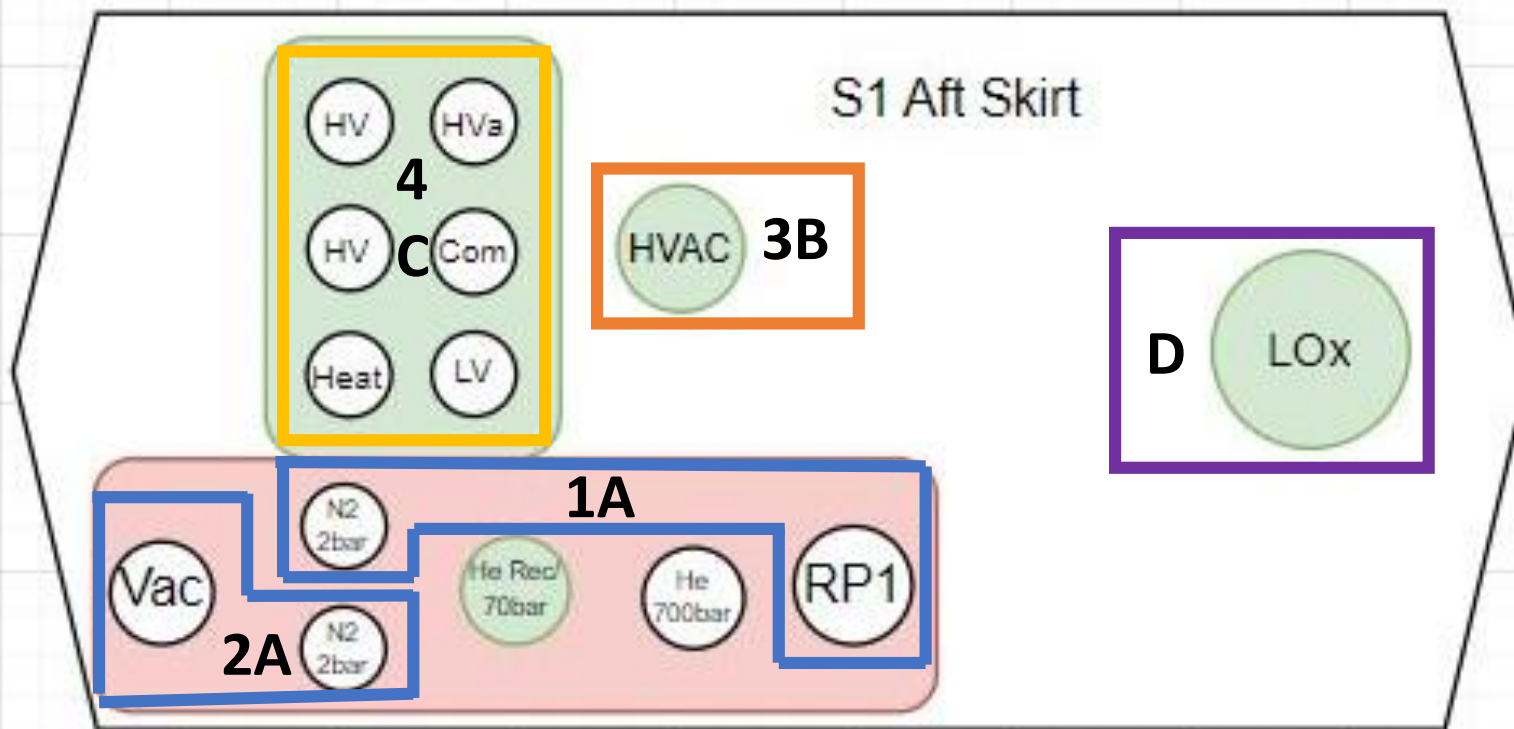
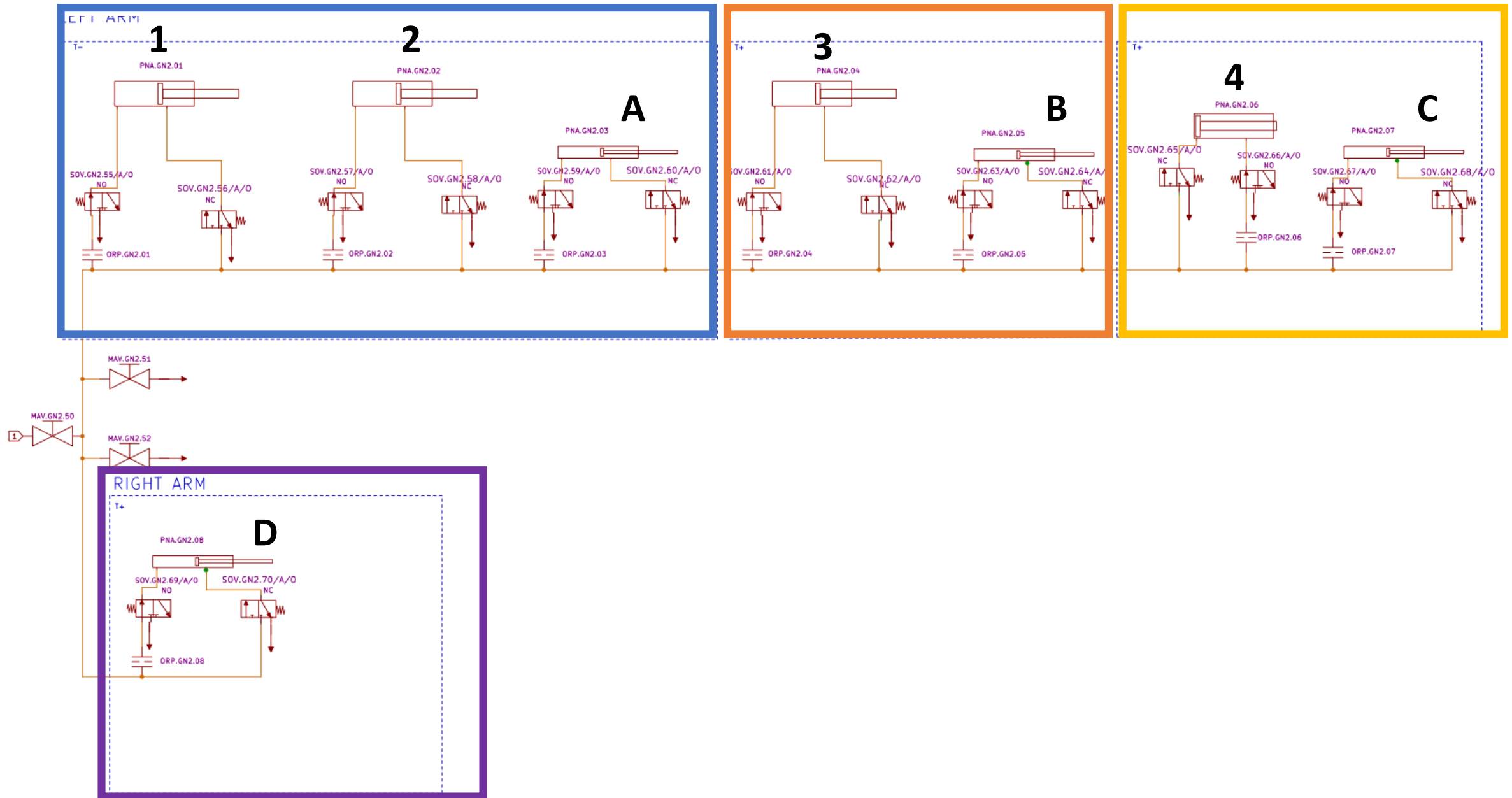


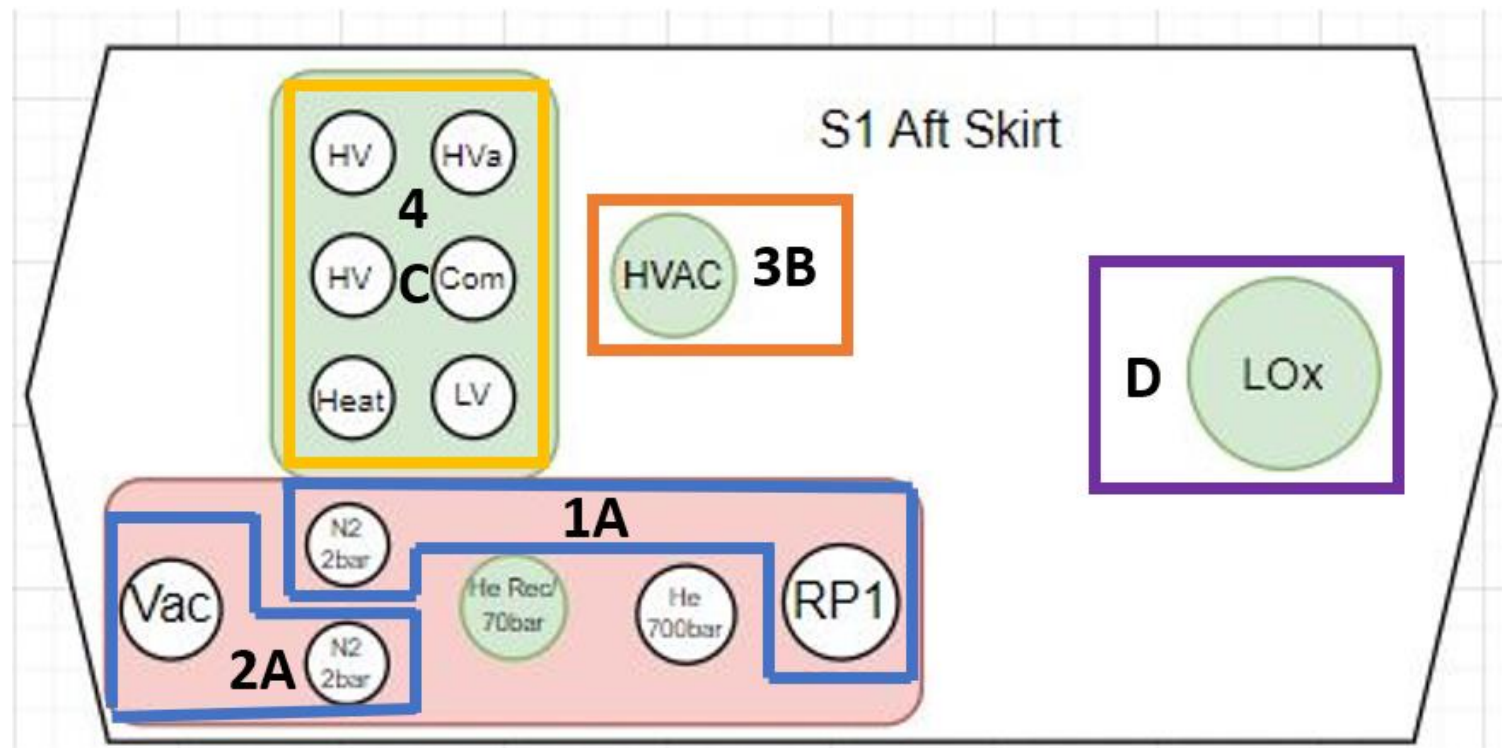
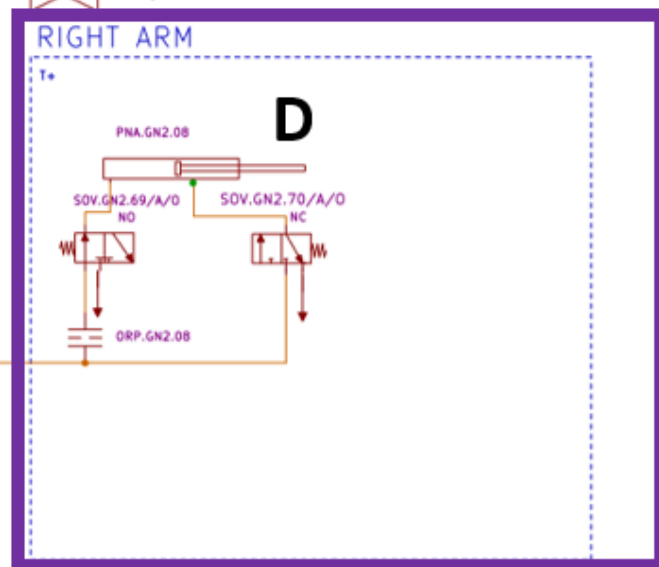
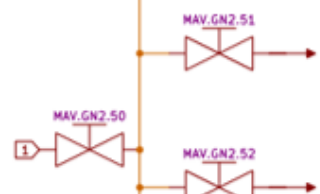
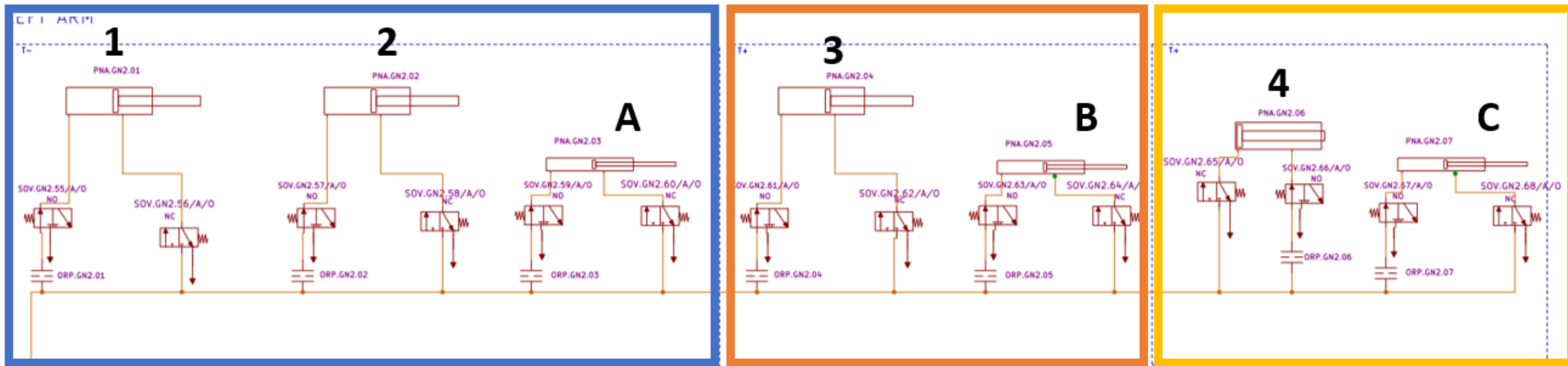
S1L



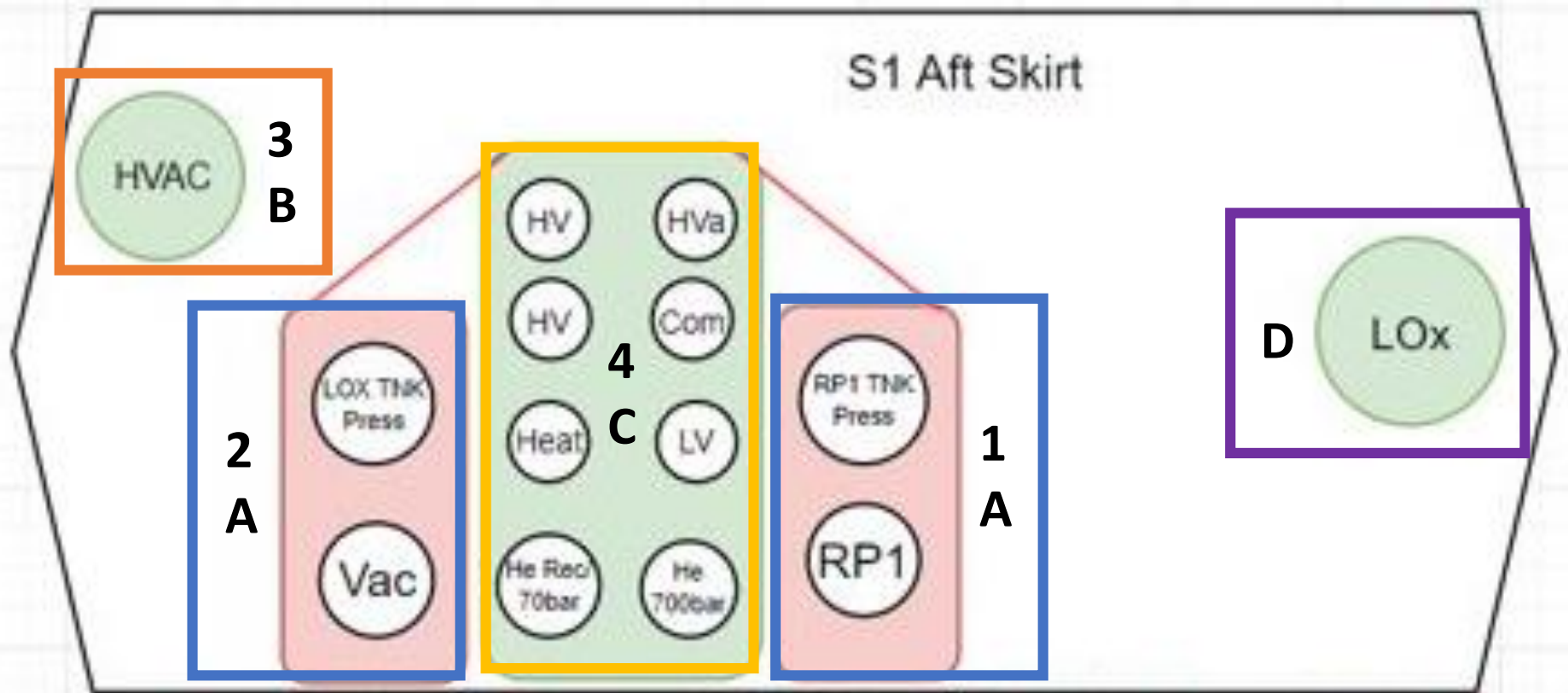
S1L

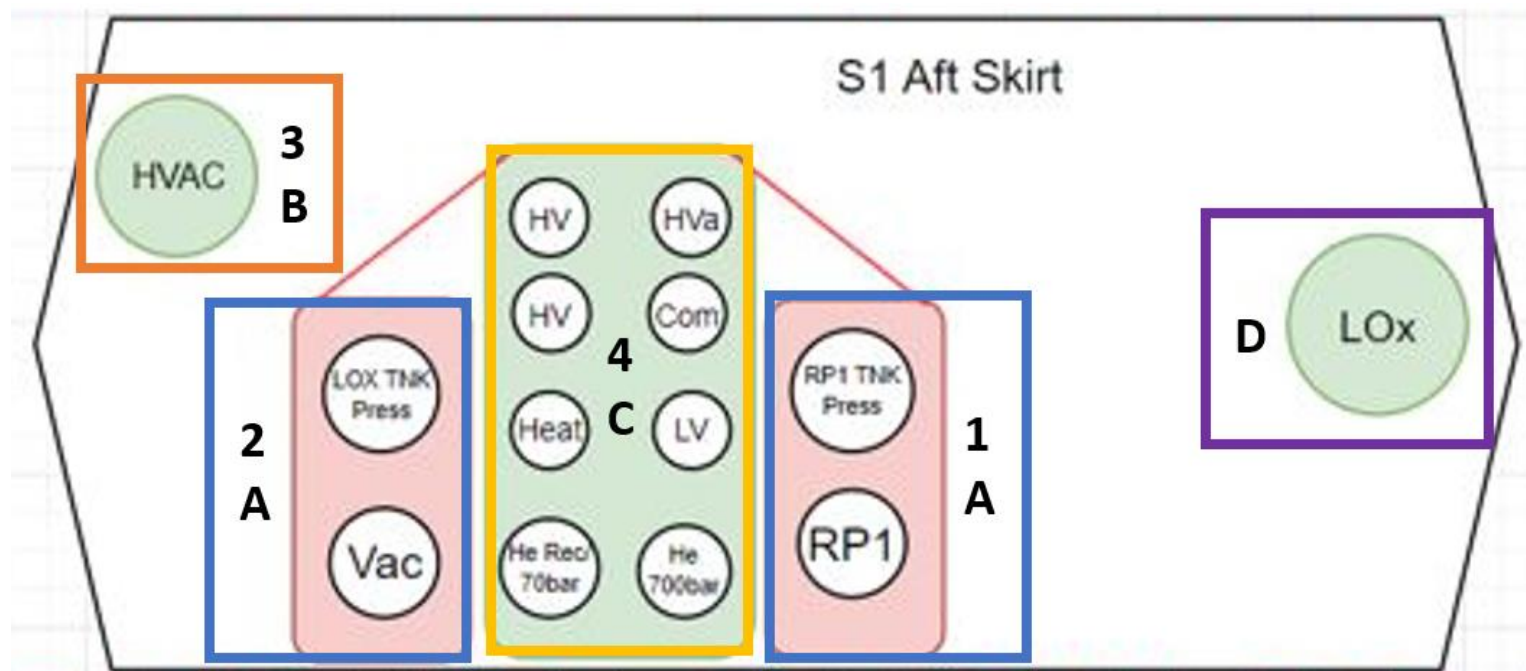
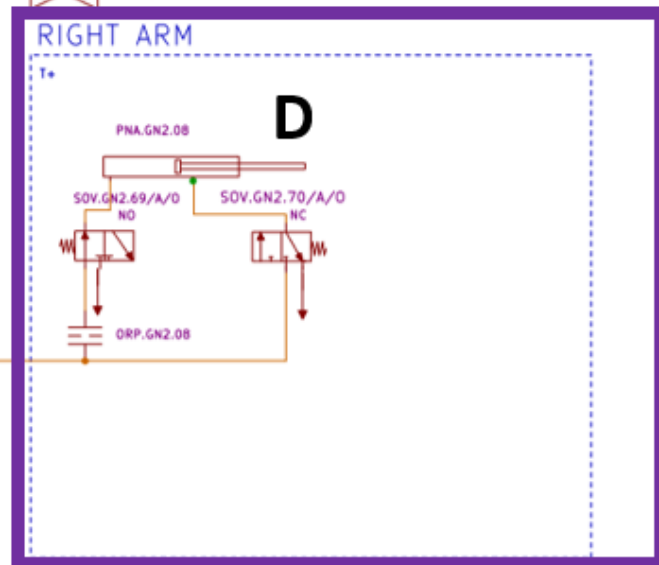
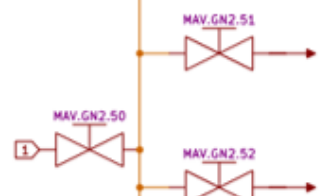
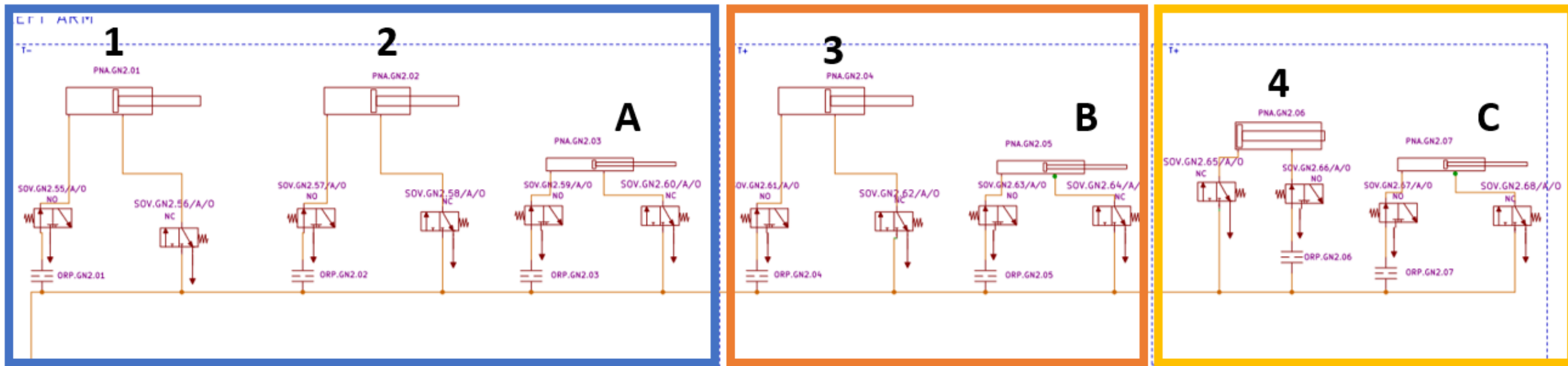


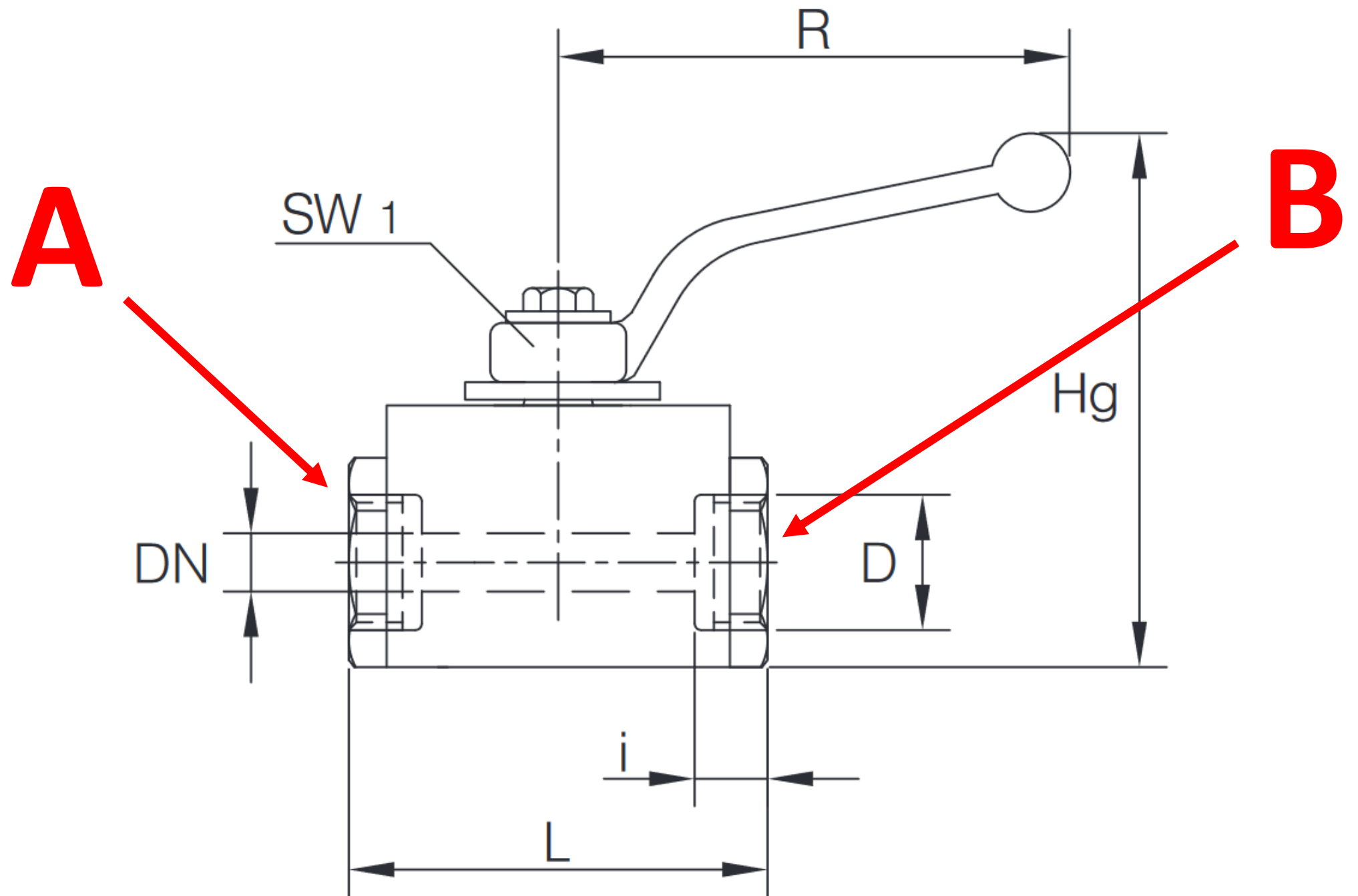


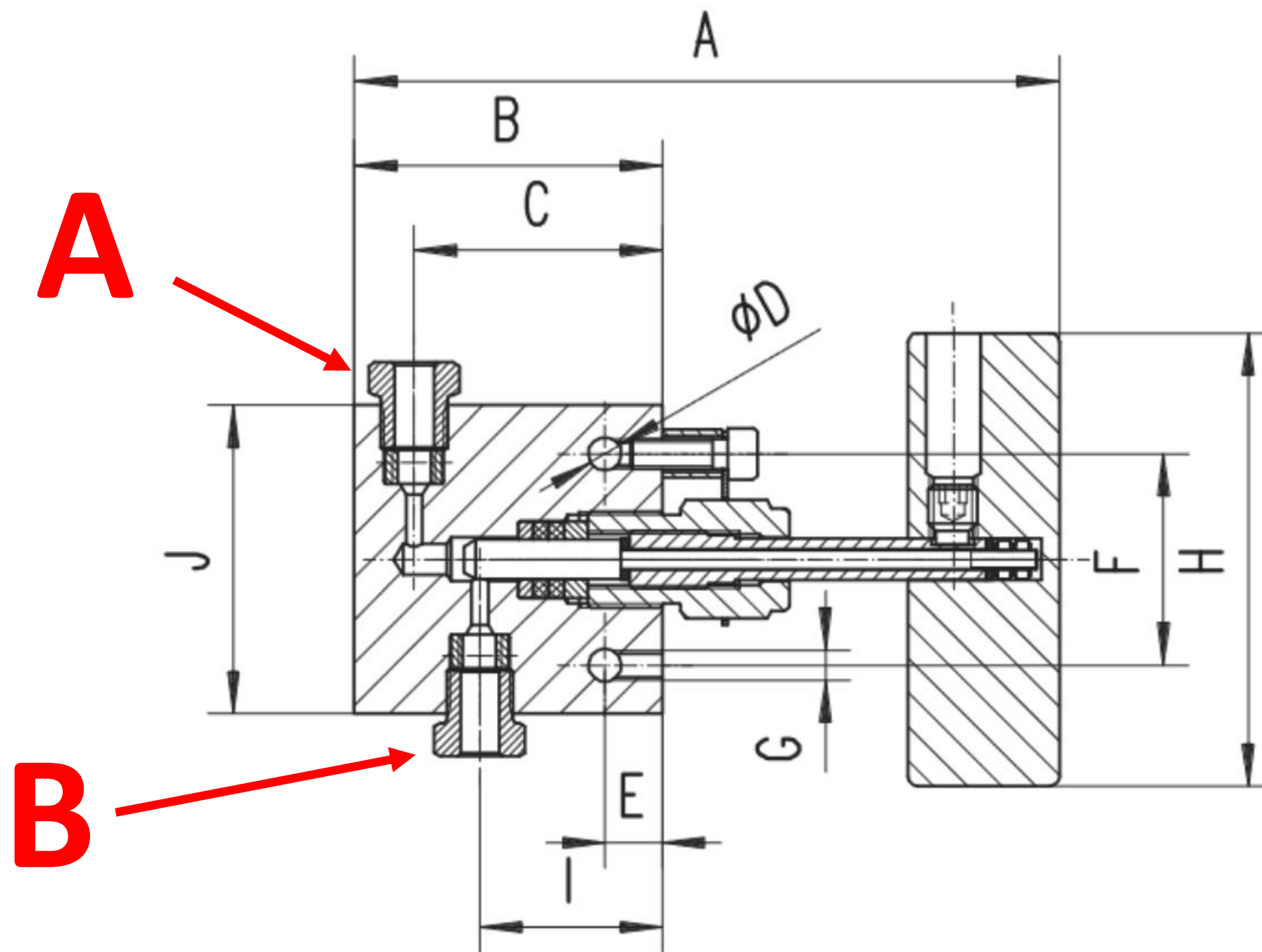


S1L



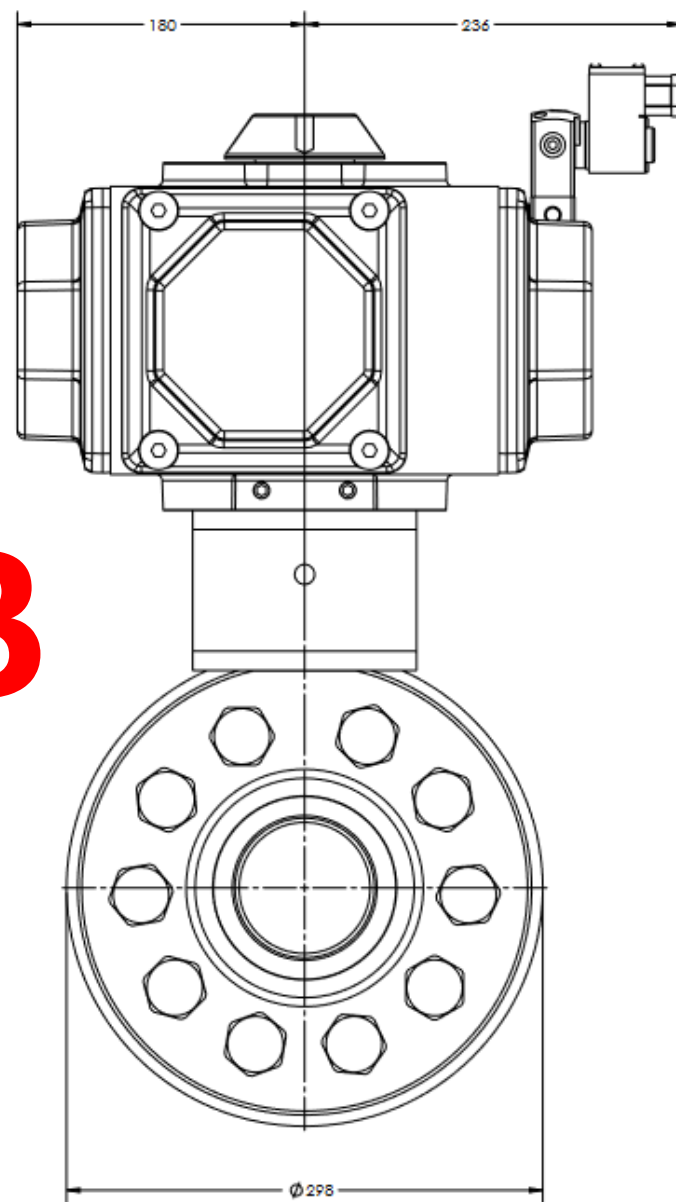
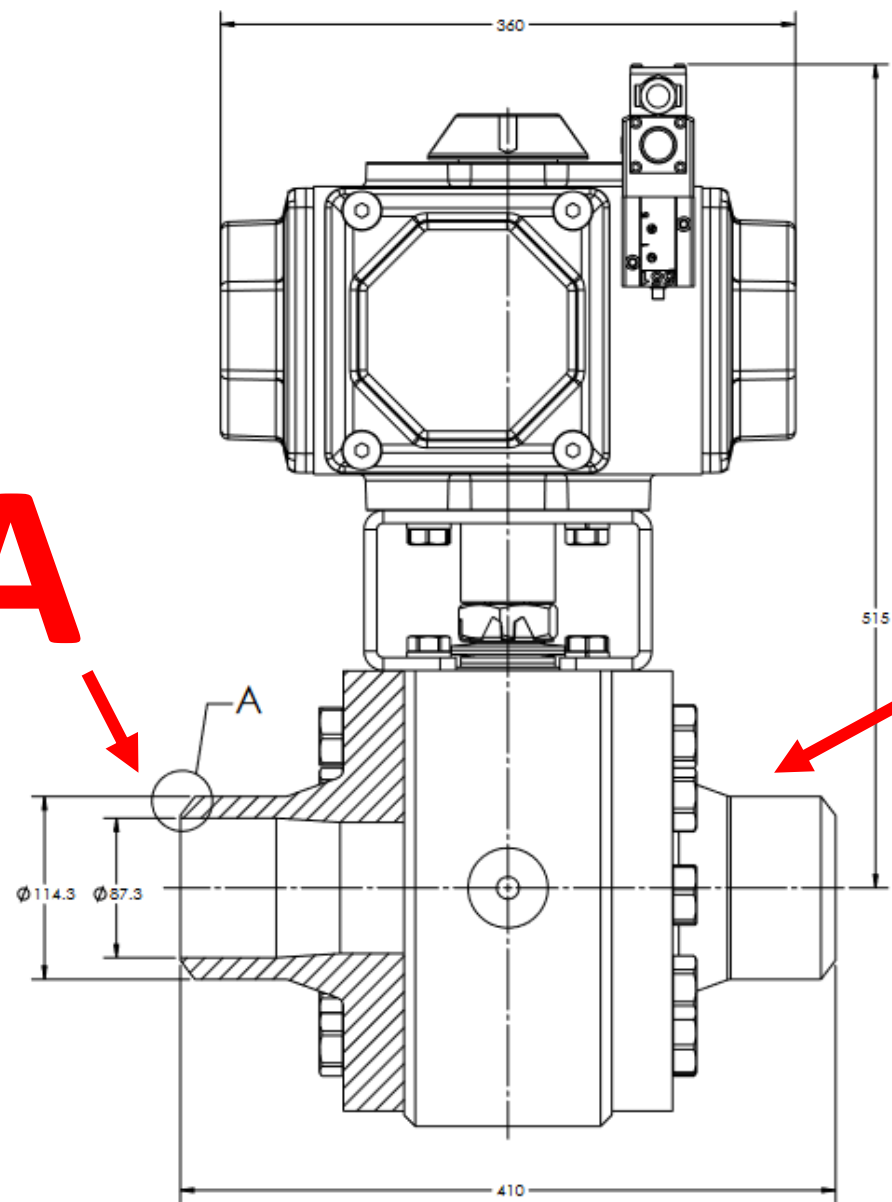




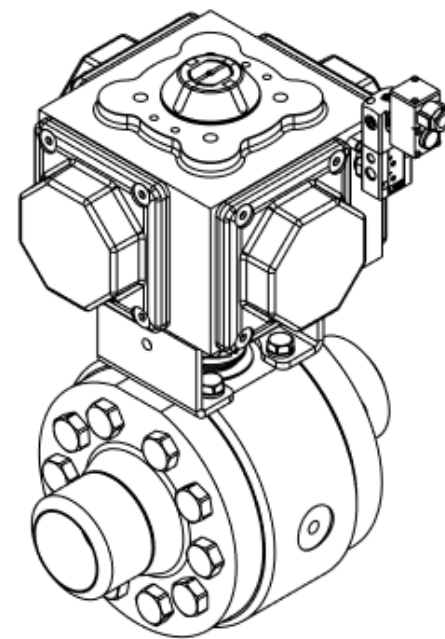
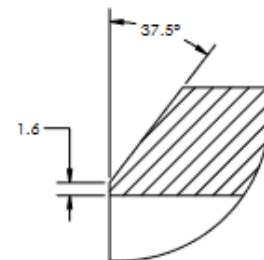


A

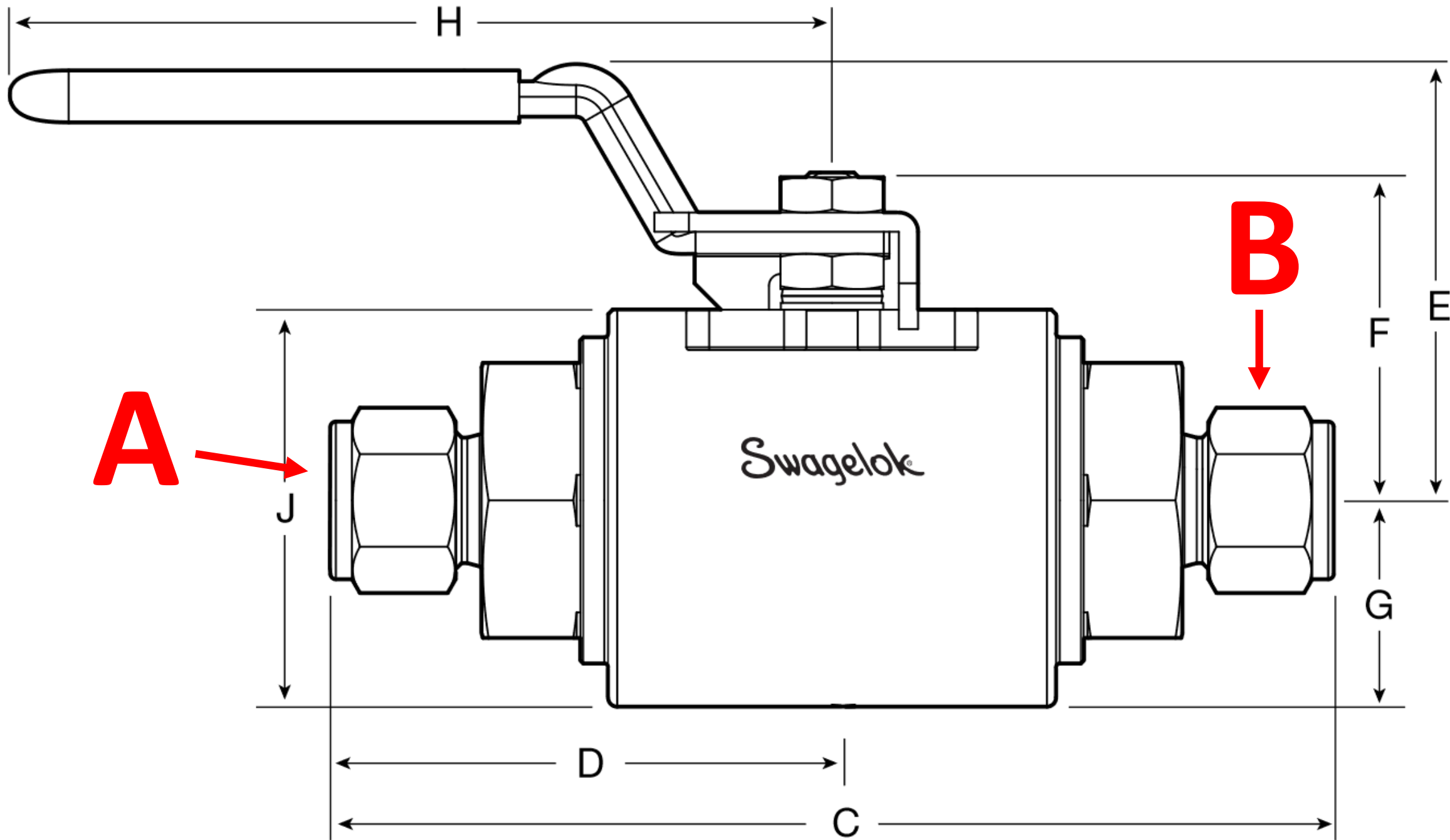
B

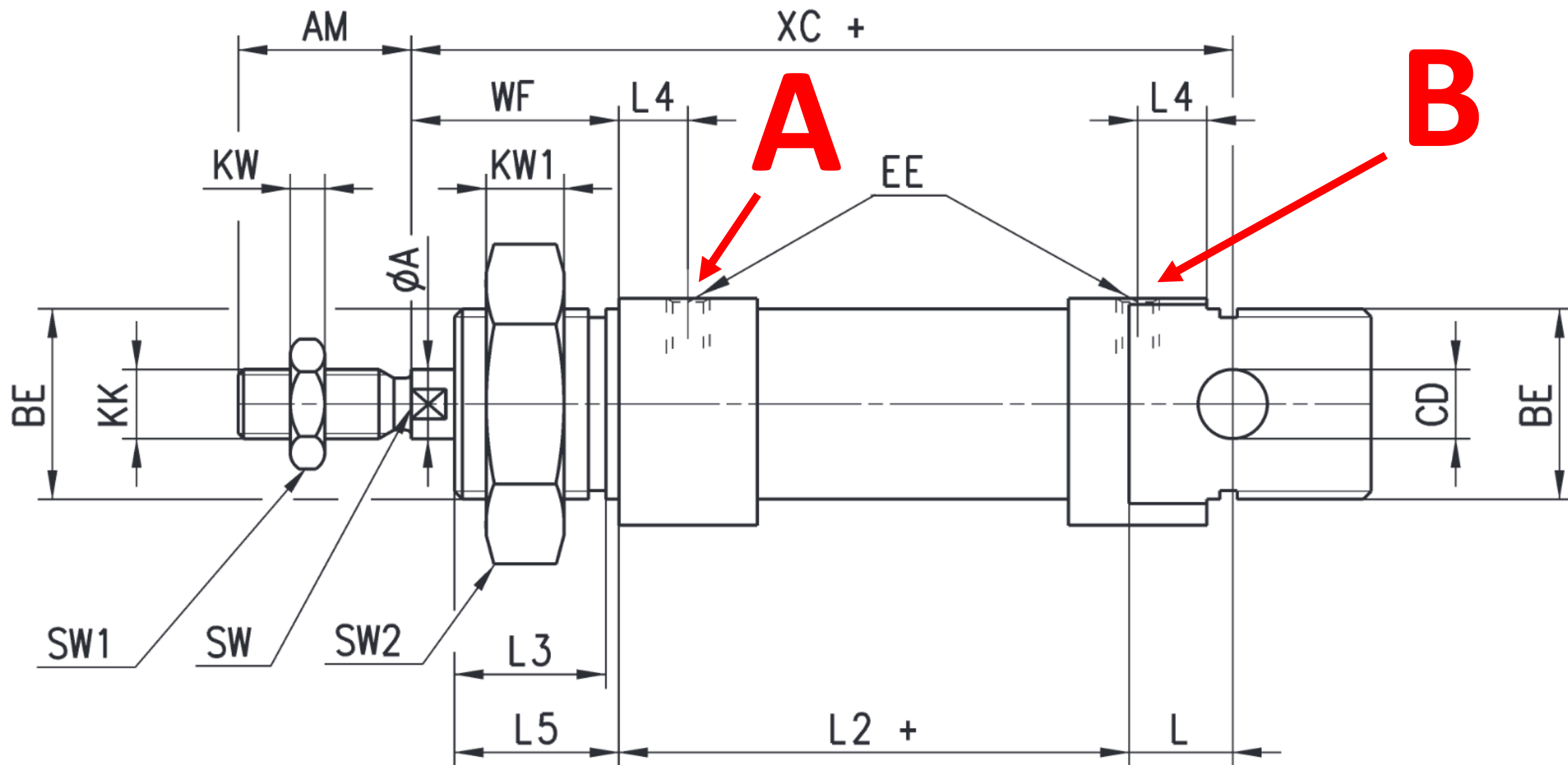


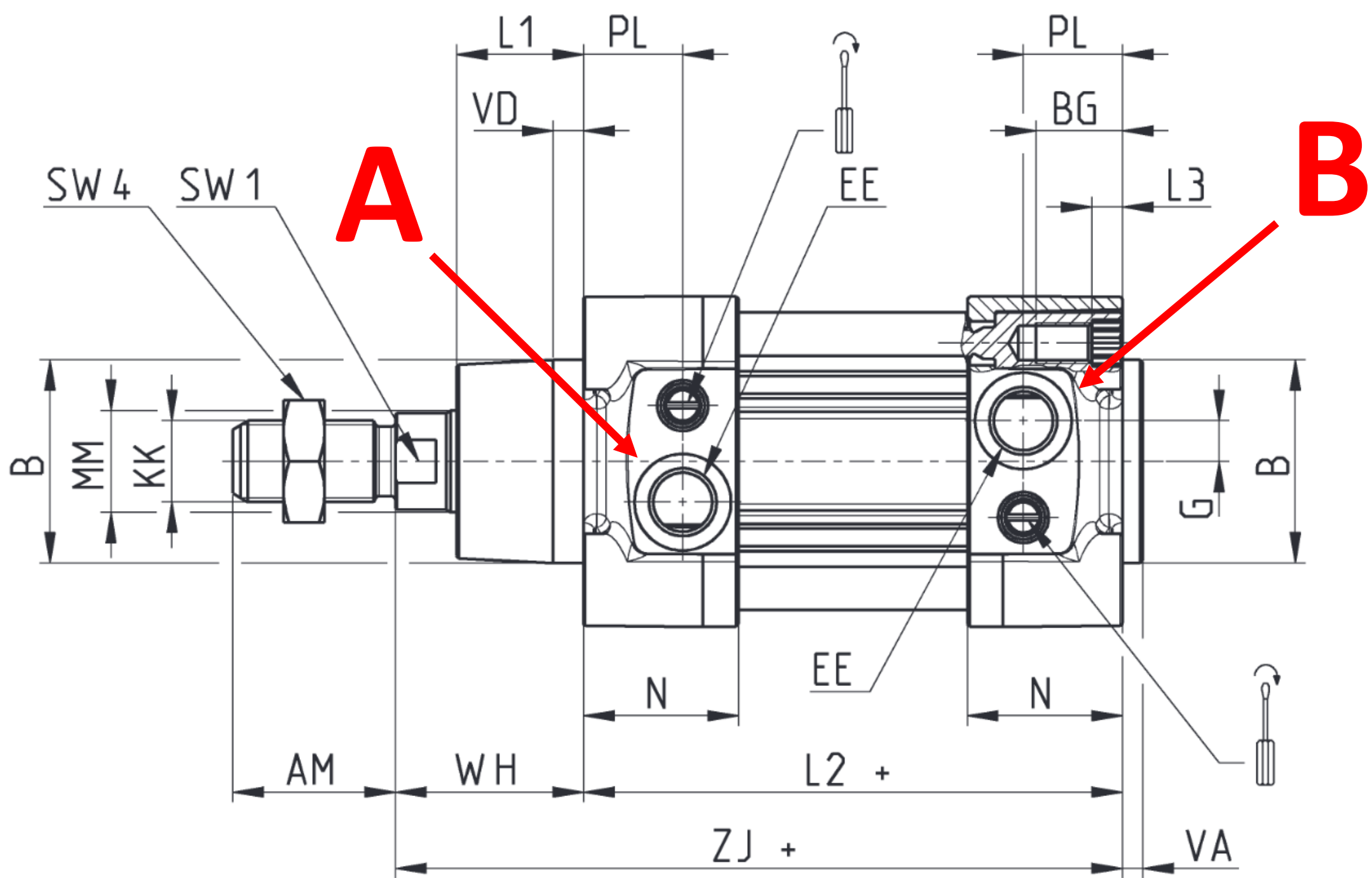
DETAIL A
SCALE 2 : 1



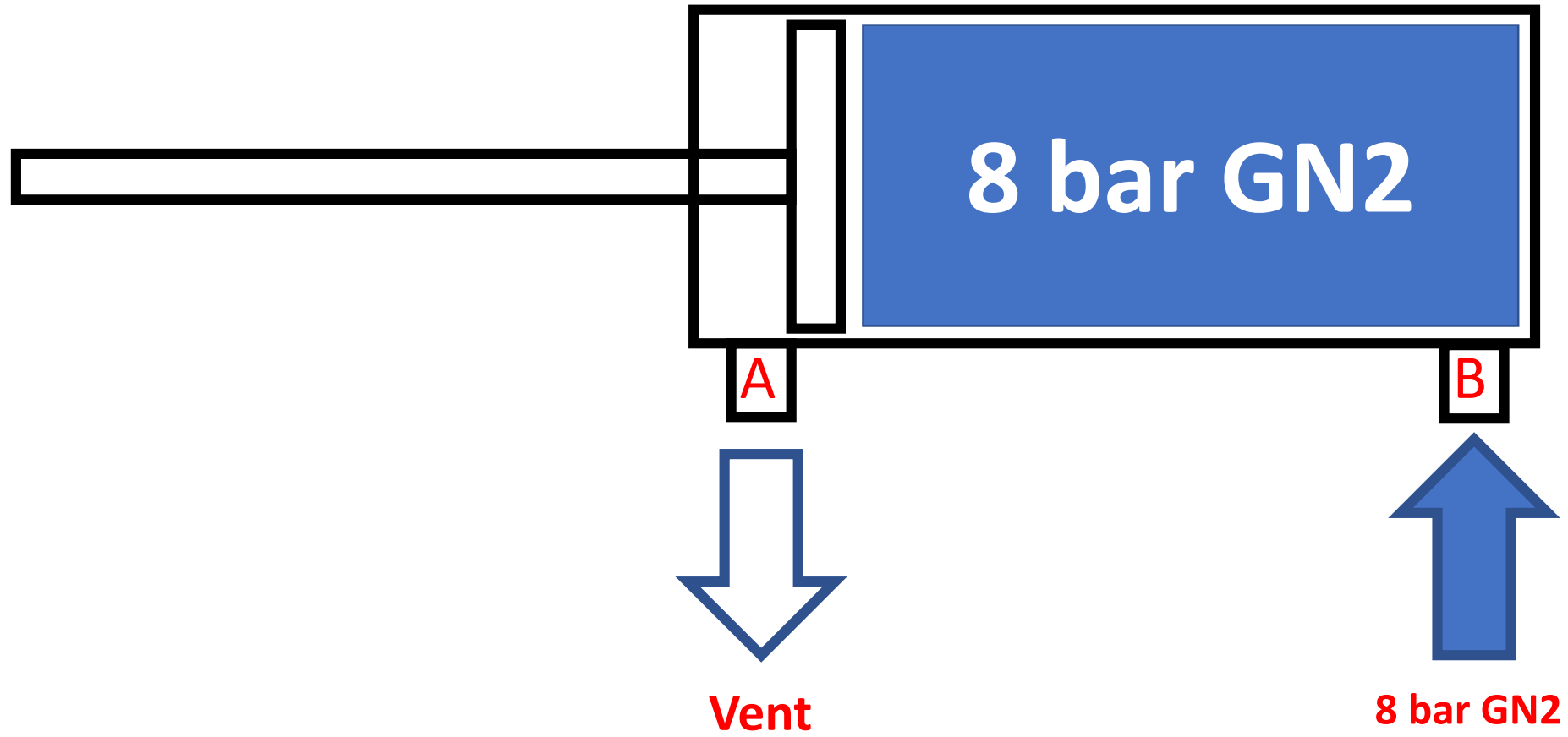
ALL DIMENSIONS ARE GIVEN IN MILLIMETERS



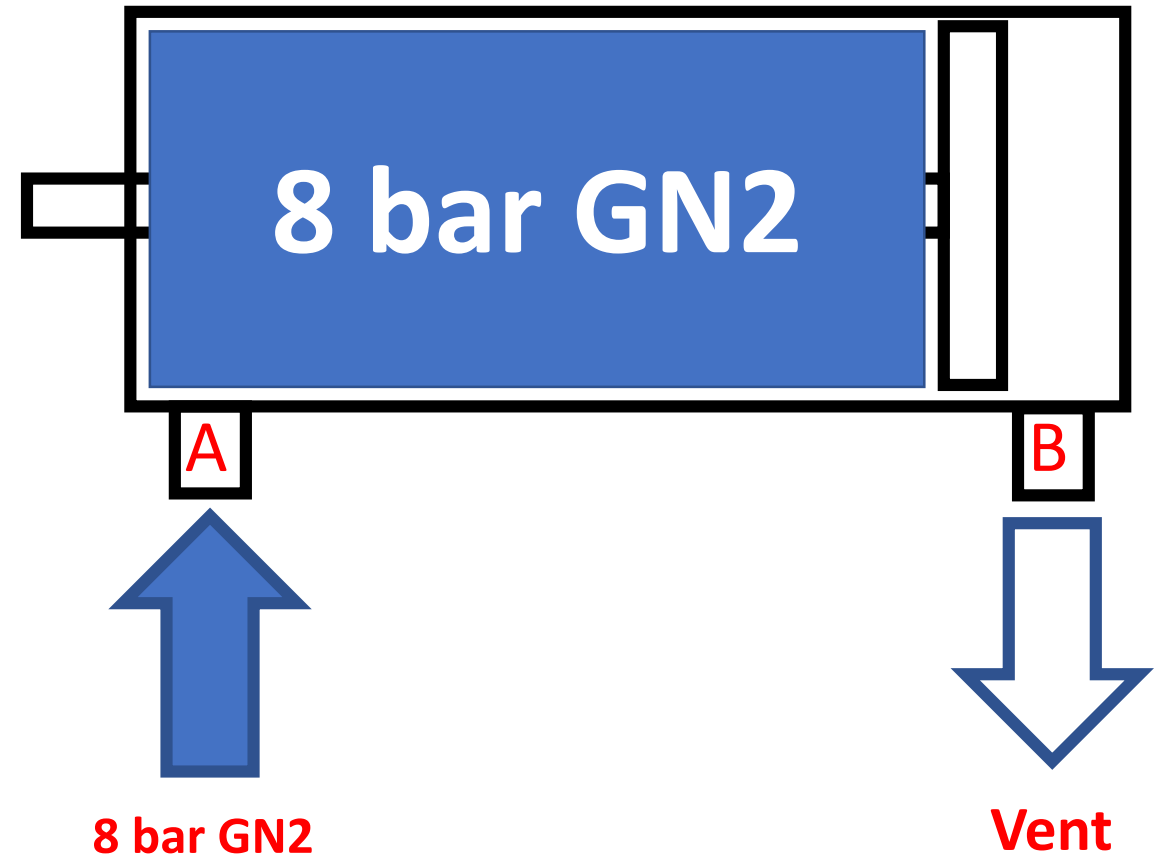




Primary Pulling Piston: Extended

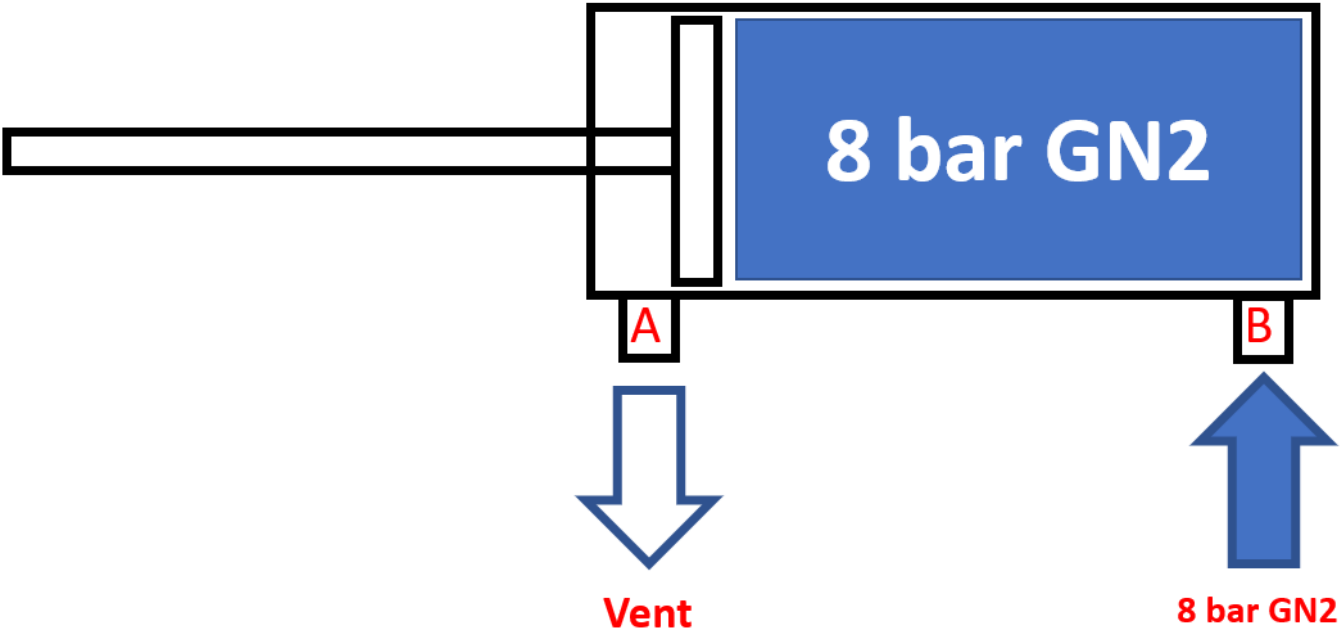


Primary Pulling Piston: Retracted

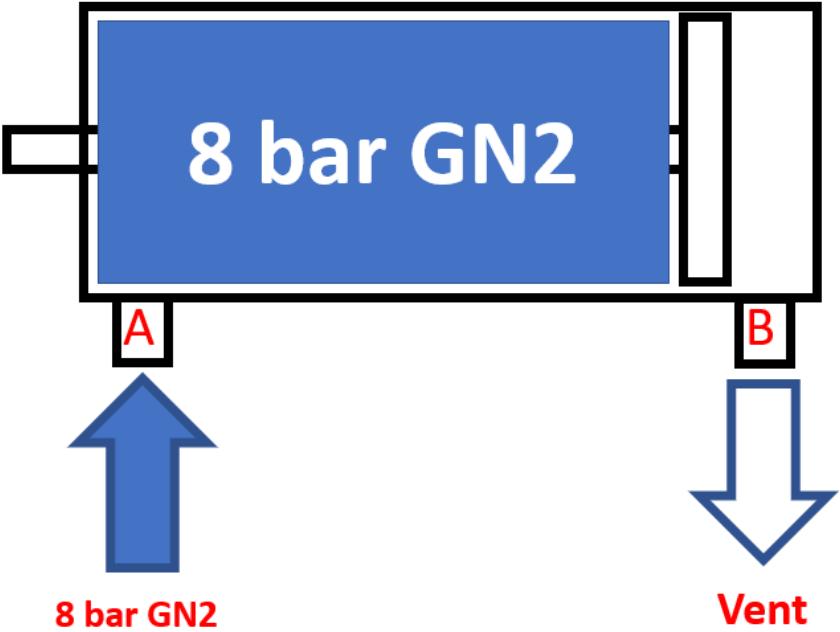


In case of losing	Piston behavior
Electrical power	Extended
Pneumatics	Undefined (influenced by friction in the piston and external forces)

Primary Pulling Piston:
Extended

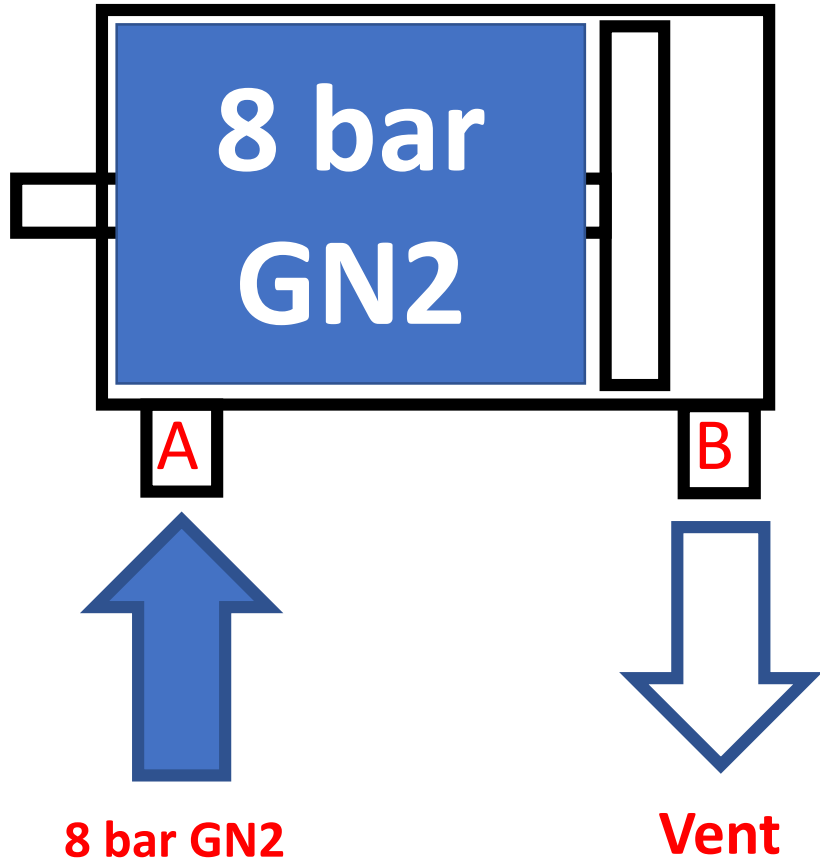


Primary Pulling Piston:
Retracted

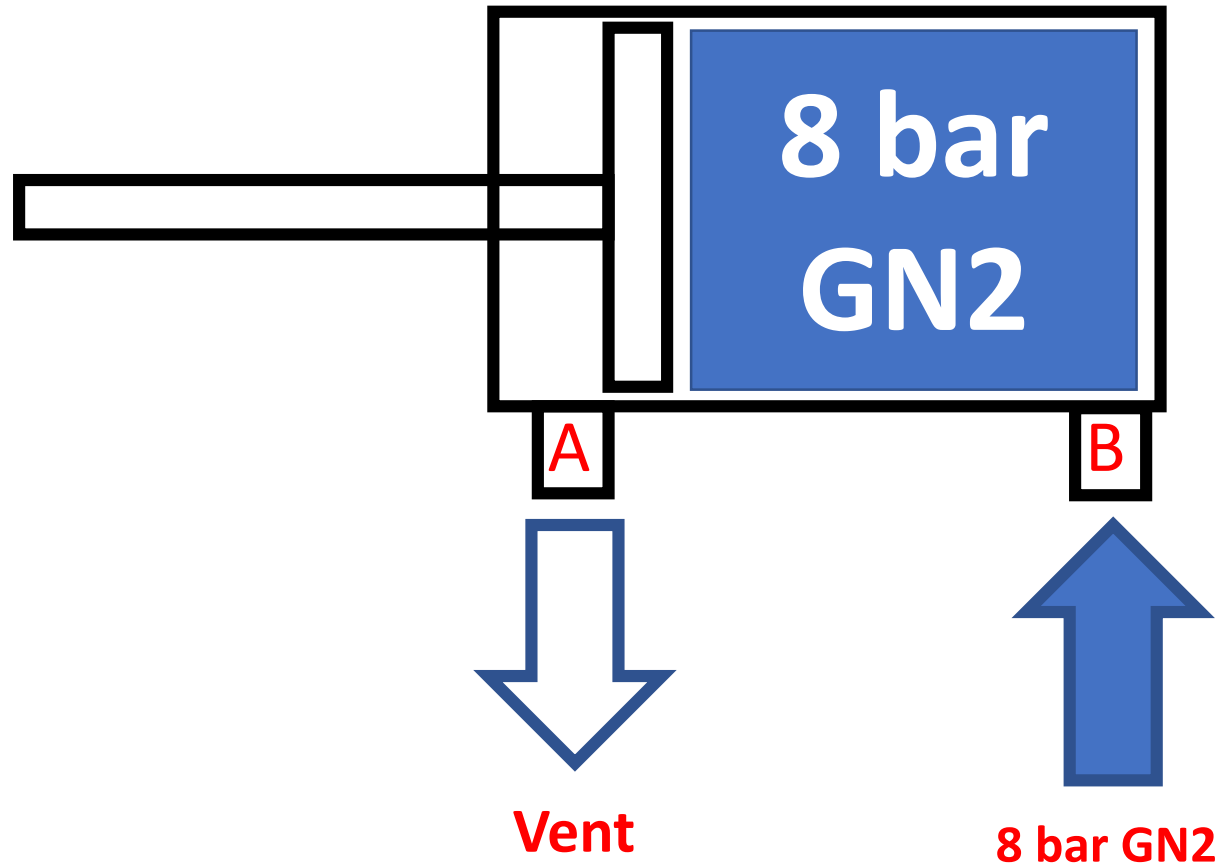


In case of losing	Piston behavior
Electrical power	Extended
Pneumatics	Undefined (influenced by friction in the piston and external forces)

Primary Pushing Piston: Retracted

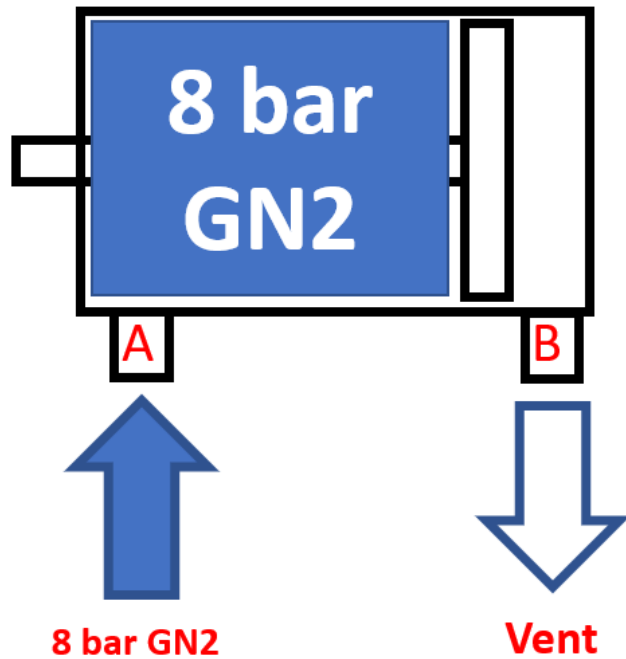


Primary Pushing Piston: Extended

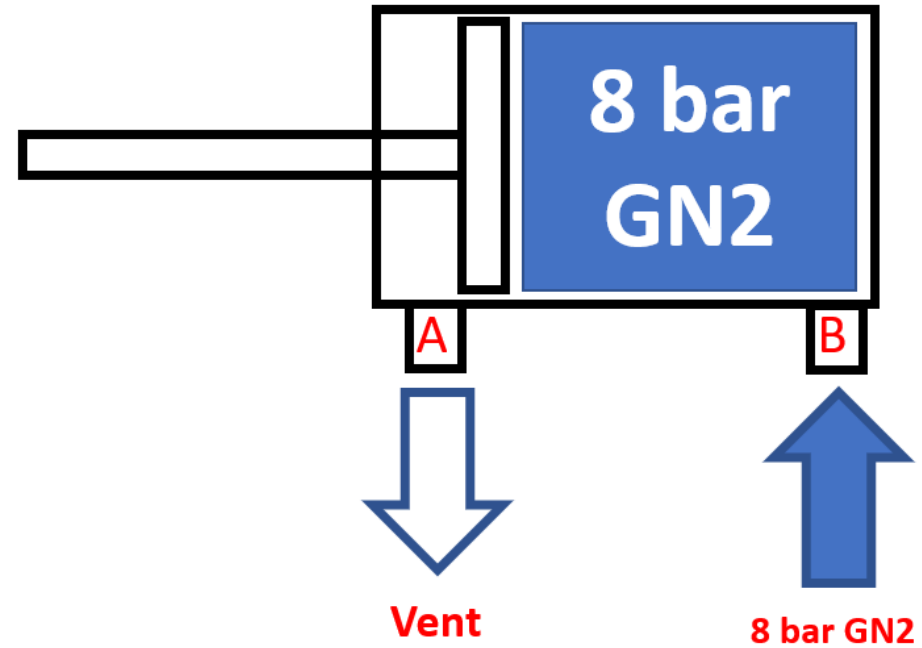


In case of losing	Piston behavior
Electrical power	Retracted
Pneumatics	Undefined (influenced by friction in the piston and external forces)

Primary Pushing Piston: Retracted



Primary Pushing Piston: Extended



In case of losing

Electrical power

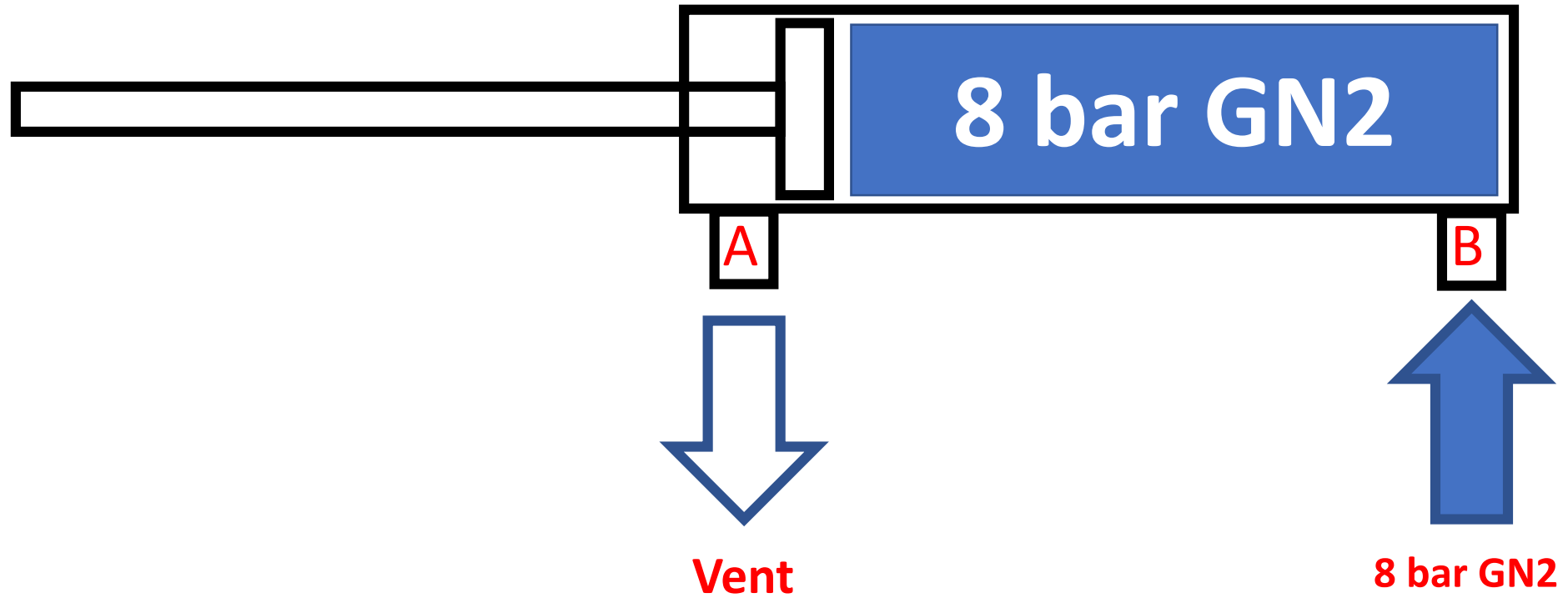
Pneumatics

Piston behavior

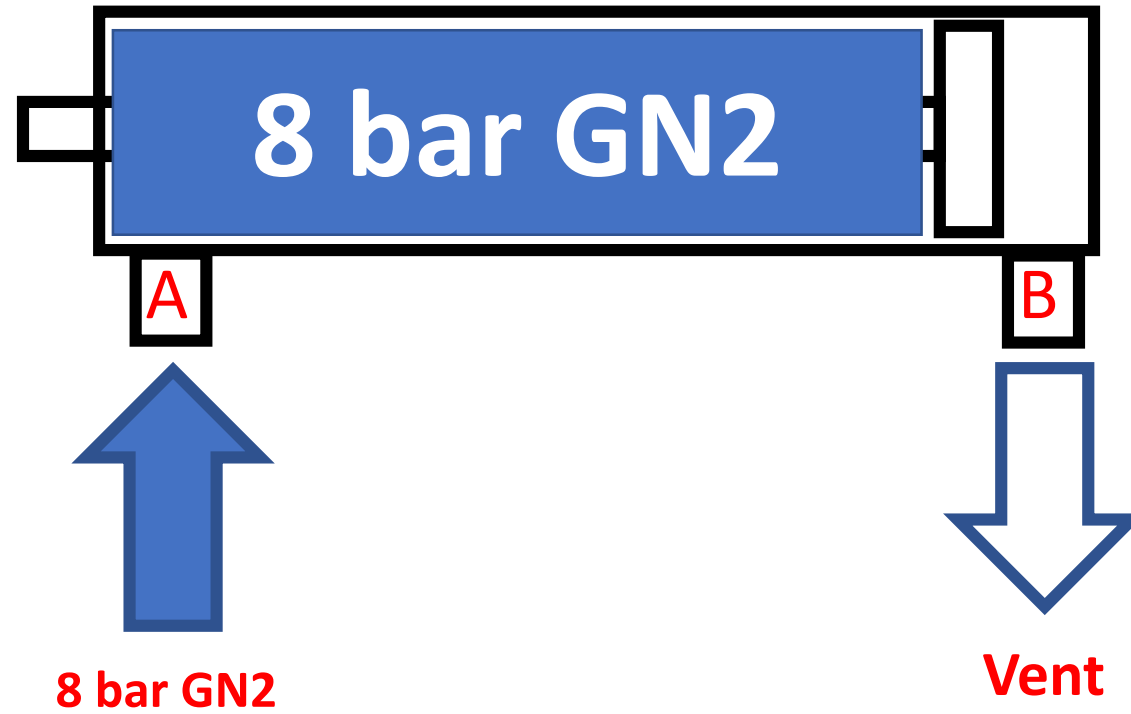
Retracted

Undefined
(influenced by friction in the piston
and external forces)

Secondary Pulling Piston: Extended

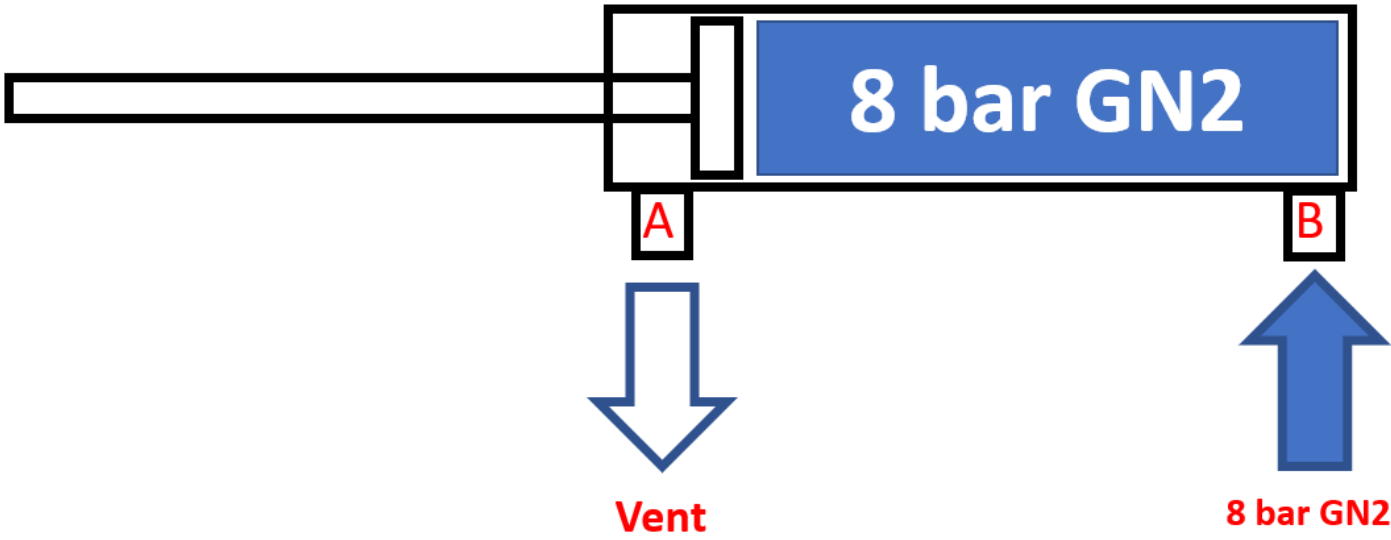


Secondary Pulling Piston: Retracted



In case of losing	Piston behavior
Electrical power	Extended
Pneumatics	Undefined (influenced by friction in the piston and external forces)

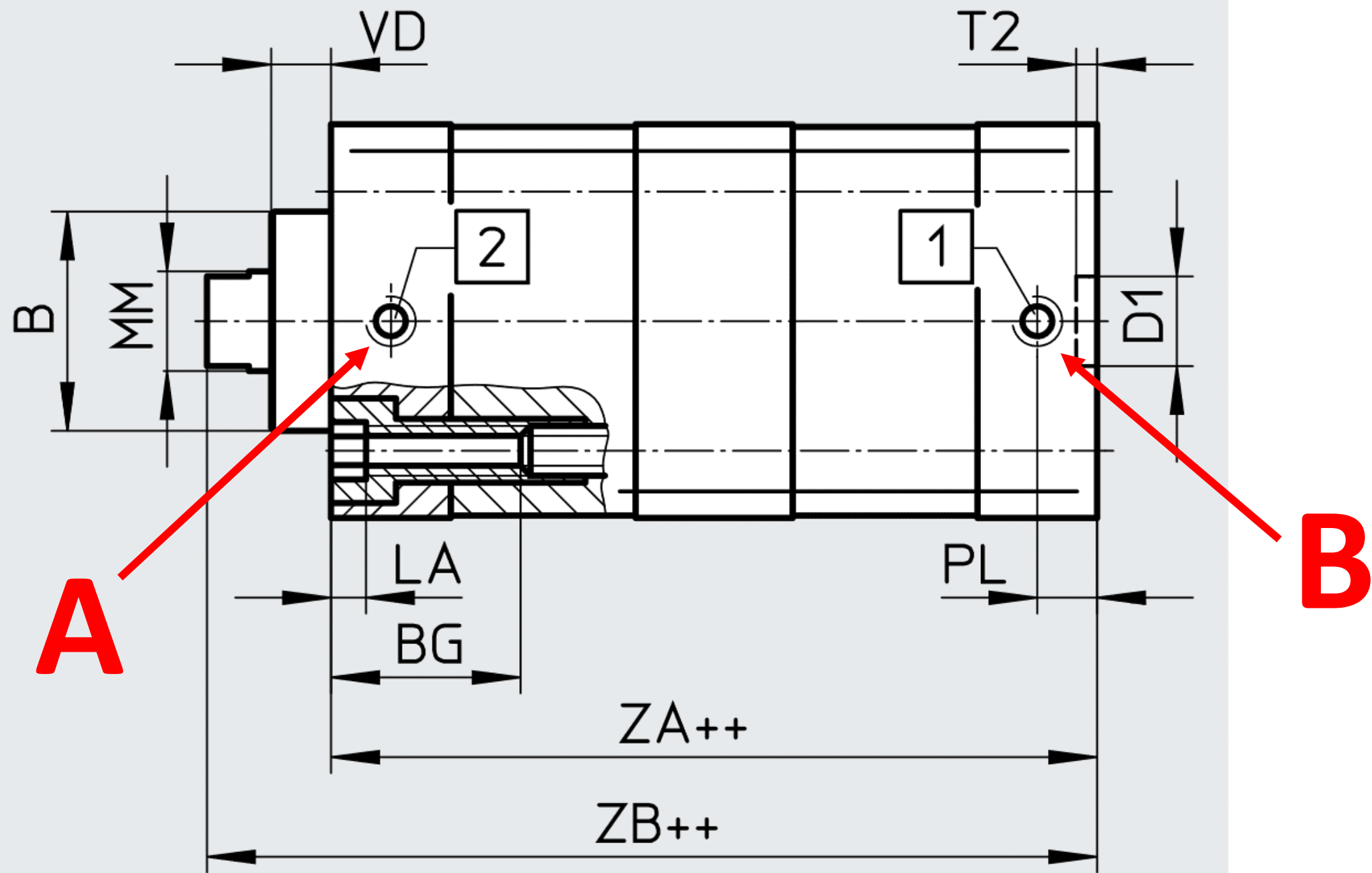
Secondary Pulling Piston:
Extended



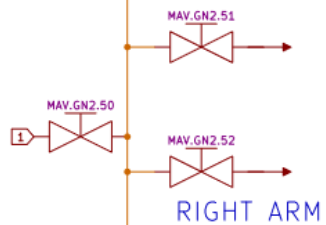
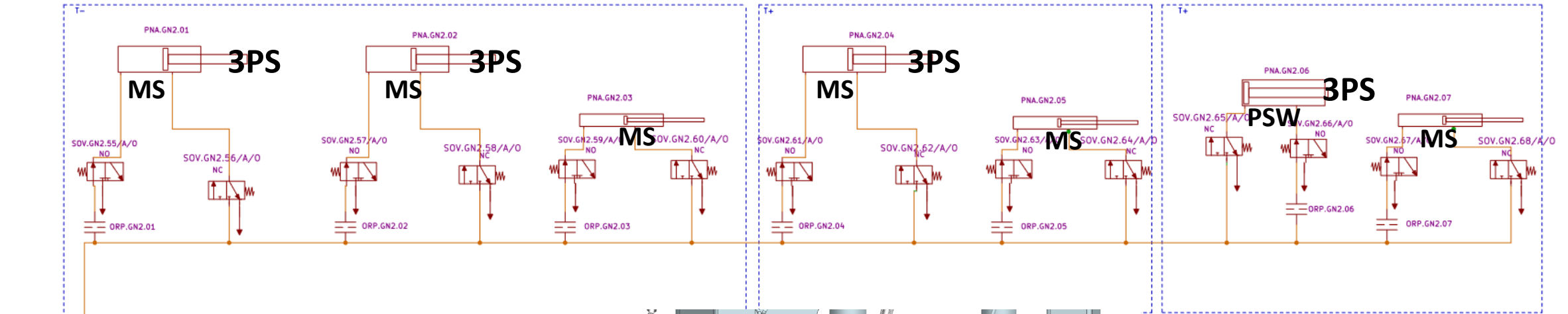
Secondary Pulling Piston:
Retracted



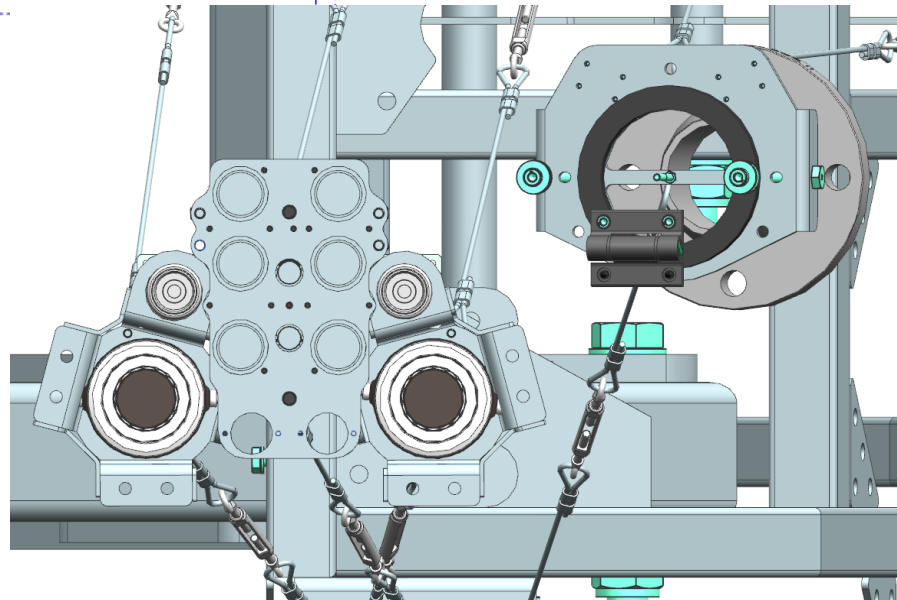
In case of losing	Piston behavior
Electrical power	Extended
Pneumatics	Undefined (influenced by friction in the piston and external forces)



LEFT ARM

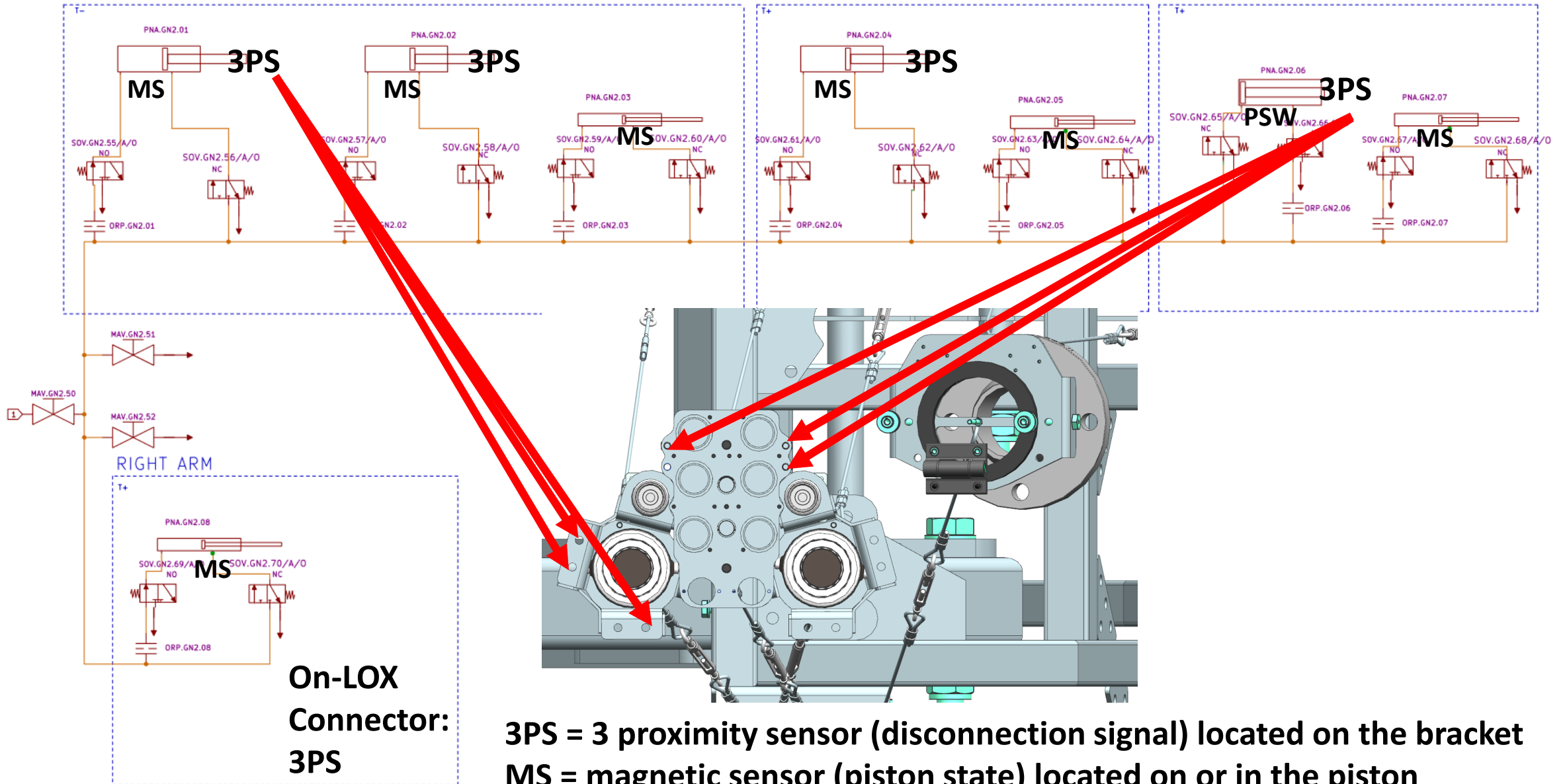


On-LOX
Connector:
3PS



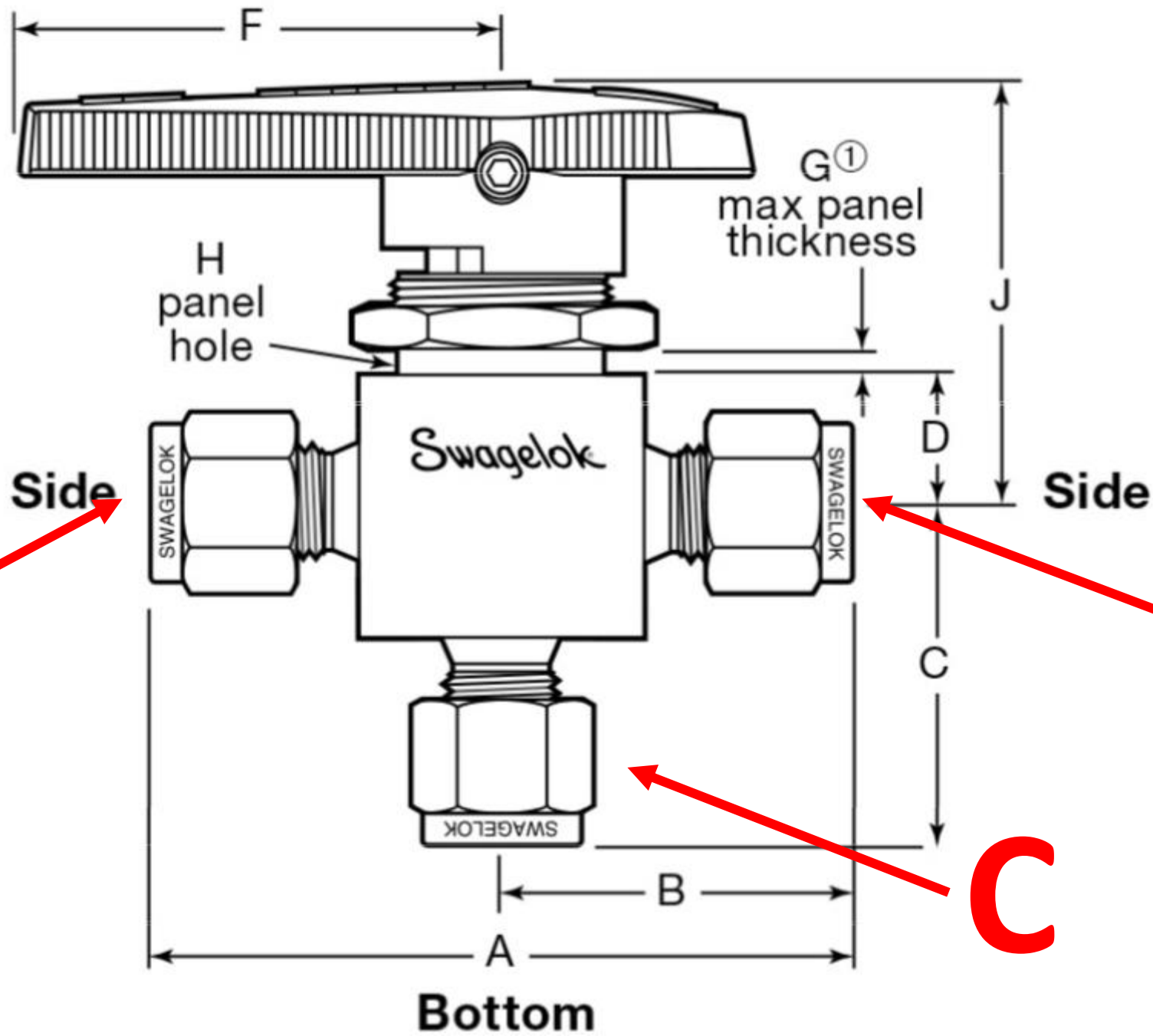
3PS = 3 proximity sensor (disconnection signal) located on the bracket
MS = magnetic sensor (piston state) located on or in the piston
PSW = proximity switch (piston state) located on or in the piston

LEFT ARM



On-LOX
Connector:
3PS

3PS = 3 proximity sensor (disconnection signal) located on the bracket
MS = magnetic sensor (piston state) located on or in the piston
PSW = proximity switch (piston state) located on or in the piston



A

B

C

