

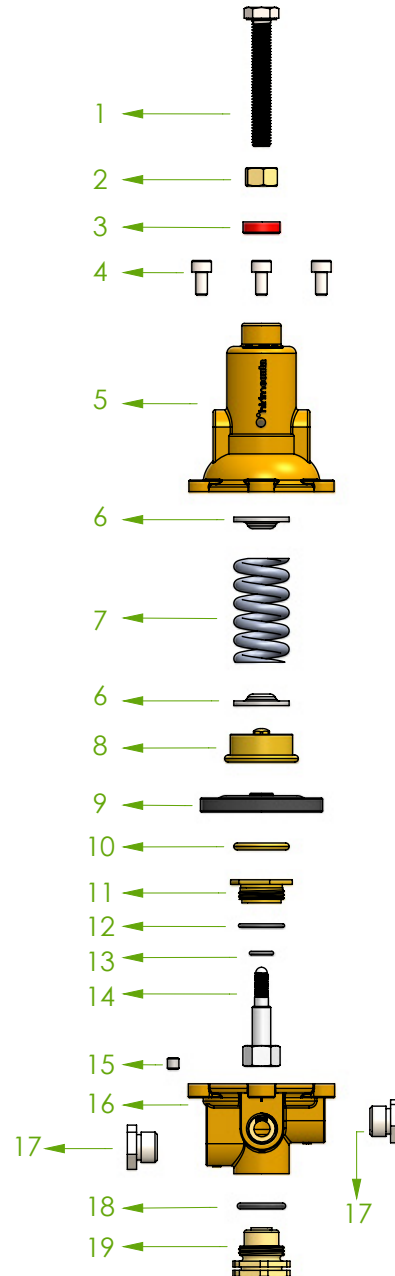
## PRESSURE RELIEF PILOT

The pressure relief pilot sets the maximum tare pressure limit through a set screw. If the upstream pressure exceeds the set pressure, the valve is opened by communicating the valve chamber to the atmospheric pressure, so it relieves excess pressure in the line.



### Disassembly

	DESCRIPTION	MATERIAL
1	Screw M-8x55	INOX
2	Nut M-8	Brass
3	Red washer	Nylon
4	Screw M-5	INOX
5	Pilot cap	Brass
6	Spring stop	INOX
7	Spring 4,5 mm	INOX
8	Membrane upper washer	Brass
9	Diaphragm	EPDM
10	Lower diaphragm washer	Brass
11	Pilot guide bushing	Brass
12	Seal 17x1,5	NBR
13	Seal 8x1,5	NBR
14	Shaft	INOX
15	Threaded stud M-5x5	INOX
16	Body	Brass
17	Plug 1/4	Brass
18	Seal 16x2,5	NBR
19	Pilot's butt	INOX



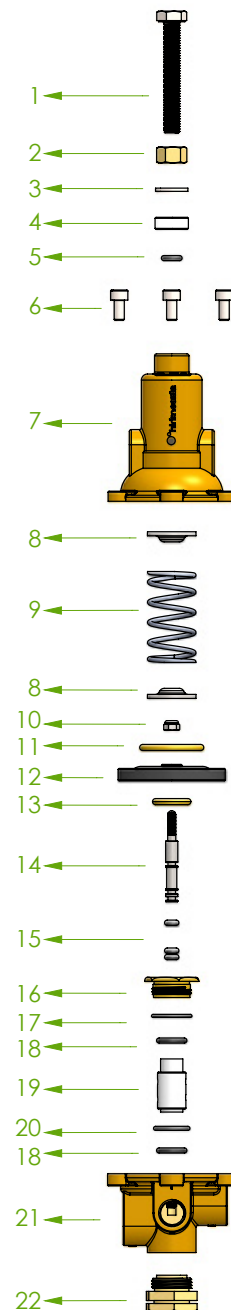
## FLOW LIMITER PILOT

The pilot regulates the opening of the valve according to the differential pressure, providing the pre-set flow rate and maintaining the constant flow rate. By actuating the screw of the pilot's tare it is possible to vary the flow rate. With two sensors, installed on both sides of an orifice plate that produces a certain pressure drop, the circulating flow is obtained, closing the hydraulic valve partially until just a determined flow in case of overcome the predetermined flow.



### Disassembly

	DESCRIPTION	MATERIAL
1	Screw M-8x55	INOX
2	Nut M-8	Brass
3	Washer M-8	INOX
4	Washer	Nylon
5	Gasket 5,25x2,5	NBR
6	Screw M-5	INOX
7	Pilot cap	Brass
8	Spring stop	INOX
9	Spring 2,25 mm	INOX
10	Nut M-4	INOX
11	Membrane top washer	Brass
12	Diaphragm	EPDM
13	Lower washer diaphragm	Brass
14	Shaft	INOX
15	Seal 2,6x1,9	NBR
16	Pilot guide bushing	Brass
17	Seal 17x1,5	NBR
18	Seal 10x2,5	NBR
19	Teflon pilot	Teflon
20	Seal 14x2	NBR
21	Body	Brass
22	Pilot's butt	Brass



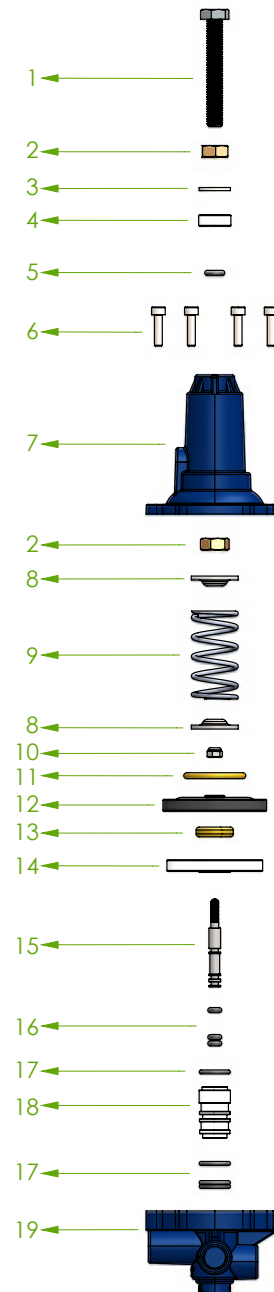
## FLOW LIMITER PILOT

The pilot regulates the opening of the valve according to the differential pressure, providing the pre-set flow rate and maintaining the constant flow rate. By actuating the screw of the pilot's tare it is possible to vary the flow rate. With two sensors, installed on both sides of an orifice plate that produces a certain pressure drop, the circulating flow is obtained, closing the hydraulic valve partially until just a determined flow in case of overcome the predetermined flow.



### Disassembly

	DESCRIPTION	MATERIAL
1	Screw M-8x55	INOX 304
2	Nut M-8	Brass
3	Washer M-8	INOX 304
4	Washer delrin	Nylon
5	Gasket 5,25x2,5	NBR
6	Screw M-4x15	INOX 304
7	Bell	Polyamide
8	Spring stop	INOX 304
9	Spring 2,25 mm	INOX
10	Nut M-4	INOX 304
11	Membrane top washer	Brass
12	Diaphragm	EPDM
13	Membrane upper washer	Brass
14	Washer	Polyamide
15	Shaft	INOX 304
16	Seal 2,6x1,9	NBR
17	Seal 12x2	NBR
18	Teflon pilot	Teflon
19	Base	Polyamide



## REDUCING OR SUSTAINING PILOT

**Reduction functioning:** The pilot sets the downstream pressure regardless the inlet pressure. If the outlet pressure is less than the preset pressure, the valve is completely open. If the upstream pressure is less than the calibrated, the pilot will open the valve, it will act just when the pressure exceeds the set pressure.

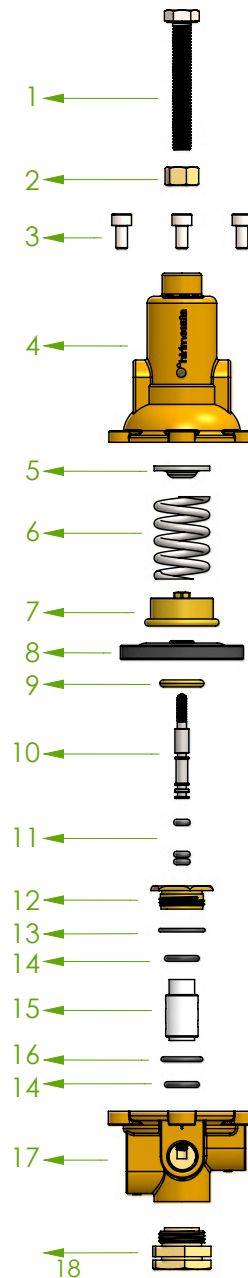
**Sustaining functioning:** The pilot is designed to maintain a minimum upstream pressure if the pressure is higher than the set value. Otherwise the valve will close until the upstream pressure is equal to or greater than the tare.



### Disassembly



	DESCRIPTION	MATERIAL
1	Screw M-8x55	INOX
2	Nut M-8	Brass
3	Screw M-5	INOX
4	Pilot cap	Brass
5	Spring stop	INOX
6	Spring 3,5 mm	INOX
7	Upper diaphragm washer	Brass
8	Diaphragm	EPDM
9	Lower washer diaphragm	Brass
10	Shaft	INOX
11	Seal 2,6x1,9	NBR
12	Pilot guide bushing	Brass
13	Seal 17x1,5	NBR
14	Seal 10x2,5	NBR
15	Teflon pilot	Teflon
16	Seal 14x2	NBR
17	Body	Brass
18	Pilot's butt	Brass



## REDUCING OR SUSTAINING PILOT

**Reduction functioning:** The pilot sets the downstream pressure regardless the inlet pressure. If the outlet pressure is less than the preset pressure, the valve is completely open. If the upstream pressure is less than the calibrated, the pilot will open the valve, it will act just when the pressure exceeds the set pressure.

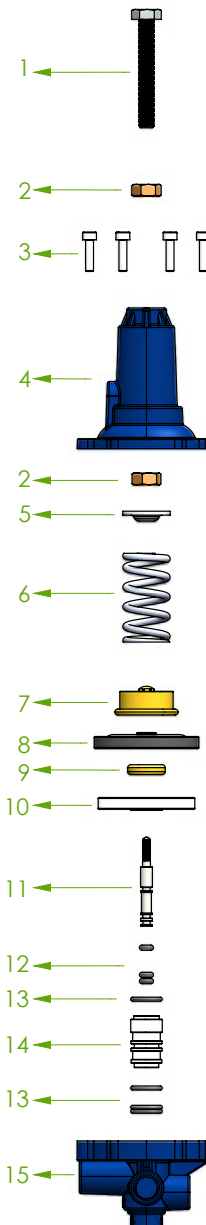
**Sustaining functioning:** The pilot is designed to maintain a minimum upstream pressure if the pressure is higher than the set value. Otherwise the valve will close until the upstream pressure is equal to or greater than the tare.



### Disassembly



	DESCRIPTION	MATERIAL
1	Tornillo M-8x55	INOX 304
2	Tuerca M-8	Brass
3	Tornillo M-4x15	INOX 304
4	Campana	Polyamide
5	Tope muelle	STAINLESS STEEL 304
6	Muelle 3,5 mm	INOX
7	Arandela sup. membrana	Brass
8	Membrana	EPDM
9	Arandela inf. membrana	Brass
10	Arandela	Polyamide
11	Eje	INOX 304
12	Junta 2,6x1,9	NBR
13	Junta 12x2	NBR
14	Teflón piloto	Teflon
15	Base	Polyamide



## Pilot springs and regulation ranges



BRASS PILOT MODEL	SPRING TYPE	WASHER	SPRING MEASURES (MM)	REGULATION RANGE (BAR)	PRECISION (BAR)
Reducer/Sustainer 3 ways	Normal pressure	Without washer	3,5	1,0/6,0	± 0,3
	High pressure	Red	4,5	3,0/12,0	± 0,4
	Low pressure	White	2,25	0,2/1,2	± 0,1
2-way reducer	High pressure	Red	4,5	3,0/12,0	± 0,3
3-way limiter	Low pressure	White	2,25	15% of the set flow rate	± 3% of the set flow rate
2-way accelerator	Normal pressure	Yellow	3,5	2,0/6,0	± 0,3
Relief 2-way	High pressure	Red	4,5	3,0/16,0	± 0,4

PLASCTIC PILOT MODEL	SPRING TYPE	WASHER	SPRING MEASURES (MM)	REGULATION RANGE (BAR)	PRECISION (BAR)
Reducer/Sustainer 3 ways	Normal pressure	Without washer	3,5	1,0/6,0	± 0,3
	High pressure	Red	4,5	3,0/12,0	± 0,4
	Low pressure	White	2,25	0,2/1,2	± 0,1
3-way limiter	Low pressure	White	2,25	15% of the set flow rate	± 3% of the set flow rate