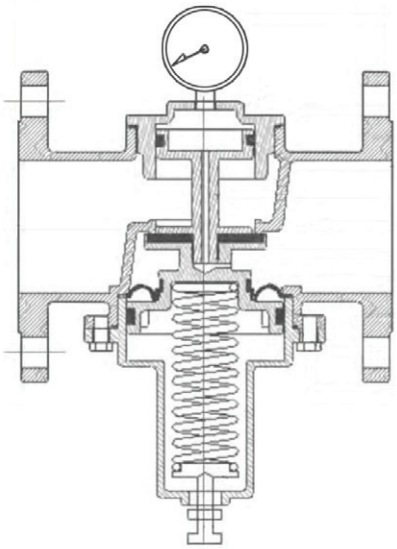
DERWENT FLOW CONTROL

avfi

DIRECT-ACTIVATED

PRESSURE SUSTAINING / BACK PRESSURE VALVE



FEATURES

- The whole set is made by stainless steel #316, and it is suitable for the fluid of pure water, acid & alkaline fluid, steam or air.
- Back pressure valve can maintain required pressure.
- Design of piston and diaphragm improves the inability of sustaining pressure and leakage.
- Back pressure chamber controls the valve gate and let gate respond, quickly and adjust pressure accurately.
- Pressure gauge indicates the sustaining pressure.
- Back Pressure (Sustaining) Valve: It's installed in branch pipe to maintain the stable pressure of fluid inside pipe. When pressure exceeds setting valve, it will automatically release over high pressure.
- Pressure Relief Valve: It's installed in branch pipe. When pressure exceeds setting valve, the valve gate will quickly and fully open to release pressure. As pipeline pressure goes down to certain level, valve gate will close slowly.
- Applied condition of Back Pressure Valve.

TECHNICAL DATA

Pressure Adjusting Range:	1~5 kgf/cm^2 4~10 kgf/cm^2
Pressure needed from fully-closed gate to fully-opened gate:	1.5 kgf/cm^2 (1 kgf/cm2 =14.2 psi)
Applied Temperature:	-15~100°C l00~180°C (For steam)
Valve Body Testing Pressure	35 kgf/cm^2
Maximum Applied Pressure	25 kgf/cm^2

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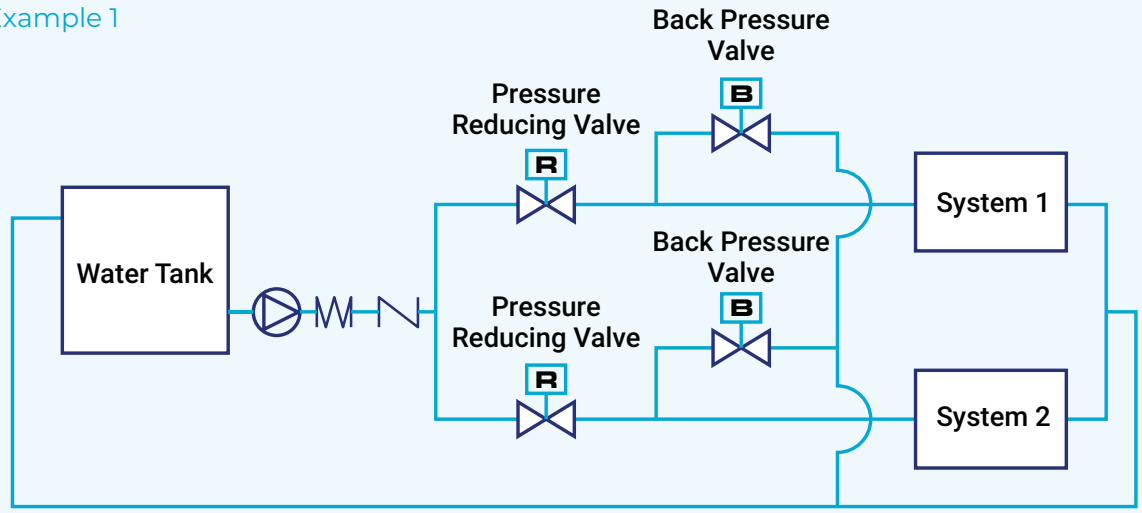
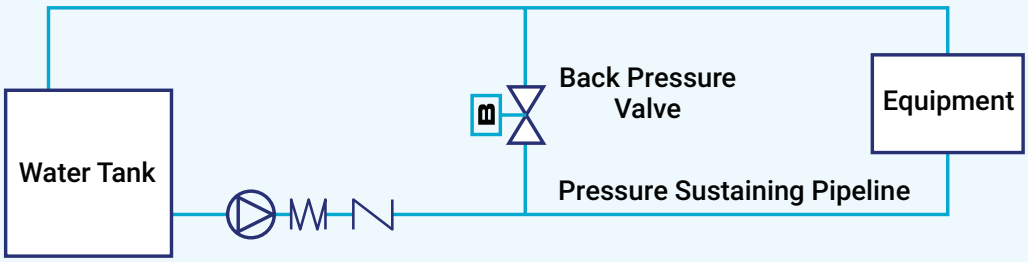
RESSURE SUSTAINING / BACK PRESSURE VALVE

Example 1



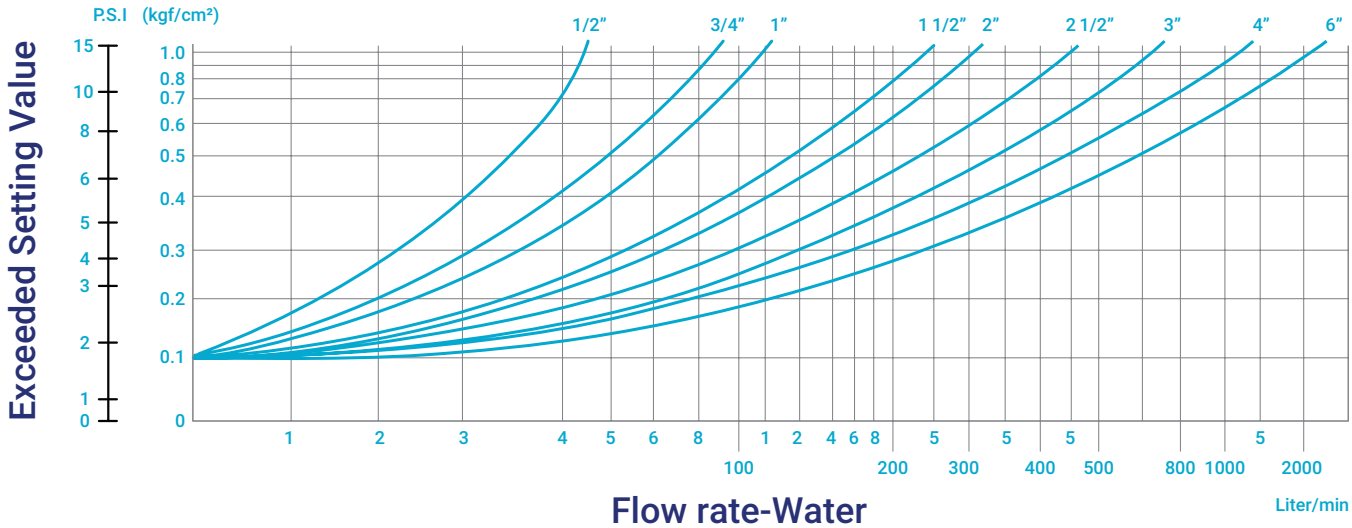
In different pressure systems of processing pipelines, installing back pressure valve can maintain required pressure of the systems and ensure safe uses of equipments after pressure reducing valve reduces pressure.

Example 2



Installing back pressure valve enables largest flow application an also stablise pipeline pressure.

Flow Chart of Direct-activated Back Pressure Valve



DIRECT-ACTIVATED
PRESSURE SUSTAINING / BACK PRESSURE VALVE

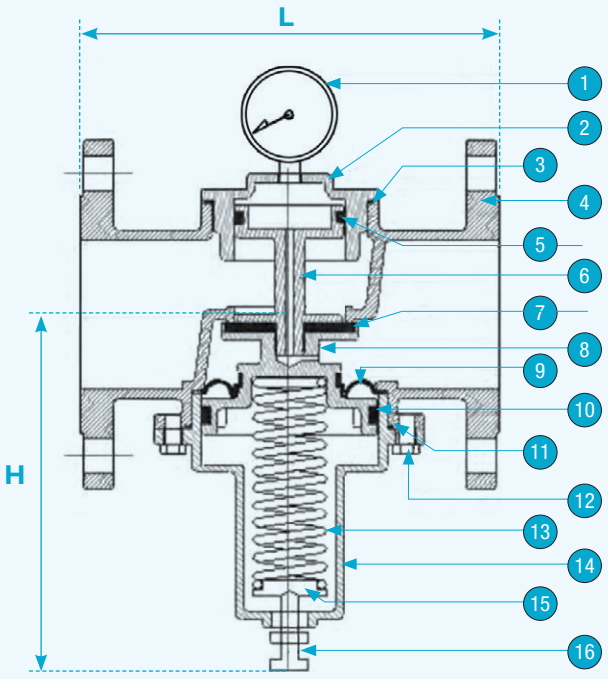
THREAD TYPE

Item No	Size	H (mm)	L (mm)	Weight (kg)	CV
ARFT15-S	1/2"	80	70	0.8	2.4
ARFT20-S	3/4"	105	85	0.9	9.0
ARFT25-S	1"	105	92	1.0	11.0
ARFT40-S	1 1/2"	130	115	2.2	21.0
ARFT50-S	2"	130	120	3.1	25.0

FLANGE TYPE

Item No	Size	H (mm)	L (mm)	Weight (kg)	CV
ARFF15-S	1/2"	85	150	2.0	2.4
ARFF20-S	3/4"	105	150	2.8	9
ARFF25-S	1"	105	150	3.5	11
ARFF40-S	1 1/2"	130	190	5.1	21
ARFF50-S	2"	130	190	5.9	25
ARFF65-S	2 1/2"	185	210	6.5	75
ARFF80-S	3"	185	225	11.5	80
ARFFI00-S	4"	230	250	12.0	120
ARFFI50-S	6"	290	310	19.0	250

DIMENSIONAL DRAWING



Thread / Flange Type
Thread type dos not have Part No. 12.

MATERIAL SPECIFICATIONS & PARTS LIST

NO.	DESCRIPTION	MATERIAL
1	Gauge	Stainless Steel
2	Upper Cover	Stainless Steel 316
3	O-ring	NBR/Viton
4	Main Body	Stainless Steel 316
5	U-ring NBR/Viton	
6	Shaft	Stainless Steel 316
7	Sealing Spacer	NBR I Viton / Teflon
8	Seat	Stainless Steel 316
9	Diaphragm	NBR/Viton
10	UH-ring	NBR/Viton
11	O-ring	NBR/Viton
12	Fixed Bolt	Stainless Steel 304
13	Spring	Spring Steel
14	Lower Cover	Stainless Steel 316
15	Washer	Brass
16	Adjusting	Stem Stainless Steel 304

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