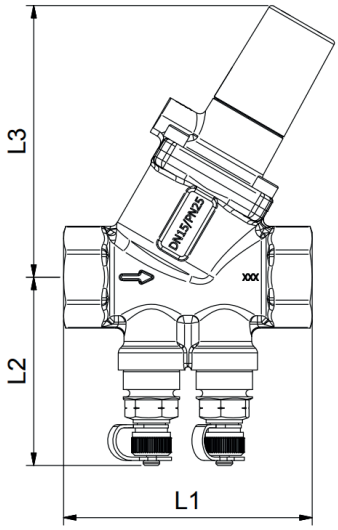
ART 24F
Differential Pressure Control Valve (DPCV)

Features

- Screwed BSP Parallel (ISO 228/1)
- High Kv value that achieves a low pressure loss and increased energy efficiency.
- Tamper-proof presetting device on top of the valve, meaning there is no need for valve sealing after presetting.
- Can be used as a flow limiter when combined with a partner valve
- Glycol mixtures up to 50% are applicable (both ethylene and propylene).

Technical data

Max pressure:	25 Bar
Max Differential pressure:	450 kPa
Working temp:	-10°C to +120°C



Control Ranges	
DN15	
	5 - 30 kPa
	20 - 60 kPa
DN20	
	5 - 30 kPa
	20 - 60 kPa
DN25 Low	
	5 - 30 kPa
DN25 High	
	20 - 80 kPa
DN32	
	20 - 80 kPa
DN40	
	20 - 80 kPa
DN50	
	20 - 80 kPa

Part Name	Material
Valve Housing D15-32	DZR Brass
Valve Housing DN40-50	Ductile Iron
DP Controller	PPS 40% glass
Spring	Stainless Steel
Diaphragm	HNBR
O-Rings and Seat	EPDM

DN	DN15	DN20	DN25 Low	DN25 High	DN32	DN40	DN50
L1	75	79	83	100	104	138	138
L2	57	57	59	63	68	71	77
L3	82	82	85	134	134	156	156
Kgs	0.71	0.73	0.83	1.57	1.72	3.12	3.55

V1. Dimensions in mm

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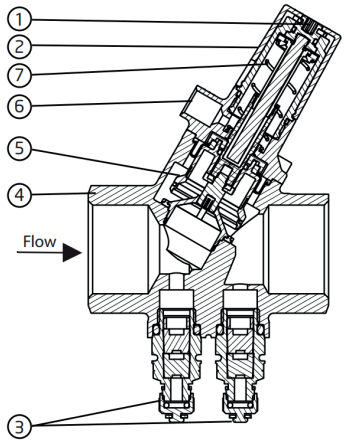


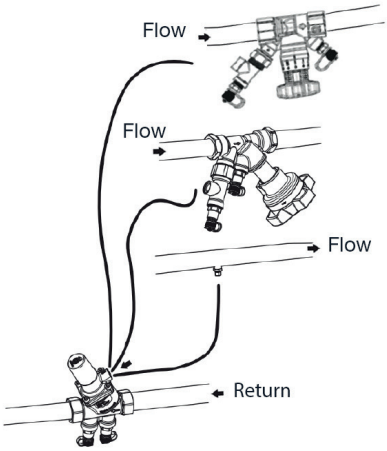
1. Adjustment Nut
2. Spring Cover
3. P/T Plugs
4. Housing
5. Piston
6. Capillary tube connection
7. Spring

The ART 24F must be installed in the return line with the capillary tube connected to the inlet line.

The valve is easily set by means of a 4mm hexagonal key.

By use of the required flow rate and differential pressure, the pre-setting of the valve can easily be determined via the pre-setting graph.

To set the valve to the desired downstream differential pressure, the valve should be set at the minimum position and then adjusted in accordance with the pre-setting graphs.



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DN15 - Low				
Flow m^3/h	**Flow l/s**	**Flow l/h**	**Control Range (kPa)**	**Kvs**
0.050-0.601	0.014-0.167	50-600	5 - 30	2.9

DN15 - High				
Flow m^3/h	**Flow l/s**	**Flow l/h**	**Control Range (kPa)**	**Kvs**
0.101-1.001	0.028-0.278	100-1000	20 - 60	2.9

DN20 - Low				
Flow m^3/h	**Flow l/s**	**Flow l/h**	**Control Range (kPa)**	**Kvs**
0.101-1.001	0.028-0.278	100-1000	5 - 30	3.5

DN20 - High				
Flow m^3/h	**Flow l/s**	**Flow l/h**	**Control Range (kPa)**	**Kvs**
0.151-2.002	0.042-0.556	150-2000	20 - 60	3.5

DN25 - Low				
Flow m^3/h	**Flow l/s**	**Flow l/h**	**Control Range (kPa)**	**Kvs**
0.601-2.099	0.167-0.583	600-2100	5 - 30	4.0

DN25 - High				
Flow m^3/h	**Flow l/s**	**Flow l/h**	**Control Range (kPa)**	**Kvs**
0.749-4.201	0.208-1.167	750-4200	20 - 80	8.7

DN32				
Flow m^3/h	**Flow l/s**	**Flow l/h**	**Control Range (kPa)**	**Kvs**
1.001-5.000	0.278-1.389	1000-5000	20 - 80	10.1

DN40				
Flow m^3/h	**Flow l/s**	**Flow l/h**	**Control Range (kPa)**	**Kvs**
2.999-7.999	0.833-2.222	3000-8000	20 - 80	15.8

DN50				
Flow m^3/h	**Flow l/s**	**Flow l/h**	**Control Range (kPa)**	**Kvs**
5.000-11.498	1.389-3.194	5000-11500	20 - 80	16.2

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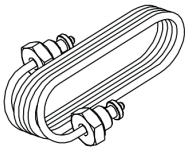
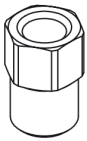
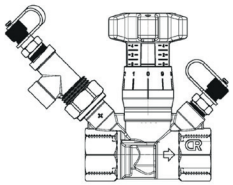




Capillary Tube Ø3mm x 1000mm	Included as standard with the ART 24F
ART 24F Capillary Adaptor 1/4”	Included as standard with the ART 24F

ART 28DP - Optional Partner Valve for ART 24F



DN	15	20	25	32	40	50
Kv Total (Fully open valve)	1.75	2.87	4.08	6.71	10.40	15.06

Kv = m^3/h at a pressure drop of 1 bar across the fully open valve.

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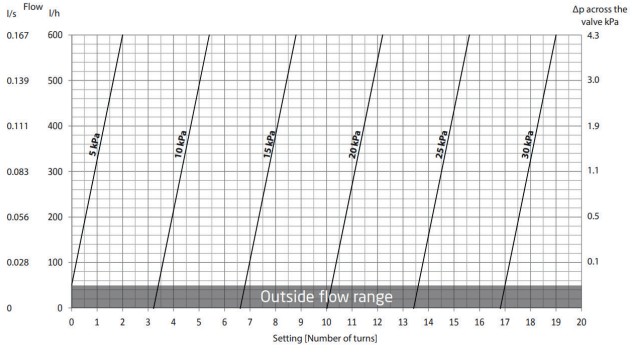
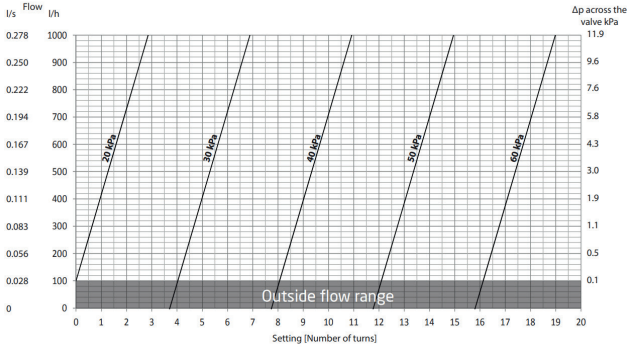
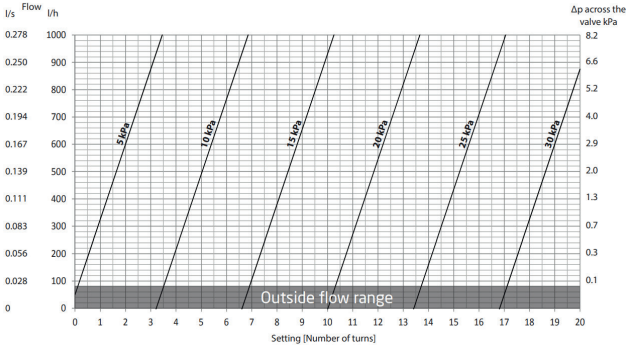
DN15 - 5-30 kPa



DN15 - 20-60 kPa



DN20 - 5-30 kPa



V1. Dimensions in mm

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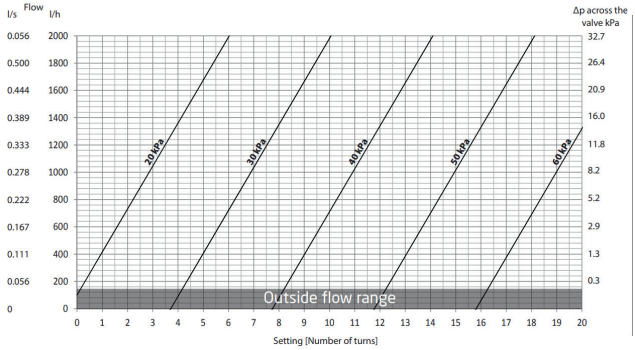
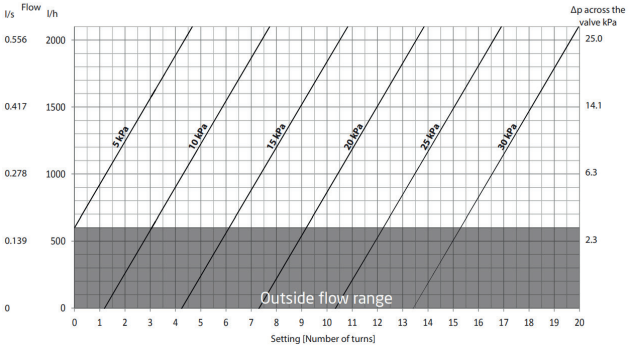
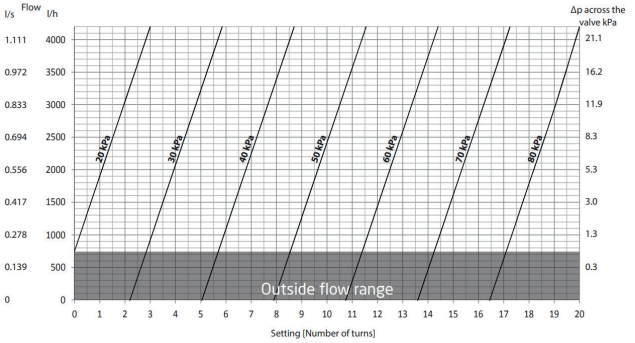
DN20 - 20-60 kPa



DN25 - 5-30 kPa



DN25 - 20-80 kPa



V1. Dimensions in mm

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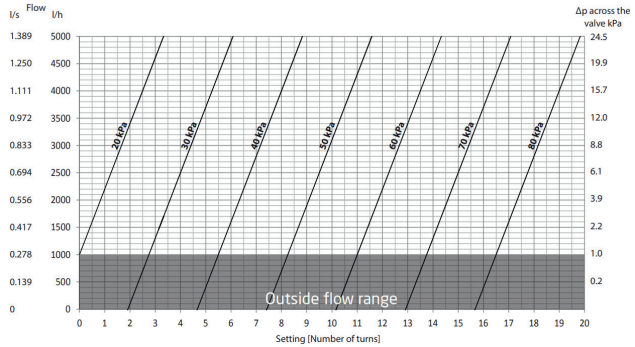
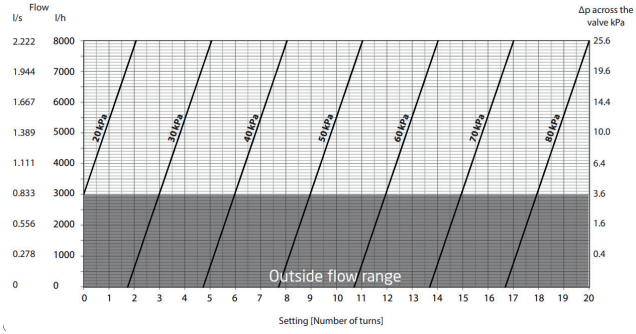
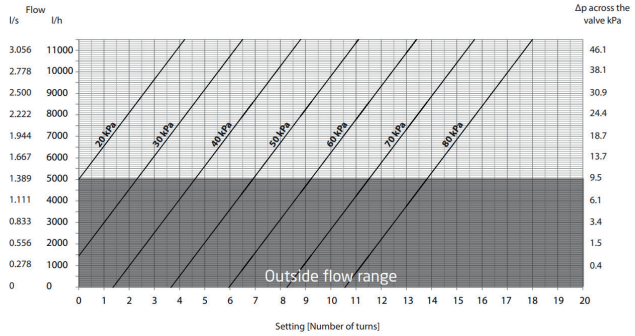
DN32 - 20-80 kPa



DN40 - 20-80 kPa



DN50 - 20-80 kPa



V1. Dimensions in mm