

# ART 242

## Differential Pressure Control Valve (DPCV)



### Features

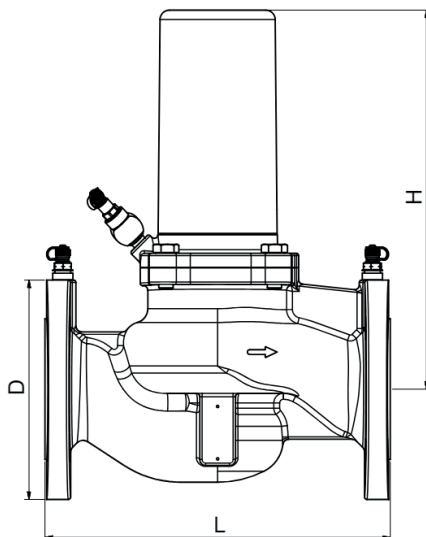
- Flange Connections ISO 7005-2 / EN 1092-2.
- High flow rates up to 261m<sup>3</sup>/h
- Higher Kvs values to offer the lowest possible pressure loss.
- Integrated P/T plugs for efficient commissioning and troubleshooting.
- Can be used as a flow limiter when combined with a partner valve.
- 25 Bar version also available

### Technical data

Max pressure: 16 Bar  
 Max Differential pressure: 1000 kPa  
 Working temp (DN50-125): -10°C to +120°C  
 Working temp (DN150-200): -10°C to +110°C

### Control Ranges

DN50	20 - 80 kPa
	20 - 100 kPa
	50 - 200 kPa
	150 - 500 kPa
DN65 - DN100	20 - 100 kPa
	50 - 200 kPa
	150 - 500 kPa
DN125 - DN200	20 - 100 kPa
	90 - 350 kPa



### Part Name

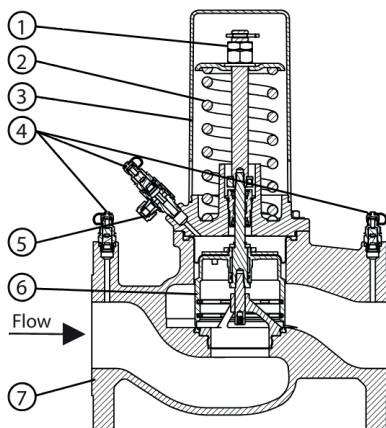
### Material

DP Controller	Stainless Steel
Spring	Spring wire (surface treated)
Spindle assembly	Stainless Steel
Diaphragm	Reinforced EPDM
O-Rings	EPDM

DN	DN50	DN65	DN80	DN100	DN125	DN150	DN200
Series	Standard	Standard	Standard	Standard	Standard	Standard	Standard
L	230	290	310	350	400	480	600
H	272	318	371	505	536	584	587
D	165	185	200	235	270	285	380
Kgs	16	21	31	50	77	115	180

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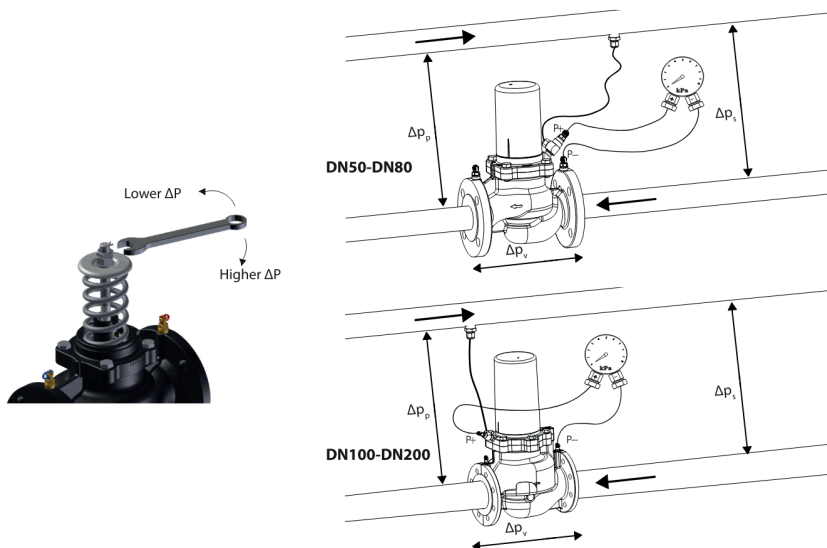
## Differential Pressure Control Valve (DPCV)



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

The ART 242 must be installed in the return line with the capillary tube connected to the inlet line.

The setting of the ART 242 is done with a wrench and a differential pressure manometer.



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DN50 - Standard				
Flow m³/h	Flow l/s	Flow gpm	Control Range (kPa)	Kvs
3.2-13.0	0.90 - 3.60	14.1 - 57.2	20 - 100	29
5.1-20.5	1.42 - 5.70	22.5 - 90.3	50 - 200	29
8.9-35.5	2.47 - 9.87	39.2 - 156	150 - 500	29

DN65 - Standard				
Flow m³/h	Flow l/s	Flow gpm	Control Range (kPa)	Kvs
4.70 - 18.8	1.30 - 5.22	20.7 - 82.8	20 - 100	42
7.4 - 29.7	2.06 - 8.25	32.6 - 131	50 - 200	42
12.9 - 51.4	3.57 - 14.3	56.8 - 226	150 - 500	42

DN80 - Standard				
Flow m³/h	Flow l/s	Flow gpm	Control Range (kPa)	Kvs
7.5 - 30.0	2.08 - 8.32	33.0 - 132	20 - 100	67
11.8 - 47.4	3.29 - 13.2	52.0 - 209	50 - 200	67
20.5 - 82.1	5.70 - 22.8	90.3 - 362	150 - 500	67

DN100 - Standard				
Flow m³/h	Flow l/s	Flow gpm	Control Range (kPa)	Kvs
12.9 - 51.4	3.57 - 14.3	56.8 - 226	20 - 100	115
20.3 - 81.3	5.65 - 22.6	89.4 - 358	50 - 200	115
35.2 - 141	9.78 - 39.1	155 - 621	150 - 500	115

DN125 - Standard				
Flow m³/h	Flow l/s	Flow gpm	Control Range (kPa)	Kvs
19.0 - 76.0	5.28 - 21.1	83.7 - 335	20 - 100	170
40.3 - 161	11.2 - 44.8	177 - 709	90 - 350	170

DN150 - Standard				
Flow m³/h	Flow l/s	Flow gpm	Control Range (kPa)	Kvs
28.0 - 112	7.76 - 31.1	123 - 493	20 - 100	250
59.3 - 237	16.5 - 65.9	261 - 1040	90 - 350	250

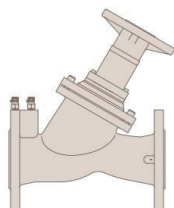
DN200 - Standard				
Flow m³/h	Flow l/s	Flow gpm	Control Range (kPa)	Kvs
30.7 - 123	8.54 - 34.2	135 - 542	20 - 100	275
65.2 - 261	18.1 - 72.5	287 - 1150	90 - 350	275

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## Differential Pressure Control Valve (DPCV)



ART 255 (FODRV) - Optional Partner Valve for ART 242



DN	50	65	80	100	125	150	200	250	300
Kv Total (Fully open valve)	38	57	79	137	260	415	612	971	1412

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