

BALANCING VALVES

Comap Ballorex is a complete range of static, dynamic and automatic valves for balancing hot and cold water circuits. Easily commissioned, they guarantee the optimal balance between control and energy savings.

APPLICATIONS

PICV VALVES (Pressure Independent Control Valves, Ballorex Dynamic): Ideal for applications where constant flow is required (such as fan coils and air conditioners) or areas where intermittent operation is necessary (such as hotel rooms and shops). Suitable for cooling or heating applications.

DPCV VALVES (Differential Pressure Control Valve, or Automatic Balancing Valve): Guarantee a constant differential pressure **across the risers of heating systems** to ensure they operate at their optimum pressure range, and prevent hydraulic interference from other branches.

MANUAL BALANCING VALVES (750, 750B, Ballorex V): Variable Orifice Valves are the most economical way to compensate for **circuit construction unbalance**.

STATIC VALVES (VENTURI): Ideal for heating applications. The direct reading capability feature is very convenient for fast commissioning; whatever the valve setting, the orifice Kv for flow measuring remains constant. One can directly read the actual flow while modifying the setting without changing the flow meter value. This dramatically reduces the commissioning time.

TECHNICAL CHARACTERISTICS

Model	Range dimensions	PN	Temperature
750	DN10-DN50	PN16	-25°C / +110°C
Ballorex V	DN15-DN50	PN25	-20°C / +120°C
750B	DN15-DN400	PN16	-10°C / +120°C (up to DN200) -10°C / +200°C (DN250-400)
Venturi	DN15-DN50	PN25	-20°C / +120°C
Ballorex Dynamic	DN15-DN32	PN25	-20°C / +120°C
Ballorex DP	DN15-DN32	PN25	-20°C / +135°C

BENEFITS

Model	Installer benefits
750	Sanitary compatibility (French ACS). Multiple orientation digital display. Sealable setting memory.
Ballorex V	Fast shut-off and isolation without losing the setting. Easy setting (Allen key). Symmetrical design: no flow direction constraint. Super compact design.
750B	Robust and accurate design
Venturi	Fast shut-off. Flow reading accuracy across the Venturi, without changing the flow meter value. Easy setting (Allen key). No straight upwards/downwards pipe required.
Ballorex Dynamic	Very accurate flow reading across the Venturi, without changing the flow meter value. Flow regulation stability. No straight pipes required.
Ballorex DP	Energy savings thanks to removal of overflows in the pipes and homogeneous temperature returns. Possibility to create new zones in the building without upgrading the whole heating system. Thermostatic valves always work at their best authority. Noise reduction in the installation.

FEATURES

The fast connector prevents the pressure ports from leaking and ageing.

Model	Venturi orifice for flow measure	Pressure port type	Principles and features
750		Fast / Needle	Bronze, oblique seat variable orifice direct reading valve (VODRV).
Ballorex V		Needle	DZR straight seat (VODRV).
750B		Fast	Cast iron flanged valves, variable orifice direct reading valve (VODRV).
Venturi	Yes	Needle	DZR valves, straight seat, fixed orifice direct reading valve (FODRV). Compactness and direct reading.
Ballorex Dynamic	Yes	Fast / Needle	DZR valve, EPDM membrane. Works with On-Off or modulating actuators.
Ballorex DP		Fast / Needle	CW602N brass valve, EPDM membrane, 2 versions, 5-25 kPa (LP) and 20-40 kPa (HP).

DYNAMIC BALANCING VALVES

PRESSURE INDEPENDANT CONTROL VALVE

NEW

BALLOREX DYNAMIC

With needle pressure test points



Size	Size (metric)	ITEM No	Flow range (m³/h)	Qty
½" F-F	DN15	4360000L-000001	0,036-0,118	1
½" F-F	DN15	4360000S-000001	0,090-0,450	1
½" F-F	DN15	4360000H-000001	0,300-1,400	1
¾" F-F	DN20	4460000S-000001	0,820-0,882	1
¾" F-F	DN20	4460000H-000001	0,835-2,220	1
1" F-F	DN25	4560000S-000001	0,835-2,340	1
1" F-F	DN25	4560000H-000001	1,750-3,330	1
1¼" F-F	DN32	4660000H-000001	1,910-4,400	1

PROPORTIONAL CONTROL THERMO-ELECTRIC ACTUATOR AND RING.

ACTUMOD

To be mounted on the Ballorex Dynamic



Size	ITEM No	Type	Operating voltage	Control Input	Qty
M30x1,5	U620001001	Normally closed	24V	0-10V	1

ON/OFF CONTROL THERMOELECTRIC ACTUATOR AND RING.

ACTUONOFF

To be mounted on the Ballorex Dynamic



Size	ITEM No	Type	Operating voltage	Control Input	Qty
M30x1,5	U620002001	Normally closed	230V	ON/OFF	1
M30x1,5	U620003001	Normally closed	24V	ON/OFF	1

DIFFERENTIAL PRESSURE AUTOMATIC BALANCING VALVES

AUTOMATIC DIFFERENTIAL PRESSURE CONTROL VALVE

NEW

BALLOREX DP- 5-25 KPA



Size	Size (metric)	ITEM No	Qty
1/2"	DN15	43550010-021003	1
3/4"	DN20	44550010-021003	1
1"	DN25	45550010-021003	1
1 1/4"	DN32	46550010-021003	1
1 1/2"	DN40	47550010-021003	1
2"	DN50	98550010-021003	1

AUTOMATIC DIFFERENTIAL PRESSURE CONTROL VALVE

NEW

BALLOREX DP- 20-40KPA



Size	Size (metric)	ITEM No	Qty
1/2"	DN15	43550030-021003	1
3/4"	DN20	44550030-021003	1
1"	DN25	45550030-021003	1
1 1/4"	DN32	46550030-021003	1
1 1/2"	DN40	47550030-021003	1
2"	DN50	98550010-021003	1

PARTNER VALVE FOR BALLOREX DP

750PV

With 2 pressure test points (for flow measuring) and connection to the Ballorex DP



Size	Size (metric)	ITEM No	Flow range (m³/h)	Qty
1/2"	DN15	754404	0,1-4,47	1
3/4"	DN20	754406	0,13-5,9	1
1"	DN25	754408	0,17-8,52	1
1 1/4"	DN32	754410	0,2-14,88	1

MANUAL BALANCING VALVES

VENTURI BALANCING VALVE

BALLOREX F

Needle pressure port, Fast shut-off and Venturi



Size	Size (metric)	ITEM No	Kv range (m ³ /h)	Ven-turi Kv m (m ³ /h)	Qty
1/2"	DN15L	435000L-001003	0,062-0,226	0,359	1
1/2"	DN15S	435000S-001003	0,13-0,530	0,746	1
1/2"	DN15H	435000H-001003	0,267-1,17	1,566	1
3/4"	DN20L	445000L-001003	0,13-0,530	0,746	1
3/4"	DN20S	445000S-001003	0,267-0,17	1,566	1
3/4"	DN20H	455000H-001003	0,511-2,17	2,952	1
1"	DN25S	455000S-001003	0,511-2,17	2,952	1
1"	DN25H	455000H-001003	1,044-4,500	6,01	1
1"1/4	DN32H	465000H-001003	1,044-4,500	6,01	1
1"1/2	DN40H	475000H-001003	1,580-6,760	9,204	1
2"	DN50H	485000H-001003	2,952-12,63	17,1	1

VENTURI BALANCING VALVE - COMPRESSION

BALLOREX C

Needle pressure port, Fast shut-off and Venturi



Size	Size (metric)	ITEM No	Kv range (m ³ /h)	Ven-turi Kv m (m ³ /h)	Qty
1/2"	DN15L	4850100H-001063	0,062-0,226	0,359	1
1/2"	DN15S	4850100H-001063	0,13-0,530	0,746	1
1/2"	DN15H	4850100H-001063	0,267-1,17	1,566	1
3/4"	DN20L	4850100H-001063	0,13-0,53	0,746	1
3/4"	DN20S	4850100H-001063	0,267-1,170	1,566	1
3/4"	DN20H	4850100H-001063	0,511-2,17	2,952	1
1"	DN25S	4850100H-001063	0,511-2,17	2,952	1
1"	DN25H	4850100H-001063	1,044-4,50	6,01	1
1"1/4	DN32H	4850100H-001063	1,044-4,50	6,01	1
1"1/2	DN40H	4850100H-001063	1,584-6,76	9,204	1
2"	DN50H	4850100H-001063	2,952-12,63	17,1	1

MANUAL BALANCING VALVES, VODRV

NEW

BALLOREX V

Needle pressure port, Fast shut-off



Size	Size (metric)	ITEM No	Type	Kvs (m ³ /h at BP 2k)	Qty	Kv range
1/2"	DN15	4351000S-001003	-	1,71	1	0,019-0,530
3/4"	DN20	4451000S-001003	-	4,4	1	0,055-1,170
1"	DN25	4551000S-001003	-	7,46	1	0,084-2,170
1 1/4"	DN32	4651000S-001003	-	13,5	1	0,310-4,500
1 1/2"	DN40	4751000S-001003	-	23,7	1	0,450-6,770
2"	DN50	4851000S-001003	-	34,5	1	0,960-12,640
1/2"	DN15	4351000S-001673 With Drain		1,71	1	0,019-0,530
3/4"	DN20	4451000S-001673 With Drain		4,4	1	0,055-1,170
1"	DN25	4551000S-001673 With Drain		7,46	1	0,084-2,170
1 1/4"	DN32	4651000S-001673 With Drain		13,5	1	0,310-4,500
1 1/2"	DN40	4751000S-001673 With Drain		23,7	1	0,450-6,776
2"	DN50	4851000S-001673 With Drain		34,5	1	0,960-12,640

BALANCING VALVES WITH DIGITAL HANDWHEEL

753



Size	Size (metric)	ITEM No	Kv range (m ³ /h)	Qty
1/2"	DN15	753104	0,1-4,47	1
3/4"	DN20	753106	0,13-5,9	1
1"	DN25	753108	0,17-8,52	1
1"1/4	DN32	753110	0,2-14,88	1
1"1/2	DN40	753112	0,23-21,09	1
2"	DN50	753116	0,55-35,48	1

BALANCING VALVES WITHOUT HANDWHEEL

1753



Size	Size (metric)	ITEM No	Kv range (m ³ /h)	Qty
1/2"	DN15	175304	0,09-4,52	1
3/4"	DN20	175306	0,12-6,01	1
1"	DN25	175308	0,15-8,65	1
1 1/4"	DN32	175310	0,25-14,97	1
1 1/2"	DN40	175312	0,29-21,2	1
2"	DN50	175316	0,76-35,73	1

BALANCING VALVES WITHOUT HANDWHEEL

1752

with one drain



Size	Size (metric)	ITEM No	Kv range (m ³ /h)	Qty
1/2"	DN15	175204	0,09-4,52	1
3/4"	DN20	175206	0,12-6,01	1
1"	DN25	175208	0,15-8,65	1

BALANCING VALVES WITH DIGITAL HANDWHEEL

750

1 pressure test point and 1 drain



Size	Size (metric)	ITEM No	Kv range (m ³ /h)	Qty
3/8"	DN10	750403	0,12-1,95	1
1/2"	DN15	750404	0,1-4,47	1
3/4"	DN20	750406	0,13-5,9	1
1"	DN25	750408	0,17-8,52	1
1 1/4"	DN32	750410	0,2-14,88	1
1 1/2"	DN40	750412	0,23-21,09	1
2"	DN50	750416	0,55-35,48	1

REDUCED KV BALANCING VALVES WITH DIGITAL HANDWHEEL

750R

1 pressure test point and 1 drain



Size	Size (metric)	ITEM No	Kv range (m ³ /h)	Qty
1/2"	DN15	7504041	0,115-1,90	1
3/4"	DN20	7504061	0,115-1,89	1
1"	DN25	7504081	0,1-5,19	1

REDUCED KV BALANCING VALVES WITH DIGITAL HANDWHEEL

751

2 pressure test points



Size	Size (metric)	ITEM No	Kv range (m ³ /h)	Qty
3/8"	DN10	751403	0,12-1,95	1
1/2"	DN15	751404	0,1-4,47	1
3/4"	DN20	751406	0,13-5,9	1
1"	DN25	751408	0,17-8,52	1
1 1/4"	DN32	751410	0,2-14,88	1
1 1/2"	DN40	751412	0,23-21,09	1
2"	DN50	751416	0,55-35,48	1

REDUCED KV BALANCING VALVES WITH DIGITAL HANDWHEEL

751R

2 pressure test points



Size	Size (metric)	ITEM No	Kv range (m ³ /h)	Qty
1/2"	DN15	7514041	0,115-1,90	1
3/4"	DN20	7514061	0,115-1,89	1
1"	DN25	7514081	0,1-5,19	1

FLANGED BALANCING VALVES

FLANGED CAST IRON BALANCING VALVE

751B

Straight through seat, VODRV



Size (metric)	ITEM No	Kv range (m ³ /h)	Qty
DN15	751504	0,13-4,5	1
DN20	751506	0,22-6,6	1
DN25	751507	0,22-9,8	1
DN32	751508	0,29-15,1	1
DN40	751509	0,88-24,9	1
DN50	751510	1,07-48,5	1
DN65	751512	2,98-74,4	1
DN80	751513	3,65-111	1
DN100	751514	3,77-165	1
DN125	751516	8,30-242	1
DN150	751518	16,2-372	1
DN200	751520	32,5-704	1

FLANGED CAST IRON BALANCING VALVE

750B

Straight through seat, VODRV



Size (metric)	ITEM No	Kv range (m ³ /h)	Qty
DN250	750750	179-812	1
DN300	750800	411-1383	1
DN350	750850	395-1651	1
DN400	750900	690-2383	1

VENTURI FLANGED BALANCING VALVE

NEW

BALLOREX VENTURI

Butterfly cast iron, FODRV



Size (metric)	ITEM No	Kvs (m ³ /h at BP 2k)	Flow range (m ³ /h)	Qty
DN65	3937000-680009	78,2	6,48 - 25,2	1
DN80	3937600-680009	169	12,6 - 54,0	1
DN100	3938200-680009	360	22,3 - 93,6	1
DN125	3938800-680009	502	32,4 - 144	1
DN150	3939400-680009	1010	60,5 - 205	1
DN200	3940000-680009	1910	101 - 360	1
DN250	3940600-680009	2540	148 - 565	1
DN300	3941200-680009	4850	259 - 814	1

ACCESSORIES

ANTI-LEAK QUICK COUPLING TEST POINT

2761

For 750 and 751 type valves



Size	ITEM No	Qty
1/4"	276102	2
3/8"	276103	2

50 MM TEST POINT EXTENSION

27

For 750 and 751 type valves



Size	ITEM No	Qty
1/4"	VBG95C00	2
3/8"	VBG95C01	2