

ELECTRIC ON/OFF GLOBE VALVES EV15 (EN)

DESCRIPTION

The ADCATrol EV15 is a series of single seated, two-way electric on/off globe valves with electric actuator. These valves are suitable for use with the most common process fluids such as steam, water, superheated water, air, neutral gases and oils.

MAIN FEATURES

Easy to service.
Compact and cost-effective.
Ambient temperature from -10 to 60 °C (others on request).
24 V AC, 115 V AC, 230 V AC, 400 V AC 50/60 Hz and 24 V DC supply voltages.
Manual operation with disengagement of the actuator motor.
Valve protection against excessive force due to load-dependent seating.
Defined closing force at the end positions leading to tight valve shutoff.
Mechanical stroke indication via anti-rotation bar.

OPTIONS AND

ACCESSORIES: Limit switches.
Heating resistor.

USE: Saturated steam.
Hot and superheated water.
Air, gases and others.

AVAILABLE MODELS: EV15G – SG iron.
EV15S – carbon steel.
EV15i – stainless steel.

SIZES: DN 15 to DN 200.

CONNECTIONS: EV15G – Flanged EN 1092-2 PN 16.
EV15S and EV15i – Flanged EN 1092-1 PN 16 or PN 40.
Standard PN 16 DN 65 flanges are supplied with 4 holes. 8 holes, according to EN 1092-1/-2, on request.



CE MARKING – GROUP 2 (PED – EUROPEAN DIRECTIVE)		
PN 16	PN 40	CATEGORY
DN 15 to 50	DN 15 to 32	SEP
DN 65 to 200	DN 40 to 100	1 (CE marked)
–	DN 125 to 200	2 (CE marked)

BODY LIMITING CONDITIONS

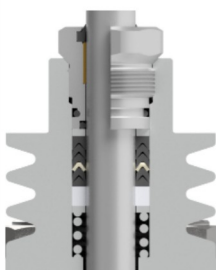
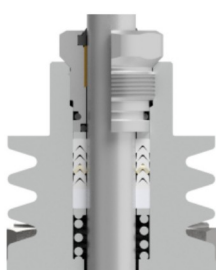
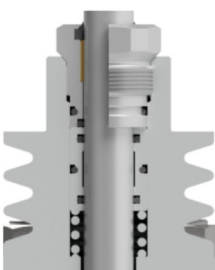
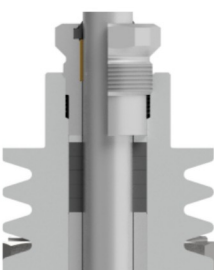
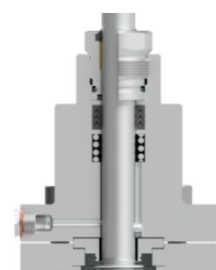
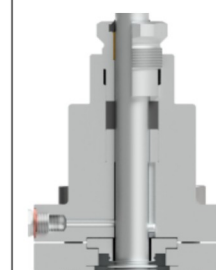
EV15G **		EV15S *				EV15i *			
FLANGED PN 16		FLANGED PN 16		FLANGED PN 40		FLANGED PN 16		FLANGED PN 40	
ALL. PRES.	REL. TEMP.	ALL. PRES.	REL. TEMP.	ALL. PRES.	REL. TEMP.	ALL. PRES.	REL. TEMP.	ALL. PRES.	REL. TEMP.
16 bar	-10 / 50 °C	16 bar	-10 / 50 °C	40 bar	-10 / 50 °C	16 bar	-10 / 50 °C	40 bar	-10 / 50 °C
14,7 bar	200 °C	13,3 bar	200 °C	33,3 bar	200 °C	13,4 bar	200 °C	33,7 bar	200 °C
13,9 bar	250 °C	12,1 bar	250 °C	27,6 bar	300 °C	12,7 bar	250 °C	29,7 bar	300 °C
12,8 bar	300 °C	11 bar	300 °C	25,7 bar	350 °C	11,8 bar	300 °C	28,5 bar	350 °C
11,2 bar	350 °C	10,2 bar	350 °C	23,8 bar	400 °C	11,4 bar	350 °C	27,4 bar	400 °C

* Rating according to EN 1092-1:2018; ** Rating according to EN 1092-2:2007.

BONNET DESIGN

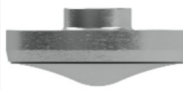
STANDARD	EXTENDED
 -10 °C to 250 °C	 Above 250 °C

STEM SEALING

PTFE/GR V-RINGS (V1.2)	PTFE V-RINGS (V2.2)	EPDM (EP1)	GRAPHITE (G1)	BELLOWS	
				(BV1)	(BG1)
 -10 to 220 °C	 -10 to 180 °C	 -10 to 150 °C *	 -10 to 400 °C	 - 60 to 220 °C **	 - 60 to 400 °C **

* Up to 180 °C in steam and hot water applications; ** Maximum operating pressure: 25 bar.

PLUG DESIGN

PARABOLIC	PARABOLIC (SOFT SEALING)
 Sealing: Metal to metal Characteristic: Quick-opening (On/Off) Flow direction: From below Leakage: Class V, acc. to IEC 60534-4	 Sealing: PTFE/GR Characteristic: Quick-opening (On/Off) Flow direction: From below Leakage: Class VI, acc. to IEC 60534-4 Max. temp.: 200 °C

FLOW RATE COEFFICIENTS (m³/h)

SIZES	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200
Kvs	5,1	6,3	10	16	25	40	63	100	160	240	370	630
SEAT Ø (mm)	19,2	19,2	25	32	38	48	65	76	96	125	150	200
STROKE (mm)	5	8	8	10	10	12,5	20	20	25	32	38	50

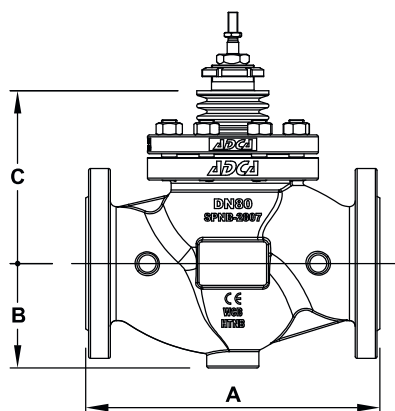
For conversion Kvs = Cv (US) x 0,865.

EV15 – FTO, UNBALANCED TRIM

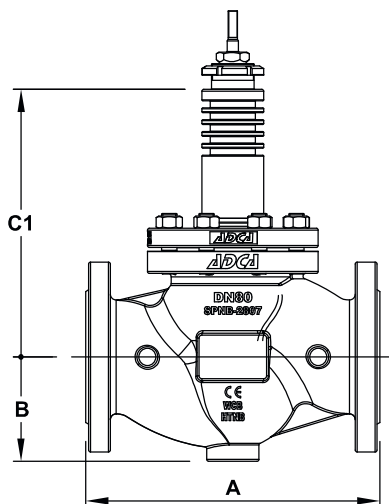
VALVE SIZE	ACTUATOR MODEL	MAXIMUM PERMISSIBLE PRESSURE DROP (bar) *			
		SOFT SEALING (CLASS VI)		METAL SEALING (CLASS V)	
		PTFE	GRAPHITE	PTFE	GRAPHITE
DN 15	EL12	40	40	40	35,1
	EL20	40	40	40	40
DN 20	EL12	40	40	23,2	19,6
	EL20	40	40	40	40
DN 25	EL12	17,8	15,7	12,2	10,1
	EL20	30,8	28,8	25,2	23,1
	EL45	40	40	40	40
DN 32	EL12	10,7	9,5	6,3	5,1
	EL20	18,7	17,4	14,3	13
	EL45	40	40	39,2	37,9
DN 40	EL12	7,5	6,6	3,8	2,9
	EL20	13,2	12,3	9,5	8,6
	EL45	30,8	29,9	27,1	26,2
	EL80	40	40	40	40
DN 50	EL20	8,2	7,6	5,2	4,7
	EL45	19,2	18,7	16,3	15,7
	EL80	40	40	40	40
DN 65	EL20	4,4	4,1	2,2	1,9
	EL45	10,4	10,1	8,2	7,9
	EL80	18,8	18,5	16,7	16,4
	EL120	28,5	28,2	26,3	26
DN 65 M16x1,5	SA07.2	31,6	31,1	29,4	28,9
	SA07.6	40	40	40	40
	EL250	40	40	40	40
DN80	EL45	7,6	7,4	5,7	5,5
	EL80	13,7	13,5	11,9	11,7
	EL120	20,8	20,6	19	18,7
DN 80 M16x1,5	SA07.2	23	22,7	21,2	20,9
	SA07.6	36,6	36,3	34,8	34,4
	EL250	40	40	40	40
	SA10.2	40	40	40	40
DN 100	EL45	4,7	4,6	3,2	3,1
	EL80	8,6	8,4	7,1	7
	EL120	13	12,9	11,5	11,4
DN 100 M16x1,5	SA07.2	14,4	14,2	12,9	12,7
	SA07.6	22,9	22,7	21,4	21,2
	EL250	27,3	27,1	25,9	25,7
	SA10.2	34,6	34,4	33,2	32,9
DN 125	EL80	5	4,9	3,9	3,8
	EL120	7,6	7,5	6,5	6,4
	SA07.2	8,5	8,3	7,3	7,2
	SA07.6	13,5	13,4	12,4	12,2
	EL250	16,1	16	15	14,8
	SA10.2	25	24,8	23,8	23,7
DN 150	EL80	3,5	3,4	2,5	2,4
	EL120	5,3	5,2	4,3	4,2
	SA07.2	5,9	5,8	4,9	4,8
	SA07.6	9,3	9,3	8,4	8,3
	EL250	11,1	11,1	10,2	10,1
	SA10.2	17,3	17,2	16,4	16,3
DN 200	SA07.2	3,3	3,2	2,5	2,5
	SA07.6	5,2	5,1	4,5	4,4
	EL250	6,2	6,2	5,5	5,4
	SA10.2	10,6	10,5	9,9	9,8
	SA14.2	20,2	20,2	19,5	19,5

* "PTFE" specified pressure drops are applicable in case of V-ring and O-ring stem seals independently of the material.

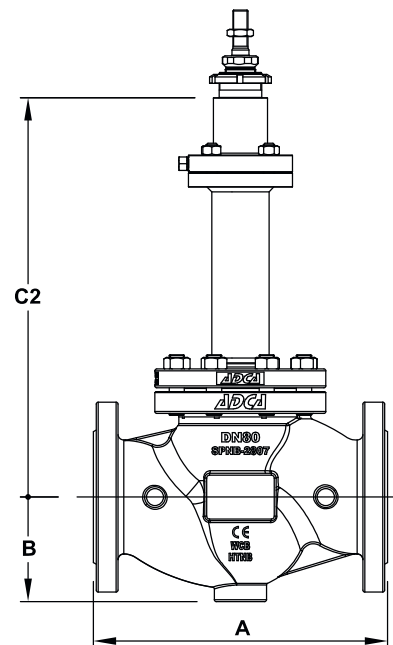
"GRAPH." specified pressure drops are applicable in case of graphite and bellow stem seals.



Valve with standard bonnet



Valve with extended bonnet



Bellows sealed valve

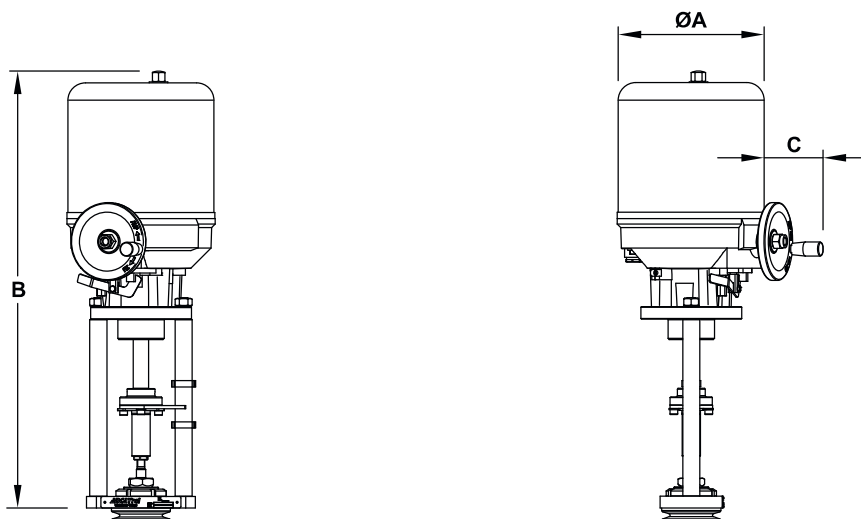
DIMENSIONS (mm)

DIMENSION	SIZE											
	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200
A	130	150	160	180	200	230	290	310	350	400	480	600
B	52	53	58	70	75	85	100	110	130	160	180	225
C	104	104	109	109	113	125	176	182	194	210	216	277
C1	169	169	189	189	193	204	276	282	314	315	320	400
C2	295	295	298	298	303	303	415	421	424	590	590	–

Remark: Standard PN 16 DN 65 flanges are supplied with 4 holes. 8 holes, according to EN 1092-1/-2, on request.

WEIGHTS (kg)

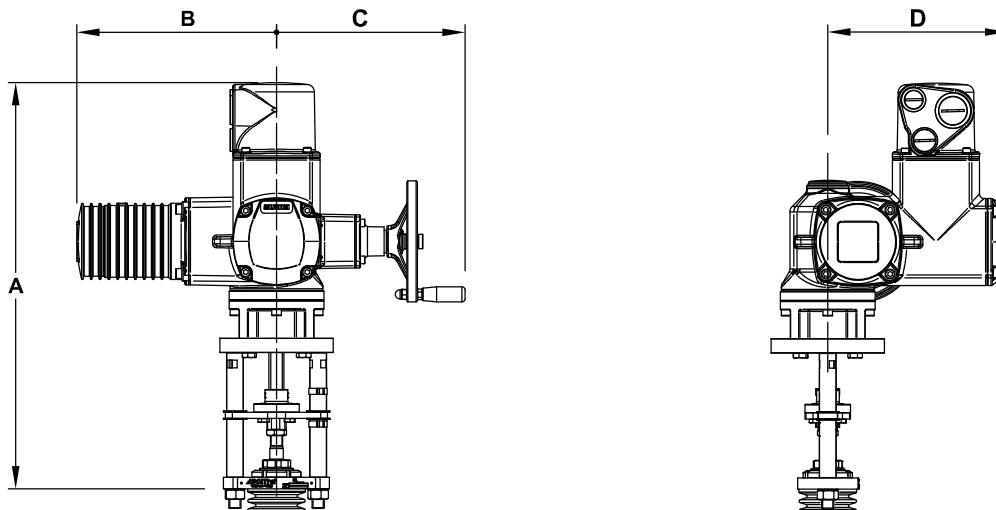
	SIZE											
	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200
STANDARD	5,1	6	6,9	10	12,6	16,4	31,8	38,2	48,9	79,1	105,5	232,3
EXTENDED	5,8	6,7	7,6	10,9	13,9	17,6	32,5	38,9	49,4	81,5	107,3	237,6
BELLOWS	9,3	10,2	10,9	14,1	16,6	20,2	35,6	41,9	53,5	85,9	112,3	–



DIMENSIONS – EL SERIES ELECTRIC ACTUATORS (mm)

DIMENSION	EL12	EL20	EL45	EL80	EL120	EL250
ØA	129	148	148	188	188	216
B	315	474	474	572	572	668
C	–	42	42	70	70	70
WEIGHT (kg)	2,1	8	8	13	13	19

For more information, please consult IS EL.012 – Linear electric actuators.



DIMENSIONS – SA SERIES ELECTRIC ACTUATORS (mm)

DIMENSION	SA07.2	SA07.6	SA10.2	SA14.2
A	539 (a) 548 (b) 583 (c)	539 (a) 548 (b) 583 (c)	583 (a) 539 (b) 548 (c)	679
B	283	283	283	389
C	254	254	254	336
D	248	248	248	286
WEIGHT (kg)	25,4 (a) 26,8 (b) 32 (c)	27,9 (a) 31,2 (b) 33,1 (c)	30 (a) 33,2 (b) 35,2 (c)	65,2

(a) DN 65 to 100; (b) DN 125 to 150; (c) DN 200.

For more information, please consult the manufacturer.