

CONVALVE SPECIALIST IN VALVE AUTOMATION



ISO 9001
Quality

ISO 14001
Environment

OHSAS 18001
Health & Safety





DIRECT OPERATED SOLENOID VALVE N.C AND N.O, 2/2 WAY, G3/8" UP TO G1/2", 0 TO 10 BAR

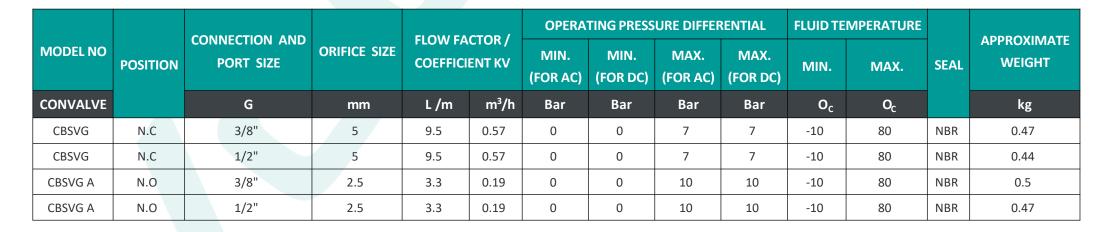


DESCRIPTION

- Fluids: Valves are suitable for water, low viscosity oils, etc... non-aggressive liquids and Air, Inert Gas, etc... gaseous but is not suitable for hazardous fluids
- Switching Function: Normally Closed (N.C, Closed when de-energized) (CBSVG 100 Series) and Normally Open (N.O, Open when de-energized) (CBSVG 101 Series)
- Principle of Operation: Direct Operated
- Way Number: 2/2 (Ports / Positions)
- Connection and Port Sizes: G1/8" and G1/4"
- Connection Type: Thread (Female), G (BSPP / ISO 228-1)
- Pressure Range: 0 -16 Bar (CBSVG 100 Series), 0-12 Bar (CBSVG 101 Series)
- Fluid Temperature: -10°C to max. 80°C, Ambient Temperature: -20°C to max. 70°C
- Opening Time: 25 ms, Closing Time: 25 ms
- Max Viscosity: 38 cSt or mm2/s
- Maximum Allowable Pressure or Design Pressure: 24 bar (CBSVG 100 Series), 18 Bar (CBSVG 101 Series)

FEATURES

- Don't require differential pressure, internal exhaust system (for CBSVG 101 Series)
- Compact design
- Valve has sealing o-rings
- Suitable AC and DC voltage, high voltage tolerance
- Coil interchangeable without dismantling the valve (don't matter AC or DC)
- Low flow loss, low power loss
- Various flow rate options, wide range of pressure ratings, wide range of orifice options
- · Mounting position, optional any position but preferably solenoid coil vertical on top
- · The fluid passing through the valve must be filtered
- Flow rate (Q) can be usually calculated as a function of pressure, density and flow coefficient
- According to 97/23/EC Pressure Equipment Directive (PED), 2006/95/EEC Low Voltage Directive (LVD) and 2004/108/EC Electromagnetic Compatibility Directive (EMC).





OPTIONS

- Custom options can be performed for customer's special requests
- On request; NPT (ANSI 1.20.3), R (BSPT / ISO 7-1), W (BSW / Whit- worth), M (Metric) etc...
- On request; diaphragm or sealing or o-rings can be FPM (VITON) (-10°C to 160°C), EPDM (-10°C to 140°C)
- On request; various body surface coating, nickel plated body, different body materials, internal parts stainless steel (for CBSVG 101), manual override, the seat can be stainless steel, filter, other pipe connections, 2 mounting sub-base holes at the bottom of the body
- On request; other special supply voltages, frequencies (60 Hz), other power, coil insulation class: F (155°C), coil duty latching model
- On request; with electronic timer, Explosion-Proof coil for use in zones 1/21-2/22 (Eex em II T4/T5), coil encapsulation material can be fiber glass reinforced (V0 or V1)
- On request; connector with LED or without connector, connector with visual indication and peak voltage suppression, connector with a cable length of 2m, Spade plug (Cable Ø 8-10 mm), connector non-flammable
- On request other versions

ELECTRICAL CHARACTERISTIC

- Protection Degree: IP 65 (EN 60529) (with connector)
- Plug Connection: DIN 46340-3 poles connectors (DIN 43650)
- Connector Specification: ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm)
- Electrical Safety: IEC 335, EN 60335-1, EN 60204-1
- Coil Insulation Class: H (1800C)
- Coil Impregnation: Polyester Fiber-Resin Glass
- Coil Encapsulation Material: Fiber Glass Reinforced (V2)
- Supply Voltages: For AC(~) 12V, 24V, 48V, 110V, 230V
- For DC (=) 12V , 24V , 48V , 110 V, 230 V
- Voltage Tolerances: For AC (~) or DC (=) %-10; %+10
- Frequency: 50 Hz
- Coil Duty Cycle: %100 ED, Continuously Rated
- Design according to DIN VDE 0580

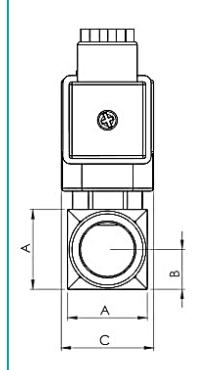
APPLICATION

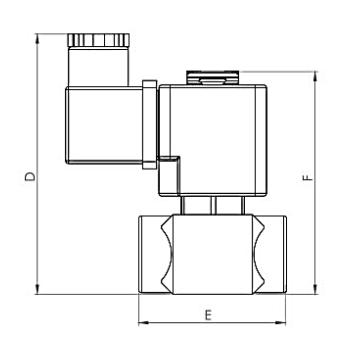
- Cooling Applications
- Gas Boilers
- Water Treatment Systems
- Garden Irrigation Systems
- Central Heating Systems
- Air Working Textile Machines

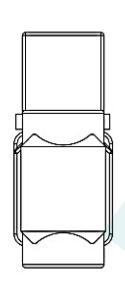
MATERIAL

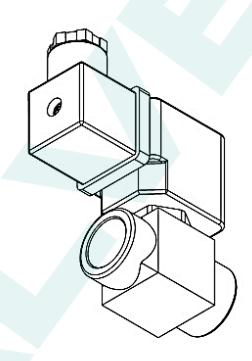
BODY	Brass
PLUNGER SEAL	NBR
ENCLOSING TUBE	Stainless Steel (AISI 430FR and AISI 304) for CBSVG 100 Series , Stainless Steel (AISI 430FR and AISI 304) and Brass for CBSVG 101 Series
PLUNGER	Stainless Steel (AISI 430FR)
SPRINGS	Stainless Steel (AISI 302)
SHADING RING	Copper
RETAINER RING	Carbon steel +epoxy/ SS304
SEAT	Brass
O-RINGS	NBR
INTERNAL METAL PARTS	Stainless Steel and Brass

DIMENSIONS MM









SIZE	A	В	С	D	E	F
3/8"	28	14	32.5	91.5	51.5	78.2
1/2"	28	14	32.5	91.5	51.5	78.2

POWER CONSUMPTION

	ALTERNATING CU	RRENT (AC)		DIRECT CURRENT (DC)					
MODEL NO	VOLTAGE	INRUSH (VA)	HOLDING (VA)	MODEL NO	VOLTAGE	COLD (W)	HOT (W)		
CVCO 10.AC.012	12V	30	18	CVCO 10.DC.012	12V	16	12		
CVCO 10.AC.024	24V	30	18	CVCO 10.DC.024	24V	16	12		
CVCO 10.AC.048	48V	30	18	CVCO 10.DC.048	48V	16	12		
CVCO 10.AC.110	110V	30	18	CVCO 10.DC.110	110V	16	12		
CVCO 10.AC.230	230V	30	18	CVCO 10.DC.230	230V	16	12		





DIRECT OPERATED SOLENOID VALVE VALVE N.C AND N.O, 2/2 WAY, G3/4" UP TO G1", 0 TO 10 BAR



DESCRIPTION

- Fluids: Valves are suitable for water, low viscosity oils, etc... non-aggressive liquids and Air, Inert Gas, etc... gaseous but is not suitable for hazardous fluids
- Switching Function: Normally Closed (N.C, Closed when de-energized) (CBSVG 100 Series) and Normally Open (N.O, Open when de-energized) (CBSVG 101 Series)
- Principle of Operation: Direct Operated
- Way Number: 2/2 (Ports / Positions)
- Connection and Port Sizes: G3/4" and G1"
- Connection Type: Thread (Female), G (BSPP / ISO 228-1)
- Pressure Range: 0 -7 Bar (CBSVG 120 Series), 0-10 Bar (CBSVG 101 Series)
- Fluid Temperature: -10°C to max. 80°C , Ambient Temperature: -20°C to max. 70°C
- Opening Time: 25 ms, Closing Time: 25 ms
- Max Viscosity: 38 cSt or mm2/s
- Maximum Allowable Pressure or Design Pressure: 24 bar (CBSVG 100 Series), 18 Bar (CBSVG 101 Series)

FEATURES

- Don't require differential pressure, internal exhaust system (for CBSVG 101 Series)
- Compact design
- Valve has sealing o-rings
- Suitable AC and DC voltage, high voltage tolerance
- · Coil interchangeable without dismantling the valve (don't matter AC or DC)
- Low flow loss, low power loss
- Various flow rate options, wide range of pressure ratings, wide range of orifice options
- · Mounting position, optional any position but preferably solenoid coil vertical on top
- The fluid passing through the valve must be filtered
- Flow rate (Q) can be usually calculated as a function of pressure, density and flow coefficient
- According to 97/23/EC Pressure Equipment Directive (PED), 2006/95/EEC Low Voltage Directive (LVD) and 2004/108/EC Electromagnetic Compatibility Directive (EMC).

		CONNECTION AND		FLOW FACTOR (OPERATING PRESSURE DIFFERENTIAL				FLUID TEMPERATURE			ADDROVINAATE
MODEL NO		PORT SIZE	ORIFICE SIZE		FLOW FACTOR / COEFFICIENT KV		MIN. (FOR DC)	MAX. (FOR AC)	MAX. (FOR DC)	MIN.	MAX.	SEAL	APPROXIMATE WEIGHT
CONVALVE		G	mm	L /m	m³/h	Bar	Bar	Bar	Bar	O _c	O _c		kg
CBSVG	N.C	3/4"	5	9.5	0.57	0	0	7	7	-10	80	NBR	0.7
CBSVG	N.C	1"	5	9.5	0.57	0	0	7	7	-10	80	NBR	0.65
CBSVG A	N.O	3/4"	2.5	3.3	0.19	0	0	10	10	-10	80	NBR	0.73
CBSVG A	N.O	1"	2.5	3.3	0.19	0	0	10	10	-10	80	NBR	0.68
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OPTIONS

- Custom options can be performed for customer's special requests
- On request; NPT (ANSI 1.20.3), R (BSPT / ISO 7-1), W (BSW / Whit- worth), M (Metric) etc...
- On request; diaphragm or sealing or o-rings can be FPM (VITON) (-10°C to 160°C), EPDM (-10°C to 140°C)
- On request; various body surface coating, nickel plated body, different body materials, internal parts stainless steel (for CBSVG 101), manual override, the seat can be stainless steel, filter, other pipe connections, 2 mounting sub-base holes at the bottom of the body
- On request; other special supply voltages, frequencies (60 Hz), other power, coil insulation class: F (155°C), coil duty latching model
- On request; with electronic timer, Explosion-Proof coil for use in zones 1/21-2/22 (Eex em II T4/T5), coil encapsulation material can be fiber glass reinforced (V0 or V1)
- On request; connector with LED or without connector, connector with visual indication and peak voltage suppression, connector with a cable length of 2m, Spade plug (Cable Ø 8-10 mm), connector non-flammable
- On request other versions

ELECTRICAL CHARACTERISTIC

- Protection Degree: IP 65 (EN 60529) (with connector)
- Plug Connection: DIN 46340-3 poles connectors (DIN 43650)
- Connector Specification: ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm)
- Electrical Safety: IEC 335, EN 60335-1, EN 60204-1
- Coil Insulation Class: H (1800C)
- Coil Impregnation: Polyester Fiber-Resin Glass
- Coil Encapsulation Material: Fiber Glass Reinforced (V2)
- Supply Voltages: For AC(~) 12V, 24V, 48V, 110V, 230V
- For DC (=) 12V , 24V , 48V , 110 V, 230 V
- Voltage Tolerances: For AC (~) or DC (=) %-10; %+10
- Frequency: 50 Hz
- Coil Duty Cycle: %100 ED, Continuously Rated
- Design according to DIN VDE 0580

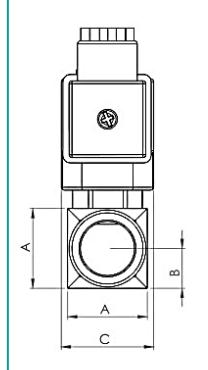
APPLICATION

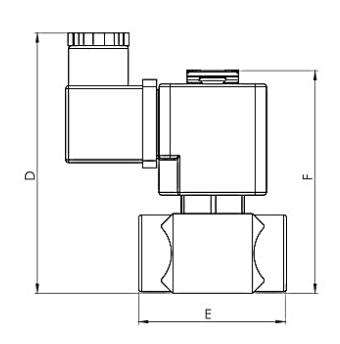
- Cooling Applications
- Gas Boilers
- Water Treatment Systems
- Garden Irrigation Systems
- Central Heating Systems
- Air Working Textile Machines

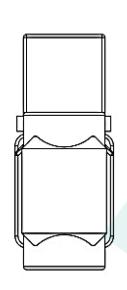
MATERIAL

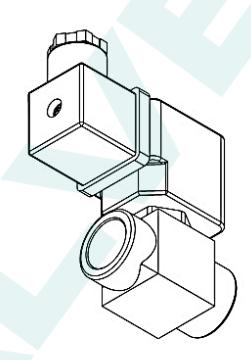
BODY	Brass
PLUNGER SEAL	NBR
ENCLOSING TUBE	Stainless Steel (AISI 430FR and AISI 304) for CBSVG 100 Series , Stainless Steel (AISI 430FR and AISI 304) and Brass for CBSVG 101 Series
PLUNGER	Stainless Steel (AISI 430FR)
SPRINGS	Stainless Steel (AISI 302)
SHADING RING	Copper
RETAINER RING	Carbon steel +epoxy/ SS304
SEAT	Brass
O-RINGS	NBR
INTERNAL METAL PARTS	Stainless Steel and Brass

DIMENSIONS MM









SIZE	Α	В	С	D	E	F
3/4"	32	16	32.5	95.5	52	82
1"	40	20	32.5	103.5	60	90

POWER CONSUMPTION

	ALTERNATING CU	RRENT (AC)			DIRECT CURRENT	(DC)	
MODEL NO	VOLTAGE	INRUSH (VA)	HOLDING (VA)	MODEL NO	VOLTAGE	COLD (W)	HOT (W)
CVCO 10.AC.012	12V	30	18	CVCO 10.DC.012	12V	16	12
CVCO 10.AC.024	24V	30	18	CVCO 10.DC.024	24V	16	12
CVCO 10.AC.048	48V	30	18	CVCO 10.DC.048	48V	16	12
CVCO 10.AC.110	110V	30	18	CVCO 10.DC.110	110V	16	12
CVCO 10.AC.230	230V	30	18	CVCO 10.DC.230	230V	16	12



CBSVG101 (N.O)



PILOT OPERATED SOLENOID VALVE VALVE



DESCRIPTION

- Fluids: Valves are suitable for water, low viscosity oils, etc... non-aggressive liquids and Air, Inert Gas, etc... gaseous but are not suitable for hazardous fluids
- Switching Function: Normally Closed (N.C, Closed when de-energized) (CBSVG 100 Series) and Normally Open (N.O, Open when de-energized) (CBSVG 101 Series)
- Principle of Operation: Pilot Operated
- Way Number: 2/2 (Ports / Positions)
- Connection and Port Sizes: G1/8" up to G2"
- Connection Type: Thread (Female), G (BSPP / ISO 228-1)
- Pressure Range: ·0,35 -16 Bar (1/8" up to 1" CBSVG 100 Series) , 0,5 -12 Bar (11/4" up to 2" CBSVG 100 Series) , 0,35 -12 Bar (1/8" up to 1" CBSVG 101 Series) , 0,5 -10 Bar (11/4" up to 2" CBSVG 101 Series)
- Fluid Temperature: -10°C to max. 80°C, Ambient Temperature: -20°C to max. 70°C
- Opening Time: 200ms up to 1500ms, Closing Time: 500ms up to 2000ms
- Max Viscosity: 38 cSt or mm2/s

FEATURES

- Maximum Allowable Pressure or Design Pressure: 24 bar (CBSVG 100 Series), 18 Bar (CBSVG 101 Series)
- Minimum operating differential pressure: 0,35 Bar (For 1/8" up to 1") and 0,5 Bar (For 11/4" up to 2"), (internal exhaust system (for CBSVG 101 Series)
- Valve has sealing o-rings
- Suitable AC and DC voltage, high voltage tolerance
- Coil interchangeable without dismantling the valve (don't matter AC or DC)
- High flow rate, high reliability, high mechanical strength
- Various flow rate options, a wide range of orifice options
- Mounting position, optional any position but preferably solenoid coil vertical on top
- The fluid passing through the valve must be filtered
- Flow rate (Q) can be usually calculated as a function of pressure, density and flow coefficient
- According to 97/23/EC Pressure Equipment Directive (PED), 2006/95/EEC Low Voltage Directive (LVD) and 2004/108/EC Electromagnetic Compatibility Directive (EMC)

		CONNECTION AND	ODIFICE	FLOVA FA	CTOD /	OPERATING PRESSURE DIFFERENTIAL FLUID TEMPE					MPERATURE		4 DDD QVI 4 4 TE
MODEL NO	POSITION	PORT SIZE	ORIFICE SIZE	FLOW FA		MIN. (FOR AC)	MIN. (FOR DC)	MAX. (FOR AC)	MAX. (FOR DC)	MIN.	MAX.	SEAL	APPROXIMATE WEIGHT
CONVALVE		G	mm	L/m	m³/h	Bar	Bar	Bar	Bar	O _c	O _c		kg
CBSVG	N.C	3/8"	12	40	2.40	0.35	0.35	16	16	-10	80	NBR	0.62
CBSVG	N.C	1/2"	15	70	4.20	0.35	0.35	16	16	-10	80	NBR	0.58
CBSVG	N.C	3/4"	20	130	7.80	0.35	0.35	16	16	-10	80	NBR	0.74
CBSVG	N.C	1"	25	180	10.80	0.35	0.35	16	16	-10	80	NBR	1
CBSVG	N.C	11/4"	32	380	22.80	0.5	0.5	12	12	-10	80	NBR	2.95
CBSVG	N.C	11/2"	40	480	28.80	0.5	0.5	12	12	-10	80	NBR	2.85
CBSVG	N.C	2"	50	600	36.00	0.5	0.5	12	12	-10	80	NBR	3.3
CBSVG A	N.O	3/8"	12	40	2.40	0.35	0.35	12	12	-10	80	NBR	0.65
CBSVG A	N.O	1/2"	15	70	4.20	0.35	0.35	12	12	-10	80	NBR	0.61
CBSVG A	N.O	3/4"	20	130	7.80	0.35	0.35	12	12	-10	80	NBR	0.75
CBSVG A	N.O	1"	25	180	10.80	0.35	0.35	12	12	-10	80	NBR	1.03
CBSVG A	N.O	11/4"	32	380	22.80	0.5	0.5	10	10	-10	80	NBR	2.98
CBSVG A	N.O	11/2"	40	480	28.80	0.5	0.5	10	10	-10	80	NBR	2.88
CBSVG A	N.O	2"	50	600	36.00	0.5	0.5	10	10	-10	80	NBR	3.33



OPTIONS

- Custom options can be performed for customer's special requests
- On request; NPT (ANSI 1.20.3), R (BSPT / ISO 7-1), W (BSW / Whit- worth), M (Metric) etc...
- On request; diaphragm or sealing or o-rings can be FPM (VITON) (-10°C to 160°C), EPDM (-10°C to 140°C)
- On request; various body surface coating, nickel plated body, different body materials, internal parts stainless steel (for CBSVG101), manual override, the seat can be stainless steel, filter, other pipe connections, flanged connection
- On request; other special supply voltages, frequencies (60 Hz), other power, coil insulation class: F (155°C), coil duty latching model
- On request; with electronic timer, Explosion-Proof coil for use in zones 1/21-2/22 (Eex em II T4/T5), coil encapsulation material can be fiberglass reinforced (V0 or V1)
- On request; connector with LED or without connector, connector with visual indication and peak voltage suppression, connector with a cable length of 2m, Spade plug (Cable Ø 8-10 mm), connector non-flammable
- On request other versions

ELECTRICAL CHARACTERISTIC

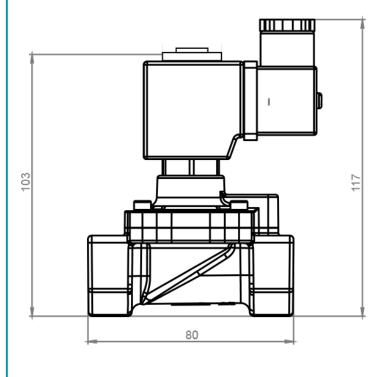
- Protection Degree: IP 65 (EN 60529) (with connector)
- Plug Connection: DIN 46340-3 poles connectors (DIN 43650)
- Connector Specification: ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm)
- Electrical Safety: IEC 335, EN 60335-1, EN 60204-1
- Coil Insulation Class: H (180°C)
- Coil Impregnation: Polyester Fiber-Resin Glass
- · Coil Encapsulation Material: Fiber Glass Reinforced (V2)
- Supply Voltages: For AC(~) 12V, 24V, 48V, 110V, 230V
- For DC (=) 12V , 24V , 48V, 110V, 230 V
- Voltage Tolerances: For AC (~) or DC (=) %-10; %+10
- Frequency: 50 Hz
- Coil Duty Cycle: %100 ED, Continuously Rated
- Design according to DIN VDE 0580

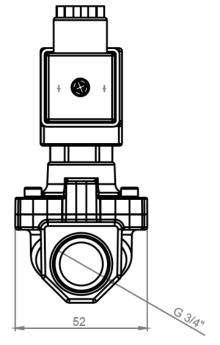
APPLICATION

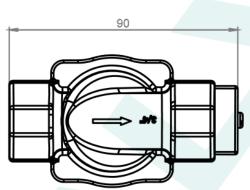
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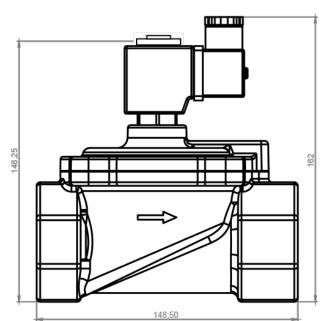
MATERIAL

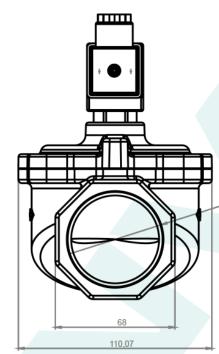
BODY	Brass
PLUNGER SEAL	NBR
ENCLOSING TUBE	Stainless Steel (AISI 430FR and AISI 304) for CBSVG 100 Series , Stainless Steel (AISI 430FR and AISI 304) and Brass for CBSVG 101 Series
PLUNGER	Stainless Steel (AISI 430FR)
SPRINGS	Stainless Steel (AISI 302)
SHADING RING	Copper
RETAINER RING	Carbon steel +epoxy/ SS304
SEAT	Brass
O-RINGS	NBR
INTERNAL METAL PARTS	Stainless Steel and Brass
COVER	Brass
DIAPHRAGM/SEAT SEAL	NBR
COVER SCREWS	Stainless Steel











SIZE	Α	В	С	D	E	F	G
1/8"	105.3	69	76.5	26.8	26.9	44	13.4
1/4"	105.3	69	76.5	26.8	26.9	44	13.4
3/8"	105.3	69	76.5	26.8	26.9	44	13.4
1/2"	105.3	69	76.5	26.8	26.9	44	13.4
3/4"	109.8	80	86.8	31.8	31.9	53.8	15.3
1"	120.3	89	95.5	40.9	40.7	62	20.5

SIZE	Α	В	С	D	Ε	F
11/4"	110	117	130	48	74	24
11/2"	140	127	140	56	98	28
2"	145	143	156	70	110	35

POWER CONSUMPTION

	ALTERNATING CU	RRENT (AC)		DIRECT CURRENT (DC)					
MODEL NO	VOLTAGE	INRUSH (VA)	HOLDING (VA)	MODEL NO	VOLTAGE	COLD (W)	HOT (W)		
CVCO 10.AC.012	12V	30	18	CVCO 10.DC.012	12V	16	12		
CVCO 10.AC.024	24V	30	18	CVCO 10.DC.024	24V	16	12		
CVCO 10.AC.048	48V	30	18	CVCO 10.DC.048	48V	16	12		
CVCO 10.AC.110	110V	30	18	CVCO 10.DC.110	110V	16	12		
CVCO 10.AC.230	230V	30	18	CVCO 10.DC.230	230V	16	12		