

DATA SHEET

# CAL-CFC-X

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CALMS AIR INC.



## CAL-CFC-X Pressure Flow System Controller

The CFC-X device in connection with the CAL-PM-X device offers compressed air control with stable and low pressure, complete air management, alarming, reporting, data logging. Motor valve for control and switching of neutral through to highly aggressive media in process engineering, chemical industries and for plant equipment.

### Key features and benefits:

- > Advanced flow controller that separates the supply side (compressors) from demand side (peaks) and maintains constant system pressure no matter the system demand;
- > Online monitoring - CFC is the only device that has online monitoring and compressor control integrated for achieving best energy efficiency;
- > Easy to install as many as you need for multiple production lines;
- > Fail safe operation;

## CAL-CFC-X Device:

Model:	Description:	Pipe diameter:	Design flow:	Regulation range:	Pressure SP resolution:
		mm / inch	m3/min	Bar / PSI	Bar / PSI
CAL-CFC-50	<p>CALMS Flow Controller DN50 (2"), without on-off bypass valve, with CALMS online connection</p> <p>NOTE: Model selection based on pressure, flow and temperature specification! CFC includes also 2x pressure sensors, additional cards I/O (CAL-AI4, CAL-AO4) for CAL-PM device</p>	DN50 / 2"	2-25	2-40 (max 42) / 29-580 (max 609)	0.05 / 1
CAL-CFC-65	<p>CALMS Flow Controller DN65 (2 ½"), without on-off bypass valve, with CALMS online connection, 2x pressure sensors, additional cards I/O (CAL-AI4, CAL-AO4) for CAL-PM box</p> <p>NOTE: Model selection based on pressure, flow and temperature specification! CFC includes also 2x pressure sensors, additional cards I/O (CAL-AI4, CAL-AO4) for CAL-PM device</p>	DN65 / 2.5"	2-34	2-40 (max 42) / 29-580 (max 609)	0.05 / 1
CAL-CFC-80	<p>CALMS Flow Controller DN80 (3"), without on-off bypass valve, with CALMS online connection, 2x pressure sensors, additional cards I/O (CAL-AI4, CAL-AO4) for CAL-PM box</p> <p>NOTE: Model selection based on pressure, flow and temperature specification! CFC includes also 2x pressure sensors, additional cards I/O (CAL-AI4, CAL-AO4) for CAL-PM device</p>	DN80 / 3"	5-45	2-40 (max 42) / 29-580 (max 609)	0.08 / 1

<p>CAL-CFC-100</p>	<p>CALMS Flow Controller DN100 (4"), without on-off bypass valve, with CALMS online connection</p> <p>NOTE: Model selection based on pressure, flow and temperature specification! CFC includes also 2x pressure sensors, additional cards I/O (CAL-AI4, CAL-AO4) for CAL-PM device</p>	<p>DN100 / 4"</p>	<p>5-89</p>	<p>2-40 (max 42) / 29-580 (max 609)</p>	<p>0.08 / 1</p>
<p>CAL-CFC-150</p>	<p>CALMS Flow Controller DN150 (6"), without on-off bypass valve, with CALMS online connection</p> <p>NOTE: Model selection based on pressure, flow and temperature specification! CFC includes also 2x pressure sensors, additional cards I/O (CAL-AI4, CAL-AO4) for CAL-PM device</p>	<p>DN150 / 6"</p>	<p>8-120</p>	<p>2-40 (max 42) / 29-580 (max 609)</p>	<p>0.08 / 1</p>

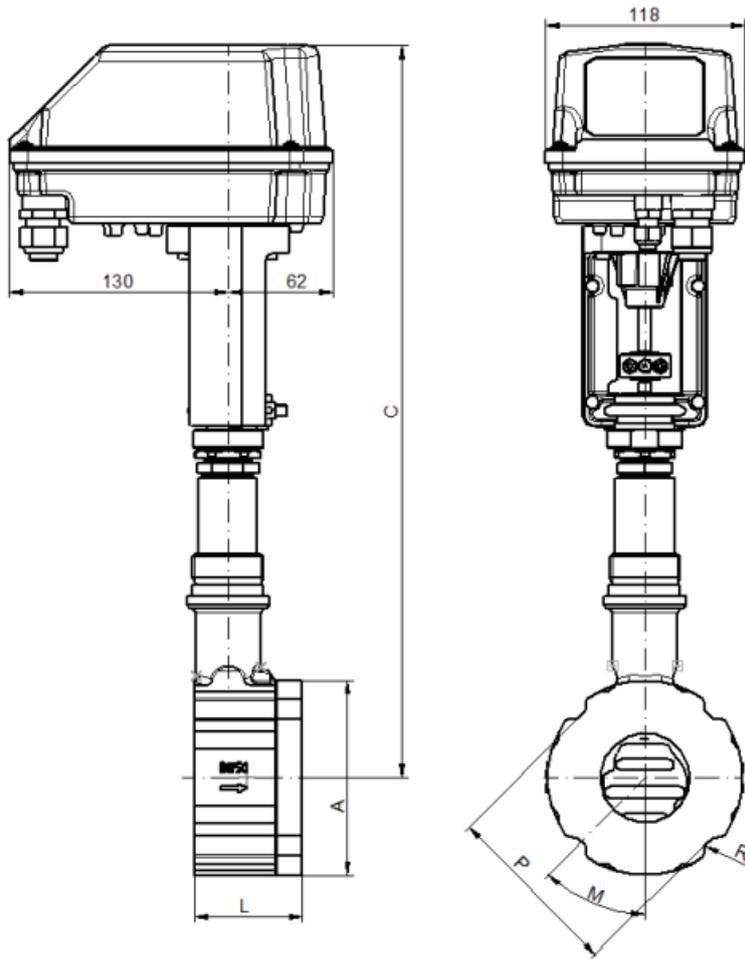
## Valve technical information:

Design	Wafer-type design for flanges acc. DIN EN 1092-1 form B
Nominal Sizes	DN 50 - 200, 2" - 8"
Nominal pressure acc. DIN 2401 for flanges with facing type B	PN 40 DN 50 - DN 150
Rangeability	30: 1
Temperature	from -60°C up to +350°C
Leakage Rate (% of Kvs-value)	sliding unit STN2 < 0,0001
Specific leakage rate shaft and body sealing	ISO FE-BH-CC3-SSA0-t(-40°C/+350°C) - PN40-ISO 15848-1

## Valve technical information:

Function	Control			
	CA24C	CA260C	CA24C-R	CA260C-R
Motor type	CA24C	CA260C	CA24C-R	CA260C-R
Mains connection	24V AC/DC	90-260V AC	24V AC/DC	90-260V AC
Set point range	(0)2-10V / (0)4-20mA			
Feedback	(0)2-10V / (0)4-20mA			
Limit switch	2			
Potentiometer feedback	-			
Max. switching capacity	24V AC/DC 200 mA			
Actuating speed	1.5 / 2 / 3 s/mm (Standard: 2 s/mm)			
Safety functions	Monitoring of tensile force, set point, temperature of the electronics, etc.			
Diagnostic functions	Storage of motor and total operating time, temperature and directional classes, etc.			
Fail Safe position	-	-	freely adjustable	
Load	500 $\Omega$ for current set point / 95 k $\Omega$ for voltage set point			
Max. input	13 W	12 W	13 W	12 W
Input heating resistor	10 W			
Starting current heating resistor	6 A	2,5 A	6 A	2,5 A
Actuating power	800 N			
Protection class (EN 60529)	IP 65			
Adm. Ambient temperature	-10°C to +60°C			
Duty cycle	100%			

## Dimensions and weights:



DN [mm]	A [mm]	C [mm]	L [mm]	Stroke	Weight [kg]
15	64	410	56	6	4
20	72	415	56	6	4
25	82	420	56	6	5
32	89	425	56	6	5
40	99	430	56	6	5
50	116	440	64	8	7
65	138	447	68	8	8
80	153	457	70	8	9
100	184	470	75	9	13
125	212	485	80	8.5	15

### All ordered CFC kits includes:

- > Special electric disc valve DN50-150 flange type with electric positioner assembly flow calibrated and configured for CALMS ;
- > 2x Pressure transducers and additional I/O (CAL-AI4, CAL-AO4) cards to connect to existing CAL-PM-X device ;
- > Full close function up to 40bar.

