

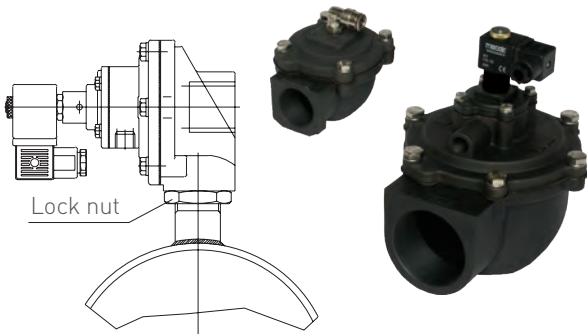


mecair 200 SERIES

THREADED VALVES

PENTAIR CLEAN AIR SYSTEMS

MECAIR THREADED VALVES 200 SERIES



DESCRIPTION

The **200 SERIES** is a range of diaphragm valves suitable for dust collector applications, in particular for reverse pulse-jet filter cleaning of filter bags, cartridges, envelope filters, ceramic filters and sintered metal fibre filters. The 200 Series valve has the inlet port at 90° to the outlet port. The 200 Series range comprises 6 models, from 3/4" to 2 1/2", all with threaded female Gas connections. The 1 1/2" model is available in single and double diaphragm versions, while the 2" and 2 1/2" are all double diaphragm valves. The special design assures an extremely fast opening time, high flow rates and easy installation. The valves are constructed in diecast aluminium and have an anodised protection treatment which protect them from corrosive and environmental agents. Bolts and screws are in stainless steel.

The 200 Series is available in the following versions:

- **VNP**, with integrated solenoid pilot
- **VEM**, with remote pneumatic connection.

Upon request: Integral pilot valves with ATEX Certification:
 • ATEX II 3 D (94/9/CE); for the above approved model the correct code to use is VEM+PV 24V/DCX (solenoid coil is 24V-DC/18W and DIN connector in conformity with the ATEX Directive 94/9/CE) (PLG11-ATEX). Remote pilot valves meet the requirements of: • ATEX II 2 GD when mounted with PXA Pilot or CXD Enclosure (94/9/CE).

GENERAL CHARACTERISTICS

Fluids	Filtered air and oil free
Diaphragm	Standard NBR: -20°C/+120°C Optional Viton: -30°C/+200°C Nitrile: -40°C/+120°C
Pressure range	From 0.5 to 7.5 bar

CONSTRUCTION FEATURES – VALVE

Cover	Diecast aluminium (anodised)
Body	Diecast aluminium (anodised)
Pilot base	Aluminium (anodised)
Pilot	Stainless steel
Diaphragm	NBR
Bolts and screws	Stainless steel
Diaphragm backing disk	Stainless steel
Diaphragm spring	Stainless steel

ELECTRICAL CHARACTERISTICS – SOLENOID

Coil insulation	Class H
DIN socket connector	Pg9 connection (cable entry)
DIN socket standard	EN175301 - 803 (previously DIN 43650A) / A/ISO 4400
DIN socket optional	94/9/CE ATEX II 3GD T6
Isolation class DIN socket	VDE 0110 - 1/89
DIN socket protection	IP65 EN60529
Voltage range	12V DC (supply +10% max.) 18W 24V DC (supply +10% max.) 18W 48V DC (supply +10% max.) 18W 110V DC (supply +10% max.) 18W 24V 50/60 Hz (supply +10% max.) 38/31 VA 48V 50/60 Hz (supply +10% max.) 41/32 VA 115V 50/60 Hz (supply +10% max.) 63/53 VA 220/240V 50/60 Hz (supply +10% max.) 46/37 VA

Ambient temperature -30°C/+40°C

TYPE	PORT SIZE Ø	No. DIAPH.	PRESSURE RANGE (BAR)		WEIGHT kg	COIL	KV	CV
			min.	max.				
VNP206	3/4"	1	0.5	7.5	0.55	YES	10	11.6
VNP208	1"	1	0.5	7.5	0.65	YES	21	24.4
VNP212	1 1/2"	1	0.5	7.5	1.4	YES	37	43.0
VNP214	1 1/2"	2	0.5	7.5	1.5	YES	44	51.2
VNP216	2"	2	0.5	7.5	2.5	YES	78	90.7
VNP220	2 1/2"	2	0.6	7.5	3.3	YES	96	112
VEM206	3/4"	1	0.5	7.5	0.25	NO	10	11.6
VEM208	1"	1	0.5	7.5	0.35	NO	21	24.4
VEM212	1 1/2"	1	0.5	7.5	1.1	NO	37	43.0
VEM214	1 1/2"	2	0.5	7.5	1.2	NO	44	51.2
VEM216	2"	2	0.5	7.5	2.2	NO	78	90.7
VEM220	2 1/2"	2	0.6	7.5	3	NO	96	112

HOW TO ORDER

Part Number Code:

VEM/VNP 2 08 110/50

Valve

- N VNP – with integral pilot
- E VEM – without pilot

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"200 Series"

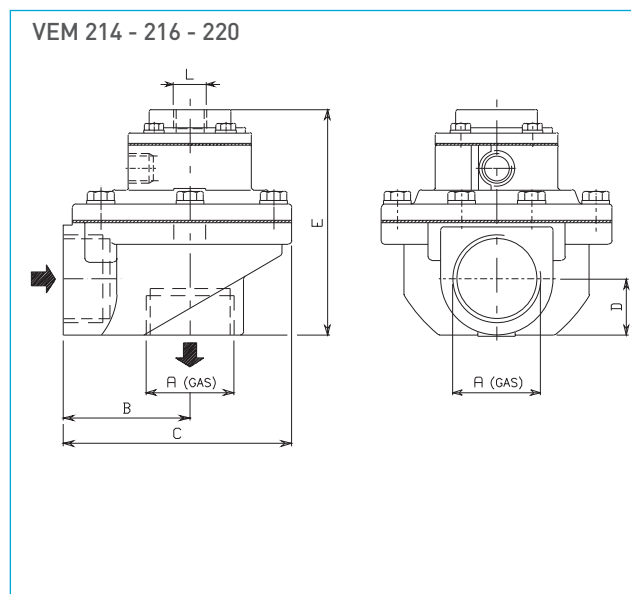
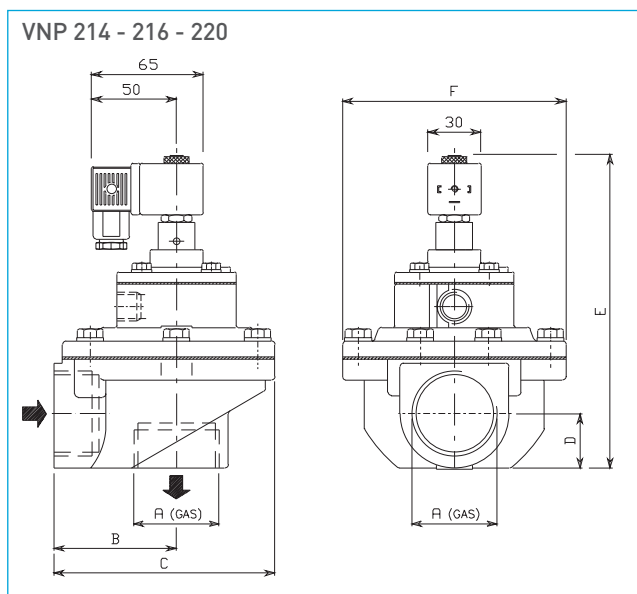
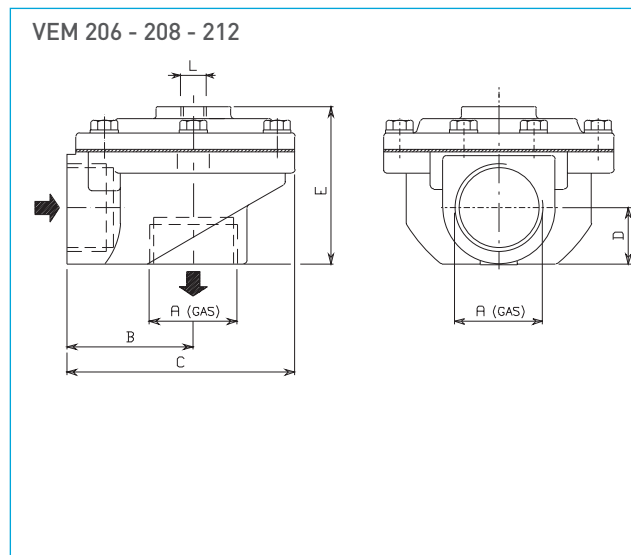
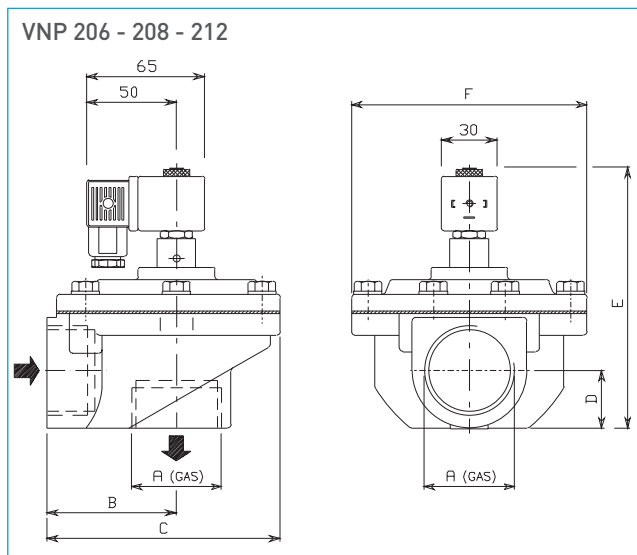
Voltage and frequency required

Valve connection diameter

- 06 = 3/4"
- 08 = 1"
- 12 = 1 1/2" (single diaphragm)
- 14 = 1 1/2" (double diaphragm)
- 16 = 2"
- 20 = 2 1/2"

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DIMENSIONS

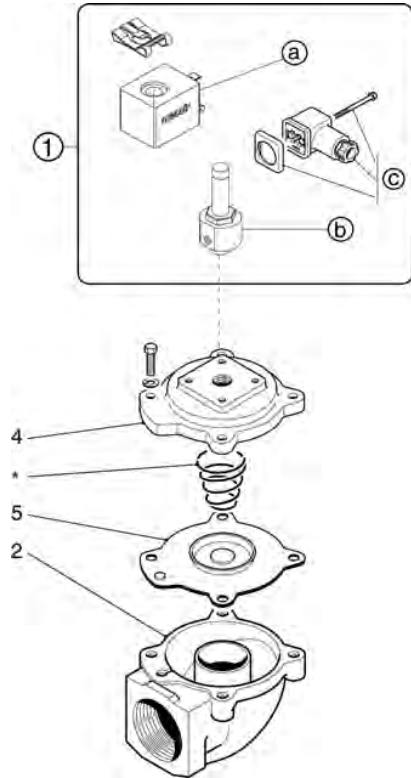


MODEL	Ø A	B	C	D	E	F	WEIGHT kg	MODEL	E	Ø L	WEIGHT kg	PRESSURE RANGE (BAR)		No. DIAPH.
												min.	max.	
VNP 206	3/4"	41	75	18	119	60	0.55	VEM 206	59	1/4"	0.25	0.5	7.5	1
VNP 208	1"	52	90	23	123	74	0.65	VEM 208	63	1/4"	0.35	0.5	7.5	1
VNP 212	1 1/2"	72	130	31	153	135	1.40	VEM 212	93	1/4"	1.10	0.5	7.5	1
VNP 214	1 1/2"	72	130	31	186	135	1.50	VEM 214	126	1/4"	1.20	0.5	7.5	2
VNP 216	2"	90	165	35	206	160	2.50	VEM 216	146	1/4"	2.20	0.5	7.5	2
VNP 220	2 1/2"	116	199	47	226	190	3.30	VEM 220	166	1/4"	3.00	0.6	7.5	2

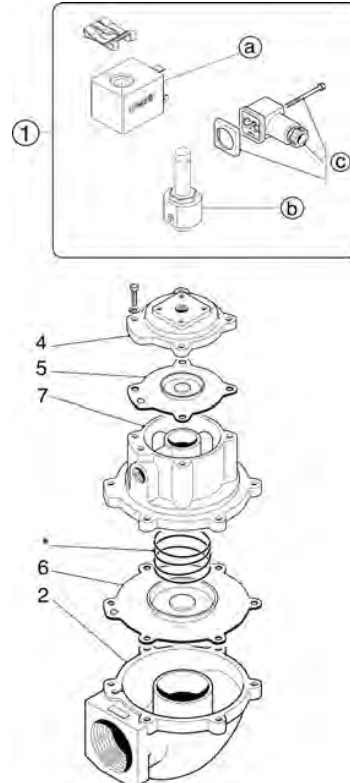
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SPARE PARTS

VEM/VNP 206 - 208 - 212



VEM/VNP 214 - 216 - 220



STANDARD VERSION

POS	DESCRIPTION	CODE
Standard 1	a) Solenoid (*)	a) KIT SB4 - ../.. (*) -18 W
	b) Pilot group complete with base and ferrule	b) KIT CP1/4
	c) DIN connector PG9EN175301-803 IP65	c) KIT PLG9

OPTIONAL VERSION

POS	DESCRIPTION	CODE
Optional 1	a) Solenoid (*)	a) KIT SB4 -24/DCX -18W
	b) Pilot group complete with base and ferrule	b) KIT CP1/4
	c) DIN connector (3GD IP65 T6)	c) KIT PLG11 - ATEX

(*) Specify voltage and frequency.

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Version in conformity with European Directive 94/9/CE ATEX (cod. KIT PV-24/DCX)

POS	DESCRIPTION	CODE					
		VEM/VNP206	VEM/VNP208	VEM/VNP212	VEM/VNP214	VEM/VNP216	VEM/VNP220
1	Pilot group complete with solenoid (*) and DIN connector	KIT PV - ../.. (*)	KIT PV - ../.. (*)	KIT PV - ../.. (*)	KIT PV - ../.. (*)	KIT PV - ../.. (*)	KIT PV - ../.. (*)
a+b+4	Pilot group complete with solenoid (*), top cover and screws	KIT PVM06 - ../.. (*)	KIT PVM08 - ../.. (*)	KIT PVM12 - ../.. (*)	KIT PVM06 - ../.. (*)	KIT PVM06 - ../.. (*)	KIT PVM06 - ../.. (*)
2	Valve body	KIT M100201	KIT M100204	KIT M100211	KIT M100211	KIT M100218	KIT M300222
7	Intermediate cover (double diaphragm)	—	—	—	KIT M110098	KIT M110100	KIT M110101
4	Top cover	KIT M10082	KIT M10086	KIT M10092	KIT M10082	KIT M10082	KIT M310082
5	Diaphragm	KIT DB 16/G	KIT DB 18/G	KIT DB 112/G	—	—	—
5	Viton Diaphragm	KIT DB 16V/S	KIT DB 18V/S	KIT DB 112V/S	—	—	—
5+6+Spring	Diaphragm (main and secondary)	—	—	—	KIT DB 114/C	KIT DB 116/C	KIT DB 120/C
5+6+Spring	Viton Diaphragm (main and secondary)	—	—	—	KIT DB 114V	KIT DB 116V	KIT DB 120V

(*) Specify voltage and frequency.



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