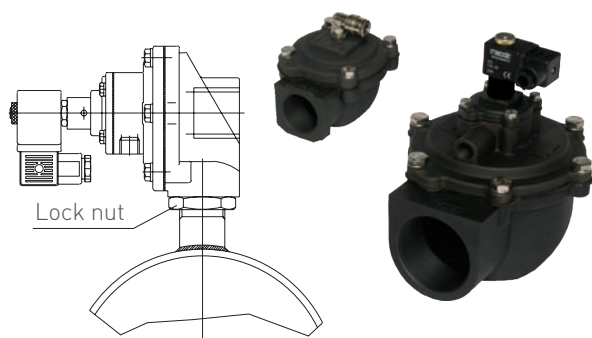




mecair 200 SERIES
THREADED VALVES

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	12 V DC (supply +10% max.) 18 W 24 V DC (supply +10% max.) 18 W 48 V DC (supply +10% max.) 18 W 110 V DC (supply +10% max.) 18 W 24 V 50/60 Hz (supply +10% max.) 38/31 VA 48 V 50/60 Hz (supply +10% max.) 41/32 VA 115 V 50/60 Hz (supply +10% max.) 63/53 VA 220/240 V 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

2

"200 Series"

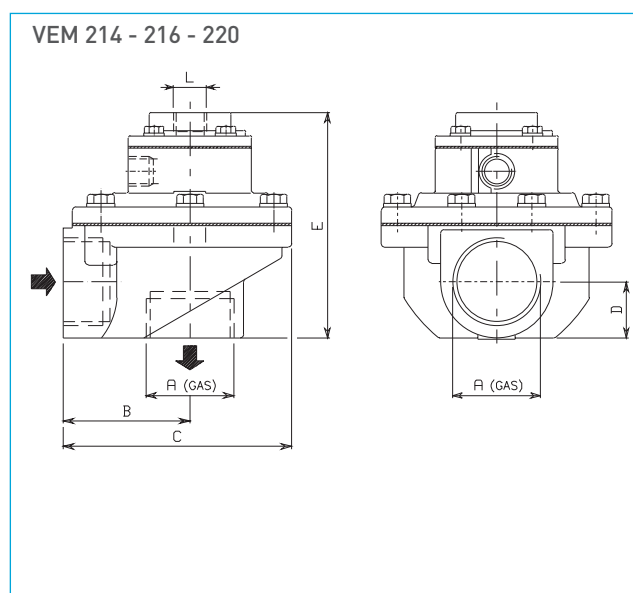
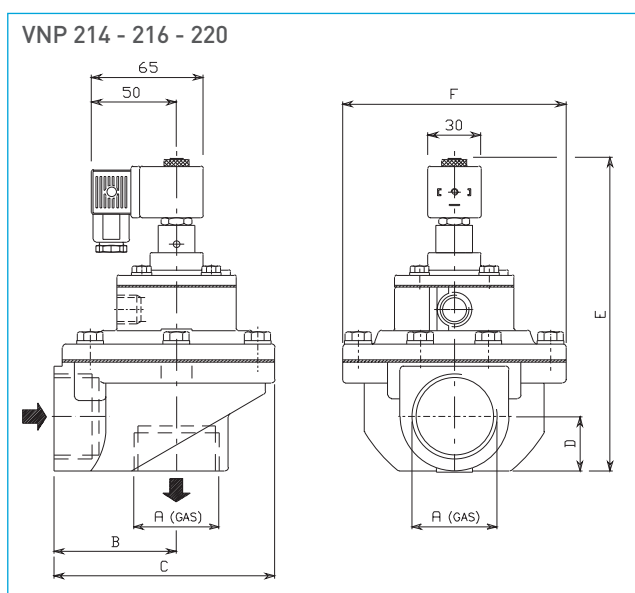
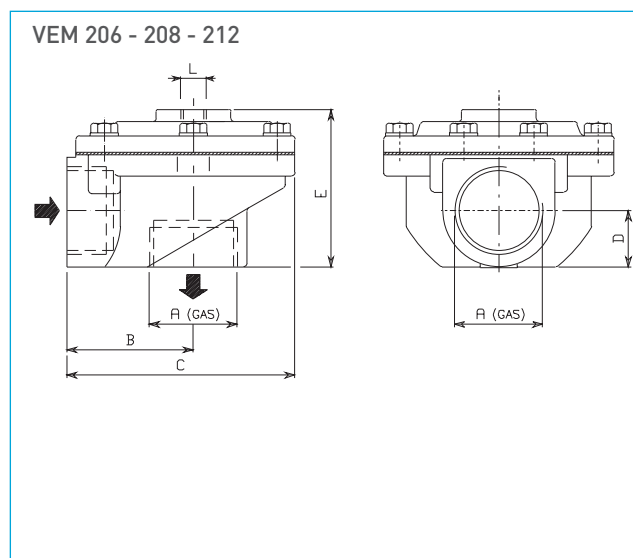
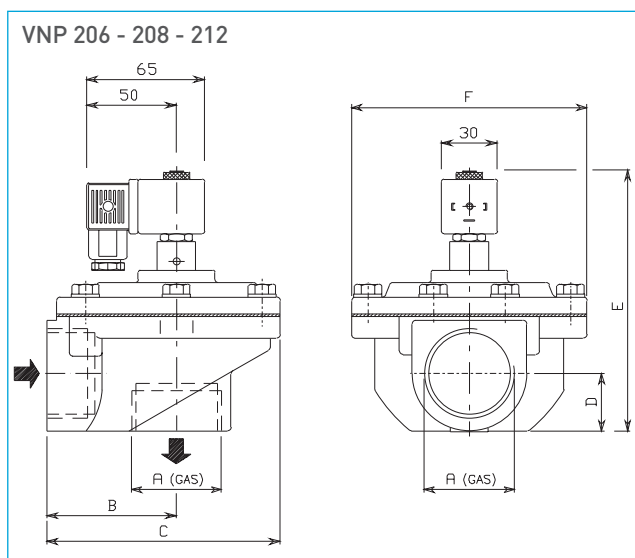
Voltage and frequency required

Valve connection diameter

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

MECAIR THREADED VALVES 200 SERIES

DIMENSIONS

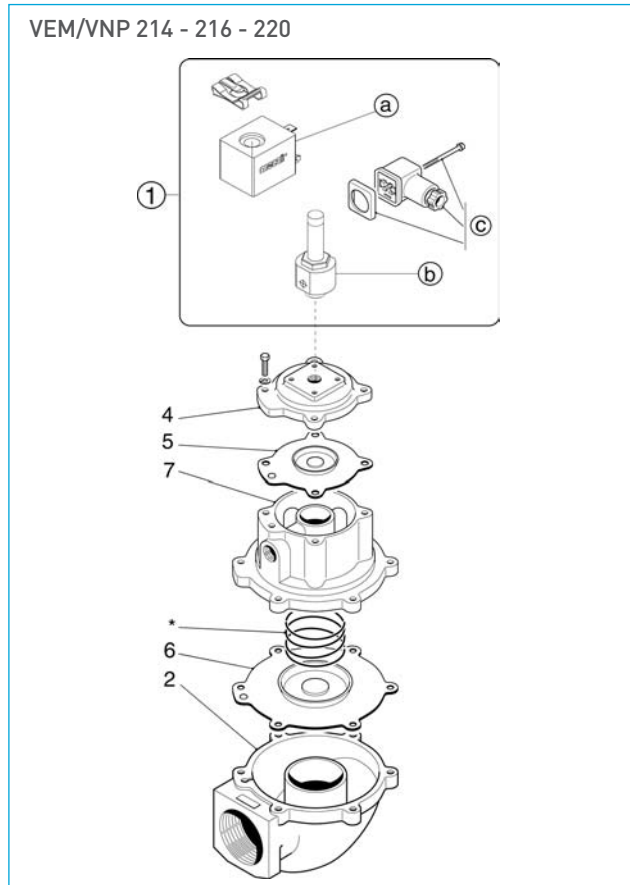
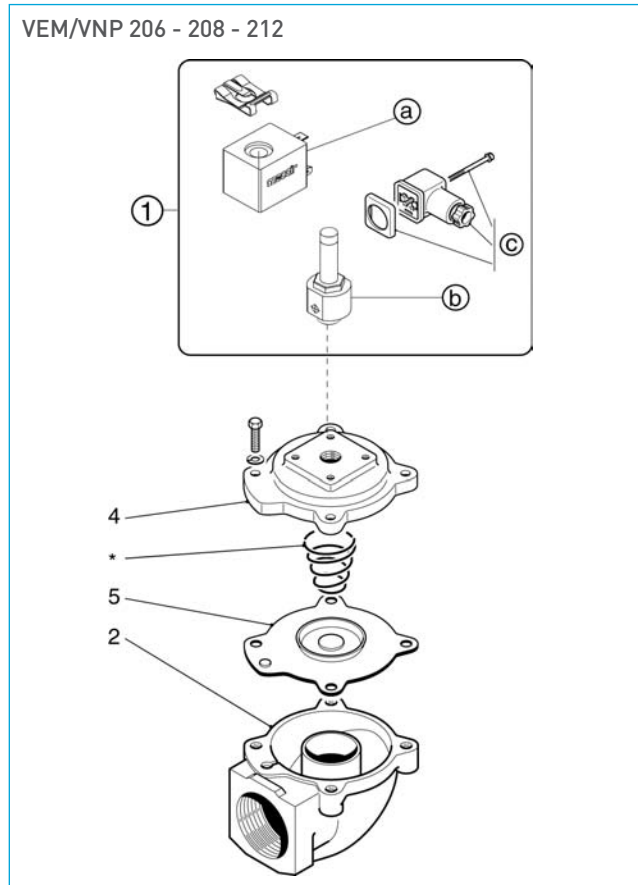


MODEL	Ø A	B	C	D	E	F	WEIGHT KG	MODEL	E	Ø L	WEIGHT KG	PRESSURE RANGE (BAR)		No. DIAPH.
												MIN.	MAX.	
VNP 206	3/4"	41	75	18	119	60	0,55	VEM 206	59	1/4"	0,25	0,5	7,5	1
VNP 208	1"	52	90	23	123	74	0,65	VEM 208	63	1/4"	0,35	0,5	7,5	1
VNP 212	1 1/2"	72	130	31	153	135	1,40	VEM 212	93	1/4"	1,10	0,5	7,5	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

MECAIR THREADED VALVES

200 SERIES

SPARE PARTS



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

(*) Specify voltage and frequency.

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.

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.

MECAIR THREADED VALVES

200 SERIES
AISI



DESCRIPTION

The **200 SERIES** in stainless steel 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 range includes two models, which comprises a 1" valve and a 1½" size valve. Both models have a single diaphragm. The inlet and outlet ports have threaded female gas connections. The 200 Series valves in stainless steel, are manufactured in AISI316L. These valves are particularly appropriate for installation in aggressive environments where there is risk of corrosion. Chemical processes, off-shore refineries and plants, and nuclear environments are just some typical applications where the Series 200 valve in stainless steel can be mounted. With a special diaphragm which has FDA Accreditation/Approval, the stainless steel valve can also be installed in special environments including, pharmaceutical, food and grain, wheat and flour, and in any other environment where food or medical grade is required. The Series 200 in stainless steel is available in 2 versions:

- **VXP**, with solenoid pilot mounted on board
- **VXM**, which can be utilised with a remote pneumatic connection – only 1" valve using a CSN or CXD enclosure, or alternatively for both models, 1" and 1½" valves, with explosion-proof pilot mounted on board. Explosion-proof pilot with ATEX Certification is also available in stainless steel – AISI316L.

GENERAL CHARACTERISTICS

Fluids	Filtered air and oil free
Diaphragm	Standard NBR: -20°C/+120°C Viton: -40°C/+80°C FDA PTFE/Gylon: -260°C/+260°C EPDM: -40°C/+160°C
Pressure range	From 0,5 to 7,5 bar

CONSTRUCTION FEATURES – VALVE

Cover	AISI 316L
Body	AISI 316L
Pilot	Stainless steel
Spring	Stainless steel
Bolts and screws	Stainless steel
Diaphragm backing disk	Stainless steel

ELECTRICAL CHARACTERISTICS – SOLENOID

Coil insulation	Class H
DIN socket connector	Pg9 connection
DIN socket standard	EN175301 - 803 / A/ISO 4400
DIN socket optional	94/9/CE ATEX II 2GD T4 IP67
Isolation class DIN socket	VDE 0110 - 1/89
Electrical protection	IP65 EN60529
Voltage range	24 V AC – 50 Hz 24 V AC – 60 Hz 110/220 V AC – 50/60 Hz 24/110 V DC
Power absorption	19 VA/AC 15 W/DC
Ambient temperature	-20°C/+60°C

TYPE	PORT SIZE Ø	No. DIAPH.	PRESSURE RANGE (BAR)		WEIGHT KG	COIL	KV	CV
			MIN.	MAX.				
VXP208	1"	1	0,5	7,5	1,13	YES	21	24,4
VXP212	1½"	1	0,5	7,5	2,67	YES	37	43,0
VXM208	1"	1	0,5	7,5	0,85	NO	21	24,4
VXM212	1½"	1	0,5	7,5	2,39	NO	37	43,0

HOW TO ORDER

Part Number Code: **VXM/VXP 2 08 110/50**

Valve

P VXP – with integral pilot
M VXM – without pilot

2

"200 Series"

Voltage and frequency required

Valve connection diameter

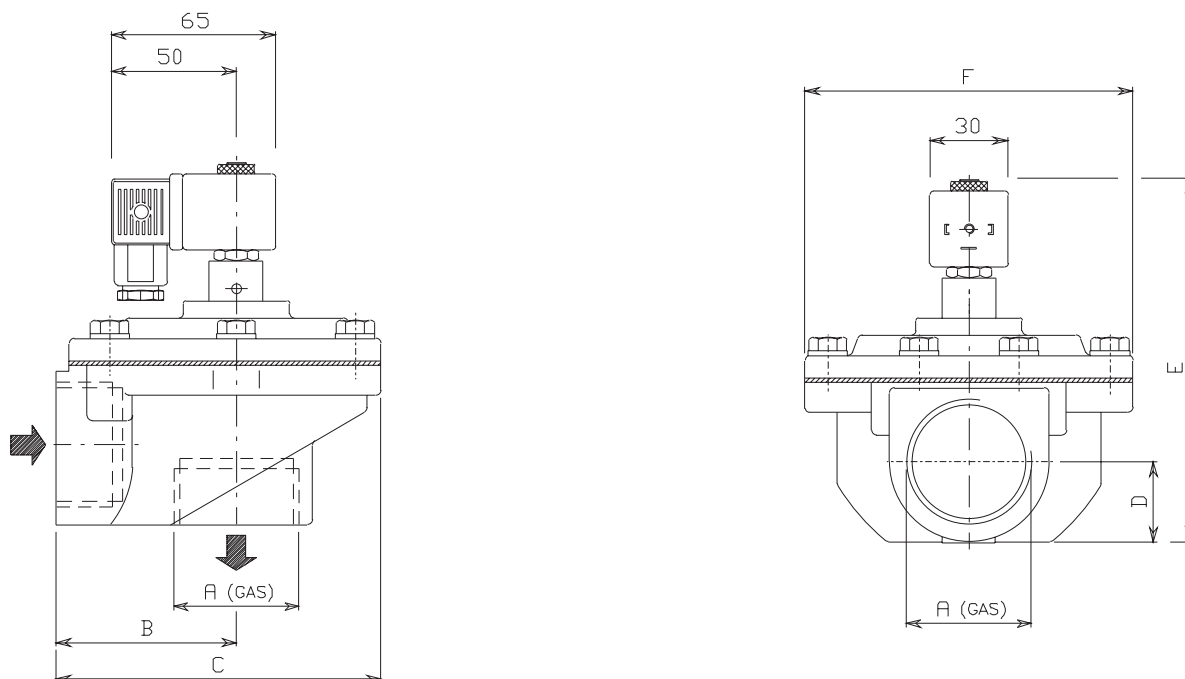
- 08 = 1"
- 12 = 1½"

MECAIR THREADED VALVES

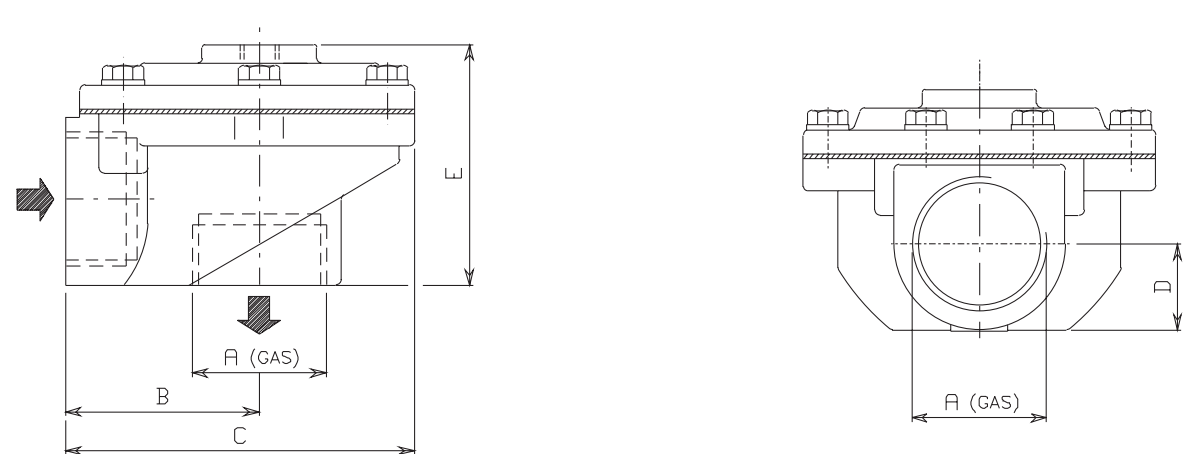
200 SERIES
AISI

DIMENSIONS

VXP 208 - 212



VXP 208 - 212



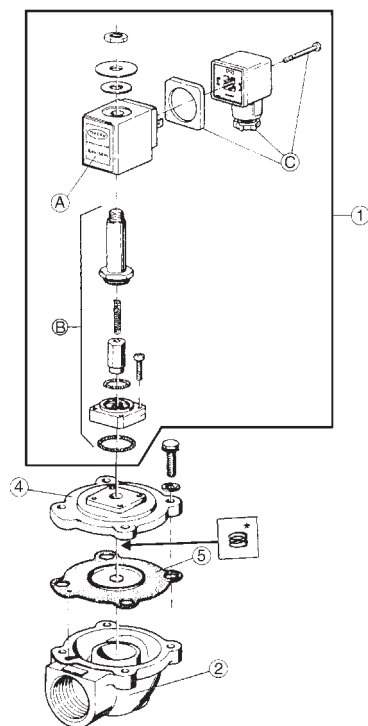
MODEL	Ø A	B	C	D	E	F	WEIGHT KG	MODEL	E	Ø L	WEIGHT KG	PRESSURE RANGE (BAR)		No. DIAPH.
												MIN.	MAX.	
VXP 208	1"	52	90	23	135	74	1,13	VXM 208	60	1/8"	0,85	0,5	7,5	1
VXP 212	1 1/2"	72	130	31	60	135	2,67	VXM 212	85	1/8"	2,39	0,5	7,5	1

MECAIR THREADED VALVES

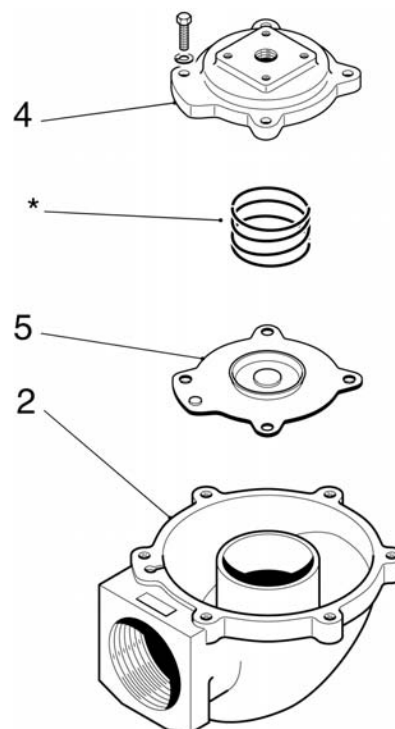
200 SERIES
AISI

SPARE PARTS

VXP 208 - 212



VXM 208 - 212



STANDARD VERSION

	POS	DESCRIPTION	CODE
Standard	1	a) Solenoid (*)	a) KIT SLB8 (*)
		b) Pilot group complete with fixing screws	b) KIT ESL8V
		c) DIN connector PG9 EN175301-803 IP65	c) KIT PLG9

(*) Specify voltage and frequency.

POS	DESCRIPTION	CODE	
		VXM / VXP208	VXM / VXP212
1	(B) Pilot group complete with fixing screws	KIT ESL8	KIT ESL8
4	Top cover	KIT M110090	KIT M110096
5	Diaphragm	KIT DB18/G-I KIT DB18VI (VITON)	KIT DB112i KIT DB112VI/S (VITON)
2	Valve body	KIT M100209	KIT M100216

(*) Specify voltage and frequency.



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