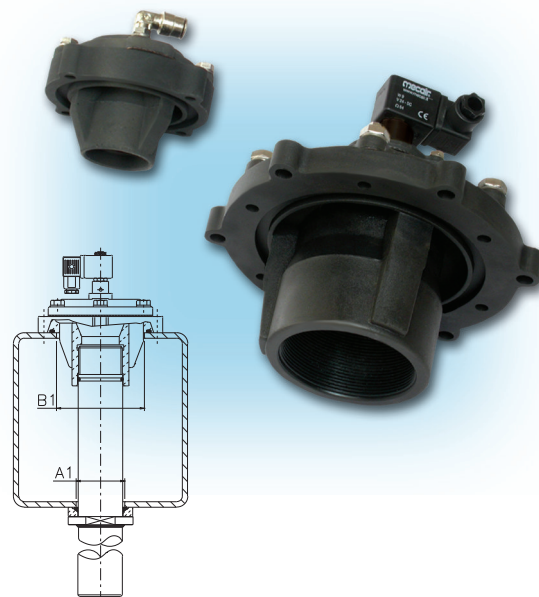


DESCRIPTION

400 Series

The **400 SERIES** valves are suitable for low pressure systems (0.5 ÷ 1.5 bar), and high pressure systems (0.5 ÷ 7.5bar). The Series 400 is a range of diaphragm valve 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. These valves have been designed to be installed flat surfaces or square/rectangular tanks. They are called "full immersion" because they draw the compressed air directly from the tank, with higher pneumatic performance. Upon request they can be supplied complete with the blow tube and counter flange. The valve is fixed to the tank with a special counter flange and fixing screws. The 2, 2 1/2" and 3" are all double diaphragm valves; the 1 1/2" model can be single or double diaphragm valve. The valves are constructed in die-cast aluminium and have an anodised protection treatment which protect them from corrosive and environmental agents. Bolts and screws are in stainless steel. The 400 Series is available in the following versions:

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



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 1,5 bar

CONSTRUCTIVE FEATURES - VALVE

Cover	Die-cast aluminium (Anodised)
Body	Die-cast aluminium (Anodised)
Pilot Base	Brass (Chromed)
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
Din Socket Standard	EN175301 - 803 / A/ISO 4400
Din Socket Optional	94/9/CE ATEX II 3GD T6
Isolation class Din socket	VDE 0110 - 1/89
Electrical protection	IP65 EN60529
Voltage Range	12V DC (-5%, +20%) 12W 24V DC (-5%, +20%) 12W 48 V DC (-10%, +20%) 9W 110 V DC (-10%, +20%) 12W 24V 50/60Hz (-10%, +20%) 16/12 VA 48 V 50/60 Hz (-10%, +20%) 16/12 VA 110/127 V 50/60 Hz (-10%, +20%) 19/14 VA 220/240 V 50/60 Hz (-10%, +20%) 19/14 VA
Ambient temperature	-20°C / +60°C

TYPE	Port size Ø	N° Diaph.	Pressure range (bar)		Weight Kg.	Coil	Kv	Cv
			min.	max				
VNP408	1"	1	0,5	7,5	0,7	YES	26,3	30,6
VNP412	1 1/2"	1	0,5	7,5	1,4	YES	56,2	65,3
VNP414	1 1/2"	2	0,5	7,5	1,45	YES	61,3	71,3
VNP416	2"	2	0,5	7,5	2,3	YES	110	128
VNP420	2 1/2"	2	0,5	7,5	3,3	YES	210	240
VNP424	3"	2	0,5	7,5	3,3	YES	260	300
VEM408	1"	1	0,5	7,5	0,4	NO	26,3	30,6
VEM412*	1 1/2"	1	0,5	7,5	1,1	NO	56,2	65,3
VEM414	1 1/2"	2	0,5	7,5	1,6	NO	61,3	71,3
VEM416	2"	2	0,5	7,5	2	NO	110	128
VEM420	2 1/2"	2	0,5	7,5	3	NO	210	240
VEM424	3"	2	0,5	7,5	3	NO	260	300

HOW TO ORDER:

VEM/VNP 4 08 110/50

VNP: with integral pilot
VEM: without pilot

4: "400 SERIES"

VALVE CONNECTOR DIAMETER

- 08 = 1"
- 12 = 1 1/2" (single diaphragm)
- 14 = 1 1/2" (double diaphragm)
- 16 = 2"
- 20 = 2 1/2"
- 24 = 3"

Voltage and frequency required.

DIMENSIONS

400 Series

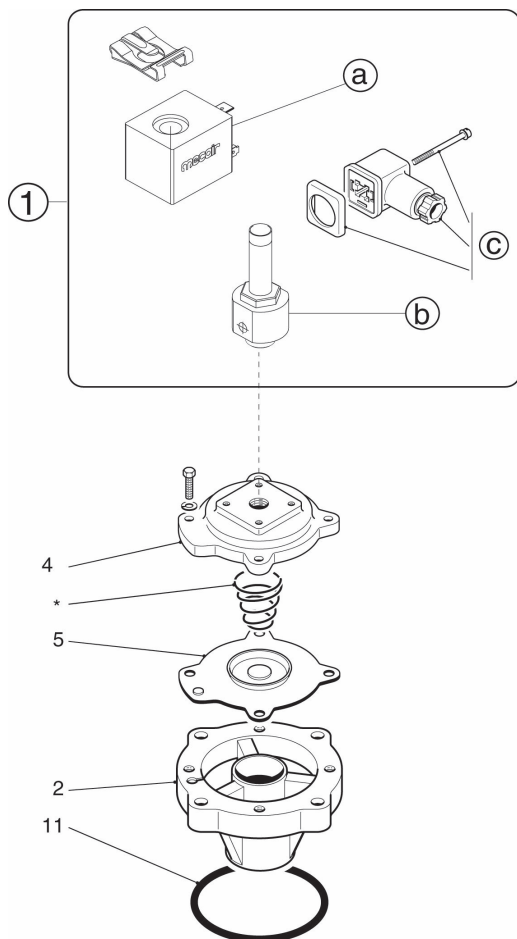
VNP 408 - 412	VEM 408 - 412
VNP 414 - 416 - 420 - 424	VEM 414 - 416 - 420 - 424
VNP 408 - 412	VNP 414 - 416 - 420 - 424
Note: Fix the valve body to the tank using the appropriate eyelets in the valve body	

MODEL	Ø A	B	C	D	E	F	G	I	H Ø	N°	M	Weight Kg.	MODEL	E	Ø L	A1	B1	Weight Kg.	N° Diaph.	O-Ring
VNP 408	1"	63	94	114	136	32	18	25	7	4	10	0,7	VEM 408	76	1/4"	36	64	0,4	1	M330370
VNP 412	1 1/2"	94	140	160	155	58	18	39	11	6	14	1,1	VEM 412	95	1/4"	50	95	1,4	1	M330341
VNP 414	1 1/2"	94	140	160	188	58	18	39	11	6	14	1,9	VEM 414	128	1/4"	50	95	1,6	2	M330341
VNP 416	2"	105	175	195	210	62	18	45	11	6	14	2,3	VEM 416	150	1/4"	63	107	2	2	M330342
VNP 420	2 1/2"	128	200	220	228	80	20	40	11	6	14	3,3	VEM 420	168	1/4"	78	130	3	2	M330343
VNP 424	3"	128	200	220	228	80	20	50	11	6	14	3,3	VEM 424	168	1/4"	90	130	3	2	M330343

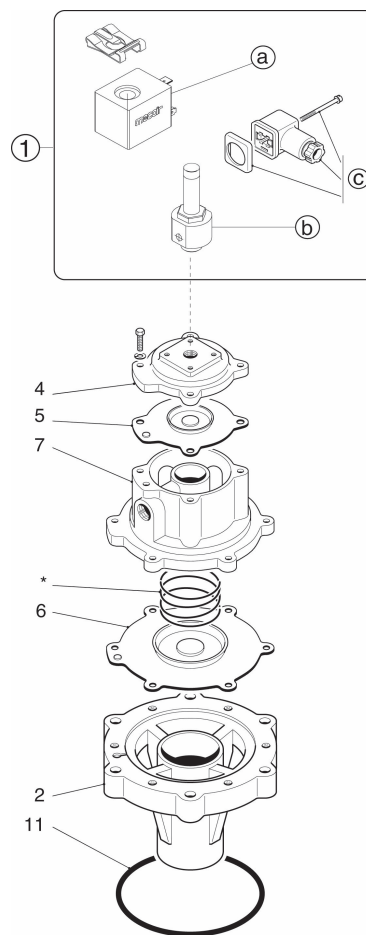
SPARE PARTS

400 Series

VEM / VNP 408 - 412



VEM / VNP 414 - 416 - 420 - 424



* Code for Spring **M470568** for model **VEM / VNP 412 - 414 - 416 - 420 - 424**

STANDARD Version

POS	DESCRIPTION	CODE
1	a) Solenoid (*)	a) SB3 - ../.. (*)
	b) Pilot group complete with base and ferrule	b) CP1/4
	c) Din Connector PG9EN175301-803 IP65	c) PLG9

(*) Specify Voltage and Frequency

OPTIONAL Version

POS	DESCRIPTION	CODE
1	a) Solenoid (*)	a) SB3 - 24/DCX
	b) Pilot group complete with base and ferrule	b) CP1/4
	c) Din Connector (3GD IP65 T6)	c) PLG9 - ATEX

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

POS	DESCRIPTION	CODE					
		VEM/VNP408	VEM/VNP412	VEM/VNP414	VEM/VNP416	VEM/VNP420	VEM/VNP424
1	Pilot group complete with solenoid (*) and din connector	PV - ../.. (*)	PV - ../.. (*)	PV - ../.. (*)	PV - ../.. (*)	PV - ../.. (*)	PV - ../.. (*)
1+4	Pilot group complete with solenoid (*), din connector, top cover and screws	PVM08 - ../.. (*)	PVM12 - ../.. (*)	PVM06 - ../.. (*)	PVM06 - ../.. (*)	PVM06 - ../.. (*)	PVM06 - ../.. (*)
2	Valve Body	M300207	M300214	M300214	M300220	M300235	M300239
7	Intermediate cover (Double diaphragm)	—	—	M3100098	M310100	M310101	M310101
4	Top Cover	M310086	M310092	M310082	M310082	M310082	M310082
5	Diaphragm	DB 18	DB 112	DB 16	DB 16	DB 16	DB 16
6	Diaphragm (Secondary)	—	—	DB 114	DB 116	DB 120	DB 120
11	O-Rings	M330370	M330341	M330341	M330342	M330343	M330343

(*) Specify Voltage and Frequency