

TECHNICAL SPECIFICATION

Flanged Diaphragm Valves with Increased Flow Rates – 600 Series



Product Description



Features



Performance



Dimensional Details



Part Identification



Accessories



How to Order



PRODUCT DESCRIPTION

The 600 Series is a range of diaphragm solenoid valves for the cleaning of dust collector filters with compressed air. These valves, due to their inlet port larger than the outlet port by 1", create a Venturi effect by causing high speed and flow rate at the outlet. The inlet is provided with a square flange designed for the coupling with the steel counter flange (optional) and stub pipe which are welded directly to the tank. The outlet is equipped with a quick connection fitting for the blow tube. The valves are manufactured in anodised die-cast aluminium to protect them from environmental and corrosive agents.

The 600 Series is available in the following versions:

- VEP, with integrated solenoid pilot.
- VEM, with remote solenoid pilot in enclosure.



FEATURES

General Features

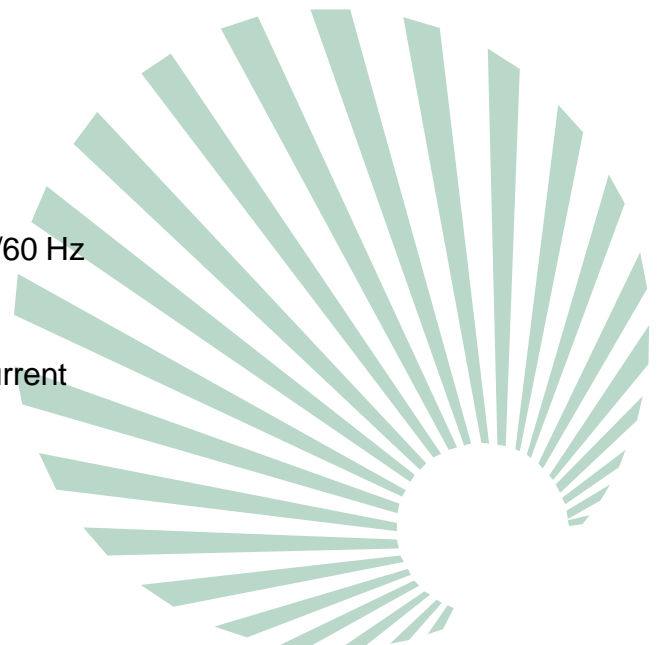
Fluids	Filtered and oil free air
Diaphragm	Standard: -20°C/+120°C Viton -30°C/+200°C Nitrite -40°C/+120°C
Operating pressure	From 0.5 to 7.5 bar

Constructive Features

Cover	Die-cast aluminium
Body	Die-cast aluminium
Core	Stainless steel
COre spring	Stainless steel
Sealing	NBR
Bolts and screws	Stainless steel
Diaphragm disc	Stainless steel
Diaphragm spring	Stainless steel

Electrical features

Coil insulation	Class H
Connector	Connection Pg9
connector specification	DIN 43650 - ISO 4400
Conector insulation class	VDE 0110 - 1/89
Electrical protection	IP65
Standard voltages	24 V AC - 50 Hz 24 V AC - 60 Hz 110/220 V AC - 50/60 Hz 24/110 V DC
Power consumption	19VA alternative current 15 W direct current
Ambient temperature	-20°C/+60°C



PERFORMANCE

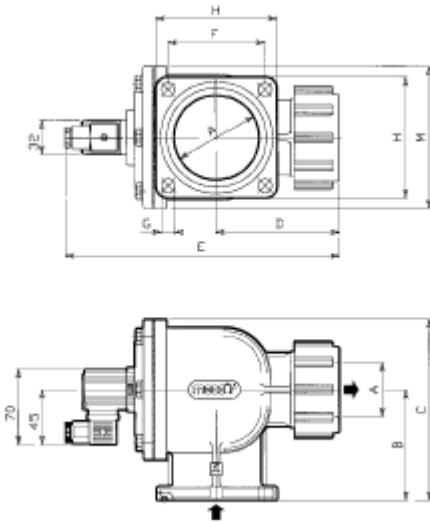
Type	Ø		No. diaph.	Operating Pressure (bar)		Weight kg	Coil	Kv	Cv
	in	out		min	max				
VEP608	2"	1"	1	0.5	7.5	1.5	yes	33.0	38.4
VEP612	2 1/2"	1 1/2"	1	0.5	7.5	2.1	yes	51.9	59.9
VEP614	2 1/2"	1 1/2"	2	0.5	7.5	2.2	yes	58.9	68.5
VEP616	3"	2"	2	0.5	7.5	2.8	yes	192	223
VEP620	2 1/2"	1 1/2"	2	0.6	7.5	3.7	yes	239	278
VEM608	2"	1"	1	0.5	7.5	1.2	no	33.0	38.4
VEM612*	2 1/2"	1 1/2"	1	0.5	7.5	1.8	no	51.1	59.9
VEM614	2 1/2"	1 1/2"	2	0.5	7.5	1.9	no	58.9	68.5
VEM616	3"	2"	2	0.5	7.5	2.5	no	192	223
VEM620	3 1/2"	2 1/2"	2	0.6	7.5	3.4	no	239	278

* available with Mecair explosion proof solenoid pilot only.

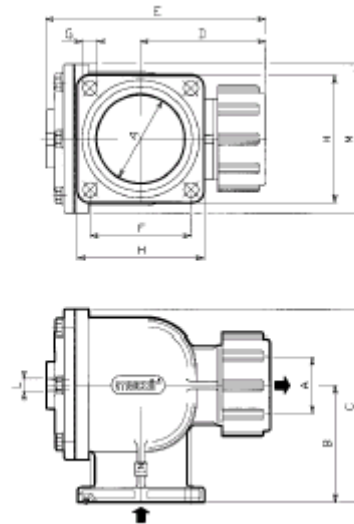


DIMENSIONAL DETAILS

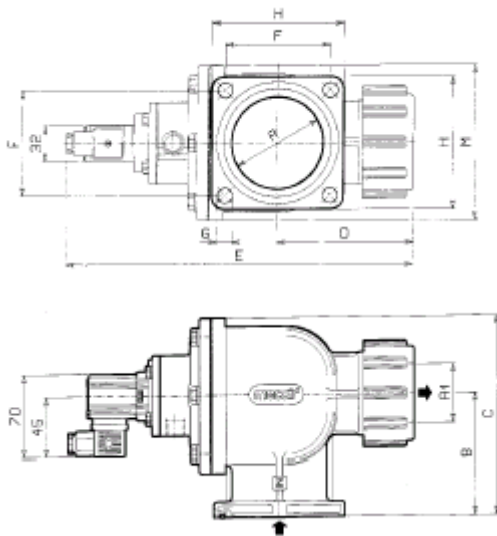
VEP 608 - 612



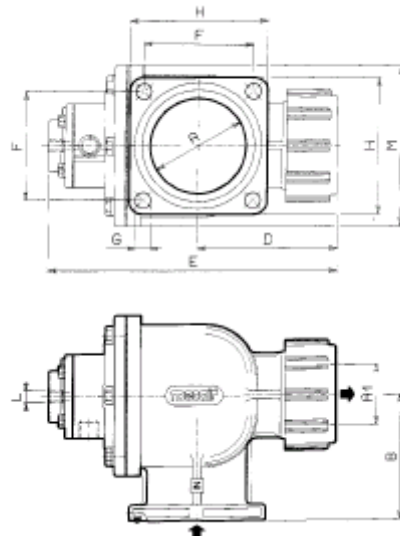
VEM 608 - 612



VEP 614 - 616 - 620



VEM 614 - 616 - 620



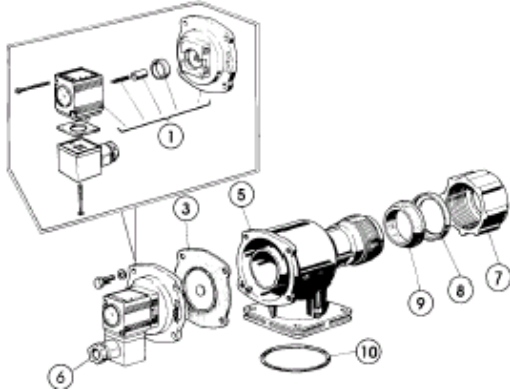
Type	A Ø	A1 Ø	B	C	D	E	F	G	H Ø	M	Weight kg
VEP608	2"	1"	81	125	130	225	60	9	83	90	1.5
VEP612	2 1/2"	1 1/2"	96	160	130	272	72	11.5	95	140	2.1
VEP614	2 1/2"	1 1/2"	96	160	130	305	72	11.5	95	140	2.2
VEP616	3"	2"	110	185	140	330	85	13.5	110	165	2.8
VEP620	3 1/2"	2 1/2"	125	215	165	360	94	13.5	120	190	3.7

Type	E	L Ø	Weight kg	No. diaph	OR
VEM608	180	1/8"	1.2	1	OR6250
VEM612	212	1/8"	1.8	1	OR178
VEM614	245	1/8"	1.9	2	OR178
VEM616	270	1/8"	2.5	2	OR6350
VEM620	300	1/8"	3.4	2	OR189

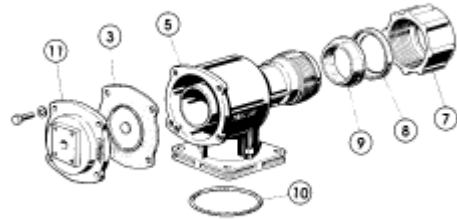


PART IDENTIFICATION

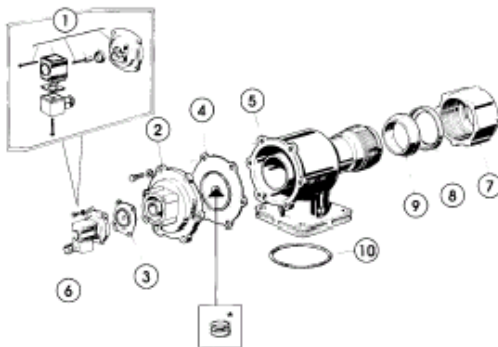
VEP 608 - 612



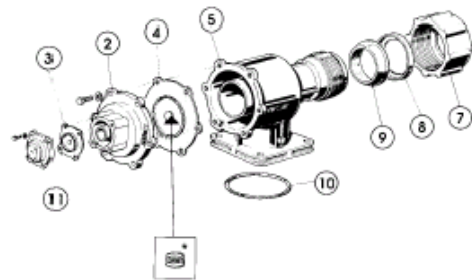
VEM 608 - 612



VEP 614 - 616 - 620



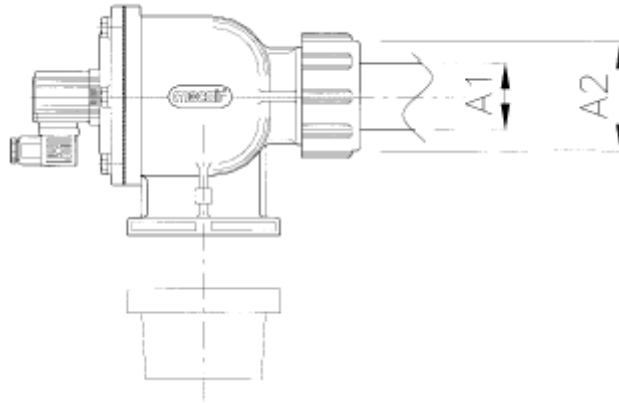
VEM 614 - 616 - 620



* Spring code M470568 only for VEM/VEP 212-214-216-220-224

Pos	Description parts	VEP608	VEP612	VEP614	VEP616	VEP620
1	Pilot group complete with coil (* cover and anchor screws. (* Specify voltage and frequency (or DC)	PDF08- .../.. (*	PDM12- .../.. (*	PDM06 .../.. (*	PDM06- .../.. (*	PDM06- .../.. (*
2	Intermediate cover (double Diaphragm)	-	-	M310098	M3100100	M3100101
3	Diaphragm	DB18M	DB112	DB16	DB16	DB16
4	Diaphragm	-	-	DB114	DB116	DB120
5	Body	M300273	M300272	M300272	M300279	M300280
6	Connector DIN IP65	PLG9	PLG9	PLG9	PLG9	PLG9
7	Ring nut	M550024	M550026	M550026	M550018	M550020
8	Washer	M620014	M620015	M620015	M620023	M620033
9	Conical gasket	M330203	M330204	M330204	M330292	M33031
10	Flanged gasket	M30018	M330019	M330019	M330311	M330270
Pos	Description parts	VEM608	VEM612	VEM614	VEM616	VEM620
11	Top cover	M310042	M310092	M310082	M310082	M310082
2-10	See VEP description	See above	See above	See above	See above	See above

600 Series diaphragm valves

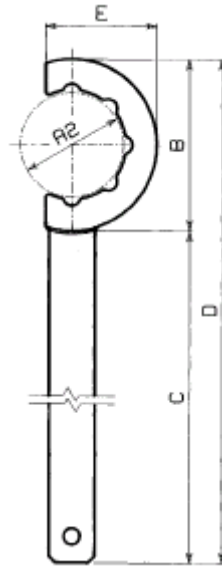


Type Value	A1 Ø	A2 Ø	Wrench
808	1"	61	CH08
612	1 1/2"	82	CH14
614	1 1/2"	82	CH14
616	2"	95	CH16
620	2 1/2"	115	CH20



ACCESSORIES

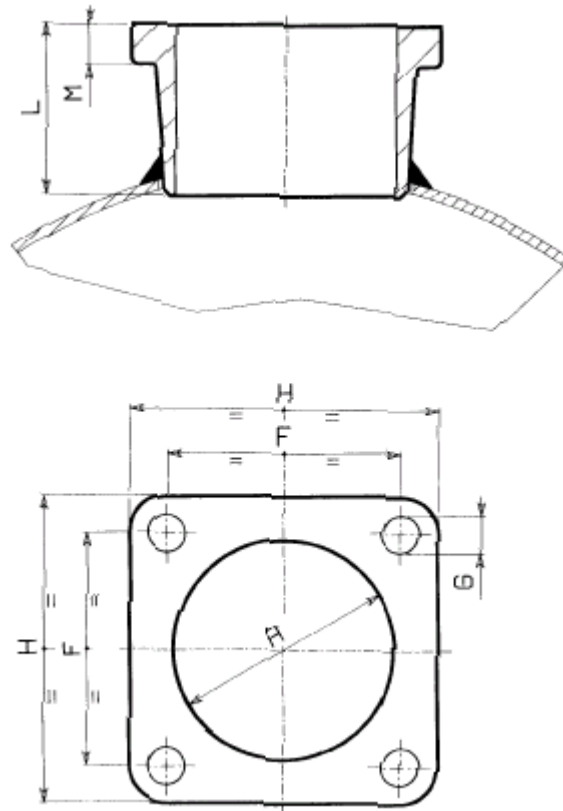
CH Tightening wrench



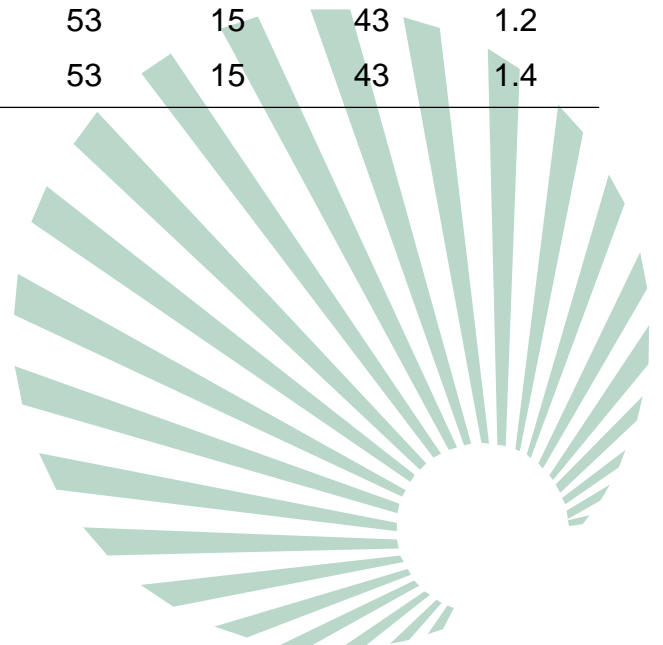
Type Value	A1 Ø	A2 Ø	B Ø	C	D	E	Weight Kg
CH08	1"	61	100	250	350	68	0.44
CH14	1 1/2"	82	130	300	430	85	0.7
CH16	2"	95	150	350	500	100	0.78
CH20	2 1/2"	135	170	350	520	130	0.8



“FL” Counterflange with stub pipe (optional)



Type Value	A Ø	F	G Ø	H Ø	L	M	N	Weight Kg
FL08	2"	60	9	83	53	12.5	41	0.7
FL14	2 1/2"	72	11.5	95	53	12.5	41	0.8
FL16	3"	85	13.5	110	53	15	43	1.2
FL20	3 1/2"	94	13.5	120	53	15	43	1.4



HOW TO ORDER

VEP 608 – 110/50

VE – Diaphragm valve

P – Integrated pilot

or

M – Remote pilot

6 – 600 Series

08 – Valve connection diameter

08 = 1"

12 = 1 1/2" (single diaphragm)

14 = 1 1/2" (double diaphragm)

16 = 2"

20 = 2 1/2"

110/50 – Voltage and frequency (specify for VEP models only):

24V AC – 50Hz

24V AC – 60Hz

110/220V AC – 50/60 Hz

24/110V DC

