



MISSION
RUBBER UK

NON RETURN & FLAP VALVES



The Original and Best - Rubber Flexible Couplings and Bushes

INTRODUCTION

FLAP VALVES

The principle applications for flap valves are for surface water drainage associated with river, estuary and sea water outfalls to prevent backflow into the sewer and for final effluent outfalls from wastewater treatment works to prevent flood damage within the works.

NON-RETURN VALVES

Non return valves or backwater valves are used within sewerage and drainage systems to eliminate the risk of flood damage by the backflow of sewage into properties through low level entries such as low level drain gullies, toilets and washing machine outlets. The Environment Agency in their publication on damage limitation for properties at risk from flooding and the Government guidance note "Preparing for Floods" both recommend the installation of non-return valves (anti-flooding devices) on all drains and sewers.

The Building Regulations 2000, Approved Document H, recommends the installation of double flap non-return valves on drains from basements in low risk areas and on all drains in areas with a high risk of flooding or sewer surcharge.

MATERIALS

FLAP VALVES

- Body & flap - Glass reinforced plastic using a isophthalic polyester resin with surface isophthalic gel coat
- Hinge - Self lubricating Ertacetal plastic
- Seal - Ethylene Propylene Diene Monomer (EPDM) to BS EN 681-1
Optional nitrile (NBR) seal available
- Fittings - Grade 1.4401 (316) austenitic stainless Steel to BS EN 10088-2

NON-RETURN VALVES

Kessel (DN50 to 200) - Body & Flap - PVCu

Norham (DN225 to 500)

- Body & flap - Glass reinforced plastic using a isophthalic polyester resin with surface isophthalic gel coat
- Hinge - Self lubricating Ertacetal plastic
- Seal - Ethylene Propylene Diene Monomer (EPDM) to BS EN 681-1
Optional nitrile (NBR) seal available
- Fittings - Grade 1.4401 (316) austenitic stainless steel to BS EN 10088-2

NON – RETURN VALVES

DN50 to DN200

See separate Kessel brochure for a full range of non-return valves complying with the requirements of BS EN 13564. The range includes valves of the double valve type with manual closure as required by The Building Regulations, Approved Document H, para. 2.11.

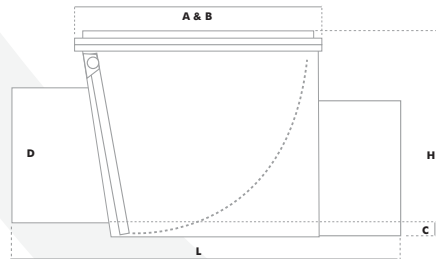
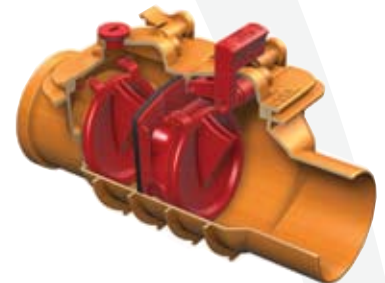
Designed for connection to solid walled PVCu pipe these valves can be connected to other pipe materials using Mission Rubber flexible couplings (see separate Technical brochure).

DN225 to DN500

A range of grp non-return valves designed for connection to any pipe material using Mission Rubber Standard Couplings and Bushes.

ADVANTAGES

- Resistant to 1bar (10m head) back pressure
- Low weight for ease of installation yet with high mechanical strength
- Resistant to all normal sewage effluents operating at normal temperatures (below 800 C) and not containing harmful industrial effluents.
- Seals at a low level of back pressure
- Easily connected to any type of pipe material
- Low maintenance



Reference	DN	DE	H	L	A	B	C	Wgt(kg)
MULTI250	250	260	485	730	680	440	50	12
MULTI300	300	320	490	840	530	460	30	15
MULTI400	400	400	605	990	655	590	30	27
MULTI500	500	510	670	1245	960	710	40	36

FLAP VALVES

A range of grp flap valves designed for ease of installation due to their low weight but with exceptional mechanical strength and durability.

ADVANTAGES

- Resistant to 1bar (10m head) back pressure (Multi-CD 0.8 bar)
- Most sizes can be handled by one person due to low weight
- Low weight ensures ease of installation
- High mechanical strength
- High resistance to corrosion and ultraviolet degradation
- Seals at a low level of back pressure
- Low operating head due to low weight
- Low maintenance

MULTI - N

DN200 to 600

A range of flap valves designed for direct connection to any type of drain or sewer pipe using Mission Rubber Standard Couplings and Bushes



ADVANTAGES

- Eliminates need for concrete headwall or pipe flange for fixing e.g. can be connected to the spigot of an outfall pipe passing through gabions
- No drilling required
- Fast and easy installation

Reference	DN	OUTSIDE SPIGOT	OVERALL HEIGHT	OVERALL LENGTH	WIDTH	Wgt(kg)
MULTI200N	200	200	TBA	TBA	TBA	1.2
MULTI250N	250	250	400	310	350	1.9
MULTI300N	300	325	450	360	400	3.0
MULTI400N	400	400	540	390	485	14
MULTI500N	500	515	680	500	590	20
MULTI600N	600	600	770	530	715	29

MULTI - BD

DN100 to DN200

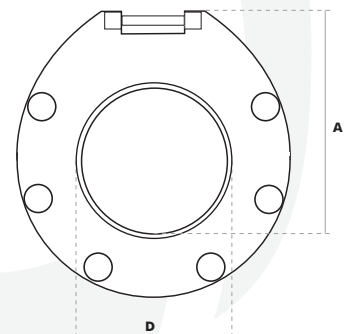
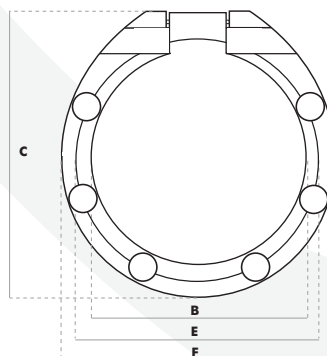
A range of small diameter flap valves with a PN 10 flange and an integral foamed EPDM rubber gasket for direct fixing to a flange or concrete headwall.

ADVANTAGES

- Lightweight for fast and easy installation
- No need for cement grout when fixing to a headwall

Reference	A	B	C	D	E	F	G	Wgt(kg)
MULTI100BD	179	150	212	110	180	220	36	0.5
MULTI125BD	210	175	252	125	210	250	45	0.75
MULTI150BD	240	200	285	160	240	285	42	1
MULTI200BD	296	250	375	200	295	340	55	1.5

Wall mounting kits available



FLAP VALVES CONT.

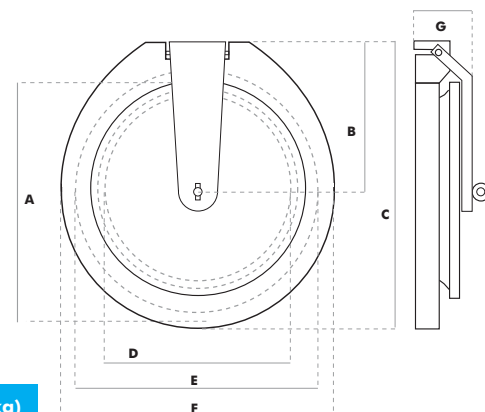
MULTI – CD

DN250 to 600

A range of medium diameter flap valves with a PN 10 flange.
Integral EPDM rubber sealing rings for sealing to concrete headwall.

ADVANTAGES

- Lightweight for fast and easy installation.
- Resistant to 0.8bar (8m head) backpressure.
- No need for cement grout when fixing to headwall.
- Hinged design ensures full face sealing when closed.



Reference	DN	A	B	C	D	E	F	G	Wgt.(kg)
MULTI250CD	250	310	215	420	250	350	395	108	8
MULTI300CD	300	360	245	475	300	410	460	108	10
MULTI400CD	400	460	300	590	400	520	580	108	15
MULTI500CD	500	560	365	722	500	650	715	110	22
MULTI600CD	600	600	415	835	600	770	840	117	30

Wall mounting kits available

MULTI – NB

DN200 to 1500

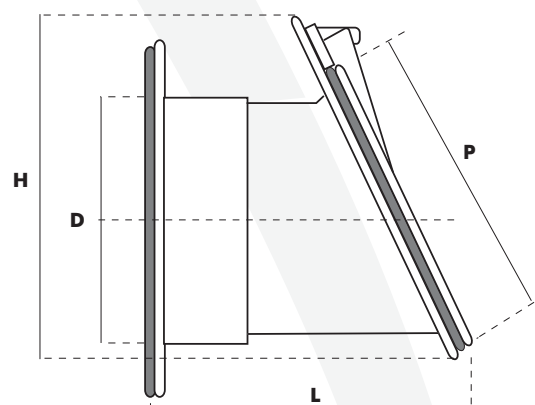
A range of medium diameter flap valves with an inclined flap and PN 10 flange.
Integral EPDM rubber sealing rings for sealing to concrete headwall.

ADVANTAGES

- Lightweight for fast and easy installation.
- Inclined flap for additional security against backflow.
- No need for cement grout when fixing to headwall.
- Hinged design ensures flap closure when no discharge.

Reference	DN	D	H	L	OVERALL WIDTH	P	Wgt.(kg)
MULTI200NB	200	200	280	150	280	220	3
MULTI250NB	250	235	400	310	310	345	10
MULTI300NB	300	315	450	360	360	410	12
MULTI400NB	400	380	540	390	390	495	20
MULTI500NB	500	500	680	500	500	620	26
MULTI600NB	600	585	770	530	530	730	33
MULTI700NB	700	700	1000	450	940	880	46
MULTI800NB	800	800	1125	490	1030	990	53
MULTI1000NB	1000	1000	1360	600	1250	1160	80
MULTI1200NB	1200	1200	1525	600	1440	1430	115
MULTI1400NB	1400	1400	1755	770	1640	1545	160
MULTI1500NB	1500	1500	1855	825	1740	1755	180

Wall mounting kits available



For more information please contact us

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