

BUTTERFLY VALVE (FOR FIRE PROTECTION) WITH INTEGRAL SUPERVISORY TAMPER SWITCH



TECHNICAL DATA

SIZES	2" (50NB), 2.5" (65NB), 3" (80NB), 4" (100NB), 6" (150NB), 8" (200NB), 10" (250NB), 12" (300NB)
MAXIMUM WORKING PRESSURE	300 psi (21 kg/sq.cm)
TEMPERATURE RATING	0 - 80°C
BODY	Ductile iron conforming to ASTM A-536, grade 65-45-12
DISC	Ductile iron ASTM A-536, EPDM Coated
COATING	Fusion Bond Epoxy Coating (In accordance with ANSI/ AWWA C550)
APPROVALS	UL Listed & FM Approved
MODEL	
Wafer Type:	HDMW250, HDMW300, HDMWPN16
Grooved Type:	HDMG250, HDMG300, HDPGPN16
Lug Type:	HDML250, HDML300, HDMLPN16 (Refer Table 1 for details)

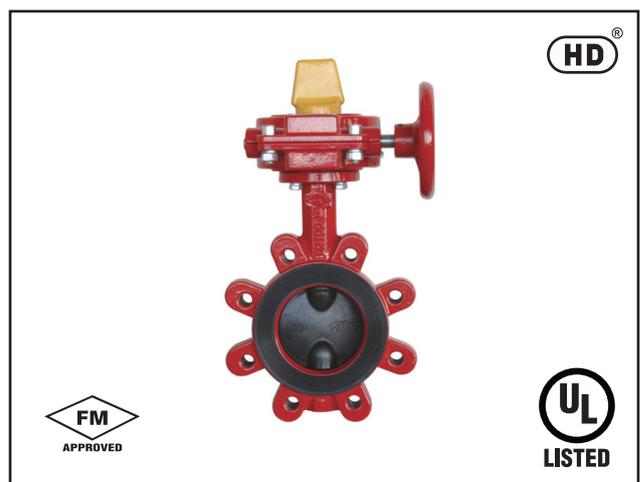
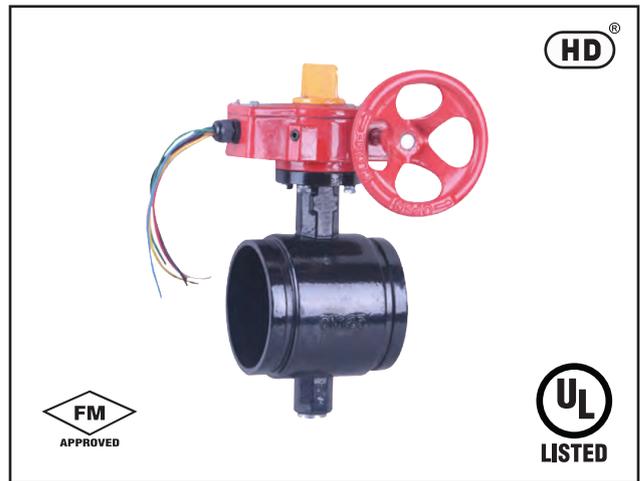
DESCRIPTION

HD Butterfly Valves are available in three types: 1. Wafer type 2. Grooved type and 3. Lug type, used in Fire Protection pipelines and applications. These are gear operated fitted with integral visual indicator and supervisory tamper switch. Wafer Type Butterfly Valves are suitable for installation between two flanges. These have universal design and can be connected between ANSI B16 Class125, ASME B16.5 Class 150 and BSEN 1092 PN10/PN16 Flanges. Grooved joint dimensions are made in accordance with ANSI/ AWWA C606 (Ductile iron pipe and steel pipe) and metric pipe specifications.

Valve gearbox is fitted with two internal switches with SPDT contact to supervise valve open or closed position. HD Butterfly valves offer minimum flow restriction and pressure loss when used in the fully open position.

TABLE-I

Model	Description
HDMW	Butterfly valve with gearbox and micro-switches, Wafer type
HDMG	Butterfly valve with gearbox and micro-switches, Grooved type
HDML	Butterfly valve with gearbox and micro-switches, Lug type
Ending with	
250/300	Connect to flange complying with ASME B16.5, class 150
PN16	Connect to flange complying with EN 1092 (contact sales for its details)



INSTALLATION

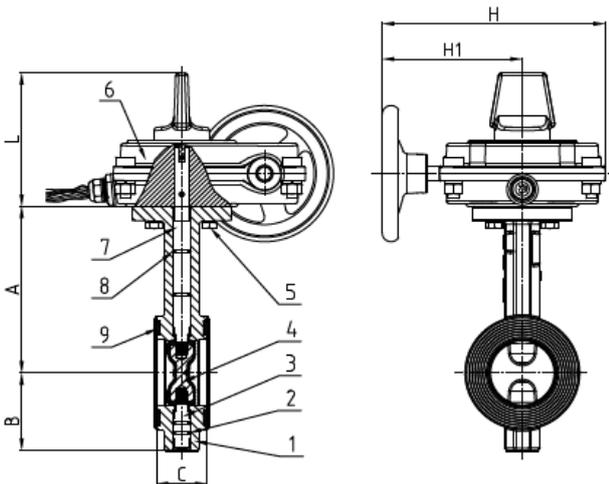
Wafer Type/Lug Type: HD Wafer Type Butterfly Valve can be installed vertically or horizontally with flow in either direction. Valve is self-sealing with no additional gasket needed. While inserting valve between the flanges, close the butterfly valve fully so that it can be properly positioned between the flanges. Insert and hand tighten the bolts, check whether valve disc is free while opening and closing. Electrical connections need to be connected as per wiring diagram.

Grooved Type: HD Grooved Type Butterfly valve should be connected to the piping system with approved grooved couplings and connections. It can be installed vertically or horizontally with flow in either direction.

MAINTENANCE

Inspect and verify proper operation on a semi-annual basis or according to the requirements of NFPA 25 and the Authority Having Jurisdiction (AHJ). The frequency of inspections may vary in case of contaminated or corrosive water supplies and/or corrosive atmosphere. Check for leakage at the valve pipe connection and body-to-operator connection. Always ensure that the connecting pipe flange faces or couplings are clean of any foreign material such as scales, or welding slag. If needed, clean the pipe flange face or connecting couplings. If the valve closes hard, please ensure that there is no debris clogged in the waterway around the seat area. Backing off the hand wheel and closing the butterfly valve again can often resolve this issue. Do not apply excessive torque to the gearbox or using a wrench. Installation, inspection, and maintenance should be performed by a qualified person(s) and certified by the Authority Having Jurisdiction.

WAFER TYPE BUTTERFLY VALVE



Part No	Part	Material
1	Valve Body	ASTM A536, 65-45-12
2	O-Ring	NBR
3	Stub Shaft	AISI 431
4	Disc	ASTM A536, 65-45-12+EPDM
5	Hex Nut	Carbon Steel Zinc Plated
6	Signal Gear Box	Body: ASTM A536,65-45-12
7	Drive Shaft	AISI 431
8	O-Ring	NBR
9	End Face Steel	EPDM

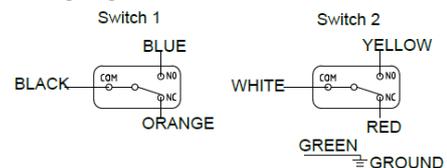
NOTES:

- 1) Dimensions given are in mm
- 2) Design standard: MSS-SP 67
- 3) Top flange standard: ISO 5211
- 4) Flange specification: ASME B16.1 CL125, ASME B16.5 CL150
- 5) Working Pressure: 300 psi

Signal description:

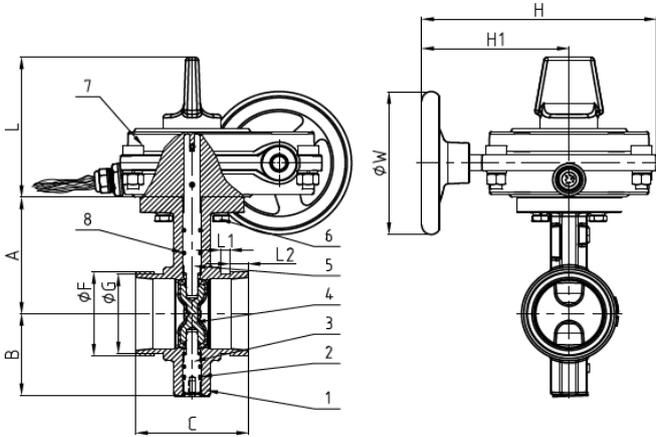
1. Switch parameters: 16A 1/2HP 125/250VAC

2. Wiring diagram:



Inch	mm	A	B	C	L	H1	H
2"	50	140.5	65	43±2	122.5	127	202.2
2.5"	65	153	71	46±2	122.5	127	202.2
3"	80	157.5	81	46±2	122.5	127	202.2
4"	100	176	95	52±2	122.5	127	202.2
5"	125	191	111	56±2	122.5	127	202.2
6"	150	202.5	133	56±2	122.5	139.5	215
8"	200	243.5	164	60±2	122.5	198.5	274
10"	250	273	196	68±2	122.5	198.5	274
12"	300	311	226	78±2	132	198.5	293.5

GROOVED TYPE BUTTERFLY VALVE



Part No	Part	Material
1	Body	ASTM A536, 65-45-12
2	O-Ring	NBR
3	Stub Shaft	AISI 431
4	Disc	ASTM A536, 65-45-12+EPDM
5	Drive Shaft	AISI 431
6	Hex Nut	Carbon Steel Zinc Plated
7	Signal Gear Box	Body:ASTM A536, 65-45-12
8	O-Ring	NBR

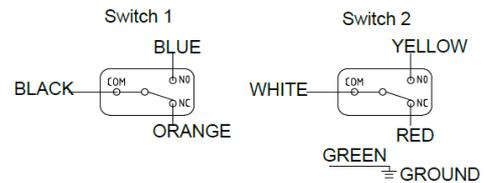
NOTES:

- 1) Dimensions given are in mm
- 2) Design standard: MSS SP-67
Face to Face dimension:MSS SP-67
- 3) Top flange standard: ISO 5211
- 4) Groove specification: AWWA C606
- 5) Working Pressure: 300 psi
- 6) Flange specification: ASME B16.1 CL125
ASME B16.5 CL150

Signal description:

1.Switch parameters:16A 1/2HP 125/250VAC

2.Wiring diagram:

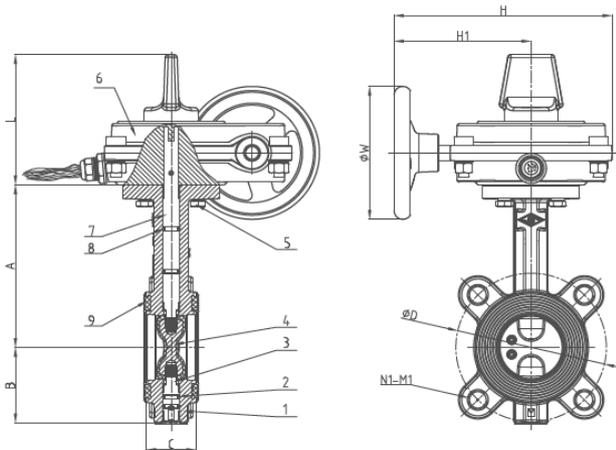


Note:

Valve must not be installed with disc in full open position.
Disc must be partly closed so that no part is protruding beyond end of valve body.

Inch	mm	A	B	C	F	G	L	L1	L2	H1	H	W
2"	50	89	65	81	60.3	57.15	122.5	7.93	15.88	127	202.2	125
2.5"	65	102	71	97	73.0	69.09	122.5	7.93	15.88	127	202.2	125
3"	80	109	81	97	88.9	84.94	122.5	7.93	15.88	127	202.2	125
4"	100	128	95	116	114.3	110.08	122.5	9.53	15.88	127	202.2	125
5"	125	141	111	148	141.3	137.03	122.5	9.53	15.88	127	202.2	125
6"	150	153	133	148	168.3	163.96	122.5	9.53	15.88	139.5	215	225
8"	200	184	164	133	219.1	214.40	122.5	11.10	19.05	198.5	274	225
10"	250	216	196	159	273.1	268.28	122.5	12.70	19.05	198.5	274	225
12"	300	254	226	165	323.9	318.29	132.0	12.70	19.05	198.5	293.5	225

LUG TYPE BUTTERFLY VALVE



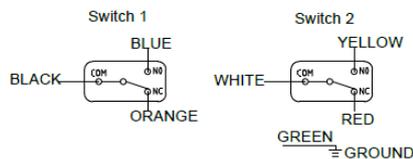
Part No	Part	Material
1	Valve Body	ASTM A536, 65-45-12
2	O-Ring	NBR
3	Stub Shaft	AISI 431
4	Disc	ASTM A536, 65-45-12+EPDM
5	Hex Nut	Carbon Steel Zinc Plated
6	End Face Seal	EPDM
7	O-Ring	NBR
8	Drive Shaft	AISI 431
9	Signal Gear Box	Body:ASTM A536, 65-45-12

NOTES:

- 1) Dimensions given are in mm
- 2) Design standard: MSS SP-67
- 3) Top flange standard: ISO 5211
- 4) Flange specification: ASME B16.42 CL150
- 5) Working Pressure: 300 psi

Signal description:

1. Switch parameters: 16A 1/2HP 125/250VAC
2. Wiring diagram:



Inch	mm	A	B	C	L	H1	H	ØD	N1-M1	ØW
2"	50	140.5	65	43	122.5	127	202.2	120.7	4-5/8	125
2.5"	65	153	71	46	122.5	127	202.2	139.7	4-5/8	125
3"	80	157.5	81	46	122.5	127	202.2	152.4	4-5/8	125
4"	100	176	95	52	122.5	127	202.2	190.5	8-5/8	125
5"	125	191	111	56	122.5	127	202.2	215.9	8-3/4	125
6"	150	202.5	133	56	122.5	139.5	215	241.3	8-3/4	225
8"	200	243.5	164	60	122.5	198.5	274	298.5	8-3/4	225
10"	250	273	196	68	122.5	198.5	274	362	12-7/8	225
12"	300	311	226	78	132.0	198.5	293.5	431.8	12-7/8	225

LIMITED WARRANTY

HD FIRE PROTECT LIMITED (Formerly known as HD FIRE PROTECT PVT. LTD.) hereby referred to as HD FIRE, warrants to the original purchaser of the fire protection products manufactured by HD FIRE and to any other person to whom such equipment is transferred, that such products will be free from defect in material and workmanship under normal use and care, for two (2) years from the date of shipment by HD FIRE. Products or Components supplied or used by HD FIRE, but manufactured by others, are warranted only to the extent of the manufacturer's warranty. No warranty is given for product or components which have been subject to misuse, improper installation, corrosion, unauthorized repair, alteration or un-maintained. HD FIRE shall not be responsible for system design errors or improper installation or inaccurate or incomplete information supplied by buyer or buyer's representatives. HD FIRE will repair or replace defective material free of charge, which is returned to our factory, transportation charge prepaid, provided after our inspection the material is found to have been defective at the time of initial shipment from our works. HD FIRE shall not be liable for any incidental or consequential loss, damage or expense arising directly or indirectly from the use of the product including damages for injury to person, damages to property and penalties resulting from any products and components manufactured by HD FIRE. HD FIRE shall not be liable for any damages or labour charges or expense in making repair or adjustment to the product. HD FIRE shall not be liable for any damages or charges sustained in the adaptation or use of its engineering data & services. In no event shall HD FIRE's product liability exceed an amount equal to the sale price. The foregoing warranty is exclusive and in lieu of all other warranties and representation whether expressed, implied, oral or written, including but not limited to, any implied warranties or merchantability or fitness for a particular purpose. All such other warranties and representations are hereby cancelled.

NOTICE :

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