

Parts Exploded View



Molex Boom Part Numbers

Description	Part Number
*Complete Boom Assembly	
1) 120mm-4" Female Bauer or 6" spigot to 6" Female Bauer	142642/159197
2) 180mm Hi-Torque SS Clip	101162
3) M16 Nyloc Nut	104045 x8
4) Boom Roller Spacer	152843
5) Boom Roller Pin	152842
6) Boom Roller	136978 x6
7) Boom Extending Arm	154074 x2
8) PTFE Slide Boss	153729
9) Extending Arm Pipe	See 43469
10) Extending Arm Ram Brace	See 43471
11) Extending Cylinder 50x1350	154523
12) Boom Tipping Arm	154070
13) Boom Side Support Arm	154072
13.1) Side Support Arm	155672
14) Arm Tip Profile	154070
*Complete Boom Arm Assembly	
Consists of items: 7, 9, 10, 12, 13, 13.1 & 14	
15) 180mm Hi-Torque SS Clip	101162
16) 5" Boom Suction Hose Spigot	154738
16.1) 6" Boom Suction Hose Spigot	157826
16.2) 4" Boom Spigot	186417
17) Suction Hose Holder Gasket	137027
18) Conveyor Housing	167300
19) Molex Boom Swivel	152951
20) Molex Swivel Top Cover	136904
21) Swivel Top Cover Gasket	137028
22) Shut Off Plate Assembly	153632
23) Suction Hose Holder Gasket	137027
24) Shut Off Cylinder Mount Bracket	136901
25) Shut Off Cylinder	137030
26) M8 x 25mm Hex Set	104076
27) M12 X 35mm Hex Set	135125 x2
28) 5" & 6" Hydraulic Motor	132969
29) M12 x 35 Hex Socket 12.9	153479 x4
30) Boom Worm Screw	145999
31) Boom Worm Screw Housing (Machined)	136905
32) M8 x 25mm Hex Set	104076 x2
33) Boom Worm Screw Guard	153564
34) Limit Switch Bracket	137022
35) Gear Cover	152881
36) Swivel Plate	160421
37) M10 X 40 SS A2 Set screw	107370 x8
38) Limit Switch	144345
*Items 39-44 come as a complete turret assembly	
	177359



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40) M16 x 70 x 38 Hex Bolt	*104116 x12
40.1 M16 Flat Washer	*104220 x12
40.2 M16 Nyloc Nut	*104045 x12
41) Worm Wheel	*101370
42) Outlet Connector Gasket	*137029
43) Seal Retaining Ring	*154682
44) Boom Support Manway CS	*137025
44.1 304 Version	*140538
44.2 316 Version	*140539
45) Complete Hydraulic Valve Assembly	153040
45.1 Single Solenoid Valve	157686
45.2 Double Solenoid Valve	157687
45.3 Cetop Valve Cap	156361
46) Boom Manifold	154492
46.1) Manifold Mounting Bracket	154007
46.2) Boom Valve Enclosure SS	154492
47) Boom Terminal Box	153023
47.1 Boom Air Valve 24v	140638
48) Vacuum Gauge	132387
49) Vacuum Gauge Mount	120853
50) Boom Lift Ram Assist	154524
51) Hinge Pin For Lift Cylinder	152839
52) Pin For Extending Cylinder	152841 x2
53) 5.2M Boom Suction Hose	129323



Boom Pendant Part Number:182432



Speed of use, Minimum Fatigue



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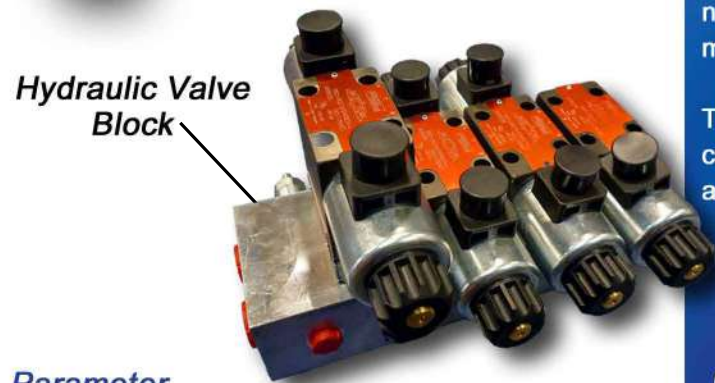
Vacuum Truck Supplies

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Molex Hydraulic Lifting Boom



The suction boom normally installed on the upper part of the tank is an accessory designed to be incorporated onto a machine equipped with tanks to suck sludge (or similar fluids) from road gullies or pits. The suction is created by vacuum inside the tank, or air movement can be used for greater depths. The suction boom essentially consists of a hydraulically arm (which houses a suction pipe) connected to the sludge tank. The movement of this suction boom is completely entrusted to the hydraulic system. A motor attached to the central gear deals with the rotation, while lifting and extension of the arm is achieved through the hydraulic cylinders. This allows the operator's work to be simplified by nearing the hose to the workplace allowing speed of use and minimum operator fatigue.

The image of the suction loading boom highlights the main components. The Molex Boom comes complete with hose, pendant and hydraulic valve block.

Operating Parameters

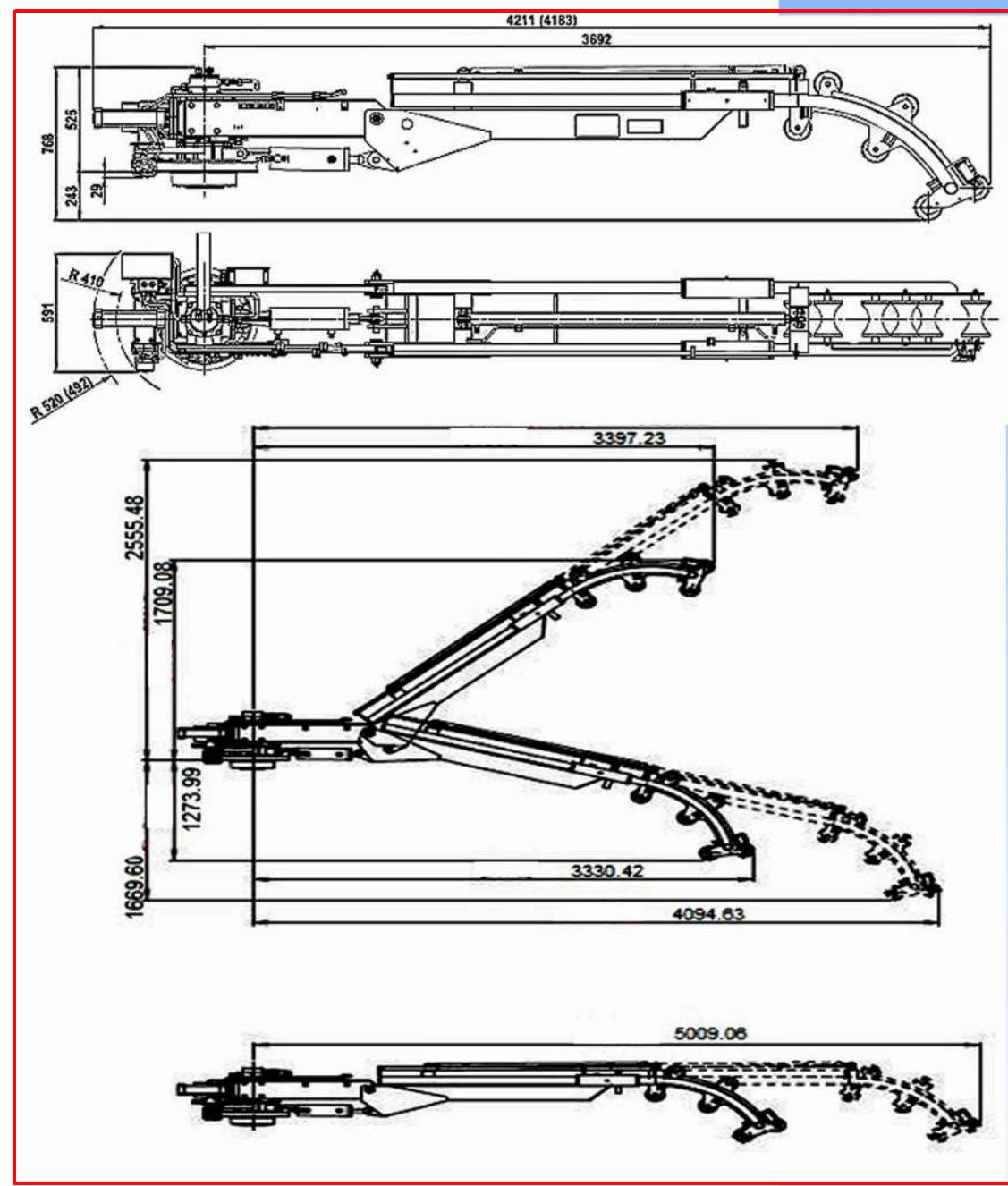
Parameter	Operating Valve	Maximum Valve
HYDRAULIC PRESSURE	120 Bar	135 Bar
HYDRAULIC FLOW RATE	10-15L/Min	30L/Min
Maximum Counter Pressure on The Valve Block		150 Bar
PNEUMATIC PRESSURE	6 Bar	8 Bar
VOLTAGE	12/24v	+/-10.00%

Available versions
The suction boom is available in 4", 5" and 6" versions with standard 24V power solenoids, optional 12V is also available.

The suction boom is designed to withstand (relative) vacuum/ pressure -1 / +1 bar. The solenoid valve coils have a consumption of approximately 1 A in the 24V version and approximately 2 A in the 12V versions.

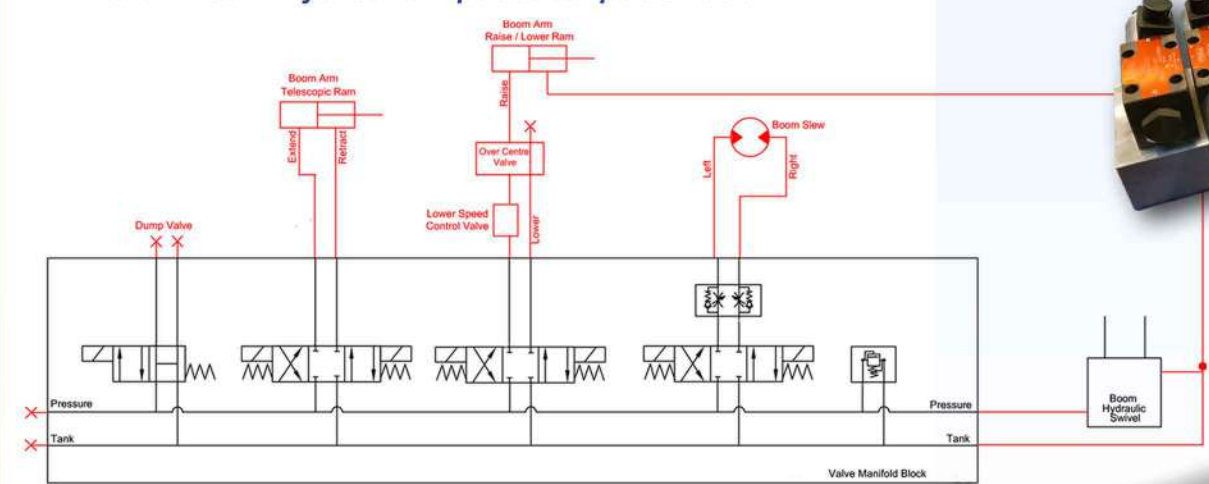
The suction boom is designed to allow for a maximum rotation angle of 300° and a maximum telescopic extension of 1350mm.

Molex Boom Dimensions



Molex Suction Loading Boom

Molex Boom Hydraulic Input & Output Circuit



Molex Loading Boom Hydraulic Schematic



Auxiliary Reels

Molex Auxiliary hose reel is designed to be used either at the rear of the vehicle or under the hose tray. The cast alloy drum ensures great strength with minimum weight, Hose lengths up to 100m can be accommodated due to it's modular design giving great flexibility.

- Side Mount & Rear Mount Optional
- Manual & Hydraulic Versions Available
- Suitable for 1/2" Jetting Hose
- Reels to suit 30m, 60m and 100m 1/2" Hose
- Water Blow Out System (Frost Protection)
- Hose Guide & Handle



Reel Working Parameters

Operating Parameters	Value
Working Pressure	Max 280 Bar
Hose Diameter	1/2" Jetting Hose
Min-Max Hose Length	30m-100m (Reel Dependant)
Weight (Approx)	52Kg
Operation	Manual & Hydraulic Available

Example Of Reel Applications

Under Tray Mounted



Rear Mounted



Related Items

30,60 &100m Pressure tested jetting hose



Nozzles for all jetting applications



Jetting guns, extentions and nozzles for all applications



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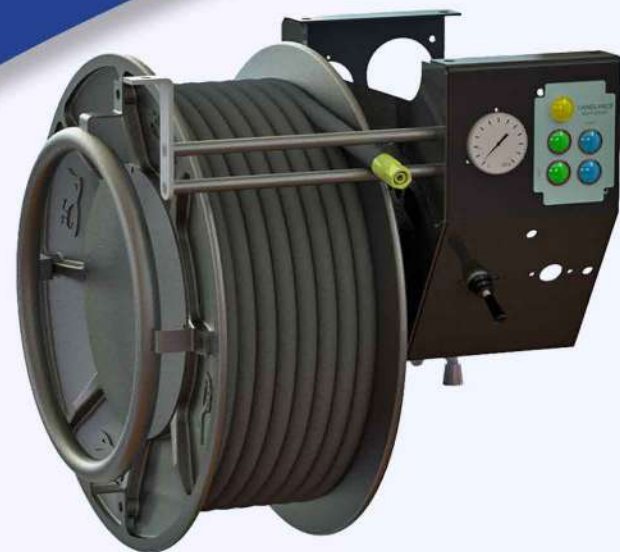


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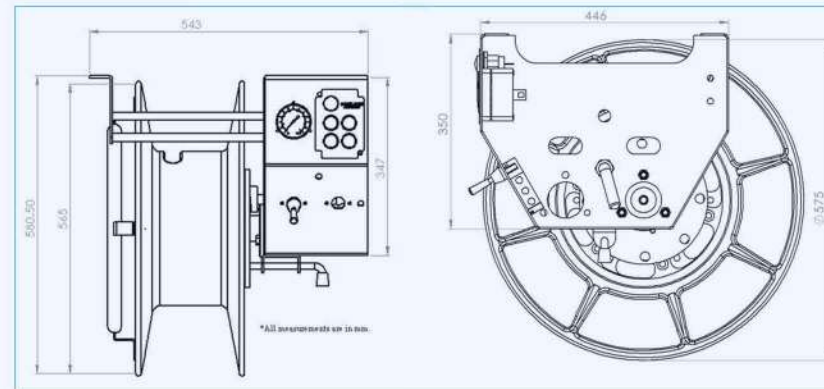


Auxiliary Hose Reels

Under Tray Mounted Reels

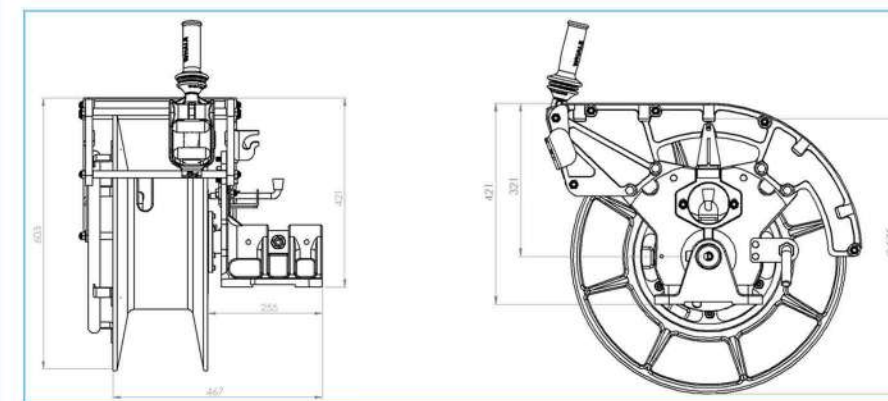


30-60m Manual Under Tray Mount Reel



Rear Mounted Reels

30-60m Manual Rear Mount Reel



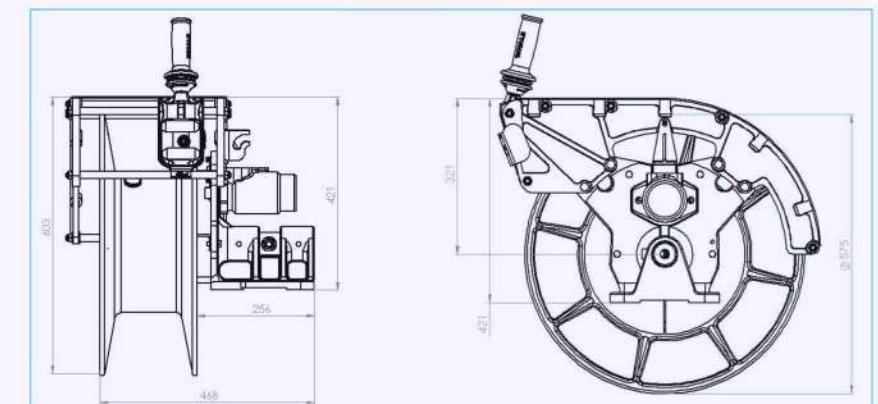
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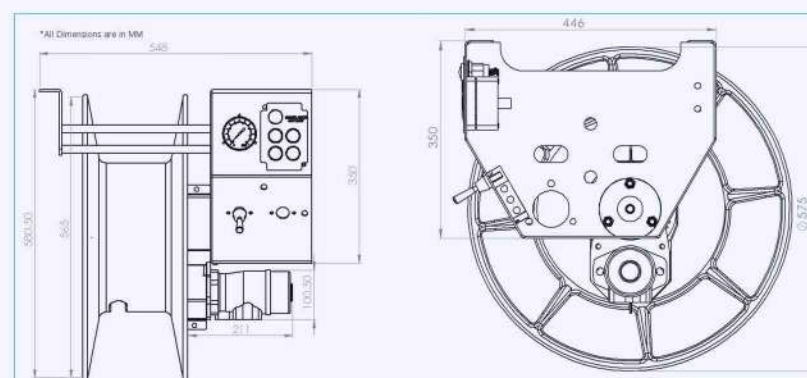
Exploded Parts View



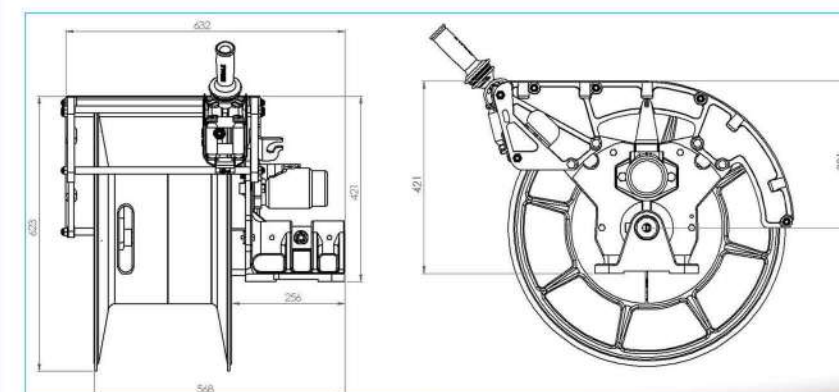
30-60m Hydraulic Rear Mount Reel



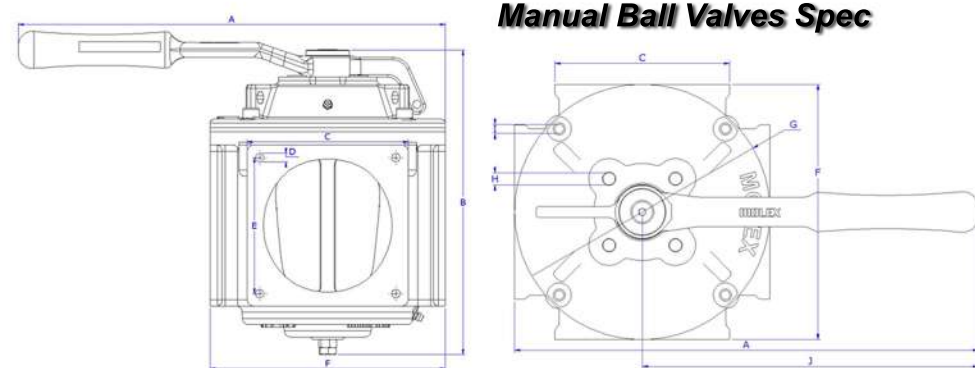
30-60m Hydraulic Under Tray Mount Reel



100m Hydraulic Rear Mount Reel

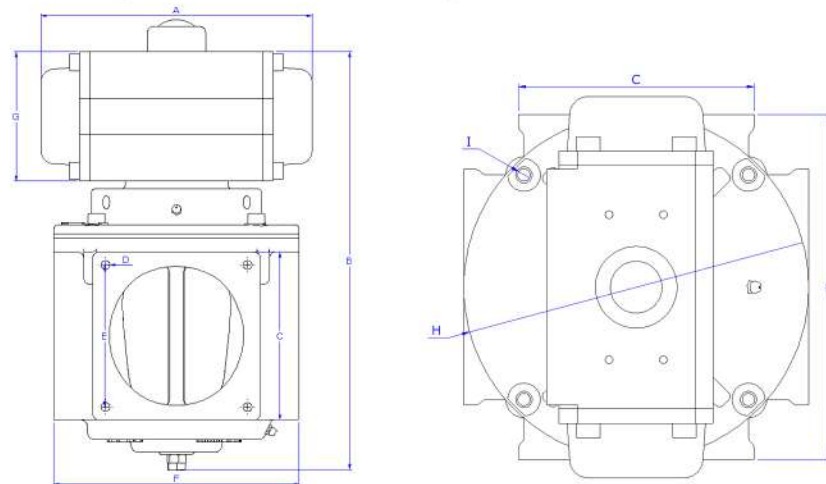


Manual Ball Valves Spec



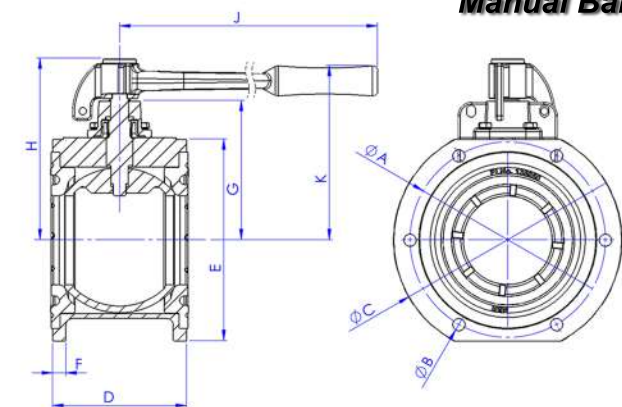
Size	4"	6"
Design Pressure	-1/+4 Bar	-1/+4 Bar
A	345mm	350mm
B	247mm	300mm
C	130mm	190mm
D	6.8mm	10.2mm
E	110mm	160mm
F	190mm	200mm
G	190Ø	195Ø
H	9mm	9mm
I	6.8mm	6.8mm
J	250mm	250mm
Weight(kg)	18kg	

Air Operated Ball Valves Spec



Size	4"	6"
Design Pressure	-1/+4 Bar	-1/+4 Bar
A	345mm	350mm
B	247mm	300mm
C	130mm	190mm
D	6.8mm	10.2mm
E	110mm	160mm
F	190mm	200mm
G	190Ø	195Ø
H	9mm	9mm
I	6.8mm	6.8mm
J	250mm	250mm
Weight(kg)	18kg	

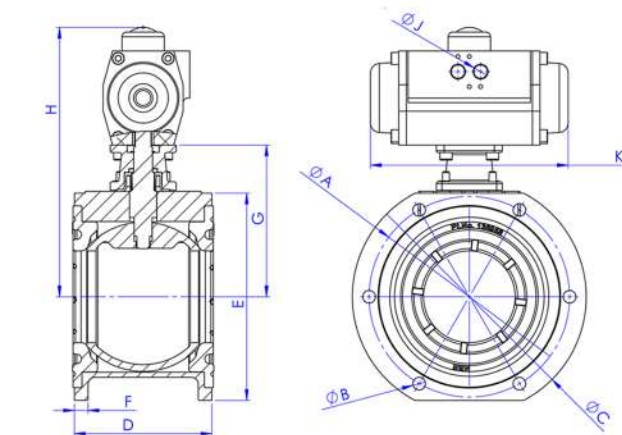
Manual Ball Valves Spec



Size	1 1/2"	2"	3"	4"	6"
Pressure Rating	PN16	PN16	PN10	PN10	PN16
A	103	123	168	213	240
B	8.5	11	11	13.5	M20
No. of holes	4	4	6	6	8
C	SQ 90	SQ 107	205	250	300
D	61	70	121	146	210
E	SQ90	SQ 107	178	220	280
F	8.5	9	15	11.5	20
G	72	90	131	152	172
H	94	130	131	152	203
J	125	230	315	400	560
K	110	140	162	190	203
Weight(KG)	2.2	4	10	14	35

Size	2"	3"	4"	6"
Pressure Rating	PN16	PN10	PN10	PN16
A	123	168	213	240
B	8.5	11	13.5	M20
No. of holes	4	6	6	8
C	SQ 107	205	250	300
D	70	121	146	210
E	SQ 107	178	220	280
F	9	15	11.5	20
G	97	139	161	183
H	205	265	290	350
J(BSP)	1/4"	1/4"	1/4"	1/4"
K	150	205	205	305
Weight(KG)	4	12	16	40

Air Operated Ball Valves Spec



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Molex Valves

MOLEX BALL VALVES

Many options are available for this popular type of easy operation, full flow valve. These include manual, air or electrical activation. Standard non-hazardous valves are compliant to BS EN 12266 with ADR and stainless steel versions available to BS EN 14432.

- Stainless Steel 316 ball as Standard
- Stainless Steel Range Optional
- Viton and PTFE Seals Optional
- Air or Electrical activation Optional



1.5" & 2" Cast and Stainless Steel Valves



3" & 4" Cast and Stainless Steel Valves



6" Cast and Stainless Steel Valves



4" AND 6" MOLEX REVERSE FLOW VALVES, AIR OPERATED AND MANUAL OPERATION



- Manual and Air Operated
- 4" and 6" Versions Available
- Cast and Bronze Deflectors Available



MOLEX WATER SUPPLY VALVES

- 1" BSP Inlet & Outlet
- Flow Rate: Up to 220 L/PM
- Max Working Pressure: 280 Bar



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