

# Section 6

## Ball, Gate and Check Valves

	<u>Page No</u>
Mini Ball Valves	184 - 185
Full Flow Ball Valves	184 - 186
Three Way Ball Valves	186
Gas Approved Mini Ball Valves	187
Gas Approved Mini Ball Valve Accessories	188
Gas Approved Full Flow Ball Valves	189
Stainless Steel Ball Valves	190
Full Flow 'Bibcock' Ball Valves	191
High Pressure Ball & Flow Control Valves <b>NEW</b>	192
Ball Valves c/w Pneumatic Actuators <b>NEW</b>	193 - 195
Check Valves	196
Check Valve Filters	196
Gate Valves	196
Solenoid Valves	197 - 200
Stainless Steel Solenoid Valves	201 - 202
Sight Flow Indicators <b>NEW</b>	203
Safety Check Valves	204
Safety Lock-out Valves	205
Safety Relief Valves <b>NEW</b>	206

Suitable for pneumatic, domestic and hydraulic installations: hot water, gasoline, fuel, oils, gas-oil, kerosene, acids, compressed air.



MINI BALL VALVE FEMALE / FEMALE - BRASS			
PART NO.	MALE / FEMALE BSP	WORKING PRESSURE	PRICE
B/V10-04	1/4"	15 bar	£ 2.10
B/V10-06	3/8"	15 bar	£ 2.10
B/V10-08	1/2"	15 bar	£ 2.52
B/VREDHAND	Red Handle to suit above		£ 0.12
Temperature Range -10°C to +90°C			



MINI BALL VALVE MALE / FEMALE - BRASS			
PART NO.	FEMALE / FEMALE BSP	WORKING PRESSURE	PRICE
B/V11-04	1/4"	15 bar	£ 2.10
B/V11-06	3/8"	15 bar	£ 2.10
B/V11-08	1/2"	15 bar	£ 2.52
B/VREDHAND	Red Handle to suit above		£ 0.12
Temperature Range -10°C to +90°C			

## FULL FLOW RANGE



STEEL HANDLED FULL FLOW BALL VALVE FEMALE / FEMALE - BRASS			
PART NO.	FEMALE / FEMALE BSP	WORKING PRESSURE	PRICE
B/V12-04	1/4"	50 bar	£ 2.90
B/V12-06	3/8"	50 bar	£ 2.90
B/V12-08	1/2"	50 bar	£ 3.18
B/V12-12	3/4"	40 bar	£ 4.65
B/V12-16	1"	40 bar	£ 6.81
Temperature Range -10°C to +90°C			

Suitable for industrial, pneumatic, domestic and hydraulic installations: hot water, gasoline, fuel, oils, gas-oil, kerosene, acids, compressed air.



MINI BALL VALVE FEMALE / FEMALE - BRASS			
PART NO.	FEMALE / FEMALE BSP	WORKING PRESSURE	PRICE
B/V2125-04	1/4"	15 bar	£ 2.21
B/V2125-06	3/8"	15 bar	£ 2.21
B/V2125-08	1/2"	15 bar	£ 2.50
B/V2125-12	3/4"	15 bar	£ 3.80
Temperature Range -10°C to +90°C			



MINI BALL VALVE MALE / FEMALE - BRASS			
PART NO.	MALE / FEMALE BSPT/BSP	WORKING PRESSURE	PRICE
B/V2126-04	1/4"	15 bar	£ 2.21
B/V2126-06	3/8"	15 bar	£ 2.21
B/V2126-08	1/2"	15 bar	£ 2.50
B/V2126-12	3/4"	15 bar	£ 3.80
Temperature Range -10°C to +90°C			

## FULL FLOW RANGE



FULL FLOW BALL VALVE FEMALE / FEMALE - BRASS			
PART NO.	FEMALE / FEMALE BSP	WORKING PRESSURE	PRICE
B/V2090-04	1/4"	50 bar	£ 3.04
B/V2090-06	3/8"	50 bar	£ 3.04
B/V2090-08	1/2"	50 bar	£ 3.25
B/V2090-12	3/4"	40 bar	£ 4.80
B/V2090-16	1"	40 bar	£ 6.86
B/V2090-20	1.1/4"	30 bar	£11.51
B/V2090-24	1.1/2"	30 bar	£16.55
B/V2090-32	2"	25 bar	£24.10
B/V2090-40	2.1/2"	18 bar	£52.08
B/V2090-48	3"	16 bar	£81.75
B/V2090-64	4"	14 bar	£138.59
Temperature Range -15°C to +150°C			



FULL FLOW BALL VALVE MALE / FEMALE - BRASS			
PART NO.	MALE / FEMALE BSPT/BSP	WORKING PRESSURE	PRICE
B/V2091-04	1/4"	50 bar	£ 3.40
B/V2091-06	3/8"	50 bar	£ 3.50
B/V2091-08	1/2"	50 bar	£ 3.96
B/V2091-12	3/4"	40 bar	£ 5.71
B/V2091-16	1"	40 bar	£ 8.12
B/V2091-20	1.1/4"	30 bar	£14.19
B/V2091-24	1.1/2"	30 bar	£19.35
B/V2091-32	2"	25 bar	£27.75
Temperature Range -15°C to +150°C			

Suitable for industrial, pneumatic, domestic and hydraulic installations: hot water, steam, gasoline, fuel, oils, gas-oil, kerosene, acids, compressed air.



FULL FLOW BALL VALVE 'T' HANDLE FEMALE / FEMALE - BRASS			
PART NO.	FEMALE / FEMALE BSP	WORKING PRESSURE	PRICE
B/V2092-04	1/4"	50 bar	£ 3.30
B/V2092-06	3/8"	50 bar	£ 3.30
B/V2092-08	1/2"	50 bar	£ 3.62
B/V2092-12	3/4"	40 bar	£ 5.37
B/V2092-16	1"	40 bar	£ 5.70
Temperature Range -15°C to +150°C			



FULL FLOW BALL VALVE 'T' HANDLE MALE / FEMALE - BRASS			
PART NO.	MALE / FEMALE BSPT/BSP	WORKING PRESSURE	PRICE
B/V2093-04	1/4"	50 bar	£ 3.40
B/V2093-06	3/8"	50 bar	£ 3.51
B/V2093-08	1/2"	50 bar	£ 3.95
B/V2093-12	3/4"	40 bar	£ 5.70
B/V2093-16	1"	40 bar	£ 8.35
Temperature Range -15°C to +150°C			

## THREE WAY RANGE



THREE WAY BALL VALVE 'L' PORT FEMALE - BRASS			
PART NO.	FEMALE BSP	WORKING PRESSURE	PRICE
B/V2128-04L	1/4"	25 bar	£25.99
B/V2128-06L	3/8"	25 bar	£25.99
B/V2128-08L	1/2"	25 bar	£26.97
B/V2128-12L	3/4"	25 bar	£44.10
B/V2128-16L	1"	25 bar	£64.39
B/V2128-20L	1.1/4"	25 bar	£86.90
B/V2128-24L	1.1/2"	25 bar	£142.90
B/V2128-32L	2"	25 bar	£215.00
Temperature Range -15°C to +150°C			



THREE WAY BALL VALVE 'T' PORT FEMALE - BRASS			
PART NO.	FEMALE BSP	WORKING PRESSURE	PRICE
B/V2128-04T	1/4"	25 bar	£25.99
B/V2128-06T	3/8"	25 bar	£25.99
B/V2128-08T	1/2"	25 bar	£26.97
B/V2128-12T	3/4"	25 bar	£44.10
B/V2128-16T	1"	25 bar	£64.39
B/V2128-20T	1.1/4"	25 bar	£86.90
B/V2128-24T	1.1/2"	25 bar	£142.90
B/V2128-32T	2"	25 bar	£215.00
Temperature Range -15°C to +150°C			

Suitable for industrial, pneumatic, domestic, and hydraulic installation :  
compressed air, water, oils, GAS, etc.

BRITISH GAS APPROVED TO DIN EN 331.

**(NOT SUITABLE FOR USE WITH METHYL ALCOHOL AND SATURATED STEAM.)**



FEMALE / FEMALE ISO7/1 - CHROME-NICKEL PLATED BRASS			
PART NO.	FEMALE / FEMALE BSPP	WORKING PRESSURE	PRICE
B/V6300-02	1/8"	20 bar	£ 5.25
B/V6300-04	1/4"	20 bar	£ 5.45
B/V6300-06	3/8"	20 bar	£ 5.60
B/V6300-08	1/2"	20 bar	£ 7.10
B/V6300-12	3/4"	20 bar	£ 9.26
Temperature Range -18°C to +80°C			



MALE / FEMALE ISO7/1 - CHROME-NICKEL PLATED BRASS			
PART NO.	MALE / FEMALE BSPT/BSPP	WORKING PRESSURE	PRICE
B/V6310-02	1/8"	20 bar	£ 5.25
B/V6310-03	1/4" x 1/8"	20 bar	£ 5.45
B/V6310-04	1/4"	20 bar	£ 5.60
B/V6310-06	3/8"	20 bar	£ 6.12
B/V6310-08	1/2"	20 bar	£ 7.10
B/V6310-12	3/4"	20 bar	£ 9.26
Temperature Range -18°C to +80°C			



TUBE / TUBE - CHROME NICKEL-PLATED BRASS			
PART NO.	TUBE / TUBE OD	WORKING PRESSURE	PRICE
B/V6450-6	6 mm	20 bar	£ 6.12
B/V6450-8	8 mm	20 bar	£ 6.30
B/V6450-10	10 mm	20 bar	£ 6.60
B/V6450-12	12 mm	20 bar	£ 6.87
B/V6450-15	15 mm	20 bar	£ 8.79
Temperature Range -18°C to +80°C			



VALVE EXHAUST HOLE FEMALE - CHROME-NICKEL-PLATED BRASS			
PART NO.	FEMALE BSPP	WORKING PRESSURE	PRICE
B/V6600-02	1/8"	20 bar	£ 7.45
B/V6600-04	1/4"	20 bar	£ 7.56
B/V6600-06	3/8"	20 bar	£ 8.15
Temperature Range -18°C to +80°C			



STANDARD HANDLE			
PART NO.	LENGTH	BALL VALVE SIZE	PRICE
B/V6900A	19 mm	1/8", 1/4", 3/8"	£ 0.70
B/V6900B	26 mm	1/2", 3/4"	£ 0.70



LONG HANDLE			
PART NO.	LENGTH	BALL VALVE SIZE	PRICE
B/V6910A	35 mm	1/8", 1/4", 3/8"	£ 0.80
B/V6910B	50 mm	1/2", 3/4"	£ 0.80



COLOURED PLATE			
PART NO.	COLOUR	BALL VALVE SIZE	PRICE
B/V6920AR	RED	1/8", 1/4", 3/8"	£ 0.30
B/V6920AB	BLUE	1/8", 1/4", 3/8"	£ 0.30
B/V6920AY	YELLOW	1/8", 1/4", 3/8"	£ 0.30
B/V6920AG	GREEN	1/8", 1/4", 3/8"	£ 0.30
B/V6920AW	WHITE	1/8", 1/4", 3/8"	£ 0.30
B/V6920BR	RED	1/2", 3/4"	£ 0.30
B/V6920BB	BLUE	1/2", 3/4"	£ 0.30
B/V6920BY	YELLOW	1/2", 3/4"	£ 0.30
B/V6920BG	GREEN	1/2", 3/4"	£ 0.30
B/V6920BW	WHITE	1/2", 3/4"	£ 0.30

COLOUR CODE

R = RED

B = BLUE

Y = YELLOW

G = GREEN

W = WHITE



Suitable for industrial, pneumatic, domestic, and hydraulic installation : hot water, dry steam, gasoline, unleaded gasoline, fuel, gas-oil, kerosene, oils, GAS, compressed air, etc.

BRITISH GAS APPROVED TO DIN 3537 PART 1.

**(NOT SUITABLE FOR USE WITH METHYL ALCOHOL AND SATURATED STEAM.)**



FULL FLOW BALL VALVES FEMALE / FEMALE ISO7/1 - BRASS			
PART NO.	FEMALE / FEMALE BSP	WORKING PRESSURE	PRICE
B/V2070-04	1/4"	50 bar	£ 3.44
B/V2070-06	3/8"	50 bar	£ 3.60
B/V2070-08	1/2"	50 bar	£ 4.65
B/V2070-12	3/4"	40 bar	£ 7.01
B/V2070-16	1"	40 bar	£10.20
B/V2070-20	1.1/4"	30 bar	£16.39
B/V2070-24	1.1/2"	30 bar	£23.00
B/V2070-32	2"	25 bar	£30.25
Temperature Range			
Air -15°C to +220°C    Water 0°C to +150°C without steam    Gas -15°C to +150°C			



FULL FLOW BALL VALVES MALE / FEMALE ISO7/1 - BRASS			
PART NO.	MALE / FEMALE BSPT/BSP	WORKING PRESSURE	PRICE
B/V2071-04	1/4"	50 bar	£ 3.75
B/V2071-06	3/8"	50 bar	£ 4.00
B/V2071-08	1/2"	50 bar	£ 4.84
B/V2071-12	3/4"	40 bar	£ 7.22
B/V2071-16	1"	40 bar	£10.30
B/V2071-20	1.1/4"	30 bar	£16.58
B/V2071-24	1.1/2"	30 bar	£23.55
B/V2071-32	2"	25 bar	£31.00
Temperature Range			
Air -15°C to +220°C    Water 0°C to +150°C without steam    Gas -15°C to +150°C			



FULL FLOW 'T' HANDLE FEMALE / FEMALE ISO7/1 - BRASS			
PART NO.	FEMALE / FEMALE BSP	WORKING PRESSURE	PRICE
B/V2072-04	1/4"	50 bar	£ 3.44
B/V2072-06	3/8"	50 bar	£ 3.60
B/V2072-08	1/2"	50 bar	£ 4.65
B/V2072-12	3/4"	40 bar	£ 7.05
B/V2072-16	1"	40 bar	£10.20
Temperature Range			
Air -15°C to +220°C    Water 0°C to +150°C without steam    Gas -15°C to +150°C			



FULL FLOW 'T' HANDLE MALE / FEMALE ISO7/1 - BRASS			
PART NO.	MALE / FEMALE BSPT/BSP	WORKING PRESSURE	PRICE
B/V2073-04	1/4"	50 bar	£ 3.70
B/V2073-06	3/8"	50 bar	£ 3.85
B/V2073-08	1/2"	50 bar	£ 4.82
B/V2073-12	3/4"	40 bar	£ 7.19
B/V2073-16	1"	40 bar	£10.40
Temperature Range			
Air -15°C to +220°C    Water 0°C to +150°C without steam    Gas -15°C to +150°C			



ONE PIECE BALL VALVE

REDUCED BORE, FEMALE

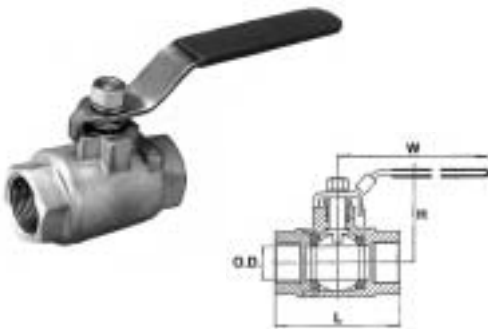


PART NUMBER	FEMALE BSP	O.D. mm	L mm	H mm	W mm	PRICE
SJ-V10-04	1/4"	5.0	40	33	67	£14.36
SJ-V10-06	3/8"	7.0	45	36	67	£15.93
SJ-V10-08	1/2"	9.0	58	42	90	£17.28
SJ-V10-12	3/4"	12.5	60	45	90	£23.67
SJ-V10-16	1"	16.0	72	52	112	£28.50
SJ-V10-20	1.1/4"	20.0	80	57	112	£40.39
SJ-V10-24	1.1/2"	24.5	85	60	132	£50.60
SJ-V10-32	2"	32.0	102	66	132	£65.08

Working Pressures: 1/4" to 1.1/4" - 1000psi  
 1.1/2" to 2" - 800psi  
 Working Temperature: -20°C to +200°C  
 Body Material: 316 Stainless Steel  
 Seals & Seat: PTFE

TWO PIECE BALL VALVE

FULL FLOW, FEMALE

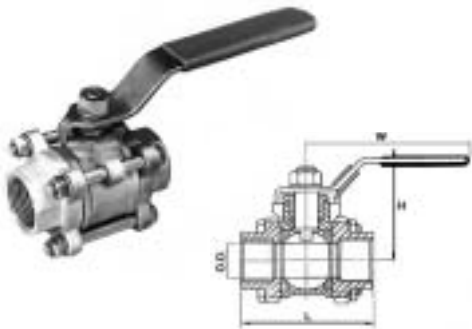


PART NUMBER	FEMALE BSP	O.D. mm	L mm	H mm	W mm	PRICE
SJ-V20-04	1/4"	11.6	61.5	48	120	£22.44
SJ-V20-06	3/8"	12.7	61.5	48	120	£22.44
SJ-V20-08	1/2"	15.0	63.3	49	120	£24.80
SJ-V20-12	3/4"	20.0	76.7	55	130	£35.90
SJ-V20-16	1"	25.0	91.0	69	155	£48.25
SJ-V20-20	1.1/4"	32.0	100.0	77	155	£68.11
SJ-V20-24	1.1/2"	39.0	118.0	84	185	£90.32
SJ-V20-32	2"	50.8	137.5	93	185	£129.03

Working Pressure: 1000psi  
 Working Temperature: -20°C to +200°C  
 Body Material: 316 Stainless Steel  
 Seals & Seat: PTFE

THREE PIECE BALL VALVE

FULL FLOW, FEMALE

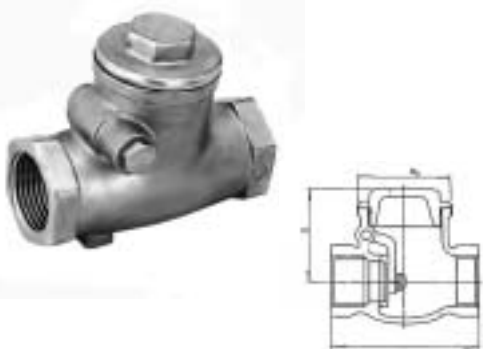


PART NUMBER	FEMALE BSP	O.D. mm	L mm	H mm	W mm	PRICE
SJ-V30-04	1/4"	11.6	65	42	98	£25.81
SJ-V30-06	3/8"	12.7	65	42	98	£25.81
SJ-V30-08	1/2"	15.0	66	49	115	£33.66
SJ-V30-12	3/4"	20.0	83	52	115	£41.51
SJ-V30-16	1"	25.4	95	62	143	£51.72
SJ-V30-20	1.1/4"	32.0	111	66	143	£72.93
SJ-V30-24	1.1/2"	38.0	130	77	178	£94.70
SJ-V30-32	2"	50.8	151	85	178	£147.09

Working Pressure: 1000psi  
 Working Temperature: -20°C to +200°C  
 Body Material: 316 Stainless Steel  
 Seals & Seat: PTFE

CHECK VALVE

FEMALE



PART NUMBER	FEMALE BSP	L mm	H mm	D2 mm	PRICE
SJ-C10-08	1/2"	61	45	32	£38.00
SJ-C10-12	3/4"	75	48	40	£44.99
SJ-C10-16	1"	85	55	42	£55.87
SJ-C10-20	1.1/4"	95	58	51	£88.51
SJ-C10-24	1.1/2"	105	61	62	£98.65
SJ-C10-32	2"	121	71	72	£123.62

Test Pressures:  
 Shell (Hydrostatic): 500psi  
 Seat (Air): 80psi

Suitable for industrial, pneumatic, domestic and hydraulic installations: hot and cold water, steam, oils, compressed air.



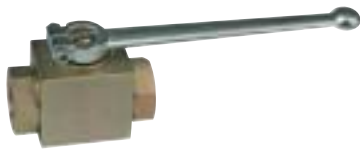
'BIBCOCK' BALL VALVE MALE / HOSETAIL - BRASS			
PART NO.	MALE / HOSETAIL	WORKING PRESSURE	PRICE
B/V2132-08	1/2" / 13 mm	15 bar	£ 3.86
B/V2132-12	3/4" / 19 mm	15 bar	£ 5.07
B/V2132-16	1" / 25 mm	12 bar	£10.70
Temperature Range: Air: -15°C to +110°C Temperature Range: Water: 0°C to +80°C			



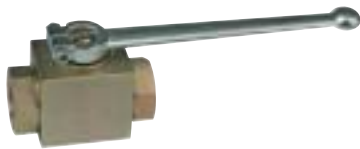
'BIBCOCK' BALL VALVE 'T' HANDLE MALE / HOSETAIL - BRASS			
PART NO.	MALE / HOSETAIL	WORKING PRESSURE	PRICE
B/V2134-08	1/2" / 13 mm	15 bar	£ 3.86
B/V2134-12	3/4" / 19 mm	15 bar	£ 5.07
B/V2134-16	1" / 25 mm	12 bar	£10.70
Temperature Range: Air: -15°C to +110°C Temperature Range: Water: 0°C to +80°C			



LOCKABLE 'BIBCOCK' BALL VALVE MALE / HOSETAIL - BRASS			
PART NO.	MALE / HOSETAIL	WORKING PRESSURE	PRICE
B/V2144-08	1/2" / 13 mm	15 bar	£ 5.07
Temperature Range: Air: -15°C to +110°C Temperature Range: Water: 0°C to +80°C			



HIGH PRESSURE BALL VALVES			
PART NO.	CONNECTION	WORKING PRESSURE	PRICE
BKH-04	1/4" BSPP	500 bar	£13.76
BKH-06	3/8" BSPP	500 bar	£16.12
BKH-08	1/2" BSPP	500 bar	£17.48
BKH-12	3/4" BSPP	500 bar	£37.00
BKH-16	1" BSPP	500 bar	£49.99
BKH-20	1.1/4" BSPP	350 bar	£58.28
BKH-24	1.1/2" BSPP	350 bar	£65.64



HIGH PRESSURE BALL VALVES - FORGE BODY			
PART NO.	CONNECTION	WORKING PRESSURE	PRICE
MKH-20	1.1/4" BSPP	350 bar	£145.36
MKH-24	1.1/2" BSPP	350 bar	£167.92
MKH-32	2" BSPP	350 bar	£199.56



3-WAY SELECTOR 'L' PORTED BALL VALVES			
PART NO.	CONNECTION	WORKING PRESSURE	PRICE
BK3-04L	1/4" BSPP	500 bar	£36.44
BK3-06L	3/8" BSPP	500 bar	£38.56
BK3-08L	1/2" BSPP	500 bar	£40.72
BK3-12L	3/4" BSPP	500 bar	£87.12
BK3-16L	1" BSPP	500 bar	£107.52
OTHER SIZES AVAILABLE ON REQUEST			



3-WAY SELECTOR 'T' PORTED BALL VALVES			
PART NO.	CONNECTION	WORKING PRESSURE	PRICE
BK3-04T	1/4" BSPP	500 bar	£36.44
BK3-06T	3/8" BSPP	500 bar	£38.56
BK3-08T	1/2" BSPP	500 bar	£40.72
BK3-12T	3/4" BSPP	500 bar	£87.12
BK3-16T	1" BSPP	500 bar	£107.52
OTHER SIZES AVAILABLE ON REQUEST			



FLOW CONTROL VALVE			
PART NO.	CONNECTION	WORKING PRESSURE	PRICE
NDV-02	1/8" BSPP	350 bar	£33.36
NDV-04	1/4" BSPP	350 bar	£24.24
NDV-06	3/8" BSPP	350 bar	£27.04
NDV-08	1/2" BSPP	350 bar	£35.04
NDV-12	3/4" BSPP	350 bar	£52.84
NDV-16	1" BSPP	350 bar	£100.64
NDV-20	1.1/4" BSPP	350 bar	£151.84
NDV-24	1.1/2" BSPP	350 bar	£153.96



FLOW CONTROL VALVE - C/W CHECK VALVE			
PART NO.	CONNECTION	WORKING PRESSURE	PRICE
NDRV-02	1/8" BSPP	350 bar	£46.84
NDRV-04	1/4" BSPP	350 bar	£56.96
NDRV-06	3/8" BSPP	350 bar	£33.96
NDRV-08	1/2" BSPP	350 bar	£45.16
NDRV-12	3/4" BSPP	350 bar	£72.92
NDRV-16	1" BSPP	350 bar	£131.76
NDRV-20	1.1/4" BSPP	350 bar	£160.36
NDRV-24	1.1/2" BSPP	350 bar	£188.04



**BALL VALVE FEMALE / FEMALE - BRASS C/W SINGLE ACTING PNEUMATIC ACTUATOR**



PART NO.	FEMALE / FEMALE	PRICE
HVSB-14PWS	1/4" BSP	£120.00
HVSB-38PWS	3/8" BSP	£120.00
HVSB-12PWS	1/2" BSP	£120.00
HVSB-34PWS	3/4" BSP	£123.80
HVSB-1PWS	1" BSP	£164.35
HVSB-114PWS	1.1/4" BSP	£236.32
HVSB-112PWS	1.1/2" BSP	£242.85
HVSB-2PWS	2" BSP	£249.76
HVSB-212PWS	2.1/2" BSP	£444.48
HVSB-3PWS	3" BSP	£566.50
HVSB-4PWS	4" BSP	£835.90

ACTUATORS SIZED FOR WET SERVICE THROUGH BALL VALVE, WITH 6 BAR G PILOT 2 PIECE FULL BORE ISO TOP BALL VALVE, BRASS BODY/BALL. PTFE SEATS & STEM SEAL, WITH BLOW OUT PROOF STEM & ADJUSTABLE PACKING. PRESSURE RANGE 600 PSI WATER OR GAS, 150 PSI STEAM.

**BALL VALVE FEMALE / FEMALE - BRASS C/W DOUBLE ACTING PNEUMATIC ACTUATOR**



PART NO.	FEMALE / FEMALE	PRICE
HVDB-14PW	1/4" BSP	£112.10
HVDB-38PW	3/8" BSP	£112.10
HVDB-12PW	1/2" BSP	£112.10
HVDB-34PW	3/4" BSP	£114.30
HVDB-1PW	1" BSP	£117.02
HVDB-114PW	1.1/4" BSP	£152.48
HVDB-112PW	1.1/2" BSP	£158.00
HVDB-2PW	2" BSP	£165.02
HVDB-212PW	2.1/2" BSP	£387.85
HVDB-3PW	3" BSP	£507.20
HVDB-4PW	4" BSP	£792.00

ACTUATORS SIZED FOR WET SERVICE THROUGH BALL VALVE, WITH 6 BAR G PILOT 2 PIECE FULL BORE ISO TOP BALL VALVE, BRASS BODY/BALL. PTFE SEATS & STEM SEAL, WITH BLOW OUT PROOF STEM & ADJUSTABLE PACKING. PRESSURE RANGE 600 PSI WATER OR GAS, 150 PSI STEAM.

**BALL VALVE FEMALE / FEMALE - STAINLESS STEEL C/W SINGLE ACTING PNEUMATIC ACTUATOR**



PART NO.	FEMALE / FEMALE	MAXIMUM W.P.	PRICE
HVWS-14SS	1/4" BSP	70 bar	£155.00
HVWS-38SS	3/8" BSP	70 bar	£155.00
HVWS-12SS	1/2" BSP	70 bar	£156.00
HVWS-34SS	3/4" BSP	70 bar	£170.25
HVWS-1SS	1" BSP	70 bar	£262.35
HVWS-114SS	1.1/4" BSP	70 bar	£277.10
HVWS-112SS	1.1/2" BSP	70 bar	£376.56
HVWS-2SS	2" BSP	70 bar	£433.07
HVWS-212SS	2.1/2" BSP	70 bar	£700.00
HVWS-3SS	3" BSP	70 bar	£908.15
HVWS-4SS	4" BSP	70 bar	£1220.10

3 PIECE FULL BORE BALL VALVE, 316 BODY/BALL WITH ISO TOP MOUNTING PAD. PTFE SEATS & STEM SEAL. TEMPERATURE RANGE: -34°C TO +200°C

**BALL VALVE FEMALE / FEMALE - STAINLESS STEEL C/W DOUBLE ACTING PNEUMATIC ACTUATOR**



PART NO.	FEMALE / FEMALE	MAXIMUM W.P.	PRICE
HVPW-14SS	1/4" BSP	70 bar	£146.27
HVPW-38SS	3/8" BSP	70 bar	£146.27
HVPW-12SS	1/2" BSP	70 bar	£147.10
HVPW-34SS	3/4" BSP	70 bar	£162.39
HVPW-1SS	1" BSP	70 bar	£177.28
HVPW-114SS	1.1/4" BSP	70 bar	£224.00
HVPW-112SS	1.1/2" BSP	70 bar	£292.16
HVPW-2SS	2" BSP	70 bar	£350.00
HVPW-212SS	2.1/2" BSP	70 bar	£547.24
HVPW-3SS	3" BSP	70 bar	£720.35
HVPW-4SS	4" BSP	70 bar	£1120.18

3 PIECE FULL BORE BALL VALVE, 316 BODY/BALL WITH ISO TOP MOUNTING PAD. PTFE SEATS & STEM SEAL. TEMPERATURE RANGE: -34°C TO +200°C



## 3 WAY BALL VALVE FEMALE L OR T PORT - BRASS C/W SINGLE ACTING PNEUMATIC ACTUATOR



PART NO.	FEMALE / FEMALE	MAXIMUM W.P.	PRICE
HVSA-04L	1/4" BSP	30 bar	£147.50
HVSA-06L	3/8" BSP	30 bar	£147.50
HVSA-08L	1/2" BSP	30 bar	£149.80
HVSA-12L	3/4" BSP	30 bar	£218.29
HVSA-16L	1" BSP	16 bar	£240.76
HVSA-20L	1.1/4" BSP	10 bar	£280.25
HVSA-24L	1.1/2" BSP	10 bar	£370.00
HVSA-32L	2" BSP	10 bar	£471.26

**IF T PORT REQUIRED SUBSTITUTE T FOR L eg SA-08T**  
 BRASS BODY, CHROME PLATED BRASS BALL, PTFE SEALS  
 TEMPERATURE RANGE: -20°C TO +120°C

## 3 WAY BALL VALVE FEMALE L OR T PORT - BRASS C/W DOUBLE ACTING PNEUMATIC ACTUATOR



PART NO.	FEMALE / FEMALE	MAXIMUM W.P.	PRICE
HVDA-04L	1/4" BSP	30 bar	£138.00
HVDA-06L	3/8" BSP	30 bar	£138.00
HVDA-08L	1/2" BSP	30 bar	£140.26
HVDA-12L	3/4" BSP	30 bar	£199.15
HVDA-16L	1" BSP	16 bar	£221.20
HVDA-20L	1.1/4" BSP	10 bar	£262.00
HVDA-24L	1.1/2" BSP	10 bar	£345.24
HVDA-32L	2" BSP	10 bar	£447.27

**IF T PORT REQUIRED SUBSTITUTE T FOR L eg DA-08T**  
 BRASS BODY, CHROME PLATED BRASS BALL, PTFE SEALS  
 TEMPERATURE RANGE: -20°C TO +120°C

## 3 WAY BALL VALVE FEMALE L OR T PORT - STAINLESS STEEL C/W SINGLE ACTING PNEUMATIC ACTUATOR



PART NO.	FEMALE / FEMALE	MAXIMUM W.P.	PRICE
HVSA-04LSS	1/4" BSP	55 bar	£252.10
HVSA-06LSS	3/8" BSP	55 bar	£253.34
HVSA-08LSS	1/2" BSP	55 bar	£300.08
HVSA-12LSS	3/4" BSP	55 bar	£332.00
HVSA-16LSS	1" BSP	55 bar	£400.00
HVSA-20LSS	1.1/4" BSP	55 bar	£510.75
HVSA-24LSS	1.1/2" BSP	55 bar	£586.60
HVSA-32LSS	2" BSP	55 bar	£837.16

**IF T PORT REQUIRED SUBSTITUTE T FOR L eg SA-08TSS**  
 316 STAINLESS STEEL THROUGHOUT REINFORCED PTFE SEATS AND SEALS  
 TEMPERATURE RANGE: -20°C TO +120°C

## 3 WAY BALL VALVE FEMALE L OR T PORT - STAINLESS STEEL C/W DOUBLE ACTING PNEUMATIC ACTUATOR



PART NO.	FEMALE / FEMALE	MAXIMUM W.P.	PRICE
HVDA-04LSS	1/4" BSP	55 bar	£187.00
HVDA-06LSS	3/8" BSP	55 bar	£187.00
HVDA-08LSS	1/2" BSP	55 bar	£199.87
HVDA-12LSS	3/4" BSP	55 bar	£208.03
HVDA-16LSS	1" BSP	55 bar	£344.17
HVDA-20LSS	1.1/4" BSP	55 bar	£436.85
HVDA-24LSS	1.1/2" BSP	55 bar	£511.00
HVDA-32LSS	2" BSP	55 bar	£747.50

**IF T PORT REQUIRED SUBSTITUTE T FOR L eg DA-08TSS**  
 316 STAINLESS STEEL THROUGHOUT REINFORCED PTFE SEATS AND SEALS  
 TEMPERATURE RANGE: -20°C TO +120°C



## FLANGED BALL VALVE PN10/PN16 AND ASA150 - STAINLESS STEEL C/W SINGLE ACTING PNEUMATIC ACTUATOR



PART NO.	FLANGE	MAXIMUM W.P.	PRICE
HVSA-08SS16	1/2"	16 bar	£275.00
HVSA-12SS16	3/4"	16 bar	£300.24
HVSA-16SS16	1"	16 bar	£326.18
HVSA-20SS16	1.1/4"	16 bar	£409.07
HVSA-24SS16	1.1/2"	16 bar	£454.87
HVSA-32SS16	2"	16 bar	£563.00
HVSA-40SS16	2.1/2"	16 bar	£732.50
HVSA-48SS16	3"	16 bar	£900.42
HVSA-64SS16	4"	16 bar	£1244.00

FOR ASA150 SUBSTITUTE -ASA FOR 16 eg SA-16SSASA

ASA150 MAXIMUM WORKING PRESSURE: 20 bar

TEMPERATURE RANGE: -20°C TO +120°C

## FLANGED BALL VALVE PN10/PN16 AND ASA150 - STAINLESS STEEL C/W DOUBLE ACTING PNEUMATIC ACTUATOR



PART NO.	FLANGE	MAXIMUM W.P.	PRICE
HVDA-08SS16	1/2"	16 bar	£210.00
HVDA-12SS16	3/4"	16 bar	£236.54
HVDA-16SS16	1"	16 bar	£259.76
HVDA-20SS16	1.1/4"	16 bar	£310.20
HVDA-24SS16	1.1/2"	16 bar	£400.00
HVDA-32SS16	2"	16 bar	£477.52
HVDA-40SS16	2.1/2"	16 bar	£656.10
HVDA-48SS16	3"	16 bar	£934.07
HVDA-64SS16	4"	16 bar	£1155.10

FOR ASA150 SUBSTITUTE -ASA FOR 16 eg SA-16SSASA

ASA150 MAXIMUM WORKING PRESSURE: 20 bar

TEMPERATURE RANGE: -20°C TO +120°C

## FLANGED BALL VALVE - CAST IRON C/W SINGLE ACTING PNEUMATIC ACTUATOR



PART NO.	FLANGE	MAXIMUM W.P.	PRICE
HVSA-08CI	1/2"	16 bar	£243.00
HVSA-12CI	3/4"	16 bar	£246.00
HVSA-16CI	1"	16 bar	£256.48
HVSA-20CI	1.1/4"	16 bar	£307.12
HVSA-24CI	1.1/2"	16 bar	£330.87
HVSA-32CI	2"	16 bar	£365.25
HVSA-40CI	2.1/2"	16 bar	£460.00
HVSA-48CI	3"	16 bar	£563.00
HVSA-64CI	4"	16 bar	£790.23

CAST IRON (GGG40) BODY FULL BORE BALL VALVE STAINLESS STEEL BALL &amp; STEM. PTFE SEAT &amp; VITON SEALS.

TEMPERATURE RANGE: -20°C TO +120°C

## FLANGED BALL VALVE - CAST IRON C/W DOUBLE ACTING PNEUMATIC ACTUATOR



PART NO.	FLANGE	MAXIMUM W.P.	PRICE
HVDA-08CI	1/2"	16 bar	£143.00
HVDA-12CI	3/4"	16 bar	£147.10
HVDA-16CI	1"	16 bar	£201.78
HVDA-20CI	1.1/4"	16 bar	£224.63
HVDA-24CI	1.1/2"	16 bar	£246.70
HVDA-32CI	2"	16 bar	£310.62
HVDA-40CI	2.1/2"	16 bar	£385.42
HVDA-48CI	3"	16 bar	£441.00
HVDA-64CI	4"	16 bar	£582.70

CAST IRON (GGG40) BODY FULL BORE BALL VALVE STAINLESS STEEL BALL &amp; STEM. PTFE SEAT &amp; VITON SEALS.

TEMPERATURE RANGE: -20°C TO +120°C

Suitable for industrial, pneumatic, domestic and hydraulic installations: hot water, oxygenated water, sodium water, different oils, compressed air. It can be fitted in horizontal, vertical or oblique position.



EUROPA CHECK VALVE FEMALE / FEMALE - BRASS			
PART NO.	FEMALE / FEMALE BSP	WORKING PRESSURE	PRICE
B/V3085-06	3/8"	25 bar	£ 3.21
B/V3085-08	1/2"	25 bar	£ 3.33
B/V3085-12	3/4"	25 bar	£ 4.49
B/V3085-16	1"	25 bar	£ 6.01
B/V3085-20	1.1/4"	18 bar	£ 9.70
B/V3085-24	1.1/2"	18 bar	£13.46
B/V3085-32	2"	18 bar	£19.94
B/V3085-40	2.1/2"	12 bar	£44.39
B/V3085-48	3"	12 bar	£70.16
B/V3085-64	4"	12 bar	£114.85

Temperature Range  
 Air -20°C to +110°C      Water 0°C to +90°C      Gas -20°C to +80°C

## FILTER FOR CHECK VALVE



STAINLESS STEEL FILTER FOR EUROPA CHECK VALVE		
PART NO.	MALE BSP	PRICE
B/V3086-06	3/8"	£ 1.14
B/V3086-08	1/2"	£ 1.14
B/V3086-12	3/4"	£ 1.28
B/V3086-16	1"	£ 1.66
B/V3086-20	1.1/4"	£ 2.01
B/V3086-24	1.1/2"	£ 2.27
B/V3086-32	2"	£ 3.47
B/V3086-40	2.1/2"	£ 7.17
B/V3086-48	3"	£ 8.44
B/V3086-64	4"	£11.26

## GATE VALVE RANGE



GUNMETAL GATE VALVE FEMALE / FEMALE			
PART NO.	FEMALE / FEMALE BSP	WORKING PRESSURE	PRICE
B/V2160-04	1/4"	16 bar	£ 3.82
B/V2160-06	3/8"	16 bar	£ 3.82
B/V2160-08	1/2"	16 bar	£ 3.82
B/V2160-12	3/4"	16 bar	£ 4.62
B/V2160-16	1"	16 bar	£ 6.59
B/V2160-20	1.1/4"	16 bar	£ 9.76
B/V2160-24	1.1/2"	16 bar	£12.99
B/V2160-32	2"	16 bar	£19.06
B/V2160-40	2.1/2"	10 bar	£35.12
B/V2160-48	3"	10 bar	£44.14
B/V2160-64	4"	10 bar	£78.62



**NORMALLY OPEN OR CLOSED 1/8" - 1/2"**

**GENERAL DATA**

Direct acting, two-way normally open or closed solenoid valve for on/off control of non-aggressive liquids and gases, e.g. air, oil, water, compatible with materials of construction. Port sizes 1/8" to 1/2".



**TECHNICAL DATA**

Functions: 2-way normally open or normally closed  
 Ambient Temp: -20°C to +55°C  
 Fluid Temp: -10°C to +130°C  
 Viscosity: Max. 37Cst. 5°E  
 Materials: Brass body, tube and tube nut of stainless steel. Metal to metal seat between tube and body, except normally open or manual override versions, which employ 'O'-ring seals  
 Seal Material: Viton  
 Coil Voltage: 12V and 24V DC, 24V, 48V, 110V and 240V 50Hz  
 Voltage Tolerance: ± 10% (+10% - 5% on pure DC)  
 Duty Cycle: 100% continuous rating  
 Protection Class: IP 65 to DIN 40050 with correctly assembled connectors  
 Response Time: 10 to 30 m/seconds  
 Cycling Frequencies: Max. 1500 cpm

\*\*Kv Measured in m³/h  
 Water at 1 bar P

**COIL CONSUMPTION**

DESCRIPTION	'E'	'H'	'M'
Inrush current VA(AC)	25	25	43
Holding current VA(AC)	14	14	27
Power consumption W(AC/DC)	8	8	14

**WHEN ORDERING, STATE VOLTAGE REQUIRED:  
 (COILS TO BE ORDERED SEPARATELY)**

12V DC  
 24V DC  
 24V 50Hz  
 48V 50 Hz  
 110V 50Hz  
 230V 50Hz

**SOLENOID VALVES TYPE A - normally open**

PART NO.	PORT SIZE Inches	ORIFICE SIZE mm	Kv** m³/h	MAXIMUM OPERATING PRESSURE (bar)				PRICE
				8 WATT COILS E & H		14 WATT COIL M		
				AC	DC	AC	DC	
AVA3Z25	1/8"	2.5	0.13	14	9	30	25	£24.26
AVA2Z30	1/4"	3.0	0.18	10	5	25	20	£24.26
AVA5Z45	3/8"	4.5	0.21	5	1.5	12	6	£26.24
AVA8Z45	1/2"	4.5	0.50	5	1.5	12	6	£27.32

**SOLENOID VALVES TYPE A - normally closed**

AVA3K25	1/8"	2.5	0.13	14	14	17	17	£20.40
AVA2K30	1/4"	3.0	0.18	10	10	15	15	£20.40
AVA5K45	3/8"	4.5	0.21	4	4	6	6	£20.68
AVA8K45	1/2"	4.5	0.50	4	4	6	6	£22.26

**COIL 'E' - max temp. 120°C**

**COIL 'H' - max temp. 150°C**

**COIL 'M' - max temp. 180°C**

PART NO.	TYPE	PRICE	PART NO.	TYPE	PRICE	PART NO.	TYPE	PRICE
AVA12VDCE	Standard	£ 9.78	AVA12VDCH	High Temp.	£11.00	AVA12VDCM	High Power	£23.48
AVA24VDCE	Standard	£ 9.78	AVA24VDCH	High Temp.	£11.00	AVA24VDCM	High Power	£23.48
AVA2450E	Standard	£ 9.78	AVA2450H	High Temp.	£11.00	AVA2450M	High Power	£23.48
AVA4850E	Standard	£ 9.78	AVA4850H	High Temp.	£11.00	AVA4850M	High Power	£23.48
AVA11050E	Standard	£ 9.78	AVA11050H	High Temp.	£11.00	AVA11050M	High Power	£23.48
AVA23050E	Standard	£ 9.78	AVA23050H	High Temp.	£11.00	AVA23050M	High Power	£23.48



DIN PLUG		
PART NO.	DESCRIPTION	PRICE
AVK13000B9	DIN Plug for Solenoid Valves	£ 1.02



**NORMALLY CLOSED 3/8" - 1"**

**GENERAL DATA**

Solenoid valves type 21H are normally closed valves, energised to open and similar in design to servo-acting valves 21W series but with the diaphragm coupled to the solenoid plunger. This enables the valve to operate at zero pressures without the need for a pressure differential, thus overcoming the problem associated with gravity feed and circulatory systems. Operates from zero pressure, no differential required.



**TECHNICAL DATA**

Ambient Temp:	-20°C to +55°C
Fluid Temp:	-10°C to +140°C
Viscosity:	Max. 21Cst. 3°E
Seal Material:	Viton
Coil Voltage:	24V DC, 24V, 48V, 110V and 230V 50Hz
Voltage Tolerance:	± 10%
Consumption:	8 watts 28/13 VA 14 watts 27/22 VA
Duty Cycle:	100% continuous rating
Protection Class:	IP 65 to DIN 40050 with correctly assembled connectors

\*\*Kv Measured in m³/h  
Water at 1 bar P

<b>WHEN ORDERING, STATE VOLTAGE REQUIRED:</b>	<b>24V DC</b>
<b>(COILS TO BE ORDERED SEPARATELY)</b>	<b>24V 50Hz</b>
	<b>48V 50Hz</b>
	<b>110V 50Hz</b>
	<b>230V 50Hz</b>

**COIL CONSUMPTION**

DESCRIPTION	'E'	'M'
Inrush current VA(AC)	25	43
Holding current VA(AC)	14	27
Power consumption W(AC/DC)	8	14

**SOLENOID VALVES TYPE H - normally closed**

PART NO.	PORT SIZE Inches	ORIFICE SIZE mm	Kv** m³/h	MAXIMUM OPERATING PRESSURE (bar)				PRICE
				8 WATT COIL E		14 WATT COIL M		
				AC	DC	AC	DC	
AVH1K-12	3/8"	12	1.7	16	-	-	-	£41.86
AVH2K-12	1/2"	12	1.9	16	-	-	-	£45.24
AVH3K-19	3/4"	19	4.2	-	-	15	-	£53.30
AVH3K-19S	3/4"	19	3.9	-	-	-	6	£53.30
AVH4K-25	1"	25	6.3	-	-	15	-	£62.08
AVH4K-25S	1"	25	5.7	-	-	-	6	£62.08

**COIL 'E'**

**COIL 'M'**

PART NO.	TYPE	PRICE	3/8" - 1/2" ARE AVAILABLE WITH STANDARD COIL ('E') OR HIGH POWER COIL ('M')	PART NO.	TYPE	PRICE
AVA24VDCE	Standard	£ 9.78		3/4" - 1" ARE AVAILABLE WITH HIGH POWER COIL ONLY ('M')	AVA24VDCM	High Power
AVA2450E	Standard	£ 9.78	AVA2450M		High Power	£23.48
AVA4850E	Standard	£ 9.78	AVA4850M		High Power	£23.48
AVA11050E	Standard	£ 9.78	AVA11050M		High Power	£23.48
AVA23050E	Standard	£ 9.78	AVA23050M		High Power	£23.48



DIN PLUG		
PART NO.	DESCRIPTION	PRICE
AVK13000B9	DIN Plug for Solenoid Valves	£ 1.02



## NORMALLY CLOSED 1/8" - 1/4"

## GENERAL DATA

Low cost direct acting solenoid valve for on-off control of non-aggressive fluids and gases, air, oil, or water, compatible with materials of construction.



## TECHNICAL DATA

Functions:	Normally closed, energised to open
Ambient Temp:	-10°C to +55°C
Fluid Temp:	Max. 90°C
Viscosity:	Max. 21Cst. 3°E
Materials:	Body and tube brass, other inner parts stainless steel
Seal Material:	NBR
Coil Voltage:	12V and 24V DC, 24V, 48V, 110V and 230V 50Hz
Voltage Tolerance:	± 10%
Consumption:	DC: approx. 8 watts
Duty Cycle:	100% continuous rating
Protection Class:	IP 65 to DIN 40050 with correctly assembled connectors
Weight:	0.20 Kg
Coil Insulation:	Class F

\*\*Kv Measured in m<sup>3</sup>/h  
Water at 1 bar P

WHEN ORDERING, STATE VOLTAGE REQUIRED: (COILS TO BE ORDERED SEPARATELY)	12V DC
	24V DC
	24V 50Hz
	48V 50Hz
	110V 50Hz
	230V 50Hz

## COIL CONSUMPTION

DESCRIPTION	'E'
Inrush current VA(AC)	25
Holding current VA(AC)	14
Power consumption W(AC/DC)	8

## SOLENOID VALVES TYPE T - normally closed

PART NO.	PORT SIZE Inches	ORIFICE SIZE mm	Kv** m <sup>3</sup> /h	MAXIMUM OPERATING PRESSURE (bar)		PRICE
				AC	DC	
AVT1B17	1/8"	1.7	0.11	0-30	0-15	£ 6.26
AVT1B28	1/8"	2.8	0.18	0-17	0-06	£ 6.26
AVT2B28	1/4"	2.8	0.18	0-12	0-06	£ 6.26
AVT2B40	1/4"	4.0	0.25	0-06	0-02	£ 6.26

## COIL 'E'

PART NO.	TYPE	PRICE
AVA12VDCE	Standard	£ 9.78
AVA24VDCE	Standard	£ 9.78
AVA2450E	Standard	£ 9.78
AVA4850E	Standard	£ 9.78
AVA11050E	Standard	£ 9.78
AVA23050E	Standard	£ 9.78



DIN PLUG		
PART NO.	DESCRIPTION	PRICE
AVK13000B9	DIN Plug for Solenoid Valves	£ 1.02



## NORMALLY OPEN OR CLOSED 3/4" - 2"

## GENERAL DATA

Servo acting solenoid valves for on-off control of non-aggressive fluid, e.g. air, oil, or water, compatible with materials of construction.

Minimum pressure drop of 0.1 bar required to ensure satisfactory operation.



## TECHNICAL DATA

Ambient Temp:	-20°C to +55°C
Fluid Temp:	-10°C to +90°C
Viscosity:	Max. 21Cst. 5°E
Materials:	Body brass, inner parts brass and stainless steel
Seal Material:	NBR
Coil Voltage:	24V DC, 24V, 48V, 110V and 230V 50Hz
Voltage Tolerance:	± 10%
Consumption:	AC: 28V A inrush, 13V A hold DC: 8 Watts
Duty Cycle:	100% continuous rating
Protection Class:	IP 65 to DIN 40050 with correctly assembled connectors
Operating Speed:	Max. 200 cycles per min.

\*\*Kv Measured in m<sup>3</sup>/h Water at 1 bar P

WHEN ORDERING, STATE VOLTAGE REQUIRED: (COILS TO BE ORDERED SEPARATELY)	24V DC
	24V 50Hz
	48V 50Hz
	110V 50Hz
	230V 50Hz

## COIL CONSUMPTION

DESCRIPTION	'E'
Inrush current VA(AC)	25
Holding current VA(AC)	14
Power consumption W(AC/DC)	8

## SOLENOID VALVES TYPE W - normally open

PART NO.	PORT SIZE Inches	ORIFICE SIZE mm	Kv** m <sup>3</sup> /h	MAXIMUM OPERATING PRESSURE (bar)	PRICE
AVW3Z19	3/4"	19	7	0.1-16	£73.18
AVW4Z25	1"	25	10	0.1-16	£79.76
AVW5Z35	1.1/4"	35	23	0.1-10	£163.52
AVW6Z40	1.1/2"	40	25	0.1-10	£170.56
AVW7Z50	2"	50	33	0.1-10	£232.06

## SOLENOID VALVES TYPE W - normally closed

AVW3K19	3/4"	19	7	0.1-16	£65.26
AVW4K25	1"	25	10	0.1-16	£71.18
AVW5K35	1.1/4"	35	23	0.1-10	£157.94
AVW6K40	1.1/2"	40	25	0.1-10	£167.18
AVW7K50	2"	50	33	0.1-10	£223.32

## COIL 'E'

PART NO.	TYPE	PRICE
AVA24VDCE	Standard	£ 9.78
AVA2450E	Standard	£ 9.78
AVA4850E	Standard	£ 9.78
AVA11050E	Standard	£ 9.78
AVA23050E	Standard	£ 9.78



## DIN PLUG

PART NO.	DESCRIPTION	PRICE
AVK13000B9	DIN Plug for Solenoid Valves	£ 1.02



**NORMALLY CLOSED 1/8" & 1/4"**

**GENERAL DATA**

Direct-acting solenoid valve for the on-off control of aggressive fluids compatible with the metals of construction.



**TECHNICAL DATA**

Functions:	Normally closed, optional normally open
Port:	BSP as standard, optional NPT
Ambient Temp:	-10°C to +50°C
Fluid Temp:	-10°C to +90°C Viton, +120°C EPDM
Viscosity:	Max. 40 Cst.
Materials:	AISI303 stainless steel body, stainless steel tube, 430F stainless steel plunger
Seal Material:	Viton as standard, NBR & EPDM on request
Coil Voltage:	12V, 24V and 48V DC, 24V, 110V, 220V and 380V 50/60Hz
Voltage Tolerance:	± 10%
Duty Cycle:	100%
Protection Class:	IP65 to DIN 40050 with correctly assembled connectors

\*\*Kv Measured in m³/Hr  
Water at 1 bar Pressure drop

**COIL CONSUMPTION**

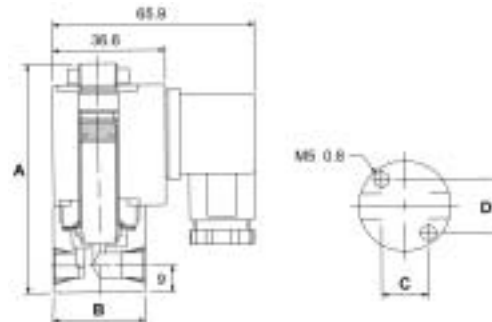
DESCRIPTION	
Inrush current (AC)	26VA
Holding current (AC)	12VA
Power consumption (DC)	9 Watts

**WHEN ORDERING, STATE VOLTAGE REQUIRED:  
(COILS TO BE ORDERED SEPARATELY)**

- 12V DC
- 24V DC
- 48V DC
- 24V 50/60Hz
- 110V 50/60Hz
- 220V 50/60Hz
- 380V 50/60Hz

SOLENOID VALVES TYPE JA - normally closed						
PART NO.	PORT SIZE	ORIFICE SIZE (mm)	KV M³/Hr	MAXIMUM PRESSURE (bar)		PRICE
				AC Coil	DC Coil	
JA18AV	1/8"	1.2	0.05	40	30	£23.17
JA18BV	1/8"	1.6	0.10	30	20	£23.17
JA18CV	1/8"	2.4	0.12	20	15	£23.17
JA18DV	1/8"	3.2	0.17	15	10	£23.17
JA18EV	1/8"	4.0	0.24	10	8	£23.17
JA1/4DV	1/4"	3.2	0.17	15	10	£23.17
JA1/4EV	1/4"	4.0	0.24	10	8	£23.17
JA1/4FV	1/4"	5.0	0.43	8	6	£23.17

IP65 COILS		
PART NO.	VOLTAGE	PRICE
JA12VDC	12V DC	£25.66
JA24VDC	24V DC	£25.66
JA48VDC	48V DC	£25.66
JA24V 50HZ	24V 50/60Hz	£25.66
JA110V 50HZ	110V 50/60Hz	£25.66
JA220V 50HZ	220V 50/60Hz	£25.66
JA380V 50HZ	380V 50/60Hz	£25.66



DIMENSIONS				
Port	A	B	C	D
1/8"	76.0	30.0	15.2	17.8
1/4"	77.0	35.0	16.0	22.0



**NORMALLY CLOSED 3/8" - 2"**

**GENERAL DATA**

Servo-acting solenoid for on-off control of aggressive fluids compatible with metals of construction. Minimum pressure drop of 0.5 bar required.



**TECHNICAL DATA**

Functions:	Normally closed
Port:	BSP as standard, optional NPT, ANSI150lb & PN16 Flanges
Ambient Temp:	-20°C to +60°C
Fluid Temp:	-10°C to +90°C
Viscosity:	Max. 50 Cst.
Materials:	316 Stainless steel body, 304 stainless steel tube, 430F stainless steel Plunger
Seal Material:	Viton as standard, NBR & EPDM on request
Coil Voltage:	12V, 24V, 48V DC, 24V 110V, 220V and 380V 50/60Hz
Voltage Tolerance:	± 10%
Duty Cycle:	100%
Protection Class:	IP 65 to DIN 40050 with correctly assembled connectors

\*\*Kv Measured in m³/Hr  
Water at 1 bar Pressure drop

<b>WHEN ORDERING, STATE VOLTAGE REQUIRED:</b>	12V DC
	24V DC
	48V DC
	24V 50/60Hz
	110V 50/60Hz
	220V 50/60Hz
	380V 50/60Hz

**COIL CONSUMPTION**

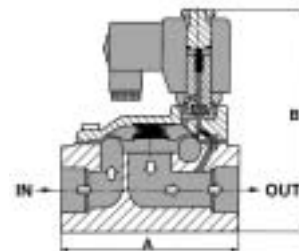
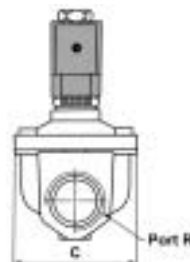
DESCRIPTION	
Inrush current (AC)	30VA
Holding current (AC)	22VA
Power consumption (DC)	8 Watts

**SOLENOID VALVES TYPE SPU - normally closed**

PART NO.	PORT SIZE	ORIFICE SIZE (mm)	KV M³/Hr	MAX. DIFFERENTIAL PRESSURE (bar)	MAX. OPERATING PRESSURE (bar)	PRICE
SPU22503A	3/8"	13	2.4	10	15	£120.32
SPU22504A	1/2"	13	2.4	10	15	£120.32
SPU22506A	3/4"	25	9.9	10	15	£169.09
SPU22508A	1"	25	9.9	10	15	£169.09
SPU22512A	1.1/4"	40	27.0	10	15	£281.84
SPU22514A	1.1/2"	40	27.0	10	15	£281.84
SPU22520A	2"	50	34.8	10	15	£457.55

**IP65 COILS**

PART NO.	VOLTAGE	PRICE
SPU22003-8	12V DC	£25.66
SPU22003-9	24V DC	£25.66
SPU22003-5	48V DC	£25.66
SPU22003-3	24V 50/60Hz	£25.66
SPU22003-1	110V 50/60Hz	£25.66
SPU22003-2	220V 50/60Hz	£25.66
SPU22003-4	380V 50/60Hz	£25.66



**DIMENSIONS**

Model	SPU22503A & 04A	SPU22506A & 08A	SPU22512A & 14A	SPU22520A
Port	3/8" & 1/2"	3/4" & 1"	1.1/4" & 1.1/2"	2"
A	66.5	100.0	132.6	160.0
B	106.5	134.0	141.0	160.5
C	48.0	70.0	96.0	112.0



A low cost, 'entry level' sight flow indicator with either a high sensitivity spinner or ball operating from 0.7 l/m (water). The nitrile seals and nylon spinner or PTFE ball give excellent chemical resistance which is further enhanced in the stainless steel version by the use of borosilicate glass as standard.

These compact sight flow indicators are used extensively in plant protection applications to show coolant or lubrication flow to pumps, compressors and engines.

As an added advantage the series 400's can be used in any orientation, apart from the 'ball type', which needs to be in the horizontal plane.

**MATERIALS**

<b>Body</b> (choice)	Gunmetal - BS1400LG2 Stainless Steel - ASTM A351 CF8M
<b>Cover Rings</b>	Brass - BS2872 CZ122
<b>Glass</b> - Gunmetal	Soda Lime Glass - BS3463
Stainless Steel	Toughened Borosilicate - DIN7080
<b>Gaskets</b>	Nitrile O Ring - BS128
<b>Spinner Mounting Pin</b>	Stainless Steel - 316
<b>Spinner</b>	Nylon
<b>Ball</b>	PTFE

**MAXIMUM RATINGS**

	Pressure	Temperature
Gunmetal	7 bar	100°C
Stainless Steel	16 bar	100°C

**STANDARD END CONNECTIONS**

- BSP Taper
- BSP Parallel
- NPT

**SIGHT FLOW INDICATORS**

**GUNMETAL - SPINNER TYPE**



PART NO.	THREAD BSPT	LENGTH (mm)	WEIGHT (kg)	FLOWRATE (l/h, water)		PRICE
				MIN	MAX	
FIG-1703001	1/4"	76	0.5	30	200	£50.49
FIG-1703051	3/8"	76	0.5	50	450	£52.12
FIG-1703101	1/2"	76	0.6	60	600	£53.74
FIG-1703151	3/4"	83	0.6	120	1600	£76.54
FIG-1703201	1"	89	1.1	300	1600	£96.11

**STAINLESS STEEL - SPINNER TYPE**



FIS-1703001	1/4"	76	0.5	30	200	£73.94
FIS-1703051	3/8"	76	0.5	50	450	£76.34
FIS-1703101	1/2"	76	0.6	60	600	£78.72
FIS-1703151	3/4"	83	0.6	120	1600	£112.11
FIS-1703201	1"	89	1.1	300	1600	£140.71

**GUNMETAL - BALL TYPE**



FIG-1766001	1/4"	76	0.5	30	200	£40.77
FIG-1766051	3/8"	76	0.5	50	450	£46.90
FIG-1766101	1/2"	76	0.6	60	600	£48.37
FIG-1766151	3/4"	83	0.6	120	1600	£68.89
FIG-1766201	1"	89	1.1	300	1600	£86.50



The cut off flow of the selected valve must be less than the actual flow that would occur should a hose coupling fail. The valve selection must be based on additional guidelines other than compressor ratings or hose size. Air flow (SCFM) varies with distance of flow and restrictions within each system. Select the pipe size which is the same as the hose with which it will be used. To avoid nuisance cut offs, the valve should have a nominal cut off rating of 110% of the maximum consumption of the air tool to be used.

Install a cut off valve in each line and branch line which may be subject to rupturing or accidental disconnection. Test each valve for proper function at installation and periodically thereafter.

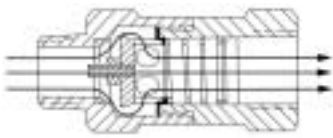
Contact distributor for additional selection and installation recommendations or for application other than compressed air.

### FEATURES

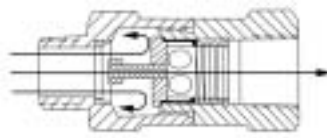
- Automatically senses change in air flow and shuts off the flow in the event of a surge in excess of valve rating
- Fully conforms to OSHA regulations 1926.302 requiring safety devices at source of air supply and at branch air lines
- Controls air flow in one direction, however permits flow in either direction

**SAFETY PRODUCT**

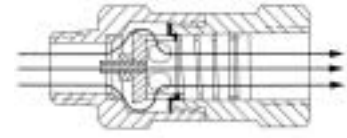
### HOW IT WORKS



**During normal operation,** air pressure on each side of the valve is approximately equal. Valve seat is held open by a spring, allowing unrestricted flow.



**When hose breaks,** air surges through the valve closing valve shut. A small amount of air seeps through bleed hole. Valve will remain closed as long as pressure on upstream side is greater than downstream pressure.



**After repair is made,** air pressure equalises on each side of the valve. Spring opens valve and full flow is restored automatically.

### ORDERING INFORMATION



PART NO.	PIPE SIZE	CUT OFF FLOW @ 90 PSI SCFM	PRICE
SC2-19 BSP	1/4" BSP	23-29	£24.20
SC3M-19 BSP	3/8" BSP	39-47	£25.20
SC3-19 BSP	3/8" BSP	52-65	£25.20
SC4M-19 BSP	1/2" BSP	70-78	£29.00
SC4-19 BSP	1/2" BSP	80-96	£29.00
SC6E-19 BSP	3/4" BSP	72-88	£45.50
SC6L-19 BSP	3/4" BSP	92-108	£45.50
SC6M-19 BSP	3/4" BSP	112-128	£45.50
SC6N-19 BSP	3/4" BSP	132-148	£45.50
SC6-19 BSP	3/4" BSP	160-180	£45.50
SC6H-19 BSP	3/4" BSP	180-200	£45.50
SC8L-19 BSP	1" BSP	165-195	£54.00
SC8M-19 BSP	1" BSP	280-320	£54.00
SC8H-19 BSP	1" BSP	310-340	£54.00
SC10E-19 BSP	1.1/4" BSP	260-290	£94.40
SC10L-19 BSP	1.1/4" BSP	300-340	£94.40
SC10-19 BSP	1.1/4" BSP	440-500	£94.40
SC10H-19 BSP	1.1/4" BSP	570-630	£94.40
SC12L-19 BSP	1.1/2" BSP	300-360	£168.90
SC12M-19 BSP	1.1/2" BSP	470-530	£168.90
SC12X-19 BSP	1.1/2" BSP	564-602	£168.90
SC12-19 BSP	1.1/2" BSP	640-720	£168.90
SC12H-19 BSP	1.1/2" BSP	750-830	£168.90
SC16L-19 BSP	2" BSP	510-590	£233.50
SC16M-19 BSP	2" BSP	725-825	£233.50
SC16-19 BSP	2" BSP	900-1050	£233.50
SC16H-19 BSP	2" BSP	1100-1200	£233.50
SC240L19 BSP	3" BSP	1200-1400	£844.50
SC240-19 BSP	3" BSP	2400-2700	£844.50



### BENEFITS AND FEATURES

- Supplied in safety yellow and red (on the same unit).
- Locks in Closed-Exhaust position only (an OSHA requirement).
- Operating sleeve resists accidental shut-off, yet slides smoothly without sticking after long periods between operations.
- Sleeve rotates for location of a standard padlock.
- 50% to 60% less costly than other valve types.
- Takes less space than spool, poppet and ball valves.
- No handles to remove or vibrate off the valve.
- Controlled exhaust rate muffles exhaust noise.
- Operating sleeve cannot be removed while valve is locked.



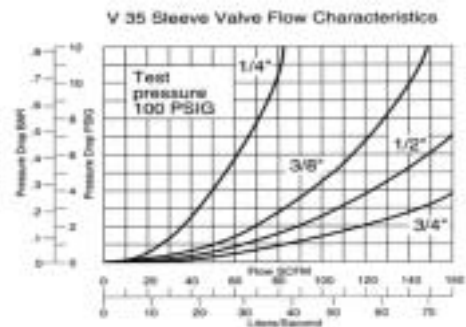
### MEETS OSHA REGULATIONS

In compliance with OSHA standards, the V-35 only locks in the closed / exhaust position. It provides positive lockout with any shackle diameter up to 3/8".

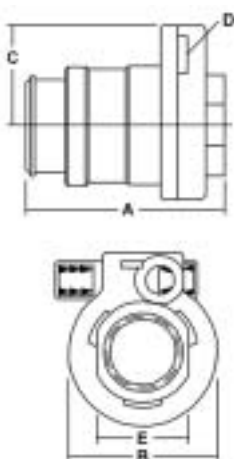
### MATERIALS AND SPECIFICATIONS

<b>Valve Body</b>	Hard Anodised Teflon-coated Aluminium
<b>Valve Sleeve</b>	Yellow Anodised Aluminium
<b>Lockout Ring</b>	Red, Glass-filled Nylon
<b>Seals</b>	Pre-lubricated, Floating, Buna-N, O-Rings
<b>Media</b>	Compressed Air Only
<b>Padlocks</b>	Any locking device (key or combination) with a shackle diameter not greater than 3/8".

**Temperature Range** 4°C to 65.6°C (40°F to 150°F)  
**Pressure Range** 1 to 250 PSI (0.07 to 17.2 bar)



### ORDERING INFORMATION



PART NO.	PORT BSP	Cv AVERAGE	DIMENSIONS-MAXIMUM(mm)					WEIGHT (kg)	PRICE
			A	B	C	D	E		
V35-2W	1/4"	2.44	68.3	50.8	34.9	9.6	31.8	0.21	£35.00
V35-3W	3/8"	4.59	68.3	50.8	34.9	9.6	31.8	0.21	£35.00
V35-4W	1/2"	5.93	68.3	50.8	34.9	9.6	31.8	0.21	£35.00
V35-6W	3/4"	7.29	68.3	50.8	34.9	9.6	31.8	0.21	£35.00

**Series 6000** - 1/4" Atmospheric discharge with pull ring easing gear. This type is used extensively on compressed air cylinders and pressure vessels. When fitted with a silicone rubber seat this valve is also used on small dental or hospital sterilising equipment.

**Series 6100** - 1/4" to 1" (5 sizes available) Atmospheric discharge with lifting knob easing gear. These valves are primarily used on compressed air supply systems, compressor sets and pressure vessels. Fitted to systems to prevent a safe working pressure being exceeded.



**Series 6200 & 6500** - 1/2" to 1" (3 sizes available) Side outlet discharge with or without lifting gear. Same air applications as 6100 but also used on medical air gases. Valve with sealed top is available as Series 6500.

**Series 6300** - 1/2" to 1" (3 sizes available) Side outlet discharge. Same as above series 6200 but with pull ring instead of knob and de-greased for oxygen duty.

### SPECIFICATIONS

These high lift safety release valves are suitable for air and inert gas applications. Series 6000 & 6100 valves have atmospheric discharge. Series 6200, 6300 and 6500 valves have a side outlet discharge. The flow is de-rated and measures in accordance with BS6759 Part 2: 1984. The valve re-seats by mins 10% of set pressure.  
 Maximum Set Pressure: 27.6 bar  
 Maximum Temperature: 140°C  
 Minimum Temperature: -15°C

### FEATURES

- Soft valve washer for 'bubble tight' seal
- High performance
- Pressure range 0.5 bar to 27.6 bar
- Atmospheric discharge - Series 6000 & 6100
- Side outlet discharge - Series 6200, 6300 & 6500
- Valve washers to suit air and inlet gases
- Brass construction with stainless steel springs

## SAFETY RELIEF VALVES

### SERIES 6000

PART NO.	CONNECTION	SET PRESSURE	PRICE
60006-5.5	1/4" BSPT	5.5 bar	£13.07
60006-9.0	1/4" BSPT	9.0 bar	£13.07
60006-11.0	1/4" BSPT	11.0 bar	£13.07

### SERIES 6100

61006-5.5	1/4" BSPT	5.5 bar	£26.14
61006-11.0	1/4" BSPT	11.0 bar	£26.14
61010-11.0	3/8" BSPT	11.0 bar	£27.16
61015-5.5	1/2" BSPT	5.5 bar	£27.68
61015-9.0	1/2" BSPT	9.0 bar	£27.68
61015-11.0	1/2" BSPT	11.0 bar	£27.68
61020-11.0	3/4" BSPT	11.0 bar	£30.24
61025-11.0	1" BSPT	11.0 bar	£32.80

### SERIES 6200

62015-5.5	1/2" BSPT	5.5 bar	£32.29
62015-9.0	1/2" BSPT	9.0 bar	£32.29
62020-5.5	3/4" BSPT	5.5 bar	£34.85
62025-5.5	1" BSPT	5.5 bar	£48.43

### SERIES 6300

63015-5.5	1/2" BSPT	5.5 bar	£38.95
63020-5.5	3/4" BSPT	5.5 bar	£45.61
63025-5.5	1" BSPT	5.5 bar	£57.91

### SERIES 6500

65015-5.5	1/2" BSPT	5.5 bar	£32.29
65020-5.5	3/4" BSPT	5.5 bar	£34.85
65025-5.5	1" BSPT	5.5 bar	£48.43

