

## PRODUCT WEIGHT LIST (REFERENCE)

### DIAPHRAGM VALVE

**TYPE 14, TYPE 15, TYPE 72 — FLANGED** [MANUAL](#) UNIT: kg

mm	inch	BODY MATERIAL					VALVE TYPE
		U-PVC	C-PVC	PP	PVDF	PVDF	
		BONNET MATERIAL					
U-PVC	PP	PP	PPG	PVDF			
15	1/2	0.7	0.7	0.6	0.8	0.8	TYPE 14
20	3/4	0.8	0.8	0.6	0.9	0.9	
25	1	1.1	1.1	0.8	1.2	1.3	
32	1 1/4	1.4	1.4	1.0	1.5	1.6	
40	1 1/2	2.8	2.7	2.2	2.9	3.1	
50	2	3.6	3.5	2.8	3.9	4.1	
65	2 1/2	5.6	5.3	4.2	6.0	6.5	
80	3	7.4	7.2	5.4	7.4	8.4	
100	4	11.5	12.6	8.3	12.5	13.1	
125	5	22.0	—	19.5	23.5	26.3	TYPE 15
150	6	34.5	—	30.5	35.5	40.7	TYPE 72
200	8	52.6	—	45.0	57.3	62.3	
250	10	93.3	—	77.3	97.6	110.2	

**TRUE UNION TYPE 14 — SOCKET, THREADED** [MANUAL](#) UNIT: kg

mm	inch	BODY MATERIAL					VALVE TYPE
		U-PVC	C-PVC	PP	PVDF	PVDF	
		BONNET MATERIAL					
U-PVC	PP	PP	PPG	PVDF			
15	1/2	0.5	0.5	0.4	0.6	0.6	TRUE UNION TYPE 14
20	3/4	0.6	0.6	0.5	0.7	0.7	
25	1	0.9	0.9	0.7	1.0	1.1	
32	1 1/4	1.1	1.1	0.8	1.2	1.3	
40	1 1/2	2.6	2.5	2.0	2.7	2.9	
50	2	2.9	2.8	2.3	3.1	3.3	

**TYPE 14** [AUTOMATIC PNEUMATIC](#) [TYPE AN](#)

UNIT: kg

mm	inch	DOUBLE ACTING				AIR TO OPEN				AIR TO CLOSE			
		U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF
15	1/2	2.5	2.5	2.0	2.5	3.0	3.0	2.5	3.0	2.6	2.6	2.1	2.6
20	3/4	2.5	2.5	2.0	2.5	3.0	3.0	2.5	3.0	2.6	2.6	2.1	2.6
25	1	2.5	2.5	2.5	3.0	3.0	3.0	3.0	3.5	2.6	2.6	2.6	3.1
32	1 1/4	3.0	3.0	2.5	3.0	3.5	3.5	3.0	3.5	3.1	3.1	2.6	3.1
40	1 1/2	5.5	5.5	5.0	5.5	7.0	7.0	6.5	7.0	5.7	5.7	5.2	5.7
50	2	6.5	6.5	5.5	6.5	8.0	8.0	7.0	8.0	6.7	6.7	5.7	6.7

**TYPE 14, TYPE 15, TYPE 72** [AUTOMATIC PNEUMATIC](#) [TYPE AV](#)

UNIT: kg

mm	inch	DOUBLE ACTING				AIR TO OPEN				AIR TO CLOSE			
		U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF
65	2 1/2	10.0	10.0	9.0	10.5	22.5	22.5	21.5	23.0	17.0	17.0	16.0	17.5
80	3	12.0	12.0	10.5	12.5	34.5	34.5	33.0	35.0	24.5	24.5	23.0	25.0
100	4	19.0	19.0	16.5	19.5	61.0	61.0	58.5	61.5	45.5	45.5	43.0	46.0
125	5	31.0	—	28.5	33.0	138	—	136	141	73.0	—	70.5	75.0
150	6	59.0	—	55.5	62.0	148	—	145	150	89.0	—	86	91.0
200	8	113	—	107	118	—	—	—	—	—	—	—	—
250	10	183	—	173	190	—	—	—	—	—	—	—	—

**TYPE 14** [PNEUMATIC](#) [TYPE AP](#)

mm	inch	AIR TO OPEN								AIR TO CLOSE				DOUBLE ACTING			
		0.6MPa				1.0MPa											
		U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF
65	2 1/2	13.1	13.1	12.1	13.6	13.7	13.7	12.7	14.2	12.0	12.0	11.0	12.5	11.4	11.4	10.4	11.9
80	3	15.3	15.3	13.8	15.8	18.1	18.1	16.6	18.6	13.6	13.6	12.1	14.1	12.5	12.5	11.0	13.0
100	4	21.2	21.2	18.7	21.7	28.4	28.4	25.9	28.9	22.7	22.7	20.2	23.2	17.3	17.3	14.8	17.8

▶ DIAPHRAGM VALVE

**TYPE 14, TYPE 15** AUTOMATIC ELECTRIC TYPE H UNIT: kg

mm	inch	U-PVC	C-PVC	PP	PVDF
15	1/2	8.0	8.0	7.5	8.0
20	3/4	8.0	8.0	7.5	8.0
25	1	8.0	8.0	8.0	8.5
32	1 1/4	8.5	8.5	8.0	8.5
40	1 1/2	9.5	9.5	9.0	9.5
50	2	10.5	10.5	9.5	10.5
65	2 1/2	15.0	15.0	14.0	15.5
80	3	16.5	16.5	15.0	17.0
100	4	19.5	19.5	17.0	20.0
125	5	45.0	—	42.5	47.0
150	6	54.5	—	50.5	57.0

**TYPE 14** AUTOMATIC ELECTRIC TYPE M UNIT: kg

mm	inch	U-PVC	C-PVC	PP	PVDF
15	1/2	6.5	6.5	6.0	6.5
20	3/4	6.5	6.5	6.0	6.5
25	1	6.5	6.5	6.5	7.0
32	1 1/4	7.0	7.0	6.5	7.5
40	1 1/2	11.0	11.0	10.5	11.0
50	2	12.0	12.0	11.0	12.0
65	2 1/2	18.0	18.0	17.0	19.0
80	3	20.0	20.0	18.0	20.0
100	4	23.0	23.0	20.0	23.0

**TYPE 15, TYPE 72** AUTOMATIC ELECTRIC TYPE S UNIT: kg

mm	inch	U-PVC	PP	PVDF
125	5	62.5	60.0	64.5
150	6	94.5	90.5	97.5
200	8	118	113	123
250	10	177	167	185

**TRUE UNION TYPE 14** AUTOMATIC PNEUMATIC TYPE AN UNIT: kg

mm	inch	DOUBLE ACTING				AIR TO OPEN				AIR TO CLOSE			
		U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF
15	1/2	2.3	2.3	1.8	2.3	2.3	2.8	2.3	2.8	2.3	2.4	1.9	2.4
20	3/4	2.3	2.3	1.9	2.3	2.8	2.8	2.4	2.8	2.3	2.4	2.0	2.4
25	1	2.3	2.3	2.4	2.8	2.8	2.8	2.9	2.8	2.3	2.4	2.5	2.9
32	1 1/4	2.7	2.7	2.4	2.8	3.2	3.2	2.9	3.12	2.7	2.7	2.5	2.9
40	1 1/2	5.3	5.3	4.8	5.3	6.3	6.8	6.3	6.8	5.5	5.5	5.0	5.5
50	2	5.8	5.8	5.0	5.7	6.8	6.8	6.5	7.2	6.0	6.0	5.2	5.9

**TRUE UNION TYPE 14** AUTOMATIC ELECTRIC TYPE H UNIT: kg

mm	inch	U-PVC	C-PVC	PP	PVDF
15	1/2	8.0	8.0	7.5	8.0
20	3/4	8.0	8.0	7.5	8.0
25	1	8.0	8.0	8.0	8.0
32	1 1/4	8.5	8.5	8.0	8.5
40	1 1/2	9.5	9.5	9.0	9.5
50	2	10.5	10.5	9.5	10.5

**TRUE UNION TYPE 14** AUTOMATIC ELECTRIC TYPE M UNIT: kg

mm	inch	U-PVC	C-PVC	PP	PVDF
15	1/2	6.5	6.5	6.0	6.5
20	3/4	6.5	6.5	6.0	6.5
25	1	6.5	6.5	6.5	7.0
32	1 1/4	7.0	7.0	7.0	7.0
40	1 1/2	11.0	11.0	10.5	11.0
50	2	12.0	12.0	11.0	12.0

## PRODUCT WEIGHT LIST (REFERENCE)

### ▶ DIAPHRAGM VALVE

#### TYPE AI **AUTOMATIC PNEUMATIC** TYPE AI

UNIT: kg

mm	inch	DOUBLE ACTING				AIR TO OPEN (0.7 MPa TYPE)				AIR TO OPEN (1.0 MPa TYPE)				AIR TO CLOSE			
		U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF
15	1/2	1.0	1.1	0.9	1.1	1.2	1.3	1.0	1.3	1.3	1.3	1.1	1.4	1.1	1.2	1.0	1.2
20	3/4	1.3	1.3	1.1	1.4	1.4	1.5	1.3	1.6	1.5	1.6	1.3	1.6	1.3	1.4	1.2	1.5
25	1	1.5	1.7	1.3	1.7	1.8	1.9	1.6	2.0	1.8	1.9	1.6	2.0	1.6	1.7	1.4	1.8
32	1 1/4	1.8	1.9	1.5	2.0	2.0	2.2	1.8	2.3	2.1	2.2	1.8	2.3	1.9	2.0	1.6	2.1
40	1 1/2	4.0	4.2	3.6	4.3	4.9	5.1	4.5	5.2	5.0	5.2	4.6	5.3	4.4	4.6	4.0	4.7
50	2	4.8	5.1	4.1	5.2	5.7	6.0	5.1	6.2	6.7	7.0	6.0	7.2	5.2	5.5	4.6	5.7

#### TRUE UNION TYPE AI **AUTOMATIC PNEUMATIC** TYPE AI

UNIT: kg

mm	inch	DOUBLE ACTING				AIR TO OPEN (0.7 MPa TYPE)				AIR TO OPEN (1.0 MPa TYPE)				AIR TO CLOSE			
		U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF
15	1/2	0.9	0.9	0.8	0.9	1.1	1.1	0.9	1.1	1.1	1.2	1.0	1.2	1.0	1.0	0.9	1.0
20	3/4	1.1	1.2	1.0	1.2	1.3	1.4	1.2	1.4	1.4	1.4	1.2	1.4	1.2	1.3	1.1	1.3
25	1	1.4	1.4	1.2	1.5	1.6	1.7	1.5	1.7	1.7	1.7	1.5	1.8	1.4	1.5	1.3	1.6
32	1 1/4	1.6	1.7	1.4	1.8	1.8	1.9	1.6	2.0	1.9	2.0	1.7	2.0	1.7	1.8	1.5	1.8
40	1 1/2	3.7	3.8	3.4	3.9	4.6	4.7	4.3	4.8	4.7	4.9	4.4	4.9	4.1	4.3	3.8	4.4
50	2	4.5	4.6	3.9	4.7	5.4	5.5	4.8	5.6	6.4	6.5	5.8	6.6	5.0	5.0	4.3	5.1

#### TYPE 16 **AUTOMATIC PNEUMATIC** TYPE AD

UNIT: kg

mm	inch	DOUBLE ACTING			AIR TO OPEN		
		FLANGED	THREADED	SOCKET	FLANGED	THREADED	SOCKET
15	1/2		0.6	0.4		0.4	0.4
20	3/4		1.0	0.7		0.7	0.7
25	1		1.2	0.8		0.8	0.8
40	1 1/2		3.4	2.8		2.7	3.1
50	2		5.7	4.9		4.9	5.6

## BALL VALVE

### TYPE 21, TYPE 21α [MANUAL](#)

UNIT: kg

mm	inch	FLANGED (JIS10K)				THREADED (JIS)				SOCKET, SPIGOT			
		U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF
15	1/2	0.4	0.4	0.3	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
20	3/4	0.6	0.7	0.5	0.7	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3
25	1	0.8	0.9	0.7	1.0	0.4	0.5	0.4	0.5	0.4	0.5	0.4	0.5
32	1 1/4	1.2	1.3	0.9	1.5	0.7	0.7	0.6	0.8	0.6	0.7	0.5	0.7
40	1 1/2	1.7	1.8	1.2	2.0	1.1	1.2	0.7	1.3	1.0	1.0	0.8	1.2
50	2	2.5	2.7	1.8	3.7	1.8	2.0	1.2	2.2	1.7	1.8	1.2	2.0
65	2 1/2	3.3	3.5	2.4	4.0	2.3	2.5	1.7	2.8	2.4	2.6	1.7	2.8
80	3	4.9	5.5	3.4	5.7	3.7	4.0	2.5	4.5	3.8	4.1	2.4	4.4
100	4	10.5	10.6	7.0	12.1	8.8	9.9	6.0	11.3	9.2	9.9	6.0	10.8

Spigot: U-PVC, PP, PVDF only.

### WATER BALL VALVE [MANUAL](#)

UNIT: kg

mm	inch	SOCKET	THREADED (JIS)
		U-PVC	
15	1/2	0.2	0.2
20	3/4	0.3	0.3
25	1	0.5	0.5
32	1 1/4	0.7	0.6
40	1 1/2	1.0	0.8
50	2	1.7	1.5

### 3 WAY BALL VALVE TYPE 23 [MANUAL](#)

UNIT: kg

mm	inch	FLANGED (JIS10K)				SOCKET				THREADED (JIS)			
		U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF
15	1/2	0.5	0.5	0.3	0.6	0.2	0.2	0.1	0.2	0.2	0.3	0.2	0.4
20	3/4	0.8	0.9	0.5	0.9	0.4	0.4	0.2	0.4	0.4	0.4	0.2	0.4
25	1	1.3	1.4	0.8	1.5	0.6	0.6	0.4	0.7	0.6	0.6	0.4	0.7
32	1 1/4	2.2	2.4	1.4	2.6	1.3	1.4	0.8	1.5	1.4	1.5	0.9	1.7
40	1 1/2	2.2	2.4	1.4	2.6	1.3	1.4	0.8	1.5	1.4	1.5	0.9	1.7
50	2	3.5	3.7	2.2	4.0	2.5	2.7	1.6	2.9	2.6	2.8	1.7	3.1
65	2 1/2	7.0	7.5	4.4	8.5	5.8	5.8	3.5	6.8	5.5	6.0	3.5	6.5
80	3	7.0	7.5	4.4	8.5	6.0	6.0	3.6	7.0	5.5	6.0	3.5	6.5
100	4	14.0	15.0	9.0	16.5	13.5	14.0	8.5	15.5	13.0	14.0	8.5	15.5

### 3 WAY BALL VALVE TYPE 23 H [MANUAL](#)

UNIT: kg

mm	inch	FLANGED (JIS10K)	SOCKET, THREADED, SPIGOT
		PP	PP
25	1	0.9	0.4
32	1 1/4	1.7	1.1
40	1 1/2	1.7	1.1

### LAB COCK [MANUAL](#)

UNIT: g

CONNECTION	U-PVC
1/4 MALE × 1/4 MALE	25
1/2 MALE × 1/2 MALE	30
1/4 FEMALE × 1/4 FEMALE	30
3/8 FEMALE × 3/8 FEMALE	30
1/4 HOSE × 1/4 HOSE	25
1/2 MALE × ELBOW 16 mm	55

### COMPACT BALL VALVE TYPE 27 [MANUAL](#)

UNIT: kg

mm	inch	Socket End (JIS)		Threaded End (JIS)	
		U-PVC	C-PVC	U-PVC	C-PVC
13	3/8	0.1	0.1	-	-
15	1/2	0.1	0.1	0.1	0.1
20	3/4	0.2	0.2	0.2	0.2
25	1	0.3	0.3	0.3	0.3
32	1 1/4	0.4	0.5	0.4	0.5
40	1 1/2	0.7	0.7	0.7	0.8
50	2	1.2	1.2	1.2	1.3

## PRODUCT WEIGHT LIST (REFERENCE)

► BALL VALVE

**TYPE 21, TYPE 21α** AUTOMATIC PNEUMATIC TYPE TA

UNIT: kg

mm	inch	DOUBLE ACTING										
		FLANGED				THREADED				SOCKET		
		U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP
15	1/2	2.0	2.0	1.5	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
20	3/4	2.0	2.0	2.0	2.0	1.5	1.5	1.5	2.0	2.0	1.5	1.5
25	1	2.5	2.5	2.0	2.5	2.0	2.0	1.5	2.0	2.0	2.0	1.5
32	1 1/4	2.5	3.0	2.0	3.0	2.0	2.0	2.0	2.5	2.0	2.0	—
40	1 1/2	3.5	3.5	3.0	3.5	3.0	3.0	2.5	3.0	3.0	3.0	2.5
50	2	4.5	4.5	3.5	4.5	3.5	3.5	3.0	4.0	3.5	3.5	3.0
65	2 1/2	6.5	6.5	5.5	7.0	5.5	5.5	5.0	6.0	5.5	5.5	5.0
80	3	9.5	10.0	8.0	10.5	8.5	9.0	7.0	9.5	8.5	9.0	7.5
100	4	15.0	16.0	12.0	17.0	14.5	15.0	12.0	16.0	14.5	15.0	12.0

mm	inch	AIR TO OPEN / AIR TO CLOSE										
		FLANGED				THREADED				SOCKET		
		U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP
15	1/2	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
20	3/4	4.0	4.0	3.5	4.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5
25	1	4.0	4.0	4.0	4.0	3.5	3.5	3.5	3.5	3.5	4.0	3.5
32	1 1/4	4.5	4.5	4.0	4.5	4.0	4.0	3.5	4.0	4.0	4.0	—
40	1 1/2	5.0	5.5	4.5	5.5	4.5	4.5	4.0	5.0	4.5	4.5	4.0
50	2	6.0	6.0	5.0	6.0	5.5	5.5	4.5	5.5	5.0	5.0	4.5
65	2 1/2	9.5	9.5	8.5	10.0	8.5	8.5	8.0	9.0	8.5	8.5	8.0
80	3	14.5	15.0	13.0	15.5	13.5	14.0	12.0	14.5	14.0	14.0	12.5
100	4	20.0	21.0	17.0	22.0	19.5	20.0	16.5	21.0	20.0	20.0	16.5

**TYPE 21, TYPE 21α** AUTOMATIC PNEUMATIC TYPE AA

UNIT: kg

mm	inch	DOUBLE ACTING											AIR TO OPEN / AIR TO CLOSE										
		FLANGED				THREADED				SOCKET			FLANGED				THREADED				SOCKET		
		U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP
15	1/2	1.0	1.0	0.9	1.1	0.8	0.8	0.8	0.8	0.8	0.8	0.7	1.6	1.6	1.5	1.7	1.4	1.4	1.3	1.4	1.4	1.4	1.3
20	3/4	1.2	1.2	1.0	1.4	0.9	0.9	0.9	1.0	0.9	0.9	0.8	1.8	1.8	1.6	1.9	1.5	1.5	1.5	1.6	1.7	1.5	1.4
25	1	1.5	1.5	1.2	1.7	1.0	1.1	0.9	1.1	1.0	1.2	0.9	2.1	2.2	1.8	2.3	1.6	1.7	1.5	1.7	1.7	1.6	1.5
32	1 1/4	1.9	2.0	1.5	2.1	1.3	1.3	1.1	1.5	1.3	1.3	1.1	2.5	2.6	2.0	2.7	1.9	1.9	1.6	2.1	1.9	1.9	—
40	1 1/2	2.7	2.8	2.1	3.0	2.0	2.1	1.7	2.3	2.0	2.1	1.7	4.0	4.1	3.4	4.2	3.3	3.4	3.0	3.6	3.3	3.3	2.9
50	2	3.5	3.7	2.8	4.2	2.8	2.9	2.2	3.2	2.8	2.9	2.1	4.8	5.0	4.0	5.4	4.1	4.2	3.4	4.5	4.0	4.1	3.3

**TYPE 21, TYPE 21α** AUTOMATIC ELECTRIC TYPE T

UNIT: kg

mm	inch	FLANGED				THREADED				SOCKET		
		U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP
15	1/2	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
20	3/4	3.0	3.0	2.5	3.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5
25	1	3.0	3.0	3.0	3.0	2.5	2.5	2.5	3.0	2.5	2.5	2.5
32	1 1/4	3.0	3.5	3.0	3.5	3.0	3.0	2.5	3.0	3.0	3.0	—
40	1 1/2	3.5	3.5	3.0	4.0	3.0	3.5	3.0	3.5	3.0	3.5	3.0
50	2	4.0	4.5	3.5	4.5	4.0	4.0	3.5	4.0	4.0	4.0	3.5
65	2 1/2	7.0	7.0	6.0	7.5	6.0	6.5	6.0	6.5	6.0	6.5	6.0
80	3	8.0	8.0	6.5	8.5	7.0	7.5	6.0	7.5	7.0	7.5	6.5
100	4	11.5	12.0	9.0	12.5	11.0	11.0	8.5	12.0	11.0	11.0	8.5

► BALL VALVE

**WATER BALL VALVE** AUTOMATIC PNEUMATIC TYPE VC

UNIT: kg

mm	inch	DOUBLE ACTING		AIR TO OPEN / AIR TO CLOSE	
		THREADED	SOCKET	THREADED	SOCKET
		U-PVC	U-PVC	U-PVC	U-PVC
15	1/2	0.4	0.4	0.6	0.6
20	3/4	0.5	0.5	0.7	0.7
25	1	0.8	0.8	1.1	1.1
32	1 1/4	1.0	1.0	1.9	1.8
40	1 1/2	1.5	1.5	2.2	2.1
50	2	2.2	2.2	2.9	2.9

**WATER BALL VALVE** AUTOMATIC ELECTRIC TYPE V

UNIT: kg

mm	inch	THREADED, SOCKET
		U-PVC
15	1/2	1.1
20	3/4	1.2
25	1	1.4
32	1 1/4	2.0
40	1 1/2	2.3
50	2	3.0

**TYPE 23 (3 WAY VALVE)** AUTOMATIC PNEUMATIC TYPE TA

UNIT: kg

mm	inch	DOUBLE ACTING											
		FLANGED				THREADED				SOCKET			
		U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	
15	1/2	2.0	2.0	1.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9
20	3/4	2.5	2.5	2.3	2.5	2.5	2.0	2.0	2.0	2.0	2.0	2.0	1.9
25	1	3.0	3.0	2.5	3.0	3.0	2.0	2.0	2.5	2.0	2.0	2.0	1.9
32	1 1/4	4.0	4.5	3.2	5.0	3.5	3.5	3.0	3.5	3.5	3.5	3.5	—
40	1 1/2	4.0	4.5	3.2	5.0	4.0	3.5	3.0	3.5	3.5	3.5	3.5	3.0
50	2	5.0	5.5	3.7	5.5	5.0	4.0	3.1	4.5	4.0	4.5	4.5	3.1
65	2 1/2	12.0	12.5	9.4	13.5	10.8	11.0	8.5	12.0	10.8	10.8	10.8	8.4
80	3	12.0	12.5	9.4	13.5	10.5	11.0	8.5	12.0	11.0	11.0	11.0	8.5
100	4	20.0	21.0	15.0	23.0	19.0	19.5	14.0	21.5	19.0	19.5	19.5	14.0

mm	inch	AIR TO OPEN / AIR TO CLOSE											
		FLANGED				THREADED				SOCKET			
		U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	
15	1/2	4.0	4.0	3.8	4.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.4
20	3/4	4.0	4.5	3.8	4.5	4.0	4.0	3.8	4.0	4.0	4.0	4.0	3.8
25	1	4.5	5.0	4.0	5.0	4.0	4.0	3.8	4.0	4.0	4.0	4.0	3.8
32	1 1/4	6.0	6.0	5.2	6.5	5.0	5.0	4.5	5.5	5.0	5.0	5.0	—
40	1 1/2	6.0	6.0	5.2	6.5	5.0	5.0	4.5	5.5	5.0	5.0	5.0	4.5
50	2	6.5	7.0	5.7	7.5	5.5	6.0	4.6	6.0	5.5	6.0	6.0	4.6
65	2 1/2	17.0	17.0	14.4	18.5	15.3	16.0	13.5	17.0	15.8	15.8	15.8	13.5
80	3	17.0	17.5	14.4	18.5	15.3	16.0	13.5	17.0	16.0	16.0	16.0	13.6
100	4	25.0	26.0	20.0	28.0	24.0	24.5	19.5	26.5	24.0	24.5	24.5	19.6

**TYPE 23 (3 WAY VALVE)** AUTOMATIC ELECTRIC TYPE T

UNIT: kg

mm	inch	FLANGED				THREADED				SOCKET		
		U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP
15	1/2	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
20	3/4	3.0	3.0	2.5	3.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5
25	1	3.0	3.0	3.0	3.0	2.5	2.5	2.5	3.0	2.5	2.5	2.5
32	1 1/4	3.0	3.5	3.0	3.5	3.0	3.0	2.5	3.0	3.0	3.0	—
40	1 1/2	3.5	3.5	3.0	4.0	3.0	3.5	3.0	3.5	3.0	3.5	3.0
50	2	4.0	4.5	3.5	4.5	4.0	4.0	3.5	4.0	4.0	4.0	3.5
65	2 1/2	7.0	7.0	6.0	7.5	6.0	6.5	6.0	6.5	6.0	6.5	6.0
80	3	8.0	8.0	6.5	8.5	7.0	7.5	6.0	7.5	7.0	7.5	6.5
100	4	11.5	12.0	9.0	12.5	11.0	11.0	8.5	12.0	11.0	11.0	8.5

## PRODUCT WEIGHT LIST (REFERENCE)

### BUTTERFLY VALVE

TYPE 57, TYPE 56, TYPE 75, TYPE 55, TYPE 55IS, TYPE 56D, TYPE 75D, ROTARY DAMPER (STANDARD) — LEVER TYPE / GEAR TYPE [MANUAL](#) UNIT: kg

mm	inch	TYPE 57, TYPE 56, TYPE 75			TYPE 55	TYPE 55IS	TYPE 56D TYPE 75D	ROTARY DAMPER (STANDARD TYPE)		
		U-PVC	PP	PVDF	FCD-S	FCD-S	PDCPD	U-PVC	PP	PVDF
40	1 1/2	1.3 / 3.4	1.1 / 3.1	1.4 / 3.5	—	—	—	1.1 / 3.1	0.9 / 3.0	1.4 / 3.3
50	2	1.5 / 3.5	1.2 / 3.3	1.7 / 3.8	3.0 / 4.9	2.8 / 4.9	—	1.3 / 3.3	1.0 / 3.1	1.7 / 3.6
65	2 1/2	1.7 / 3.8	1.4 / 3.4	1.9 / 4.0	—	4.0 / 6.0	—	1.5 / 3.5	1.2 / 3.3	2.0 / 3.7
80	3	1.9 / 3.9	1.6 / 3.6	2.2 / 4.2	4.5 / 6.4	4.2 / 6.2	—	1.7 / 3.7	1.3 / 3.4	2.3 / 4.0
100	4	2.5 / 4.5	2.0 / 4.0	2.9 / 4.9	6.0 / 7.9	5.6 / 7.7	—	2.3 / 4.2	1.7 / 3.8	3.1 / 4.8
125	5	4.9 / 6.5	4.0 / 5.6	5.7 / 7.3	10.5 / 11.4	8.8 / 10.4	—	4.4 / 6.0	3.5 / 5.1	5.3 / 6.9
150	6	5.8 / 7.4	4.6 / 6.2	6.9 / 8.5	— / 14.4	— / 12.5	—	5.3 / 6.9	4.2 / 5.8	6.6 / 8.1
200	8	9.3 / 10.7	7.4 / 8.9	11.0 / 12.5	— / 22.9	— / 23.0	—	8.4 / 9.9	6.6 / 8.1	10.1 / 12.0
250	10	— / 14.7	— / 12.2	— / 18.6	— / 32.9	—	—	11.2 / 13.7	8.0 / 10.5	22.5 / 25.0
300	12	— / 28.0	— / 24.0	— / 34.5	—	—	—	17.0 / 22.5	15.0 / 20.5	32.7 / 38.2
350	14	— / 30.2	— / 26.3	— / 36.8	—	—	—	19.0 / 24.5	16.0 / 21.5	35.2 / 40.7
400	16	—	— / 36.0	— / 46.0	—	—	— / 47	—	22.0 / 27.5	48.5 / 54.0
450	18	—	— / 95.5	— / 103.0	—	—	— / 100	—	28.0 / 33.5	50.0 / 55.5
500	20	—	— / 112.0	— / 124.0	—	—	— / 114	—	36.0 / 41.5	57.5 / 63.0
600	24	—	— / 136.0	— / 157.0	—	—	— / 140	—	66.0 / 71.5	79.0 / 84.5

LUG BUTTERFLY VALVE TYPE 57L — LEVER TYPE / GEAR TYPE [MANUAL](#) UNIT: kg

mm	inch	PDCPD	
		DISC: PP	DISC: PVDF
80	3	2.7 / 4.7	2.8 / 4.9
100	4	3.3 / 5.3	3.5 / 5.6
125	5	6.3 / 8.5	6.9 / 9.0
150	6	7.3 / 8.9	8.1 / 9.6
200	8	13.7 / 15.1	15.0 / 16.5
250	10	— / 20.3	— / 22.7

PDCPD BUTTERFLY VALVE [MANUAL](#) UNIT: kg

mm	inch	MANUAL
700	28	380
800	32	460
900	36	550
1,000	40	830
1,100	44	1,000
1,200	48	1,100

BUTTERFLY VALVE TYPE 58 [MANUAL](#) UNIT: kg

mm	inch	MANUAL	
		DISC: PP	DISC: PVDF
700	28	190	210

► BUTTERFLY VALVE

**TYPE 57, TYPE 56, TYPE 75** AUTOMATIC PNEUMATIC TYPE TA

UNIT: kg

mm	inch	DOUBLE ACTING			AIR TO OPEN / AIR TO CLOSE		
		U-PVC	PP	PVDF	U-PVC	PP	PVDF
40	1 1/2	2.8	2.6	3.0	4.5	4.3	4.7
50	2	3.0	2.7	3.2	4.7	4.4	4.9
65	2 1/2	4.0	3.7	4.3	6.8	6.5	7.1
80	3	4.2	3.9	4.5	7.0	6.7	7.3
100	4	6.1	5.6	6.6	11.2	10.7	11.7
125	5	11.1	10.3	12.2	21.0	20.2	22.1
150	6	11.9	11.0	13.3	21.8	20.9	23.2
200	8	18.6	17.0	21.1	36.8	35.2	39.3
250	10	32.5	29.9	36.1	64.5	62.9	69.1
300	12	41.7	37.5	47.5	74.7	70.5	80.5
350	14	96.1	91.6	103	196	192	203
400	16	—	106	138	—	206	238
450	18	—	146	185	—	—	—
500	20	—	158	209	—	—	—
600	24	—	186	263	—	—	—

**TYPE 57** AUTOMATIC ELECTRIC TYPE T

UNIT: kg

mm	inch	U-PVC	PP	PVDF
40	1 1/2	5.7	5.5	5.9
50	2	5.9	5.6	6.1
65	2 1/2	6.1	5.8	6.4
80	3	6.3	6.0	6.6
100	4	6.9	6.4	7.4
125	5	11.0	10.2	12.1
150	6	16.6	15.7	18.0
200	8	20.0	18.4	22.5
250	10	38.5	35.9	42.1
300	12	47.2	43.0	53.0
350	14	49.9	45.4	57.0

**TYPE 57, TYPE 56, TYPE 75** AUTOMATIC ELECTRIC TYPE S

UNIT: kg

mm	inch	U-PVC	PP	PVDF
40	1 1/2	15.5	15.3	15.7
50	2	15.7	15.4	15.9
65	2 1/2	15.9	15.6	16.2
80	3	16.1	15.8	16.4
100	4	16.7	16.2	17.2
125	5	18.6	17.8	19.7
150	6	19.4	18.5	20.8
200	8	27.8	26.2	30.3
250	10	32.5	29.9	36.1
300	12	94	90	100
350	14	97	93	104
400	16	—	122	154
450	18	—	137	177
500	20	—	150	201
600	24	—	178	254

**TYPE 56D, TYPE 75D** AUTOMATIC PNEUMATIC TYPE TW

UNIT: kg

mm	inch	PDCPD
400	16	139
450	18	152
500	20	166
600	24	192

**TYPE 56D, TYPE 75D** AUTOMATIC ELECTRIC TYPE S

UNIT: kg

mm	inch	PDCPD
400	16	124
450	18	137
500	20	151
600	24	177

**PDCPD LARGE SIZE** AUTOMATIC ELECTRIC TYPE S

UNIT: kg

mm	inch	PDCPD
700	28	425
800	32	560
900	36	650
1,000	40	960
1,100	44	1375
1,200	48	1475



## PRODUCT WEIGHT LIST (REFERENCE)

### ► BUTTERFLY VALVE

**TYPE 55** AUTOMATIC PNEUMATIC **TYPE TA** UNIT: kg

mm	inch	DOUBLE ACTING	AIR TO OPEN / AIR TO CLOSE
		FCD-S	FCD-S
50	2	4.5	6.0
80	3	7.0	9.5
100	4	10.0	15.0
125	5	14.0	19.0
150	6	20.5	30.1
200	8	33.5	50.6
250	10	52.0	84.7

**TYPE 55** AUTOMATIC ELECTRIC **TYPE T** UNIT: kg

mm	inch	FCD-S
50	2	7.5
80	3	9.0
100	4	10.7
125	5	17.0
150	6	26.2
200	8	34.1
250	10	55.7

**TYPE 55** AUTOMATIC ELECTRIC **TYPE S** UNIT: kg

mm	inch	FCD-S
50	2	16.0
80	3	17.5
100	4	19.0
125	5	23.5
150	6	27.0
200	8	41.5
250	10	49.5

**ROTARY DAMPER TYPE 57, TYPE 56, TYPE 75** AUTOMATIC PNEUMATIC **TYPE TA** UNIT: kg

mm	inch	DOUBLE ACTING			AIR TO OPEN / AIR TO CLOSE		
		U-PVC	PP	PVDF	U-PVC	PP	PVDF
40	1 1/2	2.4	2.1	2.5	4.1	3.8	4.2
50	2	2.5	2.2	2.7	4.2	3.9	4.4
65	2 1/2	2.8	2.4	3.0	4.5	4.1	4.7
80	3	2.9	2.6	3.2	4.6	4.3	4.9
100	4	3.5	3.0	4.0	5.2	4.7	5.7
125	5	7.2	6.3	8.2	12.3	11.4	13.3
150	6	8.2	6.9	9.3	13.3	12.0	14.4
200	8	13.8	11.9	16.0	24.1	22.2	26.3
250	10	21.4	18.1	26.0	31.7	28.4	36.3
300	12	26.1	21.7	33.6	36.4	32.0	43.9
350	14	32.7	27.8	41.8	50.5	45.6	59.6
400	16	—	51.8	83.8	—	84.8	117
450	18	—	59.3	98.3	—	97.2	136
500	20	—	70.3	121	—	109	160
600	24	—	97.4	174	—	137	214

**ROTARY DAMPER TYPE 57, TYPE 56** AUTOMATIC ELECTRIC **TYPE T** UNIT: kg

mm	inch	U-PVC	PP	PVDF
40	1 1/2	5.6	5.1	5.5
50	2	5.7	5.2	5.6
65	2 1/2	6.0	5.3	5.9
80	3	6.1	5.4	6.0
100	4	6.7	5.8	6.8
125	5	9.0	7.1	9.0
150	6	10.5	8.3	10.7
200	8	21.1	17.3	21.4
250	10	26.9	21.9	29.7
300	12	35.6	25.9	37.8
350	14	38.3	27.9	41.9
400	16	—	46.5	64.7

**ROTARY DAMPER TYPE 57, TYPE 56, TYPE 75** AUTOMATIC ELECTRIC **TYPE S** UNIT: kg

mm	inch	U-PVC	PP	PVDF
40	1 1/2	15.4	15.2	15.6
50	2	15.6	15.3	15.8
65	2 1/2	15.8	15.5	16.1
80	3	15.9	15.6	16.2
100	4	16.4	15.9	16.9
125	5	18.2	17.4	19.3
150	6	18.8	17.9	20.2
200	8	28.0	26.4	30.5
250	10	29.8	27.2	33.4
300	12	39.2	35.5	39.5
350	14	44.6	42.6	42.2
400	16	—	49.0	59.0
450	18	—	61.1	100
500	20	—	72.1	123
600	24	—	99.2	176

## CONTROL VALVE

### CONTROL VALVE AUTOMATIC PNEUMATIC TYPE AV

UNIT: kg

mm	inch	E/P POSITIONER				P/P POSITIONER			
		DOUBLE ACTING		AIR TO OPEN		DOUBLE ACTING		AIR TO OPEN	
		U-PVC	PVDF	U-PVC	PVDF	U-PVC	PVDF	U-PVC	PVDF
15	1/2	6.1	6.4	7.9	8.2	5.1	5.4	6.9	7.2
25	1	7.3	7.7	9.8	10.0	6.3	6.7	8.8	9.2
50	2	10.0	—	15.0	—	9.0	—	14.0	—
80	3	14.0	—	24.0	—	13.0	—	23.0	—
100	4	19.0	—	34.0	—	18.0	—	33.0	—

### CONTROL VALVE AUTOMATIC ELECTRIC TYPE M

UNIT: kg

mm	inch	U-PVC	PVDF
15	1/2	4.5	6.3
25	1	5.5	7.4
50	2	16.0	—
80	3	19.0	—
100	4	22.0	—

## PRODUCT WEIGHT LIST (REFERENCE)

### CHECK VALVE

#### SWING CHECK VALVE [MANUAL](#)

UNIT: kg

mm	inch	FLANGED (JIS10K)		
		HI-PVC	PP	PVDF
15	1/2	0.8	0.6	1.0
20	3/4	0.9	0.6	1.0
25	1	1.7	1.2	2.0
30	1 1/4	2.6	1.7	3.0
40	1 1/2	2.6	1.7	3.0
50	2	4.0	2.7	4.6
65	2 1/2	5.5	3.5	6.5
80	3	6.0	4.0	7.5
100	4	10.5	7.0	12.0
125	5	16.0	12.0	20.0
150	6	22.0	16.0	27.0
200	8	34.5	24.5	42.0

#### WAFER CHECK VALVE [MANUAL](#)

UNIT: kg

mm	inch	FLANGED (JIS10K)	
		U-PVC	
80	3		1.0
100	4		1.8
125	5		2.1
150	6		2.9
200	8		4.6
250	10		7.6
300	12		12.0

#### BALL CHECK VALVE [MANUAL](#)

UNIT: kg

mm	inch	FLANGED (JIS10K)		SOCKET				THREADED			
		U-PVC	PP	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF
15	1/2	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
20	3/4	0.4	0.4	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2
25	1	0.6	0.7	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.3
40	1 1/2	1.1	1.1	0.6	0.6	0.3	0.7	0.6	0.7	0.4	0.7
50	2	1.8	1.6	0.8	0.9	0.5	1.1	0.8	0.9	0.6	1.0
80	3	4.0	4.3	2.4	2.6	1.5	2.8	2.2	2.4	1.5	2.9
100	4	7.2	11.0	5.9	6.1	3.0	6.5	5.8	6.2	3.7	7.0

#### BALL FOOT VALVE [MANUAL](#)

UNIT: kg

mm	inch	FLANGED (JIS10K)		SOCKET			THREADED			
		U-PVC	C-PVC	U-PVC	C-PVC	PP	U-PVC	C-PVC	PP	PVDF
15	1/2	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1
20	3/4	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.1
25	1	0.4	0.7	0.3	0.4	0.3	0.3	0.4	0.4	0.2
40	1 1/2	1.5	1.5	0.5	0.9	0.5	0.8	0.9	0.9	0.5
50	2	1.5	1.9	0.9	1.0	0.7	0.9	1.0	1.0	0.7
80	3	4.3	5.0	3.5	3.5	2.2	3.5	3.5	3.5	2.0
100	4	9.0	10.0	7.0	7.5	4.8	6.7	7.5	7.5	4.0

## OTHERS

CONSTANT FLOW VALVE **MANUAL** UNIT: kg

mm	
15	1.4
20	1.5
25	1.5
50	5.0
80	8.5
100	16.5

NEEDLE VALVE **MANUAL** UNIT: kg

mm	
15	1.4
20	1.5
25	1.6

SEDIMENT STRAINER (TYPE Y) **MANUAL** UNIT: kg

mm	FLANGED	SOCKET	THREADED
15	0.6	0.3	0.3
20	0.8	0.5	0.5
25	1.2	0.7	0.8
32	2.5	2.0	2.0
40	2.2	1.5	1.6
50	2.8	1.8	1.9
65	6.3	5.4	5.3
80	6.5	5.4	6.0
100	20.5	18.0	19.5

SELF CONTROL VALVE **MANUAL**

UNIT: kg

mm	PRESSURE REDUCING TYPE			PRESSURE RELIEF TYPE			PRESSURE RETAINING TYPE		
	FLANGED	SOCKET	THREADED	FLANGED	SOCKET	THREADED	FLANGED	SOCKET	THREADED
15	1.0	0.8	0.8	1.0	0.6	0.7	0.7	0.5	0.5
20	1.8	1.5	1.5	1.2	0.8	0.8	0.9	0.6	0.6
25	2.4	1.9	1.9	2.5	1.7	1.7	2.0	1.5	1.5
32	4.0	3.4	3.4	2.9	1.9	2.0	2.2	1.6	1.6
40	4.4	3.7	3.7	8.6	7.6	7.6	7.8	7.1	7.2
50	6.8	6.1	6.1	9.1	7.9	8.0	8.1	7.4	7.4

## GATE VALVE

GATE VALVE — FLANGED **MANUAL**

UNIT: kg

mm	TYPE P				TYPE S			
	INSIDE SCREW		INSIDE SCREW		OUTSIDE SCREW			
	ROUND HANDLE TYPE	CAP TYPE	ROUND HANDLE TYPE	CAP TYPE	ROUND HANDLE TYPE	CAP TYPE*		
40	2.5	3.5	3.0	4.0	3.2	—		
50	3.5	4.5	4.0	5.0	4.5	—		
65	5.5	6.0	5.5	6.0	7.5	—		
75(80)	7.0	8.0	8.0	9.0	8.3	—		
100	8.5	9.5	12.5	13.0	12.6	13.0		
125	13.5	14.5	15.0	15.5	24.0	—		
150	19.5	20.0	22.5	23.0	24.8	25.7		
200	29.5	30.0	31.5	32.0	44.5	35.0		
250	42.0	43.0	—	—	71.0	60.0		
300	68.0	68.5	—	—	—	—		
350	81.5	82.0	—	—	—	—		

AIR RELEASE VALVE **MANUAL** UNIT: kg

mm	FLANGED	THREADED
25	8.8	3.8
75	6.9	—
100	10.0	—
150	21.0	—
200	41.0	—

ISOLATING VALVE **MANUAL** UNIT: kg

mm	
75	3.3
100	6.5
150	9.5
200	14.0

**NOTES** (1) The above values are the estimated weight of flange type.

(2) The asterisk indicates the weight of section valves (applicable for shallow layer burial).

ALFALFA VALVE® TYPE 82 **MANUAL** UNIT: kg

mm	FLANGED	SOCKET
50	1.3	1.0
80	2.0	1.6
100	3.3	2.7

ROTARY ANGLE VALVE **MANUAL** UNIT: kg

mm	HANDLE FIXING	T-SHAPED HANDLE
50	3.0	3.0
75	4.5	4.5

ANGLE BUTTERFLY VALVE **MANUAL** UNIT: kg

mm	HANDLE FIXING
80	5.4
100	10.0