Water Products Overview

Honeywell

V4 Series

More than 100 years in business

Since 1885, Honeywell has been the world's leading supplier in the environmental control business.

Honeywell is a US$ 24-billion diversified technology and manufacturing leader, serving customers world-wide with aerospace products and services; control technologies for buildings, homes and industry; automotive products; power generation systems; specialty chemicals; fibers; plastics and electronic and advanced materials.

The company employs approximately 120,000 people in 95 countries. Honeywell is traded on the New York Stock Exchange under the symbol Hon, as well as on the London, Chicago and Pacific stock exchanges. It is one of the 30 stocks that make up the Dow Jones Industrial Average and is also a component of the Standard & Poor's 500 index. Additional information on the company is available on the internet at: www.honeywell.com

V4 Cast Iron Body Valves

V4-ABFL-EPN16

Actuated Lug Type Butterfly Valves

Rating : PN16
Size Range : DN50 to DN600
Page : 1 to 3

V4-ABFW-EPN16

Actuated Wafer Type Butterfly Valves

Rating : PN16
Size Range : DN50 to DN600
Page : 1 to 3

V4-BFL-GP16

Lug Type Butterfly Valves With Hand Lever or Gear Operated Handwheel

Rating : PN16
Size Range : DN50 to DN600
Page : 4

V4-BFW-GP16

Wafer Type Butterfly Valves With Hand Lever or Gear Operated Handwheel

Rating : PN16
Size Range : DN50 to DN600
Page : 5

V4-GAN-GP16

Gate Valve – Non-rising Stem

Rating : PN16
Size Range : DN50 to DN600
Page : 6

V4-GAR-GP16

Gate Valve – Rising Stem

Rating : PN16
Size Range : DN50 to DN400
Page : 7

V4-GLO-GP16

Globe Valve

Rating : PN16
Size Range : DN50 to DN300
Page : 8

V4-YST-GP16

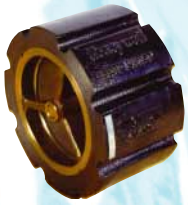
Y-Strainer

Rating : PN16
Size Range : DN50 to DN300
Page : 9

V4-CGV-GP16

Silent Check Valve – Globe Type

Rating : PN16
Size Range : DN50 to DN300
Page : 10



V4-CGW-GP16

Silent Check Valve – Wafer Type

Rating : PN16
Size Range : DN50 to DN250
Page : 11

V4-CHS-GP16

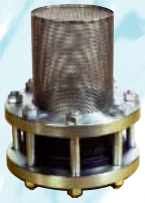
Check Valve – Horizontal Swing

Rating : PN16
Size Range : DN50 to DN300
Page : 12

V4-CWD-GP16

Double Door Check Valve

Rating : PN16
Size Range : DN50 to DN300
Page : 13



V4-FOV-GP16

Foot Valve

Rating : PN16
Size Range : DN50 to DN300
Page : 14

V4-BLC-GP16

Flanged Balancing and Shut-off Valves

Rating : PN16
Size Range : DN65 to DN300
Page : 15

V4-ABFL-EPN16 / V4-ABFW-EPN16

FEATURES

- Cast Iron Lug/Wafer Body
- Centric butterfly valve with elastomer liner
- Wide DN-range (DN50 … DN600)
- For On/Off and Modulating Control
- Robust actuators in epoxy coated aluminum
- Manual override non-clutch design. Manual operation can be operated without any lever, clutch or brake upon power voltage.
- Irreversible worm gear
- Visual mechanical position indicator for accurate visual reference of valve position
- Anti-condensation heater and 2 aux. limit switches on standard model
- Enclosure IP67

V4-ABFL-EPN16

V4-ABFW-EPN16

SPECIFICATIONS

Valve

Sizes	DN50 – DN600 (Lug/Wafer Type)
Nominal pressure	16 bar
Tightness	Bubble tight
Temperature range	EPDM: -10°C to 120°C; NBR: -10°C to 82°C
Body	Cast Iron, BS EN-JL1030
Shaft	Stainless Steel, BS970 420S37
Disc	Ductile Iron with FBE coating
Liner	Elastomer

Actuator

Motor Voltage	230VAC, 50/60Hz
Current, Running time	See table (1a and 1b)
Travel Angle	90° ± 5°
Input (Modulating)	4~20mA, 1~5V, or 0(2)~10V select by DIP- switch
Enclosure	IP67 Watertight
Ambient Temperature	-5°C to +60°C
Indicator	Continuous position indicator
Manual Override	Non-clutch design
Worm Gear	Permanently lubricated and self locking
Mechanical Stops	External adjustable limit stops
Space heater	15W 230V Anti-condensation
Material	Steel. Aluminium Alloy, Al Bronze
External coating	Anodized and dry powder epoxy
Stall Protection	Built-in thermal protection
	Cut off at 125 ± 5°C
	Reset at 95 ± 5°C

Control Type and Valve Size Data for V4-ABFL-EPN16 (Table 1a)

Valve Size	On/Off Model No.	Actuator Type	Modulating Model No.	Actuator Type	Max Torque (Nm)	Op Time sec/90° at 60Hz	Power (Watts)	Manual Override	Kvs (m^3/h)	Weight Kg
DN50	V4-ABFL-EPN16-050-03	OM-1	V4-ABFL-EPN16-050-04	OM-P1	35	12	10	Lever	100	13.4
DN65	V4-ABFL-EPN16-065-03	OM-1	V4-ABFL-EPN16-065-04	OM-P1	35	12	10	Lever	170	14.4
DN80	V4-ABFL-EPN16-080-03	OM-2	V4-ABFL-EPN16-080-04	OM-P2	90	15	40	Lever	281	14.8
DN100	V4-ABFL-EPN16-100-03	OM-2	V4-ABFL-EPN16-100-04	OM-P2	90	15	40	Hand-wheel	619	16.7
DN125	V4-ABFL-EPN16-125-03	OM-2	V4-ABFL-EPN16-125-04	OM-P2	90	15	40	Hand-wheel	884	20.2
DN150	V4-ABFL-EPN16-150-03	OM-3	V4-ABFL-EPN16-150-04	OM-P3	150	22	40	Hand-wheel	1366	22.2
DN200	V4-ABFL-EPN16-200-03	OM-3	V4-ABFL-EPN16-200-04	OM-P3	150	22	40	Hand-wheel	2713	29.4
DN250	V4-ABFL-EPN16-250-03	OM-4	V4-ABFL-EPN16-250-04	OM-P4	400	22	120	Hand-wheel	4819	44.2
DN300	V4-ABFL-EPN16-300-03	OM-5	V4-ABFL-EPN16-300-04	OM-P5	500	22	120	Hand-wheel	7136	52.6
DN350	V4-ABFL-EPN16-350-03	OM-7	V4-ABFL-EPN16-350-04	OM-P7	1000	46	180	Hand-wheel	10485	89.0
DN400	V4-ABFL-EPN16-400-03	OM-8	V4-ABFL-EPN16-400-04	OM-P8	1500	46	220	Hand-wheel	14007	145.6
DN450	V4-ABFL-EPN16-450-03	OM-8	V4-ABFL-EPN16-450-04	OM-P8	1500	46	220	Hand-wheel	18560	172.0
DN500	V4-ABFL-EPN16-500-03	OM-9	V4-ABFL-EPN16-500-04	OM-P9	2000	58	220	Hand-wheel	23860	196.0
DN600	V4-ABFL-EPN16-600-03	OM-11	V4-ABFL-EPN16-600-04	OM-P11	3000	58	250	Hand-wheel	36900	257.0

Control Type and Valve Size Data for V4-ABFW-EPN16 (Table 1b)

(The below table is based on differential pressure of 10 bar.)

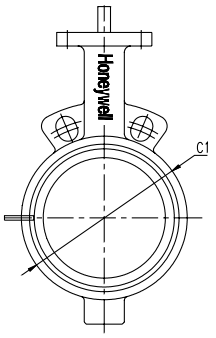
Valve Size	On/Off Model No.	Actuator Type	Modulating Model No.	Actuator Type	Max Torque (Nm)	Op Time sec/90° at 60Hz	Power (Watts)	Manual Override	Kvs (m^3/h)	Weight Kg
DN50	V4-ABFW-EPN16-050-03	OM-1	V4-ABFW-EPN16-050-04	OM-P1	35	12	10	Lever	100	13.4
DN65	V4-ABFW-EPN16-065-03	OM-1	V4-ABFW-EPN16-065-04	OM-P1	35	12	10	Lever	170	14.4
DN80	V4-ABFW-EPN16-080-03	OM-2	V4-ABFW-EPN16-080-04	OM-P2	90	15	40	Lever	281	14.6
DN100	V4-ABFW-EPN16-100-03	OM-2	V4-ABFW-EPN16-100-04	OM-P2	90	15	40	Hand-wheel	619	16.6
DN125	V4-ABFW-EPN16-125-03	OM-2	V4-ABFW-EPN16-125-04	OM-P2	90	15	40	Hand-wheel	884	20.1
DN150	V4-ABFW-EPN16-150-03	OM-3	V4-ABFW-EPN16-150-04	OM-P3	150	22	40	Hand-wheel	1366	25.0
DN200	V4-ABFW-EPN16-200-03	OM-3	V4-ABFW-EPN16-200-04	OM-P3	150	22	40	Hand-wheel	2713	29.9
DN250	V4-ABFW-EPN16-250-03	OM-4	V4-ABFW-EPN16-250-04	OM-P4	400	22	120	Hand-wheel	4819	43.4
DN300	V4-ABFW-EPN16-300-03	OM-5	V4-ABFW-EPN16-300-04	OM-P5	500	22	120	Hand-wheel	7136	55.8
DN350	V4-ABFW-EPN16-350-03	OM-7	V4-ABFW-EPN16-350-04	OM-P7	1000	46	180	Hand-wheel	10485	89.0
DN400	V4-ABFW-EPN16-400-03	OM-8	V4-ABFW-EPN16-400-04	OM-P8	1500	46	220	Hand-wheel	14007	145.0
DN450	V4-ABFW-EPN16-450-03	OM-8	V4-ABFW-EPN16-450-04	OM-P8	1500	46	220	Hand-wheel	18560	165.0
DN500	V4-ABFW-EPN16-500-03	OM-9	V4-ABFW-EPN16-500-04	OM-P9	2000	58	220	Hand-wheel	23860	184.0
DN600	V4-ABFW-EPN16-600-03	OM-11	V4-ABFW-EPN16-600-04	OM-P11	3000	58	250	Hand-wheel	36900	241.0

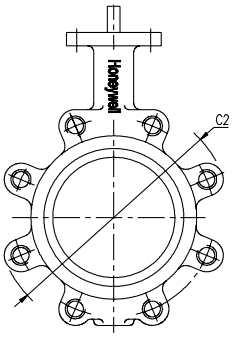
Kv Values-Valve Sizing coefficients (m^3/h at 1Bar Diff P)

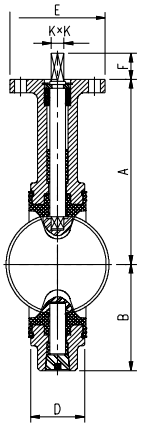
Nominal Size	Kv at Disk Opening								
	10°	20°	30°	40°	50°	60°	70°	80°	90°
DN50	0.05	2.60	6.10	13	23	38	61	91	100
DN65	0.09	5.20	10	22	39	65	103	154	170
DN80	0.17	7.80	16	34	61	100	158	238	261
DN100	0.26	15	31	68	120	199	315	472	519
DN125	0.43	25	53	115	205	339	536	804	884
DN150	0.69	39	82	177	317	523	829	1243	1366
DN200	1.70	77	163	353	629	1040	1646	2469	2713
DN250	2.60	131	277	600	1070	1771	2803	4205	4619
DN300	3.50	202	428	927	1653	2735	4329	6494	7136
DN350	5.10	289	611	1324	2360	3904	6179	9268	10185
DN400	6.80	397	840	1821	3245	5369	8497	12746	14007
DN450	9.40	526	1113	2412	4297	7111	11255	16882	18551
DN500	11.90	676	1431	3101	5526	9144	14471	21706	23853
DN600	18.80	1044	2211	4791	8538	14126	22356	33535	36851

Valve Dimensions in mm and Weight

DN	A	B	D	E	F	KxK	Top Plate Date		C1 (for V4-ABFW-EPN16)	C2 (for V4-ABFL-EPN16)	Weight (Kg) (for V4-ABFW-EPN16)	Weight (Kg) (for V4-ABFL-EPN16)
							PCD	HOLE N-Dia.				
50	140	70	41	90	30	11x11	70	4 - Ø9	105	150	4.5	4.5
65	152	76	44	90	30	11x11	70	4 - Ø9	117	175	5.4	5.4
80	159	88	44	90	30	11x11	70	4 - Ø9	130	187	5.6	5.6
100	178	102	51	90	30	14x14	70	4 - Ø9	162	222	7.6	7.6
125	191	119	54	90	30	14x14	70	4 - Ø9	187	254	10.1	10.1
150	203	133	54	90	30	17x17	70	4 - Ø9	216	279	12.0	12.0
200	241	170	64	125	30	17x17	102	4 - Ø11	271	337	16.9	16.9
250	273	210	64	125	30	22x22	102	4 - Ø11	330	403	26.4	26.4
300	308	243	76	125	30	22x22	102	4 - Ø11	376	486	37.8	37.8
350	368	280	78	150	45	22x22	125	4 - Ø13	415	525	67.0	70.0
400	400	310	88	175	45	27x27	140	4 - Ø18	488	590	110.0	122.0
450	422	340	109	175	45	27x27	140	4 - Ø18	535	640	127.0	137.0
500	480	388	127	210	45	Ø48	165	4 - Ø22	587	730	160.0	160.0
600	562	450	154	210	45	Ø48	165	4 - Ø22	685	840	185.0	201.0



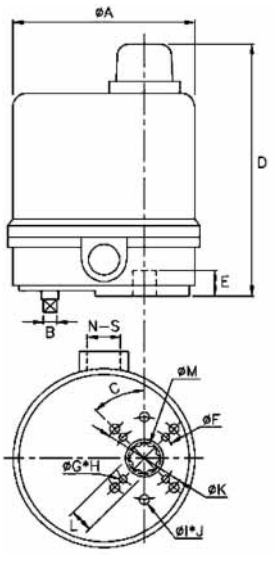




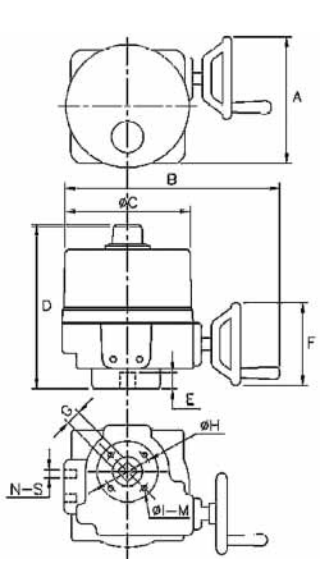
Actuator Dimensions OM-1 to OM12 in mm

Model No.	A	B	C	D	E	F	G	Gmax	H	I	J	K	L	Lmax	M	Mmax	N	P	S	Flange Type
OM-1	108	8	45°	155	15	36	m5	-	4	m6	6	50	-	14	19	-	1	-	½ PT	F03/F05
OM-2 to OM-3	200	300	200	255	30	125	-	22	70	m8	-	-	-	-	4	-	2	-	½ PT	F07
OM-4 to OM-6	300	380	234	315	40	195	-	35	102	m10	-	-	-	-	4	-	2	-	½ PT	F10
OM-7 to OM-8	450	340	234	420	60	295	140	-	45°	m16	4	180	10	-	-	35	2	-	½ PT	F14
OM-9 to OM-12	470	350	260	590	100	395	45°	-	12	m20	4	75	165	-	221	-	2	360	½ PT	F16/F14

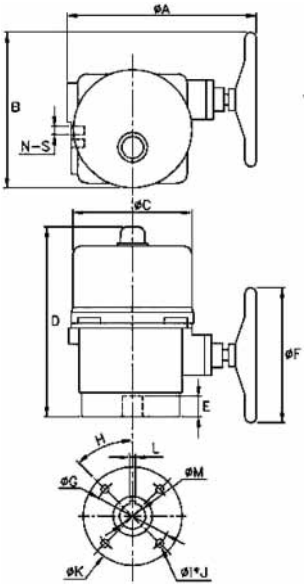
OM-1



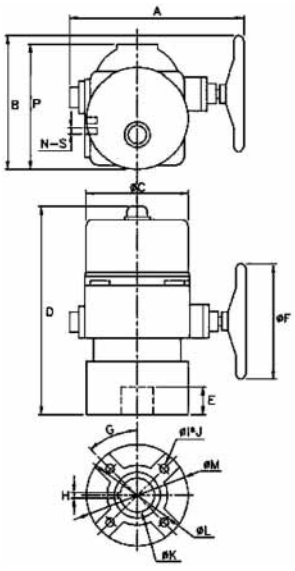
OM-2 to OM-3, OM-4 to OM-6



OM-7 to OM-8



OM-9 to OM-12



Option : (1) L = 11, M = 15
(2) L = 9, M = 12
With modulating card, D = 185

Note:
without torque switch A = 385

V4-BFL-GP16

WITH HAND LEVER OR GEAR OPERATED HANDWHEEL

FEATURES

- Cast Iron Body, PN16
- 90° closing / opening operation (10 position)
- Lock-lever handle (steel material)
- Elastomer Liner
- Memory lock mechanism
- Ductile iron disc with FBE coating

V4-BFL-GP16 Hand Lever

SPECIFICATIONS

Valve

Sizes	DN50 ~ DN600 (Lug Type)
Nominal pressure	16 bar
Temperature range	EPDM: -10°C to 120°C; NBR: -10°C to 82°C
Test Pressure (bar)	Shell (Water) 24 bar, Seat (Water)17.6 bar

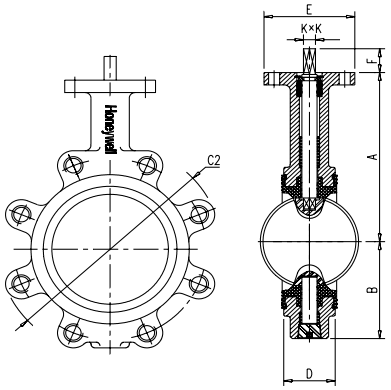
V4-BFL-GP16 Gear Operated Handwheel

MATERIALS

NO.	DESCRIPTION	MATERIAL	BS Standard
1	Body	Cast Iron	EN-JL1030
2	Shaft	Stainless Steel	420 S37
3	Disc	0) Ductile	EN-JS1050
		1) Stainless Steel	304S15
		2) Bronze	1400 LG2
4	Bushing	PTFE	Commercial
5	Liner	Rubber	EPDM / NBR
6	O-rings	Rubber	EPDM / NBR

DIMENSIONS in mm

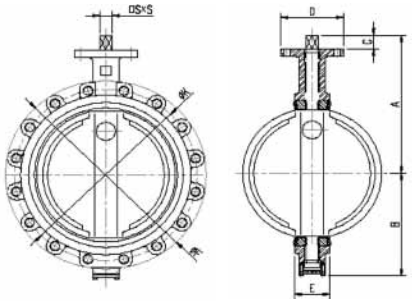
DN	Part No. With Hand Lever	Part No. With Gear Operated Handwheel	A	B	C1	D	E	F	KxK	Top Plate Data	
										PCD	HOLE N-Dia.
50	V4-BFL-GP16-G050-0-0	V4-BFL-GP16-G050-1-0	140	70	150	41	90	30	11x11	70	4 - Ø9
65	V4-BFL-GP16-G065-0-0	V4-BFL-GP16-G065-1-0	152	76	175	44	90	30	11x11	70	4 - Ø9
80	V4-BFL-GP16-G080-0-0	V4-BFL-GP16-G080-1-0	159	88	187	44	90	30	11x11	70	4 - Ø9
100	V4-BFL-GP16-G100-0-0	V4-BFL-GP16-G100-1-0	178	102	222	51	90	30	14x14	70	4 - Ø9
125	V4-BFL-GP16-G125-0-0	V4-BFL-GP16-G125-1-0	191	119	254	54	90	30	14x14	70	4 - Ø9
150	V4-BFL-GP16-G150-0-0	V4-BFL-GP16-G150-1-0	203	133	279	54	90	30	17x17	70	4 - Ø9
200	V4-BFL-GP16-G200-0-0	V4-BFL-GP16-G200-1-0	241	170	337	64	125	30	17x17	102	4 - Ø11
250	V4-BFL-GP16-G250-0-0	V4-BFL-GP16-G250-1-0	273	210	403	64	125	30	22x22	102	4 - Ø11
300	V4-BFL-GP16-G300-0-0	V4-BFL-GP16-G300-1-0	308	243	486	76	125	30	22x22	102	4 - Ø11



Size DN50 - DN300

DIMENSIONS in mm

DN	Part No.	Part No.	A	B	C	D	E	F	K	SxS/d	Top Plate Data
	With Hand Lever	With Gear Operated Handwheel									PCD
350	V4-BFL-GP16-G350-0-0	V4-BFL-GP16-G350-1-0	413	280	45	150	78	525	470	22x22	125
400	V4-BFL-GP16-G400-0-0	V4-BFL-GP16-G400-1-0	445	310	45	175	88	590	525	27x27	140
450	V4-BFL-GP16-G450-0-0	V4-BFL-GP16-G450-1-0	467	340	45	175	109	640	585	27x27	140
500	V4-BFL-GP16-G500-0-0	V4-BFL-GP16-G500-1-0	525	388	45	210	127	730	650	Ø48	165
600	V4-BFL-GP16-G600-0-0	V4-BFL-GP16-G600-1-0	607	450	45	210	154	840	770	Ø48	165



Size DN350 - DN600

V4-BFW-GP16

WITH HAND LEVER OR GEAR OPERATED HANDWHEEL

FEATURES

- Cast Iron Body, PN16
- 90° closing / opening operation (10 position)
- Lock-lever handle (steel material)
- Elastomer Liner
- Memory lock mechanism
- Ductile iron with FBE coating

V4-BFW-GP16 Hand Lever

SPECIFICATIONS

Valve

Sizes	DN50 ~ DN600 (Wafer Type)
Nominal pressure	16 bar
Temperature range	EPDM: -10°C to 120°C; NBR: -10°C to 82°C
Test Pressure (bar)	Shell (Water) 24 bar, Seat (Water) 17.6 bar

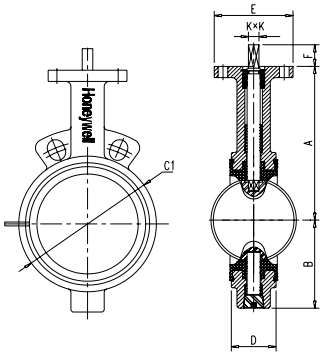
V4-BFW-GP16 Gear Operated Handwheel

MATERIALS

NO.	DESCRIPTION	MATERIAL	BS Standard
1	Body	Cast Iron	EN-JL1030
2	Shaft	Stainless Steel	420 S37
3	Disc	0) Ductile	EN-JS1050
		1) Stainless Steel	304 S15
		2) Bronze	1400 LG2
4	Bushing	PTFE	Commercial
5	Liner	Rubber	EPDM / NBR
6	O-rings	Rubber	EPDM / NBR

DIMENSIONS in mm

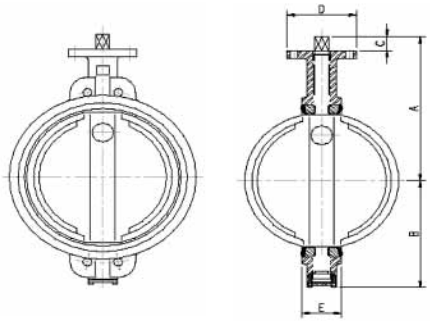
DN	Part No. With Hand Lever	Part No. With Gear Operated Handwheel	A	B	C1	D	E	F	KxK	Top Plate Data	
										PCD	HOLE N-Dia.
50	V4-BFW-GP16-G050-0-0	V4-BFW-GP16-G050-1-0	140	70	105	41	90	30	11x11	70	4 - Ø9
65	V4-BFW-GP16-G065-0-0	V4-BFW-GP16-G065-1-0	152	76	117	44	90	30	11x11	70	4 - Ø9
80	V4-BFW-GP16-G080-0-0	V4-BFW-GP16-G080-1-0	159	91	130	44	90	30	11x11	70	4 - Ø9
100	V4-BFW-GP16-G100-0-0	V4-BFW-GP16-G100-1-0	178	102	162	51	90	30	14x14	70	4 - Ø9
125	V4-BFW-GP16-G125-0-0	V4-BFW-GP16-G125-1-0	191	119	187	54	90	30	14x14	70	4 - Ø9
150	V4-BFW-GP16-G150-0-0	V4-BFW-GP16-G150-1-0	203	133	216	54	90	30	17x17	70	4 - Ø9
200	V4-BFW-GP16-G200-0-0	V4-BFW-GP16-G200-1-0	241	170	271	64	125	30	17x17	102	4 - Ø11
250	V4-BFW-GP16-G250-0-0	V4-BFW-GP16-G250-1-0	273	210	330	64	125	30	22x22	102	4 - Ø11
300	V4-BFW-GP16-G300-0-0	V4-BFW-GP16-G300-1-0	308	243	376	76	125	30	22x22	102	4 - Ø11



Size DN50 - DN300

DIMENSIONS in mm

DN	Part No. With Hand Lever	Part No. With Gear Operated Handwheel	A	B	C	D	E	SxS/d	Top Plate Data PCD
350	V4-BFW-GP16-G350-0-0	V4-BFW-GP16-G350-1-0	413	280	45	150	78	22x22	125
400	V4-BFW-GP16-G400-0-0	V4-BFW-GP16-G400-1-0	445	309	45	175	88	27x27	140
450	V4-BFW-GP16-G450-0-0	V4-BFW-GP16-G450-1-0	467	340	45	175	109	27x27	140
500	V4-BFW-GP16-G500-0-0	V4-BFW-GP16-G500-1-0	525	388	45	210	127	Ø48	165
600	V4-BFW-GP16-G600-0-0	V4-BFW-GP16-G600-1-0	607	450	45	210	154	Ø48	165



Size DN350 - DN600

V4-GAN-GP16

FEATURES

- Cast Iron Body
- Non Rising Stem
- Solid Wedge Disc
- Bolted Bonnet
- Stainless Steel Stem

V4-GAN-GP16

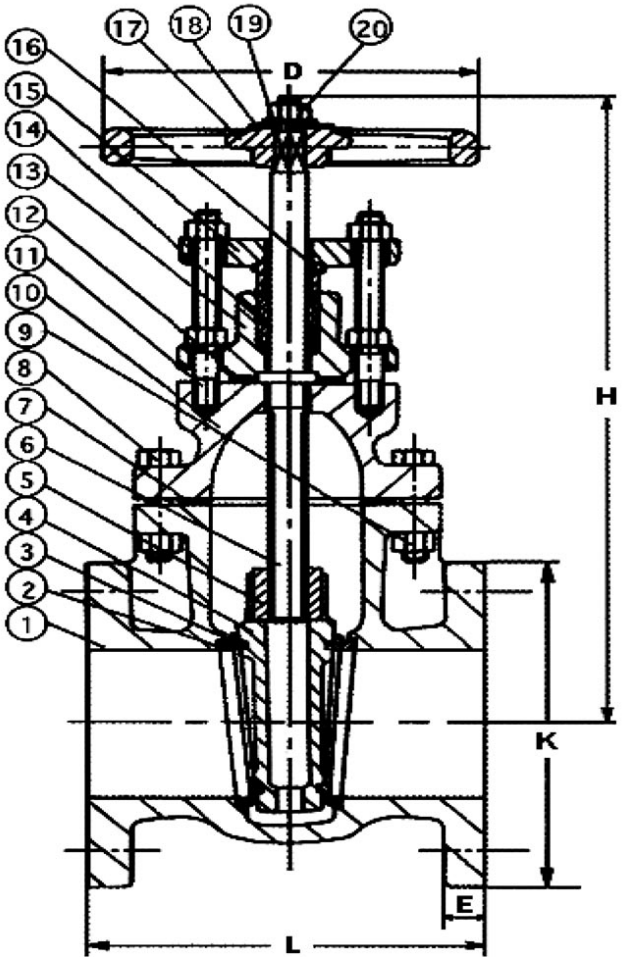
SPECIFICATIONS

Valve

Sizes DN50 ~ DN500 (Flanged ends)
Nominal pressure 16 Bar at -10°C to 120°C
Test Pressure Shell (Water) 24 Bar, Seat (Water) 17.6 Bar

MATERIALS

NO.	DESCRIPTION	MATERIAL	BS Standard
1	Body	Cast Iron	EN-JL1030
2	Seat Ring	Bronze	1400 LG2
3	Wedge Face Ring	Bronze	1400 LG2
4	Wedge	Cast Iron	EN-JL1030
5	Wedge Nut	Bronze	1400 LG2
6	Stem	Stainless Steel	970 420S37
7	Body Gasket	Graphite	Non Asbestos
8	Bolts	Carbon steel	Commercial
9	Nuts	Carbon steel	Commercial
10	Bonnet	Cast Iron	EN-JL1030
11	Gland Follower Bolts	Carbon Steel	Commercial
12	Stuffing Box Gasket	Graphite	Non Asbestos
13	Stuffing Box	Cast Iron	EN-JL1030
14	Packing	Graphite	Non Asbestos
15	Gland Follower	Ductile Iron	EN-JS1050
16	Packing Gland	Brass	2874CZ114
17	Handwheel	Cast Iron	EN-JL1030
18	Identification Plate	Aluminum	Commercial
19	Washer	Carbon Steel	Commercial
20	Handwheel Nut	Carbon Steel	Commercial



DIMENSIONS in mm

DN	Part No.	D	H	K	L	E
50	V4-GAN-GP16-G050	178.0	322	165.0	177.8	20
65	V4-GAN-GP16-G065	178.0	322	185.0	190.0	20
80	V4-GAN-GP16-G080	200.0	340	200.0	203.2	22
100	V4-GAN-GP16-G100	250.0	420	220.0	228.6	24
125	V4-GAN-GP16-G125	300.0	477	250.0	254.0	26
150	V4-GAN-GP16-G150	300.0	542	285.4	266.7	26
200	V4-GAN-GP16-G200	356.0	668	340.0	292.1	30
250	V4-GAN-GP16-G250	400.0	750	405.0	330.2	32
300	V4-GAN-GP16-G300	457.0	835	460.0	355.6	32
350	V4-GAN-GP16-G350	508.0	1,015	520.0	381.0	36
400	V4-GAN-GP16-G400	558.0	1,120	580.0	406.4	38
450	V4-GAN-GP16-G450	610.0	1,210	640.0	431.8	40
500	V4-GAN-GP16-G500	610.0	1,250	715.0	457.2	42

V4-GAR-GP16

FEATURES

- Cast Iron Body
- Rising Stem
- Solid Wedge Disc
- Bolted Bonnet
- Stainless Steel Stem

V4-GAR-GP16

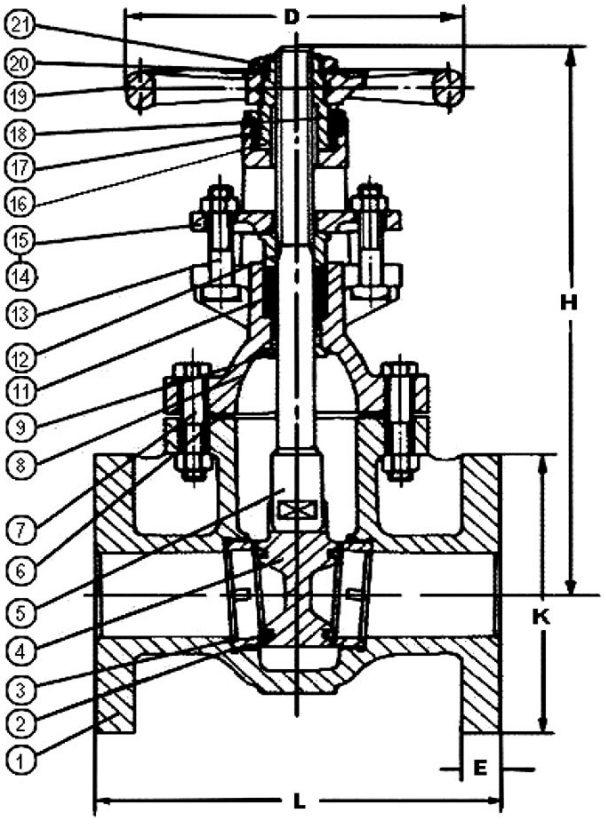
SPECIFICATIONS

Valve

Sizes DN50 ~ DN400 (Flanged ends)
Nominal pressure 16 Bar at -10°C to 120°C
Test Pressure Shell (Water) 24 Bar, Seat (Water) 17.6 Bar

MATERIALS

NO.	DESCRIPTION	MATERIAL	BS Standard
1	Body	Cast Iron	EN-JL1030
2	Seat Ring	Bronze	1400 LG2
3	Wedge Face Ring	Bronze	1400 LG2
4	Wedge	Cast Iron	EN-JL1030
5	Stem	Stainless Steel	970 420S37
6	Body Gasket	Graphite	Non asbestos
7	Bolts	Carbon steel	Commercial
8	Nuts	Carbon steel	Commercial
9	Bonnet	Cast Iron	EN-JL1030
10	Backseat Bushing	Brass	2874 CZ114
11	Packing	Graphite	Commercial
12	Packing Gland	Brass	2874 CZ114
13	Gland Follower Bolts	Carbon Steel	Commercial
14	Gland Follower Nuts	Carbon Steel	Commercial
15	Gland Follower	Ductile Iron	EN-JS1050
16	Yoke Bushing	Bronze	1400 LG2
17	Yoke Bushing Nut	Cast Iron	EN-JL1030
18	Screw	Carbon Steel	Commercial
19	Handwheel	Cast Iron	EN-JL1030
20	Indentification Plate	Aluminum	Commercial
21	Handwheel Nut	Carbon Steel	Commercial



DIMENSIONS in mm

DN	Part No.	D	H (open)	K	L	E
50	V4-GAR-GP16-G050	178.0	405	165.0	177.8	20
65	V4-GAR-GP16-G065	178.0	415	185.0	190.0	20
80	V4-GAR-GP16-G080	190.0	486	200.0	203.2	22
100	V4-GAR-GP16-G100	250.0	632	220.0	228.6	24
125	V4-GAR-GP16-G125	307.0	710	250.0	254.0	26
150	V4-GAR-GP16-G150	307.0	842	285.0	266.7	26
200	V4-GAR-GP16-G200	356.0	1,100	340.0	292.1	30
250	V4-GAR-GP16-G250	400.0	1,228	405.0	330.2	32
300	V4-GAR-GP16-G300	457.0	1,373	460.0	355.6	32
350	V4-GAR-GP16-G350	508.0	1,595	520.0	381.0	36
400	V4-GAR-GP16-G400	558.0	1,900	580.0	406.4	38

V4-GLO-GP16

FEATURES

- Cast Iron Body
- Rising Stem
- Bolted Bonnet
- Stainless Steel Stem

V4-GLO-GP16

SPECIFICATIONS

Valve

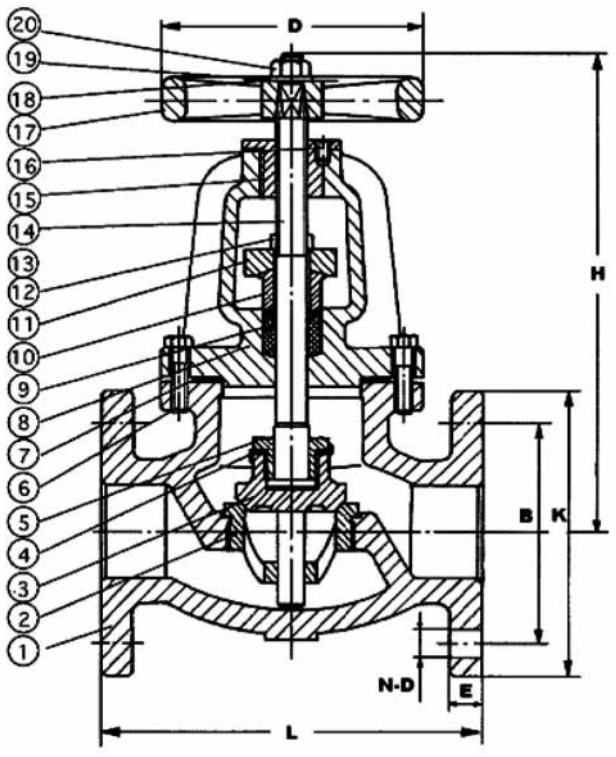
Sizes DN50 ~ DN300 (Flanged ends)

Nominal pressure 16 Bar at -10°C to 120°C

Test Pressure Shell (Water) 24 Bar, Seat (Water) 17.6 Bar

MATERIALS

NO.	DESCRIPTION	MATERIAL	BS Standard
1	Body	Cast Iron	EN-JL1030
2	Seat Ring	Bronze	1400 LG2
3	Disc	Cast Iron	EN-JL 1030
4	Locking Washer	Brass	2874 CZ114
5	Swivel Nut	Brass	2874 CZ114
6	Bolts	Carbon Steel	Commercial
7	Body Gasket	Graphite	Non -Asbestos
8	Bonnet	Cast Iron	EN-JL1030
9	Packing	Graphite	Non -Asbestos
10	Packing Gland	Brass	2874 CZ114
11	Gland Follower	Ductile Iron	EN-JS1050
12	Gland Bolts	Carbon Steel	Commercial
13	Nuts	Carbon Steel	Commercial
14	Stem	Stainless Steel	970 420 S37
15	Yoke Bushing	Bronze	1400 LG2
16	Screws	Carbon Steel	Commercial
17	Hand Wheel	Cast Iron	EN-JL1030
18	Identification Plate	Aluminum	Commercial
19	Washer	Carbon Steel	Commercial
20	Nuts	Carbon Steel	Commercial



DIMENSIONS in mm

DN	Part No.	B	K	D	H (open)	L	E	N-D
50	V4-GLO-GP16-G050	125	165	190.5	295	203.0	20	4-19
65	V4-GLO-GP16-G065	145	185	190.5	336	216.0	20	4-19
80	V4-GLO-GP16-G080	160	200	190.5	345	241.0	22	8-19
100	V4-GLO-GP16-G100	180	220	305.0	389	292.0	24	8-19
125	V4-GLO-GP16-G125	210	250	305.0	425	330.0	26	8-19
150	V4-GLO-GP16-G150	240	285	305.0	511	356.0	26	8-23
200	V4-GLO-GP16-G200	295	340	305.0	580	495.0	30	8-23
250	V4-GLO-GP16-G250	355	405	400.0	720	622.0	32	12-28
300	V4-GLO-GP16-G300	410	460	457.0	859	698.5	32	12-28

V4-YST-GP16

FEATURES

- Cast Iron Body
- Bolted Bonnet Cover
- Stainless Steel 304 Perforated screen

V4-YST-GP16

SPECIFICATIONS

Valve

Sizes	DN50 ~ DN300 (Flanged ends)
Nominal pressure	16 Bar from -10°C to 120°C
Test Pressure	Shell (Water) 24 Bar

MATERIALS

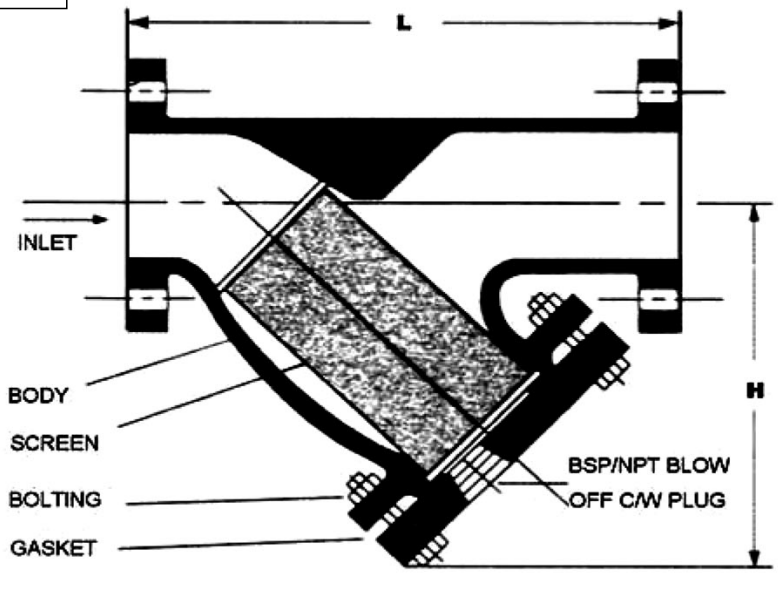
NO.	DESCRIPTION	MATERIAL	BS Standard
1	Body	Cast Iron	EN-JL1030
2	Cover	Cast Iron	EN-JL1030
3	Plug	Malleable Iron	Commercial
4	Gasket	Graphite	Commercial
5	Screen	Stainless Steel	970 304 S15

STANDARD SCREEN

Size	Hole Diameter (mm)	Free Flow Area (%)
DN50 ~ DN80	1.5	26.0
DN100 ~ DN300	3.0	40.0

DIMENSIONS in mm

DN	Part No.	H	L
50	V4-YST-GP16-G050	174	230
65	V4-YST-GP16-G065	208	290
80	V4-YST-GP16-G080	224	314
100	V4-YST-GP16-G100	280	370
125	V4-YST-GP16-G125	311	430
150	V4-YST-GP16-G150	355	490
200	V4-YST-GP16-G200	435	570
250	V4-YST-GP16-G250	545	680
300	V4-YST-GP16-G300	625	800



Denotes recomended spare parts

V4-CGV-GP16

FEATURES

- Cast Iron Body
- Silent Check function

V4-CGV-GP16

SPECIFICATIONS

Valve

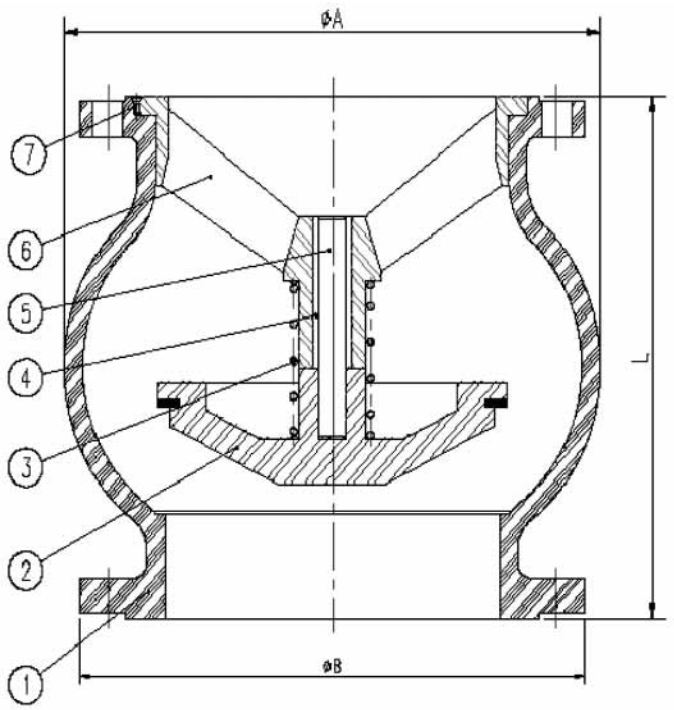
Sizes DN50 ~ DN300 (Flange ends)
Nominal pressure EPDM disc seat : 16 bar at -10°C to 120°C
NBR disc seat: 16 bar at -10°C to 82°C.

MAX. OPENING PRESSURE (bar)

Size	Horizontal	Vertical
DN50	2.28	2.51
DN65	3.19	3.62
DN80	3.84	4.55
DN100	4.07	5.41
DN125	5.42	7.82
DN150	11.97	16.07
DN200	15.99	22.84
DN250	23.35	35.61
DN300	27.17	47.30

MATERIALS

NO.	DESCRIPTION	MATERIAL	BS Standard
1	Body	Cast Iron	EN-JL 1030
2-1	Disc	Cast Iron (EPDM)	CI with EPDM
2-2	Disc	Cast Iron (NBR)	CI with NBR
3	Spring	Stainless Steel	970 304S15
4	Bushing	Bronze	1400 LG2
5	Stem	Stainless Steel	970 420 S37
6	Ring	Cast Iron	EN-JL 1030
7	Bolt	Stainless Steel	970 304S15



DIMENSIONS in mm

DN	Part No.	L	A	B
50	V4-CGV-GP16-G050	100	97	165
65	V4-CGV-GP16-G065	120	125	185
80	V4-CGV-GP16-G080	140	150	200
100	V4-CGV-GP16-G100	170	187	220
125	V4-CGV-GP16-G125	200	220	250
150	V4-CGV-GP16-G150	230	260	285
200	V4-CGV-GP16-G200	288	340	340
250	V4-CGV-GP16-G250	354	420	405
300	V4-CGV-GP16-G300	410	490	460

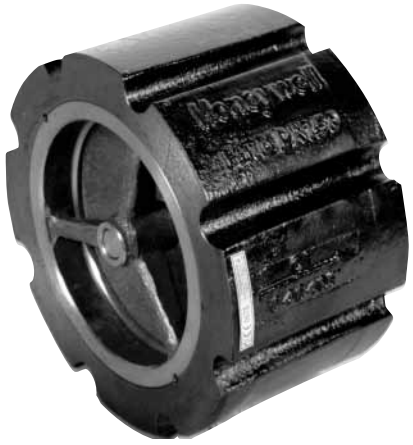
Note
1. Designed and tested in accordance with the lasted editions of EN12334.
2. Flange can be drilled to BS4504 PN10 / PN16, BS10 T D / E. Other flange types are available.

V4-CGW-GP16

FEATURES

- Cast Iron Body
- Silent Check function

V4-CGW-GP16



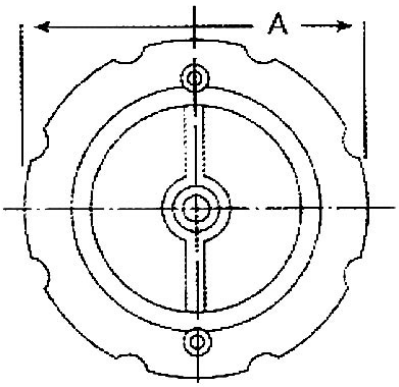
SPECIFICATIONS

Valve

Sizes	DN50 ~ DN250 (Wafer Type)
Nominal pressure	16 bar at -10°C to 120°C
Test pressure	Shell (Water) 24 Bar, Seat (Water) 17.6 Bar

MATERIALS

NO.	DESCRIPTION	MATERIAL	BS Standard
1	Body	Cast Iron	EN-JL1030
2	Plug	Bronze	1400LG2
3	Seat	Bronze	1400LG2
	Screw	Stainless Steel	970 304 S15
4	Bushing	Bronze	1400LG2
5	Spring	Stainless Steel	970 304 S15

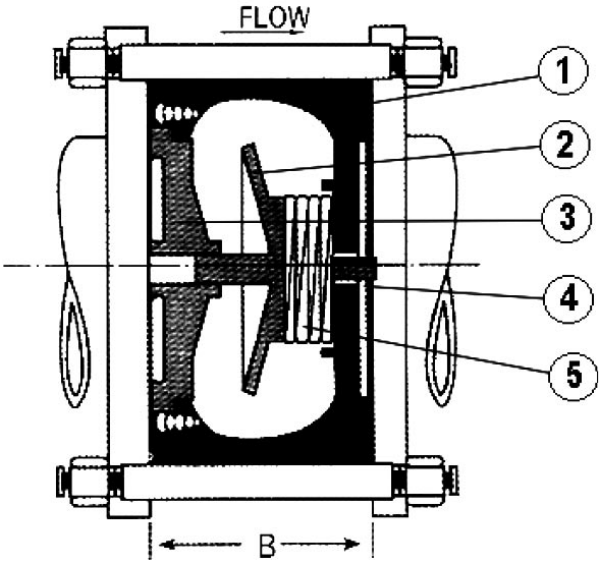


DIMENSIONS in mm

DN	Part No.	A	B	*Kv/Cv
50	V4-CGW-GP16-G050	113	67.0	42.8/50
65	V4-CGW-GP16-G065	127	73.0	61.6/72
80	V4-CGW-GP16-G080	150	80.0	78.7/92
100	V4-CGW-GP16-G0100	188	102.0	153.9/180
125	V4-CGW-GP16-G0125	213	118.0	236.0/276
150	V4-CGW-GP16-G0150	248	140.0	348.8/408
200	V4-CGW-GP16-G0200	340	165.0	615.6/720
250	V4-CGW-GP16-G0250	410	216.0	923.4/108

** Kv : Cubic meters per hour of water at 1 bar pressure drop.*

** Cv : Usgallons per minute of water at 1 psi pressure drop.*



INSTALLATION POSITION :
Valves can be installed in any position i.e. horizontal or vertical

V4-CHS-GP16

FEATURES

- Cast Iron Body
- Bolt - Bonnet
- Bronze seat & disc ring

V4-CHS-GP16

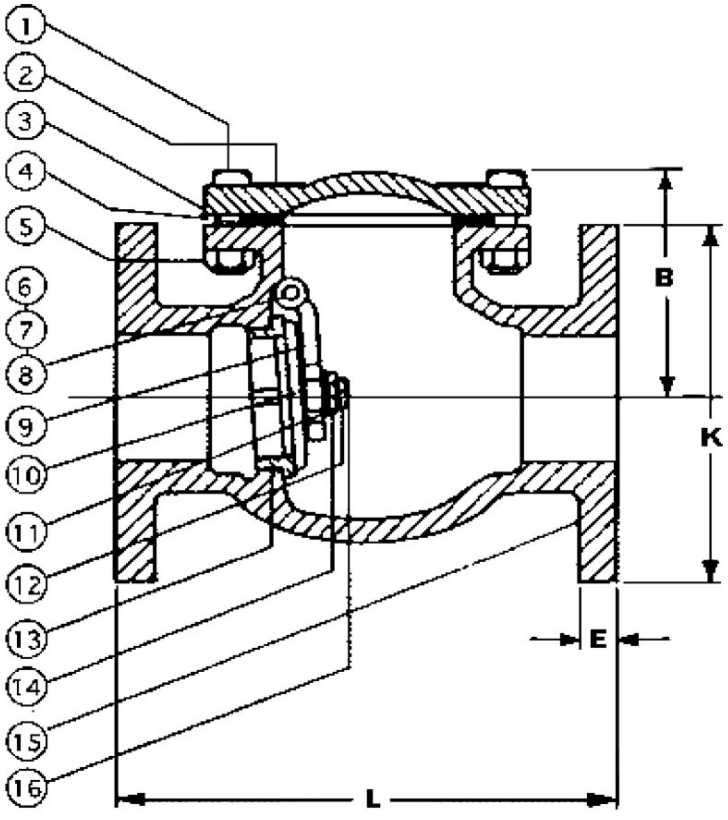
SPECIFICATIONS

Valve

Sizes	DN50 ~ DN300 (Flanged Ends)
Nominal pressure	16 bar at -10°C to 120°C
Test Pressure	Shell (Water) 24 Bar, Seat (Water) 17.6 Bar

MATERIALS

NO.	DESCRIPTION	MATERIAL	BS Standard
1	Bolts	Carbon Steel	Commercial
2	Identification Plate	Aluminium	Commercial
3	Bonnet	Cast Iron	EN-JL1030
4	Body Gasket	Graphite	Non Asbestos
5	Nuts	Carbon Steel	Commercial
6	SidePlug	Brass	2874 CZ114
7	Gasket	Rubber	EPDM
8	Hanger Pin	Stainless Steel	970 420 S37
9	Hanger	Ductile Iron	EN-JS1050
10	Disc	Cast Iron	EN-JL1030
	Disc Ring	Cast Bronze	1400 LG2
11	Washer	Steel	Commercial
12	Split Pin	Stainless Steel	970 420 S37
13	Seat Ring	Cast Bronze	1400 LG2
14	Disc Nut	Carbon Steel	Commercial
15	Body	Cast Iron	EN-JL1030
16	Stud Bolt	Carbon Steel	Commercial



DIMENSIONS in mm

DN	Part No.	L	K	B	E
50	V4-CHS-GP16-G050	203.2	165.0	121.0	20
65	V4-CHS-GP16-G065	215.9	185.0	133.0	20
80	V4-CHS-GP16-G080	241.3	200.0	142.0	22
100	V4-CHS-GP16-G100	292.1	220.6	163.0	24
125	V4-CHS-GP16-G125	330.2	250.0	182.0	26
150	V4-CHS-GP16-G150	355.6	285.4	212.0	26
200	V4-CHS-GP16-G200	495.3	340.0	267.0	30
250	V4-CHS-GP16-G250	622.3	405.0	305.0	32
300	V4-CHS-GP16-G300	698.5	460.0	343.0	32

V4-CWD-GP16

FEATURES

- Cast Iron Body
- Stainless Steel Disc

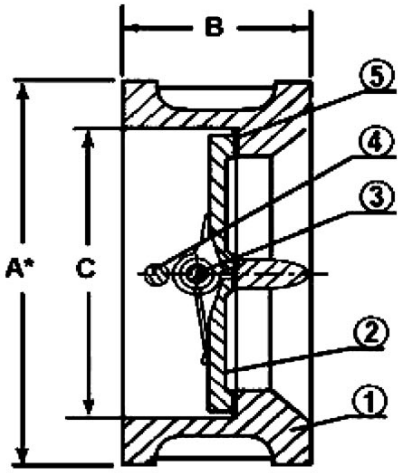
V4-CWD-GP16

SPECIFICATIONS

Valve

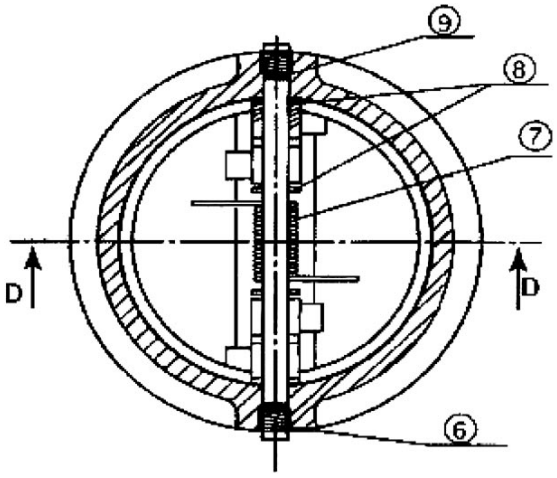
Sizes	DN50 ~ DN300 (Wafer Type)
Nominal pressure	16 bar at -10°C to 120°C
Test Pressure	Shell (Water) 24 Bar, Seat (Water) 17.6 Bar

(D-D Section)



MATERIALS

NO.	DESCRIPTION	MATERIAL	BS Standard
1	Body	Cast Iron	EN-JL 1030
2	Plates	Stainless Steel	970 304 S15
3	Hinge pin	Stainless Steel	970 420 S37
4	Stop pin	Stainless Steel	970 420 S37
5	Seat	Rubber	NBR or EPDM
6	Pin retainer	Stainless Steel	970 420 S37
7	Spring	Stainless Steel	970 316 S16
8	Spacer	Teflon	PTFE
9	Washer	Rubber	EPDM



DIMENSIONS in mm

DN	Part No.	A	B	C
50	V4-CWD-GP16-G050	109	54	66
65	V4-CWD-GP16-G065	129	54	78
80	V4-CWD-GP16-G080	144	57	90
100	V4-CWD-GP16-G0100	164	64	115
125	V4-CWD-GP16-G0125	194	70	141
150	V4-CWD-GP16-G0150	220	76	170
200	V4-CWD-GP16-G0200	275	95	210
250	V4-CWD-GP16-G0250	330	108	273
300	V4-CWD-GP16-G0300	380	143	324

V4-FOV-GP16

FEATURES

- Cast Iron Body
- Bolted Bonnet Cover
- Stainless Steel 304 Perforated Screen

V4-FOV-GP16

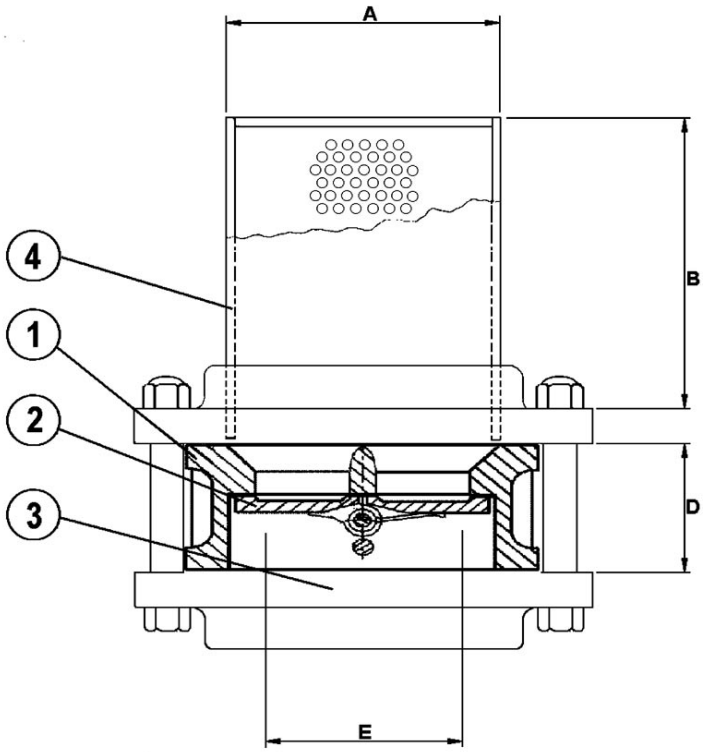
SPECIFICATIONS

Valve

Sizes	DN50 ~ DN300
Nominal pressure	Non-shock working pressure 16 bar at -10°C to 120°C
Test Pressure	Shell (Water) 24 Bar, Seat (Water) 17.6 Bar

MATERIALS

NO.	DESCRIPTION	MATERIAL	BS Standard
1	Body	Cast Iron	EN-JL1030
2	Disc	Stainless Steel	970 304 S15
3	Flange	Carbon Steel	080A25
4	Screen	Stainless Steel	970 304 S15



DIMENSIONS in mm

DN	Part No.	A	B	D	E
50	V4-FOV-GP16-G050	66.0	76.0	54.0	33.3
65	V4-FOV-GP16-G065	79.0	89.0	54.0	47.8
80	V4-FOV-GP16-G080	92.0	95.0	57.0	52.6
100	V4-FOV-GP16-G100	117.0	127.0	64.0	76.2
125	V4-FOV-GP16-G125	143.0	165.0	70.0	95.3
150	V4-FOV-GP16-G150	168.0	191.0	76.0	120.7
200	V4-FOV-GP16-G200	219.0	229.0	95.0	163.5
250	V4-FOV-GP16-G250	276.0	381.0	108.0	183.7
300	V4-FOV-GP16-G300	327.0	432.0	143.0	269.3

V4-BLC-GP16

FEATURES

- Balancing through stroke limitation with digital pre-setting and visible pre-setting indicator
- Equipped with 2 pressure test cocks for differential pressure measurement
- Rising spindle with EPDM O-ring sealing
- Pre-setting isn't altered when handwheel is turned
- Regulation screw protected by protection cap

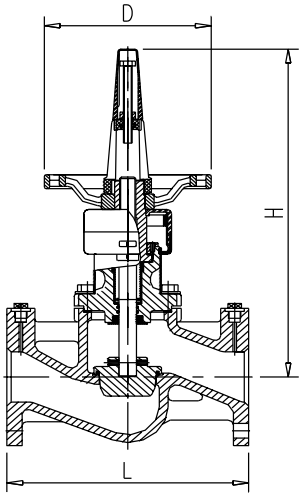
V4-BLC-GP16

SPECIFICATIONS

Flange	BS EN 1092-2 PN16
Operating temperature	-10 to 120 °C (14 to 248 °F) water applications
Nominal pressure	16 Bar
k_{VS}-values	see table below

MATERIALS

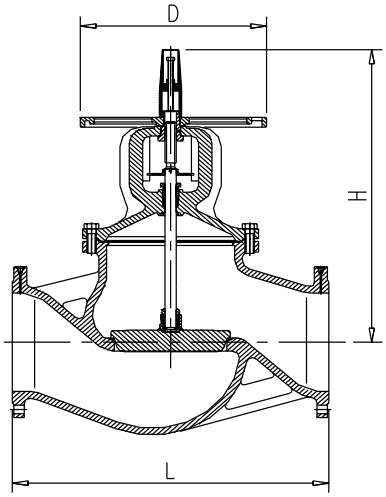
NO.	DESCRIPTION	MATERIAL	BS Standard
1	Body	Cast Iron	EN-JL1040
2	Bonnet	Cast Iron	EN-JL1040
3	Disc	Carbon Steel, chromium plated with PTFE seat ring	060A35
4	Gasket	Stainless Steel + Graphite	970 304 S15
5	Stem	Stainless Steel	970 420 S37
6	Handwheel	Ductile Iron	EN-JS1050



Size DN65 - DN200

DIMENSIONS in mm

DN	Part No.	(R)	k_{VS}-value	L	H	ØD	n x Ød
65	V4-BLC-GP16-G065	2 1/2"	74.4	290	420	190	4 x 19
80	V4-BLC-GP16-G080	3"	111.0	310	443	190	8 x 19
100	V4-BLC-GP16-G100	4"	165.0	350	477	190	8 x 19
125	V4-BLC-GP16-G125	5"	242.0	400	511	305	8 x 19
150	V4-BLC-GP16-G150	6"	372.0	480	550	305	8 x 23
200	V4-BLC-GP16-G200	8"	704.0	600	665	305	12 x 23
250	V4-BLC-GP16-G250	10"	945.0	730	829	515	12 x 28
300	V4-BLC-GP16-G300	12"	1,635.0	850	883	515	12 x 28



Size DN250 - DN300

Product Selection Chart

Honeywell

Category	Type of Body	Type of Valve	Standard	Pressure Rating	Drilling Standard/Size	Special request	

Category

- V = valve
- G = gauge
- J = joint

Type of Body

- 1 = Brass
- 2 = Forge Brass
- 3 = Bronze
- 4 = Cast Iron
- 5 = Ductile Iron
- 6 = Aluminium
- 7 = Stainless Steel 304
- 8 = Stainless Steel 316
- 9 = Carbon Steel

Type of Valve

- GAN = Gate valve, non-rising stem
- GAR = Gate valve, rising stem
- GLO = Globe valve
- BAF = Ball valve, full bore
- BAL = Ball valve, reduced bore
- CHS = Check valve, horizontal swing type
- CVS = Check valve, vertical check
- CGV = Check valve, silent check globe pattern, flange type
- CGW = Check valve, silent check globe pattern, wafer type
- CHL = Check valve, horizontal lift type
- CVL = Check valve, vertical lift type
- BFW = Butterfly valve, wafer type
- BFL = Butterfly valve, lugged type
- CWS = Check valve, wafer, swing type, single disc
- CWD = Check valve, wafer, double disc
- JRS = Rubber flexible joint, single bellow
- JRD = Rubber flexible joint, double bellow
- YST = Y-Strainer
- BLC = Manual Balancing valve
- PRA = Pressure, Absolute
- PCP = Pressure, Compound
- PVA = Pressure, Vacuum

Standard

- A = American Standard
- J = Japanese Standard
- B = British Standard
- G = German Standard

Pressure Rating

- J05 = JIS5k
- J10 = JIS10k
- J15 = JIS15k
- J20 = JIS20k
- P07 = PN07
- P10 = PN10
- P14 = PN14
- P16 = PN16
- P20 = PN20
- P25 = PN25
- P32 = PN32
- P40 = PN40
- P64 = PN64
- 125 = 125#ANSI
- 150 = 150#ANSI
- 200 = 200#ANSI
- 250 = 250#ANSI
- 300 = 300#ANSI
- 400 = 400#ANSI
- 600 = 600#ANSI

Drilling Standard/Size

Size	ANSI	BST	JIS	DIN
1/4”	A025	B006	J006	G006
3/8”	A038	B010	J010	G010
1/2”	A050	B015	J015	G015
3/4”	A075	B020	J020	G020
1”	A100	B025	J025	G025
11/4”	A125	B032	J032	G032
11/2”	A150	B040	J040	G040
2”	A200	B050	J050	G050
21/2”	A250	B065	J065	G065
3”	A300	B080	J080	G080
4”	A400	B100	J100	G100
5”	A500	B125	J125	G125
6”	A600	B150	J150	G150
8”	A800	B200	J200	G200
10”	AA10	B250	J250	G250
12”	AA12	B300	J300	G300
14”	AA14	B350	J350	G350
16”	AA16	B400	J400	G400
18”	AA18	B450	J450	G450
20”	AA20	B500	J500	G500

Special request

- T = Thread
- S = Solder
- F = Flange
- W = Wafer
- L = Lugged
- G = Groove
- 0 = handlever
- 1 = gear operator
- 03 = on/off control
- 04 = modulating control
- TW = w/o handlever & face plate
- A = Dial face, 65mm Diameter, bottom connection
- B = Dial face, 65mm Diameter
- C = Dial face, 90mm Diameter, bottom connection
- D = Dial face, 90mm Diameter
- E = Dial face, 115mm Diameter, bottom connection
- F = Dial face, 115mm Diameter

- 0 = Ductile iron disc
- 1 = Stainless steel
- 2 = Alubronze

Hydrostatic Shock Working Pressure

All Honeywell valves are suitable for working pressure specified in the catalogue. These working pressures don't take SHOCK pressure into consideration.

"SHOCK" occurs when there is a rise in pressure greater than the static working pressure. When a valve in a hydraulic system is closed suddenly, the flow of liquid stops instantaneously. The sudden stop of liquid flow effects a rise in pressure. Pressure increase due to shock is not dependent upon the working pressure in the system but upon the speed at which the liquid is flowing. In some cases, shock can cause valves or piping to fail.

Shock generally happens in line equipped with check or quick –closing valves, or in line supplied by reciprocating pumps. It may also be produced to a lesser degree, by rapid closure of gate and globe valves. Therefore, care should be taken when closing valves installed in liquid lines and also hydraulic installations should be equipped with some kind of shock absorbers.

Where shock is likely to occur, the maximum shock pressure should be added to the working pressure of the line to determine working pressure of the products in the line.

Body rating (nominal):
The theoretical pressure rating, expressed in kPa, of the valve body exclusive of packing, disc, etc. The nominal rating is often cast on the valve body and provides a way to classify the valve by pressure. A valve of specified body material and nominal body rating often has characteristics such as pressure-temperature ratings, wall thickness, and end connections which are determined by a society such as ANSI (American National Standards Institute). Note that the nominal body rating is not the same as the actual body rating.

Body rating (actual):
The correlation between safe, permissible flowing fluid pressure and flowing fluid temperature of the valve body (exclusive of the packing, disc, etc.). The nominal valve body rating is the permissible pressure at a specific temperature.

EXAMPLE: A cast-iron, screwed-end valve with a nominal rating of 850 kPa could have an actual rating of 850kPa at 180°C and 1200 kPA at 65°C.

Maximum pressure and temperature:
The maximum pressure and temperature limitations of fluid flow that a valve can withstand. These ratings may be due to valve packing, body, or disc material or actuator limitations. The actual valve body ratings are exclusively for the valve body and the maximum pressure and temperature ratings are for the complete valve (body and trim). Note that the maximum pressure and temperature ratings may be less than the actual valve body ratings.

Example:
The body of a valve, exclusive of packing, disc, etc, has a pressure and temperature rating of 850 kPa at 180°C. If the valve contains a composition disc that can withstand a temperature of only 115°C, then the temperature limit of the disc becomes the maximum temperature ratings for the valves.

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