



## HQ004 Electric Actuator on DURAPIPE, VKD PVC Double Union Ball Valve

- BSP, Imperial and Metric Socket
- PVC Body, Full Flow
- EPDM or FPM Seals
- Fitted to HKC (HQ004) Electric Actuator
- On/Off Duty or Modulating Option

### Description

The VKD DualBlock® ball valve is a fully unionised valve that stands up to the most severe industrial applications and probably one of the most technically advanced on the market. Fitted to the HKC range of Electric Actuators, which are all built and tested in house.

EPDM and FPM seals are offered as options, as are the choice of end connections. Pressure rating: Maximum working pressure: 16 bar at 20°C. Options include choices of supply voltage and the option of fail safe battery back up and modulating control. Use our product selector tool to obtain the perfect valve for your application.

Patented DualBlock® system: The locking device ensures the union nuts are retained in position, even under the most arduous conditions, i.e. vibration or thermal expansion. Patented Seat Stop® ball seat carrier, with micro adjustment of the ball seats and 'take up' of axial pipe loads, which can all be done without the need to drain the system



### Description

Durapipe (FIP) offers a PVC plastic bodied ball valve (Type VKD). The valve is fitted complete with a HKC electric actuator, sized to offer both power and repeatability. As an automatic valve, it gives remote On/Off operation. The unit is lightweight and has options for both seal material and end connections, BSP threaded, with metric and imperial solvent weld ends.



### Beschreibung

Durapipe (FIP) bietet einen Kugelhahn mit PVC-Kunststoffgehäuse (Typ VKD) an. Das Ventil ist komplett mit einem elektrischen HKC-Antrieb ausgestattet, der so dimensioniert ist, dass er sowohl Leistung als auch Wiederholbarkeit bietet. Als automatisches Ventil bietet es ferngesteuerten Ein-/Aus-Betrieb. Die Einheit ist leicht und hat Optionen für Dichtungsmaterial und Endanschlüsse, BSP-Gewinde, mit metrischen und imperialen Quellschweißenden.



### Descripción

Durapipe (FIP) ofrece una válvula de bola con cuerpo de plástico de PVC (Tipo VKD). La válvula está equipada con un actuador eléctrico HKC, dimensionado para ofrecer tanto potencia como repetibilidad. Como válvula automática, proporciona una operación remota de encendido/apagado. La unidad es liviana y tiene opciones tanto para el material del sello como para las conexiones finales, rosca BSP, con extremos para soldar solventes métricos e imperiales.

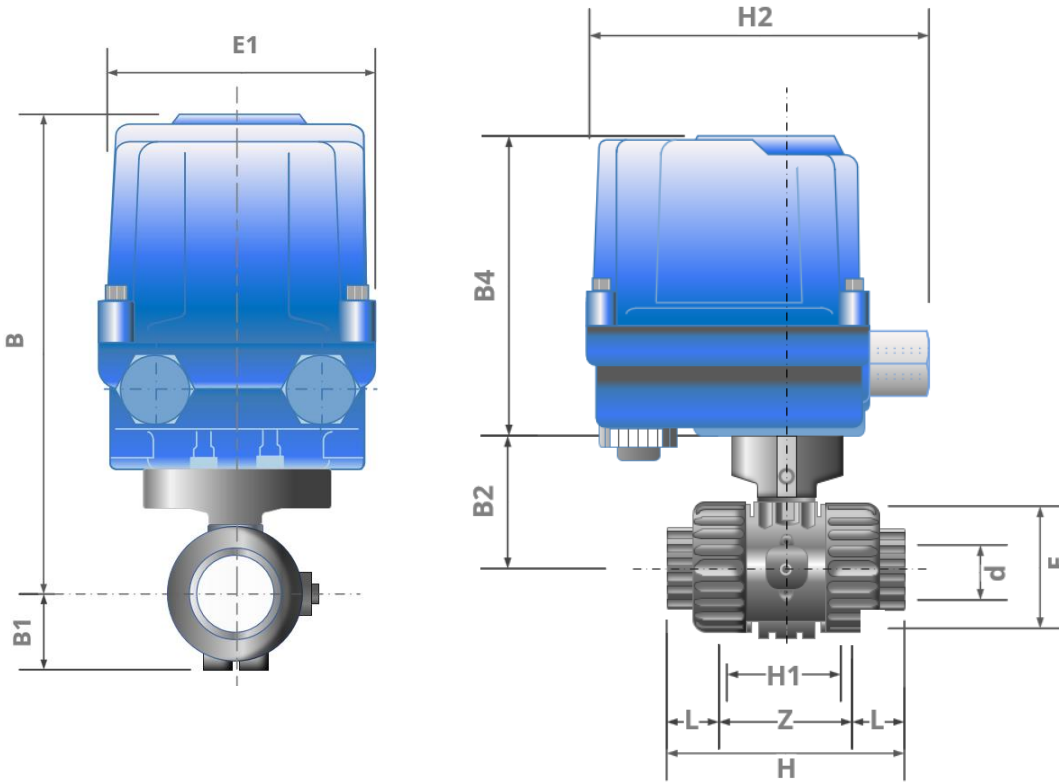


### Description

Durapipe (FIP) propose une vanne à boisseau sphérique en plastique PVC (Type VKD). La vanne est équipée d'un actionneur électrique HKC, dimensionné pour offrir à la fois puissance et répétabilité. En tant que vanne automatique, elle permet un fonctionnement marche/arrêt à distance. L'unité est légère et dispose d'options pour le matériau d'étanchéité et les connexions d'extrémité, filetés BSP, avec extrémités à souder au solvant métriques et impériales.



# EA5562



## HQ004 Electric VKD Ball Valve

- PVC VKD Ball Valve
- EPDM or FPM Seats
- Full Bore
- Reliable Electric Actuator
- IP67 weatherproof
- Manual override
- Anti-condensation heater
- Four limit switches
- Lightweight and Robust
- 24 VAC/DC & 110/240 V AC

### Serial/Series Number VKDFV-AP9002

#### HQ004 - BSP THREADED ENDS

d	DN	PN	Act.	H	E	H <sub>1</sub>	H <sub>2</sub>	H <sub>4</sub>	L	Z	B	B <sub>1</sub>	B <sub>2</sub>
3/8"	10	16	HQ004	103	54	65	152	132	11.4	80.2	190	29	58
1/2"	15	16	HQ004	110	54	65	152	132	15	80	190	29	58
3/4"	20	16	HQ004	116	65	70	152	132	16.3	83.4	205.5	34.5	69
1"	25	16	HQ004	134	73	78	152	132	19.1	95.8	206	39	74
1 1/4"	32	16	HQ004	153	86	88	152	132	21.4	110.2	229	46	91
1 1/2"	40	16	HQ004	156	98	91	152	132	21.4	113.2	236	52	97
2"	50	16	HQ004	186	122	111	152	132	25.7	134.6	246	62	114

### Serial/Series Number VKDLV-AP9002

#### HQ004 - BS IMPERIAL SOCKET ENDS

d	DN	PN	Act.	H	E	H <sub>1</sub>	H <sub>2</sub>	H <sub>4</sub>	L	Z	B	B <sub>1</sub>	B <sub>2</sub>
1/2"	15	16	HQ004	103	54	65	152	132	16.5	70	190	29	58
3/4"	20	16	HQ004	115	65	70	152	132	19	77	205.5	34.5	73.5
1"	25	16	HQ004	128	73	78	152	132	22.5	83	206	39	74
1 1/4"	32	16	HQ004	146	86	88	152	132	26	94	229	46	97
1 1/2"	40	16	HQ004	164	98	91	152	132	30	104	236	52	104
2"	50	16	HQ004	199	122	111	152	132	36	127	246	62	114

### Serial/Series Number VKDIV-AP9002

#### HQ004 - METRIC SOCKET ENDS

d	DN	PN	Act.	H	E	H <sub>1</sub>	H <sub>2</sub>	H <sub>4</sub>	L	Z	B	B <sub>1</sub>	B <sub>2</sub>
16	10	16	HQ004	103	54	65	152	132	14	75	190	29	58
20	15	16	HQ004	103	54	65	152	132	16	71	190	29	58
25	20	16	HQ004	115	65	70	152	132	19	77	205.5	34.5	73.5
32	25	16	HQ004	128	73	78	152	132	22	84	206	39	74
40	32	16	HQ004	146	86	88	152	132	26	94	229	46	97
50	40	16	HQ004	164	98	91	152	132	31	102	236	52	104
63	50	16	HQ004	199	122	111	152	132	38	123	246	62	114

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## HQ004 Electric Actuator

- Powder coated Aluminium Actuator
- Reliable On/Off Electric Actuator
- IP66 weatherproof
- Manual override, Optical Position Indicator
- Anti-condensation heater
- Adjustable limit switches
- Lightweight and Robust
- 12-24 VAC/DC & 110/240 VAC
- **Options** for Modulating Actuator
- **Options** for Fail Safe Close

### Serial/Series Number VKDFV-AP9002

The HQ004 electric rotary actuator is a compact and powerful unit, designed for on/off duty, which provides a long service life. Materials and components have been chosen for maintenance free operation. The modular design offers many additional features such as limit switches, heaters, optical indicator and manual override, all housed in a aluminium powder coated enclosure.

Full actuator details can be found on SKU AP9002 on the valves online website.

### Standard Specification

Enclosure	:	Weatherproof IP67
Power Supply	:	110/220v 50/60Hz, 24 VAC/DC
Duty Cycle	:	(On/Off Duty) S2, 35%
Motor	:	Reversible Motor
Limit Switches	:	2 x SPDT, 250V AC 3A
Space Heater	:	2W (110/240 V AC)
Manual Override	:	Hexagon
Conduit Entries	:	2 x M20
Travel Angle	:	320°± 10° (0°to 320°)
Ambient Temperature	:	minus 20°C to plus 70°C
External Coating	:	Dry Powder Polyester

### Standard Specification

Type (model)	Max Output Torque	Operating Time 50/60Hz	Motor Class E	Rated Current (A)				Weight
				24V	110V	220V	24VDC	
		90°	W F					Kg
HQ - 004	40NM	14 / 12 Secs		0.3	0.39/0.4	0.19/0.2	0.2	3
HQ - 006	80NM	14 / 12 Secs		0.3	0.39/0.4	0.19/0.2	0.2	3

- Output torques of 40Nm
- Reversible motor with low current consumption
- IP67 weatherproof
- Two M20 cable entries
- Manual override
- Anti-condensation heater
- Four limit switches
- Push button terminal strip

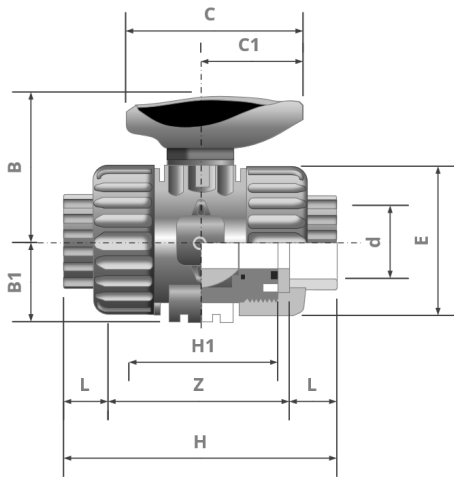
The modular design offers many additional features to be added to the basic device such as extra limit switches, potentiometers and emergency power.

With the control actuator version the input signals (eg. 4-20 mA, 0-20 mA, 0-10 V) as well as the output signals can be programmed.

Heating resistor and torque limiter are in standard.

## Serial/Series Number VKDFV – BSP Threaded

A PVC-U plastic bodied ball valve. Offered as either a manual isolating valve and easily adapted to operate with actuators, this valve has options for both seal material. Sizes range from 3/8" - 2" BSP threaded.



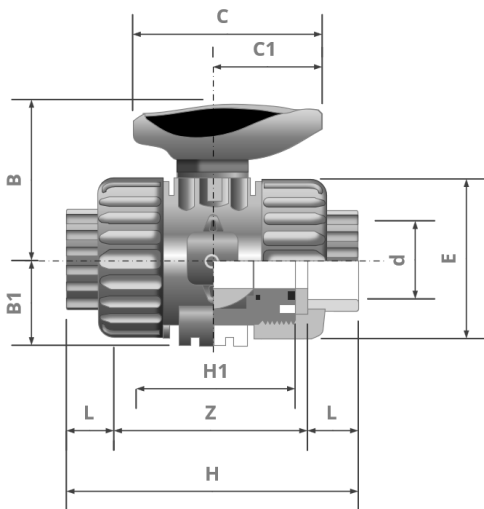
### SKU-BV5520

#### Dimensions - BSP THREADED ENDS

d	DN	PN	L	H	H1	E	B	B1	C	C1	Z****	N/m
3/8"	10	16	11.4	103	65	54	54	29	67	40	80.2	3
1/2"	15	16	15	110	65	54	54	29	67	40	73	3
3/4"	20	16	16.3	116	70	65	65	34.5	85	49	82.4	4
1"	25	16	19.1	134	78	73	69.5	39	85	49	89.8	6
1 1/4"	32	16	21.4	153	88	86	82.5	46	108	64	103.2	7
1 1/2"	40	16	21.4	156	91	98	89	52	108	64	121.2	10
2"	50	16	25.7	186	111	122	108	62	134	76	147.6	16

## Serial/Series Number VKDLV-BS Imperial Socket

A PVC-U plastic bodied ball valve. Offered as either a manual isolating valve and easily adapted to operate with actuators, this valve has options for both seal material. Sizes range from 1/2" - 2" BS Imperial Socket.



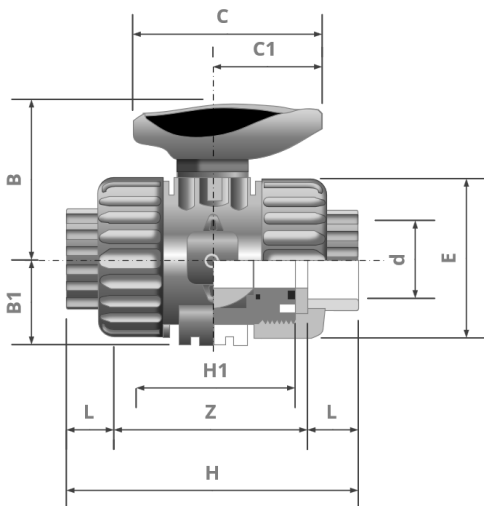
### SKU-BV5521

#### Dimensions - BS 5392 Female Solvent Ends

d	DN	PN	L	Z	H	H1	E	B	B1	C	C1	N/m
1/2"	15	16	16.5	70	103	65	54	54	29	67	40	3
3/4"	20	16	19	77	115	70	65	65	34.5	85	49	4
1"	25	16	22.5	83	128	78	73	69.5	39	85	49	6
1 1/4"	32	16	26	94	146	88	86	82.5	46	108	64	7
1 1/2"	40	16	30	104	164	91	98	89	52	108	64	10
2"	50	16	36	127	199	111	122	108	62	134	76	16

## Serial/Series Number VKDIV-Metric Socket

A PVC-U plastic bodied ball valve. Offered as either a manual isolating valve and easily adapted to operate with actuators, this valve has options for both seal material. Sizes range from 16mm - 63mm Metric Socket.

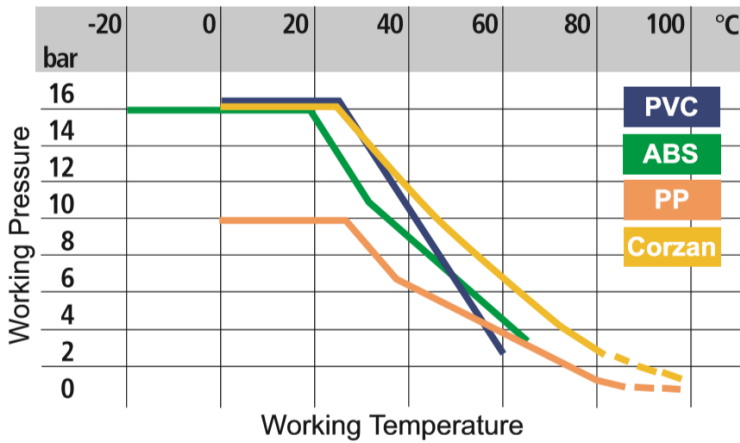


### SKU-BV5522

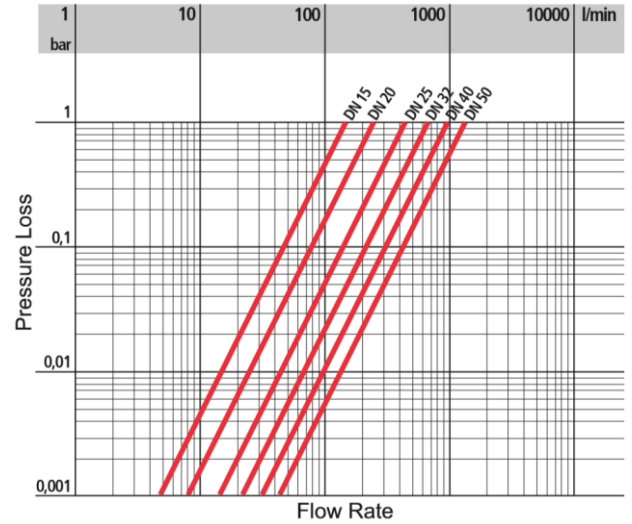
#### Dimensions - Female Metric Ends

d	DN	PN	L	Z	H	H1	E	B	B1	C	C1	N/m
16	10	16	14	75	103	65	54	54	29	67	40	3
20	15	16	16	71	103	65	54	54	29	67	40	4
25	20	16	19	77	115	70	65	65	34.5	85	49	6
32	25	16	22	84	128	78	73	69.5	39	85	49	7
40	32	16	26	94	146	88	86	82.5	46	108	64	9
50	40	16	31	102	164	91	98	89	52	108	64	10
63	50	16	38	123	199	111	122	108	62	134	76	16

## Dimensions and Standards



Pressure/temperature rating for water and harmless fluids to which the material is RESISTANT. In other cases a reduction of the PN is required. (25 years with safety factor).



DN	10	15	20	25	32	40	50
$k_{v100}$	80	200	385	770	1100	1750	3400

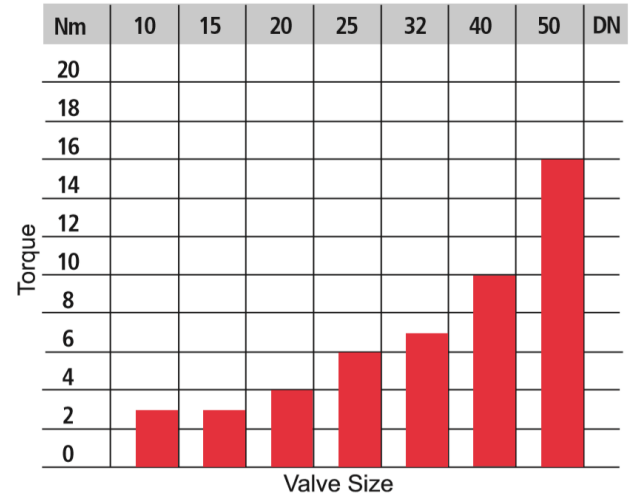
### Flow coefficient $k_{v100}$

$k_{v100}$  is the number of litres per minute of water at a temperature of 20°C that will flow through a valve with a one bar pressure differential at a specified rate. The  $k_{v100}$  values shown in the table are calculated with the valve fully open.

**Imperial** The Imperial System is manufactured in accordance with the relevant British Standards: BS 5392 fittings.

**Metric** The Metric System is manufactured generally in accordance with the relevant International Standards: ISO 15493, KIWA 49 and 549, DIN 8062 and 8063.

**BSP Thread** Threaded fittings conform to the requirements of BS 21/DIN 2999/ISO7. Socket dimensions of metric fittings for solvent welding comply with ISO/DIS 727-1. Interchangeability Components in the imperial and metric ranges are not interchangeable



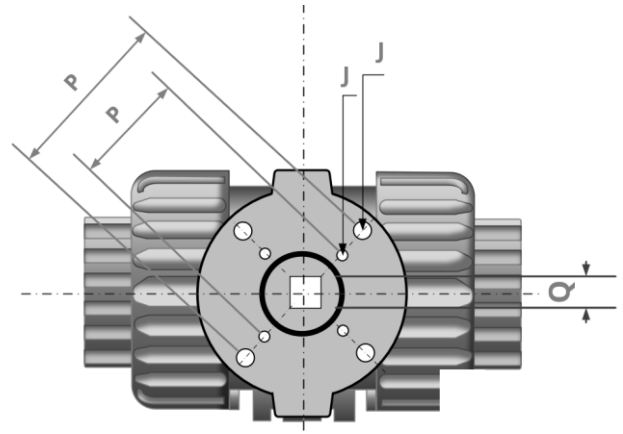
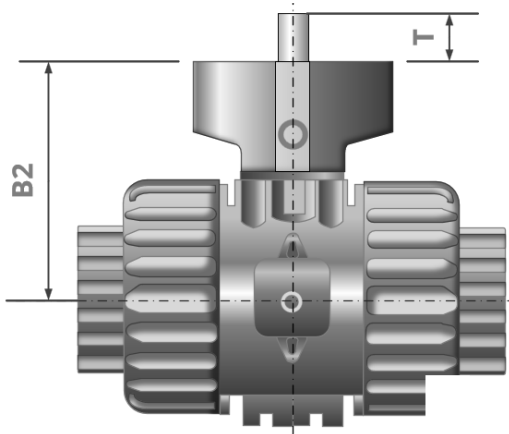
Torque at max. working pressure: 16 Bar.

DN (nominal bore)	Metric Size (mm)	Imperial Size (inch)
10	16	3/8"
15	20	1/2"
20	25	3/4"
25	32	1"
32	40	1 1/4"
40	50	1 1/2"
50	63	2"
65	75	2 1/2"
80	90	3"
100	110	4"
125	140	5"
150	160	6"
200	225	8"
250	250	10"
300	315	12"

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## Accessories

## Mounting Bracket



The valve can be supplied actuated, pneumatic or electric, by our Actuation Department. The GR-PP mounting bracket (with standard ISO 5211 drillings) can be supplied for self-actuation and/or retrofitting of actuators to installed valves

d	DN	B2	Q	T	P x J	P x J	Product Code
1/2" - 20	15	58	11	12	F03 x 5.5	F04 x 5.5	KTPQPEF
3/4" - 25	20	69	11	12	F03 x 5.5	F05 x 6.5	KTPQPGG
3/4" - 25	20	69	11	12		F04 x 5.5	KTPQPG4
1" - 32	25	74	11	12	F03 x 5.5	F05 x 6.5	KTPQPHH
1" - 32	25	74	11	12		F04 x 5.5	KTPQPH4
1 1/4" - 40	32	91	14	16	F05 x 6.5	F07 x 7.5	KTPQPII
1 1/2" - 50	40	97	14	16	F05 x 6.5	F07 x 7.5	KTPQPJJ
2" - 63	50	114	14	16	F05 x 6.5	F07 x 7.5	KTPQPLL

## pneumatic



CE Ex IIC T4 Gc

## Electric Options



Valves



J+J