

HANSENtm

VALVES



FOR BEST FLOW



Quality
Endorsed
Company
ISO 9001
QEC 3776

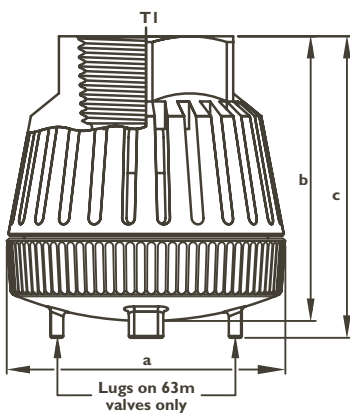
HANSEN™

FOOT VALVES

FOOT VALVE INFORMATION

- The unique design of the HANSEN™ Foot Valve gives you more flow in less time which saves cost.
- Unrestricted flow.
- Efficiency in excess of 95% many other types 35% - 60%
- Unique Product Design incorporates Built in Strainer.
- Operates via Pressure Differential.
- Operates at any Angle or Position.
- No Poppet Valve to Wear or Jam - Smooth Flow.
- Easy Serviced - if required.
- Diaphragm and Spring are Interchangeable Components used in the same size Check Valve.
- Blockage reduced due to Low Fluid Velocity through Slots.
- Manufactured from Non-Corrosive materials:
BODY - High Quality Glass Fibre Reinforced Nylon.
DIAPHRAGM - Nitrile Rubber.
SPRING - 302 Stainless Steel.
- All components of this valve manufactured from materials approved for use with potable (drinkable) water.
- Maximum Recommended Working Pressure - 16 Bar (1600 kPa, 235 PSI) @ 20°C.
- All connecting threads are BSPT/NPT.

FOOT VALVE DIMENSIONS



Code	TI BSPT	a mm	b mm	c mm
FV25	1"	69	72	na
FV32	1 1/4"	87	88	na
FV40	1 1/2"	99	99	na
FV50	2"	123	120	na
FV63	2 1/2"	152	na	157

EXTEND THE LIFE OF YOUR PUMP

HANSEN™ Foot Valves are used on the end of a suction line to stop the fluids in the line emptying when the pump is turned off. This eliminates the need to prime your pump each time you start it.

SELF CLEANING

The unique design provides self cleaning as part of the valve operation

NON-CORROSIVE

Non-Corrosive materials for a long life valve



EASY ACCESS

Screw cap access for servicing to all moving parts if required

FAST RESPONSE

Smooth Operating Valve for High Efficiency

Works at Any Angle; up side down, on its side or straight up and down.

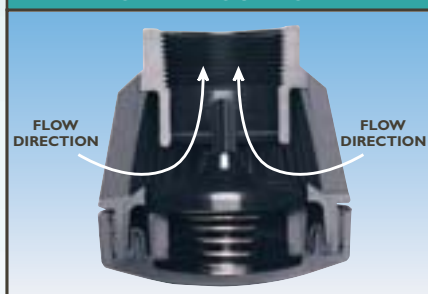
Available Sizes:

25mm, 32mm, 40mm, 50mm, 63mm (1", 1 1/4", 1 1/2", 2", 2 1/2" BSPT/NPT)

FOOT VALVE OPERATION

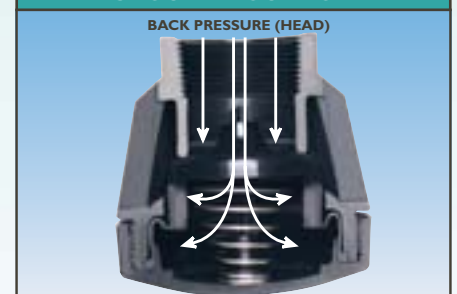
When fluid is required in the direction of flow, the diaphragm opens allowing full flow. As the flow through the valve stops, the diaphragm closes preventing any return flow. The greater the back or head pressure, the better the diaphragm seals against the valve seat.

OPEN POSITION



Cross section shows valve in fully open position

CLOSED POSITION



Cross section shows valve in fully closed position

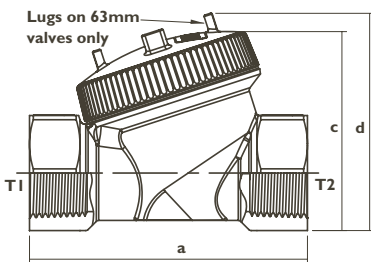
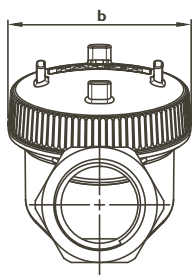
HANSEN™

CHECK VALVES

CHECK VALVE INFORMATION

- The unique design of the HANSEN™ Check Valve gives you more flow.
- Exceptional Flow - Move More water in Less Time.
- Inline Servicing: Removable cap, easy access to all moving parts. VALVE STAYS INLINE FOR SERVICING.
- No Poppet Valve to Wear or Jam - Smooth Flow.
- Interchangeable Components - Diaphragm and Spring are Interchangeable Components used in the same size Foot Valve.
- Manufactured from Non-Corrosive materials:
BODY - High Quality Glass Fibre Reinforced Nylon.
DIAPHRAGM - Nitrile Rubber.
SPRING - 302 Stainless Steel.
- All components of this valve manufactured from materials approved for use with potable (drinkable) water.
- Fast Response Opening & Closing
- Maximum Recommended Working Pressure - 10 Bar (1000 kPa. 145 PSI) @ 20°C.
- When screwing metal products into valve, do not over tighten.
- All pipe work must be adequately supported.
- All connecting threads are BSPT/NPT.

CHECK VALVE DIMENSIONS



Code	T1 BSPT	T2 BSPT	a mm	b mm	c mm	d mm
CV25	1"	1"	102	69	74	na
CV32	1 1/4"	1 1/4"	122	87	94	na
CV40	1 1/2"	1 1/2"	133	99	106	na
CV50	2"	2"	164	123	132	na
CV63	2 1/2"	2 1/2"	198	152	na	180

MORE FLOW

HANSEN™ Check Valves are used in-line as a non return valve to stop fluids flowing back through your system.

EASY ACCESS

Screw cap access for in-line servicing to all moving parts

NON-CORROSIVE

Non-Corrosive materials for a long life valve



EXCEPTIONAL FLOW

Exceptional Flow Rate means Shorter Pumping Time

FAST RESPONSE

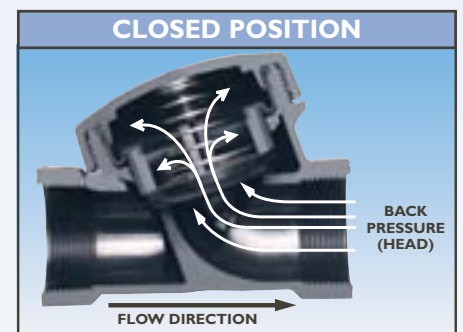
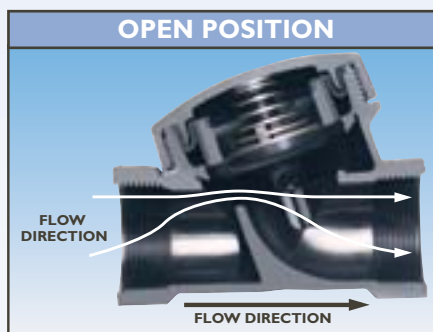
Smooth Operating Valve for High Efficiency

Available sizes:

25mm, 32mm, 40mm, 50mm, 63mm (1", 1 1/4", 1 1/2", 2", 2 1/2" BSPT/NPT)

CHECK VALVE OPERATION

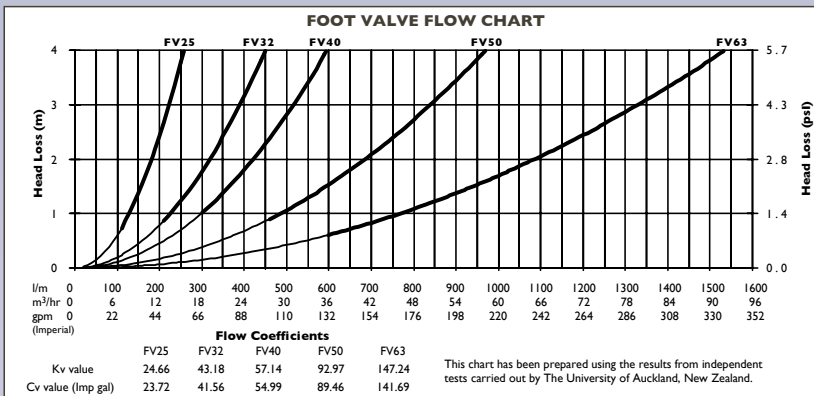
When fluid is required in the direction of flow, the diaphragm opens allowing flow. As the flow through the valve stops, the diaphragm closes preventing any return flow. The greater the back or head pressure, the better the diaphragm seals against the valve seat.



Cross section shows valve in fully open position

Cross section shows valve in fully closed position

VALVE TECHNICAL INFORMATION



Maximum Head Pressure @ 20°C:

	FV25	FV32	FV40	FV50	FV63
psi	235	235	235	235	235
Bar	16	16	16	16	16
kPa	1600	1600	1600	1600	1600

Vacuum required for initial flow:

	FV25	FV32	FV40	FV50	FV63
psi	-0.5	-0.5	-0.5	-0.5	-0.5
kPa	-3.5	-3.5	-3.5	-3.5	-3.5

Vacuum required to fully open diaphragm:

	FV25	FV32	FV40	FV50	FV63
psi	-1.5	-1.5	-1.5	-1.5	-1.5
kPa	-10.0	-10.0	-10.0	-10.0	-10.0

Minimum flow for self cleaning action:

	FV25	FV32	FV40	FV50	FV63
l/min	110	210	300	460	600

Installation: Valve will operate at any angle.

Maximum operating temperature: @ 20°C

Head Loss: See chart above.

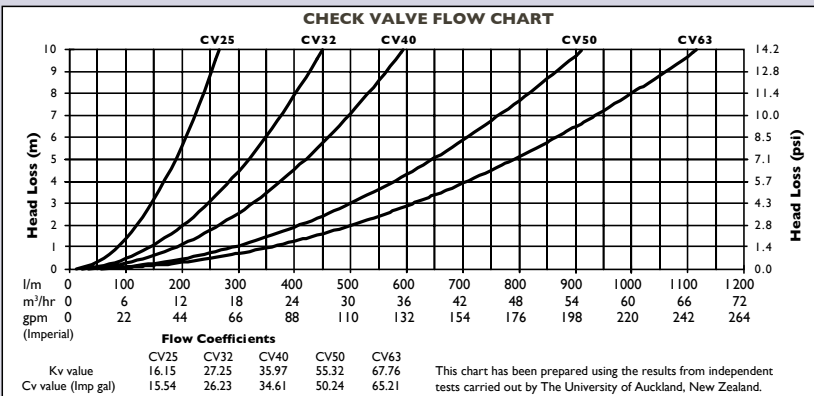
Note: All references to gallons are in Imperial gallons.

Choosing the Correct Foot Valve

Step 1: Measure or calculate the capacity of your pump installation.

Step 2: Look at the chart for the valve(s) that cover the flow rate.

Step 3: For dirty water applications choose the largest valve that will be operating in the area shown by the thicker line.



Maximum Recommended Working Pressure @ 20°C:

	CV25	CV32	CV40	CV50	CV63
psi	145	145	145	145	145
Bar	10	10	10	10	10
kPa	1000	1000	1000	1000	1000

Pressure required for initial flow:

	CV25	CV32	CV40	CV50	CV63
psi	0.5	0.5	0.5	0.5	0.5
kPa	3.5	3.5	3.5	3.5	3.5

Flow required to fully open diaphragm:

	CV25	CV32	CV40	CV50	CV63
l/min	110	142	158	225	330

Installation: Valve will operate at any angle.

Maximum operating temperature: @ 20°C

Head Loss: See chart above.

Note: All references to gallons are in Imperial gallons.

Choosing the Correct Check Valve

Use this chart and technical specifications to determine the correct Check Valve for your requirements.

VALVE APPROVALS



Quality System
Endorsed Company
ISO 9001
QEC 3776

Hansen Products (NZ) Limited are justifiably proud to be certified to the new ISO 9001 : 2000 standard. Quality Management Systems – Requirements. The old versions were based on service standards whilst the latest is a focus on process. The object of a quality management system is to increase the efficiency and effectiveness of any organisation to eliminate risk to the customer.

We are certified for the design, manufacture, assembly, packaging, distribution and marketing of our products.



SGS M&I
SGS M&I is the Marine and Industrial Division of SGS New Zealand Limited and forms part of the global SGS group, who are the world's

largest independent Inspection, Testing and Certification body. The M&I division of SGS New Zealand Limited is the countries largest marine and industrial inspection, testing and Safe Ship Management service provider. They offer Ships Surveys, SSM Systems Consultancy and Audit, Ships design Verification and Marine Product Certification for use on N.Z.'s commercial vessel fleet.

Hansen Foot and Check Valves have been M&I approved. For more information on this approval please visit our website: www.hansenproducts.co.nz

CONVERSIONS

25mm	-	1"
32mm	-	1 1/4"
40mm	-	1 1/2"
50mm	-	2"
63mm	-	2 1/2"

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