PACKLESS LINE VALVES

Introduction

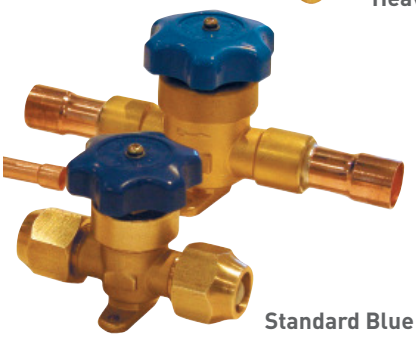
Heldon packless line valves (Diaphragm Valves) are used to isolate an individual line, component or part of a refrigeration or air conditioning system. They are engineered to offer both long life and precise sealing, making them the ideal choice as a long term positive isolation valve.

Heldon packless line valves feature a forged brass body with maximised port sizes for greater flow and lower pressure drop. Stainless steel diaphragms separate the stem from the seat ensuring the valve's longevity and preventing leakage during the life of the valve. The valve seat is made from a polyamide nylon ensuring a complete shut off with minimal pressure applied.

Suitable for all fluorinated refrigerants they are available in two distinct designs. Blue line for medium duty, and Heldon for applications that require high usage and greater flow rate as well as being fully serviceable. Service kits are available as a standard part for the Heldon valves.

Heldon also manufacture a three way version of the heavy duty valve where the branch has the ability to be isolated from the line without interrupting the line flow.

Heavy Duty



Standard Blue Line

Features

1. Designed for maximum flow and minimal pressure drop.
2. Solid copper extended connectors.
3. Three stainless steel diaphragms.
4. Integral mounting bracket.
5. Safe Working Pressure of 4,200 kPa (R410A compatible).
6. Polyamide nylon valve spindle seat.
7. Available in two versions, Standard (Brass and Plastic handles) and Heavy duty (Brass handle only).

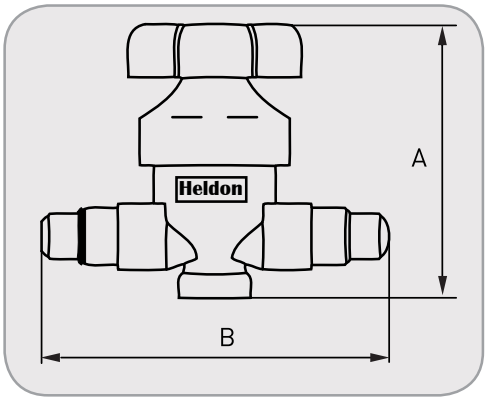
Benefits

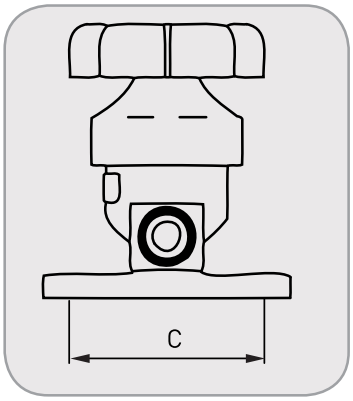
1. Negligible loss in system efficiency.
2. Easier installation without the need for flux.
3. Accurate sealing and extended life.
4. Easy installation.
5. Compatible with all fluorinated refrigerants and oils.
6. Complete shut off with minimal torque.
7. Cost effective options.

Manufacturing Standards

Manufactured in accordance with AS/NZS 1677.2
Safe Working Pressure: 4,200 kPa

Dimensions and Capacities





Heldon Packless Line Valves - Male SAE

Conn. Size	Part No.	Dimensions (mm)			Kv (m3/Hr)	Weight (kg)
		A	B	C		
1/4	2100-0404	75	78	51	0.26	0.47
3/8	2100-0606	76	79	51	0.90	0.48
1/2	2100-0808	90	98	54	1.98	0.70
5/8	2100-1010	90	97	54	2.80	0.70
3/4	2100-1212	119	121	64	4.75	1.195

2100 Series

Heldon Packless Line Valves - Solder/Extension

Conn. Size	Part No.	Dimensions (mm)			Kv (m3/Hr)	Weight (kg)
		A	B	C		
1/4	2111-0404	75	112	51	0.26	0.479
3/8	2111-0606	75	132	51	0.90	0.479
1/2	2111-0808	89	180	54	1.98	0.737
5/8	2111-1010	89	171	54	2.80	0.742
3/4	2111-1212	92	199	54	4.75	0.770
7/8	2111-1414	107	285	64	5.00	1.360

2111 Series

Heldon Three-Way Packless Line valve - Male SAE

Conn. Size	Part No.	Dimensions (mm)			Kv (m3/Hr)	Weight (kg)
		A	B	C		
1/4	2120-040404	89	88	41	0.26	0.540
3/8	2120-060606	89	88	40	0.90	0.650
1/2	2120-080808	89	104	41	1.98	0.970
5/8	2120-101010	86	104	40	2.80	1.020

2120 Series

Blue Line Packless Line Valves “B Series” (Plastic Handle) - Male SAE

Conn. Size	Part No.	Dimensions (mm)			Kv (m3/Hr)	Weight (kg)
		A	B	C		
1/4	2100B-0404	60	58	37	0.25	0.225
3/8	2100B-0606	68	70	41	0.80	0.285
1/2	2100B-0808	68	72	41	1.50	0.298
5/8	2100B-1010	68	78	41	2.20	0.324
3/4	2100B-1212	80	97	50	2.90	0.398

2100B Series

Blue Line Packless Line Valve - Solder/Extension

Conn. Size	Part No.	Dimensions (mm)			Kv (m3/Hr)	Weight (kg)
		A	B	C		
1/4	2111B-0404	60	120	35	0.25	0.497
3/8	2111B-0606	68	130	38	0.80	0.471
1/2	2111B-0808	68	140	38	1.50	0.737
5/8	2111B-1010	68	158	38	2.20	0.737
3/4	2111B-1212	80	178	50	2.90	0.737

2111B Series

PACKED CAPPED VALVES

Introduction

Heldon packed capped valves are used to isolate individual components or part of a refrigeration or air-conditioning system. They are designed to streamline flow leading to an extremely low pressure drop across the valve. The body design incorporates large volume areas leading on to and off the seat to enable the refrigerant velocity to reduce while changing in direction. This design feature minimises turbulence, reduces pressure drop and makes Heldon's packed capped line valves ideal in modern, efficient refrigeration and air-conditioning systems.

Suitable for all fluorinated refrigerants they are available in two designs, Straight or Right Angle, for applications that require high usage, high flow rate and to be fully serviceability.

2090 Series

Features

1. Designed for maximum flow and minimal pressure drop.
2. Strong high tensile brass body.
3. Precision stainless steel stem.
4. Safe Working Pressure of 4,200 kPa (R410A compatible).
5. Polyamide nylon seat disc.

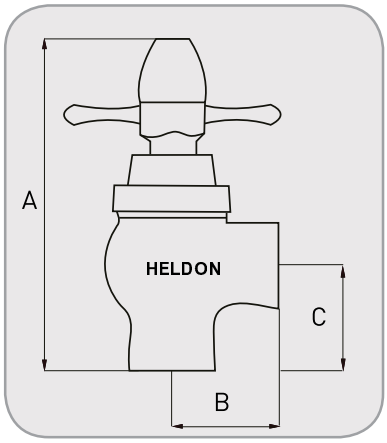
Benefits

1. Negligible loss in system efficiency.
2. Stable platform when mounted in a system.
3. Accurate sealing and extended life.
4. Compatible with all fluorinated refrigerants and oils.
5. Complete shut off with minimal torque. Cost effective options.

Packed Capped Valves - Angle (2090 Series)

The bodies are cast high tensile brass and have a unique spindle/valve seat mechanism that is easily removed and fully serviceable. The stainless steel spindle is sealed with gland rubber and the seat disc is made from a polyamide nylon ensuring a complete shut off with minimal pressure applied.

2090 Series



Dimensions and Capacities

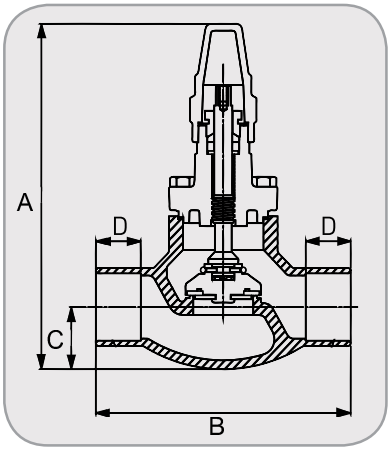
Conn. Size I.D. (Inch)	Part No.	Dimensions (mm)			Kv (m3/Hr)	Weight (kg)
		A	B	C		
7/8	**2090-1414**	160	47	47	12.78	1.30
1-1/8	**2090-1818**	160	51	51	13.67	1.30
1-3/8	**2090-2222**	195	55	55	25.98	2.350
1-5/8	**2090-2626**	195	60	60	31.50	2.350

Manufacturing Standards

Manufactured in accordance with AS/NZS 1677.2
Safe Working Pressure: 4,200 kPa

Packed Capped Valves – Straight (203 Series)

203 Series



Dimensions and Capacities

Conn. Size I.D. (Inch)	Henry Part No.	Dimensions (mm)				Kv (m3/Hr)	MWP (barg)	Weight (kg)
		A	B	C	D			
7/8	**2030-AA**	143	108	25	19	4.58	31.0	1.36
1-1/8	**2030-BA**	149	124	29	24	6.40	31.0	2.13
1-3/8	**2031**	222	137	32	25	9.34	31.0	3.34
1-5/8	**2032**	252	165	38	29	11.50	31.0	4.73
2-1/8	**2033**	270	216	51	38	19.03	31.0	7.59
2-5/8	**2034**	303	279	58	43	31.40	31.0	12.78
3-1/8	**2035**	337	305	67	44	44.98	31.0	20.00

203 Series

Features

1. Valve Body & Bonnet made from bronze and brass respectively.
2. Stainless steel stem.
3. PTFE seat seal material.
4. Graphite compound packing gland.
5. Safe Working Pressure of 3,100 kPa.

Benefits

1. Quality and long life.
2. Precision operation.
3. Excellent sealing characteristics.
4. Leak proof.
5. Compatible with modern refrigerants (excluding R410A).

Installation

Packed Capped Valves must be protected from heat damage during installation. Full instructions are given in the product instruction sheet which is included with each valve.

Cross Reference Table: Heldon 2094 Series vs Henry Part Numbers

Heldon Part No.	Henry Part No.
2094-1414	2030-AA
2094-1818	2030-BA
2094-2222	2031
2094-2626	2032
2094-3434	2033
2094-4242	2034

CAPPED LINE VALVES

Introduction

Heldon Capped Line Valves are designed and manufactured for a multitude of uses in refrigeration and air-conditioning systems. These forged brass valves provide easy accessibility, serviceability and isolation. Most of this range has been manufactured by Heldon for over 50 years and have a reputation second to none in pressure critical environments.

The valves use a forged brass body with polished stainless steel spindle. The gland sealing utilises the double O-Ring seal on selected models or Teflon gland rings as standard. The double O-Ring style is fully serviceable.

Suitable for all fluorinated refrigerants they are available in a number of configurations to suit most applications including right angle, (offset) straight through, with or without mounting foot and back seating.

Features

1. Designed for maximum flow and minimal pressure drop.
2. Strong forged brass or solid brass body.
3. Precision ground and polished stainless steel stem.
4. Integral foot mount mounting bracket.
5. Available in a multitude of configurations.
6. Safe Working Pressure of 4,200 kPa (R410A compatible).
7. Stainless steel stem on swivel models.

Benefits

1. Negligible loss in system efficiency.
2. Stable platform when mounted in a system.
3. Accurate sealing and extended life.
4. Easy intallation.
5. Suit most applications.
6. Compatible with all fluroinated refrigerants and oils.
7. Stronger and less susceptible to fatique failure.

Manufacturing Standards

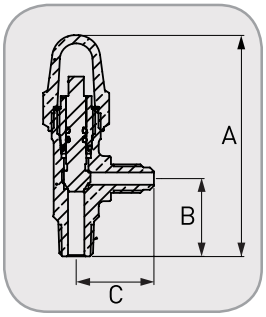
Manufactured in accordance with AS/NZS 1677.2
Safe Working Pressure: 4,200 kPa

Dimensions

(Angle) Male SAE Side to Male BSP Bottom

Part No.	Description	Dimensions (mm)			Weight (kg)
		A	B	C	
2201-0404	1/4 MSAE x 1/4 MBSP	86	30	30	0.17
2201-0406	1/4 MSAE x 3/8 MBSP	86	30	30	0.17
2201-0408	1/4 MSAE x 1/2 MBSP	104	35	34	0.30
2201-0604	3/8 MSAE x 1/4 MBSP	86	30	30	0.18
2201-0606	3/8 MSAE x 3/8 MBSP	86	30	30	0.18
2201-0608	3/8 MSAE x 1/2 MBSP	104	35	37	0.31
2201-0806	1/2 MSAE x 3/8 MBSP	104	35	35	0.30
2201-0808	1/2 MSAE x 1/2 MBSP	104	35	35	0.31
2201-1008	5/8 MSAE x 1/2 MBSP	104	35	35	0.31
2201-1012	5/8 MSAE x 3/4 MBSP	122	43	39	0.41
2201-1208	3/4 MSAE x 1/2 MBSP	122	43	39	0.42

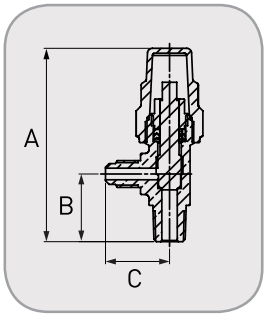
2201 Series



Male SAE Side to Male Taper NPT Bottom

Part No.	Description	Dimensions (mm)			Weight (kg)
		A	B	C	
2202-0406	1/4 MSAE x 3/8 MNPT	80	28	27	0.13
2202-0606	3/8 MSAE x 3/8 MNPT	80	28	29	0.18

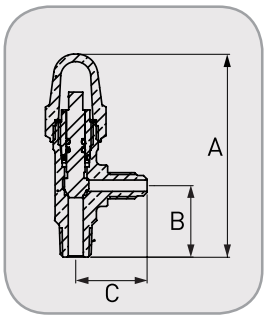
2202 Series



Male Taper BSP Side to Male SAE Bottom

Part No.	Description	Dimensions (mm)			Weight (kg)
		A	B	C	
2210-0808	1/2 MBSP x 1/2 MSAE	104	35	35	0.31

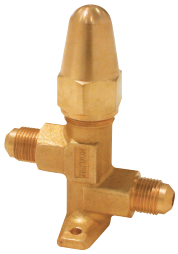
2210 Series

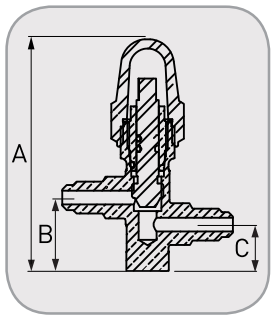


In-line Foot Mount - Male SAE Flare

Part No.	Description	Dimensions (mm)			Weight (kg)
		A	B	C	
2220-0404	1/4 MSAE	80	25	16	0.20
2220-0606	3/8 MSAE	100	35	17	0.37
2220-0808	1/2 MSAE	102	35	19	0.38
2220-1010	5/8 MSAE	116	40	20	0.50

2220 Series

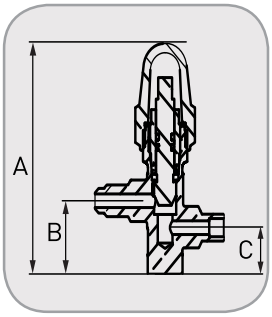




Male SAE Flare to Female Solder

Part No.	Description	Dimensions (mm)			Weight (kg)
		A	B	C	
2227-0404A1	1/4 ID (lwr port) x 1/4 MSAE	80	25	16	0.19
2227-0606A1	3/8 ID (lwr port) x 3/8 MSAE	100	34	16	0.37

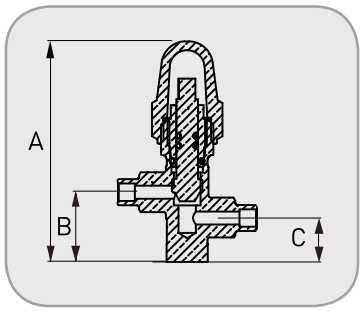
2227 Series



Dimensions

Part No.	Description	Dimensions (mm)			Weight (kg)
		A	B	C	
2230-0404	1/4 ID	80	25	18	0.19
2230-0606	3/8 ID	101	34	18	0.34
2230-0808	1/2 ID	100	34	18	0.33
2230-1010	5/8 ID	116	42	22	0.44
2230-1212	3/4 ID	116	42	22	0.46

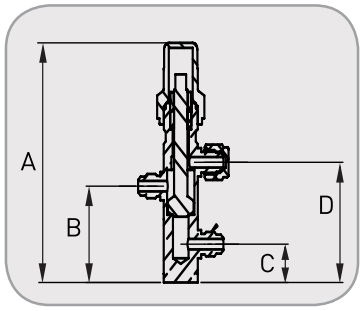
2230 Series



In Line Foot Mount with Access (Front and Back seats) - Male SAE Flare

Part No.	Description	Dimensions (mm)				Weight (kg)
		A	B	C	D	
2225-0606	3/8 MSAE	110	44	18	55	0.29
2225-0808	1/2 MSAE	114	44	18	54	0.30
2225-1010	5/8 MSAE	114	44	18	54	0.31

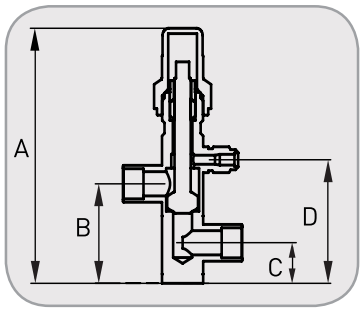
2225 Series



Female Solder - Foot Mount

Part No.	Description	Dimensions (mm)				Weight (kg)
		A	B	C	D	
2235-0606	3/8 ID	110	44	18	55	0.29
2235-0808C	1/2 ID	114	44	18	54	0.30
2235-1010C	5/8 ID	114	44	18	54	0.31

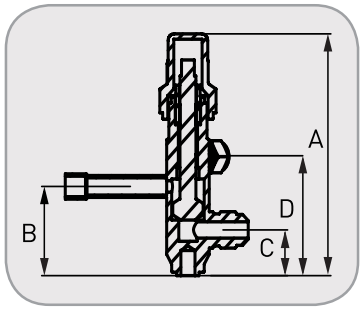
2235 Series



Female Solder - Threaded Base

Part No.	Description	Dimensions (mm)				Weight (kg)
		A	B	C	D	
2254-0404	1/4 ID x 1/4 MSAE - Hex Base Mount c/w Access	110	41	22	52	0.20
2254-0606	3/8 ID x 3/8 MSAE - Hex Base Mount c/w Access	110	41	22	52	0.22

2254 Series



Service Valve Kit

Part No.	Parts To Suit	Weight (kg)
2201-04-KIT	22XX-0404 / 0406 / 0604 / 0606	0.07
2201-06-KIT	22XX-0408 / 0608 / 0808 / 1008	0.11
2201-10-KIT	22XX-1012 / 1212	0.13

2201 KIT Series

SERVICE VALVES

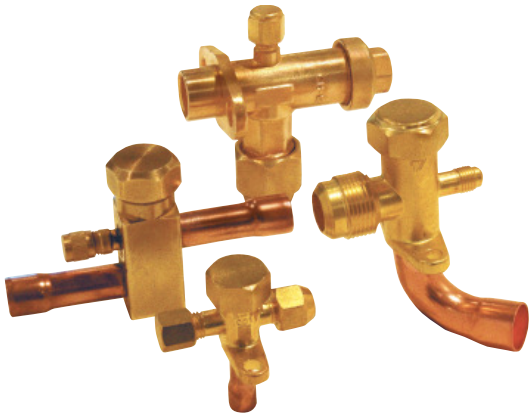
Introduction

Service valves are used in refrigeration and air-conditioning systems to allow manufacturers to seal a pre-charge inside prefabricated units for shipping. They also aid in the safe servicing of installed units.

Heldon Service Valves offer optimum flow characteristic and positive shut off for both front and backseat. The Heldon range are specially engineered to maximise the body chamber and optimise flow while minimising intrusion of the seat and stem mechanism in the back seat position, there by reducing pressure drop.

The brass bodies are forged or machined with copper extensions and all valves feature an isolatable access port. Available in a straight through offset square body version that has a tapped base for mounting and a right angle flange mount. These valves can be made to order in special configurations based on quantity.

Heldon's range of cast iron service/compressor valves offer complete isolation and high flow rates.



Features

1. Designed for maximum flow and minimal pressure drop.
2. Strong forged brass or cast iron body
3. Integral mounting bracket
4. Available as made to order for OEM's
5. Safe Working Pressure in excess of 4,200 kPa (R410A compatible)
6. Complete with flange, bolts and brass spigot and gasket

Benefits

1. Negligible loss in system efficiency
2. Stable platform when mounted in a system
3. Easy installation as a flange or foot mount
4. Suit most applications
5. Compatible will all fluorinated refrigerants and Oils
6. Complete kit for easy installation

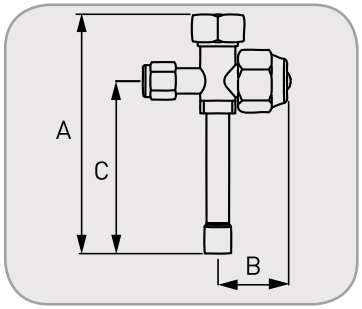
Manufacturing Standards

Manufactured in accordance with AS/NZS 1677.2
Safe Working Pressure: 4,200 kPa

A/C OEM Service Valve (copper ext) - Male to Access Valve

Part No.	Connection	Dimensions (mm)			Weight (kg)
		A	B	C	
2240-0404	1/4 MSAE x 1/4 SWEAT x SCHR	96	72	72	0.11
2240-0406	1/4 MSAE x 3/8 SWEAT x NO SCHR	96	72	72	0.14
2240-0606	3/8 MSAE x 3/8 SWEAT x SCHR	67	45	45	0.14
2240-0606-410A	3/8 MSAE x 3/8 SWEAT x SCHR-410A	67	39	39	0.13
2240-0606E	3/8 MSAE x 3/8 ID Angle x SCHR x Alu. Cap	75	30	50	0.15
2240-0808	1/2 MSAE x 1/2 SWEAT x SCHR	107	75	73	0.14
2240-1010	5/8 MSAE x 5/8 SWEAT x SCHR	110	77	77	0.27
2240-1010E	5/8 MSAE x 5/8 ID Angle x SCHR x Alu. Cap	92	41	65	0.27
2240-1212	3/4 MSAE x 3/4 SWEAT x SCHR	125	85	85	0.42
2240-1212E	5/8 MSAE x 5/8 ID Angle x SCHR x Alu. Cap	104	43	57	0.43

2240 Series



Brass Service Valve Caps with Copper Washer

Part No.	Parts to Suit	Weight (kg)
760-0404	1/4" Valve	0.07
760-0608	3/8" & 1/2" Valve	0.08
760-1012	5/8" & 3/4" Valve	0.09

760 Series

Blue Plastic Service Valve Caps To Suit Full Flow Rotalock Valves

Part No.	Description	Weight (kg)
760-2605-20	Rotalock valve plastic cap 20 x 1.5 - small	0.01
760-2605-30	Rotalock valve plastic cap 22 x 1.5 - medium	0.01
760-2605-35	Rotalock valve plastic cap 24 x 2.0 - large	0.02

760 Series

Cast Iron Service Valve - Four Bolt Flange Mount (c/w Flange)

Part No.	Connection	Weight (kg)
2242-7026	1-5/8" Outlet complete with flange, bush, gasket & screws	3.64
2242-8034	2-1/8" Outlet complete with flange, bush, gasket & screws	6.87
2242-9042	2-5/8" Outlet complete with flange, bush, gasket & screws	8.30

2242 Series

Flange Gasket

Part No.	Parts To Suit	Weight (kg)
700-002-005	Flange Gasket to suit 2242-7026 Cast Iron Comp. Valve 1-5/8 ID	0.01
700-022-005	Flange Gasket to suit 2242-8034 Cast Iron Comp. Valve 2-1/8 ID Flange Gasket to suit 2242-9042 Cast Iron Comp. Valve 2-5/8 ID	0.01

700 Series

BALL VALVES

Introduction

Ball valves are used in a wide variety of air conditioning and refrigeration applications. They can be used for both liquid and gas applications. Ball valves are commonly used for isolating purposes. All ball valves are suitable for HCFC and HFC refrigerants, along with their associated oils. The SWP of these valves allows them to be used for R410A and sub-critical CO_2 applications.

Features

1. Bi-directional flow.
2. Mounting pad for easy installation.
3. Extended copper tails.
4. Indicator on stem shows valve position – open or closed.
5. Fully opened or closed with a quarter turn of the valve stem.
6. Positive stem stop ensures precise positioning in the open or closed position.
7. Blow-out proof stem design.
8. Double stem seal.
9. Ball cavity vented to prevent over-pressure.
10. Schrader valve options: 1/4" or 5/16" Schrader Valves available.
11. Integral Schrader access fitting on brass body.
12. Full flow port design on Valves 3/8" to 3-1/8".
13. Body is hermetically sealed.
14. Hexagonal seal cap with eyelet included.
15. Helium tested to a maximum of 4.69 E^{-7} cm^3/sec.

Benefits

1. May be installed in any position.
2. Can be mounted securely preventing undue stress on the connecting pipe work.
3. Allows for quick and easy installation.
4. At a glance the valves position can be determined when cap is removed.
5. Quick & simple operation gives the operator full control.
6. Ensures the valve is in the position it is meant to be in – open or closed.
7. Cannot blow out under pressure due to its design.
8. Double O-Ring stem seal provides a greater sealing surface.
9. Provides equalisation of pressure surrounding ball to ensure smooth easy action. Allows for liquid expansion.
10. Allow access to system pressure measurement.
11. Positioned on the main body there is less chance of damage to the valve during installation.
12. Full Flow means minimal pressure drop across the range of valves on offer.
13. A streamlined design that is fully rated to 48 bar.
14. Seal cap can be safely secured to valve body. The Neoprene seal in the cap is the final defence in the Henry Triple Stem Seal design.
15. The smaller Helium molecule enables detection of minute leaks that may not be detected by other leak testing methods.

Materials of Construction

The valve body, valve body adaptor, and seal cap are made from brass. The stem is made from stainess steel. The pipe extensions are made from copper. The ball seals are made from virgin PTFE, stem O-rings and cap seal from neoprene. The ball is made from electro-plated brass.

Installation – Main Issues

The valve body must be protected against excessive heat during installation, to prevent damage to the seals. Full instructions are given in the Product Instruction Sheet, included with each valve.

Technical Specification

Allowable Operating Temperature = -40°C to +150°C
Allowable Operating Pressure = 0 to 4,800 kPag (0 to 700 psig)

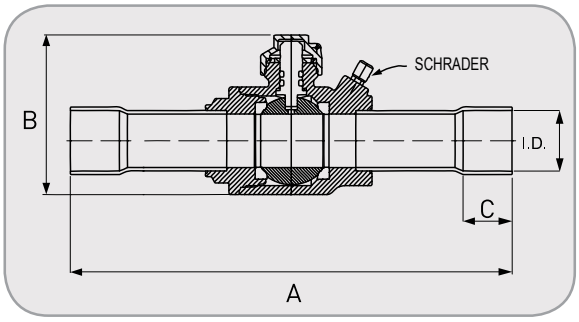
NEW HIGH PRESSURE RANGE AVAILABLE.
SAFE WORKING PRESSURE = 5,300 kPa

Sealing Integrity Features

- Premium quality PTFE ball seals.
- Double O-ring stem seal design.
- Premium quality neoprene stem O-ring seals Neoprene cap seal (on new line).

Dimensions and Capacity

937 Series



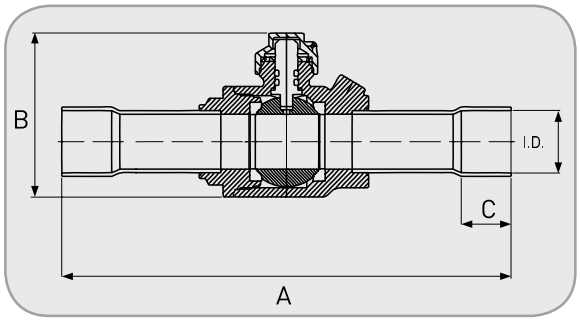
1/4" Schrader Access Port Fitted

Part No.	Conn. Size ID (Inch)	Dimensions (mm)			Mounting Hole Size	Ball Port Diameter (Inch)	Kv (m3/hr)**	Weight (kg)
		A	B	C				
937203	3/8	165	54	8	#8 -36 UNF	1/2	3.7	0.33
937204	1/2	165	54	10	#8 -36 UNF	1/2	6.0	0.33
937205	5/8	165	54	13	#8 -36 UNF	1/2	12.0	0.33
937306	3/4	184	67	16	#8 -36 UNF	3/4	18.1	0.62
937307	7/8	184	67	19	#8 -36 UNF	3/4	26.1	0.64
937409	1-1/8	216	76	23	#10 - 32 UNF	1	52.9	0.95
937511	1-3/8	235	94	25	#10 - 32 UNF	1-1/4	73.5	1.52
937613	1-5/8	254	109	28	1/4 - 28 UNF	1-1/2	182.8	2.44
937617	2-1/8	289	132	34	1/4 - 28 UNF	2	245.7	4.58
937721*	2-5/8	327	132	37	1/4 - 28 UNF	2	205.2	5.04
937721FP	2-5/8	365	154	37	1/4 - 28 UNF	2-1/2	259.5	8.73
937825FP	3-1/8	420	178	43	5/16-24 UNF	3-1/8	362.1	18.20

* Reduced Port
** Kv rating @ 1 bar pressure drop across valve

Dimensions and Capacity

907 Series



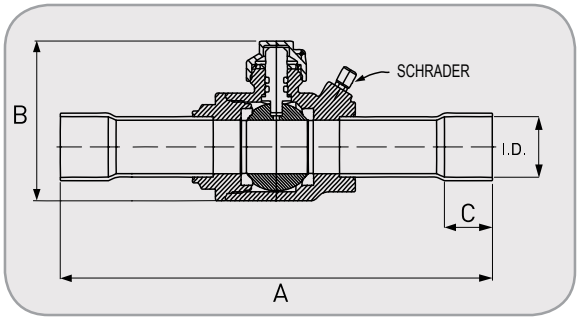
No Access Port Fitted

Part No.	Conn. Size ID (Inch)	Dimensions (mm)			Mounting Hole Size	Ball Port Diameter (Inch)	Kv (m3/hr)**	Weight (kg)
		A	B	C				
907203	3/8	165	54	8	#8 -36 UNF	1/2	3.7	0.33
907204	1/2	165	54	10	#8 -36 UNF	1/2	6.0	0.33
907205	5/8	165	54	13	#8 -36 UNF	1/2	12.0	0.33
907306	3/4	184	67	16	#8 -36 UNF	3/4	18.1	0.62
907307	7/8	184	67	19	#8 -36 UNF	3/4	26.1	0.64
907409	1-1/8	216	76	23	#10 - 32 UNF	1	52.9	0.95
907511	1-3/8	235	94	25	#10 - 32 UNF	1-1/4	73.5	1.52
907613	1-5/8	254	109	28	1/4 - 28 UNF	1-1/2	182.8	2.44
907617	2-1/8	289	132	34	1/4 - 28 UNF	2	245.7	4.58
907721*	2-5/8	327	132	37	1/4 - 28 UNF	2	205.2	5.04
907721FP	2-5/8	365	154	37	1/4-28 UNF	2-1/2	259.5	8.73
907825FP	3-1/8	420	178	43	5/16-24UNF	3-1/8	362.1	18.20

* Reduced Port

** Kv rating @ 1 bar pressure drop across valve.

947 Series



5/16" Schrader Access Port Fitted

Part No.	Conn. Size ID (Inch)	Dimensions (mm)			Mounting Hole Size	Ball Port Diameter (Inch)	Kv (m3/hr)**	Weight (kg)
		A	B	C				
947203	3/8	165	54	8	#8 -36 UNF	1/2	3.7	0.33
947204	1/2	165	54	10	#8 -36 UNF	1/2	6.0	0.33
947205	5/8	165	54	13	#8 -36 UNF	1/2	12.0	0.33
947306	3/4	184	67	16	#8 -36 UNF	3/4	18.1	0.62
947307	7/8	184	67	19	#8 -36 UNF	3/4	26.1	0.64
947409	1-1/8	216	76	23	#10 - 32 UNF	1	52.9	0.95
947511	1-3/8	235	94	25	#10 - 32 UNF	1-1/4	73.5	1.52

** Kv rating @ 1 bar pressure drop across valve.

Cross Reference Table: Henry Vs Heldon

With Access Port

Conn. Size ID (Inch)	Ball Port Diameter (Inch)	Heldon Part No.	Length (mm)	Lay-in Length (mm)	Weight (kg)	Henry Part No.	Length (mm)	Lay-in Length (mm)	Weight (kg)
1/4	1/2	-	-	-	-	**937202**	165	149	0.33
3/8	1/2	**2352-0606**	140	124	0.31	**937203**	165	149	0.33
1/2	1/2	**2352-0808**	161	141	0.31	**937204**	165	146	0.33
5/8	1/2	**2352-1010**	161	135	0.31	**937205**	165	140	0.33
3/4	3/4	**2352-1212**	189	157	0.52	**937306**	184	153	0.62
7/8	3/4	**2352-1414**	189	151	0.69	**937307**	184	146	0.64
1-1/8	1	**2352-1818**	214	168	1.32	**937409**	216	170	0.95
1-3/8	1-1/4	**2352-2222**	254	204	1.58	**937511**	235	186	1.52
1-5/8	1-1/2	**2352-2626**	279	223	2.28	**937613**	254	199	2.44
2-1/8	2	**2352-3434**	305	237	3.90	**937617**	289	221	4.58
2-5/8*	2	**2352-4242**	305	231	4.17	**937721**	327	253	5.04
2-5/8	2-7/16	**2352-4242FP**	343	269	6.08	**937721FP**	365	291	8.73
3-1/8	3	**2352-5050FP**	406	322	9.67	**937825FP**	420	334	14.7

*Reduced Port

No Access Port

Conn. Size ID (Inch)	Ball Port Diameter (Inch)	Heldon Part No.	Length (mm)	Lay-in Length (mm)	Weight (kg)	Henry Part No	Length (mm)	Lay-in Length (mm)	Weight (kg)
1/4	1/2	**n/a**	138	122	n/a	**907202**	165	149	0.33
3/8	1/2	**2302-0606**	140	124	0.31	**907203**	165	149	0.33
1/2	1/2	**2302-0808**	161	141	0.31	**907204**	165	146	0.33
5/8	1/2	**2302-1010**	161	135	0.31	**907205**	165	140	0.33
3/4	3/4	**2302-1212**	189	157	0.52	**907306**	184	153	0.62
7/8	3/4	**2302-1414**	189	151	0.69	**907307**	184	146	0.64
1-1/8	1	**2302-1818**	214	168	1.32	**907409**	216	170	0.95
1-3/8	1-1/4	**2302-2222**	254	204	1.58	**907511**	235	186	1.52
1-5/8	1-1/2	**2302-2626**	279	223	2.28	**907613**	254	199	2.44
2-1/8	2	**2302-3434**	305	237	3.90	**907617**	289	221	4.58
2-5/8*	2	**2302-4242**	305	231	4.17	**907721**	327	253	5.04
2-5/8	2-7/16	**2302-4242FP**	343	269	6.08	**907721FP**	365	275	8.43
3-1/8	3	**2302-5050FP**	406	322	9.67	**907825FP**	420	334	14.7

*Reduced Port

3 IN 1 BALL VALVE

937XXXSG Series

Introduction

Introducing, the Henry 3 in 1 ball valve.
It's a ball valve, sight glass and moisture indicator all in one.
All the features that you would expect from a Henry Ball Valve plus more.

Features

1. Ball valve, sight glass and moisture indicator all-in-one.
2. Large clear sight glass.
3. Positive colour contrast moisture indicator.
4. Bi –directional flow.
5. Mounting pad for easy installation.
6. Indicator on stem shows valve position – open or closed.
7. Fully opened or closed with a quarter turn of the valve stem.
8. Blow-out proof stem design.
9. Double stem seal.
10. Ball cavity vented to prevent over-pressure.
11. 1/4" Schrader valve fitted standard, 5/16" Schrader valve available on selected models.
12. Full flow port design on entire range (unless specified).
13. Body is hermetically sealed.

Benefits

1. Less brazed joints and smaller lay-in length required.
2. Provides quick & easy visual check of the refrigerant charge.
3. Easy diagnosis of the condition of the refrigerant charge (wet/dry).
4. May be installed in any position.
5. Can be mounted securely preventing undue stress on the connecting pipe work.
6. At a glance the postion of the valve spindle is easily identified.
7. Quick & simple operation gives the operator full control.
8. Cannot blow out under pressure due to its unique design.
9. Double O-Ring stem seal provides a greater sealing surface.
10. Provides equalisation of pressure surrounding ball to ensure smooth easy action.
11. Allow access to system pressure measurement.
12. Full flow means minimal pressure drop across the range of valves on offer.
13. A streamlined design that is fully rated to 48 bar.

Technical Specifications

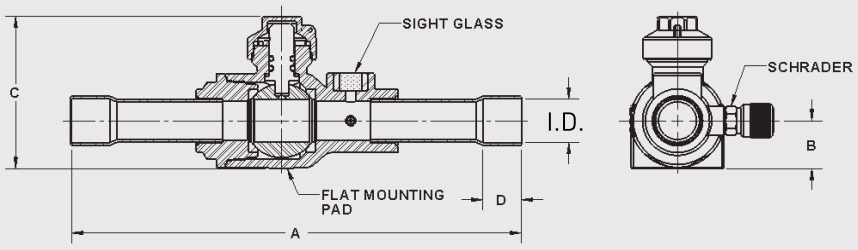
Allowable Operating Temperature = -40°C to 120°C
Allowable Operating Pressure = 0 to 4,800 kPag, (0 to 700 psig)

Suitable for use with HFC , HCFC and R744 refrigerants along with their associated oils.

The brass body must be protected against excessive heat during installation to prevent damage to the seals. Full details are provided in the installation sheet, included with each valve.

Dimensions and Capacity

Schrader Valve Part No.	Conn. Size I.D (Inch)	Dimensions (mm)				Mounting Hole Size	Port Size (mm)	MWP (kPag)	Weight (kg)
		A	B	C	D				
937202SG	1/4	185	16	55	8	#8-36 UNF-2B	12.70	4800	0.42
937203SG	3/8	185	16	55	8	#8-36 UNF-2B	12.70	4800	0.42
937204SG	1/2	185	16	55	10	#8-36 UNF-2B	12.70	4800	0.42
937205SG	5/8	185	16	55	13	#8-36 UNF-2B	12.70	4800	0.42
937306SG	3/4	211	21	67	19	#8-36 UNF-2B	19.05	4800	0.80
937307SG	7/8	211	21	67	20	#8-36 UNF-2B	19.05	4800	0.80
937409SG	1 1/8	237	26	76	24	#10-32 UNF-2B	25.40	4800	1.20



BALL VALVES WITH SIGHT GLASS & MOISTURE INDICATOR

Moisture Content vs Colour Change

Refrigerant	Temp (°C)	Moisture content (parts per million) Indicator colour		
		Dry (Green)	Caution (Light Green)	Wet (Yellow)
R404A	24	below 20	20-100	above 100
	38	below 35	35-130	above 130
	52	below 45	45-200	above 200
R410A	24	below 20	20-100	above 100
	38	below 30	30-120	above 120
	52	below 50	50-150	above 150
R134a	24	below 30	30-90	above 90
	38	below 50	50-120	above 120
	52	below 70	70-150	above 150
R22	24	below 20	20-85	above 85
	38	below 30	30-90	above 90
	52	below 45	45-110	above 110

FULL FLOW ROTALOCK VALVES

Introduction

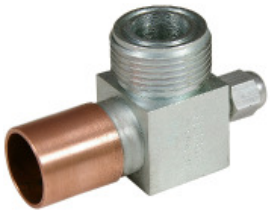
Rotalock Valves are widely used throughout the refrigeration and air-conditioning industry as a convenient removable connection point and service valve typically fitted to compressors and pressure vessels.

The Rotalock connection consists of male and female components that when joined compress a sacrificial Teflon washer. By compressing the Teflon washer a seal is created that can maintain its intregrity with large changes in temperature and constant vibration.

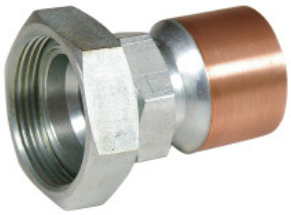
Henry Technologies have taken these valves to a new level with the introduction of their Full Flow Rotalock design. This Patented design incorporates a number of unique features to benefit the user including a recessed polished steel spindle that allows for an uninterrupted flow through the valve when in the fully back seated position. Flow tests confirm that Full Flow Rotalock valves are up to 50% more efficient than the traditional type Rotalock valves on the market today.

Available in a range of styles and connection sizes, these are the valves your system needs to deliver maximum capacity and efficiency.

293 Series



296 Series



292 Series

965 Series

2605 Series

Features

1. Polished steel spindle withTeflon gland seal.
2. Seat surfaces are copper.
3. Copper line connection.
4. Optimum flow due to recessed spindle (back seat position).
5. Zinc Blue Passivated coating (Salt spray tested to 300 hours).
6. Dual ¼ MSAE access ports.
7. Safe Working Pressure: 4,200 kPa.
8. Suitable for all fluorinated refrigerants and oils.

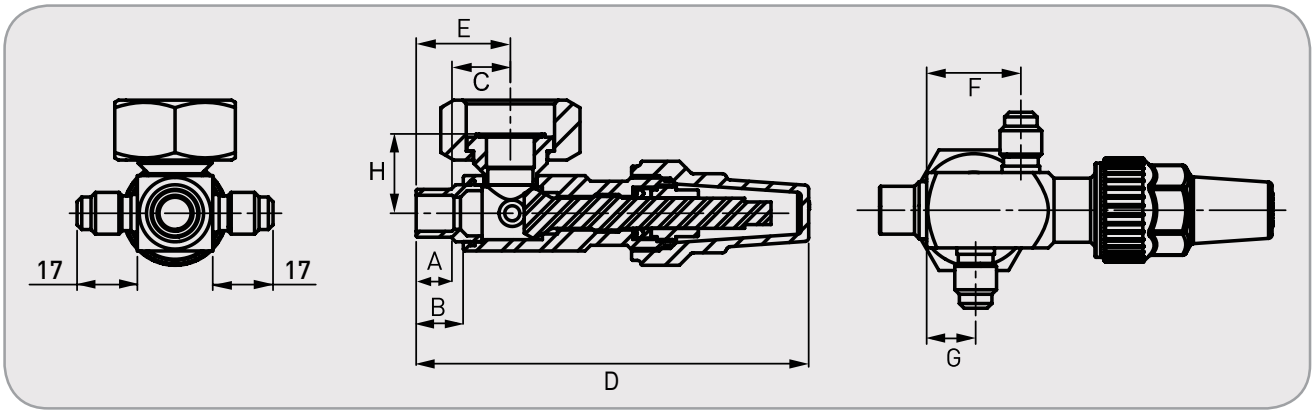
Benefits

1. Increased service life and less torque required when closing.
2. Provides a superior seal with less sealing torque.
3. Requires only low silver content solder with less heat for an improved leak proof joint.
4. Delivers minimal pressure drop & improved system efficiency.
5. Corrosion resistance superior to Nickel plating.
6. Dual access ports accept Schrader cores to provide improved service flexibility.
7. R410A compatible.
8. Ideal for today's Refrigeration systems.

Manufacturing Standards

Manufactured in accordance with AS/NZS 1677.2
Safe Working Pressure: 4,200 kPa

Dimensions

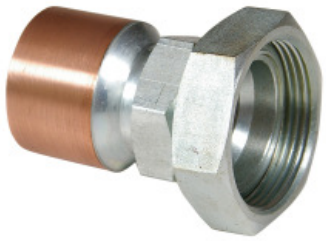


Rotalock Service Valve with Dual Access

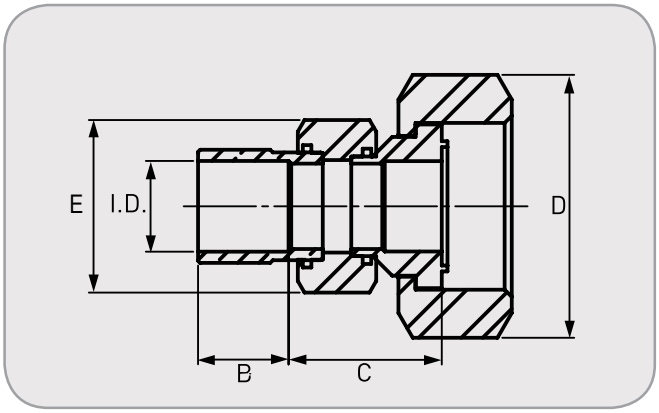
Part No.	Connection ID Solder (Inch)	Rotalock Or Vessel Conn. & RL Thread (Inch)	Dimensions (mm)								Weight (kg)
			A	B	C	D (±2)	E	F	G	H	
2605-061220	3/8	3/4-16 UNF	10	13	16	103	25	25	13	20	0.22
2605-061620	3/8	1-14 UN	10	13	16	103	25	25	13	20	0.24
2605-081220	1/2	3/4-16 UNF	13	13	13	103	25	25	13	20	0.22
2605-081620	1/2	1-14 UN	13	13	13	103	25	25	13	20	0.24
2605-101620	5/8	1-14 UN	14	20	18	110	33	25	13	20	0.24
2605-102030	5/8	1-1/4-12 UNF	14	23	26	137	39	34	18	28	0.45
2605-122030	3/4	1-1/4-12 UNF	20	32.5	30	147	50	34	18	28	0.46
2605-142030	7/8	1-1/4-12 UNF	24	32.5	26	147	50	34	18	28	0.46
2605-142830	7/8	1-3/4-12 UN	24	32.5	26	147	50	34	18	28	0.52
2605-182030	1-1/8	1-1/4-12 UNF	28	39.5	29	154	57	34	18	28	0.48
2605-182835	1-1/8	1-3/4-12 UN	23	30	27	173	50	39	20	30	0.47
2605-222835	1-3/8	1-3/4-12 UN	25	37	32	180	57	39	20	30	0.70
2605-262835	1-5/8	1-3/4-12 UN	28	45	37	188	65	39	20	30	0.75

2605 Series

Dimensions



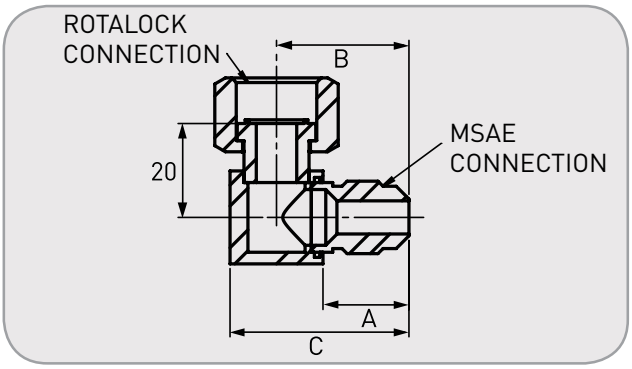
292 Series



Straight Adapter Female Solder to Female Rotalock Nut

Part No.	Connection ID Solder (Inch)	Rotalock Or Vessel Conn. & RL Thread (Inch)	Dimensions (mm)				Nominal Weight (kg)
			Solder Depth B (±1)	RL & Solder Base C (±1)	RL Nut A/F D	Connector Nut A/F E	
292-0816	1/2	1-14 UN	13	22	30	21	0.09
292-1016	5/8	1-14 UN	14	27	30	21	0.09
292-1020	5/8	1-1/4-12 UNF	14	32	36	29	0.14
292-1220	3/4	1-1/4-12 UNF	20	37	36	29	0.17
292-1420	7/8	1-1/4-12 UNF	24	33	36	29	0.18
292-1820	1-1/8	1-1/4-12 UNF	28	36	36	29	0.20
292-1828	1-1/8	1-3/4-12 UN	23	31	50	32	0.21
292-2228	1-3/8	1-3/4-12 UN	25	37	50	32	0.26

295 Series

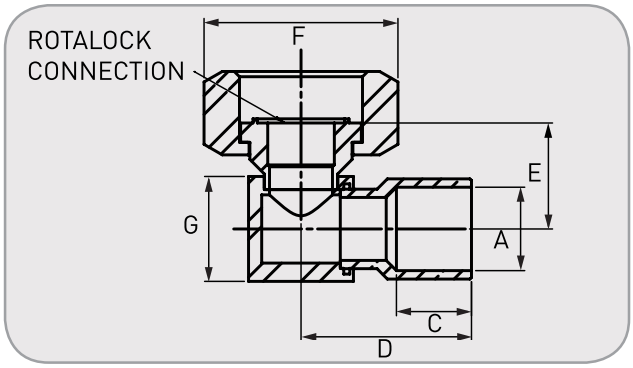


Elbow 90° Connector (No- Access Fitting) - Male Flare to Female Rotalock Nut

Part No.	Connection ID Male Flare (Inch)	Rotalock Or Vessel Conn. & RL Thread (Inch)	Dimensions (mm)				Nominal Weight (kg)
			Body Size	Flare Length A	Elbow Centre to Flare End B	Flare to Elbow End C	
295-0412	1/4 MSAE	3/4-16 UNF	20 SQ.	19	29	39	0.09
295-0612	3/8 MSAE	3/4-16 UNF	20 SQ.	19	29	39	0.10
295-1812	1/2 MSAE	3/4-16 UNF	20 SQ.	22	32	42	0.14

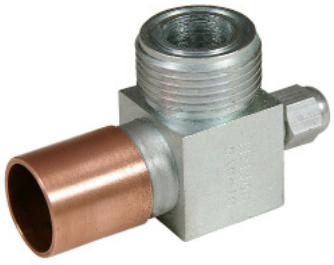
Dimensions

293 Series

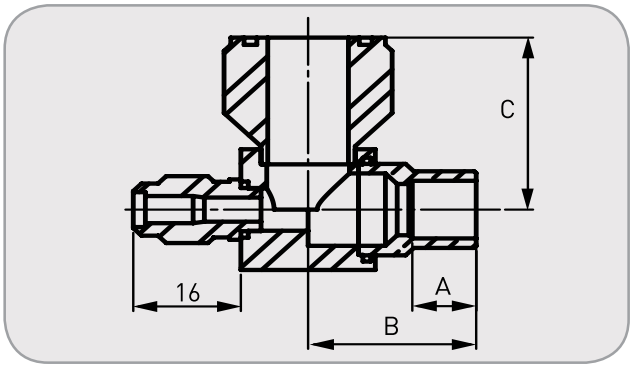


Elbow 90° Connector (No- Access Fitting) Female Solder to Female Rotalock Nut

Part No.	Connection ID Solder A (Inch)	Rotalock Or Vessel Conn. & RL Thread (Inch)	Dimensions (mm)					Nominal Weight (kg)
			Body Size G	Solder Depth C (±1)	Elbow Centre to Solder End D (±1)	Solder Centre to RL Base E (±1)	RL Nut Flat A/F F	
293-0612	3/8	3/4-16 UNF	20 SQ.	9.5	25	20	24	0.08
293-0812	1/2	3/4-16 UNF	20 SQ.	13	25	20	24	0.08
293-0816	1/2	1-14 UN	20 SQ.	13	25	20	30	0.11
293-1016	5/8	1-14 UN	20 SQ.	14	32	20	30	0.11
293-1216	3/4	1-14 UN	20 SQ.	20	39	20	30	0.13
293-1416	7/8	1-14 UN	20 SQ.	24	44	20	30	0.14
293-1020	5/8	1-1/4-12 UNF	30 SQ.	14	40	27	36	0.24
293-1420	7/8	1-1/4-12 UNF	30 SQ.	24	50	27	36	0.25
293-1820	1-1/8	1-1/4-12 UNF	35 SQ.	28	57	27	36	0.26
293-1828	1-1/8	1-3/4-12 UN	35 SQ.	23	50	30	50	0.35
293-2228	1-3/8	1-3/4-12 UN	35 SQ.	25	57	30	50	0.40



296 Series

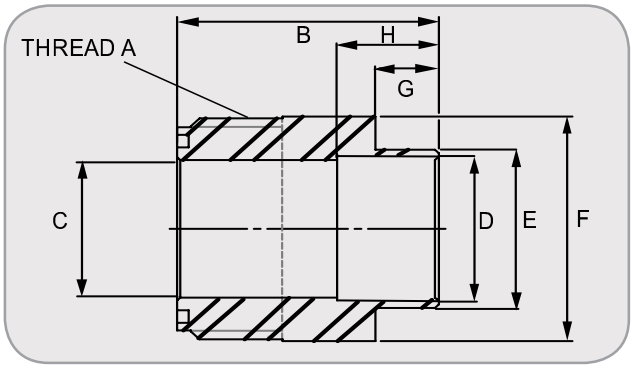


Elbow 90° Connector (With Access Port) - Female Solder to Male Rotalock Nut

Part No.	Connection ID Solder (Inch)	Rotalock Or Vessel Conn. & RL Thread (Inch)	Dimensions (mm)				Nominal Weight (kg)
			Body Size	Flare Length A	Elbow Centre to Flare End B	Solder to Elbow End C	
296-0616	3/8	1 - 14 UN	20 SQ.	9.5	25	29	0.11
296-0816	1/2	1 - 14 UN	20 SQ.	12.7	25	29	0.11
296-1220	3/4	1-1/4 - 12 UNF	30 SQ.	20	50	33.5	0.22
296-1420	7/8	1-1/4 - 12 UNF	30 SQ.	24	50	33.5	0.25

Dimensions

965 Series



Rotalock Welding Spuds - Available as AS1210 or ASME - Female ID Weld to Male Rotalock Thread

Part No.	Description	Thread (Inch) A	Dimensions (mm)							Nominal Weight (kg)
			Overall Length B	I.D. C	I.D. D	O.D. E	Welded End O.D. F	Length G	Depth H	
965-26XX-12S	Suit 3/4 Rotalock	3/4-16 UNF	34	7.9	7.9	11.1	19.1	6	-	0.04
965-26XX-16S	Suit 1 Rotalock	1-14 UN	36	12.7	12.7	15.9	25.4	6	-	0.09
965-26XX-20S	Suit 1 1/4 Rotalock	1-1/4-12 UNF	38	19.0	19.0	22.2	31.8	8	-	0.09
965-26XX-28S	Suit 1 3/4 Rotalock	1-3/4-12 UN	38	31.75	34.9	38.1	44.5	8	15	0.18
965-26XX-36S	Suit 2 1/4 Rotalock	2-1/4-12 UN	39	41.3	41.3	47.6	57.2	8	-	0.27

Rotalock Gaskets

Part No.	Description	Pk Q'ty
800-26XX-12	Suit 3/4" R/L Nut	10
800-26XX-16	Suit 1" R/L Nut	5
800-26XX-20	Suit 1-1/4" R/L Nut	5
800-26XX-28	Suit 1-3/4" R/.L Nut	5
800-26XX-36	Suit 2-1/4" R/L Nut	5

800 Series

Cross Reference : Old Heldon Series v's New

Old Series	New Series
2600-XXXXXX	2605-XXXXXX
2601-XXXXXX	2605-XXXXXX
262-XXXXXX	292-XXXXXX
263-XXXXXX	293-XXXXXX
264-XXXXXX	296-XXXXXX
265-XXXXXX	295-XXXXXX

Recommended Torque settings for Rotalock Nuts

Rotalock Nut Size	Torque (Nm)
Rotalock 3/4-16 UNF	40-50
Rotalock 1-14 UNS	70-80
Rotalock 1-1/4-12 UNF	120-135
Rotalock 1-3/4-12 UNF	135-160
Rotalock 2-1/4-12 UNF	165-190

Rotalock Cross Reference

Part No.	Connection R/L / Sol. ID Valve	Part No.	Rotalock Nylon Gasket	Maneurop MT/Z		Maneurop SM		Copeland ZR		Copeland ZF		Copeland ZS	
				Discharge	Suction	Discharge	Suction	Discharge	Suction	Discharge	Suction	Discharge	Suction
2605-061620	1" / 3/8"	800-26XX	1-14 UN	MT/Z18	-	-	-	-	-	-	-	-	-
				MT/Z22	-	-	-	-	-	-	-	-	-
				MT/Z28	-	-	-	-	-	-	-	-	-
2605-081620	1" / 1/2"	800-26XX	1-14 UN	MT/Z32	MT/Z18	-	-	-	-	-	-	-	-
				MT/Z36	MT/Z22	-	-	-	-	-	-	-	-
				MT/Z40	MT/Z28	-	-	-	-	-	-	-	-
2605-101620	1" / 5/8"	800-26XX	1-14 UN	-	-	-	-	ZR18K	-	ZF09K	-	ZS15K	-
				-	-	-	-	ZR22K	-	ZF11K	-	ZS19K	-
				-	-	-	-	ZR28K	-	ZF13K	-	ZS21K	-
				-	-	-	-	ZR34K	-	ZF15K	-	ZS26K	-
				-	-	-	-	ZR40K	-	ZF18K	-	ZS30K	-
				-	-	-	-	ZR48K	-	-	-	ZS38K	-
				-	-	-	-	ZR49K	-	-	-	ZS45K	-
				-	-	-	-	ZR61K	-	-	-	-	-
				-	-	-	-	ZR72K	-	-	-	-	-
2605-102030	1-1/4" / 5/8"	800-26XX-20	1-1/4-12 UNF	-	MT/Z32	-	-	-	-	-	-	-	-
				-	MT/Z36	-	-	-	-	-	-	-	-
				-	MT/Z40	-	-	-	-	-	-	-	-
2605-122030	1-1/4" / 3/4"	800-26XX-20	1-1/4-12 UNF	MT/Z44	-	SM085	-	ZR81K	-	-	-	ZS56K	-
				MT/Z50	-	SM100	-	ZR90K	-	-	-	-	-
				MT/Z56	-	SM125	-	ZR11M	-	-	-	-	-
				MT/Z64	-	-	-	-	-	-	-	-	-
				MT/Z72	-	-	-	-	-	-	-	-	-
				MT/Z80/1	-	-	-	-	-	-	-	-	-
2605-142030	1-1/4" / 7/8"	800-26XX-20	1-3/4-12 UN	MT/Z100	-	-	-	ZR12M	ZR18K	ZF33K	ZF09K	-	ZS15K
				MT/Z125	-	-	-	ZR16M	ZR22K	ZF40K	ZF11K	-	ZS19K
				MT/Z160	-	-	-	-	ZR28K	-	ZF13K	-	ZS21K
				-	-	-	-	-	ZR34K	-	ZF15K	-	ZS26K
				-	-	-	-	-	ZR40K	-	ZF18K	-	ZS30K
				-	-	-	-	-	ZR48K	-	ZF24K	-	ZS38K
				-	-	-	-	-	ZR49K	-	-	-	ZS45K
				-	-	-	-	-	ZR61K	-	-	-	-
				-	-	-	-	-	ZR72K	-	-	-	-
				-	-	-	-	-	ZR81K	-	-	-	-
2605-142830	1-3/4" / 7/8"	800-26XX-28	1-3/4-12 UN	-	MT/Z44	SM175	-	-	-	-	-	-	-
				-	MT/Z50	SM185	-	-	-	-	-	-	-
				-	MT/Z56	-	-	-	-	-	-	-	-
				-	MT/Z64	-	-	-	-	-	-	-	-
				-	MT/Z72	-	-	-	-	-	-	-	-
				-	MT/Z80/1	-	SM085	ZR19M	ZR90K	ZF48K	ZF24K	ZS11M	ZS56K
2605-182835	1-3/4" / 1-1/8"	800-26XX-28	1-3/4-12 UN	-	MT/Z100	-	SM100	-	-	-	-	-	-
				-	MT/Z125	-	SM125	-	-	-	-	-	-
				-	MT/Z160	-	-	-	-	-	-	-	-
2605-222835	1-3/4" / 1-3/8"	800-26XX-28	1-3/4-12 UN	-	-	-	-	ZR250K	ZR11M	-	ZF33K	-	ZS75K
				-	-	-	-	ZR300K	ZR12M	-	ZF40K	-	-
				-	-	-	-	ZR310K	ZR16M	-	-	-	-
				-	-	-	-	ZR380K	-	-	-	-	-
2605-262835	1-3/4" / 1-5/8"	800-26XX-28	1-3/4-12 UN	-	-	-	SM175	-	-	-	-	-	-
				-	-	-	SM185	-	-	-	-	-	-
2600-263650	2-1/4" / 1-5/8"	800-26XX-36	2-1/4-12 UN	-	-	-	-	-	ZR19M	-	-	-	-
				-	-	SM175	-	-	ZR250K	-	-	-	-
				-	-	SM185	-	-	ZR300K	-	-	-	-
				-	-	-	-	-	ZR310K	-	-	-	-
				-	-	-	-	-	ZR380K	-	-	-	-

*Note: All care has been taken in compiling this cross reference/ guide based on published data from the relevent manufacturers and their agents. As manufacturers can change their specifications this should be used as a guide only.

STANDARD FLOW ROTALOCK VALVE

Introduction

Heldon's Standard Flow Rotalock Valve range offers MSAE connections from 1/4" through to 3/4" in size.

These valves have a solid brass body with a nickel plated finish. A polished stainless steel spindle employs a solid Teflon seal to deliver increased service life with less torque required to close.

This range of Rotalock valves feature a single 1/4" MSAE access port for service purposes.

Suitable for all fluorinated refigerants and oils, these valves are supplied complete with an individual Teflon Rotalock seal.

2610 Series

Features

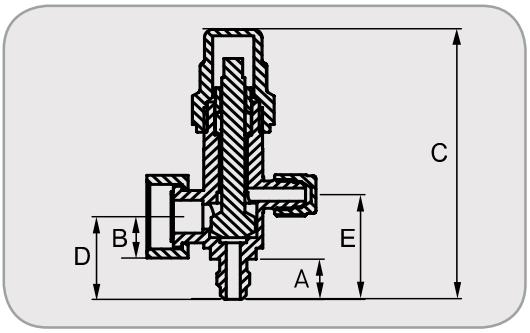
1. Strong forged or solid brass body.
2. Precision ground and polished stainless steel stem.
3. Supplied with Rotalock gasket.
4. Brass to stainless steel seat.
5. Safe Working Pressure of 4,200 kPa (R410A Compatible).

Benefits

1. Stable platform when mounted in a system.
2. Accurate sealing and extended life.
3. Complete ready to install.
4. Tighter seal and less susceptible leakage.
5. Compatible with all flurorinated refigerants and oils.

Dimensions

2610 Series



Manufacturing Standards

Manufactured in accordance with AS/NZS 1677.2

Rotalock Service Valve - Male SAE Flare to Rotalock Nut

Part No.	MSAE Conn. (Inch)	Vessel Conn. & RL Thread (Inch)	Dimensions (mm)					Weight (kg)
			A	B	C	D	E	
2610-041220-HEX	1/4	3/4-16 UNF	14.8	16.5	101.0	31.3	21.0	0.19
2610-061220-HEX	3/8	3/4-16 UNF	14.8	14.2	101.0	29.0	21.0	0.19
2610-061620	3/8	1-14 UNS	23.0	12.5	104.0	35.5	24.0	0.25
2610-081620	1/2	1-14 UNS	23.0	12.5	104.0	35.5	24.0	0.25
2610-101620-1L	5/8	1-14 UNS	24.0	13.0	107.0	37.0	24.0	0.27
2610-102022	5/8	1-1/4-12 UNF	27.0	16.0	115.0	43.0	27.0	0.32
2610-122022	3/4	1-1/4-12 UNF	31.0	14.0	118.0	45.0	27.0	0.34
2610-122030	3/4	1-1/4-12 UNF	37.0	12.5	149.0	49.5	29.5	0.56

CHECK VALVES

Introduction

Check Valves are used in refrigeration and air-conditioning when the liquid or vapour refrigerant is required to flow in one direction only. The Check Valve allows for full flow in the direction of operational flow while preventing flow in the opposite direction. A typical application would be to install a check valve downstream of an oil separator. This prevents condensed liquid refrigerant from returning down the discharge line and into the oil separator.

Please note that In-line Check Valves are not suitable for discharge lines of reciprocating compressors. This is due to the reciprocating compressors discharge pressure pulsations.

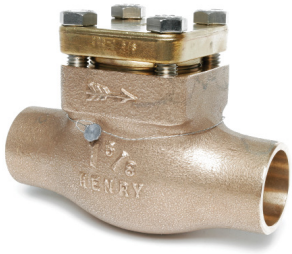
The Henry Technologies range includes both the Lift type and the In-line type Check Valves.

The Lift Check Valves are: 116, 205 & 2027 Series
(Note: 205 Series is replacing the old 2024 Series)

The In-line Check Valves are: 119 & 120 Series
(Note: 119 & 120 Series is replacing the old 2001 & 2006 Series)

Henry Technologies check valve are suitable for HCFC and HFC refrigerants, along with their associated oils.
Typically, Henry Technologies Check Valves will start to open at 3.4 kPa and be fully open at 34 kPa.

2027 Series



205 Series

116 Series

119 Series

Features

1. Flow direction arrow.
2. Minimum opening pressure required.
3. Designed for maximum flow and minimum pressure drop.
4. Robust design.
5. Optimised seat material.
6. Models available with copper extensions – 120 Series.
7. Working Temperature range:
   - 116 & 205 Series = -40 °C to 150 °C
   - 119 & 120 Series = -30 °C to 90 °C
   - 2027 Series = -40 °C to 100 °C

Benefits

1. Ensures correct installation.
2. Does not impose a load on the system.
3. Negligible loss in system efficiency.
4. Provides stable platform when mounted in a system.
5. Efficient sealing with negligible leak rate.
6. Quick and easy installation.
7. Suitable for a wide range of applications.

Materials of Construction

The valve body for the 205 series is made from cast bronze. All other check valves bodies are made from brass. All pistons are made from brass. Springs are made from stainless steel. The seat seal material is PTFE for the 205 & 116 Series. The seat material is neoprene for the 119 & 120 Series.

Manufacturing Standards

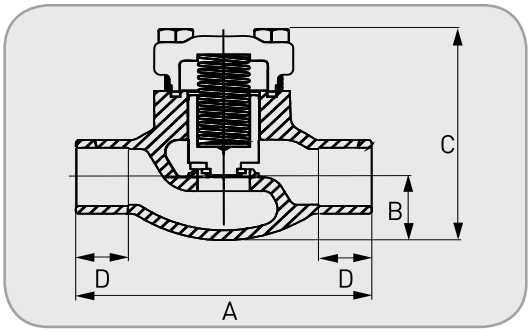
Manufactured in accordance with AS/NZS 1677.2, CE & UL
Safe Working Pressure = 3,100 kPa / 205 Series
= 3,500 kPa / 116, 119 & 120 Series
= 4,200 kPa / 2027 Series

Installation – Main issues

1. Valves must be installed in accordance with the flow direction arrow.
2. The valve bodies and valve internals must be protected against damage during brazing. Full instructions are given in the Product Instruction Sheet, included with each valve.
3. Series 205 valves up to 1 3/8" connector size can be installed in any position except bonnet down. For larger sizes, the bonnet must be positioned upwards. For all models, the recommended bonnet position is upwards.
4. Discharge check valves should be positioned as far from the compressor as possible.

Dimensions

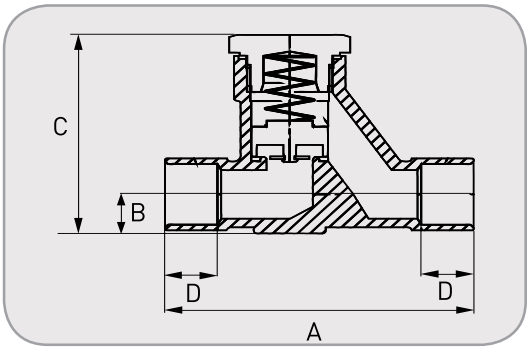
205 Series



Check Valves - Globe Design

Part No.	Connection Size ID (Inch)	Dimensions (mm)				Kv (m3/Hr)	Weight (kg)	CE Cat
		A	B	C	D			
205-7/8	7/8	108	25	80	19	6.1	1.24	SEP
205-1-1/8	1-1/8	124	29	98	24	8.6	2.00	SEP
205-1-3/8	1-3/8	137	32	108	25	11.9	2.74	Cat I
205-1-5/8	1-5/8	165	38	129	29	15.4	4.23	Cat I
205-2-1/8	2-1/8	216	51	157	38	25.5	7.76	Cat I
205-2-5/8	2-5/8	279	57	183	43	42.3	12.44	Cat I

116 Series



Check Valves - Globe Design

Part No.	Connection Size ID (Inch)	Dimensions (mm)				Kv (m3/Hr)	Weight (kg)	CE Cat
		A	B	C	D			
116003	3/8	74.7	10.4	52.3	7.9	1.4	0.24	SEP
116004	1/2	74.7	10.4	52.3	9.7	1.9	0.23	SEP
116005	5/8	74.7	10.4	52.3	12.7	2.3	0.22	SEP
116007	7/8	98.6	16.0	74.7	22.4	3.1	0.93	SEP

Capacities

Part No.	Conn. Size (Inch)	Style	R404A		
			Liquid Lines (kW)	Suction Vapour (kW)	Hot Gas (m3/hr)
205-7/8	7/8	Globe, Bolted Bonnet	29.5	1.8	62.9
205-1-1/8	1-1/8	Globe, Bolted Bonnet	42.3	3.5	87.2
205-1-3/8	1-3/8	Globe, Bolted Bonnet	57.3	7.0	121.6
205-1-5/8	1-5/8	Globe, Bolted Bonnet	74.2	11.6	157.3
205-2-1/8	2-1/8	Globe, Bolted Bonnet	122.7	32.0	260.1
205-2-5/8	2-5/8	Globe, Bolted Bonnet	204.0	88.3	432.1
116003	3/8	Y Type Screwed Bonnet	8.4	0.14	18.2
116004	1/2	Y Type Screwed Bonnet	17.6	0.67	37.2
116005	5/8	Y Type Screwed Bonnet	22.2	1.1	46.9
116007	7/8	Y Type Screwed Bonnet	47.1	4.8	100.0

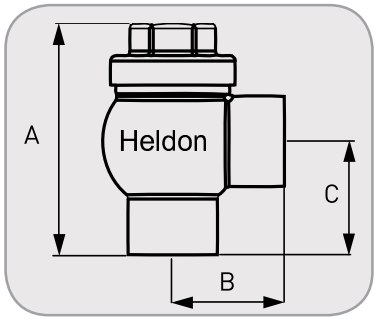
* Based on 38°C Condensing and -40°C Evaporating

Dimensions

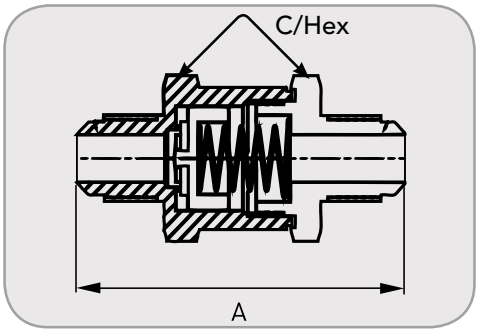
Angle Female Solder

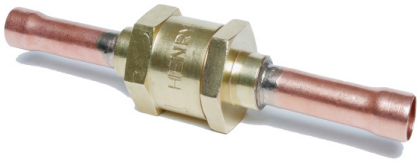
Part No.	Connection Size ID (Inch)	Dimensions (mm)			Kv (m3/Hr)	Weight (kg)
		A	B	C		
2027-1414	7/8	96	47	40	8.95	0.82
2027-1818	1-1/8	96	51	40	14.30	0.78
2027-2222	1-3/8	120	60	67	21.60	1.42
2027-2626	1-5/8	120	60	67	29.45	1.44

2027 Series



119 Series

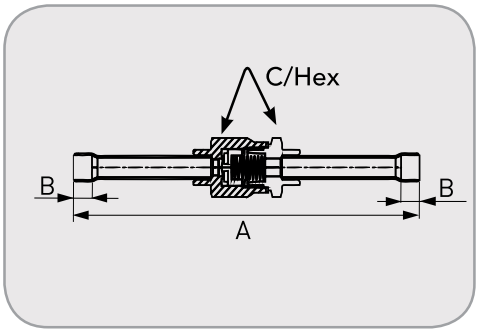




120 Series

Straight Through Design

Part No.	Connection Size	Dimensions (mm)			Weight (kg)
		A	B	C/Hex	
119-1/4	1/4 FL	57.4	-	21	0.10
119-3/8	3/8 FL	63.8	-	21	0.12
119-1/2	1/2 FL	76.2	-	32	0.13
120-3/8	3/8 ID	133.4	7.9	21	0.13
120-1/2	1/2 ID	161.3	9.7	32	0.26
120-5/8	5/8 ID	159.5	12.7	32	0.29



MAGNETIC CHECK VALVES

Introduction

The Henry Technologies check valve uses magnetic attraction to return the valve plate to its seat rather than spring pressure. A conventional type check valve requires an increase in pressure to force the valve plate off its seat leading to an increase in pressure drop. The magnetic check valve (MCV) has a decreasing force to move it away from its seat. The further it travels the magnetic attraction diminishes leading to a decrease in pressure drop. MCV's are therefore a more efficient option to the conventional check valves.

The Henry MCV uses the latest technology in Dura Form processing, a manufacturing method that eliminates the use of braze materials that can overheat and damage internal components. The body is 100% copper that has been spun into shape and the connections machined. The result is a valve that is hermetically sealed, can easily be installed with either soft or hard solder, with a near zero leak rate and exceptional performance.

Suitable for use in the Liquid, Suction, Discharge or Hot Gas lines employing fluorinated refrigerants, these valves are ideal in a new installation or as a replacement for conventional check valves.

MCV's are not recommended for Heat Reclaim applications with high differential pressures.

Note: The F63 Series is replacing the old 2026 Series Magnetic Check Valves.

F63 Series

Features

1. Designed for maximum flow and minimal pressure drop.
2. Hermetically sealed copper body.
3. Optimised seat material with a Neoprene coated valve plate.
4. Multi orientation while maintaining flow direction.
5. Built in 30 mesh strainer.
6. Working Temperature range = 40 °C to 150 °C.
7. Safe Working Pressure 5,200 kPa up to 5/8" sizes.

Benefits

1. Negligible loss in system efficiency.
2. Stable platform with no chance of a leak.
3. Efficient sealing with a negligible leak rate.
4. Able to be installed in any position.
5. Strain debris out of the system and extend the valve service life.
6. Suitable for a wide range of applications, including combination (muffler/check valve).
7. Compatible with all fluorinated refrigerants and oils.

Manufacturing Standards

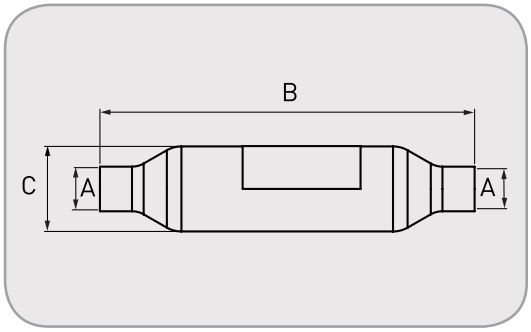
Manufactured in accordance with AS/NZS 1677.2
Safe Working Pressure: Please refer to table on next page for details.

Part Number Cross Reference

Henry	Heldon Old	Emerson	Superior
F6306	2026-0404	AKC-4	900M-4S
F6307	2026-0606	AKC-6	900M-6S
F6308	2026-0808	AKC-8	900M-8S
F6309	2026-1010	AKC-10	900M-10S
F6310	2026-1212	AKC-12	900M-12S
F6311	2026-1414	AKC-14	900M-14S
F6312	2026-1818	AKC-18	N/A
F6313	2026-2222	AKC-22	N/A
F6314	2026-2626	AKC-26	N/A
F6315	2026-3434	AKC-34	N/A
F6316	2026-4242	AKC-42	N/A
F6085	2026-5050	N/A	N/A

Dimensions

F63 Series



Part No.	Connection Size A	Description	Valve Length (mm) B	Valve Dia. (mm) C	Weight (kg)
F6306	1/4	MS-4	102	22.3	0.09
F6307	3/8	MS-6	102	22.3	0.09
F6308	1/2	MS-8	127	28.6	0.15
F6309	5/8	MS-10	127	28.6	0.15
F6310	3/4	MS-12	178	41.3	0.39
F6311	7/8	MS-14	178	41.3	0.39
F6312	1-1/8	MS-18	213	54	0.67
F6313	1-3/8	MS-22	238	66.7	1.13
F6314	1-5/8	MS-26	267	79.4	1.63
F6315	2-1/8	MS-34	305	92.1	2.47
F6316	2-5/8	MS-42	330	105	3.54
F6085	3-1/8	MS-50	330	105	3.54

Capacities

	Suction (kW)			Liquid (kW)			SWP (kPa)	Kv m3/Hr
	R22	R134a	R404A	R22	R134a	R404A		
F6306	1.1	0.8	0.9	9.5	8.8	6.8	5,500	0.47
F6307	2.2	1.6	2.0	19.9	18.3	14.2	5,500	0.99
F6308	6.0	4.4	5.3	53.8	49.4	38.2	5,200	2.67
F6309	6.7	4.9	5.9	60	55.1	42.6	5,200	2.98
F6310	12.5	9.2	11	112.2	103.1	79.7	4,100	5.56
F6311	17	12.5	15	152.8	140.4	108.5	4,100	7.58
F6312	29.6	21.7	26.1	265.9	244.3	188.8	4,100	13.19
F6313	36.5	26.8	32.2	327.9	301.3	232.5	4,000	16.26
F6314	62.3	45.8	54.9	560.1	514.6	397.7	3,000	27.78
F6315	108.2	79.5	95.5	973.3	894.3	691.1	3,200	48.27
F6316	145.2	106.7	128.1	1,305.9	1,200	927.3	3,000	64.76
F6085	145.2	106.7	128.1	1,305.9	1,200	927.3	3,000	64.76

The rated liquid and suction capacities are based on an evaporating temperature: An average temperature of te = -10°C, liquid temperature ahead of the valve t = 25°C and a pressure drop across the valve of p = 15 kPa (2.18 psi).

SOLENOID VALVES

Introduction

Solenoid valves are used in refrigeration and air-conditioning to stop, interrupt or divert the flow of refrigerant. They operate by opening or closing the orifice directly or by pilot (Servo) operation. An electro-magnetic coil is used to open the valve when it is energised.

Heldon's new style Solenoid valves (2402 & 2403 Series) are made from brass forgings and are available with extended copper or male SAE connections. A special diaphragm material is used for an extended service life, to be compatible with most fluorinated refrigerant and oil combinations.

These new style valves are matched to a range of "click-on" style coils, which, when installed with the supplied Hirschmann plug and o-ring, offer an IP65 rating. Another feature of these is the built-in LED, indicating power supply to the coil.

Note: Solenoid Coil to be purchased separately.

Features

1. Solid forged brass construction.
2. Range available from 1/4" to 1-1/8" connections.
3. 1/4" valve is a Direct Operating type.
4. 3/8" to 1-1/8" – Pilot (Servo) Operating Valves.
5. Click-on style Solenoid Coils available in a range of voltages.
6. Rigorously tested to 300,000 cycles.
7. Available with extended copper tails and as reduced port versions.
8. Built-in LED in the coil plug indicates power supply either on or off.
9. Rated to IP65 when installed with supplied o-ring and plug.
10. Safe Working Pressure = 3,200 kPa.
11. Working Temperature Range:
    - Solenoid Valve -25°C to 100°C
    - Solenoid Coil -40°C to 80°C

Benefits

1. Provides a strong stable platform when mounted in a system.
2. Delivers an extensive range of capacities in Liquid, Vapour and Hot Gas applications.
3. No pressure drop required to operate.
4. Easy and reliable operating action.
5. Quick and easy to install.
6. Reliability guaranteed.
7. Provide more choice to suit your application.
8. Safety and assists the technician in fault finding.
9. Solenoid coil offers great protection and long life span.
10. Suitable for use with a large range of HCFC and HFC refrigerants.
11. Suits a wide range of applications.

Nomenclature

240X - XXXX XX

- 240X: 2 - Male Flare (MSAE); 3 - Solder ID; 6 - Solenoid Coil
- XXXX: Valves - Connection Size:
  - 0404 - 1/4 x 1/4
  - 0606 - 3/8 x 3/8
  - 0808 - 1/2 x 1/2
  - 1010 - 5/8 x 5/8
  - 1212 - 3/4 x 3/4
  - 1414 - 7/8 x 7/8
  - 1818 - 1 1/8 x 1 1/8
- XX: Coils - Voltage:
  - 12 - 12 volt
  - 24 - 24 volt
  - 110 - 110 volt
  - 240 - 220/240 volt
- Blank - Standard
- RP - Reduced Port
- LT - Long Tail (extended copper connections)

or

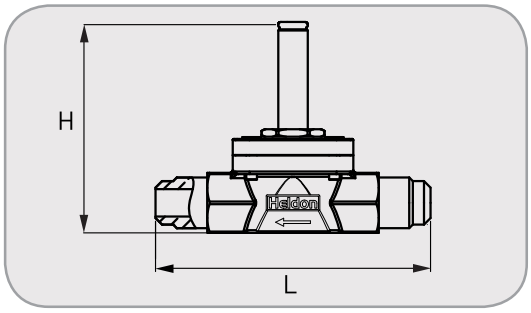
- AC - AC coil
- DC - DC coil

Manufacturing Standards

Manufactured in accordance with AS/NZS 1677.2

Dimensions and Capacities

2402 Series



Part No.	Flare Conn. Size (Inch)	Dimensions (mm)		Weight (kg)
		H	L	
2402-0404	1/4	63	67	0.125
2402-0606	3/8	69	75	0.220
2402-0808	1/2	78	102	0.480
2402-1010	5/8	78	107	0.490
2402-1212	3/4	80	126	0.840

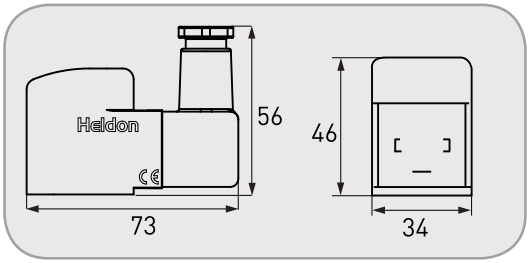
Part No.	Flare Conn.	Liquid (kW)			Vapour (kW)			Hot Gas (kW)			Kv (m3/hr)	Opening Diff. Pressure (bar)	Maximum Operating Pressure Differential (bar)	
		R22	R134a	R404A	R22	R134a	R404A	R22	R134a	R404A			AC Coil	DC Coil
2402-0404	1/4	3.2	3.0	2.1	-	-	-	2.1	1.6	1.8	0.175	0	21	19
2402-0606	3/8	14.5	13.5	9.5	2.2	1.8	1.85	9.5	6.9	8.2	0.8	0.5	21	19
2402-0808	1/2	39.6	37.1	26.2	6.0	4.8	5.0	26.0	18.9	22.4	2.3	0.5	21	18
2402-1010	5/8	47.0	44.0	31.0	7.0	5.7	6.0	30.8	22.9	26.5	3.8	0.5	21	18
2402-1212	3/4	86.4	80.0	57.1	13.2	10.5	11.0	56.8	41.5	48.5	4.9	0.5	21	13

Solenoid Coils

Part No.	Coils Description	Watts	Hz	Weight (kg)	Pack Q'ty
2406-012-DC	12 volt DC solenoid coil	9w	50/60 Hz	0.190	20
2406-024-DC	24 volt DC solenoid coil	9w	50/60 Hz	0.190	20
2406-24-AC	24 volt AC solenoid coil	9w	50/60 Hz	0.190	1
2406-240-AC	240 volt AC solenoid coil	9w	50/60 Hz	0.190	1

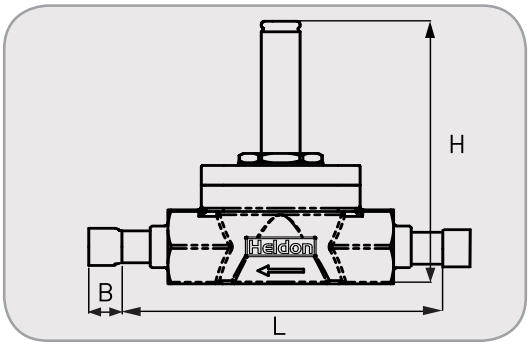
2406 Series

Solenoid Coil Dimensions (mm)



Dimensions and Capacities

2403 Series



Part No.	Solder Conn. Size (Inch)	Dimensions (mm)			Weight (kg)
		H	L	B	
2403-0404	1/4	63	102	7	0.135
2403-0404LT	1/4	63	250	7	0.180
2403-0606	3/8	69	111	8	0.230
2403-0606LT	3/8	69	250	8	0.280
2403-0808	1/2	78	127	10	0.500
2403-0808LT	1/2	78	250	10	0.550
2403-1010	5/8	78	127	13	0.520
2403-1212	3/4	80	176	16	0.860
2403-1414	7/8	80	176	19	0.870
2403-1818RP	1-1/8	80	176	19	0.880

Part No.	Solder Conn. (Inch)	Liquid (kW)			Vapour (kW)			Hot Gas (kW)			Kv (m3/hr)	Opending Diff. Pressure (bar)	Maximum Operating Pressure Differential (bar)	
		R22	R134a	R404A	R22	R134a	R404A	R22	R134a	R404A			AC coil	DC Coil
2403-0404	1/4	3.2	3.0	2.1	-	-	-	2.1	1.6	1.8	0.155	0	21	19
2403-0404LT	1/4	3.2	3.0	2.1	-	-	-	2.1	1.6	1.8	0.155	0	21	19
2403-0606	3/8	14.5	13.5	9.5	2.2	1.8	1.9	9.5	6.9	8.2	0.8	0.5	21	19
2403-0606LT	3/8	14.5	13.5	9.5	2.2	1.8	1.9	9.5	6.9	8.2	0.8	0.5	21	19
2403-0808	1/2	39.6	37.1	26.2	6.0	4.8	5.0	26.0	18.9	22.4	2.3	0.5	21	19
2403-0808LT	1/2	39.6	37.1	26.2	6.0	4.8	5.0	26.0	18.9	22.4	2.3	0.5	21	19
2403-1010	5/8	47.0	44.0	31.0	7.0	5.7	6.0	30.8	22.9	26.5	3.8	0.5	21	19
2403-1212	3/4	87.0	80.5	58.0	13.2	10.5	11.0	56.8	41.5	48.5	4.9	0.7	21	19
2403-1414	7/8	105.0	99.0	69.0	15.5	12.8	13.4	67.5	49.2	58.2	5.9	0.7	21	19
2403-1818RP	1-1/8	105.0	99.0	69.0	15.5	12.8	13.4	67.5	49.2	58.2	5.9	0.7	21	19

Capacities based on; Hot gas capacities based on:
Evaporating temperature: 4°C
Suction temperature: 18°C
Condensing Temperature: 38°C
Pressure drop: 100 kPa
Pressure drop across valve: 15 kPa

SOLENOID COILS

Introduction

Heldon offer flexibility in their range of encapsulated solenoid coils by designing them to suit a number of alternative brands in addition to the Heldon range.

The range offered suits the following Normally Closed solenoid valves:

- 2406 series coils suit the 2402 & 2403 series Heldon solenoid valves as well as the Castel brand of solenoid valves.
- 2406-EVR coils fit the Danfoss type EVR solenoid valves.
- 2405 series coils suit the old style 2400 & 2401 series Heldon solenoid valves.

The 2406 series coils come in a various voltage combinations and provides the service market with the ability to stock less replacement coils due to the interchangeability of the Heldon coils.

In addition, the 2406 series solenoild valve coils have the added visual diagnostic feature of a LED light that is illuminated when power is supplied to the coil Din Plug.

Both the 2405 & 2406 series solenoid coils are of rugged moisture proof design with a 2406 series featuring a simple click-on mounting. Both are IP65 rated with the CE mark to meet the low voltage directive of Europe (LVD) 72/23/EC where applicable.

In addition, Heldon also produce the 2405-MAG Permanent Magnet. This is a great asset for the Service Technician as it allows the solenoid valve to be energized without power supply. Ideal for trouble shooting, evacuating a system or for pressure testing purposes, when power is not available. Fits Heldon, Danfoss and most other popular brands of solenoid valve.

2406 Series

2406-EVR Series

2405-MAGNET Series

2406-DIN-LED Series

Features

1. Compact Ergonomic Design.
2. Low wattage coil.
3. LED light feature.
4. UV stabilised outer shell.
5. Hirschman style din plug.
6. Coil operating temperature -40 °C to 80 °C.
7. Fits multiple brands.

Benefits

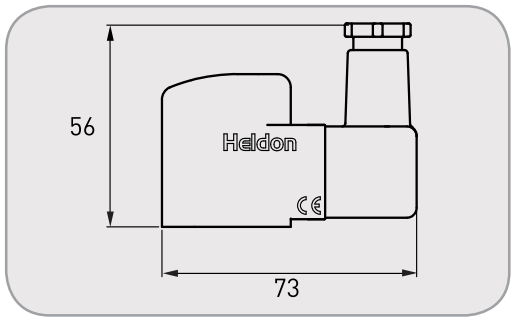
1. Simple click-on with minimal space requirement.
2. Power saving costs.
3. Visual diagnostic feature.
4. Suits tough hot environments.
5. Quick and safe connection.
6. Suits Australian conditions.
7. Saves stocking costs.

Manufacturing Standards

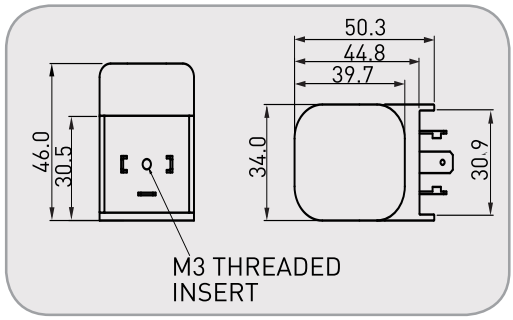
Manufactured in accordance with AS/NZS 1677.2

Dimensions

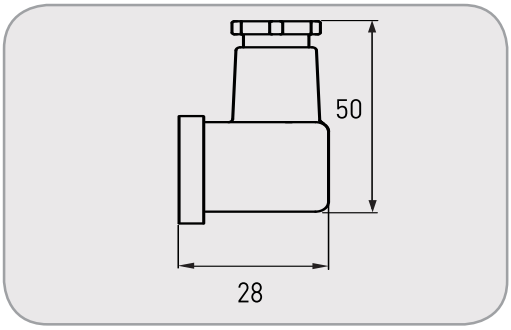
2406 With Terminal Box



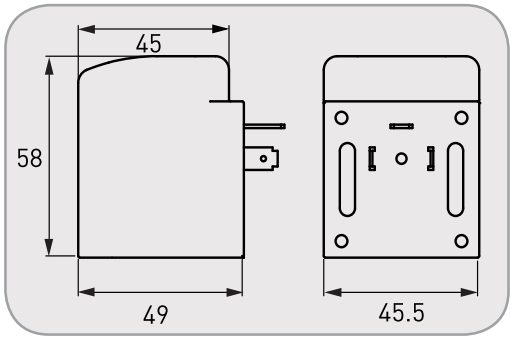
2406



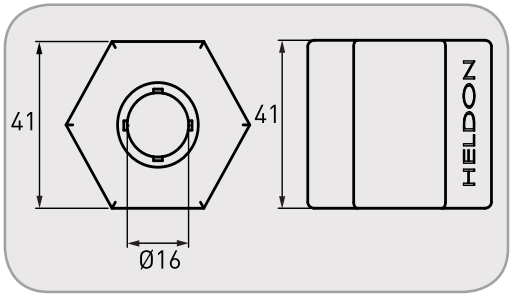
2406-DIN-LED



2406-EVR



2405-MAG



Note: Dimensions in mm.

Capacities

Solenoid Coil Range - 2406 Series (Fits new series 2402 & 2403 Solenoid Valves)

Part No.	Suit Valve Series	Brands Coil Fits	Supply Voltage V a.c / DC"	Frequency (Hz)	Power Cons. (a.c)	Power Cons. (DC)	Temp. Range	Weight (kg)
2406-240-AC	2402 Flare & 2403 Solder	Heldon / Castel	240 V a.c.	50/60	9W	-	-40/80°C	0.190
2406-24-AC	2402 Flare & 2403 Solder	Heldon / Castel	24 V a.c.	50/60	9W	-	-40/80°C	0.190
2406-012-DC	2402 Flare & 2403 Solder	Heldon / Castel	12 V DC.	-	-	9W	-40/80°C	0.190
2406-EVR-240-AC	EVR Danfoss - Flare & Solder	Danfoss	240 V a.c	50/60	10W	-	-40/80°C	0.315
2406-EVR-24-AC	EVR Danfoss - Flare & Solder	Danfoss	24 V a.c	50/60	10W	-	-40/80°C	0.315
2406-EVR-12-DC	EVR Danfoss - Flare & Solder	Danfoss	12 V DC	-	-	10W	-40/80°C	0.315
2406-DIN-LED	EVR Danfoss - Flare & Solder **	Danfoss	-	-	-	-	-40/80°C	0.020
2405-MAG	2405 / 2406 / EVR *	Heldon / Castel / Danfoss	-	-	-	-	-40/80°C	0.120

* Permanent Magnetic Coil
** Terminal Assemble for 2406-EVR

Solenoid Coil Range - 2405 Series (Fits old series 2400 & 2401 Solenoid Valves)

Part No.	Suit Valve Series	Supply Voltage V a.c / DC	Frequency (Hz)	Power Cons. (a.c)	Power Cons. (DC)	Temp. Range	Weight (kg)
2405-240V-AC	2400 Flare & 2401 Solder	240 V a.c.	50/60	9W	-	-40/80°C	0.190
2405-24V-AC	2400 Flare & 2401 Solder	24 V a.c.	50/60	9W	-	-40/80°C	0.190
2405-24V-DC	2400 Flare & 2401 Solder	24 V DC	50/60	9W	-	-40/80°C	0.190
2405-12V-DC	2400 Flare & 2401 Solder	12 V DC	50/60	9W	-	-40/80°C	0.190

Note: Stock will be run out due to discontinued stock on the 2400 & 2401 series Solenoid Valves.

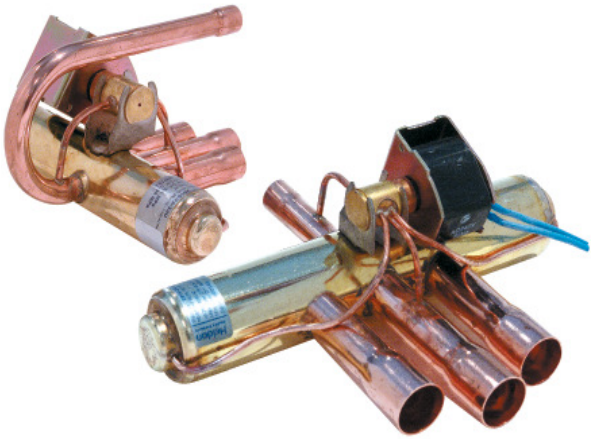
REVERSING VALVES

Introduction

The Reversing Valves are used in air-conditioning reverse cycle and heat pump systems to change the refrigerant direction of flow. By changing the refrigerant direction of flow the evaporator can become the condenser (the indoor coil) and the condenser can become the evaporator (the outdoor coil). This will lead to heat being rejected inside for heating in winter or outside for cooling in summer.

The cycle inversion is initiated by a small pilot solenoid valve that directs pressure to either end of the valve body forcing a piston and sliding valve to change ends altering the internal port configuration and reversing the flow direction of the refrigerant in the system. Due to the large port design of Heldon valves the changeover happens almost instantaneously with a minimal pressure differential, pressure drop and risk of internal leakage.

Heldon Reversing Valves are constructed from corrosion resistant brass with solid copper connectors and pilot tubes. Available in capacities from 4 to 45 kW with a maximum safe working pressure of 4,100 kPa for most models making those versions suitable for R410A.



Features

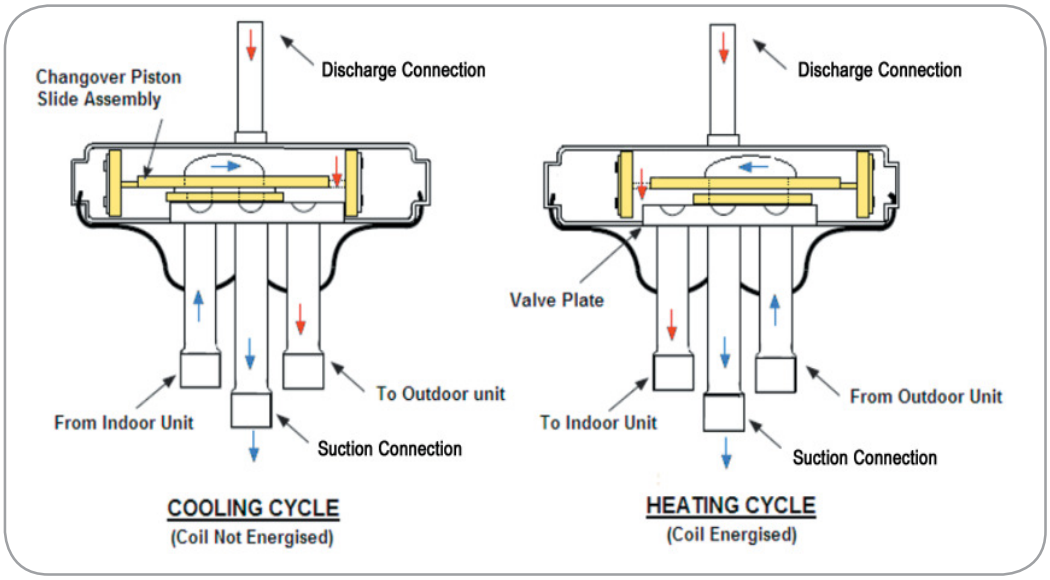
1. Designed for maximum flow and minimal pressure drop.
2. Brass construction.
3. Solid copper extended connectors.
4. Suitable for all fluorinated refrigerants up to 4,100 kPa (most models).
5. Wear resistant seals.
6. Working range = -20°C to 50°C Ambient.
7. High capacity pilot valve and tubes.

Benefits

1. Negligible loss in system efficiency.
2. Strong stable platform.
3. Easy installation and soldering.
4. Compatible with most fluorinated refrigerants and oils.
5. Longer reliable working life.
6. Suitable for a wide range of applications.
7. Reduced chance of a blockage.

Manufacturing Standards

Manufactured in accordance with AS/NZS 1677.2



Dimensions and Capacities

Heldon Reversing Valves

Part No.	Cap. (kW)	Refrig.	Disch. ID	Suction ID	Operating Diff. Pressure (Mpa)		Disch. Position	Disch. Style	Interchangeable Models	
					Min	Max			Ranco	Danfoss
2500-11-45D1	11	R22	1/2	5/8	0.34	2.50	Straight	Off set	V3-410084-7IL	
2510-4A-23U	4	ALL	5/16	3/8	0.25	3.10	U shape	Centre		CHV-0101
2510-7A-34U	7	ALL	3/8	1/2	0.34	3.10	U shape	Centre	V2-308064-2IL	
2510-9-35U	9	R22	3/8	5/8	0.34	3.10	U shape	Centre		
2510-20A-47	20	ALL	1/2	7/8	0.34	3.10	Straight	Centre	V6-414084-1IL	
2510-35A-67	35	ALL	3/4	7/8	0.34	3.10	Straight	Centre	V10-312124-1IL	CHV-0712
2510-45-79	45	R22	7/8	1 1/8	0.34	2.50	Straight	Centre	V10-318144-1IL	CHV-2011

Nominal capacity kW based on 40°C condensing temperature, 5°C evaporator temperature, 15 kPa pressure differential across suction port for refrigerant R22.

Heldon Reversing Valves come complete with 240V Coil.
Other voltages sold separately.

Reversing Valve Solenoid Coil

Part No.	Description
2510-4-10A1	R/V Solenoid Coil - 240VAC Lead Wire
2510-4-10A4	R/V Solenoid Coil - 24VAC Lead Wire
2510-4-10E1	R/V Solenoid Coil - 240VAC Spade Connector
2510-4-10E4	R/V Solenoid Coil - 24VAC Spade Connector
9220000	Coil - Ranco - 24VDC - 4-series
9220002	Coil - Ranco - 240VAC - 4-series

Ranco Reversing Valves

Part No.	Cap. (kW)	Refrig.	Disch. ID	Suction ID	Operating Diff. Pressure (MPa)		Disch. Style	Disch. Position
					Min	Max		
V2-408064-2IL	7	R410A	3/8	1/2	0.1	2.59	Straight	Centre
V3-410084-7IL	11	R410A	1/2	5/8	0.1	2.59	Straight	Centre
V6-412084-1IL	21	R410A	1/2	3/4	0.1	2.59	Straight	Centre
V6-414084-1IL	21	R410A	1/2	7/8	0.1	2.59	Straight	Centre
V10-414084-2IL	35	R410A	1/2	7/8	0.1	2.59	Straight	Centre
V10-414124-2IL	35	R410A	3/4	7/8	0.1	2.59	Straight	Centre
V10-418144-2IL	35	R410A	7/8	1-1/8	0.1	2.59	Straight	Centre
V12-4220T4-1IL	42	R410A	1 1/8	1 3/8	0.1	2.59	Straight	Centre
V12-4220T20-2IL	42	R410A	1 1/8	1 3/8	0.1	2.59	Straight	Centre