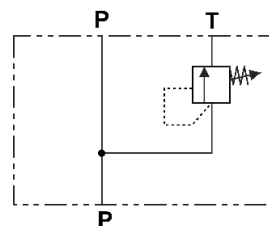


Line Mount Valves

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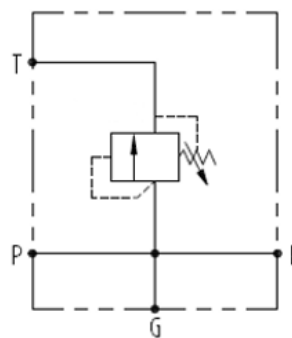
Pressure Relief Valves (Direct Acting Poppet) - Steel Body



Order Code	Ports Size	Max. Flow (L/min)	Adjustable Pressure (bar)	Factory Set (bar)	Max. Pressure (bar)	List Each
HDR-G1/4-210	G 1/4	25	50 - 210	200	315	\$190.00
HDR-G3/8-210	G 3/8	50				\$200.00
HDR-G1/2-210	G 1/2	80				\$210.00
HDR-G3/4-210	G 3/4	120				\$296.00
HDR-G1-210	G 1	220				\$327.00

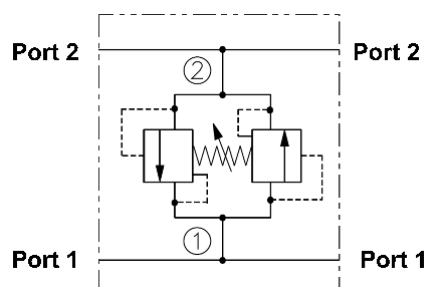
Order Code	Ports Size	Max. Flow (L/min)	Adjustable Pressure (bar)	Factory Set (bar)	Max. Pressure (bar)	List Each
HDR-G1/4-315	G 1/4	25	70 - 315	200	315	\$190.00
HDR-G3/8-315	G 3/8	50				\$200.00
HDR-G1/2-315	G 1/2	80				\$210.00
HDR-G3/4-315	G 3/4	120				\$296.00
HDR-G1-315	G 1	220				\$327.00

Pressure Relief Valve (Direct Acting) - Alloy Body



Order Code	Port Size	Gauge Port	Max. Flow (L/min)	Adjustable Pressure (bar)	Factory Set (bar)	Max. Pressure (bar)	List Each
MRDFA-LAN-G1	G 1	G 1/4	200	35 - 210	196.5	210	\$346.00

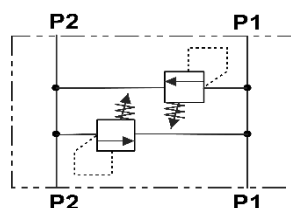
Bi-Directional Pressure Relief Valves (Direct Acting, Differential Area, Poppet) - Alloy Body



Order Code	Port Size	Max. Flow (L/min)	Adjustable Pressure (bar)	Factory Set (bar)	Max. Pressure (bar)	List Each
LBRV2-10-24/0138	N/A	60	20 - 168	138	240	\$275.00
LBRV2-10-30/0138			100 - 210			
LB10-2-A-4G4	G 1/2	N/A	N/A	N/A	210	\$155.00

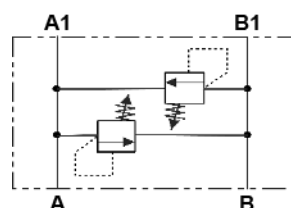
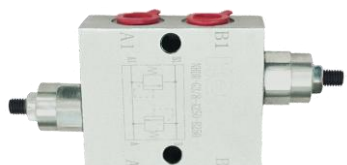
Note: Cartridge & Body are sold separately and not assembled.

Cross Line Pressure Relief Valves (Direct Acting Poppet) - Steel Body



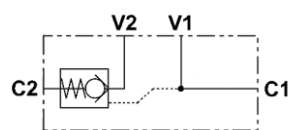
Order Code	Port Size	Max. Flow (L/min)	Adjustable Pressure (bar)	Factory Set (bar)	Max. Pressure (bar)	List Each
VAIL-G3/8-210	G 3/8	25	70 - 210	200	315	\$255.00
VAIL-G1/2-210	G 1/2	50				\$297.00
VAIL-G1-210	G 1	120				\$437.00

Order Code	Port Size	Max. Flow (L/min)	Adjustable Pressure (bar)	Factory Set (bar)	Max. Pressure (bar)	List Each
VAIL-G3/8-315	G 3/8	25	100 - 315	200	315	\$255.00
VAIL-G1/2-315	G 1/2	50				\$297.00
VAIL-G1-315	G 1	120				\$437.00



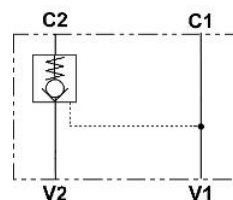
Order Code	Port Size	Max. Flow (L/min)	Adjustable Pressure (bar)	Factory Set (bar)	Max. Pressure (bar)	List Each
NHDR-G3/8-A250-B250	G 3/8	45	20 - 250	200	315	\$225.00
NHDR-G1/2-A250-B250	G 1/2	60				\$225.00

Single Pilot Operated Check Valves - Steel Body



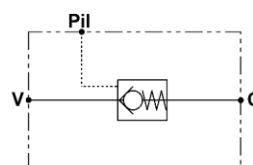
Order Code	Port Size	Max. Flow (L/min)	Max. Pressure (bar)	Pilot Ratio	Free Flow Cracking Pressure (bar)	Length (mm)	List Each
VRSE-G1/4	G 1/4	20	350	4.5 : 1	3.5	116	\$111.00
VRSE-G3/8	G 3/8	50	350	4.0 : 1		139	\$139.00
VRSE-G1/2	G 1/2	80	300	4.0 : 1		173	\$151.00

Single Pilot Operated Check Valves - Steel Body



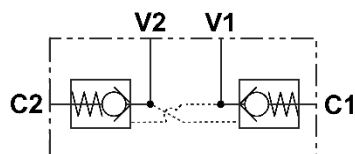
Order Code	Port Size	Max. Flow (L/min)	Max. Pressure (bar)	Pilot Ratio	Free Flow Cracking Pressure (bar)	List Each
VRSL-G1/4	G 1/4	20	350	7.1 : 1	3.5	\$161.00
VRSL-G3/8	G 3/8	30		7.1 : 1		\$193.00
VRSL-G1/2	G 1/2	50		4.8 : 1		\$225.00
VRSL-G3/4	G 3/4	100		5.4 : 1		\$284.00

Barrel Pilot Operated Check Valves - Steel Body



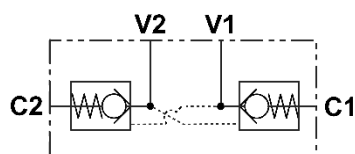
Order Code	Port Size	Pilot Port	Max. Flow (L/min)	Max. Pressure (bar)	Pilot Ratio	Free Flow Cracking Pressure (bar)	List Each
VRPE-G1/4	G 1/4	G 1/4	20	350	3.6 : 1	3.5	\$136.00
VRPE-G3/8	G 3/8		40	350	4.5 : 1		\$136.00
VRPE-G1/2	G 1/2		60	350	4.5 : 1		\$149.00
VRPE-G3/4	G 3/4		100	300	4.5 : 1		\$308.00
VRPE-G1	G 1		150	300	3.5 : 1		\$412.00

Double Pilot Operated Check Valves - Steel Body



Order Code	Port Size	Max. Flow (L/min)	Max. Pressure (bar)	Pilot Ratio	Free Flow Cracking Pressure (bar)	Length (mm)	List Each
VRDE-G1/4	G 1/4	20	350	4.5 : 1	3.5	115	\$122.00
VRDE-G3/8	G 3/8	50	350	4.0 : 1		139	\$152.00
VRDE-G1/2	G 1/2	80	300	4.0 : 1		173	\$165.00

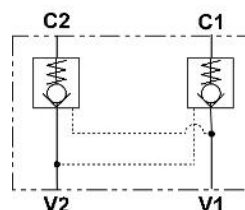
Short Length Double Pilot Operated Check Valve - Steel Body



Order Code	Port Size	Max. Flow (L/min)	Max. Pressure (bar)	Pilot Ratio	Free Flow Cracking Pressure (bar)	Length (mm)	List Each
VRDS-G1/4	G 1/4	20	350	4.0 : 1	3.0	80	\$192.00

Note: Valve is fitted with a Pilot Piston Seal. This is recommended when using the valve with a closed centre spool in the DCV or when you have very small flow which could be unloaded through the piston causing a malfunction. Remove the piston seal if reaction time is too slow.

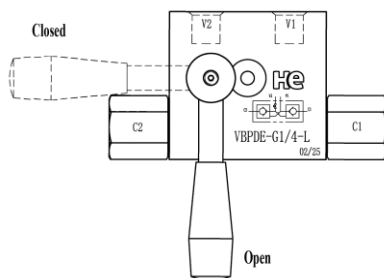
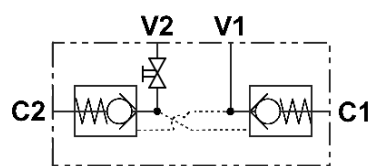
Double Pilot Operated Check Valves - Steel Body



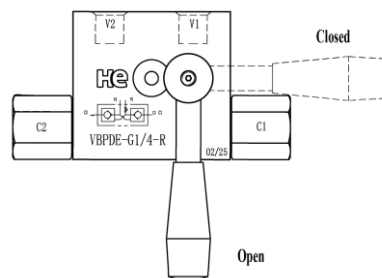
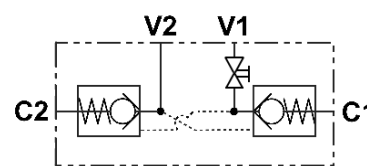
Order Code	Port Size	Max. Flow (L/min)	Max. Pressure (bar)	Pilot Ratio	Free Flow Cracking Pressure (bar)	List Each
VRDL-G1/4	G 1/4	20	350	7.1 : 1	3.5	\$204.00
VRDL-G3/8	G 3/8	30		7.1 : 1		\$233.00
VRDL-G1/2	G 1/2	50		4.8 : 1		\$262.00
VRDL-G3/4	G 3/4	100		5.4 : 1		\$438.00

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Double Pilot Operated Check Valves with Shut Off Valve - Steel Body



Left Hand build



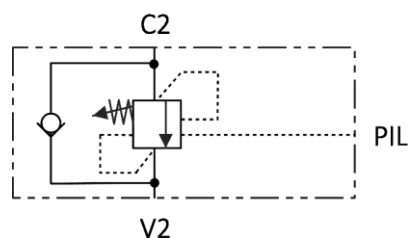
Right Hand build

Order Code	Port Size	Max. Flow (L/min)	Max. Pressure (bar)	Pilot Ratio	Free Flow Cracking Pressure (bar)	Length (mm)	List Each
VBPDE-G1/4-*	G 1/4	20	350	5.5 : 1	4.0	113	\$363.00
VBPDE-G3/8-*	G 3/8	30		5.5 : 1	4.0	118	\$399.00
VBPDE-G1/2-*	G 1/2	50		5.0 : 1	3.0	142	\$545.00

Note:

- * = insert L for Left Hand build or R for Right Hand build.
- To prevent cylinder intensification on the rod end when the Shut Off Valve is closed and system pressure applied connect as follows:
VBPDE-G*/*-L Port C2 to full bore end.
VBPDE-G*/*-R Port C1 to full bore end.
- VBPDE-G1/2-* is not stocked and available as indent to customer order.

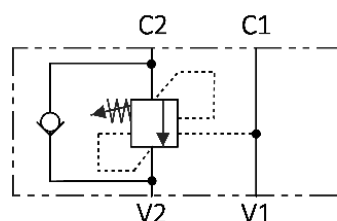
3 Port Single Counterbalance Valves - Steel Body



Order Code	Port Size	Pilot Port	Max. Flow (L/min)	Adjustable Pressure (bar)	Max. Pressure (bar)	Pilot Ratio	Free Flow Cracking Pressure (bar)	List Each
VBCD-G1/4-SE-3VIE	G 1/4	G 1/4	20	80 - 315	350	4.5 : 1	3.5	\$237.00
VBCD-G3/8-SE-3VIE	G 3/8		40					\$237.00
VBCD-G1/2-SE-3VIE	G 1/2		60					\$248.00
VBCD-G3/4-SE-3VIE	G 3/4		100					\$412.00
VBCD-G1-SE-3VIE	G 1		150					\$557.00

Note: Factory Set 300 bar. Counterbalance valves should be set at least 1.3 times the maximum load induced pressure and 1.5 times when valve is set below 140 bar. Therefore maximum load induced pressure is 242 bar.

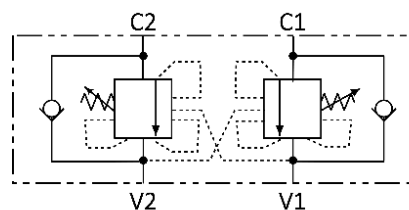
4 Port Single Counterbalance Valves - Steel Body



Order Code	Port Size	Max. Flow (L/min)	Adjustable Pressure (bar)	Max. Pressure (bar)	Pilot Ratio	Free Flow Cracking Pressure (bar)	List Each
VBCD-G1/4-SE A	G 1/4	20	80 - 315	350	4.5 : 1	3.5	\$237.00
VBCD-G3/8-SE A	G 3/8	40					\$237.00
VBCD-G1/2-SE A	G 1/2	60					\$248.00
VBCD-G3/4-SE A	G 3/4	100					\$412.00
VBCD-G1-SE A	G 1	150					\$557.00

Note: Factory Set 300 bar. Counterbalance valves should be set at least 1.3 times the maximum load induced pressure and 1.5 times when valve is set below 140 bar. Therefore maximum load induced pressure is 242 bar.

4 Port Dual Counterbalance Valves - Steel Body



Order Code	Port Size	Max. Flow (L/min)	Adjustable Pressure (bar)	Max. Pressure (bar)	Pilot Ratio	Free Flow Cracking Pressure (bar)	List Each
VBCD-G1/4-DE A	G 1/4	20	80 - 315	350	4.5 : 1	3.5	\$329.00
VBCD-G3/8-DE A	G 3/8	40					\$329.00
VBCD-G1/2-DE A	G 1/2	60					\$340.00
VBCD-G3/4-DE A	G 3/4	100					\$578.00
VBCD-G1-DE A	G 1	150					\$748.00

Note: Factory Set 300 bar. Counterbalance valves should be set at least 1.3 times the maximum load induced pressure and 1.5 times when valve is set below 140 bar. Therefore maximum load induced pressure is 242 bar.

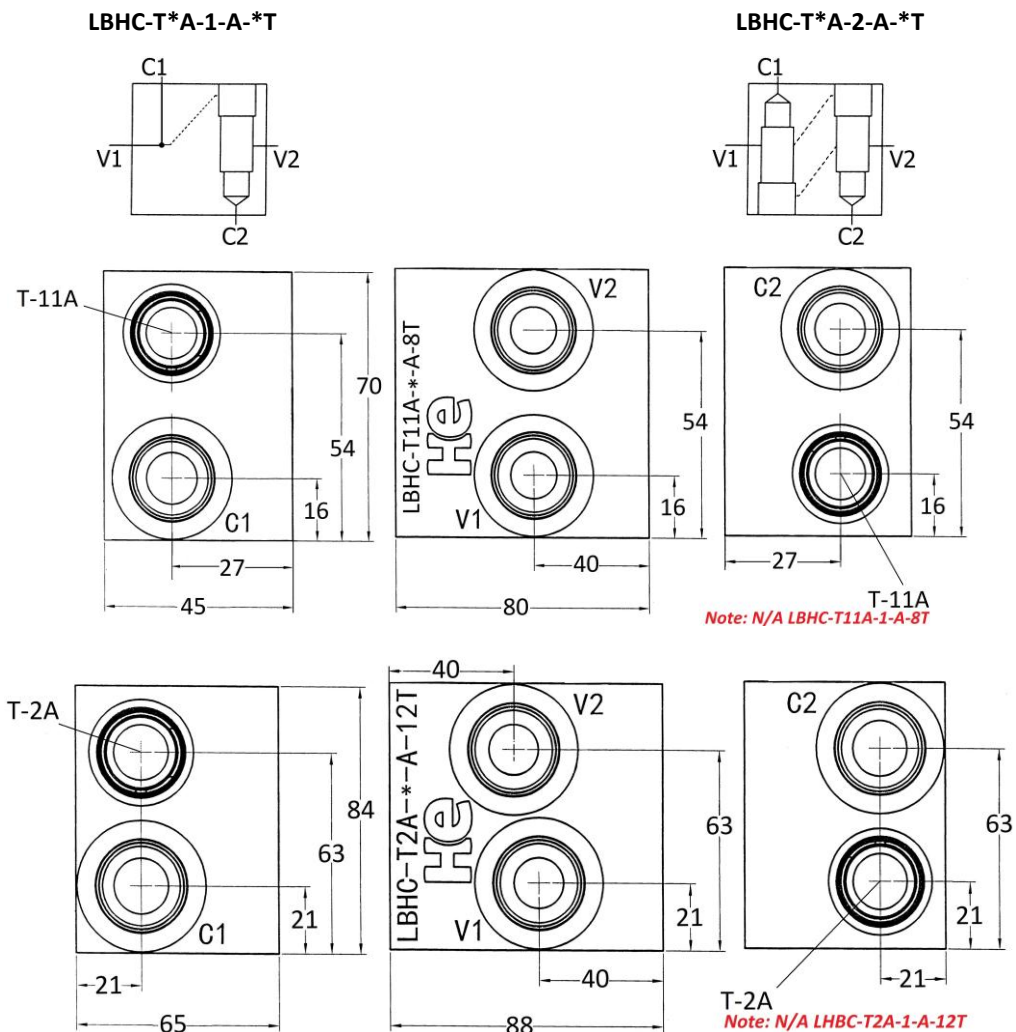
Cylinder Mount Counterbalance & Pilot Operated Check Valves



Order Code	Cavity	Ports	Material	Max. Pressure (bar)	List Each
LBHC-T11A-1-A-8T	T-11A x 1	3/4" UNO	Aluminium (6061T6)	210	\$134.00
LBHC-T11A-2-A-8T	T-11A x 2				\$160.00
LBHC-T2A-1-A-12T	T-2A x 1	1 1/16" UNO			\$182.00
LBHC-T2A-2-A-12T	T-2A x 2				\$210.00

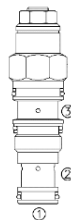
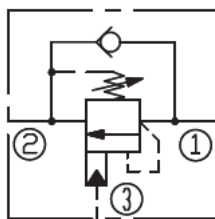
Note:

- LBHC-T*A-1-A-*T (single cavity body), load is held on port C2.
- Cartridge Information on [Page 4.10](#).



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Counterbalance Valves

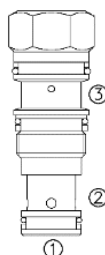
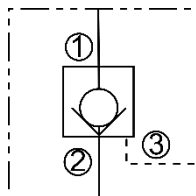


Order Code	Cavity	Max. Flow (L/min)	Pilot Ratio	Free Flow Cracking Pressure (bar)	Adjustable Pressure (bar)	Factory Set (bar)	List Each
LCBCA-LAN	T-11A	60	3 : 1	0.3	70 - 280	210	\$165.00
LCBCA-LHN			3 : 1	1.7	70 - 280	210	\$165.00
LCBCA-LIN			3 : 1	1.7	25 - 105	70	\$165.00
LCBCH-LJN			10 : 1	1.7	140 - 350	210	\$178.00
LCBEA-LHN	T-2A	120	3 : 1	1.7	70 - 280	210	\$246.00

Note:

- Two check valve cracking pressures are available. Use the 1.7 bar check unless actuator cavitation is a concern. Generally, the 1.7 bar check spring is recommended for most applications as it is more robust and insensitive to rapid flow reversals. The 0.3 bar check spring should be used if there is a need to pull in make-up oil.
- Counterbalance valves should be set at least 1.3 times the maximum load induced pressure and 1.5 times when valve is set below 140 bar.
- Additional information available on [Page 9.20](#).

Pilot Operated Check Valves



Order Code	Cavity	Max. Flow (L/min)	Max. Pressure (bar)	Pilot Ratio	Pilot Piston Seal	Free Flow Cracking Pressure (bar)	List Each
LCKCB-XCN	T-11A	60	350	3 : 1	No	2.0	\$123.00
LCKCD-XCN					Yes		

Elbow Fittings



Order Code	Threads	HC Cylinder Bore	List Each
6807-08-06-NWO	3/4" UNO x 9/16" UNO	1.5" - 2.0"	\$31.00
6807-08-08-NWO	3/4" UNO x 3/4" UNO	2.5" - 5.0"	

Note:

- Elbow Fitting allows direct mounting of body to cylinder port. Not available for LBHC-T2A-*A-12T.
- Tube & Fittings from body to the other cylinder port are not supplied.
- LBHC-T*A-1-A -*T (single cavity body), load is held on port C2.

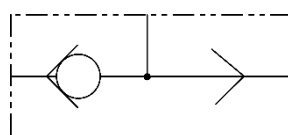
Inline Check Valves (Poppet) - Steel Body



Order Code	Port Size	Cracking Pressure (bar)	Max. Flow (L/min)	Max. Pressure (bar)	List Each
VUR-G1/4-0.5	G 1/4	0.5	20	400	\$32.00
VUR-G3/8-0.5	G 3/8		45	400	\$34.00
VUR-G1/2-0.5	G 1/2		70	350	\$45.00
VUR-G3/4-0.5	G 3/4		110	350	\$57.00
VUR-G1-0.5	G 1		160	350	\$86.00
VUR-G1 1/4-0.5	G 1 1/4		250	300	\$179.00
VUR-G1 1/2-0.5	G 1 1/2		350	250	\$214.00

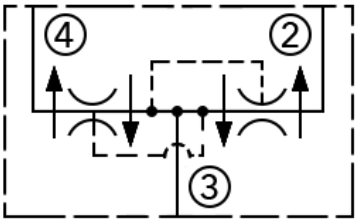
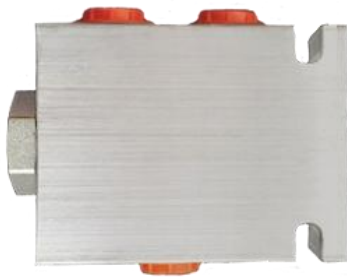
Order Code	Port Size	Cracking Pressure (bar)	Max. Flow (L/min)	Max. Pressure (bar)	List Each
VUR-G1/4-5.0	G 1/4	5.0	20	400	\$32.00
VUR-G3/8-5.0	G 3/8		45	400	\$34.00
VUR-G1/2-5.0	G 1/2		70	350	\$45.00
VUR-G3/4-5.0	G 3/4		110	350	\$57.00
VUR-G1-5.0	G 1		160	350	\$86.00
VUR-G1 1/4-5.0	G 1 1/4		250	300	\$179.00
VUR-G1 1/2-5.0	G 1 1/2		350	250	\$214.00

Shuttle Valves - Steel Body



Order Code	Port Size	Max. Flow (L/min)	Max. Pressure (bar)	List Each
VUSF-G1/4	G 1/4	35	350	\$69.00
VUSF-G3/8	G 3/8	50		\$91.00
VUSF-G1/2	G 1/2	90		\$103.00
VUSF-G3/4	G 3/4	140		\$148.00

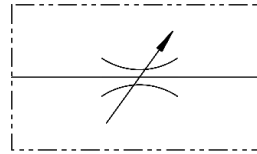
Flow Divider / Combiner - Alloy Body



Order Code	Port Size	Max. Inlet Flow at ③ (L/min)	Ratio	Max. Pressure (bar)	List Each
LFD-10-3.0	N/A	11.4	50 : 50	240	\$235.00
LFD-10-6.0		22.7			
LFD-10-12.0		45.4			
LFD-10-16.0		60.6			
LB10-4-A-3G/S	G 3/8	N/A	N/A	210	\$112.00
LB10-4-A-4G/S	G 1/2				

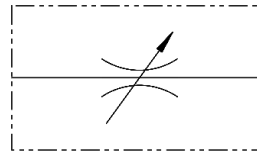
Note: Cartridge & Body are sold separately and not assembled.

Needle Valves



Order Code	Port Size	Max. Flow (L/min)	Max. Pressure (bar)	Materials	List Each
NV-G1/8	G 1/8	14	315	Body: Steel - Phosphate surface Knob: Aluminium - Zinc plated	\$70.00
NV-G1/4	G 1/4	40			\$73.00
NV-G3/8	G 3/8	60			\$77.00
NV-G1/2	G 1/2	85			\$89.00
NV-G3/4	G 3/4	175			\$101.00
NV-G1	G 1	200			\$149.00
NV-G1 1/4	G 1 1/4	300			\$353.00
NV-G1 1/2	G 1 1/2	400			\$742.00

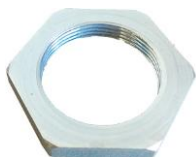
Note: Locking Grub Screw on Knob.



Order Code	Port Size	Max. Flow (L/min)	Max. Pressure (bar)	Materials	List Each
STB-G1/4	G 1/4	12	400	Body: Steel - Cr3+ (White Zinc Plating) Knob: Aluminium (Clear Anodised)	\$66.00
STB-G3/8	G 3/8	30			\$96.00
STB-G1/2	G 1/2	50			\$112.00
STB-G3/4	G 3/4	85			\$132.00
STB-G1	G 1	150	320		\$182.00

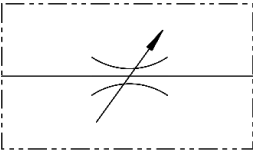
Note: Locking Grub Screw on Knob.

STB Series Panel Mount Nut



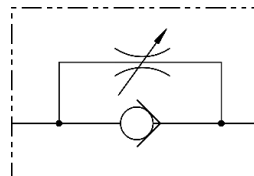
Order Code	Suits Valve	Material	List Each
STN-G1/4	STB-G1/4	Steel – Zinc Plated	\$10.00
STN-G3/8	STB-G3/8		\$11.00
STN-G1/2	STB-G1/2		\$12.00
STN-G3/4	STB-G3/4		\$13.00
STN-G1	STB-G1		\$15.00

Barrel Needle Valves



Order Code	Port Size	Max. Flow (L/min)	Max. Pressure (bar)	List Each
VBRF-G1/4	G 1/4	12	320	\$76.00
VBRF-G3/8	G 3/8	30		\$90.00
VBRF-G1/2	G 1/2	50		\$111.00
VBRF-G3/4	G 3/4	85	280	\$144.00
VBRF-G1	G 1	120	250	\$210.00

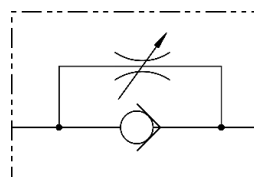
Flow Control Valves



Order Code	Port Size	Max. Flow (L/min)	Max. Pressure (bar)	Materials	List Each
FC-G1/8	G 1/8	14	315	Body: Steel - Phosphate surface Knob: Aluminium - Zinc plated	\$73.00
FC-G1/4	G 1/4	40			\$75.00
FC-G3/8	G 3/8	60			\$79.00
FC-G1/2	G 1/2	85			\$93.00
FC-G3/4	G 3/4	175			\$116.00
FC-G1	G 1	200			\$167.00
FC-G1 1/4	G 1 1/4	300			\$371.00
FC-G1 1/2	G 1 1/2	400			\$788.00

Note:

- Locking Grub Screw on Knob.
- Free Flow Cracking Pressure 0.5 bar.

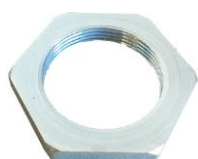


Order Code	Port Size	Max. Flow (L/min)	Max. Pressure (bar)	Materials	List Each
STU-G1/4	G 1/4	12	400	Body: Steel - Cr3+ (White Zinc Plating) Knob: Aluminium (Clear Anodised)	\$70.00
STU-G3/8	G 3/8	30			\$102.00
STU-G1/2	G 1/2	50			\$122.00
STU-G3/4	G 3/4	85			\$146.00
STU-G1	G 1	150	320		\$196.00

Note:

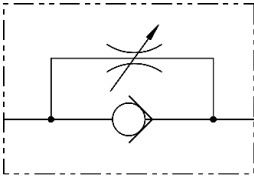
- Locking Grub Screw on Knob.
- Free Flow Cracking Pressure 0.5 bar.

STU Series Panel Mount Nut



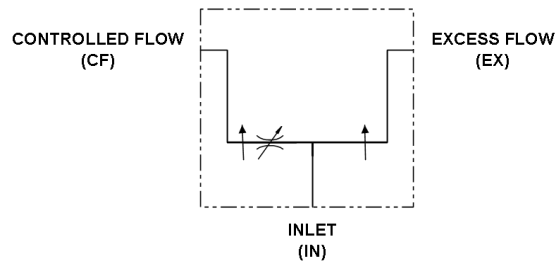
Order Code	Suits Valve	Material	List Each
STN-G1/4	STU-G1/4	Steel – Zinc Plated	\$10.00
STN-G3/8	STU-G3/8		\$11.00
STN-G1/2	STU-G1/2		\$12.00
STN-G3/4	STU-G3/4		\$13.00
STN-G1	STU-G1		\$15.00

Barrel Flow Control Valves



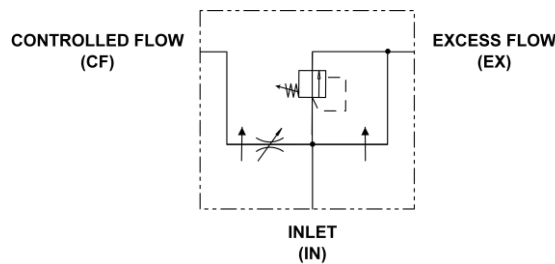
Order Code	Port Size	Max. Flow (L/min)	Max. Pressure (bar)	Free Flow Cracking Pressure (bar)	List Each
VURF-G1/4	G 1/4	12	320	0.5	\$95.00
VURF-G3/8	G 3/8	30			\$110.00
VURF-G1/2	G 1/2	50			\$136.00
VURF-G3/4	G 3/4	85	280		\$176.00
VURF-G1	G 1	120	250		\$202.00

Pressure Compensated Priority Flow Control Valves



Order Code	Port Size	Max. Flow - IN & CF (L/min)	Max. Pressure (bar)	List Each
FC51-G3/8	G 3/8	30	207	\$272.00
FC51-G1/2	G 1/2	60		\$272.00
FC51-G3/4	G 3/4	114		\$272.00
FC51-G1	G 1	190		\$1,031.00
FC51-G1 1/4	G 1 1/4	340		\$1,072.00

Pressure Compensated Priority Flow Control Valves with Relief



Order Code	Port Size	Max. Flow - IN & CF (L/min)	Preset Pressure (bar)	Adjustable Pressure (bar)	Max. Pressure (bar)	List Each
FCR51-G3/8	G 3/8	30	145	52 - 207	207	\$295.00
FCR51-G1/2	G 1/2	60				
FCR51-G3/4	G 3/4	114				

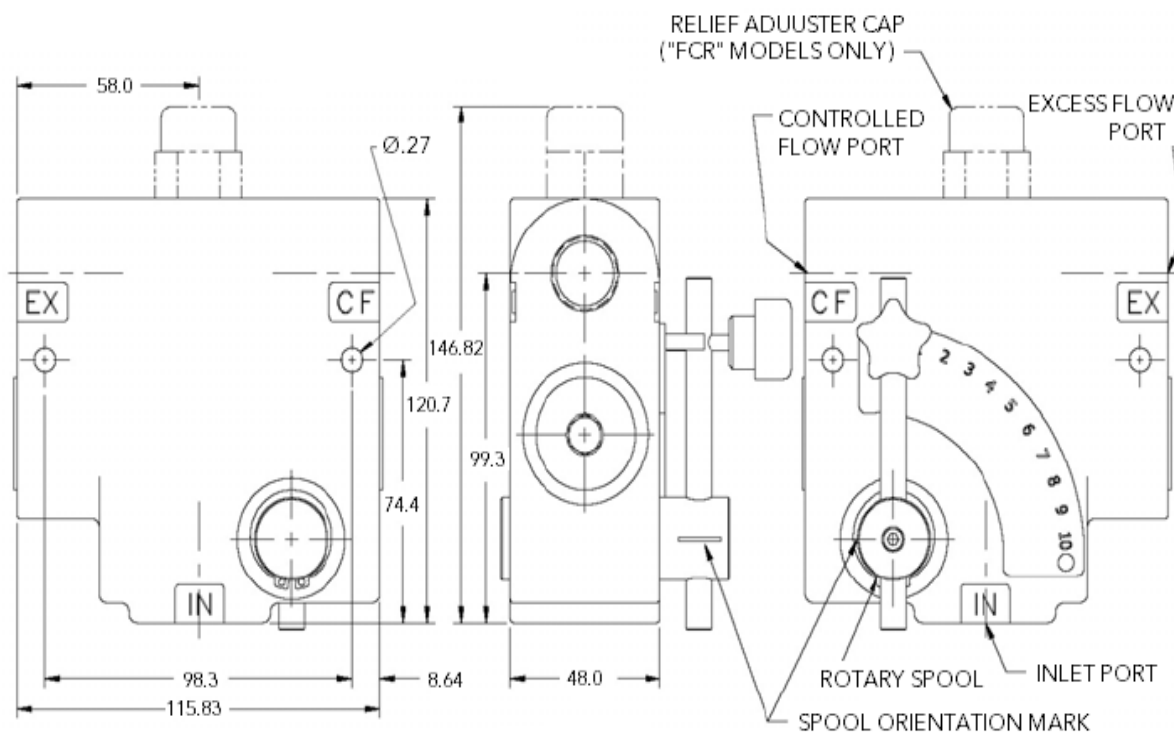
General Information

The Hoyea full range pressure compensating variable flow control is designed so that the orifice area varies as the lever is rotated. Fluid travels past the variable orifice, through the compensator spool and then out the controlled flow port. Therefore, the flow out of the CF port is proportional to the orifice area which can vary from closed to open. The sum of the controlled flow and the excess flow equals the inlet flow and as the controlled flow increases the excess flow decreases. Both outlet flows are pressure compensated with a spool that maintains a constant flow by adjusting for pressure. Hunting between the compensated pump and valve is dampened with a dashpot on the compensator spool. Therefore, the outlet flow is smooth and constant regardless of the pressure on the CF and EX port. External seals on the rotary spool prevent contamination from getting between the spool and the casting, thus preventing the spool from locking in one position.

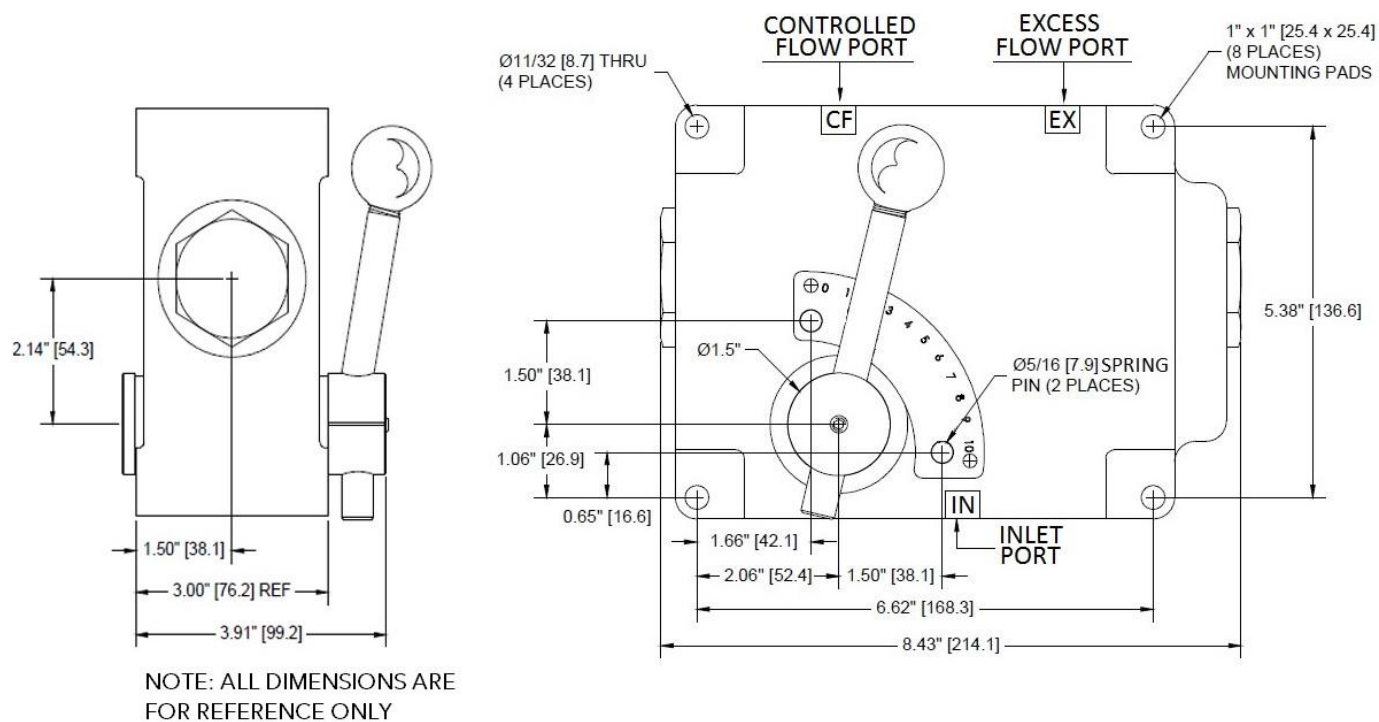
The adjustable poppet relief valve (FCR51 Models) allows pressure compensated flow up to the pressure relief setting. Once the pressure on the CF port increases above the relief setting the relief valve opens and diverts flow to the **EX** port while maintaining the pressure on the CF port. **Note: The EX port must be connected back to tank.**

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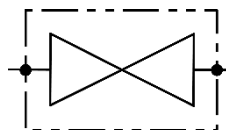
FC(R)51-G3/8, G1/2 & G3/4



FC51-G1 & G1 1/4



2 Way Steel Ball Valves



Order Code	Port Size	Nominal Dia. (DN)	Ball Hole Dia.	Max. Pressure (bar)	List Each
KHB-G1/4-06-11231-B-MH	G 1/4	06	6	500	\$45.00
KHB-G3/8-10-11231-B-MH	G 3/8	10	10		\$53.00
KHB-G1/2-13-11231-B-MH	G 1/2	13	13		\$60.00
KHB-G3/4-20-11231-B-MH	G 3/4	20	20	315	\$103.00
KHB-G1-25-11231-B-MH	G 1	25	25		\$135.00
KHB-G1 1/4-32-11231-B-MH	G 1 1/4	32	32		\$234.00
KHB-G1 1/2-40-11231-B-MH	G 1 1/2	40	40		\$297.00

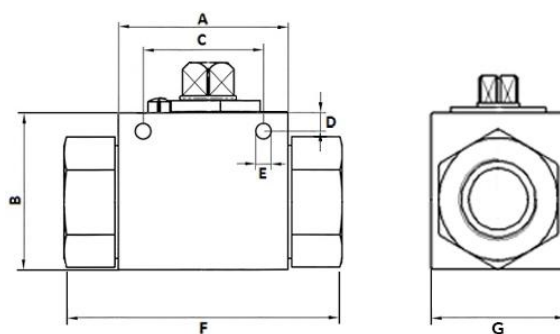
Note: Ball Seal material is POM, Valve Stem & Body Seal material is NBR.

2 Way SUS 316 Ball Valves (No Mounting Holes)

Order Code	Port Size	Nominal Dia. (DN)	Ball Hole Dia.	Max. Pressure (bar)	List Each
KHB-G1/4-06-33231	G 1/4	06	6	500	\$268.00
KHB-G3/8-10-33231	G 3/8	10	10		\$327.00
KHB-G1/2-13-33231	G 1/2	13	13		\$373.00

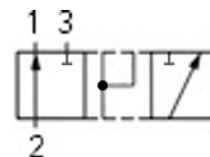
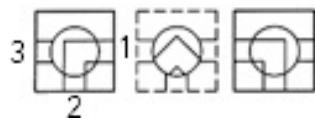
Note: Ball Seal material is POM, Valve Stem & Body Seal material is NBR.

2 Way Ball Valve Dimensions



Port Size	A	B	C	D	E	F	G
G 1/4	40	32	31.5	4.8	Ø 4.5	69	26
G 3/8	42	40	31.5	5.0	Ø 6.5	72	34
G 1/2	48	45	38.5	6.0	Ø 6.5	83	35
G 3/4	60	56	48.5	6.0	Ø 6.5	95	48
G 1	64	64	50.5	7.0	Ø 8.5	113	58
G 1 1/4	72	75	50.5	7.0	Ø 8.5	110	68
G 1 1/2	80	86	63.0	7.0	Ø 8.5	130	80

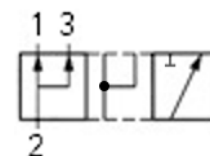
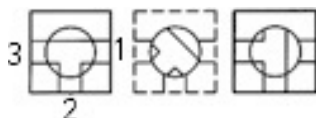
3 Way Steel Ball Valves (L - Type, Negative Overlap)



Order Code	Port Size	Nominal Dia. (DN)	Ball Hole Dia.	Max. Pressure (bar)	List Each
KHB3L-G1/4-06-11231-B-MH	G 1/4	06	6	500	\$65.00
KHB3L-G3/8-10-11231-B-MH	G 3/8	10	10		\$75.00
KHB3L-G1/2-13-11231-B-MH	G 1/2	13	12		\$82.00
KHB3L-G3/4-20-11231-B-MH	G 3/4	20	20	315	\$147.00
KHB3L-G1-25-11231-B-MH	G 1	25	25		\$184.00
KHB3L-G1 1/4-32-11231-B-MH	G 1 1/4	32	30		\$309.00
KHB3L-G1 1/2-40-11231-B-MH	G 1 1/2	40	36		\$409.00

Note: Ball Seal material is POM, Valve Stem & Body Seal material is NBR.

3 Way Steel Ball Valves (T - Type, Negative Overlap)



Order Code	Port Size	Nominal Dia. (DN)	Ball Hole Dia.	Max. Pressure (bar)	List Each
KHB3T-G1/4-06-11231-B-MH	G 1/4	06	6	500	\$65.00
KHB3T-G3/8-10-11231-B-MH	G 3/8	10	10		\$75.00
KHB3T-G1/2-13-11231-B-MH	G 1/2	13	12		\$82.00
KHB3T-G3/4-20-11231-B-MH	G 3/4	20	20	315	\$147.00
KHB3T-G1-25-11231-B-MH	G 1	25	25		\$184.00
KHB3T-G1 1/4-32-11231-B-MH	G 1 1/4	32	30		\$309.00
KHB3T-G1 1/2-40-11231-B-MH	G 1 1/2	40	36		\$409.00

Note: Ball Seal material is POM, Valve Stem & Body Seal material is NBR.

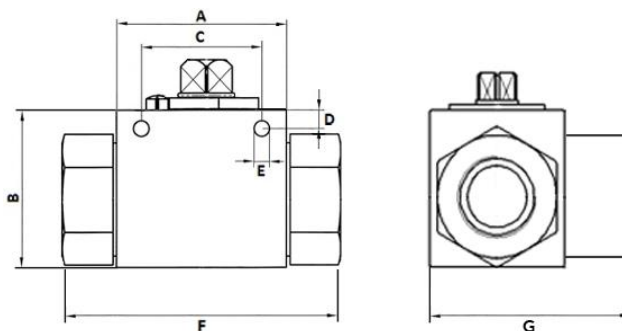
Negative Overlap:

With a negative overlapping ball in the mid position (45°) flow will be directed simultaneously from Port 2 to 1 & 3.

Blocking all ports by switching the ball in a middle position is not possible.

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3 Way Ball Valve Dimensions



Port Size	A	B	C	D	E	F	G
G 1/4	39	32	31.5	4.8	Ø 4.5	69	49
G 3/8	41	40	31.5	5.0	Ø 6.5	72	52
G 1/2	48	45	38.5	6.0	Ø 6.5	83	53
G 3/4	59	56	48.5	6.0	Ø 6.5	95	73
G 1	63	63	50.5	7.0	Ø 8.5	113	85
G 1 1/4	72	75	50.5	7.0	Ø 8.5	110	93
G 1 1/2	80	86	63.0	7.0	Ø 8.5	130	108

Ball Valve Handles



Order Code	Port Size	Handle Marking	Stem Size (mm)	Screw Thread Size	List Each
KHBH-9	G 1/4	SW9	9	M6	\$13.00
	G 3/8				
	G 1/2				
KHBH-12	G 3/4	SW12	12	M6	\$16.00
	G 1				
KHBH-14	G 1 1/4	SW14	14	M8	\$18.00
	G 1 1/2				

Note: Handle is marked as 2 way and includes one screw, one standard washer and two flow direction washers (3-Way L & 3-Way T). N/A - G 1/8 & G 1/4 Old Design. Supplied with one screw and one standard washer.

Ball Valve Order Code

KHB – G** - 13 - 1 1 2 3 1 - B - MH

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

- | | |
|---|--|
| <p>① Series Code
 KHB = 2 Way
 KHB3L = 3 Way L Configuration
 KHB3T = 3 Way T Configuration</p> <p>② Port Connection
 G** = (BSPP Female) (Standard)
 M** = (Metric Male)
 N** = (NPT Female)
 R** = (BSPT / PT Female)
 U** = (UNO Female)
 LR** = (24° Cone Connection - Light Series)
 (DIN 2353 / ISO 8434-1)
 SR** = (24° Cone Connection - Heavy Series)
 (DIN 2353 / ISO 8434-1)</p> <p>③ Nominal Diameter</p> <p>④ Valve Body Material
 1 = Steel
 2 = SUS304
 3 = SUS316</p> <p>⑤ Ball & Stem Material
 1 = Steel
 2 = SUS304
 3 = SUS316</p> | <p>⑥ Ball Seal Material
 2 = POM (Delrin®, - 30 °C ≈ +100 °C) (Standard)
 3 = PTFE (Teflon®, - 200 °C ≈ +200 °C)
 4 = PEEK (Polyetheretherketone, - 40 °C ≈ +250°C)</p> <p>⑦ Valve Stem & Body Seals
 2 = PTFE (Teflon®, - 200 °C ≈ +200 °C)
 3 = NBR (Nitrile, Buna-N, - 30 °C ≈ +100 °C) (Standard)
 4 = FPM (FKM, Viton®, - 200 °C ≈ +200 °C)</p> <p>⑧ Handle Type
 1 = Zinc Casting Offset (Crank) (Standard)
 2 = Zinc Casting Straight</p> <p>⑨ Surface Treatment
 Omit for Stainless Steel
 B = Cr3+ (White Zinc Plating) (Standard)
 H = Chemical (Electroless) Nickel
 P = Phosphoric</p> <p>⑩ MH
 Mounting Holes (Standard)</p> |
|---|--|

Solenoid Selector (Diverter) Valves



Order Code	Port Size	Max. Flow (L/min)	Max. Pressure (bar)	Basic Symbol	Transient Condition	List Each
SV-3238-***-Z5L-50	G 3/8	50	250			\$297.00
SV-3212-***-Z5L-51	G 1/2	80	210			\$340.00
SV-6214-***-Z5L-50	G 1/4	25	250			\$297.00
SV-6238-***-Z5L-50	G 3/8	40	210			\$328.00
SV-6212-***-Z5L-50	G 1/2	60	210			\$382.00
SV-6234-***-Z5L-50	G 3/4 Drain G 1/4	100	210 (Drain Plugged) 315 (Drain Connected)			\$590.00

Note:

- Valves supplied with DIN Light Plug. Wiring Information on [Page 5.10](#).
- Deutsch Connector Coil available for SV-3238, SV-6214 & SV-6238. Change Code Z5L to K40. Add 20.00 to valve price above (includes Deutsch Plug).



Max. Flow: 80 L/min		Max. Pressure: 210 bar		Ports Size: G 1/2	
Order Code	Description	Basic Symbol	Transient Condition	List Each	
SVV-4102266	SVV-12V-G			\$521.00	
SVV-4103561	SVV-24V-G				

Note:

- Valves supplied with DIN Light Plug. Wiring Information on [Page 5.10](#).
- SVV Inlet Ports can be changed to Right Inlet by reversing Spool, End Plug & Solenoid.

Continued Next Page

SV Series Selector (Diverter) Valve Order Code

SV - *2 - *** - Z5L - ** - **** - * - 5***

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① **Selector Valve – Solenoid Operated**

② **Valve Type:**
32 = 3 port / 2 position
62 = 6 port / 2 position

③ **Port Size:**
14 = G 1/4
38 = G 3/8
12 = G 1/2
34 = G 3/4

④ **Coil Voltage:**
D12 = 12V DC
D24 = 24V DC
D36 = 36V DC (N/A SV-6234)
D48 = 48V DC (N/A SV-6234)
R110 = 110V AC (Rectifier in coil) (N/A SV-6234)
R220 = 220V AC (Rectifier in coil) (N/A SV-6234)
Note: SV-3212 requires coil ID machined from 31.0 mm to 31.5 mm for D36, D48, R110 & R220.
Purchaser to make this modification.



SV-*238 coil shown with N9 plus RB & RC fitted

⑤ **Coil Connector:**
Z5L = DIN Light Plug (standard)
K40 = Deutsch (Optional) 12V & 24V - SV-3238, 6214, 6238

⑥ **Manual Override Option:**
Omit = Plain override on solenoid end only
(No override in non-solenoid end of valve)
LMO = Locking Manual Override
N9 = Extended Push Pin with M5 male thread (N/A SV-6234)

⑦ **N9 Options:** (N/A SV-6234)
Omit = M5 male thread only
RB = Red Ball
RC = Rubber Cap (SV-3238 & SV-6238 only)

⑧ **Seal Material:**
Omit = NBR (Standard)
V = FPM (Is not stocked and available as indent to customer order)

⑨ **Design Number**



Deutsch Coil

SV Series Coils, Accessories & Spare Parts


DIN Coil

Deutsch Coil

Locking Manual Override

Rubber Cap

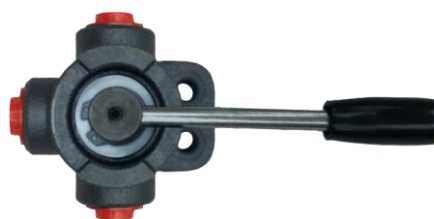
Red Ball

Core Tube with N9

SV-3238 / SV-6214 / SV-6238			
Order Code	Description	Coil Dimensions	List Each
FW-3-D12-Z5L-50	12V/30W DC DIN Coil (DIN Light Plug included)	23 ID x 45 OD x 51 L	\$60.00
FW-3-D24-Z5L-50	24V/30W DC DIN Coil (DIN Light Plug included)		\$60.00
FW-3-D36-Z5L-50	36V/30W DC DIN Coil (DIN Light Plug included)		\$60.00
FW-3-D48-Z5L-50	48V/30W DC DIN Coil (DIN Light Plug included)		\$60.00
FW-3-R110-Z5L-50	110V/30W AC Rectified DIN Coil (DIN Light Plug included)		\$60.00
FW-3-R220-Z5L-50	220V/30W AC Rectified DIN Coil (DIN Light Plug included)		\$60.00
FW-3-D12-K40-50	12V/30W DC Deutsch Coil (Deutsch Plug included)		\$80.00
FW-3-D24-K40-50	24V/30W DC Deutsch Coil (Deutsch Plug included)		\$80.00
FW-3-DC-CT-50	DC Core Tube		\$35.00
FW-3-DC-CT-N9-50	DC Core Tube with N9 Manual Override – M5 Male Thread		\$42.00
FW-3-DC-LMO-50	DC Locking Manual Override		\$35.00
FW-3-DC-NUT-50	DC Coil / Core Tube Nut (M22 x 1.5)		\$6.00
FW-RB	Red Ball		\$7.00
FW-3-RC-50	Rubber Cap (no manual override) – use with FW-3-DC-CT-N9-50		\$6.00
SV-3212			
Order Code	Description	Coil Dimensions	List Each
FW-5-D12-Z5L-51	12V/36W DC DIN Coil (DIN Light Plug included) (SV-3212)	31.5 ID x 63 OD x 75 L	\$118.00
FW-5-D24-Z5L-51	24V/36W DC DIN Coil (DIN Light Plug included) (SV-3212)		\$118.00
SV-6212			
FW-5-D12-Z5L-50	12V/36W DC DIN Coil (DIN Light Plug included)	31.0 ID x 63 OD x 75 L	\$118.00
FW-5-D24-Z5L-50	24V/36W DC DIN Coil (DIN Light Plug included)		\$118.00
FW-5-D36-Z5L-50	36V/36W DC DIN Coil (DIN Light Plug included)		\$118.00
FW-5-D48-Z5L-50	48V/36W DC DIN Coil (DIN Light Plug included)		\$118.00
FW-5-R110-Z5L-50	110V/36W AC Rectified DIN Coil (DIN Light Plug included)		\$118.00
FW-5-R220-Z5L-50	220V/36W AC Rectified DIN Coil (DIN Light Plug included)		\$118.00
FW-5-DC-CT-50	DC Core Tube		\$56.00
FW-5-DC-CT-N9-50	DC Core Tube with N9 Manual Override - M5 Male Thread		\$73.00
FW-5-DC-LMO-50	DC Locking Manual Override		\$54.00
FW-5-DC-NUT-50	DC Coil / Core Tube Nut (M30 x 1.5)		\$7.00
FW-RB	Red Ball - use with FW-5-DC-CT-N9-50		\$6.00
SV-6234 / SVV			
Order Code	Description	Coil Dimensions	List Each
03170569	12V/60W DC DIN Coil (DIN Light Plug included)	31.5 ID x 63 OD x 75 L	\$118.00
03170568	24V/60W DC DIN Coil (DIN Light Plug included)		\$118.00
DIN & Deutsch Plugs			
Order Code	Voltage	Description	List Each
C01010001-N	DC	DIN Light Plug - DC	\$18.00
C01010004-N	AC	DIN Light Plug - AC	\$18.00
DT06-2S-0462	DC	Deutsch Plug - Male (Includes 2 pcs Solid Socket)	\$15.00
0462-209-16141x10	N/A	Deutsch Plug Solid Socket (Female Pins) - Pack of 10 pcs (Spare Parts)	\$50.00

Note: DIN & Deutsch Plug Wiring Information on [Page 5.10](#).

Manual Selector (Diverter) Valves



Order Code	Port Size	Max. Flow (L/min)	Max. Pressure (bar)	Basic Symbol	List Each
RV-3-G3/8-A	G 3/8	60	315		\$95.00
RV-3-G1/2-A	G 1/2	90			\$121.00
RV-3-G3/4-A	G 3/4	120			\$158.00
RV-3-G1-A	G 1	200	250		\$210.00

Note: Closed Centre Crossover (Code B) is not stocked and available as indent to customer order.



Order Code	Port Size	Max. Flow (L/min)	Max. Pressure (bar)	Basic Symbol	List Each
RV-6-G3/8-A	G 3/8	60	315		\$196.00
RV-6-G1/2-A	G 1/2	90			\$248.00
RV-6-G3/4-A	G 3/4	120			\$323.00
RV-6-G1-A	G 1	200	250		\$428.00

Note: Closed Centre Crossover (Code B) is not stocked and available as indent to customer order.



Order Code	Port Size		List Each
RV-6-G3/8-ASSY KIT		G 3/8	\$6.00
RV-6-G1/2- ASSY KIT		G 1/2	\$6.00
RV-6-G3/4- ASSY KIT		G 3/4	\$7.00
RV-6-G1- ASSY KIT		G 1	\$8.00
RV-G3/8-G1/2-H	Handle & Screw	G 3/8 & G 1/2	\$15.00
RV-G3/4-G1-H	Handle & Screw	G 3/4 & G 1	\$17.00

Note: RV-6-G**-A valve consists of 2 x RV-3-G**-A valves & 1 x RV-6-G**-ASSY KIT.

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Max. Pressure: 210 bar					
Order Code	Description	Port Size	Max. Flow (L/min)	Symbol	List Each
SV80-4101623	SV80-A-G12-K	G 1/2	75		\$235.00
SV120-4107017	SV120-A-G34-K	G 3/4	113		\$352.00
4106858	Clevis SV80/SV120 (Replaces Knob)				\$49.00



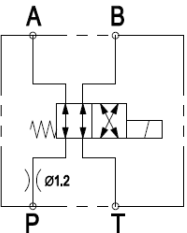
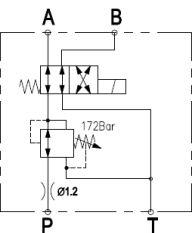
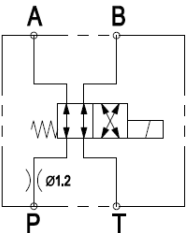
Max. Pressure: 315 bar						
Order Code	Description	Port Size	Max. Flow (L/min)	Basic Symbol	Transient Condition	List Each
DV60-4101034	DV60(R)/A11KZ1-G38	G 3/8	60			\$352.00
DV90-4113644	DV90/A11KZ1-G	G 1/2	90			\$456.00

Note:

- Closed Centre Crossover (Code B) is not stocked and available as indent to customer order.
- DV60 Inlet Ports can be changed to Left Inlet by reversing Spool & Controls.

Quick Hitch Valves - Steel Body



QHV-207-207-*H			QHV-207-207-*ER-LMO			QHV-350-350-*H-LMO		
								
Hirschman (DIN Light) Plug Connector								
Order Code	Ports	Max. Flow (L/min)	Max. Inlet Pressure (bar)	Max. Outlet Pressure (bar)	Factory Set (bar)	Locking Manual Override	List Each	
QHV-207-207-*H	G 1/4	11	207	207	N/A	No	\$339.00	
QHV-207-207-*H-LMO						Yes	\$377.00	
QHV-350-207-*H			350	207	172	No	\$713.00	
QHV-350-207-*H-LMO						Yes	\$751.00	
QHV-350-350-*H			350	350	N/A	No	\$529.00	
QHV-350-350-*H-LMO						Yes	\$585.00	
Deutsch Plug Connector								
Order Code	Ports	Max. Flow (L/min)	Max. Inlet Pressure (bar)	Max. Outlet Pressure (bar)	Factory Set (bar)	Locking Manual Override	List Each	
QHV-207-207-*ER	G 1/4	11	207	207	N/A	No	\$367.00	
QHV-207-207-*ER-LMO						Yes	\$405.00	
QHV-350-207-*ER			350	207	172	No	\$741.00	
QHV-350-207-*ER-LMO						Yes	\$779.00	
QHV-350-350-*ER			350	350	N/A	No	\$541.00	
QHV-350-350-*ER-LMO						Yes	\$597.00	

Note:

- * = Coil Voltage
1 = 12V DC
2 = 24V DC
- Valve supplied with DIN Light Plug or Deutsch Plug. Wiring Information on [Page 5.10](#).
- LMO = Locking Manual Override.
- All components are supplied loose for customer assembly.
- Lubricate cartridge valve seals with oil before assembly.
- Coil must be installed with letters up, so they are closest to the Coil Retaining Nut.
- QHV-350-350-*# comes standard with Non-Locking Manual Override.
For QHV-350-350-*#-LMO replace the standard Coil Retaining Nut with the special Coil Retaining Nut.
The O Ring supplied with the valve is installed between the Coil & Coil Retaining Nut.

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Quick Hitch Valves - LMO Operation

QHV-207-207-##-LMO & QHV-350-207-##-LMO (Locking Manual Override) Operation:

- Normal Operation, push red button in and turn clockwise.
- To override, push red button in, twist counterclockwise and release.

QHV-350-350-## (Non-Locking Manual Override) operation:

- To override, push button in. This will shift the valve.
- To return to the de-energised position, release button.

QHV-350-350-##-LMO (Locking Manual Override) Operation:

- To override, screw the knob clockwise until it stops. This will shift the valve.
- To return to the de-energised position, screw the knob counterclockwise until it stops.

Quick Hitch Valves - Spare Parts



QHV-207-207		
Order Code	Description	List Each
MSV2-08-4CO	4/2 Cartridge	\$141.00
MSV2-08-4CO-M	4/2 Cartridge with LMO	\$179.00
MC-13-C-12HDC	Coil DIN 12V/21W DC with Light Plug	\$40.00
MC-13-C-24HDC	Coil DIN 24V/21W DC with Light Plug	\$40.00
ECDS-12V-13	Coil Deutsch 12V/18W DC without Plug	\$53.00
ECDS-24V-13	Coil Deutsch 24V/18W DC without Plug	\$53.00
DT06-2S-0462	Deutsch Plug - Male (Includes 2 pcs Solid Socket)	\$15.00
0462-209-16141x10	Deutsch Plug Solid Socket (Female Pins) - Pack of 10 pcs (Spare Parts)	\$50.00
QHV-350-207		
Order Code	Description	List Each
MSV2-08-4CO	4/2 Cartridge	\$141.00
MSV2-08-4CO-M	4/2 Cartridge with LMO	\$179.00
MC-13-C-12HDC	Coil DIN 12V/21W DC with Light Plug	\$40.00
MC-13-C-24HDC	Coil DIN 24V/21W DC with Light Plug	\$40.00
ECDS-12V-13	Coil Deutsch 12V/18W DC without Plug	\$53.00
ECDS-24V-13	Coil Deutsch 24V/18W DC without Plug	\$53.00
DT06-2S-0462	Deutsch Plug - Male (Includes 2 pcs Solid Socket)	\$15.00
0462-209-16141x10	Deutsch Plug Solid Socket (Female Pins) - Pack of 10 pcs (Spare Parts)	\$50.00
MPBBB-LAN	Pressure Reducing Cartridge	\$180.00
QHV-350-350		
Order Code	Description	List Each
LSV2-M20-4RCO-M	4/2 Cartridge with Override	\$240.00
L2102NOPM-105	Locking Manual Override	\$56.00
LC3-10-C-1H	Coil DIN 12V/26W DC without Light Plug	\$57.00
LC3-10-C-2H	Coil DIN 24V/26W DC without Light Plug	\$57.00
C01010001-N	DIN Light Plug - DC	\$16.00
SC-10-C-1ER	Coil Deutsch 12V/22W DC without Plug	\$70.00
SC-10-C-2ER	Coil Deutsch 24V/22W DC without Plug	\$70.00
DT06-2S-0462	Deutsch Plug - Male (Includes 2 pcs Solid Socket)	\$15.00
0462-209-16141x10	Deutsch Plug Solid Socket (Female Pins) - Pack of 10 pcs (Spare Parts)	\$50.00