



HYDRAULIC VALVES PRODUCT INDEX

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PRODUCT LIST

EFFECTIVE: APRIL 1, 2011



META DIRECTIONAL CONTROL VALVES – MONOBLOCK CONSTRUCTION

Model Code	No of Spool	Maximum Flow	Maximum Pressure	Tank Line Pressure	A & B Ports	P.T.N. Ports	
DE 40/1 A1 GKN	1						
DE 40/1 D1 GKN	1						
DE 40/1K16 FLOAT	1						
DE 40/2 A2 GKN	2						
DE 40/2 A1D1 GKN	2	45 LPM 12 US GPM	300 BAR 4350 PSI	50 BAR 700 PSI	G 3/8" BSPP	G 1/2" BSPP	
DE 40/2 A1K16 FLOAT	2						
DE 40/3 A3 GKN	3						
DE40/3 A1K16 FLOAT	3						
DE 40/4 A4 GKN	4						
DE 40/5 A5 GKN	5						

OPTIONS & ACCESSORIES

Part No.	Description	
CARRY 38	POWER BEYOND PLUG	
BL 001	DETENT KIT POS. B	
BL 003	DETENT KIT POS. A & B	
KIT 40	CABLE CONNECTION	

SPARE PARTS

Part No.	Description	
BL008	LEVER BOX	
A SPOOL	DOUBLE ACTING	
B SPOOL	SINGLE ACTING	
D SPOOL	MOTOR SPOOL	
SPOOL CONVERSION PER SPOOL		



PRODUCT LIST

EFFECTIVE: APRIL 1, 2011



META DIRECTIONAL CONTROL VALVES – MONOBLOCK CONSTRUCTION

Model Code	No of Spools	Maximum Flow	Maximum Pressure	Tank Line Pressure	A & B Ports	P.T.N. Ports	
DE 80/1 A1 GKN	1						
DE 80/1 D1 GKN	1						
DE 80/2 A2 GKN	2						
DE 80/2 A1D1 GKN	2	80 LPM 21 US GPM	300 BAR 4350 PSI	50 BAR 700 PSI	G 1/2" BSPP	G 3/4" BSPP	
DE 80/3 A3 GKN	3						
DE 80/4 A4 GKN	4						
DE 80/5 A5 GKN	5						

OPTIONS & ACCESSORIES

Part No.	Description	
CARRY 12	POWER BEYOND PLUG	
BL 001	DETENT KIT POS. B	
BL 003	DETENT KIT POS. A & B	
KIT 80	CABLE CONNECTION	

SPARE PARTS

Part No.	Description	
BL0010	LEVER BOX	
A SPOOL	DOUBLE ACTING	
B SPOOL	SINGLE ACTING	
D SPOOL	MOTOR SPOOL	
SPOOL CONVERSION PER SPOOL		



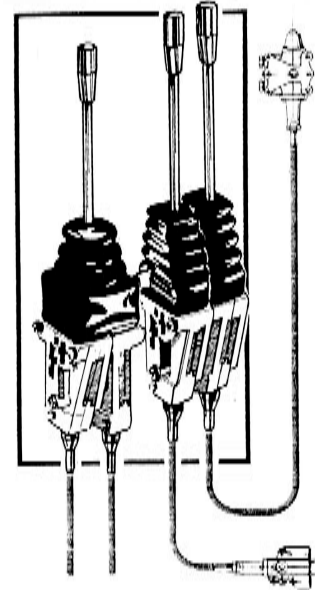
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MORSE REMOTE VALVE CONTROL SYSTEMS

PART No.	DESCRIPTION
212502	RVC CONTROL - INDUSTRIAL
211711	RVC CONTROL - + AXIS
206366100	1.00 METRE CABLE - BULKHEAD
206366125	1.25 METRE CABLE - BULKHEAD
206366150	1.50 METRE CABLE - BULKHEAD
206366175	1.75 METRE CABLE - BULKHEAD
206366200	2.00 METRE CABLE - BULKHEAD
206366225	2.25 METRE CABLE - BULKHEAD
206366250	2.50 METRE CABLE - BULKHEAD
206366275	2.75 METRE CABLE - BULKHEAD
206366300	3.00 METRE CABLE - BULKHEAD
292959100	1.00 METRE CABLE - BONNET
292959125	1.25 METRE CABLE - BONNET
292959150	1.50 METRE CABLE - BONNET
292959175	1.75 METRE CABLE - BONNET
292959200	2.00 METRE CABLE - BONNET
292959225	2.25 METRE CABLE - BONNET
292959250	2.50 METRE CABLE - BONNET
292959275	2.75 METRE CABLE - BONNET
292959300	3.00 METRE CABLE - BONNET



3.00 METRE TO 6.00 METRE CABLE + PER .25mtr

BULKHEAD CLEVIS

PART No.	DESCRIPTION
029025	1/4" UNF CLEVIS - BULKHEAD

KITS SUIT 292959 CABLES

PART No.	DESCRIPTION
KIT 40	KIT - META DE40 VALVE
KIT 80	KIT - META DE80 VALVE
L102	KIT - HDMS 11 HIDROIMA VALVE
HDM / CCK	KIT - HDM18
293107	KIT - CASAPPA VCD 20 VALVE
294255	KIT - OILPATH VCD 10 VALVE
294336	KIT - OILPATH VCD 20 VALVE
212042	KIT - LAMBORGHINI LM8 / LM10 VALVE & HC-D2

PRODUCT LIST**EFFECTIVE: APRIL 1, 2011****HDM11S MONOBLOCK DIRECTIONAL CONTROL VALVE****STANDARD DOUBLE ACTING – SPRING CENTRES – INDIVIDUAL LOAD CHECK ON EACH SPOOL**

Model Code	No. of Spools	Maximum Flow		Maximum Pressure		Port Size
HDM11 S/1K12150/A1						
HDM11 S/2K12150/A01x2	2	40 LPM	10 US GPM	300 BAR	4300 PSI	3/4" UNO
HDM11 S/3K12150/A01x3	3					
HDM11 S/4K12150/A01x4	4					

OPTIONS & ACCESSORIES

Model Code	Part No.	Description
Type 03	768520010	Detent Kit – 3 Position (03)
Type 05	768520050	Detent Kit – 2 position “out” (05)
Type 02	768530010	Detent Kit – 2 Position “in”
Type ‘G’	65120910	Single Acting Spool <u>(Not available as a spare part)</u>
Type ‘C’	65107010	Motor Spool <u>(Not Available as a spare part)</u>
Type 04	768540030	4 th Position Float Spool kit <u>(Not available as a spare part)</u>
SET	SET	Pre-Set Relief Valve <u>(Other than factory set 150 Bar)</u>
	413010210	Power Beyond Plug
	778300010	Closed Centre Plug
Type L130	775920200	‘Plus Axis Joystick Kit <u>(per Joystick Assembly)</u>
	778400140	‘No Relief Valve Kit’
Type L102	760900030	Cable Connector Kit
Type 30	768610300	Micro Switch Provision – Position ‘1’ (per spool)
Type 32	768610600	Micro Switch Provision – Position ‘2’ (per spool)
Type 34	768610640	Micro Switch Provision – Position ‘1’ & ‘2’ (per spool)

PRODUCT LIST

EFFECTIVE: APRIL 1, 2011



HDM18 CONTROL VALVE

INDIVIDUAL LOAD CHECK ON EACH SPOOL

PART No.	DESCRIPTION
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HDM 18 / 1A	ONE SPOOL
HDM 18 / 2AA	TWO SPOOL
HDM 18 / 3AAA	THREE SPOOL
HDM 18 / 4AAAA	FOUR SPOOL

SPOOL CONVERSION – NETT CHARGE PER SPOOL

OPTIONS

PART No.	DESCRIPTION
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HDM / 03	3 POSITION DETENT
HDM / 02	2 POSITION DETENT (NOMINATE HANDLE “IN” OR “OUT”)
HDM / CCP	CLOSED CENTRE PLUG
HDM / PB	POWER BEYOND ADAPTOR
HDM / CCK	CABLE CONNECTOR KIT
HDM / PAJ	PLUS AXIS JOYSTICK ASSY.

SPOOL CODING

A SPOOL DOUBLE ACTING - OPEN CENTRE
C SPOOL DOUBLE ACTING - MOTOR
G SPOOL SINGLE ACTING - OPEN CENTRE

STANDARD FEATURES

* MONO – BLOCK CONSTRUCTION – PARALLEL CIRCUITRY * RATED FLOW 70 LITRES MINUTE
[18 US GPM] * MAX PRESSURE 400 BAR [5700 PSI] * MAX – ADJUSTABLE RELIEF VALVE
* SAE #12 – 1 1/16 OUTLET – SAE #10 – 7/8” UN “O” RING INLET + SERVICE PORTS * HIGH PRESSURE
CARRY OVER PROVISION STANDARD *



PRODUCT LIST

EFFECTIVE: APRIL 1, 2011



CROSS HYDRAULIC VALVES

PART No.	DESCRIPTION		KG
BA11AG3TDO	ONE SPOOL		6.00
BA13AG3TDO	ONE SPOOL		6.00
BA15AG3TDO	ONE SPOOL		6.00
BA1AXG3TDO	ONE SPOOL		6.00
BA211AAG3TDO	TWO SPOOL		9.50
BA213AAG3TDO	TWO SPOOL		9.50
BA233AAG3TDO	TWO SPOOL		9.50
BA215AAG3TDO	TWO SPOOL		9.50
BA2A1XAG3TDO	TWO SPOOL		9.50
BA3111AAAG3TDO	THREE SPOOL		15.00
BA3113AAAG3TDO	THREE SPOOL		15.00
BA3A11XAAG3TDO	THREE SPOOL		15.20
CA11AGAO	ONE SPOOL		4.00
CV CONVERTA	ONE SPOOL		4.00

SPECIFIC APPLICATION VALVES

BC1AG3TDO	ONE SPOOL WITH FLOW CONTROL	9.50
CD11EGDO	ONE SPOOL LOG SPLITTER VALVE	4.50
128517	ROW MARKER SEQUENCE VALVE	2.20

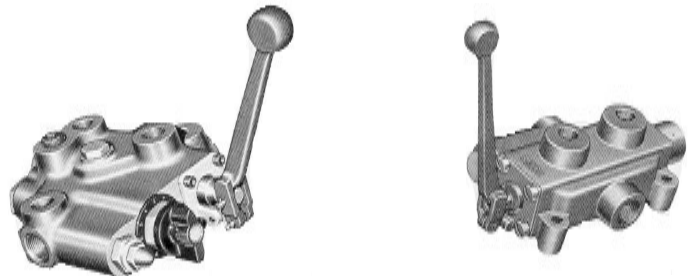
SPOOL CONVERSION – NETT CHARGE PER SPOOL

SPOOL CODING

#1 – DOUBLE ACTING	- OPEN CENTRE
#3 – SINGLE ACTING	- OPEN CENTRE
#5 – DOUBLE ACTING	- MOTORING
#X – DOUBLE ACTING	- FLOAT

STANDARD FEATURES

- * RATED FLOW 114 LITRES MINUTE [30 US GPM] * MAX OPERATING PRESSURE 172 BAR [2500 PSI]
- * MAX SHOCK AND SURGE PRESSURE 276 BAR [4000 PSI] * PARALLEL CIRCUITRY, CHECK VALVE
- ALL WORK SECTIONS * INTEGRAL DIFFERENTIAL RELIEF VALVE, ADJUSTABLE, SET AT 138 BAR [2000 PSI], [10 GPM]
- * SAE #12 – 1 1/16" – 12 INLET & OUTLET * CLOSED CENTRE THROUGH CONVERSION PLUG * POWER BEYOND THROUGH CONVERSION PLUG * PRESSURE RELEASE DETENT OPTIONS AVAILABLE.



PRODUCT LIST

EFFECTIVE: APRIL 1, 2011



CROSS HYDRAULIC CONTROL VALVE

PART No.	DESCRIPTION
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OPTIONS

1V0 206	CLOSED CENTRE PLUG
1V0 208	POWER BEYOND SLEEVE - 3/4" NPT
1V0 249	POWER BEYOND SLEEVE - 1 1/16" UNO
1V0 294	DETENT KIT - 3 POSITION
1V0 557	DETENT KIT - 2 POSITION
1V0 558	DETENT KIT - 1 POSITION HANDLE IN
1V0 559	DETENT KIT - 1 POSITION HANDLE OUT
1V0 642	DETENT KIT - PRESSURE RELEASE PER SPOOL:
1V1 626	BA HANDLE KIT - STEEL

CHA / PNUB	BA PNEUMATIC ACTUATION KIT	PER SPOOL:
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1R0016	RELIEF CARTRIDGE	- (500 TO 1499 PSI)
1R0017	RELIEF CARTRIDGE	- (1500 TO 3000 PSI)
1R0035	NO RELIEF PLUG	

SPARE PARTS

PART No.	DESCRIPTION
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1A0294	END CAP
1V1225	SPRING RETURN KIT
1V1701	PIN KIT – B SERIES VALVES
1V1702	PIN KIT – C SERIES VALVES
1V1703	HANDLE – B & C SERIES VALVES
2V0008	SEAL KIT – BA1 VALVE
2V0009	SEAL KIT – BA2 VALVE
2V0010	SEAL KIT – BA3 VALVE
2V0001	SEAL KIT – CA1, CV VALVE
2V0003	SEAL KIT – CD1 VALVE
4Z4306	HANDLE BRACKET – B & C SERIES VALVES
2A0079 – 404	CAP SCREW

PRODUCT LIST

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CROSS HYDRAULIC SELECTOR VALVES



PART No.	DESCRIPTION	PORT SIZE	KG
VS2BKLF2	THREE PORT SELECTOR	1 / 2" NPT	1.20
VS2BKLF4	THREE PORT SELECTOR	3 / 4" UNO	1.20
VS4BKLF6	THREE PORT SELECTOR	3 / 4" NPT	2.70
VS4BKLF7	THREE PORT SELECTOR	7 / 8" UNO	2.70
VS4BKLF8	THREE PORT SELECTOR	1-1 / 16" UNO	2.70
SD4BKLA1	SIX PORT SELECTOR	1 / 2" NPT	4.00
SD4BKLA2	SIX PORT SELECTOR	3 / 4" UNO	4.00
SD4BKLA5	SIX PORT SELECTOR	1-1 / 16" UNO	4.00
SD4BADA5	SIX PORT SELECTOR	1-1 / 16" UNO	4.00

ACTUATOR CODING

K - KNOB
A - HANDLE WITH TWO POSITION DETENT

OPTIONS

1VO 930 CLEVIS ADAPTOR KIT
1VO 931 HANDLE KIT
1VO 932 SPRING RETURN KIT
1VO 933 KNOB
1VO 934 DETENT KIT – TWO POSITION



CROSS HYDRAULIC RELIEF VALVES

PART No.	DESCRIPTION	PORT SIZE	KG
RC11DD	DRV4HH DUAL RELIEF	1 / 2" NPT	2.50
RC13DD	DRV5HH DUAL RELIEF	3 / 4" UNO	2.50
RC15DD	DRV1HH DUAL RELIEF	1-1 / 16" UNO	2.50
RD11D	RV4H SINGLE RELIEF	1 / 2" NPT	1.40
RD13D	RV5H SINGLE RELIEF	3 / 4" UNO	1.40
RD15D	RV1H SINGLE RELIEF	1-1 / 16" UNO	1.40

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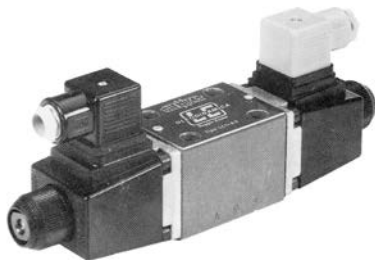
LC SOLENOID AND MODULAR VALVE SYSTEM

PART No.	DESCRIPTION	SERIES
LC1A11A / * * * *	3 WAY OPEN CENTRE	CTOP 3
LC1B2 / * * * *	4 WAY CLOSED CENTRE	CTOP 3
LC1C2 / * * * *	4 WAY OPEN MOTOR	CTOP 3
LC1E2 / * * * *	4 WAY CLOSED MOTOR	CTOP 3
LC1A2 / * * * *	4 WAY TANDEM CENTRE	CTOP 3
LC1M2A / * * * *	4 WAY MOTOR DETENTED	CTOP 3
LC2A11A / * * * *	3 WAY OPEN CENTRE	CTOP 5
LC2B2 / * * * *	4 WAY CLOSED CENTRE	CTOP 5
LC2C2 / * * * *	4 WAY OPEN MOTOR	CTOP 5
LC2E2 / * * * *	4 WAY CLOSED MOTOR	CTOP 5
LC2A2 / * * * *	4 WAY TANDEM CENTRE	CTOP 5
LC2M2A / * * * *	4 WAY MOTOR DETENTED	CTOP 5
K12131 110V 240V	COIL – 110 VOLT AC COIL – 240 VOLT AC	CTOP 3 CTOP 3
D122096 12V DC 24V DC	COIL – 12 VOLT DC COIL – 24 VOLT DC	CTOP 3 CTOP 3
K16339 110V 240V	COIL – 110 VOLT AC COIL – 240 VOLT AC	CTOP 5 CTOP 5
D16358 12V DC 24V DC	COIL – 12 VOLT DC COIL – 24 VOLT DC	CTOP 5 CTOP 5

* * * * INSERT COIL VOLTAGE REQUIRED – 240V 12DC 24DC OTHER

VALVE PRICES INCLUDE COILS, HIRSCHMANN CONNECTORS & STANDARD BOLT KIT – CARDBOARD BOXED

FOR OTHER SPOOL OPTIONS CONTACT YOUR NEAREST ALFORD SALES OFFICE



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LC SOLENOID AND MODULAR VALVE SYSTEMS

CETOP 3 MODULAR VALVE SYSTEM

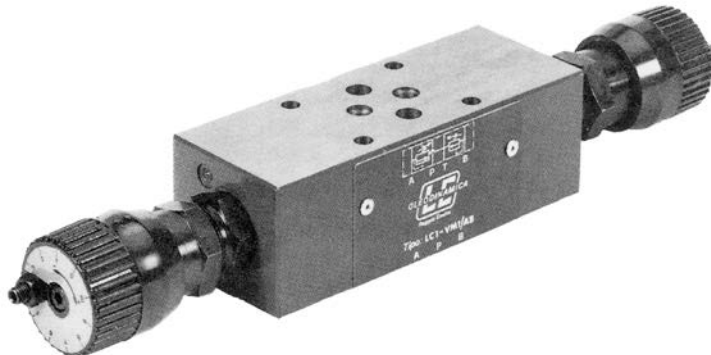
PART No.	DESCRIPTION	ADJUST
LC1VM1P1	SINGLE RELIEF – P TO T	KNOB
LC1VM1A1	SINGLE RELIEF – A TO T	KNOB
LC1VM1B1	SINGLE RELIEF – B TO T	KNOB
LC1VM1AB1	DUAL RELIEF – AB VENTING TO T	KNOB
LC1VM2AB	DUAL RELIEF – AB CROSS OVER	KNOB
LC1VRPM1P	PRESSURE REDUCING – P TO T	KNOB
LC1VRA	PILOT CHECK – SINGLE CHECK ON A	
LC1VRB	PILOT CHECK – SINGLE CHECK ON B	
LC1VRAB	PILOT CHECK – DUAL CHECK ON A & B	
LC1VF1A	FLOW CONTROL – METER OUT ON A	KNOB
LC1VF2A	FLOW CONTROL – METER IN ON A	KNOB
LC1VF1B	FLOW CONTROL – METER OUT ON B	KNOB
LC1VF2B	FLOW CONTROL – METER IN ON B	KNOB
LC1VF1AB	FLOW CONTROL – METER OUT ON A & B	KNOB
LC1VF2AB	FLOW CONTROL – METER IN ON A & B	KNOB

* INSERT RELIEF SETTING / CRACKING PRESSURE CODE REQUIRED:

RELIEF: [0] 0 – 100 [1] 20 – 210 [2] 50 – 350

REDUCERS: [0] 0 – 70 [1] 10 – 180 [2] 30 – 300

*** ABOVE SETTING ARE IN BAR ***



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LC SOLENOID AND MODULAR VALVE SYSTEM

CETOP 5 MODULAR VALVE SYSTEM



PART No.	DESCRIPTION	ADJUST
LC2VM1P1	SINGLE RELIEF – P TO T	KNOB
LC2VM1A1	SINGLE RELIEF – A TO T	KNOB
LC2VM1B1	SINGLE RELIEF – B TO T	KNOB
LC2VM1AB1	DUAL RELIEF – AB VENTING TO T	KNOB
LC2VM2AB	DUAL RELIEF – AB CROSS OVER	KNOB
LC2VRPM1P	PRESSURE REDUCING – P TO T	KNOB
LC2VRA	PILOT CHECK – SINGLE CHECK ON A	
LC2VRB	PILOT CHECK – SINGLE CHECK ON B	
LC2VRAB	PILOT CHECK – DUAL CHECK ON A & B	
LC2VF1A	FLOW CONTROL – METER OUT ON A	KNOB
LC2VF2A	FLOW CONTROL – METER IN ON A	KNOB
LC2VF1B	FLOW CONTROL – METER OUT ON B	KNOB
LC2VF2B	FLOW CONTROL – METER IN ON B	KNOB
LC2VF1AB	FLOW CONTROL – METER OUT ON A & B	KNOB
LC2VF2AB	FLOW CONTROL – METER IN ON A & B	KNOB

* INSERT RELIEF SETTING / CRACKING PRESSURE CODE REQUIRED:

RELIEF: [0] 0 – 60 [1] 10 – 140 [2] 20 – 200 [3] 50 – 300

REDUCERS: [0] 0 – 70 [1] 10 – 180 [2] 30 – 300

*** ABOVE SETTING ARE IN BAR ***

SUBPLATE - MANIFOLD BLOCKS - ACCESSORIES

PART No.	DESCRIPTION	PORT	LOCATION
PDM 120	CTOP 3 SUBPLATE	3 / 8" BSPP	BACK PORTS
PDM 121 LAT	CTOP 3 SUBPLATE	3 / 8" BSPP	LATERAL PORTS
PDM 220	CTOP 5 SUBPLATE	1 / 2" BSPP	BACK PORTS
PDM 1232V	CTOP 3 SUBPLATE	3 / 8" BSPP	WITH RELIEF
LC1BK1	BOLT KIT M5 x 70 (4 PIECES PER KIT)		
LC1BK2	BOLT KIT M5 x 110		
LC2BK1	BOLT KIT M6 x 80 (4 PIECES PER KIT)		
LC2BK2	BOLT KIT M6 x 125		

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**METRO SELECTOR VALVES - THREE PORT**

PART No.	CONTROL	PORTS	LTR MIN	KG
MV08	KNOB	3 / 4" UN	75	1.53
MV08 – 82 SPRING RETURN	KNOB	3 / 4" UN	75	1.53
MSL12	KNOB	1-1 / 16" UN	150	3.40

METRO SELECTOR VALVES - SIX PORT

PART No.	CONTROL	PORTS	LTR MIN	KG
DS08 – 20	KNOB	3 / 4" UN	75	1.92
MDS12 – 20	KNOB	1-1 / 16" UN	150	4.50

METRO SELECTOR VALVES - OPTIONS

PART No.	DESCRIPTION	KG
810 – 00 – 111	CLEVIS KIT - SUIT MV VALVE	0.10
810 – 00 – 112	SPRING RETURN KIT - SUIT MV VALVE	0.20
850 – 00 – 050	PILOT CAP - SUIT MSL / MDS	0.50
850 – 00 – 0SR	SPRING RETURN KIT - SUIT MSL / MDS	0.50

METRO LOCK VALVES – DOUBLE PILOT OPERATED CHECK VALVES

PART No.	PILOT	PORTS	LTR MIN	KG
409 – 04	3 : 1 INTERNAL	1 / 2" NPT	60	1.02
409 – 08	3 : 1 INTERNAL	3 / 4" UN	60	1.02
M4001	FLOW CONTROL – SUIT 409 SERIES			.20

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METRO CHECK AND RESTRICTOR VALVES

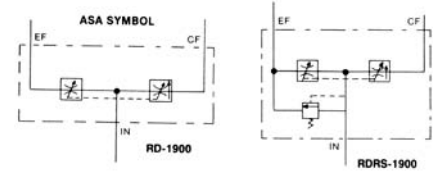
PART No.	DESCRIPTION	THREAD
RV50 – 05	CHECK VALVE	1 / 2" NPTF
RV50 – 30	CHECK VALVE	1 / 2" NPTF
RV50 – 60	CHECK VALVE	1 / 2" NPTF
RV50 – 200	RELIEF VALVE	1 / 2" NPTF
RV50 – 250	RELIEF VALVE	1 / 2" NPTF
RV50 – 500	RELIEF VALVE	1 / 2" NPTF
RV50 – 750	RELIEF VALVE	1 / 2" NPTF
RV50 – 1000	RELIEF VALVE	1 / 2" NPTF
RV50 – 1250	RELIEF VALVE	1 / 2" NPTF
RV50 – 1500	RELIEF VALVE	1 / 2" NPTF
RV50 – 2000	RELIEF VALVE	1 / 2" NPTF
RV50 – 2500	RELIEF VALVE	1 / 2" NPTF
FC60 – 05	CHECK VALVE	3 / 4" NPTF
FR50 - 046	RESTRICTOR VALVE	1 / 2" NPTF
FR50 - 062	RESTRICTOR VALVE	1 / 2" NPTF
FR50 - 078	RESTRICTOR VALVE	1 / 2" NPTF
FR50 - 093	RESTRICTOR VALVE	1 / 2" NPTF
FR50 - 109	RESTRICTOR VALVE	1 / 2" NPTF
FR50 - 125	RESTRICTOR VALVE	1 / 2" NPTF
FR50 - 140	RESTRICTOR VALVE	1 / 2" NPTF
FR50 - 156	RESTRICTOR VALVE	1 / 2" NPTF
FR50 - 187	RESTRICTOR VALVE	1 / 2" NPTF
FR50 - 250	RESTRICTOR VALVE	1 / 2" NPTF

PRODUCT LIST

EFFECTIVE: APRIL 1, 2011



PRINCE HYDRAULIC CONTROL VALVES



PART No.	DESCRIPTION	PORT SIZE
RD1950 – 04	FLOW CONTROL	1 / 2" NPTF
RD1950 – 08	FLOW CONTROL	1 / 2" NPTF
RD1950 – 16	FLOW CONTROL	1 / 2" NPTF
RD1975 – 16	FLOW CONTROL	3 / 4" NPTF
RD1975 – 30	FLOW CONTROL	3 / 4" NPTF
RDRS1950 – 04	FLOW CONTROL WITH RELIEF	1 / 2" NPTF
RDRS1950 – 08	FLOW CONTROL WITH RELIEF	1 / 2" NPTF
RDRS1950 – 16	FLOW CONTROL WITH RELIEF	1 / 2" NPTF
RDRS1975 – 16	FLOW CONTROL WITH RELIEF	3 / 4" NPTF
RDRS1975 – 30	FLOW CONTROL WITH RELIEF	3 / 4" NPTF

NOTE: RDRS RELIEF SET AT 104 BAR (1500 PSI) ADJUSTABLE.

ORDERING INFORMATION

TYPE	PORT SIZE	MAXIMUM CONTROLLED FLOW
RD-19	50 (1/2" NPT PORTS)	4, US G.P.M. (15 L/m) 8, US G.P.M. (30 L/m)
	75 (3/4" NPT PORTS)	16, US G.P.M. (60 L/m)
RDRS-19		30, US G.P.M. (113 L/m)

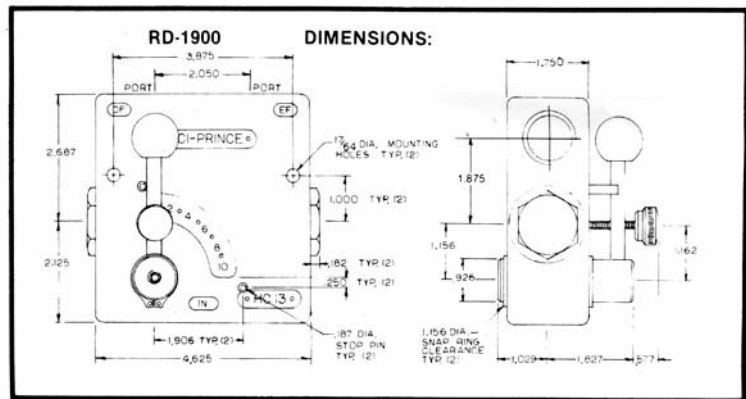


EXAMPLE:

RD-1950-16 (RD TYPE, 1/2" NPT PORTS, 16 US G.P.M.)

NOTE: CONTROLLED FLOW IS THE MAXIMUM FLOW AVAILABLE FROM THE 'CF' PORT.

SELECT CONTROLLED FLOW WHICH EXCEEDS MAXIMUM FLOW REQUIREMENTS BY AS LITTLE AS POSSIBLE TO GAIN MAXIMUM CONTROL.



THIS VALVE WILL START AND STOP A HYDRAULIC MOTOR OR CYLINDER AND VARY THE SPEED SMOOTHLY OVER THE FULL RANGE. ONCE THE SPEED IS SET WITH THE LEVER IT WILL REMAIN CONSTANT REGARDLESS OF LOAD VARIATION.

PRODUCT LIST

EFFECTIVE: APRIL 1, 2011

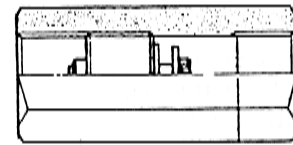


SPECIFIC APPLICATION VALVE

HOLMBURY VPC SERIES HOSE BURST VALVES

PART No.	DESCRIPTION	LTR MIN	PORTS
VPC – 14	INLINE	20	1 / 4" BSPP
VPC – 38	INLINE	40	3 / 8" BSPP
VPC – 12	INLINE	80	1 / 2" BSPP
VPC – 34	INLINE	150	3 / 4" BSPP

HOSE BURST CHECK VALVES ARE DESIGNED TO PREVENT THE UNCONTROLLED DROP OF A HYDRAULIC CYLINDER IN THE EVENT OF HOSE OR PIPE FAILURE. THESE VALVES SHOULD BE FITTED DIRECTLY TO CYLINDER PORT.



LINKAGE ISOLATOR VALVE

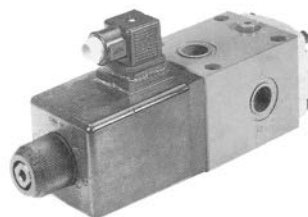
PART No.	DESCRIPTION	LTR MIN	PORTS
V3065	ISOLATOR	35	3 / 8" BSPP

PROVIDES 3 POINT ISOLATION ON MF35 TO MF188 TRACTORS. ALLOWS ADDITIONAL AND SELECTION OF A REMOTE HYDRAULIC DIRECTIONAL CONTROL VALVE.



SOLENOID OPERATED SELECTOR VALVES

PART No.	DESCRIPTION	PORTS	LTR MIN	THREAD
VS80A12DC	12 VOLT DC	3	40	3 / 8" BSPP
VS80A24DC	24 VOLT DC	3	40	3 / 8" BSPP
VS10012DC	12 VOLT DC	3	75	1 / 2" BSPP
VS10024DC	24 VOLT DC	3	75	1 / 2" BSPP
VS280F12DC	12 VOLT DC	6	90	1 / 2" BSPP
VS280F24DC	24 VOLT DC	6	90	1 / 2" BSPP



PRODUCT LIST

EFFECTIVE: APRIL 1, 2011



HOLMBURY HCV SERIES 2 & 3 WAY HP BALL VALVES

CODE	DESCRIPTION
HCV-2- 6-R	1/4" BSPP 2 WAY
HCV-2-10-R	3/8" BSPP 2 WAY
HCV-2-13-R	1/2" BSPP 2 WAY
HCV-2-20-R	3/4" BSPP 2 WAY
HCV-2-24-R	1" BSPP 2 WAY
HCV-3- 6-R	1/4" BSPP 3 WAY
HCV-3-10-R	3/8" BSPP 3 WAY
HCV-3-13-R	1/2" BSPP 3 WAY



NEEDLE VALVES - HIGH PRESSURE STEEL BODY

PART No.	WAY	PORT	MAX. PRESSURE
DV – 02		1 / 8" BSPP	345BAR (5000psi)
DV – 04		1 / 4" BSPP	345BAR (5000psi)
DV – 06		3 / 8" BSPP	345BAR (5000psi)
DV – 08		1 / 2" BSPP	207BAR (3000psi)
DV – 12		3 / 4" BSPP	207BAR (3000psi)
DV – 16		1" BSPP	207BAR (3000psi)

FLOW CONTROL VALVES – HIGH PRESSURE STEEL BODY

PART No.	WAY	PORT	MAX. PRESSURE
FV – 400S		1 / 4" BSPP	345BAR (5000psi)
FV – 600S		3 / 8" BSPP	345BAR (5000psi)
FV – 800S		1 / 2" BSPP	207BAR (3000psi)
FV – 1200S		3 / 4" BSPP	207BAR (3000psi)
FV – 1600S		1" BSPP	207BAR (3000psi)



PRODUCT LIST

EFFECTIVE: APRIL 1, 2011



HOLMBURY ATR SERIES CHECK VALVES

CODE	DESCRIPTION
ATR 14	1/4" BSPP – 5 P.S.I CRACKING
ATR 38	3/8" BSPP – 5 P.S.I CRACKING
ATR 12	1/2" BSPP – 5 P.S.I CRACKING
ATR 34	3/4" BSPP – 5 P.S.I CRACKING
ATR 100	1" BSPP – 5 P.S.I CRACKING

IN-LINE CHECK VALVES – 0.35 BAR (5 PSI) CRACKING PRESSURE

PART No.	DESCRIPTION	FEMALE / FEMALE THREAD
FT 260618	CHECK VALVE	1 / 8" BSPP
FT 2576114	CHECK VALVE	1-1/4" BSPP



PRODUCT LIST

EFFECTIVE: APRIL 1, 2011



COUNTERBALANCE VALVES

SINGLE – LINE MOUNTED – 3 : 1 PILOT RATIO

PART No.	DESCRIPTION & CAVITY CODE	LTR MIN	MAIN PORTS	PILOT PORT
ECJ	BODY T11A	40	3 / 4" UN	9 / 16" UN
ECK	BODY T11A	60	7 / 8" UN	9 / 16" UN
BCL	BODY T 2A	120	1-1 / 16" UN	9 / 16" UN
HCM	BODY T17A	160	1-5 / 16" UN	9 / 16" UN
HCN	BODY T17A	240	1- 5 / 8" UN	9 / 16" UN
CBCA LHN	CARTRIDGE T11A	60		
CBEA LAN	CARTRIDGE T 2A	120		
CBGA LHN	CARTRIDGE T17A	240		

SINGLE – DIRECT MOUNT – THREADED PORT – 3:1 PILOT RATIO

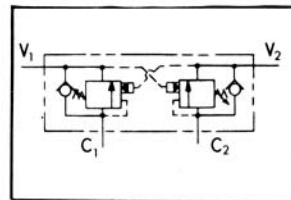
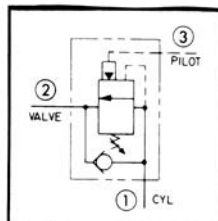
WPE	BODY T11A	40	3 / 4" UN	INTERNAL
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DUAL – LINE MOUNTED – 3:1 PILOT RATIO – INTERNAL CROSS PILOT

YEK	BODY T11A	60	7 / 8" UN	
YAL	BODY T 2A	120	1-1 / 16" UN	
YJM	BODY T17A	160	1-5 / 16" UN	
YJY	BODY T17A	240	1-1 / 4" BSPP	

SELECT BODY AND CARTRIDGE / S BY DETAILED CAVITY CODE.

PORT CODING



FOR OTHER OPTIONS AVAILABLE WITHIN THE SUN COUNTERBALANCE VALVE RANGE – CONSULT YOUR NEAREST ALFORD SALES OFFICE.

PRODUCT LIST

EFFECTIVE: APRIL 1, 2011



RELIEF VALVES - LINE MOUNTED - WITH THROUGH – PRESSURE AND GAUGE PORT

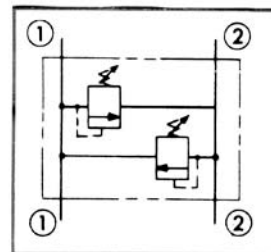
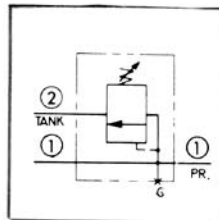
PART No.	DESCRIPTION & CAVITY CODE	LTR MIN	BAR MAX	PORTS
FEK	BODY T10A	100	210	7 / 8" UN
FEK / STEEL	BODY T10A	100	420	7 / 8" UN
CEL	BODY T 3A	150	210	1-1 / 16" UN
CEL / STEEL	BODY T 3A	200	420	1-1 / 16" UN
CEM	BODY T 3A	200	210	1-5 / 16" UN
RPEC LDN	CARTRIDGE T10A		2 / 60	
RPEC LAN	CARTRIDGE T10A		7 / 210	
RPEC LWN	CARTRIDGE T10A		10 / 310	
RPGC LDN	CARTRIDGE T 3A		2 / 60	
RPGC LAN	CARTRIDGE T 3A		7 / 210	
RPGC LWN	CARTRIDGE T 3A		10 / 310	

DUAL CROSS PORT RELIEF VALVES

YFK	BODY T10A	100	210	7 / 8" UN
YFK / STEEL	BODY T10A	100	310	7 / 8" UN
YBK	BODY T 3A	120	210	7 / 8" UN
YCX	BODY T 3A	200	210	1-5 / 16" UN

SELECT BODY AND CARTRIDGE / S BY DETAILED CAVITY CODE.

PORT CODING



FOR OTHER OPTIONS AVAILABLE WITHIN THE SUN COUNTERBALANCE VALVE RANGE – CONSULT YOUR NEAREST ALFORD SALES OFFICE.

PRODUCT LIST

EFFECTIVE: APRIL 1, 2011



SEQUENCE VALVES - DIRECT ACTING WITH REVERSE FLOW CHECK

PART No.	DESCRIPTION & CAVITY CODE	LTR MIN	MAIN PORTS	DRAIN PORT
ECJ	BODY T11A	40	3 / 4" UN	9 / 16" UN
ECK	BODY T11A	60	7 / 8" UN	9 / 16" UN
BCL	BODY T 2A	120	1-1 / 16" UN	9 / 16" UN
HCM	BODY T17A	160	1-5 / 16" UN	9 / 16" UN
HCN	BODY T17A	240	1-5 / 8" UN	9 / 16" UN
SCCA LWN	CARTRIDGE T11A	60		
SCEA LWN	CARTRIDGE T 2A	120		
SCGA LWN	CARTRIDGE T17A	240		

PRESSURE REDUCING VALVE - PILOT OPERATED - BALANCED SPOOL

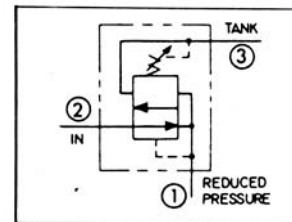
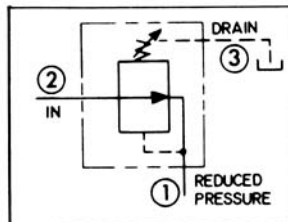
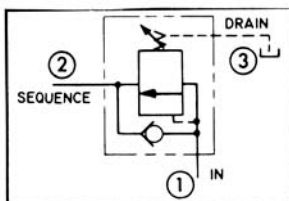
PBDB LAN	CARTRIDGE T11A	40
PBFB LAN	CARTRIDGE T 2A	80
PBHB LAN	CARTRIDGE T17A	160

***** USE SAME BODY AS ABOVE FOR SEQUENCE VALVE

REDUCING / RELIEVING VALVES

				<u>TANK PORT</u>
EAK	BODY T11A	40	7 / 8" UN	3 / 4" UN
BAL	BODY T 2A	80	1-1 / 16" UN	7 / 8" UN
HEM	BODY T17A	160	1-5 / 16" UN	1-1 / 16" UN
PPDB LWN	CARTRIDGE T11A			
PPFB LWN	CARTRIDGE T 2A			
PPHB LWN	CARTRIDGE T17A			

PORT CODING



PRODUCT LIST

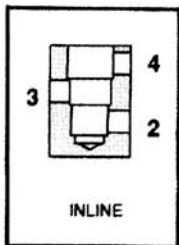
EFFECTIVE: APRIL 1, 2011



FLOW DIVIDER / COMBINER VALVES

PART No.	DESCRIPTION & CAVITY CODE	LTR MIN	PORTS
MMV	BODY T31A		1 / 2" BSPP
NMW	BODY T32A		3 / 4" BSPP
PMX	BODY T33A		1" BSPP
FSBS XAN	CARTRIDGE T31A	3 / 15	DIVIDER / COMBINER
FSCS XAN	CARTRIDGE T31A	6 / 30	HIGH ACCURACY
FSDS XAN	CARTRIDGE T32A	15 / 60	SYNCHRONISING
FSES XAN	CARTRIDGE T33A	20 / 120	
FSDH XAN	CARTRIDGE T32A	15 / 80	HIGH FLOW
FSEH XAN	CARTRIDGE T33A	30 / 160	LOWER ACCURACY

PORT CODING



FUNCTION	SYMBOL
Divider	
Divider/ Combiner High Accuracy	
Divider/ Combiner High Accuracy Synchronizing	
Divider/ Combiner High Flow Lower Accuracy	

SELECT BODY AND CARTRIDGE BY DETAILED CAVITY CODE.

FOR OTHER OPTIONS AVAILABLE WITHIN THE SUN FLOW DIVIDER COMBINER RANGE CONSULT YOUR NEAREST ALFORD SALES OFFICE.

PRODUCT LIST

EFFECTIVE: APRIL 1, 2011



MANIFOLD - ALLOY - CTOP 3 – SERIES

PART No.	RELIEF CAVITY	KG
HMC 3 S2M	NO	2.00
3 S3M	NO	3.10
3 S4M	NO	3.60
3 S5M	NO	4.80
3 S6M	NO	5.60
3 S7M	NO	5.60
3 S8M	NO	6.30
HMC 3 S2MS	SUN T10A	2.00
3 S3MS	SUN T10A	3.10
3 S4MS	SUN T10A	3.60
3 S5MS	SUN T10A	4.80
3 S6MS	SUN T10A	5.60
3 S7MS	SUN T10A	5.60
3 S8MS	SUN T10A	6.30



NOTE: PRICES DO NOT INCLUDE RELIEF CARTRIDGE

MANIFOLD - ALLOY - CTOP 3 - PARALLEL



PART No.	RELIEF CAVITY	KG
HMC 3 P1M	NO	1.20
3 P2M	NO	2.00
3 P3M	NO	3.10
3 P4M	NO	3.60
3 P5M	NO	4.80
3 P6M	NO	5.60
3 P7M	NO	5.60
3 P8M	NO	6.30
HMC 3 P1MS	SUN T10A	1.20
3 P2MS	SUN T10A	2.00
3 P3MS	SUN T10A	3.10
3 P4MS	SUN T10A	3.60
3 P5MS	SUN T10A	4.80
3 P6MS	SUN T10A	5.60
3 P7MS	SUN T10A	5.60
3 P8MS	SUN T10A	6.30

NOTE: PRICES DO NOT INCLUDE RELIEF CARTRIDGE.

PRODUCT LIST

EFFECTIVE: APRIL 1, 2011



MANIFOLD - ALLOY - CTOP 5 - PARALLEL



PART No.	RELIEF CAVITY	KG
HMC 5 P1M	NO	2.20
5 P2M	NO	4.50
5 P3M	NO	6.50
5 P4M	NO	8.50
5 P5M	NO	10.50
5 P6M	NO	12.00
5 P7M	NO	12.50
5 P8M	NO	13.50
HMC 5 P1MS	SUN T10A	2.20
5 P2MS	SUN T10A	4.50
5 P3MS	SUN T10A	6.50
5 P4MS	SUN T10A	8.50
5 P5MS	SUN T10A	10.50
5 P6MS	SUN T10A	12.00
5 P7MS	SUN T10A	12.50
5 P8MS	SUN T10A	13.50

NOTE: PRICES DO NOT INCLUDE RELIEF CARTRIDGE.

MANIFOLD - ALLOY - CTOP 5 - SERIES



PART No.	RELIEF CAVITY	KG
HMC 5 S2M	NO	4.50
5 S3M	NO	6.50
5 S4M	NO	8.50
5 S5M	NO	10.50
5 S6M	NO	12.00
HMC 5 S2MS	SUN T10A	4.50
5 S3MS	SUN T10A	6.50
5 S4MS	SUN T10A	8.50
5 S5MS	SUN T10A	10.50
5 S6MS	SUN T10A	12.00

NOTE: PRICES DO NOT INCLUDE RELIEF CARTRIDGE.

PRODUCT LIST

EFFECTIVE: APRIL 1, 2011



BLANKING PLATES - ALLOY

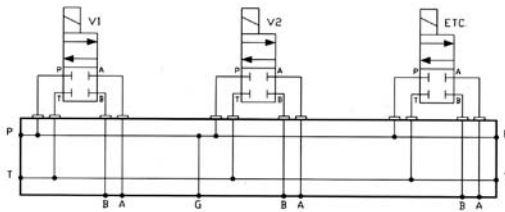
PART No.	CTOP	KG
HBP C 3M	3	0.20
HBP C 5M	5	0.30
HXPC3PTM CROSSOVER P TO T	3	0.20

SUN CARTRIDGE

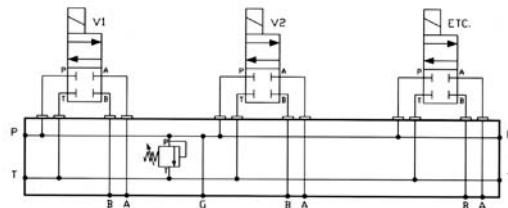
PART No.	CTOP	SUN CAVITY
RPEC LAN	3 & 5	T10A

MANIFOLD SCHEMATICS

PARALLEL

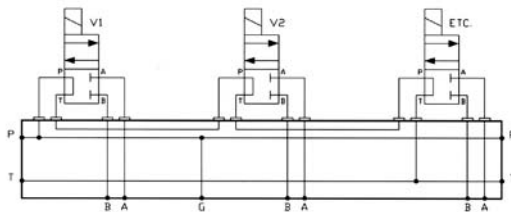


Parallel Circuit

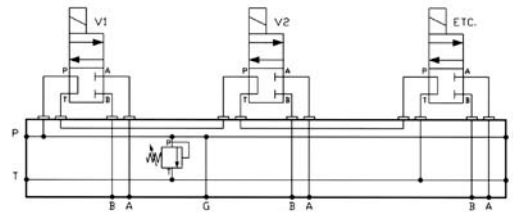


Parallel Circuit with relief

SERIES



Series Circuit



Series Circuit with relief