



The OP11 Directional Valve Series provides a compact range of manually operated directional valves for low flow applications. Because of the physical size of OP11 valves are ideally suited for mounting on small machines where most other valves would be 'out of place'. Like all Oilpath DCV's the handle assembly is fully enclosed to reduce the likelihood of corrosion affecting the handle mechanism. The handle bracket and spring end cover are made from glass filled nylon that has better impact and wear properties than aluminium. Each valve is supplied with a 3/8" bspt plug that can be easily inserted into a pre-tapped gallery to create Power Beyond (H.P.C.) and closed centre facility.

#### OVERALL SPECIFICATIONS

- Number of Spools.....1 to 4
- Maximum working pressure.....345 bar (5000 psi)
- Rated flow.....45 ltrs/min (10 Imp. gpm)
- MATERIAL SPECIFICATIONS Body.....High tensile strength Australian cast iron  
Spools.....Hardened steel
- Seals.....Buna - N

#### STANDARD FEATURES

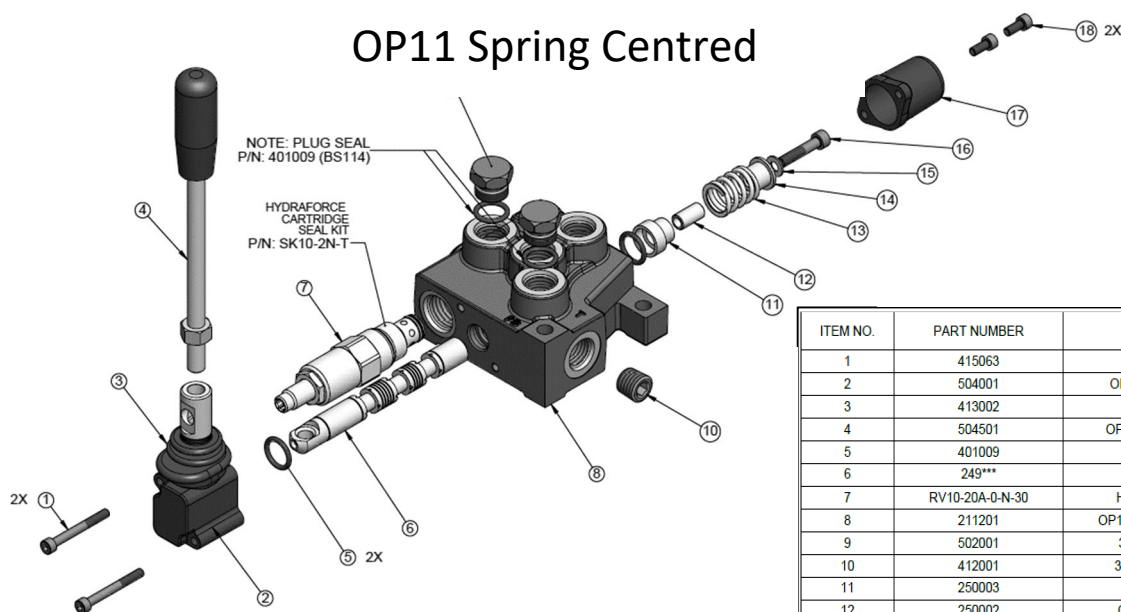
- Parallel circuit
- Integral HydraForce direct acting relief valve, adjustable [Set at 175 bar (2530 psi)]
- Optional side/top inlet and outlet ports
- 3/4" UN O-Ring inlet, outlet and work ports
- Open or closed centre positions, 3-way or 4-way operation, motor spool and other spool options
- Hardened steel non-return check

#### OPTIONS

- Micro switch actuation on spool shift
- 2 and 3 position detent & spring centred detent
- Pneumatic spool actuation
- Closed circuit & power beyond
- Electric limit switch

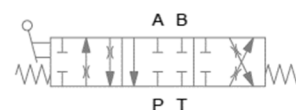
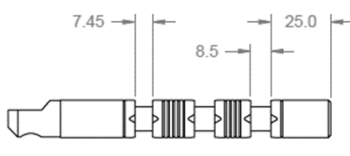
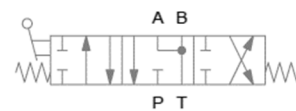
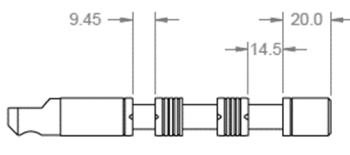
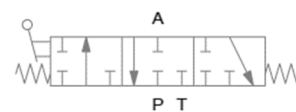
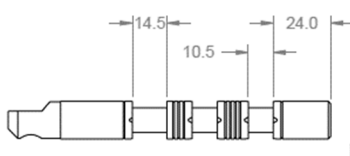
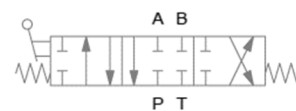
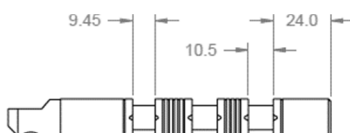
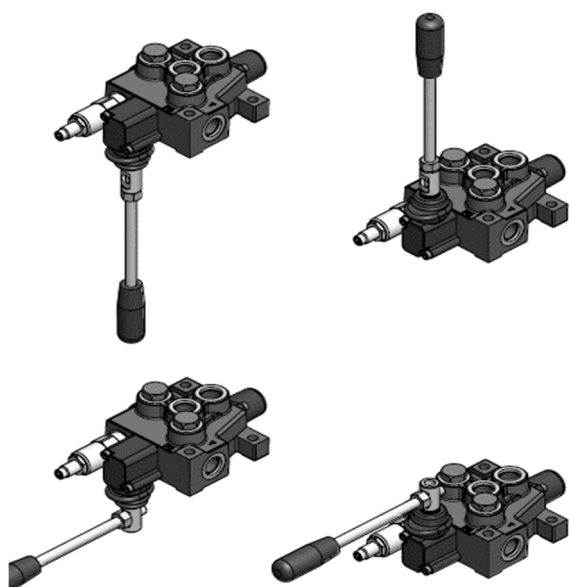
***\*Note 4 spool valves remain as OP10 designation***

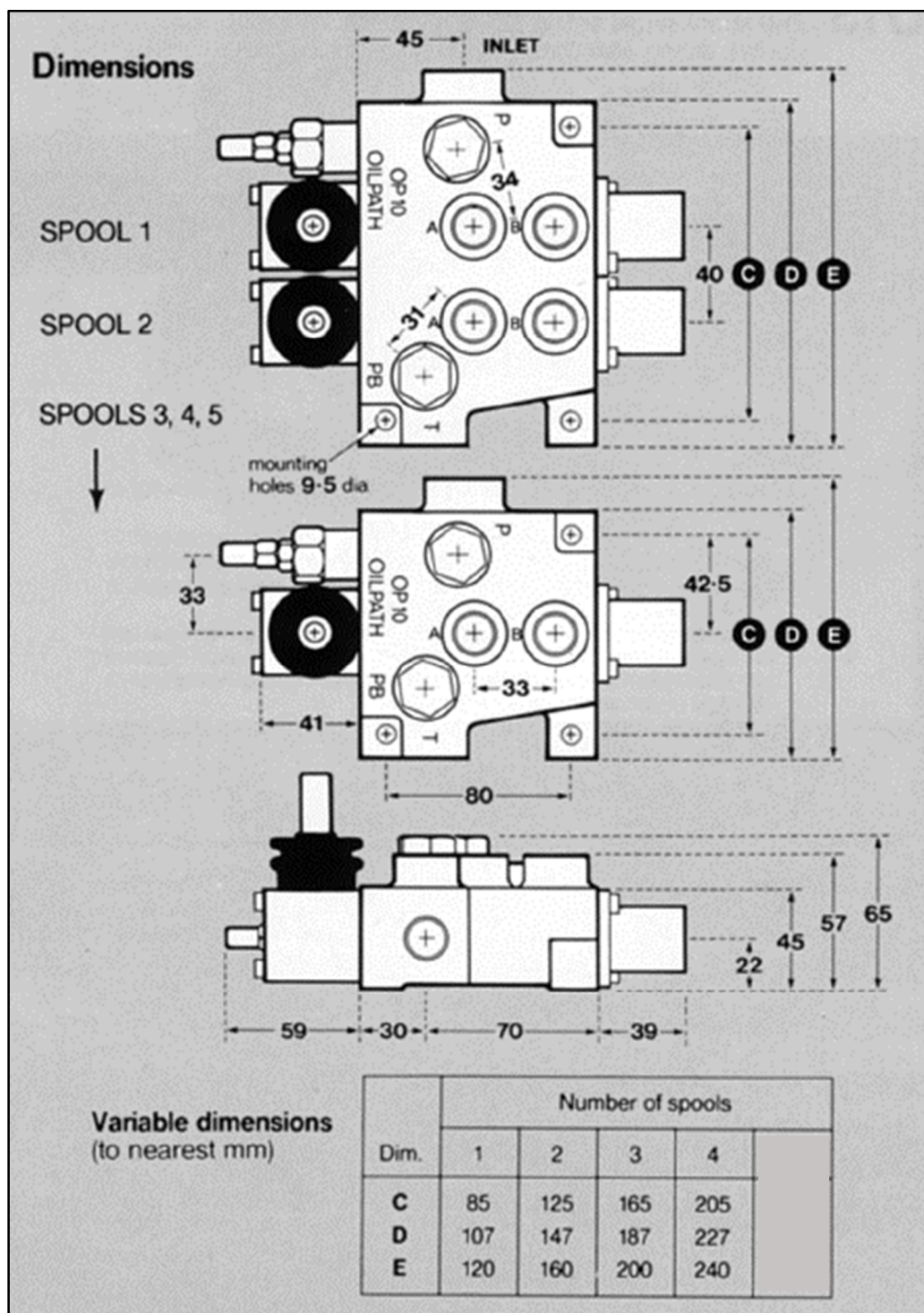
## OP11 Spring Centred



ITEM NO.	PART NUMBER	DESCRIPTION	SPRG CNTRD/QTY
1	415063	M5 x 45 SHCS	2
2	504001	OP10 LEVER BOX ASSEMBLY	1
3	413002	OP10 Lever Box Boot	1
4	504501	OP10 LEVER STEM ASSEMBLY	1
5	401009	N7 114 NITRILE O RING	2
6	249***	OP10 * Spool	1
7	RV10-20A-0-N-30	HYDRAFORCE CARTRIDGE	1
8	211201	OP11 01 3/4" UNF FIN. MACHINED	1
9	502001	3/4" UNF PLUG ASSEMBLY	2
10	412001	3/8" BSPT PRESSURE PLUG	1
11	250003	OP10 Long Spring Cup	1
12	250002	OP10 Spring Centering Bush	1
13	416007	OP S/C SPRING STD	1
14	250001	OP10 Short Spring Cup	1
15	418008	1/4" x 1/2" ZP Washer	1
16	415004	M6 x 30 SHCS	1
17	340001	OP10 Spring Cap	1
18	415005	M5 x 12 SHCS	2

NOTE: ALTERNATE HANDLE ORIENTATION FOR OP11 VALVE





## ORDERING INFORMATION

OP11 (OP10) valves can be ordered by quoting a number/letter group sequence as follows:  
Valve series; Spool configuration; Relief setting; Options required

Valve Model	Spool Types		Relief Setting	Options	
OP11	D	Double Acting	Specify Relief Valve Pressure Setting 100 - 5000 psi HydraForce Relief Valves on OP11  No Setting required with NR option	PB	High pressure carry over. Plug supplied in package as standard
	Q	Double Acting low flow version		CC	Closed Centre
	S	Single Acting		NR	Relief valve not required
	M	Motor Spool		SCDA	Spring centred dented to port A
OP10 (4 spool only)			400 - 5000 psi Oilpath Relief valves on OP10-4	SCDB	Spring centred dented to port B
				A	Air Control (OP118) supplied only with manual override
				D	Three position detent
				E	Electric limit switch followed by numeral indicating spools

OP11	D	2000	PB	Single Double acting spool 2000psi relief high pressure carry over
OP11	DS	2500	D2	Double 1 <sup>st</sup> spool double acting spring centred 2 <sup>nd</sup> spool single acting detented
OP11	DDD	1500	D1A23	Triple all double acting spools 1500 psi relief detent on 1 <sup>st</sup> spool pneumatically operated 2 <sup>nd</sup> & 3 <sup>rd</sup> spools
OP10	DDDM	3500	SCDB23	OP10 four spool with double acting spools on 1,2,3, motor spool on 4 3500 psi relief spring centred to B on 2 <sup>nd</sup> & 3 <sup>rd</sup> spool

## OP10 & OP11 Directional Control Valve Pricing

Part Number	Description	List Price for Base Valve	15% discount if no options (double acting) List price
0111xxxx	Single Spool Valve	334	290
0112xxxx	Two Spool Valve	513	446
0113xxxx	Three Spool Valve	681	592
0104xxxx	Four Spool Valve	840	730

## OP10 & OP11 Options Pricing

OPTIONS for OP11/10	Part Number	Description	List Price
D1	507020	Detent per spool, (three pos.) factory fitted # indicates pos.	39
CC	511048	OP10 Pressure Relief Blanking Plug kit, for closed centre	39
	511014	OP11 Pressure Relief Blanking Plug kit, for closed centre	48
E1	503003	Electric Limit Switch for single spool valve, factory fitted Note: Micro switch is not included in price	113
E12	503004	Electric Limit Switch for double spool valve, factory fitted Note: Micro switch is not included in price	209
E123	503005	Electric Limit Switch for triple spool valve, factory fitted Note: Micro switch is not included in price	289
E1234	503006	Electric Limit Switch for four spool valve, factory fitted Note: Micro switch is not included in price	377
	503010	Micro Switch for above kits, (one per valve) standard micro switch. This switch has a weather-proof rating to IP67	84
13A	248013	Optional micro switch sleeve for S/A spools with code E, kit only (add on spool)	20
Q		Optional D/A spool with metering for low flow DC power units	POA
SCDA	509018	Spring Centred Detent with det. acting on A port is pressurised	130
SCDB	509012	Spring Centred Detent with det. acting on B port is pressurised	130
S/O	509010	Spring offset to "B" (No centre position)	43
A1		OP118 Air Kit with handle control	167

**Note:** 4 spool valves remain as OP10 designation with Oilpath integrated lift drop check and relief valve.

OP11 valves contain a separate lift drop check and a HydraForce Pressure Relief Valve

## OP10/11 SPARES

		List Price
RV50-26A-0-P-50	HydraForce Relief Valve up to 5000 psi	160.00
RV10-26A-0-N-30	HydraForce Relief Valve up to 3000 psi	144.00
512011	Seal Kit Single Spool	28.00
512015	Seal Lit Double Spool	31.00
512043	Seal Kit Triple Spool	34.00
512017	Seal Kit Four Spool	37.00
511048	CC OP10 Pressure Relief Blanking Plug kit, for closed centre (511048)	43.00
511014	OP11 Pressure Relief Blanking Plug kit, for closed centre (511014)	54.00
509018	SCDA spring Centred Detent with det. acting on A port is pressurised (509018)	140.00
509012	SCDB Spring Centred Detent with det. acting on B port is pressurised (509012)	140.00
509001	Spring Centring Kit to suit all spools, without spring cap	38.00
507020	D1 Detent per spool, (three pos.) kit, or factory fitted # indicates pos. (507020)	42.00
506081	OP118 Air Kit for OP11	177.00
505016	Relief Valve complete cartridge including lift drop check	116.00
504504	Handle Lever Stainless Steel 10mm diameter	35.00
504503	Handle Lever complete with nut and rubber knob M8	31.00
504501	Handle Lever complete with nut and rubber knob	31.00
504027	Lever Box with shift leg & rubber boot but no handle	96.00
503010	Micro Switch for above kits, (one per valve) standard micro switch (503010) This switch has a weather-proof rating to IP67	92.00



503009	13A Optional micro switch sleeve for S/A spools with code E, kit only (503009) (add on spool)	130.00
503006	E1234 Electric Limit Switch for four spool valve, kit or factory fitted (503006) Note: Micro switch is not included in price	406.00
503005	E123 Electric Limit Switch for triple spool valve, kit or factory fitted (503005)	313.00
503004	E12 Electric Limit Switch for double spool valve, kit or factory fitted (503004)	226.00
503003	E1 Electric Limit Switch for single spool valve, kit or factory fitted (503003)	130.00
416220	Rubber Boot Bottom Clips	4.00
416219	Rubber Boot Top Clips	4.00
416009	Relief Valve Main Spring Z	24.00
416008	Relief Valve Main Spring X	24.00
416005	Relief Valve Main Spring Y	24.00
413002	Rubber Boot for lever box	11.00
340001	Spring Cup supplied without M5 cap screws	27.00
249017	Q Optional D/A spool with metering for low flow DC power units	POA
249004	Motor Spool with no spring centring mechanism	116.00
249003	Single Acting Spool with no spring centring mechanism	116.00
249002	Double Acting Spool with no spring centring mechanism	116.00
	With spring centring mechanism ADD	36.00