



## **- HYDRAULIC POWER PACKS -**



BKC1-18

***SUPERIOR TORQUE AND TENSION SOLUTIONS***

**BUILD CODE****PAGES**  
**3-4****MOTORS****PAGE**  
**5****START SOLENOIDS****PAGE**  
**6****PUMPS****PAGE**  
**7****CIRCUITS****PAGES**  
**8-10****RESERVOIRS****PAGES**  
**11-14****PENDANTS / WIRING****PAGES**  
**15-17****MANIFOLDS****PAGE**  
**18****VALVES****PAGE**  
**19-20**

## MOTOR

Build Code	Description
A	12v 4.5", 2.2kw, 1 Term
B	12v 4.5", 2.2kw, 2 Term
C	24v 4.5", 2.2kw, 1 Term
D	24v 4.5", 2.2kw, 1 Term
E	12/24v 5", 3.8/5.8kw 2 Term

## START SOLENOID

Build Code	Description
1	12v, 3 Term, Plastic
2	12v, 4 Term, Plastic
3	24v, 3 Term, Plastic
4	12v, 4 Term, Plastic
5	12v, 3 Term, Steel
6	24v, 4 Term, Steel
7	24v, 3 Term, Steel
8	24v, 4 Term, Steel
9	Not Required

## PUMP

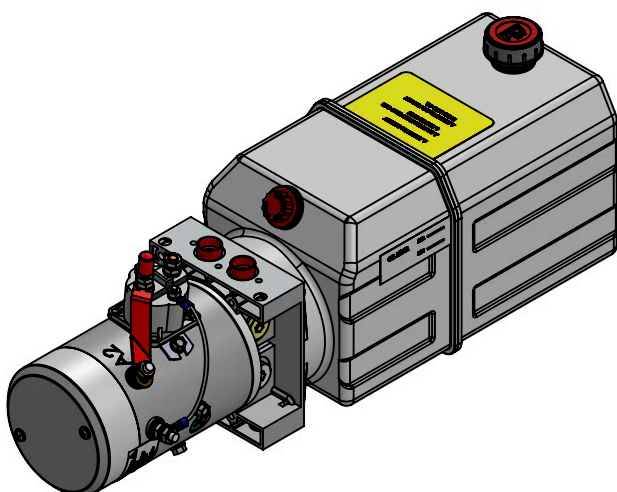
Build Code	Description
A	0.63 cc
B	0.80 cc
C	1.20 cc
D	1.60 cc
E	2.10 cc
F	2.50 cc
G	2.70 cc
H	3.20 cc
J	4.20 cc
K	5.10 cc
L	6.00 cc

## CIRCUIT

Build Code	Description
A	101
B	102
C	102A
D	102B
E	103
F	103A
G	104A
H	104B
J	105
K	108
L	109
M	110
N	111
P	114
Q	114A
R	114B
S	114C
T	114D
U	208
V	211
W	215

## COIL TERMINALS

Build Code	Description
0	Not Required
1	Dual Spade
2	Single Stud
3	Hirschmann



DUAL SPADE

SINGLE STUD

HIRSCHMANN

## RESERVOIR

Build Code	Description
A	Not required
B	1.5 LTR Round Steel
C	2 LTR Round Steel
D	3 LTR Round Steel
E	4 LTR Round Steel
F	4 LTR Steel Offset
G	6 LTR Steel Offset
H	8 LTR Steel Offset
J	10 LTR Steel Offset
K	12 LTR Steel Offset
L	8 LTR Steel Square
M	12 LTR Steel Square
N	16 LTR Steel Square
P	20 LTR Steel Square
Q	3 LTR Plastic
R	4 LTR Plastic
S	6 LTR Plastic
T	8 LTR Plastic
U	10 LTR Plastic
V	14 LTR Plastic
Z	Special

## PLUMBING

Build Code	Description
1	Horizontal
2	Vertical
3	Horizontal/Vertical

## RELIEF

Build Code	Description
A	70 Bar
B	105 Bar
C	140 Bar
D	175 Bar
E	210 Bar
F	240 Bar
G	OTHER

## UNIQUE CODE

\* \*

## OPTIONS

### PENDANTS



### MANIFOLDS



### VALVES

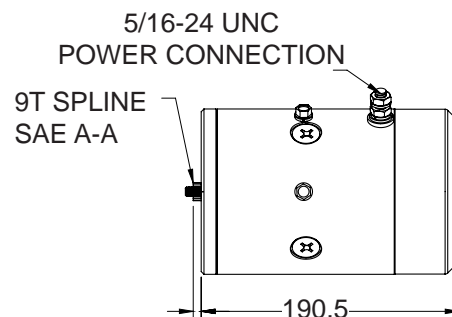
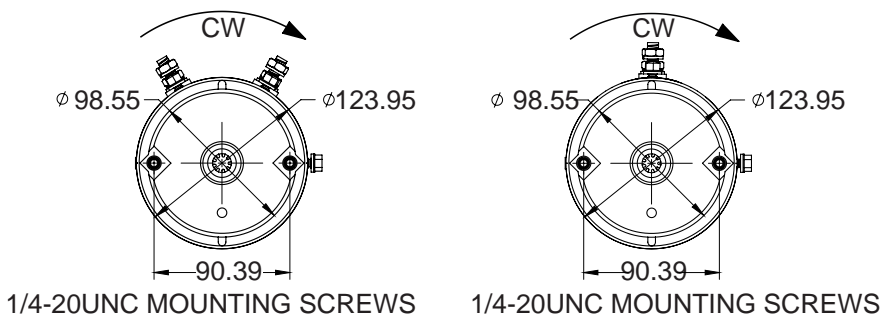


## HEAVY DUTY MOTORS

- 4.5", 4 field series wound
- Available with single terminal internally grounded and two terminal externally grounded models
- Up to 2.6kw of power
- Clockwise rotation

## SPECIFICATIONS

Build Code	Model	Voltage	Terminals	Torque (Nm)	Current (Amp)	Speed (rpm)	Power (kw)
A	1245-29	12	1	5.65	198	3000	1.8
B	1245-30	12	2	5.65	204	3000	1.8
C	2445-6	24	1	7.91	143	3000	2.6
D	2445-7	24	2	7.91	145	3000	2.5

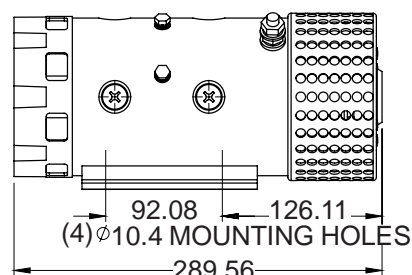
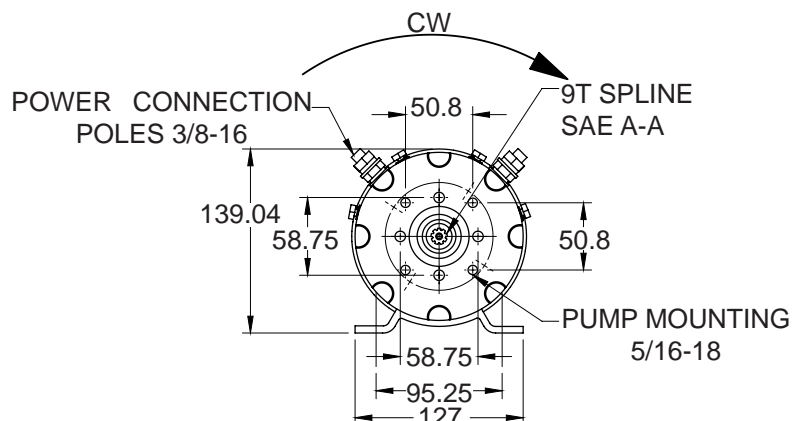


## HI POWER CONTINUOUS DUTY

- 5" open end fan cooled
- Two terminal externally grounded
- Up to 5kw of power
- Clockwise rotation
- Dual voltage 12v/24v

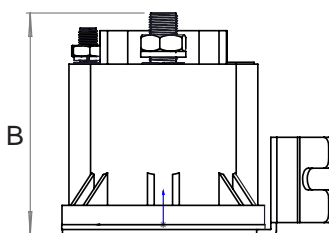
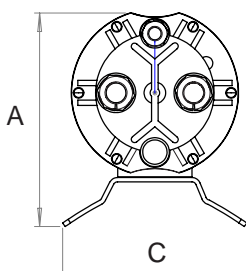
## SPECIFICATIONS

Build Code	Model	Voltage	Terminals	Torque (Nm)	Current (Amp)	Speed (rpm)	Power (kw)
E	2450-3	12/24	2	145/289	201/338	3000	3/5



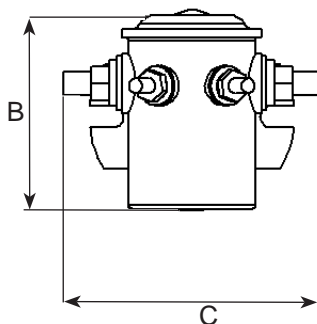
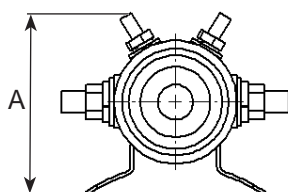
## FEATURES

- Available in plastic or steel
- 200 amp continuous rated capacity
- Available with 3 terminal for internally ground models or 4 terminal for externally ground models



## SPECIFICATIONS

Build Code	Model	Description	A (mm)	B (mm)	C (mm)
1	391-31	12v, 3 Terminal, Plastic	78.5	66.2	69.1
2	391-32	12v, 4 Terminal, Plastic	78.5	66.2	66.2
3	391-33	24v, 3 Terminal, Plastic	78.5	66.2	66.2
4	391-34	24v, 4 Terminal, Plastic	78.5	66.2	66.2



## SPECIFICATIONS

Build Code	Model	Description	A (mm)	B (mm)	C (mm)
5	391-35	12v, 3 Terminal, Steel	59.8	63.3	87.4
6	391-36	12v, 4 Terminal, Steel	59.8	63.3	87.4
7	391-37	24v, 3 Terminal, Steel	59.8	63.3	87.4
8	391-38	24v, 4 Terminal, Steel	59.8	63.3	87.4





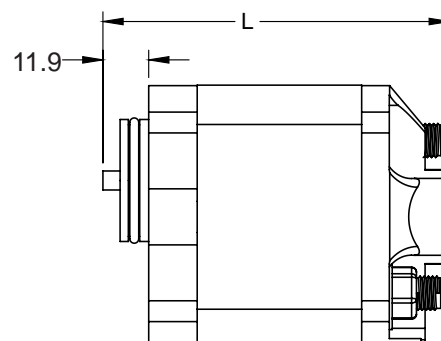
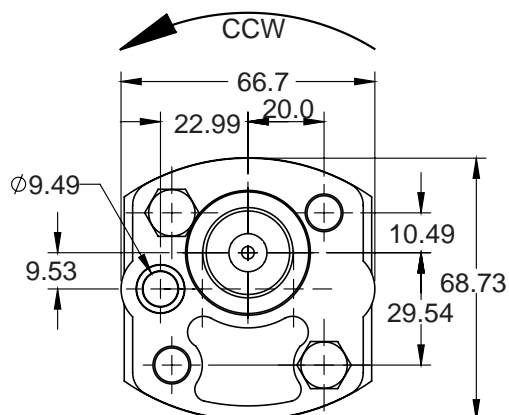
## FEATURES

- Latest design utilises an 11 tooth 32/64 spline for higher torque
- Pressure balanced gear pump
- High mechanical and volume efficiency
- Low noise
- Counter clockwise rotation
- Positive T.I.R. (Total Indicator Reading) alignment



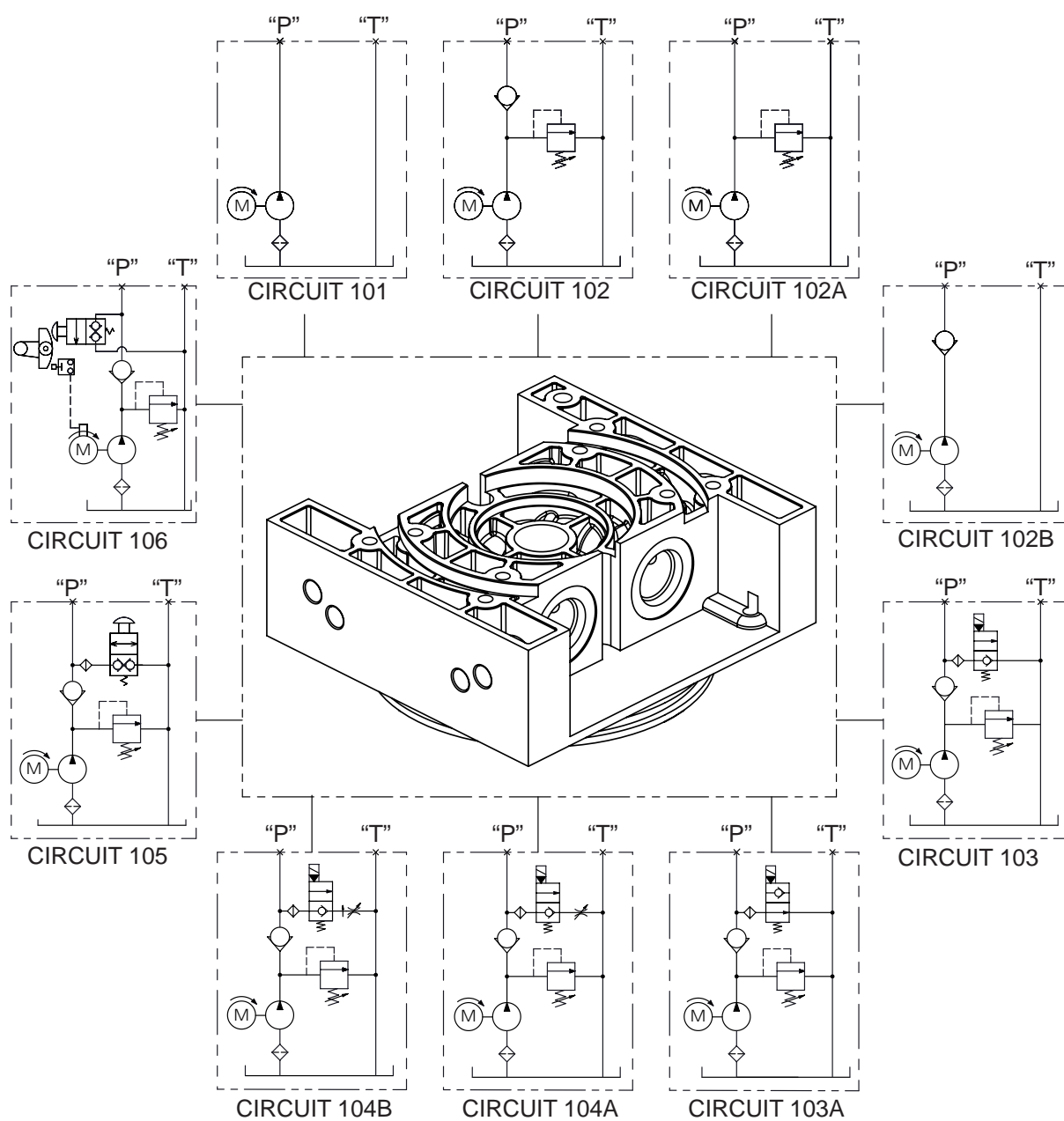
## SPECIFICATIONS

Build Code	Model	Displacement	Pressure		Length (mm)
			Working (Bar/PSI)	Max (Bar/PSI)	
A	PL-0.63-11T-K	0.63 cc	200/2900	280/4000	84.33
B	PL-0.80-11T-K	0.80 cc	200/2900	280/4000	85.34
C	PL-1.20-11T-K	1.20 cc	200/2900	280/4000	86.87
D	PL-1.60-11T-K	1.60 cc	200/2900	280/4000	88.39
E	PL-2.10-11T-K	2.10 cc	200/2900	280/4000	90.42
F	PL-2.50-11T-K	2.50 cc	200/2900	280/4000	91.95
G	PL-2.70-11T-K	2.70 cc	200/2900	280/4000	92.96
H	PL-3.20-11T-K	3.20 cc	200/2900	280/4000	95.00
J	PL-4.20-ES-11T-K	4.20 cc	180/2610	260/3770	98.81
K	PL-5.1-ES-11T-K	5.10 cc	138/2000	227/3300	101.85
L	PL-6.0-ES-11T-K	6.00 cc	138/2000	227/3300	105.41



## UNIVERSAL MANIFOLD 1 (UM1)

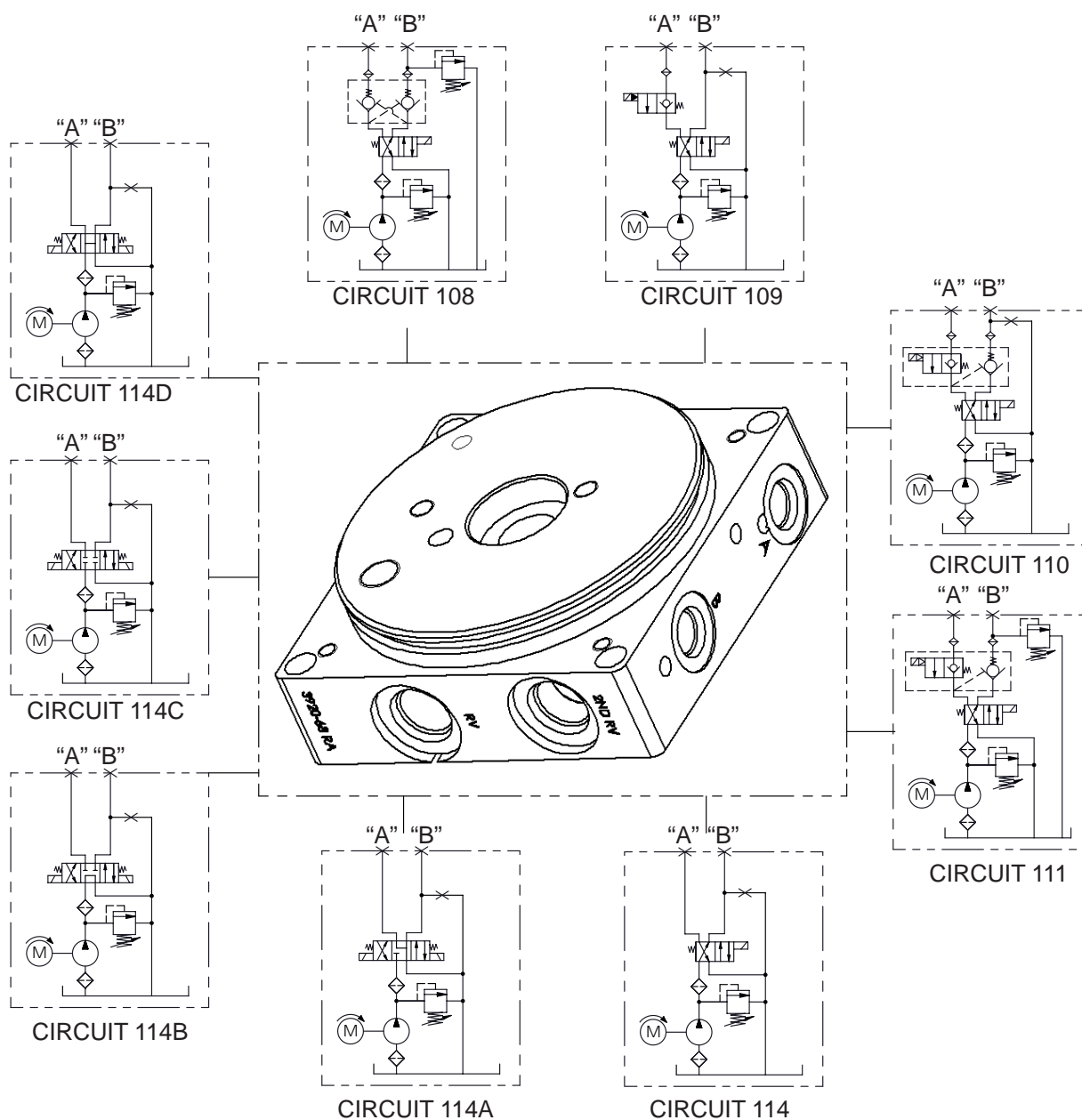
- 10 standard circuits
- Manufactured from lightweight aluminium
- Industry standard C08 cavities
- 3/8 BSPP ports (SAE available on request)





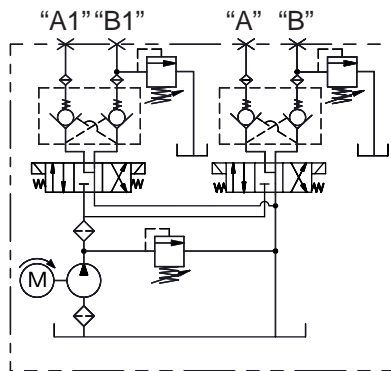
## UNIVERSAL MANIFOLD 2 (UM2)

- 9 standard circuits
- Manufactured from lightweight aluminium
- Industry standard C08 cavities
- 9/16 SAE ports

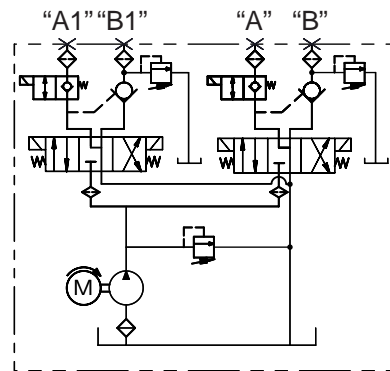


## UNIVERSAL MANIFOLD 3 (UM3)

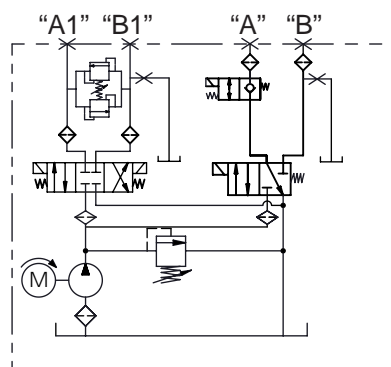
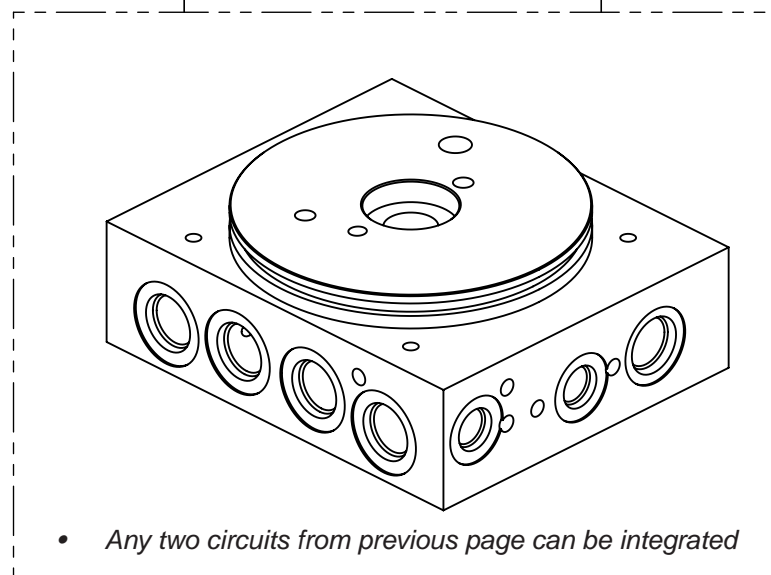
- Allows for multiple integrated single and double acting circuits
- Manufactured from lightweight aluminium
- Industry standard C08 cavities
- 9/16 SAE ports



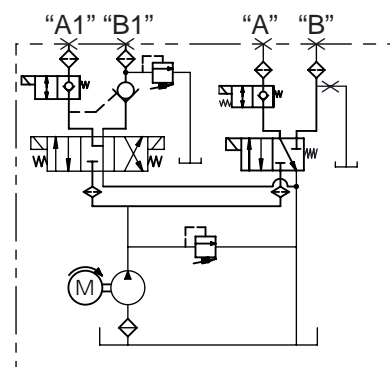
CIRCUIT 208



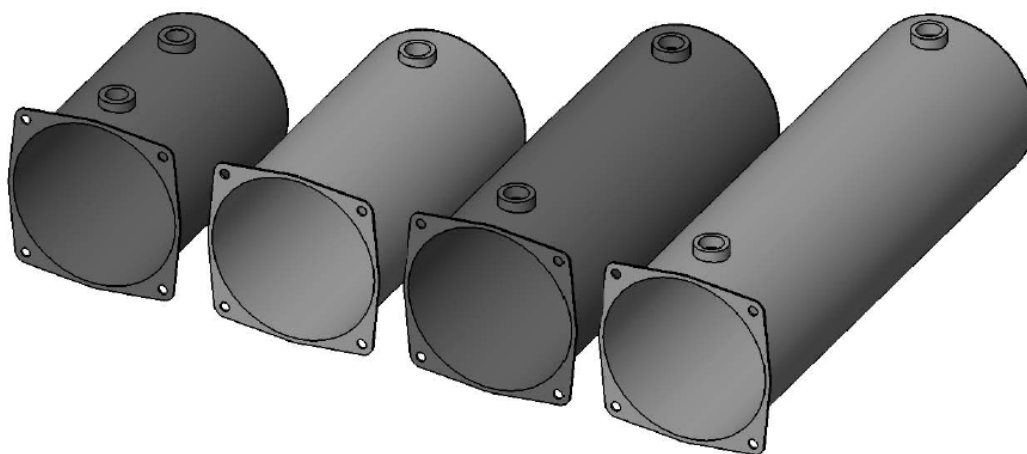
CIRCUIT 211



CIRCUIT 216



CIRCUIT 215

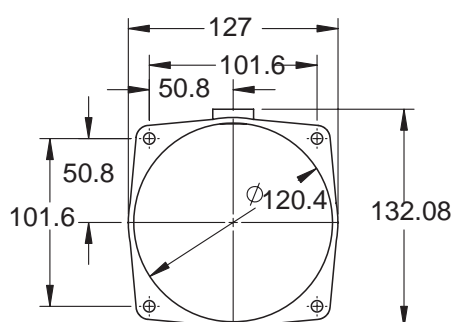
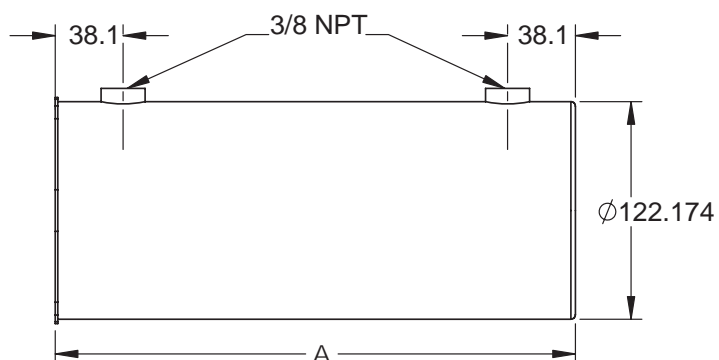


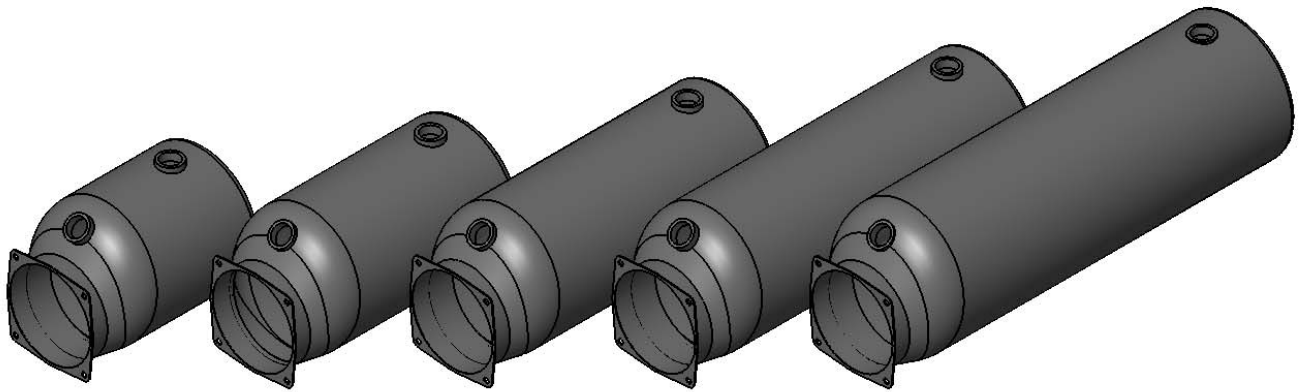
## FEATURES

- Manufactured by using a deep drawn steel process
- Up to 4 litre useable
- Supplied breather includes oil level dipstick
- Black powder coat finish

## SPECIFICATIONS

Build Code	Model	Useable Volume (lt)	A Length (mm)
B	8080-21-K	1.5	159
C	8080-2-K	2	213
D	8080-3-K	3	292
E	8080-4-K	4	378



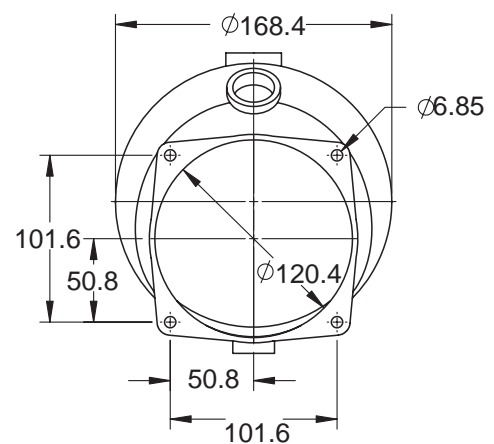
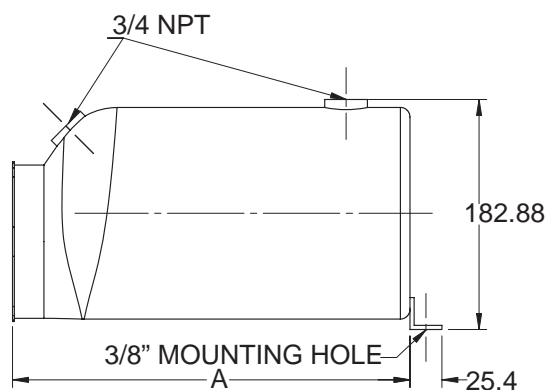


## FEATURES

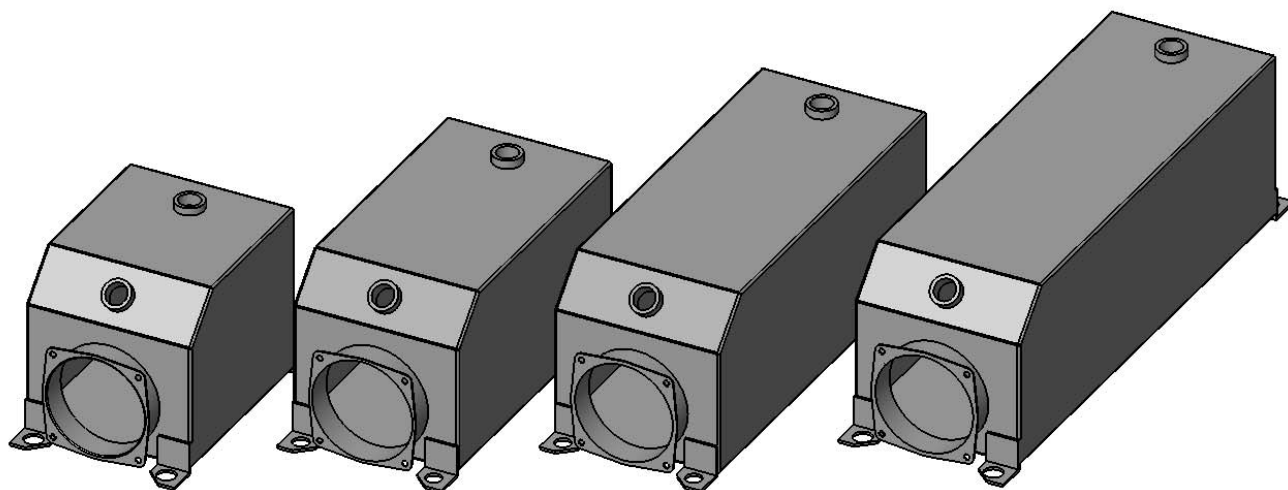
- Offset design
- Up to 12 litre useable
- Supplied breather includes oil level dipstick
- Black powder coat finish

## SPECIFICATIONS

Build Code	Model	Useable Volume (lt)	A Length (mm)
F	8080-5-K	4	232
G	8080-6-K	6	318
H	8080-8-K	8	403
J	8080-10-K	10	489
K	8080-12-K	12	575



\* SHIMMING MAY BE REQUIRED ON MOUNT TABS FOR ALIGNMENT ON INSTALLATION

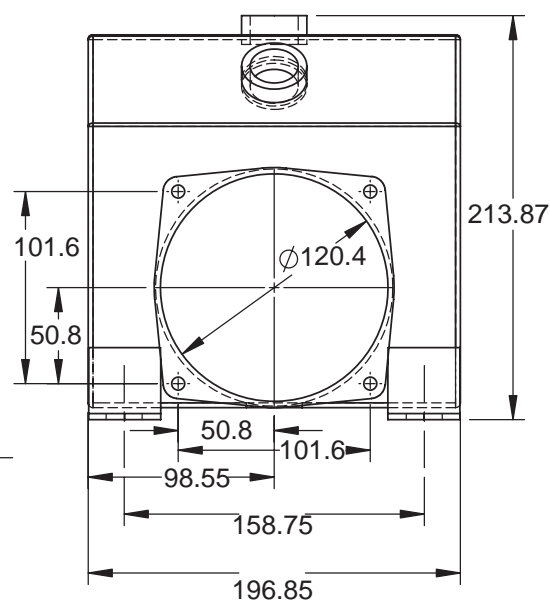
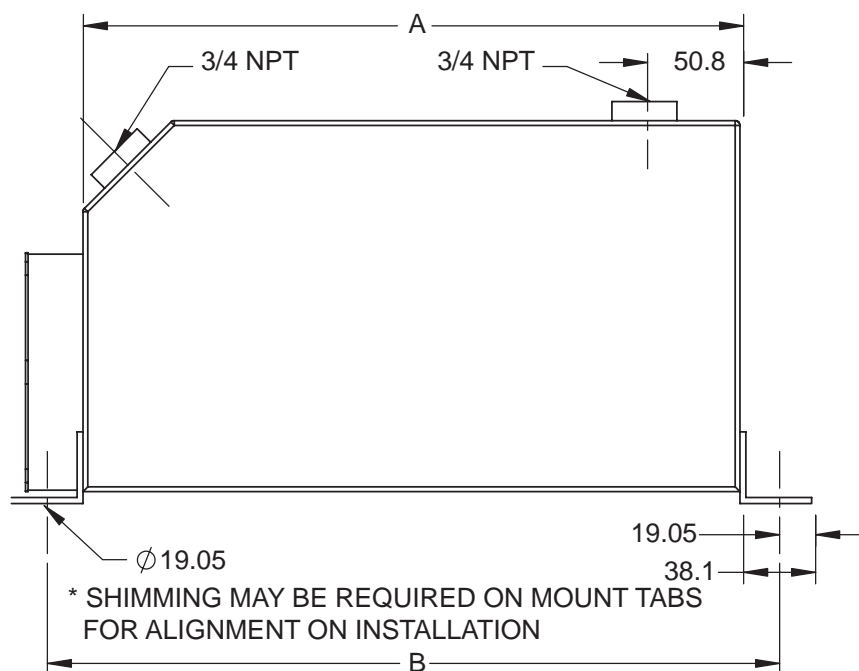


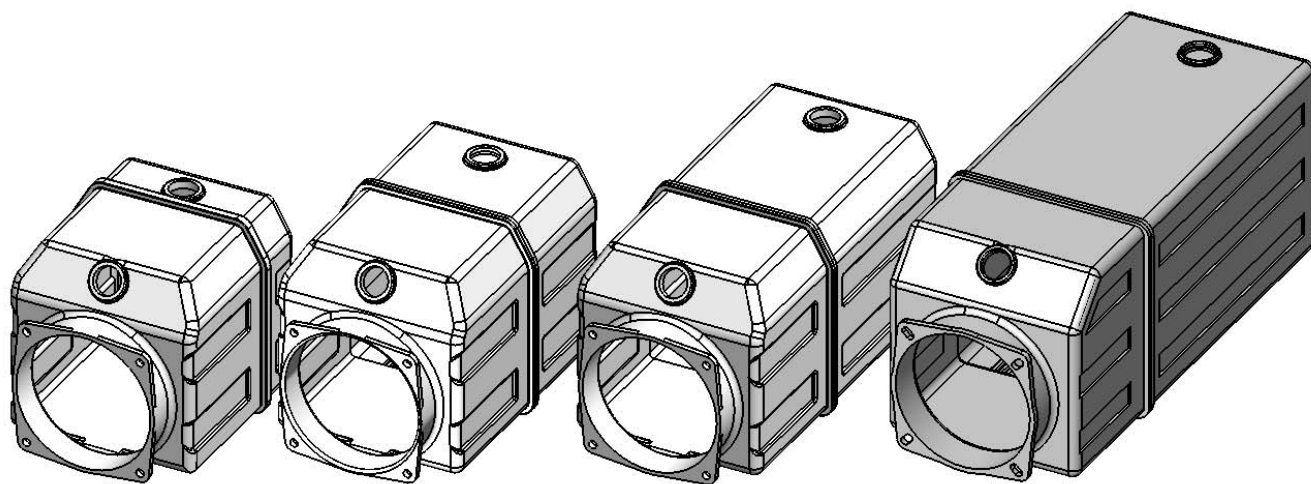
## FEATURES

- Up to 20 litre useable
- Supplied breather includes oil level dipstick
- Black powder coat finish
- Front and rear mounting tabs on all models

## SPECIFICATIONS

Build Code	Model	Useable Volume (lt)	A Length (mm)	B Length (mm)
L	8080-8-S-K	8	235	273
M	8080-13-K	12	349	387
N	8080-16-K	16	470	508
P	8080-20-K	20	581	619



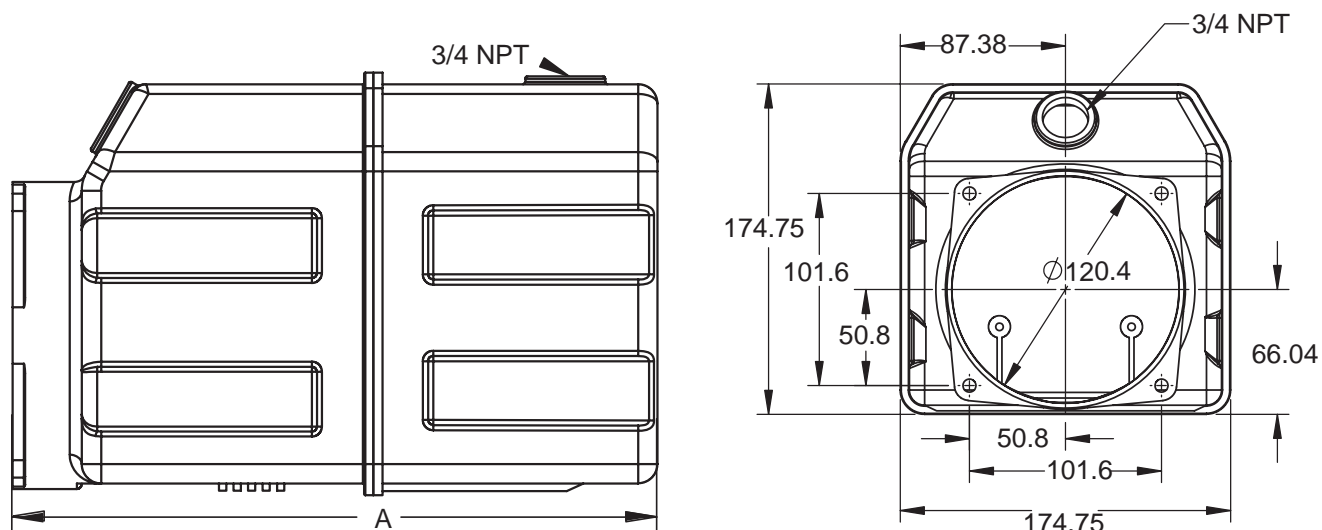


## FEATURES

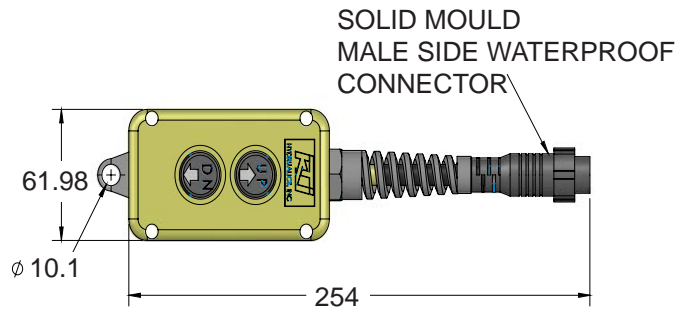
- High impact plastic
- Oil level visible at all times
- Up to 14 litre useable
- Supplied breather includes oil level dipstick
- Lightweight
- Rear mounting tabs available on request

## SPECIFICATIONS

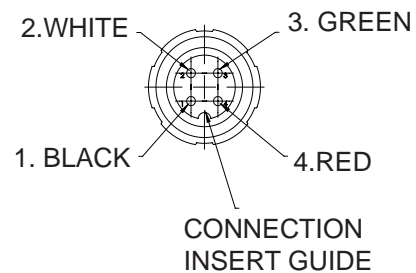
Build Code	Model	Useable Volume (lt)	A Length (mm)
Q	8181-35-K	3	203
R	8181-5-K	4	267
S	8181-6-K	6	337
T	8282-8-K	8	440
U	8282-10-K	10	632
V	8181-14-K	14	699



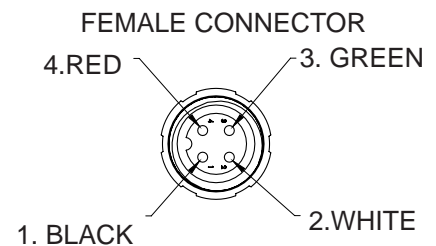
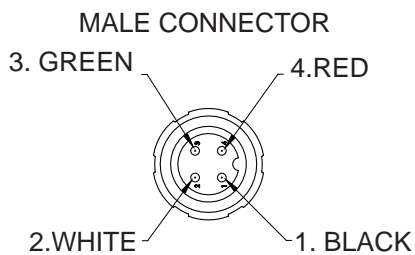
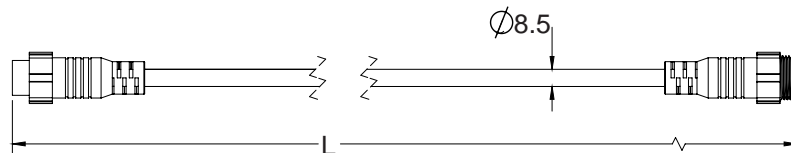
## PENDANT SPECIFICATIONS



Model	Description
3952-52	2 button pendant with solid mould quick connector
395-55-1	As above with LED battery condition indicator



## EXTENSION CABLE



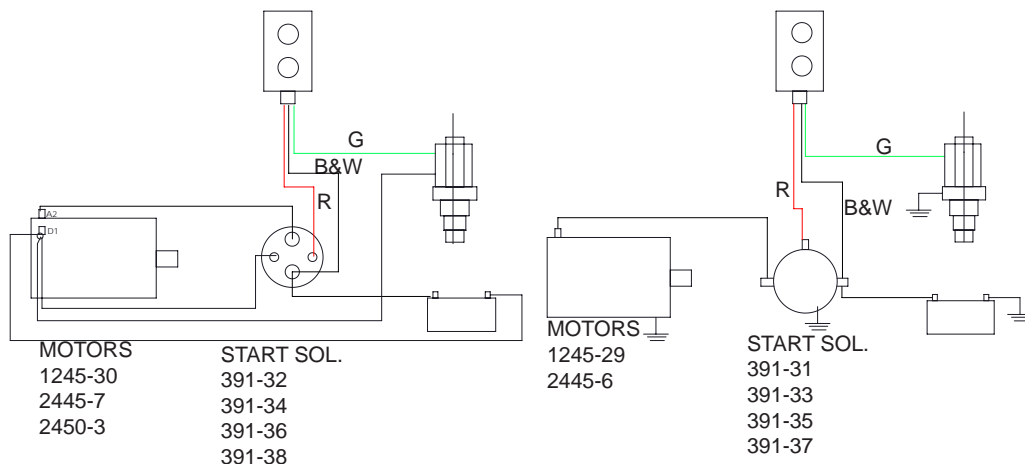
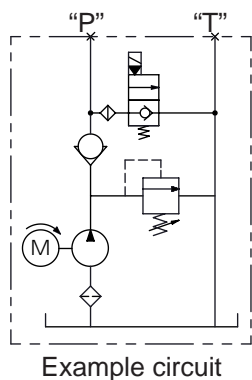
Model	Description	A Length (mm)
74-06	Extension cord with one male and one female solid mould connectors.	4572
74-07	Extension cord with one male and one female solid mould connectors.	7620



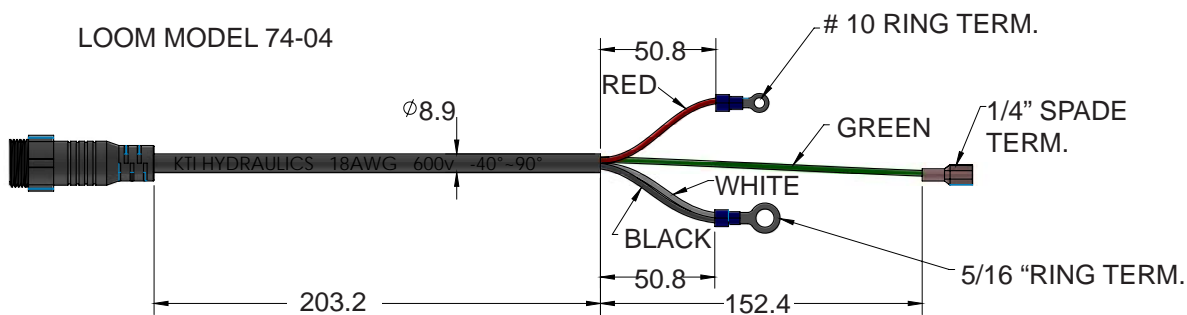


## SINGLE ACTING

### 2W2P USING INTEGRAL VALVE

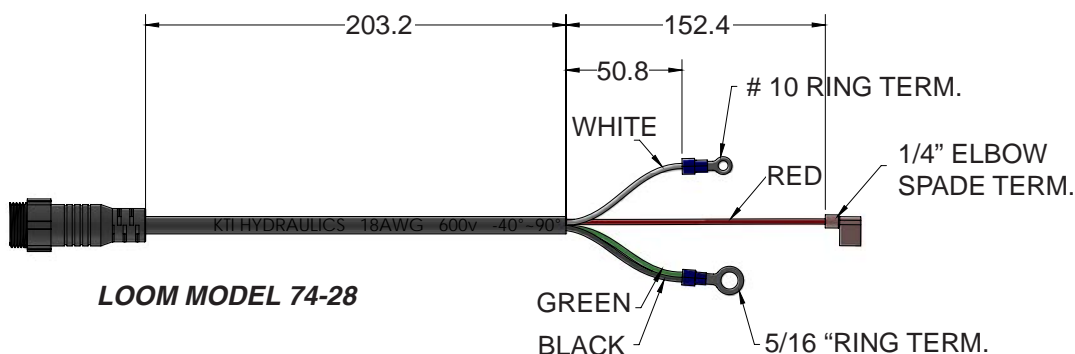
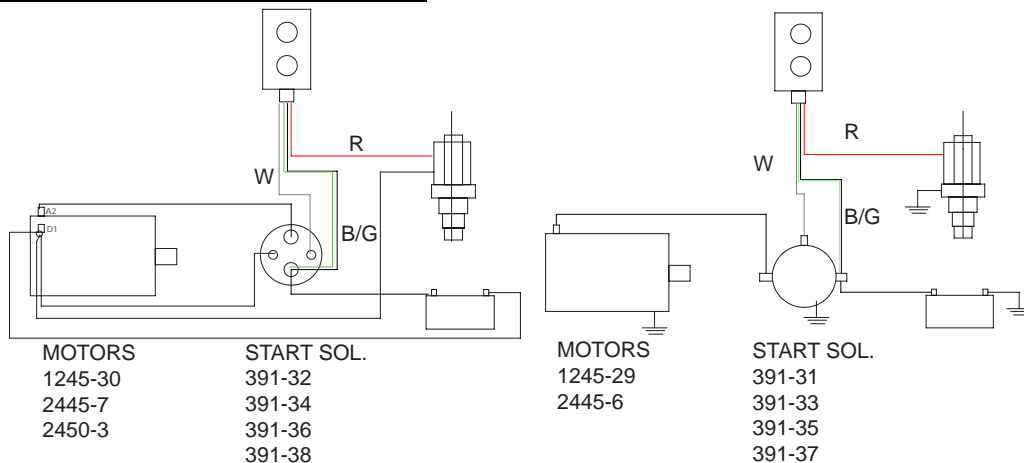
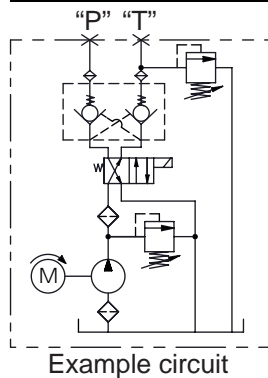


LOOM MODEL 74-04



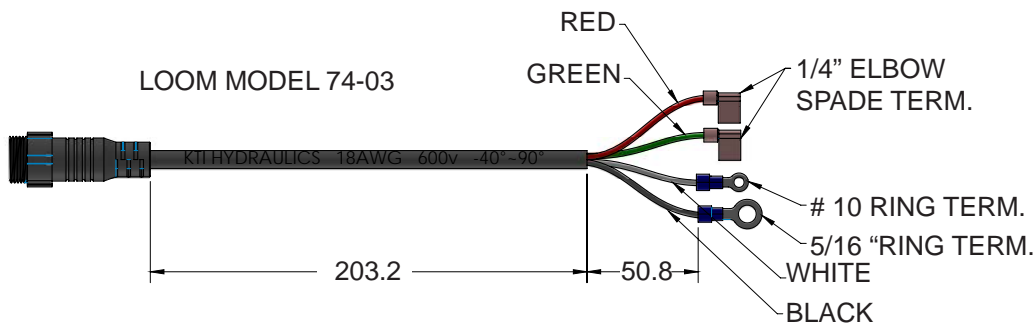
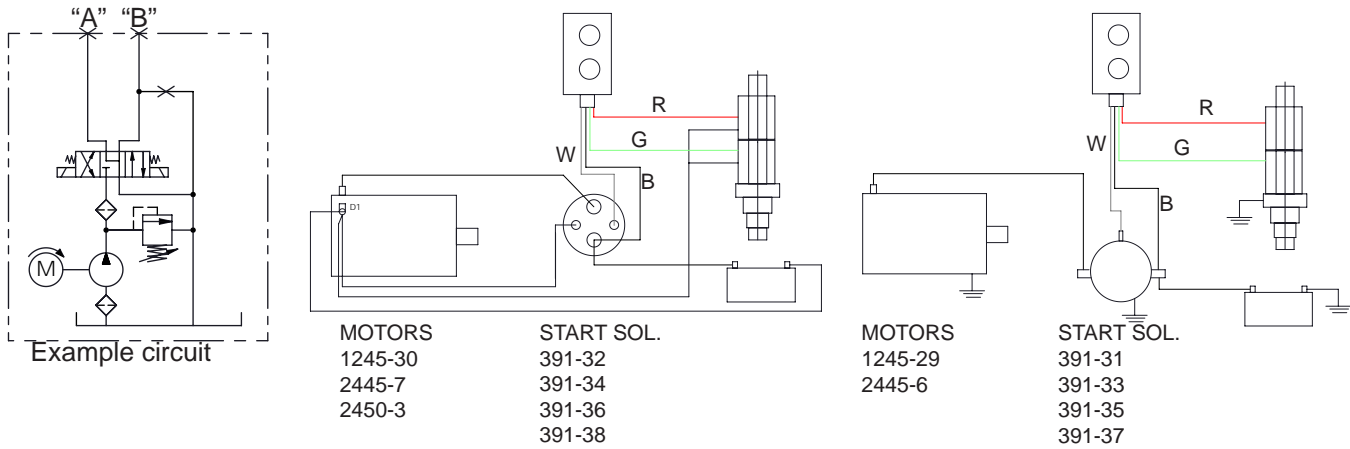
## DOUBLE ACTING

### 4W2P USING INTEGRAL VALVES

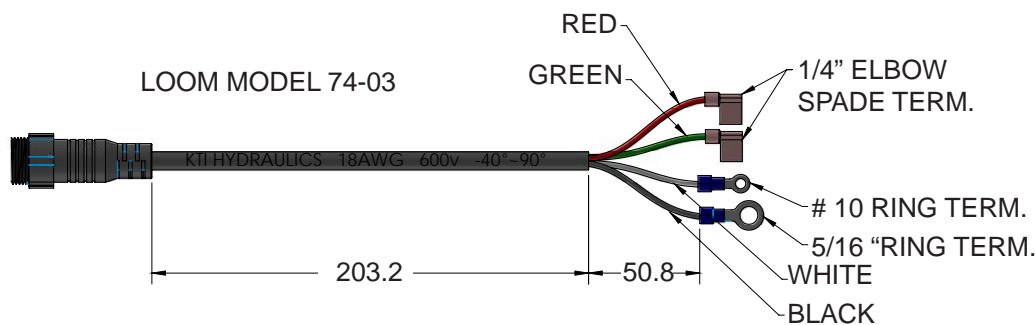
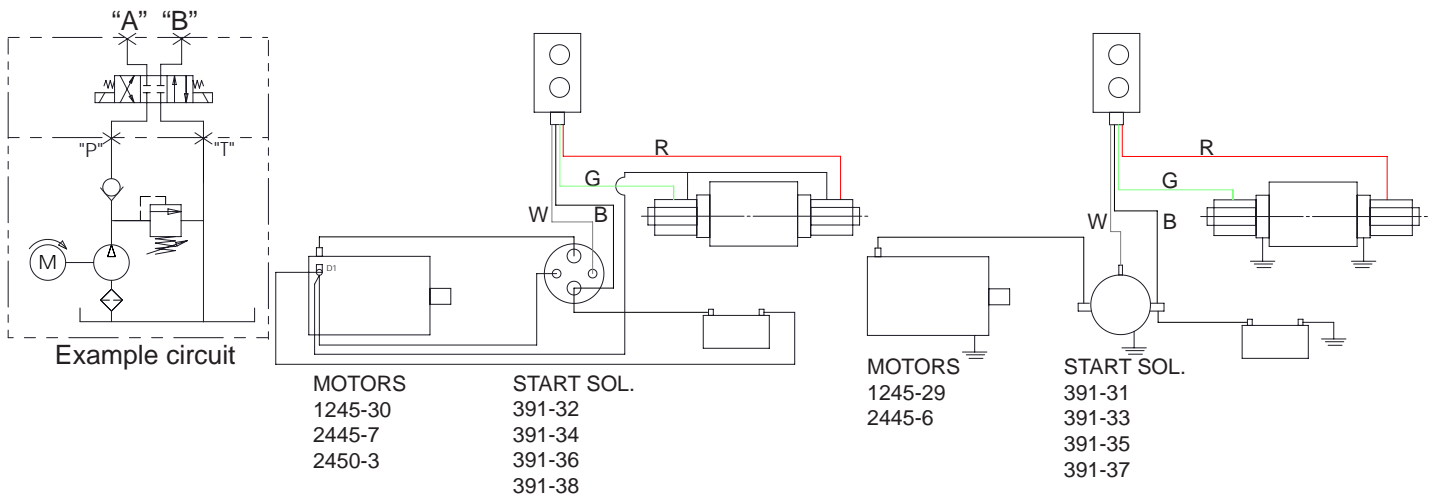


## DOUBLE ACTING

### 4W3P USING INTEGRAL VALVES



### 4W3P USING CETOP VALVES



## FEATURES

- Manufactured from lightweight aluminium material
- 210 bar working pressure

## CETOP 3 MANIFOLD

Model	Description
3030-10-H-K	Single CETOP 3 manifold - Horizontal mount
3030-10-16-H-K	Single CETOP 3 manifold - Vertical mount.



## STACKABLE VALVE MANIFOLD

Model	Description
3030-HDF-K	Stackable valve manifold - Horizontal mount.
3030-VDF-K	Stackable valve manifold - Vertical mount.



## SPACER

Model	Description
3030-10-11-K	Spacer block - increases height of P & T ports by 31.75mm



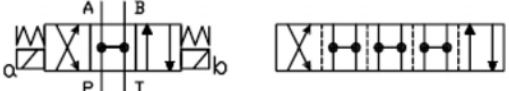
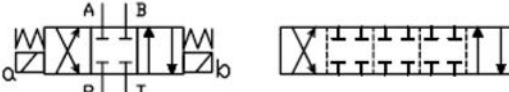
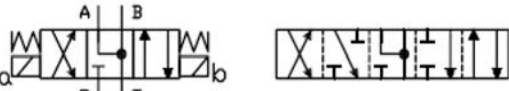
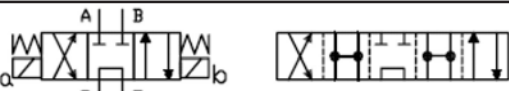
## FEATURES

- 1-8 valves in a stack
- Available with 12v or 24v coils
- Use with a 3030-HDF or 3030-VDF to mount onto Boss hydraulic power unit.
- Can be used a standalone valve stack

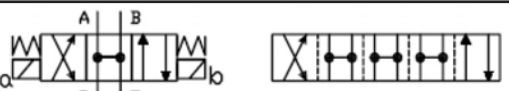
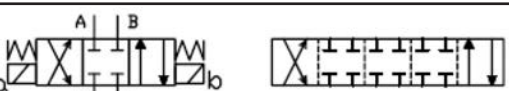
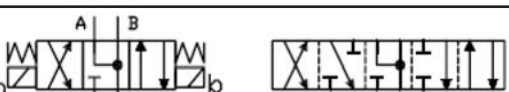
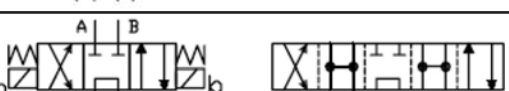
## SPECIFICATIONS

Nominal Flow Rate	20 L/min
Max Flow Rate	25 L/min
Max. Nominal Pressure (P,A,B)	250 Bar
Max Rec. Pressure (T)	200 Bar
13mm Coil	

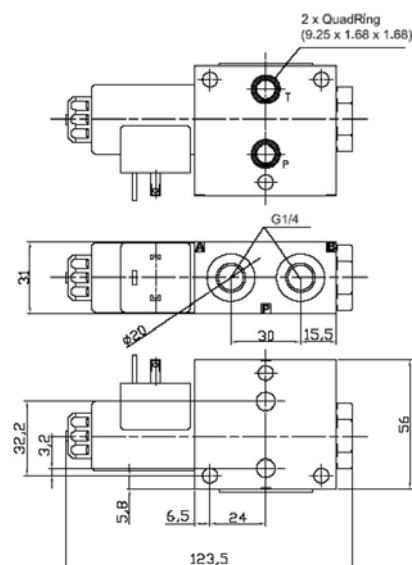
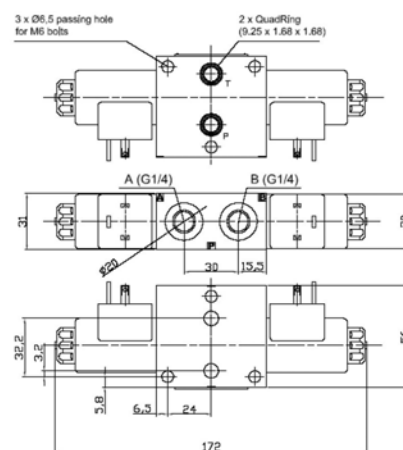


PART NO.	SPOOL & INTERMEDIATE POSITION	VALVE TYPE
HDF-ES-0C-0000/10		4W3P
HDF-ES-1C-0000/10		4W3P
HDF-ES-3C-0000/10		4W3P
HDF-ES-4C-0000/10		4W3P

- HDF models require a closing end plate part number PD1-03.

PART NO.	SPOOL & INTERMEDIATE POSITION	VALVE TYPE
HDFC-ES-0C-0000/10		4W3P
HDFC-ES-1C-0000/10		4W3P
HDFC-ES-3C-0000/10		4W3P
HDFC-ES-4C-0000/10		4W3P

- HDFC models can be used as a standalone valve or as the closing valve on a stack
- Does not require a closing plate



## FEATURES

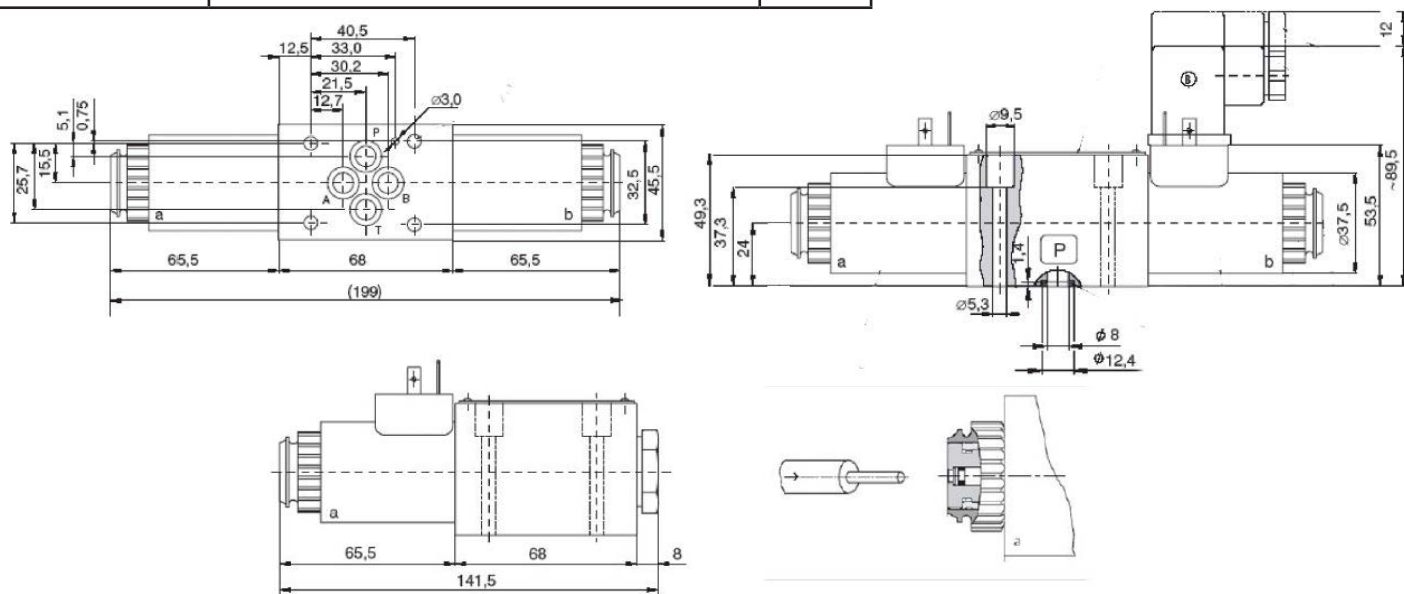
- Manufactured in Europe
- Available with AC or DC coils
- Variety of Sandwich valves also available.
- Valves require a 3030-HDF or 3030-VDF manifold to mount onto Boss packs



## SPECIFICATIONS

Nominal Flow Rate	50 L/min
Max Flow Rate	60 L/min
Max. Nominal Pressure (P,A,B)	320 Bar
Max Rec. Pressure (T)	210 Bar
19mm Coil Stem	

PART NO.	SPOOL & INTERMEDIATE POSITION	VALVE TYPE
HD3-ES-0C-0000/20		4W3P
HD3-ES-1C-0000/20		4W3P
HD3-ES-3C-0000/20		4W3P
HD3-ES-4C-0000/20		4W3P
HD3-ES-1LL-0000/20		4W2P





## HYDRAULIC AG STYLE CYLINDERS CYLINDERS

# BOSS

## HYDRAULICS

- Dual ported UN-Oring threads
- Hard chrome plated piston rod - AISI K1045 material
- CDSM honed barrel
- Range of bore sizes available (1.5-5")



## 700 BAR HYDRAULIC CYLINDERS PUMPS AND TOOLS

# BOSS

## HYDRAULICS

- Single and double acting cylinders
- Hand, electric and air driven pumps
- Hydraulic pullers
- Hydraulic tools and workshop equipment



## HYDRAULIC &amp; PNEUMATIC TORQUE WRENCHES, PUMPS &amp; ACCESSORIES

# PROTORC

WWW.PROTORC.COM.AU



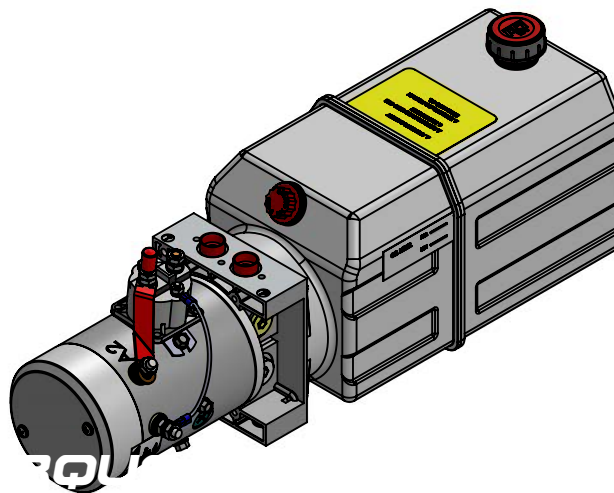
- Hydraulic and Pneumatic torque wrenches
- Wrenches over 80,000 Nm available
- Square drive wrenches available from 3/4"-2 1/2" drive
- Low Clearance wrenches up to M120 bolts
- In house calibration facility







- HYDRAULIC POWER PACKS -
- LARGE VARIETY OF PUMP SIZES -
- CUSTOMISED DESIGNS -
- HYDRAULIC COMPONENTS AVAILABLE-
- WIDE RANGE OF STANDARD CIRCUITS -
- HEAVY DUTY 12 AND 24V MOTORS -
- AFTER SALES CUSTOMER SUPPORT -



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