

techhose

QUALITY CONNECTIONS

Hydraulics

Pneumatics
& Vacuum

Industrial

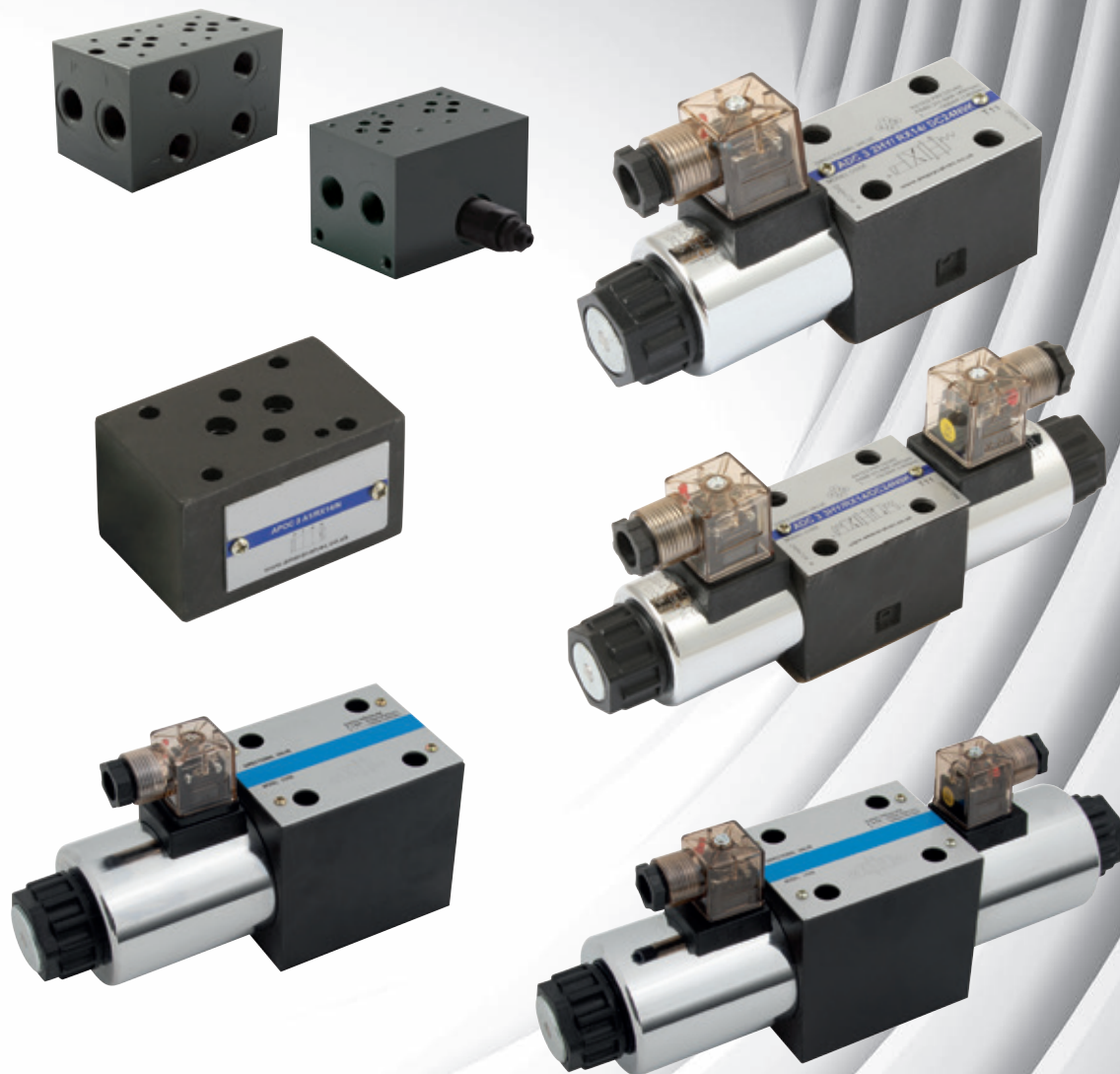
Compressed Air
& Ring Main

Process &
Instrumentation

Hydraulics

Valves, Pumps & Motors

CETOP Directional Control Valves

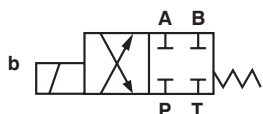


CETOP 3, Single Solenoid

Max Flow Rate: 80 L/min
 Viscosity 2.8-100 mm²/s
 ISO 4401 Size 3
 DIN 24340 Size 6
 IP65

Working Temperature:
 -20°C to +70°C

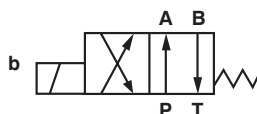
Maximum Working Pressure:
 350 bar



2 Position, All Ports Closed, Spring Offset to Centre

0451	Model	Voltage
1010-1047	ADC 3 2EY/RX14/AC110N9K	110V AC
1010-1046	ADC 3 2EY/RX14/DC24N9K	24V DC

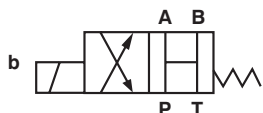
Tech Sheet 10682



2 Position, Spring Offset, Open Transient

0451	Model	Voltage
1010-1045	ADC 3 2CY/RX14/AC110N9K	110V AC
1010-1044	ADC 3 2CY/RX14/DC24N9K	24V DC

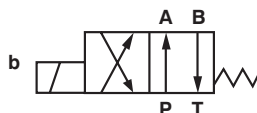
Tech Sheet 10682



2 Position, All Ports Open, Spring Offset to Centre

0451	Model	Voltage
1010-1000	ADC 3 2HY/RX14/AC110N9K	110V AC
1010-1001	ADC 3 2HY/RX14/DC24N9K	24V DC
1010-1059	ADC 3 2HY/RX14/DC12N9K	12V DC

Tech Sheet 10682



2 Position, Spring Offset End to End

0451	Model	Voltage
1010-1002	ADC 3 2DY/RX14/AC110N9K	110V AC
1010-1003	ADC 3 2DY/RX14/DC24N9K	24V DC
1010-1058	ADC 3 2DY/RX14/DC12N9K	12V DC

Tech Sheet 10682



You might also need
CETOP 3 Manifold
 see page 208



CETOP DIRECTIONAL CONTROL VALVES



CETOP 3, Double Solenoid

Max Flow Rate: 80 L/min

Viscosity 2.8-100 mm²/s

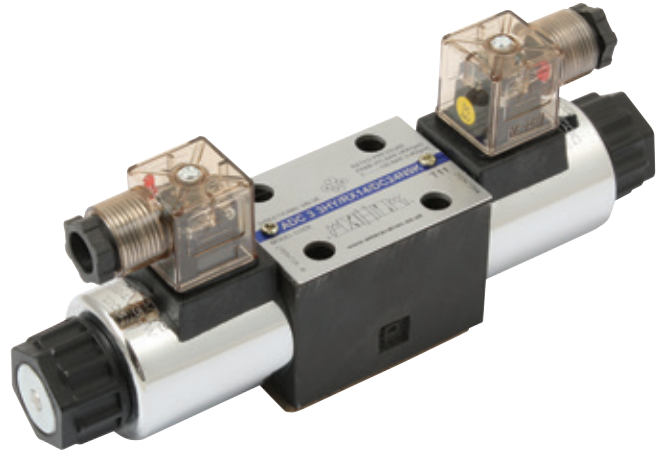
ISO 4401 Size 3

DIN 24340 Size 6

IP65

Working Temperature:
-20°C to +70°C

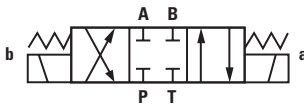
Maximum Working Pressure:
350 bar



3 Position, All Ports Open, Spring Centred

0451	Model	Voltage
1010-1004	ADC 3 3HY/RX14/AC110N9K	110V AC
1010-1006	ADC 3 3HY/RX14/DC24N9K	24V DC
1010-1005	ADC 3 3HY/RX14/DC12N9K	12V DC

Tech Sheet 10682



3 Position, All Ports Closed, Spring Centred

0451	Model	Voltage
1010-1007	ADC 3 3EY/RX14/AC110N9K	110V AC
1010-1008	ADC 3 3EY/RX14/DC24N9K	24V DC
1010-1060	ADC 3 3EY/RX14/DC12N9K	12V DC

Tech Sheet 10682



3 Position, A, B & T Connected, Spring Centred

0451	Model	Voltage
1010-1009	ADC 3 3JY/RX14/AC110N9K	110V AC
1010-1010	ADC 3 3JY/RX14/DC24N9K	24V DC
1010-1062	ADC 3 3JY/RX14/DC12N9K	12V DC

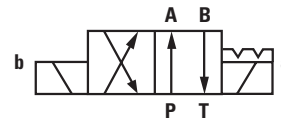
Tech Sheet 10682



3 Position, P & T Connected A & B Blocked, Spring Centred

0451	Model	Voltage
1010-1011	ADC 3 3GY/RX14/AC110N9K	110V AC
1010-1012	ADC 3 3GY/RX14/DC24N9K	24V DC
1010-1061	ADC 3 3GY/RX14/DC12N9K	12V DC

Tech Sheet 10682



2 Position, Detent

0451	Model	Voltage
1010-1013	ADC 3 2DD/RX14/AC110N9K	110V AC
1010-1014	ADC 3 2DD/RX14/DC24N9K	24V DC

Tech Sheet 10682

CETOP 5, Single Solenoid

Max Flow Rate: 120 L/min

Viscosity 2.8-100 mm²/s

ISO 4401 Size 5

DIN 24340 Size 10

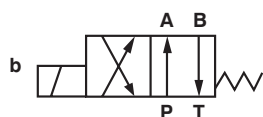
IP65

Working Temperature:

-20°C to +70°C

Maximum Working Pressure:

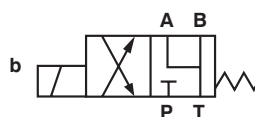
315 bar



2 Position, Spring Offset End to End

0451	Model	Voltage
1010-1015	ADC 5 2DY/RX14/AC110N9K	110V AC
1010-1016	ADC 5 2DY/RX14/DC24N9K	24V DC
1010-1063	ADC 5 2DY/RX14/DC12N9K	12V DC

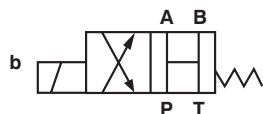
Tech Sheet 10683



2 Position, A, B & T Connected, Spring Return

0451	Model	Voltage
1010-1071	ADC 5 2JY/RX14/DC12N9K	12V DC
1010-1072	ADC 5 2JY/RX14/DC24N9K	24V DC

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2 Position, All Ports Open, Spring Offset to Centre

0451	Model	Voltage
1010-1069	ADC 5 2HY/RX14/DC24N9K	24V DC
1010-1064	ADC 5 2HY/RX14/DC12N9K	12V DC

Tech Sheet 10683

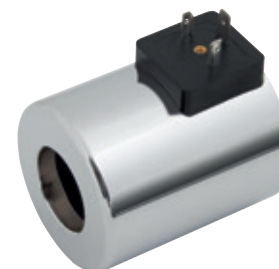
Replacement Coils



CETOP 3

0451	Voltage
1010-1036	110V AC
1010-1037	220V AC
1010-1038	12V DC
1010-1039	24V DC

Tech Sheet 10683



CETOP 5

0451	Voltage
1010-1040	110V AC
1010-1041	220V AC
1010-1042	12V DC
1010-1043	24V DC

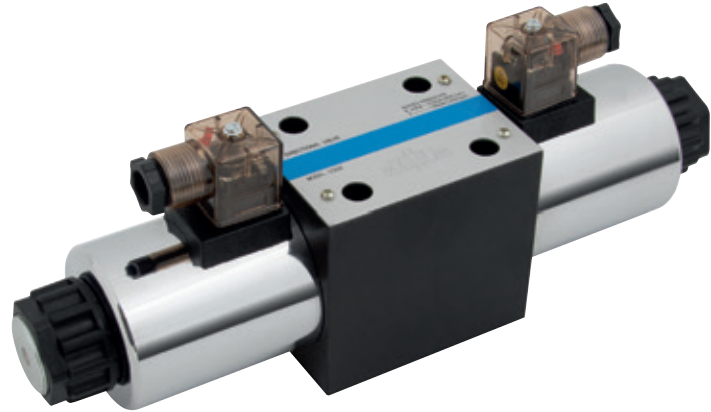
Tech Sheet 10683

CETOP 5, Double Solenoid

Max Flow Rate: 120 L/min
 Viscosity 2.8-100 mm²/s
 ISO 4401 Size 5
 DIN 24340 Size 10
 IP65

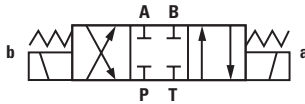
 **Working Temperature:**
 -20°C to +70°C

 **Maximum Working Pressure:**
 315 bar



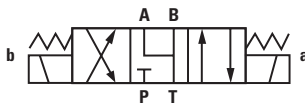
3 Position, All Ports Open, Spring Centred

0451	Model	Voltage
1010-1070	ADC 5 3HY/RX14/DC24N9K	24V DC
1010-1067	ADC 5 3HY/RX14/DC12N9K	12V DC
Tech Sheet 10683		



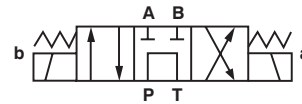
3 Position, All Ports Closed, Spring Centred

0451	Model	Voltage
1010-1017	ADC 5 3EY/RX14/AC110N9K	110V AC
1010-1018	ADC 5 3EY/RX14/DC24N9K	24V DC
1010-1065	ADC 5 3EY/RX14/DC12N9K	12V DC
Tech Sheet 10683		



3 Position, A, B & T Connected, Spring Centred

0451	Model	Voltage
1010-1019	ADC 5 3JY/RX14/AC110N9K	110V AC
1010-1020	ADC 5 3JY/RX14/DC24N9K	24V DC
1010-1068	ADC 5 3JY/RX14/DC12N9K	12V DC
Tech Sheet 10683		



3 Position, P & T Connected A & B Blocked, Spring Centred

0451	Model	Voltage
1010-1056	ADC 5 3GY/RX14/AC110N9K	110V AC
1010-1021	ADC 5 3GY/RX14/DC24N9K	24V DC
1010-1066	ADC 5 3GY/RX14/DC12N9K	12V DC
Tech Sheet 10683		



2 Position, Detented

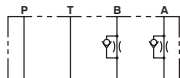
0451	Model	Voltage
1010-1055	ADC 5 2DD/RX14/AC110N9K	110V AC
1010-1054	ADC 5 2DD/RX14/DC24N9K	24V DC
Tech Sheet 10683		

° Working Temperature:
-20°C to +70°C

Maximum Working Pressure:
350 bar

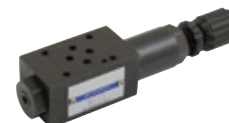
Max Flow Rate: 80 L/min
Viscosity 2.8-100 mm²/s
ISO 4401 Size 3
DIN 24340 Size 6

CETOP 3 Sandwich Valves



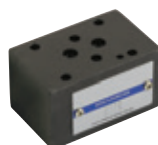
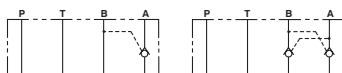
Flow Restrictor

0451	Model	Type
1010-1022	AFR 3 X2/RX14/2Q	A & B Meter In
1010-1023	AFR 3 Y2/RX14/2Q	A & B Meter Out
1010-1053	AFR 3 Z P2/RX14/2Q	P Line
Tech Sheet 10682		



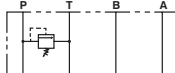
Pressure Reducing

0451	Model	Pressure Range Bar
1010-1026	ARD 3 PP 2/RX14/75	3.5 - 75
1010-1027	ARD 3 PP 2/RX14/150	10 - 150
1010-1028	ARD 3 PP 2/RX14/210	20 - 210
Tech Sheet 10682		



Pilot Operated Check

0451	Model	Type
1010-1024	APOC 3 A1/RX14/N	Single
1010-1025	APOC 3 AB1/RX14/	Double
Tech Sheet 10682		



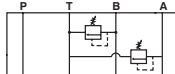
Single Line Pressure Relief

0451	Model	Pressure Range Bar
1010-1050	ASPR 3 PT1/RX14/100	3 - 100
1010-1029	ASPR 3 PT1/RX14/200	10 - 200
1010-1030	ASPR 3 PT1/RX14/315	50 - 315
Tech Sheet 10682		



Direct Operated Check

0451	Model	Cracking Pressure Bar
1010-1052	ADOC 3 PA/RX14/	0.5
Tech Sheet 10682		



Dual Line Pressure Relief

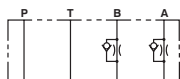
0451	Model	Pressure Range Bar
1010-1051	ADPR 3 AT1 BT1/RX14/200	10 - 200
Tech Sheet 10682		

° Working Temperature:
-20°C to +70°C

Maximum Working Pressure:
315 bar

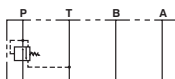
Max Flow Rate; 80 L/min
Viscosity 2.8-100 mm²/s
ISO 4401 Size 5
DIN 24340 Size 10

CETOP 5 Sandwich Valves



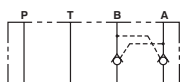
Flow Restrictor

0451	Model	Type
1010-1031	AFR 5 Y2/RX14/2Q	A & B Meter Out
1010-1057	AFR 5 X2/RX14/2Q	A & B Meter In
Tech Sheet 10683		



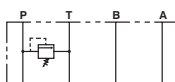
Pressure Reducing

0451	Model	Pressure Range Bar
1010-1033	ARD 5 PP 2/RX14/200	8.5 - 200
1010-1034	ARD 5 PP 2/RX14/315	8.5 - 315
Tech Sheet 10683		



Pilot Operated Check

0451	Model	Type
1010-1032	APOC 5 AB1/RX14	Double
Tech Sheet 10683		



Single Line Pressure Relief

0451	Model	Pressure Range Bar
1010-1035	ASPR 5 PT1/RX14/315	8.5 - 315
Tech Sheet 10683		

CETOP MANIFOLD & AUXILIARY PLATES



CETOP 3, Steel Manifold

Maximum Working Pressure:
345 bar



Ports: P & T 1/2", A & B 3/8" BSPP

0345	No of Stations
CM3-1G	1
CM3-2G	2
CM3-3G	3
CM3-4G	4
CM3-5G	5
CM3-6G	6

Tech Sheet 10041

CETOP 3, Steel Manifold with Pressure Relief Valve

Maximum Working Pressure:
345 bar



Ports: P & T 1/2", A & B 3/8" BSPP,
60-250 bar

0345	No of Stations
CM3-1G-ADJ	1
CM3-2G-ADJ	2
CM3-3G-ADJ	3
CM3-4G-ADJ	4
CM3-5G-ADJ	5
CM3-6G-ADJ	6

Tech Sheet 10041

CETOP 3, Aluminium Manifold

Maximum Working Pressure:
207 bar



Ports: P & T 1/2", A & B 3/8" BSPP

0345	No of Stations
CM3-1G/ALU	1
CM3-2G/ALU	2
CM3-3G/ALU	3
CM3-4G/ALU	4
CM3-5G/ALU	5
CM3-6G/ALU	6

Tech Sheet 10041

CETOP 5, Steel Manifold

Maximum Working Pressure:
345 bar



Ports: P 3/4" & T 1", A & B 1/2" BSPP

0345	No of Stations
CM5-1G	1
CM5-2G	2
CM5-3G	3
CM5-4G	4
CM5-5G	5
CM5-6G	6

Tech Sheet 10130

CETOP 5, Steel Manifold with Pressure Relief Valve

Maximum Working Pressure:
345 bar



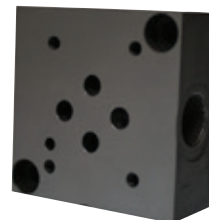
Ports: P 3/4" & T 1",
A & B 1/2" BSPP, 60-250 bar

0345	No of Stations
CM5-1G-ADJ	1
CM5-2G-ADJ	2
CM5-3G-ADJ	3
CM5-4G-ADJ	4
CM5-5G-ADJ	5
CM5-6G-ADJ	6

Tech Sheet 10130

CETOP 3, Side Entry Subplate

Maximum Working Pressure:
345 bar



BSPP

0345	Thread
CSP-03	3/8"

Tech Sheet 10041

CETOP 5, Side Entry Subplate



BSPP

0345	Thread
CSP-05	1/2"

Tech Sheet 10130

Auxiliary Plates



CETOP 3

0345	Type
CBP-03	Blanking Plate
CCOP-PA-03	Cross Over Plate P-A
CCOP-PB-03	Cross Over Plate P-B
CTP-AB-03	Tapping Plate A & B
CTP-PT-03	Tapping Plate P & T

Tech Sheet 10041



CETOP 5

0345	Type
CBP-05	Blanking Plate
CCOP-PA-05	Cross Over Plate P-A
CCOP-PB-05	Cross Over Plate P-B
CTP-AB-05	Tapping Plate A & B
CTP-PT-05	Tapping Plate P & T

Tech Sheet 10130

Cetop 3 Valves



Solenoid Operated Directional Valve DG4V-3-60 Design

General Description

Solenoid operated directional control valves are for directing and stopping flow at any point in a hydraulic system.

- Efficient control of greater hydraulic powers without increasing solenoid power consumption.
- Installed cost and space savings from higher power/weight-and-size ratios.
- Installation flexibility resulting from choice of numerous combinations of solenoid connectors and locations.
- Viton seals as standard for multi-fluid capability. Nitrile seals available as a model code option.

- Higher sustained machine productivity and higher uptime because of proven fatigue life and endurance, tested over 20 million cycles.
- Solenoid coils can be changed quickly and easily without leakage from hydraulic system.
- Compact, cost effective system design when used with Vickers SystemStak™ valves and subplates.

DG4V-3 High Performance Valves

- Available with manual overrides for industrial or water-resistant overrides for mobile applications.
- Minimum pressure drop 2.5 Bar at 30 lpm.
- Range of coil voltages.
- Up to 80 lpm at 350 Bar.
- Offers designers the opportunity to select the optimum value package for each application.
- International standard interface. The valve mounting face conforms to ISO 4401, size 03 and is compatible with related international standards.
- Alternative coil voltages and connectors such as Deutsch, Amp and terminal box are available, contact sales office for a quotation.

HYDRAULIC DIRECTIONAL CONTROL VALVES



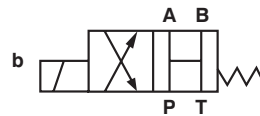
CETOP 3 Single Solenoid Directional Control Valves

Max flow rates up to 80 L/min.
Mounting interface.
ISO 4401 Size 3.
ANSI/B93.7M Size 3.
CETOP RP6SH Size 3.
DIN 24340 (NG6).

Temperature Limits:
Min -20°C (-4°F)
Max +70°C (+150°F)

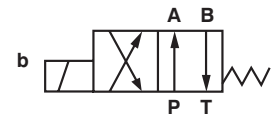
Working Temperature:
-20°C (-4°F) to +70°C (+150°F)

Maximum Working Pressure:
350 bar (5075 psi)



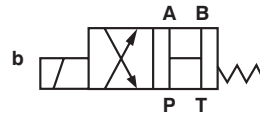
2 Position, All Ports Open, Spring Offset End to Centre

3019	Voltage	Manufacturer's Code
859160	24V DC	DG4V 3 0B M U H7 60
859195	110V AC	DG4V 3 0B M U A6 60
Tech Sheet 3111		



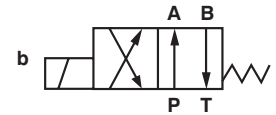
2 Position, Spring Offset End to End

3019	Voltage	Manufacturer's Code
529762	24V DC	DG4V 3 2A M U H7 60
529763	110V AC	DG4V 3 2A M U A6 60
Tech Sheet 3111		



2 Position, All Ports Open, Spring Offset End to Centre, Water Resistant Override

3019	Voltage	Manufacturer's Code
869951	12V DC	DG4V 3 0B H M U G7 60
870804	24V DC	DG4V 3 0B H M U H7 60
Tech Sheet 3111		



2 Position, Spring Offset End to End, Water Resistant Override

3019	Voltage	Manufacturer's Code
869959	12V DC	DG4V 3 2A H M U G7 60
870221	24V DC	DG4V 3 2A H M U H7 60
871358	110/120V 50/60Hz	DG4V 3 2A H M U B6 60
871505	220/240V 50/60Hz	DG4V 3 2A H M U D6 60
Tech Sheet 3111		



For **CETOP Coils**
see page **219**



Other voltages are available. Please contact our Business Development Team for more details.

HYDRAULIC DIRECTIONAL CONTROL VALVES

CETOP 3 Double Solenoid Directional Control Valves

Max flow rates up to 80 L/min.

Mounting interface.

ISO 4401 Size 3.

ANSI/B93.7M Size 3.

CETOP RP6SH Size 3.

DIN 24340 (NG6).

Temperature Limits:

Min -20°C (-4°F)

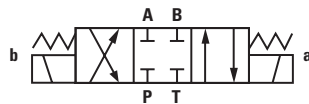
Max +70°C (+150°F)

Working Temperature:

-20°C (-4°F) to +70°C (+150°F)

Maximum Working Pressure:

350 bar (5075 psi)



3 Position, All Ports Closed, Spring Centred

3019	Voltage	Manufacturer's Code
529761	110V AC	DG4V 3 2C M U A6 60

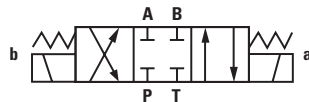
Tech Sheet 3111



3 Position, A, B & T Connected, Spring Centred

3019	Voltage	Manufacturer's Code
565465	24V DC	DG4V 3 6C M U H7 60
859177	110V AC	DG4V 3 6C M U A6 60

Tech Sheet 3111



3 Position, All Ports Closed, Spring Centred, Water Resistant Override

3019	Voltage	Manufacturer's Code
859172	220/240V 50/60Hz	DG4V 3 2C H M U D6 60
870177	24V DC	DG4V 3 2C H M U H7 60
870378	12V DC	DG4V 3 2C H M U G7 60

Tech Sheet 3111



3 Position, A, B & T Connected, Spring Centred, Water Resistant Override

3019	Voltage	Manufacturer's Code
869952	12V DC	DG4V 3 6C H M U G7 60
869953	24V DC	DG4V 3 6C H M U H7 60
02-146111	110/120V 50/60Hz	DG4V 3 6C H M U B6 60

Tech Sheet 3111

For Hydraulic Quick Release Couplings
see pages 289-294



Other voltages are available. Please contact our Business Development Team for more details.

HYDRAULIC DIRECTIONAL CONTROL VALVES



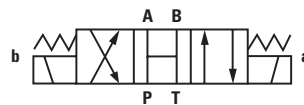
CETOP 3 Double Solenoid Directional Control Valves

Max flow rates up to 80 L/min.
 Mounting interface.
 ISO 4401 Size 3.
 ANSI/B93.7M Size 3.
 CETOP RP6SH Size 3.
 DIN 24340 (NG6).

Temperature Limits:
 Min -20°C (-4°F)
 Max +70°C (+150°F)

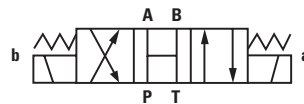
Working Temperature:
 -20°C (-4°F) to +70°C (+150°F)

Maximum Working Pressure:
 350 bar (5075 psi)



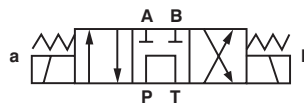
3 Position, All Ports Open, Spring Centred

3019	Voltage	Manufacturer's Code
859197	110V AC	DG4V 3 0C M U A6 60
Tech Sheet 3111		



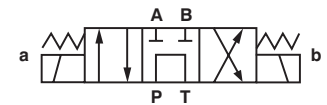
3 Position, All Ports Open, Spring Centred, Water Resistant Override

3019	Voltage	Manufacturer's Code
869960	24V DC	DG4V 3 0C H M U H7 60
870518	12V DC	DG4V 3 0C H M U G7 60
Tech Sheet 3111		



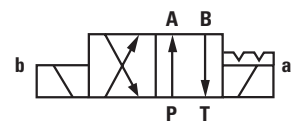
P & T Connected, A & B Blocked, Spring Centred

3019	Voltage	Manufacturer's Code
02-144961	110V AC	DG4V 3 8C VM U A6 61
02-145162	24V DC	DG4V 3 8C VM U H7 61
Tech Sheet 3111		



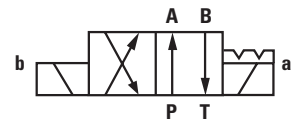
P & T Connected, A & B Blocked, Spring Centred, Water Resistant Override

3019	Voltage	Manufacturer's Code
02-353298	110/120V 50/60Hz	DG4V 3 8C H VM U B6 61
Tech Sheet 3111		



2 Position, Detented

3019	Voltage	Manufacturer's Code
529764	24V DC	DG4V 3 2N M U H7 60
529765	110V AC	DG4V 3 2N M U A6 60
Tech Sheet 3111		



2 Position, Detented, Water Resistant Override

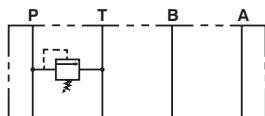
3019	Voltage	Manufacturer's Code
02-139074	24V DC	DG4V 3 2N H M U H7 60
Tech Sheet 3111		

Other voltages are available. Please contact our Business Development Team for more details.

SYSTEM STACK VALVES

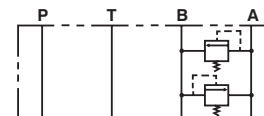


CETOP 3 Modules



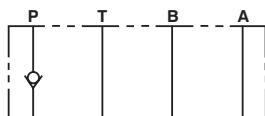
Single Line Relief Valves

3019	Pressure Range Bar	Manufacturer's Code
694419	10-200	DGMC 3 PT CW 41
869641	50-315	DGMC 3 PT GW 41
Tech Sheet 71678		



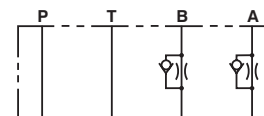
Dual Line Relief Valve

3019	Pressure Range Bar	Manufacturer's Code
869628	10-200	DGMC2 3 AB CW BA CW 41
Tech Sheet 71678		



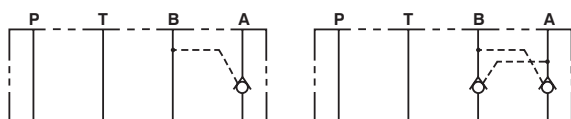
Direct Operated Check Valve

3019	Manufacturer's Code
694415	DGMDC 3 Y PK 41
Tech Sheet 71678	



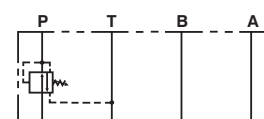
Flow Restrictors

3019	Description	Manufacturer's Code
694414	A & B Meter In	DGMFN 3 X A2W B2W 41
694412	A & B Meter Out	DGMFN 3 Y A2W B2W 41
870043	P Line	DGMFN 3 Z P2W 41
Tech Sheet 71678		



Pilot Operated Check Valves

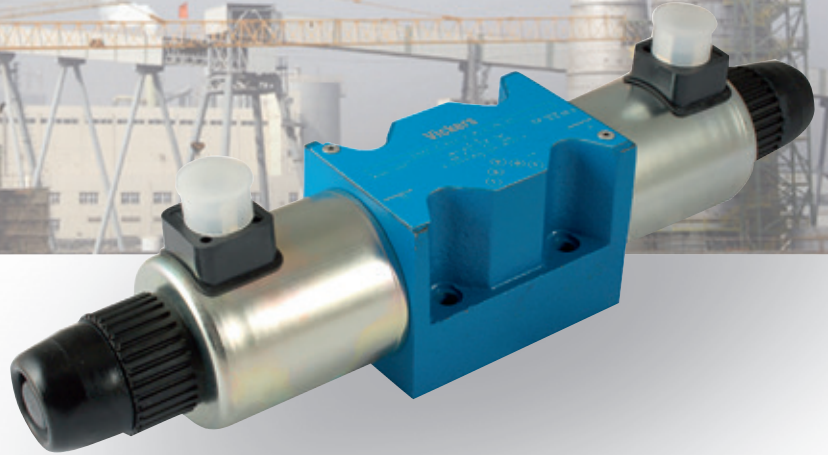
3019	Description	Manufacturer's Code
870024	Single	DGMPC 3 ABK 41
694400	Double	DGMPC 3 ABK BAK 41
Tech Sheet 71678		



Pressure Reducing Valves

3019	Pressure Range Bar	Manufacturer's Code
870036	3.5-70	DGMX2 3 PP BW B 40
870038	20-250	DGMX2 3 PP FW B 40
Tech Sheet 71678		

Cetop 5 Valves



Solenoid Operated Directional Valve DG4V-5-20/22 Design

General Description

A range of four-port solenoid operated directional control valves with four-land spool design to facilitate provision of smooth, variable valve response speeds.

The range includes:

- AC and DC wet-armature solenoid options with ISO 4400 (DIN 43650) electrical connections and manual overrides and manual overrides for industrial or water-resistant overrides for mobile applications.
- Variable speed changeover potential in all DC models; see "Response Times" section.
- Many spool types; in spring-offset, spring centred and detented arrangements.
- Compact, cost effective system design when used with Vickers® SystemStak™ valves and subplates.

HYDRAULIC DIRECTIONAL CONTROL VALVES

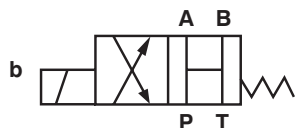
CETOP 5 Single Solenoid Directional Control Valves

Max flow rates up to 120 L/min.
 Mounting interface.
 ISO 4401 Size 5.
 NFPA D02
 DIN 24340 (NG10).

Temperature Limits:
 Min -20°C (-4°F)
 Max +70°C (+150°F)

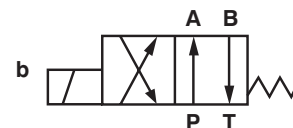
Working Temperature:
 -20°C (-4°F) to +70°C (+150°F)

Maximum Working Pressure:
 350 bar (5075 psi)



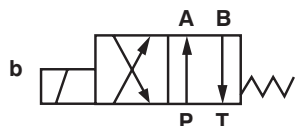
2 Position, All Ports Open, Spring Offset End to Centre

3019	Voltage	Manufacturer's Code
459215	110V AC	DG4V 5 0B M U A6 20
Tech Sheet 3112		



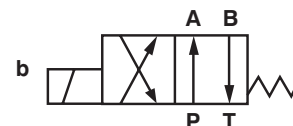
2 Position, Spring Offset End to End, Water Resistant Override

3019	Voltage	Manufacturer's Code
829AN00176A	24V DC	DG4V 5-2AJ H M U H7 22
Tech Sheet 3112		



2 Position, Spring Offset End to End, Notched Spool

3019	Voltage	Manufacturer's Code
829AN00102A	24V DC	DG4V 5 2AJ M U H7 22
Tech Sheet 3112		



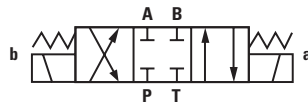
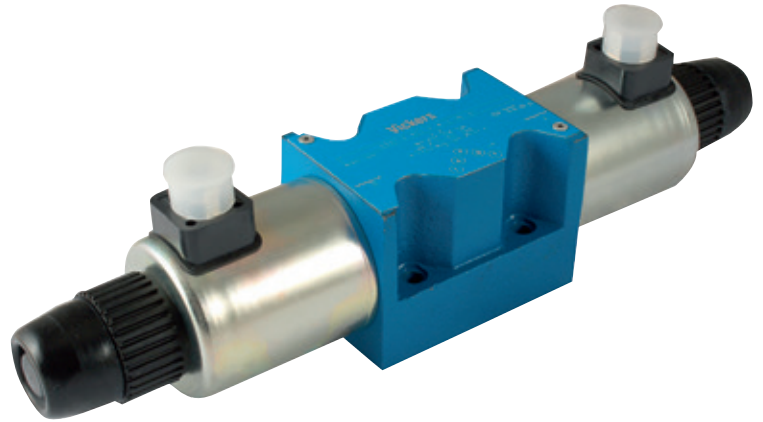
2 Position, Spring Offset End to End

3019	Voltage	Manufacturer's Code
616769	110V AC	DG4V 5 2A M U A6 20
Tech Sheet 3112		

Other voltages are available. Please contact our Business Development Team for more details.

HYDRAULIC DIRECTIONAL CONTROL VALVES

CETOP 5 Double Solenoid Directional Control Valves



All Ports Closed, Spring Centred

3019	Voltage	Manufacturer's Code
829AN00101A	24V DC	DG4V 5 2CJ M U H7 22
616777	110V AC	DG4V 5 2C M U A6 20
Tech Sheet 3112		



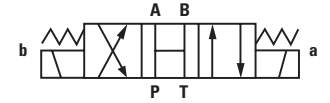
A & B to T, P Blocked, Spring Centred,
Water Resistant Override

3019	Voltage	Manufacturer's Code
829AN00158A	24V DC	DG4V 5 6CJ H M U H7 22
Tech Sheet 3112		



A & B to T, P Blocked, Spring Centred

3019	Voltage	Manufacturer's Code
829AN00100A	24V DC	DG4V 5 6CJ M U H7 22
616781	110V AC	DG4V 5 6C M U A6 20
Tech Sheet 3112		

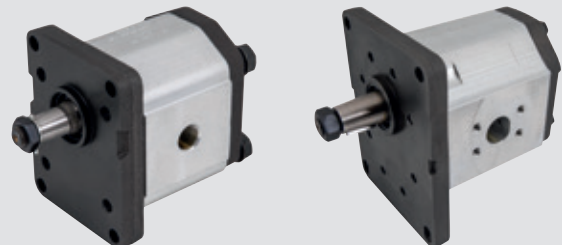


All Ports Open, Spring Centred

3019	Voltage	Manufacturer's Code
829AN00132A	24V DC	DG4V 5 0CJ M H7 22
616789	110V DC	DG4V 5 0C M U A6 20
Tech Sheet 3112		

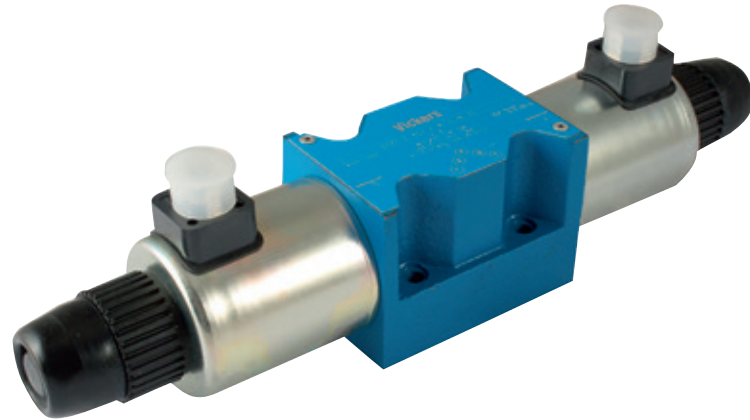
Roquet
making moves

For Gear Pumps & Motors
see pages 231-236



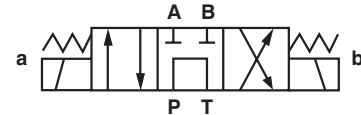
HYDRAULIC DIRECTIONAL CONTROL VALVES

CETOP 5 Double Solenoid Directional Control Valves



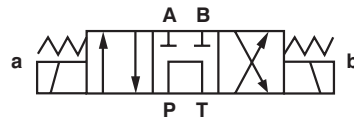
All Ports Open, Spring Centred, Water Resistant Override

3019	Voltage	Manufacturer's Code
829AN00165A	24V DC	DG4V 5 0CJ H M U H7 22
Tech Sheet 3112		



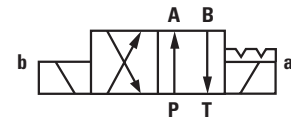
P & T Connected, A & B Blocked, Spring Centred, Water Resistant Override

3019	Voltage	Manufacturer's Code
829AN00221A	24V DC	DG4V 5 8CJ H VM U H7 22
Tech Sheet 3112		



P & T Connected, A & B Blocked, Spring Centred

3019	Voltage	Manufacturer's Code
829AN00103A	24V DC	DG4V 5 8CJ VM U H7 22
616785	110V AC	DG4V 5 8CJ VM U A6 20
Tech Sheet 3112		



2 Position, Detented

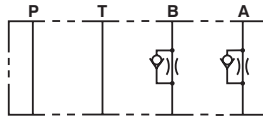
3019	Voltage	Manufacturer's Code
829AN00105A	24V DC	DG4V 5 2NJ M U H7 22
616773	110V AC	DG4V 5 2N M U A6 20
Tech Sheet 3112		

Other voltages are available. Please contact our Business Development Team for more details.

SYSTEM STACK VALVES

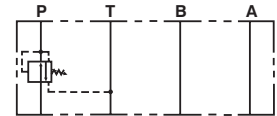


CETOP 5 Modules



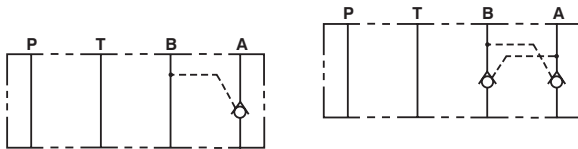
Flow Restrictors

3019	Description	Manufacturer's Code
867332	Meter Out	DGMFN 5 Y A2W B2W 30
867335	Meter In	DGMFN 5 X A2W B2W 30
Tech Sheet 3112		



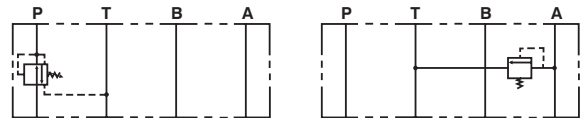
Pressure Reducing Valves

3019	Pressure Range Bar	Manufacturer's Code
868314	8.5-100	DGMX2 5 PP BW B 30
880553	8.5-200	DGMX2 5 PP FW B 30
879046	8.5-315	DGMX2 5 PP GH B 30
Tech Sheet 3112		



Pilot Operated Check Valve, 1 bar Cracking Pressure

3019	Description	Manufacturer's Code
867339	Single A Port	DGMPC 5 ABK 30
867340	Single B Port	DGMPC 5 BAK 30
867364	Double A & B Port	DGMPC 5 ABK BAK 30
Tech Sheet 3112		



Single Line Relief Valves

3019	Pressure Range Bar	Manufacturer's Code
868651	4-100	DGMC 5 AT BW B 30
879342	4-200	DGMC 5 PT FW B 30
868300	4-315	DGMC 5 PT GW B 30
Tech Sheet 3112		

CETOP VALVE COILS



CETOP 3 Coils, 60 Design



DC Coils

3019	Voltage
507847	12V
507848	24V
507855	12V 18W
507852	24V 18W
865882	48V
865637	98V
865884	110V
865638	196V

AC Coils

3019	Voltage
507825	110V 50Hz
507826	220V 50Hz
507833	110V 50Hz / 120V 60Hz
507834	220V 50Hz / 240V 60Hz

CETOP 5 Coils, 20 Design



DC Coils

3019	Voltage
617470	12V
617471	24V
457942	48V
457977	98V
457911	110V
698523	196V

AC Coils

3019	Voltage
617475	110V 50Hz
617476	220V 50Hz
617477	240V 50Hz
617499	115V 60Hz
617500	230V 60Hz

ELECTRICAL CONNECTORS

EN175301-803, DIN43650

PG11

0347	Voltage	Description
GDM2011-G	250V AC/DC	No LED, Grey
GDML2011-GB1-B	250V AC/DC	Bridge-type Rectifier No LED
GDML2011LED-24-B	24V AC/DC	LED No Protection
GDML2011LED-120B	120V AC/DC	LED No Protection
GDML2011LED-230B	230V AC/DC	LED No Protection
GDML2011LED-24HH	24V DC	LED with Diode Protection
GDML2011LED-48HH	48V DC	LED with Diode Protection
Tech Sheet 10132		



HYDRAULIC VALVES PUMPS & MOTORS



Parker Cetop 3 & 5 Valves



**Cetop 3 - 4 Port 3 & 2
Position Solenoid Directional Control Valve - 24-110V**

0484	Coil Voltage	Control Spool	Description
D1VW001CNJW	24V DC	All Blocked	4 Port 3 Pos



**Cetop 5 - 4 Port 3 & 2
Position Solenoid Directional Control Valve - 24-110V**

0484	Coil Voltage	Control Spool	Description
D3VW008CNJW	24V DC	PT Connected	4 Port 3 Pos



**Cetop 3 Modular
Flow Control Valve**

0484	Metering
FM2DDSV	A & B



**Cetop 5 Modular
Flow Control Valve**

0484	Metering
FM3DDSV	A & B



**Cetop 3 Modular
Pilot Operated Check Valve, 1 bar Cracking Pressure**

0484	Cracking Pressure Bar
CPOM2DDV	1.0



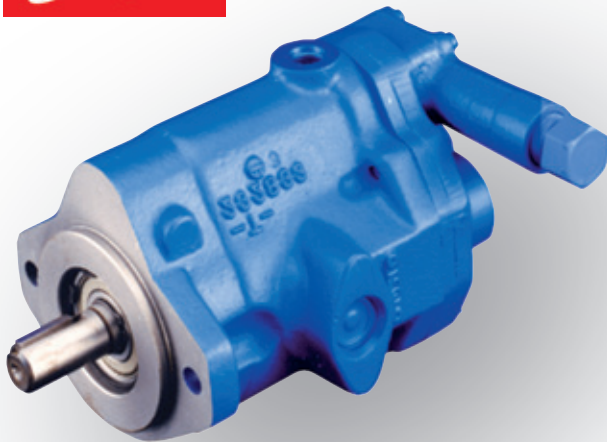
**Cetop 5 Modular
Pilot Operated Check Valve, 1 bar Cracking Pressure**

0484	Cracking Pressure Bar
CPOM3DDV	1.0

For **Hydraulic Oils**
see page **283**



Vane & Piston Pumps



Vickers Vane Pumps – V10 and V20

- V10 and V20 balanced vane type construction.
- High performance.
- Enhanced bearing life.
- Low cost.
- High flow, pressure and speed capabilities enable these pumps to meet the hydraulic circuit needs of many types of modern machinery.

Vickers PVQ inline variable displacement pumps.

- Available in five displacements from 10.55cc/rev to 41.00cc/rev.
- Low noise characteristics.
- Choice of pump compensators, high and low-pressure compensator, remote compensator, and load sense compensator.
- Pump stroke adjustment kits available for all sizes.

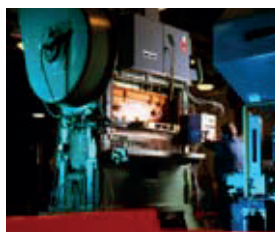


Vickers Intravane pumps – 25V, 35V and 45V.

- High performance.
- Low noise characteristics.
- The cartridge design offers fast and efficient field serviceability.
- Eleven flow displacements and high operating pressure capabilities provide optimum selection and single source capabilities.

Vickers PVM variable displacement axial piston pumps.

- Available in six displacements from 18cc/rev to 131cc/rev.
- 315 Bar continuous working pressure across all displacements.
- Low noise characteristics.
- Compact size envelope.
- Available as pressure compensated or load sensing.



INDUSTRIAL VANE PUMPS



V10 Series

SAE A 2 Bolt Mounting, Keyed Shaft, BSPP Ports

3017	Displacement cc/rev	Max Pressure Bar	Manufacturer's Code
708371-C	6.60	172	V10 1B2B 1C 20
708784-C	9.80	172	V10 1B3B 1C 20
708785-C	13.10	172	V10 1B4B 1C 20
708219-C	16.40	172	V10 1B5B 1C 20
708786-C	19.50	152	V10 1B6B 1C 20
708787-C	22.80	138	V10 1B7B 1C 20
Tech Sheet 10095			

V20 Series

SAE A 2 Bolt Mounting, Keyed Shaft, BSPP Ports

3017	Displacement cc/rev	Max Pressure Bar	Manufacturer's Code
707277-C	19.5	172	V20 1B6B 1C 11 EN1000
708397-C	22.80	172	V20 1B7B 1C 11 EN1000
706996-C	26.5	172	V20 1B8B 1C 11 EN1000
707278-C	29.7	172	V20 1B9B 1C 11 EN1000
706997-C	36.40	172	V20 1B11B 1C 11 EN1000
708398-C	39.0	152	V20 1B12B 1C 11 EN1000
706998-C	42.4	152	V20 1B13B 1C 11 EN1000
Tech Sheet 10095			

25V Series

SAE B 2 Bolt Mounting, Keyed Shaft, SAE Flanged Ports

3017	Displacement cc/rev	Max Pressure Bar	Manufacturer's Code
02-137109-CR	39	172	25V 12A 1C 22R
02-137110-CR	45	172	25V 14A 1C 22R
02-137113-CR	55	172	25V 17A 1C 22R
02-137117-CR	67	172	25V 21A 1C 22R
Tech Sheet 10097			

35V Series

SAE C 2 Bolt Mounting, Keyed Shaft, SAE Flanged Ports

3017	Displacement cc/rev	Max Pressure Bar	Manufacturer's Code
02-137124-CR	81	172	35V 25A 1C 22R
02-137126-CR	97	172	35V 30A 1C 22R
02-137129-CR	112	172	35V 35A 1C 22R
02-137132-CR	121	172	35V 38A 1C 22R
Tech Sheet 10097			

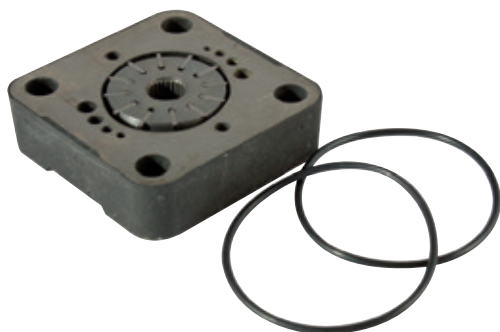
45V Series

SAE C 2 Bolt Mounting, Keyed Shaft, SAE Flanged Ports

3017	Displacement cc/rev	Max Pressure Bar	Manufacturer's Code
02-137140-CR	138	172	45V 42A 1C 22R
02-137144-CR	162	172	45V 50A 1C 22R
02-137146-CR	193	172	45V 60A 1C 22R
Tech Sheet 10097			

Other options available, contact us with your requirements

Replacement Parts



V10 Cartridge Kits

3017	Displacement cc/rev	To Suit
923471	3.3	V10 1G Cartridge Kit
923470	6.6	V10 2G Cartridge Kit
923496	9.8	V10 3G Cartridge Kit
923469	13.10	V10 4G Cartridge Kit
923468	16.40	V10 5G Cartridge Kit
923497	19.5	V10 6G Cartridge Kit
923498	22.80	V10 7G Cartridge Kit

V20 Cartridge Kits

3017	Displacement cc/rev	To Suit
02-137560	19.5	V20 6G Cartridge Kit
02-137561	22.80	V20 7G Cartridge Kit
02-137562	26.5	V20 8G Cartridge Kit
02-137563	29.7	V20 9G Cartridge Kit
02-137565	36.40	V20 11G Cartridge Kit
02-137566	39.0	V20 12G Cartridge Kit
02-137567	42.4	V20 13G Cartridge Kit

25V Cartridge Kits

3017	Displacement cc/rev	To Suit
02-102532	39	25V 12G Cartridge Kit
02-102533	45	25V 14G Cartridge Kit
02-102534	55	25V 17G Cartridge Kit
02-102535	67	25V 21G Cartridge Kit

35V Cartridge Kits

3017	Displacement cc/rev	To Suit
02-102552	81	35V 25G Cartridge Kit
02-102553	97	35V 30G Cartridge Kit
02-102554	112	35V 35G Cartridge Kit
02-102555	121	35V 38G Cartridge Kit

45V Cartridge Kits

3017	Displacement cc/rev	To Suit
02-102572	138	45V 42G Cartridge Kit
02-102574	162	45V 50G Cartridge Kit
02-102575	193	45V 60G Cartridge Kit



Shafts

3017	To Suit
238929	25V No. 11 Splined Shaft
242287	35V No. 11 Splined Shaft
242885	45V No. 11 Splined Shaft
392669	35V No. 86 HD Keyed Shaft
361760	45V No. 86 HD Keyed Shaft
393536	Key to suit 392669
239751	Key to suit 361760



Seal Kits

3017	To Suit
923548	V10 Standard Seal Kit
919772	V10 F3 Seal Kit
922733	V20 Standard Seal Kit
919805	V20 F3 Seal Kit
922850	25V Standard Seal Kit
919656	25V F3 Seal Kit
922851	35V Standard Seal Kit
919262	35V F3 Seal Kit
919850	45V Standard Seal Kit
919632	45V F3 Seal Kit

Other options available, contact us with your requirements

HYDRAULIC PISTON PUMPS



Q Series Piston Pump

210 bar, SAE A Flange, Keyed Shaft

3017	Displacement cc/rev	Manufacturer's Code
02-341576	10.5	PVQ10 A2R SE1S 20 C21 12
Tech Sheet 10045		

140 bar, SAE A 2 Bolt Flange, Keyed Shaft

3017	Displacement cc/rev	Manufacturer's Code
02-341644	13.8	PVQ13 A2R SE1S 20 C14 12
Tech Sheet 10045		

210 bar, SAE B 2 Bolt Flange, Keyed Shaft

3017	Displacement cc/rev	Manufacturer's Code
02-341552	21.1	PVQ20 B2R SE1S 21 C21 12
Tech Sheet 10045		

140 bar, SAE B 2 Bolt Flange, Keyed Shaft

3017	Displacement cc/rev	Manufacturer's Code
02-341685	32.9	PVQ32 B2R SE1S 21 C14 12
Tech Sheet 10045		

210 bar, SAE B 2 Bolt Flange, Keyed Shaft

3017	Displacement cc/rev	Manufacturer's Code
02-341949	41.0	PVQ40AR01AB01AB10G2100000100100CDDA
Tech Sheet 10045		

Q Series Piston Pump Compensator

Standard Compensator

3017	To Suit
9900224-003	PVQ10, 13, 20, 32
02-348260	PVQ40
Tech Sheet 10045	

CM Low Pressure Compensator

3017	To Suit
9900224-002	PVQ10,13,20,32
02-348259	PVQ40
Tech Sheet 10045	

CG Hydraulic Remote Compensator

3017	To Suit
02-348243	PVQ10,13,20,32,40
Tech Sheet 10045	

C**V**B Load Sensing Compensator

3017	To Suit
02-466861	PVQ10,13,20,32
Tech Sheet 10045	

Q Series Piston Pump Stroke Adjustment Kit

Maximum Stop/Stroke Limiter

3017	To Suit
5986572-001	PVQ10,13
5986574-001	PVQ20,32
5986576-001	PVQ40
Tech Sheet 10045	

Q Series Piston Pump Seal Kits

Standard Buna Material

3017	To Suit
919191	PVQ10,13
919682	PVQ20,32
920227	PVQ40
Tech Sheet 10045	

Other options available, contact us with your requirements

HYDRAULIC PISTON PUMPS



M Series Piston Pump



Pressure Compensate Pump

3017	Displacement cc/rev	Max Pressure Bar	Manufacturer's Code
123AL02399A	18.0	320	PVM018ER02AS02AAA28000001A0A
123AL02398A	45.0	320	PVM045ER06CS02AAA28000001A0A
123AL02054A	57.0	320	PVM057ER09GS02AAA28000001A0A
123AL02062A	74.0	320	PVM074ER09GS02AAA28000001A0A
123AL02070A	98.0	320	PVM098ER09GS02AAA28000001A0A
123AL02090A	131.0	320	PVM131ER09GS02AAA28000001A0A

Tech Sheet 71680

Load Sense Pump

3017	Displacement cc/rev	Max Pressure Bar	Manufacturer's Code
123AL02012A	18.0	320	PVM018ER02AS02AAC28200001A0A
123AL02150A	45.0	320	PVM045ER06CS02AAC28110001A0A
123AL02056A	57.0	320	PVM057ER09GS02AAC28200001A0A
123AL02241A	74.0	320	PVM074ER09GS02AAC28200001A0A
123AL02074A	98.0	320	PVM098ER09GS02AAC28200001A0A
123AL02356A	131.0	320	PVM131ER09GS02AAC28200001A0A

Tech Sheet 71680



For **Roquet Gear Pumps**
see page **231**





Partnership brands available



**Hydraulic Accumulators
& Accessories**

See section 1 pages 227-228



Hydraulic Oil Coolers

See section 1 page 273



Pneumatic Quick Release Couplings

See section 3 pages 330-390



Filters & Drains Air, Water & Vacuum

See section 4 page 430



Plastic Push-in Fittings

See section 6 pages 800-803



Ball & Check Valves

See section 5 page 628



Plastic Push-in Fittings

See section 6 pages 793-807



Metal Push-in Fittings

See section 6 pages 848-851



Ball Valves

See section 7 pages 933-935



Blow Guns

See section 15 page 1596



Aluminium Ring Main Systems

See section 8 pages 1063-1067

ENGINEERING YOUR SUCCESS.

HYDRAULIC ACCUMULATORS & ACCESSORIES



Diaphragm Accumulators

- Low cost non-repairable accumulators
- High reliability gas sealing system, ensures no leakage
- Electron beam welded steel shell
- Parallel threads with bonded seal recess ensures easy connection with no leaks
- **Material:** steel shell electron beam welded. Non repairable
- Nitrile membrane for mineral oil or non aggressive fluid



BSPP

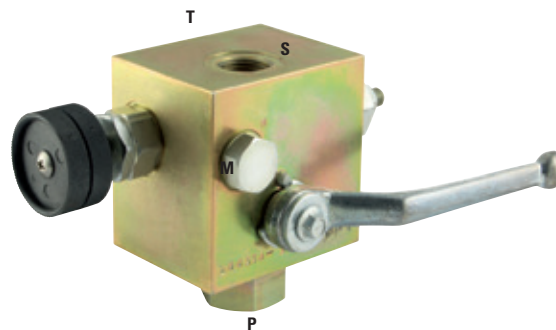
0197	Manufacturer's Code	Thread	Capacity Litres	Temp Range °C	Max Pressure Bar
E007-1515-013611	108492-01125	1/2"	0.075	-10/+80	250
E016-1515-013611	108493-01125	1/2"	0.16	-10/+80	250
E032-1515-013611	109866-01125	1/2"	0.32	-10/+80	210
E050-1515-023611	108495-01125	1/2"	0.50	-20/+80	210
E075-1515-093611	108497-01125	1/2"	0.75	-20/+80	210
E100-1515-123611	109847-01125	1/2"	1.0	-20/+80	210
E140-1515-113511	108502-01125	1/2"	1.4	-20/+80	140
E200-1515-063411	108504-01125	1/2"	2.0	-10/+80	100
E200-1515-063611	110134-01125	3/4"	2.0	-10/+80	250
E280-1515-032611	108879-01125	3/4"	2.8	-10/+80	250
E350-1515-092611	108505-01125	3/4"	3.5	-10/+80	250

Tech Sheet 10553

Safety Blocks

- Carbon steel
- All blocks fully tested
- Nitrile seals as standard, Viton available on request
- Contact technical department
- Pressure relief valve for the protection of accumulator
- Manual dump to tank as standard

Maximum Working Pressure:
360 bar



Carbon Steel

0197	BSPP S	BSPP P	BSPP T	BSPP M	Max Pressure Bar
ECA12-01-L-N	1/2"	1/2"	1/4"	1/4"	360

Tech Sheet 2153

Hydra-Cushions

Hydracushions are a robust non repairable accumulator. They have been specifically designed for high volume, low cost applications, where it is more economical to replace a unit than to refurbish it after a long service life.

- Steel construction
- Nitrile bladder
- 1/4" gas valve

Maximum Working Pressure:
172 bar



BSPP

0197	Thread	Litres
HC0100A-00-17	3/4"	1.0
HC0200A-00-17	1"	2.0
HC0400A-00-17	1.1/4"	4.0

Tech Sheet 10797

Accumulator Bladder Kits

The kit comprises of a bladder assembly, protective cap, anti extrusion ring, O-Ring for the fluid port, back up ring and seal for the bleed plug.



Oil Service

0197	Litres	Description
0B00A-00	0.16	-
0F00A-00	0.6	-
01C00A-00	1.15	-
0300A-00	3	5/8" Stem
03C00A-00	3	7/8" Stem
0400A-00	4	-
1000A-00	10	-
2000A-00	20	-
2800A-00	28	-
3700A-00	37	-
5400A-00	54	-

Tech Sheet 10797

Thermoswitches

For use with the LAC series of air blast coolers.



1/2" BSPP

0197	Temp °C
598262	40
598261	50
598263	60
598264	70
598265	80

HYDRAULIC ACCUMULATORS & ACCESSORIES



Accumulator Charging Kits

For safe pre-charging of accumulators, Fawcett Christie Hydraulics offer a comprehensive range of equipment.



Universal Pre-charged

0197	Description
10597-01	0-25 & 0-250 bar Gauge
10597-02	0-60 & 0-400 bar Gauge
10597-03	0-10 & 0-160 bar Gauge

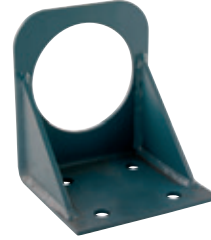
Accumulator Accessories

Designed to allow quick, easy and safe installation of accumulators. They are fabricated from steel and come complete with rubber cushion mouldings and mounting bolts.



Saddle & Clamps

0197	Bore mm
10958	112-114
10959	165-168
10960	220-230



Support Brackets

0197	To Suit
10961	4-9 Litre FCH Accumulators
10962	10-54 Litre FCH Accumulators



Cushioning Rings

0197	To Suit
48473-A00	10-54 Litre Support Brackets



Gas Valves

0197	Thread
10031-S03	1/4" x 1/4" BSPP
43030	0.302 x 1/2" UNF



For Hydraulic Filtration
see pages 247-251



HYDRAULIC HAND PUMPS

Pumps

Specification

- Cast iron body
- White zinc-plated support lever
- Lever connection OD: 27mm
- White zinc-plated external parts

 **Maximum Working Pressure:**
350 bar



Double Acting Pump with Release Knob, Side Mount

0462	Displacement cm ³	Thread	Max Pressure Bar	Model	To Suit
HHP-01	20	1/2"	350	Wall Mount	Single Acting Cylinder

Tech Sheet 60145

Specification

- Cast iron body
- Piston treated with Niploy
- White zinc-plated support lever
- Lever connection OD: 27mm
- White zinc-plated external parts

 **Maximum Working Pressure:**
280 bar



Double Acting Pump with Release Knob, Bottom Mount

0462	Displacement cm ³	Thread	Max Pressure Bar	Model	To Suit
HHP-02	50	1/2"	280	Wall Mount	Single Acting Cylinder

Tech Sheet 60146

Double acting hand pump for single acting cylinder.

Specification

- Cast iron body
- Piston treated with Niploy
- White zinc-plated support lever
- Lever connection OD: 27mm
- White zinc-plated external parts
- Oil tank mounting kit included
- Pressure relief valve (standard setting): 100 bar

 **Maximum Working Pressure:**
350 bar



Double Acting Pump with Release Knob & Pressure Relief Valve

0462	Displacement cm ³	Thread	Max Pressure Bar	Model	To Suit
HHP-03	25	3/8"	350	Tank Mount	Single Acting Cylinder

Tech Sheet 60147

Double acting hand pump for double acting cylinder.

Specification

- Cast iron body
- Piston treated with Niploy
- White zinc-plated support lever
- Lever connection OD: 27mm
- White zinc-plated external parts

 **Maximum Working Pressure:**
350 bar



Double Acting Pump with 4/3 Diverter Valve & Pressure Relief Valve

0462	Displacement cm ³	Thread	Max Pressure Bar	Model	To Suit
HHP-04	25	3/8"	350	Tank Mount	Double Acting Cylinder

Tech Sheet 60148

HYDRAULIC HAND PUMPS

Pumps

Double acting pump for double acting cylinder.

Specification:

- Cast iron body
- Piston treated with Niploy
- White zinc-plated support lever
- Lever connection OD: 27mm
- White zinc-plated external parts
- Oil tank mounting kit included
- Hydraulic brake to operate under 50 bar
- Pressure relief valve (standard setting): 100 bar

 **Maximum Working Pressure:**
350 bar



Double Acting Pump with 4/3 Diverter Valve, PRV & Dual PO Check Valve

0462	Displacement cm ³	Thread	Max Pressure Bar	Model	To Suit
HHP-05	25	3/8"	350	Tank Mount	Double Acting Cylinder
Tech Sheet 60149					

Single acting pump for single acting cylinder.

Specification:

- White zinc-plated steel body
- Piston treated with Niploy
- White zinc-plated external parts
- Release lever

 **Maximum Working Pressure:**
220 bar



Single Acting Foot Pump with 1.5 Litre Reservoir

0462	Displacement cm ³	Thread	Max Pressure Bar	To Suit
HFP-01	15	1/4"	220	Single Acting Cylinder
Tech Sheet 60150				

Accessories

Specification:

- Black hand grip
- White zinc-plated steel lever



Operating Lever

0462	To Suit	Length mm
HHP-OL	HHP Series	900
Tech Sheet 60152		

Closed centre option available.



3 Way Flow Diverter Valves

0462	Thread	Description	Max Pressure Bar	LPM
HHPDV-06	3/8"	Open Centre	350	60
HHPDV-08	1/2"	Open Centre	350	90
HHPDV-12	3/4"	Open Centre	350	120
Tech Sheet 60153				

Normally open, two position with mechanical control for tipping trucks.

Specification:

- Cast iron body
- Piston treated with Niploy
- White zinc plated external parts

 **Maximum Working Pressure:**
250 bar



End Stroke Valves

0462	Thread	LPM
HESV-06	3/8"	60
HESV-08	1/2"	80

Gear Pump Elbows, BSPP

0347	Group	Thread
GPE1-12	1	1/2"
GPE1-38	1	3/8"
GPE2-12	2	1/2"
GPE2-34	2	3/4"
Tech Sheet 10129		



Steel Tanks

Specification:

- Suction pipe included
- Breather Cap 1/4" BSPP
- Release Cap 1/4" BSPP
- Standard colour black

Steel Oil Tanks for Hand Pumps

0462	Volume Litres	Thread
HHPT-01	1	1/4"
HHPT-02	2	1/4"
HHPT-03	3	1/4"
HHPT-05	5	1/4"
HHPT-07	7	1/4"
Tech Sheet 60151		



Gear Pumps

Roquet is a premium manufacturer of gear pumps and motors ranging from 0.33-150 cm³/rev. As standard, all Roquet gear pumps are manufactured with cast iron front and rear covers; reducing noise and increasing the product's life cycle. This design also enables the unit to accommodate in-built valves for speed control, etc.

Roquet pumps have an anechoic chamber, where engineers have designed the gear profile to reduce noise levels.

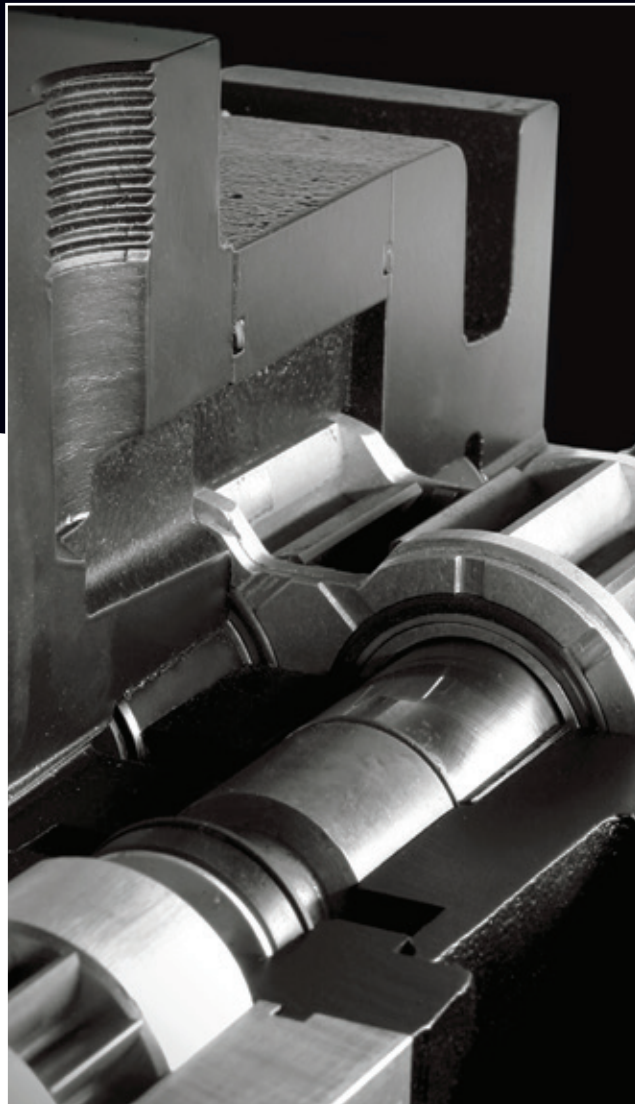
Gear Pumps

A gear pump is a positive displacement pump. It contains two identical interlocking gears, supported by separate shafts.

Generally, one gear is driven by a motor, and this in turn drives the other gear (idler gear).

Fixed volumes of fluid are enclosed between the outer gear teeth mechanically using a cyclic pumping action. This delivers a smooth and pulse-free flow, which is proportional to the rotational speed of the gears.

Close tolerances between the gears prevent fluid from transferring back through the centre. Also, close tolerances between the gears and the casing allow the pump to create suction at the inlet, and prevents fluid leaking back from the outlet. (Leakage is more likely with low viscosity liquids)



ALUMINIUM GEAR PUMPS



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new
product

Group 1

Series: L0

Body: Aluminium

Displacement: from 1cm³/rev to 6,63cm³/rev

- Pumps with back cover in built valves available.
- Multiple pumps available.



**1:8 Taper Shaft,
4 Bolt European Flange,
BSPP Ports, Clockwise Rotation**

3014	Displacement (cc/rev)	Continuous Max Pressure (bar)	Intermittent Max Pressure (bar)
1L01.5DE10R	1	275	300
1L03DE10R	2	275	300
1L05DE10R	3.3	240	275
1L07.5DE10R	5	185	200
1L010DE10R	6.6	135	150

Tech Sheet 71710

Group 2

Series: G

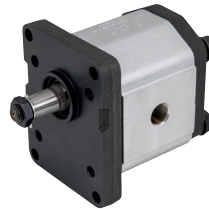
Body: Aluminium

Displacement: from 4cm³/rev to 26,67cm³/rev

- Pumps with back cover in built valves available.
- Multiple pumps available.

'G' series improvements over previous 'L' series:

- More drive shaft designs are available.
- Shorter multiple pumps.
- Higher torque admissible.
- Higher torque from rear pumps in multiple pumps.



**1:8 Taper Shaft,
4 Bolt European Flange,
BSPP Ports, Clockwise Rotation**

3014	Displacement (cc/rev)	Continuous Max Pressure (bar)	Intermittent Max Pressure (bar)
1G4CDE10R	4	275	300
1G6CDE10R	6	275	300
1G8CDE10R	8	275	300
1G11CDE10R	10.7	275	300
1G12CDE10R	12	275	300
1G15CDE10R	14.7	250	275
1G16CDE10R	16	250	275
1G18CDE10R	18	225	250
1G23CDE10R	23.3	180	200
1G27CDE10R	26.6	170	190

Tech Sheet 71710

**9 Tooth Splined Shaft,
2 Bolt SAE-A Flange,
BSPP Ports, Clockwise Rotation**



3014	Displacement (cc/rev)	Continuous Max Pressure (bar)	Intermittent Max Pressure (bar)
1G4CDG09R	4	275	300
1G6CDG09R	6	275	300
1G8CDG09R	8	275	300
1G11CDG09R	10.7	275	300
1G12CDG09R	12	275	300
1G15CDG09R	14.7	250	275
1G16CDG09R	16	250	275
1G18CDG09R	18	225	250
1G23CDG09R	23.3	180	200
1G27CDG09R	26.6	170	190

Tech Sheet 71710

**1:5 Taper Shaft, 4 Bolt German Flange,
Square Flanged Ports, Clockwise Rotation**



3014	Displacement (cc/rev)	Continuous Max Pressure (bar)	Intermittent Max Pressure (bar)
1G4CDJ23F	4	275	300
1G6CDJ23F	6	275	300
1G8CDJ23F	8	275	300
1G11CDJ23F	10.7	275	300
1G12CDJ23F	12	275	300
1G15CDJ23F	14.7	250	275
1G16CDJ23F	16	250	275
1G18CDJ23F	18	225	250
1G23CDJ23F	23.3	180	200
1G27CDJ23F	26.6	170	190

Tech Sheet 71710

Other shaft, flange, porting or rotation configurations available on request. Also available in cast iron material.

ALUMINIUM GEAR PUMPS



Roquet
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Group 3

Series: PLA

Body: Aluminium

Displacement: from 18cm³/rev to 56cm³/rev

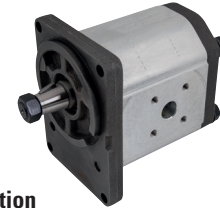
- Pumps with back cover in built valves available.
- Multiple pumps available.



1:8 Taper Shaft, 4 Bolt European Flange, BSPP Ports, Clockwise Rotation

3014	Continuous Max Pressure (bar)	Intermittent Max Pressure (bar)
1PLA27DE10R	250	275
1PLA36DE10R	250	275
1PLA45DE10R	250	275
1PLA54DE10R	225	250
1PLA66DE10R	200	225
1PLA84DE10R	175	200

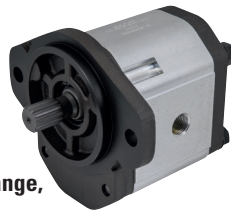
Tech Sheet 71710



1:5 Taper Shaft, 4 Bolt German Flange, Square Flanged Ports, Clockwise Rotation

3014	Displacement (cc/rev)	Continuous Max Pressure (bar)	Intermittent Max Pressure (bar)
1PLA27DJ23F	18	250	275
1PLA36DJ23F	24	250	275
1PLA45DJ23F	30	250	275
1PLA54DJ23F	36	225	250
1PLA66DJ23F	44	200	225
1PLA84DJ23F	56	175	200

Tech Sheet 71710



9 Tooth Splined Shaft, 2 Bolt SAE-A Flange, BSPP Ports, Clockwise Rotation

3014	Displacement (cc/rev)	Continuous Max Pressure (bar)	Intermittent Max Pressure (bar)
1PLA27DG09R	18	250	275
1PLA36DG09R	24	250	275
1PLA45DG09R	30	250	275
1PLA54DG09R	36	225	250
1PLA66DG09R	44	200	225
1PLA84DG09R	56	175	200

Tech Sheet 71710

Group 3.5

Series: PLC

Body: Aluminium

Displacement: from 53,33cm³/rev to 150cm³/rev

- Pumps with back cover in built valves available.
- Multiple pumps available.



1:8 Taper Shaft, 4 Bolt European Flange, SAE Ports, Clockwise Rotation

3014	Displacement (cc/rev)	Continuous Max Pressure (bar)	Intermittent Max Pressure (bar)
1PLC80DE10M	53.3	225	250
1PLC100DE10M	66.6	225	250
1PLC125DE10M	83.3	225	250
1PLC150DE10M	100	225	250
1PLC175DE10M	116.6	225	250
1PLC200DE10M	133.3	200	225
1PLC225DE10M	150	150	175

Tech Sheet 71710

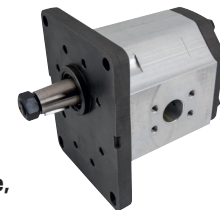
Group 4

Series: PLC

Body: Aluminium

Displacement: from 53,33cm³/rev to 150cm³/rev

- Pumps with back cover in built valves available.
- Multiple pumps available.



1:8 Taper Shaft, 4 Bolt European Flange, SAE Ports, Clockwise Rotation

3014	Displacement (cc/rev)	Continuous Max Pressure (bar)	Intermittent Max Pressure (bar)
1PLC80DJ23M	53.3	225	250
1PLC100DJ23M	66.6	225	250
1PLC125DJ23M	83.3	225	250
1PLC150DJ23M	100	225	250
1PLC175DJ23M	116.6	225	250
1PLC200DJ23M	133.3	200	225
1PLC225DJ23M	150	150	175

Tech Sheet 71710

Other shaft, flange, porting or rotation configurations available on request. Also available in cast iron material.

Gear Motors

Roquet is a premium manufacturer of gear pumps and motors ranging from 0.33-150 cm³/rev. As standard, all Roquet gear motors are manufactured with cast iron front and rear covers; reducing noise and increasing the product's life cycle. This design also enables the unit to accommodate in-built valves for speed control, etc.

Roquet gear motors have an anechoic chamber where engineers have designed the gear profile to reduce noise levels.

Gear Motors

A gear motor is a mechanical actuator converting hydraulic pressure and flow into shaft rotation and torque. It is the rotary counterpart of the hydraulic cylinder.

Similarly to a gear pump, a gear motor consists of two identical interlocking gears, the driven gear and the idler gear. High-pressure oil enters the inlet side of the motor and flows around the outer periphery of the gear teeth - the gears mesh, which prevents the oil from coming back to the inlet from the outlet side.

For lubrication, a small amount of oil from the pressurised side bleeds through the bearings, and vents to the low pressure side, or through the drain port.



ALUMINIUM GEAR MOTORS



Roquet
making moves



Group 1

Series: L0

Body: Aluminium

Displacement: from 1cm³/rev to 6,63cm³/rev

- Motors with back cover in built valves available.



1:8 Taper Shaft, 4 Bolt European Flange, BSPP Ports, Clockwise Rotation

3014	Displacement (cc/rev)	Continuous Max Pressure (bar)	Intermittent Max Pressure (bar)
1ML01.5DE10R	1	275	300
1ML03DE10R	2	275	300
1ML05DE10R	3.3	240	275
1ML07.5DE10R	5	185	200
1ML010DE10R	6.6	135	150

Tech Sheet 71711

Group 2

Series: G

Body: Aluminium

Displacement: from 4cm³/rev to 26,67cm³/rev

- Motors with back cover in built valves available.

'G' series improvements over previous 'L' series:

- More drive shaft designs are available.
- Shorter multiple pumps.
- Higher torque admissible.
- Higher torque from rear pumps in multiple pumps.



1:8 Taper Shaft, 4 Bolt European Flange, BSPP Ports, Clockwise Rotation

3014	Displacement (cc/rev)	Continuous Max Pressure (bar)	Intermittent Max Pressure (bar)
1MG4CDE10R	4	275	300
1MG6CDE10R	6	275	300
1MG8CDE10R	8	275	300
1MG11CDE10R	10.7	275	300
1MG12CDE10R	12	275	300
1MG15CDE10R	14.7	250	275
1MG16CDE10R	16	250	275
1MG18CDE10R	18	225	250
1MG23CDE10R	23.3	180	200
1MG27CDE10R	26.6	170	190

Tech Sheet 71711

Other shaft, flange, porting or rotation configurations available on request. Also available in cast iron material.

Group 3

Series: PLA

Body: Aluminium

Displacement: from 18cm³/rev to 56cm³/rev

- Motors with back cover in built valves available.



1:8 Taper Shaft, 4 Bolt European Flange, BSPP Ports, Clockwise Rotation

3014	Displacement (cc/rev)	Continuous Max Pressure (bar)	Intermittent Max Pressure (bar)
1MPLA27DE10R	18	250	275
1MPLA36DE10R	24	250	275
1MPLA45DE10R	30	250	275
1MPLA54DE10R	36	225	250
1MPLA66DE10R	44	200	225
1MPLA84DE10R	56	175	200

Tech Sheet 71711

Group 3.5

Series: PLC

Body: Aluminium

Displacement: from 53,33cm³/rev to 150cm³/rev

- Motors with back cover in built valves available.



1:8 Taper Shaft, 4 Bolt European Flange, SAE Ports, Clockwise Rotation

3014	Displacement (cc/rev)	Continuous Max Pressure (bar)	Intermittent Max Pressure (bar)
1MPLC80DE10M	53.3	225	250
1MPLC100DE10M	66.6	225	250
1MPLC125DE10M	83.3	225	250
1MPLC150DE10M	100	225	250
1MPLC175DE10M	116.6	225	250
1MPLC200DE10M	133.3	200	225
1MPLC225DE10M	150	150	175

Tech Sheet 71711

Group 4

Series: PLC

Body: Aluminium

Displacement: from 53,33cm³/rev to 150cm³/rev

- Motors with back cover in built valves available.

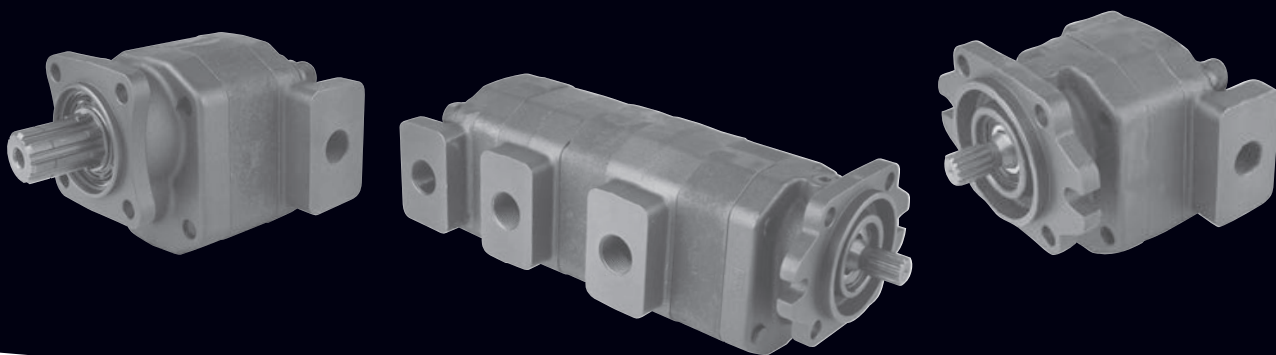


1:8 Taper Shaft, 4 Bolt European Flange, SAE Ports, Clockwise Rotation

3014	Displacement (cc/rev)	Continuous Max Pressure (bar)	Intermittent Max Pressure (bar)
1MPLC80DJ23M	53.3	225	250
1MPLC100DJ23M	66.6	225	250
1MPLC125DJ23M	83.3	225	250
1MPLC150DJ23M	100	225	250
1MPLC175DJ23M	116.6	225	250
1MPLC200DJ23M	133.3	200	225
1MPLC225DJ23M	150	150	175

Tech Sheet 71711

Cast Iron Gear Pumps



Group 3

- Series:** PNA
Material: Nodular cast iron
Displacement: from 53,33cm³/rev to 150cm³/rev
 • Pumps with back cover in built valves available.
 • Multiple pumps available.



13 Tooth Splined Shaft, 2 Bolt SAE-B Flange, BSPP Ports, Clockwise Rotation with Ball Bearing & Shaft Seal

3014	Displacement (cc/rev)	Continuous Max Pressure (bar)	Intermittent Max Pressure (bar)
13PNA36DG09R	24	270	300
13PNA45DG09R	30	270	300
13PNA54DG09R	36	260	285
13PNA66DG09R	44	260	285
13PNA84DG09R	56	210	250
13PNA96DG09R	64	180	225
13PNA110DG09R	73.3	160	200

Tech Sheet 71712

Group 3.5

- Series:** PNC
Material: Nodular cast iron
Displacement: from 53,33cm³/rev to 150cm³/rev
 • Pumps with back cover in built valves available.
 • Multiple pumps available.



1:8 Taper Shaft, 4 Bolt European Flange, BSPP Ports, Clockwise Rotation

3014	Displacement (cc/rev)	Continuous Max Pressure (bar)	Intermittent Max Pressure (bar)
1PNC80DE10M	53.3	260	290
1PNC100DE10M	66.6	260	290
1PNC125DE10M	83.3	250	275
1PNC150DE10M	100	250	275
1PNC175DE10M	116.6	225	250
1PNC200DE10M	133.3	200	225
1PNC225DE10M	150	175	200

Tech Sheet 71712

Other shaft, flange, porting or rotation configurations available on request.

HYDRAULIC CONTROL VALVES

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1.07 Valves, Pumps & Motors

1

Monoblock Valves

 **Maximum Working Pressure:**
350 bar

Port Sizes:

P, T, A, B: 3/8" BSPP

Nominal Flow: 40 L/min

Maximum Spool Quantity: 6

Main Relief Valve Pressure Ranges

Available: 5-80 bar, 85-175 bar,
180-250 bar, 255-350 bar



3/8" BSPP, 102 Series, 3 Position, Single Section, Open Centre, 85-175 bar Relief Valve

3013	Spool Control Option	Spool Type
102N1PA12I	Spring Return	Motor
102N1PA12D	Spring Return	Cylinder
102N2PA12I	Detent	Motor
102N2PA12D	Detent	Cylinder
102N22PA12I	Pneumatic Pilot	Motor
102N22PA12D	Pneumatic Pilot	Cylinder
102N35RA12I	Rotative	Motor
102N35RA12D	Rotative	Cylinder

Tech Sheet 71709

 **Maximum Working Pressure:**
350 bar

Port Sizes:

P, T, A, B: 1/2" BSPP

Nominal Flow: 60 L/min

Maximum Spool Quantity: 2

Main Relief Valve Pressure Ranges

Available: 5-80 bar, 85-175 bar,
180-250 bar, 255-350 bar



1/2" BSPP, 1102 Series, 3 Position, Single Section, Open Centre, 85-175 bar Relief Valve

3013	Spool Control Option	Spool Type
1102N1PA12I	Spring Return	Motor
1102N1PA12D	Spring Return	Cylinder
1102N2PA12I	Detent	Motor
1102N2PA12D	Detent	Cylinder
1102N22PA12I	Pneumatic Pilot	Motor
1102N22PA12D	Pneumatic Pilot	Cylinder
1102N35RA12I	Rotative	Motor
1102N35RA12D	Rotative	Cylinder

Tech Sheet 71709

Sectional Valves

 **Maximum Working Pressure:**
350 bar

Port Sizes:

P, T: 3/4" BSPP

A, B: 1/2" BSPP

Nominal Flow: 100 L/min

Maximum Spool Quantity: 10

Main Relief Valve Pressure Ranges

Available: 5-80 bar, 85-175 bar,
180-250 bar, 255-350 bar



1/2" BSPP, 406 Series, 3 Position, Single Section, Open Centre, 85-175 bar Relief Valve

3013	Spool Control Option	Spool Type
406N1PA12I	Spring Return	Motor
406N1PA12D	Spring Return	Cylinder
406N2PA12I	Detent	Motor
406N2PA12D	Detent	Cylinder
406N22PA12I	Pneumatic Pilot	Motor
406N22PA12D	Pneumatic Pilot	Cylinder
406N35RA12I	Rotative	Motor
406N35RA12D	Rotative	Cylinder

Tech Sheet 71709

 **Maximum Working Pressure:**
350 bar

Port Sizes:

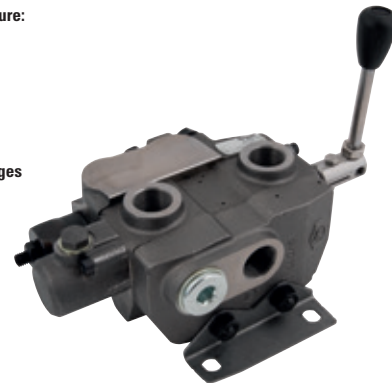
P, T, A, B: 3/4" BSPP

Nominal Flow: 100 L/min

Maximum Spool Quantity: 10

Main Relief Valve Pressure Ranges

Available: 5-80 bar, 85-175 bar,
180-250 bar, 255-350 bar



3/4" BSPP, 1406 Series, 3 Position, Single Section, Open Centre, 85-175 bar Relief Valve

3013	Spool Control Option	Spool Type
1406N1PA12I	Spring Return	Motor
1406N1PA12D	Spring Return	Cylinder
1406N2PA12I	Detent	Motor
1406N2PA12D	Detent	Cylinder
1406N22PA12I	Pneumatic Pilot	Motor
1406N22PA12D	Pneumatic Pilot	Cylinder
1406N35RA12I	Rotative	Motor
1406N35RA12D	Rotative	Cylinder

Tech Sheet 71709

Closed centre, HPCO, additional sections and bespoke configurations available on request

Hydraulics