

CATFORD ENGINEERING PRODUCTS

Jamestown
SA 5491

All Prices Excluding GST

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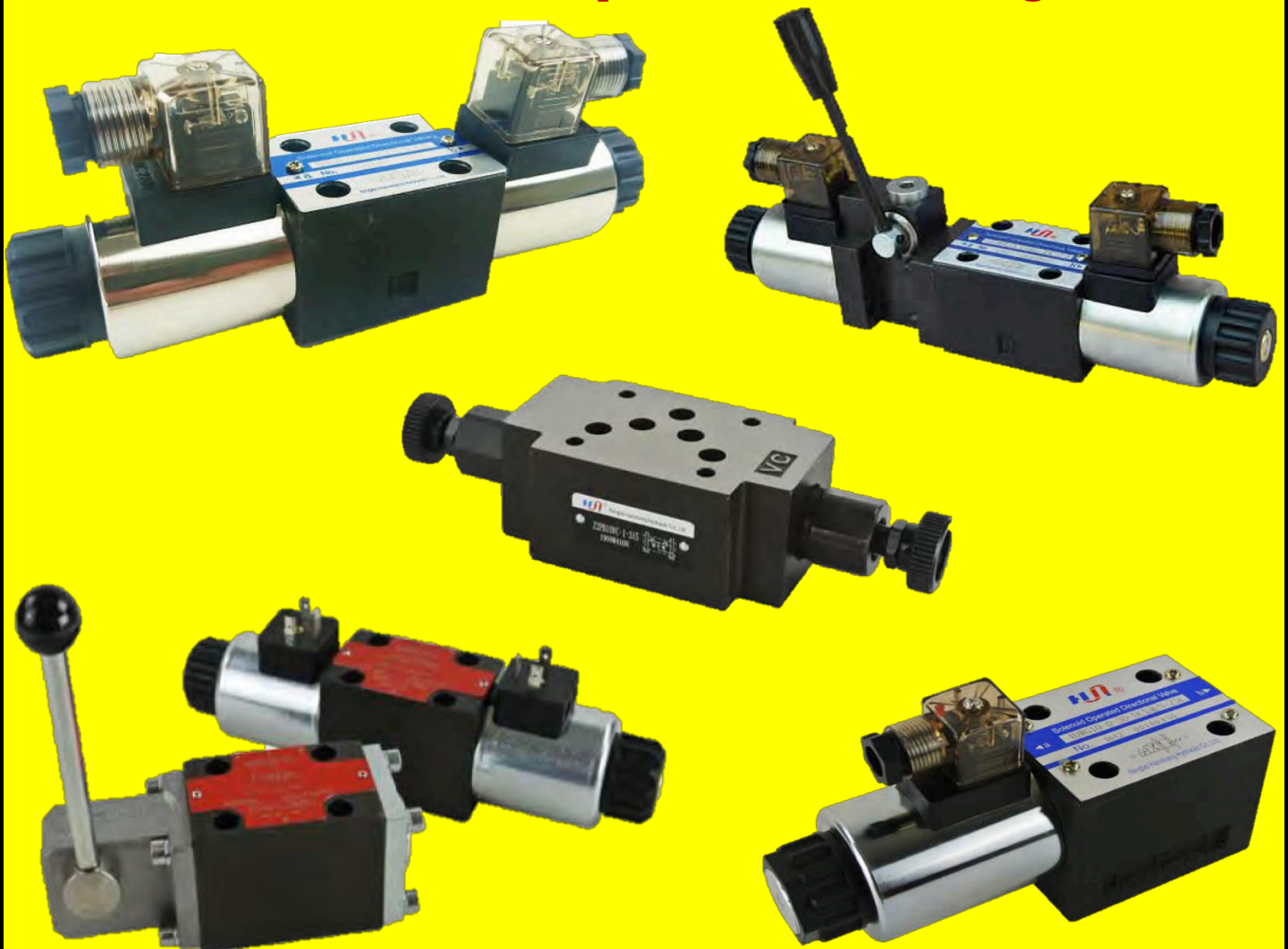
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Cetop Valves, Subplates & Manifolds

*Cetop 3, 5 & 7 Solenoid Valves *Manual Solenoid

*Subplates *Manifolds *Coils *DIN *Plugs

*Sandwich *Valves *Endplates *Relief Cartridges





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sales@catford.com.au

Due to fluctuations in the Australian dollar and the economic climate, please be advised that all prices are subject to change.
Please contact us to confirm pricing.

All prices stated within are exclusive of GST
(All prices are correct as of January 1st 2022, but Catford Engineering reserve the right to change these prices without notice)

Cetop Valves, Subplates & Manifolds

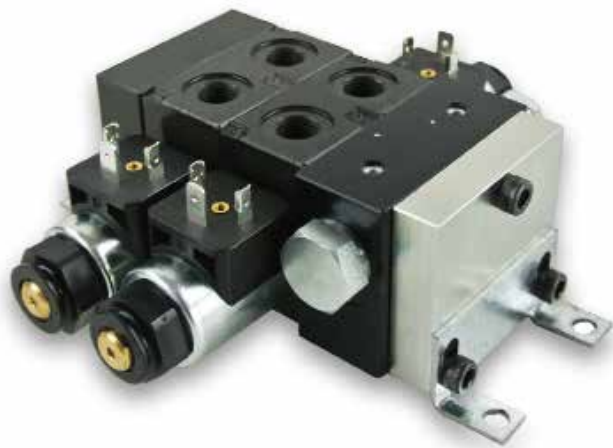
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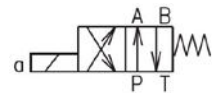
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Sandwich Valve

Part #	List Price \$	Max Pressure	Max Flow	Ports	Transition	Diagram
HDF-ES-1C	367.00	250 bar	20 lpm	1/4" BSPP	Closed	1
HDF-ES-1LL	340.00	250 bar	20 lpm	1/4" BSPP	Closed	2
HDF-ES-4C	430.00	250 bar	20 lpm	1/4" BSPP	Open	3
HDF-ES-3C	367.00	250 bar	20 lpm	1/4" BSPP	A + B to T	4
HDF-ES-0C	367.00	250 bar	20 lpm	1/4" BSPP	Open	5
HDF-ES-0ML	340.00	250 bar	20 lpm	1/4" BSPP	Open	6
AMF-MOP-25	220.00	250 bar	20 lpm	1/4" BSPP	Relief	7
AMF-HP2	324.00	200 bar	2cc	-	Hand Pump	8



1



2



3



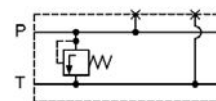
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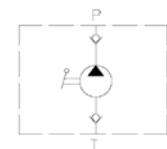
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Sandwich valve price does not include coils



Sandwich Valve HDF Coils

Part #	List Price \$	Voltage	Amp Draw	Core Size	Length	Connector
BO1-012C	58.00	12v DC	2.8 amp	13.8mm	41.2mm	DP-LED-DC
BO1-024C	58.00	24v DC	1.4 amp	13.8mm	41.2mm	DP-LED-DC
BO1-230R	58.00	220v AC	0.17 amp	13.8mm	41.2mm	DP-LED-AC

Sandwich Valve Endplates & Manifolds

Part #	List Price \$	Material	Port	Description
PD1-03/32-0	120.00	Aluminium	-	End plate
PD1-03/32-5	166.00	Aluminium	3/8" BSPP	Remote mount plate port
GE-01	50.00	Aluminium	-	Manual override knob for HDF valves
MAF-KIT-2	91.00	Aluminium	-	Remote mount mounting bracket

MAF-KIT-2



GE-01



Sandwich Valve Bolt Kits

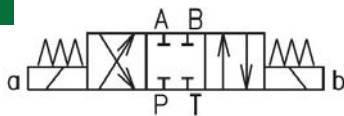
Part #	List Price \$	Description
VIT-HDF-M6X55	13.00	Bolt Kit - 1 Section HDF/CS Valve
VIT-HDF-M6X100	53.00	Bolt Kit - 2 Section HDF/CS Valve
VIT-HDF-M6X133	63.00	Bolt Kit - 3 Section HDF/CS Valve
VIT-HDF-M6X163	64.00	Bolt Kit - 4 Section HDF/CS Valve
VIT-HDF-M6X194	66.00	Bolt Kit - 5 Section HDF/CS Valve
VIT-HDF-M6X224	67.00	Bolt Kit - 6 Section HDF/CS Valve
VIT-HDF-M6X256	72.00	Bolt Kit - 7 Section HDF/CS Valve
VIT-HDF-M6X287	75.00	Bolt Kit - 8 Section HDF/CS Valve



Sandwich Valve

Part #	List Price \$	Transition	Voltage	Max Flow	Max Pressure	Ports
CS-3C2-03-D12	278.00	Closed	12v	15 lpm	200 bar	1/4" BSPP
CS-3C2-03-D24	278.00	Closed	24v	15 lpm	200 bar	1/4" BSPP
CS-3C2-03-A22	281.00	Closed	220v	15 lpm	200 bar	1/4" BSPP
CS-3C4-03-D12	278.00	A + B open to T	12v	15 lpm	200 bar	1/4" BSPP
CS-3C4-03-D24	278.00	A + B open to T	24v	15 lpm	200 bar	1/4" BSPP
CS-3C4-03-A22	281.00	A + B open to T	220v	15 lpm	200 bar	1/4" BSPP
CS-C3B-03-D12	261.00	Open	12v	15 lpm	200 bar	1/4" BSPP
CS-C3B-03-D24	261.00	Open	24v	15 lpm	200 bar	1/4" BSPP
CS-C3B-03-A22	281.00	Open	220v	15 lpm	200 bar	1/4" BSPP

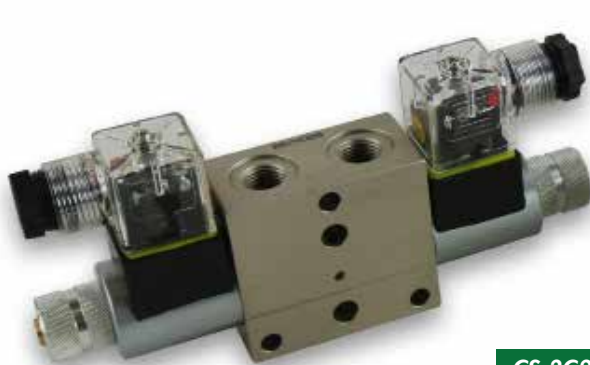
CS-3C2



CS-3C4



CS-C3B



CS-3C2



CS-3CB

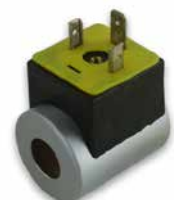
Maximum 8 sections
CS valves include coils

Sandwich Valve Endplates & Manifolds

Part #	List Price \$	Material	Port	Description
T0407	87.00	Aluminium	n/a	End plate
T0407-PT	147.00	Aluminium	9/16" UNO	Remote mount plate port
CS-03-M	48.00	Aluminium	n/a	Manual override knob for CS valves

Coils

Part #	List Price \$	Voltage	Amp Draw	Core Size	Length	Connector
CS-12V	64.00	12v DC	2.8 amp	13.2mm	37mm	DP-LED-DC
CS-24V	64.00	24v DC	1.4 amp	13.2mm	37mm	DP-LED-DC
CS-A22	124.00	220v AC	0.17 amp	13.2mm	37mm	DP-REC-AC



Aidro Cetop 3 Solenoid & Manual Valves

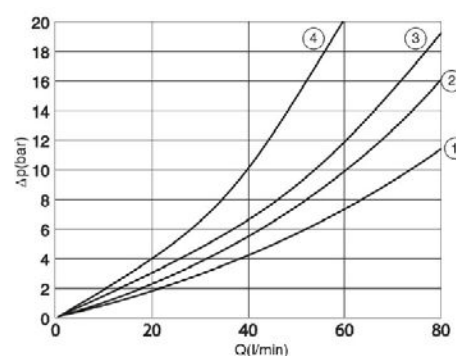
	SOLENOID	MANUAL
Nominal Flow Rate	60 lpm	60 lpm
Maximum Recommended Flow	80 lpm	80 lpm
Maximum Nominal Pressure P _{A,B}	350 bar	320 bar
Maximum Pressure on T Port	210 bar	100 bar
Duty Cycle	100%	n/a
Bolts (single valve)	M5x45mm (tighten to 8Nm)	



Typical Diagrams

Typical Δp -Q curves for valves HD3-ES-* in standard configuration. Measured with mineral oil at 32mm²/s and T=40°C.

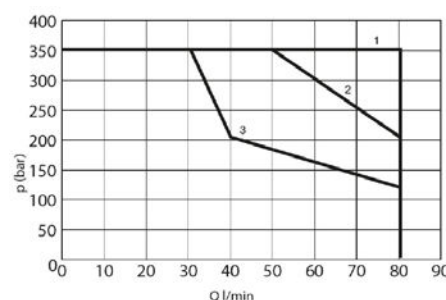
Spool	P-A	P-B	A-T	B-T	P-T
1C	1	1	2	2	-
4C	3	3	4	4	1
0C	1	1	2	2	1
3C	1	1	2	2	-
1LL	1	1	2	2	-
1LLb	1	1	2	2	-
1ML		1	2	-	-
4ML	4	-	4	-	2
0ML	-	1	2	-	1
3ML	1	-	2	-	-



Hydraulic Limit of Use

Δp -Q characteristics limits for safe use of HD3-ES-* solenoid operated valves. Measured with mineral oil at 32mm²/s and T=40°C.

Spool	Limit	Spool	Limit
1C	1	1ML	1
4C	3	0ML	2
0C	2	1MLb	1
3C	2	1LLb	1
1LL	1	4MLb	3
3ML	2	0MLb	2
4ML	3	3MLb	2



HYDRAULIC FLUID

Seals and materials used on standard HD3-* valves are fully compatible with hydraulic fluids of mineral base, upgrading with antifoaming and antioxidising agents.

The hydraulic fluid must be kept clear and filtered to ISO4406 class 19/17/14, or better, and used in a recommended viscosity range from 10cSt to 60cSt.

Cetop 3 Solenoid Valves (AIDRO)

Part #	List Price \$	Coil Voltage	Diagram
HD3-ES-0C-012C/10	409.00	12v DC	
HD3-ES-0C-024C/10	409.00	24v DC	
HD3-ES-0C-230A/10	471.00	230v AC	
HD3-ES-0C-115A/10	471.00	115v AC	
HD3-ES-1C-012C/10	409.00	12v DC	
HD3-ES-1C-024C/10	409.00	24v DC	
HD3-ES-1C-230A/10	471.00	230v AC	
HD3-ES-1C-115A/10	471.00	115v AC	
HD3-ES-3C-012C/10	409.00	12v DC	
HD3-ES-3C-024C/10	409.00	24v DC	
HD3-ES-3C-230A/10	471.00	230v AC	
HD3-ES-3C-115A/10	471.00	115v AC	
HD3-ES-4C-012C/10	465.00	12v DC	
HD3-ES-4C-024C/10	465.00	24v DC	
HD3-ES-4C-230A/10	527.00	230v AC	
HD3-ES-4C-115A/10	527.00	115v AC	
NEW HD3-ES-1N-012C/10	498.00	12v DC	
NEW HD3-ES-1N-024C/10	498.00	24v DC	
NEW HD3-ES-1N-230A/10	528.00	230v AC	
NEW HD3-ES-1N-115A/10	528.00	115v AC	

Detent



DIN plugs/accessories
See page 177

Cetop 3 Solenoid Valves (AIDRO)

Part #	List Price \$	Coil Voltage	Diagram
HD3-ES-0LL-012C/10	330.00	12v DC	
HD3-ES-0LL-024C/10	330.00	24v DC	
HD3-ES-0LL-230A/10	361.00	230v AC	
HD3-ES-0LL-115A/10	361.00	115v AC	
HD3-ES-0ML-012C/10	330.00	12v DC	
HD3-ES-0ML-024C/10	330.00	24v DC	
HD3-ES-0ML-230A/10	361.00	230v AC	
HD3-ES-0ML-115A/10	361.00	115v AC	
HD3-ES-1LL-012C/10	330.00	12v DC	
HD3-ES-1LL-024C/10	330.00	24v DC	
HD3-ES-1LL-230A/10	361.00	230v AC	
HD3-ES-1LL-115A/10	361.00	115v AC	
HD3-ES-1LLb-012C/10	330.00	12v DC	
HD3-ES-1LLb-024C/10	330.00	24v DC	
HD3-ES-1LLb-230A/10	361.00	230v AC	
HD3-ES-1LLb-115A/10	361.00	115v AC	
HD3-ES-1ML-012C/10	330.00	12v DC	
HD3-ES-1ML-024C/10	330.00	24v DC	
HD3-ES-1ML-230A/10	361.00	230v AC	
HD3-ES-1ML-115A/10	361.00	115v AC	
HD3-ES-3ML-012C/10	330.00	12v DC	
HD3-ES-3ML-024C/10	330.00	24v DC	
HD3-ES-3ML-230A/10	361.00	230v AC	
HD3-ES-3ML-115A/10	361.00	115v AC	
HD3-ES-4ML-012C/10	386.00	12v DC	
HD3-ES-4ML-024C/10	386.00	24v DC	
HD3-ES-4ML-230A/10	417.00	230v AC	
HD3-ES-4ML-115A/10	417.00	115v AC	



DIN plugs/accessories
See page 177

Cetop 3 Manual Valves (AIDRO)					
Part #	List Price \$	Coil Voltage		Diagram	
HD3-LO-0C/10	601.00	Manual	H		
HD3-LO-0D/10	601.00	Manual w/ detent		Detent	
HD3-LO-1C/10	601.00	Manual	E		
HD3-LO-1D/10	601.00	Manual w/ detent		Detent	
HD3-LO-3C/10	601.00	Manual	J		
HD3-LO-3D/10	601.00	Manual w/ detent		Detent	
HD3-LO-4C/10	657.00	Manual	G		
HD3-LO-4D/10	657.00	Manual w/ detent		Detent	
HD3-LO-0LL/10	601.00	Manual	D		
HD3-LO-0N/10	601.00	Manual w/ detent		Detent	
HD3-LO-1LL/10	601.00	Manual	C		
HD3-LO-1N/10	601.00	Manual w/ detent		Detent	



Aidro Cetop 3 Proportional Valve

	SOLENOID
Nominal Flow Rate	5, 16, 32 lpm
Maximum Nominal Pressure P _{A,B}	320 bar
Maximum Pressure on T Port	160 bar
Duty Cycle	100%
Bolts (single valve)	M5x45mm (tighten to 8Nm)



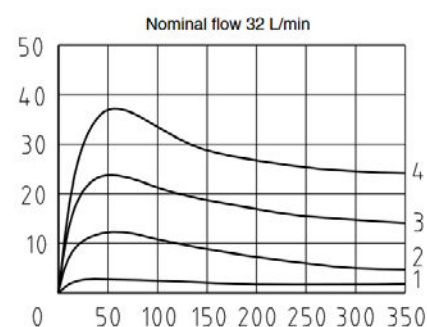
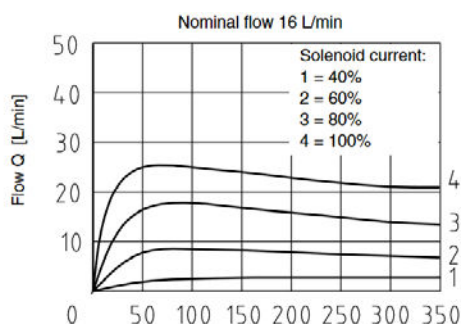
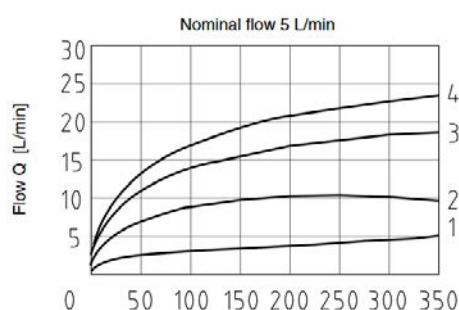
Valves type HD3-PS are operated by proportional solenoids that are rated for an average maximum power of 13.5 watt.

The values of nominal maximum current are for coils type:

- R2 (2.3): $I_{max} = 2.4amp$
- R3 (4.5): $I_{max} = 1.7amp$
- R4 (13.4): $I_{max} = 1.0amp$
- R5 (18.6): $I_{max} = 0.85amp$

Currents to hydraulic proportional valves are normally supplied by an electronic driver based on PWM mode of operation, and capable of full control of minimum and maximum values of current for drivers type UED.

(See following page for UEDs)



HYDRAULIC FLUID

Seals and materials used on standard HD3-* valves are fully compatible with hydraulic fluids of mineral base, upgrading with antifoaming and antioxidising agents.

The hydraulic fluid must be kept clear and filtered to ISO4406 class 19/17/14, or better, and used in a recommended viscosity range from 10cSt to 60cSt.

Universal Electronic Driver

	Part #	List Price \$	Voltage	Input Signal	Output Current	Mounting	Controls
NEW	UED-KA	967.00	9-36v DC	0-5v, 0-10v, 4-20mA	0-3 amp	DIN 43650-A	1 solenoid
NEW	UED-D	1746.00	9-36v DC	0-5v, 0-10v, 4-20mA	0-3 amp	DIN rail (open)	1 or 2 solenoid

Independent adjustments
(ramp up - ramp down)

Wide ramp time range

Display & adjust current
and voltage values

PVM output

UED-KA



UED-D

Cetop 3 Proportional Valve - AIDRO (P,T,A,B blocked)

Part #	List Price \$	Flow	Coil Voltage	Nominal Max. Current	Diagram
NEW HD3-PS-105C-K-R2/10	1040.00	5 lpm, ΔP 10 bar	12v DC	2.5a / 2.3Ω	
NEW HD3-PS-105C-K-R4/10	1040.00	5 lpm, ΔP 10 bar	24v DC	1.0a / 13.4Ω	
NEW HD3-PS-1RC-K-R2/10	963.00	16 lpm, ΔP 10 bar	12v DC	2.5a / 2.3Ω	
NEW HD3-PS-1RC-K-R4/10	963.00	16 lpm, ΔP 10 bar	24v DC	1.0a / 13.4Ω	
NEW HD3-PS-1PC-K-R2/10	963.00	32 lpm, ΔP 10 bar	12v DC	2.5a / 2.3Ω	
NEW HD3-PS-1PC-K-R4/10	963.00	32 lpm, ΔP 10 bar	24v DC	1.0a / 13.4Ω	
NEW HD3-PS-105MLb-K-R2/10	1040.00	5 lpm, ΔP 10 bar	12v DC	2.5a / 2.3Ω	
NEW HD3-PS-105MLb-K-R4/10	1040.00	5 lpm, ΔP 10 bar	24v DC	1.0a / 13.4Ω	
NEW HD3-PS-1RMLb-K-R2/10	963.00	16 lpm, ΔP 10 bar	12v DC	2.5a / 2.3Ω	
NEW HD3-PS-1RMLb-K-R4/10	963.00	16 lpm, ΔP 10 bar	24v DC	1.0a / 13.4Ω	
NEW HD3-PS-1PMLb-K-R2/10	963.00	32 lpm, ΔP 10 bar	12v DC	2.5a / 2.3Ω	
NEW HD3-PS-1PMLb-K-R4/10	963.00	32 lpm, ΔP 10 bar	24v DC	1.0a / 13.4Ω	
NEW HD3-PS-105ML-K-R2/10	1040.00	5 lpm, ΔP 10 bar	12v DC	2.5a / 2.3Ω	
NEW HD3-PS-105ML-K-R4/10	1040.00	5 lpm, ΔP 10 bar	24v DC	1.0a / 13.4Ω	
NEW HD3-PS-1RML-K-R2/10	963.00	16 lpm, ΔP 10 bar	12v DC	2.5a / 2.3Ω	
NEW HD3-PS-1RML-K-R4/10	963.00	16 lpm, ΔP 10 bar	24v DC	1.0a / 13.4Ω	
NEW HD3-PS-1PML-K-R2/10	963.00	32 lpm, ΔP 10 bar	12v DC	2.5a / 2.3Ω	
NEW HD3-PS-1PML-K-R4/10	963.00	32 lpm, ΔP 10 bar	24v DC	1.0a / 13.4Ω	

Optional Coils

Part #	List Price \$	Coil Voltage	Nominal Max. Current	Connection
BO3-12R2	57.00	12v DC	2.5a / 2.3Ω	DIN 43650A
BO3-12R3	57.00	12v DC	2.7a / 4.4Ω	DIN 43650A
BO3-24R4	57.00	24v DC	1a / 13.4Ω	DIN 43650A
BO3-24R5	57.00	24v DC	1.29a / 18.6Ω	DIN 43650A
BO3-12R2-D	78.00	12v DC	2.5a / 2.3Ω	DEUTSCH
BO3-12R3-D	78.00	12v DC	2.7a / 4.4Ω	DEUTSCH
BO3-24R4-D	78.00	24v DC	1a / 13.4Ω	DEUTSCH
BO3-24R5-D	78.00	24v DC	1.29a / 18.6Ω	DEUTSCH



BO3 (DIN)



BO3 (DEUTSCH)

Cetop 3 Proportional Valve - AIDRO (P blocked, A,B,T connected)

Part #	List Price \$	Flow	Coil Voltage	Nominal Max. Current	Diagram
NEW HD3-PS-305C-K-R2/10	1040.00	5 lpm, ΔP 10 bar	12v DC	2.5a / 2.3Ω	
NEW HD3-PS-305C-K-R4/10	1040.00	5 lpm, ΔP 10 bar	24v DC	1.0a / 13.4Ω	
NEW HD3-PS-3RC-K-R2/10	963.00	16 lpm, ΔP 10 bar	12v DC	2.5a / 2.3Ω	
NEW HD3-PS-3RC-K-R4/10	963.00	16 lpm, ΔP 10 bar	24v DC	1.0a / 13.4Ω	
NEW HD3-PS-3PC-K-R2/10	963.00	32 lpm, ΔP 10 bar	12v DC	2.5a / 2.3Ω	
NEW HD3-PS-3PC-K-R4/10	963.00	32 lpm, ΔP 10 bar	24v DC	1.0a / 13.4Ω	
NEW HD3-PS-305MLb-K-R2/10	1040.00	5 lpm, ΔP 10 bar	12v DC	2.5a / 2.3Ω	
NEW HD3-PS-305MLb-K-R4/10	1040.00	5 lpm, ΔP 10 bar	24v DC	1.0a / 13.4Ω	
NEW HD3-PS-3RMLb-K-R2/10	963.00	16 lpm, ΔP 10 bar	12v DC	2.5a / 2.3Ω	
NEW HD3-PS-3RMLb-K-R4/10	963.00	16 lpm, ΔP 10 bar	24v DC	1.0a / 13.4Ω	
NEW HD3-PS-3PMLb-K-R2/10	963.00	32 lpm, ΔP 10 bar	12v DC	2.5a / 2.3Ω	
NEW HD3-PS-3PMLb-K-R4/10	963.00	32 lpm, ΔP 10 bar	24v DC	1.0a / 13.4Ω	
NEW HD3-PS-305ML-K-R2/10	1040.00	5 lpm, ΔP 10 bar	12v DC	2.5a / 2.3Ω	
NEW HD3-PS-305ML-K-R4/10	1040.00	5 lpm, ΔP 10 bar	24v DC	1.0a / 13.4Ω	
NEW HD3-PS-3RML-K-R2/10	963.00	16 lpm, ΔP 10 bar	12v DC	2.5a / 2.3Ω	
NEW HD3-PS-3RML-K-R4/10	963.00	16 lpm, ΔP 10 bar	24v DC	1.0a / 13.4Ω	
NEW HD3-PS-3PML-K-R2/10	963.00	32 lpm, ΔP 10 bar	12v DC	2.5a / 2.3Ω	
NEW HD3-PS-3PML-K-R4/10	963.00	32 lpm, ΔP 10 bar	24v DC	1.0a / 13.4Ω	

Pressure Compensator Valve

Part #	List Price \$	Description
NEW AM3-LS-P3/20	705.00	3-way pressure compensator valve with load-sensing (more details on page 182)



Cetop 3 Valves w/ dual coils & LED DIN plugs

Recommended maximum flow 40 lpm @ 210 bar

Part #	List Price \$	Coil Voltage	Max Press Tank	Diagram	
4DWG6-E-60-DC12-N-Z5L	260.00	12v DC	210 bar	E	
4DWG6-E-60-DC24-N-Z5L	260.00	24v DC	210 bar		
4DWG6-E-60-AC220-N-Z5L	260.00	240v AC	160 bar		
4DWG6-H-60-DC12-N-Z5L	260.00	12v DC	210 bar	H	
4DWG6-H-60-DC24-N-Z5L	260.00	24v DC	210 bar		
4DWG6-H-60-AC220-N-Z5L	260.00	240v AC	160 bar		
4DWG6-J-60-DC12-N-Z5L	260.00	12v DC	210 bar	J	
4DWG6-J-60-DC24-N-Z5L	260.00	24v DC	210 bar		
4DWG6-J-60-AC220-N-Z5L	260.00	240v AC	160 bar		
4DWG6-G-60-DC12-N-Z5L	260.00	12v DC	210 bar	G	
4DWG6-G-60-DC24-N-Z5L	260.00	24v DC	210 bar		
4DWG6-G-60-AC220-N-Z5L	260.00	240v AC	160 bar		



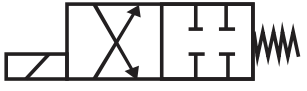
Cetop 3 Valves w/ single coils & LED DIN plugs

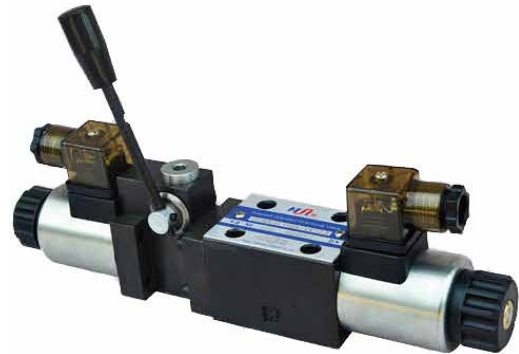
Recommended maximum flow 40 lpm @ 210 bar

Part #	List Price \$	Coil Voltage	Max Press Tank	Diagram	
4DWG6-C-60-DC12-N-Z5L	215.00	12v DC	210 bar	C	
4DWG6-C-60-DC24-N-Z5L	215.00	24v DC	210 bar		
4DWG6-C-60-AC220-N-Z5L	215.00	240v AC	160 bar		
4DWG6-D-60-DC12-N-Z5L	215.00	12v DC	210 bar	D	
4DWG6-D-60-DC24-N-Z5L	215.00	24v DC	210 bar		
4DWG6-D-60-AC220-N-Z5L	215.00	240v AC	160 bar		
4DWG6-HA-60-DC12-N-Z5L	215.00	12v DC	210 bar	HA	
4DWG6-HA-60-DC24-N-Z5L	215.00	24v DC	210 bar		
4DWG6-HA-60-AC220-N-Z5L	215.00	240v AC	160 bar		

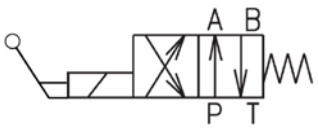
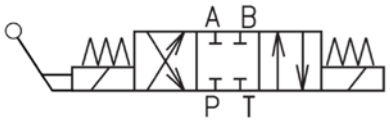
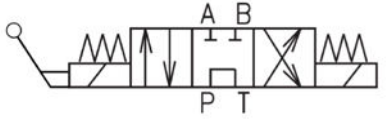
Cetop 3 Valves w/ single coils & LED DIN plugs (...continued)

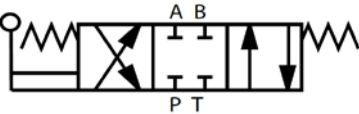
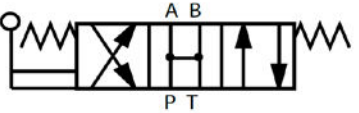
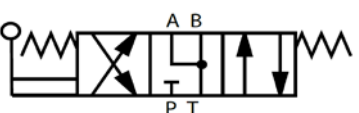
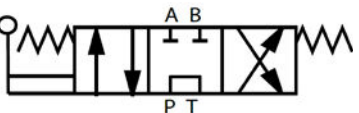
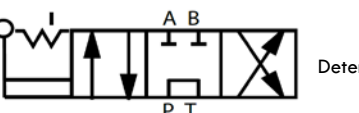
Recommended maximum flow 40 lpm @ 210 bar

Part #	List Price \$	Coil Voltage	Max Press Tank	Diagram	
4DWG6-EB-60-DC12-N-Z5L	215.00	12v DC	210 bar	EB	
4DWG6-EB-60-DC24-N-Z5L	215.00	24v DC	210 bar		
4DWG6-EB-60-AC220-N-Z5L	215.00	240v AC	160 bar		
4DWG6-EA-60-DC12-N-Z5L	215.00	12v DC	210 bar	EA	
4DWG6-EA-60-DC24-N-Z5L	215.00	24v DC	210 bar		
4DWG6-EA-60-AC220-N-Z5L	215.00	240v AC	160 bar		



Cetop 3 Valves w/ dual coils, LED DIN plugs & manual lever

Part #	List Price \$	Coil Voltage	Max Press Tank	Diagram	
4DWG6C-EL-E/DC12Z5L	398.00	12v DC	160 bar	C	
4DWG6C-EL-E/DC24Z5L	398.00	24v DC	160 bar		
4DWG6C-EL-E/DC220Z5L	398.00	240v AC	160 bar		
4DWG6E-EL-E/DC12Z5L	430.00	12v DC	160 bar	E	
4DWG6E-EL-E/DC24Z5L	430.00	24v DC	160 bar		
4DWG6E-EL-E/DC220Z5L	430.00	240v AC	160 bar		
4DWG6J-EL-E/DC12Z5L	430.00	12v DC	160 bar	J	
4DWG6J-EL-E/DC24Z5L	430.00	24v DC	160 bar		
4DWG6J-EL-E/DC220Z5L	430.00	240v AC	160 bar		
4DWG6G-EL-E/DC12Z5L	430.00	12v DC	160 bar	G	
4DWG6G-EL-E/DC24Z5L	430.00	24v DC	160 bar		
4DWG6G-EL-E/DC220Z5L	430.00	240v AC	160 bar		
4DWG6H-EL-E/DC12Z5L	430.00	12v DC	160 bar	H	
4DWG6H-EL-E/DC24Z5L	430.00	24v DC	160 bar		
4DWG6H-EL-E/DC220Z5L	430.00	240v AC	160 bar		

Cetop 3 Manual Valves						Diagram
Part #	List Price \$	Coil Voltage	Max Press Tank	Transition		
4DWMG6-E-50	266.00	Manual	210 bar	Closed	E	
4DWMG6-H-50	266.00	Manual	210 bar	Open	H	
4DWMG6-J-50	266.00	Manual	210 bar	A+B to tank	J	
4DWMG6-G-50	278.00	Manual	210 bar	Open	G	
4DWMG6-G-50-F	292.00	Manual Spring Return Detent	210 bar	Open	G	 Detent
4DWMG6-C-50	266.00	Manual	210 bar	Open	C	
4DWMG6-C-50-F	279.00	Manual Spring Return Detent	210 bar	Open	C	 Detent



Aidro Cetop 5 Solenoid Valves

ED Series (Cetop 5 flow rate with Cetop 3 coils)

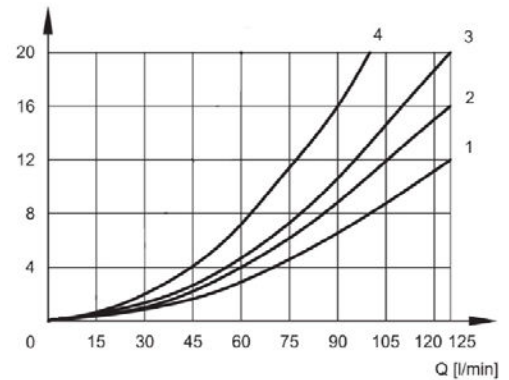
	SOLENOID
Nominal Flow Rate	100 lpm
Maximum Recommended Flow	125 lpm
Maximum Nominal Pressure P _{A,B}	320 bar
Maximum Pressure on T Port	210 bar
Duty Cycle	100%
Bolts (single valve)	M6x35mm (tighten to 12Nm)



Typical Diagrams

Typical Δp -Q curves for valves HD5-ED-* in standard configuration. Measured with mineral oil at 32mm²/s and T=40°C.

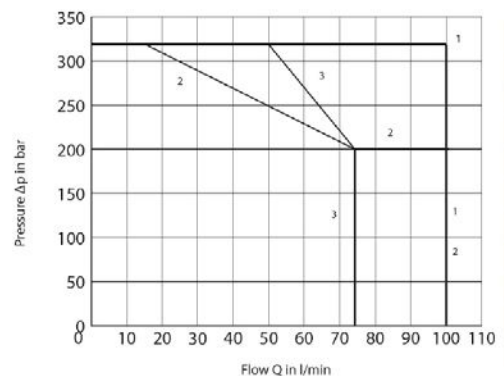
Spool	P-A	P-B	A-T	B-T	P-T
0C	1	1	1	1	1
1C	1	1	2	2	-
3C	1	1	1	1	-
4C	4	4	4	4	1
1LL	2	2	3	3	-
1LLb	2	2	3	3	-



Hydraulic Limit of Use

Δp -Q characteristics limits for safe use of HD5-ED-* solenoid operated valves. Measured with mineral oil at 32mm²/s and T=40°C.

Spool	Limit	Spool	Limit
1C	1	4ML	3
4C	3	1ML	1
0C	1	1MLb	1
3C	2	1LLb	1
1LL	1	4MLb	3
3ML	2		



HYDRAULIC FLUID

Seals and materials used on standard HD5-* valves are fully compatible with hydraulic fluids of mineral base, upgrading with antifoaming and antioxidising agents.

The hydraulic fluid must be kept clear and filtered to ISO4406 class 19/17/14, or better, and used in a recommended viscosity range from 10cSt to 60cSt.

Cetop 5 Solenoid Valves (AIDRO)

ED Series (Cetop 5 flow rate with Cetop 3 coils)

Part #	List Price \$	Coil Voltage	Diagram
HD5-ED-0C-012C/10	647.00	12v DC	H
HD5-ED-0C-024C/10	647.00	24v DC	
HD5-ED-0C-230A/10	712.00	230v AC	
HD5-ED-0C-115A/10	712.00	115v AC	
HD5-ED-1C-012C/10	647.00	12v DC	E
HD5-ED-1C-024C/10	647.00	24v DC	
HD5-ED-1C-230A/10	712.00	230v AC	
HD5-ED-1C-115A/10	712.00	115v AC	
HD5-ED-3C-012C/10	647.00	12v DC	J
HD5-ED-3C-024C/10	647.00	24v DC	
HD5-ED-3C-230A/10	712.00	230v AC	
HD5-ED-3C-115A/10	712.00	115v AC	
HD5-ED-4C-012C/10	771.00	12v DC	G
HD5-ED-4C-024C/10	771.00	24v DC	
HD5-ED-4C-230A/10	834.00	230v AC	
HD5-ED-4C-115A/10	834.00	115v AC	

Cetop 5 ED uses low power coils - page 176

DIN plugs/accessories
See page 177



Cetop 5 Solenoid Valves (AIDRO)

ED Series (Cetop 5 flow rate with Cetop 3 coils)

Part #	List Price \$	Coil Voltage	Diagram
HD5-ED-0LL-012C/10	534.00	12v DC	
HD5-ED-0LL-024C/10	534.00	24v DC	
HD5-ED-0LL-230A/10	569.00	230v AC	
HD5-ED-0LL-115A/10	569.00	115v AC	
HD5-ED-0ML-012C/10	534.00	12v DC	
HD5-ED-0ML-024C/10	534.00	24v DC	
HD5-ED-0ML-230A/10	567.00	230v AC	
HD5-ED-0ML-115A/10	567.00	115v AC	
HD5-ED-1LL-012C/10	534.00	12v DC	
HD5-ED-1LL-024C/10	534.00	24v DC	
HD5-ED-1LL-230A/10	567.00	230v AC	
HD5-ED-1LL-115A/10	567.00	115v AC	
HD5-ED-1ML-012C/10	534.00	12v DC	
HD5-ED-1ML-024C/10	534.00	24v DC	
HD5-ED-1ML-230A/10	567.00	230v AC	
HD5-ED-1ML-115A/10	567.00	115v AC	
HD5-ED-3ML-012C/10	534.00	12v DC	
HD5-ED-3ML-024C/10	534.00	24v DC	
HD5-ED-3ML-230A/10	567.00	230v AC	
HD5-ED-3ML-115A/10	567.00	115v AC	
HD5-ED-4ML-012C/10	658.00	12v DC	
HD5-ED-4ML-024C/10	658.00	24v DC	
HD5-ED-4ML-230A/10	690.00	230v AC	
HD5-ED-4ML-115A/10	690.00	115v AC	



DIN plugs/accessories
See page 177

Cetop 5 ED uses low
power coils - page 176

Aidro Cetop 5 Solenoid Valves

ES Series (high power BO5 coils)

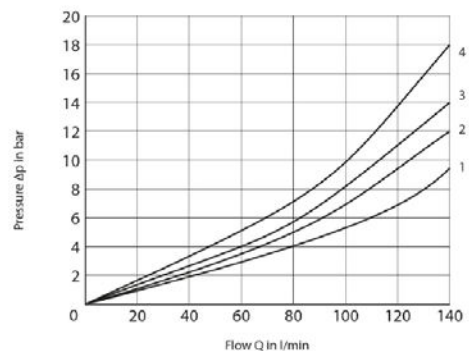
	SOLENOID
Nominal Flow Rate	120 lpm
Maximum Recommended Flow	See graphs
Maximum Nominal Pressure P _{A,B}	320 bar
Maximum Pressure on T Port	210 bar
Duty Cycle	100%
Bolts (single valve)	M6x35mm (tighten to 12Nm)



Typical Diagrams

Typical Δp -Q curves for valves HD5-ES-* in standard configuration. Measured with mineral oil at 32mm²/s and T=40°C.

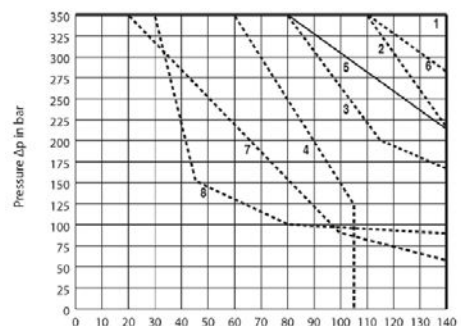
Spool	P-A	P-B	A-T	B-T	P-T
0C	1	1	2	2	1
1C	1	1	2	2	-
3C	1	1	2	2	-
4C	3	3	4	4	1
OLL	1	1	1	3	-
1LL	1	1	2	2	-
0ML	-	1	2	-	1
1ML	-	1	2	-	-
3ML	-	1	2	-	-
4ML	3	-	-	4	1



Hydraulic Limit of Use

Δp -Q characteristics limits for safe use of HD5-ES-* solenoid operated valves. Measured with mineral oil at 32mm²/s and T=40°C.

Spool	Limit	Spool	Limit
0C	1	4C	3
1C	1	OLL	2
0ML	1	1LL	2
1ML	1	1LLb	2
3C	5	4MLb	3
3ML	5		



HYDRAULIC FLUID

Seals and materials used on standard HD5-* valves are fully compatible with hydraulic fluids of mineral base, upgrading with antifoaming and antioxidising agents.

The hydraulic fluid must be kept clear and filtered to ISO4406 class 19/17/14, or better, and used in a recommended viscosity range from 10cSt to 60cSt.

Cetop 5 Solenoid Valves (AIDRO) High Power

ES Series (high power BO5 coils)

Part #	List Price \$	Coil Voltage	Diagram
HD5-ES-0C-012C/20	775.00	12v DC	H
HD5-ES-0C-024C/20	775.00	24v DC	
HD5-ES-0C-230A/20	838.00	230v AC	
HD5-ES-0C-115A/20	838.00	115v AC	
HD5-ES-1C-012C/20	775.00	12v DC	E
HD5-ES-1C-024C/20	775.00	24v DC	
HD5-ES-1C-230A/20	838.00	230v AC	
HD5-ES-1C-115A/20	838.00	115v AC	
HD5-ES-3C-012C/20	750.00	12v DC	J
HD5-ES-3C-024C/20	750.00	24v DC	
HD5-ES-3C-230A/20	836.00	230v AC	
HD5-ES-3C-115A/20	836.00	115v AC	
HD5-ES-4C-012C/20	905.00	12v DC	G
HD5-ES-4C-024C/20	905.00	24v DC	
HD5-ES-4C-230A/20	967.00	230v AC	
HD5-ES-4C-115A/20	967.00	115v AC	



DIN plugs/accessories
See page 177

Cetop 5 Solenoid Valves (AIDRO) High Power

ES Series (high power BO5 coils)

Part #	List Price \$	Coil Voltage	Diagram
HD5-ES-0LL-012C/20	596.00	12v DC	
HD5-ES-0LL-024C/20	596.00	24v DC	
HD5-ES-0LL-230A/20	627.00	230v AC	
HD5-ES-0LL-115A/20	627.00	115v AC	
HD5-ES-0ML-012C/20	596.00	12v DC	
HD5-ES-0ML-024C/20	596.00	24v DC	
HD5-ES-0ML-230A/20	627.00	230v AC	
HD5-ES-0ML-115A/20	627.00	115v AC	
HD5-ES-1LL-012C/20	596.00	12v DC	
HD5-ES-1LL-024C/20	596.00	24v DC	
HD5-ES-1LL-230A/20	627.00	230v AC	
HD5-ES-1LL-115A/20	627.00	115v AC	
HD5-ES-1ML-012C/20	596.00	12v DC	
HD5-ES-1ML-024C/20	596.00	24v DC	
HD5-ES-1ML-230A/20	627.00	230v AC	
HD5-ES-1ML-115A/20	627.00	115v AC	
HD5-ES-3ML-012C/20	596.00	12v DC	
HD5-ES-3ML-024C/20	596.00	24v DC	
HD5-ES-3ML-230A/20	627.00	230v AC	
HD5-ES-3ML-115A/20	627.00	115v AC	
HD5-ES-4ML-012C/20	725.00	12v DC	
HD5-ES-4ML-024C/20	725.00	24v DC	
HD5-ES-4ML-230A/20	757.00	230v AC	
HD5-ES-4ML-115A/20	757.00	115v AC	

DIN plugs/accessories
See page 177



Cetop 5 Valves w/ dual coils & LED DIN plugs

Recommended maximum flow 80 lpm @ 210 bar

Part #	List Price \$	Coil Voltage	Max Press Tank		Diagram
4DWG10-E-30-DC12-N-Z5L	397.00	12v DC	210 bar	E	
4DWG10-E-30-DC24-N-Z5L	397.00	24v DC	210 bar		
4DWG10-E-30-AC220-N-Z5L	397.00	240v AC	160 bar		
4DWG10-H-30-DC12-N-Z5L	397.00	12v DC	210 bar	H	
4DWG10-H-30-DC24-N-Z5L	397.00	24v DC	210 bar		
4DWG10-H-30-AC220-N-Z5L	397.00	240v AC	160 bar		
4DWG10-J-30-DC12-N-Z5L	397.00	12v DC	210 bar	J	
4DWG10-J-30-DC24-N-Z5L	397.00	24v DC	210 bar		
4DWG10-J-30-AC220-N-Z5L	397.00	240v AC	160 bar		
4DWG10-G-30-DC12-N-Z5L	397.00	12v DC	210 bar	G	
4DWG10-G-30-DC24-N-Z5L	397.00	24v DC	210 bar		
4DWG10-G-30-AC220-N-Z5L	397.00	240v AC	160 bar		



Single Coil table on following page

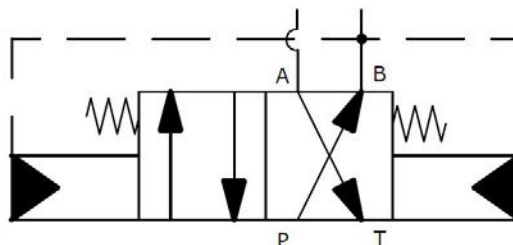
Cetop 5 Valves w/ single coils & LED DIN plugs

Recommended maximum flow 80 lpm @ 210 bar

Part #	List Price \$	Coil Voltage	Max Press Tank	Diagram
4DWG10-C-30-DC12-N-Z5L	328.00	12v DC	210 bar	
4DWG10-C-30-DC24-N-Z5L	328.00	24v DC	210 bar	
4DWG10-C-30-AC220-N-Z5L	328.00	240v AC	160 bar	
4DWG10-D-30-DC12-N-Z5L	328.00	12v DC	210 bar	
4DWG10-D-30-DC24-N-Z5L	328.00	24v DC	210 bar	
4DWG10-D-30-AC220-N-Z5L	328.00	240v AC	160 bar	
4DWG10-HA-30-DC12-N-Z5L	328.00	12v DC	210 bar	
4DWG10-HA-30-DC24-N-Z5L	328.00	24v DC	210 bar	
4DWG10-HA-30-AC220-N-Z5L	328.00	240v AC	160 bar	
4DWG10-EB-30-DC12-N-Z5L	328.00	12v DC	210 bar	
4DWG10-EB-30-DC24-N-Z5L	328.00	24v DC	210 bar	
4DWG10-EB-30-AC220-N-Z5L	328.00	240v AC	160 bar	
4DWG10-EA-30-DC12-N-Z5L	328.00	12v DC	210 bar	
4DWG10-EA-30-DC24-N-Z5L	328.00	24v DC	210 bar	
4DWG10-EA-30-AC220-N-Z5L	328.00	240v AC	160 bar	

Auto-Cycling Valve

Part #	List Price \$	Description
ES610-41	929.00	Cetop 3 autocycling valve
ES610-42	1094.00	Cetop 5 autocycling valve



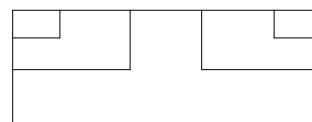
Cetop 7 Pilot-Operated Valves w/ coils & LED DIN plugs

Recommended maximum flow 200 lpm @ 210 bar

Part #	List Price \$	Coil Voltage	Max Press Tank	Diagram	
4DWHG16E60/DC12ET	877.00	12v DC	160 bar	E	
4DWHG16E60/DC24ET	877.00	24v DC	160 bar		
4DWHG16E60/AC220ET	877.00	240v AC	100 bar		
4DWHG16H60/DC12ET	877.00	12v DC	160 bar	H	
4DWHG16H60/DC24ET	877.00	24v DC	160 bar		
4DWHG16H60/AC220ET	877.00	240v AC	100 bar		
4DWHG16J60/DC12ET	877.00	12v DC	160 bar	J	
4DWHG16J60/DC24ET	877.00	24v DC	160 bar		
4DWHG16J60/AC220ET	877.00	240v AC	100 bar		
4DWHG16G60/DC12ET	877.00	12v DC	160 bar	G	
4DWHG16G60/DC24ET	877.00	24v DC	160 bar		
4DWHG16G60/AC220ET	877.00	240v AC	100 bar		
4DWHG16C60/DC12ET	748.00	12v DC	160 bar	C	
4DWHG16C60/DC24ET	748.00	24v DC	160 bar		
4DWHG16C60/AC220ET	748.00	240v AC	100 bar		
4DWHG16D60/DC12ET	748.00	12v DC	160 bar	D	
4DWHG16D60/DC24ET	748.00	24v DC	160 bar		
4DWHG16D60/AC220ET	748.00	240v AC	100 bar		

Cetop 7 Subplates

Part #	List Price \$	Stations	Function	Ports	Material
BS72S	396.00	1	Rear Ports	1" BSPP	Steel



See page 176 for coil options

Valve Coils (4DWG6)

Part #	List Price \$	Voltage	Amp	Core Size	Length	Connector	Valve
COIL-06-12VDC	66.00	12v DC	2.66a	23.5mm	50.7mm	DIN 43650-A	4DWG6
COIL-06-24VDC	66.00	24v DC	1.45a	23.5mm	50.7mm	DIN 43650-A	4DWG6
COIL-06-48VDC	66.00	48v DC	0.7a	23.5mm	50.7mm	DIN 43650-A	4DWG6
COIL-06-110VAC	66.00	110v AC	0.35a	23.5mm	50.7mm	DIN 43650-A	4DWG6
COIL-06-220VAC	66.00	220v AC	0.17a	23.5mm	50.7mm	DIN 43650-A	4DWG6

Valve Coils (4DWG10)

Part #	List Price \$	Voltage	Amp	Core Size	Length	Connector	Valve
COIL-10-12VDC	87.00	12v DC	4.0a	31.8mm	75.2mm	DIN 43650-A	4DWG10
COIL-10-24VDC	87.00	24v DC	2.0a	31.8mm	75.2mm	DIN 43650-A	4DWG10
COIL-10-110VAC	87.00	110v AC	0.5a	31.8mm	75.2mm	DIN 43650-A	4DWG10
COIL-10-220VAC	87.00	220v AC	0.25a	31.8mm	75.2mm	DIN 43650-A	4DWG10



Valve Coils (HD5-ES High Power)

Part #	List Price \$	Voltage	Amp	Core Size	Length	Connector	Valve
BO5-12C	133.00	12v DC	3.17	31mm	73.5	DIN 43650-A	HD5-ES
BO5-24C	133.00	24v DC	1.73	31mm	73.5	DIN 43650-A	HD5-ES
BO5-48C	133.00	48v AC	0.865	31mm	73.5	DIN 43650-A	HD5-ES
BO5-115A	166.00	115v AC	0.40	31mm	73.5	DIN 43650-A	HD5-ES
BO5-230A	166.00	230v AC	0.20	31mm	73.5	DIN 43650-A	HD5-ES

Valve Coils (HD3-ES / HD5-ED Low Power)

Part #	List Price \$	Voltage	Amp	Core Size	Length	Connector	Valve
BO3-12R3	57.00	12v DC	2.5	22 mm	52 mm	DIN 43650-A	HD3-ES / HD5-ED
BO3-24R4	57.00	24v DC	1.0	22 mm	52 mm	DIN 43650-A	HD3-ES / HD5-ED
BO3-48C	57.00	48v AC	0.6	22 mm	52 mm	DIN 43650-A	HD3-ES / HD5-ED
BO3-115A	88.00	115v AC	0.26	22 mm	52 mm	DIN 43650-A	HD3-ES / HD5-ED
BO3-230A	88.00	230v AC	0.14	22 mm	52 mm	DIN 43650-A	HD3-ES / HD5-ED



B05



B03

HD3-ES / HD5-ED Spare Parts & Bolt Kits

Part #	List Price \$	Description
KIT-03K	58.00	Manual override nut
T03-T	190.00	Soft shift kit
TAP-03-OR	44.00	Nut & spring kit
HD3-01-BK	5.00	Cetop 3 - 1 section bolt kit
HD3-02-BK	19.00	Cetop 3 - 2 section bolt kit
HD3-03-BK	26.00	Cetop 3 - 3 section bolt kit
HD5-01-BK-ED	5.00	Cetop 5 - 1 section bolt kit (ED Series)
HD5-02-BK-ED	12.00	Cetop 5 - 2 section bolt kit (ED Series)
HD5-03-BK-ED	21.00	Cetop 5 - 3 section bolt kit (ED Series)

HD5-ES Spare Parts & Bolt Kits

Part #	List Price \$	Description
WK-05	36.00	Manual override nut
TAP-05-20	51.00	Nut & spring kit
HD5-01-BK-ES	5.00	Cetop 5 - 1 section bolt kit (ES Series)
HD5-02-BK-ES	12.00	Cetop 5 - 2 section bolt kit (ES Series)
HD5-03-BK-ES	21.00	Cetop 5 - 3 section bolt kit (ES Series)

Manual Override Nut (4DWG6)

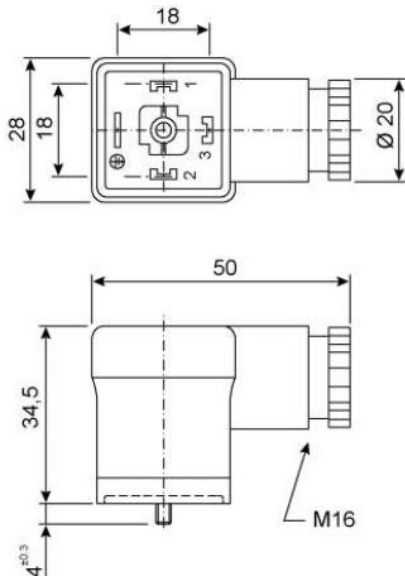
Part #	List Price \$	Description	Valve
4DWE6-DT-M-S	35.00	Fits 14mm solenoid thread	4DWG6
4DWE6-DT-M-L	35.00	Fits 22mm solenoid thread	4DWG6



DIN Plugs

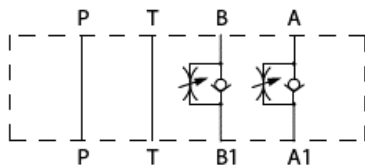
Part #	List Price \$	Description	DIN Size	Terminals	Body	LED
DP-IP67-AC/DC-250	17.00	1-250V AC+DC, IP67	DIN 43650-A	3	Clear	Yes
DP-IP67-AC/DC-38	17.00	1-38V AC+DC, IP67	DIN 43650-A	3	Clear	Yes
DP-IP67-AC/DC-3M	35.00	1-38V AC+DC, 3m Cable, IP67	DIN 43650-A	3	Clear	Yes
DP-LED-AC	11.00	AC	DIN 43650-A	3	Clear	Yes
DP-LED-DC	11.00	DC	DIN 43650-A	3	Clear	Yes
DP-REC-LV	29.00	Rectifier AC to DC (1-48v)	DIN 43650-A	3	Clear	Yes
DP-REC	29.00	Rectifier AC to DC (70-250v)	DIN 43650-A	3	Clear	No

Note: DIN 43650-A = ISO 4400

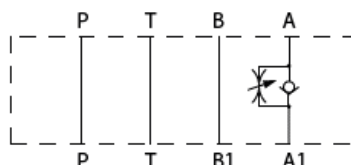


Flow Control Subplates (Meter In)

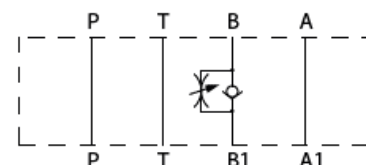
Part #	List Price \$	Function	Maximum Recommended Flow Rate	Maximum Nominal Pressure
AM3-FX-AB/10	308.00	Flow control on A & B, meter in	60 lpm	320 bar
AM3-FX-A/10	278.00	Flow control on A, meter in	60 lpm	320 bar
AM3-FX-B/10	278.00	Flow control on B, meter in	60 lpm	320 bar



FX-AB



FX-A



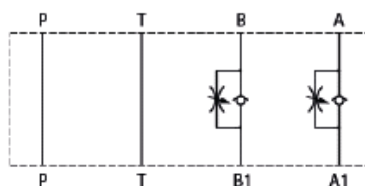
FX-B



Bolt kit required
Options on page 177

Flow Control Subplates (Meter Out)

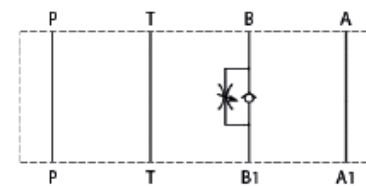
Part #	List Price \$	Function	Maximum Recommended Flow Rate	Maximum Nominal Pressure
AM3-FC-AB/10	308.00	Flow control on A & B, meter in	60 lpm	320 bar
AM3-FC-A/10	278.00	Flow control on A, meter in	60 lpm	320 bar
AM3-FC-B/10	278.00	Flow control on B, meter in	60 lpm	320 bar



FC-AB



FC-A



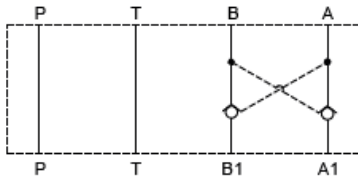
FC-B



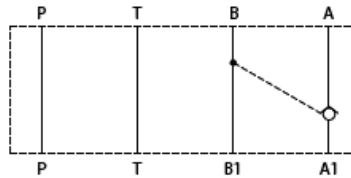
Bolt kit required
Options on page 177

Pilot Check Subplates

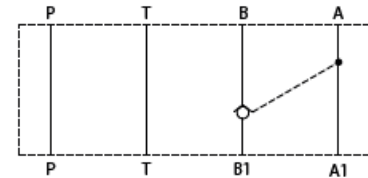
Part #	List Price \$	Function	Maximum Recommended Flow Rate	Maximum Nominal Pressure
AM3-CP-AB/10	311.00	Pilot check on A & B	60 lpm	320 bar
AM3-CP-A/10	287.00	Pilot check on A	60 lpm	320 bar
AM3-CP-B/10	287.00	Pilot check on B	60 lpm	320 bar



CP-AB



CP-A



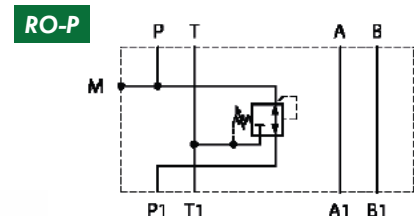
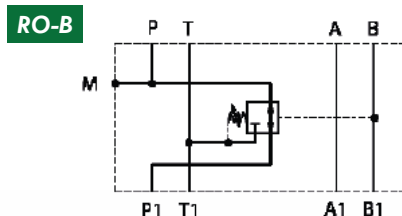
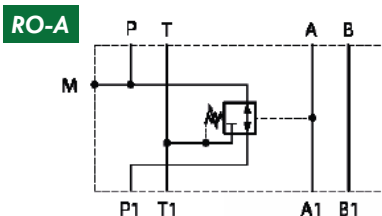
CP-B



Bolt kit required
Options on page 177

Pressure Reducing Subplates (No Check)

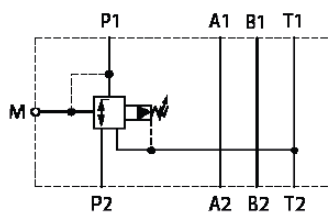
Part #	List Price \$	Function	Pressure Reducing Range	Maximum Recommended Flow Rate	Maximum Nominal Pressure
AM3-RO-P-32/10	522.00	Pressure reducing in P	3-35 bar	60 lpm	320 bar
AM3-RO-A-32/10	559.00	Pressure reducing in A	3-35 bar	60 lpm	320 bar
AM3-RO-B-32/10	559.00	Pressure reducing in B	3-35 bar	60 lpm	320 bar
AM3-RO-P-6.3/10	522.00	Pressure reducing in P	10-70 bar	60 lpm	320 bar
AM3-RO-A-6.3/10	559.00	Pressure reducing in A	10-70 bar	60 lpm	320 bar
AM3-RO-B-6.3/10	559.00	Pressure reducing in B	10-70 bar	60 lpm	320 bar
AM3-RO-P-12.5/10	522.00	Pressure reducing in P	30-140 bar	60 lpm	320 bar
AM3-RO-A-12.5/10	559.00	Pressure reducing in A	30-140 bar	60 lpm	320 bar
AM3-RO-B-12.5/10	559.00	Pressure reducing in B	30-140 bar	60 lpm	320 bar
AM3-RO-P-25/10	522.00	Pressure reducing in P	60-280 bar	60 lpm	320 bar
AM3-RO-A-25/10	559.00	Pressure reducing in A	60-280 bar	60 lpm	320 bar
AM3-RO-B-25/10	559.00	Pressure reducing in B	60-280 bar	60 lpm	320 bar



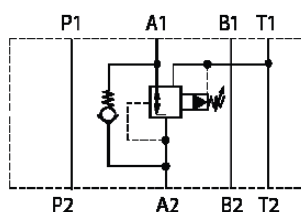
Bolt kit required
Options on page 177

Pressure Reducing Subplates (With Check)

Part #	List Price \$	Function	Pressure Range	Maximum Recommended Flow Rate	Maximum Nominal Pressure
AM3-RP-P-20/10	552.00	Pressure reducing in P	30-140 bar	60 lpm	320 bar
AM3-RP-AC-20/10	586.00	Pressure reducing in A	30-140 bar	60 lpm	320 bar
HD3-02-RP-BK	19.00	2 section bolt kit			
HD3-03-RP-BK	26.00	3 section bolt kit			



RP-P

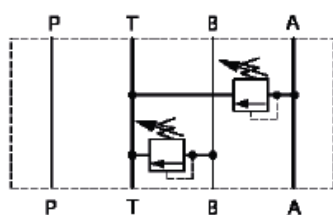


RP-AC

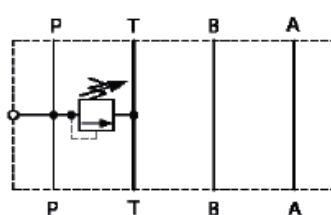


Direct Acting Pressure Relief Subplates

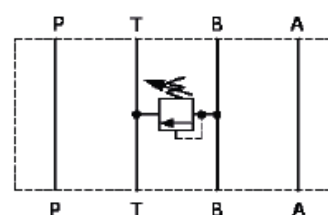
Part #	List Price \$	Function	Pressure Range	Maximum Recommended Flow Rate	Maximum Nominal Pressure
AM3-MO-P-12.5/10	308.00	Direct acting relief on P	25-125 bar	60 lpm	320 bar
AM3-MO-B-12.5/10	308.00	Direct acting relief on B	25-125 bar	60 lpm	320 bar
AM3-MO-BA-12.5/10	447.00	Direct acting relief on A & B	25-125 bar	60 lpm	320 bar
AM3-MO-P-20/10	308.00	Direct acting relief on P	40-250 bar	60 lpm	320 bar
AM3-MO-B-20/10	308.00	Direct acting relief on B	40-250 bar	60 lpm	320 bar
AM3-MO-BA-20-20/10	447.00	Direct acting relief on A & B	40-250 bar	60 lpm	320 bar
AM3-MO-P-32/10	308.00	Direct acting relief on P	100-320 bar	60 lpm	320 bar
AM3-MO-B-32/10	308.00	Direct acting relief on B	100-320 bar	60 lpm	320 bar
AM3-MO-BA-32-32/10	447.00	Direct acting relief on A & B	100-320 bar	60 lpm	320 bar



MO-BA



MO-P



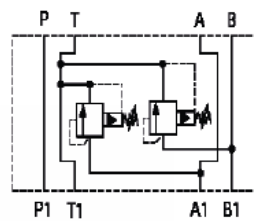
MO-B



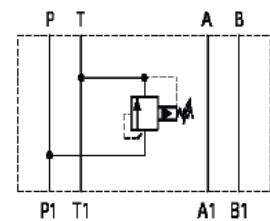
Bolt kit required
Options on page 177

Pilot Operated Pressure Relief Subplates

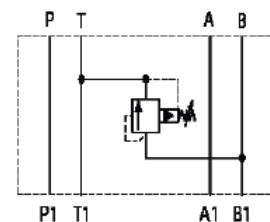
Part #	List Price \$	Function	Pressure Range	Maximum Recommended Flow Rate	Maximum Nominal Pressure
AM3-MP-P-6.3/10	446.00	Pilot operated relief on P	10-70 bar	60 lpm	320 bar
AM3-MP-B-6.3/10	446.00	Pilot operated relief on B	10-70 bar	60 lpm	320 bar
AM3-MP-BA-6.3-6.3/10	723.00	Pilot operated relief on A & B	10-70 bar	60 lpm	320 bar
AM3-MP-P-12.5/10	446.00	Pilot operated relief on P	10-140 bar	60 lpm	320 bar
AM3-MP-B-12.5/10	446.00	Pilot operated relief on B	10-140 bar	60 lpm	320 bar
AM3-MP-BA-12.5-12.5/10	723.00	Pilot operated relief on A & B	10-140 bar	60 lpm	320 bar
AM3-MP-P-20/10	446.00	Pilot operated relief on P	20-210 bar	60 lpm	320 bar
AM3-MP-B-20/10	446.00	Pilot operated relief on B	20-210 bar	60 lpm	320 bar
AM3-MP-BA-20-20/10	723.00	Pilot operated relief on A & B	20-210 bar	60 lpm	320 bar
AM3-MP-P-32/10	446.00	Pilot operated relief on P	20-320 bar	60 lpm	320 bar
AM3-MP-B-32/10	446.00	Pilot operated relief on B	20-320 bar	60 lpm	320 bar
AM3-MP-BA-32-32/10	723.00	Pilot operated relief on A & B	20-320 bar	60 lpm	320 bar



MP-BA



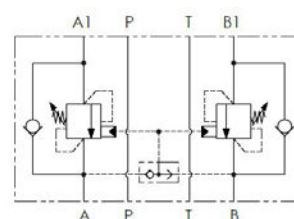
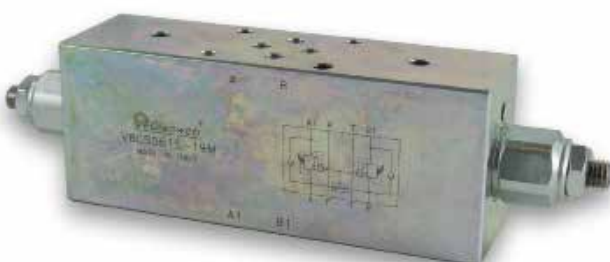
MP-P



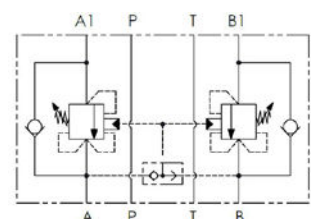
MP-B

Cetop 3 Counterbalance Valves

Part #	List Price \$	Maximum Pressure	Centre	Maximum Flow	Ratio
VBCS0601S	390.00	210 bar	Open	40 lpm	1:4.25
VBCS0602S	390.00	350 bar	Open	40 lpm	1:4.25
VBCT0601S	454.00	210 bar	Closed	40 lpm	1:4.25
VBCT0602S	454.00	350 bar	Closed	40 lpm	1:4.25



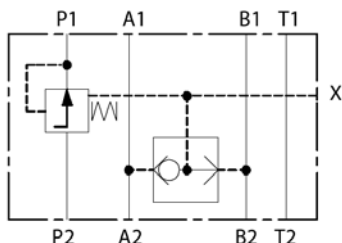
VBCS



VBCT

2-Way Pressure Compensator Valve (Meter In)

Part #	List Price \$	Maximum Pressure	Maximum Flow	Fixed Differential Setting
NEW AM3-PC-P/10	540.00	320 bar	32 lpm	10 bar

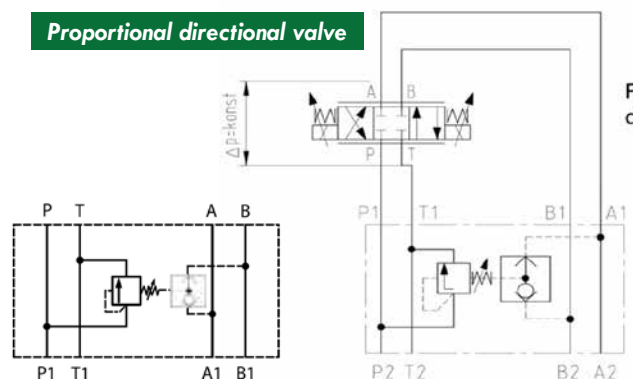


3-Way Pressure Compensator Valve with Load

Part #	List Price \$	Maximum Pressure	Maximum Flow	Adj. Differential Setting
NEW AM3-LS-P3/20	705.00	320 bar	40 lpm	5-40 bar



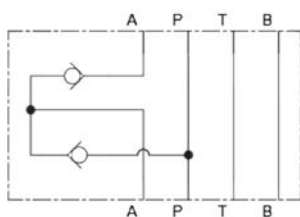
Proportional directional valve



Pressure compensator

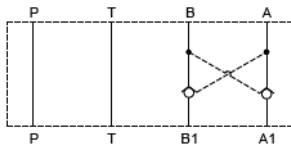
Regenerative Valve

Part #	List Price \$	Maximum Pressure	Maximum Flow	Function
NEW AM3-RGT-AP/10	348.00	350 bar	30 lpm	Flow from A-P

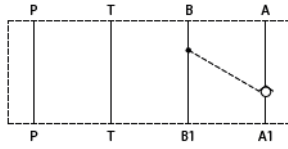


Pilot Check Subplates

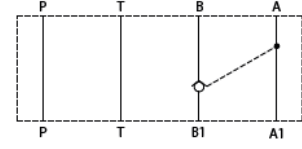
Part #	List Price \$	Maximum Pressure	Function
Z2DS6-50	189.00	250 bar	Pilot check on A & B
Z2DS6A-50	167.00	250 bar	Pilot check on A
Z2DS6B-50	167.00	250 bar	Pilot check on B



DS6



DS6A

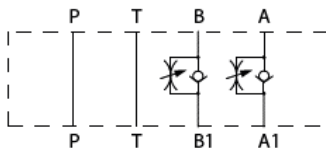


DS6B

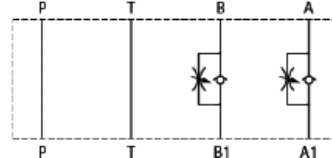


Flow Control Subplates (Steel Body)

Part #	List Price \$	Maximum Pressure	Function
Z2FDS630-S	200.00	250 bar	Flow control on A & B, meter in
Z2FDS630-S2	200.00	250 bar	Flow control on A & B, meter out



S

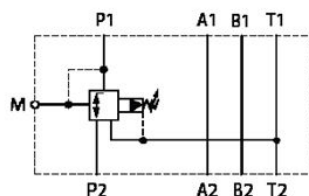


S2

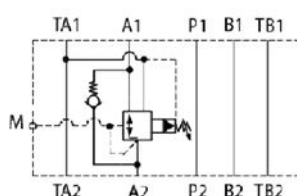


Pressure Reducing Subplates (Steel Body)

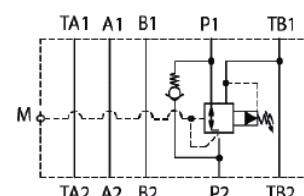
Part #	List Price \$	Maximum Pressure	Function
ZPR6DP2-30-210-Y-M	231.00	250 bar	Pressure reducing in P, 70-210 bar
ZPR6DA2-30-210-Y-M	231.00	250 bar	Pressure reducing in A, 70-210 bar
ZPR6DB2-30-210-Y-M	231.00	250 bar	Pressure reducing in B, 70-210 bar



DP



DA

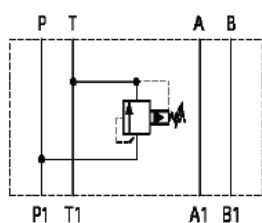


DB

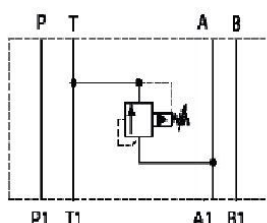


Relief Subplates (Steel Body)

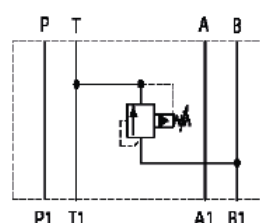
Part #	List Price \$	Maximum Pressure	Function
ZPB6VP-1-315	216.00	250 bar	Relief on P, 70-250 bar
ZPB6VA-1-315	216.00	250 bar	Relief on A, 70-250 bar
ZPB6VB-1-315	216.00	250 bar	Relief on B, 70-250 bar
ZPB6VC-1-315	362.00	250 bar	Relief on A & B, 70-250 bar



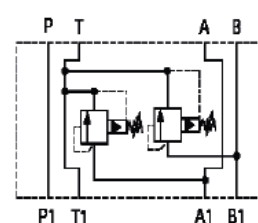
P



A



B

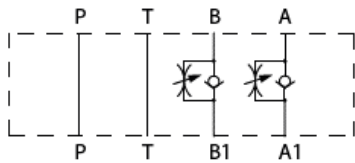


A & B

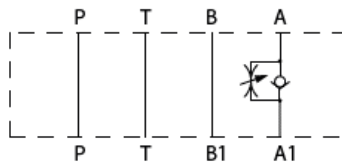


Flow Control Subplates (Meter In)

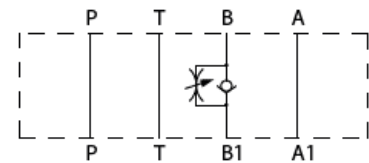
Part #	List Price \$	Function	Maximum Recommended Flow Rate	Maximum Nominal Pressure
AM5-FX-AB/10	537.00	Flow control on A & B, meter in	100 lpm	320 bar
AM5-FX-A/10	506.00	Flow control on A, meter in	100 lpm	320 bar
AM5-FX-B/10	506.00	Flow control on B, meter in	100 lpm	320 bar



FX-AB



FX-A



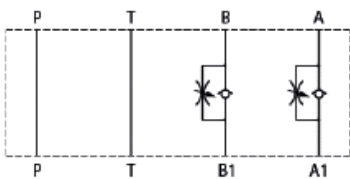
FX-B



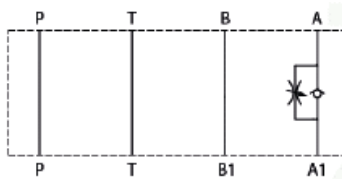
Bolt kit required
Options on page 177

Flow Control Subplates (Meter Out)

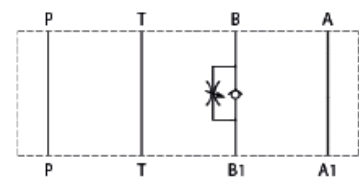
Part #	List Price \$	Function	Maximum Recommended Flow Rate	Maximum Nominal Pressure
AM5-FC-AB/10	537.00	Flow control on A & B, meter in	100 lpm	320 bar
AM5-FC-A/10	506.00	Flow control on A, meter in	100 lpm	320 bar
AM5-FC-B/10	506.00	Flow control on B, meter in	100 lpm	320 bar



FC-AB



FC-A



FC-B



Bolt kit required
Options on page 177

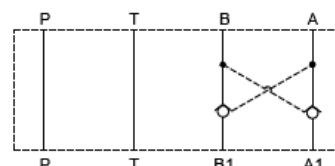
Pilot Check Subplates

Part #	List Price \$	Function	Maximum Recommended Flow Rate	Maximum Nominal Pressure
AM5-CP-AB/10	718.00	Pilot check on A & B	100 lpm	320 bar
AM5-CP-A/10	528.00	Pilot check on A	100 lpm	320 bar
AM5-CP-B/10	528.00	Pilot check on B	100 lpm	320 bar
AM5-CP-AB/20	718.00	Pilot check on A & B	140 lpm	350 bar
AM5-CP-A/20	643.00	Pilot check on A	140 lpm	350 bar
AM5-CP-B/20	643.00	Pilot check on B	140 lpm	350 bar

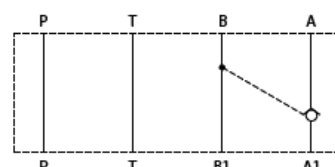
Bolt kit required
Options on page 177



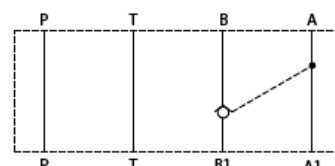
CP-AB



CP-B

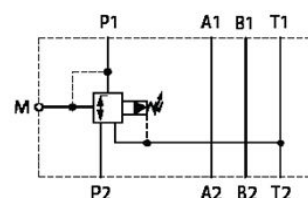


CP-A

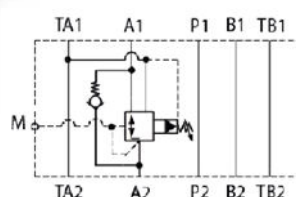


Pressure Reducing Subplates (With Check)

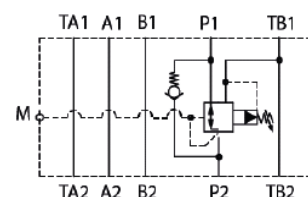
Part #	List Price \$	Function	Pressure Range	Max Recommended Flow Rate	Regulated Line Flow Rate	Max Nominal Pressure
AM5-RP-A-6.3/10	1301.00	Pressure reducing in A	5-70 bar	100 lpm	80 lpm	320 bar
AM5-RP-B-6.3/10	1301.00	Pressure reducing in B	5-70 bar	100 lpm	80 lpm	320 bar
AM5-RP-P-6.3/10	960.00	Pressure reducing in P	5-70 bar	100 lpm	80 lpm	320 bar
AM5-RP-A-20/10	1301.00	Pressure reducing in A	16-210 bar	100 lpm	80 lpm	320 bar
AM5-RP-B-20/10	1301.00	Pressure reducing in B	16-210 bar	100 lpm	80 lpm	320 bar
AM5-RP-P-20/10	960.00	Pressure reducing in P	16-210 bar	100 lpm	80 lpm	320 bar



RP-P



RP-A

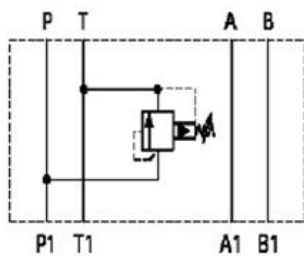


RP-B

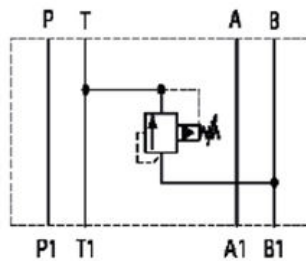
Bolt kit required
Options on page 177

Pilot Operated Pressure Relief Subplates

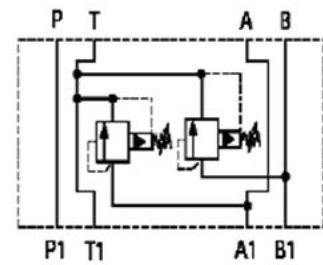
Part #	List Price \$	Function	Pressure Range	Maximum Recommended Flow Rate	Maximum Nominal Pressure
AM5-MP-P-6.3/10	632.00	Pilot operated relief on P	10-70 bar	100 lpm	320 bar
AM5-MP-A-6.3/10	662.00	Pilot operated relief on B	10-70 bar	100 lpm	320 bar
AM5-MP-BA-6.3-6.3/10	995.00	Pilot operated relief on A & B	10-70 bar	100 lpm	320 bar
AM5-MP-P-12.5/10	632.00	Pilot operated relief on P	10-140 bar	100 lpm	320 bar
AM5-MP-A-12.5/10	662.00	Pilot operated relief on B	10-140 bar	100 lpm	320 bar
AM5-MP-BA-12.5-12.5/10	995.00	Pilot operated relief on A & B	10-140 bar	100 lpm	320 bar
AM5-MP-P-20/10	632.00	Pilot operated relief on P	20-210 bar	100 lpm	320 bar
AM5-MP-A-20/10	662.00	Pilot operated relief on B	20-210 bar	100 lpm	320 bar
AM5-MP-BA-20-20/10	995.00	Pilot operated relief on A & B	20-210 bar	100 lpm	320 bar
AM5-MP-P-32/10	632.00	Pilot operated relief on P	20-320 bar	100 lpm	320 bar
AM5-MP-A-32/10	662.00	Pilot operated relief on B	20-320 bar	100 lpm	320 bar
AM5-MP-BA-32-32/10	995.00	Pilot operated relief on A & B	20-320 bar	100 lpm	320 bar



MP-P



MP-A



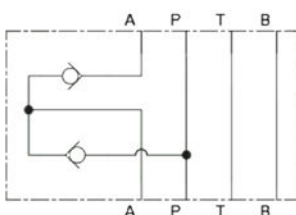
MP-BA



Bolt kit required
Options on page 177

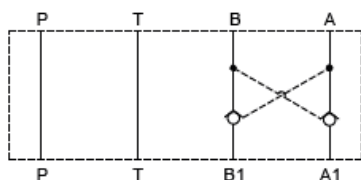
Regenerative Valve

Part #	List Price \$	Maximum Pressure	Maximum Flow	Function
NEW AM5-RGT	544.00	350 bar	80 lpm	Flow from B-P

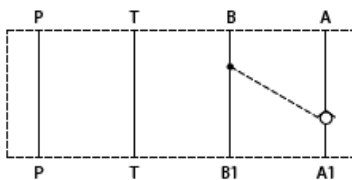


Pilot Check Subplates (Steel Body)

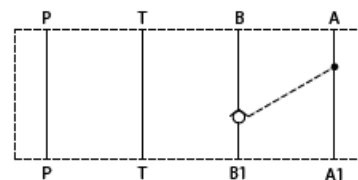
Part #	List Price \$	Maximum Pressure	Function
Z2DS10-10	279.00	250 bar	Pilot check on A & B
Z2DS10A-10	267.00	250 bar	Pilot check on A
Z2DS10B-10	267.00	250 bar	Pilot check on B



DS10



DS10A

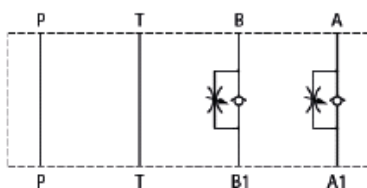


DS10B

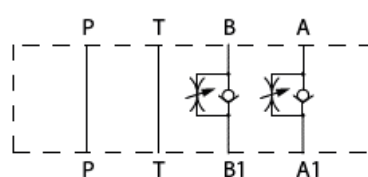


Flow Control Subplates (Steel Body)

Part #	List Price \$	Maximum Pressure	Function
Z2FDS1030-S	311.00	250 bar	Flow control on A & B, meter in
Z2FDS1030-S2	311.00	250 bar	Flow control on A & B, meter out



S

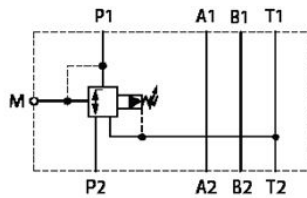


S2

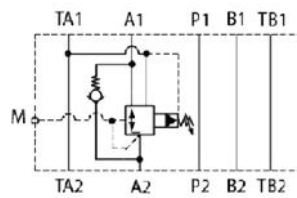


Pressure Reducing Subplates (Steel Body)

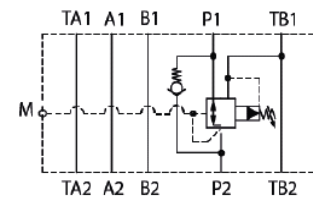
Part #	List Price \$	Maximum Pressure	Function
ZPR10DP2-30-210-Y-M	447.00	250 bar	Pressure reducing in P, 70-210 bar
ZPR10DA2-30-210-Y-M	447.00	250 bar	Pressure reducing in A, 70-210 bar
ZPR10DB2-30-210-Y-M	447.00	250 bar	Pressure reducing in B, 70-210 bar



P



A

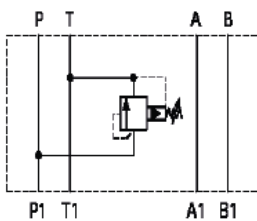


B

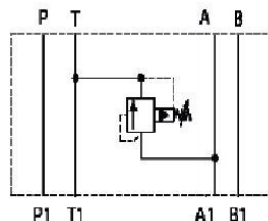


Relief Subplates (Steel Body)

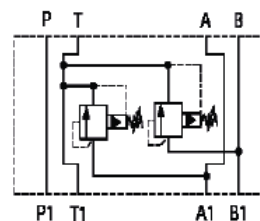
Part #	List Price \$	Maximum Pressure	Function
Z2PB10VP-1-315	306.00	250 bar	Relief on P, 70-250 bar
Z2PB10VA-1-315	280.00	250 bar	Relief on A, 70-250 bar
Z2PB10VB-1-315	280.00	250 bar	Relief on B, 70-250 bar
Z2PB10VC-1-315	408.00	250 bar	Relief on A & B, 70-250 bar



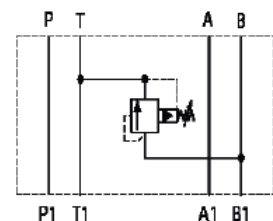
P



A



B



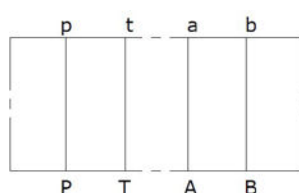
C



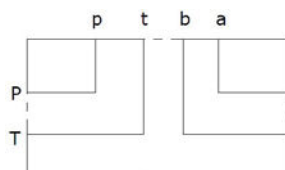
Cetop 3 Manifold Subplate

Part #	List Price \$	Port Position A/B/P/T	Port Size	Nominal Flow	Maximum Flow	Material
EA06-07-38	121.00	Rear	3/8" BSPP	30 lpm	70 lpm	Aluminium
ES06-07-38	150.00	Rear	3/8" BSPP	30 lpm	70 lpm	Steel
ES06-08-38	205.00	Side	3/8" BSPP	30 lpm	70 lpm	Steel
ES06-09-38	188.00	Side	3/8" BSPP	30 lpm	70 lpm	Steel
NEW PJ21286	165.00	Side	3/8" BSPP	30 lpm	70 lpm	Aluminium
EA06-09-38	140.00	Side	3/8" BSPP	30 lpm	70 lpm	Aluminium
EA06-08-38	156.00	Side Parallel	3/8" BSPP	30 lpm	70 lpm	Aluminium

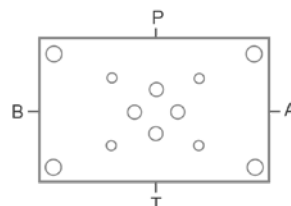
Note: 1 Station Subplates have no relief bar, gauge port or unloader cavity.



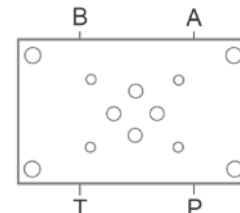
07-38



08-38, 09-38



EA06-09-38



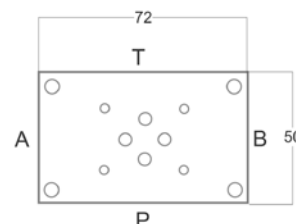
EA06-08-38



EA06-08-38

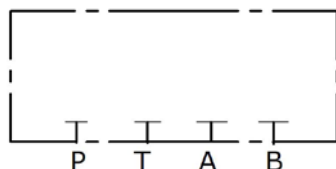


PJ21286

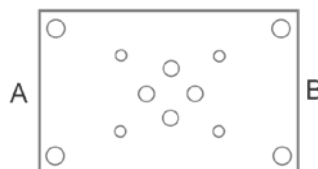


Cetop 3 Manifold Subplates

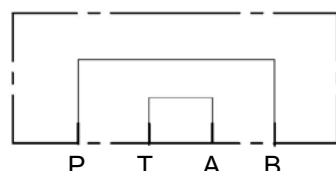
Part #	List Price \$	Description	Material
ES06-00-10	75.00	Cetop 3 blanking plate	Steel
ES06-00-20-3	130.00	Cetop 3 crossover plate P-B T-A	Steel
ES06-01-14-1	130.00	Cetop 3 subplate A + B ports 1/4" BSPP	Steel
ES06-01-14-4	130.00	Cetop 3 subplate P + T ports 1/4" BSPP	Steel



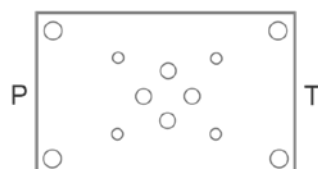
00-10



14-1



20-3



14-4

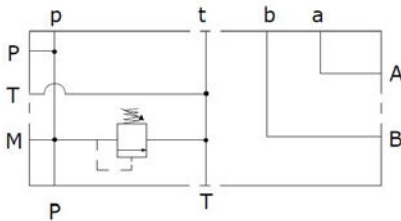


Cetop 3 Manifolds (1/2" BSPP Ports P+T)

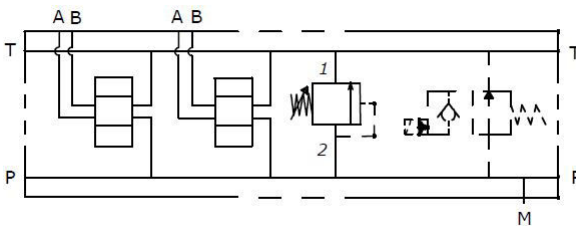
Part #	List Price \$	Stations	Relief Bar	A-B	P-T	Unloader Cavity	Gauge Port	Nominal Flow	Max Flow	Material
EA06-10-38-1-3-H	269.00	1	50-220 (M20)	3/8" BSPP	3/8" BSPP	n/a	1/4" BSPP	30 lpm	40 lpm	Aluminium
EA06-14-38-2-4-3-H	466.00	2	50-220 (M20)	3/8" BSPP	1/2" BSPP	Yes (SAE8-2)	1/4" BSPP	30 lpm	40 lpm	Aluminium
EA06-14-38-3-4-3-H	571.00	3	50-220 (M20)	3/8" BSPP	1/2" BSPP	Yes (SAE8-2)	1/4" BSPP	30 lpm	40 lpm	Aluminium
EA06-14-38-4-4-3-H	667.00	4	50-220 (M20)	3/8" BSPP	1/2" BSPP	Yes (SAE8-2)	1/4" BSPP	30 lpm	40 lpm	Aluminium
EA06-14-38-5-4-3-H	737.00	5	50-220 (M20)	3/8" BSPP	1/2" BSPP	Yes (SAE8-2)	1/4" BSPP	30 lpm	40 lpm	Aluminium
EA06-14-38-6-4-3-H	833.00	6	50-220 (M20)	3/8" BSPP	1/2" BSPP	Yes (SAE8-2)	1/4" BSPP	30 lpm	40 lpm	Aluminium
EA06-14-38-7-4-3-H	944.00	7	50-220 (M20)	3/8" BSPP	1/2" BSPP	Yes (SAE8-2)	1/4" BSPP	30 lpm	40 lpm	Aluminium
EA06-14-38-8-4-3-H	1086.00	8	50-220 (M20)	3/8" BSPP	1/2" BSPP	Yes (SAE8-2)	1/4" BSPP	30 lpm	40 lpm	Aluminium

Note: Unload valve not included

10-38



14-38



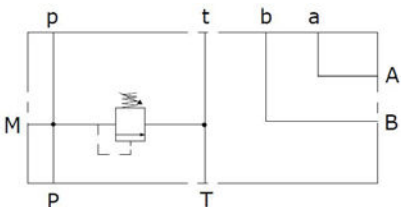
Relief options
on page 195

Cetop 3 High Flow Manifolds (3/4" BSPP Ports P+T)

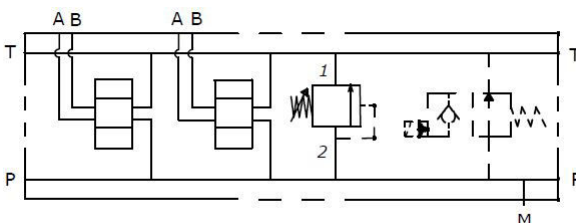
Part #	List Price \$	Stations	Relief Bar	A-B	P-T	Unloader Cavity	Gauge Port	Flow	Material
EA06-10-12-1-3-H	269.00	1	20-215 (M20)	1/2" BSPP	1/2" BSPP	n/a	1/4" BSPP	30 lpm	Aluminium
EA06-28-12-2-4-3-H	694.00	2	10-240 (SAE10-2)	1/2" BSPP	3/4" BSPP	Yes (SAE10-2)	1/4" BSPP	80 lpm	Aluminium
EA06-28-12-3-4-3-H	803.00	3	10-240 (SAE10-2)	1/2" BSPP	3/4" BSPP	Yes (SAE10-2)	1/4" BSPP	80 lpm	Aluminium
EA06-28-12-4-4-3-H	921.00	4	10-240 (SAE10-2)	1/2" BSPP	3/4" BSPP	Yes (SAE10-2)	1/4" BSPP	80 lpm	Aluminium
EA06-28-12-5-4-3-H	1030.00	5	10-240 (SAE10-2)	1/2" BSPP	3/4" BSPP	Yes (SAE10-2)	1/4" BSPP	80 lpm	Aluminium
EA06-28-12-6-4-3-H	1144.00	6	10-240 (SAE10-2)	1/2" BSPP	3/4" BSPP	Yes (SAE10-2)	1/4" BSPP	80 lpm	Aluminium

Note: Unload valve not included

10-12



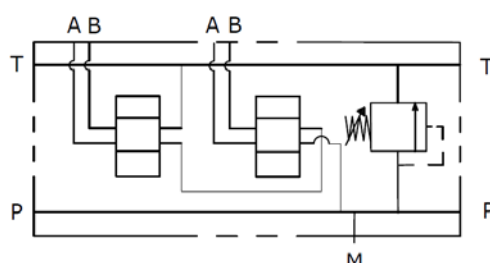
28-12



Unload valve options
on page 86

Cetop 3 Series Manifolds (1/2" BSPP Ports P+T)

Part #	List Price \$	Stations	Relief Bar	A-B	P-T	Unloader Cavity	Gauge Port	Nominal Flow	Max Flow	Material
EA06-19-38-2-1-3-H	530.00	2	50-215 (M20)	3/8" BSPP	1/2" BSPP	Yes (SAE8-2)	1/4" BSPP	30 lpm	40 lpm	Aluminium
EA06-19-38-3-1-3-H	658.00	3	50-215 (M20)	3/8" BSPP	1/2" BSPP	Yes (SAE8-2)	1/4" BSPP	30 lpm	40 lpm	Aluminium
EA06-19-38-4-1-3-H	796.00	4	50-215 (M20)	3/8" BSPP	1/2" BSPP	Yes (SAE8-2)	1/4" BSPP	30 lpm	40 lpm	Aluminium



Relief options on page 195

Unload valve options on page 86

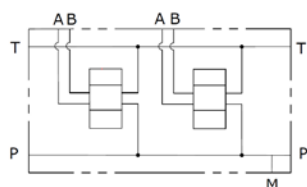
Cetop 3 Manifolds with Relief Valves

Part #	List Price \$	Stations	P-T	A-B	Relief	Material
BPT3A	174.00	P+T block only	3/8" BSPP	3/8" BSPP	SAE8-2	Aluminium
BS3C2	195.00	1	1/2" BSPP	3/8" BSPP	20-210 bar *	Aluminium
BM2AC2	348.00	2	1/2" BSPP	3/8" BSPP	20-210 bar *	Aluminium
BM3AC2	411.00	3	1/2" BSPP	3/8" BSPP	20-210 bar *	Aluminium
BM4AC2	454.00	4	1/2" BSPP	3/8" BSPP	20-210 bar *	Aluminium
BM5AC2	570.00	5	1/2" BSPP	3/8" BSPP	20-210 bar *	Aluminium
BM6AC2	612.00	6	1/2" BSPP	3/8" BSPP	20-210 bar *	Aluminium

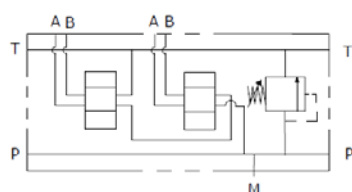
* 10-90 bar available on request

Cetop 3 Manifolds without Relief Valves

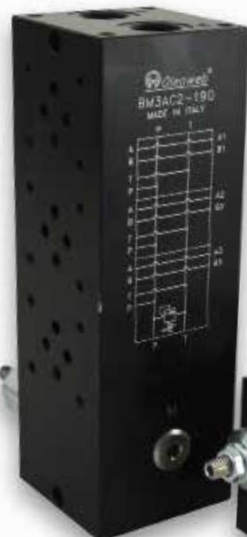
Part #	List Price \$	Stations	P-T	A-B	Relief	Material
BM2A	220.00	2	1/2" BSPP	3/8" BSPP	-	Aluminium
BM3A	274.00	3	1/2" BSPP	3/8" BSPP	-	Aluminium
BM4A	330.00	4	1/2" BSPP	3/8" BSPP	-	Aluminium
BM5A	411.00	5	1/2" BSPP	3/8" BSPP	-	Aluminium
BM6A	450.00	6	1/2" BSPP	3/8" BSPP	-	Aluminium



BM2A



BM2AC2



BM



BS3



BPT

Relief options on page 195

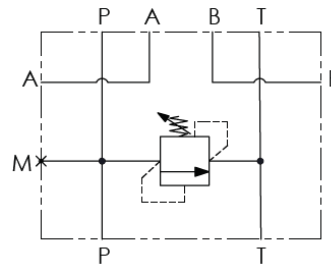
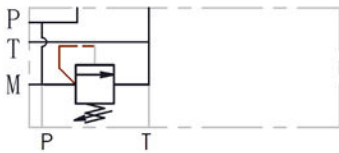
Cetop 5 Manifold Subplate

Part #	List Price \$	Stations	Port Size P-T-A-B	Gauge Port	Relief	Material
BPT5A	293.00	P+T block only	3/4" BSPP	1/4" BSPP	SAE10-2	Aluminium
BS5C2	278.00	1	3/4" BSPP	1/4" BSPP	20-210 bar	Aluminium

BPT5A



BS5C2

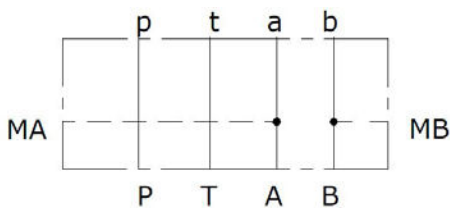


**BPT5A relief options
on page 195**

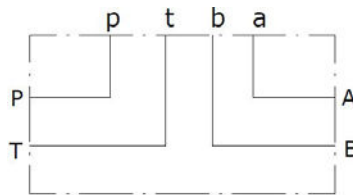
Cetop 5 Manifold Subplate

Part #	List Price \$	Port Position A-B-P-T	Port Size P-T-A-B	Flow	Material
EA10-02-34	185.00	Side	3/4" BSPP	80 lpm	Aluminium
ES10-02-34	311.00	Side	3/4" BSPP	80 lpm	Steel
ES10-01-34	271.00	Rear	3/4" BSPP	80 lpm	Steel

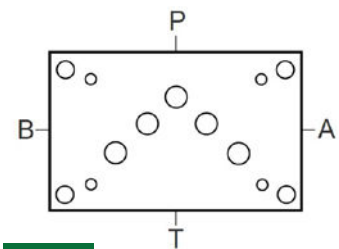
Note: 1 Station Subplates have no relief bar, gauge port, relief cavity or unloader cavity.



01-34



02-34



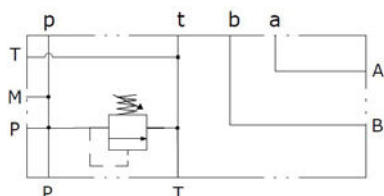
02-34



Cetop 5 Manifolds

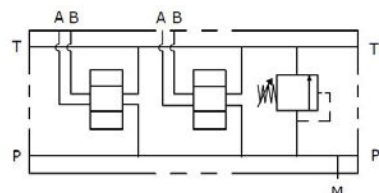
Part #	List Price \$	Stations	Relief Bar	A-B	P-T	Unloader Cavity	Gauge Port	Flow	Material
EA10-09-34-1-3-H	507.00	1	70-250 (M26)	3/4" BSPP	3/4" BSPP	No	1/4" BSPP	80 lpm	Aluminium
EA10-06-34-2-1-3-H	542.00	2	70-250 (M26)	1/2" BSPP	3/4" BSPP	No	1/4" BSPP	80 lpm	Aluminium
EA10-06-34-3-1-3-H	657.00	3	70-250 (M26)	1/2" BSPP	3/4" BSPP	No	1/4" BSPP	80 lpm	Aluminium
EA10-06-34-4-1-3-H	830.00	4	70-250 (M26)	1/2" BSPP	3/4" BSPP	No	1/4" BSPP	80 lpm	Aluminium
EA10-06-34-5-1-3-H	1117.00	5	70-250 (M26)	1/2" BSPP	3/4" BSPP	No	1/4" BSPP	80 lpm	Aluminium
EA10-06-34-6-1-3-H	1362.00	6	70-250 (M26)	1/2" BSPP	3/4" BSPP	No	1/4" BSPP	80 lpm	Aluminium

10-09



EA10

10-06



EA610

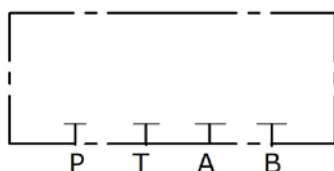


Cetop 5 Subplates

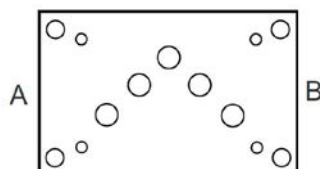
Part #	List Price \$	Description	Material
EA610-05-0	140.00	Cetop 5 to 3 reducing subplate	Aluminium

Cetop 5 Subplates

Part #	List Price \$	Description	Material
ES10-00-10	102.00	Cetop 5 blanking plate	Steel
ES10-00-20-3	156.00	Cetop 5 crossover plate P-B T-A	Steel
ES10-10-14-1	148.00	Cetop 5 subplate A + B ports 1/4" BSPP	Steel
ES10-10-14-4	148.00	Cetop 5 subplate P + T ports 1/4" BSPP	Steel



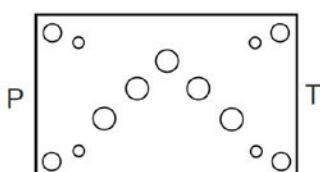
00-10



14-1



20-3



14-4



Direct Acting Relief Cartridge SAE-08

Part #	List Price \$	Size	Pressure Range	Maximum Flow
DRV-S08-04-60-N-H	79.00	SAE8-2	16-160 bar	30 lpm
DRV-S08-04-135-N-H	79.00	SAE8-2	25-135 bar	30 lpm
DRV-S08-04-220-N-H	79.00	SAE8-2	50-220 bar	30 lpm
DRV-S08-04-350-N-H	79.00	SAE8-2	120-350 bar	30 lpm
CPS-08	28.00	Steel blanking plug, SAE8-2 cavity		



Direct Acting Relief Cartridge SAE-10

Part #	List Price \$	Size	Pressure Range	Maximum Flow
DRV-S10-02-110-N-H	128.00	SAE10-2	5-110 bar	80 lpm
DRV-S10-02-240-N-H	128.00	SAE10-2	10-240 bar	80 lpm
DRV-S10-02-350-N-H	128.00	SAE10-2	50-350 bar	80 lpm
CPS-10	52.00	Steel blanking plug, SAE10-2 cavity		



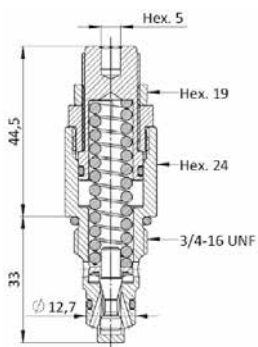
Direct Acting Relief Cartridge M20

Part #	List Price \$	Size	Pressure Range	Maximum Flow
DRV-M20-02-055-N-H	96.00	M20	5-55 bar	30 lpm
DRV-M20-02-110-N-H	96.00	M20	25-110 bar	30 lpm
DRV-M20-02-215-N-H	96.00	M20	50-215 bar	30 lpm
DRV-M20-02-350-N-H	96.00	M20	100-350 bar	30 lpm
CPS-M20	22.00	Steel blanking plug, M20 cavity		

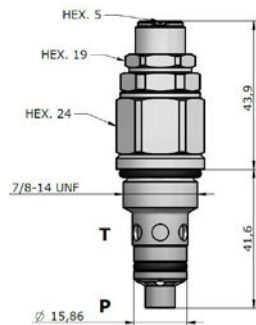


Direct Acting Relief Cartridge M26

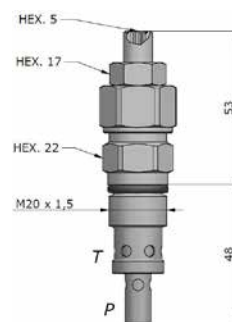
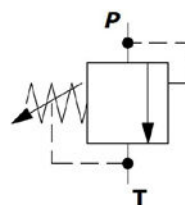
Part #	List Price \$	Size	Pressure Range	Maximum Flow
DRV-M26-01-055-N-H	128.00	M26	5-55 bar	80 lpm
DRV-M26-01-110-N-H	128.00	M26	25-110 bar	80 lpm
DRV-M26-01-250-N-H	128.00	M26	75-250 bar	80 lpm
CPS-M26	31.00	Steel blanking plug, M26 cavity		



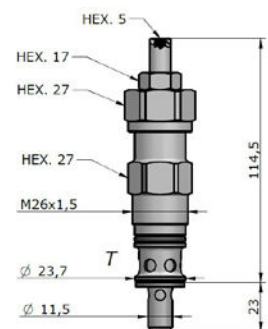
SAE-08



SAE-10



M20



M26