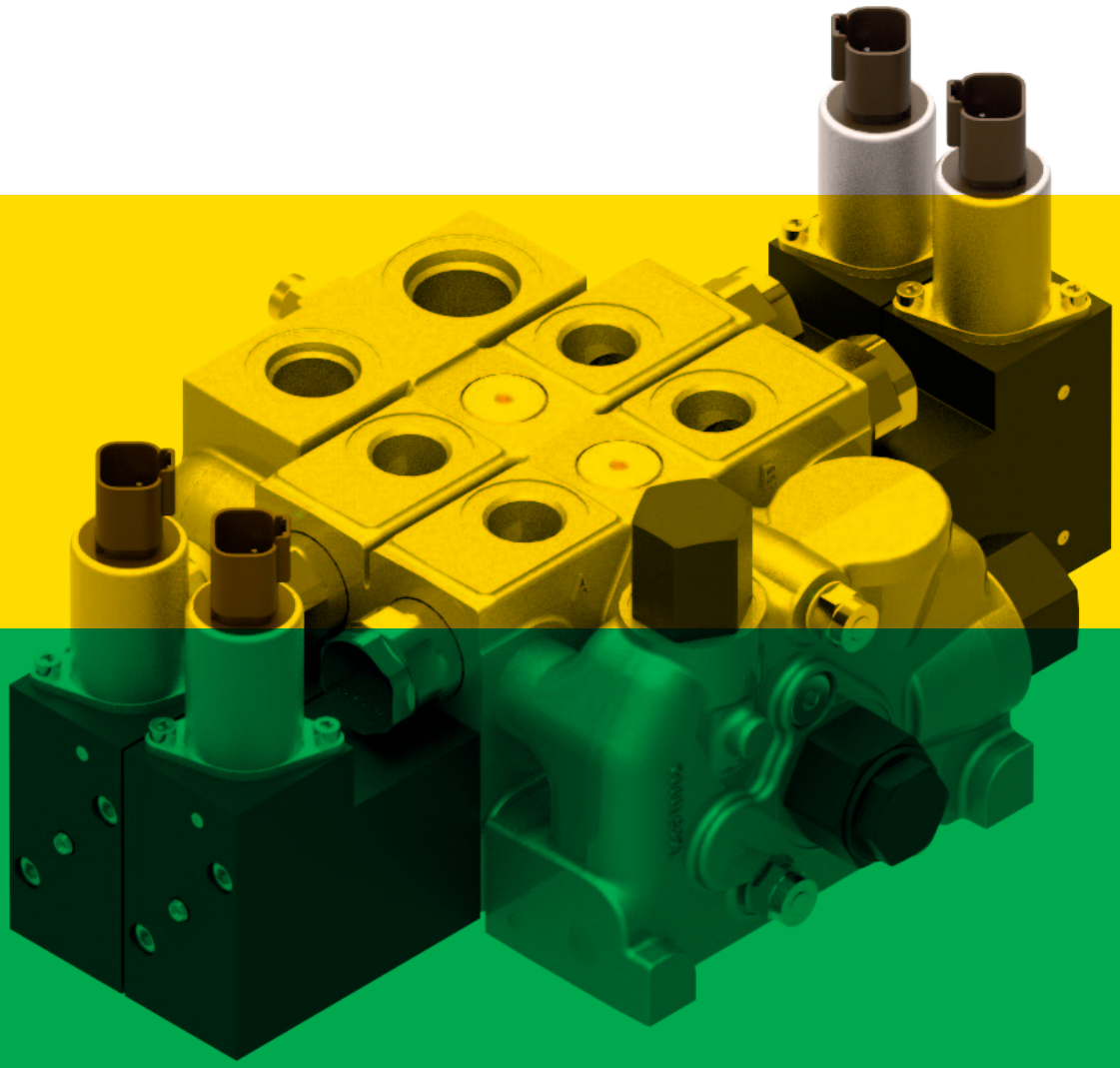
VD8Z

Directional control Valve

Sectional control valve with integrated electro-hydraulic control



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COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
= ISO 9001:2015 =

salami
FLUID POWER SYSTEMS ®

Final revised edition - October 2018

The data in this catalogue refers to the standard product.The policy of Salami S.p.A. consists of a continuous improvement of its products. It reserves the right to change the specifications of the different products whenever necessary and without giving prior information.
If any doubts, please contact our sales department.

General Index

General Features

- Cast iron sectional and biblock construction.
- Steel spools, hardened and nickel plated.
- Electro-Hydraulic open loop on-off and proportional control (12 or 24 Vdc).
- Parallel circuit with load check valve on each section.
- Several type of spools: double and single acting, motor spool, regenerative position, etc.
- Emergency command button.
- Hand lever.
- Power beyond (HPCO) configuration.
- Availability of auxiliary valves either on port A or B or on both.
- Spool position sensor.
- Compact dimensions.
- No need of external pilot lines.
- Assemblable with VD8A standard sections.

Applications

- Agriculture
- Municipal public works
- Construction
- Material handling

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Technical Data

SPOOLS	From 1 To 8	
MAX FLOW	Q	90 l/min - *(24 gpm US)*
MAX PRESSURE	port P	350 bar - *(5070 psi)*
	ports A/B	350 bar - *(5070 psi)*
	port T	25 bar - *(363 psi)*
SPOOL STROKE (POSITIONS 1 AND 2)	± 7 mm - *(0.28 in.)*	
CIRCUIT	Parallel	

Types of Ports and Threads

●= Standard
○= Option

		Inlet Section				Working Section	Outlet Section					
		P	PL	T	TL	A/B	T	TL	TL1	P3	Pp	Tp
BSP (UNI ISO 1179 - THREADS UNI ISO 228/1)	G1/4										●	●
	G1/2	●	●			●				●		
	G3/4	○		●	●	○	●	●	●			
BSPF - JIS B 2351-1 (UNI EN ISO 8434-1)	G1/4										●	●
	G1/2	●	●			●				●		
	G3/4			●	●		●	●	●			
SAE UN-UNF (UNI ISO 11926 - THREADS UNI ISO 725)	SAE4 (7/16-20 UNF)										●	●
	SAE8 (3/4-16 UNF)					○						
	SAE10 (7/8-14 UNF)	●	●			●				●		
	SAE12 (1-1/16-12 UN)			●	●		●	●	●			

Valves

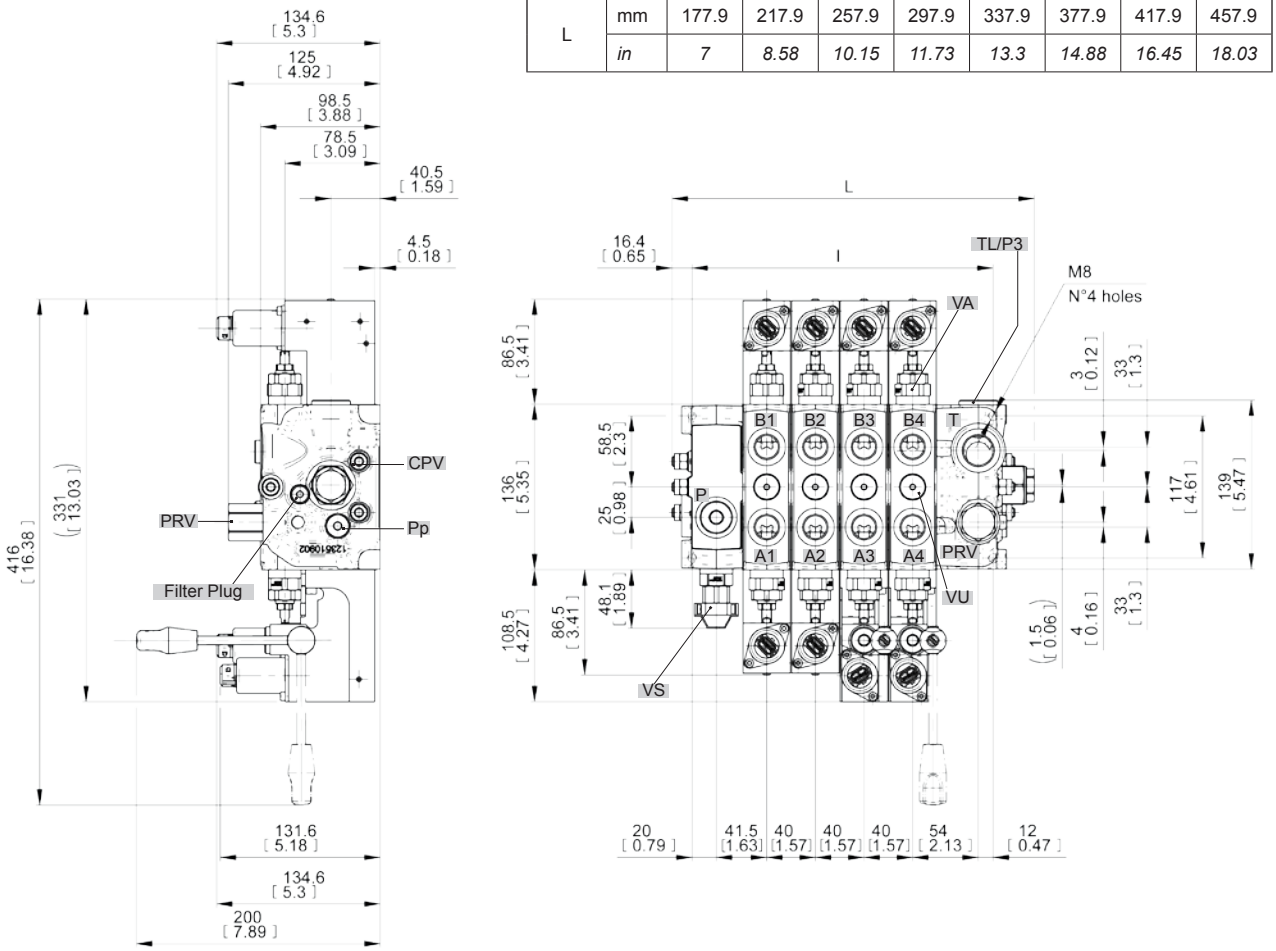
INLET VALVES		AUXILIARY VALVES	
DIRECT	VS	OVERLOAD	VA
PILOT	P	OVERLOAD AND ANTICAVITATION	AR
UNLOAD	VU	ANTICAVITATION	VR
► For auxiliary valves see Technical Catalogue **VD8A** (E0.06.0911.02.02) Page_26/27		CONVERSION	CV

Electro-Hydraulic Controls

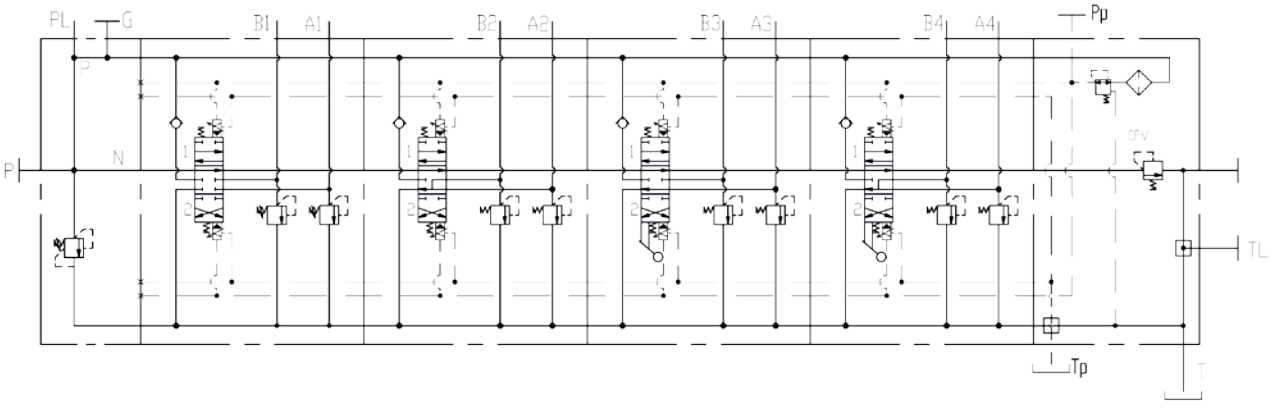
	ON-OFF		PROPORTIONAL	
SPOOL COMMAND	no lever	with lever	no lever	with lever
	SHF	LHF	SKF	LKF
SPOOL POSITIONINGS	Positioning with spring return			
	HF		KF	
	Positioning with spring return and spool position sensor			
	PHF		PKF	

Dimensions

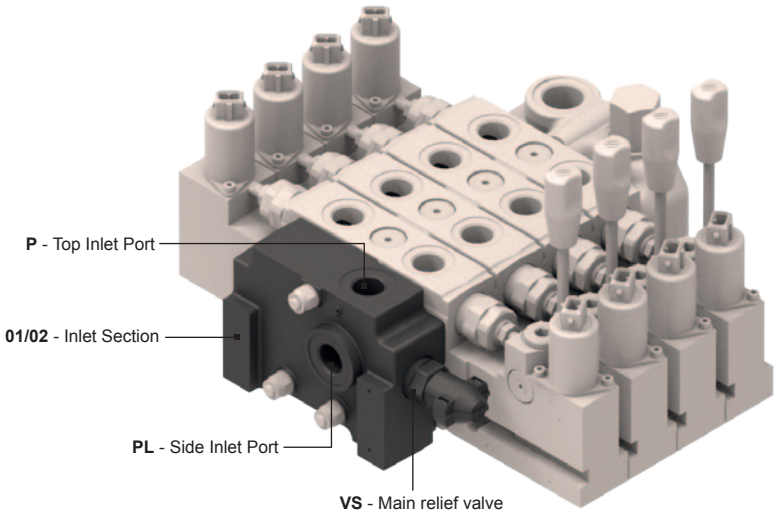
SECTIONS		1	2	3	4	5	6	7	8
I	mm	127.5	167.5	207.5	247.5	287.5	327.5	367.5	407.5
	in	*5,02*	*6.59*	*8.17*	*9.74*	*11.32*	*12.89*	*14.47*	*16.04*
L	mm	177.9	217.9	257.9	297.9	337.9	377.9	417.9	457.9
	in	*7*	*8.58*	*10.15*	*11.73*	*13.3*	*14.88*	*16.45*	*18.03*

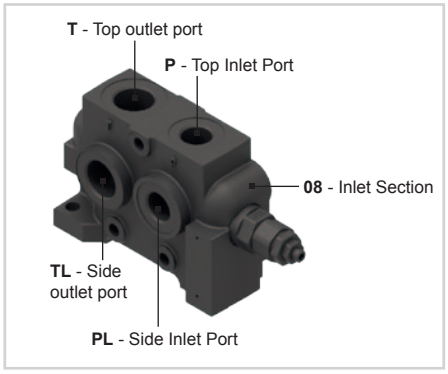


Hydraulic Circuit



Inlet Module

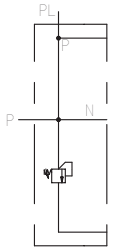




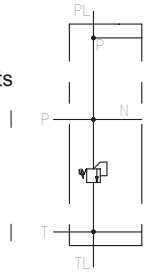
Example:

Code 01:
Side Inlet port plugged.

Code 02:
Top Inlet port plugged.

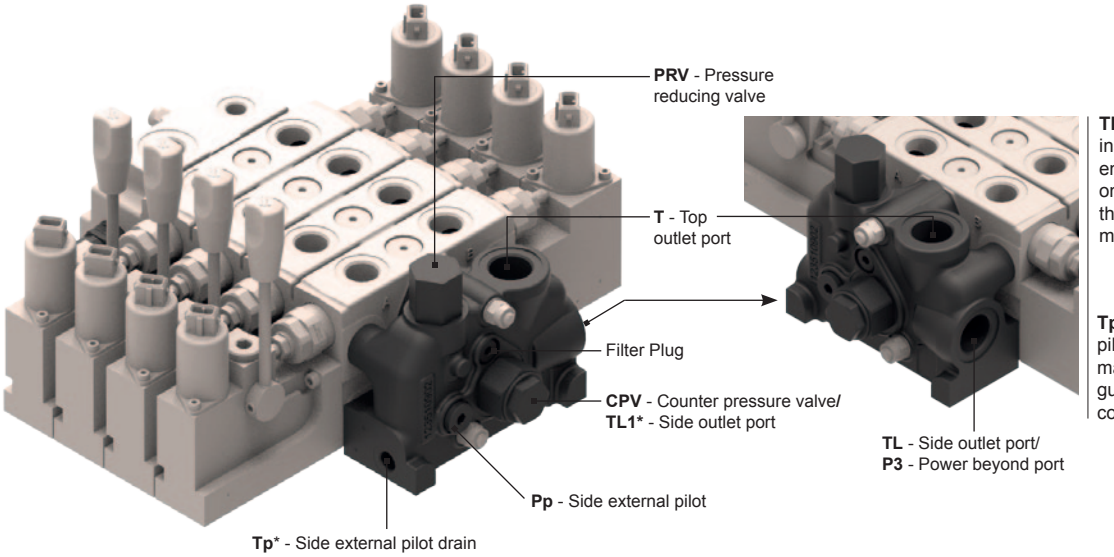


Code 08:
Top inlet and Top outlet ports plugged.



► For Inlet sections see Technical Catalogue **VD8A** (E0.06.0911.02.02) Page_10

Outlet Module

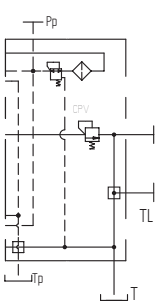


TL1*= Port available instead of CPV valve, ensure at least 10 bars on T line to guarantee the Electro-Hydraulic modules function.

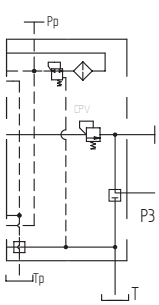
Tp*= Plug for internal pilot drain line. Ensure max 5 bar on T line to guarantee the hydraulic comand function.

Example:

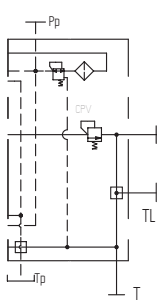
Code U19:
Side Outlet port and Side External Pilot plugged.



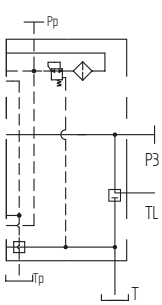
Code U31:
Power beyond configuration and Side External Pilot plugged.



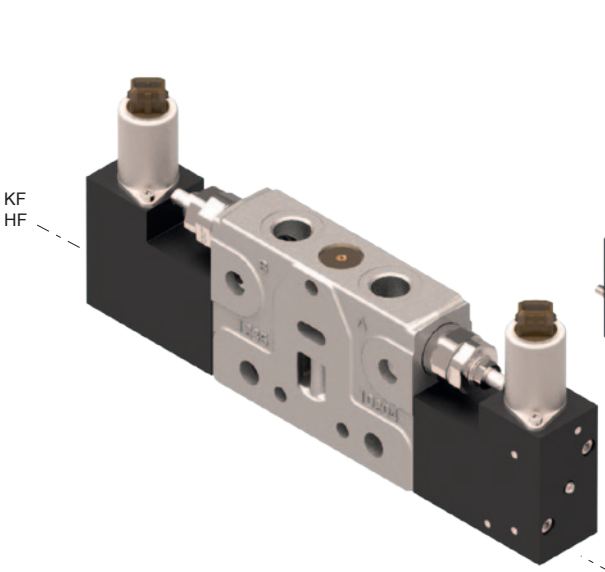
Code U26:
Outlet ports plugged and Side External Pilot plugged. Inlet with outlet port.

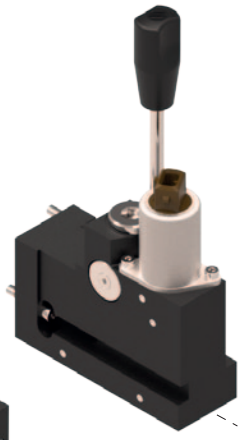


Code U32:
Power beyond and Outlet ports plugged. Inlet with outlet port.



Working Sections





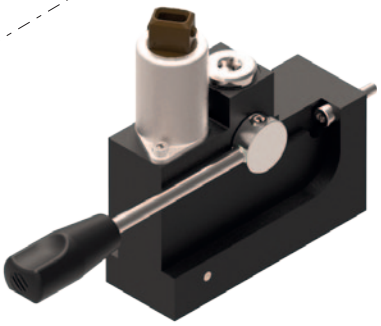
LKF - KF
Working Module with Electro-Hydraulic Proportional Control and lever

LHF - HF
Working Module with Electro-Hydraulic On-Off Control and lever

SKF
SHF

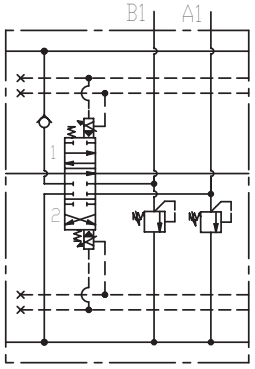
SKF - KF
Working Module with Electro-Hydraulic Proportional Control

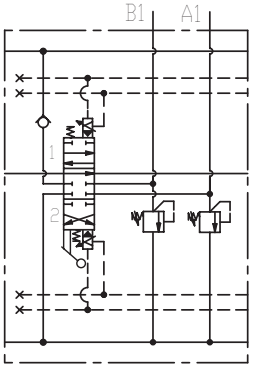
SHF - HF
Working Module with Electro-Hydraulic On-Off Control



Special Lever 90° assembling
LKF(90°) - LHF(90°)

Hydraulic Circuit





Electrical Data

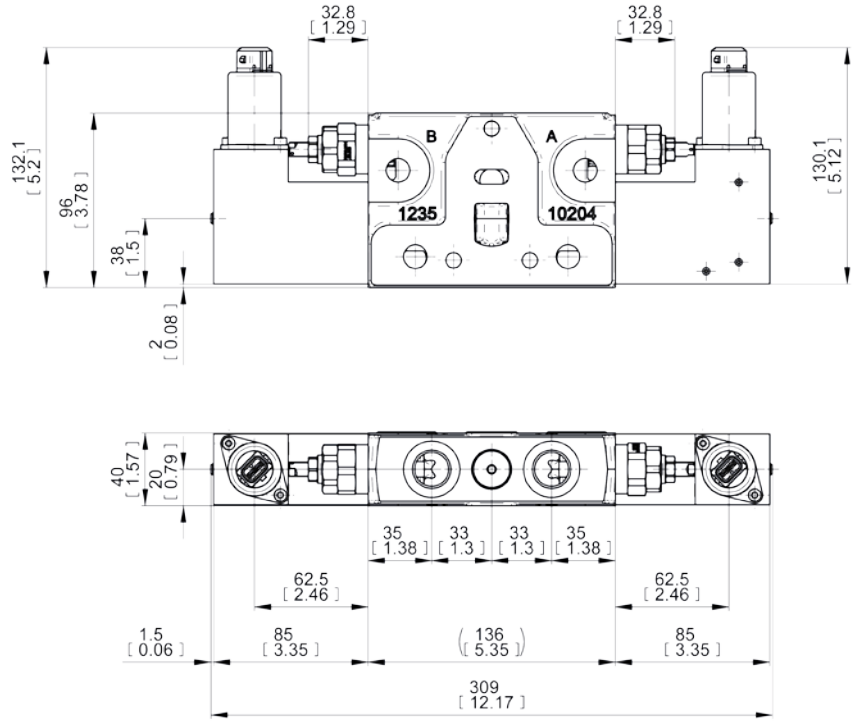
VOLTAGE	12V	24V	TYPE OF CONTROL	On/Off	Direct Current 12 and 24 V
CURRENT	1500 mA	750 mA		Proportional	PWM or super imposed frequency dither 100 Hz recommended
RESISTANCE	4.72 Ω ± 5%	20.8 Ω ± 5%	CONNECTOR	AMP Junior Timer Deutsch Connector DT04-2P Flying Leads	

E0.235.1018.11.00IM00

Working Sections Dimensions

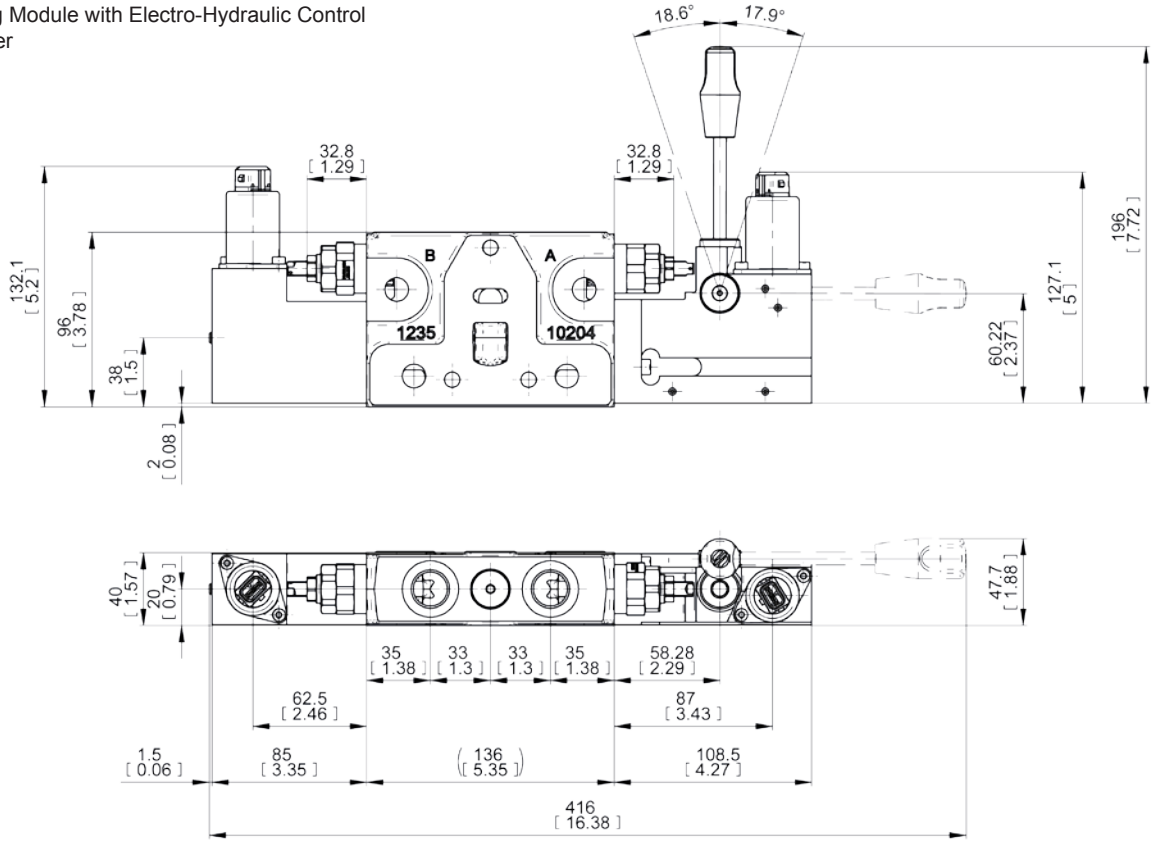
SHF - HF | SKF - KF

Working Module with Electro-Hydraulic Control



LHF - HF | LKF - KF

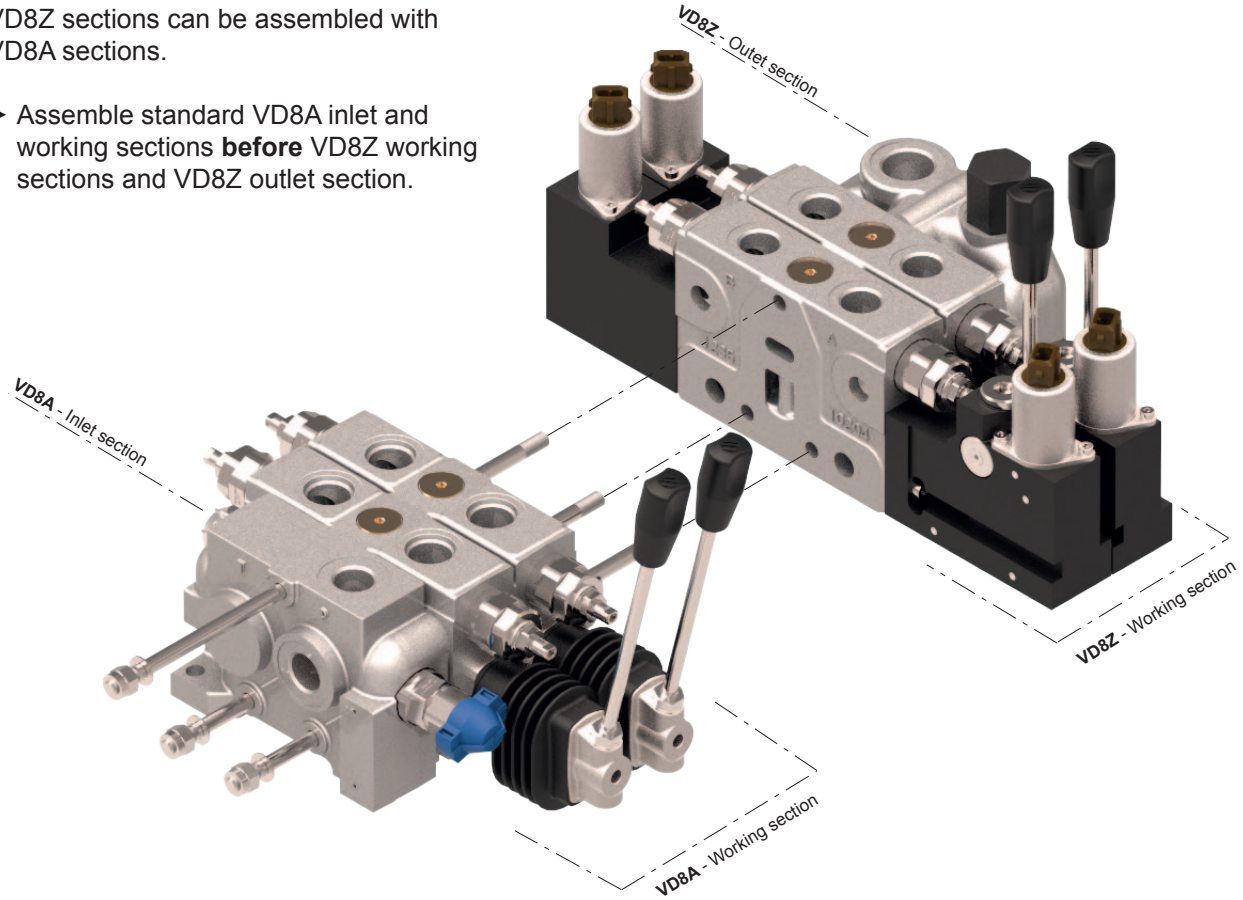
Working Module with Electro-Hydraulic Control and lever

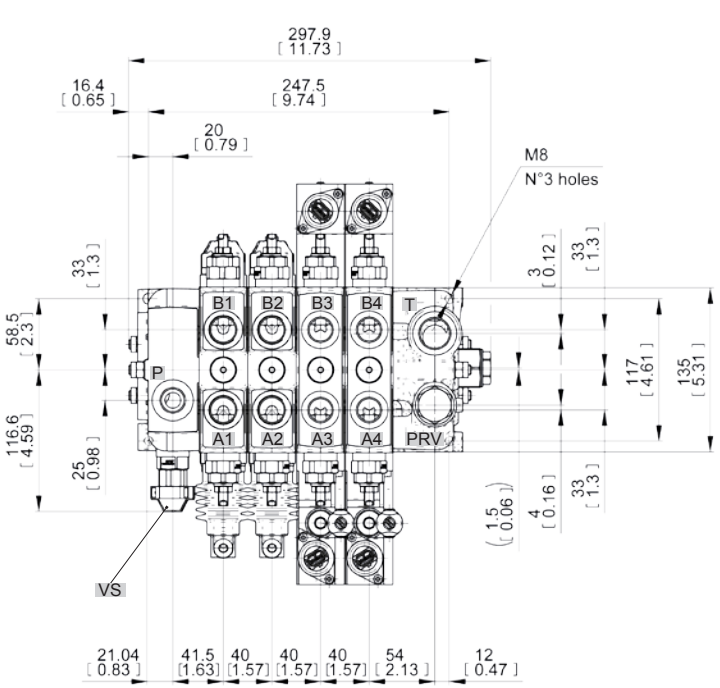


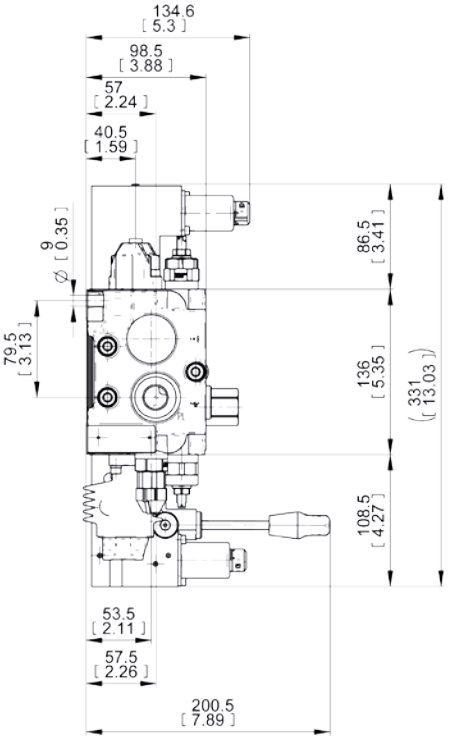
Configuration With VD8A

VD8Z sections can be assembled with VD8A sections.

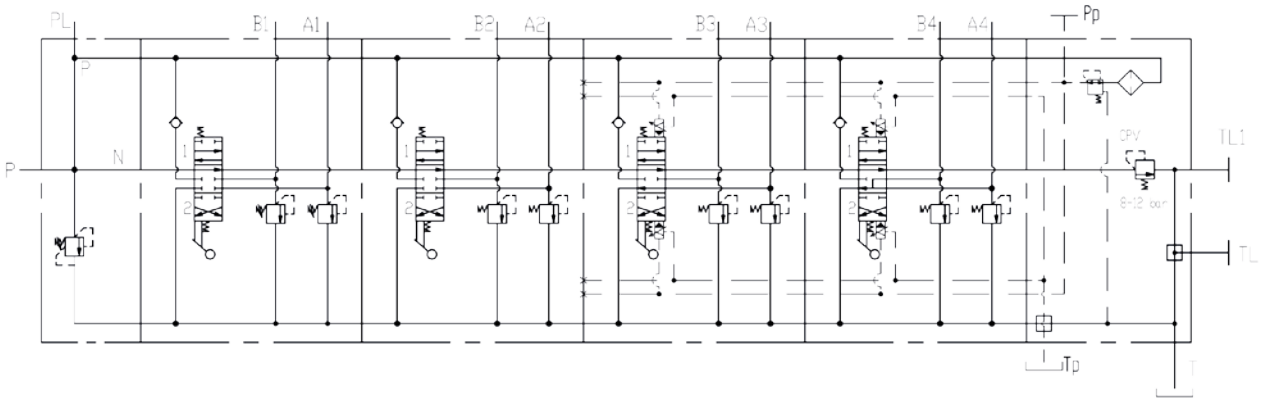
► Assemble standard VD8A inlet and working sections **before** VD8Z working sections and VD8Z outlet section.







Hydraulic Circuit - VD8Z/VD8A



How to Order

► See Technical Catalogue **VD8A** (E0.06.0911.02.02)

VD8Z	01	D	180	/	2	X	P	01	C	-	VA	250	A	.	VA	250	B	-	LKF	1	A	-	KF	1	/	U19	G
	A	B	C		D		E	F	G		H		I		H		I		L	M	N		O	M		P	Q

A – INLET PLATE (page 7) ►

01 - 02 - 08

B – MAIN RELIEF VALVE (page 5) ►

D	Direct main relief valve
P	Piloted main relief valve
W	Without main relief valve

C – MAIN RELIEF SETTING ►

From 25 to 350 bar *(363 to 5070 psi)*

D – NUMBER OF IDENTICAL CONSECUTIVE SECTIONS

E – WORKING SECTIONS (page 5) ►

P	Parallel circuit

F – SPOOL TYPES

01C	Double acting spool for hydraulic control
02C	Double acting motor spool for hydraulic control
03C	Double acting motor spool (“B” port blocked) for hydraulic control
04C	Double acting motor spool (“A” port blocked) for hydraulic control
05C	Single acting spool “A” working port for hydraulic control
06C	Single acting spool “B” working port for hydraulic control

G – SPOOL FLOW

C	Standard

H – AUXILIARY VALVES (page 5) ►

VA	Overload valve
AR	Overload and Anticavitation valve
VR	Anticavitation valve
CV	Conversion valve

Q – PORTS (page 5) ►

G	GAS - BSP Threaded (ISO 228)
S	SAE UN - UNF Threaded (ISO 725)
J	GAS - BSPF O-RING BOSS Threaded (JIS B 2351)

P – OUTLET COVER (page 7)

U19 - U26 - U31 - U32

O – SPOOL POSITIONINGS (page 5)

HF	Electro-hydraulic On/Off positioning with spring return
KF	Electro-hydraulic Proportional positioning with spring return
PHF	Electro-hydraulic On/Off positioning with spring return and spool position sensor
PKF	Electro-hydraulic Proportional positioning with spring return and spool position sensor

N – CONTROL SIDE

A	A port side
B	B port side

M – VOLTAGE ELECTRO-HYDRAULIC MODULES (page 8)

1	12V
2	24V

L – SPOOLS CONTROLS (page 5)

SHF	Electro-hydraulic On/Off
SKF	Electro-hydraulic Proportional
LHF	Electro-hydraulic On/Off with lever
LKF	Electro-hydraulic Proportional with lever

I – PORT ON WHICH THE VALVE IS MOUNTED

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