

## CDL046... STACKABLE CIRCUIT SELECTOR VALVES



### CDL046...

"A09" DC Coils CAP. I • 73

CONNECTORS STANDARD CAP. I • 20

The stackable circuit selector valves, type CDL.04.6, allows one single drive of 5 users with 4 elements connected in series.

As they are moved from high performances solenoids they don't need the external drainage.

Additionally, beyond having a reduced and compact dimensions, they can manage high hydraulic powers with a minimal pressure drop. The body valve is white zinc plated.

Max. pressure	250 bar
Max. flow	20 l/min
Overlap	positive
Hydraulic fluids	Mineral oils DIN 51524
Fluid viscosity	10 ÷ 500 mm <sup>2</sup> /s
Fluid temperature	-25°C ÷ 75°C
Ambient temperature	-25°C ÷ 60°C
Max. contamination level	class 10 in accordance NAS with 1638 with filter $\beta_{25} \geq 75$
Weight	see "Overall dimension"

### ORDERING CODE

**CDL** Stackable circuit selector valve

**04** Size NG04

**6** No. of way  
(single element)

**W** Threaded connectors  
1/4" BSP

**I** Internal drainage

**\*** No. of elements: 1 / 2 / 3 / 4

**\*** Voltage (Tab. 1)

**\*\*** Variants (Tab. 2)

**1** Serial No.

Tab.1 - A09 (27 W) COIL

DC VOLTAGE **	
L	12V
4	14V
M	24V
N	48V*
P	110V*
Z	102V*
X	205V*
W	Without DC coil

115Vac/50Hz  
120Vac/60Hz  
with rectifier

230Vac/50Hz  
240Vac/60Hz  
with rectifier

Voltage codes are not stamped on the plate, their are readable on the coils.

\* Special voltage

\*\* Technical data see page CAP. I • 73

- The AMP Junior coil, the Deutsch coil with bidirectional diode and the coil with flying leads (with or without diode) coils are available in 12V or 24V DC voltage only.

Tab. 2 - VARIANTS

VARIANT	CODE
No variant (without connectors)	S1(*)
Viton	SV(*)
Rotary emergency button	P2(*)(**)
Emergency button	ES(*)
AMP Junior connection	AJ(*)
Bobina con fili (250 mm)	FL
with flying leads (130 mm) and integr. diode	LD
Deutsch connection with bidir. diode	CX

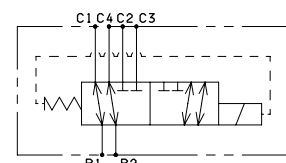
Other variants available on request.

(\*) Coils with Hirschmann and AMP Junior connection supplied without connectors. The connectors can be ordered separately, CAP. I • 20

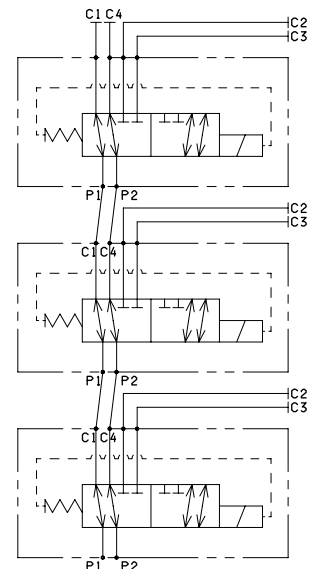
(\*\*) P2 Emergency tightening torque **max. 6÷9 Nm / 0.6 ÷ 0.9 Kgm** with CH n. 22

### HYDRAULIC SYMBOLS

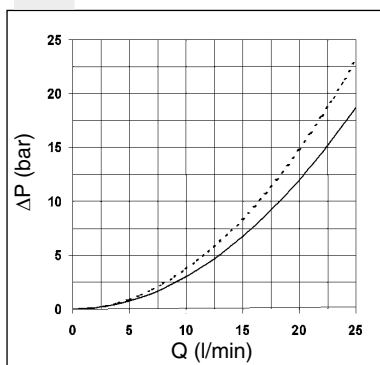
#### SINGLE ELEMENT



#### MULTI STATION CONNECTION

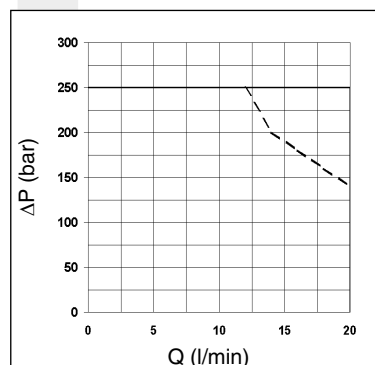


### PRESSURE DROPS



— P1 → C1  
P1 → C2  
- - - P2 → C3  
P2 → C4

### LIMITS OF USE



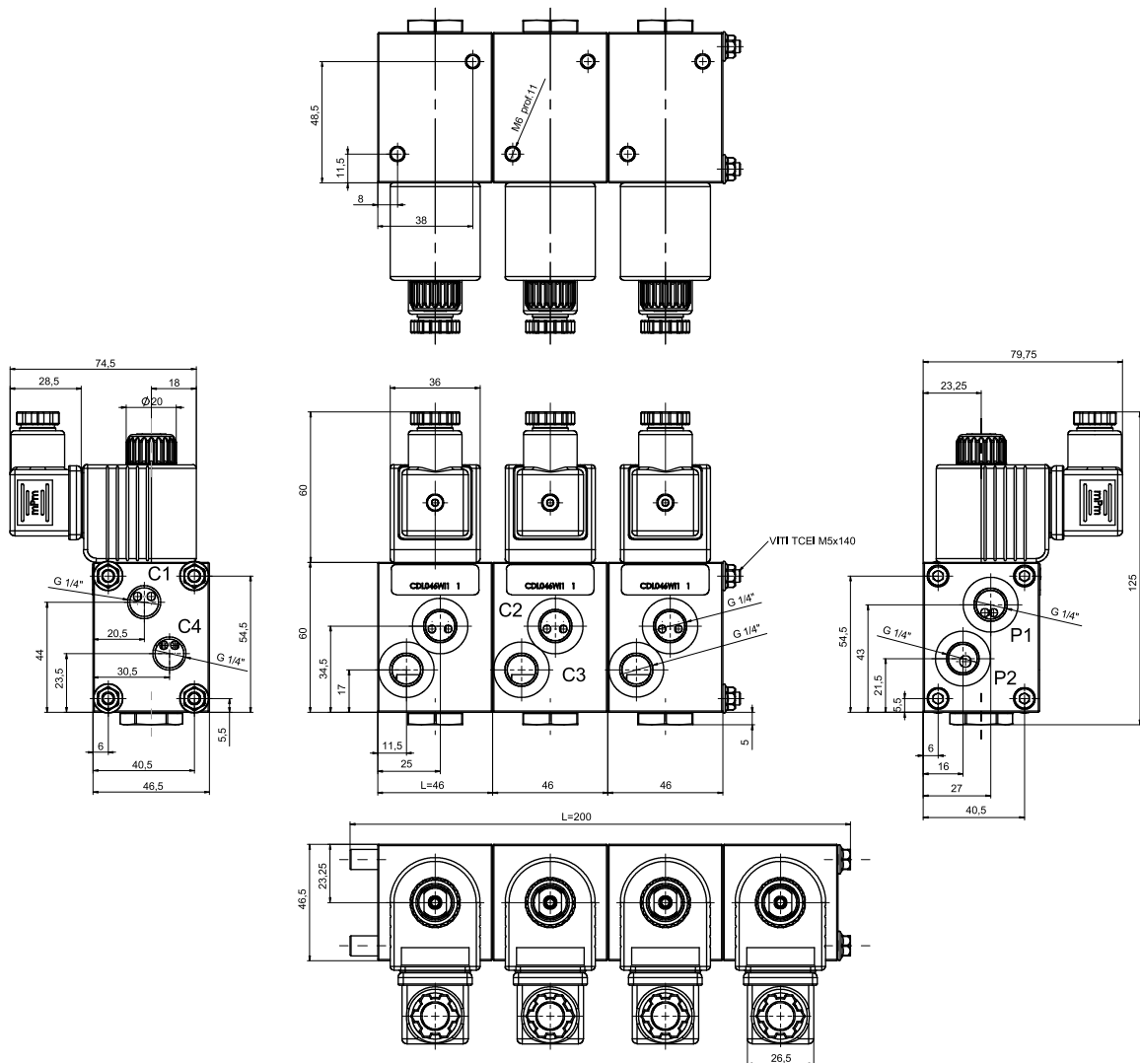
— Energizing  
- - - De-energizing

The tests have been carried out with solenoids at operating temperature and a voltage 10% less than rated voltage with a fluid temperature of 50°C. The fluid used was a mineral oil with a viscosity of 46 mm<sup>2</sup>/s at 40 degrees C.

# CDL046... STACKABLE CIRCUIT SELECTOR VALVES

## OVERALL DIMENSIONS

1

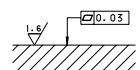


Tighten the screws to a torque of 5 Nm (0.5 Kgm)  
Fixing screws with material specifications min. 8.8

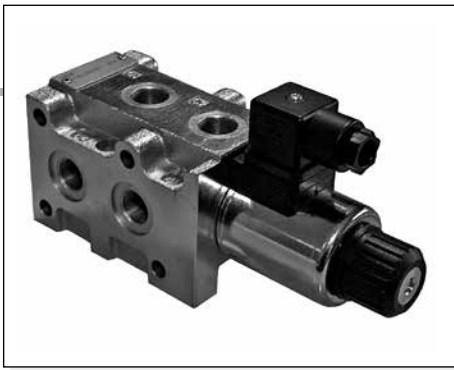
No. of elements	No. of way	L (Length)	Weight (Kg)	Fixing screws	Kit spare part code* (rods and studs)
1	06	46	1.05	—	—
2	08	100	2.20	TCEI M5x95	V89.54.0020
3	10	145	3.30	TCEI M5x140	V89.54.0021
4	12	200	4.45	TCEI M5x194 (special rods)	V89.54.0022

(\*) For multiple composition rods and studs are available.

Support plane specifications



# CDL066... STACKABLE CIRCUIT SELECTOR VALVES



The stackable circuit selector valves, type CDL.06.6, allows one single drive of 6 users with 5 elements connected in series.

As they are moved from high performances solenoids they don't need the external drainage.

This valves can manage high hydraulic powers with a minimal pressure drop.

Max. pressure	250 bar
Max. flow	50 l/min
Overlap	negative
Hydraulic fluids	Mineral oils DIN 51524
Fluid viscosity	10 ÷ 500 mm <sup>2</sup> /s
Fluid temperature	-25°C ÷ 75°C
Ambient temperature	-25°C ÷ 60°C
Max. contamination level	class 10 in accordance NAS with 1638 with filter β <sub>25</sub> ≥ 75
Weight	see "Overall dimension"

<b>CDL066...</b>	
"40W" DC COILS	CAP. I • 74
CONNECTORS STANDARD	CAP. I • 20

### ORDERING CODE

### ORDERING CODE

<b>CDL</b>	Stackable circuit selector valve
<b>06</b>	Size NG06
<b>6</b>	No. of way (single element)
<b>W</b>	Threaded connectors 3/8" BSP
<b>I</b>	Internal drainage
<b>*</b>	No. of elements: 1 / 2 / 3 / 4 / 5
<b>*</b>	Voltage (Tab. 1)
<b>**</b>	Variants (Tab. 2)
<b>1</b>	Serial No.

### TAB.1 - 40W COIL

#### DC VOLTAGE

<b>L</b>	12V
<b>M</b>	24V
<b>W</b>	Without DC coil

Voltage codes are not stamped on the plate, their are readable on the coils.

### TAB.2 - VARIANTS

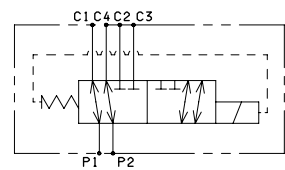
No variant (without connectors)	S1(*)
Viton	SV(*)
Emergency button	ES(*)
Rotary emergency button	P2(*)
Raccordements Deutsch DT04-2P	CZ

Other variants available on request.

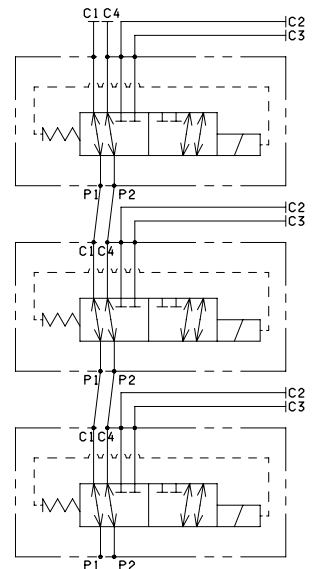
(\*) Coils with Hirschmann connection supplied without connectors. The connectors can be ordered separately, CAP. I • 20.

### HYDRAULIC SYMBOLS

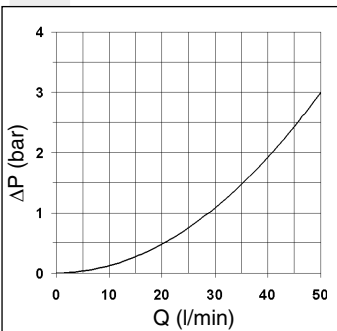
#### SINGLE ELEMENT



#### MULTISTATION CONNECTION



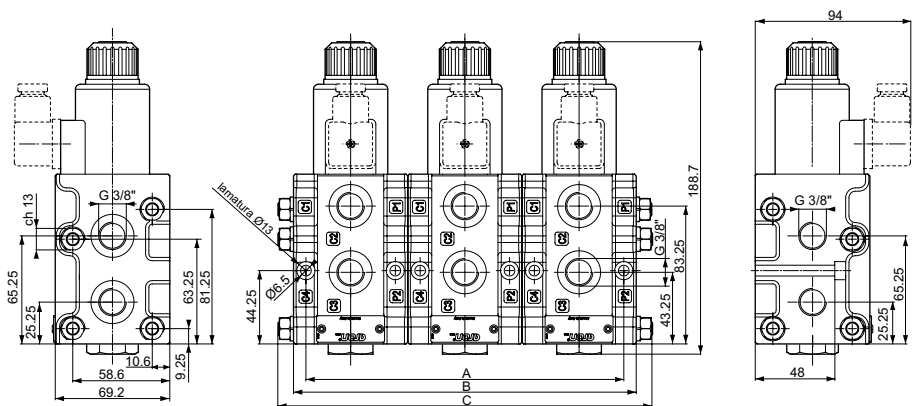
### PRESSURE DROPS



— P1 → C1, P1 → C2, P2 → C3 e P2 → C4

The fluid used is a mineral oil with a viscosity of 46 mm<sup>2</sup>/s at 40°C; the tests have been carried out at a fluid temperature of 40°C.

### OVERALL DIMENSIONS



Fixing screws UNI 5931 M6x60 with material specifications min. 8.8  
Tightening torque for studs 8 Nm / 0.8 Kgm  
Tightening torque for rods 20 Nm / 2 Kgm

(\*) For multiple composition rods and studs are available.



## ADL066... FLOW DIVERSION VALVES

The 6 way flow diversion valves are special solenoid valves which allow the simultaneous connection of two systems.

In order to obtain valve's working at pressure of 250 bar up to 320 bar (external drainage) the G 1/8" BSP plug must be removed to Y connector.

Max. pressure (without drainage, Y plugged)	250 bar
Max. pressure (external drainage)	320 bar
Max. flow	40 l/min
Overlap	negative
Fluid viscosity	10 ÷ 500 mm <sup>2</sup> /s
Fluid temperature	-25°C ÷ 75°C
Ambient temperature	-25°C ÷ 60°C
Max. contamination level	class 10 in accordance with NAS 1638 with filter β <sub>25</sub> ≥ 75
Weight	2,4 Kg

<b>ADL066...</b>	
"D15" DC Coils	CAP. I • 73
STANDARD CONNECTORS	CAP. I • 20

### ORDERING CODE

<b>ADL06</b>	Flow diversion valves NG6
<b>6</b>	No. of way
<b>W</b>	Threaded connectors 3/8" BSP
<b>I</b>	Drainage plugged
<b>*</b>	Voltage (see table 1)
<b>**</b>	Variants (see table 2)
<b>3</b>	Serial No.

### TAB.2 - VOLTAGE

<b>D15 COIL (30W) **</b>	
<b>L</b>	12V
<b>M</b>	24V
<b>V</b>	28V*
<b>N</b>	48V*
<b>Z</b>	102V*
<b>P</b>	110V*
<b>X</b>	205V*
<b>W</b>	Without DC coils and connectors

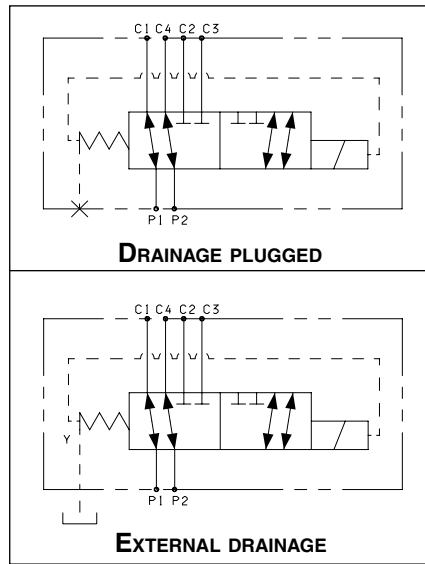
115Vac/50Hz  
120Vac/60Hz  
with rectifier

230Vac/50Hz  
240Vac/60Hz  
with rectifier

Voltage codes are not stamped on the plate, they are readable on the coils.

\* Special voltage  
\*\* Technical data see CAP. I • 73

- AMP Junior (with or without diode) and Deutsch and with flying leads coils, are available in 12V or 24V DC voltage only.
- Plastic type coils are available in 12V, 24V, 28V or 110V DC voltage only.

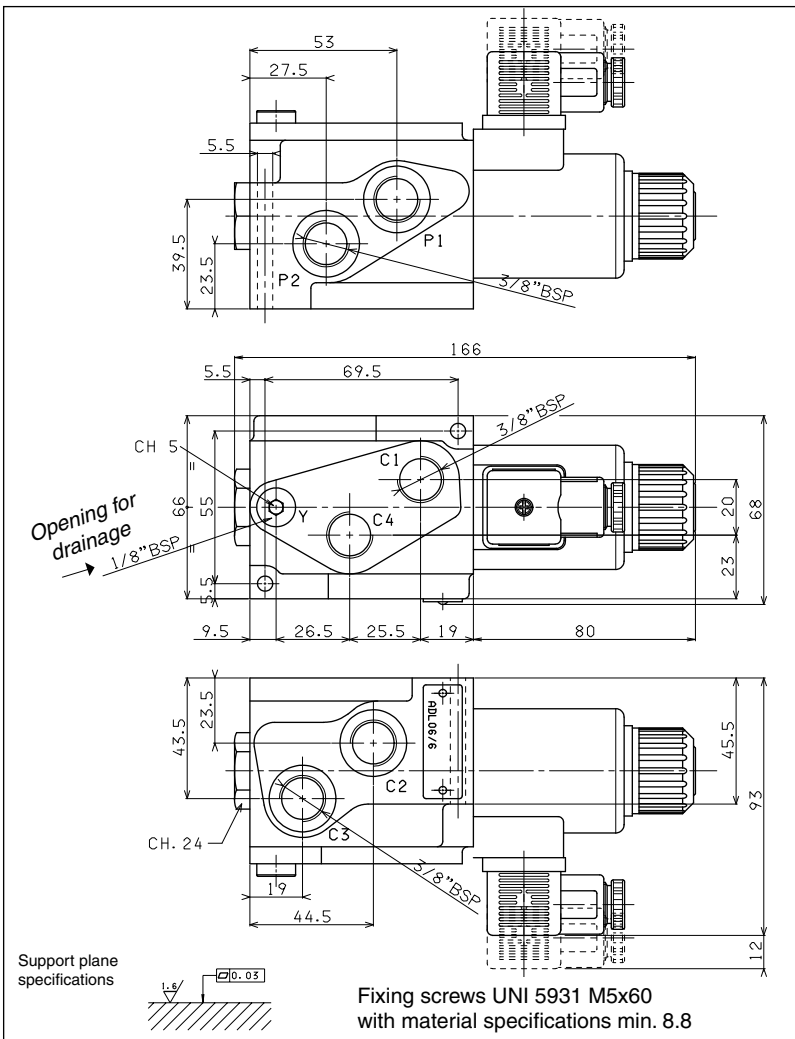


### TAB.2 - VARIANTS

No variant (without connectors)	S1(*)
Viton	SV(*)
Emergency button	ES(*)
Rotary emergency button	P2(*)
AMP Junior coil	AJ(*)
AMP Junior coil and integrated diode	AD(*)
Coil with flying leads (175mm)	SL
Deutsch DT04-2P Coil type	CZ
Plastic type coil D15	RS(*)

Other variants available on request.

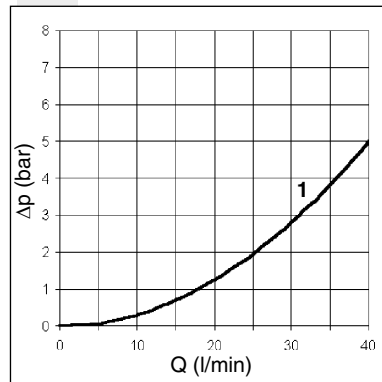
(\*) Coils with Hirschmann and AMP Junior connection supplied without connectors. The connectors can be ordered separately, CAP. I • 20.



### PRESSURE DROPS

Curve n° 1:

- P1 → C1
- P1 → C2
- P2 → C3
- P2 → C4



**BDL066...**

"40W" DC COILS	CAP. I • 74
STANDARD CONNECTORS	CAP. I • 20

**BDL066... FLOW DIVERSION VALVES**

The 6 way flow diversion valves, type BDL.06.6, are special solenoid valves which allow the simultaneous connection of two systems. With all user ports on the same side, these valves allow to simplify the layout of hydraulic plant. As they are moved from high performances solenoids they don't need the external drainage.

This valves can manage high hydraulic powers with a low pressure drop.

Max. pressure	250 bar
Max. flow	50 l/min
Overlap	negative
Hydraulic fluids	Mineral oils DIN 51524
Fluid viscosity	10 ÷ 500 mm <sup>2</sup> /s
Fluid temperature	-25°C ÷ 75°C
Ambient temperature	-25°C ÷ 60°C
Max. contamination level	class 10 in accordance with NAS 1638 with filter $\beta_{25} \geq 75$
Weight	3 Kg

**ORDERING CODE**

<b>BDL</b>	Flow diversion valves
<b>06</b>	Size NG06
<b>6</b>	No. of way
<b>W</b>	Threaded connectors 3/8" BSP
<b>I</b>	Internal drainage
<b>*</b>	Voltage (Tab. 1)
<b>**</b>	Variants (Tab. 2)
<b>1</b>	Serial No.

**TAB.1 - 40W COIL****DC VOLTAGE**

<b>L</b>	12V
<b>M</b>	24V
<b>N</b>	48V*
<b>W</b>	Without DC coils

Voltage codes are not stamped on the plate, their are readable on the coils.

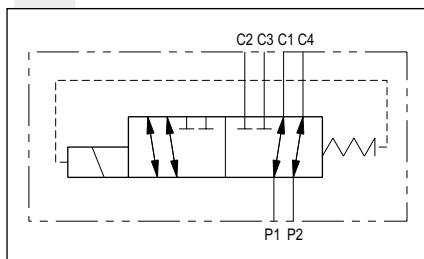
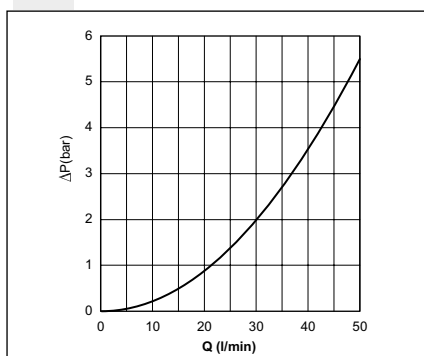
\* Special voltage

**TAB.2 - VARIANTS**

No variant (without connectors)	S1(*)
Viton	SV(*)
Emergency button	ES(*)
Rotary emergency button	P2(*)
Deutsch DT04-2P Coil type	CZ

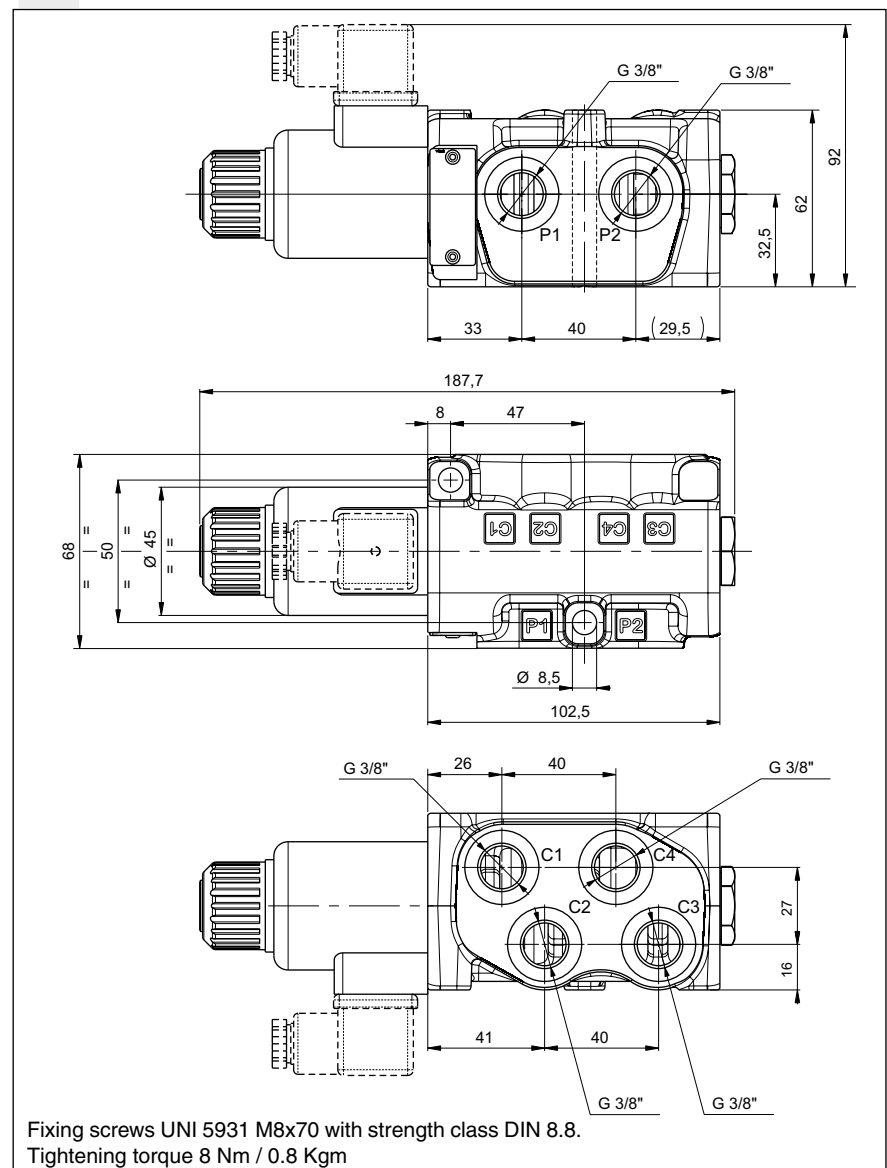
Other variants available on request.

(\*) Coils with Hirschmann connection supplied without connectors. The connectors can be ordered separately, CAP. I • 20.

**HYDRAULIC SYMBOL****PRESSURE DROPS**

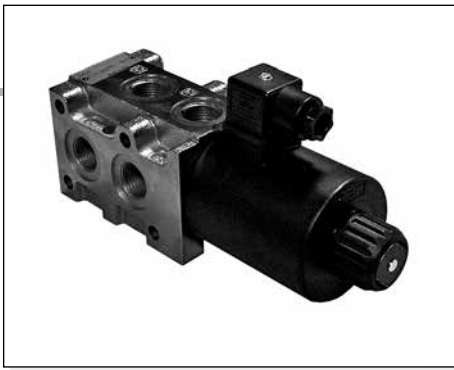
P1 → C1 , P1 → C2  
P2 → C4 , P2 → C3

The fluid used is a mineral oil with a viscosity of 46 mm<sup>2</sup>/s at 40°C; the tests have been carried out at a fluid temperature of 40°C.

**OVERALL DIMENSIONS**

Fixing screws UNI 5931 M8x70 with strength class DIN 8.8.  
Tightening torque 8 Nm / 0.8 Kgm

# CDL106... STACKABLE CIRCUIT SELECTOR VALVES



The stackable circuit selector valves, type CDL.10.6, allows one single drive of 6 users with 5 elements connected in series.

As they are moved from high performances solenoids they don't need the external drainage.

This valves can manage high hydraulic powers with a minimal pressure drop.

Max. pressure	250 bar
Max. flow	80 l/min
Overlap	negative
Hydraulic fluids	Mineral oils DIN 51524
Fluid viscosity	10 ÷ 500 mm <sup>2</sup> /s
Fluid temperature	-25°C ÷ 75°C
Ambient temperature	-25°C ÷ 60°C
Max. contamination level	class 10 in accordance NAS with 1638 with filter $\beta_{25}^{375}$
Weight	see "Overall dimension"

<b>CDL106...</b>	
"A16" DC Coils	CAP. I • 74
CONNECTORS STANDARD	CAP. I • 20

### ORDERING CODE

<b>CDL</b>	Stackable circuit selector valve
<b>10</b>	Size NG10
<b>6</b>	No. of way (single element)
<b>*</b>	W = Threaded connectors 1/2" BSP U = Threaded connectors SAE107/8"-14 UNF
<b>I</b>	Internal drainage
<b>*</b>	No. of elements: 1 / 2 / 3 / 4 / 5
<b>*</b>	Voltage (Tab. 1)
<b>**</b>	Variants (Tab. 2)
<b>1</b>	Serial No.

### TAB.1 - A16 COIL

DC VOLTAGE **	
L	12V
M	24V
N	48V*
P	110V*
Z	102V*
X	205V*
W	Without DC coil

115Vac/50Hz  
120Vac/60Hz with rectifier

230Vac/50Hz  
240Vac/60Hz with rectifier

Voltage codes are not stamped on the plate, their are readable on the coils.

\* Special voltage  
\*\* Technical data see CAP. I • 74

### TAB.2 - VARIANTS

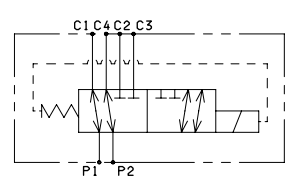
No variant (without connectors)	S1(*)
Viton	SV(*)
Emergency button	ES(*)
Rotary emergency button	P2(*)

Other variants available on request.

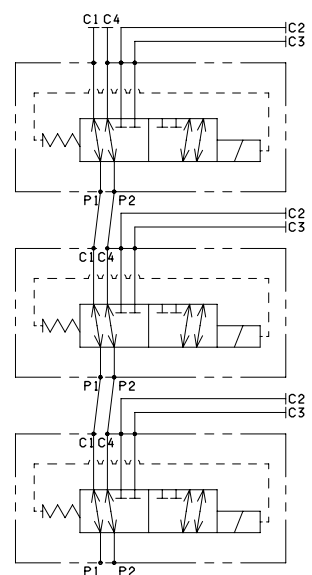
(\*) Coils with Hirschmann connection supplied without connectors. The connectors can be ordered separately, CAP. I • 20.

### HYDRAULIC SYMBOLS

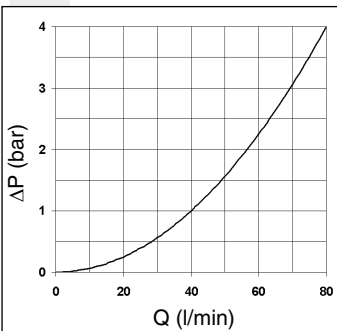
#### SINGLE ELEMENT



#### MULTISTATION CONNECTION



### PRESSURE DROPS

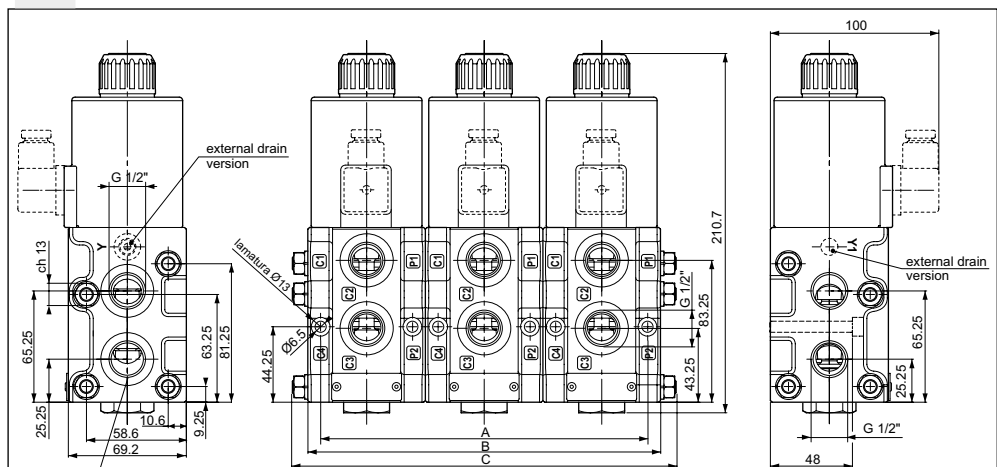


— P1 → C1, P1 → C2,  
P2 → C3 e P2 → C4

The fluid used is a mineral oil with a viscosity of 46 mm<sup>2</sup>/s at 40°C; the tests have been carried out at a fluid temperature of 40°C.

Fixing screws UNI 5931 M6x60 with material specifications min. 8.8  
Tightening torque for studs 8 Nm / 0.8 Kg  
Tightening torque for rods 20 Nm / 2 Kg

### OVERALL DIMENSIONS



N. 2 O-ring  
1/2" BSP: 2-024  
SAE107/8"-14 UNF: 2-025

No. of elements	No. of way	Length (mm)			Weight (Kg)	Kit spare part code* (rods and studs)
		A	B	C		
1	06	54	69	-	4,5	/
2	08	123	138	160	9,3	V89.56.0001
3	10	192	207	226	14	V89.56.0002
4	12	261	276	296	18,5	V89.56.0003
5	14	330	345	365	23,3	V89.56.0004

(\*) For multiple composition rods and studs are available.



## ADL106... FLOW DIVERSION VALVES

The 6 way flow diversion valves are special solenoid valves which allow the simultaneous connection of two systems.

In order to obtain valve's working at pressure of 250 bar up to 320 bar (external drainage) the G 1/8" BSP plug must be removed to Y connector.

Max. pressure (without drainage, Y plugged)	250 bar
Max. pressure (external drainage)	320 bar
Max. flow	80 l/min
Fluid viscosity	10 ÷ 500 mm <sup>2</sup> /s
Fluid temperature	-25°C ÷ 75°C
Ambient temperature	-25°C ÷ 60°C
Max. contamination level	class 10 in accordance with NAS 1638 with filter $\beta_{25} \geq 75$
Weight	3,6 Kg

### ADL106...

"A16" DC COILS	CAP. I • 74
STANDARD CONNECTORS	CAP. I • 20

### ORDERING CODE

<b>ADL10</b>	Flow diversion valves NG10
<b>6</b>	No. of way
<b>J</b>	Connectors 3/4"BSP
<b>I</b>	Drainage plugged
<b>*</b>	Voltage (see table 1)
<b>**</b>	Variants (see table 2)
<b>1</b>	Serial No.

**TAB.1 - A16 COIL**

DC VOLTAGE **	
L	12V
M	24V
N	48V*
P	110V*
Z	102V*
X	205V*
W	Without DC coil

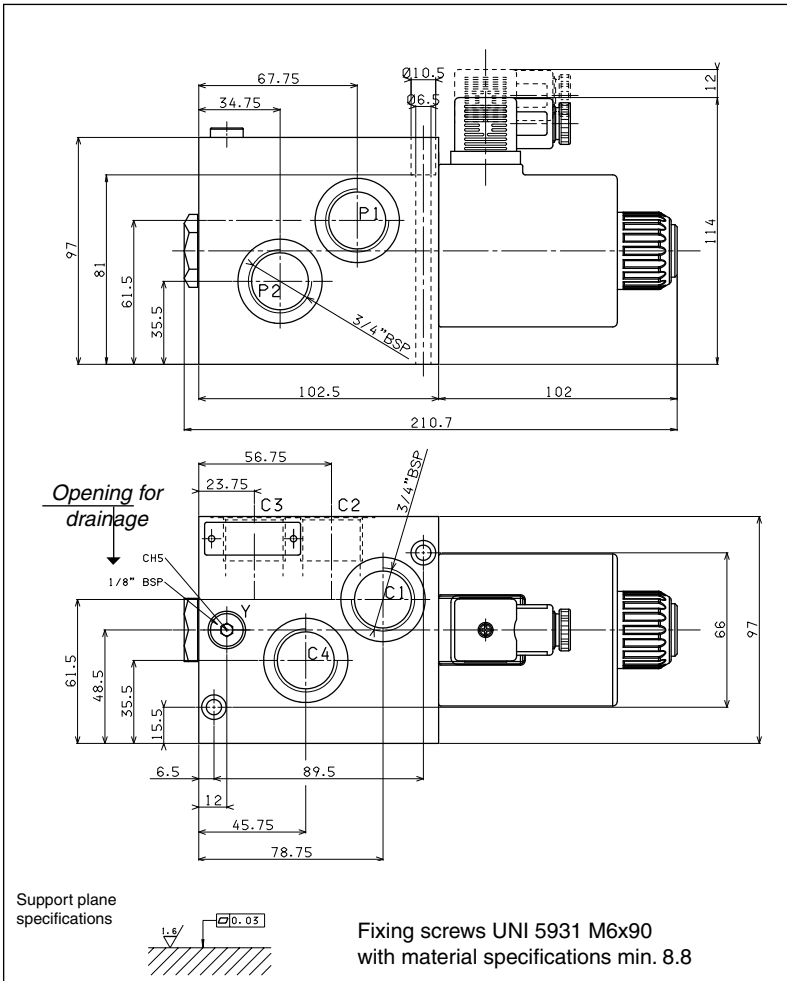
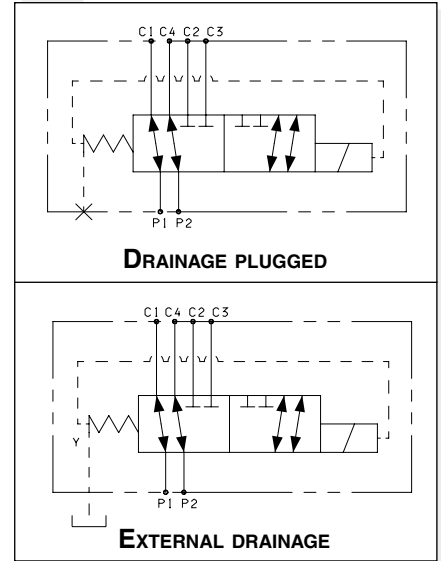
115Vac/50Hz  
120Vac/60Hz  
with rectifier

230Vac/50Hz  
240Vac/60Hz  
with rectifier

Voltage codes are not stamped on the plate, their are readable on the coils.

\* Special voltage  
\*\* Technical data see CAP. I • 74

**DRAINS AND HYDRAULIC SYMBOLS**



**TAB.2 - VARIANTS**

No variant (without connectors)	S1(*)
Viton	SV(*)
Emergency button	ES(*)
Rotary emergency button	P2(*)

Other variants available on request.

(\*) Coils with Hirschmann and AMP Junior connection supplied without connectors. The connectors can be ordered separately, CAP. I • 20.

**PRESSURE DROPS**

