

## CDL.04.6... STACKABLE CIRCUIT SELECTOR VALVES



**CDL.04.6...**

"A09" DC COILS CH. I PAGE 68

CONNECTORS STANDARD CH. I PAGE 19

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"

1

### 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 \*\*

<b>L</b>	12V	
<b>4</b>	14V	
<b>M</b>	24V	115Vac/50Hz 120Vac/60Hz with rectifier
<b>N</b>	48V*	
<b>P</b>	110V*	230Vac/50Hz 240Vac/60Hz with rectifier
<b>Z</b>	102V*	
<b>X</b>	205V*	
<b>W</b>	Without DC coil	

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

\* Special voltage

\*\* Technical data see page I • 67

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

• The Deutsch coil with bidirectional diode is available in 12V DC voltage only.

**TAB. 2 - VARIANTS**

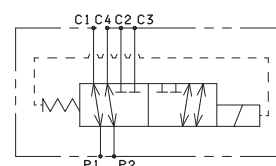
VARIANT	CODE
No variant (without connectors)	S1(*)
Viton	SV(*)
Rotary emergency button	P2(*)(**)
Emergency button	ES(*)
AMP Junior connection	AJ(*)
Bobina con fili (250 mm)	FL
with flying leads (130 mm) and integr. diode	LD
Deutsch connection with bidir. diode	CX
Other variants available on request.	

(\*) Coils with Hirschmann and AMP Junior connection supplied without connectors. The connectors can be ordered separately, ch. I page 19.

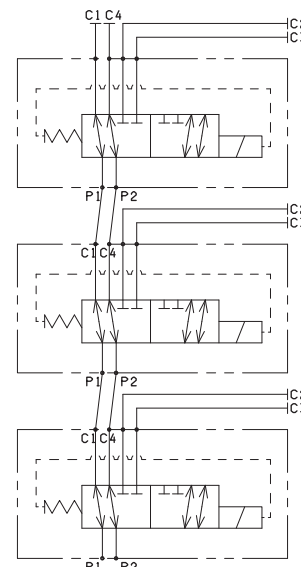
(\*\*) P2 Emergency tightening torque **max. 6÷9 Nm / 0.6 ÷ 0.9 Kgm** with CH n. 22

### HYDRAULIC SYMBOLS

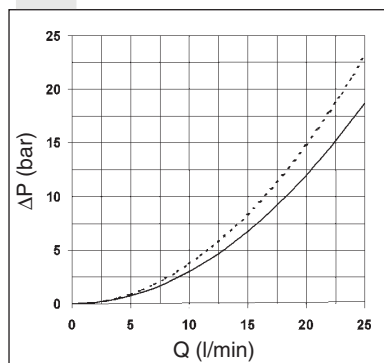
#### SINGLE ELEMENT



#### MULTI STATION CONNECTION

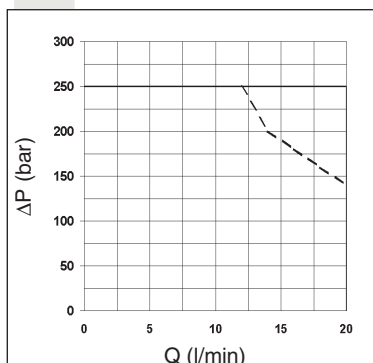


### PRESSURE DROPS



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

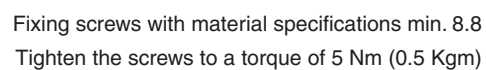
### LIMITS OF USE



— 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.

## 1



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



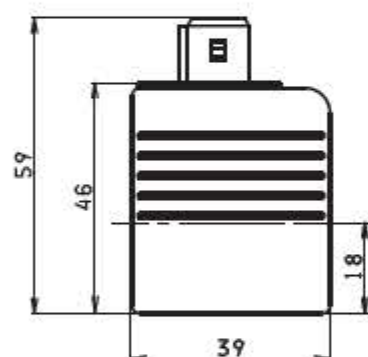
## "A09" DC COILS FOR CDL.04...

Type of protection (in relation to connector used)	IP 65
Number of cycle	18.000/h
Supply tolerance	±10%
Ambient temperature	-30°C ÷ 60°C
Duty cycle	100% ED
Insulation class wire	H
Weight	0,215 Kg

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

• The Deutsch coil with bidirectional diode is available in 12V DC voltage only.

### AMP JUNIOR (AJ)

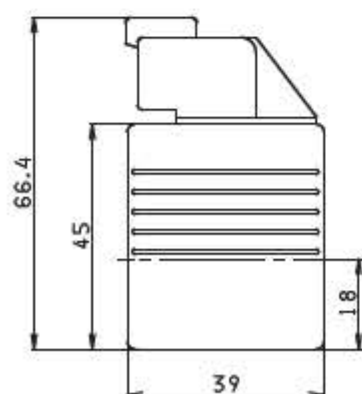


VOLTAGE (V)	MAX WINDING TEMPERATURE (AMBIENT TEMPERATURE 25°C)	RATED POWER (W)	RESISTANCE AT 20°C (OHM) ±7%
12V	123°C	27	5.3
24V	123°C	27	21.3
48V*	123°C	27	85.3
102V <sup>(*)</sup> <sup>(**)</sup>	123°C	27	392
110V <sup>(*)</sup> <sup>(**)</sup>	123°C	27	448
205V <sup>(*)</sup> <sup>(**)</sup>	123°C	27	1577

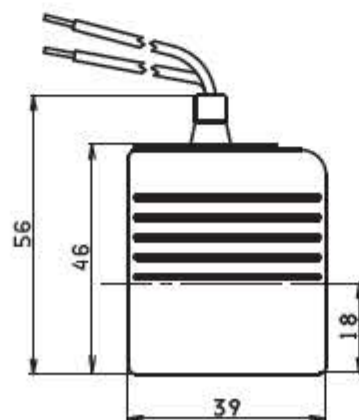
\* Special voltages

\*\* The european low voltage directive is applied to electronical equipments used at a nominal voltages between 50 and 1000 VAC or 75 and 1500 VDC. In conformity with the low directive each part of the manifold or the subplate on which the valve is mounted should be connected to a protective earth with a resistance less than 0.1 ohms.

### DEUTSCH COIL WITH BIDIR. DIODE (CX) DT04 - 2P

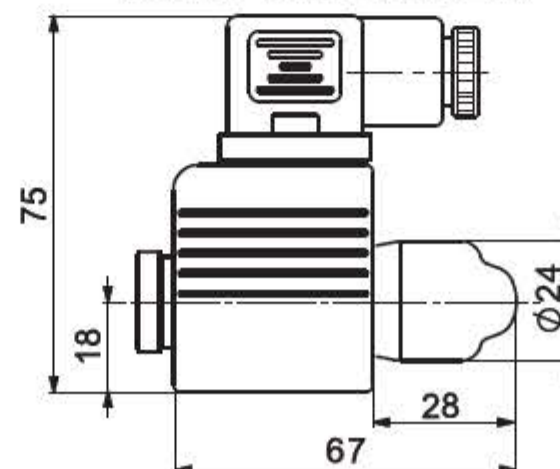


### FLYING LEADS (FL) LEADS WITH DIODO (LD)

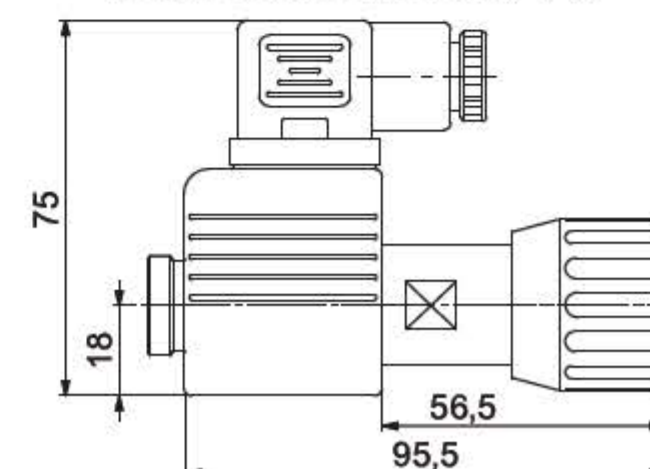


### EMERGENCY (COILS WITH HIRSCHMANN CONNECTION)

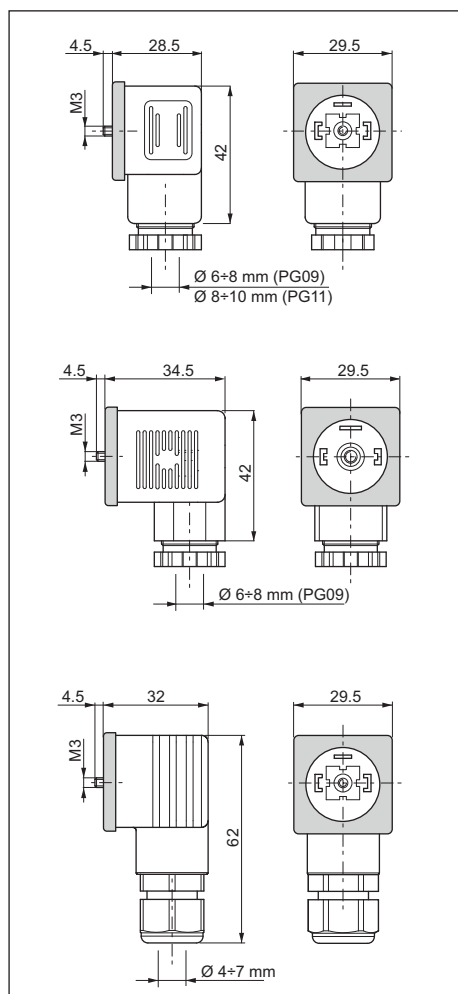
#### MANUAL WITHOUT CONN. (ES) MANUAL WITH CONN. (E1)



#### ROTARY WITHOUT CONNECTOR (P2\*) ROTARY WITH CONNECTOR (P1\*)



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



Connector	Protection level	Type	Cable gland	Code
Standard	IP65	Black color	PG09	V86 05 0002
		Grey color	PG09	V86 05 0004
		Black color	PG11	V86 05 0006
		Grey color	PG11	V86 05 0008
Lens cover with pilot light (*)	IP65	12 VAC/VDC	PG09	V86 10 0018
		24 VAC/VDC	PG09	V86 10 0012
		115 VAC/VDC	PG09	V86 10 0020
		230 VAC/VDC	PG09	V86 10 0022

Screw tightening torque: 0.60 Nm

Connector	Protection level	Type	Cable gland	Code
With rectifier (*) Inlet voltage 12÷230 VAC Outlet voltage 9÷205 VDC	IP65	Black color	PG09	V86 20 0002
		Grey color	PG09	V86 20 0004
Lens cover with pilot light and rectifier (*) Inlet voltage 12÷230 VAC Outlet voltage 9÷205 VDC	IP65	12 VAC	PG09	V86 25 0018
		24 VAC	PG09	V86 25 0019
		48 VAC	PG09	V86 25 0020
		115 VAC	PG09	V86 25 0021
		230 VAC	PG09	V86 25 0022

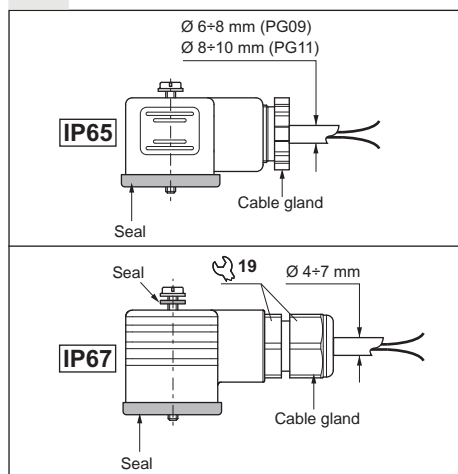
Screw tightening torque: 0.60 Nm

Connector	Protection level	Type	Cable gland	Code
With protection level IP67	IP67	Black color	—	V86 28 0001
		Grey color	—	V86 28 0002

Screw tightening torque: 0.60 Nm

(\*) Don't use for proportional versions

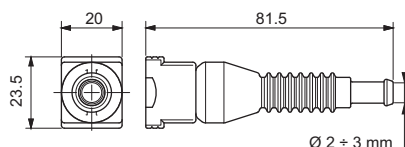
## ELECTRICAL FEATURES OF CONNECTORS



Description	IP65	IP67
AC rated voltage	Max. 250 V	Max. 250 V
DC rated voltage	Max. 300 V	Max. 300 V
Pin contact nominal current	10A	10A
Pin contact max. current	16A	16A
Max. section cable	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>
Cable gland PG09 - M16x1,5 Cable gland PG11 - G 1/2" - M20x1,5	Ø cable 6 ÷ 8 mm Ø cable 8 ÷ 10 mm	Ø cable 4 ÷ 7 mm —
Protection level	IP65 EN60529	IP67 EN60529
Insulation class	VDE 0110-1/89	VDE 0110-1/89
Operating temperature	-40°C ÷ 90°C	-20°C ÷ 80°C

The degrees of protection indicate is guaranteed only if the connectors were properly mounted with his original seals.

## AMP JUNIOR CONNECTORS



Connector	Type	Cable section	Pin contact max current	Code
AMP Junior connector Timer 2 contact	Black color	0,5 ÷ 1,5 mm <sup>2</sup>	10A	RKRC0808000