

1

ORDERING CODE

| | |
|-----------|----------------------------------|
| AD | Directional valve |
| 5 | CETOP 5/NG10 |
| * | Type of operator (tab.1) |
| ** | Spools (see tables on page I•31) |
| * | Mounting type (tab.2) |
| * | Voltage / Specification (tab.3) |
| ** | Variants (tab.4) |
| 2 | Serial No. |

TAB.1 - TYPE OF OPERATOR

| | |
|----------|-------------------|
| E | Electrical |
| D | Direct mechanical |
| O | Oleo-pneumatic |
| L | Lever |

TAB.2 MOUNTING

| STANDARD | |
|----------------------------------|--|
| C | |
| D | |
| E | |
| F | |
| SPECIALS (WITH PRICE INCREASING) | |
| G | |
| H | |
| I | |
| L | |
| M | |

• **Mounting type D** is only for valves with detent

• In case of **mounting D** with detent a maximum supply time of 2 sec is needed (only for AC coils).

• The springs for the version with detent (mounting **D**) are different from those for standard versions.

TAB.3 - VOLTAGE / SPECIFICATION

| Operator | Voltage Specs. | Description | Note | |
|----------|----------------|---|---|---|
| E | A | 24V/50Hz | AC Voltage ** (Technical data see page I•36) | |
| | B | 48V/50Hz* | | |
| | J | 115V/50Hz - 120V/60Hz | | |
| | Y | 230V/50Hz - 240V/60Hz | | |
| | E | 240V/50Hz* | | |
| | F | 24V/60Hz* | | |
| | | K | Without AC coils | DC Voltage ** (Technical data see page I•36) |
| | | L | 12V | |
| | | M | 24V | |
| | | N | 48V* | |
| | | P | 110V* | |
| | | Z | 102V* 115Vac/50Hz 120Vac/60Hz with rectifier | |
| | X | 205V* 230Vac/50Hz 240Vac/60Hz with rectifier | | |
| | W | Without DC coils | | |
| D | Z | standard | — | |
| O | Z | standard | — | |
| L | Z | valve with lever | — | |
| | X | valve without lever | — | |

* Special voltage

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

TAB.4 - VARIANTS

| VARIANT | CODE | PAGE |
|--|-------|------------|
| No variant (without connectors) | S1(*) | |
| Viton | SV(*) | |
| Emergency button | ES(*) | I•36 |
| Preset for microswitch - (E/F/G/H only) see below note ◊ | MS(*) | I•32- I•35 |
| Rotary emergency button | P2(*) | I•36 |
| Marine version (AD.5.O..) | H1 | |
| Preset for microswitch + Viton | MV | |
| Spool movement speed control (VDC only) with ø 0.5 mm diameter orifice | 5S(*) | I•33 |
| Spool movement speed control (VDC only) with ø 0.6 mm diameter orifice | 6S(*) | I•33 |
| Spool movement speed control (VDC only) with ø 0.7 mm diameter orifice | 7S(*) | I•33 |
| Spool movement speed control (VDC only) with ø 0.8 mm diameter orifice | 8S(*) | I•33 |
| External draining solenoid (electrically operated only) | S5(*) | I•33 |
| Microswitch+ Detent (for lever operation) | MD | |
| Detent for lever control | D1 | |

◊ = Maximum counter-pressure on T port: 4 bar - Microswitch type AM1107 code V79000001 can be ordered separately.

◆ = Variant codes stamped on the plate

(*) Coils with Hirschmann connection supplied without connectors. The connectors can be ordered separately, ch. I page 20.

| TWO SOLENOIDS, SPRING CENTRED "C" MOUNTING | | | |
|--|--|----------|--------------------|
| Spool type | | Covering | Transient position |
| 01 | | + | |
| 02 | | - | |
| 03 | | + | |
| 04* | | - | |
| 05 | | + | |
| 66 | | + | |
| 06 | | + | |
| 07* | | + | |
| 08* | | + | |
| 10* | | + | |
| 22* | | + | |
| 11* | | + | |
| 12* | | + | |
| 13* | | + | |
| 14* | | - | |
| 28* | | - | |

| ONE SOLENOID, SIDE A "E" MOUNTING | | | |
|-----------------------------------|--|----------|--------------------|
| Spool type | | Covering | Transient position |
| 01 | | + | |
| 02 | | - | |
| 03 | | + | |
| 04* | | - | |
| 05 | | + | |
| 66 | | + | |
| 06 | | + | |
| 08* | | + | |
| 10* | | + | |
| 12* | | + | |
| 15 | | - | |
| 16 | | + | |
| 17 | | + | |
| 14* | | - | |
| 28* | | - | |

STANDARD SPOOLS

(*) Spool with price increasing

• With spools 15 / 16 / 17 only the mounting E / F are possible

• 19 / 20 / 21 spool not planned for AD.5.E...J*

• For lever operated the spools used are different.
Available spools for this kind of valve see AD5L..

| ONE SOLENOID, SIDE B "F" MOUNTING | | | |
|-----------------------------------|--|----------|--------------------|
| Spool type | | Covering | Transient position |
| 01 | | + | |
| 02 | | - | |
| 03 | | + | |
| 04* | | - | |
| 05 | | + | |
| 66 | | + | |
| 06 | | + | |
| 08* | | + | |
| 10* | | + | |
| 22* | | + | |
| 12* | | + | |
| 13* | | + | |
| 07* | | + | |
| 15 | | - | |
| 16 | | + | |
| 17 | | + | |
| 14* | | - | |
| 28* | | - | |

| TWO SOLENOIDS "D" MOUNTING | | | |
|----------------------------|--|----------|--------------------|
| Spool type | | Covering | Transient position |
| 19* | | - | |
| 20* | | + | |
| 21* | | + | |

1



| | |
|---------------------------|--|
| Max. pressure ports P/A/B | 320 bar |
| Max. pressure port T | 160 bar |
| Max. flow | 100 l/min |
| Min. operating pressure | $4 + [0.027 \times (pt^*)]$ bar - see note |
| Max. operating pressure | 200 bar |
| Fluid viscosity | $10 \div 500 \text{ mm}^2/\text{s}$ |
| Fluid temperature | $-25^\circ\text{C} \div 75^\circ\text{C}$ |
| Ambient temperature | $-25^\circ\text{C} \div 60^\circ\text{C}$ |
| Max. contamination level | class 10 in according with NAS 1638 with filter $\beta_{25} \geq 75$ |
| Weight (single pilot) | 4,1 Kg |
| Weight (twin pilot) | 5,4 Kg |

- Possible mounting:
Hydraulic control:
C / D / E / F / G / H / I / L / M
Pneumatic control:
I / L / M

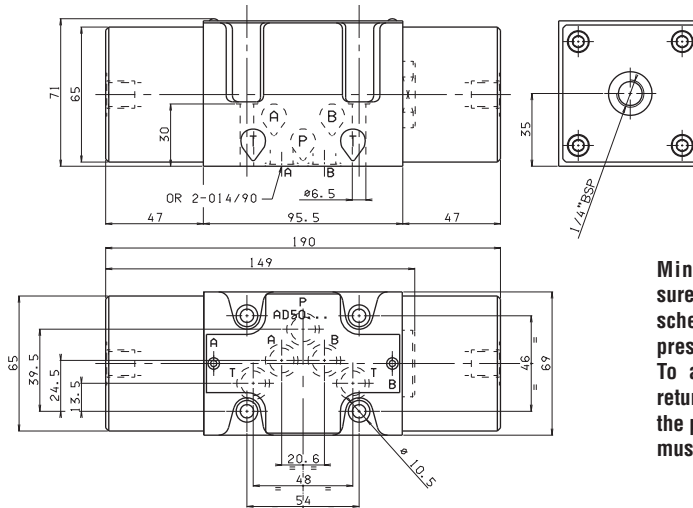
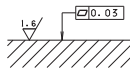
• Ordering code see page I•30

(pt*) = Pressure at port T

OVERALL DIMENSIONS

Fixing screws UNI 5931 M6x40
with material specifications min. 8.8
Tightening torque 8 Nm / 0.8 Kgm

Support plane
specifications



Minimum pilot pressure depends on spool scheme, flow rate and pressure.
To allow the spool to return to neutral position, the pilot pressure must be below 2 bar.

EAD50 - 02/2000/e