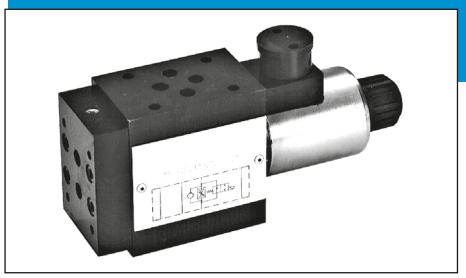
# A66... MODULAR FLOW CONTROL VALVES
## FAST / SLOW ASSEMBLY CETOP 3



This is modular assembly ON/OFF solenoid valve which, by fitting suitable 2 way regulator, allows two speed operation in the same system via an electrical changeover command.

**The flow rate regulator type QC32... must be ordered separately.**
**The operational limit curves have been obtained with the regulator fully closed, and those same limits improve gradually with the opening of the regulator.**

| Max. operating pressure | 320 bar |
|---|---|
| Hydraulic fluids | Mineral oils DIN 51524 |
| Fluid viscosity | 10 ÷ 500 mm²/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 | 2,4 Kg |

The test have been carried out at operating temperature, with a voltage 10% lower than rated voltage and with a fluid temperature of 50 degrees C. The fluid used was a mineral based oil with a viscosity of 46 mm²/s at 40 degrees C.

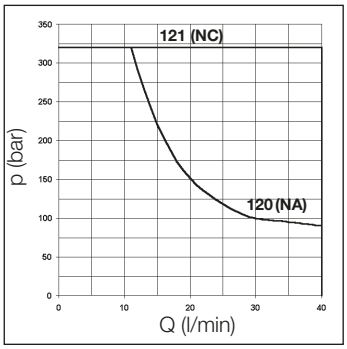
**A66...**


| | |
|---|---|
| STANDARD CONNECTORS | SECT. L 15 |
| DC COILS | SECT. A 74 |
| QC32... | SECT. C 2 |
| SCREWS AND STUDS | SECT. D 21 |

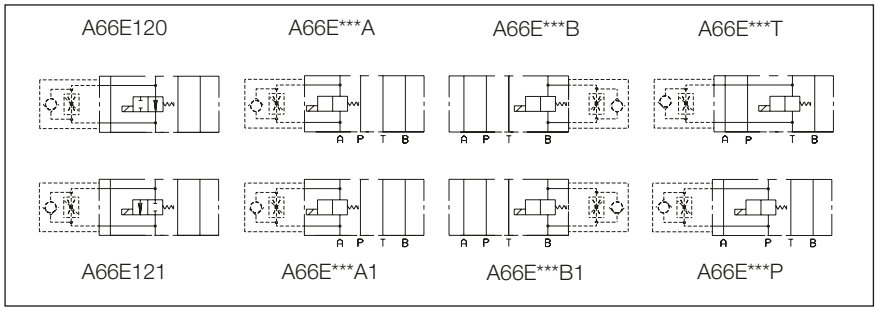

### ORDERING CODE

| | |
|---|---|
| **A** | Speed control valve |
| **66** | Size |
| **E** | Electrical operator |
| *** | **120** = Normally open<br>**121** = Normally closed<br>See table hydraulic symbols |
| * | Control on lines **A/B/P/T** (see symbols)<br>The interface holder "H" must be turned by 180° in order to obtain the **A1** and **B1** versions. |
| * | Voltage: see tab.1 |
| ** | Variants: see tab.2 |
| **4** | Serial No. |

### LIMITS OF USE




### HYDRAULIC SYMBOLS




### TAB.1 VOLTAGE

**D15 COILS (IN DC - 30W) ****

| | | |
|---|---|---|
| **L** | 12V | 115Vac/50Hz 120Vac/60Hz with rectifier |
| **M** | 24V | |
| **V** | 28V* | |
| **N** | 48V* | |
| **Z** | 102V* | 230Vac/50Hz 240Vac/60Hz with rectifier |
| **P** | 110V* | |
| **X** | 205V* | |
| **W** | without coils | |

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

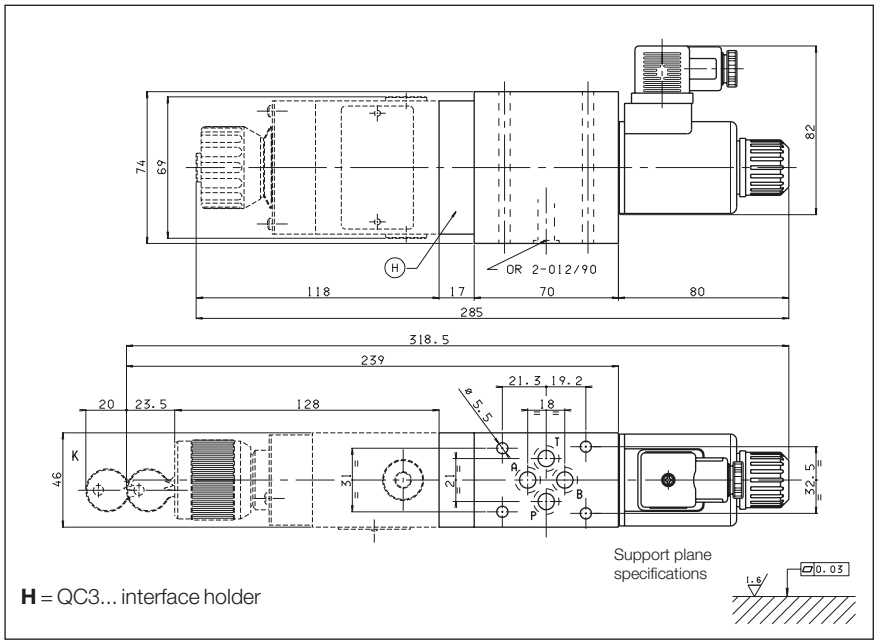
* Special voltage
** Technical data see Sect. L 4

### TAB.2 - VARIANTS

| | |
|---|---|
| No variant (without connectors) | S1(*) |
| FKM | SV(*) |
| Other variants available on request | |

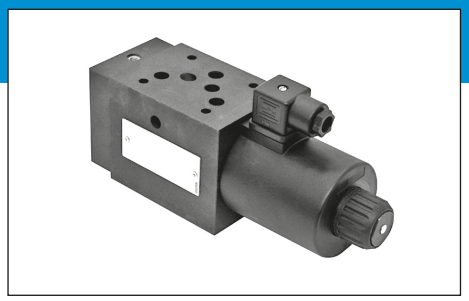
(*) Coils with Hirschmann connection supplied without connectors. The connectors can be ordered separately, Sect. L 15.

### OVERALL DIMENSIONS




**H** = QC3... interface holder

# A88... MODULAR FLOW CONTROL VALVES
## FAST / SLOW ASSEMBLY CETOP 5



| A88... | | |
|---|---|---|
| "A16" DC COILS | SECT. A | 42 |
| STANDARD CONNECTORS | SECT. L | 15 |
| QC32... | SECT. C | 2 |
| SCREWS AND STUDS | SECT. D | 36 |

This is a modular assembly ON/OFF solenoid valve which, by fitting a suitable 2 way regulator, allows two speed operation in the same system via an electrical changeover command.

**The flow rate regulator type QC32 must be ordered separately.**
**The limit of use curves have been obtained with the regulator fully closed, and those same limits improve gradually with the opening of the regulator.**

**• Solenoids used are standard type A16 for DC voltage.**

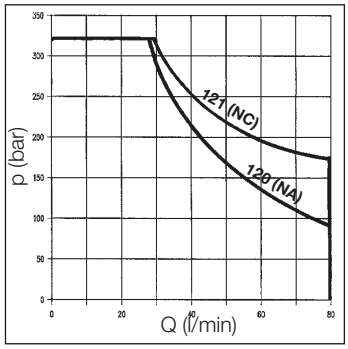
| | |
|---|---|
| Max. operating pressure | 320 bar |
| Max pressure on port T | see note (*) below |
| Hydraulic fluids | Mineral oils DIN 51524 |
| Fluid viscosity | 10 ÷ 500 $mm^2/s$ |
| Fluid temperature | -25°C ÷ 75°C |
| Ambient temperature | -25°C ÷ 60°C |
| Max. contamination level | class 10 in accordance with NAS 1638 with filter $ß_{25}≥75$ |
| Weight with a DC solenoid | 4,2 Kg |
| (*) Pressure dynamic allowed for 1 millions of cycles. | |

The test have been carried out at operating temperature, with a voltage 10% lower than rated voltage and with a fluid temperature of 50 degrees C. The fluid used was a mineral based oil with a viscosity of 46 $mm^2$/sec at 40 degrees C.

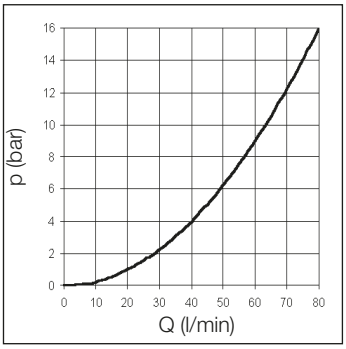
### ORDERING CODE

| | |
|---|---|
| **A** | Speed control valve |
| **88** | Size |
| **E** | Electrical operator |
| *** | **120** = Normally open<br>**121** = Normally closed<br>See table "Hydraulic symbols" |
| * | Control on lines **A/B/P/T** (see symbols)<br>The interface holder "H" must be turned by 180° in order to obtain the **A1** and **B1** versions. |
| * | Voltage : see tab.1 |
| ** | Variants: see tab.2 |
| **3** | Serial No. |

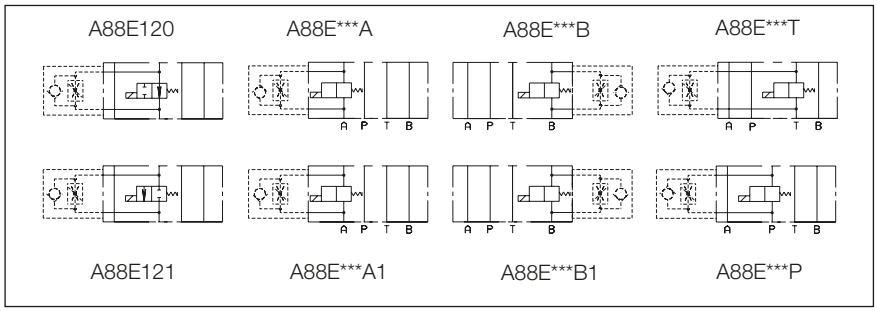
### LIMITS OF USE DC SOLENOID




### FREE FLOW THROUGH SPOOL




### HYDRAULIC SYMBOLS




### TAB.1 - A16 COIL (45W)

**DC VOLTAGE ****

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

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

* Special voltage
** Technical data see Sect. F 7

### TAB.2 - VARIANTS

| | |
|---|---|
| No variant (without connectors) | S1(*) |
| FKM | SV(*) |
| Other variants available on request | |

(*) Coils with Hirschmann connection supplied without connectors. The connectors can be ordered separately, Sect. L 15 .

