

# Model Code

**Housing Material** 

**Electrical Connection** 

0

1

4 6

Α

Signal \_

0060

= Aluminum (for hydraulic oils)

= Steel (for water based fluids)

= 4 to 20 mA, 2 conductor

= 1.59 to 15.9 gpm 0300 = 3.96 to 79.3 gpm

= M12x1, 4 pole (connector not supplied)

# EVS 3 1 X X - A - XXXX - 000

## **Pin Connections** Binder 714 M18

	Pin	31X4-A	
	1	nc	
	2	Signal +	
	3	Signal -	
	4	nc	
M12x1, 4 p	ole		
M12x1, 4 p	ole Pin	31X6-A	
M12x1, 4 p	ole Pin 1	<b>31X6-A</b> Signal +	
M12x1, 4 p	ole Pin 1 2	<b>31X6-A</b> Signal + nc	
M12x1, 4 p	ole Pin 1 2 3	<b>31X6-A</b> Signal + nc Signal -	
M12x1, 4 p	Pin 1 2 3 4	<b>31X6-A</b> Signal + nc Signal - nc	

## 0600 = 10.6 to 159 gpm **Modification Number**

**Measuring Range** 0020 = 0.26 to 5.28 gpm

#### 000 = Standard

SAE 37 = SAE 37 Thread using an adapter (this adapter handles up to 2000 psi)

= 4 pole Binder series 714 M18 (connector not supplied)

Note: On units with a different modification number, please read the label or the technical amendment details supplied with the unit.

Accessories: Appropriate accessories, such as electrical connectors, can be found in the Accessories section.

## **Dimensions**



Model	Measuring Range gpm	Material	L	н	D / SW*	G	DN	P <sub>max</sub> in psi	T <sub>max</sub>
EVS 310X-A-0020	0.26 to 5.28	AL/SS	4.61"	5.31"	1.85" / 1.81"	G 1/4	0.28"	5800	-4° to 194°F
EVS 310X-A-0060	1.59 to 15.9	AL/SS	5.67"	5.31"	1.91" / 1.81"	G 1/2	0.43"	5800	-4° to 194°F
EVS 310X-A-0300	3.96 to 79.3	AL/SS	6.10"	5.91"	2.50" / 2.36"	G 1 1/4	0.87"	5800	-4° to 194°F
EVS 310X-A-0600	10.6 to 159	AL/SS	7.13"	5.91"	2.50" / 2.36"	G 1 1/2	1.81"	4565(A) 5800(S)	-4° to 194°F

### INNOVATIVE FLUID POWER HYDAC 63



# HDA 5500 Series Intelligent Display Unit



# Description

The digital display units in the series HDA 5500 are microprocessor controlled display and monitoring units designed for control panel mounting. Different versions are available with a maximum of 3 analog inputs, an analog output (4 to 20 mA or 0 to 10 V) and up to 4 relay outputs.

The analog input signals are displayed according to the settings selected by the user. Each of the 4 relay outputs can be allocated to each of the 1 to 3 sensor inputs and to the differential between input 1 and 2.

A PT100 temperature probe can be connected directly to the unit. There is also an option for frequency measurement using the HDS 1000 (HYDAC rpm probe), for example to measure the speed of rotating components.

Depending on the model, it is also possible to connect SMART sensors (condition monitoring sensors). SMART sensors are a new generation of sensors from HYDAC, which can provide a variety of different measurement values.

# Special Features

- Digital display of analog signals
- Clear 4-digit, 7-segment LED display
- Up to 3 analog inputs (4 to 20 mA, 0 to 10 V or 0 to 5 V)
- Accuracy  $\leq \pm 0.5\%$
- Differential measurement possible
- Analog output (4 to 20 mA or 0 to 10 V)
- Up to 4 relay switching outputs
- RS 232 interface
- Voltage supply 12 to 32 V DC or 85 to 265 V AC 50 / 60 Hz
- Option for PT100 sensor input or frequency input

# Approvals



CE mark is a mandatory conformity mark on many products placed on the single market in the European Economic Area



# **Technical Details**

Display	7 segment LED display, 4 digits, 0.55" high 3 LED for measuring range 4 LED for switch points		
Bange of display	-999 to 9999 (adjustable)		
Display units with background lighting	bar, kg/cm_, Mpa, psi, °C, °F, L/min, mA, V, Hz, kN, m, mm, L, gal, gal/min, 1/min		
Weight	320g		
Input Specifications			
Analog signal input	Measuring Range 4 to 20 mA 0 to 5V 0 to 10V		
	Accuracy $\leq \pm 0.5\%$ at 77°F		
PT 100 input	Measuring Range -13° to 212°F (-25 to 100°C)		
	Accuracy $\leq \pm 0.5\%$ at 77°F		
Frequency / counter input	Signal Threshold 0 to 0.6V = LOW 3 to 24V = HIGH		
	Frequency Range 15Hz to 4kHz		
Output Specifications			
Туре	2 or 4 relays with isolated common		
Switching voltage	100mV to 250 VAC		
Switching current	9 mA to 2A		
Contact rating	400 VA, 50 W (use varistors with inductive load)		
Set point range	1.5 to 100% FS		
Reset point range	0.5 to 99% FS		
Life expectancy of switch contacts	≥ 20 million cycles at minimum load ≥ 1 million cycles at maximum load		
Reaction time	approx. 20 ms (with switch delay = 0 ms)		
Interface	Serial interface RS 232 Baud rate 19200 - 8 data bits 1 start and stop bit - no parity no hand shake		
Output signal	4 to 20 mA, ≤ 400 ohm 0 to 10 VDC, ≥ 2 Kohm		
Environmental Condition			
Norminal temperature range	32° to 122°F (0 to 50°C)		
Operating temperature range	32° to 122°F (0° to 50°C)		
Storage temperature range	-40° to 176°F (-40° to 80°C)		
CE mark	EN 61000-6-1 / 2 / 3 / 4		
Environmental protection	IP 20		
Electrical Specifications			
Supply voltage	85 to 265 VAC (50 / 60 Hz) 12 to 32 VDC		
Reverse polarity protection of the supply voltage, excess voltage, override and short circuit protection	Standard		
Connection terminals	Supply Voltage terminal block, 2 pole, 2.5mm		
	Input/output terminal block, 11 pole, 2.5mm		
	Relays 2 terminal blocks. 5 pole. 2.5mm		

## **(HYDAC)** INNOVATIVE FLUID POWER 64



# Model Code

## <u>HDA 5500</u> - <u>X</u> - <u>X</u> - <u>XX</u> - <u>000</u>

- Inputs
- 0 = 1 analog input
- = 3 analog inputs 1
- = 1 analog + 1 frequency / Count function 2
- = 1 analog + PT 100 input 3

## Outputs

- = without relay option 0
- 1 = 2 relay outputs

### 2 = 4 relay outputs

- AC = 85 to 265 VAC DC = 12 to 32 VDC

## **Modification Number**

000 = standard

# **Input Variations**

Analog Signal	HDA 5500-0
Analog Signal Analog Signal Analog Signal	HDA 5500-1
Analog Signal and Frequency Signal	HDA 5500-2
Analog Signal and PT 100 Temperature Signal	HDA 5500-3

# **Ouput Variations**

HDA 5500-X-0	Analog Output
HDA 5500-X-1	Relay-Switching Output 1 Relay-Switching Output 2 Analog Output
HDA 5500-X-2	Relay-Switching Output 1 Relay-Switching Output 2 Relay-Switching Output 3 Relay-Switching Output 4 Analog Output

# **Dimensions**





**Protection Cover** Part #02701890 Purchase separately

