

# AVENTICS™ Proportional Valves SENTRONIC<sup>HD</sup>

Digital High Definition Pressure Regulator

**3/3**  
Series  
**616**

## Features

- SENTRONIC<sup>HD</sup> is a high-definition 3-way proportional valve with digital control.
- SENTRONIC<sup>HD</sup> stands for high-definition pressure regulation.
- The DaS-HD software is supplied to offer optimum adjustment over PC and viewing of all process variables. It allows easy diagnostics, parameter setting and maintenance.

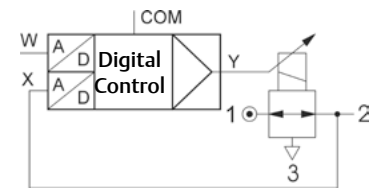


## General

<b>Fluids</b>	Air or neutral gases, condensate-free, lubricated or unlubricated Class 5 to ISO 8573-1
<b>Ports</b>	G1/4
<b>Max. allowable pressure</b>	12 bar
<b>Pressure range</b>	See "PRODUCT CODE" overleaf
<b>Fluid temperature</b>	0...50 °C
<b>Ambient temperature</b>	0...50 °C
<b>Hysteresis</b>	± 0,25 % of span
<b>Linearity / pressure measurement</b>	± 0,25 % of span
<b>Repeatability</b>	± 0,25 % of span

## Construction

<b>Body</b>	Pilot operated valve
<b>Internal parts</b>	Aluminium
<b>Seals</b>	Stainless steel, brass, aluminium and POM
<b>Degree of protection</b>	FPM
	See table below



## Electrical Characteristics

nominal diameter DN	stabilised voltage *	max. power (W)	max. current (mA)	insulation class	degree of protection	electrical connection
6	24 V DC +/-10%	5	240	F	IP65	8-pin M12 connector, A coded (not supplied)

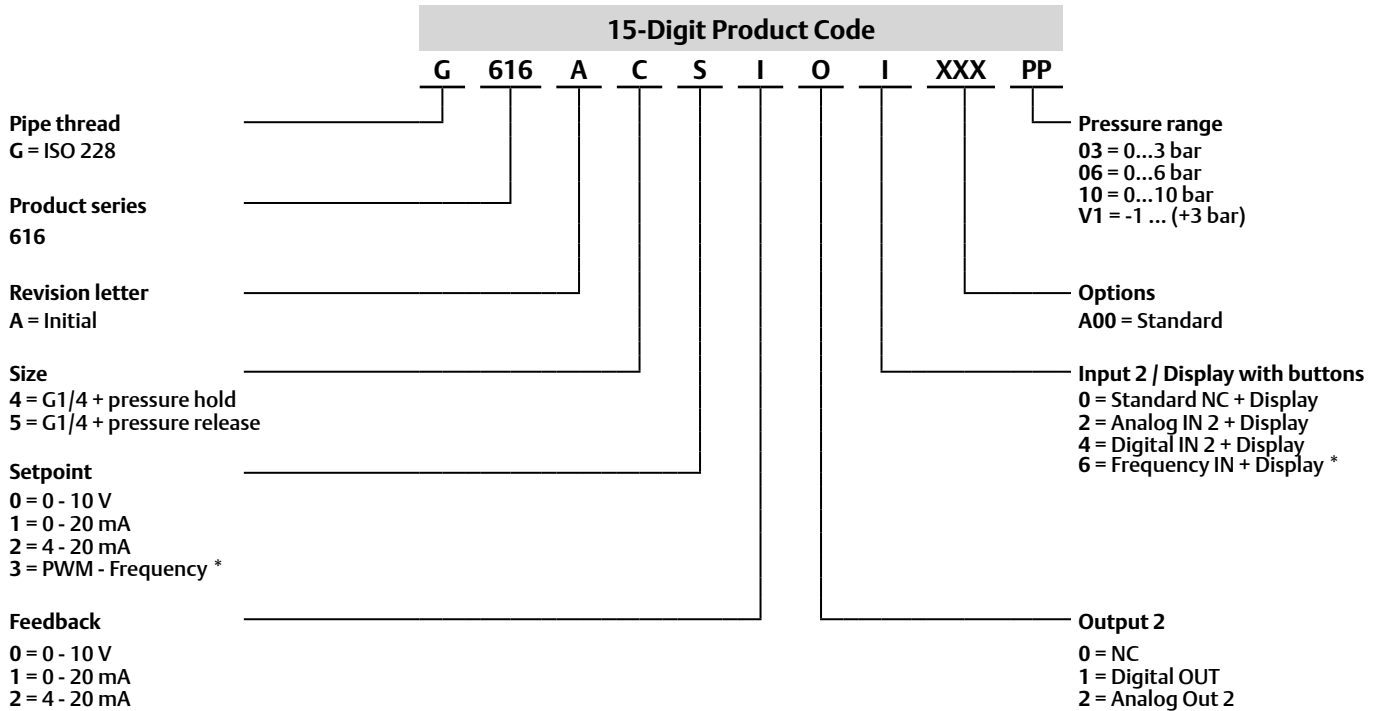
\* Max. ripple: 10 %

## Specifications

pipe size	orifice size (mm)	flow	
		coefficient Kv (Nm <sup>3</sup> /h)	at 6 bar (l/min - ANR)
G 1/4	6	1,12	1200

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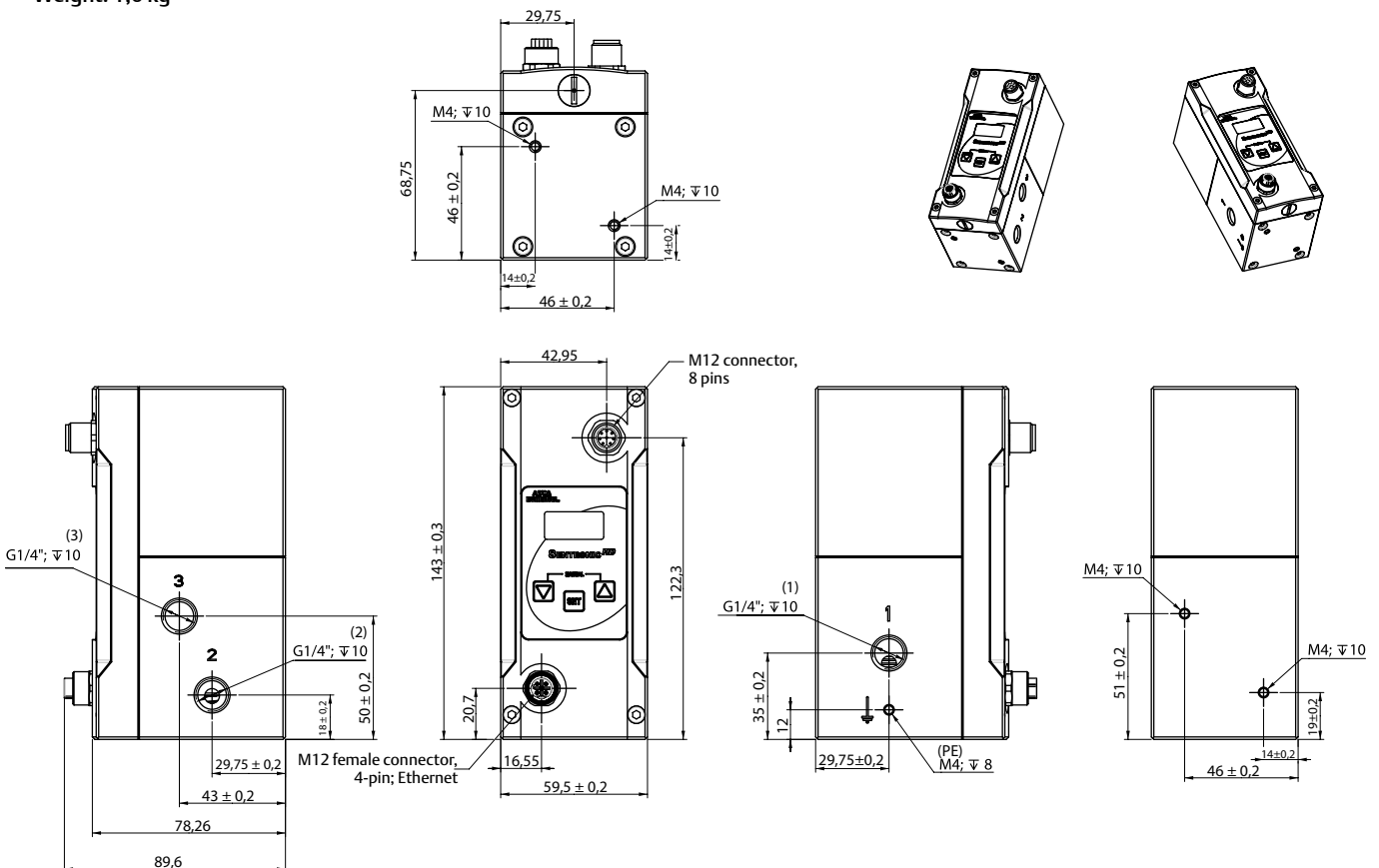
## How to Order



\* If Setpoint PMW-Frequency is selected, frequency input is not available at IN 2

## Dimensions (mm), Weight (kg)

Weight: 1,6 kg



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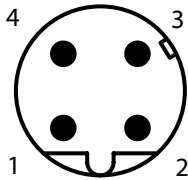
With M12 Connection

Series  
**616**

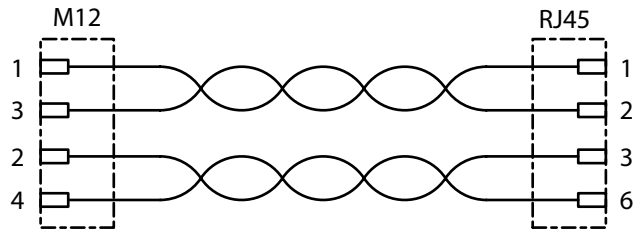
## Connector Pinning / Cable Wiring

Ethernet TCP/IP programming interface

M12 male connector,  
4-pin, D coded

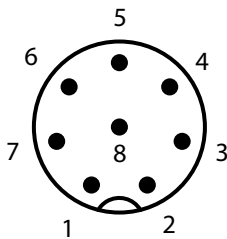


View on male connector  
(the device is equipped  
with a female connector)



※) The use of a shielded cable is recommended.

M12 male connector,  
8-pin, A coded



View on valve

pin	description	8-wire cable (5 m, 10 m)
1	Digitaler input	white
2	+24 VDC voltage supply	brown
3	Setpoint ground SET-	green
4	Setpoint SET+ (PWM)	yellow
5	Analog input 2 / Digital input 2 / Frequency input	grey
6	Analog output	pink
7	Ground 24VDC	blue
8	Digital output / Analog output 2	red
Body	EMC screen	shield

## Accessories

description	catalogue number
Supply cable 5 m; 8x0,50 mm <sup>2</sup> ; straight connector	N43802302700000
Supply cable 10 m; 8x0,50 mm <sup>2</sup> ; straight connector	N43802302800000
Supply cable 10 m; 8x0,50 mm <sup>2</sup> ; right-angle connector	N43802302900000
Programming cable 2 m; M12 to RJ45 connector	N43802302600000

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