

Herion 33D Series

Solid state switches (pneumatic / all-fluid)

Vac to 9100 psi

Real time pressure display with backlight

Compact and robust design

Easy programming of set points and additional functions

Transistor output signals 1 x PNP, 2 x PNP, or 1 x PNP + 4 to 20 mA

Electronic lock

Switching status indicated by LED

Standard M12x1 electrical connection (IP 65)

For pneumatic, all fluid and hydraulic applications

Technical data

Medium

Pneumatic types: compressed air or neutral gases

All fluid types: gasses or liquids, including aggressive

Display

LCD 4 digits illuminated, pressure unit programmable for bar, psi, mpa

Mounting position

Optional

Operating pressure

Vac to 230 psi (pneumatic)

0 to 9100 psi (hydraulic/allfluid)

Temperature sensitivity (zero point)

0.4% of final value/10 K

Temperature sensitivity (range)

0.4% FS/10 K

Ambient temperature

14°F to 140°F (-10°C to 60°C)

Fluid temperature

14°F to 75°F (-10°C to 80°C)

Switching point

Adjustable between 0 and 100% FS

Reset point

Adjustable between 0 and 100% FS

Electrical connection

M12 x 1

Linearity

< 0.2% FS ±1 digit

Degree of protection to DIN

40 050

IP 65 (with mounted plug)

Materials

Housing: aluminum

Pneumatic version

Seal : viton O-ring (FKM)

Sensor: silicon

Hydraulic/All fluid version

Porting block / sensor: 316 SS welded



Model number - standard pneumatic models*

Port size	Measuring range (psi) (relative pressure)	Maximum overpressure (psi)	Output signal	Model
1/4 NPT	Vac-15	145	1 x PNP	0863014
Flange	Vac-15	145	1 x PNP	0863016
1/4 NPT	Vac-15	145	2 x PNP	0863024
Flange	Vac-15	145	2 x PNP	0863026
1/4 NPT	Vac-15	145	1 x PNP / 4-20 mA	0863044
Flange	Vac-15	145	1 x PNP / 4-20 mA	0863046
1/4 NPT	0 - 230	435	1 x PNP	0863214
Flange	0 - 230	435	1 x PNP	0863216
1/4 NPT	0 - 230	435	2 x PNP	0863224
Flange	0 - 230	435	2 x PNP	0863226
1/4 NPT	0 - 230	435	1 x PNP / 4-20 mA	0863244
Flange	0 - 230	435	1 x PNP / 4-20 mA	0863246

* M12 x 1 connector not included. Please see table on next page.

Options selector

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Pressure range (pneumatic)	Substitute	Fluid/electrical connection	Substitute
Vac-15 psi	0	G¼, M12 x 1	2
0 - 230 psi	2	¼ NPT, M12 x 1	4
		Flange, M12 x 1	6
Pressure range (allfluid)	Substitute	Output signal	Substitute
0 - 145 psi	1	1 digital out	1
0 - 580 psi	3	2 digital out	2
0 - 1450 psi	4	1 digital out/4 - 20 mA**	4
0 - 2300 psi	5		
0 - 3600 psi	6		
0 - 5800 psi	7		
0 - 9100 psi	8		

** 4-20 mA option not available on flange mounted versions.

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Solid state pressure switches (pneumatic / all-fluid)

Vacuum to 9100 psi

Electrical parameters

Electrical connection	M12 x 1
Power supply	10 – 32 V d.c. (polarity safe) digital models 15 – 32 V d.c. (polarity safe) analog models
Permissible residual ripple	10% (within 12 to 32 V)
Current consumption	<50 mA (plus load current)

Electromagnetic compatibility

Interference emission	Conforming to EN 50081. Part 1
Interference immunity	Conforming to EN 50082. Part 2

Electrical connection M12 x 1

Pin	Signal	Cable
1	Supply voltage	Brown
2	Out 2 (PNP) / analog 4 – 20 mA	White
3	Common	Blue
4	Out 1 (PNP)	Black
5	Earth ground	Grey

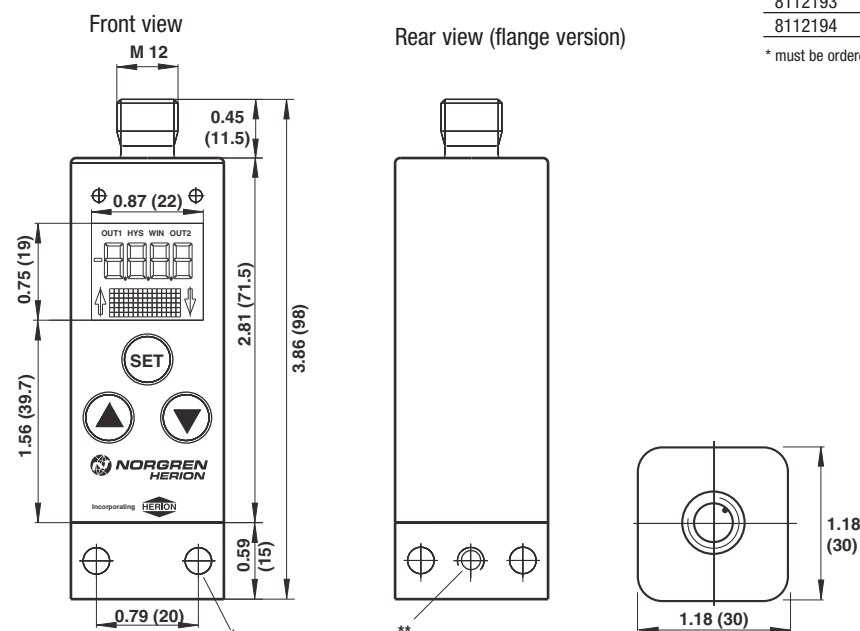
Switching output

Switching mode	PNP sourcing type transistor, suitable for inductive load
Output voltage	Supply voltage -1.5 V
Analog output	4 – 20mA
Contact rating	I _{max} = 500 mA (short-circuit proof)
Switching time	< 10 ms
Damping	5 ms – 0.64 sec programmable
Signal delay:	On/off 0 to 20 sec programmable
Service life	min. 100 million switching cycles
Switching logic	n.o. / n.c. programmable
Operating mode	Standard, hysteresis and window mode Separately selectable for each output

Accessories

Part number	Connectors and cordsets (M12 x 1)*
8112184	Mating connector 5-pin straight w/screw terminals, no cable
8112193	Molded cordset 5-pin straight w/2m cable
8112194	Molded cordset 5-pin 90° w/2m cable

* must be ordered separately



* Suitable for M 5 x 35 or 10-24 screws

** Flange diameter 8 x 1.2 deep, O-ring 4.47 x 1.78 (Viton 90)