

# HZRE

## Electropneumatic Proportional Regulator

- Integrated high precision pressure sensor
- 3 sizes: 31 (G1/8) - 32 (G1/4) - 33 (G1/2)
- Integrated digital display
- M12A connector
- Integrated user interface buttons
- Aluminium body



### TECHNICAL CHARACTERISTICS

	HZRE31	HZRE32	HZRE33
Ambient temperature	0 ÷ 50 °C		
Fluid	filtered compressed air 5 µm, inert gas, with or without lubrication		
Adjusting range(bar)	0 ÷ 1, 0 ÷ 5, 0 ÷ 9		
Max pressure	10 bar (2 bar adjusting range 0 ÷ 1 bar)		
Min pressure	controlled pressure +1 bar		
Connections	G1/8	G1/4	G1/2
Nominal flow rate (NI/min)	300	1500	5000
Weight (g)	370	420	770

### ELECTRICAL CHARACTERISTICS

Voltage	24 V DC ± 10%	
Power consumption	< 6 W	
Protection degree	IP65	
Connections	M12A male connector 4 poles	
Input signal	Current	4 ÷ 20 mA 0 ÷ 20 mA
	Voltage	0 ÷ 10 V DC 0 ÷ 5 V DC
	Preset	4 input
Output signal	Analog	4 ÷ 20 mA/1 ÷ 5 V DC
	Digital	24 V DC PNP/NPN
Sensitivity	≤ ± 0,5% F.S. <sup>(a)</sup>	
Linearity	≤ 1% F.S. <sup>(a)</sup>	
Repeatability	≤ ± 0,5% F.S. <sup>(a)</sup>	
Hysteresis	≤ 0,5% F.S. <sup>(a)</sup>	

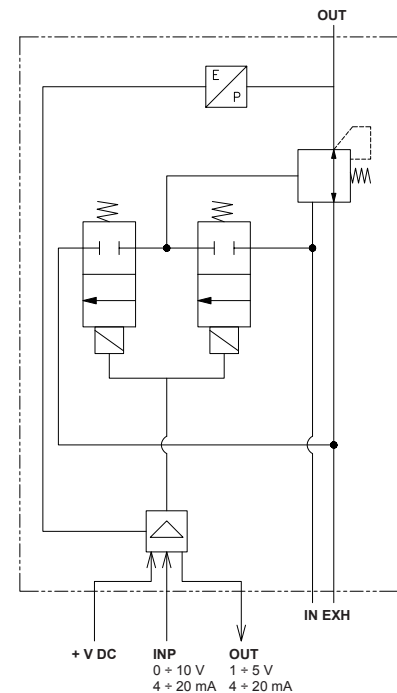
### CODIFICATION KEY

H	Z	R	E	3	2	0	8	G	C	B	B
1	2	3	4	5	6						

1 Series	2 Type	3 Thread
HZRE = Electropneumatic proportional regulator	31 = Size 1 32 = Size 2 33 = Size 3	06G = G1/8 (size 1) 08G = G1/4 (size 2) 15G = G1/2 (size 3)

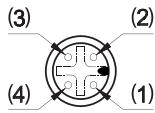
4 Adjusting range	5 Input Signal	6 Output Signal
A = 0 ÷ 1 bar B = 0 ÷ 5 bar C = 0 ÷ 9 bar	A = 4 ÷ 20 mA (0 ÷ 20 mA) B = 0 ÷ 10 V DC (0 ÷ 5 V DC) C = Preset 4 input <sup>(b)</sup>	A = 4 ÷ 20 mA B = 1 ÷ 5 V DC C = 24 V DC PNP D = 24 V DC NPN

### Working principle



(a) = F.S. Full span (b) = Not available with output signal

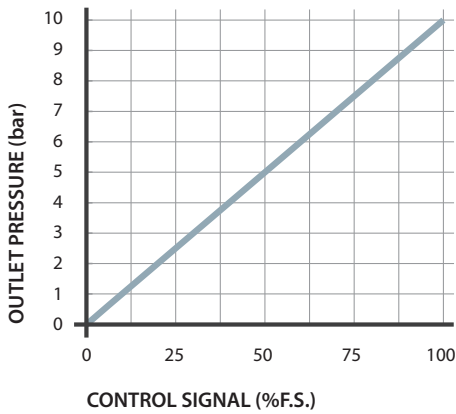
M12A connector electrical connections



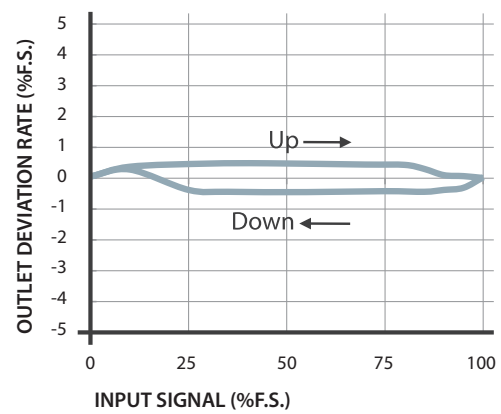
Pin No.	Cable	Analog signal	Preset 4 Input
1	Red/Brown	+24 V DC	+ 24 V DC
2	White	Input signal	Input 1
3	Blue	0 V	0 V
4	Black	Output signal	Input 2

Characteristic curves

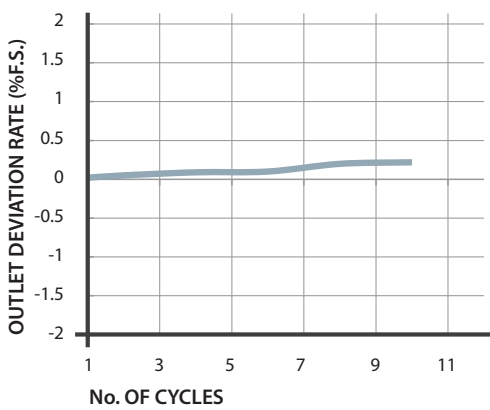
LINEARITY



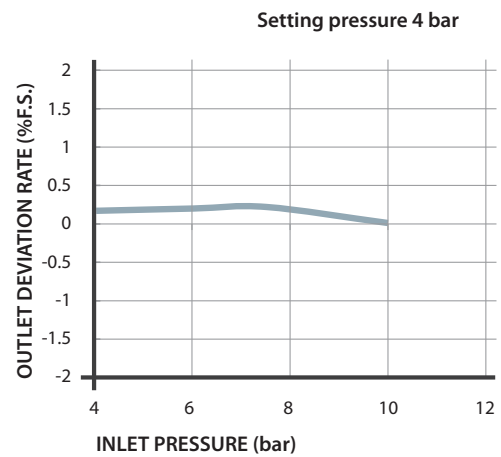
HYSTERESIS



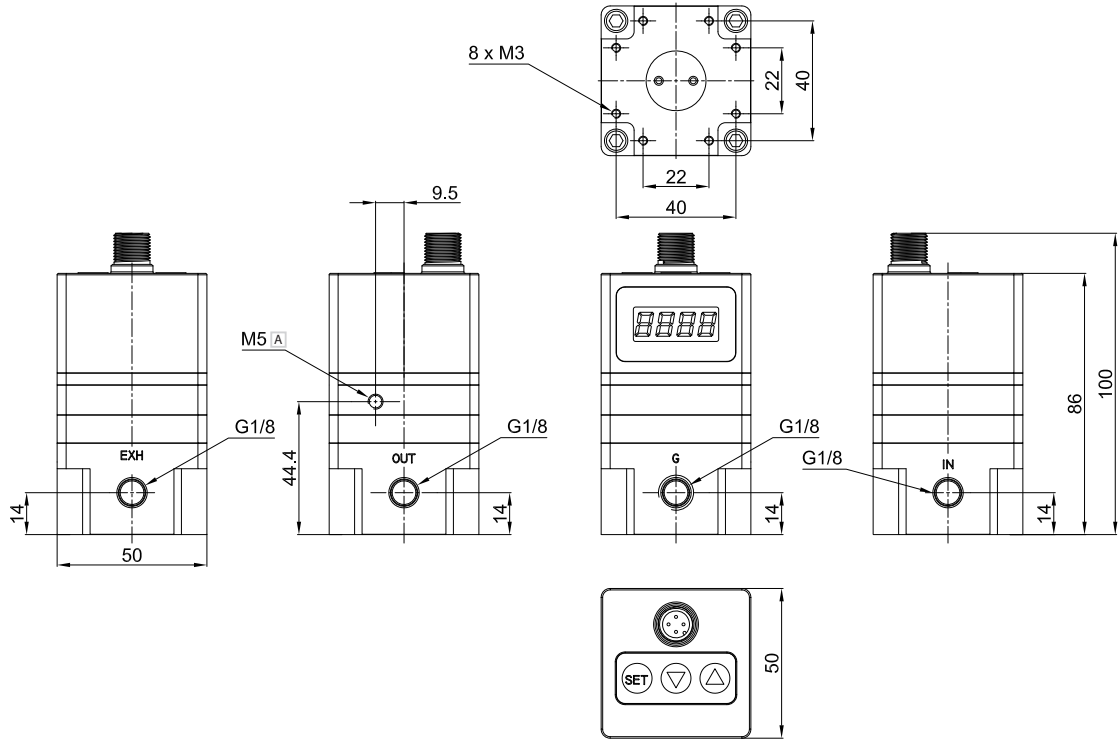
REPEATABILITY



PRESSURE CHARACTERISTIC

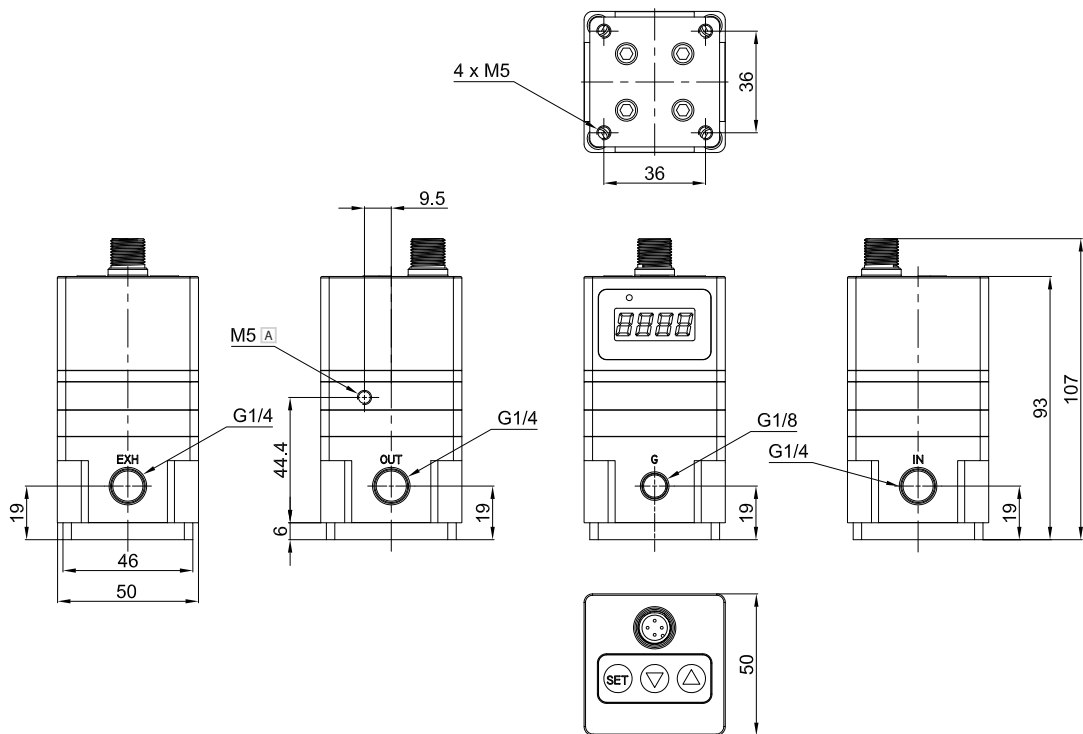


HZRE3106G



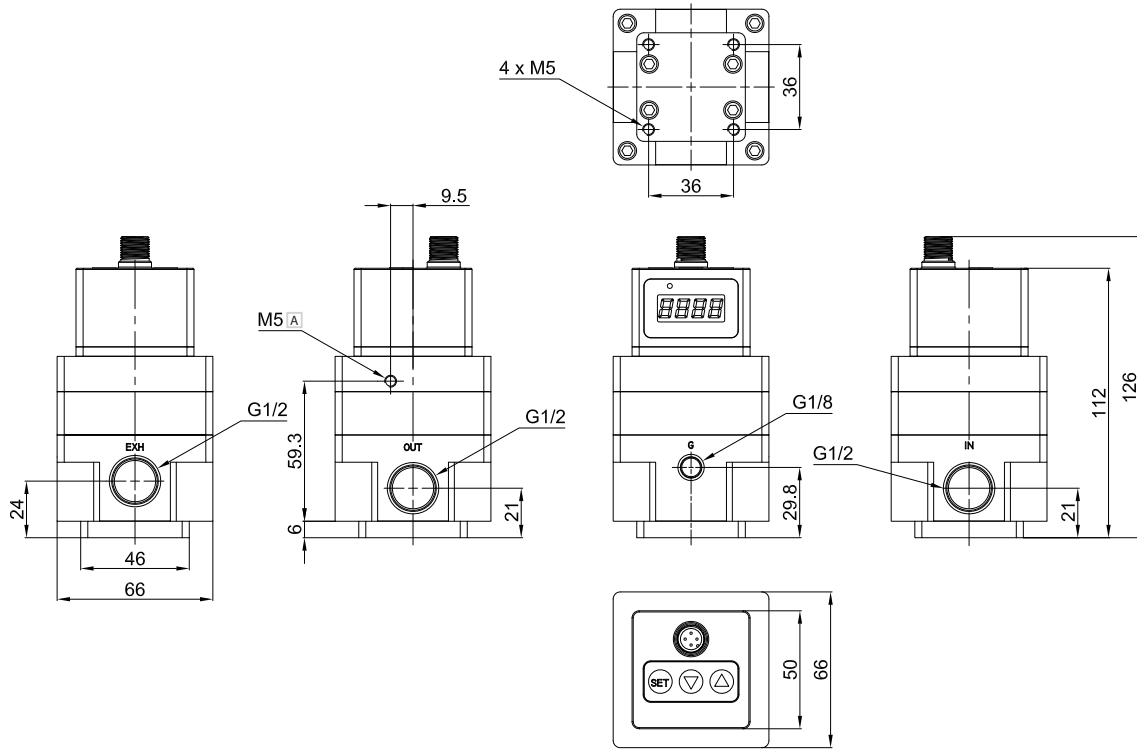
A = pilot exhaust

HZRE3208G



A = pilot exhaust

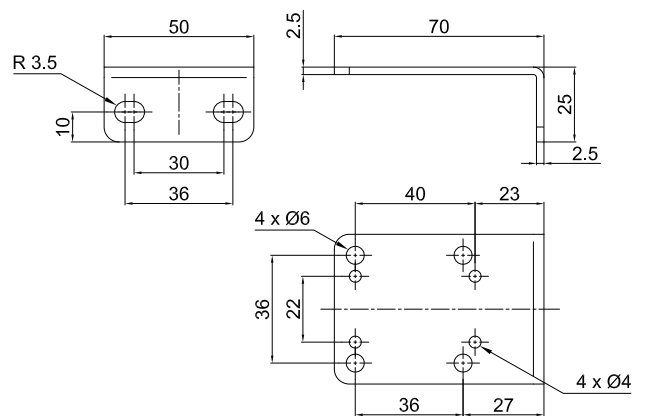
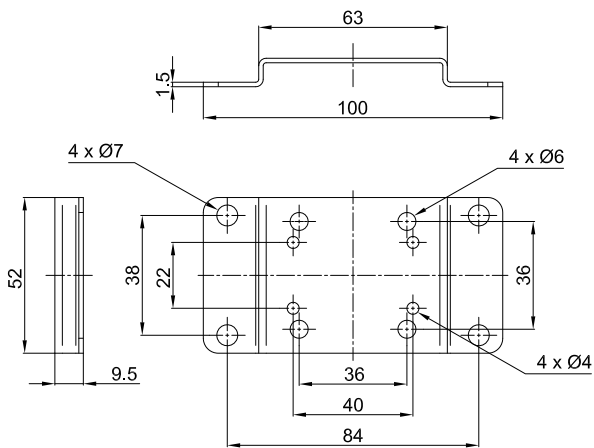
HZRE3315G



A = pilot exhaust

HZRE30300 Horizontal bracket

HZRE30310 Wall bracket



HZREM12L03D M12 In-line connector 3 m cable

HZREM12L03L M12 90° connector 3 m cable

