



- 1** High-performance pressure sensor and valve enable fast pressure control
- 2** Simplified gas lines reduce dead volume

## Product specifications

Digital/Analog communication model	UR-Z712MO (-B) <sup>*3</sup>	UR-Z712MC (-B) <sup>*3</sup>
DeviceNet™ communication model <sup>*1</sup>	UR-Z714MO (-B) <sup>*3</sup>	UR-Z714MC (-B) <sup>*3</sup>
EtherCAT® communication model <sup>*2</sup>	UR-Z717MO (-B) <sup>*3</sup>	UR-Z717MC (-B) <sup>*3</sup>
Valve type	Normally Open:O	Normally Close:C
Applicable fluid	Gas	
Pressure control range	Gauge pressure type :20-950 kPa (G) <sup>*4</sup> 10-500 kPa (G) Absolute pressure type :10-300 kPa (A)	Gauge pressure type :20-950 kPa (G) <sup>*4</sup> 10-500 kPa (G) <sup>*5</sup> Absolute pressure type :10-300 kPa (A)
Pressure regulator flow rate <CV value> In use of N <sub>2</sub> gas	Pressure condition:Primary pressure 50 kPa (G) Secondary pressure atmospheric pressure[101.3 kPa (A)] 1 LM<0.0032>/5 LM<0.016> under the above pressure conditions	
Accuracy	±0.5 %F.S.	
Maximum primary pressure	Gauge pressure type :1 MPa (G) Absolute pressure type:400 kPa (A)	Gauge pressure type :1 MPa (G) ≤ 550 kPa (G) <sup>*5</sup> Absolute pressure type:400 kPa (A)
Minimum differential pressure	Gauge pressure type :50 kPa (D) Absolute pressure type:100 kPa (D)	
Pressure resistance	Gauge pressure type :1.5 MPa (G) for 950 kPa (G) type 1 MPa (G) for 500 kPa (G) type Absolute pressure type:450 kPa (A)	
Leak integrity	≤ 5 × 10 <sup>-12</sup> Pa · m <sup>3</sup> /s (He)	
Operating temperature	5-50 °C (Recommended temperature range 15-45 °C)	
Wetted material	SUS316L	
Standard fittings	1/4 inch VCR equivalent	
Communication	Digital/Analog communication model	Pressure setting signal:0.1-5 VDC (2-100 %F.S.) Pressure output signal:0-5 VDC (0-100 %F.S.) Digital interface:RS-485 F-Net Protocol Power supply:+15 VDC ±5 % 150 mA -15 VDC ±5 % 150 mA
Power supply	DeviceNet™ communication model <sup>*1</sup>	DeviceNet™ Protocol Power supply:Applicable for ODVA standard DC24 V 4.0 VA
	EtherCAT® communication model <sup>*2</sup>	EtherCAT® Protocol Power supply:24 VDC ±4 V 6.6 VA
Mounting orientation	Free	

\*1 DeviceNet™ is trademark of Open DeviceNet Vendors Association. \*2 EtherCAT® is a registered trademark and patented technology, licensed by Beckhoff Automation GmbH in Germany.

\*3 -B is primary pressure regulator \*4 When the maximum pressure range is 950 kPa (G), 100 % setting signal corresponds to the pressure 1000 kPa (G).

\*5 For primary pressure regulator

• In the notation of pressure units, (G) shows gauge pressure, (A) shows absolute pressure, and (D) shows differential pressure.

• LM is the symbol for gas flow rate (L/min, at 25 °C 101.3 kPa). • F.S. is a percentage of the full scale

Digital/Analog communication model	UR-Z722MO (-B) <sup>*3</sup>	UR-Z722MC (-B) <sup>*3</sup>
DeviceNet™ communication model <sup>*1</sup>	UR-Z724MO (-B) <sup>*3</sup>	UR-Z724MC (-B) <sup>*3</sup>
EtherCAT® communication model <sup>*2</sup>	UR-Z727MO (-B) <sup>*3</sup>	UR-Z727MC (-B) <sup>*3</sup>
Valve type	Normally Open:O	Normally Close:C
Applicable fluid	Gas	
Pressure control range	Gauge pressure type :20-950 kPa (G) <sup>*4</sup> 10-500 kPa (G) Absolute pressure type :10-300 kPa (A)	Gauge pressure type :10-500 kPa (G) Absolute pressure type :10-300 kPa (A)
Pressure regulator flow rate <CV value> In use of N <sub>2</sub> gas	Pressure condition:Primary pressure 50 kPa (G) Secondary pressure atmospheric pressure[101.3 kPa (A)] 10 LM<0.032> under the above pressure conditions	
Accuracy	±0.5 %F.S.	
Maximum primary pressure	Gauge pressure type :1 MPa (G) Absolute pressure type:400 kPa (A)	Gauge pressure type :550 kPa (G) Absolute pressure type:400 kPa (A)
Minimum differential pressure	Gauge pressure type :50 kPa (D) Absolute pressure type:100 kPa (D)	
Pressure resistance	Gauge pressure type :1.5 MPa (G) for 950 kPa (G) type 1 MPa (G) for 500 kPa (G) type Absolute pressure type:450 kPa (A)	Gauge pressure type:1 MPa (G) Gauge pressure type:450 kPa (A)
Leak integrity	≤ 5 × 10 <sup>-12</sup> Pa · m <sup>3</sup> /s (He)	
Operating temperature	5-50 °C (Recommended temperature range 15-45 °C)	
Wetted material	SUS316L	
Standard fittings	1/4 inch VCR equivalent	
Communication	Digital/Analog communication model	Pressure setting signal:0.1-5 VDC (2-100 %F.S.) Pressure output signal:0-5 VDC (0-100 %F.S.) Digital interface:RS-485 F-Net Protocol Power supply:+15 VDC ±5 % 150 mA -15 VDC ±5 % 150 mA
Power supply	DeviceNet™ communication model <sup>*1</sup>	DeviceNet™ Protocol Power supply:Applicable for ODVA standard DC24 V 4.0 VA
	EtherCAT® communication model <sup>*2</sup>	EtherCAT® Protocol Power supply:24 VDC ±4 V 6.6 VA
Mounting orientation	Free	

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\*3 -B is primary pressure regulator

\*4 When the maximum pressure range is 950 kPa (G), 100 % setting signal corresponds to the pressure 1000 kPa (G).

• In the notation of pressure units, (G) shows gauge pressure, (A) shows absolute pressure, and (D) shows differential pressure.

• LM is the symbol for gas flow rate (L/min, at 25 °C 101.3 kPa). • F.S. is a percentage of the full scale

Digital/Analog communication model	UR-Z732MO (-B) <sup>*3</sup>	UR-Z732MC (-B) <sup>*3</sup>
DeviceNet™ communication model <sup>*1</sup>	UR-Z734MO (-B) <sup>*3</sup>	UR-Z734MC (-B) <sup>*3</sup>
EtherCAT® communication model <sup>*2</sup>	UR-Z737MO (-B) <sup>*3</sup>	UR-Z737MC (-B) <sup>*3</sup>
Valve type	Normally Open:O	Normally Close:C
Applicable fluid		Gas
Pressure control range	Gauge pressure type :10-500 kPa (G) Absolute pressure type:10-300 kPa (A)	
Pressure regulator flow rate <CV value> In use of N <sub>2</sub> gas	Pressure condition:Primary pressure 100 kPa (G) Secondary pressure atmospheric pressure[101.3 kPa (A)] 50 LM<0.1> under the above pressure conditions	
Accuracy	±0.5 %F.S.	
Maximum primary pressure	Gauge pressure type :550 kPa (G) Absolute pressure type:400 kPa (A)	
Minimum differential pressure	100 kPa (D)	
Pressure resistance	Gauge pressure type :1 MPa (G) Absolute pressure type:450 kPa (A)	
Leak integrity	≤ 5 × 10 <sup>-12</sup> Pa · m <sup>3</sup> /s (He)	
Operating temperature	5-50 °C (Recommended temperature range 15-45 °C)	
Wetted material	SUS316L	
Standard fittings	3/8 inch VCR equivalent	
Communication	Digital/Analog communication model	Pressure setting signal:0.1-5 VDC (2-100 %F.S.) Pressure output signal:0-5 VDC (0-100 %F.S.) Digital interface:RS-485 F-Net Protocol Power supply:+15 VDC ±5 % 150 mA -15 VDC ±5 % 150 mA
Power supply	DeviceNet™ communication model <sup>*1</sup>	DeviceNet™ Protocol Power supply:Applicable for ODVA standard DC24 V 4.0 VA
	EtherCAT® communication model <sup>*2</sup>	EtherCAT® Protocol Power supply:24 VDC ±4 V 6.6 VA
Mounting orientation		Free

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<sup>\*3</sup> -B is primary pressure regulator

• In the notation of pressure units, (G) shows gauge pressure, (A) shows absolute pressure, and (D) shows differential pressure.

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## Selecting a model

①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪					
UR-Z71	7	M	C	S		-B	,,	5LM	,	4CRL	,	SUC	,	3PA	,

### ① Model

UR-Z71	Pressure regulator flow rate 1 LM/5 LM
UR-Z72	Pressure regulator flow rate 10 LM
UR-Z73	Pressure regulator flow rate 50 LM

### ② Protocol

2	Digital/Analog communication
4	DeviceNet™ communication
7	EtherCAT® communication

### ③ Seal

M	Metal
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### ④ Valve type

O	Normally Open:O
C	Normally Close:C

### ⑤ Connector position

T	Top of case (applicable with UR-Z7*2/Z7*4)
S	Side of case (applicable with UR-Z7*4/Z7*7)

### ⑥ DeviceNet™ output range

Blank	UR-Z7*2/Z7*7
1	Full scale flow rate output 100 %F.S.
3	Full scale flow rate output 133 %F.S.
5	Full scale flow rate output 133.329 %F.S.

### ⑦ Pressure control position

Blank	Secondary side of UR
-B	Primary side of UR

### ⑧ Flow rate

1 LM	UR-Z71*
5 LM	UR-Z71*
10 LM	UR-Z72*
50 LM	UR-Z73*

### ⑨ Standard fittings

4CRB	1/4 inch VCR equivalent Face to face dimension 106 mm (applicable with UR-Z712/Z722/Z714/Z724)
4CRL	1/4 inch VCR equivalent Face to face dimension 124 mm (applicable with UR-Z71*/Z72*)
6CRL	3/8 inch VCR equivalent Face to face dimension 124 mm (applicable with UR-Z732/Z734)
8CRJ	1/2 inch VCR equivalent Face to face dimension 150.4 mm (applicable with UR-Z737)
14C3	1.125 inch C-seal Port to port dimension 92 mm (applicable with UR-Z71*/Z72*)
14W3	1.125 inch W-seal Port to port dimension 92 mm (applicable with UR-Z71*/Z72*)

### ⑩ Polishing of wetted material

Blank	No (Applicable with UR-Z7*2/Z7*4)
SUC	Yes (Applicable with UR-Z7*2/Z7*4/Z7*7)

14C3 fitting and 14W3 fitting can be selected only for SUC.

### ⑪ Pressure range

3PA	Pressure control range 10-300 kPa (A)
5PG	Pressure control range 10-500 kPa (G)
10PG	Pressure control range 20-950 kPa (G)

10PG type can be selected only for UR-Z71\*MO/Z72\*MO and secondary pressure control type of UR-Z71\*MC.



The HORIBA Group adopts IMS (Integrated Management System) which integrates Quality Management System ISO9001, Environmental Management System ISO14001, and Occupational Health and Safety Management System ISO45001.  
We have now integrated Business Continuity Management System ISO22301 in order to provide our products and services in a stable manner, even in emergencies.



**Applying to the EU RoHS Directive : This products is compliant with the restriction of the designated 10 hazardous substances(\*)**

(\*) lead , cadmium , mercury , hexavalent chromium , polybrominated biphenyls (PBB) , polybrominated diphenyl ethers (PBDE) , bis (2-ethylhexyl) phthalate (DEHP) , butyl benzyl phthalate (BBP) , dibutyl phthalate (DBP) and diisobutyl phthalate (DIBP)

**Using lead-free soldering : Lead-free soldering is used for mounting components of printed circuit boards.**

- Many countries consider the reinforcement of regulations concerning the risk caused by lead to human body and the environment

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## HORIBA STEC

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Please read the operation manual before using this product  
to ensure safe and proper handling of the product.

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