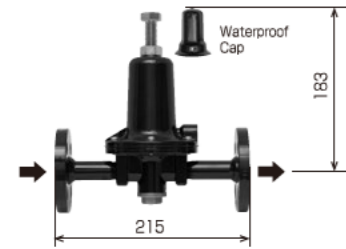


CM/GM/GMF Range

Medium Pressure Regulator

Incorporated: (Strainer*)
*CM-100, CM-100A and GMF-70 only.

- The CM, GM, GMF range is of direct-operated regulators to be used with high inlet pressure up to 1.56MP, and reduce outlet pressure to the range of 0.02~0.30 MPa.
- The JIS 20K flanged connection for high pressure inlet.



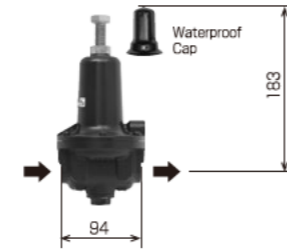
CM-100

Maximum Flow Rate (Nm ³ /h)	37
Inlet	JIS 20K 15A Flange (RF)
Outlet	JIS 10K 15A Flange (FF)
Strainer Mesh Gauge	110 Mesh



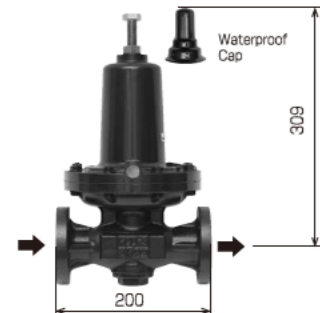
CM-100A

Maximum Flow Rate (Nm ³ /h)	37
Inlet	JIS 20K 15A Flange (RF)
Outlet	JIS 10K 15A Flange (FF)
Strainer Mesh Gauge	110 Mesh



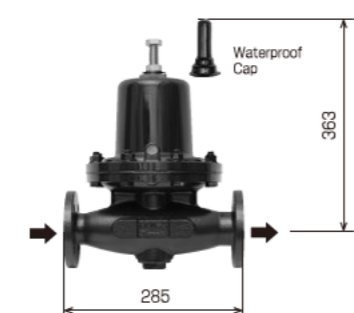
CM-100A (without Flange)

Maximum Flow Rate (Nm ³ /h)	37
Inlet	Rc1/2
Outlet	Rc1/2
Strainer Mesh Gauge	110 Mesh



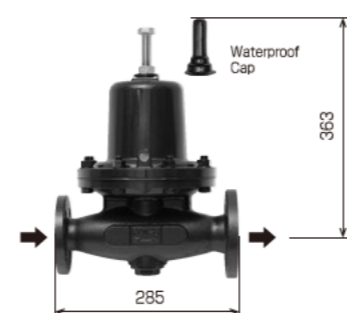
GMF-70

Maximum Flow Rate (Nm ³ /h)	130
Inlet	JIS 20K 20A Flange (RF)
Outlet	JIS 10K 20A Flange (FF)
Strainer Mesh Gauge	60 Mesh



GMF-100

Maximum Flow Rate (Nm ³ /h)	190
Inlet	JIS 20K 25A Flange (RF)
Outlet	JIS 10K 25A Flange (FF)



GMF-200

Maximum Flow Rate (Nm ³ /h)	380
Inlet	JIS 20K 25A Flange (RF)
Outlet	JIS 10K 40A Flange (FF)



GMF-300

Maximum Flow Rate (Nm ³ /h)	580
Inlet	JIS 20K 40A Flange (RF)
Outlet	JIS 10K 40A Flange (FF)



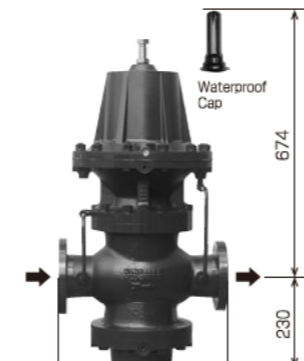
GMF-400

Maximum Flow Rate (Nm ³ /h)	950
Inlet	JIS 20K 50A Flange (RF)
Outlet	JIS 10K 50A Flange (FF)



GMF-500

Maximum Flow Rate (Nm ³ /h)	950
Inlet	JIS 20K 50A Flange (RF)
Outlet	JIS 10K 50A Flange (FF)



GM-1000

Maximum Flow Rate (Nm ³ /h)	1600
Inlet	JIS 20K 80A Flange (RF)
Outlet	JIS 10K 80A Flange (FF)

Range Specification

Inlet	0.10~1.56MPa
Outlet	0.02~0.30 MPa*1
Lockup Pressure (MPa)	≤Set Point×1.3 (Minimum: Set Point+0.012)

*1 Interchangeable springs are available.

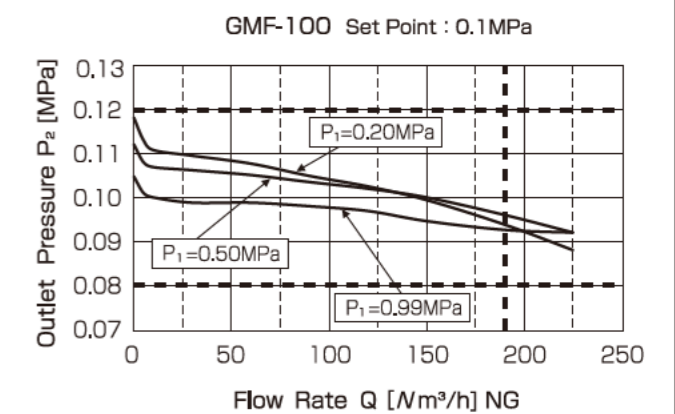
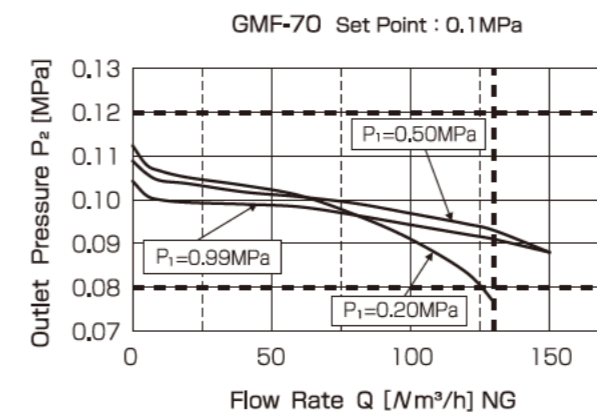
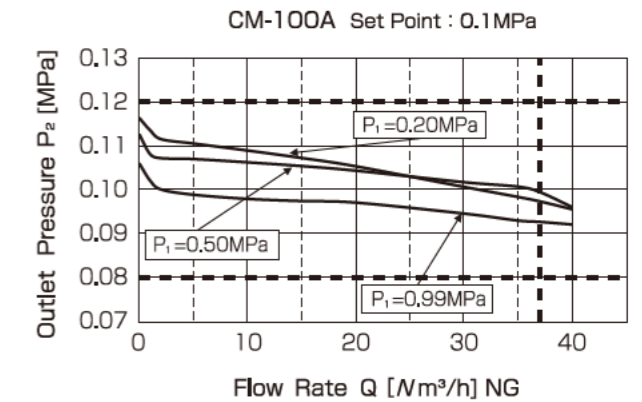
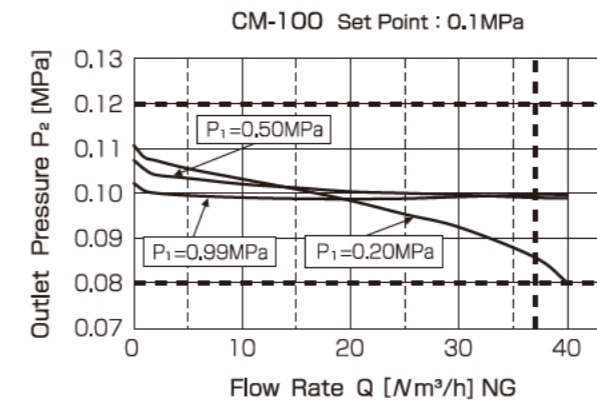
Interchangeable Spring Selection

Set Point Range (MPa)	0.02~0.03	0.02~0.07	0.02~0.15	0.02~0.20	0.02~0.30	
No.	CM-100	⑤	⑥	①	②	③
	GMF-70	④	⑤	①	②	③

Set Point Range (MPa)	0.02~0.03	0.02~0.06	0.02~0.10	0.02~0.15	0.02~0.20	0.02~0.30
No.	GMF-100~200		(A1)	(A1)+(B1)		
	GMF-300~500	(B1)	(A0)	(A1)	(A1)+(B1)	(A2)+(B1)
	GM-1000		(A1)	(A1)+(B1)		(A2)+(B2)

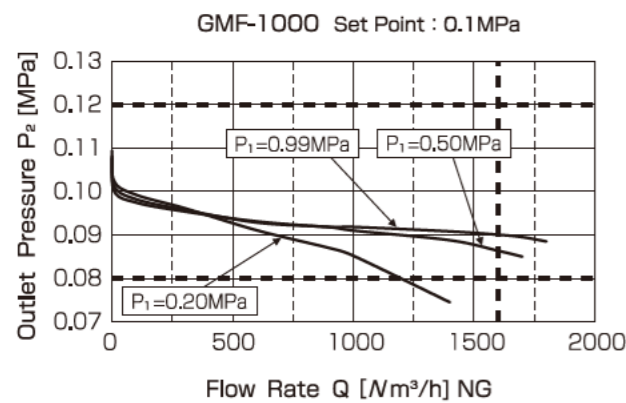
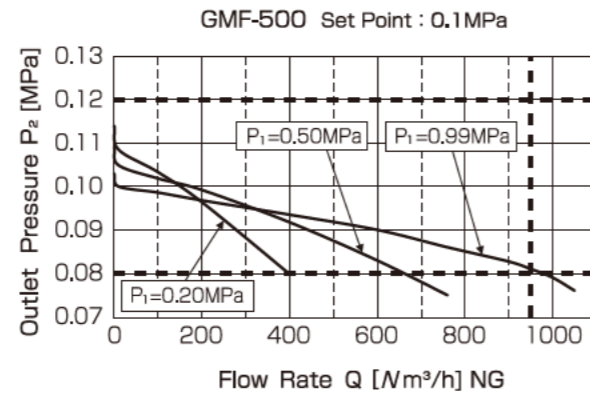
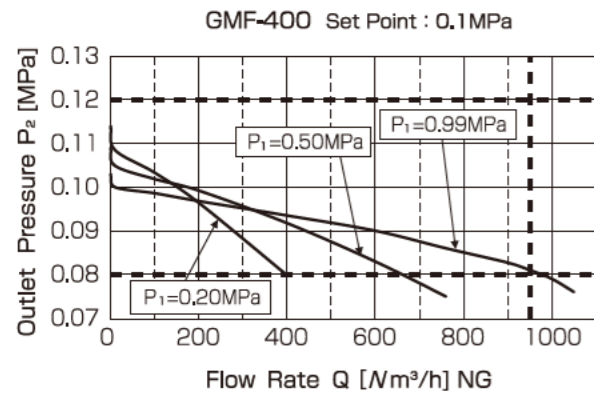
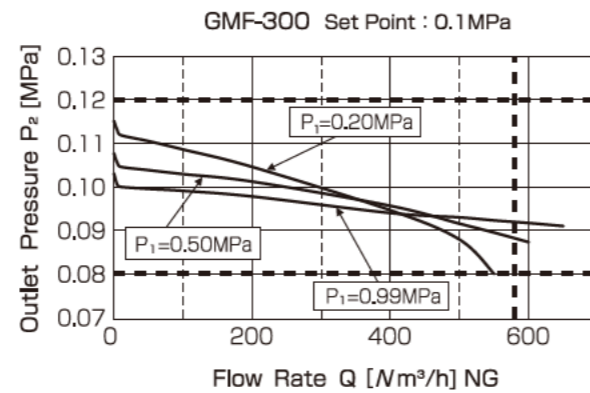
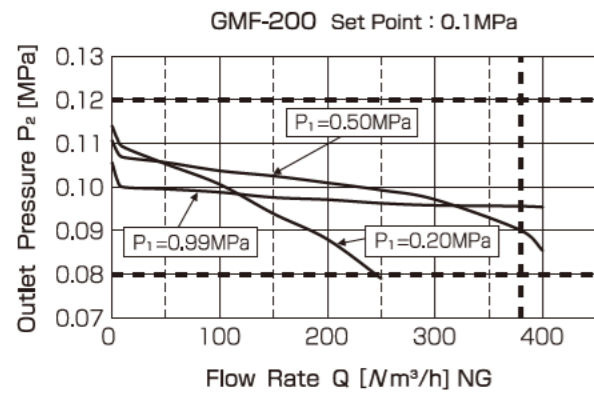
■ shows the standard spring.

Flow Rate



CM/GM/GMF Range

Flow Rate

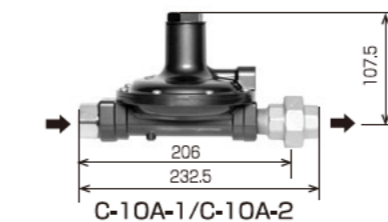


C/G/GL Range

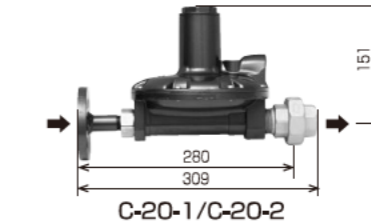
Low Pressure Regulator

Incorporated : (Relief) (Strainer)
 *C-10A, C-20, GL-50, GL-70 and G-32A only.

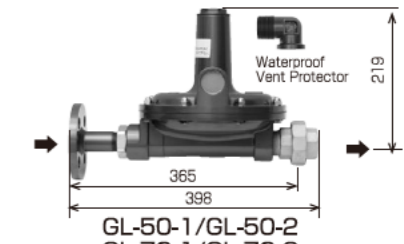
The C, G, GL range is a direct-operated regulator to reduce outlet pressure to 20kPa or less.
 Available for type 1 or type 2 according to the inlet pressure. Type 1 for high pressure pipe line use up to 1.56MPa with a JIS 20K flanged connection at inlet, and Type 2 for medium pressure pipe line use between 0.025~0.10MPa with JIS 10K flanged connection at inlet.



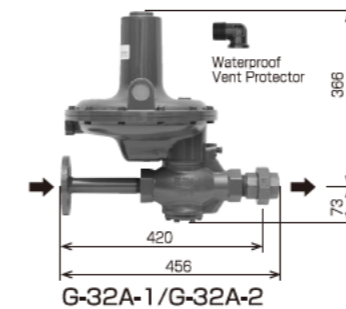
Maximum Flow Rate (Nm³/h)	C-10A-1: 12 C-10A-2: 18
Inlet	Rc 1/2
Outlet	Rc 3/4 Union
Vent Connection	Rc 1/4
Strainer Mesh Gauge	60 Mesh



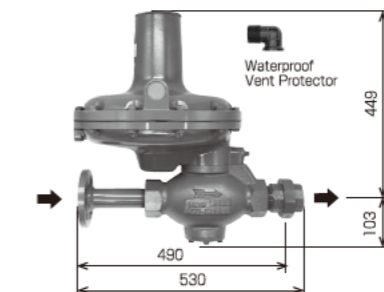
Maximum Flow Rate (Nm³/h)	C-20-1: 24 C-20-2: 37
Inlet	Type 1: JIS20K15A Flange(RF) Type 2: JIS10K15A Flange(FF)
Outlet	Rc 1 Union
Vent Connection	Rc 3/4
Strainer Mesh Gauge	60 Mesh



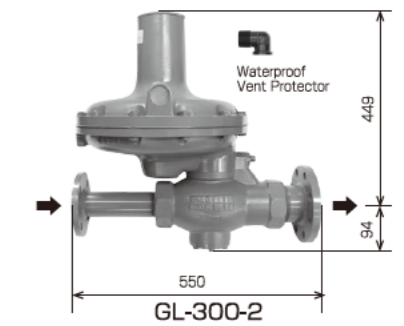
Maximum Flow Rate (Nm³/h)	GL-50-1/2: 60 GL-70-1/2: 85
Inlet	Type 1: JIS20K25A Flange(RF) Type 2: JIS10K25A Flange(FF)
Outlet	Rc 1 1/4 Union
Vent Connection	Rc 1
Strainer Mesh Gauge	60 Mesh



Maximum Flow Rate (Nm³/h)	120
Inlet	Type 1: JIS20K25A Flange(RF) Type 2: JIS10K25A Flange(FF)
Outlet	Rc 1 1/2 Union
Vent Connection	Rc 1
Strainer Mesh Gauge	60 Mesh



Maximum Flow Rate (Nm³/h)	245
Inlet	Type 1: JIS20K40A Flange(RF) Type 2: JIS10K40A Flange(FF)
Outlet	Rc 2 Union
Vent Connection	Rc 1



Maximum Flow Rate (Nm³/h)	370
Inlet	JIS10K50A Flange(FF)
Outlet	JIS10K80A Flange(FF)
Vent Connection	Rc 1

Range Specification

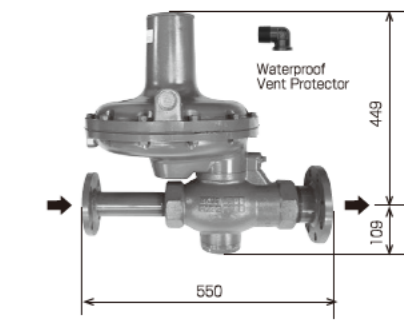
Regulation Type	Type 1	Type 2
Inlet Pressure (MPa)	0.07~1.56	0.025~0.10
Outlet Pressure (kPa)	C-10A~GL-70 G-32A~GL-500	0.50~20.0*1 0.80~20.0*1
Lockup Pressure (kPa)	≤ Set Point × 1.3	

*1 Interchangeable springs are available.

Interchangeable Spring Selection

No.	Set Point Range (kPa)				
	①	②	③	④	⑤
C-10A	2.30~3.60	1.50~2.30	3.60~5.50	7.50~10.0	9.00~15.0
C-20	1.60~3.40	5.00~10.0	9.00~15.0	14.0~20.0	0.80~1.80
GL-50 GL-70	1.00~4.00	3.50~10.0	5.00~15.0	10.0~20.0	15.0~20.0
G-32A	1.30~3.70	0.80~1.50		8.00~16.0	3.00~10.5
G-36C GL-300 GL-400 GL-500	1.50~3.50	3.20~10.5	1.25~2.50	0.80~1.50	8.00~16.0
No.	⑥	⑦	⑧	⑨	SGX No.1 (White)
C-10A	14.0~20.0	5.50~8.00	4.00~8.00	9.00~12.0	0.50~1.50
C-20	1.30~3.00	3.00~6.00	16.0~20.0	8.00~12.0	0.50~1.50
GL-50 GL-70		0.30~1.00	0.50~2.00	6.00~12.0	
G-32A	14.0~20.0	2.00~8.00	6.00~12.0		
G-36C GL-300 GL-400 GL-500	14.0~20.0	3.00~6.00		8.00~12.0	

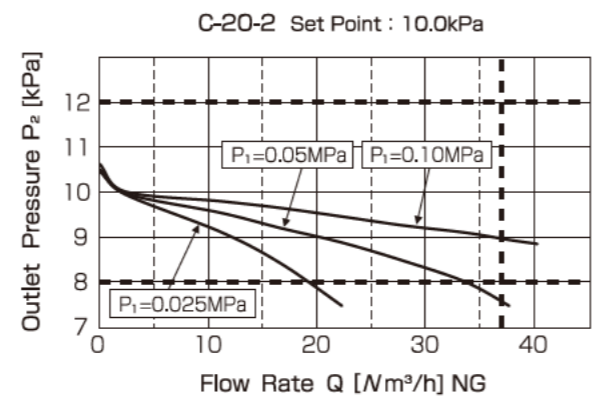
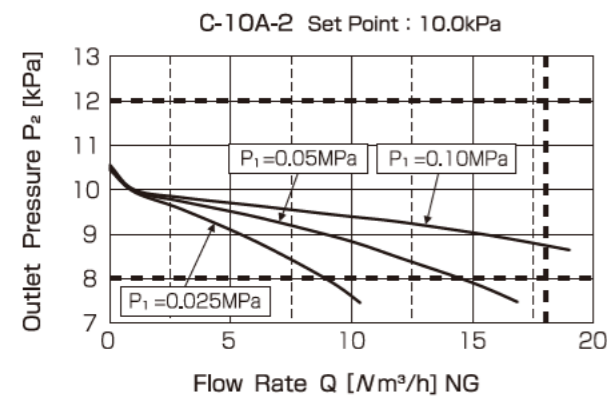
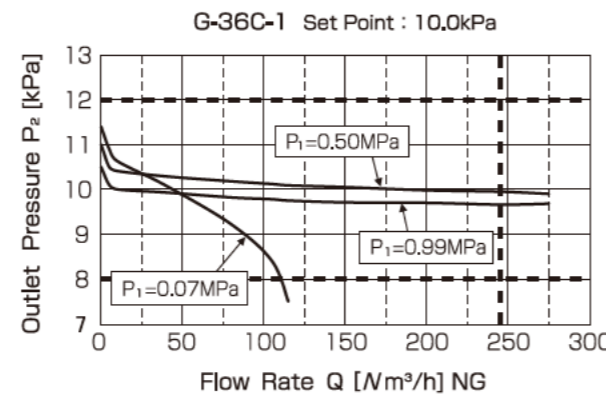
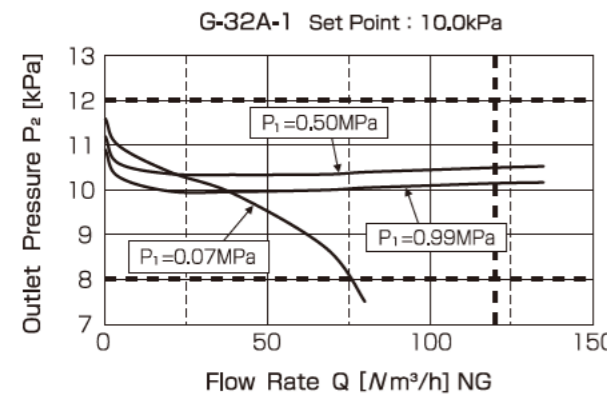
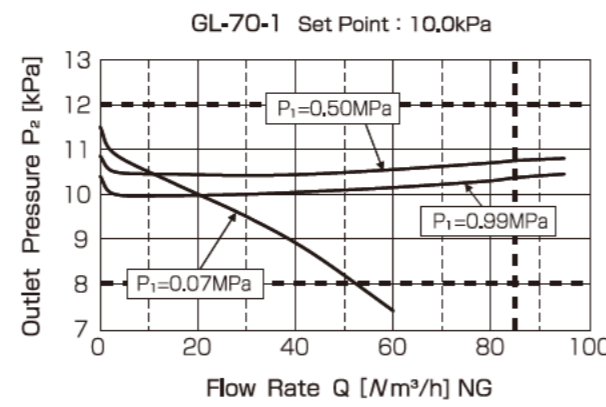
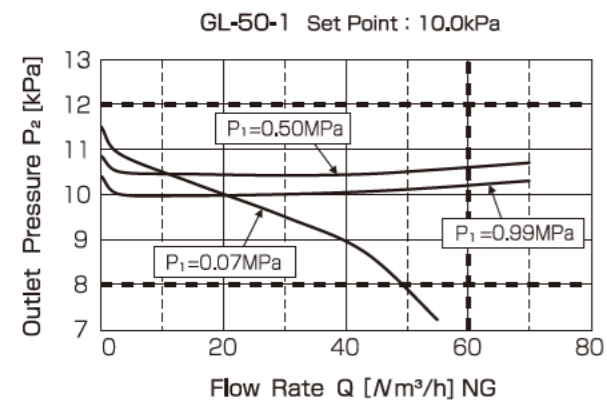
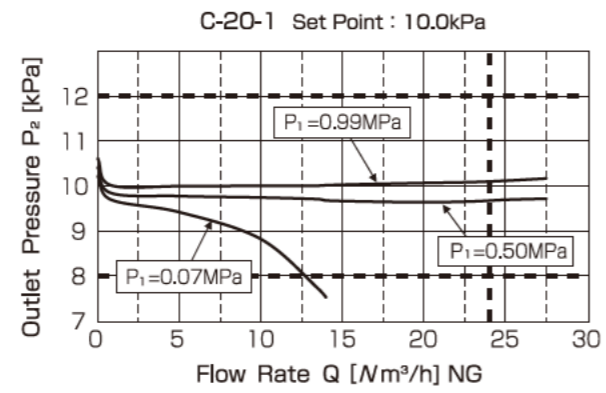
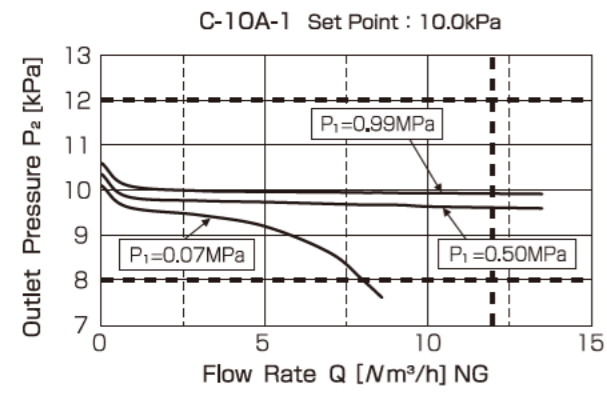
■ shows the standard spring.
 ■ requires additional supporting diaphragm disc.



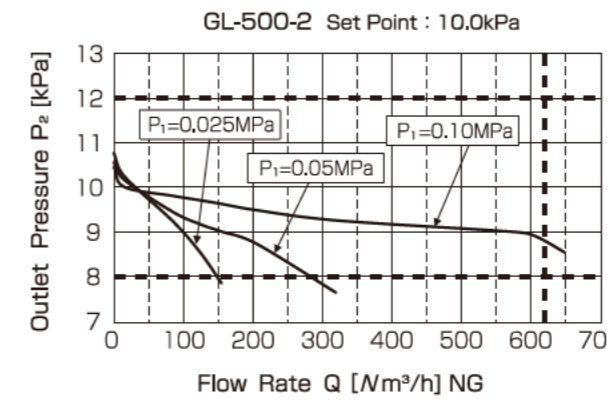
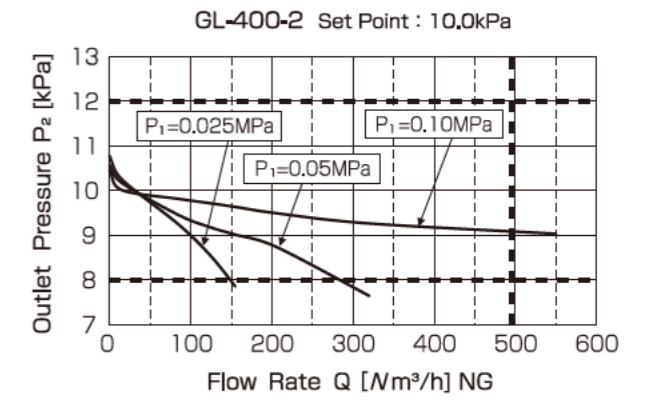
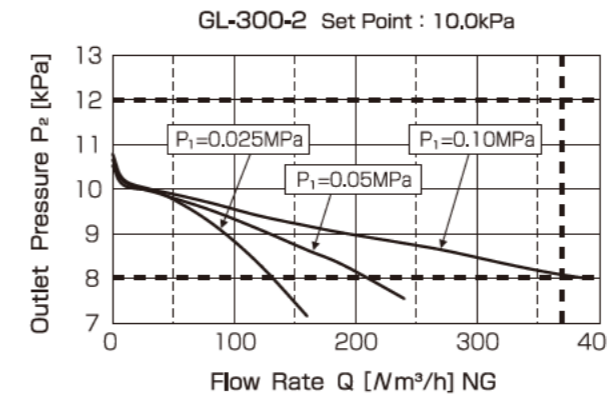
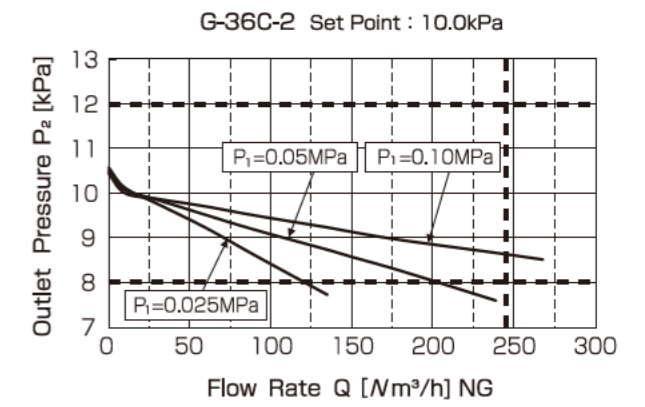
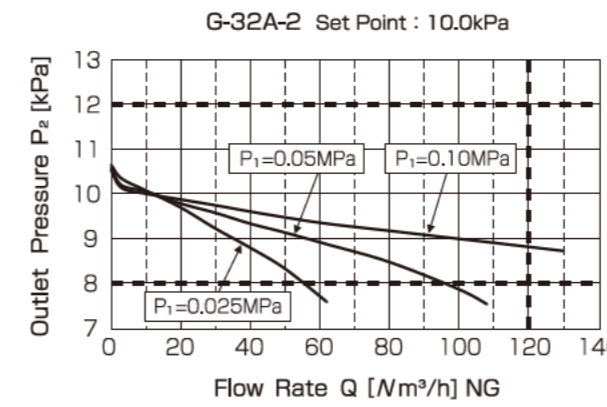
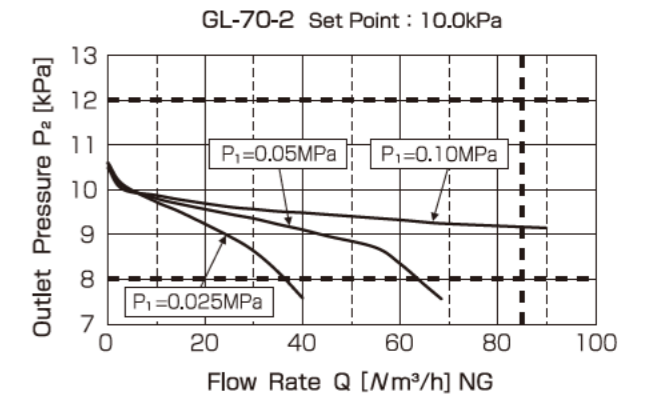
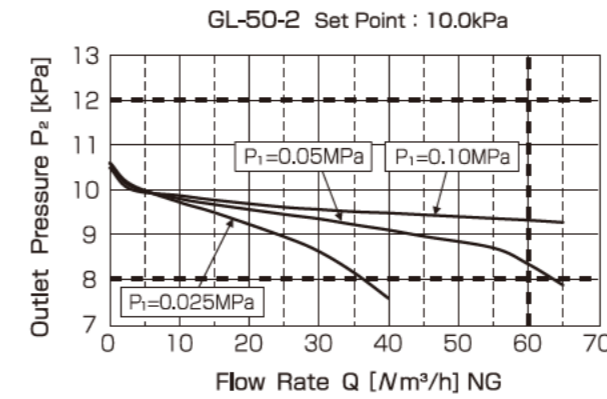
Maximum Flow Rate (Nm³/h)	GL-400-2: 495 GL-500-2: 620
Inlet	JIS10K50A Flange(FF)
Outlet	JIS10K80A Flange(FF)
Vent Connection	Rc 1

C/G/GL Range

Flow Rate



Flow Rate

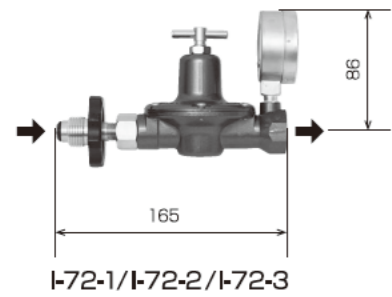


I-72/CM-H/GMF-H Range

Variable Type Pressure Regulator

Incorporated : (Strainer)

The variable type pressure regulator has an external handle linked to the adjusting screw to make the outlet pressure setting easier without using a wrench or other tools.

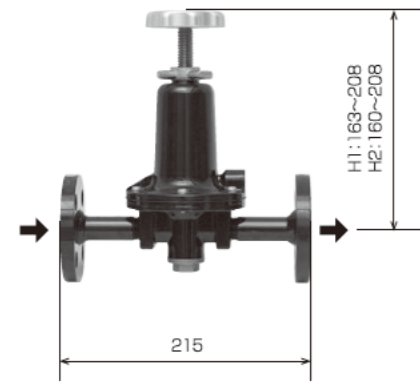


I-72-1/I-72-2/I-72-3

Specifications

Model	I-72-1/I-72-2/I-72-3
Maximum Flow Rate	6.2 Nm ³ /h
Inlet Connection	JIS POL with Handwheel*
Outlet Connection	Rc 1/2
Strainer Mesh Gauge	200 Mesh

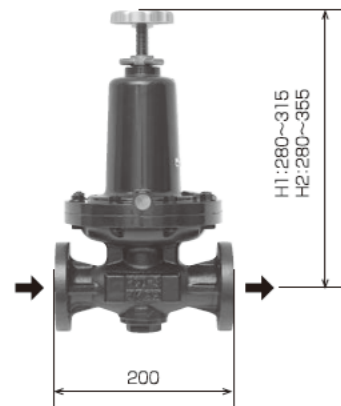
* According to JIS B 8245.



CM-100-H1/CM-100-H2

Specifications

Model	CM-100-H1/CM-100-H2
Maximum Flow Rate	37 Nm ³ /h
Inlet Connection	JIS 20K 15A Flange (RF)
Outlet Connection	JIS 10K 15A Flange (FF)
Strainer Mesh Gauge	110 Mesh



GMF-70-H1/GMF-70-H2

Specifications

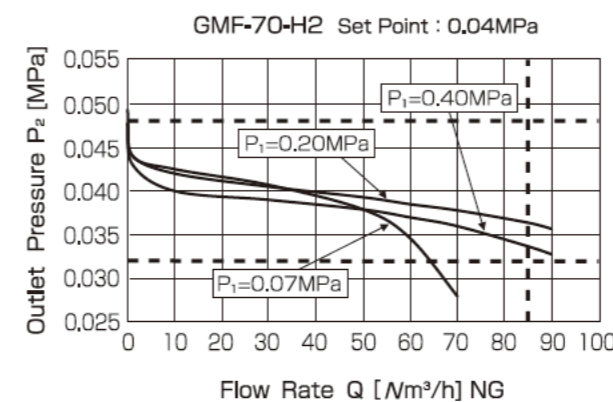
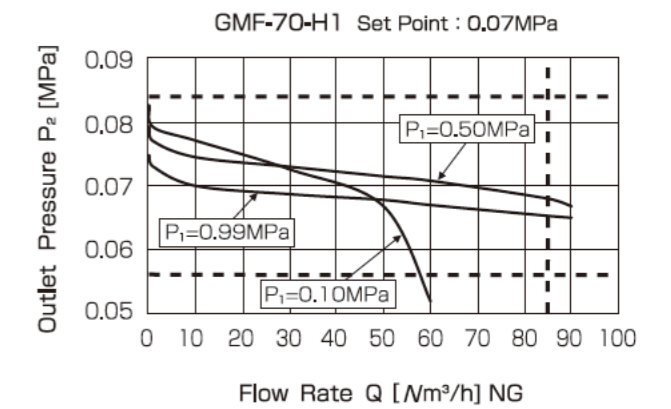
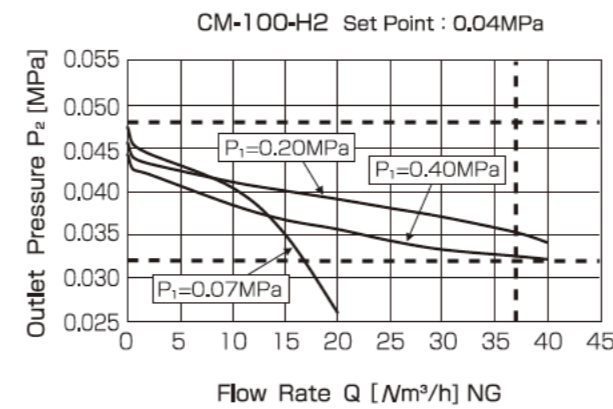
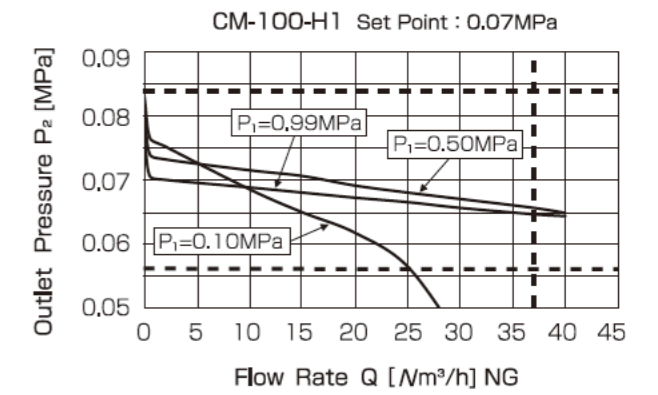
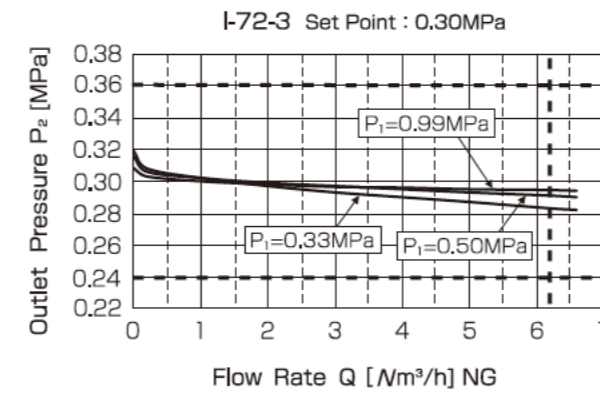
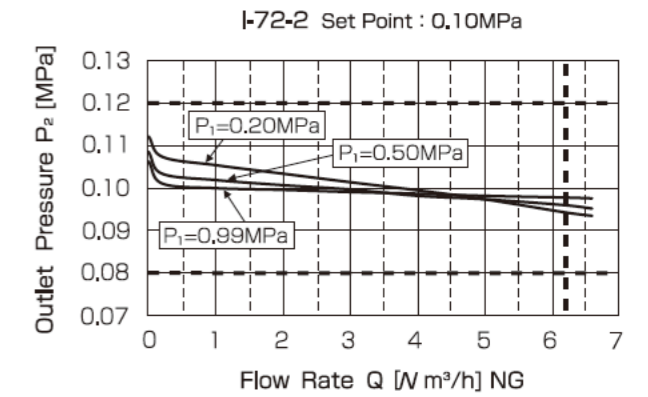
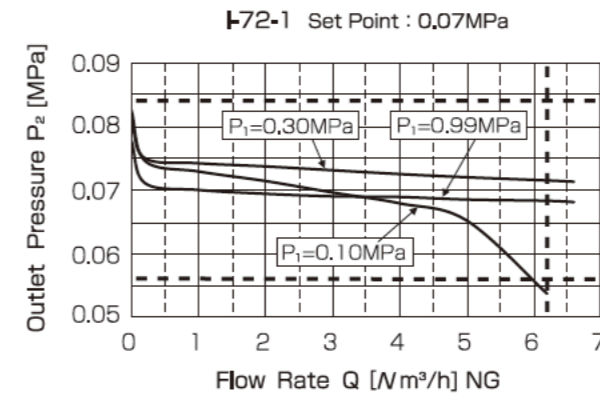
Model	GMF-70-H1/GMF-70-H2
Maximum Flow Rate	85 Nm ³ /h
Inlet Connection	JIS 20K 20A Flange (RF)
Outlet Connection	JIS 10K 20A Flange (FF)
Strainer Mesh Gauge	60 Mesh

Specifications

Model	I-72-1	I-72-2	I-72-3	CM-100-H1	CM-100-H2	GMF-70-H1	GMF-70-H2
Inlet Pressure(MPa)	0.13~1.56	0.17~1.56	0.40~1.56	0.10~1.56	0.07~0.40	0.10~1.56	0.10~0.40
Variable Outlet Pressure Range(MPa)	0.01~0.07	0.01~0.16	0.01~0.35	0.02~0.30 ¹⁾	0~0.04	0.02~0.30 ¹⁾	0~0.04

¹⁾ Interchangeable springs are available.
See page 44 regarding the springs of CM-100 and GMF-70.

Flow Rate

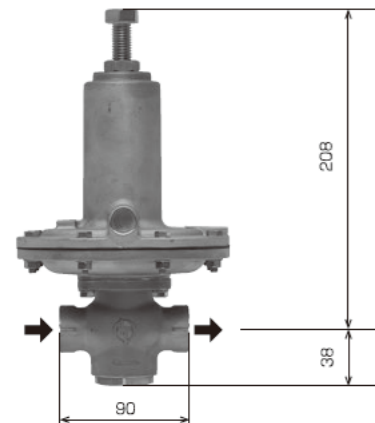


AC/AM Range

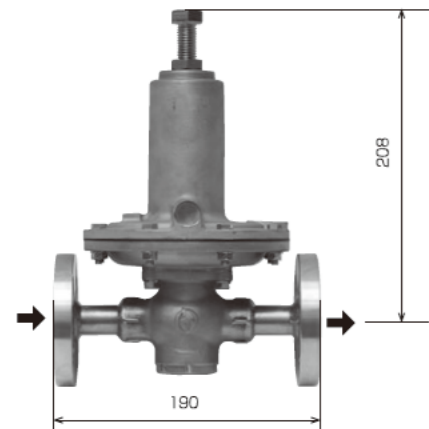
Stainless Steel Regulator

Incorporated: (Strainer)*AM-150 and AM-150F only

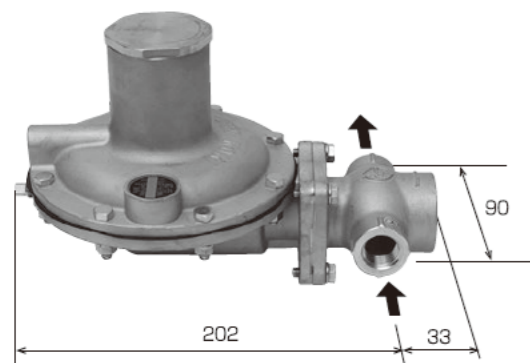
Regulators with key components manufactured from stainless steel for use with various fluids such as a compressed gas including ammonia, nitrogen, or hydrogen.



AM-150



AM-150F



AC-15

Specifications

Model	AM-150	AM-150F	AC-15
Maximum Flow Rate	28Nm ³ /h		19Nm ³ /h
Inlet Pressure	0.10~1.80MPa		0.07~0.15MPa
Outlet Pressure	0.03~0.30MPa*1		0.50~15.0kPa*1
Lockup Pressure	≤0.095MPa		≤3.50kPa
Safety Relief Valve	N/A		Working Pressure : 7±1.4kPa
Connection	Rc1/2	JIS 20K 15A Flange	Rc 1/2
Vent Connection	Rc1/4		
Strainer Mesh Gauge	80 Mesh		N/A

*1 Interchangeable springs are available.

AM-150 Interchangeable Spring Selection

No.	①	②	③	④
Set Point Range (MPa)	0.03~0.20	0.05~0.30	0.00~0.09	0.00~0.02

■ shows the standard spring.

AC-15 Interchangeable Spring Selection

No.	①	②	③	④	⑤
Set Point Range (kPa)	2.50~4.00	4.00~10.0	9.00~15.0	0.50~1.00	1.00~3.00

■ shows the standard spring.

Flow Rate

