

# GVK(SWR) PRESSURE REGULATING VALVE

**Total Engineering Solution Service** 



## **Mission**

기초에 근거하여 원천 기술을 살리고 원천 기술을 극대화하여 세계 중심에 서는 것 To stand at the centre of the world by utilizing original technology based on the foundation and maximizing original technology

## **Vision**

우리는 옳은 일과 가치 있는 일에 주저함이 없이 최선을 다하고 실천하여 세계의 중심에 서자 Let us put ourselves at the center of the world by doing our best and not hesitating to stand up for what is right and worthy







#### **Valve Product Service**



## The Professional Provider of Automatic valve Actuastors

GVK Limited, founded in June 2020 by a leader with 38 years of experience, focuses on R&D while ensuring quality, price, and functionality through domestic production. The company offers Process Valves, Valve Equipment, and Total Engineering services for industries such as Gas, Refining, Petroleum, Power generation, Environment, and Water treatment. With a management team possessing 30-40 years of experience, GVK has developed numerous patents and adheres to quality standards like ISO 9001, 14001, 45001, and CE. Recognized for its advanced automatic control valves, GVK also supplies a range of Control Valves globally through OEM and ODM partnerships.

Although still in the early design and manufacturing stages, GVK has emerged as a leading company in Korea, equipped with skilled personnel and testing capabilities. The company aims to lower production costs, enhance efficiency, and improve quality while accumulating Hyper-Intelligence Valve Engineering (HIVE) technology. GVK Limited is committed to meeting customer needs with competitive pricing and high value-added services.

















#### **Mutually Beneficial Relationships**



**To Be Your Best Partner** 



### Twenty years experience "one stop" goods and services











# **SWR SERIES**Pressure Regulating Valve

**Total Engineering Solution Service** 



GVK / SWR Series Pressure Regulating Valve

## Contents

#### **Series SWR**

04 Structural Features

05

06

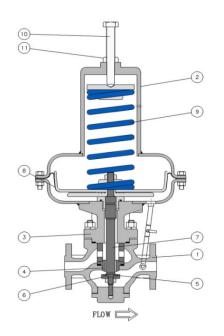
#### **■** Table Of Contents

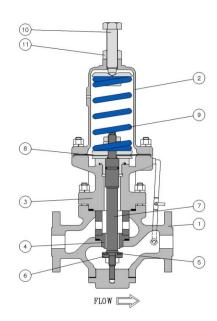
Pressure Reducing Valve (SWR	R-NP Series) ······ 3
Materials & Features	
Specifications & dimensions	4
Cv Table ·····	
Failures & Solutions	7
Pressure Relief Valve (SWR-NI	R Series) ······ 8
Materials & Features ·······	8
Specifications & dimensions	9
Cv Table ·····	10
Failures & Solutions	11

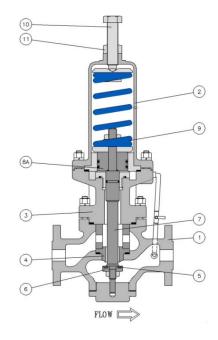




#### ■ Parts list (Materials)







SWR-NP 11L/12L Series

SWR-NP 12/22 Series

**SWR-NP 22H Series** 

No	Part Name	Materials	No	Part Name	Materials
1	Body		7	Stem	Note 2.
2	Spring Case	Note 1.	8	Diaphragm	N.B.R / E.P.D.M
3	Bonnet		8A	Piston	Note 2.
4	Seat	Note 2.	9	Spring	Spring Steel
5	Disc	N.B.R / E.P.D.M	10	Adjust Screw	Brass
<sub>.×</sub> 6	Disc Holder	Note 2.	11	Lock Nut	Brass

Note 1. A216-WCB / A351-CF8 / CF8M / CF3M

Note. 2. 316 SS / 316L SS / MONEL

#### ■ Features

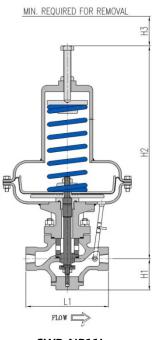
- 1. Single-port construction, large diaphragm area, light-rate springs, soft disc material and seat design provide low lock-up pressure.
- 2. Unexpected erosion, vibration and noise can be avoided by application of anti-cavitation or low-noise trim.
- 3. SWR-NP series have a quick change trim, it provides easy maintenance and long durability.
- 4. The valve is a compact and inexpensive, direct-acting pressure reducing valve.
- 5. The valve is developed to handle water and air, so they have wide applications.
- 6. The valve has wide adjustment ranges and can control very low flow rates.
- 7. Various springs are offered to meet any pressure adjustment range.
- 8. Users do not have to move or remove the valve to change the pressure adjustment range. This can be accomplished where the valve is installed in the piping.
- 9. The valve disc is made of rubber and it prevents any leakage.

#### [SWR-NP11L / 12L Series]

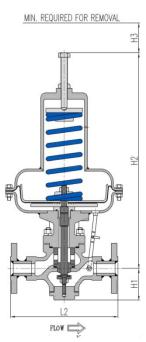
#### ■ Specifications

Model	SWR-NP11L	SWR-NP12L					
Service Fluid	Liquid / Air / Gas						
Max. Inlet Pressure	10 barg						
Mary Tamanawaki	80 °C (N.B.R)						
Max. Temperature	120 °C (E.P.D.M)						
Catting Dance	0.1 ~ 0.3 barg						
Setting Range	0.3 ~ 1 barg						
End Connections	NPT Screwed ASME 150# Flanged						

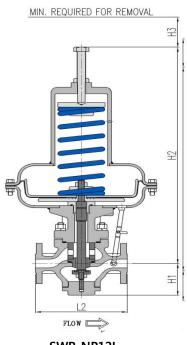
#### **■** Dimensions



SWR-NP11L <1/2"~2">



SWR-NP12L <1/2" >



SWR-NP12L

<3/4"~2" >

#### SWR-NP11L / 12L Series (ASME CLASS 150/300#)

Size (inch)	L1 (Screwed)	L2 (Flanged)	H1	H2	H3
1/2	180	260	75	520	250
3/4	180	191	75	520	250
1	180	194	75	520	250
1-1/2	250	237	120	620	250
2	250	273	135	620	250

<sup>\*</sup> Other standards are available, but length(L) and weight may vary

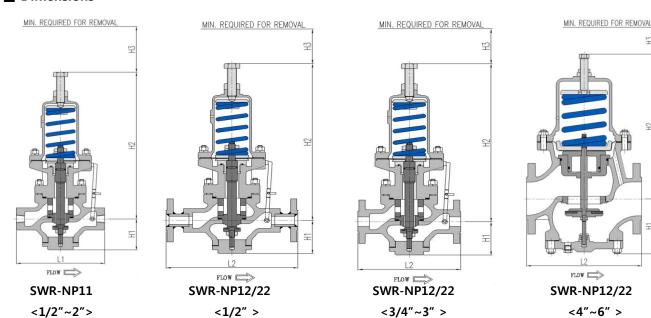


#### [ SWR-NP12 / 22 Series ]

#### **■** Specifications

Model	SWR-NP11	SWR-NP12	SWR-NP22			
Service Fluid	Liquid / Air / Gas					
Max. Inlet Pressure	10 barg 20 b					
May Tamanayatuya		80 °C (N.B.R)				
Max. Temperature		120 ℃ (E.P.D.M)				
Catting Banas		1 ~ 3 barg				
Setting Range		3 ~ 8 barg				
End Connections	NPT Screwed	ASME 150# Flanged	ASME 300# Flanged			

#### **■** Dimensions



#### SWR-NP12 / 22 Series (ASME CLASS 150/300#)

Size (inch)	L1 (Screwed)	L2 (150# Flanged)	L2 (300# Flanged)	H1	H2	НЗ
1/2	180	260	270	75	350	200
3/4	180	191	197	75	350	200
1	180	194	201	75	350	200
1-1/2	250	237	244	140	690	300
2	250	273	280	140	690	300
2-1/2	N/A	298	305	140	520	300
3	N/A	324	331	160	630	300
4	N/A	326	342	170	480	400
5	N/A	360	379	200	665	400
6	N/A	400	422	225	600	400

<sup>\*</sup> Other standards are available, but length(L) and weight may vary

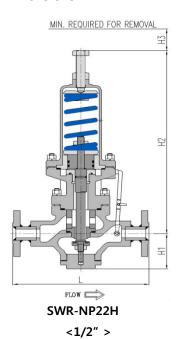
#### **Valve Actuator Product Service**

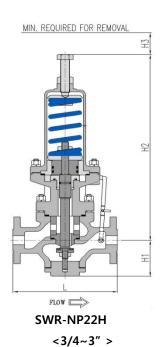
#### [ SWR-NP22H Series ]

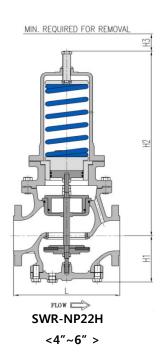
#### **■** Specifications

Model	SWR-NP22H
Service Fluid	Liquid / Air / Gas
Max. Inlet Pressure	20 barg
Mary Taman anatoma	80 °C (N.B.R)
Max. Temperature	120 °C (E.P.D.M)
Setting Range	8 ~ 11 barg
End Connections	ASME 300# Flanged

#### **■** Dimensions







#### SWR-NP22H Series (ASME CLASS 300#)

Size (inch)	L	H1	H2	H3
1/2	270	75	380	200
3/4	197	75	380	200
1	201	75	380	200
1-1/2	244	120	570	300
2	280	140	650	300
2-1/2	305	140	520	300
3	331	160	680	300
4	342	159	660	400
5	379	191	767	400
6	422	200	770	400

<sup>\*</sup> Other standards are available, but length(L) and weight may vary



## **Pneumatic and Hydraulic Scotch Yoke Rotary Motion**

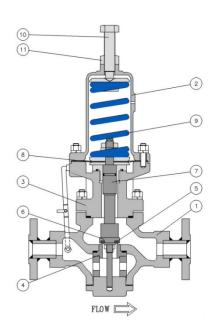
#### ■ Cv Table

Size (inch)	1/2	3/4	1	1-1/2	2	2-1/2	3	4	5	6
Cv	1.8	1.8	3	5.5	9	16	33	65	90	120

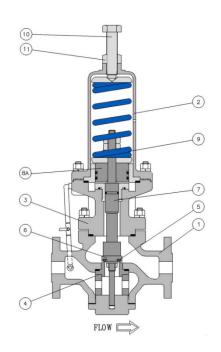
#### **■** Failures & Solutions

Symptom	Solutions
	- Make sure that the impurities between disc and seat.
Rise the secondary pressure	- Reset the set pressure.
	- Check the diaphragm.
	- Make sure that the impurities between disc and seat.
Descent the secondary pressure	- Reset the set pressure.
	- Check the diaphragm.

#### ■ Parts list (Materials)



SWR-NR12,22 Series



SWR-NR12,22 Series

No	Part Name	Materials	No	Part Name	Materials
1	Body		7	Stem	Note 2.
2	Spring Case	Note 1.	8	Diaphragm	N.B.R / E.P.D.M
3	Bonnet		8A	Piston	Note 2.
4	Seat	Note 2.	9	Spring	Spring Steel
5	Disc	N.B.R / E.P.D.M	10	Adjust Screw	Brass
6	Disc Holder	Note 2.	11	Lock Nut	Brass

X Note 1. A216-WCB / A351-CF8 / CF8M / CF3M

Note. 2. 316 SS / 316L SS / MONEL

#### ■ Features

- 1. Single-port construction, large diaphragm area, light-rate springs, soft disc material and seat design provide low lock-up pressure.
- 2. Unexpected erosion, vibration and noise can be avoided by application of anti-cavitation or low-noise trim.
- 3. SWR-NR series have a quick change trim, it provides easy maintenance and long durability.
- 4. The valve is a compact and inexpensive, direct-acting pressure reducing valve.
- 5. The valve is developed to handle water and air, so they have wide applications.
- 6. The valve has wide adjustment ranges and can control very low flow rates.
- 7. Various springs are offered to meet any pressure adjustment range.
- 8. Users do not have to move or remove the valve to change the pressure adjustment range. This can be accomplished where the valve is installed in the piping.
- 9. The valve disc is made of rubber and it prevents any leakage.

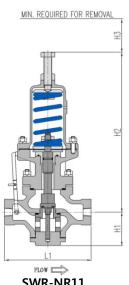


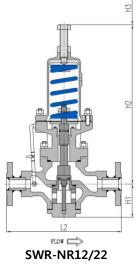
#### [ SWR-NR12 / 22 Series ]

#### **■** Specifications

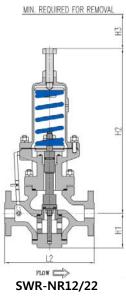
Model	SWR-NR11	SWR-NR12	SWR-NR22				
Service Fluid		Liquid / Air / Gas					
Max. Inlet Pressure	10	20 barg					
May Tomponature		80 °C (N.B.R)					
Max. Temperature		120 °C (E.P.D.M)					
Catting Dance		1 ~ 3 barg					
Setting Range		3 ~ 8 barg					
End Connections	NPT Screwed	ASME 150# Flanged	ASME 300# Flanged				

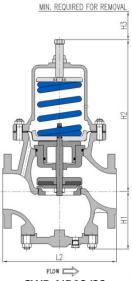
#### Dimensions





MIN. REQUIRED FOR REMOVAL





SWR-NR11 <1/2"~2">

<1/2" >

<3/4"~3" >

SWR-NR12/22 <4"~6" >

#### SWR-NP12 / 22 Series (ASME CLASS 150/300#)

Size (inch)	L1 (Screwed)	L2 (150# Flanged)	L2 (300# Flanged)	H1	H2	Н3
1/2	180	260	270	75	350	200
3/4	180	191	197	75	350	200
1	180	194	201	75	350	200
1-1/2	250	237	244	140	690	300
2	250	273	280	140	690	300
2-1/2	N/A	298	305	140	520	300
3	N/A	324	331	160	630	300
4	N/A	326	342	170	480	400
5	N/A	360	379	200	665	400
6	N/A	400	422	225	600	400

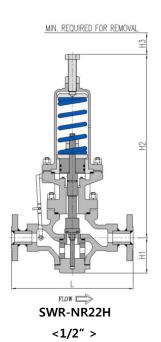
<sup>\*</sup> Other standards are available, but length(L) and weight may vary

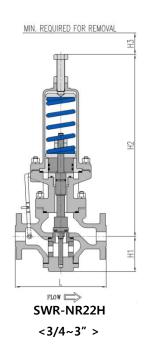
#### [ SWR-NR22H Series ]

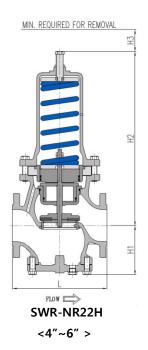
#### **■** Specifications

Model	SWR-NR22H		
Service Fluid	Liquid / Air / Gas		
Max. Inlet Pressure	20 barg		
May Tamananatura	80 °C (N.B.R)		
Max. Temperature	120 °C (E.P.D.M)		
Setting Range	8 ~ 11 barg		
End Connections	ASME 300# Flanged		

#### Dimensions







#### SWR-NP22H Series (ASME CLASS 300#)

Size (inch)	L	H1	H2	Н3
1/2	270	75	380	200
3/4	197	75	380	200
1	201	75	380	200
1-1/2	244	120	570	300
2	280	140	650	300
2-1/2	305	140	520	300
3	331	160	680	300
4	342	158	660	400
5	379	185	767	400
6	422	195	770	400

 $<sup>^{\</sup>star}$  Other standards are available, but length(L) and weight may vary

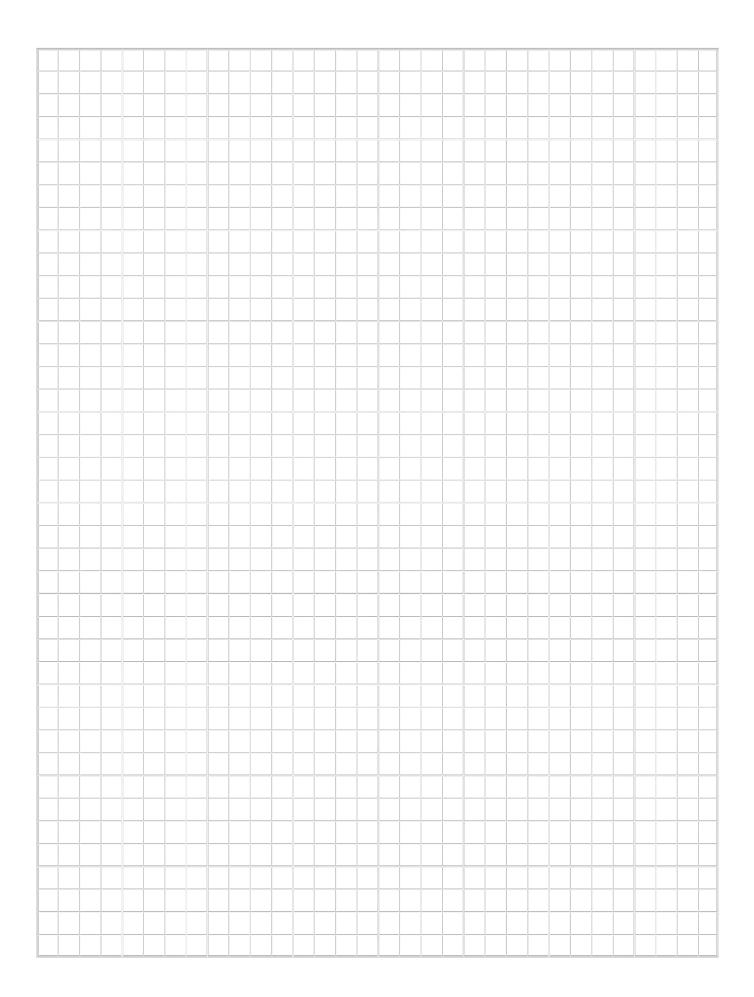


#### ■ Cv Table

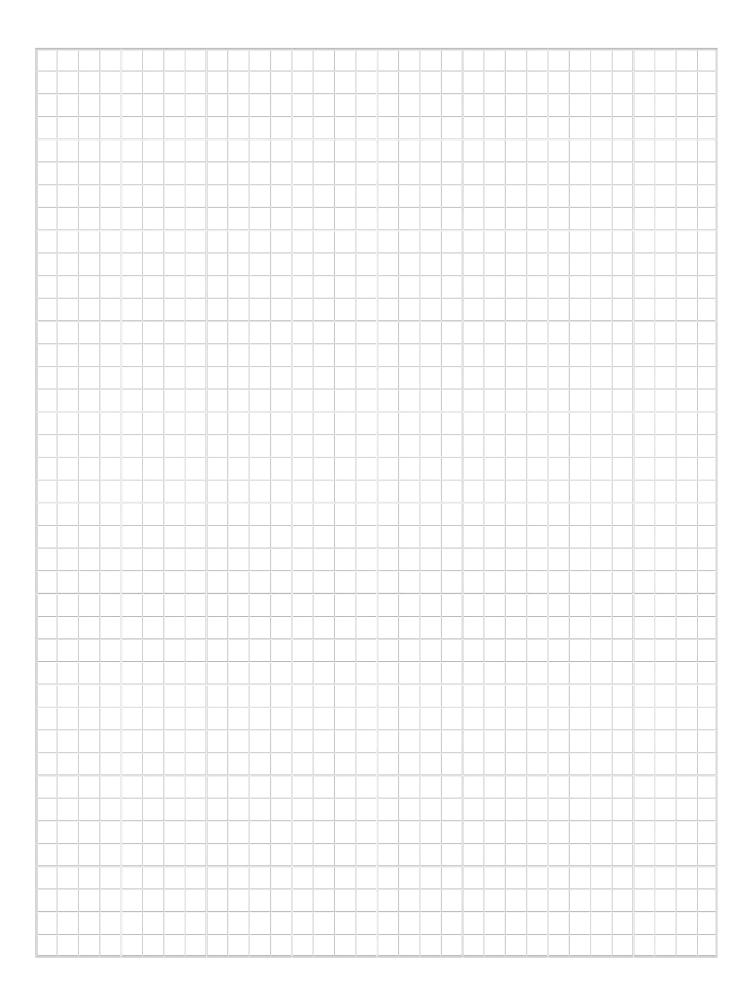
Size (inch)	1/2	3/4	1	1-1/2	2	2-1/2	3	4	5	6
Cv	3	3	3	8	15	33	50	90	120	170

#### **■** Failures & Solutions

Symptom	Solutions		
The primary procesure is higher	- Make sure that the impurities between disc and seat.		
The primary pressure is higher	- Reset the set pressure.		
than secondary	- Check the spring range.		
The valve is opened at lower	- Reset the set pressure.		
pressure than set Pressure	- Check the spring.		







#### **Product Service Qualified Certificate**

#### ISO 9001:2015 ISO 14001:2015 ISO 45001:2018





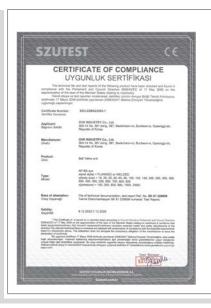


#### **CE: Globe Control Valve**

#### CE: Ball Valve

#### Research Institute









ASME U, PP Stemp

EAC: RUSSIA TRCU

#### API 6D / 600 By KSM







#### Venture company

#### Material · Part · Equipment

#### **Rooting Enterprise**









## GVK(SWR) PRESSURE REGULATING VALVE

**Total Engineering Solution Service** 

**GVK CO.,LTD.** 

#### **HEAD OFFICE**

Techno Valley C-503, 236, Jubuto-ro, Bupyeong-gu, Incheon, Republic of Korea

> TEL +82-32-678-7972 FAX +82-32-678-7973 EMAIL ican@gvkvalve.com

> > www.gvkvalve.com