

## PRESSURE REDUCING VALVE (HG) DIRECT TYPE

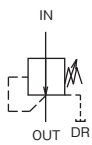


A pressure reducing valve reduces the pressure in a portion of the hydraulic circuit to a level lower than the main pressure. It maintains the pressure in the reduced pressure circuit at the specified level even if the main circuit pressure fluctuates.

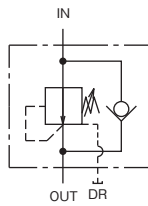
### ■ Features

1. This valve allows the setting of a low pressure and stably maintains this pressure at the set level.
  2. The direct acting type valve ensures a quick response and generates virtually no surge pressure.
- For size 03 and larger valves, the mounting dimensions are the same as those of the balance piston type pressure reducing valve.
  - For size 03 and larger valves, the drainage volume varies depending on the setting pressure.
    - Setting at 1 MPa: 1.5 L/min
    - Setting at 3.5 MPa: 3.5 L/min

Without Check Valve

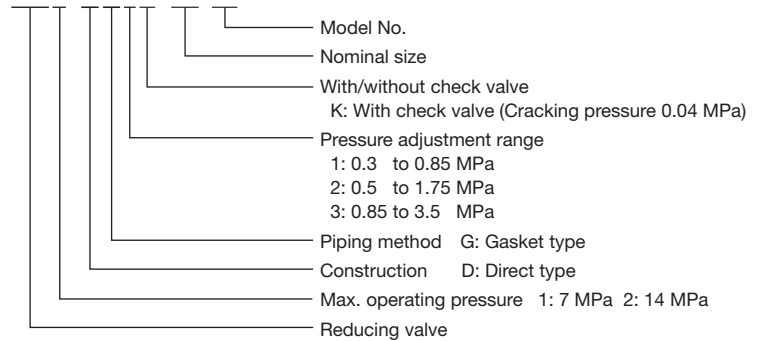


With Check Valve



### ■ Description of the model designation

#### HG2-DG1K-02(A)

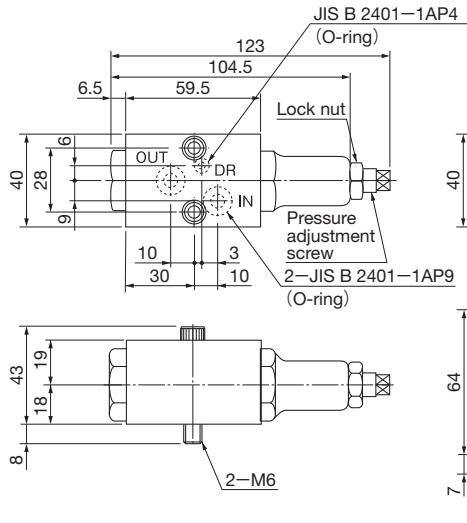


### ■ Specifications

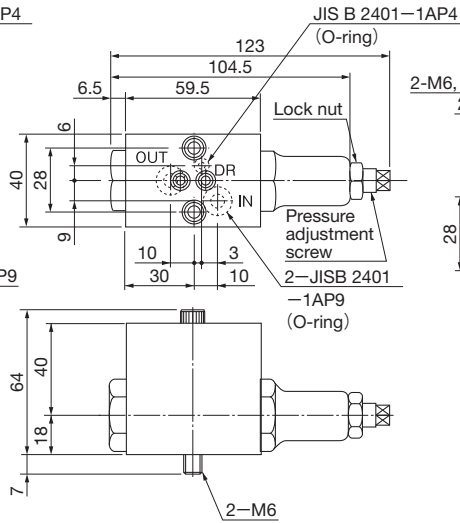
Nominal size	Rated flow rate (L/min)	Max. operating pressure (MPa)	Pressure adjustment range (MPa)	Model	
				Without check valve	With check valve
02	5	14	0.30 to 0.85	HG2-DG1-02A	HG2-DG1K-02A
			0.50 to 1.75	HG2-DG2-02A	HG2-DG2K-02A
			0.85 to 3.5	HG2-DG3-02A	HG2-DG3K-02A
			1.75 to 7	HG2-DG4-02A	HG2-DG4K-02A
03	20	7	0.30 to 0.85	HG1-DG1-03	HG1-DG1K-03
	30		0.50 to 1.75	HG1-DG2-03	HG1-DG2K-03
			0.85 to 3.5	HG1-DG3-03	HG1-DG3K-03
06	50	7	0.30 to 0.85	HG1-DG1-06	HG1-DG1K-06
	75		0.50 to 1.75	HG1-DG2-06	HG1-DG2K-06
			0.85 to 3.5	HG1-DG3-06	HG1-DG3K-06

Outside dimensions

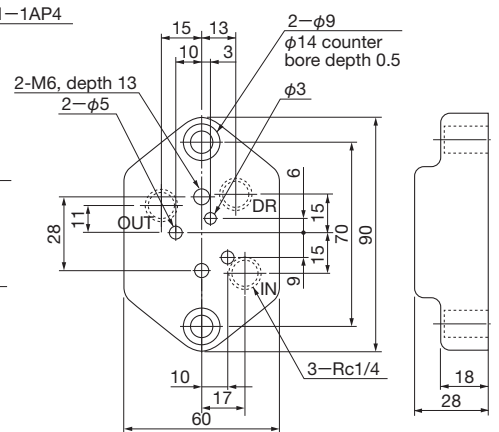
HG2-DG\*-02A



HG2-DG\*K-02A



SHG02-02T1

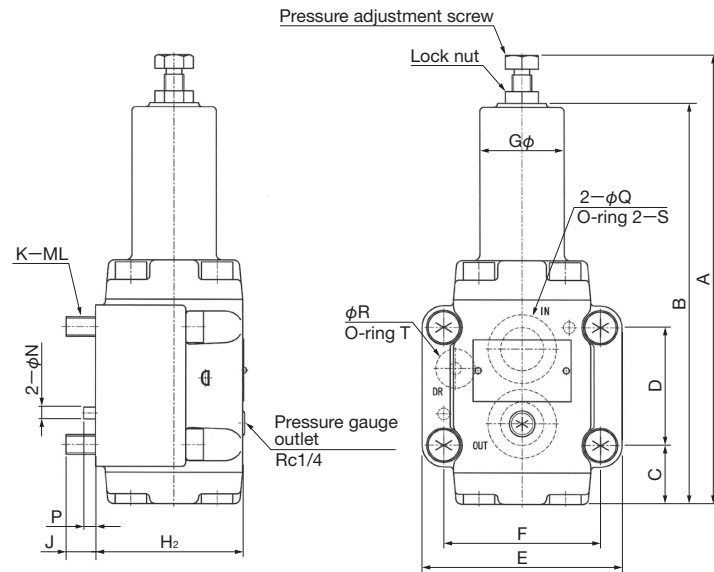


Mass: 0.7kg

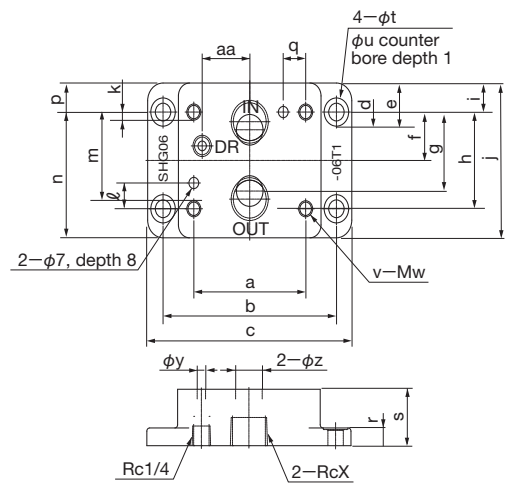
Mass: 1kg

NOTE: For SHG02-\*\*\*T3, refer to page L-4.

HG1-DG\*(K)-03, 06



SHG\*\* - \*\*T1



NOTE: Mounting bolts for type 03 and 06 are 4 pieces.

NOTE: For SHG\*\*-\*\*\*T3, refer to page L-4, L-5.

Model	A	B	C	D	E	F	G	H1	H2	J	K	L	N	P	Q	R	S	T	Mass (kg)	
																			Without check valve	With check valve
HG1-DG*(K)-03	201	178	29	43	88	67	30	86	67	15	4	10	6	6	14	6	JIS B 2401-1AP21	JIS B 2401-1AP11	3.5	3.6
HG1-DG*(K)-06	230.2	204	30	60	102	80	43	98	75	15	4	10	6	6	22	6	JIS B 2401-1AG30	JIS B 2401-1AP16	5.4	6

Model	a	b	c	d	e	f	g	h	i	j	k	l	m	n	p	q	r	s	t	u	v	w	x	y	z	aa
SHG03-03T1	67	106.4	130	7	21.5	-	36	43	11	65	5	11	38	43	11	14.5	11	25	11	17.5	4	10	3/8	5	14.5	25.5
SHG03-04T1	67	106.4	130	7	21.5	-	36	43	15.5	74	2.5	11	40.5	52	11	14.5	11	30	11	17.5	4	10	1/2	5	14.5	25.5
SHG06-06T1	80	124	146	11	21	-	49	60	18	96	6	16	54	60	18	16	11	35	11	17.5	4	10	3/4	6	19	34
SHG06-08T1	80	124	146	11	21	-	49	60	24	108	1	16	59	72	18	16	11	43	11	17.5	4	10	1	5	19	34

# PRESSURE REDUCING VALVE (HG)(BALANCE PISTON TYPE)



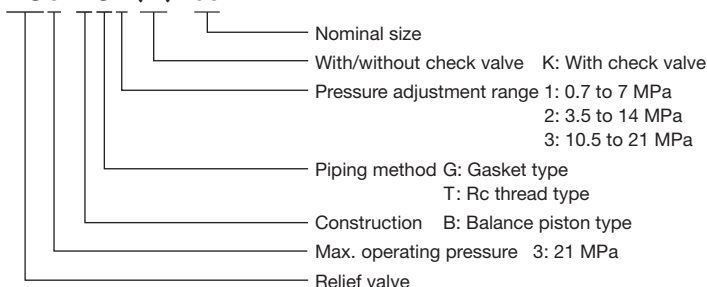
## ■ Features

A pressure reducing valve reduces the pressure in a portion of the hydraulic circuit to a level lower than the main pressure. It maintains the pressure in the reduced pressure circuit at the specified level even if the main circuit pressure fluctuates.

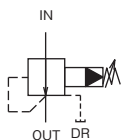
- Set the pressure in the reduced pressure circuit to a level at least 0.7 MPa lower than the main circuit pressure.
- Return the drainage (DR) directly to the reservoir independently since the drainage volume is approximately 0.8 to 1.2 L/min.

## ■ Description of the model designation

### HG3-BG1 (K)-03

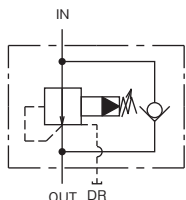


### Without check valve



Nominal size	Rated flow rate (L/min)	Max. operating pressure (MPa)	Pressure adjustment range (MPa)	Model	
				Thread joint type	Gasket joint type
03	35	21	0.7 to 7	HG3-BT1-03	HG3-BG1-03
			3.5 to 14	HG3-BT2-03	HG3-BG2-03
			10.5 to 21	HG3-BT3-03	HG3-BG3-03
06	120		0.7 to 7	HG3-BT1-06	HG3-BG1-06
			3.5 to 14	HG3-BT2-06	HG3-BG2-06
			10.5 to 21	HG3-BT3-06	HG3-BG3-06

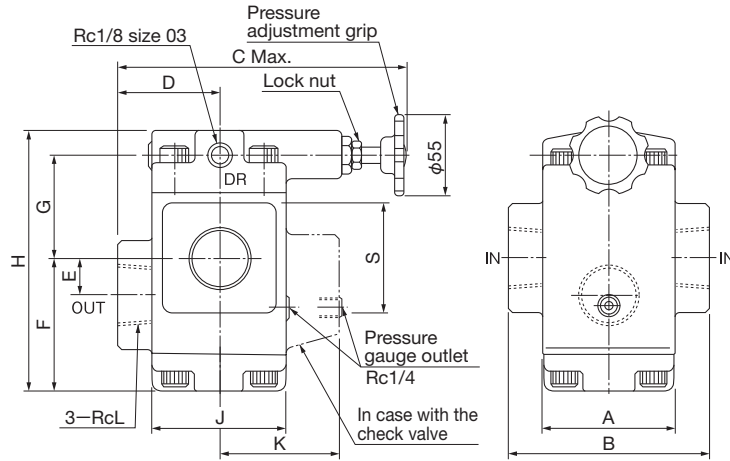
### With check valve



Nominal size	Rated flow rate (L/min)	Max. operating pressure (MPa)	Pressure adjustment range (MPa)	Model	
				Thread joint type	Gasket joint type
03	35	21	0.7 to 7	HG3-BT1K-03	HG3-BG1K-03
			3.5 to 14	HG3-BT2K-03	HG3-BG2K-03
			10.5 to 21	HG3-BT3K-03	HG3-BG3K-03
06	120		0.7 to 7	HG3-BT1K-06	HG3-BG1K-06
			3.5 to 14	HG3-BT2K-06	HG3-BG2K-06
			10.5 to 21	HG3-BT3K-06	HG3-BG3K-06

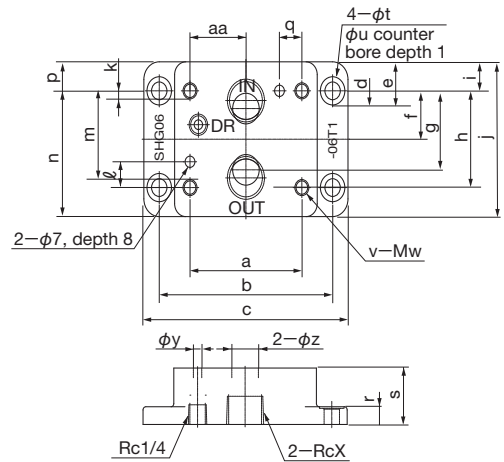
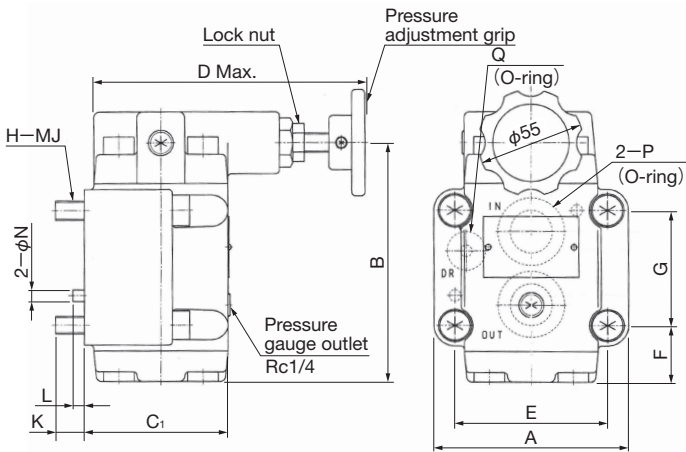
Outside dimensions

HG3-BT\*(K) - \*\*



HG3-BG\*(K) - \*\*

SHG\*\* - \*\*T1



NOTE: For SHG\*\* - \*\*T3, refer to page L-4, L-5.

Model	A	B	C	D	E	F	G	H	J	K	L	S	Mass (kg)	
													Without check valve	With check valve
HG3-BT*(K)-03	62	96	158	48	17	59	49	124	62	50	3/8	54	4.7	5
HG3-BT*(K)-06	70	110	161	54	21.5	71.5	53.5	141	70	63	3/4	58	6	6.5

Model	A	B	C1	C2	D	E	F	G	H	J	K	L	N	P	Q	Mass (kg)	
																Without check valve	With check valve
HG3-BG*(K)-03	88	108	67	86	146	67	29	43	4	10	15	6	6	JIS B 2401-1AP21	JIS B 2401-1AP11	4.5	5.0
HG3-BG*(K)-06	102	125	75	98	147	80	30	60	4	10	16	6	6	JIS B 2401-1AG30	JIS B 2401-1AP16	6.7	7.5

Model	a	b	c	d	e	f	g	h	i	j	k	l	m	n	p	q	r	s	t	u	v	w	x	y	z	aa
SHG03-03T1	67	106.4	130	7	21.5	-	36	43	11	65	5	11	38	43	11	14.5	11	25	11	17.5	4	10	3/8	5	14.5	25.5
SHG03-04T1	67	106.4	130	7	21.5	-	36	43	15.5	74	2.5	11	40.5	52	11	14.5	11	30	11	17.5	4	10	1/2	5	14.5	25.5
SHG06-06T1	80	124	146	11	21	-	49	60	18	96	6	16	54	60	18	16	11	35	11	17.5	4	10	3/4	6	19	34
SHG06-08T1	80	124	146	11	21	-	49	60	24	108	1	16	59	72	18	16	11	43	11	17.5	4	10	1	5	19	34