

# BALANCING VALVE (HGR)



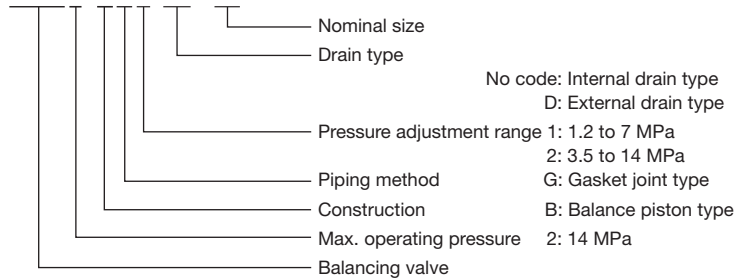
A balancing valve is a new type of compound pressure control valve that supplies the required balancing pressure to allow smooth vertical movements of a high load spindle head. The valve can control circuits with its compound functions: the pressure-reducing valve function and the relief valve function. It also enables control of the required balance pressure using one handle.

### ■ Features

- Using this type of valve, the hydraulic system can be designed compactly and installation space can be reduced.
- The pressure can be adjusted easily with a single handle operation.
- The valve is compact and light.
  - Two drain types (internal drain type and external drain type) are available.
  - If subplate SHGR\*\*-\*T3 is necessary, please order one separately.

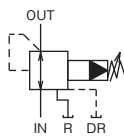
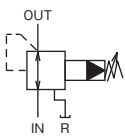
### ■ Description of the model designation

#### HGR2-BG2(D)-03



Internal drain type

External drain type



### ■ Specifications

Nominal size	Rated flow rate (L/min)	Maximum flow rate (L/min)	Max. operating pressure (MPa)	Pressure adjustment range (MPa)	Model	
					Internal drain type	External drain type
03	40	80	14	1.2 to 7	HGR2-BG1-03	HGR2-BG1D-03
				3.5 to 14	HGR2-BG2-03	HGR2-BG2D-03
06	120	190	14	1.2 to 7	HGR2-BG1-06	HGR2-BG1D-06
				3.5 to 14	HGR2-BG2-06	HGR2-BG2D-06

### ■ Outside dimensions

#### HGR2-BG\*(D)-03

146 Max. Lock nut Pressure adjustment grip JIS B 2401-1AP11 (O-ring) 3-JIS B 2401-1AP21 (O-ring)

4-M10 149 2-φ6 133 15 75 10.5 33.5 52.5 67 88 99 7 21.5 32 36 43

Filler plug Rc1/8 Pressure gauge outlet Rc1/4

Filler plug Rc1/8

Mass: 4.7kg

#### SHGR\*\*-\*T3

Rc1/4 φ5 2-φ7x7 4-M10x18

IN DR OUT R

4-φ11 through φ17.5 counter bore depth 10.8

3-Rc cc 3-φbb

#### HGR2-BG\*(D)-06

147 Max. Lock nut Pressure adjustment grip JIS 2401-1AP16 (O-ring) 3-JIS 2401-1AG30 (O-ring)

4-M10 179 2-φ6 163 15 83 6 40 64 80 102 11 11 47 49 60 87 128

Filler plug Rc1/8 Pressure gauge outlet Rc1/4

Filler plug Rc1/8

Mass: 6.0kg

Unit: mm

Model	a	b	c	d	e	f	g	h	i	j	k	l	m	n
SHGR03-03T3	100	78	11	56	35	10	8	33.5	52.5	67	16.5	110	88	11
SHGR03-04T3	100	78	11	56	28	10	8	33.5	52.5	67	16.5	118	96	11
SHGR06-06T3	114	92	11	66	29	10	6	40	64	80	17	158	136	11
SHGR06-08T3	114	92	11	66	26	10	6	40	64	80	17	174	152	11

Model	p	q	r	s	t	u	v	w	x	y	z	aa	bb	cc
SHGR03-03T3	76.5	51.5	40	26.5	7	21.5	32	36	43	65	26.5	40	14	3/8
SHGR03-04T3	79	48	48	17	7	21.5	32	36	43	65	34.5	45	14	1/2
SHGR06-06T3	113	68	54.5	23	11	21	44	49	60	87	40.5	55	22	3/4
SHGR06-08T3	126	76	62.5	26	11	21	44	49	60	87	48.5	60	22	1