

SEQUENCE VALVE WITH CHECK VALVE / COUNTER BALANCE VALVE (HQ, HB)

B

PRESSURE CONTROL VALVES



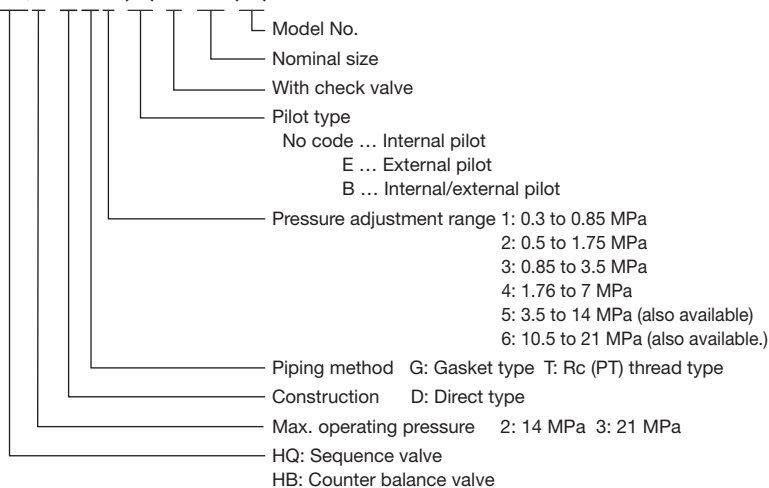
■ Features

These valves are used to control the operating sequence of the hydraulic circuit (sequence operation) by controlling the pilot pressure, to hold the load, or to prevent a device from falling under its own weight (counterbalance operation).

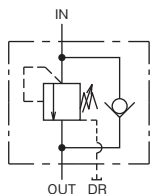
- Sequence valves are classified into three types, namely the internal pilot type, the external pilot type and the internal/external pilot type, according to the source of the pilot pressure, and counterbalance valves into two types, namely the internal pilot type and the external pilot type.

■ Description of the model designation

HQ2-DG2(E) K-02(A)

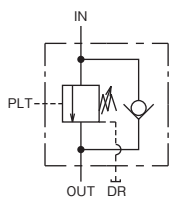


Sequence valve with internal pilot type check valve



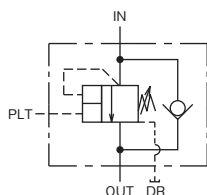
Nominal size	Rated flow rate (L/min)	Max. operating pressure (MPa)	Model	
			Thread joint type	Gasket joint type
02	5	14		HQ2-DG*K-02A
03	35		HQ3-DT*K-03	HQ3-DG*K-03
06	120		HQ3-DT*K-06	HQ3-DG*K-06

Sequence valve with external pilot type check valve



Nominal size	Rated flow rate (L/min)	Max. operating pressure (MPa)	Model	
			Thread joint type	Gasket joint type
02	5	14		HQ2-DG*EK-02A
03	35		HQ3-DT*EK-03	HQ3-DG*EK-03
06	120		HQ3-DT*EK-06	HQ3-DG*EK-06

Sequence valve with the internal, external pilot type check valve



Nominal size	Rated flow rate (L/min)	Max. operating pressure (MPa)	Model	
			Thread joint type	Gasket joint type
03	35	21	HQ3-DT*BK-03	HQ3-DG*BK-03
06	120		HQ3-DT*BK-06	HQ3-DG*BK-06

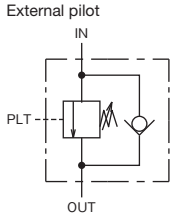
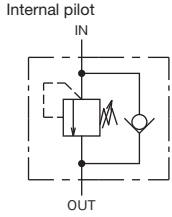
Please note that this type has not the pressure adjustment range of 1: 0.3 to 0.85 MPa.

Pilot pressure ratio of internal, external pilot type sequence valve

Nominal size	Pilot pressure ratio (Note)	
	Pressure adjustment range code	
	2 to 4	5 to 6
03	1/10	1/18
06	1/10	1/16.5

NOTE: The pilot pressure ratio is the ratio of external pilot pressure relative to the internal pilot pressure.

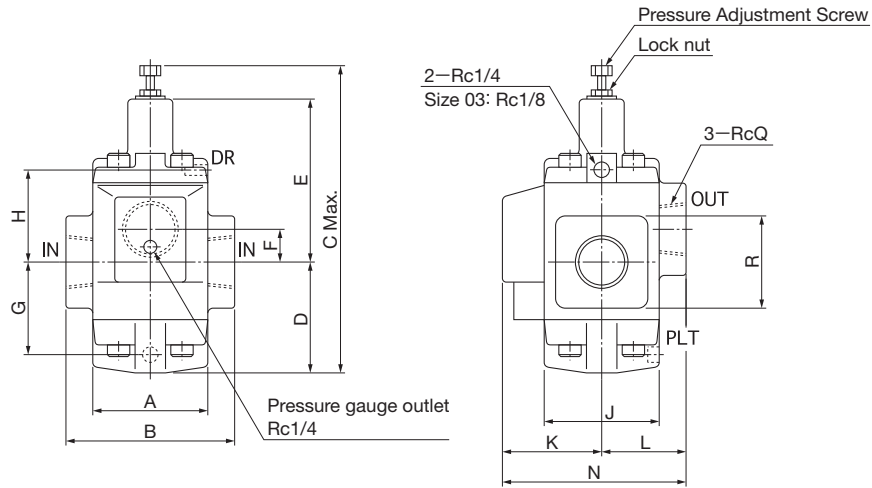
Counter balance valve



Nominal size	Rated flow rate (L/min)	Max. operating pressure (MPa)	Model			
			Internal pilot type		External pilot type	
			Thread joint type	Gasket joint type	Thread joint type	Gasket joint type
03	35	21	HB3-DT*K-03	HB3-DG*K-03	HB3-DT*EK-03	HB3-DG*EK-03
06	120		HB3-DT*K-06	HB3-DG*K-06	HB3-DT*EK-06	HB3-DG*EK-06

Outside dimensions

HQ3-DT**K-**
HB3-DT*K-**



NOTE: Counter balance valve has the internal drain.

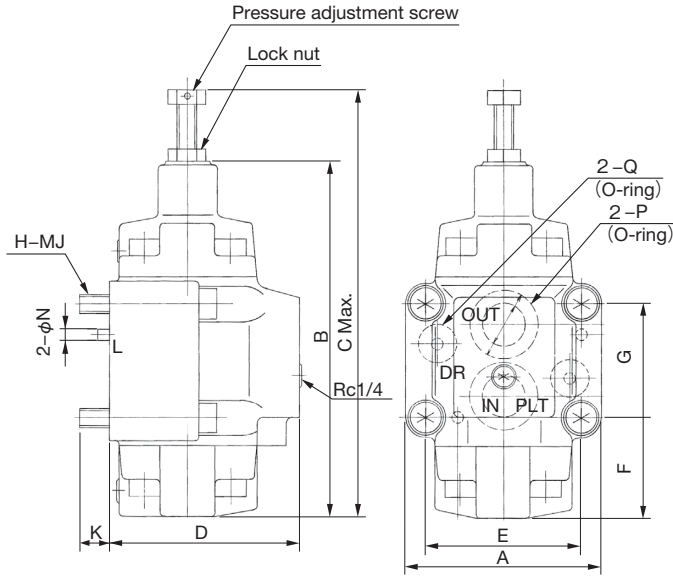
Unit: mm

Model	A	B	C	D	E	F	G	H	J	K	L	N	Q	R	Mass (kg)
H*3-DT**K-03	62	96	185	56	95	17	45.5	56	62	50	48	98	3/8	54	6.5
H*3-DT**K-06	70	110	221	68.5	115.5	21.5	57.5	66.5	70	63	54	117	3/4	58	6.5

■ Outside dimensions

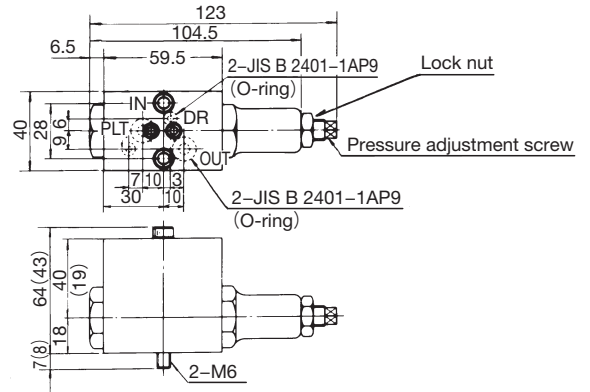
HQ3-DG**K-**

HB3-DG*K-**



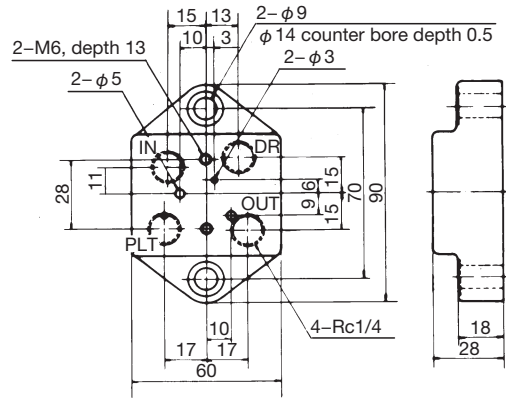
For the sub-plate SHQ**-*T1 (A), refer to page B-19.

HQ2-DG* (E) (K) -02A



Parentheses indicate an application without the check valve.

SHQ02-02T1



Mass: 5.5kg

SHQ02-02T3, refer to page L-5.

Unit: mm

Model	A	B	C	D	E	F	G	H	J	K	L	N	P	Q	Mass (kg)
H*3-DG**K-03	88	151	185	86	67	43	43	4	10	15	6	6	JIS B 2401-1AP21	JIS B 2401-1AP11	4.5
H*3-DG**K-06	102	184	221	98	80	50	60	4	10	15	6	6	JIS B 2401-1AG30	JIS B 2401-1AP16	5.5