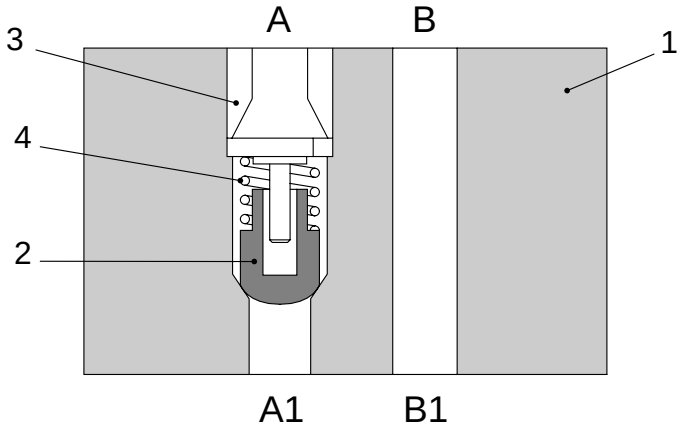
Size 6 & 10 up to 315 bar up to 40 & 100 L/min	Check Valve (Direct Acting) Sandwich Plate Valve Type S-C6 & S-C10, Series 10	Data Sheet S-1001/10.98 GB

Features

- ◊ Direct operated check valve.
- ◊ Used in vertical stacking assemblies.
- ◊ Seven different isolating functions.
- ◊ Leak free closure ports.
- ◊ Porting pattern to DIN 24 340 form A, ISO 4401 and CETOP-RP 121H.

Type S-C10



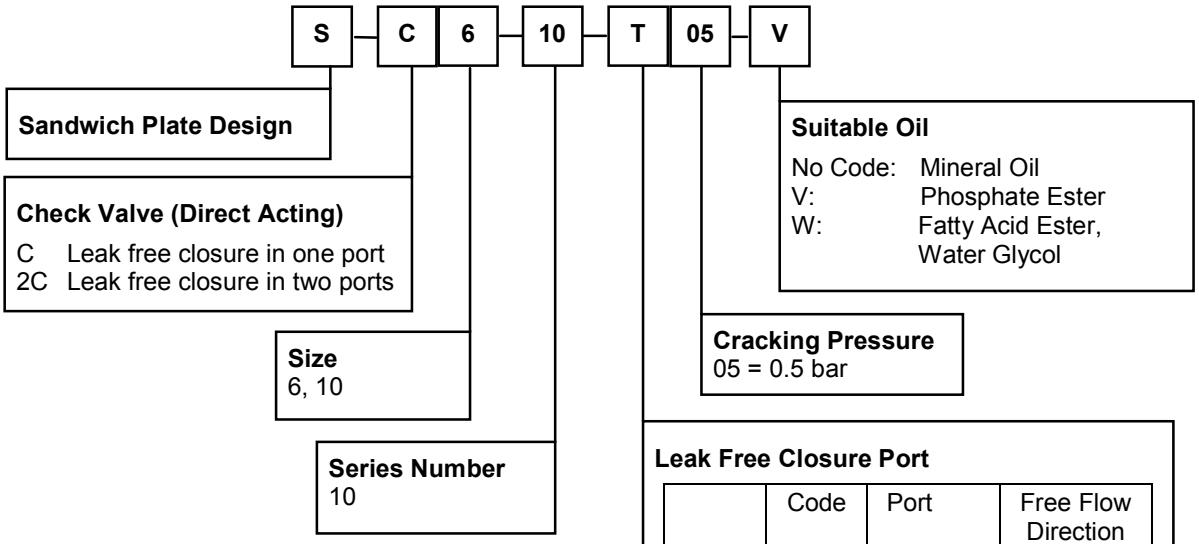
Functional Description

Type S-C6/S-C10 Series 10 Check Valves are directly controlled valves of sandwich plate design. The valves provide leak-free closure in one direction and free flow in the opposite direction.

The valves basically consist of the housing (1), the poppet (2), spring plate (3) and integrated spring (4).

When there is no flow through the valve the integrated spring (4) holds the poppet (2) in the closed position. Flow acts against the poppet (2) opening the valve, the stroke of which is limited by the spring plate (3). When the flow stops, the integrated spring (4) returns the poppet (2) to the closed position.

Ordering Code – Check Valve (Direct Acting)

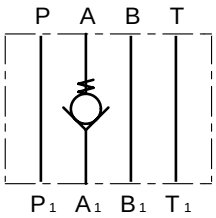


	Code	Port	Free Flow Direction
C	T	Port T	T→T1
	P	Port P	P1→P
	A	Port A	A1→A
	B	Port B	B1→B
	C	Port A	A→A1
	D	Port B	B→B1
2C	E	Port A Port B	A→A1 B→B1

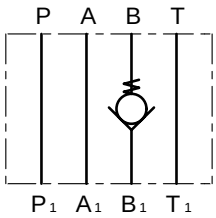
Symbols

SYMBOLS

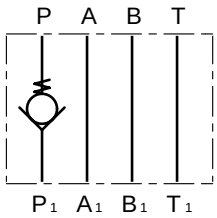
S-C6-10-A



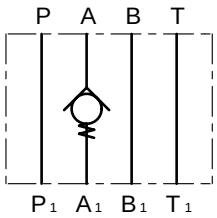
S-C6-10-B



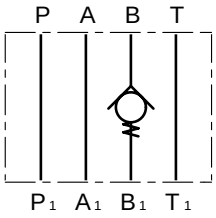
S-C6-10-P



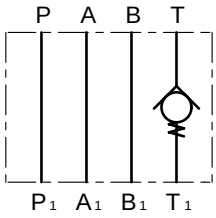
S-C6-10-C



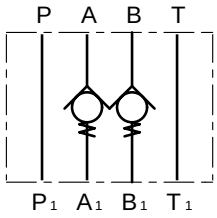
S-C6-10-D



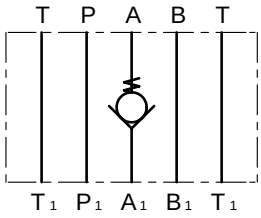
S-C6-10-T



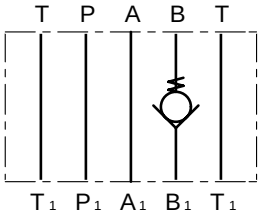
S-2C6-10-E



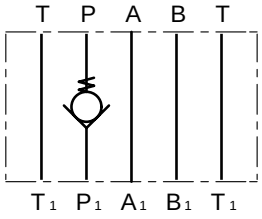
S-C10-10-A



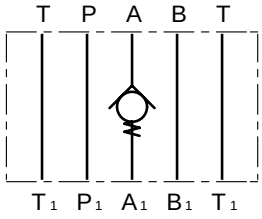
S-C10-10-B



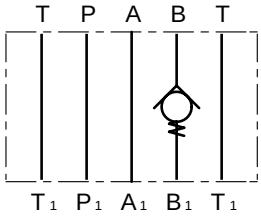
S-C10-10-P



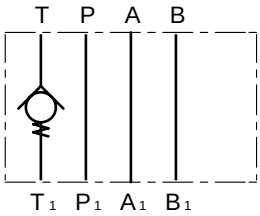
S-C10-10-C



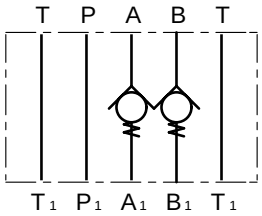
S-C10-10-D



S-C10-10-T



S-2C10-10-E



(NOTE) P_1, A_1, B_1, AND T_1 SHOW PORTS ON THE SUBPLATE SIDE AND P, A, B AND T SHOW ONES ON THE DIRECTIONAL CONTROL VALVE

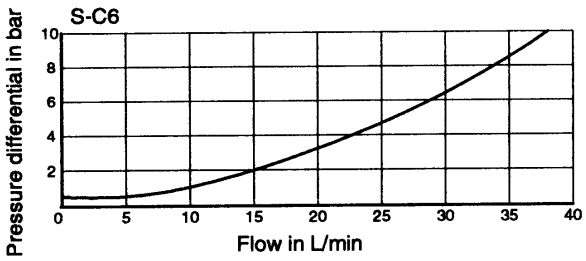
Technical Data

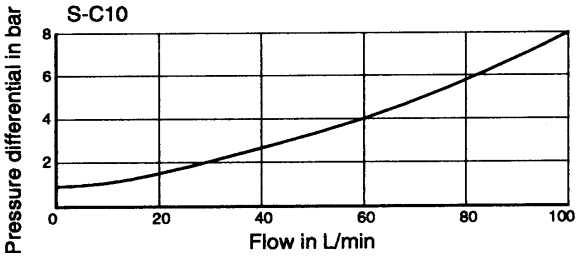
For applications outside the following parameters, please consult Kawasaki Precision Machinery (UK) Ltd.

Maximum Operating Pressure	315 bar
Pressure Fluid	Mineral oil, phosphate ester, fatty acid ester and water glycol. Phosphate ester is only suitable for use with FPM seals.
Pressure Fluid Temperature Range	-20°C to +70°C
Viscosity Range	2.8 to 380cSt
Maximum Flow	40 L/min – Type S-C6 100 L/min – Type S-C10
Degree of Contamination	Maximum permissible degree of contamination of the fluid is to NAS 1638 Class 9. Kawasaki recommend that a filter with a minimum retention rate of $ß_{10} \geq 75$ is used.
Cracking Pressure:	0.5 bar
Weight	0.9 kg - S-C6 2.4 kg - S-C10

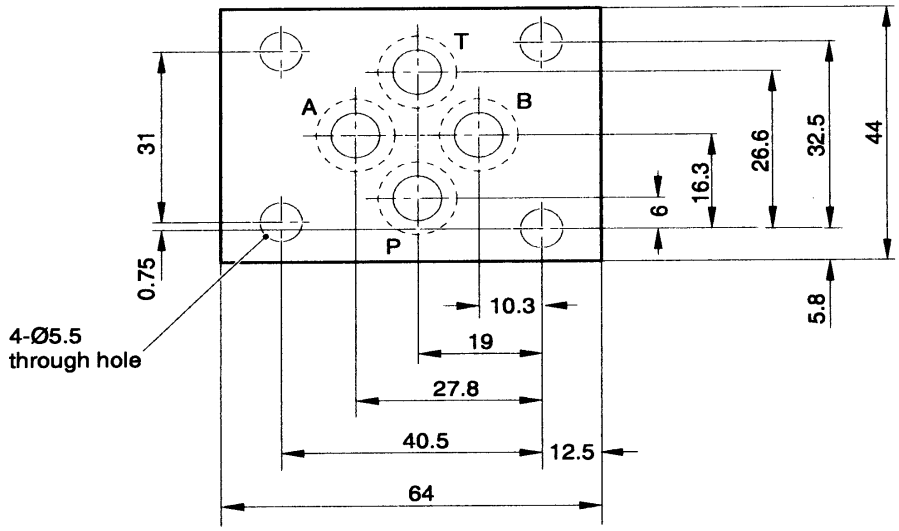
Characteristic Curves

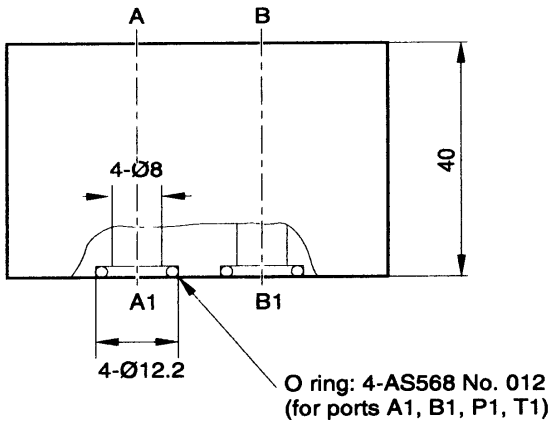
Measured at ν = 36cSt and *t* = 50°C



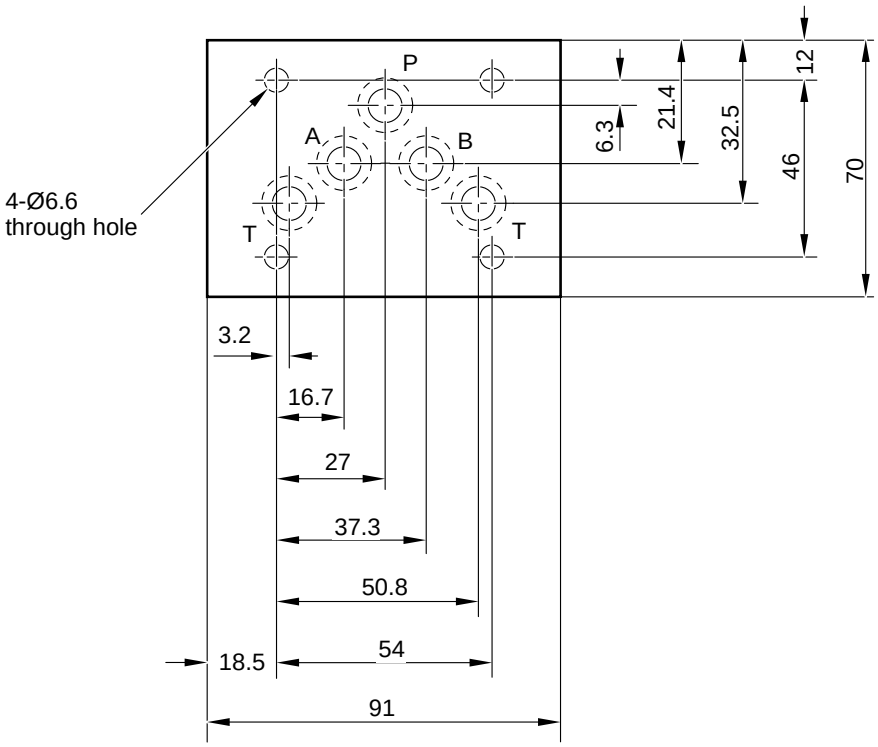


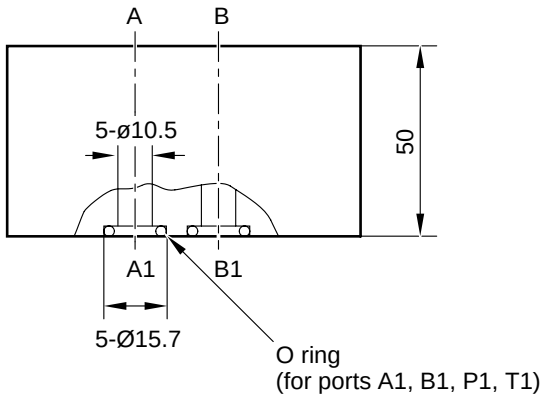
Unit Dimensions - Type S-C6 **(dimensions in mm)**





Unit Dimensions - Type S-C10 (dimensions in mm)





(NOTE) FOR TYPE S-C10 -*- T,
THERE IS NO PORT T PASS ONTHE PORT B SIDE

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Model	Page	Data Sheet
S-C6 & S-C10	6.6	S-1001/10.98

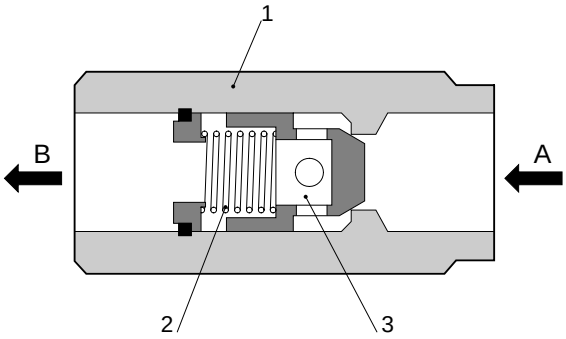
Kawasaki Hydraulic Products

Size 6 to 30 up to 315 bar up to 400 L/min	Check Valve Direct Acting Type C, Series 10	Data Sheet C-1001/10.98 GB

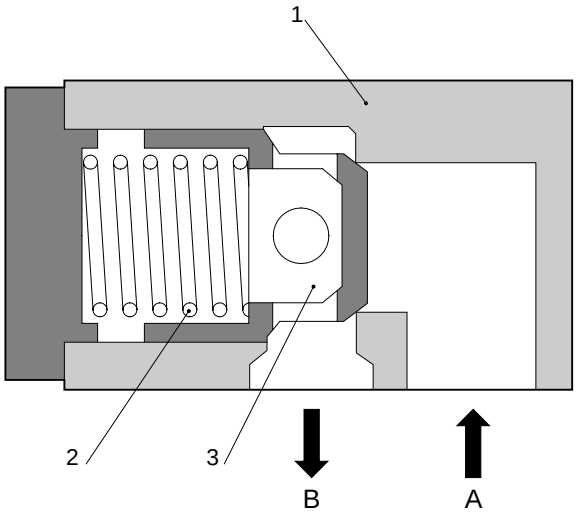
Features

- ◊ In-line threaded connection or angled sub-plate connection.
- ◊ High durability.
- ◊ Various options.
- ◊ Leak free enclosure in one direction.

Type C (In-Line Threaded Connection)



In-Line Threaded Connection



Angled sub-plate Connection

Functional Description

Type C Series 10 Check Valves are direct acting valves that allow free flow in one direction and block any reverse direction flow.

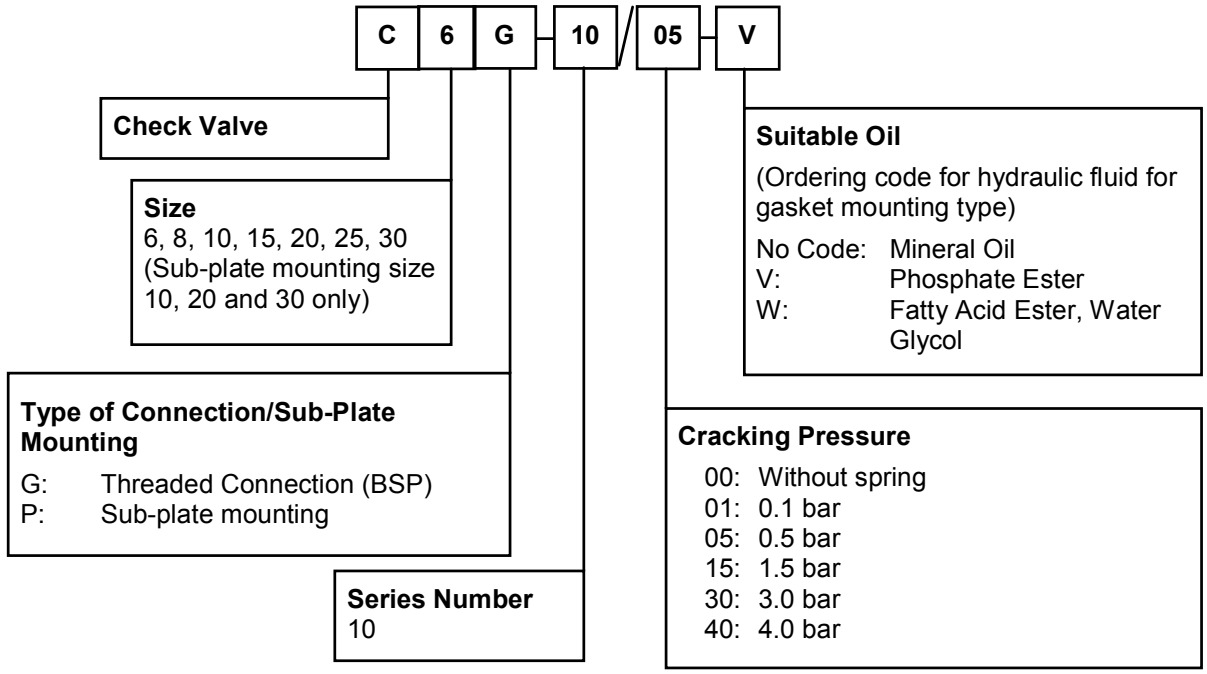
The valves consist of the housing (1), one spring (2), the poppet (3), and input and output ports.

When no fluid flows the spring (2) holds the poppet (3) in the closed position.

Fluid pressure compresses the spring (2) and opens the poppet (3) allowing the flow from port A to B. The spring force determines the pressure that the valve will open.

Fluid attempting to flow in the opposite direction will close the valve stopping the flow.

Ordering Code



Technical Data

For applications outside the following parameters, please consult Kawasaki Precision Machinery (UK) Ltd.

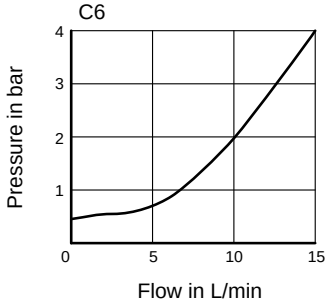
Maximum Operating Pressure	315 bar
Pressure Fluid	Mineral oil, phosphate ester, fatty acid ester and water glycol. Phosphate ester is only suitable for use with FPM seals.
Pressure Fluid Temperature Range	-20°C to +70°C
Viscosity Range	2.8 to 380 cSt
Maximum Flow	See characteristic curve
Degree of Contamination	Maximum permissible degree of contamination of the fluid is to NAS 1638 class 9. Kawasaki recommend that a filter with a minimum retention rate of $ß_{10} \geq 75$ is used.

Weight	Size 6	Size 8	Size 10	Size 15	Size 20	Size 25	Size 30
Threaded connection	0.1 kg	0.2 kg	0.3 kg	0.5 kg	1.0 kg	2.0 kg	2.5 kg
Sub-plate mounting	-	-	1.4 kg	-	4 kg	-	12 kg

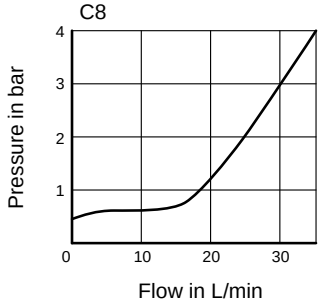
Characteristic Curves

Measured at v = 36cSt and t = 50°C

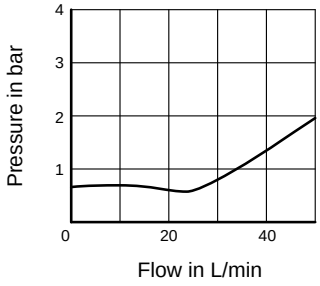
C6



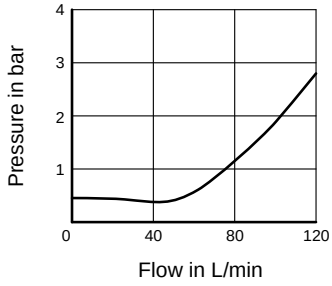
C8



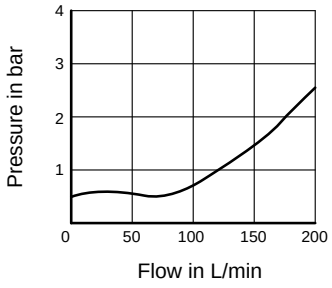
C10



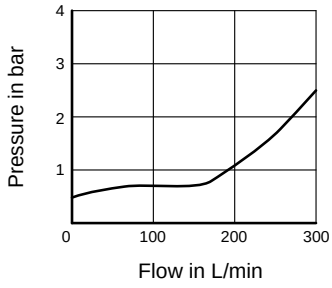
C15



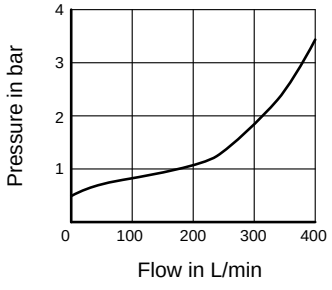
C20



C25

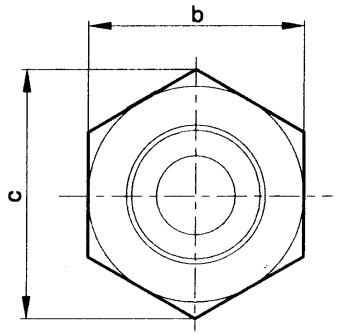


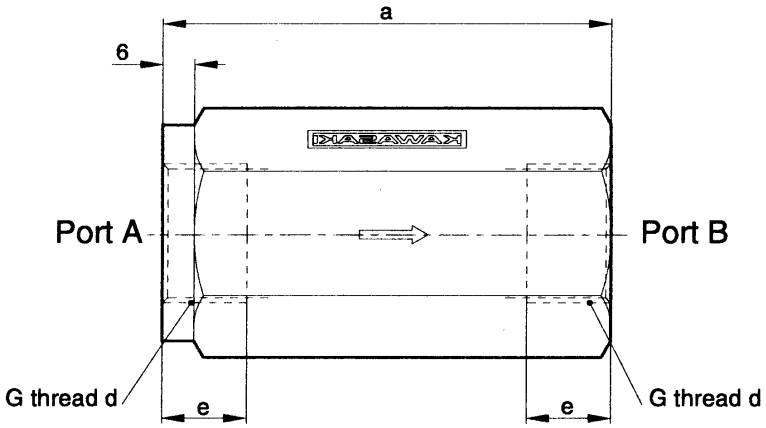
C30



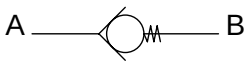
Unit Dimensions (dimensions in mm)

In-Line Threaded





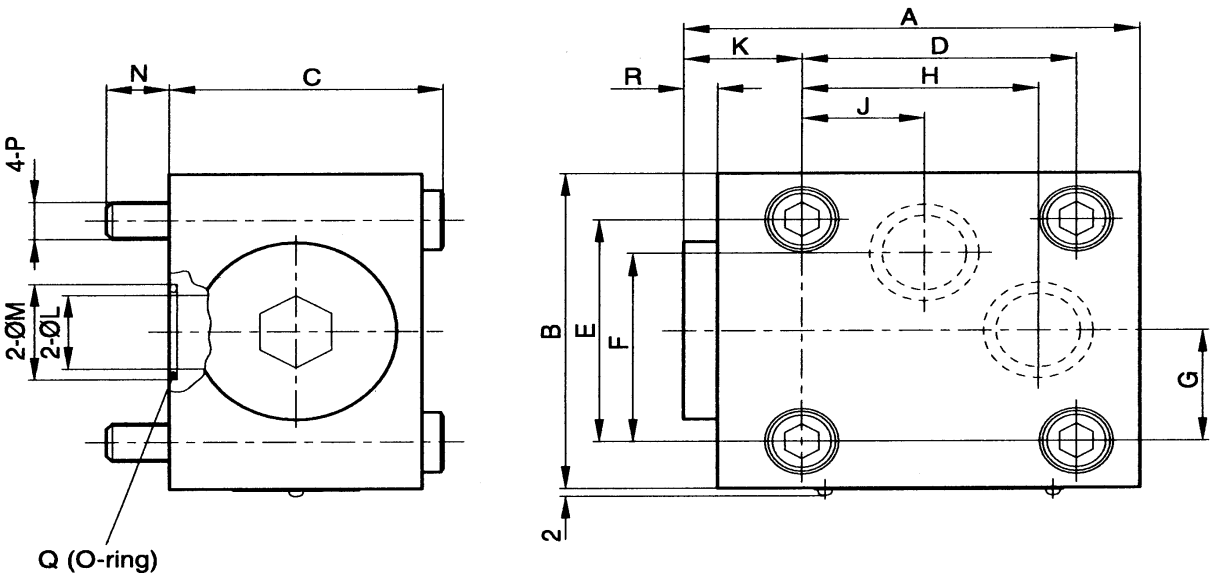
Valve Type	Weight (kg)	Thread d	a	b	c	e
C6G-10-…	0.2	¼	58	24	27.7	12
C8G-10-…	0.3	3/8	58	32	37	12
C10G-10-…	0.5	½	72	36	41.6	14
C15G-10-…	0.7	¾	85	41	47.3	16
C20G-10-…	1.2	1	98	50	57.7	18
C25G-10-…	2.2	1¼	120	63	72.7	23
C30G-10-…	2.8	1½	132	63	72.7	23



Symbol

Unit Dimensions (dimensions in mm)

Angled sub-plate



	Size 10	Size 20	Size 30
A	75	108	145
B	60	85	130
C	46	65	83
D	40	65	95
E	40	60	100
F	32	51	83
G	20	30	50
H	36	56	85
J	18	29	45
K	20	28	30
L	10	20	30
M	16	26	40
N	12	15	24
P	M8	M10	M16
Q (O-Ring)	2-JIS B2401 P12 Hs90	2-JIS B2401 P22 Hs90	2-JIS B2401 G35 Hs90
R	5	8	5
Tightening torque Nm (kgf-cm)	23.6~27.4 (240~280)	44.1~49.0 (450~500)	186.2~205.8 (1900~2100)

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Model	Page	Data Sheet
C	4.5	C-1001/10.98

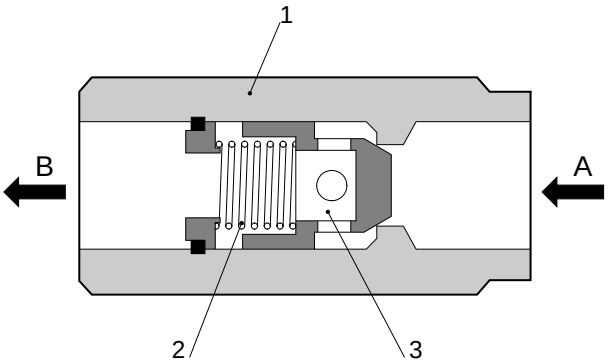
Kawasaki Hydraulic Products

Size 52 to 150 up to 315 bar up to 6400 L/min	Check Valve Direct Acting Type C, Series 10	Data Sheet C-1003/06.99 GB

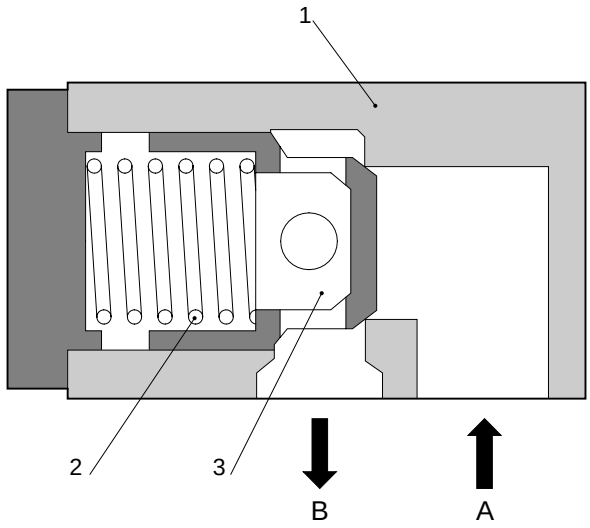
Features

- ◊ In-line flange connection or angled sub-plate connection.
- ◊ High durability.
- ◊ Various options.
- ◊ Leak free enclosure in one direction.

Type C (In-Line flange Connection)



In-Line Threaded Connection



Angled sub-plate Connection

Functional Description

Type C Series 10 Check Valves are direct acting valves that allow free flow in one direction and block any reverse direction flow.

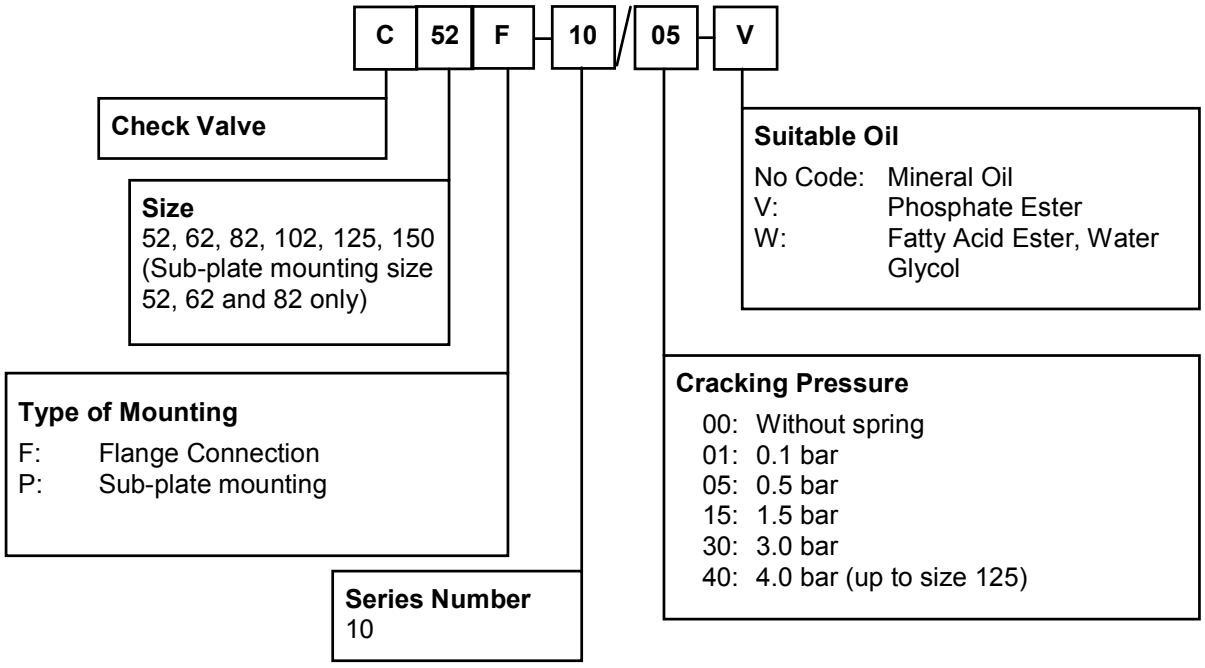
The valves consist of the housing (1), one spring (2), the poppet (3), and input and output ports.

When no fluid flows the spring (2) holds the poppet (3) in the closed position.

Fluid pressure compresses the spring (2) and opens the poppet (3) allowing the flow from port A to B. The spring force determines the pressure that the valve will open.

Fluid attempting to flow in the opposite direction will close the valve stopping the flow.

Ordering Code



Technical Data

For applications outside the following parameters, please consult Kawasaki Precision Machinery (UK) Ltd.

Maximum Operating Pressure	315 bar
Pressure Fluid	Mineral oil, phosphate ester, fatty acid ester and water glycol. Phosphate ester is only suitable for use with FPM seals.
Pressure Fluid Temperature Range	-20°C to +70°C
Viscosity Range	2.8 to 380 cSt
Degree of Contamination	Maximum permissible degree of contamination of the fluid is to NAS 1638 class 9. Kawasaki recommend that a filter with a minimum retention rate of $ß_{10} \geq 75$ is used.

Maximum Flow:

Size	Size 52	Size 62	Size 82	Size 102	Size 125	Size 150
Max. Flow (L/min)	700	1100	1800	3000	4400	6400

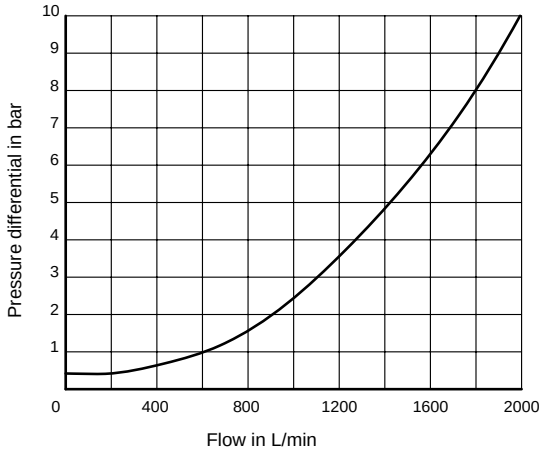
Weight:

Size	Size 52	Size 62	Size 82	Size 102	Size 125	Size 150
Flange connection	10.6 kg	15 kg	27.5 kg	50 kg	190 kg	330 kg
Sub-plate mounting	17 kg	31.5 kg	57 kg	-	-	-

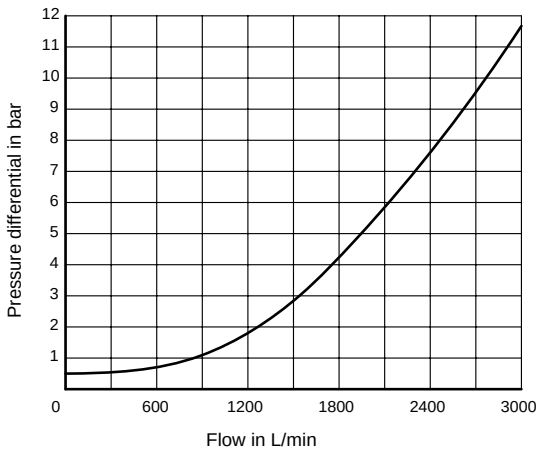
Characteristic Curves

Measured at v = 36cSt and t = 50°C

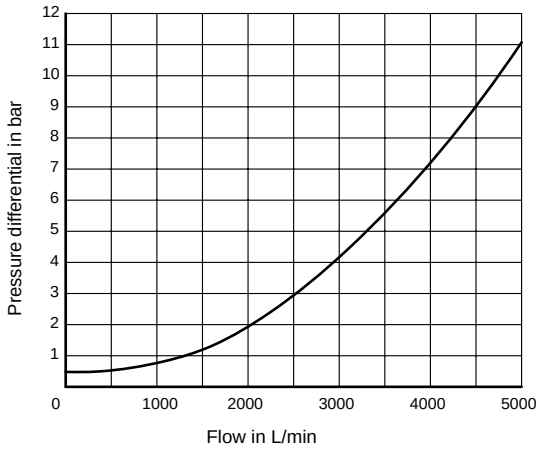
C52



C62



C82



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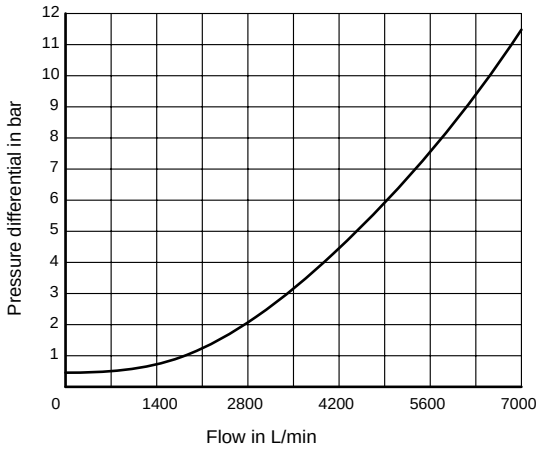

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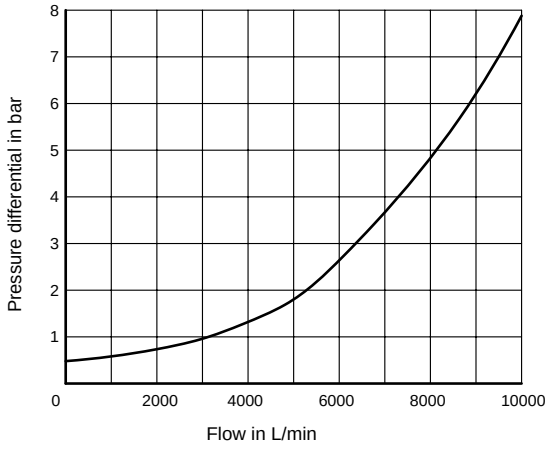

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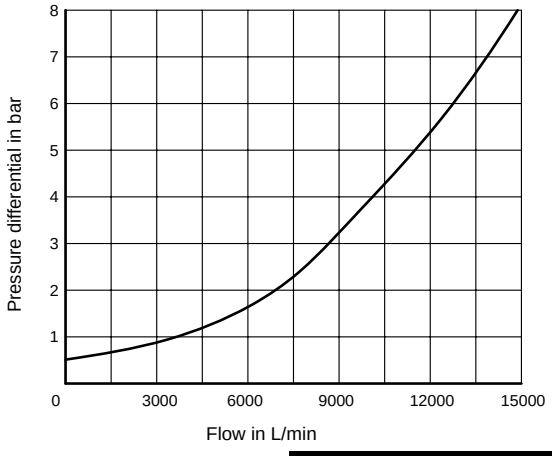
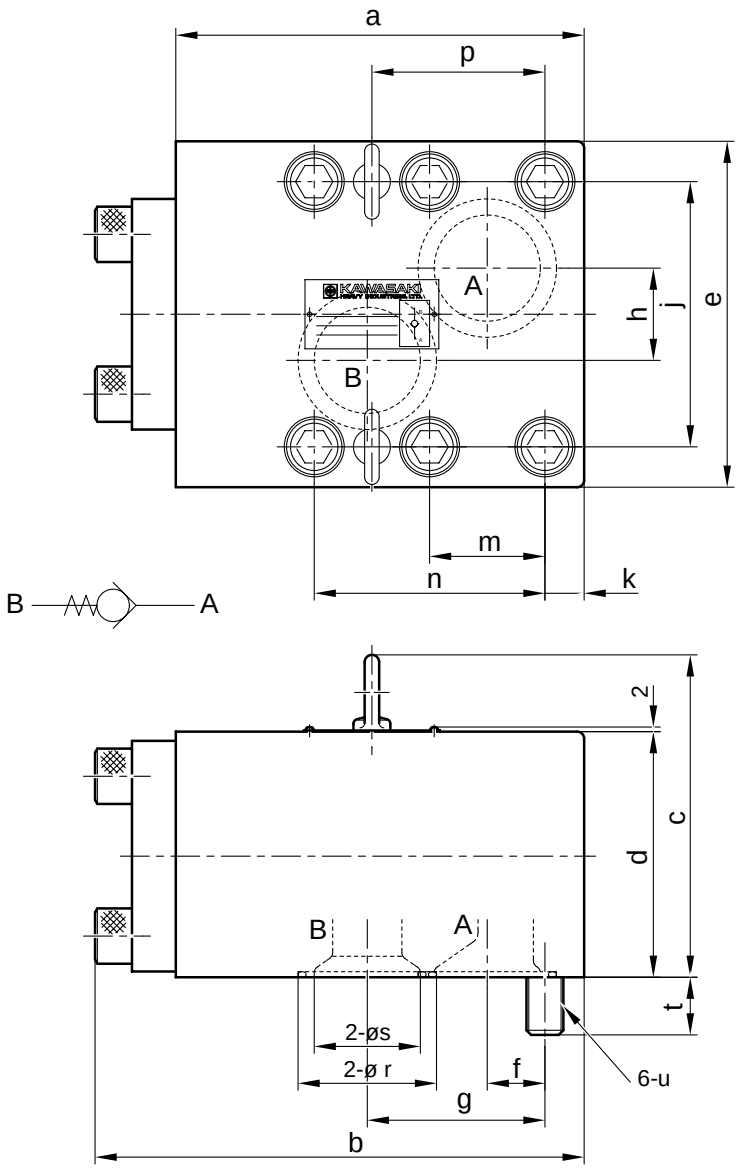


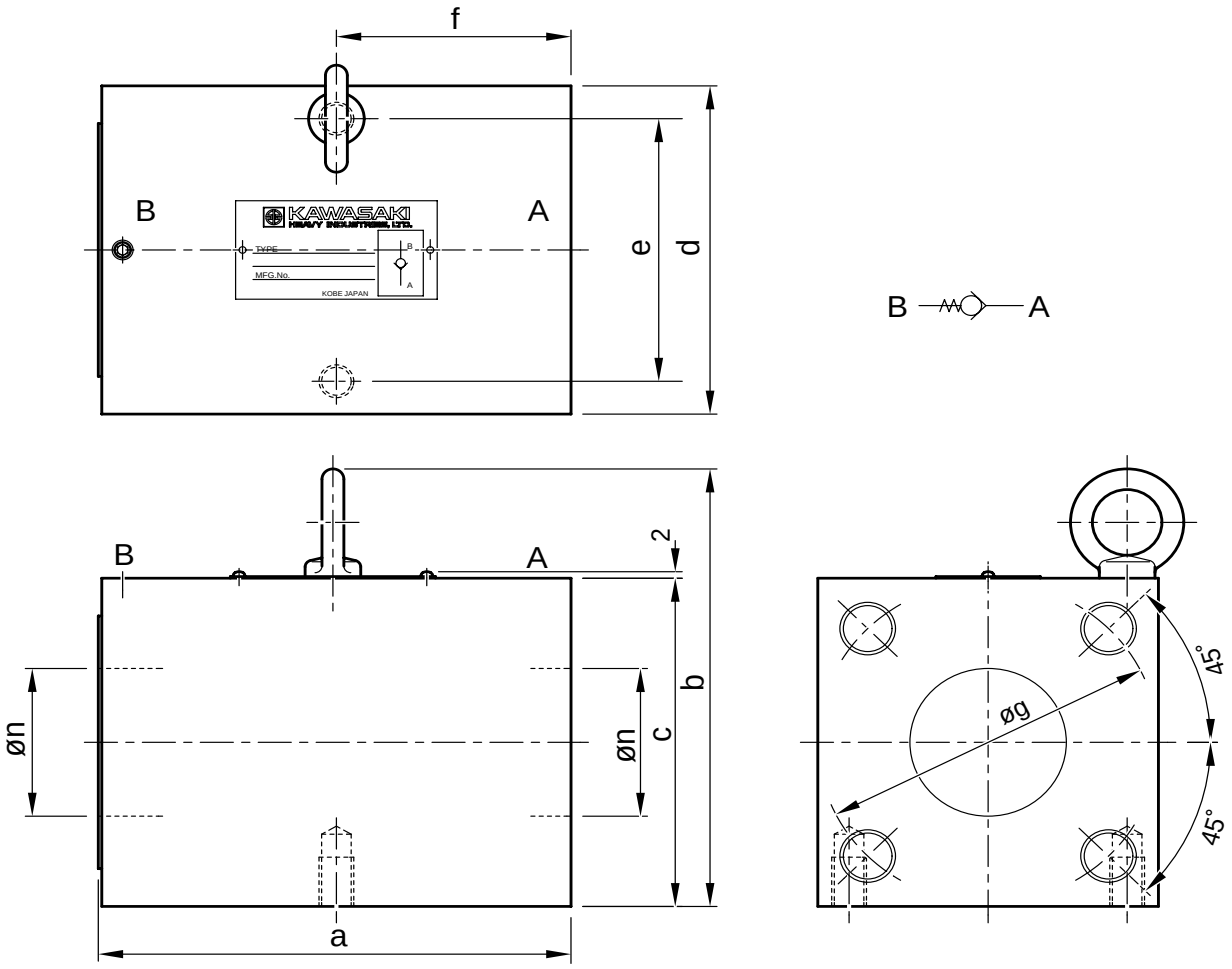
Unit Dimensions (Angled Valve) (dimensions in mm)



Size	a	b	c	d	e	f	g	h	j	k
52	177	212	140.5	106.5	150	25	77	40	115	17
62	224	266.5	160.5	126.5	180	34	100	40	140	21.5
82	275	325	190.5	156.5	210	30	115	50	170	35

Size	m	n	p	r	s	t	u	'O' Seal
52	50	100	75	60	50	25	M16	2-JISB2401 G55Hs90
62	65	128	96	70	60	30	M20	2-JISB2401 G65Hs90
82	70	140	105	90	80	30	M20	2-JISB2401 G85Hs90

Unit Dimensions (In-line Flange Valve) (dimensions in mm)



Size	a	b	c	d	e	f	g	h	j	k	m	n
52	135.5	132	98	100	80	67.5	98	M16	26	M10	15	45
62	165.5	152	118	120	100	82.5	118	M20	32	M10	15	55
82	195.5	182	148	150	120	97.5	145	M24	36	M12	20	72
102	245.5	220	178	180	150	122.5	175	M30	40	M12	20	90

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Kawasaki Hydraulic Products

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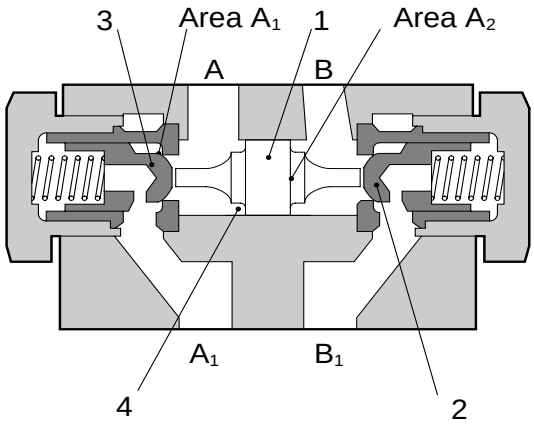
Kawasaki Hydraulic Products

Size 6 & 10 up to 315 bar up to 50 & 80 L/min	Check Valve (Pilot Operated) Sandwich Plate Valve Type S-CH6 & S-CH10, Series 10	Data Sheet S-1002/10.98 GB

Features

- ◊ Pilot operated check valve.
- ◊ Used in vertical stacking assemblies.
- ◊ Leak free closure of one or two actuator ports.
- ◊ Porting pattern to DIN 24 340 form A, ISO 4401 and CETOP-RP 121H.

Type S-CH10



Type S-CH6

Functional Description

Type S-CH6/S-CH10 Series 10 Check Valves are pilot controlled valves of sandwich plate design. The valves provide leakage free closure in one direction for one or two actuator ports and free flow in the other direction. These valves can be used for long standstill periods.

Type S-CH6

The valve basically consists of a housing, a spool (1) and a poppet (2)(3).

When there is no flow through the valve, the poppet (2)(3) is in the closed position. Flow from ($A \rightarrow A_1$) acts against the poppet (3) opening the valve, at the same time the spool (1) is pushed to the right and pushes the poppet (2) from its seat and opening $B_1 \rightarrow B$. Pressure in the opposite direction closes the poppet (3) not allowing the flow. When the flow stops, the poppet (2)(3) returns to the closed position.

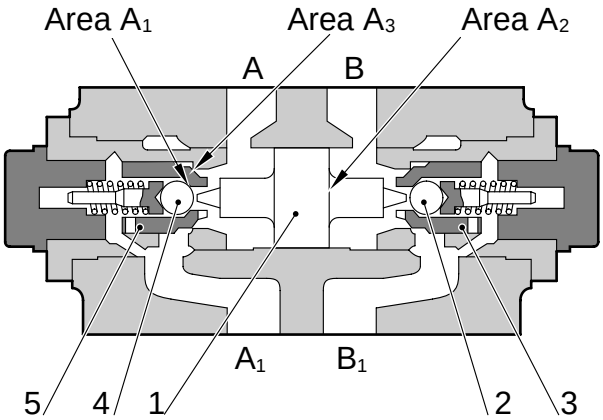
To enable the safe closure of poppet the actuator ports of the valve must be connected to the tank when in the centre position.

Type S-CH10

The valve basically consists of a housing, a spool (1), a ball-poppet (2)(4) and a main poppet (3)(5).

When there is no flow through the valve, the ball-poppet (2)(4) and main poppet (3)(5) are in the closed position. Flow from ($A \rightarrow A_1$) acts against the ball-poppet (4) and the main poppet (5) opening the valve. At the same time the spool (1) is pushed to the right and pushes the ball-poppet (2) first and then the main poppet (3) from their seats opening $B_1 \rightarrow B$. When the flow stops, the ball-poppet (2)(4) and the main poppet (3)(5) return to the closed position.

To enable the safe closure of the poppet, the actuator ports of the valve must be connected to the tank when in the centre position.



Type S-CH10

Ordering Code – Sandwich Plate Valve

S	CH	6	10	A	V

Sandwich Plate Design

Check Valve (Pilot Operated)

CH	Leak free closure in one channel
2CH	Leak free closure in two channels

Size
6, 10

Series Number
10

Suitable Oil

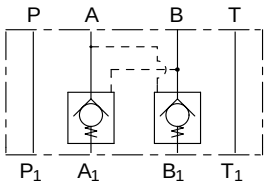
No Code:	Mineral Oil
V:	Phosphate Ester
W:	Fatty Acid Ester, Water Glycol

Leak Free Closure Port

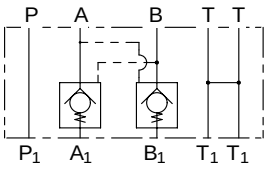
	Code	Port	Free Flow Direction
2CH	No code	Port A	A→A1
		Port B	B→B1
CH	A	Port A	A→A1
	B	Port B	B→B1

Symbols

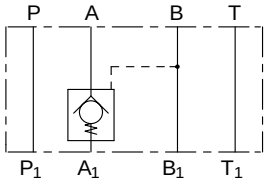
S - 2CH6



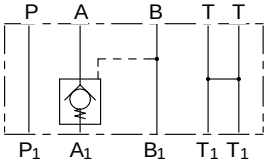
S - 2CH10



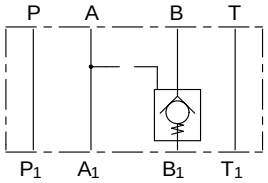
S - CH6 - 10 - A



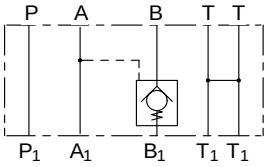
S - CH10-10-A



S - CH6 - 10 -B



S - CH10-10-B



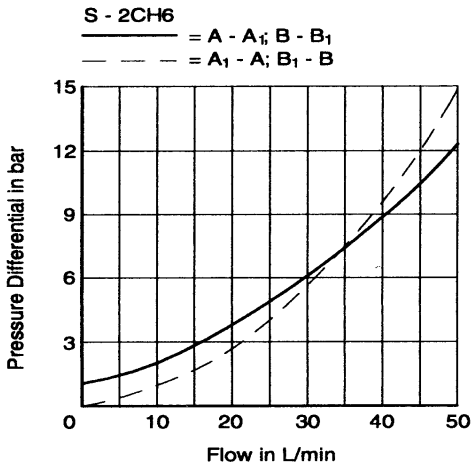
Technical Data

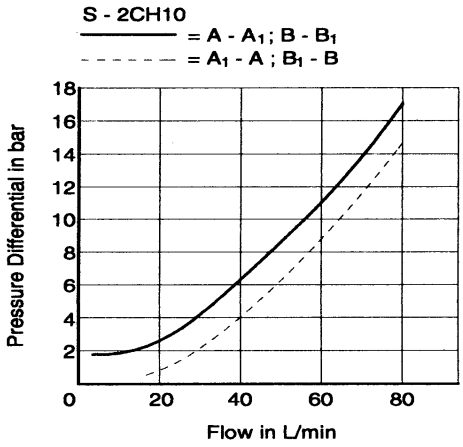
For applications outside the following parameters, please consult Kawasaki Precision Machinery (UK) Ltd.

Maximum Operating Pressure	315 bar
Pressure Fluid	Mineral oil, phosphate ester, fatty acid ester and water glycol. Phosphate ester is only suitable for use with FPM seals.
Pressure Fluid Temperature Range	-20°C to +70°C
Viscosity Range	2.8 to 380cSt
Maximum Flow	50 L/min - S-CH6; 80L/min - S-CH10
Degree of Contamination	Maximum permissible degree of contamination of the fluid is to NAS 1638 Class 9. Kawasaki recommend that a filter with a minimum retention rate of $ß_{10} \geq 75$ is used.
Opening Pressure in Free Direction	See Characteristic Curves
Direction of Flow	See Symbols
Area Ratio	A1/A2 = 1/3 (size 6 valve) A1/A2=1/10.9 (size 10 valve) A3/A2=1/2.8 (size 10 valve)
Weight	0.9 kg - S-CH6; 2.2 kg - S-CH10

Characteristic Curves

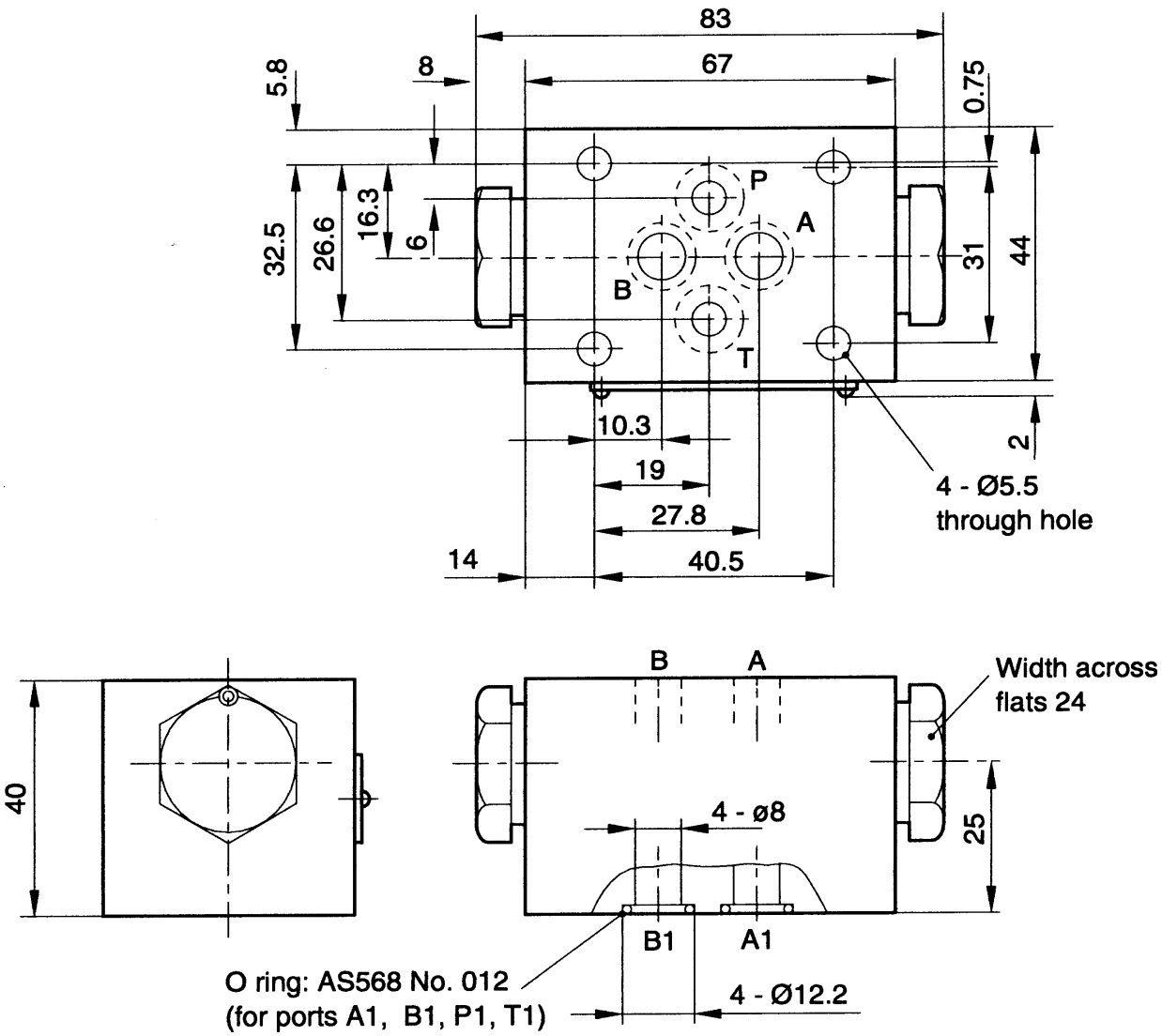
Measured at $v = 36cSt$ and $t = 50°C$





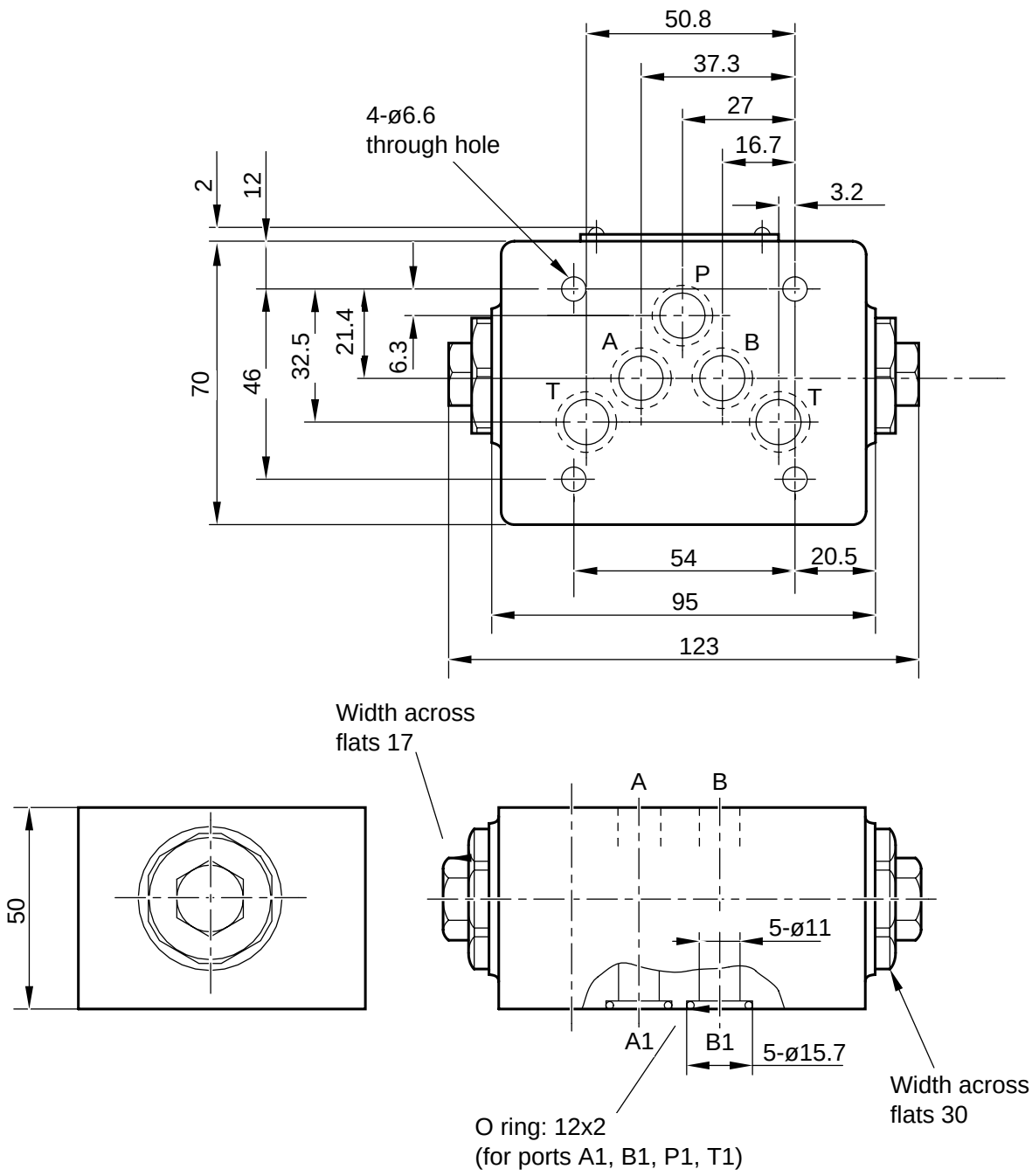
Unit Dimensions (dimensions in mm)

Type S-CH6



Unit Dimensions (dimensions in mm)(continued)

Type S-CH10



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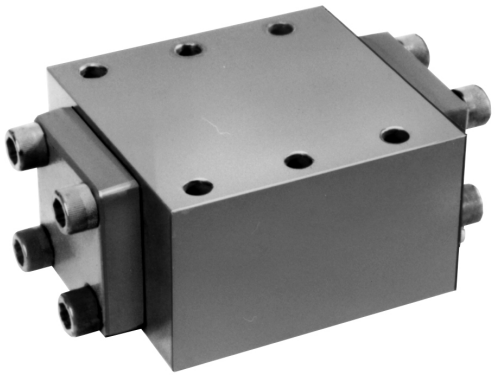
Model	Page	Data Sheet
S-CH6 & SCH10	6.7	S-1002/10.98

Kawasaki Hydraulic Products

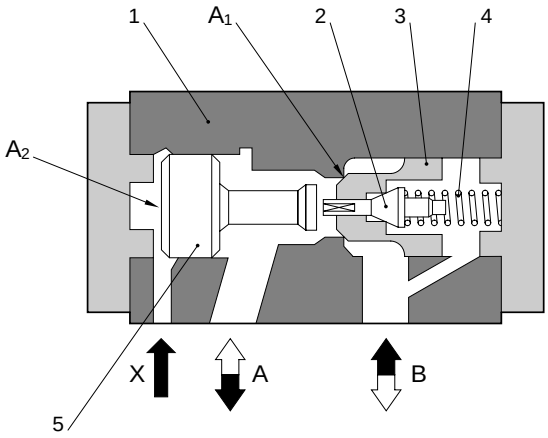
Size 6 to 30 up to 315 bar up to 300 L/min	Check Valve Pilot Operated Type CH, Series 10	Data Sheet C-1002/10.98 GB

Features

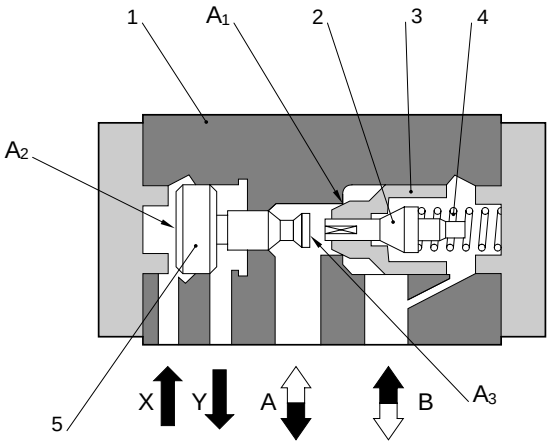
- ◊ Sub-plate mounting and threaded connection.
- ◊ Shock-free directional control with pre-opening.
- ◊ With or without drain port.
- ◊ Porting pattern to DIN 24 340 Form D, ISO 5781 and CETOP-RP 121 H.



Type CH



Without Drain Port



With Drain Port

Functional Description

Type CH Series 10 Check Valves are pilot operated valves that may be hydraulic operated to permit reverse flow. Valves may be supplied with or without drain ports.

These valves are used to isolate a hydraulic circuit under pressure to prevent a load from falling.

The valves comprise a housing (1), a pilot poppet (2), main poppet (3), a spring (4) and a pilot piston (5).

Without Drain Port

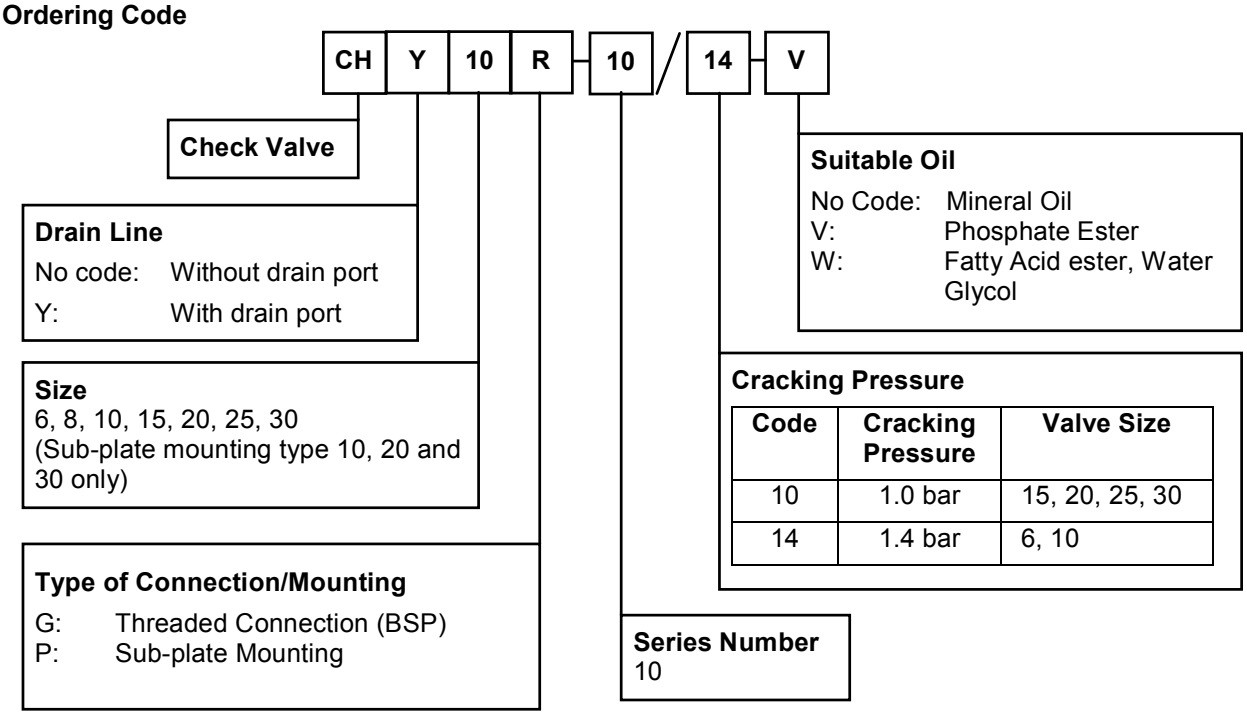
Pressure from A to B opens the main poppet (3) with the pilot poppet (2) against the spring (4) enabling the the fluid to flow from A to B. Pressure from B to A pushes the main poppet (3) and pilot poppet (2) closed stopping flow from B to A.

Applying pressure to the pilot connection X, moves the pilot piston (5) to the right lifting the pilot poppet (2) first and then the main poppet (3) allowing the fluid to flow from B to A.
To ensure that the valve opens due to pressure applied to the pilot piston, a minimum pilot pressure is required (see precautions in use).
Drain port Y is plugged.

With Drain Port

The valve is the same as the description above with the addition of a drain port.
The drain port Y is connected to the valve and annular area of the pilot piston (4) is separated from Port A.
The pressure from port A will now only act on area A_3 of the pilot piston.

Ordering Code



Code	Cracking Pressure	Valve Size
10	1.0 bar	15, 20, 25, 30
14	1.4 bar	6, 10

Technical Data

For applications outside the following parameters, please consult Kawasaki Precision Machinery (UK) Ltd.

Maximum Operating Pressure 315 bar

Pressure Fluid Mineral oil, phosphate ester, fatty acid ester and water glycol. Phosphate ester is only suitable for use with FPM seals.

Pressure Fluid Temperature Range -20°C to +70°

Viscosity Range 2.8 to 380cSt

Maximum Flow

Type/Size	6	8	10	15	20	25	30
Without Drain Port	80 L/min			170 L/min		300 L/min	
With Drain Port	80 L/min			300 (170 L/min for size 20 sub-plate mounting) L/Min			

Degree of Contamination Maximum permissible degree of contamination of the fluid is to NAS 1638 class 9. Kawasaki recommend that a filter with a minimum retention rate of $ß_{10} \geq 75$ is used.

Cracking Pressure 1.0 bar - size 15, 20, 25, 30
1.4 bar - size 6, 10

Technical Data (continued)

Weight

Type/Size	6	8	10	15	20	25	30
Without Drain Port	2.5 kg			4kg		8kg	
With Drain Port	2.5 kg			8 kg (6.5 kg for size 20 sub-plate mounting).			

Installed Position: Optional

Direction of Flow: From A to B, from B to A when pilot operated

Pilot Pressure: Up to 315 bar

Pilot Flow: Figures below, figures in brackets () are for valve CHY20P.

	Port	Size 6	Size 8	Size 10	Size 15	Size 20	Size 25	Size 30
CH	X	2.2 cm³	2.2 cm³	2.2 cm³	8.7 cm³	8.7 cm³	17.5 cm³	17.5 cm³
	Y	-	-	-	-	-	-	-
CHY	X	2.2 cm³	2.2 cm³	2.2 cm³	17.5 cm³	17.5 cm³ (8.7 cm³)	17.5 cm³	17.5 cm³
	Y	1.9 cm³	1.9 cm³	1.9 cm³	15.8 cm³	15.8 cm³ (7.6 cm³)	15.8 cm³	15.8 cm³

Control Areas

Size &Type	A_1	A_2	A_3
CH & CHY 6, 8, 10	1.13 cm²	3.14 cm²	0.5 cm²
CH 15 & 20	3.14 cm²	9.64 cm²	-
CHY 20P	3.14 cm²	9.64 cm²	1.13 cm²
CHY 15 & 20G, CH/CHY 25 & 30	5.30 cm²	15.90 cm²	1.54 cm²

Precautions in use

Required pilot pressure for the CH valve:

$$P_{ST} = P_1 \frac{A_1}{A_2} + 5\text{bar} \ (P_2 = 0)$$

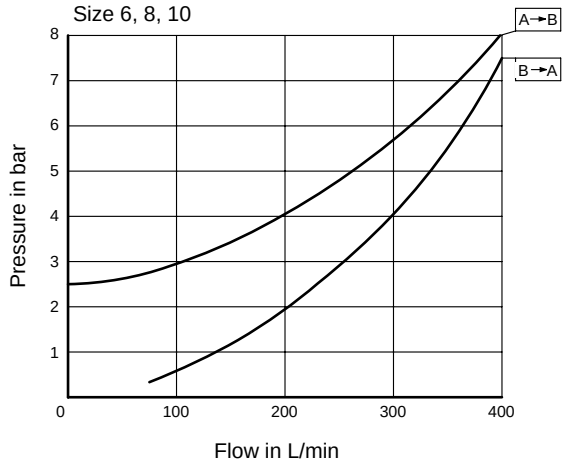
Required pilot pressure for the CHY valve:

$$P_{ST} = \frac{P_1 \times A_1 - P_2 \times (A_1 - A_3)}{A_2} + 5\text{bar}$$

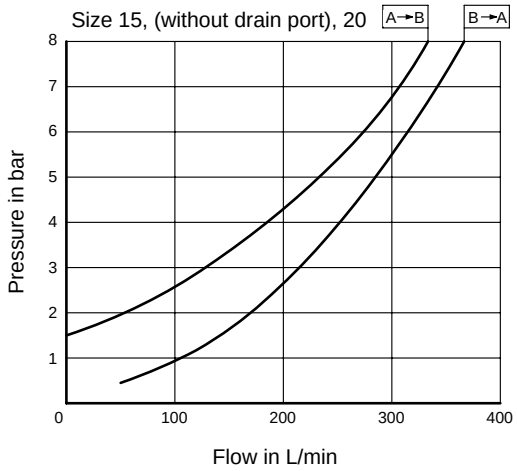
Characteristic Curves

Measured at v = 36cSt and t = 50°C

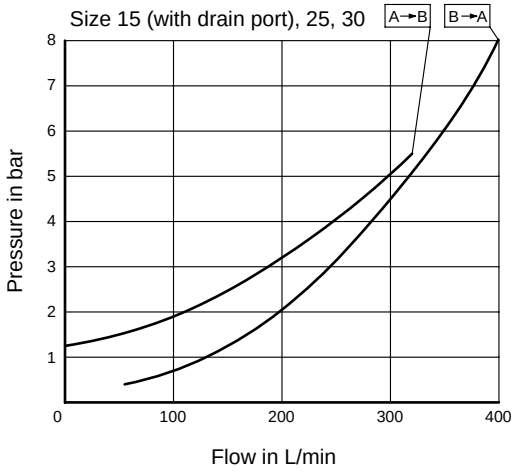
Size 6, 8, 10

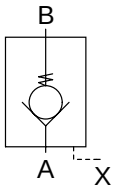


Size 15, (without drain port), 20

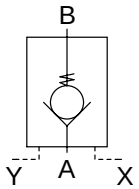


Size 15 (with drain port), 25, 30





Without drain



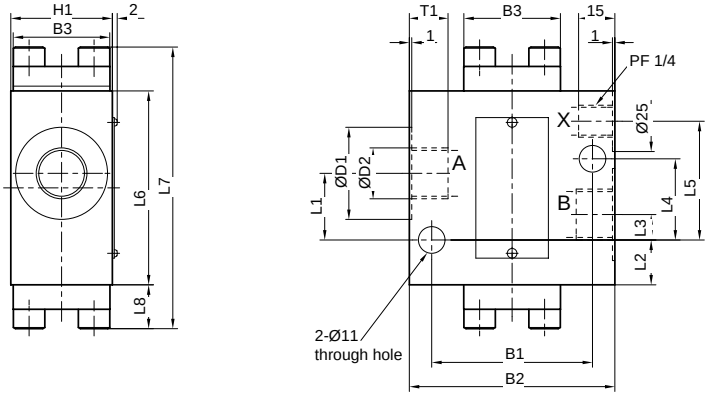
With drain

Symbols

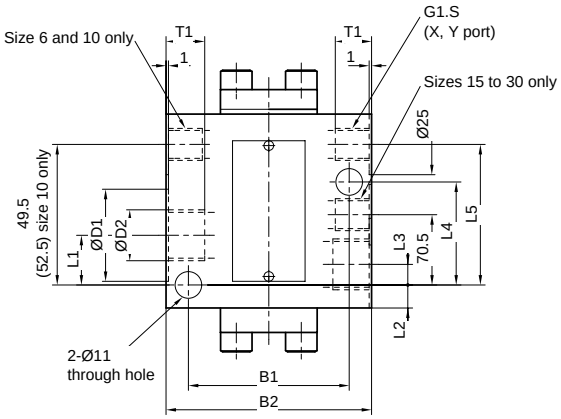
Model	Page	Data Sheet
CH	4.5	C-1002/10.98

Kawasaki Hydraulic Products

Unit Dimensions (dimensions in mm)



CH*G



CHY*G

Type	Size	L1	L2	L3	L4	L5	L6	L7	L8	ØD1	ØD2	B1	B2	B3	H1	T1
Without drain port	6	27.5	18.5	10.5	33.5	49	80	116	18	25	G ¼	66.5	85	40	42	15
	8									32	G 3/8					
	10									38	G ½					16
	15	36.5	17.5	13	50.5	65.5	95	135	20	45	G ¾	79.5	100	58	60	17
	20									52	G 1					18
	25	54.5	15.5	20.5	71.5	87.5	115	173	29	63	G 1¼	97	120	73	75	24
	30									65	G 1½					
With drain port	6	23.5	16.5	12.5	35.5	51	80	116	18	25	G ¼	66.5	85	40	42	15
	8	19								32	G 3/8					
	10	19.5	13.5	15.5		54				38	G ½					16
	15	54.5	15.5	20.5	84	97.5	125	183	29	45	G ¾	74	120	73	75	17
	20			18						52	G 1					18
	25									63	G 1¼					24
	30									65	G 1½					

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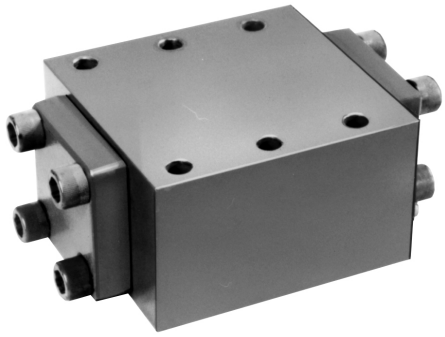
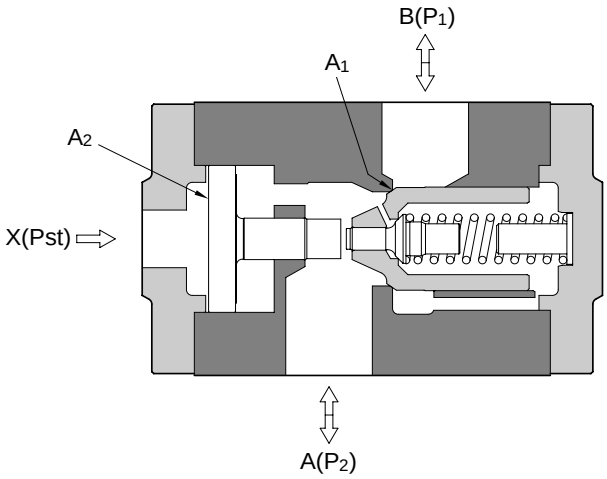
Size 52 to 150 up to 315 bar up to 6400 L/min	Check Valve Pilot Operated Type CH, Series 10	Data Sheet C-1004/06.99 GB

Features

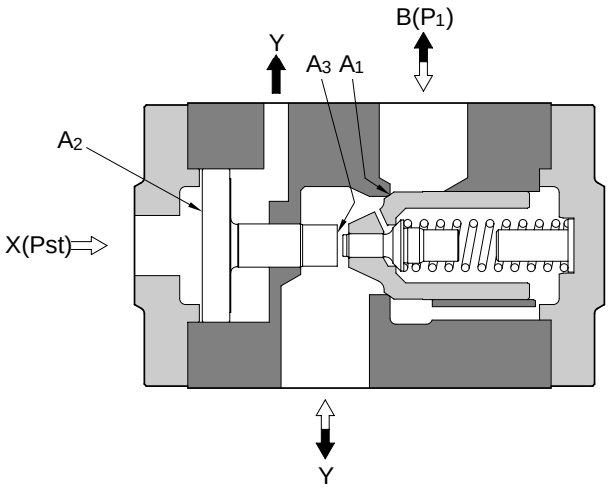
- ◊ Sub-plate mounting and flange connection.
- ◊ Shock-free directional control with pre-opening.
- ◊ With or without drain port.
- ◊ Porting pattern to DIN 24 340 Form D, ISO 5781 and CETOP-RP 121 H.



Type CH



Without Drain Port



With Drain Port

Functional Description

Type CH Series 10 Check Valves are pilot operated valves that may be hydraulic operated to permit reverse flow. Valves may be supplied with or without drain ports.

These valves are used to isolate a hydraulic circuit under pressure to prevent a load from falling.

The valves comprise a housing (1), a pilot poppet (2), main poppet (3), a spring (4) and a pilot piston (5).

Without Drain Port

Pressure from A to B opens the main poppet (3) with the pilot poppet (2) against the spring (4) enabling the the fluid to flow from A to B. Pressure from B to A pushes the main poppet (3) and pilot poppet (2) closed stopping flow from B to A.

Applying pressure to the pilot connection X, moves the pilot piston (5) to the right lifting the pilot poppet (2) first and then the main poppet (3) allowing the fluid to flow from B to A.
To ensure that the valve opens due to pressure applied to the pilot piston, a minimum pilot pressure is required (see precautions in use).
Drain port Y is plugged.

With Drain Port

The valve is the same as the description above with the addition of a drain port.
The drain port Y is connected to the valve and annular area of the pilot piston (4) is separated from Port A.
The pressure from port A will now only act on area A_3 of the pilot piston.

Ordering Code

CH	Y	52	F	10	30	V

Pilot Operated Check Valve

Drain Line
No code: Without drain port
Y: With drain port

Size
52, 62, 82, 102, 125, 150
(Sub-plate mounting type 52, 62 and 82 only)

Type of Connection/Mounting
F: Flange Connection
P: Sub-plate Mounting

Series Number
10

Cracking Pressure
10: 1 bar
30: 3 bar

Suitable Oil
No Code: Mineral Oil
V: Phosphate Ester
W: Fatty Acid ester, Water Glycol

Technical Data

For applications outside the following parameters, please consult Kawasaki Precision Machinery (UK) Ltd.

Maximum Operating Pressure	315 bar
Pressure Fluid	Mineral oil, phosphate ester, fatty acid ester and water glycol. Phosphate ester is only suitable for use with FPM seals.
Pressure Fluid Temperature Range	-20°C to +70°
Viscosity Range	2.8 to 380cSt

Maximum Flow

Size	52	62	82	102	125	150
Max. flow (L/min)	700	1100	1800	3000	4400	6400

Degree of Contamination	Maximum permissible degree of contamination of the fluid is to NAS 1638 class 9. Kawasaki recommend that a filter with a minimum retention rate of $ß_{10} \geq 75$ is used.
Cracking Pressure	1.0 bar - size 15, 20, 25, 30 1.4 bar - size 6, 10

Technical Data (continued)

Weight	Size	52	62	82	102	125	150
	Weight (kg)	32	42	84	152	300	480

Installed Position — Optional

Direction of Flow — From A to B, from B to A when pilot operated

Pilot Pressure — Up to 315 bar

Pilot Volume — Figures below:

	Size 52	Size 62	Size 82	Size 102	Size 125	Size 150
Port X	91cm^3	153 cm^3	238 cm^3	458 cm^3	834 cm^3	1538 cm^3
Port Y (only CHY)	83.5 cm^3	142 cm^3	220 cm^3	422 cm^3	757 cm^3	1444 cm^3

Control Area — Figures below:

Size &Type	A_1	A_2	A_3
CH & CHY 52	21.24 cm²	47.78 cm²	3.8 cm²
CH & CHY 62	30.19 cm²	66.47 cm²	4.9
CH & CHY 82	43.0 cm²	95.0 cm²	7.06 cm²
CH & CHY 102	65.47 cm²	143.14 cm²	11.34 cm²
CH & CHY 125	103.87 cm²	213.6 cm²	19.64 cm²
CH & CHY 150	149.57 cm²	320.47 cm²	19.64 cm²

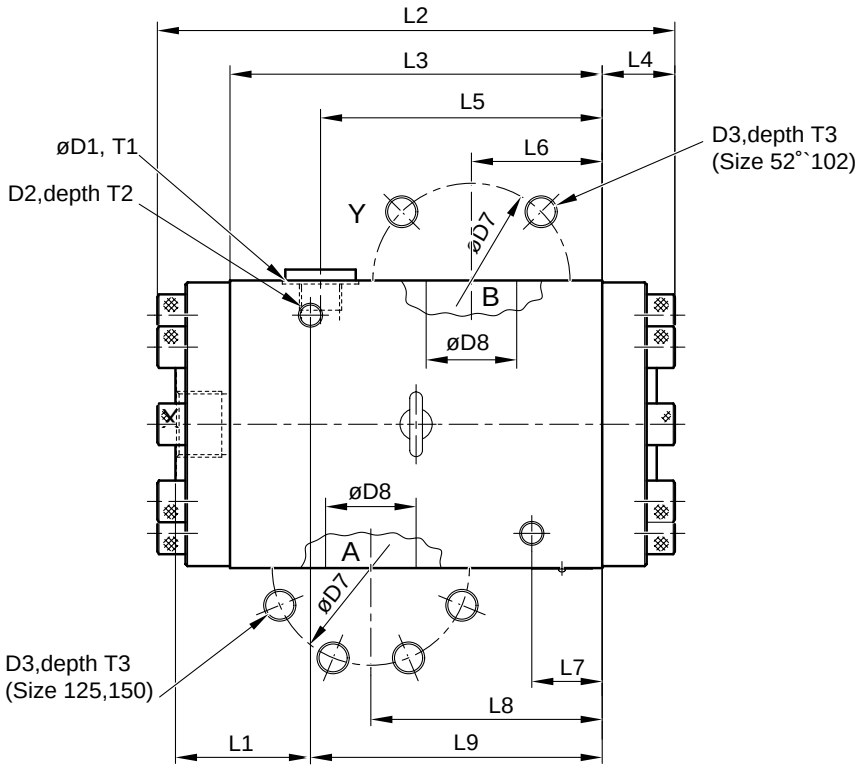
Precautions in use — Required pilot pressure for the CH valve:

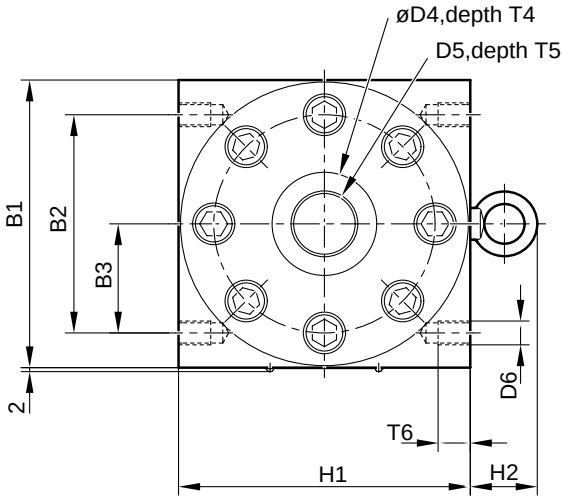
$$P_{ST} = P_1 \frac{A_1}{A_2} + 5\text{bar} \; (P_2 = 0)$$

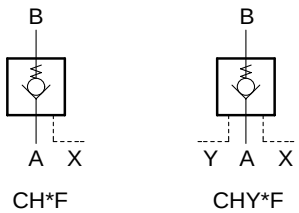
Required pilot pressure for the CHY valve:

$$P_{ST} = \frac{P_1 \times A_1 - P_2 \times (A_1 - A_3)}{A_2} + 5\text{bar}$$

Unit Dimensions CH(Y) 52 to 150 F-10-10 (dimensions in mm)







Model	Page	Data Sheet
CH	4.8	C-1004/06.99

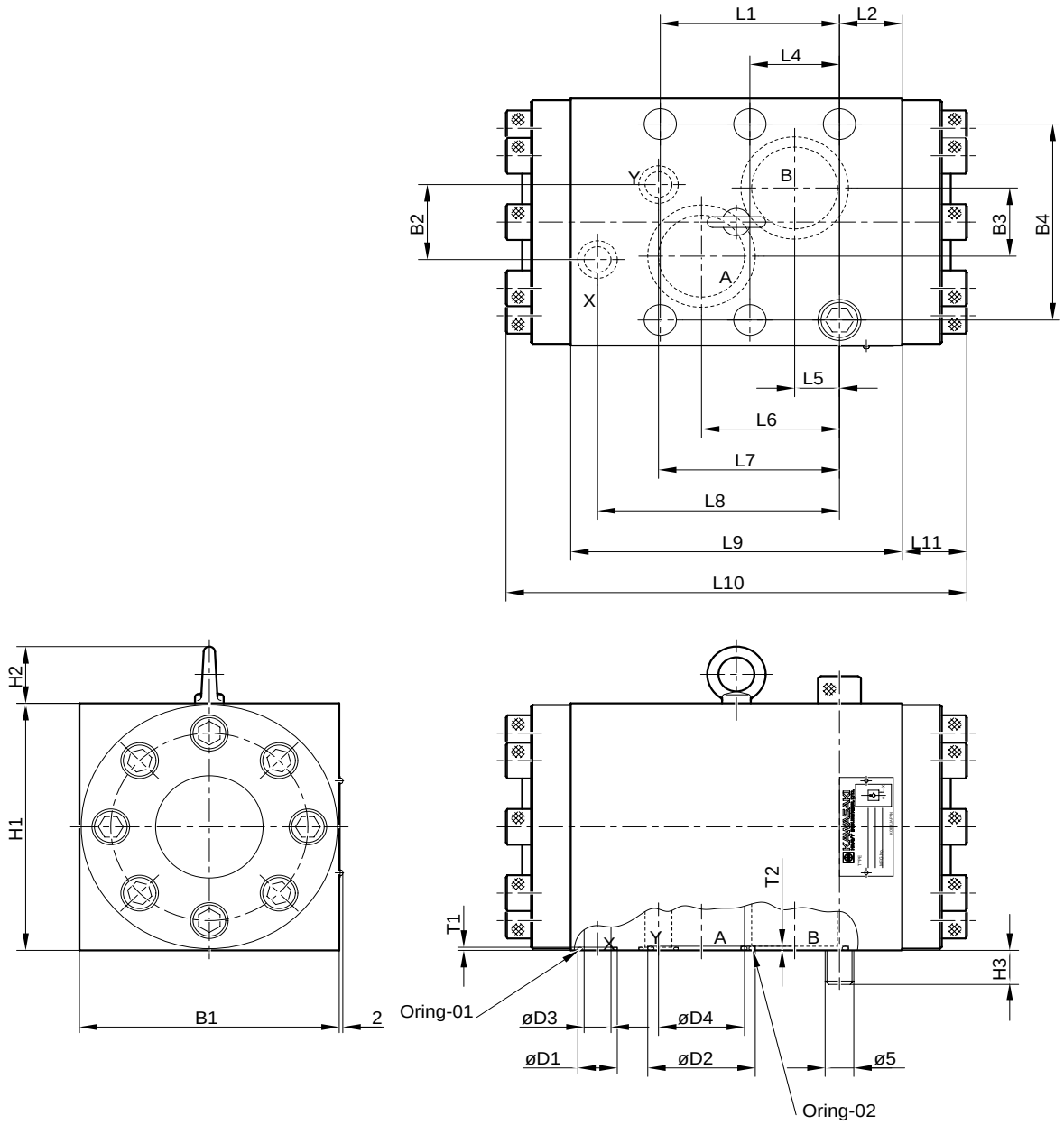
Kawasaki
Hydraulic Products

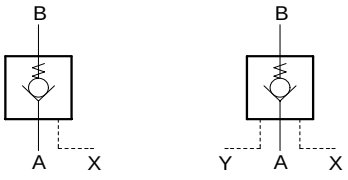
Unit Dimensions CH(Y) 52 to 150 F-10-10 (dimensions in mm) (continued)

Size	B1	B2	B3	D1	D2	D3	D4	D5	D6	D7	D8	H1	H2	L1
52	145	110	55	38	G1,Q	4-M16	52	G1	4-M12	98	45	145	34	67
62	155	120	60	38	G1,Q	4-M20	52	G1	4-M12	118	55	155	34	75
82	200	130	65	45	G3,S	4-M24	52	G1	4-M12	145	72	200	42	103
102	230	170	85	45	G3,S	4-M30	52	G1	4-M16	175	90	250	60	121
125	290	200	100	65	G1.1, Q	8-M30	65	G1.1, Q	4-M24	245	122	305	60	128
150	350	300	150	65	G1 1/2	8-M36	65	G1 1/2	4-M24	290	150	360	60	134

Size	L2	L3	L4	L5	L6	L7	L8	L9	T1	T2	T3	T4	T5	T6
52	257	185	36	140	65	35	115	145	0.5	15	25	0.5	16	16
62	298	220	39	170	75	35	135	175	0.5	15	30	1	16	16
82	386	270	58	212	100	70	170	210	0.5	16	36	1	16	16
102	461	335	63	262	125	70	210	265	0.5	16	41	1	16	20
125	564	430	67	337	150	70	270	360	1	24	50	1	25	30
150	654	500	77	400	180	70	320	430	1	24	52	1	25	30

Unit Dimensions CH(Y) 52, 62, 82 P-10-10 (dimensions in mm)





CH*P CHY*P

Model	Page	Data Sheet
CH	6.8	C-1004/06.99

Kawasaki Hydraulic Products

Unit Dimensions CH(Y) 52, 62, 82 P-10-10 (dimensions in mm) (continued)

B1	B2	B3	B4	D1	D2	D3	D4	D5	H1	H2	H3	L1	L2
145	44	40	115	22	60	15	48	6-M16	145	33.3	20	100	35
155	48	40	125	22	70	15	60	6-M20	155	33.3	25	128	35
200	60	50	170	22	85	15	75	6-M20	200	41.5	25	140	59

L4	L5	L6	L7	L8	L9	L10	L11	T1	T2	01	02	
50	25	77	101	135	185	257	36	1.8	2.4	JIS B2401 P18 Hs90	G55	JIS B2401 Hs90
65	34	100	132	170	220	298	39	1.8	2.4		G65	
70	30	115	151	185	270	386	58	1.8	2.4		G80	

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The specified data is for product description purposes only and may not be deemed to be guaranteed unless expressly confirmed in the contract

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