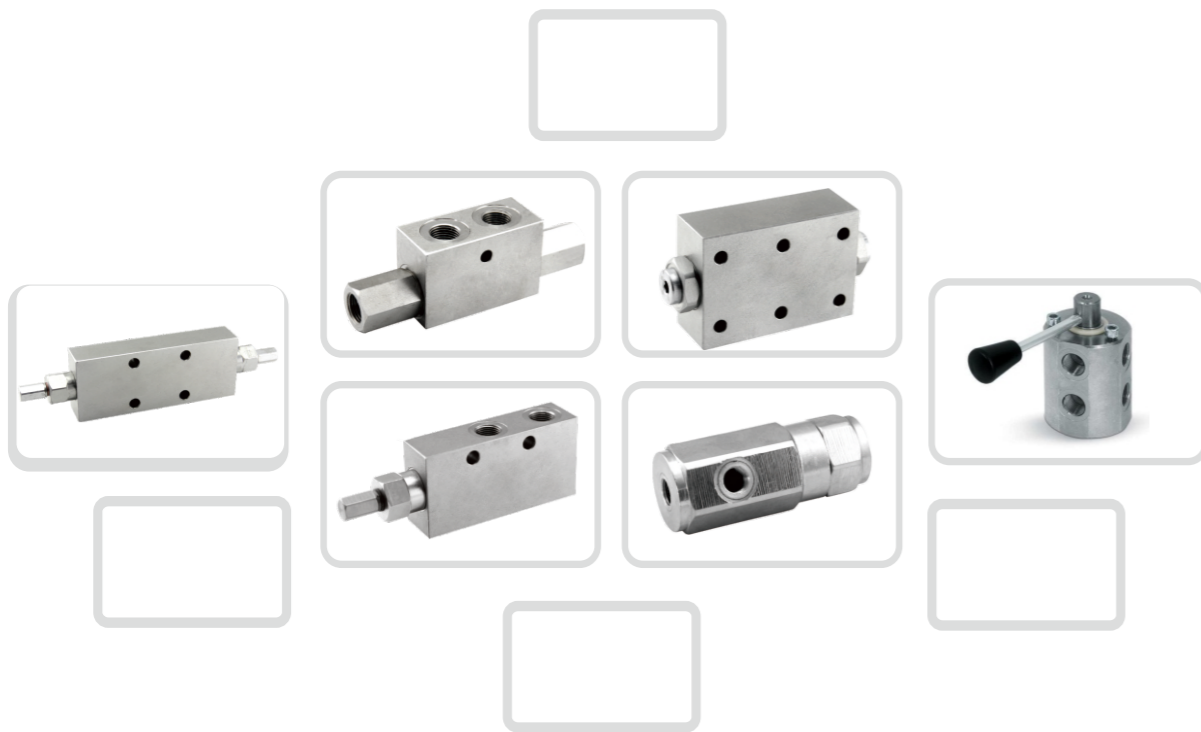


HYDRAULIC VALVES



ACCESSHYDRO HYDRAULIC VALVES

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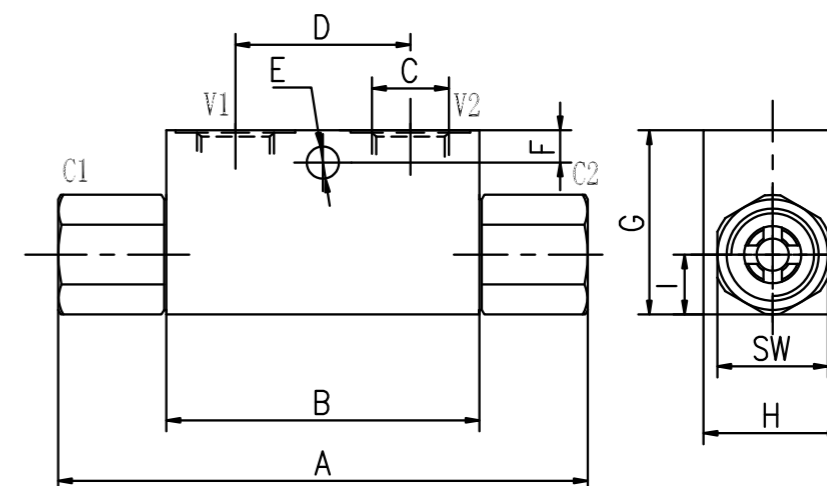
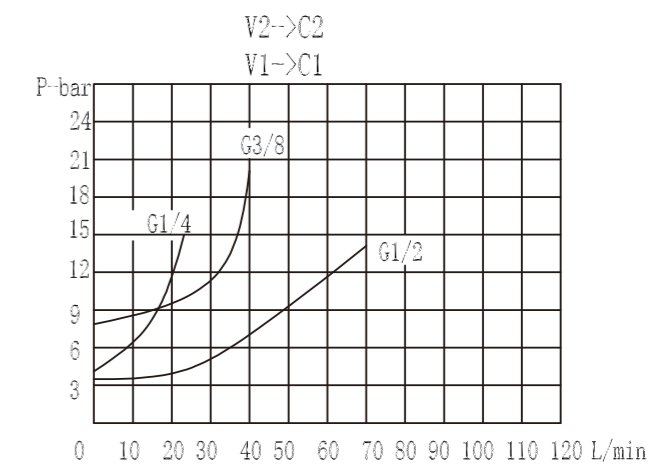
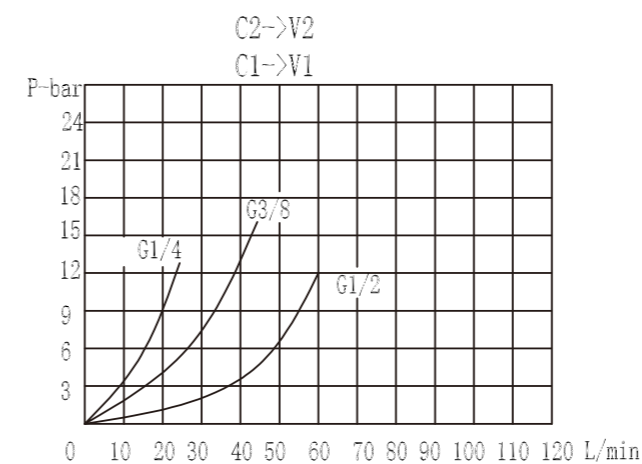
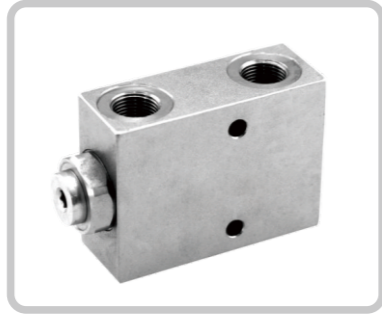
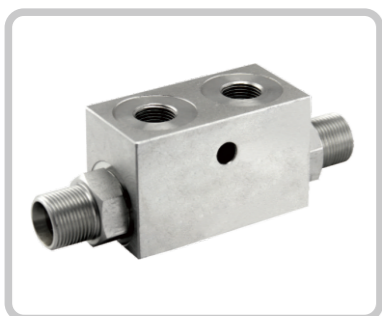
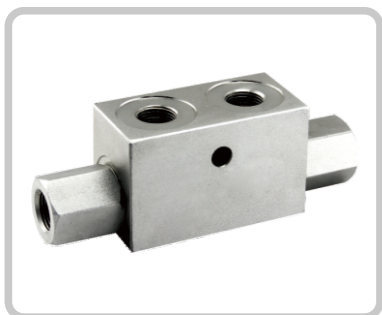
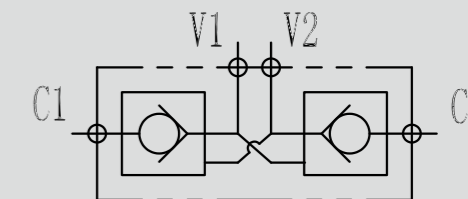
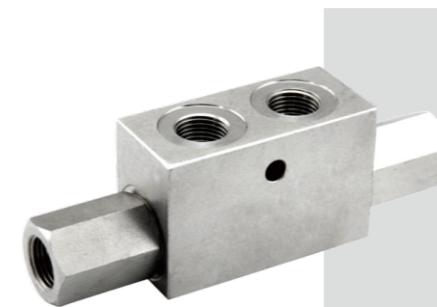
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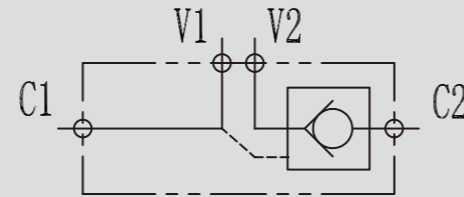
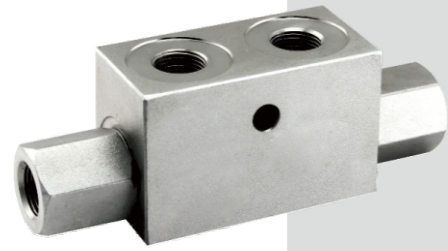
Pilot Operated Check Valves

HYDRAULIC DIAGRAM

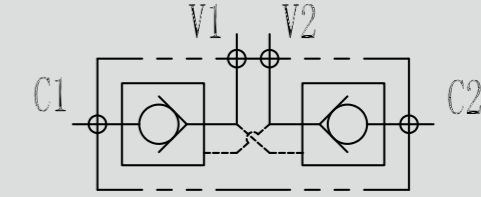
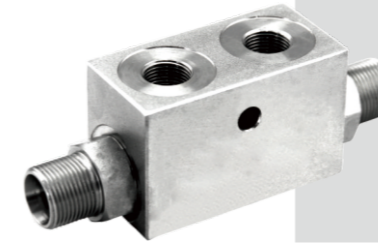


TYPE	(bar)	(L/min)	(pilot ratio)	(cracking pressure)(bar)	A	B	C	D	E	F	G	H	I	SW
VBPDE L-G1/4	350	20	1:4.5	3.5	115	68	G1/4	38	7	7	40	30	13	24
VBPDE L-G3/8		50	1:4	3.5	139	80	G3/8	40	8.5	15	50	40	16	27
VBPDE L-G1/2	300	80	1:4	3.5	173	90	G1/2	40	8.5	15	60	40	20	30

HYDRAULIC DIAGRAM

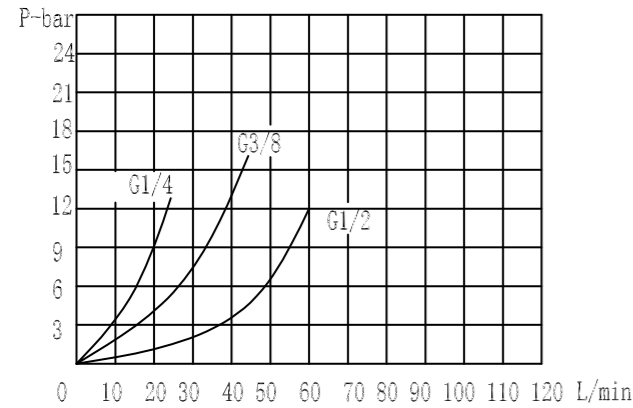


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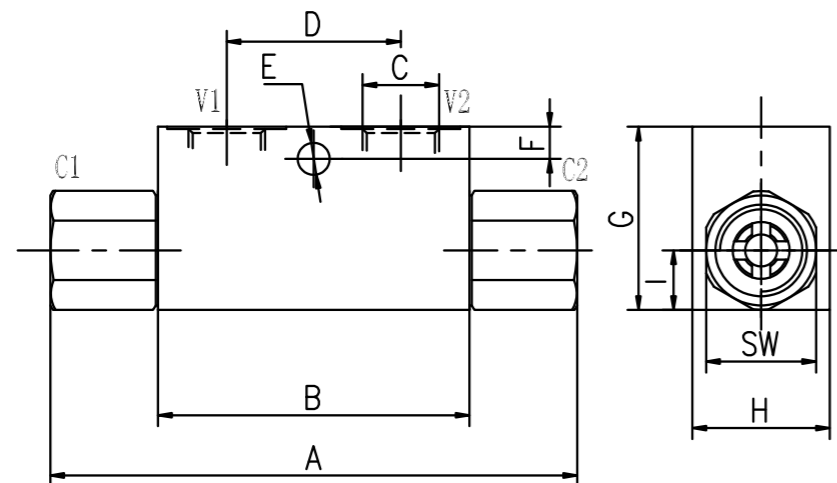
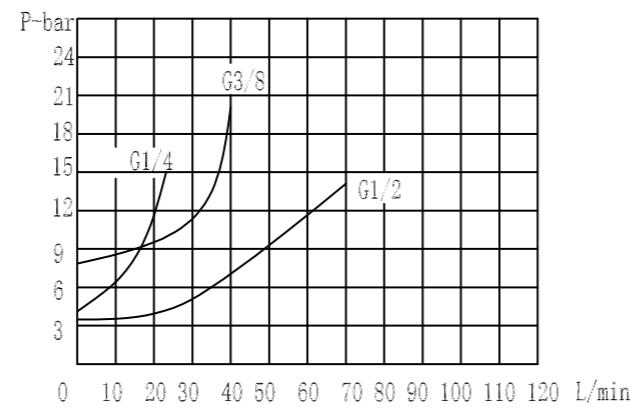


3

C2->V2



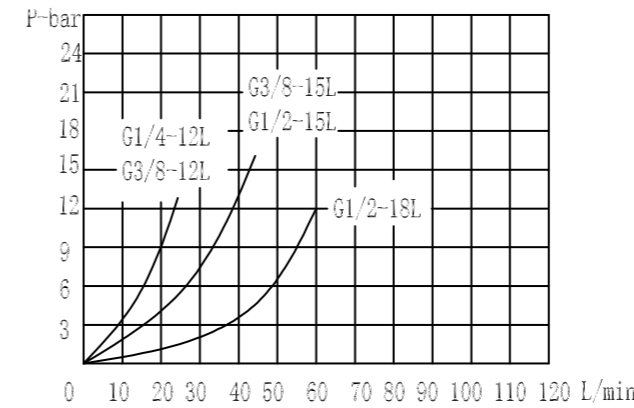
V2->C2



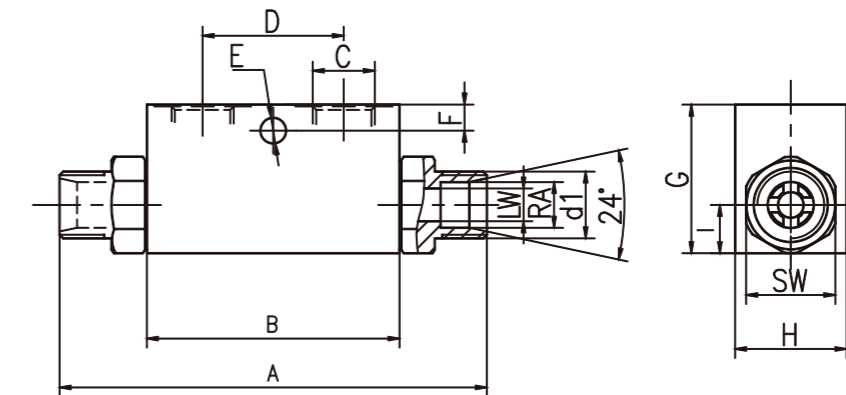
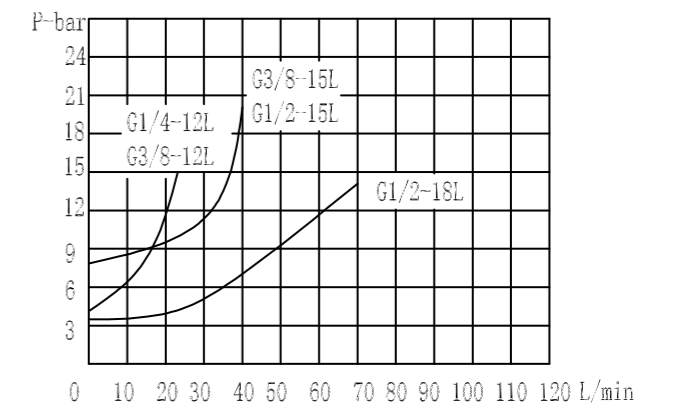
TYPE	(bar)	(L/min)	(pilot ratio)	(cracking pressure)(bar)	A	B	C	D	E	F	G	H	I	SW
VPSE L-G1/4	350	20	1:4.5	3.5	115	68	G1/4	38	7	7	40	30	13	24
VPSE L-G3/8		50	1:4	3.5	139	80	G3/8	40	8.5	15	50	40	16	27
VPSE L-G1/2	300	80	1:4	3.5	173	90	G1/2	40	8.5	15	60	40	20	30

4

C2->V2



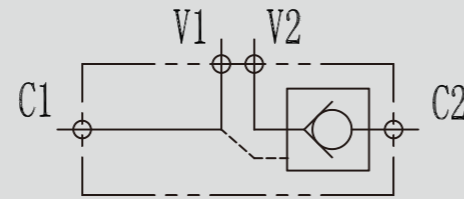
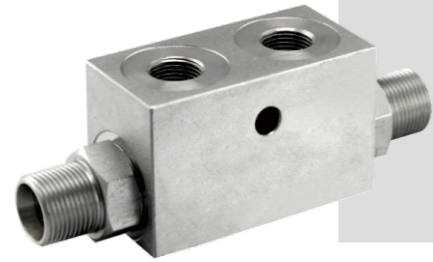
V2->C2



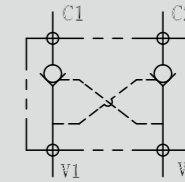
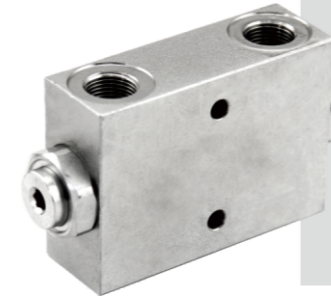
TYPE	(bar)	(L/min)	(pilot ratio)	(cracking pressure)(bar)	A	B	C	D	E	F	G	H	I	RA	LW	d1	SW
VPDE C-G1/4-12L	350	20	1:4.5	3.5	115	68	G1/4	38	7	7	40	30	13	12.3	12	M18x1.5	24
VPDE C-G3/8-12L		20	1:4.5	3.5	115	68	G3/8	38	7	7	40	30	13	12.3	15	M18x1.5	24
VPDE C-G3/8-15L		50	1:4	3.5	139	80	G3/8	40	8.5	15	50	40	16	15.3	15	M22x1.5	27
VPDE C-G1/2-15L		50	1:4	3.5	139	80	G1/2	40	8.5	15	50	40	16	15.3	18	M22x1.5	27
VPDE-G1/2-18L	300	80	1:4	3.5	163	90	G1/2	40	8.5	15	60	40	20	18.3	18	M26x1.5	30

"-KT" : VPDE C-G1/4-12L-KT
 All types of products are not with the compression fitting sets of joints,
 if you need it add "-KT" after the type With compression fitting sets Ordering example : VPDE C-G1/4-12L-KT

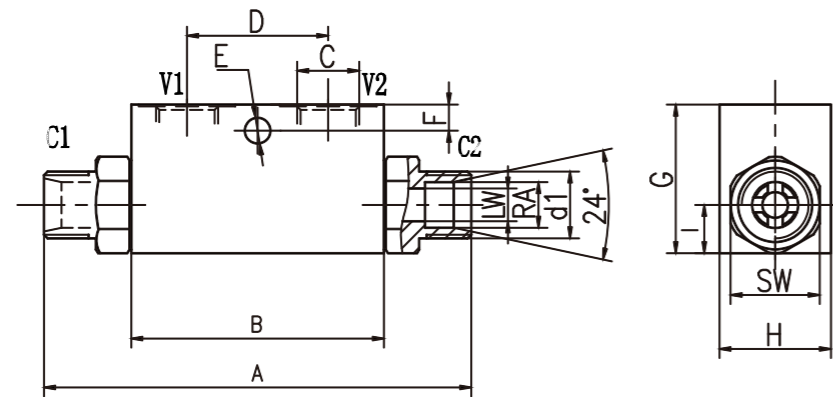
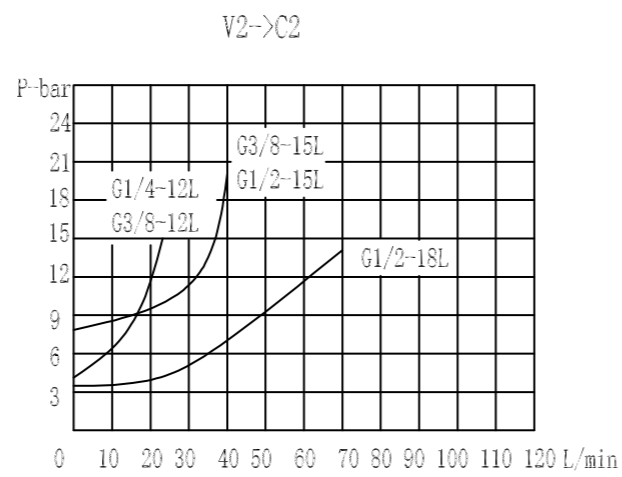
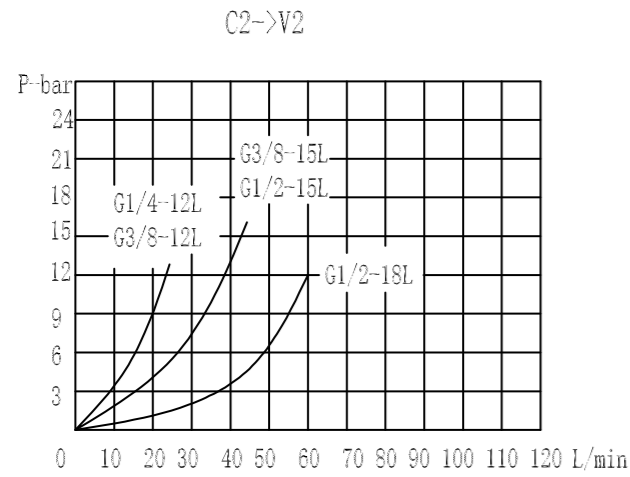
HYDRAULIC DIAGRAM



HYDRAULIC DIAGRAM



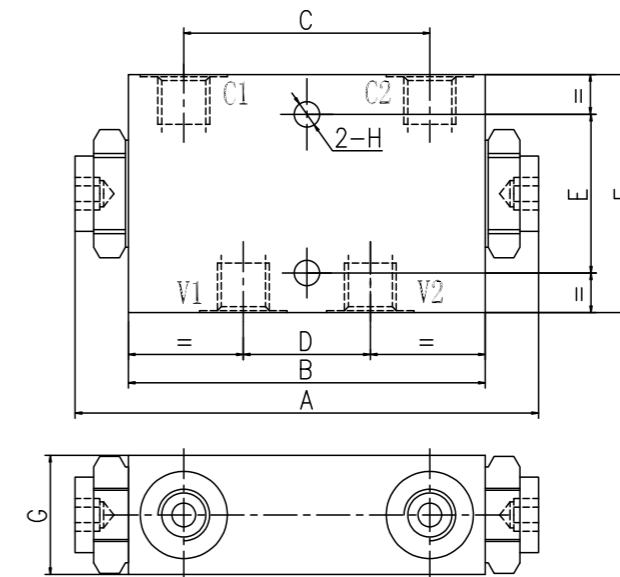
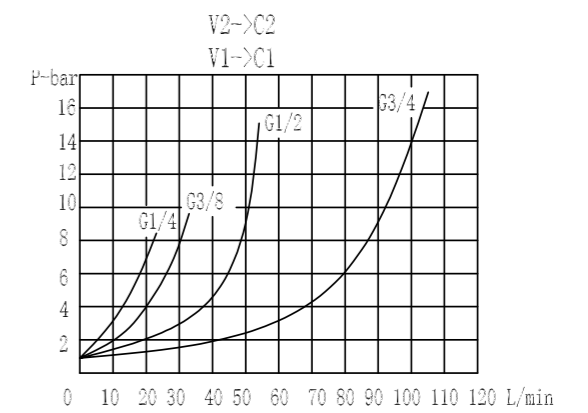
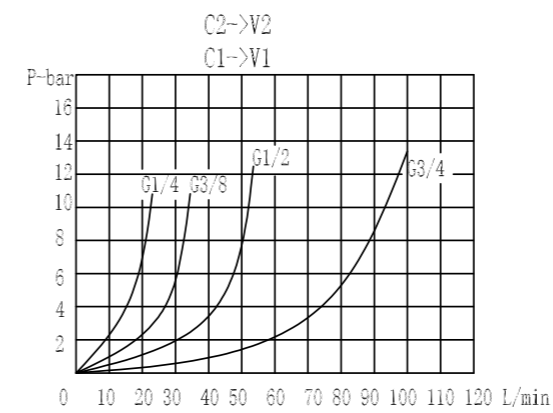
5



TYPE	(bar)	(L/min)	(pilot ratio)	(cracking pressure)(bar)	A	B	C	D	E	F	G	H	I	RA	LW	d1	SW
VBPSE C-G1/4-12L	350	20	1:4.5	3.5	115	68	G1/4	38	7	7	40	30	13	12.3	12	M18x1.5	24
VBPSE C-G3/8-12L		20	1:4.5	3.5	115	68	G3/8	38	7	7	40	30	13	12.3	15	M18x1.5	24
VBPSE C-G3/8-15L		50	1:4	3.5	139	80	G3/8	40	8.5	15	50	40	16	15.3	15	M22x1.5	27
VBPSE C-G1/2-15L		50	1:4	3.5	139	80	G1/2	40	8.5	15	50	40	16	15.3	18	M22x1.5	27
VBPSE C-G1/2-18L	300	80	1:4	3.5	163	90	G1/2	40	8.5	15	60	40	20	18.3	18	M26x1.5	30

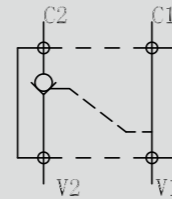
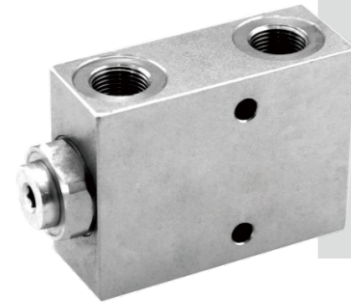
-KT" : VBPSE C-G1/4-12L-KT
 All types of products are not with the compression fitting sets of joints,
 if you need it add "-KT" after the type With compression fitting sets Ordering example : VBPSE C-G1/4-12L-KT

6

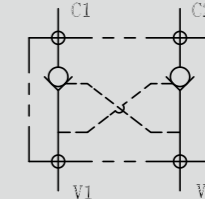
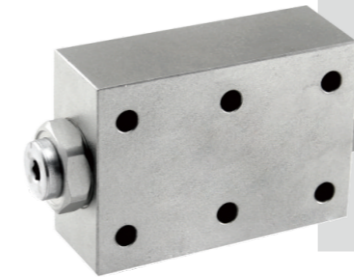


TYPE	C1-C2 V1-V2	(L/min)	(bar)		A	B	C	D	E	F	G	H
			/steel	/aluminium								
VBPDEA-G1/4	G1/4	20	350	210	117	90	62	30	40	64	30	6.5
VBPDEA-G3/8	G3/8	30			117	90	62	30	40	64	30	6.5
VBPDEA-G1/2	G1/2	50			129	114	76	38	40	70	35	8.5
VBPDEA-G3/4	G3/4	100			154	140	90	46	50	90	44	10.5

HYDRAULIC DIAGRAM

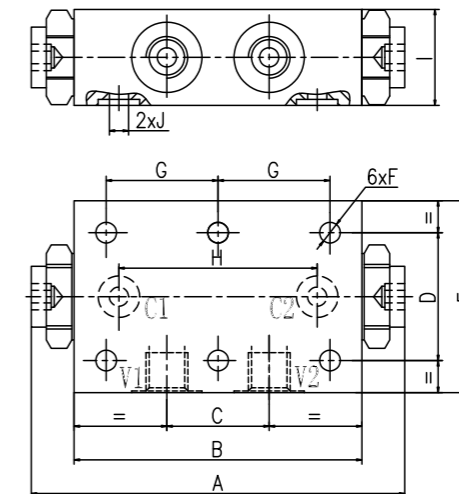
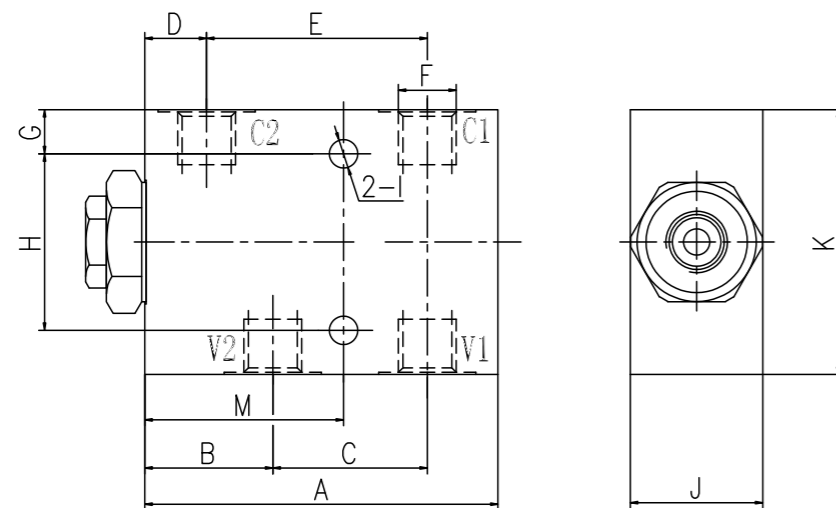
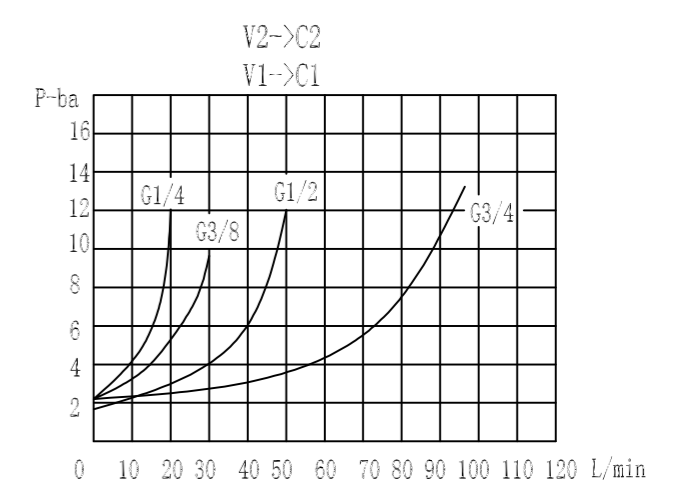
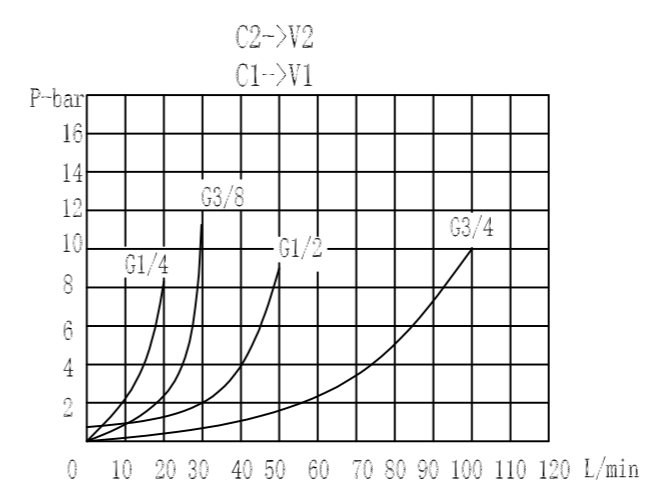
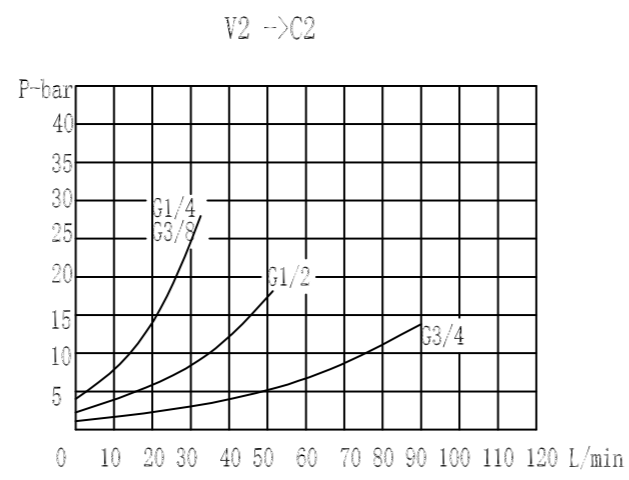
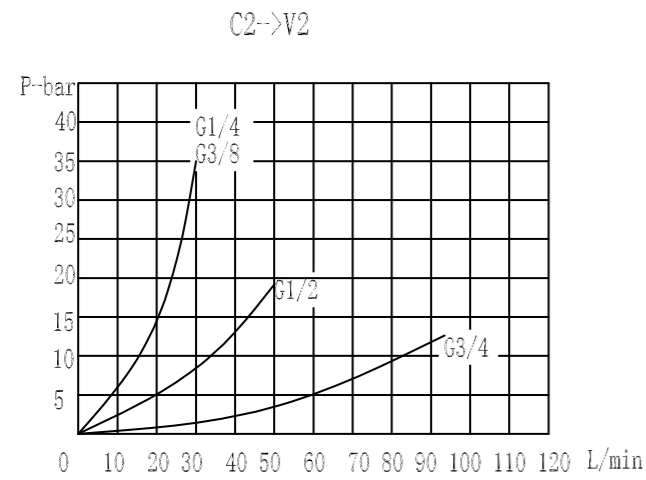


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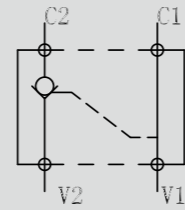
8



TYPE	(L/min)	(bar)		(pilot ratio)	(cracking pressure) (bar)	A	B	C	D	E	F	G	H	I	J	K	M
		/steel	/aluminium														
VBPSE A-G1/4	20	350	200	7.1:1	3.5	80	29	35	14	50	G1/4	10	40	Φ6.5	30	60	45
VBPSE A-G3/8	30			7.1:1	3.5	80	29	35	14	50	G3/8	10	40	Φ6.5	30	60	45
VBPSE A-G1/2	50			3.2:1	3.5	100	38	38	19	57	G1/2	15	40	Φ8.5	35	70	57
VBPSE A-G3/4	100			4:1	3.5	140	47	68	25	90	G3/4	20	50	Φ10.5	44	90	70

TYPE	(L/min)	(bar)		(plot ratio)	(cracking pressure) (bar)	C1-C2 V1-V2	A	B	C	D	E	F	G	H	I	J	O-ring
		/steel	/aluminium														
VBPDE -G1/4-FL	20	350	210	7.1:1	3.5	G1/4	110	90	32	40	64	Φ6.5	35	62	34	Φ6	9.19x2.62
VBPDE -G3/8-FL	30			7.1:1	3.5	G3/8	110	90	32	40	64	Φ6.5	35	62	34	Φ6	9.19x2.62
VBPDE -G1/2-FL	50			3.2:1	3.5	G1/2	142.5	114	34	40	70	Φ8.5	40	65	35	Φ10	15.54x2.62
VBPDE -G3/4-FL	100			4:1	3.5	G3/4	166	140	46	51	83	Φ10.5	48	96	44	Φ14	18.72x2.62

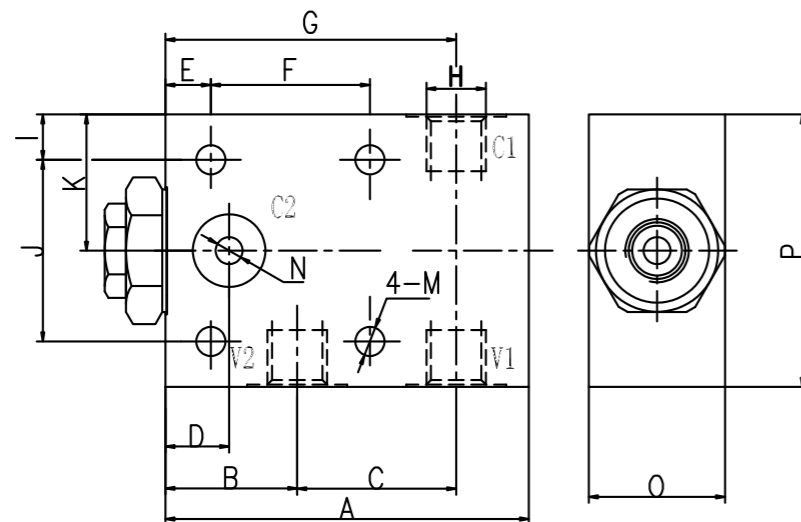
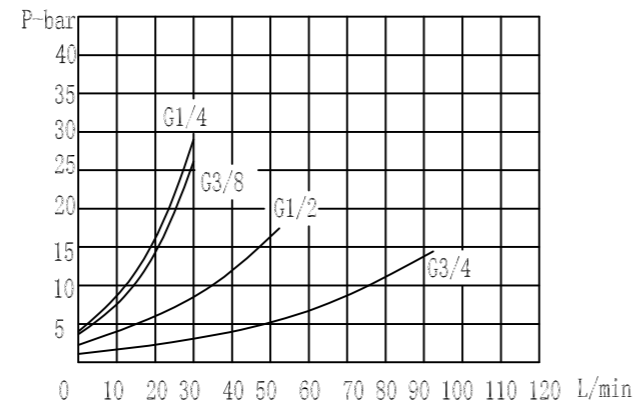
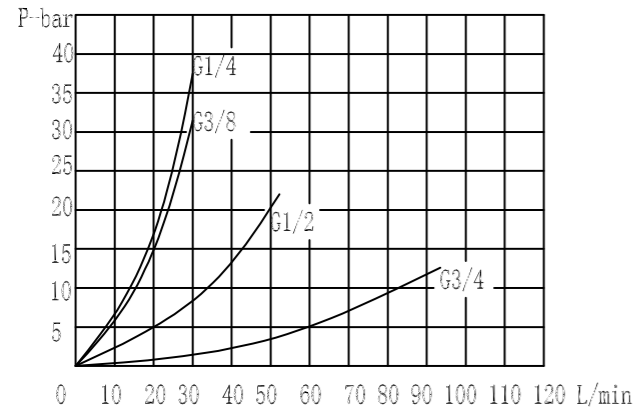
HYDRAULIC DIAGRAM



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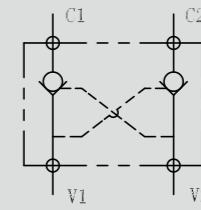
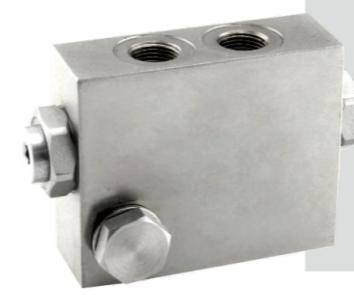
C2->V2

V2->C2

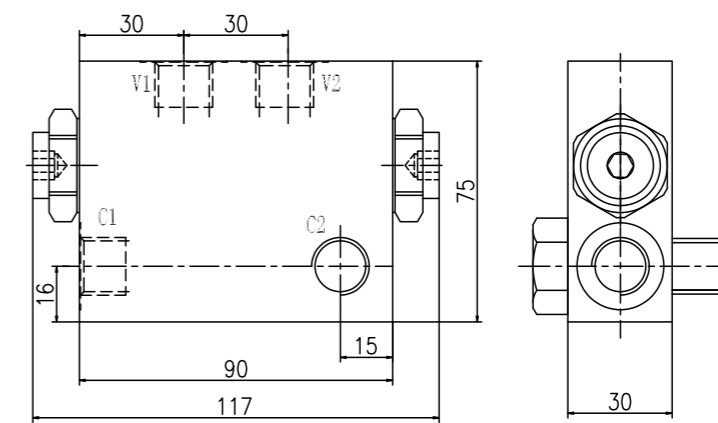
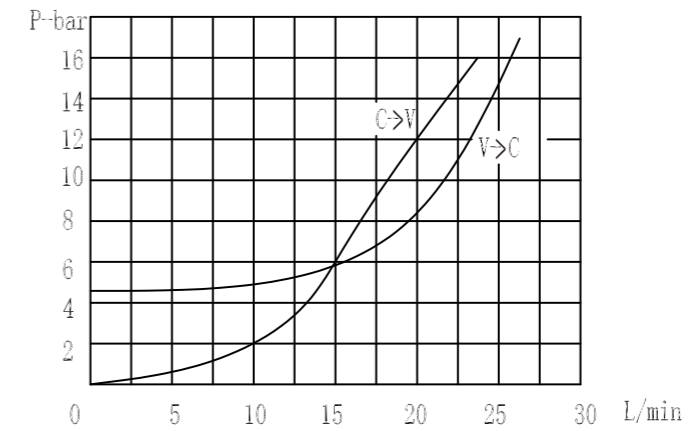


TYPE	(L/min)	(bar)		(plot ratio)	(cracking pressure) (bar)	A	B	C	D	E	F	G	H	I	J	K	M	N	O	P
		/stainless steel	/aluminium																	
VBPSE-G1/4-FL	20	350	210	7.1:1	3.5	80	29	35	14	10	35	64	G1/4	10	40	30	Φ6.5	Φ6	30	60
VBPSE-G3/8-FL	30			7.1:1	3.5	80	29	35	14	10	35	64	G3/8	10	40	30	Φ6.5	Φ6	30	60
VBPSE-G1/2-FL	50			3.2:1	3.5	100	38	38	19	15	40	76	G1/2	15	40	35	Φ8.5	Φ10	35	70
VBPSE-G3/4-FL	100			4:1	3.5	140	47	68	25	22	48	115	G3/4	20	50	45	Φ10.5	Φ14	44	90

HYDRAULIC DIAGRAM

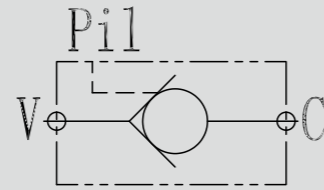
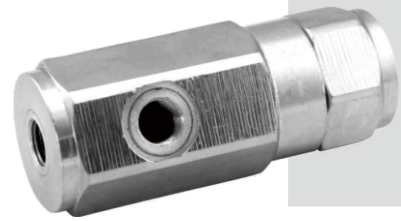


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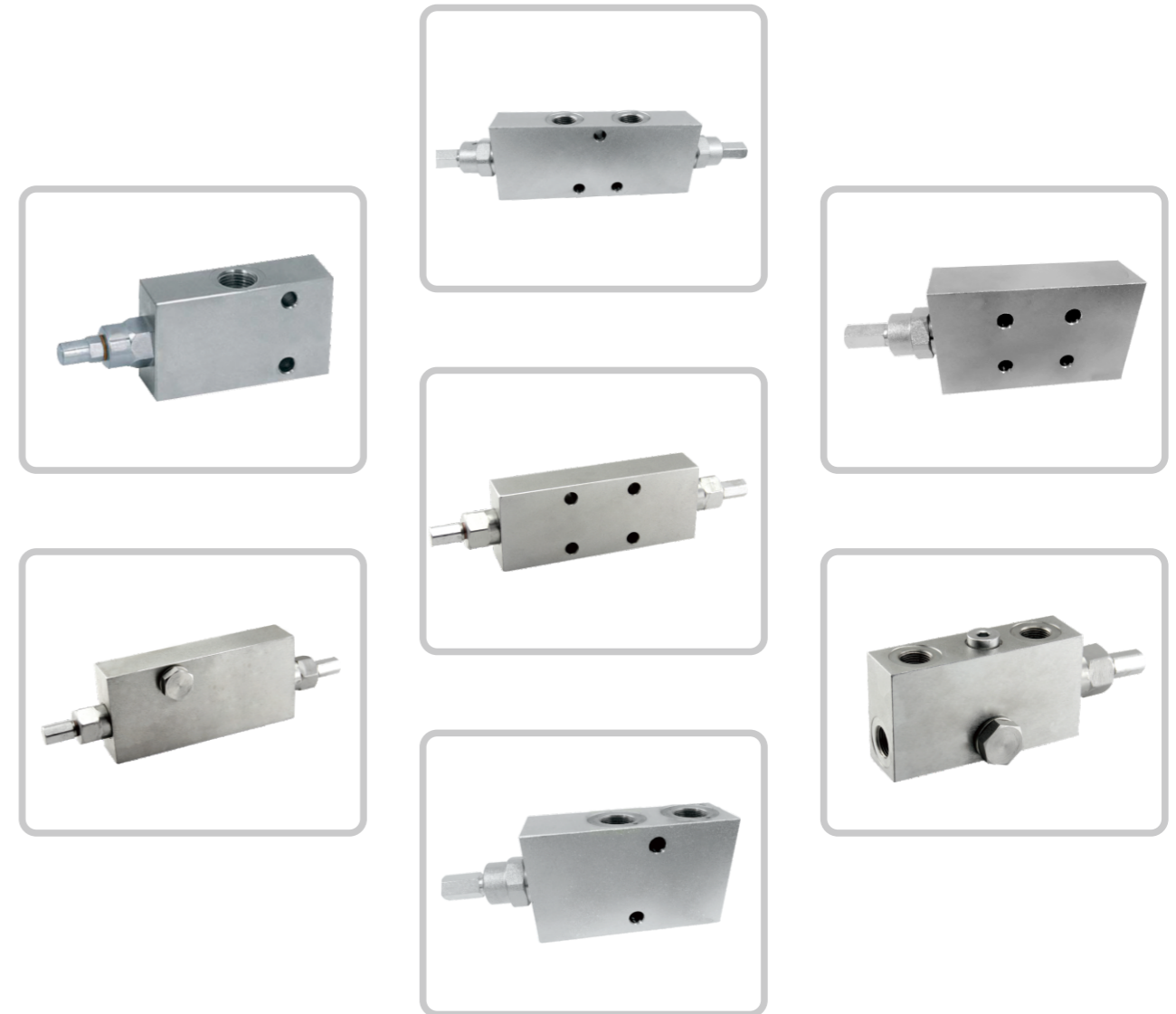


TYPE	(L/min)	(bar)	(pilot ratio)	(cracking pressure) (bar)
VBPDE A FLV-G1/4	20	350	7.1:1	3.5
VBPDE A FLV-G3/8	30		7.1:1	3.5

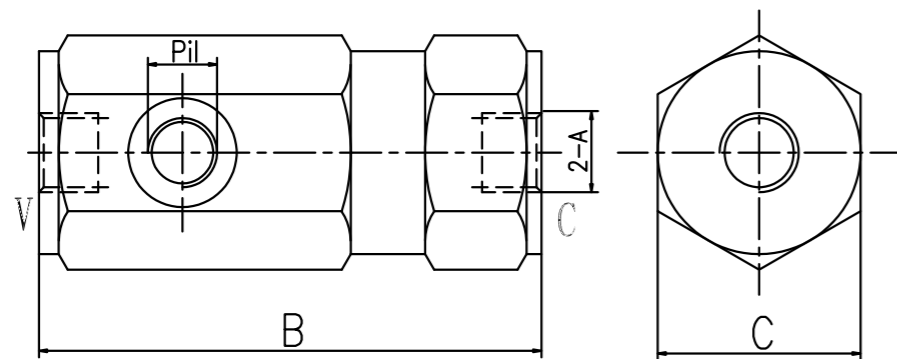
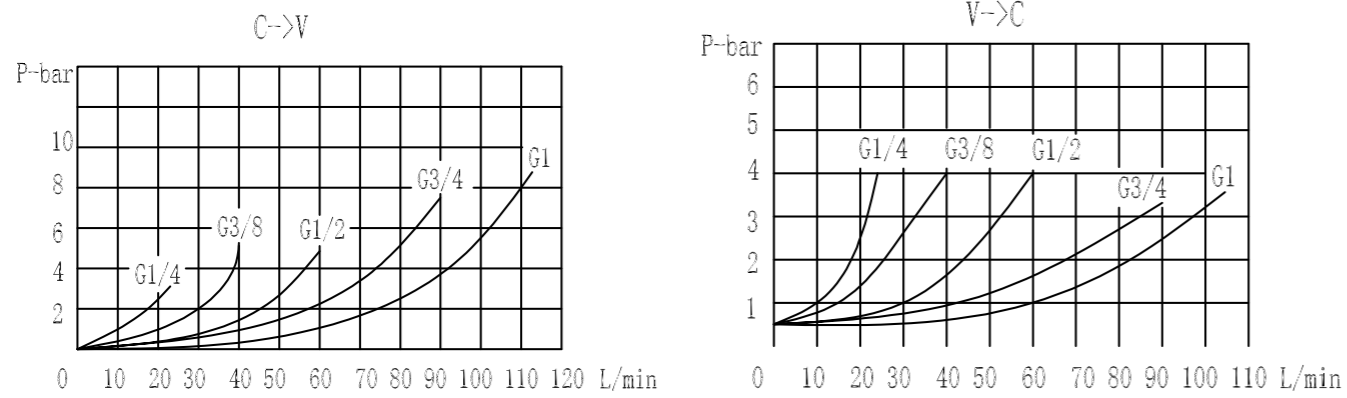
HYDRAULIC DIAGRAM



Counterbalance Valve



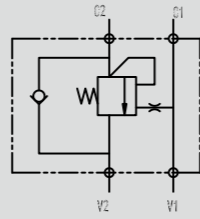
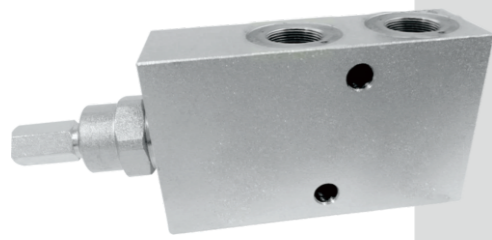
11



TYPE	A	(L/min)	(bar)	B	C	Pil	(pilot ratio)
VBPSL-G1/4	G1/4	25	350	102	40	G1/4	1:3.6
VBPSL-G3/8	G3/8	40	350	108	41		1:3.2
VBPSL-G1/2	G1/2	60	350	120	42		1:2.8
VBPSL-G3/4	G3/4	100	300	131	55		1:3.2
VBPSL-G1	G1	150	300	170	60		1:6.2

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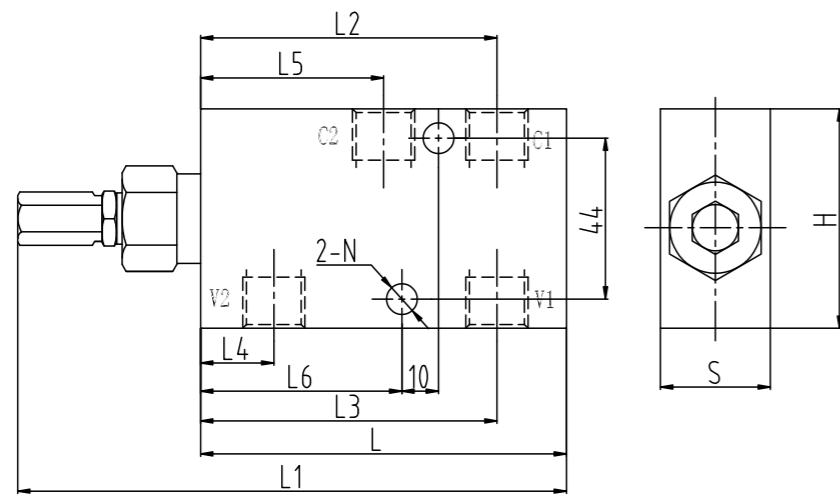
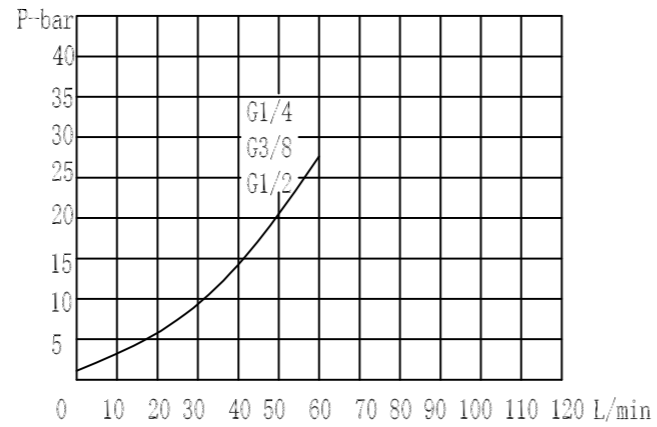
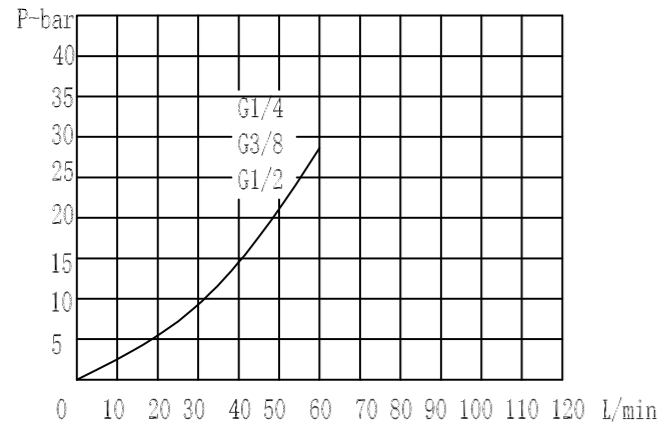
HYDRAULIC DIAGRAM



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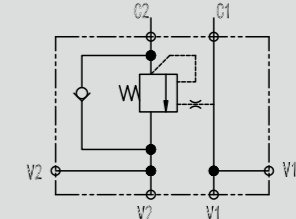
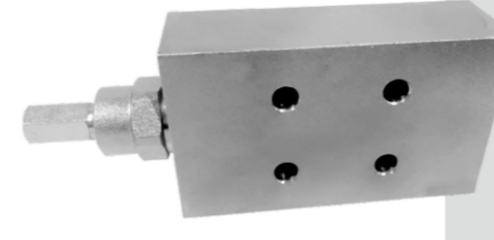
C2->V2

V2 ->C2



TYPE	(L/min)	(bar)		(pilot ratio)	V1-V2 C1-C2	L	L1	L2	L3	L4	L5	L6	N	H	S
		/steel	/aluminium												
VBCD-G1/4-SE A	20	350	210	4.5:1	G1/4	110	150	90	90	20	50	55	Φ8.5	60	30
VBCD-G3/8-SE A	40				G3/8	110	150	91	91	20	50	55	Φ8.5	60	30
VBCD-G1/2-SE A	60				G1/2	110	150	91	91	20	50	57.5	Φ8.5	65	35

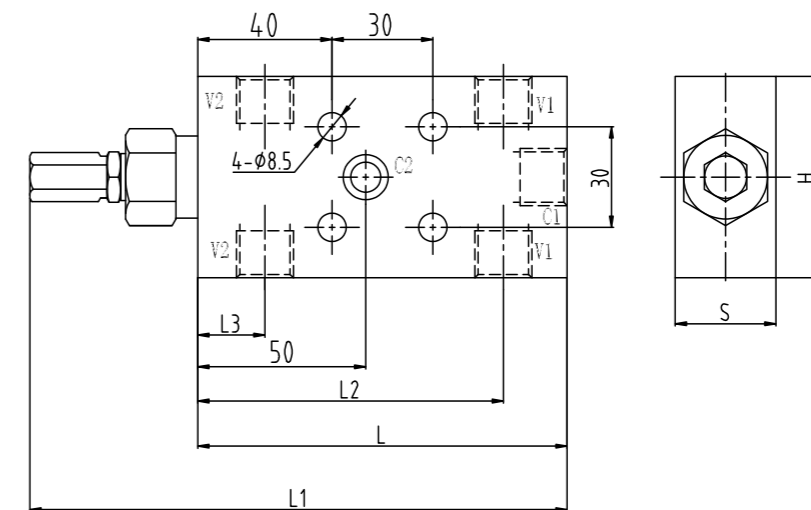
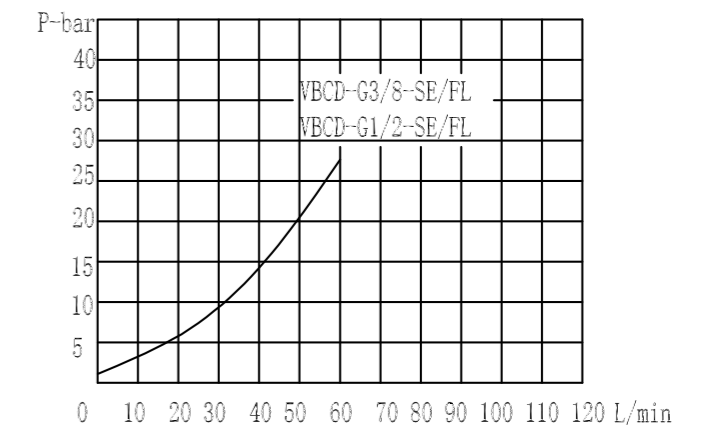
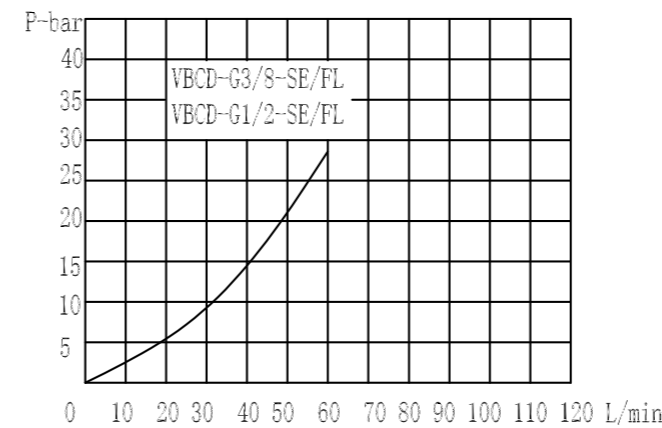
HYDRAULIC DIAGRAM



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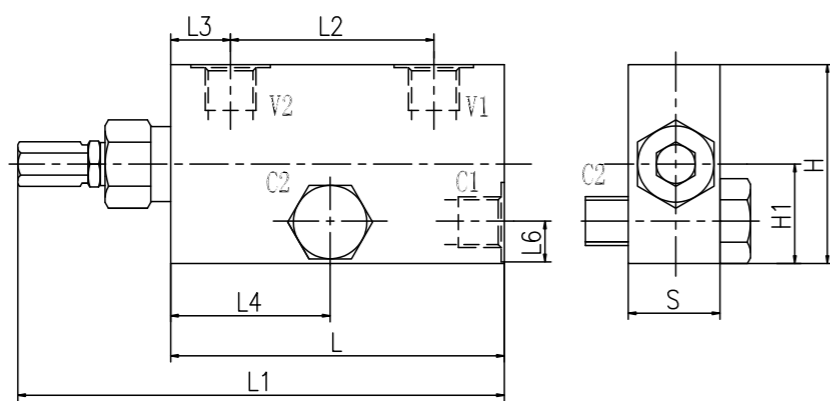
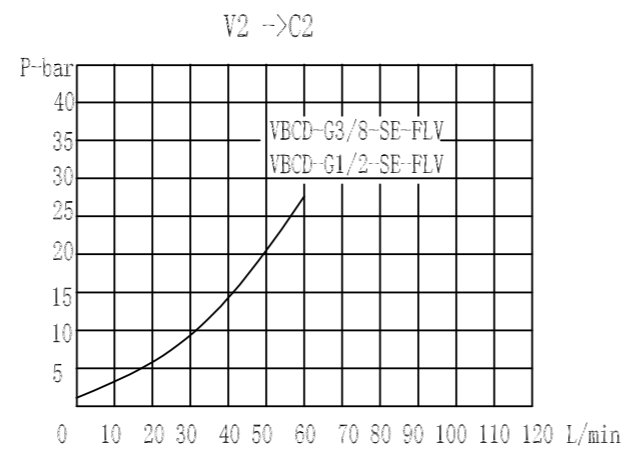
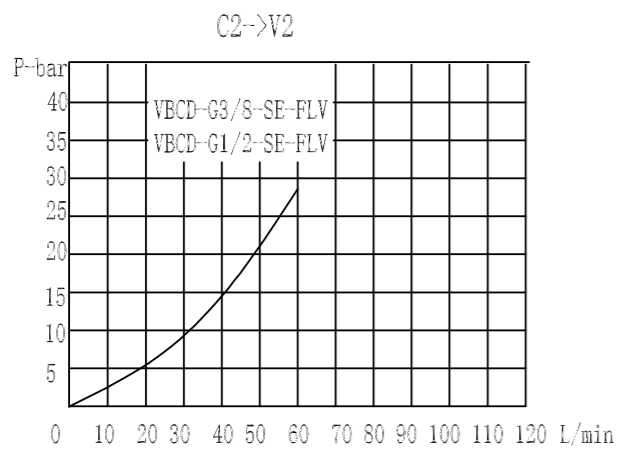
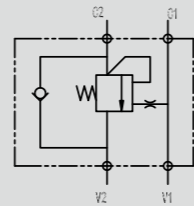
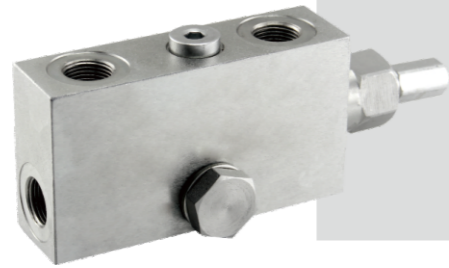
C2->V2

V2 ->C2



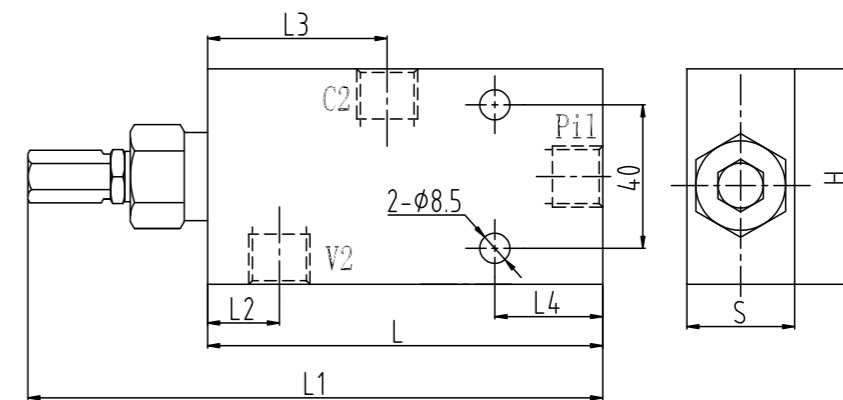
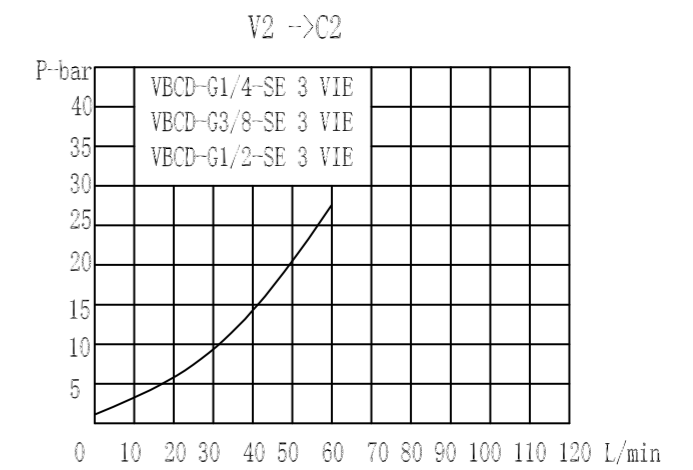
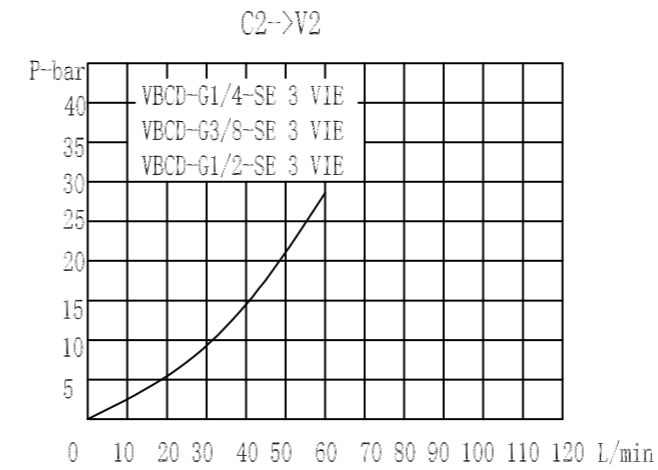
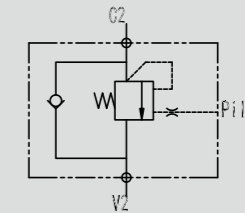
TYPE	(L/min)	(bar)		(pilot ratio)	V1-V2 C1	C2	L	L1	L2	L3	H	S
		/steel	/aluminium									
VBCD-G3/8-SE FL	40	350	210	4.5:1	G3/8	Φ9	110	150	91	20	60	30
VBCD-G1/2-SE FL	60				G1/2	Φ9	110	150	91	20	65	35

HYDRAULIC DIAGRAM



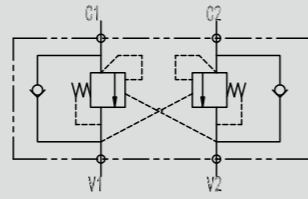
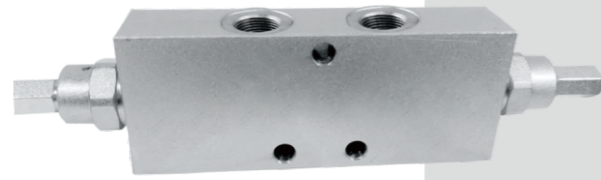
TYPE	(L/min)	(bar)		(pilot ratio)	V1-V2 C1	C2	L	L1	L2	L3	L4	L6	H	H1	S
		/steel	/aluminium												
VBCD-G3/8-SE-FLV	40	350	210	4.5:1	G3/8	Φ9	110	159	67	20	52	13.5	65	32.5	35
VBCD-G1/2-SE-FLV	60				G1/2	Φ9	110	159	67	20	52	15	65	35	35

HYDRAULIC DIAGRAM

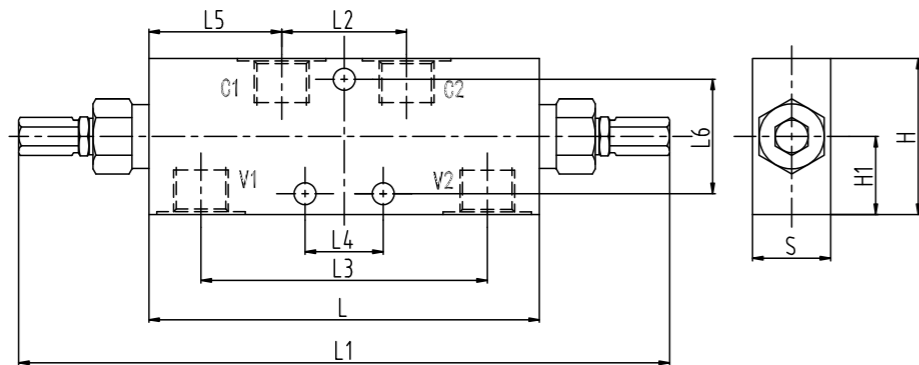
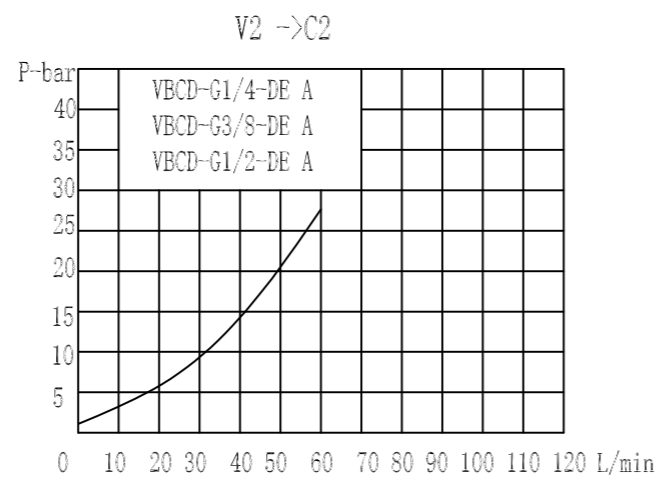
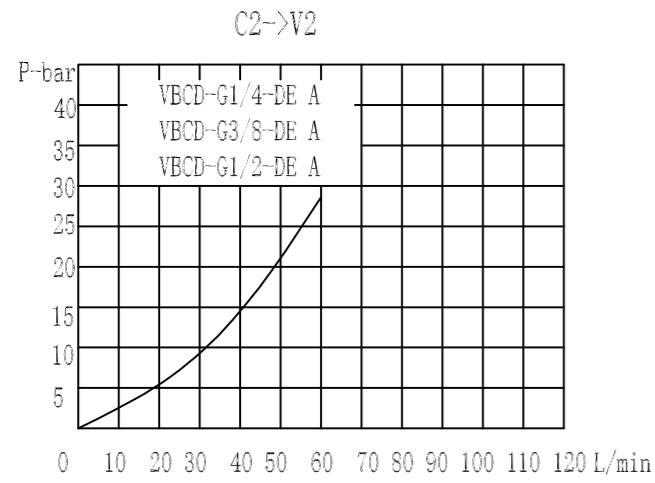


TYPE	(L/min)	(bar)		(pilot ratio)	V2 C2	Pil	L	L1	L2	L3	L4	H	S
		/steel	/aluminium										
VBCD-G1/4-SE-3VIE	20	350	210	4.5:1	G1/4	G1/4	110	150	20	50	25	60	30
VBCD-G3/8-SE-3VIE	40				G3/8	G1/4	110	150	20	50	25	60	30
VBCD-G1/2-SE-3VIE	60				G1/2	G1/4	110	150	20	50	25	65	35

HYDRAULIC DIAGRAM

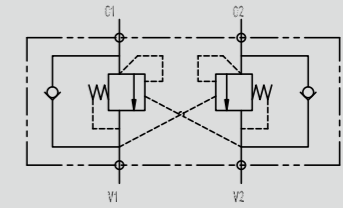


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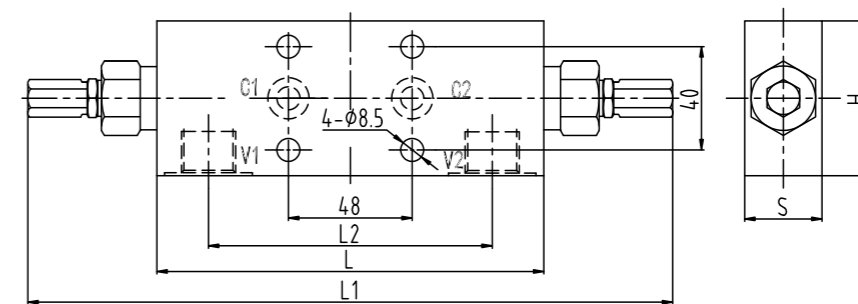
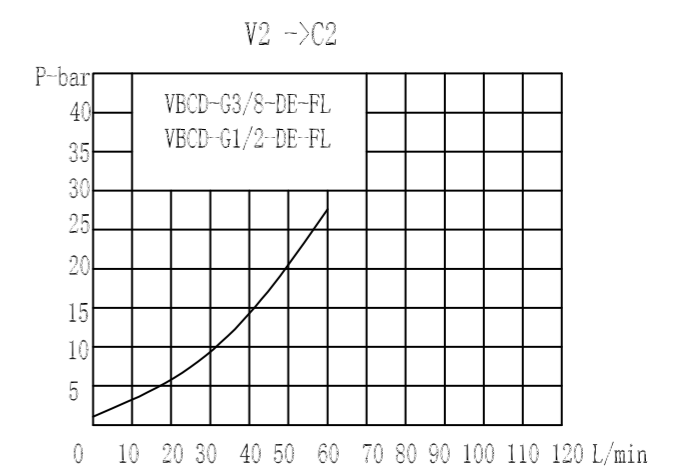
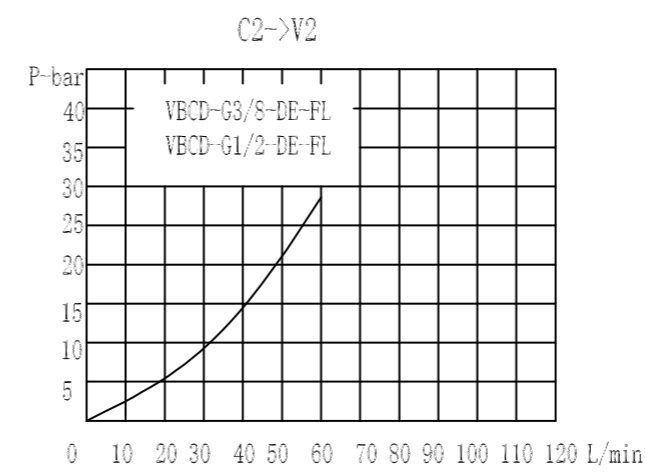


TYPE	(L/min)	(bar)		(pilot ratio)	V1-V2 C1-C2	L	L1	L2	L3	L4	L5	L6	H1	H	S
		/steel	/aluminium												
VBCD-G1/4-DE A	20	350	210	4.5:1	G1/4	150	250	50	110	30	50	44	30	60	30
VBCD-G3/8-DE A	40				G3/8	150	250	50	110	30	50	44	30	60	30
VBCD-G1/2-DE A	60				G1/2	150	250	50	110	30	50	44	30	65	35

HYDRAULIC DIAGRAM

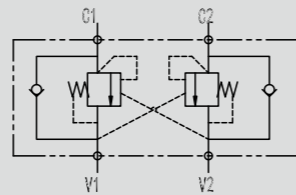


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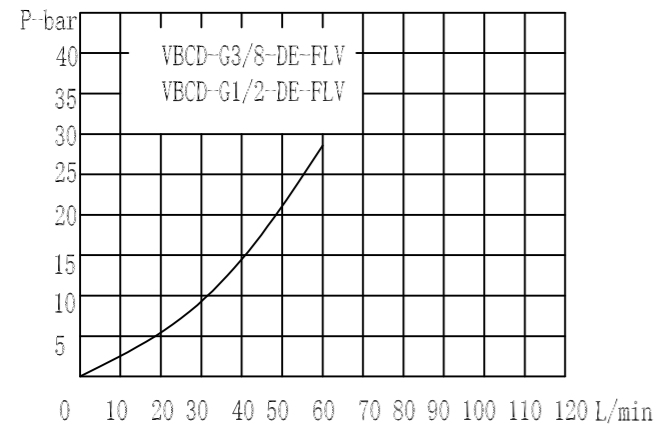
TYPE	(L/min)	(bar)		(pilot ratio)	V1-V2 C1-C2	L	L1	L2	H	S	O-ring
		/steel	/aluminium								
VBCD-G3/8-DE-FL	40	350	210	4.5:1	G3/8	150	250	110	60	30	10.78x2.62
VBCD-G1/2-DE-FL	60				G1/2	150	250	110	65	35	10.78x2.62

HYDRAULIC DIAGRAM

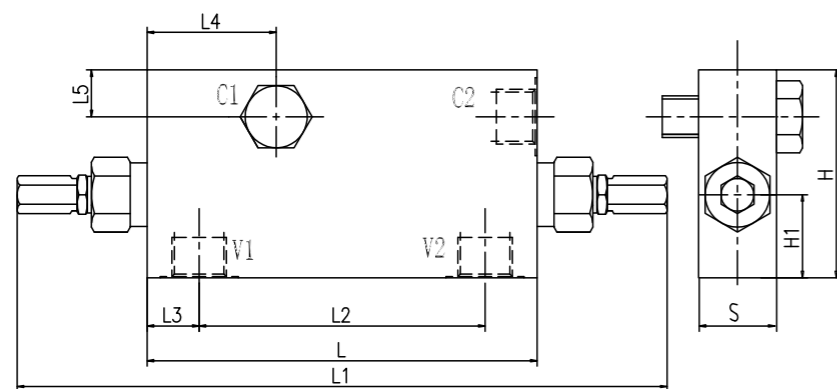
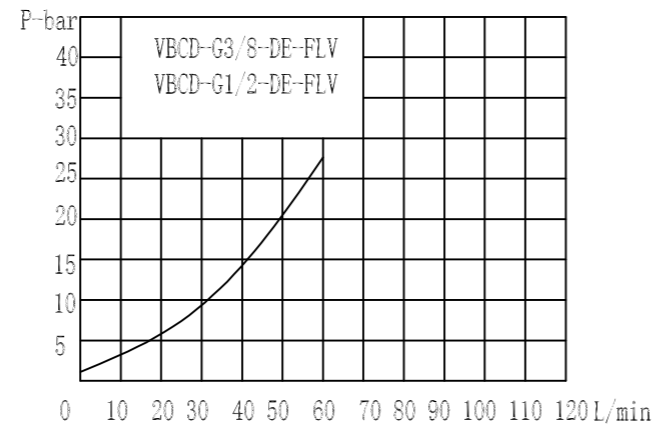


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C2->V2



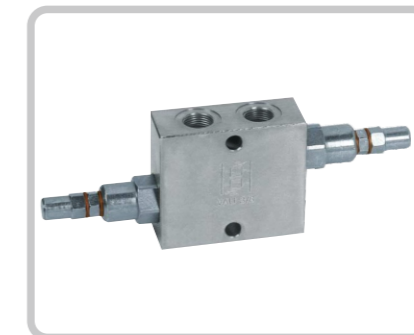
V2 ->C2



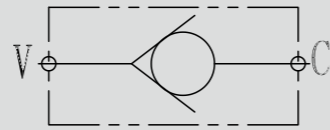
TYPE	(L/min)	(bar)		(plot ratio)	V1-V2 C1-C2	L	L1	L2	L3	L4	L5	H1	H	S
		/stainless steel	/aluminium											
VBCD-G3/8-DE-FLV	40	350	210	4.5:1	G3/8	150	250	110	20	50	12.5	30	70	30
VBCD-G1/2-DE-FLV	60				G1/2	150	250	110	20	50	18	32	80	30

IN-LINE VALVE

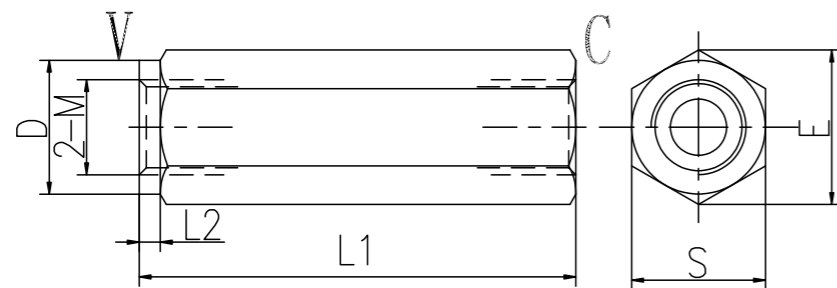
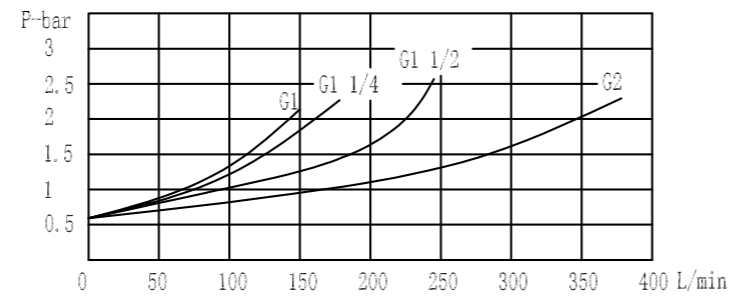
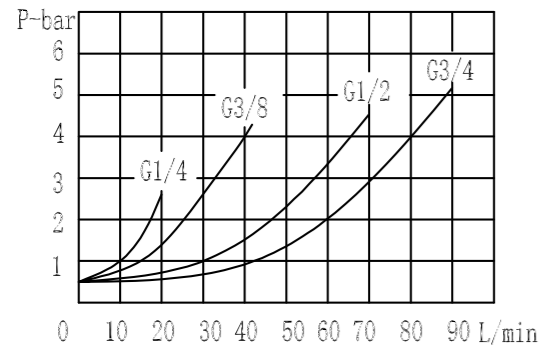
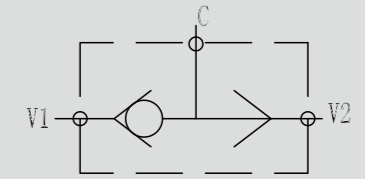
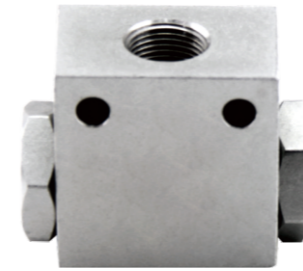
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HYDRAULIC DIAGRAM

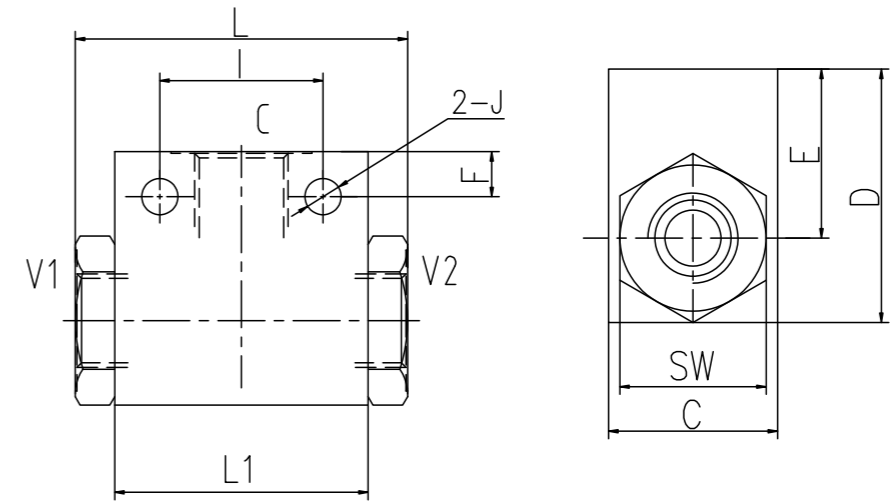


HYDRAULIC DIAGRAM



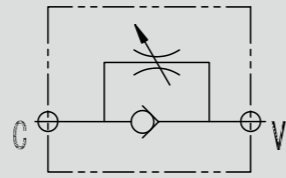
TYPE	DN (mm)	(L/min)	PN (Bar)	DIMENSION				
				L1	L2	E	S	D
VU-G1/4-*	8	30	500	62	3	21.5	19	19
VU-G3/8-*	10	45	500	68	3	27.5	24	24
VU-G1/2-*	12	70	500	77	3	34.5	30	30
VU-G3/4-*	16	110	400	88	3	41.5	36	36
VU-G1-*	20	160	350	105	3	47	41	41
VU-G1 1/4-*	25	210	350	130	3	63	55	55
VU-G1 1/2-*	30	320	350	138	3	75	65	65
VU-G2-*	40	460	250	160	3	92	80	80

NOTE:M can be designe according to customer requireme-nts

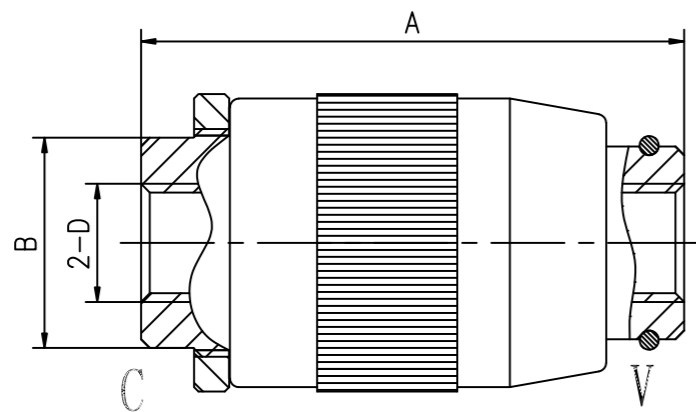
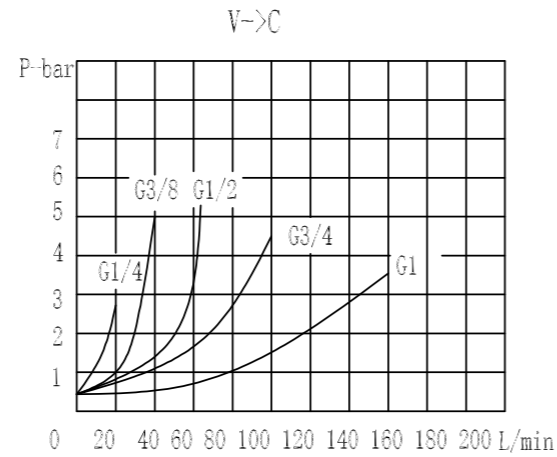
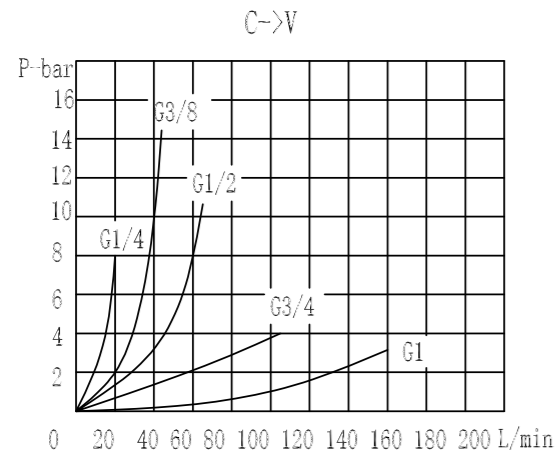
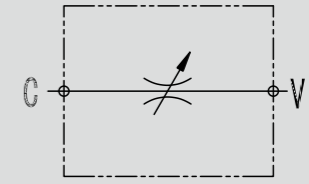


TYPE	(bar)	(L/min)	DN (mm)	L	L1	C	D	E	F	G	I	J	SW
VU2P-G1/4	350	20	6	48	36	25	35	22.5	7.5	G1/4	25	5.5	22
VU2P-G3/8	350	45	10	59	45	30	45	30	8	G3/8	29	6.5	27
VU2P-G1/2	350	80	13	90	57	35	50	32.5	8.5	G1/2	36	6.5	32
VU2P-G3/4	350	110	20	113	62	45	60	37	6.5	G3/4	50	8.5	41
VU2P-G1	350	150	25	120	80	50	80	54.5	11	G1	60	10.5	46

HYDRAULIC DIAGRAM

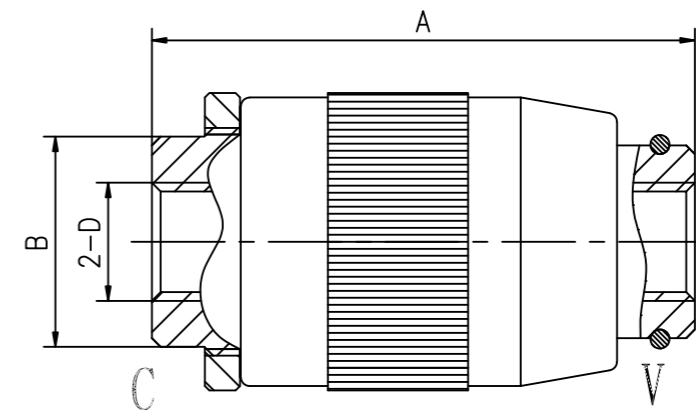
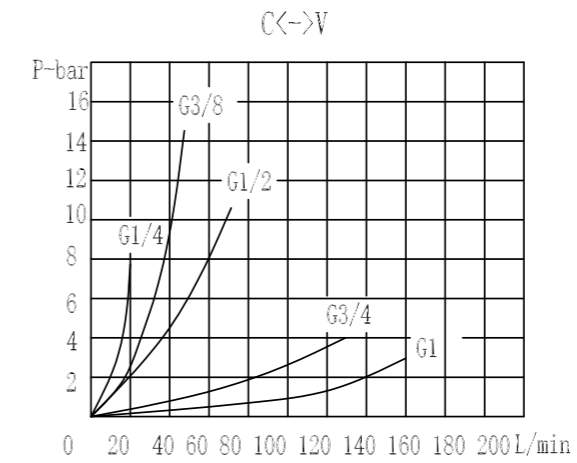


HYDRAULIC DIAGRAM



TYPE	D	(L/min)	(bar)	A	B	(cracking pr-essure) (bar)
VRU-G1/4	G1/4	12	320	62	21	0.5
VRU-G3/8	G3/8	30	320	78	26	0.5
VRU-G1/2	G1/2	50	320	80	30	0.5
VRU-G3/4	G3/4	85	280	100	36	0.5
VRU-G1	G1	120	250	118	41	0.5

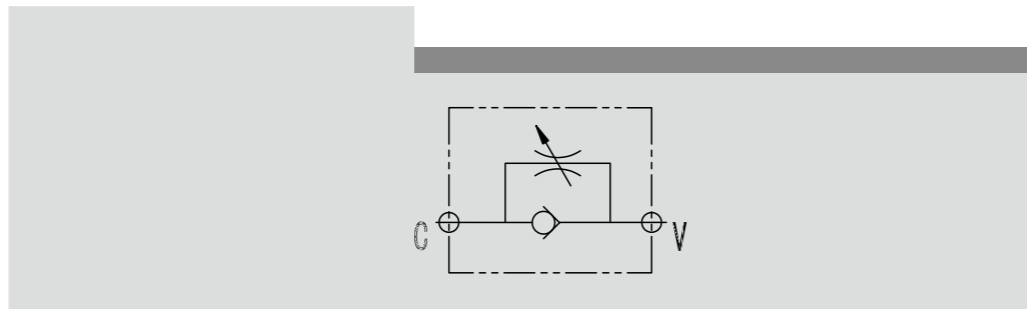
NOTE:D can be designed according to customer requirements



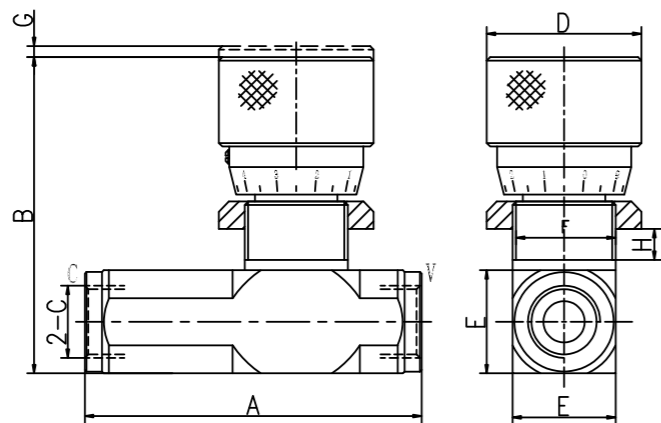
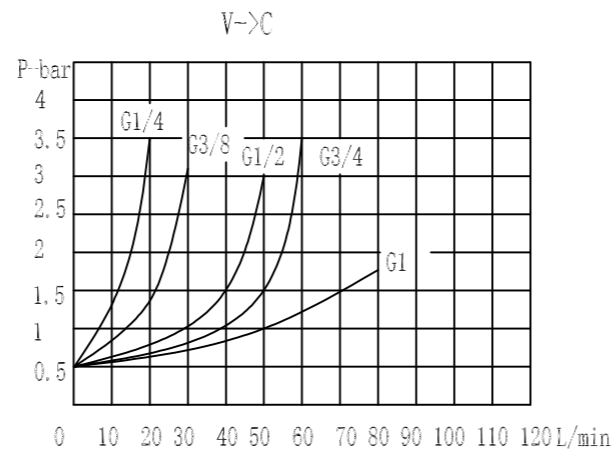
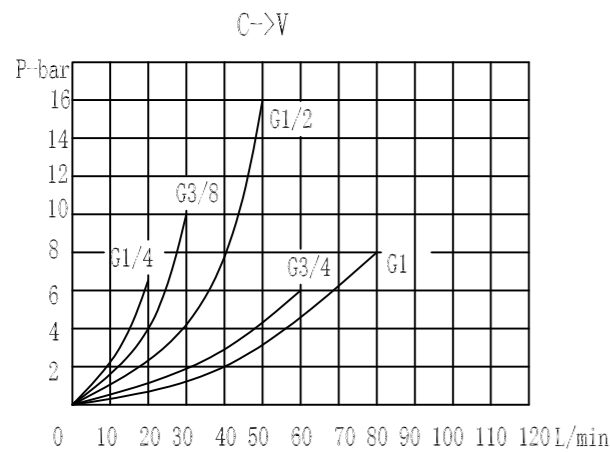
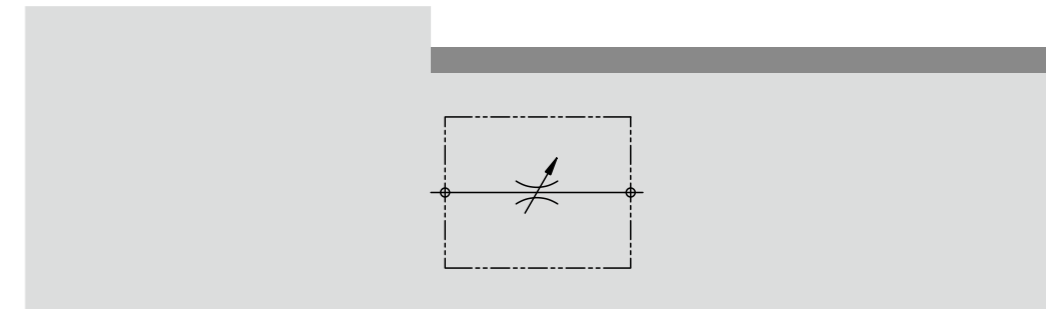
TYPE	D	(L/min)	(bar)	A	B
VRB-G1/4	G1/4	12	320	62	21
VRB-G3/8	G3/8	30	320	78	26
VRB-G1/2	G1/2	50	320	80	30
VRB-G3/4	G3/4	85	280	100	36
VRB-G1	G1	120	250	118	41

NOTE:D can be designed according to customer requirements

HYDRAULIC DIAGRAM

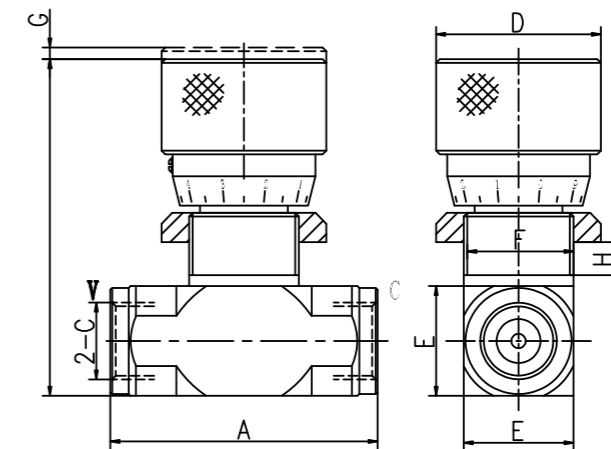
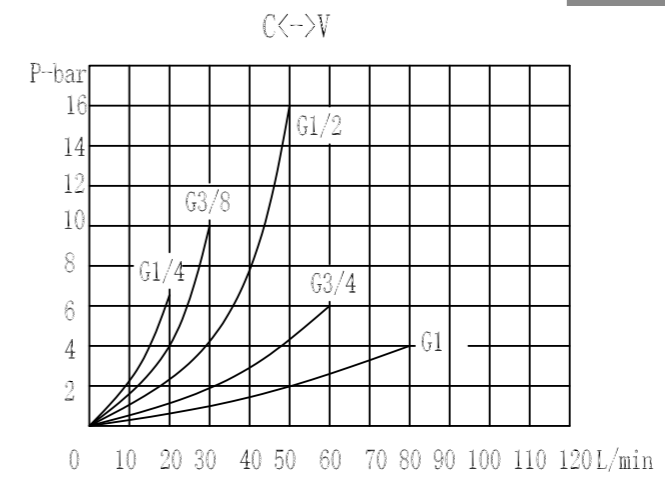


HYDRAULIC DIAGRAM



TYPE	C	(L/min)	(bar)	A	B	D	E	F	G	H
STU-G1/4	G1/4	12	400	73	72	32	20	M20x1	5	7
STU-G3/8	G3/8	30	400	82	80	32	25	M25x1.5	9	7
STU-G1/2	G1/2	50	400	98	92	45	30	M30x1.5	9	9
STU-G3/4	G3/4	85	400	112	100	45	40	M35x1.5	10	11
STU-G1	G1	150	320	142	122	45	45	M40x1.5	12	15

Note: 1) The impacted nut at F should be purchased by another way.
2) C can be designed according to customer requirements

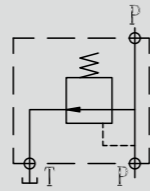


TYPE	C	(L/min)	(bar)	A	B	D	E	F	G	H
STB-G1/4	G1/4	12	400	54	72	32	20	M20x1	5	7
STB-G3/8	G3/8	30	400	62	80	32	25	M25x1.5	9	7
STB-G1/2	G1/2	50	400	73	92	45	30	M30x1.5	9	9
STB-G3/4	G3/4	85	400	84	100	45	40	M35x1.5	10	11
STB-G1	G1	150	320	102	122	45	45	M40x1.5	12	15

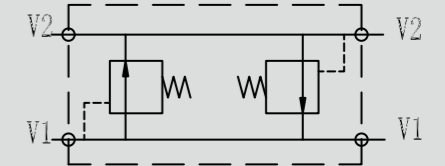
Note: 1) The impacted nut at F should be purchased by another way.
2) C can be designed according to customer requirements



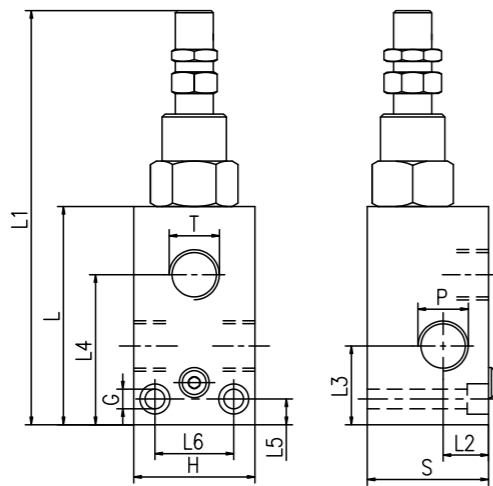
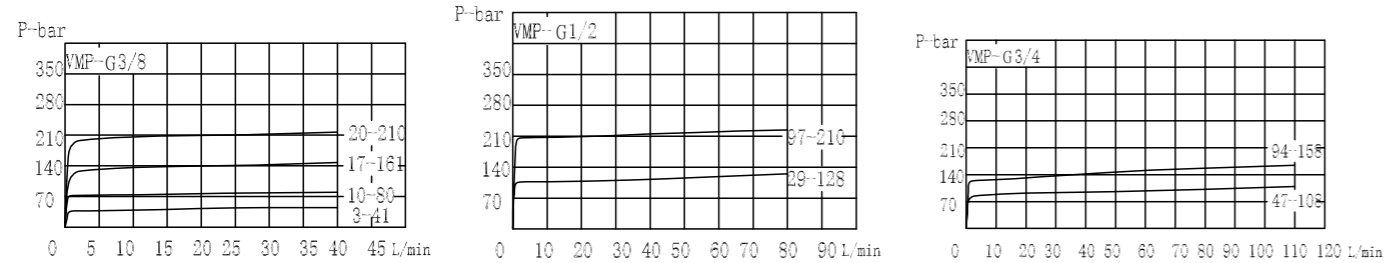
HYDRAULIC DIAGRAM



HYDRAULIC DIAGRAM



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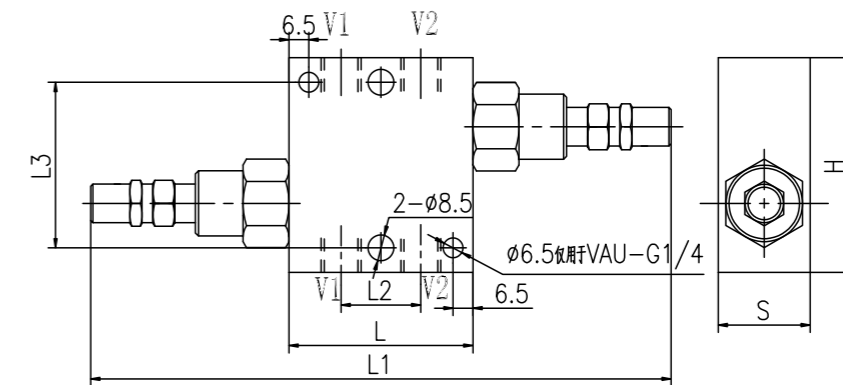
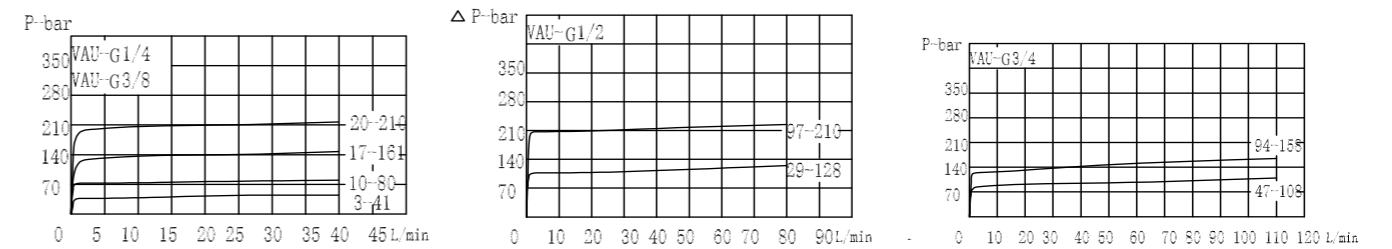


TYPE	(L/min)	P-T	L	L1	L2	L3	L4	L5	L6	G	H	S
VMP-G3/8	40	G3/8	72	134	15	26	49.5	8.5	26	6.5	40	40
VMP-G1/2	70	G1/2	77	139	17.5	29.5	54	8.5	30	6.5	45	45
VMP-G3/4	110	G3/4	92	154	17.5	35	68	10	32	8.5	50	50

NOTE: Thread can be designed according to customer requirements.

TYPE	SPRINGS		
	Press range (bar)	Press increase (bar/turn)	Standard setting (bar)
VMP-G3/8	3-41	20	207
	10-80	40	207
	17-161	80	207
	20-210	120	207
VMP-G1/2	29-128	29	120
	97-210	50	200
VMP-G3/4	47-107	47	79
	94-158	58	125

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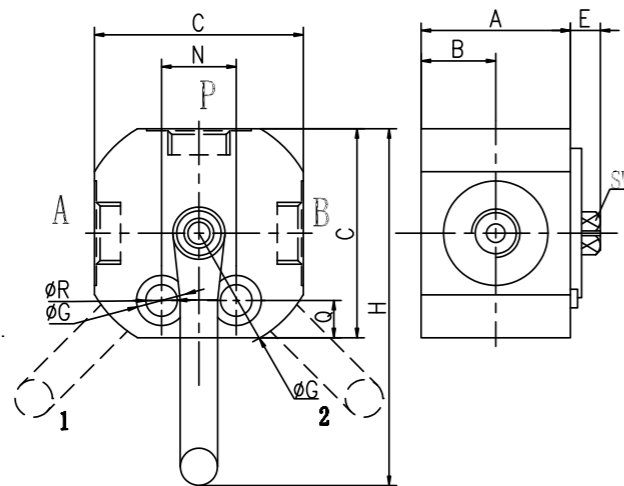
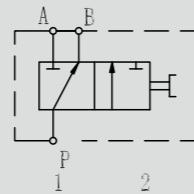


TYPE	(L/min)	V1-V2	L	L1	L2	L3	H	S
VAU-G1/4	40	G1/4	60	158	26	54	70	30
VAU-G3/8	40	G3/8	80	178	33	54	70	30
VAU-G1/2	70	G1/2	80	204	38	54	70	30
VAU-G3/4	110	G3/4	95	219	44	54	70	35

NOTE: Thread can be designed according to customer requirements.

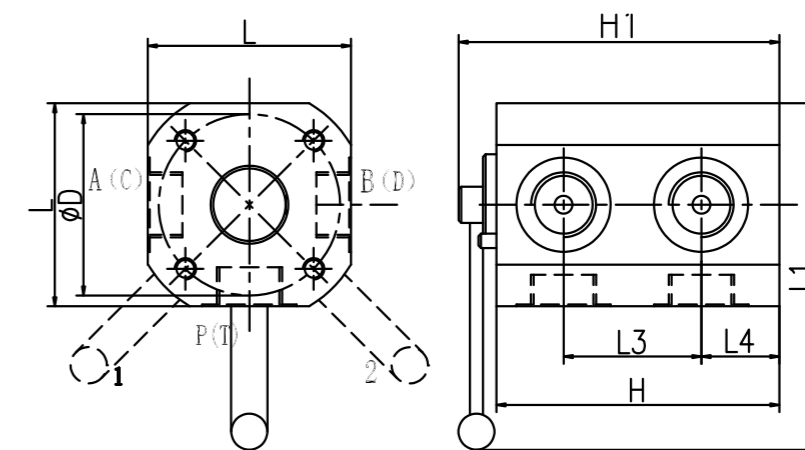
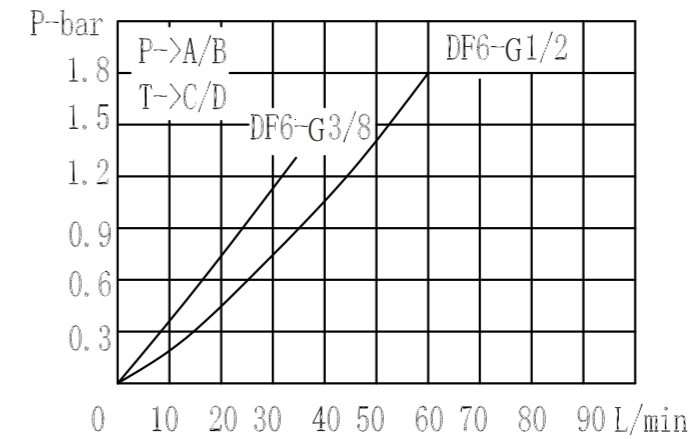
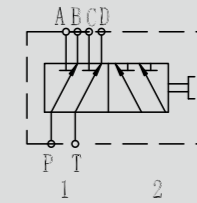
TYPE	SPRINGS		
	Press range (bar)	Press increase (bar/turn)	Standard setting (bar)
VAU-G1/4 VAU-G3/8	3-41	20	207
	10-80	40	207
	17-161	80	207
	20-210	120	207
VAU-G1/2	29-128	29	120
	97-210	50	200
VAU-G3/4	47-107	47	79
	94-158	58	125

HYDRAULIC DIAGRAM



TYPE	(L/min)	(bar)	B/A/P	A	B	C	E	F	ΦG	H	L	LW	N	Q	ΦR	ΦS	SW
DF3VIE-G1/4	20	500	G1/4	33	15	55	16	49	62	110	15.5	6	26	10	8.5	135	9
DF3VIE-G3/8	35	500	G3/8	38	17.5	55	16	54	62	110	15.5	8	26	10	8.5	135	9
DF3VIE-G1/2	60	500	G1/2	43	20	60	16	59	67	110	17	11	32	11	10.5	135	9
DF3VIE-G3/4	100	500	G3/4	48	22.5	75	20.5	68.5	82	180	21	12	32	14	10.5	165	14
DF3VIE-G1	180	500	G1	53	25	85	20.5	73.5	97	180	21	16	32	14	10.5	165	14

HYDRAULIC DIAGRAM



TYPE	(L/min)	(bar)	A (B) C (D) P (T)	L	L3	L4	ΦD	H	H1	G
DF6VIE-G3/8	40	300	G3/8	55	32	25	47	74	96	M8
DF6VIE-G1/2	60	300	G1/2	60	37	27	47	83	105	M8