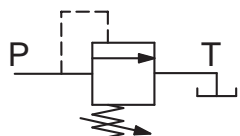
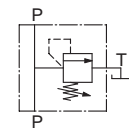
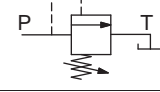
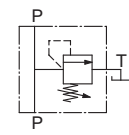
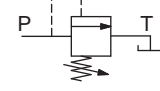
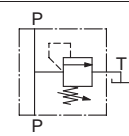
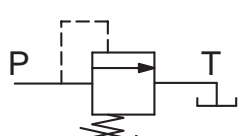
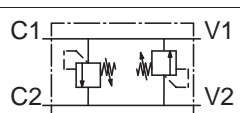


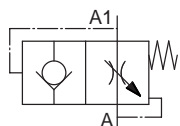
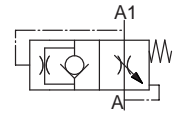
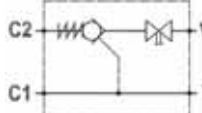


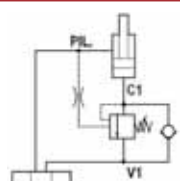
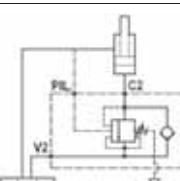
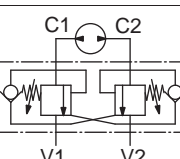
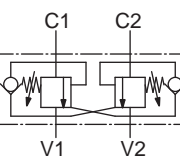
VALVES AND MANIFOLDS CATALOGUE


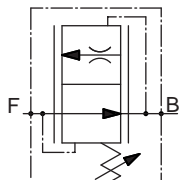


INDEX

pag	code	description	Qmax (l/min)	pmax (bar)	code p/n	symbol
		Relief valves				
1.01	VM 35	Direct acting guided poppet style relief valves	35	350	900F111220YZ000	
1.02	VMC 35	Direct acting guided poppet style relief valves with body	35	350	900F210110303XYZ00	
1.03	VM 50	Direct acting guided poppet style relief valves	50	350	900F211222YZ000	
1.04	VMC 50	Direct acting guided poppet style relief valves with body	50	350	900F210110404XYZ00	
1.05	VS 80 N	Direct acting guided poppet style relief valves	80	350	332041105X99Y	
1.06	VSC 80 N	Direct acting guided poppet style relief valves with body	80	350	900F2101106Z0XY00	
1.07	DBV 80 S	Direct acting guided poppet style relief valves	80	280	086F11139XY000	
1.08	DBVC 80 S	Direct acting guided poppet style relief valves with body	80	280	900F2101107Z0XY00	
1.09	VS 30 N	Direct acting guided poppet style relief valves with body	30	350	332041118X99Y	
1.10	VSC 30 N	Direct acting guided poppet style relief valves with body	30	350	900F2101130ZXY00	
1.11	DBV 26 V	Direct acting guided poppet style relief valves	25	210	900F111111YZ0000	
1.12	DBV10	Direct acting guided poppet style relief valves	10	270	332F111107XY000	
1.13	DBV 25	Direct acting guided poppet style relief valves	25	210	332F111118YZ000	
1.14	DBV 30	Direct acting guided poppet style relief valves	30	350	900F111119YZ000	
1.15	DBV 35	Direct acting guided poppet style relief valves	60	380	900F111121XY0000	
1.16	VSDI L 35 T	Dual cross over direct acting relief valves	60	250	900F2109103Z0XY00	

pag	code	description	Q _{max} (l/min)	p _{max} (bar)	code p/n	symbol
		Check valves				
2.01	VU-C-SO30	Single pilot operated check cartridge valves	30	350	009F1230609YZ00	
2.02	FPS C-40	Single pilot operated check cartridge valves	40	350	086FPSC40XY	
2.03	FPS	Single pilot operated check valves	12-85	300 350	086FPSXZ0000	
2.04	FPSL	Pilot operated check valves	30-85	250	086FPSLXYZ000	
2.05	FPSF	Pilot operated check valves	30-85	250	086FPSFXYZ000	
2.06	FPD o FP1	Double pilot operated check valves	12-85	280- 350	086FPDXYZ0000	
2.07	FPDL	Double pilot operated check valves	20-85	250	086FPDLXYZ000	
2.08	FPDF	Double pilot operated check valves	30-85	250	086FPDFXYZ000	
2.09	FP1R o FP2R	Double pilot operated check valves with banjo-union	12-20	250	086FP1RHKXYZ	
2.10	FPRC	Cartridge check valves	15-70	350	086FPRCX0000	
2.11	RVL _K/K1	Cartridge check valves	20-80		332XY0100	
2.12	RVL	Cartridge check valves		350	332F1222XY0100	
2.13	FPR	One directional check valves	12-310	210 350	086FPRXZ0000	
2.14	FPRU	Fixed setting throttle check valves	12-310	350 210	086FPRUXYZ0	
2.15	VS	Fixed setting throttle check valves			185F3302101XYZ00	

pag	code	description	Q _{max} (l/min)	p _{max} (bar)	code p/n	symbol
		Check valves				
2.16	FPP	Hose burst valves	25-150	350	332FPPXYZ00	
2.17	MFP e FFP	Hose burst valves			900KXYZ00	
2.18	FPS-LR1	Single pilot operated check valve with manual shut-off	30	250	086FPSLRXY000	

		Overcenter valves				
3.01	FPO-C	Overcenter	15-300	350	900F111220YZ000	
3.02	FPOFB-C	Overcenter fully balanced	25-300	350	900F210110303XYZ00	
3.03	FPOB- FPO	Overcenter, line mounted	35-150	350	900F211222YZ000	
3.04	OMP/OMR OMS FLANGIA 48x40	Flanged Overcenter	50	350	900F210110404XYZ00	
3.05		Overcenter with drilled screw - Danfoss Motors	40-60	350	332041105X99Y	

		Flow regulators				
4.01	DV C 04	Needle valve	40	350	900F1300X20000	
4.02	VLC (MFC-FFC)	Flow compensated adjustable valves, line mounting	140	350	900F513101XYZ0	
4.03	FPU	Unidirectional flow control valves	12-85	250 300	086FPUXYZ0000	
4.04	FPB	Bidirectional flow control valves	12-85	250 300	086FPBXY00000	

pag	code	description	Q _{max} (l/min)	p _{max} (bar)	code p/n	symbol
		Flow regulators				
4.05	FPSU	Unidirectional flow control valves	12-40	300	086FPSUX00000	
4.06	FPSB	Bidirectional flow control valve	12-25	280 300	086FPSBX00000	
4.07	FPMU	Adjustable throttle check valves	12-150	250 350	086FPMUXY00000	
4.08	FPMB	Adjustable throttle valves	12-150	250 350	086FPMBX00000	
4.09	RFP-38-TF	Fixed constant flow priority valve	70	350	930RFP38XA00	

		Solenoid operated directional valves				
5.01	CE	CONNECTORS			339CE10XY	
5.02	C30	Coil			334CE0503XY	
5.03	C36	Coil			334CE0507XY	
5.04	C37	Coil			334CE0509XY	
5.05	C38	Coil			334CE0511XY	
5.06		2 / 2 solenoid operated cartridge valves				
5.07		2 / 2 solenoid operated cartridge valves				
5.08		3 / 2 solenoid operated cartridge valves				
5.09		3 / 2 solenoid operated cartridge valves				
5.10		3/3 & 4/2 solenoid operated cartridge valves				
5.11		4 / 2 solenoid operated cartridge valves				
5.12		4/2 & 4/3 solenoid operated cartridge valves				

pag	code	description	Q _{max} (l/min)	p _{max} (bar)	code p/n	symbol
		Solenoid operated directional valves				
5.13		4 / 3 solenoid operated cartridge valves				
5.14		2 Way standard manifolds				
5.15		3 Way standard manifolds				
5.16		4 Way standard manifolds				

		Flangeable valves for hydraulic motors				
6.01		Dual Cross Relief valve				
6.01		Overcenter valve				
6.02		Overcenter with brake unclaping				
6.02		Brake unclaping valves				
6.03	VMDI 30	Flangeable dual cross over direct acting relief valves	30	210	900F2109230304XY10	
6.04	VFDI 45	Flangeable flow control valve	45	350	900F2105240304X0000	

		CETOP subplates				
7.01	P06-SA 38	Subplate (CETOP3)		250	900H551111003000	
7.02	P06-SC 38	Subplate (CETOP3)		250	900H551112003000	

pag	code	description	Q _{max} (l/min)	p _{max} (bar)	code p/n	symbol
		CETOP subplates				
7.03	VMSB	Subplate (CETOP3)		250	900H5511121030YZ	
7.04	P06-38 VMS-30	Subplate (CETOP3)		250	900H5511123030XY	
7.05	P06-M 38/n°	Subplate (CETOP3)		250	900H55X3003000	
7.06	P06-MVS 38B2/n°	Subplate (CETOP3)		250	900H55Z33030XY	
7.07	P10-12 S	Subplate (CETOP 5)		250	900H551212004000	
7.08	P10-12 SB	Subplate (CETOP 5)		250	900H551211004000	
7.09	P10-12 VMS	Subplate (CETOP 5)		250	900H5512121040XY	
7.10	P10-M 12/n°	Subplate (CETOP 5)		250	900H55X3004000	
7.11	P10-MVS 12/n°	Subplate (CETOP 5)		250	900H55Z31040XY	

pag	code	description	Qmax (l/min)	pmax (bar)	code p/n	symbol
		Various valves				
8.01		Valves CETOP 3	50 100	280 350	DX3-Y-Z	
8.02		Valves CETOP 5	150	320	DS5-Y-Z	
8.03		Automatic reversing valve CETOP 3	35	350	086FPIA-L6-VMX	
8.04		Automatic reversing valve CETOP 5	80	350	086FPIA-L10-VMX	
8.05		End run valve	40	300	096FCM380X	
8.06	KH2	Two-way ball valves		350 500	412F551102Z200	
8.07	KH3	Three-way ball valves		250 315	412F551103Z200	
8.08	FPE	Manometer protection schock valves		400	086FPEX0000	
8.09	FPEA	Manometer protection schock valves		400	086FPEX0000	

		Technical notes				
9.01		Recommended nipples				
9.02		Our GAS ports				





DIRECT ACTING GUIDED POPPET STYLE RELIEF VALVES

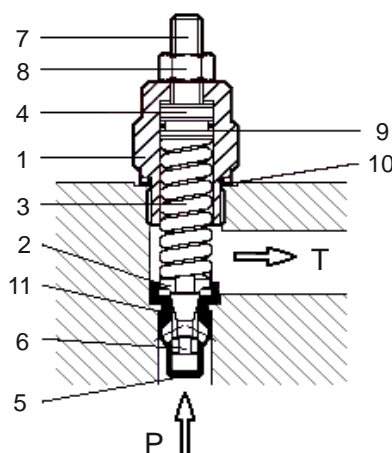
TYPE

VM 35

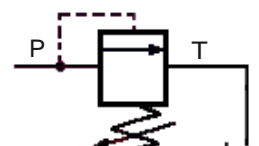
CODE

900F111220YZ000

- QUICK RESPONSE
- LOW HYSTERESIS
- FILTRATION LEVEL : 50 μ m
- INSTALLATION TORQUE : 50 Nm
- FLOW MAX. : 35 L/min
- MAX. WORKING PRESSURE : 350 bar
- WEIGHT : 0,13 Kg



SYMBOL

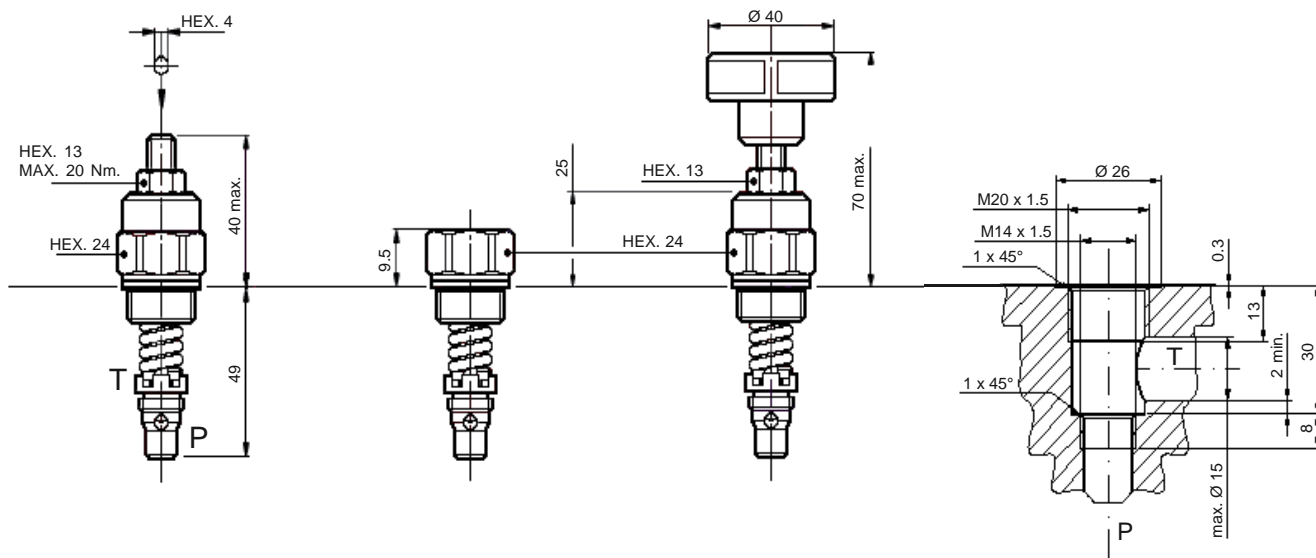


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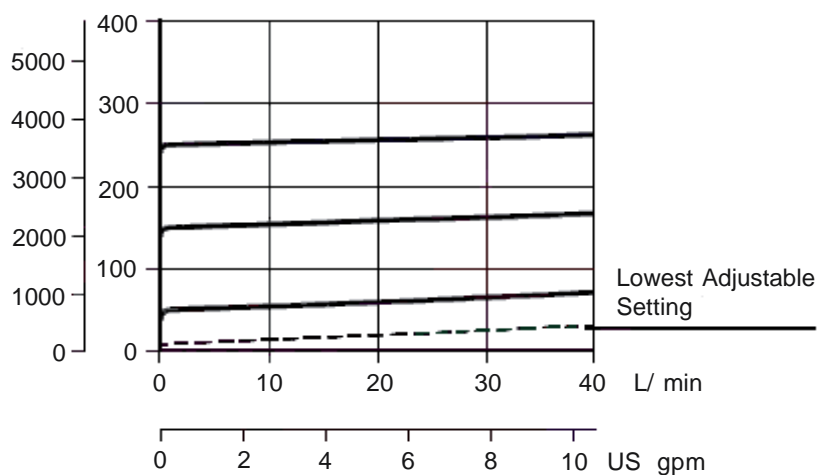
Y=2

Y=1

CAVITY : CFH003



psi bar



Y	ADJUSTMENTS
0	LEAKPROOF HEX. SOCKET SCREW
1	HANDKNOB AND LOCKNUT
2	FIXED SETTING

Z	SPRINGS
2	30-160 bar
3	50-220 bar
4	100-350 bar

OIL VISCOSITY 46cSt AT 40° C

DIRECT ACTING GUIDED POPPET STYLE RELIEF VALVES WITH BODY

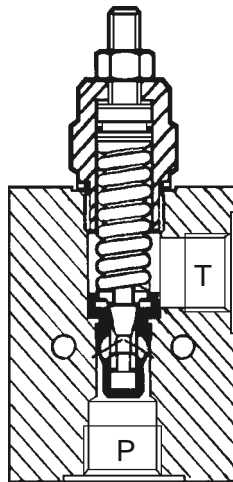
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VMC 35

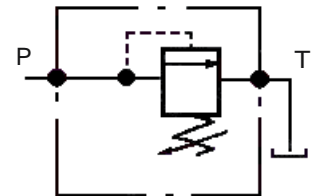
CODE

900F210110303XYZ00

- MATERIAL OF BODIES : **HIGH QUALITY ALUMINIUM / STEEL**
- QUICK RESPONSE
- LOW HYSTERESIS
- FILTRATION LEVEL : **50 μ m**
- INSTALLATION TORQUE : **50 Nm**
- FLOW MAX. : **35 L/min**
- MAX. WORKING PRESSURE : **250bar / 350 bar**
- WEIGHT : **0,38 Kg**



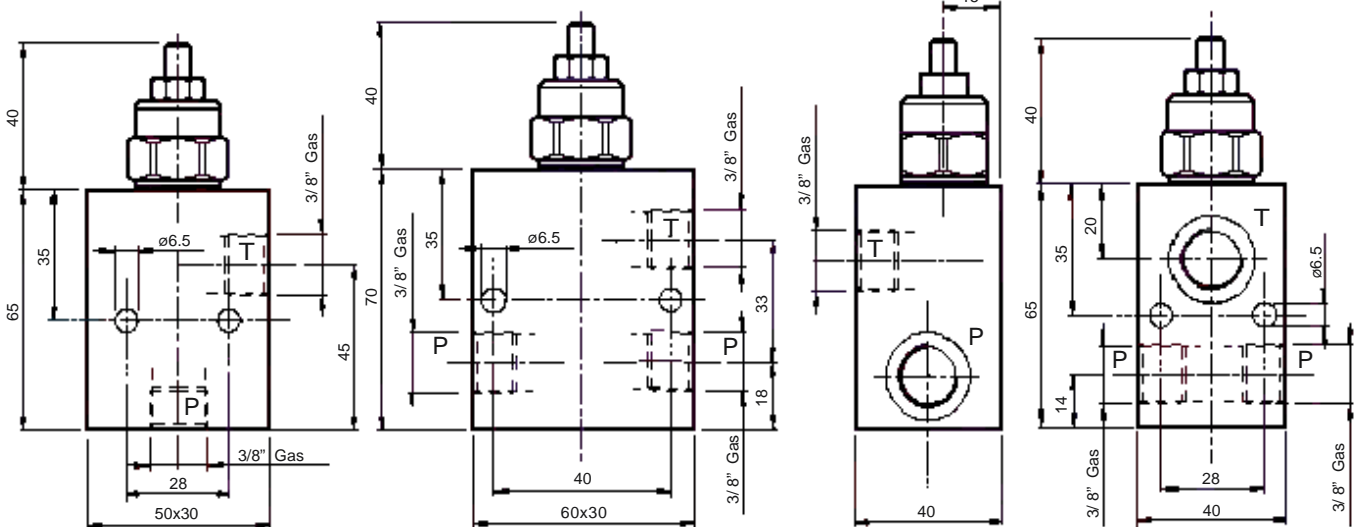
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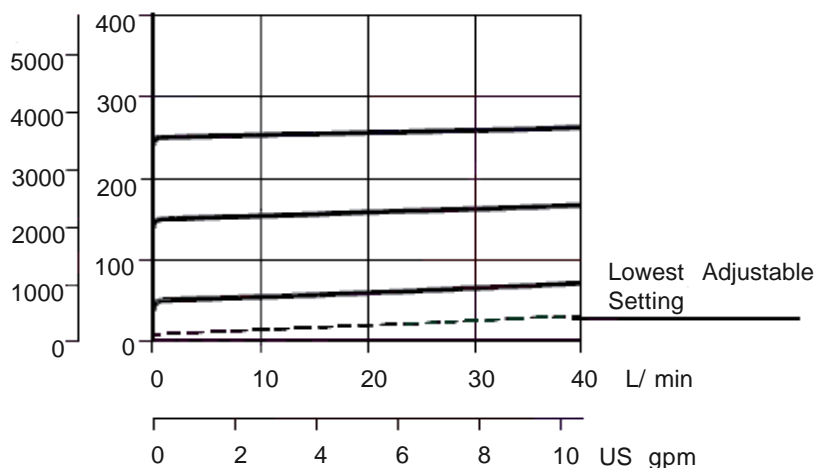
X=1 (TYPE D)

X=2 (TYPE L)

X=3 (TYPE G)



psi bar



Y	ADJUSTMENTS
0	LEAKPROOF HEX. SOCKET SCREW
1	HANDKNOB AND LOCKNUT
2	FIXED SETTING

Z	SPRINGS
2	30 - 160 bar
3	50 - 220 bar
4	100 - 350 bar

OIL VISCOSITY 46cSt AT 40° C

DIRECT ACTING GUIDED POPPET STYLE RELIEF VALVES

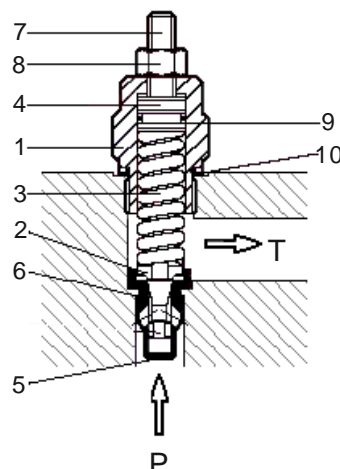
TYPE

VM 50

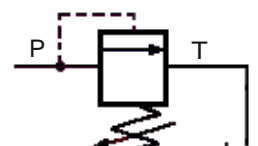
CODE

900F111222YZ000

- QUICK RESPONSE
- LOW HYSTERESIS
- FILTRATION LEVEL : 50 μm
- INSTALLATION TORQUE : 50 Nm
- FLOW MAX. : 50 L/min
- MAX. WORKING PRESSURE : 350 bar
- WEIGHT : 0,13 Kg



SYMBOL

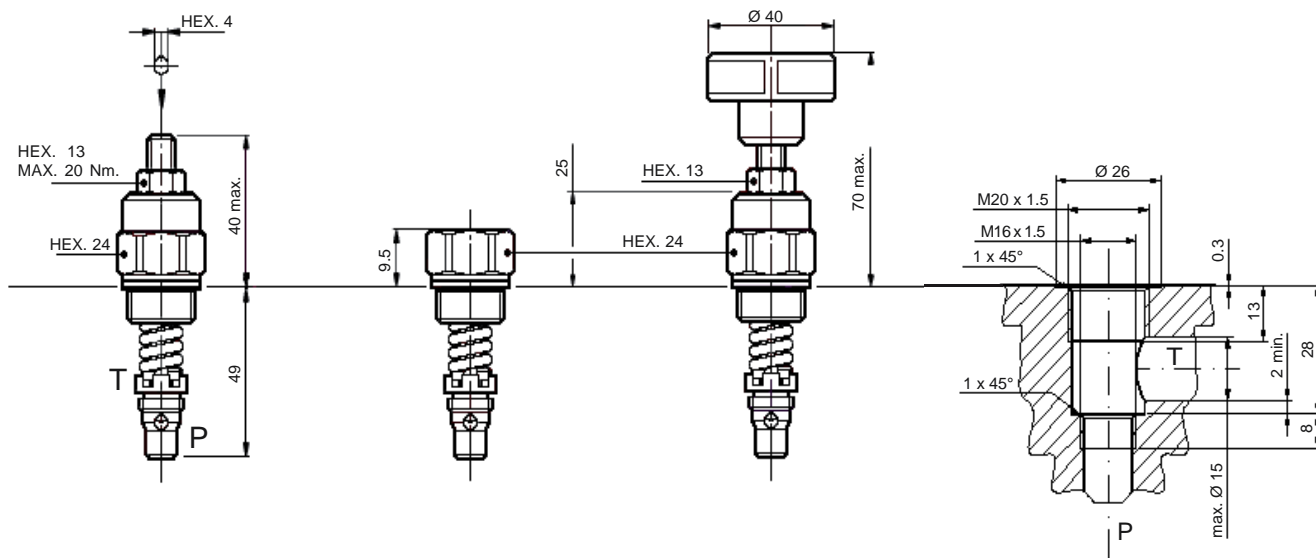


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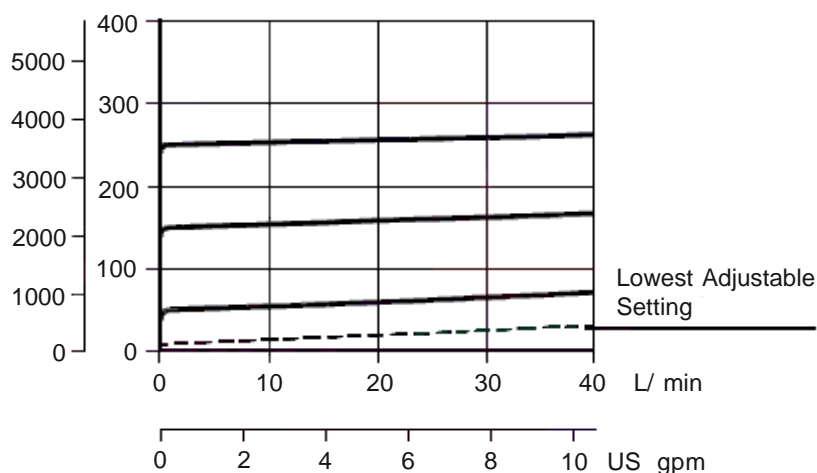
Y=2




Y=1

CAVITY : CFH006



psi bar



Y	ADJUSTMENTS
0	LEAKPROOF HEX. SOCKET SCREW 
1	HANDKNOB AND LOCKNUT 
2	FIXED SETTING 

Z	SPRINGS
1	30 - 120 bar
2	50 - 220 bar
3	80 - 350 bar

OIL VISCOSITY 46cSt AT 40° C

DIRECT ACTING GUIDED POPPET STYLE RELIEF VALVES WITH BODY

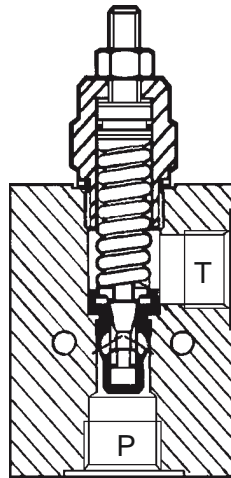
TYPE

VMC 50

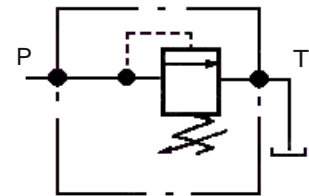
CODE

900F210110404XYZ00

- MATERIAL OF BODIES : **HIGH QUALITY ALUMINIUM / STEEL**
- QUICK RESPONSE
- LOW HYSTERESIS
- FILTRATION LEVEL : **50 μ m**
- INSTALLATION TORQUE : **50 Nm**
- FLOW MAX. : **50 L/min**
- MAX. WORKING PRESSURE : **250bar / 350 bar**
- WEIGHT : **0,38 Kg**



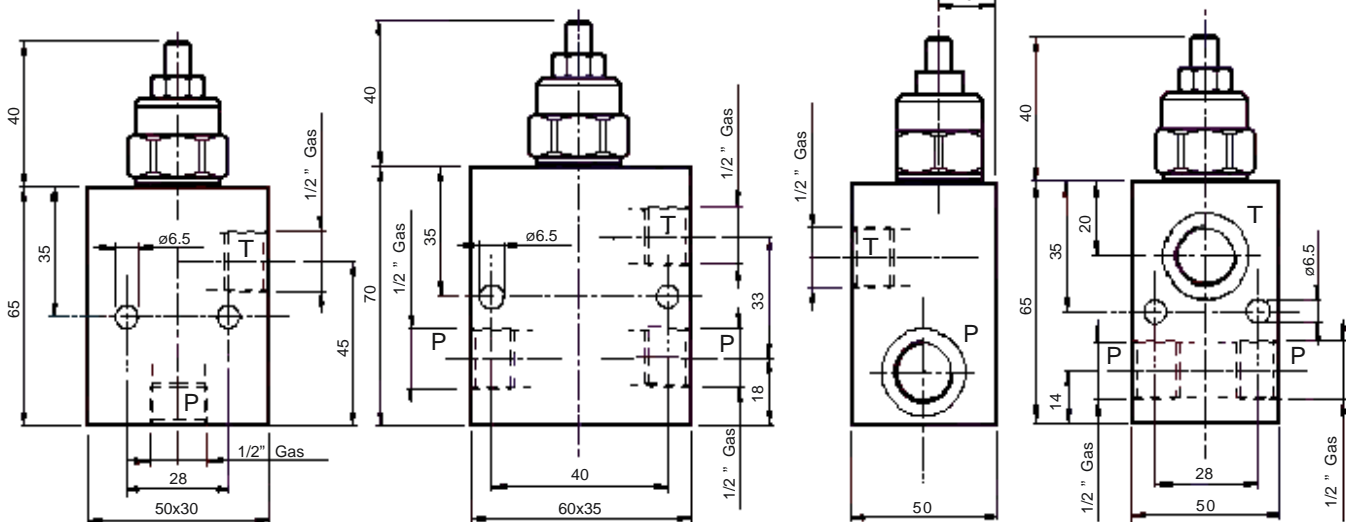
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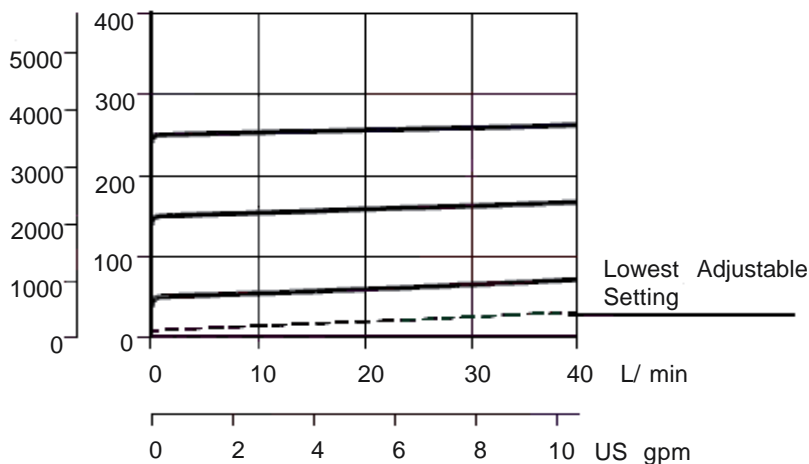
X=1 (TYPE D)

X=2 (TYPE L)

X=3 (TYPE G)



psi bar



Y	ADJUSTMENTS
0	LEAKPROOF HEX. SOCKET SCREW
1	HANDKNOB AND LOCKNUT
2	FIXED SETTING

Z	SPRINGS
1	30 - 120 bar
2	50 - 220 bar
3	80 - 350 bar

OIL VISCOSITY 46cSt AT 40° C

DIRECT ACTING GUIDED POPPET STYLE RELIEF VALVES WITH BODY

TYPE

VSC 80 N

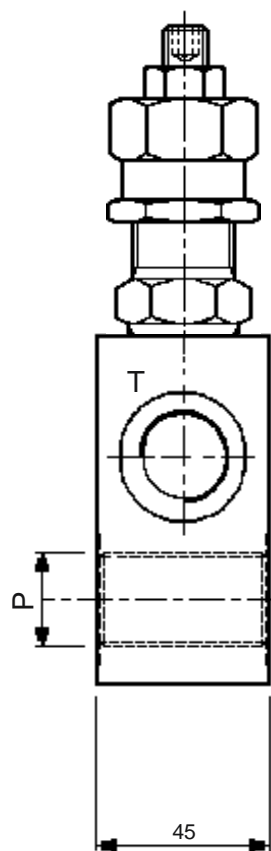
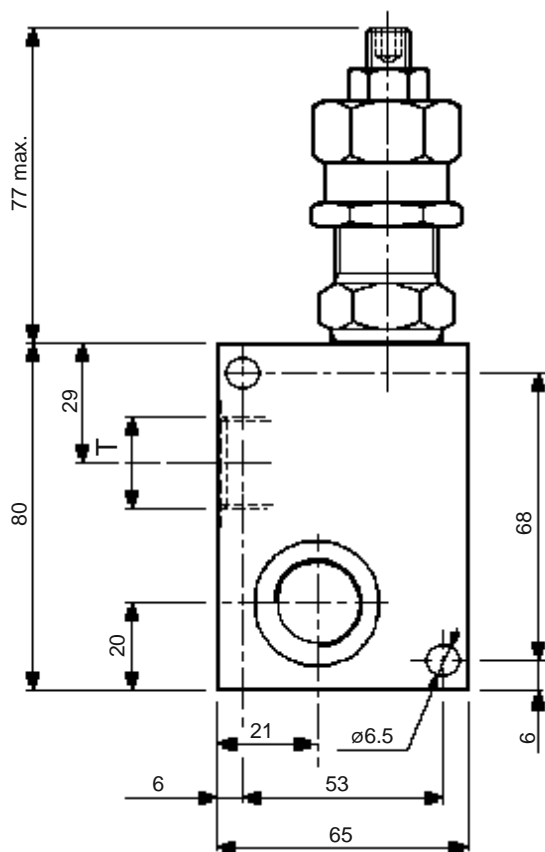
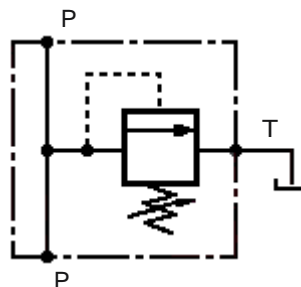
CODE

900F2101106**ZoXY**00

- MATERIAL OF BODIES : **HIGH QUALITY ALUMINIUM / STEEL**
- QUICK RESPONSE
- LOW HYSTERESIS
- FILTRATION LEVEL : **50 μ m**
- FLOW MAX. : **80 L/min**
- MAX. WORKING PRESSURE : **250bar / 350 bar**
- WEIGHT : **0,75 Kg**

XY : SEE VS 80 N PAG. 1.05

SYMBOL



OIL VISCOSITY 46cSt AT 40° C

Z	PORT SIZE P-T
04	1/2" BSPP
05	3/4" BSPP

DIRECT ACTING GUIDED POPPET STYLE RELIEF VALVES

TYPE

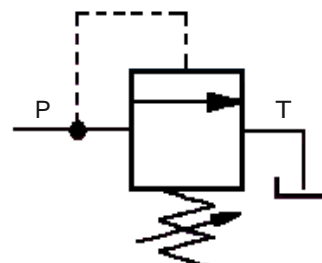
DBV 80 S

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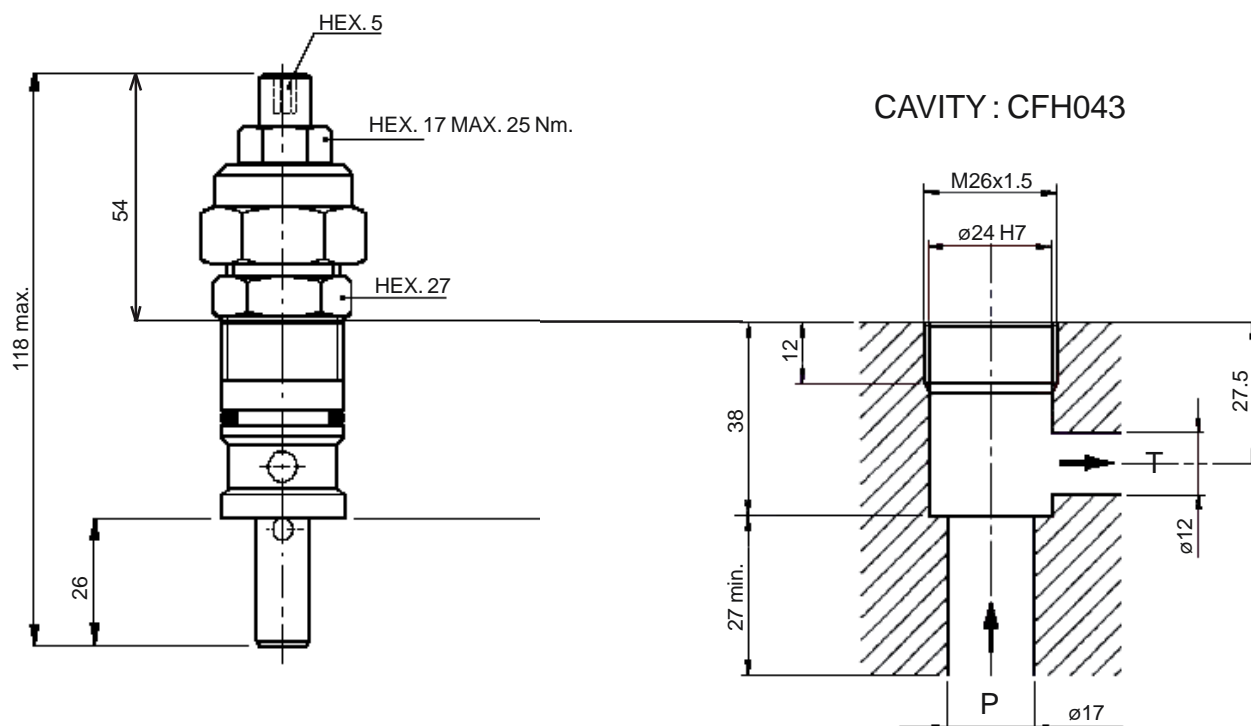
086F111139**XY**000

- QUICK RESPONSE
- LOW HYSTERESIS
- FILTRATION LEVEL : **50 μ m**
- INSTALLATION TORQUE : **98-108 Nm**
- FLOW MAX. : **80 L/min**
- MAX. WORKING PRESSURE: **350 bar**
- WEIGHT : **0,285 Kg**

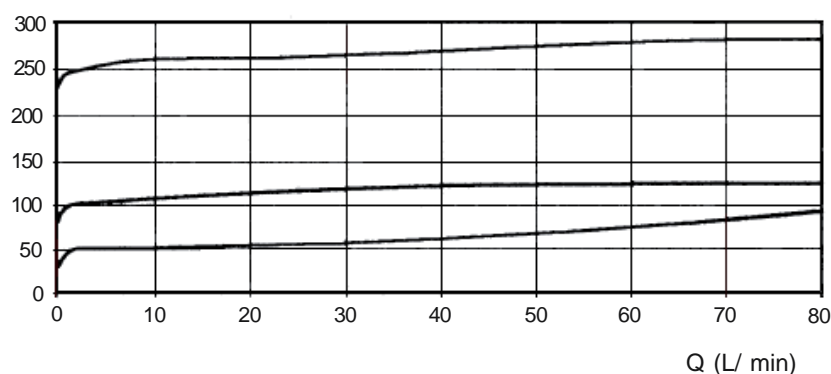
SYMBOL



CAVITY : CFH043



P (bar)



OIL VISCOSITY 46cSt AT 40° C

X ADJUSTMENTS

03

LEAKPROOF HEX.
SOCKET SCREW



04

HANDKNOB
AND LOCKNUT



Y SPRINGS

Y	ADJ. PRESS. RANGE BAR	COLOR
05	5-50 bar	White
10	30-100 bar	Yellow
20	80-280 bar	Green
35	120-350 bar	Black

DIRECT ACTING GUIDED POPPET STYLE RELIEF VALVES WITH BODY

TYPE

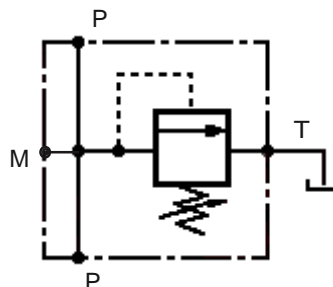
DBVC 80 S

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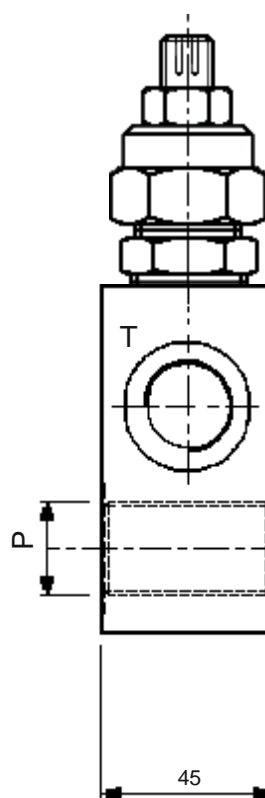
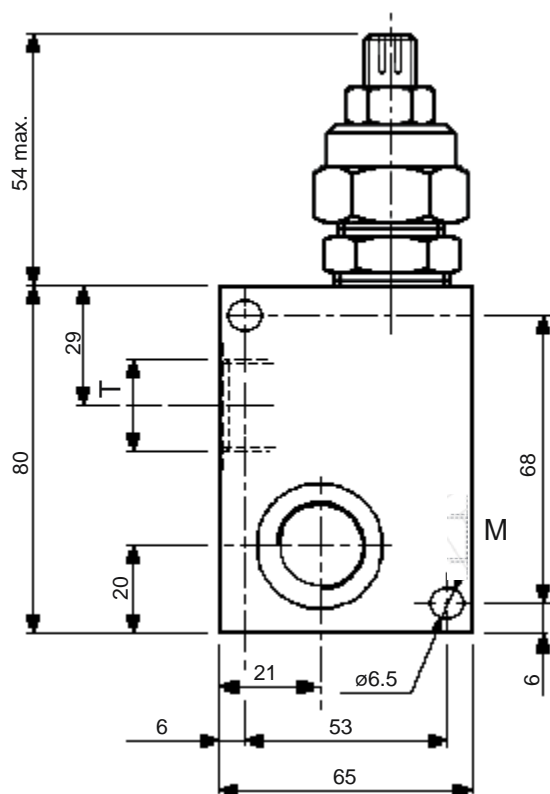
900F2101107**Z**₀**XY**₀₀

- MATERIAL OF BODIES : **HIGH QUALITY ALUMINIUM / STEEL**
- QUICK RESPONSE
- LOW HYSTERESIS
- FILTRATION LEVEL : **50 µm**
- FLOW MAX. : **80 L/min**
- MAX. WORKING PRESSURE: **250bar / 350bar**
- WEIGHT : **0,685 Kg**
- **M 1/4" BSPP**

SYMBOL



XY : SEE DBV 80 S PAGE 1.07



OIL VISCOSITY 46cSt AT 40° C

Z	PORT SIZE P-T
04	1/2" BSPP
05	3/4" BSPP

DIRECT ACTING GUIDED POPPET STYLE RELIEF VALVES

TYPE

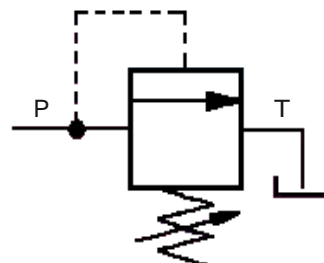
VS 30 N

CODE

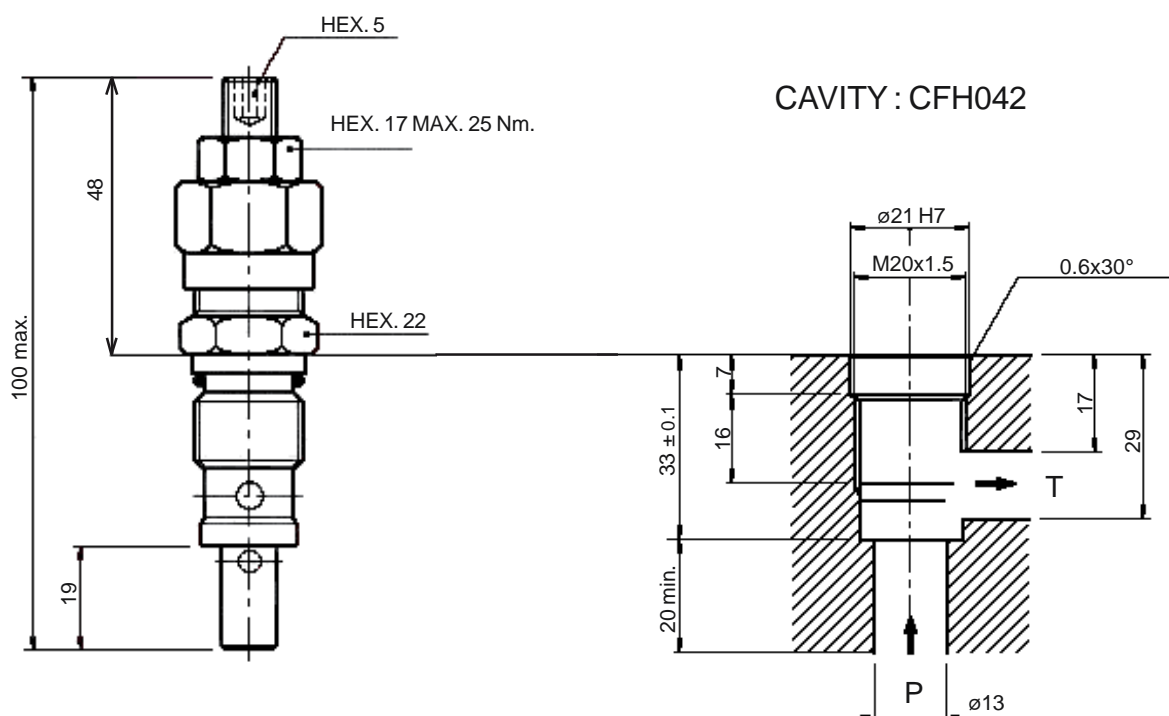
332041118X99Y

- QUICK RESPONSE
- LOW HYSTERESIS
- FILTRATION LEVEL : 50 μm
- INSTALLATION TORQUE : 54-60 Nm
- FLOW MAX. : 30 L/min
- MAX. WORKING PRESSURE: 350 bar
- WEIGHT : 0,17 Kg

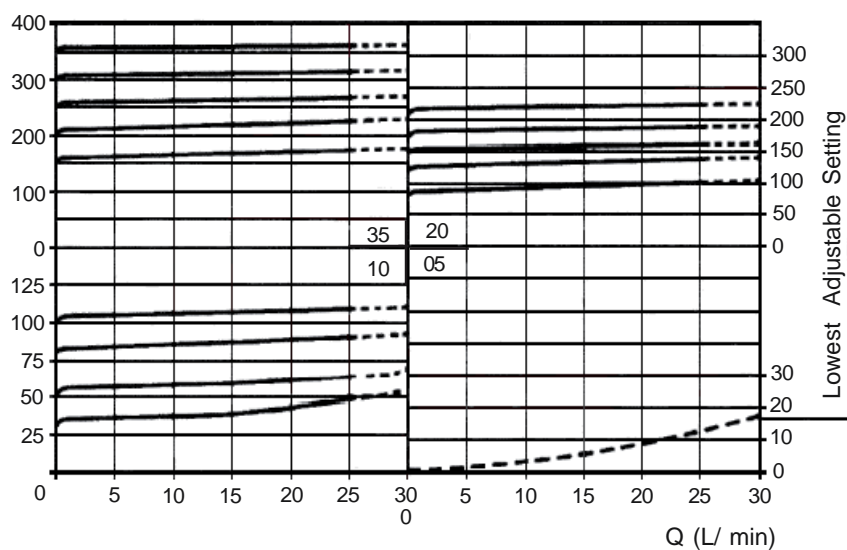
SYMBOL



CAVITY : CFH042



P (bar)



OIL VISCOSITY 46cSt AT 40° C

X

ADJUSTMENTS

03

LEAKPROOF HEX.
SOCKET SCREW



04

HANDKNOB
AND LOCKNUT



Y

SPRINGS

ADJ. PRESS.
RANGE BAR

COLOR

05

5-50 bar

Black

10

30-100 bar

Bleu

20

50-200 bar

Green

35

100-350 bar

Yellow

DIRECT ACTING GUIDED POPPET STYLE RELIEF VALVES WITH BODY

TYPE

VSC 30 N

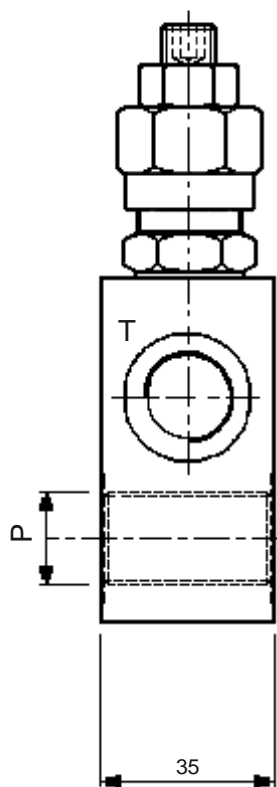
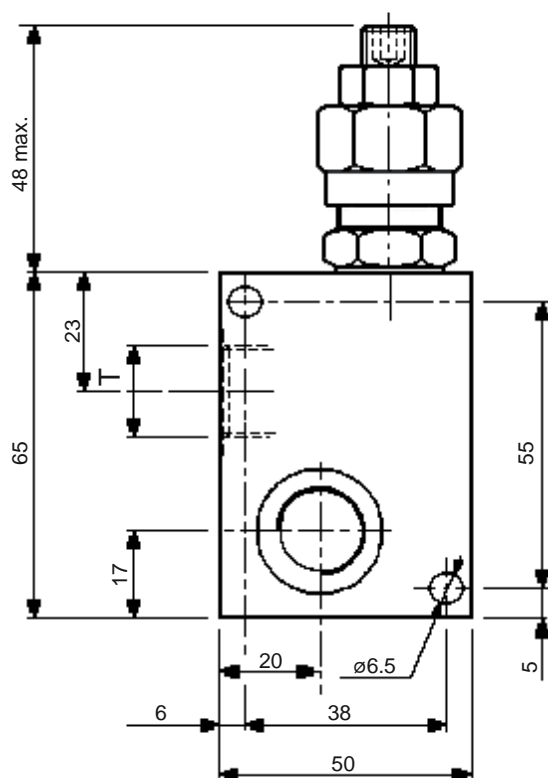
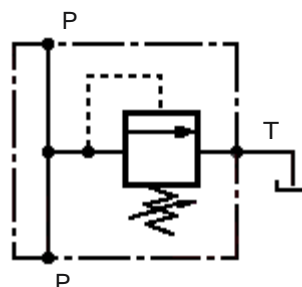
CODE

900F2101130ZXY00

- MATERIAL OF BODIES : **HIGH QUALITY ALUMINIUM / STEEL**
- QUICK RESPONSE
- LOW HYSTERESIS
- FILTRATION LEVEL : **50 μ m**
- FLOW MAX. : **30 L/min**
- MAX. WORKING PRESSURE: **250bar / 350 bar**
- WEIGHT : **0,41 Kg**

XY : SEE VS 30 N PAG. 1.09

SYMBOL



OIL VISCOSITY 46cSt AT 40° C

Z	PORT SIZE P-T
02	1/4" BSPP
03	3/8" BSPP
04	1/2" BSPP

DIRECT ACTING GUIDED POPPET STYLE RELIEF VALVES

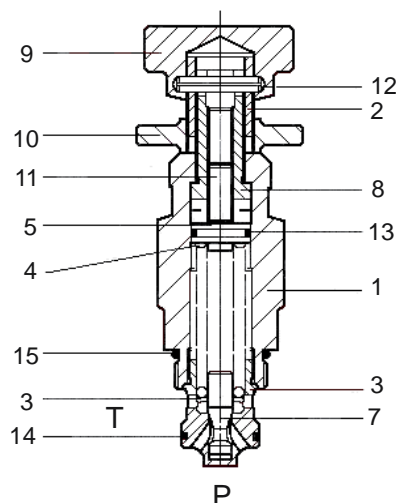
TYPE

DBV 26 V

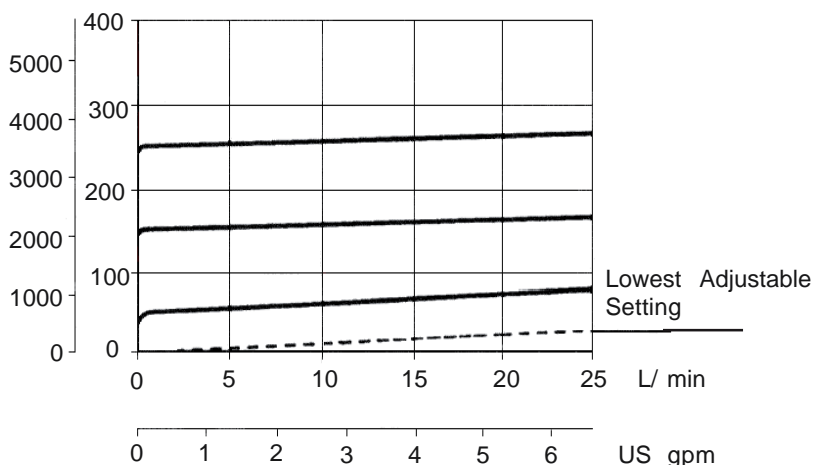
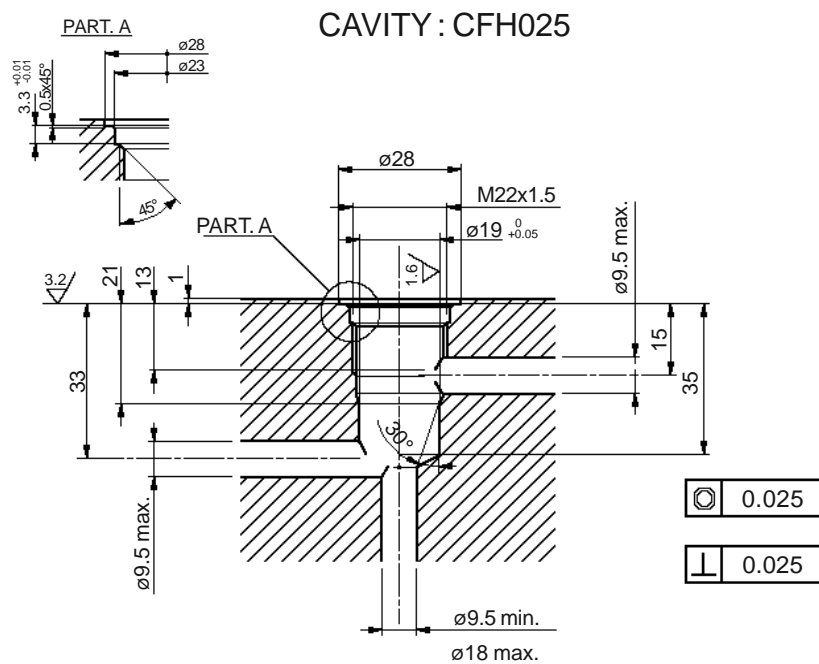
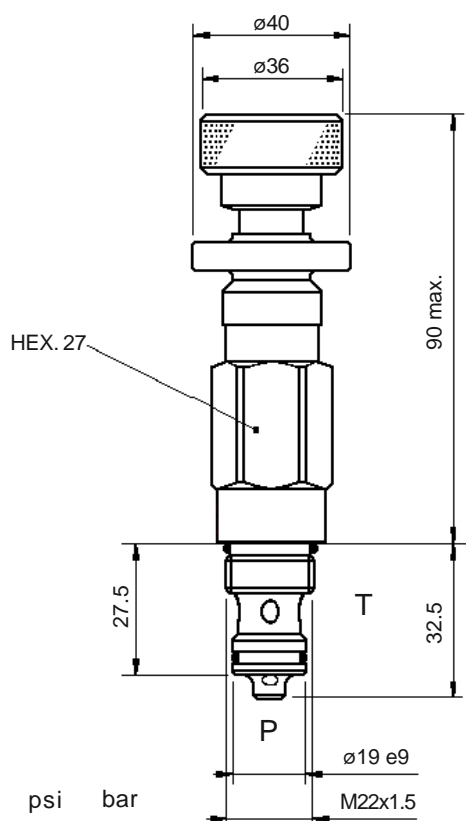
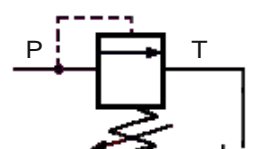
CODE

900F11111 YZ0000

- QUICK RESPONSE
- LOW HYSTERESIS
- FILTRATION LEVEL : **30 μ m**
- INSTALLATION TORQUE : **50-60 Nm**
- FLOW MAX. : **25 L/min**
- MAX. WORKING PRESSURE: **210 bar**
- WEIGHT : **0,130 Kg**



SYMBOL



OIL VISCOSITY 46cSt AT 40° C

Y	ADJUSTMENTS
1	HANDKNOB AND LOCKNUT 

Z	SPRINGS	
	ADJ. PRESS. RANGE BAR	COLOR
2	20-210 bar	Blue

DIRECT ACTING GUIDED POPPET STYLE RELIEF VALVES

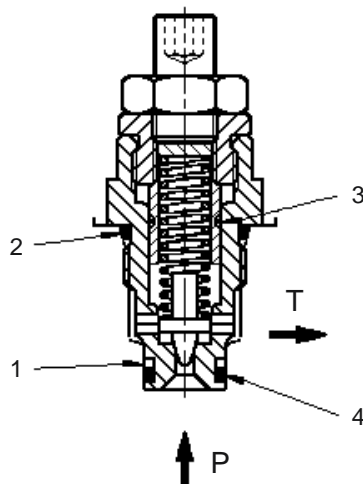
TYPE

DBV 10

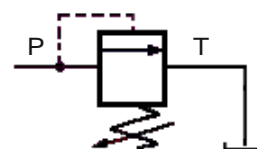
CODE

332F111107XY000

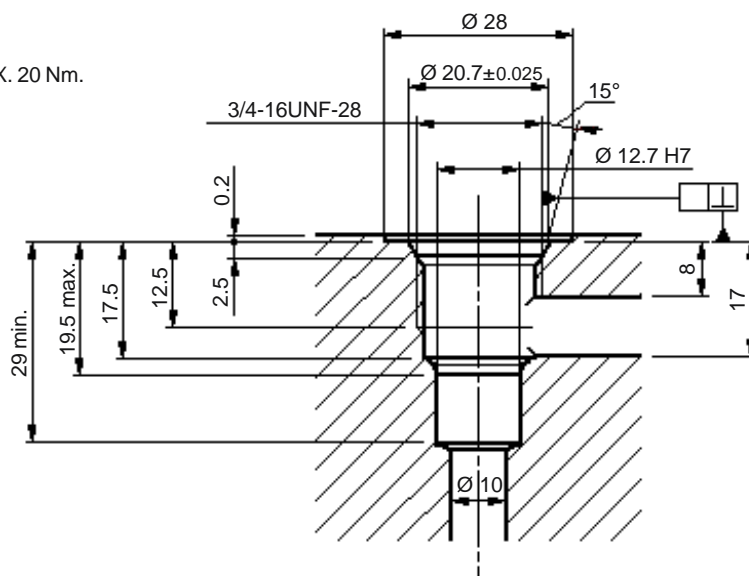
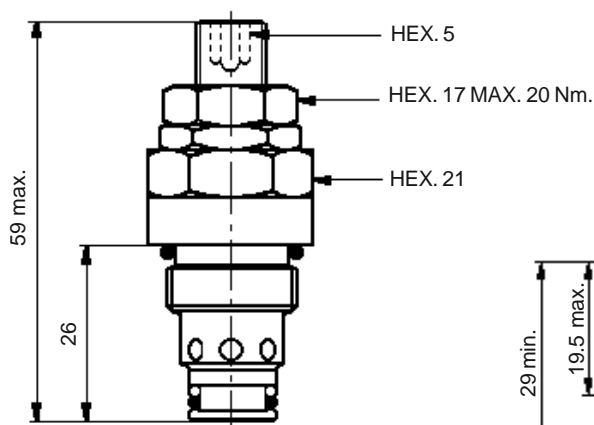
- QUICK RESPONSE
- LOW HYSTERESIS
- FILTRATION LEVEL : **50 μ m**
- INSTALLATION TORQUE : **30-35 Nm**
- FLOW MAX. : **10 L/min**
- MAX. WORKING PRESSURE: **270 bar**
- WEIGHT : **0,095 Kg**



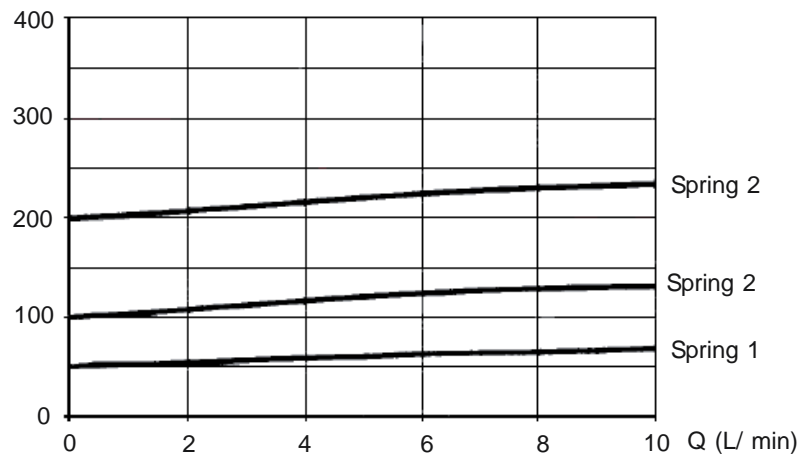
SYMBOL



CAVITY : CFH010



P (bar)



OIL VISCOSITY 46cSt AT 40° C

X

ADJUSTMENTS

0

LEAKPROOF HEX.
SOCKET SCREW



Y

SPRINGS

1

10-60 bar

2

40-270 bar

DIRECT ACTING GUIDED POPPET STYLE RELIEF VALVES

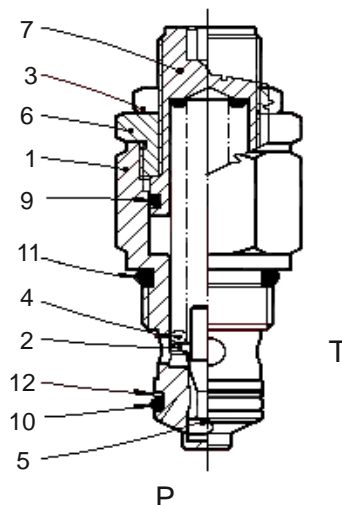
TYPE

DBV 25

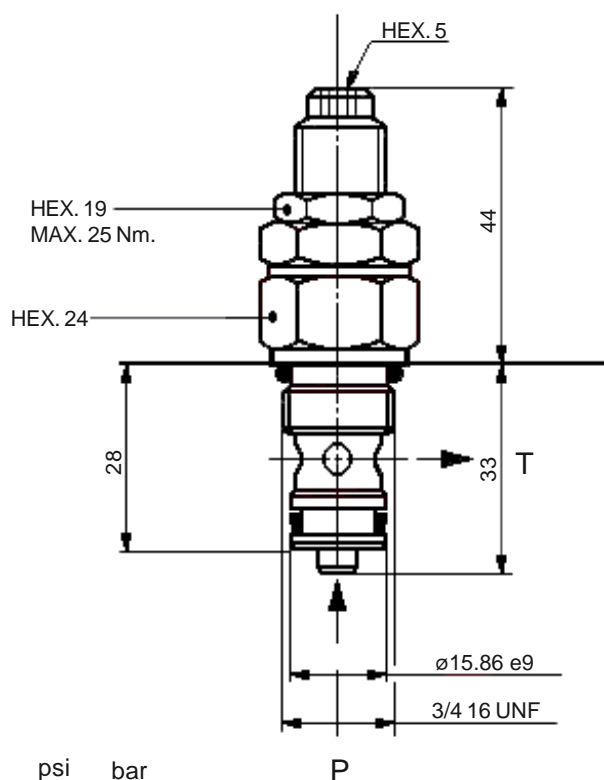
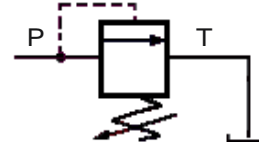
CODE

332F11118 YZ000

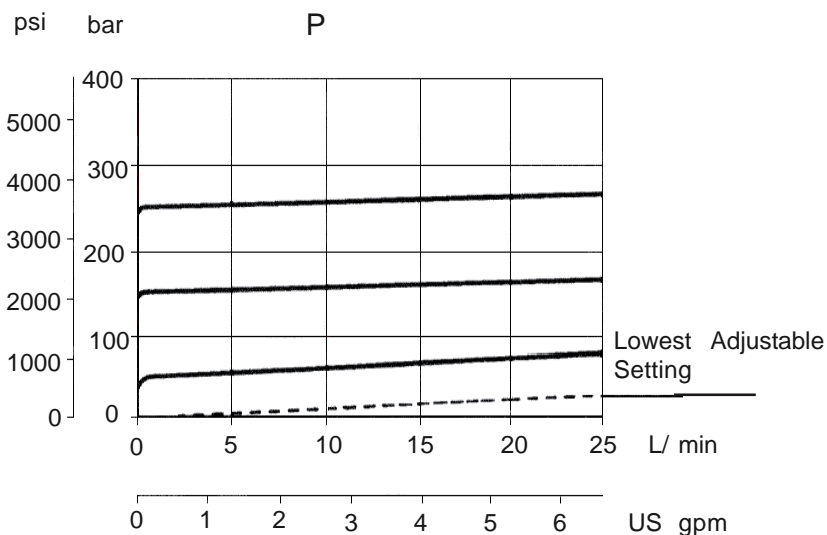
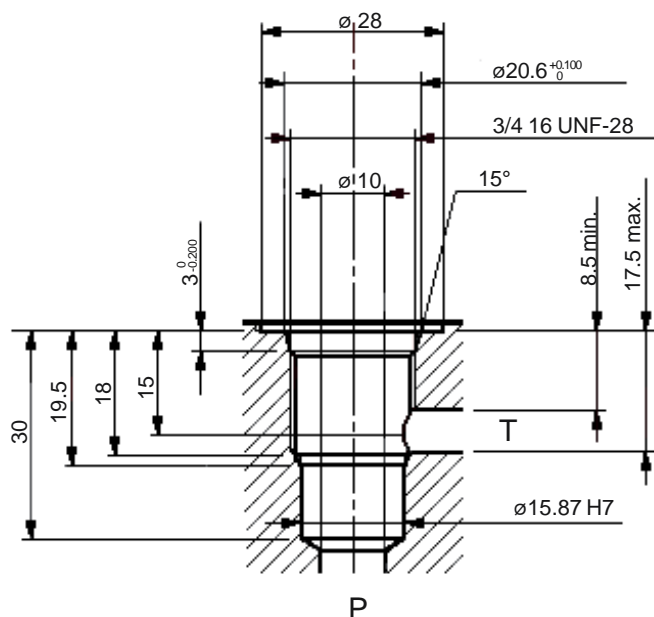
- QUICK RESPONSE
- LOW HYSTERESIS
- FILTRATION LEVEL: **50 µm**
- INSTALLATION TORQUE : **50-60 Nm**
- FLOW MAX. : **25 L/min**
- MAX. WORKING PRESSURE: **210 bar**
- WEIGHT : **0,130 Kg**



SYMBOL



CAVITY : CFH026



Y	ADJUSTMENTS	
0	LEAKPROOF HEX. SOCKET SCREW	

Z	SPRINGS	
	ADJ. PRESS. RANGE BAR	COLOR
2	20-210 bar	Blue

OIL VISCOSITY 46cSt AT 40° C

DIRECT ACTING GUIDED POPPET STYLE RELIEF VALVES

TYPE

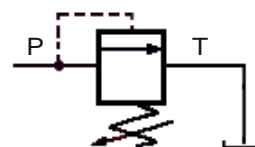
DBV 30

CODE

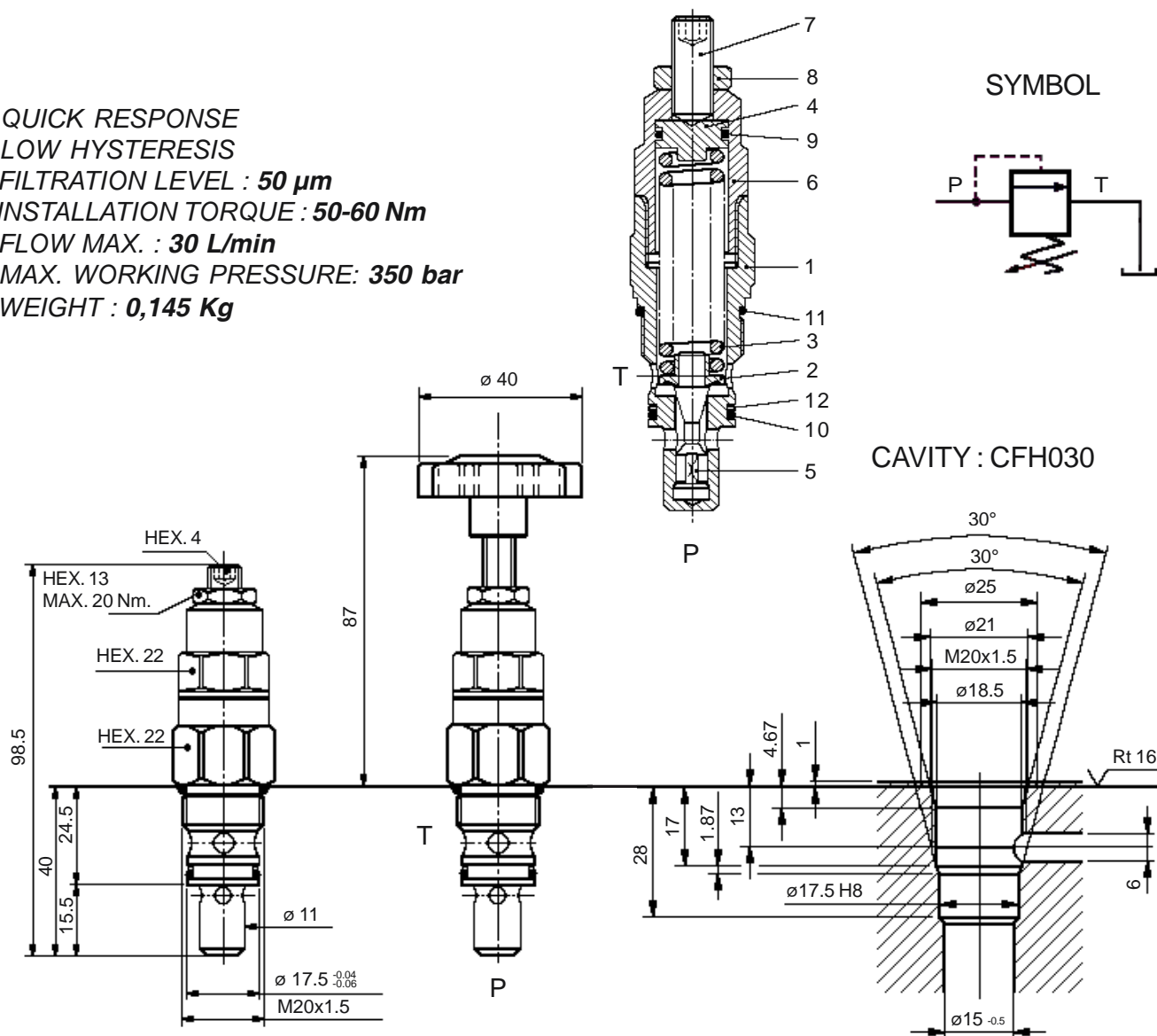
900F111119**XY**000

- QUICK RESPONSE
- LOW HYSTERESIS
- FILTRATION LEVEL : 50 μ m
- INSTALLATION TORQUE : 50-60 Nm
- FLOW MAX. : 30 L/min
- MAX. WORKING PRESSURE: 350 bar
- WEIGHT : 0,145 Kg

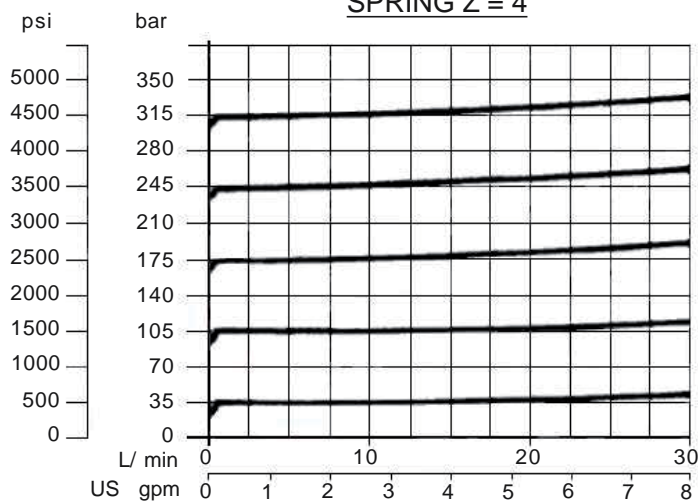
SYMBOL



CAVITY : CFH030



SPRING Z = 4



OLI VISCOSITY 46cSt AT 40° C

Y	ADJUSTMENTS
0	LEAKPROOF HEX. SOCKET SCREW
1	HANDKNOB AND LOCKNUT

Z	SPRINGS	
	ADJ. PRESS. RANGE BAR	COLOR
1	10-100 bar	Black
2	20-210 bar	Blue
3	30-250 bar	Green
4	30-350 bar	Yellow

**DUAL CROSS
OVER DIRECT ACTING
RELIEF VALVES**

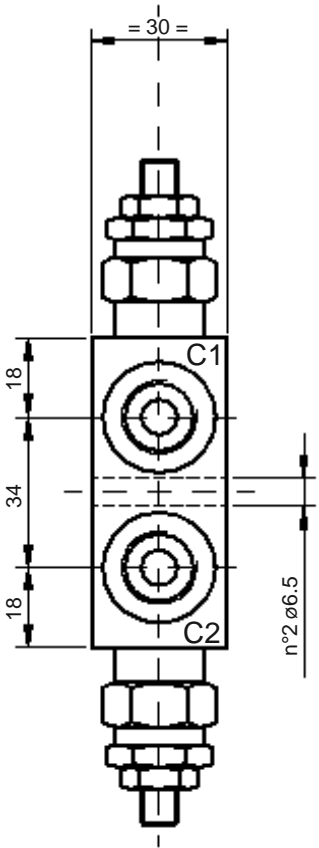
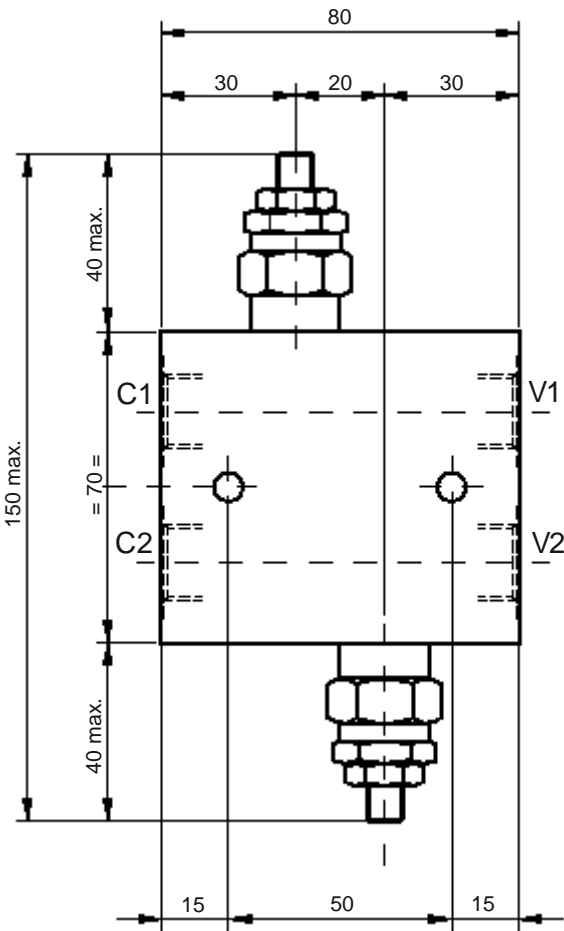
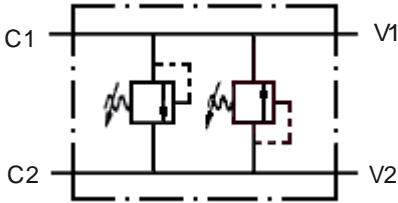
TYPE **VSDI L 35 T**

CODE **900F2109103Z0XY00**

- MATERIAL OF BODIES : **HIGH STRENGTH WROUGHT ALUMINIUM**
- QUICK RESPONSE
- LOW HYSTERESIS
- FILTRATION LEVEL : **50 µm**
- FLOW MAX. : **60 L/min**
- MAX. WORKING PRESSURE: **250 bar**
- WEIGHT : **0,7 Kg**

XY : SEE DBV 35 PAG. 1.15

SYMBOL

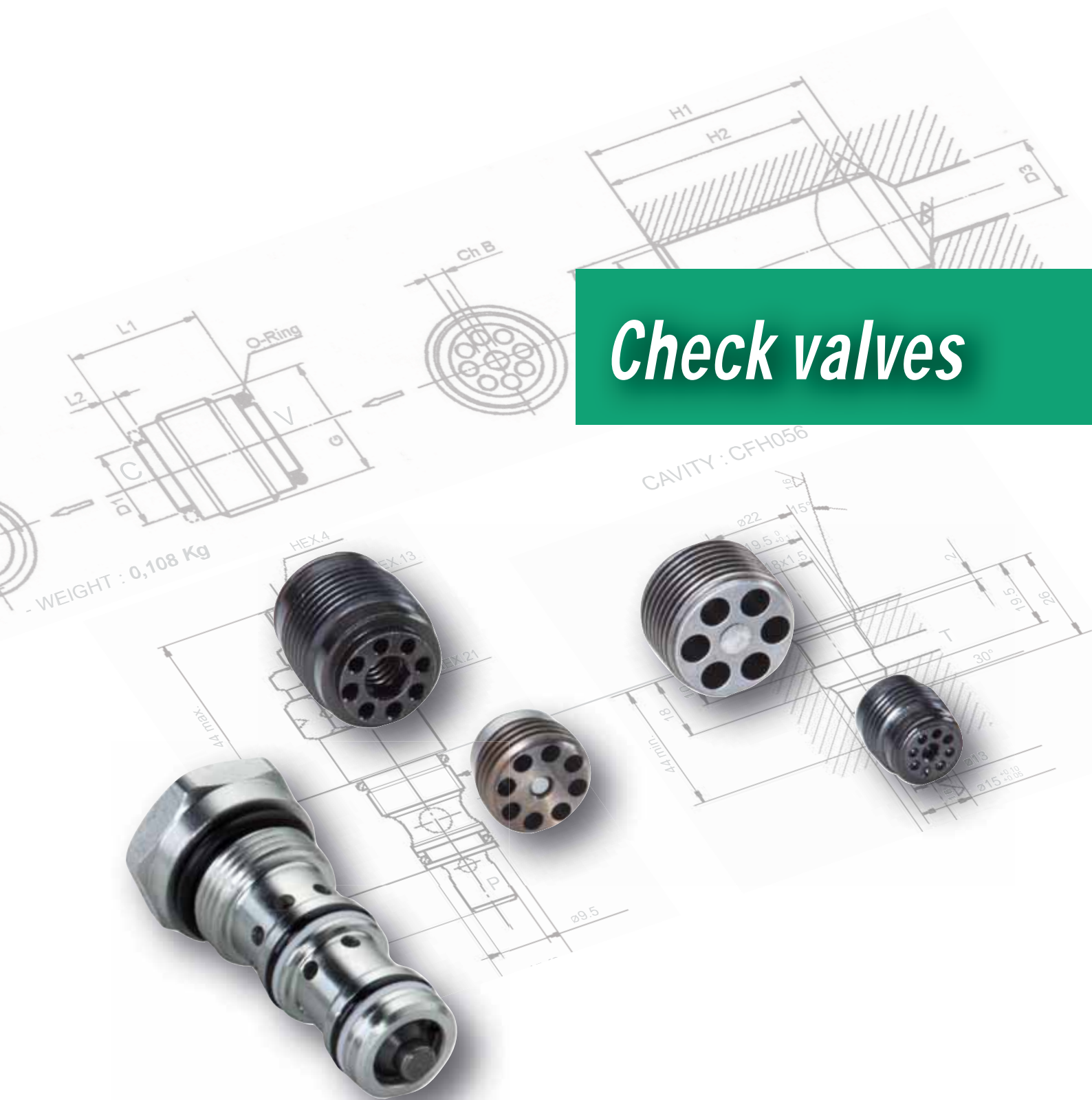


Z	PORT SIZE
02	1/4" BSPP
03	3/8" BSPP

OIL VISCOSITY 46cSt AT 40° C



Check valves



SINGLE PILOT OPERATED CHECK CARTRIDGE VALVES

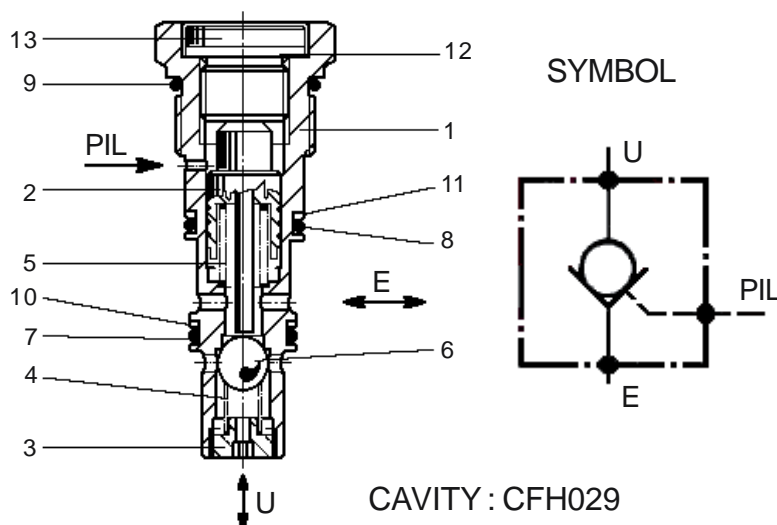
TYPE

VU-C-S030

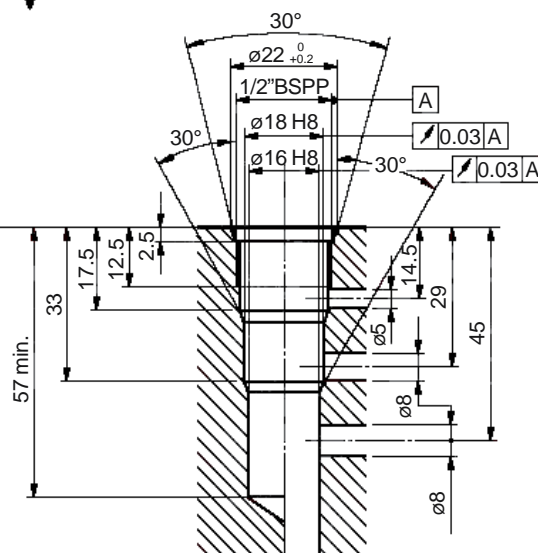
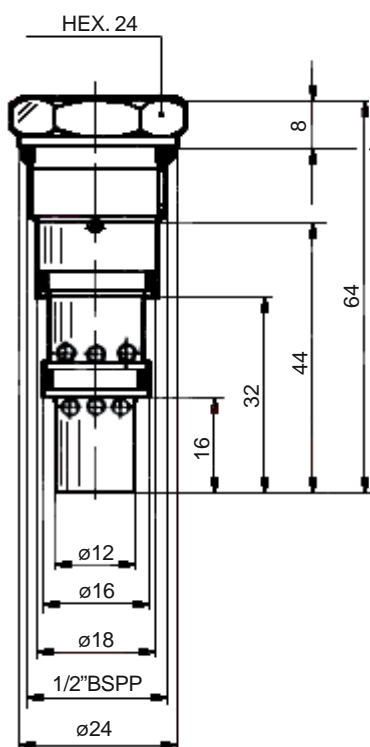
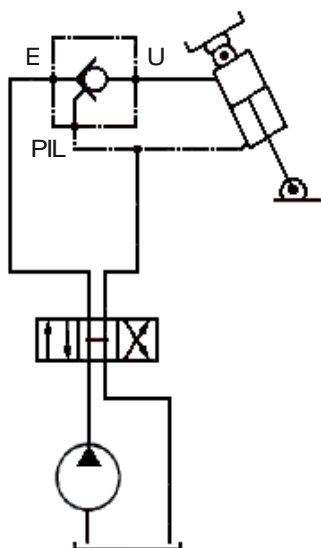
CODE

009F1230609YZ00

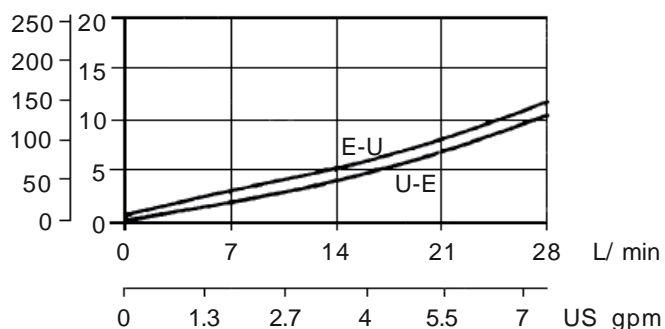
- FILTRATION LEVEL : 50 μ m
- INSTALLATION TORQUE : 40-50 Nm
- FLOW MAX. : 30 L/min
- MAX. WORKING PRESSURE: 350 bar
- WEIGHT : 0,1 Kg



MOUNTING EXAMPLE



ΔP
psi bar



OIL VISCOSITY 46cSt AT 40° C

Y	PILOT-RATIO
1	3.5 : 1

Z	SPRINGS
1	0.5 bar

SINGLE PILOT OPERATED CHECK CARTRIDGE VALVES

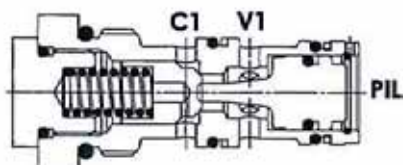
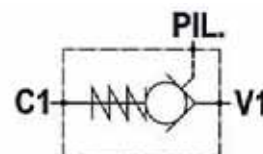
TYPE

FPS C-40

CODE

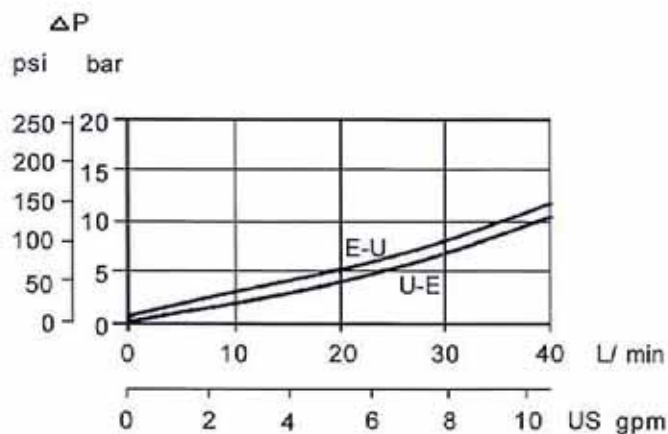
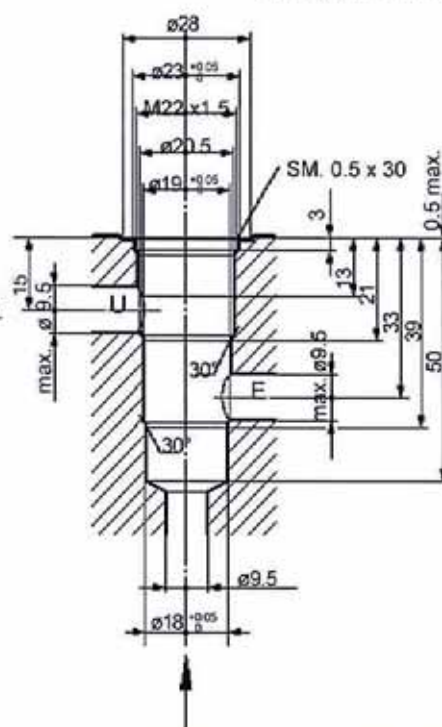
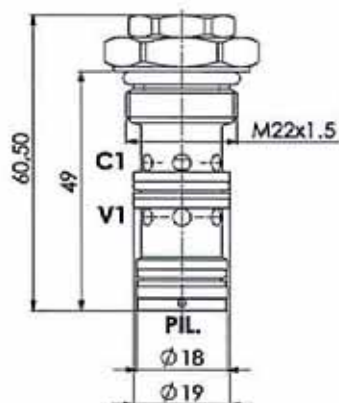
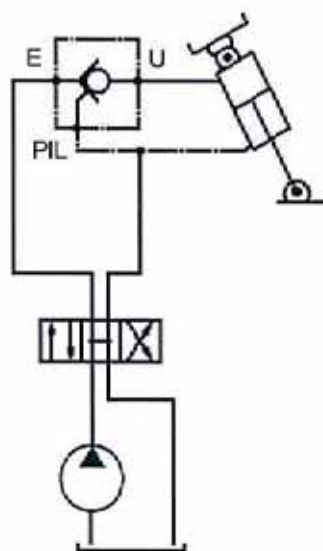
086FPSC40XY

- FILTRATION LEVEL : 50 μ m
- INSTALLATION TORQUE : 40-50 Nm
- FLOW MAX. : 40 L/min
- MAX. WORKING PRESSURE : 350 bar
- WEIGHT : 0,1 Kg
- PILOT RATIO : 1 : 4



CAVITA' : CFH004

MOUNTING EXAMPLE



X	SPRINGS
0,5	STANDARD
2,5	2,5 Bar
5	5 Bar
10	10 Bar
20	20 Bar

Y	SEAL
G	SEAL ON PILOT PISTON
	OMIT IF NOT REQUEST

*WITH THE SEAL ON THE PILOT PISTON, WE RECOMMEND TO ASSEMBLY AAT LEAST 2.5bar SPRING

SINGLE PILOT OPERATED CHECK VALVES

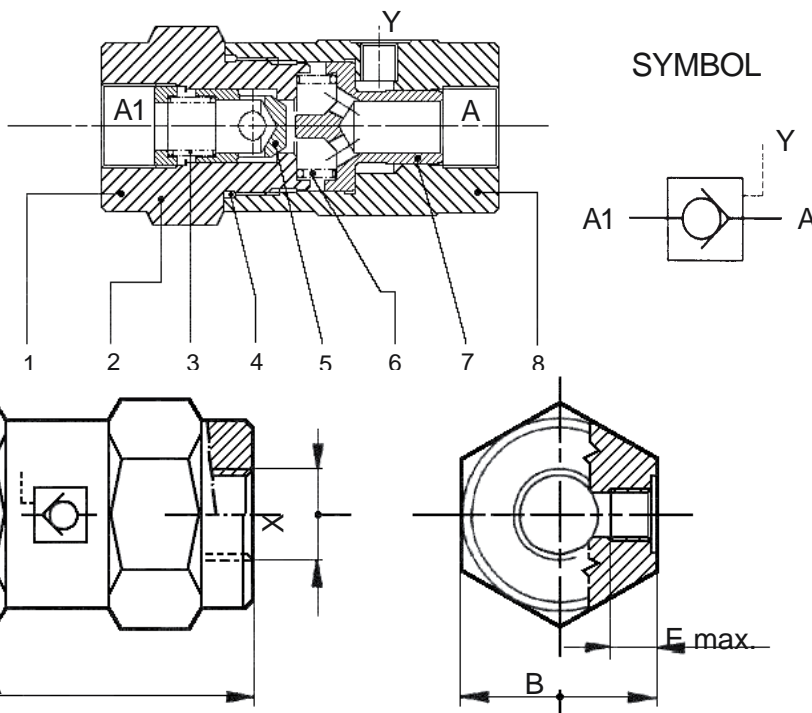
TYPE

FPS

CODE

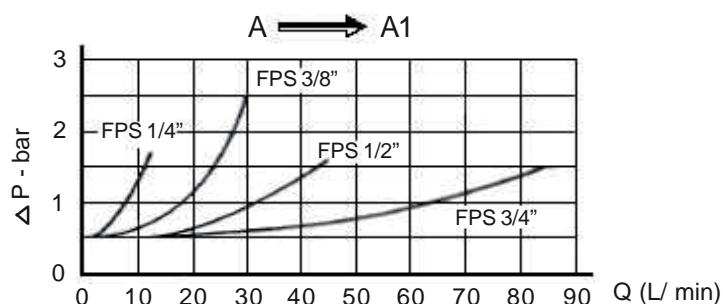
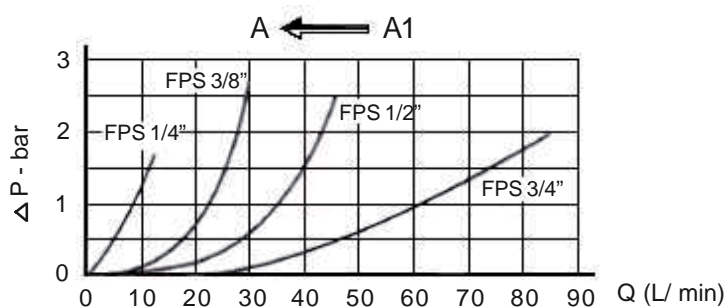
086FPSXZ0000

- LINE MOUNTING
- MATERIAL : **ZINC-PLATED STEEL**
- FLUID TEMPERATURE : **-20 +90°C**
- FILTRATION LEVEL : **50 µm**



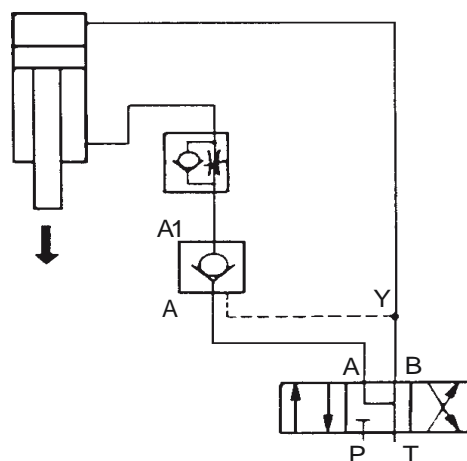
X	TYPE	F. MAX.	MAX. P.	A	B	X	Y	E	WEIGHT	PILOT-RATIO
		L/ min	bar	mm	mm	BSPP	BSPP	mm	Kg	
02	FPS 1/4"	12	350	103	36	1/4"	1/4"	11	0.65	1:9
03	FPS 3/8"	30	310	109	40	3/8"	1/4"	11.5	0.82	1:6
04	FPS 1/2"	45	310	120	42	1/2"	1/4"	11	0.96	1:4.5
05	FPS 3/4"	85	300	131	55	3/4"	1/4"	14	1.95	1:3.7

Z	CRACKING PRESSURE
01	0.5 bar
02	2.5 bar
03	5 bar
04	10 bar



OIL VISCOSITY 46cSt AT 40° C

MOUNTING EXAMPLE



PILOT OPERATED CHECK VALVES

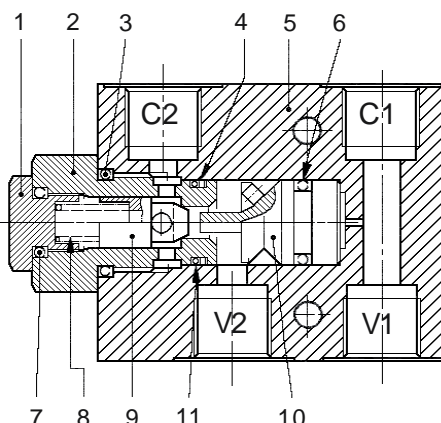
TYPE

FPSL

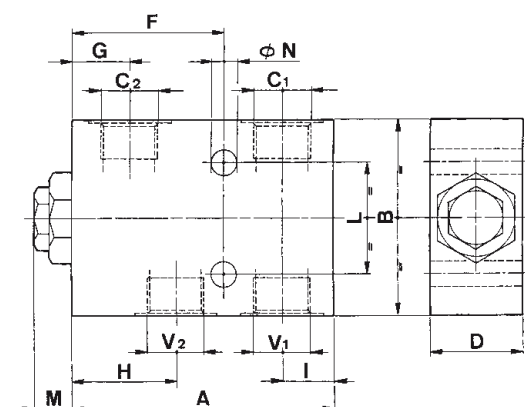
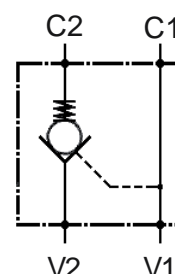
CODE

086FPSLXYZ000*

- LINE MOUNTING
- MATERIAL OF BODIES :
ALUMINIUM / STEEL (*-S)
- LEAK PROOF SEAT DESIGN
- FLUID TEMPERATURE : **-20 +90°C**
- FILTRATION LEVEL : **50 µm**



SYMBOL

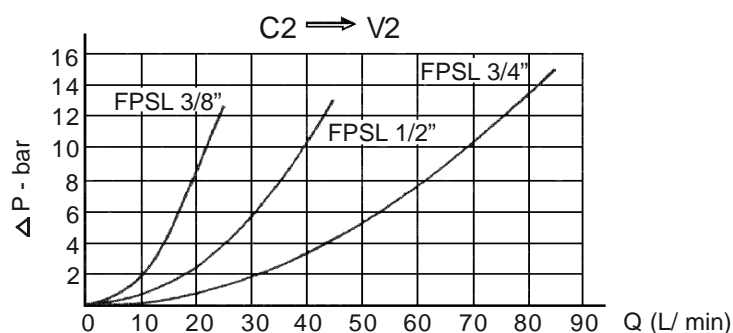
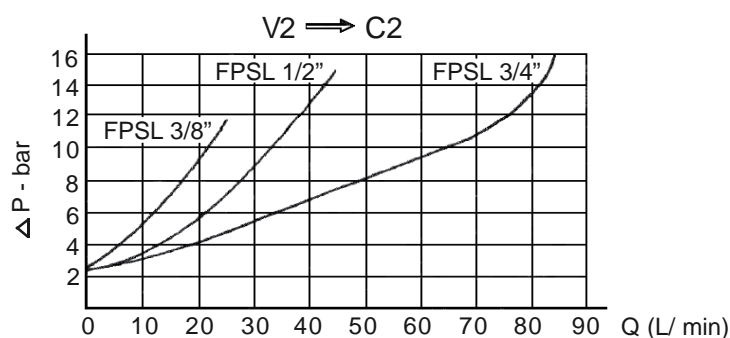


Z	O-RING ON PILOT PISTON
0	NO O-RING
1	WITH O-RING

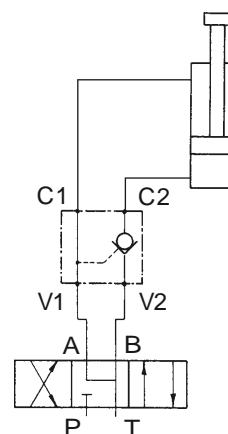
Y	CRACKING PRESSURE
1	2.5 bar
2	5 bar
3	10 bar

X	TYPE	F. MAX. L/ min	MAX. P. bar	V1-C1 V2-C2 BSPP	A mm	B mm	D mm	F mm	G mm	H mm	I mm	L mm	M mm	N mm	WEIGHT Kg	PILOT-RATIO
03	FPSL 3/8	30	250	3/8"	75	60	35	45	14	29	14	40	18.5	6.5	0.48	1:7
04	FPSL 1/2	45	250	1/2"	95	70	35	55	21	38	19	40	15	8.5	0.62	1:3.5
05	FPSL 3/4	85	250	3/4"	135	90	50	80	30	57.5	22	50	14	10.5	1.65	1:4

STEEL : P. MAX 350 bar



MOUNTING EXAMPLE



OIL VISCOSITY 46cSt AT 40° C

PILOT OPERATED CHECK VALVES

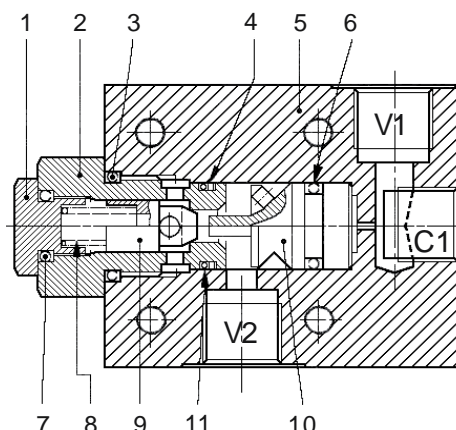
TYPE

FPSF

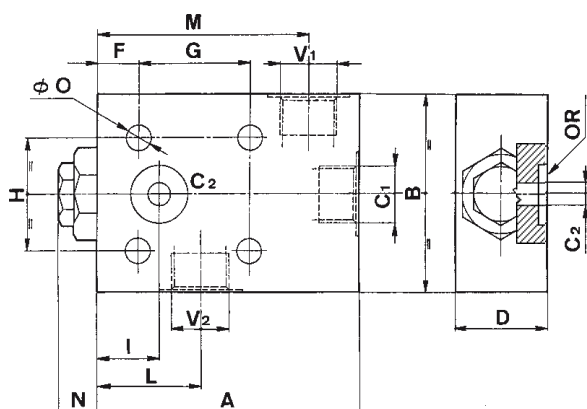
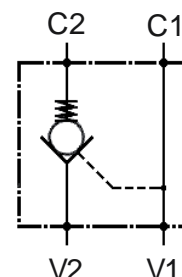
CODE

086FPSFXYZ000*

- FLANGEABLE MOUNTING
- MATERIAL OF BODIES :
ALUMINIUM / STEEL (*-S)
- LEAK PROOF SEAT DESIGN
- FLUID TEMPERATURE : **-20 +90°C**
- FILTRATION LEVEL : **50 µm**



SYMBOL

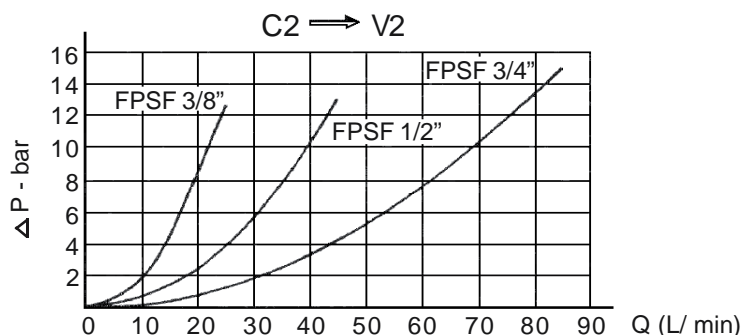
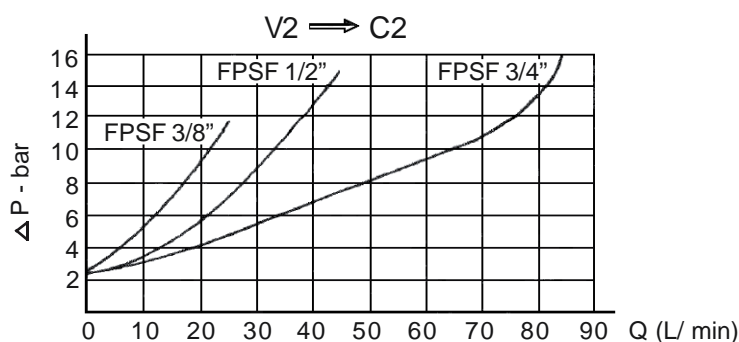


Z	O-RING ON PILOT PISTON
0	NO O-RING
1	WITH O-RING

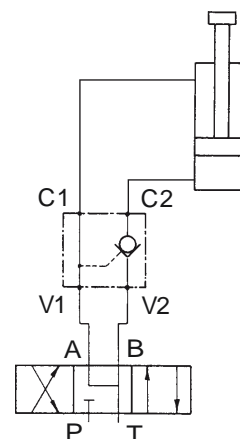
Y	CRACKING PRESSURE
1	2.5 bar
2	5 bar
3	10 bar

X	TYPE	F. MAX. L/ min	MAX. P. bar	V1-C1 V2 BSPP	C2 mm	A mm	B mm	D mm	F mm	G mm	H mm	I mm	L mm	M mm	N mm	O mm	WEIGHT Kg	PILOT-RATIO	SEAL O-RING
02	FPSF 3/8	30	250	3/8"	6	75	60	34	10	35	40	14	29	61	18.5	6.5	0.47	1:7	9.19x 2.62
03	FPSF 1/2	45	250	1/2"	8	95	70	34	15	40	40	22.5	38	76	15	8.5	0.6	1:3.5	15.54x 2.62
04	FPSF 3/4	85	250	3/4"	14	135	90	49	15	65	50	30	57.5	113	14	10.5	1.7	1:4	18.64x 3.53

STEEL P. MAX. 350 bar



MOUNTING EXAMPLE



OIL VISCOSITY 46cSt AT 40° C

DOUBLE PILOT OPERATED CHECK VALVES

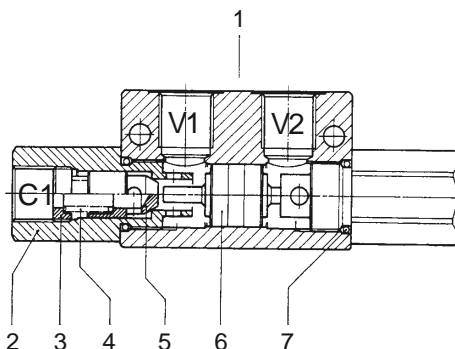
TYPE

FPD o FP1

CODE

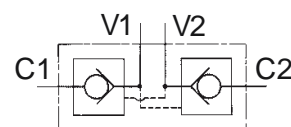
086FPDXYZ0000 086FP1XYZ0000

- LINE MOUNTING
- MATERIAL OF BODIES : ZINC-PLATED STEEL
- LEAK PROOF SEAT DESIGN
- FLUID TEMPERATURE : -20 +90°C
- FILTRATION LEVEL : 50 µm

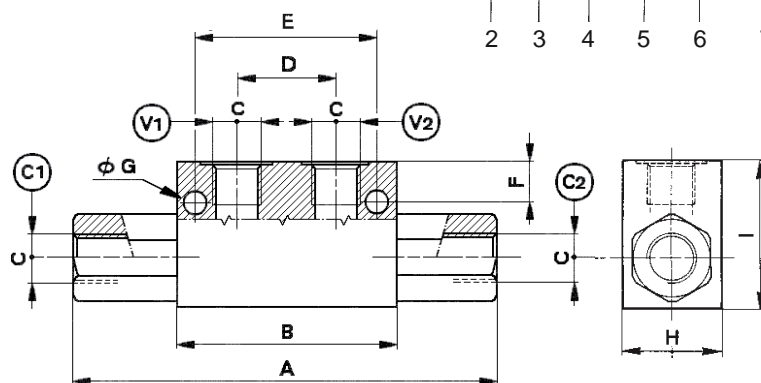
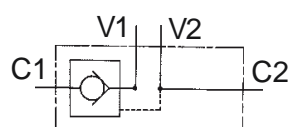


SYMBOL

TYPE FPD



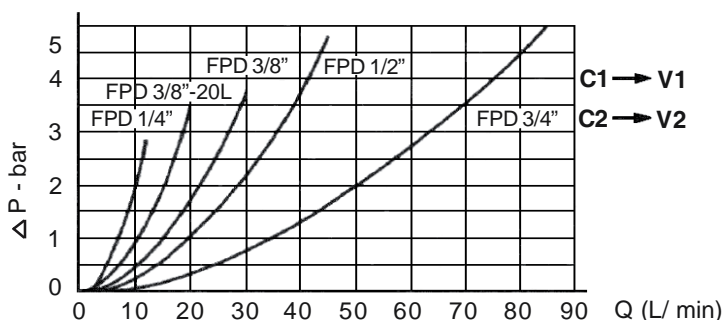
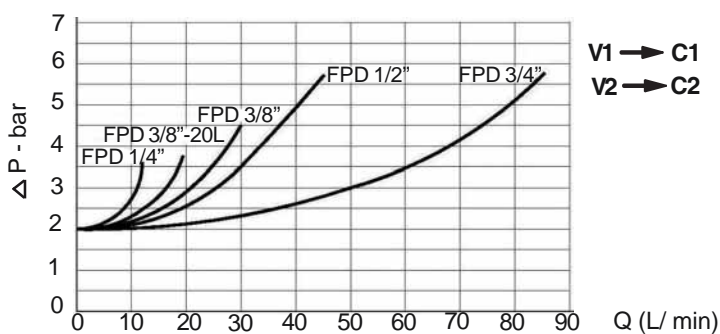
TYPE FP1



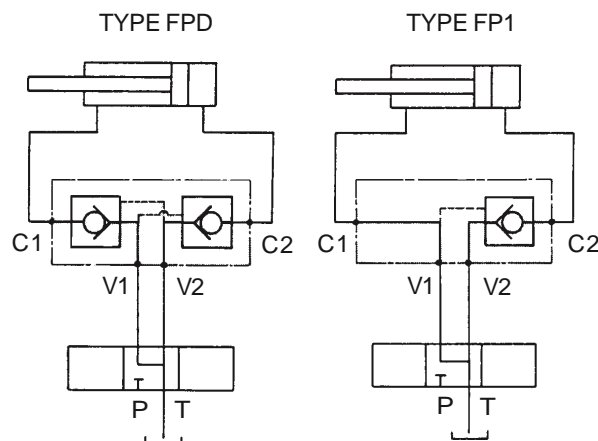
Z	O-RING ON PILOT PISTON
0	NO O-RING
1	WITH O-RING

X	TYPE	F. MAX.	MAX. P.	A	B	C	D	E	F	G	H	I	WEIGHT	PILOT-RATIO
		L/ min	bar	mm	mm	BSP	mm	mm	mm	mm	mm	mm	Kg	
02	FPD 1/4	12	350	126	63	1/4"	29	51	9	6.5	30	45	0.65	1:4
A3	FPD 3/8-20L	20	300	126	63	3/8"	29	-	-	-	30	45	0.62	1:4
03	FPD 3/8	30	300	158	90	3/8"	40	75	17	8	40	60	1.75	1:6
04	FPD 1/2	45	300	174	90	1/2"	40	75	17	8	40	60	1.78	1:4
05	FPD 3/4	85	280	212	120	3/4"	60	104	16	9	50	70	3.25	1:3.6

Y	CRACKING PRESSURE
1	2.5 bar
2	5 bar
3	10 bar



MOUNTING EXAMPLE



OIL VISCOSITY 46cSt AT 40°C

DOUBLE PILOT OPERATED CHECK VALVES

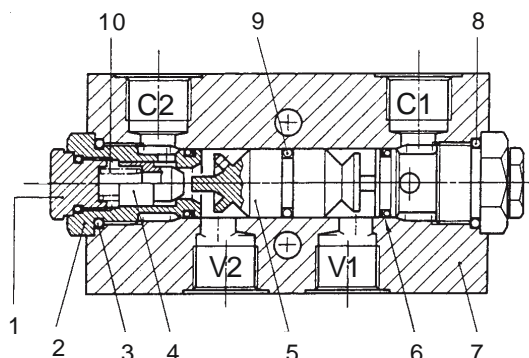
TYPE

FPDL

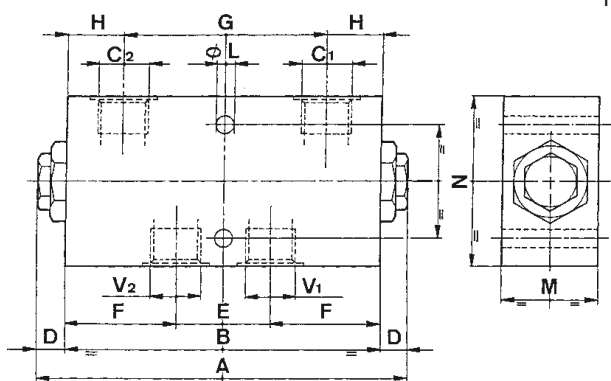
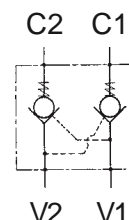
CODE

086FPDLXYZ000*

- LINE MOUNTING
- MATERIAL OF BODIES :
ALUMINIUM / STEEL (*-S)
- LEAK PROOF SEAT DESIGN
- FLUID TEMPERATURE : **-20 +90°C**
- FILTRATION LEVEL : **50 µm**



SYMBOL

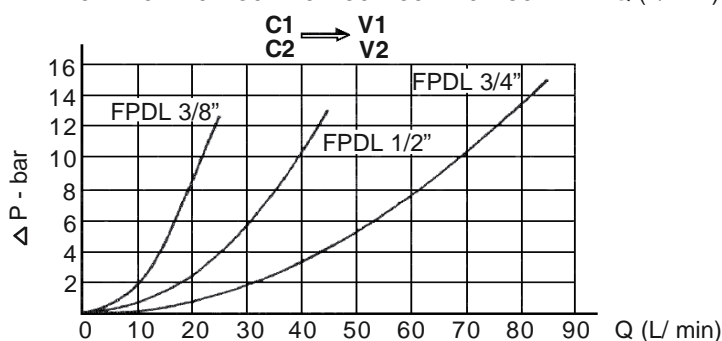
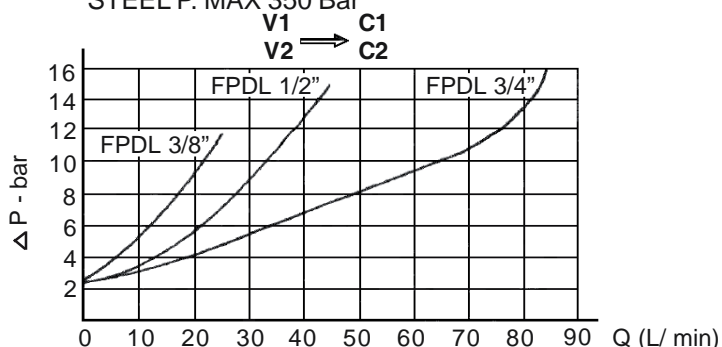


Z	O-RING ON PILOT PISTON
0	NO O-RING
1	WITH O-RING

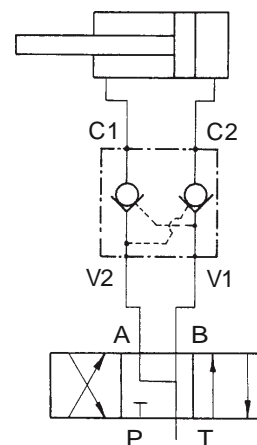
Y	CRACKING PRESSURE
1	2.5 bar
2	5 bar
3	10 bar

X	TYPE	Q. MAX. L/min	P. MAX. bar	V1-V2 C1-C2 BSPP	A mm	B mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M mm	N mm	WEIGHT Kg	PILOT-RATIO
02	FPDL 1/4	20	250	1/4"	126	90	18	34	25,5	60	12,5	40	8.5	30	60	0.625	1:4
03	FPDL 3/8	30	250	3/8"	127	90	18.5	32	29	62	14	40	6.5	35	60	0.65	1:7
04	FPDL 1/2	45	250	1/2"	138	110	14.5	34	38	68	21	40	8.5	35	70	0.75	1:3.5
05	FPDL 3/4	85	250	3/4"	193	165	14	50	57.5	107	29	60	8.5	50	90	2.3	1:4

STEEL P. MAX 350 Bar



MOUNTING EXAMPLE



OIL VISCOSITY 46cSt AT 40° C

DOUBLE PILOT OPERATED CHECK VALVES

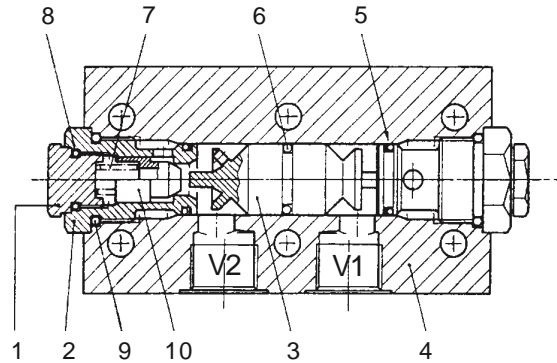
TYPE

FPDF

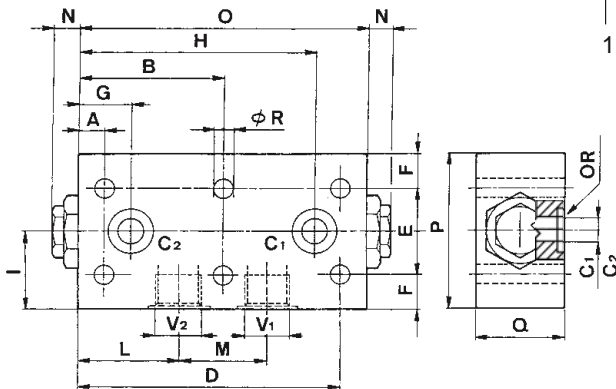
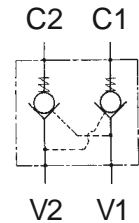
CODE

086FPDFXYZ000*

- FLANGEABLE MOUNTING
- MATERIAL OF BODIES :
ALUMINIUM / STEEL (*-S)
- FLUID TEMPERATURE : -20-90°C
- FILTRATION LEVEL : 50 µm



SYMBOL

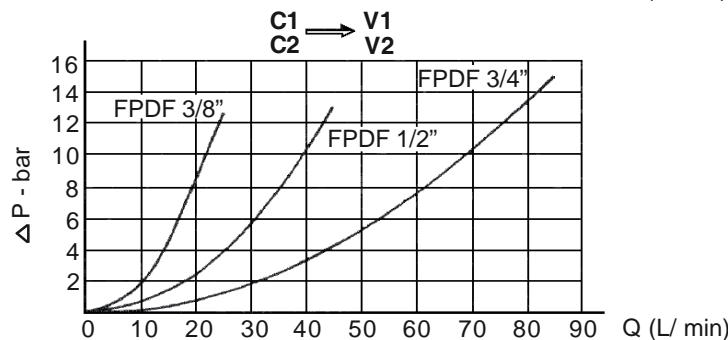
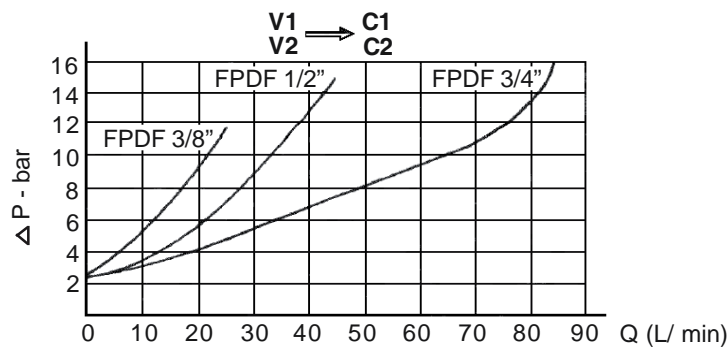


Z	O-RING ON PILOT PISTON
0	NO O-RING
1	WITH O-RING

Y	CRACKING PRESSURE
1	2.5 bar
2	5 bar
3	10 bar

X	TYPE	F. MAX.	MAX. P.	V1-V2	C1-C2	A	B	D	E	F	G	H	I	L	M	N	O	P	Q	R	WEIGHT
		L/min	bar	BSPP	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Kg
03	FPDF 3/8"	30	250	3/8"	6	10	45	80	40	10	14	76	30	29	32	18.5	90	60	34.5	6.5	0.65
04	FPDF 1/2"	45	250	1/2"	8	15	55	95	40	15	22.5	87.5	35	38	34	14.5	110	70	34.5	8.5	0.75
05	FPDF 3/4"	85	250	3/4"	14	15	82.5	150	50	20	30	135	45	57.5	50	14	165	90	49.5	10.5	2.3

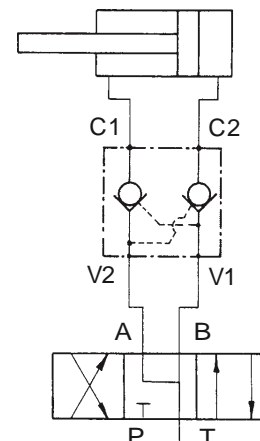
STEEL P. MAX. 350bar



OIL VISCOSITY 46cSt AT 40° C

X	PILOT-RATIO	O-RING
03	1:7	9.19x 2.62
04	1:3.5	15.54x 2.62
05	1:4	18.64x 3.53

MOUNTING EXAMPLE



DOUBLE PILOT OPERATED CHECK VALVES WITH BANJO-UNION

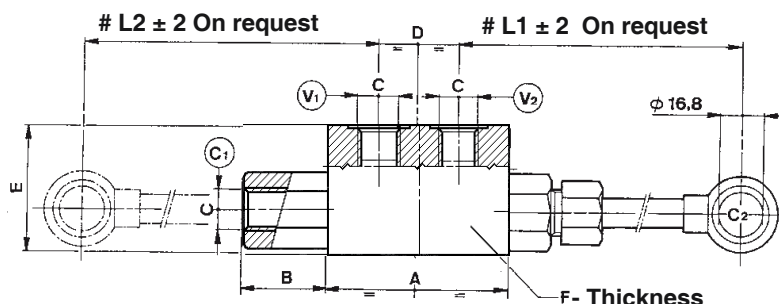
TYPE

FP1R o FP2R

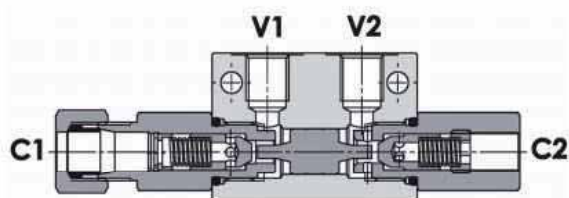
CODE

086FP1RHKXYZ 086FP2RHKXYZ

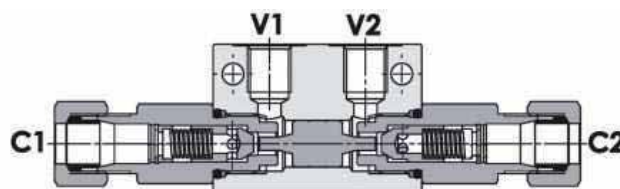
- LINE MOUNTING
- MATERIAL OF BODIES : ZINC-PLATED STEEL
- LEAK PROOF SEAT DESIGN
- FLUID TEMPERATURE : -20 +90°C
- FILTRATION LEVEL : 50 µm



FP1R

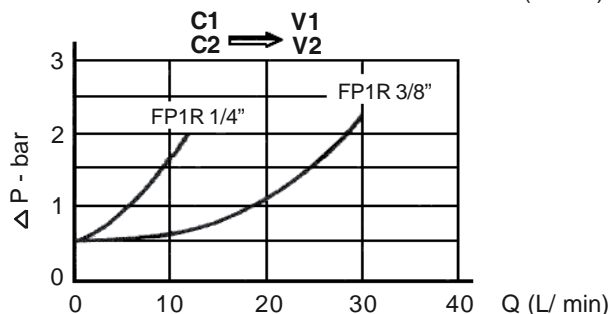
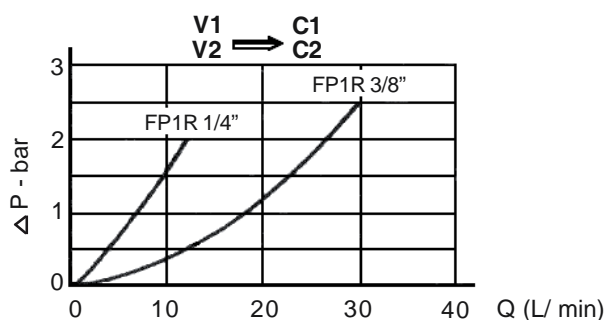


FP2R



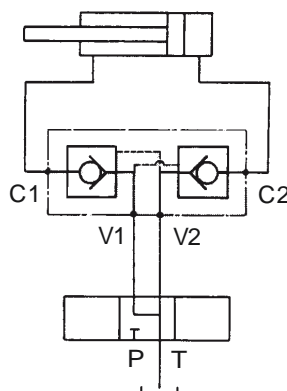
H	TYPE	F. MAX.	MAX. P.	A	B	C	D	E	F	L1 min	L2 min	PILOT-RATIO
		L/ min	bar	mm	mm	BSPP	mm	mm	mm	mm	mm	
02	FP1R 1/4	12	250	63	32	1/4"	29	45	30	80	-	1:4
A2	FP2R 1/4				-					80	80	
03	FP1R 3/8	20			32	3/8"				80	-	
A3	FP2R 3/8				-					80	80	

K	CRACKING PRESSURE
1	2.5 bar
2	5 bar
3	10 bar



OIL VISCOSITY 46cSt AT 40° C

MOUNTING EXAMPLE



X	O-RING ON PILOT PISTON
0	NO O-RING
1	WITGH O-RING

Y	L1
--	ON REQUEST mm

Z	L2
--	ON REQUEST mm

CARTRIDGE CHECK VALVES

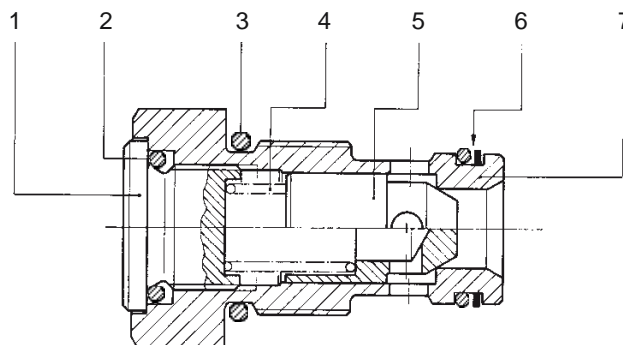
TYPE

FPRC

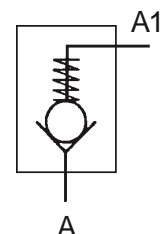
CODE

086FPRCXY0000

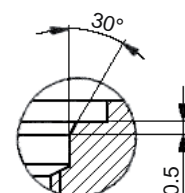
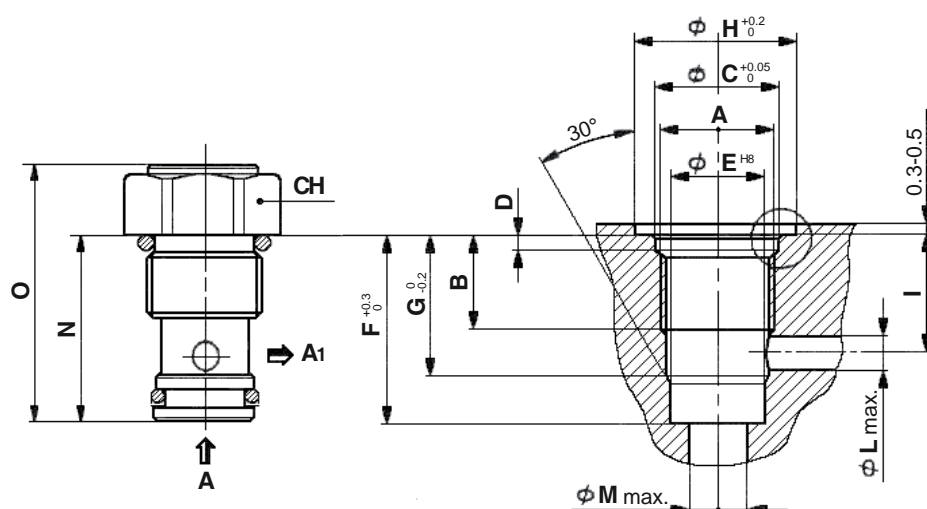
- FLUID TEMPERATURE : -20-90°C
- FILTRATION LEVEL : 50 µm



SYMBOL



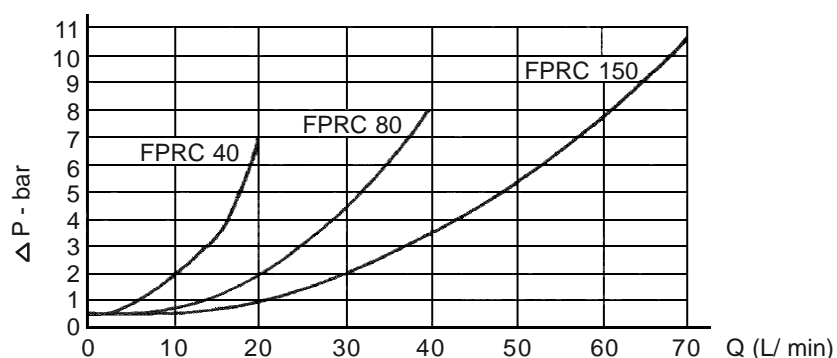
CAVITY



X	TYPE	Q. MAX.	P. MAX.	INSTALLATION TORQUE	N	O	CH	WEIGHT
		L/ min	bar					
01	FPRC 20	15	350	30-40	24.5	33,5	22	0.050
02	FPRC 40	20	350	50-60	25.5	44	27	0.090
03	FPRC 80	40	350	50-60	35.5	50	27	0.095
04	FPRC 150	70	300	110-120	43	60	38	0.230

Y	CRACKING PRESSURE
01	0.5 bar
02	2.5 bar
03	5 bar
04	10 bar

NOTE: FPRC20 ONLY WITH 2,5bar SPRING



OIL VISCOSITY 46cSt AT 40° C

CAVITY						
	A	B	C	D	E	F
FPRC 40	M22x1.5	14	23.5	3.5	19	27.5
FPRC 80	M22x1.5	18	23.5	3.5	19	36
FPRC 150	M33x2	20	34	3.5	28	43.5
	G	H	I	L	M	TYPE
FPRC 40	17	31	14	6.5	8	CFH054
FPRC 80	26.5	31	21	10	11	CFH025
FPRC 150	32	43	24.5	13.5	16	CFH055

CARTRIDGE CHECK VALVES

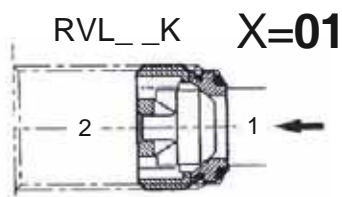
TYPE

RVL_K/K1

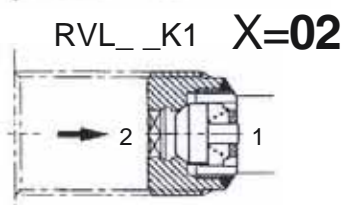
CODE

332FXY0100

- INSERT TYPE
- FILTRATION LEVEL : 50 µm
- MAX. PRESSURE : 350 bar

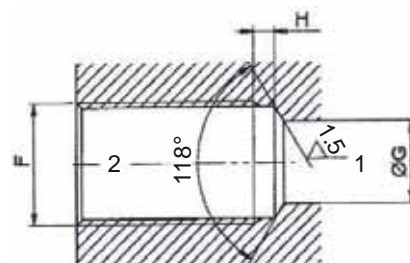
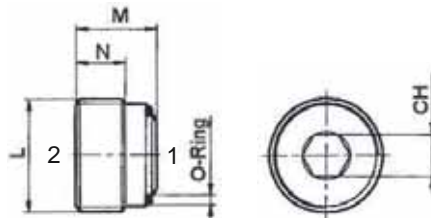
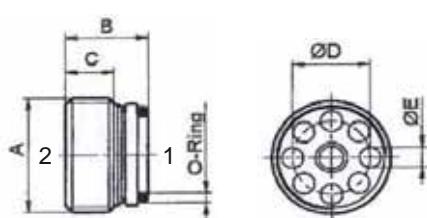


SYMBOL



RVL_K

RVL_K1



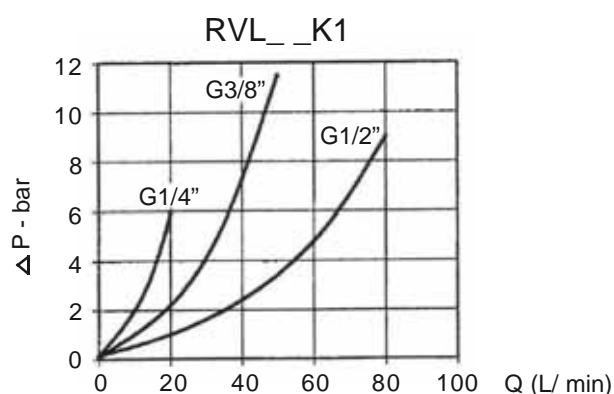
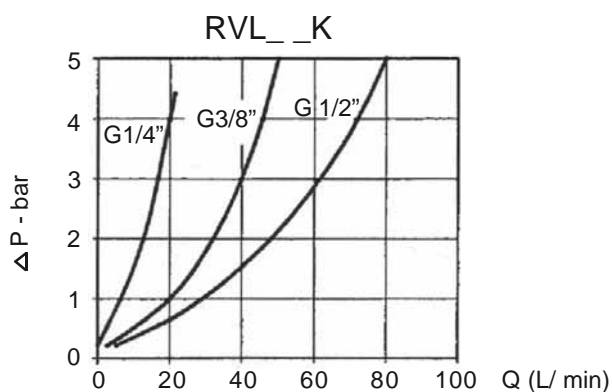
Y	TYPE	F. MAX.	INSTALLATION TORQUE	A	B	C	D	E	WEIGHT	O-RING
		L/min	Nm	mm	mm	mm	mm	mm	Kg	
02	RVL_K	20	6	1/4"	8.8	4.2	8.5	2.2	0.005	ø8.1x 1.6
03		50	6	3/8"	12	7	10.8	3	0.015	ø11x 1.5
04		80	10	1/2"	14.7	8	14.2	3.8	0.015	ø14x 1.78

F	G	H
mm	mm	mm
1/4"	7	3
3/8"	9	3
1/2"	12	3

Y	TYPE	F. MAX.	INSTALLATION TORQUE	L	M	N	CH	WEIGHT	O-RING
		L/min	Nm	mm	mm	mm	mm	Kg	
02	RVL_K1	20	6	1/4"	10	6	5	0.005	ø9x1
03		50	6	3/8"	11.5	7	6	0.015	ø11x 1.5
04		80	10	1/2"	13.5	8	8	0.015	ø14x 1.5

CRACKING PRESSURE

< 0.5 bar



OIL VISCOSITY 46cSt AT 40° C

CARTRIDGE CHECK VALVES

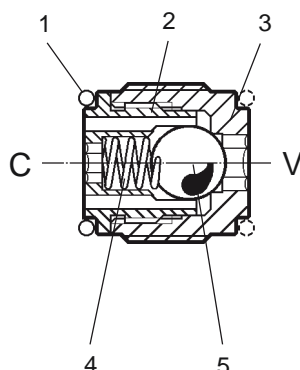
TYPE

RVL

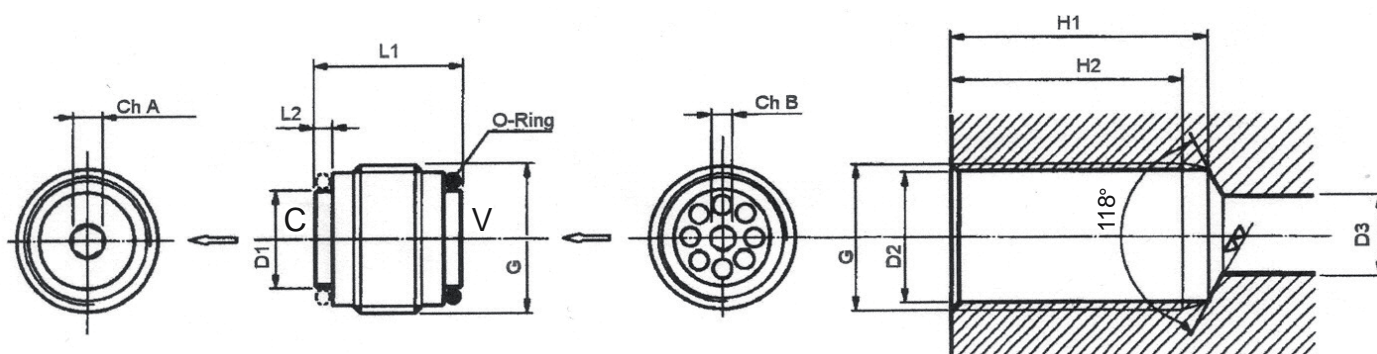
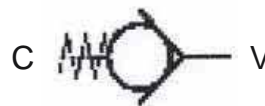
CODE

332F1222XY0100

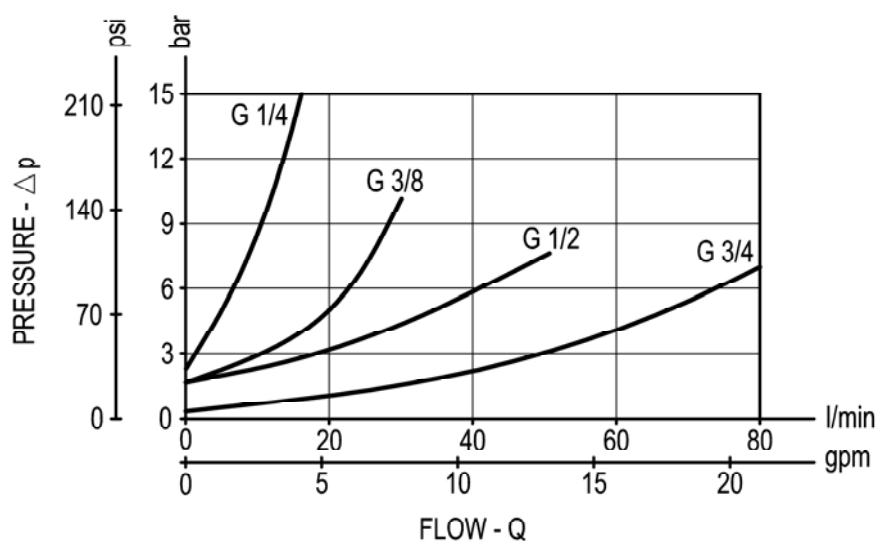
- INSERT TYPE
- FILTRATION LEVEL : 50 μ m
- MAX. WORKING PRESSURE : 350 bar



SYMBOL



X	Y	G	INSTALLATION TORQUE	L1	L2	H1	H2	CH. A	CH. B	D1	D2	D3	WEIGHT	O-RING	CRACKING PRESSURE
			Nm												
05	02	1/4" BSPP	6	17	1	28	25	3	3	9.2	11.8	8	0.015	1x9	2.3
07	03	3/8" BSPP	6	18.5	1.8	30	27	4	3	11	15.2	9	0.025	1.8x0.8	1.75
09	04	1/2" BSPP	10	22.5	1.8	36	32	6	5	14.2	19	12	0.040	1.8x14	1.75
11	05	3/4" BSPP	20	28.5	2.7	42	37	8	8	19	24.5	17	0.070	2.6x18.7	0.3



OIL VISCOSITY 46cSt AT 40° C

ONE DIRECTIONAL CHECK VALVES

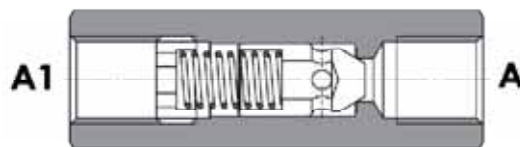
TYPE

FPR

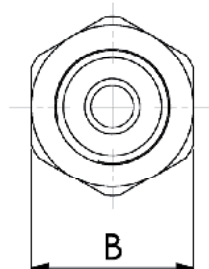
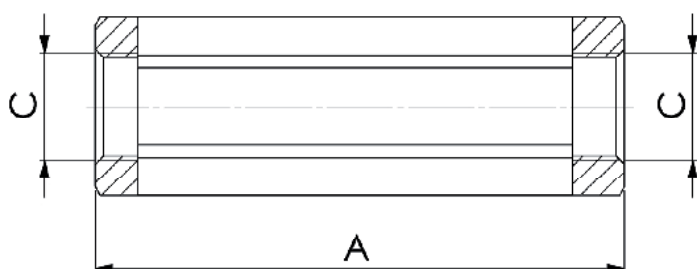
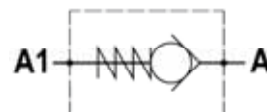
CODE

086FPRXZ0000

- LINE MOUNTING
- MATERIAL: **ZINC-PLATED STEEL**
- LEAK PROOF SEAT DESIGN
- FLUID TEMPERATURE : **-20 +90°C**
- FILTRATION LEVEL : **50 µm**

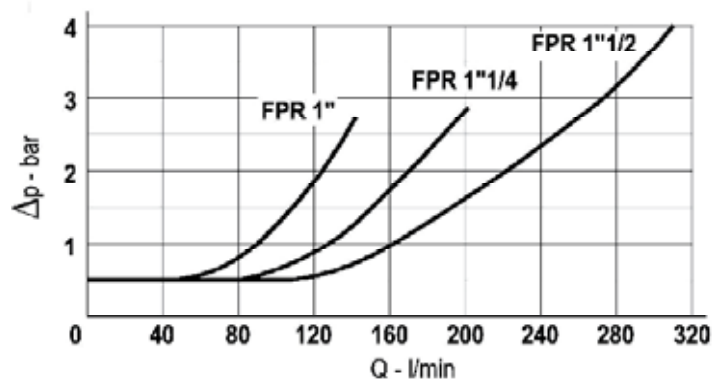
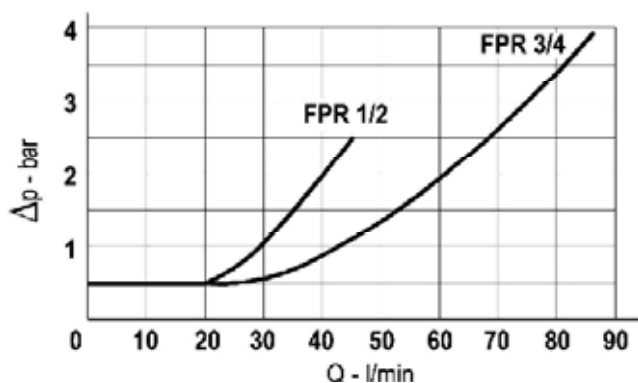
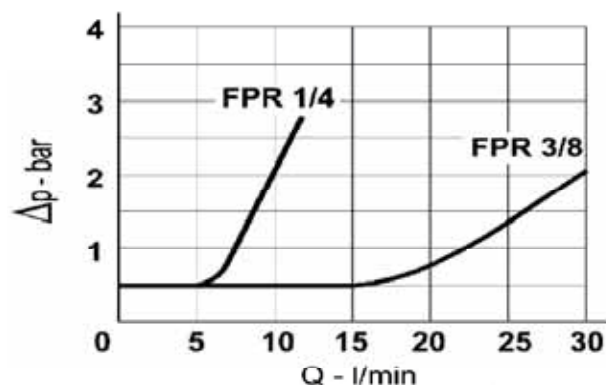


SYMBOL



Z	CRACKING PRESSURE
01	0.5 bar
02	2.5 bar
03	5 bar
04	10 bar

X	TYPE	F. MAX.	MAX. P.	A	B	C	WEIGHT
		L/ min	bar	mm	mm	BSPP	Kg
02	FPR 1/4	12	350	62	19	1/4"	0.10
03	FPR 3/8	30	350	68	24	3/8"	0.17
04	FPR 1/2	45	320	78	27	1/2"	0.22
05	FPR 3/4	85	300	88	36	3/4"	0.45
06	FPR 1	140	250	112	46	1"	0.97
07	FPR 1 1/4	200	250	145	55	1 1/4"	1.68
08	FPR 1 1/2	310	210	155	60	1 1/2"	2.1



OIL VISCOSITY 46cSt A 40° C

FIXED SETTING THROTTLE CHECK VALVES

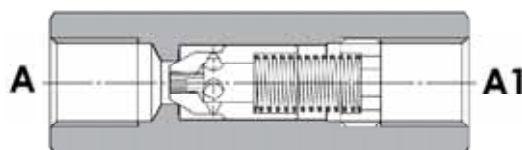
TYPE

FPRU

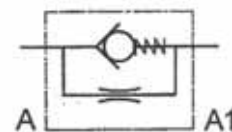
CODE

086FPRUXYZo

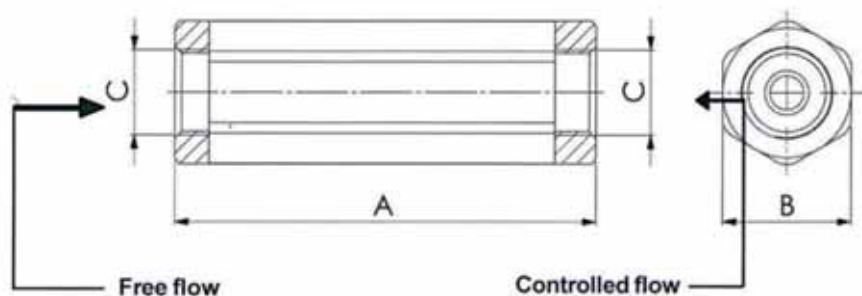
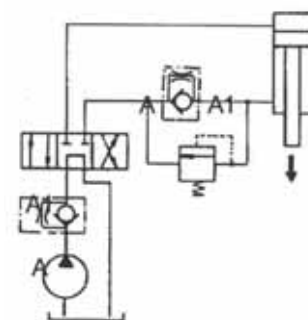
- LINE MOUNTING
- MATERIAL: **ZINC-PLATED STEEL**
- LEAK PROOF SEAT DESIGN
- FLUID TEMPERATURE : **-20 +90°C**
- FILTRATION LEVEL : **50 µm**



SYMBOL



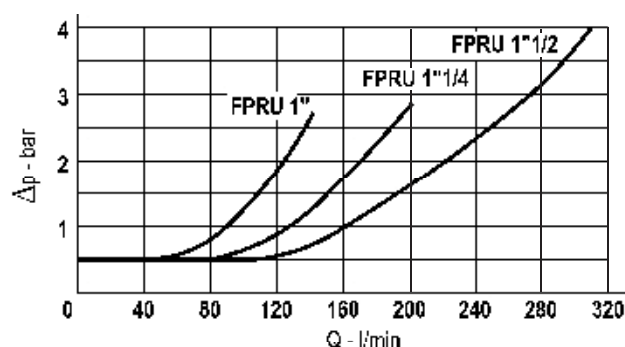
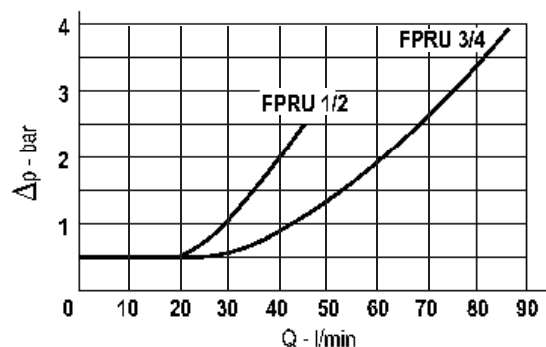
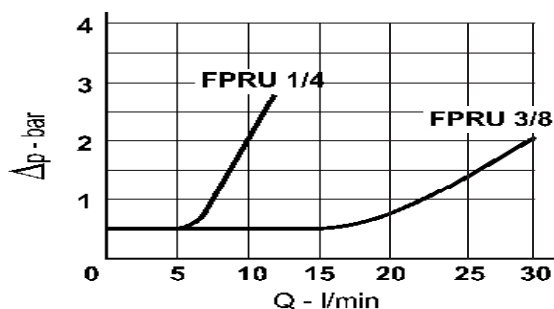
MOUNTING
EXAMPLE



X	TYPE	Q. MAX.	P. MAX.	A	B	C	WEIGHT
		L/ min	bar	mm	mm	BSP	Kg
02	FPRU 1/4	12	350	62	19	1/4"	0.10
03	FPRU 3/8	30	350	68	24	3/8"	0.17
04	FPRU 1/2	45	300	78	27	1/2"	0.22
05	FPRU 3/4	85	300	88	36	3/4"	0.45
06	FPRU 1	140	250	112	46	1"	0.97
07	FPRU 1 1/4	200	250	145	55	1 1/4"	1.68
08	FPRU 1 1/2	310	210	155	60	1 1/2"	2.1

Y	
THROTTLING HOLE	
ØMIN	ØMAX
0.60	2.0
0.60	3.50
0.60	4.00
0.60	4.00
ON REQUEST	

Z	CRACKING PRESSURE
01	0.5 bar
02	2.5 bar
03	5 bar
04	10 bar



OIL VISCOSITY 46cSt A 40° C

FIXED SETTING THROTTLE CHECK VALVES

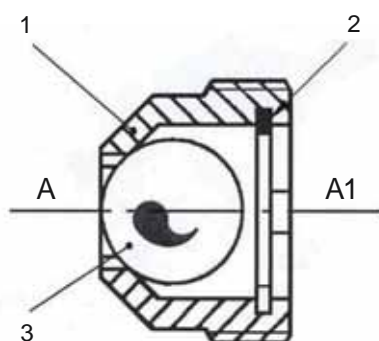
TYPE

VS

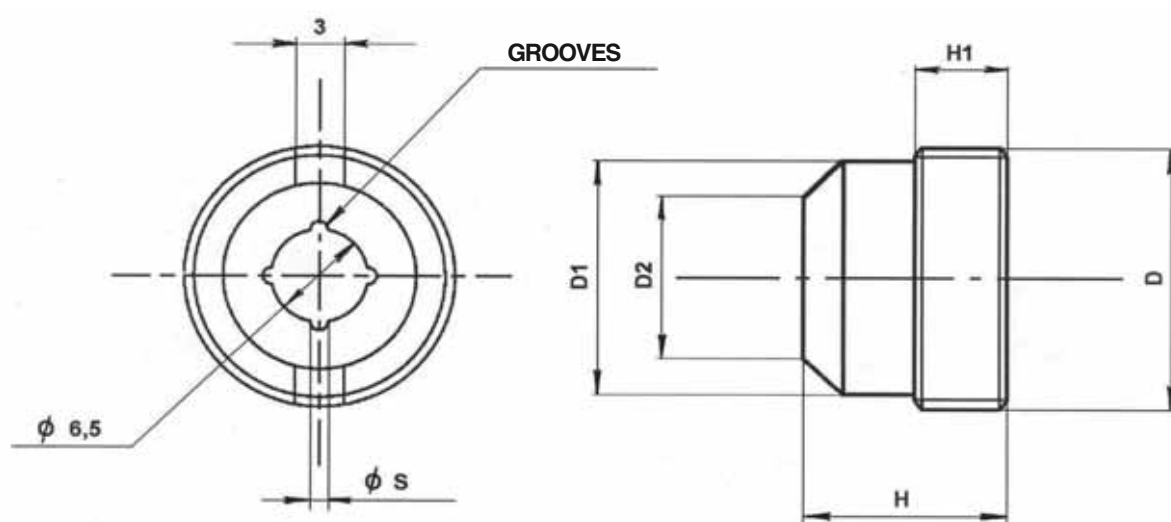
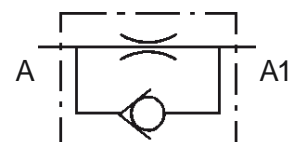
CODE

185F3302101XYZ00

- INSERT-TYPE
- FLUID TEMPERATURE : -20 +90°C
- FILTRATION LEVEL : 50 µm



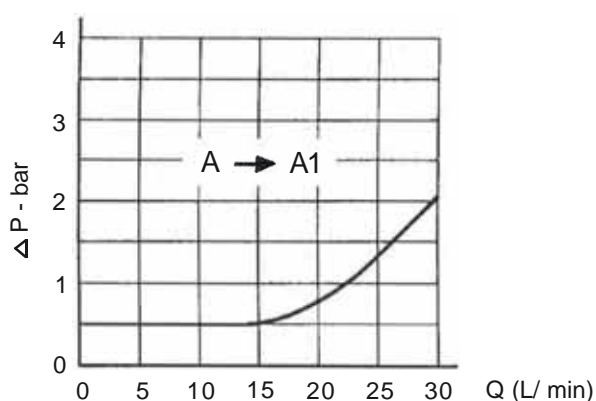
SYMBOL



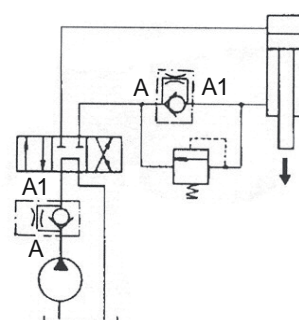
X	D	D1	D2	H	H1
	BSPP	mm	mm	mm	mm
03	3/8" GAS	14.5	8	10	4
04	1/2" GAS	15	9	11	5
18	M18x1.5	15	9	11	5

Y	DIM. GROOVES ØS
1	1.4 mm
2	2 mm
3	2.5 mm

Z	N° GROOVES
2	2 GROOVES
4	4 GROOVES



MOUNTING EXAMPLE



OIL VISCOSITY 46cSt AT 40° C

HOSE BURST VALVES

TYPE

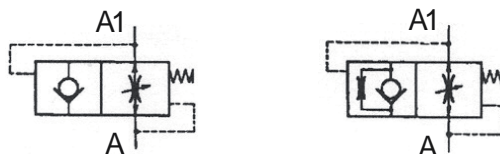
FPP

CODE

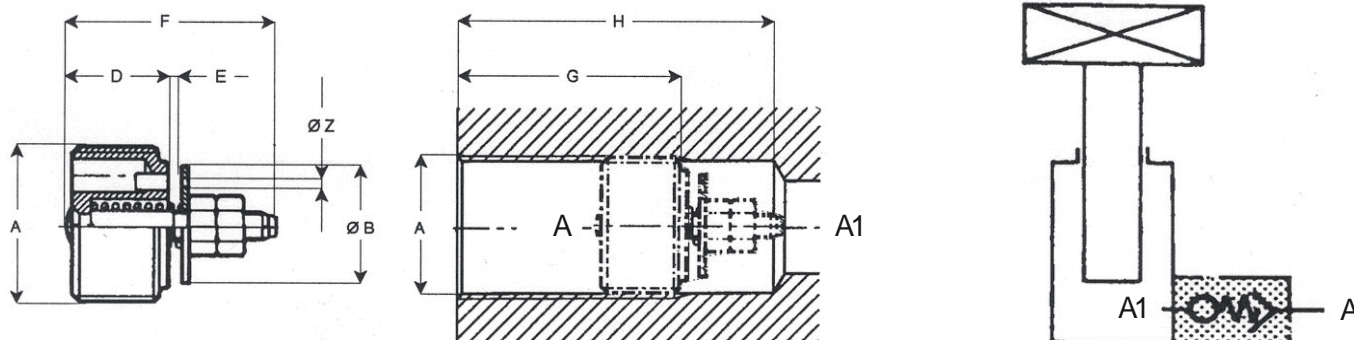
332FPPXYZ00

SYMBOL

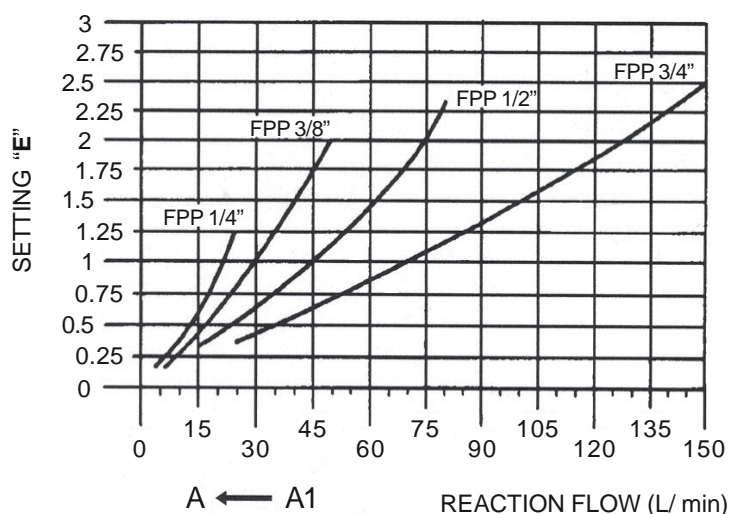
- INSERT-TYPE
- FLUID TEMPERATURE : -20 +90°C
- FILTRATION LEVEL : 50 µm



MOUNTING EXAMPLE



X	TYPE	F. MIN.	F. MAX.	MAX. P.	A	B	Z	D	E	F	G	H	WEIGHT
		L/ min	L/ min	bar	BSPP	mm	mm	mm	mm	mm	mm	mm	Kg
02	FPP 1/4	4	25	350	1/4"	9.5	SEE TABLE	8	SEE DIAGRAM	17.5	24	35	0.005
03	FPP 3/8	6.3	50	350	3/8"	12.5		10.5		23	26	37	0.010
04	FPP 1/2	16	80	350	1/2"	15		12		25	30	45	0.020
05	FPP 3/4	25	150	350	3/4"	18		17		30.5	38	54	0.042



IT IS RECOMMENDED TO PRE-SET THE VALVE FOR A FLOW AT LEAST 50% HIGHER THAN THE REGULATOR FLOW

OIL VISCOSITY 46cSt AT 40° C

Z	TYPE	THROTTLING HOLE ON REQUEST					
	FPP 1/4	0.5	0.8	10*			
	FPP 3/8	0.5	0.8	1.2	1.5		
	FPP 1/2	0.5	0.8	1.2	1.5		
	FPP 3/4	0.8	1.2	1.5	20*		

* : 10=1mm - 20=2mm

Y	TYPE	FLOWS L/ min						
	FPP 1/4	04	06	10	16			
	FPP 3/8	06	10	16	25	50		
	FPP 1/2	16	25	40	50	80		
	FPP 3/4	25	40	50	60	10*	12*	15*

* : 10=100 L/ min - 12=125 L/ min - 15=150 L/ min

HOSE BURST VALVES

TYPE

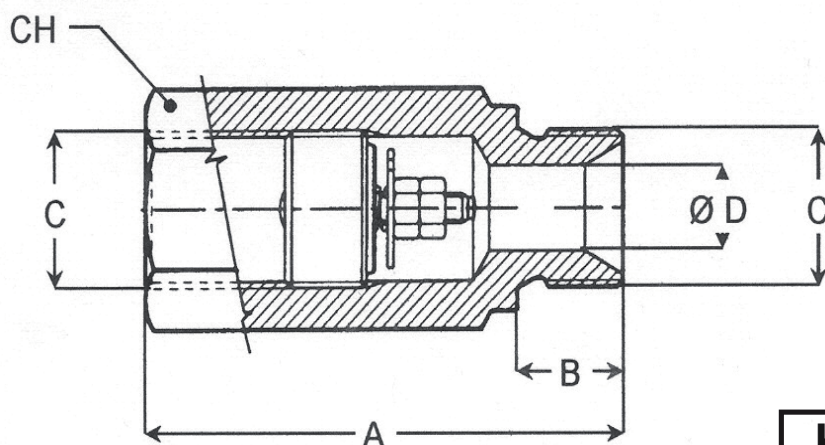
MFP e FFP

CODE

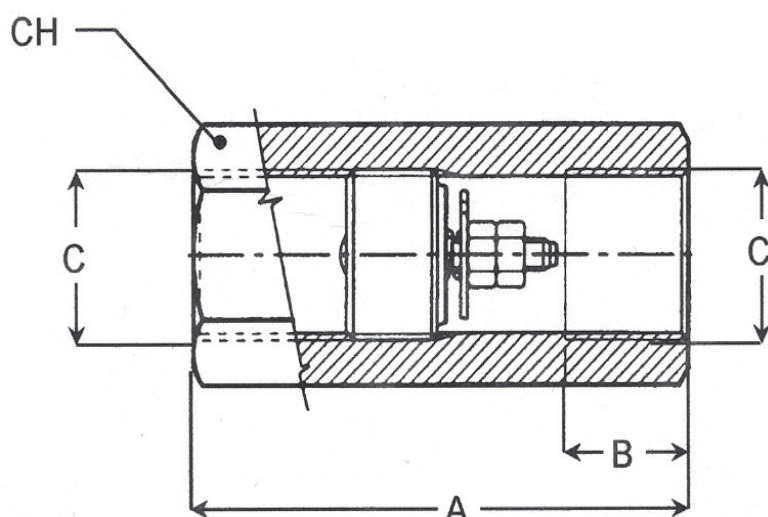
900KXYZ00

- MATERIAL : ZINC-PLATED STEEL

XYZ : SEE FPP PAGE 2.16



K	A mm	B mm	C mm	D mm	CH mm	WEIGHT kg
MFP	50	10	1/4"	6	19	0.075
MFP	55	12	3/8"	9	22	0.105
MFP	70	14	1/2"	12	27	0.185
MFP	75	16	3/4"	16	36	0.365



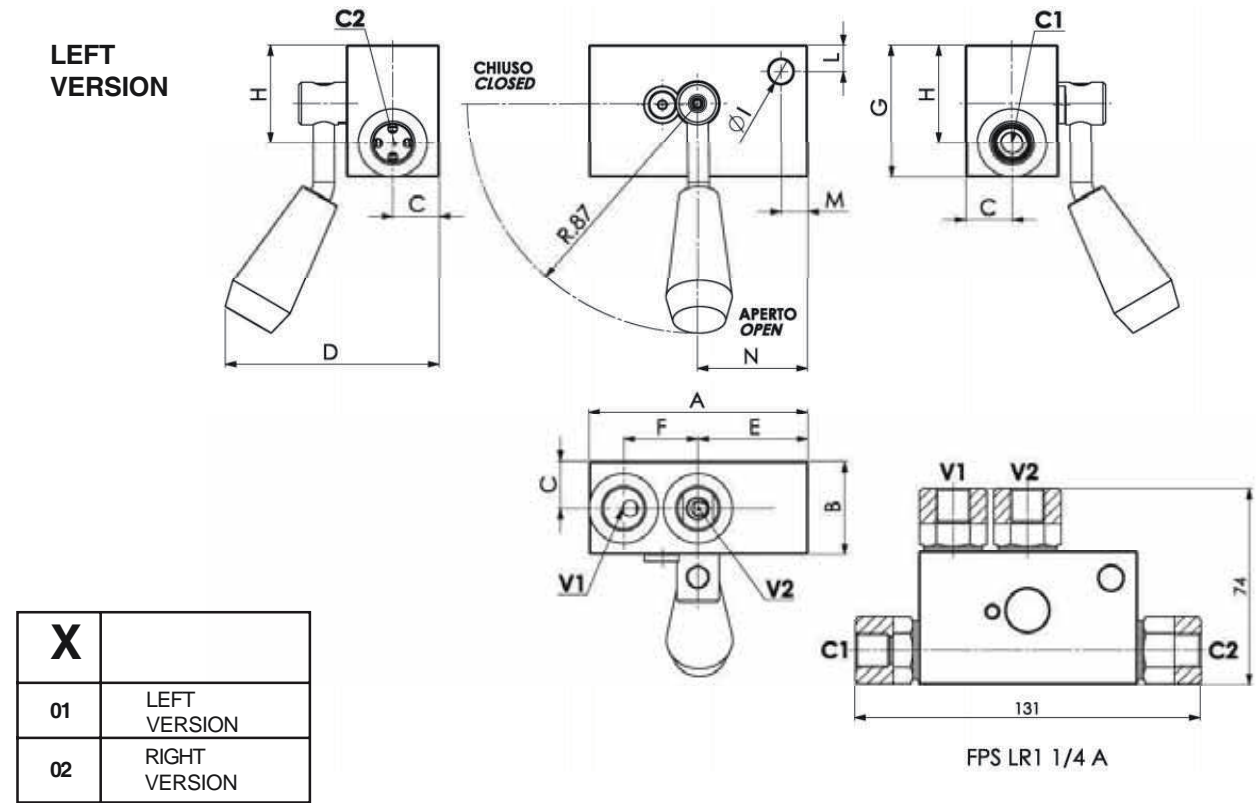
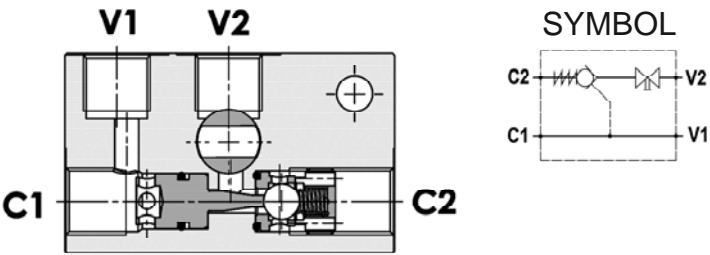
K	A mm	B mm	C mm	CH mm	WEIGHT kg
FFP	48	12	1/4"	19	0.075
FFP	52	12	3/8"	22	0.097
FFP	60	14	1/2"	27	0.160
FFP	72	16	3/4"	32	0.350

OIL VISCOSITY 46cSt AT 40° C

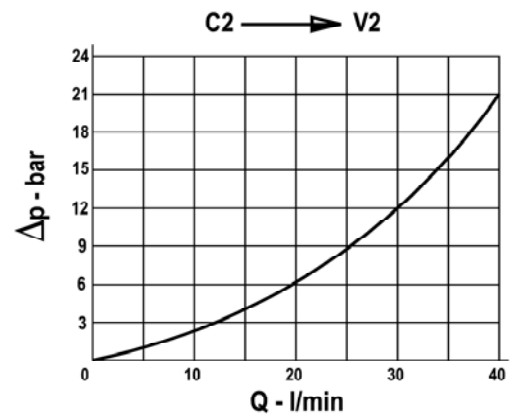
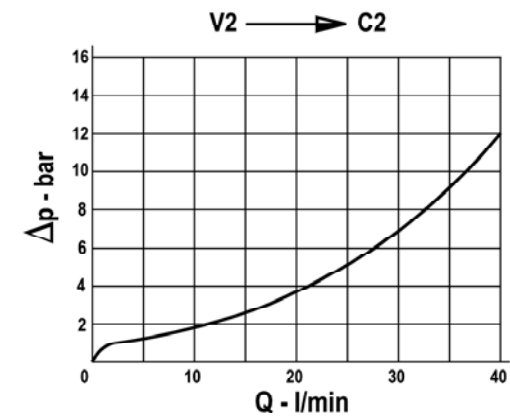
SINGLE PILOT OPERATED CHECK VALVE WITH MANUAL SHUT-OFF

TYPE	FPS-LR1
CODE	086FPSLRXY000

- LINE MOUNTED
- MATERIALS : BODY **ALUMINIUM**
INTERNAL PARTS: **HARDENED STEEL**
- FILTRIERUNG : **50 µm**
- MAX. PRESSURE : **250 bar**
- CRACKING PRESSURE : **1 bar**



Y	TIPO TYPE	PORTATA MAX. MAX FLOW	PRESS. MAX. MAX PRESSURE	V1-C1 V2-C2	A	B	C	D	E	F	G	H	I	L	M	N	RAPP. DI PILOTAGGIO PILOT RATIO	PESO WEIGHT
		L/MIN	BAR	BSPP	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		Kg
1	FPS LR1 1/4	30	250	1/4"	131	35	17.5	82	41	28	74	37	9	10	10	41.5	1 : 3.5	0.770
2	FPS LR1 3/8	30	250	3/8"	82.5	35	17.5	82	41	28	50	37	9	10	10	41.5	1 : 3.5	0.500



OIL VISCOSITY 24cSt BEI 50° C





OVERCENTER

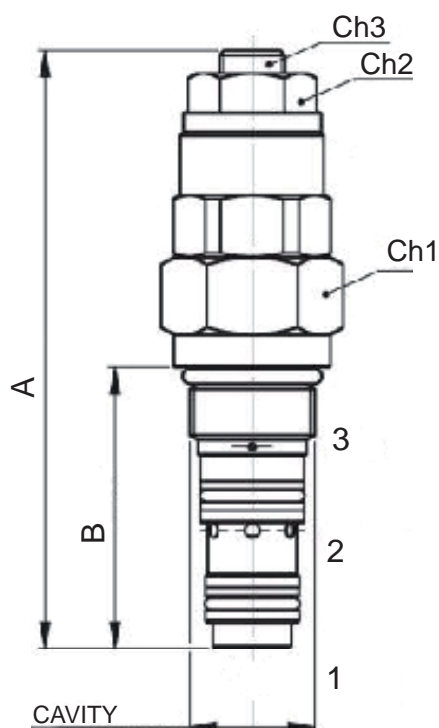
TYPE

FPO-C

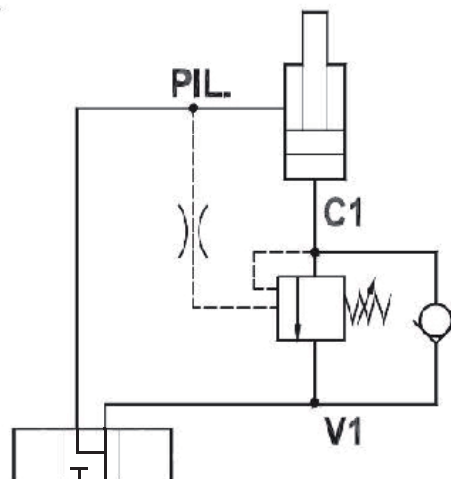
CODE

086FPO-X-Y-Z

- MATERIAL: **ZINC-PLATED STEEL**
- FILTRATION LEVEL: **25 μ m**
- FLUID TEMPERATURE: **-20+70C°**
- LEAK PROOF SEAT DESIGN
- MAX. WORKING PRESSURE : **350 bar**
- VISCOSITY RANGE: **10 to 500 cSt**



SYMBOL



X												Y	Z OMIT IF STD.
	TYPE	Q _{max} L/min	CAVITY	1	2	3	A mm	B mm	Ch1 mm	Ch2 mm	Ch3 mm	SPRING	PILOT-RATIO
01	FPO-15-CM	15	M18 x 1,5	C1	V1	PIL	95	41	22	13	5	35 (80-350 BAR)	1 : 4,5
02	FPO-25-C	25	3/4"-16unf-2b	C1	V1	PIL	92	42,8	24	17	5	20 (60-220 BAR) 35 (100-350 BAR)	1 : 4 std; B = 1:8
03	FPO-25-CM	25	M20 x 1,5	C1	V1	PIL	92	42,8	24	17	5	20 (60-210 BAR) 35 (100-350 BAR)	1 : 4 std; B = 1 : 8
04	FPO-50-C	50	1"1/16-12unf	PIL	C1	V1	123	67,5	32	14	4	20 (60-220 BAR) 35 (80-350 BAR)	1:4,25 std ; B=1: 8 ; C=1:11
05	FPO-60-C	60	7/8"-14unf-2b	C1	V1	PIL	102	47,5	27	17	5	20 (60-220 BAR) 35 (100-350 BAR)	1 : 4 std; B = 1 : 8
06	FPO-90-C	90	1"3/16-12unf	PIL	C1	V1	141	83	36	14	4	35 (100-350 BAR)	1 : 4,2
07	FPO-100-C	100	1"1/16-12unf	C1	V1	PIL	127,5	59,5	32	17	5	20 (60-220 BAR) 35 (100-350 BAR)	1 : 4 std; B = 1: 8
08	FPO-140-CM	140	M38 x 1,5	C1	V1	PIL	176,5	72,7	46	17	5	35 (220-350 BAR)	1 : 4
09	FPO-150-CM	150	M33 x 2	PIL	C1	V1	164	95	38	24	5	35 (100-350 BAR)	1 : 4 std; B = 1 : 8
10	FPO-300-CM	300	M33 x 2	PIL	C1	V1	204,5	114,5	46	32	6	35 (100-350 BAR)	1 : 4

OVERCENTER FULLY BALANCED

TYPE

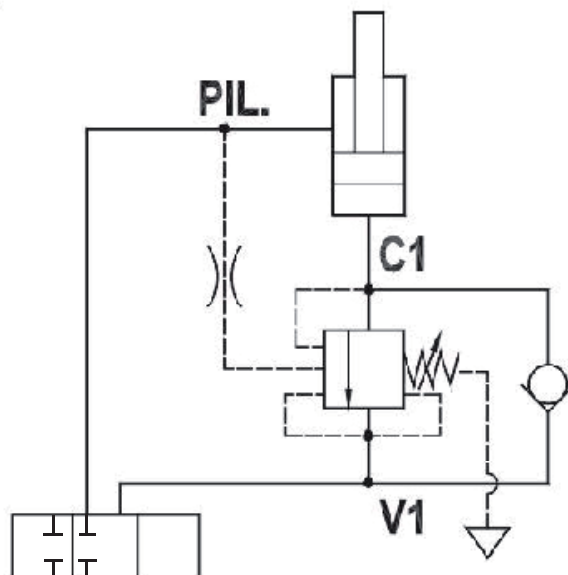
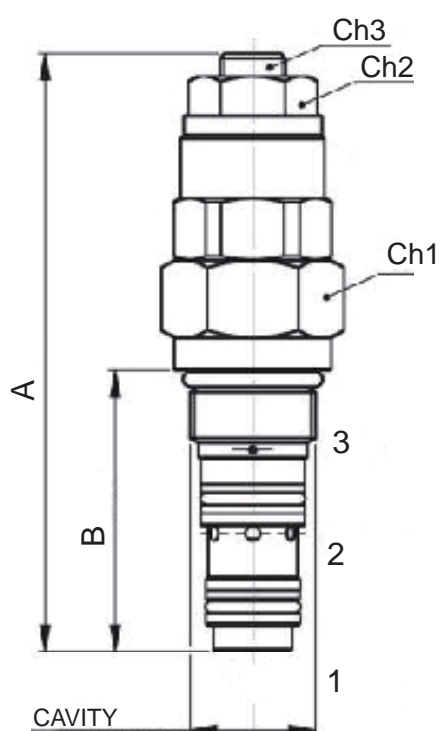
FPOFB-C

CODE

086FPOFB-X-Y-Z

- MATERIAL: **ZINC-PLATED STEEL**
- FILTRATION LEVEL: **25 μ m**
- FLUID TEMPERATURE: **-20+70C°**
- LEAK PROOF SEAT DESIGN
- MAX. WORKING PRESSURE : **350 bar**
- VISCOSITY RANGE: **10 to 500 cSt**

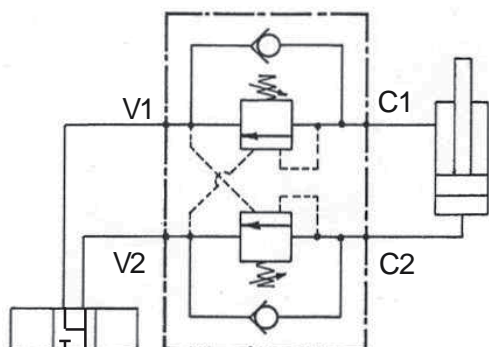
SYMBOL



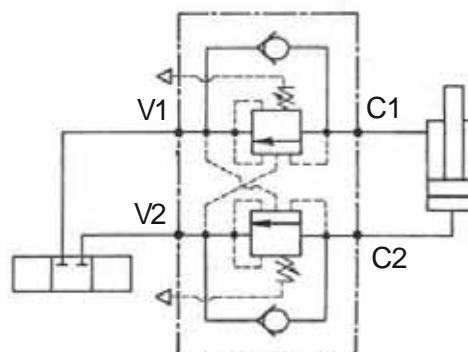
X												Y	Z OMIT IF STD.
	TYPE	Q _{max} L/min	CAVITY	1	2	3	A	B	Ch1	Ch2	Ch3	SPRING	PILOT-RATIO
01	FPOFB-25	25	3/4"-16unf-2b	C1	V1	PIL	92	42,8	24	17	5	20 (60-220 BAR) 35 (100-350 BAR)	1 : 4 std; B = 1:8
02	FPOFB-25-M	25	M20 x 1,5	C1	V1	PIL	92	42,8	24	17	5	20 (60-220 BAR) 35 (100-350 BAR)	1 : 4 std; B = 1 : 8
03	FPOFB-60	60	7/8"-14unf-2b	C1	V1	PIL	102	47,5	27	17	5	20 (60-220 BAR) 35 (100-350 BAR)	1 : 4 std; B = 1 : 8
04	FPOFB-100	100	1"1/16-12unf	C1	V1	PIL	127,5	59,5	32	17	5	20 (60-220 BAR) 35 (100-350 BAR)	1 : 4 std; B = 1 : 8
05	FPOFB-150-M	150	M33 x 2	PIL	C1	V1	165,5	95	38	24	5	35 (100-350 BAR)	1 : 4 std; B = 1 : 8
06	FPOFB-300-M	300	M42 x 2	PIL	C1	V1	204,5	114,5	46	32	6	35 (100-350 BAR)	1 : 4

VALVE TYPE "B" BACKPRESSURE RESISTANT
FOR TECHNICAL DETAILS SEE PAGES 3.01 / 3.02

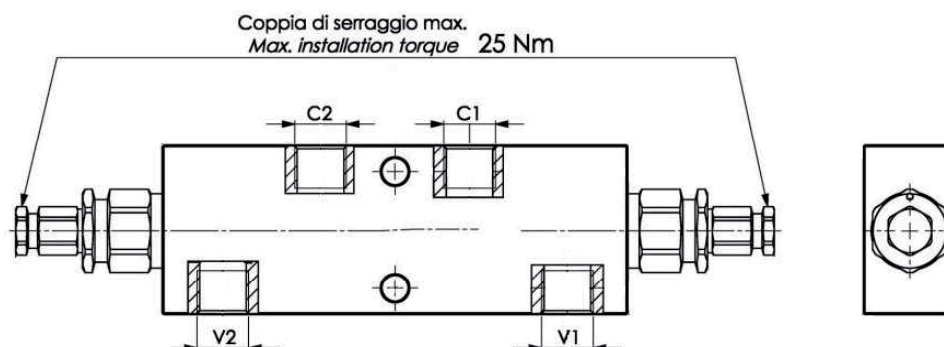
MOUNTING EXAMPLE FPO



MOUNTING EXAMPLE FPOB

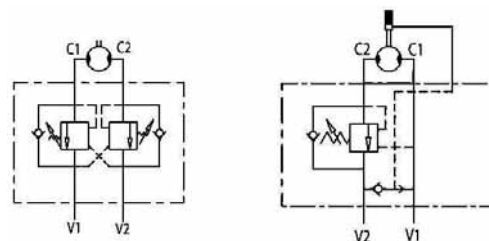
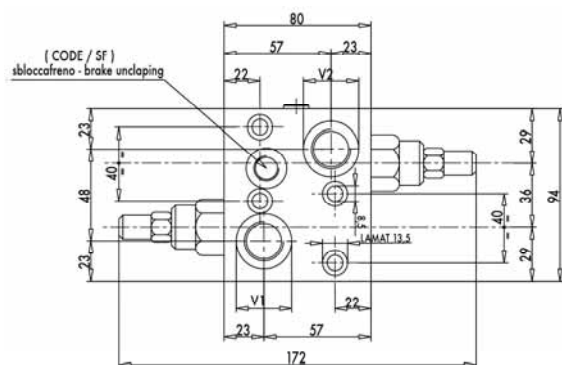


	X	Y	Z <small>OMIT IF STD</small>	S	
TYPE	Q max L/min	PORTS BSPP	PILOT - RATIO	SPRING	P. MAX bar
FPO	35	1/4"	1 : 4 std; B = 1 : 8	20 (60-220 BAR) 35 (100-350 BAR)	350
FPOE	40	3/8"	1 : 4 std; B = 1 : 8	20 (60-220 BAR) 35 (100-350 BAR)	350
FPO	50	3/8" - 1/2"	1 : 4 std; B = 1 : 8	20 (60-220 BAR) 35 (100-350 BAR)	350
FPOE	70	1/2"	1 : 4 std; B = 1 : 8	20 (60-220 BAR) 35 (100-350 BAR)	350
FPO	90	3/4"	1 : 4 std; B = 1 : 8	35 (100-350 BAR)	350
FPOE	120	3/4"	1 : 4	35 (100-350 BAR)	350
FPO	150	3/4"	1 : 4	35 (100-350 BAR)	350



- All valves are in the single-acting version available
- On request detailed documentation for each valve.

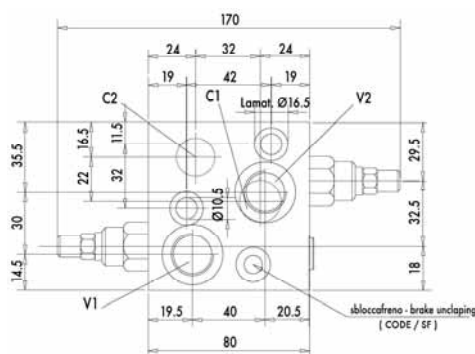
OMP / OMR



CODE	TYPE	Q. max	PILOT-RATIO	PORTS	P. MAX
877 V 04 15	SINGLE ACTING	50	1 : 4,5	G 1/2"	350
877 V 04 25	DOUBLE ACTING	50	1 : 4,5	G 1/2"	350

Both versions are available with brake unclamping

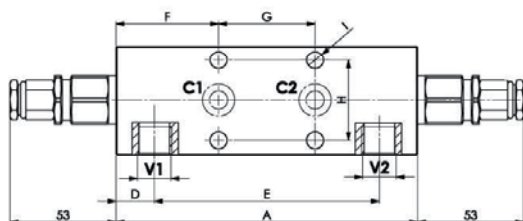
OMS



CODE	TYPE	Q. max	PILOT-RATIO	PORTS	P. MAX
877 V 04 15	SINGLE ACTING	50	1 : 4,5	G 1/2"	350
877 V 04 25	DOUBLE ACTING	50	1 : 4,5	G 1/2"	350

Both versions are available with brake unclamping

FLANGE 48x40



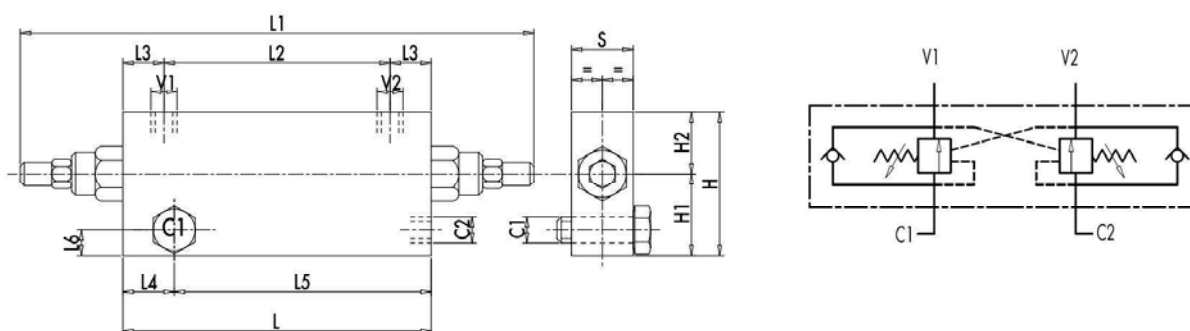
			X	Y	
CODE	TYPE	Q. max	PILOT-RATIO	PORTS	P. MAX
FPO-50-D-x-y	DOPPIO EFFETTO	50	A= 1 : 4,25 std B= 1:8 C= 1:11	G 3/8" G 1/2"	350
FPOB-50-D-x-y	DOPPIO EFFETTO, BILANCIATO	50	A= 1 : 4,25 std B= 1:8 C= 1:11	G 3/8" G 1/2"	350

Ex: FPOB-50-D-**B-3/8**"

- All valves are in the single-acting version available
- On request different flanges are available

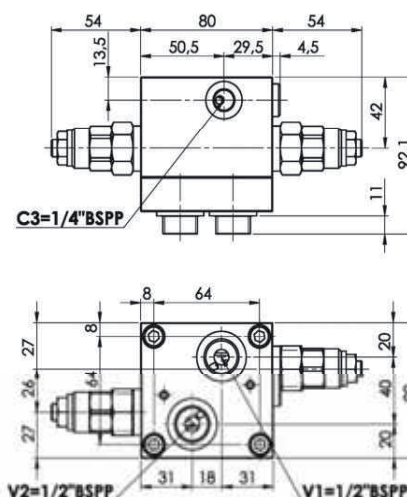
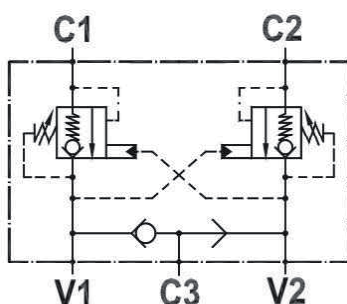
- ON REQUEST DETAILED DOCUMENTATION FOR EACH VALVE

OVERCENTER WITH DRILLED SCREW



CODE	TYPE	Q. max	PILTO-RATIO	PORTS	P. MAX
877 V0422/FLV	3/8"	40	1 : 4,5	G 3/8"	350
877 V0432/FLV	1/2"	60	1 : 4,5	G 1/2"	350

Danfoss Motors



X	Y	Z			
TYPE	SPRING	PILOT-RATIO	Q. max	PORTS	P. MAX
D2= OMP /R /H	20 (60-220)	A= 1 : 4,5	60	G 1/2"	350
D3= OMS	35 (100-350)	B= 1 : 8	60	G 1/2"	350

CODE : 086FPO-60-DV-**X**-1/2"-U-**Y-Z**

- AVAILABLE FOR SAMHYDRAULIK AND OIL DRIVE MOTORS,
- ALL VALVES ARE IN THE SINGLE-ACTING VERSION AVAILABLE
- ON REQUEST DETAILED DOCUMENTATION FOR EACH VALVE





Flow regulators



NEEDLE VALVE

TYPE

DV C 04

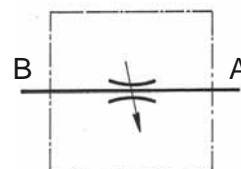
CODE

900F1300X20000

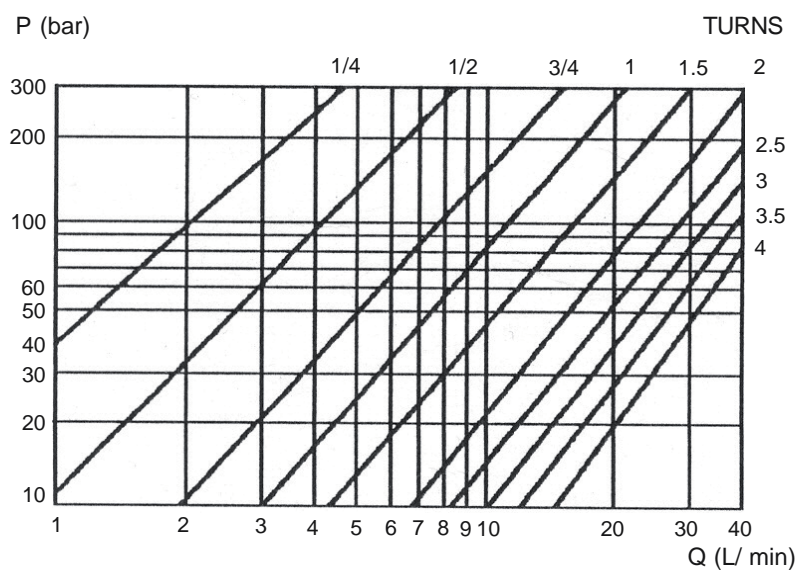
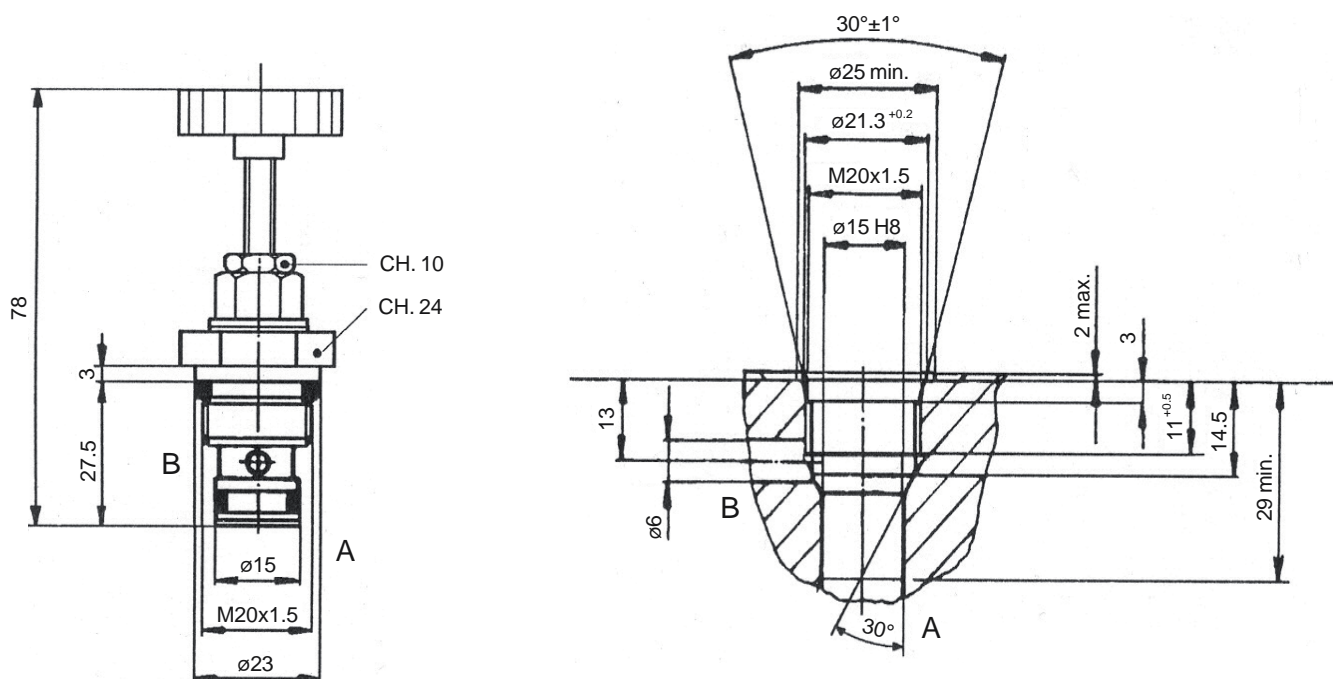
SCREW-IN, CARTRIDGE STYLE,
VARIABLE ORIFICE, HYDRAULIC
FLOW RESTRICTOR VALVE.

- FILTRATION LEVEL : **50 μ m**
- INSTALLATION TORQUE : **40 Nm**
- P. MAX. : **350 bar**
- WEIGHT : **0,095 Kg**

SYMBOL

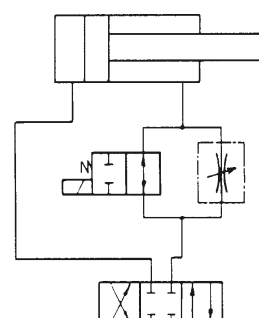


CAVITY: **CFH032**



X	ADJUSTMENTS	
02	LEAKPROOF HEX. SOCKET SCREW	
04	HANDKNOB AND LOCKNUT (STEEL)	

MOUNTING EXAMPLE

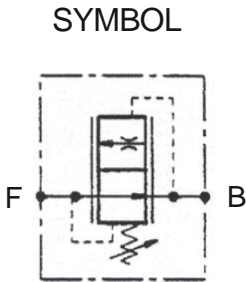
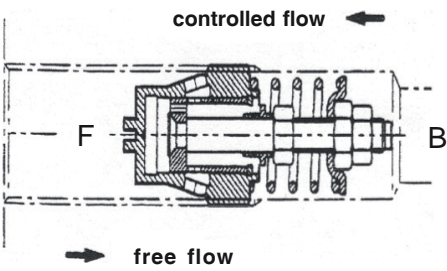


OIL VISCOSITY 46cSt At 40° C

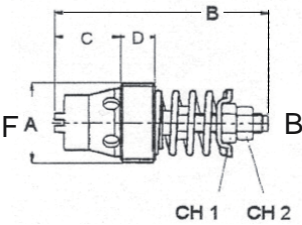
FLOW COMPENSATED ADJUSTABLE VALVES, LINE MOUNTING

TYPE	VLC
CODE	900F53101XYZ0

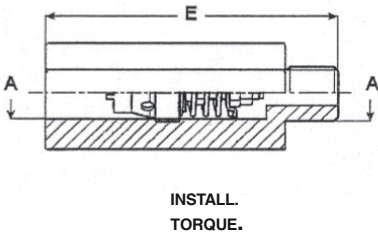
- TEMPERATURE RANGE : -30-80°C
- FILTRATION LEVEL : 50 µm
- MAX WORKING PRESSURE. : 350 bar
- MIN. WORKING PRESSURE : 15 bar



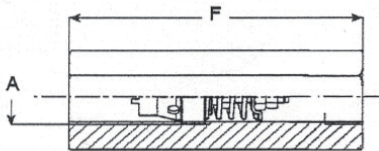
VLC
Z=0



MFC
Z=1

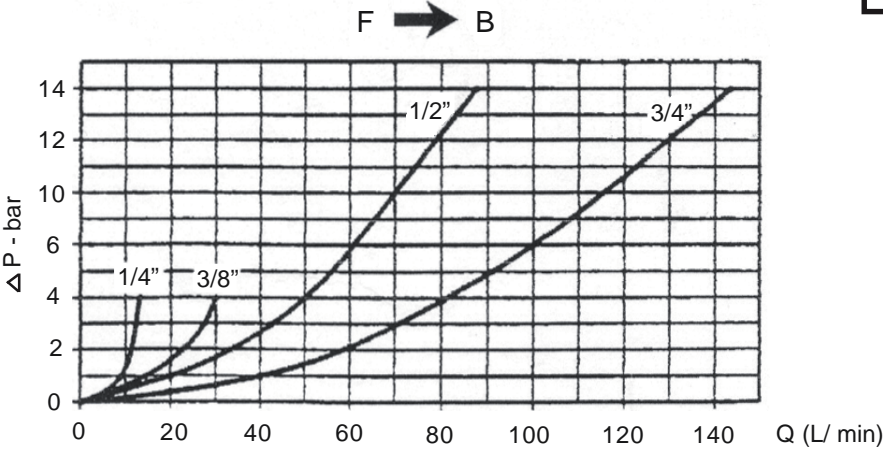


FFC
Z=2



X	A	B	C	D	E	F	CH. 1	CH. 2	WEIGHT	INSTALL. TORQUE
	BSPP	mm	mm	mm	mm	mm	mm	mm	Kg	Nm
02	1/4"	38.3	12.5	7	78	66	5.5	4.5	0.012	6
03	3/8"	43	13.5	7	82	70	7	6	0.025	8
04	1/2"	49	16	8	96	80	7	6	0.038	12
05	3/4"	60	21	10	106	100	7	6	0.070	15

Y	FLOW RANGE (L/ Min)			
	VLC 1/4"	VLC 3/8"	VLC 1/2"	VLC 3/4"
1	1.0 ÷ 1.6	2.5 ÷ 4.0	16 ÷ 21	37 ÷ 50
2	1.5 ÷ 2.5	3.8 ÷ 6.3	20.5 ÷ 28	48 ÷ 65
3	2.4 ÷ 4.0	6.1 ÷ 10	27.5 ÷ 37	63 ÷ 90
4	3.9 ÷ 6.3	9.8 ÷ 16	36.5 ÷ 50	88 ÷ 120
5	6.2 ÷ 10	15.8 ÷ 25	48 ÷ 65	115 ÷ 150
6	9.5 ÷ 15	24.5 ÷ 35		



OIL VISCOSITY 46cSt BEI 40° C

UNIDIRECTIONAL FLOW CONTROL VALVES

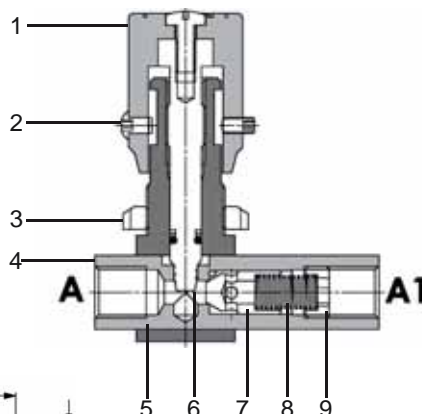
TYPE

FPU

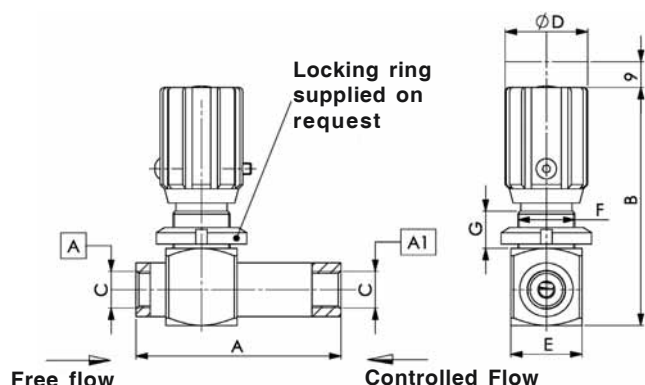
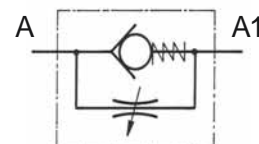
CODE

086FPUXYZ0000

- LINE AND PANEL MOUNTING
- MATERIAL : ZINC-PLATED STEEL
- TEMPERATURE RANGE : -20 +70°C
- FILTRATION LEVEL : 25 µm
- VISCOSITY RANGE : 10 - 500 cSt



SYMBOL

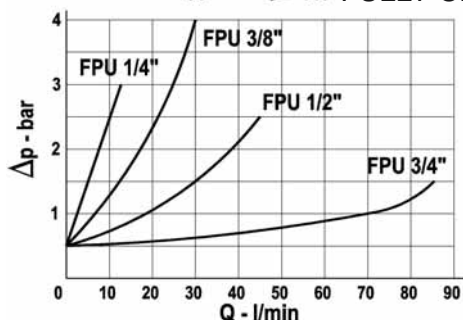


Z	LOCKING RING
0	WITHOUT
1	WITH

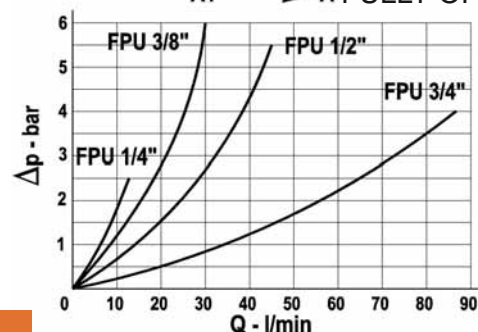
X	TYPE	Q. MAX. l/min	P. MAX. bar	A mm	B mm	C BSPP	D mm	E mm	F	G mm	WEIGHT Kg
02	FPU 1/4	12	300	72	80	1/4"	25	25	M20x1	13	0.25
03	FPU 3/8	30	300	78	85	3/8"	32	32	M25x1.5	13	0.42
04	FPU 1/2	45	280	92	92	1/2"	35	35	M30x1.5	13	0.60
05	FPU 3/4	85	250	106	105	3/4"	40	45	M35x1.5	14	1.10

Y	CRACKING PRESSURE
0	0.5 bar
1	2.5 bar
2	5 bar
3	10 bar

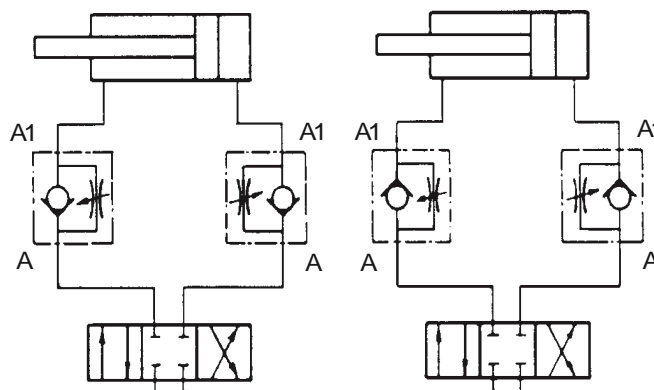
A → A1 FULLY CLOSED THROTTLE



A1 → A FULLY OPEN THROTTLE



MOUNTING EXAMPLE



OIL VISCOSITY 46cSt AT 40° C

BIDIRECTIONAL FLOW CONTROL VALVES

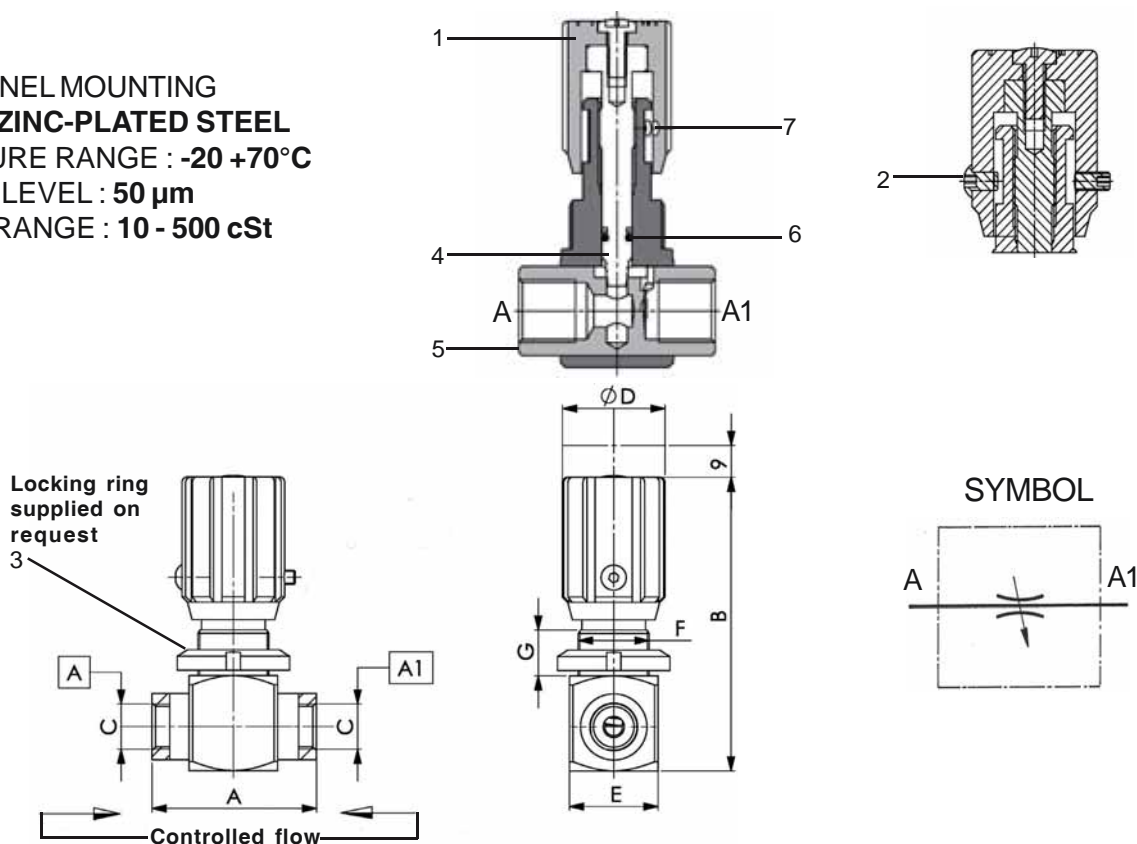
TYPE

FPB

CODE

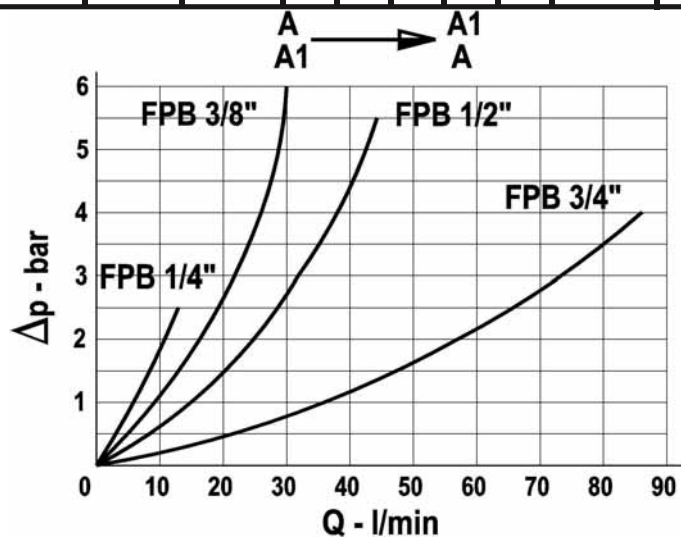
086FPB**XZ**00000

- LINE AND PANEL MOUNTING
- MATERIAL : **ZINC-PLATED STEEL**
- TEMPERATURE RANGE : **-20 +70°C**
- FILTRATION LEVEL : **50 µm**
- VISCOSITY RANGE : **10 - 500 cSt**



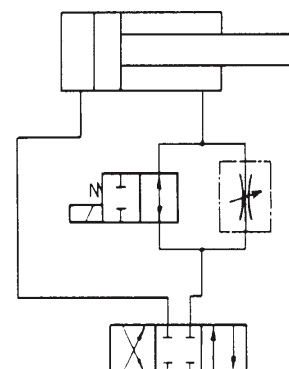
X	TYPE	Q. MAX. L/min	P. MAX. bar	A mm	B mm	C BSPP	D mm	E mm	F	G mm	WEIGHT Kg
02	FPB 1/4"	12	300	45	80	1/4"	28	25	M21x1	13	0.21
03	FPB 3/8"	30	300	52	85	3/8"	28	30	M25x1.5	13	0.35
04	FPB 1/2"	45	280	60	92	1/2"	38	35	M30x1.5	13	0.50
05	FPB 3/4"	85	250	68	105	3/4"	38	45	M35x1.5	14	0.87

Z	LOCKING RING
0	WITHOUT
1	WITH



OIL VISCOSITY 46cSt AT 40° C

MOUNTING EXAMPLE



UNIDIRECTIONAL FLOW CONTROL VALVES

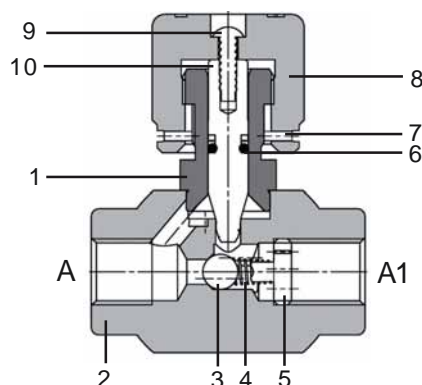
TYPE

FPSU

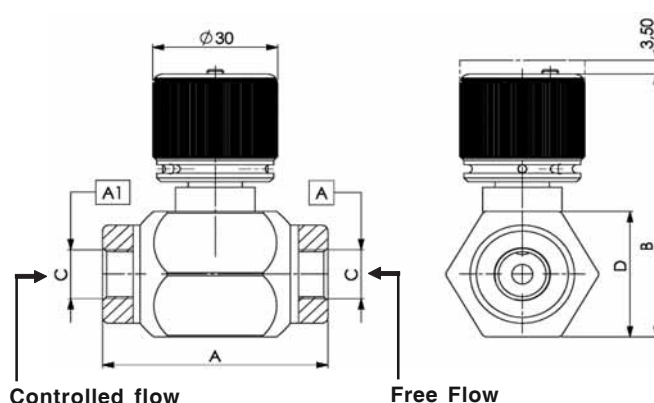
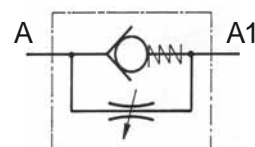
CODE

086FPSUX00000

- LINE MOUNTING
- MATERIAL : ZINC-PLATED STEEL
- TEMPERATURE RANGE : -20 +70°C
- FILTRATION LEVEL : 25 µm
- VISCOSITY RANGE : 10 - 500 cSt

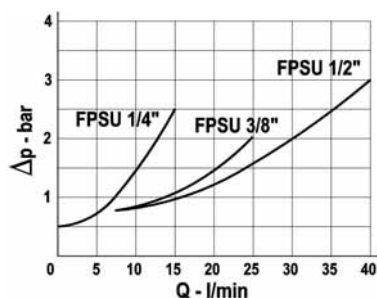


SYMBOL

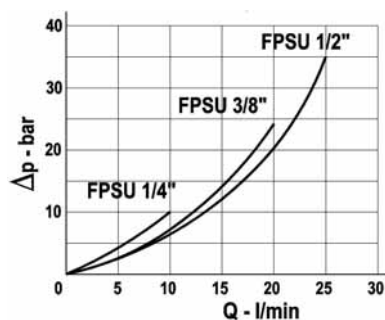


X	TYPE	Q. MAX.	P. MAX.	A	B	C	D	WEIGHT
		L/ min	bar	mm	mm	BSPP	mm	Kg
02	FPSU 1/4	12	300	54	64	1/4"	32	0.310
03	FPSU 3/8	25	300	62	64	3/8"	32	0.310
04	FPSU 1/2	40	280	62	64	1/2"	32	0.310

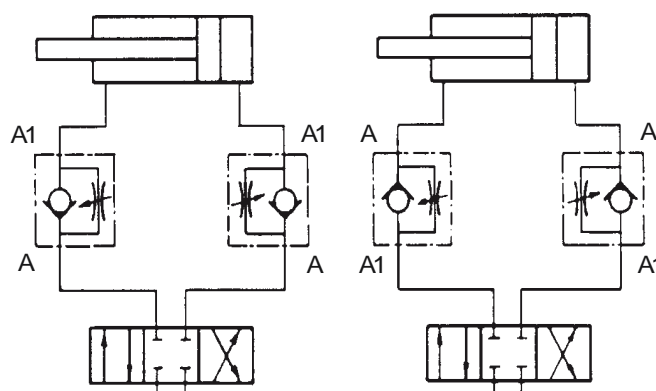
A1 ← A FULLY CLOSED THROTTLE



A1 → A FULLY OPEN THROTTLE



MOUNTING EXAMPLE



BIDIRECTIONAL FLOW CONTROL VALVE

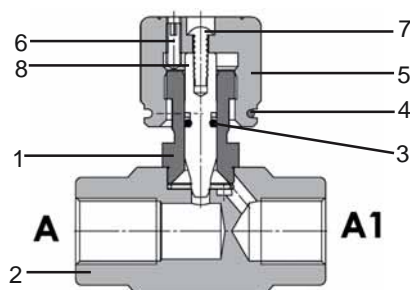
TYPE

FPSB

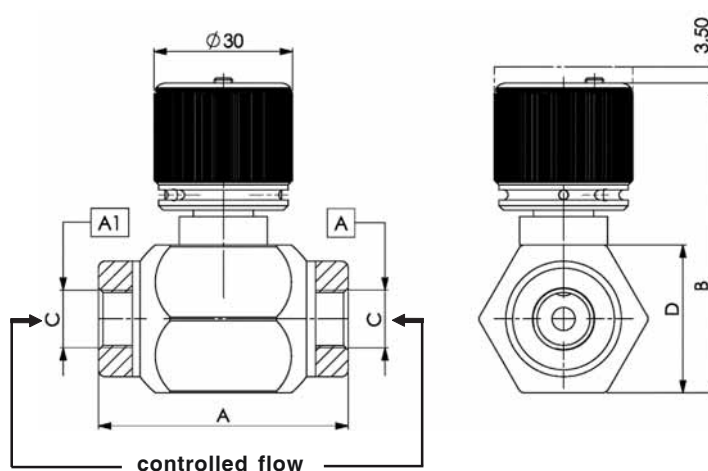
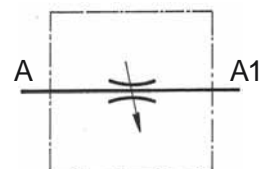
CODE

086FPSBX00000

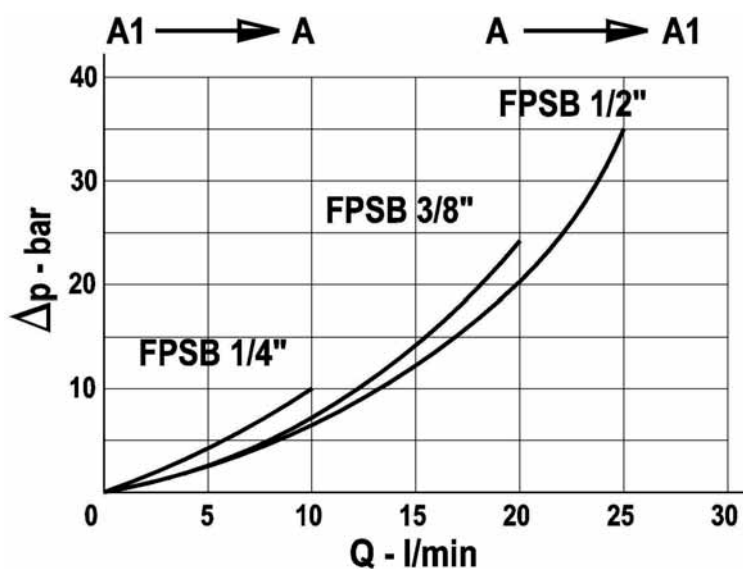
- LINE MOUNTING
- MATERIAL : **ZINC-PLATED STEEL**
- TEMPERATURE RANGE : **-20 +70°C**
- FILTRATION LEVEL : **25 µm**
- VISCOSITY RANGE : **10 - 500 cSt**



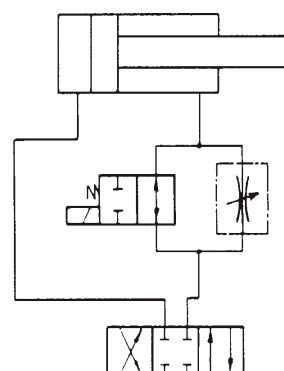
SYMBOL



X	TYPE	Q. MAX.	P. MAX.	A	B	C	D	WEIGHT
		L/ min	bar	mm	mm	BSPP	mm	Kg
02	FPSB 1/4	12	300	54	64	1/4"	32	0.310
03	FPSB 3/8	20	300	62	64	3/8"	32	0.310
04	FPSB 1/2	25	280	62	64	1/2"	32	0.310



MOUNTING EXAMPLE



OIL VISCOSITY 46cSt A 40° C

ADJUSTABLE THROTTLE CHECK VALVES

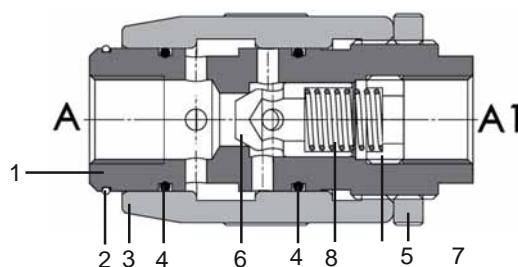
TYPE

FPMU

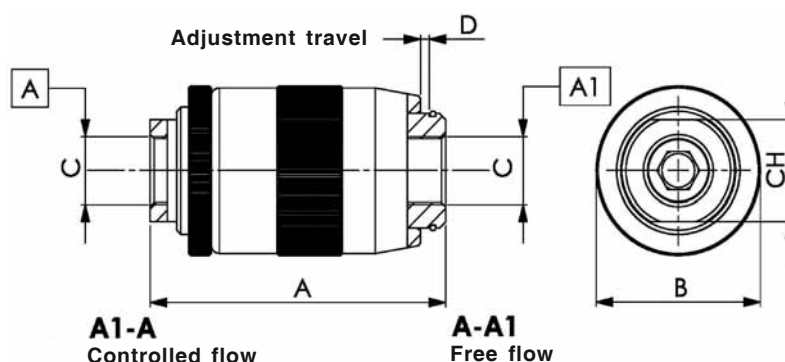
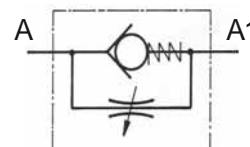
CODE

086FPMUXY00000

- LINE MOUNTING
- MATERIAL : ZINC-PLATED STEEL
- TEMPERATURE RANGE : -20 +70°C
- FILTRATION LEVEL : 50 µm
- VISCOSITY RANGE : 10 - 500 cSt



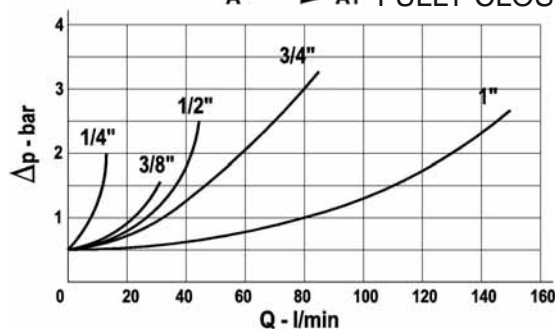
SYMBOL



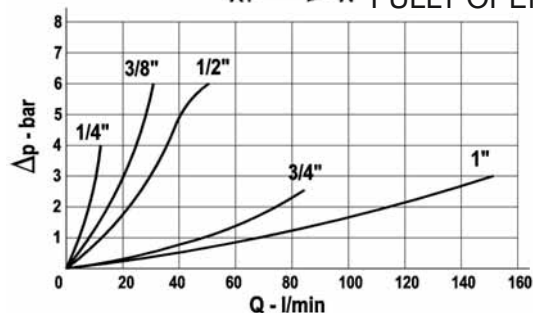
X	TYPE	Q. MAX. L/min	P. MAX. bar	A mm	B mm	C BSPP	D mm	CH mm	weight Kg
02	FPMU 1/4"	12	350	62	34	1/4"	4.5	19	0.275
03	FPMU 3/8"	30	350	72	40	3/8"	5.5	24	0.430
04	FPMU 1/2"	45	310	80	46	1/2"	7	30	0.630
05	FPMU 3/4"	85	280	100	54	3/4"	10	36	1.050
06	FPMU 1"	150	250	125	65	1"	12	41	2.050

Y	CRACKING PRESSURE
0	0.5 bar
1	2.5 bar
2	5 bar
3	10 bar

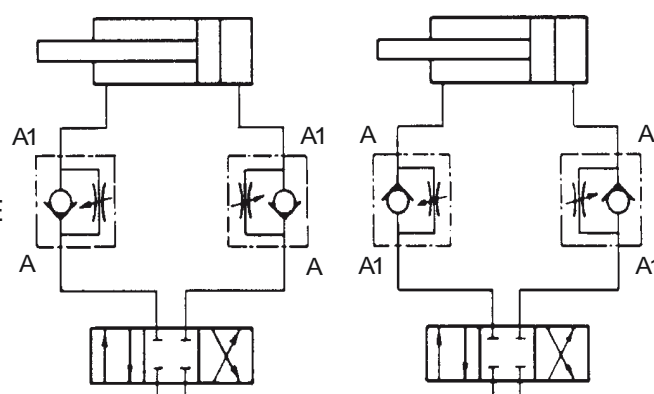
A → A1 FULLY CLOSED THROTTLE



A1 → A FULLY OPEN THROTTLE



MOUNTING EXAMPLE



OIL VISCOSITY 46cSt A 40° C

ADJUSTABLE THROTTLE VALVES

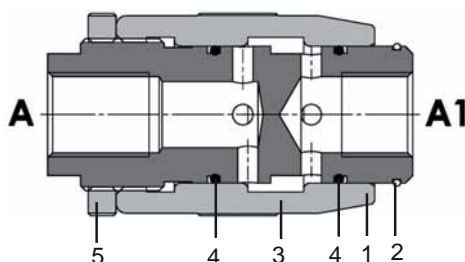
TYPE

FPMB

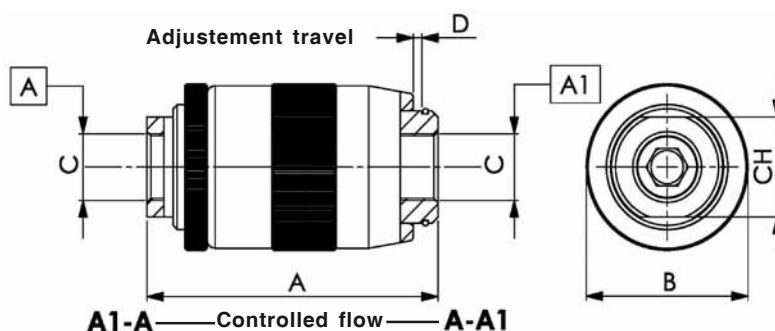
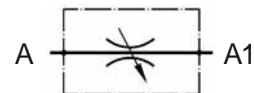
CODE

086FPMBX00000

- LINE MOUNTING
- MATERIAL : **ZINC-PLATED STEEL**
- TEMPERATURE RANGE : **-20 +70°C**
- FILTRATION LEVEL : **25 µm**
- VISCOSITY RANGE : **10 - 500 cSt**

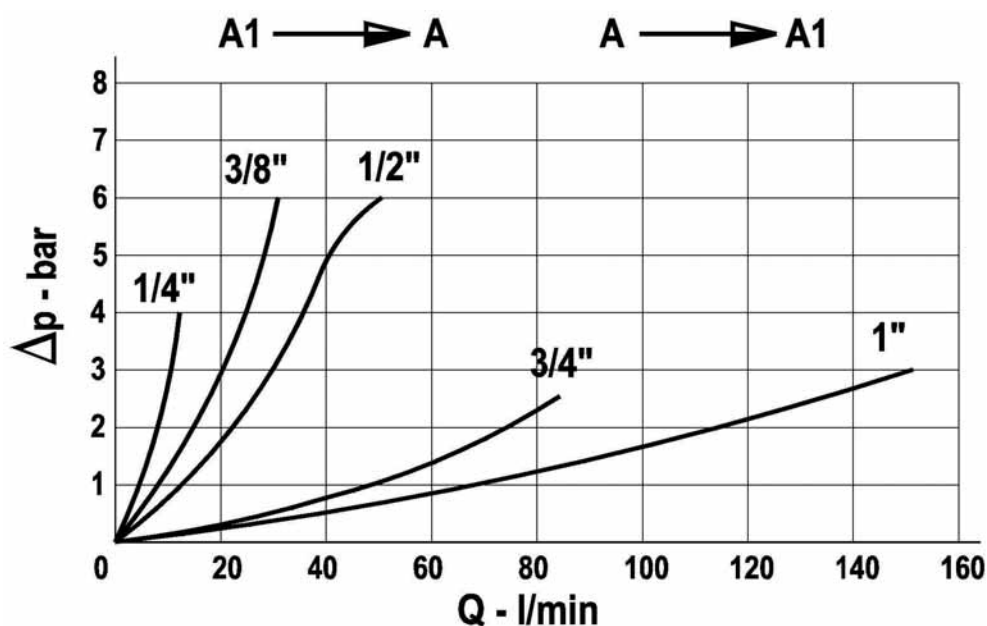


SYMBOL



X	TYPE	Q. MAX.	P. MAX.	A	B	C	D	CH	Weight
		L/min	bar	mm	mm	BSPP	mm	mm	Kg
02	FPMB 1/4"	12	350	62	34	1/4"	4.5	19	0.275
03	FPMB 3/8"	30	350	72	40	3/8"	5.5	24	0.430
04	FPMB 1/2"	45	310	80	46	1/2"	7	30	0.630
05	FPMB 3/4"	85	280	100	54	3/4"	10	36	1.050
06	FPMB 1"	150	250	110	75	1"	12	41	2.050

FULLY OPEN THROTTLE



OIL VISCOSITY 46cSt AT 40° C

FIXED CONSTANT FLOW PRIORITY VALVE

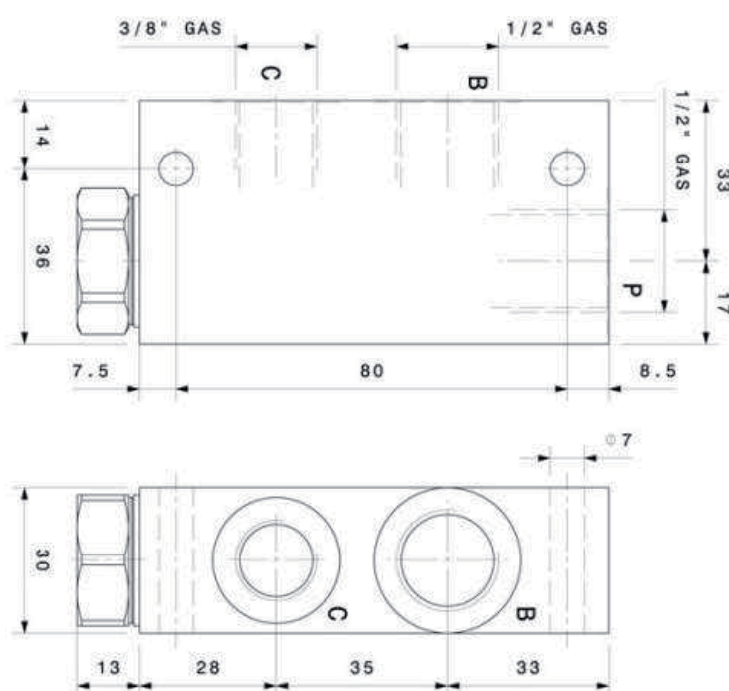
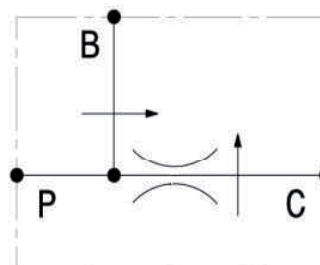
TYPE

RFP-38-TF

CODE

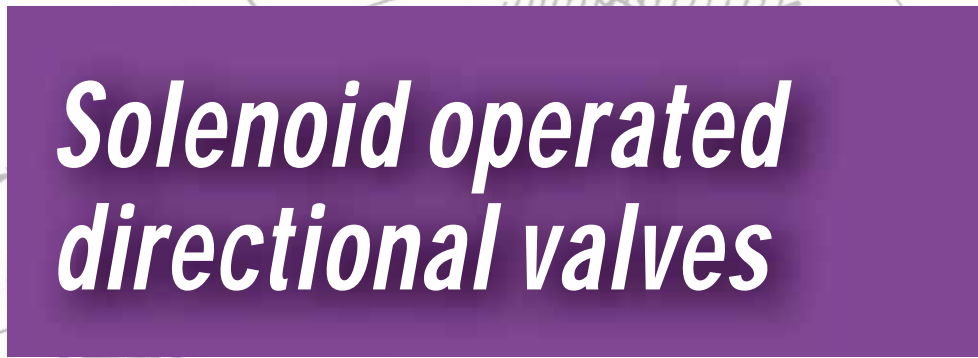
930RFP38XA00

- MATERIAL OF BODY : **STEEL**
- FILTRATION LEVEL : **30 μ**
- FLOW max : **70 l/min**
- MAX WORKING PRESSURE : **350 bar**
- MAX FLOW RATIO Q_a / Q_p : **0,7**
- EXCEEDING FLOW TO PRESSURE
- PRIORITY OUTLET : **C**
- WEIGHT : **1,1 Kg**



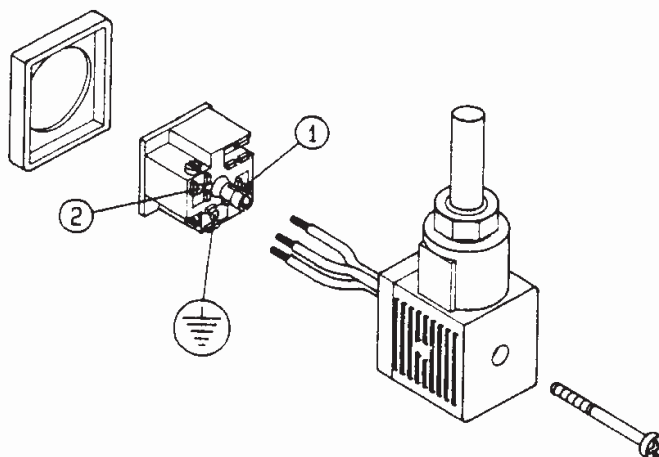
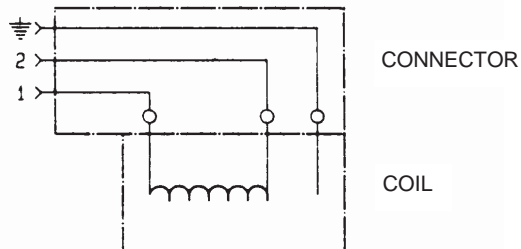
X	Ø FIXED ORIFICE mm	FIXED FLOW l/min $\pm 7,5\%$
01	1.00	1,5
02	1.50	4,0
03	2.00	6,0
04	2.50	9,0
05	3.00	12,0
06	3.50	15,0
07	4.00	20,0



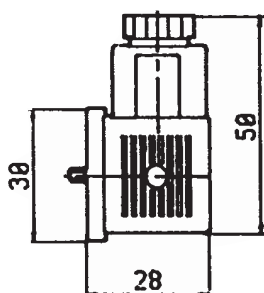


STANDARDIZED ACCORDING TO DIN 43650

- NOMINAL CURRENT CARRYING CAPACITY = **10A**
- MAX CURRENT CARRYING CAPACITY = **16A**
- CABLE GLAND THREAD = **PG 9 DIN 40430**
- TIGHTENING TORQUES = **3÷4 Nm**
- CABLE DIAMETER = **6÷8 mm**
- PROTECTION CLASS = **IP 65 (DIN 40050)**
- INSULATION = **CLASS C (VDE 0110)**

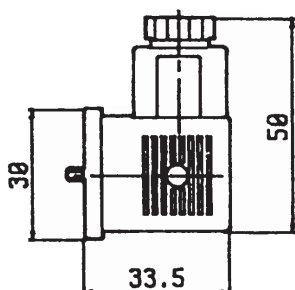


HIRSCHMANN



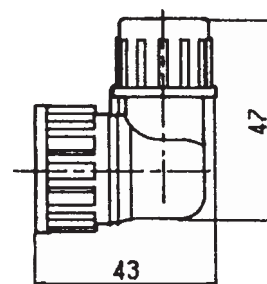
X	Y
01	01

HIRSCHMANN WITH RECTIFIER



X	Y	Inlet voltage	Rectified voltage
10	01	24 V a.c.	22 V c.c.
10	02	110 V a.c.	102 V c.c.
10	03	220 V a.c.	198 V c.c.

KOSTAL



X	Y
05	01

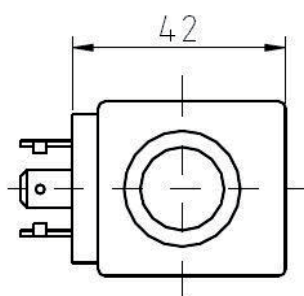
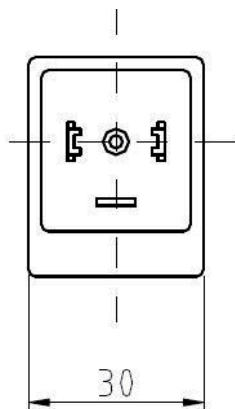
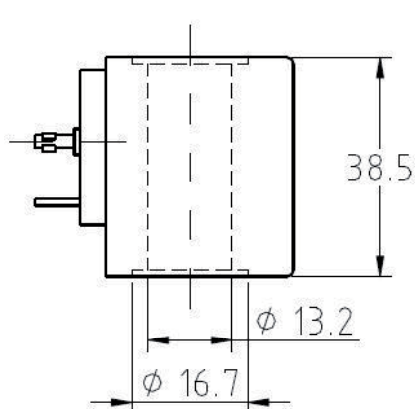
COIL

TYPE

C30

CODE

334CE0503XY

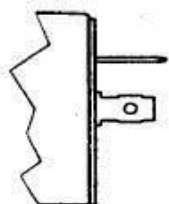


Y	VOLTAGE
01	12 Volts d.c.
02	24 Volts d.c.
03	*48 Volts d.c.
04	*110 Volts d.c.
05	*220 Volts d.c.
06	24 Volts 50 Hz a.c.
07	*48 Volts 50 Hz a.c.
08	110 Volts 50 Hz a.c.
09	220 Volts 50 Hz a.c.
10	*380 Volts 50 Hz a.c.
11	*24 Volts 60 Hz a.c.
12	
13	110 Volts 60 Hz a.c.
14	*220 Volts 60 Hz a.c.
15	
16	24 Volts RAC
17	110 Volts RAC
18	220 Volts RAC

*ATTENTION : special voltage

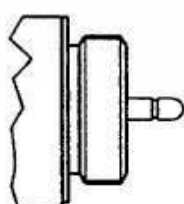
- PROTECTION CLASS = **IP65 DIN 40050**
- POWER CONSUPTION = **18 WATT**
- TEMPERATURE RANGE = **-30°C +50°C**
- INTERMITTENT RATING = **ED 100%**

X=1



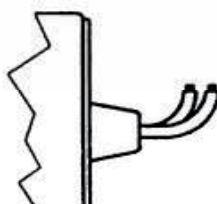
Hirschmann
DIN 43650

X=2



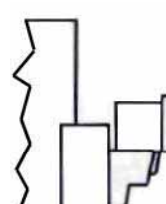
Kostal

X=3



Cables (1m)

X=4



Deutsch

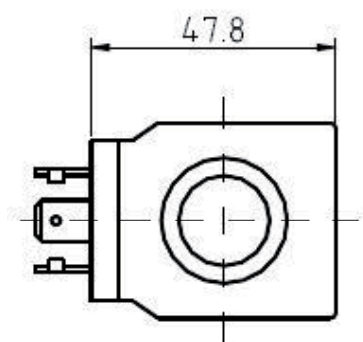
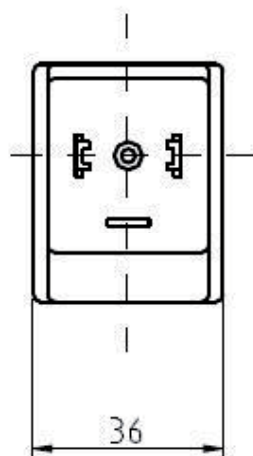
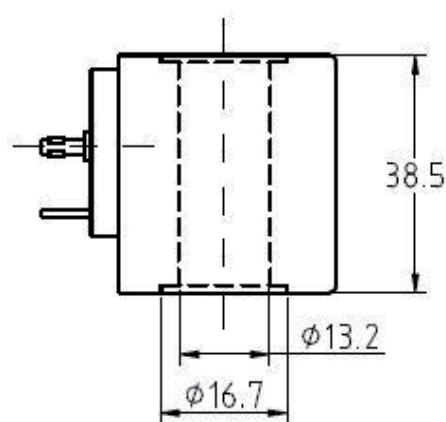
COIL

TYPE

C36

CODE

334CE0507XY

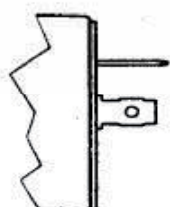


Y	VOLTAGE
01	12 Volts d.c.
02	24 Volts d.c.
03	*48 Volts d.c.
04	
05	
06	*24 Volts 50 Hz a.c.
07	
08	*110 Volts 50 Hz a.c.
09	*220 Volts 50 Hz a.c.
10	
11	
12	
13	*110 Volts 60 Hz a.c.
14	
15	
16	24 Volts RAC
17	110 Volts RAC
18	220 Volts RAC

*ATTENTION : special voltage

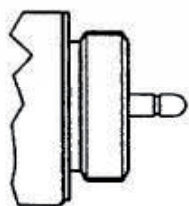
- PROTECTION CLASS = **IP65 DIN 40050**
- POWER CONSUPTION = **22 WATT**
- TEMPERATURE RANGE = **-30°C +50°C**
- INTERMITTENT RATING = **ED 100%**

X=1



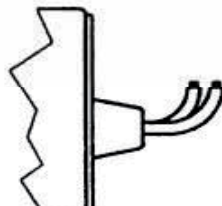
Hirschmann
DIN 43650

X=2



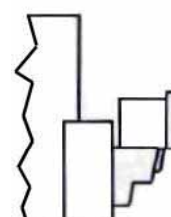
Kostal

X=3



Cables (1m)

X=4



Deutsch

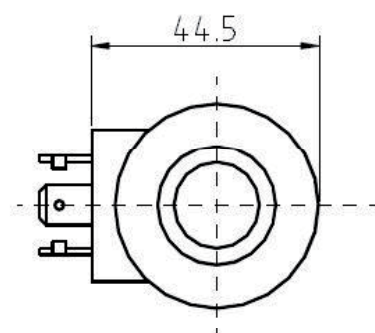
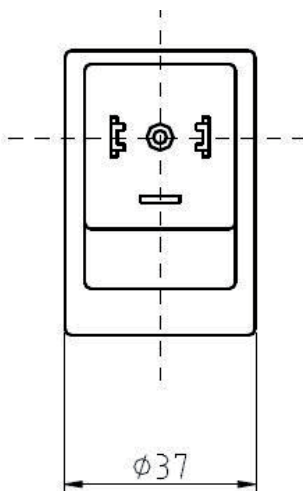
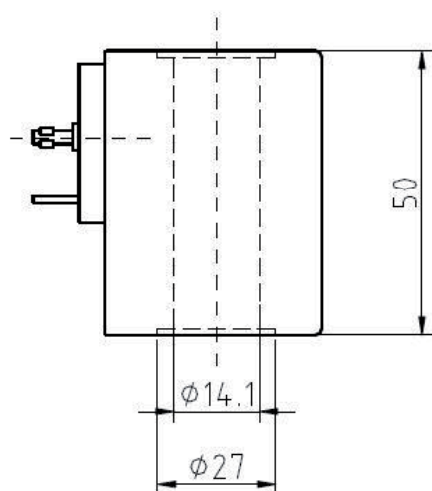
COIL

TYPE

C37

CODE

334CE0509XY

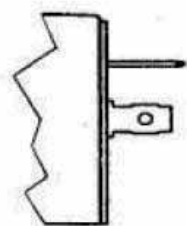


Y	VOLTAGE
01	12 Volts d.c.
02	24 Volts d.c.
03	*48 Volts d.c.
04	*110 Volts d.c.
05	*220 Volts d.c.
06	24 Volts 50 Hz a.c.
07	*48 Volts 50 Hz a.c.
08	110 Volts 50 Hz a.c.
09	220 Volts 50 Hz a.c.
10	*380 Volts 50 Hz a.c.
11	*24 Volts 60 Hz a.c.
12	
13	110 Volts 60 Hz a.c.
14	*220 Volts 60 Hz a.c.
15	
16	24 Volts RAC
17	110 Volts RAC
18	220 Volts RAC

*ATTENTION : special voltage

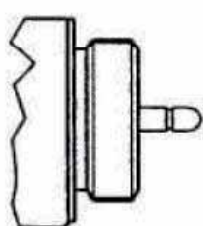
- PROTECTION CLASS = **IP65 DIN 40050**
- POWER CONSUMPTION = **25 WATT**
- TEMPERATURE RANGE = **-30°C +50°C**
- INTERMITTENT RATING = **ED 100%**

X=1



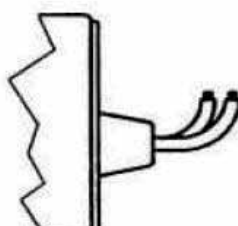
Hirschmann
DIN 43650

X=2



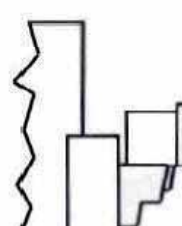
Kostal

X=3



Cables (1m)

X=4



Deutsch

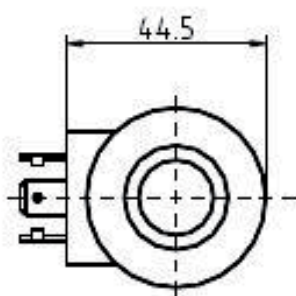
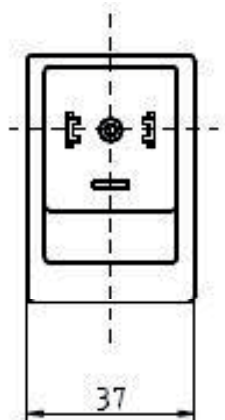
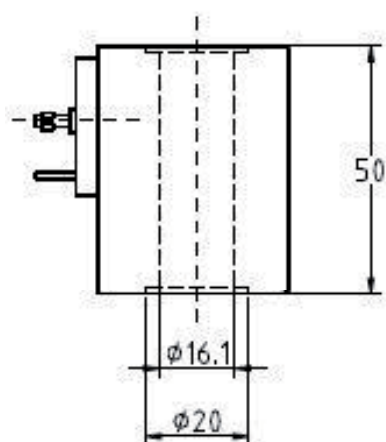
COIL

TYPE

C38

CODE

334CE0511**XY**

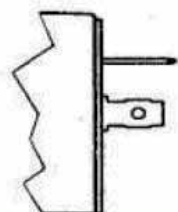


Y	VOLTAGE
01	12 Volts d.c.
02	24 Volts d.c.
03	*48 Volts d.c.
04	*110 Volts d.c.
05	*220 Volts d.c.
06	24 Volts 50 Hz a.c.
07	*48 Volts 50 Hz a.c.
08	110 Volts 50 Hz a.c.
09	220 Volts 50 Hz a.c.
10	*380 Volts 50 Hz a.c.
11	*24 Volts 60 Hz a.c.
12	
13	110 Volts 60 Hz a.c.
14	*220 Volts 60 Hz a.c.
15	
16	24 Volts RAC
17	110 Volts RAC
18	220 Volts RAC

*ATTENTION : special voltage

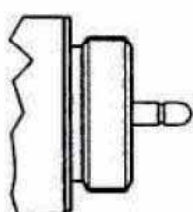
- PROTECTION CLASS = **IP65 DIN 40050**
- POWER CONSUPTION = **28 WATT**
- TEMPERATURE RANGE = **-30°C +50°C**
- INTERMITTENT RATING = **ED 100%**

X=1



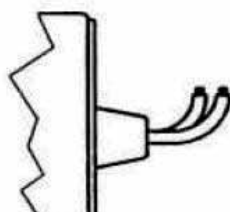
Hirschmann
DIN 43650

X=2



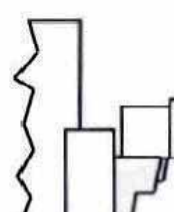
Kostal

X=3



Cables (1m)

X=4



Deutsch

2 / 2 SOLENOID OPERATED CARTRIDGE VALVES

ELETTROVALVOLA 2/2 - NORMALMENTE APERTA - 2/2 SOLENOID OPERATED VALVE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M16 NA	M16	10	250
	EV M18 NA	M18	12	250
	EV 3/4 NA	SAE 08	12	250
	EV 3/4S NA	SAE 08-S	12	250
	EV M22 NA	M22	35	310
	EV 7/8 NA	SAE 10	35	310
	EV M33 NA	M33	60	310

ELETTROVALVOLA 2/2 - NORMALMENTE CHIUSA - 2/2 SOLENOID OPERATED VALVE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M16 NC	M16	10	250
	EV M18 NC	M18	12	250
	EV 3/4 NC	SAE 08	12	250
	EV 3/4S NC	SAE 08-S	12	250
	EV M22 NC	M22	35	310
	EV 7/8 NC	SAE 10	35	310
	EV M33 NC	M33	60	310

ELETTROVALVOLA 2/2 - NORMALMENTE CHIUSA A OTTURATORE - 2/2 SOLENOID OPERATED VALVE - POPPET TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M16 D1	M16	30	220
	EV M18 D1	M18	40	350
	EV 3/4 D1	SAE 08	40	350
	EV 3/4S D1	SAE 08-S	40	350
	EV M22 D1	M22	60	350
	EV 7/8 D1	SAE 10	60	350
	EV M33 D1	M33	150	300

ELETTROVALVOLA 2/2 - NORMALMENTE APERTA A OTTURATORE - 2/2 SOLENOID OPERATED VALVE - POPPET TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M16 D2	M16	30	220
	EV M18 D2	M18	40	350
	EV 3/4 D2	SAE 08	40	350
	EV 3/4S D2	SAE 08-S	40	350
	EV M22 D2	M22	60	350
	EV 7/8 D2	SAE 10	60	350
	EV M33 D2	M33	150	300

ELETTROVALVOLA 2/2 - NORMALMENTE APERTA A OTTURATORE - 2/2 SOLENOID OPERATED VALVE - POPPET TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M18 B1	M18	40	350
	EV 3/4 B1	SAE 08	40	350
	EV 3/4S B1	SAE 08-S	40	350
	EV M22 B1	M22	60	350
	EV 7/8 B1	SAE 10	60	350
	EV M33 B1	M33	150	300

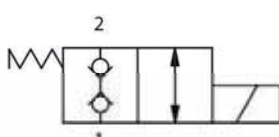
** All models are available with manual emergency on request

2 / 2 SOLENOID OPERATED CARTRIDGE VALVES

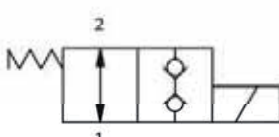
ELETTROVALVOLA 2/2 - NORMALMENTE CHIUSA A OTTURATORE - 2/2 SOLENOID OPERATED VALVE - POPPET TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Q (l/min)	Pressione Pressure	(bar)
	EV M18 B2	M18	40		350	
	EV 3/4 B2	SAE 08	40		350	
	EV 3/4S B2	SAE 08-S	40		350	
	EV M22 B2	M22	60		350	
	EV 7/8 B2	SAE 10	60		350	
	EV M33 B2	M33	120		300	

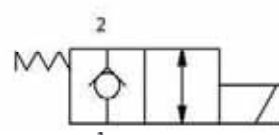
ELETTROVALVOLA 2/2 A DOPPIA TENUTA - NORMALMENTE CHIUSA - 2/2 SOLENOID OPERATED VALVE - BIDIRECTIONAL BLOCKING

	Modello Model	Grandezza Size	Portata Nominal Flow	Q (l/min)	Pressione Pressure	(bar)
	EV M18 B3	M18	20		250	
	EV 3/4 B3	SAE 08	20		250	
	EV 3/4S B3	SAE 08-S	20		250	
	EV M22 B3	M22	30		220	
	EV 7/8 B3	SAE 10	30		220	

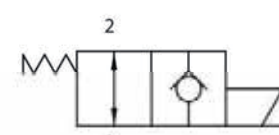
ELETTROVALVOLA 2/2 A DOPPIA TENUTA - NORMALMENTE APERTA - 2/2 SOLENOID OPERATED VALVE - BIDIRECTIONAL BLOCKING

	Modello Model	Grandezza Size	Portata Nominal Flow	Q (l/min)	Pressione Pressure	(bar)
	EV M22 B4	M22	30		220	
	EV 7/8 B4	SAE 10	30		220	

ELETTROVALVOLA 2/2 A OTTURATORE - NORMALMENTE CHIUSA 2/2 SOLENOID OPERATED VALVE - POPPET TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Q (l/min)	Pressione Pressure	(bar)
	EV M16 B5	M16	2		250	
	EV M18 B5	M18	2		310	
	EV 3/4 B5	SAE 08	2		310	
	EV 3/4S B5	SAE 08-S	2		310	

ELETTROVALVOLA 2/2 A OTTURATORE - NORMALMENTE APERTA - 2/2 SOLENOID OPERATED VALVE - POPPET TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Q (l/min)	Pressione Pressure	(bar)
	EV M16 B6	M16	2		250	
	EV M18 B6	M18	2		310	
	EV 3/4 B6	SAE 08	2		310	
	EV 3/4S B6	SAE 08-S	2		310	

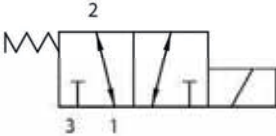
**All models are available with manual emergency on request

3 / 2 SOLENOID OPERATED CARTRIDGE VALVES

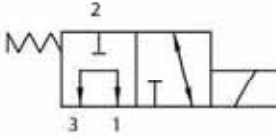
ELETTROVALVOLA 3/2 A CURSORE - 3/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M16 32A1	M16	10	220
	EV M18 32A1	M18	12	310
	EV 3/4 32A1	SAE 08	12	310
	EV M22 32A1	M22	35	310
	EV 7/8 32A1	SAE 10	35	310
	EV M33 32A1	M33	80	310

ELETTROVALVOLA 3/2 A CURSORE - 3/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M16 32A2	M16	10	220
	EV M18 32A2	M18	12	310
	EV 3/4 32A2	SAE 08	12	310
	EV M22 32A2	M22	35	310
	EV 7/8 32A2	SAE 10	35	310
	EV M33 32A2	M33	60	310

ELETTROVALVOLA 3/2 A CURSORE - 3/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M16 32A3	M16	10	220
	EV M18 32A3	M18	12	310
	EV 3/4 32A3	SAE 08	12	310
	EV M22 32A3	M22	35	310
	EV 7/8 32A3	SAE 10	35	310
	EV M33 32A3	M33	60	310

ELETTROVALVOLA 3/2 A CURSORE - 3/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M16 32A4	M16	10	220
	EV M18 32A4	M18	12	310
	EV 3/4 32A4	SAE 08	12	310
	EV M22 32A4	M22	35	310
	EV 7/8 32A4	SAE 10	35	310
	EV M33 32A4	M33	60	310

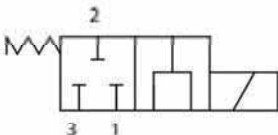
ELETTROVALVOLA 3/2 A CURSORE - 3/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M16 32A5	M16	10	220
	EV M18 32A5	M18	12	310
	EV 3/4 32A5	SAE 08	12	310
	EV M22 32A5	M22	35	310
	EV 7/8 32A5	SAE 10	35	310
	EV M33 32A5	M33	60	310

**All models are available with manual emergency on request

3 / 2 SOLENOID OPERATED CARTRIDGE VALVES

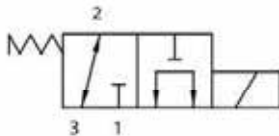
ELETTROVALVOLA 3/2 A CURSORE - 3/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M16 32A6	M16	10	220
	EV M18 32A6	M18	12	310
	EV 3/4 32A6	SAE 08	12	310
	EV M22 32A6	M22	35	310
	EV 7/8 32A6	SAE 10	35	310

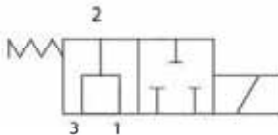
ELETTROVALVOLA 3/2 A CURSORE - 3/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M16 32A7	M16	10	220
	EV M22 32A7	M22	35	310
	EV M33 32A7	M33	60	310

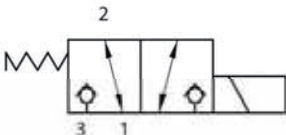
ELETTROVALVOLA 3/2 A CURSORE - 3/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M16 32A8	M16	10	220
	EV M18 32A8	M18	12	310
	EV M22 32A8	M22	35	310
	EV 7/8 32A8	SAE 10	35	310
	EV M33 32A8	M33	60	310

ELETTROVALVOLA 3/2 A CURSORE - 3/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV 3/4 32A9	SAE 08	12	310

ELETTROVALVOLA 3/2 A OTTURATORE - 3/2 SOLENOID OPERATED VALVE - POPPET TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV 3/4 32B2	SAE 08	12	220
	EV M22 32B2	M22	35	220
	EV 7/8 32B2	SAE 10	35	220

**All models are available with manual emergency on request

3/3 & 4/2 SOLENOID OPERATED CARTRIDGE VALVES

ELETTROVALVOLA 3/3 A CURSORE - 3/3 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M22 33E1	M22	35	310

ELETTROVALVOLA 3/3 A CURSORE - 3/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EVM18 33E2	M18	12	310

ELETTROVALVOLA 4/2 A CURSORE - 4/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M16 42F1	M16	10	220
	EV M18 42F1	M18	12	310
	EV 3/4 42F1	SAE 08	12	310
	EV M22 42F1	M22	35	310
	EV 7/8 42F1	SAE 10	35	310
	EV M33 42F1	M33	60	310

ELETTROVALVOLA 4/2 A CURSORE - 4/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M18 42F2	M18	12	220
	EV 3/4 42F2	SAE 08	12	310
	EV M22 42F2	M22	35	310
	EV 7/8 42F2	SAE 10	35	310
	EV M33 42F2	M33	60	310

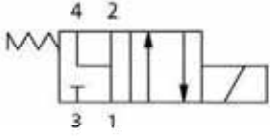
ELETTROVALVOLA 4/2 A CURSORE - 4/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M18 42F3	M18	8	310
	EV 3/4 42F3	SAE 08	8	310
	EV M22 42F3	M22	35	310
	EV 7/8 42F3	SAE 10	35	310

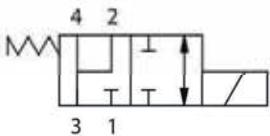
****All models are available with manual emergency on request**

4 / 2 SOLENOID OPERATED CARTRIDGE VALVES

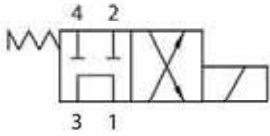
ELETTROVALVOLA 4/2 A CURSORE - 4/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M22 42F4	M22	35	310
	EV 7/8 42F4	SAE 10	35	310

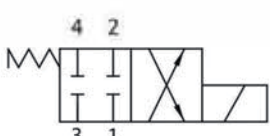
ELETTROVALVOLA 4/2 A CURSORE - 4/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M18 42F5	M18	12	310
	EV 3/4 42F5	SAE 08	12	310

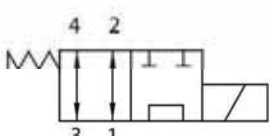
ELETTROVALVOLA 4/2 A CURSORE - 4/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV 3/4 42F6	SAE 08	8	310
	EV M22 42F6	M22	35	310

ELETTROVALVOLA 4/2 A CURSORE - 4/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M22 42F7	M22	35	310

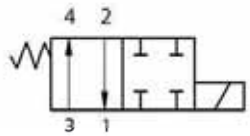
ELETTROVALVOLA 4/2 A CURSORE - 4/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M22 42F8	M22	35	310

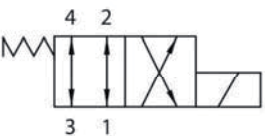
**All models are available with manual emergency on request

4/2 & 4/3 SOLENOID OPERATED CARTRIDGE VALVES

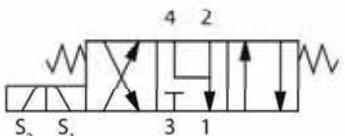
ELETTROVALVOLA 4/2 A CURSORE - 4/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M22 42F9	M22	35	310

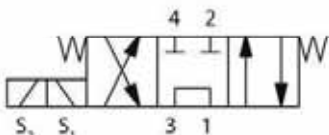
ELETTROVALVOLA 4/2 A CURSORE - 4/2 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV 3/4 42F11	SAE 08	12	310
	EV 7/8 42F11	SAE 10	25	310

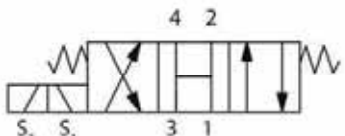
ELETTROVALVOLA 4/3 A CURSORE - 4/3 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M18 43G1	M18	12	310
	EV 3/4 43G1	SAE 08	12	310
	EV M22 43G1	M22	35	310
	EV 7/8 43G1	SAE 10	35	310
	EV M33 43G1	M33	60	310

ELETTROVALVOLA 4/3 A CURSORE - 4/3 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M18 43G2	M18	12	310
	EV 3/4 43G2	SAE 08	12	310
	EV M22 43G2	M22	35	310
	EV 7/8 43G2	SAE 10	35	310
	EV M33 43G2	M33	60	310

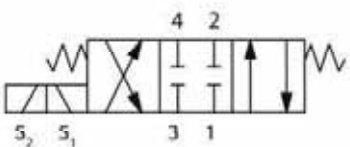
ELETTROVALVOLA 4/3 A CURSORE - 4/3 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	EV M18 43G3	M18	12	310
	EV 3/4 43G3	SAE 08	12	310
	EV M22 43G3	M22	35	310
	EV 7/8 43G3	SAE 10	35	310
	EV M33 43G3	M33	60	310

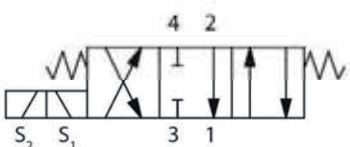
**All models are available with manual emergency on request

4 / 3 SOLENOID OPERATED CARTRIDGE VALVES

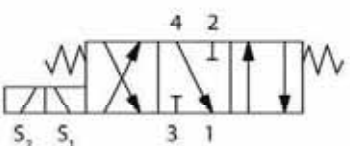
ELETTROVALVOLA 4/3 A CURSORE - 4/3 SOLENOID OPERATED VALVE - SPOOL TYPE

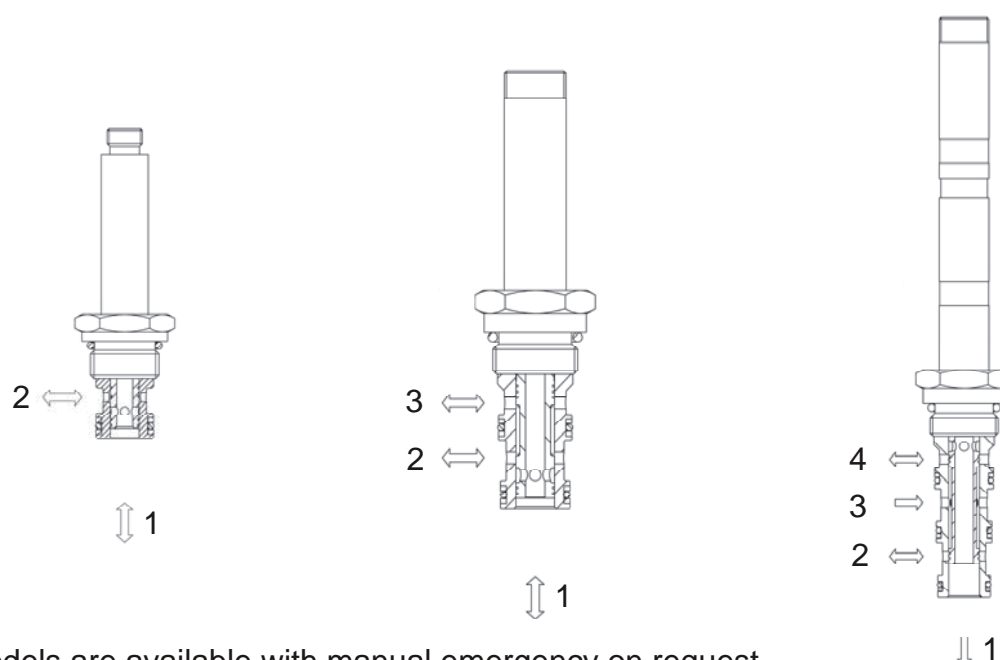
	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	(l/min)	(bar)		
	EV M18 43G4	M18	12	310
	EV 3/4 43G4	SAE 08	12	310
	EV M22 43G4	M22	35	310
	EV 7/8 43G4	SAE 10	35	310
	EV M33 43G4	M33	60	310

ELETTROVALVOLA 4/3 A CURSORE - 4/3 SOLENOID OPERATED VALVE - SPOOL TYPE

	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	(l/min)	(bar)		
	EV M22 43G5	M22	35	310

ELETTROVALVOLA 4/3 A CURSORE - 4/3 SOLENOID OPERATED VALVE - SPOOL TYPE

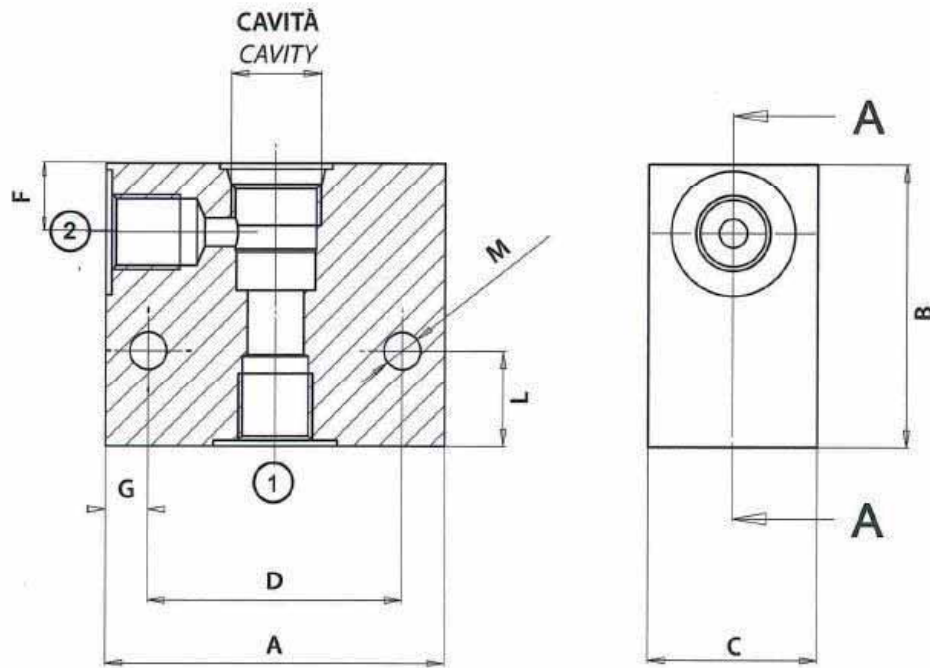
	Modello Model	Grandezza Size	Portata Nominal Flow	Pressione Pressure
	(l/min)	(bar)		
	EV M22 43G6	M22	35	310
	EV 7/8 43G6	SAE 10	35	310



**All models are available with manual emergency on request

2 WAY STANDARD MANIFOLDS

- MATERIAL : **ALUMINIUM** MAX. 250 bar
STEEL MAX. 350 bar

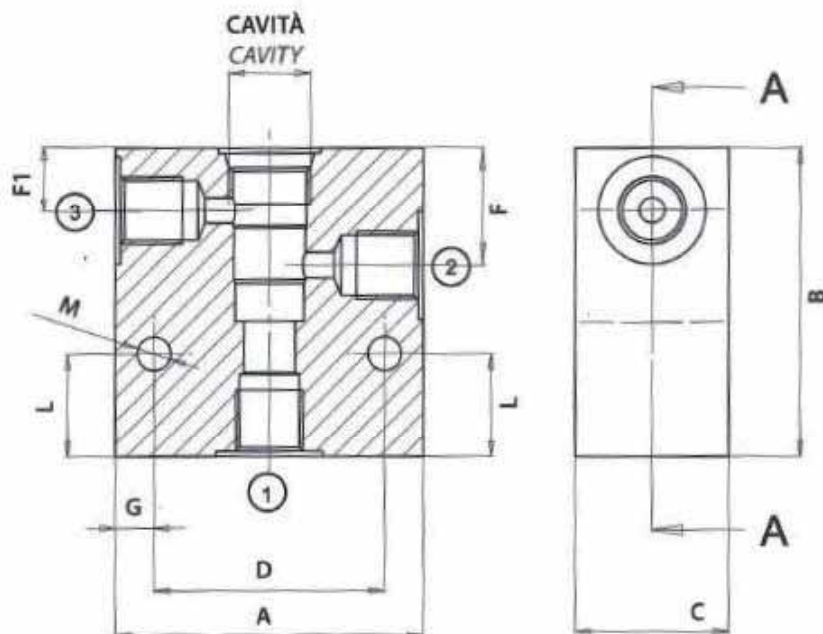


CAVITY	A	B	C	D	F	G	L	M	PORTS
M16 x 1,5	60	60	30	45	21,9	7,5	20	6,5	1/4" - 3/8"
M18 x 1,5	60	60	30	45	28	7,5	17	6,5	1/4" - 3/8"
3/4"-16 SAE08	60	60	30	45	29	7,5	15	6,5	1/4" - 3/8"
3/4"-16 S	60	60	30	45	29	7,5	15	6,5	1/4" - 3/8"
M22 x 1,5	60	70	30	45	33	7,5	20	6,5	3/8" - 1/2"
7/8"-14 SAE10	60	70	30	45	53	7,5	15	6,5	3/8" - 1/2"
1"1/16 SAE12	80	90	50	54	53	7,5	15	6,5	1/2" - 3/4"
M33 x 2	90	95	50	60	46	15	25	8,5	1/2" - 3/4"

- ALL THE BLOCKS ARE AVAILABLE IN STEEL TOO
- CHANGING CAN BE DONE ON REQUEST
- ON SOME TYPES THE FIXING HOLES OR THE MEASURES MAY CHANGE.

3 WAY STANDARD MANIFOLDS

- MATERIAL : **ALUMINIUM** MAX. 250 bar
STEEL MAX. 350 bar

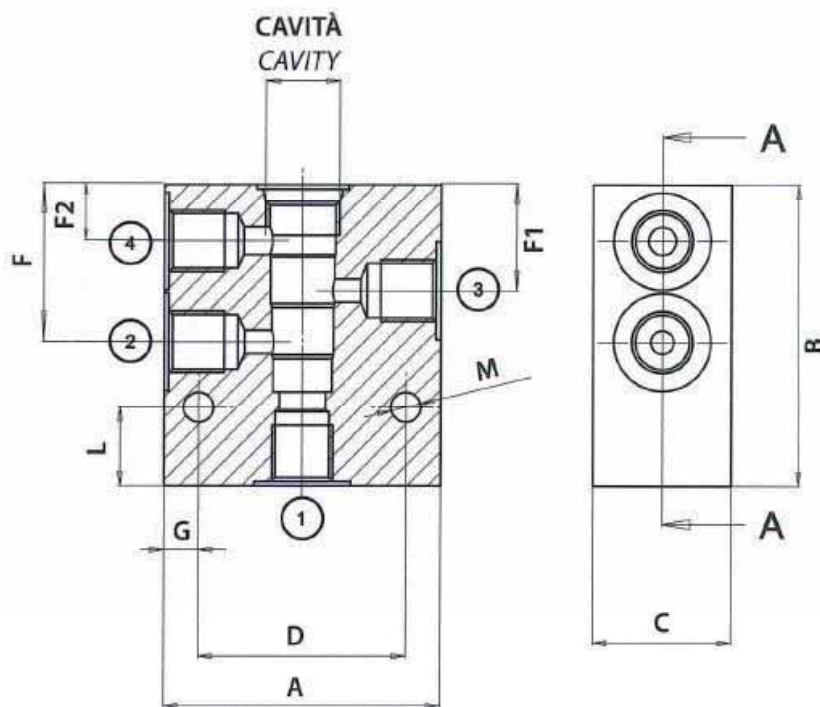


CAVITY	A	B	C	D	F	F1	G	L	M	PORTS
M16 x 1,5	60	60	30	45	21,9	11,2	7,5	20	6,5	1/4" - 3/8"
M18 x 1,5	60	60	30	45	28	13	7,5	17	6,5	1/4" - 3/8"
3/4"-16 SAE08	60	60	30	45	29	14	7,5	15	6,5	1/4" - 3/8"
M22 x 1,5	60	70	30	45	33	15	7,5	20	6,5	3/8" - 1/2"
7/8"-14 SAE10	60	70	30	45	53	17,5	7,5	15	6,5	3/8" - 1/2"
1"1/16 SAE12	80	90	50	54	53	28	7,5	15	6,5	1/2" - 3/4"
M33 x 2	90	95	50	60	46	21	15	25	8,5	1/2" - 3/4"

- ALL THE BLOCKS ARE AVAILABLE IN STEEL TOO
- CHANGING CAN BE DONE ON REQUEST
- ON SOME TYPES THE FIXING HOLES OR THE MEASURES MAY CHANGE.

4 WAY STANDARD MANIFOLDS

- MATERIAL : **ALUMINIUM** MAX. 250 bar
STEEL MAX. 350 bar



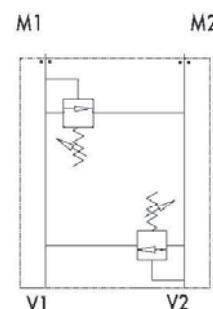
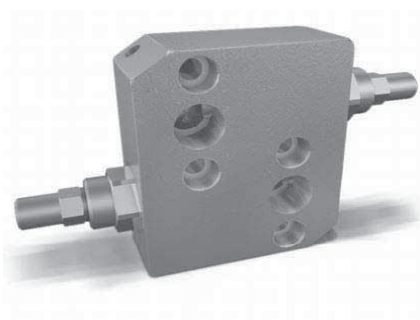
CAVITY	A	B	C	D	F	F1	F2	G	L	M	PORTS
M16 x 1,5	60	65	30	45	32,9	21,9	11,2	7,5	17	6,5	1/4" - 3/8"
M18 x 1,5	60	75	30	45	32,9	28	13	7,5	17	6,5	1/4" - 3/8"
3/4"-16 SAE08	60	75	30	45	43	29	14	7,5	15	6,5	1/4" - 3/8"
M22 x 1,5	60	85	30	45	50	33	15	7,5	15	6,5	3/8" - 1/2"
7/8"-14 SAE10	60	85	30	45	73	53	17,5	7,5	15	6,5	3/8" - 1/2"
1"1/16 SAE12	80	115	50	54	78	53	28	7,5	15	6,5	1/2" - 3/4"
M33 x 2	90	115	50	60	71	46	21	15	25	8,5	1/2" - 3/4"

- ALL THE BLOCKS ARE AVAILABLE IN STEEL TOO
- CHANGING CAN BE DONE ON REQUEST
- ON SOME TYPES THE FIXING HOLES OR THE MEASURES MAY CHANGE.





DUAL CROSS RELIEF VALVE



flangeable on Motors:

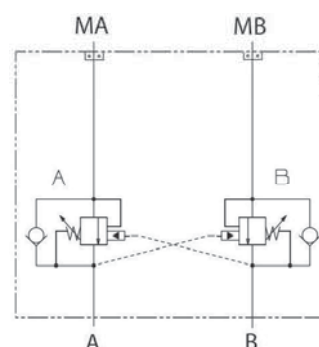
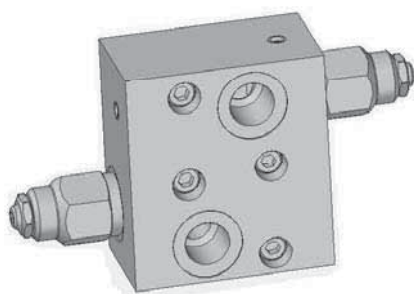
DANFOSS : OMP/OMR; OMS/OMT; DH; DS

CHAR-LYNN : SERIE J; H; S; 2000

SAMHYDRAULIK : BGM; AG; BG; AR; BR

WHITE : RE; RS

OVERCENTER VALVE



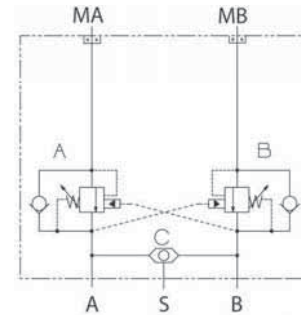
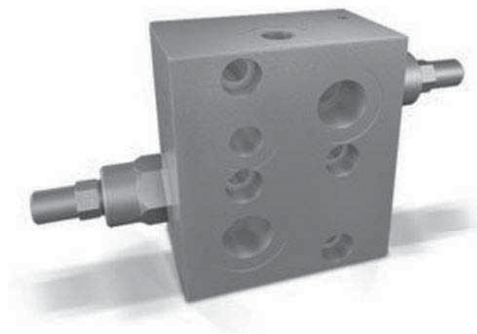
flangeable on Motors:

DANFOSS : OMP/OMR; OMS/OMT; OMH; DH; DS

SAMHYDRAULIK : ARZ

** On request, we can develop special versions

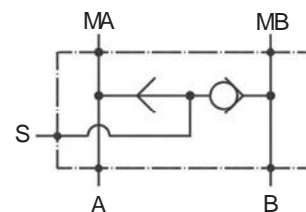
OVERCENTER WITH BRAKE UNCLAPING



flangeable on Motors:

DANFOSS :	OMP/OMR; OMH; OMS; OMT; DH; DS
CHAR-LYNN :	SERIE H; S; T; 2000
SAMHYDRAULIK :	AG; BG; AR; BR
WHITE :	RE; RS

BRAKE UNCLAPING VALVES



flangeable on Motors:

DANFOSS :	OMP/OMR; OMH; OMS
CHAR-LYNN :	SERIE J-2; H; S; T; 2000
SAMHYDRAULIK :	BGM; AG; BG; AR; BR; ARSR; MB
WHITE :	RE; RS

** On request, we can develop special versions

FLANGEABLE DUAL CROSS OVER DIRECT ACTING RELIEF VALVES

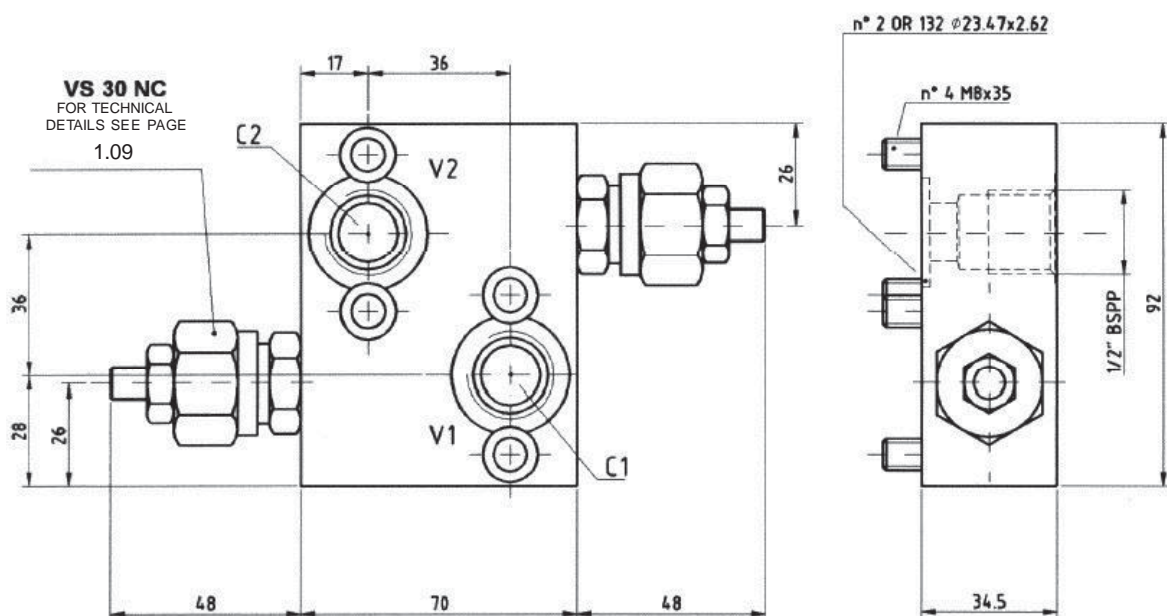
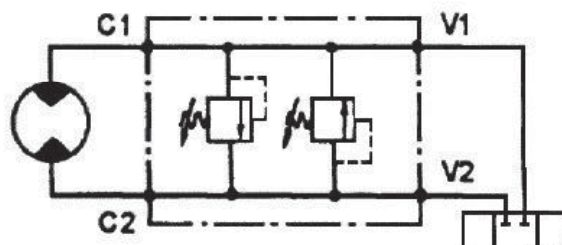
TYPE

VMDI 30

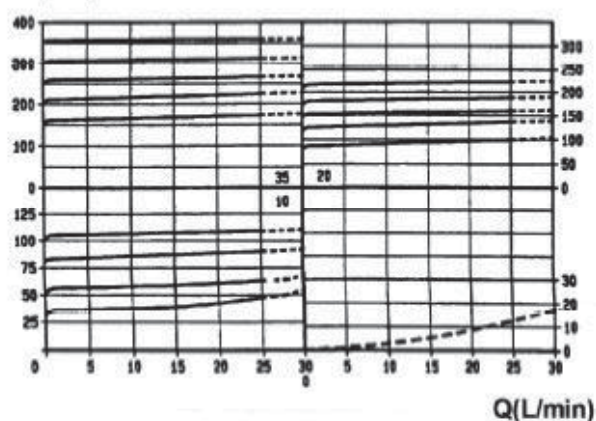
CODE

900F2109230304XY₁₀

- MATERIAL OF BODY : ALUMINIUM
- QUICK RESPONSE
- LOW HYSTERESIS
- FILTRATION LEVEL : 50 µm
- FLOW MAX. : 30 L/min
- PRESSURE MAX. : 210 bar
- WEIGHT : 0,7 Kg
- TYPE OF MOTORS: DANFOSS OMR/OMP



ΔP (bar)



OIL VISCOSITY 45 cSt AT 40°C

X

ADJUSTMENTS

0

LEAKPROOF HEX.
SOCKET SCREW



1

HANDKNOB AND
LOCKNUT



Y

SPRINGS

2

30 - 100 bar

3

50 - 210 bar

FLANGEABLE FLOW CONTROL VALVES

TYPE

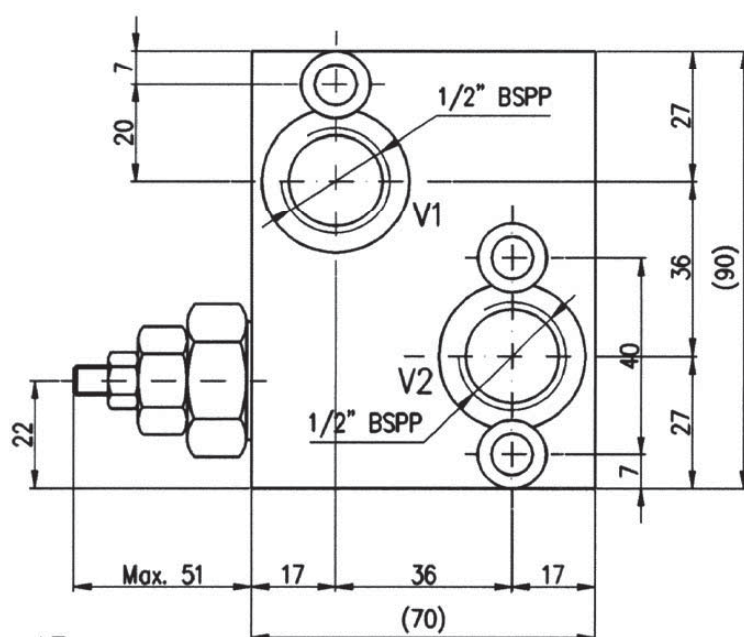
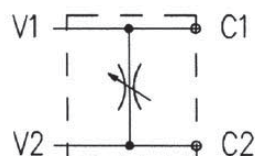
VFDI 45

CODE

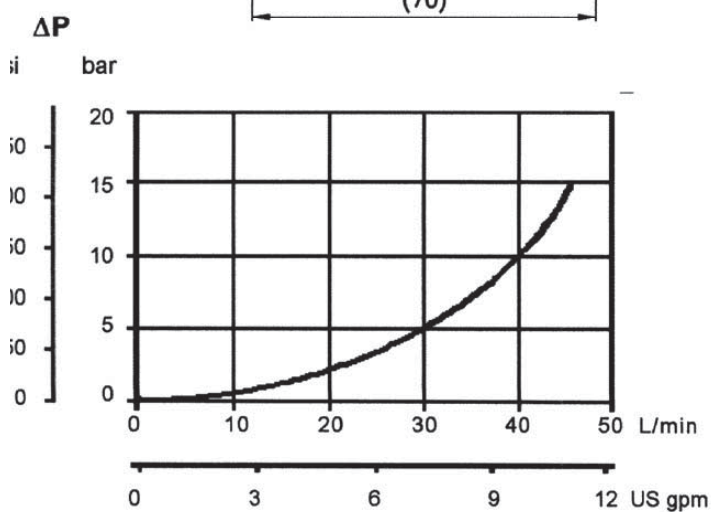
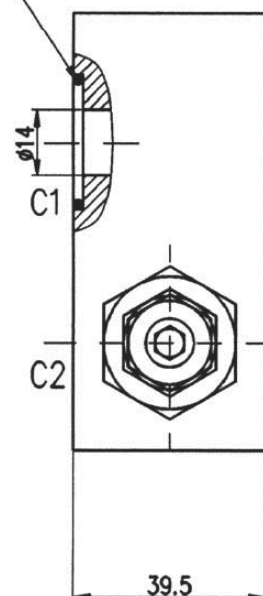
900F2105240304**X**0000

MATERIAL OF BODY : **ALUMINIUM**
LEAK PROOF SEAT DESIGN
FILTRATION LEVEL : **50 μ**
FLOW Max. : **45 l/min.**
PRESSURE Max. : **350 bar**
TYPE OF MOTORS : **DANFOSS OMP, OMR**
WEIGHT : **0,7 Kg**

SYMBOL



O-Ring 3100

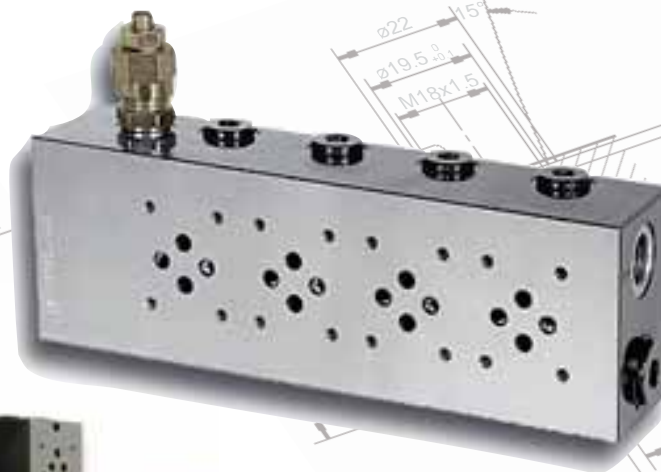


OIL VISCOSITY 46 cSt AT 40° C

X ADJUSTEMENTS	
0	LEAKPROOF HEX. SOCKET SCREW
1	HAND KNOB



CETOP subplates



SUBPLATE (CETOP 3)

TYPE

P06-SA 38

CODE

900H551111003000

MOUNTING SUBPLATE FOR
SOLENOID VALVE (CETOP3)

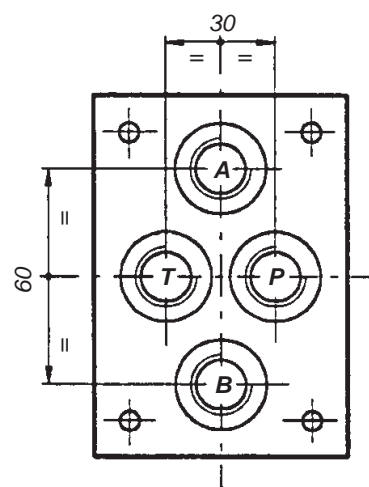
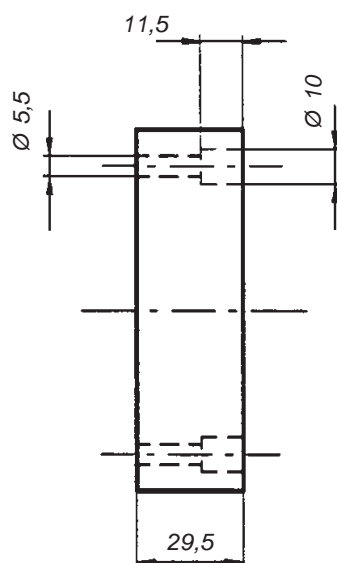
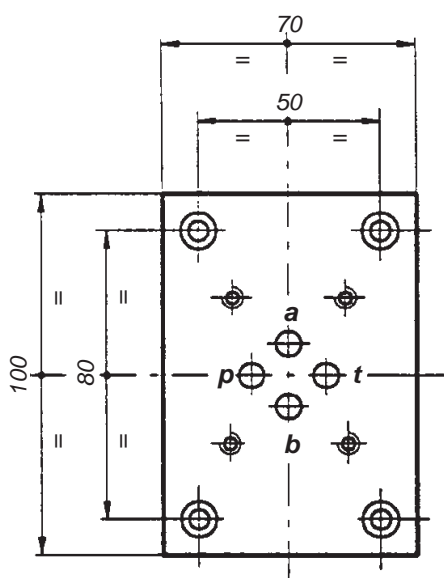
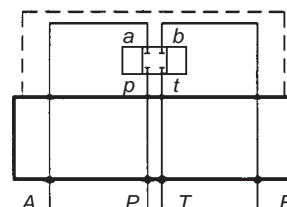
SYMBOL

MATERIAL : **ALUMINIUM**

WEIGHT : **0,500 Kg**

PORT SIZE : **3/8" BSPP**

MAX. WORKING PRESSURE : **250 bar**



SUBPLATE (CETOP 3)

TYPE

P06-SC 38

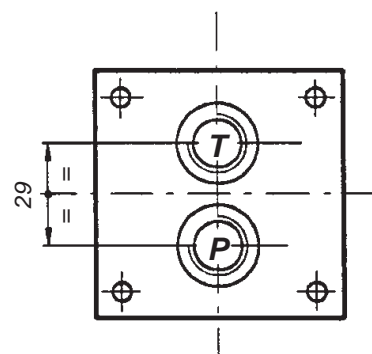
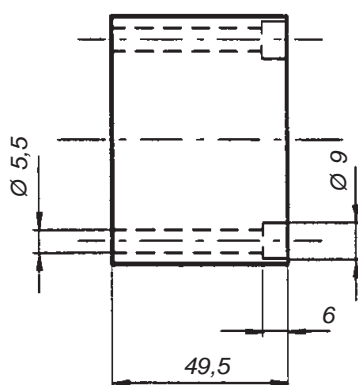
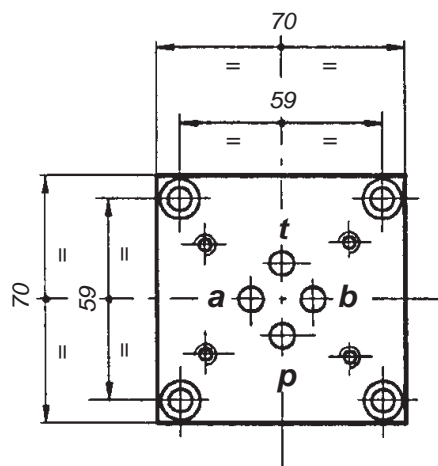
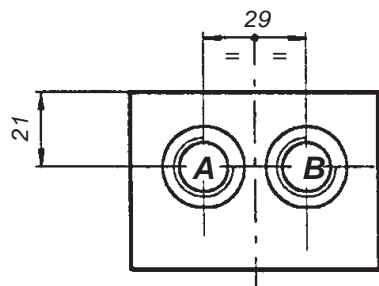
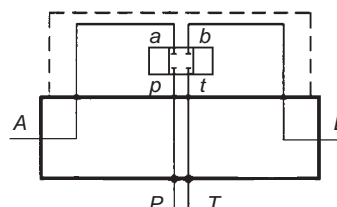
CODE

900H551112003000

MOUNTING SUBPLATE FOR SOLENOID VALVE
(CETOP3).

SYMBOL

MATERIAL : **ALUMINIUM**
WEIGHT : **0,600 Kg**
PORT SIZE : **3/8" BSPP**
MAX. WORKING PRESSURE : **250 bar**



SUBPLATE (CETOP 3)

TYPE

P06-38 VMSB

CODE

900H5511121030 **YZ**

MOUNTING SUBPLATE FOR SOLENOID VALVE
(CETOP3) WITH PRESSURE RELIEF VALVE

SYMBOL

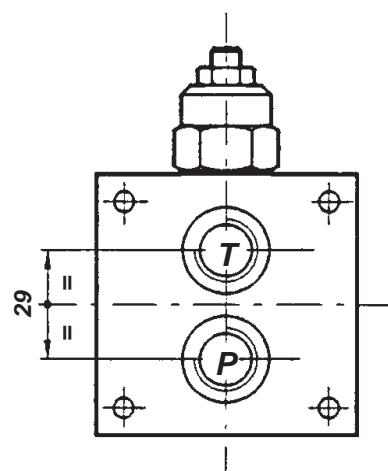
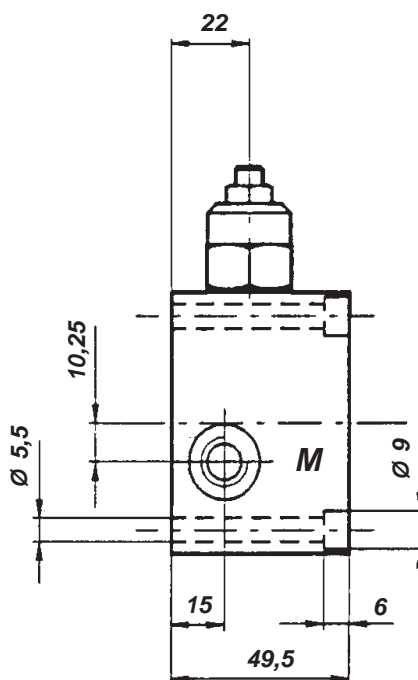
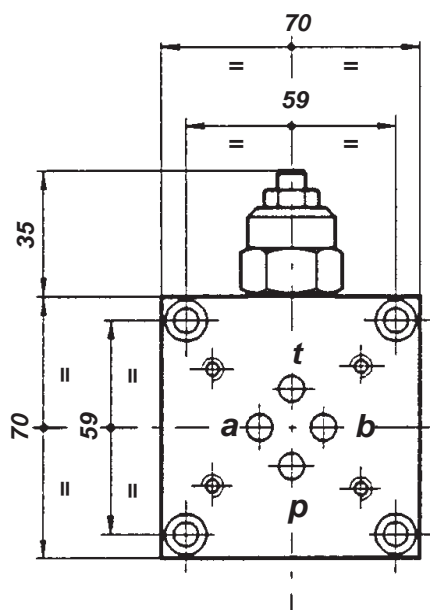
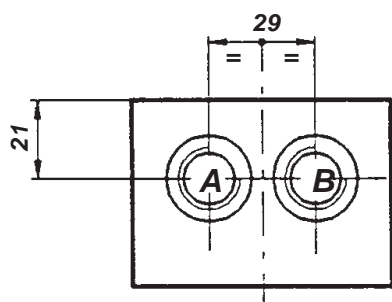
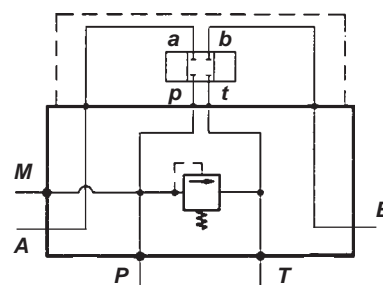
YZ : see VM35 page 1.01

MATERIAL : **ALUMINIUM**

WEIGHT : **0,725 Kg**

PORT SIZE : **3/8" BSPP**

MAX. WORKING PRESSURE : **250 bar**

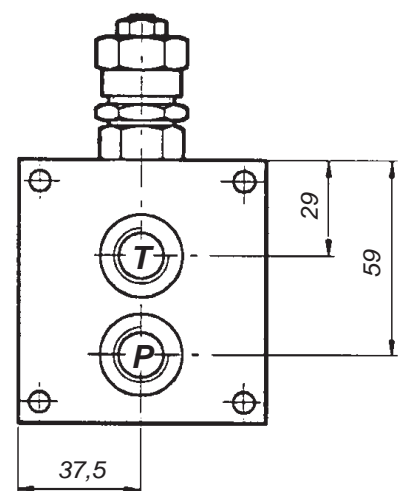
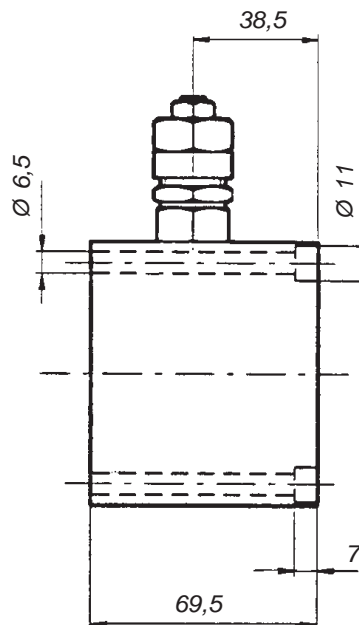
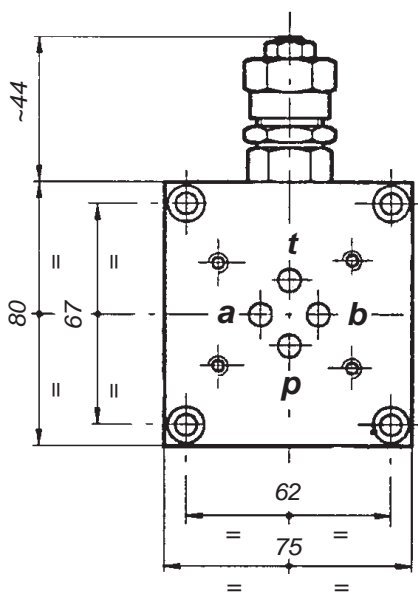


TYPE	P06-38 VMS-30
CODE	900H5511123030XY

SYMBOL

The diagram shows a Wheatstone bridge circuit. The four vertices of the bridge are labeled a , b , p , and t . A dashed rectangle encloses the top two vertices a and b . The left branch of the bridge contains a variable resistor, represented by a rectangle with a diagonal arrow pointing through it. The right branch contains a fixed resistor, represented by a rectangle with a diagonal line through it. A galvanometer, represented by a circle with a vertical line through it, is connected between vertices p and t . The bridge is connected to a DC voltage source, represented by a battery symbol, with terminals A and B on the left and right respectively. The bottom terminals of the bridge are labeled P and T .

Technical drawing of a mechanical part showing dimensions 20, 52,5, and 22,5, and labels A and B.



SUBPLATE (CETOP 3)

TYPE

P06-MVS 38B2/n°

CODE

900H55Z33030XY

MOUNTING SUBPLATES FOR SOLENOID VALVES
(CETOP3) PARALLEL CONNECTION WITH
PRESSURE RELIEF VALVE.
ON REQUEST SERIAL CONNECTION

XY : see VS-30-NC page 1.09

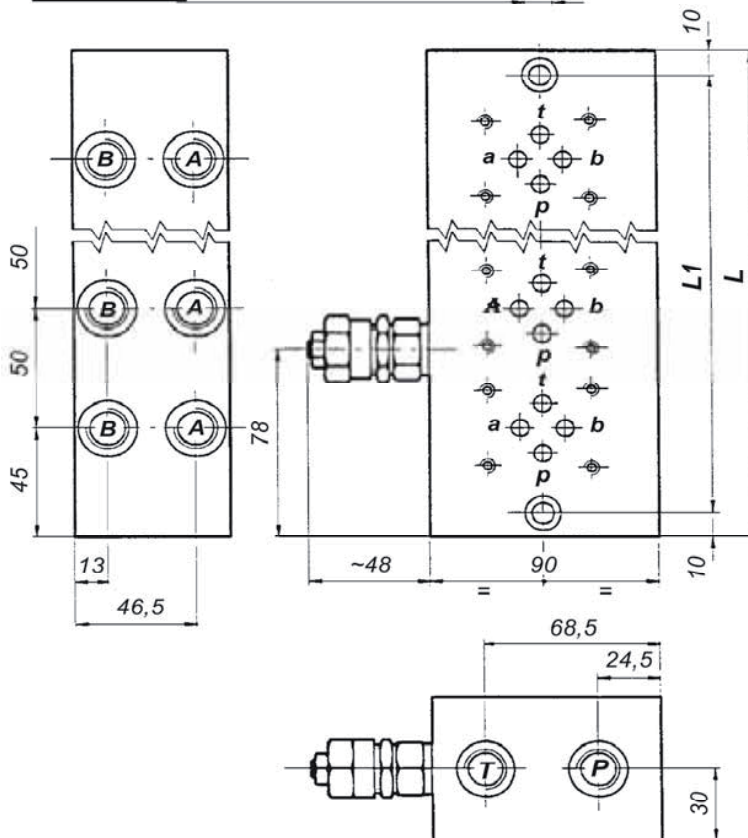
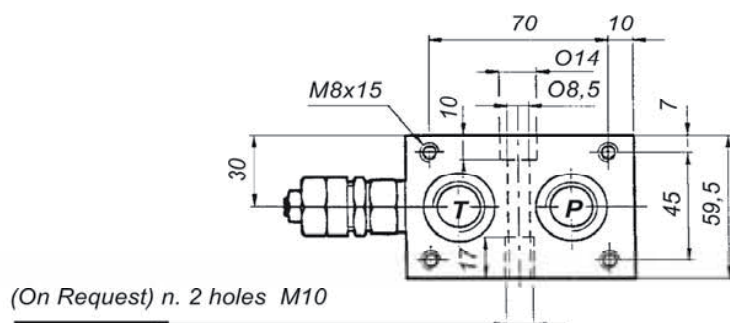
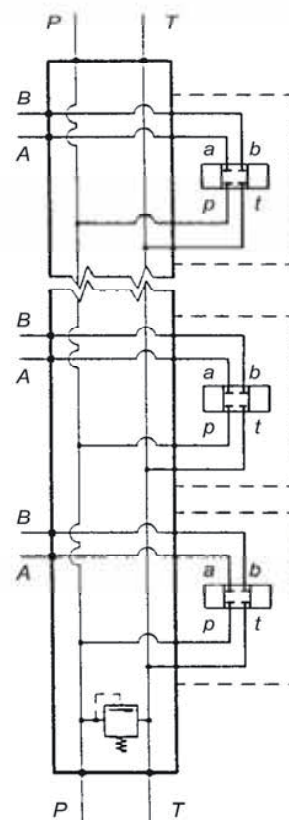
MATERIAL: **ALLUMINIUM**

PORT SIZE: **A and B 3/8" BSPP**

P and T 1/2" BSPP

MAX. WORKING PRESSURE: **250 bar**

SYMBOL



Z	TYPE	L mm.	L1 mm.	Weight Kg.
111	P06-MVS 38B2/ 1	90	70	1,39
112	P06-MVS 38B2/ 2	140	120	2,06
113	P06-MVS 38B2/ 3	190	170	2,73
114	P06-MVS 38B2/ 4	240	220	3,41
115	P06-MVS 38B2/ 5	290	270	4,08
116	P06-MVS 38B2/ 6	340	320	4,76
117	P06-MVS 38B2/ 7	390	370	5,43
118	P06-MVS 38B2/ 8	440	420	6,11

SUBPLATE (CETOP 5)

TYPE

P10-12 S

CODE

900H551212004000

MOUNTING SUBPLATES FOR SOLENOID VALVE
(CETOP5)

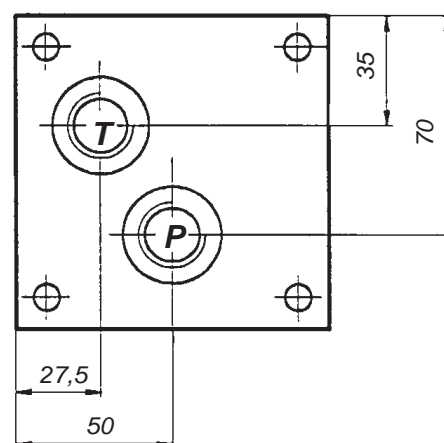
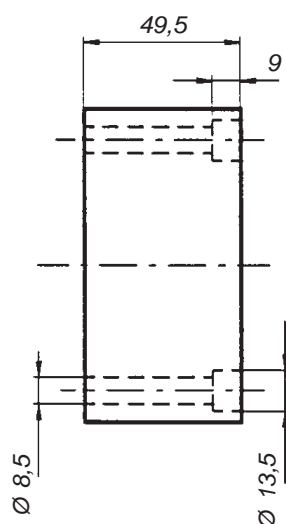
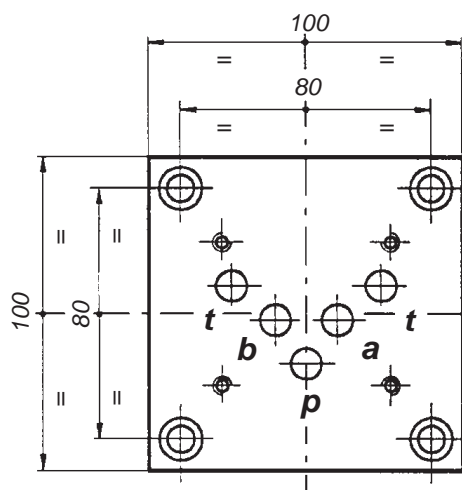
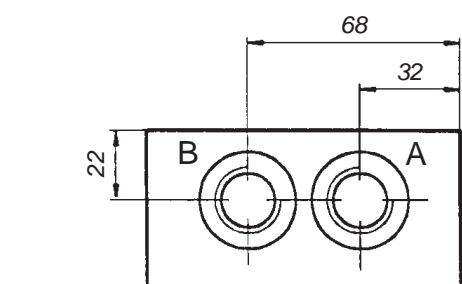
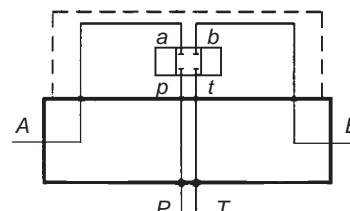
SYMBOL

MATERIAL: **ALLUMINIUM**

WEIGHT: **1,250 Kg**

PORT SIZE: **1/2" BSPP**

MAX. WORKING PRESSURE: **250 bar**



SUBPLATE (CETOP 5)

TYPE

P10-12 SB

CODE

900H551211004000

MOUNTING SUBPLATE FOR SOLENOID VALVE
(CETOP5)

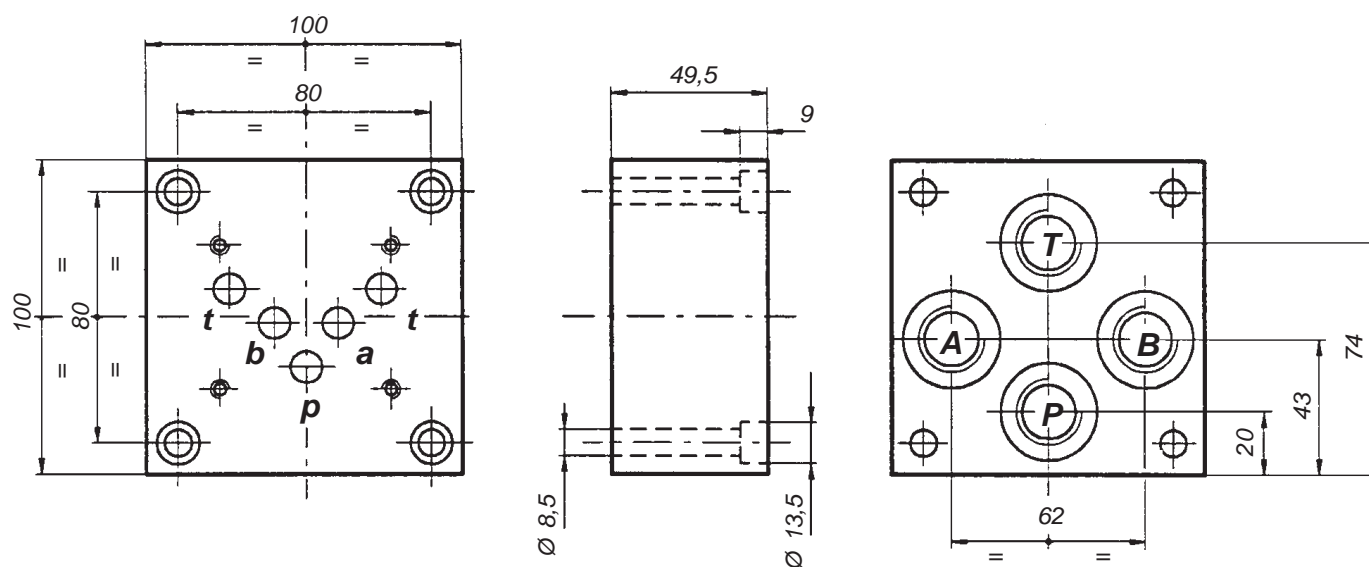
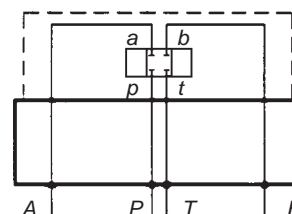
SYMBOL

MATERIAL : **ALLUMINIUM**

WEIGHT : **1,250 Kg**

PORT SIZE : **1/2" BSPP**

MAX. WORKING PRESSURE : **250 bar**



SUBPLATE (CETOP 5)

TYPE

P10-12 VMS

CODE

900H5512121040XY

MOUNTING SUBPLATE FOR SOLENOID VALVE
(CETOP5) WITH PRESSURE RELIEF VALVE

SYMBOL

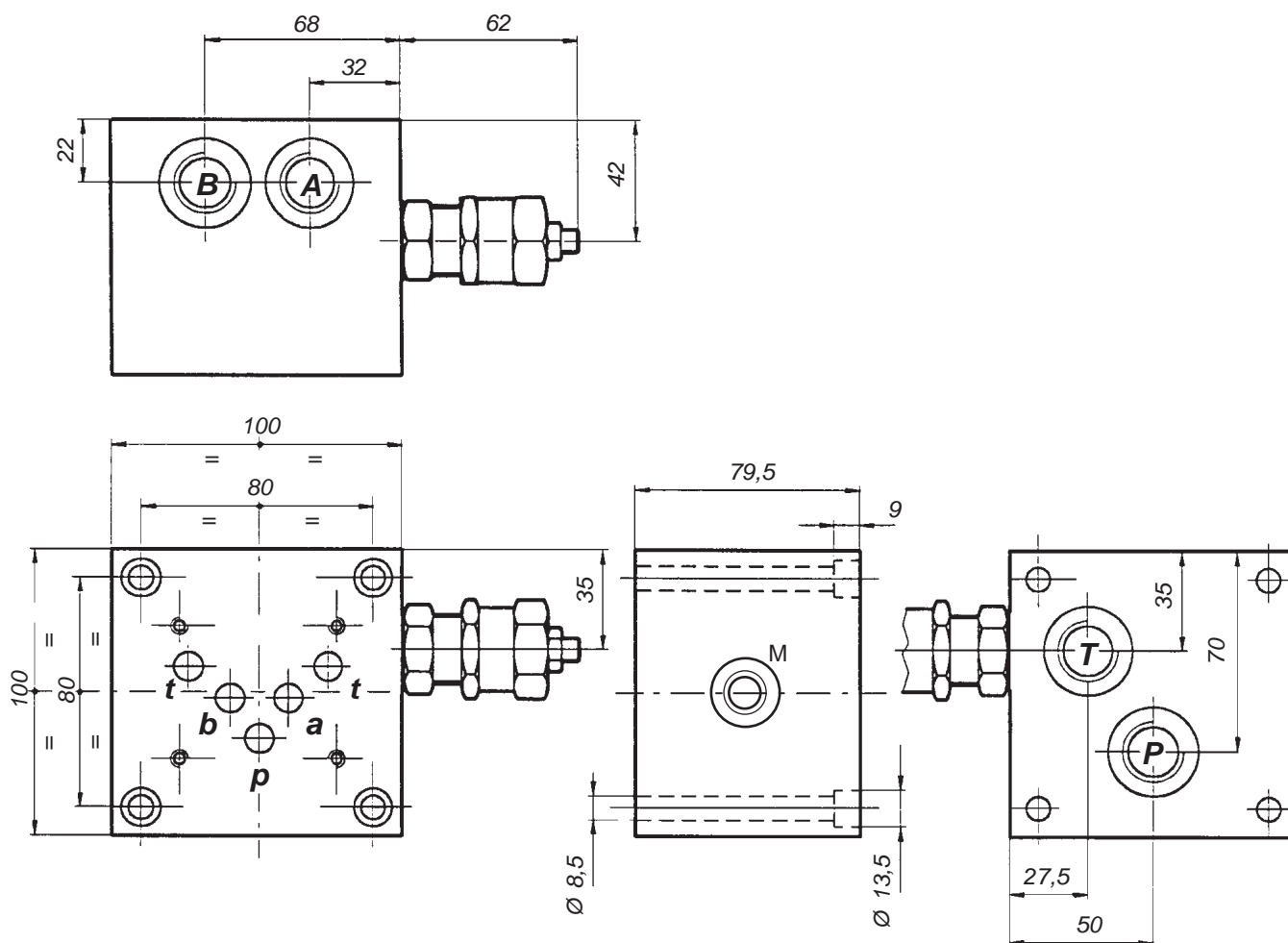
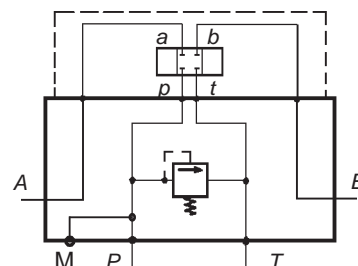
XY : see VS-80-N page 1.07

MATERIAL : **ALLUMINIUM**

WEIGHT : **2,550 Kg**

PORT SIZE : **1/2" BSPP**

MAX. WORKING PRESSURE : **250 bar**



SUBPLATE (CETOP 5)

TYPE

P10-M 12/n°

CODE

900H55X3004000

MOUNTING SUBPLATES FOR SOLENOID VALVES (CETOP5) PARALLEL CONNECTION.
ON REQUEST SERIAL CONNECTION

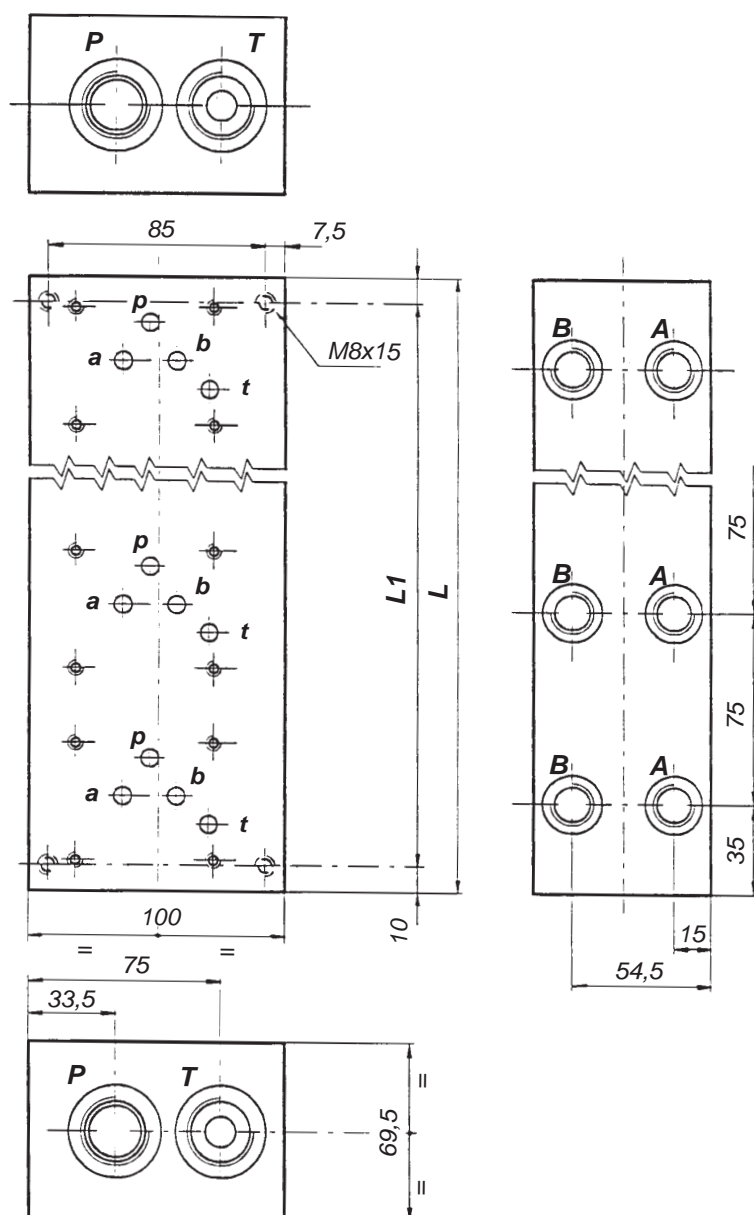
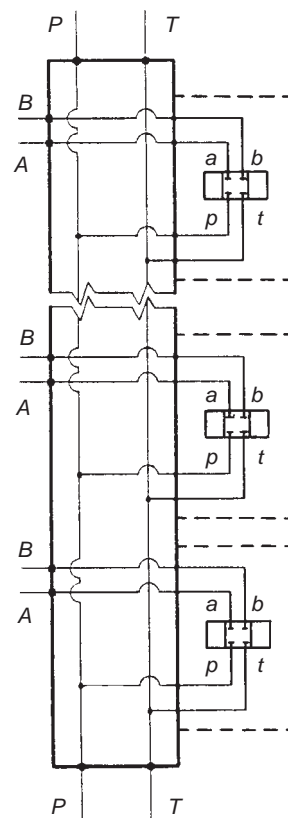
MATERIAL: **ALLUMINIUM**

PORT SIZE : **A and B 1/2" BSPP**

P and T 3/4" BSPP

MAX. WORKING PRESSURE : **250 bar**

SYMBOL



X	TYPE	L mm.	L1 mm.	WEIGHT Kg.
122	P10 - M 12/ 2	155	135	2,710
123	P10 - M 12/ 3	230	210	4,030
124	P10 - M 12/ 4	305	285	5,340
125	P10 - M 12/ 5	380	360	6,650
126	P10 - M 12/ 6	455	435	7,970

**The dimensions may change

SUBPLATE (CETOP 5)

TYPE

P10-MVS 12/n°

CODE

900H55Z31040XY

MOUNTING SUBPLATES FOR SOLENOID VALVES
(CETOP5) PARALLEL CONNECTION WITH
PRESSURE RELIEF VALVE.
ON REQUEST SERIAL CONNECTION

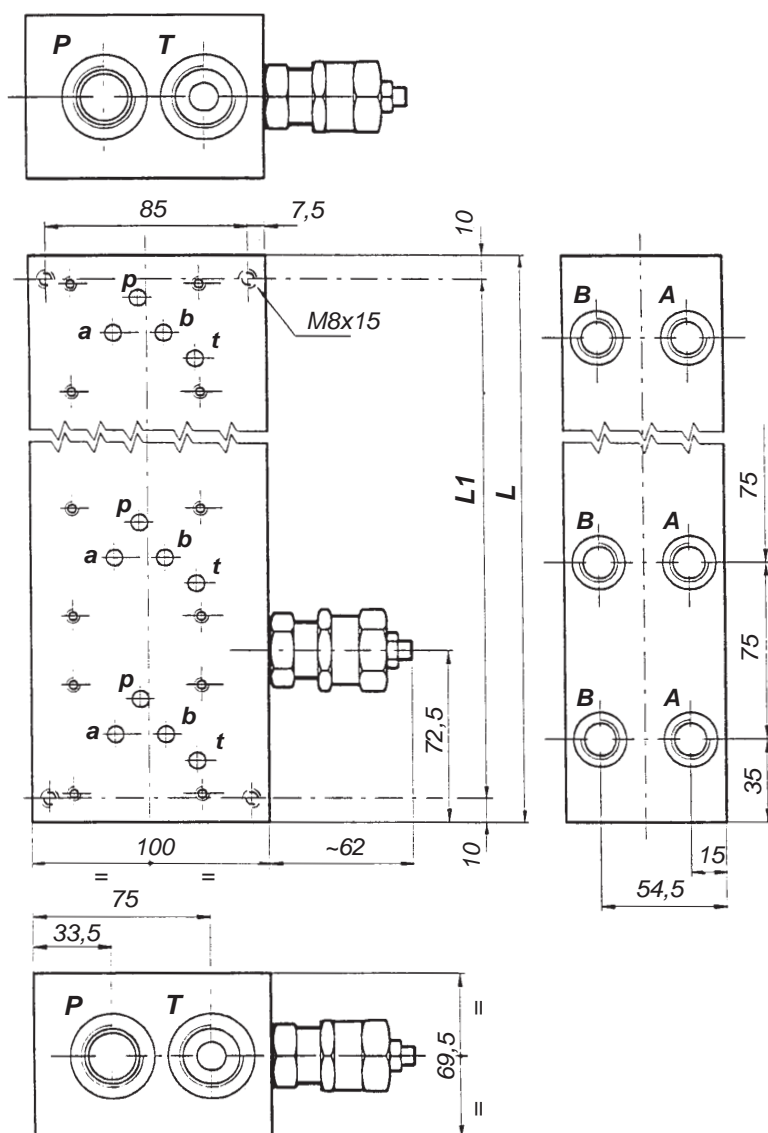
XY : see VS-80-N page 1.07

MATERIAL: **ALLUMINIUM**

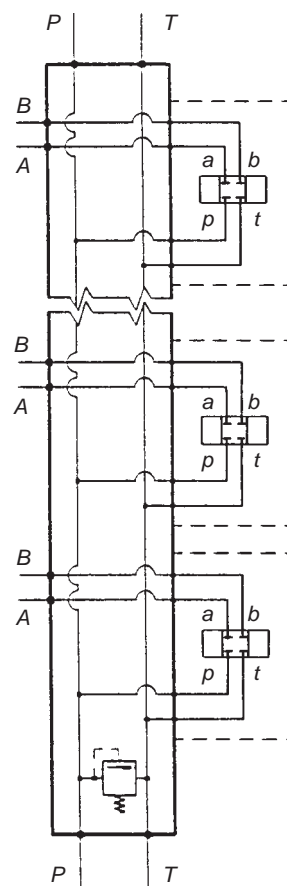
PORT SIZE: **A and B 1/2" BSPP**

P and T 3/4" BSPP

MAX. WORKING PRESSURE : **250 bar**



SYMBOL



Z	TYPE	L mm.	L1 mm.	WEIGHT Kg.
122	P10-MVS 12/ 2	155	135	3,060
123	P10-MVS 12/ 3	230	210	4,380
124	P10-MVS 12/ 4	305	285	5,690
125	P10-MVS 12/ 5	380	360	7,000
126	P10-MVS 12/ 6	455	435	8,320

**The dimensions may change





Various valves

CETOP 3 VALVES

TYPE

CODE

DX3-Y-Z

EX: DS3 - S1 - D12

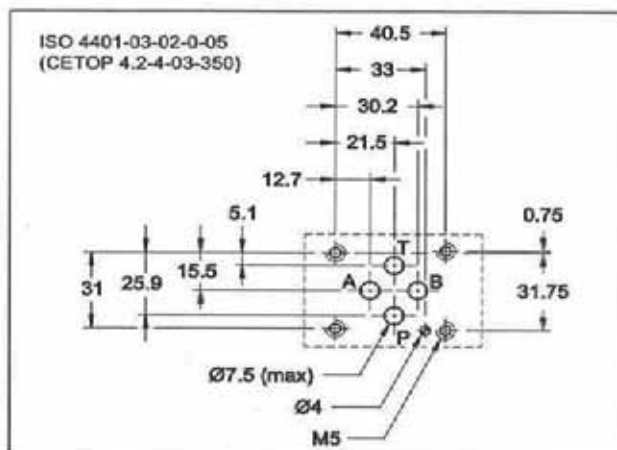
X

DL 3:

Q MAX. 50 L/min
P MAX 280 bar

DS 3:

Q MAX. 100 L/min
P MAX 350 bar



Y		Y		Drawing Disegno
CODE	Description Descrizione	CODE	Description Descrizione	
TA		S1		
TB		S2		
SA1		S3		
SB1		S4		
SA2		S10		
SB2				
Z	Solenoids voltage for CETOP 3 Tensione dei solenoidi per CETOP 3			
CODE	Description Descrizione	Nominal power Potenza nominale	Characteristics Caratteristiche	
00	No solenoid No solenoide	/	Duty cycle Ciclo di lavoro 100%	DL3
D12	12 Vdc	32 W	Insulation class Classe di isolamento F (T=155°C)	DS3
D24	24 Vdc	31 W		
D48	48 Vdc	30 W		
A24	24 Vac	48 VA	Protection index Indice di protezione IP65	
A110	110 Vac	48 VA		
A220	220 Vac	44 VA		

- IN ADDITION TO THE PISTON SHOWN ABOVE, THERE ARE OTHER VERSIONS AVAILABLE.
- SOLENOIDS WITH OTHER VOLTAGES AND CONNECTION TYPES ARE AVAILABLE ON REQUEST.
- DETAILED TECHNICAL DOCUMENTS WITH DIMENSIONS AND ADDITIONAL SERVICES DETAILS CAN BE SENT IF NECESSARY.

CETOP 5 VALVES

TYPE

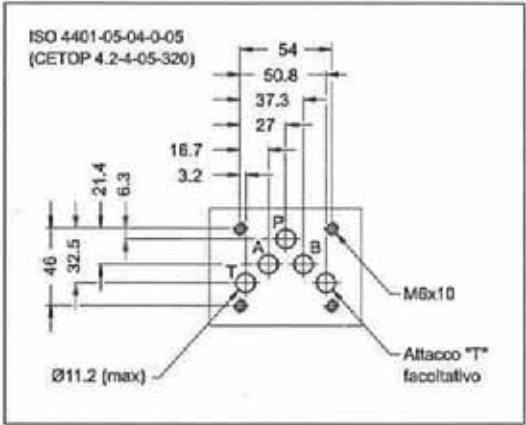
CODE

DS5-Y-Z

EX: DS5 - S1 - D12

DS 5:

Q MAX. 150 L/min
P MAX 320 bar



Y		Y		
CODE	Description Descrizione	CODE	Description Descrizione	Drawing Disegno
TA		S1		
TB		S2		
		S3		
		S4		

Z	Solenoids voltage for CETOP 3 Tensione dei solenoidi per CETOP 3		
CODE	Description Descrizione	Nominal power Potenza nominale	Characteristics Caratteristiche
00	No solenoid No solenoide	/	Duty cycle Ciclo di lavoro 100% Insulation class Classe di isolamento F (T=155°C) Protection index Indice di protezione IP65
D12	12 Vdc	32 W	
D24	24 Vdc	31 W	
D48	48 Vdc	30 W	
A24	24 Vac	48 VA	
A110	110 Vac	48 VA	
A220	220 Vac	44 VA	

- IN ADDITION TO THE PISTON SHOWN ABOVE, THERE ARE OTHER VERSIONS AVAILABLE.
- SOLENOIDS WITH OTHER VOLTAGES AND CONNECTION TYPES ARE AVAILABLE ON REQUEST.
- DETAILED TECHNICAL DOCUMENTS WITH DIMENSIONS AND ADDITIONAL SERVICES DETAILS CAN BE SENT IF NECESSARY.

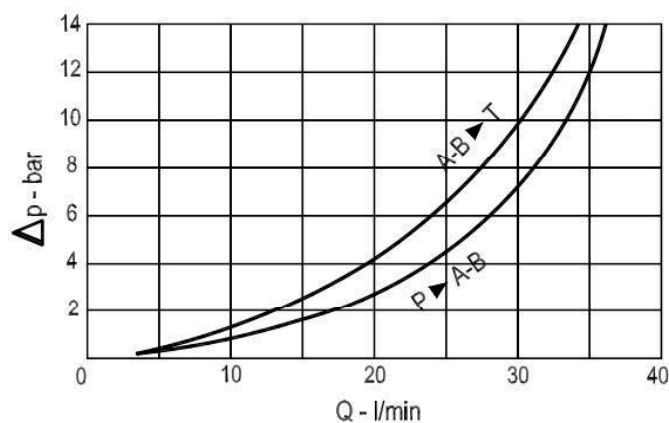
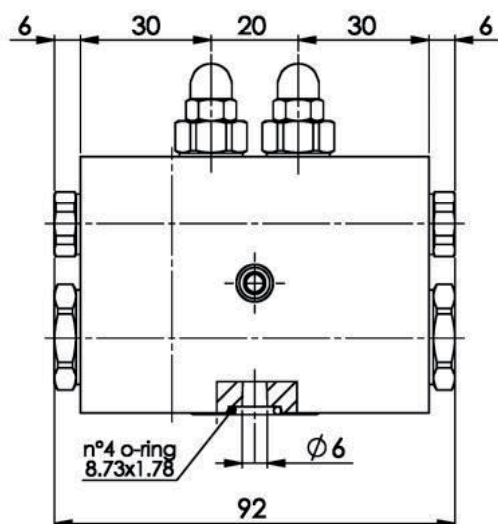
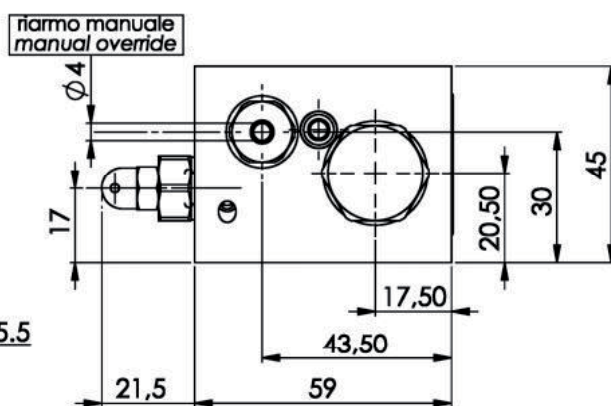
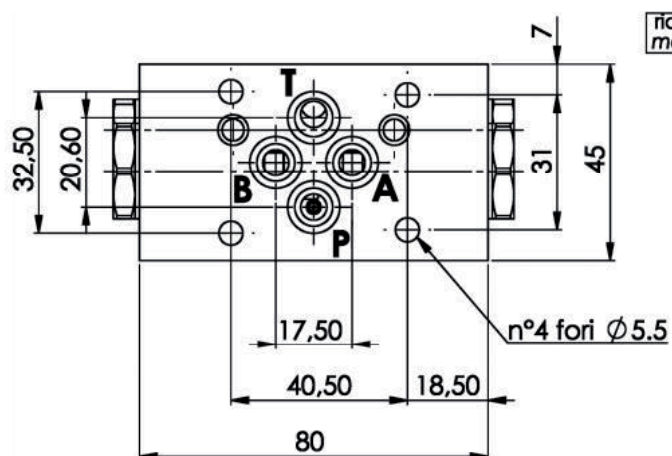
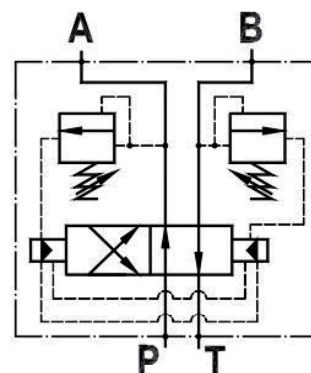
AUTOMATIC REVERSING VALVE CETOP 3

TYPE

CODE

086FPIA-L6-VMX

- MATERIAL : ZINC PLATED CAST IRON
- Q. MIN : 3 L/min
- Q. MAX : 35 L/min
- P. MAX : 350 bar
- FILTRATION LEVEL : 25 μ m
- VISCOSITY RANGE : 10 - 500 cSt



To guarantee a correct operation of valve, is advised to set the pressure on relief valve of system at least 20% higher of reversing pressure

X	SPRINGS	
	ADJUSTMENTS	STANDARD SETTING
10	20-100 bar	40 bar
20	85-260 bar	150 bar

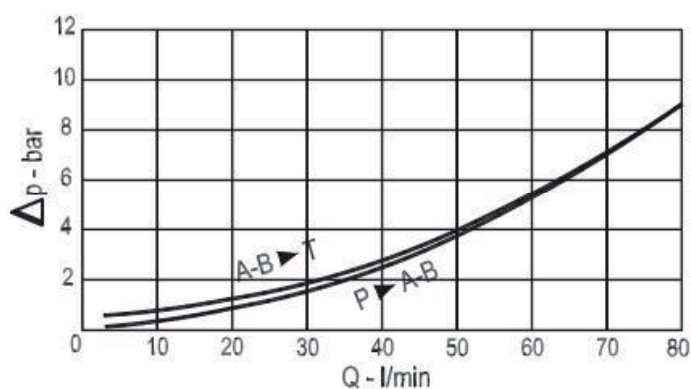
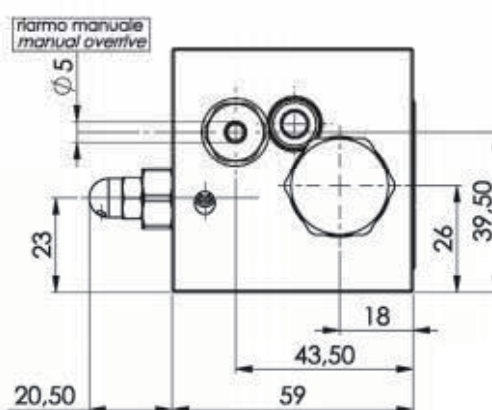
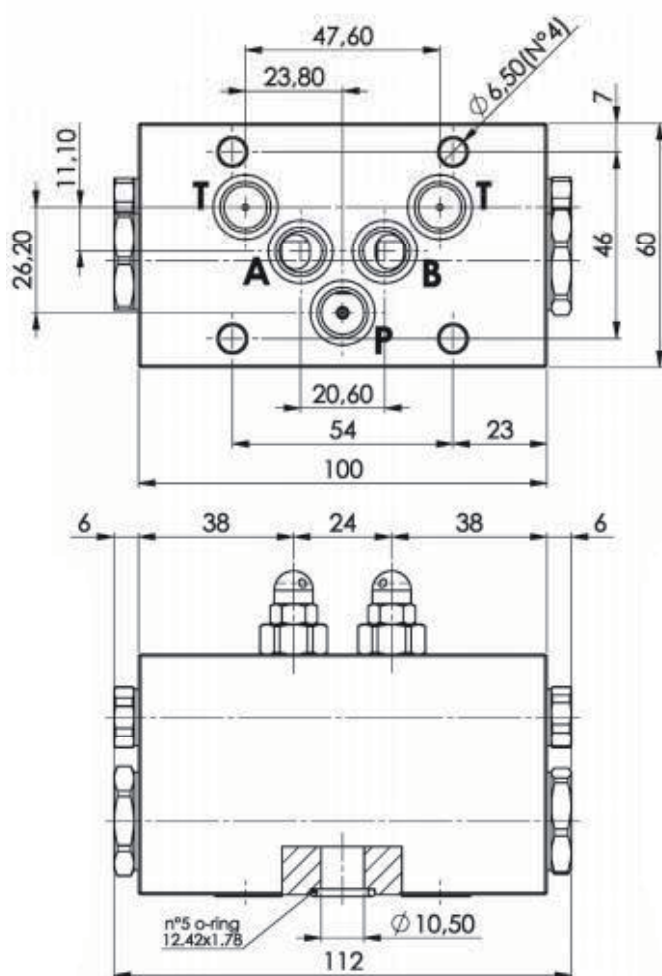
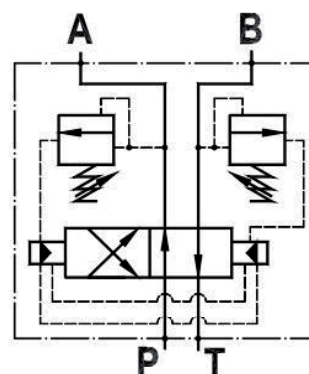
IAUTOMATIC REVERSING VALVE CETOP 5

TYPE

CODE

086FPIA-L10-VM^X

- MATERIAL : **ZINC PLATED CAST IRON**
- Q. MIN : **3 L/min**
- Q. MAX : **80 L/min**
- P. MAX : **350 bar**
- FILTRATION LEVEL : **25 µm**
- VISCOSITY RANGE : **10 - 500 cSt**



To guarantee a correct operation of valve, is advised to set the pressure on relief valve of system at least 20% higher of reversing pressure

X	SPRINGS	
	ADJUSTMENTS	STANDARD SETTINGS
10	20-100 bar	40 bar
20	85-260 bar	150 bar

END RUN VALVE

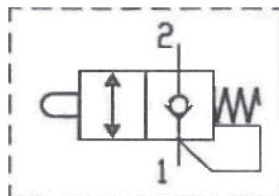
TYPE

CODE

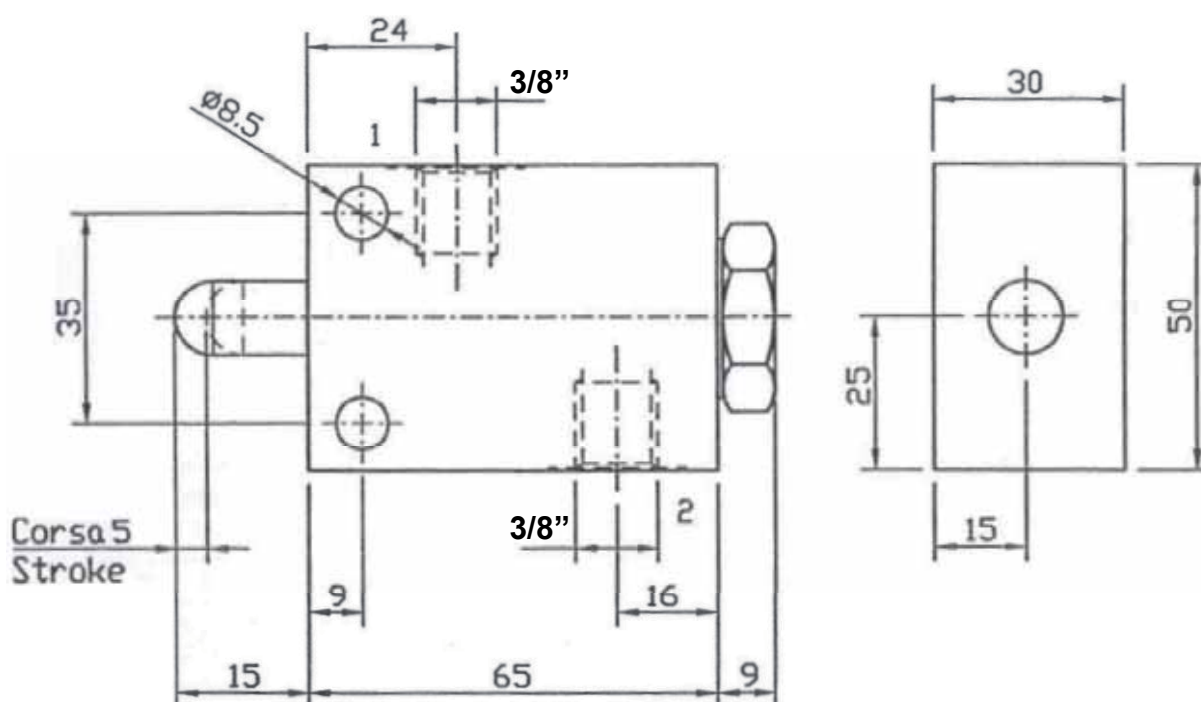
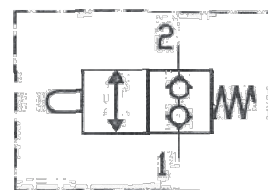
096FCM380X

- MATERIAL : **STEEL**
- Q. MAX : **40 L/min**
- P. MAX : **300 bar**
- FLUID TEMPERATUR : **-20 +70°C**
- FILTRATION LEVEL: **25 µm**
- VISCOSITY RANGE : **10 - 500 cSt**

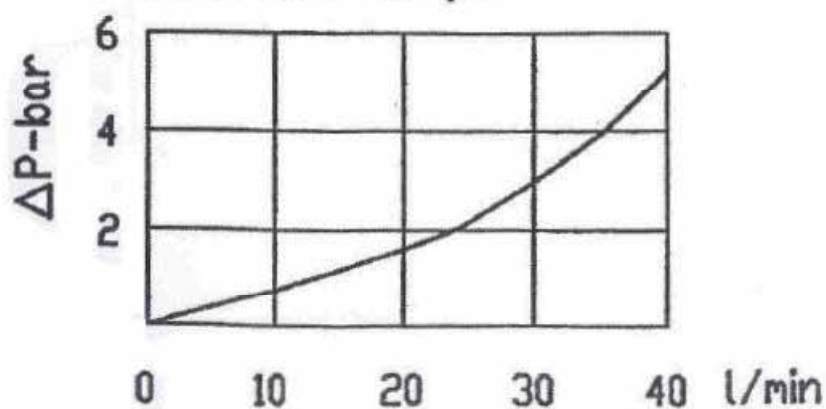
X = AA



X = BB



Perdite di carico
Pressure drops



** ON REQUEST WITH 1/4" GAS CONNECTIONS AVAILABLE

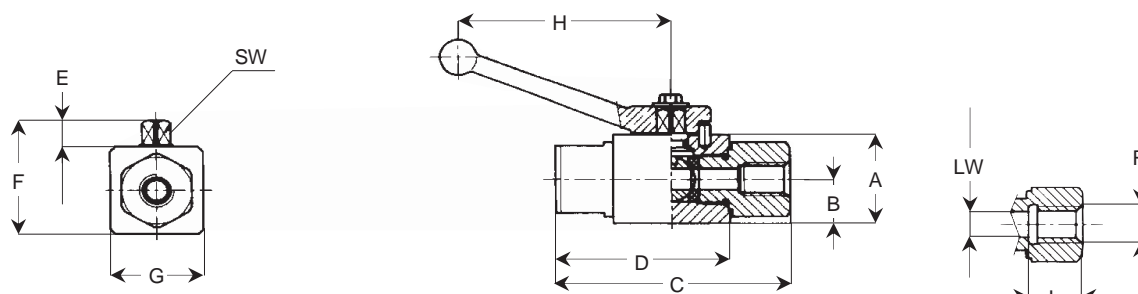
TWO-WAY BALL VALVES

TYPE

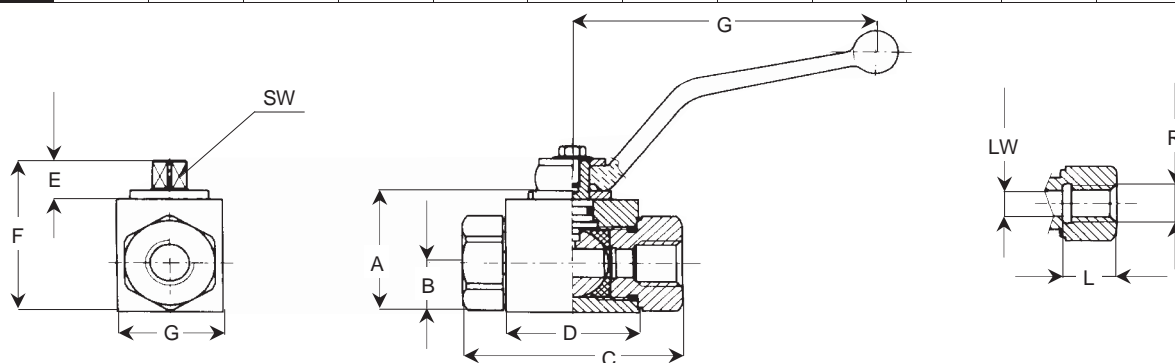
KH2

CODE

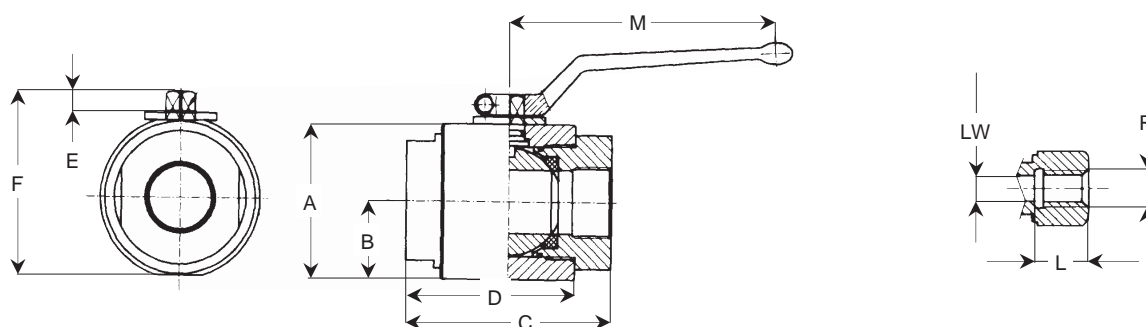
412F551102Z200



Z	R	P (bar)	A	B	C	D	E	F	G	H	L	LW	SW
00	1/4"	500	25	12.5	63	47	7	32	25	57	16	6	6



Z	R	P (bar)	A	B	C	D	E	F	G	H	L	LW	SW
01	1/8"	500	35	14	71	42	11	49	30	110	16	4	9
02	1/4"	500	35	14	71	42	11	49	30	110	16	6	9
03	3/8"	500	40	17	73	44	11	54	35	110	16	10	9
04	1/2"	500	43	18	83	48	11	57	37	110	17	13	9
05	3/4"	400	55	23	95	62	13	73	45	180	21	20	14
06	1"	350	65	29	113	66	13	83	55	180	24	25	14
07	1 1/4"	350	65	29	121	66	13	83	55	180	24	25	14
A8	1 1/2"	350	65	29	124	66	13	83	55	180	24	25	14



Z	R	P (bar)	A	B	C	D	E	F	G	H	L	LW	SW
A7	1 1/4"	350	84	42	115	95	13.5	101	84	180	23	32	14
08	1 1/2"	350	98	48	131	108	13.5	115	102	180	26	40	14
09	2"	350	98	48	131	108	13.5	115	102	180	27	40	14
A9	2"	350	103	51.5	140	115	13.5	120	108	180	27	50	14

On request DIN 2353 light series, DIN 2353 heavy series and NPT versions are available

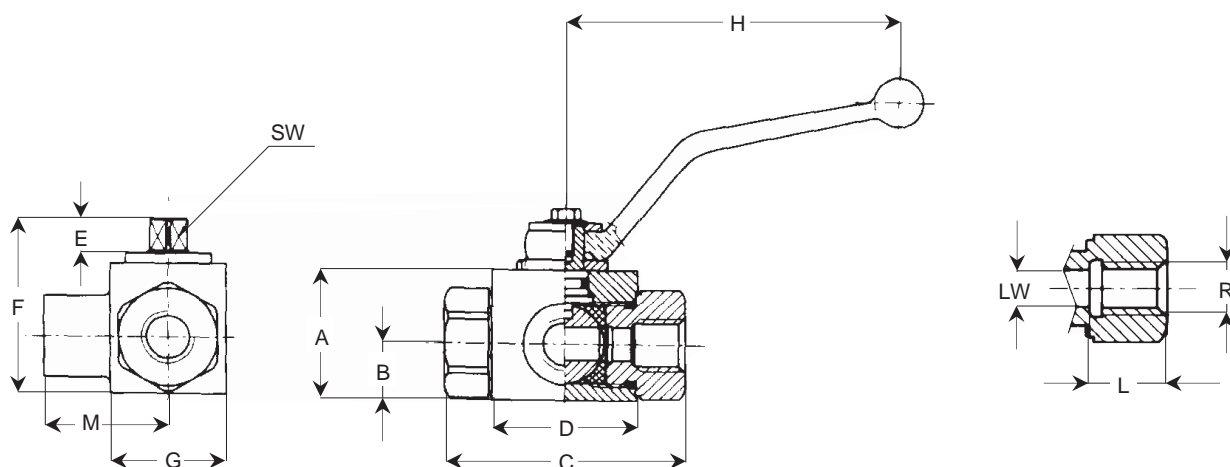
THREE-WAY BALL VALVES

TYPE

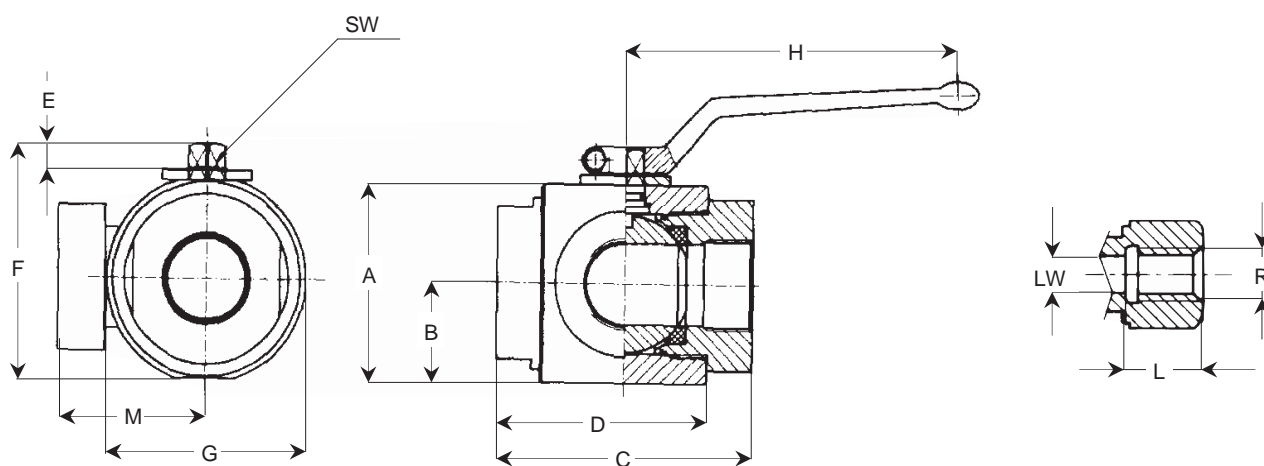
KH3

CODE

412F551103**Z**200



Z	R	P (bar)	A	B	C	D	E	F	G	H	L	M	LW	SW
02	1/4"	315	35	14	71	42	11	49	30	110	16	33.5	6	9
03	3/8"	315	40	17	73	44	11	54	35	110	16	37	10	9
04	1/2"	315	43	18	83	48	11	57	37	110	17	40	13	9
05	3/4"	250	55	23	95	62	13	73	45	180	21	52	20	14
06	1"	250	65	29	113	66	13	83	55	180	24	59	25	14
07	1 1/4"	250	65	29	121	66	13	83	55	180	24	61.5	25	14



Z	R	P (bar)	A	B	C	D	E	F	G	H	L	M	LW	SW
A7	1 1/4"	250	84	42	115	95	13.5	101	84	180	23	72	32	14
08	1 1/2"	250	98	48	131	108	13.5	115	102	180	26	81	40	14
A9	2"	250	103	51.5	140	115	13.5	120	108	180	27	85	48	14

On request DIN 2353 light series, DIN 2353 heavy series and NPT version are available

MANOMETER PROTECTION SCHOCK VALVES

TYPE

FPE

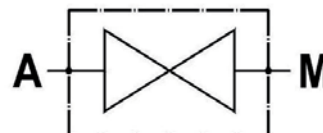
CODE

086FPEX0000

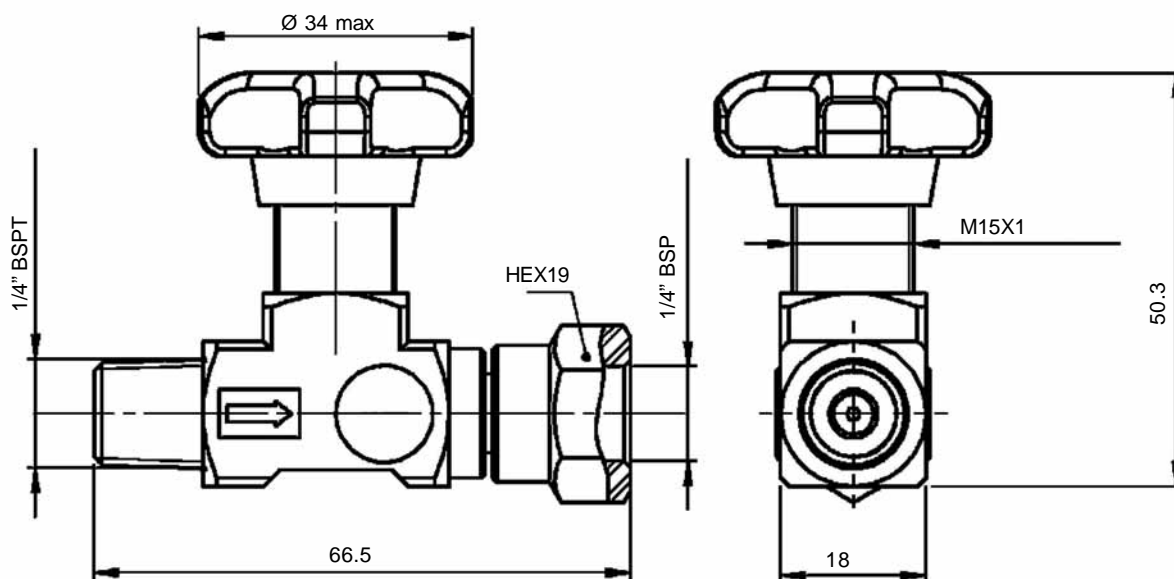
- MATERIAL OF BODIES: **BRASS ALLOW FORGED BODY;NICKEL PLATED.**
INTERNAL PARTS IN STEEL

- MAX. WORKING PRESSURE: **400 bar**

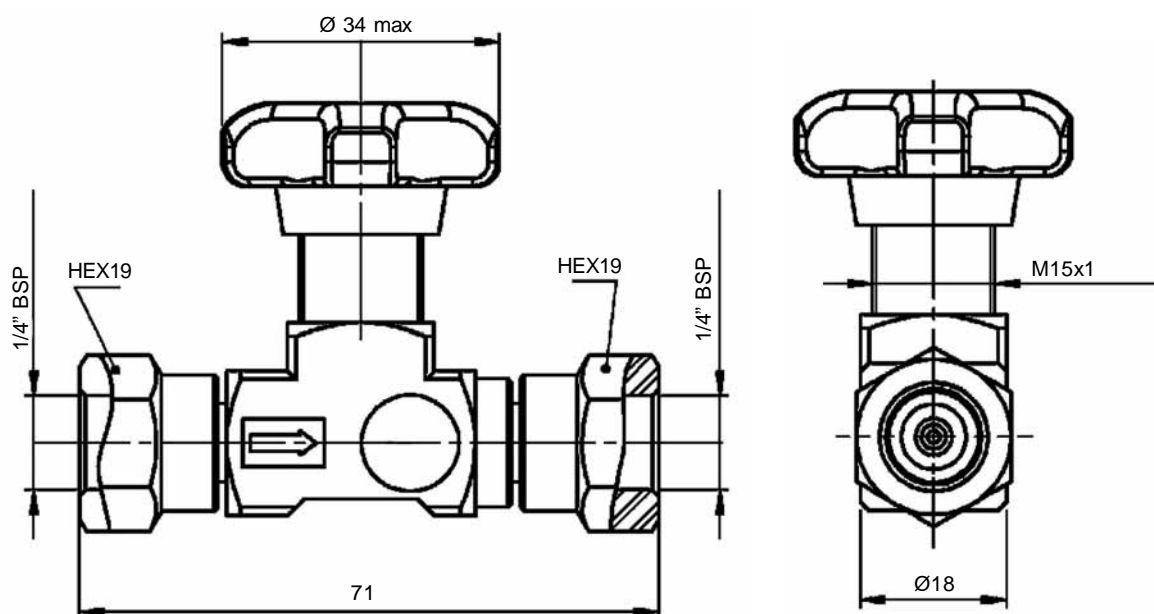
- OPTIONS: **PANNEL ASSEMBLY LOCKING RING**



X = 4



X = 5



MANOMETER PROTECTION SCHOCK VALVES

TYPE

FPEA

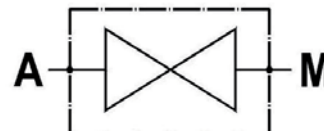
CODE

086FPEX0000

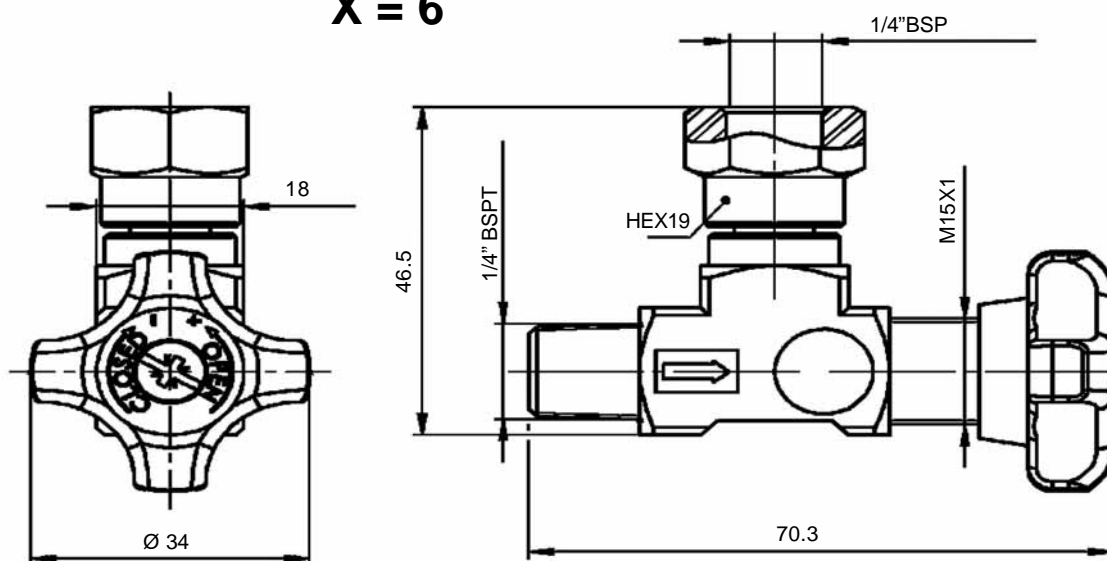
- MATERIALS : **BRASS ALLOY FORGED BODY; NICKEL PLATED.**
INTERNAL PARTS IN STEEL

- MAX. WORKING PRESSURE: **400 bar**

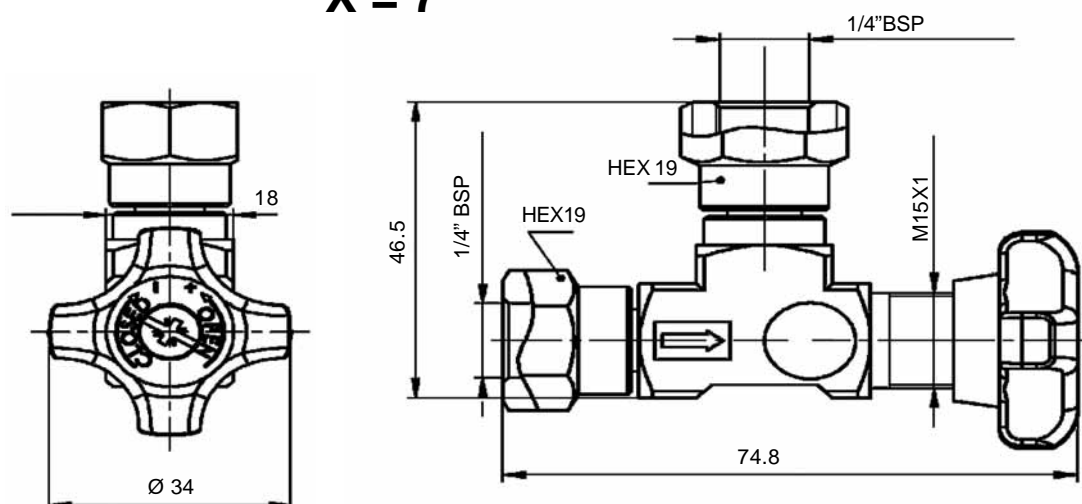
- OPTIONS: **PANNEL ASSEMBLY LOCKING RING**



X = 6

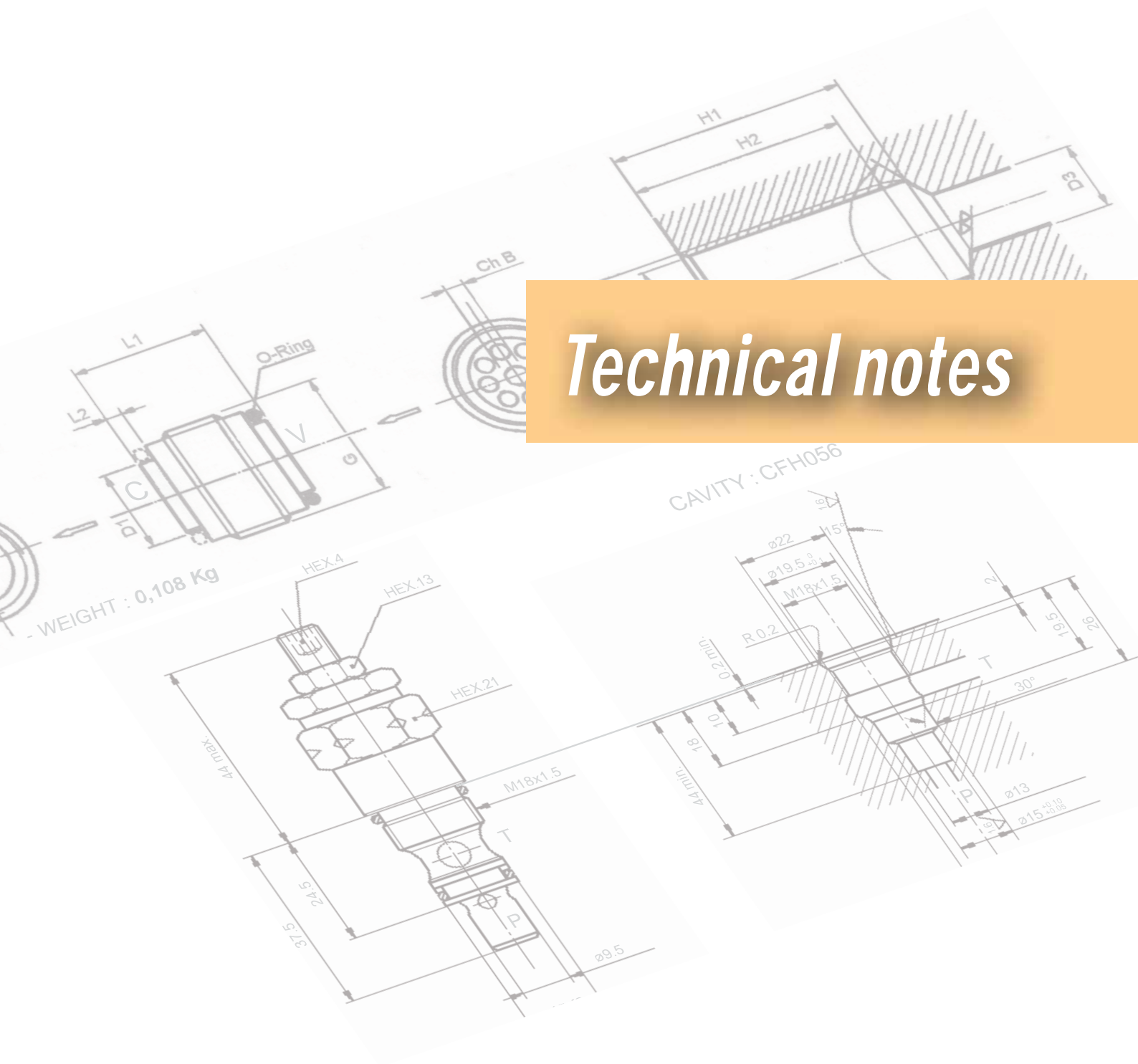


X = 7

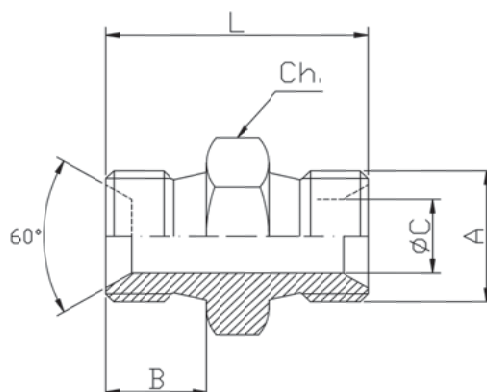




Technical notes



RECOMMENDED NIPPLES

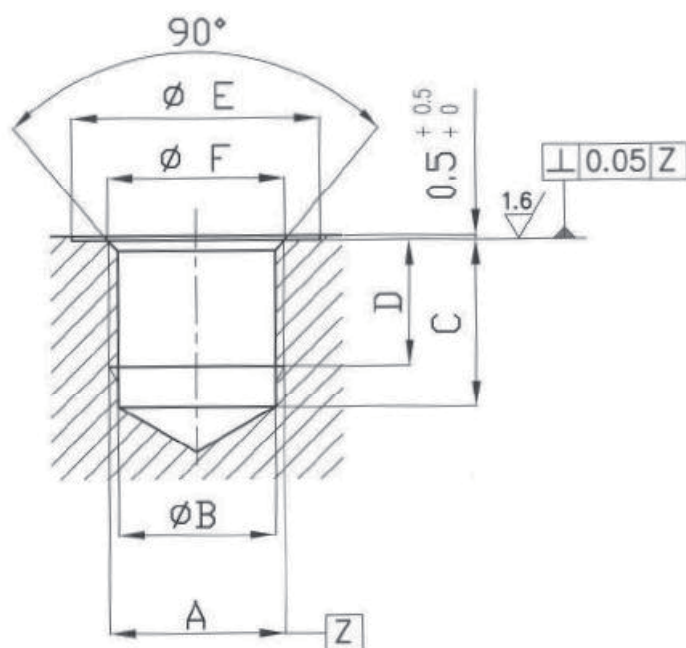


GAS NIPPLES

CODE	<u>A</u>	<u>L</u>	<u>B</u>	<u>Ch.</u>	<u>C</u>
GIO5020200	BSPP 1/8	21	7,5	14	4
GIO5040400	BSPP 1/4	22	11	19	7
GIO5060600	BSPP 3/8	34	13	22	9,5
GIO5080800	BSPP 1/2	37	14	27	12
GIO5101000	BSPP 5/8	42	16	27	14
GIO5121200	BSPP 3/4	44	17	32	16
GIO5161600	BSPP 1	50	19	41	22
GIO5202000	BSPP 1-1/4	56	21,5	50	30
GIO5242400	BSPP 1-1/2	57	21,5	55	35
GIO5323200	BSPP 2	62	24	70	44

METRICAL NIPPLES

CODE	<u>A</u>	<u>L</u>	<u>B</u>	<u>Ch.</u>	<u>C</u>
GIO6101000	M10x1	22	8	14	4
GIO6121500	M12x1,5	29	11	17	5
GIO6141500	M14x1,5	31	12	19	6
GIO6161500	M16x1,5	31	12	19	6
GIO6181500	M18x1,5	36	14	24	10
GIO6201500	M20x1,5	36	14	25	13
GIO6221500	M22x1,5	38	15	27	13
GIO6241500	M24x1,5	40	15,5	30	14
GIO6261500	M26x1,5	43	16,5	32	17
GIO6301500	M30x1,5	46	17	38	21



THREAD A	ϕB		C $^{+0.5}_{-1.0}$	D $^{+2.0}_{-0.5}$	ϕE $^{+1.0}_{0}$	ϕF MAX
	MIN	MAX	mm	mm	mm	mm
G 1/8"	8,5	8,75	14	10	17	10
G 1/4"	11,5	11,75	16	12	22	13,4
G 3/8"	15	15,25	17	12,5	25	16,9
G 1/2"	18,8	19,1	20	15	29	21,2
G 3/4"	24,3	24,6	22	17	36	26,7
G 1"	30,3	30,6	28	21	44	33,6
G 1" 1/4	39,2	39,7	30	23	55	42,3
G 1" 1/2	45	45,6	32	25	64	48,2
G 2	57	57,5	36	28	75	60

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