

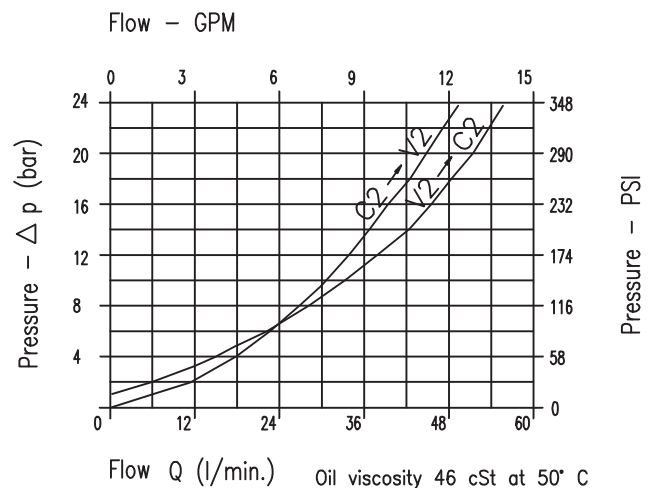
VALVE CODE	Setting range 30 + 220 bar (Colour green)		Setting range 60 + 350 bar (Colour yellow)		A	B	C	Port size V2-C2 V1-C1 GAS (BSPP)	Rated size DN	Max flow-rate l/min-GPM	Adjustment *	
	Std. bar setting (made at 5 l/i')	Press. increase bar/turn (56)	Std. bar setting (made at 5 l/i')	Press. increase bar/turn (138)							Dowel	X
WB-C-DE-LU-14-*	254		255		60	30	50	1/4"	6	20-5	Fixed setting	Z
WB-C-DE-LU-38-*	256		257					3/8"	8	40-10	Sealed	H
WB-C-DE-LU-12-*	258		259		70	35	60	1/2"	10	60-15	Sealed	K

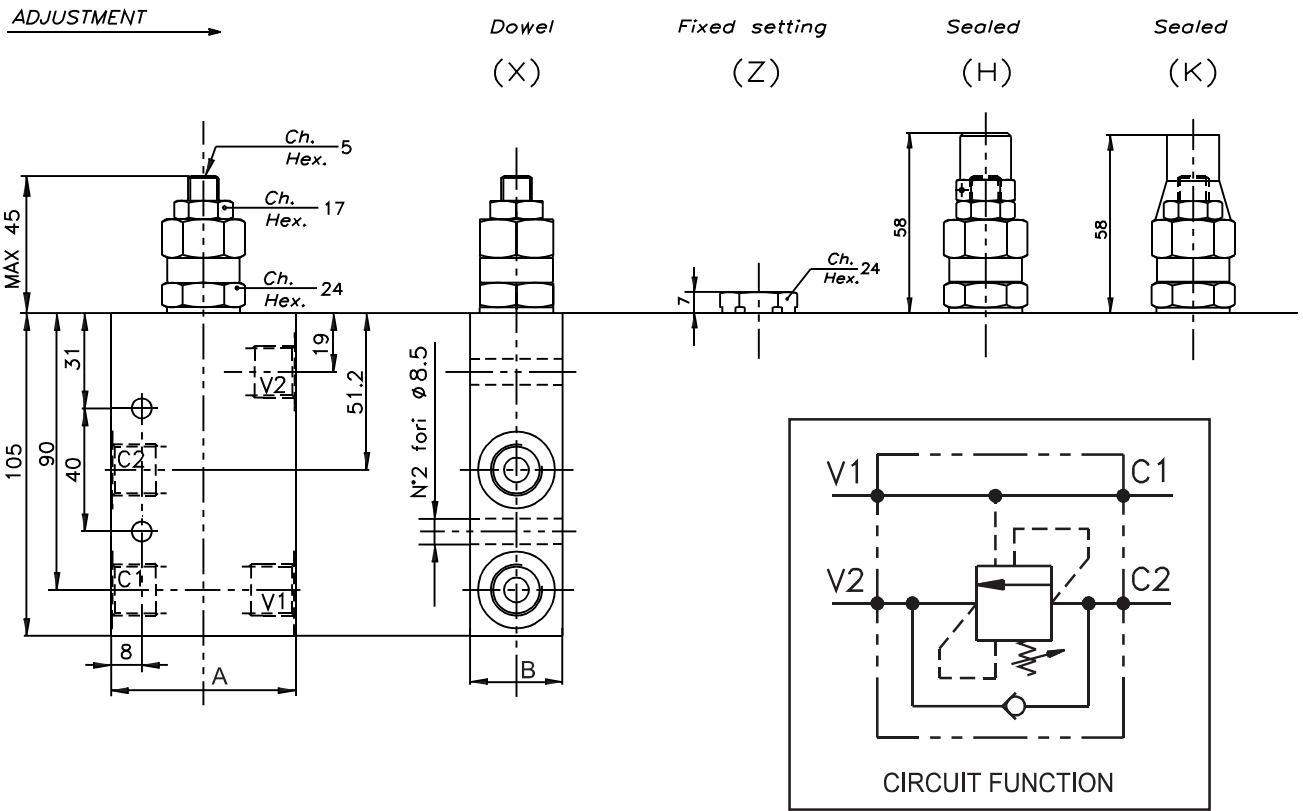
0 0 1 | 0 0

ORDERING CODE

- PERFORMANCES -

Min/max Rated size	DN	6 / 10
Min/max flow-rate	l/min-GPM	1/60 - 0.26/15.9
Max working pressure		450 bar 6525 PSI
Max setting pressure		350 bar 5075 PSI
Pilot ratio		4.25 : 1
Room temperature	°C	-30 +50
Oil temperature	°C	-30 +80
Filtration	micron	30
Tightening torque	Nm	
Weight	Kg	





VALVE CODE	Setting range 30 + 220 bar (Colour green)		Setting range 60 + 350 bar (Colour yellow)		A	B	Port size V2-C2 V1-C1 GAS (BSPP)	Rated size DN	Max flow-rate l/min-GPM	Adjustment *	
	Std. bar setting (mode at 5 1/1') 210 bar	Press. increase bar/turn (56)	Std. bar setting (mode at 5 1/1') 350 bar	Press. increase bar/turn (138)						Dowel	X
A-WB-C-SE-14-L-*	332		331		60	30	1/4"	6	20-5	Fixed setting	Z
A-WB-C-SE-38-L-*	328		327							Sealed	H
A-WB-C-SE-12-L-*	330		329		70	35	1/2"	10	60-15	Sealed	K

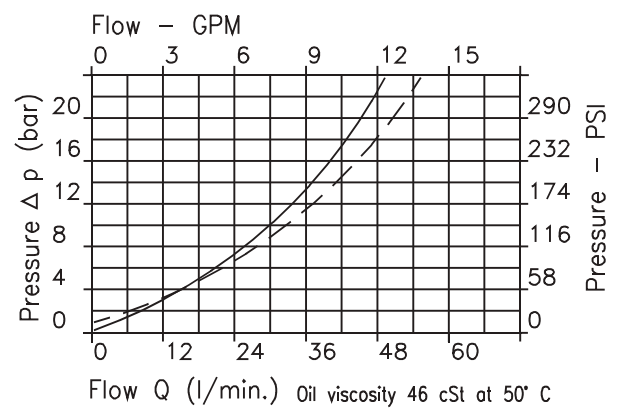
0 0 1 | 0 0
ORDERING CODE

- PERFORMANCES -

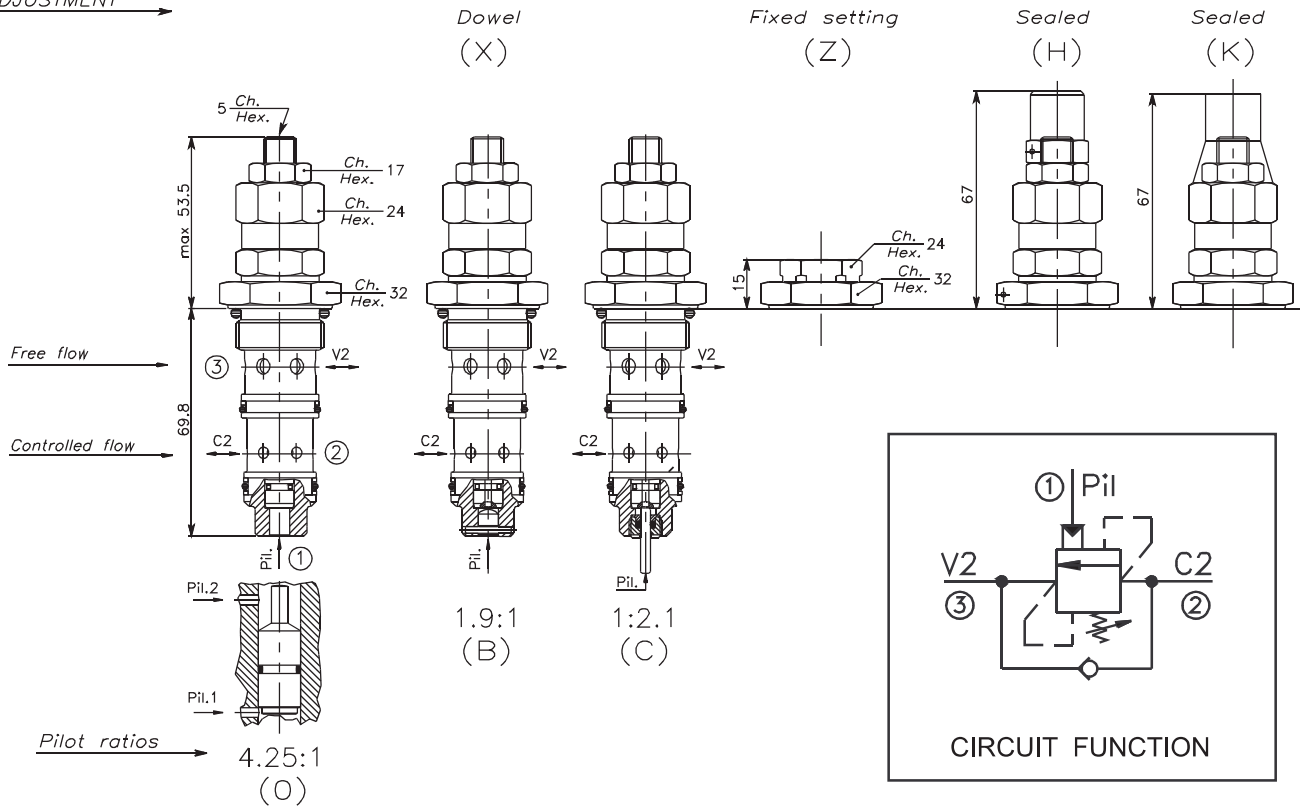
Min/max Rated size	DN	4 / 10
Min/max flow-rate	l/min-GPM	1/60 - 0.26/15.9
Max working pressure		450 bar 6525 PSI
Max setting pressure		350 bar 5075 PSI
Pilot ratio		4.25 : 1
Room temperature	°C	-30 +50
Oil temperature	°C	-30 +80
Filtration	micron	30
Tightening torque	Nm	
Weight	Kg	

HYDRAULIC PERFORMANCE

A-WB-C-SE-38-L V2 --- C2
A-WB-C-SE-12-L C2 — V2



ADJUSTMENT →

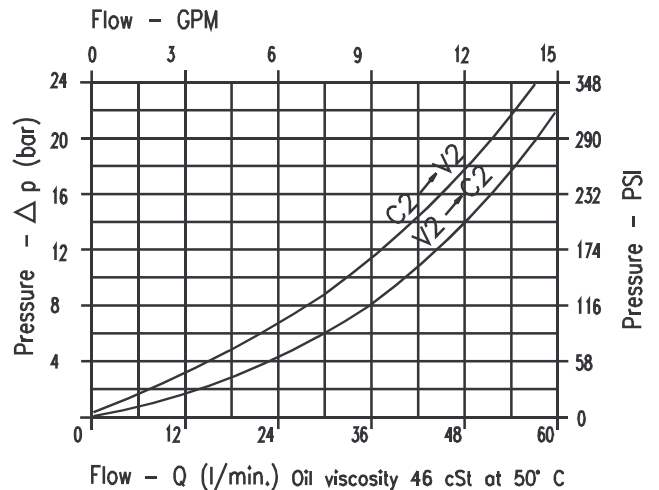


VALVE CODE	Setting range 30 + 220 bar (Colour green)		Setting range 60 + 350 bar (Colour yellow)		Pilot ratios Δ	Adjustment \ast	
	Std. bar setting (mode at 5 l/1')	Press. increase bar/turn (56)	Std. bar setting (mode at 5 l/1')	Press. increase bar/turn (138)			
WBC-40- Δ - \ast	210 bar		350 bar		4.25:1 O 1,9:1 B 1:2.1 C	Dowel X Fixed setting Z Sealed H Sealed K	

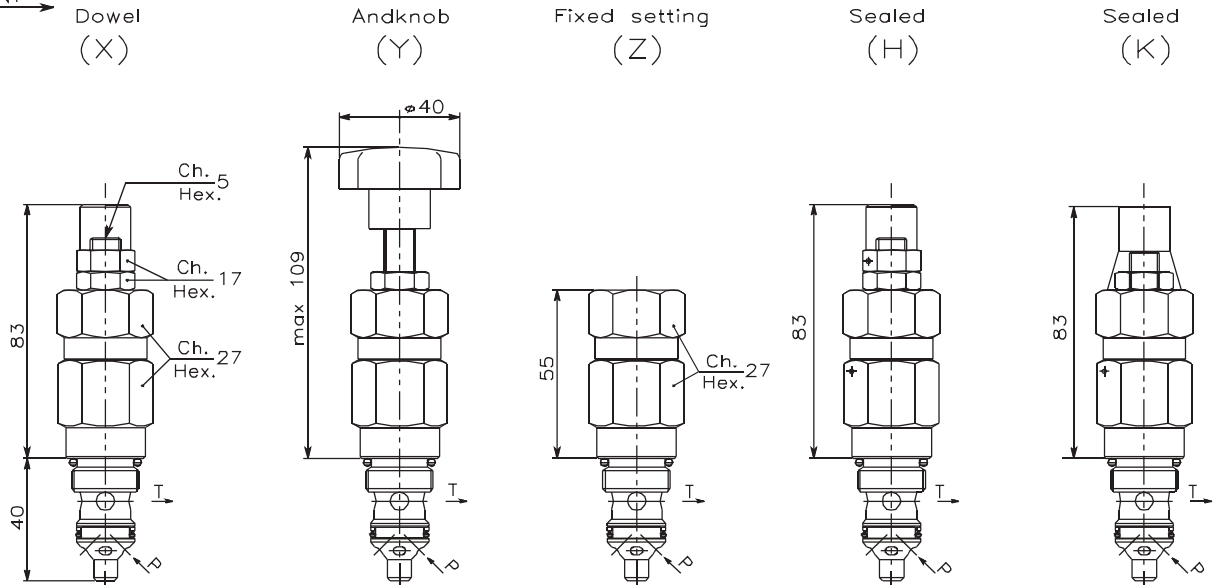
0	0	1					
ORDERING CODE							

- PERFORMANCES -

Min/max Rated size	DN	4 / 8
Min/max flow-rate	l/min-GPM	1/60 - 0.26/15.9
Max working pressure		450 bar 6525 PSI
Max setting pressure		350 bar 5075 PSI
Pilot ratio		View order code
Room temperature	°C	-30 +50
Oil temperature	°C	-30 +80
Filtration	micron	30
Tightening torque	Nm	116-128
Weight	Kg	0.300



ADJUSTMENT →



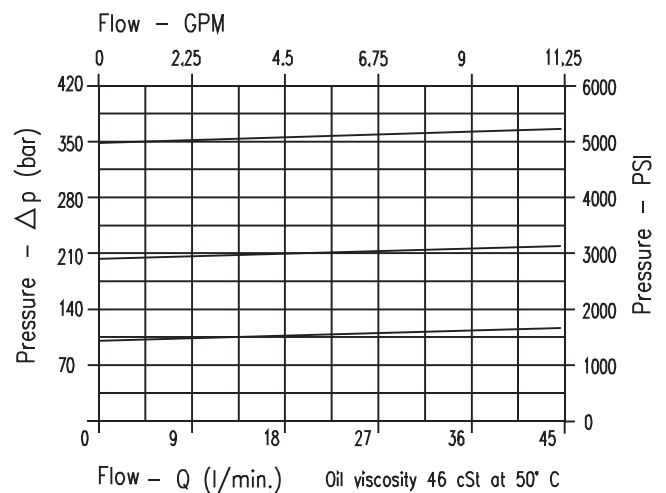
VALVE CODE	Setting range 5 + 100 bar (Colour blue)		Setting range 10 + 210 bar (Colour green)		Setting range 20 + 350 bar (Colour yellow)	
	Std. bar setting (made at 5 1/1')	Press. increase bar/turn (56)	Std. bar setting (made at 5 1/1')	Press. increase bar/turn (56)	Std. bar setting (made at 5 1/1')	Press. increase bar/turn (138)
VMP-45-*-SN	80 bar		180 bar		320 bar	
	035		268		269	

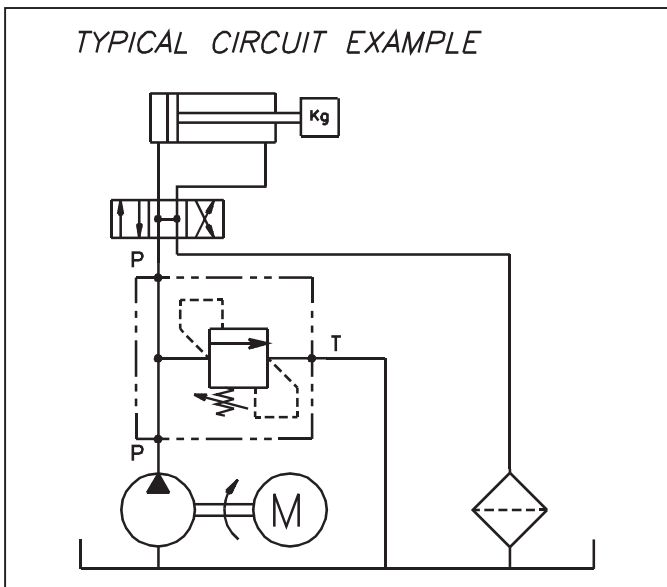
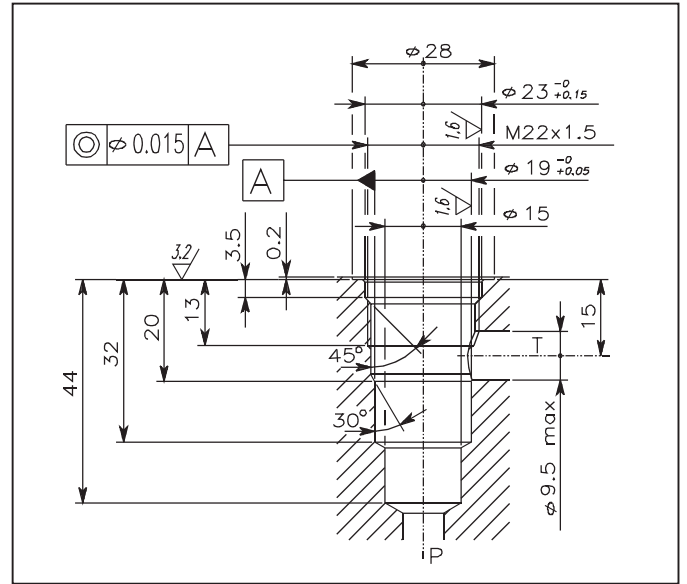
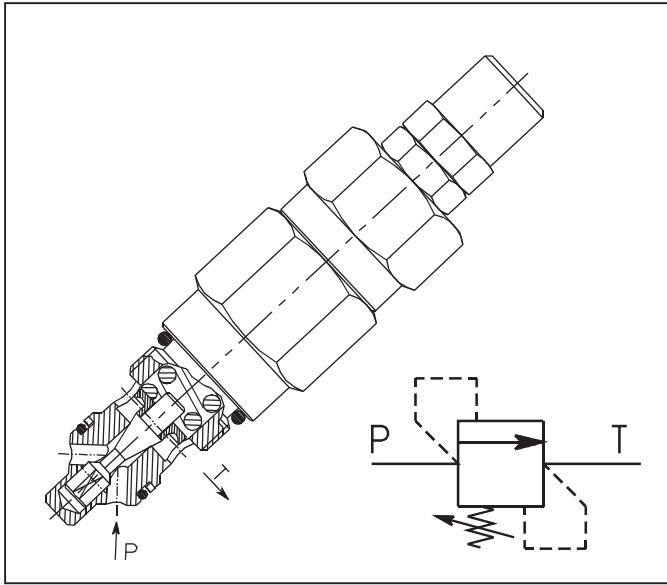
Adjustment*	
Dowel	X
Handknob	Y
Fixed setting	Z
Sealed	H
Sealed	K

0	0	2	0	0
ORDERING CODE				

- PERFORMANCES -

Rated size	DN	9
Max flow-rate	l/min-GPM	45 - 11.9
Max working pressure		450 bar 6525 PSI
Max setting pressure		350 bar 5075 PSI
Pilot ratio		
Room temperature	°C	30 +50
Oil temperature	°C	-30 +80
Filtration	micron	30 ÷ 50
Tightening torque	Nm	
Weight	Kg	





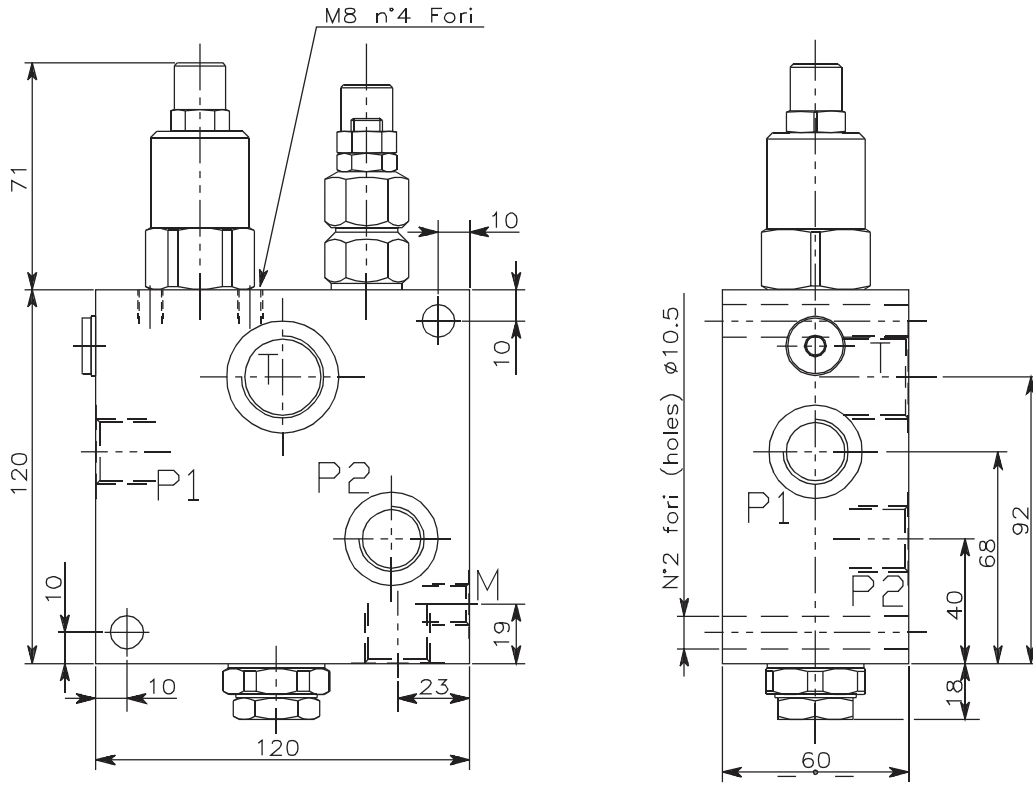
Note

002.483.000 Replacing 002.035.0Y0

002.484.000 Replacing 002.268.0Y0

002.485.000 Replacing 002.269.0Y0

ADJUSTMENT →



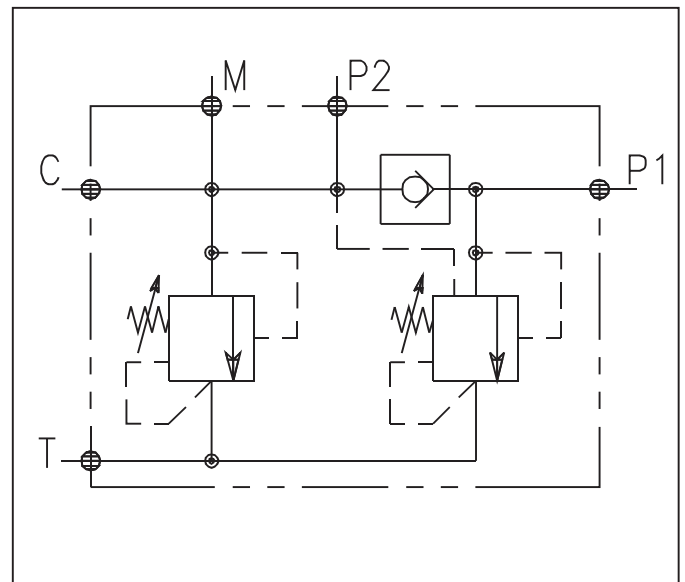
Setting range 20 ÷ 350 bar
(Colour yellow)

VALVE CODE	Std. bar setting (made at 5 1/1')	Press. increase bar/turn (138)	(Part size) T GAS (BSPP)	(Part size) P1-P2 C GAS (BSPP)	(Part size) M GAS (BSPP)	(Rated size) DN	(Max flow-rate) l/min-GPM
VD-34-12-14	280 bar	046	3/4"	1/2"	1/4"	10	90-22

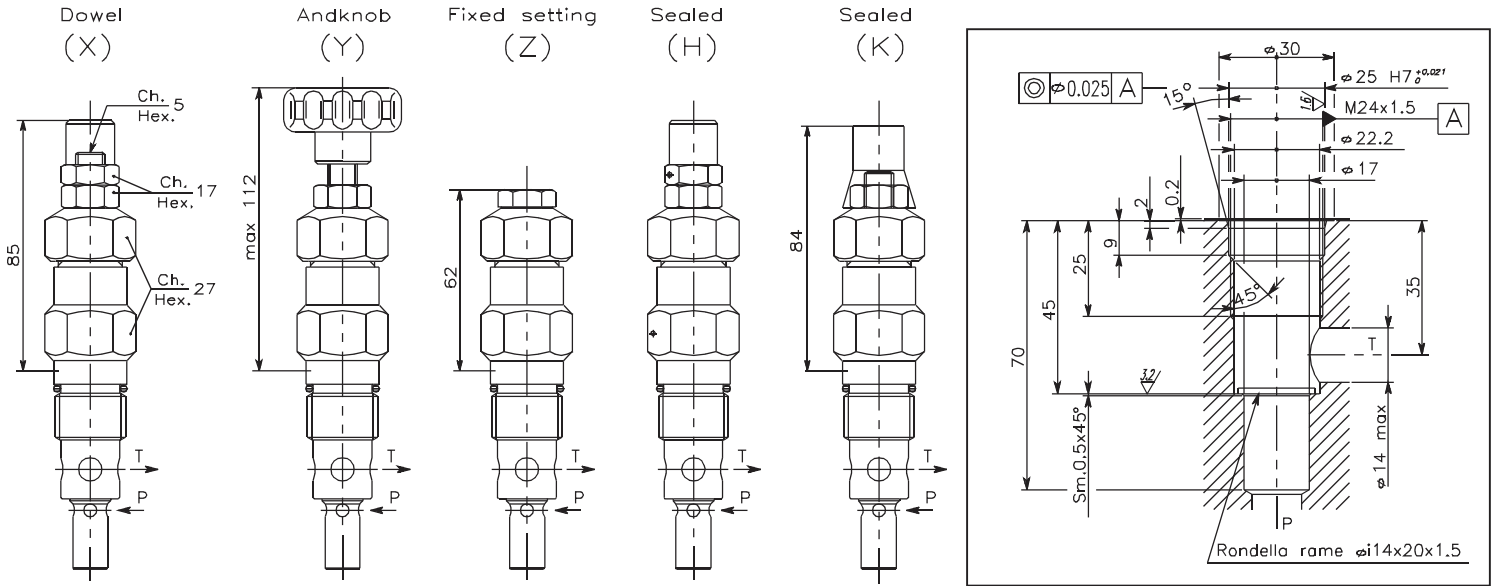
ORDERING CODE			
002		000	0

- PERFORMANCES -

Rated size	DN	10
Max flow-rate	l/min-GPM	90 - 22
Max working pressure		350 bar 5075 PSI
Max setting pressure		350 bar 5075 PSI
Room temperature	°C	-30 +50
Oil temperature	°C	-30 +80
Filtration	micron	30 ÷ 50
Tightening torque	Nm	-
Weight	Kg	-

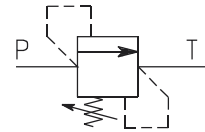
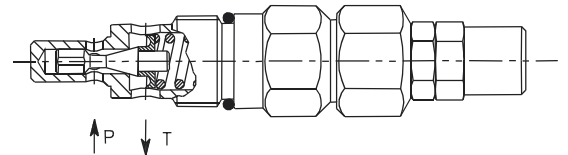


CARTRIDGE RELIEF VALVES



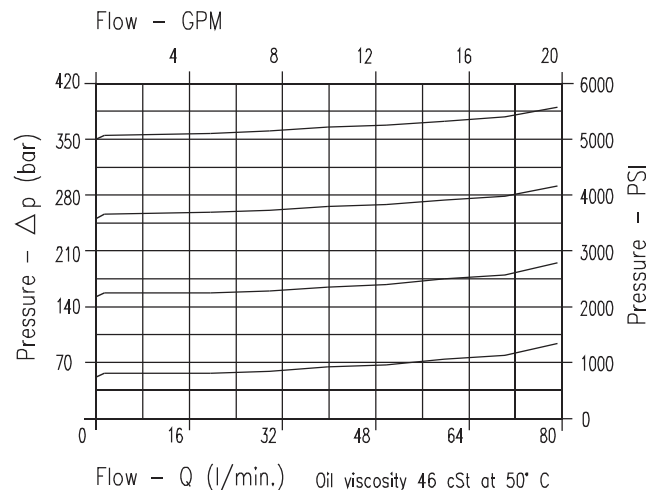
VALVE CODE	Setting range 5 ± 50 bar (Colour blue)		Setting range 5 ± 100 bar (Colour black)		Setting range 10 ± 150 bar (Colour green)		Setting range 25 ± 250 bar (Colour yellow)		Setting range 40 ± 350 bar (Colour red)		Adjustment *	
	Std. bar setting (made at 5 1/1')	Press. increase bar/turn (138)	Std. bar setting (made at 5 1/1')	Press. increase bar/turn (138)	Std. bar setting (made at 5 1/1')	Press. increase bar/turn (138)	Std. bar setting (made at 5 1/1')	Press. increase bar/turn (138)	Std. bar setting (made at 5 1/1')	Press. increase bar/turn (138)	Dowel	X
VMP-80-*	40 bar		80 bar		120 bar		210 bar		320 bar		Handknob	Y
	005		163		164		165		166		Fixed setting	Z
											Sealed	H
											Sealed	K

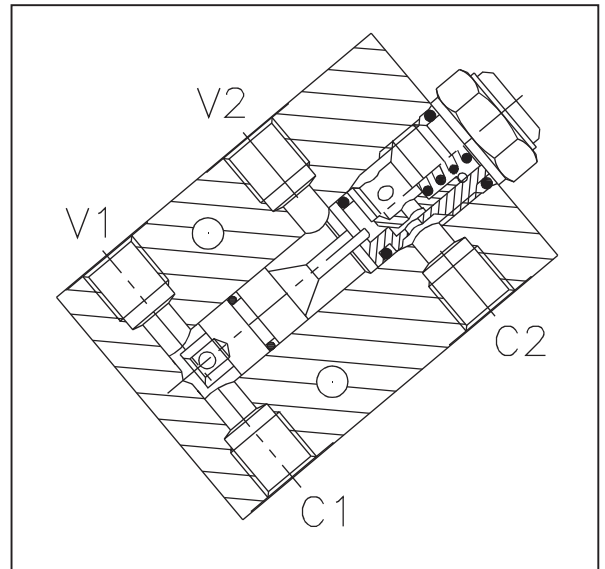
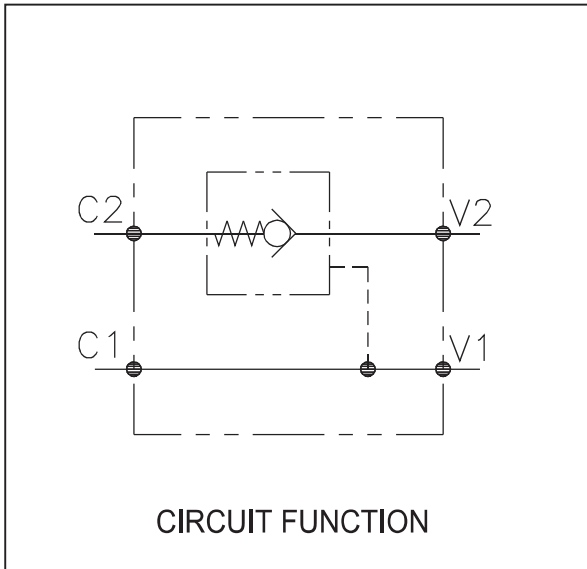
0 0 2 0 0
ORDERING CODE



- PERFORMANCES -

Rated size	DN	11
Max flow-rate	l/min-GPM	80 - 21
Max working pressure		450 bar 6525 PSI
Max setting pressure		350 bar 5075 PSI
Pilot ratio		-
Room temperature	°C	-30 +50
Oil temperature	°C	-30 +80
Filtration	micron	30 ÷ 50
Tightening torque	Nm	-
Weight	Kg	-

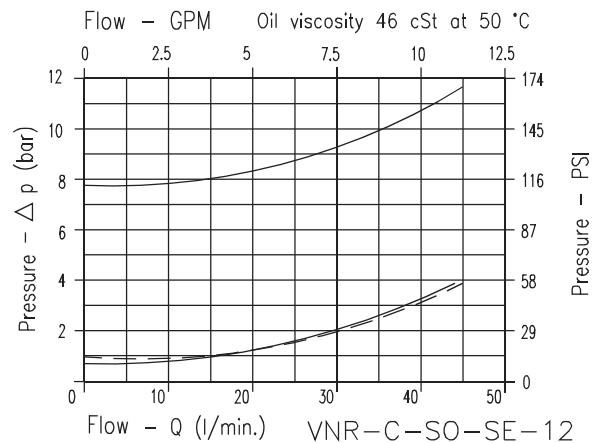
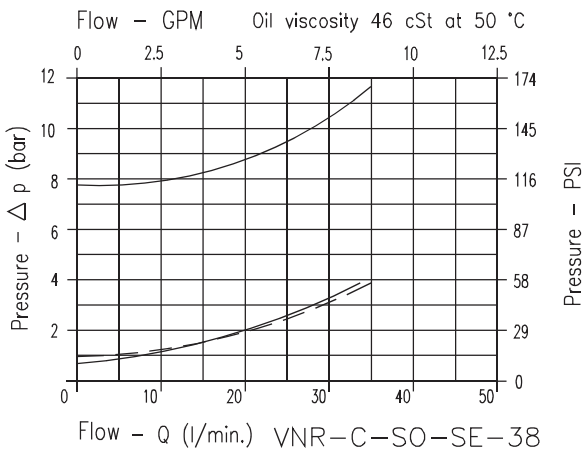
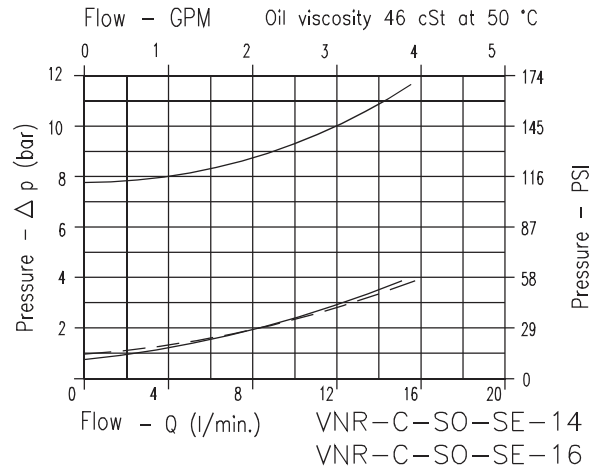


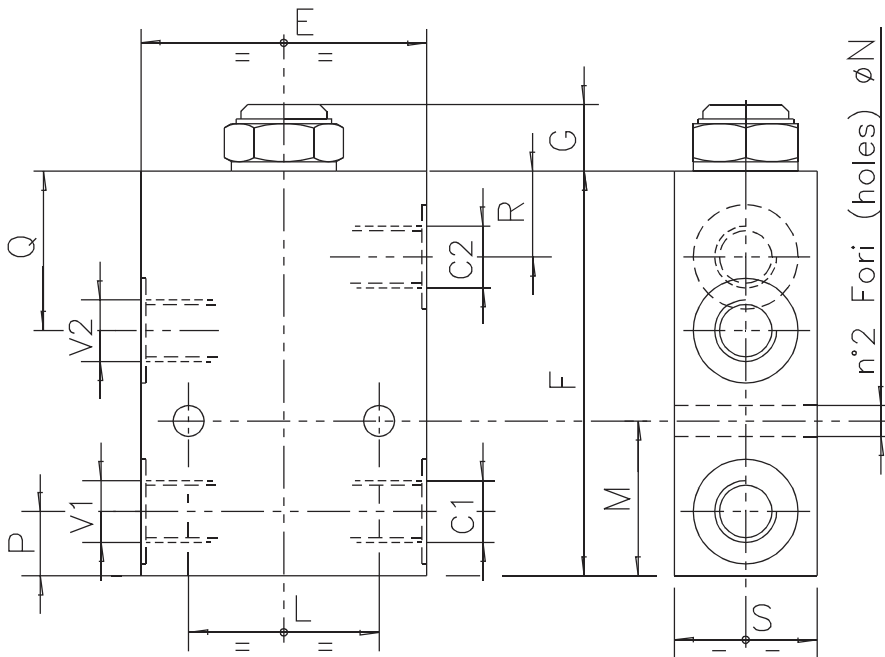


- PERFORMANCES -

Rated size	DN	Next page
Min/max flow-rate	l/min-GPM	Next page
Max working pressure		350 bar 5075 PSI
Max setting pressure		-
Pilot ratio		4 ÷ 1
Room temperature	°C	-30 +50
Oil temperature	°C	-30 +80
Filtration	micron	50
Tightening torque	Nm	-
Weight	Kg	-

8Bar (Free flow)
 1Bar (Free flow)
 (Piloted open)



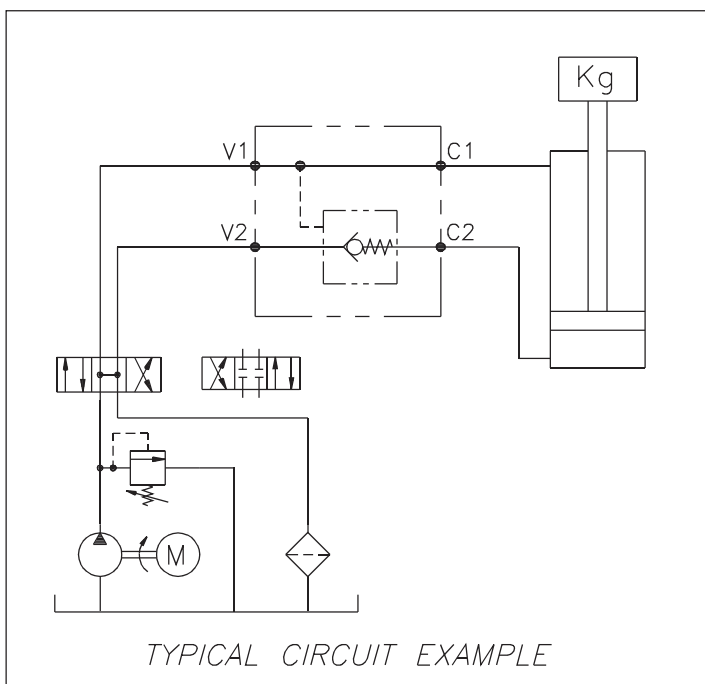


* Cracking pressure	
1 bar	J
Spring (Colour black)	
6÷8 bar	W
Spring (Colour yellow)	

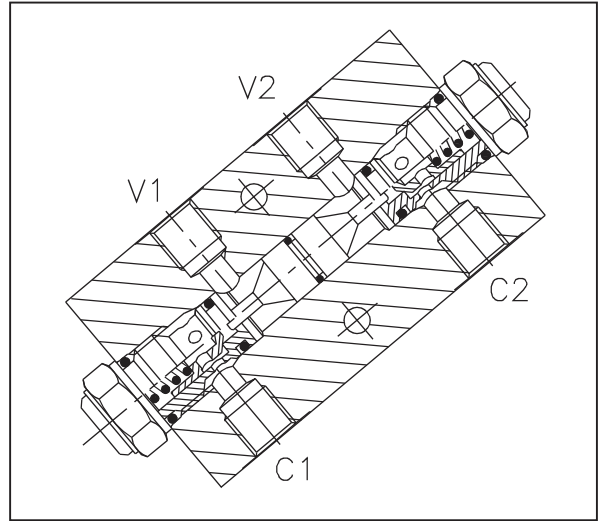
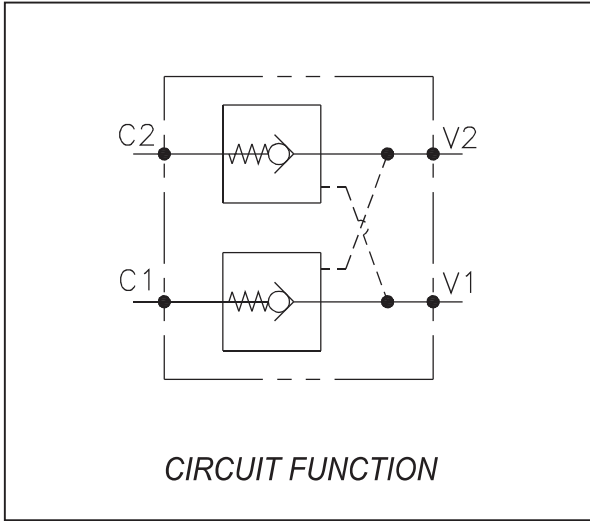
△	
Pilot Piston O-RING	A
Do not use in valve code	O

VALVE CODE	Valve Number	E	F	G	L	M	N	P	Q	R	S	Port size V2-C2 V1-C1 GAS (BSPP)	nominale Rated size DN	Max flow-rate l/min- GPM
VNR-C-S0-SE-14-△-*	036	60	85	15	40	32.5	6.5	13.5	33.5	18	30	1/4"	6	15-4
VNR-C-S0-SE-16-△-*	037					M16x1.5	6	15-4						
VNR-C-S0-SE-38-△-*	038	70	95	18	40	40	8.5	19	38	20.5	35	3/8"	8	35-9.2
VNR-C-S0-SE-12-△-*	039					1/2"	10	45-12						

0 0 3 V V V 0
CODICE ORDINAZIONE
ORDERING CODE



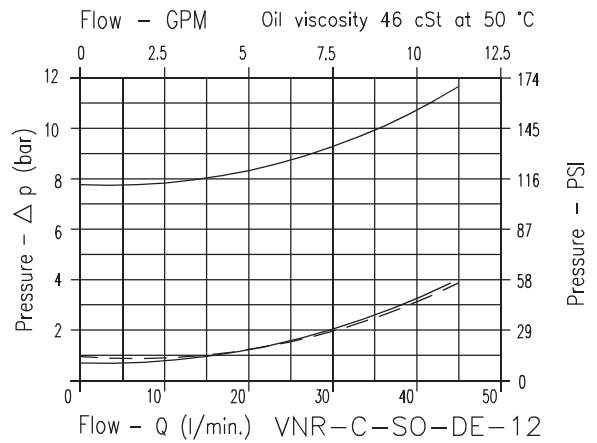
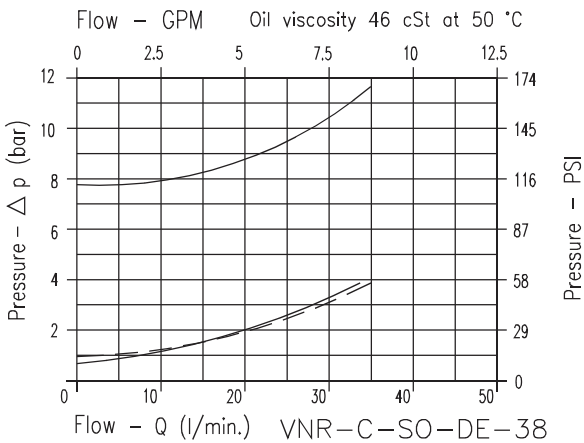
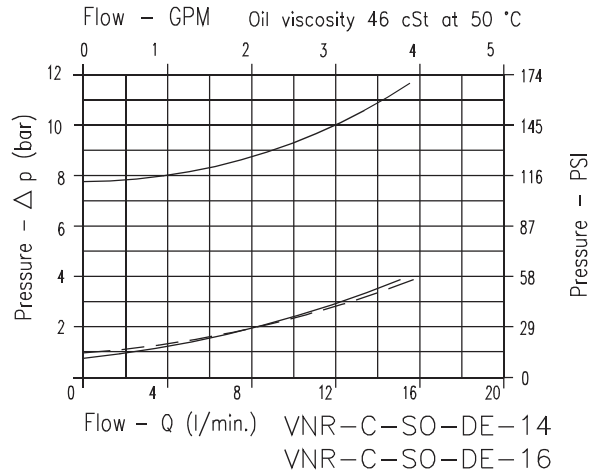
NOTE.

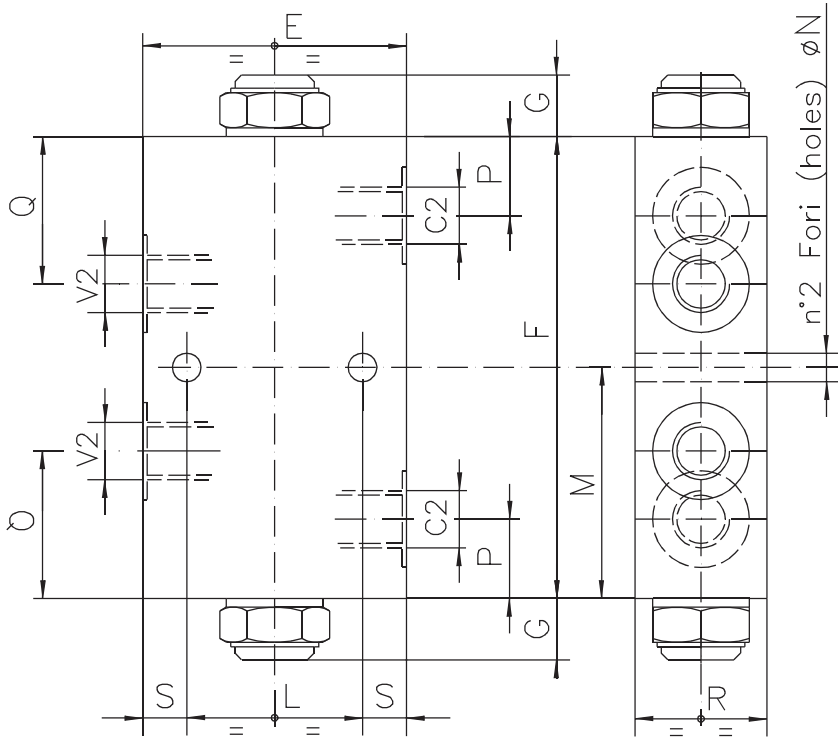


- PERFORMANCES -

Rated size	DN	Next page
Min/max flow-rate	l/min-GPM	Next page
Max working pressure		350 bar 5075 PSI
Max setting pressure		
Pilot ratio		4 : 1
Room temperature	°C	-30 +50
Oil temperature	°C	-30 +80
Filtration	micron	50
Tightening torque	Nm	
Weight	Kg	

————— 8Bar (Free flow)
 - - - - - 1Bar (Free flow)
 ———— 1Bar (Piloted open)



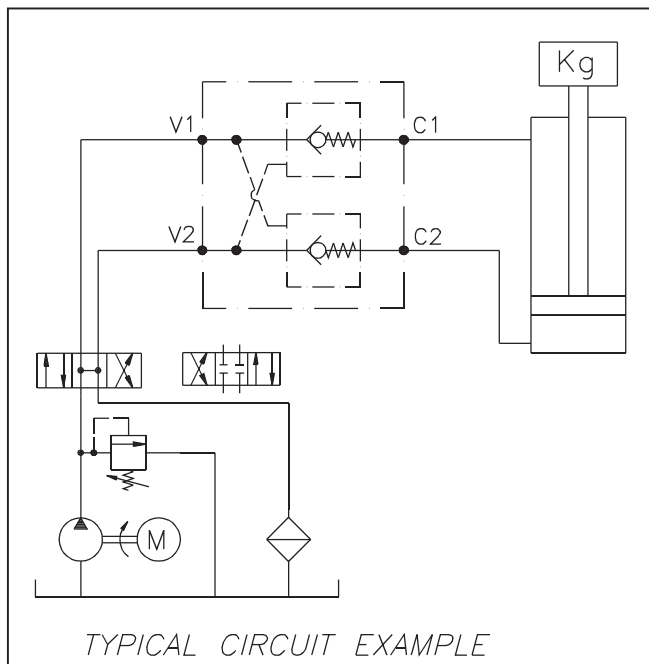


* Cracking pressure	
1 bar	J
Spring (Colour black)	
6 ± 8 bar	W
Spring (Colour yellow)	

△	
Pilot Piston O-RING	A
Do not use in valve code	O

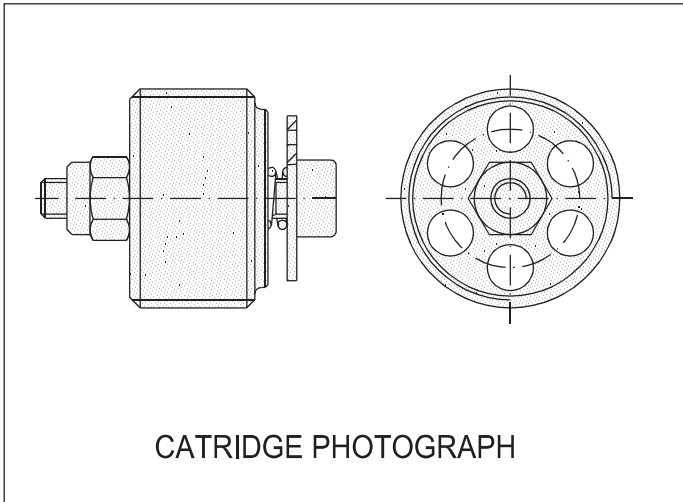
VALVE CODE	Valve Number	E	F	G	L	M	N	P	Q	R	S	Port size	Rated size DN	Max flow-rate l/min- GPM
												V2-C2 V1-C1 GAS (BSPP)		
VNR-C-S0-DE-14-△-*	047	60	105	15	40	52.5	6.5	18	33.5	30	10	1/4"	6	15-4
VNR-C-S0-DE-16-△-*	048											M16x1.5		
VNR-C-S0-DE-38-△-*	049	70	110	18	55	8.5	20.5	38	35	15	10	3/8"	8	35-9.2
VNR-C-S0-DE-12-△-*	050											1/2"		

0 0 3 | | | 0
ORDERING CODE

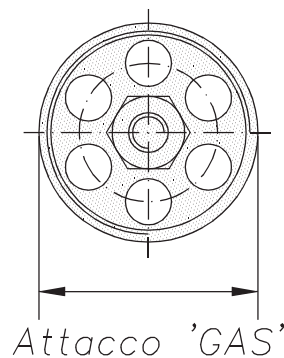
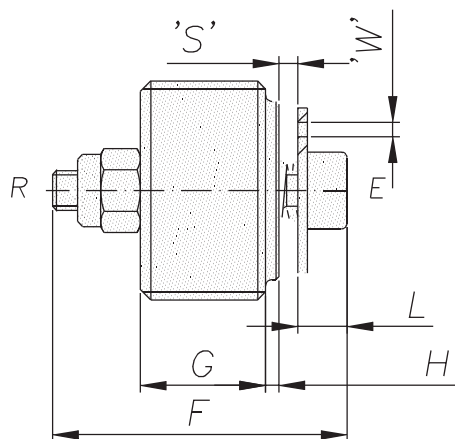
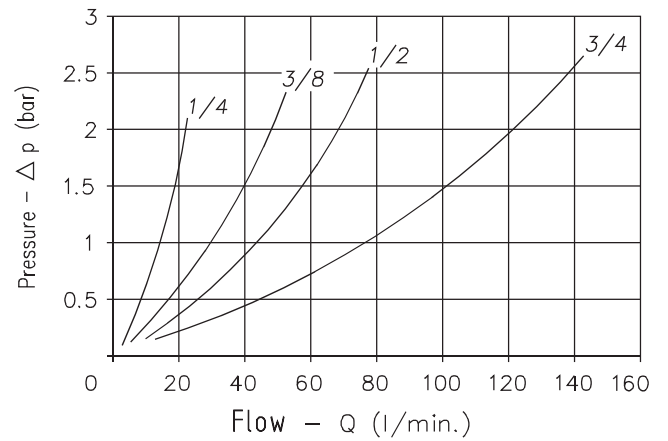
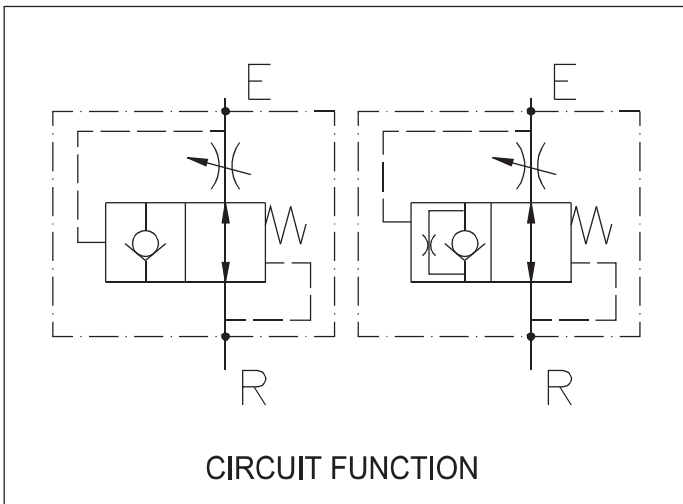


NOTE.

HOSE BURST CHECK VALVES



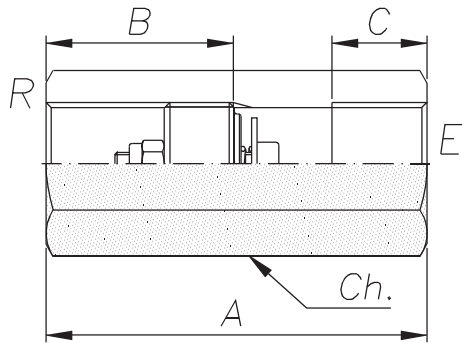
<i>PERFORMANCES</i>	
<i>Size</i>	1/4" 3/8" 1/2" 3/4" 1"
<i>Max flow-rate</i>	25/180 L/min.
<i>Max pressure</i>	350 bar
<i>Room temperature</i>	°C -30 +50
<i>Oil temperature</i>	°C -30 +80
<i>Filtration</i>	µm 30
<i>Weight</i>	Kg 0.010/0.098



'W' HOLE ON REQUEST

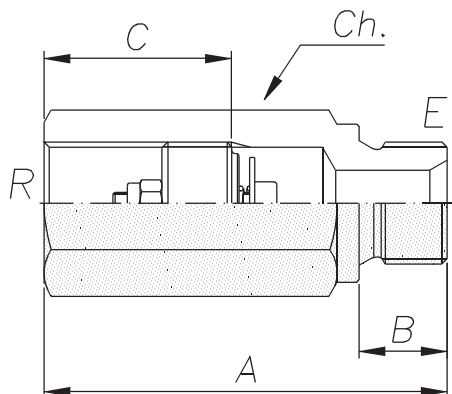
<i>VALVE CODE</i>	<i>ORDERING CODE</i>	F	G	H	L	<i>Port size GAS (BSPP)</i>	<i>Rated size DN</i>	<i>Max flow-rate l/min-GPM</i>	<i>Weight Kg.</i>
VP-14	003.059.000	16	7	1	4.5	1/4"	6	25- 5.5	0.01
VP-38	003.060.000	20	9.5	1.5	5	3/8"	8	45- 9.9	0.015
VP-12	003.061.000	24	11.5	1.5	6.5	1/2"	11	70- 15.4	0.025
VP-34	003.062.000	28	15.5	2.5	6.5	3/4"	16	140- 30.8	0.045
VP-100	.	33	18.5	1.5	8.5	1"	19	180- 39.6	0.098

SLEEVES WITH 'VP' VALVES



VALVE CODE	ORDERING CODE	A	B	C	Ch	Port size GAS (BSPP)	Weight Kg.
VPC-14-FF	003.067.000	48	26	16	19	1/4"	0.07
VPC-38-FF	003.068.000	58	26	17	22	3/8"	0.095
VPC-12-FF	003.069.000	60	33	19	27	1/2"	0.145
VPC-34-FF	003.070.000	76	36	23	32	3/4"	0.22
VPC-100-FF	.	85	45	25	42	1"	0.435

FOR SLEEVES ORDERING CODE CHANGE LAST .000 WITH .001

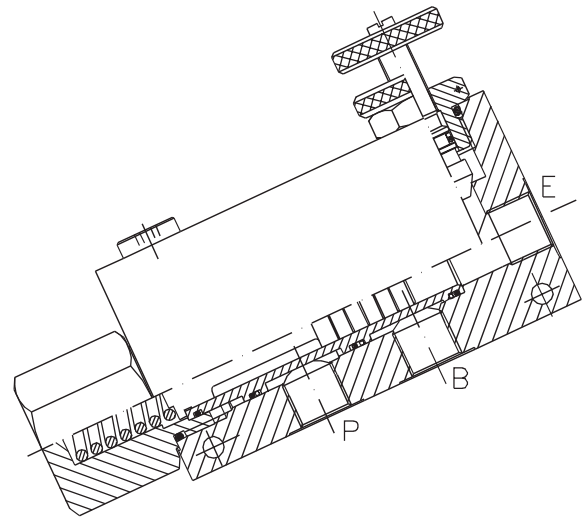
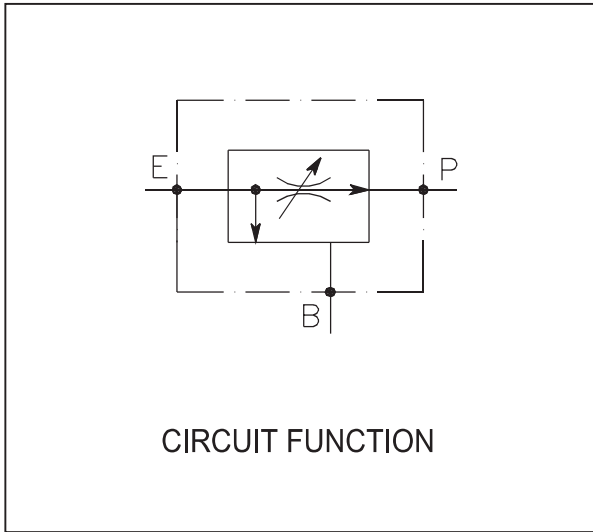


VALVE CODE	ORDERING CODE	A	B	C	Ch	Port size GAS (BSPP)	Weight Kg.
VPC-14-MF	003.063.000	50	12	23	19	1/4"	0.07
VPC-38-MF	003.064.000	58	12	27	22	3/8"	0.095
VPC-12-MF	003.065.000	66	17	33	27	1/2"	0.145
VPC-34-MF	003.066.000	78	19	36	32	3/4"	0.22
VPC-100-MF	.	90	26	45	42	1"	0.435

These valves can block flow from an actuator if the descent speed of the load exceeds the medium acceptable speed, for example in case of hose failure. They should be screwed either directly into the actuator or into an in-line manifold, mounted as close as possible to the actuator which has to be controlled.

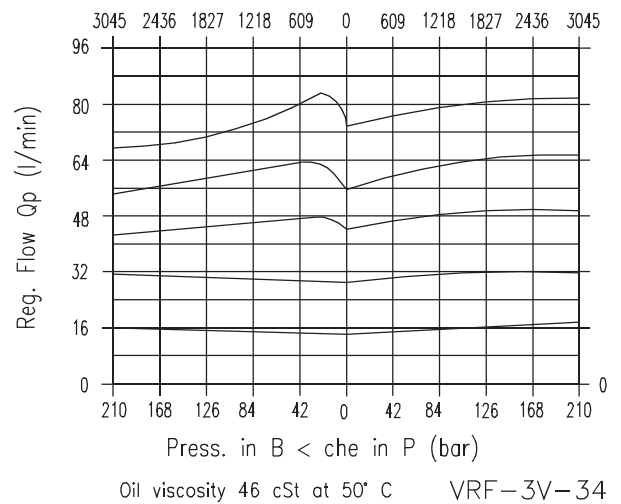
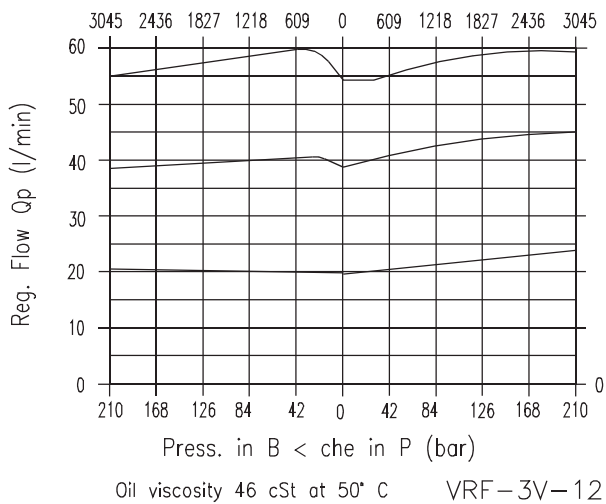
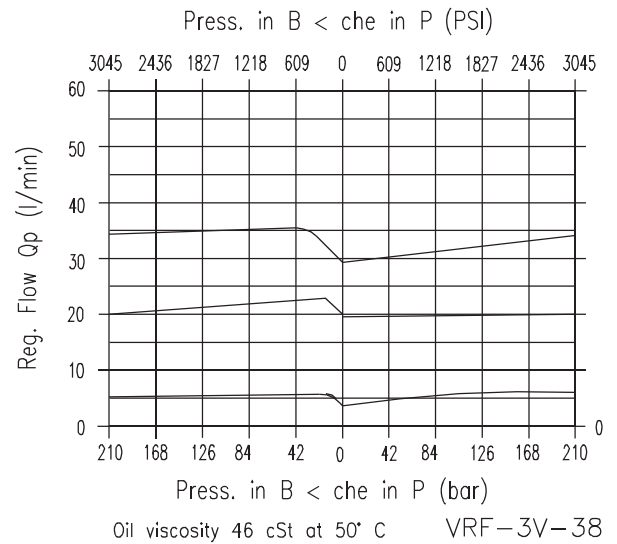
It is recommended to fit a flow regulator downstream the hose burst valve at the end of the flexible hose and to pre-set the valve for a flow at least 50% higher than the regulated flow.

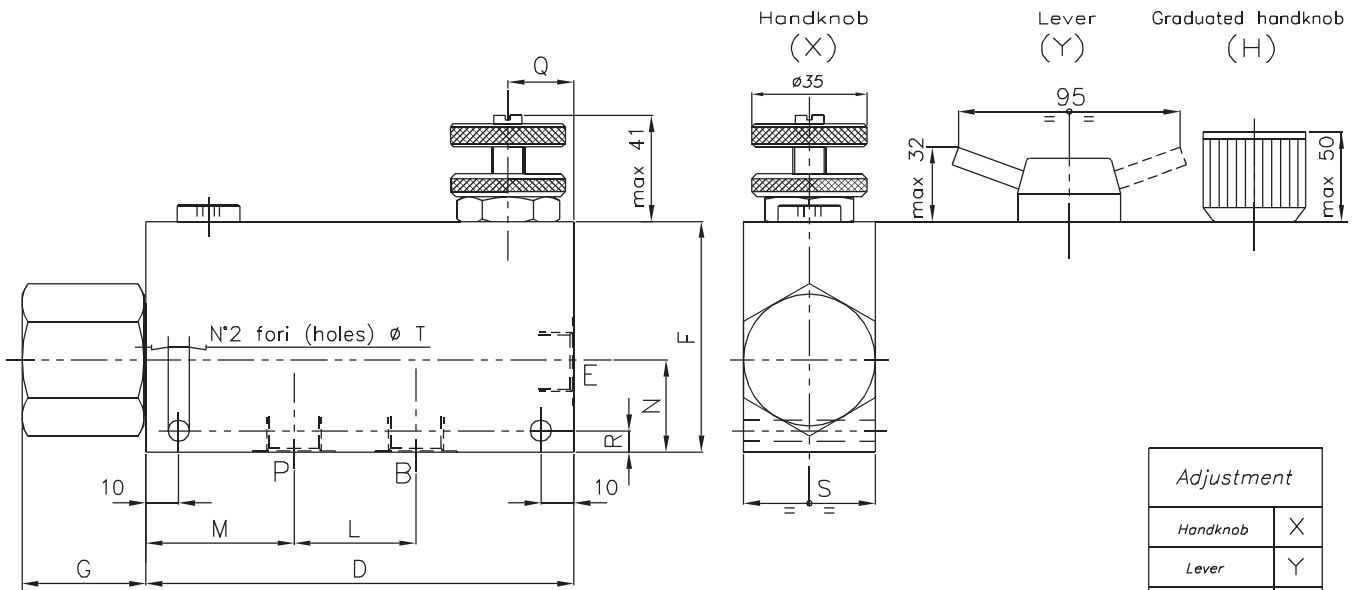
Note.



- PERFORMANCES -

Rated size	DN	6 ÷ 11
Min/max flow-rate	l/min-GPM	1/150 - 0.26/39.6
Max working pressure		210 bar 3045 PSI
Max setting pressure		.
Room temperature	°C	-30 +50
Oil temperature	°C	-30 +80
Filtration	micron	50
Tightening torque	Nm	. -
Weight	Kg	.





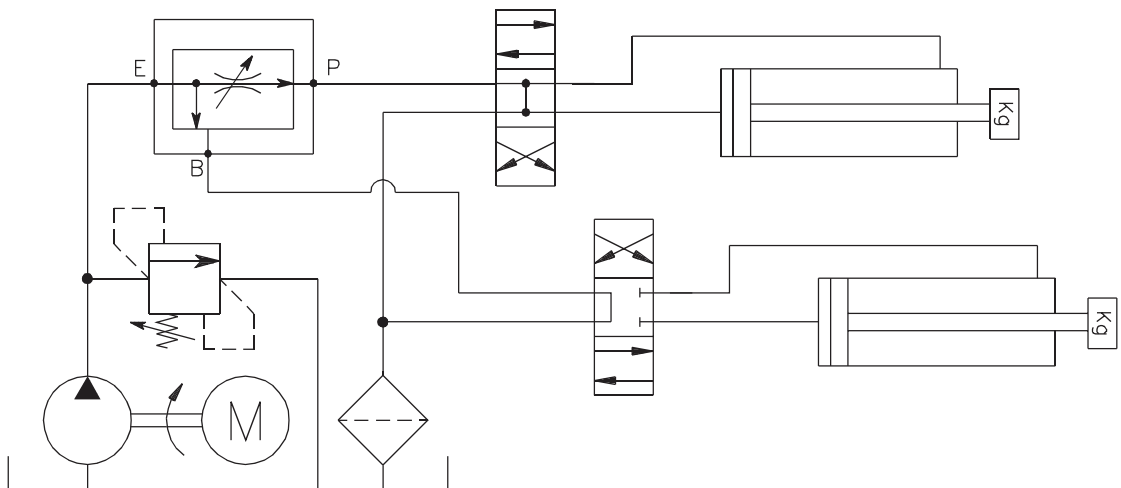
Adjustment	
Handknob	X
Lever	Y
Graduated handknob	H

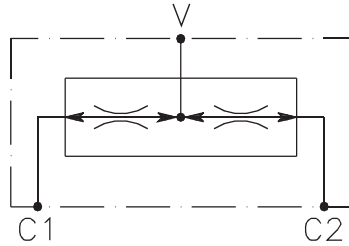
VALVE CODE	Valve Number	D	F	G	L	M	N	Q	R	S	T	Port size E-P-B GAS (BSPP)	nominale Rated size DN	QP l/min-GPM	QE l/min-GPM
VRF-3V-38	003	130	70	38	37	45	28	20	6.5	40	6.5	3/8"	6	30-7.9	55-14.5
VRF-3V-12	005	130	70	38	37	45	28	20	6.5	40	6.5	1/2"	8	55-14.5	90-23.8
VRF-3V-34	007	155	90	35	44	54	35	25	7.5	50	8.5	3/4"	11	90-23.8	150-39.6



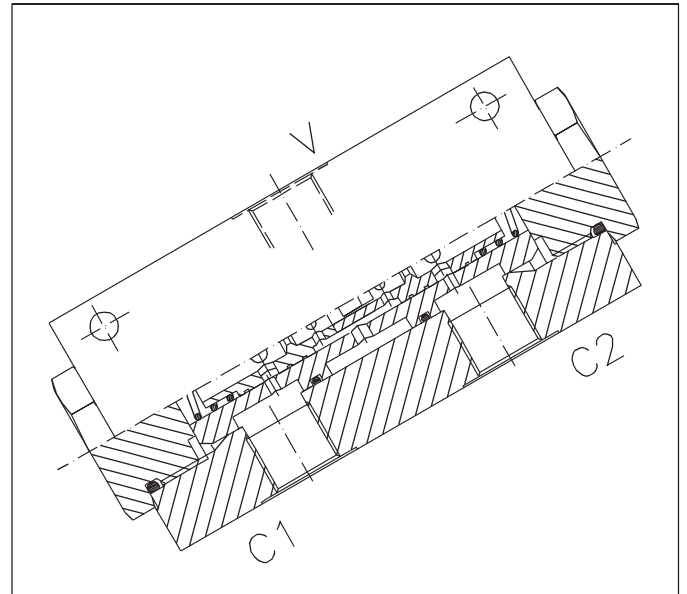
QE = Max admitted inlet flow "E" port - l/min
 QP = Max delivery in priority flow "P" - l/min

TYPICAL CIRCUIT EXAMPLE



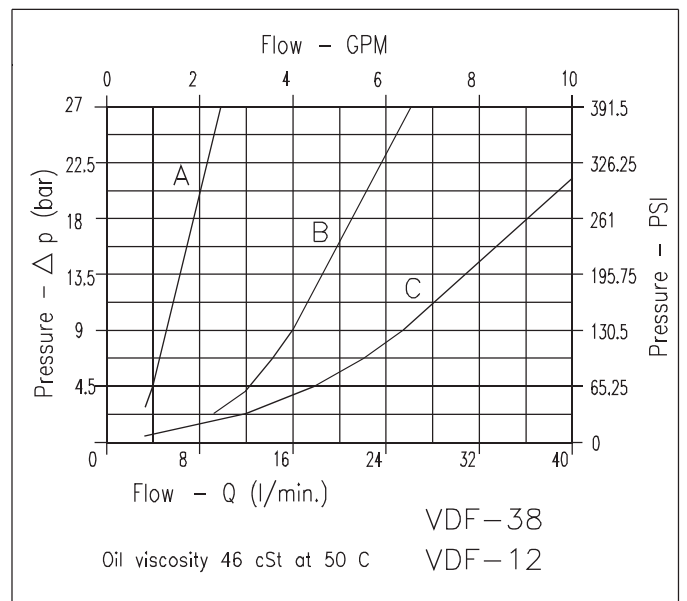


CIRCUIT DIAGRAM



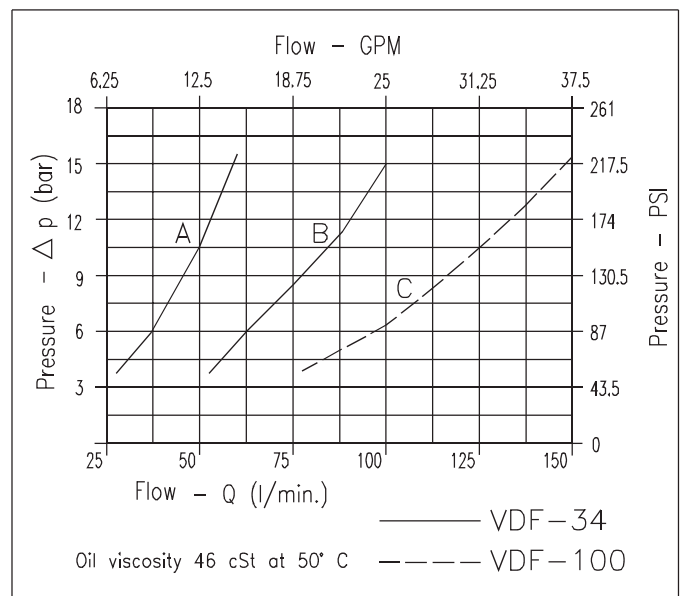
- PERFORMANCES -

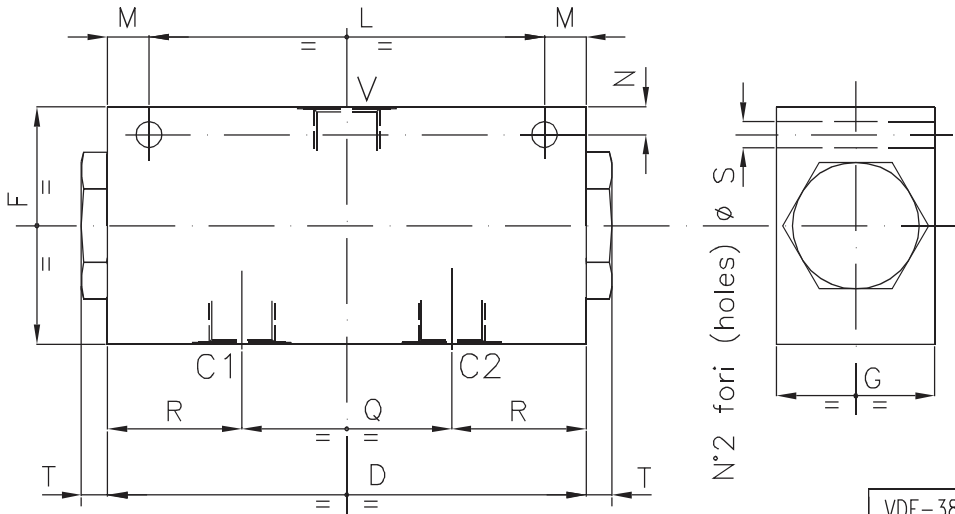
Flow division ratio		50%
Min/max flow-rate	l/min-GPM	Vedi Pag.02
Max working pressure		210 bar 3045 PSI
Max setting pressure		.
Pilot ratio		.
Room temperature	°C	-30 +50
Oil temperature	°C	-30 +80
Filtration	micron	50
Tightening torque	Nm	. -
Weight	Kg	.



Note

004.058.000 Replacing 004.056.B00



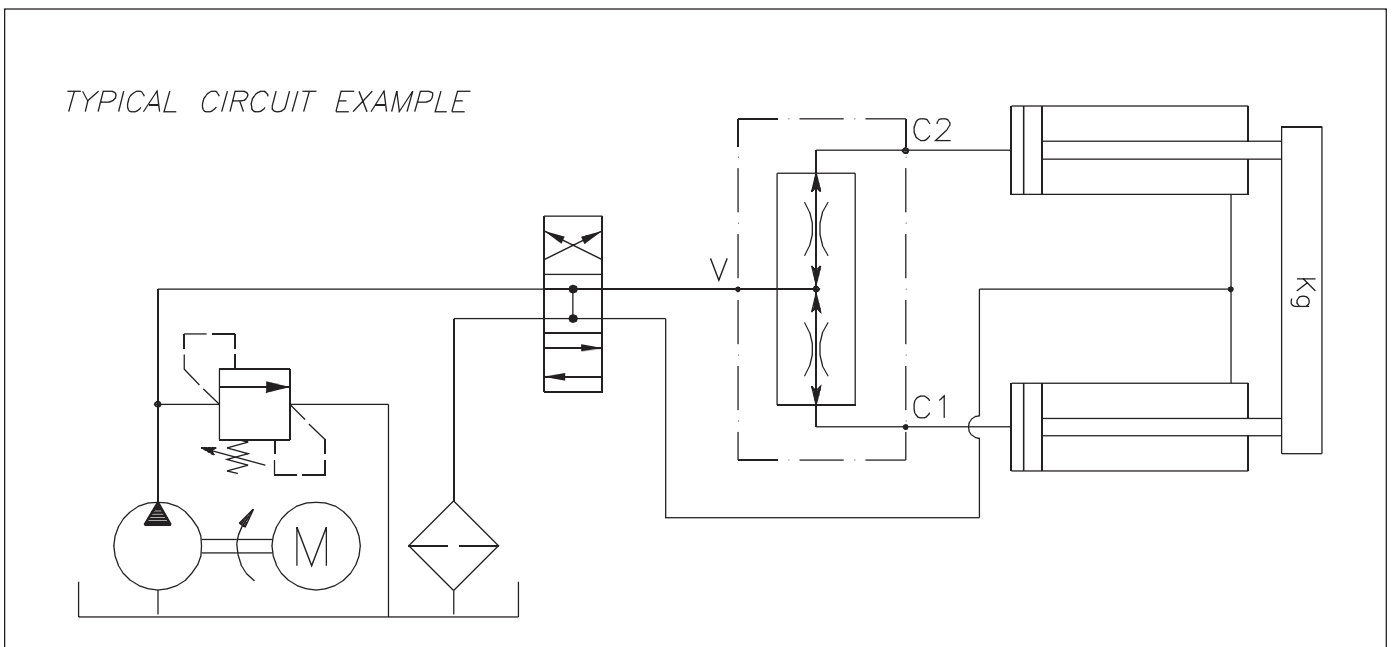
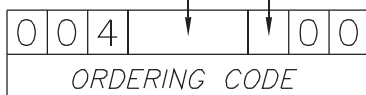


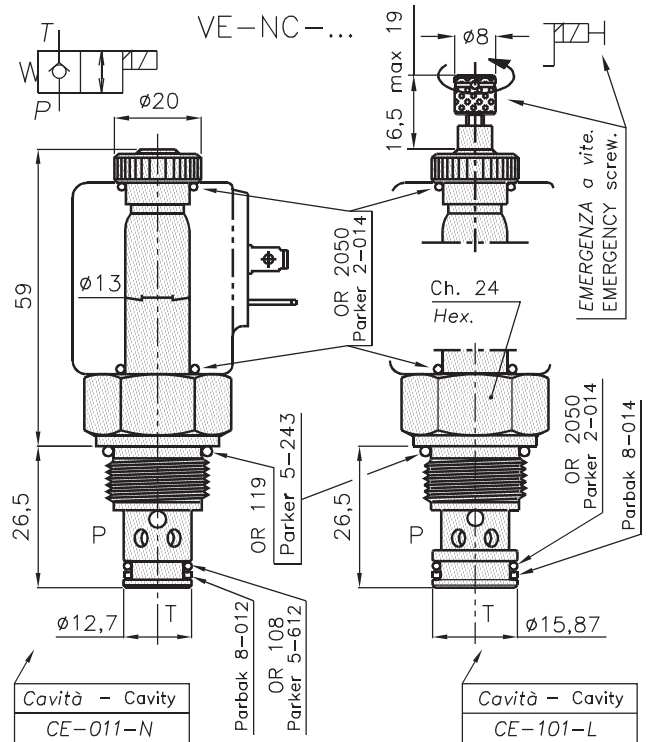
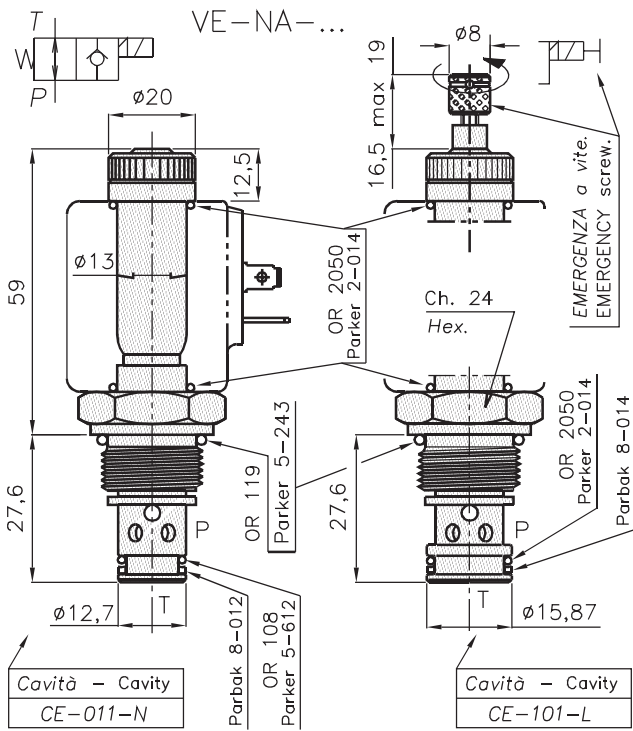
VDF-38 e VDF-12	
Inlet capacity (max admitted slippage ±3%) l/min - GPM	
1.7 to 2.9	A
3.4 to 5.8	B
6.6 to 10	C

VDF-100
Inlet capacity (max admitted slippage ±3%) l/min - GPM
23.8 to 39.6

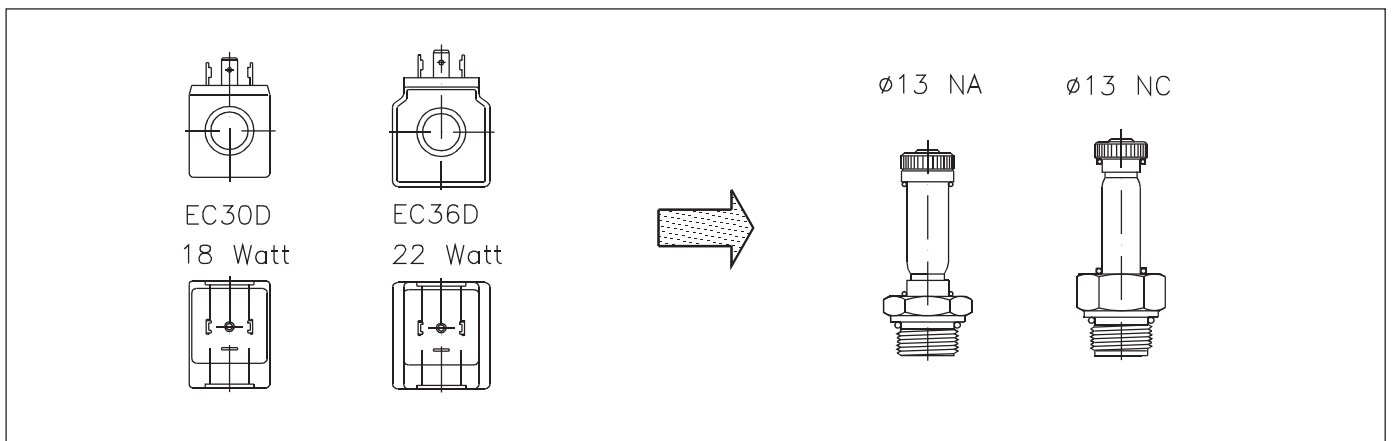
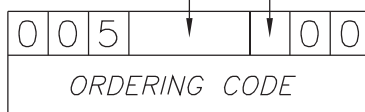
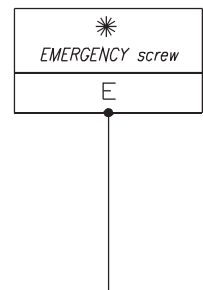
VDF-34	
Inlet capacity (max admitted slippage ±3%) l/min - GPM	
7.4 to 14.5	A
14.8 to 25.1	B

VALVE CODE	Valve Number	D	F	G	L	M	N	Q	R	S	T	Port size V GAS (BSPP)	Port size C1-C2 GAS (BSPP)
VDF-38-*	008	135	60	40	100	10.5	7	53	34	6.5	7	3/8"	3/8"
VDF-12-*	009											1/2"	3/8"
VDF-34-*	056	160	80	50	140	10	10	80	40	8.5	8	3/4"	1/2"
VDF-100	059											1"	3/4"

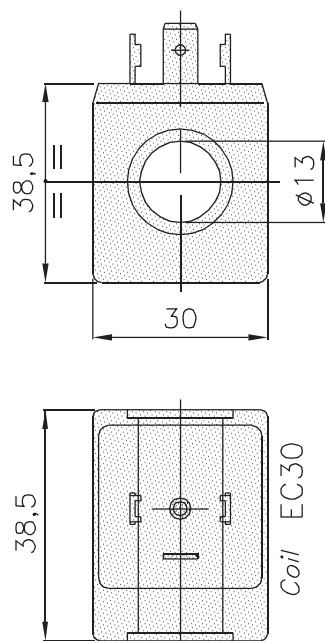




VALVE CODE	Valve Number	Cavity	Notes	Magnete Coil	Collettore Bodie
VE-NA-20-011N-34UNF-*	540	CE-011-N	Normally open	5.04.01.01 5.04.01.02	5.05.01.01 5.05.02.01 5.05.03.01
VE-NC-20-011N-34UNF-*	541	CE-011-N	Normally closed		
VE-NA-20-101L-34UNF-*	542	CE-101-L	Normally open		
VE-NC-20-101L-34UNF-*	543	CE-101-L	Normally closed		

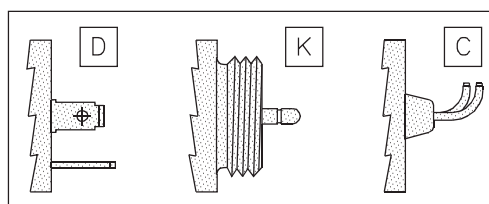


EC30 18W



Weight: 0.125 Kg
 Power consumption
 AC: 28VA (nominal cool)
 DC: 18W (nominal cool)

Power at starting is max
 3.5 times higher than
 service one.



Plug	Cod.
DIN with rectifier	DR
DIN (Hirschmann)	D
Kostal	K
Leads	C

Ordering Code



Cartridge	Bodie
5.01.01.01	5.05.01.01
5.01.01.02	5.05.02.01
	5.05.03.01

Coil	Cod.
EC30 18W	C30

Connection	Cod.
DIN (Hirsch.)	D
Kostal	K
Cavi Leads	C

Volt/Hertz	Cod.
12V DC	012DC
24V DC	024DC
24V AC	024AC
220V 50Hz	22050
110V 50Hz	11050
220V RAC	220RC
110V RAC	110RC

NOTE..

The coils are supplied to operate continuously. The working duty ED is the ratio between energized time TI and full cycle time TC, where TC=TI+TR (TR de-energized time). $ED=TI/TC * 100\%$

Working continuously duty means that all the coils have ED=100% (in the limits of the operating temperature).

The maximum working temperature for the coils is 125°C; the ambient temperature must be between -30 and +50°C.

Fluctuations in the operating voltage must not exceed +/- 10% of the nominal voltage.

Exceeding this limit will result in an incorrect operations of the cartridges.

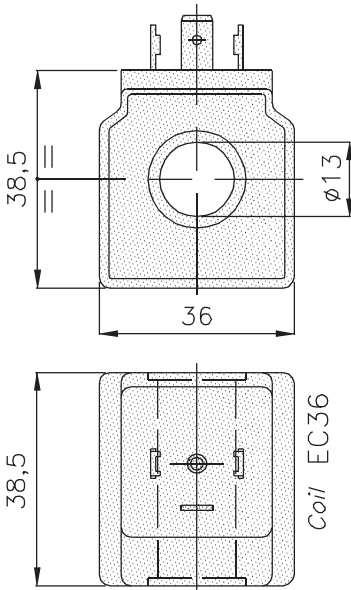
Connectors are standard DIN 43650 - ISO 4400 (Hirschmann). On request are available also Kostal connectors and wires.

To calculate the current intensity use the following formulas:

alternate current: $intensity(A)=power(VA)/tension(V)$

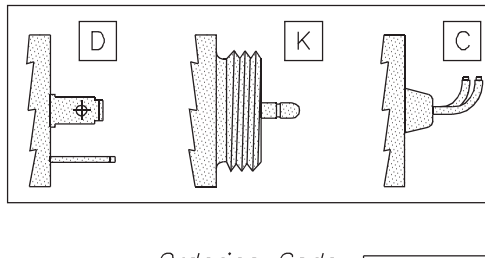
direct current: $intensity(A)=power(W)/tension(V)$

EC36 22W



Weight: 0.200 Kg
 Power consumption
 AC: 32VA (nominal cool)
 DC: 22W (nominal cool)

Power at starting is
 max 3.5 times higher
 than service one.



OPTIONAL

Plug	Cod.
DIN with rectifier	DR
DIN (Hirschmann)	D
Kostal	K
Cavi Leads	C

Ordering Code

C	3	6							
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Cartridge	Bodie
5.01.01.01/02	5.05.01.01
5.01.01.03/04	5.05.02.01
5.01.02.01/02	5.05.03.01
5.01.02.03/04	

Coil	Cod.
EC36 22W	C36

Connection	Cod.
DIN (Hirsch.)	D
Kostal	K
Cavi Leads	C

Volt/Hertz	Cod.
12V DC	012DC
24V DC	024DC
24V AC	024AC
220V 50Hz	22050
110V 50Hz	11050
220V RAC	220RC
110V RAC	110RC

NOTE..

The coils are supplied to operate continuously. The working duty ED is the ratio between energized time TI and full cycle time TC, where TC=TI+TR (TR de-energized time). $ED=TI/TC * 100\%$
 Working continuously duty means that all the coils have ED=100% (in the limits of the operating temperature).
 The maximum working temperature for the coils is 125°C: the ambient temperature must be between -30 and +50°C.
 Fluctuations in the operating voltage must not exceed +/- 10% of the nominal voltage.
 Exceeding this limit will result in an incorrect operations of the cartridges.

Connectors are standard DIN 43650 - ISO 4400 (Hirschmann). On request are available also Kostal connectors and wires.
 To calculate the current intensity use the following formulas:
 alternate current: $intensity(A)=power(VA)/tension(V)$
 direct current: $intensity(A)=power(W)/tension(V)$