

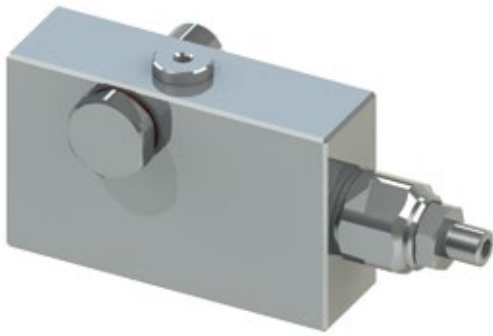


**HYDRAULIC VALVES AND COMPONENTS**

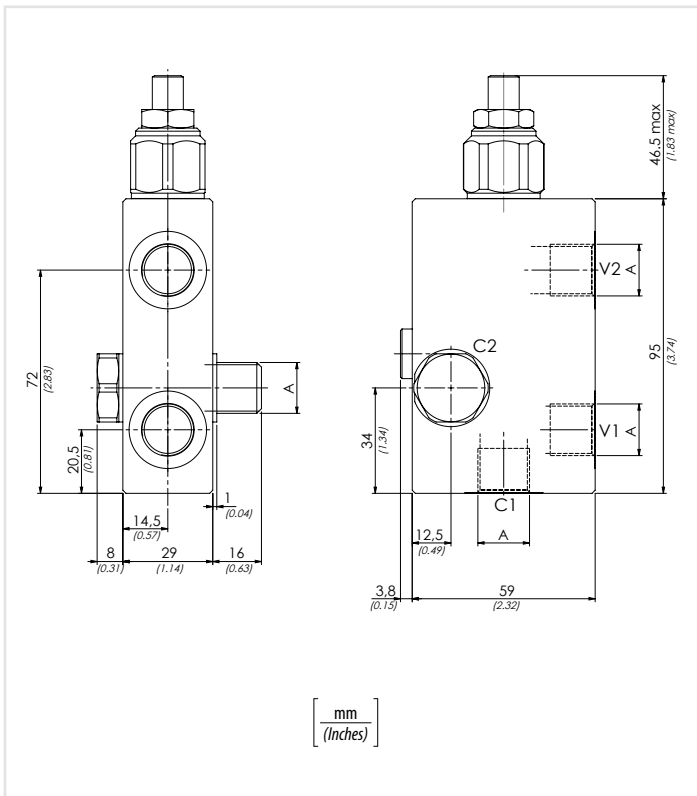
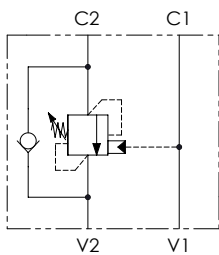


## Counterbalance valves

*Valvole di bilanciamento*

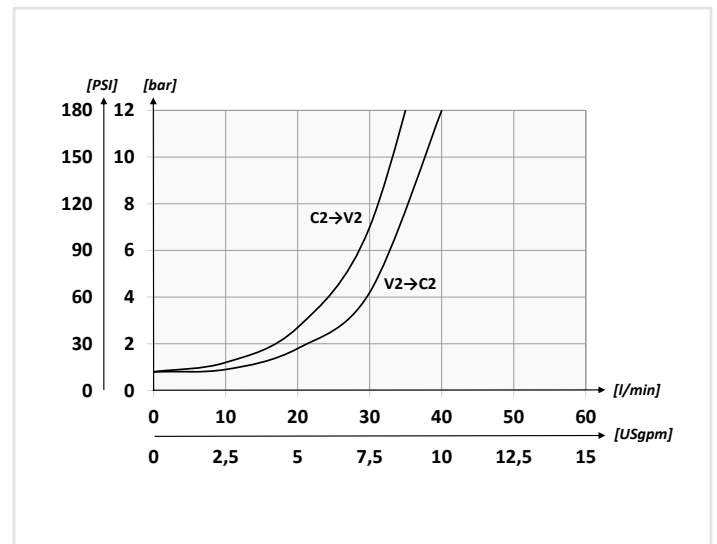


Schema idraulico - Hydraulic circuit



	01	02	03	04	05
<b>Codice ordinazione</b> <b>Ordering code</b>	<b>VBCB</b>	<b>380</b>			
<b>01</b>	Valvole di bilanciamento singola a bullone per centro aperto (Bolt-fitting single counterbalance valves for open center)				<b>VBCB</b>
<b>02</b>	Dimensione (Size)	BSPP3/8			<b>380</b>
<b>03</b>	Molla (Spring) <b>30/210 bar</b> (435/3045 PSI)	Incremento pressione al giro (Press. increase) <b>70 bar/al giro</b> (1015 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>	
	Molla (Spring) <b>60/350 bar</b> (870/5075 PSI)	Incremento pressione al giro (Press. increase) <b>120 bar/al giro</b> (1740 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>	
<b>04</b>	Materiale (Material)	Corpo in acciaio + zincatura (Steel body + zinc-plated)			<b>S</b>
		Corpo in acciaio + zinco-nichel (Steel body + zinc-nickel)			<b>K</b>
<b>05</b>	Rapporto di pilotaggio (Pilot ratio)	1:4.25 Standard			<b>/</b>
		1:8			<b>8</b>

**Performances**



**Dati tecnici - Technical data**

<b>Olio idraulico/Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>		
<b>Viscosità olio/Oil viscosity</b>	<b>15-250 mm<sup>2</sup>/s (15 to 250 cSt)</b>		
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>		
<b>Temperatura dell'olio/Oil temperature</b>	<b>-20°C +80°C</b>	<b>-4°F + 176°F</b>	
<b>Temperatura ambiente/Ambient temperature</b>	<b>-20°C +50°C</b>	<b>-4°F + 122°F</b>	
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)			

**Caratteristiche tecniche - Technical characteristics**

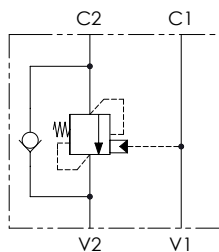
Codice Code	A	Portata max Max flow l/min-USgpm	Pressione max Max pressure bar/PSI	Peso approssimativo Approx weight kg/lb
<b>VBCB380</b>	<b>BSPP3/8</b>	<b>40 (10.6)</b>	<b>350 (5075)</b>	<b>1,24 (2.73)</b>



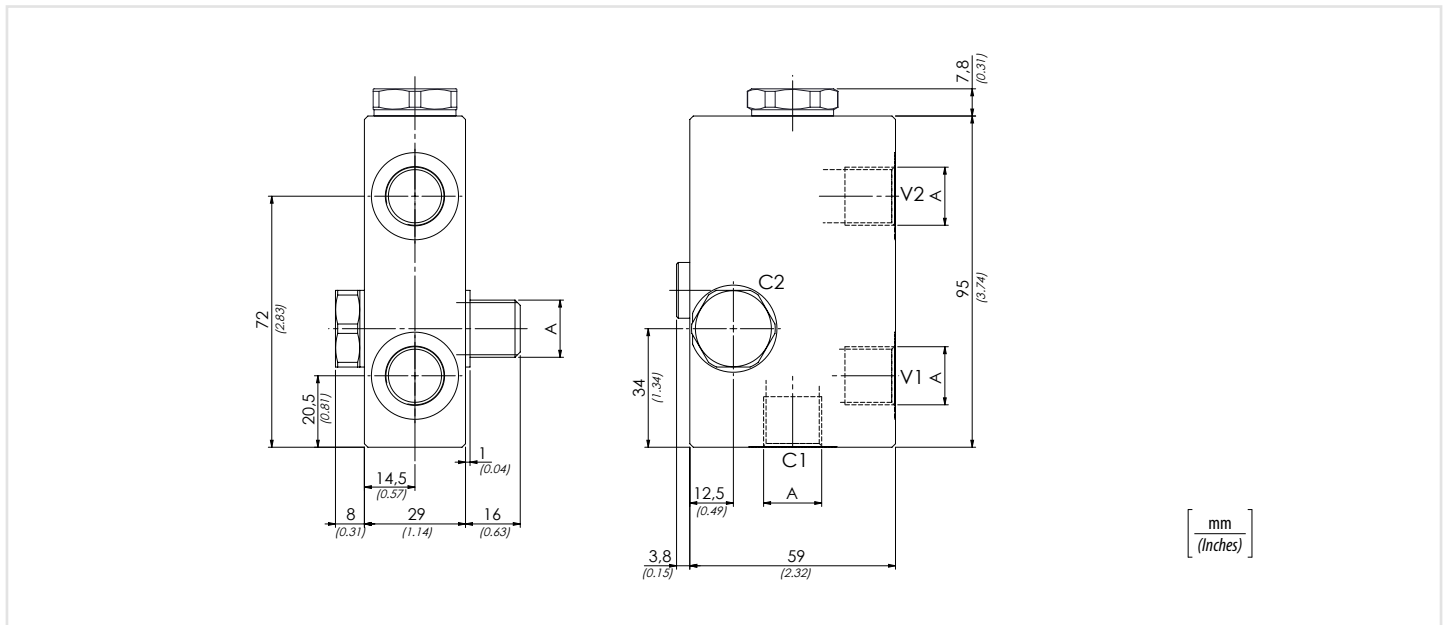
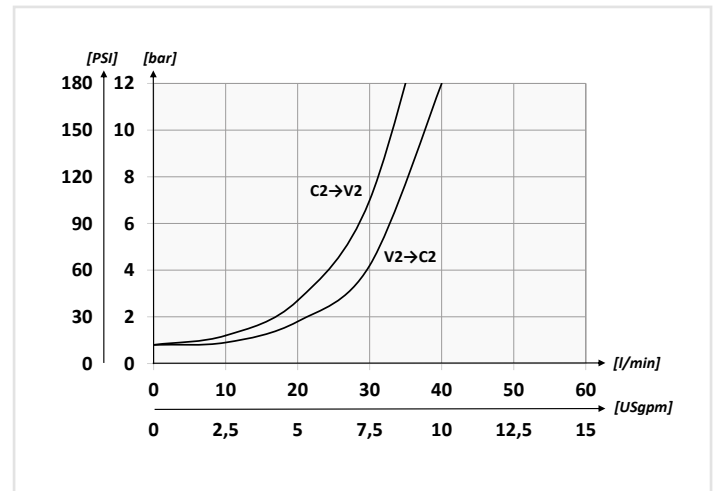
	01	02	03	04
<b>Codice ordinazione</b> <b>Ordering code</b>	<b>VBZB</b>	<b>380</b>	<b>2</b>	

<b>01</b>	Valvole di bilanciamento a bullone singola per centro aperto a taratura fissa <i>(Bolt-fitting single counterbalance valves fixed setting for open center)</i>	<b>VBZB</b>	
<b>02</b>	Dimensione (Size)	BSPP3/8 <b>380</b>	
<b>03</b>	Taratura (Setting) <b>Q=5 l/min 350 bar (5075 PSI)</b>	<b>2</b>	
<b>04</b>	Materiale (Material)	Corpo in acciaio + zincatura <i>(Steel body + zinc-plated)</i>	<b>S</b>
		Corpo in acciaio + zinco-nichel <i>(Steel body + zinc-nickel)</i>	<b>K</b>
Rapporto di pilotaggio (Pilot ratio) 1:4.25			

### Schema idraulico - Hydraulic circuit



### Performances

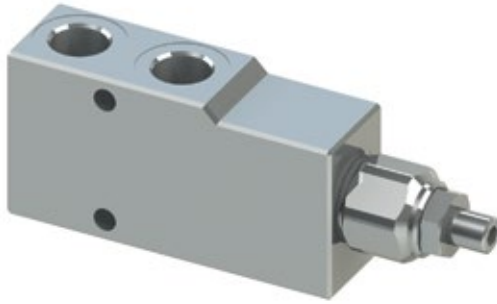


### Dati tecnici - Technical data

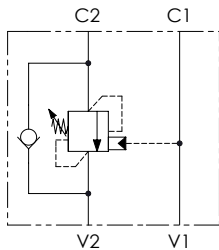
<b>Olio idraulico/Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>
<b>Viscosità olio/Oil viscosity</b>	<b>15-250 mm<sup>2</sup>/s (15 to 250 cSt)</b>
<b>Classe di contaminazione max con filtro</b> <i>Max contamination index with filter</i>	<b>ISO 4406:1999 Classe 19/17/14</b>
<b>Temperatura dell'olio/Oil temperature</b>	<b>-20°C +80°C      -4°F + 176°F</b>
<b>Temperatura ambiente/Ambient temperature</b>	<b>-20°C +50°C      -4°F + 122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> <i>It is necessary a filter use to protect the valve (advised filtration 15 µm)</i>	

### Caratteristiche tecniche - Technical characteristics

Codice Code	A	Portata max Max flow l/min-USgpm	Pressione max Max pressure bar/PSI	Peso approssimativo Approx weight kg/lb
<b>VBZB380</b>	<b>BSPP3/8</b>	<b>40 (10.6)</b>	<b>350 (5075)</b>	<b>1,18 (2.60)</b>



### Schema idraulico - Hydraulic circuit



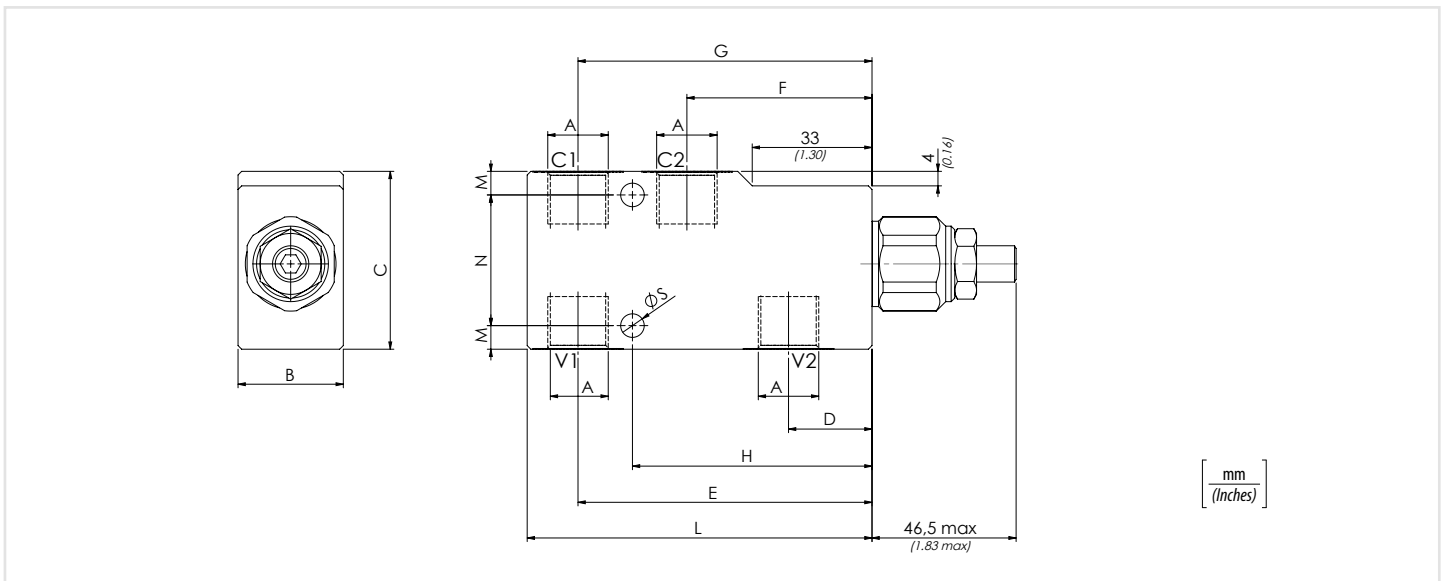
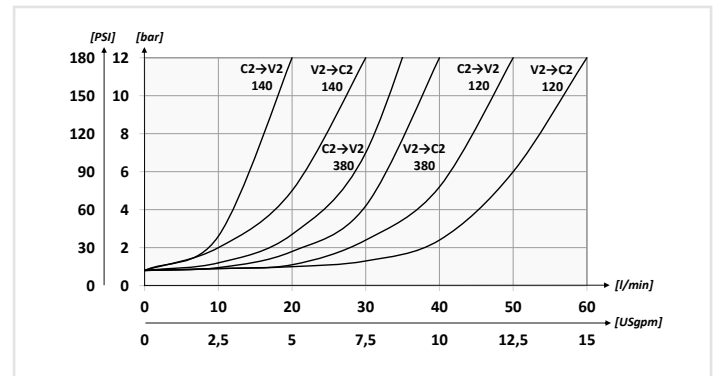
### Dati tecnici - Technical data

Olio idraulico/Mineral oil	ISO 6743/4 (DIN 51524)	
Viscosità olio/Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)	
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14	
Temperatura dell'olio/Oil temperature	-20°C +80°C	-4°F + 176°F
Temperatura ambiente/Ambient temperature	-20°C +50°C	-4°F + 122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)		

01	02	03	04	05
<b>VBCL</b>				

<b>01</b>	Valvole di bilanciamento singole per centro aperto (Single counterbalance valves for open center)	<b>VBCL</b>
<b>02</b>	Dimensione (Size)	BSPP1/4 <b>140</b>
		BSPP3/8 <b>380</b>
		BSPP1/2 <b>120</b>
<b>03</b>	Molla (Spring) <b>30/210 bar</b> (435/3045 PSI)	Incremento pressione al giro (Press. increase) <b>70 bar/al giro</b> (1015 PSI/turn) Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI) <b>1</b>
	Molla (Spring) <b>60/350 bar</b> (870/5075 PSI)	Incremento pressione al giro (Press. increase) <b>120 bar/al giro</b> (1740 PSI/turn) Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI) <b>2</b>
<b>04</b>	Materiale (Material)	Corpo in acciaio + zincatura (Steel body + zinc-plated) <b>S</b>
		Corpo in acciaio + zinco-nichel (Steel body + zinc-nickel) <b>K</b>
<b>05</b>	Rapporto di pilotaggio (Pilot ratio)	1:4.25 Standard <b>/</b>
		1:8 <b>8</b>

### Performances

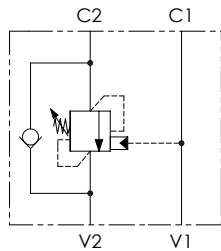


### Caratteristiche tecniche - Technical characteristics

Codice Code	A	Portata max Max flow l/min-USgpm	Pressione max Max pressure bar/PSI	B	C	D	E	F	G	H	L	M	N	S	Peso approssimativo Approx weight kg/lb					
<b>VBCL140</b>	<b>BSPP1/4</b>	<b>30 (7.9)</b>	<b>350 (5075)</b>	<b>30 (1.18)</b>	<b>50 (1.97)</b>	<b>23 (0.91)</b>	<b>58 (2.28)</b>	<b>51 (2,01)</b>	<b>81 (3.19)</b>	<b>66 (2.60)</b>	<b>95 (3.74)</b>	<b>7 (0.28)</b>	<b>36 (1.42)</b>	<b>6,5 (0.26)</b>	<b>0,98 (2.16)</b>					
<b>VBCL380</b>	<b>BSPP3/8</b>	<b>40 (10.6)</b>			<b>60 (2.36)</b>	<b>21 (0.83)</b>	<b>63 (2.48)</b>								<b>84 (3.31)</b>	<b>67,5 (2.66)</b>	<b>100 (3.94)</b>	<b>10 (0.39)</b>	<b>40 (1.57)</b>	<b>1,09 (2.40)</b>
<b>VBCL120</b>	<b>BSPP1/2</b>	<b>60 (15.9)</b>			<b>60 (2.36)</b>	<b>21 (0.83)</b>	<b>63 (2.48)</b>								<b>84 (3.31)</b>	<b>67,5 (2.66)</b>	<b>100 (3.94)</b>	<b>10 (0.39)</b>	<b>40 (1.57)</b>	<b>1,09 (2.40)</b>



Schema idraulico - Hydraulic circuit



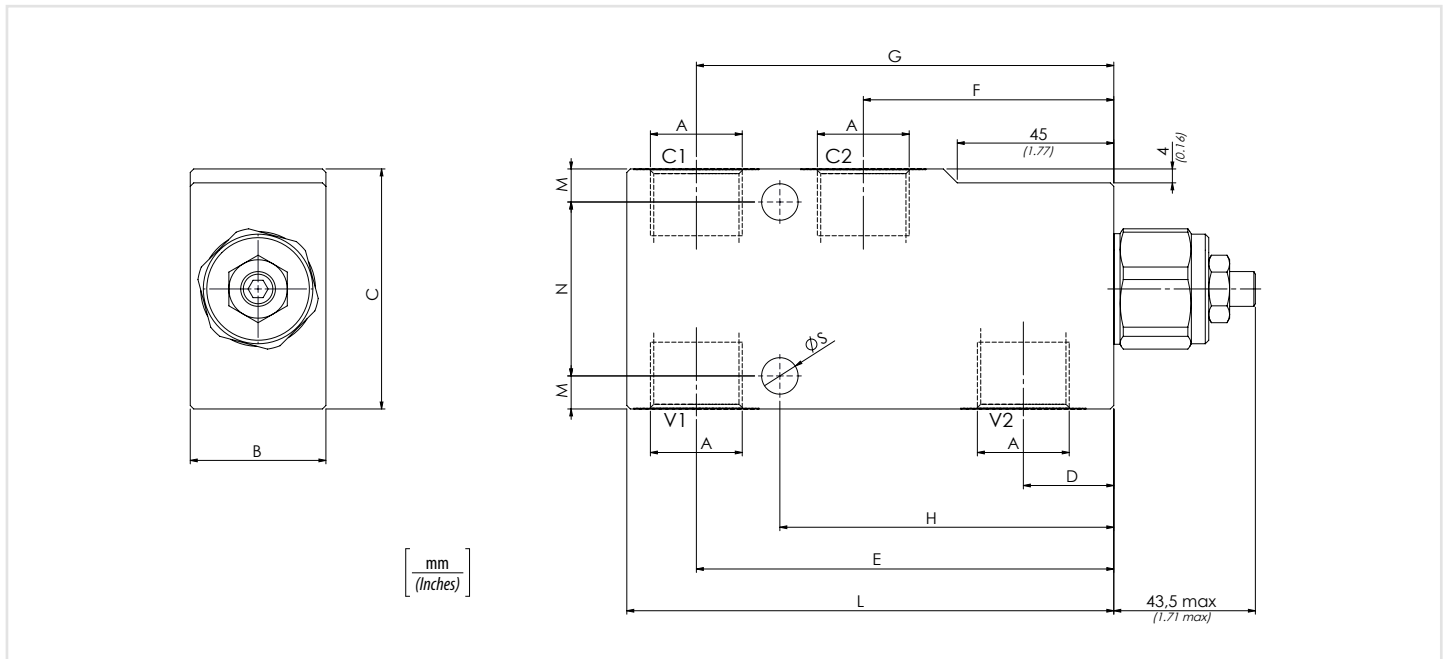
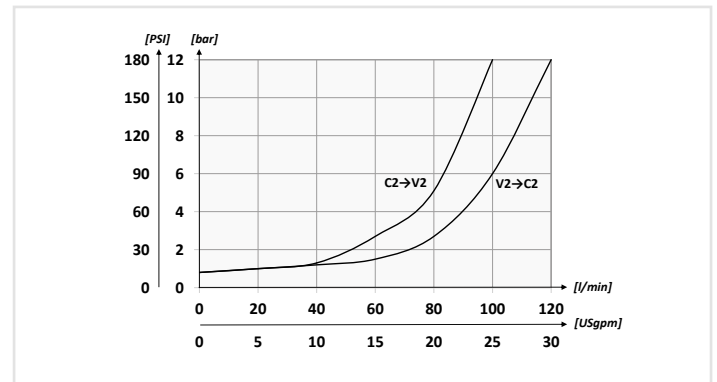
Dati tecnici - Technical data

Olio idraulico/Mineral oil	ISO 6743/4 (DIN 51524)		
Viscosità olio/Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)		
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14		
Temperatura dell'olio/Oil temperature	-20°C +80°C	-4°F + 176°F	
Temperatura ambiente/Ambient temperature	-20°C +50°C	-4°F + 122°F	
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)			

Codice ordinazione Ordering code	01	02	03	04	05
	<b>VBCL</b>	<b>340</b>	<b>2</b>		

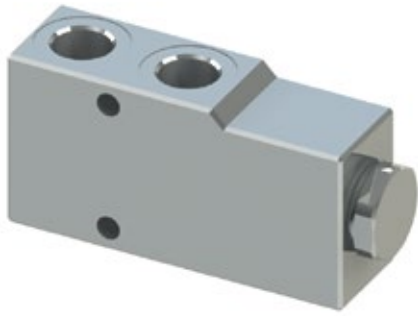
01	Valvole di bilanciamento singole per centro aperto (Single counterbalance valves for open center)			<b>VBCL</b>
02	Dimensione (Size)	BSPP3/4		<b>340</b>
03	Molla (Spring) <b>60/350 bar</b> (870/5075 PSI)	Incremento pressione al giro (Press. increase) <b>120 bar/al giro</b> (1740 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>
04	Materiale (Material)	Corpo in acciaio + zincatura (Steel body + zinc-plated)		<b>S</b>
05	Rapporto di pilotaggio (Pilot ratio)	1:6,2		/
		1:10,6		<b>11</b>

Performances

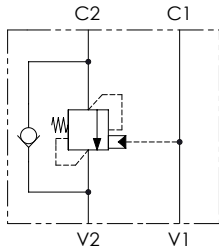


Caratteristiche tecniche - Technical characteristics

Codice Code	A	Portata max Max flow l/min-USgpm	Pressione max Max pressure bar/PSI	B	C	D	E	F	G	H	L	M	N	S	Peso approssimativo Approx weight kg/lb
<b>VBCL340</b>	<b>BSPP3/4</b>	<b>120 (31.7)</b>	<b>350 (5075)</b>	<b>40 (1.57)</b>	<b>70 (2.76)</b>	<b>20 (0.79)</b>	<b>94 (3.7)</b>	<b>72 (2.83)</b>	<b>120 (4.72)</b>	<b>96 (3.78)</b>	<b>140 (5.51)</b>	<b>50 (1.96)</b>	<b>10 (0.39)</b>	<b>10,5 (0.41)</b>	<b>2,54 (5.59)</b>



### Schema idraulico - Hydraulic circuit



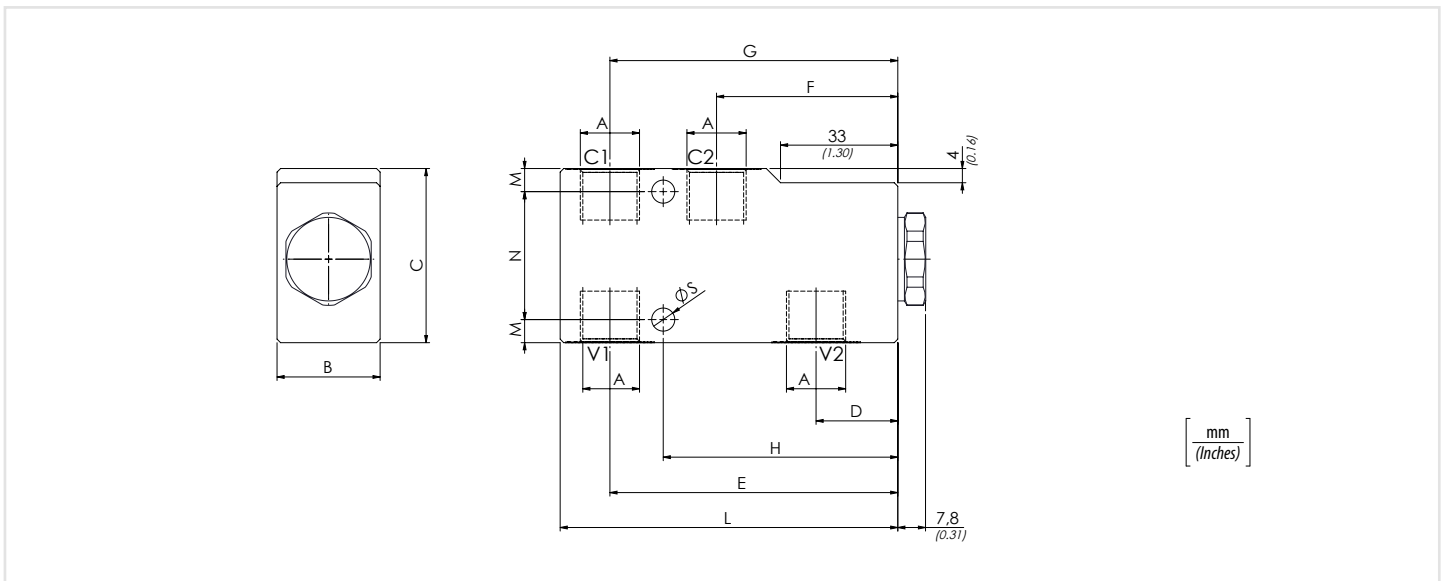
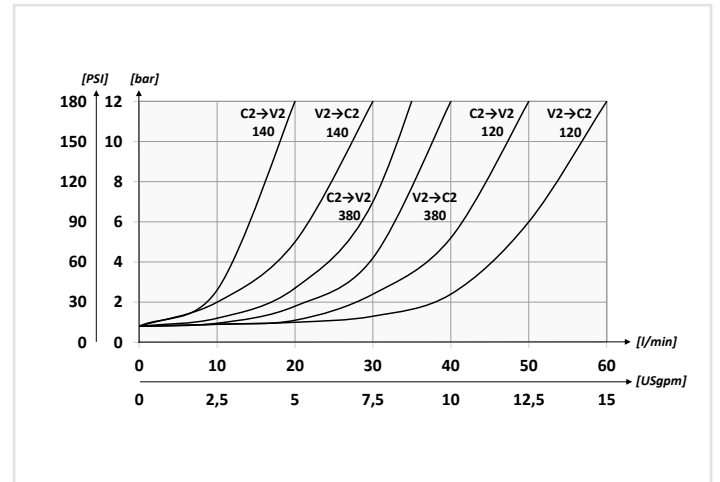
### Dati tecnici - Technical data

Olio idraulico/Mineral oil	ISO 6743/4 (DIN 51524)		
Viscosità olio/Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)		
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14		
Temperatura dell'olio/Oil temperature	-20°C +80°C	-4°F + 176°F	
Temperatura ambiente/Ambient temperature	-20°C +50°C	-4°F + 122°F	
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)			

Codice ordinazione Ordering code	01	02	03	04
	<b>VBZL</b>		<b>2</b>	

01	Valvole di bilanciamento singole per centro aperto a taratura fissa (Single counterbalance valves fixed setting for open center)		<b>VBZL</b>
02	Dimensione (Size)	BSPP1/4	<b>140</b>
		BSPP3/8	<b>380</b>
		BSPP1/2	<b>120</b>
05	Taratura (Setting) <b>Q=5 l/min 350 bar (5075 PSI)</b>		<b>2</b>
04	Materiale (Material)	Corpo in acciaio + zincatura (Steel body + zinc-plated)	<b>S</b>
		Corpo in acciaio + zinco-nichel (Steel body + zinc-nickel)	<b>K</b>
Rapporto di pilotaggio (Pilot ratio) 1:4.25			

### Performances

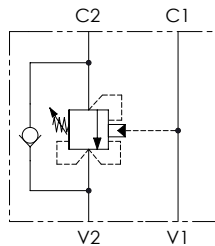


### Caratteristiche tecniche - Technical characteristics

Codice Code	A	Portata max Max flow l/min-USgpm	Pressione max Max pressure bar/PSI	B	C	D	E	F	G	H	L	M	N	S	Peso approssimativo Approx weight kg/lb
<b>VBZL140</b>	<b>BSPP1/4</b>	<b>30 (7.9)</b>	<b>350 (5075)</b>	<b>30 (1.18)</b>	<b>50 (1.97)</b>	<b>23 (0.91)</b>	<b>58 (2.28)</b>	<b>51 (2,01)</b>	<b>81 (3.19)</b>	<b>66 (2.60)</b>	<b>95 (3.74)</b>	<b>7 (0.28)</b>	<b>36 (1.42)</b>	<b>6,5 (0.26)</b>	<b>0,91 (2.00)</b>
<b>VBZL380</b>	<b>BSPP3/8</b>	<b>40 (10.6)</b>			<b>60 (2.36)</b>	<b>21 (0.83)</b>	<b>63 (2.48)</b>		<b>84 (3.31)</b>	<b>67,5 (2.66)</b>	<b>100 (3.94)</b>	<b>10 (0.39)</b>	<b>40 (1.57)</b>		<b>1,02 (2.24)</b>
<b>VBZL120</b>	<b>BSPP1/2</b>	<b>60 (15.9)</b>			<b>60 (2.36)</b>	<b>21 (0.83)</b>	<b>63 (2.48)</b>		<b>84 (3.31)</b>	<b>67,5 (2.66)</b>	<b>100 (3.94)</b>	<b>10 (0.39)</b>	<b>40 (1.57)</b>		<b>1,02 (2.24)</b>



### Schema idraulico - Hydraulic circuit

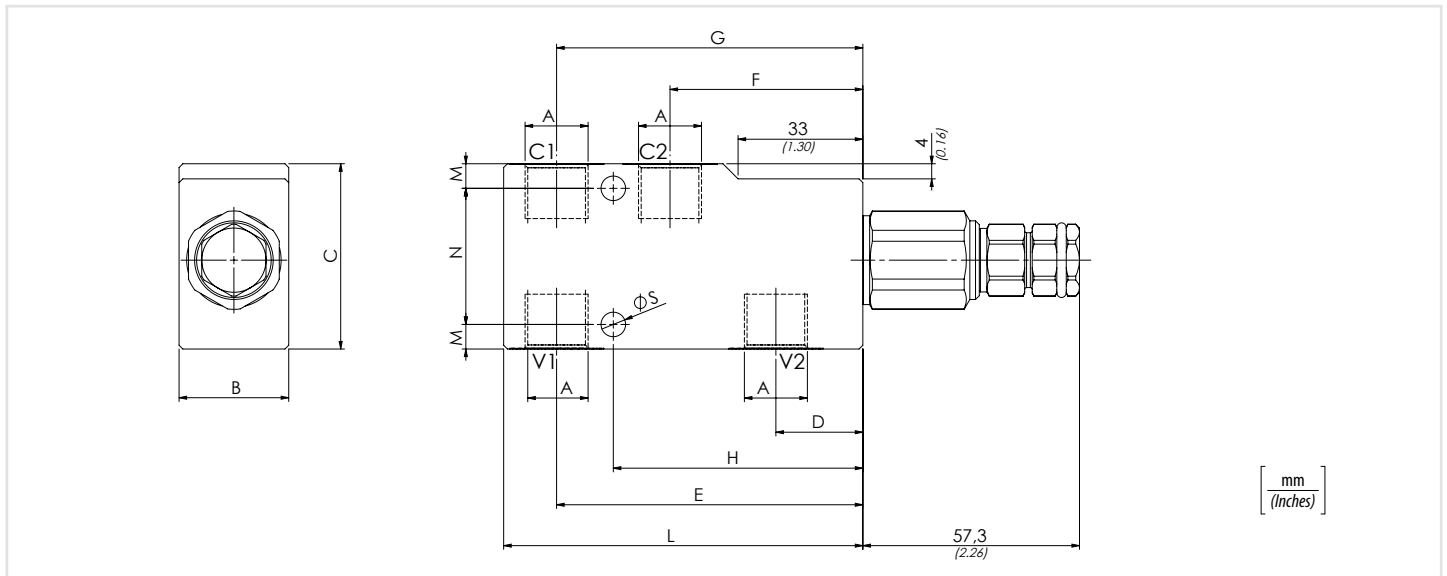
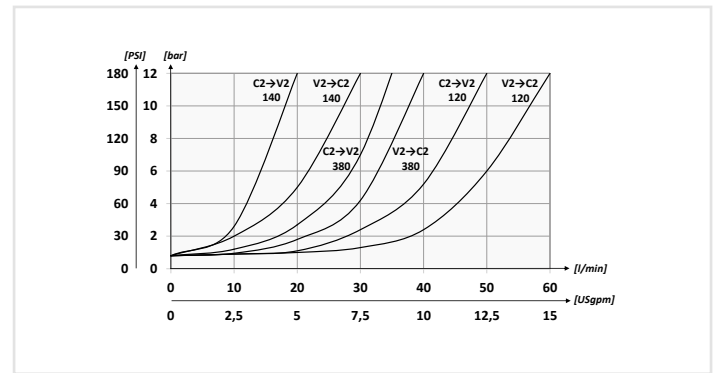


### Dati tecnici - Technical data

<b>Olio idraulico/Mineral oil</b>	ISO 6743/4 (DIN 51524)		
<b>Viscosità olio/Oil viscosity</b>	15-250 mm <sup>2</sup> /s (15 to 250 cSt)		
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	ISO 4406:1999 Classe 19/17/14		
<b>Temperatura dell'olio/Oil temperature</b>	-20°C +80°C	-4°F + 176°F	
<b>Temperatura ambiente/Ambient temperature</b>	-20°C +50°C	-4°F + 122°F	
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)			

	01	02	03	04	05
<b>Codice ordinazione</b> <b>Ordering code</b>	<b>VCCL</b>			<b>S</b>	
<b>01</b>	Valvole di bilanciamento singole per centro chiuso (Single counterbalance valves for closed center)				<b>VCCL</b>
<b>02</b>	Dimensione (Size)	BSPP1/4		<b>140</b>	
		BSPP3/8		<b>380</b>	
		BSPP1/2		<b>120</b>	
<b>03</b>	Molla (Spring) <b>30/210 bar</b> (435/3045 PSI)	Incremento pressione al giro (Press. increase) <b>70 bar/al giro</b> (1015 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)		<b>1</b>
	Molla (Spring) <b>60/350 bar</b> (870/6075 PSI)	Incremento pressione al giro (Press. increase) <b>120 bar/al giro</b> (1740 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (6075 PSI)		<b>2</b>
<b>04</b>	Materiale (Material)	Corpo in acciaio + zincatura (Steel body + zinc-plated)			<b>5</b>
<b>05</b>	Rapporto di pilotaggio (Pilot ratio)	1:4.25 Standard			<b>/</b>
		1:8			<b>8</b>

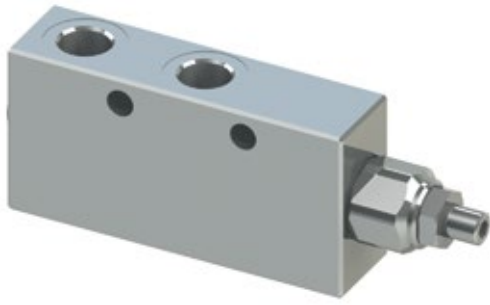
### Performances



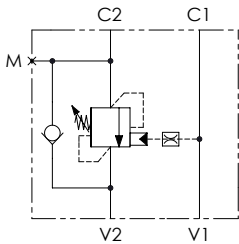
### Caratteristiche tecniche - Technical characteristics

Codice Code	A	Portata max Max flow l/min-USgpm	Pressione max Max pressure bar/PSI	B	C	D	E	F	G	H	L	M	N	S	Peso approssimativo Approx weight kg/lb					
<b>VCCL140</b>	<b>BSPP1/4</b>	<b>30 (7.9)</b>	<b>350 (5075)</b>	<b>30 (1.18)</b>	<b>50 (1.97)</b>	<b>23 (0.91)</b>	<b>58 (2.28)</b>	<b>51 (2,01)</b>	<b>81 (3.19)</b>	<b>66 (2.60)</b>	<b>95 (3.74)</b>	<b>7 (0.28)</b>	<b>36 (1.42)</b>	<b>6,5 (0.26)</b>	<b>1,02 (2.24)</b>					
<b>VCCL380</b>	<b>BSPP3/8</b>	<b>40 (10.6)</b>			<b>60 (2.36)</b>	<b>21 (0.83)</b>	<b>63 (2.48)</b>								<b>84 (3.31)</b>	<b>67,5 (2.66)</b>	<b>100 (3.94)</b>	<b>10 (0.39)</b>	<b>40 (1.57)</b>	<b>1,15 (2.53)</b>
<b>VCCL120</b>	<b>BSPP1/2</b>	<b>60 (15.9)</b>			<b>60 (2.36)</b>	<b>21 (0.83)</b>	<b>63 (2.48)</b>								<b>84 (3.31)</b>	<b>67,5 (2.66)</b>	<b>100 (3.94)</b>	<b>10 (0.39)</b>	<b>40 (1.57)</b>	<b>1,15 (2.53)</b>





### Schema idraulico - Hydraulic circuit



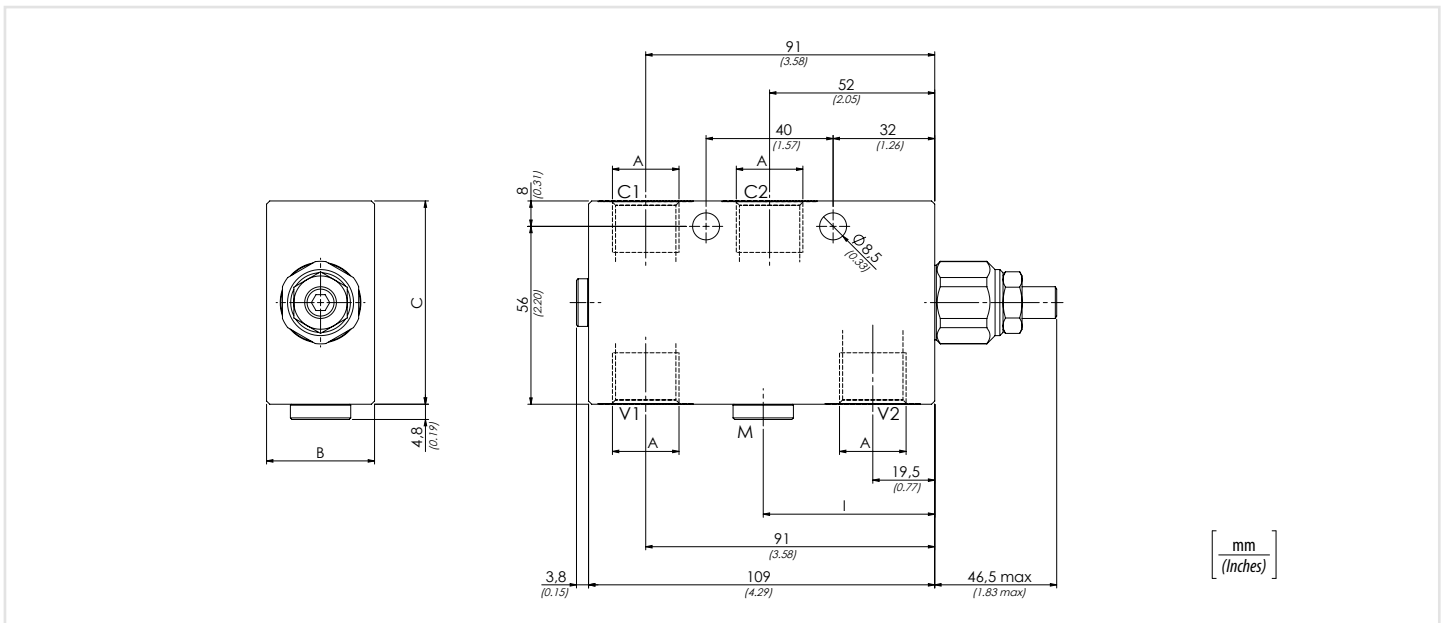
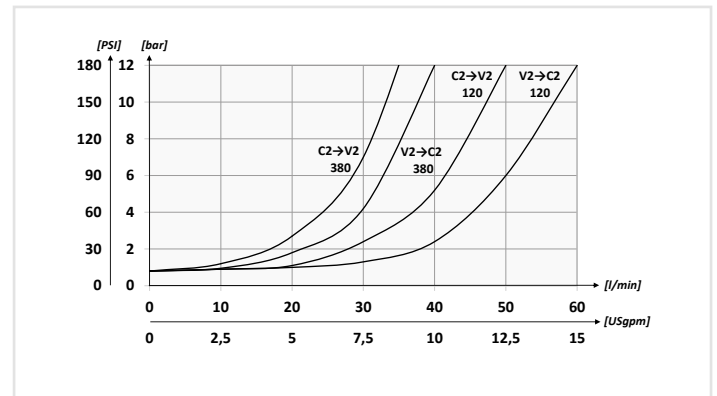
### Dati tecnici - Technical data

Olío idraulico/Mineral oil	ISO 6743/4 (DIN 51524)		
Viscosità olio/Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)		
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14		
Temperatura dell'olio/Oil temperature	-20°C +80°C	-4°F + 176°F	
Temperatura ambiente/Ambient temperature	-20°C +50°C	-4°F + 122°F	
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)			

01	02	03	04	05
<b>VBLP</b>				

<b>01</b>	Valvole di bilanciamento singole per centro aperto (Single counterbalance valves for open center)	<b>VBLP</b>	
<b>02</b>	Dimensione (Size)	BSPP3/8 <b>380</b>	
		BSPP1/2 <b>120</b>	
<b>03</b>	Molla (Spring) <b>30/210 bar</b> (435/3045 PSI)	Incremento pressione al giro (Press. increase) <b>70 bar/al giro</b> (1015 PSI/turn)	Taratura standard (Std. setting Q=5 l/min) <b>200 bar</b> (2900 PSI)
	Molla (Spring) <b>60/350 bar</b> (870/6075 PSI)	Incremento pressione al giro (Press. increase) <b>120 bar/al giro</b> (1740 PSI/turn)	Taratura standard (Std. setting Q=5 l/min) <b>350 bar</b> (5075 PSI)
<b>04</b>	Materiale (Material)	Corpo in acciaio + zincatura (Steel body + zinc-plated)	<b>S</b>
		Corpo in acciaio + zinco-nichel (Steel body + zinc-nickel)	<b>K</b>
<b>05</b>	Rapporto di pilotaggio (Pilot ratio)	1:4.25 Standard	/
		1:8	<b>8</b>

### Performances



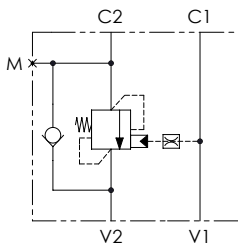
### Caratteristiche tecniche - Technical characteristics

Code Code	A	Portata max (l/min) Max flow (USgpm)	Pressione max (bar) Max pressure (PSI)	B	C	I	M	Peso approssimativo (kg) Approx weight (lb)
<b>VBLP380</b>	<b>BSPP3/8</b>	<b>40 (10.6)</b>	<b>350 (5075)</b>	<b>29 (1.14)</b>	<b>54 (2.13)</b>	/	/	<b>1,21 (2.63)</b>
<b>VBLP120</b>	<b>BSPP1/2</b>	<b>60 (15.9)</b>		<b>34 (1.34)</b>	<b>64 (2.52)</b>	<b>54 (2.13)</b>	<b>BSPP1/4</b>	<b>1,59 (3.46)</b>





### Schema idraulico - Hydraulic circuit



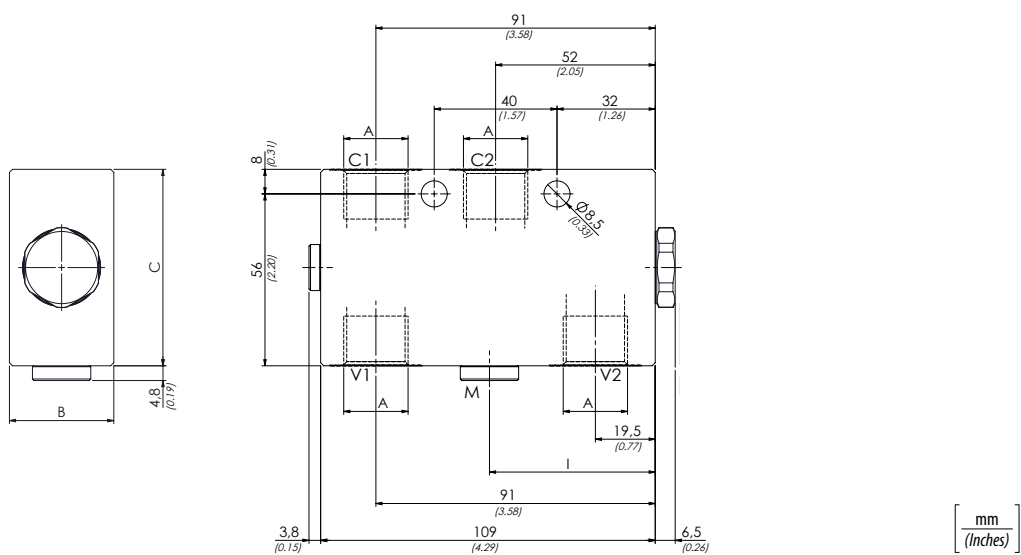
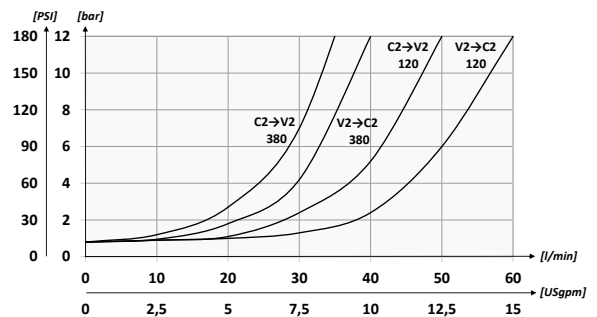
### Dati tecnici - Technical data

<b>Olio idraulico/Mineral oil</b>	ISO 6743/4 (DIN 51524)	
<b>Viscosità olio/Oil viscosity</b>	15-250 mm <sup>2</sup> /s (15 to 250 cSt)	
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	ISO 4406:1999 Classe 19/17/14	
<b>Temperatura dell'olio/Oil temperature</b>	-20°C +80°C	-4°F + 176°F
<b>Temperatura ambiente/Ambient temperature</b>	-20°C +50°C	-4°F + 122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)		

<b>Codice ordinazione</b> <b>Ordering code</b>	01	02	03	04
	<b>VBZP</b>		<b>2</b>	

<b>01</b>	Valvole di bilanciamento singole per centro aperto a taratura fissa (Single counterbalance valves fixed setting for open center)	<b>VBZP</b>	
<b>02</b>	Dimensione (Size)	BSPP1/4	<b>140</b>
		BSPP3/8	<b>380</b>
		BSPP1/2	<b>120</b>
<b>05</b>	Taratura (Setting) <b>Q=5 l/min 350 bar (5075 PSI)</b>	<b>2</b>	
<b>04</b>	Materiale (Material)	Corpo in acciaio + zincatura (Steel body + zinc-plated)	<b>S</b>
		Corpo in acciaio + zinco-nichel (Steel body + zinc-nickel)	<b>K</b>
Rapporto di pilotaggio (Pilot ratio) 1:4.25			

### Performances

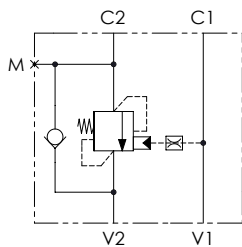


### Caratteristiche tecniche - Technical characteristics

Codice Code	A	Portata max (l/min) Max flow (USgpm)	Pressione max (bar) Max pressure (PSI)	B	C	I	M	Peso approssimativo (kg) Approx weight (lb)
<b>VBZP380</b>	<b>BSPP3/8</b>	<b>40 (10.6)</b>	<b>350 (5075)</b>	<b>29 (1.14)</b>	<b>54 (2.13)</b>	/	/	<b>1,14 (2.50)</b>
<b>VBZP120</b>	<b>BSPP1/2</b>	<b>60 (15.9)</b>		<b>34 (1.34)</b>	<b>64 (2.52)</b>	<b>54 (2.13)</b>	<b>BSPP1/4</b>	<b>1,52 (3.34)</b>



### Schema idraulico - Hydraulic circuit



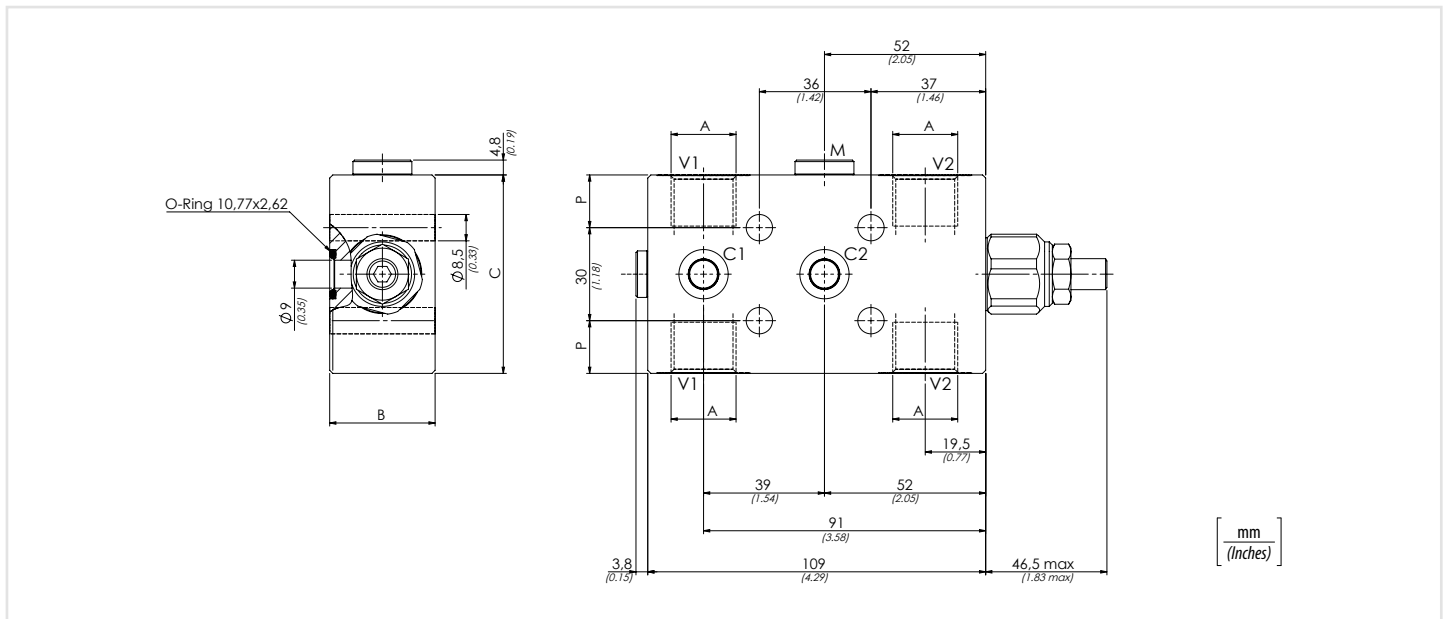
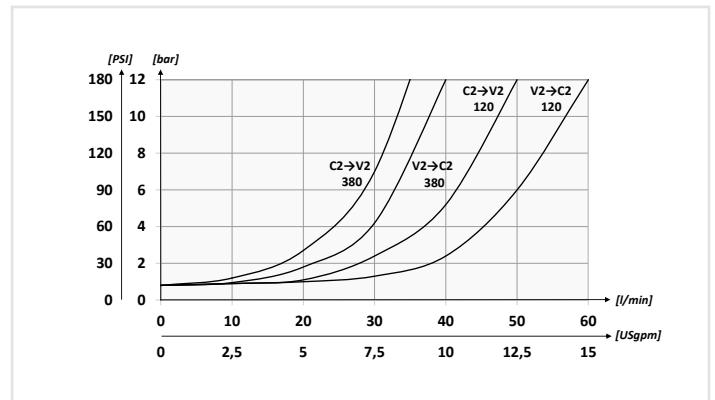
### Dati tecnici - Technical data

<b>Olio idraulico/Mineral oil</b>	ISO 6743/4 (DIN 51524)	
<b>Viscosità olio/Oil viscosity</b>	15-250 mm <sup>2</sup> /s (15 to 250 cSt)	
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	ISO 4406:1999 Classe 19/17/14	
<b>Temperatura dell'olio/Oil temperature</b>	-20°C +80°C	-4°F + 176°F
<b>Temperatura ambiente/Ambient temperature</b>	-20°C +50°C	-4°F + 122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)		

	01	02	03	04	05
<b>Codice ordinazione</b> <b>Ordering code</b>	<b>VBLF</b>				

<b>01</b>	Valvole di bilanciamento singole per centro aperto - flangiate (Single counterbalance valves for open center - flanged version)		<b>VBLF</b>
<b>02</b>	Dimensione (Size)	BSPP3/8	<b>380</b>
		BSPP1/2	<b>120</b>
<b>03</b>	Molla (Spring) <b>30/210 bar</b> (435/3045 PSI)	Incremento pressione al giro (Press. increase) <b>70 bar/al giro</b> (1015 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)
	Molla (Spring) <b>60/350 bar</b> (870/5075 PSI)	Incremento pressione al giro (Press. increase) <b>120 bar/al giro</b> (1740 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)
<b>04</b>	Materiale (Material)	Corpo in acciaio + zincatura (Steel body + zinc-plated)	<b>S</b>
		Corpo in acciaio + zinco-nichel (Steel body + zinc-nickel)	<b>K</b>
<b>05</b>	Rapporto di pilotaggio (Pilot ratio)	1:4.25 Standard	<b>/</b>
		1:8	<b>8</b>

### Performances

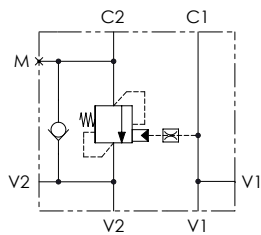


### Caratteristiche tecniche - Technical characteristics

Codice Code	A	Portata max (l/min) Max flow (USgpm)	Pressione max (bar) Max pressure (PSI)	H	M	P	S	Peso approssimativo (kg) Approx weight (lb)
<b>VBLF380</b>	<b>BSPP3/8</b>	<b>40 (10.6)</b>	<b>350 (5075)</b>	<b>54 (2.13)</b>	<b>BSPP1/4</b>	<b>12 (0.47)</b>	<b>29 (1.14)</b>	<b>1,17 (2.55)</b>
<b>VBLF120</b>	<b>BSPP1/2</b>	<b>60 (15.9)</b>		<b>64 (2.52)</b>		<b>17 (0.67)</b>	<b>34 (1.34)</b>	<b>1,55 (3.37)</b>



### Schema idraulico - Hydraulic circuit



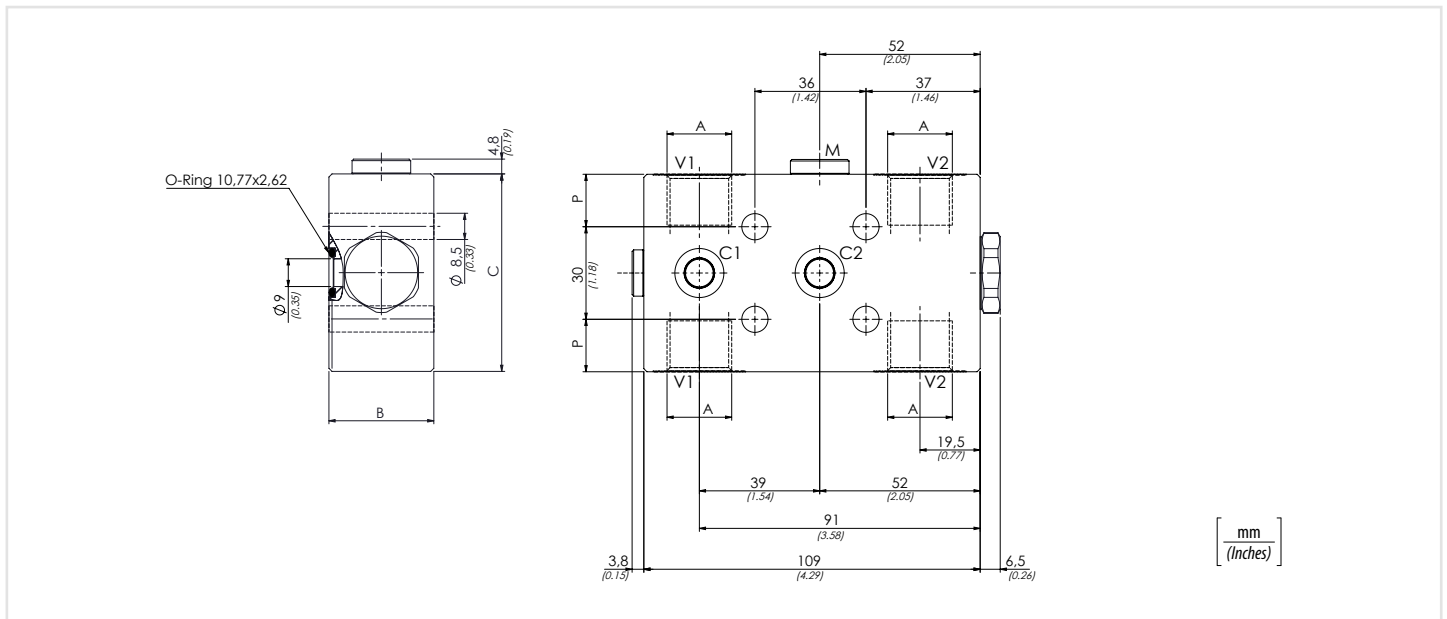
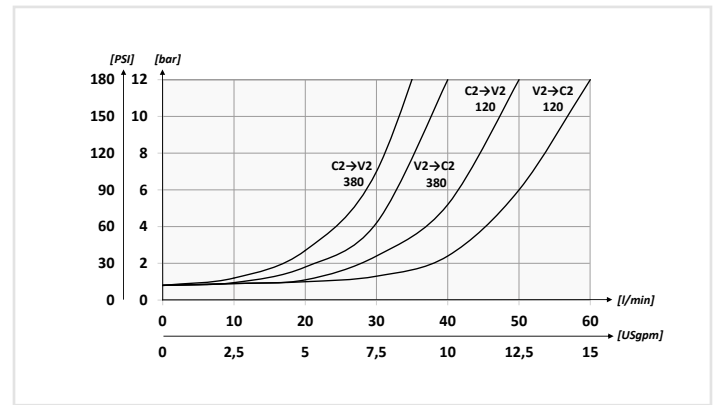
### Dati tecnici - Technical data

<b>Olio idraulico/Mineral oil</b>	<b>ISO 6743/4 (DIN 51524)</b>	
<b>Viscosità olio/Oil viscosity</b>	<b>15-250 mm<sup>2</sup>/s (15 to 250 cSt)</b>	
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	<b>ISO 4406:1999 Classe 19/17/14</b>	
<b>Temperatura dell'olio/Oil temperature</b>	<b>-20°C +80°C</b>	<b>-4°F + 176°F</b>
<b>Temperatura ambiente/Ambient temperature</b>	<b>-20°C +50°C</b>	<b>-4°F + 122°F</b>
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)		

<b>Codice ordinazione</b> <b>Ordering code</b>	01	02	03	04
	<b>VBZF</b>		<b>2</b>	

<b>01</b>	Valvole di bilanciamento singole per centro aperto - flangiate a taratura fissa (Single counterbalance valves fixed setting for open center - flanged version)	<b>VBZF</b>
<b>02</b>	Dimensione (Size)	BSPP1/4 <b>140</b>
		BSPP3/8 <b>380</b>
		BSPP1/2 <b>120</b>
<b>03</b>	Taratura (Setting) <b>Q=5 l/min 350 bar (5075 PSI)</b>	<b>2</b>
<b>04</b>	Materiale (Material)	Corpo in acciaio + zincatura (Steel body + zinc-plated) <b>S</b>
		Corpo in acciaio + zinco-nichel (Steel body + zinc-nickel) <b>K</b>
Rapporto di pilotaggio (Pilot ratio) 1:4.25		

### Performances

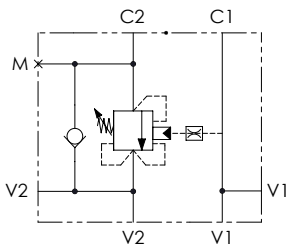


### Caratteristiche tecniche - Technical characteristics

Codice Code	A	Portata max (l/min) Max flow (USgpm)	Pressione max (bar) Max pressure (PSI)	H	M	P	S	Peso approssimativo (kg) Approx weight (lb)
<b>VBZF380</b>	<b>BSPP3/8</b>	<b>40 (10.6)</b>	<b>350 (5075)</b>	<b>54 (2.13)</b>	<b>BSPP1/4</b>	<b>12 (0.47)</b>	<b>29 (1.14)</b>	<b>1,10 (2.42)</b>
<b>VBZF120</b>	<b>BSPP1/2</b>	<b>60 (15.9)</b>		<b>64 (2.52)</b>		<b>17 (0.67)</b>	<b>34 (1.34)</b>	<b>1,48 (3.25)</b>



Schema idraulico - Hydraulic circuit

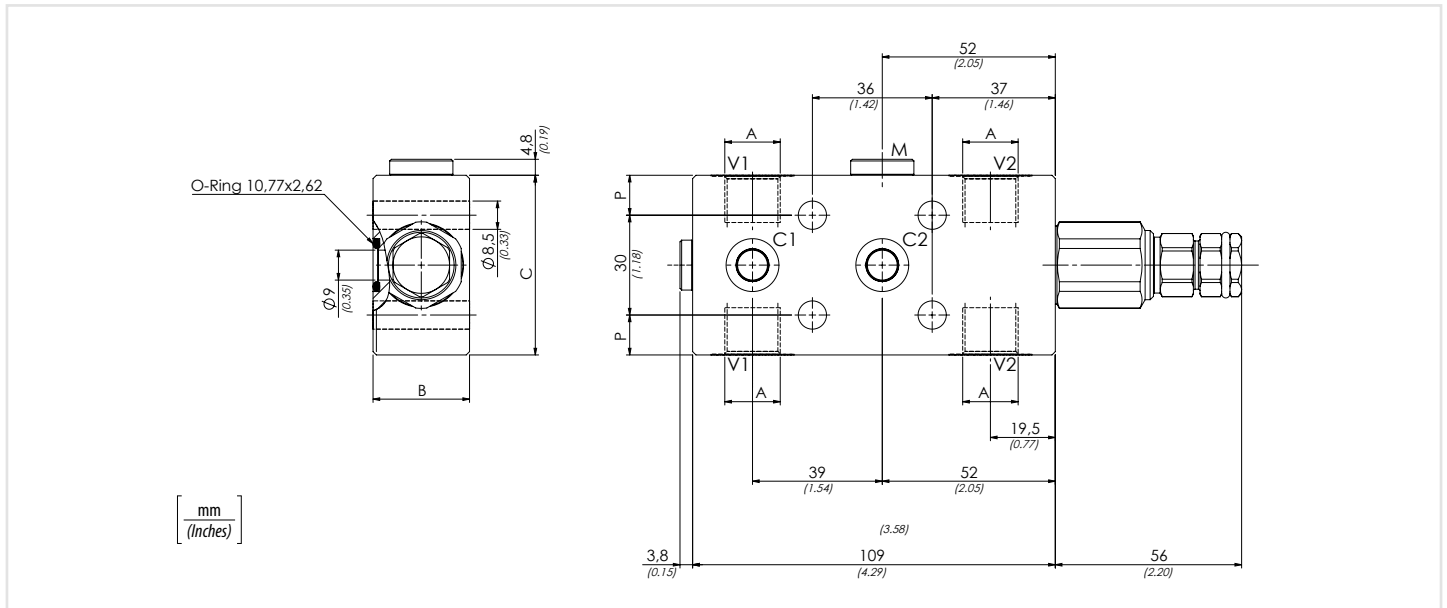
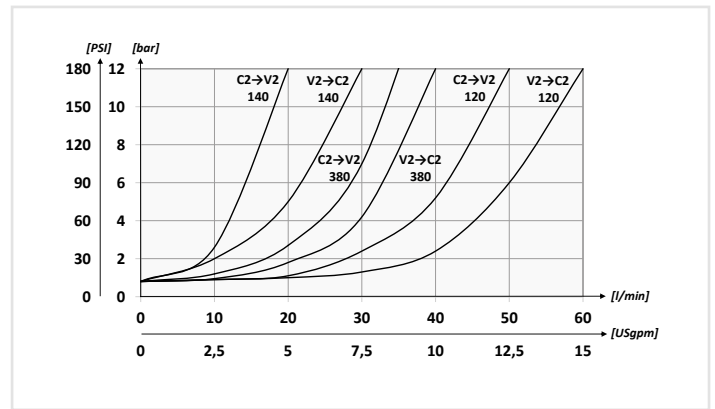


Dati tecnici - Technical data

olio idraulico/Mineral oil	ISO 6743/4 (DIN 51524)		
Viscosità olio/Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)		
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14		
Temperatura dell'olio/Oil temperature	-20°C +80°C	-4°F + 176°F	
Temperatura ambiente/Ambient temperature	-20°C +50°C	-4°F + 122°F	
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)			

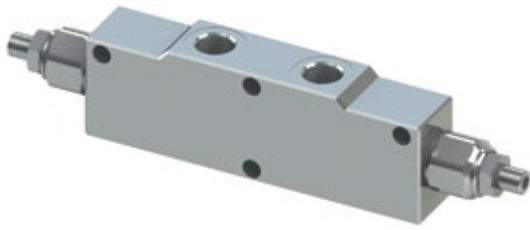
	01	02	03	04	05
<b>Codice ordinazione</b> <b>Ordering code</b>	<b>VCLF</b>			<b>S</b>	
<b>01</b>	Valvole di bilanciamento singole per centro chiuso - flangiate (Single counterbalance valves for closed center - flanged version)				<b>VCLF</b>
<b>02</b>	Dimensione (Size)	BSPP3/8			<b>380</b>
		BSPP1/2			<b>120</b>
<b>03</b>	Molla (Spring) <b>30/210 bar</b> (435/3045 PSI)	Incremento pressione al giro (Press. increase) <b>70 bar/al giro</b> (1015 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)		<b>1</b>
	Molla (Spring) <b>60/350 bar</b> (870/5075 PSI)	Incremento pressione al giro (Press. increase) <b>120 bar/al gir</b> (1740 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)		<b>2</b>
<b>04</b>	Materiale (Material)	Corpo in acciaio + zincatura (Steel body + zinc-plated)			<b>5</b>
<b>05</b>	Rapporto di pilotaggio (Pilot ratio)	1:4.25 Standard			<b>/</b>
		1:8			<b>8</b>

Performances

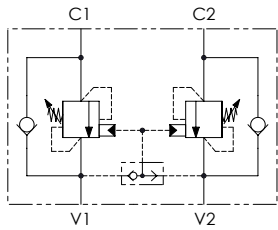


Caratteristiche tecniche - Technical characteristics

Codice Code	A	Portata max (l/min) Max flow (USgpm)	Pressione max (bar) Max pressure (PSI)	H	M	P	S	Peso approssimativo (kg) Approx weight (lb)
<b>VCLF380</b>	<b>BSPP3/8</b>	<b>40</b> (10.6)	<b>350</b> (5075)	<b>54</b> (2.13)	<b>BSPP1/4</b>	<b>12</b> (0.47)	<b>29</b> (1.14)	<b>1,22</b> (2.69)
<b>VCLF120</b>	<b>BSPP1/2</b>	<b>60</b> (15.9)		<b>64</b> (2.52)		<b>17</b> (0.67)	<b>34</b> (1.34)	<b>1,60</b> (3.52)



Schema idraulico - Hydraulic circuit



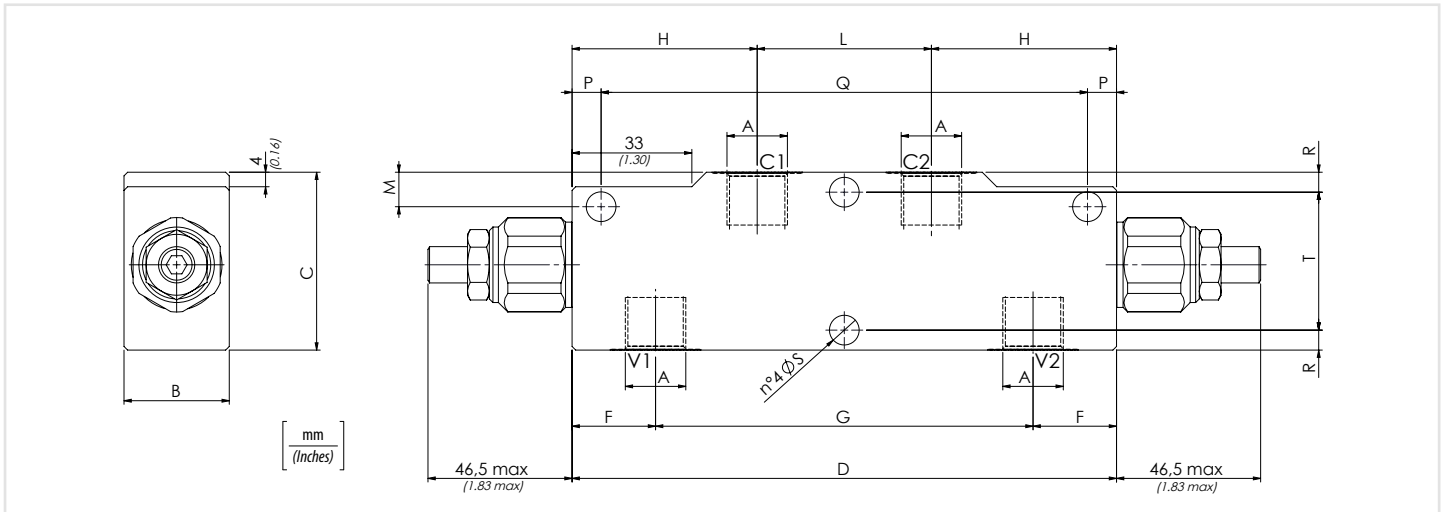
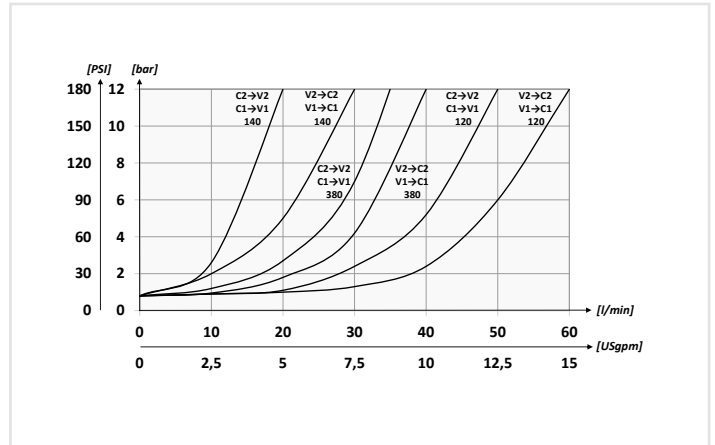
Dati tecnici - Technical data

Olio idraulico/Mineral oil	ISO 6743/4 (DIN 51524)		
Viscosità olio/Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)		
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14		
Temperatura dell'olio/Oil temperature	-20°C +80°C	-4°F +176°F	
Temperatura ambiente/Ambient temperature	-20°C +50°C	-4°F +122°F	
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)			

Codice ordinazione Ordering code	01	02	03	04	05
	<b>VBCD</b>				

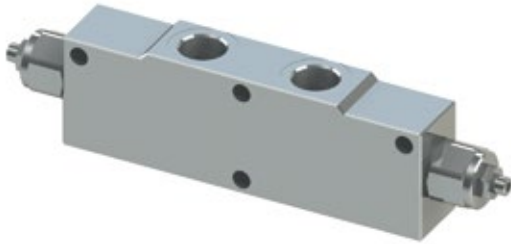
<b>01</b>	Valvole di bilanciamento doppie per centro aperto (Dual counterbalance valves for open center)	<b>VBCD</b>		
<b>02</b>	Dimensione (Size)	BSP1/4	<b>140</b>	
		BSP3/8	<b>380</b>	
		BSP1/2	<b>120</b>	
<b>03</b>	Molla (Spring) <b>30/210 bar</b> (435/3045 PSI)	Incremento pressione al giro (Press. increase) <b>70 bar/al giro</b> (1015 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>
	Molla (Spring) <b>60/350 bar</b> (870/5075 PSI)	Incremento pressione al giro (Press. increase) <b>120 bar/al giro</b> (1740 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>
<b>04</b>	Materiale (Material)	Corpo in acciaio + zincatura (Steel body + zinc-plated)	<b>S</b>	
		Corpo in acciaio + zinco-nichel (Steel body + zinc-nickel)	<b>K</b>	
<b>05</b>	Rapporto di pilotaggio (Pilot ratio)	1:4.25 Standard	<b>/</b>	
		1:8	<b>8</b>	

Performances

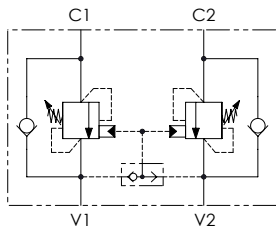


Caratteristiche tecniche - Technical characteristics

Codice Code	A	Portata max Max flow l/min-USgpm	Pressione max Max pressure bar/PSI	B	C	D	F	G	H	L	M	P	Q	R	S	T	Peso approssimativo Approx weight kg/lb
<b>VBCD140</b>	<b>BSP1/4</b>	<b>30 (7.9)</b>	<b>350 (5075)</b>	<b>30 (1.18)</b>	<b>50 (1.97)</b>	<b>150 (5.91)</b>	<b>23 (0.91)</b>	<b>104 (4.09)</b>	<b>51 (2.01)</b>	<b>48 (1.89)</b>	<b>10 (0.39)</b>	<b>8 (0.31)</b>	<b>134 (5.28)</b>	<b>6 (0.24)</b>	<b>8,5 (0.33)</b>	<b>38 (1.50)</b>	<b>1,57 (3,46)</b>
<b>VBCD380</b>	<b>BSP3/8</b>	<b>40 (10.6)</b>					<b>21 (0.83)</b>	<b>108 (4.25)</b>								<b>12 (0.47)</b>	
<b>VBCD120</b>	<b>BSP1/2</b>	<b>60 (15.9)</b>		<b>60 (2.36)</b>												<b>43 (1.69)</b>	<b>1,78 (3.92)</b>



### Schema idraulico - Hydraulic circuit



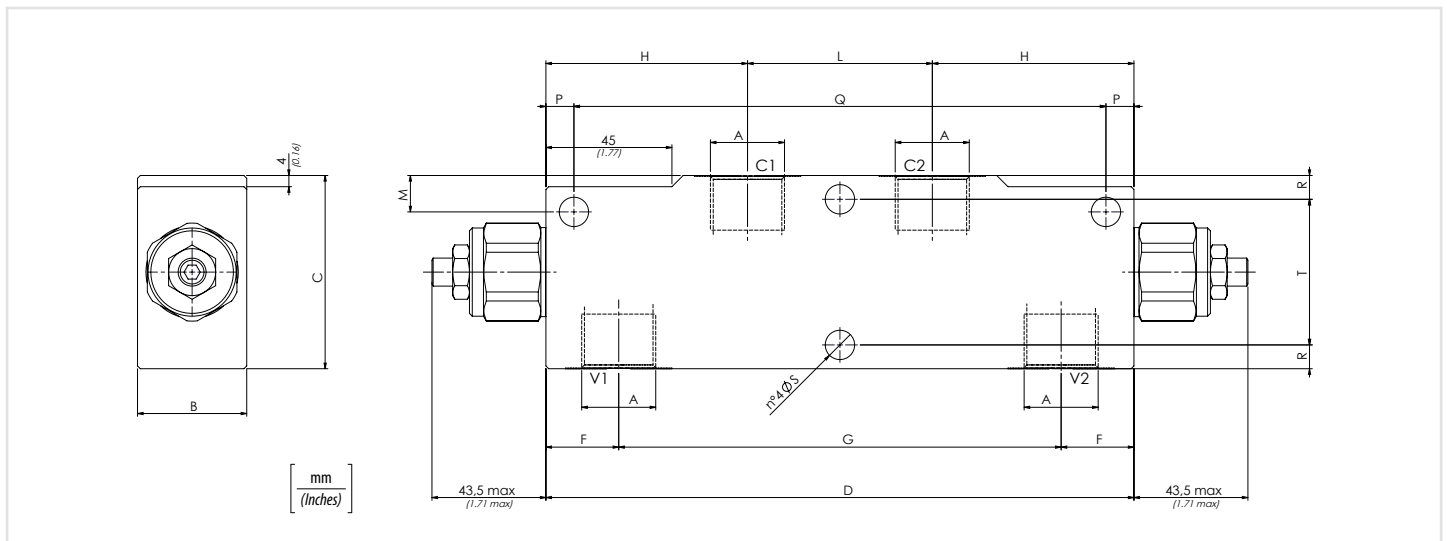
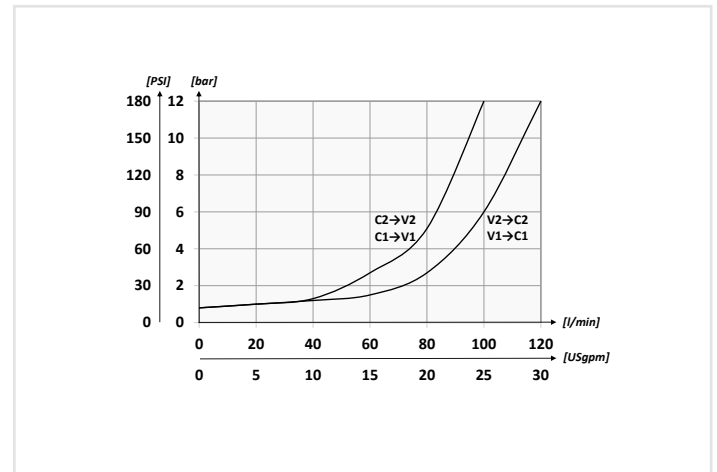
### Dati tecnici - Technical data

Olio idraulico/Mineral oil	ISO 6743/4 (DIN 51524)		
Viscosità olio/Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)		
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14		
Temperatura dell'olio/Oil temperature	-20°C +80°C	-4°F + 176°F	
Temperatura ambiente/Ambient temperature	-20°C +50°C	-4°F + 122°F	
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)			

Codice ordinazione Ordering code	01	02	03	04	05
	<b>VBCD</b>	<b>340</b>	<b>2</b>	<b>S</b>	

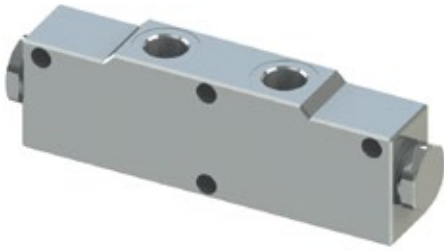
01	Valvole di bilanciamento doppie per centro aperto (Dual counterbalance valves for open center)		<b>VBCD</b>	
02	Dimensione (Size)	BSP3/4	<b>340</b>	
03	Molla (Spring) <b>60/350 bar</b> (870/5075 PSI)	Incremento pressione al giro (Press. increase) <b>130 bar/al giro</b> (1885 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>
04	Materiale (Material)	Corpo in acciaio + zincatura (Steel body + zinc-plated)		<b>S</b>
05	Rapporto di pilotaggio (Pilot ratio)	1:6,2	/	
		1:10,6	<b>11</b>	

### Performances

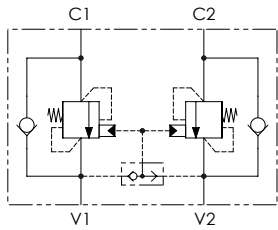


### Caratteristiche tecniche - Technical characteristics

Codice Code	A	Portata max Max flow l/min-USgpm	Pressione max Max pressure bar/PSI	B	C	D	F	G	H	L	M	P	Q	R	S	T	Peso approssimativo Approx weight kg/lb
<b>VBCD340</b>	<b>BSP3/4</b>	<b>120 (31.7)</b>	<b>350 (5075)</b>	<b>40 (1.57)</b>	<b>70 (2.76)</b>	<b>210 (8.27)</b>	<b>26 (1.02)</b>	<b>158 (6.22)</b>	<b>72 (2.83)</b>	<b>66 (2.6)</b>	<b>13 (0.51)</b>	<b>10 (0.39)</b>	<b>190 (7.48)</b>	<b>9 (0.35)</b>	<b>10,5 (0.41)</b>	<b>52 (2.05)</b>	<b>4,5 (8,81)</b>



### Schema idraulico - Hydraulic circuit



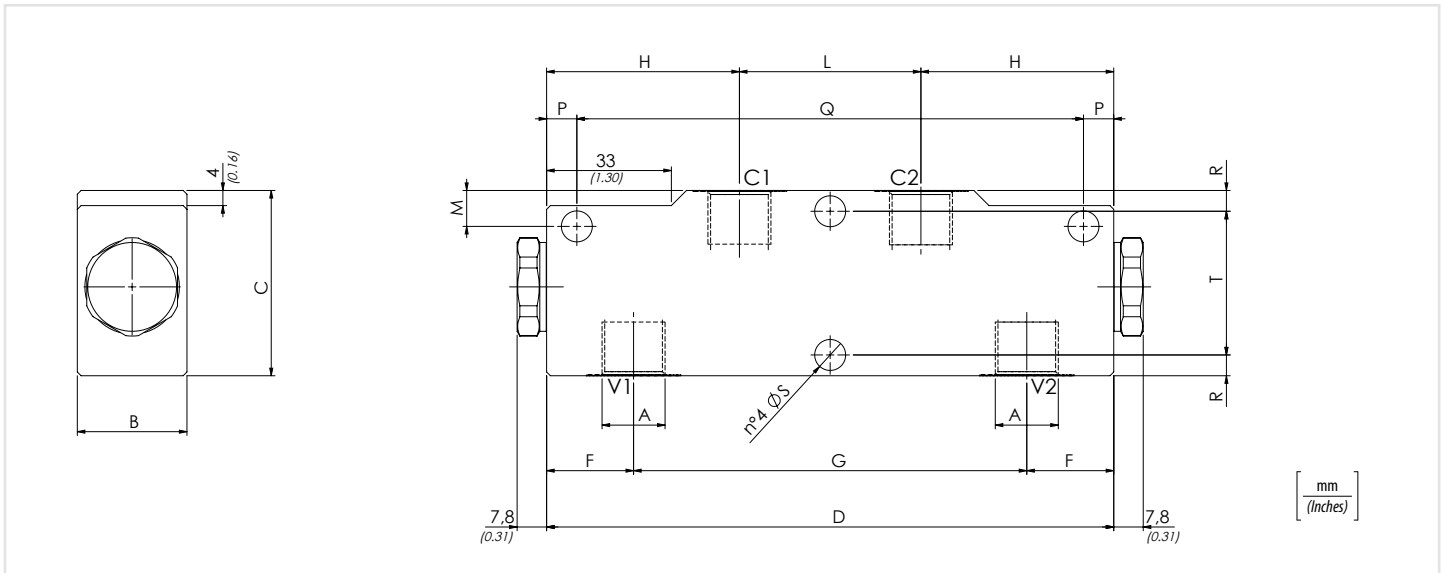
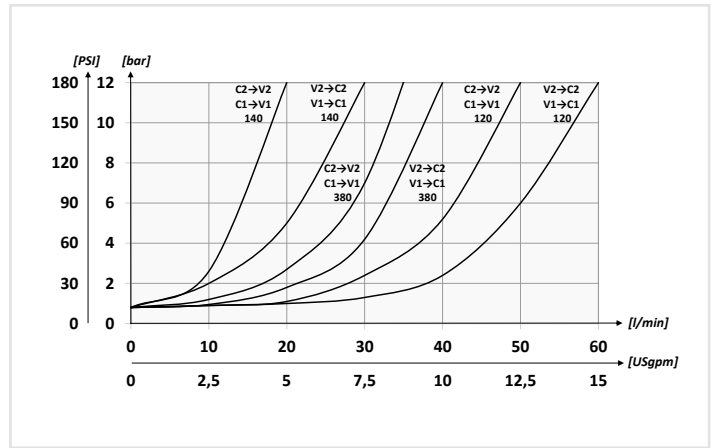
### Dati tecnici - Technical data

<b>Olio idraulico/Mineral oil</b>	ISO 6743/4 (DIN 51524)	
<b>Viscosità olio/Oil viscosity</b>	15-250 mm <sup>2</sup> /s (15 to 250 cSt)	
<b>Classe di contaminazione max con filtro</b> Max contamination index with filter	ISO 4406:1999 Classe 19/17/14	
<b>Temperatura dell'olio/Oil temperature</b>	-20°C +80°C	-4°F + 176°F
<b>Temperatura ambiente/Ambient temperature</b>	-20°C +50°C	-4°F + 122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)		

<b>Codice ordinazione</b> <b>Ordering code</b>	01	02	03	04
	<b>VBZD</b>		<b>2</b>	

<b>01</b>	Valvole di bilanciamento doppie per centro aperto a taratura fissa (Dual counterbalance valves fixed setting for open center)	<b>VBZD</b>
<b>02</b>	Dimensione (Size)	BSP1/4 <b>140</b>
		BSP3/8 <b>380</b>
		BSP1/2 <b>120</b>
<b>03</b>	Taratura (Setting) <b>Q=5 l/min 350 bar (5075 PSI)</b>	<b>2</b>
<b>04</b>	Materiale (Material)	Corpo in acciaio + zincatura (Steel body + zinc-plated) <b>S</b>
		Corpo in acciaio + zinco-nichel (Steel body + zinc-nickel) <b>K</b>
Rapporto di pilotaggio (Pilot ratio) 1:4.25		

### Performances



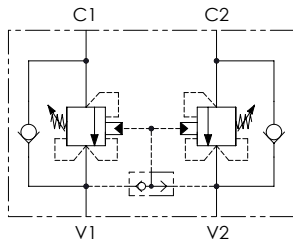
### Caratteristiche tecniche - Technical characteristics

Codice Code	A	Portata max Max flow l/min-USgpm	Pressione max Max pressure bar/PSI	B	C	D	F	G	H	L	M	P	Q	R	S	T	Peso approssimativo Approx weight kg/lb		
<b>VBZD140</b>	<b>BSP1/4</b>	<b>30 (7.9)</b>	<b>350 (5075)</b>	<b>30 (1.18)</b>	<b>50 (1.97)</b>	<b>150 (5.91)</b>	<b>23 (0.91)</b>	<b>104 (4.09)</b>	<b>51 (2.01)</b>	<b>48 (1.89)</b>	<b>10 (0.39)</b>	<b>8 (0.31)</b>	<b>134 (5.28)</b>	<b>6 (0.24)</b>	<b>8,5 (0.33)</b>	<b>38 (1.50)</b>	<b>1,50 (3,30)</b>		
<b>VBZD380</b>	<b>BSP3/8</b>	<b>40 (10.6)</b>			<b>60 (2.36)</b>		<b>21 (0.83)</b>	<b>108 (4.25)</b>								<b>12 (0.47)</b>		<b>43 (1.69)</b>	<b>1,48 (3,25)</b>
<b>VBZD120</b>	<b>BSP1/2</b>	<b>60 (15.9)</b>			<b>60 (2.36)</b>		<b>21 (0.83)</b>	<b>108 (4.25)</b>								<b>12 (0.47)</b>		<b>43 (1.69)</b>	<b>1,71 (3.76)</b>





### Schema idraulico - Hydraulic circuit



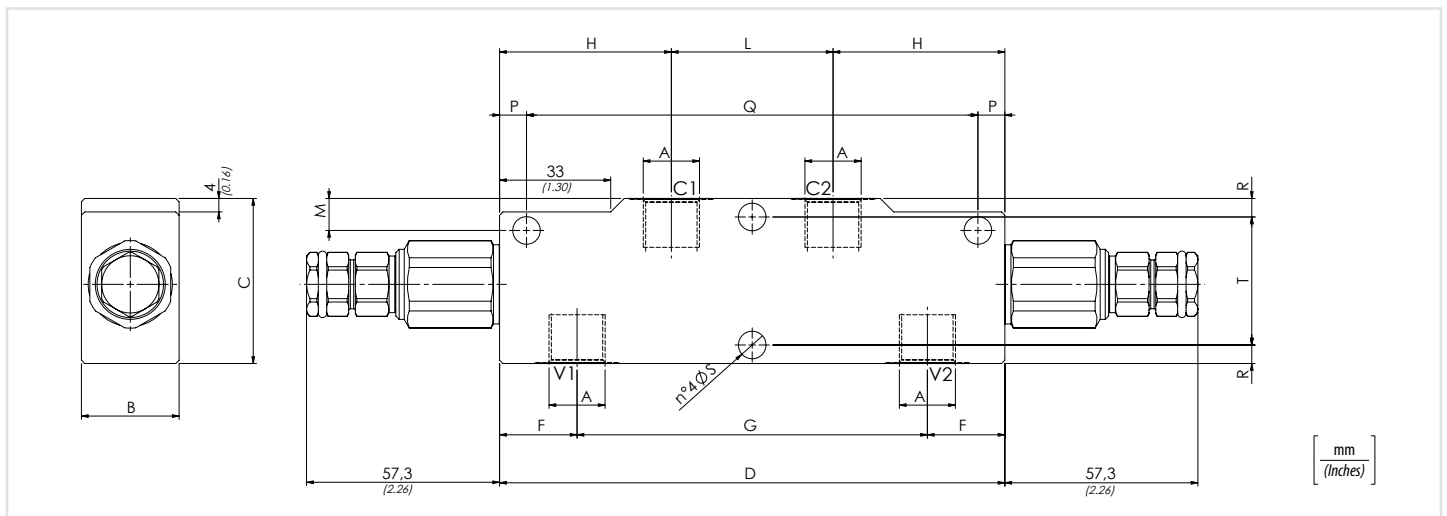
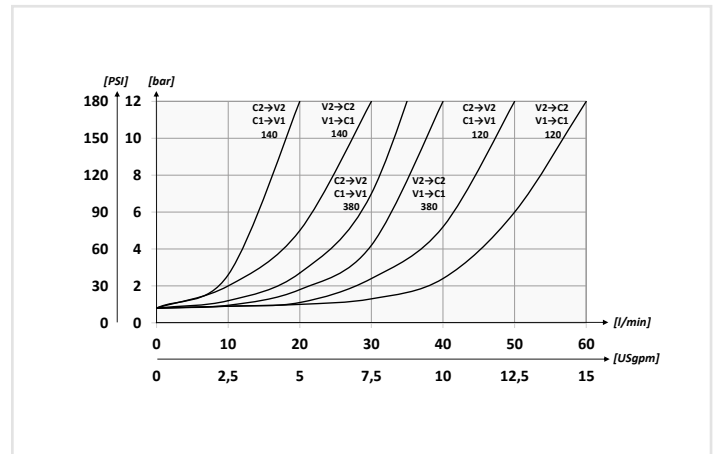
### Dati tecnici - Technical data

olio idraulico/Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio/Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio/Oil temperature	-20°C +80°C      -4°F + 176°F
Temperatura ambiente/Ambient temperature	-20°C +50°C      -4°F + 122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

Codice ordinazione Ordering code	01	02	03	04	05
	<b>VBCC</b>			<b>S</b>	

<b>01</b>	Valvole di bilanciamento doppie per centro chiuso (Dual counterbalance valves for closed center)		<b>VBCC</b>
<b>02</b>	Dimensione (Size)	BSPP1/4	<b>140</b>
		BSPP3/8	<b>380</b>
		BSPP1/2	<b>120</b>
<b>03</b>	Molla (Spring) <b>30/210 bar</b> (435/3045 PSI)	Incremento pressione al giro (Press. increase) <b>70 bar/al giro</b> (1015 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)
	Molla (Spring) <b>60/350 bar</b> (870/5075 PSI)	Incremento pressione al giro (Press. increase) <b>120 bar/al giro</b> (1740 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)
<b>04</b>	Materiale (Material)	Corpo in acciaio + zincatura (Steel body + zinc-plated)	
<b>05</b>	Rapporto di pilotaggio (Pilot ratio)	1:4.25 Standard	
		1:8	

### Performances

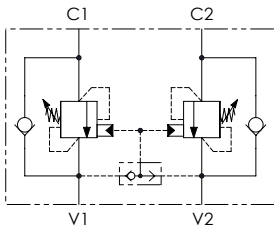


### Caratteristiche tecniche - Technical characteristics

Codice Code	A	Portata max Max flow l/min-USgpm	Pressione max Max pressure bar/PSI	B	C	D	F	G	H	L	M	P	Q	R	S	T	Peso approssimativo (kg) Approx weight (lb)
<b>VBCC140</b>	<b>BSPP1/4</b>	<b>30 (8)</b>	<b>350 (5075)</b>	<b>30 (1.18)</b>	<b>50 (1.97)</b>	<b>150 (5.91)</b>	<b>23 (0.91)</b>	<b>104 (4.09)</b>	<b>51 (2.01)</b>	<b>48 (1.89)</b>	<b>10 (0.39)</b>	<b>8 (0.31)</b>	<b>134 (5.28)</b>	<b>6 (0.24)</b>	<b>8,5 (0.33)</b>	<b>38 (1.50)</b>	<b>1,68 (3.70)</b>
<b>VBCC380</b>	<b>BSPP3/8</b>	<b>40 (10.5)</b>			<b>60 (2.36)</b>		<b>21 (0.83)</b>	<b>108 (4.25)</b>								<b>43 (1.69)</b>	<b>1,66 (3.66)</b>
<b>VBCC120</b>	<b>BSPP1/2</b>	<b>60 (16)</b>			<b>21 (0.83)</b>		<b>108 (4.25)</b>	<b>43 (1.69)</b>								<b>1,89 (4.16)</b>	



### Schema idraulico - Hydraulic circuit

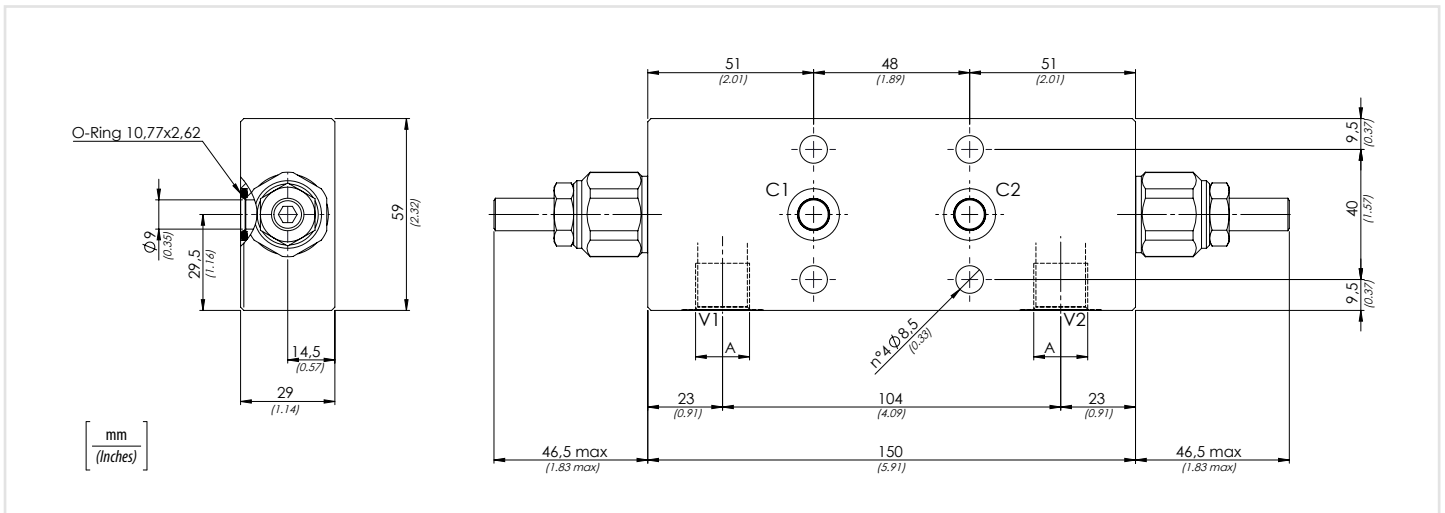
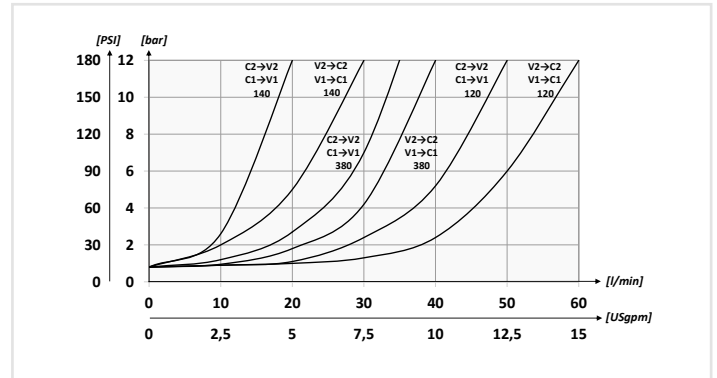


### Codice ordinazione Ordering code

01	02	03	04	05
<b>VBCF</b>				

<b>01</b>	Valvole di bilanciamento doppie per centro aperto - flangiate (Dual counterbalance valves for open center - flanged version)		<b>VBCF</b>	
<b>02</b>	Dimensione (Size)	BSPP1/4	<b>140</b>	
		BSPP3/8	<b>380</b>	
		BSPP1/2	<b>120</b>	
<b>03</b>	Molla (Spring) <b>30/210 bar</b> (435/3045 PSI)	Incremento pressione al giro (Press. increase) <b>70 bar/al giro</b> (1015 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>
	Molla (Spring) <b>60/350 bar</b> (870/5075 PSI)	Incremento pressione al giro (Press. increase) <b>120 bar/al giro</b> (1740 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>
<b>04</b>	Materiale (Material)	Corpo in acciaio + zincatura (Steel body + zinc-plated)	<b>S</b>	
		Corpo in acciaio + zinco-nichel (Steel body + zinc-nickel)	<b>K</b>	
<b>05</b>	Rapporto di pilotaggio (Pilot ratio)	1:4.25 Standard	<b>/</b>	
		1:8	<b>8</b>	

### Performances



### Dati tecnici - Technical data

Oil hydraulic / Mineral oil	ISO 6743/4 (DIN 51524)	
Viscosità olio / Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)	
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14	
Temperatura dell'olio / Oil temperature	-20°C +80°C	-4°F + 176°F
Temperatura ambiente / Ambient temperature	-20°C +50°C	-4°F + 122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)		

### Caratteristiche tecniche - Technical characteristics

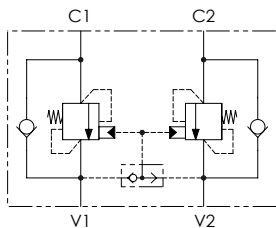
Codice Code	A	Portata max Max flow l/min-USgpm	Pressione max (bar) Max pressure (PSI)	Peso approssimativo (kg) Approx weight (lb)
<b>VBCF140</b>	<b>BSPP1/4</b>	<b>40 (10.6)</b>	<b>350 (5075)</b>	<b>2,02 (4.45)</b>
<b>VBCF380</b>	<b>BSPP3/8</b>			<b>1,95 (4.30)</b>
<b>VBCF120</b>	<b>BSPP1/2</b>	<b>60 (15.9)</b>		<b>1,92 (4.23)</b>



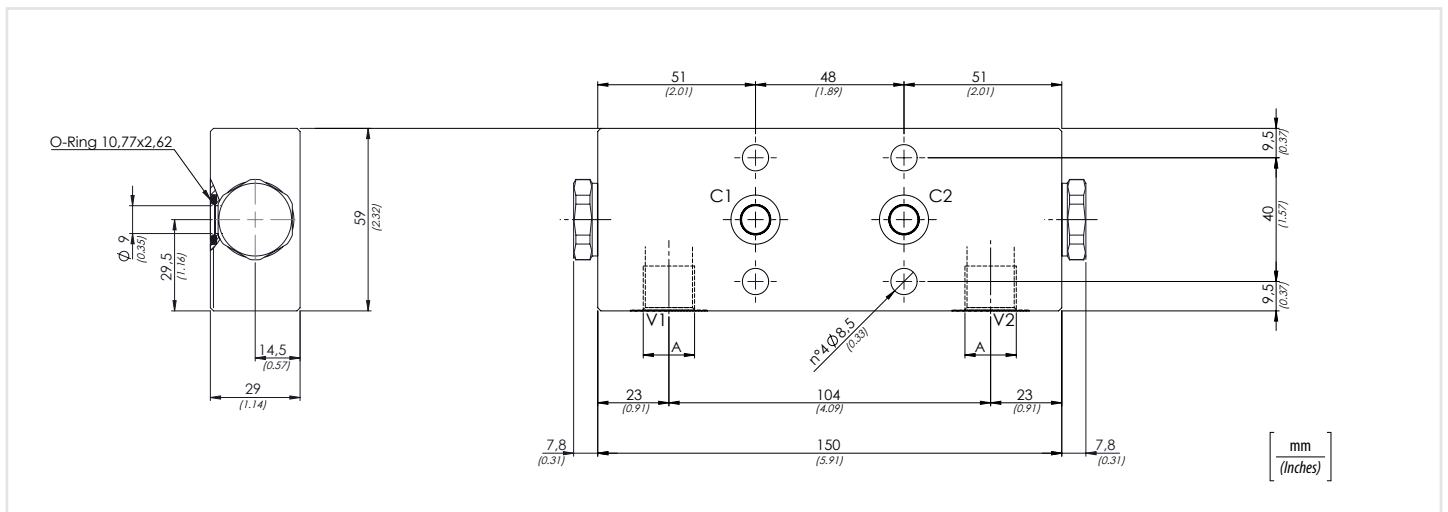
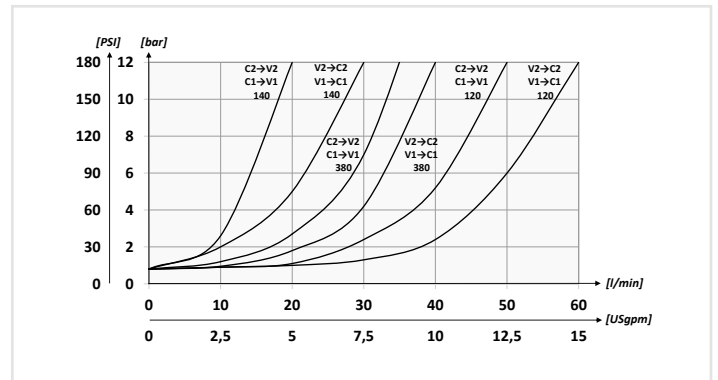
Codice ordinazione Ordering code	01	02	03	04
	<b>VBZG</b>		<b>2</b>	

<b>01</b>	Valvole di bilanciamento doppie per centro aperto - flangiate a taratura fissa (Dual counterbalance valves fixed setting for open center - flanged version)		<b>VBZG</b>
<b>02</b>	Dimensione (Size)	BSP1/4	<b>140</b>
		BSP3/8	<b>380</b>
		BSP1/2	<b>120</b>
<b>03</b>	Taratura (Setting) <b>Q=5 l/min 350 bar (5075 PSI)</b>		<b>2</b>
<b>04</b>	Materiale (Material)	Corpo in acciaio + zincatura (Steel body + zinc-plated)	<b>S</b>
		Corpo in acciaio + zinco-nichel (Steel body + zinc-nickel)	<b>K</b>
Rapporto di pilotaggio (Pilot ratio) 1:4.25			

### Schema idraulico - Hydraulic circuit



### Performances



### Dati tecnici - Technical data

Olio idraulico/Mineral oil	ISO 6743/4 (DIN 51524)
Viscosità olio/Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14
Temperatura dell'olio/Oil temperature	-20°C +80°C      -4°F + 176°F
Temperatura ambiente/Ambient temperature	-20°C +50°C      -4°F + 122°F
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)	

### Caratteristiche tecniche - Technical characteristics

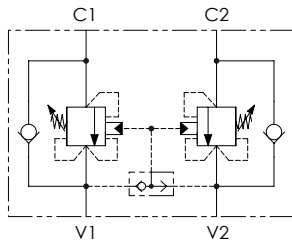
Codice Code	A	Portata max Max flow l/min-USgpm	Pressione max (bar) Max pressure (PSI)	Peso approssimativo (kg) Approx weight (lb)
<b>VBZG140</b>	<b>BSP1/4</b>	<b>40 (10.6)</b>	<b>350 (5075)</b>	<b>1,95 (4.29)</b>
<b>VBZG380</b>	<b>BSP3/8</b>			<b>1,88 (4.13)</b>
<b>VBZG120</b>	<b>BSP1/2</b>	<b>60 (15.9)</b>		<b>1,85 (4.07)</b>



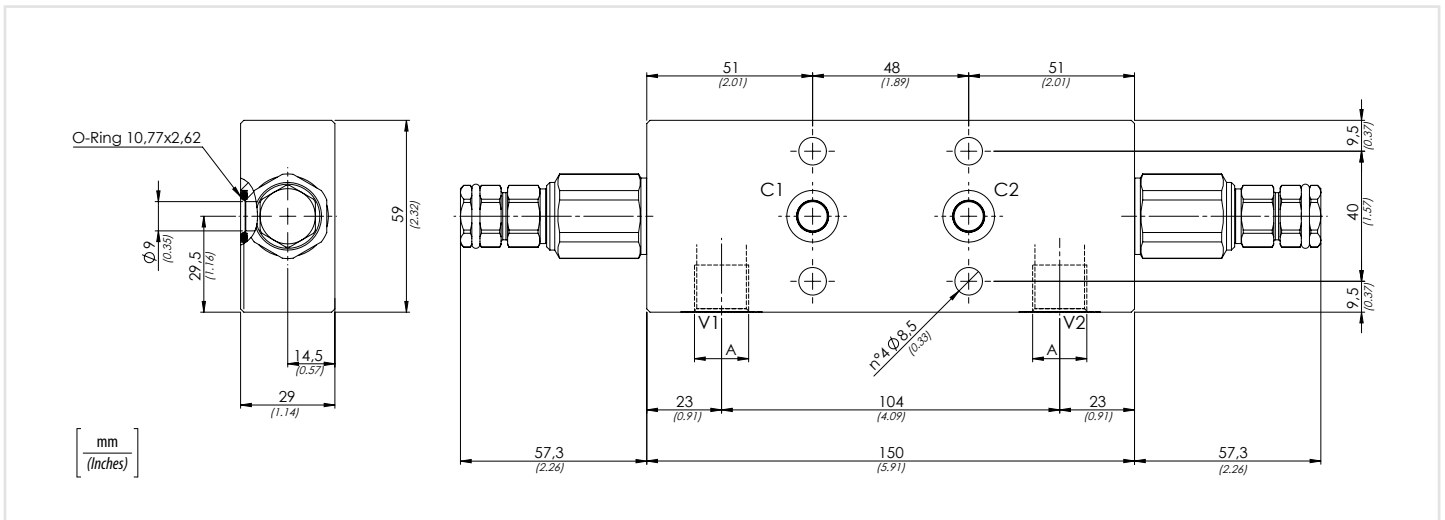
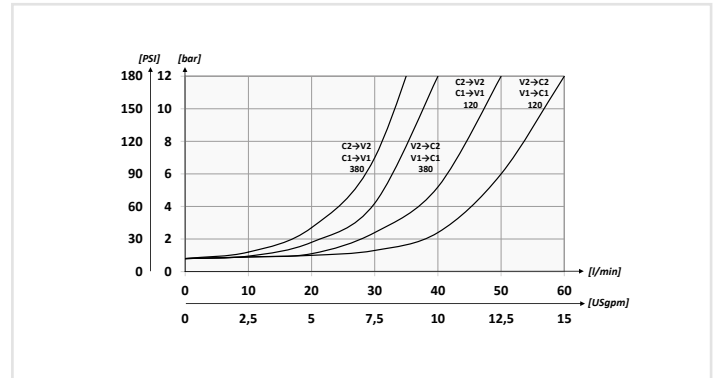
	01	02	03	04	05
<b>Codice ordinazione</b> <b>Ordering code</b>	<b>VBCM</b>			<b>S</b>	

<b>01</b>	Valvole di bilanciamento doppie per centro chiuso - flangiate (Dual counterbalance valves for closed center - flanged version)			<b>VBCM</b>
<b>02</b>	Dimensione (Size)			
	BSPP1/4			<b>140</b>
	BSPP3/8			<b>380</b>
			BSPP1/2	<b>120</b>
<b>03</b>	Molla (Spring) <b>30/210 bar</b> (435/3045 PSI)	Incremento pressione al giro (Press. increase) <b>70 bar/al giro</b> (1015 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>
	Molla (Spring) <b>60/350 bar</b> (870/5075 PSI)	Incremento pressione al giro (Press. increase) <b>120 bar/al giro</b> (1740 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>
<b>04</b>	Materiale (Material)			<b>5</b>
<b>05</b>	Rapporto di pilotaggio (Pilot ratio)			
	1:4.25 Standard			<b>/</b>
			1:8	<b>8</b>

### Schema idraulico - Hydraulic circuit



### Performances

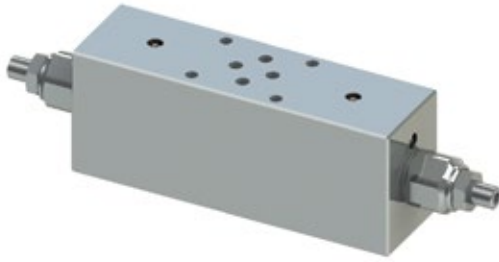


### Dati tecnici - Technical data

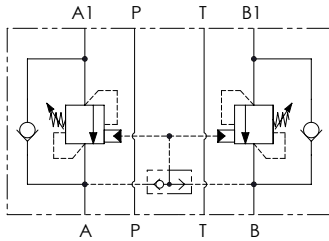
Olio idraulico/Mineral oil	ISO 6743/4 (DIN 51524)		
Viscosità olio/Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)		
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14		
Temperatura dell'olio/Oil temperature	-20°C +80°C	-4°F +176°F	
Temperatura ambiente/Ambient temperature	-20°C +50°C	-4°F +122°F	
È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm) It is necessary a filter use to protect the valve (advised filtration 15 µm)			

### Caratteristiche tecniche - Technical characteristics

Codice Code	A	Portata max Max flow l/min-USgpm	Pressione max Max pressure bar-PSI	Peso approssimativo Approx weight kg-lb
<b>VBCM140</b>	<b>BSPP1/4</b>	<b>40 (10.6)</b>	<b>350 (5075)</b>	<b>2,13 (4.69)</b>
<b>VBCM380</b>	<b>BSPP3/8</b>			<b>2,09 (4.60)</b>
<b>VBCM120</b>	<b>BSPP1/2</b>	<b>60 (15.9)</b>		<b>2,06 (4.54)</b>



### Schema idraulico - Hydraulic circuit



### Dati tecnici - Technical data

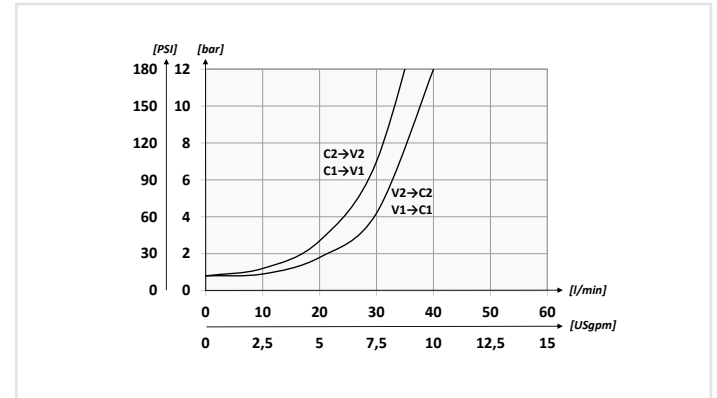
<b>Olio idraulico/Mineral oil</b>	ISO 6743/4 (DIN 51524)	
<b>Viscosità olio/Oil viscosity</b>	15-250 mm <sup>2</sup> /s (15 to 250 cSt)	
<b>Classe di contaminazione max con filtro</b>	ISO 4406:1999 Classe 19/17/14	
<i>Max contamination index with filter</i>		
<b>Temperatura dell'olio/Oil temperature</b>	-20°C +80°C	-4°F + 176°F
<b>Temperatura ambiente/Ambient temperature</b>	-20°C +50°C	-4°F + 122°F
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b>		
<i>It is necessary a filter use to protect the valve (advised filtration 15 µm)</i>		

### Codice ordinazione Ordering code

01	02	03	04	05
<b>VBCS06</b>		<b>S</b>		

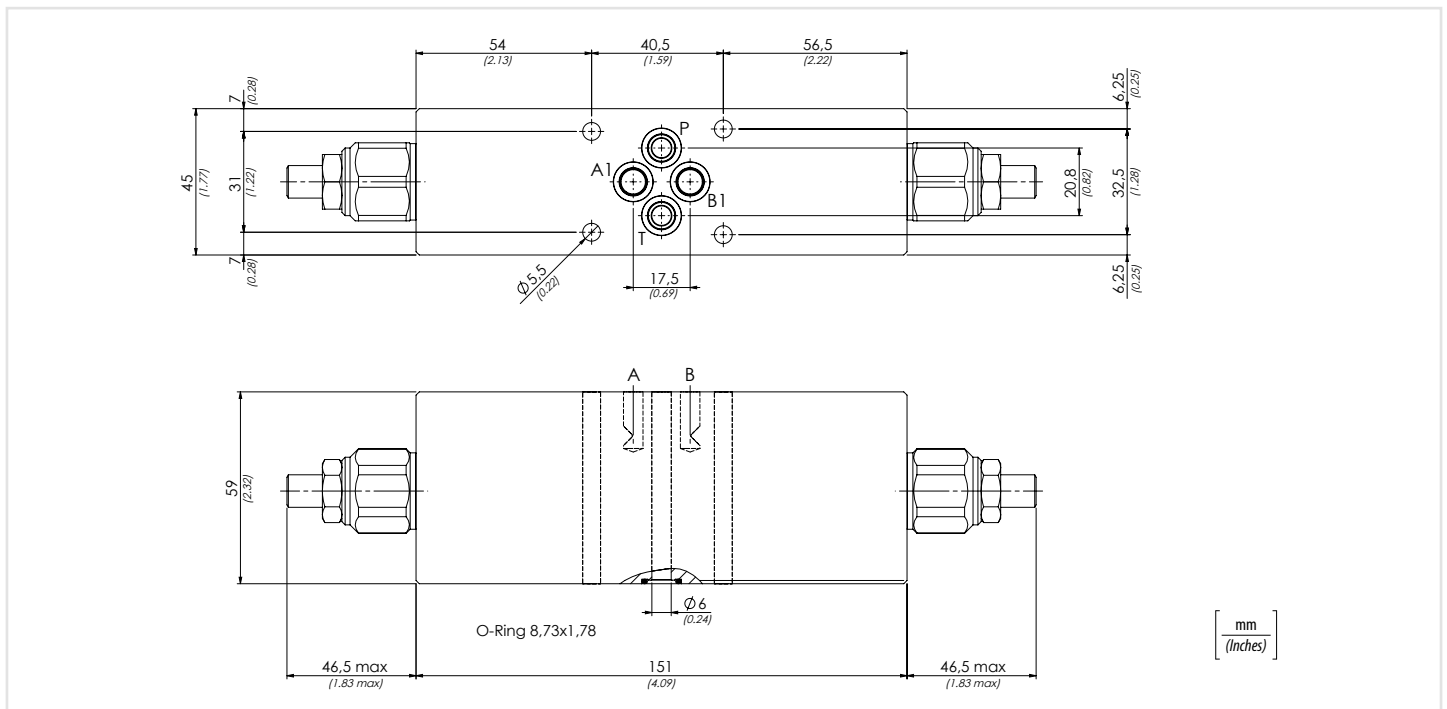
<b>01</b>	Valvole di bilanciamento modulari CETOP3 doppie per centro aperto (Dual CETOP3 modular counterbalance valves for open center)		<b>VBCS06</b>
<b>02</b>	Molla (Spring) <b>30/210 bar</b> (435/3045 PSI)	Incremento pressione al giro (Press. increase) <b>70 bar/al giro</b> (1015 PSI/turn)	Taratura standard Std. setting <b>Q=5 l/min 200 bar</b> (2900 PSI)
	Molla (Spring) <b>60/350 bar</b> (870/5075 PSI)	Incremento pressione al giro (Press. increase) <b>120 bar/al giro</b> (1740 PSI/turn)	Taratura standard Std. setting <b>Q=5 l/min 350 bar</b> (5075 PSI)
<b>03</b>	Materiale (Material)	Corpo in acciaio + zincatura (Steel body + zinc-plated)	<b>S</b>
<b>04</b>	Rapporto di pilotaggio (Pilot ratio)	1:4.25 Standard	/
		1:8	<b>8</b>

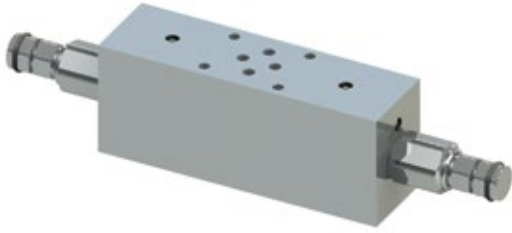
### Performances



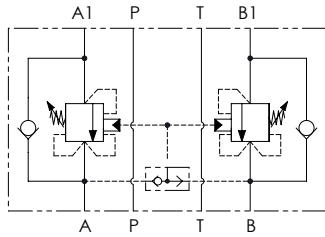
### Caratteristiche tecniche - Technical characteristics

Codice Code	Portata max Max flow l/min-USgpm	Pressione max Max pressure bar/PSI	Peso approssimativo Approx weight kg/lb
<b>VBCS06</b>	<b>40 (10.6)</b>	<b>350 (5075)</b>	<b>3,10 (6.80)</b>





Schema idraulico - Hydraulic circuit



Codice ordinazione  
Ordering code

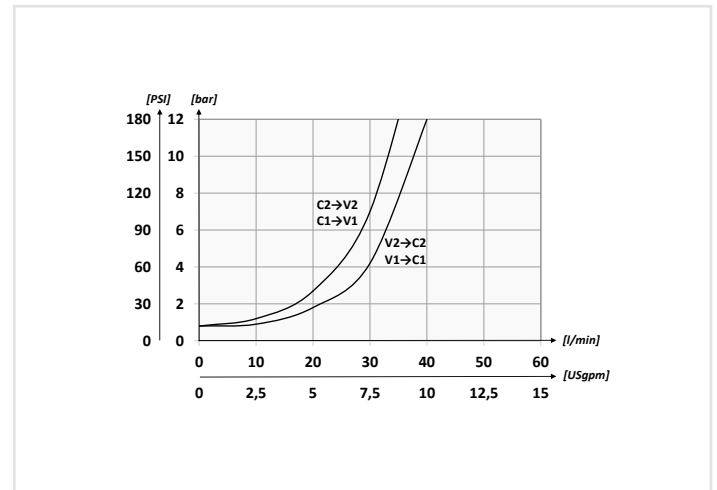
01	02	03	04	05
<b>VBCT06</b>		<b>S</b>		

<b>01</b>	Valvole di bilanciamento modulari CETOP3 doppie per centro chiuso (Dual CETOP3 modular counterbalance valves for closed center)	<b>VBCT06</b>		
<b>02</b>	Molla (Spring) <b>30/210 bar</b> (435/3045 PSI)	Incremento pressione al giro (Press. increase) <b>70 bar/al giro</b> (1015 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 200 bar</b> (2900 PSI)	<b>1</b>
<b>02</b>	Molla (Spring) <b>60/350 bar</b> (870/5075 PSI)	Incremento pressione al giro (Press. increase) <b>120 bar/al giro</b> (1740 PSI/turn)	Taratura standard (Std. setting) <b>Q=5 l/min 350 bar</b> (5075 PSI)	<b>2</b>
<b>03</b>	Materiale (Material)	Corpo in acciaio + zincatura (Steel body + zinc-plated)		<b>S</b>
<b>04</b>	Rapporto di pilotaggio (Pilot ratio)	1:4.25 Standard		<b>/</b>
		1:8		<b>8</b>

Dati tecnici - Technical data

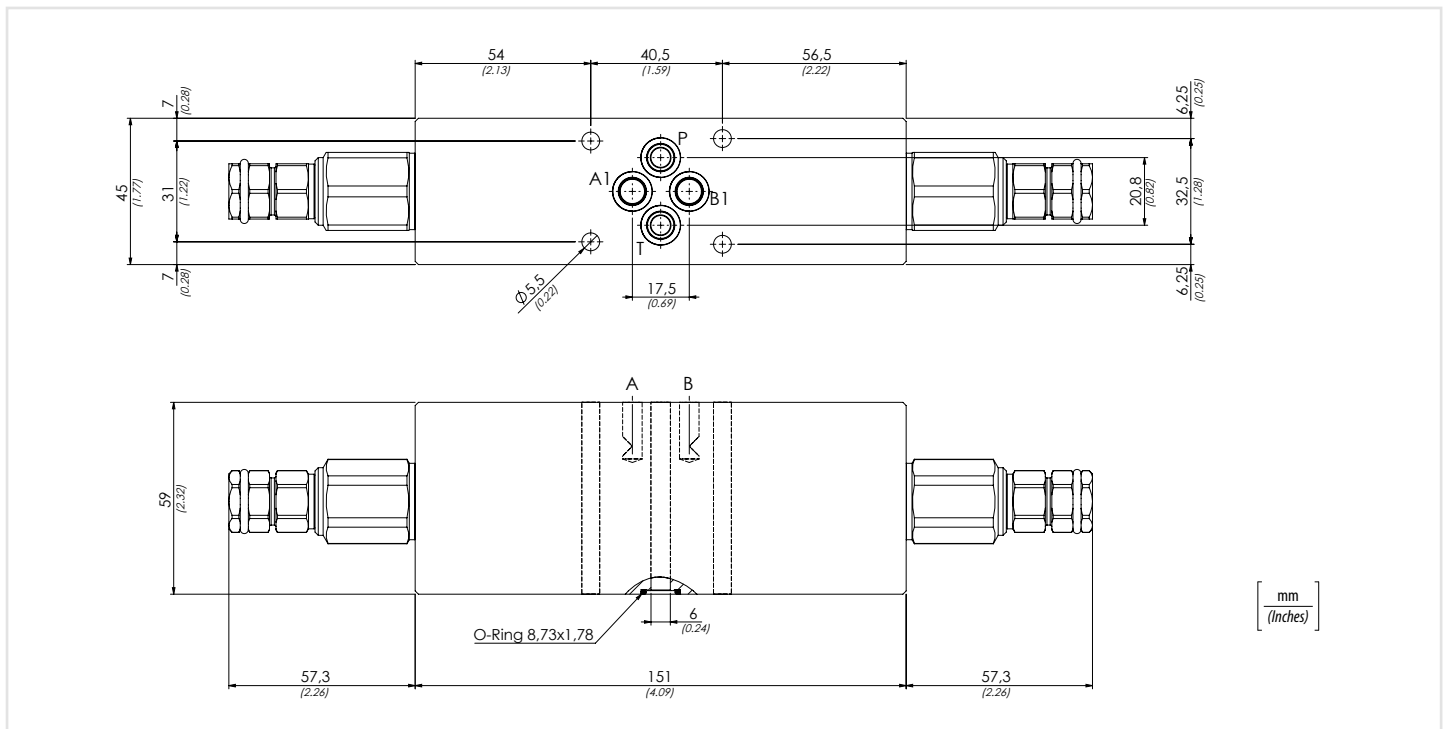
Olio idraulico/Mineral oil	ISO 6743/4 (DIN 51524)		
Viscosità olio/Oil viscosity	15-250 mm <sup>2</sup> /s (15 to 250 cSt)		
Classe di contaminazione max con filtro Max contamination index with filter	ISO 4406:1999 Classe 19/17/14		
Temperatura dell'olio/Oil temperature	-20°C +80°C	-4°F + 176°F	
Temperatura ambiente/Ambient temperature	-20°C +50°C	-4°F + 122°F	
<b>È indispensabile l'utilizzo di un filtro per proteggere la valvola (filtrazione consigliata 15 µm)</b> It is necessary a filter use to protect the valve (advised filtration 15 µm)			

Performances



Caratteristiche tecniche - Technical characteristics

Codice Code	Portata max Max flow l/min-USgpm	Pressione max Max pressure bar/PSI	Peso approssimativo Approx weight kg/lb
<b>VBCT06</b>	<b>40 (10.6)</b>	<b>350 (5075)</b>	<b>3,10 (6.9)</b>





01

Codice ordinazione  
Ordering code

01	81300119	M6
	81300037	M8
	81300095	M10
	81300120	M12
	81300121	M16