1/E



oil sistem

VALVOLE ELETTRICHE
SOLENOID VALVES

Rev. 05/06

INFORMAZIONI SULLA GARANZIA
Warranty information

Contenuto del presente catalogo

- Tutte le informazioni e i dati tecnici contenuti nel presente catalogo si ritengono validi fino al momento della stampa del presente catalogo.
- Oil Sistem si riserva il diritto di cessare la produzione di qualsiasi modello o di variarne specifiche tecniche e/o disegni in ogni momento senza preavviso e senza incorrere in alcun obbligo.
- Il presente catalogo annulla e sostituisce tutta la precedente documentazione tecnica riguardante le valvole elettriche Oil Sistem.

About this catalogue

- *All data and technical information contained in this catalogue were as accurate as know at the time it was approved for printing.*
- *Oil Sistem reserves the right to discontinue models or change specifications and designs at any time without notice or incurring obligations.*
- *This catalogue supersedes any previous technical data sheet about Oil Sistem solenoid valves*

Garanzia limitata di due anni

- Oil Sistem garantisce che i suoi prodotti, se impiegati in condizioni di funzionamento normali e conformi alle specifiche, sono esenti da difetti di materiale e di costruzione per un periodo di 24 mesi dalla data di spedizione dai suoi magazzini di Reggio Emilia (Italia).
- La garanzia è strettamente limitata alla riparazione o sostituzione, a discrezione di Oil Sistem, di ogni particolare o prodotto, risultato difettoso in materiale o costruzione dopo esame in Oil Sistem. I prodotti ritenuti difettosi debbono essere rispediti a Oil Sistem franco destino, assieme alla descrizione dettagliata del malfunzionamento.
- La garanzia non verrà applicata ai prodotti che, a solo giudizio di Oil Sistem, hanno subito manomissioni o sono stati utilizzati in modo improprio.
- In nessun caso il cliente potrà richiedere la cancellazione del contratto, sospensioni anche parziali dei pagamenti, compensi per danni o rimborsi spese, compresa la mano d'opera per la sostituzione del prodotto difettoso.
  Oil Sistem non risponderà in nessun caso di eventuali perdite economiche conseguenti a fermo macchina di apparecchiature su cui siano montati prodotti Oil Sistem, di costi di smontaggio o sostituzione di prodotti Oil Sistem e di qualunque altro costo relativo alla spedizione o installazione di prodotti riparati o sostituiti in garanzia.
- Questa garanzia esclude e sostituisce completamente ogni altra garanzia di qualunque genere, esplicita o implicita.

Two years limited warranty

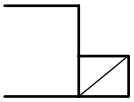
- *Oil Sistem warrants that its products, when operated under normal conditions and in accordance with industry recommended practices, are free from defects in material and workmanship for a period of 24 months from the date of shipment from factory in Reggio Emilia (Italy).*
- *This warranty is strictly limited to the repair or replacement, at Oil Sistem's option, of any part or product determined to be defective in material or workmanship upon examination at Oil Sistem. Defective products must be returned to Oil Sistem, carriage pre-paid by the customer, together with a detailed description of the malfunction.*
- *This warranty shall not apply to products which, in the sole judgement of Oil Sistem, have been subjected to contamination, tempering, negligent handling, improper installation, unauthorized disassembling or any other misuse.*
- *In no event can the customer claim the cancellation of the contract, compensation for damages or reimbursement of any expenses. Oil Sistem shall not be liable, under any circumstances, for any loss of profit, consequential damages to any equipment into which the products of Oil Sistem are fitted, for the costs of removing and replacing the product or any other costs incurred in the shipment or installation of repaired or replaced products.*
- *This warranty is expressly in lieu of, excludes and supersedes any other warranty expressed or implied.*

Responsabilità d'uso

- Tutti i prodotti Oil Sistem sono sottoposti a rigorosi collaudi funzionali, conformemente alle caratteristiche riportate sulla documentazione tecnica Oil Sistem.
- Dal momento che le reali condizioni di funzionamento delle apparecchiature del cliente finale non sono riproducibili integralmente nei laboratori Oil Sistem, la responsabilità della scelta e valutazione della idoneità dei prodotti all'impiego sono a carico del cliente stesso.

Responsibility for use

- *All Oil Sistem products are checked and tested in accordance with specifications indicated in this catalogue and in other relevant technical documents.*
- *Since the actual installation and performance of the customer's equipment cannot be exactly reproduced in Oil sistem's testing laboratories and is out of Oil Sistem's control, it is sole responsibility of the user to determine suitability of all Oil Sistem products for the user's application.*

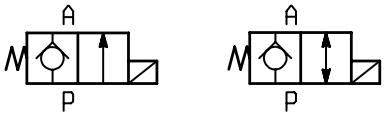
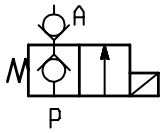
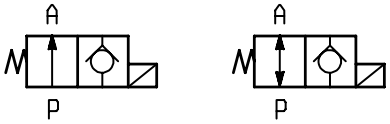
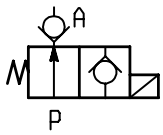


Bobine e connettori *Coils and connections*	Potenza *Power* (W)	ED	*Connettore Connections*	Tensione *Voltage* (V)	Pag
S1-MCE	18	25%	Faston	12Vdc 24Vdc	2.52.01
S2-CE	18	100%	Hirschmann	24V-50Hz 48V-50Hz 110V-50Hz 220V-50Hz 380V-50Hz 24V-60Hz 48V-60Hz 110V-60Hz 220V-60Hz 380V-60Hz	2.52.02
S2-CE-C	18	100%	Cavi *Cables*		
S-CE	18	100%	Hirschmann	12Vdc 24Vdc 48Vdc 24V RAC 48V RAC 110V RAC 220V RAC	2.52.06
S-CE-C	18	100%	Cavi *Cables*		
S-CE-H (classe H 180°C)	18	100%	Hirschmann	12Vdc 24Vdc	
S-CE-K	18	100%	Kostal M27x1		
S-CE-A	18	100%	AMP Junior		
S-CE-D	18	100%	Deutsch DT04-2P		
S4-CEI	26	100%	Hirschmann	12Vdc 24Vdc 48VDC 24V RAC 48V RAC 110V RAC 220V RAC	2.50.10
S4-CEI-C	26	100%	Cavi *Cables*		
S4-CEI-K	26	100%	Kostal M27x1	12Vdc 24Vdc	
S4-CEI-VK (varistore)	26	100%	Kostal M27x1		
S4-CEI-D	26	100%	Deutsch DT04-2P		
S-V3D	60	35%	Hirschmann	12Vdc 24Vdc 48VDC 110V RAC 220V RAC	2.50.12
S8 (EDY SISTEM)	20	100%	Hirschmann Cavo - Cable AMP Junior	12Vdc 24Vdc 48VDC 110V RAC 220V RAC	2.50.18

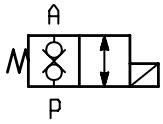
VALVOLE A 2 VIE DIRETTE
2 WAY DIRECT ACTING VALVES

Normalmente chiuse, tenuta singola *Normally closed, one way lock*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag

VALVOLE A 2 VIE PILOTATE A TENUTA SINGOLA
2 WAY PILOT OPERATED VALVES

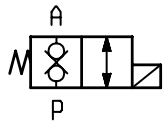
Normalmente chiuse, tenuta singola *Normally closed, one way lock*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**MCE1-NC**	20	210	S1-MCE	2.52.04
	VE1-NC (A.C. current)	40	350	S2-CE	2.52.05
	VE3-NC (D.C. current)	40	350	S-CE	2.52.10
	VEI-8A-2A-06-NC-D-ET	20	250	S8	2.52.12
	CEI6-NC	45	350	S-CE	2.52.29
	CEI10-NC	70	350	S-CE	2.52.35
	CEI12-NC	150	350	S-CE	2.52.39
Normalmente chiuse, monodirezionali a tenuta singola con ritegno *Normally closed, one way flow, one way lock and check valve*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**VE1-NC-VU (A.C. current)**	30	250	S2-CE	2.52.05
	VE3-NC-VU (D.C. current)	30	250	S-CE	2.52.10
Normalmente aperte, a tenuta singola *Normally open, one way lock*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**VE3-NA**	30	250	S-CE	2.52.14
	CEI6-NA	45	350	S-CE	2.52.43
	CEI10-NA	70	350	S-CE	2.52.45
	CEI12-NA	150	350	S-CE	2.52.47
Normalmente aperte, monodirezionali a tenuta singola con ritegno *Normally open, one way flow, one way lock and check valve*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**VE3-NA-VU**	30	250	S-CE	2.52.14

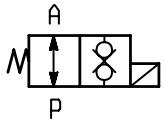
VALVOLE A 2 VIE DIRETTE A DOPPIA TENUTA
2 WAY DOUBLE LOCK VALVES

Normalmente chiuse, doppia tenuta *Normally closed, double lock*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**CE3-DT**	15	210	S-CE	2.52.52
	CEI16-DT	30	230	S4-CEI	2.52.60

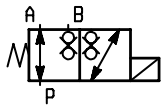
Normalmente aperte, doppia tenuta *Normally open, double lock*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag

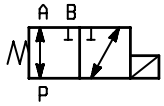
VALVOLE A 2 VIE PILOTATE A DOPPIA TENUTA
2 WAY PILOT OPERATED, DOUBLE LOCK VALVES

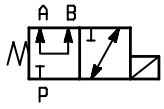
Normalmente chiuse, doppia tenuta *Normally closed, double lock*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**VEI-8A-2T-06-NC-S**	40	350	S8	2.52.70
	VEI-8A-2T-09-NC-S	70	350	S8	2.52.70
	VEI-8A-2T-12-NC-S	150	350	S8	2.52.70

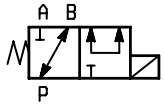
Normalmente aperte, doppia tenuta *Normally open, double lock*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**VEI-8A-2T-06-NA-S**	40	350	S8	2.52.72
	VEI-8A-2T-09-NA-S	70	350	S8	2.52.72
	VEI-8A-2T-12-NA-S	150	350	S8	2.52.72

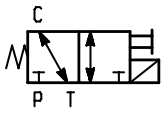
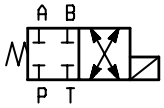
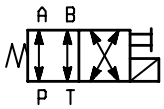
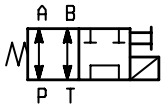
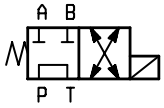
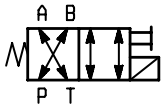
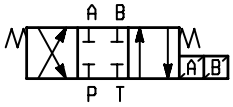
VALVOLE A 3 VIE 2 POSIZIONI DIRETTE
3 WAY 2 POSITION, DIRECT ACTING VALVES

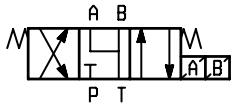
A tenuta *Poppet style*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**V3D-DT**	20	250	S4-CEI	2.53.02
	V3D-CE	25	300	S-V3D	2.53.06

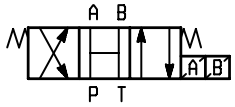
A cursore – selettrici *Spool style – selector*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**V3DS-2P**	8	210	S-CE	2.53.10
	V3DS4-2P	20	210	S4-CEI	2.53.14

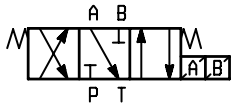
A cursore – Normalmente chiuse *Spool style – Normally closed*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**V3DS-2P**	8	210	S-CE	2.53.10

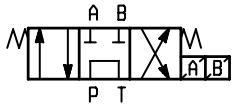
A cursore – Normalmente aperte *Spool style – Normally open*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**V3DS-2P**	8	210	S-CE	2.53.10
	V3DS4-2P	20	210	S4-CEI	2.53.14

A cursore – Normalmente chiuse con cannotto in spinta *Spool style – Normally closed with pushing tube*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**V3D-CEI-2P**	20	210	S4-CEI	2.53.16
VALVOLE A 4 VIE 2 POSIZIONI DIRETTE A CURSORE ***4 WAY 2 POSITION, DIRECT ACTING, SPOOL TYPE VALVES***					
Centro chiuso *Closed Centre*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**V4DS-2P**	8	210	S-CE	2.54.02
	V4DS4-2P	25	315	S4-CEI	2.54.04
Parallelo incrociato *Centre P on A, B on T*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**V4DS-2P**	8	210	S-CE	2.54.02
	V4DS4-2P	25	315	S4-CEI	2.54.04
Centro con P in B, A in T – Eccitata con A e B chiusi, P in T *Centre P on B, A on T – Energized A on B, P on T*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**V4D-CEI-2P**	25	315	S4-CEI	2.54.06
Centro con P in T, A e B chiusi *Centre P on T, A and B closed*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**V4DS4-2P**	25	315	S4-CEI	2.54.04
Incrociato - parallelo *Centre P on B, A on T*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**V4D-CEI-2P**	25	315	S4-CEI	2.54.06
VALVOLE A 4 VIE 3 POSIZIONI DIRETTE A CURSORE ***4 WAY 3 POSITION, DIRECT ACTING, SPOOL TYPE VALVES***					
Centro chiuso *Closed Centre*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**V4DS-3P**	8	210	S-CE	2.54.16
	V4D-CEI-3P	25	350	S4-CEI	2.54.24

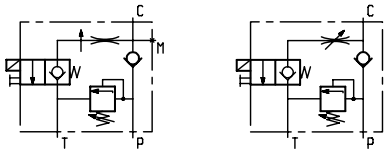
Centro con P chiuso A e B in T *Centre with P closed, A and B to T*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**V4DS-3P**	8	210	S-CE	2.54.16
	V4D-CEI-3P	25	315	S4-CEI	2.54.24

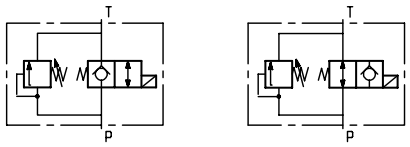
Centro con figura ad “H” *Centre “H” figure*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**V4DS-3P**	8	210	S-CE	2.54.16

Centro con P chiuso, A in T, B chiuso *Centre P closed, A to T, B closed*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**V4DS-3P**	8	210	S-CE	2.54.16
	V4D-CEI-3P	25	315	S4-CEI	2.54.24

Centro con P in T, A e B chiusi *Centre P on T, A and B closed*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**V4D-CEI-3P**	25	315	S4-CEI	2.54.24

CIRCUITI INTEGRATI
INTEGRATED BLOCKS

Valvola elettrica per comando cilindro a semplice effetto *Solenoid valve for single acting cylinder*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**CE6-VM-VU-ST**	25	300	S-CE	2.56.02
	CE1-VM-VU-STF14	10	250	S-CE	2.56.04

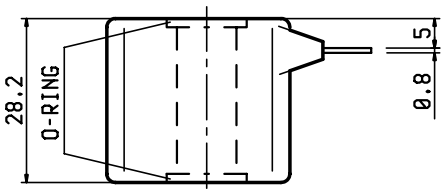
Valvola di massima con by-pass a comando elettrico *Relief valve with solenoid operated by-pass*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag
	**CE6-VM25**	25	300	S-CE	2.56.06

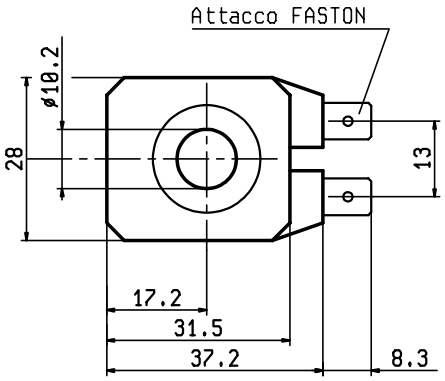
Valvola di massima pilotata elettricamente *Ventable pilot operated relief valve*		Q max (l/min)	P max (bar)	Bobina *Coil*	Pag

SOLENOIDI CON CONNETTORE PER CARTUCCE SERIE "M-CE"
Coils with connector for cartridge "M-CE" series

S1-MCE (18 Watt ED25%) DENOMINAZIONE VALVOLA *Valve denomination*

CODICE ORDINAZIONE *Ordering code* **C1.664.15.XY.0**





XY	Tensioni *Voltage*
OB	12 Volts C.C. - *D.C.*
OC	24 Volts C.C. - *D.C.*

Trattasi di una serie di bobine realizzata per l'uso con elettrovalvola della serie miniatura "M-CE".

Alle due estremità della bobina sono alloggiate due guarnizioni per protezione dagli agenti atmosferici.

- Bobina disponibile solo con attacco Faston
- Rivestimento bobina: resina polimmidica caricata con fibra di vetro
- Servizio intermittente ED25% per un tempo massimo di eccitazione di 15 min a 20°C.
- Voltaggio minimo richiesto: 90% della tensione nominale.
- Grado di protezione: IP00 IEC 144 – DIN 40050

Classe di isolamento F (155°C)

This is a serie of coils to be used with miniature solenoid valves "M-CE" type.

On the two extremities of the coils there are two seal for protection against dust and water jets.

- This coil is available with Faston connections only.
- Coil protection: polyamide resin with fiber glass
- Duty service ED25% for a maximum excitation of 15 min at 20°C.
- Minimum voltage: 90% of the nominal voltage.
- Protection degree: IP00 IEC 144 – DIN 40050.

Insulation class F (155°C)

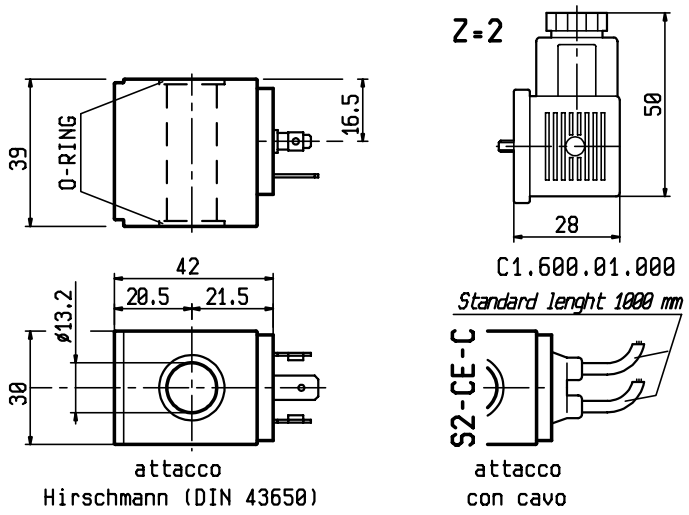
SOLENOIDI CON CONNETTORE
Coils with connector

S2-CE (18 Watt ED100%)
S2-CE-C (18 Watt ED100%)

DENOMINAZIONE VALVOLA
Valve denomination

CODICE ORDINAZIONE
Ordering code

C1.664.01.XY.Z
C1.664.08.XY.1



XY	Tensioni *Voltage*					
OB	12 Volts C.C. - *D.C.*					
OC	24 Volts C.C. - *D.C.*					
OD	48 Volts C.C. - *D.C.*					
OH	24 Volts 50 Hz C.A. - *A.C.*					
OL	48 Volts 50 Hz C.A. - *A.C.*					
OM	110 Volts 50 Hz C.A. - *A.C.*					
ON	220 Volts 50 Hz C.A. - *A.C.*					
OO	380 Volts 50 Hz C.A. - *A.C.*					
OP	24 Volts 60 Hz C.A. - *A.C.*					
OQ	48 Volts 60 Hz C.A. - *A.C.*					
OR	110 Volts 60 Hz C.A. - *A.C.*					
OS	220 Volts 60 Hz C.A. - *A.C.*					
OT	380 Volts 60 Hz C.A. - *A.C.*					
OV	24 Volts RAC					
OK	48 Volts RAC					
OW	110 Volts RAC					
OZ	220 Volts RAC					

Z	Connettori - *Connectors type*	
1	Senza connettore	*Without connector*
2	Connettore standard	*Standard connector*

Trattasi di una serie di bobine realizzata per l'uso con elettrovalvole della serie "VE1".
Alle due estremità della bobina sono alloggiate due guarnizioni OR2056 per protezione dagli agenti atmosferici.

- Rivestimento bobina: resina poliammidica caricata con fibre di vetro.
- Voltaggio minimo richiesto: 90% della tensione nominale.
- Grado di protezione: IP65 IEC 144 – DIN 40050 (protezione totale contro polvere e acqua spruzzata in getti a bassa pressione).

Classe di isolamento F (155°C)

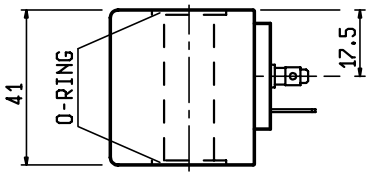
This is a serie of coils to be used with solenoid valves "VE1" types.
On the two extremities of the coils there are two seal OR2056 for protection against dust and water jets.

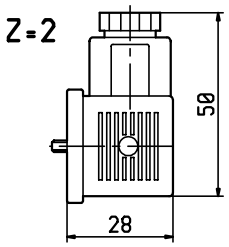
- Coil protection: Polyamide resin with fiber glass.
- Minimum voltage: 90% of the nominal voltage.
- Protection degree: IP65 IEC 144 – DIN 40050 (total protection against dust and low pressure jets)

Insulation class F (155°C)

SOLENOIDI CON CONNETTORE
Coils with connector

	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
S-CE (18 Watt ED100%)		**C1.664.55.XY.Z**
S-CE-H (18 Watt ED100%) Insulation class H 180°C		**C1.664.62.XY.Z**
S-CE-K (18 Watt ED100%)		**C1.664.56.XY.Z**
S-CE-C (18 Watt ED100%)		**C1.664.57.XY.1**
S-CE-A (18 Watt ED100%)		**C1.664.58.XY.1**
S-CE-D (18 Watt ED100%)		**C1.664.63.XY.1**





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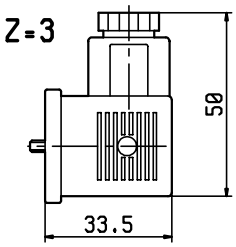

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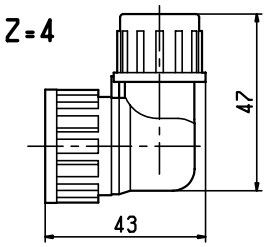

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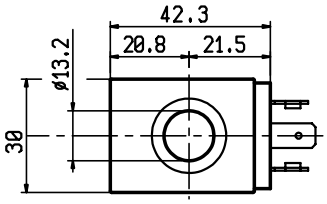
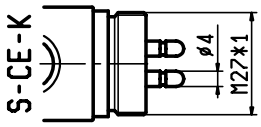
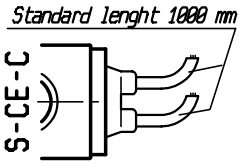


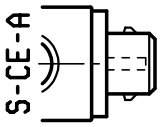
attacco
Hirschmann (DIN 43650)



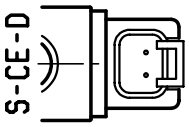
attacco
Kostal



attacco
con cavo



attacco
AMP JUNIOR



attacco
DEUTSCH DT04-2P

XY	Tensioni *Voltage*	S-CE	S-CE-H	S-CE-K	S-CE-A	S-CE-D
OB	12 Volts C.C. - *D.C.*	•	•	•	•	•
OC	24 Volts C.C. - *D.C.*	•	•	•	•	•
OD	48 Volts C.C. - *D.C.*	•				
OV	24 Volts RAC	•				
OK	48 Volts RAC	•				
OW	110 Volts RAC	•				
OZ	220 Volts RAC	•				

Trattasi di una serie di bobine potenziate, a disegno Oil Sistem.
- Rivestimento bobina: resina poliammidica caricata con fibre di vetro.
- I solenoide S-CE (18 W) sono dimensionati per servizio continuo ED100%.
- Voltaggio minimo richiesto: 90% della tensione nominale.
- Grado di protezione: IP65 IEC 144 – DIN 40050 (protezione totale contro polvere e acqua spruzzata in getti a bassa pressione).

Classe di isolamento F (155°C)

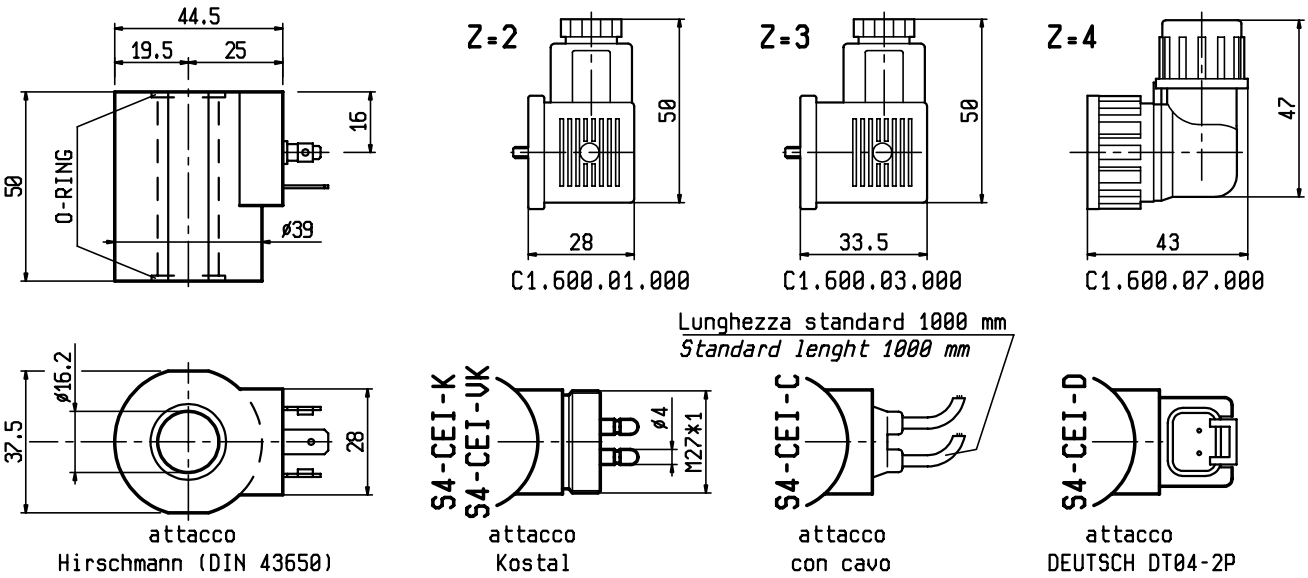
This is a serie of Oil Sistem coils more powerful.
- Coil protection: Polyamide resin with fiber glass.
- Solenoids “S-CE” (18 W) are designed for continuos duty ED100%.
- Minimum voltage: 90% of the nominal voltage.
- Protection degree: IP65 IEC 144 – DIN 40050 (total protection against dust and low pressure jets)

Insulation class F (155°C)

Z	Connettori - *Connectors type*				
1	Senza connettore	*Without connector*	3	Connettore con raddrizzatore	*Connector with rectifier*
2	Connettore standard	*Standard connector*	4	Connettore attacco Kostal	*Kostal connector*

SOLENOIDI CON CONNETTORE
Coils with connector

DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
S4-CEI (26 Watt ED100%)	**C1.664.37.XY.Z**
S4-CEI-K (26 Watt ED100%)	**C1.664.44.XY.Z**
S4-CEI-VK (26 Watt ED100%) (Varistore)	**C1.664.45.XY.Z**
S4-CEI-C (26 Watt ED100%)	**C1.664.51.XY.1**
S4-CEI-D (26 Watt ED100%)	**C1.664.61.XY.1**



XY	Tensioni *Voltage*	S4-CEI	S4-CEI-K	S4-CEI-VK	S4-CEI-D
OB	12 Volts C.C. - *D.C.*	•	•	•	•
OC	24 Volts C.C. - *D.C.*	•	•	•	•
OD	48 Volts C.C. - *D.C.*	•			
OV	24 Volts RAC	•			
OK	48 Volts RAC	•			
OW	110 Volts RAC	•			
OZ	220 Volts RAC	•			

Trattasi di una serie di bobine realizzata per l'uso con elettrovalvole della serie "CEI". Alle due estremità della bobina sono alloggiate due guarnizioni OR2062 per protezione dagli agenti atmosferici.

- Rivestimento bobina: resina poliammidica caricata con fibre di vetro.
- I solenoidi S4-CEI (26 W) sono dimensionati per servizio continuo ED100%.
- Voltaggio minimo richiesto: 90% della tensione nominale.
- Grado di protezione IP65 IEC 144 – DIN 40050 (protezione totale contro polvere e acqua spruzzata in getti a bassa pressione).

Classe di isolamento F (155°C)

This is a serie of coils to be used with solenoid valves "CEI" types.
On the two extremities of the coils there are two seal OR2062 for protection against dust and water jets.

- Coil protection: Polyamide resin with fiber glass.
- Solenoids "S4-CEI" (26 W) are designed for continuos duty ED100%.
- Minimum voltage: 90% of the nominal voltage.
- Protection degree: IP65 IEC 144 – DIN 40050 (total protection against dust and low pressure jets)

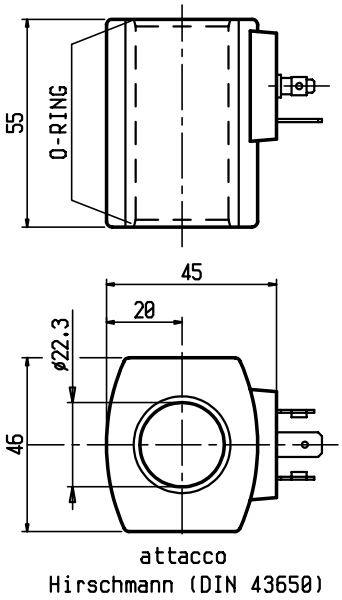
Insulation class F (155°C)

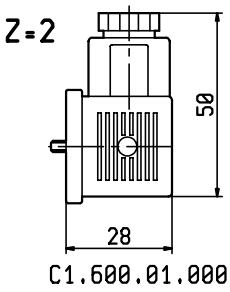
Z	Connettori - *Connectors type*				
1	Senza connettore	*Without connector*	3	Connettore con raddrizzatore	*Connector with rectifier*
2	Connettore standard	*Standard connector*	4	Connettore attacco Kostal	*Kostal connector*

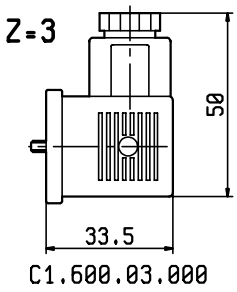
SOLENOIDI CON CONNETTORE PER CARTUCCE SERIE "V3D-CE"
Coils with connector for cartridge "V3D-CE" series

S-V3D (60 Watt ED35%) — DENOMINAZIONE VALVOLA *Valve denomination*

CODICE ORDINAZIONE *Ordering code* **C1.664.25.XY.Z**







XY	Tensioni *Voltage*				
OB	12 Volts C.C. - *D.C.*				
OC	24 Volts C.C. - *D.C.*				
OD	48 Volts C.C. - *D.C.*				
OW	110 Volts RAC				
OZ	220 Volts RAC				

Z	Connettori *Connectors type*	
1	Senza connettore	*Without connector*
2	Connettore standard	*Standard connector*
3	Connettore con raddrizzatore	*Connector with rectifier*

Trattasi di una serie di bobine realizzata per l'uso con elettrovalvole della serie "V3D-CE".
Alle due estremità della bobina sono alloggiate due guarnizioni OR2087 per protezione dagli agenti atmosferici.

- Rivestimento bobina: resina poliammidica caricata con fibre di vetro.
- I solenoidi S-V3D (60 W) sono dimensionati per servizio intermittente ED35% e tempo max di eccitazione 21 min riferito a 20°C.
- Voltaggio minimo richiesto: 90% della tensione nominale.
- Grado di protezione: IP65 IEC 144 – DIN 40050 (protezione totale contro polvere e acqua spruzzata in getti a bassa pressione).

Classe di isolamento F (155°C)

This is a serie of coils to be used with solenoid valves "V3D-CE" types.
On the two extremities of the coils there are two seal OR2087 for protection against dust and water jets.

- Coil protection: Polyamide resin with fiber glass.
- Solenoids "S-V3D" (60 W) are designed for intermittent duty ED35% and for an excitation time of 21 min at 20°C.
- Minimum voltage: 90% of the nominal voltage.
- Protection degree: IP65 IEC 144 – DIN 40050 (total protection against dust and low pressure jets)

Insulation class F (155°C)

SOLENOIDI CON CONNETTORE
Coils with connector

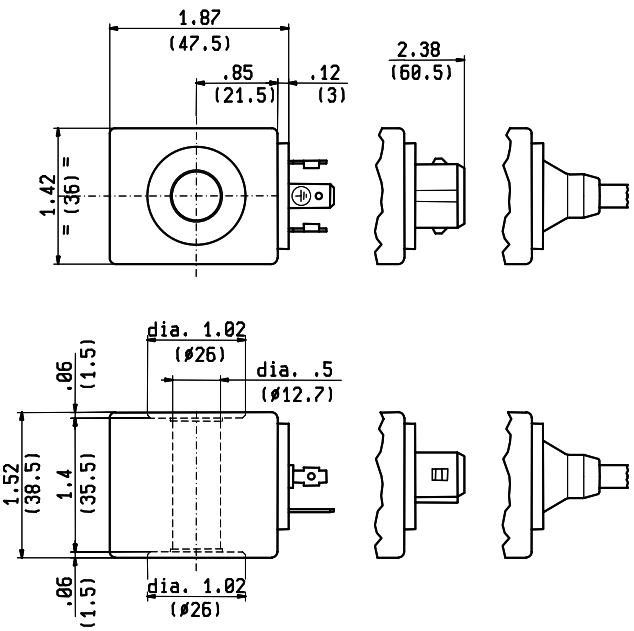
S8 (20 Watt ED100%)

DENOMINAZIONE VALVOLA
Valve denomination

CODICE ORDINAZIONE
Ordering code

OD.02-17-X.Y-Z

Prodotto Edi System
Edi System product



Descrizione
Description

- Peso : 0.180 kg
- La tensione di alimentazione non deve subire variazioni superiori al ± 10% per il buon funzionamento delle bobine.

- *Weight : 0.180 kg*
- *Inlet voltage fluctuations must not exceed ± 10% to obtain correct operation and long life of coils.*

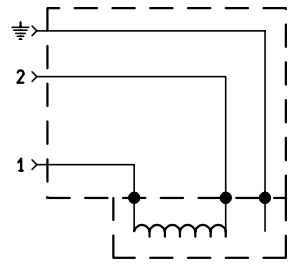
Classe di isolamento H (180°C)

Insulation class H (180°C)

X.Y	Connessioni *Connections*	Circuito *Circuit*	Tensione *Voltage*
01.30	DIN 43650 - ISO4400	Standard	*DC - RAC*
07.30	AMP Junior	Standard	*DC*
0G.03	Single Lead	Standard	*DC*

Z	Tensione nominale *Nominal Voltage* **(V)**	Resistenza *Resistance* **(Ω)**	Potenza *Power* **(W)**	Corrente *Current* **(A)**		ΔT °C
		Ta= 20-25 °C	Bobina fredda *Cold coil*	Bobina fredda *Cold coil*	Bobina calda *Hot coil*	Dopo 1 ora a Ta= 20-25°C *After 1 hour at 20-25°C*
OB	12V dc	7,4	20	1,62	1,19	Tensione nominale *Nominal Voltage* 105-110
OC	24V dc	28,5	20	0,85	0,61	
OV	24V RAC		20			
OW	110V RAC		20			
OZ	220V RAC		20			

CONNETTORI
Connectors

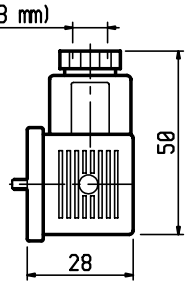


PG9 (ø cable 6-8 mm)

STANDARD TYPE

CONNETTORE TIPO 2
CONNECTOR TYPE 2

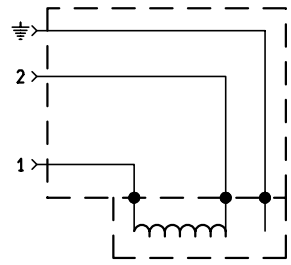
CODICE *Code* C1.600.01.000



CONNETTORE STANDARD attacco HIRSCHMANN DIN 43650

STANDARD CONNECTOR type HIRSCHMANN DIN 43650

- *Nominal current: 10 A*
- *Max operating current: 16 A*
- *Contact resistance: 4 mOhm*
- *Max Cond. Cross-section: 1,5 mm²*
- *Protection class: IP 65 EN60529*
- *Insulation class: VDE 0110-1/89*

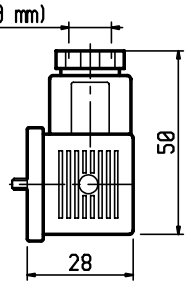


PG11 (ø cable 8-10 mm)

SPECIAL TYPE CABLE PG11

CONNETTORE TIPO 5
CONNECTOR TYPE 5

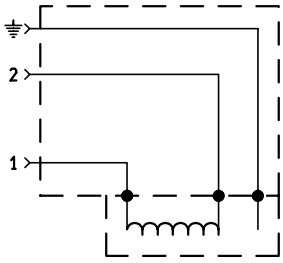
CODICE *Code* C1.600.01.011



CONNETTORE STANDARD attacco HIRSCHMANN DIN 43650

STANDARD CONNECTOR type HIRSCHMANN DIN 43650

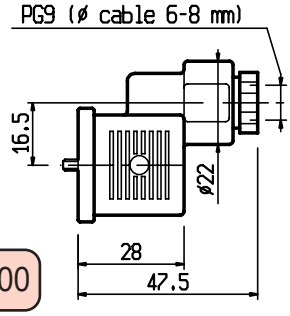
- *Nominal current: 10 A*
- *Max operating current: 16 A*
- *Contact resistance: 4 mOhm*
- *Max Cond. Cross-section: 1,5 mm²*
- *Protection class: IP 65 EN60529*
- *Insulation class: VDE 0110-1/89*



PG9 (ø cable 6-8 mm)

CONNETTORE TIPO 6
CONNECTOR TYPE 6

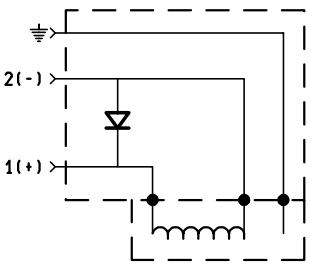
CODICE *Code* C1.600.12.000



CONNETTORE STANDARD attacco HIRSCHMANN DIN 43650

STANDARD CONNECTOR type HIRSCHMANN DIN 43650

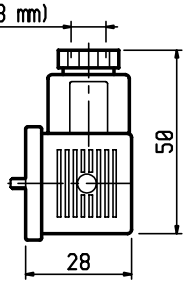
- *Nominal current: 10 A*
- *Max operating current: 16 A*
- *Contact resistance: 4 mOhm*
- *Max Cond. Cross-section: 1,5 mm²*
- *Protection class: IP 65 EN60529*
- *Insulation class: VDE 0110-1/89*



PG9 (ø cable 6-8 mm)

CONNETTORE TIPO 7
PER TENSIONE 24 VCC
CONNECTOR TYPE 7
FOR 24 VDC TENSION

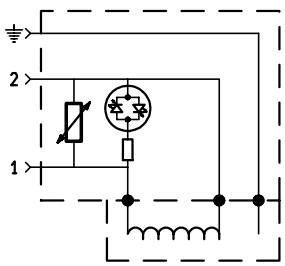
CODICE *Code* C1.600.17.000



CONNETTORE attacco DIN43650 con DIODO di blocco sovra tensione in apertura

CONNECTOR type DIN 43650 with DIODE to stop over voltage on opening.

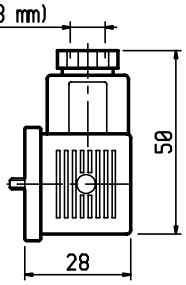
- *Nominal current: 10 A*
- *Max operating current: 16 A*
- *Contact resistance: 4 mOhm*
- *Max Cond. Cross-section: 1,5 mm²*
- *Protection class: IP 65 EN60529*
- *Insulation class: VDE 0110-1/89*



PG9 (ø cable 6-8 mm)

CONNETTORE TIPO 11
PER TENSIONE 24 VCC
CONNECTOR TYPE 11
FOR 24 VDC TENSION

CODICE *Code* C1.600.13.000

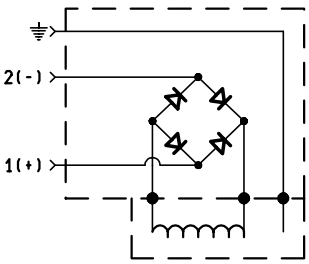


CONNETTORE attacco DIN43650 con led bipolare + VDR di protezione contro le sovra tensioni provenienti dall'alimentazione e dal carico all'apertura.

CONNECTOR type DIN 43650 with led and VDR to protect supply and switch (the voltageon the coil is limited by the VDR)

- *Nominal current: 10 A*
- *Max operating current: 16 A*
- *Contact resistance: 4 mOhm*
- *Max Cond. Cross-section: 1,5 mm2*
- *Protection class: IP 65 EN60529*
- *Insulation class: VDE 0110-1/89*

CONNETTORI
Connectors

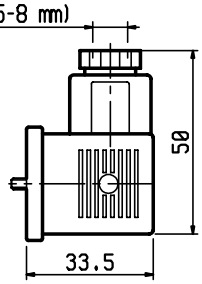


PG9 (ø cable 6-8 mm)

STANDARD TYPE

CONNETTORE TIPO 3
CONNECTOR TYPE 3

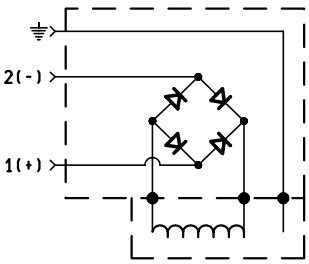
CODICE *Code* C1.600.03.000



CONNETTORE STANDARD attacco HIRSCHMANN DIN 43650 con ponte raddrizzatore a 4 diodi interno.

STANDARD CONNECTOR type HIRSCHMANN DIN 43650 with full wave bridge rectifier (4 diode)

- *Nominal current: 10 A*
- *Max operating current: 16 A*
- *Contact resistance: 4 mOhm*
- *Max Cond. Cross-section: 1,5 mm²*
- *Protection class: IP 65 EN60529*
- *Insulation class: VDE 0110-1/89*

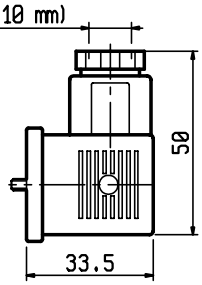


PG11 (ø cable 8-10 mm)

SPECIAL TYPE CABLE PG11

CONNETTORE TIPO 8
CONNECTOR TYPE 8

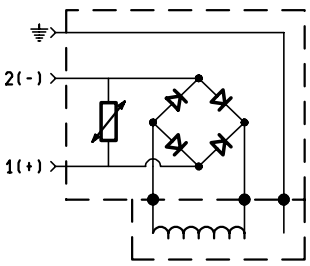
CODICE *Code* C1.600.03.001



CONNETTORE con attacco HIRSCHMANN DIN 43650 con ponte raddrizzatore a 4 diodi interno.

CONNECTOR type HIRSCHMANN DIN 43650 with full wave bridge rectifier (4 diode)

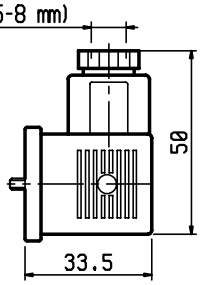
- *Nominal current: 10 A*
- *Max operating current: 16 A*
- *Contact resistance: 4 mOhm*
- *Max Cond. Cross-section: 1,5 mm²*
- *Protection class: IP 65 EN60529*
- *Insulation class: VDE 0110-1/89*



PG9 (ø cable 6-8 mm)

CONNETTORE TIPO 9
PER TENSIONE 24 VCC
CONNECTOR TYPE 9
FOR 24 VDC TENSION

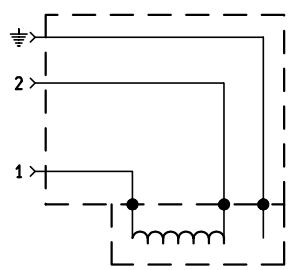
CODICE *Code* C1.600.18.000



CONNETTORE con attacco HIRSCHMANN DIN 43650 con ponte raddrizzatore a 4 diodi + VDR di protezione contro le sovra tensioni provenienti dall'alimentazione e dal carico all'apertura.

CONNECTOR type HIRSCHMANN DIN 43650 with full wave bridge rectifier (4 diode) + VDR to protect against supply over voltage

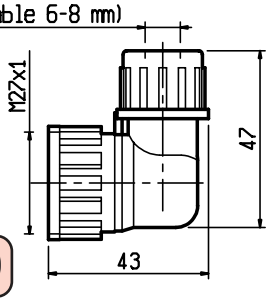
- *Nominal current: 10 A*
- *Max operating current: 16 A*
- *Contact resistance: 4 mOhm*
- *Max Cond. Cross-section: 1,5 mm²*
- *Protection class: IP 65 EN60529*
- *Insulation class: VDE 0110-1/89*



PG9 (ø cable 6-8 mm)

CONNETTORE TIPO 4
CONNECTOR TYPE 4

CODICE *Code* C1.600.07.000



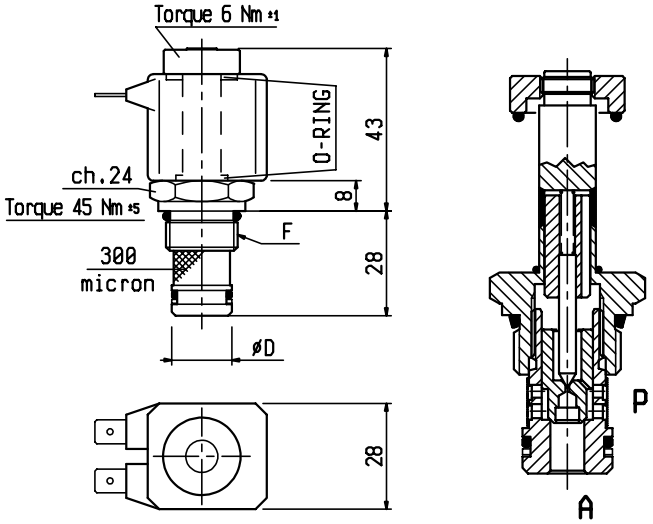
CONNETTORE STANDARD attacco KOSTAL

STANDARD CONNECTOR type KOSTAL (only for use with DC input)

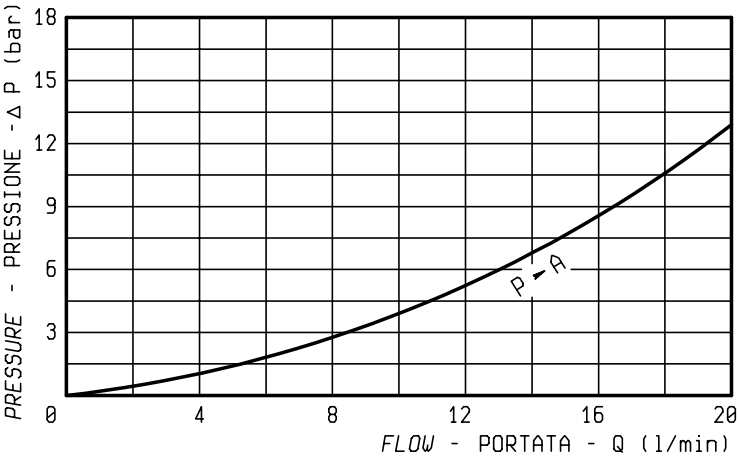
- *Nominal current: 10 A*
- *Max operating current: 16 A*
- *Contact resistance: 4 mOhm*
- *Max Cond. Cross-section: 1,5 mm²*
- *Protection class: IP 65 EN60529*
- *Insulation class: VDE 0110-1/89*

VALVOLE ELETTRICHE 2 VIE MONODIREZIONALI PILOTATE NORMALMENTE CHIUSE
2 way pilot operated solenoid valves normally closed

	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
MCE1-NC		**V3.896.28.A.Y.0**
MCE1-NC+S1-MCE		**77.896.28.A.Y.0.15.WW.0**



Solenoide "S1-MCE"
"S1-MCE" coil



Pressione max di lavoro *Max working pressure*	210 bar	Portata max *Max flow*	20 l/min

Solenoidi - *Coils*

WW	Tensione *Voltage*	WW	Tensione *Voltage*	WW	Tensione *Voltage*
OB	12V dc				
OC	24V dc				

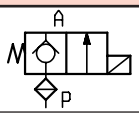
Connettori - *Connectors*

Attacco Faston
Faston connection

Descrizione *Description*

Valvola unidirezionale pilotata a 2 vie con otturatore conico, con ingombro esterno ridotto;
- Trafilamento interno virtualmente nullo (vedi pag. 9.50.08);
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide: (vedi pag. 2.50.01)

Solenoid valve 2 way pilot operated, poppet style, with small external dimensions;
- *Internal leakage: virtually zero (see on page 9.50.08);*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coil features: (see on page 2.50.01).*

	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:*	
		Diseccitato *De-energized*	Eccitato *Energized*
		P○>A A→P	P→A

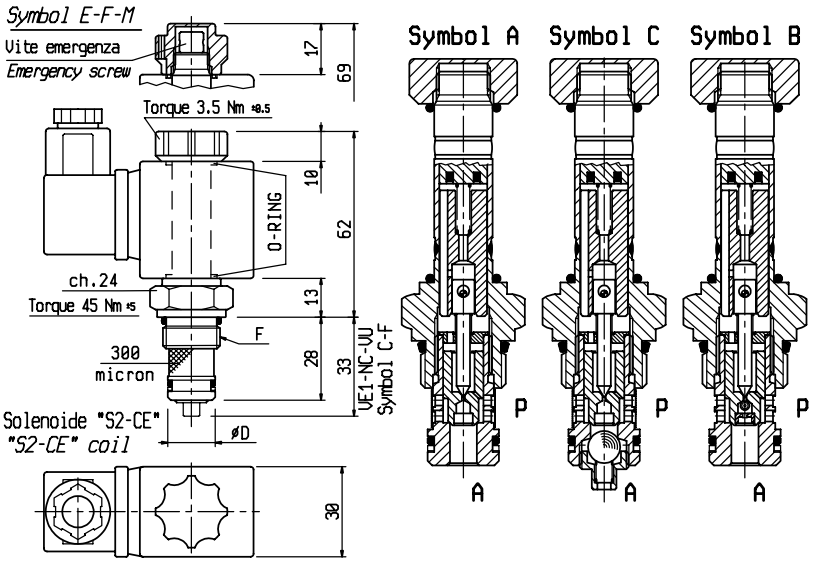
Y	Cavità - *Cavity*		
	N°	F	ØD
1	V096001	3/4"-16 UNF	15,87
2	V096004	3/4"-16 UNF	12,7

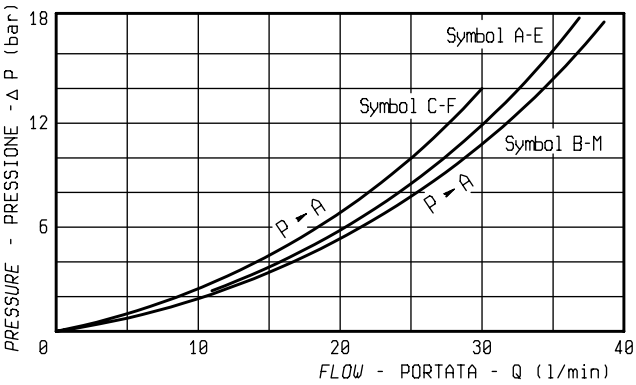
Tempi di risposta *Operating time*	Apertura - *Opening*	Chiusura - *Closing*
	26-35 ms	30-45 ms

VALVOLE ELETTRICHE 2 VIE PILOTATE NORMALMENTE CHIUSE
2 way pilot operated solenoid valves, normally closed

DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
VE1-NC	**V3.896.69.X.Y.0**
VE1-NC+S2-CE	**77.896.69.X.Y.0.01.WW.J**

PATENTED





Pressione max di lavoro *Max working pressure*	350 bar 250 bar(*)	Portata max *Max flow*	40 l/min 30 l/min(*)

(*) Valvola con filtro - *Valve with filter*

Solenoidi - *Coils*

WW	Tensione *Voltage*	WW	Tensione *Voltage*	WW	Tensione *Voltage*
OH	24V 50Hz ac	OP	24V 60Hz ac		
OL	48V 50Hz ac	OQ	48V 60Hz ac		
OM	110V 50Hz ac	OR	110V 60Hz ac		
ON	220V 50Hz ac	OS	220V 60Hz ac		
OO	380V 50Hz ac	OT	380V 60Hz ac		
OB	12V dc	OV	24V RAC	OZ	220V RAC
OC	24V dc	OK	48V RAC		
OD	48V dc	OW	110V RAC		

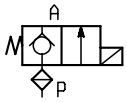
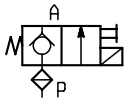
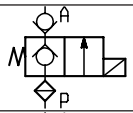
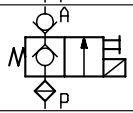
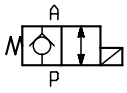
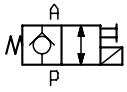
Connettori - *Connectors*

J	Senza *Without*	Standard *Standard*
	1	2

Descrizione *Description*

Soluzione classica pilotata ad otturatore conico, intercambiabile con le valvole di produzione americana ed europea;
- Trafilamento interno virtualmente nullo (vedi pag. 9.50.08);
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.02);
- Protezione superficiale: zincato bianco;

This is a standard 2 way pilot operated valves poppet style interchangeable with the same American and European valves
- *Internal leakage: virtually zero (see on page 9.50.08);*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.02);*

X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:* Diseccitato *De-energized*	Eccitato *Energized*
A		P○>A A→P	P→A
E		P○>A A→P	P→A
C		P○>A A○>P	P→A A○>P
F		P○>A A○>P	P→A A○>P
B		P○>A A→P	P→A A→P
M		P○>A A→P	P→A A→P

Y	Cavità - *Cavity* N°	F	ØD
1	V096001	3/4"-16 UNF	15,87
2	V096004	3/4"-16 UNF	12,7

La valvola con VU (schemi C ed F) può essere assemblata solamente in cavità V096001 con preforo minimo Ø10 mm

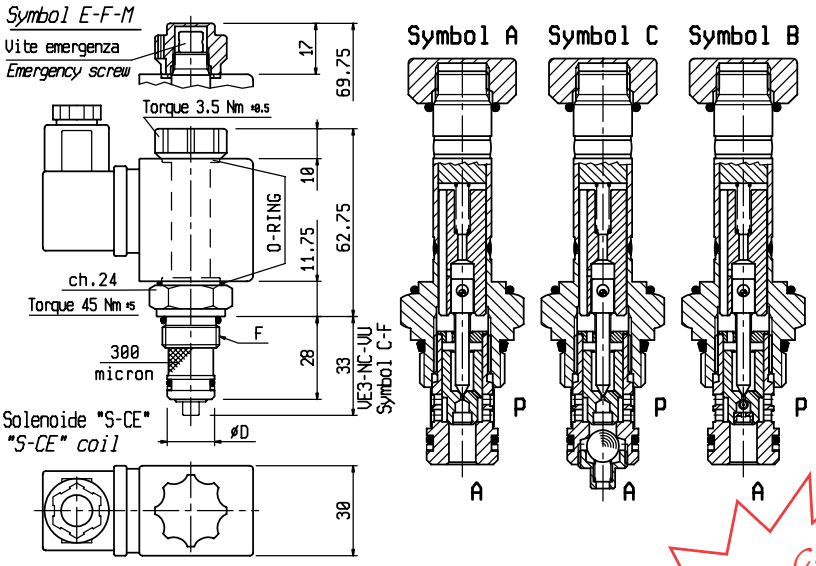
Valves with VU (symbol C and F) can be assembled in cavity V096001 only. Prehole min. Ø10 mm is requested

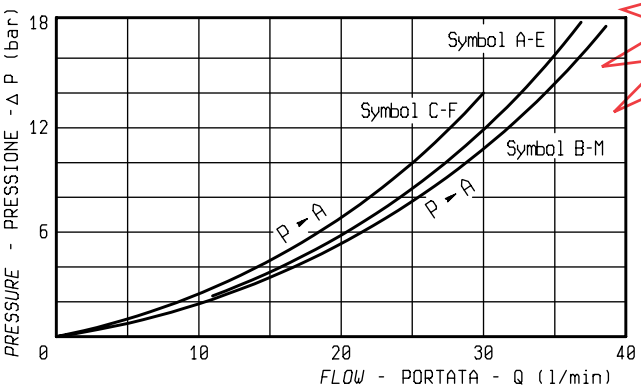
Tempi di risposta *Operating time*	Apertura - *Opening*	Chiusura - *Closing*
	30-40 ms	60-85 ms

VALVOLE ELETTRICHE 2 VIE PILOTATE NORMALMENTE CHIUSE
2 way pilot operated solenoid valves normally closed

	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
VE3-NC		**V3.896.71.X.Y.0**
VE3-NC+S-CE		**77.896.71.X.Y.0.55.WW.J**

PATENTED





Solo in C.C.
Only for D.C. current

Pressione max di lavoro *Max working pressure*	350 bar 250 bar(*)	Portata max *Max flow*	40 l/min 30 l/min(*)

(*) Valvola con filtro - *Valve with filter*

Solenoidi - *Coils*

WW	Tensione *Voltage*	WW	Tensione *Voltage*	WW	Tensione *Voltage*
OB	12V dc	**OV**	24V RAC	**OZ**	220V RAC
OC	24V dc	**OK**	48V RAC		
OD	48V dc	**OW**	110V RAC		

Connettori - *Connectors*

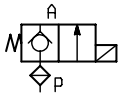
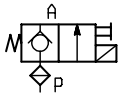
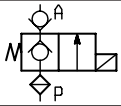
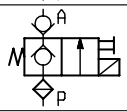
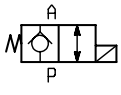
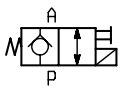
J	Senza *Without*	Standard *Standard*	Con raddrizzatore *With rectifier*	Attacco Kostal *Kostal connector*
	1	**2**	**3**	**4**

Tempi di risposta *Operating time*	Apertura - *Opening*	Chiusura - *Closing*
	30-40 ms	60-85 ms

Descrizione *Description*

Soluzione classica pilotata ad otturatore conico, intercambiabile con le valvole di produzione americana ed europea;
- Trafilamento interno virtualmente nullo (vedi pag. 9.50.08);
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.06);
- Protezione superficiale: zincato verde-oliva;

This is a standard 2 way pilot operated valves poppet style interchangeable with the same American and European valves
- *Internal leakage: virtually zero (see on page 9.50.08);*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.06);*

X	Schema	Funzioni possibili con solenoide: *Operating features with solenoid:* Diseccitato *De-energized*	Eccitato *Energized*
A		P o>A A→P	P→A
E		P o>A A→P	P→A
C		P o>A A o>P	P→A A o>P
F		P o>A A o>P	P→A A o>P
B		P o>A A→P	P→A A→P
M		P o>A A→P	P→A A→P

Y	Cavità - *Cavity* N°	F	ØD
1	V096001	3/4"-16 UNF	15,87
2	V096004	3/4"-16 UNF	12,7
4	V096069	M20x1,5	15

La valvola con VU (schemi C ed F) può essere assemblata solamente in cavità V096001 con preforo minimo Ø10 mm

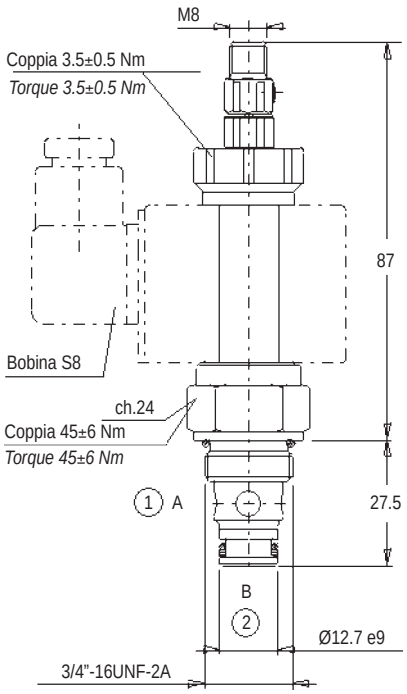
Valves with VU (symbol C and F) can be assembled in cavity V096001 only. Prehole min. Ø10 mm is requested

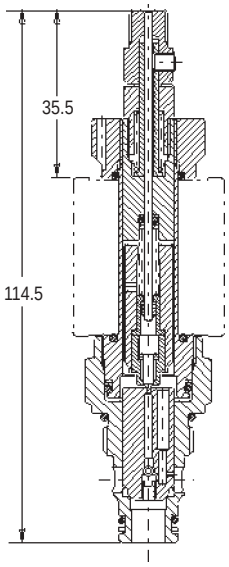
VALVOLE ELETTRICHE 2 VIE PILOTATE
2 way pilot operated solenoid valves

VEI-8A-2A-06-NC-D-ET DENOMINAZIONE VALVOLA *Valve denomination*

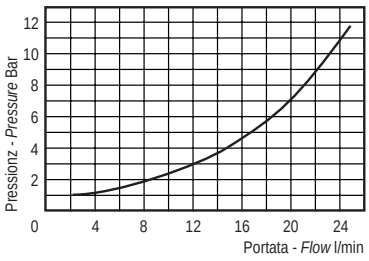
CODICE ORDINAZIONE *Ordering code* **OD.15.05.18.25.Z**

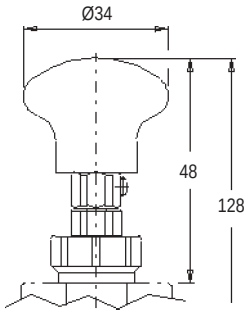
Prodotto Edi System
Edi System product





Solenoide "S8"
"S8" coil





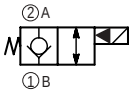
Descrizione
Description

Sono valvole ad azionamento elettrico a 2 vie, a tenuta pilotate, normalmente chiuse a cartuccia indicate per applicazioni in cui si richiedono bassi tempi di risposta e un trafilamento interno praticamente nullo.
- Filtrazione : 25 μm nominali o inferiore
- Minimo Voltaggio Richiesto : 90% del nominale

Solenoidi da ordinare separatamente

Two way, pilot operated, normally closed poppet style solenoid cartridge valves, designed for applications requiring fast response time and virtually zero internal leakage.
- *Filtration : 25 μm nominal or better*
- *Minimum Voltage Required : 90% of nominal*

Coils must be ordered separately

	Schema Symbol	Funzioni possibili con solenoide: *Operating features with solenoid:*	
		Diseccitato *De-energized*	Eccitato *Energized*
		B→A A○>B	B→A A→B

Tempi di risposta *Operating time*	Apertura - *Opening*	Chiusura - *Closing*
	30-40 ms	60-85 ms

Pressione max di lavoro *Max working pressure*	250 bar	Portata max *Max flow*	20 l/min

	Cavità - *Cavity*		
	N°	F	ØD
	V096004	3/4"-16 UNF	12,7

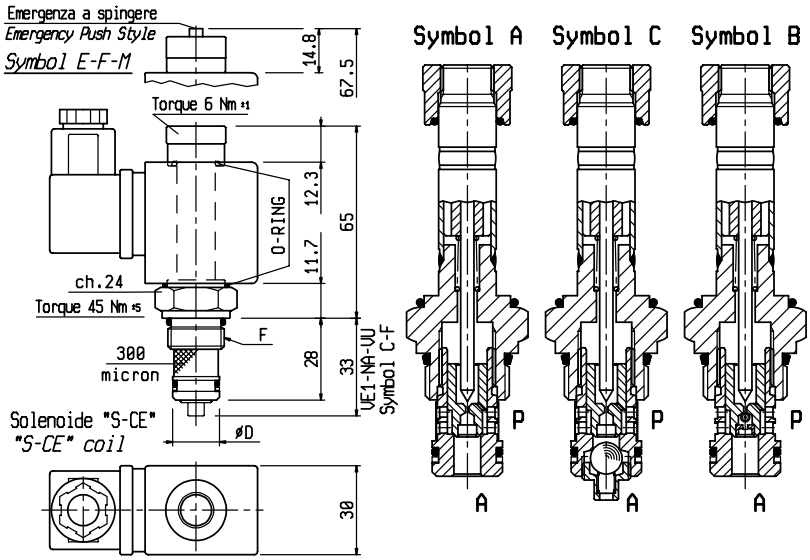
IMPORTANTE: Non superare per nessun motivo la Pressione massima di lavoro, in quanto a pressioni superiori a 300 bar, la valvola tende ad aprirsi

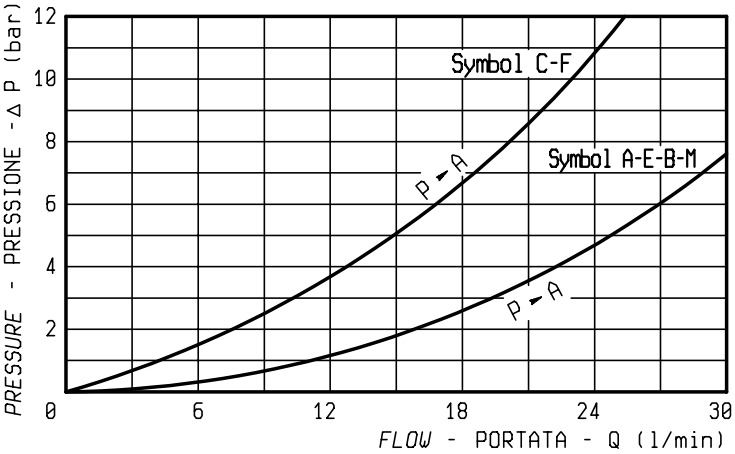
IMPORTANT: *Maximum operating pressure must never be exceeded, since this valve tends to open at pressures over 300 bar*

Z	Cavità - *Cavity*
00	Emergenza a tirare con cavo *Cable operated pull style override*
01	Emergenza a tirare con pomolo *Hand operated pull style override*

VALVOLE ELETTRICHE 2 VIE PILOTATE NORMALMENTE APERTE
2 way pilot operated solenoid valves, normally open

VE3-NA	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*	V3.896.74.X.Y.0
VE3-NA+S-CE			77.896.74.X.Y.0.55.WW.J





Pressione max di lavoro *Max working pressure*	250 bar	Portata max *Max flow*	30 l/min

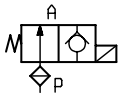
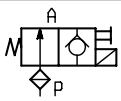
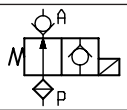
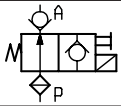
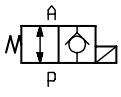
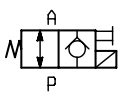
Solenoidi - *Coils*					
WW	Tensione *Voltage*	**WW**	Tensione *Voltage*	**WW**	Tensione *Voltage*
OB	12V dc	**OV**	24V RAC	**OZ**	220V RAC
OC	24V dc	**OK**	48V RAC		
OD	48V dc	**OW**	110V RAC		

Connettori - *Connectors*				
J	Senza *Without*	Standard *Standard*	Con raddrizzatore *With rectifier*	Attacco Kostal *Kostal connector*
	1	**2**	**3**	**4**

Descrizione *Description*

Soluzione classica pilotata ad otturatore conico, intercambiabile con le valvole di produzione americana ed europea;
- Trafilamento interno virtualmente nullo (vedi pag. 9.50.08);
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.06);

This is a standard 2 way pilot operated valves poppet style interchangeable with the same American and European valves
- *Internal leakage: virtually zero (see on page 9.50.08);*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.06);*

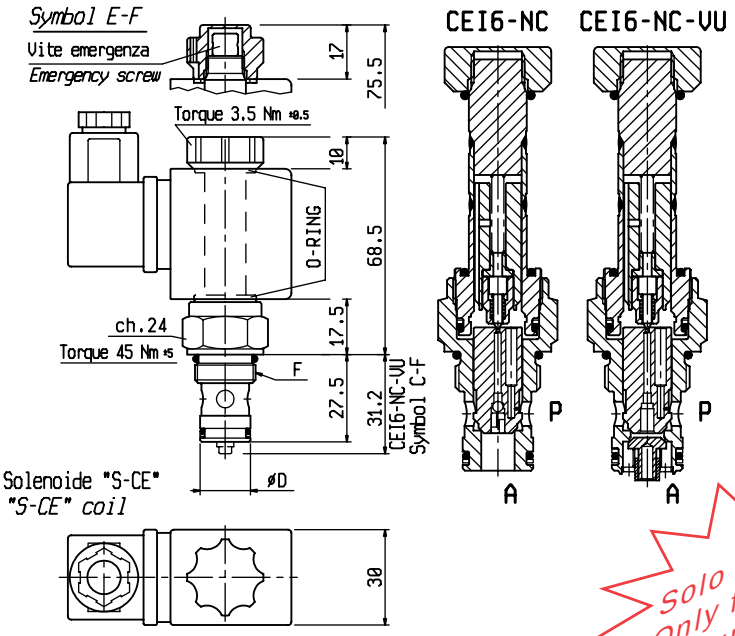
X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:*	
		Diseccitato *De-energized*	Eccitato *Energized*
A		P→A A→P	P○>A
E		P→A A→P	P○>A
C		P→A A○>P	P○>A A○>P
F		P→A A○>P	P○>A A○>P
B		P→A A→P	P○>A A→P
M		P→A A→P	P○>A A→P

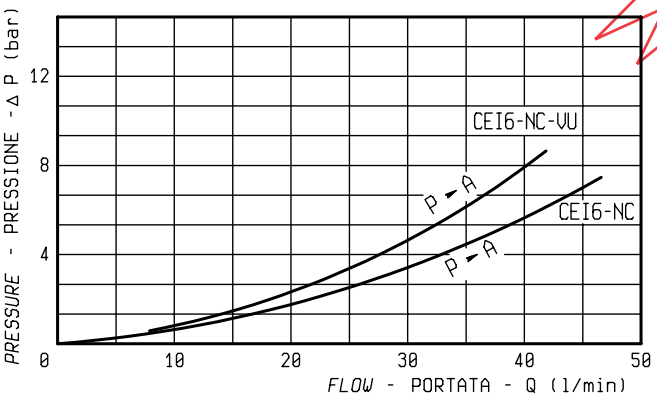
Y	Cavità - *Cavity*		
	N°	F	ØD
1	V096001	3/4"-16 UNF	15,87
2	V096004	3/4"-16 UNF	12,7
La valvola con VU (schemi C ed F) può essere assemblata solamente in cavità V096001 con preforo minimo Ø10 mm			
Valves with VU (symbol C and F) can be assembled in cavity V096001 only. Prehole min. Ø10 mm is requested			

VALVOLE ELETTRICHE 2 VIE BIDIREZIONALI PILOTATE NORMALMENTE CHIUSE
2 way pilot operated solenoid valves, normally closed

	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
CEI6-NC		**V3.896.64.X.Y.0**
CEI6-NC+S-CE		**77.896.64.X.Y.0.55.WW.J**

PATENTED



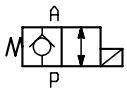
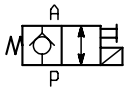


Descrizione *Description*

Soluzione classica pilotata ad otturatore conico e cannotto avvitato.
- Trafilamento interno virtualmente nullo (vedi pag. 9.50.08);
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.06);

This is a standard 2 way pilot operated valves poppet style with screwed tube.
- *Internal leakage: virtually zero (see on page 9.50.08);*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.06);*

Solo in C.C.
Only for D.C. current

X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:*	
		Diseccitato *De-energized*	Eccitato *Energized*
A		P o>A A→P	P→A A→P
E		P o>A A→P	P→A A→P

Tempi di risposta *Operating time*	Apertura - *Opening*	Chiusura - *Closing*
	30-40 ms	70-95 ms

Pressione max di lavoro *Max working pressure*	350 bar	Portata max *Max flow*	45 l/min

Solenoidi - *Coils*

WW	Tensione *Voltage*	WW	Tensione *Voltage*	WW	Tensione *Voltage*
OB	12V dc	OV	24V RAC	OZ	220V RAC
OC	24V dc	OK	48V RAC		
OD	48V dc	OW	110V RAC		

Connettori - *Connectors*

J	Senza *Without*	Standard *Standard*	Con raddrizzatore *With rectifier*	Attacco Kostal *Kostal connector*
	1	2	3	4

Nuova versione con bobina S-CE
New version with S-CE coil

Y	Cavità - *Cavity*		
	N°	F	ØD
1	V096001	3/4"-16 UNF	15,87
2	V096004	3/4"-16 UNF	12,7
4	V096069	M20x1,5	15

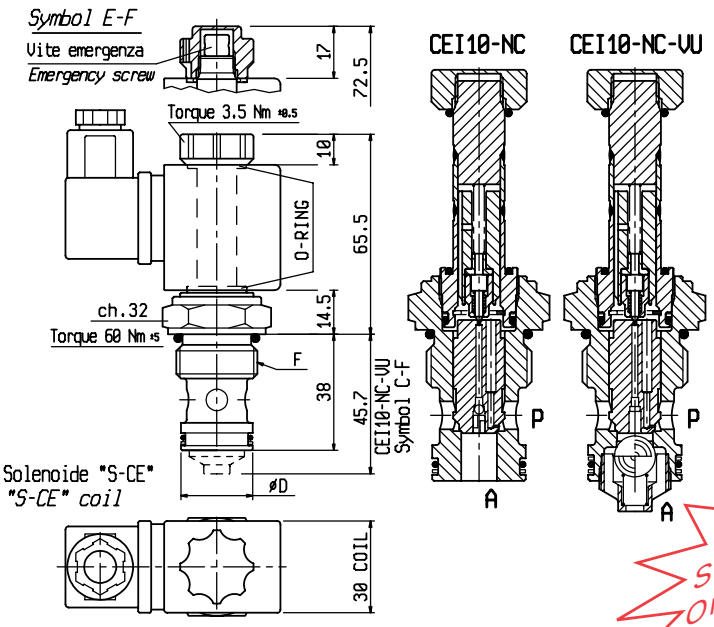
La valvola con VU (C ed F) può essere assemblata solo in cavità V096001 con preforo minimo Ø11 mm prof. 32.

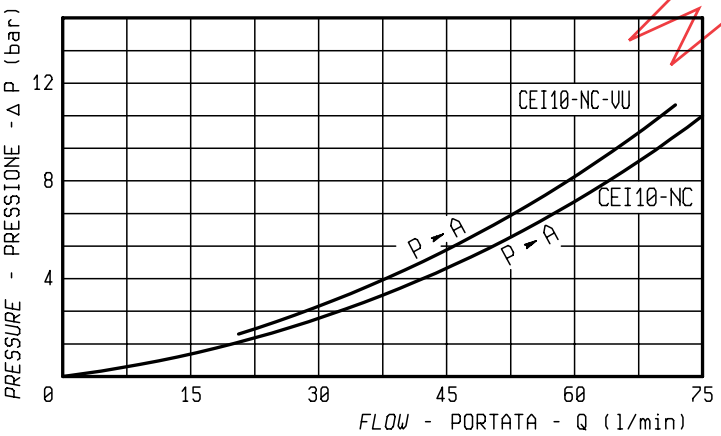
Valves with VU (C and F) must be assembled in cavity V096001. Pre hole minimum Ø11 mm depth 32 is request.

VALVOLE ELETTRICHE 2 VIE BIDIREZIONALI PILOTATE NORMALMENTE CHIUSE
2 way pilot operated solenoid valves, normally closed

	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
CEI10-NC		**V3.896.66.X.0.0**
CEI10 -NC+S-CE		**77.896.66.X.0.0.55.WW.J**

PATENTED



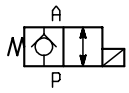
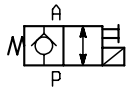


Solo in C.C.
Only for D.C. current

Descrizione *Description*

Soluzione classica pilotata ad otturatore conico e cannotto avvitato.
- Trafilamento interno virtualmente nullo (vedi pag. 9.50.08);
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.06);

This is a standard 2 way pilot operated valves poppet style with screwed tube.
- *Internal leakage: virtually zero (see on page 9.50.08);*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.06);*

X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:*	
		Diseccitato *De-energized*	Eccitato *Energized*
A		P○>A A→P	P→A A→P
E		P○>A A→P	P→A A→P

Tempi di risposta *Operating time*	Apertura - *Opening*	Chiusura - *Closing*
	45-60 ms	140-220 ms

Pressione max di lavoro *Max working pressure*	350 bar	Portata max *Max flow*	70 l/min

Nuova versione con bobina S-CE
New version with S-CE coil

Solenoidi - *Coils*

WW	Tensione *Voltage*	WW	Tensione *Voltage*	WW	Tensione *Voltage*
OB	12V dc	**OV**	24V RAC	**OZ**	220V RAC
OC	24V dc	**OK**	48V RAC		
OD	48V dc	**OW**	110V RAC		

Connettori - *Connectors*

J	Senza *Without*	Standard *Standard*	Con raddrizzatore *With rectifier*	Attacco Kostal *Kostal connector*
	1	**2**	**3**	**4**

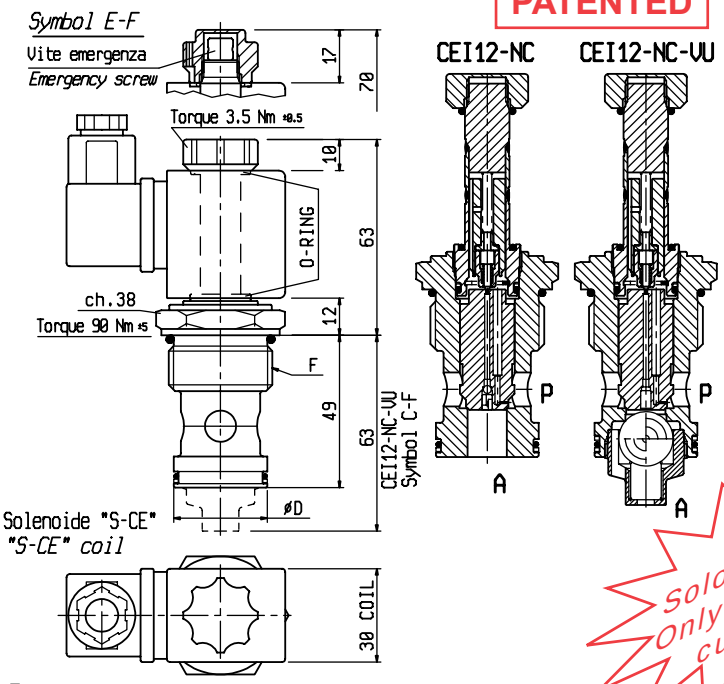
Y	Cavità - *Cavity*		
	N°	F	ØD
	V096005	3/4"BSPP	23,5

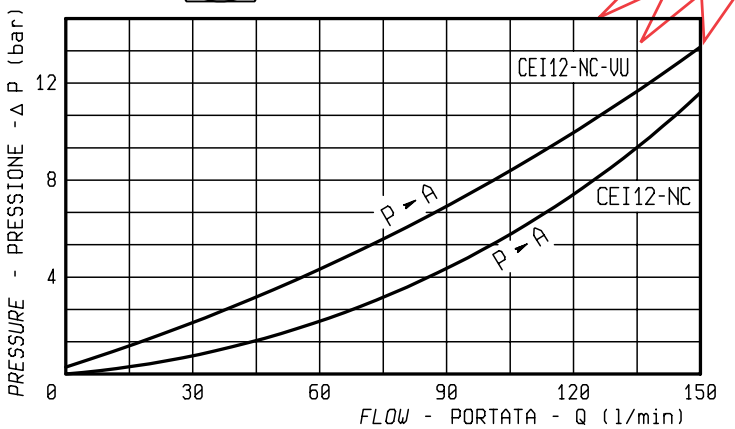
La valvola con VU (C ed F) può essere assemblata solo in cavità V096005 con preforo minimo Ø18 mm prof. 50.
Valves with VU (C and F) must be assembled in cavity V096005. Pre hole minimum Ø18 mm depth 50 is request.

VALVOLE ELETTRICHE 2 VIE BIDIREZIONALI PILOTATE NORMALMENTE CHIUSE
2 way pilot operated solenoid valves, normally closed

	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
CEI12-NC		**V3.896.67.X.0.0**
CEI12 -NC+S-CE		**77.896.67.X.0.0.55.WW.J**

PATENTED



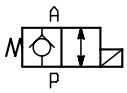
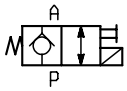


Descrizione *Description*

Soluzione classica pilotata ad otturatore conico e cannotto avvitato.
- Trafilamento interno virtualmente nullo (vedi pag. 9.50.08);
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.06);

This is a standard 2 way pilot operated valves poppet style with screwed tube.
- *Internal leakage: virtually zero (see on page 9.50.08);*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.06);*

Solo in C.C. Only for D.C. current

X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:* Diseccitato *De-energized*	Eccitato *Energized*
A		P o>A A→P	P→A A→P
E		P o>A A→P	P→A A→P

Tempi di risposta *Operating time*	Apertura - *Opening*	Chiusura - *Closing*
	45-60 ms	180-240 ms

Pressione max di lavoro *Max working pressure*	350 bar	Portata max *Max flow*	150 l/min

Solenoidi - *Coils*

WW	Tensione *Voltage*	**WW**	Tensione *Voltage*	**WW**	Tensione *Voltage*
OB	12V dc	**OV**	24V RAC	**OZ**	220V RAC
OC	24V dc	**OK**	48V RAC		
OD	48V dc	**OW**	110V RAC		

Connettori - *Connectors*

J	Senza *Without*	Standard *Standard*	Con raddrizzatore *With rectifier*	Attacco Kostal *Kostal connector*
	1	**2**	**3**	**4**

Nuova versione con bobina S-CE New version with S-CE coil

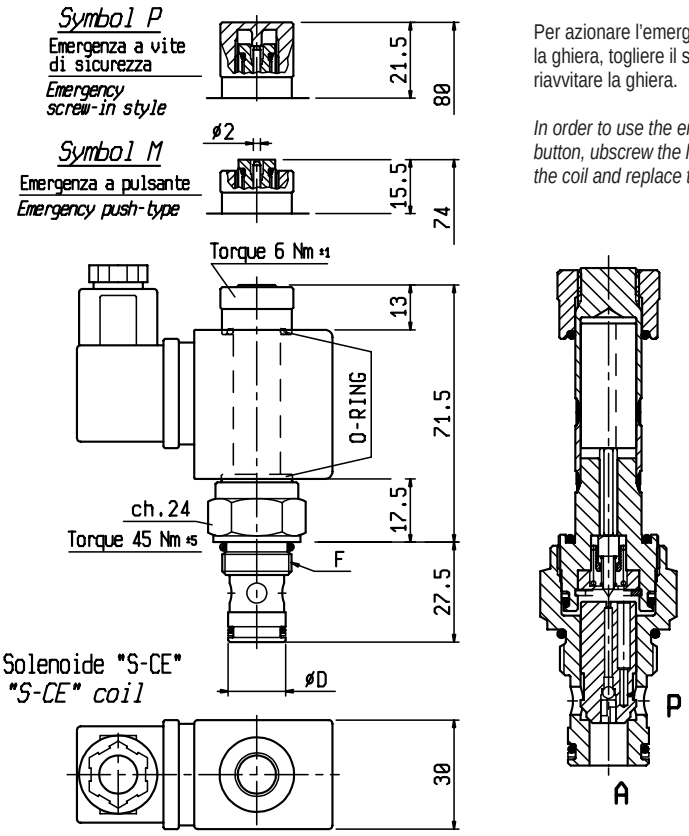
Y	Cavità - *Cavity*		
	N°	F	ØD
	V096006	1"BSPP	30

La valvola con VU (C ed F) può essere assemblata solo in cavità V096006 con preforo minimo Ø25 mm prof. 67.

Valves with VU (C and F) must be assembled in cavity V096006. Pre hole minimum Ø25 mm depth 67 is request.

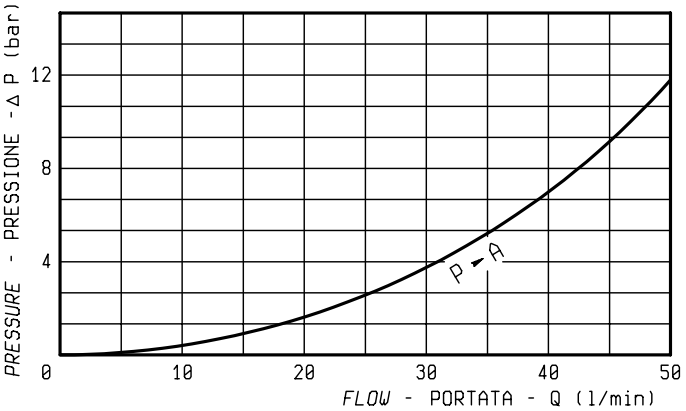
VALVOLE ELETTRICHE 2 VIE BIDIREZIONALI PILOTATE NORMALMENTE APERTE
2 way pilot operated solenoid valves, normally open

	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
CEI6-NA		**V3.896.64.X.Y.0**
CEI6 -NA+S-CE		**77.896.64.X.Y.0.55.WW.J**



Per azionare l'emergenza svitare la ghiera, togliere il solenoide e riavvitare la ghiera.

In order to use the emergency button, ubscrew the lead, remove the coil and replace the lead.



Pressione max di lavoro *Max working pressure*	350 bar	Portata max *Max flow*	45 l/min

Solenoidi - *Coils*

WW	Tensione *Voltage*	WW	Tensione *Voltage*	WW	Tensione *Voltage*
OB	12V dc	**OV**	24V RAC	**OZ**	220V RAC
OC	24V dc	**OK**	48V RAC		
OD	48V dc	**OW**	110V RAC		

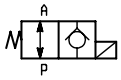
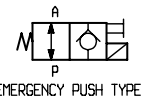
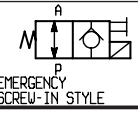
Connettori - *Connectors*

J	Senza *Without*	Standard *Standard*	Con raddrizzatore *With rectifier*	Attacco Kostal *Kostal connector*
	1	**2**	**3**	**4**

Descrizione *Description*

Soluzione classica pilotata ad otturatore conico e cannotto avvitato.
- Trafilamento interno virtualmente nullo (vedi pag. 9.50.08);
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.06);

This is a standard 2 way pilot operated valves poppet style with screwed tube.
- *Internal leakage: virtually zero (see on page 9.50.08);*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.06);*

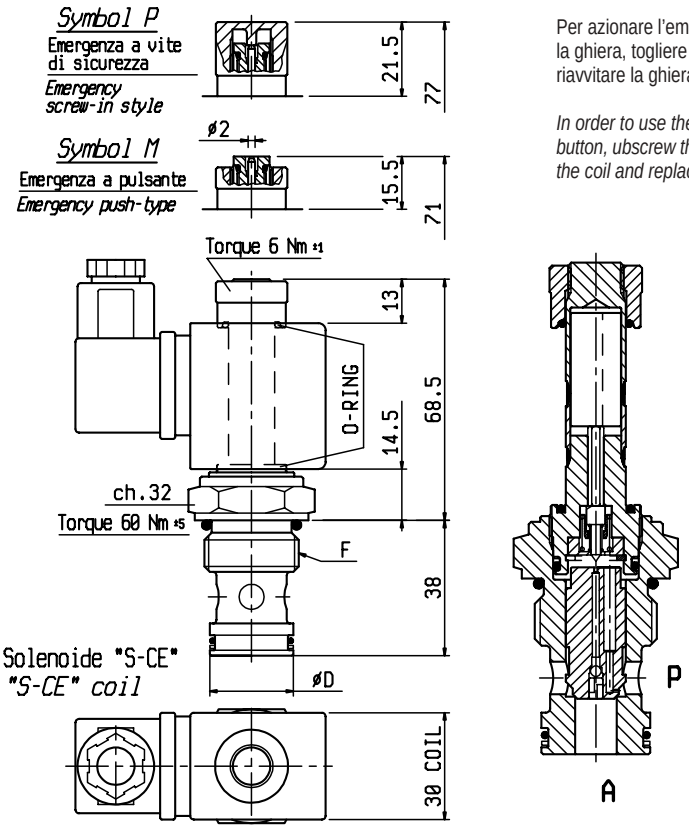
X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:* Diseccitato *De-energized*	Eccitato *Energized*
B		P→A A→P	P○>A A→P
M	 EMERGENCY PUSH TYPE	P→A A→P	P○>A A→P
P	 EMERGENCY SCREW-IN STYLE	P→A A→P	P○>A A→P

Nuova versione con bobina S-CE
New version with S-CE coil

Y	Cavità - *Cavity* N°	F	ØD
1	V096001	3/4"-16 UNF	15,87
2	V096004	3/4"-16 UNF	12,7
4	V096069	M20x1,5	15

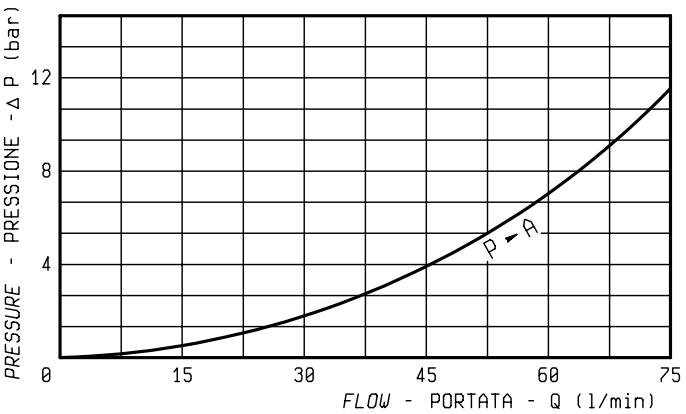
VALVOLE ELETTRICHE 2 VIE BIDIREZIONALI PILOTATE NORMALMENTE APERTE
2 way pilot operated solenoid valves, normally open

	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
CEI10-NA		**V3.896.66.X.0.0**
CEI10-NA+S-CE		**77.896.66.X.0.0.55.WW.J**



Per azionare l'emergenza svitare la ghiera, togliere il solenoide e riavvitare la ghiera.

In order to use the emergency button, ubscrew the lead, remove the coil and replace the lead.



Pressione max di lavoro *Max working pressure*	350 bar	Portata max *Max flow*	70 l/min

Solenoidi - *Coils*

WW	Tensione *Voltage*	WW	Tensione *Voltage*	WW	Tensione *Voltage*
OB	12V dc	**OV**	24V RAC	**OZ**	220V RAC
OC	24V dc	**OK**	48V RAC		
OD	48V dc	**OW**	110V RAC		

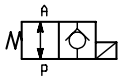
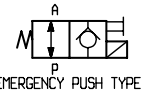
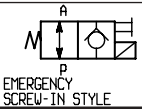
Connettori - *Connectors*

J	Senza *Without*	Standard *Standard*	Con raddrizzatore *With rectifier*	Attacco Kostal *Kostal connector*
	1	**2**	**3**	**4**

Descrizione *Description*

Soluzione classica pilotata ad otturatore conico e cannotto avvitato.
- Trafilamento interno virtualmente nullo (vedi pag. 9.50.08);
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.06);

This is a standard 2 way pilot operated valves poppet style with screwed tube.
- *Internal leakage: virtually zero (see on page 9.50.08);*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.06);*

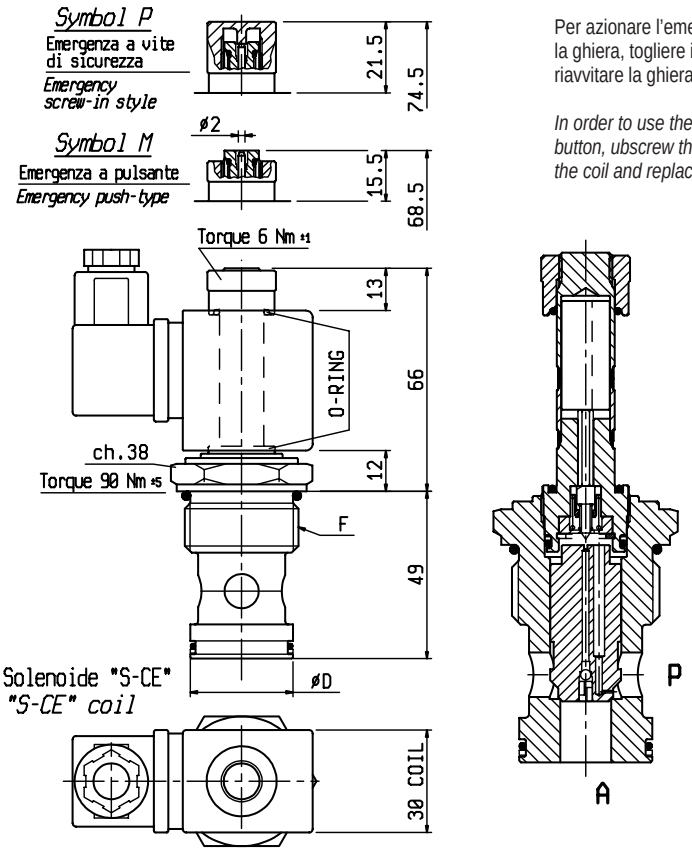
X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:* Diseccitato *De-energized*	Eccitato *Energized*
B		P→A A→P	P○>A A→P
M	 EMERGENCY PUSH TYPE	P→A A→P	P○>A A→P
P	 EMERGENCY SCREW-IN STYLE	P→A A→P	P○>A A→P

Nuova versione con bobina S-CE
New version with S-CE coil

Y	Cavità - *Cavity* N°	F	ØD
	V096005	3/4"BSPP	23,5

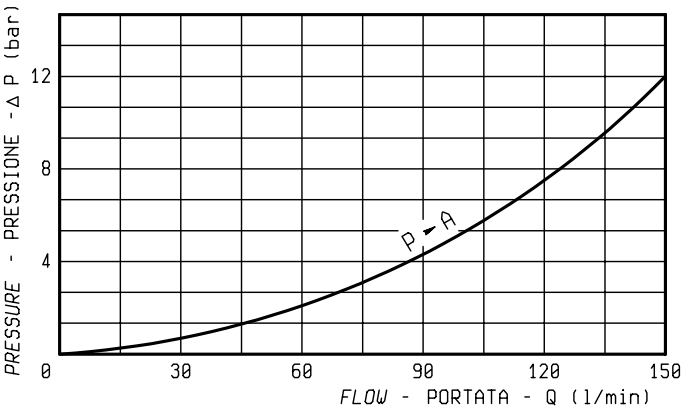
VALVOLE ELETTRICHE 2 VIE BIDIREZIONALI PILOTATE NORMALMENTE APERTE
2 way pilot operated solenoid valves, normally open

	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
CEI12-NA		**V3.896.67.X.0.0**
CEI12-NA+S-CE		**77.896.67.X.0.0.55.WW.J**



Per azionare l'emergenza svitare la ghiera, togliere il solenoide e riavvitare la ghiera.

In order to use the emergency button, ubscrew the lead, remove the coil and replace the lead.



Pressione max di lavoro *Max working pressure*	350 bar	Portata max *Max flow*	150 l/min

Solenoidi - *Coils*

WW	Tensione *Voltage*	WW	Tensione *Voltage*	WW	Tensione *Voltage*
OB	12V dc	**OV**	24V RAC	**OZ**	220V RAC
OC	24V dc	**OK**	48V RAC		
OD	48V dc	**OW**	110V RAC		

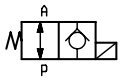
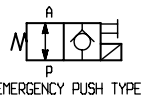
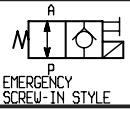
Connettori - *Connectors*

J	Senza *Without*	Standard *Standard*	Con raddrizzatore *With rectifier*	Attacco Kostal *Kostal connector*
	1	**2**	**3**	**4**

Descrizione *Description*

Soluzione classica pilotata ad otturatore conico e cannotto avvitato.
- Trafilamento interno virtualmente nullo (vedi pag. 9.50.08);
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.06);

This is a standard 2 way pilot operated valves poppet style with screwed tube.
- *Internal leakage: virtually zero (see on page 9.50.08);*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.06);*

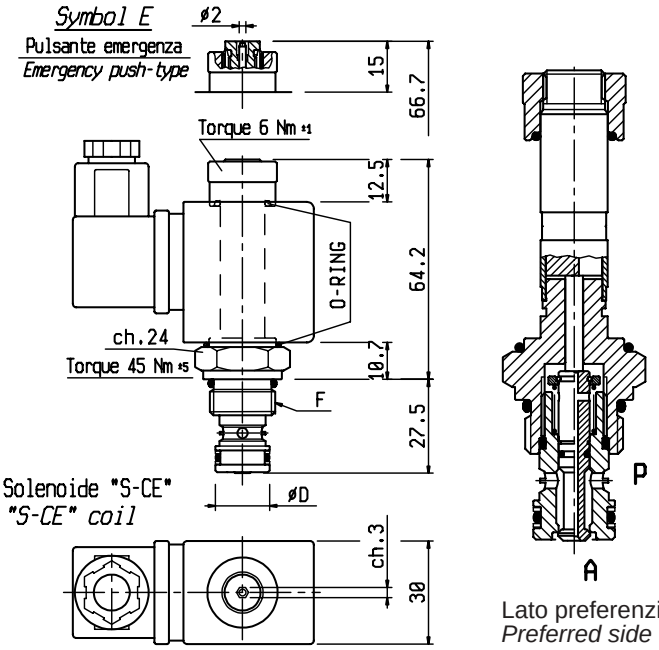
X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:* Diseccitato *De-energized*	Eccitato *Energized*
B		P→A A→P	P○>A A→P
M	 EMERGENCY PUSH TYPE	P→A A→P	P○>A A→P
P	 EMERGENCY SCREW-IN STYLE	P→A A→P	P○>A A→P

Nuova versione con bobina S-CE
New version with S-CE coil

Y	Cavità - *Cavity* N°	F	ØD
	V096006	1"BSPP	30

VALVOLE ELETTRICHE 2 VIE DIRETTE A DOPPIA TENUTA NORMALMENTE CHIUSE
2 way direct acting solenoid valves, double lock normally closed

	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
CE3-DT		**V3.896.22.X.Y.Z**
CE3-DT+S-CE		**77.896.22.X.Y.Z.55.WW.J**

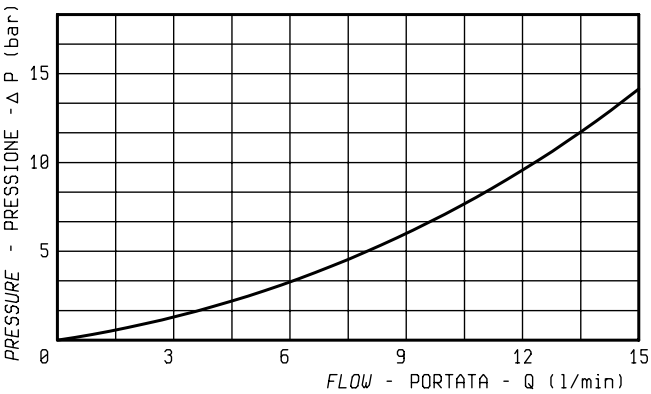


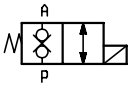
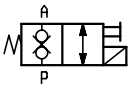
Lato preferenziale di tenuta: P
Preferred side for locking: P

Descrizione *Description*

Valvole che consentono il libero passaggio o il blocco a perfetta tenuta dell'olio su entrambe gli utilizzi P ed A;
- Trafilamento interno virtualmente nullo (vedi pag. 9.50.08);
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.06);

On this valve the oil can pass free or can be perfectly locked on each ports P & A:
- *Internal leakage: virtually zero (see on page 9.50.08);*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.06);*



X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:*	
		Diseccitato *De-energized*	Eccitato *Energized*
A		P○>A A○>P	P→A A→P
E		P○>A A○>P	P→A A→P

Tempi di risposta *Operating time*	Apertura - *Opening*	Chiusura - *Closing*
	15-20 ms	20-45 ms

Pressione max di lavoro *Max working pressure*	210 bar	Portata max *Max flow*	15 l/min 12 l/min(*)

(*) Valvola con filtro - *Valve with filter*

Z	Filtro - *Filter*	
	300 micron	
0	Senza filtro	*Without filter*
1	Con filtro	*With filter*

Solenoidi - *Coils*

WW	Tensione *Voltage*	WW	Tensione *Voltage*	WW	Tensione *Voltage*
OB	12V dc	OV	24V RAC	OZ	220V RAC
OC	24V dc	OK	48V RAC		
OD	48V dc	OW	110V RAC		

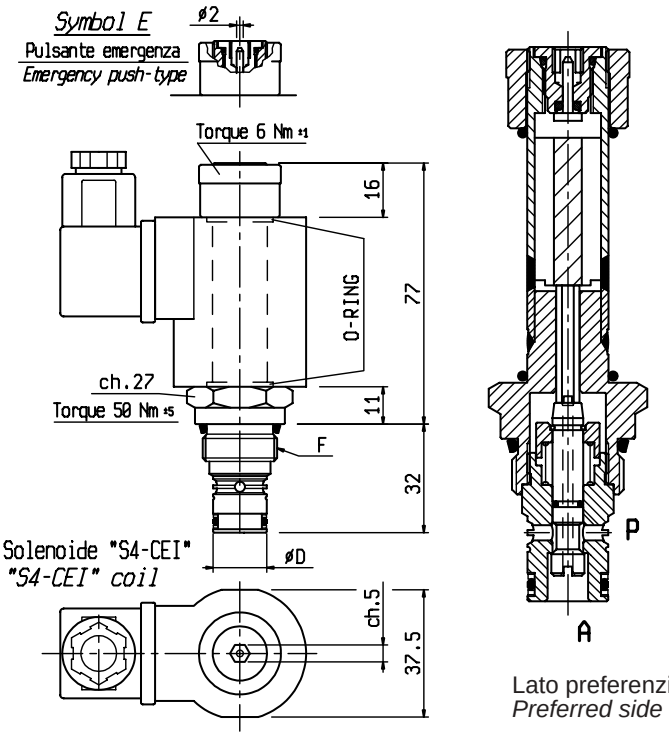
Y	Cavità - *Cavity*		
	N°	F	ØD
1	V096001	3/4"-16 UNF	15,87
2	V096004	3/4"-16 UNF	12,7
4	V096069	M20x1,5	15

Connettori - *Connectors*

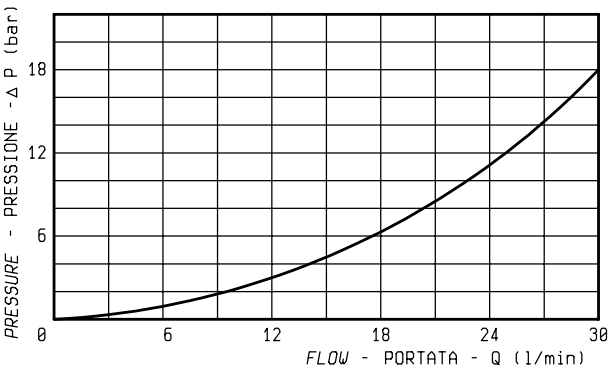
J	Senza *Without*	Standard *Standard*	Con raddrizzatore *With rectifier*	Attacco Kostal *Kostal connector*
	1	2	3	4

VALVOLE ELETTRICHE 2 VIE DIRETTE A DOPPIA TENUTA NORMALMENTE CHIUSE
2 way direct acting solenoid valves, double lock normally closed

	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
CEI16-DT		**V3.896.46.X.Y.Z**
CEI16-DT+S4-CEI		**77.896.46.X.Y.Z.37.WW.J**



Lato preferenziale di tenuta: P
Preferred side for locking: P



Tempi di risposta *Operating time*	Apertura - *Opening*	Chiusura - *Closing*
	15-25 ms	30-50 ms

Pressione max di lavoro *Max working pressure*	230 bar	Portata max *Max flow*	30 l/min 20 l/min(*)

(*) Valvola con filtro - *Valve with filter*

Solenoidi - *Coils*

WW	Tensione *Voltage*	WW	Tensione *Voltage*	WW	Tensione *Voltage*
OB	12V dc	**OV**	24V RAC	**OZ**	220V RAC
OC	24V dc	**OK**	48V RAC		
OD	48V dc	**OW**	110V RAC		

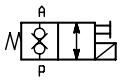
Connettori - *Connectors*

J	Senza *Without*	Standard *Standard*	Con raddrizzatore *With rectifier*	Attacco Kostal *Kostal connector*
	1	**2**	**3**	**4**

Descrizione *Description*

Valvole che consentono il libero passaggio o il blocco a perfetta tenuta dell'olio su entrambe gli utilizzi P ed A;
- Trafilamento interno virtualmente nullo (vedi pag. 9.50.08);
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.10);

On this valve the oil can pass free or can be perfectly locked on each ports P & A:
- *Internal leakage: virtually zero (see on page 9.50.08);*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.10);*

X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:*	
		Diseccitato *De-energized*	Eccitato *Energized*
E		P○>A A○>P	P→A A→P

Z	Filtro - *Filter*	
	300 micron	
0	Senza filtro	*Without filter*
1	Con filtro	*With filter*

Y	Cavità - *Cavity*		
	N°	F	ØD
5	V096077	7/8"-14 UNF	15,87

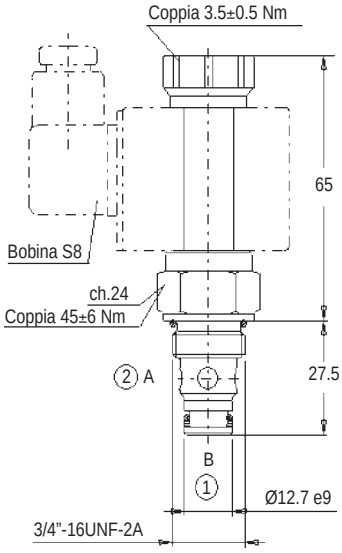
VALVOLE ELETTRICHE 2 VIE PILOTATE A DOPPIA TENUTA
2 way pilot operated double lock solenoid valves

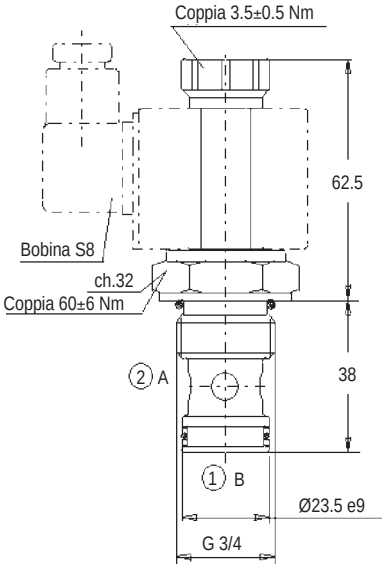
DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
VEI-8A-2T-06-NC-S	**OD.15.31.18.Y.00**
VEI-8A-2T-09-NC-S	**OD.15.31.17.Y.00**
VEI-8A-2T-12-NC-S	**OD.15.31.21.Y.00**

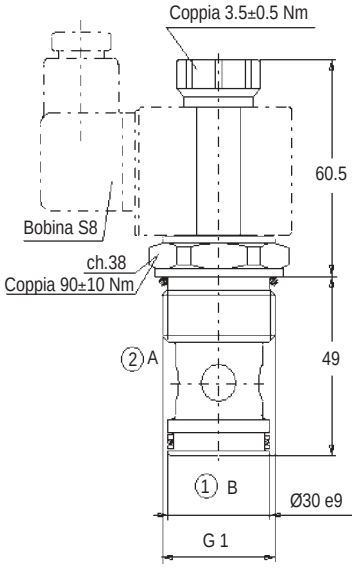
Descrizione *Description*

Sono valvole ad azionamento elettrico a 2 vie a doppia tenuta pilotate normalmente chiuse a cartuccia indicate per applicazioni in cui si richiede un trafilamento interno praticamente nullo.
- Filtrazione : 25 µm nominali o inferiore
- Minimo Voltaggio Richiesto : 90% del nominale
- Solenoidi da ordinare separatamente

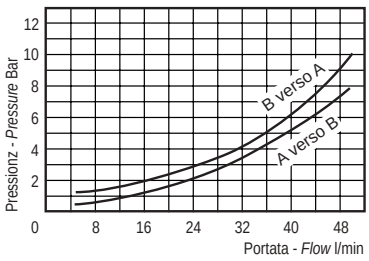
Two way, pilot operated, double lock normally closed poppet style solenoid cartridge valves, designed for applications requiring virtually zero internal leakage.
- *Filtration : 25 µm nominal or better*
- *Minimum Voltage Required : 90% of nominal*
- *Coils must be ordered separately*



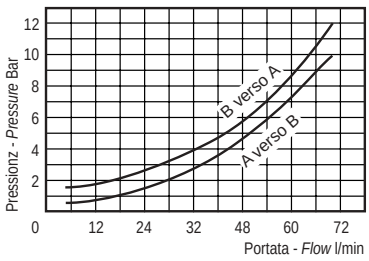




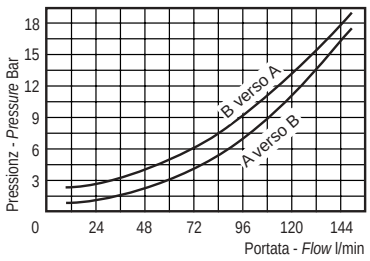
Perdite di carico - *Pressure drop*

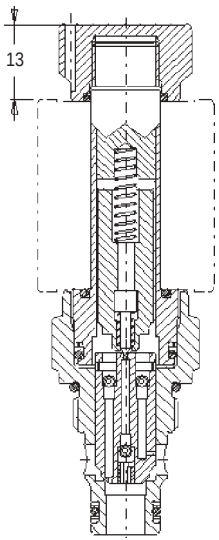


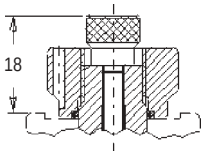
Perdite di carico - *Pressure drop*

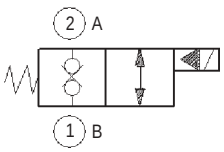


Perdite di carico - *Pressure drop*









Y	Opzioni - *Options*
37	Standard
47	Con emergenza a vite *With emergency screw*

Prodotto Edi System
Edi System product

PATENTED

Tipo valvola *Valve type*	Cavità *Cavity*	Pressione max lavoro *Max working pressure*	Portata max *Max flow*
VEI-8A-2T-06-NC-S	V096004	350 bar	40 l/min
VEI-8A-2T-09-NC-S	V096005	350 bar	70 l/min
VEI-8A-2T-12-NC-S	V096006	350 bar	150 l/min

Tipo valvola *Valve type*	Tempi di risposta - *Response time*	
	Apertura - *Opening*	Chiusura - *Closing*
VEI-8A-2T-06-NC-S	30-40 ms	75-110 ms
VEI-8A-2T-09-NC-S	45-60 ms	140-220 ms
VEI-8A-2T-12-NC-S	45-60 ms	180-240 ms

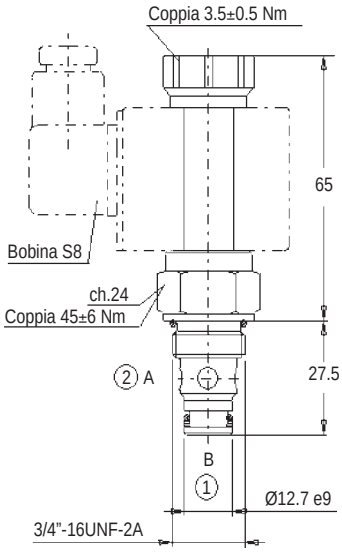
VALVOLE ELETTRICHE 2 VIE PILOTATE A DOPPIA TENUTA
2 way pilot operated double lock solenoid valves

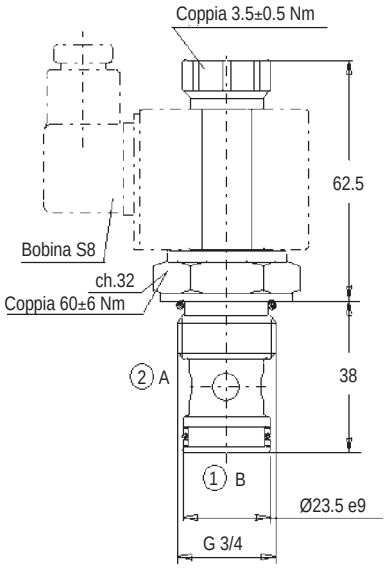
DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
VEI-8A-2T-06-NA-S	**OD.15.32.18.Y.00**
VEI-8A-2T-09-NA-S	**OD.15.32.17.Y.00**
VEI-8A-2T-12-NA-S	**OD.15.32.21.Y.00**

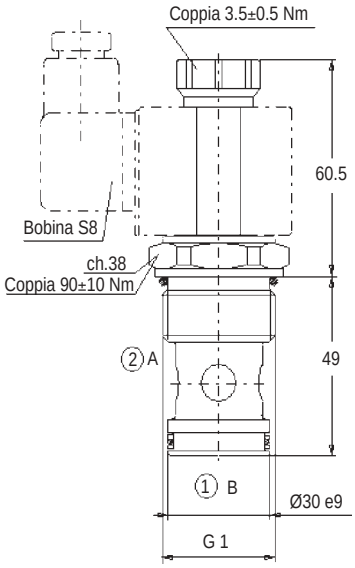
Descrizione *Description*

Sono valvole ad azionamento elettrico a 2 vie a doppia tenuta pilotate normalmente chiuse a cartuccia indicate per applicazioni in cui si richiede un trafilamento interno praticamente nullo.
- Filtrazione : 25 µm nominali o inferiore
- Minimo Voltaggio Richiesto : 90% del nominale
- Solenoidi da ordinare separatamente

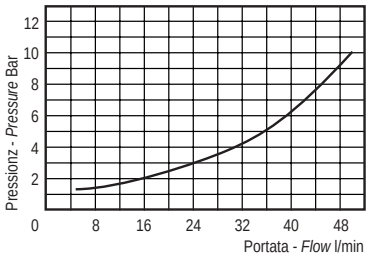
Two way, pilot operated, double lock normally closed poppet style solenoid cartridge valves, designed for applications requiring virtually zero internal leakage.
- *Filtration : 25 µm nominal or better*
- *Minimum Voltage Required : 90% of nominal*
- *Coils must be ordered separately*



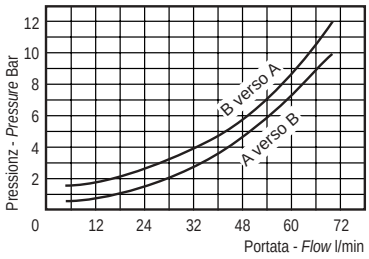




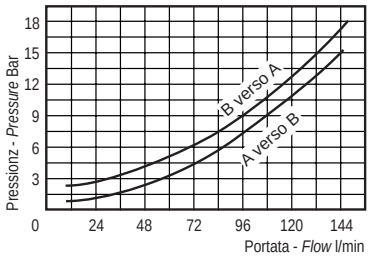
Perdite di carico - *Pressure drop*

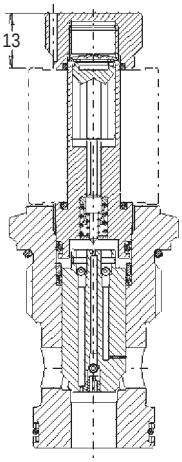


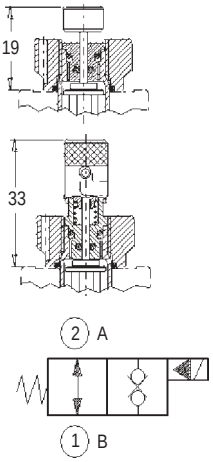
Perdite di carico - *Pressure drop*



Perdite di carico - *Pressure drop*







Y	Opzioni - *Options*
17	Standard
18	Con emergenza a spinta *With push emergency*
19	Con emergenza a spinta e rotazione *With push and spin emergency*

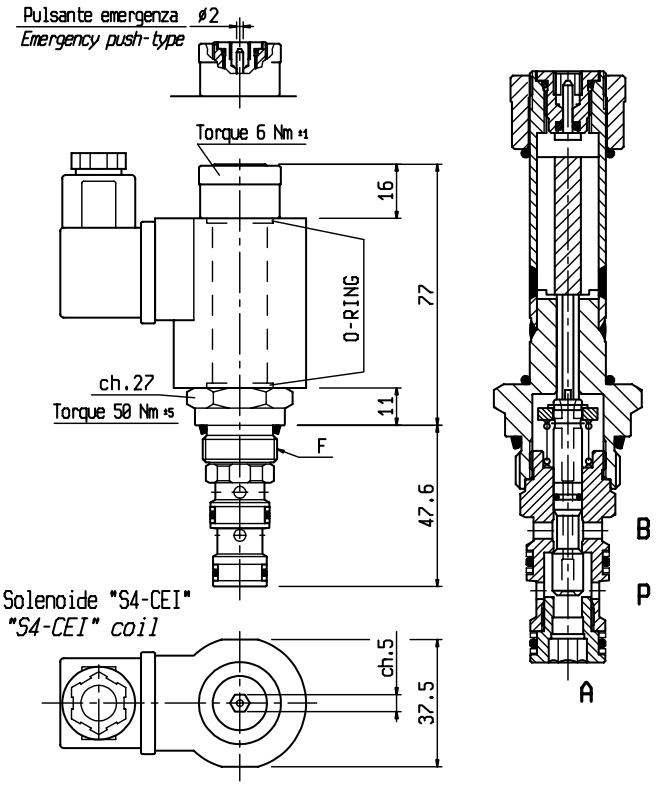
Prodotto Edi System
Edi System product

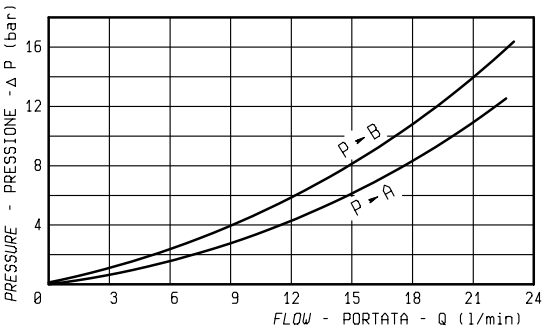
PATENTED

Tipo valvola *Valve type*	Cavità *Cavity*	Pressione max lavoro *Max working pressure*	Portata max *Max flow*
VEI-8A-2T-06-NA-S	V096004	350 bar	40 l/min
VEI-8A-2T-09-NA-S	V096005	350 bar	70 l/min
VEI-8A-2T-12-NA-S	V096006	350 bar	150 l/min

VALVOLE ELETTRICHE 3 VIE DIRETTA A TENUTA
3 way direct acting poppet style solenoid valves

V3D-DT	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*	**V3.896.43.A.Y.0**
V3D-DT+S4-CEI			**78.896.43.A.Y.0.37.WW.J**

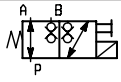
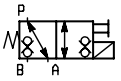
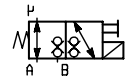




Descrizione *Description*

Valvole a 3 vie con otturatore conico a tenuta.
La pressione può arrivare da qualsiasi foro della cavità senza che il funzionamento venga compromesso:
- Trafilamento interno virtualmente nullo (vedi pag. 9.50.08);
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.10);

The oil can enter into any of cavity's holes without compromising its function:
- *Internal leakage: virtually zero (see on page 9.50.08);*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.10);*

	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:*	
		Diseccitato *De-energized*	Eccitato *Energized*
	 SELETTRICE *SELECTOR*	P↔A B o><o	P↔B A o><o
	 N.C. *NORMALLY CLOSED*	B o><o P↔A	B↔P A o><o
	 N.A. *NORMALLY OPEN*	A↔P B o><o	A o><o P↔B

Tempi di risposta *Operating time*	Apertura - *Opening*	Chiusura - *Closing*
	20-35 ms	40-60 ms

Pressione max di lavoro *Max working pressure*	250 bar	Portata max *Max flow*	20 l/min

Solenoidi - *Coils*

WW	Tensione *Voltage*	WW	Tensione *Voltage*	WW	Tensione *Voltage*
OB	12V dc	**OV**	24V RAC	**OZ**	220V RAC
OC	24V dc	**OK**	48V RAC		
OD	48V dc	**OW**	110V RAC		

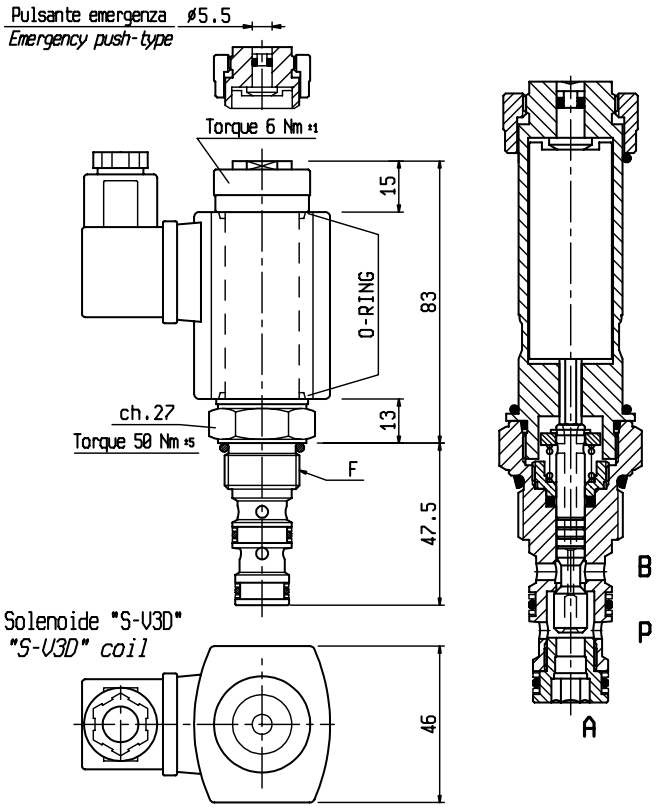
Connettori - *Connectors*

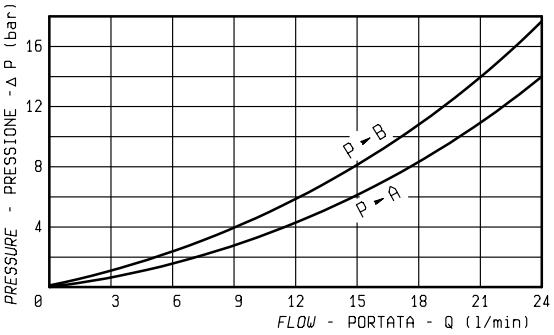
J	Senza *Without*	Standard *Standard*	Con raddrizzatore *With rectifier*	Attacco Kostal *Kostal connector*
	1	**2**	**3**	**4**

Y	Cavità - *Cavity*		
	N°	F	
0	V096002	7/8"-14 UNF	

VALVOLE ELETTRICHE 3 VIE 2 POSIZIONI DIRETTE A TENUTA
3 way 2 position direct acting poppet style solenoid valves

DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
V3D-CE	**V3.896.04.A.0.0**
V3D-CE+S-V3D	**78.896.04.A.0.0.25.WW.J**

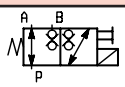
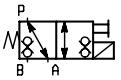
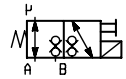




Descrizione *Description*

Valvole a 3 vie con otturatore conico a tenuta.
La pressione può arrivare da qualsiasi foro della cavità senza che il funzionamento venga compromesso:
- Trafilamento interno virtualmente nullo (vedi pag. 9.50.08);
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.10);

The oil can enter into any of cavity's holes without compromising its function:
- *Internal leakage: virtually zero (see on page 9.50.08);*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.10);*

	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:*	
		Diseccitato *De-energized*	Eccitato *Energized*
	 SELETTRICE *SELECTOR*	P↔A B o><o	P↔B A o><o
	 N.C. *NORMALLY CLOSED*	B o><o P↔A	B↔P A o><o
	 N.A. *NORMALLY OPEN*	A↔P B o><o	A o><o P↔B

Tempi di risposta *Operating time*	Apertura - *Opening*	Chiusura - *Closing*
	20-35 ms	40-60 ms

Pressione max di lavoro *Max working pressure*	300 bar	Portata max *Max flow*	25 l/min

Solenoidi - *Coils*

WW	Tensione *Voltage*	WW	Tensione *Voltage*	WW	Tensione *Voltage*
OB	12V dc	**OW**	110V RAC		
OC	24V dc	**OZ**	220V RAC		
OD	48V dc				

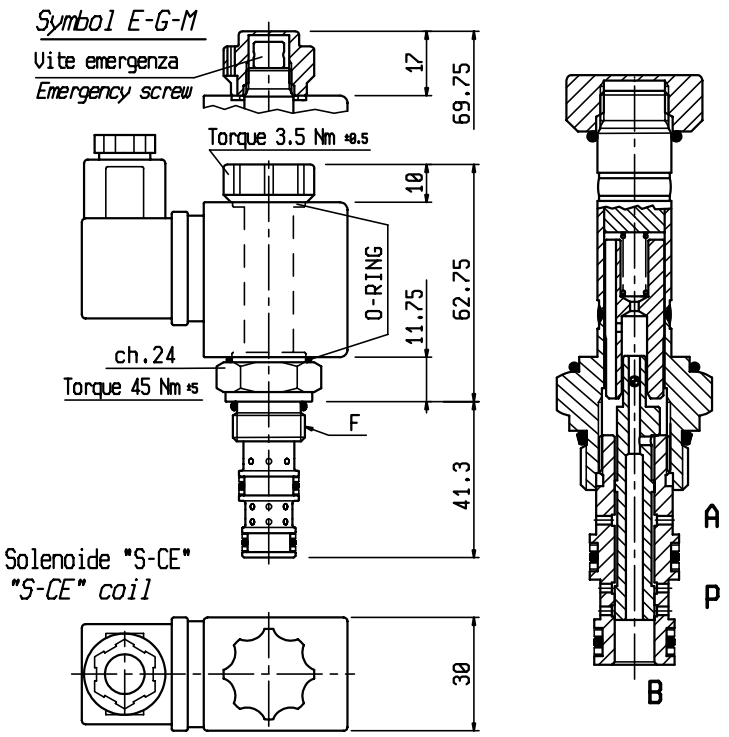
Connettori - *Connectors*

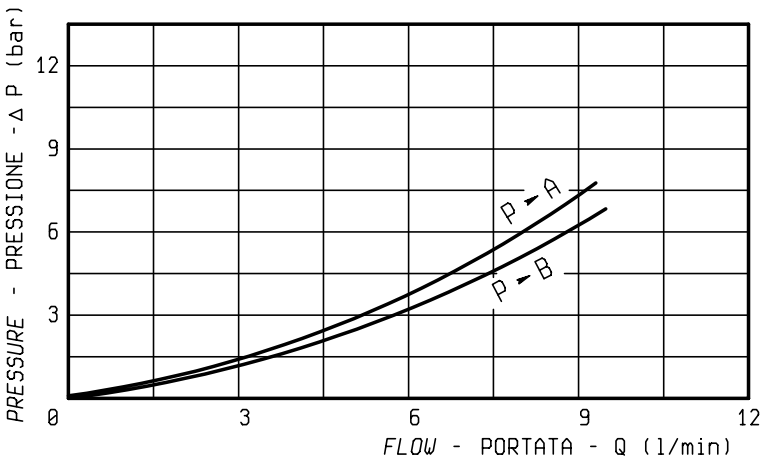
J	Senza *Without*	Standard *Standard*	Con raddrizzatore *With rectifier*	
	1	**2**	**3**	

	Cavità - *Cavity*		
	N°	F	
	V096002	7/8"-14 UNF	

VALVOLE ELETTRICHE 3 VIE 2 POSIZIONI A CURSORE
3 way 2 position solenoid valves, spool type

	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
V3DS-2P		**V3.896.55.X.Y.0**
V3DS-2P+S-CE		**78.896.55.X.Y.0.55.WW.J**





Pressione max di lavoro *Max working pressure*	210 bar	Portata max *Max flow*	8 l/min

Solenoidi - *Coils*

WW	Tensione *Voltage*	WW	Tensione *Voltage*	WW	Tensione *Voltage*
OB	12V dc	**OV**	24V RAC	**OZ**	220V RAC
OC	24V dc	**OK**	48V RAC		
OD	48V dc	**OW**	110V RAC		

Connettori - *Connectors*

J	Senza *Without*	Standard *Standard*	Con raddrizzatore *With rectifier*	Attacco Kostal *Kostal connector*
	1	**2**	**3**	**4**

Descrizione *Description*

Valvola a 3 vie 2 posizioni a cassetto di piccole dimensioni e di accurata lavorazione per montaggio in blocchi integrati di elevata compattezza.
- Trafilamento interno max: 60 cm^3/min a 210 bar con olio 46 CSt a 20°C
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.06);

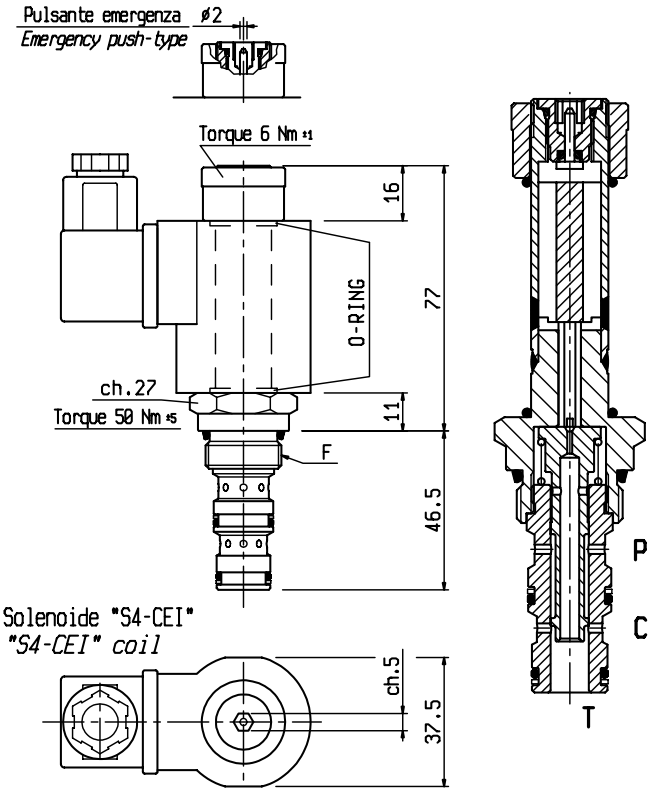
3 way 2 position valve, spool type on very small dimensions very useful for small integrated blocks.
- *Max Internal leakage: 60 cc/min at 210 bar with 46 cSt oil at 20°C.*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.06);*

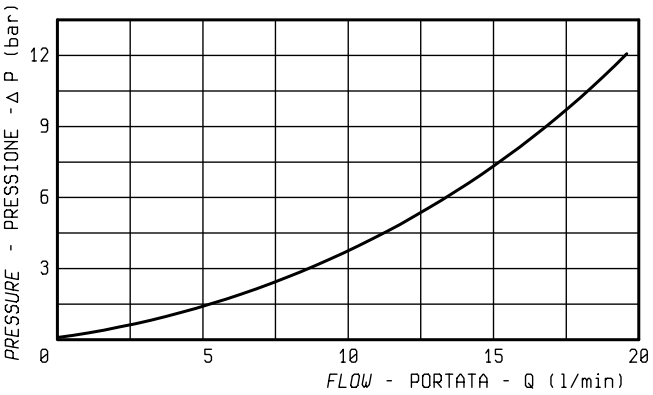
X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:* Diseccitato *De-energized*	Eccitato *Energized*
A	SELETTRICE *SELECTOR*	P→A B o>	P→B A o>
E	SELETTRICE *SELECTOR*	P→A B o>	P→B A o>
B	N.C. *NORMALLY CLOSED*	P o> A↔B	P↔B A o>
G	N.C. *NORMALLY CLOSED*	P o> A↔B	P↔B A o>
C	N.A. *NORMALLY OPEN*	P↔B A o>	P o> A↔B
M	N.A. *NORMALLY OPEN*	P↔B A o>	P o> A↔B

Y	Cavità - *Cavity* N°	F	
0	V096057	3/4"-16 UNF	

VALVOLE ELETTRICHE 3 VIE 2 POSIZIONI A CURSORE
3 way 2 position solenoid valve, spool type

	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
V3D-CEI-2P		**V3.896.37.X.1.0**
V3D-CEI-2P+S4-CEI		**78.896.37.X.1.0.37.WW.J**





Descrizione *Description*

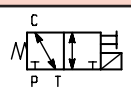
Valvola a 3 vie 2 posizioni a cassetto di piccole dimensioni e di accurata lavorazione per montaggio in blocchi integrati di elevata compattezza.
- Trafilamento interno max: 80 cm³/min a 210 bar con olio 46 CSt a 20°C
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.10);

3 way 2 position valve, spool type on very small dimensions very useful for small integrated blocks.
- *Max Internal leakage: 80 cc/min at 210 bar with 46 cSt oil at 20°C.*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.10);*

Pressione max di lavoro *Max working pressure*	210 bar	Portata max *Max flow*	20 l/min

Solenoidi - *Coils*					
WW	Tensione *Voltage*	**WW**	Tensione *Voltage*	**WW**	Tensione *Voltage*
OB	12V dc	**OV**	24V RAC	**OZ**	220V RAC
OC	24V dc	**OK**	48V RAC		
OD	48V dc	**OW**	110V RAC		

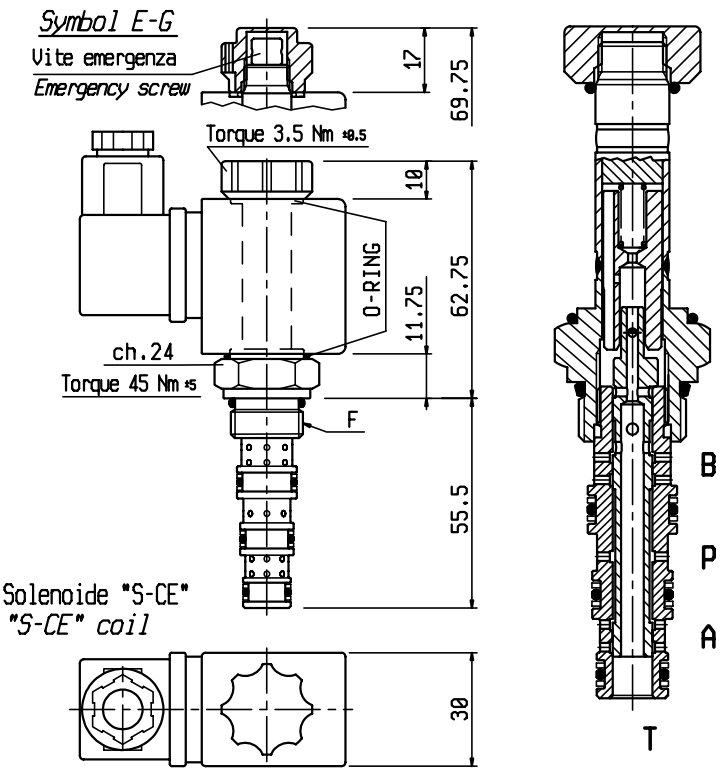
Connettori - *Connectors*				
J	Senza *Without*	Standard *Standard*	Con raddrizzatore *With rectifier*	Attacco Kostal *Kostal connector*
	1	**2**	**3**	**4**

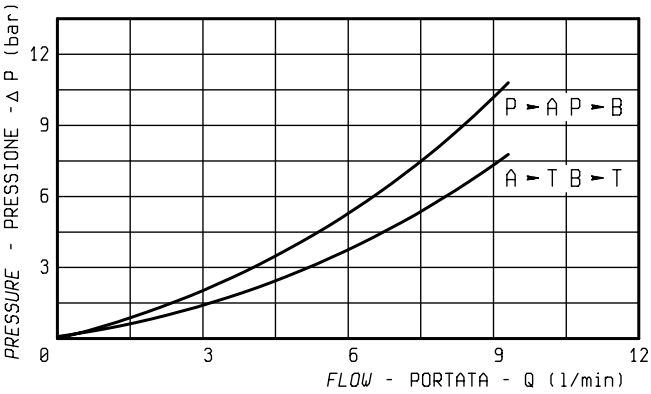
X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:*	
		Diseccitato *De-energized*	Eccitato *Energized*
A	 N.C. *NORMALLY CLOSED*	P o> C→T	P→C T o>

Y	Cavità - *Cavity*		
	N°	F	
	V096002	7/8"-14 UNF	

VALVOLE ELETTRICHE 4 VIE 2 POSIZIONI A CURSORE
4 way 2 position solenoid valves, spool type

V4DS-2P	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*	**V3.896.56.X.Y.0**
V4DS-2P+S-CE			**79.896.56.X.Y.0.55.WW.J**





Descrizione *Description*

Valvola a 4 vie 2 posizioni a cassetto di piccole dimensioni e di accurata lavorazione per montaggio in blocchi integrati di elevata compattezza.

- Trafilamento interno max: 60 cm^3/min a 210 bar con olio 46 CSt a 20°C
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.06);

4 way 2 position valve, spool type on very small dimensions very useful for small integrated blocks.

- *Max Internal leakage: 60 cc/min at 210 bar with 46 cSt oil at 20°C.*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.06);*

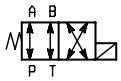
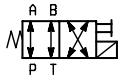
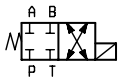
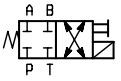
Pressione max di lavoro *Max working pressure*	210 bar	Portata max *Max flow*	8 l/min

Solenoidi - *Coils*

WW	Tensione *Voltage*	WW	Tensione *Voltage*	WW	Tensione *Voltage*
OB	12V dc	**OV**	24V RAC	**OZ**	220V RAC
OC	24V dc	**OK**	48V RAC		
OD	48V dc	**OW**	110V RAC		

Connettori - *Connectors*

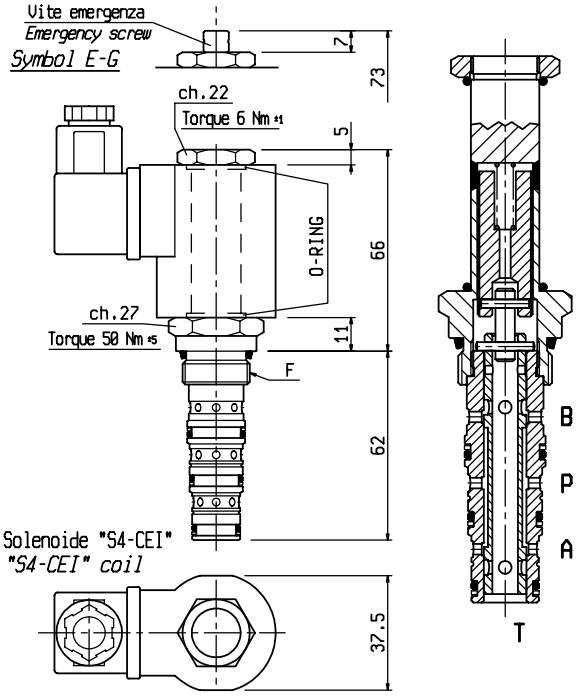
J	Senza *Without*	Standard *Standard*	Con raddrizzatore *With rectifier*	Attacco Kostal *Kostal connector*
	1	**2**	**3**	**4**

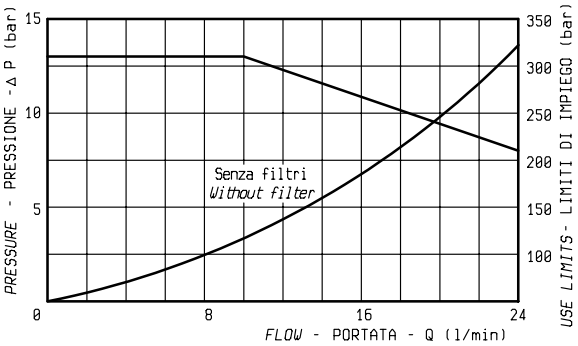
X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:* Diseccitato *De-energized*	Eccitato *Energized*
A		P↔A B↔T	P↔B A↔T
E		P↔A B↔T	P↔B A↔T
B		P A B T o><o P A B T	P↔B A↔T
G		P A B T o><o P A B T	P↔B A↔T

Y	Cavità - *Cavity*		
	N°	F	
0	V096032	3/4"-16 UNF	

VALVOLE ELETTRICHE 4 VIE 2 POSIZIONI A CURSORE
4 way 2 position solenoid valves, spool type

	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
V4DS4-2P		**V3.896.63.X.Y.Z**
V4DS4-2P+S4-CEI		**79.896.63.X.Y.Z.37.WW.J**





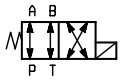
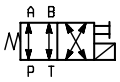
Descrizione *Description*

Valvola a 4 vie 2 posizioni a cassetto di piccole dimensioni e di accurata lavorazione per montaggio in blocchi integrati di elevata compattezza.

- Trafilamento interno max: 80 cm^3/min a 210 bar con olio 46 CSt a 20°C
- Filtrazione 25 micron nominali o inferiore;
- Caratteristiche solenoide (vedi pag. 2.50.10);

4 way 2 position valve, spool type on very small dimensions very useful for small integrated blocks.

- *Max Internal leakage: 80 cc/min at 210 bar with 46 cSt oil at 20°C.*
- *Filtration level: 25 micron or better;*
- *Coils features (see on page 2.50.10);*

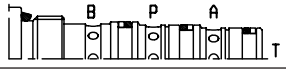
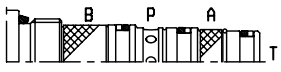
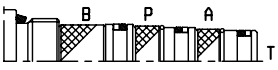
X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:*	
		Diseccitato *De-energized*	Eccitato *Energized*
A		P↔A B↔T	P↔B A↔T
E		P↔A B↔T	P↔B A↔T

Z	Cavità - *Cavity*		
	N°	F	
0	V096074	7/8"-14 UNF	

Pressione max di lavoro *Max working pressure*	Vedi diagramma *See diagram*	Portata max *Max flow*	25 l/min

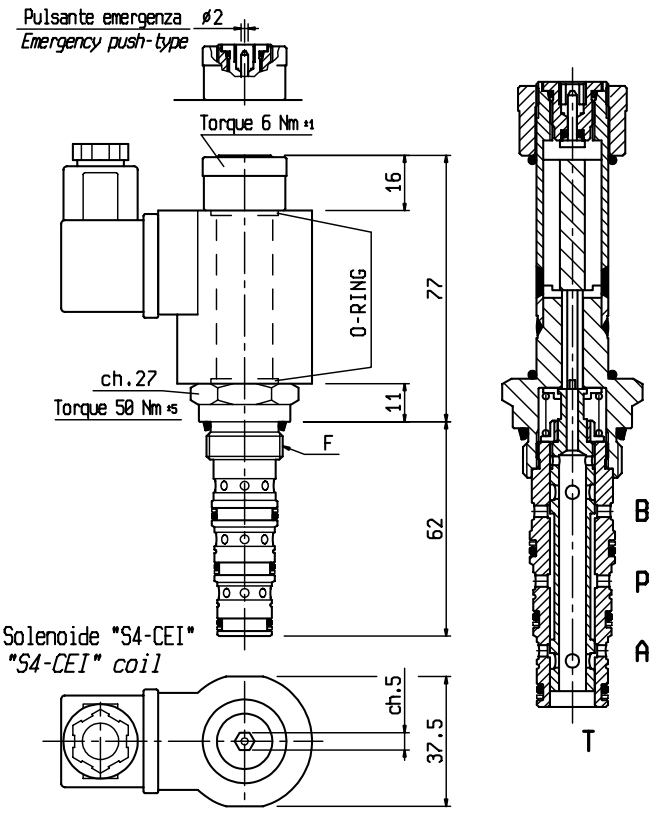
Solenoidi - *Coils*					
WW	Tensione *Voltage*	WW	Tensione *Voltage*	WW	Tensione *Voltage*
OB	12V dc	OV	24V RAC	OZ	220V RAC
OC	24V dc	OK	48V RAC		
OD	48V dc	OW	110V RAC		

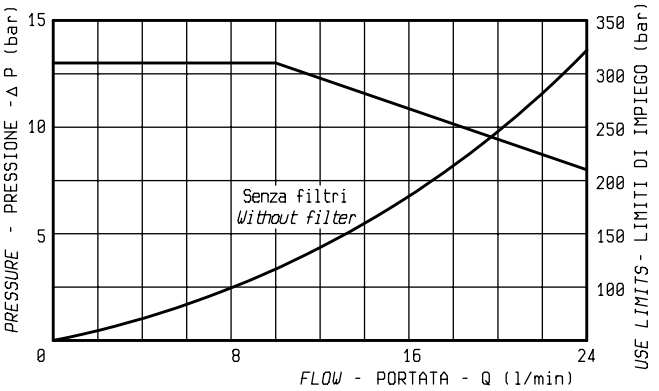
Connettori - *Connectors*				
J	Senza *Without*	Standard *Standard*	Con raddrizzatore *With rectifier*	Attacco Kostal *Kostal connector*
	1	2	3	4

Y	Filtri - *Filter*
1	Senza filtri *Without filter* 
2	Filtri su A e B *With filter on A-B* 
3	Filtri su P-A-B *With filter on P-A-B* 

VALVOLE ELETTRICHE 4 VIE 2 POSIZIONI A CURSORE
4 way 2 position solenoid valves, spool type

DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
V4D-CEI-2P	**V3.896.31.X.Y.0**
V4D-CEI-2P+S4-CEI	**79.896.31.X.Y.0.37.WW.J**





Pressione max di lavoro *Max working pressure*	Vedi diagramma *See diagram*	Portata max *Max flow*	25 l/min

Solenoidi - *Coils*

WW	Tensione *Voltage*	WW	Tensione *Voltage*	WW	Tensione *Voltage*
OB	12V dc	**OV**	24V RAC	**OZ**	220V RAC
OC	24V dc	**OK**	48V RAC		
OD	48V dc	**OW**	110V RAC		

Connettori - *Connectors*

J	Senza *Without*	Standard *Standard*	Con raddrizzatore *With rectifier*	Attacco Kostal *Kostal connector*
	1	**2**	**3**	**4**

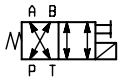
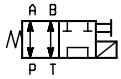
Descrizione *Description*

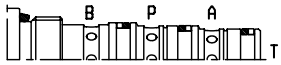
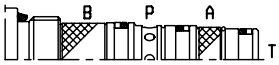
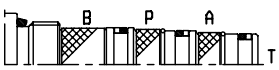
Valvola a 4 vie 2 posizioni a cassetto di piccole dimensioni e di accurata lavorazione per montaggio in blocchi integrati di elevata compattezza.

- Trafilamento interno max: 80 cm^3/min a 210 bar con olio 46 CSt a 20°C
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.10);

4 way 2 position valve, spool type on very small dimensions very useful for small integrated blocks.

- *Max Internal leakage: 80 cc/min at 210 bar with 46 cSt oil at 20°C.*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.10);*

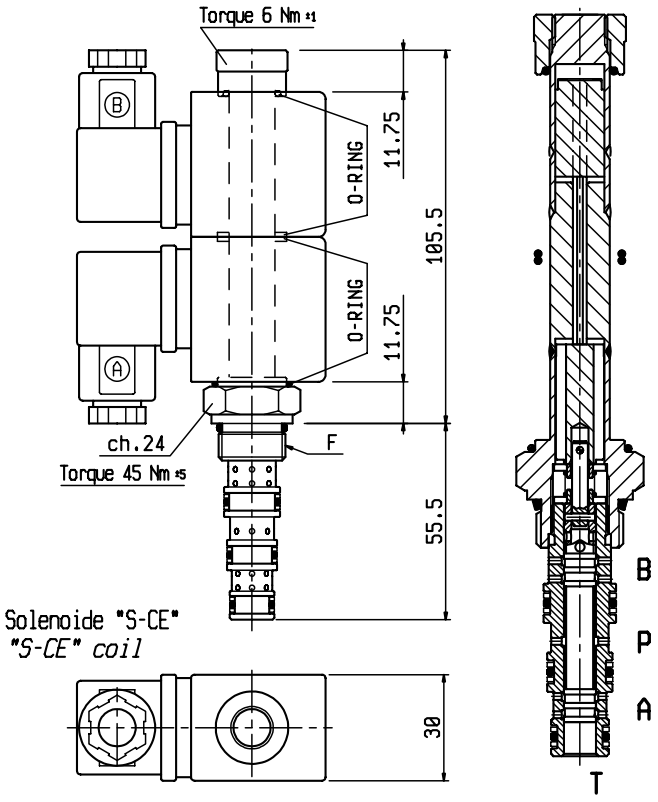
X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:* Diseccitato *De-energized*	Eccitato *Energized*
A		P↔B A↔T	P↔A B↔T
D		P↔A B↔T	P↔T A o> B o>

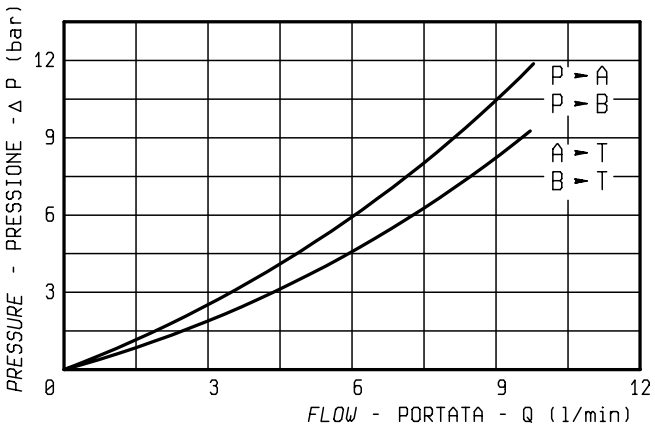
Y	Filtri - *Filter*
1	Senza filtri *Without filter* 
2	Filtri su A e B *With filter on A-B* 
3	Filtri su P-A-B *With filter on P-A-B* 

	Cavità - *Cavity*		
	N°	F	
	V096074	7/8"-14 UNF	

VALVOLE ELETTRICHE 4 VIE 3 POSIZIONI A CURSORE
4 way 3 position solenoid valves, spool type

	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*
V4DS-3P		**V3.896.57.X.Y.0**
V4DS-3P+S-CE		**79.896.57.X.Y.0.55.WW.J**





Pressione max di lavoro *Max working pressure*	210 bar	Portata max *Max flow*	8 l/min

Solenoidi - *Coils*

WW	Tensione *Voltage*	WW	Tensione *Voltage*	WW	Tensione *Voltage*
OB	12V dc	**OV**	24V RAC	**OZ**	220V RAC
OC	24V dc	**OK**	48V RAC		
OD	48V dc	**OW**	110V RAC		

Connettori - *Connectors*

J	Senza *Without*	Standard *Standard*	Con raddrizzatore *With rectifier*	Attacco Kostal *Kostal connector*
	1	**2**	**3**	**4**

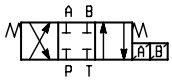
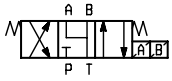
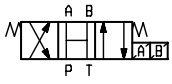
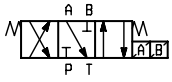
Descrizione *Description*

Valvola a 4 vie 3 posizioni a cassetto di piccole dimensioni e di accurata lavorazione per montaggio in blocchi integrati di elevata compattezza.

- Trafilamento interno max: 60 cm^3/min a 210 bar con olio 46 CSt a 20°C
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.06);

4 way 3 position valve, spool type on very small dimensions very useful for small integrated blocks.

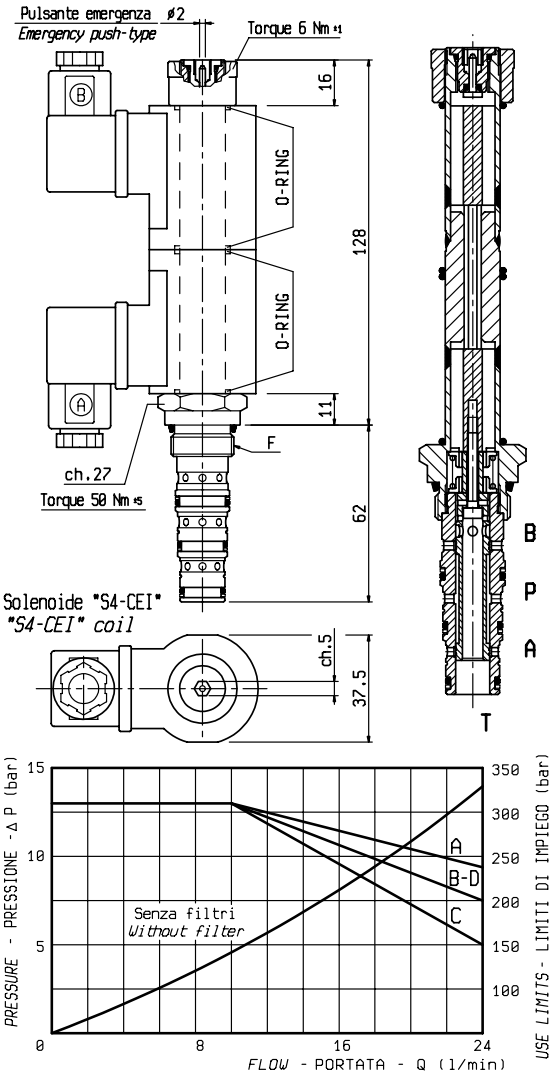
- *Max Internal leakage: 60 cc/min at 210 bar with 46 cSt oil at 20°C.*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.06);*

X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:* Eccitato **A** *Energized **A***	Diseccitato *De-energized*	Eccitato **B** *Energized **B***
A		P→B A→T	P P A o><o A B B T T	P→A B→T
B		P→B A→T	A→T B→T P o>	P→A B→T
C		P→B A→T	P P A ↔ A B B T T	P→A B→T
D		P→B A→T	P o> B o> A→T	P→A B→T

Y	Cavità - *Cavity* N°	F	
0	V096032	3/4"-16 UNF	

VALVOLE ELETTRICHE 4 VIE 3 POSIZIONI A CURSORE
4 way 3 position solenoid valve, spool type

V4D-CEI-3P	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*	**V3.896.33.X.Y.Z**
V4D-CEI-3P+S4-CEI			**79.896.33.X.Y.Z.37.WW.J**



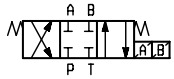
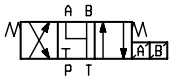
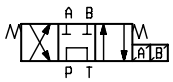
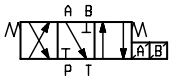
Descrizione *Description*

Valvola a 4 vie 3 posizioni a cassetto di piccole dimensioni e di accurata lavorazione per montaggio in blocchi integrati di elevata compattezza.

- Trafilamento interno max: 80 cm³/min a 210 bar con olio 46 CSt a 20°C
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.10);

4 way 3 position valve, spool type on very small dimensions very useful for small integrated blocks.

- *Max Internal leakage: 80 cc/min at 210 bar with 46 cSt oil at 20°C.*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.10);*

X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:*		
		Eccitato **A** *Energized A*	Diseccitato *De-energized*	Eccitato **B** *Energized B*
A		P→B A→T	P P A o><o A B B T T	P→A B→T
B		P→B A→T	A→T B→T P o>	P→A B→T
C		P→B A→T	A o> B o> P→T	P→A B→T
E		P→B A→T	P o> B o> A→T	P→A B→T

Z	Cavità - *Cavity*		
	N°	F	
0	V096074	7/8"-14 UNF	

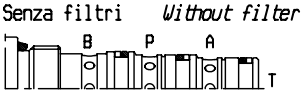
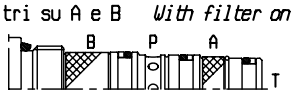
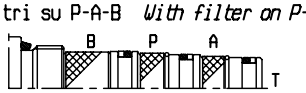
Pressione max di lavoro *Max working pressure*	Vedi diagramma *See diagram*	Portata max *Max flow*	25 l/min

Solenoidi - *Coils*

WW	Tensione *Voltage*	**WW**	Tensione *Voltage*	**WW**	Tensione *Voltage*
OB	12V dc	**OV**	24V RAC	**OZ**	220V RAC
OC	24V dc	**OK**	48V RAC		
OD	48V dc	**OW**	110V RAC		

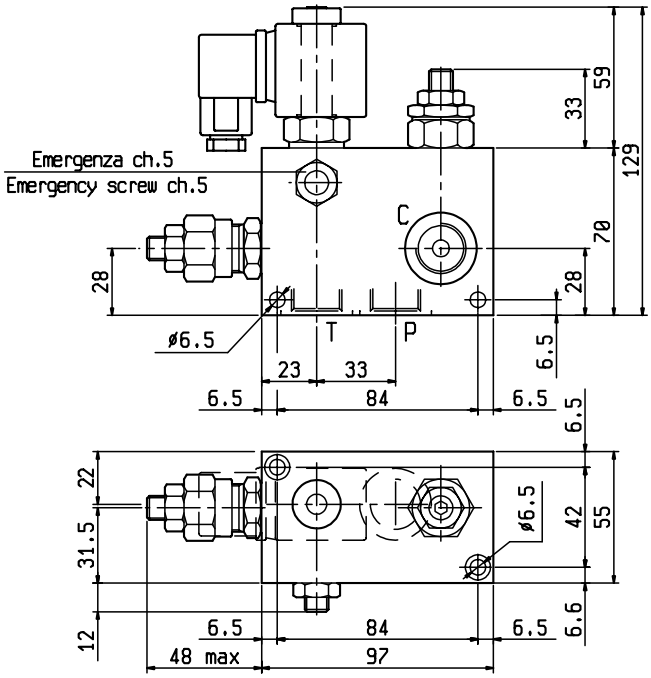
Connettori - *Connectors*

J	Senza *Without*	Standard *Standard*	Con raddrizzatore *With rectifier*	Attacco Kostal *Kostal connector*
	1	**2**	**3**	**4**

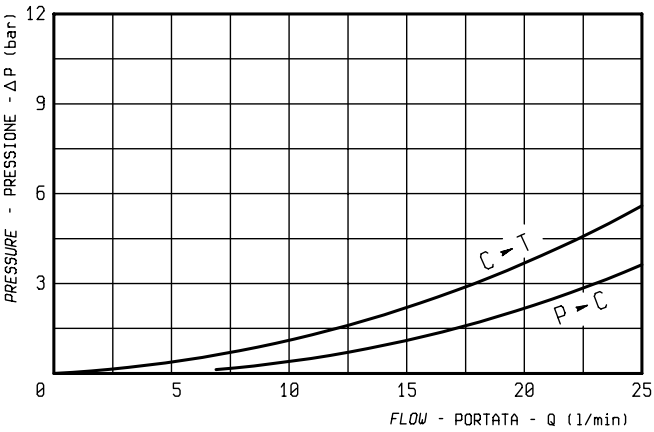
Y	Filtri - *Filter*
	300 micron
1	Senza filtri *Without filter* 
2	Filtri su A e B *With filter on A-B* 
3	Filtri su P-A-B *With filter on P-A-B* 

VALVOLE ELETTRICHE PER COMANDO CILINDRO A SEMPLICE EFFETTO
Solenoid valve for single acting cylinder

CE6-VM-VU-ST	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*	V3.880.06.X.Y.Z



Solenoidi: “S-CE” (da ordinare separatamente)
Coils: “S-CE” (to be ordered separately)



Pressione max di lavoro *Max working pressure*	300 bar	Portata max *Max flow*	25 l/min

Molle - *Springs*

Z	Campo di taratura *Pressure range* (bar)	Taratura standard *Standard setting* (bar)	Codice di ordinazione *Ordering code*	Colore *Colour*
2	30 – 100	100 (at 5 l/min)		Blu / *Blue*
3	50 – 210	200 (at 5 l/min)		Verde / *Green*
4	100 – 350	350 (at 5 l/min)		Giallo / *Yellow*

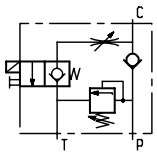
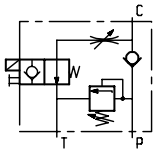
Descrizione *Description*

Circuiti integrati per impianti con cilindro S.E.: con un pulsante si comanda l’avviamento del motore elettrico ed il conseguente sollevamento del carico; con un secondo pulsante, eccitando il solenoide, si ottiene la discesa del carico alla velocità prestabilita. Con motore fermo e solenoide diseccitato si ha la sicurezza di una perfetta tenuta. La valvola di controllo pressione è in grado di evitare picchi di pressione indesiderati.

- Trafilamento interno virtualmente nullo (vedi pag. 9.50.08);
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.06)

These blocks are typically used in hydraulic lifts with single acting cylinder. Whit the NC solenoid valve the load lifting is obtained by starting the pump and the lowering by energizing the solenoid valve; when the pump and the solenoid valve are off, the perfect load-holding is ensured.
The relief valve avoid undesired pick pressure.

- *Internal leakage: virtually zero (see on page 9.50.08);*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.06)*

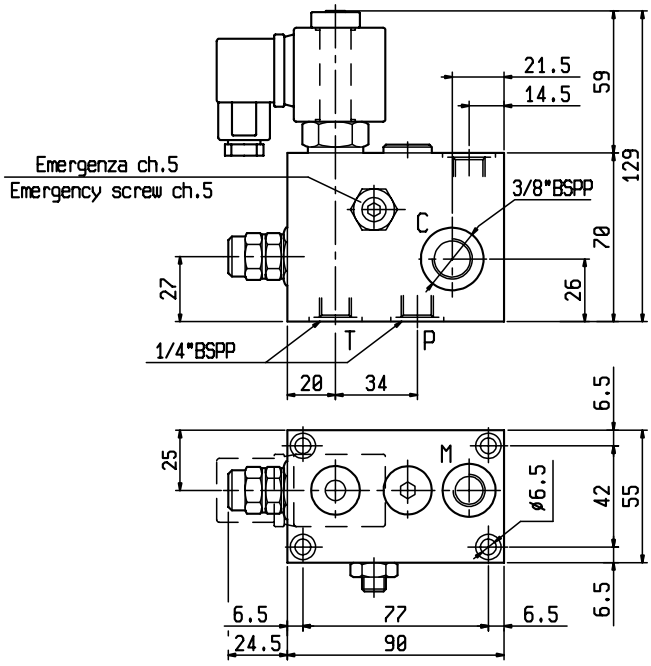
X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:*	
		Diseccitato *De-energized*	Eccitato *Energized*
A		P→C Co>T	C→T
B		P→T C→T	Co>T

Y	Attacchi - *Ports size*
	P - T - C
1	1/4”BSPP
2	3/8”BSPP
3	1/2”BSPP

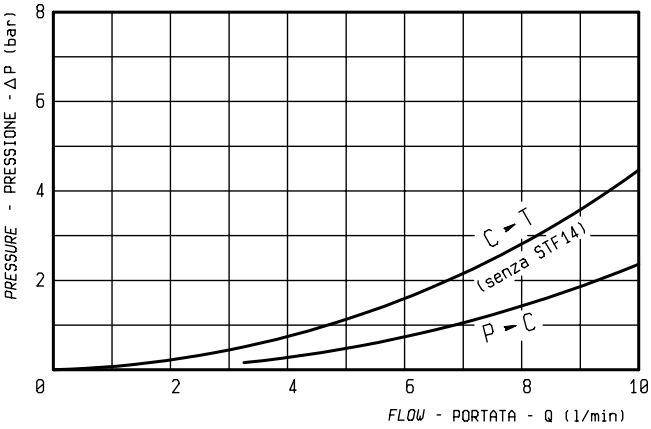
VALVOLE ELETTRICHE PER COMANDO CILINDRO A SEMPLICE EFFETTO
Solenoid valve for single acting cylinder

CE1-VM-VU-STF14 DENOMINAZIONE VALVOLA *Valve denomination*

CODICE ORDINAZIONE *Ordering code* **V3.880.40.X.Y.Z**



Solenoidi: "S-CE" (da ordinare separatamente)
Coils: "S-CE" (to be ordered separately)



Pressione max di lavoro *Max working pressure*	250 bar	Portata max *Max flow*	10 l/min

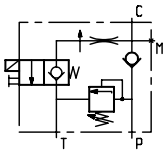
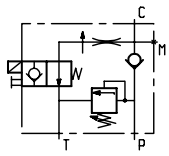
Descrizione *Description*

Circuiti integrati per impianti con cilindro S.E.: con un pulsante si comanda l'avviamento del motore elettrico ed il conseguente sollevamento del carico; con un secondo pulsante, eccitando il solenoide, si ottiene la discesa del carico alla velocità prestabilita. Con motore fermo e solenoide diseccitato si ha la sicurezza di una perfetta tenuta. La valvola di controllo pressione è in grado di evitare picchi di pressione indesiderati.

- Trafilamento interno virtualmente nullo (vedi pag. 9.50.08);
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.06)

These blocks are typically used in hydraulic lifts with single acting cylinder. Whit the NC solenoid valve the load lifting is obtained by starting the pump and the lowering by energizing the solenoid valve; when the pump and the solenoid valve are off, the perfect load-holding is ensured.
The relief valve avoid undesired pick pressure.

- *Internal leakage: virtually zero (see on page 9.50.08);*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.06)*

X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:* Diseccitato *De-energized*	Eccitato *Energized*
A		P→C Co>T	C→T
B		P→T C→T	Co>T

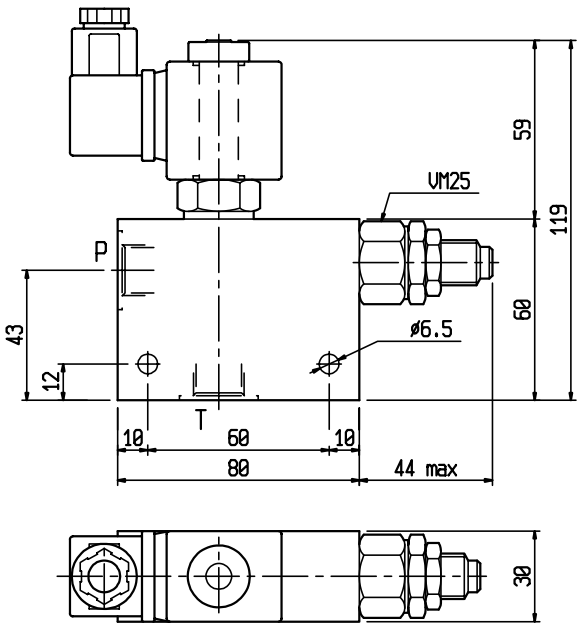
Molle - *Springs*

Y	Campo di taratura *Pressure range* (bar)	Taratura standard *Standard setting* (bar)	Codice di ordinazione *Ordering code*	Colore *Colour*
1	5 – 50	30 (at 5 l/min)		Nero / *Black*
2	30 – 120	80 (at 5 l/min)		Blu / *Blue*
3	80 – 250	150 (at 5 l/min)		Verde / *Green*

Z	Portata regolata STF14 *STF14 regulated flow*		
Codice *Code*	l/min (±10%)	Codice *Code*	l/min (±10%)
0	Senza / without	E	5
A	1	F	6
B	2	G	7
C	3	H	8
D	4	L	10

VALVOLE DI MASSIMA CON BY-PASS A COMANDO ELETTRICO
Relief valve with solenoid operated by-pass

CE6-VM25	DENOMINAZIONE VALVOLA *Valve denomination*	CODICE ORDINAZIONE *Ordering code*	V3.880.09.X.Y.Z

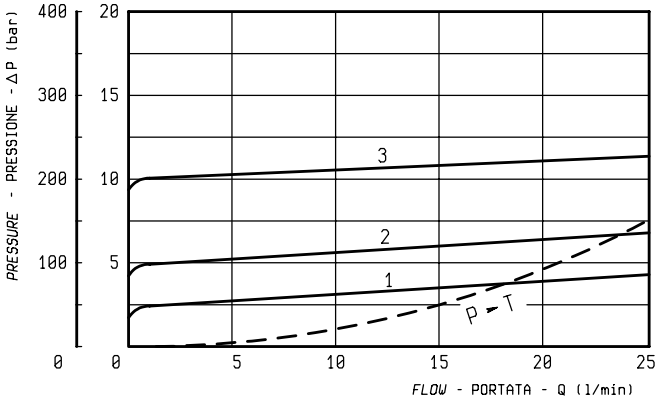


Solenoidi: “S-CE” (da ordinare separatamente)
Coils: “S-CE” (to be ordered separately)

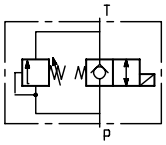
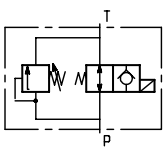
Descrizione *Description*

Modulo integrato impiegato in circuiti ove si richieda controllo della pressione di funzionamento e possibilità di mettere a scarico la portata mediante un by-pass a comando elettrico.
- Elemento controllo pressione ad otturatore conico guidato tipo VM25;
- Trafilamento interno virtualmente nullo (vedi pag. 9.50.08);
- Filtrazione 25 micron nominali o inferiore;
- Voltaggio minimo richiesto: 90% del nominale;
- Caratteristiche solenoide (vedi pag. 2.50.06)

These blocks can be used in circuits where relief protection and solenoid operated by-pass features are required.
- *Pressure control poppet style;*
- *Internal leakage: virtually zero (see on page 9.50.08);*
- *Filtration level: 25 micron or better;*
- *Minimum operating voltage: 90% of nominal;*
- *Coils features (see on page 2.50.06)*



Pressione max di lavoro *Max working pressure*	300 bar	Portata max *Max flow*	25 l/min

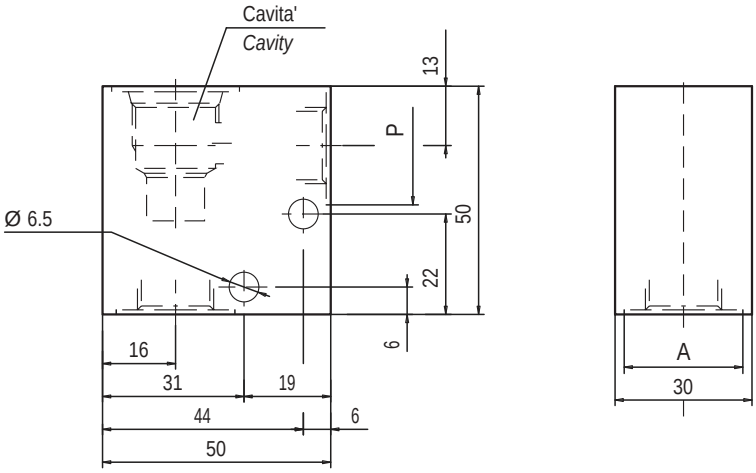
X	Schema *Symbol*	Funzioni possibili con solenoide: *Operating features with solenoid:* Diseccitato *De-energized*	Eccitato *Energized*
A		Po>T	P→T
B		P→T	Po>T

Z	Campo di taratura *Pressure range* (bar)	Taratura standard *Standard setting* (bar)	Codice di ordinazione *Ordering code*	Colore *Colour*
1	5 – 100	50 (at 5 l/min)		Nero / *Black*
2	40 – 200	100 (at 5 l/min)		Blu / *Blue*
3	70 – 350	200 (at 5 l/min)		Verde / *Green*

Y	Attacchi - *Port size*
	P - T
2	3/8”BSPP
3	1/2”BSPP

COLLETTORI IN ALLUMINIO PER VALVOLE A CARTUCCIA
Aluminium manifolds

CODICE ORDINAZIONE *Ordering code* **B3.857.XX.000**



Descrizione *Description*

Linea di collettori in alluminio estruso AL 2011 UNI9002/5 per il montaggio in cavità unificate di tutta la nostra gamma di valvole.

Manifold obtained from extruded aluminium AL 2011 UNI9002/5 for assembling all our valves on unified cavity.

Pressione max di lavoro *Max working pressure*	300 bar

XX	Attacchi P-A *Port size P-A*	Cavità N° *Cavity N°*	Peso Kg. *Weight Kg.*
62	1/4" BSPP	V096004	0.16
63	3/8" BSPP		

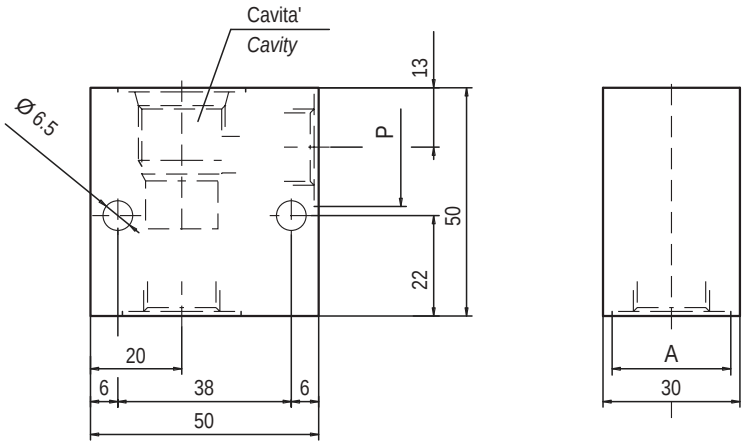
COMPOSIZIONE CODICE BLOCCO+VALVOLA+SOLENOIDE
ORDERING CODE FOR MANIFOLD+VALVE+COIL

96.7.XX.YY.YYY.WW.WWW

- Codice blocco *Manifold code*
- Codice valvola (ultime 5 cifre) *Valve code (last 5 numbers)*
- Codice solenoide (ultime 5 cifre) *Coil code (last 5 numbers)*

COLLETTORI IN ALLUMINIO PER VALVOLE A CARTUCCIA
Aluminium manifolds

CODICE ORDINAZIONE *Ordering code* **B3.857.XX.000**



Descrizione *Description*

Linea di collettori in alluminio estruso AL 2011 UNI9002/5 per il montaggio in cavità unificate di tutta la nostra gamma di valvole.

Manifold obtained from extruded aluminium AL 2011 UNI9002/5 for assembling all our valves on unified cavity.

Pressione max di lavoro *Max working pressure*	300 bar

XX	Attacchi P-A *Port size P-A*	Cavità N° *Cavity N°*	Peso Kg. *Weight Kg.*
32	1/4" BSPP	V096001	0.16
11	3/8" BSPP		
45	1/4" BSPP	V096004	
40	3/8" BSPP		

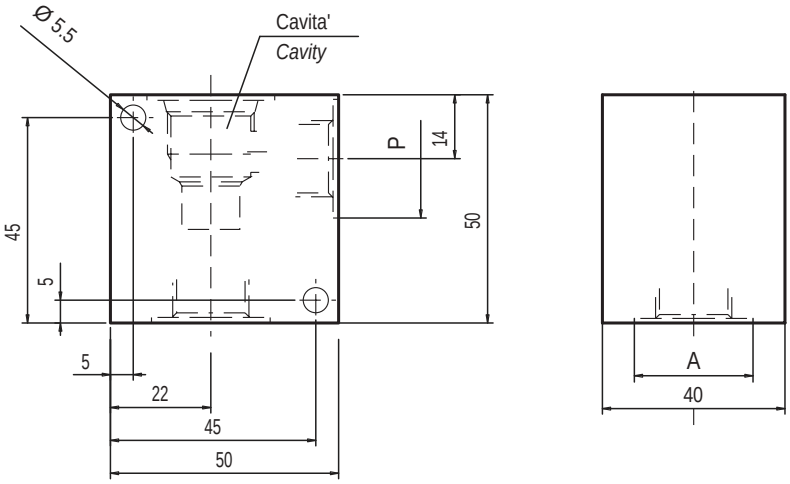
COMPOSIZIONE CODICE BLOCCO+VALVOLA+SOLENOIDE
ORDERING CODE FOR MANIFOLD+VALVE+COIL

96.7.XX.YY.YYY.WW.WWW

- Codice blocco *Manifold code*
- Codice valvola (ultime 5 cifre) *Valve code (last 5 numbers)*
- Codice solenoide (ultime 5 cifre) *Coil code (last 5 numbers)*

COLLETTORI IN ALLUMINIO PER VALVOLE A CARTUCCIA
Aluminium manifolds

CODICE ORDINAZIONE *Ordering code* **B3.857.XX.000**



Descrizione *Description*

Linea di collettori in alluminio estruso AL 2011 UNI9002/5 per il montaggio in cavità unificate di tutta la nostra gamma di valvole.

Manifold obtained from extruded aluminium AL 2011 UNI9002/5 for assembling all our valves on unified cavity.

Pressione max di lavoro *Max working pressure*	300 bar

XX	Attacchi P-A *Port size P-A*	Cavità N° *Cavity N°*	Peso Kg. *Weight Kg.*
46	1/4" BSPP	V096004	0.20
47	3/8" BSPP		
48	1/2" BSPP		

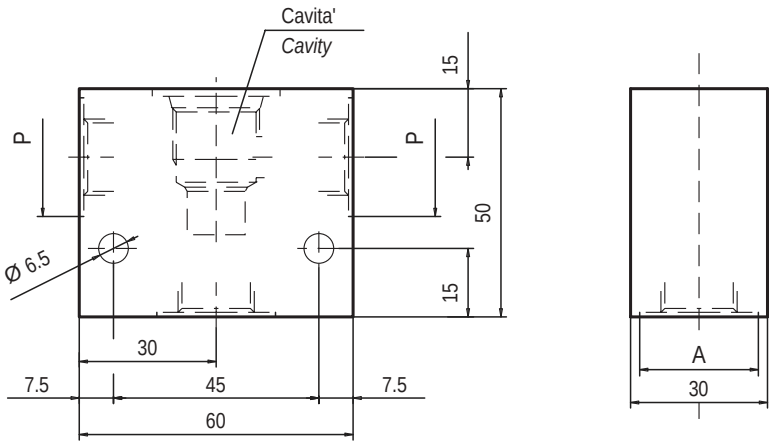
COMPOSIZIONE CODICE BLOCCO+VALVOLA+SOLENOIDE
ORDERING CODE FOR MANIFOLD+VALVE+COIL

96.7.XX.YY.YYY.WW.WWW

Codice blocco *Manifold code*
Codice valvola (ultime 5 cifre) *Valve code (last 5 numbers)*
Codice solenoide (ultime 5 cifre) *Coil code (last 5 numbers)*

COLLETTORI IN ALLUMINIO PER VALVOLE A CARTUCCIA
Aluminium manifolds

CODICE ORDINAZIONE *Ordering code* **B3.857.XX.000**



Descrizione *Description*

Linea di collettori in alluminio estruso AL 2011 UNI9002/5 per il montaggio in cavità unificate di tutta la nostra gamma di valvole.

Manifold obtained from extruded aluminium AL 2011 UNI9002/5 for assembling all our valves on unified cavity.

Pressione max di lavoro *Max working pressure*	300 bar

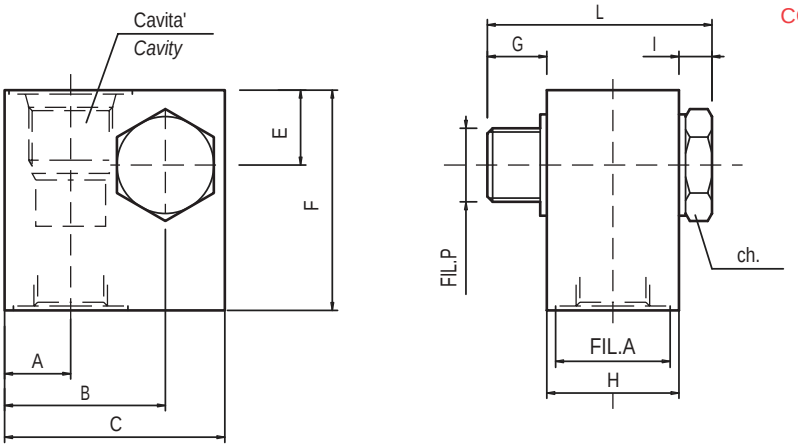
XX	Attacchi P-A *Port size P-A*	Cavità N° *Cavity N°*	Peso Kg. *Weight Kg.*
50	1/4" BSPP	V096004	0.21
51	3/8" BSPP		

COMPOSIZIONE CODICE BLOCCO+VALVOLA+SOLENOIDE
ORDERING CODE FOR MANIFOLD+VALVE+COIL

96.7.XX.YY.YYY.WW.WWW

Codice blocco *Manifold code*
Codice valvola (ultime 5 cifre) *Valve code (last 5 numbers)*
Codice solenoide (ultime 5 cifre) *Coil code (last 5 numbers)*

COLLETTORI IN ALLUMINIO PER VALVOLE A CARTUCCIA
Aluminium manifolds



CODICE ORDINAZIONE
Ordering code

V3.880.04.0XX

Descrizione
Description

Linea di collettori in alluminio estruso AL 2011 UNI9002/5 per il montaggio in cavità unificate di tutta la nostra gamma di valvole.

Manifold obtained from extruded aluminium AL 2011 UNI9002/5 for assembling all our valves on unified cavity.

Pressione max di lavoro *Max working pressure*	300 bar

15	33.5	45	22	50	12	30	7.5	49.5	19	1/4"BSPP
15	36.5	50	22	50	13.5	30	7.5	51	22	3/8"BSPP
A	B	C	E	F	G	H	I	L	Ch.	Fil.A-Fil.P

XX	Attacchi P-A *Port size P-A*	Cavità N° *Cavity N°*	Peso Kg. *Weight Kg.*
10	1/4" BSPP	V096001	0.34
20	3/8" BSPP		0.36

COMPOSIZIONE CODICE BLOCCO+VALVOLA+SOLENOIDE
ORDERING CODE FOR MANIFOLD+VALVE+COIL

97.4.XX.YY.YYY.WW.WWW

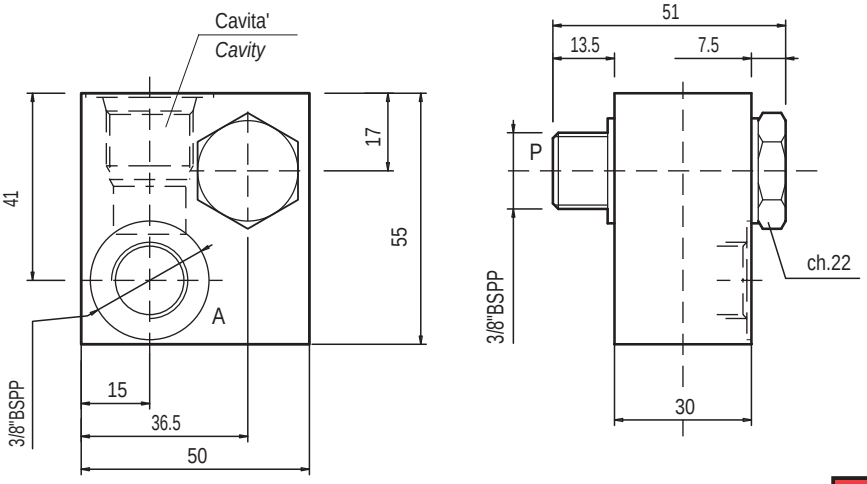
Codice blocco
Manifold code

Codice valvola (ultime 5 cifre)
Valve code (last 5 numbers)

Codice solenoide (ultime 5 cifre)
Coil code (last 5 numbers)

COLLETTORI IN ALLUMINIO PER VALVOLE A CARTUCCIA
Aluminium manifolds

CODICE ORDINAZIONE *Ordering code* **V3.880.43.0XX**



Descrizione *Description*

Linea di collettori in alluminio estruso AL 2011 UNI9002/5 per il montaggio in cavità unificate di tutta la nostra gamma di valvole.

Manifold obtained from extruded aluminium AL 2011 UNI9002/5 for assembling all our valves on unified cavity.

Pressione max di lavoro *Max working pressure*	300 bar

XX	Attacchi P-A *Port size P-A*	Cavità N° *Cavity N°*	Peso Kg. *Weight Kg.*
20	3/8" BSPP	V096001	0.38

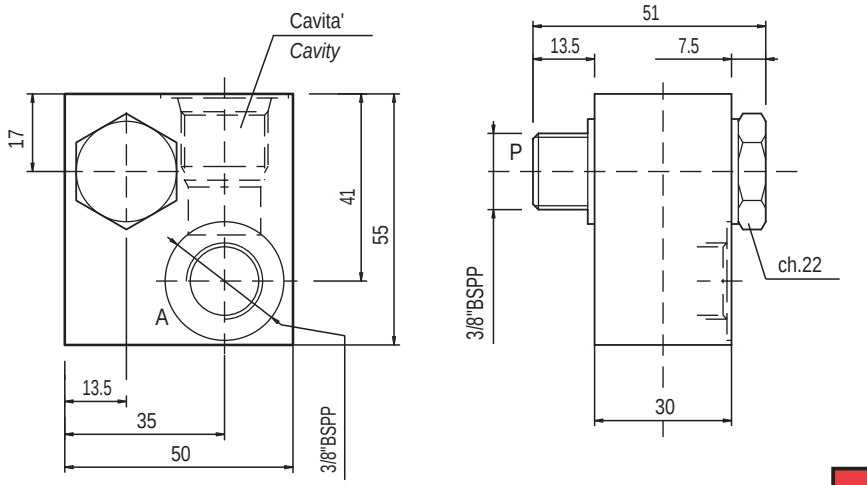
COMPOSIZIONE CODICE BLOCCO+VALVOLA+SOLENOIDE
ORDERING CODE FOR MANIFOLD+VALVE+COIL

97.3.XX.YY.YYY.WW.WWW

Codice blocco *Manifold code*
Codice valvola (ultime 5 cifre) *Valve code (last 5 numbers)*
Codice solenoide (ultime 5 cifre) *Coil code (last 5 numbers)*

COLLETTORI IN ALLUMINIO PER VALVOLE A CARTUCCIA
Aluminium manifolds

CODICE ORDINAZIONE *Ordering code* **V3.880.42.0XX**



Descrizione *Description*

Linea di collettori in alluminio estruso AL 2011 UNI9002/5 per il montaggio in cavità unificate di tutta la nostra gamma di valvole.

Manifold obtained from extruded aluminium AL 2011 UNI9002/5 for assembling all our valves on unified cavity.

Pressione max di lavoro *Max working pressure*	300 bar

XX	Attacchi P-A *Port size P-A*	Cavità N° *Cavity N°*	Peso Kg. *Weight Kg.*
20	3/8" BSPP	V096001	0.38

COMPOSIZIONE CODICE BLOCCO+VALVOLA+SOLENOIDE
ORDERING CODE FOR MANIFOLD+VALVE+COIL

97.1.XX.YY.YYY.WW.WWW

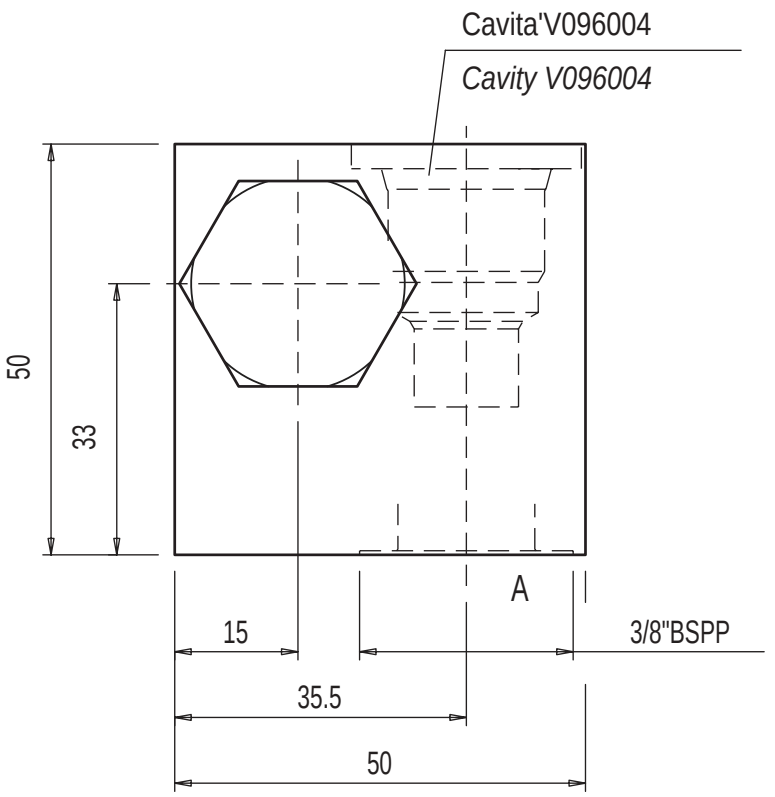
Codice blocco *Manifold code*
Codice valvola (ultime 5 cifre) *Valve code (last 5 numbers)*
Codice solenoide (ultime 5 cifre) *Coil code (last 5 numbers)*

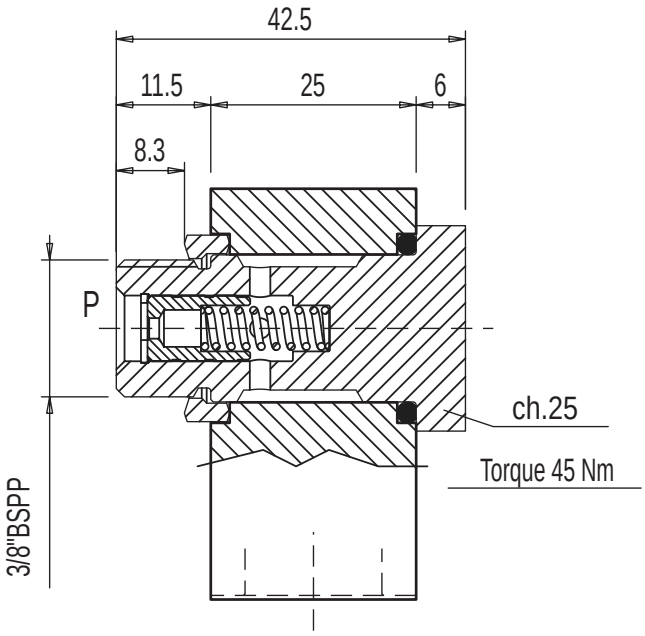
COLLETTORI IN ALLUMINIO PER VALVOLE A CARTUCCIA
Aluminium manifolds

Blocco+SBF38-10 (1-10 l/min)
Blocco+SBF38-20 (11-20 l/min)

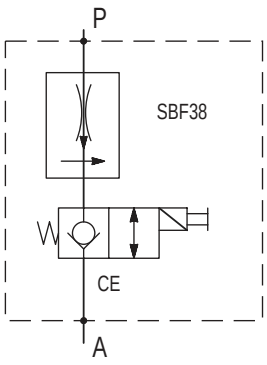
CODICE ORDINAZIONE
Ordering code

V3.880.05.01X
V3.880.05.02Z





SCHEMA IDRAULICO



Descrizione
Description

Collettore in acciaio zincato giallo flangiabile su cilindro con valvola controllo discesa a taratura fissa incorporata.

Steel manifold coated with zinc plating strengthened by yellow passivation flangeable on cylinders with fixed flow control valve compensated.

Pressione max di lavoro *Max working pressure*	350 bar

X	A	B	C	D	E	F	G	H	I	L
Portata L/min	1	2	3	4	5	6	7	8	9	10
Foro #	1.1	1.1	1.5	1.7	1.9	2.1	2.3	2.5	2.7	2.9

Z	M	N	O	P	Q	R	T	Z		
Portata L/min	11	12	13	14	15	16	18	20		
Foro #	2.5	2.6	2.7	2.8	2.9	3.0	3.3	3.4		

CODICE BLOCCO+SBF38-10+VALVOLA+SOLENOIDE
ORDERING CODE FOR MANIFOLD+SBF38-10+VALVE+COIL

95.5.1X.YY.YYY.WW.WWW

- Codice blocco *Manifold code*
- Codice valvola (ultime 5 cifre) *Valve code (last 5 numbers)*
- Codice solenoide (ultime 5 cifre) *Coil code (last 5 numbers)*

CODICE BLOCCO+SBF38-20+VALVOLA+SOLENOIDE
ORDERING CODE FOR MANIFOLD+SBF38-20+VALVE+COIL

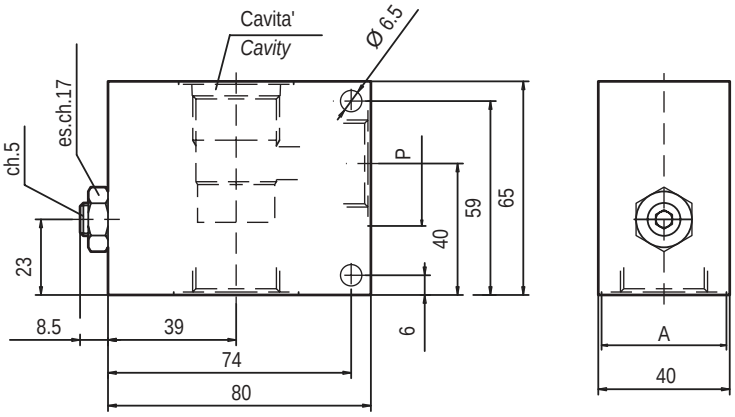
95.5.2Z.YY.YYY.WW.WWW

- Codice blocco *Manifold code*
- Codice valvola (ultime 5 cifre) *Valve code (last 5 numbers)*
- Codice solenoide (ultime 5 cifre) *Coil code (last 5 numbers)*

COLLETTORI IN ALLUMINIO PER VALVOLE A CARTUCCIA
Aluminium manifolds

CODICE ORDINAZIONE
Ordering code

B3.855.XX.000



Descrizione
Description

Linea di collettori in alluminio estruso AL 2011 UNI9002/5 per il montaggio in cavità unificate di tutta la nostra gamma di valvole.

Manifold obtained from extruded aluminium AL 2011 UNI9002/5 for assembling all our valves on unified cavity.

Pressione max di lavoro *Max working pressure*	250 bar

XX	Attacchi P-A *Port size P-A*	Cavità N° *Cavity N°*	Peso Kg. *Weight Kg.*
78	1/2" BSPP	V096005	0.46
79	3/4" BSPP		

COMPOSIZIONE CODICE BLOCCO+VALVOLA+SOLENOIDE
ORDERING CODE FOR MANIFOLD+VALVE+COIL

96.5.XX.YY.YYY.WW.WWW

Codice blocco
Manifold code

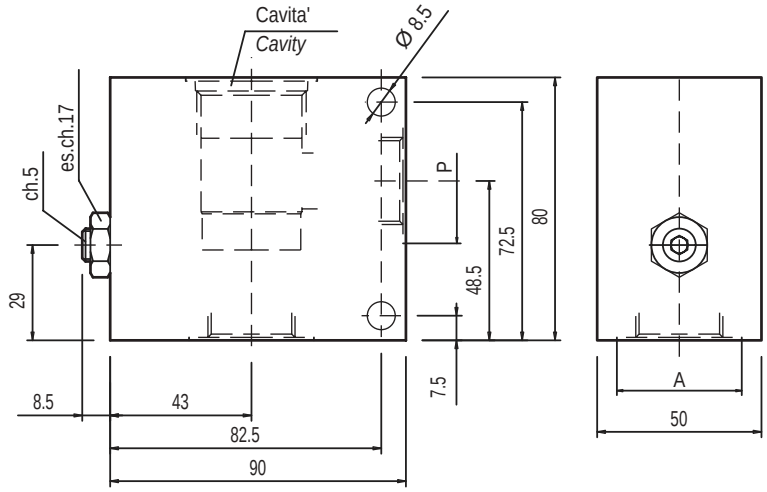
Codice valvola (ultime 5 cifre)
Valve code (last 5 numbers)

Codice solenoide (ultime 5 cifre)
Coil code (last 5 numbers)

COLLETTORI IN ALLUMINIO PER VALVOLE A CARTUCCIA
Aluminium manifolds

CODICE ORDINAZIONE
Ordering code

B3.855.XX.000



Descrizione
Description

Linea di collettori in alluminio estruso AL 2011 UNI9002/5 per il montaggio in cavità unificate di tutta la nostra gamma di valvole.

Manifold obtained from extruded aluminium AL 2011 UNI9002/5 for assembling all our valves on unified cavity.

Pressione max di lavoro *Max working pressure*	250 bar

XX	Attacchi P-A *Port size P-A*	Cavità N° *Cavity N°*	Peso Kg. *Weight Kg.*
94	3/4" BSPP	V096006	0.82
80	1" BSPP		

COMPOSIZIONE CODICE BLOCCO+VALVOLA+SOLENOIDE
ORDERING CODE FOR MANIFOLD+VALVE+COIL

96.5.XX.YY.YYY.WW.WWW

Codice blocco
Manifold code

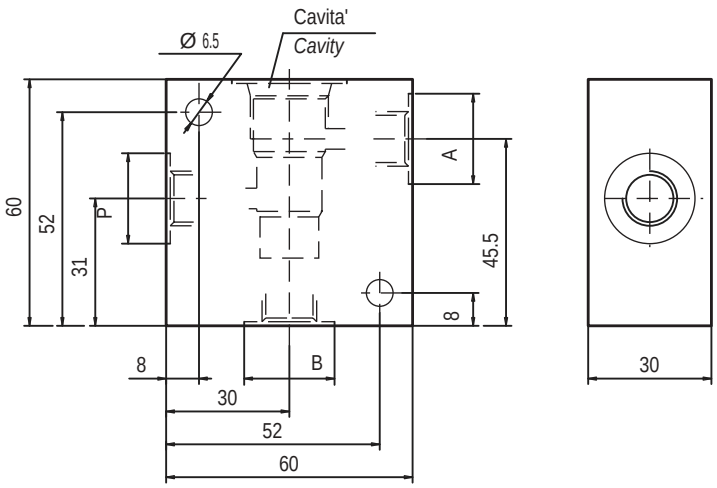
Codice valvola (ultime 5 cifre)
Valve code (last 5 numbers)

Codice solenoide (ultime 5 cifre)
Coil code (last 5 numbers)

COLLETTORI IN ALLUMINIO PER VALVOLE A CARTUCCIA 3 VIE
3 way aluminium manifolds

CODICE ORDINAZIONE
Ordering code

B3.856.XX.000



Descrizione
Description

Linea di collettori in alluminio estruso AL 2011 UNI9002/5 per il montaggio in cavità unificate di tutta la nostra gamma di valvole.

Manifold obtained from extruded aluminium AL 2011 UNI9002/5 for assembling all our valves on unified cavity.

Pressione max di lavoro *Max working pressure*	250 bar

XX	Attacchi P-A *Port size P-A*	Cavità N° *Cavity N°*	Peso Kg. *Weight Kg.*
25	1/4" BSPP	V096057	0.26

COMPOSIZIONE CODICE BLOCCO+VALVOLA+SOLENOIDE
ORDERING CODE FOR MANIFOLD+VALVE+COIL

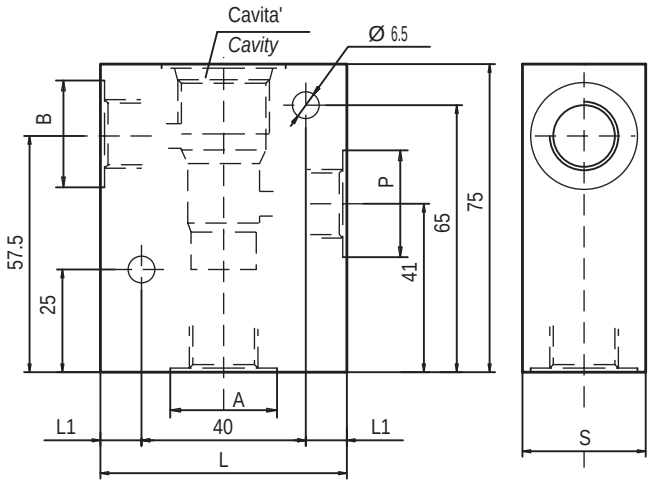
92.6.XX.YY.YYY.WW.WWW

- Codice blocco *Manifold code*
- Codice valvola (ultime 5 cifre) *Valve code (last 5 numbers)*
- Codice solenoide (ultime 5 cifre) *Coil code (last 5 numbers)*

COLLETTORI IN ALLUMINIO PER VALVOLE A CARTUCCIA 3 VIE
3 way aluminium manifolds

CODICE ORDINAZIONE
Ordering code

B3.856.XX.000



Descrizione
Description

Linea di collettori in alluminio estruso AL 2011 UNI9002/5 per il montaggio in cavità unificate di tutta la nostra gamma di valvole.

Manifold obtained from extruded aluminium AL 2011 UNI9002/5 for assembling all our valves on unified cavity.

Pressione max di lavoro *Max working pressure*	250 bar

XX	Attacchi P-A *Port size P-A*	Cavità N° *Cavity N°*	Peso Kg. *Weight Kg.*
23	3/8" BSPP	V096002	0.31
24	1/2" BSPP		0.38

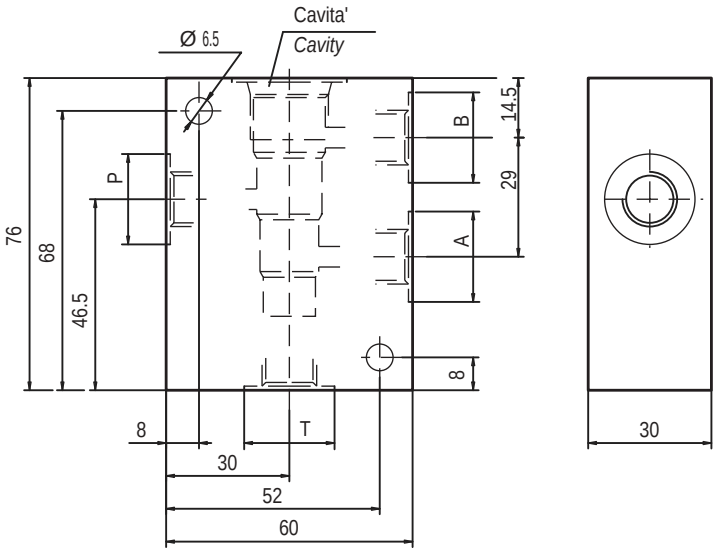
COMPOSIZIONE CODICE BLOCCO+VALVOLA+SOLENOIDE
ORDERING CODE FOR MANIFOLD+VALVE+COIL

92.6.XX.YY.YYY.WW.WWW

- Codice blocco *Manifold code*
- Codice valvola (ultime 5 cifre) *Valve code (last 5 numbers)*
- Codice solenoide (ultime 5 cifre) *Coil code (last 5 numbers)*

COLLETTORI IN ALLUMINIO PER VALVOLE A CARTUCCIA 4 VIE
4 way aluminium manifolds

CODICE ORDINAZIONE *Ordering code* **B3.856.XX.000**



Descrizione *Description*

Linea di collettori in alluminio estruso AL 2011 UNI9002/5 per il montaggio in cavità unificate di tutta la nostra gamma di valvole.

Manifold obtained from extruded aluminium AL 2011 UNI9002/5 for assembling all our valves on unified cavity.

Pressione max di lavoro *Max working pressure*	250 bar

XX	Attacchi P-A *Port size P-A*	Cavità N° *Cavity N°*	Peso Kg. *Weight Kg.*
26	1/4" BSPP	V096032	0.32

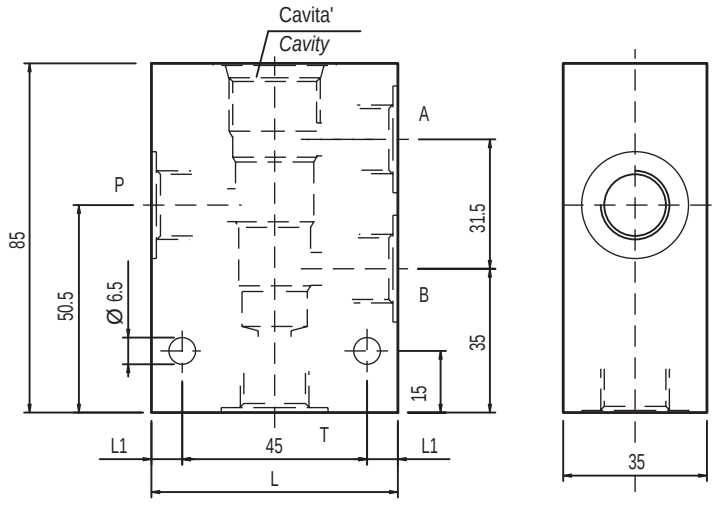
COMPOSIZIONE CODICE BLOCCO+VALVOLA+SOLENOIDE
ORDERING CODE FOR MANIFOLD+VALVE+COIL

93.6.XX.YY.YYY.WW.WWW

Codice blocco *Manifold code*
Codice valvola (ultime 5 cifre) *Valve code (last 5 numbers)*
Codice solenoide (ultime 5 cifre) *Coil code (last 5 numbers)*

COLLETTORI IN ALLUMINIO PER VALVOLE A CARTUCCIA 4 VIE
4 way aluminium manifolds

CODICE ORDINAZIONE *Ordering code* **B3.857.XX.000**



Descrizione *Description*

Linea di collettori in alluminio estruso AL 2011 UNI9002/5 per il montaggio in cavità unificate di tutta la nostra gamma di valvole.

Manifold obtained from extruded aluminium AL 2011 UNI9002/5 for assembling all our valves on unified cavity.

Pressione max di lavoro *Max working pressure*	250 bar

XX	Attacchi P-A *Port size P-A*	Cavità N° *Cavity N°*	Peso Kg. *Weight Kg.*
02	3/8" BSPP	V096074	0.33
03	1/2" BSPP		0.45

COMPOSIZIONE CODICE BLOCCO+VALVOLA+SOLENOIDE
ORDERING CODE FOR MANIFOLD+VALVE+COIL

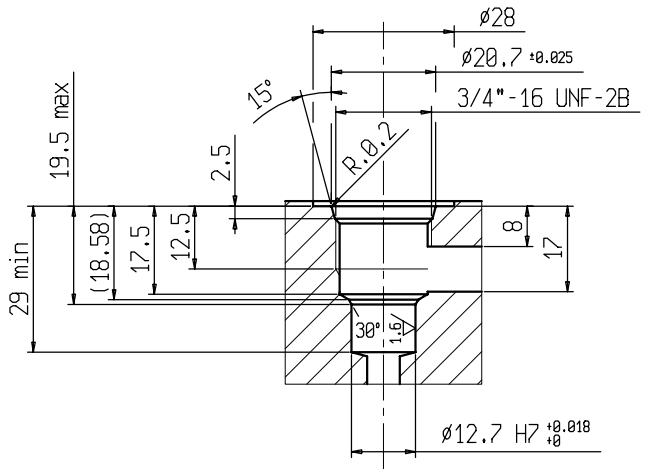
93.7.XX.YY.YYY.WW.WWW

Codice blocco *Manifold code*
Codice valvola (ultime 5 cifre) *Valve code (last 5 numbers)*
Codice solenoide (ultime 5 cifre) *Coil code (last 5 numbers)*

CAVITÀ STANDARD
Standard cavity

TABELLA TECNICA
Technical data

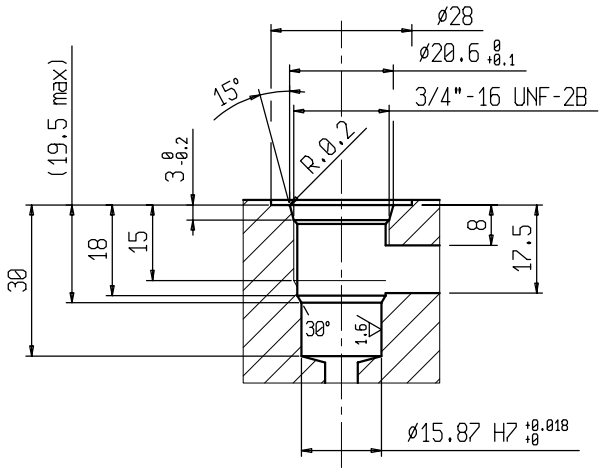
CAV. V096004



Utensile - *Type of tool*	Codice - *Code*
Sgrossatore - *Rougher*	TPU004
Finitore - *Finisher*	TAL004

◎	0.05
⊥	0.025

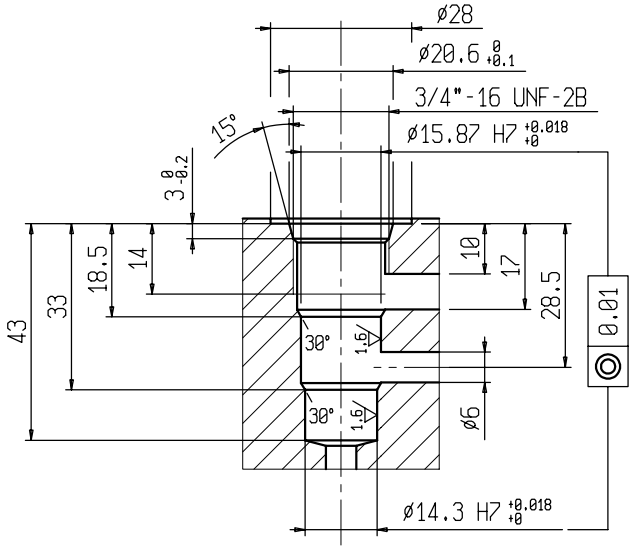
CAV. V096001



Utensile - *Type of tool*	Codice - *Code*
Sgrossatore - *Rougher*	TPU001
Finitore - *Finisher*	TAL001

◎	0.05
⊥	0.025

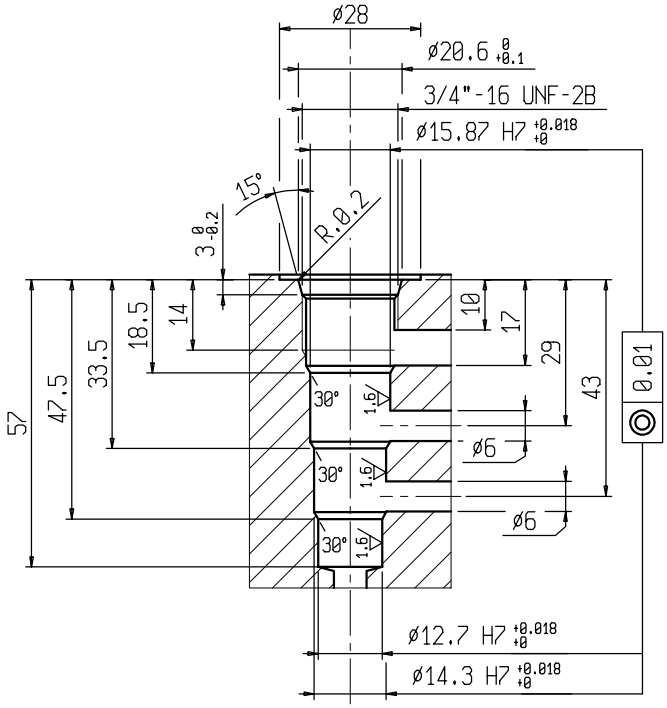
CAV. V096057



Utensile - *Type of tool*	Codice - *Code*
Sgrossatore - *Rougher*	TPU057
Finitore - *Finisher*	TAL057

◎	0.05
⊥	0.025

CAV. V096032



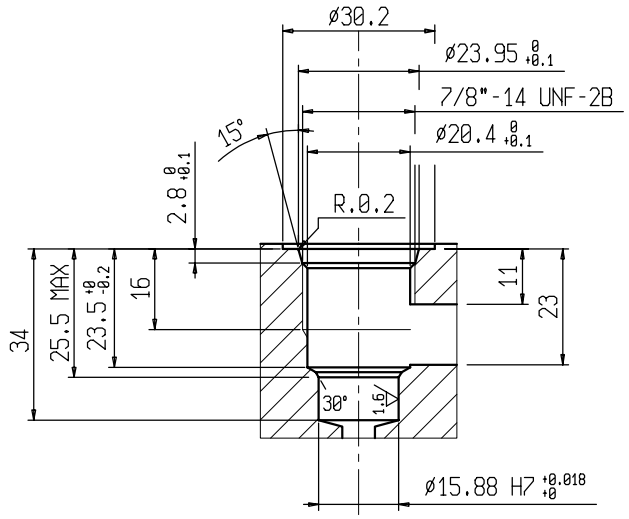
Utensile - *Type of tool*	Codice - *Code*
Sgrossatore - *Rougher*	TPU032
Finitore - *Finisher*	TAL032

◎	0.05
⊥	0.025

CAVITÀ STANDARD
Standard cavity

TABELLA TECNICA
Technical data

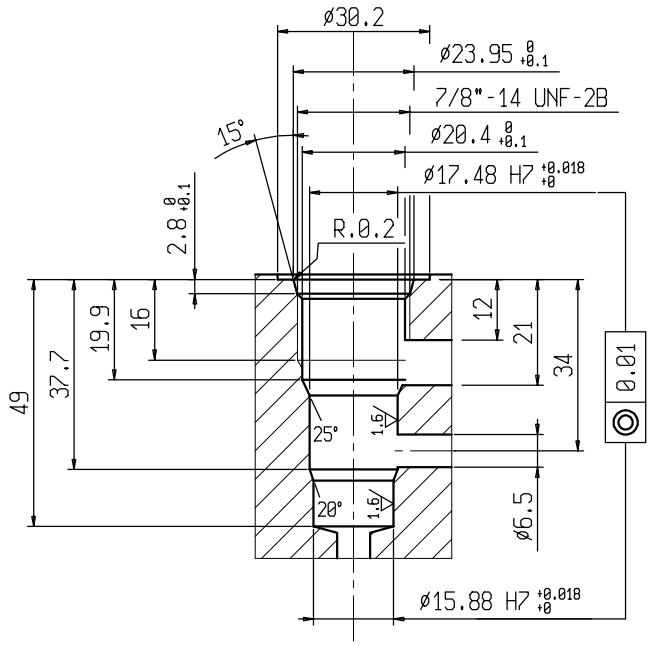
CAV. V096077



Utensile - *Type of tool*	Codice - *Code*
Sgrossatore - *Rougher*	TPU077
Finitore - *Finisher*	TAL077

◎	0.05
⊥	0.025

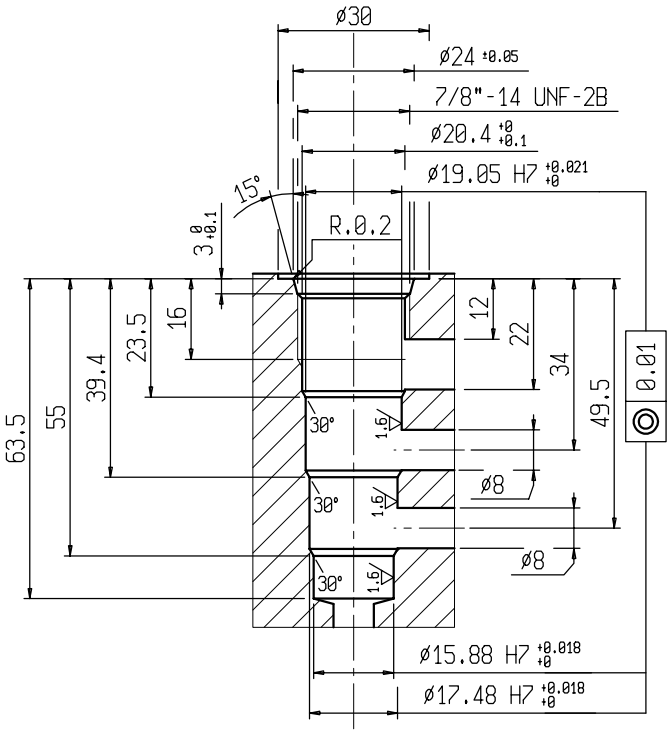
CAV. V096002



Utensile - *Type of tool*	Codice - *Code*
Sgrossatore - *Rougher*	TPU002
Finitore - *Finisher*	TAL002

◎	0.05
⊥	0.025

CAV. V096074



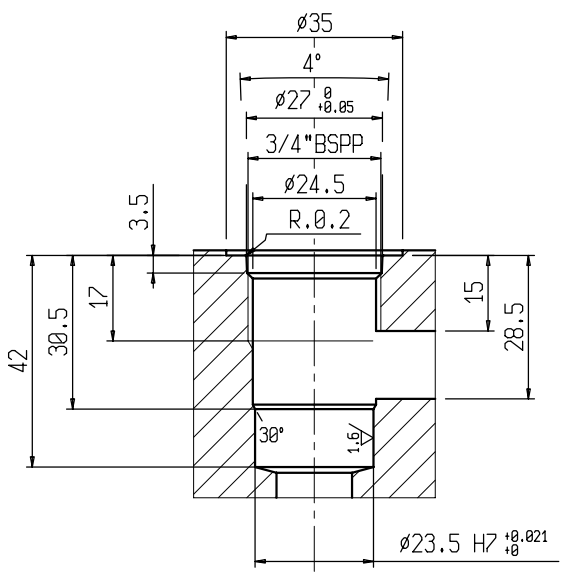
Utensile - *Type of tool*	Codice - *Code*
Sgrossatore - *Rougher*	TPU074
Finitore - *Finisher*	TAL074

◎	0.05
⊥	0.025

CAVITÀ STANDARD
Standard cavity

TABELLA TECNICA
Technical data

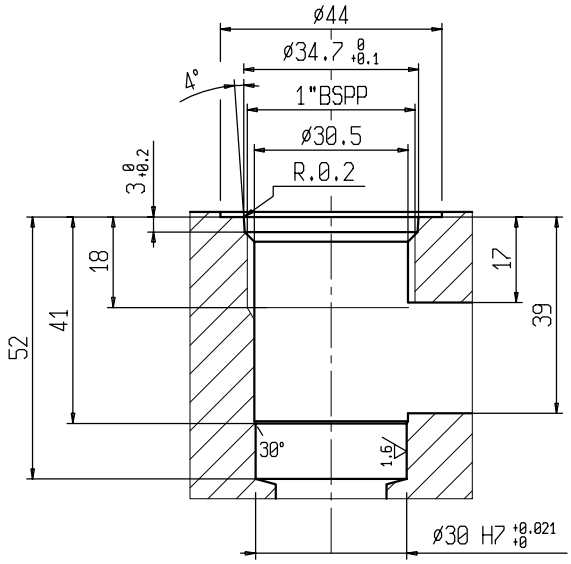
CAV. V096005



Utensile - *Type of tool*	Codice - *Code*
Sgrossatore - *Rougher*	TPU005
Finitore - *Finisher*	TAL005

◎	0.05
⊥	0.025

CAV. V096006



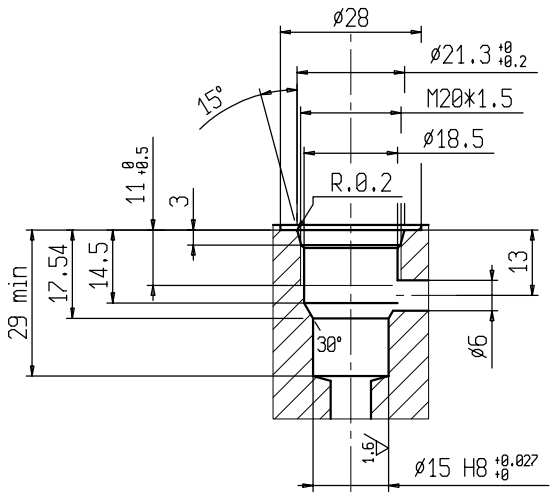
Utensile - *Type of tool*	Codice - *Code*
Sgrossatore - *Rougher*	TPU006
Finitore - *Finisher*	TAL006

◎	0.05
⊥	0.025

CAVITÀ INTERCAMBIABILI CON ALTRI COSTRUTTORI
Other brands interchangeable cavity

TABELLA TECNICA
Technical data

CAV. V096069 (M20X1.5 FLUTEC)



Utensile - *Type of tool*	Codice - *Code*
Sgrossatore - *Rougher*	
Finitore - *Finisher*	

◎	0.05
⊥	0.025

BOBINE PER SERVIZIO CONTINUO – ED 100%
Continuous duty coils – ED 100%

DATI TECNICI
Technical information

Intermittenza di funzionamento DIN VDE 0580

L'intermittenza di funzionamento ED di un elettromagnete è il valore percentuale del tempo di inserzione "ti" rispetto al tempo completo di funzionamento "tc" dove tc = ti + tr dove "tr" è il tempo di riposo.

ED = (ti / tc) * 100%

TUTTE LE BOBINE FUNZIONANO CON ED = 100% PURCHÉ NON VENGA SUPERATO IL VALORE LIMITE DI TEMPERATURA PER LA LORO CLASSE DI ISOLAMENTO.

Working duty DIN VDE 0580

The working duty ED of a coil is the ratio between energized time ti and full cycle time tc where tc = ti + tr and tr = de-energized time.

*ED = (ti / tc) * 100 %*

ALL COILS ARE RATED FOR ED = 100 % PROVIDED THAT TEMPERATURE LIMIT OF THEIR INSULATION CLASS IS NOT EXCEEDED

Protezione EN 60529

IP 65 con connettore DIN 43650 montato correttamente.

Il grado di protezione viene indicato con le lettere IP seguite da due cifre: la prima indica il grado di protezione contro la penetrazione di corpi solidi estranei, la seconda contro la penetrazione di liquidi.

IP 65 SIGNIFICA PROTEZIONE CONTRO:
- POLVERE
- ACQUA SPRUZZATA IN GETTI A BASSA PRESSIONE

Quindi le bobine possono entrare in contatto on un getto d'acqua ma NON POSSONO RIMANERE IMMERSE IN ACQUA. Il grado di protezione non prende comunque in considerazione rischi di esplosione o condizioni particolari come umidità, ambienti corrosivi, muffe, ecc.

Protection EN 60529

Protection class is designated by the letter IP followed by two digits: the first indicates protection against penetration of foreign solid bodies, the second against penetration of water.

IP 65 MEANS TOTAL PROTECTION AGAINST:
- *DUST*
- *LOW PRESSURE WATER JETS*

Our coils resist therefore to water sprayed from every direction but CANNOT BE PLUNGED INTO WATER OR REMAIN UNDER WATER.
Protection class doesn't apply to explosion risks or to conditions such as moisture, corrosive agents, mildew etc.

Tensione di alimentazione

Per ottenere un corretto funzionamento ed una lunga durata di esercizio delle bobine è necessario che le variazioni della tensione di alimentazione non siano superiori al ±10% della tensione nominale.

Inlet voltage

To obtain correct operation and long life of coils it is necessary that operating voltage fluctuations do not exceed ± 10 % of nominal voltage.

Isolamento termico DIN VDE 0580

BOBINE STANDARD		
BOBINA COMPLETA	Classe F	155°C
Filo di rame smaltato		180°C
BOBINE S-CE-H		
BOBINA COMPLETA	Classe H	180°C
Filo di rame smaltato		200°C

I valori indicati sono i massimi ammissibili per la temperatura assoluta T = TA + ΔT con TA = temperatura ambiente e ΔT = variazione di temperatura dovuta al funzionamento. Quindi se ad esempio TA = 40°C ottengo ΔT max = 115°C per rispettare il limite di 155°C e ΔT max = 140°C per rispettare il limite di 180°C.

La variazione di temperatura ΔT viene calcolata dalla resistenza a temperatura ambiente e dalla resistenza a temperatura stabilizzata, misurata secondo DIN VDE 0580:
- la bobina è montata su una valvola a cartuccia standard, a sua volta montata su di un collettore standard in acciaio appoggiato su una superficie di legno.

Heat insulation DIN VDE 0580

STANDARD COIL		
COMPLETE COIL	*Class F*	*155°C*
Copper wire		*180°C*
COILS S-CE-H		
COMPLETE COILS	*Class H*	*180°C*
Copper wire		*200°C*

These are the maximum allowable absolute temperatures T = TA + ΔT where TA = ambient temperature and ΔT = temperature rise due to operation.
For example, if TA = 40°C we obtain ΔT max = 115°C if we have to comply with the limit of 155°C and ΔT max = 140°C if we have to comply with the limit of 180°C.

The temperature rise ΔT is calculated from resistance at ambient temperature and resistance at stabilized temperature, measured according to DIN VDE 0580:
- *coil is mounted on a standard cartridge valve inserted in a standard steel manifold on a wooden surface.*

BOBINE PER SERVIZIO CONTINUO – ED 100%
Continuous duty coils – ED 100%

- la bobina è tenuta eccitata per 1 ora a tensione nominale con temperatura ambiente TA = 20-25°C e ventilazione naturale.

Se ne deduce che LE BOBINE CLASSE F NON POSSONO FUNZIONARE IN SERVIZIO CONTINUO SE LA TEMPERATURA AMBIENTE SUPERA IL VALORE Tx = 155 - ΔT °C IN QUESTI CASI DEBBONO ESSERE IMPIEGATE BOBINE IN CLASSE H, E IN OGNI CASO SI RACCOMANDA DI NON IMPEDIRE IL LIBERO SMALTIMENTO DEL CALORE EVITANDO DI INCAPSULARE LE BOBINE IN INVOLUCRI CHIUSI ED ASSICURANDO UNA ADEGUATA AERAZIONE.

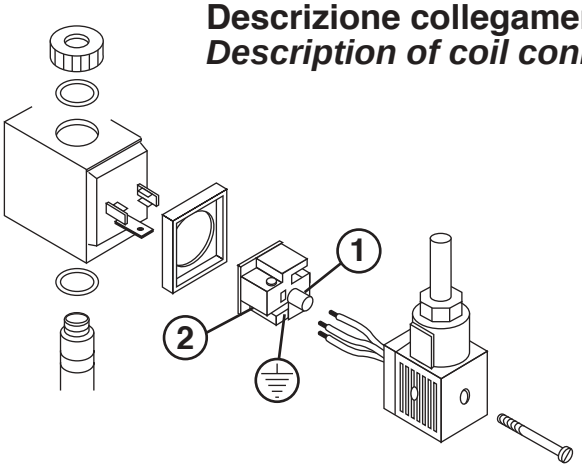
La TEMPERATURA ESTERNA delle bobine non ha nessuna relazione diretta con il ΔT. Tale temperatura, dopo alcuni minuti di eccitazione continua, può raggiungere 80 - 100°C per cui dovranno essere prese opportune precauzioni per evitare il contatto accidentale con tali superfici.

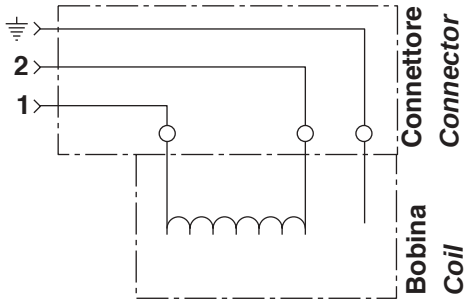
- *coil is kept energized for 1 hour at nominal voltage, with ambient temperature TA = 20-25∞C and natural ventilation.*

CLASS F COILS ARE NOT RATED FOR CONTINUOUS DUTY ED = 100 % IF AMBIENT TEMPERATURE EXCEEDS THE VALUE Tx = 155 - ΔT °C
IN THESE CASES CLASS H COILS SHOULD BE USED. AND IN ANY CASE FREE HEAT EXCHANGE AND NATURAL VENTILATION ARE NECESSARY FOR THE CORRECT OPERATION OF COILS.

EXTERNAL TEMPERATURE of coils is not directly related with ΔT. After few minutes of continuous energizing, temperatures up to 80 - 100°C can be reached, so care should be taken to avoid accidental contact of people with hot surfaces.

Descrizione collegamento solenoide con connettore standard
Description of coil connection with standard connector





Fluido idraulico

CARATTERISTICHE GENERALI
Il fluido idraulico deve avere caratteristiche fisiche, lubrificanti e chimiche tali da renderlo idoneo all'impiego in impianti oleodinamici, come ad esempio gli

OLI IDRAULICI A BASE MINERALE HL	DIN 51524 Parte 1
OLI IDRAULICI A BASE MINERALE HLP	DIN 51524 Parte 2

GRADO DI VISCOSITÀ ISO 3448 – DIN 51519
Il grado di viscosità ISO viene indicato con le lettere ISO VG seguite da un numero che rappresenta la viscosità cinematica MEDIA a 40°C in mm2/s o centiStokes cSt.

Hydraulic fluid

GENERAL PROPERTIES
Hydraulic fluid must have physical, lubricating and chemical properties suitable for use in hydraulic systems such as for example

MINERAL HYDRAULIC OILS HL	*DIN 51524 Part1*
MINERAL HYDRAULIC OILS HLP	*DIN 51524 Part2*

VISCOSITY DEGREE ISO 3448 – DIN 51519
ISO viscosity degree is expressed by ISO VG followed by one number representing the medium cinematic viscosity at 40°C in mm2/s or centiStock cSt.

Grado di viscosità *Viscosity degree*	Viscosità cinematica - Cinematic viscosity		
	Massima - *Max* 0°C	Media - *Medium* 40°C	Minima - *Minimum* 100°C
ISO VG 10	90	**10**	2,4
ISO VG 22	300	**22**	4,1
ISO VG 32	420	**32**	5,0
ISO VG 46	780	**46**	6,1
ISO VG 68	1400	**68**	7,8
ISO VG 100	2650	**100**	9,9

Collaudo funzionale - Temperature - Trafilamenti

COLLAUDO FUNZIONALE
Tutte le curve di funzionamento riportate a catalogo sono state rilevate utilizzando olio minerale con grado di viscosità ISO VG 46 alla temperatura di 40°C. Tutte le valvole vengono collaudate a queste condizioni su banchi prova che assicurano un GRADO DI FILTRAZIONE ASSOLUTA di 10 micron. Tutte le curve di funzionamento rappresentano la media dei valori rilevati sulle valvole collaudate, pertanto i valori reali possono discostarsi da tali curve di ± 1-2 bar per le perdite di carico e di ± 20-30 ms per i tempi di risposta.

VALORI LIMITE DI TEMPERATURA

TEMPERATURA AMBIENTE	da -20°C a +50°C
TEMPERATURA OLIO	da -20°C a +80°C

Queste limitazioni di temperatura sono rese necessarie dai limiti di impiego delle bobine elettriche standard in classe F e delle guarnizioni standard in NBR. Si raccomanda di rispettare tali limiti e di contattare il nostro Ufficio Tecnico per impieghi con campi di temperatura diversi.

TRAFILAMENTO INTERNO – VALVOLE A TENUTA
Il VALORE MASSIMO AMMISSIBILE DI TRAFILAMENTO INTERNO per le valvole a tenuta è di 1 cm^3/min (15-20 gocce/min) alla massima pressione di esercizio e con olio a viscosità 46 cSt. In realtà il trafilamento è mediamente inferiore a 10 gocce/min e tende in ogni caso a ridursi dopo alcuni secondi.

Testing – Temperatures – Internal leakage

FUNCTIONAL TESTING
All performance curves in this catalogue are obtained using mineral based hydraulic oil with 46 cSt viscosity at 40°C (ISO VG 46 viscosity class).
All valves go through functional testing at these conditions before shipment.
Our test stands ensure 10 micron ABSOLUTE FILTRATION. All performance curves represent the average of real values measured on tested valves. For this reason a tolerance of ± 1-2 bar for pressure drop and ± 20-30 ms for response time has to be considered normal and acceptable.

TEMPERATURE RANGE

AMBIENT TEMPERATURE	*-20°C to +50°C*
OIL TEMPERATURE	*-20°C to +80°C*

It is strongly recommended not to exceed these temperature limits whenever standard CLASS F coils and standard NBR seals are used. Please consult us for different temperature ranges.

INTERNAL LEAKAGE – POPPET VALVES
MAXIMUM ALLOWABLE INTERNAL LEAKAGE of all poppet valves cannot exceed 1 cm3/min (15-20 drops/min) at the maximum working pressure with 46 cSt oil viscosity. Actual leakage is expected, on average, to be less than 10 drops/min and anyway tends to decrease after few seconds.

Guarnizioni

O-RING
Acrilo - Nitrile Butadiene NBR (BUNA-N) standard per temperature comprese tra -20°C e +100°C.
A richiesta sono disponibili in FLUOROCARBONIO FPM (Viton) e in altre mescole.

ANELLI ANTIESTRUSIONE
LUBRIFLON - PTFE

KIT DI GUARNIZIONI
Il KIT DI GUARNIZIONI di ogni valvola comprende TUTTE LE GUARNIZIONI ESTERNE. Le guarnizioni interne delle valvole a cartuccia sono escluse in quanto il cliente non è autorizzato a smontare tali valvole.
CODICE DI ORDINAZIONE: Sostituire V3 con KS
ESEMPI
Codice valvola: V3.896.03.A10
Codice Kit: ..... KS.896.03.A10.

Installazione delle cartuccie

Si raccomanda di seguire scrupolosamente la seguente procedura:
- Assicurarsi che la cartuccia non sia sporca o in cattive condizioni.
- Assicurarsi che gli O-ring e gli anelli antiestrusione siano integri e correttamente montati. L'O-ring deve essere montato verso la bocca a pressione più alta se vi è un solo anello antiestrusione, oppure tra due anelli antiestrusione se entrambe le bocche possono ricevere olio ad alta pressione.
- Immergere la cartuccia in olio pulito.
- Avvitare la cartuccia A MANO finché si incontra l'O-ring, quindi serrare con chiave dinamometrica alla coppia di serraggio riportata sulla pagina catalogo relativa alla cartuccia.

Contaminazione e filtrazione

CONSIDERAZIONI GENERALI
I maggiori costruttori ed utilizzatori di componenti e sistemi oleodinamici riconoscono che l'eccessiva contaminazione del fluido è la principale causa di guasti e disfunzioni negli impianti oleodinamici. Le particelle abrasive che circolano nel fluido provocano l'erosione delle parti in movimento che porta all'usura dei componenti e al malfunzionamento dell'impianto. Si raccomanda di mantenere il livello di contaminazione per lo meno ai valori nominali indicati in tabella, adottando i sistemi di filtrazione più idonei allo scopo.

RAPPORTO DI FILTRAZIONE BETAX
E' il rapporto tra il numero di particelle all'ingresso e all'uscita del filtro che hanno diametro di X micron

GRADO DI FILTRAZIONE ASSOLUTA ISO 4572
E' il diametro X della particella più grande con BetaX ≥75

CLASSE DI CONTAMINAZIONE ISO 4406
E' espressa da due numeri che indicano rispettivamente il numero di particelle di diametro maggiore di 5 micron e maggiore di 15 micron contenute in 1 ml di fluido.

CLASSE DI CONTAMINAZIONE NAS 1638
E' espressa da un numero che indica il numero di particelle contenute in 100 ml di fluido suddivise per classi dimensionali

Seals

O-RINGS
Acryl - Nitrile Butadiene Rubber NBR (BUNA-N) standard for temperatures between -20°C and +100°C. FLUOROCARBON FPM (Viton) and other compounds are available on request.

BACK-UP RINGS
LUBRIFLON - PTFE

SEAL KIT
SEAL KITS include ALL EXTERNAL SEALS. Internal seals of cartridge valves are not included, since the customer is not allowed to disassemble cartridge valves.
ORDERING CODE: Replace V3 with KS
Example
Valve code: V3.896.03.A10
Seal Kit code: KS.896.03.A10

Cartridge installation

It is recommended to follow these steps:
- *Inspect the cartridge to ensure that it is in good conditions and no external contaminant is present.*
- *Check that O-ring and back-up rings are intact and correctly positioned. The O-ring should be towards the higher pressure port if only one back-up ring is present or between double back-up rings if both ports receive high pressure.*
- *Dip the cartridge in clean oil.*
- *Screw the cartridge in BY HAND until the O-ring is met, then tighten to the torque specified in the cartridge catalogue page.*

Contamination and filtration

GENERAL INFORMATION
Manufactures and users of hydraulic equipment admit that contamination is the most likely cause of malfunction or failure in hydraulic systems and reduces security and reliability of components and systems. Metal particles flowing throughout the circuit scratch moving surfaces so that contamination level, if not controlled, increases very rapidly.
It is strongly recommended to maintain contamination level at least at nominal values shown below, choosing adequate filtration products.

FILTRATION RATIO BETAX
It is the ratio between the number of particles before and after the filter with diameter larger than X microns.

ABSOLUTE FILTRATION RATING ISO 4572
It is the diameter X of the largest particle with BetaX ≥75

CONTAMINATION CLASS ISO 4406
It is expressed by two scale numbers representing the number of particles larger than 5 microns and larger than 15 microns contained in 1 ml of fluid.

CONTAMINATION CLASS NAS 1638
It is expressed by one scale number representing the number of particles of different size ranges contained in 100 ml of fluid.

Contaminazione e filtrazione – *Contamination and filtration*				
Tipo di sistema Type of system Tipo di valvola Type of valve	Valore minimo richiesto *Minimum required*	Valori consigliati per aumentare la durata dei prodotti *Filtration recommended for extended product life*		
	Filtrazione nominale *Nominal filtration* (micron)	Grado di filtrazione assoluta (ISO 4572) *Absolute filtration rating (ISO 4572)* BETAx ≥ 75	Classe di contaminazione secondo *Contamination class according to*	
			ISO 4406	NAS 1638
Sistemi o componenti operanti ad ALTA PRESSIONE (>250 bar) CICLI AD ALTA FREQUENZA Sistemi con componenti FORTEMENTE sensibili ai contaminanti. Valvole proporzionali *Systems/Components operating at HIGH PRESSURE (>250 bar)* *HIGH FREQUENCY CYCLE APPLICATION* *Systems/Components with BAD dirt tolerance* *Proportional valves*	**10**	**X = 10 - 12**	**17 / 14**	**8**
Sistemi o componenti operanti a MEDIA PRESSIONE fino a 250 bar *Systems/Components operating at MEDIUM PRESSURE up to 250 bar*	**15**	**X = 12 - 15**	**18 / 14**	**9**
Sistemi o componenti operanti a BASSA PRESSIONE (<100 bar) CICLI A BASSA FREQUENZA Sistemi con componenti SCARSAMENTE sensibili ai contaminanti. *Systems/Components operating at LOW PRESSURE (<100 bar)* *LOW FREQUENCY CYCLE APPLICATION* *Systems/Components with GOOD dirt tolerance*	**25**	**X = 15 - 25**	**19 / 15**	**10 - 11**



oil sistem

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