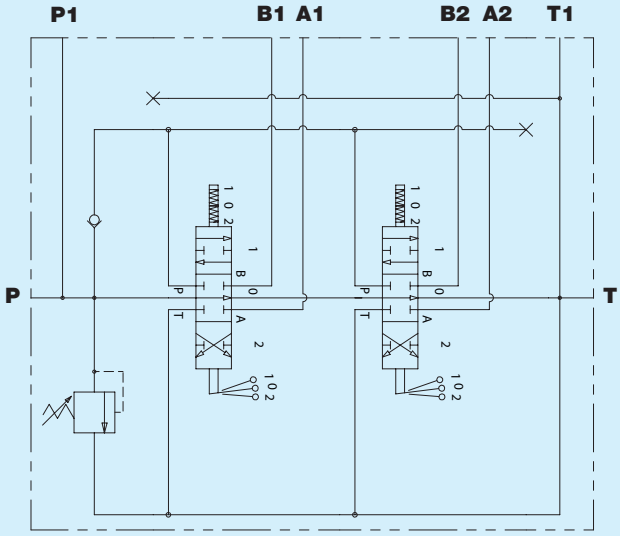
DN85 - Valvola di controllo direzionale

Prima di iniziare l'utilizzo leggere attentamente il documento ISTRUZIONI GENERALI D'IMPIEGO PER LE VALVOLE DI CONTROLLO DIREZIONALE

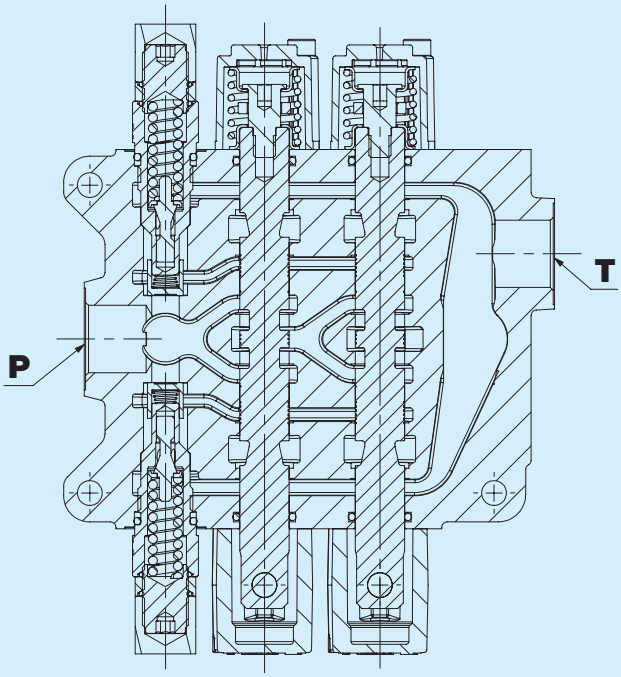
Dati tecnici

Portata nominale	**90 l/min** ***23,8 US gpm***
Pressione nominale	**250 bar** ***3625 psi***
Contropressione massima a scarico	**50 bar** ***725 psi***
Massima trafila interna (A o B -> P e T) p=100 bar (1450 psi)	**8 cm³/min** ***0,49 in³/min***
Temperatura di utilizzo	**-20°C +85°C NBR seals** ***(max peak +100°C)*** ***-20°C + 130°C HNBR seals***
Viscosità olio d'esercizio	**da 15 mm²/s a 90 mm²/s** ***(15 cSt a 90 cSt)***
Fluido	**Fluidi idraulici definiti dalla norma ISO 6743-4**

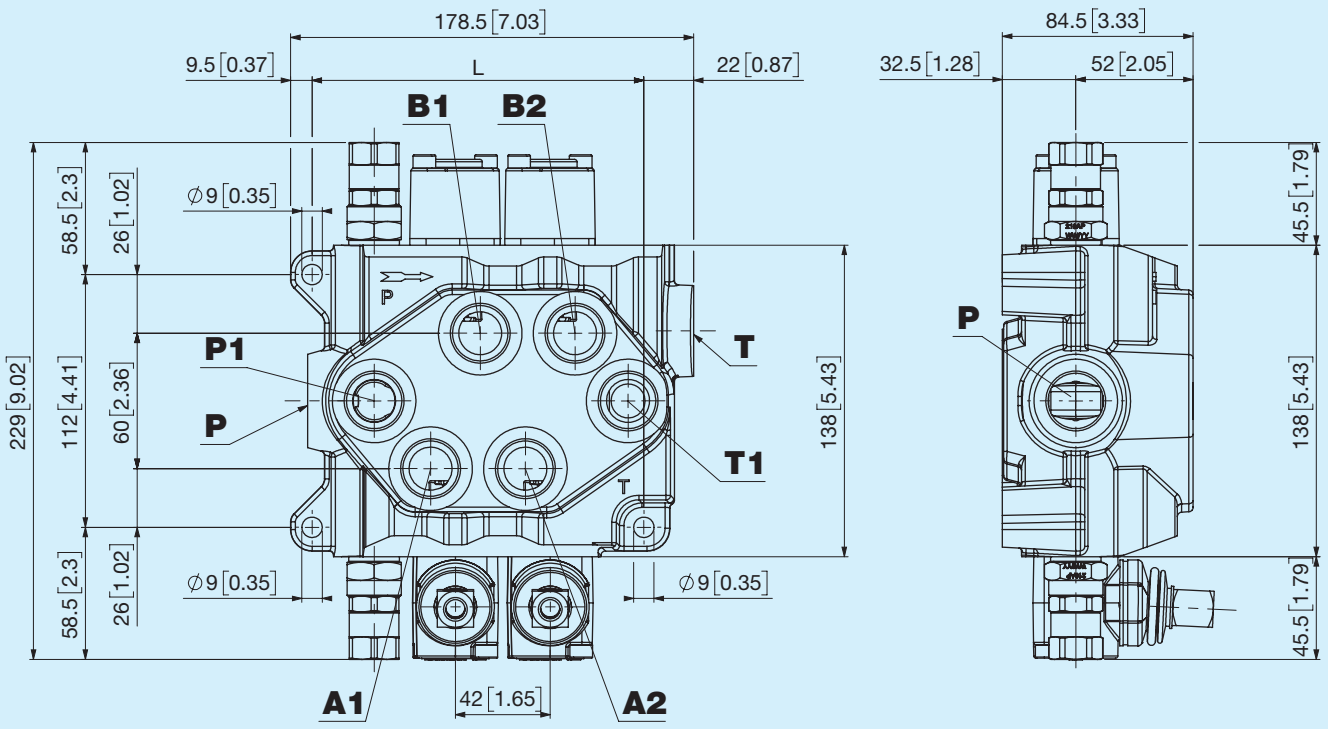


Versione STANDARD

Sezionato



Dimensioni



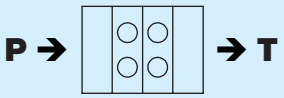
Standard

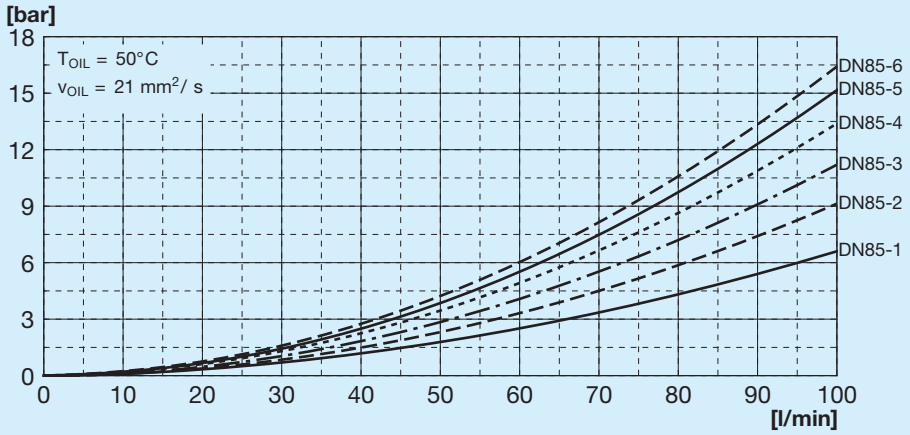
Dimensioni per numero di sezioni

Codice	N° sezioni	L		Massa	
		mm	in	kg	lb
1	1	105	4,1	7,5	16,5
2	2	147	5,8	10,5	23,1
3	3	189	7,4	13,5	29,7
4	4	231	9,1	16,5	36,3
5	5	273	10,7	19,5	42,9
6	6	315	12,4	22,5	49,5

Curve Caratteristiche

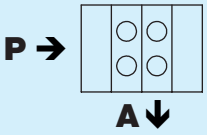
Curva caratteristica P-T

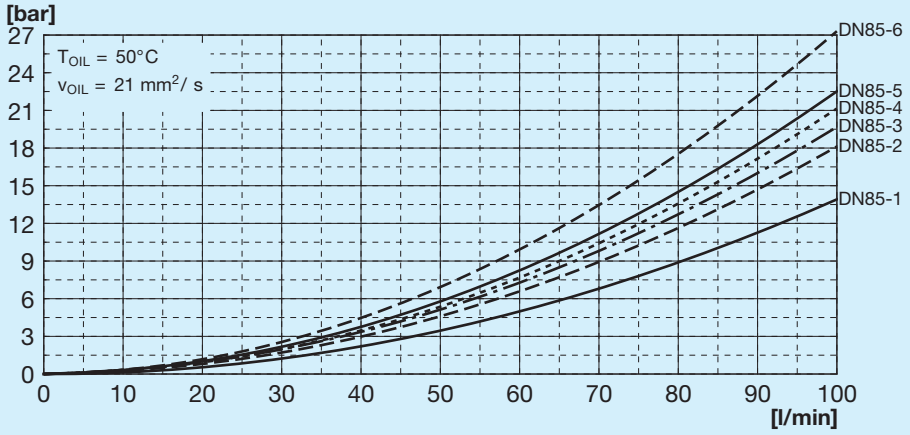




Parametri di prova: Circuito **01**

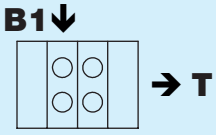
Curva caratteristica P-A

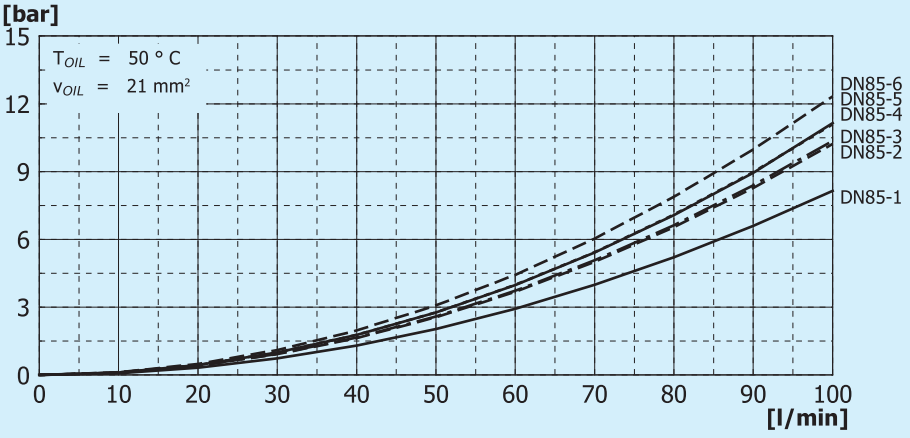




Parametri di prova: Circuito **01**

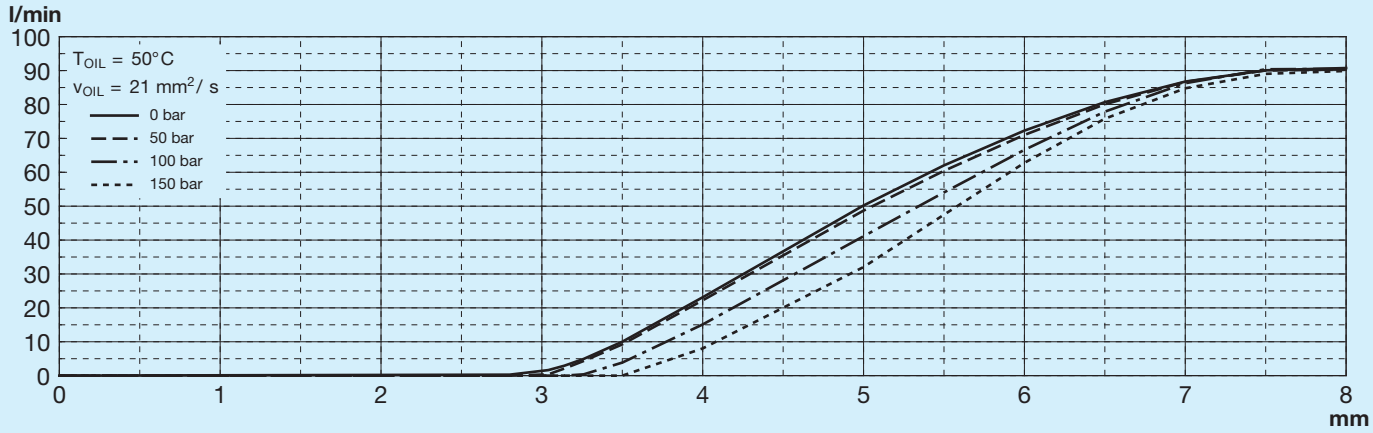
Curva caratteristica B1-T





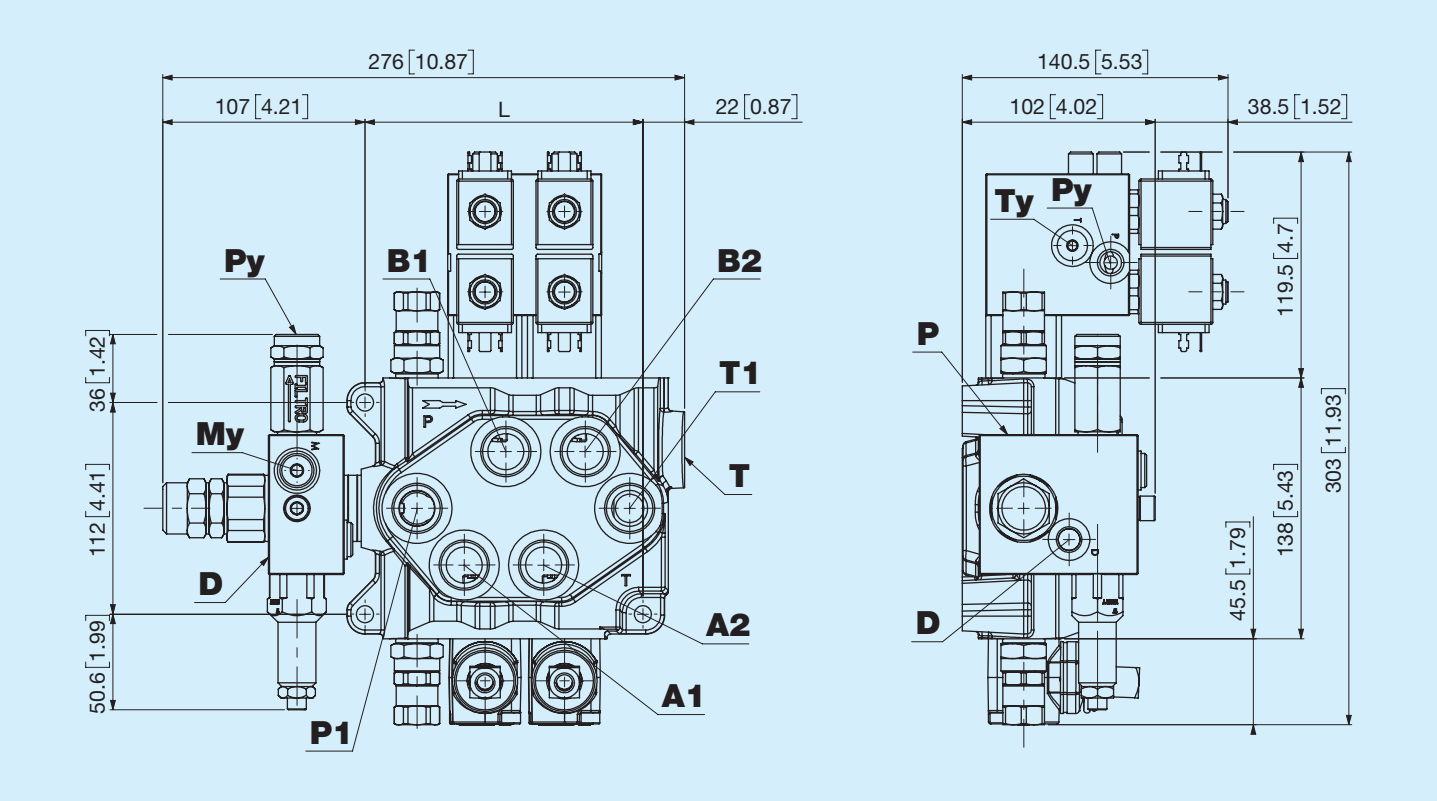
Parametri di prova: Circuito **01**

Metering

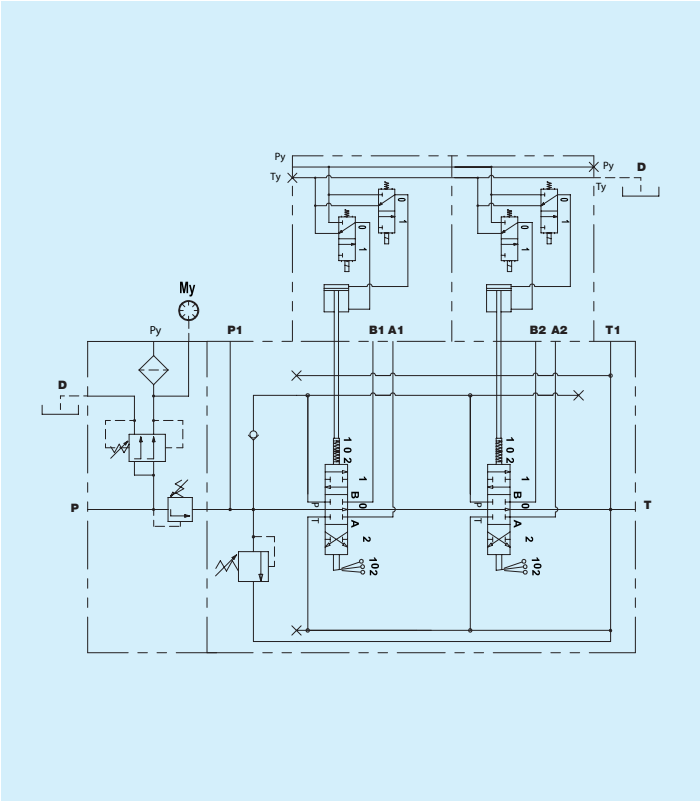


Parametri di prova: Circuito **01**

A Alimentatore

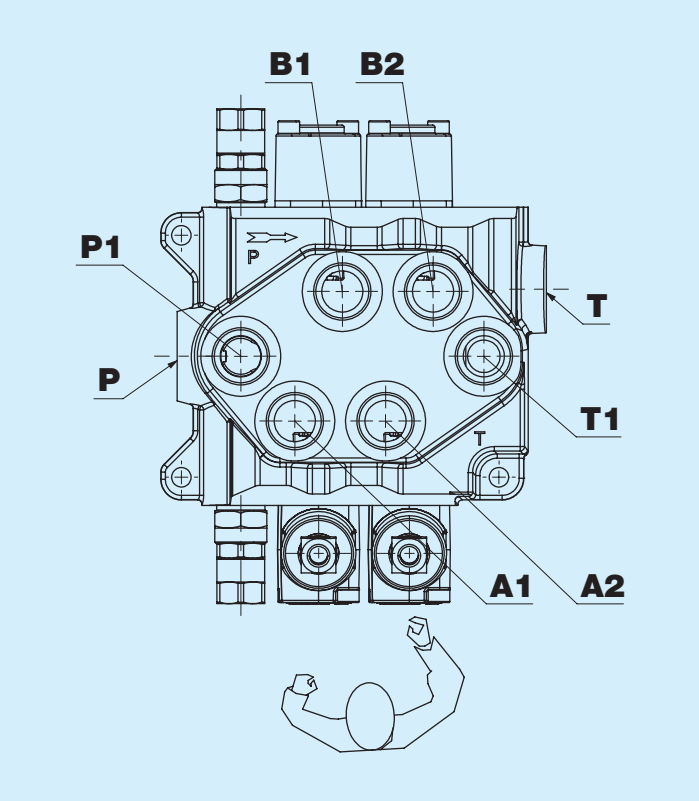


La seguente opzione viene utilizzata per lo più in quei casi in cui si desidera anche un azionamento elettro-idraulico o semplicemente idraulico del distributore. Con questa scelta, il kit per la funzione elettro-idraulica non sarà provvisto di tubi di collegamento.

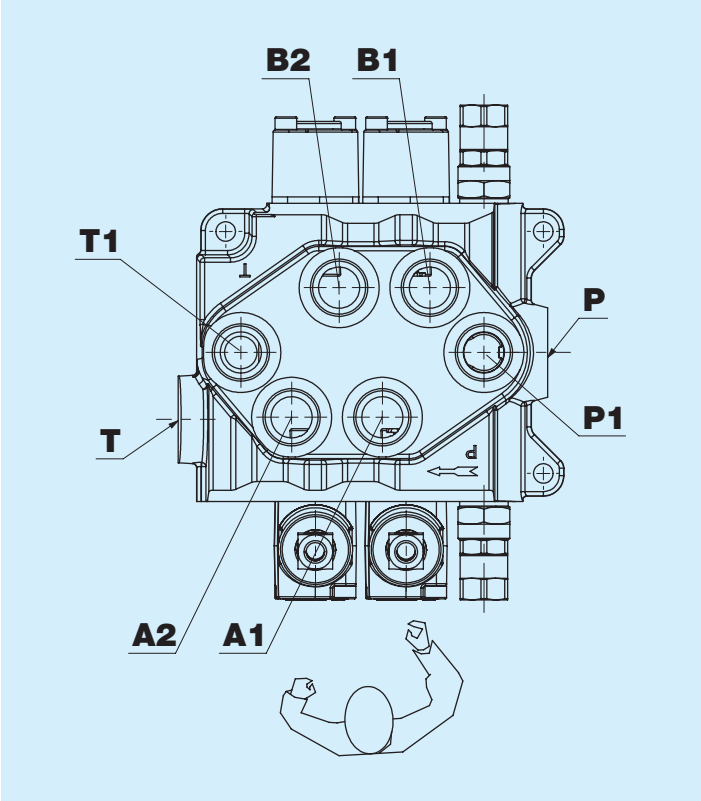


Tipo di entrata

S Sinistra (standard)



D Destra



La bocca A è generalmente la porta più vicina al lato dell'azionamento.

Filettatura bocche

Filettatura bocca P

Codice	Tipo	Serraggio ± 10% Nm
B	1/2'' GAS ISO 1179	70
F	3/4'' GAS ISO 1179	150
N	M22x1,5 ISO 9974	70
J	M22x1,5 ISO 6149	70
R	7/8'' - 14 SAE ISO 11926	70
V	1'' 1/16 - 12 SAE ISO 11926	150

Filettatura bocca P1

Codice	Tipo	Serraggio ± 10% Nm
0	Non lavorata	
L	1/4'' GAS ISO 1179	27
B	1/2'' GAS ISO 1179	70
F	3/4'' GAS ISO 1179	150
N	M22x1,5 ISO 9974	70
J	M22x1,5 ISO 6149	70
R	7/8'' - 14 SAE ISO 11926	70
V	1'' 1/16 - 12 SAE ISO 11926	150

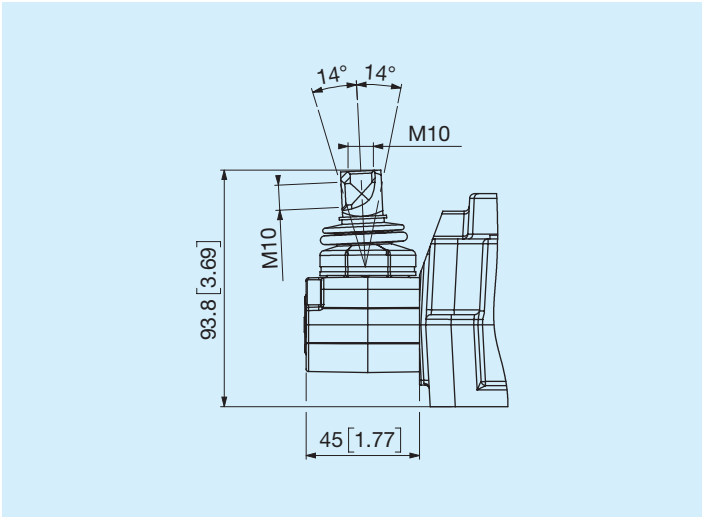
Filettatura bocche A - B

Codice	Tipo	Serraggio ± 10% Nm
B	1/2'' GAS ISO 1179	70
F	3/4'' GAS ISO 1179	150
N	M22x1,5 ISO 9974	70
J	M22x1,5 ISO 6149	70
R	7/8'' - 14 SAE ISO 11926	70

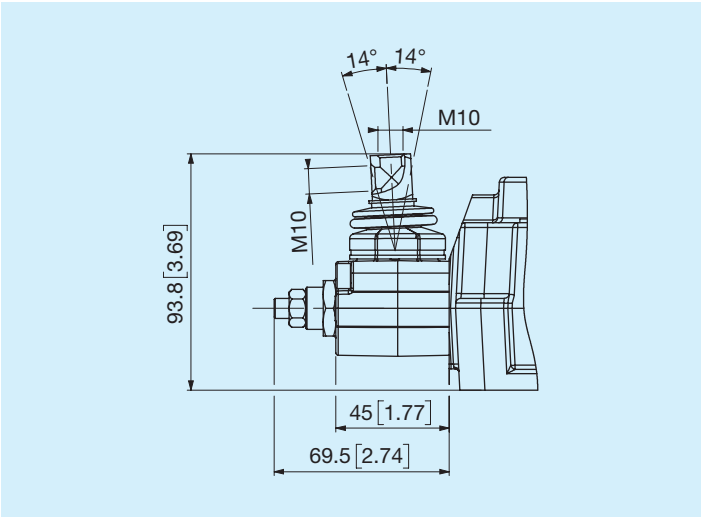
Filettatura bocche T - T1

Codice	Tipo	Serraggio ± 10% Nm
B	1/2'' GAS ISO 1179	70
F	3/4'' GAS ISO 1179	150
N	M22x1,5 ISO 9974	70
J	M22x1,5 ISO 6149	70
R	7/8'' - 14 SAE ISO 11926	70
V	1'' 1/16 - 12 SAE ISO 11926	150

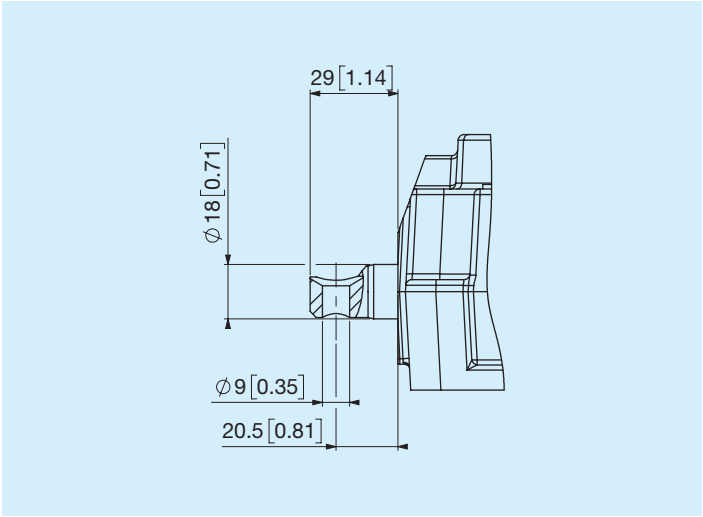
L Standard kit portaleva



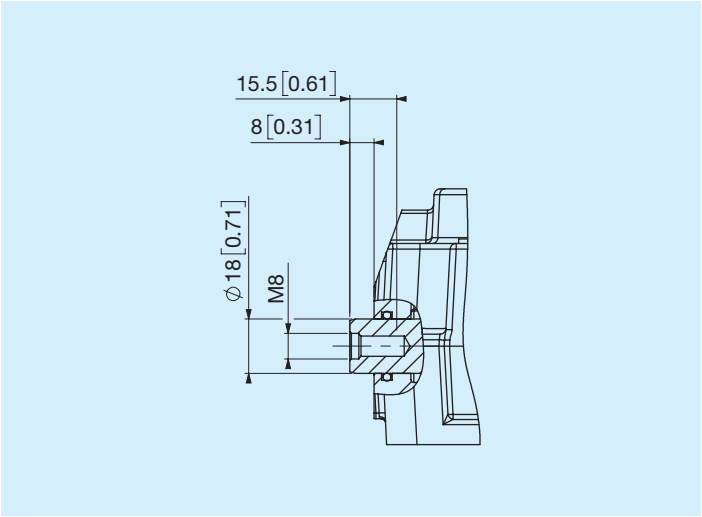
Z Portaleva con limitatore di corsa



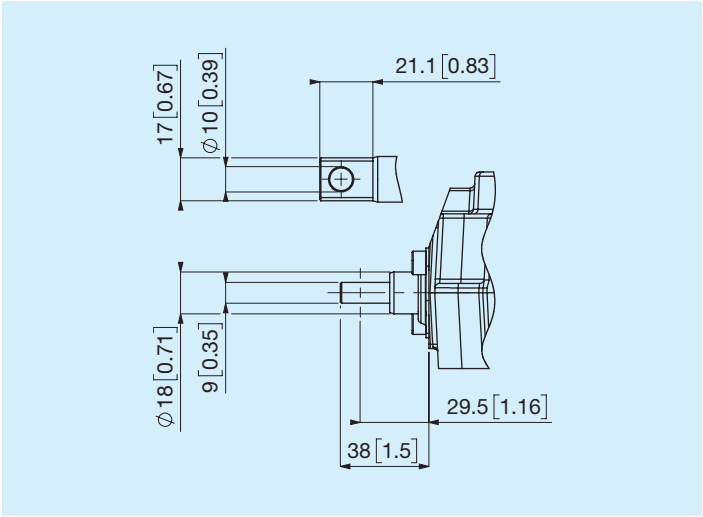
A Senza portaleva, appendice standard



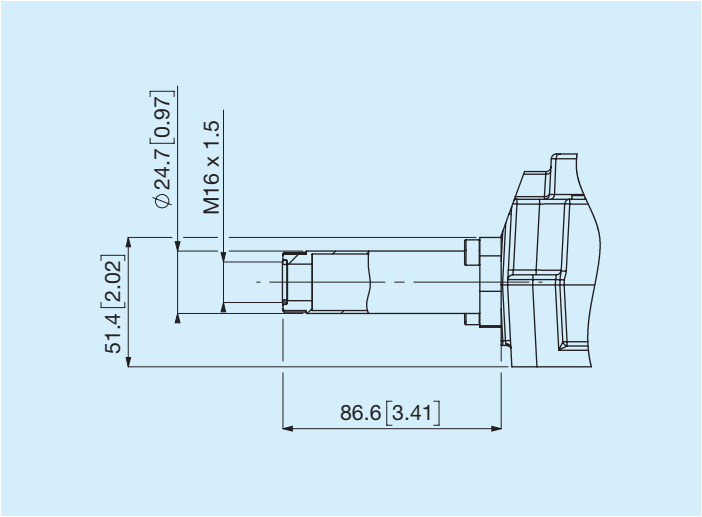
B Senza portaleva, senza appendice



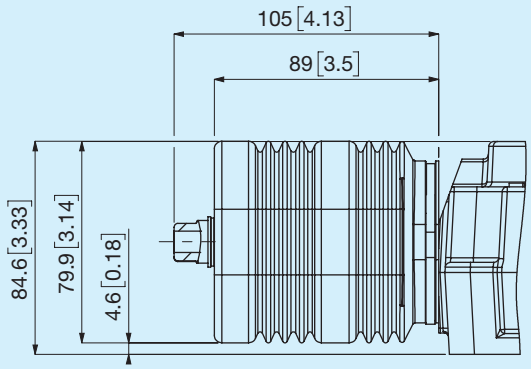
C Senza portaleva, appendice piatta

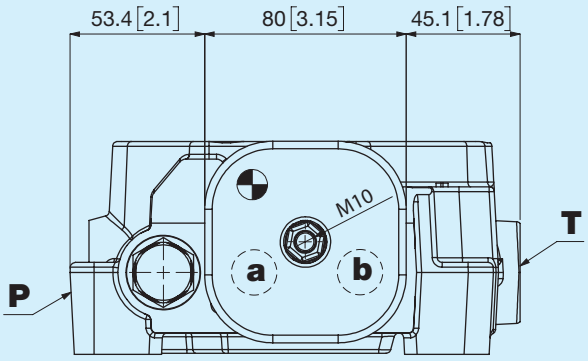


T Predisposizione cavo lato azionamento



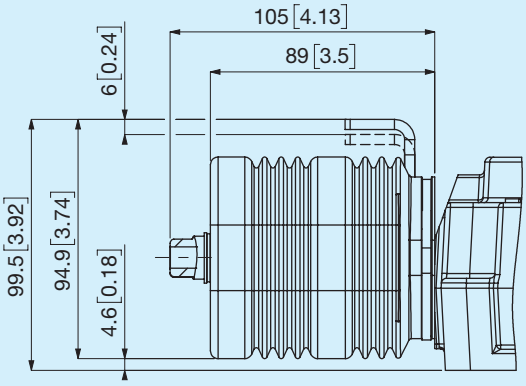
M Manipolatore



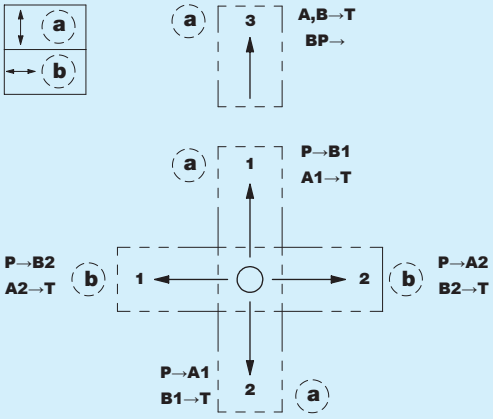


a=Spola 1ª sezione b=Spola 2ª sezione

G Manipolatore con blocca spole

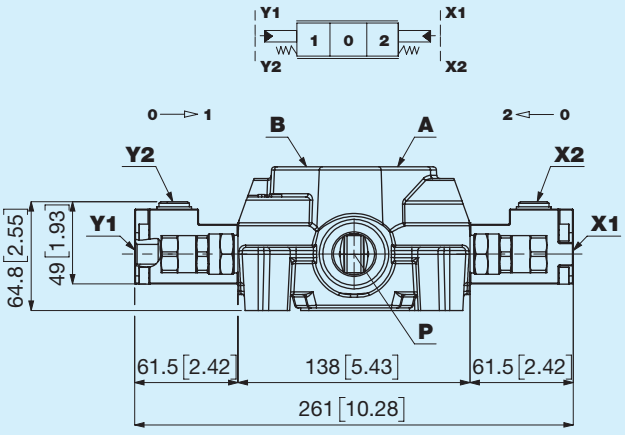


Funzioni manipolatore

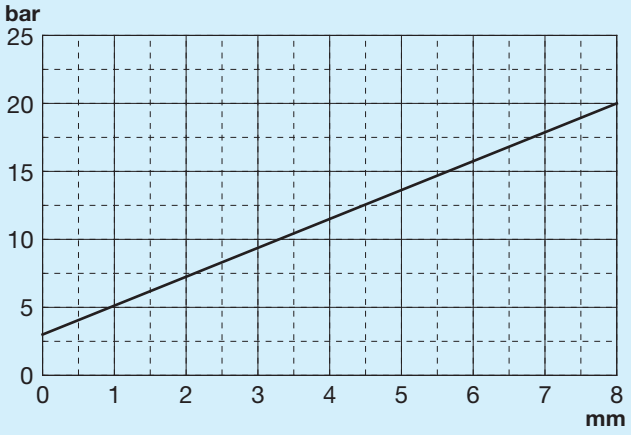


Disponibile anche in altre configurazioni.

K Comando idraulico

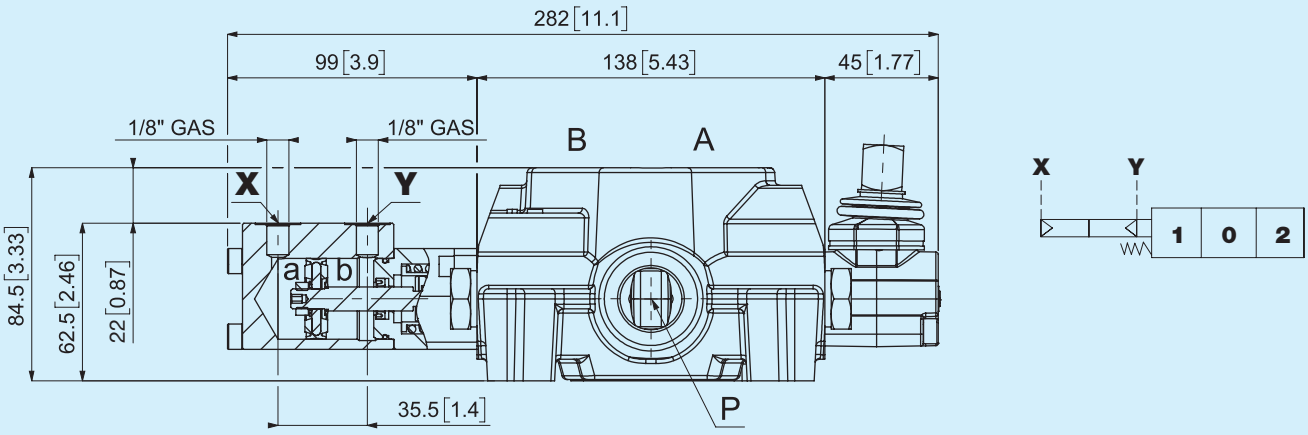


Comando idraulico



BONDIOLI & PAVESI DINOIL

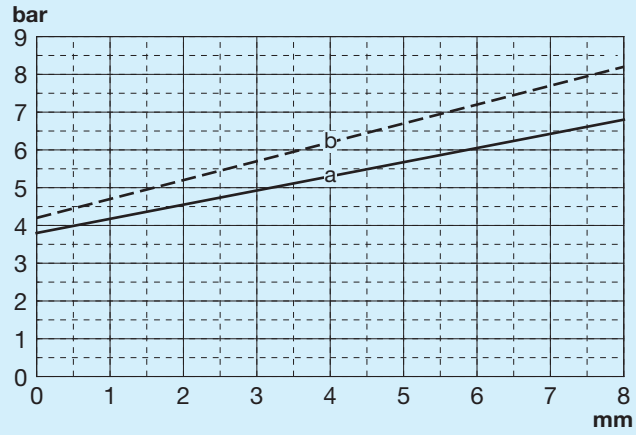
P Pneumatico



a = Camera grande b = Camera piccola

L'azionamento pneumatico va a collocarsi nel lato in cui normalmente è posto il posizionatore e rappresenta l'azionamento principale. Il distributore verrà fornito, come standard, anche con portaleva nel lato opposto.

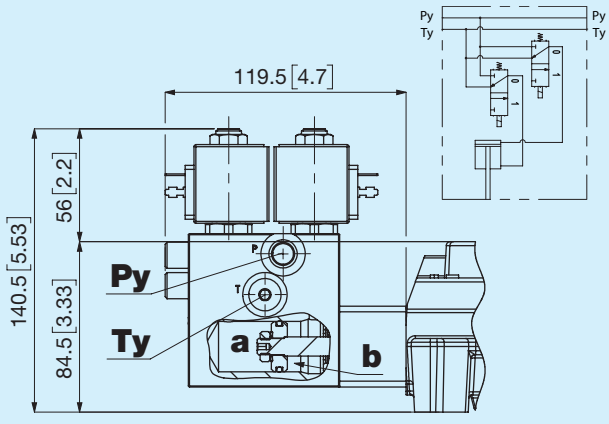
Comando pneumatico



a = Camera grande b = Camera piccola

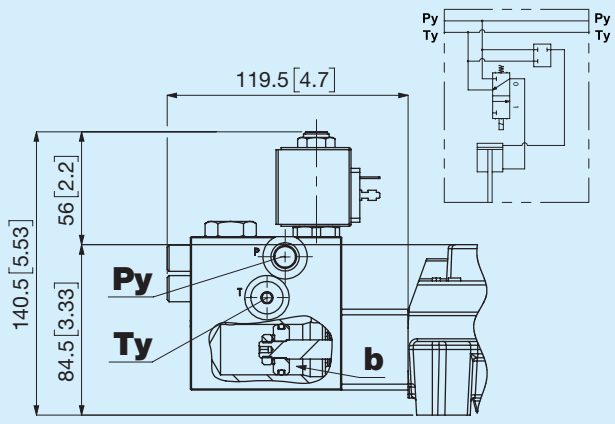
Azionamenti con comando elettro-idraulico

H Doppio effetto



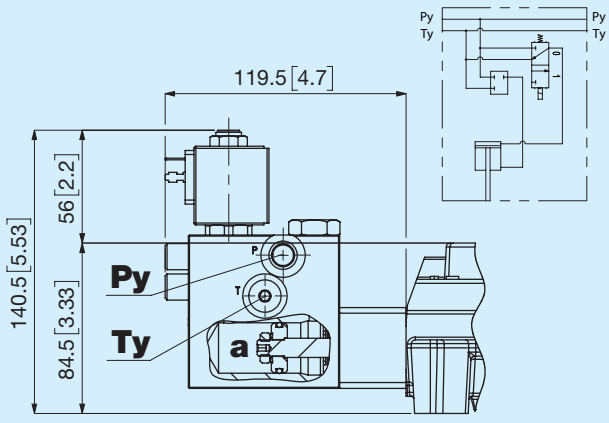
a = Camera grande b = Camera piccola

S Semplice effetto bocca A



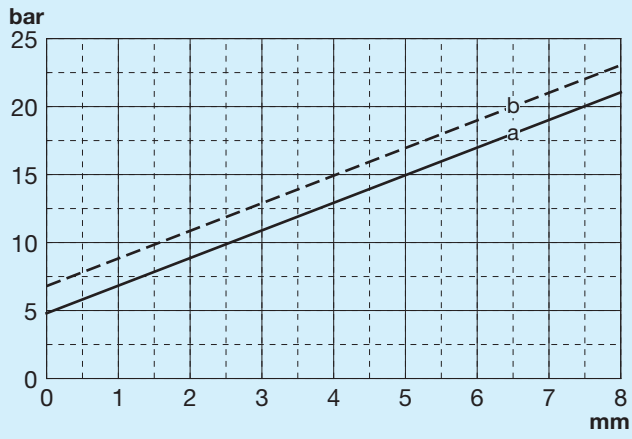
b = Camera piccola

X Semplice effetto bocca B



a = Camera grande

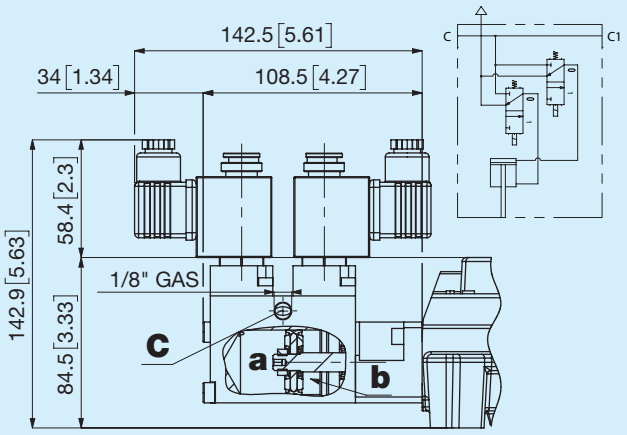
Comando elettro-idraulico



a = Camera grande b = Camera piccola

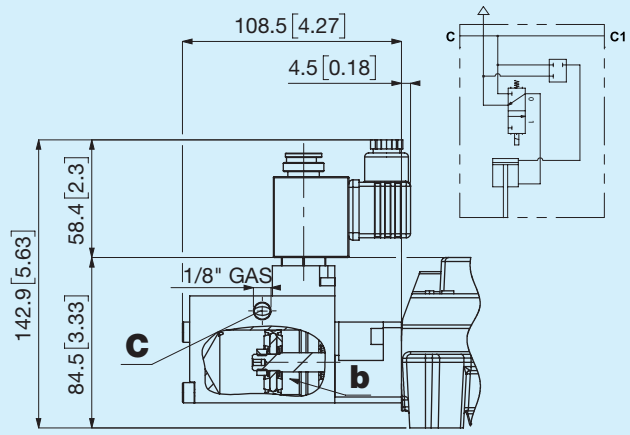
BONDIOLI & PAVESI DINOIL

U Doppio effetto



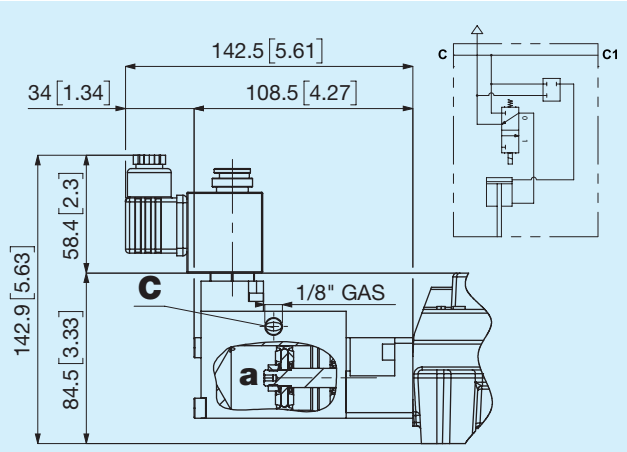
a = Camera grande b = Camera piccola

I Semplice effetto bocca A



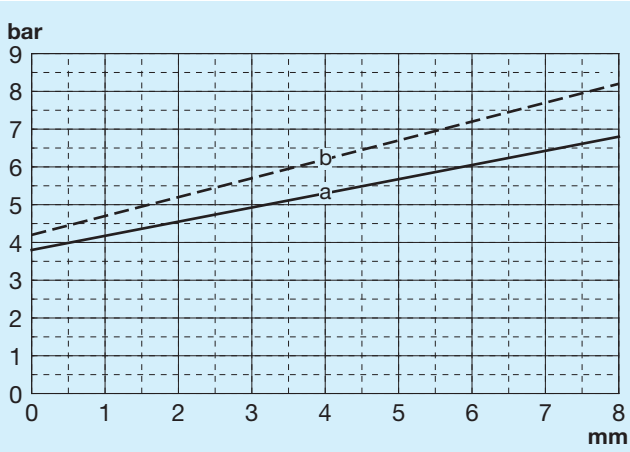
b = Camera piccola

W Semplice effetto bocca B



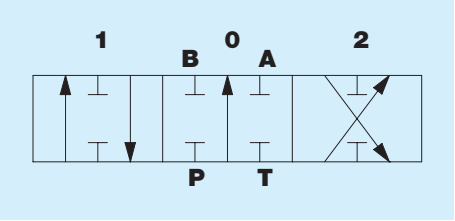
a = Camera grande

Comando elettro-pneumatico



a = Camera grande b = Camera piccola

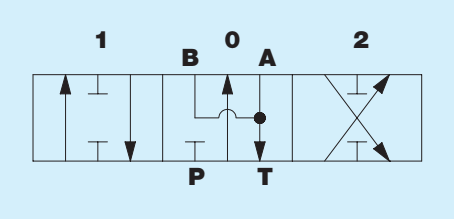
01 Circuito



Posizioni

3	1	0	2	4
	P → B A → T BP ┤	P, T ┤ A, B ┤ BP →	P → A B → T BP ┤	

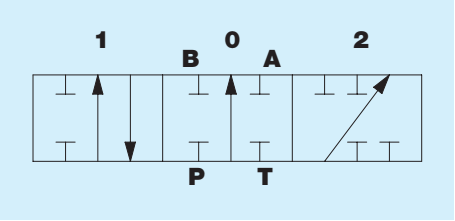
03 Circuito



Posizioni

3	1	0	2	4
	P → B A → T BP ┤	A, B → T P ┤ BP →	P → A B → T BP ┤	

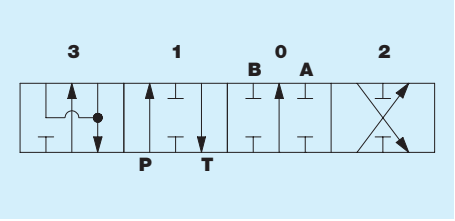
04 Circuito



Posizioni

3	1	0	2	4
	A → T P, B ┤ BP →	P, T ┤ A, B ┤ BP →	P → A B, T ┤ BP ┤	

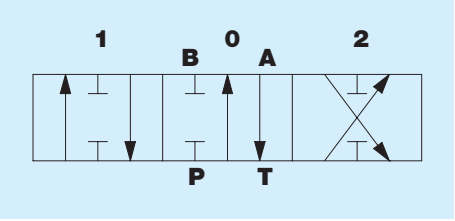
07 Circuito



Posizioni

3	1	0	2	4
A, B → T P ┤ BP →	P → B A → T BP ┤	P, T ┤ A, B ┤ BP →	P → A B → T BP ┤	

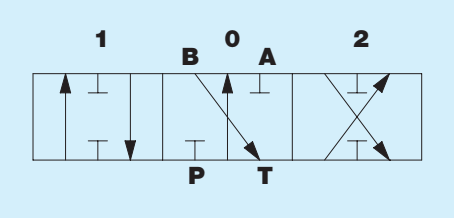
08 Circuito



Posizioni

3	1	0	2	4
	P → B A → T BP ┤	A → T P, B ┤ BP →	P → A B → T BP ┤	

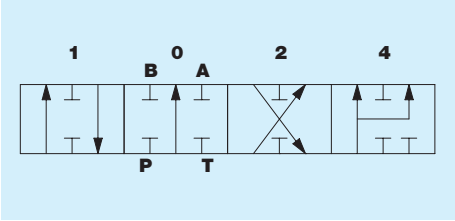
10 Circuito



Posizioni

3	1	0	2	4
	P → B A → T BP ┤	B → T P, A ┤ BP →	P → A B → T BP ┤	

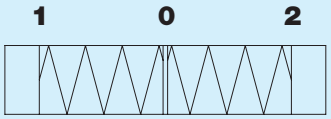
71 Circuito



Posizioni

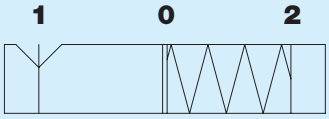
3	1	0	2	4
	P → B A → T BP ┤	P, T ┤ A, B ┤ BP →	P → A B → T BP ┤	P → A, B T ┤ BP ┤

0A



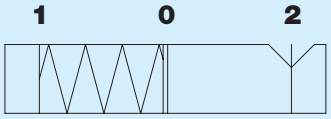
Posizione neutra in 0

0B



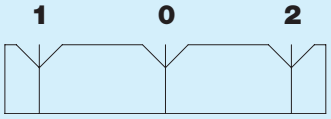
Posizione neutra in 0, detent in 1

0C



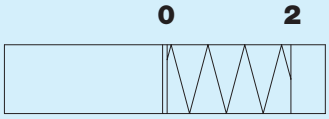
Posizione neutra in 0, detent in 2

0D



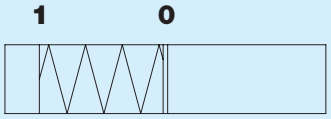
Detent in 0, 1, 2

0E



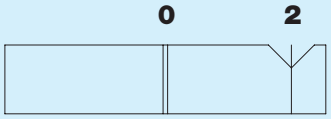
Posizione neutra in 0

0F



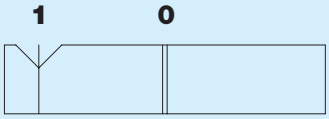
Posizione neutra in 0

0H



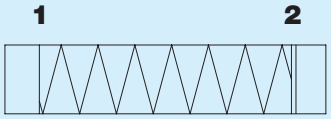
Detent in 2

0L



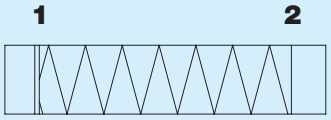
Detent in 1

0R



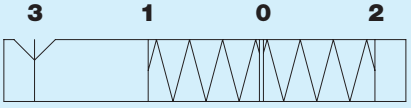
Posizione neutra in 2

0S



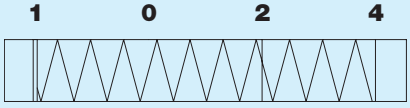
Posizione neutra in 1

NS



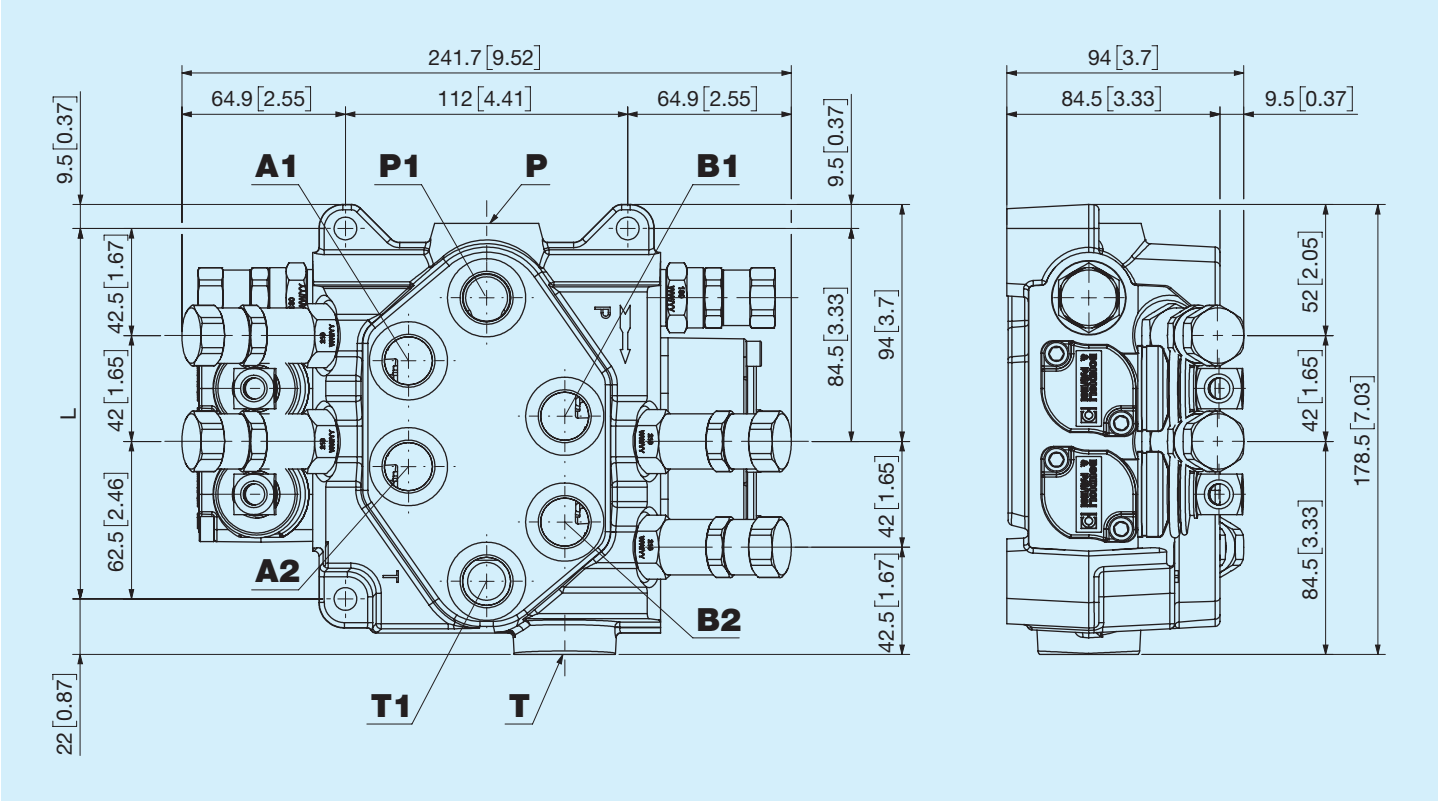
Posizione neutra in 0, detent in 3

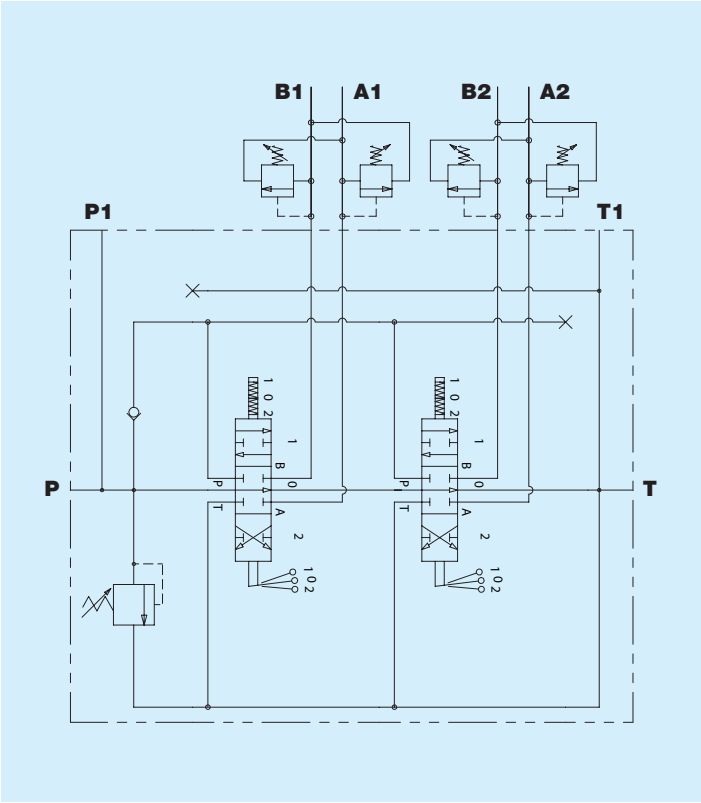
TR



Posizione neutra in 1

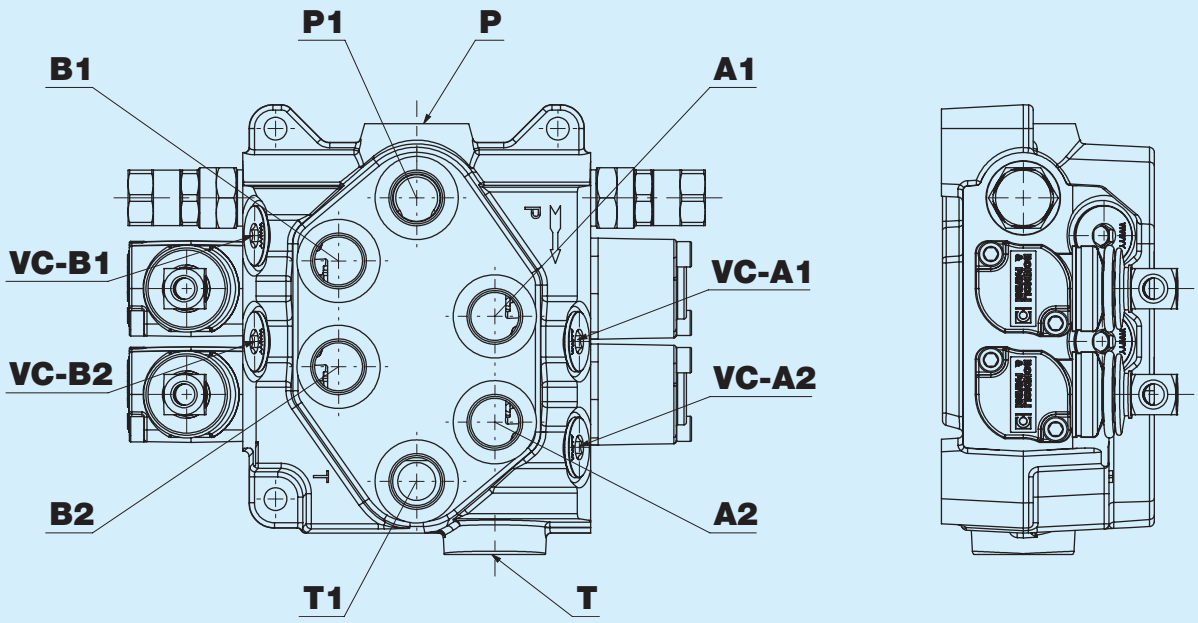
VL Valvola limitatrice di pressione bocca A e B

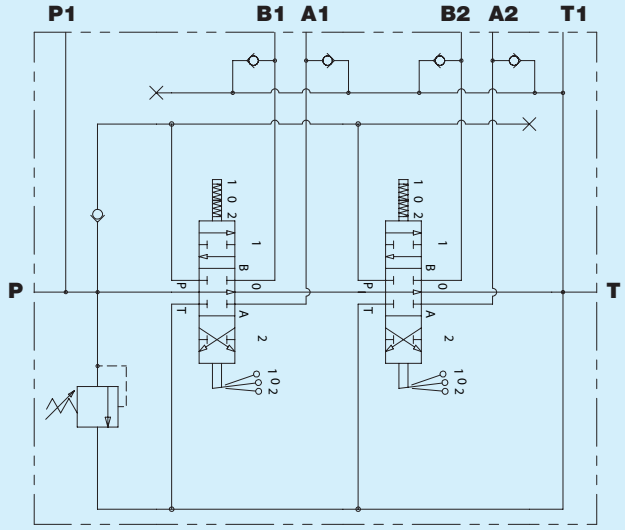




Tipo di valvola bocca A e B

VC Valvola di anticavitazione

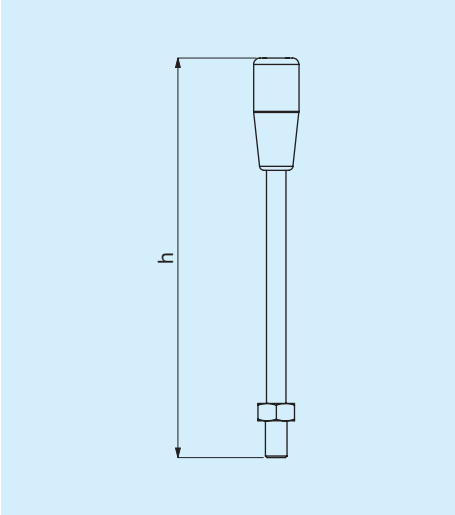




Opzioni leva

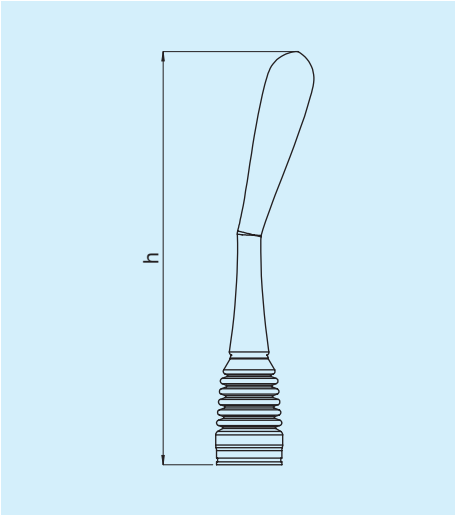
Dritta pomello standard

Codice	Descrizione	h [mm]	h [in]
A	Dritta pomello standard	109	4,3
B	Dritta pomello standard	134	5,28
C	Dritta pomello standard	184	7,24
D	Dritta pomello standard	214	8,42
E	Dritta pomello standard	254	10
F	Dritta pomello standard	304	11,97



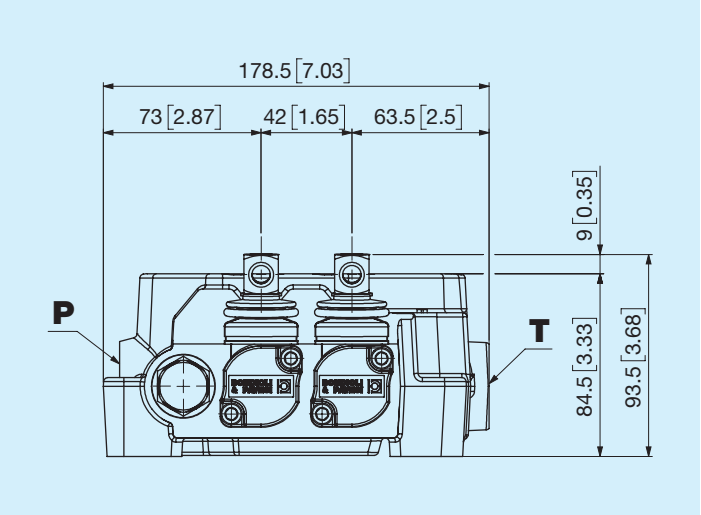
Leva ergonomica

Codice	Descrizione	h [mm]	h [in]
L	Dritta verticale	180	7,09
O	Piegata 15° verticale	180	7,09
R	Piegata 30° verticale	180	7,09
M	Dritta orizzontale	180	7,09
Y	Piegata 15° orizzontale	180	7,09
Q	Piegata 30° orizzontale	180	7,09

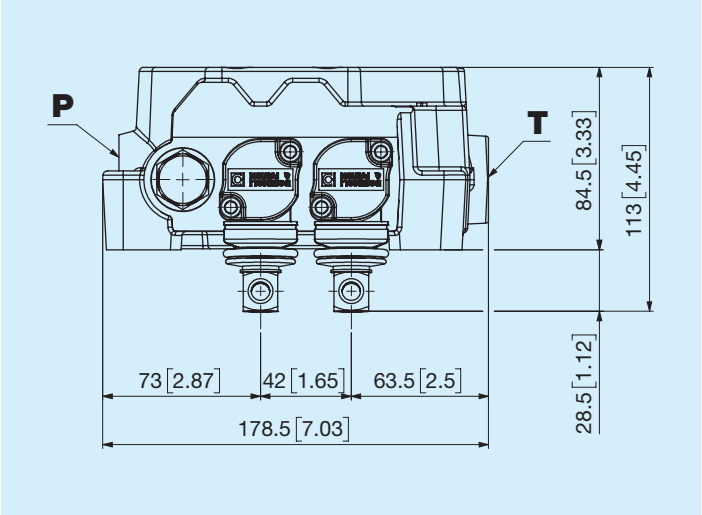


Posizione portaleva

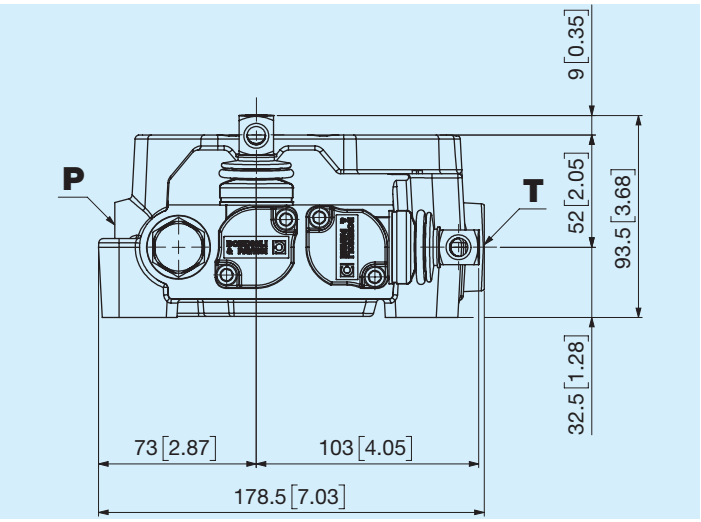
A Dritto



C Ruotato 180°

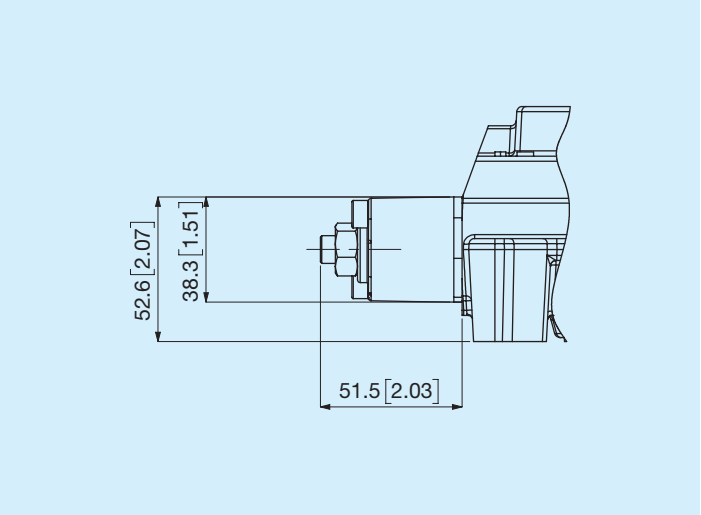


D Ruotata 90° verso il T

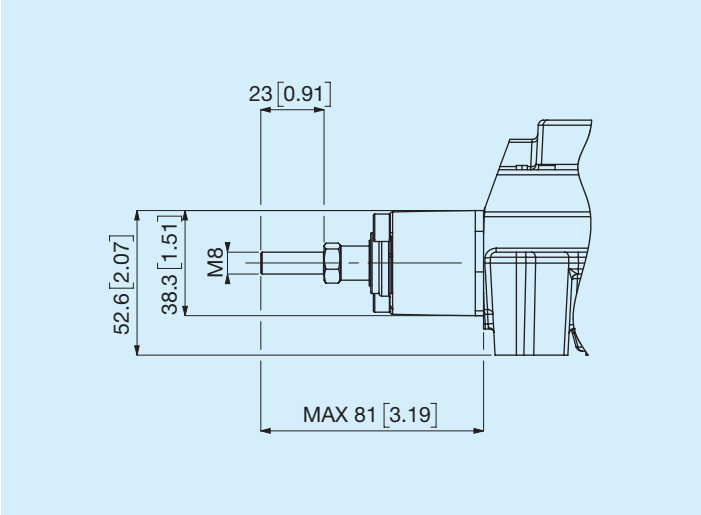


Opzioni lato posizionatore

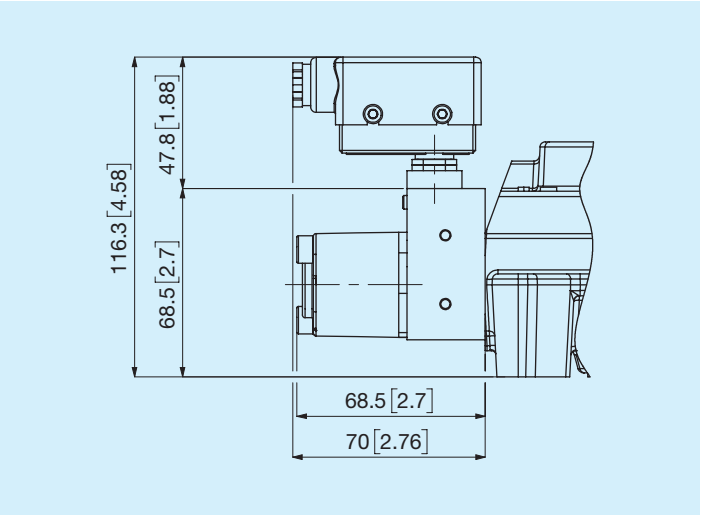
C Limitatore di corsa



M Doppio comando maschio



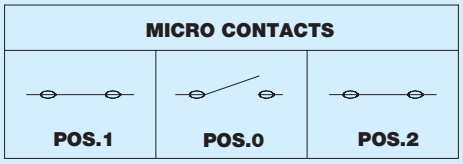
Micro



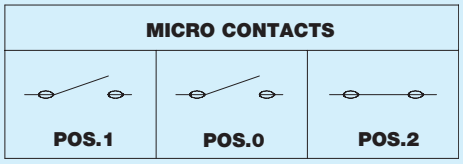
Caratteristiche posizionatore Micro

Portata dei contatti	16(5)A at 250V A.C 50 Hz 3A at 30V D.C. L/R= 5 ms
Temperatura di funzionamento	-20° a 85° C
Vita meccanica attesa	10 milioni di cicli a 1 Hz
Isolamento	Fino a 100 MΩ

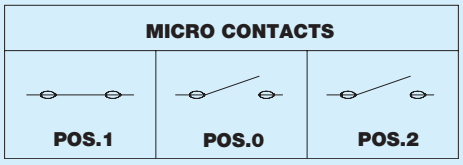
Y Micro doppio effetto



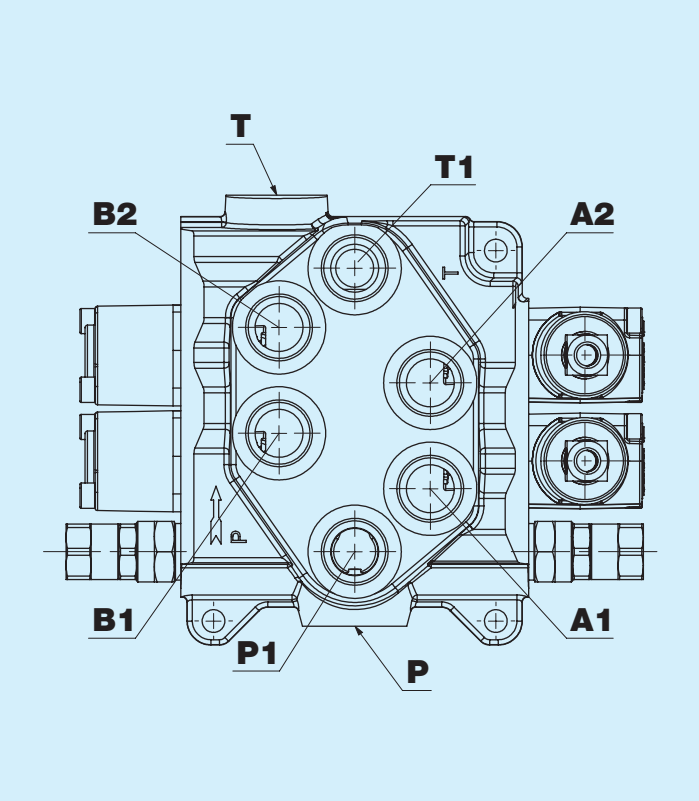
P Micro semplice effetto bocca A

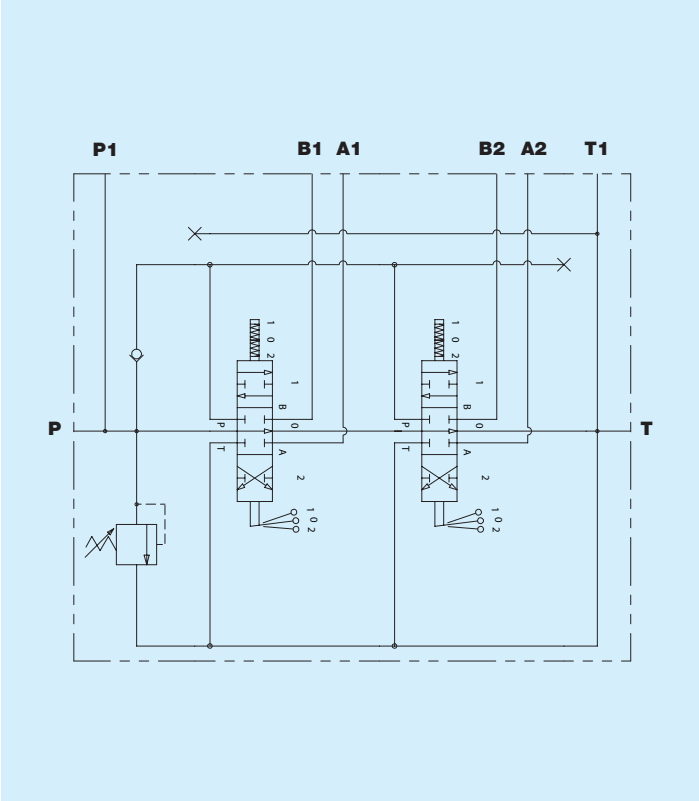


O Micro semplice effetto bocca B

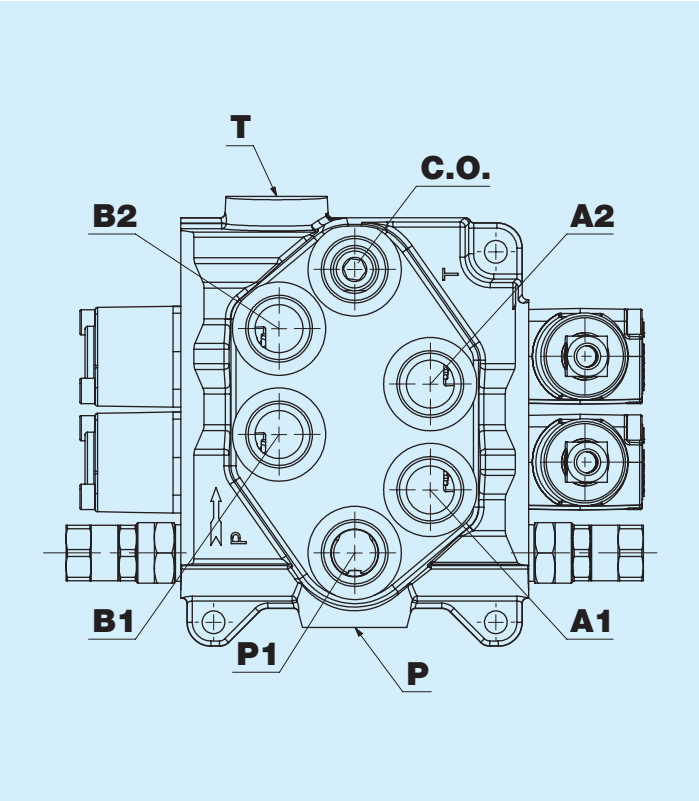


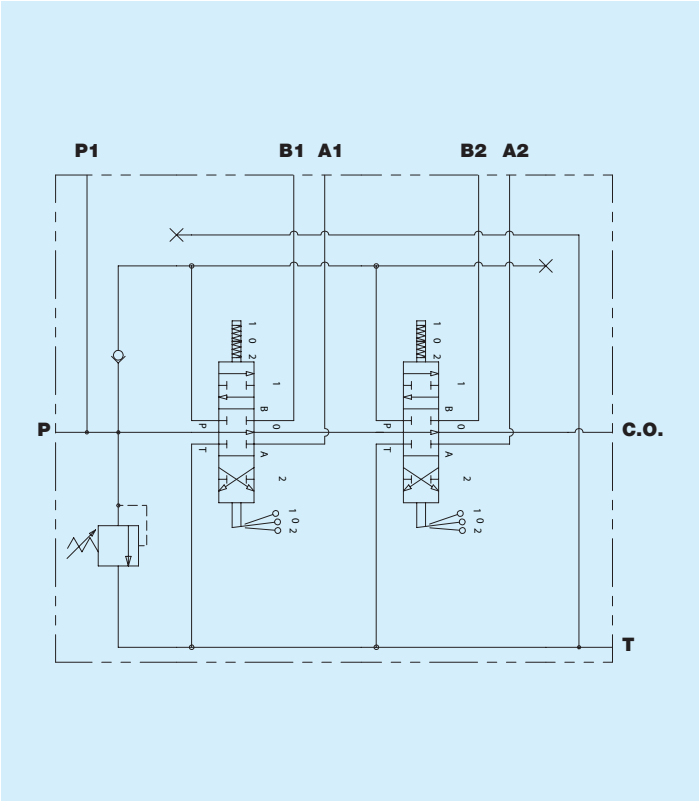
A Predisposizione Carry-Over





B Con Carry-Over bocca T





BONDIOLI & PAVESI DINOIL

Istruzioni per l'ordinazione

Ripetere per ogni sezione del distributore

DN85	1	2	3	4	5	6	7 8	9	10	11	12 13	14	15 16

1 Numero di sezioni

1	Sezioni	**3**	Sezioni	**5**	Sezioni
2	Sezioni	**4**	Sezioni	**6**	Sezioni

2 Opzioni generali

N	Nessuna	**Z**	Zincatura	**B**	Alimentatore e verniciatura nera
V	Verniciatura nera	**A**	Alimentatore	**E**	Alimentatore e zincatura

3 Tipo di entrata

S	Sinistra (standard)	**D**	Destra

4 Filettatura bocca P

B	1/2'' GAS ISO 1179	**N**	M22x1,5 ISO 9974	**R**	7/8'' - 14 SAE ISO 11926
F	3/4'' GAS ISO 1179	**J**	M22x1,5 ISO 6149	**V**	1'' 1/16 - 12 SAE ISO 11926

5 Filettatura bocca P1

0	Non lavorata	**B**	1/2'' GAS ISO 1179	**N**	M22x1,5 ISO 9974	**R**	7/8'' - 14 SAE ISO 11926
L	1/4'' GAS ISO 1179	**F**	3/4'' GAS ISO 1179	**J**	M22x1,5 ISO 6149	**V**	1'' 1/16 - 12 SAE ISO 11926

6 Opzioni su bocca P - P1

A	P aperto - P1 aperto (standard)	**B**	P aperto - P1 tappato	**C**	P tappato - P1 aperto	**D**	P aperto - P1 non lavorato

7 8 Tipo valvola di massima pressione

00	Tappo sostitutivo VMP	**11**	110 bar	**17**	170 bar	**23**	230 bar
06	60 bar	**12**	120 bar	**18**	180 bar	**24**	240 bar
07	70 bar	**13**	130 bar	**19**	190 bar	**25**	250 bar
08	80 bar	**14**	140 bar	**20**	200 bar		
09	90 bar	**15**	150 bar	**21**	210 bar		
10	100 bar	**16**	160 bar	**22**	220 bar		

9 Tipo di terminale valvola di massima pressione

G	Grano	**C**	Cappuccio	**P**	Sigillata	**N**	Nessuna

10 Filettatura bocche A e B

B	1/2'' GAS ISO 1179	**N**	M22x1,5 ISO 9974	**R**	7/8'' - 14 SAE ISO 11926
F	3/4'' GAS ISO 1179	**J**	M22x1,5 ISO 6149		

11 Azionamenti

L	Standard kit portaleva	**Z**	Portaleva con limitatore di corsa	**K**	Comando idraulico	**X**	Comando elettro-idraulico semplice effetto bocca B
A	Senza portaleva, appendice standard	**T**	Predisposizione cavo lato azionamento	**P**	Comando pneumatico	**U**	Comando elettro-pneumatico doppio effetto
B	Senza portaleva, senza appendice	**M**	Manipolatore	**H**	Comando elettro-idraulico doppio effetto	**I**	Comando elettro-pneumatico semplice effetto bocca A
C	Senza portaleva, appendice piatta	**G**	Manipolatore con blocca spole	**S**	Comando elettro-idraulico semplice effetto bocca A	**W**	Comando elettro-pneumatico semplice effetto bocca B

12 13 Circuiti

01	Circuito	**04**	Circuito	**08**	Circuito	**71**	Circuito
03	Circuito	**07**	Circuito	**10**	Circuito		

17	18	19	20	21	22	23	24	25	26	27	28

14

Opzioni spole

A	Spola standard 70-100 l/min	**C**	Spola standard 35-65 l/min	**N**	Nessuna
B	Spola nichelata 70-100 l/min	**D**	Spola nichelata 35-65 l/min		

15 16

Posizionatore

NN	Nessuno	**0D**	Detent in 0, 1, 2	**0L**	Detent in 1	**TR**	Posizione neutra in 1
0A	Posizione neutra in 0	**0E**	Posizione neutra in 0	**0R**	Posizione neutra in 2	**...**	
0B	Posizione neutra in 0, detent in 1	**0F**	Posizione neutra in 0	**0S**	Posizione neutra in 1	**...**	Per la scelta, vedi capitolo dedicato
0C	Posizione neutra in 0, detent in 2	**0H**	Detent in 2	**NS**	Posizione neutra in 0, detent in 3		

17 18

Valve type port A

00	Nessuna	**09**	VL 90 bar	**15**	VL 150 bar	**21**	VL 210 bar
TP	Lavorato tappato	**10**	VL 100 bar	**16**	VL 160 bar	**22**	VL 220 bar
VC	Valvola di anticavitazione	**11**	VL 110 bar	**17**	VL 170 bar	**23**	VL 230 bar
06	VL 60 bar	**12**	VL 120 bar	**18**	VL 180 bar	**24**	VL 240 bar
07	VL 70 bar	**13**	VL 130 bar	**19**	VL 190 bar	**25**	VL 250 bar
08	VL 80 bar	**14**	VL 140 bar	**20**	VL 200 bar		

19 20

Valve type port B

00	Nessuna	**09**	VL 90 bar	**15**	VL 150 bar	**21**	VL 210 bar
TP	Lavorato tappato	**10**	VL 100 bar	**16**	VL 160 bar	**22**	VL 220 bar
VC	Valvola di anticavitazione	**11**	VL 110 bar	**17**	VL 170 bar	**23**	VL 230 bar
06	VL 60 bar	**12**	VL 120 bar	**18**	VL 180 bar	**24**	VL 240 bar
07	VL 70 bar	**13**	VL 130 bar	**19**	VL 190 bar	**25**	VL 250 bar
08	VL 80 bar	**14**	VL 140 bar	**20**	VL 200 bar		

21

Opzioni leva

N	Nessuna	**C**	h 184 mm / 7,24 in	**L**	Dritta verticale	**Y**	Piegata 15° orizzontale
S	Senza leva	**D**	h 214 mm / 8,42 in	**O**	Piegata 15° verticale	**Q**	Piegata 30° orizzontale
A	h 109 mm / 4,3 in	**E**	h 254 mm / 10 in	**R**	Piegata 30° verticale		
B	h 134 mm / 5,28 in	**F**	h 304 mm / 11,97 in	**M**	Dritta orizzontale		

22

Posizione portaleva

A	Dritto	**C**	Ruotato 180°	**N**	Nessuno
B	Ruotato 90° verso il P (entrata a destra)	**D**	Ruotato 90° verso il T		

23

Opzioni lato posizionatore

N	Nessuna	**M**	Doppio comando maschio	**P**	Micro semplice effetto bocca A
C	Limitatore di corsa	**Y**	Micro doppio effetto	**O**	Micro semplice effetto bocca B

24

Tensione e connettore

N	Nessuno	**A**	12V DIN 43650	**B**	24V DIN 43650

25

Filettatura bocca T

B	1/2'' GAS ISO 1179	**N**	M22x1,5 ISO 9974	**R**	7/8'' - 14 SAE ISO 11926
F	3/4'' GAS ISO 1179	**J**	M22x1,5 ISO 6149	**V**	1'' 1/16 - 12 SAE ISO 11926

26

Filettatura bocca T1

B	1/2'' GAS ISO 1179	**N**	M22x1,5 ISO 9974	**R**	7/8'' - 14 SAE ISO 11926
F	3/4'' GAS ISO 1179	**J**	M22x1,5 ISO 6149	**V**	1'' 1/16 - 12 SAE ISO 11926

27

Opzioni su bocca T - T1

A	T aperto - T1 aperto (Standard)	**B**	T aperto - T1 tappato	**C**	T tappato - T1 aperto

28

Opzioni a scarico

A	Predisposizione carry-over (standard)	**B**	Con carry-over bocca T1