

DISTRIBUTORI MONOBLOCCO MONOBLOCK DIRECTIONAL CONTROL VALVES



Pag.
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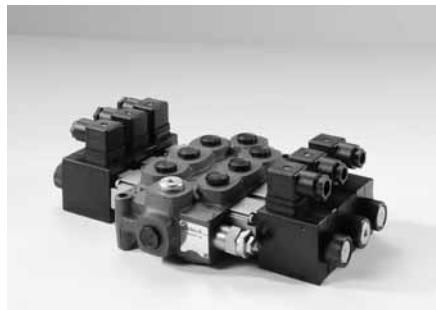
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CARATTERISTICHE

- Elevate prestazioni tecniche che consentono una vasta applicazione.
- Corpo in ghisa speciale ad alta resistenza per essere adatto alle alte pressioni di lavoro.
- Cursori nichelati ad alto scorrimento che permettono di poter lavorare ad alte pressioni con lunga durata di vita.
- Il circuito standard in parallelo offre manovre simultanee e, grazie a ricopimenti negativi e metering dedicati, si ottengono movimenti proporzionali agli utilizzi.
- Trafilamenti di valore ridottissimo.
- Intercambiabilità dei cursori, anche con quelli dei distributori componibili aventi schema "parallelo" o "singolo".
- Possibilità di inversione del lato di comando ruotando il cursore di 180°, consentendo così unificazione, versatilità, bassi valori di particolari a magazzino.
- Il tipo di libera circolazione a "Y" permette alte portate con basse perdite di carico, in rapporto alle ridotte dimensioni del distributore.
- Fa eccezione Q35 che ha ricoprimento positivo e una gamma di cursori apposita, sempre intercambiabili tra loro.

CHARACTERISTICS

- *High technical performances granting larger application range.*
- *Special high resistance cast-iron body, suitable for high working pressures.*
- *Nickel-plated offering granting long working life under high pressure conditions (see attached scheme).*
- *Standard circuit in parallel grants simultaneous operations, and due to negative overlaps and dedicate metering, there is proportional movement at the working ports.*
- *Minimal internal leakages.*
- *Interchangeability of the spools also with the ones of the sectional valves with "parallel" or "single" scheme*
- *Possibility to reverse the control side, turning the spool of 180° permits unification, versatility and low value of some parts in stock.*
- *Free movement version "Y shape" allows high oil flow with low pressure drops, in relation with the small dimensions of the control valves.*
- *Above features not valid for Q35 having positive overlap. The Q35 spools are interchangeable.*

**AVVERTENZA PER L'INSTALLAZIONE
DEI DISTRIBUTORI**

- I tre piedini dei distributori devono sempre appoggiare su una superficie perfettamente piana
- Non utilizzare raccordi conici su filetti cilindrici.
- Per pulire il distributore, prima della verniciatura, non utilizzare diluenti/solventi o qualsiasi prodotto che possa intaccare le parti in gomma.

**NOTES FOR DIRECTIONAL CONTROL
VALVES ASSEMBLY**

- *The three feet of the valve must always and perfectly rest on a 180° degree flat surface.*
- *No conical nipples with JIC thread must be used.*
- *Before painting the control valve, do not use diluents or any products that could damage rubber parts.*

CARATTERISTICHE TECNICHE

TECHNICAL CHARACTERISTICS

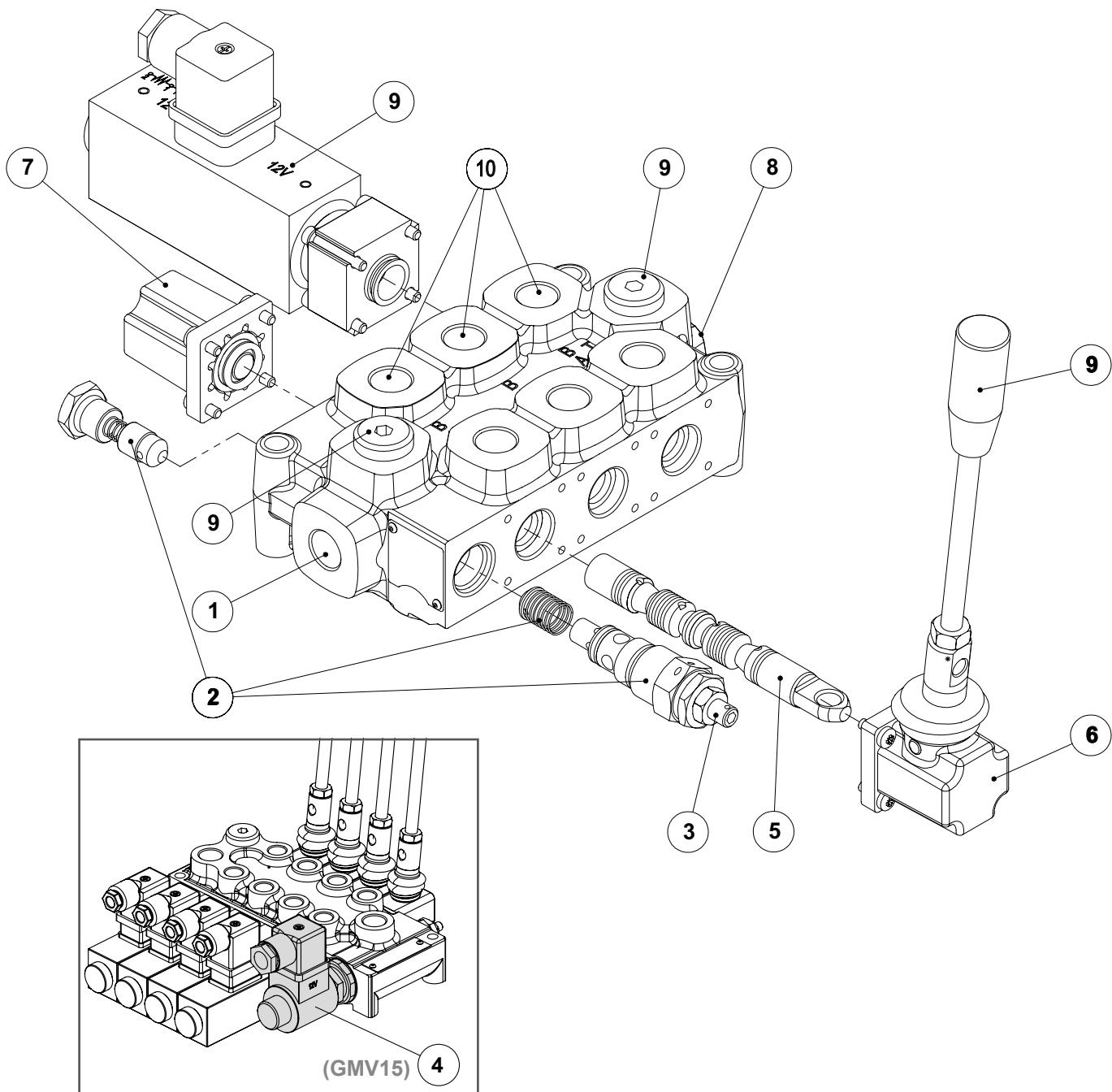
	Q35	Q15	GMV15	Q25	Q45	Q65	Q75	Q95
Numero massimo di sezioni di lavoro <i>Working sections maximum</i>	1	1	4	8		1	6	6
Limits temperatura olio <i>Oil temperature range</i>				-30 ÷ 80 °C				
Temperatura olio consigliata <i>Recommended oil temperature</i>				30° ÷ 60 °C				
Filtraggio consigliato <i>Recommended filtration</i>				26/23µm ISO DIS 4406				
Fluido <i>Hdraulic fluid</i>				Olio minerale Mineral oil				
Viscosità <i>Viscosity</i>				10 ÷ 400 mm ² /s				

Massa [Kg] <i>Weight (lbs)</i>	1 Sezione di lavoro <i>Working section</i>	1.85 (4.1)	1.20 (2.6)	—	3.00 (6.6)	3.40 (7.5)	5.70 (12.6)	5.70 (12.6)
	2 Sezioni di lavoro <i>Working sections</i>	—	—	2.50 (5.5)	4.50 (9.9)	—	7.60 (16.8)	7.60 (16.8)
	3 Sezioni di lavoro <i>Working sections</i>	—	—	3.15 (6.9)	5.60 (12.3)	—	10.40 (22.9)	10.40 (22.9)
	4 Sezioni di lavoro <i>Working sections</i>	—	—	3.80 (8.4)	7.30 (16.1)	—	12.40 (27.3)	12.40 (27.3)
	5 Sezioni di lavoro <i>Working sections</i>	—	—	—	8.90 (19.6)	—	14.50 (32.0)	14.8 (32.6)
	6 Sezioni di lavoro <i>Working sections</i>	—	—	—	10.1 (22.3)	—	16.60 (36.6)	18.3 (40.4)
	7 Sezioni di lavoro <i>Working sections</i>	—	—	—	11.0 (24.3)	—	—	—
	8 Sezioni di lavoro <i>Working sections</i>	—	—	—	13.6 (30.0)	—	—	—

Pressioni massime di lavoro [bar] <i>Max working pressure (PSI)</i>	1 o 2 sezioni di lavoro <i>from 1 up to 2 sections</i>	300 (4350)	250 (3625)	280 (4060)	350 (5075)	350 (5075)	350 (5075)	350 (5075)
	3 sezioni <i>3 sections</i>	—	—	280 (4060)	320 (4640)	—	300 (4350)	300 (4350)
	da 4 a 8 sezioni <i>from 4 up to 8 sections</i>	—	—	280 (4060)	300 (4350)	—	270 (3915)	270 (3915)
Pressione massima sullo scarico [bar] <i>Max back pressure (PSI)</i>	25 (363)							
A richiesta, solo su monoblocco 1 o 2 sezioni, contropressione sullo scarico 180 bar (indicare la lettera "S" al termine del codice) On request, 1 or 2 section monoblock valve only, max back pressure allowable is 2610 PSI (indicate the letter "S" at the end of code)	•	—	—	•	•	—	—	—

ESEMPIO DI ORDINAZIONE IN CODICE
ORDERING CODE EXAMPLE

Tipologia Type	Fiancata d'ingresso <i>Inlet section</i>	Sezione di lavoro <i>Working section</i>			Fiancata di scarico <i>Outlet section</i>	Note aggiuntive <i>Additional notes</i>	
Q25	F7S R250 MSE	2x	103	A1	M1	F3D	12V
1	2 3 4	5	6	7	8	9	10

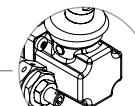
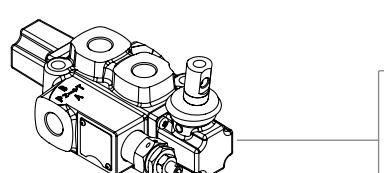


ESEMPIO DI ORDINAZIONE IN CODICE ORDERING CODE EXAMPLE

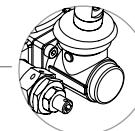
Tipo	Type
1 - Tipo Q35, Q15, GMV15, Q25, Q45, Q65, Q75, Q95	1 - Type Q35, Q15, GMV15, Q25, Q45, Q65, Q75, Q95
Indica il tipo di distributore; le caratteristiche dimensionali sono riportate da pag. A6 a pag. A21.	<i>Indicates model valve, characteristics and dimensions found on pages A6 to page A21.</i>
Fiancata d'ingresso	Inlet section
2 - Tipo fiancata d'ingresso (pag. A-22)	2 - Inlet section type (page A-22)
3 - Tipo molla e taratura valvola (pag. A-22)	3 - Type of spring and valve setting (page A-22)
Dove è presente la valvola VLP (fiancate F1S e F7S), deve essere specificato il tipo di molla (B, N o R) e la sua pressione di taratura; se quest'ultima viene omessa verrà montata la molla N tarata a 150 bar.	<i>If valve VLP is installed (inlet section F1S and F7S), specify the type of spring (B, N or R) and its pressure setting. If omitted, spring N with a 150 bar setting will be installed.</i>
4 - Valvole aggiuntive alla fiancata di ingresso (pag. A-23).	4 - Additional valves on the inlet section (page A-23)
Sezione di lavoro	Working section
I campi da 4 a 6 sono da ripetere per ogni sezione. Nel caso in cui due sezioni contigue siano identiche, è sufficiente descriverne solo una anteponendo 2x al campo 4.	<i>Fields 4 to 6 must be repeated for each section. If two adjacent sections are identical, just describe one and put 2x before field 4.</i>
N.B. Il numero massimo complessivo di sezioni di lavoro sono indicate a pag. A3.	<i>NOTE. The maximum overall number of working sections is indicated on page A3.</i>
5 - Tipo cursore (pag. A-24)	4 - Spool type (page A-24)
6 - Tipo di comando (pag. A-28, A-32)	5 - Control type (page A-28, A-32)
7 - Tipo posizionatore (pag. A-35)	6 - Positioner type (page A-35)
Fiancata di scarico	Outlet section
8 - Tipo fiancata di scarico (pag. A-62)	7 - Outlet section type (page A-62)
Note aggiuntive	Additional notes
9 - Note aggiuntive (pag. A-63)	8 - Additional notes (page A-63)
10 - Numero elementi (pag. A-63)	9 - Number of sections (page A-63)
Specificare il numero delle sezioni di lavoro (es. 2E) previste.	<i>Specify the number of working sections needed (e.g. 2E).</i>

Q35

DISTRIBUTORI MONOBLOCCO MONOBLOCK DIRECTIONAL CONTROL VALVES

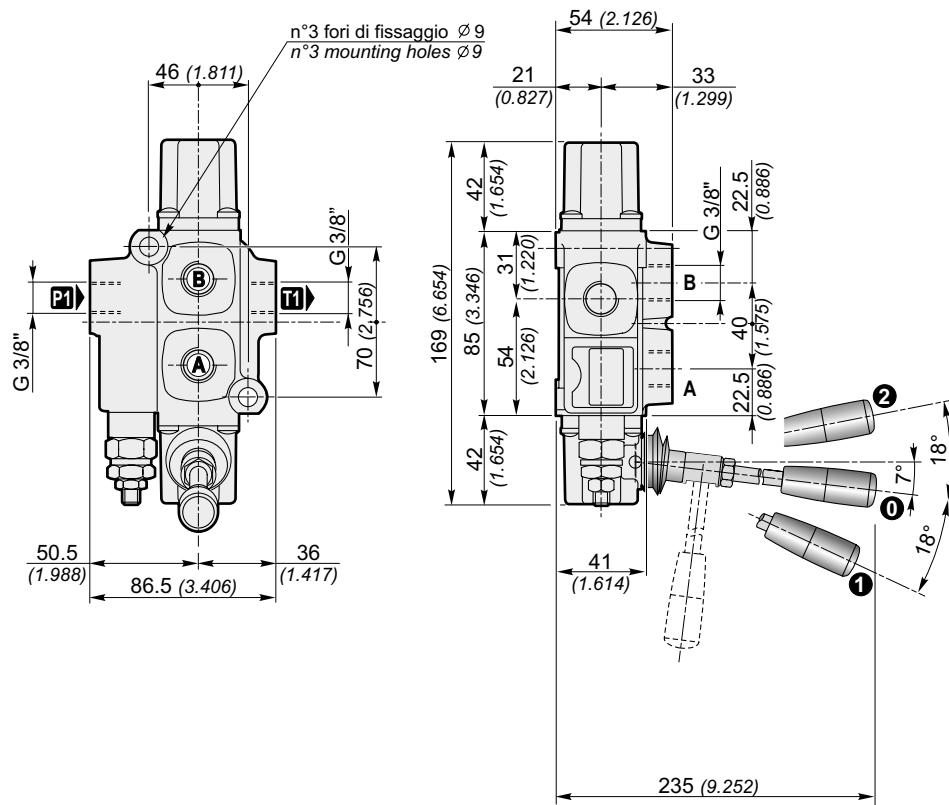


(Standard)
Comando e posizionatore in plastica
Control and positioner plastic



S
Comando e posizionatore in Alluminio
Control and positioner Aluminium

Q35	F7S	R250	103	A1	M1	F3D	S	1E
1	2	3	4	5	6	7	8	9



Q35	F7S	R250	103	A1	M1	F3D	12V	2E
1	2	3	5	6	7	8	9	10

Filettature disponibili / Available ports

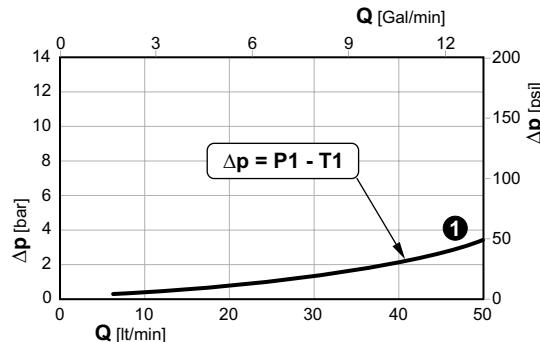
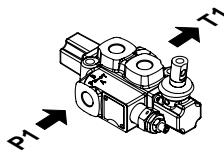
Bocche Ports	BSP (standard)	SAE	BSP G 1/2"
P1	G 3/8"	3/4" - 16 UNF (SAE8)	BSP G 1/2"
A-B	G 3/8"	3/4" - 16 UNF (SAE8)	BSP G 1/2"
T1	G 3/8"	3/4" - 16 UNF (SAE8)	BSP G 1/2"

Dimensioni in / Dimensions in: mm (inch)

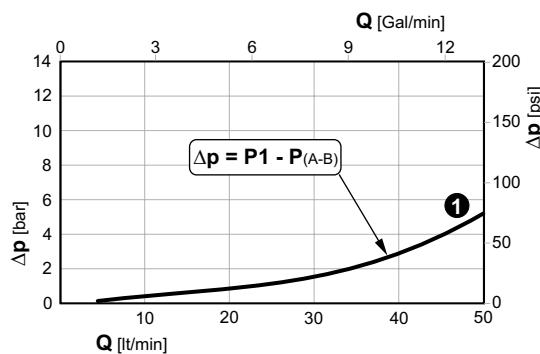
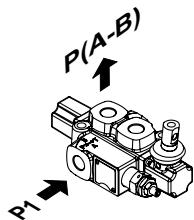
Q35

DISTRIBUTORI MONOBLOCCO MONOBLOCK DIRECTIONAL CONTROL VALVES

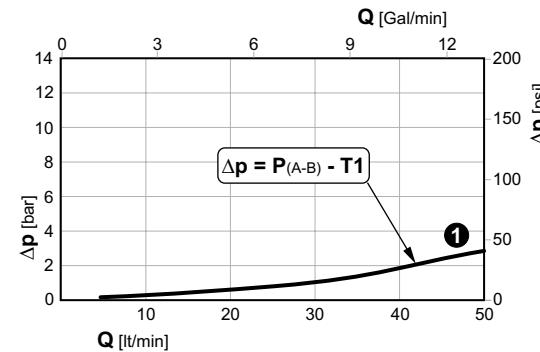
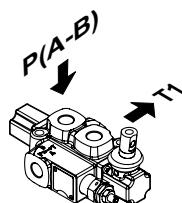
Perdite di carico con il cursore in posizione neutra
Pressure drop with spool in neutral position



Perdite di carico con il cursore in posizione di lavoro
Pressure drop with spool in working position

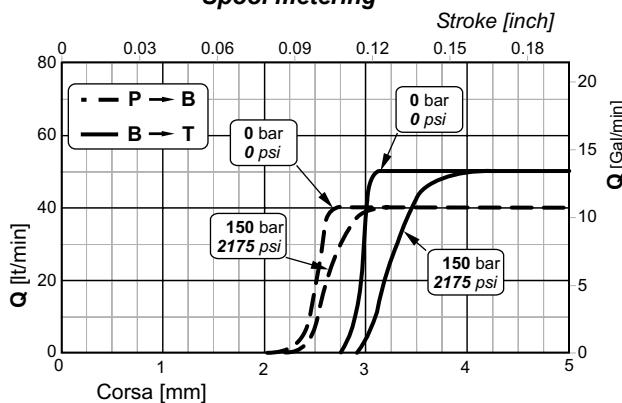


Perdite di carico con il cursore in posizione di lavoro
Pressure drop with spool in working position

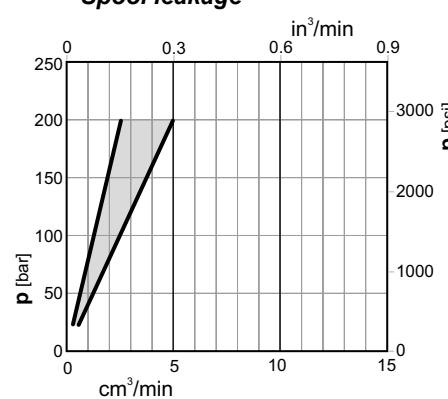


1 Sezioni / Sections

Curve di progressività Spool metering

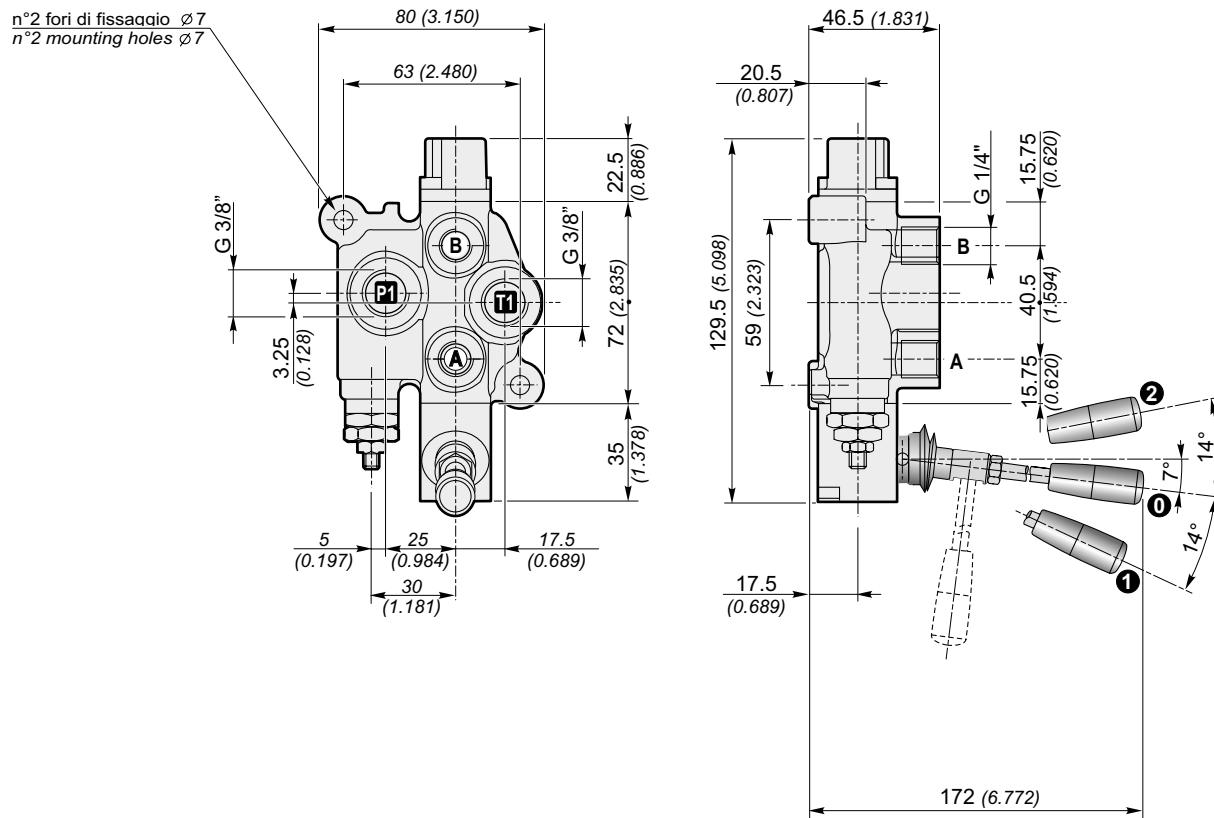
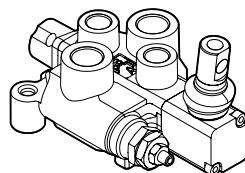


Trafilamenti sul cursore Spool leakage



N.B. Le curve sono ricavate con cursore 103 / NOTE. Performance curves measured using spool 103 type.

Q15

**DISTRIBUTORI MONOBLOCCO
MONOBLOCK DIRECTIONAL CONTROL VALVES**


Q15 — F7S N250 — 103 A1 M1 — F3D
 1 2 3 5 6 7 8

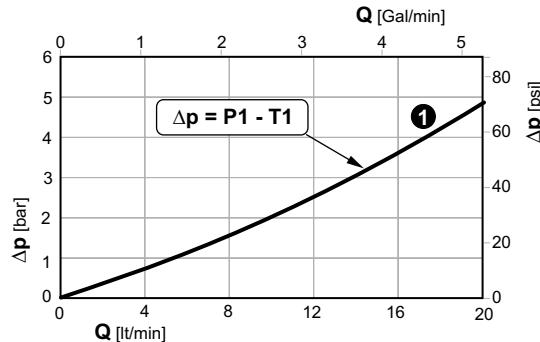
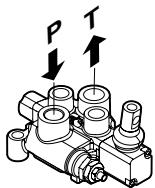
Filettature disponibili / Available ports

Bocche Ports	BSP (standard)	SAE
P - T	G 3/8"	3/4" - 16UNF (SAE 8)
A - B	G 1/4"	9/16" - 18UNF (SAE 6)

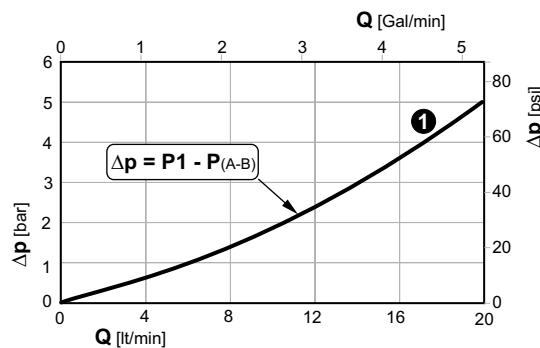
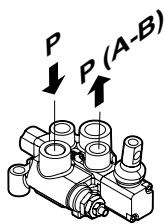
Q15

DISTRIBUTORI MONOBLOCCO MONOBLOCK DIRECTIONAL CONTROL VALVES

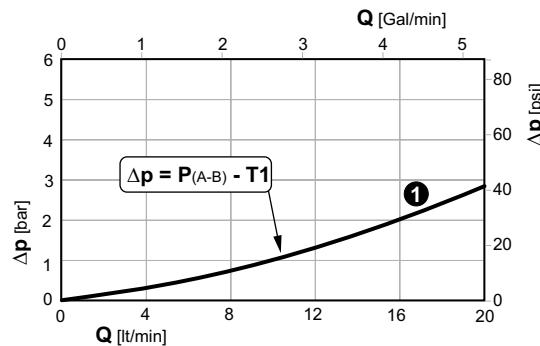
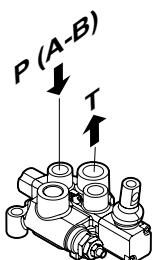
Perdite di carico con il cursore in posizione neutra
Pressure drop with spool in neutral position



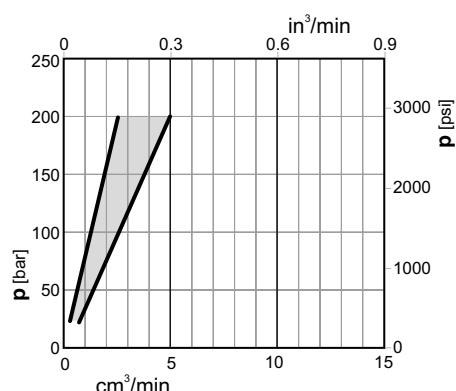
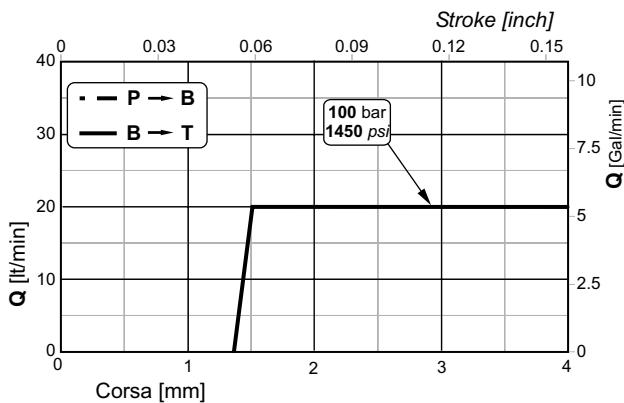
Perdite di carico con il cursore in posizione di lavoro
Pressure drop with spool in working position

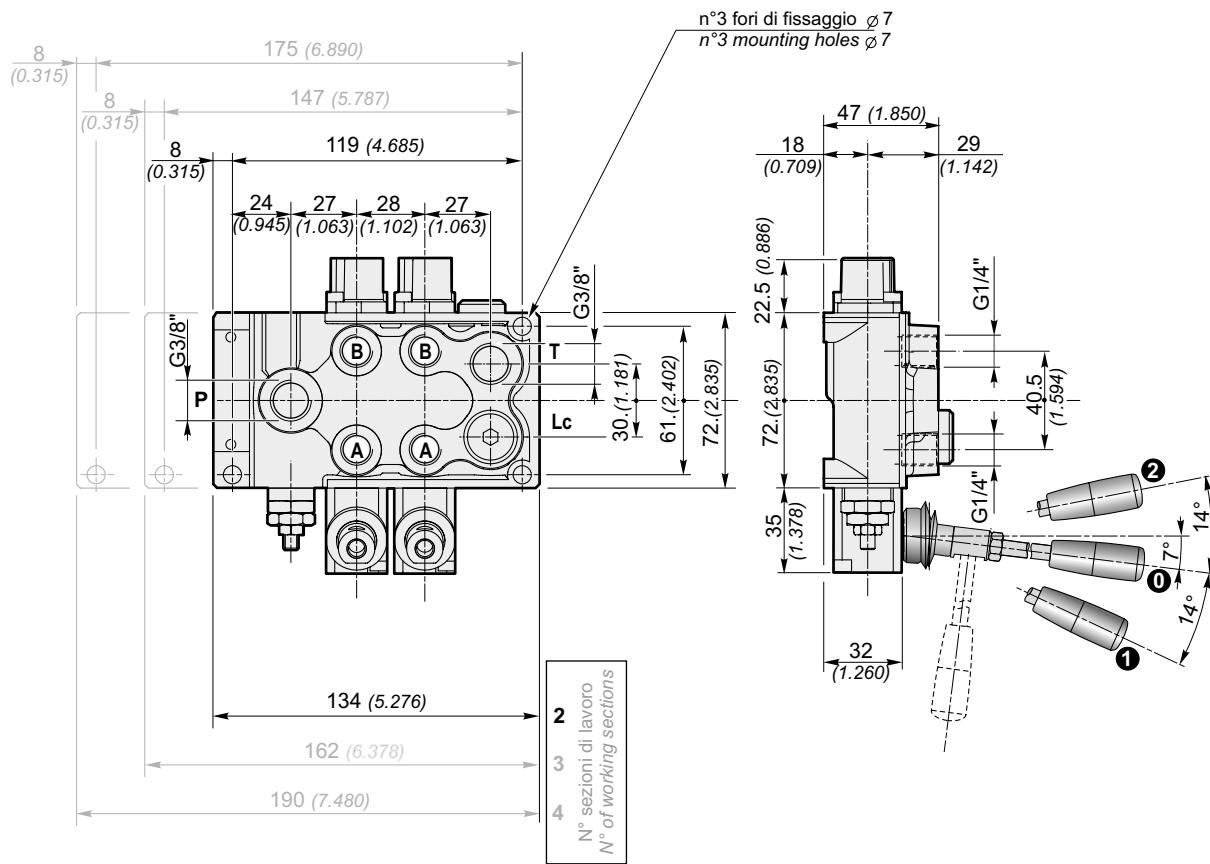
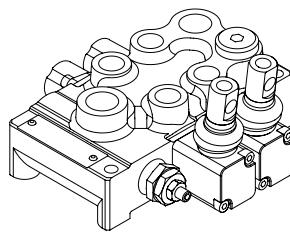


Perdite di carico con il cursore in posizione di lavoro
Pressure drop with spool in working position



① Sezioni / Sections



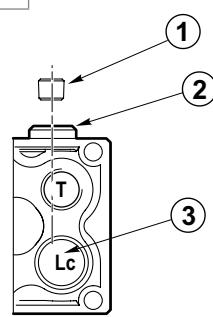
GMV15
DISTRIBUTORI MONOBLOCCO
MONOBLOCK DIRECTIONAL CONTROL VALVES


GMV15 — [F7S | N250] — 2x [103 | A1 | M1] — F3D

1 2 3 5 6 7 8

Filettature disponibili / Available ports

Bocche Ports	BSP (standard)	SAE
P	G 3/8"	3/4" - 16UNF (SAE 8)
A - B	G 1/4"	9/16" - 18UNF (SAE 6)
T	G 3/8"	3/4" - 16UNF (SAE 8)
Lc	G 3/8"	3/4" - 16UNF (SAE 8)


Come fare la funzione carry-over

Togliere il tappo ② montare il tappo conico G1/8" ① e rimontare il tappo ②.
Togliere il tappo della libera circolazione ③.

Come fare la funzione centro chiuso

Togliere il tappo ② montare il tappo conico G1/8" ① e rimontare il tappo ②.
Montare il tappo della libera circolazione ③.

How to make the carry-over function

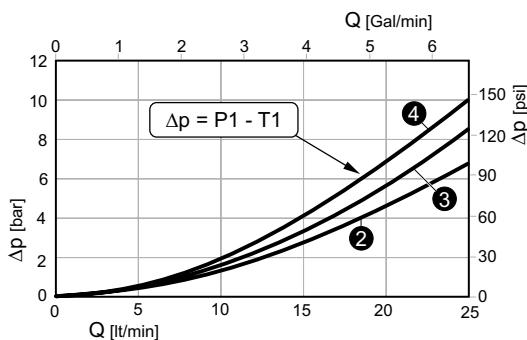
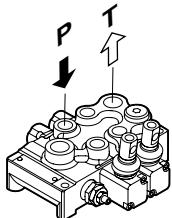
Remove the plug ② mount a conical plug G1/8" ① and reassemble the plug ②.
Remove the plug on the carry-over port ③.

How to make the closed center function

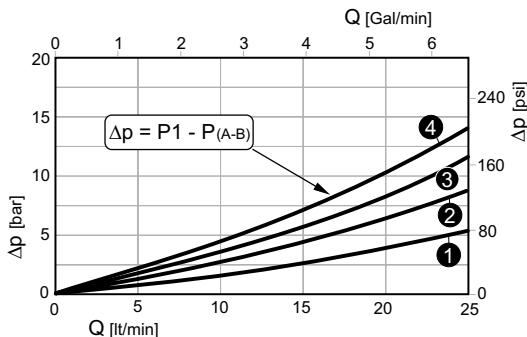
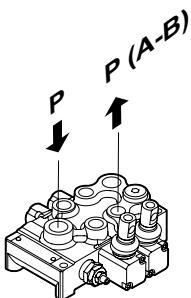
Remove the plug ② mount a conical plug G1/8" ① and reassemble the plug ②.
Mounting the plug on the carry-over port ③.

GMV15
DISTRIBUTORI MONOBLOCCO
MONOBLOCK DIRECTIONAL CONTROL VALVES

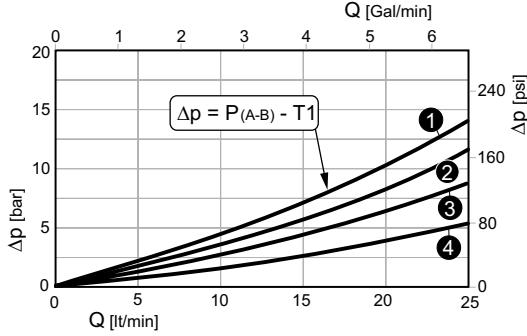
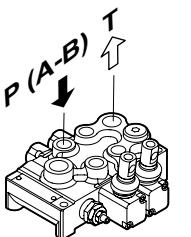
Perdite di carico con il cursore in posizione neutra
 Pressure drop with spool in neutral position



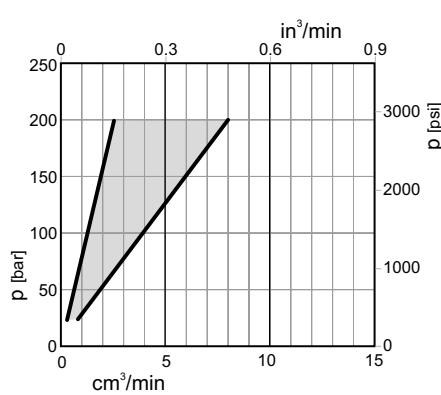
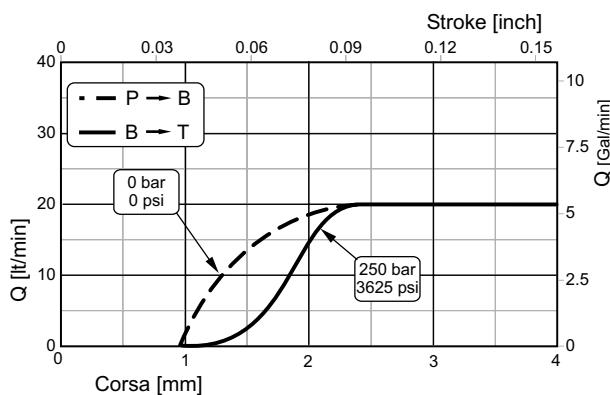
Perdite di carico con il cursore in posizione di lavoro
 Pressure drop with spool in working position



Perdite di carico con il cursore in posizione di lavoro
 Pressure drop with spool in working position



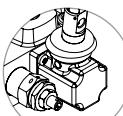
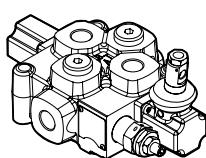
1 2 3 4 Sezioni / Sections



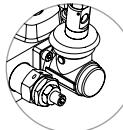
N.B. Le curve sono state effettuate con olio Tellus 46 a 40 °C e cursore 103.
 NOTE. The tests were performed with Tellus 46 oil to 40 °C and spool 103 type.

Q25

DISTRIBUTORI MONOBLOCCO MONOBLOCK DIRECTIONAL CONTROL VALVES

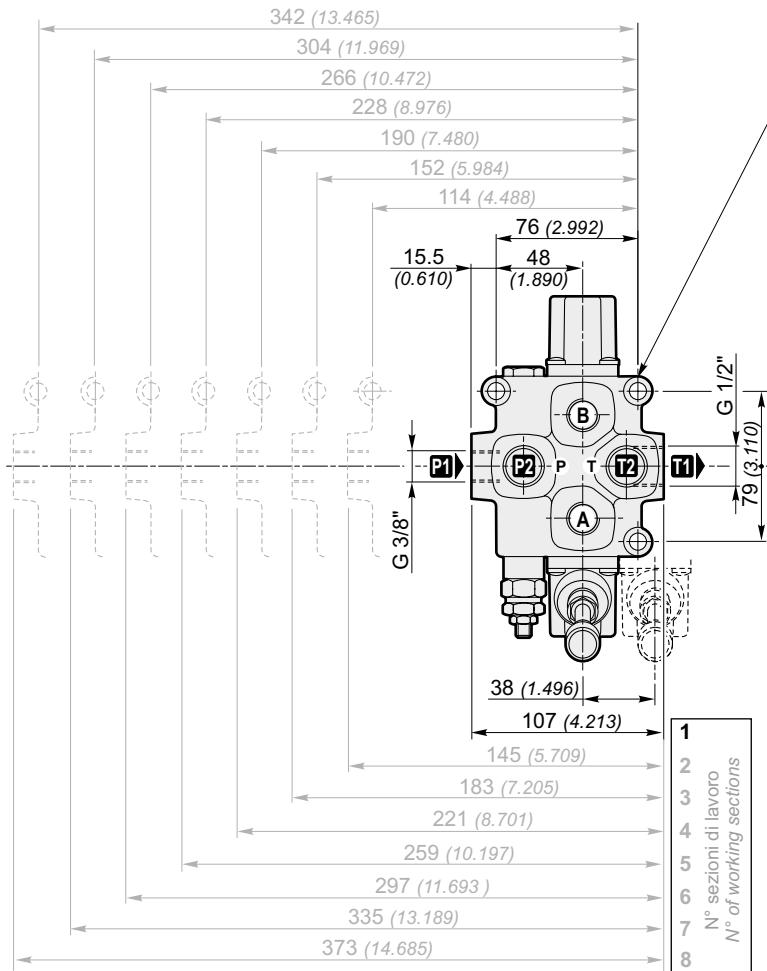


(Standard)
Comando e posizionatore in plastica
Control and positioner plastic

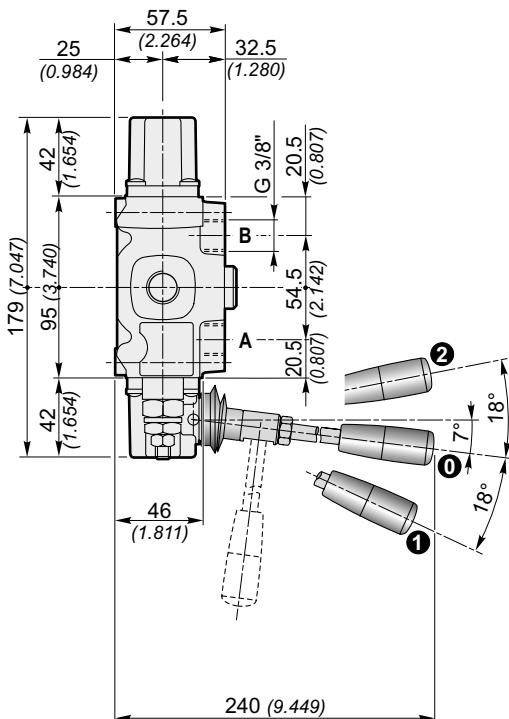


S
Comando e posizionatore in Alluminio
Control and positioner Aluminium

Q25	F7S	R250	—	2x	103	A1	M1	—	F3D	—	S	—	1E
1	2	3		4	5	6	7		8		9		10



n°3 fori di fissaggio ø 9
n°3 mounting holes ø 9



Q25	—	F7S	R250	—	2x	103	A1	M1	—	F3D	—	12V	—	2E
1	2	3		5	6	7		8		9		10		

Filettature disponibili / Available ports

Bocche Ports	BSP (standard)	SAE
P1	G 3/8"	9/16" - 18UNF (SAE 6)
P2	G 3/8"	9/16" - 18UNF (SAE 6)
A-B	G 3/8"	9/16" - 18UNF (SAE 6)
T1	G 1/2"	7/8" - 14UNF (SAE 10)
T2	G 3/8"	9/16" - 18UNF (SAE 6)

Tappo per carry-over (su uscita T1)
Carry-over plug (on T1 port)

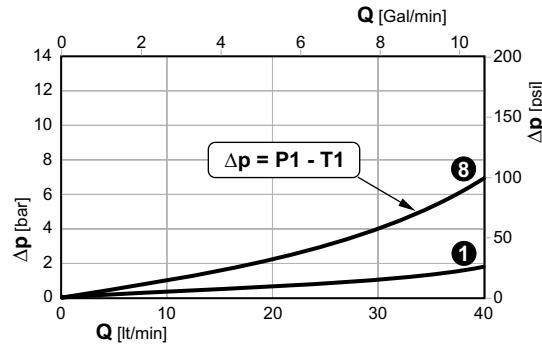
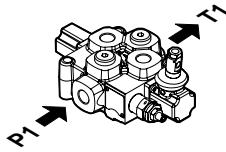
	T1		X	
	19.7 (0.776)	G 1/2"	7/8"-14UNF (SAE 10)	G 3/8" G 1/2" 3/4" - 16UNF (SAE 8)

Q25

DISTRIBUTORI MONOBLOCCO MONOBLOCK DIRECTIONAL CONTROL VALVES

Perdite di carico con il cursore in posizione neutra
(Δp in funzione del numero di sezioni attraversate)

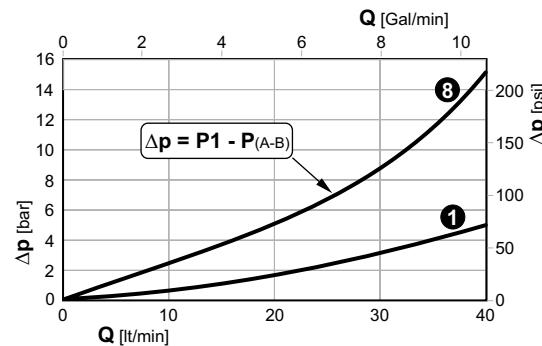
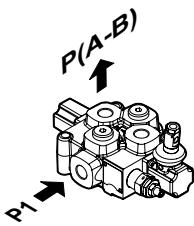
Pressure drop with spool in neutral position
(Δp depending on the number of the crossed sections)



Perdite di carico con il cursore in posizione di lavoro

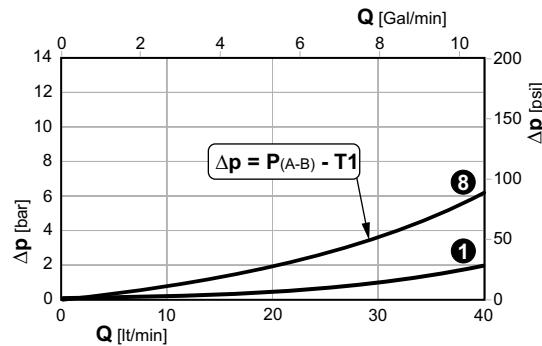
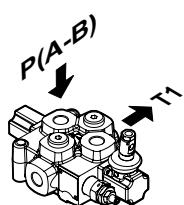
(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in working position
(Δp depending on the number of the crossed sections)



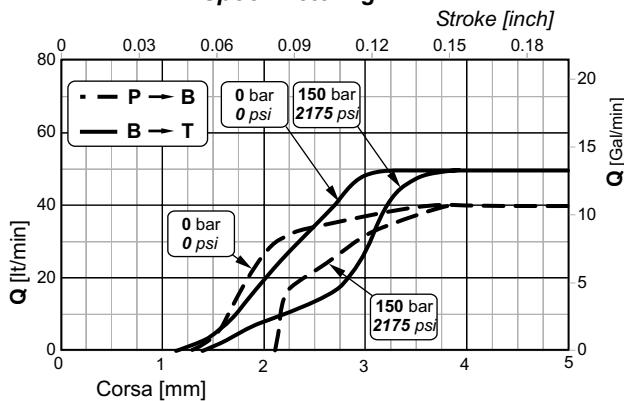
Perdite di carico con il cursore in posizione di lavoro
(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in working position
(Δp depending on the number of the crossed sections)

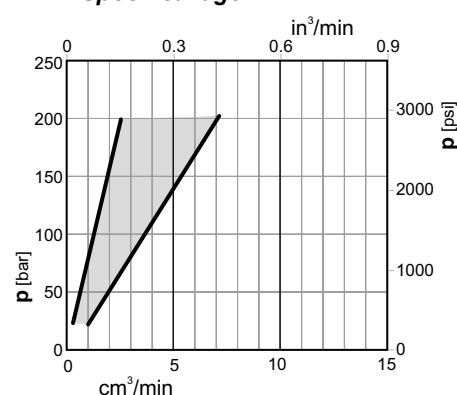


① ⑧ Sezioni / Sections

Curve di progressività Spool metering

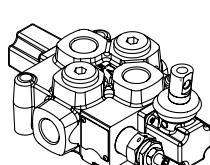


Trafilamenti sul cursore Spool leakage

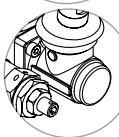


Q45

DISTRIBUTORI MONOBLOCCO MONOBLOCK DIRECTIONAL CONTROL VALVES

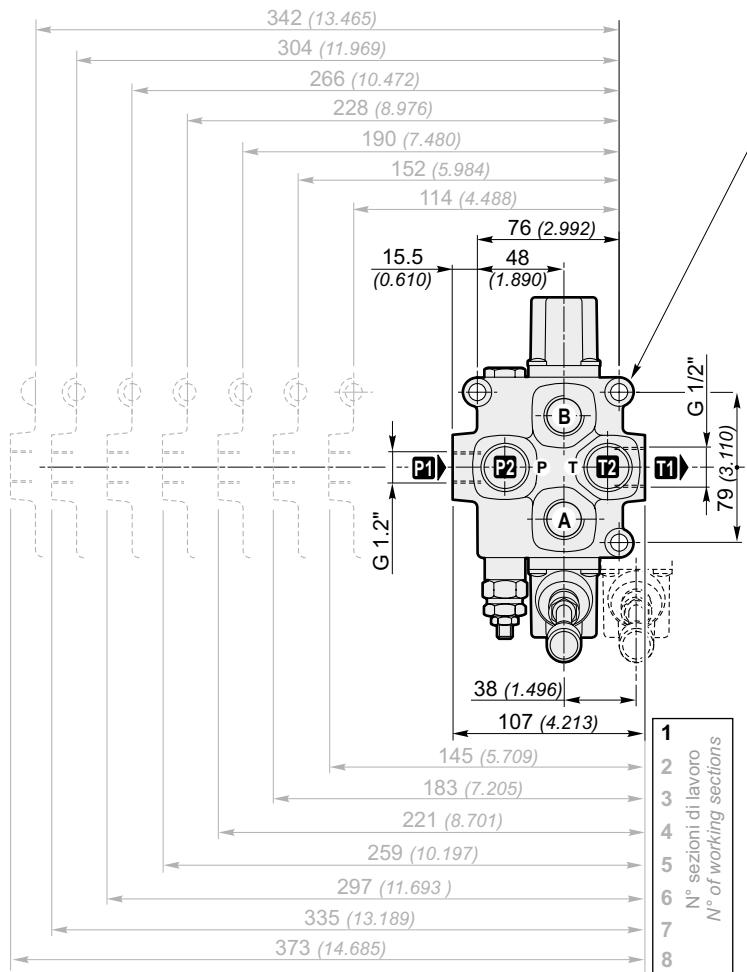


(Standard)
Comando e posizionatore in plastica
Control and positioner plastic

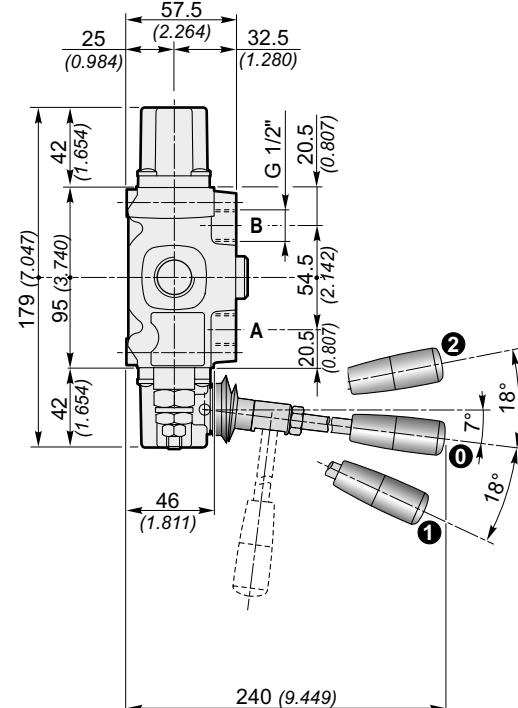


S
Comando e posizionatore in Alluminio
Control and positioner Aluminium

Q45 — F7S | R250 — 2x 103 A1 M1 — F3D — **S** — 1E
1 2 3 4 5 6 7 8 9



n°3 fori di fissaggio ø 9
n°3 mounting holes ø 9



Q45 — F7S | R250 — 2x 103 A1 M1 — F3D — 12V — 2E
1 2 3 5 6 7 8 9 10

Filettature disponibili / Available ports

Bocche Ports	BSP (standard)	SAE
P1	G 1/2"	3/4" - 16 UNF (SAE 8)
P2	G 1/2"	3/4" - 16 UNF (SAE 8)
A-B	G 1/2"	3/4" - 16 UNF (SAE 8)
T1	G 1/2"	7/8" - 14 UNF (SAE 10)
T2	G 1/2"	3/4" - 16 UNF (SAE 8)

Tappo per carry-over (su uscita T1)
Carry-over plug (on T1 port)

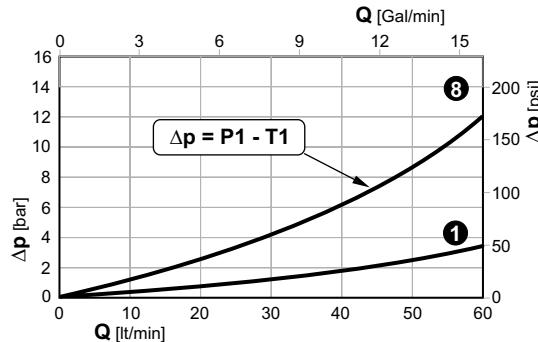
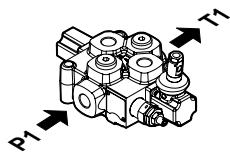
	T1		X	
	19.7 (0.776)	G 1/2"	7/8"-14UNF (SAE 10)	G 3/8" G 1/2"
				3/4" - 16UNF (SAE 8) 7/8" - 14UNF (SAE 10)

Q45

DISTRIBUTORI MONOBLOCCO MONOBLOCK DIRECTIONAL CONTROL VALVES

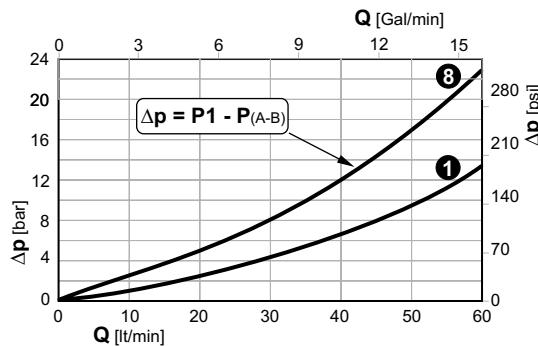
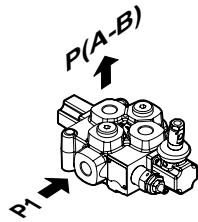
Perdite di carico con il cursore in posizione neutra
(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in neutral position
(Δp depending on the number of the crossed sections)



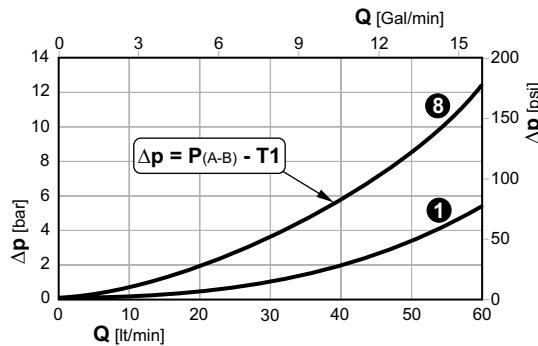
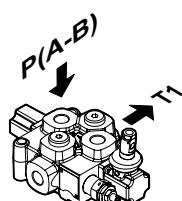
Perdite di carico con il cursore in posizione di lavoro
(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in working position
(Δp depending on the number of the crossed sections)



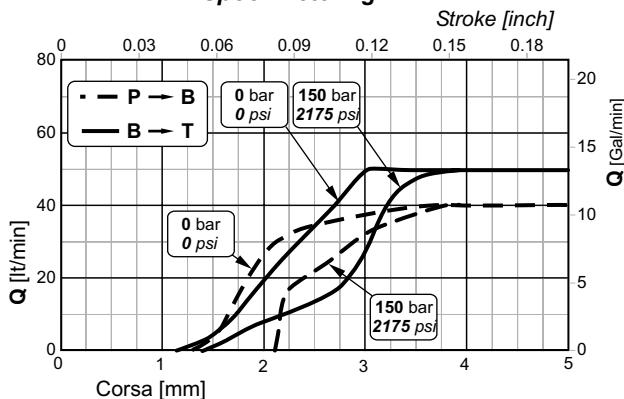
Perdite di carico con il cursore in posizione di lavoro
(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in working position
(Δp depending on the number of the crossed sections)

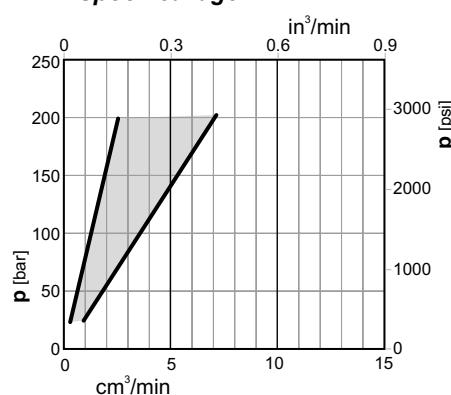


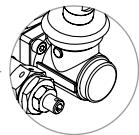
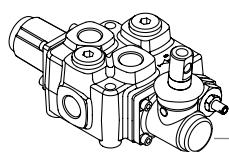
① ⑧ Sezioni / Sections

Curve di progressività Spool metering



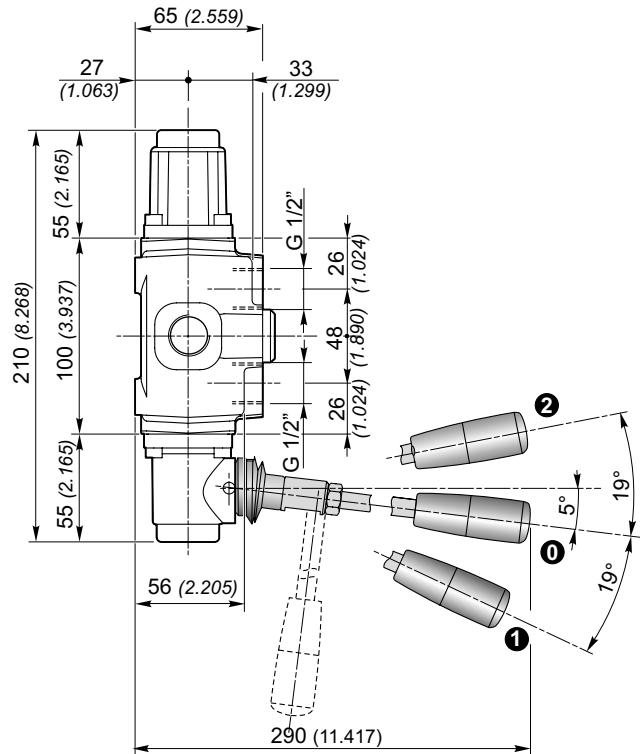
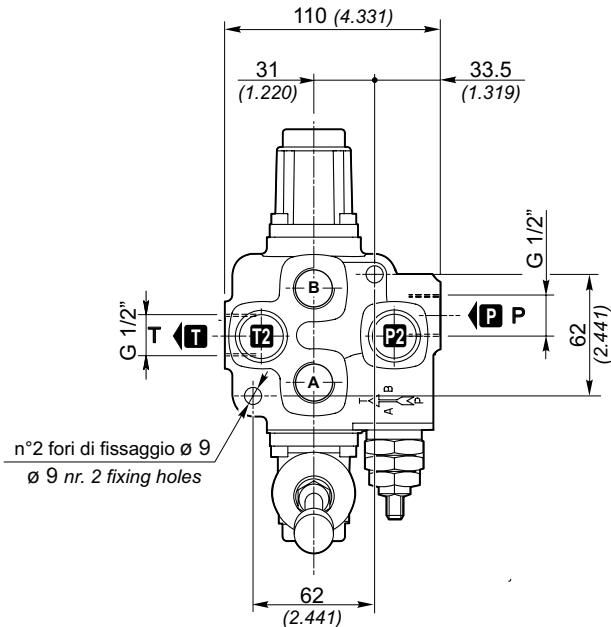
Trafilamenti sul cursore Spool leakage



Q65
DISTRIBUTORI MONOBLOCCO
MONOBLOCK DIRECTIONAL CONTROL VALVES


Comando e posizionatore in Alluminio
Control and positioner Aluminium

Q65 — F7S R250 — 2x 103 A1 M1 — F3D — S — 1E
 1 2 3 4 5 6 7 8 9



Q65 — F7S R250 — 103 A1 M1 — F3D — 12V
 1 2 3 5 6 7 8 9

Filettature disponibili / Available ports

Bocche Ports	BSP (standard)	SAE
P1	G 1/2"	7/8" - 14 UNF (SAE 10)
P2	G 1/2"	7/8" - 14 UNF (SAE 10)
A-B	G 1/2"	7/8" - 14 UNF (SAE 10)
T1	G 1/2"	7/8" - 14 UNF (SAE 10)
T2	G 1/2"	7/8" - 14 UNF (SAE 10)

Tappo per carry-over (su uscita T1)
Carry-over plug (on T1 port)

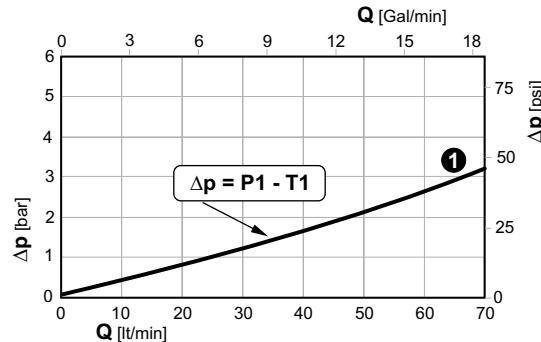
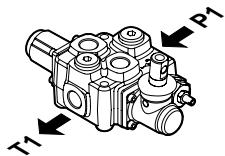
T1		X	
19.7 (0.776)	G 1/2"	7/8"-14UNF (SAE 10)	G 3/8" G 1/2" 3/4" - 16UNF (SAE 8) 7/8" - 14UNF (SAE 10)

Q65

DISTRIBUTORI MONOBLOCCO MONOBLOCK DIRECTIONAL CONTROL VALVES

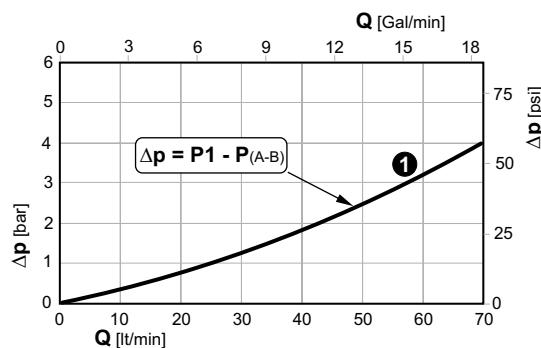
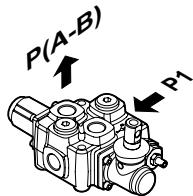
Perdite di carico con il cursore in posizione neutra
(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in neutral position
(Δp depending on the number of the crossed sections)



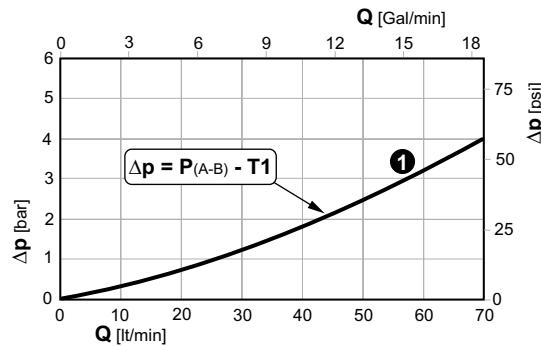
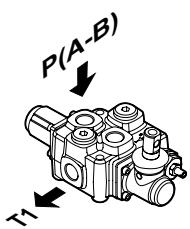
Perdite di carico con il cursore in posizione di lavoro
(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in working position
(Δp depending on the number of the crossed sections)



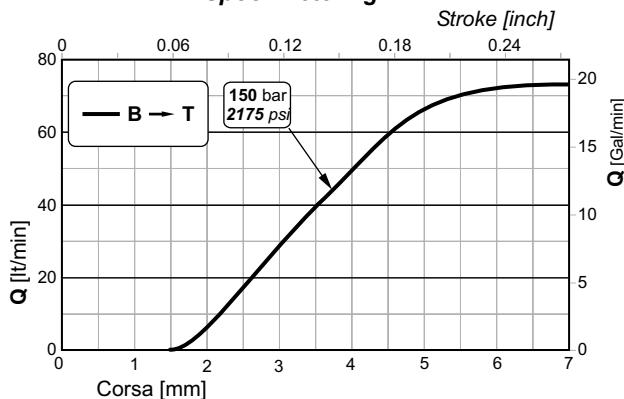
Perdite di carico con il cursore in posizione di lavoro
(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in working position
(Δp depending on the number of the crossed sections)

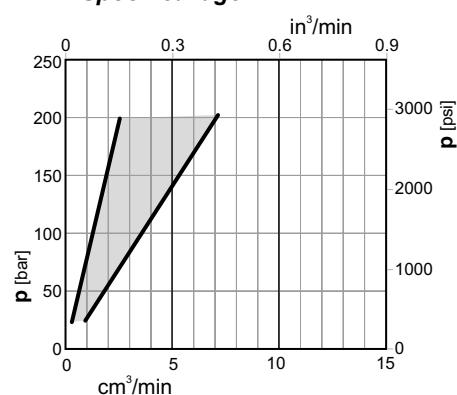


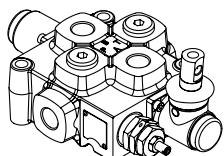
❶ Sezioni / Sections

Curve di progressività Spool metering

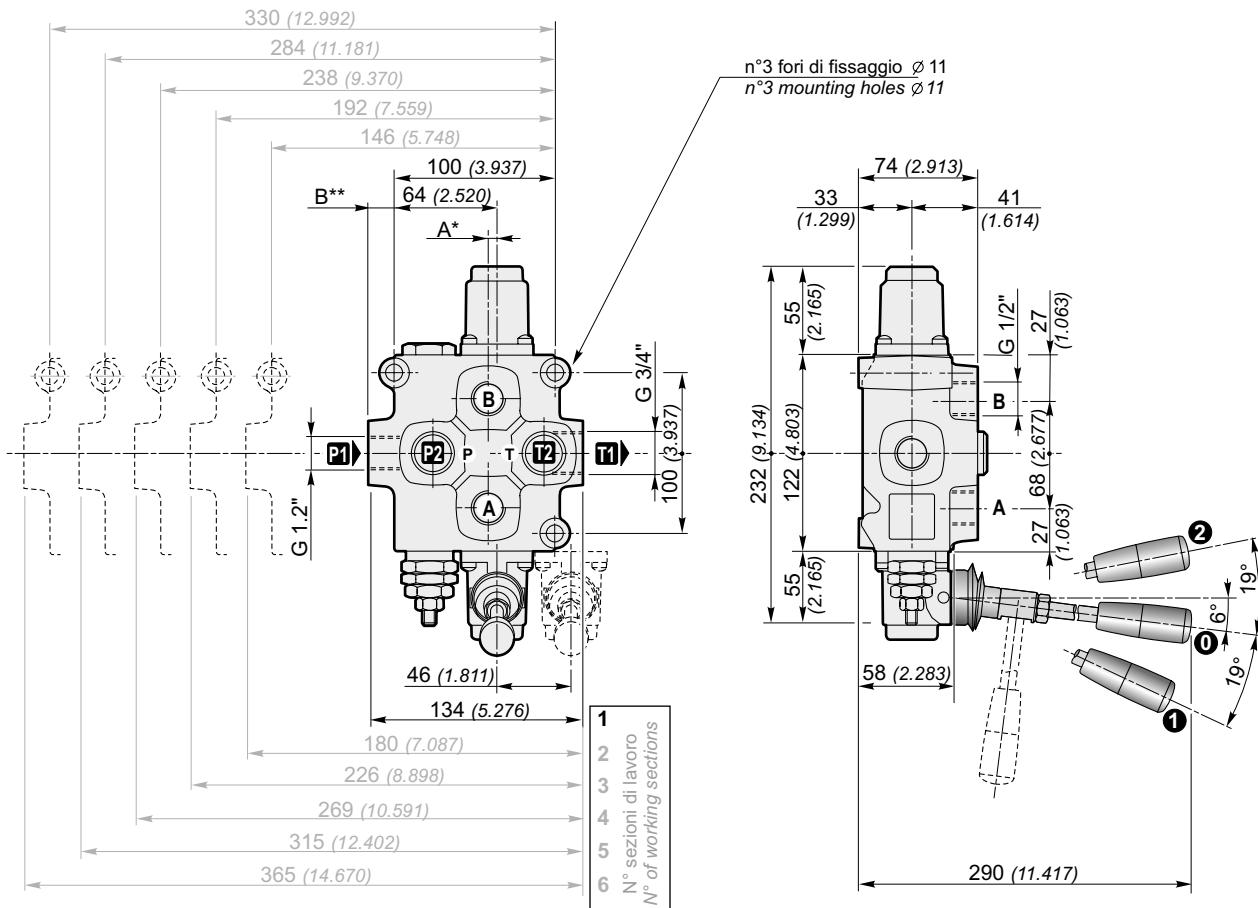


Trafilamenti sul cursore Spool leakage



Q75
DISTRIBUTORI MONOBLOCCO
MONOBLOCK DIRECTIONAL CONTROL VALVES


(Standard)
Comando e posizionatore in Alluminio
Control and positioner Aluminium



* **A=5.5** per monoblocco ad 1 sezione, **A=0** per monoblocchi a 2, 3, 4, 5, 6 sezioni di lavoro

* **A = 5.5 for 1 working section, A=0 for 2, 3, 4, 5 and 6 working sections**

** **B=16** per monoblocco ad 1, 2, 3, 6 sezioni, **B=13** per monoblocchi a 4 e 5 sezioni di lavoro

** **B=16 for 1, 2, 3, 6 working section, B=13 for 4 and 5 working sections**

Q75 — F7S R250 — 2x 103 A1 M1 — F3D — 12V — 2E
 1 2 3 5 6 7 8 9 10

Filettature disponibili / Available ports

Bocche Ports	BSP (standard)	SAE
P1	G 1/2"	7/8" - 14 UNF (SAE 10)
P2	G 1/2"	7/8" - 14 UNF (SAE 10)
A-B	G 1/2"	7/8" - 14 UNF (SAE 10)
T1	G 3/4"	1" 1/16" - 12 UN (SAE 12)
T2	G 1/2"	7/8" - 14 UNF (SAE 10)

Tappo per carry-over (su uscita T1)
Carry-over plug (on T1 port)

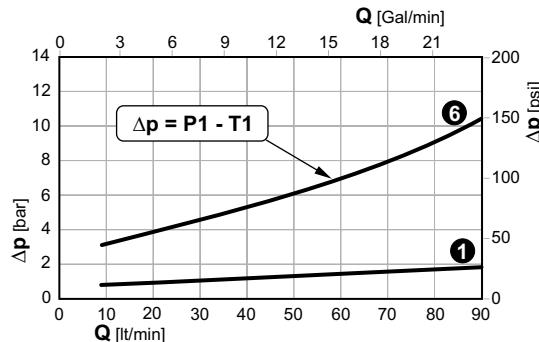
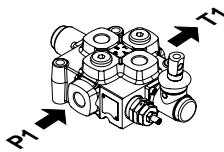
	T1	X
26.8 (1.055) G 3/4"	1" 1/16" - 12 UN (SAE 12)	G 1/2" G 3/4" 7/8" - 14 UNF (SAE 10)

Q75

DISTRIBUTORI MONOBLOCCO MONOBLOCK DIRECTIONAL CONTROL VALVES

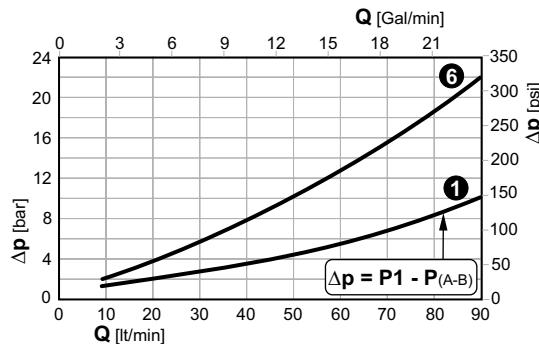
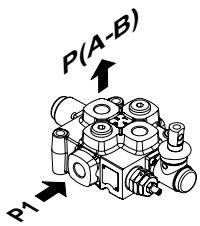
Perdite di carico con il cursore in posizione neutra
(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in neutral position
(Δp depending on the number of the crossed sections)



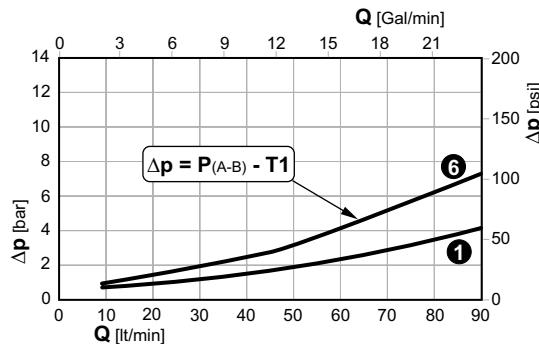
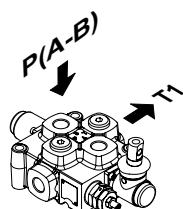
Perdite di carico con il cursore in posizione di lavoro
(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in working position
(Δp depending on the number of the crossed sections)



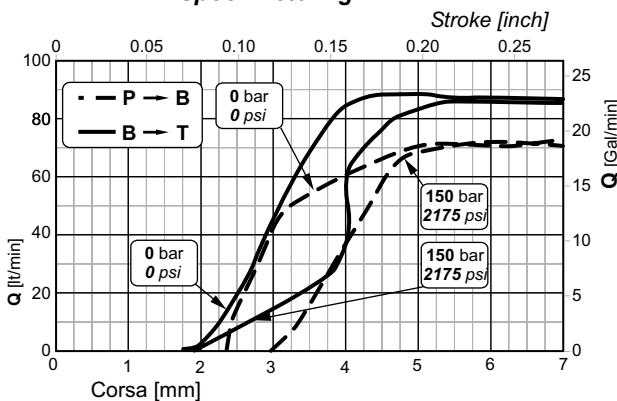
Perdite di carico con il cursore in posizione di lavoro
(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in working position
(Δp depending on the number of the crossed sections)

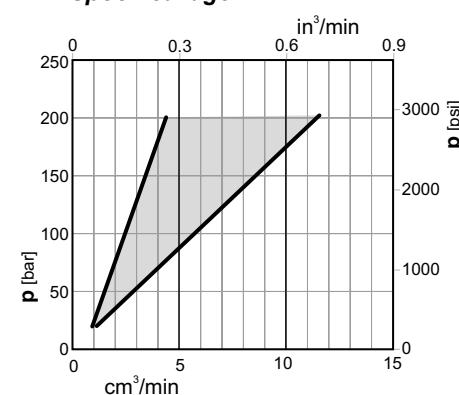


① ⑥ Sezioni / Sections

Curve di progressività Spool metering

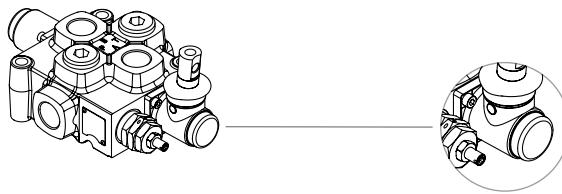


Trafilamenti sul cursore Spool leakage

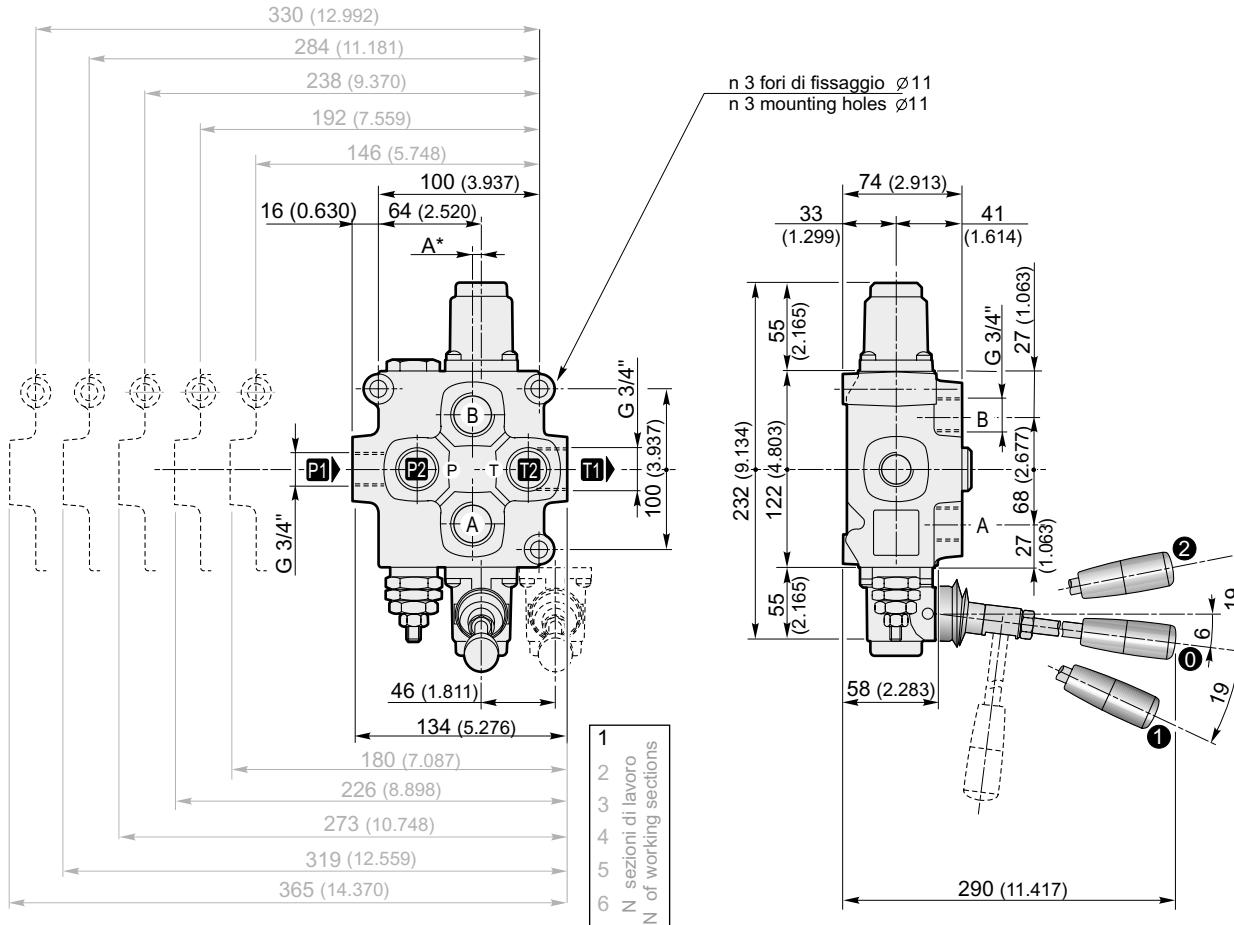


Q95

DISTRIBUTORI MONOBLOCCO MONOBLOCK DIRECTIONAL CONTROL VALVES



(Standard)
Comando e posizionatore in Alluminio
Control and positioner Aluminium



* **A= 5.5** per monoblocco a 1 sezione; **A=0** per monoblocco a 2-3-5-6 sezioni di lavoro

* **A= 5.5** for 1 working section, **A=0** for 2-3-5-6 working section

Q95 — **F7S R250** — **2x 103 A1 M1** — **F3D** — **12V** — **2E**

1 2 3 5 6 7 8 9 10

Filettature disponibili / Available ports

Bocche Ports	BSP (standard)	SAE
P1	G 3/4"	1" 1/16" - 12 UN (SAE 12)
P2	G 3/4"	1" 1/16" - 12 UN (SAE 12)
A-B	G 3/4"	1" 1/16" - 12 UN (SAE 12)
T1	G 3/4"	1" 1/16" - 12 UN (SAE 12)
T2	G 3/4"	1" 1/16" - 12 UN (SAE 12)

Tappo per carry-over (su uscita T1)
Carry-over plug (on T1 port)

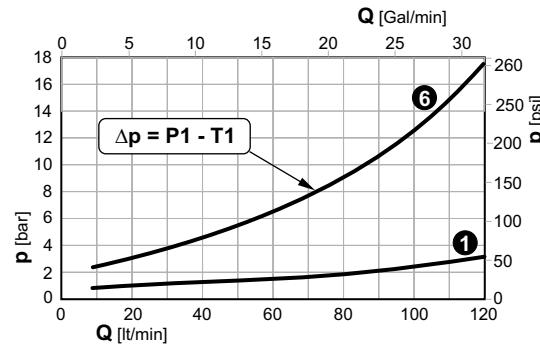
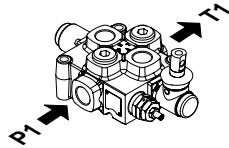
	T1	X
	G 3/4" 1" 1/16" - 12 UN (SAE 12)	G 3/4" 7/8" - 14 UNF (SAE 10)

Q95

DISTRIBUTORI MONOBLOCCO MONOBLOCK DIRECTIONAL CONTROL VALVES

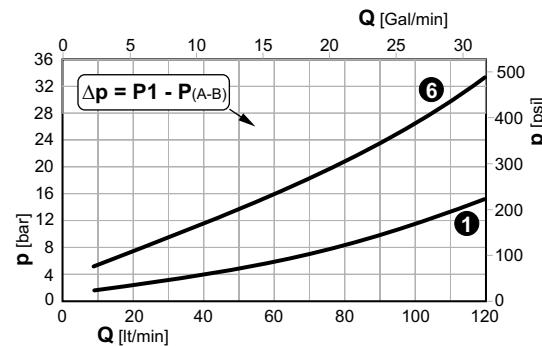
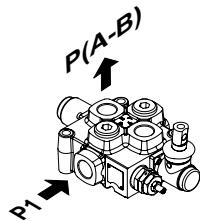
Perdite di carico con il cursore in posizione neutra
(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in neutral position
(Δp depending on the number of the crossed sections)



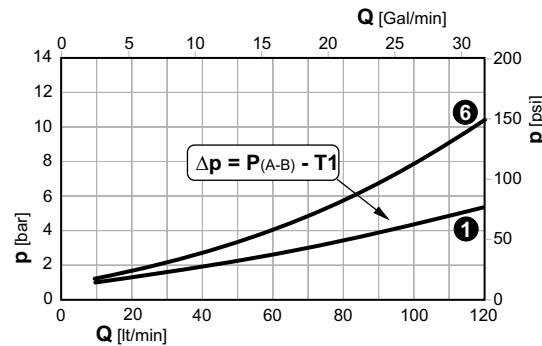
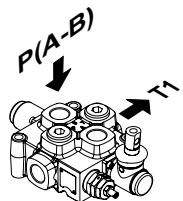
Perdite di carico con il cursore in posizione di lavoro
(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in working position
(Δp depending on the number of the crossed sections)



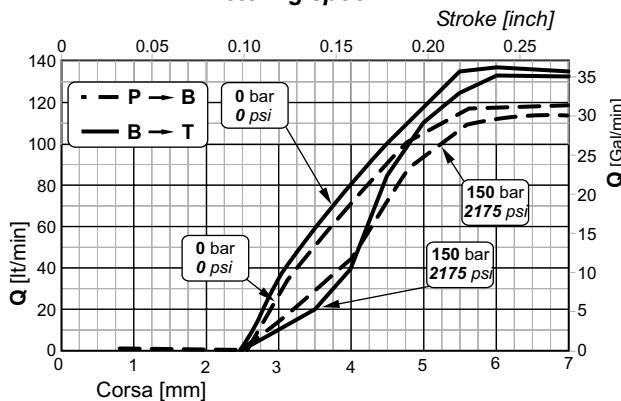
Perdite di carico con il cursore in posizione di lavoro
(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in working position
(Δp depending on the number of the crossed sections)

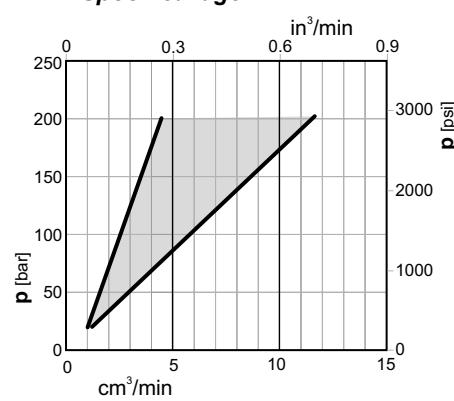


① ⑥ Sezioni / Sections

Curve di progressività Metering spool



Trafilamenti sul cursore Spool leakage



Fiancata d'ingresso

Inlet section



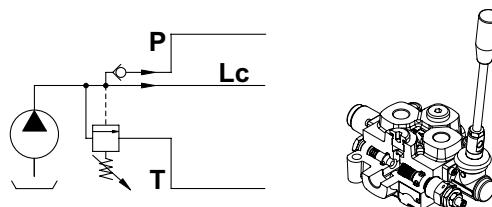
2 - Tipo fiancata d'ingresso / Inlet section type

Q35	Q15	GMV 15	Q25	Q45	Q65	Q75	Q95
-----	-----	--------	-----	-----	-----	-----	-----

F1S	Collettore di entrata con valvola di ritegno VR e valvola limitatrice di pressione VLP	Inlet section with check (VR) and relief valves (VLP)			•	•	•	•	•
F2S	Collettore di entrata con valvola di ritegno VR	Inlet sections with check valve VR			•	•	•	•	•
F7S	Collettore di entrata con valvola limitatrice di pressione VLP	Inlet section with relief valve VLP	•	•	•	•	•	•	•
F8S	Collettore di entrata senza valvole VLP e VR	Inlet section without valves VLP and VR	•	•	•	•	•	•	•

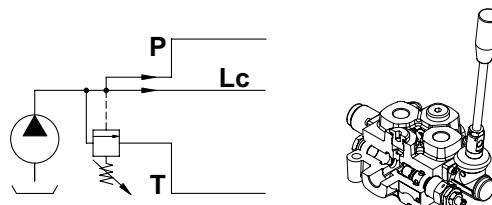
F1S F1S/SAE

Collettore di entrata con valvola di ritegno VR
e valvola limitatrice di pressione VLP
Inlet section with check (VR) and relief valves VLP



F7S

Collettore di entrata con valvola limitatrice di pressione VLP
Inlet section with relief valve VLP



3 - Tipo molla e taratura valvola

3 - Type of spring and valve setting

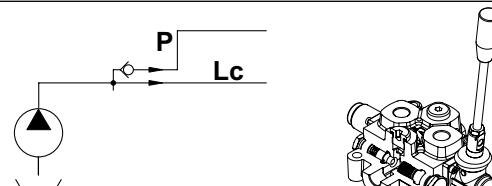
Dove è presente la valvola VLP (fiancate F1S e F7S), deve essere specificato il tipo di molla (B, N o R) e la sua pressione di taratura; se quest'ultima viene omessa, verrà messa la molla N tarata a 150 bar.

If valve VLP is installed (inlet section F1S and F7S), specify the type of spring (B, N or R) and its pressure setting. If omitted, spring N with a 150 bar setting will be installed.

R	Tipo di molla per la VLP Type of spring for relief valve	Campi di taratura / Calibration fields bar (psi)		
		B	N	R
Calibration fields bar (psi)				
250	Taratura della VLP VLP Setting	35S / 65S / 105S	10 ÷ 80 (145 ÷ 1160)	81 ÷ 200 (1175 ÷ 2900)
		15S	0 ÷ 120 (0 ÷ 1740)	201 ÷ 380 (2915 ÷ 5510)

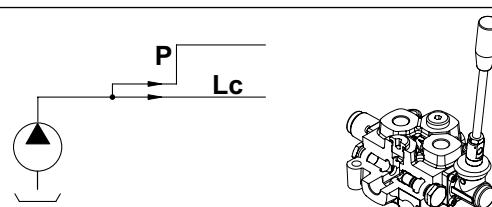
F2S

Collettore di entrata con valvola di ritegno VR
Inlet sections with check valve VR



F8S

Collettore di entrata senza valvole
Inlet section without valves



Fiancata d'ingresso

Inlet section



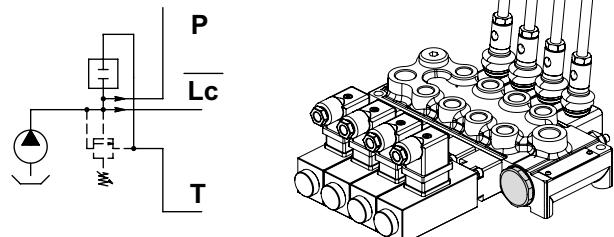
4 - Valvole aggiuntive alla fiancata (facoltativo) / Additional valves to the inlet section (optional)

	Q35	Q15	GMV 15	Q25	Q45	Q65	Q75	Q95
--	-----	-----	-----------	-----	-----	-----	-----	-----

PMS	Collettore di entrata con predisposizione per valvola di messa a scarico elettrica (diretta) <i>Inlet section presets for electrical outlet release valve (direct)</i>	•						
MSE	Collettore di entrata con valvola di messa a scarico elettrica (diretta) <i>Inlet section with electrical outlet release valve (direct)</i>	•						

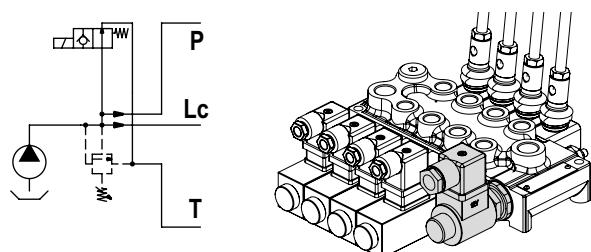
PMS

Collettore di entrata con predisposizione per valvola di messa a scarico elettrica (diretta)
Inlet section presets for electrical outlet release valve (direct)



MSE

Collettore di entrata con valvola di messa a scarico elettrica (diretta)
Inlet section with electrical outlet release valve (direct)

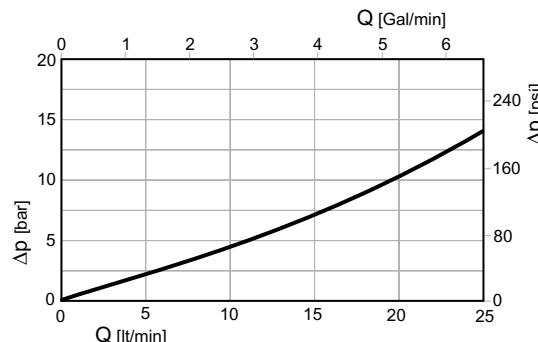


N.B.

Specificare tensione e schema dell'elettrovalvola
Specify voltage and type of the solenoid operated valve

Tensione Voltage	Schema Scheme	
12 V.DC	N.C.	Normalmente chiusa <i>Usually closed</i>
24 V.DC	N.A.	Normalmente aperta <i>Usually open</i>

Perdite di carico del distributore con valvola di messa a scarico elettrica aperta.
Directional control valve pressure drop with electrical outlet release valve open.



Sezione di lavoro

Working section



5 - Tipo cursore / Spool type

Cursori / Spools

Q35	Q15	GMV 15	Q25	Q45	Q65	Q75	Q95
-----	-----	-----------	-----	-----	-----	-----	-----

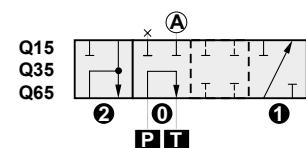
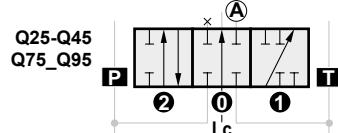
101	Semplice effetto in A	Single acting in A port	●	●	●	●	●
102	Semplice effetto in B	Single acting in B port	●	●	●	●	●
103	Doppio effetto, A e B chiusi in posizione 0	Double acting A and B closed in 0 position	●	●	●	●	●
103RN	Doppio effetto a ricoprimento negativo	Double acting with negative overlap	●	●			●
106	Doppio effetto, passaggi chiusi in posizione 0	Double acting, ports closed in 0 position			●	●	●
107	Doppio effetto, A in T e B chiuso in posizione 0	Double acting, A to T and B closed in 0 position			●	●	●
108	Doppio effetto, B in T e A chiuso in posizione 0	Double acting, B to T and A closed in 0 position			●	●	●
109	Semplice effetto in A, A in T in posizione 0	Single acting in A, A to T in 0 position			●	●	●
110	Semplice effetto in B, B in T in posizione 0	Single acting in B, B to T in 0 position			●	●	●
111	Doppio effetto, A e B in T in posizione 0	Double acting, A and B to T in 0 position	●	●	●	●	●
114	Doppio effetto, A e B in T e Lc chiusa in posizione 0	Double acting, A and B to T and through passage closed in 0 position			●	●	●
116*	Doppio effetto con 4 ^a posizione flottante	Double acting with 4 th position floating		●	●	●	●
126*	Doppio effetto con 4 ^a posizione flottante	Double acting with 4 th position floating			●	●	●

* Limitazioni / Limitations

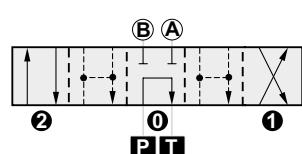
Cursore Spools	Applicabile con: / Applicable with:	
	Comando / Control	Posizionatore / Positioner
116	A1-Z1 / A2-Z1 / A4-Z1 / A6-Z1 / A8-Z1	R8
126	A1 / A2 / A4 / A5 / A6 / A8 / SL / SLA15 / A15 / A16	R10-Z1

101

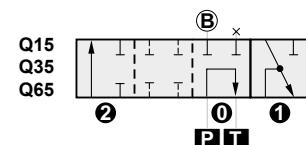
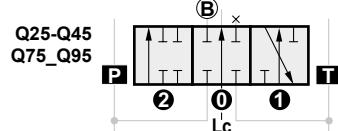
Semplice effetto in A
Single acting in A port

**103RN**

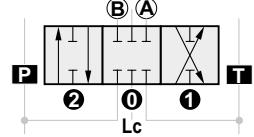
Doppio effetto a ricoprimento negativo
Double acting with negative overlap

**102**

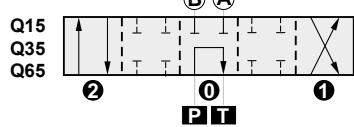
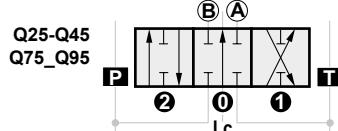
Semplice effetto in B
Single acting in B port

**106**

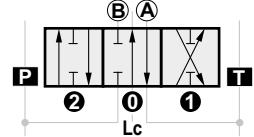
Doppio effetto, passaggi chiusi in posizione 0
Double acting, ports closed in 0 position

**103**

Doppio effetto, A e B chiusi in posizione 0
Double acting, A and B closed in 0 position

**107**

Doppio effetto, A in T e B chiuso in posizione 0
Double acting, A to T and B closed in 0 position



Sezione di lavoro

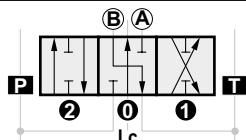
Working section



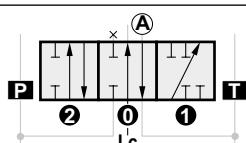
Cursori / Spools

108

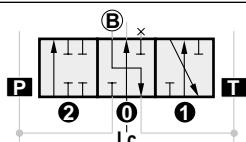
Doppio effetto, B in T e A chiuso
in posizione 0
*Double acting, B to T and A closed
in 0 position*

**109**

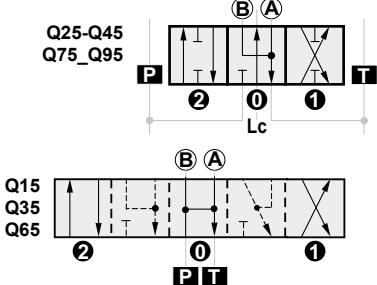
Semplice effetto in A, A in T
in posizione 0
*Single acting in A, A to T
in 0 position*

**110**

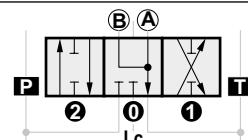
Semplice effetto in B, B in T
in posizione 0
*Single acting in B, B to T
in 0 position*

**111**

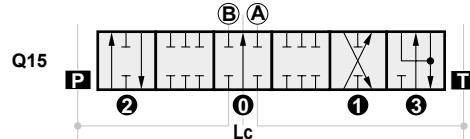
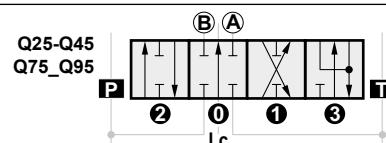
Doppio effetto, A e B in T
in posizione 0
*Double acting, A and B to T
in 0 position*

**114**

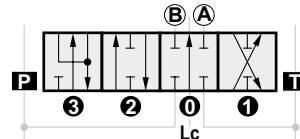
Doppio effetto, A e B in T e
Lc chiusa in posizione 0
*Double acting, A and B to T and
through passage closed in 0 position*

**116**

Doppio effetto con 4^a
posizione flottante
*Double acting with 4th
position floating*

**126**

Doppio effetto con 4^a
posizione flottante
*Double acting with 4th
position floating*



Sezione di lavoro

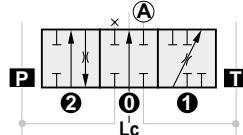
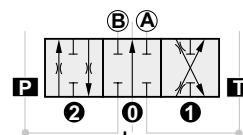
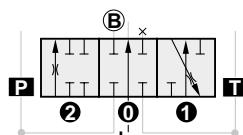
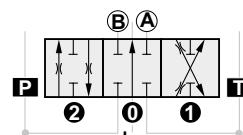
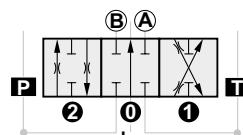
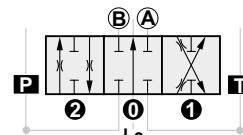
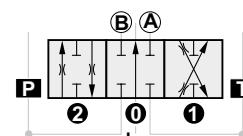
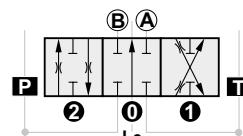
Working section



Cursori sensibilizzati / Sensitized spools

Q35	Q25	Q45	Q75	Q95
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101.20	Semplice effetto in A <i>Single acting in A port</i>	Single acting in A port		•	•	•	•
102.20	Semplice effetto in B <i>Single acting in B port</i>	Single acting in B port		•	•	•	•
103.05	Doppio effetto, A e B chiusi in posizione 0 <i>Double acting, A and B closed in 0 position</i>	Double acting, A and B closed in 0 position		•	•	•	•
103.10	Doppio effetto, A e B chiusi in posizione 0 <i>Double acting, A and B closed in 0 position</i>	Double acting, A and B closed in 0 position				•	•
103.20	Doppio effetto, A e B chiusi in posizione 0 <i>Double acting, A and B closed in 0 position</i>	Double acting, A and B closed in 0 position		•	•		
103.25	Doppio effetto, A e B chiusi in posizione 0 <i>Double acting, A and B closed in 0 position</i>	Double acting, A and B closed in 0 position		•	•		
103.30	Doppio effetto, A e B chiusi in posizione 0 <i>Double acting, A and B closed in 0 position</i>	Double acting, A and B closed in 0 position				•	•
103.40	Doppio effetto, A e B chiusi in posizione 0 <i>Double acting, A and B closed in 0 position</i>	Double acting, A and B closed in 0 position		•	•		
107.20	Doppio effetto, A in T e B chiuso in posizione 0 <i>Double acting, A to T and B closed in 0 position</i>	Double acting, A to T and B closed in 0 position		•	•		
108.20	Doppio effetto, B in T e A chiuso in posizione 0 <i>Double acting, B to T and A closed in 0 position</i>	Double acting, B to T and A closed in 0 position		•	•		
111.05	Doppio effetto, A e B in T in posizione 0 <i>Double acting, A and B to T in 0 position</i>	Double acting, A and B to T in 0 position		•	•		
111.10	Doppio effetto, A e B in T in posizione 0 <i>Double acting, A and B to T in 0 position</i>	Double acting, A and B to T in 0 position				•	•
111.20	Doppio effetto, A e B in T in posizione 0 <i>Double acting, A and B to T in 0 position</i>	Double acting, A and B to T in 0 position		•	•		
111.25	Doppio effetto, A e B in T in posizione 0 <i>Double acting, A and B to T in 0 position</i>	Double acting, A and B to T in 0 position		•	•		
111.30	Doppio effetto, A e B in T in posizione 0 <i>Double acting, A and B to T in 0 position</i>	Double acting, A and B to T in 0 position				•	•
111.40	Doppio effetto, A e B in T in posizione 0 <i>Double acting, A and B to T in 0 position</i>	Double acting, A and B to T in 0 position			•	•	

101.20Semplice effetto in A
Single acting in A port**103.20**Doppio effetto, A e B chiusi in posizione 0
Double acting, A and B closed in 0 position**102.20**Semplice effetto in B
Single acting in B port**103.25**Doppio effetto, A e B chiusi in posizione 0
Double acting, A and B closed in 0 position**103.05**Doppio effetto, A e B chiusi in posizione 0
Double acting, A and B closed in 0 position**103.30**Doppio effetto, A e B chiusi in posizione 0
Double acting, A and B closed in 0 position**103.10**Doppio effetto, A e B chiusi in posizione 0
Double acting, A and B closed in 0 position**103.40**Doppio effetto, A e B chiusi in posizione 0
Double acting, A and B closed in 0 position

Sezione di lavoro

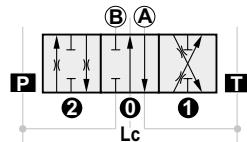
Working section



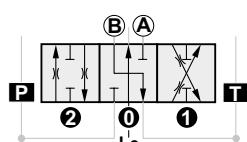
Cursori sensibilizzati / Sensitized spools

107.20

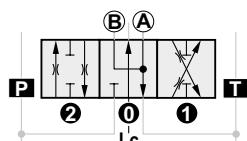
Doppio effetto, A in T e B chiuso in posizione 0
Double acting, A to T and B closed in 0 position

**108.20**

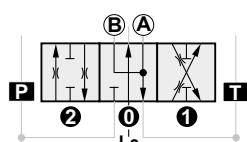
Doppio effetto, B in T e A chiuso in posizione 0
Double acting, B to T and A closed in 0 position

**111.05**

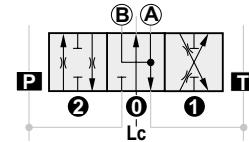
Doppio effetto, A e B in T in posizione 0
Double acting, A and B to T in 0 position

**111.10**

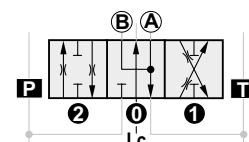
Doppio effetto, A e B in T in posizione 0
Double acting, A and B to T in 0 position

**111.20**

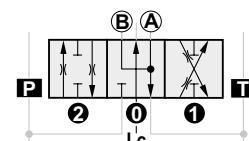
Doppio effetto, A e B in T in posizione 0
Double acting, A and B to T in 0 position

**111.25**

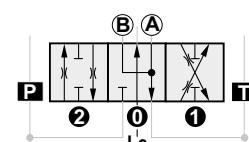
Doppio effetto, A e B in T in posizione 0
Double acting, A and B to T in 0 position

**111.30**

Doppio effetto, A e B in T in posizione 0
Double acting, A and B to T in 0 position

**111.40**

Doppio effetto, A e B in T in posizione 0
Double acting, A and B to T in 0 position



Sezione di lavoro

Working section



6 - Tipo di comando / Control type

	Q35	Q15 GMV15	Q25	Q45	Q65	Q75	Q95
--	-----	--------------	-----	-----	-----	-----	-----

A1	Comando manuale con leva standard	<i>Hand control with standard lever</i>	•	•	•	•	•	•
A1/Z1*	Versione con kit distanziale per il montaggio del cursore 116	<i>Version with spacer kit for installation of spool 116</i>		•	•	•	•	•
A1S	Comando manuale con leva di sicurezza	<i>Hand control with safety lever</i>	•		•	•	•	•
A2	Comando manuale con leva standard ruotata di 180°	<i>Hand control with standard lever mounted rotated 180°</i>		•	•	•	•	•
A2/Z1*	Versione con kit distanziale per il montaggio del cursore 116	<i>Version with spacer kit for installation of spool 116</i>		•	•	•	•	•
A2S	Comando manuale con leva di sicurezza ruotata di 180°	<i>Hand control with safety lever rotated 180°</i>	•		•	•	•	•
A3*	Scatola di protezione in sostituzione del comando manuale con leva	<i>Cap replacing hand control with lever</i>			•	•	•	•
A4	Attacco diretto sul cursore per rinvio a distanza rigido	<i>Direct control connection on spool for stiff remote control</i>			•	•	•	•
A4/Z1*	Versione con kit distanziale per il montaggio del cursore 116	<i>Version with spacer kit for installation of spool 116</i>			•	•	•	•
A5	Attacco diretto sul cursore con terminale sferico (da utilizzare solo con il posizionamento M4 (2-1))	<i>Direct control connection on spool with spherical end (Control to be used for positioning M4 (2-1))</i>	•		•	•	•	•
A6	Attacco diretto sul cursore con terminale ad occhio fisso	<i>Direct control connection on spool eye end</i>	•		•	•	•	•
A6/Z1*	Versione con kit distanziale per il montaggio del cursore 116	<i>Version with spacer kit for installation of spool 116</i>			•	•	•	•
A8	Attacco diretto sul cursore per cavo flessibile rinvio a distanza	<i>Direct connection on spool for remote flexible control</i>			•	•	•	•
A8/Z1*	Versione con kit distanziale per il montaggio del cursore 116	<i>Version with spacer kit for installation of spool 116</i>			•	•	•	•
C1*	Cavo flessibile	<i>Flexible cable</i>			•	•	•	•
SL*	Comando a distanza	<i>Remote control</i>			•	•	•	•
SLA15*	Comando a cloche per controllo simultaneo di due cursori a distanza	<i>Remote dual axis control for simultaneous operation of two spools</i>			•	•	•	•

* Limitazioni / Limitations

Comando Control	Applicabile con: / Applicable with:	
	Comando / Control	Cursore / Spool
A3	M1-U1 / M2-U1 / M3-U1 / M1-U2 / M2-U2 / M3-U2 / D2 / P1-N / P1-NP / D3	
C1		
SL	A8 / M1U2 - M2U2 - M3U2	Tutti / All
SLA15		

Comando Control	Applicabile con: / Applicable with:	
	Posizionatore / Positioner	Cursore / Spool
A1/Z1 A2/Z1 A4/Z1 A6/Z1 A8/Z1	R8	116

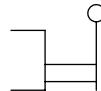
Sezione di lavoro

Working section

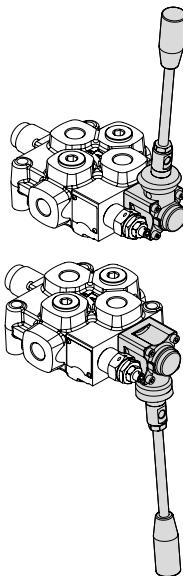
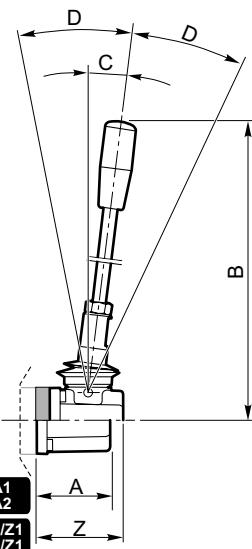


A1 | A1/Z1

A1: Comando manuale con leva standard
A1: Hand control with standard lever

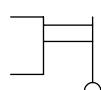


A1/Z1: Versione con kit distanziale per il montaggio del cursore 116
A1/Z1: Version with spacer kit for installation of spool 116



A2 | A2/Z1

A2: Comando manuale con leva standard ruotata di 180°
A2: Hand control with standard lever rotated 180°



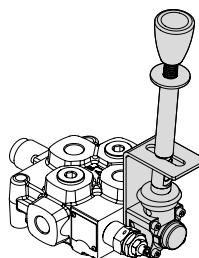
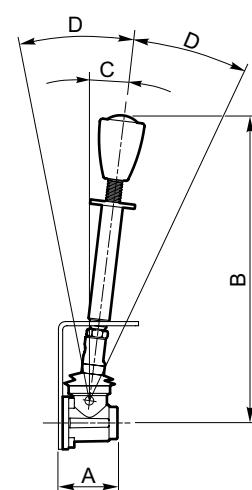
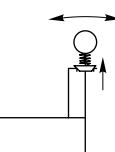
A2/Z1: Versione con kit distanziale per il montaggio del cursore 116
A2/Z1: Version with spacer kit for installation of spool 116

	A	B	C	D	Z
Q15 GMV15	35 (1.378)	211 (8.307)	7°	14°	44 (1.732)
Q35 Q25 - Q45	42 (1.654)	211 (8.307)	5°	13°	50.5 (1.988)
Q65 Q75 - Q95	55 (2.165)	260 (10.236)	6°	19°	68.5 (2.697)

A1
A2
A1/Z1
A2/Z1

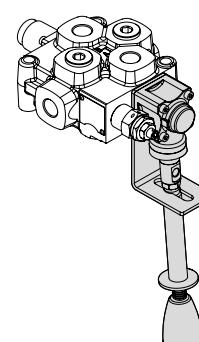
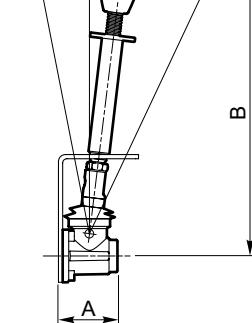
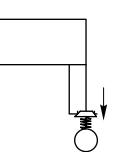
A1S

A1S: Comando manuale con leva di sicurezza
A1S: Hand control with safety lever



A2S

A2S: Comando manuale con leva di sicurezza ruotata di 180°
A2S: Hand control with safety lever rotated 180°

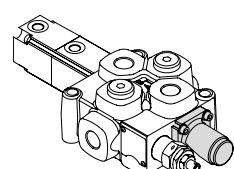


A3

Scatola di protezione in sostituzione
del comando manuale con leva
Proof cap replacing
hand control with lever



	A
Q25 - Q45	42 (1.654)
Q75 - Q95	55 (2.165)



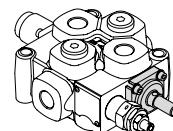
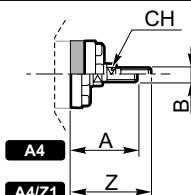
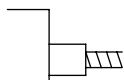
Sezione di lavoro

Working section



A4 | A4/Z1

A4: Attacco diretto sul cursore per rinvio a distanza rigido
 A4: Direct control connection on spool for stiff remote control

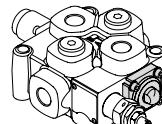
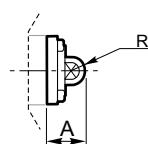
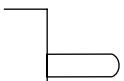


A4/Z1: Versione con kit distanziante per il montaggio del cursore 116
 A4/Z1: Version with spacer kit for installation of spool 116

	A	B	CH	Corsa Stroke	Z
Q25 - Q45	39 (1.535)	M8	9 (0.354)	±5 (0.197)	47.5 (1.870)
Q65 Q75 - Q95	53 (2.087)	M10	14 (0.551)	±7 (0.276)	66.5 (2.618)

A5

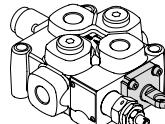
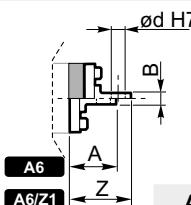
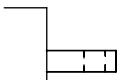
Attacco diretto sul cursore con terminale sferico (da utilizzare solo con il posizionamento M4 (2-1))
 Direct control connection on spool with spherical end (Control to be used for positioning M4 (2-1))



	A	R	Corsa Stroke
Q35	22 (0.866)	6.85 (0.270)	±5 (0.197)
Q25 - Q45 Q65 Q75 - Q95	33 (1.299)	8.75 (0.344)	±7 (0.276)

A6 | A6/Z1

A6: Attacco diretto sul cursore con terminale ad occhio fisso
 A6: Direct control connection on spool eye end

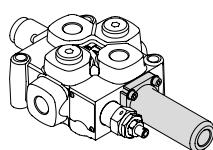
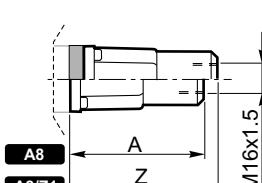
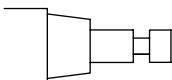


A6/Z1: Versione con kit distanziante per il montaggio del cursore 116
 A6/Z1: Version with spacer kit for installation of spool 116

	A	B	d	Corsa Stroke	Z
Q35	20 (0.787)	6	9 (0.354)	±5 (0.197)	28.5 (1.122)
Q25 - Q45 Q65 Q75 - Q95	27 (1.063)	7	11 (0.433)	±7 (0.276)	40.5 (1.594)

A8 | A8/Z1

A8: Attacco diretto sul cursore per cavo flessibile rinvio a distanza
 A8: Direct connection on spool for remote flexible control



A8/Z1: Versione con kit distanziante per il montaggio del cursore 116
 A8/Z1: Version with spacer kit for installation of spool 116

	A	Z
Q25 - Q45	73 (2.874)	81.5 (3.209)
Q65 Q75 - Q95	77 (3.031)	90.5 (3.563)

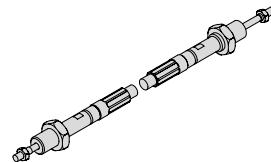
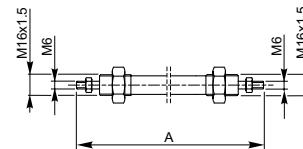
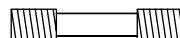
Sezione di lavoro

Working section



C1

Cavo flessibile
Flexible cable



A

Q25 - Q45
Q75 - Q95

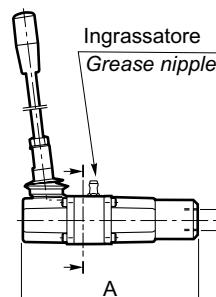
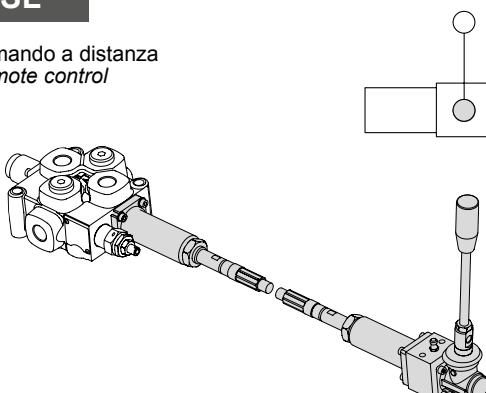
Massima lunghezza cavo consigliata 4000 mm
Raggio min. di curvatura 200mm
Max. recommended lenght 4000 mm
Minimun radium curve 200 mm

Dove è utilizzato il cavo flessibile C1, è necessario indicare la lunghezza del cavo espressa in mm.
Esempio per un cavo lungo 1000 mm: **A8-C1x1000-SL**

Indicate the cable length in mm when flexible cable C1 is used.
E.g.: for a cable 1000 mm in length: **A8-C1x1000-SL**

SL

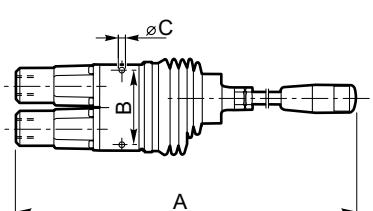
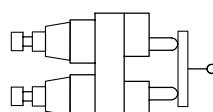
Comando a distanza
Remote control



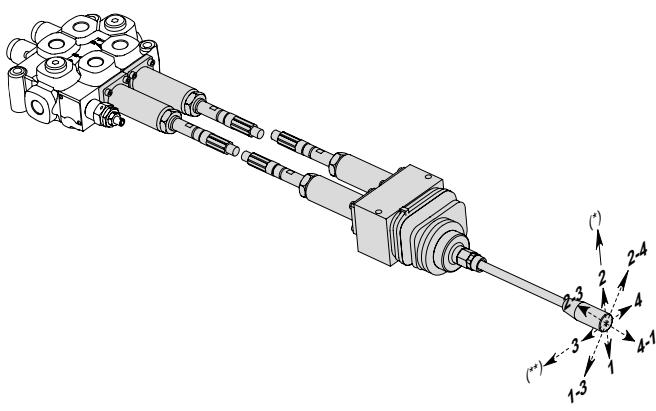
	A	B	C	d	E	F
Q25 - Q45	135 (5.315)	26 (1.024)	40 (1.575)	M16x1.5	38 (1.496)	5.5 (0.217)
Q75 - Q95	172 (6.772)	33.5 (1.319)	45 (1.772)		45 (1.772)	6.5 (0.256)

SLA15

Comando a cloche per controllo
simultaneo di due cursori a distanza
Remote dual axis control for
simultaneous operation of two spools



	A	B	\varnothing d
Q25 - Q45	358 (14.094)	77 (3.031)	6.5 (0.256)
Q75 - Q95			



Eventuale cassetto con 4^a pos. (solo cod.126)
Optional spool with 4th position (only code 126)
(*) su 1^a sezione / on 1st section
(**) su 2^a sezione / on 2nd section

Sezione di lavoro

Working section



6 - Tipo di comando / Control type

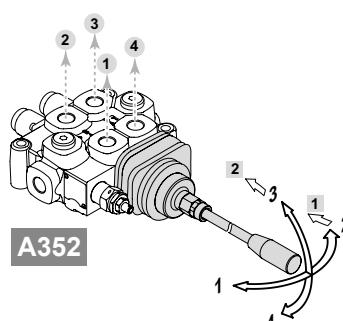
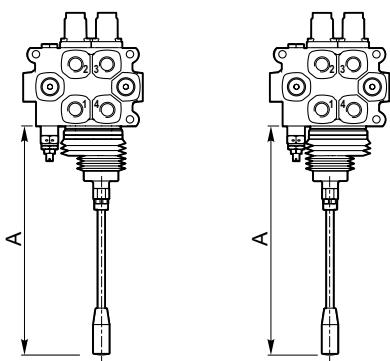
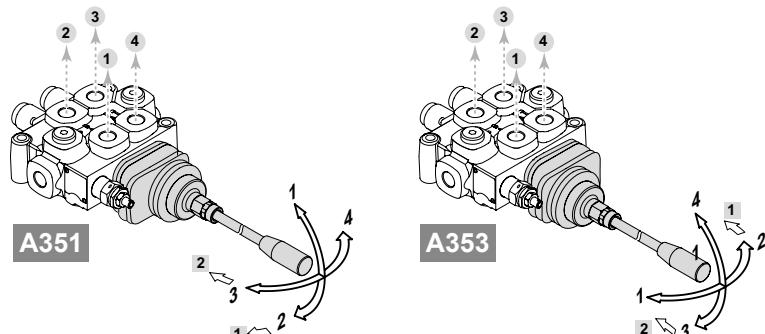
Q15 GMV15	Q25	Q45	Q75	Q95
--------------	-----	-----	-----	-----

Leva a cloche per il comando singolo o simultaneo di due cursori:	Dual axis for single or simultaneous control of two spools:						
A35	- movimento inclinato a X	- tilted movement to X	•	•	•	•	
A16	- movimento dritto a +	- straight movement to +		•	•		
	Comando manuale con attivazione del contatto elettrico del microswitch centralizzato:	Hand control with ON-OFF centralized microswitch operation					
N1-A1	- per doppio effetto	- double acting	•	•	•	•	
N1A-A1	- per semplice effetto in posizione 1	- single acting in 1 position		•	•	•	
N1B-A1	- per semplice effetto in posizione 2	- single acting in 2 position	•	•	•	•	
	Comando manuale, ruotato di 180°, con attivazione del contatto elettrico del microswitch centralizzato:	180° Rotated hand control with ON-OFF centralized microswitch operation					
N1-A2	- per doppio effetto	- double acting	•	•	•	•	
N1A-A2	- per semplice effetto in posizione 1	- single acting in 1 position		•	•	•	
N1B-A2	- per semplice effetto in posizione 2	- single acting in 2 position	•	•	•	•	
	Comando microswitch centralizzato:	Centralized microswitch control:					
N1-A3	- per doppio effetto	- double acting		•	•	•	
N1A-A3	- per semplice effetto in posizione 1	- single acting in 1 position		•	•	•	
N1B-A3	- per semplice effetto in posizione 2	- single acting in 2 position		•	•	•	

A35

Leva a cloche per il comando singolo o simultaneo di due cursori, come schema a lato
Dual axis for simultaneous or single control of two spools, as from the scheme on the side

A	
GMV15	200 (7.874)
Q25 - Q45	280 (11.024)
Q75 - Q95	300 (11.811)



N.B. Nelle configurazioni A351 e A353, la parte inferiore del comando sorge dal piano di appoggio.

Note: A351 - A353 configurations the smallest size is lower than the bolster.

Eventuale cassetto con 4^ pos. (solo cod.126)
Optional spool with 4th position (only code 126)

1 su 1^a sezione / on 1st section

2 su 2^a sezione / on 2nd section

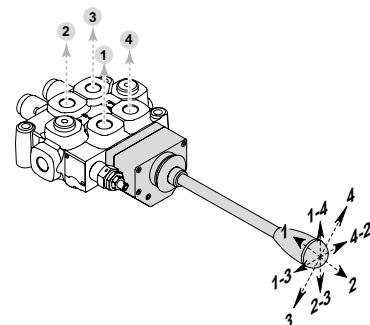
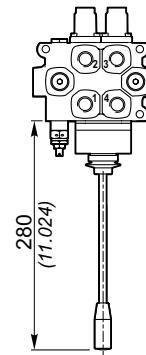
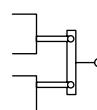
Sezione di lavoro

Working section



A16

Leva a cloche per il controllo singolo o simultaneo di due cursori come schema a lato
Dual axis for single or simultaneous control of two spools as from the scheme on the side



I comandi **A15**, **A16** o **SLA15** sono dei joistik che comandano due sezioni di lavoro; essendo un comando unico viene inserito come codice solo nella prima sezione di lavoro e viene omesso nella seconda.

Esempio

Q25 – F7SR250 – 103/A15/M1 – 103/M1 – F3D

Nella seconda sezione di lavoro è indicato solo il cursore e il posizionatore.

Quando è richiesto anche il cavo C1, è necessario specificarne la lunghezza in entrambe le sezioni.

Esempio

Q25 – F7SR250 – 103/A8-C1x1000-SLA15/M1 – 103/A8-C1x1000/M1 – F3D

Controls A15, A16 or SLA15 are joysticks that control two working sections. Since it is a single control, it is only entered as a code in the first work section and is omitted from the second.

Example

Q25 – F7SR250 – 103/A15/M1 – 103/M1 – F3D

Only the spool and positioner are indicated in the second working section.

When cable C1 is also required, its length must be specified in both sections.

Example

Q25 – F7SR250 – 103/A8-C1x1000-SLA15/M1 – 103/A8-C1x1000/M1 – F3D

Sezione di lavoro

Working section


N1-A1
N1A-A1
N1B-A1

Comando manuale con attivazione del contatto elettrico del microswitch centralizzato.

N1-A1: Per doppio effetto

N1A-A1: Per semplice effetto in pos. 1

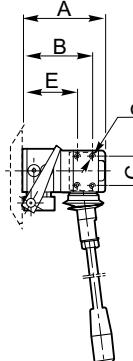
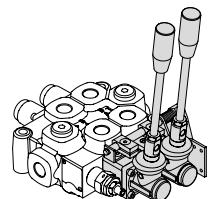
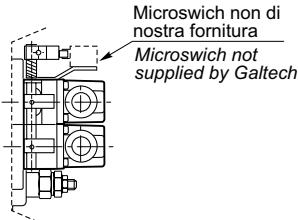
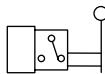
N1B-A1: Per semplice effetto in pos. 2

Hand control with ON-OFF centralized microswitch operation.

N1-A1: Double acting

N1A-A1: Single acting in 1 position

N1B-A1: Single acting in 2 position



	A	B	C	E	d
Q15 - GMV15	64 (2.520)	42 (1.654)	22.2 (0.874)	31.7 (1.248)	M2.5
Q25 - Q45	70 (2.756)	59 (2.323)	25 (0.984)	49 (1.929)	M4
Q75 - Q95	84 (3.307)				

N1-A2
N1A-A2
N1B-A2

Comando manuale ruotato di 180° con attivazione del contatto elettrico del microswitch centralizzato.

N1-A2: Per doppio effetto

N1A-A2: Per semplice effetto in pos. 1

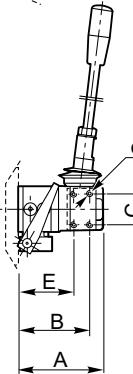
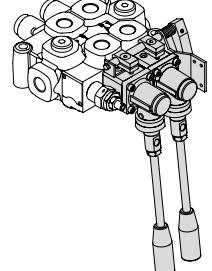
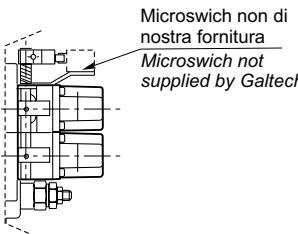
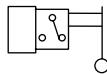
N1B-A2: Per semplice effetto in pos. 2

180° rotated hand control with ON-OFF centralized microswitch operation.

N1-A2: Double acting

N1A-A2: Single acting in 1 position

N1B-A2: Single acting in 2 position



	A	B	C	E	d
Q15 - GMV15	64 (2.520)	42 (1.654)	22.2 (0.874)	31.7 (1.248)	M2.5
Q25 - Q45	70 (2.756)	59 (2.323)	25 (0.984)	49 (1.929)	M4
Q75 - Q95	84 (3.307)				

N1-A3
N1A-A3
N1B-A3

Comando microswitch centralizzato.

N1-A3: Per doppio effetto

N1A-A3: Per semplice effetto in pos. 1

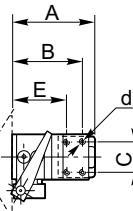
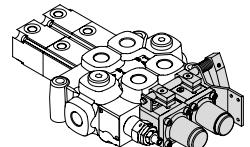
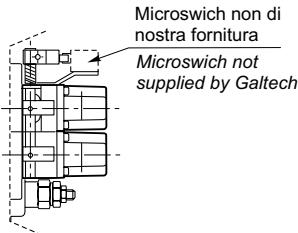
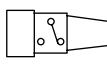
N1B-A3: Per semplice effetto in pos. 2

Centralized microswitch control.

N1-A3: Double acting

N1A-A3: Single acting in 1 position

N1B-A3: Single acting in 2 position



	A	B	C	E	d
Q25 - Q45	70 (2.756)	59 (2.323)	25 (0.984)	49 (1.929)	M4
Q75 - Q95	84 (3.307)				

Sezione di lavoro

Working section



7 - Tipo posizionatore

* La posizione dei campi 5 e 6 si riferisce al comando collocato sul lato effetto A e al posizionatore lato effetto B; se le posizioni sono opposte, invertire i due campi 5 e 6 come da esempio seguente:

A1 M1 6 - 7

Posizionatori / Positioner

M1 A1 7 - 6

Q35 Q15 GMV₁₅ Q25 Q45 Q65 Q75 Q95

Q35	Q15	GMV 15	Q25	Q45	Q65	Q75	Q95
-----	-----	-----------	-----	-----	-----	-----	-----

M1	Tre posizioni ritorno a molla in pos.0	<i>Three positions spring centred in 0</i>	●	●	●	●	●	●
M2	Due posizioni 0-1 ritorno a molla in pos.0	<i>Two positions spring 0-1 centred in 0</i>			●	●	●	●
M3	Due posizioni 0-2 ritorno a molla in pos.0	<i>Two positions spring 0-2 centred in 0</i>			●	●	●	●
M4(1-2)	Due posizioni estreme ritorno a molla in pos.1	<i>Two end positions spring back in 1</i>	●		●	●	●	●
M4(2-1)	Due posizioni estreme ritorno a molla in pos.2	<i>Two end positions spring back in 2</i>	●		●	●	●	●
R0	Posizionamento frizione	<i>Friction positioner</i>	●		●	●	●	●
R1	Tre posizioni ritorno a molla in pos.0, detent in pos.1	<i>Three positions spring centred in 0, detent in 1</i>	●		●	●	●	●
R2	Tre posizioni ritorno a molla in pos.0, detent in pos.2	<i>Three positions spring centred in 0, detent in 2</i>	●		●	●	●	●
R3	Tre posizioni in detent	<i>Three positions detent</i>	●		●	●	●	●
R4	Due posizioni in detent 0-1	<i>Two positions detent 0-1</i>			●	●	●	●
R5	<i>Due posizioni in detent 0-2</i>	<i>Two positions detent 0-2</i>			●	●	●	●
R6	<i>Due posizioni in detent 1-2</i>	<i>Two positions detent 1-2</i>			●	●	●	●
R8*	Due posizioni (1 e 2) con ritorno a molla in pos. 0; (3) 4 ^a posizione flottante con detent. (Da montare con Z1 lato comando e cursore 116)	<i>Two positions (1 and 2) with spring return centred in 0 position. (3) 4th position floating with detent. (Mounting with Z1 side control and spool 116)</i>	●		●	●		●
R10/Z1*	Due posizioni (1 e 2) con ritorno a molla in pos. 0, (3) 4 ^a posizione flottante con detent (da montare con cursore 126)	<i>Two positions (1 and 2) with spring return centred in 0, position (3) 4th position floating with detent (mounting with spool 126)</i>			●	●		●
R1K*	Comando a 3 posizioni, detent in pos. 1 con sgancio automatico registrabile. Disponibile solo con cursore cod. 103 e 111	<i>3 Position control, detent in J pos. with automatic adjustable release. Available with spool code 103 and 111 only</i>				●	●	●
R2K*	Comando a 3 posizioni, detent in pos. 2 con sgancio automatico registrabile. Disponibile solo con cursore cod. 103 e 111	<i>3 Position control, detent in 2 pos. with automatic adjustable release. Available with spool code 103 and 111 only</i>				●	●	●
R3K*	Comando a 3 posizioni, detent in pos. 1 e 2 con sgancio automatico registrabile. Disponibile solo con cursore cod. 103 e 111	<i>3 Position control, detent in 1 and 2 pos. with automatic adjustable release. Available with spool code 103 and 111 only</i>				●	●	●
M1-B1	Tre posizioni ritorno a molla in pos.0 con comando microswitch posteriore	<i>Three positions spring centred in 0 with back microswitch control</i>				●	●	●
M2-B1	Due posizioni, 0-1, ritorno a molla in pos.0 con comando microswitch posteriore	<i>Two positions 0-1, spring centred in 0 with back microswitch control</i>				●	●	●
M3-B1	Due posizioni, 0-2, ritorno a molla in pos. 0 con comando microswitch posteriore	<i>Two positions 0-2, spring centred in 0 with back microswitch control</i>				●	●	●
M1-N1 M1-N1A M1-N1B	Tre posizioni ritorno a molla in pos. 0, con attivazione del contatto elettrico del microswitch centralizzato M1-N1: Per doppio effetto M1-N1A: Per semplice effetto in pos 1 M1-N1B: Per semplice effetto in pos 2	<i>Three positions spring centred in 0, with ON-OFF centralized microswitch operation. N1-A1: Double acting N1A-A1: Single acting in 1 position N1B-A1: Single acting in 2 position</i>					●	●
M2-N1	Due posizioni, 0-1, con ritorno a molla in pos.0, con attivazione del contatto elettrico del microswitch centralizzato	<i>Two positions, 0-1 , with spring centred in 0, with ON-OFF centralized microswitch operation</i>				●	●	●
M3-N1	Due posizioni, 0-2, con ritorno a molla in pos.0, con attivazione del contatto elettrico del microswitch centralizzato	<i>Two positions, 0-2, with spring centred in 0, with ON-OFF centralized microswitch operation</i>				●	●	●
M1-B4	Posizionamento con micro a tenuta stagna	<i>Positioning with watertight</i>	●		●	●		

* Limitazioni / Limitations

Posizionatore Positioner	Applicabile con: / Applicable with:	
	Comando / Control	Cursore / Spool
R8	A1/Z1 - A2/Z1 - A4/Z1 - A6/Z1 - A8/Z1	116
R10/Z1	Tutti / All	126
R1K R2K R3K	A1 / A2 / A4 / A5 / A6 / A8 / SL / SLA15 / A15 / A16 / N1-A1 / N1-A2 / N1-A3	103 / 111

Sezione di lavoro

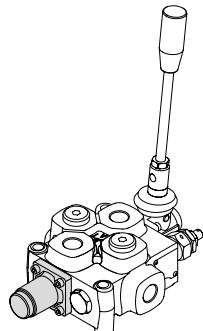
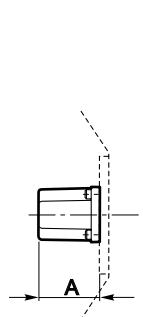
Working section

**M1**

Tre posizioni ritorno a molla in pos.0
Three positions spring centred in 0

**M2**

Due posizioni 0-1 ritorno a molla in pos.0
Two positions spring 0-1 centred in 0

**M3**

Due posizioni 0-2 ritorno a molla in pos.0
Two positions spring 0-2 centred in 0

**M4 (1-2)**

Due posizioni estreme ritorno a molla in pos.1
Two end positions spring back in 1



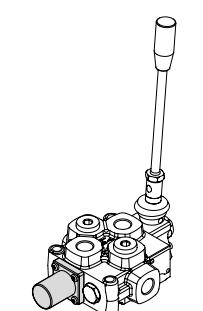
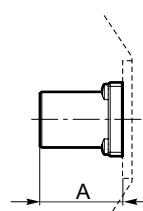
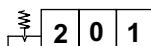
	A			
	M1	M2	M3	M4 2-1
Q15 GMV15	22.5 (0.886)	22.5 (0.886)	22.5 (0.886)	
Q35 Q25 - Q45	42 (1.654)	42 (1.654)	42 (1.654)	42 (1.654)
Q65 Q75 - Q95	55 (2.165)	55 (2.165)	55 (2.165)	55 (2.165)

M4 (2-1)

Due posizioni estreme ritorno a molla in pos.2
Two end positions spring back in 2

**R0**

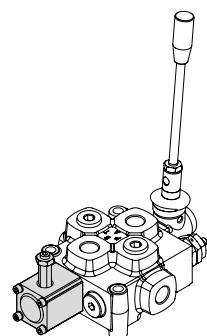
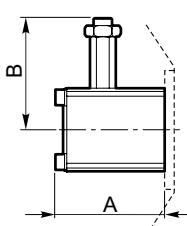
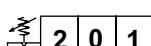
Posizionamento frizione
Friction positioner



Q35 - Q25 - Q45

Frizione non registrabile
Not adjustable friction

	A	
	Q25 - Q35 - Q45	42 (1.654)



Q65 - Q75 - Q95

Frizione registrabile
Adjustable friction

	A	B
	Q65 - Q75 - Q95	59 (2.323) 60 (2.362)

Sezione di lavoro

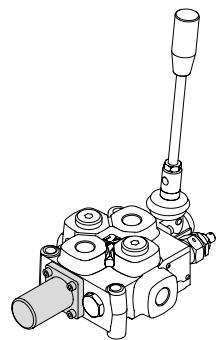
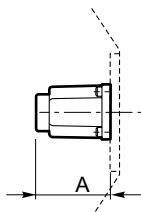
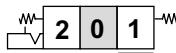
Working section



R1

Tre posizioni ritorno a molla in pos.0,
detent in pos.1

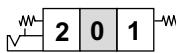
*Three positions spring centred in 0,
detent in 1*



R2

Tre posizioni ritorno a molla in pos.0,
detent in pos.2

*Three positions spring centred in 0,
detent in 2*

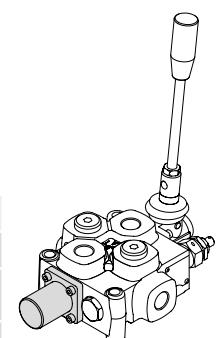
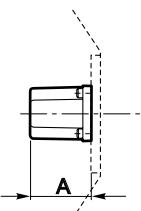
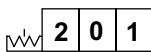


A

	R1	R2
Q35	52 (2.047)	54 (2.126)
Q25 - Q45		
Q65	70 (2.756)	68.5 (2.697)
Q75 - Q95		

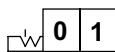
R3

Tre posizioni in detent
Three positions detent



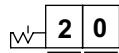
R4

Due posizioni in detent 0-1
Two positions detent 0-1



R5

Due posizioni in detent 0-2
Two positions detent 0-2

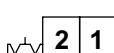


A

	R3	R4	R5	R6
Q15 GMV15	22 (0.866)	22 (0.866)	22 (0.866)	
Q35 Q25 - Q45	42 (1.654)	42 (1.654)	42 (1.654)	42 (1.654)
Q65 Q75 - Q95	55 (2.165)	55 (2.165)	55 (2.165)	55 (2.165)

R6

Due posizioni in detent 1-2
Two positions detent 1-2



Sezione di lavoro

Working section

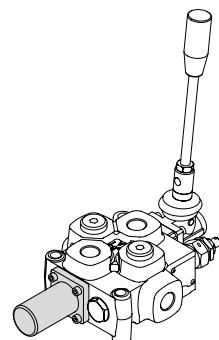
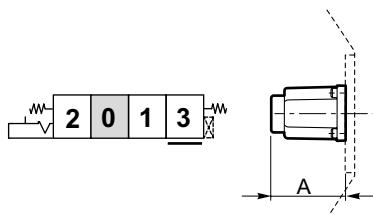


R8

Due posizioni (1 e 2) con ritorno a molla in pos. 0;
(3) 4^a posizione flottante con detent.

(Da montare con Z1 lato comando e cursore 116)
Two positions (1 and 2) with spring return centred
in 0 position.

(3) 4th position floating with detent.
(Mounting with Z1 side control and spool 116)



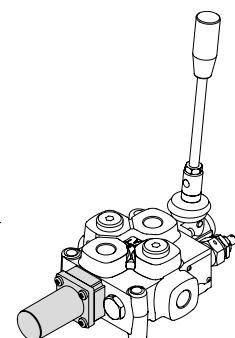
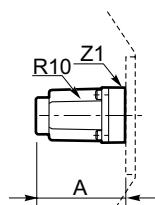
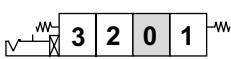
A	
Q15	43
GMV15	(1.693)
Q25 - Q45	56.5
	(2.224)
Q65	75
Q75 - Q95	(2.953)

R10/Z1

Due posizioni (1 e 2) con ritorno a molla in pos. 0,
(3) 4^a posizione flottante con detent.

(Da montare cursore 126)
Two positions (1 and 2) with spring
return centred in 0 position

(3) 4th position floating with detent.
(Mounting with spool 126)



A	
Q15	50
GMV15	(1.969)
Q25 - Q45	70
	(2.756)
Q75 - Q95	92
	(3.622)

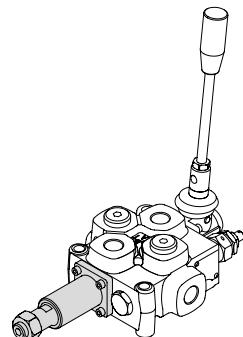
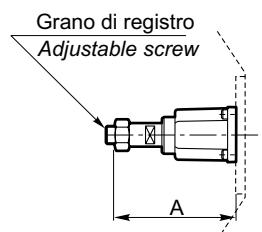
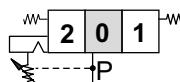
R1K

Comando a 3 posizioni, detent in pos. 1
con sgancio automatico registrabile.

Disponibile solo con cursore cod. 103 e 111

3 Position control, detent in 1 pos.
with automatic adjustable release.

Available with spool code 103 and 111 only



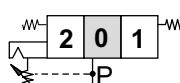
R2K

Comando a 3 posizioni, detent in pos. 2
con sgancio automatico registrabile.

Disponibile solo con cursore cod. 103 e 111

3 Position control, detent in 2 pos.
with automatic adjustable release.

Available with spool code 103 and 111 only



A			
	R1K	R2K	R3K
Q25 - Q45	91.5 (3.602)	91.5 (3.602)	91.5 (3.602)
Q75 - Q95	106 (4.173)	106 (4.173)	106 (4.173)

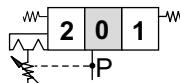
R3K

Comando a 3 posizioni, detent in pos. 1 e 2
con sgancio automatico registrabile.

Disponibile solo con cursore cod. 103 e 111

3 Position control, detent in 1 and 2 pos.
with automatic adjustable release.

Available with spool code 103 and 111 only



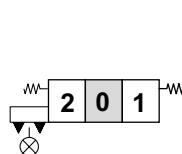
Campo di taratura della pressione per lo sgancio automatico 45 - 350 bar (653 - 5075 PSI)
Pressure calibration field for automatic release 45 - 350 bar (653 - 5075 PSI)

Sezione di lavoro

Working section

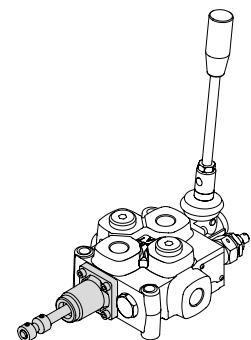
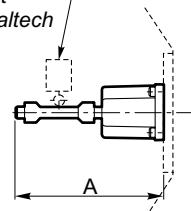
**M1-B1**

Tre posizioni ritorno a molla in pos.0 con comando microswitch posteriore
Three positions spring centred in 0 with back microswitch control

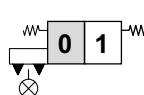


Microswitch non di nostra fornitura

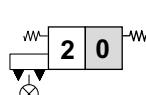
Microswitch not supplied by Galtech

**M2-B1**

Due posizioni, 0-1, ritorno a molla in pos.0 con comando microswitch posteriore
Two positions, 0-1, spring centred in 0 with back microswitch control

**M3-B1**

Due posizioni, 0-2, ritorno a molla in pos. 0 con comando microswitch posteriore
Two positions, 0-2, spring centred in 0 with back microswitch control

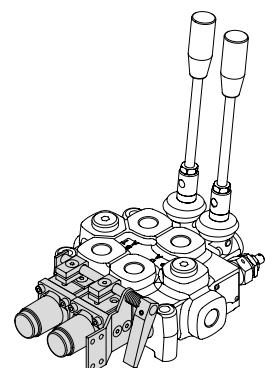
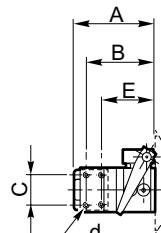


	A	M1-B1	M2-B1	M3-B1
Q25 - Q45		82 (3.228)	82 (3.228)	82 (3.228)
Q75 - Q95		102 (4.016)	102 (4.016)	102 (4.016)

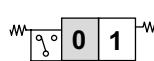
M1-N1**M1-N1A****M1-N1B**

Tre posizioni ritorno a molla in pos. 0, con attivazione del contatto elettrico del microswitch centralizzato
 M1-N1: Per doppio effetto
 M1-N1A: Per semplice effetto in pos 1
 M1-N1B: Per semplice effetto in pos 2
Three positions spring centred in 0, with ON-OFF centralized microswitch operation.

N1-A1: Double acting
 N1A-A1: Single acting in 1 position
 N1B-A1: Single acting in 2 position

**M2-N1**

Due posizioni, 0-1, con ritorno a molla in pos.0, con attivazione del contatto elettrico del microswitch centralizzato
Two positions, 0-1, with spring centred in 0, with ON-OFF centralized microswitch operation



Microswitch non di nostra fornitura

Microswitch not supplied by Galtech

M3-N1

Due posizioni, 0-2, con ritorno a molla in pos.0, con attivazione del contatto elettrico del microswitch centralizzato
Two positions, 0-2, with spring centred in 0, with ON-OFF centralized microswitch operation



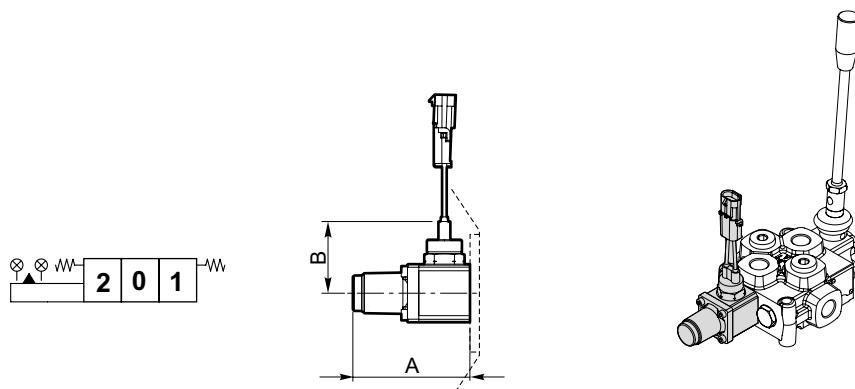
	A	B	C	E	d
Q25 - Q45	70 (2.756)	59 (2.323)	25 (0.984)	49 (1.929)	M4
Q75 - Q95	84 (3.307)				

Sezione di lavoro

Working section

**M1-B4**

Posizionatore con micro a tenuta stagna.
Positioning with watertight microswitch.



	A	B
Q25 - Q45	75.5 (2.972)	50 (1.969)

Caratteristiche elettriche / Electrical Characteristic

Corrente / Current	0.01 ÷ 5.0	Amp
Tensione / Voltage	5 ÷ 24	VDC
Connettore / Connector	Packard weather pack	
Temperatura / Temperature	-40 ÷ 120	°C
Tipo / Type	Normalmente aperto <i>Normally open</i>	

Sezione di lavoro

Working section



Comandi con posizionamento / Controls with positioning

Q35	Q25	Q45	Q75	Q95
-----	-----	-----	-----	-----

M1-U1*	Tre posizioni con ritorno a molla in pos.0, attacco diretto sul cursore per rinvio a distanza rigido	<i>Three positions spring centred in 0, with direct control connection on spool, cap side, for stiff remote control</i>		•	•	•	•
M2-U1*	Due posizioni, 0-1, con ritorno a molla in pos.0, attacco diretto sul cursore per rinvio a distanza rigido	<i>Two positions, 0-1, spring centred in 0, with direct control connection on spool, cap side, for stiff remote control</i>		•	•	•	•
M3-U1*	Due posizioni, 0-2, con ritorno a molla in pos. 0, attacco diretto sul cursore per rinvio a distanza rigido	<i>Two positions, 0-2, spring centred in 0, with direct control connection on spool, cap side, for stiff remote control</i>		•	•	•	•
M1-U2*	Tre posizioni con ritorno a molla in pos. 0, attacco diretto sul cursore per rinvio a distanza con cavo flessibile	<i>Three positions spring centred in 0, direct control connection on spool, cap side, for flexible remote control</i>		•	•	•	•
M2-U2*	Due posizioni, 0-1, ritorno a molla in pos. 0, attacco diretto sul cursore per rinvio a distanza con cavo flessibile	<i>Two positions, 0-1, spring centred in 0, direct control connection on spool, cap side, for flexible remote control</i>		•	•	•	•
M3-U2*	Due posizioni, 0-2, ritorno a molla in pos. 0, attacco diretto sul cursore per rinvio a distanza con cavo flessibile	<i>Two positions, 0-2, spring centred in 0, direct control connection on spool, cap side, for flexible remote control</i>		•	•	•	•
D2*	Comando elettroidraulico doppio con ritorno in pos. 0	<i>Double electro-hydraulic control, spring centred in 0</i>				•	•
P1-N*	Comando pneumatico	<i>Pneumatic control</i>		•	•	•	•
P1-NP*	Comando pneumatico progressivo	<i>Progressive pneumatic control</i>		•	•	•	•
D3*	Comando elettropneumatico	<i>Electropneumatic control</i>		•	•	•	•

* Limitazioni / Limitations

Posizionatore Positioner	Applicabile con: / Applicable with:	
	Comando / Control	Cursore / Spool
M1-U1 M2-U1 M3-U1 M1-U2 M2-U2 M3-U2 D2 P1-N P1-NP D3	A1 / A2 / A3 / A4 / A6 / A8	Tutti tranne 116 e 126 <i>All except 116 and 126</i>

Sezione di lavoro**Working section****M1-U1**

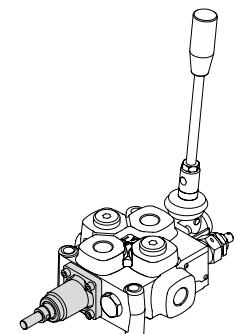
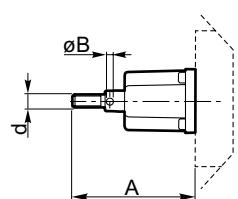
Tre posizioni con ritorno a molla in pos.0,
attacco diretto sul cursore
per rinvio a distanza rigido

*Three positions spring centred in 0,
with direct control connection on spool,
cap side, for stiff remote control*

**M2-U1**

Due posizioni, 0-1, con ritorno a molla in pos.0,
attacco diretto sul cursore
per rinvio a distanza rigido

*Two positions, 0-1, spring centred in 0,
with direct control connection on spool,
cap side, for stiff remote control*

**M3-U1**

Due posizioni, 0-2, con ritorno a molla in pos. 0,
attacco diretto sul cursore
per rinvio a distanza rigido

*Two positions, 0-2, spring centred in 0,
with direct control connection on spool,
cap side, for stiff remote control*

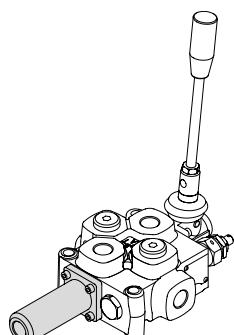
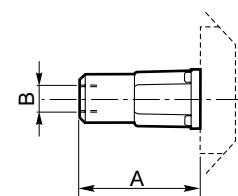


	A	B	d
Q25 - Q45	73 (2.874)	4 (0.157)	M8
Q75 - Q95	96 (3.780)	5 (0.197)	M10

M1-U2

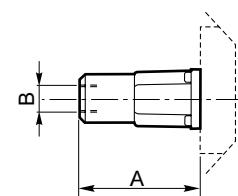
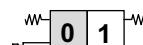
Tre posizioni con ritorno a molla in pos. 0,
attacco diretto sul cursore
per rinvio a distanza con cavo flessibile

*Three positions spring centred in 0,
direct control connection on spool,
cap side, for flexible remote control*

**M2-U2**

Due posizioni, 0-1, ritorno a molla in pos. 0,
attacco diretto sul cursore

*Two positions, 0-1, spring centred in 0,
direct control connection on spool,
cap side, for flexible remote control*

**M3-U2**

Due posizioni, 0-2, ritorno a molla in pos. 0,
attacco diretto sul cursore

*Two positions, 0-2, spring centred in 0,
direct control connection on spool,
cap side, for flexible remote control*



	A	B
Q25 - Q45	73 (2.874)	
Q75 - Q95	77 (3.031)	M16X1.5

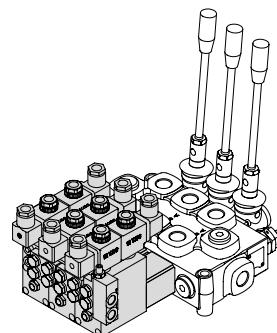
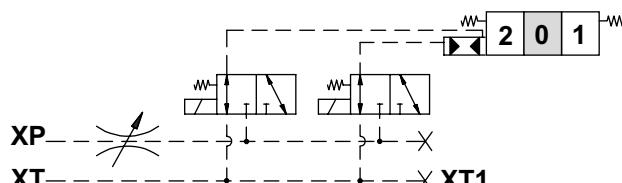
Sezione di lavoro

Working section

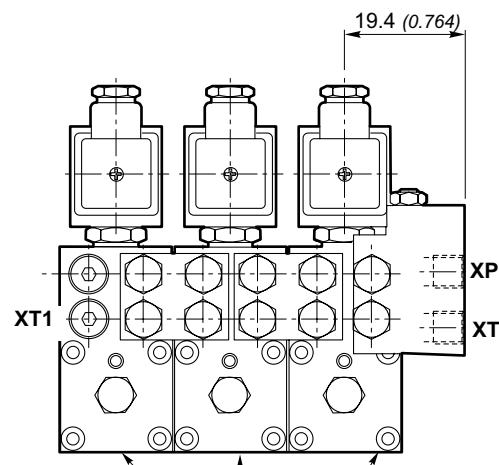
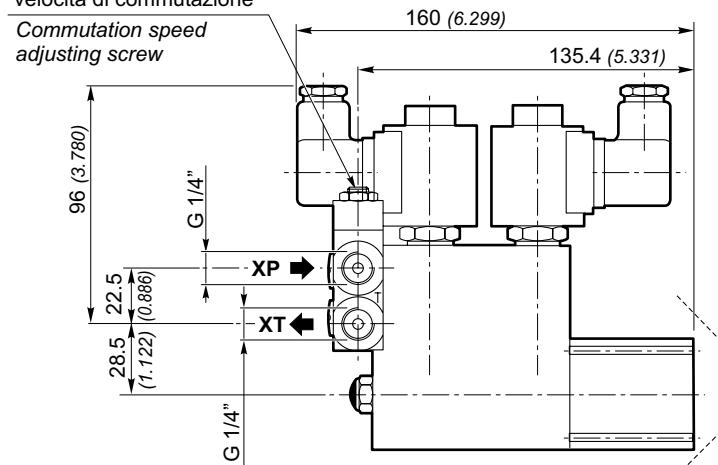
**D2**

Solo per Q75 e Q95
Only for Q75 and Q95

Comando elettroidraulico doppio
con ritorno in pos. 0
Double electro-hydraulic
control spring centred in 0



Vite di regolazione
velocità di commutazione
Commutation speed
adjusting screw



Codice: D2-2R per elementi successivi
Code: D2-2R for the following elements

Codice: D2-1R per il 1° elemento
Code: D2-1R for the 1° elements

Pressione di pilotaggio in XP Pilot pressure in XP	Contropressione max. su XT Maximum back pressure on XT	Portata minima per ogni elemento Minimum flow for each section	Volume di pilotaggio per elemento Piloting volume for each section
Max.	Min.		
35 bar (490 PSI)	20 bar (280 PSI)	4 bar (56 PSI)	0.5 lt/min (0.132 GPM) 5.5 cm ³ (0.336 in ³)

Caratteristiche tecniche elettromagnete tipo "H" / Electromagnet characteristics type "H"

Attacco magnete / Magnet connection	Tipo DIN 43650 (versione A) / Type DIN 43650 (A version)
Tipo di protezione / Protection type	IP 65
Classe d'isolamento / Coil insulation class	H 180 VDE 0580
Tensione di alimentazione / Supply voltage	D.C.: 12, 24V A.C. - 50 Hz: 110, 220 V
Variazione di tensione max. / Maximum voltage tolerance	± 10%
Potenza assorbita / Absorbed power supply	18 W
Rapporto di max. utilizzo / Maximum utilization ratio	100%
Temperatura max. / Max. temperature	100° C

Dimensioni in / Dimensions in: mm (inch)

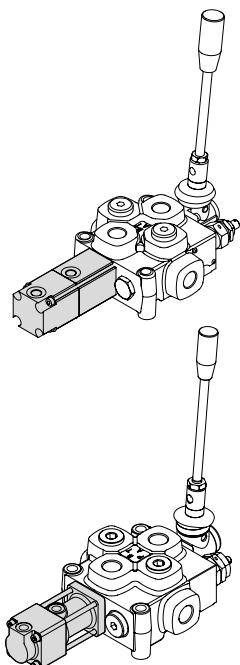
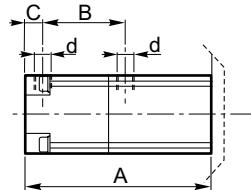
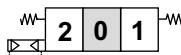
Sezione di lavoro

Working section



P1-N

Comando pneumatico a tre posizioni con ritorno in pos. 0
Three positions pneumatic control, spring centred in 0



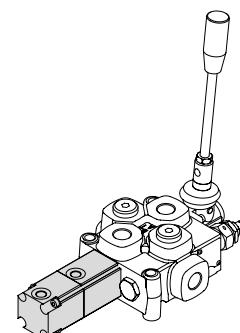
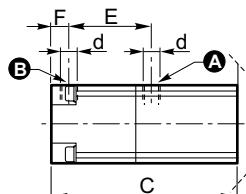
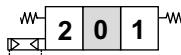
Q25-Q45 Supporto del comando in Alluminio
Q25-Q45 Command support in aluminium
Q75-Q95 Supporto del comando in Tecnopoliomer
Q75-Q95 Command support in technopolymer

	A	B	C	d	
Q25 - Q45	90.5 (3.563)	43 (1.693)	10 (0.394)		G 1/8"
Q75 - Q95	107 (4.213)	48 (1.890)	10.5 (0.413)		

Pressione di pilotaggio / Pilot pressure	Min.	5 bar (72.5 PSI)
	Max.	30 bar (435 PSI)
Volume pilotaggio / Pilot volume	Q25-Q45	4 cm³ (0.244 in³)
	Q75-Q95	9 cm³ (0.549 in³)

P1-NP

Comando pneumatico progressivo a tre posizioni con ritorno in posizione 0 per azionamento con manipolatore
Three positions progressive pneumatic control, spring centred in 0 for remote control

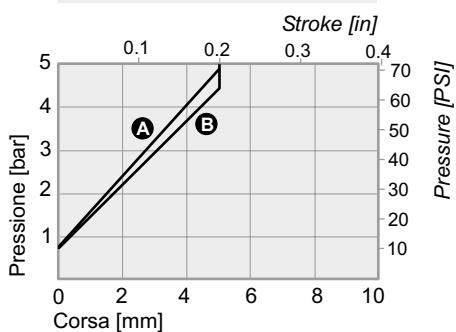


Q25-Q45 Supporto del comando in Alluminio
Q25-Q45 Command support in aluminium
Q75-Q95 Supporto del comando in Tecnopoliomer
Q75-Q95 Command support in technopolymer

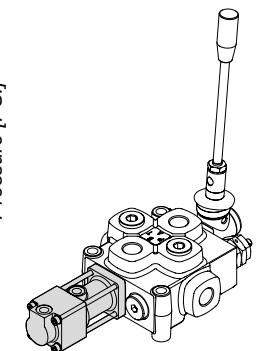
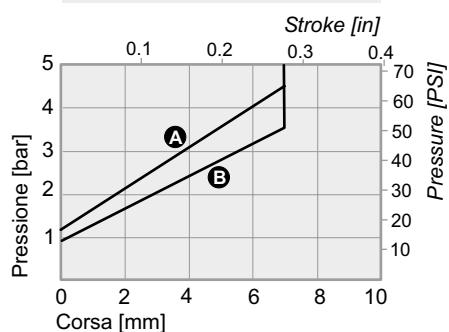
	C	E	F	d	
Q25 - Q45	90.5 (3.563)	43 (1.693)	10 (0.394)		G 1/8"
Q75 - Q95	107 (4.213)	48 (1.890)	10.5 (0.413)		

Diagramma pressione di pilotaggio - Corsa spool / Pilot pressure diagram - Spool stroke

Q25 - Q45



Q75 - Q95



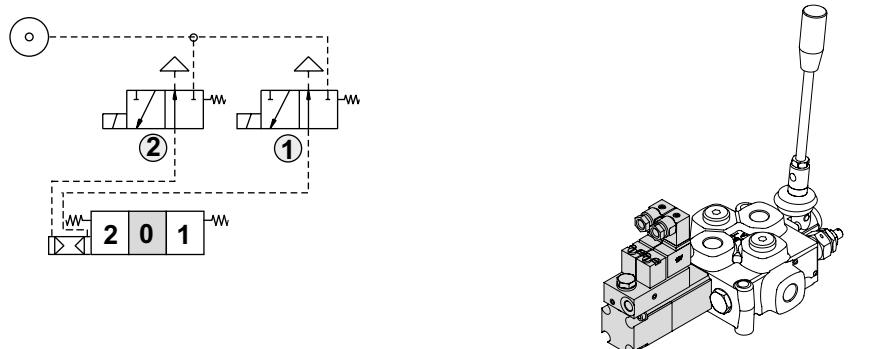
Pressione di pilotaggio / Pilot pressure	Min.	5 bar (72.5 PSI)
	Max.	30 bar (435 PSI)
Volume pilotaggio / Pilot volume	Q25-Q45	4 cm³ (0.244 in³)
	Q75-Q95	9 cm³ (0.549 in³)

Sezione di lavoro

Working section

**D3**

Comando elettropneumatico a tre posizioni con ritorno in pos. 0
Three positions electro-pneumatic control, spring centred in 0

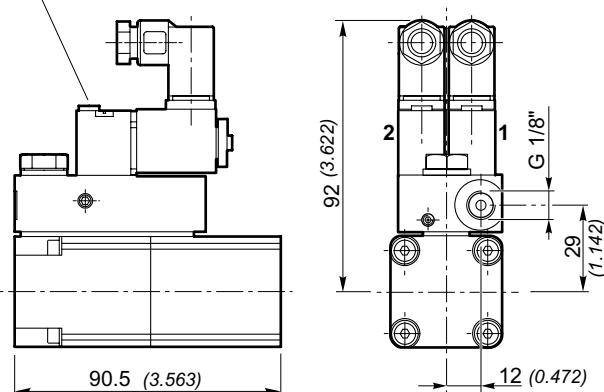


Q25-Q45 Supporto del comando in Alluminio
 Q25-Q45 Command support in aluminium

Q25 - Q45
Caratteristiche di funzionamento
Operation characteristics

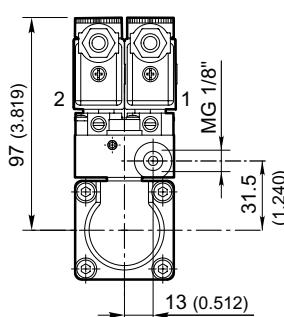
Pressione di pilotaggio <i>Pilot pressure</i>	1 ÷ 10 bar (14.5 ÷ 145 PSI)
Volume pilotaggio <i>Pilot volume</i>	27NI/ a 6 bar Δpl (27NI/ a 87 PSI Δpl)

Emergenza manuale a rotazione
Manuel override

**Q75 - Q95**
Caratteristiche di funzionamento
Operation characteristics

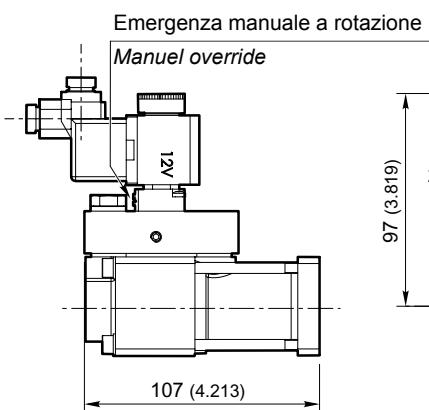
Pressione di pilotaggio <i>Pilot pressure</i>	1 ÷ 10 bar (14.5 ÷ 145 PSI)
Volume pilotaggio <i>Pilot volume</i>	53NI/ a 6 bar Δpl (53NI/ a 87 PSI Δpl)

Emergenza manuale a rotazione
Manuel override


Caratteristiche tecniche elettromagnete
Electromagnet characteristics

Tipo attacco magnete <i>Magnet connection type</i>	DIN 175301-803-C
Tipo di protezione <i>Protection type</i>	IP 65
Classe d'isolamento <i>Coil insulation class</i>	F
Tensione di alimentazione <i>Supply voltage</i>	D.C.: 12, 24V A.C.: 50 Hz 230 V
Variazione di tensione max. <i>Maximum voltage tollerance</i>	± 10%
Potenza assorbita <i>Absorbed power supply</i>	D.C.: 2.9 W A.C. 4VA
Rapporto di max. utilizzo <i>Maximum utilization ratio</i>	100%
Temperatura max. <i>Max. temperature</i>	-10 ÷ 50 °C

Q75-Q95 Supporto del comando in Tecnopoliomer
 Q75-Q95 Command support in technopolimer



Sezione di lavoro

Working section



Comandi completi / Complete controls

Q15 GMV15	Q25	Q45	Q75	Q95
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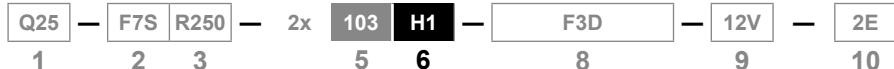
H1*	Comando idraulico ad alta pressione ON-OFF a tre posizioni, ritorno a molla in posizione 0	<i>Three positions with high-pressure hydraulic control, spring centered in 0 position</i>		•	•	•	•
H5*	Comando idraulico a bassa pressione per manipolatore idraulico	<i>Low pressure hydraulic control for hydraulic pilot valves</i>		•	•	•	•
RTL-s*	Comando rotativo frizionato a tre posizioni: tacca in pos. 0, leva in pos. 2	<i>3-position clutch-operated rotary control: notch mark in pos. 0, lever in pos. 2</i>		•	•	•	•
RTL-d*	Comando rotativo frizionato a tre posizioni: tacca in pos. 0, leva in pos. 1	<i>3-position clutch-operated rotary control: detent in pos. 0, lever in pos. 1</i>		•	•	•	•
C2*	Comando a camme 2 posizioni estreme 1-2, ritorno a molla in pos. 1	<i>Cam control, 2 end positions 1-2, spring centered in 1 position</i>		•	•	•	•
C3*	Comando a camme 2 posizioni estreme 2-1, ritorno a molla in pos. 2	<i>Cam control, 2 end positions 2-1, spring centered in 2 position</i>		•	•	•	•
A1/D41*	Comando elettrico diretto doppio, ritorno a molla in pos. 0	<i>Double direct electrical control with spring centred in 0</i>	•	•	•	•	•
A2/D41*	Comando elettrico diretto doppio con leva ruotata, ritorno a molla in pos. 0	<i>180° rotated double direct electrical control with spring centred in 0</i>	•	•	•	•	•
A1/DP*	Comando elettrico diretto doppio, ritorno a molla in pos. 0	<i>Double direct electrical control with spring centred in 0</i>		•	•	•	•
A2/DP*	Comando elettrico diretto doppio, ritorno a molla in pos. 0	<i>Double direct electrical control with spring centred in 0</i>		•	•	•	•
D9*	Comando elettrico diretto a due magneti con ritorno a molla in pos. 0	<i>Double direct electrical control with spring centred in 0</i>		•	•	•	•

* Limitazioni / Limitations

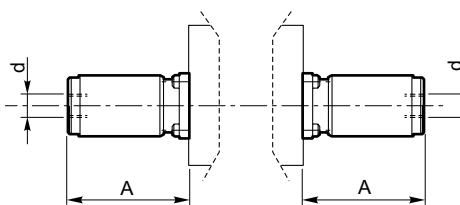
Comando completo Complete control	Applicabile con: / Applicable with:
	Cursore / Spool
H1	
H5	
RTL-s	Tutti tranne / All except 116 / 126
RTL-d	
C2	
C3	
A1/D41	
A2/D41	
A1/DP	101 / 102 / 103 / 107 / 108 / 109 / 110 / 111
A2/DP	
D9	

Sezione di lavoro

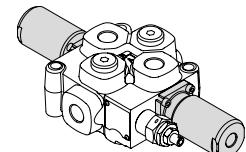
Working section

**H1**

Comando idraulico ad alta pressione ON-OFF a tre posizioni, ritorno a molla in posizione 0
Three positions whit high-pressure hydraulic control, spring centred in 0 position



	A	d
Q25 - Q45	70 (2.756)	G 1/4
Q75 - Q95	85 (3.346)	



Pressione di pilotaggio / Pilot pressure

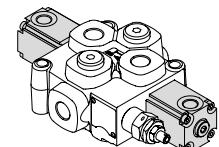
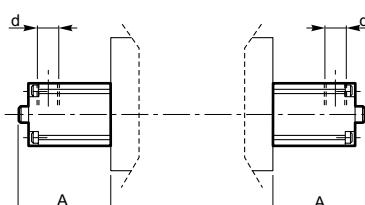
Min. 16 bar (232 PSI)
 Max. 350 bar (5075 PSI)

Volume pilotaggio / Pilot volume

Q25-Q45 2 cm³ (0.122 in³)
 Q75-Q95 3 cm³ (0.183 in³)

H5

Comando idraulico a bassa pressione a tre posizioni per manipolatore idraulico, ritorno a molla in posizione 0
Three positions whit low-pressure control for hydraulic remote control, spring centred in 0 position

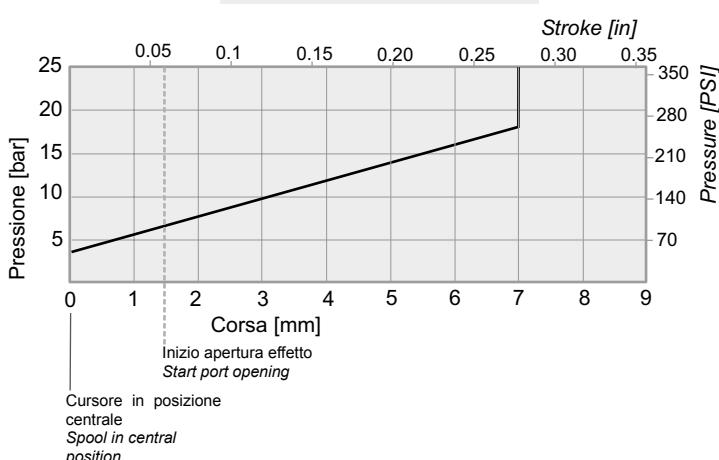
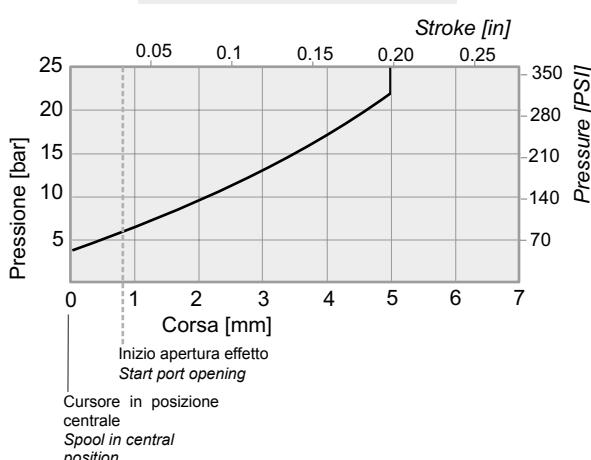


	A	d
Q25 - Q45	50 (1.969)	G 1/4
Q75 - Q95	71.5 (2.815)	

Diagramma pressione di pilotaggio - Corsa spool / Pilot pressure diagram - Spool stroke

Q25 - Q45

Q75 - Q95



N.B.

Le curve sono ricavate con cursore 103
NOTE. The curves are formed with spool 103 type

Pressione di pilotaggio / Pilot pressure	Max.	100 bar (1450 PSI)
Volume pilotaggio / Pilot volume	Q25-Q45	1 cm ³ (0.061 in ³)
	Q75-Q95	2 cm ³ (0.122 in ³)

Dimensioni in / Dimensions in: mm (inch)

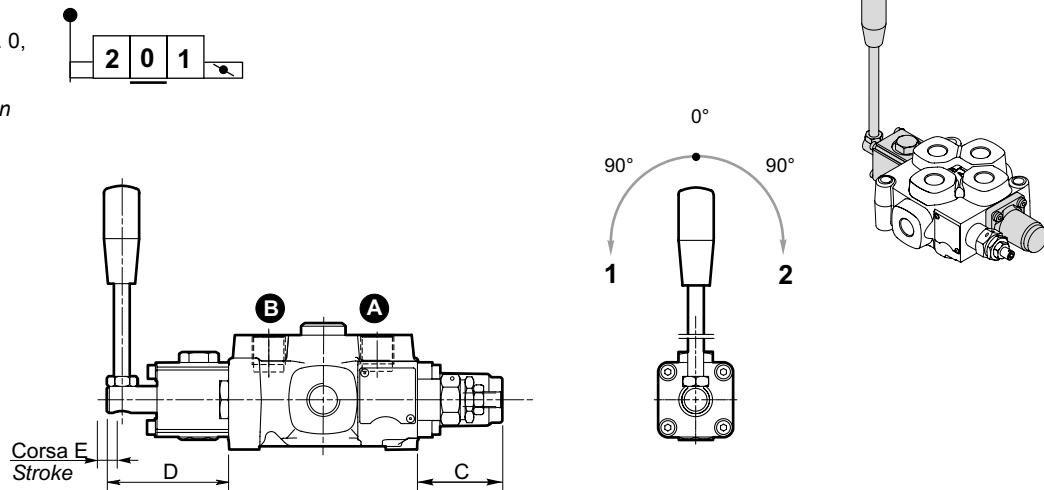
Sezione di lavoro

Working section



RTL-s

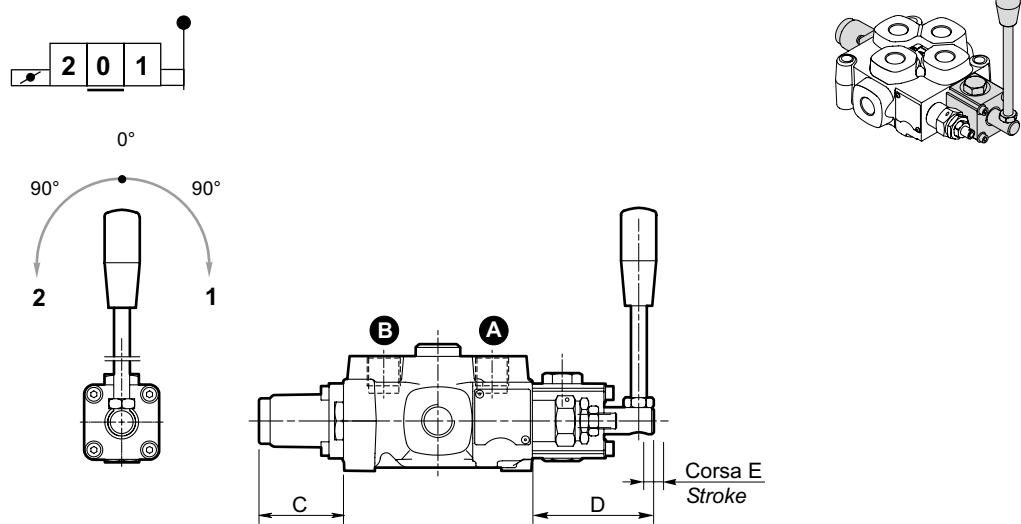
Tre posizioni con comando rotativo frizionato, tacca in pos. 0, leva in pos. 2
Three positions with rotary control, lever in 2 position



	C	D	E
Q25 - Q45	42 (1.654)	61 (2.402)	10 (5+5) 0.394 (0.197+0.197)
Q75 - Q95	55 (2.165)	72.5 (2.854)	14 (7+7) 0.551 (0.276+ 0.276)

RTL-d

Tre posizioni con comando rotativo frizionato, tacca in pos. 0, leva in pos. 1
Three positions with rotary control, lever in 1 position



	C	D	E
Q25 - Q45	42 (1.654)	61 (2.402)	10 (5+5) 0.394 (0.197+0.197)
Q75 - Q95	55 (2.165)	72.5 (2.854)	14 (7+7) 0.551 (0.276+ 0.276)

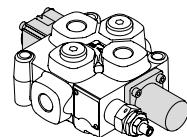
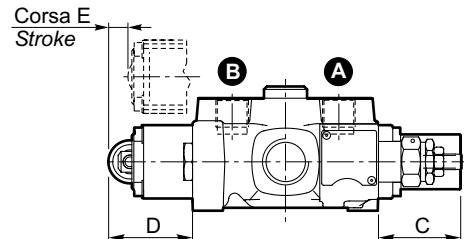
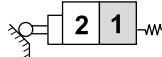
Sezione di lavoro

Working section



C2

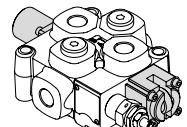
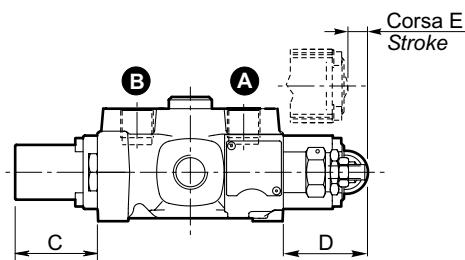
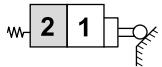
Comando a camme 2 posizioni estreme 1-2, con ritorno a molla in pos. 1
Cam control, 2 end positions 1-2, spring centred in 1 position



	C	D	E
Q25 - Q45	42 (1.654)	43 (1.693)	10 (0.394)
Q75 - Q95	55 (2.165)	51 (2.008)	14 (0.551)

C3

Comando a camme, 2 posizioni estreme 2-1, con ritorno a molla in pos. 2
Cam control, 2 end positions 2-1, spring centred in 2 position



	C	D	E
Q25 - Q45	42 (1.654)	43 (1.693)	10 (0.394)
Q75 - Q95	55 (2.165)	51 (2.008)	14 (0.551)

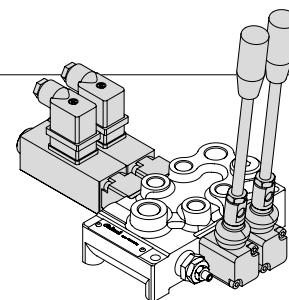
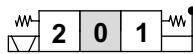
Sezione di lavoro

Working section



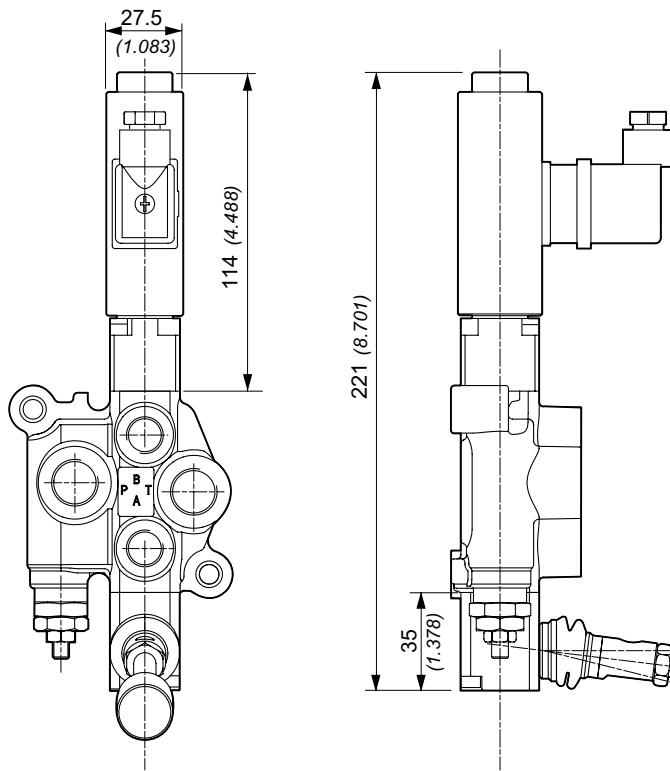
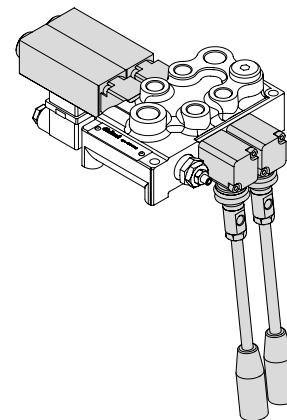
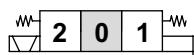
A1/D41

Comando elettrico diretto doppio ON/OFF con ritorno a molla in posizione 0
ON/OFF double direct electrical control with spring centred in 0

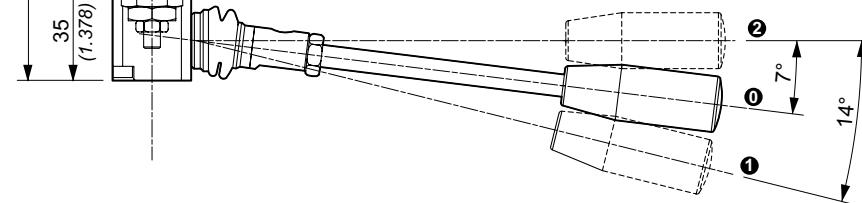


A2/D41

Comando elettrico diretto doppio ON/OFF ruotato di 180° con ritorno a molla in posizione 0
180° rotated ON/OFF double direct electrical control with spring centred in 0



Connessione Connection		
1	1 - 2	Effetto A Port A
2	1 - 3	Effetto B Port B



Dimensioni in / Dimensions in: mm (inch)

Caratteristiche tecniche elettromagnete / Electromagnet technical features

Tipo distributore / Valve type	Q15 - GMV15
Attacco magnete / Magnet connection	Tipo/Type DIN 43650 (vers. B1)
Tipo protezione / Protection type	IP65
Classe d'isolamento / Coil insulation class	H
Tensione di alimentazione / Supply voltage	12V D.C./24V D.C.
Variazione di tensione max / Maximum voltage tolerance	±10%
Potenza assorbita / Absorbed power supply	33W
Rapporto di massimo utilizzo / Maximum utilization ratio	100%

Caratteristiche tecniche distributore / Directional control valve characteristics

Portata max (lt/min) / Max. flow (Gal/min)	20 (5.3)
Pressione max di lavoro / Max. working pressure	280 bar (4060 PSI)
Contropressione max sullo scarico / Max. back outlet pressure	25 bar (3363 PSI)
Manovra di emergenza o in assenza di corrente / Emergency operation or in case of power failure	Con leva / With lever
Trafilamento max di A e B in T a 100 bar con viscosità 35 mm ² /s <i>Max. spool leakage of A and B ports to T port at 1450 PSI with viscosity 35 mm²/s</i>	5 cm ³ /min

Sezione di lavoro

Working section

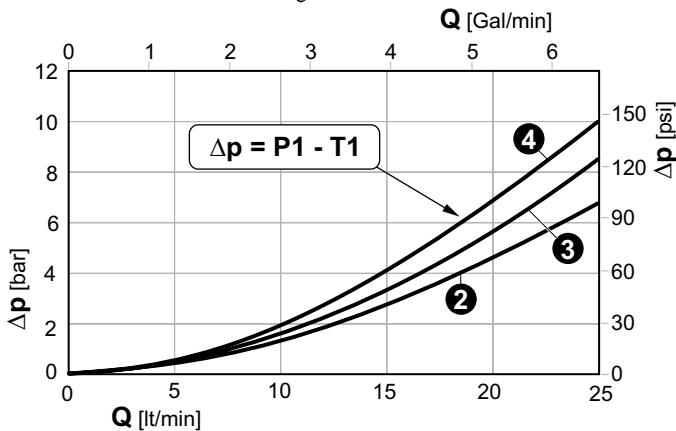
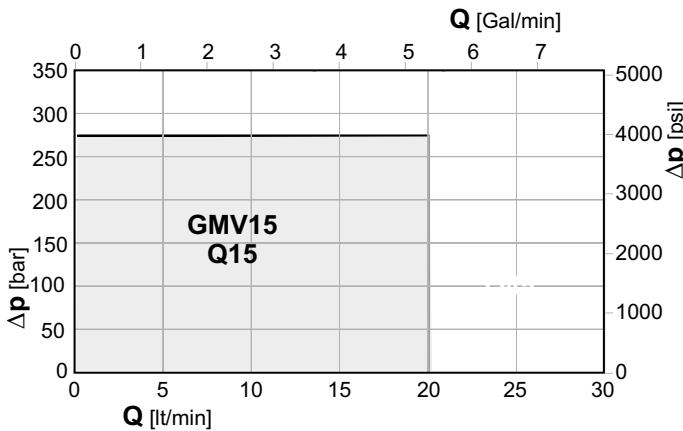
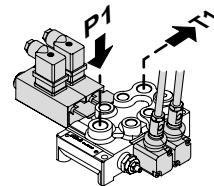
Limiti d'impiego / Use limits

Perdite di carico con il cursore in posizione neutra

(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in neutral position

(Δp depending on the number of the crossed sections)

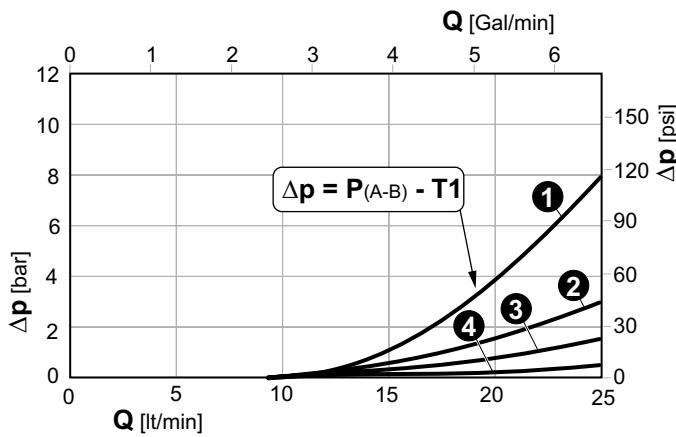
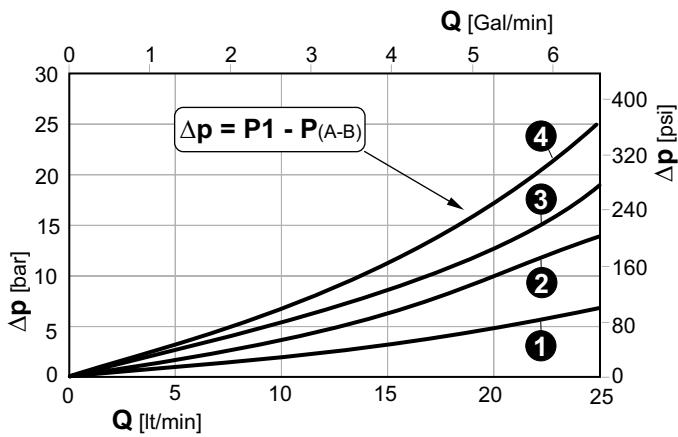
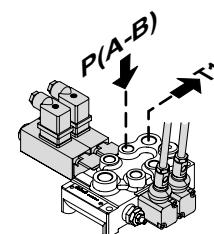
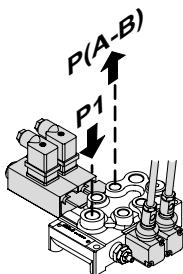


Perdite di carico con il cursore in posizione di lavoro

(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in working position

(Δp depending on the number of the crossed sections)

**1 2 3 4** Sezioni / Sections

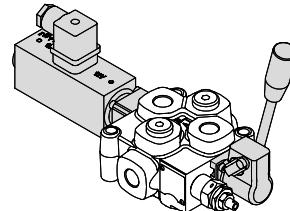
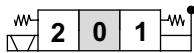
Sezione di lavoro

Working section



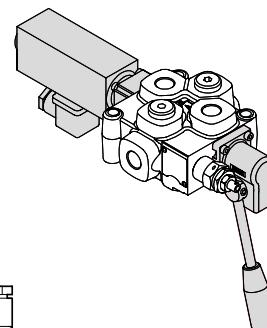
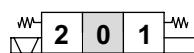
A1/D41

Comando elettrico diretto doppio ON/OFF con ritorno a molla in posizione 0
ON/OFF double direct electrical control with spring centred in 0

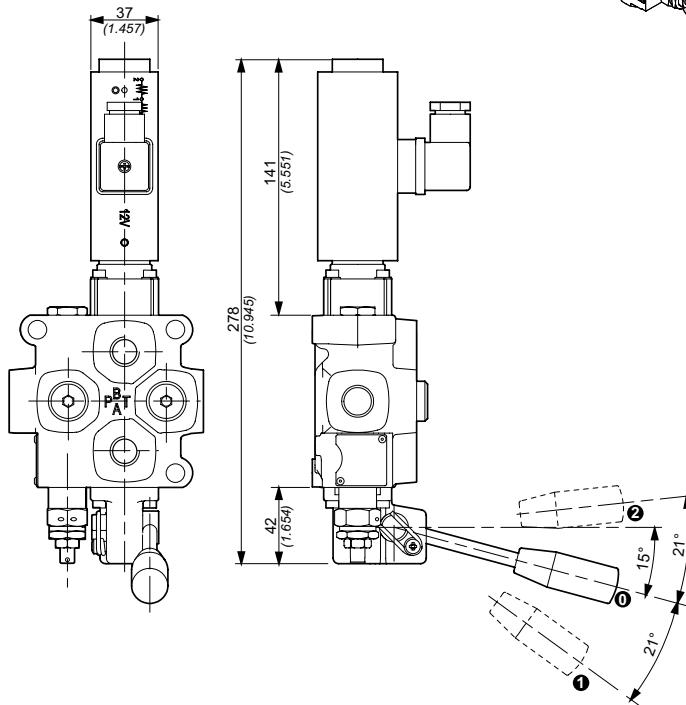


A2/D41

Comando elettrico diretto doppio ON/OFF ruotato di 180° con ritorno a molla in posizione 0
180° rotated ON/OFF double direct electrical control with spring centred in 0



Connessione Connection		
	1 - 2	Effetto A Port A
	1 - 3	Effetto B Port B



Dimensioni in / Dimensions in: mm (inch)

Caratteristiche tecniche elettromagnete / Electromagnet technical features

Tipo distributore / Valve type	Q25	Q45
Attacco magnete / Magnet connection	Tipi/Type DIN 43650 (vers. A)	
Tipo protezione / Protection type	IP65	H
Classe d'isolamento / Coil insulation class		
Tensione di alimentazione / Supply voltage	12V D.C./24V D.C.	
Variazione di tensione max / Maximum voltage tolerance	±10%	
Potenza assorbita / Absorbed power supply	58W	
Rapporto di massimo utilizzo / Maximum utilization ratio	100%	

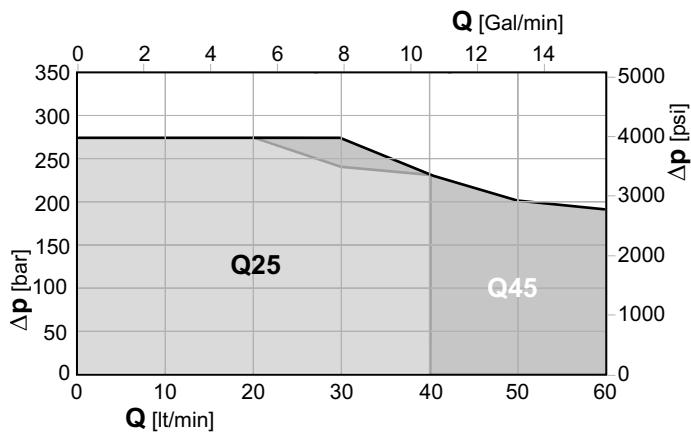
Caratteristiche tecniche distributore / Directional control valve characteristics

Portata max (lt/min) / Max. flow (Gal/min)	50 (13)	60 (16)
Pressione max di lavoro / Max. working pressure	275 bar (3988 PSI)	
Contropressione max sullo scarico / Max. back outlet pressure	25 bar (3363 PSI)	
Manovra di emergenza o in assenza di corrente / Emergency operation or in case of power failure	Con leva / With lever	
Trafilamento max di A e B in T a 100 bar con viscosità 35 mm ² /s Max. spool leakage of A and B ports to T port at 1450 PSI with viscosity 35 mm ² /s	5 cm ³ /min	

Sezione di lavoro

Working section

Limiti d'impiego / Use limits

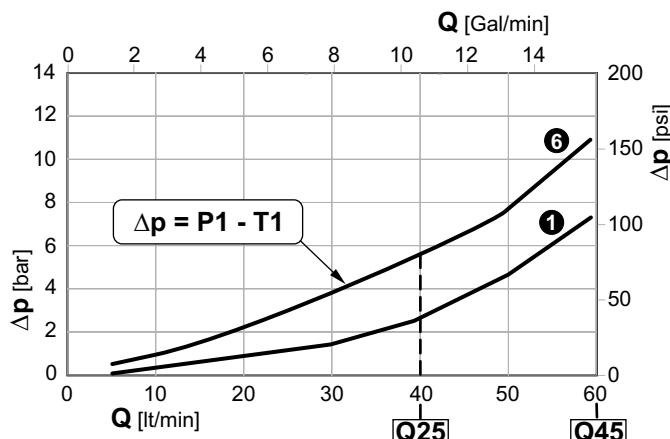
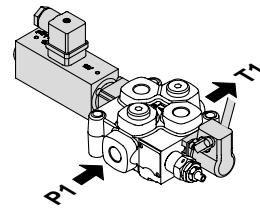


Perdite di carico con il cursore in posizione neutra

(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in neutral position

(Δp depending on the number of the crossed sections)

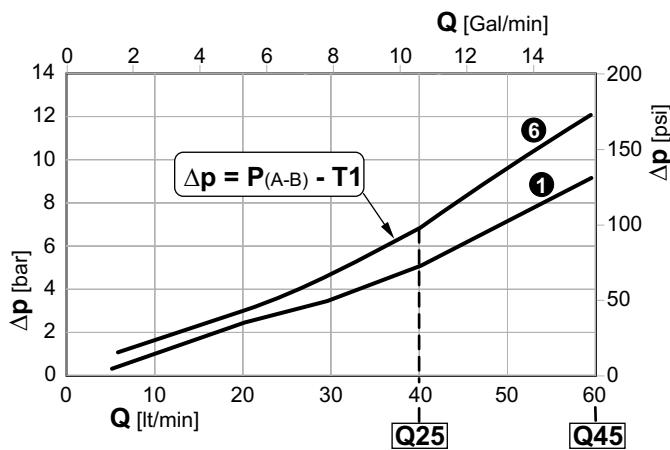
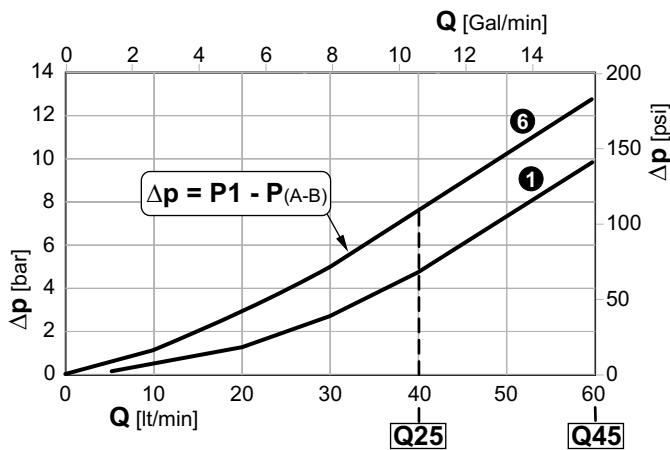
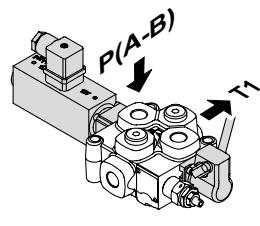
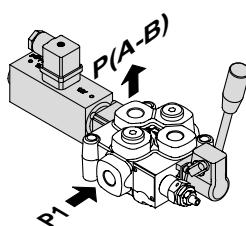


Perdite di carico con il cursore in posizione di lavoro

(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in working position

(Δp depending on the number of the crossed sections)



① ⑥ Sezioni / Sections

N.B. Le curve sono ricavate con cursore 103 / NOTE. Performance curves measured using spool 103 type.

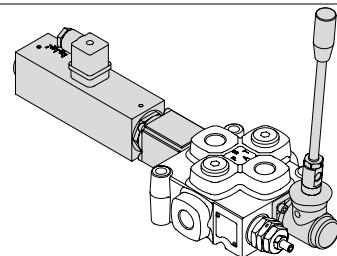
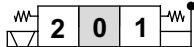
Sezione di lavoro

Working section



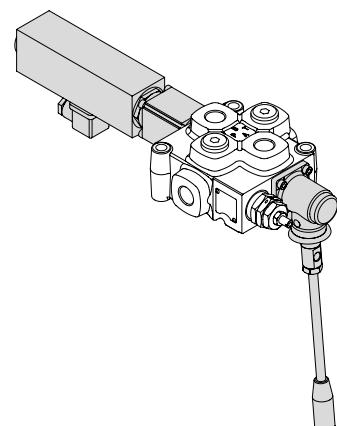
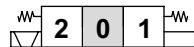
A1/D41

Comando elettrico diretto doppio ON/OFF con ritorno a molla in posizione 0
ON/OFF double direct electrical control with spring centred in 0

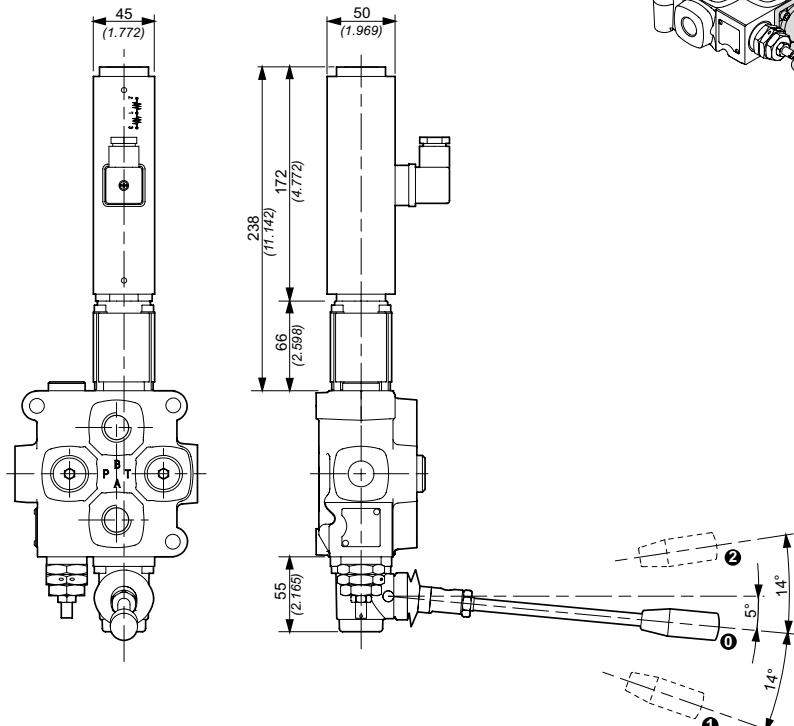


A2/D41

Comando elettrico diretto doppio ON/OFF ruotato di 180° con ritorno a molla in posizione 0
180° rotated ON/OFF double direct electrical control with spring centred in 0



Connessione Connection		
	1 - 2	Effetto A Port A
	1 - 3	Effetto B Port B



Dimensioni in / Dimensions in: mm (inch)

Caratteristiche tecniche elettromagnete / Electromagnet technical features		
Tipo distributore / Valve type	Q75	Q95
Attacco magnete / Magnet connection	Tipo/Type DIN 43650 (vers. A)	
Tipo protezione / Protection type	IP65	
Classe d'isolamento / Coil insulation class	H	
Tensione di alimentazione / Supply voltage	12V D.C./24V D.C.	
Variazione di tensione max / Maximum voltage tolerance	±10%	
Potenza assorbita / Absorbed power supply	80W	
Rapporto di massimo utilizzo / Maximum utilization ratio	100%	
Caratteristiche tecniche distributore / Directional control valve characteristics		
Portata max (lt/min) / Max. flow (Gal/min)	90 (24)	120 (32)
Pressione max di lavoro / Max. working pressure	300 bar	
Contropressione max sullo scarico / Max. back outlet pressure	25 bar	
Manovra di emergenza o in assenza di corrente / Emergency operation or in case of power failure	Con leva / With lever	
Trafilamento max di A e B in T a 100 bar con viscosità 35 mm ² /s Max. spool leakage of A and B ports to T port at 1450 bar with viscosity 35 mm ² /s	5 cm ³ /min	

Sezione di lavoro

Working section

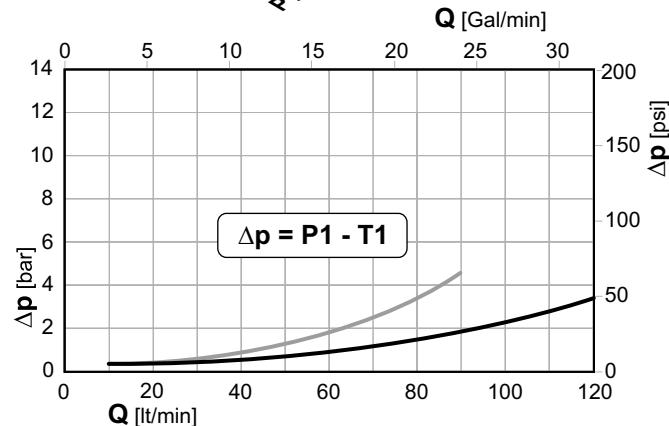
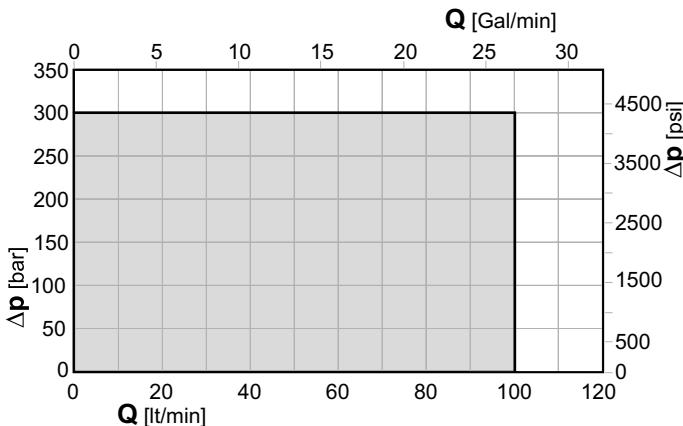
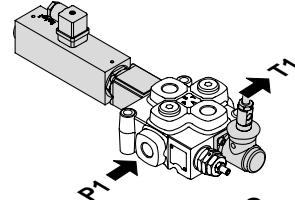
Limiti d'impiego / Use limits

Perdite di carico con il cursore in posizione neutra

(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in neutral position

(Δp depending on the number of the crossed sections)

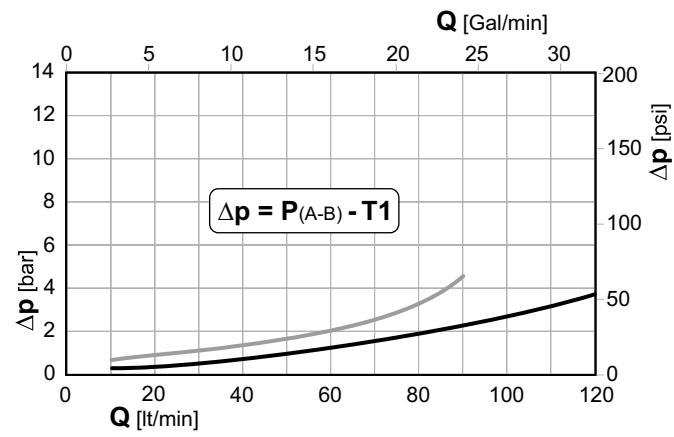
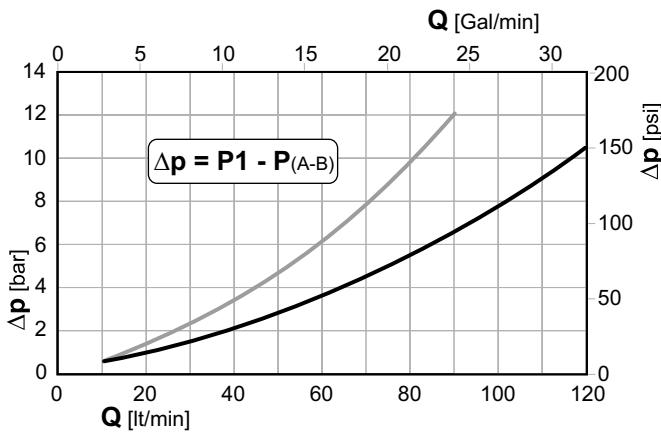
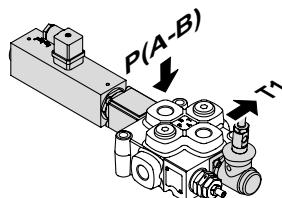
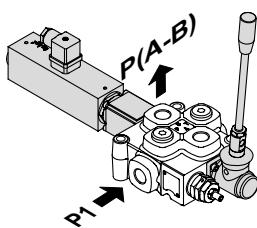


Perdite di carico con il cursore in posizione di lavoro

(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in working position

(Δp depending on the number of the crossed sections)



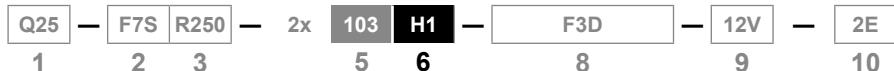
— 1 Elemento Q95 / 1 section Q95

— 1 Elemento Q75 / 1 section Q75

N.B. Le curve sono ricavate con cursore 103 / NOTE. Performance curves measured using spool 103 type.

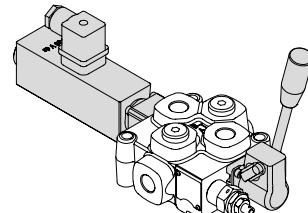
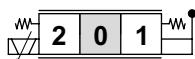
Sezione di lavoro

Working section



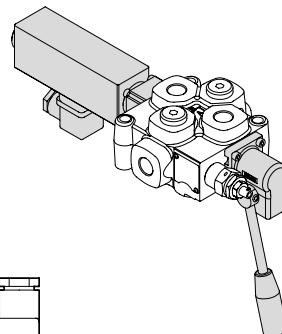
A1/DP

Comando elettrico diretto doppio con magnete proporzionale e ritorno a molla in posizione 0
Double direct electrical control with proportional solenoid and spring centred in 0

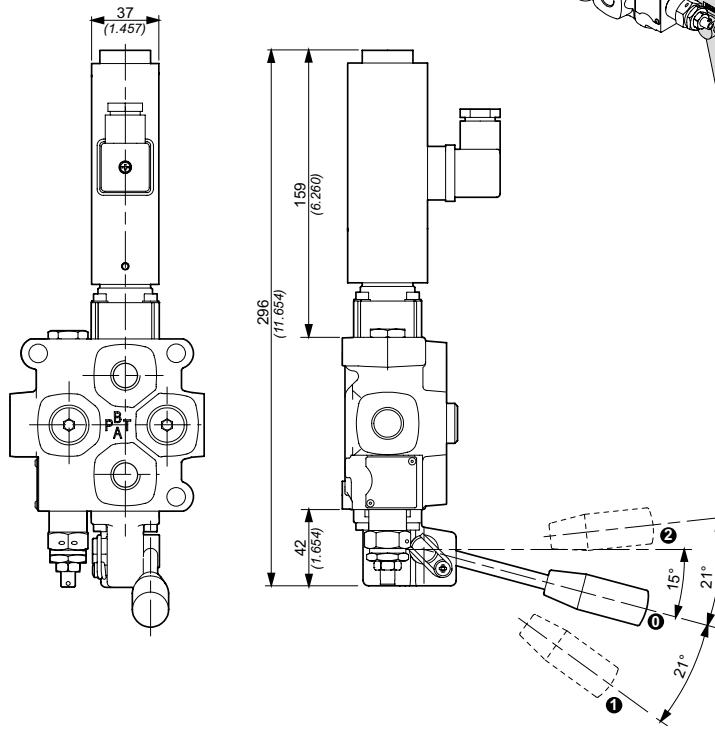


A2/DP

Comando elettrico diretto doppio con magnete proporzionale ruotato di 180° e ritorno a molla in posizione 0
180° rotated double direct electrical control with proportional solenoid and spring centred in 0



Connessione Connection		
	1 - 2	Effetto A Port A
	1 - 3	Effetto B Port B



Per l'elettronica di comando contattare l'ufficio commerciale.
For electronic control unit contact the sales office.

Dimensioni in / Dimensions in: mm (inch)

Caratteristiche tecniche elettromagnete / Electromagnet technical features		
Tipo distributore / Valve type	Q25	Q45
Attacco magnete / Magnet connection	Tipo/Type DIN 43650 (vers. A)	
Tipo protezione / Protection type	IP65	
Classe d'isolamento / Coil insulation class	H	
Tensione di alimentazione / Supply voltage	12 VDC	24 VDC
Corrente di regolazione massima / Current maximum range	5A	2.5A
PWM frequency	100 Hz	
Caratteristiche tecniche / Technical characteristics		
Portata max (lt/min) / Max. flow (Gal/min)	30 (8)	60 (16)
Pressione max di lavoro / Max. working pressure	250 bar	
Contropressione max sullo scarico / Max. back outlet pressure	25 bar	
Manovra di emergenza o in assenza di corrente / Emergency operation or in case of power failure	Con leva / With lever	
Trafilamento max di A e B in T a 100 bar con viscosità 35 mm ² /s <i>Max. spool leakage of A and B ports to T port at 1450 bar with viscosity 35 mm²/s</i>	5 cm ³ /min	

Sezione di lavoro

Working section

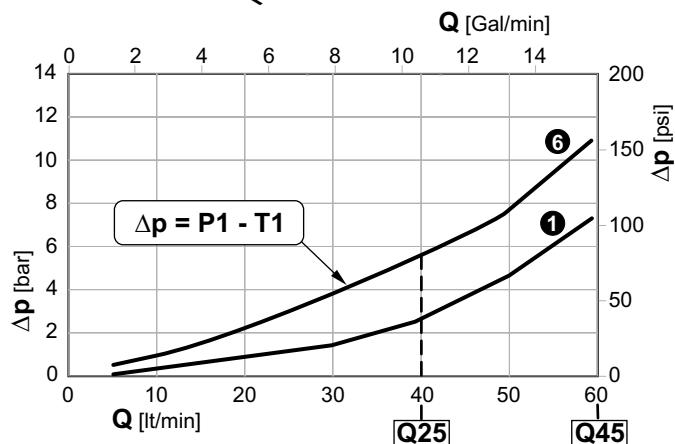
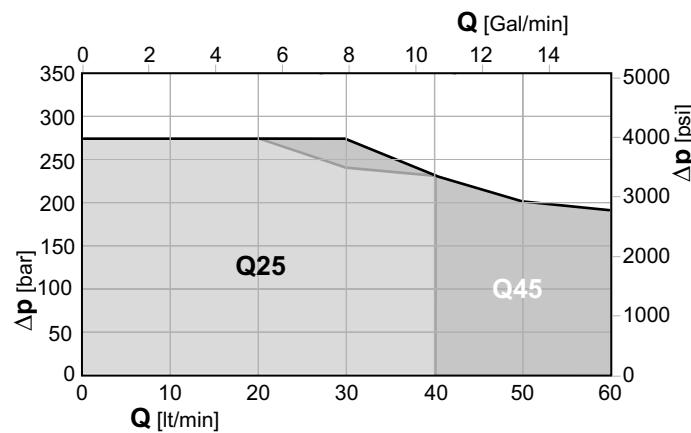
Limiti d'impiego / Use limits

Perdite di carico con il cursore in posizione neutra

(Δp in funzione del numero di sezioni attraversate)

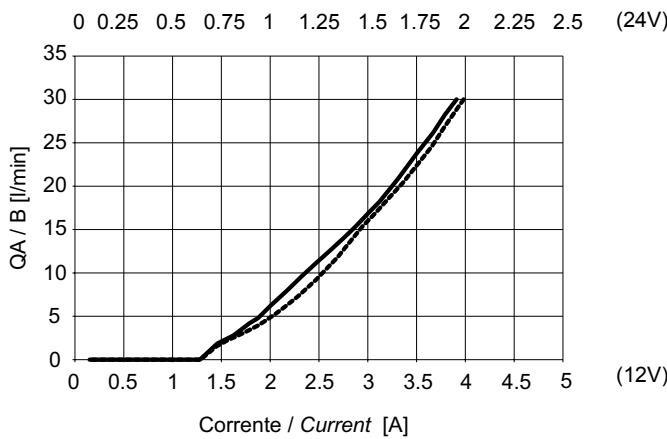
Pressure drop with spool in neutral position

(Δp depending on the number of the crossed sections)

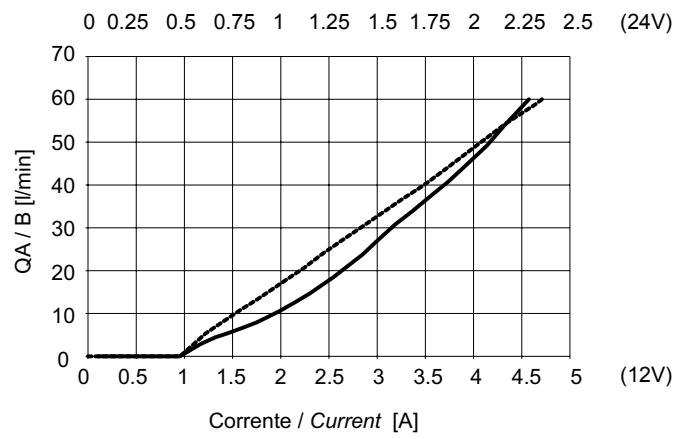


N.B. Le curve sono ricavate con cursore 103 / NOTE. Performance curves measured using spool 103 type.

1 6 Sezioni / Sections

Curve di metratura corrente bassa portata Qin 30 l/min
Metering curve current low delivery Qin 30 l/minCurve di metratura corrente bassa portata Qin 60 l/min
Metering curve current low delivery Qin 60 l/min

— Cursore 111 / Spool 111 type
— Cursore 103 / Spool 103 type

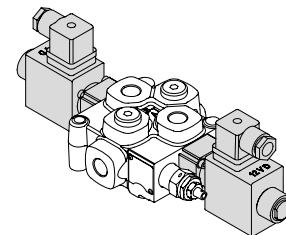
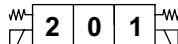


Sezione di lavoro

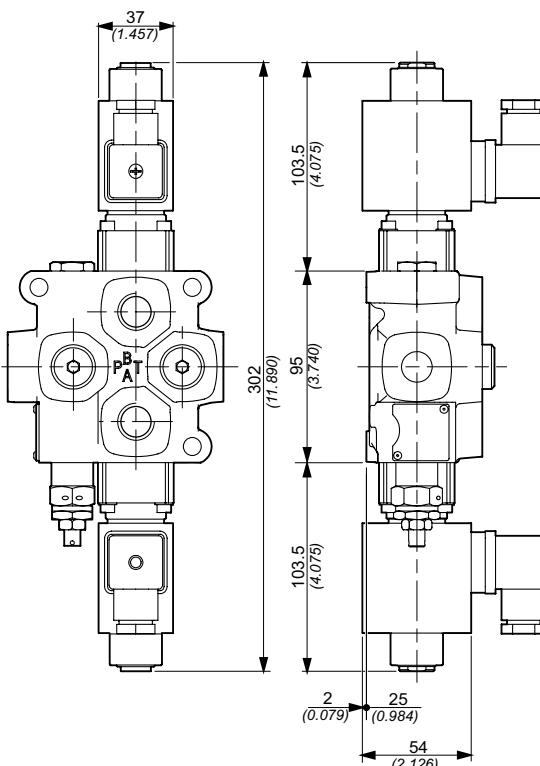
Working section

**D9**

Comando elettrico diretto doppio ON/OFF con ritorno a molla in posizione 0
ON/OFF double direct electrical control with spring centred in 0



Connessione Connection		
	1 - 2	Effetto A Port A
	1 - 3	Effetto B Port B



Dimensioni in / Dimensions in: mm (inch)

Caratteristiche tecniche elettromagnete / Electromagnet technical features		
Tipo distributore / Valve type	Q25	Q45
Attacco magnete / Magnet connection	Tipo/Type DIN 43650 (vers. A)	
Tipo protezione / Protection type	IP65	
Classe d'isolamento / Coil insulation class	H	
Tensione di alimentazione / Supply voltage	12V D.C./24V D.C.	
Variazione di tensione max / Maximum voltage tolerance	±10%	
Potenza assorbita / Absorbed power supply	58W	
Rapporto di massimo utilizzo / Maximum utilization ratio	100%	
Caratteristiche tecniche distributore / Directional control valve characteristics		
Portata max / Max. flow	50	60
Pressione max di lavoro / Max. working pressure	275 bar	
Contropressione max sullo scarico / Max. back outlet pressure	25 bar	
Manovra di emergenza o in assenza di corrente / Emergency operation or in case of power failure	A pulsante in spinta / Push type	
Trafilamento max di A e B in T a 100 bar con viscosità 35 mm²/s / Max. spool leakage of A and B ports to T port at 100 bar with viscosity 35 mm²/s	5 cm³/min	

Sezione di lavoro

Working section

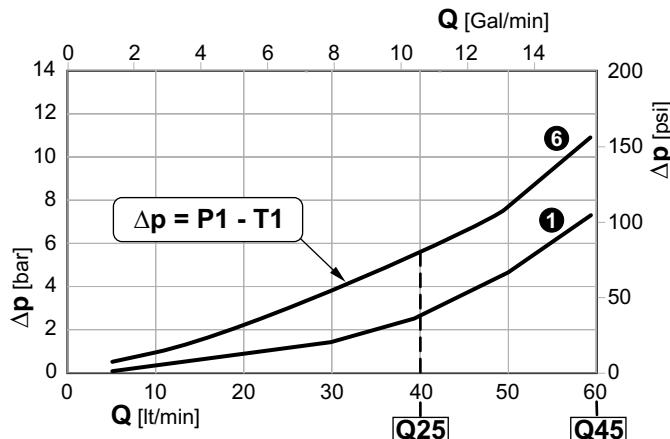
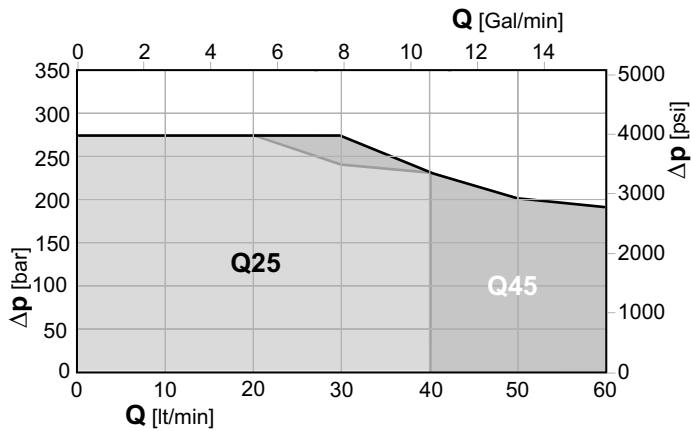
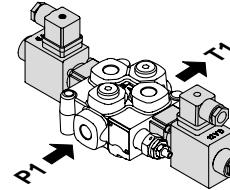
Limiti d'impiego / Use limits

Perdite di carico con il cursore in posizione neutra

(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in neutral position

(Δp depending on the number of the crossed sections)

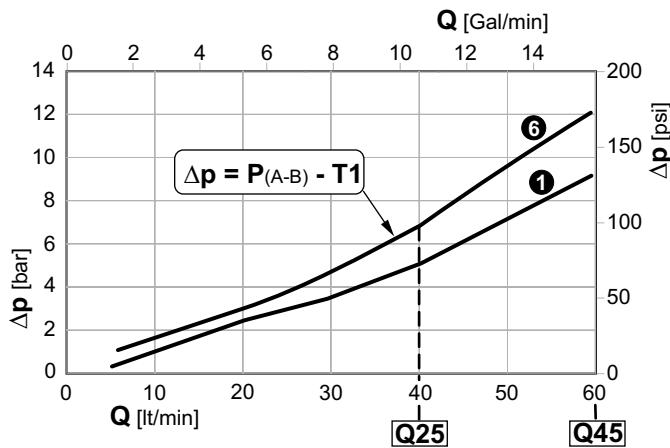
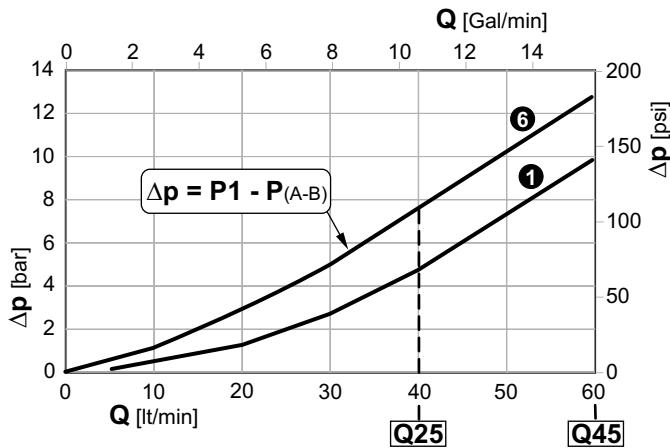
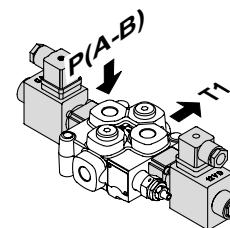
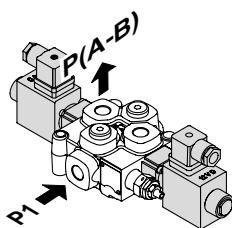


Perdite di carico con il cursore in posizione di lavoro

(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in working position

(Δp depending on the number of the crossed sections)

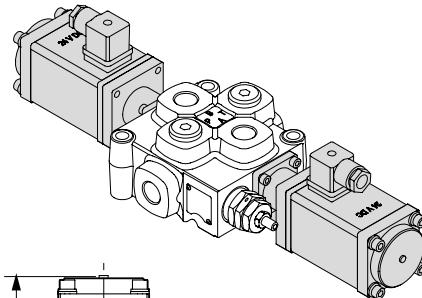
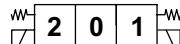


● ● Sezioni / Sections

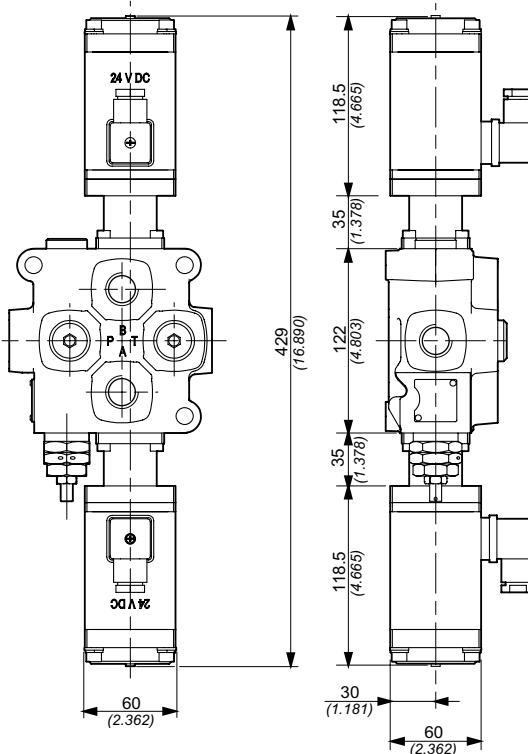
Q75 — F7S R250 — 2x 103 H1 — F3D — 12V — 2E
 1 2 3 5 6 8 9 10

D9

Comando elettrico diretto doppio ON/OFF
 con ritorno a molla in posizione 0
*ON/OFF double direct electrical control
 with spring centred in 0*



Connessione Connection		
2-3	1 - 2	Effetto A Port A
1	1 - 3	Effetto B Port B



Dimensioni in / Dimensions in: mm (inch)

Caratteristiche tecniche elettromagnete / Electromagnet technical features		
Tipo distributore / Valve type	Q75	Q95
Attacco magnete / Magnet connection	Tipo/Type DIN 43650 (vers. A)	
Tipo protezione / Protection type	IP65	
Classe d'isolamento / Coil insulation class	H	
Tensione di alimentazione / Supply voltage	12V D.C./24V D.C.	
Variazione di tensione max / Maximum voltage tolerance	±10%	
Potenza assorbita / Absorbed power supply	80W	
Rapporto di massimo utilizzo / Maximum utilization ratio	100%	
Caratteristiche tecniche distributore / Directional control valve characteristics		
Portata max / Max. flow	90	120
Pressione max di lavoro / Max. working pressure	210 bar	
Contropressione max sullo scarico / Max. back outlet pressure	25 bar	
Manovra di emergenza o in assenza di corrente / Emergency operation or in case of power failure	A pulsante in spinta / Push type	
Trafilamento max di A e B in T a 100 bar con viscosità 35 mm ² /s / Max. spool leakage of A and B ports to T port at 100 bar with viscosity 35 mm ² /s	7 cm ³ /min	

Sezione di lavoro

Working section

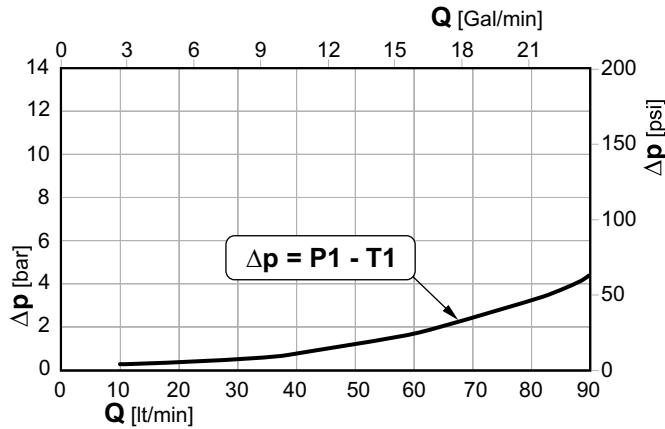
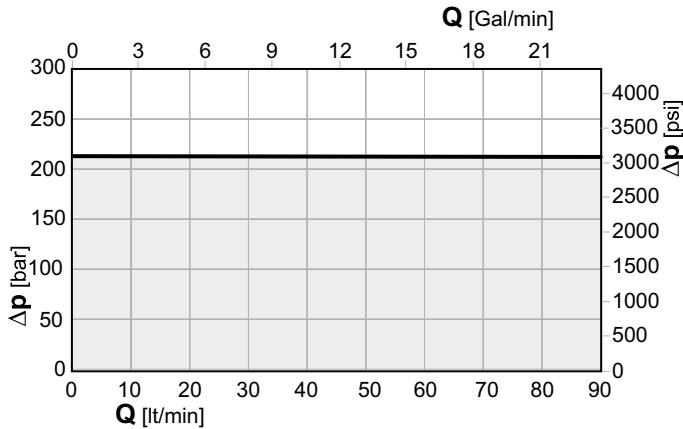
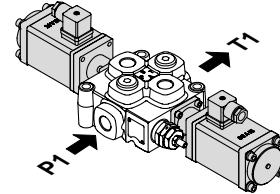
Limiti d'impiego / Use limits

Perdite di carico con il cursore in posizione neutra

(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in neutral position

(Δp depending on the number of the crossed sections)

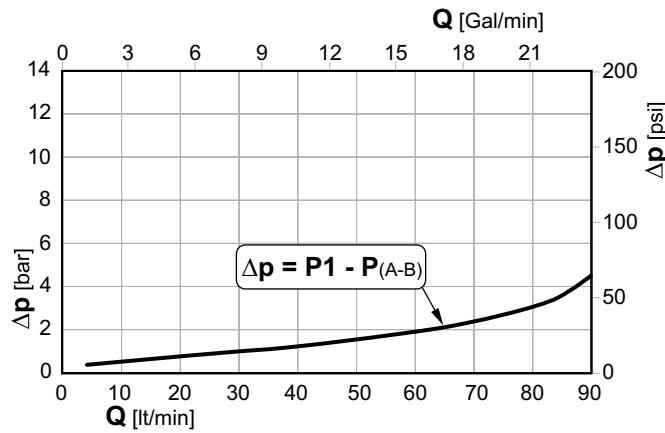
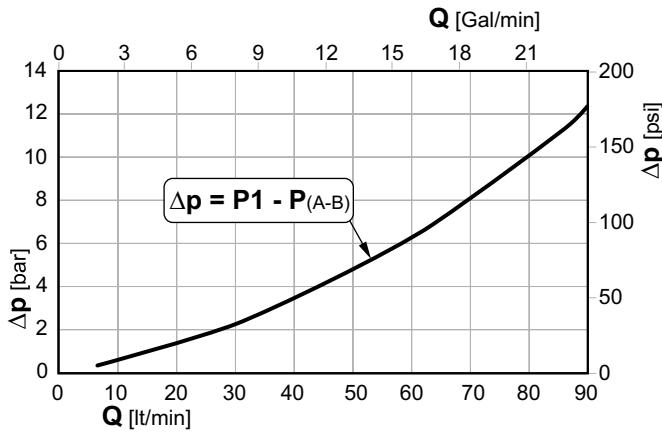
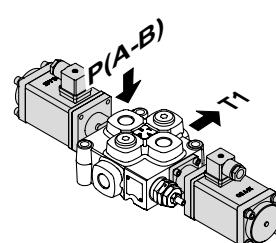
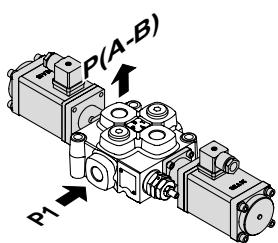


Perdite di carico con il cursore in posizione di lavoro

(Δp in funzione del numero di sezioni attraversate)

Pressure drop with spool in working position

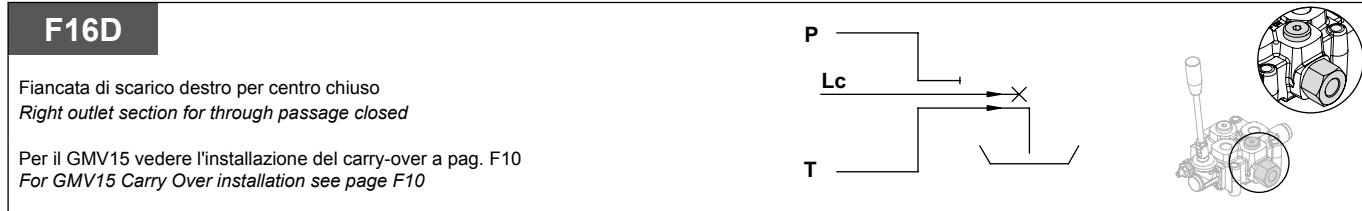
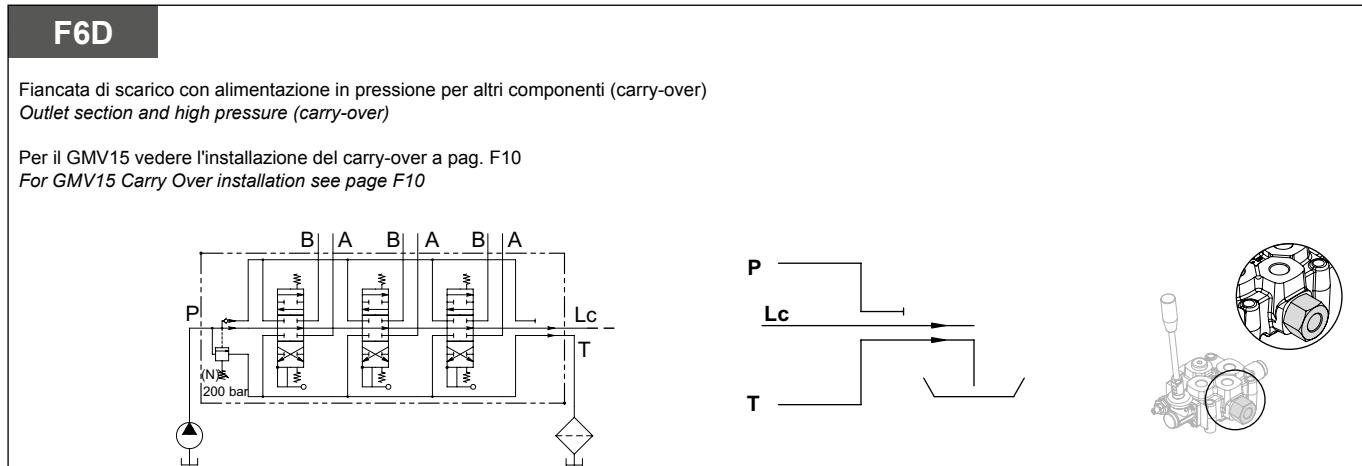
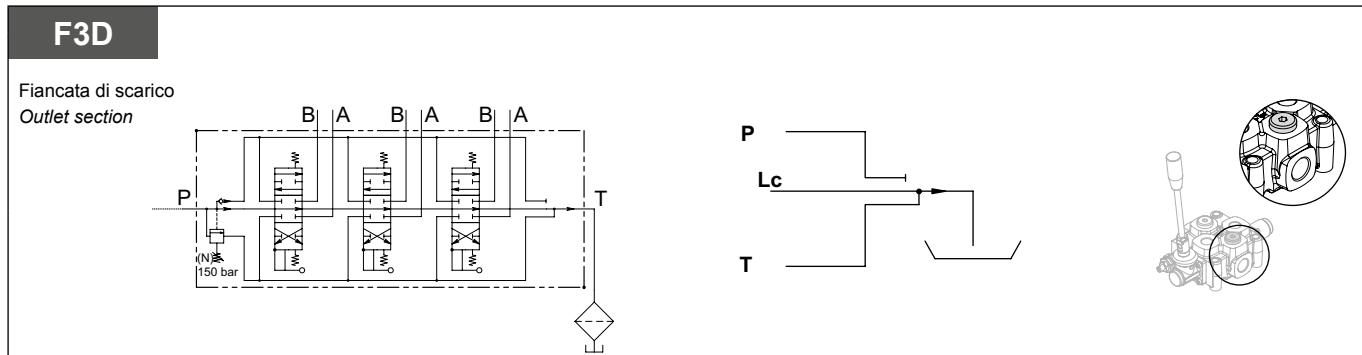
(Δp depending on the number of the crossed sections)



Fiancata di scarico**Outlet section type****8 - Tipo fiancata di scarico / Outlet section type**

Q15	GMV 15	Q35	Q25	Q45	Q65	Q75	Q95
-----	-----------	-----	-----	-----	-----	-----	-----

F3D	Fiancata di scarico	Outlet section	•	•	•	•	•	•	•	•
F6D	Fiancata di scarico con alimentazione in pressione per altri componenti (carry-over)	Outlet section and high pressure (carry-over)		•		•	•	•	•	•
F16D	Fiancata di scarico destro per centro chiuso	Right outlet section for through passage closed		•		•	•	•	•	•



Note aggiuntive

Additional notes

Q25	—	F7S	R250	—	2x	103	A1	M1	—	F3D	—	12V	—	2E
1	2	3	4	5	6	7	8	9	10					

9 - Note aggiuntive / Additional notes

12V, 24V

S Alluminio (pag. F-6 ... F-10)

Codice asta di comando (vedi tabella seguente)

8 - Additional notes

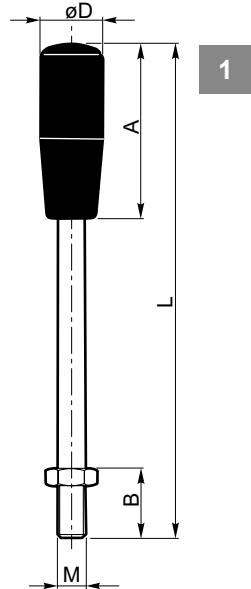
12V, 24V

S Aluminium (page F-6 ... F-10)

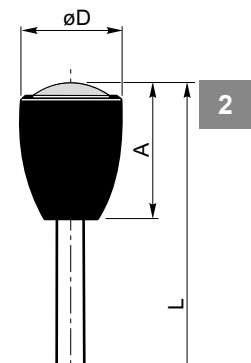
Control lever code (see next table)

Codice / Code	Versione / Version	M	L	D	A	B	Colore / Color
---------------	--------------------	---	---	---	---	---	----------------

Q35 - Q15 - GMV15 - Q25 - Q45			Dimensioni in / Dimensions in: mm (inch)					
06.029.22862	1	Standard / Standard	M8	164 (6.457)	20 (0.787)	57 (2.244)	20 (0.787)	Nero / Black
06.029.30335	1	Standard / Standard	M8	164 (6.457)	20 (0.787)	57 (2.244)	20 (0.787)	Rosso / Red
06.029.30528	1	Lunga tipo A / Long version type A	M8	184 (7.244)	20 (0.787)	57 (2.244)	20 (0.787)	Nero / Black
06.029.30492	1	Lunga tipo A / Long version type A	M8	184 (7.244)	20 (0.787)	57 (2.244)	20 (0.787)	Rosso / Red
06.029.28922	1	Lunga / Long version	M8	204 (8.031)	20 (0.787)	57 (2.244)	20 (0.787)	Nero / Black
06.029.30336	1	Lunga / Long version	M8	204 (8.031)	20 (0.787)	57 (2.244)	20 (0.787)	Rosso / Red
06.029.27421	1	Extra lunga / Extra-long	M8	324 (12.756)	20 (0.787)	57 (2.244)	20 (0.787)	Nero / Black
06.029.22876	1	Extra corta / Extra-short	M8	82 (3.228)	18 (0.709)	50 (1.969)	20 (0.787)	Nero / Black
06.029.29451	2	Standard con oblo' / Standard with lens	M8	174 (6.850)	32 (1.260)	46 (1.811)	20 (0.787)	Nero / Black
06.029.29423	2	Lunga con oblo' / Long with lens	M8	214 (8.425)	32 (1.260)	46 (1.811)	20 (0.787)	Nero / Black

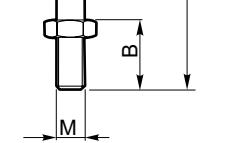


Q75 - Q95		
06.029.27013	1	Standard / Standard
06.029.28148	1	Lunga / Long version
06.029.27344	1	Corta / Short version
06.029.27635	1	Extra corta / Extra-short
06.029.29866	2	Standard con oblo' Standard with lens
06.029.30295	2	Lunga con oblo' Long with lens



Per comando elettrico / For electric control Q25 - Q45		
06.029.28945	1	Standard / Standard
06.029.29349	1	Lunga / Long version
06.029.30951	2	Standard con oblo' Standard with lens

Dimensioni in / Dimensions in: mm (inch)



Note aggiuntive		
Q25	—	F7S R250
1	2	3
4	5	6
7	8	9

Additional notes

10 - Numero elementi

Specificare il numero delle sezioni di lavoro previste (es. 2E).

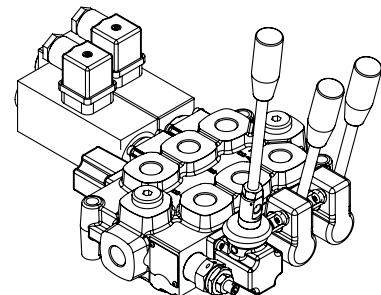
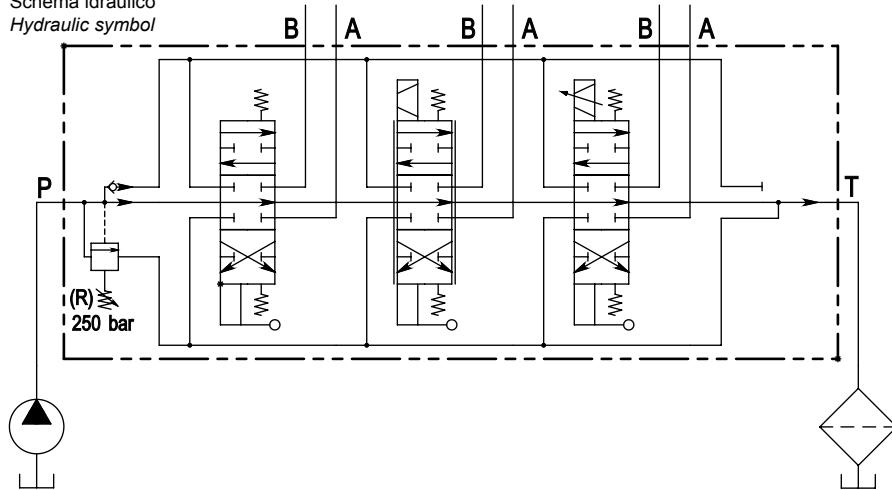
10 - Number of sections

Specify the number of working sections used (e.g. 2E).

ESEMPI DI ORDINAZIONE IN CODICE ORDERING CODE EXAMPLES

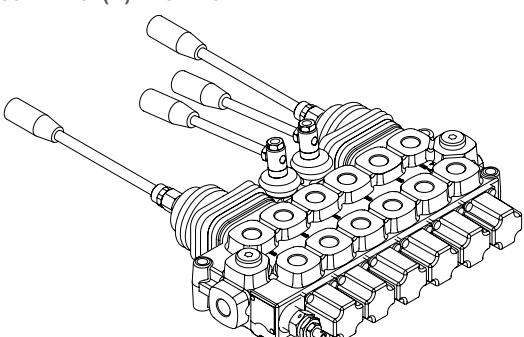
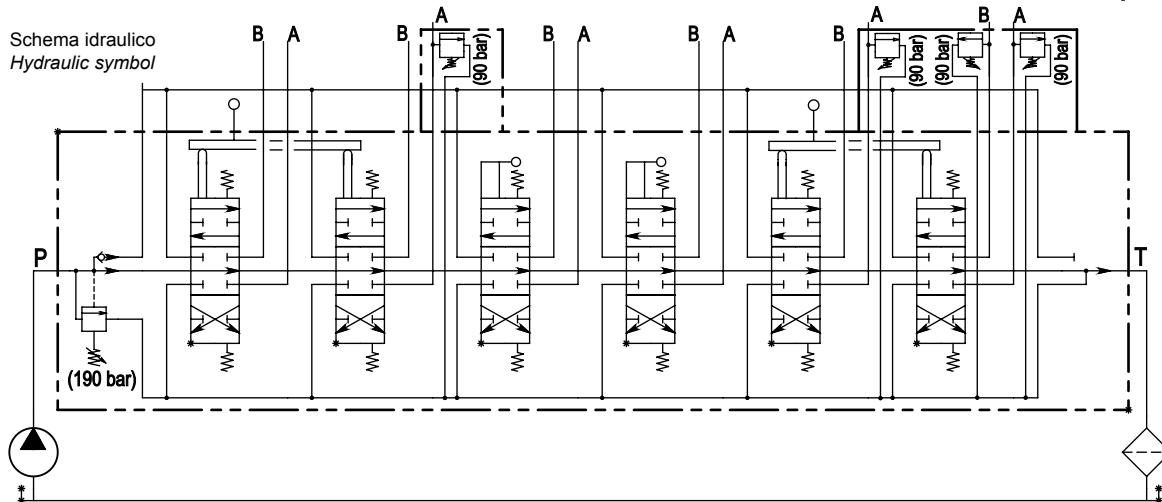
Q25 - F1S R(250) - 103/A1/M1 - 103/A1/D41 - 103/A1/DP - F3D - 12V - 3E

A	B	C	D	E	
1	2	3	5 - 6 - 7	8	9 - 10
Q25	-	F1S R250	-	103/A1/M1	-
				103/A1/D41	-
				103/A1/DP	-
				F3D	-
				12V	-
				3E	

Schema idraulico
Hydraulic symbol

Q25 - F1S(N) - 103/M1/A352 - 103/M1/V30(N) - 2x103/M1/A1 - 103/M1/A354/V30(N) - 103/M1/V32(N) - F3D - 6E

A	B	C	D	E	
1	2	3	5 - 6 - 7	8	9 - 10
Q25	-	F1S N190	-	103/M1/A352	-
				103/M1/V30(N)	-
				2x	
				103/M1/A1	
				103/M1/A354/V30(N)	
				103/M1/V32(N)	-
				F3D	-
				6E	

Schema idraulico
Hydraulic symbol

A - Tipo / Type

B - Fiancata d'ingresso / Inlet section

C - Sezione di lavoro / Working section

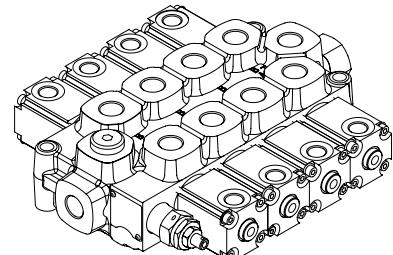
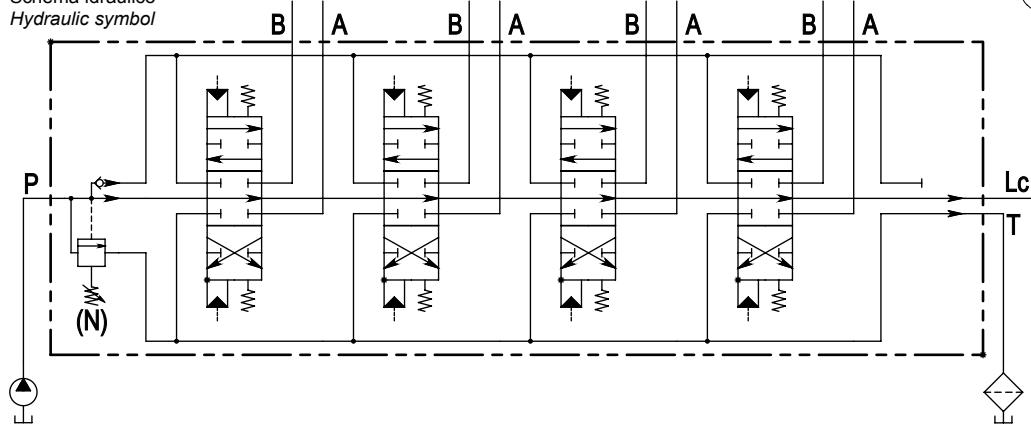
D - Fiancata di scarico / Outlet section

E - Note aggiuntive / Additional notes

ESEMPI DI ORDINAZIONE IN CODICE ORDERING CODE EXAMPLES

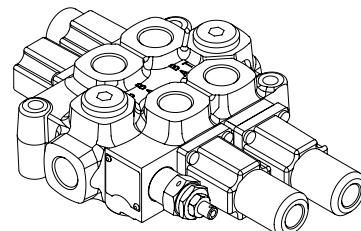
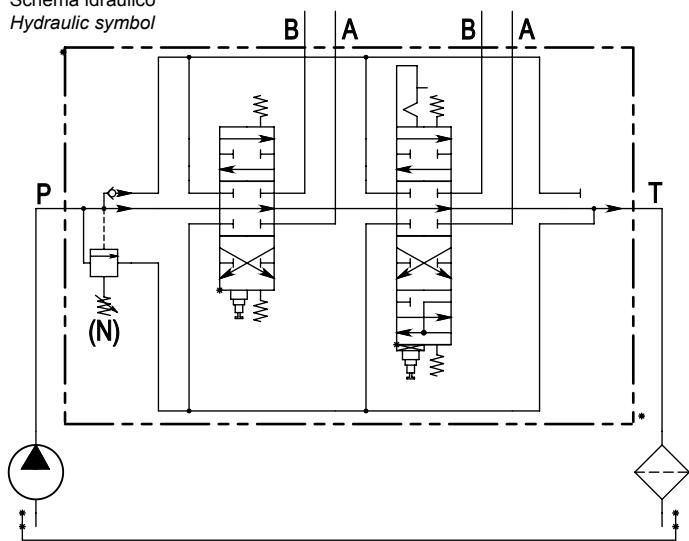
Q25 - F1S(N) - 4x103/H5 - F6D - 4E

A	B	C	D	E	
1	2	3	5 - 6 - 7	8	9 - 10
Q25	-	F1S N180 4x	103/H5	- F6D -	4E

Schema idraulico
Hydraulic symbol

Q45 - F1S(N) - 103/A8/M1 - 116/A8-Z1/R8 - F3D - 2E

A	B	C	D	E	
1	2	3	5 - 6 - 7	8	9 - 10
Q45	-	F1S R250	- 103/A8/M1 116/A8-Z1/R8	- F3D -	2E

Schema idraulico
Hydraulic symbol

A - Tipo / Type

B - Fiancata d'ingresso / Inlet section

C - Sezione di lavoro / Working section

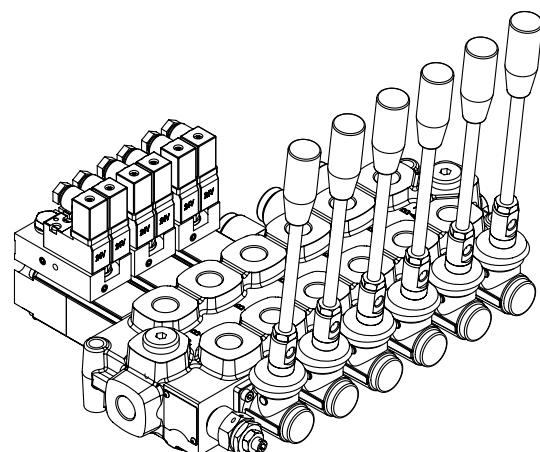
D - Fiancata di scarico / Outlet section

E - Note aggiuntive / Additional notes

ESEMPI DI ORDINAZIONE IN CODICE ORDERING CODE EXAMPLES

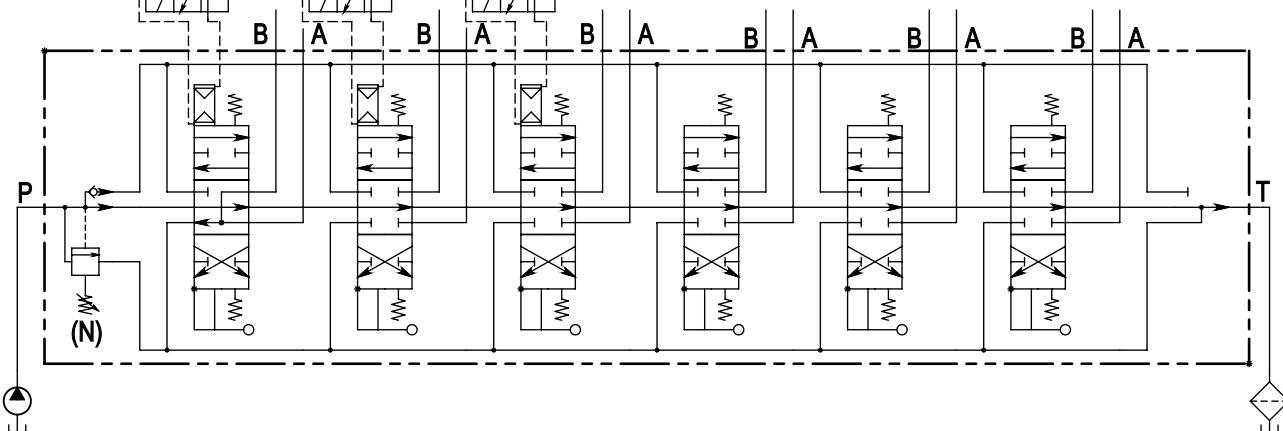
Q25 - F1S (N) - 111/A1/D3 - 2x103/A1/D3 - 3x103/A1/M1 - F3D - S 24V - 6E

A	B	C	D	E	
1	2	3	5 - 6 - 7	8	9 - 10
Q25	-	F1S N180	-	111/A1/D3	-
			2x	103/A1/D3	
			3x	103/A1/M1	



P1 P2 P3

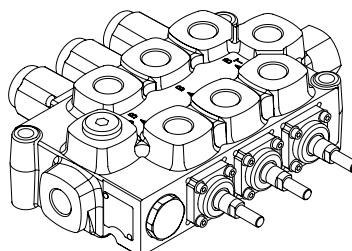
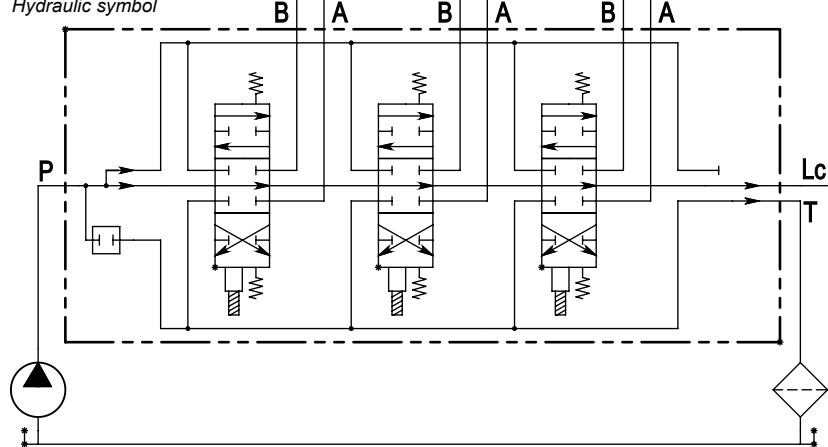
Schema idraulico
Hydraulic symbol



Q75 - F8S(N) - 3x103/A4/M1 - F6D - 3E

A	B	C	D	E	
1	2	3	5 - 6 - 7	8	9 - 10
Q75	-	F8S N180	3x	103/A4/M1	-
				F6D	-
					3E

Schema idraulico
Hydraulic symbol



A - Tipo / Type

B - Fiancata d'ingresso / Inlet section

C - Sezione di lavoro / Working section

D - Fiancata di scarico / Outlet section

E - Note aggiuntive / Additional notes