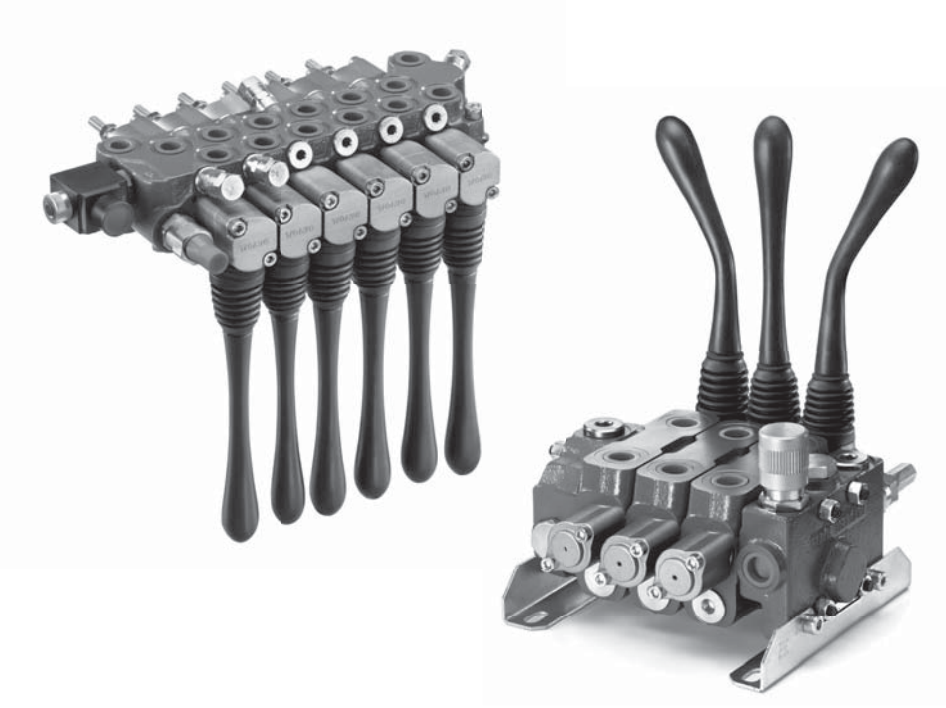
VALVOLE DI CONTROLLO DIREZIONALE

DIRECTIONAL CONTROL VALVES

STEUERGERÄTE

DC013



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DISTRIBUTORI COMPONIBILI
MODULAR DIRECTIONAL CONTROL VALVES
STEUERGERÄTE IN SANDWICHBAUWEISE

DNC35 74
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ACCESSORI
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DO790 BLOCCO LEVA / *DRIVING BLOCK* / HEBELEINLEIT 112
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DO775E MANIPOLATORE PER AZIONAMENTO A CAVO / *JOYSTICK FOR CABLES CONTROL* / JOYSTICK FÜR BOWDENZUG-STEUERUNG 118

DEVIATORE DI FLUSSO A COMANDO ELETTRICO
ELECTRIC FLOW DIVERTER
STROMUNGSVERTEILER MIT ELECTRISCHER BETÄTIGUNG

DCE50 ELETTRICO / *ELECTRIC* / ELEKTRISCH 120
DCE90 ELETTRICO / *ELECTRIC* / ELEKTRISCH 122

ISTRUZIONI GENERALI DI IMPIEGO
OPERATING INSTRUCTIONS
ALLGEMEINE GEBRAUCHSANWEISUNGEN

CARATTERISTICHE FUNZIONALI
Le curve caratteristiche rappresentate nel presente catalogo sono tipiche di prodotti di produzione calcolati e testati in laboratorio e non necessariamente rappresentative di ogni unità.

CONSERVAZIONE A MAGAZZINO
I componenti idraulici vanno conservati nel loro imballaggio in luogo asciutto, lontano dall'irraggiamento solare o da sorgenti di calore o di ozono, in un ambiente con temperatura compresa tra -20°C e +50°C.

FLUIDO IDRAULICO
Si raccomanda di utilizzare fluidi idraulici definiti dalla norma ISO 6743-4.

GRADO DI FILTRAZIONE
La classe di contaminazione consigliata per pompe e servocomandi è la seguente:
Classe ISO4406 20/18/15 (NAS1638 - 9)

INSTALLAZIONE
Prima di far funzionare i componenti idraulici, assicurarsi che tutto il circuito idraulico sia accuratamente riempito d'olio e disareato.
Filtrare l'olio di riempimento in modo da garantire la classe ISO o NAS richiesta.
Prevedere nel circuito un sistema di filtraggio che garantisca la classe ISO o NAS richiesta.
Avviare l'impianto lentamente a vuoto, facendolo spurgare bene dell'aria residua prima di applicare il carico.
Sostituire il fluido idraulico come da specifiche del fornitore.
In caso di mancato funzionamento dei componenti idraulici non insistere inutilmente; ricontrollare la corretta esecuzione dell'impianto ed eventualmente contattare il servizio tecnico.

FUNCTIONAL FEATURES
The characteristic curves represented in this catalogue are typical of laboratory calculated and tested production products and do not necessarily represent each unit.

WAREHOUSE STORAGE
The hydraulic components must be kept in their packaging in a dry place, away from sunlight or sources of heat or ozone, at a temperature between -20°C e +50°C

HYDRAULIC FLUID
We recommend using hydraulic fluids defined by the standard ISO 6743-4

FILTERING DEGREE
The recommended contamination class for pumps and servocontrols is the following:
Class ISO4406 20/18/15 (NAS1638 - 9)

INSTALLATION
Before operating the hydraulic components, make sure that the entire hydraulic circuit is completely filled with oil and deaerated.
Filter the filling oil in order to guarantee the required ISO or NAS class.
Provide a filtering system in the circuit which guarantees the required ISO or NAS class.
Start the system slowly unloaded, properly purging residual air before applying the load.
Replace the hydraulic filter according to the supplier's specifications.
If the hydraulic components do not work, do not insist in trying them to no avail; recheck the correct execution of the system and contact the technical service if needed.

FUNKTIONSEIGENSCHAFTEN
Die in dem vorliegenden Katalog dargestellten Kennlinien sind typisch für Produkte, die im Labor berechnet und getestet wurden und sind nicht unbedingt für jede Einheit charakteristisch.

LAGERUNG
Die hydraulischen Komponenten sind in ihrer Verpackung in einem trockenen Raum, fern von Sonneneinstrahlung und Wärme- oder Ozonquellen, bei einer Umgebungstemperatur zwischen -20°C und +50°C aufzubewahren.

HYDRAULIKFLUID
Es wird empfohlen, Hydraulikfluide zu verwenden, die der Norm ISO 6743-4 entsprechen.

FILTRATIONSGRAD
Für Pumpen und Servosteuerungen wird folgende Reinheitsklasse empfohlen:
Klasse ISO4406 20/18/15 (NAS1638 - 9)

INSTALLATION
Vor Inbetriebnahme der hydraulischen Komponenten, ist sicherzustellen, dass der gesamte Hydraulikkreis entsprechend mit Öl befüllt und entlüftet wurde. Das Öl für die Befüllung ist so zu filtern, dass die Einhaltung der geforderten ISO- oder NAS-Klassen gewährleistet werden kann. Im Kreislauf ist ein Filtrationssystem vorzusehen, das die Einhaltung der geforderten ISO- oder NAS-Klasse gewährleistet. Die Anlage langsam leer in Betrieb nehmen und vor Lastaufbringung die vorhandene Restluft vollständig entweichen lassen. Für den Austausch des Hydraulikfilters sind die Spezifikationen des Herstellers zu berücksichtigen. Bei einer Funktionsstörung der hydraulischen Komponenten den Betrieb unterbrechen, die korrekte Ausführung der Anlage überprüfen und gegebenenfalls den Technischen Kundendienst kontaktieren.

Non svitare e scollegare raccordi e tubi con impianto in pressione.
Evitare le fughe di olio, per prevenire l'inquinamento ambientale.
Non dirigere getti d'acqua direttamente sui componenti idraulici.
DINOIL si solleva da ogni responsabilità riguardante la non osservanza di queste indicazioni e del rispetto delle normative di sicurezza vigenti, anche se non contemplate nel presente manuale.

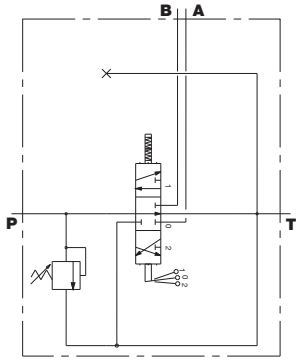
Do not unscrew or disconnect fittings and pipes with the system pressurised.
Avoid oil leakage to prevent environmental pollution.
Do not spray water directly on hydraulic components.
DINOIL will not be held liable for failure to comply with these indications and with safety standards in force even if not considered in this manual.

Keine Anschlüsse und Leitungen bei unter Druck stehender Anlage aufschrauben oder abtrennen.
Zur Vorbeugung von Umweltverschmutzungen sind Ölleckagen zu vermeiden. Niemals Wasserstrahlen direkt auf die Hydraulikkomponenten richten.
Im Fall der Nichtbeachtung dieser Anweisungen und der gültigen Sicherheitsnormen, auch wenn diese im vorliegenden Handbuch nicht angeführt, lehnt DINOIL jegliche Verantwortung ab.

MD1

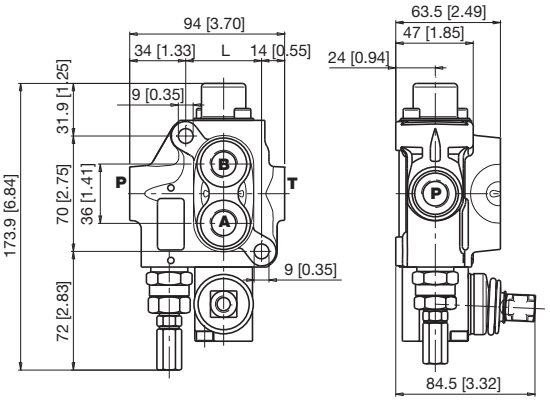
DISTRIBUTORI MONOBLOCCO
MONOBLOCK DIRECTIONAL VALVES
MONOBLOCKSTEUERGERÄTE

DATI TECNICI *TECHNICAL DATA* TECHNISCHE MERKMALE	
Portata nominale (max) *Nominal flow (max)* Nominaler Durchfluß (max)	**35 (45) l/min** **9.3 (11.9) gpm**
Portata nominale (max) con azionamenti E,D,J *Nominal flow rate (max) with drivers E,D,J* Nenn-Durchflussmenge (max.) mit Antrieben E, D, J	**20 (30) l/min** **5.3 (7.9) gpm**
Pressione nominale *Nominal pressure* Nominaler Betriebsdruck	**250 (3625)** **bar (psi)**
Pressione massima con azionamenti E,D,J *Maximum pressure with drivers E,D,J* Max. Druck mit Antrieben E, D, J	**180 (2610)** **bar (psi)**
Contropressione massima allo scarico *Maximum tank pressure* Maximaler Gegendruck Tankleitung	**50 (725)** **bar (psi)**
Massima trafila interna *Maximum internal leakage* Maximale interne Leckage	**8 cc/min** **(21 cSt - 100 bar)**
Temperatura di utilizzo *Temperature range* Betriebstemperatur	**-20°C +85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Viscosità olio *Oil viscosity* Ölviskosität	**Da 15 cSt a 90 cSt** ***From 15 cSt to 90 cSt*** **Von 15 cSt nach 90 cSt**
Fluido *Fluid* Öl	**Olio a base minerale** ***Mineral based oil*** **Mineral Öl**



STANDARD
STANDARD
STANDARD

STANDARD - ENTRATA SINISTRA
STANDARD - LEFT INLET
STANDARD - LINKER EINGANG



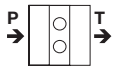
DIMENSIONI *SIZE* ABMESSUNGEN		
N° DI SEZIONI *N° OF SECTIONS* ANZAHL ELEMENTE	L mm [inch]	MASSA kg (lb) *WEIGHT kg (lb)* GEWICHT kg (lb)
MD1	46 [1.8]	2.2 (4.8)

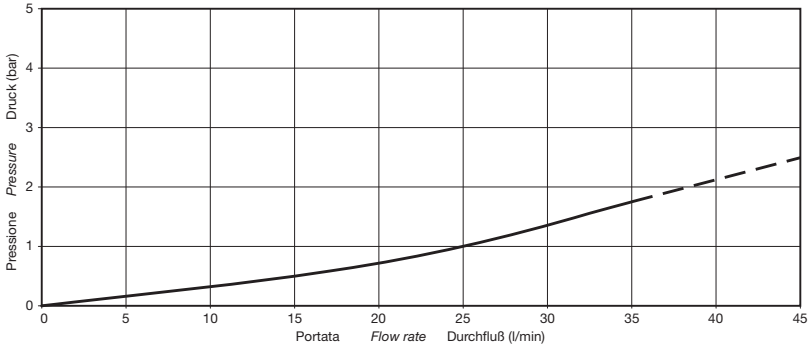
FILETTATURA *THREAD* GEWINDE		
CODICE *MODEL* BEZEICHNUNG	TIPO *TYPE* GEWINDE	SERRAGGIO Nm *TORQUE Nm* ANZUGSMOMENT Nm
B	1/2" GAS ISO 1179	70
A	3/8"GAS ISO 1179	35
C	M18x1.5 ISO 9974	40
T	M16x1.5 ISO 9974	24
E	3/4 - 16 SAE ISO 11926	50
P	9/16 - 18 SAE ISO 11926	21

CURVE CARATTERISTICHE
FLOW CURVES
DUCHFLUSSKENNLINIEN

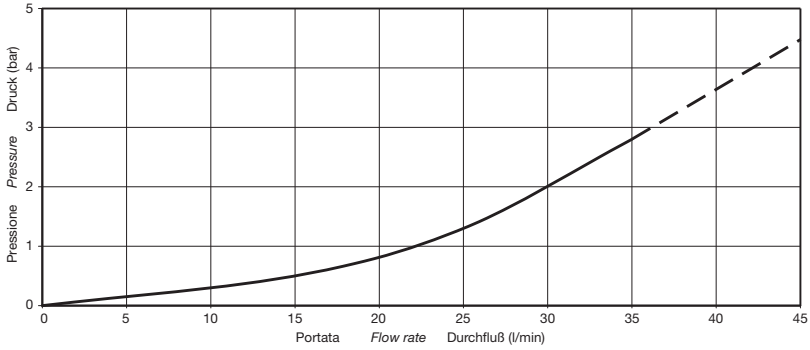
MD1

P-T

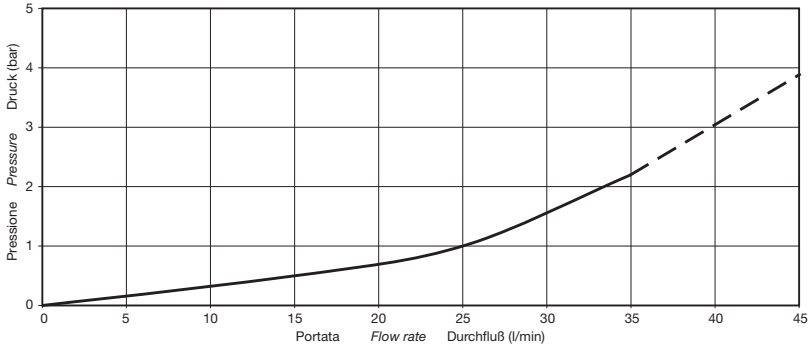




P-A



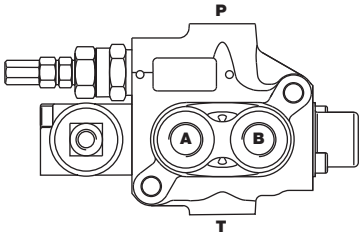
B-T



Parametri di prova: spola circuito 01
Testing parameters: 50°C - 21 cSt *spool type 01*
Prüfparameter: Kolben 01

AZIONAMENTI E OPZIONI
ACCESSORIES
ZUBEHÖR

MD1

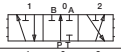
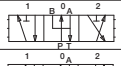
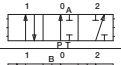
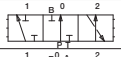
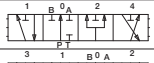


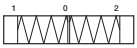
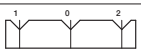
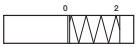
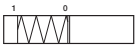
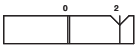
◀ AZIONAMENTO *ACTUATOR* HEBELSEITE		
L		Manuale *Manual* Handhebel
Z		Manuale con limitatore di corsa *Manual with stroke limiter* Handhebel mit Hubbegrenzung
9		Azionamento a sfera integrata *Actuator with integrated ball* Mechanische Betätigung mit Kugelende
A		Senza portaleva appendice standard *Without lever holder standard appendix* Ohne Hebelhalter, Kolben mit Zunge
B		Senza portaleva senza appendice *Without lever holder without appendix* Ohne Hebelhalter, Kolben ohne Zunge
1		Senza portaleva appendice sfera *Without lever holder ball appendix* Ohne Hebelhalter, mit Kugel
F		Senza portaleva appendice forcella *Without lever holder fork appendix* Ohne Handhebel mit Gabel
C		Senza portaleva appendice piatta *Without lever holder flat appendix* Mechanische Betätigung mit geradem Kolbenende
V		Intenzionale verticale *Intentional vertical* Sicherheitshebel, vertikal
O		Intenzionale orizzontale *Intentional horizontal* Sicherheitshebel, horizontal
E		Comando elettrico doppio effetto *Dual effect electric control* Elektrisch Doppeltwirkend
D		Comando elettrico singolo effetto bocca A *Single effect electric control port A* Elektrisch Anschluß A
J		Comando elettrico singolo effetto bocca B *Single effect electric control port B* Elektrisch Anschluß B
T		Predisposizione cavo lato azionamento *Cable setting on actuator side* Anschluß für Bowdenzug
K		Comando idraulico *Hydraulic control* Hydraulisch ferngesteuert

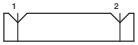
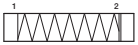
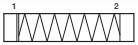
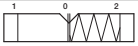
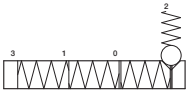
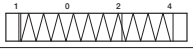
▶ OPZIONI LATO POSIZIONATORE *SPOOL CONTROL SIDE* STEUERSCHIEBERSEITE		
C		Limitatore di corsa *Stroke limiter* Hubbegrenzung
M		Doppio comando maschio *Male dual control* Kolbenansteuerung mit Außengewinde
F		Doppio comando femmina *Female dual control* Kolbenansteuerung mit Innengewinde
T		Predisposizione cavo lato posizionatore *Cable setup on positioner side* Anschluß für Bowdenzug
Y		Micro doppio effetto *Dual effect microswitch* Micro-Schalter, aktiv in A und B
P		Micro semplice effetto bocca A *Simple effect microswitch port A* Micro-Schalter, aktiv in A
O		Micro semplice effetto bocca B *Simple effect microswitch port B* Micro-Schalter, aktiv in B

CIRCUITI E SCHEMI IDRAULICI
HYDRAULIC CIRCUITS AND SCHEMES
KOLBEN UND HYDRAULISCHE SCHEMATA

MD1

CIRCUITO *SPOOL TYPE* KOLBEN TYP		POS. 3	POS. 1	POS. 0	POS. 2	POS. 4
01			P → B A → T BP ⊣	A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
03			P → B A → T BP ⊣	A,B → T BP →	P → A B → T BP ⊣	
04			A → T B ⊣ BP →	T ⊣ A ⊣ B ⊣ BP →	P → A B ⊣ T ⊣ BP ⊣	
05			P → B A ⊣ T ⊣ BP ⊣	T ⊣ A ⊣ B ⊣ BP →	A ⊣ B → T BP →	
17			P → B A → T BP ⊣	A ⊣ B ⊣ BP →	P → A B → T BP ⊣	P → A,B T ⊣ BP ⊣
23			P → B A → T BP ⊣	A ⊣ B ⊣ BP →	P → A,B T ⊣ BP ⊣	P → A B → T BP ⊣
71		→A,B ⊣ BP ⊣	P → B A → T BP ⊣	A ⊣ B ⊣ BP →	P → A B → T BP ⊣	

POSIZIONATORE *SPOOL CONTROL* SCHIEBERSTELLUNG		
0A		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0B		Posizione neutra in 0, detent in 1 *Neutral position in 0, detent in 1* Neutralstellung in 0, rastend in 1
0C		Posizione neutra in 0, detent in 2 *Neutral position in 0, detent in 2* Neutralstellung in 0, rastend in 2
0D		Detent in 0, 1, 2 *Detent in 0, 1, 2* Raststellung in 0, 1 und 2
0E		Posizone neutra in 0 *Neutral position in 0* Neutralstellung in 0
0F		Posizone neutra in 0 *Neutral position in 0* Neutralstellung in 0
0H		Detent in 2 *Detent in 2* Raststellung in 2

POSIZIONATORE *SPOOL CONTROL* SCHIEBERSTELLUNG		
0L		Detent in 1 *Detent in 1* Raststellung in 1
0Q		Detent in 1, 2 *Detent in 1, 2* Raststellung in 1, 2
0R		Posizione neutra in 2 *Neutral position in 2* Neutralstellung in 2
0S		Posizione neutra in 1 *Neutral position in 1* Neutralstellung in 1
BF		Frizionato,posizione neutra e detent in 0 *Clutched, neutral position and detent in 0* Reibgeklemmt 1, Neutralstellung gerastet in 0
DF		Frizionato, detent in 0 *Clutched, detent in 0* Reibgeklemmt , Neutralstellung gerastet in 0
SQ		Posizone neutra in 1, detent in 2 *Neutral position in 1,detent in 2* Neutralstellung in 1, rastend in 2
TH		Autosgancio in 2 *Kick-off in 2* Selbstlösung in 2
TR		Posizone neutra in 1 *Neutral position in 1* Neutralstellung in 1

OPZIONI LEVA *LEVER OPTIONS* HEBEL-OPTIONEN

A	110 mm diritta pomello standard *110 mm straight standard knob* 110 mm gerade, Standard-Griff		**L**	Ergonomica diritta verticale 180 mm *Ergonomic straight vertical 180 mm* Ergonomischer Hebel, gerade, 180 mm, vertikal
B	130 mm diritta pomello standard *130 mm straight standard knob* 130 mm gerade, Standard-Griff		**M**	Ergonomica diritta orizzontale 180 mm *Ergonomic straight horizontal 180 mm* Ergonomischer Hebel, gerade, 180 mm, horizontal
C	180 mm diritta pomello standard *180 mm straight standard knob* 180 mm gerade, Standard-Griff		**Y**	Ergonomica piegata 15° orizzontale 180 mm *Ergonomic bent 15°, horizontal 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, horizontal
D	210 mm diritta pomello standard *210 mm straight standard knob* 210 mm gerade, Standard-Griff		**O**	Ergonomica piegata 15° verticale 180 mm *Ergonomic bent 15°, vertical 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, vertikal
E	250 mm diritta pomello standard *250 mm straight standard knob* 250 mm gerade, Standard-Griff		**Q**	Ergonomica piegata 30° orizzontale 180 mm *Ergonomic bent 30°, horizontal 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, horizontal
F	300 mm diritta pomello standard *300 mm straight standard knob* 300 mm gerade, Standard-Griff		**R**	Ergonomica piegata 30° verticale 180 mm *Ergonomic bent 30°, vertical 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, vertikal

P Parapolvere (disponibile solo per azionameno A - B - 1)
Dust guard (available only for actuator A - B - 1)
Abstreifer (nur für Betätigungen A, B und 1)

ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG

MD1

MD1	N	S	A	18	G	A	L	01

MODELLO
MODEL
MODELL

OPZIONI GENERALI
GENERAL OPTIONS
ALLGEMEINE OPTIONEM

N - nessuna
V - verniciatura nera
N *- None*
V *- Black paint*
N - ohne
V - schwarz lackiert

TIPO DI ENTRATA
INLET TYPE
P-EINGANG

S - sinistra (standard)
D - destra
S *- Left (standard)*
D *- Right*
S - Links (Standard)
D - Rechts

FILETTATURA BOCCA P
THREAD PORT P
ANSCHLUSSGEWINDE P
A - B - T - C - E - P

Vedi tabella
See chart
Siehe Tabelle

TIPO VALVOLA DI MASSIMA PRESSIONE
MAXIMUM PRESSURE RELIEF VALVE TYPE
DRUCKBEGRENZUNGSVENTIL

00 - Tappo sostitutivo VMP
VMP replacement cap
Stopfen anstelle Von VMP

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

TIPO DI PIOMBATURA
TYPE OF LEAD SEAL
VERSTELLSICHERUNG

G - grano	***G*** *- Dowel*	**G** - Gewindestift
C - cappuccio	***C*** *- Cap*	**C** - Plastikkappe
P - piombata	***P*** *- Lead sealed*	**P** - Plombiert
R - pred.piom.	***R*** *- Seal setting*	**R** - Bohrung für Plombe
N - nessuna	***N*** *- None*	**N** - ohne

FILETTATURA BOCCHE A-B
THREAD PORTS A-B
ANSCHLUSSGEWINDE A-B
A - B - T - C - E - P

Vedi tabella
See chart
Siehe Tabelle

AZIONAMENTI
ACTUATORS
BETÄTIGUNG-SARTEN

Vedi tabella
See chart
Siehe Tabelle

CIRCUITO
CIRCUIT
KOLBEN

Vedi tabella
See chart
Siehe Tabelle

A | 0A | C | A | N | N | A

OPZIONI SPOLE
OPTIONS SPOOL
KOLBENVARIANTEN

A - spola standard con ricoprimento negativo
B - spola nichelata con ricopreimento negativo
C - spola standard con ricoprimento positivo
D - spola nichelata con ricoprimento positivo

A *- standard spool with negative coating*
B *- nickel-plated spool with negative coating*
C *- standard spool with positive coating*
D *- nickel-plated spool with positive coating*

A - Standard-Kolben mit negativer Überdeckung
B - Vernickelter Kolben mit negativer Überdeckung
C - Standard-Kolben mit positiver Überdeckung
D - Vernickelter Kolben mit positiver Überdeckung

POSIZIONATORE
SPOOL CONTROL
SCHIEBERSTELLUNGSSATZ

NN - Nessuno - *None* - Keiner

Altri vedi tabella
Others see chart
Andere siehe Tabelle

OPZIONI LEVA
OPTIONS LEVER
POSITION DER HANDHEBEL

N - Nessuna - *None*
Keiner
Altre vedi tabella
Others see chart
Andere siehe Tabelle

POSIZIONI LEVA — ***LEVER POSITION*** — **POSITION DER HANDHEBEL**

A - Diritta — ***A*** *- Straight* — **A** - Gerade
B - Ruotata 90° verso il P — ***B*** *- Rotated 90° towards il P* — **B** - 90° gedreht in Richtung P
C - Ruotata 180° — ***C*** *- Rotated 180°* — **C** - 180° gedreht
D - Ruotata 90° verso il T — ***D*** *- Rotated 90° towards T* — **D** - 90° gedreht in Richtung T
N - Nessuna — ***N*** *- None* — **N** - Keine

OPZIONI LATO POSIZIONATORE
POSITIONER SIDE OPTIONS
STEUERSCHIEBERSEITE

N - Nessuno - *None* - Keiner

Altri vedi tabella — *Others see chart*
Andere siehe Tabelle

TENSIONE E CONNETTORE
VOLTAGE AND CONNECTOR
MAGNETSPANNUNG UND STECKER

A - 12 V DIN 43650
B - 24 V DIN 43650
C - 12 V AMP Junior
D - 24 V AMP Junior
E - 12 V Deutchs
F - 24 V Deutchs
N - Nessuna

A *- 12 V DIN 43650*
B *- 24 V DIN 43650*
C *- 12 V AMP Junior*
D *- 24 V AMP Junior*
E *- 12 V Deutchs*
F *- 24 V Deutchs*
N *- None*

A - 12 V DIN 43650
B - 24 V DIN 43650
C - 12 V AMP Junior
D - 24 V AMP Junior
E - 12 V Deutchs
F - 24 V Deutchs
N - Keiner

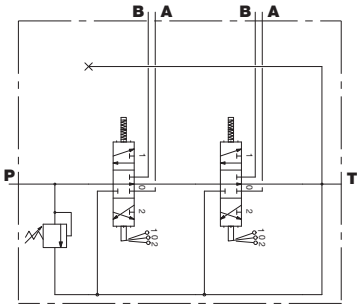
FILETTATURA BOCCA T
THREAD PORT T
ANSCHLUSSGEWINDE T

A - B - T - C - P - E
Vedi tabella
See chart
Siehe Tabelle

MDT

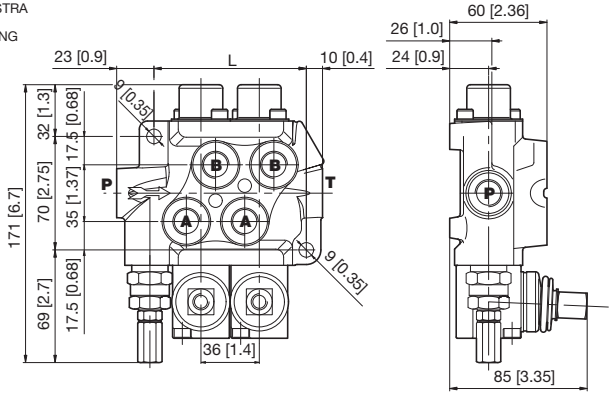
DISTRIBUTORI MONOBLOCCO
MONOBLOCK DIRECTIONAL VALVES
MONOBLOCKSTEUERGERÄTE

DATI TECNICI *TECHNICAL DATA* TECHNISCHE MERKMALE	
Portata nominale (max) *Nominal flow (max)* Nominaler Durchfluß (max)	**35 (45) l/min** **9.3 (11.9) gpm**
Portata nominale (max) con azionamenti E,D,J *Nominal flow rate (max) with drivers E,D,J* Nenn-Durchflussmenge (max.) mit Antrieben E, D, J	**20 (30) l/min** **5.3 (7.9) gpm**
Pressione nominale *Nominal pressure* Nominaler Betriebsdruck	**250 (3625)** **bar (psi)**
Pressione massima con azionamenti E,D,J *Maximum pressure with drivers E,D,J* Max. Druck mit Antrieben E, D, J	**180 (2610)** **bar (psi)**
Contropressione massima allo scarico *Maximum tank pressure* Maximaler Gegendruck Tankleitung	**50 (725)** **bar (psi)**
Massima trafila interna *Maximum internal leakage* Maximale interne Leckage	**8 cc/min** **(21 cSt - 100 bar)**
Temperatura di utilizzo *Temperature range* Betriebstemperatur	**-20°C +85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Viscosità olio *Oil viscosity* Ölviskosität	**Da 15 cSt a 90 cSt** ***From 15 cSt to 90 cSt*** **Von 15 cSt nach 90 cSt**
Fluido *Fluid* Öl	**Olio a base minerale** ***Mineral based oil*** **Mineral Öl**



STANDARD
STANDARD
STANDARD

STANDARD - ENTRATA SINISTRA
STANDARD – LEFT INLET
STANDARD - LINKER EINGANG



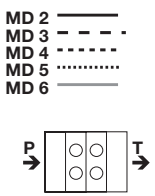
DIMENSIONI *SIZE* ABMESSUNGEN		
N° DI SEZIONI *N° OF SECTIONS* ANZAHL ELEMENTE	**L mm [inch]**	**MASSA kg (lb) *WEIGHT kg (lb)* GEWICHT kg (lb)**
MDT2	94 [3.7]	3.5 (7.7)
MDT3	133 [5.2]	4.9 (10.8)
MDT4	169 [6.6]	6.3 (13.9)
MDT5	205 [8.1]	7.7 (16.9)
MDT6	241 [9.5]	9.1 (20.0)
MDT7	277 [10.9]	10.5 (23.1)

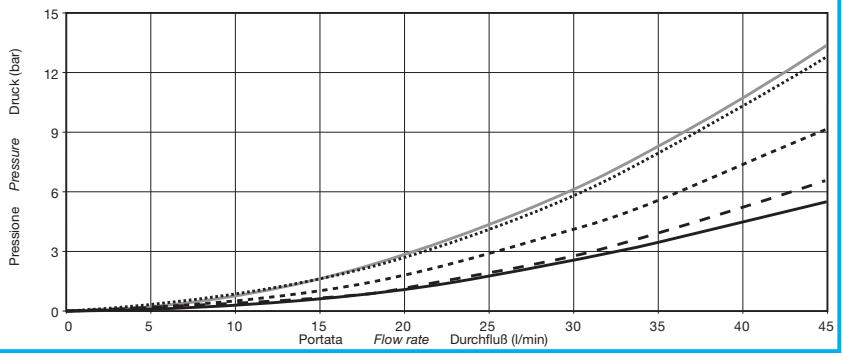
FILETTATURA *THREAD* GEWINDE		
CODICE *MODEL* BEZEICHNUNG	**TIPO *TYPE* GEWINDE**	**SERRAGGIO Nm *TORQUE Nm* ANZUGSMOMENT Nm**
0	NOT MACHINED	/
B	1/2" GAS ISO 1179	70
A	3/8"GAS ISO 1179	35
C	M18x1.5 ISO 9974	40
T	M16x1.5 ISO 9974	24
E	3/4 - 16 SAE ISO 11926	50
P	9/16 - 18 SAE ISO 11926	21

CURVE CARATTERISTICHE
FLOW CURVES
DUCHFLUSSKENNLINIEN

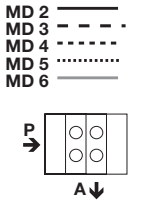
MDT

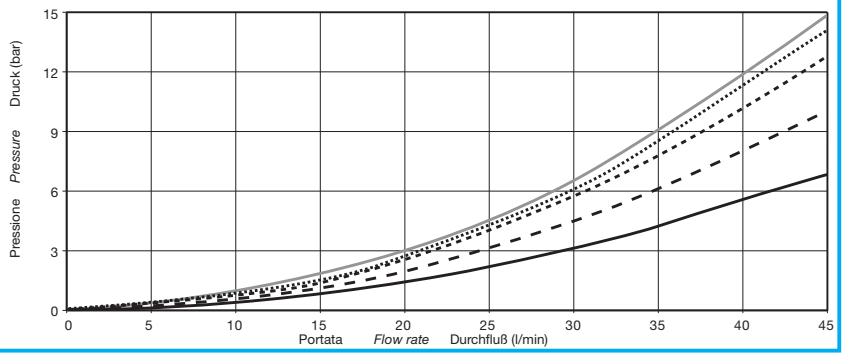
P-T



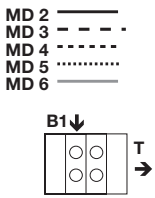


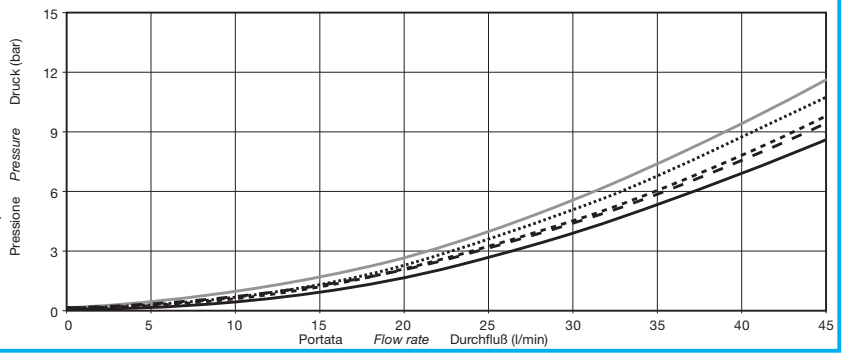
P-A





B-T



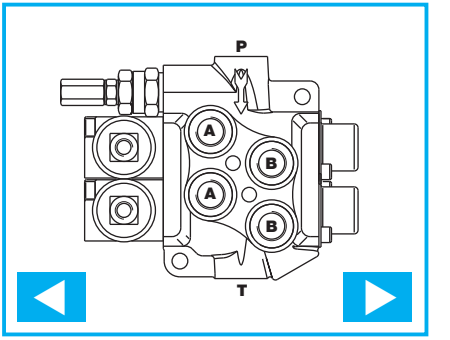


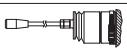
Parametri di prova: spola circuito 01
Testing parameters: 50°C - 21 cSt *spool type 01*
Prüfparameter: Kolben 01

AZIONAMENTI E OPZIONI
ACCESSORIES
ZUBEHÖR

MDT

OPZIONI GENERALI *GENERAL OPTIONS* ALLGEMEINE OPTIONEM		
M		Micro centralizzato *Centralized microswitch* Zentraler Mikroschalter
O		Micro centraliz. verniciatura nera *Centralized microswitch black paint* Zentraler Mikroschalter, schwarz lackiert

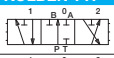
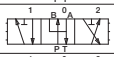
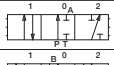
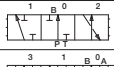
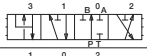
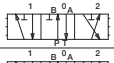
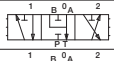
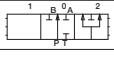


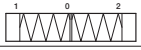
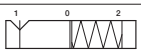
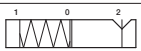
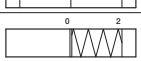
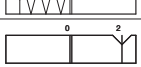
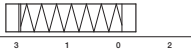
◀ AZIONAMENTO *ACTUATOR* HEBELSEITE		
L		Manuale *Manual* Handhebel
Z		Manuale con limitatore di corsa *Manual with stroke limiter* Handhebel mit Hubbegrenzung
A		Senza portaleva appendice standard *Without lever holder standard appendix* Ohne Hebelhalter, Kolben mit Zunge
B		Senza portaleva senza appendice *Without lever holder without appendix* Ohne Hebelhalter, Kolben ohne Zunge
1		Senza portaleva appendice sfera *Without lever holder ball appendix* Ohne Hebelhalter, mit Kugel
V		Intenzionale verticale *Intentional vertical* Sicherheitshebel, vertikal
O		Intenzionale orizzontale *Intentional horizontal* Sicherheitshebel, horizontal
E		Comando elettrico doppio effetto *Dual effect electric control* Elektrisch Doppeltwirkend
D		Comando elettrico singolo effetto bocca A *Single effect electric control port A* Elektrisch Anschluß A
J		Comando elettrico singolo effetto bocca B *Single effect electric control port B* Elektrisch Anschluß B
T		Predisposizione cavo lato azionamento *Cable setting on actuator side* Anschluß für Bowdenzug
M		Manipolatore *Manipulator* Joystick

▶ OPZIONI LATO POSIZIONATORE *SPOOL CONTROL SIDE* STEUERSCHIEBERSEITE		
C		Limitatore di corsa *Stroke limiter* Hubbegrenzung
M		Doppio comando maschio *Male dual control* Kolbenansteuerung mit Außengewinde
F		Doppio comando femmina *Female dual control* Kolbenansteuerung mit Innengewinde
T		Predisposizione cavo lato posizionatore *Cable setup on positioner side* Anschluß für Bowdenzug
Y		Micro doppio effetto *Dual effect microswitch* Micro-Schalter, aktiv in A und B
P		Micro semplice effetto bocca A *Simple effect microswitch port A* Micro-Schalter, aktiv in A
O		Micro semplice effetto bocca B *Simple effect microswitch port B* Micro-Schalter, aktiv in B

MDT

CIRCUITI E SCHEMI IDRAULICI
HYDRAULIC CIRCUITS AND SCHEMES
KOLBEN UND HYDRAULISCHE SCHEMATA

CIRCUITO *SPOOL TYPE* KOLBEN TYP		POS. 3	POS. 1	POS. 0	POS. 2	POS. 4
01			P → B A → T BP ⊣	A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
03			P → B A → T BP ⊣	A,B → T BP →	P → A B → T BP ⊣	
04			A → T B ⊣ BP →	T ⊣ A ⊣ B ⊣ BP →	P → A B ⊣ T ⊣ BP ⊣	
05			P → B A ⊣ T ⊣ BP ⊣	T ⊣ A ⊣ B ⊣ BP →	A ⊣ B → T BP →	
07		A,B → T BP →	P → B A → T BP ⊣	A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
08			P → B A → T BP ⊣	B ⊣ A → T BP →	P → A B → T BP ⊣	
10			P → B A → T BP ⊣	A ⊣ B → T BP →	P → A B → T BP ⊣	
11			P → B A → T BP ⊣	A,B → T BP ⊣	P → A B → T BP ⊣	
28				A ⊣ B ⊣ BP →	P → A, B BP ⊣	

POSIZIONATORE *SPOOL CONTROL* SCHIEBERSTELLUNG		
0A		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0B		Posizione neutra in 0, detent in 1 *Neutral position in 0, detent in 1* Neutralstellung in 0, rastend in 1
0C		Posizione neutra in 0, detent in 2 *Neutral position in 0, detent in 2* Neutralstellung in 0, rastend in 2
0D		Detent in 0, 1, 2 *Detent in 0, 1, 2* Raststellung in 0, 1 und 2
0E		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0F		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0H		Detent in 2 *Detent in 2* Raststellung in 2
0L		Detent in 1 *Detent in 1* Raststellung in 1
0Q		Detent in 1, 2 *Detent in 1, 2* Raststellung in 1, 2
0R		Posizione neutra in 2 *Neutral position in 2* Neutralstellung in 2
0S		Posizione neutra in 1 *Neutral position in 1* Neutralstellung in 1
NS		Posizione neutra in 0 detent in 3 *Neutral position in 0, detent in 3* Neutralstellung in 0, rastend in 3

OPZIONI LEVA *LEVER OPTIONS* HEBEL-OPTIONEN					
A		110 mm diritta pomello standard *110 mm straight standard knob* 110 mm gerade, Standard-Griff	L		Ergonomica diritta verticale 180 mm *Ergonomic straight vertical 180 mm* Ergonomischer Hebel, gerade, 180 mm, vertikal
B		130 mm diritta pomello standard *130 mm straight standard knob* 130 mm gerade, Standard-Griff	M		Ergonomica diritta orizzontale 180 mm *Ergonomic straight horizontal 180 mm* Ergonomischer Hebel, gerade, 180 mm, horizontal
C		180 mm diritta pomello standard *180 mm straight standard knob* 180 mm gerade, Standard-Griff	Y		Ergonomica piegata 15° orizzontale 180 mm *Ergonomic bent 15°, horizontal 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, horizontal
D		210 mm diritta pomello standard *210 mm straight standard knob* 210 mm gerade, Standard-Griff	O		Ergonomica piegata 15° verticale 180 mm *Ergonomic bent 15°, vertical 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, vertikal
E		250 mm diritta pomello standard *250 mm straight standard knob* 250 mm gerade, Standard-Griff	Q		Ergonomica piegata 30° orizzontale 180 mm *Ergonomic bent 30°, horizontal 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, horizontal
F		300 mm diritta pomello standard *300 mm straight standard knob* 300 mm gerade, Standard-Griff	R		Ergonomica piegata 30° verticale 180 mm *Ergonomic bent 30°, vertical 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, vertikal
P	Parapolvere (disponibile solo per azionameno A - B - 1) *Dust guard (available only for actuator A - B - 1)* Abstreifer (nur für Betätigungen A, B und 1)				

ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG

MDT

MDT	2	N	S	A	18	G	A	T	L	01

MODELLO
MODEL
MODELL

N° DI SEZIONI
N° OF SECTIONS
ANZAHL ELEMENTE

OPZIONI GENERALI
GENERAL OPTIONS
ALLGEMEINE OPTIONEM

N - nessuna
V - verniciatura nera
M - micro centralizzato
O - micro centralizzato verniciato

N *- None*
V *- Black paint*
M *- Centralised microswitch*
O *- Painted centralised microswitch*

N - ohne
V - schwarz lackiert
M - zentraler Mikroschalter
O - zentraler Mikroschalter, schwarz lackiert

TIPO DI ENTRATA
INLET TYPE
P-EINGANG

S - sinistra (standard)
D - destra

S *- Left (standard)*
D *- Right*

S - Links (Standard)
D - Rechts

FILETTATURA BOCCA P
THREAD PORT P
ANSCHLUSSGEWINDE P
A - B - T - C - P - E

Vedi tabella
See chart
Siehe Tabelle

TIPO VALVOLA DI MASSIMA PRESSIONE
MAXIMUM PRESSURE RELIEF VALVE TYPE
DRUCKBEGRENZUNGSVENTIL

00 - Tappo sostitutivo VMP
VMP replacement cap
Stopfen anstelle Von VMP

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

TIPO DI PIOMBATURA
TYPE OF LEAD SEAL
VERSTELLSICHERUNG

G - grano	***G*** *- Dowel*	**G** - Gewindestift
C - cappuccio	***C*** *- Cap*	**C** - Plastikkappe
P - piombata	***P*** *- Lead sealed*	**P** - Plombiert
R - pred.piom.	***R*** *- Seal setting*	**R** - Bohrung für Plombe
N - nessuna	***N*** *- None*	**N** - ohne

FILETTATURA BOCCHE A-B
THREAD PORTS A-B
ANSCHLUSSGEWINDE A-B
A - B - T - C - P - E
Vedi tabella *See chart* Siehe Tabelle

TIPO DI SEZIONE
TYPE OF SECTION
ART DER VENTILSEKTION

T - Tandem (standard)
V - ERV (reg. sovra-ubicato)
O - RF (reg. sotto-ubicato)

T *- Tandem (standard)*
V *- ERV (reg. located above)*
O *- RF (reg. located below)*

T - Tandem (Standard)
V - ERV (oben aufgebaut)
O - RF (unten montiert)

AZIONAMENTI
ACTUATORS
BETÄTIGUNGSARTEN

N - Nessuno - *None*
Keiner

Altri vedi tabella
Others see chart
Andere siehe Tabelle

CIRCUITO
CIRCUIT
KOLBEN

NN - Nessuno
None - Keiner

Altri vedi tabella
Others see chart
Andere siehe Tabelle

Ripetere per ogni sezione del distributore
Repeat for each section of the distributor
Für jede Sektion wiederholen

A	0A	C	A	N	N	A	A	A

OPZIONI SPOLE
OPTIONS SPOOL
KOLBENVARIANTEN

A - spola standard con ricoprimento negativo
B - spola nichelata con ricopreimento negativo
C - spola standard con ricoprimento positivo
D - spola nichelata con ricoprimento positivo
N - Nessuna

***A** - standard spool with negative coating*
***B** - nickel-plated spool with negative coating*
***C** - standard spool with positive coating*
***D** - nickel-plated spool with positive coating*
***N** - None*

A - Standard-Kolben mit negativer Überdeckung
B - Vernickelter Kolben mit negativer Überdeckung
C - Standard-Kolben mit positiver Überdeckung
D - Vernickelter Kolben mit positiver Überdeckung
N - Keiner

POSIZIONATORE
SPOOL CONTROL
SCHIEBERSTELLUNGSSATZ

NN - Nessuno - *None* - Keiner

Altri vedi tabella
Others see chart
Andere siehe Tabelle

OPZIONI LEVA
OPTIONS LEVER
POSITION DER HANDHEBEL

N - Nessuna - *None*
Keiner
Altre vedi tabella
Others see chart
Andere siehe Tabelle

POSIZIONI LEVA — ***LEVER POSITION*** — **POSITION DER HANDHEBEL**

A - Diritta	***A** - Straight*	**A** - Gerade
B - Ruotata 90° verso il P	***B** - Rotated 90° towards il P*	**B** - 90° gedreht in Richtung P
C - Ruotata 180°	***C** - Rotated 180°*	**C** - 180° gedreht
D - Ruotata 90° verso il T	***D** - Rotated 90° towards T*	**D** - 90° gedreht in Richtung T
N - Nessuna	***N** - None*	**N** - Keine

OPZIONI SU BOCCA T-C.O.
OPTIONS ON PORT T-C.O.
OPTIONEN FÜR ANSCHLUSS C.O.

A - T aperto C.O. non lavorato
B - T aperto C.O. aperto
C - T aperto C.O. tappato
D - T1 aperto, T predis. C.O.

***A** - T open C.O. not processed*
***B** - T open C.O. open*
***C** - T open C.O. plugged*
***D** - T1 open, T C.O. set-up*

A - T offen, C.O. nicht gebohrt
B - T offen, C.O. offen
C - T offen, C.O. verschlossen
D - T1 offen, T vorber. C.O.

FILETTATURA BOCCA C.O.
THREAD PORTS C.O.
ANSCHLUSSGEWINDE C.O.
O - A - C - E
Vedi tabella *See chart* Siehe Tabelle

FILETTATURA BOCCA T
THREAD PORT T
ANSCHLUSSGEWINDE T
A - B - T - C - P - E
Vedi tabella *See chart* Siehe Tabelle

TENSIONE E CONNETTORE
VOLTAGE AND CONNECTOR
MAGNETSPANNUNG UND STECKER

A - 12 V DIN 43650
B - 24 V DIN 43650
C - 12 V AMP Junior
D - 24 V AMP Junior
E - 12 V Deutchs
F - 24 V Deutchs
N - Nessuna

***A** - 12 V DIN 43650*
***B** - 24 V DIN 43650*
***C** - 12 V AMP Junior*
***D** - 24 V AMP Junior*
***E** - 12 V Deutchs*
***F** - 24 V Deutchs*
***N** - None*

A - 12 V DIN 43650
B - 24 V DIN 43650
C - 12 V AMP Junior
D - 24 V AMP Junior
E - 12 V Deutchs
F - 24 V Deutchs
N - Keiner

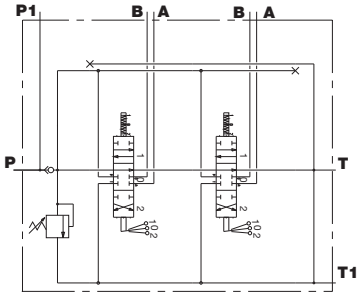
OPZIONI LATO POSIZIONATORE
POSITIONER SIDE OPTIONS
STEUERSCHIEBERSEITE

N - Nessuno - *None* - Keiner
Altri vedi tabella *Others see chart*
Andere siehe Tabelle

ML

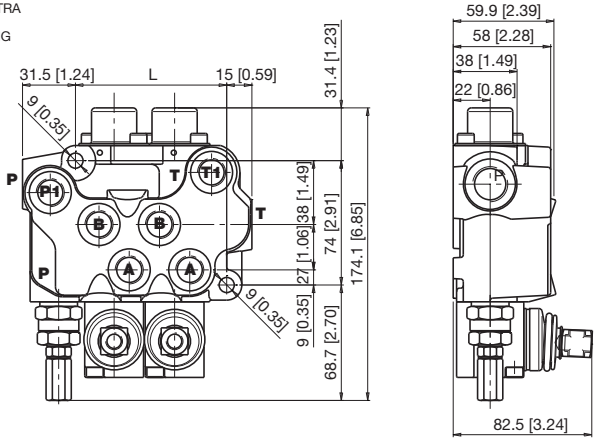
DISTRIBUTORI MONOBLOCCO
MONOBLOCK DIRECTIONAL VALVES
MONOBLOCKSTEUERGERÄTE

DATI TECNICI *TECHNICAL DATA* TECHNISCHE MERKMALE	
Portata nominale (max) *Nominal flow (max)* Nominaler Durchfluß (max)	**35 (45) l/min** **9.3 (11.9) gpm**
Pressione nominale *Nominal pressure* Nominaler Betriebsdruck	**250 (3625)** **bar (psi)**
Contropressione massima allo scarico *Maximum tank pressure* Maximaler Gegendruck Tankleitung	**50 (725)** **bar (psi)**
Massima trafila interna *Maximum internal leakage* Maximale interne Leckage	**8 cc/min** **(21 cSt - 100 bar)**
Temperatura di utilizzo *Temperature range* Betriebstemperatur	**-20°C +85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Viscosità olio *Oil viscosity* Ölviskosität	**Da 15 cSt a 90 cSt** ***From 15 cSt to 90 cSt*** **Von 15 cSt nach 90 cSt**
Fluido *Fluid* Öl	**Olio a base minerale** ***Mineral based oil*** **Mineral Öl**



STANDARD
STANDARD
STANDARD

STANDARD - ENTRATA SINISTRA
STANDARD – LEFT INLET
STANDARD - LINKER EINGANG



DIMENSIONI *SIZE* ABMESSUNGEN		
N° DI SEZIONI *N° OF SECTIONS* ANZAHL ELEMENTE	L mm [inch]	MASSA kg (lb) *WEIGHT kg (lb)* GEWICHT kg (lb)
ML1	54 [2.12]	2.9 (6.4)
ML2	90 [3.54]	4.2 (9.2)
ML3	126 [4.96]	5.3 (11.7)
ML4	162 [6.37]	6.6 (14.5)
ML5	198 [7.8]	7.8 (17.2)
ML6	234 [9.21]	9.0 (19.9)
ML7	270 [10.35]	10.2 (22.6)

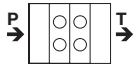
FILETTATURA *THREAD* GEWINDE		
CODICE *MODEL* BEZEICHNUNG	TIPO *TYPE* GEWINDE	SERRAGGIO Nm *TORQUE Nm* ANZUGSMOMENT Nm
0	NOT MACHINED	/
B	1/2" GAS ISO 1179	70
A	3/8"GAS ISO 1179	35
L	1/4"GAS ISO 1179	14
C	M18x1.5 ISO 9974	40
W	M18x1.5 ISO 6149	40
T	M16x1.5 ISO 9974	24
I	M16x 1,5 ISO 6149	24
E	3/4 - 16 SAE ISO 11926	50
P	9/16 - 18 SAE ISO 11926	21

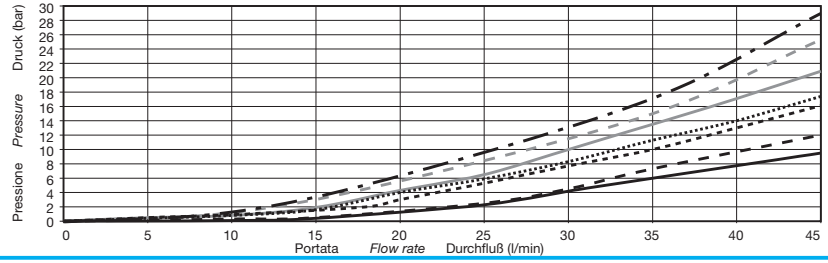
CURVE CARATTERISTICHE
FLOW CURVES
DUCHFLUSSKENNLINIEN

ML

P-T

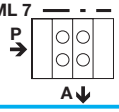
ML 1
ML 2
ML 3
ML 4
ML 5
ML 6
ML 7

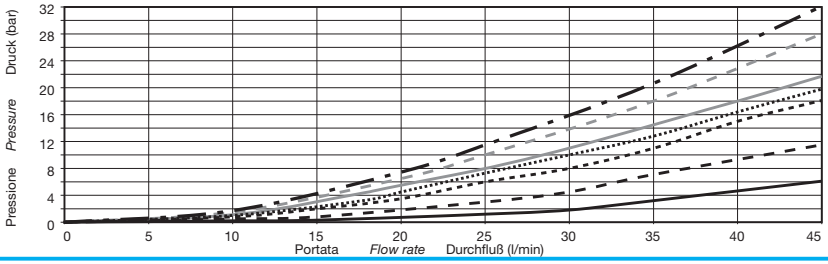




P-A

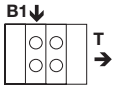
ML 1
ML 2
ML 3
ML 4
ML 5
ML 6
ML 7

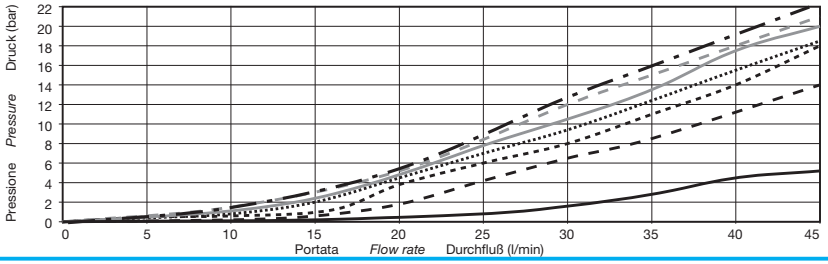




B-T

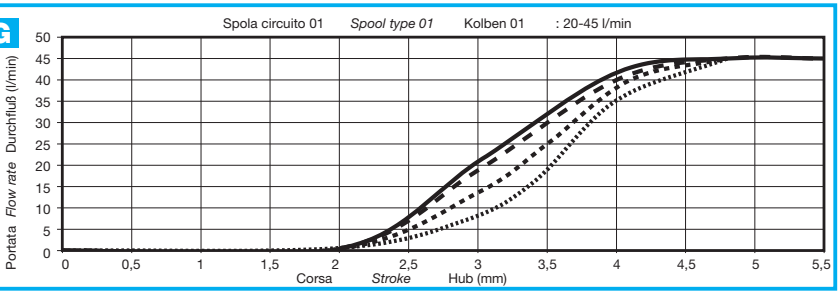
ML 1
ML 2
ML 3
ML 4
ML 5
ML 6
ML 7





METERING

0 bar
50 bar
100 bar
150 bar

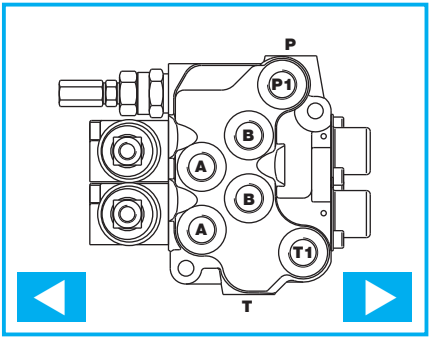


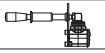
Parametri di prova: spola circuito 01
Testing parameters: 50°C - 21 cSt *spool type 01*
Prüfparameter: Kolben 01

AZIONAMENTI E OPZIONI
ACCESSORIES
ZUBEHÖR

ML

OPZIONI GENERALI *GENERAL OPTIONS* ALLGEMEINE OPTIONEM		
M		Micro centralizzato *Centralized microswitch* Zentraler Mikroschalter
O		Micro centraliz. verniciatura nera *Centralized microswitch black paint* Zentraler Mikroschalter, schwarz lackiert
A		Alimentatore *Power supply unit* Steuerölversorgung
B		Alimentatore verniciatura nera *Power supply unit black paint* Steuerölversorgung, schwarz lackiert

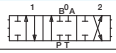
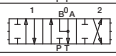
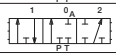
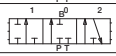
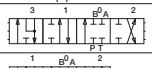
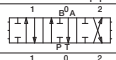
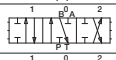
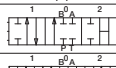
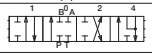


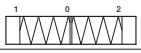
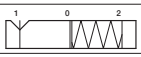
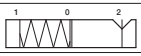
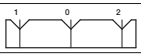
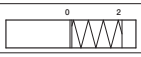
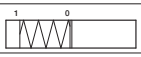
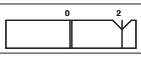
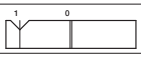
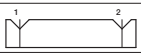
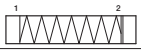
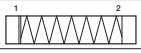
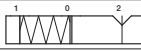
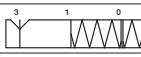
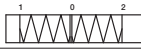
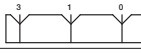
◀ AZIONAMENTO *ACTUATOR* HEBELSEITE		
L		Manuale *Manual* Handhebel
A		Senza portaleva appendice standard *Without lever holder standard appendix* Ohne Hebelhalter, Kolben mit Zunge
B		Senza portaleva senza appendice *Without lever holder without appendix* Ohne Hebelhalter, Kolben ohne Zunge
C		Senza portaleva appendice piatta *Without lever holder flat appendix* Mechanische Betätigung mit geradem Kolbenende
Z		Manuale con limitatore di corsa *Manual with stroke limiter* Handhebel mit Hubbegrenzung
T		Predisposizione cavo lato azionamento *Cable setting on actuator side* Anschluß für Bowdenzug
V		Intenzionale verticale *Intentional vertical* Sicherheitshebel, vertikal
O		Intenzionale orizzontale *Intentional horizontal* Sicherheitshebel, horizontal
M		Manipolatore *Manipulator* Joystick
K		Comando idraulico *Hydraulic control* Hydraulisch ferngesteuert

▶ OPZIONI LATO POSIZIONATORE *SPOOL CONTROL SIDE* STEUERSCHIEBERSEITE		
C		Limitatore di corsa *Stroke limiter* Hubbegrenzung
M		Doppio comando maschio *Male dual control* Kolbenansteuerung mit Außengewinde
F		Doppio comando femmina *Female dual control* Kolbenansteuerung mit Innengewinde
T		Predisposizione cavo lato posizionatore *Cable setup on positioner side* Anschluß für Bowdenzug
Y		Micro doppio effetto *Dual effect microswitch* Micro-Schalter, aktiv in A und B
P		Micro semplice effetto bocca A *Simple effect microswitch port A* Micro-Schalter, aktiv in A
O		Micro semplice effetto bocca B *Simple effect microswitch port B* Micro-Schalter, aktiv in B

CIRCUITI E SCHEMI IDRAULICI
HYDRAULIC CIRCUITS AND SCHEMES
KOLBEN UND HYDRAULISCHE SCHEMATA

ML

CIRCUITO *SPOOL TYPE* KOLBEN TYP		POS. 3	POS. 1	POS. 0	POS. 2	POS. 4
01			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
03			P → B A → T BP ⊣	A,B → T P ⊣ BP →	P → A B → T BP ⊣	
04			A → T P,B ⊣ BP →	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B,T ⊣ BP ⊣	
05			P → B A, T ⊣ BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P,A ⊣ B → T BP →	
07		B, A → T P ⊣ BP →	P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
08			P → B A → T BP ⊣	B ⊣ P ⊣ A → T BP →	P → A B → T BP ⊣	
10			P → B A → T BP ⊣	B → T A ⊣ P ⊣ BP →	P → A B → T BP ⊣	
19			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → B,A,T BP ⊣	
70			P → B A → T BP ⊣	P ⊣ T — A ⊣ B ⊣ BP →	P → A B → T BP ⊣	A,B → T P ⊣ BP →

POSIZIONATORE *SPOOL CONTROL* SCHIEBERSTELLUNG		
0A		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0B		Posizione neutra in 0, detent in 1 *Neutral position in 0, detent in 1* Neutralstellung in 0, rastend in 1
0C		Posizione neutra in 0, detent in 2 *Neutral position in 0, detent in 2* Neutralstellung in 0, rastend in 2
0D		Detent in 0, 1, 2 *Detent in 0, 1, 2* Raststellung in 0, 1 und 2
0E		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0F		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0H		Detent in 2 *Detent in 2* Raststellung in 2
0L		Detent in 1 *Detent in 1* Raststellung in 1
0Q		Detent in 1, 2 *Detent in 1, 2* Raststellung in 1, 2
0R		Posizione neutra in 2 *Neutral position in 2* Neutralstellung in 2
0S		Posizione neutra in 1 *Neutral position in 1* Neutralstellung in 1
CP		Posizione neutra in 0, detent in 2,3 *Neutral position in 0, detent in 2,3* Neutralstellung in 0, rastend in 2,3
NS		Posizione neutra in 0, detent in 3 *Neutral position in 0, detent in 3* Neutralstellung in 0, rastend in 3
NT		Posizione neutra in 0, detent in 4 *Neutral position in 0, detent in 4* Neutralstellung in 0, rastend in 4
PS		Detent in 3, 1, 0, 2 *Detent in 3, 1, 0, 2* Raststellung in 3, 1, 0, 2

TIPO DI VALVOLA BOCCA A - B *VALVE TYPE PORT A - B* SEKUNDÄRVENTIL IN ANSCHLUSS A – B		
VL		Per la taratura delle valvole consultare le istruzioni per l'ordinazione *For the valve setting, consult the ordering instructions.* Ventileinstellung siehe Bestellanleitung.
TP		

OPZIONI LEVA *LEVER OPTIONS* HEBEL-OPTIONEN				
A		110 mm diritta pomello standard *110 mm straight standard knob* 110 mm gerade, Standard-Griff	**L**	Ergonomica diritta verticale 180 mm *Ergonomic straight vertical 180 mm* Ergonomischer Hebel, gerade, 180 mm, vertikal
B		130 mm diritta pomello standard *130 mm straight standard knob* 130 mm gerade, Standard-Griff	**M**	Ergonomica diritta orizzontale 180 mm *Ergonomic straight horizontal 180 mm* Ergonomischer Hebel, gerade, 180 mm, horizontal
C		180 mm diritta pomello standard *180 mm straight standard knob* 180 mm gerade, Standard-Griff	**Y**	Ergonomica piegata 15° orizzontale 180 mm *Ergonomic bent 15°, horizontal 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, horizontal
D		210 mm diritta pomello standard *210 mm straight standard knob* 210 mm gerade, Standard-Griff	**O**	Ergonomica piegata 15° verticale 180 mm *Ergonomic bent 15°, vertical 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, vertikal
E		250 mm diritta pomello standard *250 mm straight standard knob* 250 mm gerade, Standard-Griff	**Q**	Ergonomica piegata 30° orizzontale 180 mm *Ergonomic bent 30°, horizontal 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, horizontal
F		300 mm diritta pomello standard *300 mm straight standard knob* 300 mm gerade, Standard-Griff	**R**	Ergonomica piegata 30° verticale 180 mm *Ergonomic bent 30°, vertical 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, vertikal
P	Parapolvere (disponibile solo per azionameno A - B) *Dust guard (available only for actuator A - B)* Abstreifer (nur für Betätigungen A - B)			

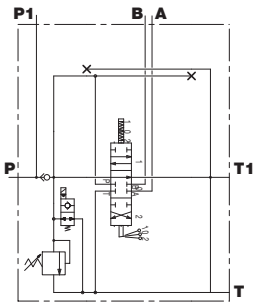
VALVOLA DI MESSA A SCARICO
DISCHARGE VALVE
UMLAUFVENTIL

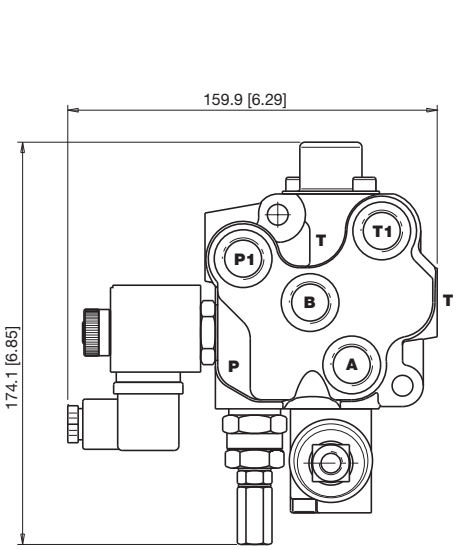
UNL

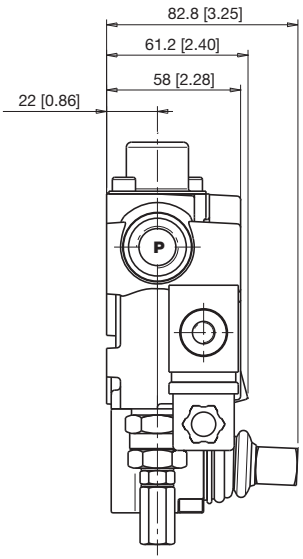
L'opzione UNL, valvola di messa a scarico, permette il collegamento diretto della linea P con la linea T.

The UNL option, discharge valve, allows the direct connection of the P line to the T line.

Die Option UNL, Umlaufventil erlaubt die direkte Entlastung des Pumpenstroms von P zu T.







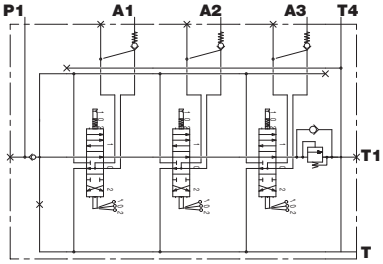
VALVOLA DI BLOCCO PILOTATA
PILOT CHECK VALVE
ENTSPERRBARES RÜCKSCHLAGVENTIL

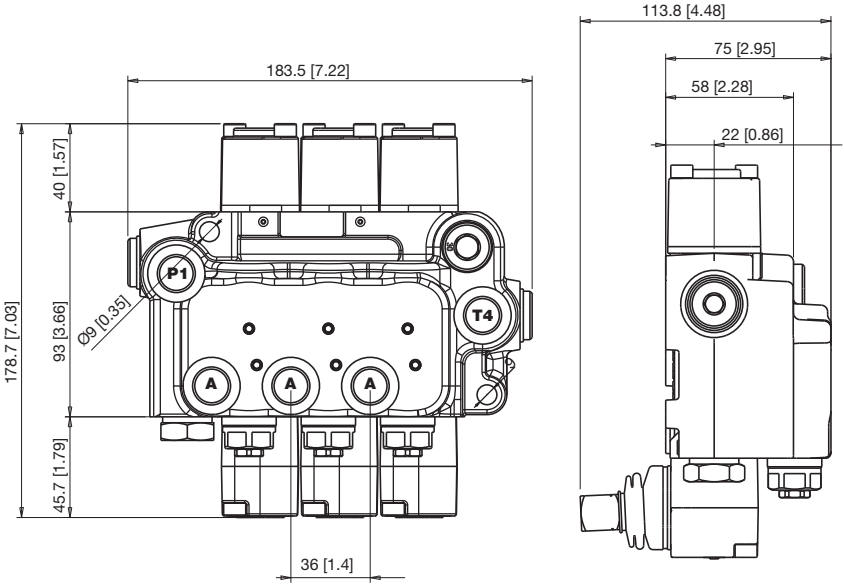
MLVB

L'opzione MLVB, disponibile solo su versione a tre sezioni, permette l'utilizzo sulle bocche A di valvole di blocco idropilotate.

The MLVB option, available only on the version with three sections, allows the use of hydro-controlled blocking valves on the ports A.

Die Option MLVB, nur als Monoblock mit drei Sektionen erhältlich, hat integrierte entsperrbare Rückschlagventile in den Anschlüssen A.





ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG

ML

ML	2	N	S	A	A	A	18	G	A	L	01	A

MODELLO
MODEL
MODELL

N° DI SEZIONI
N° OF SECTIONS
ANZAHL ELEMENTE

OPZIONI GENERALI
GENERAL OPTIONS
ALLGEMEINE OPTIONEM

N - nessuna
V - verniciatura nera
M - micro centralizzato
O - micro centralizzato verniciato

***N** - None*
***V** - Black paint*
***M** - Centralised microswitch*
***O** - Painted centralised microswitch*

N - ohne
V - schwarz lackiert
M - zentraler Mikroschalter
O - zentraler Mikroschalter, schwarz lackiert

TIPO DI ENTRATA
INLET TYPE
P-EINGANG

S - sinistra (standard)
D - destra

***S** - Left (standard)*
***D** - Right*

S - Links (Standard)
D - Rechts

FILETTATURA BOCCA P
THREAD PORT P
ANSCHLUSSGEWINDE P
A - B- T - C - I - W - P - E

Vedi tabella
See chart
Siehe Tabelle

FILETTATURA BOCCA P1
THREAD PORT P1
ANSCHLUSSGEWINDE P1
A - B- T - C - I - W - P - E

Vedi tabella *See chart*
Siehe Tabelle

OPZIONI SU BOCCA P-P1
OPTIONS ON PORT P-P1
OPTIONEN FÜR ANSCHLUSS P-P1

A - P aperto P1 aperto (standard)
B - P aperto P1 tappato
C - P tappato P1 aperto

***A** - P open P1 open (standard)*
***B** - P open P1 plugged*
***C** - P plugged P1 open*

A - P offen, P1 offen (Standard)
B - P offen, P1 verschlossen
C - P verschlossen, P1 offen

OPZIONI SPOLE
OPTIONS SPOOL
KOLBENVARIANTEN

E - spola standard
F - spola standard nichelata
A - spola 20-45 l/min
B - spola nichelata 20-45 l/min
C - spola 8-20 l/min
D - spola nichelata 8-20 l/min

***E**- standard spool*
***F**- standard nickel-plated spool*
***A**- spool 20-45l/min*
***B**- nickel-plated spool 20-45 l/min*
***C**- spool 8-20 l/min*
***D**- nickel-plated spool 8-20 l/min*

E - Kolben Standard
F - Kolben vernickelt Standard
A - Kolben, 20-45 l/min
B - Kolben vernickelt, 20-45 l/min
C - Kolben, 8-20 l/min
D - Kolben vernickelt, 8-20 l/min

CIRCUITO *CIRCUIT*
KOLBEN
Vedi tabella
See chart
Siehe Tabelle

AZIONAMENTI
ACTUATORS
BETÄTIGUNGSARTEN
Vedi tabella
See chart
Siehe Tabelle

FILETTATURA BOCCHE A-B
THREADS PORTS A-B
ANSCHLUSSGEWINDE A-B
A - T - C - I - W - E
Vedi tabella
See chart
Siehe Tabelle

TIPO DI PIOMBATURA
TYPE OF LEAD SEAL
VERSTELLSICHERUNG

G - grano	***G** - Dowel*	**G** - Gewindestift
C - cappuccio	***C** - Cap*	**C** - Plastikkappe
P - piombata	***P** - Lead sealed*	**P** - Plombiert
R - pred.piom.	***R** - Seal setting*	**R** - Bohrung für Plombe
N - nessuna	***N** - None*	**N** - ohne

TIPO VALVOLA DI MASSIMA PRESSIONE
MAXIMUM PRESSURE RELIEF VALVE TYPE
DRUCKBEGRENZUNGSVENTIL

00 - Tappo sostitutivo VMP
VMP replacement cap
Stopfen anstelle Von VMP

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

Ripetere per ogni sezione del distributore
Repeat for each section of the distributor
Für jede Sektion wiederholen

0A	00	00	C	A	N	A	A	A	A	A

POSIZIONATORE
SPOOL CONTROL
SCHIEBERSTELLUNGSSATZ
NN - Nessuno - *None* - Keiner
Altri vedi tabella
Others see chart
Andere siehe Tabelle

TIPO VALVOLA BOCCA A
VALVE TYPE PORT A
SEKUNDÄRVENTIL IN ANSCHLUSS A
00 - Nessuna - *None* - Ohne
TP - Lavorato tappato - *Processed and plugged* - Gebohrt und verschlossen

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

TIPO VALVOLA BOCCA B
VALVE TYPE PORT B
SEKUNDÄRVENTIL IN ANSCHLUSS B
00 - Nessuna - *None* - Ohne
TP - Lavorato tappato - *Processed and plugged* - Gebohrt und verschlossen

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

OPZIONI LEVA
OPTIONS LEVER
POSITION DER HANDHEBEL
N - Nessuna - *None*
Keiner
Altre vedi tabella
Others see chart
Andere siehe Tabelle

POSIZIONI LEVA	***LEVER POSITION***	**POSITION DER HANDHEBEL**
A - Diritta	***A*** - *Straight*	**A** - Gerade
B - Ruotata 90° verso il P	***B*** - *Rotated 90° towards il P*	**B** - 90° gedreht in Richtung P
C - Ruotata 180°	***C*** - *Rotated 180°*	**C** - 180° gedreht
D - Ruotata 90° verso il T	***D*** - *Rotated 90° towards T*	**D** - 90° gedreht in Richtung T
N - Nessuna	***N*** - *None*	**N** - Keine

OPZIONI LATO POSIZIONATORE
POSITIONER SIDE OPTIONS
STEUERSCHIEBERSEITE
N - Nessuno - *None* - Keiner
Altri vedi tabella *Others see chart*
Andere siehe Tabelle

OPZIONI A SCARICO
DISCHARGE OPTIONS
OPTIONEN FÜR TANKANSCHLUSS
A - pred. carry-over (standard)
B - con carry-over bocca T1
A - *carry-over setting (standard)*
B - *with carry-over port T1*
A - Vorbereitet für Druck-Weiterl. (Standard)
B - Mit Buchse für Druck-Weiterl.

OPZIONI SU BOCCA T-T1-T4
OPTIONS ON PORT T-T1-T4
OPTIONEN FÜR ANSCHLUSS T- T1-T4
A - TT1T4 aperti
B - TT1 aperti T4 non lavorato
C -TT1 aperti T4 tappato
D - TT4 aperto T1 tappato
E - T aperto T1 tappato T4 non lavorato
F - T aperto T1T4 tappati
G - T tappato T1T4 aperti
H - T tappato T1 aperto T4 tappato
I - T tappato T1 aperto T4 non lavorato
L - TT1 tappati T4 aperto
A - *TT1T4 open*
B - *TT1 open T4 not processed*
C -*TT1 open T4 plugged*
D - *TT4 open T1 plugged*
E - *T open T1 plugged T4 not processed*
F - *T open T1T4 plugged*
G - *T plugged T1T4 open*
H - *T plugged T1 open T4 plugged*
I - *T plugged T1 open T4 not processed*
L - *TT1 plugged T4 open*
A - TT1T4 offen
B - TT1 offen, T4 nicht gebohrt
C - TT1 offen, T4 verschlossen
D - TT4 offen, T1 verschlossen
E - T offen, T1 verschlossen, T4 nicht gebohrt
F - T offen, T1T4 verschlossen
G - T verschlossen, T1T4 offen
H - T verschlossen, T1 offen, T4 verschlossen
I - T verschlossen, T1 offen, T4 nicht gebohrt
L - TT1 verschlossen, T4 offen

FILETTATURA BOCCA T4
THREAD PORT T4
ANSCHLUSSGEWINDE T4
0
Standard *Standard* Standard
L - A - B - T - C - I - W - P - E
Vedi tabella *See chart* Siehe Tabelle

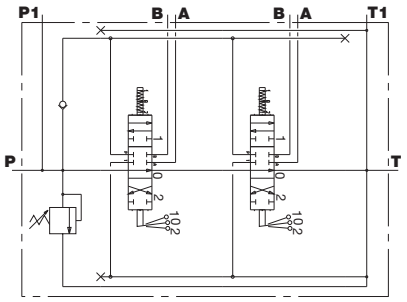
FILETTATURA BOCCA T1
THREAD PORT T1
ANSCHLUSSGEWINDE T1
A - B - T - C - I - W - P - E
Vedi tabella *See chart* Siehe Tabelle

FILETTATURA BOCCA T
THREAD PORT T
ANSCHLUSSGEWINDE T
A - B - T - C - I - W - P - E
Vedi tabella *See chart* Siehe Tabelle

DN

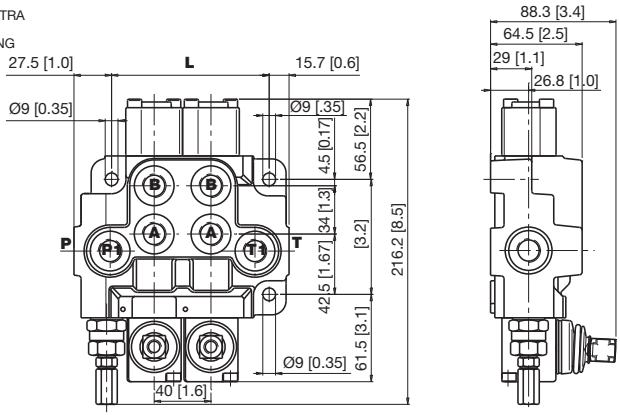
DISTRIBUTORI MONOBLOCCO
MONOBLOCK DIRECTIONAL VALVES
MONOBLOCKSTEUERGERÄTE

DATI TECNICI *TECHNICAL DATA* TECHNISCHE MERKMALE	
Portata nominale (max) *Nominal flow (max)* Nominaler Durchfluß (max)	**45 (55) l/min** **11.9 (14.5) gpm**
Pressione nominale *Nominal pressure* Nominaler Betriebsdruck	**300 (4350)** **bar (psi)**
Contropressione massima allo scarico *Maximum tank pressure* Maximaler Gegendruck Tankleitung	**50 (725)** **bar (psi)**
Massima trafila interna *Maximum internal leakage* Maximale interne Leckage	**8 cc/min** **(21 cSt - 100 bar)**
Temperatura di utilizzo *Temperature range* Betriebstemperatur	**-20°C +85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Viscosità olio *Oil viscosity* Ölviskosität	**Da 15 cSt a 90 cSt** ***From 15 cSt to 90 cSt*** **Von 15 cSt nach 90 cSt**
Fluido *Fluid* Öl	**Olio a base minerale** ***Mineral based oil*** **Mineral Öl**



STANDARD
STANDARD
STANDARD

STANDARD - ENTRATA SINISTRA
STANDARD – LEFT INLET
STANDARD - LINKER EINGANG



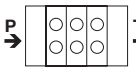
DIMENSIONI *SIZE* ABMESSUNGEN		
N° DI SEZIONI ***N° OF SECTIONS*** **ANZAHL ELEMENTE**	**L** **mm [inch]**	**MASSA kg (lb)** ***WEIGHT kg (lb)*** **GEWICHT kg (lb)**
DN1	71 [2.8]	3.0 (6.6)
DN2	111 [4.37]	5.0 (11.0)
DN3	151[5.94]	7.3 (16.0)
DN4	191 [7.52]	9.4 (20.7)
DN5	231 [9.1]	11.5 (25.3)
DN6	271 [10.67]	13.6 (30.0)

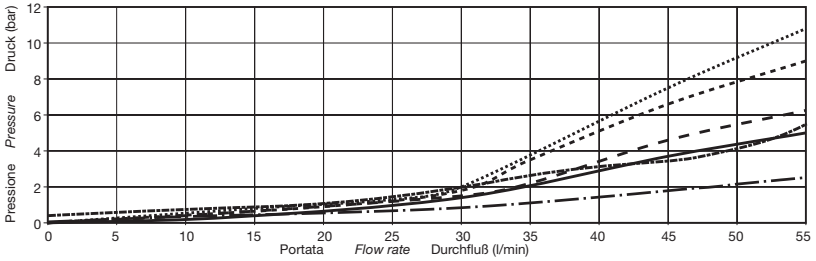
FILETTATURA *THREAD* GEWINDE		
CODICE ***MODEL*** **BEZEICHNUNG**	**TIPO** ***TYPE*** **GEWINDE**	**SERRAGGIO Nm** ***TORQUE Nm*** **ANZUGSMOMENT Nm**
0	NOT MACHINED	/
B	1/2" GAS ISO 1179	70
A	3/8"GAS ISO 1179	35
L	1/4"GAS ISO 1179	14
C	M18x1.5 ISO 9974	40
T	M18x1.5 ISO 6149	40
I	M16x1.5 ISO 9974	24
W	M16x1,5 ISO 6149	24
3	M14x1,5 ISO 9974	10
E	3/4 - 16 SAE ISO 11926	50
P	9/16 - 18 SAE ISO 11926	21

CURVE CARATTERISTICHE
FLOW CURVES
DUCHFLUSSKENNLINIEN

P-T

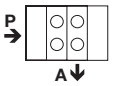
DN 1
DN 2
DN 3
DN 4
DN 5
DN 6

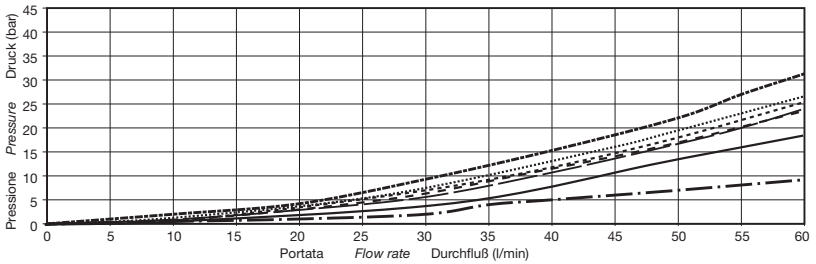




P-A

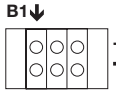
DN 1
DN 2 (VNR)
DN 2
DN 3
DN 4
DN 5
DN 6

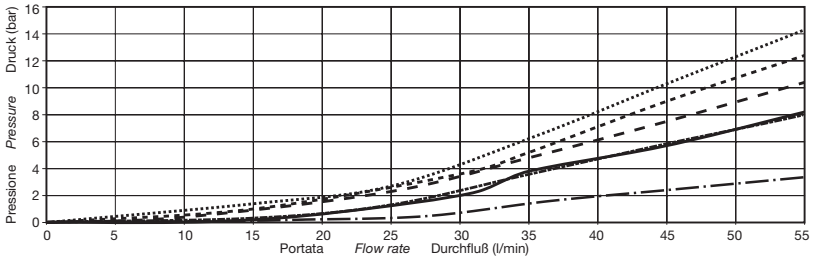




B-T

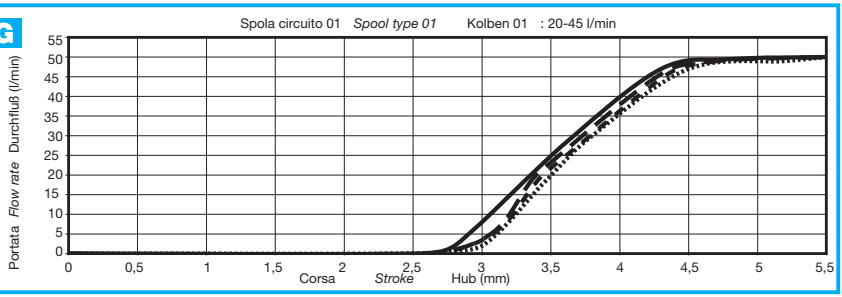
DN 1
DN 2
DN 3
DN 4
DN 5
DN 6





METERING

0 bar
50 bar
100 bar
150 bar

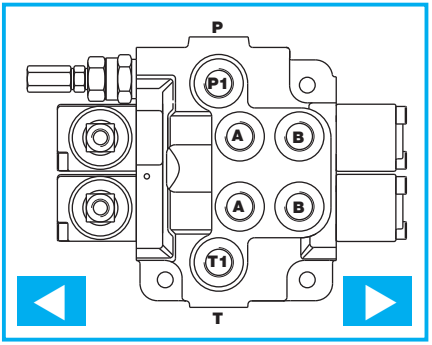


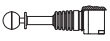
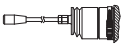
Parametri di prova: spola circuito 01
Testing parameters: 50°C - 21 cSt *spool type 01*
Prüfparameter: Kolben 01

AZIONAMENTI E OPZIONI
ACCESSORIES
ZUBEHÖR

DN

OPZIONI GENERALI *GENERAL OPTIONS* ALLGEMEINE OPTIONEM		
M		Micro centralizzato *Centralized microswitch* Zentraler Mikroschalter
O		Micro centraliz. verniciatura nera *Centralized microswitch black paint* Zentraler Mikroschalter, schwarz lackiert
A		Alimentatore *Power supply unit* Steuerölversorgung
B		Alimentatore verniciatura nera *Power supply unit black paint* Steuerölversorgung, schwarz lackiert
C		Alimentatore con tubi di collegamento *Power supply with connection tubes* Steuerölversorgung mit Verbindungsrohren
D		Alimentatore con tubi di collegamento + verniciatura *Power supply with connection tubes + paint* Steuerölversorgung mit Verbindungsrohren + Lackierung

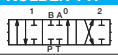
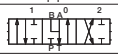
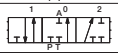
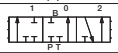
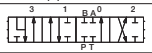
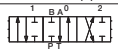
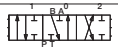
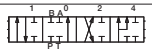
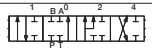


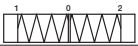
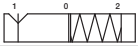
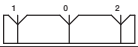
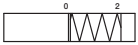
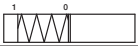
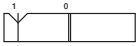
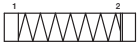
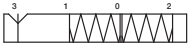
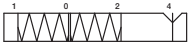
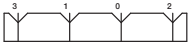
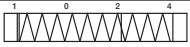
AZIONAMENTO *ACTUATOR* HEBELSEITE		
L		Manuale *Manual* Handhebel
Z		Manuale con limitatore di corsa *Manual with stroke limiter* Handhebel mit Hubbegrenzung
A		Senza portaleva appendice standard *Without lever holder standard appendix* Ohne Hebelhalter, Kolben mit Zunge
B		Senza portaleva senza appendice *Without lever holder without appendix* Ohne Hebelhalter, Kolben ohne Zunge
1		Senza portaleva appendice sfera *Without lever holder ball appendix* Ohne Hebelhalter, mit Kugel
T		Predisposizione cavo lato azionamento *Cable setting on actuator side* Anschluß für Bowdenzug
V		Intenzionale verticale *Intentional vertical* Sicherheitshebel, vertikal
O		Intenzionale orizzontale *Intentional horizontal* Sicherheitshebel, horizontal
M		Manipolatore *Manipulator* Joystick
H		Comando elettroidraulico doppio effetto *Dual effect electro-hydraulic control* Elektrohydraulisch, doppeltwirkend
S		Comando elettroidraulico singolo effetto bocca A *Single effect electro-hydraulic control port A* Elektrohydraulisch, Anschluß A
X		Comando elettroidraulico singolo effetto bocca B *Single effect electro-hydraulic control port B* Elektrohydraulisch, Anschluß B
U		Comando elettropneumatico doppio effetto *Dual effect electro-pneumatic control* Elektropneumatisch, doppeltwirkend
I		Comando elettropneumatico singolo effetto bocca A *Single effect electro-pneumatic control port A* Elektropneumatisch, Anschluß A
W		Comando elettropneumatico singolo effetto bocca B *Single effect electro-pneumatic control port B* Elektropneumatisch, Anschluß B
K		Comando idraulico *Hydraulic control* Hydraulisch ferngesteuert
P		Comando pneumatico *Pneumatic control* Pneumatisch ferngesteuert

OPZIONI LATO POSIZIONATORE *SPOOL CONTROL SIDE* STEUERSCHIEBERSEITE		
C		Limitatore di corsa *Stroke limiter* Hubbegrenzung
M		Doppio comando maschio *Male dual control* Kolbenansteuerung mit Außengewinde
F		Doppio comando femmina *Female dual control* Kolbenansteuerung mit Innengewinde
T		Predisposizione cavo lato posizionatore *Cable setup on positioner side* Anschluß für Bowdenzug
Y		Micro doppio effetto *Dual effect microswitch* Micro-Schalter, aktiv in A und B
P		Micro semplice effetto bocca A *Simple effect microswitch port A* Micro-Schalter, aktiv in A
O		Micro semplice effetto bocca B *Simple effect microswitch port B* Micro-Schalter, aktiv in B

DN

CIRCUITI E SCHEMI IDRAULICI
HYDRAULIC CIRCUITS AND SCHEMES
KOLBEN UND HYDRAULISCHE SCHEMATA

CIRCUITO *SPOOL TYPE* KOLBEN TYP		POS. 3	POS. 1	POS. 0	POS. 2	POS. 4
01			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
03			P → B A → T BP ⊣	A,B → T P ⊣ BP →	P → A B → T BP ⊣	
04			A → T P,B ⊣ BP →	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B,T ⊣ BP ⊣	
05			P → B A,T ⊣ BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P,A ⊣ B → T BP →	
07		B, A → T P ⊣ BP →	P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
08			P → B A → T BP ⊣	A → T P ⊣ B ⊣ BP →	P → A B → T BP ⊣	
10			P → B A → T BP ⊣	B → T A ⊣ P ⊣ BP →	P → A B → T BP ⊣	
17			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	P → A, B T ⊣ BP ⊣
23			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A, B T ⊣ BP ⊣	P → A B → T BP ⊣
70			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	B, A → T P ⊣ BP →

POSIZIONATORE *SPOOL CONTROL* SCHIEBERSTELLUNG		
0A		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0B		Posizione neutra in 0, detent in 1 *Neutral position in 0, detent in 1* Neutralstellung in 0, rastend in 1
0C		Posizione neutra in 0, detent in 2 *Neutral position in 0, detent in 2* Neutralstellung in 0, rastend in 2
0D		Detent in 0, 1, 2 *Detent in 0, 1, 2* Raststellung in 0, 1 und 2
0E		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0F		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0H		Detent in 2 *Detent in 2* Raststellung in 2
0L		Detent in 1 *Detent in 1* Raststellung in 1
0Q		Detent in 1, 2 *Detent in 1, 2* Raststellung in 1, 2
0R		Posizione neutra in 2 *Neutral position in 2* Neutralstellung in 2
0S		Posizione neutra in 1 *Neutral position in 1* Neutralstellung in 1
NS		Posizione neutra in 0, detent in 3 *Neutral position in 0, detent in 3* Neutralstellung in 0, rastend in 3
NT		Posizione neutra in 0, detent in 4 *Neutral position in 0, detent in 4* Neutralstellung in 0, rastend in 4
PS		Detent in 3,1,0,2 *Detent in 3,1,0,2* Raststellung in 3,1,0,2
TR		Posizione neutra in 1 *Neutral position in 1* Neutralstellung in 1

TIPO DI VALVOLA BOCCA A - B *VALVE TYPE PORT A - B* SEKUNDÄRVENTIL IN ANSCHLUSS A – B		
VL		Per la taratura delle valvole consultare le istruzioni per l'ordinazione *For the valve setting, consult the ordering instructions.* Ventileinstellung siehe Bestellanleitung.
VB		
TP		

OPZIONI LEVA *LEVER OPTIONS* HEBEL-OPTIONEN					
A		110 mm diritta pomello standard *110 mm straight standard knob* 110 mm gerade, Standard-Griff	L		Ergonomica diritta verticale 180 mm *Ergonomic straight vertical 180 mm* Ergonomischer Hebel, gerade, 180 mm, vertikal
B		130 mm diritta pomello standard *130 mm straight standard knob* 130 mm gerade, Standard-Griff	M		Ergonomica diritta orizzontale 180 mm *Ergonomic straight horizontal 180 mm* Ergonomischer Hebel, gerade, 180 mm, horizontal
C		180 mm diritta pomello standard *180 mm straight standard knob* 180 mm gerade, Standard-Griff	Y		Ergonomica piegata 15° orizzontale 180 mm *Ergonomic bent 15°, horizontal 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, horizontal
D		210 mm diritta pomello standard *210 mm straight standard knob* 210 mm gerade, Standard-Griff	O		Ergonomica piegata 15° verticale 180 mm *Ergonomic bent 15°, vertical 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, vertikal
E		250 mm diritta pomello standard *250 mm straight standard knob* 250 mm gerade, Standard-Griff	Q		Ergonomica piegata 30° orizzontale 180 mm *Ergonomic bent 30°, horizontal 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, horizontal
F		300 mm diritta pomello standard *300 mm straight standard knob* 300 mm gerade, Standard-Griff	R		Ergonomica piegata 30° verticale 180 mm *Ergonomic bent 30°, vertical 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, vertikal
P	Parapolvere (disponibile solo per azionameno A - B - 1) *Dust guard (available only for actuator A - B - 1)* Abstreifer (nur für Betätigungen A, B und 1)				

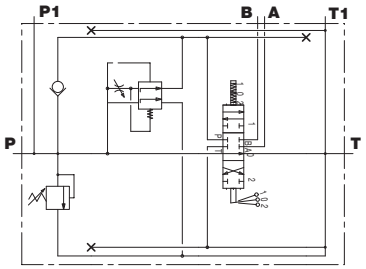
REGOLATORE DI FLUSSO
FLOW REGULATOR
STROMREGELVENTIL

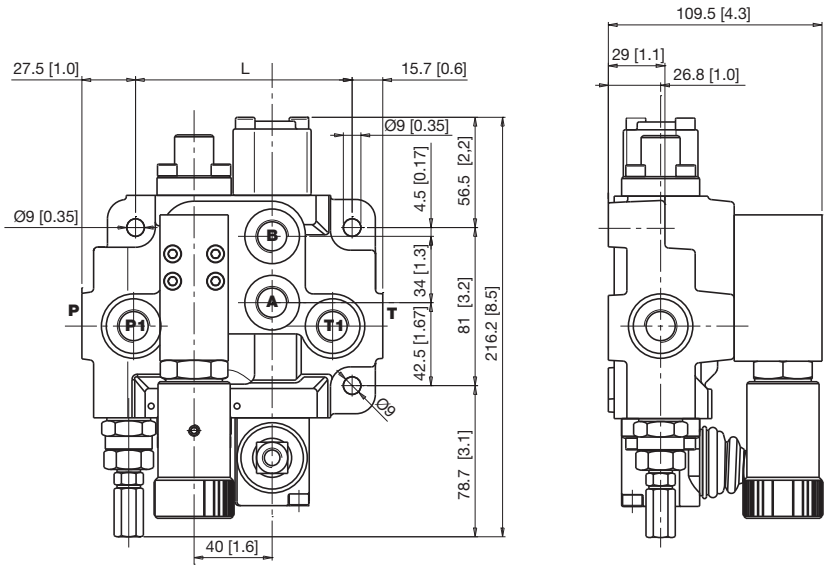
ERV

L'opzione ERV, disponibile in tutte le sezioni, permette la regolazione della portata nelle sezioni a valle indipendentemente dal carico applicato.
La regolazione della portata è ottenuta tramita una manopola, la portata eccedente è collegata a scarico

The ERV option, available in all sections, allows the adjustment of the flow rate in the sections downstream irrespective of the applied load.
The flow is adjusted by means of a knob; the excess flow is connected to the drain.

Die Spezialität ERV ist für alle Sektionen verfüGBar und erlaubt die Lastdruck-unabhängige Mengenregulierung.
Die Mengeneinstellung erfolgt mit einem Drehknopf, die Überschussmenge wird zum Tankkanal abgeleitet.





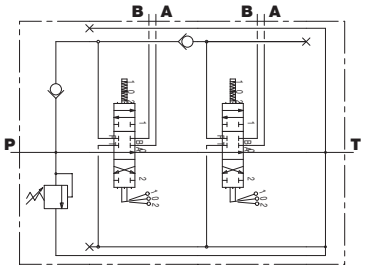
VALVOLA DI NON RITORNO INTERMEDIA
INTERMEDIATE OPTION A NON-RETURN VALVE
RÜCKSCHLAGVENTIL IM P-KANAL

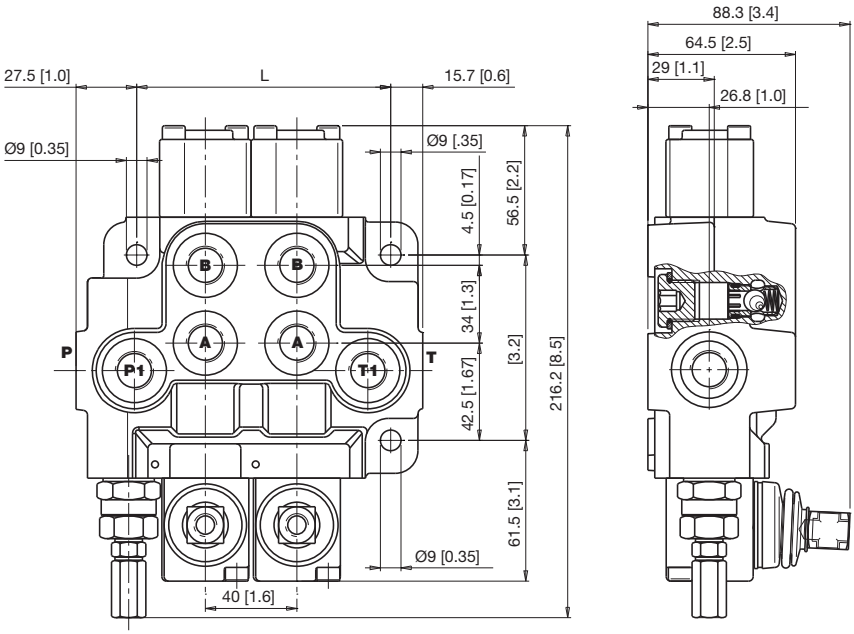
VNR

L'opzione VNR intermedia è una valvola di non ritorno sulla linea del P che evita il ritorno del flusso dalla sezione a valle a quella a monte.

The intermediate VNR option is a non-return valve on the P line which avoids the inversion of movement of the actuator in the section downstream.

Die Option VNR ist ein zusätzliches Rückschlagventil im P-Kanal, welches das Rückströmen des Öls von einem betätigten Verbraucher mit höherem Lastdruck zu einem anderen betätigten Verbraucher mit niedrigerem Lastdruck verhindert.





ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG

DN

DN	2	N	S	A	A	A	18	G	A	A	L	01

MODELLO
MODEL
MODELL

N° DI SEZIONI
N° OF SECTIONS
ANZAHL ELEMENTE

OPZIONI GENERALI
GENERAL OPTIONS
ALLGEMEINE OPTIONEM

N - nessuna
V - verniciatura nera
M - micro centralizzato
O - micro centralizzato verniciato
A - alimentatore
B - alimentatore-verniciatura nera
C - alimentatore tubi collegam.
D - alimentatore tubi collegam.-vernic. nera

***N** - None*
***V** - Black paint*
***M** - Centralised microswitch*
***O** - Painted centralised microswitch*
***A** - Power supply unit*
***B** - Power supply unit - black paint*
***C** - power supply connecting tubes*
***D** - power supply connecting tubes-black paint*

N - ohne
V - schwarz lackiert
M - zentraler Mikroschalter
O - zentraler Mikroschalter, schwarz lackiert
A - Steuerölversorgung
B - Steuerölversorgung, schwarz lackiert
C - Steuerölversorgung Verbindungsrohre
D - Steuerölversorgung Verbindungsrohre-schwarz lackiert

TIPO DI ENTRATA
INLET TYPE
P-EINGANG

S - sinistra (standard)
D - destra

***S** - Left (standard)*
***D** - Right*

S - Links (Standard)
D - Rechts

FILETTATURA BOCCA P
THREAD PORT P
ANSCHLUSSGEWINDE P

0 - L - A - B - 3 - T - C - I W - P - E

Vedi tabella
See chart
Siehe Tabelle

FILETTATURA BOCCA P1
THREAD PORT P1
ANSCHLUSSGEWINDE P1

0 - L - A - B - 3 - T - C - I - W P - E

Vedi tabella Siehe Tabelle — *See chart*

OPZIONI SU BOCCA P-P1
OPTIONS ON PORT P-P1
OPTIONEN FÜR ANSCHLUSS P-P1

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

***A** - P open P1 open (standard)*
***B** - P open P1 plugged*
***C** - P plugged P1 open*
***D** - P open, P1 not processed*
***E** - P1 open, P not processed*

A - P offen, P1 offen (Standard)
B - P offen, P1 verschlossen
C - P verschlossen, P1 offen
D - P offen, P1 nicht gebohrt
E - P1 offen, P nicht gebohrt

TIPO VALVOLA DI MASSIMA PRESSIONE
MAXIMUM PRESSURE RELIEF VALVE TYPE
DRUCKBEGRENZUNGSVENTIL

00 - Tappo sostitutivo VMP
VMP replacement cap
Stopfen anstelle Von VMP

06 - 60 bar
07 - 70 bar
08 - 80 bar
09 - 90 bar
10 - 100 bar
11 - 110 bar
12 - 120 bar
13 - 130 bar
14 - 140 bar
15 - 150 bar
16 - 160 bar
17 - 170 bar
18 - 180 bar
19 - 190 bar
20 - 200 bar
21 - 210 bar
22 - 220 bar
23 - 230 bar
24 - 240 bar
25 - 250 bar
26 - 260 bar
27 - 270 bar
28 - 280 bar
29 - 290 bar
30 - 300 bar

TIPO DI PIOMBATURA
TYPE OF LEAD SEAL
VERSTELLSICHERUNG

G - grano	***G** - Dowel*	**G** - Gewindestift
C - cappuccio	***C** - Cap*	**C** - Plastikkappe
P - piombata	***P** - Lead sealed*	**P** - Plombiert
R - pred.piom.	***R** - Seal setting*	**R** - Bohrung für Plombe
N - nessuna	***N** - None*	**N** - ohne

FILETTATURA BOCCHE A-B
THREAD PORTS A-B
ANSCHLUSSGEWINDE A-B

L - A - B - T - C - I - W - P - E

Vedi tabella
See chart
Siehe Tabelle

TIPO DI SEZIONE
SECTION TYPE
ART DER VENTILSEKTION

A - parallelo
V - ERV (reg. sovra-ubicato)

***A** - Parallel*
***V** - Erv (reg. located above)*

A - Parallel
V - ERV oben aufgebaut

AZIONAMENTI
ACTUATORS
BETÄTIGUNGSARTEN

N - Nessuno - *None*
Keiner

Altri vedi tabella
Others see chart
Andere siehe Tabelle

CIRCUITO
CIRCUIT
KOLBEN

NN - Nessuno
None - Keiner

Altri vedi tabella
Others see chart
Andere siehe Tabelle

Ripetere per ogni sezione del distributore
Repeat for each section of the distributor
Für jede Sektion wiederholen

A	0A	00	00	C	A	N	N	A	A	A	A

OPZIONI SPOLE
OPTIONS SPOOL
KOLBENVARIANTEN

A - Spola standard 25-50 l/min
B - Spola standard 10-25 l/min
C - Spola nichelata 25-50 l/min
D - Spola nichelata 10-50 l/min
N - Nessuna

***A** - Standard spool 25-50l/min*
***B** - Standard spool 10-25l/min*
***C** - Nickel-plated spool 25-50l/min*
***D** - Nickel-plated spool 10-50l/min*
***N** - None*

A - Kolben standard 25-50l/min
B - Kolben standard 10-25l/min
C - Kolben vernickelt 25-50l/min
D - spola nichelata 10-50l/min
N - Ohne Kolben

POSIZIONATORE
SPOOL CONTROL
SCHIEBERSTELLUNGSSATZ

NN - Nessuno - *None* - Keiner

Altri vedi tabella
Others see chart
Andere siehe Tabelle

TIPO VALVOLA BOCCA A
VALVE TYPE PORT A
SEKUNDÄRVENTIL IN ANSCHLUSS A

00 - Nessuna - *None* - Ohne
TP - Lavorato tappato - *Processed and plugged* Gebohrt und verschlossen
VB - Valvola di blocco pilotata - *Pilot check-valve* - Entsperrbares Rückschlagventil

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

TIPO VALVOLA BOCCA B
VALVE TYPE PORT B
SEKUNDÄRVENTIL IN ANSCHLUSS B

00 - Nessuna - *None* - Ohne
TP - Lavorato tappato - *Processed and plugged* Gebohrt und verschlossen
VB - Valvola di blocco pilotata - *Pilot check-valve* - Entsperrbares Rückschlagventil

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

OPZIONI LEVA
OPTIONS LEVER
POSITION DER HANDHEBEL

N - Nessuna - *None* Keiner

Altre vedi tabella
Others see chart
Andere siehe Tabelle

POSIZIONI LEVA ***LEVER POSITION*** **POSITION DER HANDHEBEL**

A - Diritta	***A** - Straight*	**A** - Gerade
B - Ruotata 90° verso il P	***B** - Rotated 90° towards il P*	**B** - 90° gedreht in Richtung P
C - Ruotata 180°	***C** - Rotated 180°*	**C** - 180° gedreht
D - Ruotata 90° verso il T	***D** - Rotated 90° towards T*	**D** - 90° gedreht in Richtung T
N - Nessuna	***N** - None*	**N** - Keine

OPZIONI A SCARICO
DISCHARGE OPTIONS
OPTIONEN FÜR TANKANSCHLUSS

A - pred. carry-over (standard)
B - con carry-over bocca T1

***A** - carry-over setting (standard)*
***B** - with carry-over port T1*

A - Vorbereitet für Druck-Weiterl. (Standard)
B - Mit Buchse für Druck-Weiterl.

OPZIONI SU BOCCA T-T1
OPTIONS ON PORT T-T1
OPTIONEN FÜR ANSCHLUSS T - T1

A - T aperto T1 aperto (standard)
B - T aperto T1 tappato
C - T tappato T1 aperto
D - T non lavorato, T1 aperto

***A** - T open T1 open (standard)*
***B** - T open T1 plugged*
***C** - T plugged T1 open*
***D** - T not processed, T1 open*

A - T offen, T1 offen (Standard)
B - T offen, T1 verschlossen
C - T1 offen, T verschlossen
D - T nicht gebohrt, T1 offen

FILETTATURA BOCCA T1
THREAD PORT T1
ANSCHLUSSGEWINDE T1
0 - L A - B - 3 - T - C - I - W - P - E
Vedi tabella *See chart* Siehe Tabelle

FILETTATURA BOCCA T
THREAD PORT T
ANSCHLUSSGEWINDE T
B-N-J-R
Vedi tabella *See chart* Siehe Tabelle

TENSIONE E CONNETTORE
VOLTAGE AND CONNECTOR
MAGNETSPANNUNG UND STECKER

A - 12 V DIN 43650
B - 24 V DIN 43650
C - 12 V CON FILI
D - 24 V CON FILI
N - Nessuna

***A** - 12 V DIN 43650*	**A** - 12 V DIN 43650
***B** - 24 V DIN 43650*	**B** - 24 V DIN 43650
***C** - 12 V WITH WIRES*	**C** - 12 V mit Kabel
***D** - 24 V WITH WIRES*	**D** - 24 V mit Kabel
***N** - None*	**N** - Ohne

OPZIONI LATO POSIZIONATORE
POSITIONER SIDE OPTIONS
STEUERSCHIEBERSEITE

N - Nessuno - *None* - Keiner

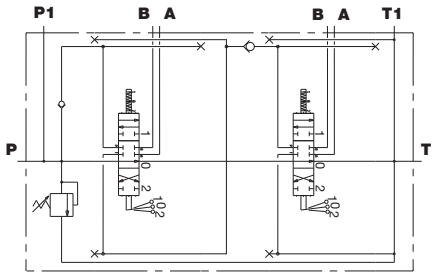
Altri vedi tabella *Others see chart*
Andere siehe Tabelle

DNS

DISTRIBUTORI MONOBLOCCO
MONOBLOCK DIRECTIONAL VALVES
MONOBLOCKSTEUERGERÄTE

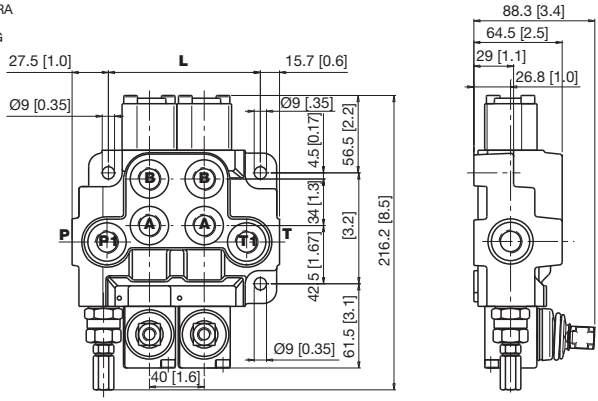
DATI TECNICI
TECHNICAL DATA
TECHNISCHE MERKMALE

Portata nominale (max) *Nominal flow (max)* Nominaler Durchfluß (max)	**45 (55) l/min** **11.9 (14.5) gpm**
Pressione nominale *Nominal pressure* Nominaler Betriebsdruck	**300 (4350)** **bar (psi)**
Contropressione massima allo scarico *Maximum tank pressure* Maximaler Gegendruck Tankleitung	**50 (725)** **bar (psi)**
Massima trafila interna *Maximum internal leakage* Maximale interne Leckage	**8 cc/min** **(21 cSt - 100 bar)**
Temperatura di utilizzo *Temperature range* Betriebstemperatur	**-20°C +85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Viscosità olio *Oil viscosity* Ölviskosität	**Da 15 cSt a 90 cSt** ***From 15 cSt to 90 cSt*** **Von 15 cSt nach 90 cSt**
Fluido *Fluid* Öl	**Olio a base minerale** ***Mineral based oil*** **Mineral Öl**



STANDARD
STANDARD
STANDARD

STANDARD - ENTRATA SINISTRA
STANDARD – LEFT INLET
STANDARD - LINKER EINGANG



DIMENSIONI
SIZE
ABMESSUNGEN

N° DI SEZIONI *N° OF SECTIONS* ANZAHL ELEMENTE	L mm [inch]	MASSA kg (lb) *WEIGHT kg (lb)* GEWICHT kg (lb)
DNS2	111 [4.37]	5.0 (11.0)
DNS3	151 [5.94]	7.3 (16.0)
DNS4	191 [7.52]	9.4 (20.7)
DNS5	231 [9.1]	11.5 (25.3)
DNS6	271 [10.67]	13.6 (30.0)

FILETTATURA
THREAD
GEWINDE

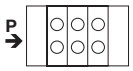
CODICE *MODEL* BEZEICHNUNG	TIPO *TYPE* GEWINDE	SERRAGGIO Nm *TORQUE Nm* ANZUGSMOMENT Nm
0	NOT MACHINED	/
B	1/2" GAS ISO 1179	70
A	3/8"GAS ISO 1179	35
L	1/4"GAS ISO 1179	14
C	M18x1.5 ISO 9974	40
T	M18x1.5 ISO 6149	40
I	M16x1.5 ISO 9974	24
W	M16x1,5 ISO 6149	24
3	M14x1,5 ISO 9974	10
E	3/4 - 16 SAE ISO 11926	50
P	9/16 - 18 SAE ISO 11926	21

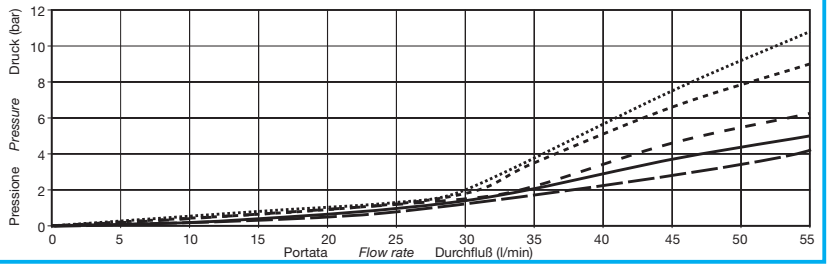
CURVE CARATTERISTICHE
FLOW CURVES
DUCHFLUSSKENNLINIEN

DNS

P-T

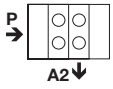
DNS 2
DNS 3
DNS 4
DNS 5
DNS 6

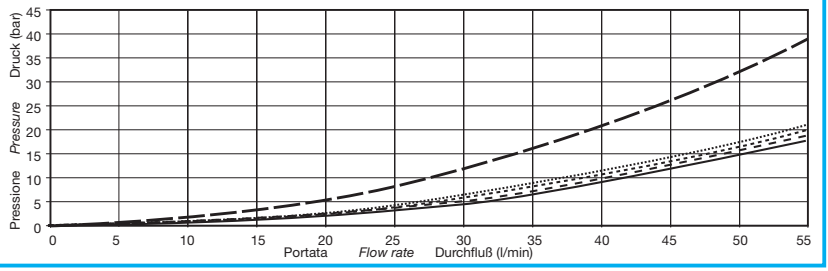




P-A

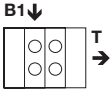
DNS 2
DNS 3
DNS 4
DNS 5
DNS 6

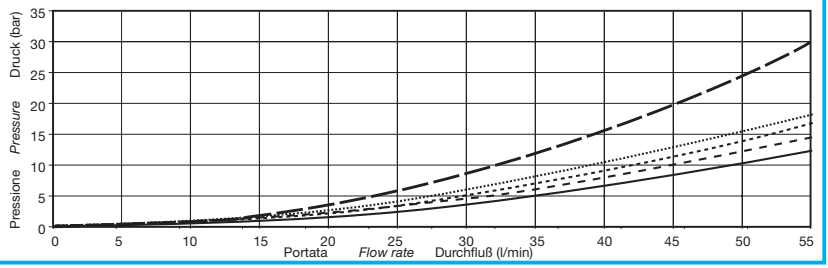




B-T

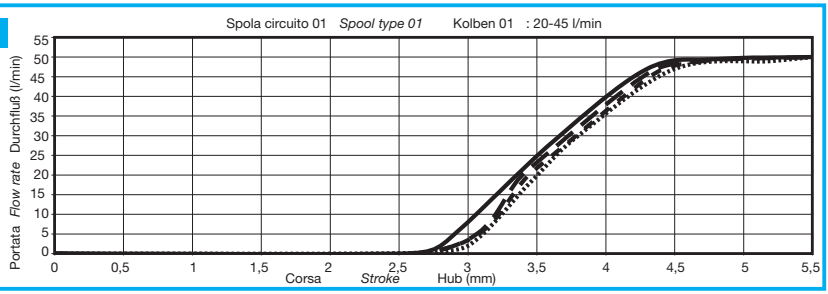
DNS 2
DNS 3
DNS 4
DNS 5
DNS 6





METERING

0 bar
50 bar
100 bar
150 bar

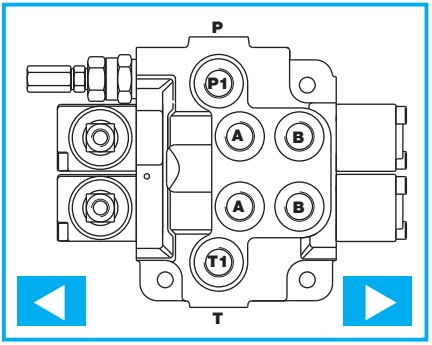


Parametri di prova: spola circuito 01
Testing parameters: 50°C - 21 cSt *spool type 01*
Prüfparameter: Kolben 01

AZIONAMENTI E OPZIONI
ACCESSORIES
ZUBEHÖR

DNS

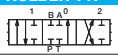
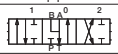
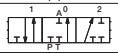
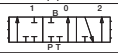
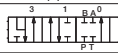
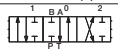
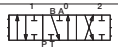
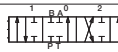
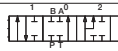
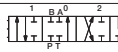
OPZIONI GENERALI *GENERAL OPTIONS* ALLGEMEINE OPTIONEM		
M		Micro centralizzato *Centralized microswitch* Zentraler Mikroschalter
O		Micro centraliz. verniciatura nera *Centralized microswitch black paint* Zentraler Mikroschalter, schwarz lackiert
A		Alimentatore *Power supply unit* Steuerölversorgung
B		Alimentatore verniciatura nera *Power supply unit black paint* Steuerölversorgung, schwarz lackiert
C		Alimentatore con tubi di collegamento *Power supply with connecting tubes* Steuerölversorgung mit Verbindungsrohren
D		Alimentatore con tubi di collegamento + verniciatura *Power supply with connecting tubes + paint* Steuerölversorgung mit Verbindungsrohren + Lackierung



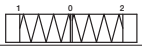
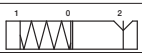
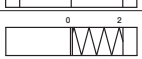
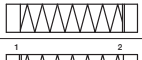
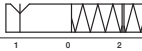
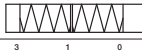
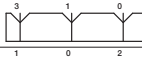
◀ AZIONAMENTO *ACTUATOR* HEBELSEITE		
L		Manuale *Manual* Handhebel
Z		Manuale con limitatore di corsa *Manual with stroke limiter* Handhebel mit Hubbegrenzung
A		Senza portaleva appendice standard *Without lever holder standard appendix* Ohne Hebelhalter, Kolben mit Zunge
B		Senza portaleva senza appendice *Without lever holder without appendix* Ohne Hebelhalter, Kolben ohne Zunge
1		Senza portaleva appendice sfera *Without lever holder ball appendix* Ohne Hebelhalter, mit Kugel
T		Predisposizione cavo lato azionamento *Cable setting on actuator side* Anschluß für Bowdenzug
V		Intenzionale verticale *Intentional vertical* Sicherheitshebel, vertikal
O		Intenzionale orizzontale *Intentional horizontal* Sicherheitshebel, horizontal
M		Manipolatore *Manipulator* Joystick
H		Comando elettroidraulico doppio effetto *Dual effect electro-hydraulic control* Elektrohydraulisch, doppeltwirkend
S		Comando elettroidraulico singolo effetto bocca A *Single effect electro-hydraulic control port A* Elektrohydraulisch, Anschluß A
X		Comando elettroidraulico singolo effetto bocca B *Single effect electro-hydraulic control port B* Elektrohydraulisch, Anschluß B
U		Comando elettropneumatico doppio effetto *Dual effect electro-pneumatic control* Elektropneumatisch, doppeltwirkend
I		Comando elettropneumatico singolo effetto bocca A *Single effect electro-pneumatic control port A* Elektropneumatisch, Anschluß A
W		Comando elettropneumatico singolo effetto bocca B *Single effect electro-pneumatic control port B* Elektropneumatisch, Anschluß B
K		Comando idraulico *Hydraulic control* Hydraulisch ferngesteuert
P		Comando pneumatico *Pneumatic control* Pneumatisch ferngesteuert

▶ OPZIONI LATO POSIZIONATORE *SPOOL CONTROL SIDE* STEUERSCHIEBERSEITE		
C		Limitatore di corsa *Stroke limiter* Hubbegrenzung
M		Doppio comando maschio *Male dual control* Kolbenansteuerung mit Außengewinde
F		Doppio comando femmina *Female dual control* Kolbenansteuerung mit Innengewinde
T		Predisposizione cavo lato posizionatore *Cable setup on positioner side* Anschluß für Bowdenzug
Y		Micro doppio effetto *Dual effect microswitch* Micro-Schalter, aktiv in A und B
P		Micro semplice effetto bocca A *Simple effect microswitch port A* Micro-Schalter, aktiv in A
O		Micro semplice effetto bocca B *Simple effect microswitch port B* Micro-Schalter, aktiv in B

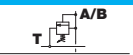
CIRCUITI E SCHEMI IDRAULICI
HYDRAULIC CIRCUITS AND SCHEMES
KOLBEN UND HYDRAULISCHE SCHEMATA

CIRCUITO *SPOOL TYPE* KOLBEN TYP		POS. 3	POS. 1	POS. 0	POS. 2	POS. 4
01			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
03			P → B A → T BP ⊣	A,B → T P ⊣ BP →	P → A B → T BP ⊣	
04			A → T P,B ⊣ BP →	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B,T ⊣ BP ⊣	
05			P → B A,T ⊣ BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P,A ⊣ B → T BP →	
07		B, A → T P ⊣ BP →	P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
08			P → B A → T BP ⊣	A → T P ⊣ B ⊣ BP →	P → A B → T BP ⊣	
10			P → B A → T BP ⊣	B → T A ⊣ P ⊣ BP →	P → A B → T BP ⊣	
17			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	P → A, B T ⊣ BP ⊣
23			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A, B T ⊣ BP ⊣	P → A B → T BP ⊣
70			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	B, A → T P ⊣ BP →

POSIZIONATORE *SPOOL CONTROL* SCHIEBERSTELLUNG

0A		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0B		Posizione neutra in 0, detent in 1 *Neutral position in 0, detent in 1* Neutralstellung in 0, rastend in 1
0C		Posizione neutra in 0, detent in 2 *Neutral position in 0, detent in 2* Neutralstellung in 0, rastend in 2
0D		Detent in 0, 1, 2 *Detent in 0, 1, 2* Raststellung in 0, 1 und 2
0E		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0F		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0H		Detent in 2 *Detent in 2* Raststellung in 2
0L		Detent in 1 *Detent in 1* Raststellung in 1
0Q		Detent in 1, 2 *Detent in 1, 2* Raststellung in 1, 2
0R		Posizione neutra in 2 *Neutral position in 2* Neutralstellung in 2
0S		Posizione neutra in 1 *Neutral position in 1* Neutralstellung in 1
NS		Posizione neutra in 0, detent in 3 *Neutral position in 0, detent in 3* Neutralstellung in 0, rastend in 3
NT		Posizione neutra in 0, detent in 4 *Neutral position in 0, detent in 4* Neutralstellung in 0, rastend in 4
PS		Detent in 3,1,0,2 *Detent in 3,1,0,2* Raststellung in 3,1,0,2
TR		Posizione neutra in 1 *Neutral position in 1* Neutralstellung in 1

TIPO DI VALVOLA BOCCA A - B
VALVE TYPE PORT A - B
SEKUNDÄRVENTIL IN ANSCHLUSS A – B

VL		Per la taratura delle valvole consultare le istruzioni per l'ordinazione *For the valve setting, consult the ordering instructions.* Ventileinstellung siehe Bestellanleitung.
VB		
TP		

OPZIONI LEVA
LEVER OPTIONS
HEBEL-OPTIONEN

A		110 mm diritta pomello standard *110 mm straight standard knob* 110 mm gerade, Standard-Griff
B		130 mm diritta pomello standard *130 mm straight standard knob* 130 mm gerade, Standard-Griff
C		180 mm diritta pomello standard *180 mm straight standard knob* 180 mm gerade, Standard-Griff
D		210 mm diritta pomello standard *210 mm straight standard knob* 210 mm gerade, Standard-Griff
E		250 mm diritta pomello standard *250 mm straight standard knob* 250 mm gerade, Standard-Griff
F		300 mm diritta pomello standard *300 mm straight standard knob* 300 mm gerade, Standard-Griff
L		Ergonomica diritta verticale 180 mm *Ergonomic straight vertical 180 mm* Ergonomischer Hebel, gerade, 180 mm, vertikal
M		Ergonomica diritta orizzontale 180 mm *Ergonomic straight horizontal 180 mm* Ergonomischer Hebel, gerade, 180 mm, horizontal
Y		Ergonomica piegata 15° orizzontale 180 mm *Ergonomic bent 15°, horizontal 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, horizontal
O		Ergonomica piegata 15° verticale 180 mm *Ergonomic bent 15°, vertical 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, vertikal
Q		Ergonomica piegata 30° orizzontale 180 mm *Ergonomic bent 30°, horizontal 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, horizontal
R		Ergonomica piegata 30° verticale 180 mm *Ergonomic bent 30°, vertical 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, vertikal
P	Parapolvere (disponibile solo per azionameno A - B - 1) *Dust guard (available only for actuator A - B - 1)* Abstreifer (nur für Betätigungen A, B und 1)	

ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG

DNS

DNS	2	N	S	A	A	A	18	G	A	L	01

MODELLO
MODEL
MODELL

N° DI SEZIONI
N° OF SECTIONS
ANZAHL ELEMENTE

OPZIONI GENERALI
GENERAL OPTIONS
ALLGEMEINE OPTIONEM

N - nessuna
V - verniciatura nera
M - micro centralizzato
O - micro centralizzato verniciato
A - alimentatore
B - alimentatore-verniciatura nera
C - alimentatore tubi collegam.
D - alimentatore tubi collegam.-vernic. nera

***N** - None*
***V** - Black paint*
***M** - Centralised microswitch*
***O** - Painted centralised microswitch*
***A** - Power supply unit*
***B** - Power supply unit - black paint*
***C** - power supply connecting tubes*
***D** - power supply connecting tubes-black paint*

N - ohne
V - schwarz lackiert
M - zentraler Mikroschalter
O - zentraler Mikroschalter, schwarz lackiert
A - Steuerölversorgung
B - Steuerölversorgung, schwarz lackiert
C - Steuerölversorgung Verbindungsrohre
D - Steuerölversorgung Verbindungsrohre-schwarz lackiert

TIPO DI ENTRATA
INLET TYPE
P-EINGANG

S - sinistra (standard)
D - destra

***S** - Left (standard)*
***D** - Right*

S - Links (Standard)
D - Rechts

FILETTATURA BOCCA P
THREAD PORT P
ANSCHLUSSGEWINDE P

0 - L - A - B - 3 - T - C - I W - P - E

Vedi tabella
See chart
Siehe Tabelle

FILETTATURA BOCCA P1
THREAD PORT P1
ANSCHLUSSGEWINDE P1

0 - L - A - B - 3 - T - C - I - W P - E

Vedi tabella *See chart*
Siehe Tabelle

OPZIONI SU BOCCA P-P1
OPTIONS ON PORT P-P1
OPTIONEN FÜR ANSCHLUSS P-P1

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

***A** - P open P1 open (standard)*
***B** - P open P1 plugged*
***C** - P plugged P1 open*
***D** - P open, P1 not processed*
***E** - P1 open, P not processed*

A - P offen, P1 offen (Standard)
B - P offen, P1 verschlossen
C - P verschlossen, P1 offen
D - P offen, P1 nicht gebohrt
E - P1 offen, P nicht gebohrt

TIPO VALVOLA DI MASSIMA PRESSIONE
MAXIMUM PRESSURE RELIEF VALVE TYPE
DRUCKBEGRENZUNGSVENTIL

00 - Tappo sostitutivo VMP
VMP replacement cap
Stopfen anstelle Von VMP

06 - 60 bar
07 - 70 bar
08 - 80 bar
09 - 90 bar
10 - 100 bar
11 - 110 bar
12 - 120 bar
13 - 130 bar
14 - 140 bar
15 - 150 bar
16 - 160 bar
17 - 170 bar
18 - 180 bar
19 - 190 bar
20 - 200 bar
21 - 210 bar
22 - 220 bar
23 - 230 bar
24 - 240 bar
25 - 250 bar
26 - 260 bar
27 - 270 bar
28 - 280 bar
29 - 290 bar
30 - 300 bar

TIPO DI PIOMBATURA
TYPE OF LEAD SEAL
VERSTELLSICHERUNG

G - grano
C - cappuccio
P - piombata
R - pred.piom.
N - nessuna

***G** - Dowel*
***C** - Cap*
***P** - Lead sealed*
***R** - Seal setting*
***N** - None*

G - Gewindestift
C - Plastikkappe
P - Plombiert
R - Bohrung für Plombe
N - ohne

FILETTATURA BOCCHE A-B
THREAD PORTS A-B
ANSCHLUSSGEWINDE A-B

L - A - B - T - C - I - W - P - E

Vedi tabella
See chart
Siehe Tabelle

AZIONAMENTI
ACTUATORS
BETÄTIGUNGSARTEN

N - Nessuno - *None*
Keiner

Altri vedi tabella
Others see chart
Andere siehe Tabelle

CIRCUITO
CIRCUIT
KOLBEN

NN - Nessuno
None - Keiner

Altri vedi tabella
Others see chart
Andere siehe Tabelle

Ripetere per ogni sezione del distributore
Repeat for each section of the distributor
Für jede Sektion wiederholen

A	0A	00	00	C	A	N	N	A	A	A	A

OPZIONI SPOLE
OPTIONS SPOOL
KOLBENVARIANTEN

A - Spola standard 25-50 l/min
B - Spola standard 10-25 l/min
C - Spola nichelata 25-50 l/min
D - Spola nichelata 10-50 l/min
N - Nessuna

***A** - Standard spool 25-50l/min*
***B** - Standard spool 10-25l/min*
***C** - Nickel-plated spool 25-50l/min*
***D** - Nickel-plated spool 10-50l/min*
***N** - None*

A - Kolben standard 25-50l/min
B - Kolben standard 10-25l/min
C - Kolben vernickelt 25-50l/min
D - Kolben vernickelt 10-50l/min
N - Ohne Kolben

POSIZIONATORE
SPOOL CONTROL
SCHIEBERSTELLUNGSSATZ

NN - Nessuno - *None* - Keiner

Altri vedi tabella
Others see chart
Andere siehe Tabelle

TIPO VALVOLA BOCCA A
VALVE TYPE PORT A
SEKUNDÄRVENTIL IN ANSCHLUSS A

00 - Nessuna - *None* - Ohne
TP - Lavorato tappato - *Processed and plugged* Gebohrt und verschlossen
VB - Valvola di blocco pilotata - *Pilot check-valve* - Entsperrbares Rückschlagventil

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

TIPO VALVOLA BOCCA B
VALVE TYPE PORT B
SEKUNDÄRVENTIL IN ANSCHLUSS B

00 - Nessuna - *None* - Ohne
TP - Lavorato tappato - *Processed and plugged* Gebohrt und verschlossen
VB - Valvola di blocco pilotata - *Pilot check-valve* - Entsperrbares Rückschlagventil

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

OPZIONI LEVA
OPTIONS LEVER
POSITION DER HANDHEBEL

N - Nessuna - *None* Keiner

Altre vedi tabella
Others see chart
Andere siehe Tabelle

POSIZIONI LEVA ***LEVER POSITION*** **POSITION DER HANDHEBEL**

A - Diritta	***A** - Straight*	**A** - Gerade
B - Ruotata 90° verso il P	***B** - Rotated 90° towards il P*	**B** - 90° gedreht in Richtung P
C - Ruotata 180°	***C** - Rotated 180°*	**C** - 180° gedreht
D - Ruotata 90° verso il T	***D** - Rotated 90° towards T*	**D** - 90° gedreht in Richtung T
N - Nessuna	***N** - None*	**N** - Keine

OPZIONI A SCARICO
DISCHARGE OPTIONS
OPTIONEN FÜR TANKANSCHLUSS

A - pred. carry-over (standard)
B - con carry-over bocca T1

***A** - carry-over setting (standard)*
***B** - with carry-over port T1*

A - Vorbereitet für Druck-Weiterl. (Standard)
B - Mit Buchse für Druck-Weiterl.

OPZIONI SU BOCCA T-T1
OPTIONS ON PORT T-T1
OPTIONEN FÜR ANSCHLUSS T - T1

A - T aperto T1 aperto (standard)
B - T aperto T1 tappato
C - T tappato T1 aperto
D - T non lavorato, T1 aperto

***A** - T open T1 open (standard)*
***B** - T open T1 plugged*
***C** - T plugged T1 open*
***D** - T not processed, T1 open*

A - T offen, T1 offen (Standard)
B - T offen, T1 verschlossen
C - T1 offen, T verschlossen
D - T nicht gebohrt, T1 offen

FILETTATURA BOCCA T1
THREAD PORT T1
ANSCHLUSSGEWINDE T1
0 - L A - B - 3 - T - C - I - W - P - E
Vedi tabella *See chart* Siehe Tabelle

FILETTATURA BOCCA T
THREAD PORT T
ANSCHLUSSGEWINDE T
B-N-J-R
Vedi tabella *See chart* Siehe Tabelle

TENSIONE E CONNETTORE
VOLTAGE AND CONNECTOR
MAGNETSPANNUNG UND STECKER

A - 12 V DIN 43650
B - 24 V DIN 43650
C - 12 V CON FILI
D - 24 V CON FILI
N - Nessuna

***A** - 12 V DIN 43650*	**A** - 12 V DIN 43650
***B** - 24 V DIN 43650*	**B** - 24 V DIN 43650
***C** - 12 V WITH WIRES*	**C** - 12 V mit Kabel
***D** - 24 V WITH WIRES*	**D** - 24 V mit Kabel
***N** - None*	**N** - Ohne

OPZIONI LATO POSIZIONATORE
POSITIONER SIDE OPTIONS
STEUERSCHIEBERSEITE

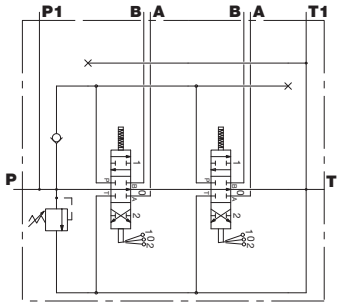
N - Nessuno - *None* - Keiner

Altri vedi tabella *Others see chart*
Andere siehe Tabelle

DN85

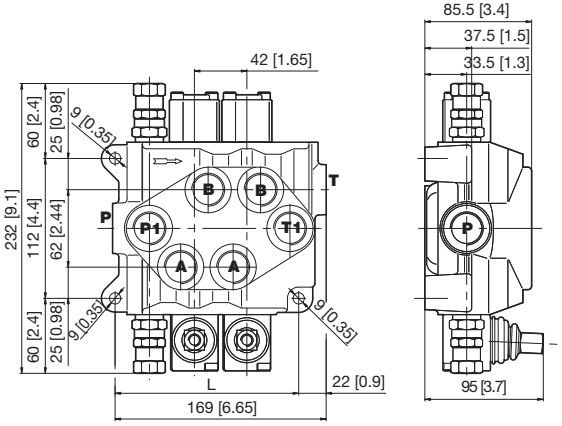
DISTRIBUTORI MONOBLOCCO
MONOBLOCK DIRECTIONAL VALVES
MONOBLOCKSTEUERGERÄTE

DATI TECNICI *TECHNICAL DATA* TECHNISCHE MERKMALE	
Portata nominale (max) *Nominal flow (max)* Nominaler Durchfluß (max)	**90 (100) l/min** **23.8 (26.45) gpm**
Pressione nominale *Nominal pressure* Nominaler Betriebsdruck	**250 (3625)** **bar (psi)**
Contropressione massima allo scarico *Maximum tank pressure* Maximaler Gegendruck Tankleitung	**50 (725)** **bar (psi)**
Massima trafila interna *Maximum internal leakage* Maximale interne Leckage	**8 cc/min** **(21 cSt - 100 bar)**
Temperatura di utilizzo *Temperature range* Betriebstemperatur	**-20°C +85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Viscosità olio *Oil viscosity* Ölviskosität	**Da 15 cSt a 90 cSt** ***From 15 cSt to 90 cSt*** **Von 15 cSt nach 90 cSt**
Fluido *Fluid* Öl	**Olio a base minerale** ***Mineral based oil*** **Mineral Öl**



STANDARD
STANDARD
STANDARD

STANDARD - ENTRATA SINISTRA
STANDARD – LEFT INLET
STANDARD - LINKER EINGANG



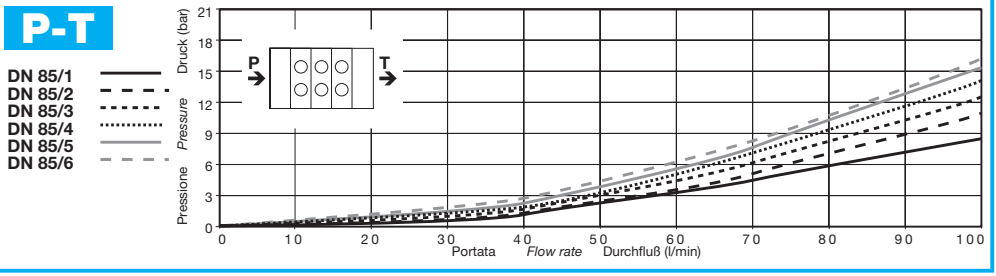
DIMENSIONI *SIZE* ABMESSUNGEN		
N° DI SEZIONI ***N° OF SECTIONS*** **ANZAHL ELEMENTE**	**L** **mm [inch]**	**MASSA kg (lb)** ***WEIGHT kg (lb)*** **GEWICHT kg (lb)**
DN851	105 [4.1]	7.5 (16.5)
DN852	147 [5.8]	10.5 (23.1)
DN853	189 [7.4]	13.5 (29.7)
DN854	231 [9.1]	16.5 (36.3)
DN855	273 [10.7]	19.5 (42.9)
DN856	315 [12.4]	22.5 (49.5)

FILETTATURA *THREAD* GEWINDE		
CODICE ***MODEL*** **BEZEICHNUNG**	**TIPO** ***TYPE*** **GEWINDE**	**SERRAGGIO Nm** ***TORQUE Nm*** **ANZUGSMOMENT Nm**
0	NOT MACHINED	/
F	3/4" GAS ISO 1179	140
B	1/2" GAS ISO 1179	70
L	1/4"GAS ISO 1179	14
N	M22x1,5 ISO 9974	78
J	M22x1,5 ISO 6149	78
R	7/8 - 14 SAE ISO 11926	77
V	1"1/16 - 12 SAE ISO 11926	125

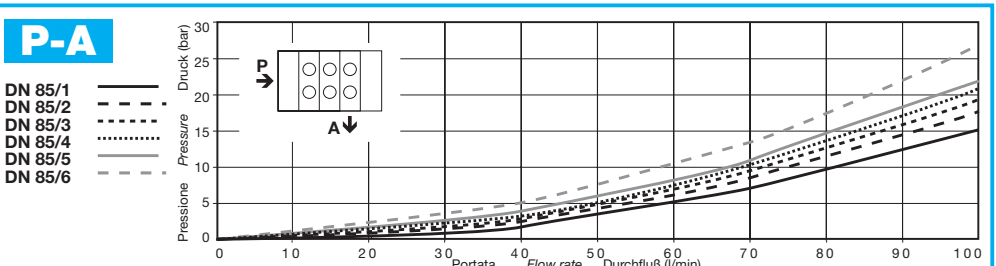
CURVE CARATTERISTICHE
FLOW CURVES
DUCHFLUSSKENNLINIEN

DN85

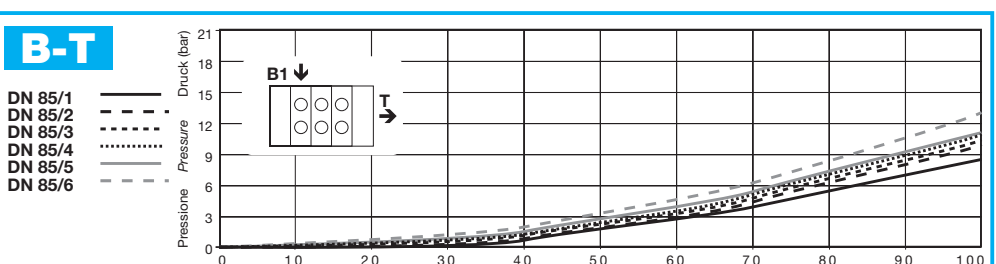
P-T



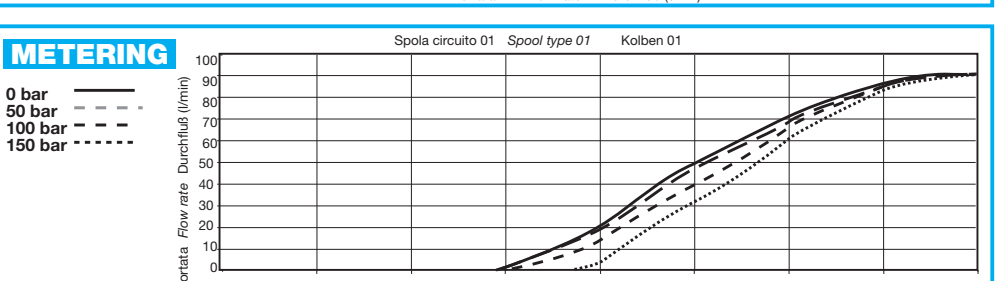
P-A



B-T



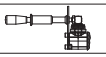
METERING

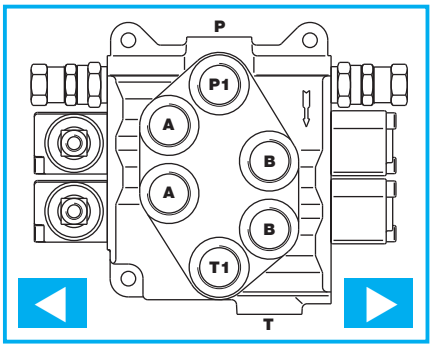


Parametri di prova: spola circuito 01
Testing parameters: 50°C - 21 cSt *spool type 01*
Prüfparameter: Kolben 01

AZIONAMENTI E OPZIONI
ACCESSORIES
ZUBEHÖR

DN85

		AZIONAMENTO *ACTUATOR* HEBELSEITE
L		Manuale *Manual* Handhebel
A		Senza portaleva appendice standard *Without lever holder standard appendix* Ohne Hebelhalter, Kolben mit Zunge
B		Senza portaleva senza appendice *Without lever holder without appendix* Ohne Hebelhalter, Kolben ohne Zunge
C		Senza portaleva appendice piatta *Without lever holder flat appendix* Mechanische Betätigung mit geradem Kolbenende
F		Senza portaleva appendice forcella *Without lever holder fork appendix* Ohne Handhebel mit Gabel
Z		Manuale con limitatore di corsa *Manual with stroke limiter* Handhebel mit Hubbegrenzung
T		Predisposizione cavo lato azionamento *Cable setting on actuator side* Anschluß für Bowdenzug
V		Intenzionale verticale *Intentional vertical* Sicherheitshebel, vertikal
O		Intenzionale orizzontale *Intentional horizontal* Sicherheitshebel, horizontal
M		Manipolatore *Manipulator* Joystick
H		Comando elettroidraulico doppio effetto *Dual effect electro-hydraulic control* Elektrohydraulisch, doppeltwirkend
S		Comando elettroidraulico singolo effetto bocca A *Single effect electro-hydraulic control port A* Elektrohydraulisch, Anschluß A
X		Comando elettroidraulico singolo effetto bocca B *Single effect electro-hydraulic control port B* Elektrohydraulisch, Anschluß B
U		Comando elettropneumatico doppio effetto *Dual effect electro-pneumatic control* Elektropneumatisch, doppeltwirkend
I		Comando elettropneumatico singolo effetto bocca A *Single effect electro-pneumatic control port A* Elektropneumatisch, Anschluß A
W		Comando elettropneumatico singolo effetto bocca B *Single effect electro-pneumatic control port B* Elektropneumatisch, Anschluß B
K		Comando idraulico 9/16"-18 UNF *Hydraulic control 9/16"-18 UNF* Hydraulisch ferngesteuert 9/16"-18 UNF
8		Comando idraulico *Hydraulic control* Hydraulisch ferngesteuert
P		Comando pneumatico *Pneumatic control* Pneumatisch ferngesteuert

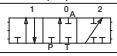
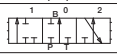
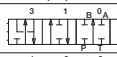
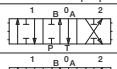
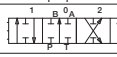


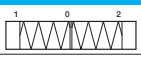
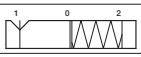
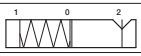
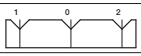
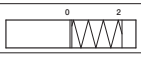
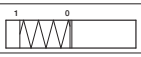
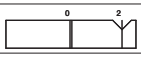
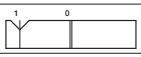
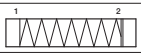
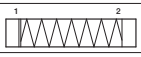
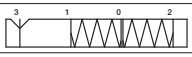
		OPZIONI GENERALI *GENERAL OPTIONS* ALLGEMEINE OPTIONEM
M		Micro centralizzato *Centralized microswitch* Zentraler Mikroschalter
O		Micro centraliz. verniciatura nera *Centralized microswitch black paint* Zentraler Mikroschalter, schwarz lackiert
A		Alimentatore *Power supply unit* Steuerölversorgung
B		Alimentatore verniciatura nera *Power supply unit black paint* Steuerölversorgung, schwarz lackiert
C		Alimentatore con tubi di collegamento *Power supply with connecting tubes* Steuerölversorgung mit Verbindungsrohren
D		Alimentatore con tubi di collegamento + verniciatura *Power supply with connecting tubes + paint* Steuerölversorgung mit Verbindungsrohren + Lackierung

		OPZIONI LATO POSIZIONATORE *SPOOL CONTROL SIDE* STEUERSCHIEBERSEITE
C		Limitatore di corsa *Stroke limiter* Hubbegrenzung
M		Doppio comando maschio *Male dual control* Kolbenansteuerung mit Außengewinde
F		Doppio comando femmina *Female dual control* Kolbenansteuerung mit Innengewinde
T		Predisposizione cavo lato posizionatore *Cable setup on positioner side* Anschluß für Bowdenzug
Y		Micro doppio effetto *Dual effect microswitch* Micro-Schalter, aktiv in A und B
P		Micro semplice effetto bocca A *Simple effect microswitch port A* Micro-Schalter, aktiv in A
O		Micro semplice effetto bocca B *Simple effect microswitch port B* Micro-Schalter, aktiv in B

CIRCUITI E SCHEMI IDRAULICI
HYDRAULIC CIRCUITS AND SCHEMES
KOLBEN UND HYDRAULISCHE SCHEMATA

DN85

CIRCUITO *SPOOL TYPE* KOLBEN TYP		POS. 3	POS. 1	POS. 0	POS. 2	POS. 4
01			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
03			P → B A → T BP ⊣	A,B → T P ⊣ BP →	P → A B → T BP ⊣	
04			A → T P,B ⊣ BP →	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B,T ⊣ BP ⊣	
05			P → B A,T ⊣ BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P,A ⊣ B → T BP →	
07		B,A → T P ⊣ BP →	P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
08			P → B A → T BP ⊣	A → T P ⊣ B ⊣ BP →	P → A B → T BP ⊣	
10			P → B A → T BP ⊣	B → T A ⊣ P ⊣ BP →	P → A B → T BP ⊣	
71			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	P → A, B T ⊣ BP ⊣

POSIZIONATORE *SPOOL CONTROL* SCHIEBERSTELLUNG		
0A		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0B		Posizione neutra in 0, detent in 1 *Neutral position in 0, detent in 1* Neutralstellung in 0, rastend in 1
0C		Posizione neutra in 0, detent in 2 *Neutral position in 0, detent in 2* Neutralstellung in 0, rastend in 2
0D		Detent in 0, 1, 2 *Detent in 0, 1, 2* Raststellung in 0, 1 und 2
0E		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0F		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0H		Detent in 2 *Detent in 2* Raststellung in 2
0L		Detent in 1 *Detent in 1* Raststellung in 1
0R		Posizione neutra in 2 *Neutral position in 2* Neutralstellung in 2
0S		Posizione neutra in 1 *Neutral position in 1* Neutralstellung in 1
NS		Posizione neutra in 0, detent in 3 *Neutral position in 0, detent in 3* Neutralstellung in 0, rastend in 3

TIPO DI VALVOLA BOCCA A - B *VALVE TYPE PORT A - B* SEKUNDARVENTIL IN ANSCHLUSS A – B		
LC		Per la taratura delle valvole consultare le istruzioni per l'ordinazione *For the valve setting, consult the ordering instructions.* Ventileinstellung siehe Bestellanleitung.
VL		
VC		

OPZIONI LEVA *LEVER OPTIONS* HEBEL-OPTIONEN				
A		110 mm diritta pomello standard *110 mm straight standard knob* 110 mm gerade, Standard-Griff	**L**	Ergonomica diritta verticale 180 mm *Ergonomic straight vertical 180 mm* Ergonomischer Hebel, gerade, 180 mm, vertikal
B		130 mm diritta pomello standard *130 mm straight standard knob* 130 mm gerade, Standard-Griff	**M**	Ergonomica diritta orizzontale 180 mm *Ergonomic straight horizontal 180 mm* Ergonomischer Hebel, gerade, 180 mm, horizontal
C		180 mm diritta pomello standard *180 mm straight standard knob* 180 mm gerade, Standard-Griff	**Y**	Ergonomica piegata 15° orizzontale 180 mm *Ergonomic bent 15°, horizontal 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, horizontal
D		210 mm diritta pomello standard *210 mm straight standard knob* 210 mm gerade, Standard-Griff	**O**	Ergonomica piegata 15° verticale 180 mm *Ergonomic bent 15°, vertical 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, vertikal
E		250 mm diritta pomello standard *250 mm straight standard knob* 250 mm gerade, Standard-Griff	**Q**	Ergonomica piegata 30° orizzontale 180 mm *Ergonomic bent 30°, horizontal 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, horizontal
F		300 mm diritta pomello standard *300 mm straight standard knob* 300 mm gerade, Standard-Griff	**R**	Ergonomica piegata 30° verticale 180 mm *Ergonomic bent 30°, vertical 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, vertikal
P	Parapolvere (disponibile solo per azionameno A - B) *Dust guard (available only for actuator A - B)* Abstreifer (nur für Betätigungen A - B)			

ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG

DN85

DN85	2	N	S	A	A	A	18	G	A	L	01	A

MODELLO
MODEL
MODELL

N° DI SEZIONI
N° OF SECTIONS
ANZAHL ELEMENTE

OPZIONI GENERALI
GENERAL OPTIONS
ALLGEMEINE OPTIONEM

N - nessuna
V - verniciatura nera
M - micro centralizzato
O - micro centralizzato verniciato
A - alimentatore
B - alimentatore-verniciatura nera
C - alimentatore tubi collegam.
D - alimentatore tubi collegam.-vernic. nera

N *- None*
V *- Black paint*
M *- Centralised microswitch*
O *- Painted centralised microswitch*
A *- Power supply unit*
B *- Power supply unit - black paint*
C *- power supply connecting tubes*
D *- power supply connecting tubes-black paint*

N - ohne
V - schwarz lackiert
M - zentraler Mikroschalter
O - zentraler Mikroschalter, schwarz lackiert
A - Steuerölversorgung
B - Steuerölversorgung, schwarz lackiert
C - Steuerölversorgung Verbindungsrohre
D - Steuerölversorgung Verbindungsrohre-schwarz lackiert

TIPO DI ENTRATA
INLET TYPE
P-EINGANG

S - sinistra (standard)
D - destra

S *- Left (standard)*
D *- Right*

S - Links (Standard)
D - Rechts

FILETTATURA BOCCA P
THREAD PORT P
ANSCHLUSSGEWINDE P
B - F - N - J - R - V

Vedi tabella
See chart
Siehe Tabelle

FILETTATURA BOCCA P1
THREAD PORT P1
ANSCHLUSSGEWINDE P1
L - B - F - N - J - V - 0

Vedi tabella *See chart*
Siehe Tabelle

OPZIONI SU BOCCA P-P1
OPTIONS ON PORT P-P1
OPTIONEN FÜR ANSCHLUSS P-P1

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

A *- P open P1 open (standard)*
B *- P open P1 plugged*
C *- P plugged P1 open*
D *- P open, P1 not processed*

A - P offen, P1 offen (Standard)
B - P offen, P1 verschlossen
C - P verschlossen, P1 offen
D - P offen, P1 nicht gebohrt

TIPO VALVOLA DI MASSIMA PRESSIONE
MAXIMUM PRESSURE RELIEF VALVE TYPE
DRUCKBEGRENZUNGSVENTIL

00 - Tappo sostitutivo VMP
VMP replacement cap
Stopfen anstelle Von VMP

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

OPZIONI SPOLE
OPTIONS SPOOL
KOLBENVARIANTEN

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

A *- Standard spool* 70-100 l/min
B *- Nickel-plated spool* 70-100 l/min
C *- Standard spool* 35-65 l/min
D *- Nickel-plated* 35-65 l/min

A - Kolben standard 70-100 l/min
B - Kolben vernickelt 70-100 l/min
C - Kolben standard 35-65 l/min
D - Kolben vernickelt 35-65 l/min

CIRCUITO
CIRCUIT
KOLBEN
Vedi tabella Siehe
See chart Tabelle

AZIONAMENTI
ACTUATORS
BETÄTIGUNGSARTEN

Vedi tabella
See chart Siehe Tabelle

FILETTATURA BOCCHE A-B
THREAD PORTS A-B
ANSCHLUSSGEWINDE A-B
B - F - N - J - R
Vedi tabella *See chart* Siehe Tabelle

TIPO DI PIOMBATURA
TYPE OF LEAD SEAL
VERSTELLSICHERUNG

G - grano	***G*** *- Dowel*	**G** - Gewindestift
C - cappuccio	***C*** *- Cap*	**C** - Plastikkappe
P - piombata	***P*** *- Lead sealed*	**P** - Plombiert
R - pred.piom.	***R*** *- Seal setting*	**R** - Bohrung für Plombe
N - nessuna	***N*** *- None*	**N** - ohne

Ripetere per ogni sezione del distributore
Repeat for each section of the distributor
Für jede Sektion wiederholen

0A	NN	00	NN	00	C	A	N	N	A	A	A	A

POSIZIONATORE
SPOOL CONTROL
SCHIEBERSTEL-LUNGSSATZ
NN - Nessuno
None - Keiner
Altri vedi tabella
Others see chart
Andere siehe Tabelle

TIPO VALVOLA
VALVE TYPE
SEKUNDÄRVENTIL
Vedi tabella
See chart
Siehe Tabelle

BOCCA A
PORT A
ANSCHLUSS A
00 - Nessuna - *None* - Ohne
TP - Lavorato tappato - Processed and plugged - Gebohrt und verschlossen
NN - Non lavorata - *not machined* nicht gebohrt

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

TIPO VALVOLA
VALVE TYPE
SEKUNDÄRVENTIL
Vedi tabella
See chart
Siehe Tabelle

BOCCA B
PORT B
ANSCHLUSS B
00 - Nessuna - *None* - Ohne
TP - Lavorato tappato - *Processed and plugged* Gebohrt und verschlossen
NN - Non lavorata - *not machined* - nicht gebohrt

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

OPZIONI LEVA
OPTIONS LEVER
POSITION DER HANDHEBEL
N - Nessuna - *None* Keiner
Altre vedi tabella
Others see chart
Andere siehe Tabelle

POSIZIONI LEVA ***LEVER POSITION*** **POSITION DER HANDHEBEL**

A - Diritta	***A*** - *Straight*	**A** - Gerade
B - Ruotata 90° verso il P	***B*** - *Rotated 90° towards il P*	**B** - 90° gedreht in Richtung P
C - Ruotata 180°	***C*** - *Rotated 180°*	**C** - 180° gedreht
D - Ruotata 90° verso il T	***D*** - *Rotated 90° towards T*	**D** - 90° gedreht in Richtung T
N - Nessuna	***N*** - *None*	**N** - Keine

OPZIONI A SCARICO
DISCHARGE OPTIONS
OPTIONEN FÜR TANKANSCHLUSS
A - pred. carry-over (standard)
B - con carry-over bocca T1
A - *carry-over setting (standard)*
B - *with carry-over port T1*
A - Vorbereitet für Druck-Weiterl. (Standard)
B - Mit Buchse für Druck-Weiterl.

OPZIONI SU BOCCA T-T1
OPTIONS ON PORT T-T1
OPTIONEN FÜR ANSCHLUSS T - T1
A - T aperto T1 aperto (standard)
B - T aperto T1 tappato
C - T tappato T1 aperto
A - *T open T1 open (standard)*
B - *T open T1 plugged*
C - *T plugged T1 open*
A - T offen, T1 offen (Standard)
B - T offen, T1 verschlossen
C - T1 offen, T verschlossen

FILETTATURA BOCCA T1
THREAD PORT T1
ANSCHLUSSGEWINDE T1
B - F - N - J - R - V
Vedi tabella *See chart* Siehe Tabelle

FILETTATURA BOCCA T
THREAD PORT T
ANSCHLUSSGEWINDE T
B- F - N - J - R - V
Vedi tabella *See chart* Siehe Tabelle

TENSIONE E CONNETTORE
VOLTAGE AND CONNECTOR
MAGNETSPANNUNG UND STECKER
A - 12 V DIN 43650
B - 24 V DIN 43650
C - 12 V CON FILI
D - 24 V CON FILI
N - Nessuna

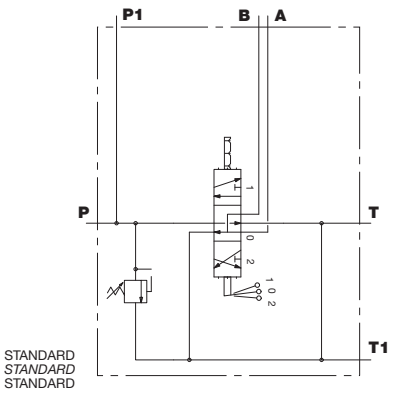
A - *12 V DIN 43650*	**A** - 12 V DIN 43650
B - *24 V DIN 43650*	**B** - 24 V DIN 43650
C - *12 V WITH WIRES*	**C** - 12 V mit Kabel
D - *24 V WITH WIRES*	**D** - 24 V mit Kabel
N - *None*	**N** - Ohne

OPZIONI LATO POSIZIONATORE
POSITIONER SIDE OPTIONS
STEUERSCHIEBERSEITE
N - Nessuno - *None* - Keiner
Altri vedi tabella *Others see chart*
Andere siehe Tabelle

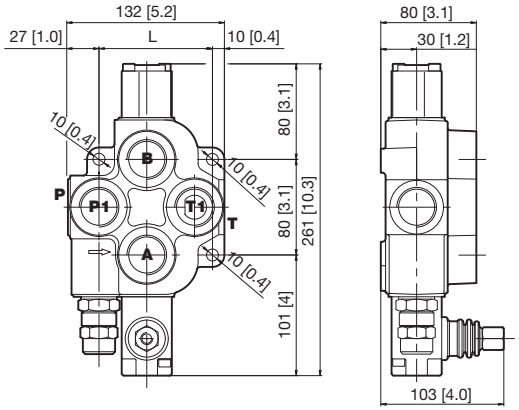
DL

DISTRIBUTORI MONOBLOCCO
MONOBLOCK DIRECTIONAL VALVES
MONOBLOCKSTEUERGERÄTE

DATI TECNICI *TECHNICAL DATA* TECHNISCHE MERKMALE	
Portata nominale (max) *Nominal flow (max)* Nominaler Durchfluß (max)	**140 (150) l/min** **37 (39.7) gpm**
Pressione nominale *Nominal pressure* Nominaler Betriebsdruck	**180 (2610)** **bar (psi)**
Contropressione massima allo scarico *Maximum tank pressure* Maximaler Gegendruck Tankleitung	**50 (725)** **bar (psi)**
Massima trafila interna *Maximum internal leakage* Maximale interne Leckage	**60 cc/min max** **(21 cSt - 100 bar)**
Temperatura di utilizzo *Temperature range* Betriebstemperatur	**-20°C +85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Viscosità olio *Oil viscosity* Ölviskosität	**Da 15 cSt a 90 cSt** ***From 15 cSt to 90 cSt*** **Von 15 cSt nach 90 cSt**
Fluido *Fluid* Öl	**Olio a base minerale** ***Mineral based oil*** **Mineral Öl**



STANDARD - ENTRATA SINISTRA
STANDARD – LEFT INLET
STANDARD - LINKER EINGANG

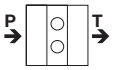


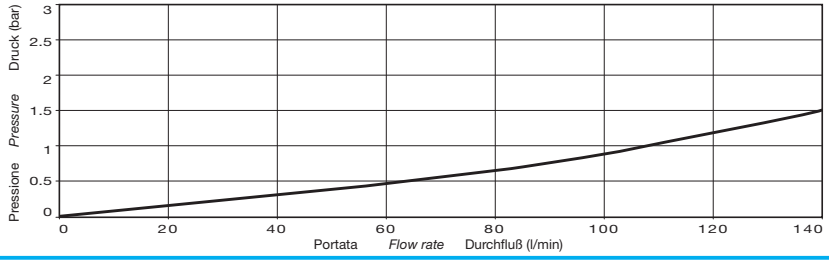
DIMENSIONI *SIZE* ABMESSUNGEN		
N° DI SEZIONI *N° OF SECTIONS* ANZAHL ELEMENTE	L mm [inch]	MASSA kg (lb) *WEIGHT kg (lb)* GEWICHT kg (lb)
DL	95 [3.7]	6.5 (14.3)

FILETTATURA *THREAD* GEWINDE		
CODICE *MODEL* BEZEICHNUNG	TIPO *TYPE* GEWINDE	SERRAGGIO Nm *TORQUE Nm* ANZUGSMOMENT Nm
0	NOT MACHINED	/
G	1"GAS ISO 1179	200
F	3/4" GAS ISO 1179	140
L	1/4"GAS ISO 1179	14
6	M33x2 ISO 9974	240
5	M27x2 ISO 9974	170
3	M14x1,5 ISO 9974	10
S	1"5/16-12 SAE ISO 11926	270
V	1"1/16 - 12 SAE ISO 11926	125
P	9/16 - 18 SAE ISO 11926	21

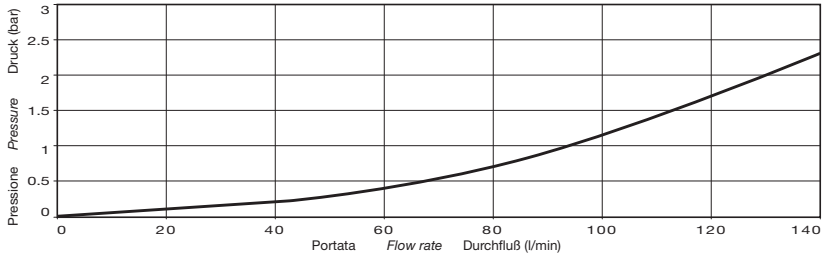
CURVE CARATTERISTICHE
FLOW CURVES
DUCHFLUSSKENNLINIEN

P-T

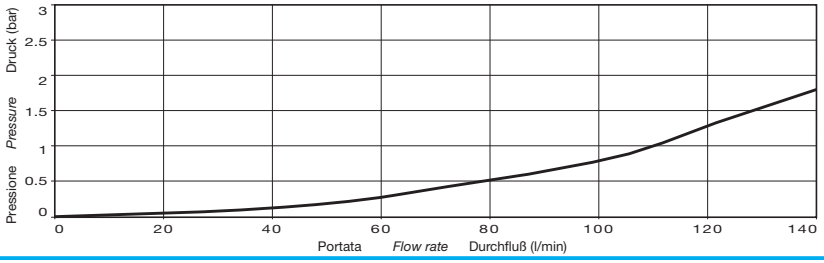




P-A

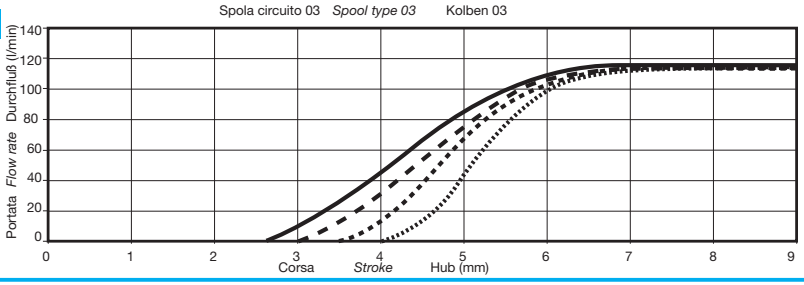


B-T



METERING

0 bar
50 bar
100 bar
150 bar

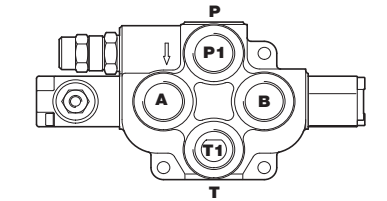


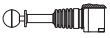
Parametri di prova: spola circuito 03
Testing parameters: 50°C - 21 cSt *spool type 03*
Prüfparameter: Kolben 03

AZIONAMENTI E OPZIONI
ACCESSORIES
ZUBEHÖR

DL

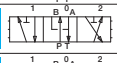
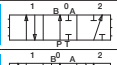
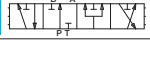
OPZIONI GENERALI *GENERAL OPTIONS* ALLGEMEINE OPTIONEM		
A		Alimentatore *Power supply unit* Steuerölversorgung
B		Alimentatore verniciatura nera *Power supply unit black paint* Steuerölversorgung, schwarz lackiert

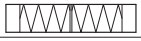
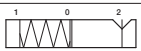
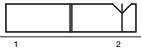
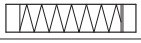
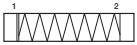
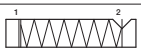


◀	AZIONAMENTO *ACTUATOR* HEBELSEITE	
L		Manuale *Manual* Handhebel
A		Senza portaleva appendice standard *Without lever holder standard appendix* Ohne Hebelhalter, Kolben mit Zunge
T		Predisposizione cavo lato azionamento *Without lever holder ball appendix* Anschluß für Bowdenzug
V		Intenzionale verticale *Intentional vertical* Sicherheitshebel, vertikal
O		Intenzionale orizzontale *Intentional horizontal* Sicherheitshebel, horizontal
H		Comando elettroidraulico doppio effetto *Dual effect electro-hydraulic control* Elektrohydraulisch, doppeltwirkend
S		Comando elettroidraulico singolo effetto bocca A *Single effect electro-hydraulic control port A* Elektrohydraulisch, Anschluß A
X		Comando elettroidraulico singolo effetto bocca B *Single effect electro-hydraulic control port B* Elektrohydraulisch, Anschluß B
P		Comando pneumatico *Pneumatic control* Pneumatisch ferngesteuert

DL

CIRCUITI E SCHEMI IDRAULICI
HYDRAULIC CIRCUITS AND SCHEMES
KOLBEN UND HYDRAULISCHE SCHEMATA

CIRCUITO *SPOOL TYPE* KOLBEN TYP		POS. 3	POS. 1	POS. 0	POS. 2	POS. 4
01			P→ B A→ T BP ⊣	A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
03			P→ B A→ T BP ⊣	A,B →T BP →	P → A B → T BP ⊣	
04			A → T B ⊣ BP→	T ⊣ A ⊣ B ⊣ BP→	P →A B ⊣ T ⊣ BP ⊣	
05			P →B A ⊣ T ⊣ BP ⊣	T ⊣ A ⊣B ⊣ BP→	A ⊣ B →T BP →	
23			P → B A → T BP ⊣	A ⊣B ⊣ BP→	P → A, B T ⊣ BP ⊣	P → A B → T BP ⊣

POSIZIONATORE *SPOOL CONTROL* SCHIEBERSTELLUNG		
0A		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0B		Posizione neutra in 0, detent in 1 *Neutral position in 0, detent in 1* Neutralstellung in 0, rastend in 1
0C		Posizione neutra in 0, detent in 2 *Neutral position in 0, detent in 2* Neutralstellung in 0, rastend in 2
0D		Detent in 0, 1, 2 *Detent in 0, 1, 2* Raststellung in 0, 1 und 2
0H		Detent in 2 *Detent in 2* Raststellung in 2
0R		Posizione neutra in 2 *Neutral position in 2* Neutralstellung in 2
0S		Posizione neutra in 1 *Neutral position in 1* Neutralstellung in 1
SQ		Posizione neutra in 1, detent in 2 *Neutral position in 1,detent in 2* Neutralstellung in 1, rastend in 2
TB		Posizione neutra in 0, detent in 1 *Neutral position in 0,detent in 1* Neutralstellung in 0, rastend in 1

OPZIONI LEVA *LEVER OPTIONS* HEBEL-OPTIONEN					
A		110 mm diritta pomello standard *110 mm straight standard knob* 110 mm gerade, Standard-Griff	L		Ergonomica diritta verticale 180 mm *Ergonomic straight vertical 180 mm* Ergonomischer Hebel, gerade, 180 mm, vertikal
B		130 mm diritta pomello standard *130 mm straight standard knob* 130 mm gerade, Standard-Griff	M		Ergonomica diritta orizzontale 180 mm *Ergonomic straight horizontal 180 mm* Ergonomischer Hebel, gerade, 180 mm, horizontal
C		180 mm diritta pomello standard *180 mm straight standard knob* 180 mm gerade, Standard-Griff	Y		Ergonomica piegata 15° orizzontale 180 mm *Ergonomic bent 15°, horizontal 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, horizontal
D		210 mm diritta pomello standard *210 mm straight standard knob* 210 mm gerade, Standard-Griff	O		Ergonomica piegata 15° verticale 180 mm *Ergonomic bent 15°, vertical 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, vertikal
E		250 mm diritta pomello standard *250 mm straight standard knob* 250 mm gerade, Standard-Griff	Q		Ergonomica piegata 30° orizzontale 180 mm *Ergonomic bent 30°, horizontal 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, horizontal
F		300 mm diritta pomello standard *300 mm straight standard knob* 300 mm gerade, Standard-Griff	R		Ergonomica piegata 30° verticale 180 mm *Ergonomic bent 30°, vertical 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, vertikal
P	Parapolvere (disponibile solo per azionameno A) *Dust guard (available only for actuator A)* Abstreifer (nur für Betätigungen A)				

ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG

DL	N	S	A	A	A	18	G	A	L

MODELLO
MODEL
MODELL

OPZIONI GENERALI
GENERAL OPTIONS
ALLGEMEINE OPTIONEM

N - nessuna
V - verniciatura nera
A - alimentatore
B - alimentatore-verniciatura nera

N - *None*
V - *Black paint*
A - *Power supply unit*
B - *Power supply unit - black paint*

N - ohne
V - schwarz lackiert
A - Steuerölversorgung
B - Steuerölversorgung, schwarz lackiert

TIPO DI ENTRATA
INLET TYPE
P-EINGANG

S - sinistra (standard)
D - destra

S - *Left (standard)*
D - *Right*

S - Links (Standard)
D - Rechts

FILETTATURA BOCCA P
THREAD PORT P
ANSCHLUSSGEWINDE P
F - G - 5 - 6 - V - S

Vedi tabella
See chart
Siehe Tabelle

FILETTATURA BOCCA P1
THREAD PORT P1
ANSCHLUSSGEWINDE P1
L - F - G - 3 - 5 - 6 - P -V - S 0

Vedi tabella *See chart*
Siehe Tabelle

OPZIONI SU BOCCA P-P1
OPTIONS ON PORT P-P1
OPTIONEN FÜR ANSCHLUSS P-P1

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

A - *P open P1 open (standard)*
B - *P open P1 plugged*
C - *P plugged P1 open*
D - *P open, P1 not processed*

A - P offen, P1 offen (Standard)
B - P offen, P1 verschlossen
C - P verschlossen, P1 offen
D - P offen, P1 nicht gebohrt

TIPO VALVOLA DI MASSIMA PRESSIONE
MAXIMUM PRESSURE RELIEF VALVE TYPE
DRUCKBEGRENZUNGSVENTIL

00 - Tappo sostitutivo VMP
VMP replacement cap
Stopfen anstelle Von VMP

06 - 60 bar
07 - 70 bar
08 - 80 bar
09 - 90 bar
10 - 100 bar
11 - 110 bar
12 - 120 bar
13 - 130 bar
14 - 140 bar
15 - 150 bar
16 - 160 bar
17 - 170 bar
18 - 180 bar

TIPO DI PIOMBATURA
TYPE OF LEAD SEAL
VERSTELLSICHERUNG

G - grano
C - cappuccio
P - piombata
R - pred.piom.
N - nessuna

G - *Dowel*
C - *Cap*
P - *Lead sealed*
R - *Seal setting*
N - *None*

G - Gewindestift
C - Plastikkappe
P - Plombiert
R - Bohrung für Plombe
N - ohne

AZIONAMENTI
ACTUATORS
BETÄTIGUNGSARTEN

Vedi tabella
See chart Siehe Tabelle

FILETTATURA BOCCHE A-B
THREAD PORTS A-B
ANSCHLUSSGEWINDE A-B
F - G - 5 - 6 - V - S
Vedi tabella
See chart
Siehe Tabelle

01	A	0A	C	A	N	A	A	A	A

CIRCUITO
CIRCUIT
KOLBEN
Vedi tabella
See chart
Siehe Tabelle

OPZIONI SPOLE
OPTIONS SPOOL
KOLBENVARIANTEN
A - Spola standard
B - Spola nichelata

A *- Standard*
B *- Nickel-plated*

A - Kolben standard
B - Nickel-plated

POSIZIONATORE
SPOOL CONTROL
SCHIEBERSTELLUNGSSATZ
NN - Nessuno - *None* - Keiner

Altri vedi tabella
Others see chart
Andere siehe Tabelle

OPZIONI LEVA
OPTIONS LEVER
POSITION DER HANDHEBEL
N - Nessuna - *None*
Keiner
Altre vedi tabella
Others see chart
Andere siehe Tabelle

POSIZIONI LEVA	*LEVER POSITION*	POSITION DER HANDHEBEL
A - Diritta	***A*** *- Straight*	**A** - Gerade
B - Ruotata 90° verso il P	***B*** *- Rotated 90° towards il P*	**B** - 90° gedreht in Richtung P
C - Ruotata 180°	***C*** *- Rotated 180°*	**C** - 180° gedreht
D - Ruotata 90° verso il T	***D*** *- Rotated 90° towards T*	**D** - 90° gedreht in Richtung T
N - Nessuna	***N*** *- None*	**N** - Keine

OPZIONI A SCARICO
DISCHARGE OPTIONS
OPTIONEN FÜR TANKANSCHLUSS
A - pred. carry-over (standard)
B - con carry-over bocca T1

A *- carry-over setting (standard)*
B *- with carry-over port T1*

A - Vorbereitet für Druck-Weiterl. (Standard)
B - Mit Buchse für Druck-Weiterl.

OPZIONI SU BOCCA T-T1
OPTIONS ON PORT T-T1
OPTIONEN FÜR ANSCHLUSS T - T1
A - T aperto T1 aperto (standard)
B - T aperto T1 tappato
C - T tappato T1 aperto
D - T aperto, T1 non lavorato

A *- T open T1 open (standard)*
B *- T open T1 plugged*
C *- T plugged T1 open*
D *- T open, T1 not processed*

A - T offen, T1 offen (Standard)
B - T offen, T1 verschlossen
C - T verschlossen, T1 offen
D - T offen, T1 nicht gebohrt

FILETTATURA BOCCA T1
THREAD PORT T1
ANSCHLUSSGEWINDE T1
L - F - G - 3 - 5 - 6 - P - V - S - 0
Vedi tabella *See chart* Siehe Tabelle

FILETTATURA BOCCA T
THREAD PORT T
ANSCHLUSSGEWINDE T
F - G - 5 - 6 - V - S
Vedi tabella *See chart* Siehe Tabelle

TENSIONE E CONNETTORE
VOLTAGE AND CONNECTOR
MAGNETSPANNUNG UND STECKER
A - 12 V DIN 43650
B - 24 V DIN 43650
C - 12 V CON FILI
D - 24 V CON FILI
N - Nessuna

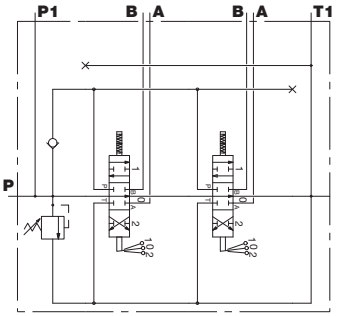
A *- 12 V DIN 43650*	**A** - 12 V DIN 43650
B *- 24 V DIN 43650*	**B** - 24 V DIN 43650
C *- 12 V WITH WIRES*	**C** - 12 V mit Kabel
D *- 24 V WITH WIRES*	**D** - 24 V mit Kabel
N *- None*	**N** - Ohne

DN120

DISTRIBUTORI MONOBLOCCO
MONOBLOCK DIRECTIONAL VALVES
MONOBLOCKSTEUERGERÄTE

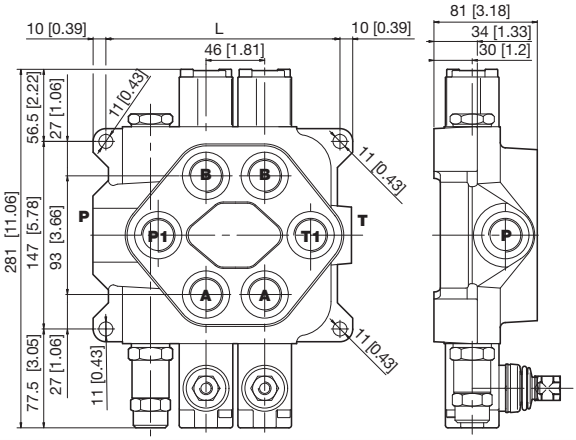
DATI TECNICI
TECHNICAL DATA
TECHNISCHE MERKMALE

Portata nominale (max) *Nominal flow (max)* Nominaler Durchfluß (max)	**120 (130) l/min** **31.74 (34.39) gpm**
Pressione nominale *Nominal pressure* Nominaler Betriebsdruck	**250 (3625)** **bar (psi)**
Contropressione massima allo scarico *Maximum tank pressure* Maximaler Gegendruck Tankleitung	**50 (725)** **bar (psi)**
Massima trafila interna *Maximum internal leakage* Maximale interne Leckage	**60 cc/min max** **(21 cSt - 100 bar)**
Temperatura di utilizzo *Temperature range* Betriebstemperatur	**-20°C +85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Viscosità olio *Oil viscosity* Ölviskosität	**Da 15 cSt a 90 cSt** ***From 15 cSt to 90 cSt*** **Von 15 cSt nach 90 cSt**
Fluido *Fluid* Öl	**Olio a base minerale** ***Mineral based oil*** **Mineral Öl**



STANDARD
STANDARD
STANDARD

STANDARD - ENTRATA SINISTRA
STANDARD – LEFT INLET
STANDARD - LINKER EINGANG



DIMENSIONI
SIZE
ABMESSUNGEN

N° DI SEZIONI *N° OF SECTIONS* ANZAHL ELEMENTE	L mm [inch]	MASSA kg (lb) *WEIGHT kg (lb)* GEWICHT kg (lb)
DN1202	183.5 [7.22]	13.9 (30.58)
DN1203	229.5 [9.03]	17.9 (39.38)
DN1204	275.5 [10.04]	21.9 (48.18)

FILETTATURA
THREAD
GEWINDE

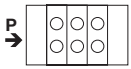
CODICE *MODEL* BEZEICHNUNG	TIPO *TYPE* GEWINDE	SERRAGGIO Nm *TORQUE Nm* ANZUGSMOMENT Nm
0	NOT MACHINED	/
G	1"GAS ISO 1179	200
F	3/4" GAS ISO 1179	140
L	1/4"GAS ISO 1179	14
6	M33x2 ISO 9974	240
5	M27x2 ISO 9974	170
3	M14x1,5 ISO 9974	10
S	1"5/16-12 SAE ISO 11926	270
V	1"1/16 -12 SAE ISO 11926	125
P	9/16 - 18 SAE ISO 11926	21

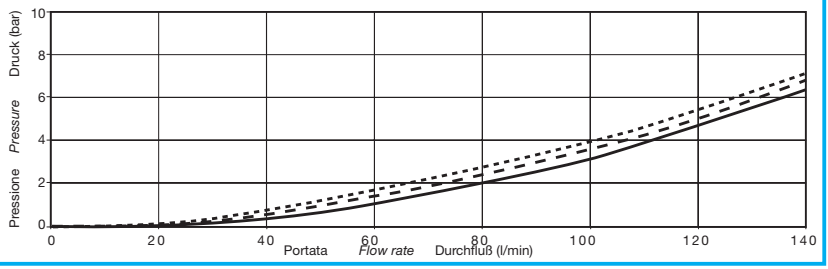
CURVE CARATTERISTICHE
FLOW CURVES
DUCHFLUSSKENNLINIEN

DN120

P-T

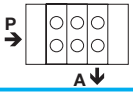
DN120/2
DN120/3
DN120/4

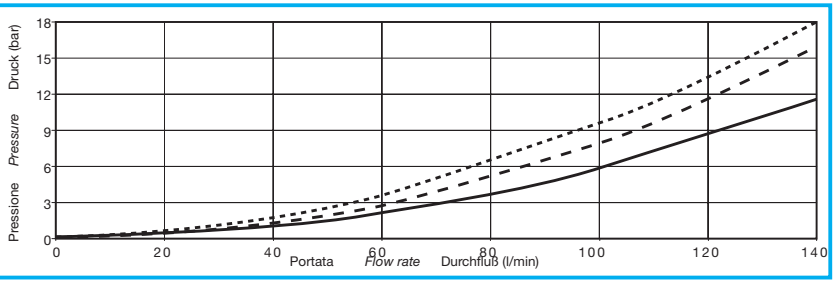




P-A

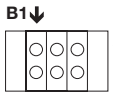
DN120/2
DN120/3
DN120/4

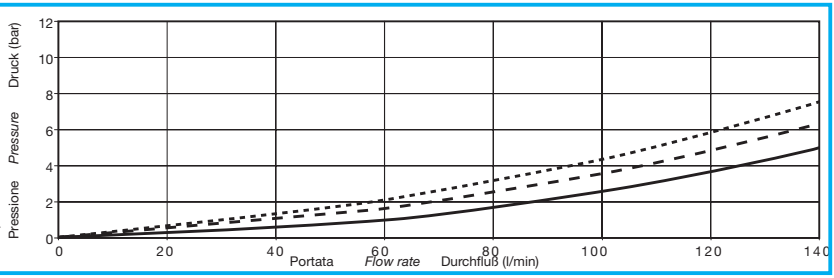




B-T

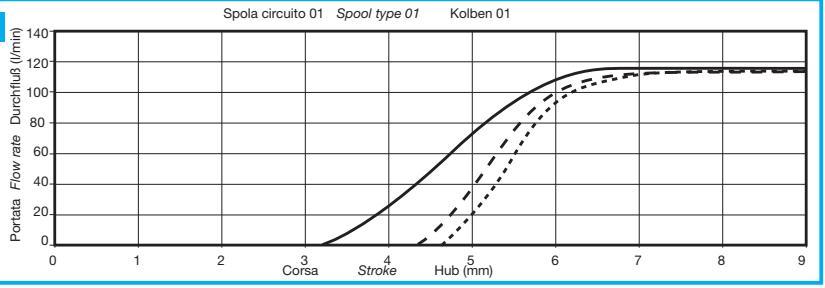
DN120/2
DN120/3
DN120/4





METERING

50 bar
100 bar
150 bar

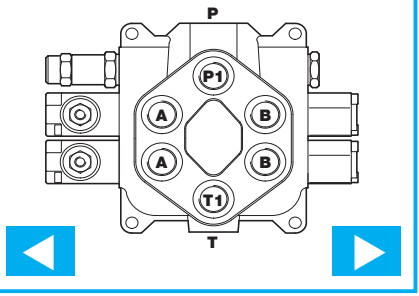


Parametri di prova: spola circuito 01
Testing parameters: 50°C - 21 cSt *spool type 01*
Prüfparameter: Kolben 01

AZIONAMENTI E OPZIONI
ACCESSORIES
ZUBEHÖR

DN120

OPZIONI GENERALI *GENERAL OPTIONS* ALLGEMEINE OPTIONEM		
A		Alimentatore *Power supply unit* Steuerölversorgung
B		Alimentatore verniciatura nera *Power supply unit black paint* Steuerölversorgung, schwarz lackiert
C		Alimentatore con tubi di collegamento *Power supply with connecting tubes* Steuerölversorgung mit Verbindungsrohren
D		Alimentatore con tubi di collegamento + verniciatura *Power supply with connecting tubes + paint* Steuerölversorgung mit Verbindungsrohren + Lackierung

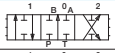
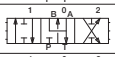
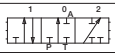


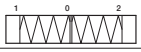
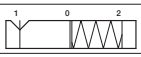
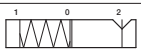
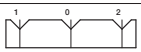
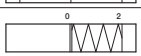
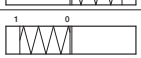
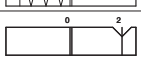
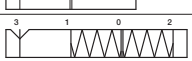
◀ AZIONAMENTO *ACTUATOR* HEBELSEITE		
L		Manuale *Manual* Handhebel
A		Senza portaleva appendice standard *Without lever holder standard appendix* Ohne Hebelhalter, Kolben mit Zunge
B		Senza portaleva senza appendice *Without lever holder without appendix* Ohne Hebelhalter, Kolben ohne Zunge
T		Predisposizione cavo lato azionamento *Cable setting on actuator side* Anschluß für Bowdenzug
V		Intenzionale verticale *Intentional vertical* Sicherheitshebel, vertikal
O		Intenzionale orizzontale *Intentional horizontal* Sicherheitshebel, horizontal
H		Comando elettroidraulico doppio effetto *Dual effect electro-hydraulic control* Elektrohydraulisch, doppeltwirkend
S		Comando elettroidraulico singolo effetto bocca A *Single effect electro-hydraulic control port A* Elektrohydraulisch, Anschluß A
X		Comando elettroidraulico singolo effetto bocca B *Single effect electro-hydraulic control port B* Elektrohydraulisch, Anschluß B
U		Comando elettropneumatico doppio effetto *Dual effect electro-pneumatic control* Elektropneumatisch, doppeltwirkend
I		Comando elettropneumatico singolo effetto bocca A *Single effect electro-pneumatic control port A* Elektropneumatisch, Anschluß A
W		Comando elettropneumatico singolo effetto bocca B *Single effect electro-pneumatic control port B* Elektropneumatisch, Anschluß B
K		Comando idraulico 9/16"-18 UNF *Hydraulic control 9/16"-18 UNF* Hydraulisch ferngesteuert 9/16"-18 UNF
P		Comando pneumatico *Pneumatic control* Pneumatisch ferngesteuert

▶ OPZIONI LATO POSIZIONATORE *SPOOL CONTROL SIDE* STEUERSCHIEBERSEITE		
C		Limitatore di corsa *Stroke limiter* Hubbegrenzung
M		Doppio comando maschio *Male dual control* Kolbenansteuerung mit Außengewinde
F		Doppio comando femmina *Female dual control* Kolbenansteuerung mit Innengewinde
T		Predisposizione cavo lato posizionatore *Cable setup on positioner side* Anschluß für Bowdenzug

CIRCUITI E SCHEMI IDRAULICI
HYDRAULIC CIRCUITS AND SCHEMES
KOLBEN UND HYDRAULISCHE SCHEMATA

DN120

CIRCUITO *SPOOL TYPE* KOLBEN TYP		POS. 3	POS. 1	POS. 0	POS. 2	POS. 4
01			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
03			P → B A → T BP ⊣	A,B → T P ⊣ BP →	P → A B → T BP ⊣	
04			A → T P,B ⊣ BP →	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B,T ⊣ BP ⊣	
07		B, A → T P ⊣ BP →	P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
10			P → B A → T BP ⊣	B → P ⊣ A ⊣ P ⊣ BP →	P → A B → T BP ⊣	

POSIZIONATORE *SPOOL CONTROL* SCHIEBERSTELLUNG		
0A		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0B		Posizione neutra in 0, detent in 1 *Neutral position in 0, detent in 1* Neutralstellung in 0, rastend in 1
0C		Posizione neutra in 0, detent in 2 *Neutral position in 0, detent in 2* Neutralstellung in 0, rastend in 2
0D		Detent in 0, 1, 2 *Detent in 0, 1, 2* Raststellung in 0, 1 und 2
0E		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0F		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0H		Detent in 2 *Detent in 2* Raststellung in 2
0L		Detent in 1 *Detent in 1* Raststellung in 1
NS		Posizione neutra in 0, detent in 3 *Neutral position in 0, detent in 3* Neutralstellung in 0, rastend in 3

OPZIONI LEVA *LEVER OPTIONS* HEBEL-OPTIONEN					
A		110 mm diritta pomello standard *110 mm straight standard knob* 110 mm gerade, Standard-Griff	**L**		Ergonomica diritta verticale 180 mm *Ergonomic straight vertical 180 mm* Ergonomischer Hebel, gerade, 180 mm, vertikal
B		130 mm diritta pomello standard *130 mm straight standard knob* 130 mm gerade, Standard-Griff	**M**		Ergonomica diritta orizzontale 180 mm *Ergonomic straight horizontal 180 mm* Ergonomischer Hebel, gerade, 180 mm, horizontal
C		180 mm diritta pomello standard *180 mm straight standard knob* 180 mm gerade, Standard-Griff	**Y**		Ergonomica piegata 15° orizzontale 180 mm *Ergonomic bent 15°, horizontal 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, horizontal
D		210 mm diritta pomello standard *210 mm straight standard knob* 210 mm gerade, Standard-Griff	**O**		Ergonomica piegata 15° verticale 180 mm *Ergonomic bent 15°, vertical 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, vertikal
E		250 mm diritta pomello standard *250 mm straight standard knob* 250 mm gerade, Standard-Griff	**Q**		Ergonomica piegata 30° orizzontale 180 mm *Ergonomic bent 30°, horizontal 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, horizontal
F		300 mm diritta pomello standard *300 mm straight standard knob* 300 mm gerade, Standard-Griff	**R**		Ergonomica piegata 30° verticale 180 mm *Ergonomic bent 30°, vertical 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, vertikal
P	Parapolvere (disponibile solo per azionameno A - B) *Dust guard (available only for actuator A - B)* Abstreifer (nur für Betätigungen A - B)				

ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG

DN120

DN120	2	N	S	A	A	A	18	G	A	L

MODELLO
MODEL
MODELL

N° DI SEZIONI
N° OF SECTIONS
ANZAHL ELEMENTE

OPZIONI GENERALI
GENERAL OPTIONS
ALLGEMEINE OPTIONEM

N - nessuna
V - verniciatura nera
A - alimentatore
B - alimentatore-verniciatura nera
C - alimentatore tubi collegam.
D - alimentatore tubi collegam.-vernic. nera

N *- None*
V *- Black paint*
A *- Power supply unit*
B *- Power supply unit - black paint*
C *- power supply connecting tubes*
D *- power supply connecting tubes-black paint*

N - ohne
V - schwarz lackiert
A - Steuerölversorgung
B - Steuerölversorgung, schwarz lackiert
C - Steuerölversorgung Verbindungsrohre
D - Steuerölversorgung Verbindungsrohre-schwarz lackiert

TIPO DI ENTRATA
INLET TYPE
P-EINGANG

S - sinistra (standard)
D - destra

S *- Left (standard)*
D *- Right*

S - Links (Standard)
D - Rechts

FILETTATURA BOCCA P
THREAD PORT P
ANSCHLUSSGEWINDE P

L - F - G - 3 - 5 - 6 - P - V - S - 0

Vedi tabella
See chart
Siehe Tabelle

FILETTATURA BOCCA P1
THREAD PORT P1
ANSCHLUSSGEWINDE P1

F - G - 5 - 6 - V - S

Vedi tabella *See chart*
Siehe Tabelle

OPZIONI SU BOCCA P-P1
OPTIONS ON PORT P-P1
OPTIONEN FÜR ANSCHLUSS P-P1

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

A *- P open P1 open (standard)*
B *- P open P1 plugged*
C *- P plugged P1 open*
D *- P not processed, P1open*

A - P offen, P1 offen (Standard)
B - P offen, P1 verschlossen
C - P verschlossen, P1 offen
D - P nicht gebohrt, P1 offen

TIPO VALVOLA DI MASSIMA PRESSIONE
MAXIMUM PRESSURE RELIEF VALVE TYPE
DRUCKBEGRENZUNGSVENTIL

00 - Tappo sostitutivo VMP
VMP replacement cap
Stopfen anstelle Von VMP

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

TIPO DI PIOMBATURA
TYPE OF LEAD SEAL
VERSTELLSICHERUNG

G - grano	***G*** *- Dowel*	**G** - Gewindestift
C - cappuccio	***C*** *- Cap*	**C** - Plastikkappe
P - piombata	***P*** *- Lead sealed*	**P** - Plombiert
R - pred.piom.	***R*** *- Seal setting*	**R** - Bohrung für Plombe
N - nessuna	***N*** *- None*	**N** - ohne

FILETTATURA BOCCHE A-B
THREAD PORTS A-B
ANSCHLUSSGEWINDE A-B

F - G - 5 - 6 - V - S

Vedi tabella
See chart
Siehe Tabelle

AZIONAMENTI
ACTUATORS
BETÄTIGUNGSARTEN

Vedi tabella
See chart
Siehe Tabelle

Ripetere per ogni sezione del distributore
Repeat for each section of the distributor
Für jede Sektion wiederholen

01	A	0A	C	A	N	N	A	A	A	A

CIRCUITO
CIRCUIT
KOLBEN
Vedi tabella
See chart
Siehe Tabelle

OPZIONI SPOLE
OPTIONS SPOOL
KOLBENVARIANTEN
A - Spola standard
B - Spola nichelata

A *- Standard*
B *- Nickel-plated*

A - Kolben standard
B - Nickel-plated

POSIZIONATORE
SPOOL CONTROL
SCHIEBERSTELLUNGSSATZ
NN - Nessuno - *None* - Keiner

Altri vedi tabella
Others see chart
Andere siehe Tabelle

OPZIONI LEVA
OPTIONS LEVER
POSITION DER HANDHEBEL
N - Nessuna - *None*
Keiner
Altre vedi tabella
Others see chart
Andere siehe Tabelle

POSIZIONI LEVA ***LEVER POSITION*** **POSITION DER HANDHEBEL**

A - Diritta	***A*** *- Straight*	**A** - Gerade
B - Ruotata 90° verso il P	***B*** *- Rotated 90° towards il P*	**B** - 90° gedreht in Richtung P
C - Ruotata 180°	***C*** *- Rotated 180°*	**C** - 180° gedreht
D - Ruotata 90° verso il T	***D*** *- Rotated 90° towards T*	**D** - 90° gedreht in Richtung T
N - Nessuna	***N*** *- None*	**N** - Keine

OPZIONI A SCARICO
DISCHARGE OPTIONS
OPTIONEN FÜR TANKANSCHLUSS
A - pred. carry-over (standard)
B - con carry-over bocca T1

A *- carry-over setting (standard)*
B *- with carry-over port T1*

A - Vorbereitet für Druck-Weiterl. (Standard)
B - Mit Buchse für Druck-Weiterl.

OPZIONI SU BOCCA T-T1
OPTIONS ON PORT T-T1
OPTIONEN FÜR ANSCHLUSS T - T1
A - T aperto T1 aperto (standard)
B - T aperto T1 tappato
C - T tappato T1 aperto
D - T non lavorato, T1 aperto

A *- T open T1 open (standard)*
B *- T open T1 plugged*
C *- T plugged T1 open*
D *- T not processed, T1 open*

A - T offen, T1 offen (Standard)
B - T offen, T1 verschlossen
C - T1 offen, T verschlossen
D - T nicht gebohrt, T1 offen

FILETTATURA BOCCA T1
THREAD PORT T1
ANSCHLUSSGEWINDE T1
F - G - 5 - 6 - V - S
Vedi tabella *See chart* Siehe Tabelle

FILETTATURA BOCCA T
THREAD PORT T
ANSCHLUSSGEWINDE T
L - F - G - 3 - 5 - 6 - P - V - S - 0
Vedi tabella *See chart* Siehe Tabelle

TENSIONE E CONNETTORE
VOLTAGE AND CONNECTOR
MAGNETSPANNUNG UND STECKER
A - 12 V DIN 43650
B - 24 V DIN 43650
C - 12 V CON FILI
D - 24 V CON FILI
N - Nessuna

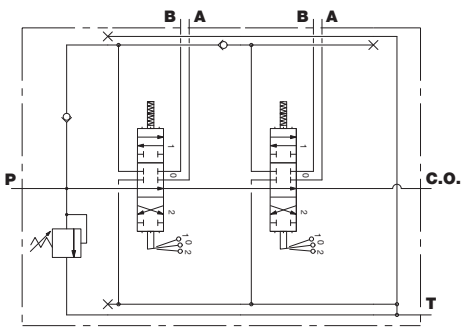
A *- 12 V DIN 43650*	**A** - 12 V DIN 43650
B *- 24 V DIN 43650*	**B** - 24 V DIN 43650
C *- 12 V WITH WIRES*	**C** - 12 V mit Kabel
D *- 24 V WITH WIRES*	**D** - 24 V mit Kabel
N *- None*	**N** - Ohne

OPZIONI LATO POSIZIONATORE
POSITIONER SIDE OPTIONS
STEUERSCHIEBERSEITE
N - Nessuno - *None* - Keiner
Altri vedi tabella *Others see chart*
Andere siehe Tabelle

DN46CV

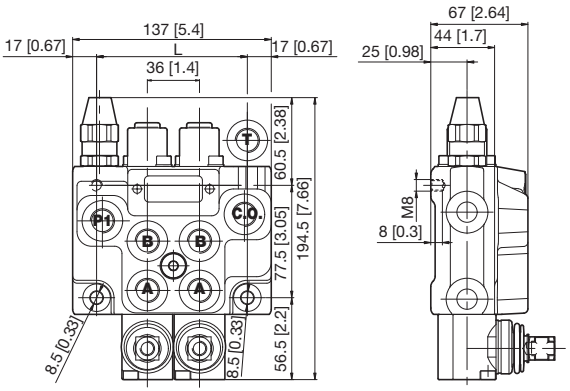
DISTRIBUTORI MONOBLOCCO
MONOBLOCK DIRECTIONAL VALVES
MONOBLOCKSTEUERGERÄTE

DATI TECNICI *TECHNICAL DATA* TECHNISCHE MERKMALE	
Portata nominale (max) *Nominal flow (max)* Nominaler Durchfluß (max)	**45 (50) l/min** **11.9 (13.2) gpm**
Pressione nominale *Nominal pressure* Nominaler Betriebsdruck	**250 (3625)** **bar (psi)**
Contropressione massima allo scarico *Maximum tank pressure* Maximaler Gegendruck Tankleitung	**50 (725)** **bar (psi)**
Massima trafila interna *Maximum internal leakage* Maximale interne Leckage	**8 cc/min** **(21 cSt - 100 bar)**
Temperatura di utilizzo *Temperature range* Betriebstemperatur	**-20°C +85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Viscosità olio *Oil viscosity* Ölviskosität	**Da 15 cSt a 90 cSt** ***From 15 cSt to 90 cSt*** **Von 15 cSt nach 90 cSt**
Fluido *Fluid* Öl	**Olio a base minerale** ***Mineral based oil*** **Mineral Öl**



STANDARD
STANDARD
STANDARD

STANDARD - ENTRATA SINISTRA
STANDARD – LEFT INLET
STANDARD - LINKER EINGANG



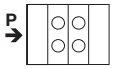
DIMENSIONI *SIZE* ABMESSUNGEN		
N° DI SEZIONI *N° OF SECTIONS* ANZAHL ELEMENTE	L mm [inch]	MASSA kg (lb) *WEIGHT kg (lb)* GEWICHT kg (lb)
DN46CV2	104 [4.1]	6.2 (13.64)

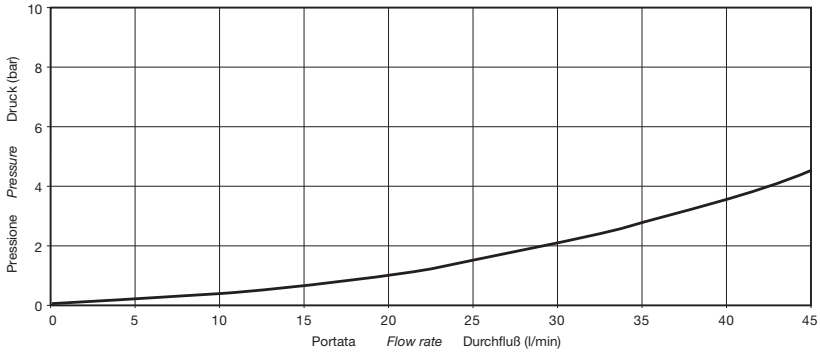
FILETTATURA *THREAD* GEWINDE		
CODICE *MODEL* BEZEICHNUNG	TIPO *TYPE* GEWINDE	SERRAGGIO Nm *TORQUE Nm* ANZUGSMOMENT Nm
B	1/2" GAS ISO 1179	70
A	3/8"GAS ISO 1179	35
C	M18x1.5 ISO 9974	40
W	M18x1.5 ISO 6149	40
E	3/4 - 16 SAE ISO 11926	50
P	9/16 - 18 SAE ISO 11926	21

CURVE CARATTERISTICHE
FLOW CURVES
DUCHFLUSSKENNLINIEN

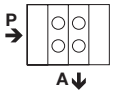
DN46CV

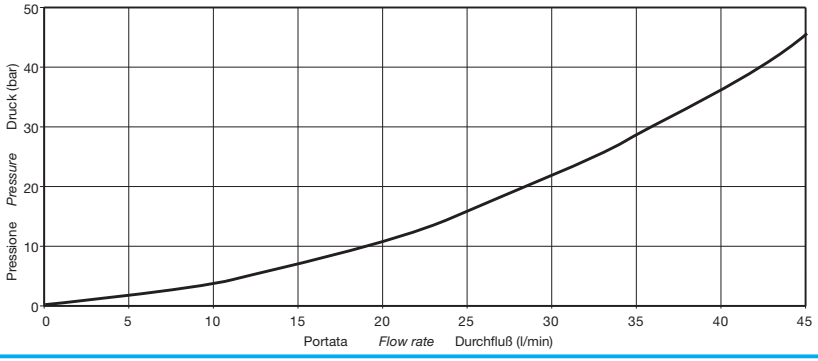
P-T



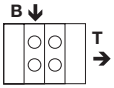


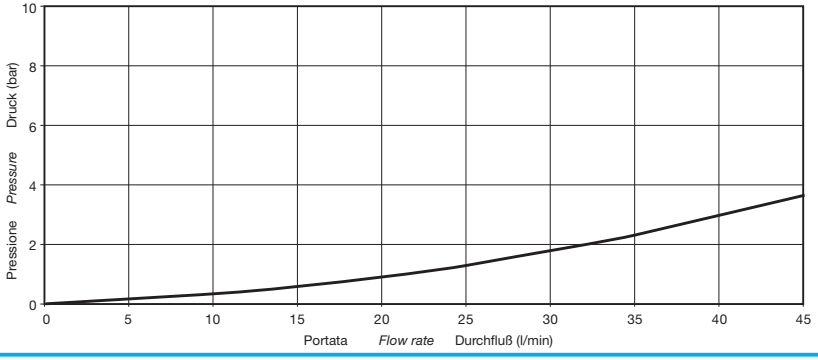
P-A/B





A/B-T

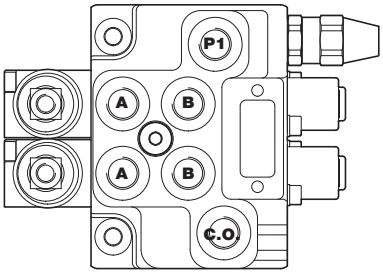


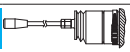
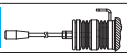


Parametri di prova: spola circuito 01
Testing parameters: 50°C - 21 cSt *spool type 01*
Prüfparameter: Kolben 01

AZIONAMENTI E OPZIONI
ACCESSORIES
ZUBEHÖR

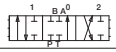
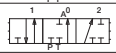
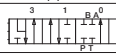
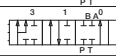
DN46CV

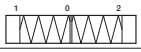
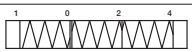
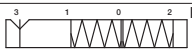


◀		AZIONAMENTO *ACTUATOR* HEBELSEITE
L		Manuale *Manual* Handhebel
A		Senza portaleva appendice standard *Without lever holder standard appendix* Ohne Hebelhalter, Kolben mit Zunge
T		Predisposizione cavo lato azionamento *Without lever holder ball appendix* Anschluß für Bowdenzug
M		Manipolatore *Manipulator* Joystick
G		Manipolatore con opzione blocca spole *Manipulator with spool lock option* Joystick mit Blockierung der Kolbenbetätigung

CIRCUITI E SCHEMI IDRAULICI
HYDRAULIC CIRCUITS AND SCHEMES
KOLBEN UND HYDRAULISCHE SCHEMATA

DN46CV

CIRCUITO *SPOOL TYPE* KOLBEN TYP		POS. 3	POS. 1	POS. 0	POS. 2	POS. 4
01			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
04			A → T P, B ⊣ BP →	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B, T ⊣ BP ⊣	
07		B, A → T P ⊣ BP →	P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
17		P → B, A T ⊣ BP ⊣	P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	

POSIZIONATORE *SPOOL CONTROL* SCHIEBERSTELLUNG		
0A		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0T		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
NS		Posizione neutra in 0, detent in 3 *Neutral position in 0, detent in 3* Neutralstellung in 0, rastend in 3

OPZIONI LEVA *LEVER OPTIONS* HEBEL-OPTIONEN					
A		110 mm diritta pomello standard *110 mm straight standard knob* 110 mm gerade, Standard-Griff	L		Ergonomica diritta verticale 180 mm *Ergonomic straight vertical 180 mm* Ergonomischer Hebel, gerade, 180 mm, vertikal
B		130 mm diritta pomello standard *130 mm straight standard knob* 130 mm gerade, Standard-Griff	M		Ergonomica diritta orizzontale 180 mm *Ergonomic straight horizontal 180 mm* Ergonomischer Hebel, gerade, 180 mm, horizontal
C		180 mm diritta pomello standard *180 mm straight standard knob* 180 mm gerade, Standard-Griff	Y		Ergonomica piegata 15° orizzontale 180 mm *Ergonomic bent 15°, horizontal 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, horizontal
D		210 mm diritta pomello standard *210 mm straight standard knob* 210 mm gerade, Standard-Griff	O		Ergonomica piegata 15° verticale 180 mm *Ergonomic bent 15°, vertical 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, vertikal
E		250 mm diritta pomello standard *250 mm straight standard knob* 250 mm gerade, Standard-Griff	Q		Ergonomica piegata 30° orizzontale 180 mm *Ergonomic bent 30°, horizontal 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, horizontal
F		300 mm diritta pomello standard *300 mm straight standard knob* 300 mm gerade, Standard-Griff	R		Ergonomica piegata 30° verticale 180 mm *Ergonomic bent 30°, vertical 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, vertikal
P	Parapolvere (disponibile solo per azionameno A) *Dust guard (available only for actuator A)* Abstreifer (nur für Betätigungen A)				

ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG

DN46CV

DN46CV	2	N	A	18	G	A	L	01

MODELLO
MODEL
MODELL

N° DI SEZIONI
N° OF SECTIONS
ANZAHL ELEMENTE

OPZIONI GENERALI
GENERAL OPTIONS
ALLGEMEINE OPTIONEM

N - nessuna
V - verniciatura nera

N - *None*
V - *Black paint*

N - ohne
V - schwarz lackiert

FILETTATURA BOCCA P
THREAD PORT P
ANSCHLUSSGEWINDE P

A - B - C - W - E

Vedi tabella *See chart*
Siehe Tabelle

TIPO VALVOLA DI MASSIMA PRESSIONE
MAXIMUM PRESSURE RELIEF VALVE TYPE
DRUCKBEGRENZUNGSVENTIL

00 - Tappo sostitutivo VMP
VMP replacement cap
Stopfen anstelle Von VMP

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

TIPO DI PIOMBATURA
TYPE OF LEAD SEAL
VERSTELLSICHERUNG

G - grano
C - cappuccio
P - piombata
R - pred.piom.
N - nessuna

G - *Dowel*
C - *Cap*
P - *Lead sealed*
R - *Seal setting*
N - *None*

G - Gewindestift
C - Plastikkappe
P - Plombiert
R - Bohrung für Plombe
N - ohne

CIRCUITO
CIRCUIT
KOLBEN

Vedi tabella
See chart
Siehe Tabelle

AZIONAMENTI
ACTUATORS
BETÄTIGUNGSARTEN

Vedi tabella
See chart
Siehe Tabelle

FILETTATURA BOCCHE A-B
THREAD PORTS A-B
ANSCHLUSSGEWINDE A-B

A - C - W - P - E
Vedi tabella
See chart
Siehe Tabelle

Ripetere per ogni sezione del distributore
Repeat for each section of the distributor
Für jede Sektion wiederholen

A	0A	C	A	A	A	A	A

OPZIONI SPOLE
OPTIONS SPOOL
KOLBENVARIANTEN
A - Spola standard
B - Spola nichelata

A *- Standard*
B *- Nickel-plated*

A - Kolben standard
B - Nickel-plated

POSIZIONATORE
SPOOL CONTROL
SCHIEBERSTELLUNGSSATZ
Vedi tabella
See chart
Siehe Tabelle

OPZIONI LEVA
OPTIONS LEVER
POSITION DER HANDHEBEL
N - Nessuna - *None*
Keiner
Altre vedi tabella
Others see chart
Andere siehe Tabelle

POSIZIONI LEVA ***LEVER POSITION*** **POSITION DER HANDHEBEL**

A - Diritta	***A*** *- Straight*	**A** - Gerade
C - Ruotata 180°	***C*** *- Rotated 180°*	**C** - 180° gedreht
N - Nessuna	***N*** *- None*	**N** - Keine

OPZIONI A SCARICO
DISCHARGE OPTIONS
OPTIONEN FÜR TANKANSCHLUSS
A - con carry-over (standard T1)
B - pred. carry-over
C - senza carry-over
A *- with carry-over (standard T1)*
B *- carry-over setting*
C *- without carry-over*
A - Mit für Druck-Weiterl. (Standard T1)
B - Vorbereitet für Druck-Weiterl.
C - Ohne Carry-over-Stopfen

OPZIONI SU BOCCA T-T1
OPTIONS ON PORT T-T1
OPTIONEN FÜR ANSCHLUSS T - T1
A - T aperto T1 aperto (standard)
B - T aperto T1 tappato
C - T tappato T1 aperto

A *- T open T1 open (standard)*
B *- T open T1 plugged*
C *- T plugged T1 open*

A - T offen, T1 offen (Standard)
B - T offen, T1 verschlossen
C - T1 offen, T verschlossen

FILETTATURA BOCCA T1
THREAD PORT T1
ANSCHLUSSGEWINDE T1
A - C - W - P - E
Vedi tabella *See chart* Siehe Tabelle

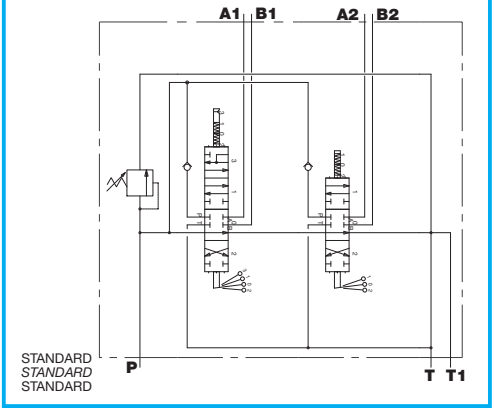
FILETTATURA BOCCA T
THREAD PORT T
ANSCHLUSSGEWINDE T
A - C - W - P - E
Vedi tabella *See chart* Siehe Tabelle

DN46FC

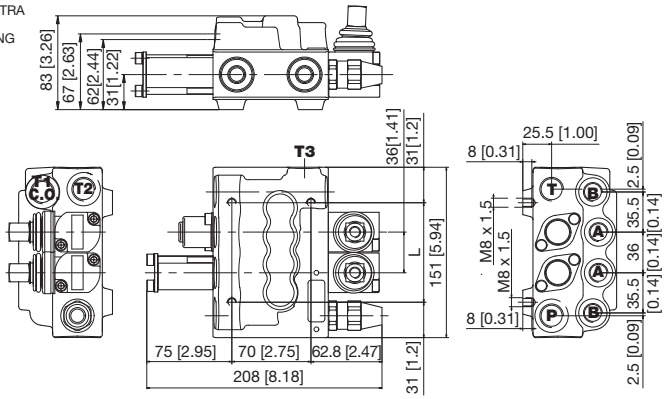
DISTRIBUTORI MONOBLOCCO
MONOBLOCK DIRECTIONAL VALVES
MONOBLOCKSTEUERGERÄTE

DATI TECNICI
TECHNICAL DATA
TECHNISCHE MERKMALE

Portata nominale (max) *Nominal flow (max)* Nominaler Durchfluß (max)	**45 (50) l/min** **11.9 (13.2) gpm**
Pressione nominale *Nominal pressure* Nominaler Betriebsdruck	**250 (3625)** **bar (psi)**
Contropressione massima allo scarico *Maximum tank pressure* Maximaler Gegendruck Tankleitung	**50 (725)** **bar (psi)**
Massima trafila interna *Maximum internal leakage* Maximale interne Leckage	**6 cc/min** **(21 cSt - 100 bar)**
Temperatura di utilizzo *Temperature range* Betriebstemperatur	**-20°C +85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Viscosità olio *Oil viscosity* Ölviskosität	**Da 15 cSt a 90 cSt** ***From 15 cSt to 90 cSt*** **Von 15 cSt nach 90 cSt**
Fluido *Fluid* Öl	**Olio a base minerale** ***Mineral based oil*** **Mineral Öl**



STANDARD - ENTRATA SINISTRA
STANDARD – LEFT INLET
STANDARD - LINKER EINGANG



DIMENSIONI
SIZE
ABMESSUNGEN

N° DI SEZIONI *N° OF SECTIONS* ANZAHL ELEMENTE	L mm [inch]	MASSA kg (lb) *WEIGHT kg (lb)* GEWICHT kg (lb)
DN46FC2	88 [3.46]	7.2 (15.84)

FILETTATURA
THREAD
GEWINDE

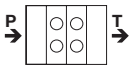
CODICE *MODEL* BEZEICHNUNG	TIPO *TYPE* GEWINDE	SERRAGGIO Nm *TORQUE Nm* ANZUGSMOMENT Nm
0	NOT MACHINED	/
B	1/2" GAS ISO 1179	70
A	3/8"GAS ISO 1179	35
L	1/4"GAS ISO 1179	14
N	M22x1,5 ISO 9974	78
C	M18x1.5 ISO 9974	40
W	M18x1.5 ISO 6149	40
3	M14x1,5 ISO 9974	10
R	7/8 - 14 SAE ISO 11926	77
E	3/4 - 16 SAE ISO 11926	50
P	9/16 - 18 SAE ISO 11926	21

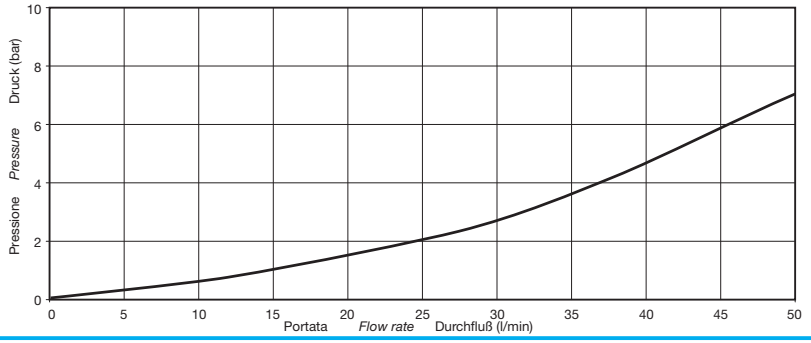
CURVE CARATTERISTICHE
FLOW CURVES
DUCHFLUSSKENNLINIEN

DN46FC

P-T

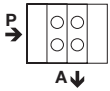
DN46/2

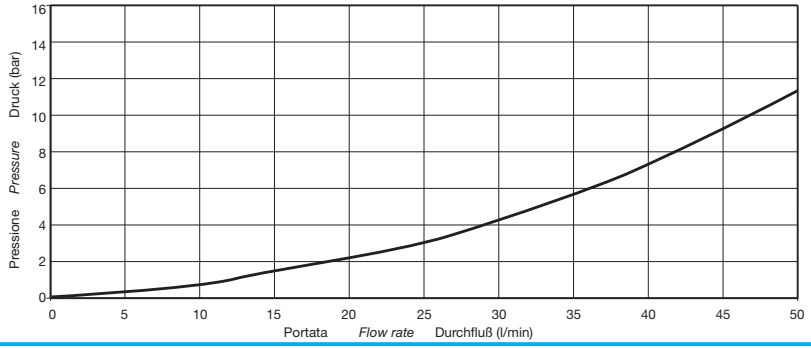




P-A

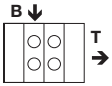
DN46/2

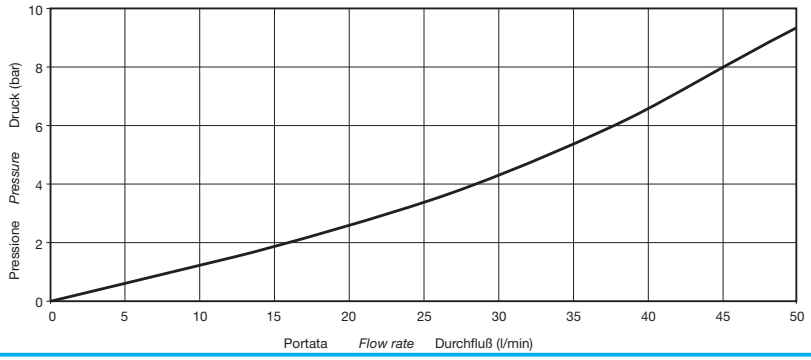




B-T

DN46/2



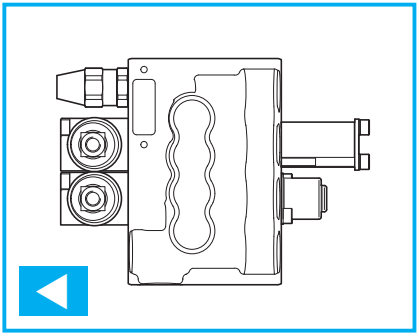


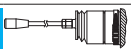
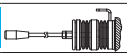
Parametri di prova: spola circuito 01
Testing parameters: 50°C - 21 cSt *spool type 01*
Prüfparameter: Kolben 01

AZIONAMENTI E OPZIONI
ACCESSORIES
ZUBEHÖR

DN46FC

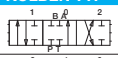
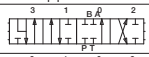
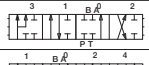
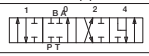
OPZIONI GENERALI *GENERAL OPTIONS* ALLGEMEINE OPTIONEM		
A		Alimentatore *Power supply unit* Steuerölversorgung
B		Alimentatore verniciatura nera *Power supply unit black paint* Steuerölversorgung, schwarz lackiert

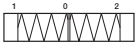
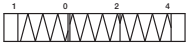
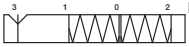


◀	AZIONAMENTO *ACTUATOR* HEBELSEITE	
L		Manuale *Manual* Handhebel
A		Senza portaleva appendice standard *Without lever holder standard appendix* Ohne Hebelhalter, Kolben mit Zunge
T		Predisposizione cavo lato azionamento *Cable setting on actuator side* Anschluß für Bowdenzug
M		Manipolatore *Manipulator* Joystick
G		Manipolatore con opzione blocca spole *Manipulator with spool lock option* Joystick mit Blockierung der Kolbenbetätigung

CIRCUITI E SCHEMI IDRAULICI
HYDRAULIC CIRCUITS AND SCHEMES
KOLBEN UND HYDRAULISCHE SCHEMATA

DN46FC

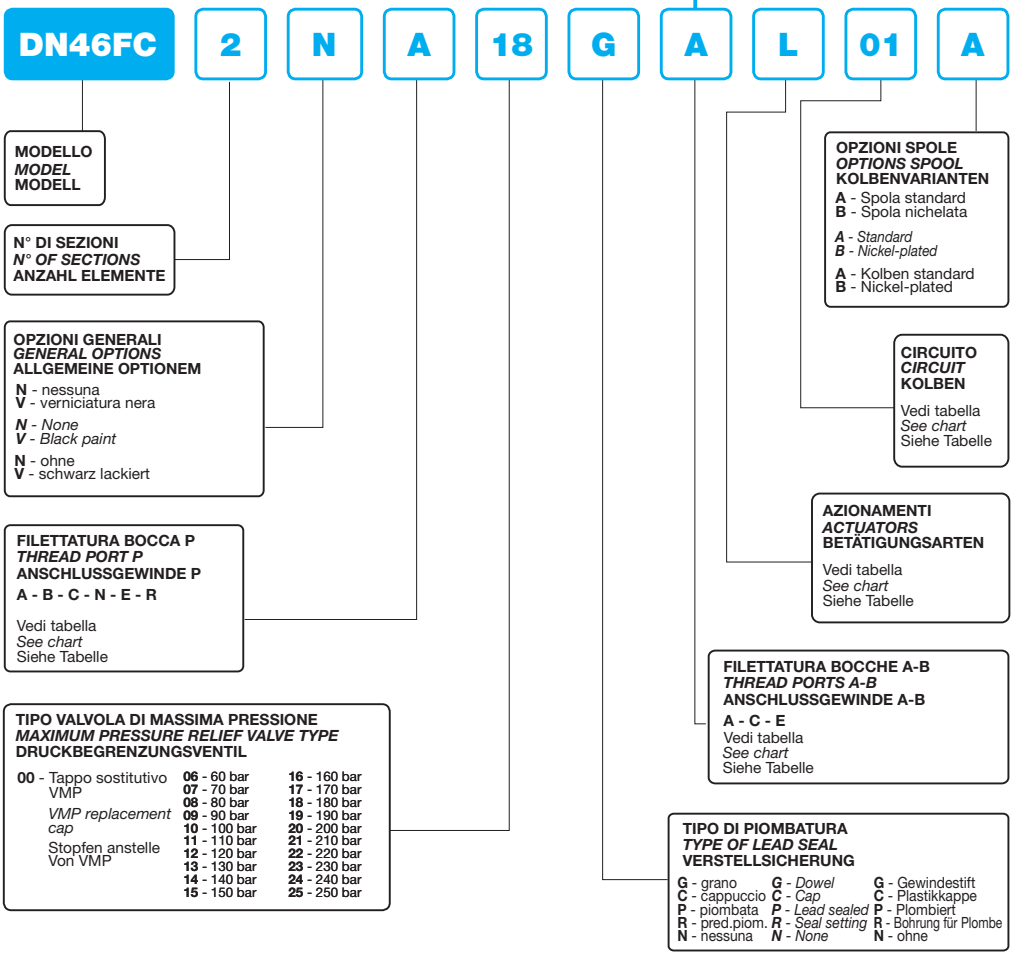
CIRCUITO *SPOOL TYPE* KOLBEN TYP		POS. 3	POS. 1	POS. 0	POS. 2	POS. 4
01			P → B A → T BP ⊣	P ⊣ T A ⊣ B BP →	P → A B → T BP ⊣	
07		B, A → T P ⊣ BP →	P → B A → T BP ⊣	P ⊣ T A ⊣ B BP →	P → A B → T BP ⊣	
17		P → B, A T ⊣ BP ⊣	P → B A → T BP ⊣	P ⊣ T A ⊣ B BP →	P → A B → T BP ⊣	
70			P → B A → T BP ⊣	P ⊣ T A ⊣ B BP →	P → A B → T BP ⊣	B, A → T P ⊣ BP →

POSIZIONATORE *SPOOL CONTROL* SCHIEBERSTELLUNG		
0A		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0T		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
NS		Posizione neutra in 0, detent in 3 *Neutral position in 0, detent in 3* Neutralstellung in 0, rastend in 3

TIPO DI VALVOLA BOCCA A - B *VALVE TYPE PORT A - B* SEKUNDARVENTIL IN ANSCHLUSS A – B		
LC		Per la taratura delle valvole consultare le istruzioni per l'ordinazione *For the valve setting, consult the ordering instructions.* Ventileinstellung siehe Bestellanleitung.
VC		
TP		

OPZIONI LEVA *LEVER OPTIONS* HEBEL-OPTIONEN					
A		110 mm diritta pomello standard *110 mm straight standard knob* 110 mm gerade, Standard-Griff	**L**		Ergonomica diritta verticale 180 mm *Ergonomic straight vertical 180 mm* Ergonomischer Hebel, gerade, 180 mm, vertikal
B		130 mm diritta pomello standard *130 mm straight standard knob* 130 mm gerade, Standard-Griff	**M**		Ergonomica diritta orizzontale 180 mm *Ergonomic straight horizontal 180 mm* Ergonomischer Hebel, gerade, 180 mm, horizontal
C		180 mm diritta pomello standard *180 mm straight standard knob* 180 mm gerade, Standard-Griff	**Y**		Ergonomica piegata 15° orizzontale 180 mm *Ergonomic bent 15°, horizontal 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, horizontal
D		210 mm diritta pomello standard *210 mm straight standard knob* 210 mm gerade, Standard-Griff	**O**		Ergonomica piegata 15° verticale 180 mm *Ergonomic bent 15°, vertical 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, vertikal
E		250 mm diritta pomello standard *250 mm straight standard knob* 250 mm gerade, Standard-Griff	**Q**		Ergonomica piegata 30° orizzontale 180 mm *Ergonomic bent 30°, horizontal 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, horizontal
F		300 mm diritta pomello standard *300 mm straight standard knob* 300 mm gerade, Standard-Griff	**R**		Ergonomica piegata 30° verticale 180 mm *Ergonomic bent 30°, vertical 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, vertikal
P	Parapolvere (disponibile solo per azionameno A) *Dust guard (available only for actuator A)* Abstreifer (nur für Betätigungen A)				

ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG



Ripetere per ogni sezione del distributore
Repeat for each section of the distributor
Für jede Sektion wiederholen

0A	00	00	C	A	N	N	A	A	A	A

POSIZIONATORE
SPOOL CONTROL
SCHIEBERSTELLUNGSSATZ

Vedi tabella
See chart
Siehe Tabelle

TIPO VALVOLA BOCCA A
VALVE TYPE PORT A
SEKUNDÄRVENTIL IN ANSCHLUSS A

00 - Nessuna - *None* - Ohne
TP - Lavorato tappato - Processed and plugged - Gebohrt und verschlossen
VC - Valvola anticavitazione - *Anticavitation valve* - Nachsaugventil

11 - LC 110 bar	**16** - LC 160 bar	**21** - LC 210 bar
12 - LC 120 bar	**17** - LC 170 bar	**22** - LC 220 bar
13 - LC 130 bar	**18** - LC 180 bar	**23** - LC 230 bar
14 - LC 140 bar	**19** - LC 190 bar	**24** - LC 240 bar
15 - LC 150 bar	**20** - LC 200 bar	**25** - LC 250 bar

TIPO VALVOLA BOCCA B
VALVE TYPE PORT B
SEKUNDÄRVENTIL IN ANSCHLUSS B

00 - Nessuna - *None* - Ohne
TP - Lavorato tappato - Processed and plugged - Gebohrt und verschlossen
VC - Valvola anticavitazione - *Anticavitation valve* - Nachsaugventil

11 - LC 110 bar	**16** - LC 160 bar	**21** - LC 210 bar
12 - LC 120 bar	**17** - LC 170 bar	**22** - LC 220 bar
13 - LC 130 bar	**18** - LC 180 bar	**23** - LC 230 bar
14 - LC 140 bar	**19** - LC 190 bar	**24** - LC 240 bar
15 - LC 150 bar	**20** - LC 200 bar	**25** - LC 250 bar

OPZIONI LEVA
OPTIONS LEVER
POSITION DER HANDHEBEL
N - Nessuna - *None*
Keiner
Altre vedi tabella
Others see chart
Andere siehe Tabelle

POSIZIONI LEVA ***LEVER POSITION*** **POSITION DER HANDHEBEL**

A - Diritta	***A*** - *Straight*	**A** - Gerade
C - Ruotata 180°	***C*** - *Rotated 180°*	**C** - 180° gedreht
N - Nessuna	***N*** - *None*	**N** - Keine

FILETTATURA BOCCA T
THREAD PORT T
ANSCHLUSSGEWINDE T

A - C - W - P - E
Vedi tabella *See chart* Siehe Tabelle

OPZIONI A SCARICO
DISCHARGE OPTIONS
OPTIONEN FÜR TANKANSCHLUSS

A - con carry-over (standard T1)
B - pred. carry-over
C - senza carry-over
A - *with carry-over (standard T1)*
B - *carry-over setting*
C - *without carry-over*
A - Mit für Druck-Weiterl. (Standard T1)
B - Vorbereitet für Druck-Weiterl.
C - Ohne Carry-over-Stopfen

OPZIONI SU BOCCA T-T1-T2-T3
OPTIONS ON PORT T-T1-T2-T3
OPTIONEN FÜR ANSCHLUSS T-T1-T2-T3

A - T T1 aperti T2T3 non lavorati (standard)
B - T T1 T2 aperti T3 non lavorato
C - T T1 T3 aperti T2 non lavorato
D - T T2 aperti T1 T3 non lavorati
E - T T3 aperti T1 T2 non lavorati

A - *T T1 open T2T3 not processed (standard)*
B - *T T1 T2 open T3 not processed*
C - *T T1 T3 open T2 not processed*
D - *T T2 open T1 T3 not processed*
E - *T T3 open T1 T2 not processed*

A - TT1 offen, T2T3 nicht gebohrt (standard)
B - TT1T2 offen, T3 nicht gebohrt
C - TT1T3 offen, T2 nicht gebohrt
D - TT2 offen, T1T3 nicht gebohrt
E - TT3 offen, T1T2 nicht gebohrt

FILETTATURA BOCCA T3
THREAD PORT T3
ANSCHLUSSGEWINDE T3
L - A - 3 - C - W - P - E - 0 (Standard)
Vedi tabella *See chart* Siehe Tabelle

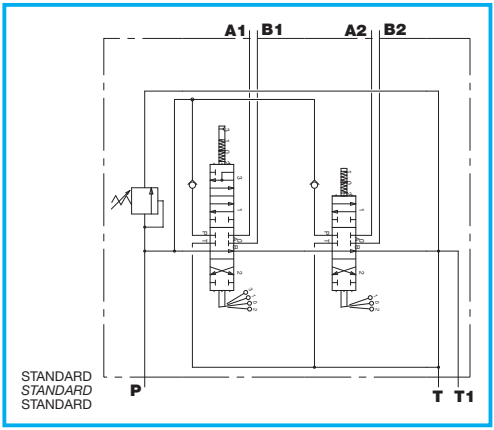
FILETTATURA BOCCA T2
THREAD PORT T2
ANSCHLUSSGEWINDE T2
L - A - 3 - C - W - P - E - 0 (Standard)
Vedi tabella *See chart* Siehe Tabelle

FILETTATURA BOCCA T1
THREAD PORT T1
ANSCHLUSSGEWINDE T1
L - A - 3 - C - W - P - E - 0
Vedi tabella *See chart* Siehe Tabelle

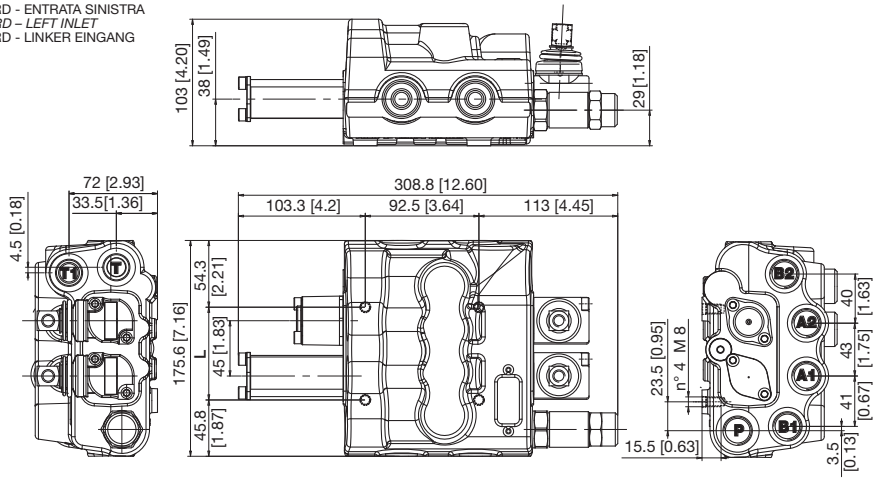
DN90FC

DISTRIBUTORI MONOBLOCCO
MONOBLOCK DIRECTIONAL VALVES
MONOBLOCKSTEUERGERÄTE

DATI TECNICI *TECHNICAL DATA* TECHNISCHE MERKMALE	
Portata nominale (max) *Nominal flow (max)* Nominaler Durchfluß (max)	**90 (100) l/min** **23.8 (26.45) gpm**
Pressione nominale *Nominal pressure* Nominaler Betriebsdruck	**250 (3625)** **bar (psi)**
Contropressione massima allo scarico *Maximum tank pressure* Maximaler Gegendruck Tankleitung	**50 (725)** **bar (psi)**
Massima trafila interna *Maximum internal leakage* Maximale interne Leckage	**6 cc/min** **(21 cSt - 100 bar)**
Temperatura di utilizzo *Temperature range* Betriebstemperatur	**-20°C +85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Viscosità olio *Oil viscosity* Ölviskosität	**Da 15 cSt a 90 cSt** ***From 15 cSt to 90 cSt*** **Von 15 cSt nach 90 cSt**
Fluido *Fluid* Öl	**Olio a base minerale** ***Mineral based oil*** **Mineral Öl**



STANDARD - ENTRATA SINISTRA
STANDARD – LEFT INLET
STANDARD - LINKER EINGANG



DIMENSIONI *SIZE* ABMESSUNGEN		
N° DI SEZIONI ***N° OF SECTIONS*** **ANZAHL ELEMENTE**	**L** **mm [inch]**	**MASSA kg (lb)** ***WEIGHT kg (lb)*** **GEWICHT kg (lb)**
DN90FC	75.5 [2.97]	14 (30.8)

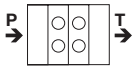
FILETTATURA *THREAD* GEWINDE		
CODICE ***MODEL*** **BEZEICHNUNG**	**TIPO** ***TYPE*** **GEWINDE**	**SERRAGGIO Nm** ***TORQUE Nm*** **ANZUGSMOMENT Nm**
0	NOT MACHINED	/
F	3/4" GAS ISO 1179	140
L	1/4"GAS ISO 1179	14
N	M22x1,5 ISO 9974	78
3	M14x1,5 ISO 9974	10
R	7/8 - 14 SAE ISO 11926	77
E	3/4 - 16 SAE ISO 11926	50
P	9/16 - 18 SAE ISO 11926	21

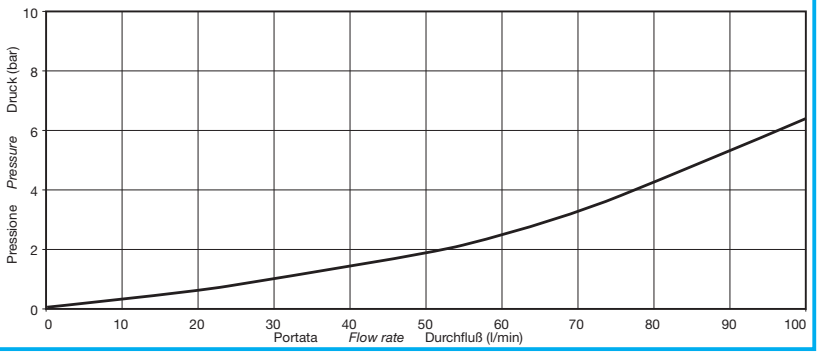
CURVE CARATTERISTICHE
FLOW CURVES
DUCHFLUSSKENNLINIEN

DN90FC

P-T

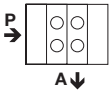
DN90/2

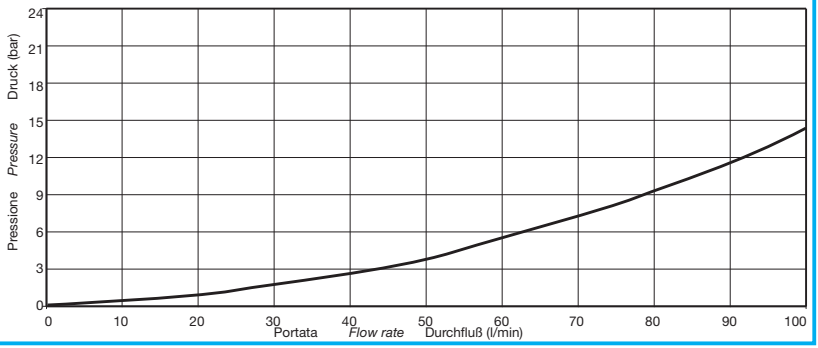




P-A

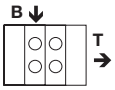
DN90/2

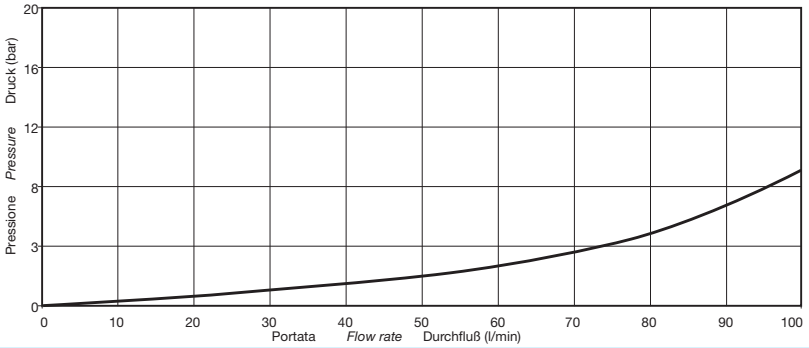




B-T

DN90/2

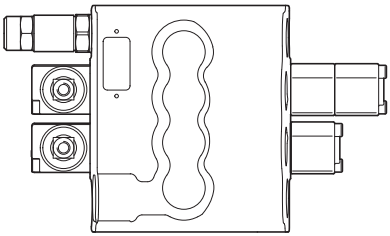


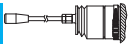


Parametri di prova: spola circuito 01
Testing parameters: 50°C - 21 cSt *spool type 01*
Prüfparameter: Kolben 01

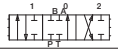
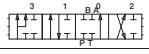
AZIONAMENTI E OPZIONI
ACCESSORIES
ZUBEHÖR

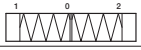
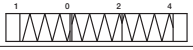
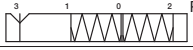
DN90FC



◀		AZIONAMENTO *ACTUATOR* HEBELSEITE
L		Manuale *Manual* Handhebel
A		Senza portaleva appendice standard *Without lever holder standard appendix* Ohne Hebelhalter, Kolben mit Zunge
T		Predisposizione cavo lato azionamento *Without lever holder ball appendix* Anschluß für Bowdenzug
M		Manipolatore *Manipulator* Joystick

CIRCUITI E SCHEMI IDRAULICI
HYDRAULIC CIRCUITS AND SCHEMES
KOLBEN UND HYDRAULISCHE SCHEMATA

CIRCUITO *SPOOL TYPE* KOLBEN TYP		POS. 3	POS. 1	POS. 0	POS. 2	POS. 4
01			P → B A → T BP ⊣	P ⊣ T A ⊣ B BP →	P → A B → T BP ⊣	
07		B, A → T P ⊣ BP →	P → B A → T BP ⊣	P ⊣ T A ⊣ B BP →	P → A B → T BP ⊣	
17		P → B, A T ⊣ BP ⊣	P → B A → T BP ⊣	P ⊣ T A ⊣ B BP →	P → A B → T BP ⊣	

POSIZIONATORE *SPOOL CONTROL* SCHIEBERSTELLUNG		
0A		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0T		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
NS		Posizione neutra in 0, detent in 3 *Neutral position in 0, detent in 3* Neutralstellung in 0, rastend in 3

TIPO DI VALVOLA BOCCA A - B
VALVE TYPE PORT A - B
SEKUNDARVENTIL IN ANSCHLUSS A – B

LC		Per la taratura delle valvole consultare le istruzioni per l'ordinazione *For the valve setting, consult the ordering instructions.* Ventileinstellung siehe Bestellanleitung.
VC		
TP		

OPZIONI LEVA
LEVER OPTIONS
HEBEL-OPTIONEN

A		110 mm diritta pomello standard *110 mm straight standard knob* 110 mm gerade, Standard-Griff	**L**	Ergonomica diritta verticale 180 mm *Ergonomic straight vertical 180 mm* Ergonomischer Hebel, gerade, 180 mm, vertikal
B		130 mm diritta pomello standard *130 mm straight standard knob* 130 mm gerade, Standard-Griff	**M**	Ergonomica diritta orizzontale 180 mm *Ergonomic straight horizontal 180 mm* Ergonomischer Hebel, gerade, 180 mm, horizontal
C		180 mm diritta pomello standard *180 mm straight standard knob* 180 mm gerade, Standard-Griff	**Y**	Ergonomica piegata 15° orizzontale 180 mm *Ergonomic bent 15°, horizontal 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, horizontal
D		210 mm diritta pomello standard *210 mm straight standard knob* 210 mm gerade, Standard-Griff	**O**	Ergonomica piegata 15° verticale 180 mm *Ergonomic bent 15°, vertical 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, vertikal
E		250 mm diritta pomello standard *250 mm straight standard knob* 250 mm gerade, Standard-Griff	**Q**	Ergonomica piegata 30° orizzontale 180 mm *Ergonomic bent 30°, horizontal 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, horizontal
F		300 mm diritta pomello standard *300 mm straight standard knob* 300 mm gerade, Standard-Griff	**R**	Ergonomica piegata 30° verticale 180 mm *Ergonomic bent 30°, vertical 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, vertikal
P	Parapolvere (disponibile solo per azionameno A) *Dust guard (available only for actuator A)* Abstreifer (nur für Betätigungen A)			

ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG

DN90FC

DN90FC	2	N	A	F	18	G	A	L	01

MODELLO
MODEL
MODELL

N° DI SEZIONI
N° OF SECTIONS
ANZAHL ELEMENTE

OPZIONI GENERALI
GENERAL OPTIONS
ALLGEMEINE OPTIONEM

N - nessuna
V - verniciatura nera
N *- None*
V *- Black paint*
N - ohne
V - schwarz lackiert

CONFIGURAZIONE
CONFIGURATION
AUSFÜHRUNG

A - centro aperto
(pompa con portata fissa)
B - centro chiuso
(per pompa load-sensing)
A *- open center*
(pump with fixed flow)
B *- closed center*
(for load-sensing pump)

A - Open center (mit Konstantpumpe)
B - Closed center
(mit LS-Verstellpumpe)

FILETTATURA BOCCA P
THREAD PORT P
ANSCHLUSSGEWINDE P
F - N - E - R

Vedi tabella
See chart
Siehe Tabelle

CIRCUITO
CIRCUIT
KOLBEN

Vedi tabella
See chart
Siehe Tabelle

AZIONAMENTI
ACTUATORS
BETÄTIGUNGSARTEN

Vedi tabella
See chart
Siehe Tabelle

FILETTATURA BOCCHE A-B
THREAD PORTS A-B
ANSCHLUSSGEWINDE A-B
F -N - E - R

Vedi tabella
See chart
Siehe Tabelle

TIPO DI PIOMBATURA
TYPE OF LEAD SEAL
VERSTELLSICHERUNG

G - grano	***G*** *- Dowel*	**G** - Gewindestift
C - cappuccio	***C*** *- Cap*	**C** - Plastikkappe
P - piombata	***P*** *- Lead sealed*	**P** - Plombiert
R - pred.piom.	***R*** *- Seal setting*	**R** - Bohrung für Plombe
N - nessuna	***N*** *- None*	**N** - ohne

TIPO VALVOLA DI MASSIMA PRESSIONE
MAXIMUM PRESSURE RELIEF VALVE TYPE
DRUCKBEGRENZUNGSVENTIL

00 - Tappo sostitutivo VMP
VMP replacement cap
Stopfen anstelle Von VMP

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

Ripetere per ogni sezione del distributore
Repeat for each section of the distributor
Für jede Sektion wiederholen

A	0A	00	00	C	A	A	A	A	A

OPZIONI SPOLE
OPTIONS SPOOL
KOLBENVARIANTEN
A - Spola standard
B - Spola nichelata

A *- Standard*
B *- Nickel-plated*

A - Kolben standard
B - Nickel-plated

POSIZIONATORE
SPOOL CONTROL
SCHIEBERSTELLUNGSSATZ

Vedi tabella
See chart
Siehe Tabelle

TIPO VALVOLA BOCCA A
VALVE TYPE PORT A
SEKUNDÄRVENTIL IN ANSCHLUSS A

00 - Nessuna - *None* - Ohne
TP - Lavorato tappato - Processed and plugged - Gebohrt und verschlossen
VC - Valvola anticavitazione - *Anticavitation valve* - Nachsaugventil

11 - LC 110 bar	**16** - LC 160 bar	**21** - LC 210 bar
12 - LC 120 bar	**17** - LC 170 bar	**22** - LC 220 bar
13 - LC 130 bar	**18** - LC 180 bar	**23** - LC 230 bar
14 - LC 140 bar	**19** - LC 190 bar	**24** - LC 240 bar
15 - LC 150 bar	**20** - LC 200 bar	**25** - LC 250 bar

TIPO VALVOLA BOCCA B
VALVE TYPE PORT B
SEKUNDÄRVENTIL IN ANSCHLUSS B

00 - Nessuna - *None* - Ohne
TP - Lavorato tappato - Processed and plugged - Gebohrt und verschlossen
VC - Valvola anticavitazione - *Anticavitation valve* - Nachsaugventil

11 - LC 110 bar	**16** - LC 160 bar	**21** - LC 210 bar
12 - LC 120 bar	**17** - LC 170 bar	**22** - LC 220 bar
13 - LC 130 bar	**18** - LC 180 bar	**23** - LC 230 bar
14 - LC 140 bar	**19** - LC 190 bar	**24** - LC 240 bar
15 - LC 150 bar	**20** - LC 200 bar	**25** - LC 250 bar

OPZIONI LEVA
OPTIONS LEVER
POSITION DER HANDHEBEL
N - Nessuna - *None*
Keiner

Altre vedi tabella
Others see chart
Andere siehe Tabelle

POSIZIONI LEVA ***LEVER POSITION*** **POSITION DER HANDHEBEL**

A - Diritta	***A*** *- Straight*	**A** - Gerade
C - Ruotata 180°	***C*** *- Rotated 180°*	**C** - 180° gedreht
N - Nessuna	***N*** *- None*	**N** - Keine

OPZIONI A SCARICO
DISCHARGE OPTIONS
OPTIONEN FÜR TANKANSCHLUSS
A - con carry-over (standard)
B - pred. carry-over
C - Nessuno

A *- carry-over setting (standard)*
B *- with carry-over port T1*
C *- None*

A - Mit Buchse für Druck-Weiterl. (Standard)
B - Vorbereitet für Druck-Weiterl.
C - Ohne

OPZIONI SU BOCCA T-T1/L.S.
OPTIONS ON PORT T-T1/L.S.
OPTIONEN FÜR ANSCHLUSS T-T1/L.S.
A - T aperto T1 aperto (standard)
B - T aperto T1 tappato
C - T tappato T1 aperto

A *- T open T1 open (standard)*
B *- T open T1 plugged*
C *- T plugged T1 open*

A - T offen, T1 offen (Standard)
B - T offen, T1 verschlossen
C - T verschlossen, T1 offen

FILETTATURA BOCCA T1/L.S.
THREAD PORT T1/L.S.
ANSCHLUSSGEWINDE T1/L.S.
L - F - 3 - N - P - E - R - 0
Vedi tabella *See chart* Siehe Tabelle

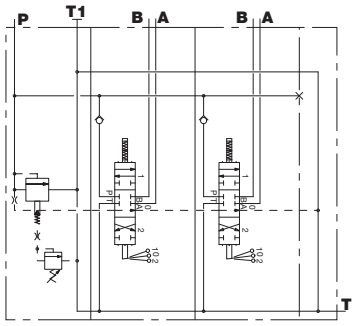
FILETTATURA BOCCA T
THREAD PORT T
ANSCHLUSSGEWINDE T
F - N - E - R
Vedi tabella *See chart* Siehe Tabelle

DNC35

DISTRIBUTORI COMPONIBILI
MODULAR DIRECTIONAL CONTROL VALVES
KOMBI-STEUERGERÄTE

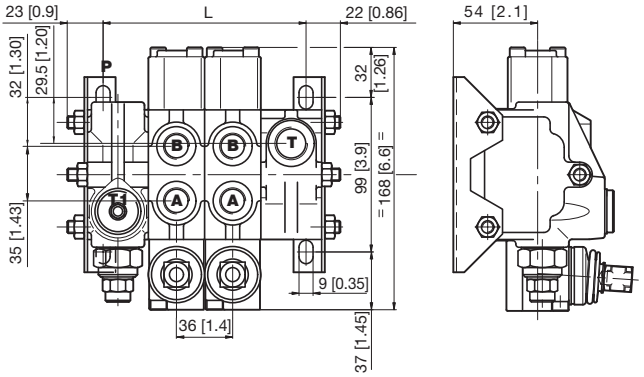
DATI TECNICI
TECHNICAL DATA
TECHNISCHE MERKMALE

Portata nominale (max) *Nominal flow (max)* Nominaler Durchfluß (max)	**40 (50) l/min** **10.5 (13.2) gpm**
Portata nominale (max) con azionamenti E,D,J *Nominal flow rate (max) with drivers E,D,J* Nenn-Durchflussmenge (max.) mit Antrieben E, D, J	**25 (30) l/min** **6,6 (7,9) gpm**
Pressione nominale *Nominal pressure* Nominaler Betriebsdruck	**250 (3625)** **bar (psi)**
Pressione massima con azionamenti E,D,J *Maximum pressure with drivers E,D,J* Max. Druck mit Antrieben E, D, J	**180 (2610)** **bar (psi)**
Contropressione massima allo scarico *Maximum tank pressure* Maximaler Gegendruck Tankleitung	**50 (725)** **bar (psi)**
Massima trafila interna *Maximum internal leakage* Maximale interne Leckage	**8 cc/min** **(21 cSt - 100 bar)**
Temperatura di utilizzo *Temperature range* Betriebstemperatur	**-20°C +85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Viscosità olio *Oil viscosity* Ölviskosität	**Da 15 cSt a 90 cSt** ***From 15 cSt to 90 cSt*** **Von 15 cSt nach 90 cSt**
Fluido *Fluid* Öl	**Olio a base minerale** ***Mineral based oil*** **Mineral Öl**



STANDARD
STANDARD
STANDARD

STANDARD - ENTRATA SINISTRA
STANDARD – LEFT INLET
STANDARD - LINKER EINGANG



DIMENSIONI
SIZE
ABMESSUNGEN

MOD. *MOD.* MOD.	L mm [inch]	MASSA kg (lb) *WEIGHT kg (lb)* GEWICHT kg (lb)	MOD. *MOD.* MOD.	L mm [inch]	MASSA kg (lb) *WEIGHT kg (lb)* GEWICHT kg (lb)
DNC351	94 [3.7]	5.2 (11.44)	**DNC356**	272 [10.7]	10.2 (22.44)
DNC352	130 [5.1]	6.2 (13.64)	**DNC357**	308 [12.1]	11.2 (24.64)
DNC353	164 [6.45]	7.2 (15.84)	**DNC358**	344 [13.5]	12.2 (26.84)
DNC354	200 [7.87]	8.2 (18.04)	**DNC359**	380 [14.96]	13.2 (29.04)
DNC355	236 [9.3]	9.2 (20.24)			

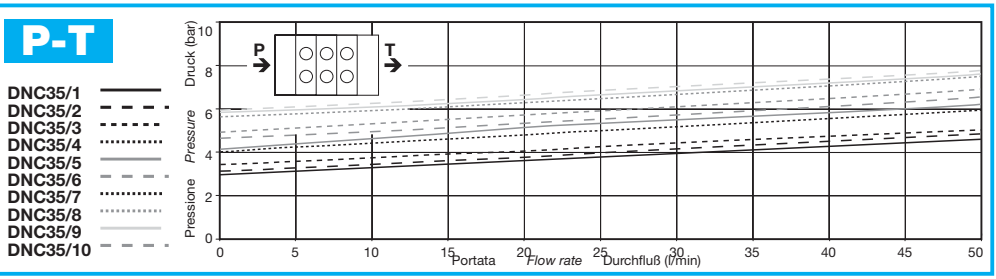
FILETTATURA
THREAD
GEWINDE

CODICE *MODEL* BEZEICHNUNG	TIPO *TYPE* GEWINDE	SERRAGGIO Nm *TORQUE Nm* ANZUGSMOMENT Nm
A	3/8 GAS ISO 1179	70
N	M22x1,5 ISO 9974	78
J	M22x1,5 ISO 6149	78
R	7/8 - 14 SAE ISO 11926	77
E	3/4 - 16 SAE ISO 11926	50

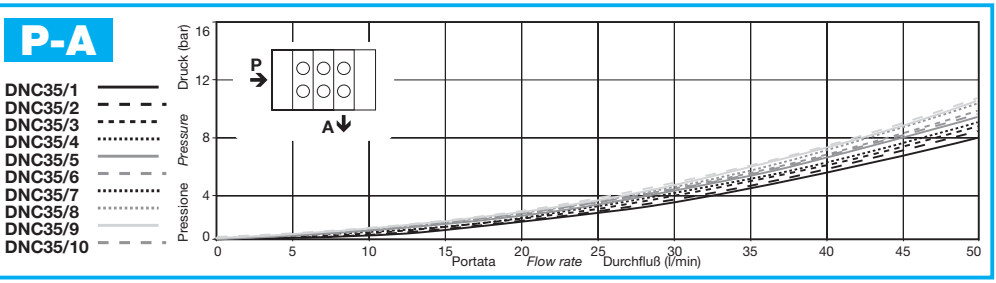
CURVE CARATTERISTICHE
FLOW CURVES
DUCHFLUSSKENNLINIEN

DNC35

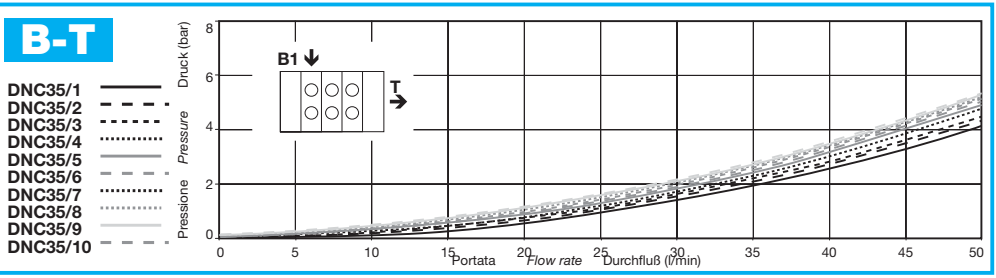
P-T



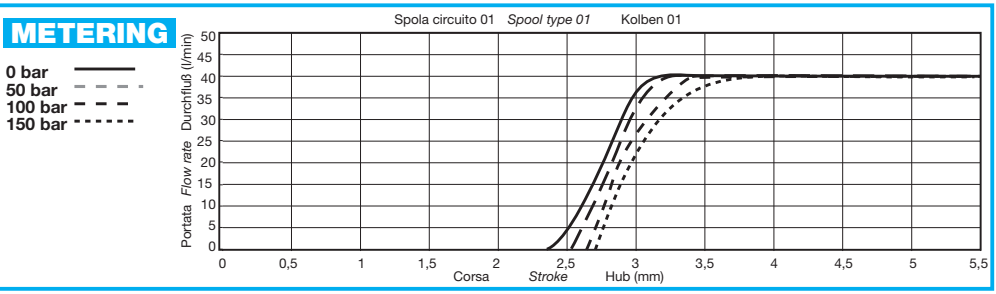
P-A



B-T



METERING

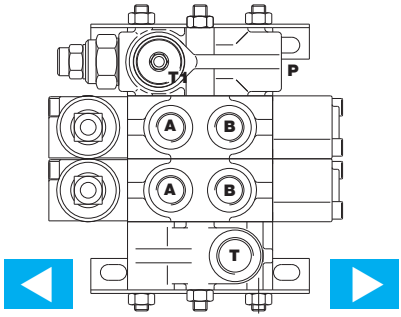


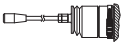
Parametri di prova: spola circuito 01
Testing parameters: 50°C - 21 cSt *spool type 01*
Prüfparameter: Kolben 01

AZIONAMENTI E OPZIONI
ACCESSORIES
ZUBEHÖR

DNC35

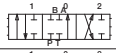
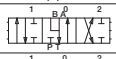
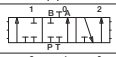
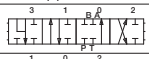
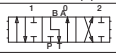
OPZIONI GENERALI *GENERAL OPTIONS* ALLGEMEINE OPTIONEM		
A		Alimentatore *Power supply unit* Steuerölversorgung
B		Alimentatore verniciatura nera *Power supply unit black paint* Steuerölversorgung, schwarz lackiert
C		Alimentatore con tubi di collegamento *Power supply with connecting tubes* Steuerölversorgung mit Verbindungsrohren
D		Alimentatore con tubi di collegamento + verniciatura *Power supply with connecting tubes + paint* Steuerölversorgung mit Verbindungsrohren + Lackierung

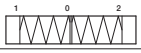
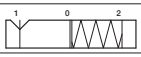
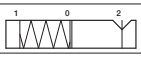
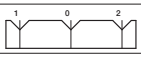
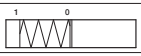
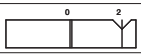
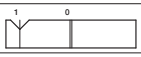
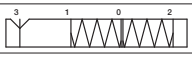


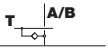
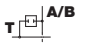
◀ AZIONAMENTO *ACTUATOR* HEBELSEITE		
L		Manuale *Manual* Handhebel
Z		Manuale con limitatore di corsa *Manual with stroke limiter* Handhebel mit Hubbegrenzung
A		Senza portaleva appendice standard *Without lever holder standard appendix* Ohne Hebelhalter, Kolben mit Zunge
B		Senza portaleva senza appendice *Without lever holder without appendix* Ohne Hebelhalter, Kolben ohne Zunge
F		Senza portaleva appendice forcella *Without lever holder fork appendix* Ohne Handhebel mit Gabel
C		Senza portaleva appendice piatta *Without lever holder flat appendix* Mechanische Betätigung mit geradem Kolbenende
T		Predisposizione cavo lato azionamento *Cable setting on actuator side* Anschluß für Bowdenzug
V		Intenzionale verticale *Intentional vertical* Sicherheitshebel, vertikal
O		Intenzionale orizzontale *Intentional horizontal* Sicherheitshebel, horizontal
M		Manipolatore *Manipulator* Joystick
K		Comando idraulico *Hydraulic control* Hydraulisch ferngesteuert
E		Comando elettrico doppio effetto *Dual effect electric control* Elektrisch Doppeltwirkend
D		Comando elettrico singolo effetto bocca A *Single effect electric control port A* Elektrisch Anschluß A
J		Comando elettrico singolo effetto bocca B *Single effect electric control port B* Elektrisch Anschluß B

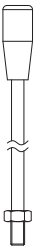
▶ OPZIONI LATO POSIZIONATORE *SPOOL CONTROL SIDE* STEUERSCHIEBERSEITE		
C		Limitatore di corsa *Stroke limiter* Hubbegrenzung
M		Doppio comando maschio *Male dual control* Kolbenansteuerung mit Außengewinde
F		Doppio comando femmina *Female dual control* Kolbenansteuerung mit Innengewinde
T		Predisposizione cavo lato posizionatore *Cable setup on positioner side* Anschluß für Bowdenzug
Y		Micro doppio effetto *Dual effect microswitch* Micro-Schalter, aktiv in A und B
P		Micro semplice effetto bocca A *Simple effect microswitch port A* Micro-Schalter, aktiv in A
O		Micro semplice effetto bocca B *Simple effect microswitch port B* Micro-Schalter, aktiv in B

CIRCUITI E SCHEMI IDRAULICI
HYDRAULIC CIRCUITS AND SCHEMES
KOLBEN UND HYDRAULISCHE SCHEMATA

CIRCUITO *SPOOL TYPE* KOLBEN TYP		POS. 3	POS. 1	POS. 0	POS. 2	POS. 4
01			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
03			P → B A → T BP ⊣	B, A → T P ⊣ BP →	P → A B → T BP ⊣	
05			P → B T ⊣ A ⊣ BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	B → T P ⊣ A ⊣ BP →	
07		B, A → T P ⊣ BP →	P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
10			P → B A → T BP ⊣	B → T P ⊣ BP →	P → A B → T BP ⊣	

POSIZIONATORE *SPOOL CONTROL* SCHIEBERSTELLUNG		
0A		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0B		Posizione neutra in 0, detent in 1 *Neutral position in 0, detent in 1* Neutralstellung in 0, rastend in 1
0C		Posizione neutra in 0, detent in 2 *Neutral position in 0, detent in 2* Neutralstellung in 0, rastend in 2
0D		Detent in 0, 1, 2 *Detent in 0, 1, 2* Raststellung in 0, 1 und 2
0E		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0F		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0H		Detent in 2 *Detent in 2* Raststellung in 2
0L		Detent in 1 *Detent in 1* Raststellung in 1
NS		Posizione neutra in 0, detent in 3 *Neutral position in 0, detent in 3* Neutralstellung in 0, rastend in 3

TIPO DI VALVOLA BOCCA A - B *VALVE TYPE PORT A - B* SEKUNDÄRVENTIL IN ANSCHLUSS A – B		
VL		Per la taratura delle valvole consultare le istruzioni per l'ordinazione *For the valve setting, consult the ordering instructions.* Ventileinstellung siehe Bestellanleitung.
VC		
LT		

OPZIONI LEVA *LEVER OPTIONS* HEBEL-OPTIONEN					
A		110 mm diritta pomello standard *110 mm straight standard knob* 110 mm gerade, Standard-Griff	L		Ergonomica diritta verticale 180 mm *Ergonomic straight vertical 180 mm* Ergonomischer Hebel, gerade, 180 mm, vertikal
B		130 mm diritta pomello standard *130 mm straight standard knob* 130 mm gerade, Standard-Griff	M		Ergonomica diritta orizzontale 180 mm *Ergonomic straight horizontal 180 mm* Ergonomischer Hebel, gerade, 180 mm, horizontal
C		180 mm diritta pomello standard *180 mm straight standard knob* 180 mm gerade, Standard-Griff	Y		Ergonomica piegata 15° orizzontale 180 mm *Ergonomic bent 15°, horizontal 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, horizontal
D		210 mm diritta pomello standard *210 mm straight standard knob* 210 mm gerade, Standard-Griff	O		Ergonomica piegata 15° verticale 180 mm *Ergonomic bent 15°, vertical 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, vertikal
E		250 mm diritta pomello standard *250 mm straight standard knob* 250 mm gerade, Standard-Griff	Q		Ergonomica piegata 30° orizzontale 180 mm *Ergonomic bent 30°, horizontal 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, horizontal
F		300 mm diritta pomello standard *300 mm straight standard knob* 300 mm gerade, Standard-Griff	R		Ergonomica piegata 30° verticale 180 mm *Ergonomic bent 30°, vertical 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, vertikal
P	Parapolvere (disponibile solo per azionameno A - B) *Dust guard (available only for actuator A - B)* Abstreifer (nur für Betätigungen A - B)				

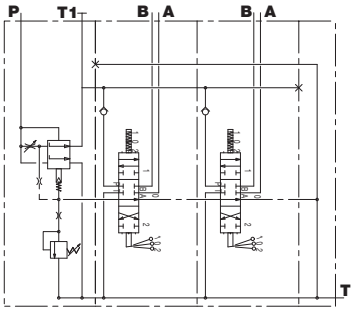
REGOLATORE DI FLUSSO
FLOW REGULATOR
STROMREGELVENTIL

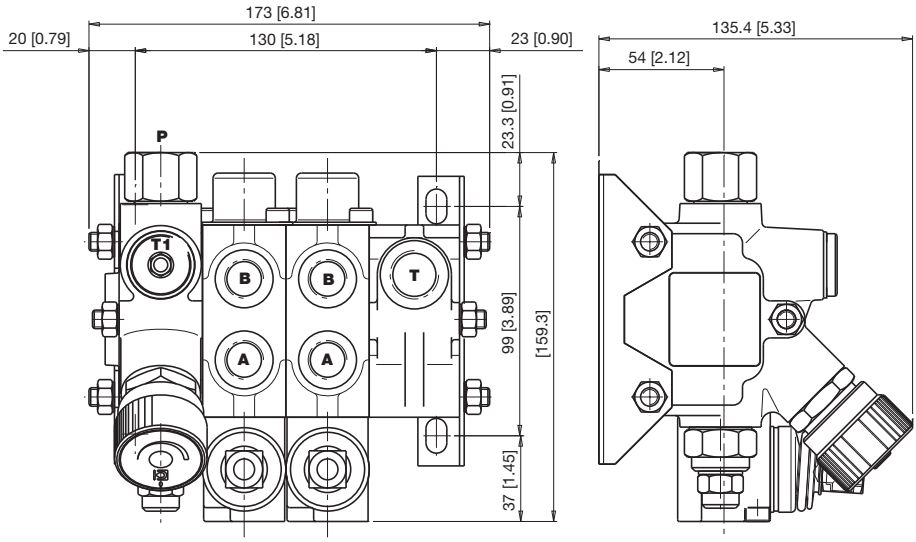
TERV

L'opzione TERV, disponibile in testata di entrata, permette la regolazione della portata nelle sezioni a valle indipendentemente dal carico applicato.
La regolazione della portata è ottenuta tramita una manopola, la portata eccedente è collegata a scarico.

The TERV option, available on the inlet cover, allows the regulation of the flow rate in the sections downstream irrespective of the applied load.
The flow is adjusted by means of a knob; the excess flow is connected to the drain.

Die Option TERV als Eingangselement erlaubt die Lastdruck-unabhängige Regelung des Volumenstroms der nachfolgenden Sektionen, wobei der Reststrom zum Tank entlastet wird. Die Volumenstrom-Einstellung erfolgt mit einem Drehknopf.





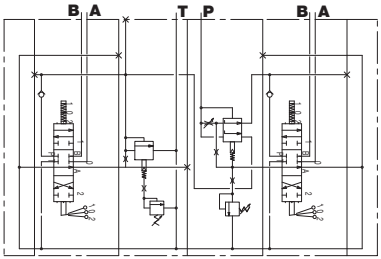
REGOLATORE DI FLUSSO
FLOW REGULATOR
STROMREGELVENTIL

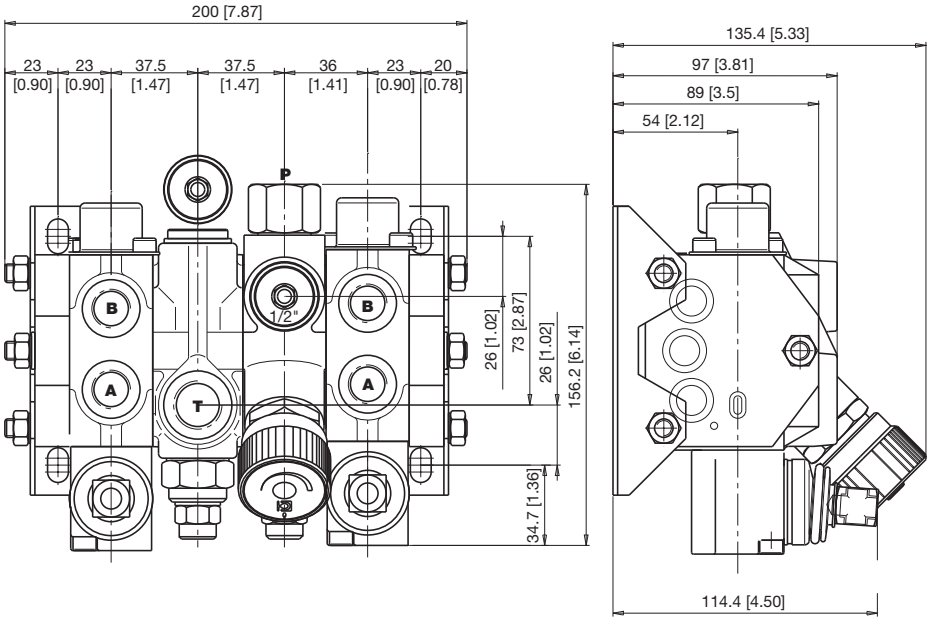
ERV

L'opzione ERV, testata di ingresso intermedia, permette la regolazione della portata nelle sezioni prioritarie indipendentemente dal carico applicato.
La regolazione della portata è ottenuta tramita una manopola, la portata eccedente alimenta le restanti sezioni.

The ERV option, on the intermediate inlet cover, allows the regulation of the flow rate in the priority sections irrespective of the applied load.
The flow is adjusted by means of a knob; the excess flow feeds the remaining sections.

Die Option ERV als Mitteneingangselement erlaubt die Lastdruck-unabhängige Regelung des Ölstroms zu den Prioritäts-Verbrauchern, während der Reststrom zu den Sekundär-Verbrauchern geleitetet wird. Die Volumenstrom-Einstellung erfolgt mit einem Drehknopf.





ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG

DNC35

DNC35	2	N	S	N	N	S	B	B	A	A	18	C	B	L

MODELLO
MODEL
MODELL

N° DI SEZIONI
N° OF SECTIONS
ANZAHL ELEMENTE

OPZIONI GENERALI
GENERAL OPTIONS
ALLGEMEINE OPTIONEM

N - nessuna
V - verniciatura nera
A - alimentatore
B - alimentatore-verniciatura nera
C - alimentatore tubi collegam.
D - alimentatore tubi collegam.-vernic. nera

N *- None*
V *- Black paint*
A *- Power supply unit*
B *- Power supply unit - black paint*
C *- power supply connecting tubes*
D *- power supply connecting tubes-black paint*

N - ohne
V - schwarz lackiert
A - Steuerölversorgung
B - Steuerölversorgung, schwarz lackiert
C - Steuerölversorgung Verbindungsrohre
D - Steuerölversorgung Verbindungsrohre-schwarz lackiert

TIPO DI TESTATA
INLET COVER TYPE
DECKEL TYP

S - standard
T - terv 0-50 l/min
D - testata doppia velocità

S *- standard*
T *- terv 0-50 l/min*
D *- double speed inlet cover*

S - standard
T - terv 0-50 l/min
D - Doppelte Schnelligkeit Deckel

DIAMETRO ORIFIZIO BASSA VELOCITA'
DIAMETER ORIFICE LOW SPEED
BLENDENDURCHMESSER FÜR SCHLEICHGANG

A - 1 mm / **B** - 1,5 mm / **C** - 2 mm
N - Nessuno - *None* - Ohne

DIAMETRO ORIFIZIO ALTA VELOCITA'
DIAMETER ORIFICE HIGH SPEED
BLENDENDURCHMESSER FÜR EILGANG

A - 2 mm / **B** - 2,5 mm / **C** - 3 mm
D - 3,5 mm / **E** - 4 mm / **F** - 4,5 mm
N - Nessuno - *None* - Ohne

TIPO DI ENTRATA
INLET TYPE
P-EINGANG

S - sinistra (standard)
D - destra

S *- Left (standard)*
D *- Right*

S - Links (Standard)
D - Rechts

FILETTATURA BOCCA P
THREAD PORT P
ANSCHLUSSGEWINDE P

B - N - E - R
Vedi tabella *See chart* Siehe Tabelle

FILETTATURA BOCCA T1
THREAD PORT T1
ANSCHLUSSGEWINDE T1

B - N - E - R
Vedi tabella *See chart* Siehe Tabelle

OPZIONI SU BOCCA P-T1
OPTIONS ON PORT P-T1
OPTIONEN FÜR ANSCHLUSS P-T1

A - P aperto T1 tappato (standard)
B - P aperto T1 aperto
C - P aperto + carry-over

A *- P open T1 plugged (standard)*
B *- P open T1 open*
C *- P open + carry-over*

A - P offen, T1 verschlossen (Standard)
B - P offen, T1 offen
C - P offen + carry over

OPZIONI TESTATA
INLET COVER OPTION
OPTION FÜR EILGANGSELEMENT

A - 12 V DIN 43650
B - 24 V DIN 43650
A - 12 V AMP JUNIOR
B - 24 V AMP JUNIOR
N - Nessuno - *None* - Ohne

TIPO VALVOLA DI MASSIMA PRESSIONE
MAXIMUM PRESSURE RELIEF VALVE TYPE
DRUCKBEGRENZUNGSVENTIL

00 - Tappo sostitutivo VMP
VMP replacement cap
Stopfen anstelle Von VMP

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

TIPO DI PIOMBATURA
TYPE OF LEAD SEAL
VERSTELLSICHERUNG

G - grano	***G*** *- Dowel*	**G** - Gewindestift
C - cappuccio	***C*** *- Cap*	**C** - Plastikkappe
P - piombata	***P*** *- Lead sealed*	**P** - Plombiert
R - pred.piom.	***R*** *- Seal setting*	**R** - Bohrung für Plombe
N - nessuna	***N*** *- None*	**N** - ohne

FILETTATURA BOCCHE A-B
THREAD PORTS A-B
ANSCHLUSSGEWINDE A-B

A - N - J - R
Vedi tabella *See chart* Siehe Tabelle

AZIONAMENTI
ACTUATORS
BETÄTIGUNGSARTEN
Vedi tabella
See chart
Siehe Tabelle

Ripetere per ogni sezione del distributore
Repeat for each section of the distributor
Für jede Sektion wiederholen

01	A	0A	00	NN	00	NN	C	A	N	N	B	B

CIRCUITO
CIRCUIT
KOLBEN
Vedi tabella
See chart
Siehe Tabelle

OPZIONI SPOLE
OPTIONS SPOOL
KOLBENVARIANTEN
A - Spola standard
B - Spola nichelata
O - On-off
A *- Standard spool*
B *- Nickel-plated*
O *- On-off*
A - Kolben standard
B - Kolben vernickelt
O - On-off

POSIZIONATORE
SPOOL CONTROL
SCHIEBERSTELLUNGSSATZ
NN - Nessuno - *None* - Keiner
Altri vedi tabella
Others see chart
Andere siehe Tabelle

TIPO VALVOLA
VALVE TYPE
SEKUNDÄRVENTIL
Altri vedi tabella *Others see chart*
Andere siehe Tabelle

BOCCA A
PORT A
ANSCHLUSS A
NN - Nessuna - *None* - Ohne

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

TIPO VALVOLA
VALVE TYPE
SEKUNDÄRVENTIL
Altri vedi tabella *Others see chart*
Andere siehe Tabelle

BOCCA B
PORT B
ANSCHLUSS B
NN - Nessuna - *None* - Ohne

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

FILETTATURA BOCCA T
THREAD PORT T
ANSCHLUSSGEWINDE T
B - N - E - R
Vedi tabella *See chart* Siehe Tabelle

TIPO DI TESTATA CHIUSURA
OUTLET COVER TYPE
ENDELEMENT
A - piastra
B - testata di uscita con T aperto
C - testata di uscita con T tappato
A *- plate*
B *- outlet cover with T open*
C *- outlet cover with T plugged*
A - Endplatte
B - Ausgangselement mit T offen
C - Ausgangselement mit T verschlossen

TENSIONE E CONNETTORE
VOLTAGE CONNECTOR
MAGNETSPANNUNG UND STECKER
A - 12 V DIN 43650
B - 24 V DIN 43650
C - 12 V AMP Junior
D - 24 V AMP Junior
N - Nessuna / ***N*** *- None* / **N** - Ohne

OPZIONI LATO POSIZIONATORE
POSITIONER SIDE OPTIONS
STEUERSCHIEBERSEITE
N - Nessuno - *None* - Keiner
Altri vedi tabella *Others see chart*
Andere siehe Tabelle

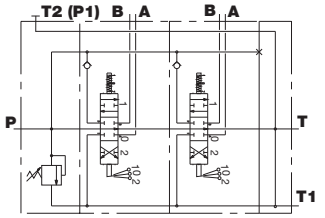
POSIZIONI LEVA
LEVER POSITION
POSITION DER HANDHEBEL
A - Diritta
B - Ruotata 90° verso il P
C - Ruotata 180°
D - Ruotata 90° verso il T
N - Nessuna
A *- Straight*
B *- Rotated 90° towards il P*
C *- Rotated 180°*
D *- Rotated 90° towards T*
N *- None*
A - Gerade
B - 90° gedreht in Richtung P
C - 180° gedreht
D - 90° gedreht in Richtung T
N - Keine

OPZIONI LEVA
OPTIONS LEVER
POSITION DER HANDHEBEL
N - Nessuna - *None*
Keiner
Altre vedi tabella
Others see chart
Andere siehe Tabelle

DNC65

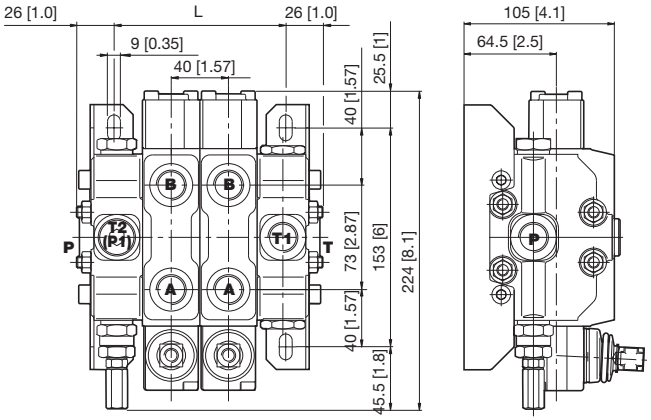
DISTRIBUTORI COMPONIBILI
MODULAR DIRECTIONAL CONTROL VALVES
KOMBI-STEUERGERÄTE

DATI TECNICI *TECHNICAL DATA* TECHNISCHE MERKMALE	
Portata nominale (max) *Nominal flow (max)* Nominaler Durchfluß (max)	**60 (70) l/min** **18.5 (21.1) gpm**
Portata nominale (max) con azionamenti E,D,J *Nominal flow rate (max) with drivers E,D,J* Nenn-Durchflussmenge (max.) mit Antrieben E, D, J	**60 (65) l/min** **15.8 (17,2) gpm**
Pressione nominale *Nominal pressure* Nominaler Betriebsdruck	**250 (3625)** **bar (psi)**
Pressione massima con azionamenti E,D,J *Maximum pressure with drivers E,D,J* Max. Druck mit Antrieben E, D, J	**180 (2610)** **bar (psi)**
Contropressione massima allo scarico *Maximum tank pressure* Maximaler Gegendruck Tankleitung	**50 (725)** **bar (psi)**
Massima trafila interna *Maximum internal leakage* Maximale interne Leckage	**8 cc/min** **(21 cSt - 100 bar)**
Temperatura di utilizzo *Temperature range* Betriebstemperatur	**-20°C +85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Viscosità olio *Oil viscosity* Ölviskosität	**Da 15 cSt a 90 cSt** ***From 15 cSt to 90 cSt*** **Von 15 cSt nach 90 cSt**
Fluido *Fluid* Öl	**Olio a base minerale** ***Mineral based oil*** **Mineral Öl**



STANDARD
STANDARD
STANDARD

STANDARD - ENTRATA SINISTRA
STANDARD – LEFT INLET
STANDARD - LINKER EINGANG



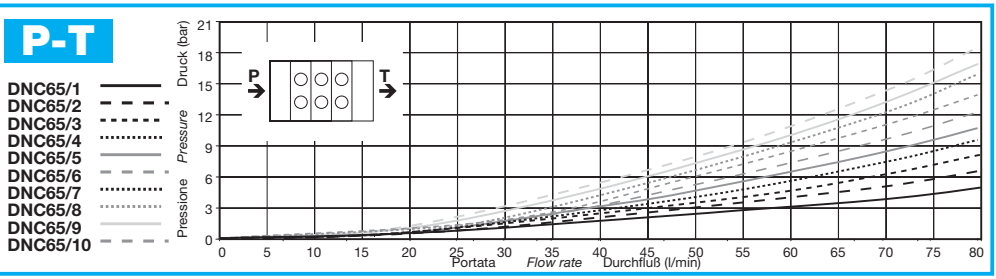
DIMENSIONI *SIZE* ABMESSUNGEN					
MOD. ***MOD.*** **MOD.**	**L** **mm [inch]**	**MASSA kg (lb)** ***WEIGHT kg (lb)*** **GEWICHT kg (lb)**	**MOD.** ***MOD.*** **MOD.**	**L** **mm [inch]**	**MASSA kg (lb)** ***WEIGHT kg (lb)*** **GEWICHT kg (lb)**
DNC651	80 [3.15]	7.5 (16.53)	**DNC656**	280 [11.02]	22.5 (49.6)
DNC652	120 [4.72]	10.5 (23.14)	**DNC657**	320 [12.59]	25.5 (56.21)
DNC653	160 [6.3]	13.5 (29.76)	**DNC658**	360 [14.17]	28.5 (62.83)
DNC654	200 [7.87]	16.5 (36.37)			
DNC655	240 [9.45]	19.5 (42.99)			

FILETTATURA *THREAD* GEWINDE		
CODICE ***MODEL*** **BEZEICHNUNG**	**TIPO** ***TYPE*** **GEWINDE**	**SERRAGGIO Nm** ***TORQUE Nm*** **ANZUGSMOMENT Nm**
0	NOT MACHINED	/
B	1/2" GAS ISO 1179	70
N	M22x1,5 ISO 9974	78
J	M22x1,5 ISO 6149	78
R	7/8 - 14 SAE ISO 11926	77

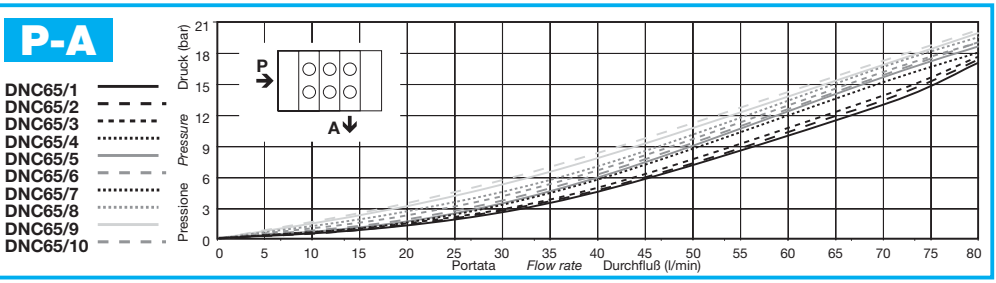
CURVE CARATTERISTICHE
FLOW CURVES
DUCHFLUSSKENNLINIEN

DNC65

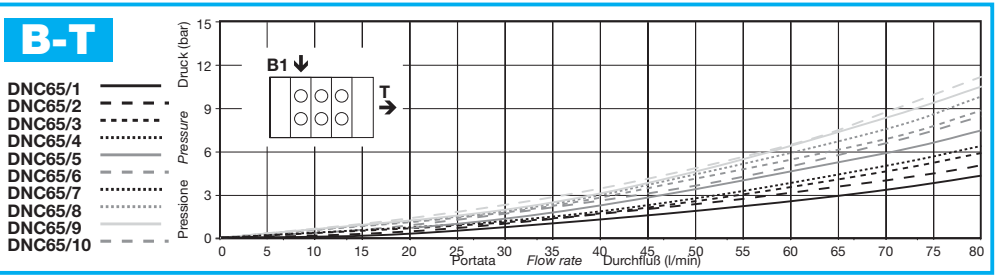
P-T



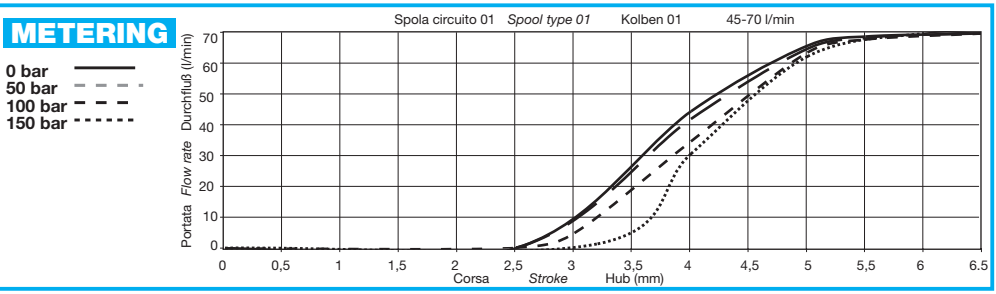
P-A



B-T



METERING

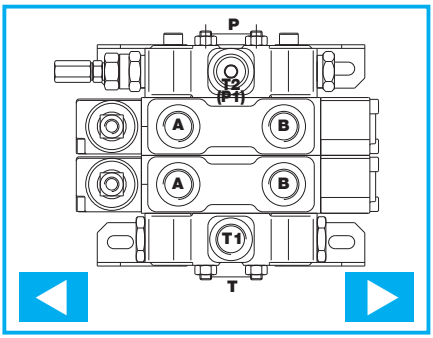


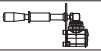
Parametri di prova: spola circuito 01
Testing parameters: 50°C - 21 cSt *spool type 01*
Prüfparameter: Kolben 01

AZIONAMENTI E OPZIONI
ACCESSORIES
ZUBEHÖR

DNC65

OPZIONI GENERALI *GENERAL OPTIONS* ALLGEMEINE OPTIONEM		
A		Alimentatore *Power supply unit* Steuerölversorgung
B		Alimentatore verniciatura nera *Power supply unit black paint* Steuerölversorgung, schwarz lackiert
C		Alimentatore con tubi di collegamento *Power supply with connecting tubes* Steuerölversorgung mit Verbindungsrohren
D		Alimentatore con tubi di collegamento + verniciatura *Power supply with connecting tubes + paint* Steuerölversorgung mit Verbindungsrohren + Lackierung



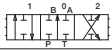
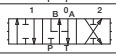
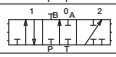
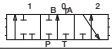
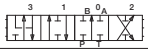
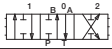
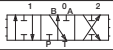
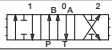
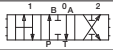
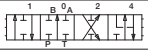
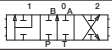
AZIONAMENTO *ACTUATOR* HEBELSEITE		
L		Manuale *Manual* Handhebel
A		Senza portaleva appendice standard *Without lever holder standard appendix* Ohne Hebelhalter, Kolben mit Zunge
B		Senza portaleva senza appendice *Without lever holder without appendix* Ohne Hebelhalter, Kolben ohne Zunge
F		Senza portaleva appendice forcella *Without lever holder fork appendix* Ohne Handhebel mit Gabel
C		Senza portaleva appendice piatta *Without lever holder flat appendix* Mechanische Betätigung mit geradem Kolbenende
T		Predisposizione cavo lato azionamento *Cable setting on actuator side* Anschluß für Bowdenzug
V		Intenzionale verticale *Intentional vertical* Sicherheitshebel, vertikal
O		Intenzionale orizzontale *Intentional horizontal* Sicherheitshebel, horizontal
M		Manipolatore *Manipulator* Joystick
H		Comando elettroidraulico doppio effetto *Dual effect electro-hydraulic control* Elektrohydraulisch, doppeltwirkend
S		Comando elettroidraulico singolo effetto bocca A *Single effect electro-hydraulic control port A* Elektrohydraulisch, Anschluß A
X		Comando elettroidraulico singolo effetto bocca B *Single effect electro-hydraulic control port B* Elektrohydraulisch, Anschluß B
U		Comando elettropneumatico doppio effetto *Dual effect electro-pneumatic control* Elektropneumatisch, doppeltwirkend
I		Comando elettropneumatico singolo effetto bocca A *Single effect electro-pneumatic control port A* Elektropneumatisch, Anschluß A
W		Comando elettropneumatico singolo effetto bocca B *Single effect electro-pneumatic control port B* Elektropneumatisch, Anschluß B

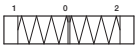
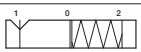
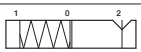
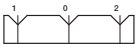
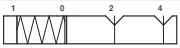
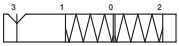
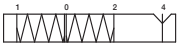
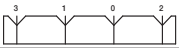
AZIONAMENTO *ACTUATOR* HEBELSEITE		
K		Comando idraulico 9/16"-18 UNF *Hydraulic control 9/16"-18 UNF* Hydraulisch ferngesteuert 9/16"-18 UNF
P		Comando pneumatico *Pneumatic control* Pneumatisch ferngesteuert
E		Comando elettrico doppio effetto *Dual effect electric control* Elektrisch Doppeltwirkend
D		Comando elettrico singolo effetto bocca A *Single effect electric control port A* Elektrisch Anschluß A
J		Comando elettrico singolo effetto bocca B *Single effect electric control port B* Elektrisch Anschluß B

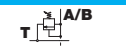
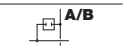
OPZIONI LATO POSIZIONATORE *SPOOL CONTROL SIDE* STEUERSCHIEBERSEITE		
C		Limitatore di corsa *Stroke limiter* Hubbegrenzung
M		Doppio comando maschio *Male dual control* Kolbenansteuerung mit Außengewinde
F		Doppio comando femmina *Female dual control* Kolbenansteuerung mit Innengewinde
T		Predisposizione cavo lato posizionatore *Cable setup on positioner side* Anschluß für Bowdenzug
Y		Micro doppio effetto *Dual effect microswitch* Micro-Schalter, aktiv in A und B
P		Micro semplice effetto bocca A *Simple effect microswitch port A* Micro-Schalter, aktiv in A
O		Micro semplice effetto bocca B *Simple effect microswitch port B* Micro-Schalter, aktiv in B

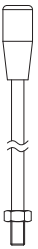
CIRCUITI E SCHEMI IDRAULICI
HYDRAULIC CIRCUITS AND SCHEMES
KOLBEN UND HYDRAULISCHE SCHEMATA

DNC65

CIRCUITO *SPOOL TYPE* KOLBEN TYP		POS. 3	POS. 1	POS. 0	POS. 2	POS. 4
01			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
03			P → B A → T BP ⊣	A,B → T P ⊣ BP →	P → A B → T BP ⊣	
04			A → T P,B ⊣ BP →	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B,T ⊣ BP ⊣	
05			P → B A,T ⊣ BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P,A ⊣ B → T BP →	
07		B,A → T P ⊣ BP →	P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
08			P → B A → T BP ⊣	A → T P ⊣ B ⊣ BP →	P → A B → T BP ⊣	
10			P → B A → T BP ⊣	B → T A ⊣ P ⊣ BP →	P → A B → T BP ⊣	
12			P → B A → T BP ⊣	P → B A → T BP →	P → A B → T BP ⊣	
33			P,A, B → T BP →	P → B A → T BP ⊣	P → A B → T BP ⊣	
70			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	A,B → T P ⊣ BP →
81			P → A, B T ⊣ BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	

POSIZIONATORE *SPOOL CONTROL* SCHIEBERSTELLUNG		
0A		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0B		Posizione neutra in 0, detent in 1 *Neutral position in 0, detent in 1* Neutralstellung in 0, rastend in 1
0C		Posizione neutra in 0, detent in 2 *Neutral position in 0, detent in 2* Neutralstellung in 0, rastend in 2
0D		Detent in 0, 1, 2 *Detent in 0, 1, 2* Raststellung in 0, 1 und 2
0R		Posizione neutra in 2 *Neutral position in 2* Neutralstellung in 2
0S		Posizione neutra in 1 *Neutral position in 1* Neutralstellung in 1
CP		Posizione neutra in 0, detent in 2,4 *Neutral position in 0, detent in 2,4* Neutralstellung in 0, rastend in 2,4
NS		Posizione neutra in 0, detent in 3 *Neutral position in 0, detent in 3* Neutralstellung in 0, rastend in 3
NT		Posizione neutra in 0, detent in 4 *Neutral position in 0, detent in 4* Neutralstellung in 0, rastend in 4
PS		Detent in 3, 1, 0, 2 *Detent in 3, 1, 0, 2* Raststellung in 3, 1, 0 und 2

TIPO DI VALVOLA BOCCA A - B *VALVE TYPE PORT A - B* SEKUNDÄRVENTIL IN ANSCHLUSS A – B		
VL		Per la taratura delle valvole consultare le istruzioni per l'ordinazione *For the valve setting, consult the ordering instructions.* Ventileinstellung siehe Bestellanleitung.
TP		

OPZIONI LEVA *LEVER OPTIONS* HEBEL-OPTIONEN				
A		110 mm diritta pomello standard *110 mm straight standard knob* 110 mm gerade, Standard-Griff	**L**	Ergonomica diritta verticale 180 mm *Ergonomic straight vertical 180 mm* Ergonomischer Hebel, gerade, 180 mm, vertikal
B		130 mm diritta pomello standard *130 mm straight standard knob* 130 mm gerade, Standard-Griff	**M**	Ergonomica diritta orizzontale 180 mm *Ergonomic straight horizontal 180 mm* Ergonomischer Hebel, gerade, 180 mm, horizontal
C		180 mm diritta pomello standard *180 mm straight standard knob* 180 mm gerade, Standard-Griff	**Y**	Ergonomica piegata 15° orizzontale 180 mm *Ergonomic bent 15°, horizontal 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, horizontal
D		210 mm diritta pomello standard *210 mm straight standard knob* 210 mm gerade, Standard-Griff	**O**	Ergonomica piegata 15° verticale 180 mm *Ergonomic bent 15°, vertical 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, vertikal
E		250 mm diritta pomello standard *250 mm straight standard knob* 250 mm gerade, Standard-Griff	**Q**	Ergonomica piegata 30° orizzontale 180 mm *Ergonomic bent 30°, horizontal 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, horizontal
F		300 mm diritta pomello standard *300 mm straight standard knob* 300 mm gerade, Standard-Griff	**R**	Ergonomica piegata 30° verticale 180 mm *Ergonomic bent 30°, vertical 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, vertikal
P	Parapolvere (disponibile solo per azionameno A - B) *Dust guard (available only for actuator A - B)* Abstreifer (nur für Betätigungen A - B)			

ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG

DNC65

DNC65	2	N	S	S	B	B	A	18	G	B	A	L

MODELLO *MODEL*
MODELL

N° DI SEZIONI
N° OF SECTIONS
ANZAHL ELEMENTE

OPZIONI GENERALI
GENERAL OPTIONS
ALLGEMEINE OPTIONEM

N - nessuna
V - verniciatura nera
A - alimentatore
B - alimentatore-verniciatura nera
C - alimentatore tubi collegam.
D - alimentatore tubi collegam.-vernic. nera

N *- None*
V *- Black paint*
A *- Power supply unit*
B *- Power supply unit - black paint*
C *- power supply connecting tubes*
D *- power supply connecting tubes-black paint*

N - ohne
V - schwarz lackiert
A - Steuerölversorgung
B - Steuerölversorgung, schwarz lackiert
C - Steuerölversorgung Verbindungsrohre
D - Steuerölversorgung Verbindungsrohre-schwarz lackiert

TIPO DI TESTATA
INLET COVER TYPE
DECKEL TYP

S - standard
T - TERV 0-50 l/min
V - TERV verticale 0-50 l/min

S *- standard*
T *- TERV 0-50 l/min*
V *- TERV vertical 0-50 l/min*

S - standard
T - TERV 0-50 l/min
V - TERV vertical 0-50 l/min

TIPO DI ENTRATA
INLET TYPE
P-EINGANG

S - sinistra (standard) ***S*** *- Left (standard)* **S** - Links (Standard)
D - destra ***D*** *- Right* **D** - Rechts

FILETTATURA BOCCA P
THREAD PORT P
ANSCHLUSSGEWINDE P
B - N - J - R
Vedi tabella *See chart* Siehe Tabelle

FILETTATURA BOCCA T2
THREAD PORT T2
ANSCHLUSSGEWINDE T2
B - N - J - R - O
Vedi tabella *See chart* Siehe Tabelle

OPZIONI SU BOCCA P-T2
OPTIONS ON PORT P-T2
OPTIONEN FÜR ANSCHLUSS P-T2

A *- P open T2 plugged (standard)*
B *- P plugged T2 open*
C *- P open T2 open*
D *- P open T2 used as P1*
E *- P plugged T2 used as P1*
F *- P upper (horizontal TERV.)*
G *- P lateral (vertical TERV.)*

A - P aperto T2 tappato (standard)
B - P tappato T2 aperto
C - P aperto T2 aperto
D - P aperto T2 usato come P1
E - P tappato T2 usato come P1
F - P superiore (terv. orizzontale)
G - P laterale (terv. verticale)

A - P offen, T2 verschlossen (Standard)
B - P verschlossen, T2 offen
C - P offen, T2 offen
D - P offen, T2 verwendet als P1
E - P verschlossen T2 verwendet als P1
F - P oben (TERV. horizontal)
G - P seitlich (TERV. vertikal)

AZIONAMENTI
ACTUATORS
BETÄTIGUNGSARTEN
Altri vedi tabella
Others see chart
Andere siehe Tabelle

TIPO DI ELEMENTO
TYPE OF ELEMENT
BAUART DES ELEMENTES

A - parallelo
E - ERV 0-25 l/min
F - ERV 0-40 l/min
P - prioritario
R - recupero

A *- parallel*
E *- ERV 0-25 l/min*
F *- ERV 0-40 l/min*
P *- priority*
R *- recovery*

A - parallel
E - ERV 0-25 L/min
F - ERV 0-40 L/min
P - Vorzugsstrom
R - Rückgewinnung

FILETTATURA BOCCHE A-B
THREAD PORTS A-B
ANSCHLUSSGEWINDE A-B
B - N - J - R
Vedi tabella *See chart* Siehe Tabelle

TIPO DI PIOMBATURA
TYPE OF LEAD SEAL
VERSTELLSICHERUNG

G - grano	***G*** *- Dowel*	**G** - Gewindestift
C - cappuccio	***C*** *- Cap*	**C** - Plastikkappe
P - piombata	***P*** *- Lead sealed*	**P** - Plombiert
R - pred.piom.	***R*** *- Seal setting*	**R** - Bohrung für Plombe
N - nessuna	***N*** *- None*	**N** - ohne

TIPO VALVOLA DI MASSIMA PRESSIONE
MAXIMUM PRESSURE RELIEF VALVE TYPE
DRUCKBEGRENZUNGSVENTIL

00 - Tappo sostitutivo VMP
VMP replacement cap
Stopfen anstelle Von VMP

10 - 100 bar	**11** - 110 bar	**12** - 120 bar
13 - 130 bar	**14** - 140 bar	**15** - 150 bar
16 - 160 bar	**17** - 170 bar	**18** - 180 bar
19 - 190 bar	**20** - 200 bar	**21** - 210 bar
22 - 220 bar	**23** - 230 bar	**24** - 240 bar
25 - 250 bar		

Ripetere per ogni sezione del distributore
Repeat for each section of the distributor
Für jede Sektion wiederholen

01	A	0A	00	00	C	A	N	N	B	B	A	A

CIRCUITO
CIRCUIT
KOLBEN
Vedi tabella
See chart
Siehe Tabelle

OPZIONI SPOLE
OPTIONS SPOOL
KOLBENVARIANTEN
A - Spola standard 45-70 l/min
B - Spola standard 20-45 l/min
C - Spola nichelata 45-70 l/min
D - Spola nichelata 20-45 l/min
N - nessuna
A - *Standard spool* 45-70 l/min
B - *Standard spool* 20-45 l/min
C - *Nickel-plated* 45-70 l/min
D - *Nickel-plated* 20-45 l/min
N - None
A - Kolben standard 45-70 l/min
B - Kolben standard 20-45 l/min
C - Kolben vernickelt 45-70 l/min
D - Kolben vernickelt 20-45 l/min
N - Ohne

POSIZIONATORE
SPOOL CONTROL
SCHIEBERSTELLUNGSSATZ
NN - Nessuno - *None* - Keiner
Altri vedi tabella
Others see chart
Andere siehe Tabelle

TIPO VALVOLA BOCCA A
VALVE TYPE PORT A
SEKUNDÄRVENTIL IN ANSCHLUSS A
00 - Nessuna - *None* - Ohne
TP - Lavorato tappato - Processed and plugged - Gebohrt und verschlossen

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

TIPO VALVOLA BOCCA B
VALVE TYPE PORT B
SEKUNDÄRVENTIL IN ANSCHLUSS B
00 - Nessuna - *None* - Ohne
TP - Lavorato tappato - Processed and plugged - Gebohrt und verschlossen

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

OPZIONI LEVA
OPTIONS LEVER
POSITION DER HANDHEBEL
N - Nessuna - *None* Keiner
Altre vedi tabella
Others see chart
Andere siehe Tabelle

POSIZIONI LEVA ***LEVER POSITION*** **POSITION DER HANDHEBEL**

A - Diritta	***A*** - *Straight*	**A** - Gerade
B - Ruotata 90° verso il P	***B*** - *Rotated 90° towards il P*	**B** - 90° gedreht in Richtung P
C - Ruotata 180°	***C*** - *Rotated 180°*	**C** - 180° gedreht
D - Ruotata 90° verso il T	***D*** - *Rotated 90° towards T*	**D** - 90° gedreht in Richtung T
N - Nessuna	***N*** - *None*	**N** - Keine

OPZIONI A SCARICO
DISCHARGE OPTIONS
OPTIONEN FÜR TANKANSCHLUSS
A - pred. carry-over (standard)
B - con carry-over bocca T1
C - carry-over non disponibile
A - *carry-over setting (standard)*
B - *with carry-over port T1*
C - *carry-over not available*
A - Vorbereitet für Druck-Weiterl. (Standard)
B - Mit Buchse für Druck-Weiterl.
C - carry-over nicht vorhanden

OPZIONI SU BOCCA T-T1
OPTIONS ON PORT T-T1
OPTIONEN FÜR ANSCHLUSS T-T1
A - T aperto T1 aperto
B - T aperto T1 tappato
C - T tappato T1 aperto
A - T open T1 open
B - T open T1 plugged
C - T plugged T1 open
A - T offen, T1 offen
B - T offen, T1 verschlossen
C - T verschlossen, T1 offen

FILETTATURA BOCCA T1
THREAD PORT T1
ANSCHLUSSGEWINDE T1
B - N - J - R
Vedi tabella *See chart* Siehe Tabelle

FILETTATURA BOCCA T
THREAD PORT T
ANSCHLUSSGEWINDE T
B - N - J - R
Vedi tabella *See chart* Siehe Tabelle

TENSIONE E CONNETTORE
VOLTAGE AND CONNECTOR
MAGNETSPANNUNG UND STECKER
A - 12 V DIN 43650
B - 24 V DIN 43650
C - 12 V CON FILI
D - 24 V CON FILI
N - Nessuna

A - *12 V DIN 43650*	**A** - 12 V DIN 43650
B - *24 V DIN 43650*	**B** - 24 V DIN 43650
C - *12 V WITH WIRES*	**C** - 12 V mit Kabel
D - *24 V WITH WIRES*	**D** - 24 V mit Kabel
N - *None*	**N** - Ohne

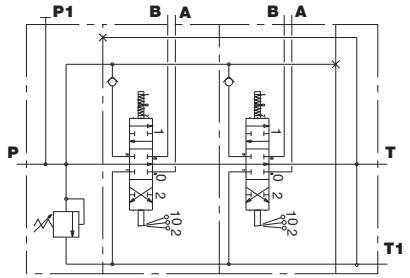
OPZIONI LATO POSIZIONATORE
POSITIONER SIDE OPTIONS
STEUERSCHIEBERSEITE
N - Nessuno - *None* - Keiner
Altri vedi tabella *Others see chart*
Andere siehe Tabelle

DNC75

DISTRIBUTORI COMPONIBILI
MODULAR DIRECTIONAL CONTROL VALVES
KOMBI-STEUERGERÄTE

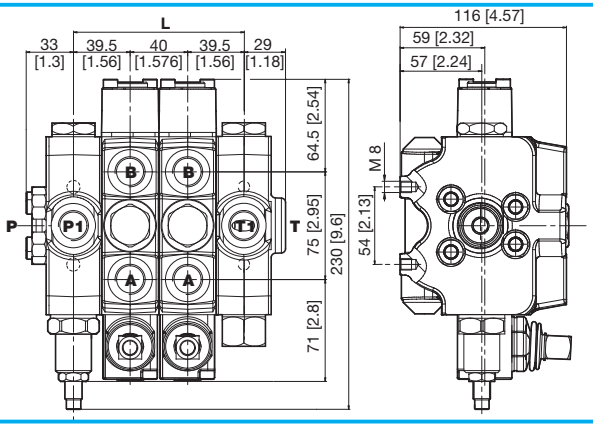
DATI TECNICI
TECHNICAL DATA
TECHNISCHE MERKMALE

Portata nominale (max) *Nominal flow (max)* Nominaler Durchfluß (max)	**60 (70) l/min** **18.5 (21.1) gpm**
Pressione nominale *Nominal pressure* Nominaler Betriebsdruck	**300 (4350)** **bar (psi)**
Contropressione massima allo scarico *Maximum tank pressure* Maximaler Gegendruck Tankleitung	**50 (725)** **bar (psi)**
Massima trafila interna *Maximum internal leakage* Maximale interne Leckage	**8 cc/min** **(21 cSt - 100 bar)**
Temperatura di utilizzo *Temperature range* Betriebstemperatur	**-20°C +85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Viscosità olio *Oil viscosity* Ölviskosität	**Da 15 cSt a 90 cSt** ***From 15 cSt to 90 cSt*** **Von 15 cSt nach 90 cSt**
Fluido *Fluid* Öl	**Olio a base minerale** ***Mineral based oil*** **Mineral Öl**



STANDARD
STANDARD
STANDARD

STANDARD - ENTRATA SINISTRA
STANDARD – LEFT INLET
STANDARD - LINKER EINGANG



DIMENSIONI
SIZE
ABMESSUNGEN

MOD. *MOD.* MOD.	L mm [inch]	MASSA kg (lb) *WEIGHT kg (lb)* GEWICHT kg (lb)	MOD. *MOD.* MOD.	L mm [inch]	MASSA kg (lb) *WEIGHT kg (lb)* GEWICHT kg (lb)
DNC751	79 [3.11]	8.3 (18.30)	**DNC756**	279 [10.98]	23 (50.71)
DNC752	119 [4.69]	11 (24.25)	**DNC757**	319 [12.56]	26 (57.32)
DNC753	159 [6.36]	14 (30.86)	**DNC758**	359 [14.13]	29 (63.93)
DNC754	199 [7.83]	17 (37.48)			
DNC755	239 [9.41]	20 (44.09)			

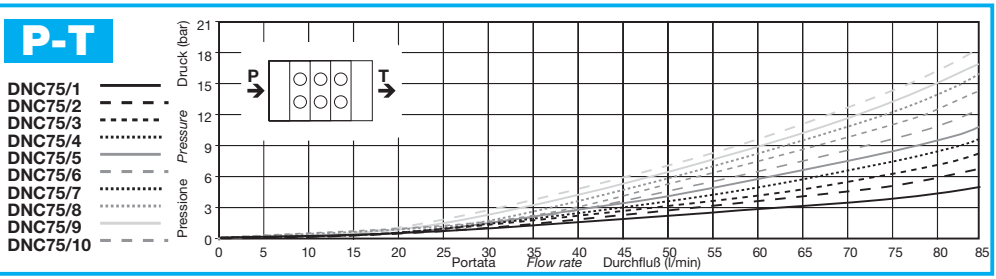
FILETTATURA
THREAD
GEWINDE

CODICE *MODEL* BEZEICHNUNG	TIPO *TYPE* GEWINDE	SERRAGGIO Nm *TORQUE Nm* ANZUGSMOMENT Nm
0	NO MACHINED	/
B	1/2" GAS ISO 1179	70
A	3/8"GAS ISO 1179	35
N	M22x1,5 ISO 9974	78
J	M22x1,5 ISO 6149	78
C	M18x1.5 ISO 9974	40
W	M18x1.5 ISO 6149	40
3	M14x1,5 ISO 9974	10
R	7/8 - 14 SAE ISO 11926	77
E	3/4 - 16 SAE ISO 11926	50
P	9/16 - 18 SAE ISO 11926	21

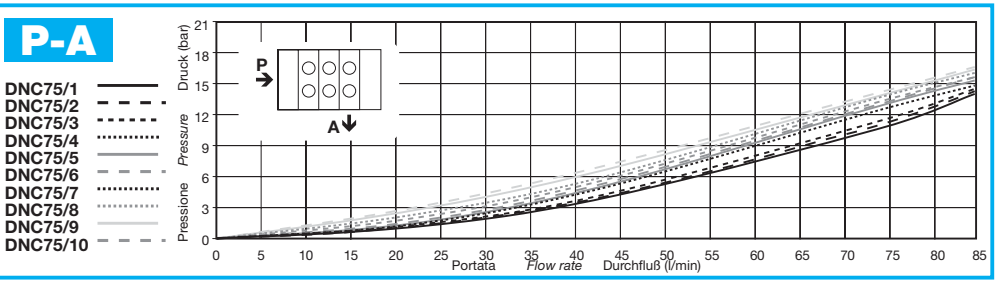
CURVE CARATTERISTICHE
FLOW CURVES
DUCHFLUSSKENNLINIEN

DNC75

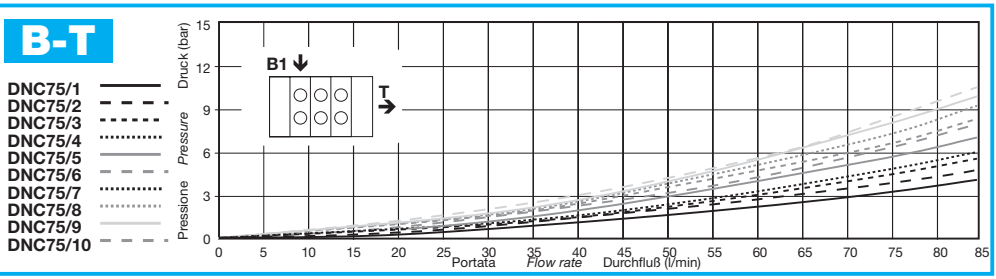
P-T



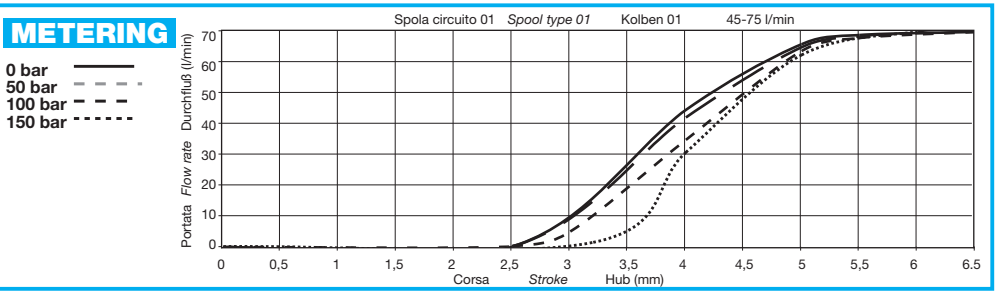
P-A



B-T



METERING

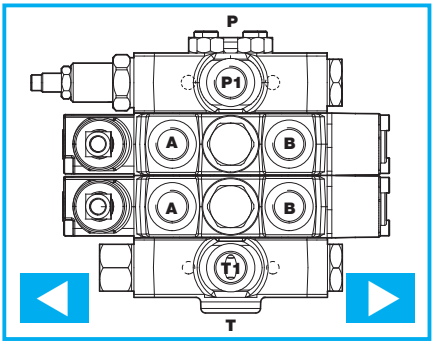


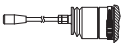
Parametri di prova: spola circuito 01
Testing parameters: 50°C - 21 cSt *spool type 01*
Prüfparameter: Kolben 01

AZIONAMENTI E OPZIONI
ACCESSORIES
ZUBEHÖR

DNC75

OPZIONI GENERALI *GENERAL OPTIONS* ALLGEMEINE OPTIONEM		
A		Alimentatore *Power supply unit* Steuerölversorgung
B		Alimentatore verniciatura nera *Power supply unit black paint* Steuerölversorgung, schwarz lackiert
C		Alimentatore con tubi di collegamento *Power supply with connecting tubes* Steuerölversorgung mit Verbindungsrohren
D		Alimentatore con tubi di collegamento + verniciatura *Power supply with connecting tubes + paint* Steuerölversorgung mit Verbindungsrohren + Lackierung

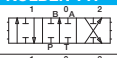
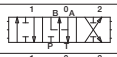
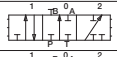
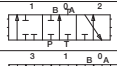
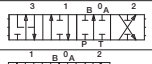
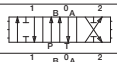
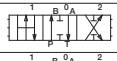
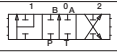


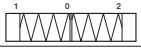
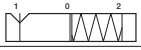
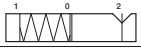
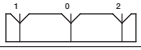
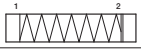
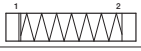
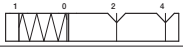
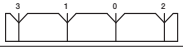
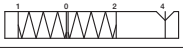
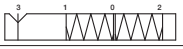
AZIONAMENTO *ACTUATOR* HEBELSEITE		
L		Manuale *Manual* Handhebel
Z		Manuale con limitatore di corsa *Manual with stroke limiter* Handhebel mit Hubbegrenzung
A		Senza portaleva appendice standard *Without lever holder standard appendix* Ohne Hebelhalter, Kolben mit Zunge
B		Senza portaleva senza appendice *Without lever holder without appendix* Ohne Hebelhalter, Kolben ohne Zunge
C		Senza portaleva appendice piatta *Without lever holder flat appendix* Mechanische Betätigung mit geradem Kolbenende
T		Predisposizione cavo lato azionamento *Cable setting on actuator side* Anschluß für Bowdenzug
V		Intenzionale verticale *Intentional vertical* Sicherheitshebel, vertikal
O		Intenzionale orizzontale *Intentional horizontal* Sicherheitshebel, horizontal
M		Manipolatore *Manipulator* Joystick
H		Comando elettroidraulico doppio effetto *Dual effect electro-hydraulic control* Elektrohydraulisch, doppeltwirkend
S		Comando elettroidraulico singolo effetto bocca A *Single effect electro-hydraulic control port A* Elektrohydraulisch, Anschluß A
X		Comando elettroidraulico singolo effetto bocca B *Single effect electro-hydraulic control port B* Elektrohydraulisch, Anschluß B
U		Comando elettropneumatico doppio effetto *Dual effect electro-pneumatic control* Elektropneumatisch, doppeltwirkend
I		Comando elettropneumatico singolo effetto bocca A *Single effect electro-pneumatic control port A* Elektropneumatisch, Anschluß A
W		Comando elettropneumatico singolo effetto bocca B *Single effect electro-pneumatic control port B* Elektropneumatisch, Anschluß B
K		Comando idraulico *Hydraulic control* Hydraulisch ferngesteuert
P		Comando pneumatico *Pneumatic control* Pneumatisch ferngesteuert

OPZIONI LATO POSIZIONATORE *SPOOL CONTROL SIDE* STEUERSCHIEBERSEITE		
C		Limitatore di corsa *Stroke limiter* Hubbegrenzung
M		Doppio comando maschio *Male dual control* Kolbenansteuerung mit Außengewinde
F		Doppio comando femmina *Female dual control* Kolbenansteuerung mit Innengewinde
T		Predisposizione cavo lato posizionatore *Cable setup on positioner side* Anschluß für Bowdenzug
Y		Micro doppio effetto *Dual effect microswitch* Micro-Schalter, aktiv in A und B
P		Micro semplice effetto bocca A *Simple effect microswitch port A* Micro-Schalter, aktiv in A
O		Micro semplice effetto bocca B *Simple effect microswitch port B* Micro-Schalter, aktiv in B

CIRCUITI E SCHEMI IDRAULICI
HYDRAULIC CIRCUITS AND SCHEMES
KOLBEN UND HYDRAULISCHE SCHEMATA

DNC75

CIRCUITO *SPOOL TYPE* KOLBEN TYP		POS. 3	POS. 1	POS. 0	POS. 2	POS. 4
01			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
03			P → B A → T BP ⊣	A,B → T P ⊣ BP →	P → A B → T BP ⊣	
04			A → T P,B ⊣ BP →	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B,T ⊣ BP ⊣	
05			P → B A,T ⊣ BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P,A ⊣ B → T BP →	
07		B, A → T P ⊣ BP →	P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
08			P → B A → T BP ⊣	A → T P ⊣ B ⊣ BP →	P → A B → T BP ⊣	
10			P → B A → T BP ⊣	B → T A ⊣ P ⊣ BP →	P → A B → T BP ⊣	
12			P → B A → T BP ⊣	P → B A → T BP →	P → A B → T BP ⊣	
33			P, A, B → T BP →	P → B A → T BP ⊣	P → A B → T BP ⊣	
70			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	A,B → T P ⊣ BP →
81			P → A, B T ⊣ BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	

POSIZIONATORE *SPOOL CONTROL* SCHIEBERSTELLUNG		
0A		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0B		Posizione neutra in 0, detent in 1 *Neutral position in 0, detent in 1* Neutralstellung in 0, rastend in 1
0C		Posizione neutra in 0, detent in 2 *Neutral position in 0, detent in 2* Neutralstellung in 0, rastend in 2
0D		Detent in 0, 1, 2 *Detent in 0, 1, 2* Raststellung in 0, 1 und 2
0R		Posizione neutra in 2 *Neutral position in 2* Neutralstellung in 2
0S		Posizione neutra in 1 *Neutral position in 1* Neutralstellung in 1
CP		Posizione neutra in 0, detent in 2,4 *Neutral position in 0, detent in 2,4* Neutralstellung in 0, rastend in 2,4
PS		Detent in 3, 1, 0, 2 *Detent in 3, 1, 0, 2* Raststellung in 3, 1, 0 und 2
NT		Posizione neutra in 0, detent in4 *Neutral position in 0, detent in4* Neutralstellung in 0, rastend in4
NS		Posizione neutra in 0, detent in3 *Neutral position in 0, detent in3* Neutralstellung in 0, rastend in3

TIPO DI VALVOLA BOCCA A - B
VALVE TYPE PORT A - B
SEKUNDÄRVENTIL IN ANSCHLUSS A – B

LC
VC
VL
LT

Per la taratura delle valvole consultare le istruzioni per l'ordinazione.
For the valve setting, consult the ordering instructions.
Ventileinstellung siehe Bestellanleitung.

OPZIONI LEVA
LEVER OPTIONS
HEBEL-OPTIONEN

A 110 mm diritta pomello standard
110 mm straight standard knob
110 mm gerade, Standard-Griff

B 130 mm diritta pomello standard
130 mm straight standard knob
130 mm gerade, Standard-Griff

C 180 mm diritta pomello standard
180 mm straight standard knob
180 mm gerade, Standard-Griff

D 210 mm diritta pomello standard
210 mm straight standard knob
210 mm gerade, Standard-Griff

E 250 mm diritta pomello standard
250 mm straight standard knob
250 mm gerade, Standard-Griff

F 300 mm diritta pomello standard
300 mm straight standard knob
300 mm gerade, Standard-Griff

L Ergonomica diritta verticale 180 mm
Ergonomic straight vertical 180 mm
Ergonomischer Hebel, gerade, 180 mm, vertikal

M Ergonomica diritta orizzontale 180 mm
Ergonomic straight horizontal 180 mm
Ergonomischer Hebel, gerade, 180 mm, horizontal

Y Ergonomica piegata 15° orizzontale 180 mm
Ergonomic bent 15°, horizontal 180 mm
Ergonomischer Hebel, 15° gebogen, 180 mm, horizontal

O Ergonomica piegata 15° verticale 180 mm
Ergonomic bent 15°, vertical 180 mm
Ergonomischer Hebel, 15° gebogen, 180 mm, vertikal

Q Ergonomica piegata 30° orizzontale 180 mm
Ergonomic bent 30°, horizontal 180 mm
Ergonomischer Hebel, 30° gebogen, 180 mm, horizontal

R Ergonomica piegata 30° verticale 180 mm
Ergonomic bent 30°, vertical 180 mm
Ergonomischer Hebel, 30° gebogen, 180 mm, vertikal

P Parapolvere (disponibile solo per azionameno A - B)
Dust guard (available only for actuator A - B)
Abstreifer (nur für Betätigungen A - B)

ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG

DNC75

DNC75	2	N	S	S	B	B	A	18	G	B	A	L

MODELLO
MODEL
MODELL

N° DI SEZIONI
N° OF SECTIONS
ANZAHL ELEMENTE

OPZIONI GENERALI
GENERAL OPTIONS
ALLGEMEINE OPTIONEM

N - nessuna
V - verniciatura nera
A - alimentatore
B - alimentatore-verniciatura nera
C - alimentatore tubi collegam.
D - alimentatore tubi collegam.-vernic. nera

N *- None*
V *- Black paint*
A *- Power supply unit*
B *- Power supply unit - black paint*
C *- power supply connecting tubes*
D *- power supply connecting tubes-black paint*

N - ohne
V - schwarz lackiert
A - Steuerölversorgung
B - Steuerölversorgung, schwarz lackiert
C - Steuerölversorgung Verbindungsrohre
D - Steuerölversorgung Verbindungsrohre-schwarz lackiert

TIPO DI ENTRATA
INLET TYPE
P-EINGANG

S - sinistra (standard)
D - destra

S *- Left (standard)* — **S** - Links (Standard)
D *- Right* — **D** - Rechts

FILETTATURA BOCCA P
THREAD PORT P
ANSCHLUSSGEWINDE P

L - B - 3 - C - N - W - J - P - R - 0

Vedi tabella *See chart* Siehe Tabelle

FILETTATURA BOCCA P1
THREAD PORT P1
ANSCHLUSSGEWINDE P1

L - B - 3 - C - N - W - J - P - R - 0

Vedi tabella *See chart* Siehe Tabelle

OPZIONI SU BOCCA P-P1
OPTIONS ON PORT P-P1
OPTIONEN FÜR ANSCHLUSS P-P1

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

A *- P open P1 not processed (standard)*
B *- P not processed P1 open*
C *- P open P1 open*
D *- P open, P1 plugged*
E *- P plugged, P1 open*

A - P offen, P1 nicht gebohrt (Standard)
B - P nicht gebohrt, P1 offen
C - P offen, P1 offen
D - P offen, P1 verschlossen
E - P verschlossen, P1 offen

OPZIONI SPOLE
OPTIONS SPOOL
KOLBENVARIANTEN

A - Spola standard 45-70 l/min
B - Spola standard 20-45 l/min
C - Spola nichelata 45-70 l/min
D - Spola nichelata 20-45 l/min

A - *Standard spool* 45-70 l/min
B - *Standard spool* 20-45 l/min
C - *Nickel-plated* 45-70 l/min
D - *Nickel-plated* 20-45 l/min

A - Kolben standard 45-70 l/min
B - Kolben standard 20-45 l/min
C - Kolben vernickelt 45-70 l/min
D - Kolben vernickelt 20-45 l/min

CIRCUITO
CIRCUIT
KOLBEN

Vedi tabella
See chart
Siehe Tabelle

AZIONAMENTI
ACTUATORS
BETÄTIGUNGSARTEN

Vedi tabella
See chart
Siehe Tabelle

FILETTATURA BOCCHE A-B
THREAD PORTS A-B
ANSCHLUSSGEWINDE A-B

A - B - T - C - N - W - J - P - E - R

Vedi tabella *See chart* Siehe Tabelle

TIPO DI PIOMBATURA
TYPE OF LEAD SEAL
VERSTELLSICHERUNG

G - grano	***G*** *- Dowel*	**G** - Gewindestift
C - cappuccio	***C*** *- Cap*	**C** - Plastikkappe
P - piombata	***P*** *- Lead sealed*	**P** - Plombiert
R - pred.piom.	***R*** *- Seal setting*	**R** - Bohrung für Plombe
N - nessuna	***N*** *- None*	**N** - ohne

TIPO VALVOLA DI MASSIMA PRESSIONE
MAXIMUM PRESSURE RELIEF VALVE TYPE
DRUCKBEGRENZUNGSVENTIL

00 - Tappo sostitutivo VMP
VMP replacement cap
Stopfen anstelle Von VMP

10 - 100 bar	**16** - 160 bar	**22** - 220 bar
11 - 110 bar	**17** - 170 bar	**23** - 230 bar
12 - 120 bar	**18** - 180 bar	**24** - 240 bar
13 - 130 bar	**19** - 190 bar	**25** - 250 bar
14 - 140 bar	**20** - 200 bar	**26** - 260 bar
15 - 150 bar	**21** - 210 bar	**27** - 270 bar
		28 - 280 bar
		29 - 290 bar
		30 - 300 bar

Ripetere per ogni sezione del distributore
Repeat for each section of the distributor
Für jede Sektion wiederholen

01	A	0A	00	00	C	A	N	N	B	B	A	A

POSIZIONATORE
SPOOL CONTROL
SCHIEBERSTELLUNGSSATZ

Vedi tabella
See chart
Siehe Tabelle

TIPO VALVOLA
VALVE TYPE
SEKUNDÄRVENTIL

00 - Non lavorata - *Not machined*
Nicht gebohrt

Altri vedi tabella *Others see chart*
Andere siehe Tabelle

BOCCA A
PORT A
ANSCHLUSS A

NN - Nessuna - *None* - Ohne

11 - 110 bar	**18** - 180 bar	**25** - 250 bar
12 - 120 bar	**19** - 190 bar	**26** - 260 bar
13 - 130 bar	**20** - 200 bar	**27** - 270 bar
14 - 140 bar	**21** - 210 bar	**28** - 280 bar
15 - 150 bar	**22** - 220 bar	**29** - 290 bar
16 - 160 bar	**23** - 230 bar	**30** - 300 bar
17 - 170 bar	**24** - 240 bar	

TIPO VALVOLA
VALVE TYPE
SEKUNDÄRVENTIL

00 - Non lavorata - *not machined* - nicht gebohrt
Altri vedi tabella
Others see chart
Andere siehe Tabelle

BOCCA B
PORT B
ANSCHLUSS B

NN - Nessuna - *None* - Ohne

11 - 110 bar	**18** - 180 bar	**25** - 250 bar
12 - 120 bar	**19** - 190 bar	**26** - 260 bar
13 - 130 bar	**20** - 200 bar	**27** - 270 bar
14 - 140 bar	**21** - 210 bar	**28** - 280 bar
15 - 150 bar	**22** - 220 bar	**29** - 290 bar
16 - 160 bar	**23** - 230 bar	**30** - 300 bar
17 - 170 bar	**24** - 240 bar	

OPZIONI LEVA
OPTIONS LEVER
POSITION DER HANDHEBEL

N - Nessuna - *None* - Keiner
Altre vedi tabella
Others see chart
Andere siehe Tabelle

POSIZIONI LEVA ***LEVER POSITION*** **POSITION DER HANDHEBEL**

A - Diritta	***A*** - *Straight*	**A** - Gerade
B - Ruotata 90° verso il P	***B*** - *Rotated 90° towards il P*	**B** - 90° gedreht in Richtung P
C - Ruotata 180°	***C*** - *Rotated 180°*	**C** - 180° gedreht
D - Ruotata 90° verso il T	***D*** - *Rotated 90° towards T*	**D** - 90° gedreht in Richtung T
N - Nessuna	***N*** - *None*	**N** - Keine

OPZIONI A SCARICO
DISCHARGE OPTIONS
OPTIONEN FÜR TANKANSCHLUSS

A - pred. carry-over (standard)
B - con carry-over bocca T1
A - *carry-over setting (standard)*
B - *with carry-over port T1*
A - Vorbereitet für Druck-Weiterl. (Standard)
B - Mit Buchse für Druck-Weiterl.

OPZIONI SU BOCCA T-T1
OPTIONS ON PORT T-T1
OPTIONEN FÜR ANSCHLUSS T-T1

A - T aperto T1 non lavorato
B - T non lavorato T1 aperto
C - T aperto T1 aperto
D- T aperto, T1 tappato
E- T tappato, T1 aperto
A- *T open T1 not processed*
B - *T not processed T1 open*
C - *T open T1 open*
D - *T open, T1 plugged*
E - *T plugged, T1 open*

A - T offen, T1 nicht gebohrt
B - T nicht gebohrt, T1 offen
C - T offen, T1 offen
D - T offen, T1 verschlossen
E - T verschlossen, T1 offen

FILETTATURA BOCCA T1
THREAD PORT T1
ANSCHLUSSGEWINDE T1

L - B - 3 - C - N - W - J - P - R - 0
Vedi tabella *See chart* Siehe Tabelle

FILETTATURA BOCCA T
THREAD PORT T
ANSCHLUSSGEWINDE T

L - B - 3 - C - N - W - J - P - R - 0
Vedi tabella *See chart* Siehe Tabelle

TENSIONE E CONNETTORE
VOLTAGE AND CONNECTOR
MAGNETSPANNUNG UND STECKER

A - 12 V DIN 43650
B - 24 V DIN 43650
C - 12 V CON FILI
D - 24 V CON FILI
N - Nessuna

A - *12 V DIN 43650*	**A** - 12 V DIN 43650
B - *24 V DIN 43650*	**B** - 24 V DIN 43650
C - *12 V WITH WIRES*	**C** - 12 V mit Kabel
D - *24 V WITH WIRES*	**D** - 24 V mit Kabel
N - *None*	**N** - Ohne

OPZIONI LATO POSIZIONATORE
POSITIONER SIDE OPTIONS
STEUERSCHIEBERSEITE

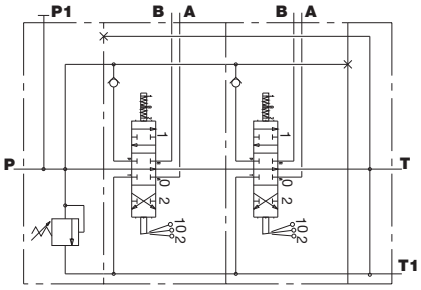
N - Nessuno - *None* - Keiner
Altri vedi tabella *Others see chart*
Andere siehe Tabelle

DNC90

DISTRIBUTORI COMPONIBILI
MODULAR DIRECTIONAL CONTROL VALVES
KOMBI-STEUERGERÄTE

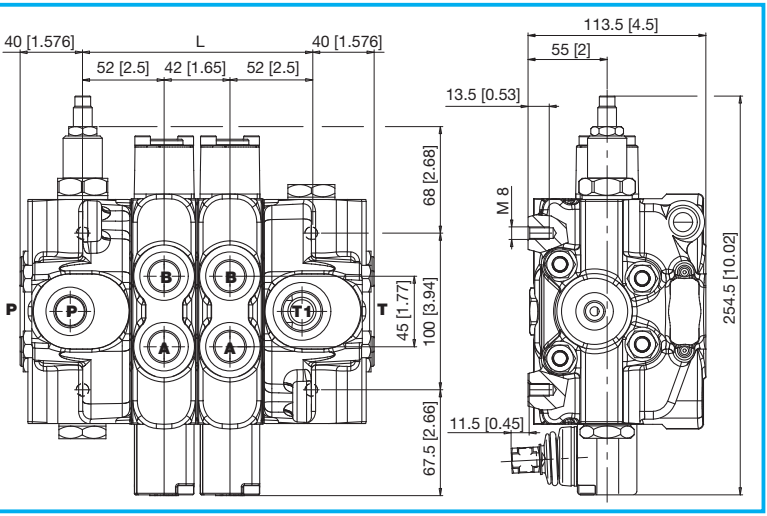
DATI TECNICI
TECHNICAL DATA
TECHNISCHE MERKMALE

Portata nominale (max) *Nominal flow (max)* Nominaler Durchfluß (max)	**90 (100) l/min** **23.7 (26.3) gpm**
Pressione nominale *Nominal pressure* Nominaler Betriebsdruck	**210 (3045)** **bar (psi)**
Contropressione massima allo scarico *Maximum tank pressure* Maximaler Gegendruck Tankleitung	**50 (725)** **bar (psi)**
Massima trafila interna *Maximum internal leakage* Maximale interne Leckage	**8 cc/min** **(21 cSt - 100 bar)**
Temperatura di utilizzo *Temperature range* Betriebstemperatur	**-20°C +85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Viscosità olio *Oil viscosity* Ölviskosität	**Da 15 cSt a 90 cSt** ***From 15 cSt to 90 cSt*** **Von 15 cSt nach 90 cSt**
Fluido *Fluid* Öl	**Olio a base minerale** ***Mineral based oil*** **Mineral Öl**



STANDARD
STANDARD
STANDARD

STANDARD - ENTRATA SINISTRA
STANDARD – LEFT INLET
STANDARD - LINKER EINGANG



DIMENSIONI
SIZE
ABMESSUNGEN

MOD. *MOD.* MOD.	L mm [inch]	MASSA kg (lb) *WEIGHT kg (lb)* GEWICHT kg (lb)	MOD. *MOD.* MOD.	L mm [inch]	MASSA kg (lb) *WEIGHT kg (lb)* GEWICHT kg (lb)
DNC901	104 [4.1]	8.3 (18.30)	**DNC906**	314 [12.36]	23 (50.71)
DNC902	146 [5.75]	11 (24.25)	**DNC907**	356 [14]	26 (57.32)
DNC903	188 [7.4]	14 (30.86)	**DNC908**	398 [15.6]	29 (63.93)
DNC904	230 [9.05]	17 (37.48)			
DNC905	272 [10.7]	20 (44.09)			

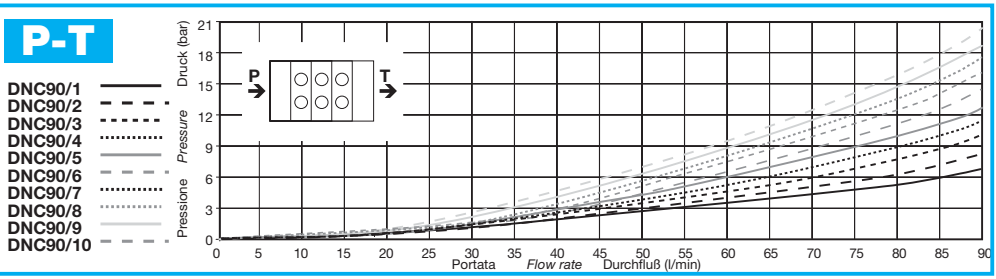
FILETTATURA
THREAD
GEWINDE

CODICE *MODEL* BEZEICHNUNG	TIPO *TYPE* GEWINDE	SERRAGGIO Nm *TORQUE Nm* ANZUGSMOMENT Nm
0	NO MACHINED	/
F	3/4" GAS ISO 1179	140
L	1/4"GAS ISO 1179	14
N	M22x1,5 ISO 9974	78
3	M14x1,5 ISO 9974	10
R	7/8 - 14 SAE ISO 11926	77
E	3/4 - 16 SAE ISO 11926	50
P	9/16 - 18 SAE ISO 11926	21

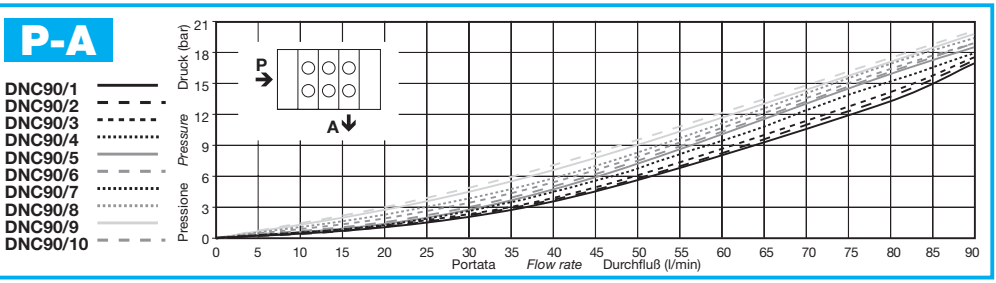
CURVE CARATTERISTICHE
FLOW CURVES
DUCHFLUSSKENNLINIEN

DNC90

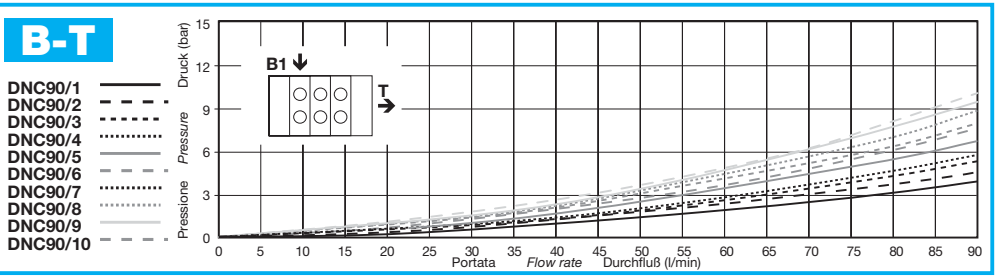
P-T



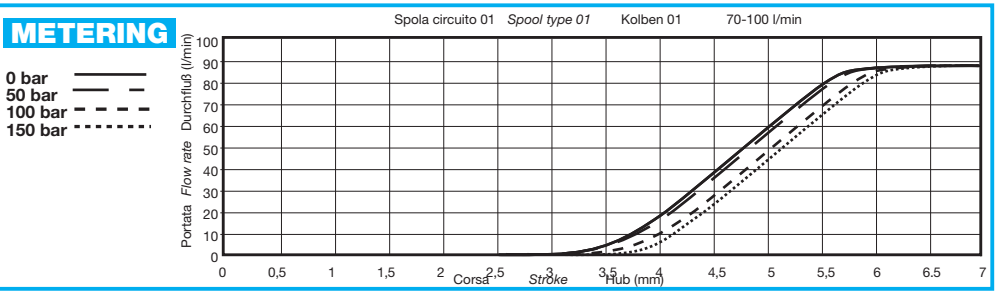
P-A



B-T



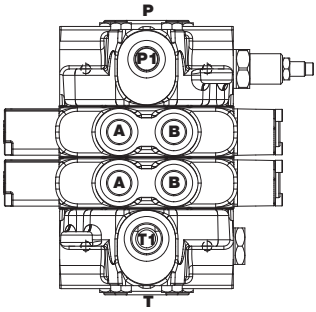
METERING

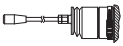


Parametri di prova: spola circuito 01
Testing parameters: 50°C - 21 cSt *spool type 01*
Prüfparameter: Kolben 01

AZIONAMENTI E OPZIONI
ACCESSORIES
ZUBEHÖR

DNC90

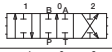
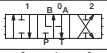
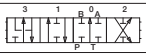


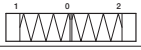
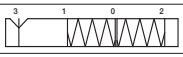
◀ AZIONAMENTO *ACTUATOR* HEBELSEITE		
L		Manuale *Manual* Handhebel
C		Senza portaleva appendice piatta *Without lever holder flat appendix* Mechanische Betätigung mit geradem Kolbenende
T		Predisposizione cavo lato azionamento *Cable setting on actuator side* Anschluß für Bowdenzug
M		Manipolatore *Manipulator* Joystick
P		Comando pneumatico *Pneumatic control* Pneumatisch ferngesteuert

▶ OPZIONI LATO POSIZIONATORE *SPOOL CONTROL SIDE* STEUERSCHIEBERSEITE		
T		Predisposizione cavo lato posizionatore *Cable setup on positioner side* Anschluß für Bowdenzug

CIRCUITI E SCHEMI IDRAULICI
HYDRAULIC CIRCUITS AND SCHEMES
KOLBEN UND HYDRAULISCHE SCHEMATA

DNC90

CIRCUITO *SPOOL TYPE* KOLBEN TYP		POS. 3	POS. 1	POS. 0	POS. 2	POS. 4
01			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
03			P → B A → T BP ⊣	B, A → T P ⊣ BP →	P → A B → T BP ⊣	
07		B, A → T P ⊣ BP →	P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	

POSIZIONATORE *SPOOL CONTROL* SCHIEBERSTELLUNG		
0A		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
NS		Posizione neutra in 0, detent in 3 *Neutral position in 0, detent in 3* Neutralstellung in 0, rastend in 3

TIPO DI VALVOLA BOCCA A - B *VALVE TYPE PORT A - B* SEKUNDÄRVENTIL IN ANSCHLUSS A – B		
LC		Per la taratura delle valvole consultare le istruzioni per l'ordinazione *For the valve setting, consult the ordering instructions.* Ventileinstellung siehe Bestellanleitung.
VC		
TP		

OPZIONI LEVA *LEVER OPTIONS* HEBEL-OPTIONEN					
A		110 mm diritta pomello standard *110 mm straight standard knob* 110 mm gerade, Standard-Griff	**L**		Ergonomica diritta verticale 180 mm *Ergonomic straight vertical 180 mm* Ergonomischer Hebel, gerade, 180 mm, vertikal
B		130 mm diritta pomello standard *130 mm straight standard knob* 130 mm gerade, Standard-Griff	**M**		Ergonomica diritta orizzontale 180 mm *Ergonomic straight horizontal 180 mm* Ergonomischer Hebel, gerade, 180 mm, horizontal
C		180 mm diritta pomello standard *180 mm straight standard knob* 180 mm gerade, Standard-Griff	**Y**		Ergonomica piegata 15° orizzontale 180 mm *Ergonomic bent 15°, horizontal 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, horizontal
D		210 mm diritta pomello standard *210 mm straight standard knob* 210 mm gerade, Standard-Griff	**O**		Ergonomica piegata 15° verticale 180 mm *Ergonomic bent 15°, vertical 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, vertikal
E		250 mm diritta pomello standard *250 mm straight standard knob* 250 mm gerade, Standard-Griff	**Q**		Ergonomica piegata 30° orizzontale 180 mm *Ergonomic bent 30°, horizontal 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, horizontal
F		300 mm diritta pomello standard *300 mm straight standard knob* 300 mm gerade, Standard-Griff	**R**		Ergonomica piegata 30° verticale 180 mm *Ergonomic bent 30°, vertical 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, vertikal

ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG

DNC90	2	N	S	B	B	A	18	G	B	L	01

MODELLO
MODEL
MODELL

N° DI SEZIONI
N° OF SECTIONS
ANZAHL ELEMENTE

OPZIONI GENERALI
GENERAL OPTIONS
ALLGEMEINE OPTIONEM

N - nessuna
V - verniciatura nera

N - *None*
V - *Black paint*

N - ohne
V - schwarz lackiert

TIPO DI ENTRATA
INLET TYPE
P-EINGANG

S - sinistra (standard)
D - destra

S - *Left (standard)*
D - *Right*

S - Links (Standard)
D - Rechts

FILETTATURA BOCCA P
THREAD PORT P
ANSCHLUSSGEWINDE P

L-B-F-3-N-5-J-U-P-R-V-0

Vedi tabella *See chart* Siehe Tabelle

FILETTATURA BOCCA P1
THREAD PORT P1
ANSCHLUSSGEWINDE P1

L-B-F-3-N-5-J-U-P-R-V-0

Vedi tabella *See chart* Siehe Tabelle

OPZIONI SU BOCCA P-P1
OPTIONS ON PORT P-P1
OPTIONEN FÜR ANSCHLUSS P-P1

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

A - *P open P1 not processed (standard)*
B - *P not processed P1 open*
C - *P open P1 open*
D - *P open P1 plugged*
E - *P plugged P1 open*

A - P offen, P1 nicht gebohrt (Standard)
B - P nicht gebohrt, P1 offen
C - P offen, P1 offen
D - P offen, P1 verschlossen
E - P verschlossen, P1 offen

TIPO VALVOLA DI MASSIMA PRESSIONE
MAXIMUM PRESSURE RELIEF VALVE TYPE
DRUCKBEGRENZUNGSVENTIL

00 - Tappo sostitutivo VMP
VMP replacement cap
Stopfen anstelle Von VMP

10 - 100 bar
11 - 110 bar
12 - 120 bar
13 - 130 bar
14 - 140 bar
15 - 150 bar
16 - 160 bar
17 - 170 bar
18 - 180 bar
19 - 190 bar
20 - 200 bar
21 - 210 bar

TIPO DI PIOMBATURA
TYPE OF LEAD SEAL
VERSTELLSICHERUNG

G - grano	***G*** - *Dowel*	**G** - Gewindestift
C - cappuccio	***C*** - *Cap*	**C** - Plastikkappe
P - piombata	***P*** - *Lead sealed*	**P** - Plombiert
R - pred.piom.	***R*** - *Seal setting*	**R** - Bohrung für Plombe
N - nessuna	***N*** - *None*	**N** - ohne

FILETTATURA BOCCHE A-B
THREAD PORTS A-B
ANSCHLUSSGEWINDE A-B

B - N - R

Vedi tabella *See chart* Siehe Tabelle

AZIONAMENTI
ACTUATORS
BETÄTIGUNGSARTEN

Vedi tabella
See chart
Siehe Tabelle

CIRCUITO
CIRCUIT
KOLBEN

Vedi tabella
See chart
Siehe Tabelle

Ripetere per ogni sezione del distributore
Repeat for each section of the distributor
Für jede Sektion wiederholen

A	0A	00	00	C	A	N	B	B	A	A

OPZIONI SPOLE
OPTIONS SPOOL
KOLBENVARIANTEN

A - Spola standard
B - Spola nichelata

A - *Standard spool*
B - *Nickel-plated*

A - Kolben standard
B - Kolben vernickelt

POSIZIONATORE
SPOOL CONTROL
SCHIEBERSTELLUNGSSATZ

Vedi tabella
See chart
Siehe Tabelle

TIPO VALVOLA BOCCA A
VALVE TYPE PORT A
SEKUNDÄRVENTIL IN ANSCHLUSS A

00 - Nessuna - *None* - Ohne
TP - Lavorato tappato - Processed and plugged - Gebohrt und verschlossen
VC - Valvola anticavitazione - *Anticavitation valve* - Nachsaugventil

11 - LC 110 bar	**16** - LC 160 bar	**21** - LC 210 bar
12 - LC 120 bar	**17** - LC 170 bar	**22** - LC 220 bar
13 - LC 130 bar	**18** - LC 180 bar	**23** - LC 230 bar
14 - LC 140 bar	**19** - LC 190 bar	**24** - LC 240 bar
15 - LC 150 bar	**20** - LC 200 bar	**25** - LC 250 bar

TIPO VALVOLA BOCCA B
VALVE TYPE PORTB
SEKUNDÄRVENTIL IN ANSCHLUSS B

00 - Nessuna - *None* - Ohne
TP - Lavorato tappato - Processed and plugged - Gebohrt und verschlossen
VC - Valvola anticavitazione - *Anticavitation valve* - Nachsaugventil

11 - LC 110 bar	**16** - LC 160 bar	**21** - LC 210 bar
12 - LC 120 bar	**17** - LC 170 bar	**22** - LC 220 bar
13 - LC 130 bar	**18** - LC 180 bar	**23** - LC 230 bar
14 - LC 140 bar	**19** - LC 190 bar	**24** - LC 240 bar
15 - LC 150 bar	**20** - LC 200 bar	**25** - LC 250 bar

OPZIONI LEVA
OPTIONS LEVER
POSITION DER HANDHEBEL

N - Nessuna - *None*
Keiner

Altre vedi tabella
Others see chart
Andere siehe Tabelle

POSIZIONI LEVA ***LEVER POSITION*** **POSITION DER HANDHEBEL**

A - Diritta	***A*** - *Straight*	**A** - Gerade
B - Ruotata 90° verso il P	***B*** - *Rotated 90° towards il P*	**B** - 90° gedreht in Richtung P
C - Ruotata 180°	***C*** - *Rotated 180°*	**C** - 180° gedreht
D - Ruotata 90° verso il T	***D*** - *Rotated 90° towards T*	**D** - 90° gedreht in Richtung T
N - Nessuna	***N*** - *None*	**N** - Keine

OPZIONI A SCARICO
DISCHARGE OPTIONS
OPTIONEN FÜR TANKANSCHLUSS

A - pred. carry-over (standard)
B - con carry-over bocca T1
C - carry-over non disponibile

A - *carry-over setting (standard)*
B - *with carry-over port T1*
C - *carry-over not available*

A - Vorbereitet für Druck-Weiterl. (Standard)
B - Mit Buchse für Druck-Weiterl.
C - carry-over nicht vorhanden

OPZIONI SU BOCCA T-T1
OPTIONS ON PORT T-T1
OPTIONEN FÜR ANSCHLUSS T-T1

A - T aperto T1 non lavorato
B - T non lavorato T1 aperto
C - T aperto T1 aperto
D- T aperto, T1 tappato
E- T tappato, T1 aperto

A- *T open T1 not processed*
B - *T not processed T1 open*
C - *T open T1 open*
D - *T open, T1 plugged*
E - *T plugged, T1 open*

A - T offen, T1 nicht gebohrt
B - T nicht gebohrt, T1 offen
C - T offen, T1 offen
D - T offen, T1 verschlossen
E - T verschlossen, T1 offen

FILETTATURA BOCCA T1
THREAD PORT T1
ANSCHLUSSGEWINDE T1
L - B - F - N - 5 - J - U - R - V - 0
Vedi tabella *See chart* Siehe Tabelle

FILETTATURA BOCCA T
THREAD PORT T
ANSCHLUSSGEWINDE T
L - B - F - N - 5 - J - U - R - V - 0
Vedi tabella *See chart* Siehe Tabelle

OPZIONI LATO POSIZIONATORE
POSITIONER SIDE OPTIONS
STEUERSCHIEBERSEITE

N - Nessuno - *None* - Keiner

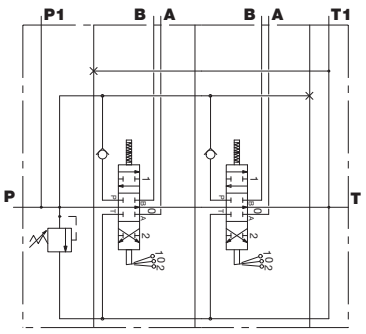
Altri vedi tabella *Others see chart*
Andere siehe Tabelle

DNC130

DISTRIBUTORI COMPONIBILI
MODULAR DIRECTIONAL CONTROL VALVES
KOMBI-STEUERGERÄTE

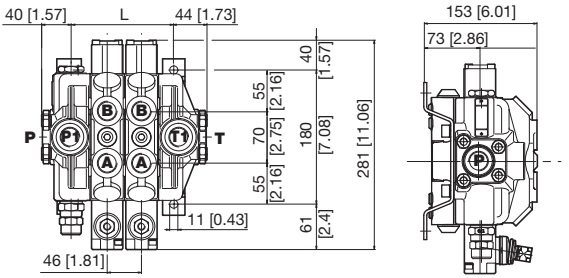
DATI TECNICI
TECHNICAL DATA
TECHNISCHE MERKMALE

Portata nominale (max) *Nominal flow (max)* Nominaler Durchfluß (max)	**130 (140) l/min** **34.39 (37) gpm**
Pressione nominale *Nominal pressure* Nominaler Betriebsdruck	**300 (4350)** **bar (psi)**
Contropressione massima allo scarico *Maximum tank pressure* Maximaler Gegendruck Tankleitung	**50 (725)** **bar (psi)**
Massima trafila interna *Maximum internal leakage* Maximale interne Leckage	**60 cc/min max** **(21 cSt - 100 bar)**
Temperatura di utilizzo *Temperature range* Betriebstemperatur	**-20°C +85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Viscosità olio *Oil viscosity* Ölviskosität	**Da 15 cSt a 90 cSt** ***From 15 cSt to 90 cSt*** **Von 15 cSt nach 90 cSt**
Fluido *Fluid* Öl	**Olio a base minerale** ***Mineral based oil*** **Mineral Öl**



STANDARD
STANDARD
STANDARD

STANDARD - ENTRATA SINISTRA
STANDARD – LEFT INLET
STANDARD - LINKER EINGANG



DIMENSIONI
SIZE
ABMESSUNGEN

MOD. *MOD.* MOD.	L mm [inch]	MASSA kg (lb) *WEIGHT kg (lb)* GEWICHT kg (lb)	MOD. *MOD.* MOD.	L mm [inch]	MASSA kg (lb) *WEIGHT kg (lb)* GEWICHT kg (lb)
DNC1301	78 [3.07]	14 (30.9)	**DNC106**	308 [12.12]	44 (97)
DNC1302	124 [4.88]	20 (44.1)			
DNC1303	170 [6.69]	26 (57.3)			
DNC1304	216 [8.5]	32 (70.5)			
DNC1305	262 [10.31]	38 (83.8)			

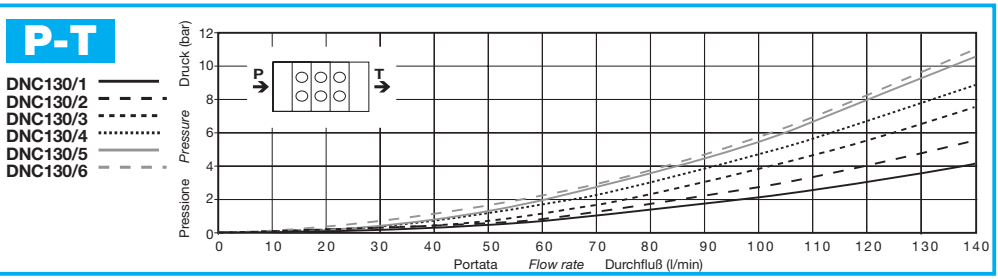
FILETTATURA
THREAD
GEWINDE

CODICE *MODEL* BEZEICHNUNG	TIPO *TYPE* GEWINDE	SERRAGGIO Nm *TORQUE Nm* ANZUGSMOMENT Nm
0	NO MACHINED	/
G	1"GAS ISO 1179	200
F	3/4" GAS ISO 1179	140
B	1/2" GAS ISO 1179	70
L	1/4"GAS ISO 1179	14
6	M33x2 ISO 9974	240
Z	M33x2 ISO 6149	240
5	M27x2 ISO 9974	170
U	M27x2 ISO 6149	170
N	M22x1,5 ISO 9974	78
J	M22x1,5 ISO 6149	78
3	M14x1,5 ISO 9974	10
S	1"5/16-12 SAE ISO 11926	270
V	1"1/16 -12 SAE ISO 11926	125
R	7/8 - 14 SAE ISO 11926	77
P	9/16 - 18 SAE ISO 11926	21

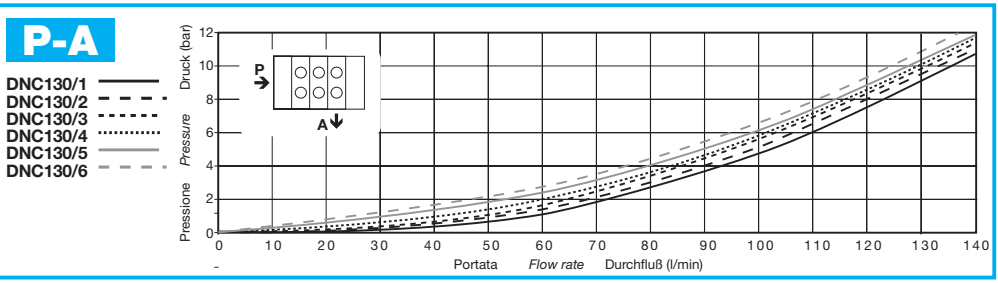
CURVE CARATTERISTICHE
FLOW CURVES
DUCHFLUSSKENNLINIEN

DNC130

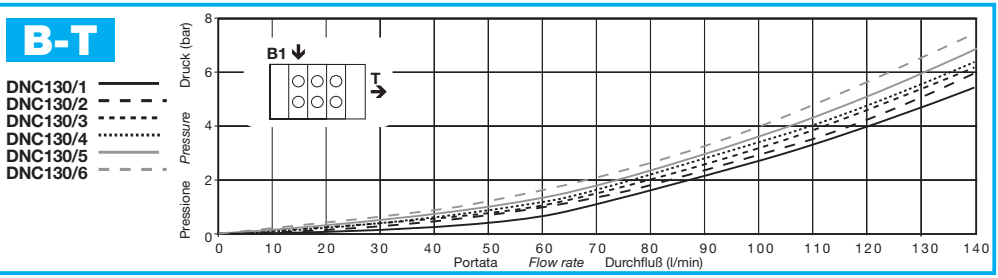
P-T



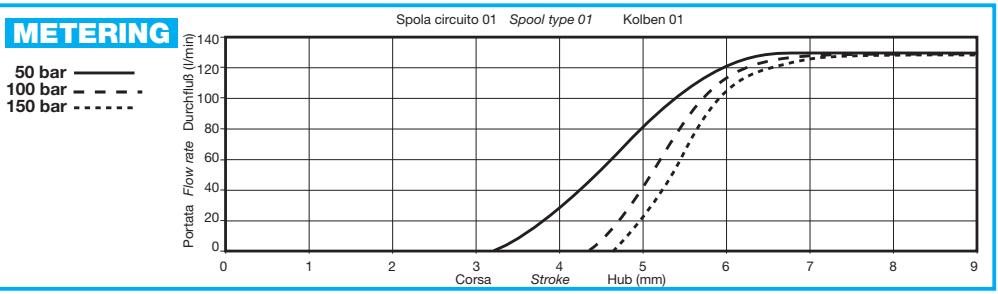
P-A



B-T

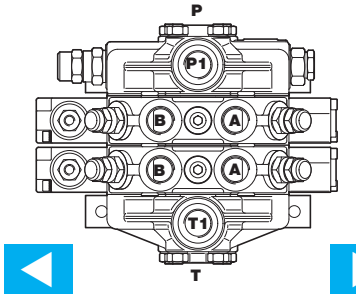


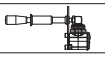
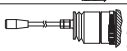
METERING



Parametri di prova: spola circuito 01
Testing parameters: 50°C - 21 cSt *spool type 01*
Prüfparameter: Kolben 01

OPZIONI GENERALI *GENERAL OPTIONS* ALLGEMEINE OPTIONEM		
A		Alimentatore *Power supply unit* Steuerölversorgung
B		Alimentatore verniciatura nera *Power supply unit black paint* Steuerölversorgung, schwarz lackiert
C		Alimentatore con tubi di collegamento *Power supply with connecting tubes* Steuerölversorgung mit Verbindungsrohren
D		Alimentatore con tubi di collegamento + verniciatura *Power supply with connecting tubes + paint* Steuerölversorgung mit Verbindungsrohren + Lackierung

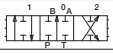
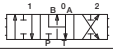
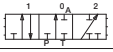
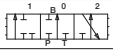
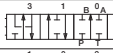
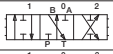
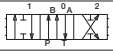


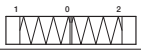
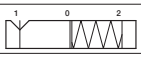
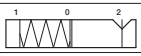
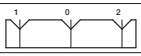
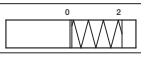
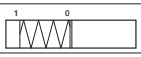
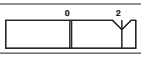
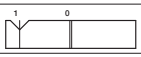
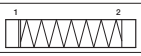
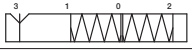
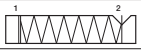
◀ AZIONAMENTO *ACTUATOR* HEBELSEITE		
L		Manuale *Manual* Handhebel
A		Senza portaleva appendice standard *Without lever holder standard appendix* Ohne Hebelhalter, Kolben mit Zunge
B		Senza portaleva senza appendice *Without lever holder without appendix* Ohne Hebelhalter, Kolben ohne Zunge
F		Senza portaleva appendice forcella *Without lever holder fork appendix* Ohne Handhebel mit Gabel
T		Predisposizione cavo lato azionamento *Cable setting on actuator side* Anschluß für Bowdenzug
V		Intenzionale verticale *Intentional vertical* Sicherheitshebel, vertikal
O		Intenzionale orizzontale *Intentional horizontal* Sicherheitshebel, horizontal
M		Manipolatore *Manipulator* Joystick
H		Comando elettroidraulico doppio effetto *Dual effect electro-hydraulic control* Elektrohydraulisch, doppeltwirkend
S		Comando elettroidraulico singolo effetto bocca A *Single effect electro-hydraulic control port A* Elektrohydraulisch, Anschluß A
X		Comando elettroidraulico singolo effetto bocca B *Single effect electro-hydraulic control port B* Elektrohydraulisch, Anschluß B
P		Comando pneumatico *Pneumatic control* Pneumatisch ferngesteuert

▶ OPZIONI LATO POSIZIONATORE *SPOOL CONTROL SIDE* STEUERSCHIEBERSEITE		
C		Limitatore di corsa *Stroke limiter* Hubbegrenzung
M		Doppio comando maschio *Male dual control* Kolbenansteuerung mit Außengewinde
F		Doppio comando femmina *Female dual control* Kolbenansteuerung mit Innengewinde
T		Predisposizione cavo lato posizionatore *Cable setup on positioner side* Anschluß für Bowdenzug

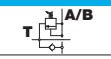
CIRCUITI E SCHEMI IDRAULICI
HYDRAULIC CIRCUITS AND SCHEMES
KOLBEN UND HYDRAULISCHE SCHEMATA

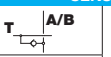
DNC130

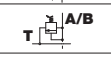
CIRCUITO *SPOOL TYPE* KOLBEN TYP		POS. 3	POS. 1	POS. 0	POS. 2	POS. 4
01			P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
03			P → B A → T BP ⊣	A,B → T P ⊣ BP →	P → A B → T BP ⊣	
04			A → T P,B ⊣ BP →	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B,T ⊣ BP ⊣	
05			P → B A,T ⊣ BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P,A ⊣ B → T BP →	
07		B, A → T P ⊣ BP →	P → B A → T BP ⊣	P ⊣ T ⊣ A ⊣ B ⊣ BP →	P → A B → T BP ⊣	
10			P → B A → T BP ⊣	B → T A ⊣ P ⊣ BP →	P → A B → T BP ⊣	
12			P → B A → T BP ⊣	P → B A → T BP →	P → A B → T BP ⊣	

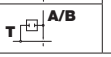
POSIZIONATORE *SPOOL CONTROL* SCHIEBERSTELLUNG		
0A		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0B		Posizione neutra in 0, detent in 1 *Neutral position in 0, detent in 1* Neutralstellung in 0, rastend in 1
0C		Posizione neutra in 0, detent in 2 *Neutral position in 0, detent in 2* Neutralstellung in 0, rastend in 2
0D		Detent in 0, 1, 2 *Detent in 0, 1, 2* Raststellung in 0, 1 und 2
0E		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0F		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0H		Detent in 2 *Detent in 2* Raststellung in 2
0L		Detent in 1 *Detent in 1* Raststellung in 1
0S		Posizione neutra in 1 *Neutral position in 1* Neutralstellung in 1
NS		Posizione neutra in 0, detent in 3 *Neutral position in 0, detent in 3* Neutralstellung in 0, rastend in 3
SQ		Posizione neutra in 1, detent in 2 *Neutral position in 1, detent in 2* Neutralstellung in 1, rastend in 2

TIPO DI VALVOLA BOCCA A - B
VALVE TYPE PORT A - B
SEKUNDÄRVENTIL IN ANSCHLUSS A – B

LC 

VC 

VL 

LT 

Per la taratura delle valvole consultare le istruzioni per l'ordinazione.
For the valve setting, consult the ordering instructions.
Ventileinstellung siehe Bestellanleitung.

OPZIONI LEVA
LEVER OPTIONS
HEBEL-OPTIONEN

A	110 mm diritta pomello standard *110 mm straight standard knob* 110 mm gerade, Standard-Griff
B	130 mm diritta pomello standard *130 mm straight standard knob* 130 mm gerade, Standard-Griff
C	180 mm diritta pomello standard *180 mm straight standard knob* 180 mm gerade, Standard-Griff
D	210 mm diritta pomello standard *210 mm straight standard knob* 210 mm gerade, Standard-Griff
E	250 mm diritta pomello standard *250 mm straight standard knob* 250 mm gerade, Standard-Griff
F	300 mm diritta pomello standard *300 mm straight standard knob* 300 mm gerade, Standard-Griff

L	Ergonomica diritta verticale 180 mm *Ergonomic straight vertical 180 mm* Ergonomischer Hebel, gerade, 180 mm, vertikal
M	Ergonomica diritta orizzontale 180 mm *Ergonomic straight horizontal 180 mm* Ergonomischer Hebel, gerade, 180 mm, horizontal
Y	Ergonomica piegata 15° orizzontale 180 mm *Ergonomic bent 15°, horizontal 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, horizontal
O	Ergonomica piegata 15° verticale 180 mm *Ergonomic bent 15°, vertical 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, vertikal
Q	Ergonomica piegata 30° orizzontale 180 mm *Ergonomic bent 30°, horizontal 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, horizontal
R	Ergonomica piegata 30° verticale 180 mm *Ergonomic bent 30°, vertical 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, vertikal

P Parapolvere (disponibile solo per azionameno A - B)
Dust guard (available only for actuator A - B)
Abstreifer (nur für Betätigungen A - B)

ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG

DNC130

DNC130	2	N	S	F	F	A	18	C	F	L	01	A

MODELLO *MODEL*
MODELL

N° DI SEZIONI
N° OF SECTIONS
ANZAHL ELEMENTE

OPZIONI GENERALI
GENERAL OPTIONS
ALLGEMEINE OPTIONEM

N - nessuna
V - verniciatura nera
A - alimentatore
B - alimentatore-verniciatura nera
C - alimentatore tubi collegam.
D - alimentatore tubi collegam.-vernic. nera

N *- None*
V *- Black paint*
A *- Power supply unit*
B *- Power supply unit - black paint*
C *- power supply connecting tubes*
D *- power supply connecting tubes-black paint*

N - ohne
V - schwarz lackiert
A - Steuerölversorgung
B - Steuerölversorgung, schwarz lackiert
C - Steuerölversorgung Verbindungsrohre
D - Steuerölversorgung Verbindungsrohre-schwarz lackiert

TIPO DI ENTRATA
INLET TYPE
P-EINGANG

S - sinistra (standard)
D - destra

S *- Left (standard)*
D *- Right*

S - Links (Standard)
D - Rechts

FILETTATURA BOCCA P
THREAD PORT P
ANSCHLUSSGEWINDE P
F - 5 - U - V
Vedi tabella
Siehe Tabelle
See chart

FILETTATURA BOCCA P1
THREAD PORT P1
ANSCHLUSSGEWINDE P1
L - F - G - 3 - 5 - 6 - U - Z - P - V - S - 0
Vedi tabella
Siehe Tabelle
See chart

OPZIONI SU BOCCA P-P1
OPTIONS ON PORT P-P1
OPTIONEN FÜR ANSCHLUSS P-P1

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

A *- P open P1 not processed (standard)*
B *- P open P1 plugged*
C *- P open P1 open*
D *- P plugged P1 open*

A - P offen, P1 nicht gebohrt (Standard)
B - P offen, P1 verschlossen
C - P offen, P1 offen
D - P verschlossen, P1 offen

TIPO VALVOLA DI MASSIMA PRESSIONE
MAXIMUM PRESSURE RELIEF VALVE TYPE
DRUCKBEGRENZUNGSVENTIL

00 - Tappo sostitutivo VMP
VMP replacement cap
Stopfen anstelle Von VMP

10 - 100 bar
11 - 110 bar
12 - 120 bar
13 - 130 bar
14 - 140 bar
15 - 150 bar
16 - 160 bar
17 - 170 bar
18 - 180 bar
19 - 190 bar
20 - 200 bar
21 - 210 bar
22 - 220 bar
23 - 230 bar
24 - 240 bar
25 - 250 bar
26 - 260 bar
27 - 270 bar
28 - 280 bar
29 - 290 bar
30 - 300 bar

TIPO DI PIOMBATURA
TYPE OF LEAD SEAL
VERSTELLSICHERUNG

C - cappuccio
P - piombata
N - nessuna

C *- Cap*
P *- Lead sealed*
N *- None*

C - Plastikkappe
P - Plombiert
N - ohne

FILETTATURA BOCCHE A-B
THREAD PORTS A-B
ANSCHLUSSGEWINDE A-B
F - G - 5 - 6 - U - Z - V - S
Vedi tabella *See chart* Siehe Tabelle

AZIONAMENTI
ACTUATORS
BETÄTIGUNGSARTEN
Vedi tabella
See chart
Siehe Tabelle

CIRCUITO
CIRCUIT
KOLBEN
Vedi tabella
See chart
Siehe Tabelle

OPZIONI SPOLE
OPTIONS SPOOL
KOLBENVARIANTEN

A - Spola standard
B - Spola nichelata

A - *Standard spool*
B - *Nickel-plated*

A - Kolben standard
B - Kolben vernickelt

Ripetere per ogni sezione del distributore
Repeat for each section of the distributor
Für jede Sektion wiederholen

0A	00	NN	00	NN	C	A	N	N	F	F	A	A

POSIZIONATORE
SPOOL CONTROL
SCHIEBERSTELLUNGSSATZ

Vedi tabella
See chart
Siehe Tabelle

TIPO VALVOLA
VALVE TYPE
SEKUNDÄRVENTIL

00 - Non lavorata - *Not machined*
Nicht gebohrt

Altri vedi tabella *Others see chart*
Andere siehe Tabelle

BOCCA A
PORT A
ANSCHLUSS A

NN - Nessuna - *None* - Ohne

11 - 110 bar	**18** - 180 bar	**25** - 250 bar
12 - 120 bar	**19** - 190 bar	**26** - 260 bar
13 - 130 bar	**20** - 200 bar	**27** - 270 bar
14 - 140 bar	**21** - 210 bar	**28** - 280 bar
15 - 150 bar	**22** - 220 bar	**29** - 290 bar
16 - 160 bar	**23** - 230 bar	**30** - 300 bar
17 - 170 bar	**24** - 240 bar	

TIPO VALVOLA
VALVE TYPE
SEKUNDÄRVENTIL

00 - Non lavorata - *not machined* - nicht gebohrt
Altri vedi tabella
Others see chart
Andere siehe Tabelle

BOCCA B
PORT B
ANSCHLUSS B

NN - Nessuna - *None* - Ohne

11 - 110 bar	**18** - 180 bar	**25** - 250 bar
12 - 120 bar	**19** - 190 bar	**26** - 260 bar
13 - 130 bar	**20** - 200 bar	**27** - 270 bar
14 - 140 bar	**21** - 210 bar	**28** - 280 bar
15 - 150 bar	**22** - 220 bar	**29** - 290 bar
16 - 160 bar	**23** - 230 bar	**30** - 300 bar
17 - 170 bar	**24** - 240 bar	

OPZIONI LEVA
OPTIONS LEVER
POSITION DER HANDHEBEL

Vedi tabella
See chart
Siehe Tabelle

POSIZIONI LEVA / ***LEVER POSITION*** / **POSITION DER HANDHEBEL**

A - Diritta	***A*** - *Straight*	**A** - Gerade
B - Ruotata 90° verso il P	***B*** - *Rotated 90° towards il P*	**B** - 90° gedreht in Richtung P
C - Ruotata 180°	***C*** - *Rotated 180°*	**C** - 180° gedreht
D - Ruotata 90° verso il T	***D*** - *Rotated 90° towards T*	**D** - 90° gedreht in Richtung T
N - Nessuna	***N*** - *None*	**N** - Keine

OPZIONI A SCARICO
DISCHARGE OPTIONS
OPTIONEN FÜR TANKANSCHLUSS

A - pred. carry-over (standard)
B - con carry-over bocca T1
A *- carry-over setting (standard)*
B *- with carry-over port T1*
A - Vorbereitet für Druck-Weiterl. (Standard)
B - Mit Buchse für Druck-Weiterl.

OPZIONI SU BOCCA T-T1
OPTIONS ON PORT T-T1
OPTIONEN FÜR ANSCHLUSS T-T1

A - T aperto T1 non lavorato
B - T non lavorato T1 aperto
C - T aperto T1 aperto
D- T aperto, T1 tappato
E- T tappato, T1 aperto
A*- T open T1 not processed*
B *- T not processed T1 open*
C *- T open T1 open*
D *- T open, T1 plugged*
E *- T plugged, T1 open*

A - T offen, T1 nicht gebohrt
B - T nicht gebohrt, T1 offen
C - T offen, T1 offen
D - T offen, T1 verschlossen
E - T verschlossen, T1 offen

FILETTATURA BOCCA T1
THREAD PORT T1
ANSCHLUSSGEWINDE T1
L - B - F - N - 5 - J - U - R - V - 0
Vedi tabella *See chart* Siehe Tabelle

FILETTATURA BOCCA T
THREAD PORT T
ANSCHLUSSGEWINDE T
L - B - F - N - 5 - J - U - R - V - 0
Vedi tabella *See chart* Siehe Tabelle

TENSIONE E CONNETTORE
VOLTAGE AND CONNECTOR
MAGNETSPANNUNG UND STECKER

A - 12 V DIN 43650
B - 24 V DIN 43650
C - 12 V CON FILI
D - 24 V CON FILI
N - Nessuna

A *- 12 V DIN 43650*	**A** - 12 V DIN 43650
B *- 24 V DIN 43650*	**B** - 24 V DIN 43650
C *- 12 V WITH WIRES*	**C** - 12 V mit Kabel
D *- 24 V WITH WIRES*	**D** - 24 V mit Kabel
N *- None*	**N** - Ohne

OPZIONI LATO POSIZIONATORE
POSITIONER SIDE OPTIONS
STEUERSCHIEBERSEITE

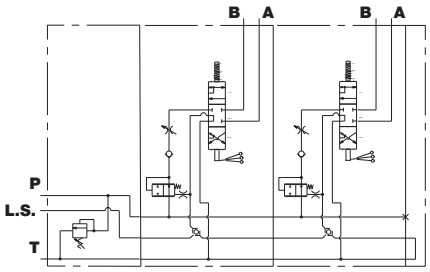
N - Nessuno - *None* - Keiner
Altri vedi tabella *Others see chart*
Andere siehe Tabelle

LSC90

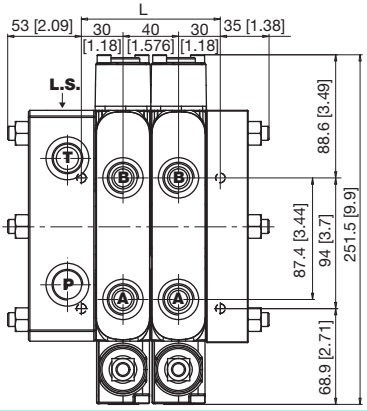
DISTRIBUTORI COMPONIBILI LOAD SENSING
LOAD SENSING DIRECTIONAL CONTROL VALVE
LOAD-SENSING-SANDWICH-STEUERGERÄT

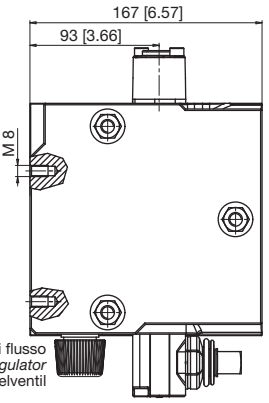
DATI TECNICI
TECHNICAL DATA
TECHNISCHE MERKMALE

Portata nominale (max) *Nominal flow (max)* Nominaler Durchfluß (max)	**100 (140) l/min** **26.4 (36.96) gpm**
Pressione nominale *Nominal pressure* Nominaler Betriebsdruck	**250 (3625)** **bar (psi)**
Contropressione massima allo scarico *Maximum tank pressure* Maximaler Gegendruck Tankleitung	**20 (290)** **bar (psi)**
Massima trafila interna *Maximum internal leakage* Maximale interne Leckage	**<15 cc/min** **(21 cSt - 100 bar)**
Temperatura di utilizzo *Temperature range* Betriebstemperatur	**-20°C +85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Viscosità olio *Oil viscosity* Ölviskosität	**Da 15 cSt a 90 cSt** ***From 15 cSt to 90 cSt*** **Von 15 cSt nach 90 cSt**
Fluido *Fluid* Öl	**Olio a base minerale** ***Mineral based oil*** **Mineral Öl**



STANDARD
STANDARD
STANDARD





Regolatore di flusso
Flow regulator
Stromregelventil

DIMENSIONI
SIZE
ABMESSUNGEN

MOD. *MOD.* MOD.	L mm [inch]	MASSA kg (lb) *WEIGHT kg (lb)* GEWICHT kg (lb)	MOD. *MOD.* MOD.	L mm [inch]	MASSA kg (lb) *WEIGHT kg (lb)* GEWICHT kg (lb)
LSC901	60 [2.36]	22 (48.4)	**LSC906**	260 [10.24]	54.5 (120)
LSC902	100 [3.94]	28.5 (62.7)	**LSC907**	300 [11.81]	61 (134.2)
LSC903	140 [5.51]	35 (77)	**LSC908**	340 [13.39]	67.5 (148.5)
LSC904	180 [7.09]	41.5 (91.3)			
LSC905	220 [8.66]	48 (105.6)			

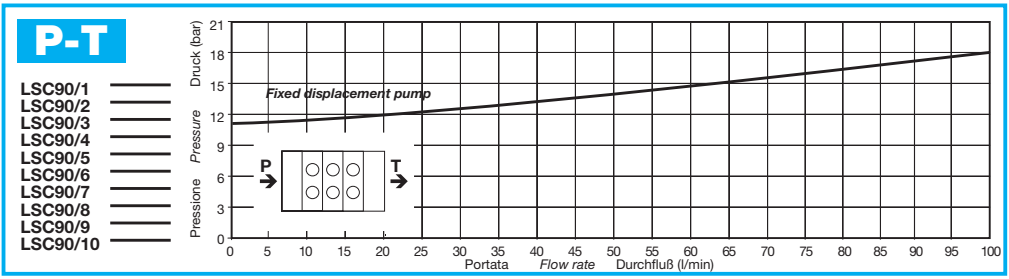
FILETTATURA
THREAD
GEWINDE

CODICE *MODEL* BEZEICHNUNG	TIPO *TYPE* GEWINDE	SERRAGGIO Nm *TORQUE Nm* ANZUGSMOMENT Nm
0	non lavorato	/
G	1"GAS ISO 1179	200
F	3/4" GAS ISO 1179	140
B	1/2" GAS ISO 1179	70
L	1/4"GAS ISO 1179	14
5	M27x2 ISO 9974	170
N	M22x1,5 ISO 9974	78
3	M14x1,5 ISO 9974	10
V	1"1/16 -12 SAE ISO 11926	125
R	7/8 - 14 SAE ISO 11926	77
P	9/16 - 18 SAE ISO 11926	21

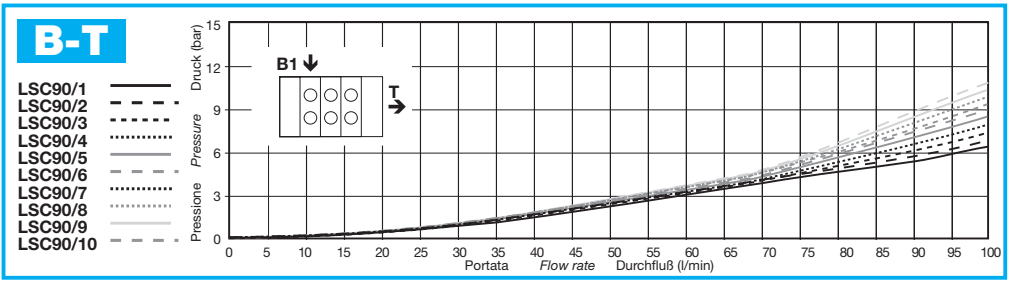
CURVE CARATTERISTICHE
FLOW CURVES
DUCHFLUSSKENNLINIEN

LSC90

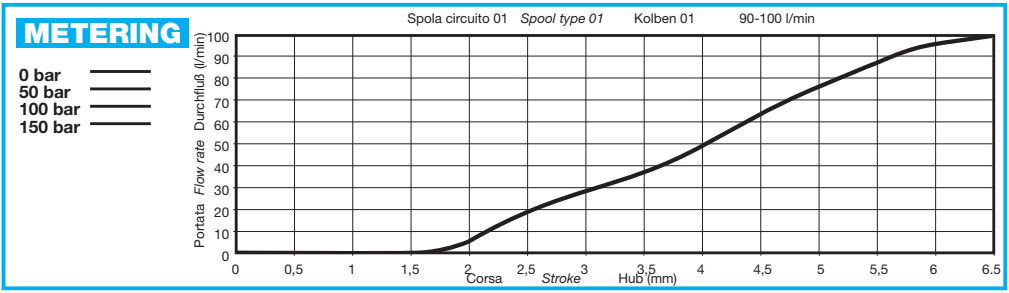
P-T



B-T



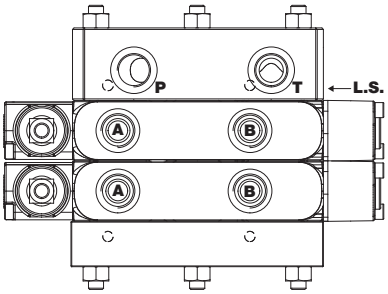
METERING



Parametri di prova: spola circuito 01
Testing parameters: 50°C - 21 cSt *spool type 01*
Prüfparameter: Kolben 01

AZIONAMENTI E OPZIONI
ACCESSORIES
ZUBEHÖR

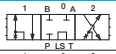
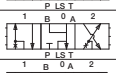
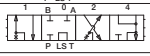
LSC90

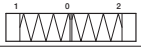
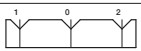
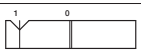
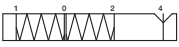
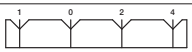


◀		AZIONAMENTO *ACTUATOR* HEBELSEITE
L		Manuale *Manual* Handhebel
A		Senza portaleva appendice standard *Without lever holder standard appendix* Ohne Hebelhalter, Kolben mit Zunge
C		Senza portaleva appendice piatta *Without lever holder flat appendix* Mechanische Betätigung mit geradem Kolbenende
T		Predisposizione cavo lato azionamento *Cable setting on actuator side* Anschluß für Bowdenzug
6		Elettro - proporzionale *Electro-proportional* Elektroproportionaler

CIRCUITI E SCHEMI IDRAULICI
HYDRAULIC CIRCUITS AND SCHEMES
KOLBEN UND HYDRAULISCHE SCHEMATA

LSC90

CIRCUITO *SPOOL TYPE* KOLBEN TYP		POS. 3	POS. 1	POS. 0	POS. 2	POS. 4
01			P → B A → T	P ⊣ T ⊣ A ⊣ B ⊣	P → A B → T	
03			P → B A → T	B, A → T P ⊣	P → A B → T	
04			A → T P ⊣ B ⊣	P ⊣ T ⊣ A ⊣ B ⊣	P → A B ⊣ T ⊣	
70			P → B A → T	P ⊣ T ⊣ A ⊣ B ⊣	P → A B → T	B, A → T P ⊣

POSIZIONATORE *SPOOL CONTROL* SCHIEBERSTELLUNG		
0A		Posizione neutra in 0 *Neutral position in 0* Neutralstellung in 0
0B		Posizione neutra in 0, detent in 1 *Neutral position in 0, detent in 1* Neutralstellung in 0, rastend in 1
0D		Detent in 0, 1, 2 *Detent in 0, 1, 2* Raststellung in 0, 1 und 2
0L		Detent in 1 *Detent in 1* Raststellung in 1
NT		Posizione neutra in 0, detent in4 *Neutral position in 0, detent in4* Neutralstellung in 0, rastend in4
PT		Detent in 1, 0, 2, 4 *Detent in 1, 0, 2, 4* Raststellung in 1, 0, 2 und 4

OPZIONI ELEMENTO *ELEMENT OPTIONS* OPTION ELEMENT		
A		Limitatore di flusso *Flow limiter* Mengenbegrenzung
B		Dispositivo zero trafila *Zero leakage device* Vorrichtung für Leckölfreiheit
C		Limitatore di flusso + zero trafila *Flow limiter + zero leakage* Mengenbegrenzung und Leckölfreiheit

OPZIONI LEVA *LEVER OPTIONS* HEBEL-OPTIONEN					
A		110 mm diritta pomello standard *110 mm straight standard knob* 110 mm gerade, Standard-Griff	L		Ergonomica diritta verticale 180 mm *Ergonomic straight vertical 180 mm* Ergonomischer Hebel, gerade, 180 mm, vertikal
B		130 mm diritta pomello standard *130 mm straight standard knob* 130 mm gerade, Standard-Griff	M		Ergonomica diritta orizzontale 180 mm *Ergonomic straight horizontal 180 mm* Ergonomischer Hebel, gerade, 180 mm, horizontal
C		180 mm diritta pomello standard *180 mm straight standard knob* 180 mm gerade, Standard-Griff	Y		Ergonomica piegata 15° orizzontale 180 mm *Ergonomic bent 15°, horizontal 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, horizontal
D		210 mm diritta pomello standard *210 mm straight standard knob* 210 mm gerade, Standard-Griff	O		Ergonomica piegata 15° verticale 180 mm *Ergonomic bent 15°, vertical 180 mm* Ergonomischer Hebel, 15° gebogen, 180 mm, vertikal
E		250 mm diritta pomello standard *250 mm straight standard knob* 250 mm gerade, Standard-Griff	Q		Ergonomica piegata 30° orizzontale 180 mm *Ergonomic bent 30°, horizontal 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, horizontal
F		300 mm diritta pomello standard *300 mm straight standard knob* 300 mm gerade, Standard-Griff	R		Ergonomica piegata 30° verticale 180 mm *Ergonomic bent 30°, vertical 180 mm* Ergonomischer Hebel, 30° gebogen, 180 mm, vertikal
P	Parapolvere (disponibile solo per azionameno A) *Dust guard (available only for actuator A)* Abstreifer (nur für Betätigungen A)				

ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG

LSC90

LSC90	2	N	A	B	B	0	18	G	20

MODELLO
MODEL
MODELL

N° DI SEZIONI
N° OF SECTIONS
ANZAHL ELEMENTE

OPZIONI GENERALI
GENERAL OPTIONS
ALLGEMEINE OPTIONEM

N - nessuna
V - verniciatura nera

N *- None*
V *- Black paint*

N - ohne
V - schwarz lackiert

TIPO DI TESTATA
INLET COVER TYPE
DECKEL TYP

A- centro aperto (pompa con portata fissa)
B- centro chiuso (per pompa load-sensing)

A*- open center (pump with fixed flow)*
B*- closed center (for load-sensing pump)*

A - open center (für Betrieb mit Konstantpumpe)
B - closed center (für Betrieb mit LS-Verstellpumpe)

FILETTATURA BOCCA P
THREAD PORT P
ANSCHLUSSGEWINDE P
B - F - G - J - 5 - R - V

Vedi tabella *See chart* Siehe Tabelle

FILETTATURA BOCCA T
THREAD PORT T
ANSCHLUSSGEWINDE T
B - F - G - J - 5 - R - V
Vedi tabella *See chart* Siehe Tabelle

FILETTATURA BOCCA L.S.
THREADS PORT L.S.
ANSCHLUSSGEWINDE L.S.
L - 3 - P - 0
Vedi tabella *See chart* Siehe Tabelle

TIPO VALVOLA DI MASSIMA PRESSIONE SECONDARIA
SECONDARY MAXIMUM PRESSURE RELIEF VALVE TYPE
SEKUNDÄR DRUCKBEGRENZUNGSVENTIL

00 - Tappo sostitutivo VMP
VMP replacement cap
Stopfen anstelle Von VMP

10 - 100 bar
11 - 110 bar
12 - 120 bar
13 - 130 bar
14 - 140 bar
15 - 150 bar
16 - 160 bar
17 - 170 bar
18 - 180 bar
19 - 190 bar
20 - 200 bar
21 - 210 bar
22 - 220 bar
23 - 230 bar
24 - 240 bar
25 - 250 bar

TIPO DI PIOMBATURA
TYPE OF LEAD SEAL
VERSTELLSICHERUNG

G - grano *G - Dowel* **G** - Gewindestift
C - cappuccio *C - Cap* **C** - Plastikkappe
P - piombata *P - Lead sealed* **P** - Plombiert
R - pred.piom. *R - Seal setting* **R** - Bohrung für Plombe
N - nessuna *N - None* **N** - ohne

TIPO VALVOLA DI MASSIMA PRESSIONE PRINCIPALE
MAIN MAXIMUM PRESSURE RELIEF VALVE TYPE
GRUNDSÄTZLICHE DRUCKBEGRENZUNGSVENTIL

00 - Tappo sostitutivo VMP
VMP replacement cap
Stopfen anstelle Von VMP

10 - 100 bar
11 - 110 bar
12 - 120 bar
13 - 130 bar
14 - 140 bar
15 - 150 bar
16 - 160 bar
17 - 170 bar
18 - 180 bar
19 - 190 bar
20 - 200 bar
21 - 210 bar
22 - 220 bar
23 - 230 bar
24 - 240 bar
25 - 250 bar

Ripetere per ogni sezione del distributore
Repeat for each section of the distributor
Für jede Sektion wiederholen

G	B	L	01	A	0A	C	A	A	B	A

TIPO DI PIOMBATURA
TYPE OF LEAD SEAL
VERSTELLSICHERUNG

G - grano
C - cappuccio
P - piombata
R - pred.piom.
N - nessuna

G - *Dowel*
C - *Cap*
P - *Lead sealed*
R - *Seal setting*
N - *None*

G - Gewindestift
C - Plastikkappe
P - Plombiert
R - Bohrung für Plombe
N - ohne

FILETTATURA BOCCHE A-B
THREAD PORTS A-B
ANSCHLUSSGEWINDE A-B

B - J - R
Vedi tabella *See chart* Siehe Tabelle

AZIONAMENTI
ACTUATORS
BETÄTIGUNGSARTEN

Altri vedi tabella
Others see chart
Andere siehe Tabelle

CIRCUITO
CIRCUIT
KOLBEN

Vedi tabella
See chart
Siehe Tabelle

OPZIONI SPOLE
OPTIONS SPOOL
KOLBENVARIANTEN

A - Spola standard
B - Spola nichelata

A - *Standard spool*
B - *Nickel-plated*

A - Kolben standard
B - Kolben vernickelt

POSIZIONATORE
SPOOL CONTROL
SCHIEBERSTELLUNGSSATZ

NN - Nessuno - *None* - Keiner
Altri vedi tabella
Others see chart
Andere siehe Tabelle

OPZIONI LEVA
OPTIONS LEVER
POSITION DER HANDHEBEL

Vedi tabella
See chart
Siehe Tabelle

TENSIONE E CONNETTORE
VOLTAGE AND CONNECTOR
MAGNETSPANNUNG UND STECKER

E - 12 V Deutchs
F - 24 V Deutchs
N - Nessuna / ***N*** - *None* / **N** - Ohne

PIASTRA DISTANZIALE FRA ELEMENTI
SPACER PLATE BETWEEN ELEMENTS
DISTANZSTÜCK ZWISCHEN ELEMENTEN

A - piastra distanziale
B - nessuna

A - spacer plate
B - none

A - Distanzstück
B - ohne

OPZIONI ELEMENTO
ELEMENT OPTIONS
OPTION ELEMENT

A - limitatore di flusso
B - dispositivo zero trafila
C - limitatore di flusso + zero trafila
N - nessuno

A - *flow limiter*
B - *zero leakage device*
C - *flow limiter + zero leakage*
N - *none*

A - Mengenbegrenzung
B - Vorrichtung für Leckölfreiheit
C - Mengenbegrenzung und Leckölfreiheit
N - ohne

POSIZIONI LEVA
LEVER POSITION
POSITION DER HANDHEBEL

A - Diritta
B - Ruotata 90° verso il P
D - Ruotata 90° verso il T
N - Nessuna

A - *Straight*
B - *Rotated 90° towards il P*
D - *Rotated 90° towards T*
N - *None*

A - Gerade
B - 90° gedreht in Richtung P
D - 90° gedreht in Richtung T
N - Keine

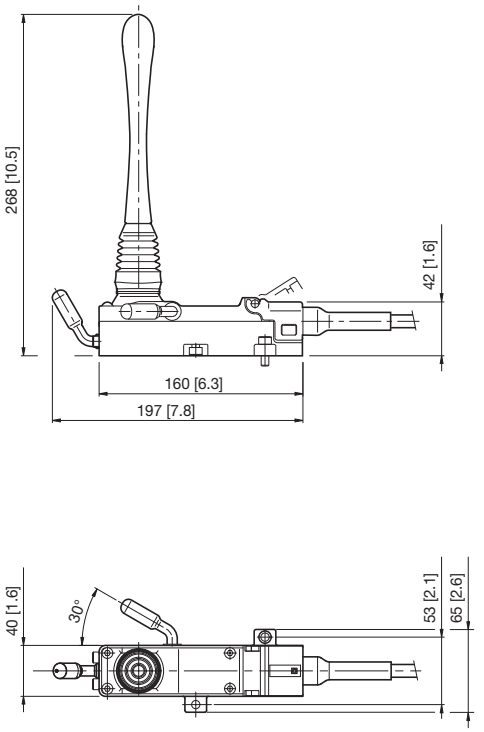
DO790---

BLOCCO LEVA
DRIVING BLOCK
HEBELEINLEIT

L'azionamento a cavo è un sistema che permette d'azionare a distanza tutti i distributori DINOIL.
Per azionare una sezione si utilizza un "blocco leva", che si collega al distributore mediante un cavo ed un "kit d'attacco".
Si tratta di un sistema modulare che permette di unire saldamente, mediante viti, un numero illimitato di blocchi, anche se di configurazione o lunghezza dei cavi diversa.
Per azionare due sezioni con una sola leva si utilizza il manipolatore.

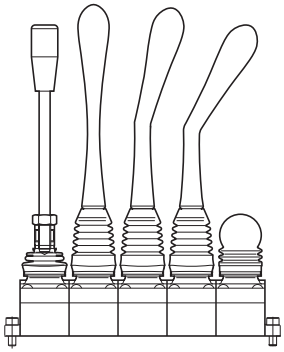
The cable control system lets actuate in the distance all DINOIL's valves.
To control one section a "driving block" joined to the valve by a cable and a "connection kit" has to be used.
Given that it's a modular system where un unlimited number of blocks keeps strongly together through screws, also with many different configurations or cables lenght.
To control two sections with just one handle a joystick has to be used.

Die BowdenzuGBetätigung kann für alle Dinoil-Steuergeräte verwendet werden.
Um ein Element anzusteuern, betätigt man eine Hebeleinheit, die über die Bowdenzüge und den Befestigungssatz mit dem Steuergerät verbunden ist. Das System besteht aus Komponenten, die es erlauben, eine unbegrenzte Anzahl von Hebeleinheiten mit Zugankern miteinander zu verbinden, auch wenn die Sonderausstattung oder die Bowdenzuglängen verschieden sind.
Um zwei Elemente mit einem Hebel zu betätigen, verwendet man einen Joystick.

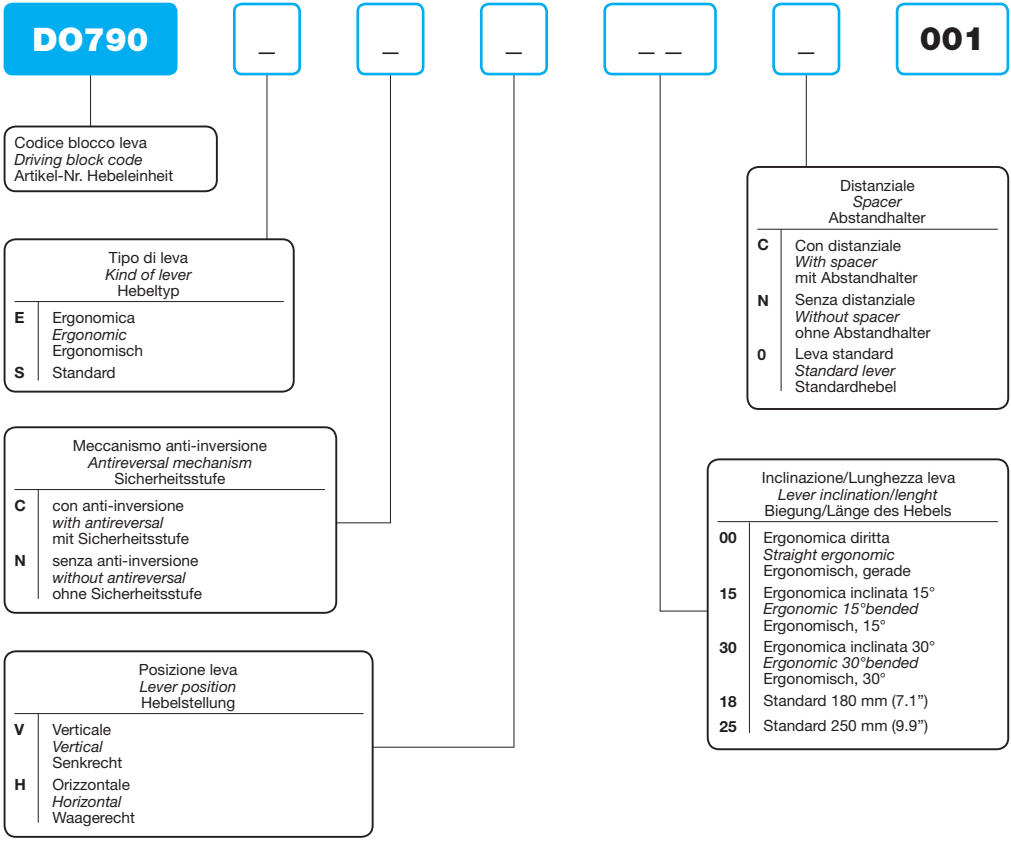


DATI TECNICI
TECHNICAL DATA
TECHNISCHE MERKMALE

Peso *Weight* Gewicht	**0.72 (1.6)** **kg (lb)**
Rapporto di leva *Lever rate* Steuerverhältnis des Hebels	**da 1:8.8 a 1:10** ***from 1:8.8 to 1:10***
Carico massimo sulla leva *Maximum load on the lever* Max. Last auf dem Hebel	**da 33 a 44 lb** ***from 33 to 44 lb***
Carico massimo sul cavo *Maximum load on the cable* Max. Last auf dem Bowdenzug	**150 (330)** **kg (lb)**
Corsa *Stroke* Hub	**+/- 14 (0.5)** **mm (inch)**
Temperatura di lavoro *Work temperature* Betriebstemperatur	**-40°C +100°C**



ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG

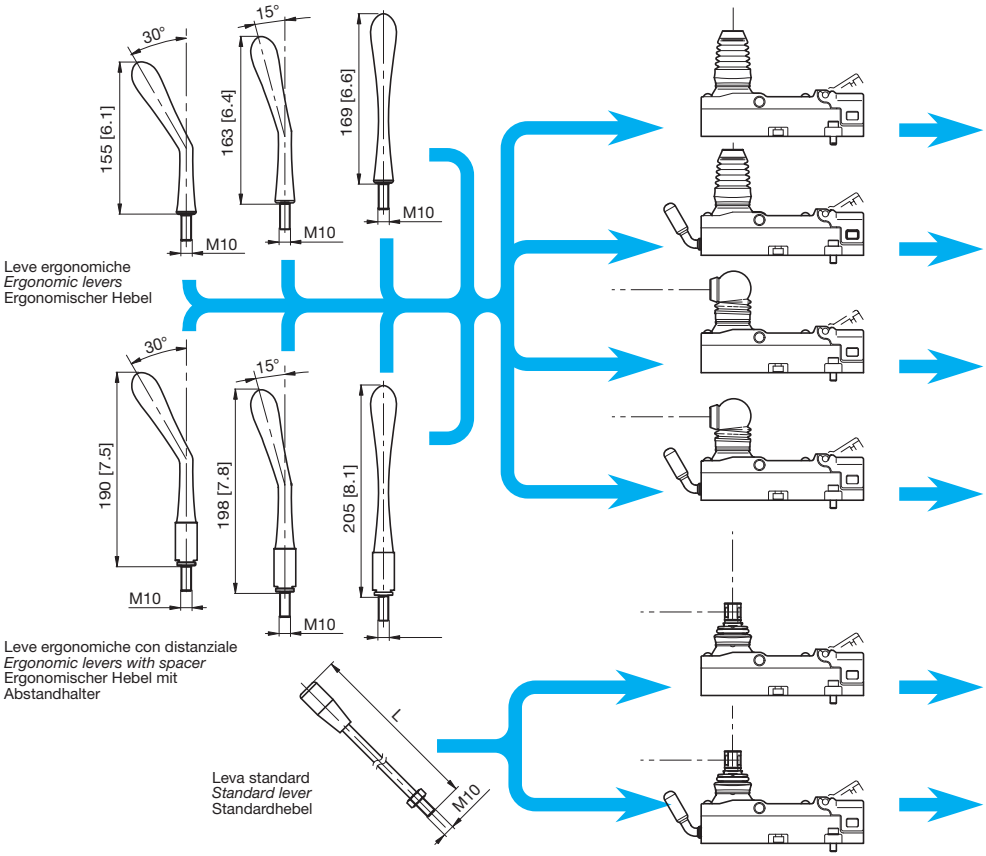


"Blocco leva", "Cavo" e "Kit attacco" sono ordinabili separatamente.
Questo a vantaggio del costruttore che può scegliere la soluzione più adatta alle proprie esigenze.
Questi tre elementi sono compatibili tra loro ed adattabili a qualsiasi distributore DINOIL sia nel lato leva che nel lato posizionatore.
Il sistema d'antinversione va ad integrare il "blocco leva" e nel codice per l'ordinazione se ne deve specificare la presenza o meno.
Il meccanismo "blocco centrale", invece, deve essere ordinato separatamente, specificando anche il numero di sezioni dell'assieme su cui verrà installato.

"Driving block", "Cable" and "Connection Kit" can be ordered separately. This advantage for the constructor permits him to choose the most suitable solution to his needs.
Those three elements are compatible among them and exchangeable with any DINOIL'S valves, on both lever and spool control side.
Antireversal system is a part belonging to the driving block, so must be specified into the ordering code.
However "Neutral lock mechanism" has to be ordered as an independent part, and the number of sections of the assembly where mounted must be specified.

"Hebeleinheit", "Bowdenzug" und "Befestigungssatz" sind einzeln erhältlich. Dadurch können individuelle Lösungen verwirklicht werden. Die 3 Bestandteile sind untereinander austauschbar und passen an alle Dinoil-Steuergeräte, sowohl an der Hebel- als auch an der Schieberseite.
Das Sicherheitssystem sieht einen zentralen Sperrhebel vor, der in die Hebeleinheit integriert ist. Bei der Bestellung muß angegeben werden, ob er gewünscht wird oder nicht.
Der Blockierhebel dagegen muß ausdrücklich bestellt werden. Dabei müssen die Elemente genannt werden, auf denen er montiert werden soll.

BLOCCO LEVA
DRIVING BLOCK
HEBELEINHEIT



BLOCCO LEVA
DRIVING BLOCK
HEBELEINHEIT

DATI TECNICI DEL CAVO
CABLE TECHNICAL DATA
BOWDENZUG TECHNISCHE ANGABEN

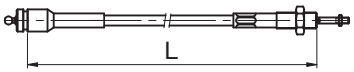
Peso *Weight* Gewicht	**0.28 (15.2)** **kg/m (lb/inch)**
Carico massimo *Maximum load* Max. Belastung	**150 (330)** **kg (lb)**
Corsa *Stroke* Hub	**+/- 18 (0.7)** **mm (inch)**

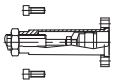
DO780 _ _ _ _ **00001**

Codice cavo
Cable code
Artikel-Nr.
Bowdenzug

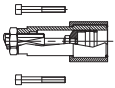
Inclinazione/Lunghezza leva
Lever inclination/lenght
Biegung/Länge Hebel

15	1500 mm (59”)
20	2000 mm (78.8”)
23	2300 mm (90.5”)
25	2500 mm (98.4”)
30	3000 mm (118.1”)
35	3500 mm (137.8”)
40	4000 mm (157.5”)





Passo
Pitch
Abstandsmaß
36-40-42 mm (1.4”-1.6”-1.65”)



Passo
Pitch
Abstandsmaß
46 mm (1.8”)

DO745 _ _ _ _ _ _ _ _

Codice kit d’attacco
Connection kit code
Artikel-Nr. Befestigungssatz

Passo
Pitch
Abstandsmaß

08212056	36-40-42 mm (1.4”-1.6”-1.65”)
09212044	46 mm (1.8”)

L	N° leve *Levers n°* Hebel-Nr.	Blocco centrale *Neutral lock* Zentraler Sperrhebel Codice *Code* Artikel-Nr.	Solo blocco centrale *Only neutral lock* Nur zentraler Sperrhebel Codice *Code* Artikel-Nr.	Blocco centrale con dispositivo anti-inversione *Neutral lock with antireversal device* Zentraler Sperrhebel und Blockierhebel Codice *Code* Artikel-Nr.
40 mm (1.6”)	1	765010000001	765010000001	765010000002
80 mm (3.1”)	2	765020000001	765020000001	765020000002
120 mm (4.7”)	3	765030000001	765030000001	765030000002
160 mm (6.3”)	4	765040000001	765040000001	765040000002
200 mm (7.9”)	5	765050000001	765050000001	765050000002
240 mm (9.4”)	6	765060000001	765060000001	765060000002
280 mm (11”)	7	765070000001	765070000001	765070000002

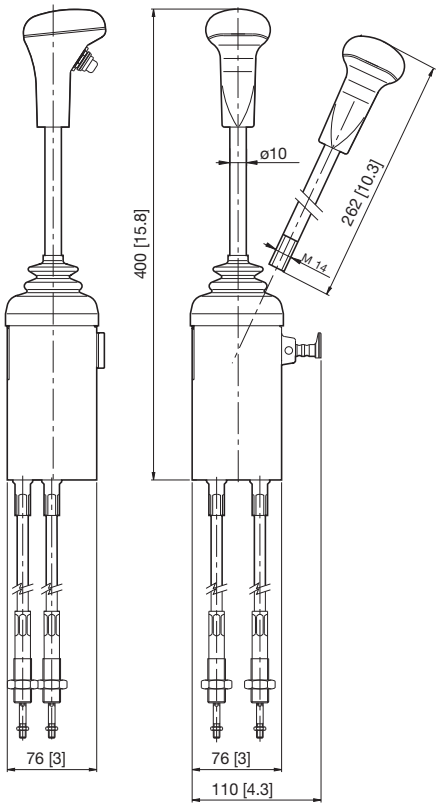
DO775---

MANIPOLATORE PER AZIONAMENTO A CAVO
JOYSTICK FOR CABLES CONTROL
JOYSTICK FÜR BOWDENZUG-STEUERUNG

Il manipolatore è un dispositivo che permette d'azionare 2 sezioni operatrici contemporaneamente.
Il kit è comprensivo dei cavi, che permettono il comando a distanza del distributore. Esso può essere dotato di uno o due "pulsanti instabili" oppure da un interruttore.
Il manipolatore è dotato, inoltre, d'un meccanismo che permette di bloccare il comando oppure di azionarlo verso solo una o due direzioni.

Joystick is a device that permits to control simultaneously 2 operating sections.
The kit includes cables to have remote control of directional control valve.
Joystick can include one or two temporary switch or just one on-off switch.
Joystick has a mechanism that permits to block it completely or actuate it in only one or two directions.

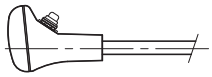
Mit Hilfe des Joysticks kann man 2 Elemente gleichzeitig betätigen. Zum Lieferumfang gehören die Kabel, die die Betätigung des Steuergerätes aus der Ferne ermöglichen. Der Joystick kann mit 1 oder 2 Druckknöpfen oder einem Kippschalter bestückt werden.
Der Joystick hat außerdem einen Mechanismus, der es erlaubt, ihn zu blockieren, ihn nur in eine Richtung oder aber in zwei Richtungen zu bewegen.



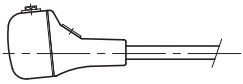
DATI TECNICI
TECHNICAL DATA
TECHNISCHE ANGABEN

Peso *Weight* Gewicht	**1.3 (2.9)** **kg (lb)**
Rapporto di leva *Lever rate* Steuerverhältnis des Hebels	**1 : 8.8** **(30.5 : 270)**
Carico massimo sulla leva *Maximum load on the lever* Max. Last auf dem Hebel	**17 (37.4)** **kg (lb)**
Carico massimo sul cavo *Maximum load on the cable* Max. Last auf dem Bowdenzug	**150 (330)** **kg (lb)**
Corsa *Stroke* Hub	**+/- 15 (0.6)** **mm (inch)**

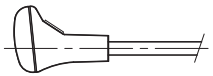
TIPO DI PULSANTE
SWITCH TYPE
SCHALTERTYP



1 pulsante
1 switch
1 Schalter



2 pulsanti
2 switch
2 Schalter



Senza pulsanti
Without switch
Ohne Schalter

ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG

DO775 _ _ _ _ _ _ **001**

Codice manipolatore
Joystick code
Bestellnr. Joystick

Tipo di pulsante
Switch type
Schaltertyp

0	Senza pulsanti *Without switch* Ohne Schalter
1	1 pulsante instabile *1 temporary switch* 1 Druckknopf
2	2 pulsanti instabili *2 temporary switch* 2 Druckknopf
3	Interruttore *On-off switch* Kippschalter

Posizione manipolatore
Joystick position
Hebelstellung

A	Standard
B	Altro *Other* Anders

Lunghezza cavo
Cable lenght
Bowdenzuglänge

0000	senza cavo *without cable* ohne Bowdenzüge
0500	500 mm (19.7") 1000 mm (39.4")
1000	1000 mm (39.4")
1500	1500 mm (59")
2000	2000 mm (78.7")
2300	2300 mm (90.5")
2500	2500 mm (98.4")
2600	2600 mm (102.4")
3000	3000 mm (118.1")

NOTA: i cavi del manipolatore sono diversi da quelli del "blocco leva", mentre è lo stesso il "kit d'attacco".

Cavi e manipolatore vengono venduti assemblati assieme mediante il codice sopra indicato.
Questi possono essere aquistati singolarmente solo come ricambi.

Note: joystick cables are different from those for the "driving block", but the "kit connection" is the same.

Cables and joystick are sold assembled using the codes shown above.

They can be bought separately only as spare parts.

Bitte beachten: Die Kabel, welche zum Joystick gehören, unterscheiden sich von denen der Hebeleinheit. Der Anbausatz ist für beide Systeme identisch.

Bowdenzüge und Joystick werden unter den o.a. Bestellnummern montiert geliefert.
Einzeln sind sie nur als Ersatzteile erhältlich.

DO775E---

MANIPOLATORE PER AZIONAMENTO A CAVO
JOYSTICK FOR CABLES CONTROL
JOYSTICK FÜR BOWDENZUG-STEUERUNG

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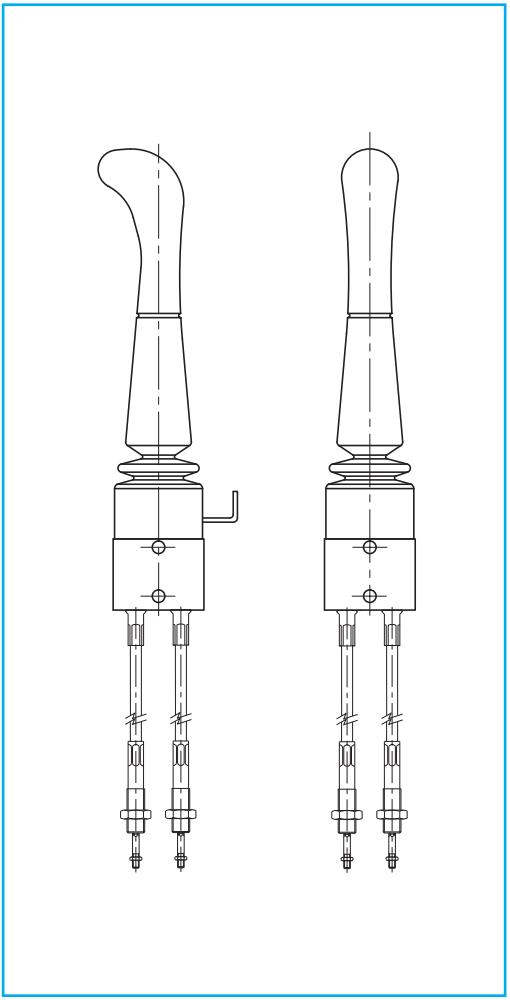

DATI TECNICI
TECHNICAL DATA
TECHNISCHE ANGABEN

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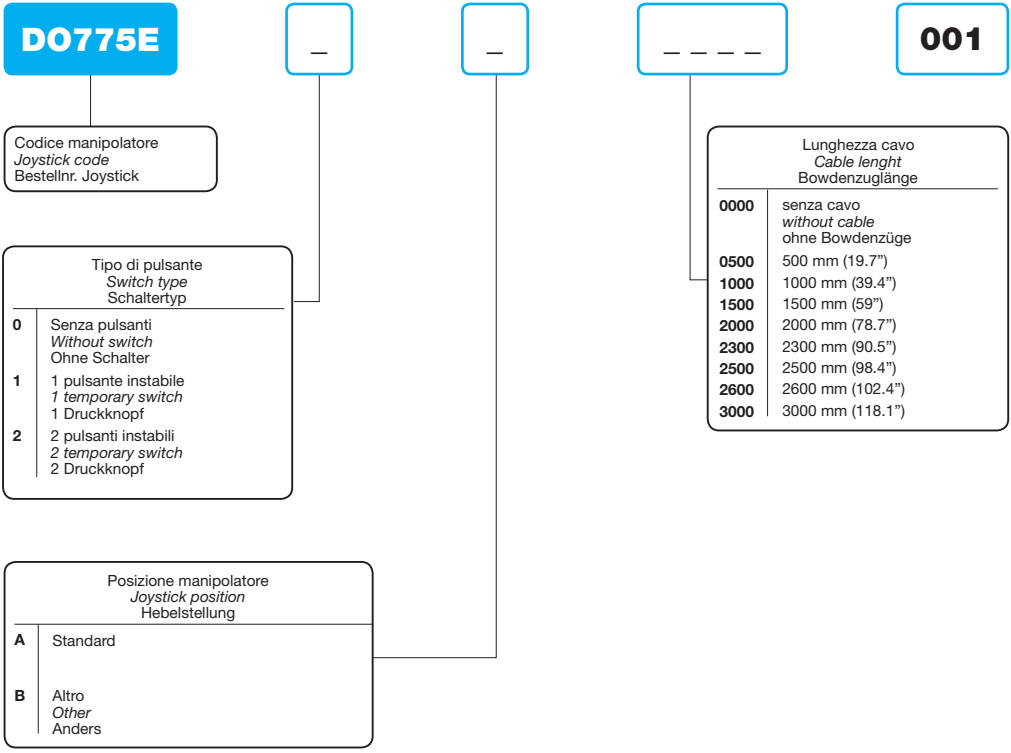
Corsa *Stroke* Hub	**+/- 15 (0.6)** **mm (inch)**

ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG



NOTA: i cavi del manipolatore sono diversi da quelli del "blocco leva", mentre è lo stesso il "kit d'attacco".

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They can be bought separately only as spare parts.

Bitte beachten: Die Kabel, welche zum Joystick gehören, unterscheiden sich von denen der Hebeleinheit. Der Anbausatz ist für beide Systeme identisch.

Bowdenzüge und Joystick werden unter den o.a. Bestellnummern montiert geliefert.
Einzeln sind sie nur als Ersatzteile erhältlich.

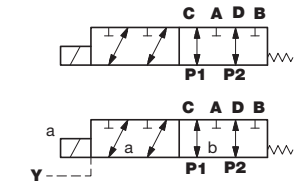
DCE50

DEVIATORE DI FLUSSO A COMANDO ELETTRICO
ELECTRIC FLOW DIVERTER
STROMUNGSVERTEILER MIT ELECTRISCHER BETÄTIGUNG

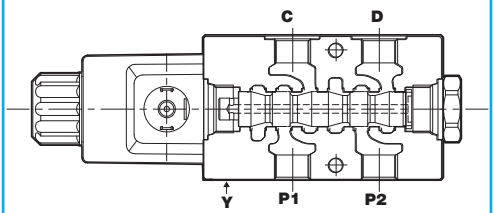
L'elettrovalvola bancabile DCE50 é un deviatore di flusso a 6 vie che permette il collegamento contemporaneo di 2 utenze, alternando la direzione del flusso tramite una valvola direzionale diretta.

DCE50 is a 6 ways bankable flow diverter that allows the simultaneous connection of 2 utilities, alternating the direction of flow through a solenoid operate directional valve.

Das aufstellbare DCE50 Elektroventil ist ein 6-Wege-Stromungsverteiler, an welcher 2 Abnehmer gleichzeitig angeschlossen werden konnen, wobei die Stromungsrichtung uber ein direktes Wegeventil umgeschaltet werden kann



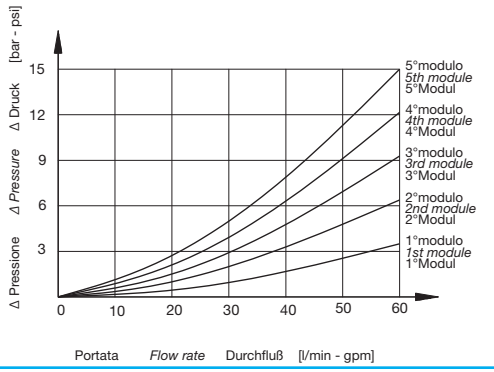
Y drenaggio esterno
Y external drain
Y externer Ablauf

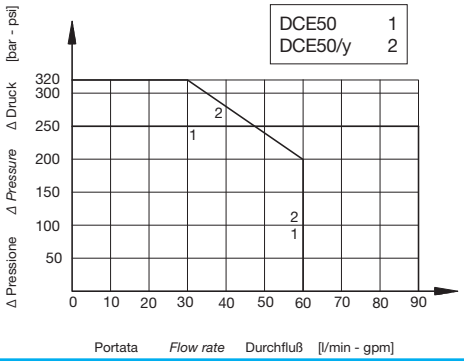


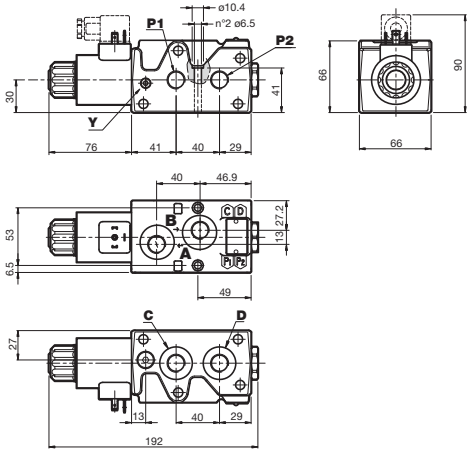
DATI TECNICI
TECHNICAL DATA
TECHNISCHE ANGABEN

Pressione Max di funzionamento *Max operating pressure* Maximaler Betriebsdruck	**250 (3625)** **bar (psi)**
Pressione Max di funzionamento con Y *Max operating pressure with Y* Maximaler Betriebsdruck mit Y	**320 (4640)** **bar (psi)**
Portata massima *Maximum flow* Maximale Durchflussleistung	**60 (15.8)** **l/min (gpm)**
Temperatura ambiente *Ambient temperature* Umgebungstemperatur	**-20 / +50°C**
Temperatura di utilizzo *Fluid temperature* Öltemperaturbereich	**-20 / +85°C**
Viscosità fluido *Fluid viscosity* Ölviskositätsbereich	**10÷400** **cSt**
Massa *Weight* Gewicht	**3 (6.6)** **kg (lb)**

PRESTAZIONI
PERFORMANCE
LEISTUNG







ISTRUZIONI PER L'ORDINAZIONE *ORDERING INSTRUCTIONS* BESTELLANLEITUNG

DCE50 - _ - **TA6/10** _ - _ _ / _ _

Codice deviatore
Diverter code
Verteiler-Code

Attacchi
Fittings
Anschlüsse
G038 = 3/8" BSP (DCE50)
G012 = 1/2" BPS (DCE90)
S008 = 3/4" 16 UNF
(a richiesta per DCE50)
(on request for DCE50)
(auf Anfrage für DCE50)

Tipo di guarnizione
Seal type
Dichtungstyp
N in NBR per oli minerali
in NBR for mineral oils
aus NBR für Mineralöle
V in FPM per fluidi particolari
in FPM for special fluids
aus FPM für besondere Öle

Tipo bobina
Coil type
Spulentyp
D12 = 12V
D24 = 24V

Drenaggio esterno
External drain
Externer Ablauf
Y

Comando manuale: omettere per comando integrato nel tubo **(standard)**
CM = comando manuale a soffietto
*Manual control: omit for integrated control in the **standard** conduit*
***CM** = manual bellows control*
Manuelle Steuerung: bei in Leitung integrierter Steuerung **(Standard)** nicht verwenden
CM = manuelle Faltenbalgsteuerung

Connessione elettrica bobina
Coil electrical connection
Elektrischer Anschluss Spule
K1 = attacco per connettore tipo DIN 43650
K7 = attacco per connettore tipo DEUTSCH DT04-2P maschio
K1 = *plug for connector type DIN 43650*
K7 = *plug for connector type DEUTSCH DT04-2P male*
K1 = Anschluss für Stecker des Typs DIN 43650
K7 = Anschluss für Stecker des Typs DEUTSCH DT04-2P

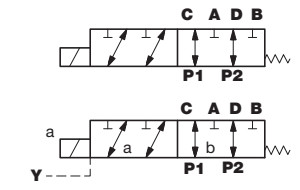
DCE90

DEVIATORE DI FLUSSO A COMANDO ELETTRICO
ELECTRIC FLOW DIVERTER
STROMUNGSVERTEILER MIT ELECTRISCHER BETÄTIGUNG

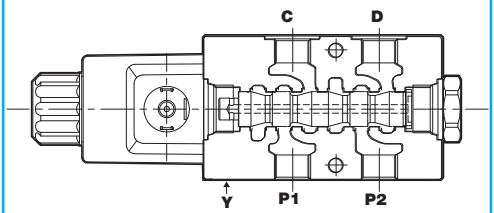
L'elettrovalvola bancabile DCE90 é un deviatore di flusso a 6 vie che permette il collegamento contemporaneo di 2 utenze, alternando la direzione del flusso tramite una valvola direzionale diretta.

DCE90 is a 6 ways bankable flow diverter that allows the simultaneous connection of 2 utilities, alternating the direction of flow through a solenoid operate directional valve.

Das aufstellbare DCE90 Elektroventil ist ein 6-Wege-Stromungsverteiler, an welcher 2 Abnehmer gleichzeitig angeschlossen werden konnen, wobei die Stromungsrichtung uber ein direktes Wegeventil umgeschaltet werden kann



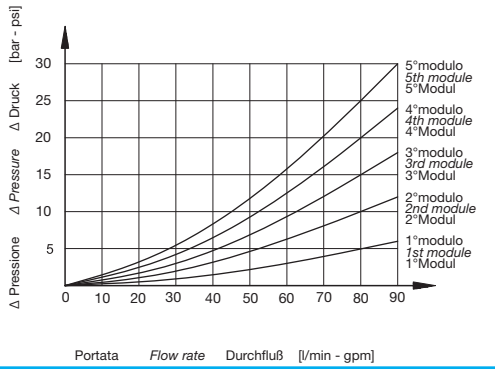
Y drenaggio esterno
Y external drain
Y externer Ablauf

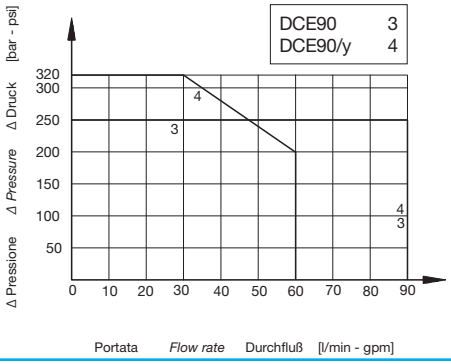


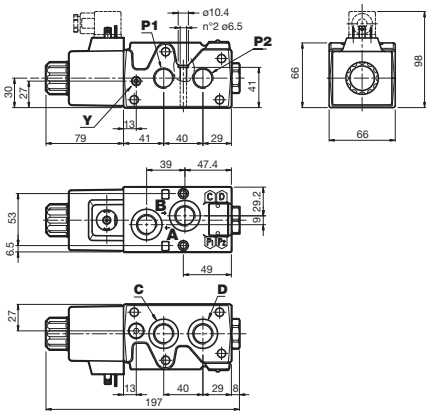
DATI TECNICI
TECHNICAL DATA
TECHNISCHE ANGABEN

Pressione Max di funzionamento *Max operating pressure* Maximaler Betriebsdruck	**250 (3625) bar (psi)**
Pressione Max di funzionamento con Y *Max operating pressure with Y* Maximaler Betriebsdruck mit Y	**320 (4640) bar (psi)**
Portata massima *Maximum flow* Maximale Durchflussleistung	**90 (23.7) l/min (gpm)**
Temperatura ambiente *Ambient temperature* Umgebungstemperaturbereich	**-20 / +50°C**
Temperatura di utilizzo *Fluid temperature* Öltemperaturbereich	**-20 / +85°C**
Viscosità fluido *Fluid temperature* Ölviskositätsbereich	**10÷400 cSt**
Massa *Weight* Gewicht	**4.2 (9.2) kg (lb)**

PRESTAZIONI
PERFORMANCE
LEISTUNG







ISTRUZIONI PER L'ORDINAZIONE *ORDERING INSTRUCTIONS* BESTELLANLEITUNG

DCE90 - _ - **TA6/10** _ - _ _ / _ _

Codice deviatore
Diverter code
Verteiler-Code

Attacchi
Fittings
Anschlüsse

G038 = 3/8" BSP (DCE50)
G012 = 1/2" BPS (DCE90)
S008 = 3/4" 16 UNF
(a richiesta per DCE50)
(on request for DCE50)
(auf Anfrage für DCE50)

Tipo di guarnizione
Seal type
Dichtungstyp

N in NBR per oli minerali
in NBR for mineral oils
aus NBR für Mineralöle

V in FPM per fluidi particolari
in FPM for special fluids
aus FPM für besondere Öle

Tipo bobina
Coil type
Spulentyp

D12 = 12V
D24 = 24V

Drenaggio esterno
External drain
Externer Ablauf
Y

Comando manuale: omettere per comando integrato nel tubo **(standard)**
CM = comando manuale a soffietto

*Manual control: omit for integrated control in the **standard** conduit*
***CM** = manual bellows control*

Manuelle Steuerung: bei in Leitung integrierter Steuerung **(Standard)** nicht verwenden
CM = manuelle Faltenbalgsteuerung

Connessione elettrica bobina
Coil electrical connection
Elektrischer Anschluss Spule

K1 = attacco per connettore tipo DIN 43650
K1 = *plug for connector type DIN 43650*
K1 = Anschluss für Stecker des Typs DIN 43650

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