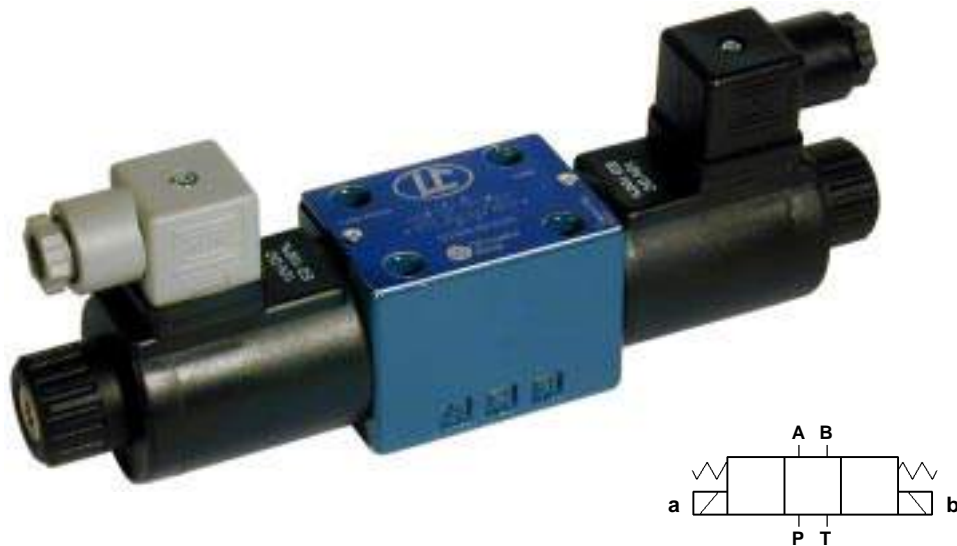


| Code Code | Type Type | Tension Voltage | Symbole Hydraulique Hydraulic Symbol | Q MAX l/min | P MAX bar | kg |
|---------------|-------------|-----------------|--------------------------------------|-------------|-----------|------|
| EL10A02002450 | LC1-A201 AZ | 24/50VAC | | 60 | 250 | 1,66 |
| EL10A02011050 | LC1-A201 AZ | 110/50VAC | | " | " | 1,66 |
| EL10A02022050 | LC1-A201 AZ | 220/50VAC | | " | " | 1,66 |
| EL10A02012VDC | LC1-A201 DZ | 12VDC | | 70 | 310 | 1,82 |
| EL10A02024VDC | LC1-A201 DZ | 24VDC | | " | " | 1,82 |
| EL10B02002450 | LC1-B201 AZ | 24/50VAC | | " | 250 | 1,66 |
| EL10B02011050 | LC1-B201 AZ | 110/50VAC | | " | " | 1,66 |
| EL10B02022050 | LC1-B201 AZ | 220/50VAC | | " | " | 1,66 |
| EL10B02012VDC | LC1-B201 DZ | 12VDC | | 70 | 310 | 1,82 |
| EL10B02024VDC | LC1-B201 DZ | 24VDC | " | " | 1,82 | |
| EL10C02002450 | LC1-C201 AZ | 24/50VAC | | 60 | 250 | 1,66 |
| EL10C02011050 | LC1-C201 AZ | 110/50VAC | | " | " | 1,66 |
| EL10C02022050 | LC1-C201 AZ | 220/50VAC | | " | " | 1,66 |
| EL10C02012VDC | LC1-C201 DZ | 12VDC | | 70 | 310 | 1,82 |
| EL10C02024VDC | LC1-C201 DZ | 24VDC | | " | " | 1,82 |
| EL10E02002450 | LC1-E201 AZ | 24/50VAC | | " | 250 | 1,66 |
| EL10E02011050 | LC1-E201 AZ | 110/50VAC | | " | " | 1,66 |
| EL10E02022050 | LC1-E201 AZ | 220/50VAC | | " | " | 1,66 |
| EL10E02012VDC | LC1-E201 DZ | 12VDC | | 70 | 310 | 1,82 |
| EL10E02024VDC | LC1-E201 DZ | 24VDC | " | " | 1,82 | |
| EL10A11S02450 | LC1-A301 AZ | 24/50VAC | | 60 | 250 | 1,25 |
| EL10A11S11050 | LC1-A301 AZ | 110/50VAC | | " | " | 1,25 |
| EL10A11S22050 | LC1-A301 AZ | 220/50VAC | | " | " | 1,25 |
| EL10A11S12VDC | LC1-A301 DZ | 12VDC | | 70 | 310 | 1,33 |
| EL10A11S24VDC | LC1-A301 DZ | 24VDC | | " | " | 1,33 |
| EL10A11C02450 | LC1-Y301 AZ | 24/50VAC | | " | 250 | 1,25 |
| EL10A11C11050 | LC1-Y301 AZ | 110/50VAC | | " | " | 1,25 |
| EL10A11C22050 | LC1-Y301 AZ | 220/50VAC | | " | " | 1,25 |
| EL10A11C12VDC | LC1-Y301 DZ | 12VDC | | 70 | 310 | 1,33 |
| EL10A11C24VDC | LC1-Y301 DZ | 24VDC | " | " | 1,33 | |
| EL10B11C02450 | LC1-B301 AZ | 24/50VAC | | 60 | 250 | 1,25 |
| EL10B11C11050 | LC1-B301 AZ | 110/50VAC | | " | " | 1,25 |
| EL10B11C22050 | LC1-B301 AZ | 220/50VAC | | " | " | 1,25 |
| EL10B11C12VDC | LC1-B301 DZ | 12VDC | | 70 | 310 | 1,33 |
| EL10B11C24VDC | LC1-B301 DZ | 24VDC | | " | " | 1,33 |
| EL10C11A02450 | LC1-C301 AZ | 24/50VAC | | " | 250 | 1,25 |
| EL10C11A11050 | LC1-C301 AZ | 110/50VAC | | " | " | 1,25 |
| EL10C11A22050 | LC1-C301 AZ | 220/50VAC | | " | " | 1,25 |
| EL10C11A12VDC | LC1-C301 DZ | 12VDC | | 70 | 310 | 1,33 |
| EL10C11A24VDC | LC1-C301 DZ | 24VDC | " | " | 1,33 | |

SUR DEMANDE - ON REQUEST : VALVES MODULAIRES POUR ELECTROVANNES CETOP 3 - MODULAR VALVES FOR SOLENOID OPERATED DIRECTIONAL VALVES CETOP 3

LC1AZ - LC1DZ

Elettrovalvole dirette controllo direzione
Solenoid operated directional valves



CARATTERISTICHE TECNICHE

Grandezza: NG6 ISO 4401 - 03 CETOP RP121 H-03 (CETOP 3)

LC1AZ - CORRENTE ALTERNATA: Portata massima : 60 l/min
Pressione massima d'esercizio su A-B-P: 250bar
Pressione massima in T: dinamica=160 bar - statica=180 bar

LC1DZ - CORRENTE CONTINUA: Portata massima : 70 l/min
Pressione massima d'esercizio su A-B-P: 310bar
Pressione massima in T: dinamica=250 bar - statica=310 bar

TECHNICAL CHARACTERISTICS

Size: NG6 ISO 4401 - 03 CETOP RP121 H-03 (CETOP 3)

*LC1AZ - A.C. VERSION: Max flow : 60 l/min
Max operating pressure on A-B-P: 250bar
Max pressure in T: dynamic=160 bar - static=180 bar*

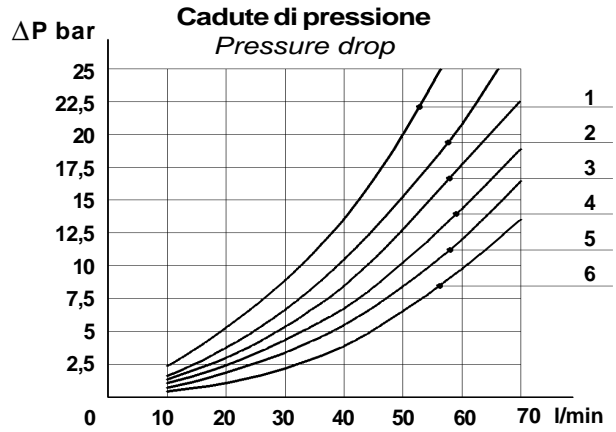
*LC1DZ - D.C. VERSION: Max flow : 70 l/min
Max operating pressure on A-B-P: 310bar
Max pressure in T: dynamic=250 bar - static=310 bar*

TIPI DI CIRCUITI • SPOOL TYPES

| TIPI DI CIRCUITI • SPOOL TYPES | | | | | | | |
|---------------------------------|----------------------------------|---------------------------|--|---------------------------------|----------------------------------|---------------------------|--|
| Nuovo codice <i>New code</i> | Vecchia sigla <i>Old code</i> | Simbolo <i>Circuit</i> | Direzione del flusso durante il passaggio al centro <i>Oil direction during shift</i> | Nuovo codice <i>New code</i> | Vecchia sigla <i>Old code</i> | Simbolo <i>Circuit</i> | Direzione del flusso durante il passaggio al centro <i>Oil direction during shift</i> |
| W | | | | W | | | |
| X301 | A11A | | | X401 | A12A | | |
| Y301 | A11C | | | Y401 | A12C | | |
| A301 | A11S | | | A401 | A12S | | |
| A361 | A14S | | | A471 | A13S | | |
| B301 | B11C | | | B471 | B12C | | |
| B361 | B14C | | | B401 | B13C | | |
| C301 | C11A | | | C471 | C12A | | |
| C361 | C14A | | | C401 | C13A | | |
| D301 | D11C | | | D471 | D12C | | |
| D361 | D14C | | | D401 | D13C | | |
| E301 | E11C | | | E401 | E12C | | |
| E361 | E14C | | | E471 | E13C | | |
| K301 | K11C | | | K401 | K12C | | |
| N301 | N11C | | | N401 | N12C | | |
| T301 | T11C | | | T409 | T12C | | |
| T361 | T13C | | | T479 | T14C | | |
| U369 | U11C | | | | | | |
| W | | | | W | | | |
| A201 | A2 | | | L201 | M2A | | |
| B201 | B2 | | | M201 | M2C | | |
| C201 | C2 | | | N201 | N2 | | |
| D201 | D2 | | | | | | |
| E201 | E2 | | | | | | |
| E2R1 | ER | | | W | | | |
| F201 | F2 | | | | | | |
| G201 | G2 | | | L501 | M2A/D | | |
| G209 | H2 | | | M501 | M2C/D | | |
| K201 | K2 | | | N501 | N2/D | | |
| K209 | R2 | | | | | | |
| U201 | U2 | | | | | | |

CARATTERISTICHE TECNICHE • TECHNICAL FEATURES

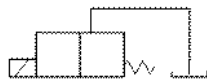
| Tipo di circuito <i>Spool type</i> | Nr. di riferimento <i>Reference number</i> | | | | |
|--|---|-----|-----|-----|-----|
| | P>T | P>A | P>B | A>T | B>T |
| A2 - A11S - A12S - A13S - A14S G2 - H2 | 2 | 1 | 1 | 1 | 1 |
| B2 - B11C - B12C - B13C - B14C M2A - M2C - U2 | | 4 | 4 | 4 | 4 |
| C2 - C11A - C12A - C13A - C14A | 6 | 5 | 5 | 6 | 6 |
| D2 - D11C - D12C - D13C - D14C | | 6 | 6 | 5 | 5 |
| E2 - E11C - E12C - E13C - E14C T11C - T12C | | 5 | 5 | 6 | 6 |
| K2 - R2 | | 5 | 5 | 3 | 3 |
| A11A - A12A - A11C - A12C | | 4 | 4 | 4 | 4 |
| N11C - N12C - N2 | | 4 | 4 | | |



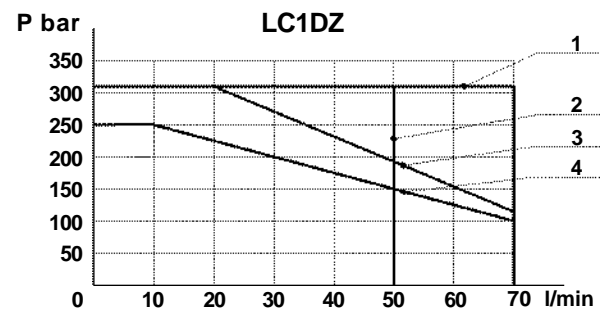
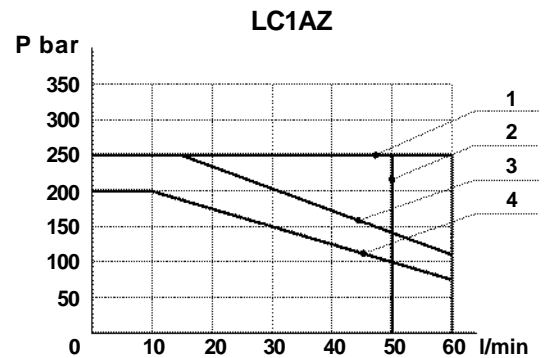
| Tipo di circuito <i>Spool type</i> | Nr. di riferimento <i>Reference number</i> |
|--|---|
| B2 - B11C - B12C - B13C B14C - C2 - C11A - C12A C13A - C14A - T12C - D2 D11C - D12C - D13C D14C - E2 - E11C - E12C E13C - E14C - T11C | 1 |
| A2 - A11S - A12S - A13S A14S - G2 - H2 - K2 - R2 | 2 |
| A11A - A12A - A11C A12C - M2C - M2A - U2 | 3 |
| N11C - N12C - N2 | 4 |

I valori indicati nel grafico non sono validi se l'elettrovalvola è utilizzata in applicazioni con collegamenti 2 o 3 vie.

The values indicated in the graph are not valid if the solenoid valve is used in applications with 2 or 3 way connections.



Portate massime in funzione della pressione *Maximum flows depending on pressure*



Tempi di commutazione

(rilevati con 40 l/min e 150 bar)

Shifting time

(taken with 40 l/min and 150 bar)

c.c. - DC

Eccitazione
Energised
30÷50ms

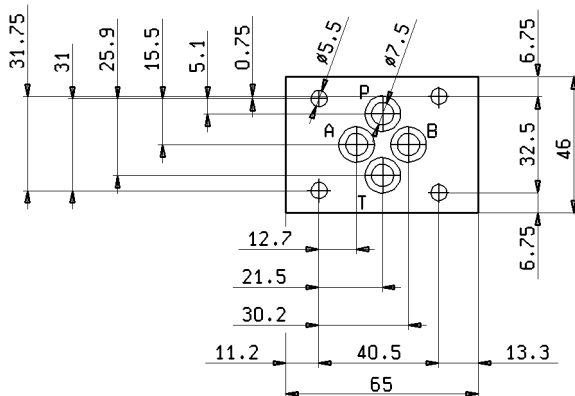
Diseccitazione
De-energised
40÷60ms

c.a. - AC

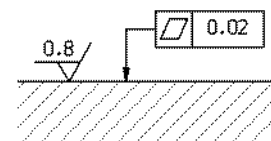
Eccitazione
Energised
10÷30ms

Diseccitazione
De-energised
20÷50ms

GRANDEZZA • SIZE : NG6 ISO 4401-03 CETOP RP 121H- 03 (CETOP 3)



Qualità superficie di attacco *Mounting plane quality*

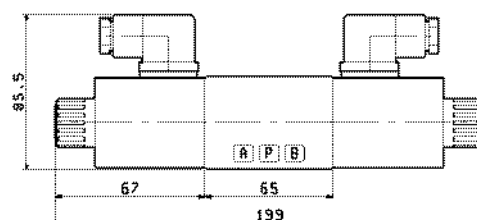
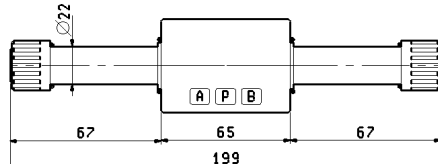
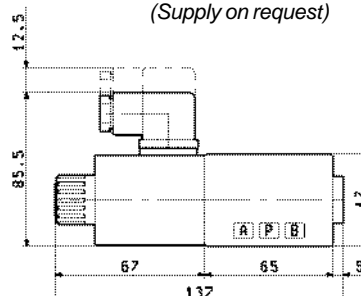
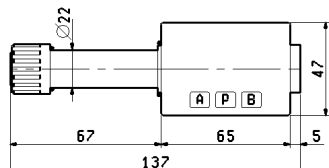


DIMENSIONI DI INGOMBRO • OVER-ALL DIMENSIONS

Elettrovalvola 4 vie 2/3 posizioni.
(Fornitura standard)
Solenoid valve 4 way 2/3 positions.
(Standard supply)

Elettrovalvola 4 vie 2/3 posizioni.
(Fornitura su richiesta)
Solenoid valve 4 way 2/3 positions.
(Supply on request)

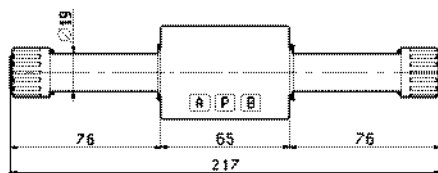
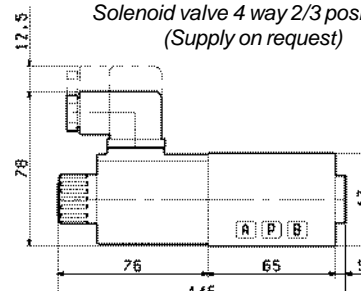
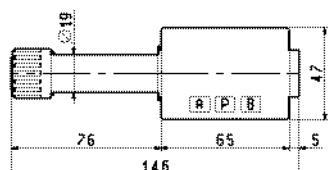
TIPO
TYPE:
LC1-AZ



Elettrovalvola 4 vie 2/3 posizioni.
(Fornitura standard)
Solenoid valve 4 way 2/3 positions.
(Standard supply)

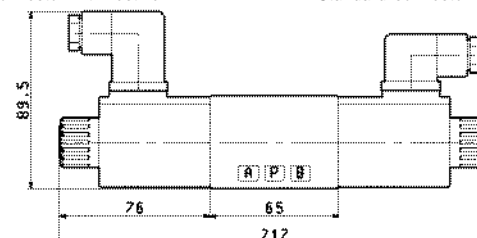
Elettrovalvola 4 vie 2/3 posizioni.
(Fornitura su richiesta)
Solenoid valve 4 way 2/3 positions.
(Supply on request)

TIPO
TYPE:
LC1-DZ



Connettore con raddrizzatore
Connector with rectifier

Connettore standard
Standard connector



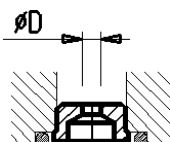
| Pesi <i>Weights</i> | |
|---|---------|
| Elettrovalvola con 1 solenoide: <i>With 1 solenoid :</i> | 1.25 kg |
| Elettrovalvola con 2 solenoidi: <i>With 2 solenoids :</i> | 1.66 kg |

Strozzatore per utilizzi P,T,A,B
Flow restrictor for P,T,A,B ports

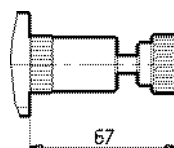
Ø D
mm
Codice
Designation code

Comando manuale di emergenza a vite
Screwed manual override
EF Cod.: LC1DZ EF

Comando manuale di emergenza a pulsante
Push-button manual override
EP Cod.: 271-05099



| | |
|-----|---------|
| 0.8 | 50-0500 |
| 1.0 | 50-0501 |
| 1.2 | 50-0502 |
| 1.5 | 50-0503 |
| 2.0 | 50-0504 |



MOMENTI MASSIMI DI SERRAGGIO • MAXIMUM BLOCKING TORQUE

| Serraggio canotto <i>Tube mounting</i> | Serraggio ghiera blocco bobina <i>Retainer nut blocking torque</i> | Viti di fissaggio <i>Fixing screws</i> |
|--|--|--|
| LC1AZ ch. 13mm: 22+24Nm | 5+6Nm | N°4 DIN 912-8.8 M5x30: 5+6Nm |
| LC1DZ ch. 16mm: 22+24Nm | | |

SOLENOIDI • SOLENOIDS

LC1AZ

Le elettrovalvole LC1AZ montano i solenoidi K14 costruiti per alimentazione in corrente alternata, con frequenze di 50 o 60Hz.

Frequenza di inserzione: 4Hz.

Sui solenoidi K14 sono montate le bobine K14-2053... nelle diverse versioni, per ulteriori informazioni tecniche vedere a pagina 2.50.07.

The valves LC1AZ use the solenoids K14 which function in alternate current (AC) with frequencies of 50 and 60Hz.

Switching frequency: 4Hz

The solenoids K14 use K 14-2053... coils in different versions; for more technical information go to page 2.50.07.

LC1DZ

Le elettrovalvole LC1DZ montano i solenoidi GM 5043, costruiti per alimentazione in corrente continua.

Per il funzionamento in corrente alternata, con frequenze di 50 o 60Hz, è indispensabile utilizzando un connettore con raddrizzatore (RAC).

Frequenza di inserzione: 3Hz.

Sui solenoidi GM 5043 sono montate le bobine C45... nelle diverse versioni, per ulteriori informazioni tecniche vedere a pagina 2.50.08.

The valves LC1DZ use the solenoids GM 5043 which function in direct current (DC).

To use in alternate current (AC) with frequencies of 50 and 60Hz is necessary use a connector with rectifier (RAC).

Switching frequency: 3Hz

The solenoids GM 5043 use C45... coils in different versions; for more technical information go to page 2.50.08.

CODICE DI ORDINAZIONE • ORDERING CODE

L 5 1

| | |
|-----------|--------------------------------|
| V | MODELLO <i>MODEL</i> |
| 11 | LC1 - DZ <i>LC1 - DZ</i> |
| 12 | LC1 - AZ <i>LC1 - AZ</i> |

| | |
|----------|--|
| W | CIRCUITO <i>CIRCUIT</i> |
| - - - - | VEDI PAGINA 2.20.02 <i>SEE PAGE 2.20.02</i> |

| | |
|-----------|---|
| Y | CONNESSIONE <i>CONNECTION</i> |
| 00 | SENZA BOBINA, SENZA CONNETTORE <i>WITHOUT COIL AND CONNECTOR</i> |
| 01 | CON BOBINA, SENZA CONNETTORE <i>WITH COIL, WITHOUT CONNECTOR</i> |
| 02 | CON CONNETTORE DIN 43650 <i>WITH CONNECTOR DIN 43650</i> |
| 03 | AMP JUNIOR <i>AMP JUNIOR</i> |

| | |
|-----------|---|
| Z | VERSIONE <i>VERSION</i> |
| 00 | STANDARD <i>STANDARD</i> |
| 0V | GUARNIZIONI IN VITON <i>SEALS IN VITON</i> |

| modello <i>model</i> | X | TENSIONE <i>VOLTAGE</i> | Connessioni disponibili <i>Available connections</i> | | | |
|-------------------------|---------------|-------------------------------------|--|-----------|-----------|--|
| | | | 00 | 01 | 03 | |
| 00 | 00 | SENZA BOBINA <i>WITHOUT COIL</i> | | | | |
| LC1 DZ | OB | 12V DC | X | X | | |
| | AD | 13V DC | X | X | X | |
| | OC | 24V DC | X | X | | |
| | AC | 27V DC | X | X | X | |
| | OD | 48V DC | X | X | | |
| | OE | 110V DC | X | X | | |
| | OV | 24 RAC (21.5 DC) | X | X | | |
| | OW | 110 RAC (98 DC) | X | X | | |
| | OZ | 230 RAC (207 DC) | X | X | | |
| | LC1 AZ | OH | 24V AC 50/60Hz | X | X | |
| OL | | 48V AC 50/60Hz | X | X | | |
| OM | | 110V AC 50/60Hz | X | X | | |
| ON | | 230V AC 50/60Hz | X | X | | |
| OK | | 240V AC 50Hz | X | X | | |