

I motori a pistoni assiali serie HP M7, HP M8 sono stati concepiti per operare sia in circuito chiuso che aperto.

I vari sistemi di comando disponibili li rendono facilmente adattabili alle esigenze applicative sia per il settore industriale che mobile.

Lo sviluppo di gruppi rotanti appositamente concepiti, unito ad uno studio accurato delle sezioni di passaggio dell'olio, consentono a questi motori di raggiungere elevate velocità di rotazione, garantendo una elevata affidabilità per pressioni di funzionamento fino a 400 bar continui (450 bar di picco).

I motori possono essere forniti completi di accessori quali valvole a scarico incrociato e valvola di scambio integrata, disponibili a richiesta.

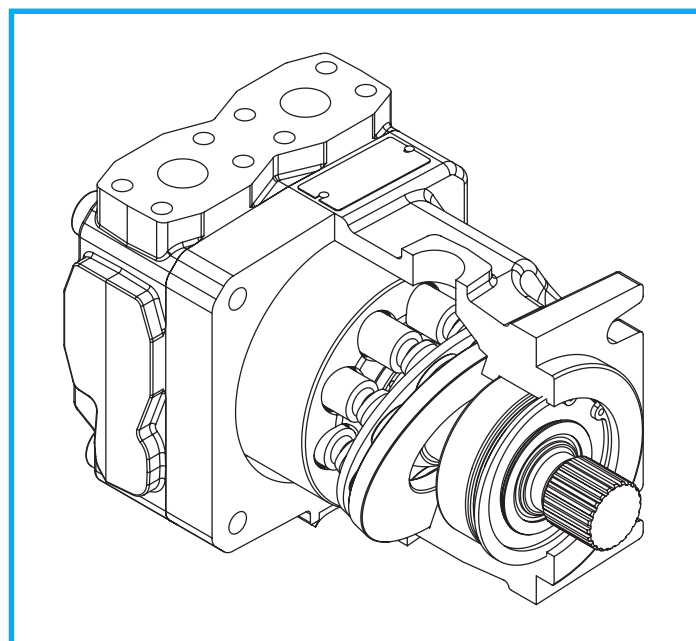
The HP M7 and M8 series axial piston motors have been designed to work both in an open and in a closed circuit. Control systems actually available are making easy to use these motors in any application for industrial and mobile field. Development of rotating groups, especially designed, united to an accurate study of oil passage sections, allow high speed rotation, giving extreme reliability for working continuous pressure unit 400 bar and until 450 bar for peak pressure.

Motors can be supplied on requests with complete accessories such as cross relief valves and built-in relief valve.

Die Axialkolbenmotoren der Serie HP M7 sind sowohl im offenen als auch im geschlossenen Kreislauf einsetzbar. Durch die lieferbaren unterschiedlichen Steuerungssysteme eignen sie sich sowohl für stationäre als auch für mobile Anwendungen.

Speziell entwickelte Zylinderblöcke mit optimalen Saugverhältnissen erlauben den Einsatz bei hohen Drehzahlen, wie von modernen Antriebsaggregaten gefordert. Dabei ist ein kontinuierlicher Betriebsdruck von bis zu 400 Bar (Spitzenwert 450 Bar) gewährleistet.

Die Motoren können auf Wunsch mit Sonderzubehör wie Kreuz-Überdruckventile und integrierte Spülventile ausgestattet werden.



DATI TECNICI • TECHNICAL DATA • TECHNISCHE MERKMALE

GRUPPO GROUP BAUREIHE	CILINDRATA TEORICA NOMINAL DISPLACEMENT FÖRDERVOLUMEN (TM)		PRESSIONE- PRESSURE - DRUCK						VELOCITÀ DI ROTAZIONE SPEED DREHZAHL		MASSA WEIGHT GEWICHT	
	cm ³	in ³	CONTINUA CONTINUOUS DAUER		INTERMITTENTE INTERMITTENT INTERMITTIERENDER		PICCO PEAK SPITZEN		MAX min ⁻¹	MIN min ⁻¹	Kg	lbs
			bar	psi	bar	psi	bar	psi				
HP M7	82	5,0	350	5075	380	5510	400	5800	4000	500	55	121
	100	6,1	350	5075	380	5510	400	5800	4000	500	55	121
	125	7,6	350	5075	380	5510	400	5800	4000	500	56	123

GRUPPO GROUP BAUREIHE	CILINDRATA TEORICA NOMINAL DISPLACEMENT FÖRDERVOLUMEN (TM)		PRESSIONE- PRESSURE - DRUCK						VELOCITÀ DI ROTAZIONE SPEED DREHZAHL		MASSA WEIGHT GEWICHT	
	cm ³	in ³	CONTINUA CONTINUOUS DAUER		INTERMITTENTE INTERMITTENT INTERMITTIERENDER		PICCO PEAK SPITZEN		MAX min ⁻¹	MIN min ⁻¹	Kg	lbs
			bar	psi	bar	psi	bar	psi				
HP M8	82	5,0	400	5800	420	6090	450	6525	4000	500	39	86
	100	6,1	400	5800	420	6090	450	6525	4000	500	40	88
	125	7,6	400	5800	420	6090	450	6525	4000	500	40	88



FLUIDO IDRAULICO

Fluidi idraulici HLP (DIN 51224 parte 2)
Oli lubrificanti per motori API CD (SAE)
Fluidi idraulici HLPV DIN 51224 parte 3 (J183).

TEMPERATURE LIMITE DI FUNZIONAMENTO

Temperatura minima -20°C
Temperatura massima continua +90°C
Temperatura massima di picco +100°C
Deve essere verificata la rispondenza alla viscosità del fluido richiesta per il corretto funzionamento.

VISCOSITA'

Minima 10 mm²/s (per brevi periodi)
Massima 1000 mm²/s (per brevi periodi alla partenza)
Campo di viscosità raccomandato 15-90 mm²/s

PRESSIONE DI DRENAGGIO

P max 2 bar (assoluti)

GRADO DI FILTRAZIONE

Le classi di contaminazione consigliate sono le seguenti:
Classe ISO4406 19/17/14 (NAS1638 - 8)

INSTALLAZIONE

Prima di far funzionare il motore, assicurarsi che tutto il circuito idraulico sia accuratamente riempito d'olio e disarmato. 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 i filtri dopo le prime 50 ore di lavoro.
Sostituire il filtro del circuito idraulico ogni 500 ore di funzionamento.
Sostituire il fluido idraulico come da specifiche del fornitore.

HYDRAULIC FLUID

Use only HLP (DIN 51224 part 2) hydraulic fluids.
API CD Engine lubricating oils (SAE). HLPV Hydraulic fluids DIN 51224 part 3 (J183).

MAX WORKING TEMPERATURE

Min. temperature -20°C
Max continuous temperature +90°C
Max peak temperature +100°C
Check oil viscosity respects operation requirements.

OIL VISCOSITY

Min. oil viscosity 10 mm²/s (for brief intervals).
Max. oil viscosity 1000 mm²/s (for brief intervals during start-up).
Recommended oil viscosity range 15-90 mm²/s.

DRAIN PRESSURE

Max pressure: 2 bar (absolute)

FILTERING RATIO

The suggested contamination classes are:
Class ISO4406 19/17/14 (NAS1638 - 8).

INSTALLATION

Before operation make sure the hydraulic circuit has been completely filled with oil and is inactive.
Filter oil in order to guarantee a class equal to required ISO or NAS class.
Equip the circuit with a filtering system that guarantees a class equal to required ISO or NAS class.
Start the machine slowly, without load, making a good air purging before loading the circuit.
Replace filters after the first 50 hours working.
Replace hydraulic circuit filter each 500 hours of work.
Replace hydraulic fluid as per supplier's specifications.

HYDRAULIKMEDIUM

Hydrauliköl HLP (DIN 51224 Teil 2), Motoröle API CD (SAE), Hydrauliköl HLPV DIN 51224 Teil 3 (J183).

GRENZWERTE DER BETRIEBSTEMPERATUR

Mindesttemperatur -20°C;
max. Dauertemperatur +90°C;
max. Spitzentemperatur +100°C.
Die für den ordnungsgemäßen Betrieb erforderliche Viskosität des Öls muss geprüft werden.

ÖLVISKOSITÄT

Min. 10 mm²/s (für kurze Zeit).
Max. 1000 mm²/s (für kurze Zeit bei Kaltstart).
Empfohlener Viskositätsbereich 15-90 mm²/s.

LECKÖLDRUCK

P max. 2 Bar (absolut)

FILTRATIONSGRAD

Die empfohlenen Reinheitsklassen sind:
Klasse ISO4406 19/17/14 (NAS1638 - 8).

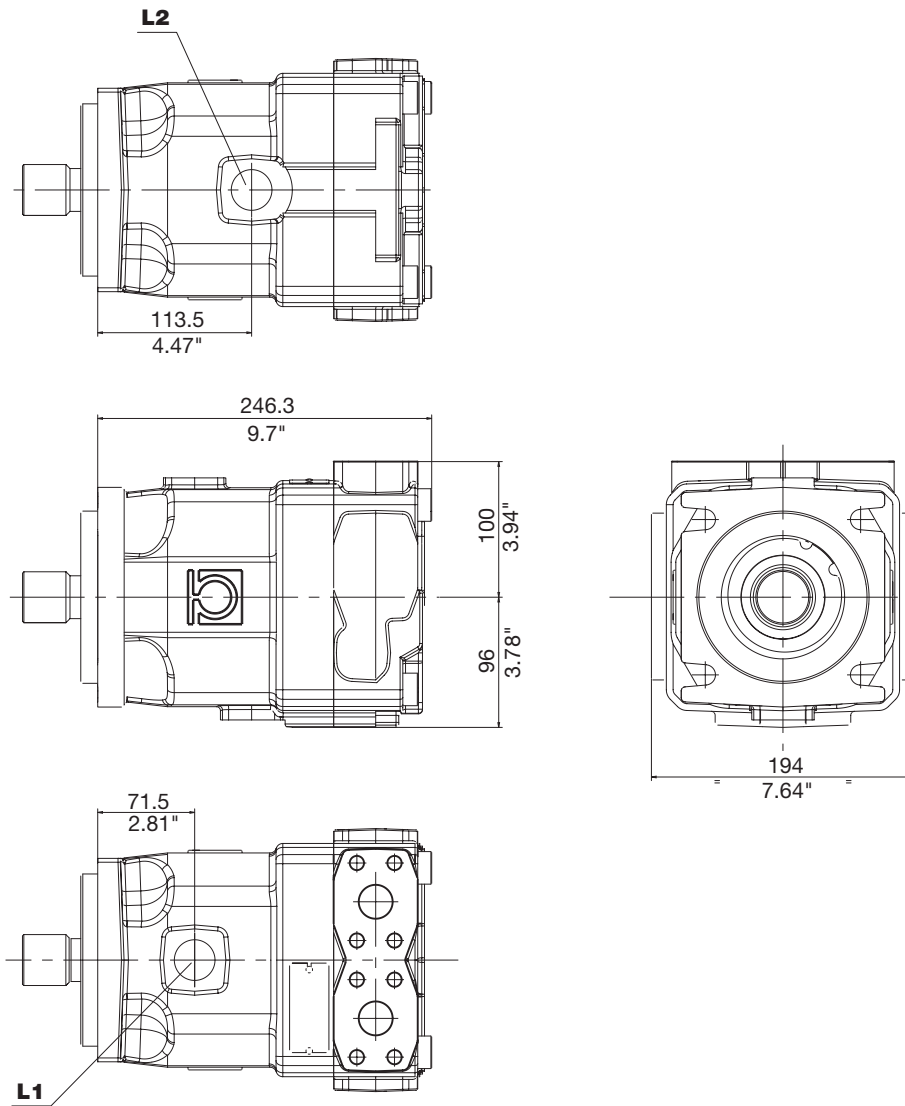
INBETRIEBNAHME

Bevor die Pumpe in Betrieb genommen wird sich davon vergewissern, dass der gesamte Hydraulikkreislauf mit Öl gefüllt und entlüftet wurde.
Das einzufüllende Öl filtern, damit die geforderte ISO- oder NAS-Klasse gewährleistet ist.
Den Kreislauf mit einem Filtersystem ausstatten, das die geforderte ISO- oder NAS-Klasse gewährleistet.
Die Anlage langsam und ohne Belastung anlaufen lassen und dabei die restliche Luft vollständig entweichen lassen.
Anschließend die Leistung langsam steigern.
Die Filter nach den ersten 50 Betriebsstunden auswechseln.
Den Filter des Hydraulikkreislaufs alle 500 Betriebsstunden auswechseln.
Das Hydrauliköl gemäß den Anweisungen des Lieferanten wechseln.

**DIMENSIONI
SIZES
ABMESSUNGENE**

HP M7

HP M8



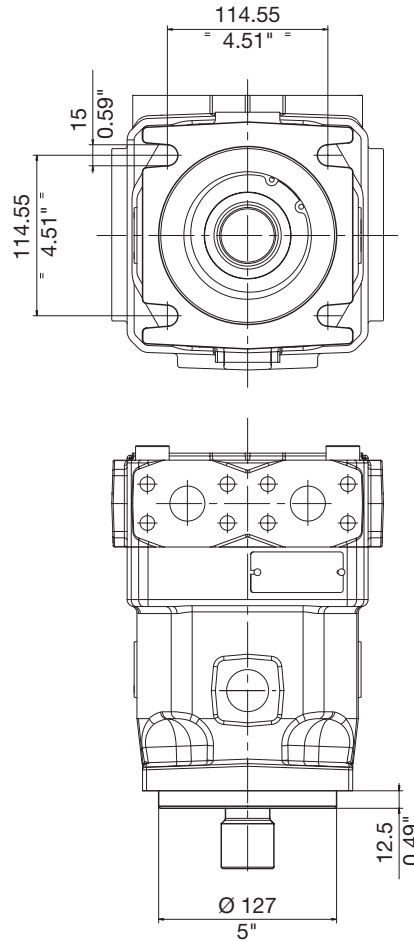


**FLANGE
FLANGES
FLANSCHEN**

HP M7

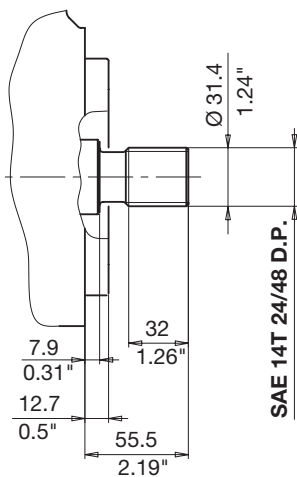
HP M8

C SAE C 4 FORI
SAE C 4 HOLES
SAE C 4 BOHRUNGEN

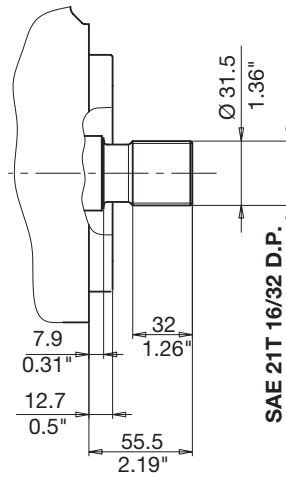


**ESTREMITÀ ALBERI
SPLINE SHAFTS
WELLENPROFILE**

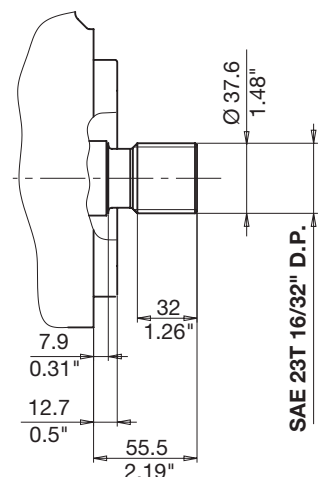
3 COPPIA MAX
MAX TORQUE
MAX DREHMOMENT 865 N•m



7 COPPIA MAX
MAX TORQUE
MAX DREHMOMENT 1085 N•m



8 COPPIA MAX
MAX TORQUE
MAX DREHMOMENT 1300 N•m

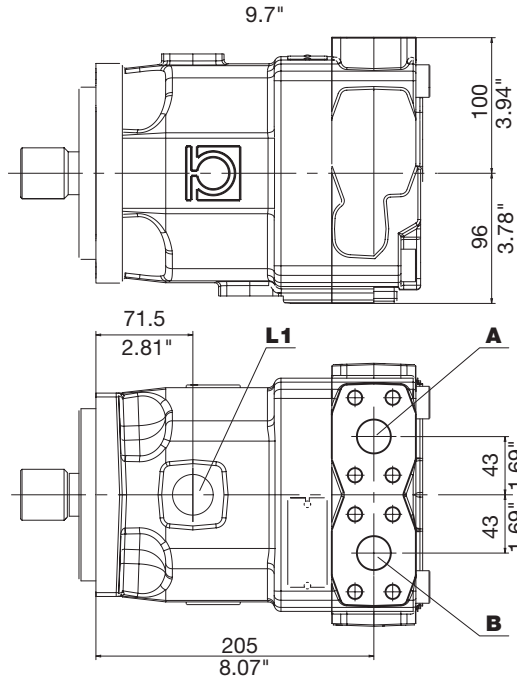


POSIZIONE BOCCHE
POSITION OF PORTS
ANSCHLUSSPOSITION

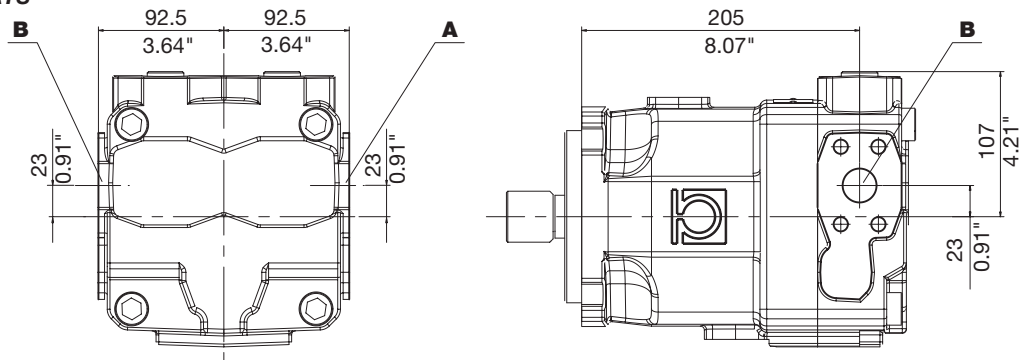
HP M7

HP M8

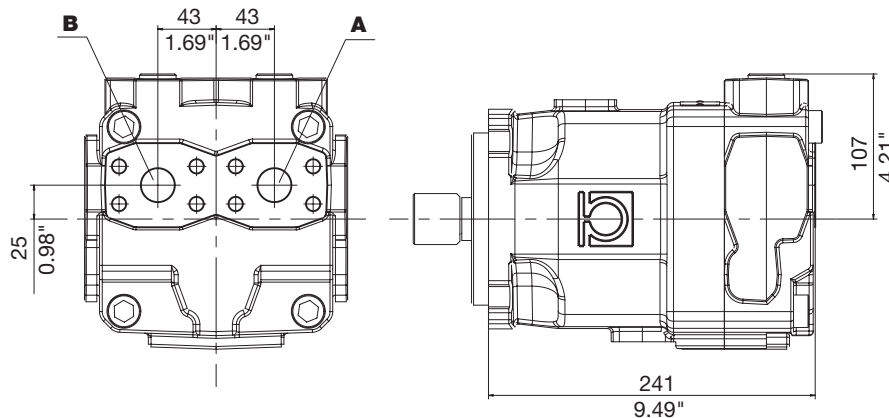
A **LATERALI ACCOPIATE**
COUPLED SIDEWAYS
SEITLICH GEKOPPELT



L **LATERALI CONTRAPPOSTE**
OPPOSITE SIDEWAYS
BEIDSEITIG



P **POSTERIORI**
REAR
HINTEN



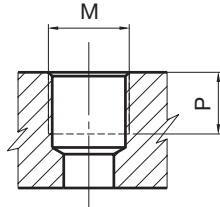


**BOCCHIE
PORTS
ANSCHLÜSSE**

HP M7

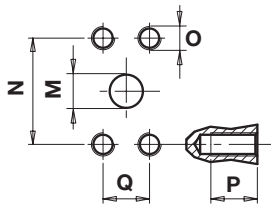
HP M8

G



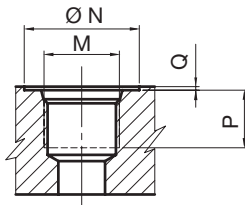
TIPO TYPE TYPE	M		P	
	mm	in	mm	in
G7	1"	GAS BSPP	18	0,75

N



TIPO TYPE TYPE	M		N		P		Q		O
	mm	in	mm	in	mm	in	mm	in	
N7	25	1	52,4	2,60	18	0,71	26,2	1,03	M10

U



TIPO TYPE TYPE	DIMENSIONE SIZE GRÖSSE	N		P		Q		M
		mm	in	mm	in	mm	in	
U7	1"	49	1,93	18	0,70	0,3	0,01	1-5/16-12 UNF

**COMBINAZIONI
COMBINATIONS
KOMBINATIONEN**

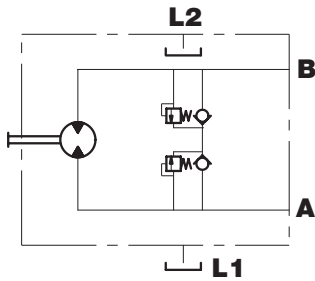
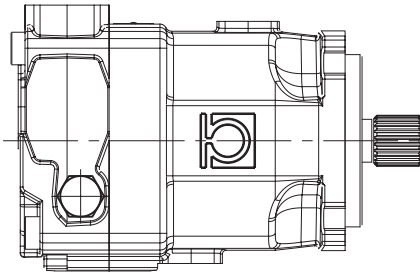
TIPO TYPE TYPE	A - B INGRESSO/USCITA INLET/ OUTLET EINGANG/AUSGANG	L1 - L2 DRENAGGIO DRAIN LECKÖLANSCHLUSS
G	N7	G7
U	N7	U7

**ACCESSORI
ACCESSORIES
ZUBEHÖR**

HP M7

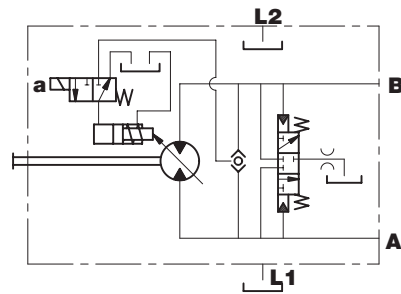
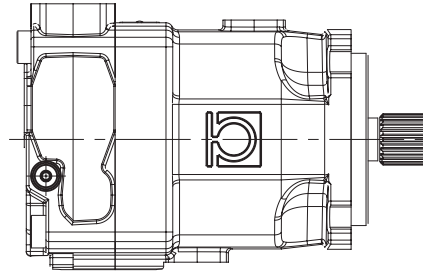
HP M8

**M VALVOLA DI MASSIMA
RELIEF VALVE
DRUCKBEGRENZUNGSVENTIL**



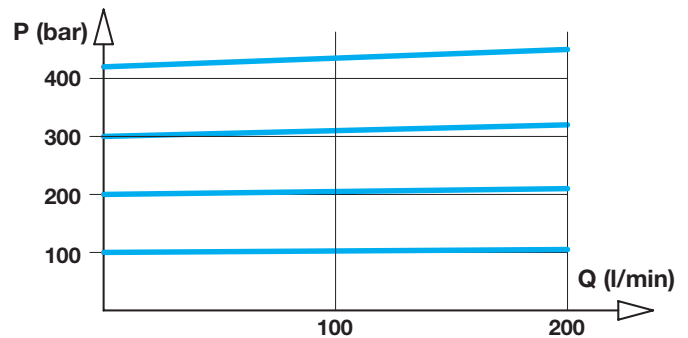
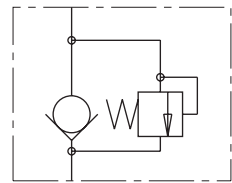
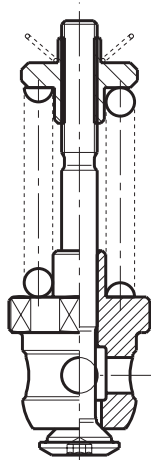
I valori di taratura sono riportati nella tabella valvole.
Settings are listed in the chart for valves
Für die Einstellwerte siehe Ventiltabelle

**V VALVOLA DI SCAMBIO (5 - 7 l/min)
EXCHANGE VALVE (5 - 7 l/min)
SPULVENTIL (5 - 7 l/min)**



**VALVOLE
VALVES
VENTILE**

TIPO TYPE TYP	PRESSIONE PRESSURE DRUCK	
	bar	psi
I	280	4060
L	300	4350
O	350	5075
P	400	5800
Q	420	6090
R	450	6525





**ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG**

HP M7

HP M8



**SERIE
SERIES
SERIE**

**PRODOTTO - PRODUCT
PRODUKTE**

- M7** - Motori a pistoni assiali a cilindrata fissa media pressione
- M8** - Motori a pistoni assiali a cilindrata fissa alta pressione
- M7** - Motori a pistoni assiali a cilindrata fissa media pressione
- M8** - Motori a pistoni assiali a cilindrata fissa alta pressione
- M7** - *Fixed-displacement axial piston motor, medium pressure*
- M8** - *Fixed-displacement axial piston motor, high pressure*
- M7** - Konstant-Axialkolbenmotoren mittlerer Druck hoher Druck
- M8** - Konstant-Axialkolbenmotoren

**CILINDRATA
DISPLACEMENT
FÖRDERVOLUMEN**
082 - 100 - 125

**SENSO DI ROTAZIONE
ROTATION
DREHRICHTUNG**
B - Bidirezionale
B - *Bidirectional*
B - Bidirektional

**FLANGIA
FLANGE
FLANSCH**
C - SAE C 4 fori
C - *SAE C 4 holes*
C - SAE C 4 Bohrungen

**ESTREMITÀ D'ALBERO
SHAFT PROFIL
WELLENENDE**
3 - Z14 12/24" DP
7 - Z21 16/32" DP
8 - Z23 16/32" DP

**BOCCHIE
PORTS
ANSCHLÜSSE**
G - Gas
U - UNF

**ESECUZIONI SPECIALI
SPECIAL VERSIONS
SONDERBAUARTEN**

**VALVOLE
VALVE
VENTILE**

- 0** - Senza valvola
Vedi tabella valvole
- 0** - *No valve*
See chart for valves
- 0** - Ohne Ventil
Siehe Ventiltabelle

**ACCESSORI
ACCESSORIES
ZUBEHÖR**

- 0** - nessuno
- M** - Valvola di massima pressione
- V** - valvola di scambio

- 0** - *no accessories*
- M** - *Relief valve*
- V** - *exchange valve*

- 0** - kein Zubehör
- M** - Druckbegrenzungsventil
- V** - Spülventil

**POSIZIONE BOCCHIE
POSITION OF PORTS
ANSCHLUSSPOSITION**

- A** - Laterali accoppiate
- L** - Laterali contrapposte
- P** - Posteriori

- A** - *Coupled sideways*
- L** - *Opposite sideways*
- P** - *Rear*

- A** - Seitlich gekoppelt
- L** - Beidseitig
- P** - Hinten