



**MOTORI A PISTONI ASSIALI
A CILINDRATA VARIABILE**

***VARIABLE-DISPLACEMENT
AXIAL PISTON MOTORS***

AXIALKOLBEN-VERSTELLMOTORE

HP V4
34.46.50.58.65

398SCM0053A00

HP V4

MOTORI A PISTONI ASSIALI A CILINDRATA VARIABILE VARIABLE-DISPLACEMENT AXIAL PISTON MOTORS AXIALKOLBENVERSTELLMOTOREN

I motori variabili a pistoni assiali serie HP V4 sono stati concepiti per operare sia in circuito aperto che in circuito chiuso. I vari sistemi di comando disponibili li rendono facilmente adattabili alle esigenze applicative sia per il settore industriale che mobile.

I comandi disponibili sono i seguenti:

- comando elettrico a 12 V (due posizioni)
- comando elettrico a 24 V (due posizioni)
- comando idraulico pilotabile a bassa pressione (30 bar) (due posizioni)
- comando idraulico diretto ad alta pressione (due posizioni).

The HP V4 series variable-displacement axial piston motors have been designed to work both in an open and closed circuit. Control systems actually available are making easy to use these motors in any application for industrial and mobile field. Available control systems are:

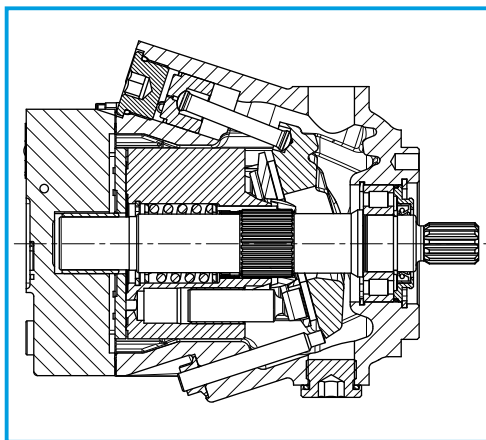
- 12 V electrical control (2-position)
- 24 V electrical control (2-position)
- hydraulic piloted, low pressure (30 bar) (2-position)
- direct hydraulic control, high pressure (2-position).

Die Axialkolbenmotoren der Serie HP V4 wurden konzipiert, um sowohl im offenen als auch im geschlossenen Kreislauf zu arbeiten. Die lieferbaren unterschiedlichen Steuerungssysteme eignen sich sowohl für Anwendungen im industriellen als auch im mobilen Sektor.

Folgende Steuerungen sind erhältlich:

- elektrische Steuerung 12 V (2 Stellungen)
- elektrische Steuerung 24 V (2 Stellungen)
- hydraulische Steuerung, Niederdruck (30 Bar - 2 Stellungen)
- hydraulische Direktsteuerung, Hochdruck (2 Stellungen).

HP V4 34.46.50.58.65

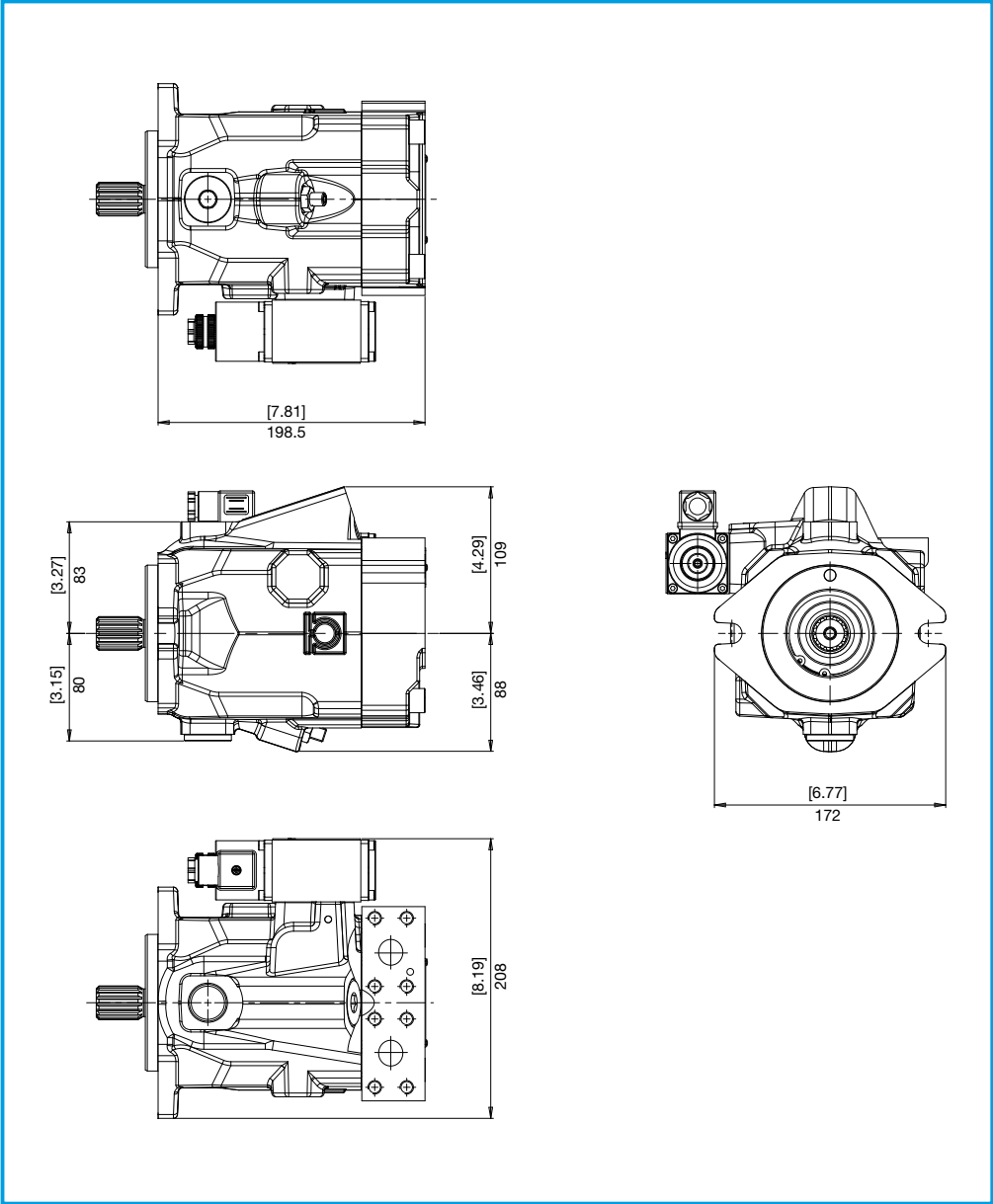


DATI TECNICI TECHNICAL DATA TECHNISCHE MERKMALE

GRUPPO GROUP BAUREIHE	CILINDRATA TEORICA NOMINAL DISPLACEMENT FORDERVOLUMEN (TM)		OSCILLANTE SWASHPLATE SCHWENKWINKEL °	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 (max V)	MAX (min V)	MIN	kg	lbs
			bar	psi	bar	psi	bar	psi	min ⁻¹	min ⁻¹	min ⁻¹			
HP V4	34	2,08	18	250	3625	330	4785	400	5800	3600	4000	500	23	50,61
	46	2,81	19	250	3625	330	4785	400	5800	3600	4000	500	23	50,61
	50	3,05	18	250	3625	330	4785	400	5800	3600	4000	500	23	50,61
	58	3,54	18	250	3625	330	4785	400	5800	3600	4000	500	24	52,81
	65	3,97	18	250	3625	300	4350	350	5075	3600	4000	500	24	52,81

**DIMENSIONI
 SIZE
 ABMESSUNGEN**

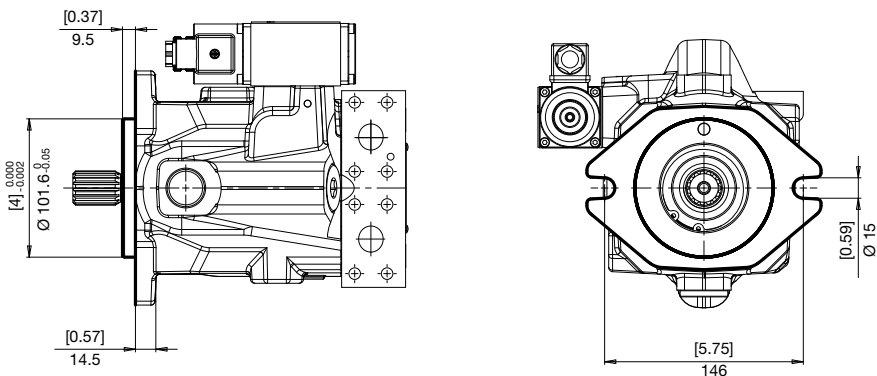
HP V4



FLANGE
FLANGES
FLANSCHEN

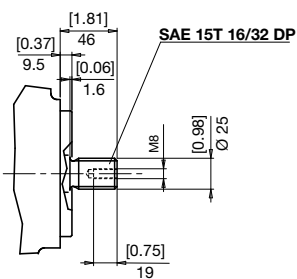
HP V4

B SAE B
SAE B
SAE B

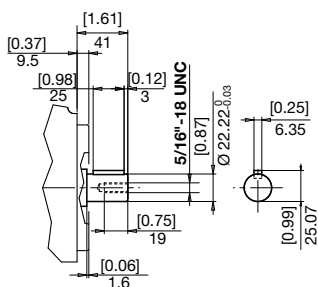


ESTREMITÀ ALBERI
SPLINE SHAFTS
WELLENPROFILE

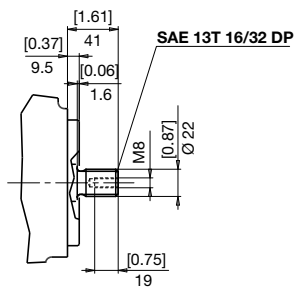
1 COPPIA MAX
MAX TORQUE 460 N•m
MAX DREHMOMENT



6 COPPIA MAX
MAX TORQUE 210 N•m
MAX DREHMOMENT



9 COPPIA MAX
MAX TORQUE 310 N•m
MAX DREHMOMENT

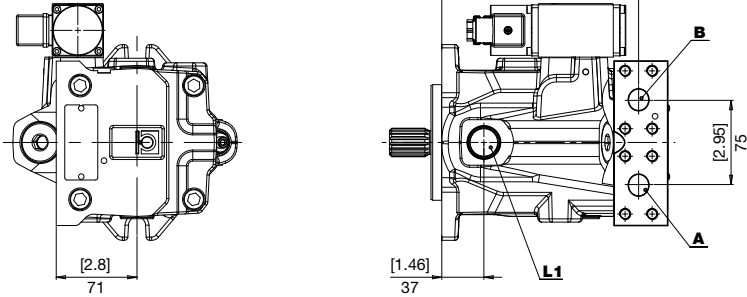




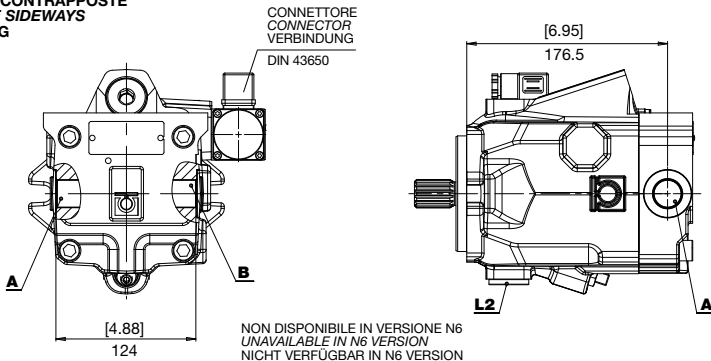
**POSIZIONE BOCHE
POSITION OF PORTS
ANSCHLUSSPOSITION**

HP V4

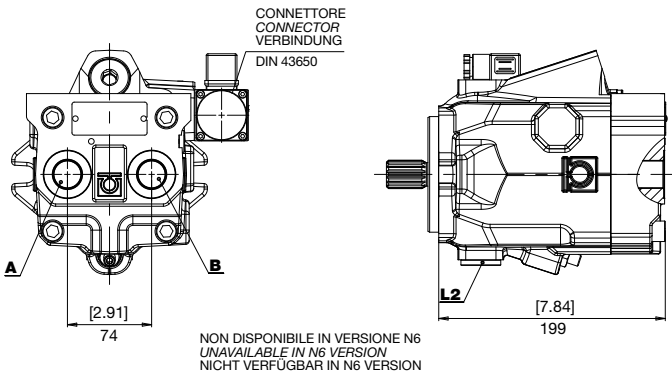
A **LATERALI ACCOPPIATE
COUPLED SIDWAYS
SEITLICH GEKOPPELT**

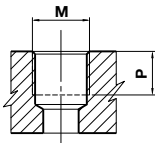


L **LATERALI CONTRAPPOSTE
OPPOSITE SIDWAYS
BEIDSEITIG**

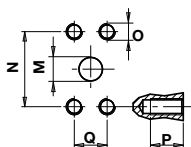


P **POSTERIORI
REAR
HINTEN**

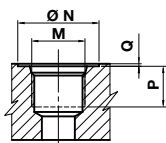




TIPO TYPE TYP	M	P	
		mm	in
G1	Port ISO 1179-1 - G 1/8	8	0,31
G6	Port ISO 1179-1 - G 3/4	90	0,75



TIPO TYPE TYP	M		N		P		Q		O
	mm	in	mm	in	mm	in	mm	in	Nm
N6	20	0,79	50,8	2,00	20	0,79	23,8	0,94	M10 38



TIPO TYPE TYP	DIMENSIONE SIZE GRÖSSE	N		P		Q		M
		mm	in	mm	in	mm	in	
U2	1/4"	20	0,79	12	0,47	0,3	0,01	Port ISO 11926-1-7/16-20 17
U6	3/4"	41	1,61	20	0,79	0,3	0,01	Port ISO 11926-1-1 1/16-12 90

**COMBINAZIONI
COMBINATIONS
KOMBINATIONEN**

TIPO TYPE TYP	A - B PILOTAGGIO PILOT STEUERDRUCK	L1 - L2 DRENAGGIO DRAIN LECKÖLANSCHLUSS	X PILOTAGGIO PILOT STEUERDRUCK
G	G6	G6	G1
M	N6	U6	U2
N	N6	G6	G1
U	U6	U6	U2



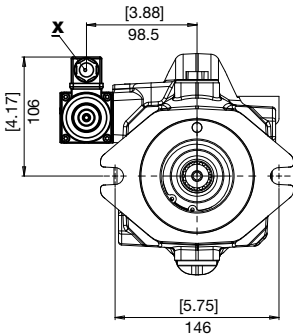
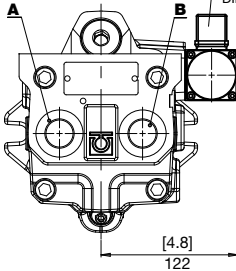
**COMANDI
CONTROLS
STEUERUNGEN**

HP V4

E F
12 V 24 V

**ELETTRICO A 2 POSIZIONI
ELECTRICAL, 2-POSITION
ELEKTRISCH, 2 STELLUNGEN**

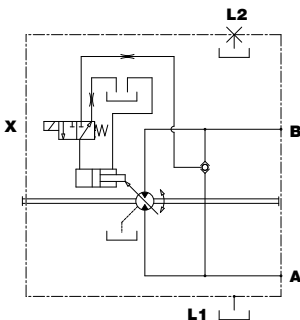
CONNETTORE
CONNECTOR
VERBINDUNG
DIN 43650



**INGRESSO
INLET
EINGANG**

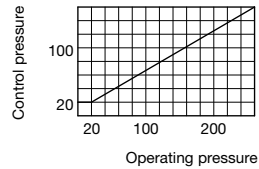
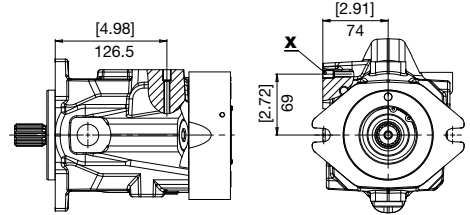
**ROTAZIONE
DIRECTION
DREHRICHTUNG**

A	DESTRA RIGHT RECHTS	
B	SINISTRA LEFT LINKS	X Elettrovalvola Solenoid Valve Magnetventil

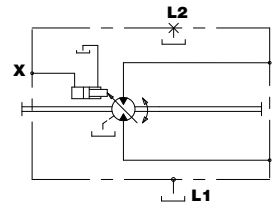


H

**IDRAULICO DIRETTO A 2 POSIZIONI
DIRECT HYDRAULIC, 2-POSITION
HYDRAULISCH DIREKT, 2 STELLUNGEN**



INGRESSO INLET EINGANG	ROTAZIONE DIRECTION DREHRICHTUNG	
A	DESTRA RIGHT RECHTS	
B	SINISTRA LEFT LINKS	X Pilotaggio Pilot Steuerdruck



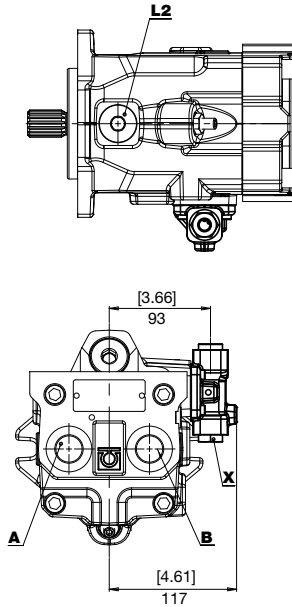
Normalmente il motore é in cilindrata massima. Applicando una pressione esterna sul pilotaggio "X" si ottiene la variazione di cilindrata alla minima. Il controllo pressione dipende direttamente dalla pressione di lavoro delle bocche "A" e "B". Per una corretta variazione della cilindrata attenersi ai valori di pressione di pilotaggio riportati nel diagramma.

The motor is usually at maximum displacement. By applying external pressure on pilot "X" the displacement is changed to a minimum. The pressure control depends directly on the working pressure at ports "A" and "B". To correctly change displacement, follow the pilot pressure values as shown in the chart.

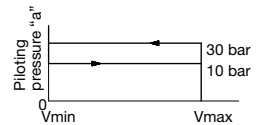
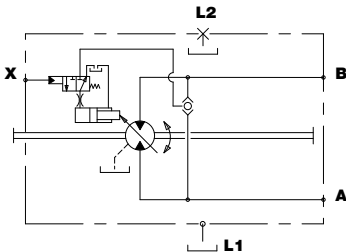
Normalerweise hat der Motor das maximale Schluckvolumen. Durch Anwendung eines äußeren Drucks auf den Steuerdruck "X" wird die Verstellung auf das Mindest-Sluckvolumen vorgenommen. Der Steuerdruck hängt direkt vom Betriebsdruck der Anschlüsse "A" und "B" ab. Zur korrekten Änderung des Schluckvolumens wird empfohlen, die im Diagramm dargestellten Steuerdruckwerte zu beachten.



IDRAULICO A 2 POSIZIONI
HYDRAULIC, 2-POSITION
HYDRAULISCH, 2 STELLUNGEN



INGRESSO INLET EINGANG	ROTAZIONE DIREZIONE DREHRICHTUNG	
A	DESTRA RIGHT RECHTS	
B	SINISTRA LEFT LINKS	X Pilotaggio Pilot Steuerdruck



Normalmente il motore é in cilindrata massima. Applicando una pressione esterna sul pilotaggio si ottiene la variazione di cilindrata alla minima.

Per una corretta variazione della cilindrata attenersi ai valori di pressione di pilotaggio riportati nel diagramma.

The motor is usually at maximum displacement. By applying external pressure on pilot "X" the displacement is changed to a minimum.

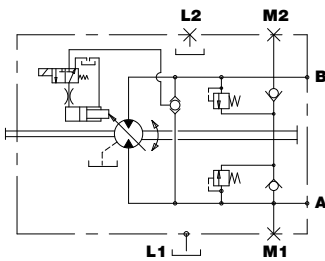
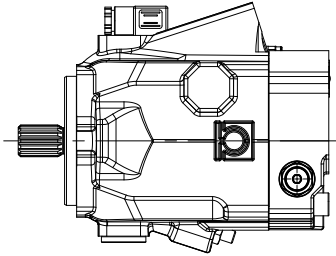
To correctly change displacement, follow the pilot pressure values as shown in the chart.

Normalerweise hat der Motor das maximale Schluckvolumen. Durch Anwendung eines äußeren Drucks auf den Steuerdruck erzielt man die Verstellung auf das Mindest-Sluckvolumen. Zur korrekten Änderung des Schluckvolumens wird empfohlen, die im Diagramm dargestellten Steuerdruckwerte zu beachten.

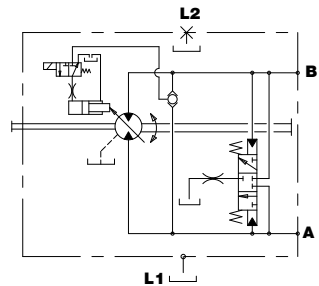
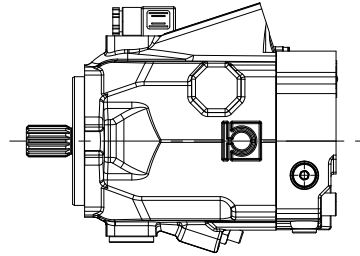
**ACCESSORI
ACCESSORIES
ZUBEHÖR**

HP V4

M VALVOLA LIMITATRICE DI PRESSIONE E ANTICAVITAZIONE
PRESSURE LIMITER AND ANTICAVITATION VALVE
DRUCKBEGRENZUNGS UND NACHSAUGVENTIL



V VALVOLA DI FLUSSAGGIO (5 - 7 l/min)
FLUSHING AND BOOST VALVE (5 - 7 l/min)
SPUL- UND SPEISED RUCKVENTIL (5 - 7 l/min)



HP

V4

034

020

1

G

A

E

0

0

...

**PRODOTTO
PRODUCT
PRODUKT**

- V4 - Motori a pistoni assiali a cilindrata variabile
- V4 - *Variable-displacement axial piston motors*
- V4 - Axialkolbenverstellmotoren

**CILINDRATA
DISPLACEMENT
FÖRDERVOLUMEN**

034 - 046 - 050 - 058 - 065

**CILINDRATA MINIMA
MIN. DISPLACEMENT
MIN. SCHLUCKVOLUMEN**

**ESTREMITÀ ALBERO
SHAFT PROFIL
WELLENENDE**

- 1 - Z15 16/32" DP
- 9 - Z13 16/32" DP
- 6 - cilindrico d. 22,22
*round shaft d. 22,22
zylindrisch d. 22,22*

**BOCCHIE
PORTS
ANSCHLÜSSE**

- G - Gas
- N - UNF
- N - SAE - split drenaggi GAS
SAE - GAS drains split
- M - SAE - Split Leckölanschluss GAS
SAE - Split Leckölanschluss GAS
- M - SAE - split drenaggi UNF
SAE - UNF drains split
- M - SAE - Split Leckölanschluss UNF
SAE - Split Leckölanschluss UNF

**ESECUZIONI
SPECIALI
SPECIAL
VERSIONS
SONDERBAUARTEN**

**TARATURA VALVOLE
VALVE SETTING
VENTILE**

- 0 - senza valvole
*no valve
ohne ventile*
- B - 150 bar
- D - 180 bar
- E - 210 bar
- G - 250 bar
- I - 280 bar
- L - 300 bar
- O - 350 bar
- P - 400 bar

ACCESSORI ACCESSORIES ZUBEHÖR

- 0 - nessuno
- M - Valvola limitatrice di pressione e anticavitazione
- S - accessori multipli
esecuzioni speciali
- V - Valvola di flussaggio
- 0 - *no accessories*
- M - *pressure limiter and anticavitation valve*
- S - *multiple accessories
special versions*
- V - *flushing and boost valve*
- 0 - kein Zubehör
- M - Druckbegrenzungs und Nachsaugventil
- S - Zubehörkombinationen
Sonderbauarten
- V - Spül- und Spisedruckventil

**COMANDI
CONTROLS
STEUERUNGE**

- E - Elettrico (12 V) a 2 posizioni
- F - Elettrico (24 V) a 2 posizioni
- H - Idrraulico diretto a 2 posizioni
- K - Idrraulico a 2 posizioni
- E - *12 V electrical, 2-position*
- F - *24 V electrical, 2-position*
- H - *Direct hydraulic, 2-position*
- K - *Hydraulic, 2-position*
- E - Elektrisch (12 V), 2 Stellungen
- F - Elektrisch (24 V), 2 Stellungen
- H - Hydraulisch direkt, 2 Stellungen
- K - Hydraulisch, 2 Stellungen

**POSIZIONE BOCCHIE
POSITION OF PORTS
ANSCHLUSSPOSITION**

- A - Lateralì accoppiate
- L - *Lateralì contrapposte*
- P - Posteriori
- A - *Coupled sideways*
- L - *Opposite sideways*
- P - *Rear*
- A - Seitlich gekoppelt
- L - Beidseitig
- P - Hinten