



**POMPE A PISTONI ASSIALI PER CIRCUITO
APERTO CON REGOLAZIONE LOAD SENSING
O A PRESSIONE COSTANTE**

***OPEN CIRCUIT AXIAL PISTON PUMPS WITH
LOAD-SENSING OR CONSTANT PRESSURE
CONTROL***

**AXIALKOLBENPUMPEN FÜR DEN OFFENEN
KREISLAUF MIT LOAD-SENSING-REGELUNG
ODER KONSTANTDRUCKREGELUNG**

HM A2

398SOP0023A01

HM A2

POMPE A PISTONI ASSIALI PER CIRCUITO APERTO CON REGOLAZIONE LOAD SENSING O A PRESSIONE COSTANTE OPEN CIRCUIT AXIAL PISTON PUMPS WITH LOAD-SENSING OR CONSTANT PRESSURE CONTROL AXIALKOLBENPUMPEN FÜR DEN OFFENEN KREISLAUF MIT LOAD-SENSING-REGELUNG ODER KONSTANTDRUCKREGELUNG

Le pompe a pistoni assiali serie HM A2 sono state concepite per operare in circuito aperto.

I vari sistemi di regolazione disponibili le rendono facilmente adattabili alle esigenze applicative sia per il settore industriale che per quello mobile. Lo sviluppo di gruppi rotanti appositamente concepiti, unito ad uno studio accurato delle sezioni di passaggio dell'olio consentono a queste pompe di raggiungere elevate velocità di rotazione, come quelle consentite dai moderni motori diesel, garantendo una elevata affidabilità per pressioni di funzionamento fino a 280 bar continui (350 bar di picco). I controlli permettono un funzionamento con regolazione load sensing o a pressione costante.

Le pompe possono essere composte in versione tandem.

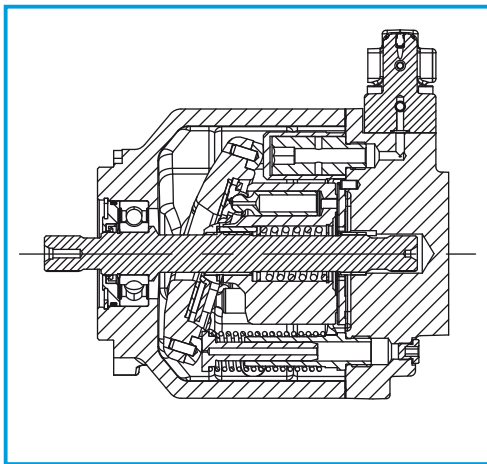
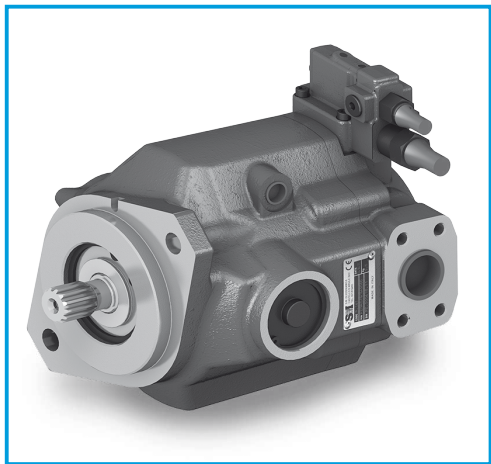
Axial piston pumps series HM A2 have been designed to operate in an open circuit. Control systems actually available are making easy to use these pumps in any application for industrial and mobile field. Development of rotating groups, especially designed, united to an accurate study of oil passage sections into the pumps, allow high speed rotation, like required by modern diesel engines, giving extreme reliability for working continuous pressure until 280 bar and until 350 bar for peak pressure. Control types allow a Load-sensing or a constant pressure control over the pump. It is possible to couple tandem versions.

Die Axialkolbenpumpen der Serie HM A2 wurden für den Betrieb im offenen Kreislauf konzipiert.

Die lieferbaren unterschiedlichen Steuerungssysteme eignen sich sowohl für stationäre als auch für mobile Anwendungen. Speziell entwickelte Zylinderblöcke mit optimalen Saugverhältnissen erlauben den Einsatz bei hohen Pumpendrehzahlen, wie von moderneren Antriebsaggregaten gefordert.

Die in diesem Abschnitt dargestellten Steuerungen sind mit Load-Sensing-Regelung oder Konstantdruckregelung lieferbar.

Für beide Pumpenfamilien können unter Anwendung von Anbauflansche Tandemversionen zusammenggebaut werden.



DATI TECNICI TECHNICAL DATA TECHNISCHE MERKMALE

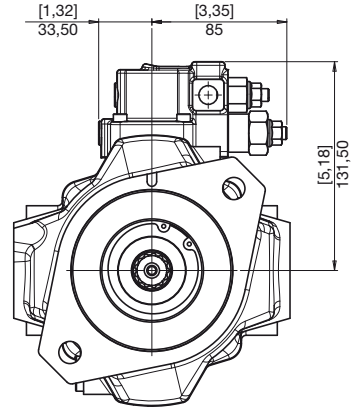
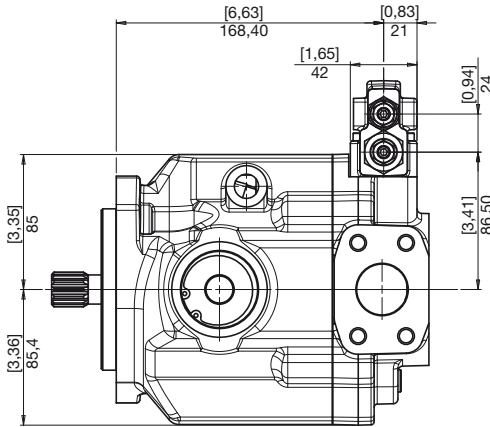
GRUPPO GROUP BAUREIHE	CILINDRATA TEORICA NOMINAL DISPLACEMENT FORDERVOLUMEN (l/m)		CONTINUA CONTINUOUS DAUER		PRESSIONE PRESSURE DRUCK		PICCO PEAK SPITZEN		VELOCITÀ DI ROTAZIONE SPEED DREHZAHL		MASSA WEIGHT GEWICHT	
	cm ³	in ³	bar	psi	bar	psi	bar	psi	min ⁻¹	min ⁻¹	kg	lbs
HM A2	20	1,22	280	4060	300	4350	330	4785	3100	500	18	39,7
	23	1,40										
	25	1,52										
	28	1,71										
	32	1,95	250	3625	280	4060	320	4640				
	34	2,07										
	36	2,20										
	38	2,32										



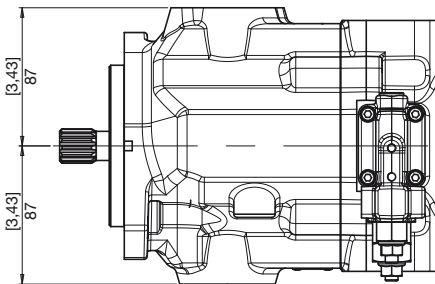
**DIMENSIONI
SIZE
ABMESSUNGEN**

HM A2

R



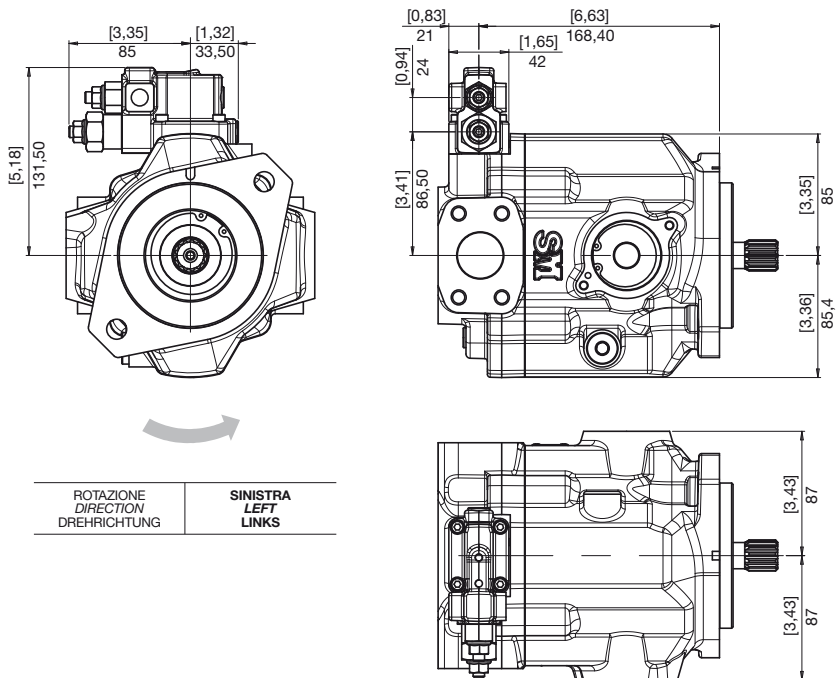
ROTAZIONE DIRECTION DREHRICHTUNG	DESTRA RIGHT RECHTS
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**DIMENSIONI
SIZE
ABMESSUNGEN**

HM A2

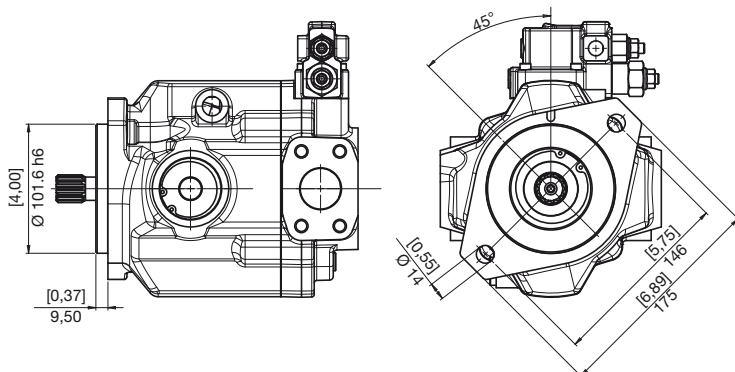
L



**FLANGE
FLANGES
FLANSCH**

A

SAE B
SAE B
SAE B





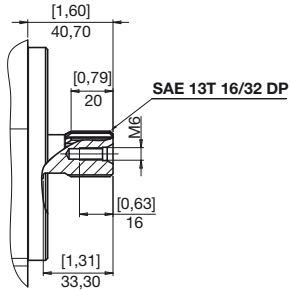
ESTREMITÀ ALBERI
SPLINE SHAFTS
WELLENPROFILE

HM A2

9

COPPIA MAX
MAX TORQUE
MAX DREHMOMENT

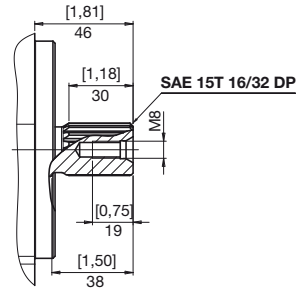
220 N•m



1

COPPIA MAX
MAX TORQUE
MAX DREHMOMENT

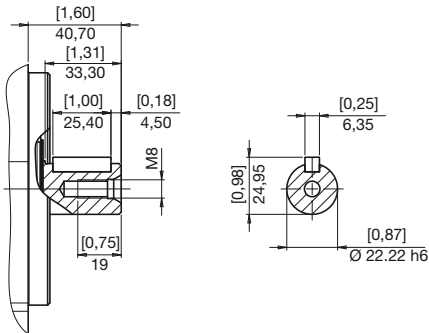
440 N•m



J

COPPIA MAX
MAX TORQUE
MAX DREHMOMENT

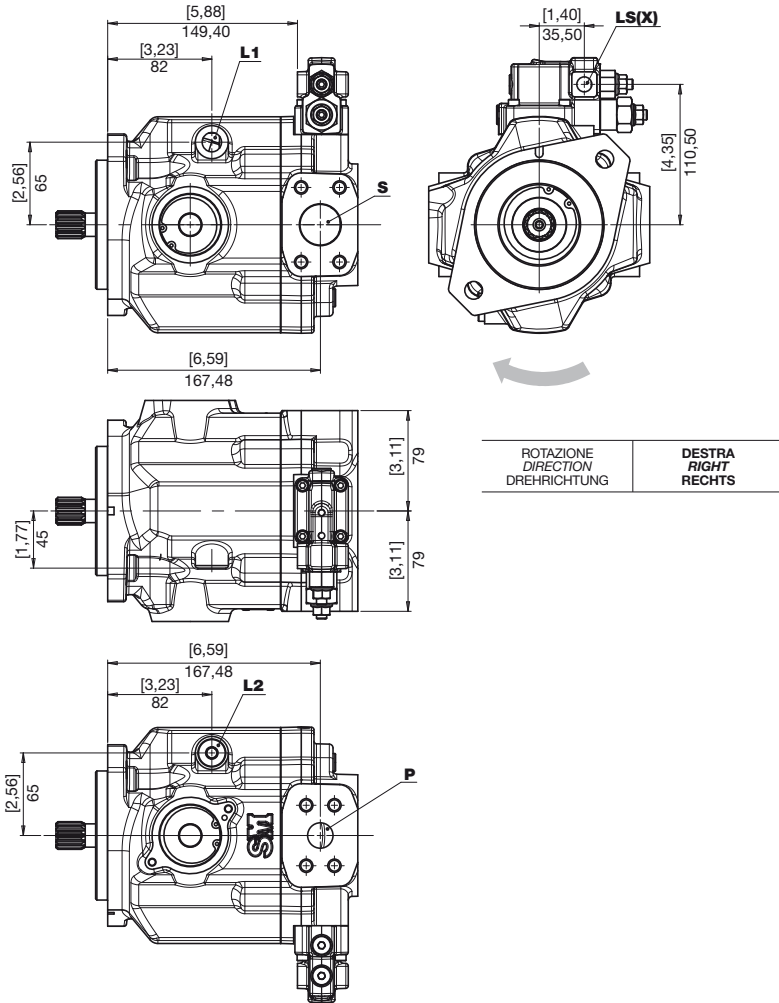
220 N•m



BOCCHIE VERSIONE DESTRA
RIGHT VERSION PORTS
ANSCHLÜSSE RECHTS VERSION

HM A2

GU



S Aspirazione
Feeding pump inlet
Ansaugöffnung

P Mandata
Output
Ausgang

L1 Drenaggi
L2 Drain
Leckölanschluss

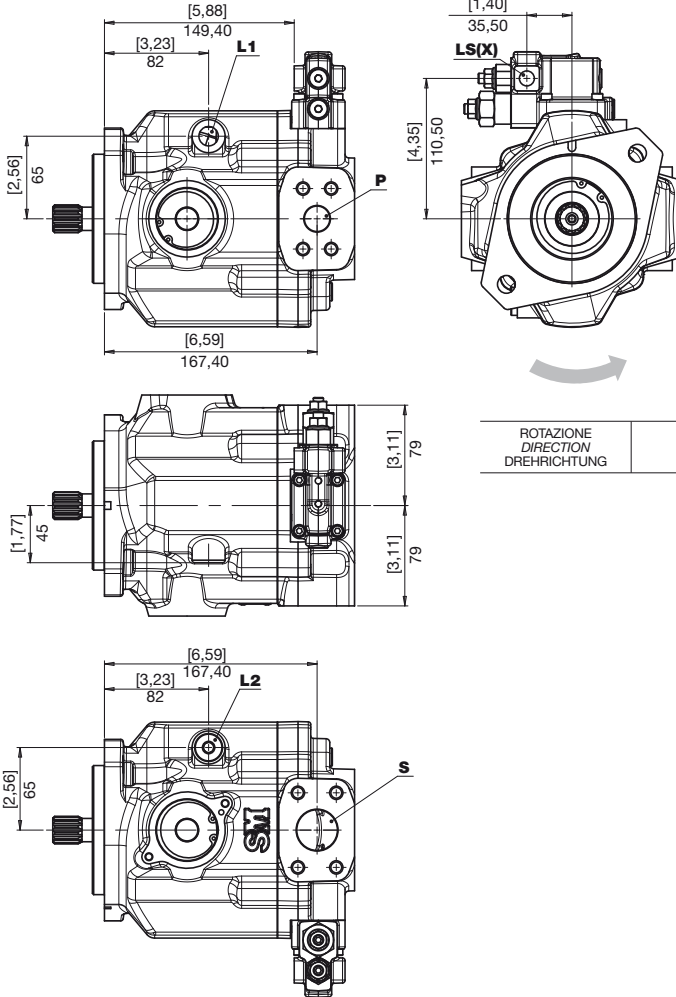
LS(X) Pilotaggio
Pilot
Steuerdruck



BOCCHIE VERSIONE SINISTRA
LEFT VERSION PORTS
ANSCHLÜSSE LINKE VERSION

HM A2

GU



S Aspirazione
Feeding pump inlet
Ansaugöffnung

P Mandata
Output
Ausgang

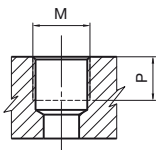
L1 Drenaggi
Drain
Leckölanschluss

LS(X) Pilotaggio
Pilot
Steuerdruck

**BOCCHIE
PORTS
ANSCHLÜSSE**

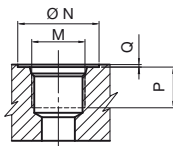
HM A2

G LATERALE
LATERAL
SEITLICH



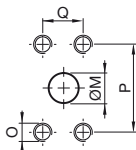
TIPO TYPE TYP	M		P	
	Nm	mm	in	in
G1	1/8" GAS BSPP	8	8	0,31
G3	3/8" GAS BSPP	40	12	0,47

U LATERALE
LATERAL
SEITLICH



TIPO TYPE TYP	DIMENSIONE SIZE GRÖSSE	N		P		Q		M	
		mm	in	mm	in	mm	in	Nm	
U2	1/4"	20	0,79	12	0,47	0,3	0,01	7/16-20 UNF	17
U4	1/2"	30	1,18	15	0,59	0,3	0,01	3/4-16 UNF	47

N LATERALE
LATERAL
SEITLICH



TIPO TYPE TYP	M		N		P		Q		O
	mm	in	mm	in	mm	in	mm	in	Nm
N7	25	1	52,4	2,06	18	0,71	26,2	1,03	M10 38
N9	38	1,5	69,9	2,75	20	0,79	35,7	1,41	M12 70

**COMBINAZIONI
COMBINATIONS
KOMBINATIONEN**

TIPO TYPE TYP	S ASPIRAZIONE INLET SAUGSEITE	P MANDATA OUTLET AUSGANG	L1 - L2 DRENAGGIO DRAIN LECKÖLANSCHLUSS	LS(X) PILOTAGGIO PILOT STEUERDRUCK
G	N9	N7	G3	G1
U	N9	N7	U4	U2



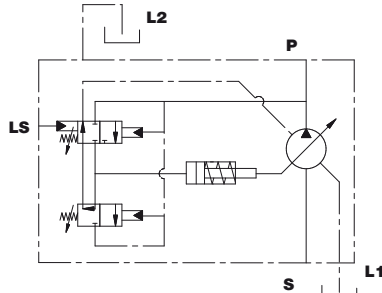
**REGOLAZIONI
CONTROL SYSTEMS
REGLEREINSTELLUNG**

HM A2

L **REGOLATORE DI PRESSIONE/PORTATA
PRESSURE/FLOW RATE REGULATOR
DRUCK-UND FORDERSTROM STROMPEGLER**

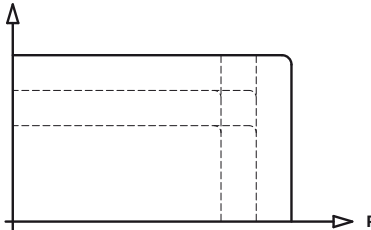
REGOLATORE DI PORTATA
FLOW RATE REGULATOR
FORDERSTROM STROMPEGLER

REGOLATORE DI PRESSIONE
PRESSURE RATE REGULATOR
DRUCK STROMPEGLER



PORTATA
FLOWRATE
FORDERSTROM

Q



P **PRESSIONE DI ESERCIZIO
WORKING PRESSURE
BETRIEBSDRUCK**

**SETTAGGIO REGOLATORI
CONTROL SYSTEM SET
VORSCHRIFTEN EINSTELLUNG**

PRESSIONE DI ESERCIZIO WORKING PRESSURE BETRIEBSDRUCK		DIFFERENZIALE DI PRESSIONE Δp PRESSURE DIFFERENTIAL Δp DIFFERENZDRUCKANZEIGER Δp		
bar	psi	14 bar - 203 psi	21 bar - 305 psi	25 bar - 363 psi
180	2610	A	B	C
210	3045	E	F	G
250	3625	I	L	M
280	4060	O	P	Q
315	4568	S	T	U

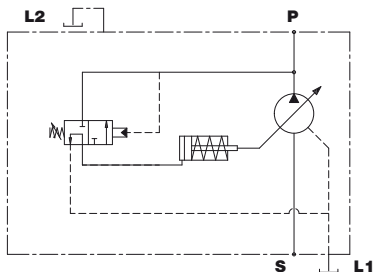
È necessario prevedere una valvola di massima pressione esterna tarata ad un valore superiore del 10% della taratura del regolatore di pressione della pompa.

An external relief valve set at 10% above the pump pressure regulator must always be provided.

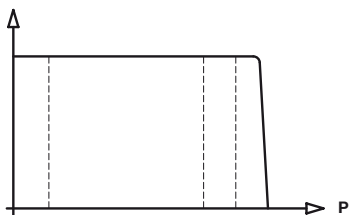
Es muss ein externes Druckbegrenzungsventil vorgesehen werden, dessen Einstellungswert mehr als 10% über dem des Druckreglers der Pumpe liegen muss.

P REGOLATORE DI PRESSIONE
PRESSURE RATE REGULATOR
DRUCK STROMPEGLER

REGOLATORE DI PRESSIONE
PRESSURE RATE REGULATOR
DRUCK STROMPEGLER



PORTATA
FLOWRATE
FORDERSTROM
Q



PRESSIONE DI ESERCIZIO
WORKING PRESSURE
BETRIEBSDRUCK

SETTAGGIO REGOLATORI
CONTROL SYSTEM SET
VORSCHRIFTEN EINSTELLUNG

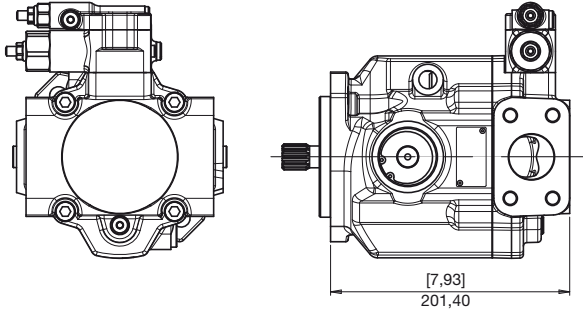
CODICE CODE BEST.- NR.	PRESSIONE DI ESERCIZIO WORKING PRESSURE BETRIEBSDRUCK	
	bar	psi
D	180	2610
H	210	3045
N	250	3625
R	280	4060
V	315	4568



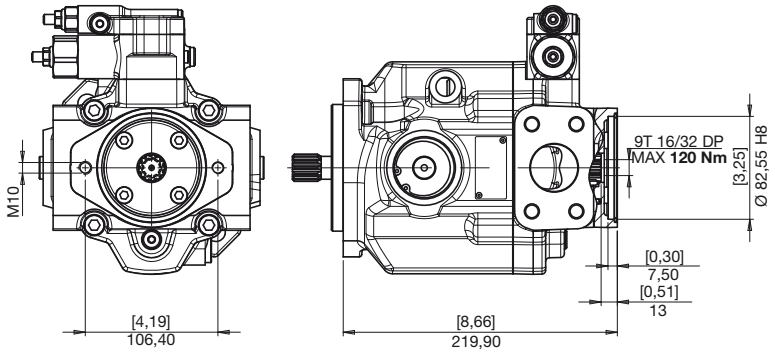
PREDISPOSIZIONI
VERSION
BAUART

HM A2

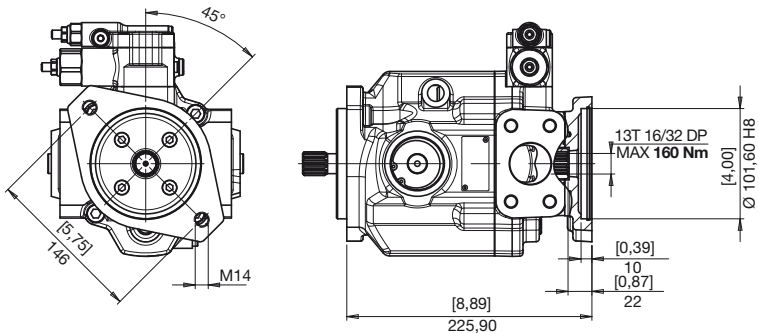
0 NESSUNA PREDISPOSIZIONE
NO SPECIAL FITTINGS
OHNE ANSCHLUßFLANSCH

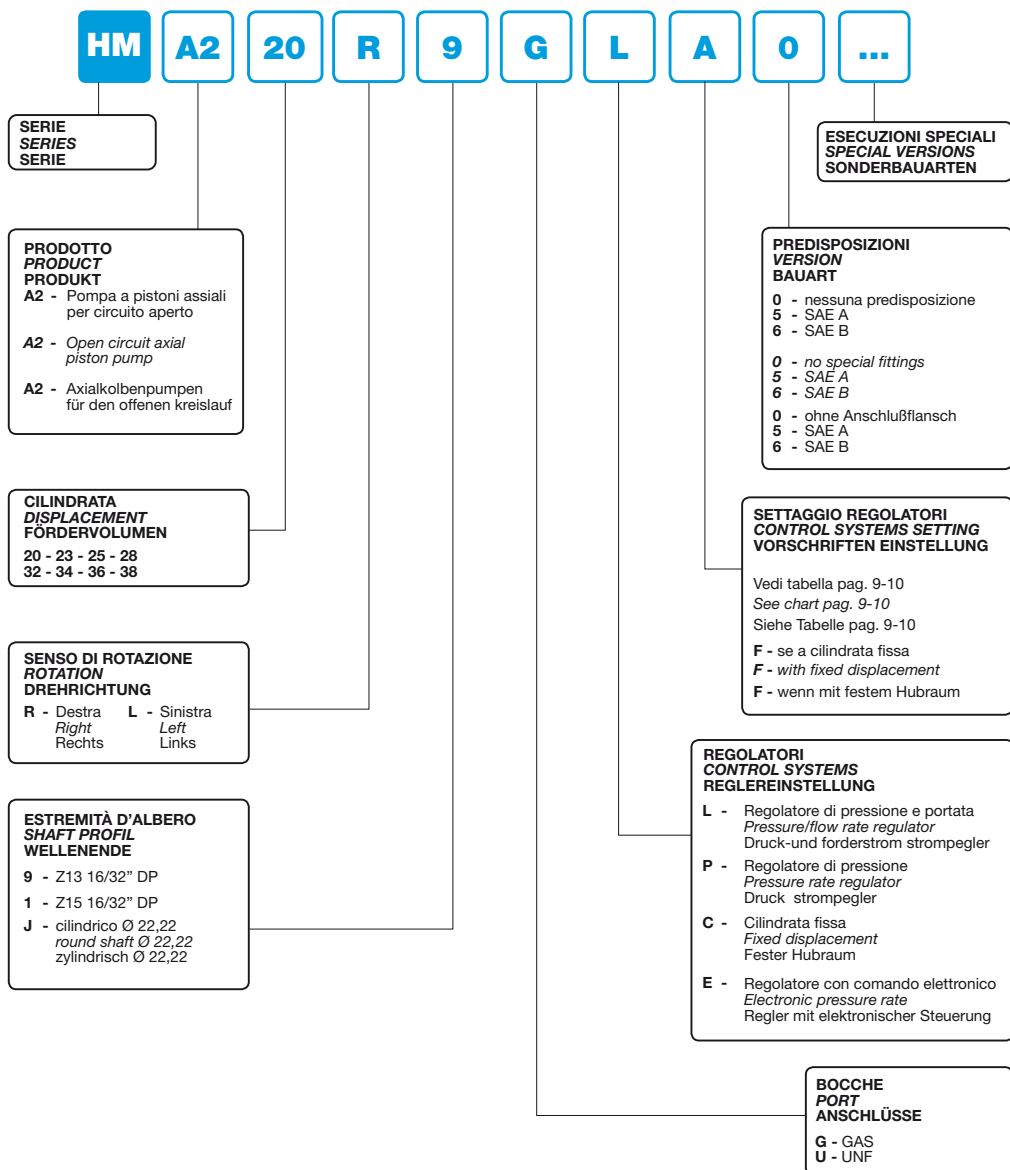


5 SAE A
SAE A
SAE A



6 SAE B
SAE B
SAE B



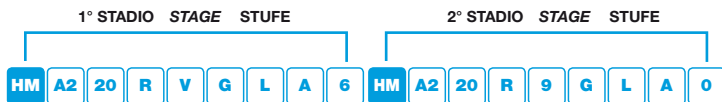




Il codice di ordinazione di una pompa multipla si ottiene sommando, come mostrato in esempio, i codici delle singole pompe (stadi) ricavati seguendo le regole di ordinazione delle pompe singole.

You build the ordering code of a multiple pump by summing the order code of the individual pumps, see our example.

Der Bestellschlüssel einer Mehrfachpumpe ergibt sich durch Summieren der Einzel-Bestellschlüssel, siehe Beispiel.



POMPA CON PREDISPOSIZIONE SAE B
 PUMP PREPARED FOR SAE B CONNECTION
 VORDERE PUMPE VORBEREITET MIT DURCHTRIEB FÜR HINTERE PUMPE (SAE B)

POMPA CON ALBERO Z13
 PUMP WITH SPLINED SHAFT Z13 16/32" DP
 HINTERE PUMPE MIT WELLENENDE Z13 16/32" DP

