



**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 A0

398SOP0083A00

Le pompe a pistoni assiali serie HM A0 sono state concepite per operare in circuito aperto.

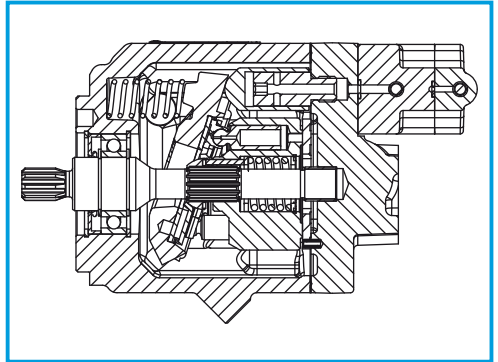
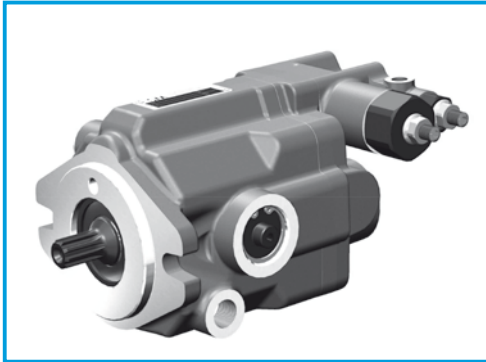
I vari sistemi di regolazione disponibili le rendono facilmente adattabili alle esigenze applicative sia per il settore industriale che per quello mobile. Lo sviluppo di gruppi rotanti appositamente concepiti, unito ad uno studio accurato delle sezioni di passaggio dell'olio consentono a queste pompe di raggiungere elevate velocità di rotazione, come quelle consentite dai moderni motori diesel, garantendo una elevata affidabilità per pressioni di funzionamento fino a 250 bar continui (315 bar di picco). I controlli permettono un funzionamento con regolazione load sensing o a pressione costante.

Axial piston pumps series HM A0 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 250 bar and until 315 bar for peak pressure. Control types allow a Load-sensing or a constant pressure control over the pump.

Die Axialkolbenpumpen der Serie HM A0 wurden für den Betrieb im offenen Kreislauf konzipiert.

Die lieferbaren unterschiedlichen Reglerbauarten 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.



DATI TECNICI TECHNICAL DATA TECHNISCHE MERKMALE

GRUPPO GROUP BAUREIHE	CILINDRATA TEORICA NOMINAL DISPLACEMENT FÖRDERVOLUMEN (l/m)		PRESSIONE PRESSURE DRUCK		VELOCITÀ DI ROTAZIONE SPEED DREHZAHL		MASSA WEIGHT GEWICHT					
	cm ³	in ³	CONTINUA CONTINUOUS DAUER	INTERMITTENTE INTERMITTENT INTERMITTIERENDER	MAX	MIN	kg	lbs				
HM A0	5	0,31	250	3625	280	4060	315	4568	3300	500	8,2	18,1
	10	0,61										
	14	0,85										

PRESSIONE CONTINUA: pressione media del normale range di pressioni di funzionamento
PRESSIONE INTERMITTENTE: pressione che può essere mantenuta per periodi brevi (circa il 10% del ciclo di lavoro)
PRESSIONE DI PICCO: pressione massima permessa regolata dalle valvole di max.(max. 1-2% del ciclo di lavoro)

CONTINUOUS PRESSURE: average pressure of the normal operating pressure range
INTERMITTENT PRESSURE: pressure that can be maintained for short periods (for about 10% of the work cycle)
PEAK PRESSURE: maximum allowable pressure regulated by maximum relief valves (max 1-2% of the work cycle)

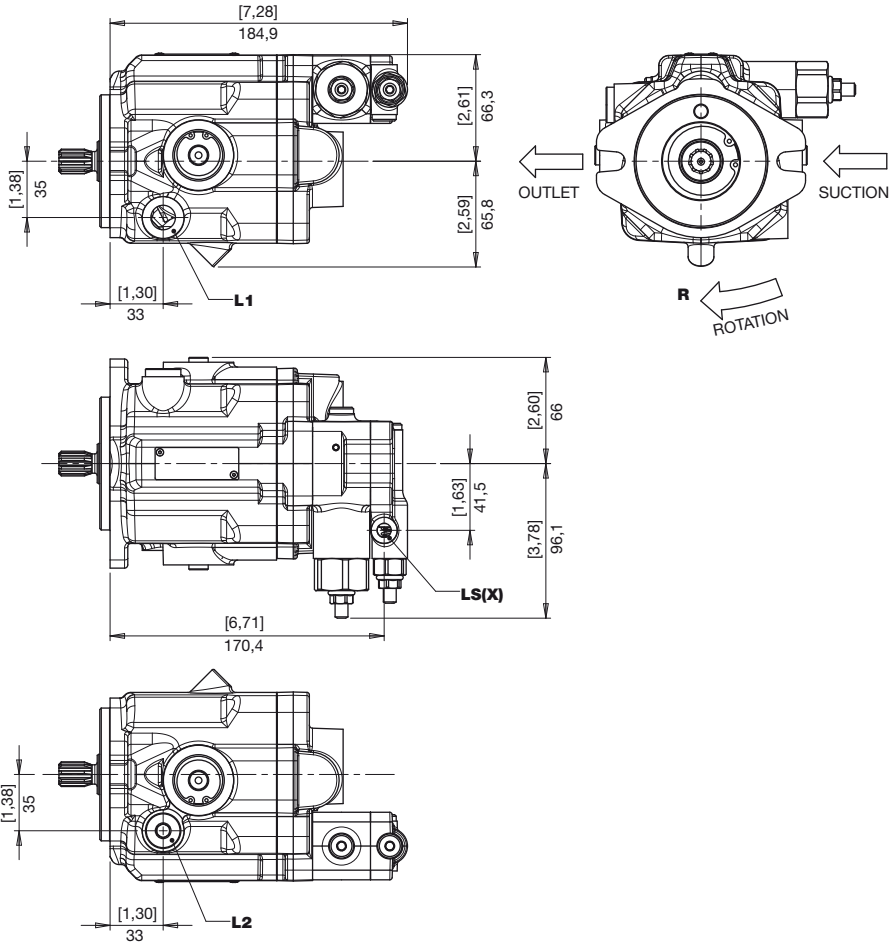
KONTINUIERLICHER DRUCK: durchschnittlicher Druck der normalen Betriebsdruckreihe
INTERMITTIERENDER DRUCK: Druck, der für kurze Zeitabschnitte beibehalten werden kann (etwa 10% des Betriebszyklus)
SPITZENDRUCK: zugelassener Höchstdruck, von den Höchstdruckventilen geregelt (max. 1-2% des Betriebszyklus)



**DIMENSIONI
SIZE
ABMESSUNGEN**

HM A0

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



S Aspirazione
Feeding pump inlet
Ansaugöffnung

P Mandata
Output
Ausgang

L1 Drenaggi
Drain
Leckölanschluss

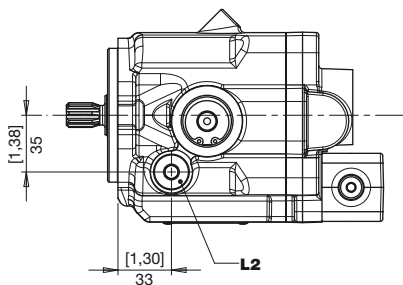
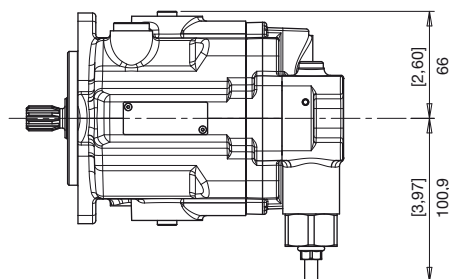
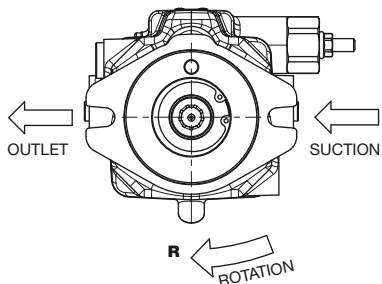
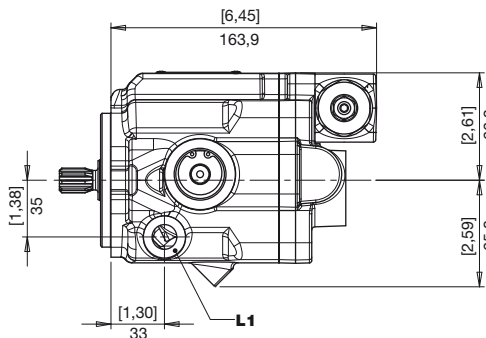
LS(X) Pilotaggio
Pilot
Steuerdruck

In versione sinistra il regolatore è montato ruotato di 180°

In left hand version the regulator is assembled 180° rotated position

Bei Drehrichtung links wird der Regler um 180° gedreht montiert

P **REGOLATORE DI PRESSIONE
PRESSURE RATE REGULATOR
DRUCK- UND FÖRDERSTROMREGLER**



S Aspirazione
Feeding pump inlet
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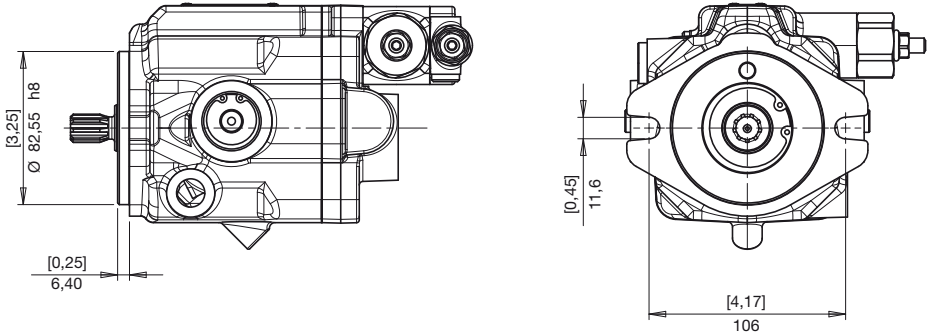
Bei Drehrichtung links wird der Regler um 180° gedreht montiert



**FLANGE
FLANGES
FLANSCH**

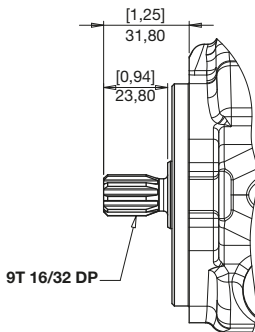
HM A0

A SAE A - 2 FORI
SAE A - 2 HOLES
SAE A - 2 BOHRUNGEN

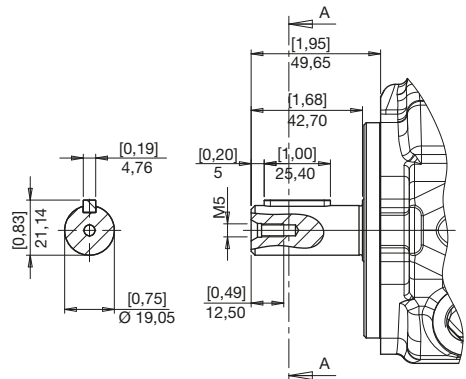


**ESTREMITÀ ALBERI
SPLINE SHAFTS
WELLENPROFILE**

V COPPIA MAX
MAX TORQUE
MAX DREHMOMENT 120 N•m

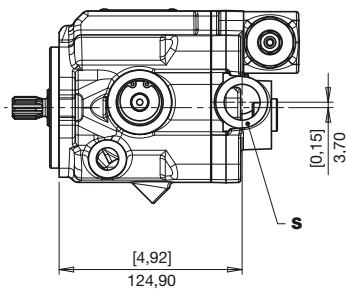
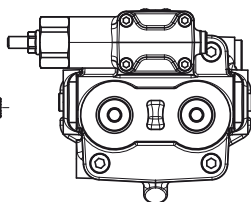
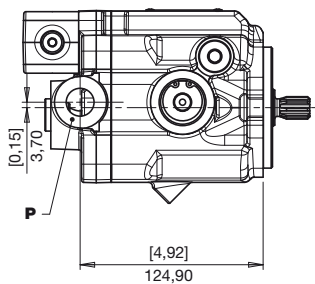


E COPPIA MAX
MAX TORQUE
MAX DREHMOMENT 55 N•m

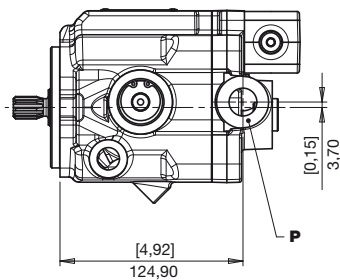
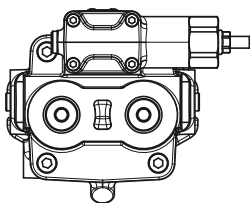
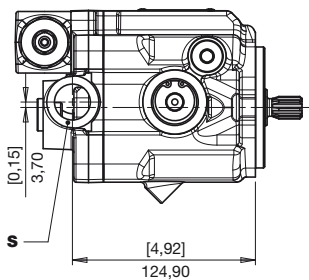


2

ROTAZIONE DIRECTION DREHRICHTUNG	DESTRA RIGHT RECHTS
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ROTAZIONE DIRECTION DREHRICHTUNG	SINISTRA LEFT LINKS
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S Aspirazione
Feeding pump inlet
Ansaugöffnung

P Mandata
Output
Ausgang

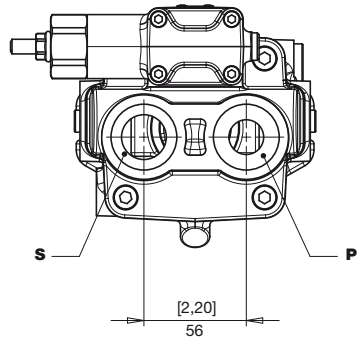
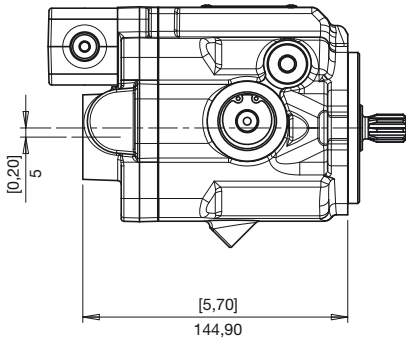


BOCCHIE POSTERIORI
REAR PORTS
HINTENANSCHLÜSSE

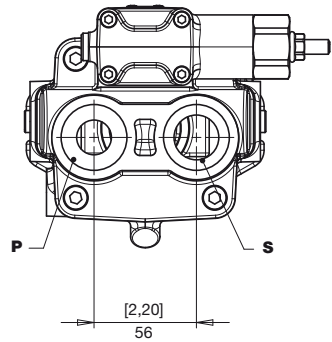
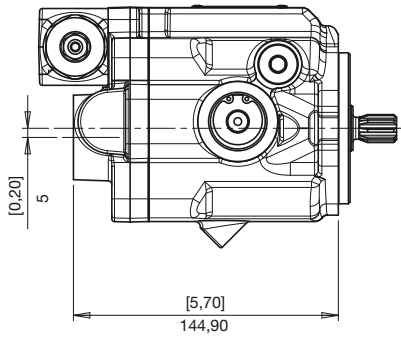
HM A0

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ROTAZIONE DIRECTION DREHRICHTUNG	DESTRA RIGHT RECHTS
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ROTAZIONE DIRECTION DREHRICHTUNG	SINISTRA LEFT LINKS
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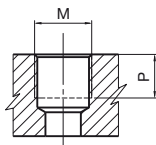


S Aspirazione
Feeding pump inlet
Ansaugöffnung

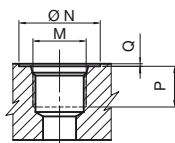
P Mandata
Output
Ausgang

**BOCCHE
PORTS
ANSCHLÜSSE**

HM AO



TIPO TYPE TYP		M		P	
		Nm	mm	in	
G1	Port ISO 1179-1 - G 1/8	8	8	0,31	
G3	Port ISO 1179-1 - G 3/8	40	12	0,47	
G4	Port ISO 1179-1 - G 1/2	70	14,5	0,57	
G6	Port ISO 1179-1 - G 3/4	90	19	0,75	



TIPO TYPE TYP	DIMENSIONE SIZE GRÖSSE	N		P		Q		M	Nm
		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
U5	5/8"	34	1,34	18	0,71	0,3	0,01	Port ISO 11926-1-3/4-16	70
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	S ASPIRAZIONE INLET SAUGSEITE	P MANDATA OUTLET AUSGANG	L1 - L2 DRENAGGIO DRAIN LECKÖLANSCHLUSS	LS(X) PILOTAGGIO PILOT STEUERDRUCK
G	G6	G4	G3	G1
U	U6	U5	U5	U2



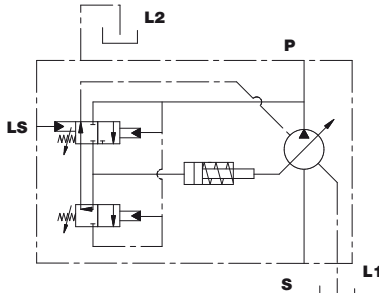
**REGOLAZIONI
CONTROL SYSTEMS
REGLEREINSTELLUNG**

HM A0

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

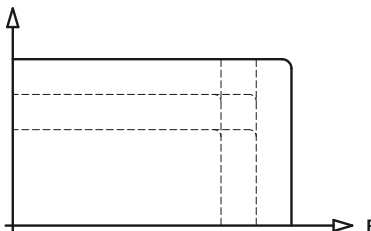
REGOLATORE DI PORTATA
FLOW RATE REGULATOR
FORDERSTROM STROMPEGLER

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

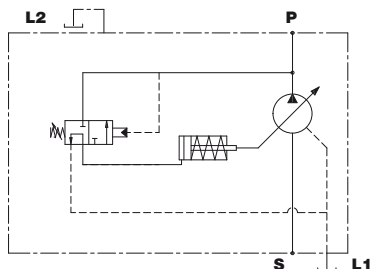
É necessario prevedere una valvola di massima pressione esterna tarata ad un valore superiore del 10% della taratura del regolatore di pressione della pompa.

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

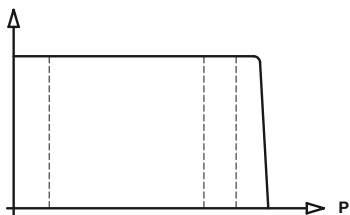
Es muss ein externes Druckbegrenzungsventil vorgesehen werden, dessen Einstellungswert mehr als 10% über dem des Druckreglers der Pumpe liegen muss.

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



ISTRUZIONI PER L'ORDINAZIONE
ORDERING INSTRUCTIONS
BESTELLANLEITUNG

HM A0

