



**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 KREI-  
SLAUF MIT LOAD-SENSING-REGELUNG ODER KON-  
STANTDRUCKREGELUNG**

**HP A6  
70.80.90**

398SOP0073A01

# HP A6

## 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 HP A6 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 richieste dai moderni motori diesel, garantendo una buona affidabilità per pressioni di funzionamento fino a 280 bar continui (350 bar di picco).

Utilizzando le opportune predisposizioni, è possibile comporre versioni tandem.

*The HP A6 series axial piston pumps have been designed to work 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.*

*It is possible to couple Tandem versions for both pump types, by means of coupling proper flanges.*

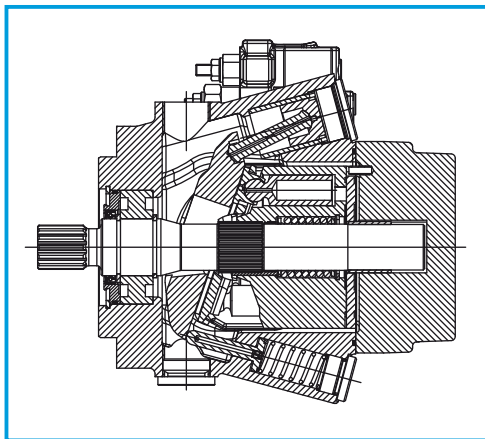
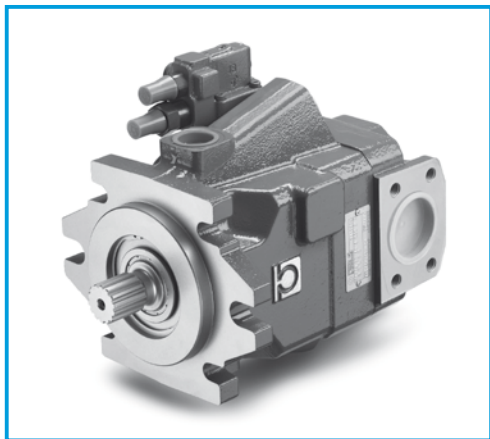
Die Axialkolbenpumpen der Serie HP A6 wurden für den Betrieb im offenen Kreislauf konzipiert.

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 modernen Antriebsaggregaten gefordert.

Für beide Pumpenfamilien können unter Anwendung von Anbauflanschen Tandemversionen zusammengebaut werden.

## HP A6 70.80.90

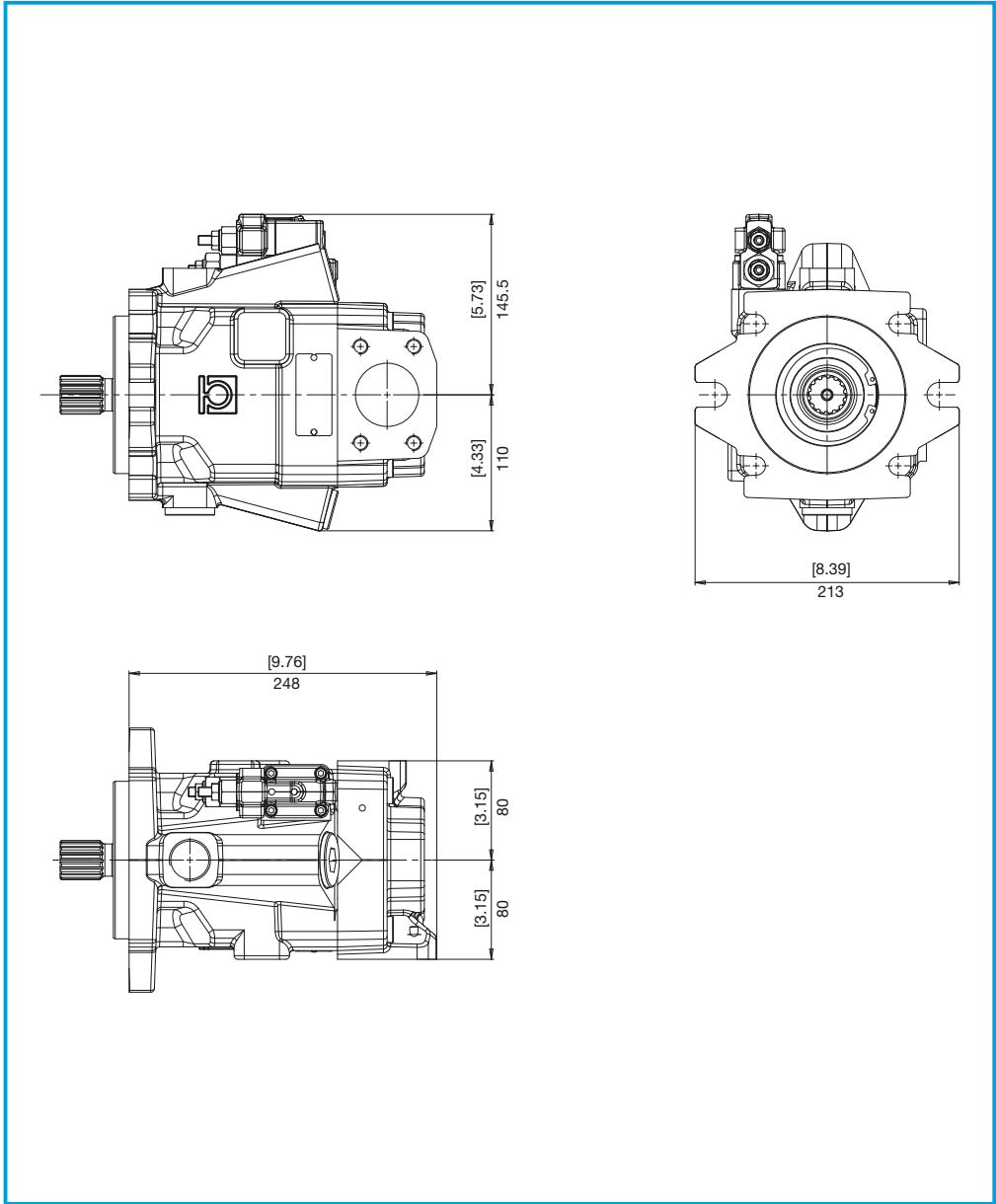


### DATI TECNICI TECHNICAL DATA TECHNISCHE MERKMALE

GRUPPO GROUP BAUREIHE	CILINDRATA TEORICA NOMINAL DISPLACEMENT FORDERVOLUMEN ( $l/m$ )		OSCILLANTE SWASHPLATE SCHWENKWINKEL °	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 <sup>-1</sup>	min <sup>-1</sup>	kg	lbs
HP A6	70	4,28	19	280	4060	320	4640	350	5075	2500	500	33	76
	80	4,89	15	250	3625	300	4350	320	4640	2400	500	33	76
	90	5,50	17	250	3625	280	4060	300	4350	2300	500	33	76

**DIMENSIONI**  
**SIZE**  
**ABMESSUNGEN**

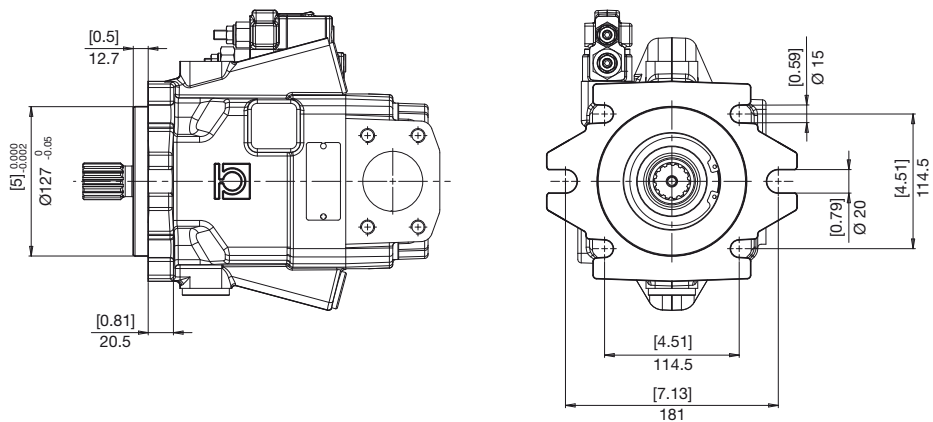
**HP A6**



**FLANGE  
FLANGES  
FLANSCHEN**

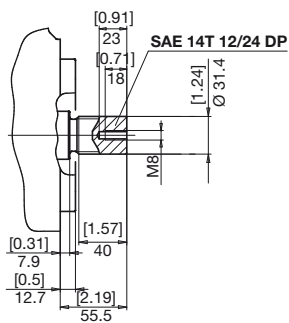
**HP A6**

**E** SAE C (2 FORI + 4 FORI)  
SAE C (2 AND 4 HOLES)  
SAE C (2 UND 4 BOHRUNGEN)



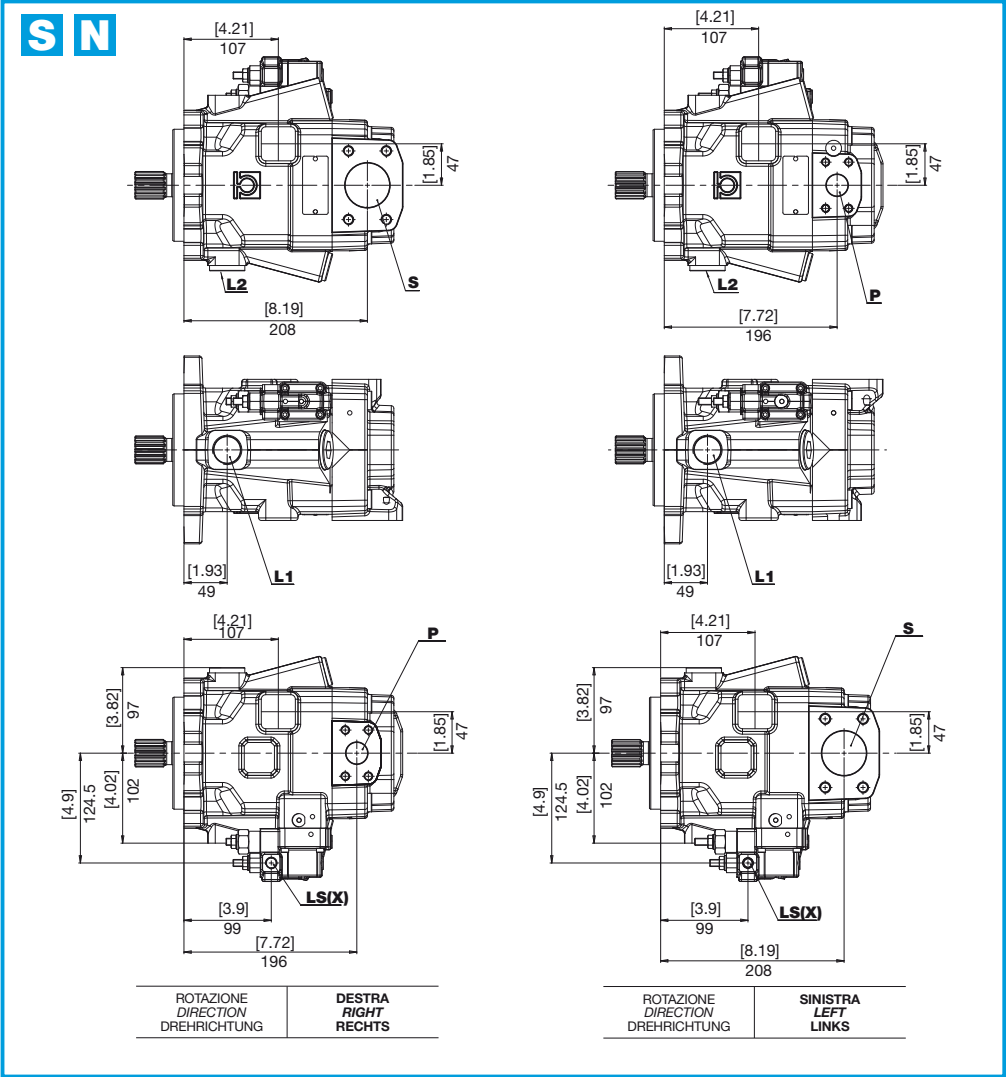
**ESTREMITÀ ALBERI  
SPLINE SHAFTS  
WELLENPROFILE**

**3** COPPIA MAX  
MAX TORQUE 850 N•m  
MAX DREHMOMENT



**BOCCHIE LATERALI**  
**LATERAL PORTS**  
**SEITLICHANSCHLÜSSE**

**HP A6**



**S** Aspirazione  
Feeding pump inlet  
Ansaugöffnung

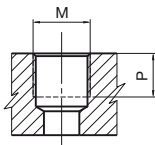
**P** Mandata  
Output  
Ausgang

**L1** Drenaggi  
Drain  
Leckölanschluss

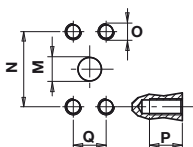
**LS(X)** Pilotaggio  
Pilot  
Steuerdruck

**BOCCHIE  
PORTS  
ANSCHLÜSSE**

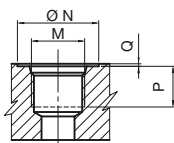
**HP A6**



TIPO TYPE TYP		M		P	
		Nm	mm	in	
<b>G2</b>	Port ISO 1179-1 - G 1/4	17	12	0,47	
<b>G7</b>	Port ISO 1179-1 - G 1	160	18	0,70	



TIPO TYPE TYP	M		N		P		Q		O	
	mm	in	mm	in	mm	in	mm	in		Nm
<b>N7</b>	25	1	52,4	2,06	18	0,71	26,2	1,03	M10	38
<b>N0</b>	51	2	77,8	3,06	20	0,79	42,9	1,69	M12	70



TIPO TYPE TYP	DIMENSIONE SIZE GRÖSSE	N		P		Q		M	
		mm	in	mm	in	mm	in		Nm
<b>U2</b>	1/4"	21	0,83	12	0,47	0,3	0,01	Port ISO 11926-1-7/16-20	17
<b>U7</b>	1"	49	1,93	18	0,70	0,3	0,01	Port ISO 11926-1-1 5/16-12	160

**COMBINAZIONI  
COMBINATIONS  
KOMBINATIONEN**

TIPO TYPE TYP	S ASPIRAZIONE INLET SAUGSEITE	P MANDATA OUTLET AUSGANG	L1 - L2 DRENAGGIO DRAIN LECKÖLANSCHLUSS	LS(X) PILOTAGGIO PILOT STEUERDRUCK
<b>S</b>	N0	N7	G7	G2
<b>N</b>	N0	N7	U7	U2



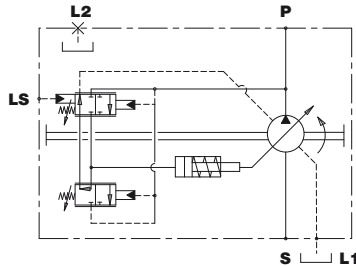
**REGOLAZIONI  
CONTROL SYSTEMS  
REGLEREINSTELLUNG**

**HP A6**

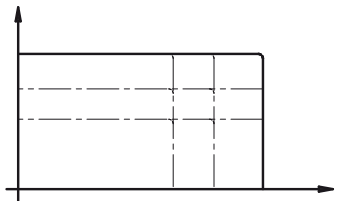
**L** **REGOLATORE DI PRESSIONE/PORTATA  
PRESSURE/FLOW RATE REGULATOR  
DRUCK-UND FORDERSTROM STROMPEGLER**

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**

PRESSIONE DI ESERCIZIO WORKING PRESSURE BETRIEBSDRUCK		DIFFERENZIALE DI PRESSIONE $\Delta p$ PRESSURE DIFFERENTIAL $\Delta p$ DIFFERENZDRUCKANZEIGER $\Delta p$		
bar	psi	14 bar - 203 psi	21 bar - 305 psi	25 bar - 363 psi
180	2610	<b>A</b>	<b>B</b>	<b>C</b>
210	3045	<b>E</b>	<b>F</b>	<b>G</b>
250	3625	<b>I</b>	<b>L</b>	<b>M</b>
280	4060	<b>O</b>	<b>P</b>	<b>Q</b>
320	4640	<b>S</b>	<b>T</b>	<b>U</b>
350	5075	<b>Z</b>	<b>X</b>	<b>Y</b>

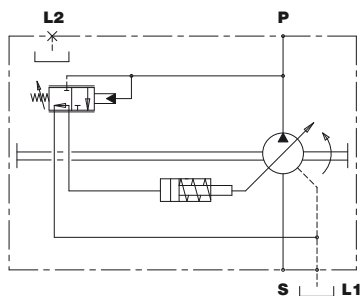
È necessario prevedere una valvola di massima pressione esterna tarata ad un valore superiore del 10% della taratura del regolatore di pressione della pompa.

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

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

**P** REGOLATORE DI PRESSIONE  
PRESSURE RATE REGULATOR  
DRUCK STROMPEGLER

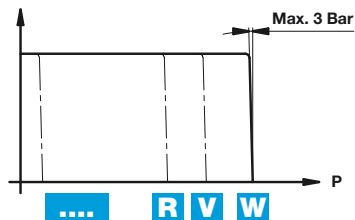
REGOLATORE DI PRESSIONE  
PRESSURE RATE REGULATOR  
DRUCK STROMPEGLER



CURVA CARATTERISTICA DELLA POMPA CON REGOLATORE DI PRESSIONE  
CHARACTERISTIC CURVE OF THE PUMP WITH PRESSURE REGULATOR  
KENNLINIE DER PUMPE MIT DRUCKREGLER

PORTATA  
FLOWRATE  
FORDERSTROM

Q max



PRESSIONE DI ESERCIZIO  
WORKING PRESSURE  
BETRIEBSDRUCK

CODICE CODE BEST.- NR.	PRESSIONE DI ESERCIZIO WORKING PRESSURE BETRIEBSDRUCK	
	bar	psi
<b>D</b>	180	2610
<b>H</b>	210	3045
<b>N</b>	250	3625
<b>R</b>	280	4060
<b>V</b>	320	4640
<b>W</b>	350	5075

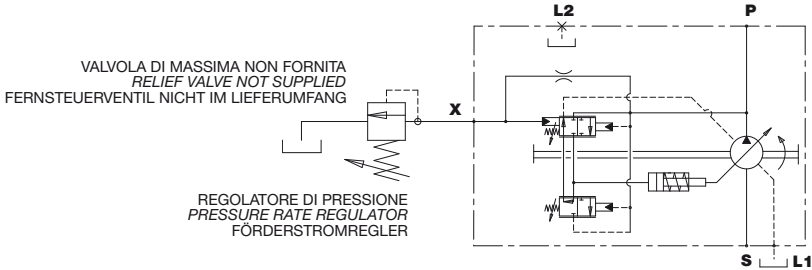




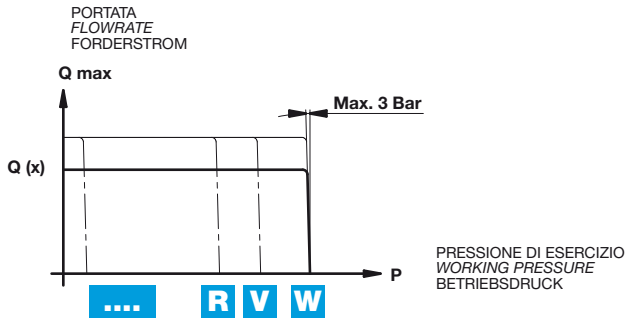
**REGOLAZIONI  
CONTROL SYSTEMS  
REGLEREINSTELLUNG**

**HP A6**

**R** **REGOLATORE DI PRESSIONE A CONTROLLO REMOTO  
PRESSURE/FLOW RATE REGULATOR REMOTE CONTROLLED  
DRUCK-UND FORDERSTROM STROMPEGLER FERNBEDIENUNG**



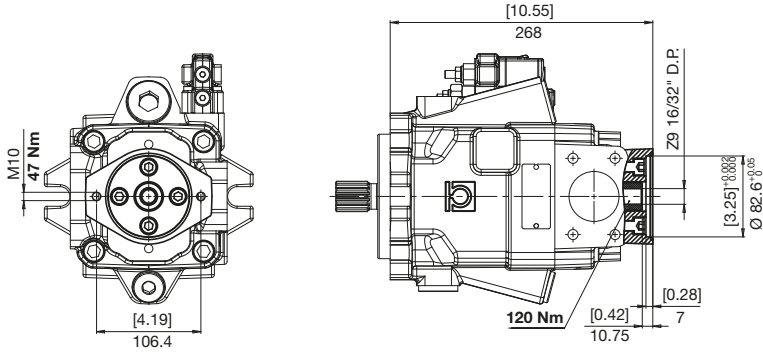
**CURVA CARATTERISTICA DELLA POMPA CON REGOLATORE DI PRESSIONE  
CHARACTERISTIC CURVE OF THE PUMP WITH PRESSURE REGULATOR  
KENNLINIE DER PUMPE MIT DRUCKREGLER**



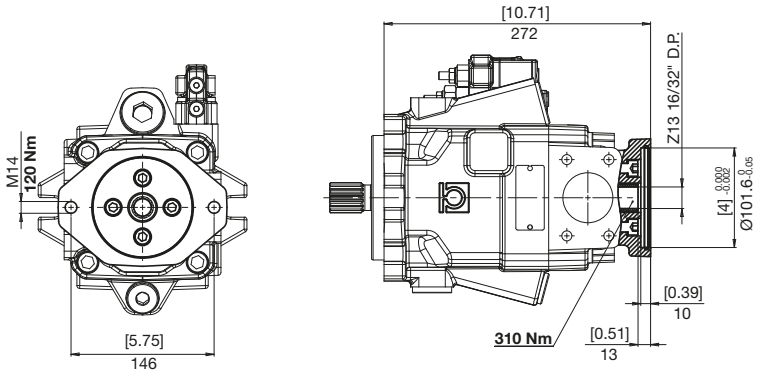
**DIFFERENZIALE DI PRESSIONE 21 bar PRESSURE DIFFERENTIAL 21 bar DIFFERENZDRUCK 21 bar**

CODICE CODE BEST.- NR.	PRESSIONE DI ESERCIZIO WORKING PRESSURE BETRIEBSDRUCK	
	bar	psi
<b>D</b>	180	2610
<b>H</b>	210	3045
<b>N</b>	250	3625
<b>R</b>	280	4060
<b>V</b>	320	4640
<b>W</b>	350	5075

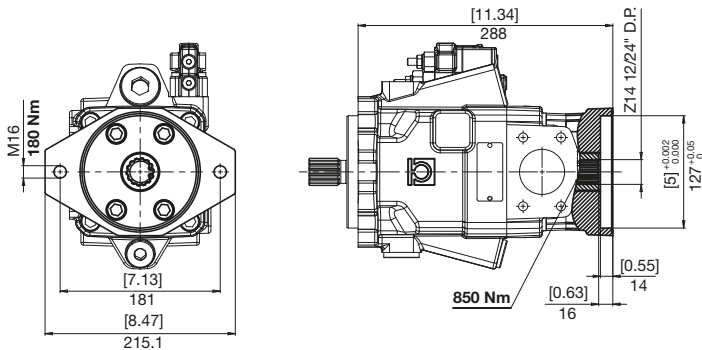
**5** SAE A  
SAE A  
SAE A



**6** SAE B  
SAE B  
SAE B



**7** SAE C  
SAE C  
SAE C





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

**HP A6**



**ESECUZIONI SPECIALI**  
**SPECIAL VERSIONS**  
**SONDERBAUARTEN**

**PREDISPOSIZIONI**  
**VERSION**  
**BAUART**

- 0 - nessuna predisposizione
- 5 - SAE A
- 6 - SAE B
- 7 - SAE C

- 0 - no special fittings
- 5 - SAE A
- 6 - SAE B
- 7 - SAE C

- 0 - ohne Anschlußflansch
- 5 - SAE A
- 6 - SAE B
- 6 - SAE C

**SET REGOLATORI**  
**CONTROL SYSTEM SET**  
**REGLERSET**

Vedi tabella  
See chart  
Siehe Tabelle

**REGOLAZIONI**  
**CONTROL SYSTEMS**  
**REGLEREINSTELLUNG**

- L** - Regolatore di pressione/portata  
Pressure/flow rate regulator  
Druck-und forderstrom strompegler
- P** - Regolatore di pressione  
Pressure rate regulator  
Druck strompegler
- R** - Regolatore di pressione a controllo remoto  
Pressure rate regulator remote controlled  
Druck strompegler fernbedienung

**BOCCHIE**  
**PORT**  
**ANSCHLÜSSE**

Vedi tabella  
See chart  
Siehe Tabelle

**PRODOTTO**  
**PRODUCT**  
**PRODUKT**

**A6** - Pompa a pistoni assiali per circuito aperto

**A6** - Open circuit axial piston pump

**A6** - Axialkolbenpumpen für den offenen kreislauf

**CILINDRATA**  
**DISPLACEMENT**  
**FÖRDERVOLUMEN**

070 - 080 - 090

**SENSO DI ROTAZIONE**  
**ROTATION**  
**DREHRRICHTUNG**

**R** - Destra    **L** - Sinistra  
Right        Left  
Rechts       Links

**FLANGIA**  
**FLANGE**  
**FLANSCH**

**E** - SAE C (2 Fori+4Fori)  
SAE C (2 Holes+4 Holes)  
SAE C (2 Boh.+4 Boh.)

**ESTREMITÀ D'ALBERO**  
**SHAFT PROFIL**  
**WELLELENDE**

3 - Z14 12/24" DP

# HP A6

## POMPE MULTIPLE MULTIPLE PUMPS MEHRFACHPUMPEN

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.

### 1° STADIO STAGE STUFE

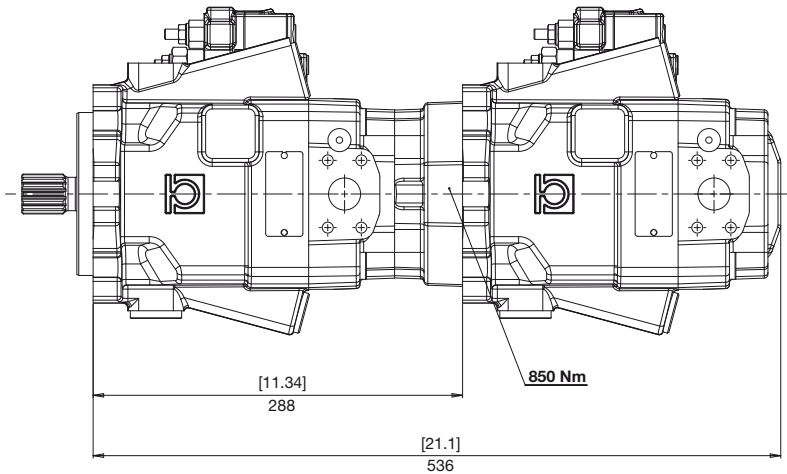
HP A6 090 R E 3 S L G 7

STADIO **ANTERIORE** POMPA HPA6  
**FRONT PUMP** HPA6  
**VORDERE PUMPE** HPA6

### 2° STADIO STAGE STUFE

HP A6 090 R E 3 S L G 0

STADIO **POSTERIORE** POMPA HPA6  
**REAR PUMP** HPA6  
**HINTERE PUMPE** HPA6





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

*You build the ordering code of an integrated version by summing the order code of the individual pumps, see our example.*

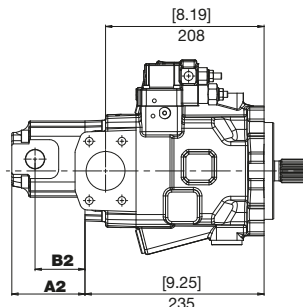
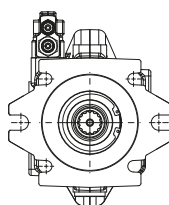
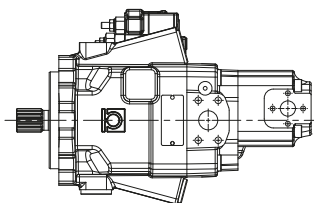
Der Bestellschlüssel einer Mehrfachpumpe ergibt sich durch Summieren der Einzel-Bestellschlüssel, siehe Beispiel.



PREDISPOSIZIONE STADIO INGRANAGGI  
IN GHISA HPG2  
*FITTING FOR CAST IRON GEAR PUMP HPG2*

DURCHTRIEB FÜR GUSSZAHNRADPUMPE  
HPG2

STADIO **POSTERIORE** POMPA HPG  
**REAR PUMP HPG**  
**HINTERE PUMPE HPG**



TIPO TYPE TYP	A2		B2	
	mm	in	mm	in
05	48,3	1,90	27,3	1,07
06	51,0	2,01	30,0	1,18
08	55,5	2,19	34,5	1,36
11	60,0	2,36	39,0	1,54
14	69,0	2,72	37,0	1,46
17	73,5	2,89	41,5	1,63
20	78,0	3,07	46,0	1,81
26	87,5	3,44	57,0	2,24
31	96,0	3,78	65,5	2,58



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