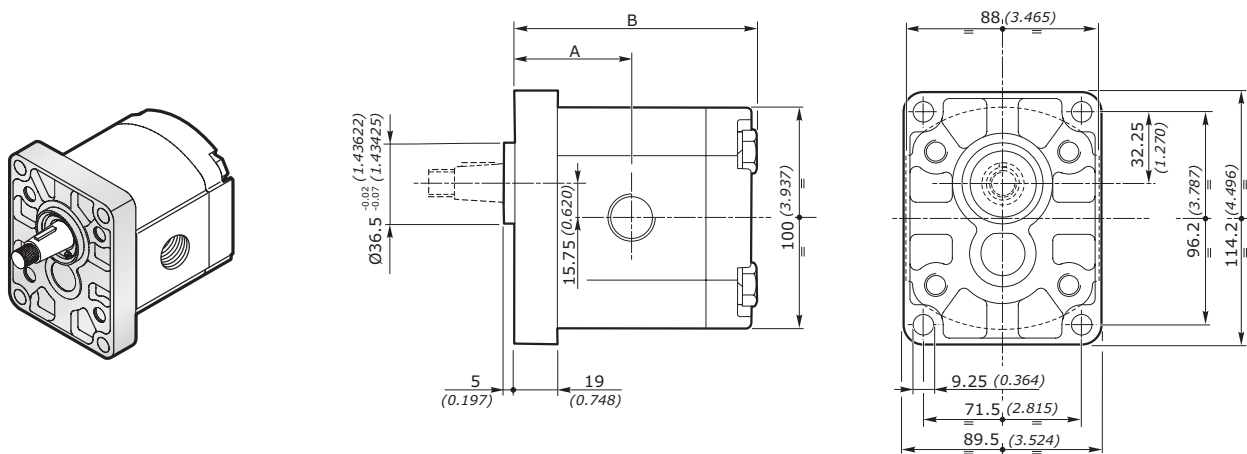


**POMPE AD INGRANAGGI GRUPPO 2SP**  
**GEAR PUMPS GROUP 2SP**
**FLANGIA EUROPEA EUR EUROPEAN FLANGE**
**FLANGIA E COPERCHIO IN ALLUMINIO - FLANGE AND COVER IN ALUMINIUM**

GRUPPO GROUP 2SP	CILINDRATA DISPLACEMENT		PRESSIONE MAX - MAX PRESSURE						VELOCITÀ MAX MAX SPEED	PORTATA MAX MAX FLOW		VELOCITÀ MIN MIN SPEED	PORTATA MIN MIN FLOW		RENDIMENTO VOLUMETRICO MIN. MIN. VOLUMETRIC EFFICIENCY
			P1		P2		P3								
	cm <sup>3</sup> /giro	in <sup>3</sup> /rev	bar	psi	bar	psi	bar	psi	giri/min - rpm	l/min	Gal/min	giri/min - rpm	l/min	Gal/min	%
<b>2SP 040</b>	4	0.24	250	3625	270	3915	290	4205	4000	16	4.23	500	1.9	0.50	95*
<b>2SP 060</b>	6	0.37	250	3625	270	3915	290	4205	4000	24	6.34	500	2.85	0.75	95*
<b>2SP 080</b>	8.5	0.52	250	3625	270	3915	290	4205	3500	29.7	7.85	500	4.03	1.06	95*
<b>2SP 110</b>	11	0.67	250	3625	270	3915	290	4205	3500	38.5	10.17	500	5.22	1.38	95*
<b>2SP 140</b>	14	0.85	250	3625	270	3915	290	4205	3500	49	12.95	500	6.65	1.76	95*
<b>2SP 160</b>	16.5	1.01	230	3335	240	3480	250	3625	3500	57.7	15.24	500	7.83	2.07	95*
<b>2SP 190</b>	19.5	1.19	210	3045	220	3190	230	3335	3300	64.3	16.99	500	9.26	2.45	95*
<b>2SP 220</b>	22.5	1.37	190	2755	200	2900	210	3045	2800	63	16.64	500	10.68	2.82	95*
<b>2SP 260</b>	26	1.59	170	2465	180	2610	190	2755	2500	65	17.17	500	12.35	3.26	95*
<b>2SP 310</b>	31.5	1.92	130	1885	140	2030	150	2175	2200	69	18.22	500	15.75	4.16	95*

**DIMENSIONI • DIMENSIONS**


GRUPPO - GROUP 2	A		B		MASSA - MASS	
	mm	inch	mm	inch	kg	lbs
<b>2SP 040</b>	44.4	1.748	93.0	3.661	2.30	5.07
<b>2SP 060</b>	46.0	1.811	96.3	3.791	2.45	5.40
<b>2SP 080</b>	48.1	1.894	100.5	3.957	2.60	5.73
<b>2SP 110</b>	50.2	1.976	104.6	4.118	2.70	5.95
<b>2SP 140</b>	52.7	2.075	109.6	4.315	2.80	6.17
<b>2SP 160</b>	54.8	2.157	113.8	4.480	2.95	6.51
<b>2SP 190</b>	57.3	2.256	118.8	4.677	3.10	6.84
<b>2SP 220</b>	59.8	2.354	123.8	4.874	3.25	7.17
<b>2SP 260</b>	62.7	2.469	129.6	5.102	3.40	7.50
<b>2SP 310</b>	66.9	2.636	138.0	5.437	3.61	7.96

**POMPE AD INGRANAGGI GRUPPO 2SP**  
**GEAR PUMPS GROUP 2SP**

**CODICE ORDINAZIONE • ORDER CODE**

**2SP - G - 140 - D - EUR - B - N - 10 - 0 - G**

SIGLA - CODE	TIPO - TYPE	DESCRIZIONE - DESCRIPTION	PAGINA - PAGE
<b>2SP</b>	Tipo pompa <i>Pump type</i>	Pompa singola gruppo 2 <i>Single pump group 2</i>	5
<b>G</b>	Materiale flangia e coperchio <i>Flange and cover material</i>	<b>A</b> = alluminio / <i>aluminium</i> <b>G</b> = Ghisa / <i>Cast iron</i>	
<b>140</b>	Cilindrata <i>Displacement</i>	Cilindrata = 14 cm <sup>3</sup> /giro <i>Displacement = 0.85 in<sup>3</sup>/rev</i>	5
<b>D</b>	Senso di rotazione <i>Rotation type</i>	<b>D</b> = Rotazione destra / <i>Clockwise rotation</i> <b>S</b> = Rotazione sinistra / <i>Anticlockwise rotation</i>	8
<b>EUR</b>	Tipo Flangia <i>Flange type</i>	Flangia standard <i>Standard flange</i>	
<b>B</b>	Tipo anello di tenuta <i>Seal ring type</i>	Vedi tabella compatibilità <i>See compatibility table</i>	46
<b>N</b>	Tipo guarnizione <i>Gasket type</i>	<b>N</b> = NBR <b>V</b> = Viton	
<b>10</b>	Tipo Albero <i>Shaft type</i>	Vedi tabella compatibilità <i>See compatibility table</i>	47
<b>0</b>	Posizione connessione <i>Connection position</i>	Vedi tabella compatibilità <i>See compatibility table</i>	50
<b>G</b>	Tipo connessione <i>Connection type</i>	Vedi tabella compatibilità <i>See compatibility table</i>	51



**POMPE AD INGRANAGGI GRUPPO 2SP**  
**GEAR PUMPS GROUP 2SP**
**TIPOLOGIA FLANGIA • FLANGE TYPE**

	EUR	SAEA	SAEAOR	B80C	B50C	E52C	P400D	SUPEUR
<b>2SP</b>								
<b>A</b> alluminio aluminium	◇	◇	◇	◇	◇	◇	◇	◇
<b>G</b> ghisa cast iron	◇	◇	◇	non disponibile not available	non disponibile not available	non disponibile not available	non disponibile not available	non disponibile not available

 ◇ = Combinazione standard - *Standard combination*
**ANELLO DI TENUTA • SEAL RING**

SIGLA - CODE	TIPO - TYPE	DESCRIZIONE - DESCRIPTION
<b>A</b>	Flangia senza anello di tenuta <i>Flange without seal ring</i>	
<b>B</b>	Anello di tenuta fino a <b>3</b> bar <i>Sealing ring up to 3 bar</i>	Per bassissime pressioni <i>For very low pressure</i>
<b>H</b>	Anello di tenuta fino a <b>8</b> bar <i>Sealing ring up to 8 bar</i>	Per basse pressioni ( con distanziali di rinforzo ) <i>For low pressure ( with stiffening seal )</i>
<b>K</b>	Anello di tenuta fino a <b>30</b> bar <i>Sealing ring up to 30 bar</i>	Per alte pressioni <i>For high pressure</i>

**COMBINAZIONE FLANGIA - ANELLO DI TENUTA - GUARNIZIONE • FLANGE - SEAL RING - GASKET COMBINATION**

	EUR	SAEA	SAEAOR	B80C	B50C	E52C	P400D	SUPEUR
<b>2SP</b>								
	Anello - Seal ring	Anello - Seal ring	Anello - Seal ring	Anello - Seal ring	Anello - Seal ring	Anello - Seal ring	Anello - Seal ring	Anello - Seal ring
	<b>B H K</b>	<b>B H K</b>	<b>B H K</b>	<b>B H K</b>	<b>B H K</b>	<b>A</b>	<b>B H K</b>	<b>B K</b>
NBR <b>N</b>	◇ ◇ ◇	◇ ◇ ◇	◇ ◇ ◇	◇ ◇ ◇	◇ ◇ ◇	◇	◇ ◇ ◇	◇ ◇
Viton <b>V</b>	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	●	● ● ●	● ●

 ◇ = Combinazione standard - *Standard combination*

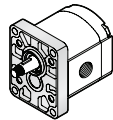
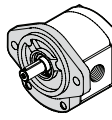
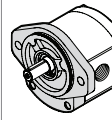
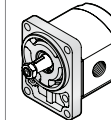
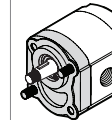
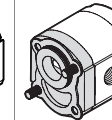
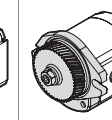
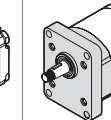
 ● = Combinazione disponibile - *Available combination*

esempio • example:

**2SP - A - 140 - D - EUR - B - N - 10 - 0 - G**
**EUR** = Flangia europea / *European flange*
**B** = Anello tenuta fino a 3 bar / *Seal ring up to 3 bar*
**N** = Guarnizione in NBR / *NBR o-ring*

**POMPE AD INGRANAGGI GRUPPO 2SP**  
**GEAR PUMPS GROUP 2SP**

**COMBINAZIONE ALBERO - FLANGIA • SHAFT - FLANGE COMBINATION**

<b>2SP</b>	EUR	SAEA	SAEAOR	B80C	B50C	FE32C	P400D	SUPEUR
								
<b>10</b> Conico 1:8 <i>Tapered 1:8</i>	◆	●	●	●	◆		◆	◆
<b>11</b> Conico 1:5 <i>Tapered 1:5</i>	●	●	●	◆	●			
<b>12</b> Cilindrico EUR <i>EUR Parallel shaft</i>	◆	●	●	◆	◆			
<b>13</b> Cilindrico SAEA <i>SAEA parallel shaft</i>	●	◆	◆	●	●			
<b>14</b> Scanalato SAEA 9 denti <i>SAEA 9T splined</i>	●	◆	◆	●	●			
<b>15</b> Scanalato DIN5482 9 denti (26/24) <i>DIN5482 9T splined (26/24)</i>	●	●	●	◆	●			
<b>16</b> Scanalato DIN5482 9 denti (20) <i>DIN5482 9T splined (20)</i>	●	●	●	◆	●			
<b>17</b> Fresato a dente frontale <i>Dihedral claw</i>						◆		
<b>40</b> Scanalato SAE 10 denti (52) <i>SAE 10T splined (52)</i>		●	●					
<b>41</b> Scanalato SAE 10 denti (37.5) <i>SAE 10T splined (37.5)</i>		●	●					
<b>42</b> Scanalato SAEA 11 denti (55.6) <i>SAEA 11T splined (55.6)</i>		●	●					
<b>43</b> Scanalato SAEA 11 denti (31.5) <i>SAEA 11T splined (31.5)</i>		●	●					
<b>44</b> Scanalato SAEA 11 denti (13.5) <i>SAEA 11T splined (13.5)</i>		●	●					

◆ = Combinazione standard - *Standard combination*

● = Combinazione disponibile - *Available combination*

**POMPE AD INGRANAGGI GRUPPO 2SP**  
**GEAR PUMPS GROUP 2SP**
**2SP**

## DIMENSIONI ALBERO - SHAFT DIMENSIONS

<p><b>10</b> Conico 1:8 Tapered 1:8</p> <p>Coppia 140 Nm Torque 104 ft-lbs</p>	<p>Disponibile per - available for: <b>EUR-SAEA-SAEOR-B50C-P400D-SUPEUR</b></p>	<p>Disponibile per - available for: <b>B80C</b></p>
<p><b>11</b> Conico 1:5 Tapered 1:5</p> <p>Coppia 140 Nm Torque 104 ft-lbs</p>	<p>Disponibile per - available for: <b>EUR - SAEA - SAEOR - B50C</b></p>	<p>Disponibile per - available for: <b>B80C</b></p>
<p><b>12</b> Cilindrico EUR EUR Parall shaft</p> <p>Coppia 80 Nm Torque 59 ft-lbs</p>	<p>Disponibile per - available for: <b>EUR - SAEA - SAEOR - B50C</b></p>	<p>Disponibile per - available for: <b>B80C</b></p>
<p><b>13</b> Cilindrico SAEA SAEA parall shaft</p> <p>Coppia 90 Nm Torque 67 ft-lbs</p>	<p>Disponibile per - available for: <b>EUR - SAEA - SAEOR - B50C</b></p>	<p>Disponibile per - available for: <b>B80C</b></p>
<p><b>14</b> Scanalato SAEA 9 denti SAEA 9T splined</p> <p>Coppia 100 Nm Torque 74 ft-lbs</p>	<p>Disponibile per - available for: <b>EUR - SAEA - SAEOR - B50C</b></p>	<p>Disponibile per - available for: <b>B80C</b></p>

**POMPE AD INGRANAGGI GRUPPO 2SP**  
**GEAR PUMPS GROUP 2SP**

**2SP**

DIMENSIONI ALBERO - SHAFT DIMENSIONS

<p><b>15</b> Scanalato DIN5482 9 denti (26/24) DIN5482 9T splined (26/24)</p> <p>Coppia 100 Nm Torque 74 ft-lbs</p>	<p>Profilo scanalato B 17x14 DIN 5482 n°denti = 9 Splined profile B 17x14 DIN 5482 n°of teeth = 9</p> <p>Disponibile per - available for: <b>EUR - SAEA - SAEAOR - B50C</b></p>	<p>Profilo scanalato B 17x14 DIN 5482 n°denti = 9 Splined profile B 17x14 DIN 5482 n°of teeth = 9</p> <p>Disponibile per - available for: <b>B80C</b></p>
<p><b>16</b> Scanalato DIN5482 9 denti (20) DIN5482 9T splined (20)</p> <p>Coppia 100 Nm Torque 74 ft-lbs</p>	<p>Profilo scanalato B 17x14 DIN 5482 n°denti = 9 Splined profile B 17x14 DIN 5482 n°of teeth = 9</p> <p>Disponibile per - available for: <b>EUR - SAEA - SAEAOR - B50C</b></p>	<p>Profilo scanalato B 17x14 DIN 5482 n°denti = 9 Splined profile B 17x14 DIN 5482 n°of teeth = 9</p> <p>Disponibile per - available for: <b>B80C</b></p>
<p><b>17</b> Fresato a dente frontale Dihedral claw</p> <p>Coppia 80 Nm Torque 59 ft-lbs</p>	<p>Giunto incluso - Coupling included Codice - Code: <b>010453100099</b></p> <p>Disponibile per - available for: <b>E52C</b></p>	
<p><b>40</b> Scanalato SAE 10 denti (52) SAE 10T splined (52)</p> <p>Coppia 130 Nm Torque 96 ft-lbs</p>	<p>Profilo scanalato Splined profile z = 10T 16/32 DP <math>\alpha = 30^\circ</math></p> <p>Disponibile per - available for: <b>SAEA - SAEAOR</b></p>	
<p><b>41</b> Scanalato SAE 10 denti (37.5) SAE 10T splined (37.5)</p> <p>Coppia 130 Nm Torque 96 ft-lbs</p>	<p>Profilo scanalato Splined profile z = 10T 16/32 DP <math>\alpha = 30^\circ</math></p> <p>Disponibile per - available for: <b>SAEA - SAEAOR</b></p>	

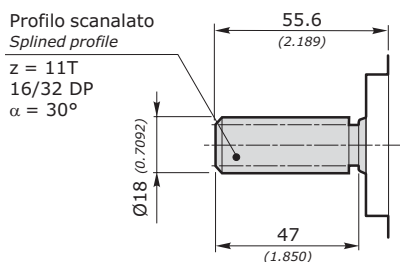
**POMPE AD INGRANAGGI GRUPPO 2SP**  
**GEAR PUMPS GROUP 2SP**

**2SP**

DIMENSIONI ALBERO - SHAFT DIMENSIONS

**42**  
Scanalato SAEA  
11 denti (55.6)  
SAEA 11T  
splined (55.6)

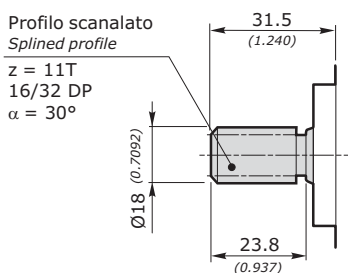
Coppia 150 Nm  
Torque 111 ft-lbs



Disponibile per - available for: **SAEA - SAEAOR**

**43**  
Scanalato SAEA  
11 denti (31.5)  
SAEA 11T  
splined (31.5)

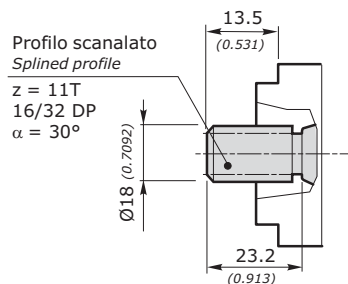
Coppia 150 Nm  
Torque 111 ft-lbs



Disponibile per - available for: **SAEA - SAEAOR**

**44**  
Scanalato SAEA  
11 denti (13.5)  
SAEA 11T  
splined (13.5)

Coppia 150 Nm  
Torque 111 ft-lbs



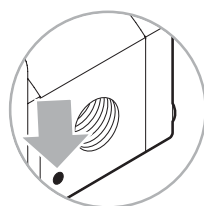
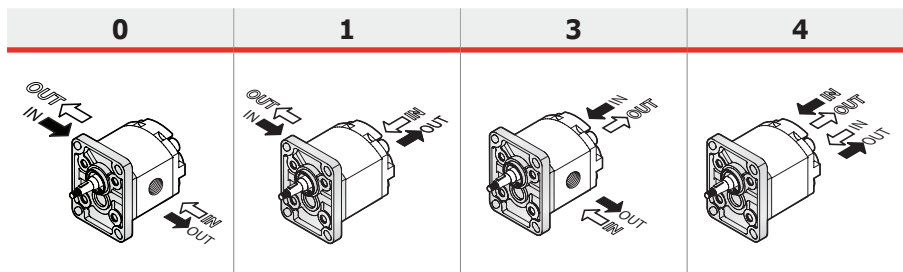
Disponibile per - available for: **SAEA - SAEAOR**

**POSIZIONE CONNESSIONE • CONNECTION POSITION**



Rotazione destra - **D**  
Right rotation - **D**

Rotazione sinistra - **S**  
Left rotation - **S**



Il segno del corpo indica il lato aspirazione per le pompe  
The sign on the body identify the suction side for the pumps



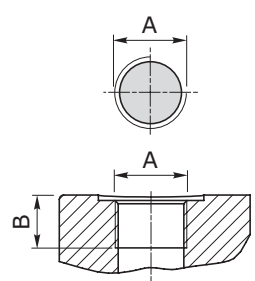
**IN = ASPIRAZIONE - SUCTION**  
**OUT = MANDATA - DELIVERY**



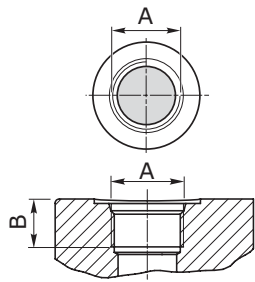
**POMPE AD INGRANAGGI GRUPPO 2SP**  
**GEAR PUMPS GROUP 2SP**

**TIPO CONNESSIONE • CONNECTION TYPE**

Le connessioni rappresentate corrispondono alle versioni standard; per connessioni differenti, contattare il nostro Ufficio Commerciale. *The connections type shown correspond to standard configuration; for different applications contact our Commercial Dept.*

<b>2SP</b>		POSIZIONE CONNESSIONE - CONNECTION POSITION			
		<b>0</b>	<b>1</b>	<b>3</b>	<b>4</b>
GAS	<b>G</b>	◇	◇	◇	◇
UNF	<b>U</b>	◇	◇	◇	◇
FLANGIATE FLANGED	<b>T</b>	◇			
	<b>N</b>	◇			
	<b>M</b>	◇			
	<b>F</b>	◇			

<b>GAS</b>	UNI ISO 228/1	SIGLA CODE	CIL. DISPL.	ASPIRAZIONE - SUCTION IN			MANDATA - DELIVERY OUT			
				<b>A</b>	<b>B</b>		<b>A</b>	<b>B</b>		
		<b>G</b>	40	G 1/2"	16 [mm] 0.630 [inch]	50 [Nm] 443 [in.lbs]	G 1/2"	16 [mm] 0.630 [inch]	50 [Nm] 443 [in.lbs]	
			60							
			80							
			110	G 3/4"	17 [mm] 0.670 [inch]	60 [Nm] 531 [in.lbs]				
			140							
			160							
			190							
			220							
			260							
			310							

<b>UNF</b>	ANSI/ASME B1.1	SIGLA CODE	CIL. DISPL.	ASPIRAZIONE SUCTION IN			MANDATA DELIVERY OUT			
				<b>A</b>	<b>B</b>		<b>A</b>	<b>B</b>		
		<b>U</b>	40	SAE 10 7/8"-14 UNF	17 [mm] 0.670 [inch]	55 [Nm] 487 [in.lbs]	SAE 10 7/8"-14 UNF	17 [mm] 0.670 [inch]	55 [Nm] 487 [in.lbs]	
			60							
			80							
			110	SAE 12 1"1/16-12 UN	20 [mm] 0.788 [inch]	60 [Nm] 531 [in.lbs]				
			140							
			160							
			190							
			220							
			260							
			310							
		<b>W</b>	40	SAE 16 1"5/16-12 UN	20 [mm] 0.788 [inch]	70 [Nm] 620 [in.lbs]	SAE 12 1"1/16-12 UN	20 [mm] 0.788 [inch]	60 [Nm] 531 [in.lbs]	
			60							
			80							
			110							
			140							
			160							
			190							
			220							
			260							
			310							



**POMPE AD INGRANAGGI GRUPPO 2SP**  
**GEAR PUMPS GROUP 2SP**

FLANGIATE FLANGED	ISO/R 262	SIGLA CODE	CIL. DISPL.	ASPIRAZIONE SUCTION IN					MANDATA DELIVERY OUT							
				A	B	C	D		A	B	C	D				
		<b>T</b>	40													
			60													
			80													
			110													
			140	20	40	M6	15	8	15	35	M6	15	8			
			160	[mm]	[mm]		[mm]	[Nm]	[mm]	[mm]		[mm]	[Nm]			
			190	0.787	1.575		0.591	71	0.591	1.378		0.591	71			
				[inch]	[inch]		[inch]	[in.lbs]	[inch]	[inch]		[inch]	[in.lbs]			
			220													
			260													
310																
		<b>N</b>	40	13	30	M6	15	8								
			60	[mm]	[mm]		[mm]	[Nm]								
			80	0.512	1.181		0.591	71								
				[inch]	[inch]		[inch]	[in.lbs]								
			110						13	30	M6	15	8			
			140						[mm]	[mm]		[mm]	[Nm]			
			160	19	40	M8	14	15	0.512	1.181		0.591	71			
			190	[mm]	[mm]		[mm]	[Nm]	[inch]	[inch]		[inch]	[in.lbs]			
			220	0.748	1.575		0.552	133								
				[inch]	[inch]		[inch]	[in.lbs]								
260																
310																
		<b>M</b>	40	non disponibile not available					non disponibile not available							
			60	non disponibile not available					non disponibile not available							
			80	non disponibile not available					non disponibile not available							
			110													
			140													
			160	19	40	M8	14	15	19	40	M8	14	15			
			190	[mm]	[mm]		[mm]	[Nm]	[mm]	[mm]		[mm]	[Nm]			
			220	0.748	1.575		0.552	133	0.748	1.575		0.552	133			
				[inch]	[inch]		[inch]	[in.lbs]	[inch]	[inch]		[inch]	[in.lbs]			
			260													
310																

FLANGIATE FLANGED	ISO/R 262	SIGLA CODE	CIL. DISPL.	ASPIRAZIONE SUCTION IN					MANDATA DELIVERY OUT						
				A	B	C	D	E		A	B	C	D	E	
		<b>F</b>	40	20	17,4	38	M6	15	8						
			60	[mm]	[mm]	[mm]		[mm]	[Nm]						
			80	0.787	0.685	1.496		0.591	71						
				[inch]	[inch]	[inch]		[inch]	[in.lbs]						
			110						15	17,4	38	M6	15	8	
			140						[mm]	[mm]	[mm]		[mm]	[Nm]	
			160	26	47.6	22.4	M6	15	8	0.591	0.685	1.496	0.591	71	
			190	[mm]	[mm]	[mm]		[mm]	[Nm]	[inch]	[inch]	[inch]	[inch]	[in.lbs]	
			220	1.024	1.874	0.882		0.591	71						
				[inch]	[inch]	[inch]		[inch]	[in.lbs]						
260															
310															