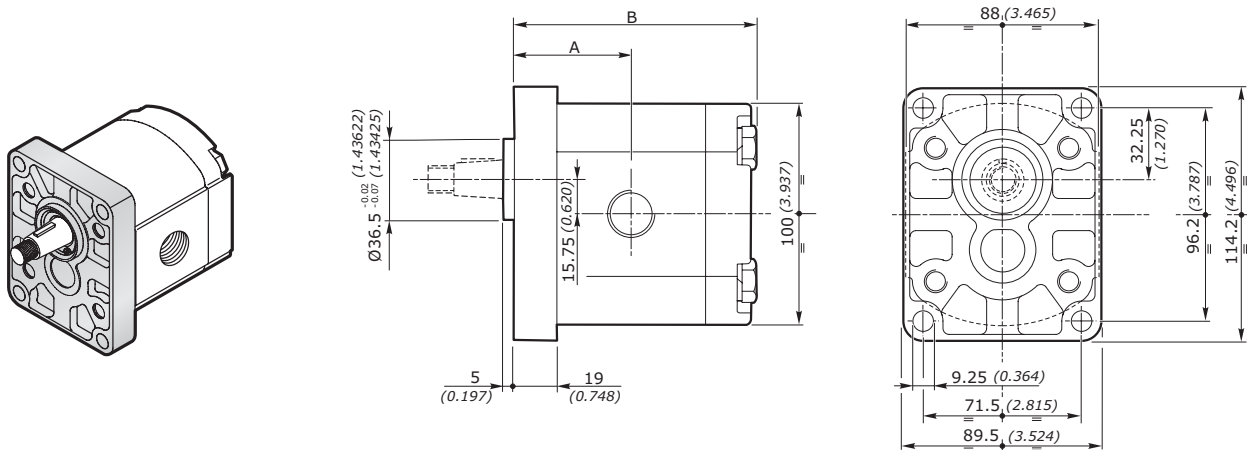


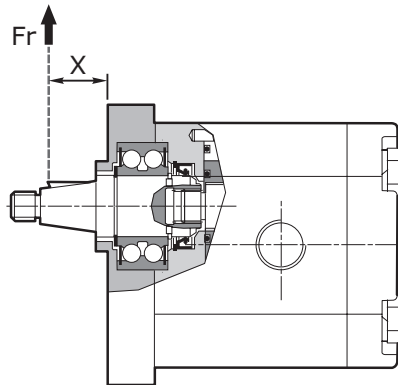
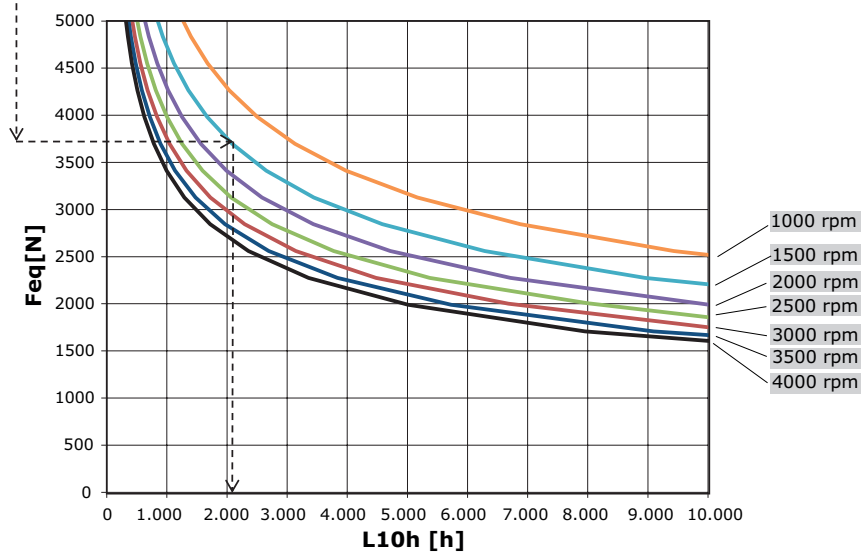
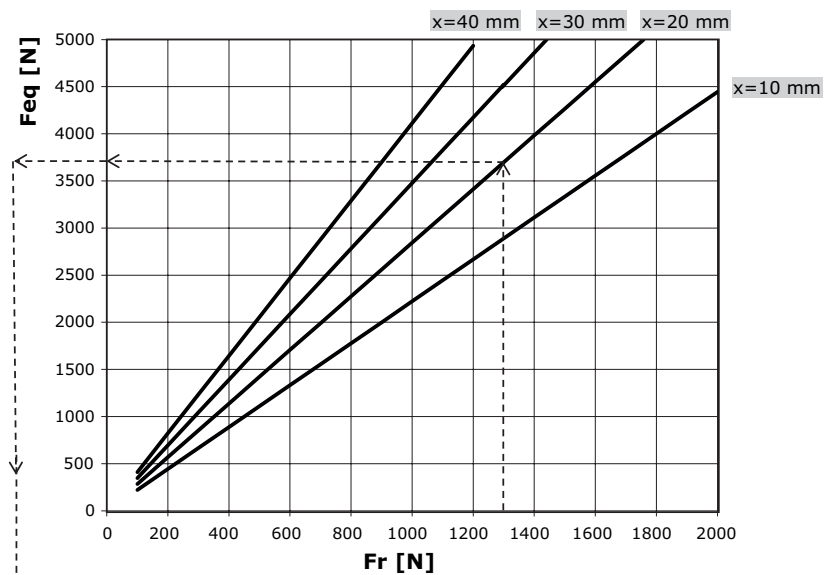
POMPE AD INGRANAGGI GRUPPO 2SP
GEAR PUMPS GROUP 2SP
FLANGIA EUROPEA EUR EUROPEAN FLANGE
FLANGIA E COPERCHIO IN ALLUMINIO - FLANGE AND COVER IN ALUMINIUM

GRUPPO GROUP 2SP	CILINDRATA DISPLACEMENT		PRESSIONE MAX - MAX PRESSURE						VELOCITÀ MAX MAX SPEED	PORTATA MAX MAX FLOW		VELOCITÀ MIN MIN SPEED
			P1		P2		P3					
	cm ³ /giro	in ³ /rev	bar	psi	bar	psi	bar	psi	giri/min - rpm	l/min	Gal/min	giri/min - rpm
2SP 040	4	0.24	250	3625	270	3915	290	4205	4000	16	4.23	500
2SP 060	6	0.37	250	3625	270	3915	290	4205	4000	24	6.34	500
2SP 080	8.5	0.52	250	3625	270	3915	290	4205	3500	29.7	7.85	500
2SP 110	11	0.67	250	3625	270	3915	290	4205	3500	38.5	10.17	500
2SP 140	14	0.85	250	3625	270	3915	290	4205	3500	49	12.95	500
2SP 160	16.5	1.01	230	3335	240	3480	250	3625	3500	57.7	15.24	500
2SP 190	19.5	1.19	210	3045	220	3190	230	3335	3300	64.3	16.99	500
2SP 220	22.5	1.37	190	2755	200	2900	210	3045	2800	63	16.64	500
2SP 260	26	1.59	170	2465	180	2610	190	2755	2500	65	17.17	500
2SP 310	31.5	1.92	130	1885	140	2030	150	2175	2200	69	18.22	500

Nota - Per valori di pressione superiori a quelli indicati contattare il Servizio Commerciale.
 Note - for higher pressure values please contact our Sales Dpt.

DIMENSIONI • DIMENSIONS


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

POMPE AD INGRANAGGI GRUPPO 2SP
GEAR PUMPS GROUP 2SP
CARICO DINAMICO EQUIVALENTE • EQUIVALENT DYNAMIC LOAD

DIAGRAMMA CUSCINETTI • DIAGRAM BEARING EXPECTED LIFE


In caso di carichi combinati applicati all'albero (radiale + assiale) contattare il nostro Ufficio Tecnico.
 In case of both radial and axial loads applied to the shaft please contact our technical department.

POMPE AD INGRANAGGI GRUPPO 2SP
GEAR PUMPS GROUP 2SP

CODICE ORDINAZIONE • ORDER CODE

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

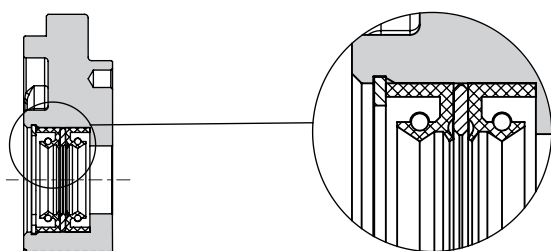
SIGLA - CODE	TIPO - TYPE	DESCRIZIONE - DESCRIPTION	PAGINA - PAGE
2SP	Tipo pompa <i>Pump type</i>	Pompa singola gruppo 2 <i>Single pump group 2</i>	5
G	Materiale flangia e coperchio <i>Flange and cover material</i>	A = alluminio / <i>aluminium</i> G = Ghisa / <i>Cast iron</i>	50
140	Cilindrata <i>Displacement</i>	Cilindrata = 14 cm ³ /giro <i>Displacement = 0.85 in³/rev</i>	5
D	Senso di rotazione <i>Rotation wise</i>	D = Rotazione destra / <i>Clockwise rotation</i> S = Rotazione sinistra / <i>Anticlockwise rotation</i> R = Reversibile / <i>Reversible</i>	8
EUR	Tipo Flangia <i>Flange type</i>	Flangia standard <i>Standard flange</i>	50
B	Tipo anello di tenuta <i>Seal ring type</i>	Vedi tabella compatibilità <i>See compatibility table</i>	51
N	Tipo guarnizione <i>Gasket type</i>	N = NBR V = Viton	50
10	Tipo Albero <i>Shaft type</i>	Vedi tabella compatibilità <i>See compatibility table</i>	52
0	Posizione connessione <i>Connection position</i>	Vedi tabella compatibilità <i>See compatibility table</i>	57
G	Tipo connessione <i>Connection type</i>	Vedi tabella compatibilità <i>See compatibility table</i>	58



VERSIONI CON DOPPIO PARAOLIO • DOUBLE SHAFT SEAL VERSION

Disponibili versioni con doppio paraolio per EUR, SAEA, SAEAOR e B50C.

Available versions with double shaft seal for EUR, SAEA, SAEAOR and B50C.



esempio • example:

2SP - A - 160 - S - SAEA2 - B - N - 14 - N

SAEA2= Doppio paraolio / *Double Shaft Seal*

Nota - La versione con paraolio è fornita con anelli a bassa pressione o alta pressione tipo K (vedi pag.51).

Note - The version with shaft seal is supplied with K rings type with low pressure or high pressure (see page 51).

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

2SP	EUR	SAEA	SAEAOR	B80C	B50C	E52C
A alluminio aluminium	◇	◇	◇	◇	◇	◇
G ghisa cast iron	◇	◇	◇	non disponibile not available	non disponibile not available	non disponibile not available

2SP	P400D	SUPEUR	SAEB*	SUPSAE	SUPB80C	SUPB50CX
A alluminio aluminium	◇	◇	non disponibile not available	◇	◇	◇
G ghisa cast iron	non disponibile not available	◇	◇	non disponibile not available	non disponibile not available	non disponibile not available

* Contattare il servizio commerciale. / Available soon. Please contact our Sales Dpt.

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

2SP	EUR	SAEA	SAEAOR	B80C	B50C	E52C	
	 Anello-Seal ring	 Anello-Seal ring	 Anello-Seal ring	 Anello-Seal ring	 Anello-Seal ring	 Anello-Seal ring	
	B H K	B H K	B H K	B H K	B H K	A	
NBR N	◇	◇	◇	◇	◇	◇	
Viton V	●	●	●	●	●	●	

2SP	P400D	SUPEUR	SAEB*	SUPSAE	SUPB80C	SUPB50CX	
	 Anello-Seal ring	 Anello-Seal ring	 Anello-Seal ring	 Anello-Seal ring	 Anello-Seal ring	 Anello-Seal ring	
	B H K	B K	H				
NBR N	◇	◇	◇	◇	◇	◇	
Viton V	●	●	●	●	●	●	

* Contattare il servizio commerciale. / Available soon. Please contact our Sales Dpt.

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

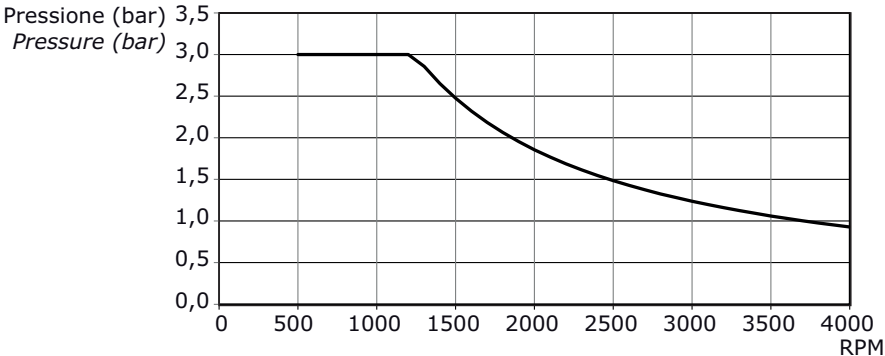
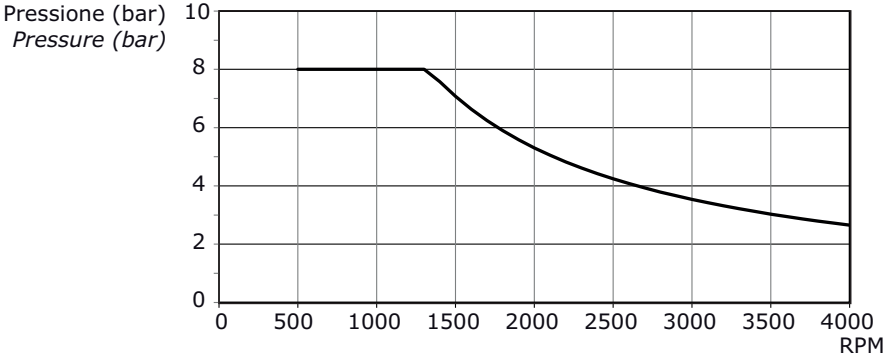
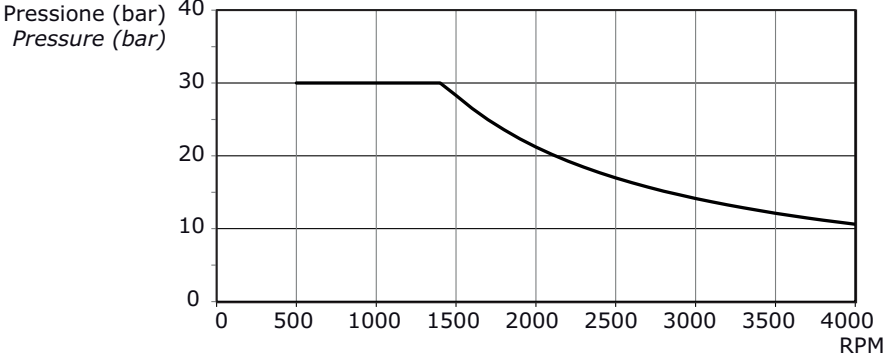
N = Guarnizione in NBR / NBR o-ring

◇ = Combinazione standard - Standard combination

● = Combinazione disponibile - Available combination

POMPE AD INGRANAGGI GRUPPO 2SP
GEAR PUMPS GROUP 2SP

ANELLO DI TENUTA • SEAL RING

SIGLA - CODE	TIPO - TYPE	DIAGRAMMA - DIAGRAM																				
A	Flangia senza anello di tenuta <i>Flange without seal ring</i>	/																				
B	Anello di tenuta fino a 3 bar <i>Sealing ring up to 3 bar</i>	 <table border="1"> <caption>Data for Seal Ring B</caption> <thead> <tr> <th>RPM</th> <th>Pressure (bar)</th> </tr> </thead> <tbody> <tr><td>500</td><td>3.0</td></tr> <tr><td>1000</td><td>3.0</td></tr> <tr><td>1250</td><td>3.0</td></tr> <tr><td>1500</td><td>2.5</td></tr> <tr><td>2000</td><td>1.8</td></tr> <tr><td>2500</td><td>1.4</td></tr> <tr><td>3000</td><td>1.2</td></tr> <tr><td>3500</td><td>1.0</td></tr> <tr><td>4000</td><td>0.8</td></tr> </tbody> </table>	RPM	Pressure (bar)	500	3.0	1000	3.0	1250	3.0	1500	2.5	2000	1.8	2500	1.4	3000	1.2	3500	1.0	4000	0.8
RPM	Pressure (bar)																					
500	3.0																					
1000	3.0																					
1250	3.0																					
1500	2.5																					
2000	1.8																					
2500	1.4																					
3000	1.2																					
3500	1.0																					
4000	0.8																					
H	Anello di tenuta fino a 8 bar <i>Sealing ring up to 8 bar</i>	 <table border="1"> <caption>Data for Seal Ring H</caption> <thead> <tr> <th>RPM</th> <th>Pressure (bar)</th> </tr> </thead> <tbody> <tr><td>500</td><td>8.0</td></tr> <tr><td>1000</td><td>8.0</td></tr> <tr><td>1250</td><td>8.0</td></tr> <tr><td>1500</td><td>7.0</td></tr> <tr><td>2000</td><td>5.5</td></tr> <tr><td>2500</td><td>4.2</td></tr> <tr><td>3000</td><td>3.5</td></tr> <tr><td>3500</td><td>3.0</td></tr> <tr><td>4000</td><td>2.5</td></tr> </tbody> </table>	RPM	Pressure (bar)	500	8.0	1000	8.0	1250	8.0	1500	7.0	2000	5.5	2500	4.2	3000	3.5	3500	3.0	4000	2.5
RPM	Pressure (bar)																					
500	8.0																					
1000	8.0																					
1250	8.0																					
1500	7.0																					
2000	5.5																					
2500	4.2																					
3000	3.5																					
3500	3.0																					
4000	2.5																					
K	Anello di tenuta fino a 30 bar <i>Sealing ring up to 30 bar</i>	 <table border="1"> <caption>Data for Seal Ring K</caption> <thead> <tr> <th>RPM</th> <th>Pressure (bar)</th> </tr> </thead> <tbody> <tr><td>500</td><td>30.0</td></tr> <tr><td>1000</td><td>30.0</td></tr> <tr><td>1250</td><td>30.0</td></tr> <tr><td>1500</td><td>25.0</td></tr> <tr><td>2000</td><td>18.0</td></tr> <tr><td>2500</td><td>14.0</td></tr> <tr><td>3000</td><td>12.0</td></tr> <tr><td>3500</td><td>10.5</td></tr> <tr><td>4000</td><td>10.0</td></tr> </tbody> </table>	RPM	Pressure (bar)	500	30.0	1000	30.0	1250	30.0	1500	25.0	2000	18.0	2500	14.0	3000	12.0	3500	10.5	4000	10.0
RPM	Pressure (bar)																					
500	30.0																					
1000	30.0																					
1250	30.0																					
1500	25.0																					
2000	18.0																					
2500	14.0																					
3000	12.0																					
3500	10.5																					
4000	10.0																					

POMPE AD INGRANAGGI GRUPPO 2SP
GEAR PUMPS GROUP 2SP

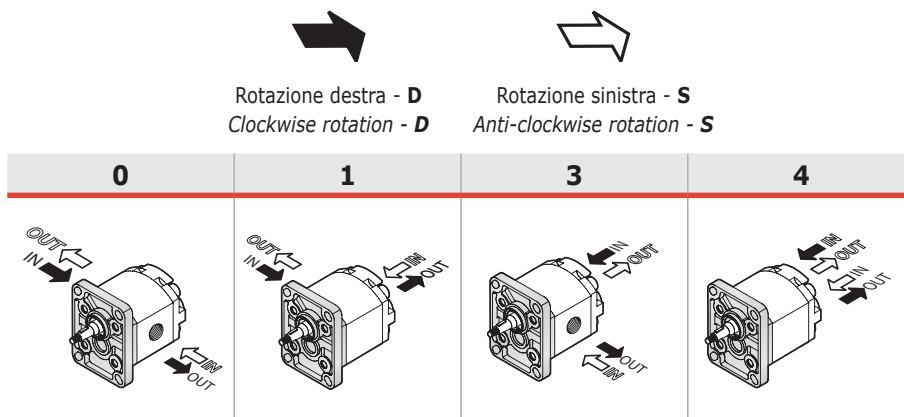
2SP

DIMENSIONI ALBERO - SHAFT DIMENSIONS

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

POMPE AD INGRANAGGI GRUPPO 2SP
GEAR PUMPS GROUP 2SP

POSIZIONE CONNESSIONE • CONNECTION POSITION



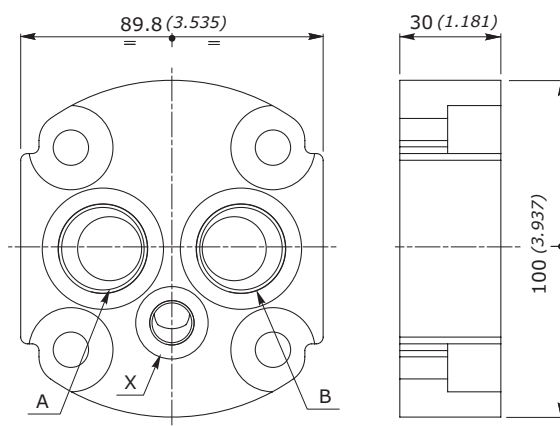
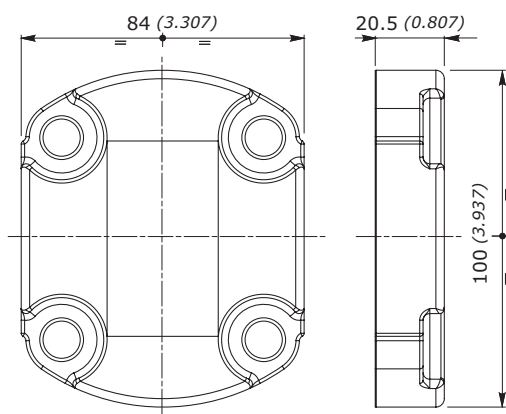
Il segno del corpo indica il lato aspirazione per le pompe
 The sign on the body identifies the suction side for the pumps

IN = ASPIRAZIONE - SUCTION
OUT = MANDATA - DELIVERY

COPERCHIO STANDARD • STANDARD COVER

Per posizione **0**
 For position **0**

Per posizioni **1, 3, 4**
 For position **1, 3, 4**



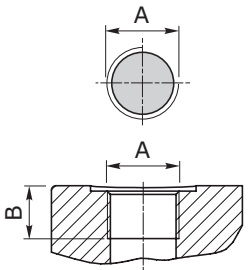




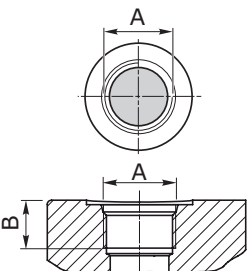
CONNESSIONI / CONNECTION			
	A	B	X
GAS	G 3/4	G 3/4	G 1/4
SAE	SAE 12	SAE 12	SAE 6

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 connection types shown correspond to standard configuration; for different applications contact our Commercial Dept.*

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

GAS	UNI ISO 228/1	SIGLA CODE	CIL. DISPL.	ASPIRAZIONE - SUCTION IN			MANDATA - DELIVERY OUT		
				A	B		A	B	
		G	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						

UNF	ANSI/ASME B1.1	SIGLA CODE	CIL. DISPL.	ASPIRAZIONE SUCTION IN			MANDATA DELIVERY OUT								
				A	B		A	B							
		U	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												
			W			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	↻			
		T	40													
			60													
			80													
			110													
			140	20	40		15	8	15	35		15	8			
			160	[mm]	[mm]	M6	[mm]	[Nm]	[mm]	[mm]	M6	[mm]	[Nm]			
			190	0.787	1.575		0.591	71	0.591	1.378		0.591	71			
			220	[inch]	[inch]		[inch]	[in.lbs]	[inch]	[inch]		[inch]	[in.lbs]			
			260													
			310													
		N	40	13	30		15	8								
			60	[mm]	[mm]	M6	[mm]	[Nm]								
			80	0.512	1.181		0.591	71								
			110													
			140						13	30		15	8			
			160	19	40		14	15	0.512	1.181	M6	0.591	71			
			190	[mm]	[mm]	M8	[mm]	[Nm]	[inch]	[inch]		[inch]	[in.lbs]			
			220	0.748	1.575		0.552	133								
			260	[inch]	[inch]		[inch]	[in.lbs]								
			310													
		M	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		14	15	19	40		14	15			
			190	[mm]	[mm]	M8	[mm]	[Nm]	[mm]	[mm]	M8	[mm]	[Nm]			
			220	0.748	1.575		0.552	133	0.748	1.575		0.552	133			
			260	[inch]	[inch]		[inch]	[in.lbs]	[inch]	[inch]		[inch]	[in.lbs]			
			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	↻
		F*	40	20	17,4	38		15	8						
			60	[mm]	[mm]	[mm]	M6	[mm]	[Nm]						
			80	0.787	0.685	1.496		0.591	71						
			110												
			140						15	17,4		15	8		
			160	26	22,4	47,6		0.591	0.685	1.496	M6	0.591	71		
			190	[mm]	[mm]	[mm]	M6	[mm]	[Nm]	[mm]	[mm]	[mm]	[Nm]		
			220	1.024	0.882	1.874		0.591	71						
			260	[inch]	[inch]	[inch]		[inch]	[in.lbs]						
			310												

*: Le flange non corrispondono a norma SAEJ518. Flange a norma disponibili a richiesta, contattare il Servizio Commerciale.

*: Flanges F do not correspond to SAEJ518. Flanges SAEJ518 available on request, please contact our Sales Dpt.