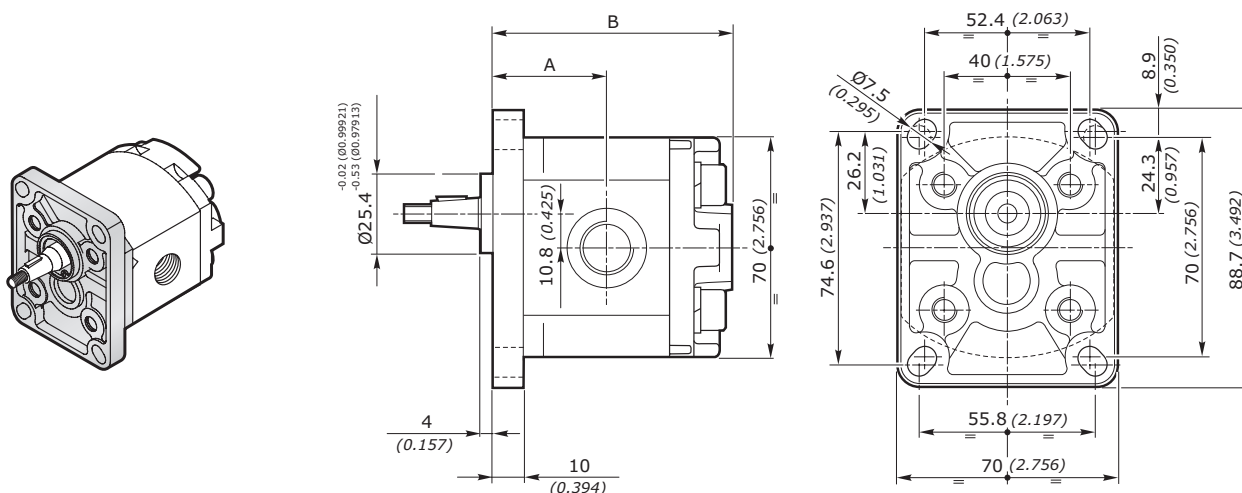


POMPE AD INGRANAGGI GRUPPO 1SP
GEAR PUMPS GROUP 1SP
FLANGIA EUROPEA **EUR** **STANDARD FLANGE**

GRUPPO GROUP 1SP	CILINDRATA DISPLACEMENT		PRESSIONE MAX - MAX PRESSURE						VELOCITÀ MAX MAX SPEED	PORTATA MAX MAX FLOW		VELOCITÀ MIN MIN SPEED
			P1		P2		P3					
	cm³/giro	in³/rev	bar	psi	bar	psi	bar	psi	giri/min - rpm	l/min	Gal/min	giri/min - rpm
1SP 009	0.89	0.05	260	3770	280	4060	290	4205	6000	5.3	1.40	600
1SP 012	1.18	0.07	260	3770	280	4060	290	4205	6000	7.1	1.88	600
1SP 016	1.6	0.10	260	3770	280	4060	290	4205	6000	9.6	2.54	400
1SP 020	2.0	0.12	260	3770	280	4060	290	4205	5500	11	2.91	400
1SP 025	2.5	0.15	260	3770	280	4060	290	4205	5000	12.5	3.30	400
1SP 032	3.2	0.20	260	3770	280	4060	290	4205	4500	14.4	3.80	400
1SP 037	3.7	0.23	250	3625	270	3915	280	4060	4000	14.8	3.91	400
1SP 042	4.2	0.26	250	3625	270	3915	280	4060	3500	14.7	3.88	400
1SP 050	5.0	0.31	250	3625	270	3915	280	4060	3000	15	3.96	400
1SP 063	6.3	0.38	170	2465	190	2755	210	3045	2700	17	4.49	400
1SP 078	7.76	0.47	170	2465	190	2755	210	3045	2500	19.4	5.13	400
1SP 098	9.78	0.60	150	2175	170	2465	190	2755	2000	19.6	5.18	400

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

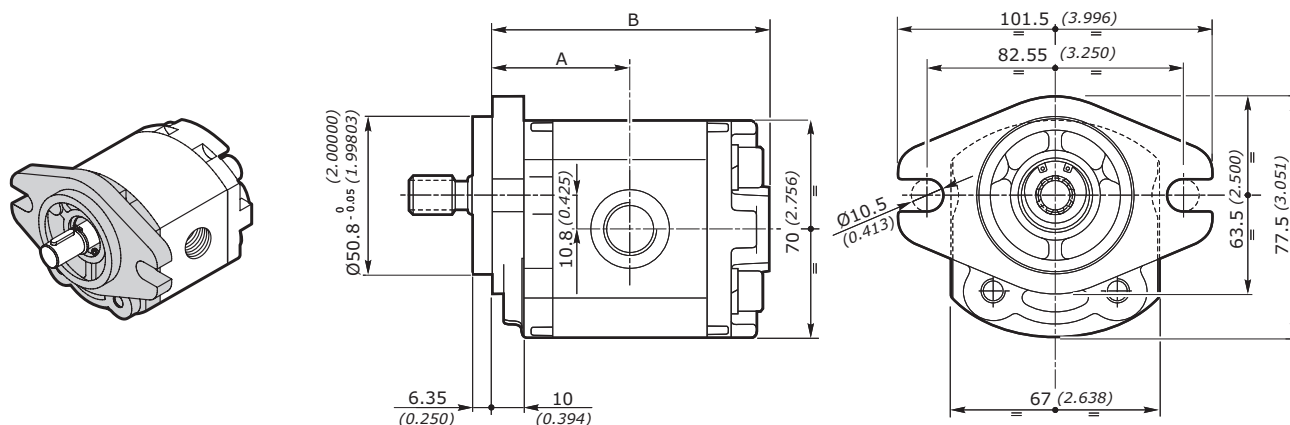
DIMENSIONI • DIMENSIONS


GRUPPO - GROUP 1	A		B		MASSA - MASS	
	mm	inch	mm	inch	kg	lbs
1SP 009	34.80	1.370	73.6	2.898	0.91	2.01
1SP 012	35.35	1.392	74.7	2.941	0.93	2.05
1SP 016	36.20	1.425	76.4	3.008	0.95	2.09
1SP 020	36.95	1.455	77.9	3.067	0.97	2.14
1SP 025	37.95	1.494	79.9	3.146	1.00	2.21
1SP 032	39.30	1.547	82.6	3.252	1.04	2.29
1SP 037	40.30	1.587	84.6	3.331	1.07	2.36
1SP 042	41.25	1.624	86.5	3.406	1.10	2.43
1SP 050	42.80	1.685	89.6	3.528	1.14	2.51
1SP 063	45.35	1.785	94.7	3.728	1.22	2.69
1SP 078	48.20	1.898	100.4	3.953	1.30	2.87
1SP 098	52.15	2.053	108.3	4.264	1.41	3.11

POMPE AD INGRANAGGI GRUPPO 1SP
GEAR PUMPS GROUP 1SP
FLANGIA SAE **SAEAA** **SAE FLANGE**

GRUPPO GROUP 1SP	CILINDRATA DISPLACEMENT		PRESSIONE MAX - MAX PRESSURE						VELOCITÀ MAX MAX SPEED	PORTATA MAX MAX FLOW		VELOCITÀ MIN MIN SPEED
			P1		P2		P3					
	cm³/giro	in³/rev	bar	psi	bar	psi	bar	psi		giri/min - rpm	l/min	
1SP 009	0.89	0.05	260	3770	280	4060	290	4205	6000	5.3	1.40	600
1SP 012	1.18	0.07	260	3770	280	4060	290	4205	6000	7.1	1.88	600
1SP 016	1.6	0.10	260	3770	280	4060	290	4205	6000	9.6	2.54	400
1SP 020	2.0	0.12	260	3770	280	4060	290	4205	5500	11	2.91	400
1SP 025	2.5	0.15	260	3770	280	4060	290	4205	5000	12.5	3.30	400
1SP 032	3.2	0.20	260	3770	280	4060	290	4205	4500	14.4	3.80	400
1SP 037	3.7	0.23	250	3625	270	3915	280	4060	4000	14.8	3.91	400
1SP 042	4.2	0.26	250	3625	270	3915	280	4060	3500	14.7	3.88	400
1SP 050	5.0	0.31	250	3625	270	3915	280	4060	3000	15	3.96	400
1SP 063	6.3	0.38	170	2465	190	2755	210	3045	2700	17	4.49	400
1SP 078	7.76	0.47	170	2465	190	2755	210	3045	2500	19.4	5.13	400
1SP 098	9.78	0.60	150	2175	170	2465	190	2755	2000	19.6	5.18	400

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

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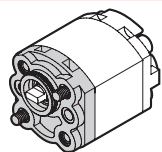
GRUPPO - GROUP 1	A		B		MASSA - MASS	
	mm	inch	mm	inch	kg	lbs
1SP 009	38.30	1.508	77.10	3.035	0.91	2.01
1SP 012	38.85	1.530	78.20	3.079	0.93	2.05
1SP 016	39.70	1.563	79.90	3.146	0.95	2.09
1SP 020	40.45	1.593	81.40	3.205	0.97	2.14
1SP 025	41.45	1.632	83.40	3.283	1.00	2.21
1SP 032	42.80	1.685	86.10	3.390	1.04	2.29
1SP 037	43.80	1.724	88.10	3.469	1.07	2.36
1SP 042	44.75	1.762	90.00	3.543	1.10	2.43
1SP 050	46.30	1.823	93.10	3.665	1.14	2.51
1SP 063	48.85	1.923	98.20	3.866	1.22	2.69
1SP 078	51.70	2.035	103.90	4.091	1.30	2.87
1SP 098	55.65	2.191	111.80	4.402	1.41	3.11

POMPE AD INGRANAGGI GRUPPO 1SP
GEAR PUMPS GROUP 1SP
FLANGIA PER MINICENTRALINA MC32 POWER-PACK FLANGE

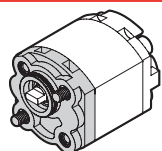
GRUPPO GROUP 1SP	CILINDRATA DISPLACEMENT		PRESSIONE MAX - MAX PRESSURE						VELOCITÀ MAX MAX SPEED	PORTATA MAX MAX FLOW		VELOCITÀ MIN MIN SPEED
			P1		P2		P3					
	cm³/giro	in³/rev	bar	psi	bar	psi	bar	psi	giri/min - rpm	l/min	Gal/min	giri/min - rpm
1SP 009	0.89	0.05	260	3770	280	4060	290	4205	6000	5.3	1.40	600
1SP 012	1.18	0.07	260	3770	280	4060	290	4205	6000	7.1	1.88	600
1SP 016	1.6	0.10	260	3770	280	4060	290	4205	6000	9.6	2.54	400
1SP 020	2.0	0.12	260	3770	280	4060	290	4205	5500	11	2.91	400
1SP 025	2.5	0.15	260	3770	280	4060	290	4205	5000	12.5	3.30	400
1SP 032	3.2	0.20	260	3770	280	4060	290	4205	4500	14.4	3.80	400
1SP 037	3.7	0.23	250	3625	270	3915	280	4060	4000	14.8	3.91	400
1SP 042	4.2	0.26	250	3625	270	3915	280	4060	3500	14.7	3.88	400
1SP 050	5.0	0.31	250	3625	270	3915	280	4060	3000	15	3.96	400
1SP 063	6.3	0.38	170	2465	190	2755	210	3045	2700	17	4.49	400
1SP 078	7.76	0.47	170	2465	190	2755	210	3045	2500	19.4	5.13	400
1SP 098	9.78	0.60	150	2175	170	2465	190	2755	2000	19.6	5.18	400

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

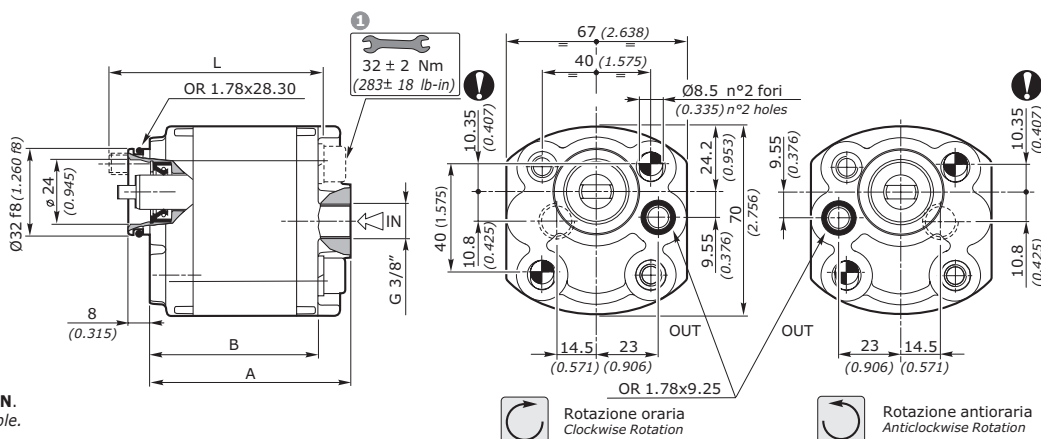
MC32



MC32N



E' disponibile la flangia senza foro **MC32N**.
 The flange without hole **MC32N** is available.

DIMENSIONI • DIMENSIONS


1 Coppia di serraggio viti: 32 ± 2 Nm (viti classe 10.9-12.9 UNI EN 20898/1)
 Il kit viti per il fissaggio della pompa è da ordinare separatamente.
 Codice di ordinazione: **0019W** (+ lunghezza L - vedi tabella)

Il fissaggio della pompa può essere effettuato con 2 viti prigioniere (25 ± 2 Nm).
 Fissare la pompa mediante dadi autobloccanti (32 ± 2 Nm).

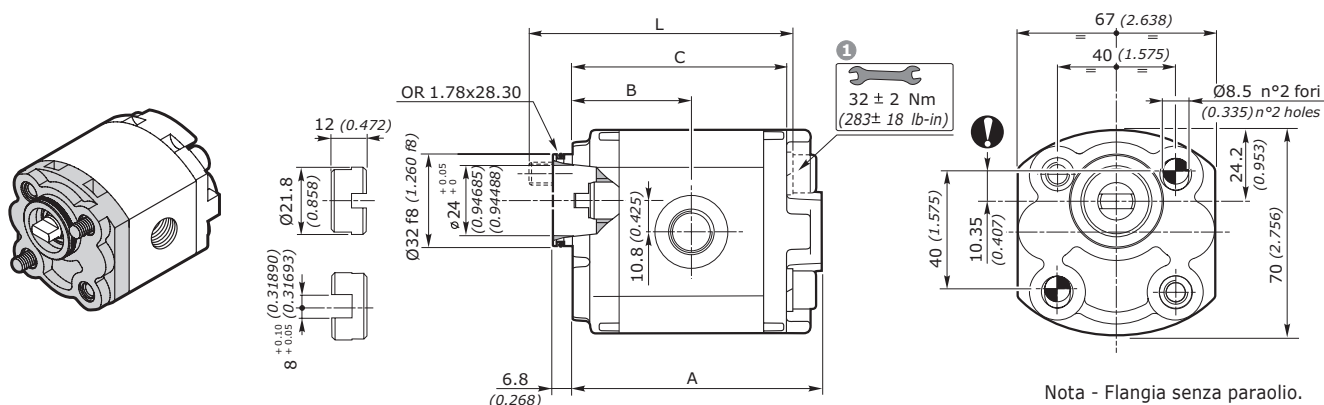
1 Screw tightening torque: 283 ± 18 lb-in (screws 10.9-12.9 UNI EN 20898/1).
 The screw kit for the pump assembly should be ordered separately.
 Ordering code: **0019W** (+ length L - see table)
 The pump assembling should be made by 2 screws (221 ± 18 lb-in).
 Fix the pump by self-locking nuts (283 ± 18 lb-in).

GRUPPO - GROUP 1	A		B		L 1		MASSA - MASS	
	mm	inch	mm	inch	mm	inch	kg	lbs
1SP 009	73.1	2.878	61.6	2.425	80	3.150	0.91	2.01
1SP 012	74.2	2.921	62.7	2.469	80	3.150	0.93	2.05
1SP 016	75.9	2.988	64.4	2.535	80	3.150	0.95	2.09
1SP 020	77.4	3.047	65.9	2.594	80	3.150	0.97	2.14
1SP 025	79.4	3.126	67.9	2.673	85	3.346	1.00	2.21
1SP 032	82.1	3.232	70.6	2.780	85	3.346	1.04	2.29
1SP 037	84.1	3.311	72.6	2.858	90	3.543	1.07	2.36
1SP 042	86.0	3.386	74.5	2.933	90	3.543	1.10	2.43
1SP 050	89.1	3.508	77.6	3.055	95	3.740	1.14	2.51
1SP 063	94.2	3.709	82.7	3.256	100	3.937	1.22	2.69
1SP 078	99.9	3.933	88.4	3.480	105	4.134	1.30	2.87
1SP 098	107.8	4.244	96.3	3.791	115	4.528	1.41	3.11

POMPE AD INGRANAGGI GRUPPO 1SP
GEAR PUMPS GROUP 1SP
FLANGIA TEDESCA FISSAGGIO MINICENTRALINA E32BX POWER-PACK FIXING GERMAN FLANGE

GRUPPO GROUP 1SP	CILINDRATA DISPLACEMENT		PRESSIONE MAX - MAX PRESSURE						VELOCITÀ MAX MAX SPEED	PORTATA MAX MAX FLOW		VELOCITÀ MIN MIN SPEED
			P1		P2		P3					
	cm³/giro	in³/rev	bar	psi	bar	psi	bar	psi	giri/min - rpm	l/min	Gal/min	giri/min - rpm
1SP 009	0.89	0.05	260	3770	280	4060	290	4205	6000	5.3	1.40	600
1SP 012	1.18	0.07	260	3770	280	4060	290	4205	6000	7.1	1.88	600
1SP 016	1.6	0.10	260	3770	280	4060	290	4205	6000	9.6	2.54	400
1SP 020	2.0	0.12	260	3770	280	4060	290	4205	5500	11	2.91	400
1SP 025	2.5	0.15	260	3770	280	4060	290	4205	5000	12.5	3.30	400
1SP 032	3.2	0.20	260	3770	280	4060	290	4205	4500	14.4	3.80	400
1SP 037	3.7	0.23	250	3625	270	3915	280	4060	4000	14.8	3.91	400
1SP 042	4.2	0.26	250	3625	270	3915	280	4060	3500	14.7	3.88	400
1SP 050	5.0	0.31	250	3625	270	3915	280	4060	3000	15	3.96	400
1SP 063	6.3	0.38	170	2465	190	2755	210	3045	2700	17	4.49	400
1SP 078	7.76	0.47	170	2465	190	2755	210	3045	2500	19.4	5.13	400
1SP 098	9.78	0.60	150	2175	170	2465	190	2755	2000	19.6	5.18	400

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

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Nota - Flangia senza paraolio.
 Note - Flange without shaft seal.

1 Coppia di serraggio viti: 32 ± 2 Nm (viti classe 10.9-12.9 UNI EN 20898/1)
 Il kit viti per il fissaggio della pompa è da ordinare separatamente.
 Codice di ordinazione: **0019W** (+ lunghezza **L** - vedi tabella)
 Il fissaggio della pompa può essere effettuato con 2 viti prigioniere (25 ± 2 Nm).
 Fissare la pompa mediante dadi autobloccanti (32 ± 2 Nm).

1 Screw tightening torque: 283 ± 18 lb-in (screws 10.9-12.9 UNI EN 20898/1).
 The screw kit for the pump assembly should be ordered separately.
 Ordering code: **0019W** (+ length **L** - see table)
 The pump assembling should be made by 2 screws (221 ± 18 lb-in).
 Fix the pump by self-locking nuts (283 ± 18 lb-in).

GRUPPO - GROUP 1	A		B		C		L 1		MASSA - MASS	
	mm	inch	mm	inch	mm	inch	mm	inch	kg	lbs
1SP 009	73.6	2.898	34.80	1.370	61.6	2.425	80	3.150	0.91	2.01
1SP 012	74.7	2.941	35.35	1.392	62.7	2.469	80	3.150	0.93	2.05
1SP 016	76.4	3.008	36.20	1.425	64.4	2.535	80	3.150	0.95	2.09
1SP 020	77.9	3.067	36.95	1.455	65.9	2.594	80	3.150	0.97	2.14
1SP 025	79.9	3.146	37.95	1.494	67.9	2.673	85	3.346	1.00	2.21
1SP 032	82.6	3.252	39.30	1.547	70.6	2.780	85	3.346	1.04	2.29
1SP 037	84.6	3.331	40.30	1.587	72.6	2.858	90	3.543	1.07	2.36
1SP 042	86.5	3.406	41.25	1.624	74.5	2.933	90	3.543	1.10	2.43
1SP 050	89.6	3.528	42.80	1.685	77.6	3.055	95	3.740	1.14	2.51
1SP 063	94.7	3.728	45.35	1.785	82.7	3.256	100	3.937	1.22	2.69
1SP 078	100.4	3.953	48.20	1.898	88.4	3.480	105	4.134	1.30	2.87
1SP 098	108.3	4.264	52.15	2.053	96.3	3.791	115	4.528	1.41	3.11

POMPE AD INGRANAGGI GRUPPO 1SP
GEAR PUMPS GROUP 1SP

FLANGIA TEDESCA FISSAGGIO MINICENTRALINA CON ANELLO DI TENUTA

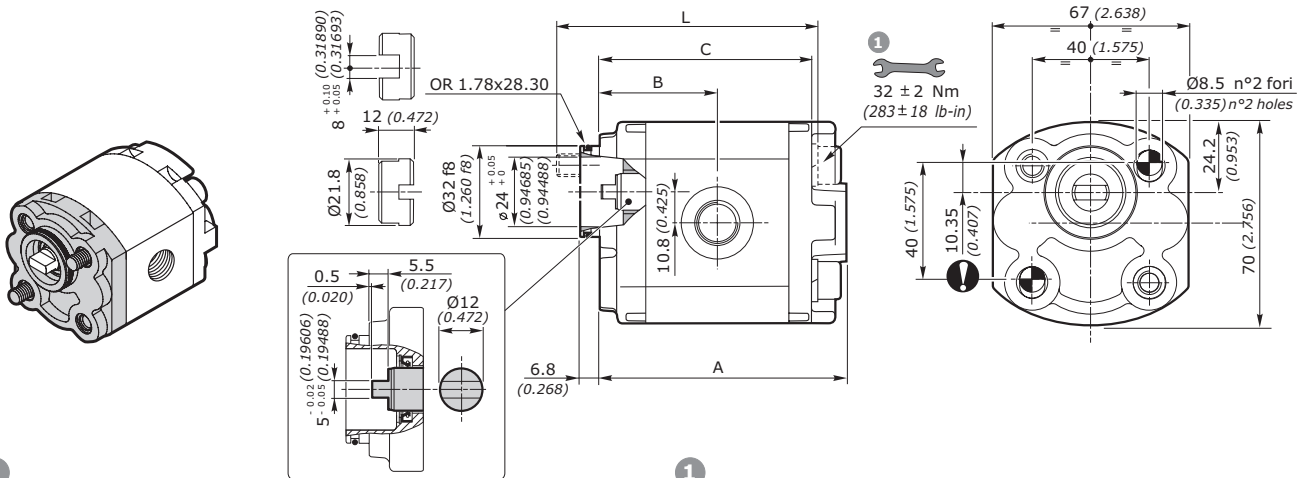
E32BC

POWER-PACK FIXING GERMAN FLANGE WITH SEAL SHAFT

GRUPPO GROUP 1SP	CILINDRATA DISPLACEMENT		PRESSIONE MAX - MAX PRESSURE						VELOCITÀ MAX MAX SPEED	PORTATA MAX MAX FLOW		VELOCITÀ MIN MIN SPEED
			P1		P2		P3					
	cm³/giro	in³/rev	bar	psi	bar	psi	bar	psi	giri/min - rpm	l/min	Gal/min	giri/min - rpm
1SP 009	0.89	0.05	260	3770	280	4060	290	4205	6000	5.3	1.40	600
1SP 012	1.18	0.07	260	3770	280	4060	290	4205	6000	7.1	1.88	600
1SP 016	1.6	0.10	260	3770	280	4060	290	4205	6000	9.6	2.54	400
1SP 020	2.0	0.12	260	3770	280	4060	290	4205	5500	11	2.91	400
1SP 025	2.5	0.15	260	3770	280	4060	290	4205	5000	12.5	3.30	400
1SP 032	3.2	0.20	260	3770	280	4060	290	4205	4500	14.4	3.80	400
1SP 037	3.7	0.23	250	3625	270	3915	280	4060	4000	14.8	3.91	400
1SP 042	4.2	0.26	250	3625	270	3915	280	4060	3500	14.7	3.88	400
1SP 050	5.0	0.31	250	3625	270	3915	280	4060	3000	15	3.96	400
1SP 063	6.3	0.38	170	2465	190	2755	210	3045	2700	17	4.49	400
1SP 078	7.76	0.47	170	2465	190	2755	210	3045	2500	19.4	5.13	400
1SP 098	9.78	0.60	150	2175	170	2465	190	2755	2000	19.6	5.18	400

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

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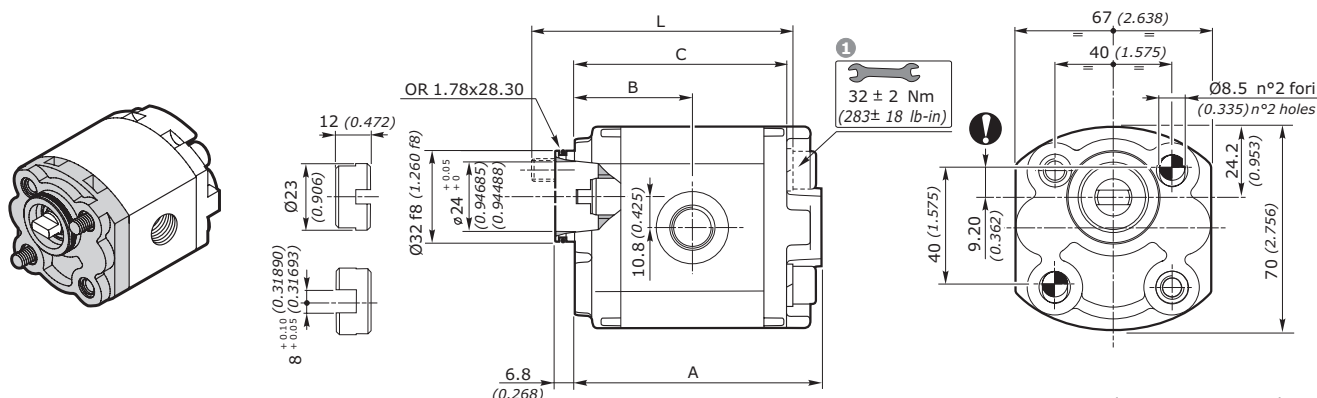
- 1 Coppia di serraggio viti: $32 \pm 2\text{Nm}$ (viti classe 10.9-12.9 UNI EN 20898/1)
 Il kit viti per il fissaggio della pompa è da ordinare separatamente.
 Codice di ordinazione: **0019W** (+ lunghezza **L** - vedi tabella)
- 1 Screw tightening torque: $283 \pm 18\text{ lb-in}$ (screws 10.9-12.9 UNI EN 20898/1).
 The screw kit for the pump assembly should be ordered separately.
 Ordering code: **0019W** (+ length **L** - see table)

GRUPPO - GROUP 1	A		B		C		L 1		MASSA - MASS	
	mm	inch	mm	inch	mm	inch	mm	inch	kg	lbs
1SP 009	73.6	2.898	34.80	1.370	61.6	2.425	80	3.150	0.91	2.01
1SP 012	74.7	2.941	35.35	1.392	62.7	2.469	80	3.150	0.93	2.05
1SP 016	76.4	3.008	36.20	1.425	64.4	2.535	80	3.150	0.95	2.09
1SP 020	77.9	3.067	36.95	1.455	65.9	2.594	80	3.150	0.97	2.14
1SP 025	79.9	3.146	37.95	1.494	67.9	2.673	85	3.346	1.00	2.21
1SP 032	82.6	3.252	39.30	1.547	70.6	2.780	85	3.346	1.04	2.29
1SP 037	84.6	3.331	40.30	1.587	72.6	2.858	90	3.543	1.07	2.36
1SP 042	86.5	3.406	41.25	1.624	74.5	2.933	90	3.543	1.10	2.43
1SP 050	89.6	3.528	42.80	1.685	77.6	3.055	95	3.740	1.14	2.51
1SP 063	94.7	3.728	45.35	1.785	82.7	3.256	100	3.937	1.22	2.69
1SP 078	100.4	3.953	48.20	1.898	88.4	3.480	105	4.134	1.30	2.87
1SP 098	108.3	4.264	52.15	2.053	96.3	3.791	115	4.528	1.41	3.11

POMPE AD INGRANAGGI GRUPPO 1SP
GEAR PUMPS GROUP 1SP
FLANGIA PER ELETTROPOMPA E32CX ELECTRO-PUMP FLANGE

GRUPPO GROUP 1SP	CILINDRATA DISPLACEMENT		PRESSIONE MAX - MAX PRESSURE						VELOCITÀ MAX MAX SPEED	PORTATA MAX MAX FLOW		VELOCITÀ MIN MIN SPEED
			P1		P2		P3					
	cm³/giro	in³/rev	bar	psi	bar	psi	bar	psi	giri/min - rpm	l/min	Gal/min	giri/min - rpm
1SP 009	0.89	0.05	260	3770	280	4060	290	4205	6000	5.3	1.40	600
1SP 012	1.18	0.07	260	3770	280	4060	290	4205	6000	7.1	1.88	600
1SP 016	1.6	0.10	260	3770	280	4060	290	4205	6000	9.6	2.54	400
1SP 020	2.0	0.12	260	3770	280	4060	290	4205	5500	11	2.91	400
1SP 025	2.5	0.15	260	3770	280	4060	290	4205	5000	12.5	3.30	400
1SP 032	3.2	0.20	260	3770	280	4060	290	4205	4500	14.4	3.80	400
1SP 037	3.7	0.23	250	3625	270	3915	280	4060	4000	14.8	3.91	400
1SP 042	4.2	0.26	250	3625	270	3915	280	4060	3500	14.7	3.88	400
1SP 050	5.0	0.31	250	3625	270	3915	280	4060	3000	15	3.96	400
1SP 063	6.3	0.38	170	2465	190	2755	210	3045	2700	17	4.49	400
1SP 078	7.76	0.47	170	2465	190	2755	210	3045	2500	19.4	5.13	400
1SP 098	9.78	0.60	150	2175	170	2465	190	2755	2000	19.6	5.18	400

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

DIMENSIONI • DIMENSIONS

1

Coppia di serraggio viti: 32 ± 2 Nm (viti classe 10.9-12.9 UNI EN 20898/1)
 Il kit viti per il fissaggio della pompa è da ordinare separatamente.
 Codice di ordinazione: **0019W** (+ lunghezza **L** - vedi tabella)
 Il fissaggio della pompa può essere effettuato con 2 viti prigioniere (25 ± 2 Nm).
 Fissare la pompa mediante dadi autobloccanti (32 ± 2 Nm).

1

Screw tightening torque: 283 ± 18 lb-in (screws 10.9-12.9 UNI EN 20898/1).
 The screw kit for the pump assembly should be ordered separately.
 Ordering code: **0019W** (+ length **L** - see table)
 The pump assembling should be made by 2 screws (221 ± 18 lb-in).
 Fix the pump by self-locking nuts (283 ± 18 lb-in).

Nota - Flangia senza paraolio.

Note - Flange without shaft seal.

GRUPPO - GROUP 1	A		B		C		L ¹		MASSA - MASS	
	mm	inch	mm	inch	mm	inch	mm	inch	kg	lbs
1SP 009	73.6	2.898	34.80	1.370	61.6	2.425	80	3.150	0.91	2.01
1SP 012	74.7	2.941	35.35	1.392	62.7	2.469	80	3.150	0.93	2.05
1SP 016	76.4	3.008	36.20	1.425	64.4	2.535	80	3.150	0.95	2.09
1SP 020	77.9	3.067	36.95	1.455	65.9	2.594	80	3.150	0.97	2.14
1SP 025	79.9	3.146	37.95	1.494	67.9	2.673	85	3.346	1.00	2.21
1SP 032	82.6	3.252	39.30	1.547	70.6	2.780	85	3.346	1.04	2.29
1SP 037	84.6	3.331	40.30	1.587	72.6	2.858	90	3.543	1.07	2.36
1SP 042	86.5	3.406	41.25	1.624	74.5	2.933	90	3.543	1.10	2.43
1SP 050	89.6	3.528	42.80	1.685	77.6	3.055	95	3.740	1.14	2.51
1SP 063	94.7	3.728	45.35	1.785	82.7	3.256	100	3.937	1.22	2.69
1SP 078	100.4	3.953	48.20	1.898	88.4	3.480	105	4.134	1.30	2.87
1SP 098	108.3	4.264	52.15	2.053	96.3	3.791	115	4.528	1.41	3.11

POMPE AD INGRANAGGI GRUPPO 1SP
GEAR PUMPS GROUP 1SP

FLANGIA PER ELETTROPOMPA CON ANELLO DI TENUTA

E32CC

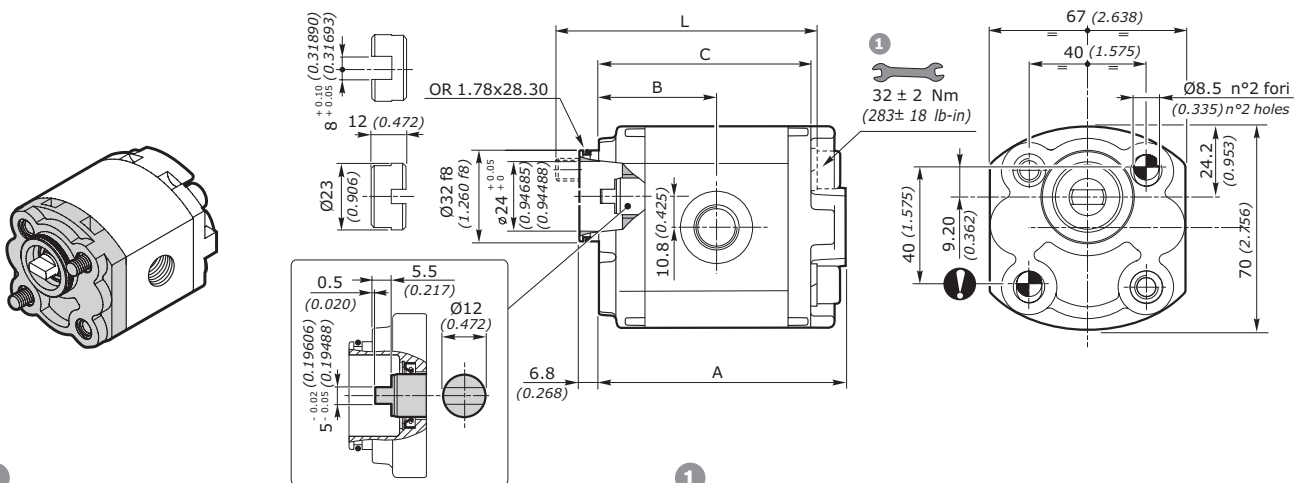
**ELECTRO-PUMP FLANGE
WITH SEAL SHAFT**

GRUPPO GROUP 1SP	CILINDRATA DISPLACEMENT		PRESSIONE MAX - MAX PRESSURE						VELOCITÀ MAX MAX SPEED	PORTATA MAX MAX FLOW		VELOCITÀ MIN MIN SPEED
			P1		P2		P3					
	cm³/giro	in³/rev	bar	psi	bar	psi	bar	psi	giri/min - rpm	l/min	Gal/min	giri/min - rpm
1SP 009	0.89	0.05	260	3770	280	4060	290	4205	6000	5.3	1.40	600
1SP 012	1.18	0.07	260	3770	280	4060	290	4205	6000	7.1	1.88	600
1SP 016	1.6	0.10	260	3770	280	4060	290	4205	6000	9.6	2.54	400
1SP 020	2.0	0.12	260	3770	280	4060	290	4205	5500	11	2.91	400
1SP 025	2.5	0.15	260	3770	280	4060	290	4205	5000	12.5	3.30	400
1SP 032	3.2	0.20	260	3770	280	4060	290	4205	4500	14.4	3.80	400
1SP 037	3.7	0.23	250	3625	270	3915	280	4060	4000	14.8	3.91	400
1SP 042	4.2	0.26	250	3625	270	3915	280	4060	3500	14.7	3.88	400
1SP 050	5.0	0.31	250	3625	270	3915	280	4060	3000	15	3.96	400
1SP 063	6.3	0.38	170	2465	190	2755	210	3045	2700	17	4.49	400
1SP 078	7.76	0.47	170	2465	190	2755	210	3045	2500	19.4	5.13	400
1SP 098	9.78	0.60	150	2175	170	2465	190	2755	2000	19.6	5.18	400

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



1 Coppia di serraggio viti: 32 ± 2Nm (viti classe 10.9-12.9 UNI EN 20898/1)
Il kit viti per il fissaggio della pompa è da ordinare separatamente.
Codice di ordinazione: **0019W** (+ lunghezza **L** - vedi tabella)

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Fissare la pompa mediante dadi autobloccanti ($32 \pm 2\text{ Nm}$).

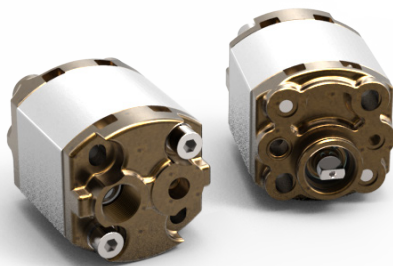
1 Screw tightening torque: 283 ± 18 lb-in (screws 10.9-12.9 UNI EN 20898/1).
The screw kit for the pump assembly should be ordered separately.
Ordering code: **0019W** (+ length **L** - see table)

The pump assembling should be made by 2 screws (221 ± 18 lb-in).
Fix the pump by self-locking nuts (283 ± 18 lb-in).

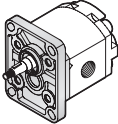
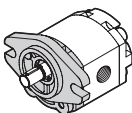
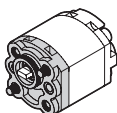
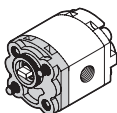
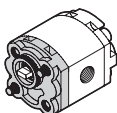
GRUPPO - GROUP 1	A		B		C		L 1		MASSA - MASS	
	mm	inch	mm	inch	mm	inch	mm	inch	kg	lbs
1SP 009	73.6	2.898	34.80	1.370	61.6	2.425	80	3.150	0.91	2.01
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1SP 050	89.6	3.528	42.80	1.685	77.6	3.055	95	3.740	1.14	2.51
1SP 063	94.7	3.728	45.35	1.785	82.7	3.256	100	3.937	1.22	2.69
1SP 078	100.4	3.953	48.20	1.898	88.4	3.480	105	4.134	1.30	2.87
1SP 098	108.3	4.264	52.15	2.053	96.3	3.791	115	4.528	1.41	3.11

POMPE AD INGRANAGGI GRUPPO 1SP
GEAR PUMPS GROUP 1SP
CODICE ORDINAZIONE • ORDER CODE
1SP - A - 020 - D - EUR - B - N - 10 - 0 - G

SIGLA - CODE	TIPO - TYPE	DESCRIZIONE - DESCRIPTION	PAGINA - PAGE
1SP	Tipo pompa <i>Pump type</i>	Pompa singola - gruppo 1 <i>Single pump - group 1</i>	4
A	Materiale flangia e coperchio <i>Flange and cover material</i>	A = alluminio / <i>aluminium</i>	
020	Cilindrata <i>Displacement</i>	Cilindrata = 2 cm ³ /giro <i>Displacement = 0.12 in³/rev</i>	4
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 europea standard <i>Standard European flange</i>	26
B	Tipo anello di tenuta <i>Seal ring type</i>	Vedi tabella compatibilità <i>See compatibility table</i>	
N	Tipo guarnizione <i>Gasket type</i>	N = NBR V = Viton	27
10	Tipo Albero <i>Shaft type</i>	Vedi tabella compatibilità <i>See compatibility table</i>	
0	Posizione connessione <i>Connection position</i>	Vedi tabella compatibilità <i>See compatibility table</i>	30
G	Tipo connessione <i>Connection type</i>	Vedi tabella compatibilità <i>See compatibility table</i>	



POMPE AD INGRANAGGI GRUPPO 1SP
GEAR PUMPS GROUP 1SP
TIPOLOGIA FLANGIA • FLANGE TYPE

	EUR	SAEAA	MC32	E32BX - E32BC	E32CX - E32CC
1SP					
A alluminio-aluminium	◇	◇	◇	◇	◇
G ghisa-cast iron	non disponibile not available	non disponibile not available	non disponibile not available	non disponibile not available	non disponibile not available

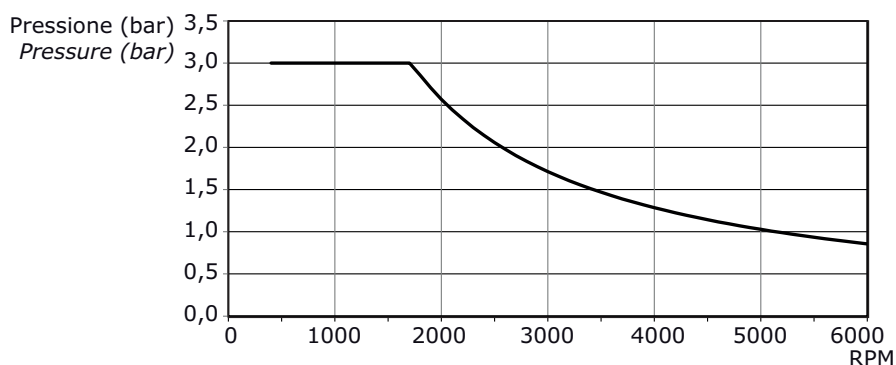
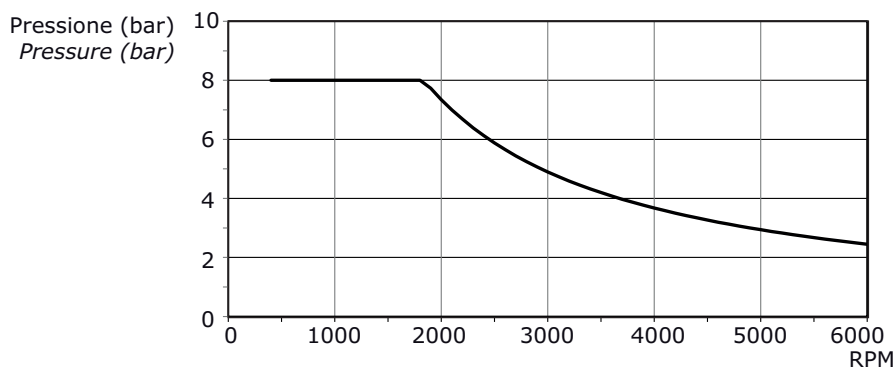
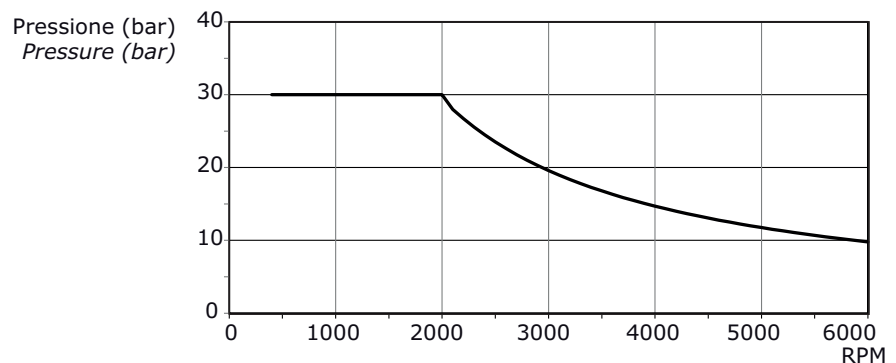
◇ = Combinazione standard - Standard combination

ANELLO DI TENUTA • SEAL RING

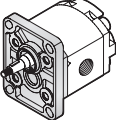
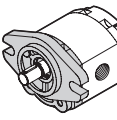
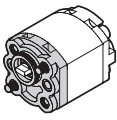
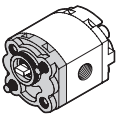
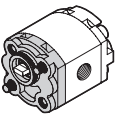
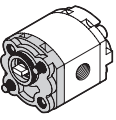
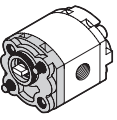
SIGLA - CODE	TIPO - TYPE	DIAGRAMMA - DIAGRAM
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A Flangia senza anello di tenuta
 Flange without seal ring

/

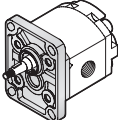
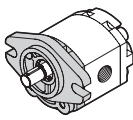
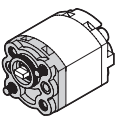
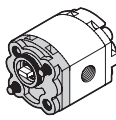
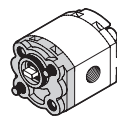
B Anello di tenuta fino a **3** bar
 Sealing ring up to **3** bar

H Anello di tenuta fino a **8** bar
 Sealing ring up to **8** bar

K Anello di tenuta fino a **30** bar
 Sealing ring up to **30** bar


POMPE AD INGRANAGGI GRUPPO 1SP
GEAR PUMPS GROUP 1SP
COMBINAZIONE FLANGIA - ANELLO DI TENUTA - GUARNIZIONE • FLANGE - SEAL RING - GASKET COMBINATION

1SP		EUR			SAEAA			MC32			E32BX		E32BC		E32CX		E32CC	
																		
		Anello - seal ring			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	A		B	K	A		B	K
NBR	N	◊	◊	◊	◊	◊	◊	◊	◊		◊	◊	●		◊	◊	●	
Viton	V	●	●	●	●	●	●	●	●		●	●	●		●	●	●	

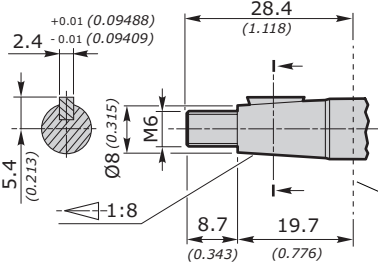
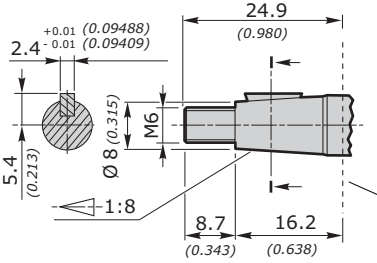
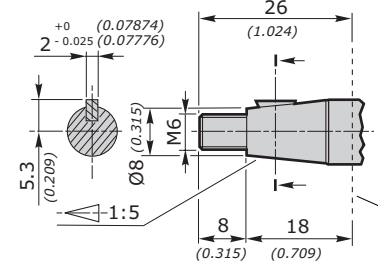
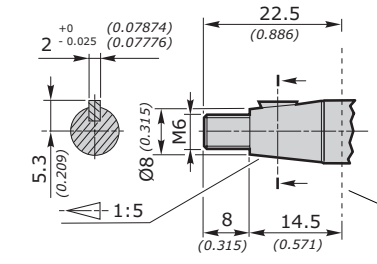
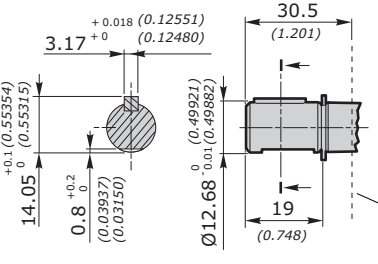
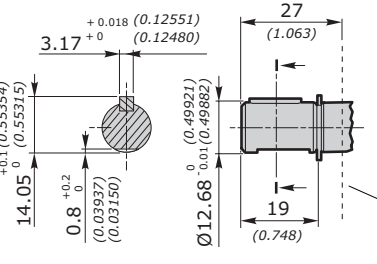
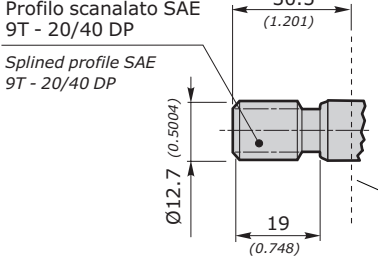
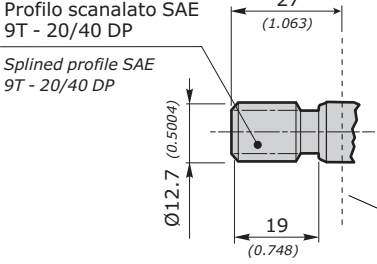
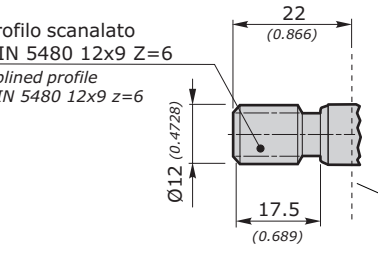
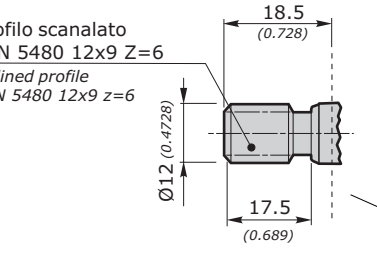
esempio • example:

1SP - A - 020 - 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 ALBERO - FLANGIA • SHAFT - FLANGE COMBINATION

1SP	EUR	SAEAA	MC32	E32BX-E32BC	E32CX-E32CC
					
10 Conico 1:8 <i>Tapered 1:8</i>	◇	●	●		
11 Conico 1:5 <i>Tapered 1:5</i>	●	●	●		
13 Cilindrico SAEAA <i>Parallel shaft SAEAA</i>	●	◇			
14 Scanalato SAEAA 9T <i>SAEAA 9T splined</i>	●	◇			
15 Scanalato DIN 5480 6T 12x9 <i>DIN 5480 Splined</i>	●	●	●		
17 Fresato a dente frontale <i>Dihedral claw</i>				◇	◇
27 Fresato a dente frontale (con anello) <i>Dihedral claw (with sealing ring)</i>	●	●	◇		

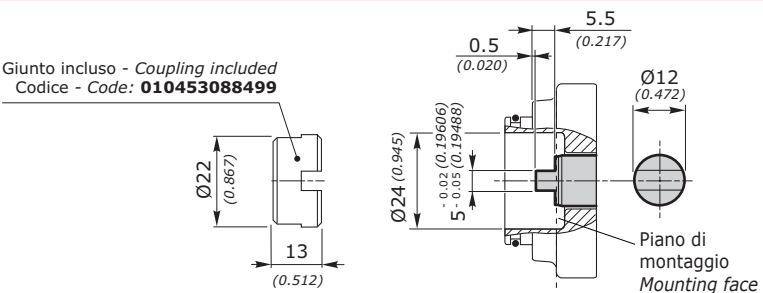
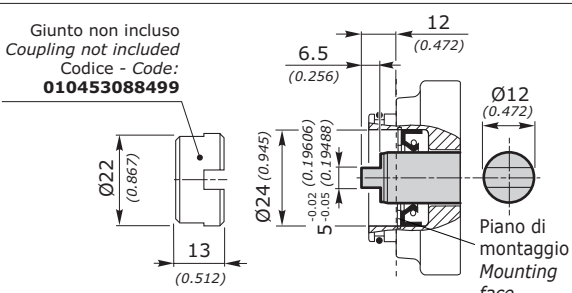
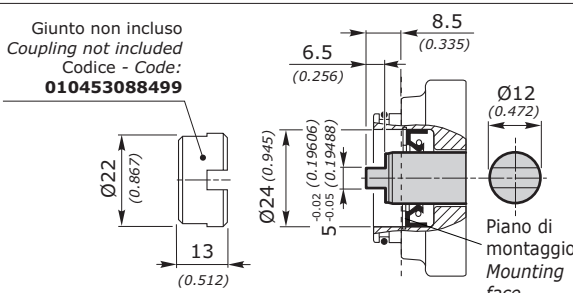
◇ = Combinazione standard - *Standard combination*● = Combinazione disponibile - *Available combination*

POMPE AD INGRANAGGI GRUPPO 1SP
GEAR PUMPS GROUP 1SP
1SP
DIMENSIONI ALBERO - SHAFT DIMENSIONS

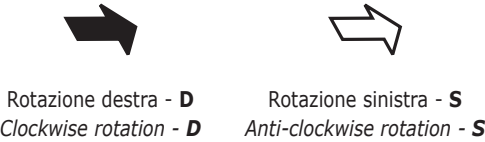
10 Conico 1:8 <i>Tapered 1:8</i> Coppia 30 Nm <i>Torque 22 ft-lbs</i>	 Disponibile per - available for: EUR - MC32	 Disponibile per - available for: SAEAA
11 Conico 1:5 <i>Tapered 1:5</i> Coppia 30 Nm <i>Torque 22 ft-lbs</i>	 Disponibile per - available for: EUR - MC32	 Disponibile per - available for: SAEAA
13 Cilindrico SAEAA <i>Parallel shaft SAEAA</i> Coppia 35 Nm <i>Torque 26 ft-lbs</i>	 Disponibile per - available for: EUR	 Disponibile per - available for: SAEAA
14 Scanalato SAEAA 9T SAEAA <i>9T splined</i> Coppia 40 Nm <i>Torque 30 ft-lbs</i>	 Disponibile per - available for: EUR	 Disponibile per - available for: SAEAA
15 Scanalato DIN 5480 6T 12x9 DIN 5480 <i>splined</i> Coppia 30 Nm <i>Torque 22 ft-lbs</i>	 Disponibile per - available for: EUR - MC32	 Disponibile per - available for: SAEAA

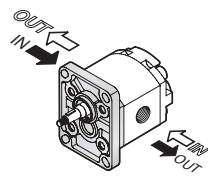
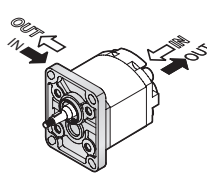
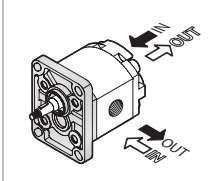
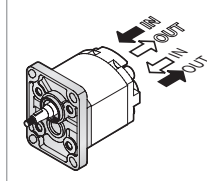
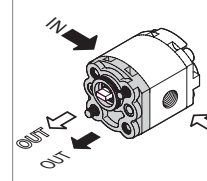
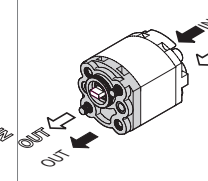
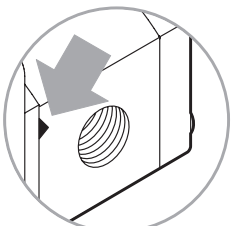
POMPE AD INGRANAGGI **GRUPPO 1SP**

GEAR PUMPS **GROUP 1SP**

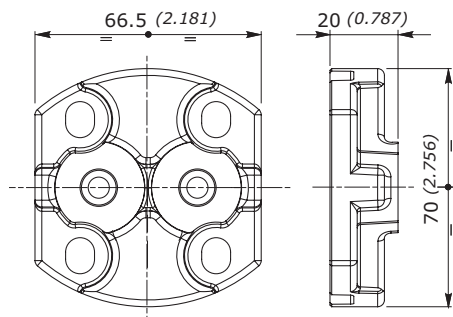
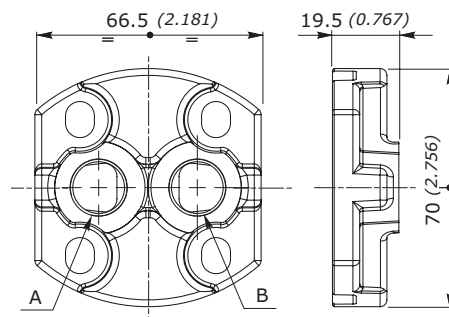
1SP	DIMENSIONI ALBERO - SHAFT DIMENSIONS	
17 Fresato a dente frontale <i>Dihedral claw</i> Coppia 25 Nm Torque 19 ft-lbs	Giunto incluso - Coupling included Codice - Code: 010453088499  Disponibile per - available for: E32BX - E32BC - E32CX - E32CC	
27 Fresato a dente frontale (con anello) <i>Dihedral claw (with sealing ring)</i> Coppia 25 Nm Torque 19 ft-lbs	Giunto non incluso Coupling not included Codice - Code: 010453088499  Disponibile per - available for: EUR - MC32	Giunto non incluso Coupling not included Codice - Code: 010453088499  Disponibile per - available for: SAEAA

POSIZIONE CONNESSIONE • CONNECTION POSITION



0	1	3	4	2 (per - for MC32)	5 (per - for MC32)
					
 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					

POMPE AD INGRANAGGI GRUPPO 1SP
GEAR PUMPS GROUP 1SP
COPERCHIO STANDARD • STANDARD COVER

 Per posizioni **0 e 2**
 For position **0 and 2**

 Per posizioni **1, 3, 4 e 5**
 For position **1, 3, 4 e 5**


CONNESSIONI / CONNECTION		
	A	B
GAS	G 3/8	G 3/8
SAE	SAE 6	SAE 6

TIPO CONNESSIONE • CONNECTION TYPE

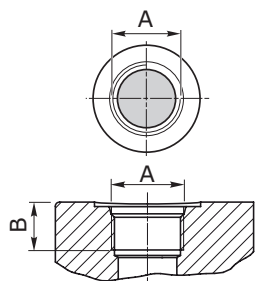
 Le connessioni rappresentate corrispondono alle versioni standard;
 per connessioni differenti, contattare il nostro Ufficio Commerciale.

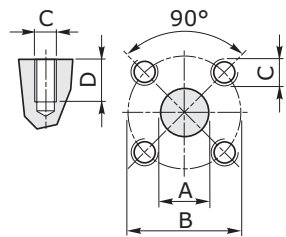
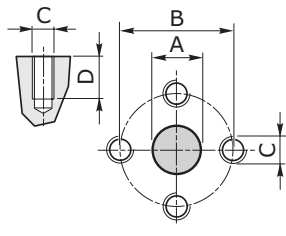
 The connection types shown correspond to standard configurations;
 for different applications contact our Commercial Dept.

1SP		POSIZIONE CONNESSIONE - CONNECTION POSITION					
		0	1	3	4	2	5
GAS	G	◇	◇	◇	◇	◇	◇
UNF	U	◇	◇	◇	◇	◇	◇
FLANGIATE	T	◇				◇	
FLANGED	N	◇				◇	

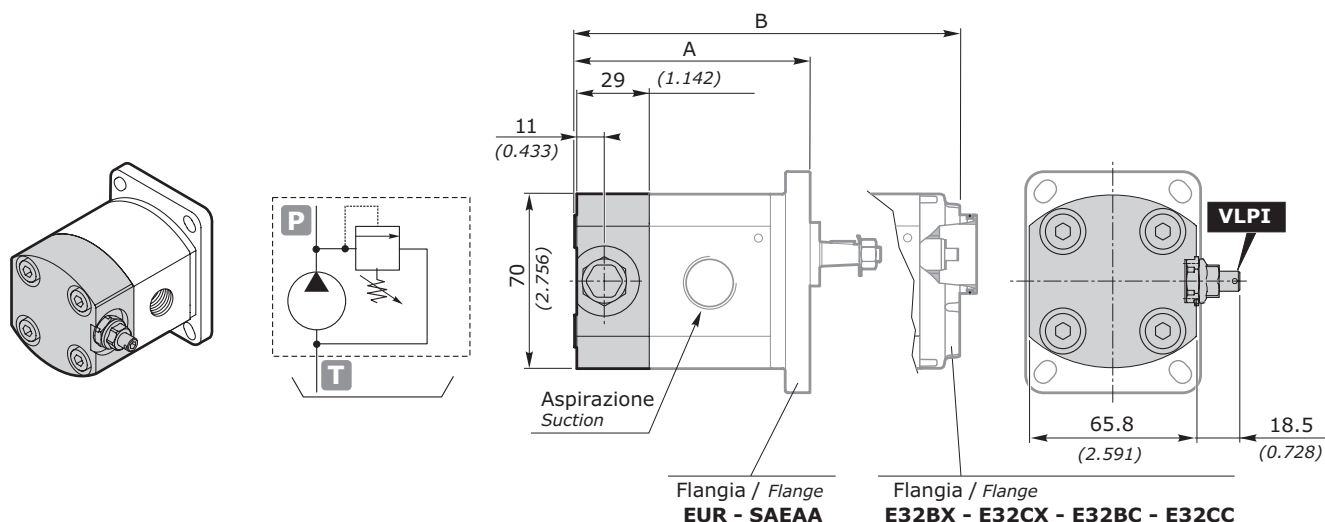
GAS	UNI ISO 228/1	SIGLA CODE	CIL. DISPL.	ASPIRAZIONE - SUCTION IN			MANDATA - DELIVERY OUT		
				A	B		A	B	
		G	009	G 3/8"	14 [mm] 0.552 [inch]	40 [Nm] 354 [in.lbs]	G 3/8"	14 [mm] 0.552 [inch]	40 [Nm] 354 [in.lbs]
			012						
			016						
			020						
			025						
			032						
			037						
			042						
			050						
			063						
			078						
			098						

POMPE AD INGRANAGGI GRUPPO 1SP
GEAR PUMPS GROUP 1SP

UNF	ANSI/ASME B1.1	SIGLA CODE	CIL. DISPL.	ASPIRAZIONE - SUCTION IN			MANDATA - DELIVERY OUT		
				A	B		A	B	
		U	009	SAE 6 9/16"-18 UNF	13 [mm] 0.512 [inch]	40 [Nm] 354 [in.lbs]	SAE 6 9/16"-18 UNF	13 [mm] 0.512 [inch]	40 [Nm] 354 [in.lbs]
			012						
			016						
			020						
			025	SAE 8 3/4"-14 UNF	15 [mm] 0.591 [inch]	50 [Nm] 443 [in.lbs]	SAE 8 3/4"-14 UNF	15 [mm] 0.591 [inch]	50 [Nm] 443 [in.lbs]
			032						
			037						
			042						
			050						
			063						
			078						
			098						

FLANGIATE FLANGED	ISO/R 262	SIGLA CODE	CIL. DISPL.	ASPIRAZIONE - SUCTION IN					MANDATA - DELIVERY OUT				
				A	B	C	D		A	B	C	D	
		T	009	12 [mm] 0.472 [inch]	30 [mm] 1.181 [inch]	M6	13 [mm] 0.512 [inch]	8 [Nm] 71 [in.lbs]	12 [mm] 0.472 [inch]	30 [mm] 1.181 [inch]	M6	13 [mm] 0.512 [inch]	8 [Nm] 71 [in.lbs]
			012										
			016										
			020										
			025										
			032										
			037										
			042										
			050										
			063										
			078										
			098										
		N	009	10 [mm] 0.394 [inch]	26 [mm] 1.024 [inch]	M5	11 [mm] 0.433 [inch]	7 [Nm] 62 [in.lbs]	10 [mm] 0.394 [inch]	26 [mm] 1.024 [inch]	M5	11 [mm] 0.433 [inch]	7 [Nm] 62 [in.lbs]
			012										
			016										
			020										
			025	13 [mm] 0.512 [inch]	30 [mm] 1.181 [inch]	M6	11 [mm] 0.433 [inch]	8 [Nm] 71 [in.lbs]	13 [mm] 0.512 [inch]	30 [mm] 1.181 [inch]	M6	11 [mm] 0.433 [inch]	8 [Nm] 71 [in.lbs]
			032										
			037										
			042										
			050										
			063										
			078										
			098										

POMPE AD INGRANAGGI GRUPPO 1SP
GEAR PUMPS GROUP 1SP
OPZIONI • OPTIONS
VLPI

 VALVOLA LIMITATRICE DI PRESSIONE A SCARICO INTERNO
 PRESSURE RELIEF VALVE WITH INTERNAL EXHAUST


GRUPPO GROUP 1	A EUR		A SAEAA		B E32BX - E32CX E32BC - E32CC	
	mm	inch	mm	inch	mm	inch
1SP 009	82.6	3.252	86.1	3.390	82.6	3.252
1SP 012	83.7	3.295	87.2	3.433	83.7	3.295
1SP 016	85.4	3.362	88.9	3.500	85.4	3.362
1SP 020	86.9	3.421	90.4	3.559	86.9	3.421
1SP 025	88.9	3.500	92.4	3.638	88.9	3.500
1SP 032	91.6	3.606	95.1	3.744	91.6	3.606
1SP 037	93.6	3.685	97.1	3.823	93.6	3.685
1SP 042	95.5	3.760	99.0	3.898	95.5	3.760
1SP 050	98.6	3.882	102.1	4.020	98.6	3.882
1SP 063	103.7	4.083	107.2	4.220	103.7	4.083
1SP 078	109.4	4.307	112.9	4.445	109.4	4.307
1SP 098	117.3	4.618	120.8	4.756	117.3	4.618

ATTENZIONE:

La valvola limitatrice di pressione si applica sostituendo il coperchio posteriore (previsto solo scarico interno).
 Il corpo VLP è disponibile in alluminio.

L'apertura della valvola limitatrice di pressione deve avvenire per tempi non superiori ai 10 secondi ogni minuto, per evitare il surriscaldamento della pompa.

WARNING:

The pressure relief valve can be applied by substituting the rear cover (only internal relief is set).
 VLP cover is available in aluminum.

The opening of the pressure relief valve should be carried out for times not over 10" each minute, to avoid the overheating of the pump.

esempio • example: **1SP - A - 020 - D - EUR - B - N - 10 - 0 - G - VLPI (N 120)**

VLPI = Coperchio con VPL a scarico interno / Cover with VPL with internal exhaust

N = Tipo molla - vedi tabella / Spring type - see table

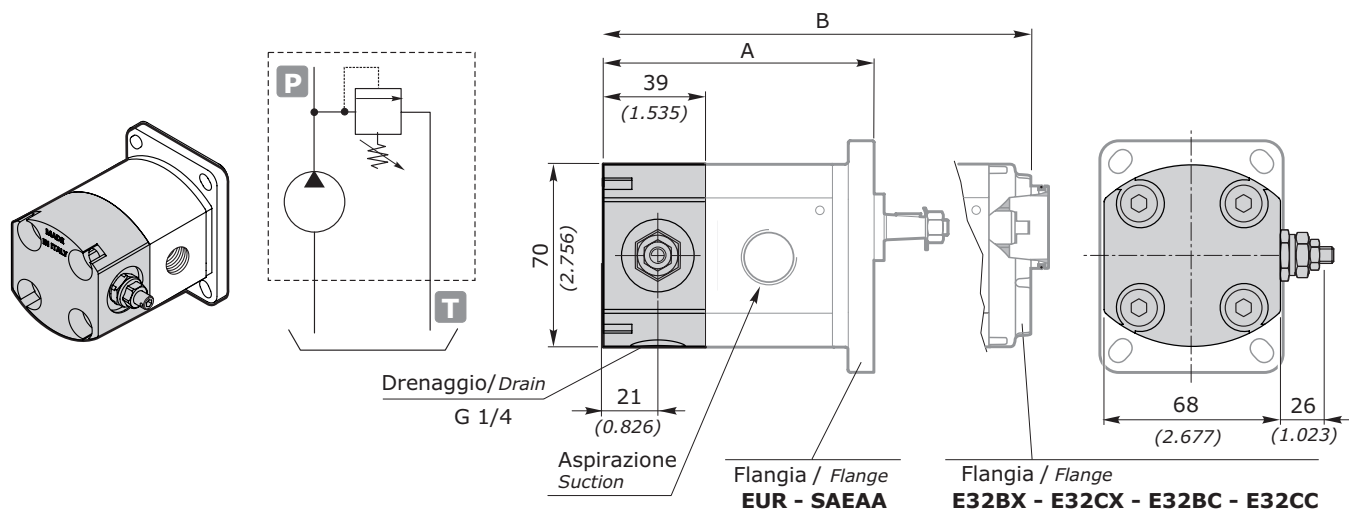
120 = Taratura - vedi tabella / Setting - see table

TIPO - TYPE	CAMPI DI TARATURE - CALIBRATION FIELDS					
	molla bianca - <i>white spring</i>	B	molla nera - <i>black spring</i>	N	molla rossa - <i>red spring</i>	R
bar	30 ÷ 80		81 ÷ 200		201 ÷ 350	
psi	435 ÷ 1160		1175 ÷ 2900		2915 ÷ 5075	
STANDARD	70 bar (1015 psi)		150 bar (2175 psi)		250 bar (3625 psi)	

NOTA: In caso di omissione del valore di taratura, esso sarà inteso standard (vedi tabella).

NOTE: Without setting request, it will be considered standard (see table).

POMPE AD INGRANAGGI GRUPPO 1SP
GEAR PUMPS GROUP 1SP
VLPE

 VALVOLA LIMITATRICE DI PRESSIONE A SCARICO ESTERNO
 PRESSURE RELIEF VALVE WITH EXTERNAL EXHAUST


GRUPPO GROUP 1	A		A		B	
	EUR		SAEAA		E32BX - E32CX E32BC - E32CC	
	mm	inch	mm	inch	mm	inch
1SP 009	92.6	3.645	96.1	3.783	92.6	3.645
1SP 012	93.7	3.688	97.2	3.826	93.7	3.688
1SP 016	95.4	3.755	98.9	3.893	95.4	3.755
1SP 020	96.9	3.814	100.4	3.952	96.9	3.814
1SP 025	98.9	3.893	102.4	4.031	98.9	3.893
1SP 032	101.6	4	105.1	4.137	101.6	4
1SP 037	103.6	4.078	107.1	4.216	103.6	4.078
1SP 042	105.5	4.153	109.0	4.291	105.5	4.153
1SP 050	108.6	4.275	112.1	4.413	108.6	4.275
1SP 063	113.7	4.476	117.2	4.614	113.7	4.476
1SP 078	119.4	4.7	122.9	4.838	119.4	4.7
1SP 098	127.3	5.011	130.8	5.149	127.3	5.011

La valvola limitatrice di pressione si applica sostituendo il coperchio posteriore. Il coperchio VLP è disponibile in alluminio. E' rappresentata una pompa con rotazione destra. Nelle pompe con rotazione sinistra, la valvola è dal lato opposto.

The pressure relief valve can be applied by substituting the rear cover. VLP cover is available in aluminum. The showed pump is with clockwise rotation. In the case of pumps with anticlockwise rotation, the valve is on the opposite side.

esempio • example: **1SP - A - 020 - D - EUR - B - N - 10 - 0 - G - VLPE (N 120)**

VLPE = Coperchio con VPL a scarico esterno / Cover with VPL with external exhaust

N = Tipo molla - vedi tabella / Spring type - see table

120 = Taratura - vedi tabella / Setting - see table

TIPO - TYPE	CAMPI DI TARATURE - CALIBRATION FIELDS					
	molla bianca - white spring	B	molla nera - black spring	N	molla rossa - red spring	R
bar	30 ÷ 80		81 ÷ 200		201 ÷ 350	
psi	435 ÷ 1160		1175 ÷ 2900		2915 ÷ 5075	
STANDARD	70 bar (1015 psi)		150 bar (2175 psi)		250 bar (3625 psi)	

NOTA: In caso di omissione del valore di taratura, esso sarà inteso standard (vedi tabella).

NOTE: Without setting request, it will be considered standard (see table).