

**SERIE LEGGERA**  
**LIGHT DUTY**

Gruppo 2 / Group 2

- **NPLA**  
 13 DIN - 3 fori attacchi posteriori / 13 DIN - 3 holes rear ports ..... pag. 03  
 4 fori ISO attacchi posteriori / 4 holes ISO rear ports ..... pag. 07
- **NPLU**  
 13 DIN - 3 fori attacchi posteriori e laterali / 13 DIN - 3 holes rear and side ports ..... pag. 11  
 4 fori ISO attacchi posteriori e laterali / 4 holes ISO rear and side ports ..... pag. 15
- **NPLH**  
 13 DIN - 3 fori / 13 DIN - 3 holes ..... pag. 23  
 ISO 4 fori / ISO 4 holes ..... pag. 27  
 13 DIN 1^ pompa tandem / 13 DIN 1^ pump tandem ..... pag. 101
- **KIPP**  
 3 fori - 13 DIN utilizzi posteriori / 3 holes - 13 DIN rear ports ..... pag. 19

**SERIE MEDIO LEGGERA**  
**MEDIUM-LIGHT DUTY**

Gruppo 2.5 / Group 2.5

- **NPK**  
 UNI 3 fori / UNI 3 holes ..... pag. 31

**SERIE MEDIA**  
**MEDIUM DUTY**

Gruppo 3 / Group 3

- **NPH**  
 UNI 3 fori / UNI 3 holes ..... pag. 35  
 UNI THIN 3 fori / UNI THIN 3 holes ..... pag. 41  
 UNI 1^ pompa tandem / UNI 1^ pump tandem ..... pag. 105
- **NPH**  
 ISO 4 fori / ISO 4 holes ..... pag. 45  
 ISO SHORT 4 fori / ISO SHORT 4 holes ..... pag. 63  
 ISO SHORT THIN ..... pag. 67  
 ISO 1^ pompa tandem / ISO 1^ pump tandem ..... pag. 111
- **LTH**  
 UNI 3 fori / UNI 3 holes ..... pag. 51  
 DIN 5482 Z13 - 3 fori / DIN 5482 Z13 - 3 holes ..... pag. 55  
 ISO 4 fori / ISO 4 holes ..... pag. 59

**SERIE MEDIO PESANTE**  
**MEDIUM-HEAVY DUTY**

Gruppo 3.5 / Group 3.5

- **LTMH**  
 UNI 3 fori / UNI 3 holes ..... pag. 71  
 ISO 4 fori / ISO 4 holes ..... pag. 75  
 ISO SHORT 4 fori / ISO SHORT 4 holes ..... pag. 79

**SERIE PESANTE**  
**HEAVY DUTY**

Gruppo 4 / Group 4

- **NPGH**  
 UNI 3 fori / UNI 3 holes ..... pag. 83  
 UNI 1^ pompa tandem / UNI 1^ pump tandem ..... pag. 117
- **NPGH**  
 ISO 4 fori / ISO 4 holes ..... pag. 87  
 ISO SHORT 4 fori / ISO SHORT 4 holes ..... pag. 91  
 ISO 1^ pompa tandem / ISO 1^ pump tandem ..... pag. 123  
 ISO SHORT 1^ pompa tandem / ISO SHORT 1^ pump tandem ..... pag. 129  
 ISO H-D 1^ pompa tandem / ISO H-D 1^ pump tandem ..... pag. 135
- **LTGH**  
 ISO 4 fori / ISO 4 holes ..... pag. 95

**ACCESSORI**  
**ACCESSORIES**

**KIT RACCORDI**  
**PUMP FITTINGS**

pag. 139

Алматы (7273)495-231  
 Ангарск (3955)60-70-56  
 Архангельск (8182)63-90-72  
 Астрахань (8512)99-46-04  
 Барнаул (3852)73-04-60  
 Белгород (4722)40-23-64  
 Благовещенск (4162)22-76-07  
 Брянск (4832)59-03-52  
 Владивосток (423)249-28-31  
 Владикавказ (8672)26-90-48  
 Владимир (4922)49-43-18  
 Волгоград (844)278-03-48  
 Вологда (8172)26-41-59  
 Воронеж (473)204-51-73  
 Екатеринбург (343)384-55-89

Иваново (4932)77-34-06  
 Ижевск (3412)26-03-58  
 Иркутск (395)279-98-46  
 Казань (843)206-01-48  
 Калининград (4012)72-03-81  
 Калуга (4842)92-23-67  
 Кемерово (3842)65-04-62  
 Киров (8332)68-02-04  
 Коломна (4966)23-41-49  
 Кострома (4942)77-07-48  
 Краснодар (861)203-40-90  
 Красноярск (391)204-63-61  
 Курск (4712)77-13-04  
 Курган (3522)50-90-47  
 Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13  
 Москва (495)268-04-70  
 Мурманск (8152)59-64-93  
 Набережные Челны (8552)20-53-41  
 Нижний Новгород (831)429-08-12  
 Новокузнецк (3843)20-46-81  
 Ноябрьск (3496)41-32-12  
 Новосибирск (383)227-86-73  
 Омск (3812)21-46-40  
 Орел (4862)44-53-42  
 Оренбург (3532)37-68-04  
 Пенза (8412)22-31-16  
 Петрозаводск (8142)55-98-37  
 Псков (8112)59-10-37  
 Пермь (342)205-81-47

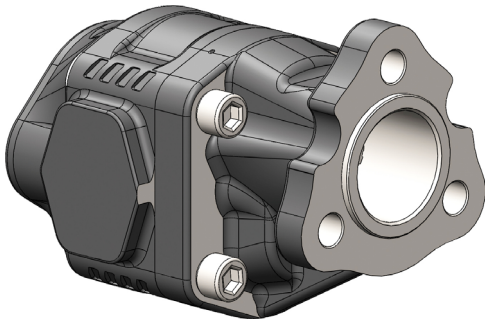
Ростов-на-Дону (863)308-18-15  
 Рязань (4912)46-61-64  
 Самара (846)206-03-16  
 Санкт-Петербург (812)309-46-40  
 Саратов (845)249-38-78  
 Севастополь (8692)22-31-93  
 Саранск (8342)22-96-24  
 Симферополь (3652)67-13-56  
 Смоленск (4812)29-41-54  
 Сочи (862)225-72-31  
 Ставрополь (8652)20-65-13  
 Сургут (3462)77-98-35  
 Сыктывкар (8212)25-95-17  
 Тамбов (4752)50-40-97  
 Тверь (4822)63-31-35

Тольятти (8482)63-91-07  
 Томск (3822)98-41-53  
 Тула (4872)33-79-87  
 Тюмень (3452)66-21-18  
 Ульяновск (8422)24-23-59  
 Улан-Удэ (3012)59-97-51  
 Уфа (347)229-48-12  
 Хабаровск (4212)92-98-04  
 Чебоксары (8352)28-53-07  
 Челябинск (351)202-03-61  
 Череповец (8202)49-02-64  
 Чита (3022)38-34-83  
 Якутск (4112)23-90-97  
 Ярославль (4852)69-52-93

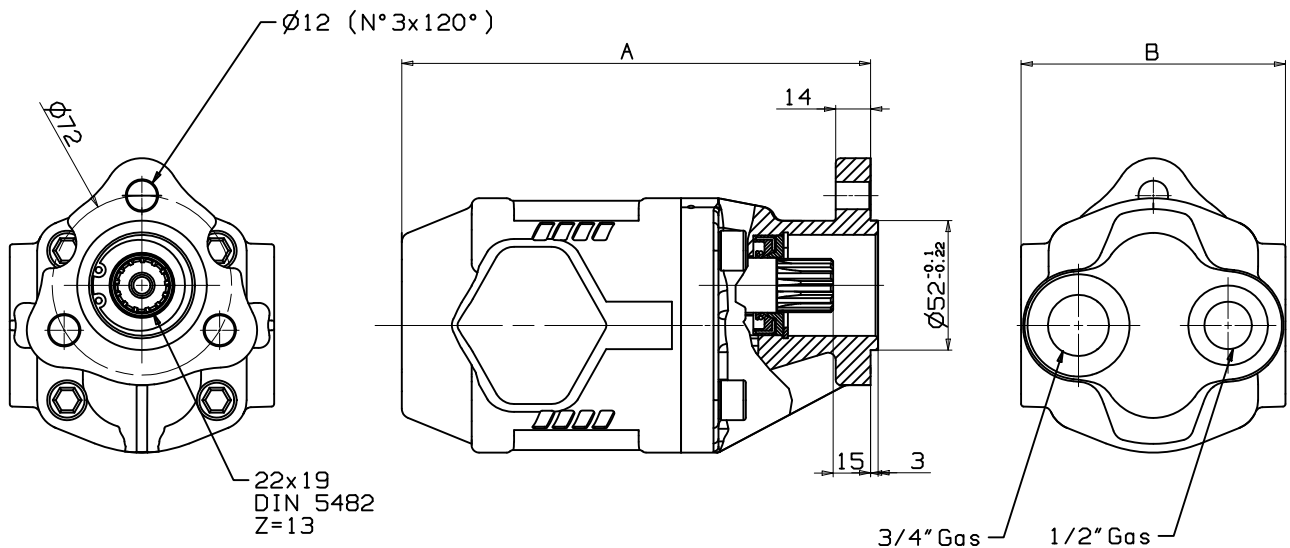
Россия +7(495)268-04-70

Казахстан +7(7172)727-132

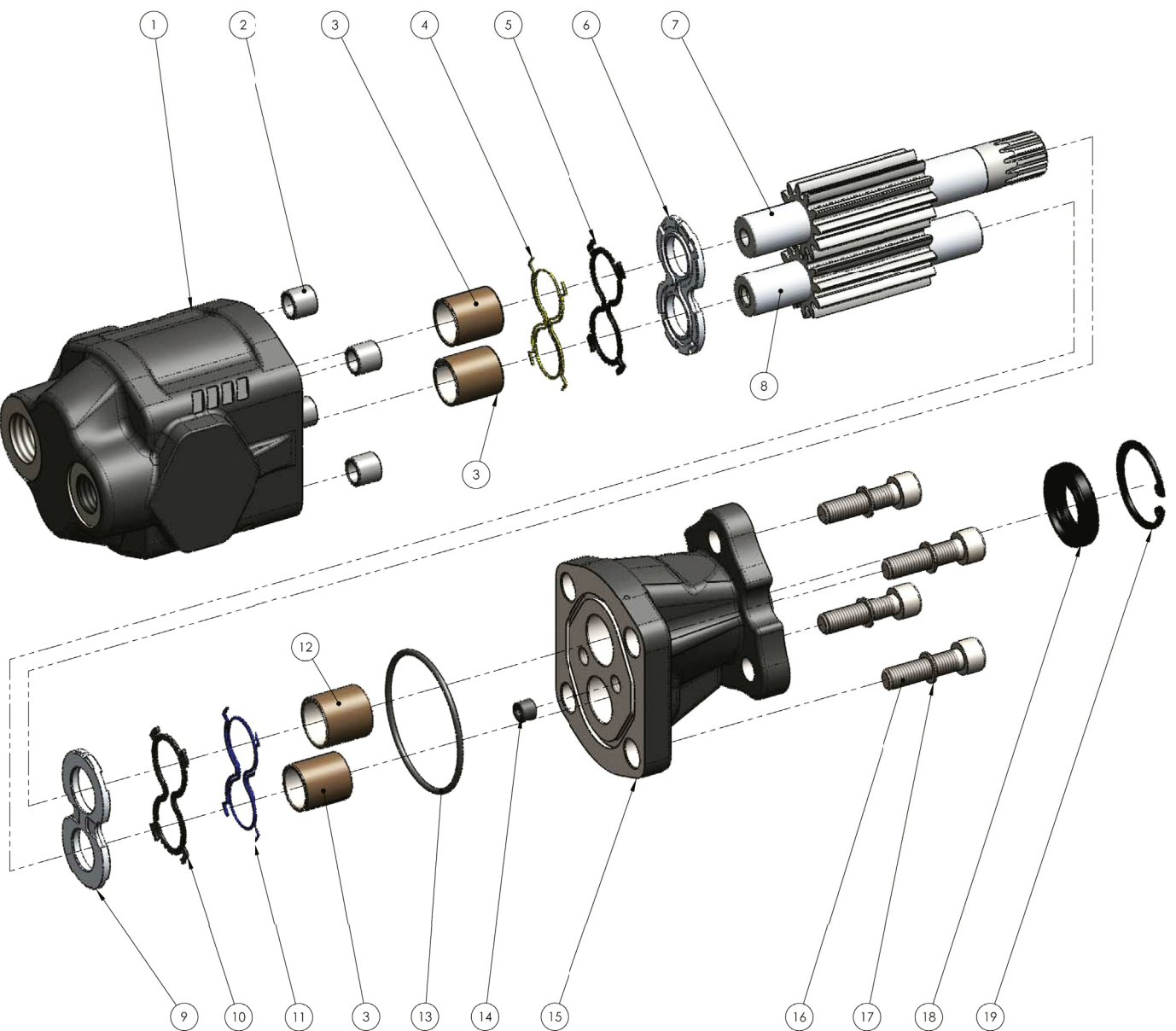
Киргизия +996(312)96-26-47



Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>	VI > 100	Temperatura di esercizio <i>Working temperature</i>			
		-15°C +100°C			
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Rotazione <i>Rotation</i>		IN	OUT	A	B	Peso <i>Weight</i>
	<i>Destra / Right</i>	<i>Sinistra / Left</i>					
<b>NPLA-06</b>	10500300078	10500300069	G 3/4	G 1/2	132	98	5
<b>NPLA-10</b>	10500300111	10500300102			138		5.2
<b>NPLA-12</b>	10500300139	10500300120			144		5.2
<b>NPLA-14</b>	10500300157	10500300148			147,5	102	5.4
<b>NPLA-16</b>	10500300175	10500300166			154		5.6
<b>NPLA-20</b>	10500300219	10500300200			162		5.9
<b>NPLA-25</b>	10500300264	10500300255			173		6.5
<b>NPLA-32</b>	10500300335	10500300326			188	106	7
<b>NPLA-40</b>	10500300415	10500300406					7.5



Kit guarnizioni / Seal Kit	
4	10590000553
5	
10	
11	
13	
18	



Pompe ad ingranaggi 3 fori - 13 DIN utilizzi posteriori  
 3 holes - 13 DIN gear pumps with rear ports  
**NPLA 13 DIN**

Fam. 105003

N°	06	10	12	14	16	20	25	32	40	Codice/Code	Descrizione / Description	Q.
1	.									51702700067	Corpo pompa Gear housing	1
		.								51702700101		
			.							51702700129		
				.						51702700147		
					.					51702700165		
						.				51702700209		
							.			51702700254		
								.		51702700325		
								.	51702700405			
2	.	.	.	.	.	.	.	.	.	50100300282	Spine forate di centraggio 14x12.5 Pins 14x12.5	4
3	.	.	.	.	.	.	.	.	.	53300400122	Boccola autolub. 20x23x20 Bushing 20x23x20	3
									.	53300400239	Boccola autolub. 20x23x25 Bushing 20x23x25	
4	.	.	.	.	.	.	.	.	.	50600002390	Guarnizione antiestrusione Back-up ring	1
5	.	.	.	.	.	.	.	.	.	50600002381	Guarnizione per rasamento Thrust plate seal	1
6	.	.	.	.	.	.	.	.	.	51001000275	Rasamento ad occhiale Thrust plate	1
7	.									52301500068	Albero dentato conduttore Drive shaft	1
		.								52301500102		
			.							52301500120		
				.						52301500148		
					.					52301500166		
						.				52301500200		
							.			52301500255		
								.		52301500326		
								.	52301500406			
8	.									52301500077	Albero dentato condotto Driven shaft	1
		.								52301500111		
			.							52301500139		
				.						52301500157		
					.					52301500175		
						.				52301500219		
							.			52301500264		
								.		52301500335		
								.	52301500415			
9	.	.	.	.	.	.	.	.	.	51001000266	Rasamento ad occhiale Thrust plate	1
10	.	.	.	.	.	.	.	.	.	50600002336	Guarnizione per rasamento Thrust plate seal	1
11	.	.	.	.	.	.	.	.	.	50600002345	Guarnizione antiestrusione Back-up ring	1
12	.	.	.	.	.	.	.	.	.	53300400113	Boccola autolub. 22x25x25 Bushing 22x25x25	1
13	.	.	.	.	.	.	.	.	.	50600200701	Guarnizione OR O-Ring	1
14	.	.	.	.	.	.	.	.	.	50401000063	Grano conico 1/8" Plug 1/8"	1
15	.	.	.	.	.	.	.	.	.	51800300250	Coperchio anteriore Mounting cover	1
									.	51800300394		
16	.	.	.		.	.	.	.	.	50200400565	Vite TCE M10x35 UNI 5931 Screw M10x35 UNI 5931	4
				.	.	.	.	.	.	50200400574	Vite TCE M10x40 UNI 5931 Screw M10x40 UNI 5931	
17	.	.	.	.	.	.	.	.	.	50102000101	Rondella elastica Schnorr Washer Schnorr	4
18	.	.	.	.	.	.	.	.	.	50602422405	Guarnizione paraolio Oil seal	1
19	.	.	.	.	.	.	.	.	.	50100100373	Anello elastico Circlip	1

**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed  rpm	Velocità max. intermittente Max. intermittent speed  rpm	Velocità min. Min. speed  rpm
		P1	P2	P3			
NPLA-06	6,3	200	220	240	2200	3000	300
NPLA-10	10,062						
NPLA-12	11,92						
NPLA-14	13,8						
NPLA-16	16,035						
NPLA-20	20,123						
NPLA-25	25,154	180	200	220	2000	2800	300
NPLA-32	32,042						
NPLA-40	39,933						

P1=Pressione max.continua  
 P2=Pressione max. intermittente  
 P3=Pressione max. di punta

Max. continuous pressure  
 Max. Intermittent pressure  
 Max. peak pressure

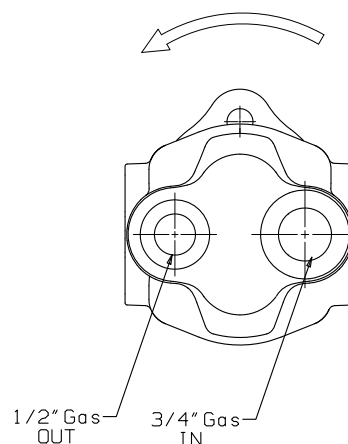
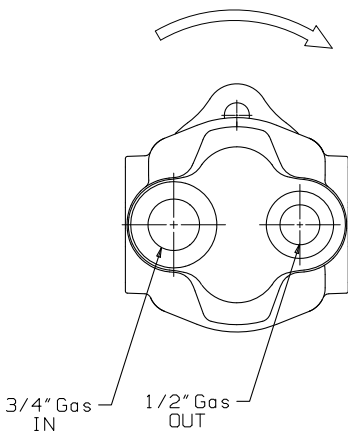
(100%)  
 (20 sec.max.)  
 (6 sec.max)

**IDENTIFICAZIONE ASPIRAZIONE/MANDATA:**

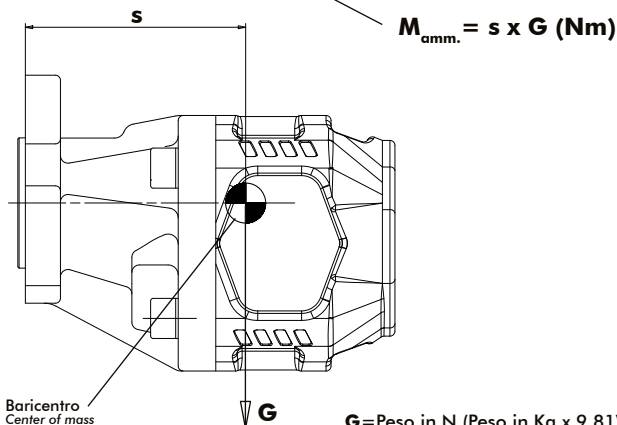
*SUCTION/DELIVERY IDENTIFICATION:*

**Rotazione antioraria, pompa sinistra**  
*Anti-clockwise rotation, left pump*

**Rotazione oraria, pompa destra**  
*Clockwise rotation, right pump*

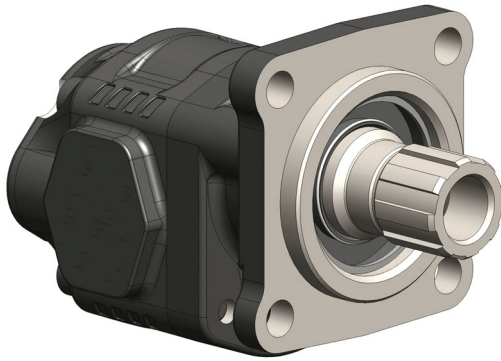


**MOMENTO PESO / MASS MOMENT**

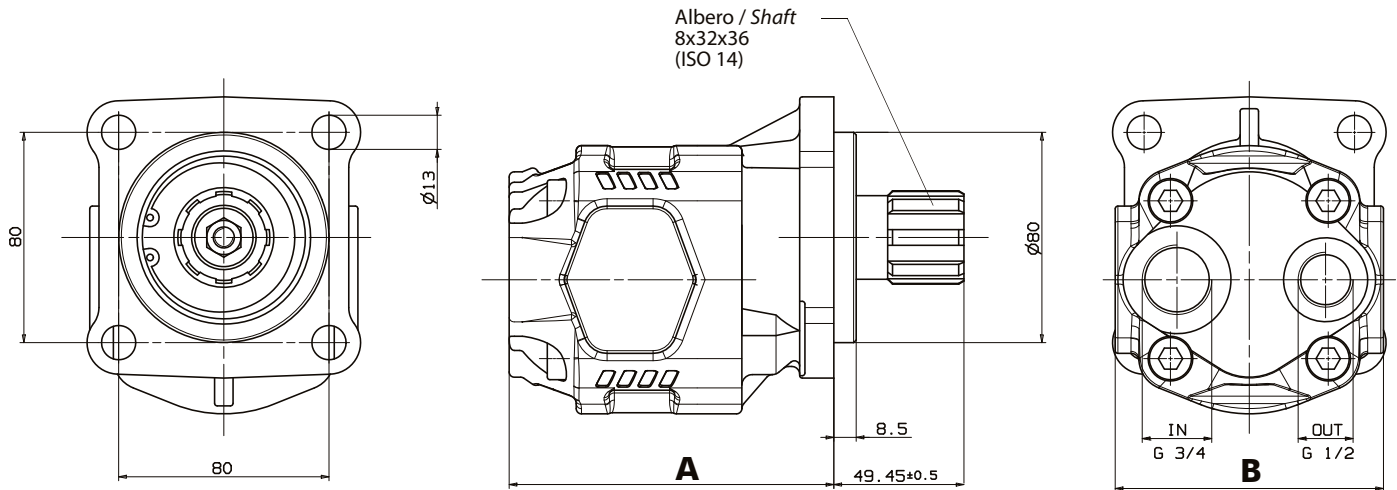


G=Peso in N (Peso in Kg x 9.81)  
 G=Weight in N (Weight in Kg x 9.81)

Tipo pompa - Pump type	S
NPLA-06	82.5
NPLA-10	83
NPLA-12	84
NPLA-14	85.5
NPLA-16	87
NPLA-20	91
NPLA-25	93
NPLA-32	102
NPLA-40	108



Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>		VI > 100	Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

**Ingombro / Dimensions**

**Dati tecnici / Technical data**

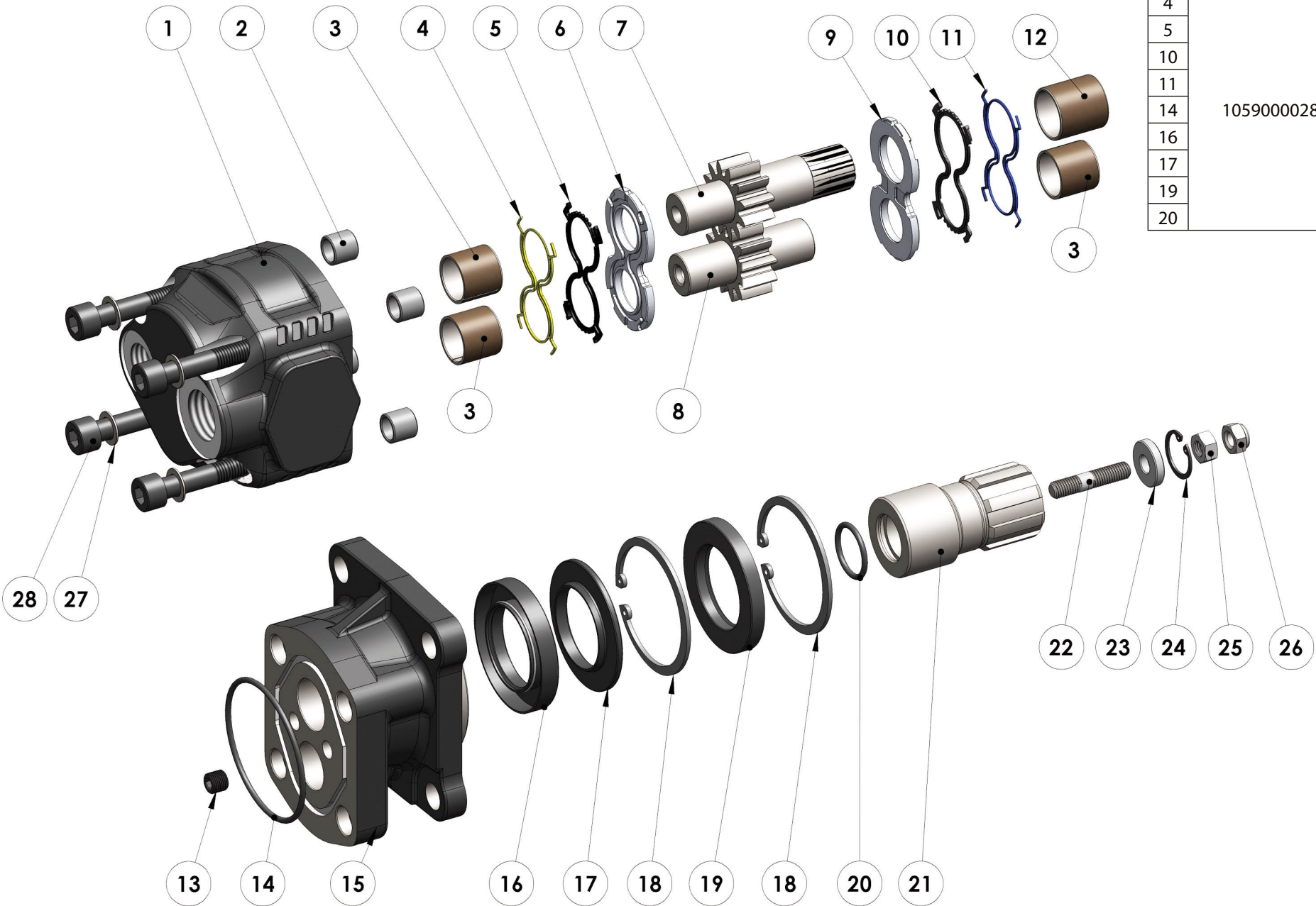
Tipo pompa <i>Pump type</i>	Rotazione <i>Rotation</i>		IN	OUT	A	B	Peso <i>Weight</i>
	<i>Sinistra / Left</i>	<i>Destra / Right</i>					
<b>NPLA-06</b>	10500330062	10500330071	G 3/4	G 1/2	108	98	5.2
<b>NPLA-10</b>	10500330106	10500330115			114		5.8
<b>NPLA-12</b>	10500330124	10500330133			120		6
<b>NPLA-14</b>	10500330142	10500330151			123.5	102	6.7
<b>NPLA-16</b>	10500330160	10500330179			130		7
<b>NPLA-20</b>	10500330204	10500330213			138		7.6
<b>NPLA-25</b>	10500330259	10500330268			149		8.2
<b>NPLA-32</b>	10500330320	10500330339			164	106	9
<b>NPLA-40</b>	10500330400	10500330419					10


**POMPE DA NON UTILIZZARE CON CARICHI ASSIALI E RADIALI SULL'ALBERO**

NO AXIAL AND RADIAL LOADS ALLOWED ON PUMP SHAFT

Kit guarnizioni / Seal Kit

4	10590000286
5	
10	
11	
14	
16	
17	
19	
20	



N°	06	10	12	14	16	20	25	32	40	Codice/Code	Descrizione / Description	Q.	
1	.									51702740069	Corpo pompa Gear housing	1	
		.								51702740103			
			.							51702740121			
				.						51702740149			
					.					51702740167			
						.				51702740201			
							.			51702740256			
								.		51702740327			
								.	51702740407				
2	.	.	.	.	.	.	.	.	.	50100300282	Spine forate di centraggio 14x12.5	Pins 14x12.5	4
3	.	.	.	.	.	.	.	.	.	53300400122	Boccola autolub. 20x23x20	Bushing 20x23x20	3
										53300400239	Boccola autolub. 20x23x25	Bushing 20x23x25	
4	.	.	.	.	.	.	.	.	.	50600002390	Guarnizione antiestrusione	Back-up ring	1
5	.	.	.	.	.	.	.	.	.	50600002381	Guarnizione per rasamento	Thrust plate seal	1
6	.	.	.	.	.	.	.	.	.	51001000275	Rasamento ad occhiale	Thrust plate	1
7	.									52301500068	Albero dentato conduttore Drive shaft	1	
		.								52301500102			
			.							52301500120			
				.						52301500148			
					.					52301500166			
						.				52301500200			
							.			52301500255			
								.		52301500326			
								.	52301500406				
8	.									52301500077	Albero dentato condotto Driven shaft	1	
		.								52301500111			
			.							52301500139			
				.						52301500157			
					.					52301500175			
						.				52301500219			
							.			52301500264			
							.		52301500335				
								.	52301500415				
9	.	.	.	.	.	.	.	.	.	51001000266	Rasamento ad occhiale	Thrust plate	1
10	.	.	.	.	.	.	.	.	.	50600002336	Guarnizione per rasamento	Thrust plate seal	1
11	.	.	.	.	.	.	.	.	.	50600002345	Guarnizione antiestrusione	Back-up ring	1
12	.	.	.	.	.	.	.	.	.	53300400113	Boccola autolub. 22x25x25	Bushing 22x25x25	1
13	.	.	.	.	.	.	.	.	.	50401000063	Grano conico 1/8"	Plug 1/8"	1
14	.	.	.	.	.	.	.	.	.	50600200701	Guarnizione OR	O-Ring	1
15	.	.	.	.	.	.	.	.	.	51800300287	Coperchio anteriore Mounting cover	1	
										51800300401			
16	.	.	.	.	.	.	.	.	.	50602138624	Guarnizione paraolio	Oil seal	1
17	.	.	.	.	.	.	.	.	.	50602238623	Anello schermo paraolio	Ring	1
18	.	.	.	.	.	.	.	.	.	50100100588	Anello elastico	Circlip	2
19	.	.	.	.	.	.	.	.	.	50600738627	Guarnizione paraolio	Oil seal	1
20	.	.	.	.	.	.	.	.	.	50600200176	Guarnizione OR	O-Ring	1
21	.	.	.	.	.	.	.	.	.	11400500227	Manicotto	Coupling	1
22	.	.	.	.	.	.	.	.	.	50300300028	Prigioniero M8x28 UNI 5911	Stud M8x28 UNI 5911	1
23	.	.	.	.	.	.	.	.	.	52900400774	Rondella 8.4x22x4.5	Washer 8.4x22x4.5	1
24	.	.	.	.	.	.	.	.	.	50100100186	Anello elastico 62 I	Circlip 62 I	1
25	.	.	.	.	.	.	.	.	.	50500300033	Dado M8 UNI 5588	Nut M8 UNI 5588	1
26	.	.	.	.	.	.	.	.	.	50501000089	Dado autobloccante M8 UNI 7474	Nut M8 UNI 7474	1
27	.	.	.	.	.	.	.	.	.	50102000101	Rondella elastica	Washer	4
28	.									50200400592	Vite TCE M10x50 UNI 5931 12.9	Screw TCE M10x50 UNI 5931 12.9	4
		.	.							50200400609	Vite TCE M10x55 UNI 5931 12.9	Screw TCE M10x55 UNI 5931 12.9	4
				.	.					50200410652	Vite TCE M10x65 UNI 5931 12.9	Screw TCE M10x65 UNI 5931 12.9	4
					.	.				50200410705	Vite TCE M10x70 UNI 5931 12.9	Screw TCE M10x70 UNI 5931 12.9	4
						.	.			50200410803	Vite TCE M10x80 UNI 5931 12.9	Screw TCE M10x80 UNI 5931 12.9	4
							.	.		50200410901	Vite TCE M10x90 UNI 5931 12.9	Screw TCE M10x90 UNI 5931 12.9	4
								.	50200400690	Vite TCE M10x100 UNI 5931 12.9	Screw TCE M10x100 UNI 5931 12.9	4	



**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed  rpm	Velocità max. intermittente Max. intermittent speed  rpm	Velocità min. Min. speed  rpm
		P1	P2	P3			
		bar	bar	bar			
<b>NPLA-06</b>	6,3	200	220	240	2200	3000	300
<b>NPLA-10</b>	10,062						
<b>NPLA-12</b>	11,92						
<b>NPLA-14</b>	13,8						
<b>NPLA-16</b>	16,035						
<b>NPLA-20</b>	20,123						
<b>NPLA-25</b>	25,154	180	200	220	2000	2800	300
<b>NPLA-32</b>	32,042						
<b>NPLA-40</b>	39,933						

P1=Pressione max.continua  
P2=Pressione max. intermittente  
P3=Pressione max. di punta

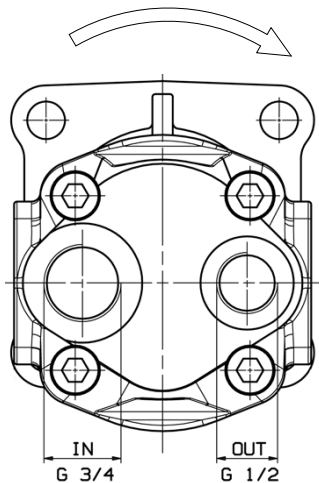
Max. continuous pressure  
Max. Intermittent pressure  
Max. peak pressure

(100%)  
(20 sec.max.)  
(6 sec.max)

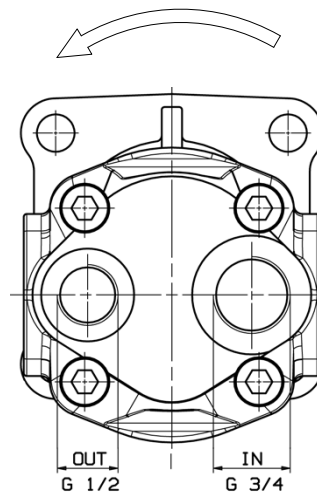
**IDENTIFICAZIONE ASPIRAZIONE/MANDATA:**

SUCTION/DELIVERY IDENTIFICATION:

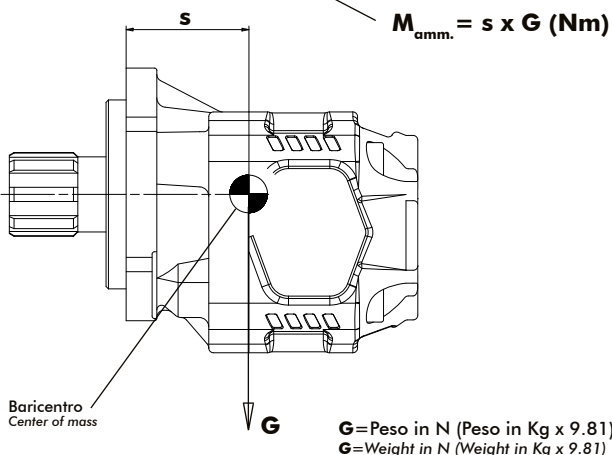
**Rotazione antioraria, pompa sinistra**  
Anti-clockwise rotation, left pump



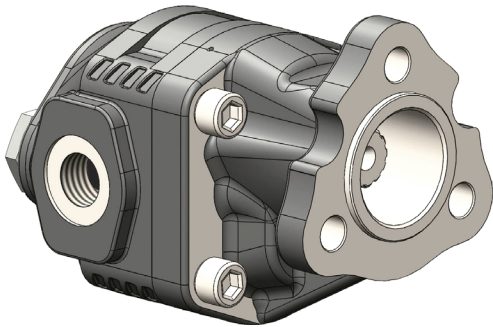
**Rotazione oraria, pompa destra**  
Clockwise rotation, right pump



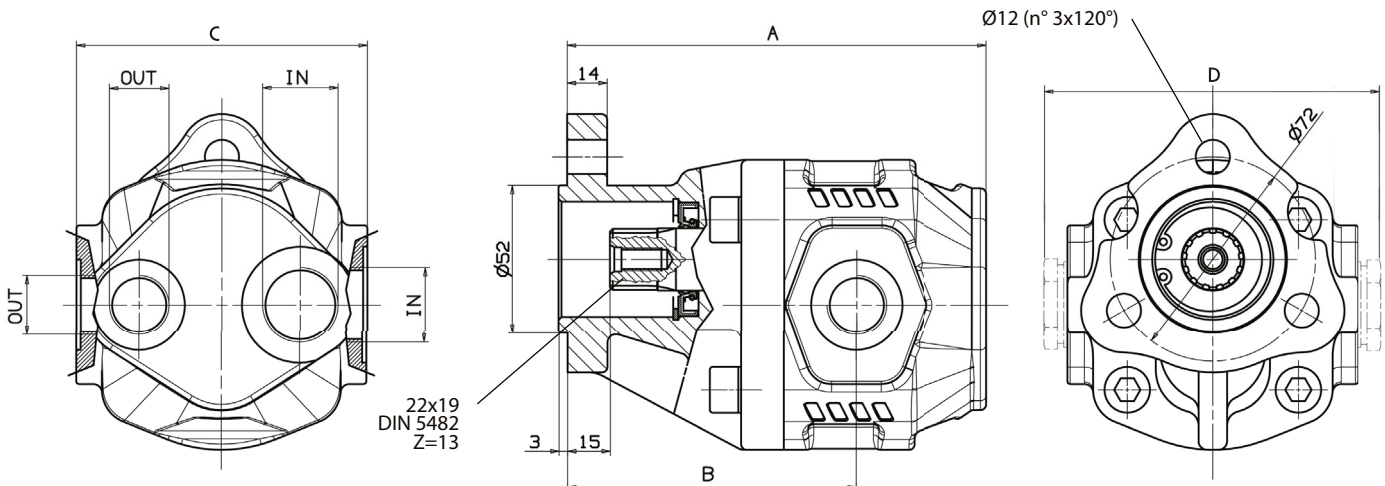
**MOMENTO PESO / MASS MOMENT**



Tipo pompa - Pump type	<b>S</b>
<b>NPLH-06</b>	50
<b>NPLH-10</b>	52
<b>NPLH-12</b>	54
<b>NPLH-14</b>	56
<b>NPLH-16</b>	58
<b>NPLH-20</b>	60
<b>NPLH-25</b>	66
<b>NPLH-32</b>	72
<b>NPLH-40</b>	79

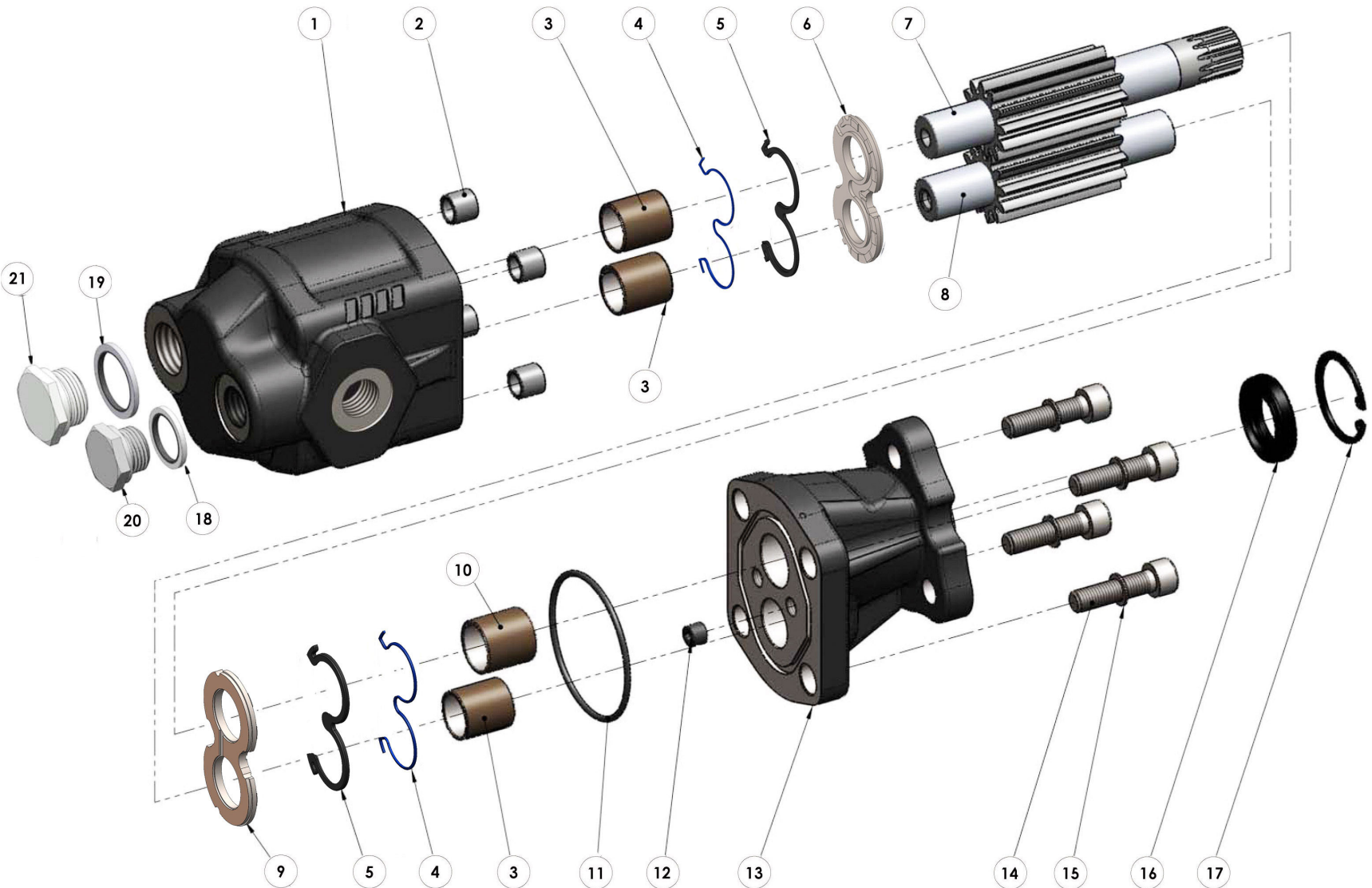


Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>		VI > 100	Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Rotazione / Rotation		A <i>mm</i>	B <i>mm</i>	C <i>mm</i>	D <i>mm</i>	IN <i>ISO 228</i>	OUT <i>ISO 228</i>	Peso <i>Weight</i> Kg
	Sinistra / Left	Destra / Right							
<b>NPLU-10</b>	10500320108	10500320117	138	104	98	116	G 3/4"	G 1/2"	5.2
<b>NPLU-12</b>	10500320126	10500320135							5.3
<b>NPLU-14</b>	10500320144	10500320153	144	98	102	120			5.4
<b>NPLU-16</b>	10500320162	10500320171	147,5	101,5					5.6
<b>NPLU-20</b>	10500320206	10500320215	154	108	106	124			5.9
<b>NPLU-25</b>	10500320251	10500320260	162	113					6.5
<b>NPLU-32</b>	10500320322	10500320331	173	124					7
<b>NPLU-40</b>	10500320402	10500320411	188	135					7.5

Kit guarnizioni / Seal Kit	
4	10590000633
5	
11	
16	



N°	10	12	14	16	20	25	32	40	Codice/Code	Descrizione / Description		Q.
1	.								51702720107	Corpo pompa	Gear housing	1
		.							51702720125			
			.						51702720143			
				.					51702720161			
					.				51702720205			
						.			51702720250			
							.		51702720321			
							.	51702720401				
2	.	.	.	.	.	.	.	.	50100300282	Spine forate di centraggio 14x12.5	Pins 14x12.5	4
3	.	.	.	.	.	.	.	.	53300400122	Boccola autolub. 20x23x20	Bushing 20x23x20	3
								.	53300400239	Boccola autolub. 20x23x25	Bushing 20x23x25	
4	.	.	.	.	.	.	.	.	50699902372	Guarnizione antiestrusione PA6	Back-up ring PA6	2
5	.	.	.	.	.	.	.	.	50600002836	Guarnizione per rasamento HNBR	Thrust plate seal HNBR	2
6	.	.	.	.	.	.	.	.	51001000382A	Rasamento ad occhiale bronzo/acciaio	Thrust plate bronze/steel	1
7	.								52301500102	Albero dentato conduttore	Drive shaft	1
		.							52301500120			
			.						52301500148			
				.					52301500166			
					.				52301500200			
						.			52301500255			
							.		52301500326			
							.	52301500406				
8	.								52301500111	Albero dentato condotto	Driven shaft	1
		.							52301500139			
			.						52301500157			
				.					52301500175			
					.				52301500219			
						.			52301500264			
							.		52301500335			
							.	52301500415				
9	.	.	.	.	.	.	.	.	51001000248A	Rasamento ad occhiale bronzo/acciaio	Thrust plate bronze/steel	1
10	.	.	.	.	.	.	.	.	53300400113	Boccola autolub. 22x25x25	Bushing 22x25x25	1
11	.	.	.	.	.	.	.	.	50600200701	Guarnizione OR	O-Ring	1
12	.	.	.	.	.	.	.	.	50401000063	Grano conico 1/8"	Plug 1/8"	1
13	.	.	.	.	.	.	.	.	51800300250	Coperchio anteriore	Mounting cover	1
								.	51800300394			
14	.	.							50200400565	Vite TCE M10x35	Screw M10x35	4
			.	.	.	.	.	.	50200400574	Vite TCE M10x40	Screw M10x40	
15	.	.	.	.	.	.	.	.	50102000101	Rondella elastica	Washer	4
16	.	.	.	.	.	.	.	.	50602422405	Guarnizione paraolio	Oil seal	1
17	.	.	.	.	.	.	.	.	50100100373	Anello elastico	Circlip	1
18	.	.	.	.	.	.	.	.	11600910129	Rondella acciaio/gomma G 1/2"	Washer	1
19	.	.	.	.	.	.	.	.	11600910343	Rondella acciaio/gomma G 3/4"	Washer	1
20	.	.	.	.	.	.	.	.	54000200110	Tappo TE G 1/2"	Plug	1
21	.	.	.	.	.	.	.	.	54000200129	Tappo TE G 3/4"	Plug	1

**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement <i>cm<sup>3</sup>/rev</i>	Pressione Pressure			Velocità max. continua Max. continuous speed <i>rpm</i>	Velocità max. intermittente Max. intermittent speed <i>rpm</i>	Velocità min. Min. speed <i>rpm</i>
		P1	P2	P3			
NPLU-10	10,06	280	310	325	2200	3000	300
NPLU-12	11,92						
NPLU-14	13,8						
NPLU-16	16,03						
NPLU-20	20,12	260	280	290	2000	2800	300
NPLU-25	25,15	220	250	260			
NPLU-32	32,04	190	210	220	1800	2500	
NPLU-40	39,93	160	180	190			

P1=Pressione max.continua  
 P2=Pressione max. intermittente  
 P3=Pressione max. di punta

Max. continuous pressure  
 Max. Intermittent pressure  
 Max. peak pressure

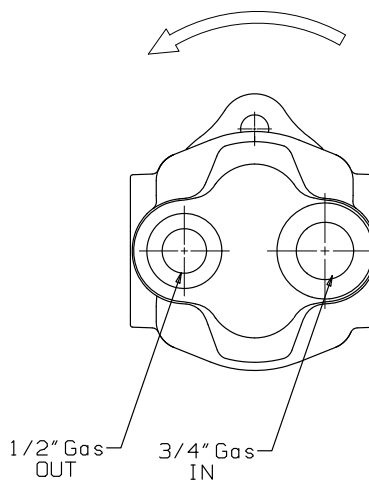
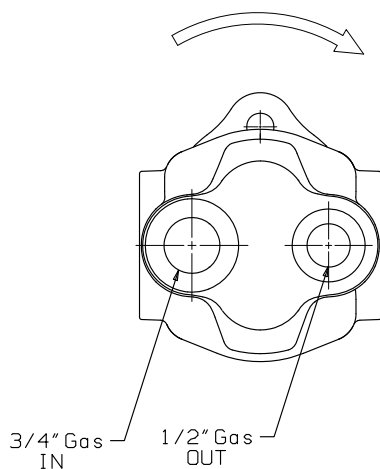
(100%)  
 (20 sec.max.)  
 (6 sec.max)

**IDENTIFICAZIONE ASPIRAZIONE/MANDATA:**

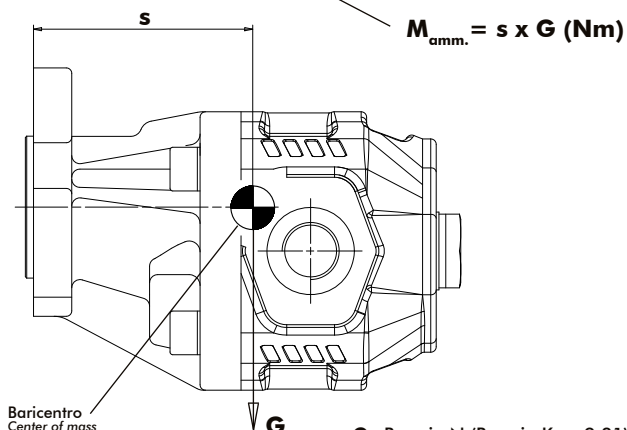
SUCTION/DELIVERY IDENTIFICATION:

**Rotazione antioraria, pompa sinistra**  
 Anti-clockwise rotation, left pump

**Rotazione oraria, pompa destra**  
 Clockwise rotation, right pump



**MOMENTO PESO / MASS MOMENT**



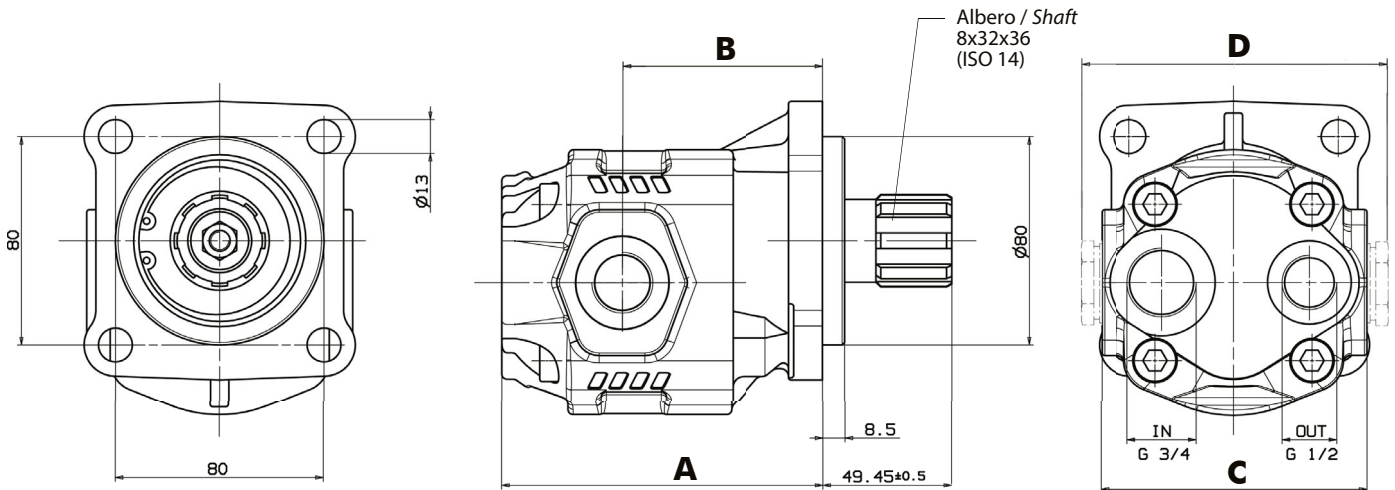
Baricentro  
Center of mass

G=Peso in N (Peso in Kg x 9.81)  
 G=Weight in N (Weight in Kg x 9.81)

Tipo pompa - Pump type	S
NPLU-10	83
NPLU-12	84
NPLU-14	85.5
NPLU-16	87
NPLU-20	91
NPLU-25	92
NPLU-32	102
NPLU-40	108



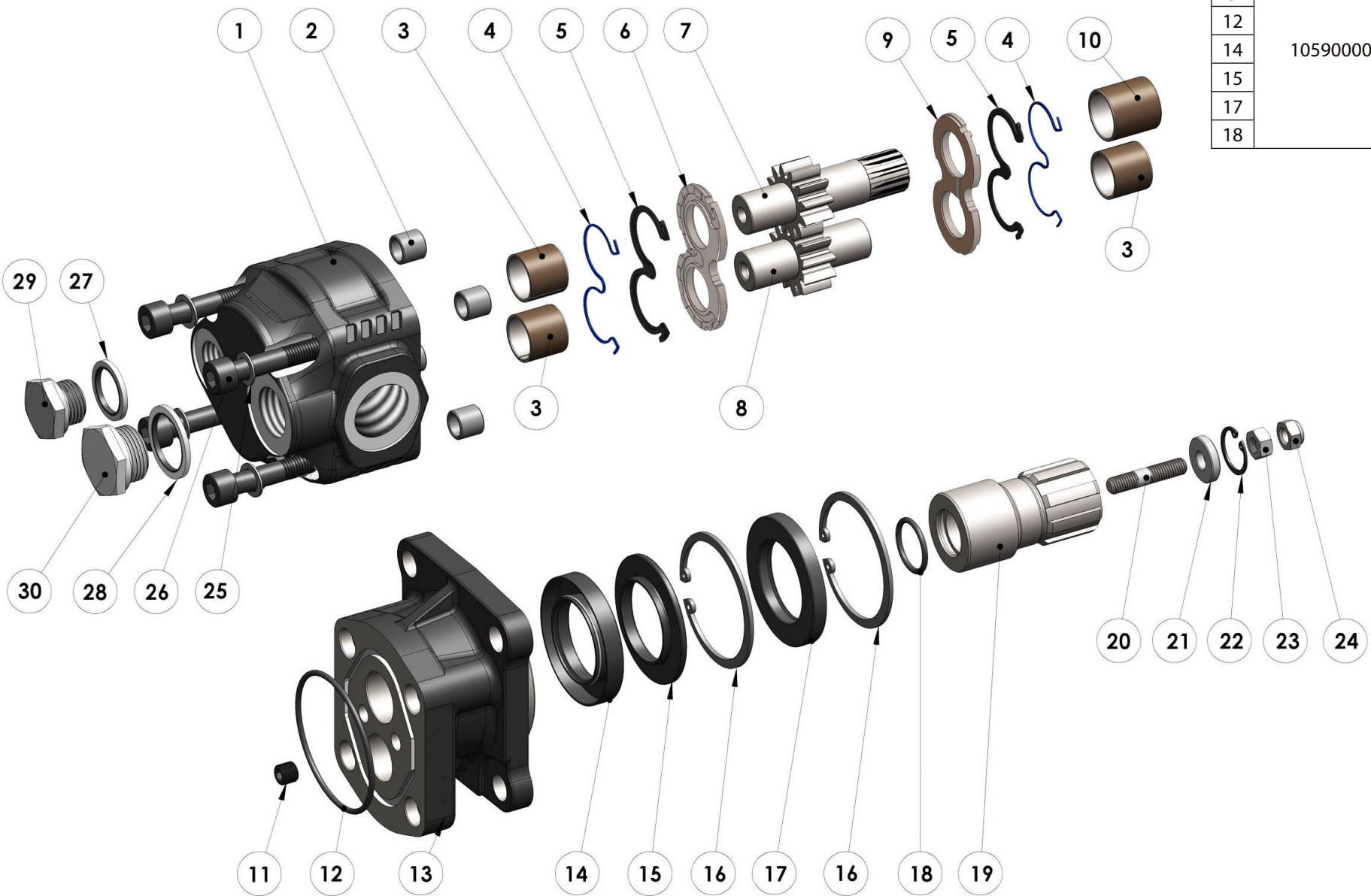
Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>		VI > 100	Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Rotazione <i>Rotation</i>		IN	OUT	A	B	C	D	Peso <i>Weight</i>
	Sinistra / Left	Destra / Right							
<b>NPLU-10</b>	10500340104	10500340113	ISO 228	ISO 228	mm	mm	mm	mm	6
<b>NPLU-12</b>	10500340122	10500340131							6.2
<b>NPLU-14</b>	10500340140	10500340159							6.9
<b>NPLU-16</b>	10500340168	10500340177							7.2
<b>NPLU-20</b>	10500340202	10500340211							7.8
<b>NPLU-25</b>	10500340257	10500340266							8.4
<b>NPLU-32</b>	10500340328	10500340337							9.2
<b>NPLU-40</b>	10500340408	10500340417							10.2


**POMPE DA NON UTILIZZARE CON CARICHI ASSIALI E RADIALI SULL'ALBERO**  
**NO AXIAL AND RADIAL LOADS ALLOWED ON PUMP SHAFT**

Kit guarnizioni / Seal Kit	
4	10590000642
5	
12	
14	
15	
17	
18	



N°	10	12	14	16	20	25	32	40	Codice/Code	Descrizione / Description	Q.	
1	.								51702760109	Corpo pompa	Gear housing	
		.							51702760127			
			.						51702760145			
				.					51702760163			
					.				51702760207			
						.			51702760252			
							.		51702760323			
							.	51702760403				
2	.	.	.	.	.	.	.	.	50100300282	Spine forate di centraggio 14x12.5	Pins 14x12.5	4
3	.	.	.	.	.	.	.	.	53300400122	Boccola autolub. 20x23x20	Bushing 20x23x20	3
								.	53300400239	Boccola autolub. 20x23x25	Bushing 20x23x25	
4	.	.	.	.	.	.	.	.	50699902372	Guarnizione antiestrusione PA6	Back-up ring PA6	2
5	.	.	.	.	.	.	.	.	50600002836	Guarnizione per rasamento HNBR	Thrust plate seal HNBR	2
6	.	.	.	.	.	.	.	.	51001000382A	Rasamento ad occhiale bronzo/acciaio	Thrust plate bronze/steel	1
7	.								52301500102	Albero dentato conduttore	Drive shaft	
		.							52301500120			
			.						52301500148			
				.					52301500166			
					.				52301500200			
						.			52301500255			
							.		52301500326			
							.	52301500406				
8	.								52301500111	Albero dentato condotto	Driven shaft	
		.							52301500139			
			.						52301500157			
				.					52301500175			
					.				52301500219			
						.			52301500264			
						.		52301500335				
							.	52301500415				
9	.	.	.	.	.	.	.	.	51001000248A	Rasamento ad occhiale bronzo/acciaio	Thrust plate bronze/steel	1
10	.	.	.	.	.	.	.	.	53300400113	Boccola autolub. 22x25x25	Bushing 22x25x25	1
11	.	.	.	.	.	.	.	.	50401000063	Grano conico 1/8"	Plug 1/8"	1
12	.	.	.	.	.	.	.	.	50600200701	Guarnizione OR	O-Ring	1
13	.	.	.	.	.	.	.	.	51800300287	Coperchio anteriore	Mounting cover	1
								.	51800300401			
14	.	.	.	.	.	.	.	.	50600738627	Guarnizione paraolio	Oil seal	1
15	.	.	.	.	.	.	.	.	50602238623	Anello schermo paraolio	Ring	1
16	.	.	.	.	.	.	.	.	50100100588	Anello elastico	Circlip	2
17	.	.	.	.	.	.	.	.	50602138624	Guarnizione paraolio	Oil seal	1
18	.	.	.	.	.	.	.	.	50600200176	Guarnizione OR	O-Ring	1
19	.	.	.	.	.	.	.	.	11400500227	Manicotto	Coupling	1
20	.	.	.	.	.	.	.	.	50300300028	Prigioniero M8x28 UNI 5911	Stud M8x28 UNI 5911	1
21	.	.	.	.	.	.	.	.	52900400774	Rondella 8.4x22x4.5	Washer 8.4x22x4.5	1
22	.	.	.	.	.	.	.	.	50100100186	Anello elastico 62 I	Circlip 62 I	1
23	.	.	.	.	.	.	.	.	50500300033	Dado M8 UNI 5588	Nut M8 UNI 5588	1
24	.	.	.	.	.	.	.	.	50501000089	Dado autobloccante M8 UNI 7474	Nut M8 UNI 7474	1
25	.	.	.	.	.	.	.	.	50102000101	Rondella elastica	Washer	4
	.	.							50200400609	Vite TCE M10x55 UNI 5931 12.9	Screw TCE M10x55 UNI 5931 12.9	4
			.	.					50200410652	Vite TCE M10x65 UNI 5931 12.9	Screw TCE M10x65 UNI 5931 12.9	4
					.				50200410705	Vite TCE M10x70 UNI 5931 12.9	Screw TCE M10x70 UNI 5931 12.9	4
						.			50200410803	Vite TCE M10x80 UNI 5931 12.9	Screw TCE M10x80 UNI 5931 12.9	4
							.		50200410901	Vite TCE M10x90 UNI 5931 12.9	Screw TCE M10x90 UNI 5931 12.9	4
							.	50200400690	Vite TCE M10x100 UNI 5931 12.9	Screw TCE M10x100 UNI 5931 12.9	4	
27	.	.	.	.	.	.	.	.	11600910129	Rondella acciaio/gomma G 1/2"	Washer	2
28	.	.	.	.	.	.	.	.	11600910343	Rondella acciaio/gomma G 3/4"	Washer	2
29	.	.	.	.	.	.	.	.	54000200110	Tappo TE G 1/2"	Plug	2
30	.	.	.	.	.	.	.	.	540-002-00129	Tappo TE G 3/4"	Plug	2



**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed  rpm	Velocità max. intermittente Max. intermittent speed  rpm	Velocità min. Min. speed  rpm
		P1	P2	P3			
NPLU-10	10,06	280	310	325	2200	3000	300
NPLU-12	11,92						
NPLU-14	13,8						
NPLU-16	16,03						
NPLU-20	20,12	260	280	290	2000	2800	300
NPLU-25	25,15	220	250	260			
NPLU-32	32,04	190	210	220	1800	2500	
NPLU-40	39,93	160	180	190			

P1=Pressione max.continua  
 P2=Pressione max. intermittente  
 P3=Pressione max. di punta

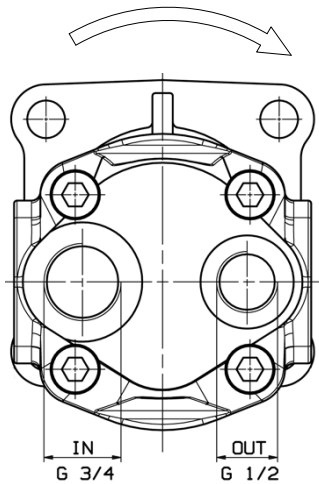
Max. continuous pressure  
 Max. intermittent pressure  
 Max. peak pressure

(100%)  
 (20 sec.max.)  
 (6 sec.max)

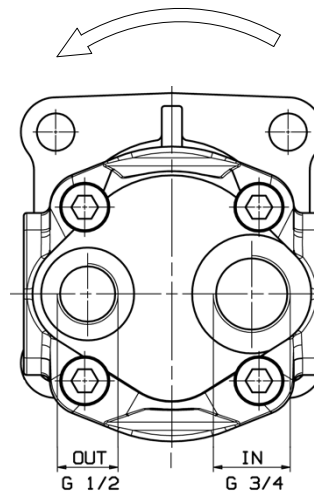
**IDENTIFICAZIONE ASPIRAZIONE/MANDATA:**

SUCTION/DELIVERY IDENTIFICATION:

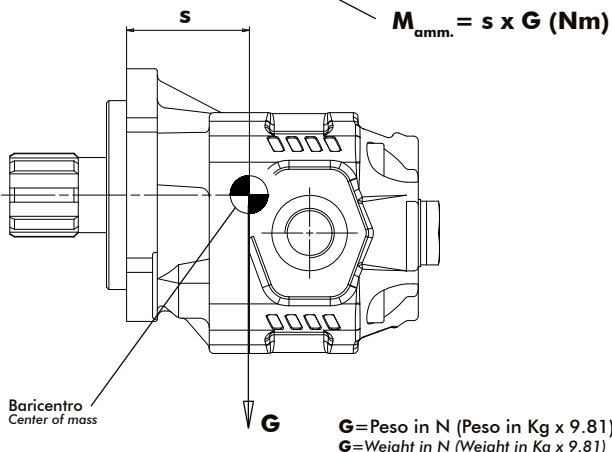
**Rotazione antioraria, pompa sinistra**  
 Anti-clockwise rotation, left pump



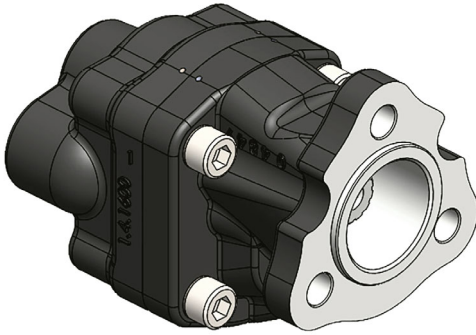
**Rotazione oraria, pompa destra**  
 Clockwise rotation, right pump



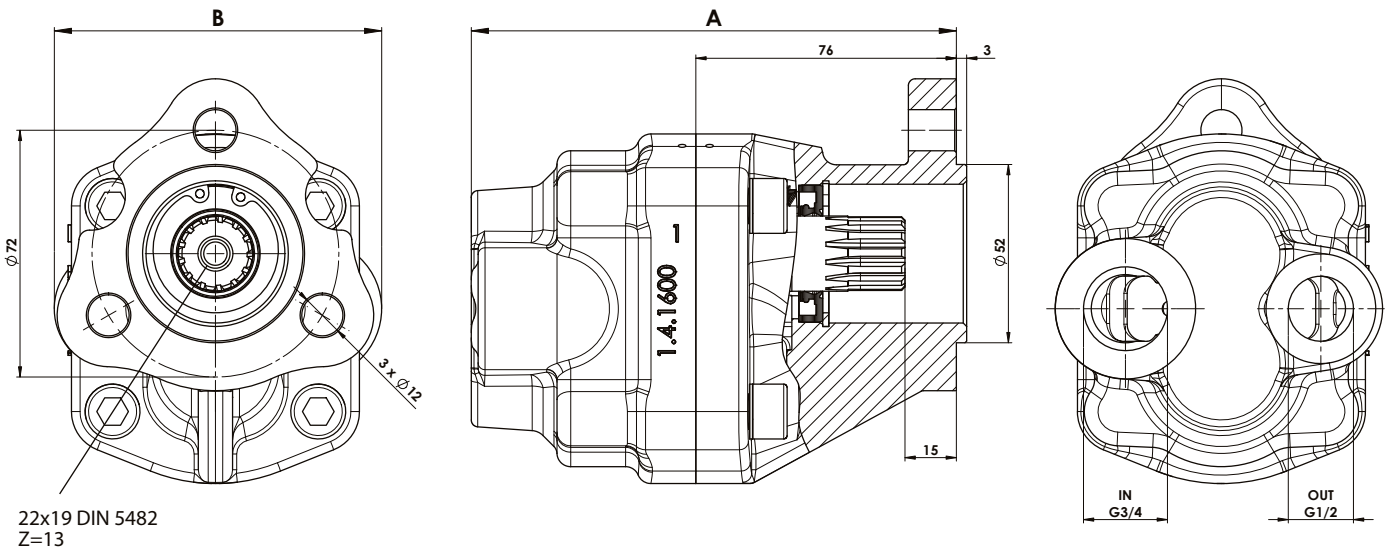
**MOMENTO PESO / MASS MOMENT**



Tipo pompa - Pump type	S
NPLU-10	52
NPLU-12	54
NPLU-14	55
NPLU-16	55.8
NPLU-20	57.4
NPLU-25	60
NPLU-32	69.1
NPLU-40	78.2



Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>	VI > 100	Temperatura di esercizio <i>Working temperature</i> -15°C +100°C			
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Rotazione <i>Rotation</i>	IN	OUT	A	B	Peso <i>Weight</i>
	<i>Sinistra / Left</i>					
<b>KIPP 16</b>	10500350166	G 3/4	G 1/2	141,5	95,5	4,4
<b>KIPP 20</b>	10500350200			148		4,7

**ATTENZIONE:**

pompa ad ingranaggi per impiego media pressione per impianti ribaltabile. La pompa ha rotazione sinistra e **NON** è possibile invertire la rotazione stessa.

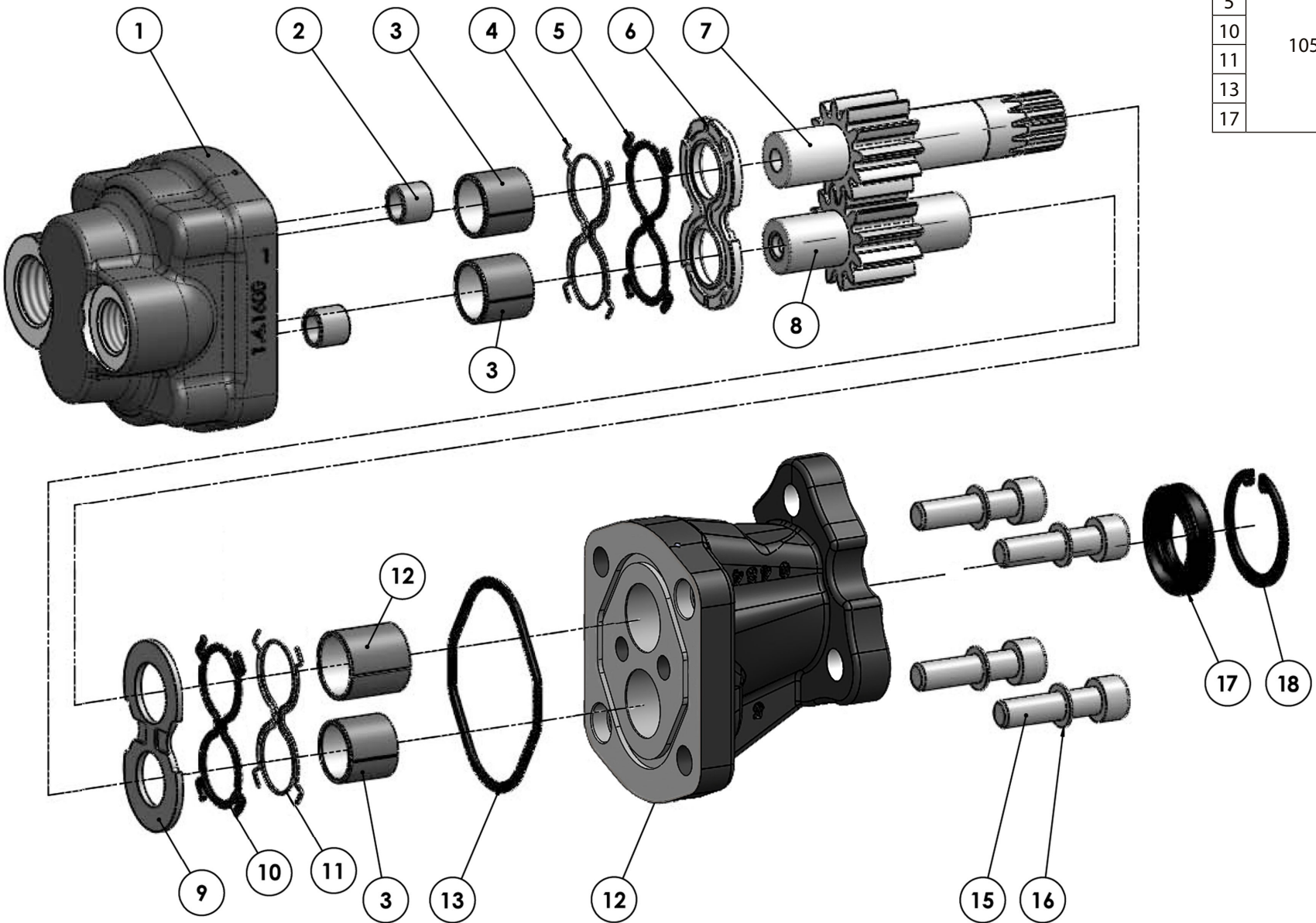
**WARNING:**

gear pump for medium pressure rate suitable for tipper applications. Direction of rotation is anticlockwise (LH) and **CANNOT** be changed.



**Kit guarnizioni / Seal Kit**

4	10590000615
5	
10	
11	
13	
17	



Pompe ad ingranaggi 3 fori - 13 DIN con utilizzi posteriori  
3 holes - 13 DIN gear pumps with rear ports  
**KIPP**

Fam. 105003

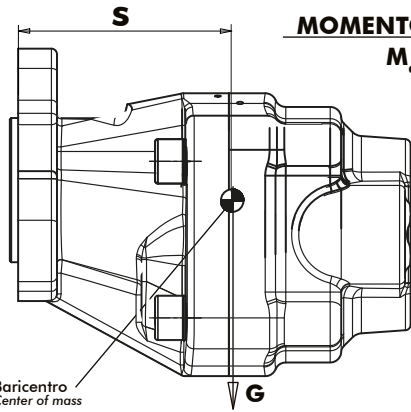
N°	16	20	Codice/Code	Descrizione / Description		Q.
1	.		51702710164	Corpo pompa	Gear housing	1
		.	51702710207			
2	.	.	50100300282	Spine forate di centraggio 14x12.5	Pins 14x12.5	2
3	.	.	53300400122	Boccola autolub. 20x23x20	Bushing 20X23X20	3
4	.	.	50600002390	Guarnizione antiestrusione	Back-up ring	1
5	.	.	50600002381	Guarnizione lato corpo	Thrust plate seal	1
6	.	.	51001000275	Rasamento ad occhiale	Thrust plate	1
7	.		52301500166	Albero dentato conduttore	Drive shaft	1
		.	52301500200			
8	.		52301500175	Albero dentato condotto	Driven shaft	1
		.	52301500219			
9	.	.	51001000266	Rasamento ad occhiale	Thrust plate	1
10	.	.	50600002336	Guarnizione lato corpo	Thrust plate seal	1
11	.	.	50600002345	Guarnizione antiestrusione	Back-up ring	1
12	.	.	53300400113	Boccola autolub. 22x25x25	Bushing 22x25x25	1
13	.	.	50600200701	Guarnizione OR 3256	3256 OR gasket	1
14	.	.	51800300885	Coperchio anteriore	Mounting cover	1
15	.	.	50200400574	Vite TCE M 10x40 UNI 5931	Screw M10x40 UNI 5931	4
16	.	.	50102000101	Rosetta elastica SCHNORR x M10 TIPO S	SCHNORR washer for M10	4
17	.	.	50602422405	Paraolio GAP 22x40x 7	Oil seal GAP 22x40x 7	1

**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO / TECHNICAL FEATURES**

Tipo pompa <i>Pump type</i>	Cilindrata Displacement <i>cm³/rev</i>	Pressione Pressure			Velocità max. continua Max. continuous speed	Velocità max. intermittente Max. intermittent speed	Velocità min. Min. speed
		P1 bar	P2 bar	P3 bar			
<b>KIPP 16</b>	16,035	140	150	160	2200 rpm	3000 rpm	300 rpm
<b>KIPP 20</b>	20,123						

P1=Pressione max.continua  
 P2=Pressione max. intermittente  
 P3=Pressione max. di punta

Max. continuous pressure (100%)  
 Max. Intermittent pressure (20 sec.max.)  
 Max. peak pressure (6 sec.max)



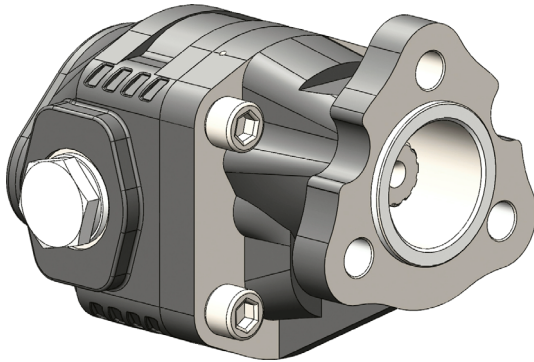
**MOMENTO PESO / MASS MOMENT**

$$M_{amm.} = s \times G \text{ (Nm)}$$

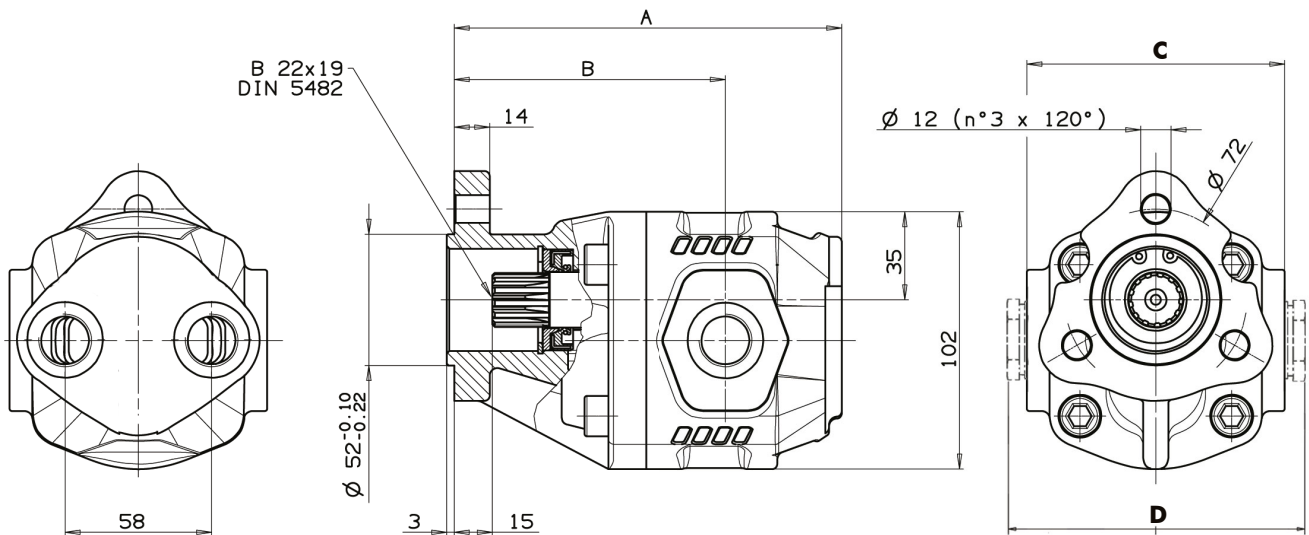
Tipo pompa - Pump type	S
<b>KIPP 16</b>	76,6
<b>KIPP 20</b>	80

Baricentro  
Center of mass

G=Peso in N (Peso in Kg x 9.81)  
 G=Weight in N (Weight in Kg x 9.81)

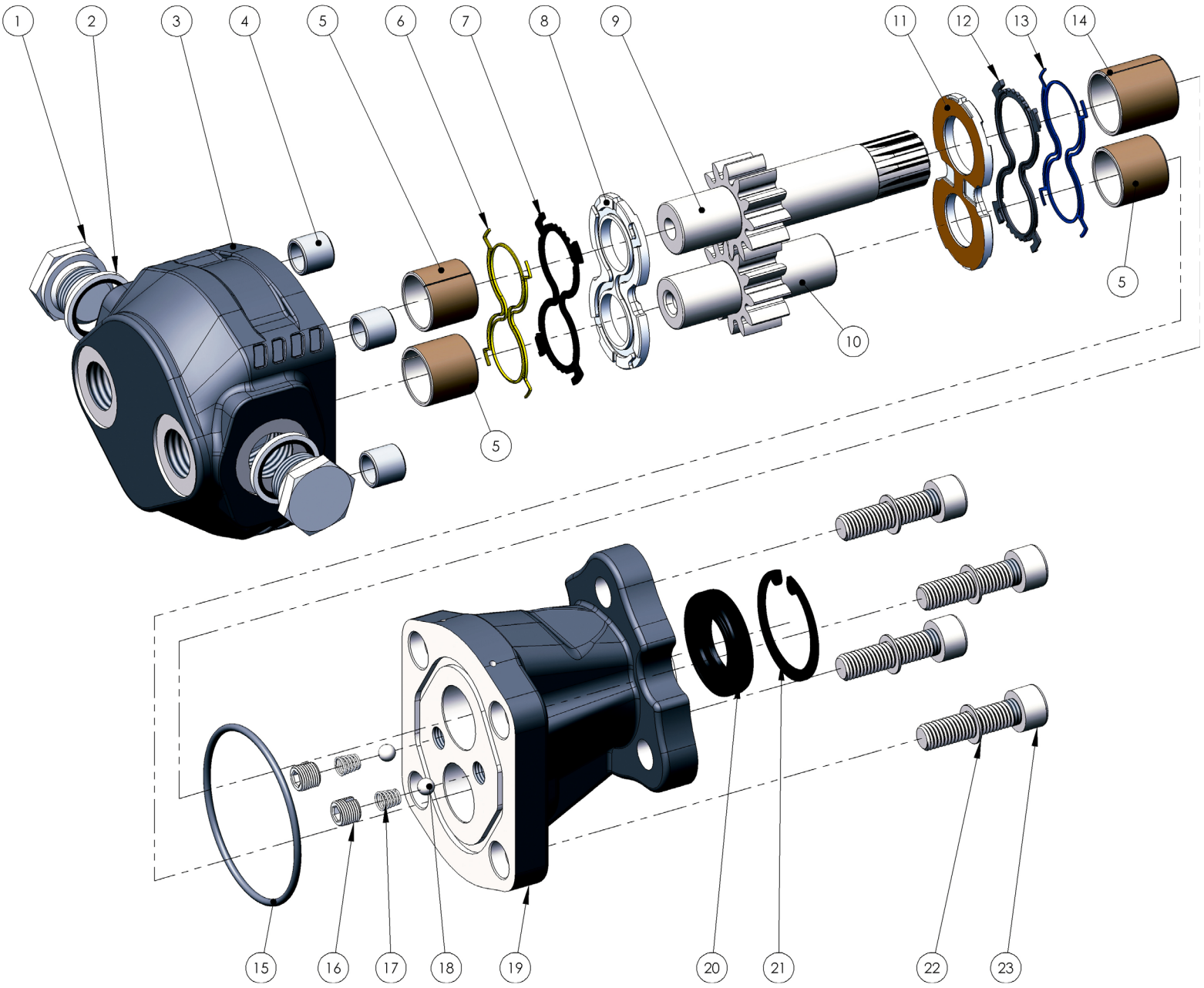


Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>	VI > 100		Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione / Inlet pressure			-0,3 ÷ 2 bar		
Senso di rotazione / Pump rotation			Bidirezionale/Bidirectional		

**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Codice ordinazione <i>Order code</i>	IN	OUT	A	B	C	D	Peso <i>Weight</i>
		ISO 228	ISO 228	mm	mm	mm	mm	
NPLH-6	10500410065	G 1/2	G 1/2	132	98,5	98	116	4,7
NPLH-10	10500410109			138	104,5			5
NPLH-12	10500410127			144	98			5,1
NPLH-14	10500410145			147,5	101,5	102	120	5,2
NPLH-16	10500410163			154	108			5,3
NPLH-20	10500410207			162	113			5,7
NPLH-25	10500410252	G 3/4	G 3/4	173	124	106	124	5,9
NPLH-32	10500410323			188	135			6,3
NPLH-40	10500410403							7,6

Kit guarnizioni / Seal Kit	
6	10590000268
7	
12	
13	
15	
20	



N°	6	10	12	14	16	20	25	32	40	Codice/Code	Descrizione / Description	Q.	
1							.	.	.	54000200129	Tappo acciaio 3/4"	Steel plug 3/4"	2
	.	.	.	.	.	.				54000200110	Tappo acciaio 1/2"	Steel plug 1/2"	
2							.	.	.	11600910343	Rondella acciaio-gomma 3/4"	Steel-rubber washer 3/4"	2
	.	.	.	.	.	.				11600910129	Rondella acciaio-gomma 1/2"	Steel-rubber washer 1/2"	
3	.									51703100061	Corpo pompa	Gear housing	1
		.								51703100105			
			.							51703100123			
				.						51703100141			
					.					51703100169			
						.				51703100203			
							.			51703100258			
								.		51703100329			
								.	51703100409				
4	.	.	.	.	.	.	.	.	.	50100300282	Spine forate di centraggio 14x12.5	Pins 14x12.5	4
5	.	.	.	.	.	.	.	.	.	53300400122	Boccola autolub. 20x23x20	Bushing 20x23x20	3
									.	53300400239	Boccola autolub. 20x23x25	Bushing 20x23x25	
6	.	.	.	.	.	.	.	.	.	50600002390	Guarnizione antiestrusione	Back-up ring	1
7	.	.	.	.	.	.	.	.	.	50600002381	Guarnizione per rasamento	Thrust plate seal	1
8	.	.	.	.	.	.	.	.	.	51001000257A	Rasamento	Thrust plate	1
9	.									52301500068	Albero dentato conduttore	Drive shaft	1
		.								52301500102			
			.							52301500120			
				.						52301500148			
					.					52301500166			
						.				52301500200			
							.			52301500255			
								.		52301500326			
								.	52301500406				
10	.									52301500077	Albero dentato condotto	Driven shaft	1
		.								52301500111			
			.							52301500139			
				.						52301500157			
					.					52301500175			
						.				52301500219			
							.			52301500264			
								.		52301500335			
								.	52301500415				
11	.	.	.	.	.	.	.	.	.	51001000239A	Rasamento	Thrust plate	1
12	.	.	.	.	.	.	.	.	.	50600002336	Guarnizione per rasamento	Thrust plate seal	1
13	.	.	.	.	.	.	.	.	.	50600002345	Guarnizione antiestrusione	Back-up ring	1
14	.	.	.	.	.	.	.	.	.	53300400113	Boccola autolub. 22x25x25	Bushing 22x25x25	1
15	.	.	.	.	.	.	.	.	.	50600200701	Guarnizione OR	O-Ring	1
16	.	.	.	.	.	.	.	.	.	50400000412	Grano valvola lubrificazione	Lube valve screw	2
17	.	.	.	.	.	.	.	.	.	51200400251	Molla conica	Tapered spring	2
18	.	.	.	.	.	.	.	.	.	51000900054	Sfera 1/4"	Ball 1/4"	2
19	.	.	.	.	.	.	.	.	.	51800300250	Coperchio anteriore	Mounting cover	1
									.	51800300394			
20	.	.	.	.	.	.	.	.	.	50602422405	Guarnizione paraolio	Oil seal	1
21	.	.	.	.	.	.	.	.	.	50100100373	Anello elastico	Circlip	1
22	.	.	.	.	.	.	.	.	.	50102000101	Rondella elastica	Washer	4
23							.	.	.	502-004-00574	Vite TCE M10x40	Screw M10x40	4
	.	.	.							502-004-00565	Vite TCE M10x35	Screw M10x35	



**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement	Pressione Pressure			Velocità max. continua Max. continuous speed	Velocità max. intermittente Max. intermittent speed	Velocità min. Min. speed
		P1	P2	P3			
	cm <sup>3</sup> /rev	bar	bar	bar	rpm	rpm	rpm
<b>NPLH-6</b>	6,3	280	310	325	2200	3000	300
<b>NPLH-10</b>	10,06						
<b>NPLH-12</b>	11,92						
<b>NPLH-14</b>	13,8						
<b>NPLH-16</b>	16,03	260	280	290	2000	2800	300
<b>NPLH-20</b>	20,1						
<b>NPLH-25</b>	25,1	220	250	260	1800	2500	300
<b>NPLH-32</b>	32,04	190	210	220			
<b>NPLH-40</b>	39,9	160	180	190			

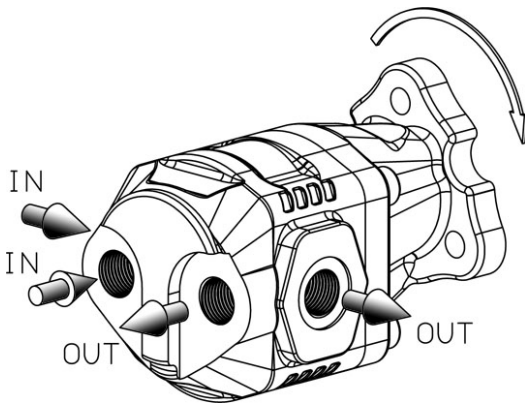
P1=Pressione max.continua  
P2=Pressione max. intermittente  
P3=Pressione max. di punta

Max. continuous pressure  
Max. Intermittent pressure  
Max. peak pressure

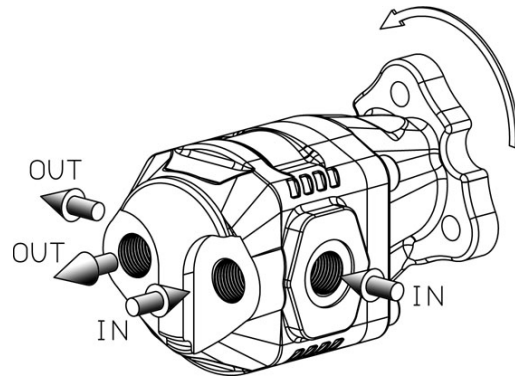
(100%)  
(20 sec.max.)  
(6 sec.max)

**IDENTIFICAZIONE ASPIRAZIONE/MANDATA:**  
SUCTION/DELIVERY IDENTIFICATION:

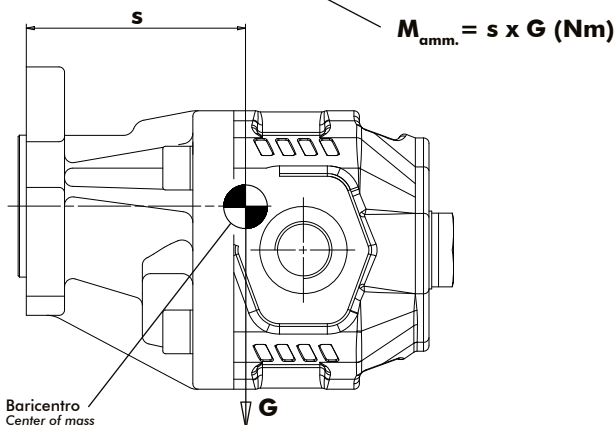
**Rotazione antioraria, pompa sinistra**  
Anti-clockwise rotation, left pump



**Rotazione oraria, pompa destra**  
Clockwise rotation, right pump

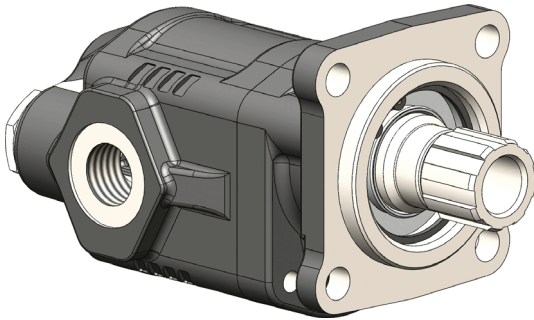


**MOMENTO PESO / MASS MOMENT**

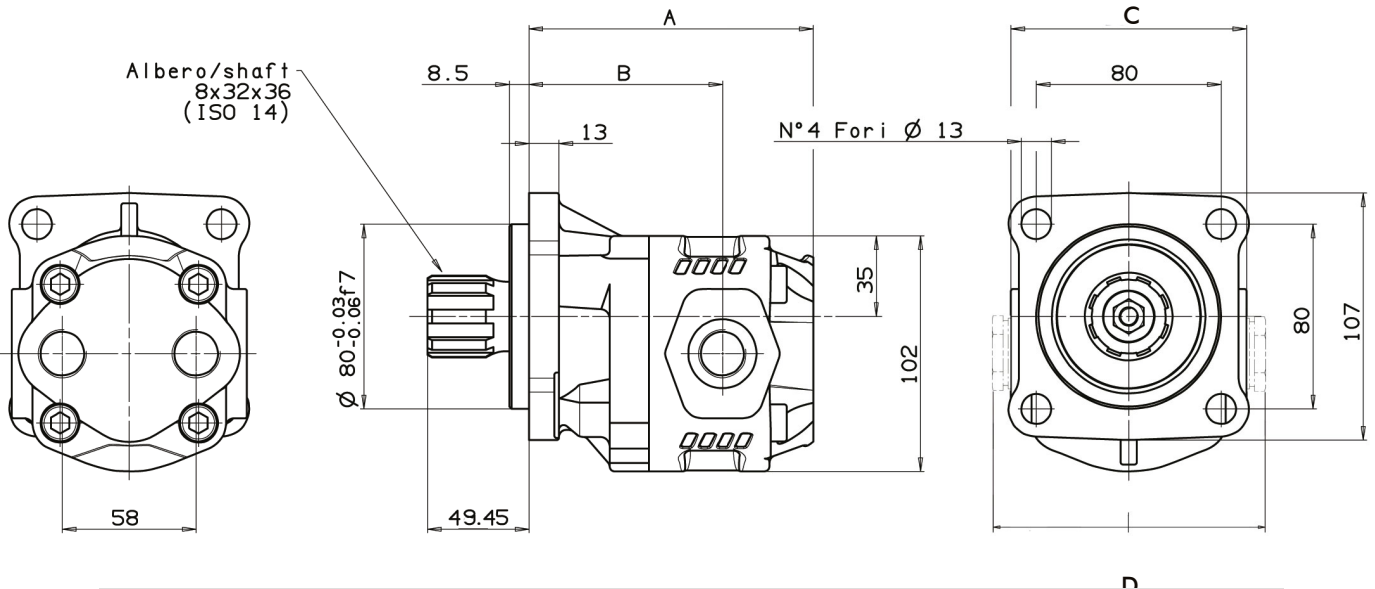


G=Peso in N (Peso in Kg x 9.81)  
G=Weight in N (Weight in Kg x 9.81)

Tipo pompa - Pump type	S
<b>NPLH-6</b>	80
<b>NPLH-10</b>	83
<b>NPLH-12</b>	84
<b>NPLH-14</b>	86
<b>NPLH-16</b>	91
<b>NPLH-20</b>	92
<b>NPLH-25</b>	97
<b>NPLH-32</b>	102
<b>NPLH-40</b>	107



Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>		VG= 10 cSt ÷ 100 cSt			
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>		VG= 750 cSt			
Indice di viscosità consigliato <i>Viscosity index suggested</i>	VI > 100		Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>		> 200 bar: 10 µm < 200 bar: 25 µm			
Pressione di aspirazione / Inlet pressure		-0,3 ÷ 2 bar			
Senso di rotazione / Pump rotation		Bidirezionale/Bidirectional			

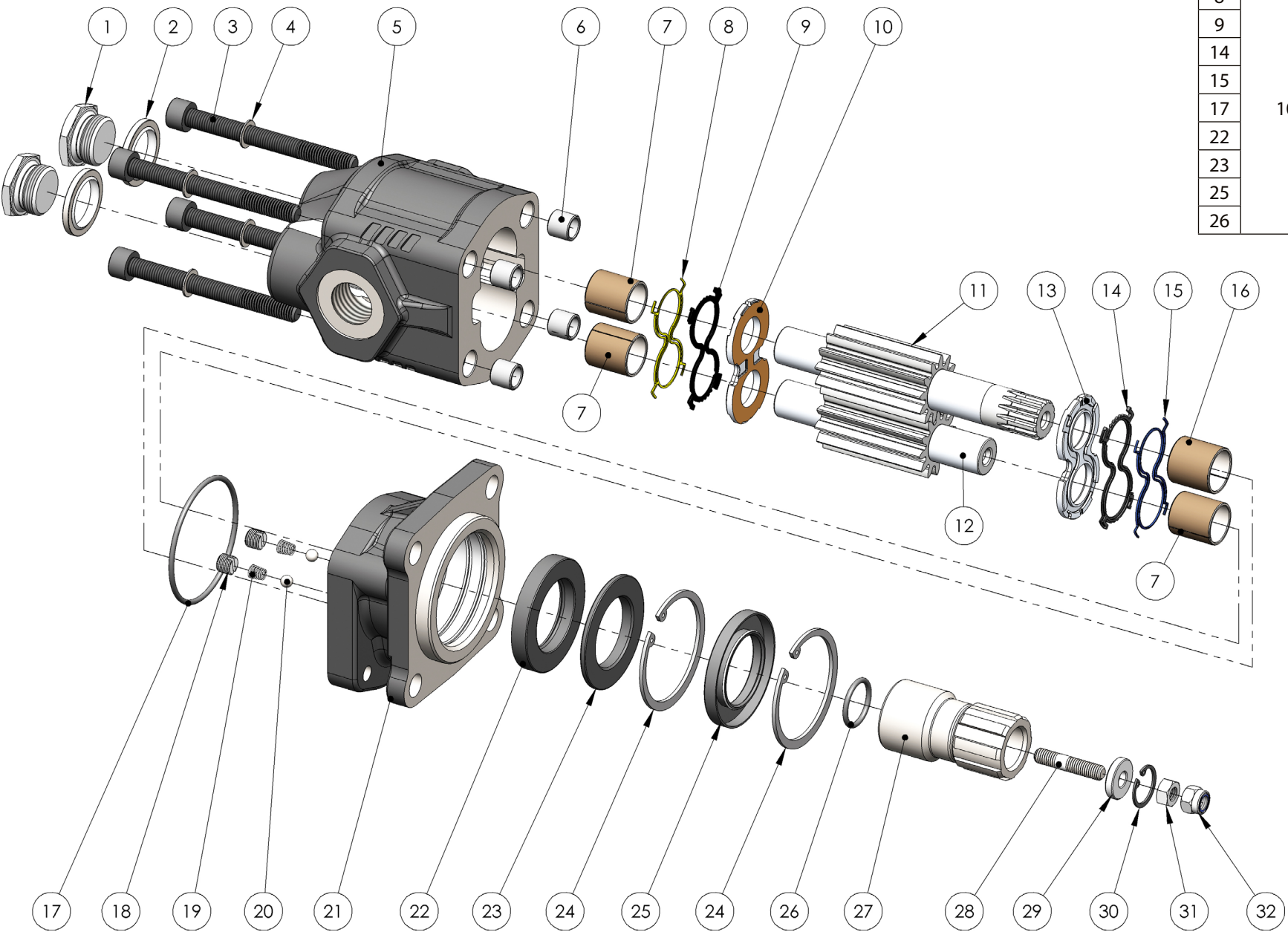
**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Codice ordinazione <i>Order code</i>	IN	OUT	A	B	C	D	Peso <i>Weight</i>
		ISO 228	ISO 228	mm	mm	mm	mm	
<b>NPLH-6</b>	10500440069	G 1/2	G 1/2	108	74.5	98	116	5.2
<b>NPLH-10</b>	10500440103			114	80			5.8
<b>NPLH-12</b>	10500440121							6
<b>NPLH-14</b>	10500440149			120	74	102	120	6.2
<b>NPLH-16</b>	10500440167			123.5	77.5			6.4
<b>NPLH-20</b>	10500440201			130	84			6.8
<b>NPLH-25</b>	10500440256	140	89	7.2				
<b>NPLH-32</b>	10500440327	G 3/4	G 3/4	149	100			7.8
<b>NPLH-40</b>	10500440407			164	111	106	124	8.3


**POMPE DA NON UTILIZZARE CON CARICHI ASSIALI E RADIALI SULL'ALBERO**
**NO AXIAL AND RADIAL LOADS ALLOWED ON PUMP SHAFT**

**Kit guarnizioni / Seal Kit**

8	10590000286
9	
14	
15	
17	
22	
23	
25	
26	



N°	6	10	12	14	16	20	25	32	40	Codice/Code	Descrizione / Description	Q.	
1	.	.	.	.	.	.	.	.	.	54000200110	Tappo acciaio 1/2"	Steel plug 1/2"	2
	.	.	.	.	.	.	.	.	.	54000200129	Tappo acciaio 3/4"	Steel plug 3/4"	
2	.	.	.	.	.	.	.	.	.	11600910129	Rondella acciaio gomma 1/2"	Steel-rubber washer 1/2"	2
	.	.	.	.	.	.	.	.	.	11600910343	Rondella acciaio gomma 3/4"	Steel-rubber washer 3/4"	
3	.	.	.	.	.	.	.	.	.	50200400592	Vite TCE M10x50	Screw M10x50	4
	.	.	.	.	.	.	.	.	.	50200400609	Vite TCE M10x55	Screw M10x55	
	.	.	.	.	.	.	.	.	.	50200410652	Vite TCE M10x65	Screw M10x65	
	.	.	.	.	.	.	.	.	.	50200410705	Vite TCE M10x70	Screw M10x70	
	.	.	.	.	.	.	.	.	.	50200410803	Vite TCE M10x80	Screw M10x80	
	.	.	.	.	.	.	.	.	.	50200410901	Vite TCE M10x90	Screw M10x90	
4	.	.	.	.	.	.	.	.	.	50200400690	Vite TCE M10x100	Screw M10x100	4
	.	.	.	.	.	.	.	.	.	50102000101	Rondella elastica	Washer	
5	.	.	.	.	.	.	.	.	.	51703300069	Corpo pompa	Gear housing	1
	.	.	.	.	.	.	.	.	.	51703300103			
	.	.	.	.	.	.	.	.	.	51703300121			
	.	.	.	.	.	.	.	.	.	51703300149			
	.	.	.	.	.	.	.	.	.	51703300167			
	.	.	.	.	.	.	.	.	.	51703300201			
	.	.	.	.	.	.	.	.	.	51703300256			
6	.	.	.	.	.	.	.	.	.	51703300327	Spine forate di centraggio 14x10.5	Pins 14x10.5	4
	.	.	.	.	.	.	.	.	.	51703300407			
7	.	.	.	.	.	.	.	.	.	50100300282	Boccole autolub. 20x23x20	Bushing 20x23x20	3
	.	.	.	.	.	.	.	.	.	53300400122	Boccole autolub. 20x23x25	Bushing 20x23x25	
8	.	.	.	.	.	.	.	.	.	53300400239	Boccole autolub. 20x23x25	Bushing 20x23x25	1
9	.	.	.	.	.	.	.	.	.	50600002390	Guarnizione antiestrusione	Back-up ring	1
10	.	.	.	.	.	.	.	.	.	50600002381	Guarnizione per rasamento	Thrust plate seal	1
11	.	.	.	.	.	.	.	.	.	51001000257A	Rasamento	Thrust plate	1
	.	.	.	.	.	.	.	.	.	52301500068	Albero dentato conduttore	Drive shaft	
	.	.	.	.	.	.	.	.	.	52301500102			
	.	.	.	.	.	.	.	.	.	52301500120			
	.	.	.	.	.	.	.	.	.	52301500148			
	.	.	.	.	.	.	.	.	.	52301500166			
	.	.	.	.	.	.	.	.	.	52301500200			
	.	.	.	.	.	.	.	.	.	52301500255			
.	.	.	.	.	.	.	.	.	52301500326				
12	.	.	.	.	.	.	.	.	.	52301500406	Albero dentato condotto	Driven shaft	1
	.	.	.	.	.	.	.	.	.	52301500077			
	.	.	.	.	.	.	.	.	.	52301500111			
	.	.	.	.	.	.	.	.	.	52301500139			
	.	.	.	.	.	.	.	.	.	52301500157			
	.	.	.	.	.	.	.	.	.	52301500175			
	.	.	.	.	.	.	.	.	.	52301500219			
	.	.	.	.	.	.	.	.	.	52301500264			
13	.	.	.	.	.	.	.	.	.	52301500335	Rasamento	Thrust plate	1
	.	.	.	.	.	.	.	.	.	52301500415			
14	.	.	.	.	.	.	.	.	.	51001000239A	Guarnizione per rasamento	Thrust plate seal	1
15	.	.	.	.	.	.	.	.	.	50600002336	Guarnizione antiestrusione	Back-up ring	1
16	.	.	.	.	.	.	.	.	.	50600002345	Guarnizione antiestrusione	Back-up ring	1
17	.	.	.	.	.	.	.	.	.	53300400113	Boccole autolub. 22x25x25	Bushing 22x25x25	1
18	.	.	.	.	.	.	.	.	.	50600200701	Guarnizione OR	O-Ring	1
19	.	.	.	.	.	.	.	.	.	50400000412	Grano valvola lubrificazione	Lube valve screw	2
20	.	.	.	.	.	.	.	.	.	51200400251	Molla conica	Tapered spring	2
21	.	.	.	.	.	.	.	.	.	51000900054	Sfera 1/4"	Ball 1/4"	2
	.	.	.	.	.	.	.	.	.	51800300287	Coperchio anteriore	Mounting cover	
22	.	.	.	.	.	.	.	.	.	51800300401	Coperchio anteriore	Mounting cover	1
23	.	.	.	.	.	.	.	.	.	50602138624	Guarnizione paraolio	Oil seal	1
24	.	.	.	.	.	.	.	.	.	50602238623	Anello paraolio	Oil seal ring	1
25	.	.	.	.	.	.	.	.	.	50100100588	Anello seeger	Seeger ring	2
26	.	.	.	.	.	.	.	.	.	50600738627	Guarnizione paraolio	Oil seal	1
27	.	.	.	.	.	.	.	.	.	50600200176	Guarnizione OR	O-Ring	1
28	.	.	.	.	.	.	.	.	.	11400500227	Manicotto	Coupling	1
29	.	.	.	.	.	.	.	.	.	50300300028	Prigioniero M8x28	Stud bolt M8x28	1
30	.	.	.	.	.	.	.	.	.	52900400774	Distanziale	Spacer	1
31	.	.	.	.	.	.	.	.	.	50100100186	Anello seeger	Seeger ring	1
32	.	.	.	.	.	.	.	.	.	50500300033	Dado M8 CH13 H6.5	Nut M8 CH13 H6.5	1
	.	.	.	.	.	.	.	.	.	50501000089	Dado autb. M8 CH13 H8	Nut M8 CH13 H8	1

**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed  rpm	Velocità max. intermittente Max. intermittent speed  rpm	Velocità min. Min. speed  rpm
		P1	P2	P3			
NPLH-6	6,3	280	310	325	2200	3000	300
NPLH-10	10,06						
NPLH-12	11,92						
NPLH-14	13,8						
NPLH-16	16,03						
NPLH-20	20,1	260	280	290	2000	2800	
NPLH-25	25,1	220	250	260			
NPLH-32	32,04	190	210	220	1800	2500	
NPLH-40	39,9	160	180	190			

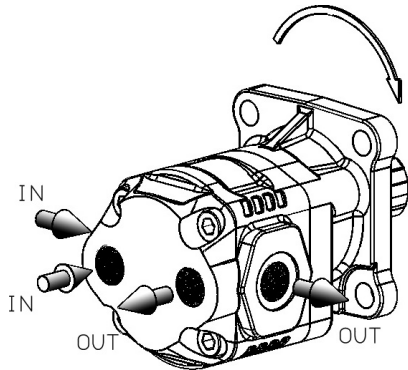
P1=Pressione max.continua  
P2=Pressione max. intermittente  
P3=Pressione max. di punta

Max. continuous pressure  
Max. Intermittent pressure  
Max. peak pressure

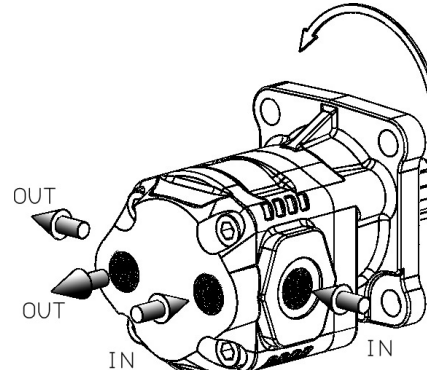
(100%)  
(20 sec.max.)  
(6 sec.max)

**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

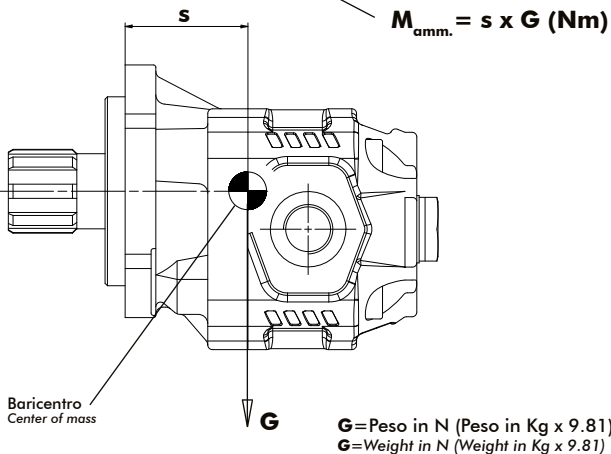
**Rotazione antioraria, pompa sinistra**  
Anti-clockwise rotation, left pump



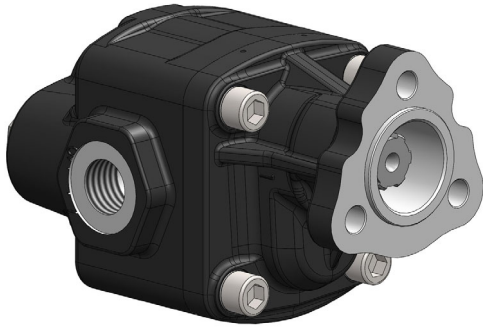
**Rotazione oraria, pompa destra**  
Clockwise rotation, right pump



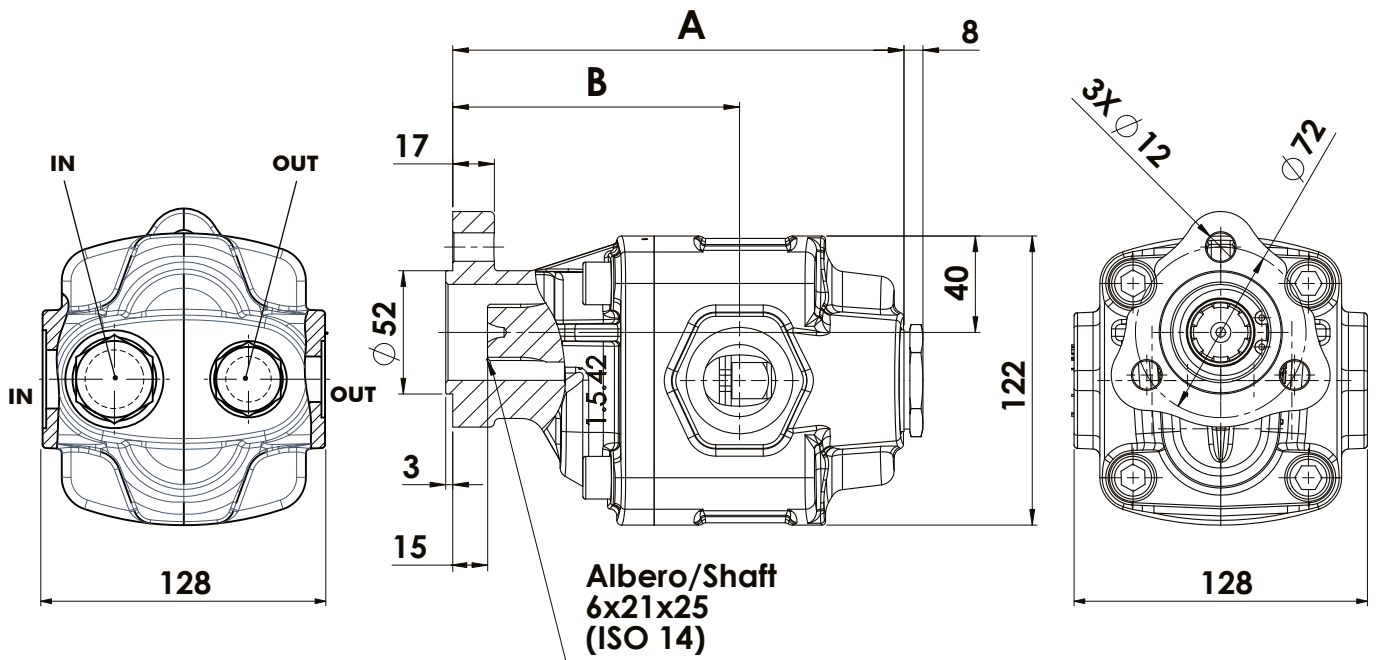
**MOMENTO PESO / MASS MOMENT**



Tipo pompa - Pump type	S
NPLH-6	53
NPLH-10	55
NPLH-12	56
NPLH-14	57
NPLH-16	58
NPLH-20	61
NPLH-25	64
NPLH-32	69
NPLH-40	77



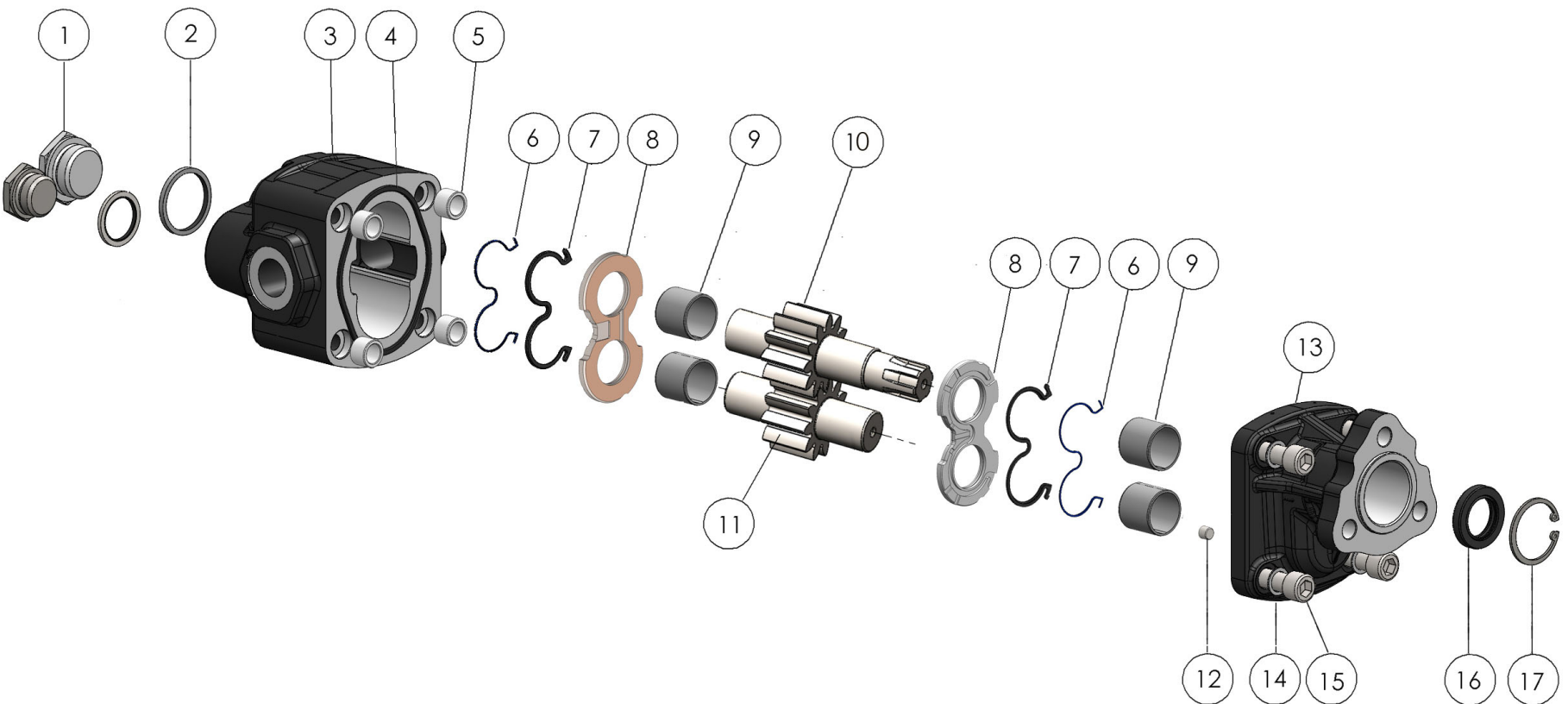
Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>		VI > 100	Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Rotazione <i>Rotation</i>		A	B	IN	OUT	Peso <i>Weight</i>
	Destra / Right	Sinistra / Left					
<b>NPK-10</b>	10505000105	10505000114	150,9	112	G 1/2	G 1/2	7,5
<b>NPK-16</b>	10505000169	10505000178	156,7	110,5	G 3/4	G 1/2	7,8
<b>NPK-20</b>	10505000203	10505000212	161,2	115			8
<b>NPK-25</b>	10505000258	10505000267	167,2	115,5	G 1	G 3/4	8,5
<b>NPK-32</b>	10505000329	10505000338	175,2	123,5			9
<b>NPK-40</b>	10505000409	10505000418	184,2	115			9,5
<b>NPK-46</b>	10505000463	10505000472	190,2	121			10

**Kit guarnizioni / Seal Kit**

4	10590000624
6	
7	
16	



N°	10	16	20	25	32	40	46	Codice/Code	Descrizione / Description	Q.	
1	.							54000200110	Tappo Acciaio G 1/2	Steel plug G 1/2	2
		.	.								1
		.	.	.	.	.	.	54000200129	Tappo Acciaio G 3/4	Steel plug G 3/4	1
				.	.	.	.	54000200138	Tappo Acciaio G 1	Steel plug G 1	1
2	.							11600910129	Rondella acciaio-gomma G 1/2	Steel-rubber washer G 1/2	2
		.	.								1
		.	.	.	.	.	.	11600910343	Rondella acciaio-gomma G 3/4	Steel-rubber washer G 3/4	1
3				.	.	.	.	11600911002	Rondella acciaio-gomma G 1	Steel-rubber washer G 1	1
	.							51704500109	Corpo pompa	Gear housing	1
		.						51704500163			
			.					51704500207			
				.				51704500252			
					.			51704500323			
						.		51704500403			
						.	51704500467				
4	.	.	.	.	.	.	.	50600002818	Guarnizione OR 3325	O-ring 3325	1
5	.	.	.	.	.	.	.	50100300291	Spine forate di centraggio 18 x 12.5	Pins 18 x 12.5	4
6	.	.	.	.	.	.	.	50699902778	Guarnizione antiestrusione	Back-up ring	2
7	.	.	.	.	.	.	.	50600002809	Guarnizione per rasamento	Thrust plate seal	2
8	.	.	.	.	.	.	.	51001000391A	Rasamento ad occhiale	Thrust plate	2
9	.	.	.	.	.	.	.	53300410102	Boccola autolub. G1 x G1 con cava	Bushing G1 x G1	4
10	.							52304000101	Albero dentato conduttore	Drive shaft	1
		.						52304000165			
			.					52304000209			
				.				52304000254			
					.			52304000325			
						.		52304000405			
11							.	52304000469	Albero dentato condotto	Driven shaft	1
	.							52304100100			
		.						52304100164			
			.					52304100208			
				.				52304100253			
					.			52304100324			
12						.		52304100404	Grano conico 1/8"	Plug 1/8"	1
						.		52304100468			
	.	.	.	.	.	.	.	50401000063			
	.	.	.	.	.	.	.	51800300723			
13	.	.	.	.	.	.	.	Coperchio anteriore	Mounting cover	1	
14	.	.	.	.	.	.	.	50102000129	Rondella SCHNORR x M12	SCHNORR washer x M12	4
15	.	.	.	.	.	.	.	50200500573	Vite TCE M12 UNI 5931	Screw M12 UNI 5931	4
16	.	.	.	.	.	.	.	50602425401	Guarnizione paraolio	Oil seal	1
17	.	.	.	.	.	.	.	50100100373	Anello elastico	Circlip	1



**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed  rpm	Velocità max. intermittente Max. intermittent speed  rpm	Velocità min. Min. speed  rpm
		P1	P2	P3			
		bar	bar	bar			
<b>NPK-10</b>	10,5	290	320	330	2200	3000	300
<b>NPK-16</b>	15,8						
<b>NPK-20</b>	19,8	280	290	300			
<b>NPK-25</b>	25						
<b>NPK-32</b>	32	275	280	290			
<b>NPK-40</b>	40	230	250	260			
<b>NPK-46</b>	45,2	200	230	250			

P1=Pressione max.continua  
P2=Pressione max. intermittente  
P3=Pressione max. di punta

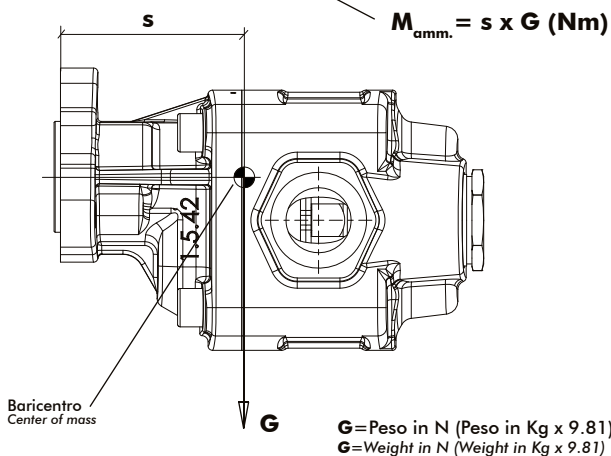
Max. continuous pressure  
Max. Intermittent pressure  
Max. peak pressure

(100%)  
(20 sec.max.)  
(6 sec.max)

**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

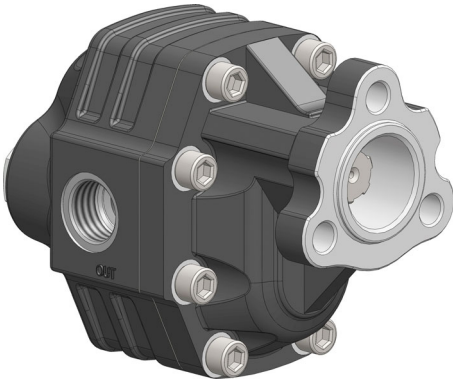
Rotazione antioraria, pompa sinistra Anti-clockwise rotation, left pump	Rotazione oraria, pompa destra Clockwise rotation, right pump
<p>VISTA FRONTALE - FRONT</p>	<p>VISTA FRONTALE - FRONT</p>

**MOMENTO PESO / MASS MOMENT**



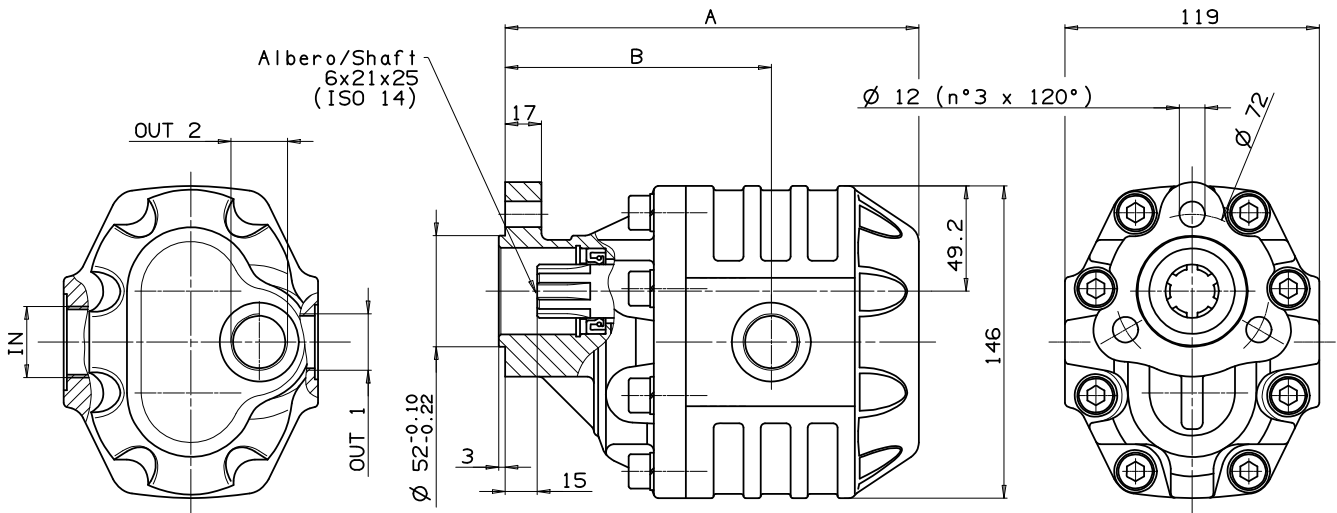
Tipo pompa - Pump type	S
<b>NPK-10</b>	89,6
<b>NPK-16</b>	89,7
<b>NPK-20</b>	92,2
<b>NPK-25</b>	95,2
<b>NPK-32</b>	99,8
<b>NPK-40</b>	103
<b>NPK-46</b>	106

**PER MODIFICARE IL SENSO DI ROTAZIONE VEDERE ISTRUZ. 99700200266**  
TO CHANGE THE DIRECTION OF ROTATION SEE INSTRUCTION 99700200266



Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>		VI > 100	Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

**Ingombro / Dimensions**

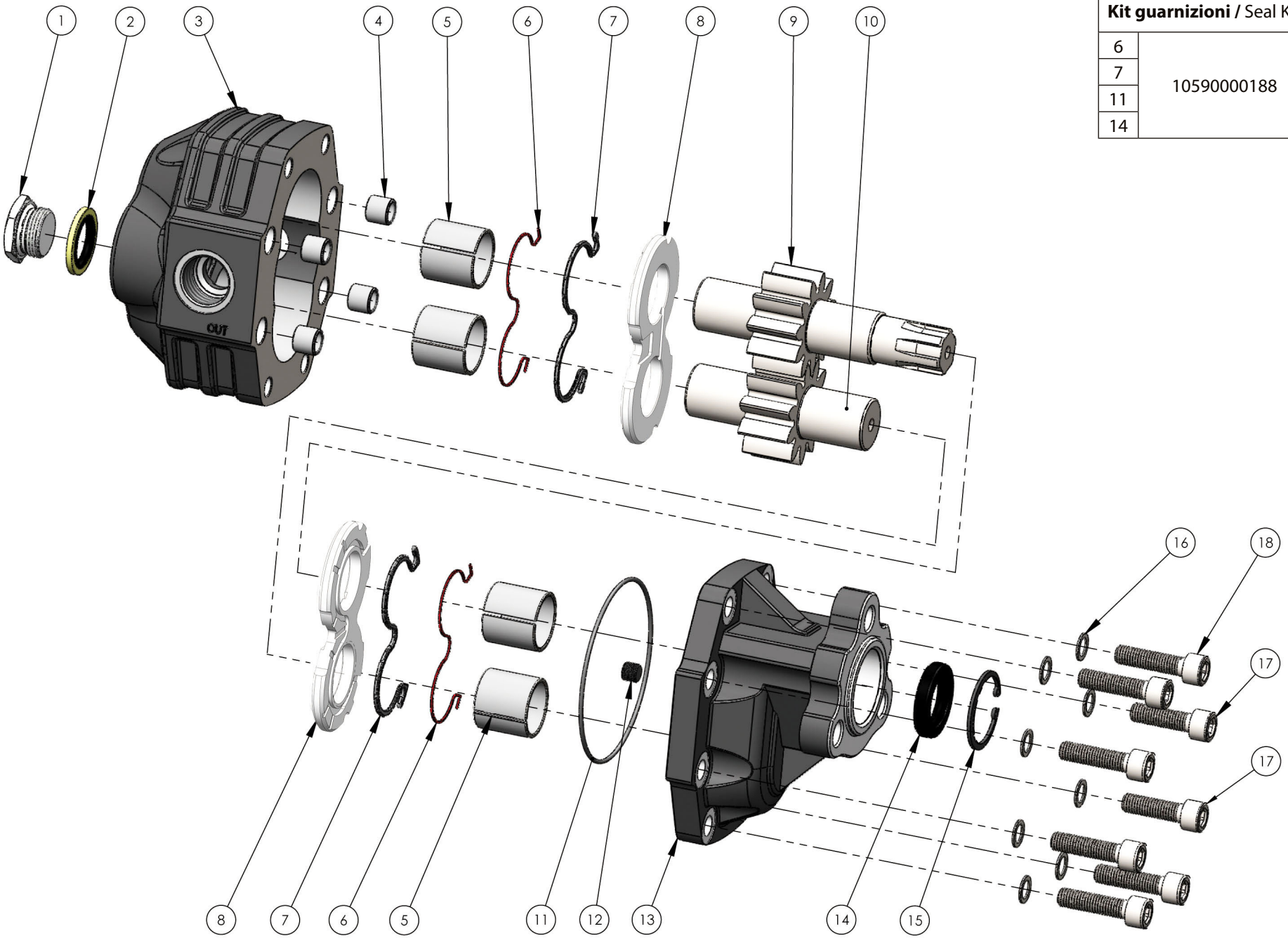


**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Rotazione <i>Rotation</i>		IN	OUT 1	OUT 2	A	B	Peso <i>Weight</i>
	Destra / Right	Sinistra / Left						
			ISO 228	ISO 228	ISO 228	mm	mm	Kg
NPH-17	10501100175	10501100184	G 1/2	G 1/2	G 1/2	152.5	103.5	8.5
NPH-22	10501100228	10501100237				156	105.5	9
NPH-27	10501100273	10501100282	G 3/4	G 3/4	G 3/4	158.5	108	9.5
NPH-34	10501100344	10501100353				163.5	109	10.5
NPH-43	10501100433	10501100442	G 1	G 1	G 3/4	169.5	114	11
NPH-51	10501100513	10501100522				174.5	114.5	11.5
NPH-61	10501100611	10501100620	G 1 1/4	G 1	G 3/4	180.5	120.5	12
NPH-73	10501100737	10501100746				188.5	119.5	12.5
NPH-82	10501100826	10501100835	G 1 1/4	G 1	G 3/4	193.5	124.5	13
NPH-90	10501100906	10501100915				204.5	132.5	13.5
NPH-100	10501101003	10501101012	G 1 1/4	G 1	G 3/4	210.5	138.5	14
NPH-125	10501101254	10501101263				226.5	142.5	16

**Kit guarnizioni / Seal Kit**

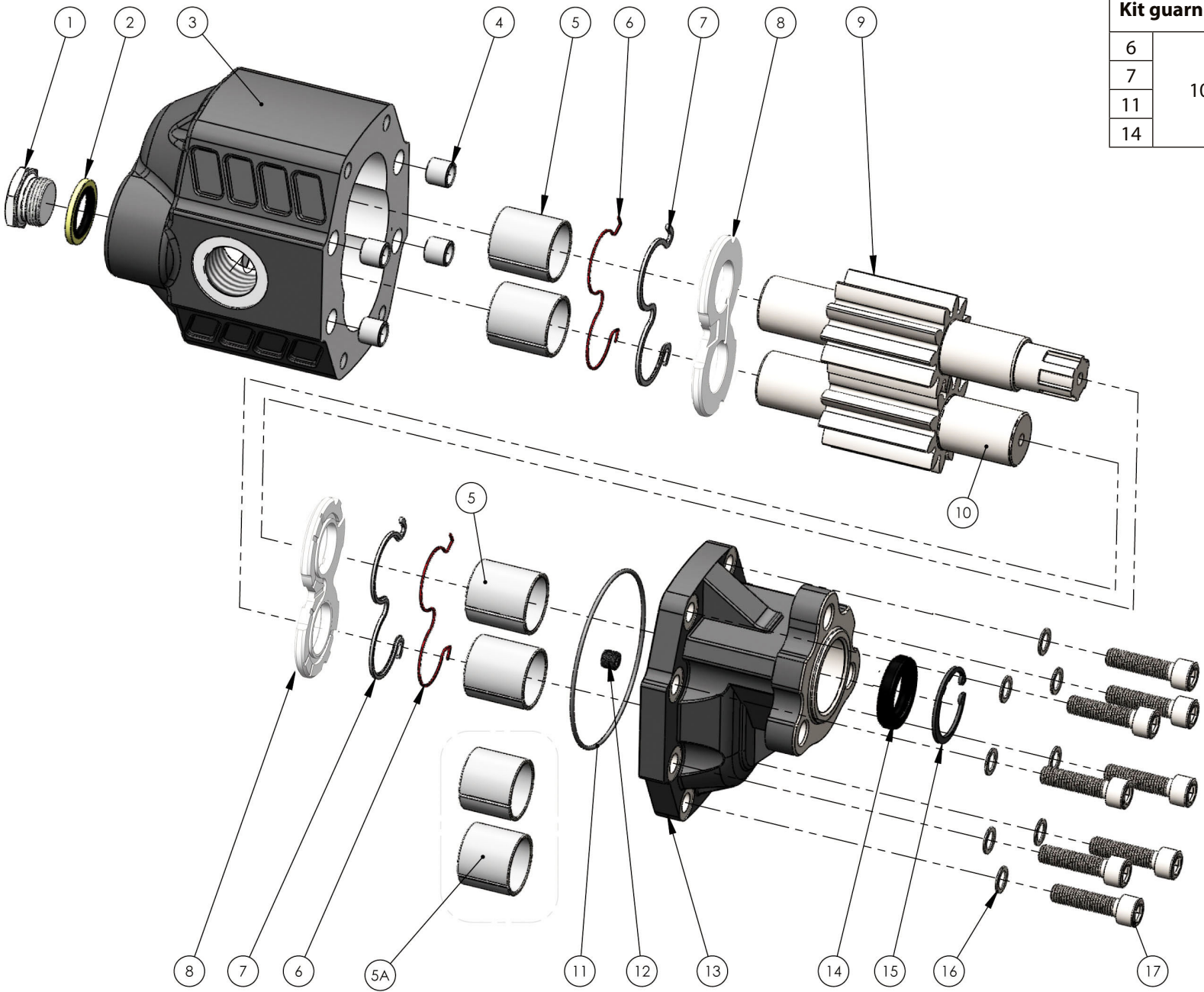
6	10590000188
7	
11	
14	



N°	17	22	27	34	43	51	61	73	82	Codice/Code	Descrizione / Description		Q.
1	.	.	.							54000200110	Tappo Acciaio 1/2"	Steel plug 1/2"	1
				.	.	.	.	.	.	54000200129	Tappo Acciaio 3/4"	Steel plug 3/4"	
2	.	.	.							11600910129	Rondella acciaio-gomma 1/2"	Steel-rubber washer 1/2"	1
				.	.	.	.	.	.	11600910343	Rondella acciaio-gomma 3/4"	Steel-rubber washer 3/4"	
3	.									51701000173	Corpo pompa	Gear housing	1
		.								51701000226			
			.							51701000271			
				.						51701000342			
					.					51701000431			
						.				51701000511			
							.			51701000619			
								.	51701000717				
								.	51701000824				
4	.	.	.	.	.	.	.	.	.	50100300282	Spine forate di centraggio 14x12.5	Pins 14x12.5	4
5	.	.	.	.	.	.	.	.	.	53300400033	Boccola autolub. 28x32x30	Bushing 28x32x30	4
6	.	.	.	.	.	.	.	.	.	50600001097	Guarnizione antiestrusione	Back-up ring	2
7	.	.	.	.	.	.	.	.	.	50600001088	Guarnizione per rasamento	Thrust plate seal	2
8	.	.	.	.	.	.	.	.	.	51001000293	Rasamento ad occhiale	Thrust plate	2
9	.									52302000178	Albero dentato conduttore	Drive shaft	1
		.								52302000221			
			.							52302000276			
				.						52302000347			
					.					52302000436			
						.				52302000516			
							.			52302000614			
							.		52302000712				
								.	52302000829				
10	.									52302100177	Albero dentato condotto	Driven shaft	1
		.								52302100220			
			.							52302100275			
				.						52302100346			
					.					52302100435			
						.				52302100515			
							.			52302100613			
							.		52302100711				
								.	52302100828				
11	.	.	.	.	.	.	.	.	.	50600001579	Guarnizione OR (2x95)	O-ring (2x95)	1
12	.	.	.	.	.	.	.	.	.	50401000063	Grano conico 1/8"	Plug 1/8"	1
13	.	.	.	.	.	.	.	.	.	51800300107	Coperchio anteriore	Mounting cover	1
14	.	.	.	.	.	.	.	.	.	50602425401	Guarnizione paraolio	Oil seal	1
15	.	.	.	.	.	.	.	.	.	50100100373	Anello elastico	Circlip	1
16	.	.	.	.	.	.	.	.	.	50102000101	Rondella elastica	Washer	8
17									.	50200400565	Vite TCE M10x35	Screw M10x35	2
18	.	.	.	.	.	.	.	.		502-004-00574	Vite TCE M10x40	Screw M10x40	8
								.	6				

**Kit guarnizioni / Seal Kit**

6	10590000320
7	
11	
14	



N°	90	100	125	Codice/Code	Descrizione / Description		Q.
1	.	.	.	54000200129	Tappo Acciaio 3/4"	Steel plug 3/4"	1
2	.	.	.	11600910343	Rondella acciaio-gomma 3/4"	Steel-rubber washer 3/4"	1
3	.			51701000904	Corpo pompa	Gear housing	1
		.		51701000995			
			.	51701001252			
4	.	.	.	50100300282	Spine forate di centraggio 14x12.5	Pins 14x12.5	4
5	.			53300400060	Boccola autolub. 30x34x35	Bushing 30x34x35	2
		.	.				4
5a	.			53300400355	Boccola autolub. 30x34x30	Bushing 30x34x30	2
6	.	.	.	50600001284	Guarnizione antiestrusione	Back-up ring	2
7	.	.	.	50600001275	Guarnizione per rasamento	Thrust plate seal	2
8	.	.	.	51001000346	Rasamento ad occhiale	Thrust plate	2
9	.			52302300906	Albero dentato conduttore	Drive shaft	1
		.		52302301003			
			.	52302301254			
10	.			52302300915	Albero dentato condotto	Driven shaft	1
		.		52302301012			
			.	52302301263			
11	.	.	.	50600001579	Guarnizione OR (2x95)	O-ring (2x95)	1
12	.	.	.	50401000063	Grano conico 1/8"	Plug 1/8"	1
13	.			51800300518	Coperchio anteriore	Mounting cover	1
		.	.	51800300134			
14	.	.	.	50602425401	Guarnizione paraolio	Oil seal	1
15	.	.	.	50100100373	Anello elastico	Circlip	1
16	.	.	.	50102000101	Rondella elastica	Washer	8
17	.	.	.	50200400574	Vite TCE M10x40	Screw M10x40	8

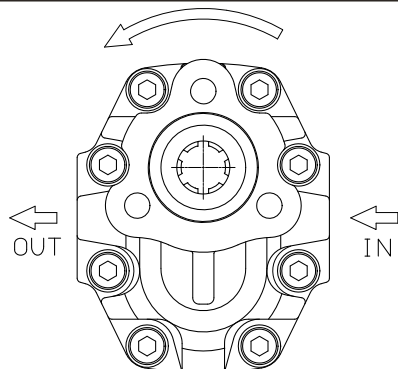
**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

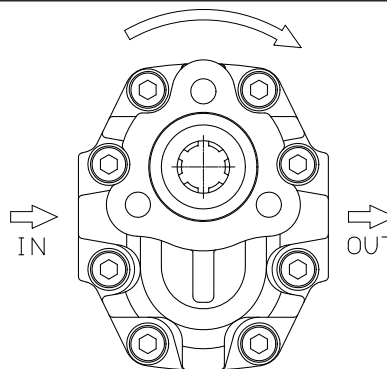
Tipo pompa Pump type	Cilindrata Displacement  cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed  rpm	Velocità max. intermittente Max. intermittent speed  rpm	Velocità min. Min. speed  rpm
		P1	P2	P3			
		bar	bar	bar			
<b>NPH-17</b>	17.04	290	315	325	2500	3000	300
<b>NPH-22</b>	22.15						
<b>NPH-27</b>	26.18						
<b>NPH-34</b>	33.88	280	300	310	2200	2800	
<b>NPH-43</b>	43.12	270	290	300	2000	2500	
<b>NPH-51</b>	50.82	240	260	280			
<b>NPH-61</b>	60.06	220	240	250	1900	2500	
<b>NPH-73</b>	72.88	205	225	230	1900	2500	
<b>NPH-82</b>	81.08	205	225	230	1900	2500	
<b>NPH-90</b>	90.43	180	200	220	1900	2500	
<b>NPH-100</b>	98.18	180	200	220	1500	1800	
<b>NPH-125</b>	122.72	160	180	200	1500	1800	

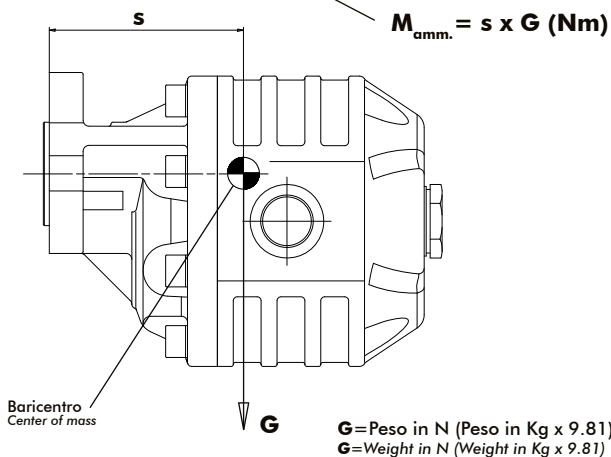
P1=Pressione max.continua  
P2=Pressione max. intermittente  
P3=Pressione max. di punta

Max. continuous pressure  
Max. Intermittent pressure  
Max. peak pressure

(100%)  
(20 sec.max.)  
(6 sec.max)

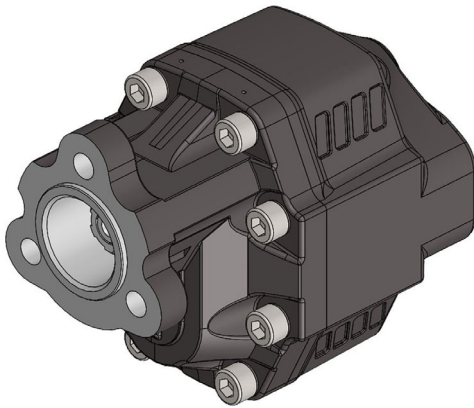
**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**
**Rotazione antioraria, pompa sinistra**  
*Anti-clockwise rotation, left pump*

 Vista FRONTALE  
FRONT

**Rotazione oraria, pompa destra**  
*Clockwise rotation, right pump*

 Vista FRONTALE  
FRONT

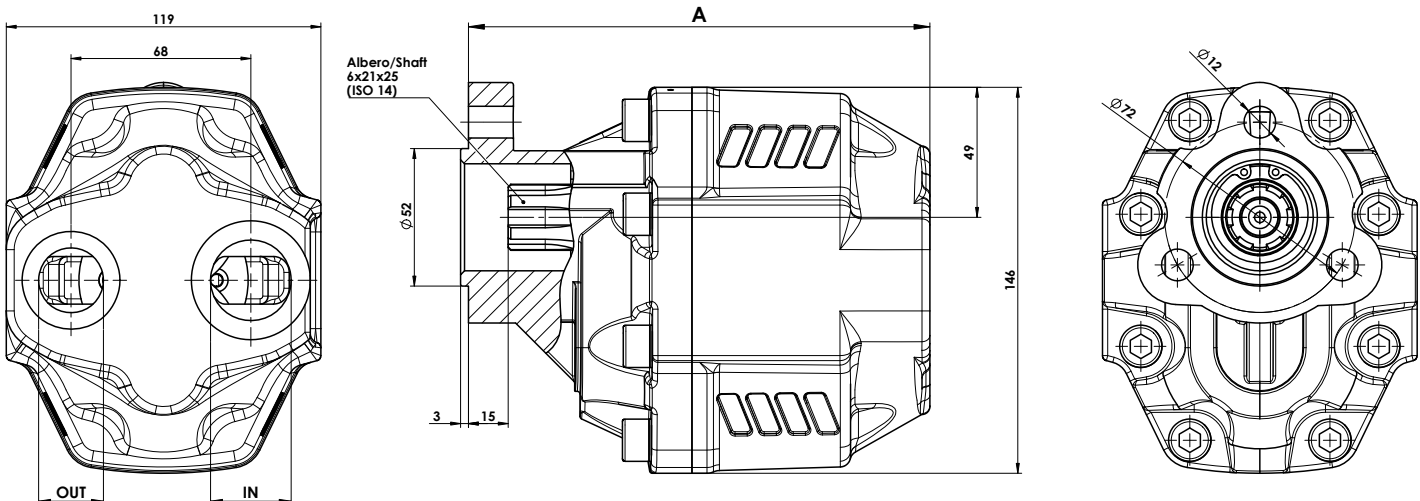
**MOMENTO PESO / MASS MOMENT**


Tipo pompa - Pump type	S
<b>NPH-17</b>	93
<b>NPH-22</b>	94
<b>NPH-27</b>	96
<b>NPH-34</b>	99
<b>NPH-43</b>	101
<b>NPH-51</b>	103
<b>NPH-61</b>	106
<b>NPH-73</b>	110
<b>NPH-82</b>	113
<b>NPH-90</b>	120
<b>NPH-100</b>	122
<b>NPH-125</b>	130

**PER MODIFICARE IL SENSO DI ROTAZIONE VEDERE ISTRUZ. 99700200042**  
**TO CHANGE THE DIRECTION OF ROTATION SEE INSTRUCTION 99700200042**



Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>		VI > 100	Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Cilindrata <i>Displacement</i>	Codice <i>Code</i>		IN	OUT	Pressione <i>Pressure</i>			A	Velocità max. continua <i>Max. continuous speed</i>	Velocità max. intermittente <i>Max. intermittent speed</i>	Velocità min. <i>Min. speed</i>	Peso <i>Weight</i>
						P1	P2	P3					
						bar	bar	bar					
<b>NPH-51</b>	50,82	10503600514	10503600523	G 1	G 3/4	240	260	280	174,5	2000	2500	300	11,5
<b>NPH-61</b>	60,06	10503600612	10503600621			220	240	250	180,5	1800	2000		12
<b>NPH-82</b>	81,08	10503600827	10503600836			190	210	220	193,5	1500	1800		13

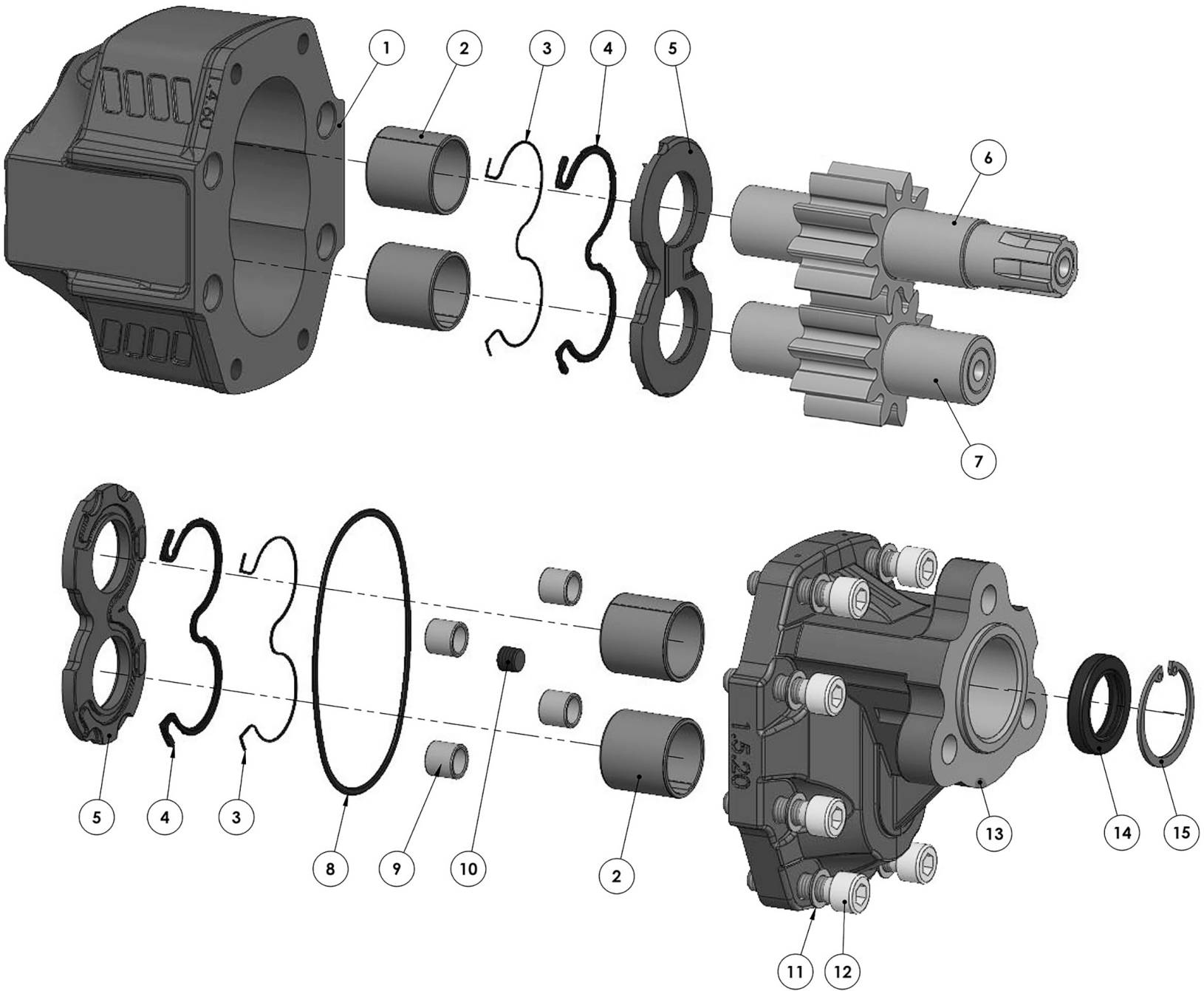
P1=Pressione max.continua  
P2=Pressione max. intermittente  
P3=Pressione max. di punta

Max. continuous pressure  
Max. Intermittent pressure  
Max. peak pressure

(100%)  
(20 sec.max.)  
(6 sec.max)



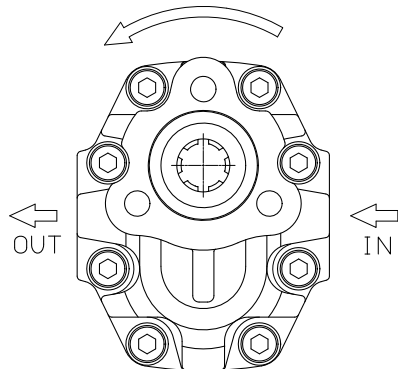
**Esplso ricambi / Spare parts**



N°	51	61	82	Codice/Code	Descrizione / Description		Q.
1	•			51701800514	Corpo pompa	Gear housing	1
		•		51701800612			
			•	51701800828			
2	•	•	•	53300400033	Boccole autolub. 28x32x30	Bushing 28x32x30	4
3	•	•	•	50600001088	Guarnizione per rasamento	Thrust plate seal	2
4	•	•	•	50600001097	Guarnizione antiestrusione	Back-up ring	2
5	•	•	•	51001000293	Rasamento a occhiale	Thrust plate	2
6	•			52302000516	Albero dentato conduttore	Drive shaft	1
		•		52302000614			
			•	52302000829			
7	•			52302100515	Albero dentato condotto	Driven shaft	1
		•		52302100613			
			•	52302100828			
8	•	•	•	50600001579	Guarnizione OR 95x99x2	O-Ring 95x99x2	1
9	•	•	•	50100300282	Spine forate di centraggio 14x12.5	Pins 14x12.5	4
10	•	•	•	50401000063	Grano conico 1/8"	Plug 1/8"	1
11	•	•	•	50102000101	Rondella elastica Schnorr tipo S	Washer Schnorr S type	8
12	•	•	•	50200400574	Vite TCE M10x40 UNI 5931	Screw M10x40 UNI 5931	8
13	•	•	•	51800300107	Coperchio anteriore	Mounting cover	1
14	•	•	•	50602425401	Paraolio GAP 25x40x7	GAP Oil 25x40x7	1
15	•	•	•	50100100373	Anello seeger 40 l	Seeger ring 40 l	1

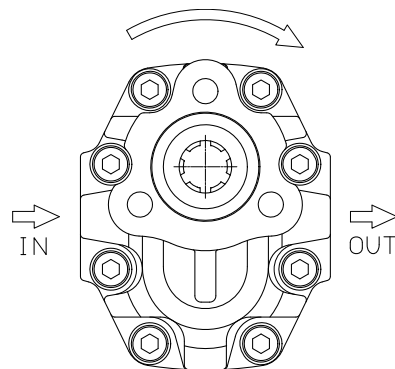
**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

**Rotazione antioraria, pompa sinistra**  
*Anti-clockwise rotation, left pump*



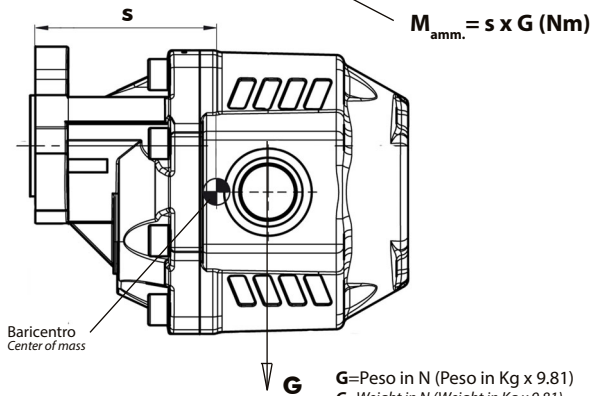
Vista FRONTALE  
 FRONT

**Rotazione oraria, pompa destra**  
*Clockwise rotation, right pump*

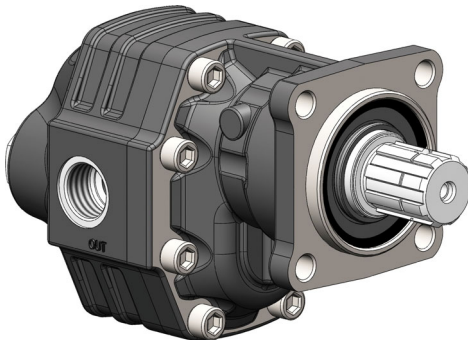


Vista FRONTALE  
 FRONT

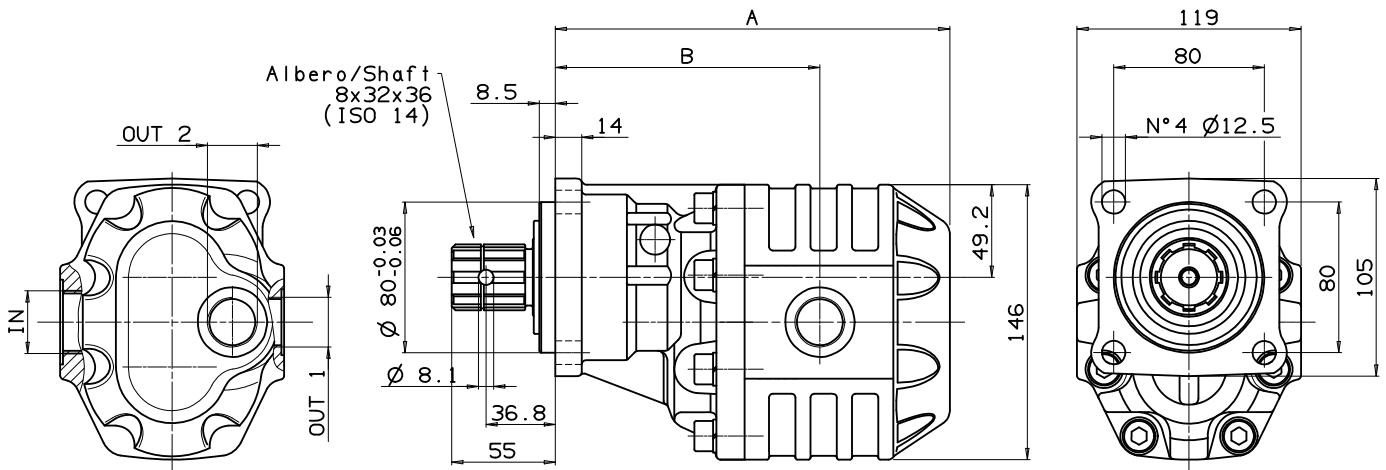
**MOMENTO PESO / MASS MOMENT**



Tipo pompa - Pump type	s
<b>NPH-51</b>	100
<b>NPH-61</b>	103
<b>NPH-82</b>	110



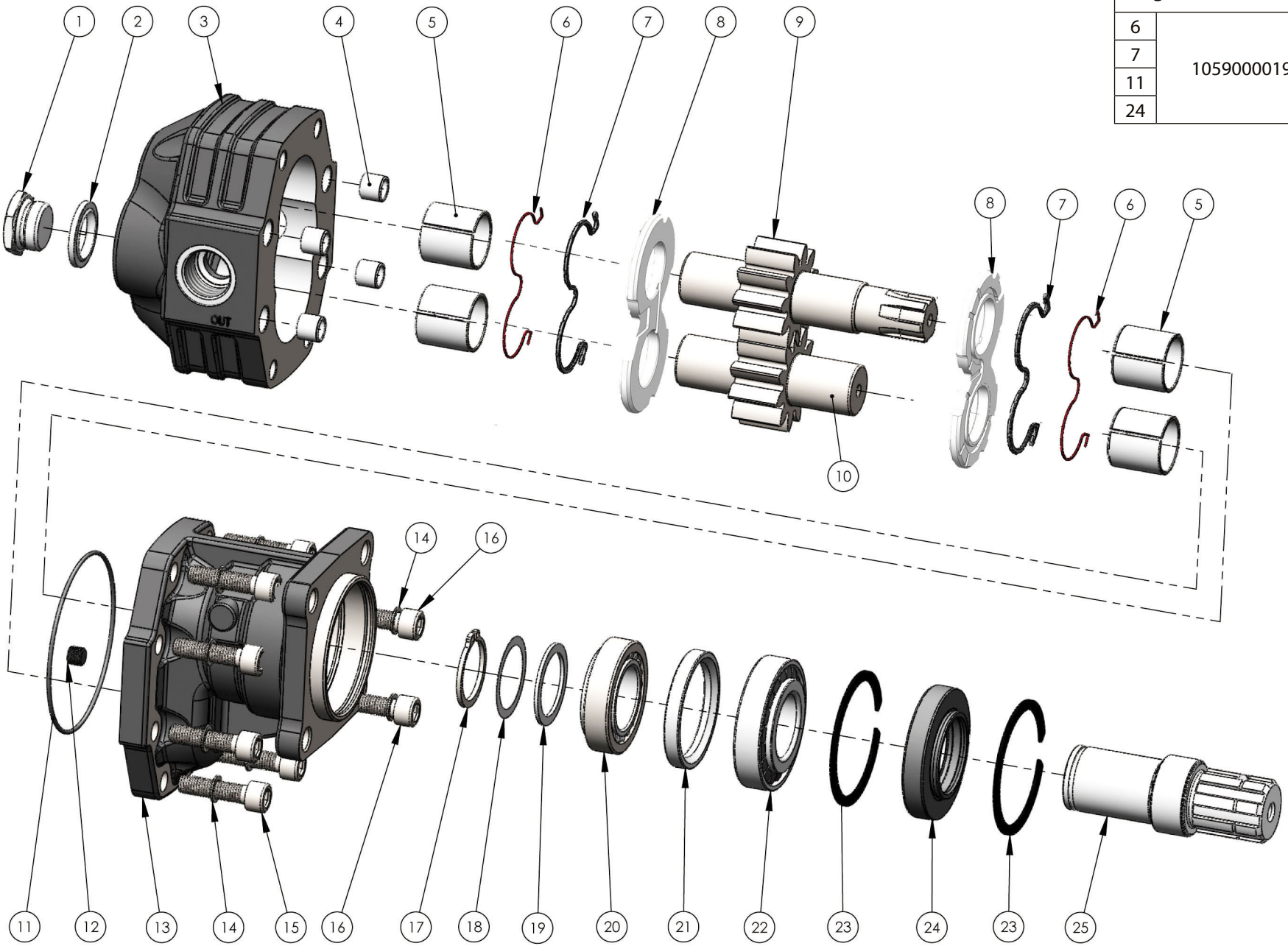
Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>		VI > 100	Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Rotazione <i>Rotation</i>		IN	OUT 1	OUT 2	A	B	Peso <i>Weight</i>		
	Destra / Right	Sinistra / Left								
			ISO 228	ISO 228	ISO 228	mm	mm	Kg		
<b>NPH-17</b>	10501110173	10501110182	G 1/2	G 1/2		168.5	119.5	11		
<b>NPH-22</b>	10501110226	10501110235				172	121.5	11.5		
<b>NPH-27</b>	10501110271	10501110280	G 3/4			174.5	124	12		
<b>NPH-34</b>	10501110342	10501110351				179.5	125	13		
<b>NPH-43</b>	10501110431	10501110441	G1	G 3/4		185.5	130	13.5		
<b>NPH-51</b>	10501110511	10501110520				190.5	130.5	14		
<b>NPH-61</b>	10501110619	10501110628				196.5	136.5	14.5		
<b>NPH-73</b>	10501110735	10501110744				204.5	135.5	15		
<b>NPH-82</b>	10501110824	10501110833	G1 1/4			209.5	140.5	15.5		
<b>NPH-90</b>	10501110904	10501110913				G1	G 3/4	220.5	148.5	15.5
<b>NPH-100</b>	10501111001	10501111010						226.5	154.5	15
<b>NPH-125</b>	10501111252	10501111261				242.5	158.5	17		

**Kit guarnizioni / Seal Kit**

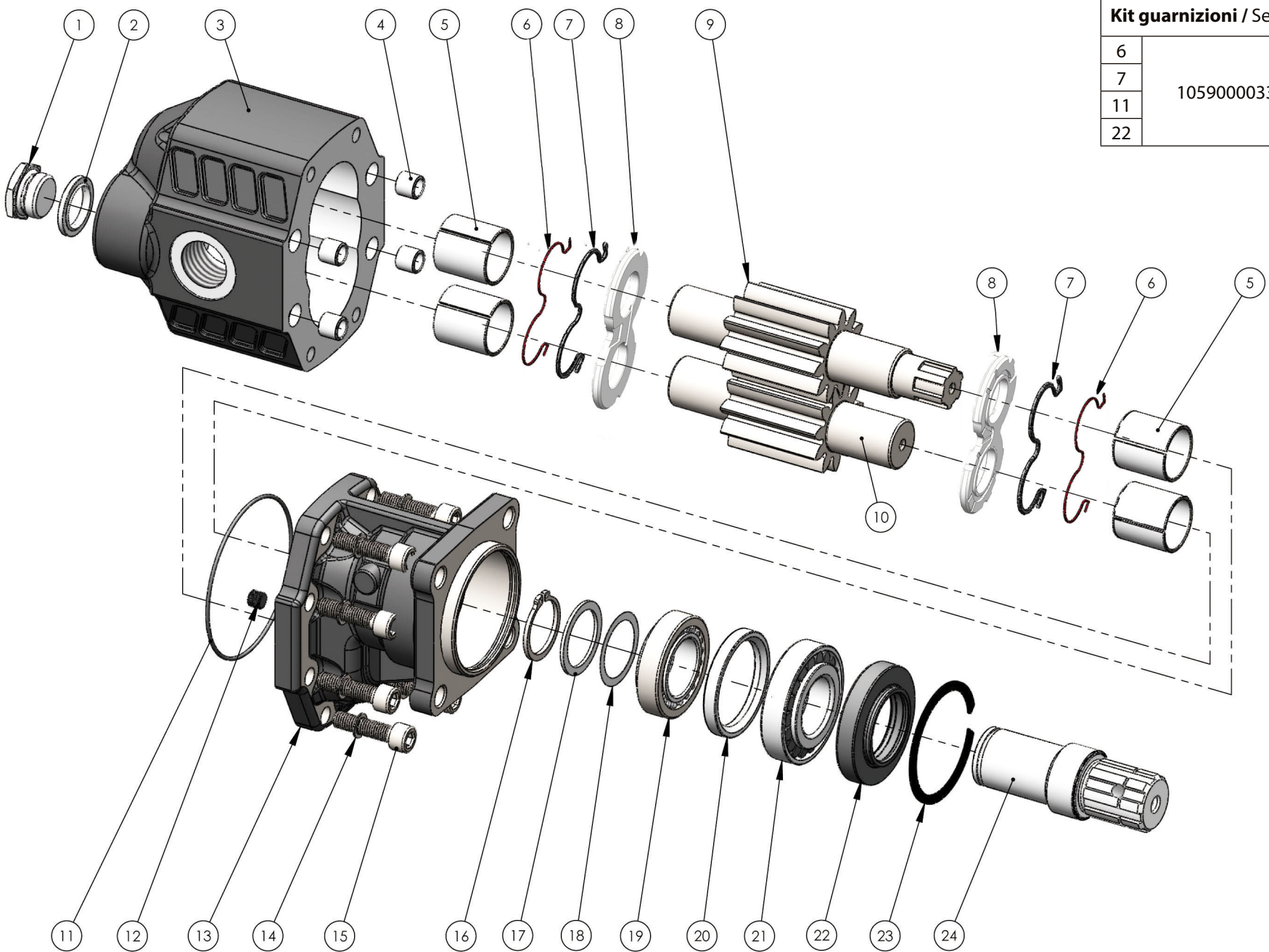
6	10590000197
7	
11	
24	



N°	17	22	27	34	43	51	61	73	82	Codice/Code	Descrizione / Description	Q.	
1	.	.	.							54000200110	Tappo Acciaio 1/2"	Steel plug 1/2"	1
				.	.	.	.	.	.	54000200129	Tappo Acciaio 3/4"	Steel plug 3/4"	
2	.	.	.							11600910129	Rondella acciaio-gomma 1/2"	Steel-rubber washer 1/2"	1
				.	.	.	.	.	.	11600910343	Rondella acciaio-gomma 3/4"	Steel-rubber washer 3/4"	
3	.									51701000173	Corpo pompa	Gear housing	1
		.								51701000226			
			.							51701000271			
				.						51701000342			
					.					51701000431			
						.				51701000511			
							.			51701000619			
								.		51701000717			
								.	51701000824				
4	.	.	.	.	.	.	.	.	.	50100300282	Spine forate di centraggio 14x12.5	Pins 14x12.5	4
5	.	.	.	.	.	.	.	.	.	53300400033	Boccola autolub. 28x32x30	Bushing 28x32x30	4
6	.	.	.	.	.	.	.	.	.	50600001097	Guarnizione antiestrusione	Back-up ring	2
7	.	.	.	.	.	.	.	.	.	50600001088	Guarnizione per rasamento	Thrust plate seal	2
8	.	.	.	.	.	.	.	.	.	51001000293	Rasamento ad occhiale	Thrust plate	2
9	.									52302000178	Albero dentato conduttore	Drive shaft	1
		.								52302000221			
			.							52302000276			
				.						52302000347			
					.					52302000436			
						.				52302000516			
							.			52302000614			
								.		52302000712			
								.	52302000829				
10	.									52302100177	Albero dentato condotto	Driven shaft	1
		.								52302100220			
			.							52302100275			
				.						52302100346			
					.					52302100435			
						.				52302100515			
							.			52302100613			
								.		52302100711			
								.	52302100828				
11	.	.	.	.	.	.	.	.	.	50600001579	Guarnizione OR (2x95)	O-ring (2x95)	1
12	.	.	.	.	.	.	.	.	.	50401000063	Grano conico 1/8"	Plug 1/8"	1
13	.	.	.	.	.	.	.	.	.	51800300116	Coperchio anteriore	Mounting cover	1
14	.	.	.	.	.	.	.	.	.	50102000101	Rondella elastica	Washer	8
15	.	.	.	.	.	.	.	.	.	50200400574	Vite TCE M10x40	Screw M10x40	8
													6
16									.	50200400565	Vite TCE M10x35	Screw M10x35	2
17	.	.	.	.	.	.	.	.	.	50100001355	Anello seeger	Seeger ring	1
18	.	.	.	.	.	.	.	.	.	52900700226	Rondella speciale 45x35x0,,2	Special washer 45x35x0,2	1
19	.	.	.	.	.	.	.	.	.	52900700208	Rondella speciale 45x35x2	Special washer 45x35x2	1
20	.	.	.	.	.	.	.	.	.	51000200202	Cuscinetto a rulli conici 35x62x18	Tapered roller bearing 35x62x18	1
21	.	.	.	.	.	.	.	.	.	53000400164	Distanziale 52x64,2x8,25	Spacer 52x64,2x8,25	1
22	.	.	.	.	.	.	.	.	.	51000200211	Cuscinetto a rulli conici 35x72x18,25	Tapered roller bearing 35x62x18	1
23	.	.	.	.	.	.	.	.	.	50100002729	Anello elastico	Circlip	2
24	.	.	.	.	.	.	.	.	.	50600842723	Guarnizione paraolio	Oil seal	1
25	.	.	.	.	.	.	.	.	.	11400500147	Manicotto	Coupling	1

Kit guarnizioni / Seal Kit

6	10590000339
7	
11	
22	



N°	90	100	125	Codice/Code	Descrizione / Description	Q.	
1	.	.	.	54000200129	Tappo Acciaio 3/4"	Steel plug 3/4"	1
2	.	.	.	11600910343	Rondella acciaio-gomma 3/4"	Steel-rubber washer 3/4"	1
3	.			51701000904	Corpo pompa	Gear housing	1
		.		51701000995			
			.	51701001252			
4	.	.	.	50100300282	Spine forate di centraggio 14x12.5	Pins 14x12.5	4
5		.	.	53300400060	Boccola autolub. 30x34x35 con cava	Bushing 30x34x35	4
	.			53300400426	Boccola autolub. 30x34x35 con cava	Bushing 30x34x35	4
6	.	.	.	50600001284	Guarnizione antiestrusione	Back-up ring	2
7	.	.	.	50600001275	Guarnizione per rasamento	Thrust plate seal	2
8	.	.	.	51001000346	Rasamento ad occhiale	Thrust plate	2
9	.			52302300906	Albero dentato conduttore	Drive shaft	1
		.		52302301003			
			.	52302301254			
10	.			52302300915	Albero dentato condotto	Driven shaft	1
		.		52302301012			
			.	52302301263			
11	.	.	.	50600001579	Guarnizione OR (2x95)	O-ring (2x95)	1
12	.	.	.	50401000063	Grano conico 1/8"	Plug 1/8"	1
13	.			51800300527	Coperchio anteriore	Mounting cover	1
		.	.	51800300152			
14	.	.	.	50102000101	Rondella elastica	Washer	8
15	.	.	.	50200400574	Vite TCE M10x40	Screw M10x40	8
16	.	.	.	50100001355	Anello seeger	Seeger ring	1
17	.	.	.	52900700226	Rondella speciale 45x35x0,,2	Special washer 45x35x0,2	1
18	.	.	.	52900700208	Rondella speciale 45x35x2	Special washer 45x35x2	1
19	.	.	.	51000200202	Cuscinetto a rulli conici 35x62x18	Tapered roller bearing 35x62x18	1
20	.	.	.	53000400164	Distanziale 52x64,2x8,25	Spacer 52x64,2x8,25	1
21	.	.	.	51000200211	Cuscinetto a rulli conici 35x72x18,25	Tapered roller bearing 35x72x18,25	1
22	.	.	.	50600842723	Guarnizione paraolio	Oil seal	1
23	.	.	.	50100002729	Anello elastico	Circlip	2
24	.	.	.	114-005-00147	Manicotto	Coupling	1



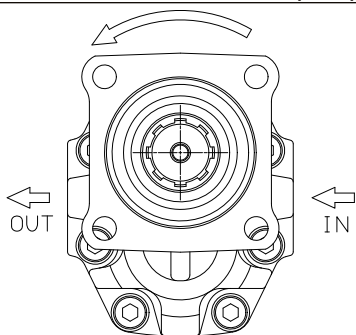
**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

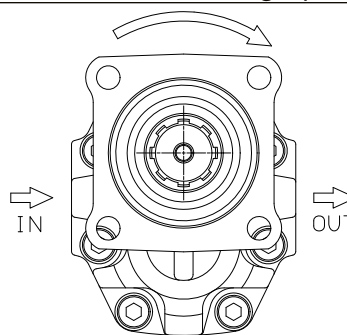
Tipo pompa Pump type	Cilindrata Displacement  cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed  rpm	Velocità max. intermittente Max. intermittent speed  rpm	Velocità min. Min. speed  rpm
		P1	P2	P3			
		bar	bar	bar			
<b>NPH-17</b>	17.04	290	315	325	2500	3000	300
<b>NPH-22</b>	22.15						
<b>NPH-27</b>	26.18						
<b>NPH-34</b>	33.88	280	300	310	2200	2800	
<b>NPH-43</b>	43.12	270	290	300	2000	2500	
<b>NPH-51</b>	50.82	240	260	280			
<b>NPH-61</b>	60.06	220	240	250	1900	2500	
<b>NPH-73</b>	72.88	205	225	230	1900	2500	
<b>NPH-82</b>	81.08	205	225	230	1900	2500	
<b>NPH-90</b>	90.43	180	200	220	1900	2500	
<b>NPH-100</b>	98.18	180	200	220	1500	1800	
<b>NPH-125</b>	122.72	160	180	200	1500	1800	

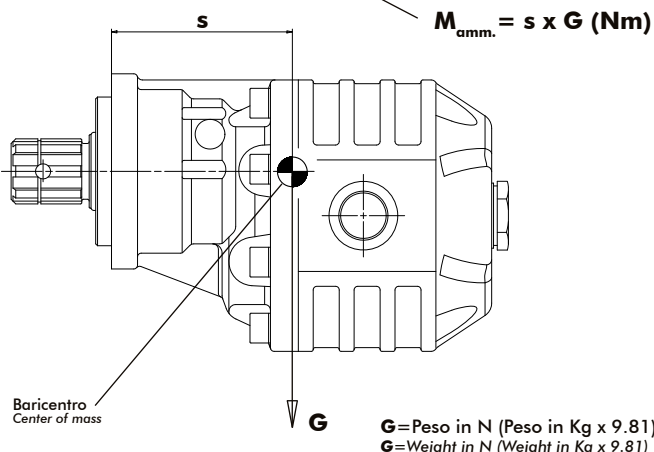
P1=Pressione max.continua  
P2=Pressione max. intermittente  
P3=Pressione max. di punta

Max. continuous pressure  
Max. Intermittent pressure  
Max. peak pressure

(100%)  
(20 sec.max.)  
(6 sec.max)

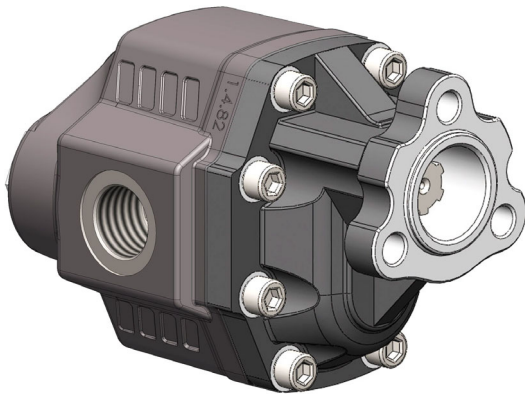
**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**
**Rotazione antioraria, pompa sinistra**  
*Anti-clockwise rotation, left pump*

Vista FRONTALE  
FRONT

**Rotazione oraria, pompa destra**  
*Clockwise rotation, right pump*

Vista FRONTALE  
FRONT

**MOMENTO PESO / MASS MOMENT**

**Tipo pompa - Pump type**

Tipo pompa - Pump type	<b>S</b>
<b>NPH-17</b>	93
<b>NPH-22</b>	94
<b>NPH-27</b>	96
<b>NPH-34</b>	99
<b>NPH-43</b>	101
<b>NPH-51</b>	103
<b>NPH-61</b>	106
<b>NPH-73</b>	110
<b>NPH-82</b>	113
<b>NPH-90</b>	120
<b>NPH-100</b>	121
<b>NPH-125</b>	130

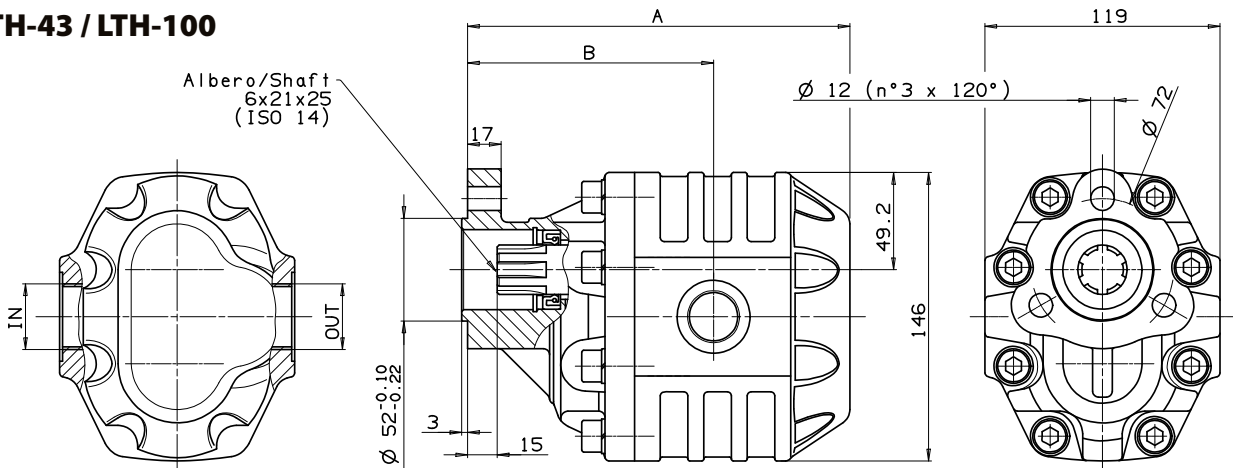
**PER MODIFICARE IL SENSO DI ROTAZIONE VEDERE ISTRUZ. 99700200042**
**TO CHANGE THE DIRECTION OF ROTATION SEE INSTRUCTION 99700200042**
**LA POMPA E' MUNITA DI PARAOLIO BIDIREZIONALE E DI CUSCINETTI A RULLI CONICI SULL'ALBERO DI USCITA**  
**THE PUMP IS COMPLETE WITH DOUBLE OIL-SEAL AND TAPERED ROLLER BEARING ON THE OUTPUT SHAFT**



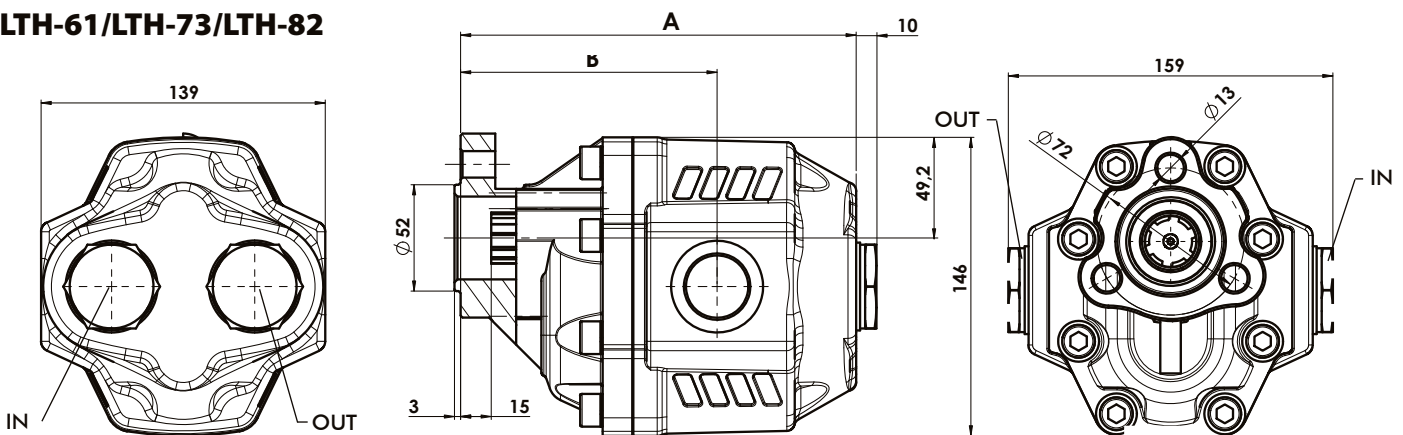
Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>		VG= 10 cSt ÷ 100 cSt			
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>		VG= 750 cSt			
Indice di viscosità consigliato <i>Viscosity index suggested</i>	VI > 100		Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>		> 200 bar: 10 µm < 200 bar: 25 µm			
Pressione di aspirazione / Inlet pressure		-0,3 ÷ 2 bar			
Senso di rotazione / Pump rotation		Bidirezionale/Bidirectional			

## Ingombro / Dimensions

## LTH-43 / LTH-100



## LTH-61/LTH-73/LTH-82

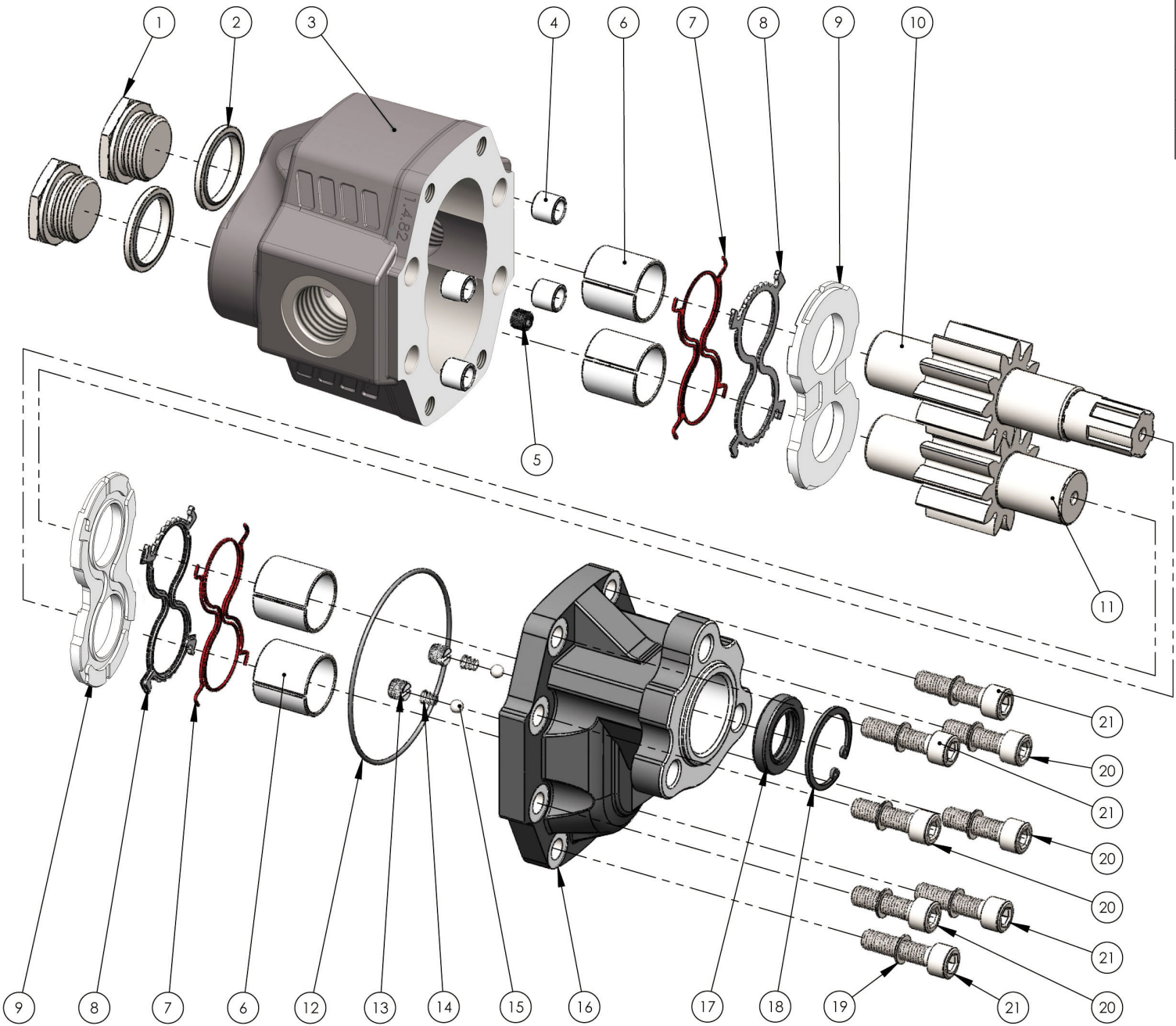


## Dati tecnici / Technical data

Tipo pompa <i>Pump type</i>	Codice ordinazione <i>Order code</i>	IN <i>ISO 228</i>	OUT <i>ISO 228</i>	A <i>mm</i>	B <i>mm</i>	Peso <i>Weight</i>
LTH-43	10502800434	G 3/4		169,5	114	11,8 Kg
LTH-61	10502800612	G 1		180,5	120,5	12,8 Kg
LTH-73	10502800738			188,5	119,5	13,3 Kg
LTH-82	10502800827			193,5	124,5	13,8 Kg
LTH-100	10502801004	G 1 1/4		210,5	138,5	14,8 Kg

**Kit guarnizioni / Seal Kit**

7	10590000348
8	
12	
17	



N°	43	61	73	82	100	Codice/Code	Descrizione / Description		Q.
1		.	.	.		54000200138	Tappo acciaio 1"	Steel plug 1"	2
2		.	.	.		11600911002	Rondella acciaio-gomma 1"	Steel-rubber washer 1"	2
3	.					51701200439	Corpo pompa	Gear housing	1
		.				51701600611			
			.			51701600738			
				.		51701600827			
					.	51701201009			
4	.	.	.	.	.	50100300282	Spine forate di centraggio 14x10.5	Pins 14x10.5	4
5	.				.	50401000063	Grano conico 1/8"	Plug 1/8"	1
6	.	.	.	.		53300400033	Boccola autolub. 28x32x30	Bushing 28x32x30	4
					.	53300400435	Boccola autolub. 30x34x35	Bushing 30x34x35	
7	.	.	.	.	.	50600002112	Guarnizione antiestrusione	Back-up ring	2
8	.	.	.	.	.	50600002103	Guarnizione per rasamento	Thrust plate seal	2
9	.	.	.	.		51001000337	Rasamento ad occhiale	Thrust plate	2
					.	51001000355			
10	.					52302000436	Albero dentato conduttore	Drive shaft	1
		.				52302000614			
			.			52302000712			
				.		52302000829			
					.	52302301003			
11	.					52302400432	Albero dentato condotto	Driven shaft	1
		.				52302400610			
			.			52302400736			
				.		52302400825			
					.	52302401002			
12	.	.	.	.	.	50600001579	Guarnizione OR	O-ring	1
13	.	.	.	.	.	50400000412	Grano valvola lubrificazione	Lube valve screw	2
14	.	.	.	.	.	51200400206	Molla conica	Tapered spring	2
15	.	.	.	.	.	51000900054	Sfera 1/4"	Ball 1/4"	2
16	.	.	.	.		51800300107	Coperchio anteriore	Mounting cover	1
					.	51800300134			
17	.	.	.	.	.	50602425401	Guarnizione paraolio	Oil seal	1
18	.	.	.	.	.	50100100373	Anello elastico	Circlip	1
19	.	.	.	.	.	50102000101	Rondella elastica	Washer	8
20		.	.	.	.	50200400565	Vite TCE M10x35	Screw M10x35	4
21		.	.			50200400574	Vite TCE M10x40	Screw M10x40	4
	.			.	.				8

**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  <i>cm<sup>3</sup>/rev</i>	Pressione Pressure			Velocità max. continua Max. continuous speed  <i>rpm</i>	Velocità max. intermittente Max. intermittent speed  <i>rpm</i>	Velocità min. Min. speed  <i>rpm</i>
		P1	P2	P3			
		<i>bar</i>	<i>bar</i>	<i>bar</i>			
<b>LTH-43</b>	43,12	230	240	250	1700	2250	300
<b>LTH-61</b>	60,06	205	225	230	1900	2500	
<b>LTH-73</b>	72,88	170	180	190	1500	1800	
<b>LTH-82</b>	81,08	205	225	230	1900	2500	
<b>LTH-100</b>	98,18	160	180	190	1400	1700	

P1=Pressione max.continua  
 P2=Pressione max. intermittente  
 P3=Pressione max. di punta

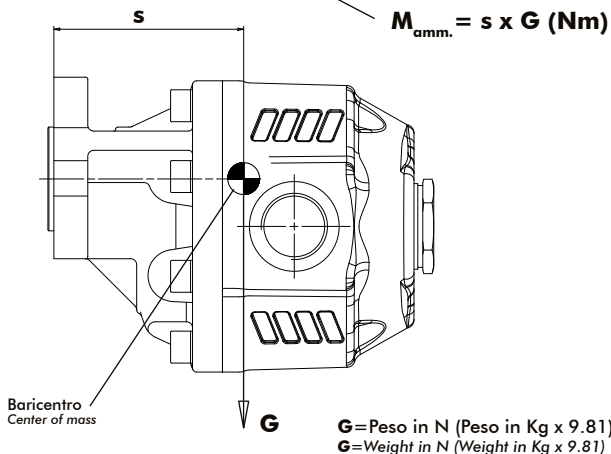
Max. continuous pressure  
 Max. Intermittent pressure  
 Max. peak pressure

(100%)  
 (20 sec.max.)  
 (6 sec.max)

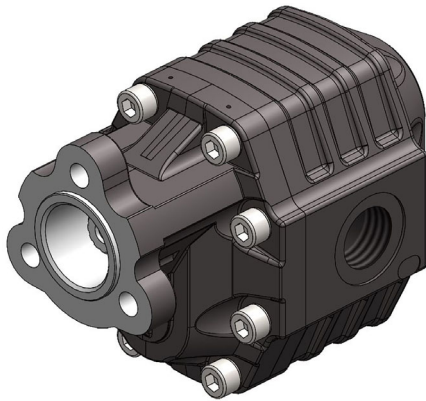
**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

Rotazione antioraria, pompa sinistra <i>Anti-clockwise rotation, left pump</i>	Rotazione oraria, pompa destra <i>Clockwise rotation, right pump</i>
<p>Vista FRONTALE FRONT</p>	<p>Vista FRONTALE FRONT</p>

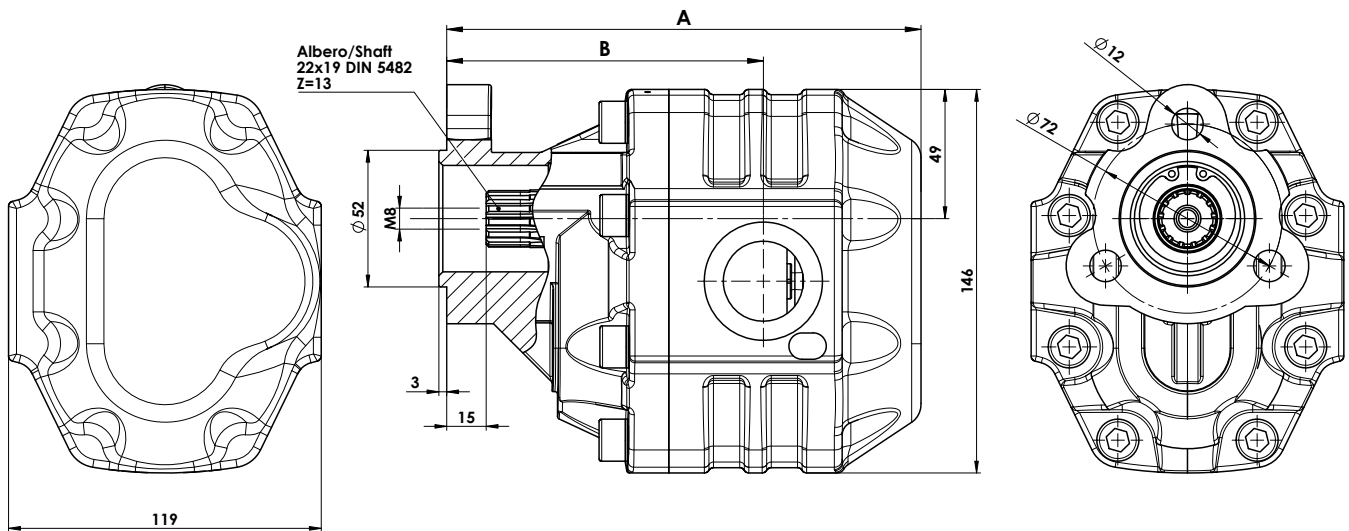
**MOMENTO PESO / MASS MOMENT**



Tipo pompa - Pump type	<b>S</b>
<b>LTH-43</b>	103
<b>LTH-61</b>	108
<b>LTH-73</b>	111
<b>LTH-82</b>	114
<b>LTH-100</b>	125



Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>	VI > 100	Temperatura di esercizio <i>Working temperature</i>			
		-15°C +100°C			
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione / <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione / <i>Pump rotation</i>			Bidirezionale/ <i>Bidirectional</i>		

**Ingombro / Dimensions**

**Dati tecnici / Technical data**

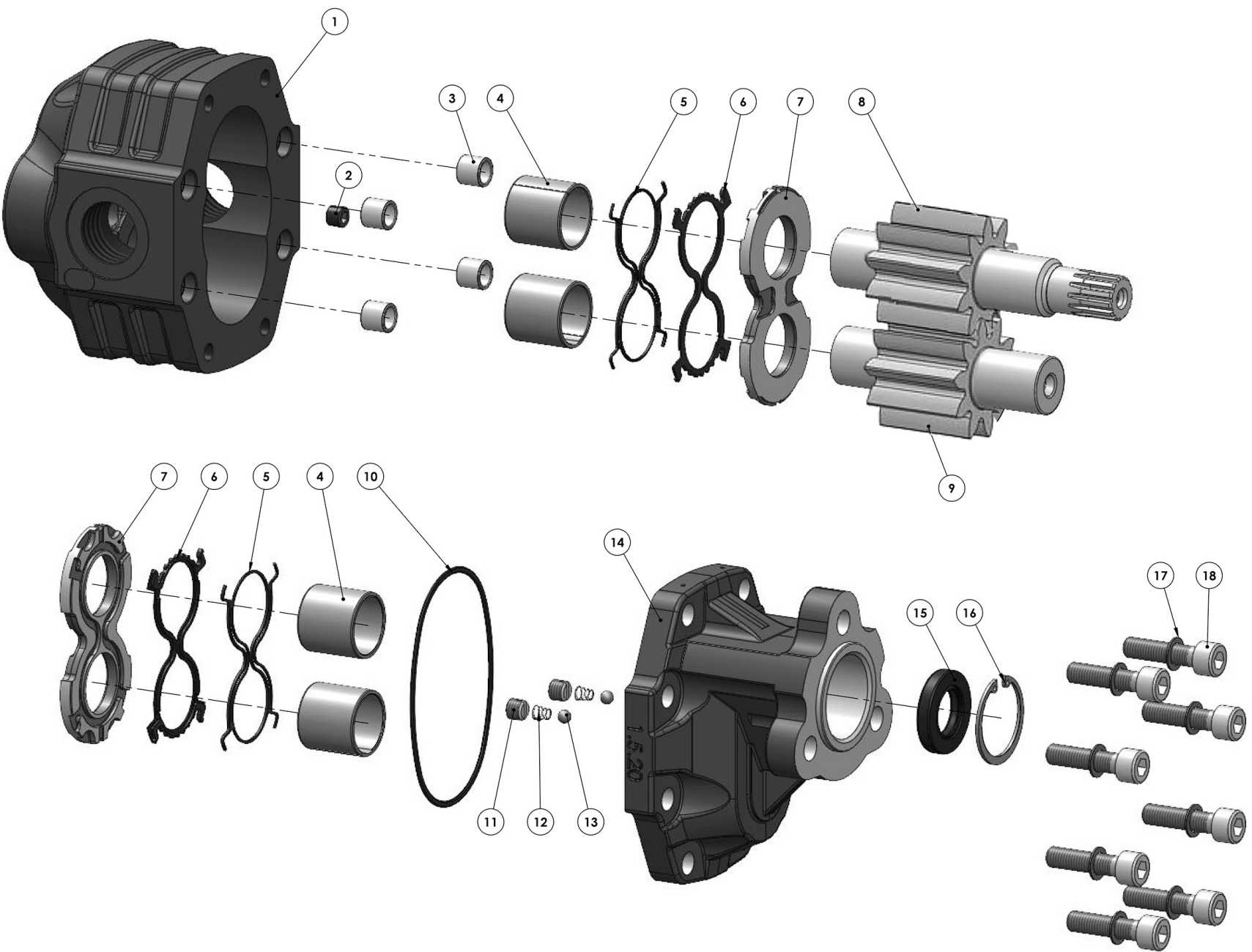
Tipo pompa <i>Pump type</i>	Cilindrata <i>Displacement</i>	Codice <i>Code</i>	IN	OUT	Pressione <i>Pressure</i>			A	B	Velocità max. continua <i>Max. continuous speed</i>	Velocità max. intermittente <i>Max. intermittent speed</i>	Velocità min. <i>Min. speed</i>	Peso <i>Weight</i>
					P1	P2	P3						
					bar	bar	bar						
LTH-61	60,06	10500133061	ISO 228	ISO 228	180	200	230	180,5	120,5	1750	2000	350	12
LTH-82	81,08	10500133082	G 1		160	180	220	193,5	125,5	1500	1750		13

P1=Pressione max.continua  
P2=Pressione max. intermittente  
P3=Pressione max. di punta

Max. continuous pressure  
Max. Intermittent pressure  
Max. peak pressure

(100%)  
(20 sec.max.)  
(6 sec.max.)

**Esplso ricambi / Spare parts**



N°	61	82	Codice/Code	Descrizione / Description		Q.
1	•		51701206193	Corpo pompa	Gear housing	1
		•	51701208244			
2	•	•	50401000063	Grano conico 1/8"	Conical screw 1/8"	1
3	•	•	50100300282	Spine forate di centraggio 14x10.5	Pins 14x10.5	4
4	•	•	53300400033	Boccola autolub. 28x32x30	Bushing 28x32x30	4
5	•	•	50600002112	Guarnizione antiestrusione	Back-up ring	2
6	•	•	50600002103	Guarnizione per rasamento	Thrust plate seal	2
7	•	•	51001000337	Rasamento ad occhiale	Thrust plate	2
8	•		52303200610	Albero dentato conduttore	Drive shaft	1
		•	52303200826			
9	•		52302400610	Albero dentato condotto	Driven shaft	1
		•	52302400825			
10	•	•	50600001579	Guarnizione OR	O-ring	1
11	•	•	50400000412	Grano valvola lubrificazione	Lube valve screw	2
12	•	•	51200400206	Molla conica	Tapered spring	2
13	•	•	51000900054	Sfera 1/4"	Ball 1/4"	2
14	•	•	51800300107	Coperchio anteriore	Mounting cover	1
10	•	•	50602422405	Guarnizione paraolio	Oil seal	1
11	•	•	50100100373	Anello elastico	Circlip	1
17	•	•	50102000101	Rondella elastica	Washer	8
18	•	•	50200400574	Vite TCE M10x40 UNI 5931	Screw M10x40 UNI 5931	8



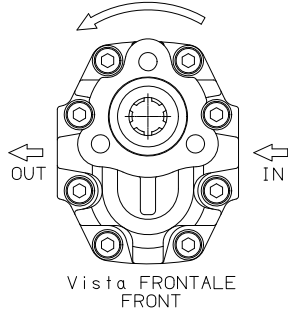
Pompe ad ingranaggi 3 fori  
3 holes hydraulic gear pumps  
LTH UNI DIN 5482 Z13

Fam. 1050013

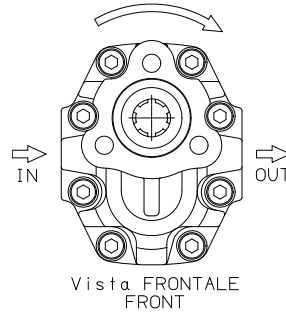


**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

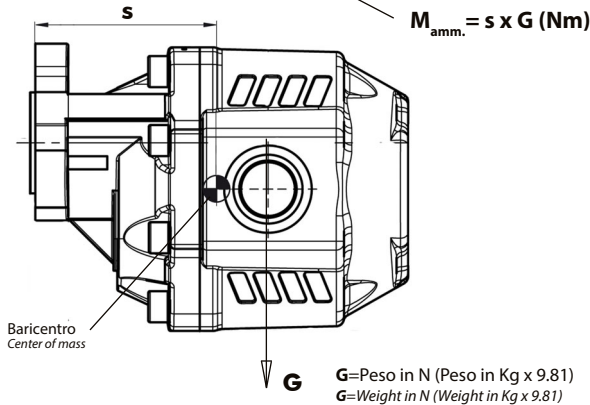
**Rotazione antioraria, pompa sinistra**  
*Anti-clockwise rotation, left pump*



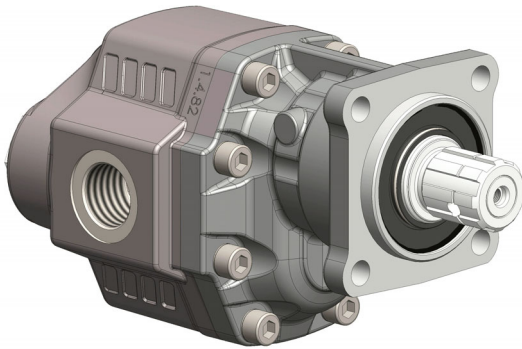
**Rotazione oraria, pompa destra**  
*Clockwise rotation, right pump*



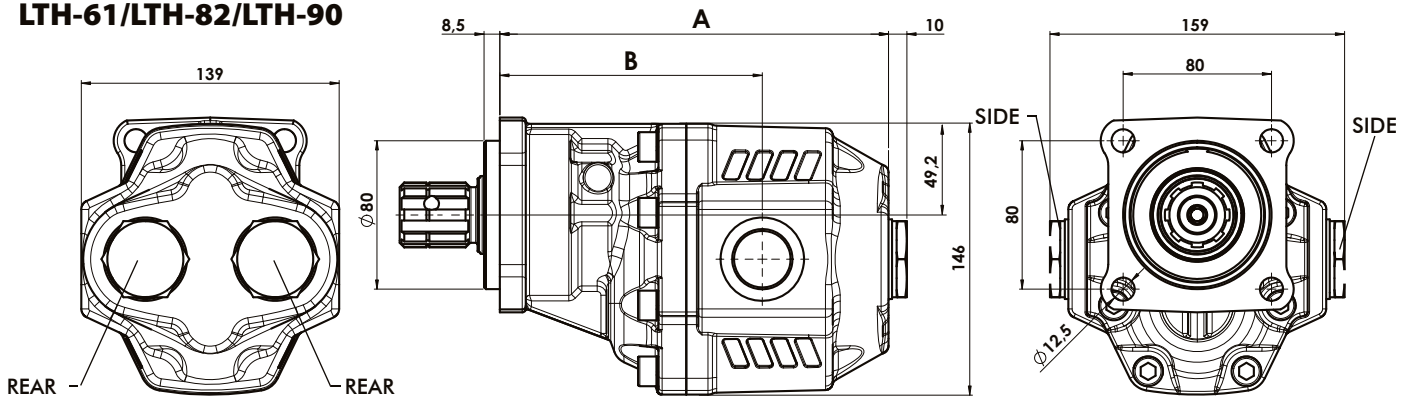
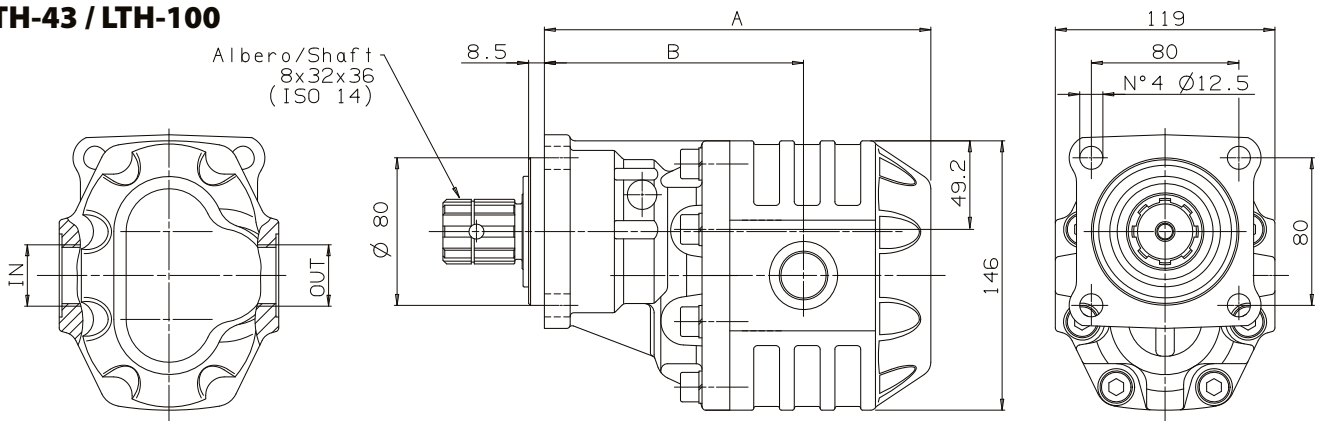
**MOMENTO PESO / MASS MOMENT**



Tipo pompa - Pump type	s
<b>LTH-61</b>	105
<b>LTH-82</b>	111



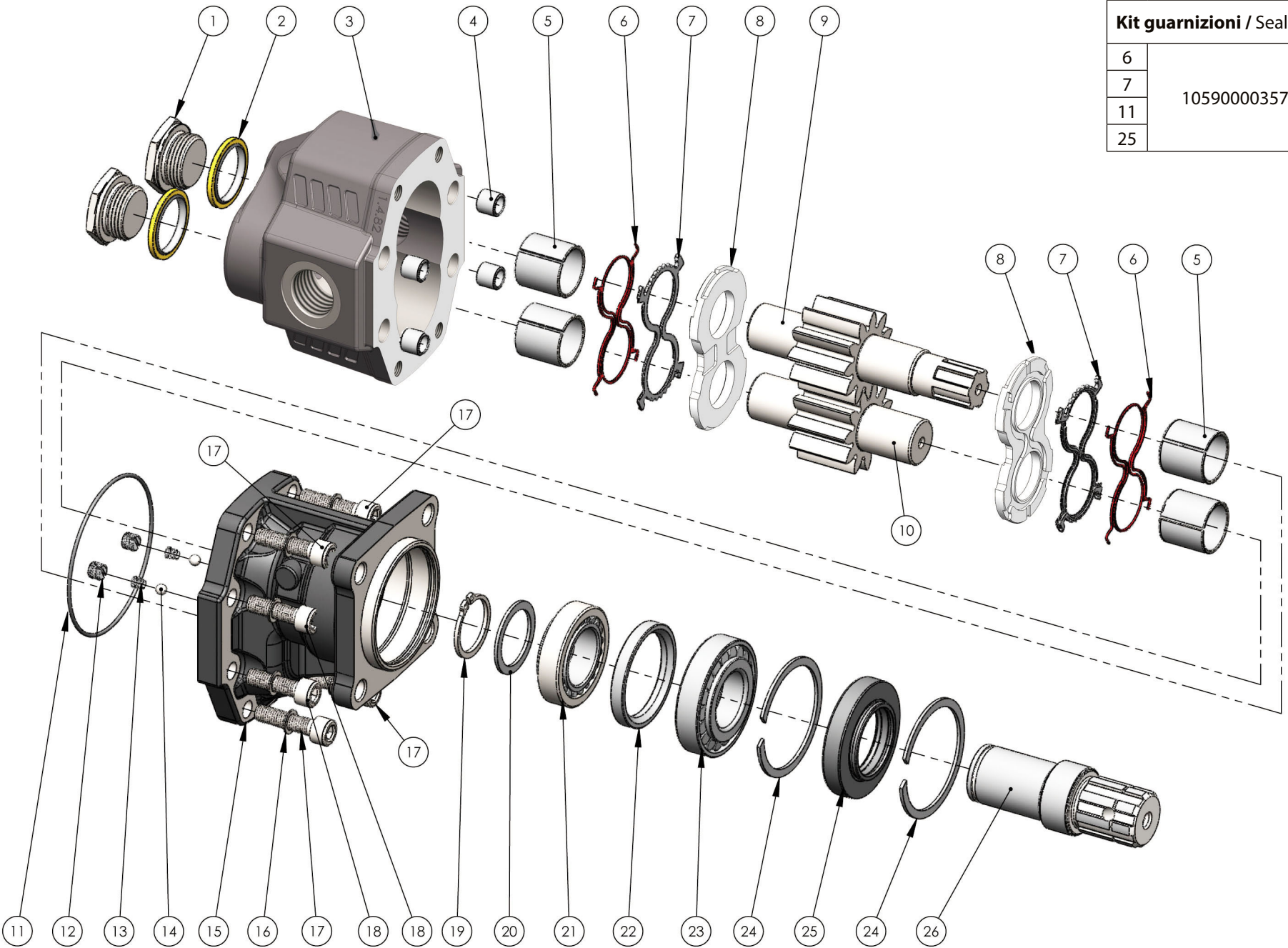
Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>		VG= 10 cSt ÷ 100 cSt			
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>		VG= 750 cSt			
Indice di viscosità consigliato <i>Viscosity index suggested</i>	VI > 100		Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>		> 200 bar: 10 µm < 200 bar: 25 µm			
Pressione di aspirazione / Inlet pressure		-0,3 ÷ 2 bar			
Senso di rotazione / Pump rotation		Bidirezionale/Bidirectional			

**Ingombro / Dimensions**
**LTH-61/LTH-82/LTH-90**

**LTH-43 / LTH-100**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Codice ordinazione <i>Order code</i>	SIDE	REAR	A	B	Peso <i>Weight</i> Kg
		ISO 228	ISO 228	mm	mm	
LTH-43	10502810432	G 3/4		185,5	130	14,3
LTH-61	10502810610	G 1		196,5	136,5	15,3
LTH-82	10502810825			209,5	140,5	16,3
LTH-90	10502810905	G 1 1/4	G 1	211	149	17,3
LTH-100	10502811002	G 1 1/4		226,5	154,5	15,8

**Kit guarnizioni / Seal Kit**

6	10590000357
7	
11	
25	



N°	43	61	82	90	100	Codice/Code	Descrizione / Description	Q.	
1		•	•			54000200138	Tappo acciaio 1"	Steel plug 1"	2
				•		54000200165	Tappo acciaio 1-1/4"	Steel plug 1-1/4"	1
				•					1
2		•	•			11600911002	Rondella acciaio-gomma 1"	Steel-rubber washer 1"	2
				•					1
				•		11600911137	Rondella acciaio-gomma 1-1/4"	Steel-rubber washer 1-1/4"	1
3	•					51701200439	Corpo pompa	Gear housing	1
		•				51701600611			
			•			51701600827			
				•		51701600909			
					•	51701201009			
4	•	•	•	•	•	50100300282	Spine forate di centraggio 14x10.5	Pins 14x10.5	4
5	•	•	•			53300400033	Boccole autolub. 28x32x30	Bushing 28x32x30	4
				•		53300400355	Boccole autolub. 30x34x30	Bushing 30x34x30	
					•	53300400060	Boccole autolub. 30x34x35	Bushing 30x34x35	
6	•	•	•	•	•	50600002112	Guarnizione antiestrusione	Back-up ring	2
7	•	•	•	•	•	50600002103	Guarnizione per rasamento	Thrust plate seal	2
8	•	•	•			51001000337	Rasamento ad occhiale	Thrust plate	2
				•	•	51001000355			
9	•					53202000436	Albero dentato conduttore	Drive shaft	1
		•				52302000614			
			•			52302000829			
				•		52302300924			
					•	52302301003			
10	•					53202400432	Albero dentato condotto	Driven shaft	1
		•				52302400610			
			•			52302400825			
				•		52302400905			
					•	52302401002			
11	•	•	•	•	•	50600001579	Guarnizione OR	O-Ring	1
12	•	•	•	•	•	50400000412	Grano valvola lubrificazione	Lube valve screw	2
13	•	•	•	•	•	51200400206	Molla conica	Tapered spring	2
14	•	•	•	•	•	51000900054	Sfera 1/4"	Ball 1/4"	2
15	•	•	•			51800300116	Coperchio anteriore	Mounting cover	1
				•		51800300527			
					•	51800300152			
16	•	•	•	•	•	50102000101	Rondella elastica	Washer	8
17	•	•				50200400574	Vite TCE M10x40	Screw M10x40	4
			•	•	•				8
18	•	•				50200400565	Vite TCE M10x35	Screw M10x35	4
19	•	•	•	•	•	50100001355	Anello seeger	Seeger ring	1
20	•	•	•	•	•	52900700208	Rondella speciale 45x35x2	Special washser 45x32x2	1
21	•	•	•	•	•	51000200202	Cuscinetto rulli conici 35x62x18	Tapered roller bearing 35x62x18	1
22	•	•	•	•	•	53000400164	Distanziale	Spacer	1
23	•	•	•	•	•	51000200211	Cuscinetto rulli conici 35x72x18.25	Tapered roller bearing 35x72x18,25	1
24	•	•	•	•	•	50100002729	Anello elastico	Circlip	2
25	•	•	•	•	•	50600842723	Guarnizione paraolio	Oil seal	1
26	•	•	•	•	•	11400500147	Manicotto	Coupling	1

**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  <i>cm<sup>3</sup>/rev</i>	Pressione Pressure			Velocità max. continua Max. continuous speed  <i>rpm</i>	Velocità max. intermittente Max. intermittent speed  <i>rpm</i>	Velocità min. Min. speed  <i>rpm</i>
		P1	P2	P3			
		<i>bar</i>	<i>bar</i>	<i>bar</i>			
<b>LTH-43</b>	43,12	230	240	250	1700	2250	300
<b>LTH-61</b>	60,06	205	225	230	1900	2500	
<b>LTH-82</b>	81,08	205	225	230	1900	2500	
<b>LTH-90</b>	90,43	160	180	190	1400	1700	
<b>LTH-100</b>	98,18	160	180	190	1400	1700	

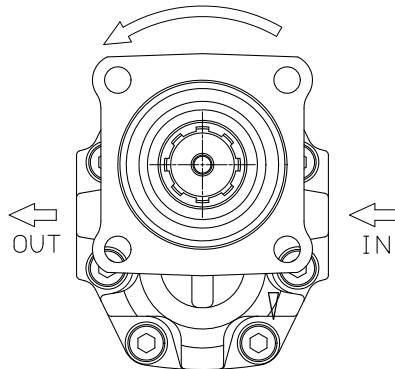
P1=Pressione max.continua  
 P2=Pressione max. intermittente  
 P3=Pressione max. di punta

Max. continuous pressure  
 Max. Intermittent pressure  
 Max. peak pressure

(100%)  
 (20 sec.max.)  
 (6 sec.max)

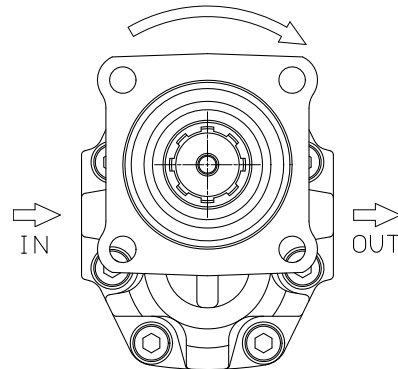
**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

**Rotazione antioraria, pompa sinistra**  
*Anti-clockwise rotation, left pump*



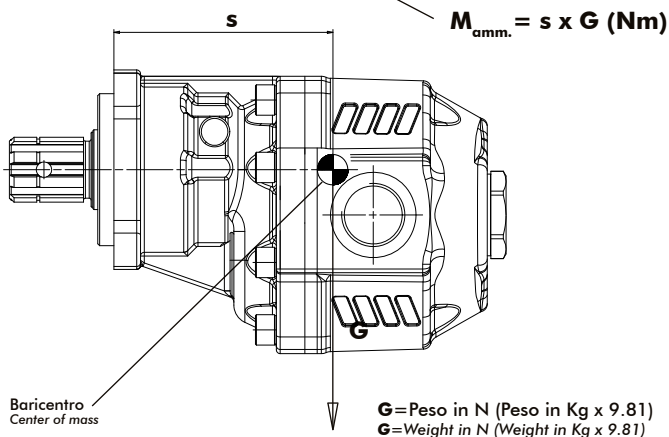
Vista FRONTALE  
FRONT

**Rotazione oraria, pompa destra**  
*Clockwise rotation, right pump*



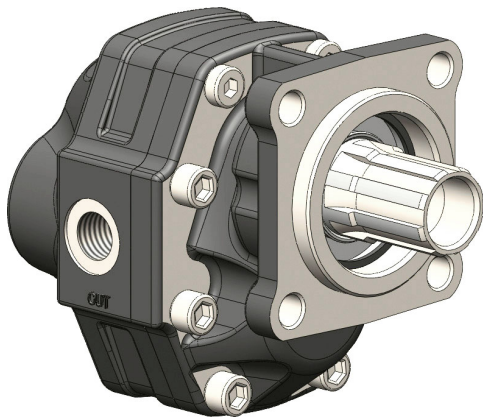
Vista FRONTALE  
FRONT

**MOMENTO PESO / MASS MOMENT**

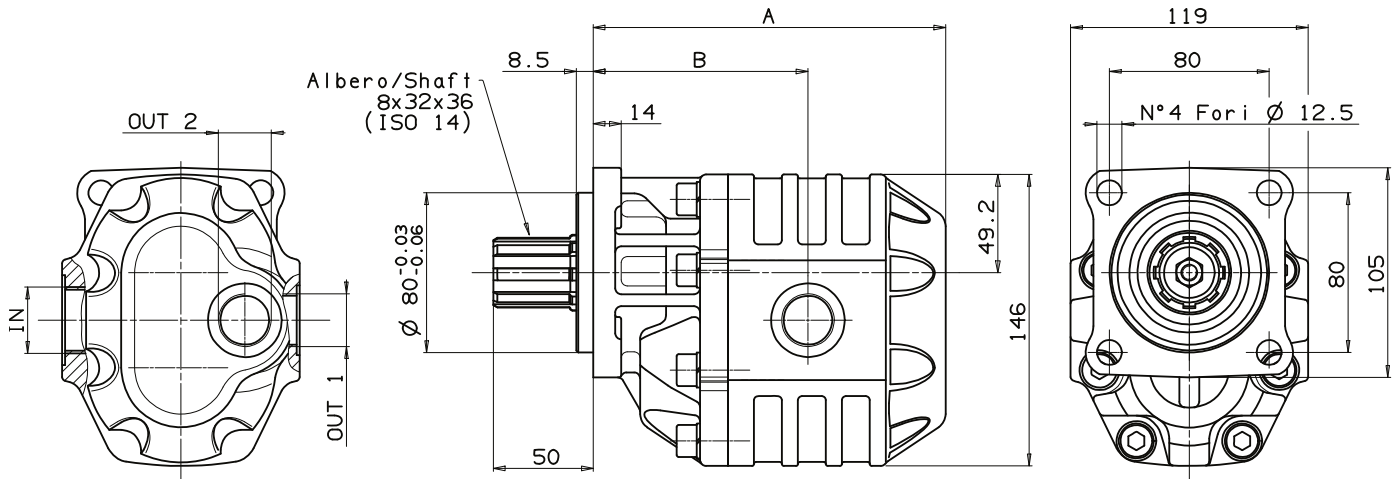


Tipo pompa - Pump type	<b>S</b>
<b>LTH-43</b>	105
<b>LTH-61</b>	109
<b>LTH-82</b>	117
<b>LTH-90</b>	120
<b>LTH-100</b>	125

**G**=Peso in N (Peso in Kg x 9.81)  
**G**=Weight in N (Weight in Kg x 9.81)



Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>		VI > 100	Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

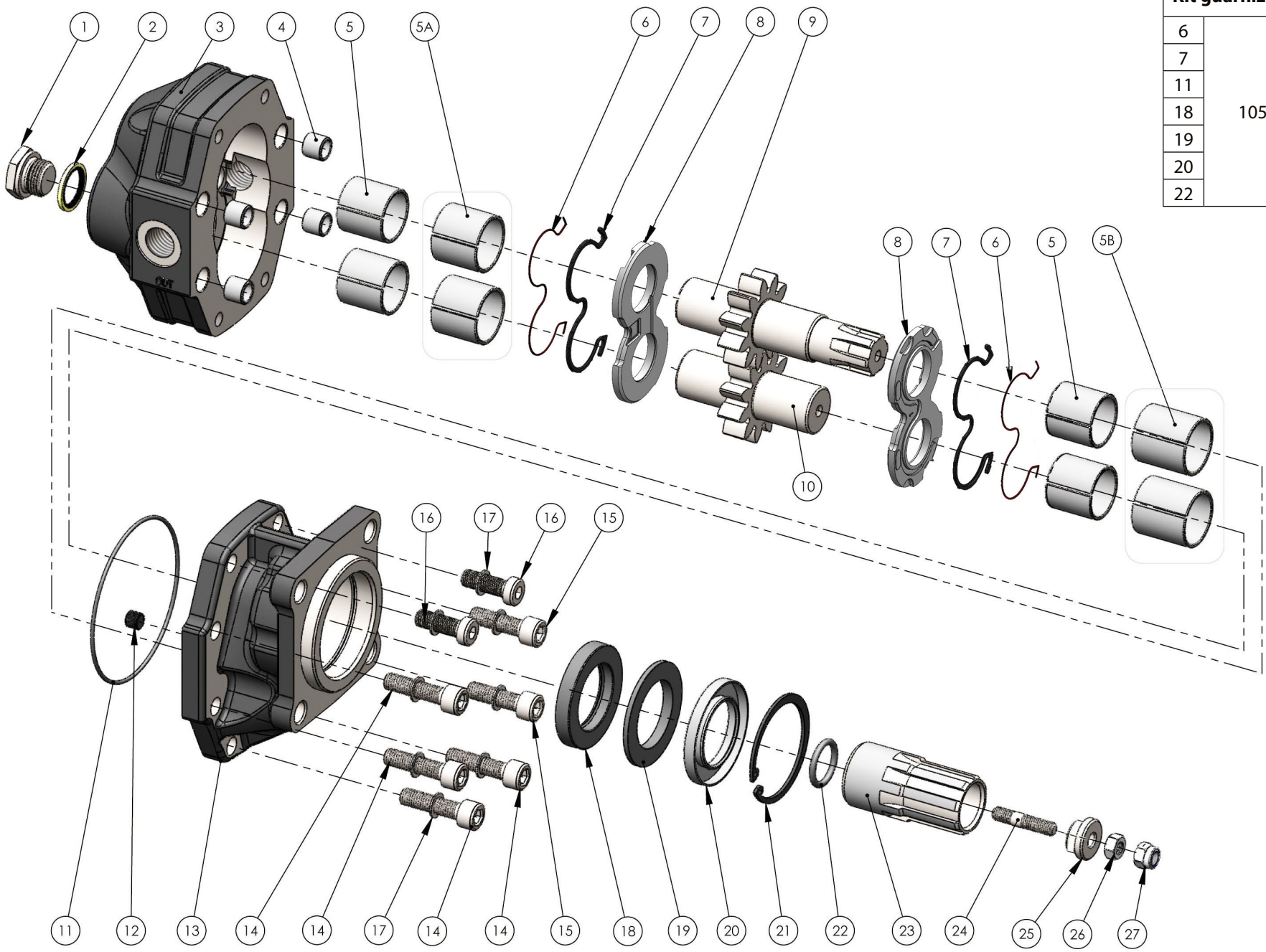
**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Rotazione / Rotation		IN <i>ISO 228</i>	OUT 1 <i>ISO 228</i>	OUT 2 <i>ISO 228</i>	A <i>mm</i>	B <i>mm</i>	Peso <i>Weight</i> Kg
	<i>Destra / Right</i>	<i>Sinistra / Left</i>						
<b>NPH-17</b>	10503000172	10503000181	G 1/2	G 1/2	G 1/2	135,5	86,5	9,4
<b>NPH-22</b>	10503000225	10503000234				139	88,5	9,8
<b>NPH-27</b>	10503000270	10503000289	G 3/4	G 3/4	G 3/4	141,5	91	10,2
<b>NPH-34</b>	10503000341	10503000350				146,5	92	11,1
<b>NPH-43</b>	10503000430	10503000449	G 1	G 1	G 1	152,5	97	11,5
<b>NPH-51</b>	10503000510	10503000529				157,5	97,5	12
<b>NPH-61</b>	10503000618	10503000627	G 1 1/4	G 1	G 1 1/4	163,5	103,5	12,4
<b>NPH-73</b>	10503000734	10503000743				171,5	102,5	12,8
<b>NPH-82</b>	10503000823	10503000832	G 1 1/4	G 1	G 3/4	176,5	107,5	13,2
<b>NPH-90</b>	10503000903	10503000912				187,5	115,5	13,8



**POMPE DA NON UTILIZZARE CON CARICHI ASSIALI E RADIALI SULL'ALBERO**  
(ES.PTO SENZA CUSCINETTI, COMPRESSE LE PTO POSTERIORI IN LINEA AD UN ASSE)  
**NO AXIAL AND RADIAL LOADS ALLOWED ON PUMP SHAFT**  
(EX. PTO'S WITHOUT BEARINGS INCLUDING ALSO SINGLE WHEEL REAR MOUNT PTO)

Kit guarnizioni / Seal Kit	
6	1059000295
7	
11	
18	
19	
20	
22	



N°	17	22	27	34	43	51	61	73	82	90	Codice/Code	Descrizione / Description	Q.	
1	.	.	.	.	.	.	.	.	.	.	54000200110	Tappo acciaio 1/2"	Steel plug 1/2"	1
											54000200129	Tappo acciaio 3/4"	Steel plug 3/4"	
2	.	.	.	.	.	.	.	.	.	.	11600910129	Rondella acciaio gomma 1/2"	Steel-rubber washer 1/2"	1
											11600910343	Rondella acciaio gomma 3/4"	Steel-rubber washer 3/4"	
3	.	.	.	.	.	.	.	.	.	.	51701000173	Corpo pompa	Gear housing	1
											51701000226			
											51701000271			
											51701000342			
											51701000431			
											51701000511			
											51701000619			
											51701000717			
4	.	.	.	.	.	.	.	.	.	.	50100300282	Spine forate di centraggio 14x10.5	Pins 14x10.5	4
											53300400033	Boccole autolub. 28x32x30	Bushing 28x32x30	4
5A											53300400355	Boccole autolub. 30x34x30	Bushing 30x34x30	2
5B											53300400060	Boccole autolub. 30x34x35	Bushing 30x34x35	2
6	.	.	.	.	.	.	.	.	.	.	50600001097	Guarnizione antiestrusione	Back-up ring	2
											50600001284			
7	.	.	.	.	.	.	.	.	.	.	50600001088	Guarnizione per rasamento	Thrust plate seal	2
											50600001275			
8	.	.	.	.	.	.	.	.	.	.	51001000293	Rasamento a occhiale	Thrust plate	2
											51001000346			
9	.	.	.	.	.	.	.	.	.	.	52302700171	Albero dentato conduttore	Drive shaft	1
											52302700224			
											52302700279			
											52302700340			
											52302700439			
											52302700519			
											52302700617			
											52302700715			
52302700822														
10	.	.	.	.	.	.	.	.	.	.	52302300906	Albero dentato condotto	Driven shaft	1
											52302100177			
											52302100220			
											52302100275			
											52302100346			
											52302100435			
											52302100515			
											52302100613			
52302100711														
11	.	.	.	.	.	.	.	.	.	.	50600001579	Guarnizione OR	O-Ring	1
											50401000063	Grano conico		1
13	.	.	.	.	.	.	.	.	.	.	51800300225	Coperchio anteriore	Mounting cover	1
											51800300536			
14	.	.	.	.	.	.	.	.	.	.	50200400574	Vite TCE M10x40	Screw M10x40	4
15	.	.	.	.	.	.	.	.	.	.	50200400565	Vite TCE M10x35	Screw M10x35	2
16	.	.	.	.	.	.	.	.	.	.	50200000514	Vite TCE M10x35 ts. H6	Screw M10x35 H6	2
17	.	.	.	.	.	.	.	.	.	.	50102000101	Rondella elastica	Washer	8
18	.	.	.	.	.	.	.	.	.	.	50602138624	Guarnizione paraolio	Oil seal	1
19	.	.	.	.	.	.	.	.	.	.	50602238623	Anello paraolio	Oil seal ring	1
20	.	.	.	.	.	.	.	.	.	.	50600738627	Guarnizione paraolio	Oil seal	1
21	.	.	.	.	.	.	.	.	.	.	50100100588	Anello seeger	Seeger ring	1
22	.	.	.	.	.	.	.	.	.	.	50600300059	Guarnizione OR	O-Ring	1
23	.	.	.	.	.	.	.	.	.	.	11400500496	Manicotto	Coupling	1
24	.	.	.	.	.	.	.	.	.	.	50300300171	Prigioniero M8x35	Stud bolt M8x28	1
25	.	.	.	.	.	.	.	.	.	.	53000500127	Distanziale	Spacer	1
26	.	.	.	.	.	.	.	.	.	.	50500300033	Dado M8 CH13 H6.5	Nut M8 CH13 H6.5	1
27	.	.	.	.	.	.	.	.	.	.	50501000089	Dado atb M8 CH13 H8	Nut M8 CH13 H8	1



**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed  rpm	Velocità max. intermittente Max. intermittent speed  rpm	Velocità min. Min. speed  rpm
		P1	P2	P3			
		bar	bar	bar			
<b>NPH-17</b>	17.04	290	315	325	2500	3000	300
<b>NPH-22</b>	22.15						
<b>NPH-27</b>	26.18						
<b>NPH-34</b>	33.88	280	300	310	2200	2800	
<b>NPH-43</b>	43.12	270	290	300	2000	2500	
<b>NPH-51</b>	50.82	240	260	280			
<b>NPH-61</b>	60.06	220	240	250	1800	2000	
<b>NPH-73</b>	72.88	200	220	230	1600	1800	
<b>NPH-82</b>	81.08	190	210	220			
<b>NPH-90</b>	90,43	180	200	220			

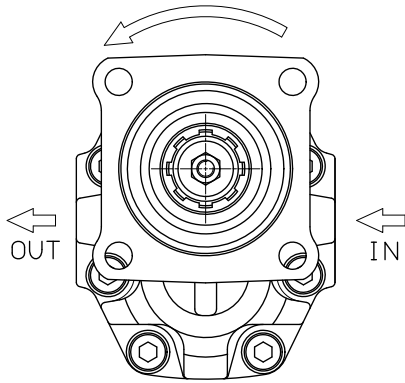
P1=Pressione max.continua  
P2=Pressione max. intermittente  
P3=Pressione max. di punta

Max. continuous pressure  
Max. Intermittent pressure  
Max. peak pressure

(100%)  
(20 sec.max.)  
(6 sec.max)

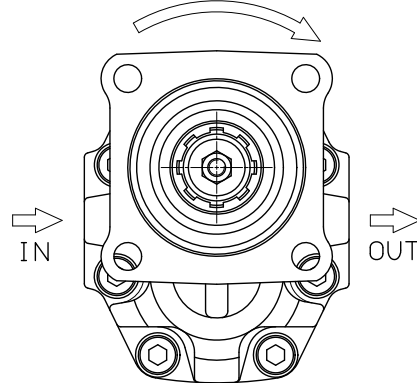
**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

**Rotazione antioraria, pompa sinistra**  
Anti-clockwise rotation, left pump



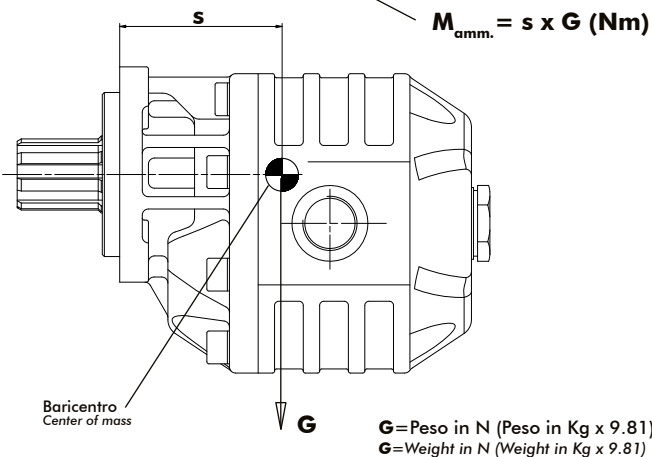
Vista FRONTALE  
FRONT

**Rotazione oraria, pompa destra**  
Clockwise rotation, right pump



Vista FRONTALE  
FRONT

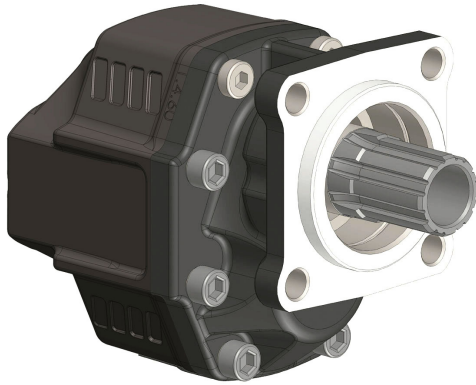
**MOMENTO PESO / MASS MOMENT**



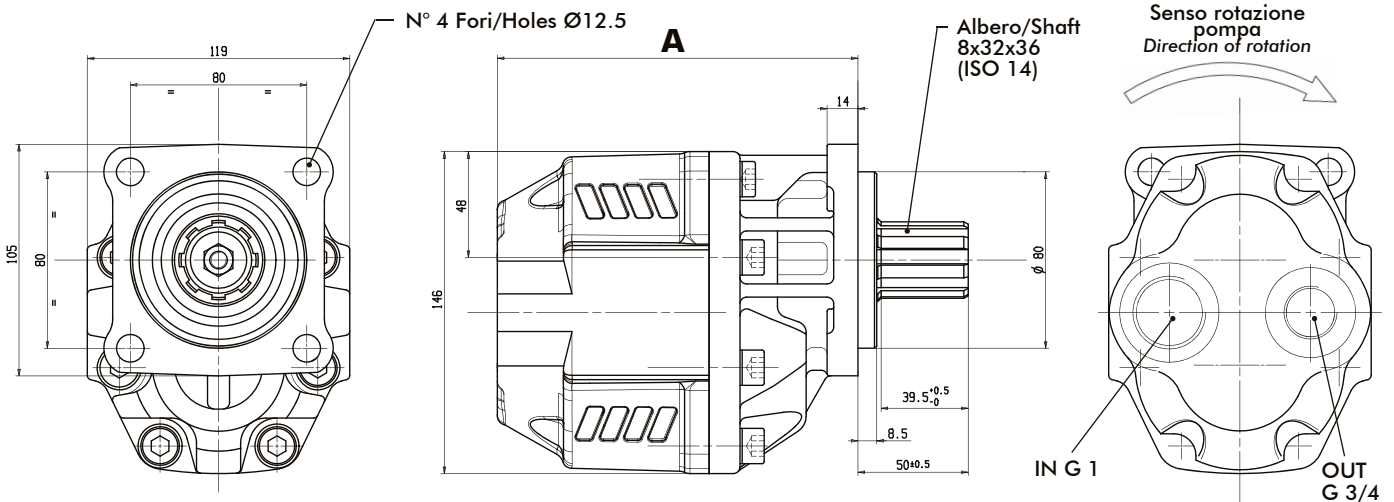
Tipo pompa - Pump type	S
<b>NPH-17</b>	76
<b>NPH-22</b>	77
<b>NPH-27</b>	78
<b>NPH-34</b>	79
<b>NPH-43</b>	81
<b>NPH-51</b>	84
<b>NPH-61</b>	87
<b>NPH-73</b>	91
<b>NPH-82</b>	95
<b>NPH-90</b>	99

**PER MODIFICARE IL SENSO DI ROTAZIONE VEDERE ISTRUZ. 9970020042**

TO CHANGE THE DIRECTION OF ROTATION SEE INSTRUCTION 9970020042



Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>		VI > 100	Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Rotazione sinistra <i>Left rotation</i>	IN <i>ISO 228</i>	OUT <i>ISO 228</i>	A <i>mm</i>	Peso <i>Weight</i> <i>Kg</i>
<b>NPH-51</b>	10503700504	G 1	G 3/4	157,5	12
<b>NPH-61</b>	10503700602			163,5	12,4
<b>NPH-82</b>	10503700823			176,5	13,2

**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO / TECHNICAL FEATURES**

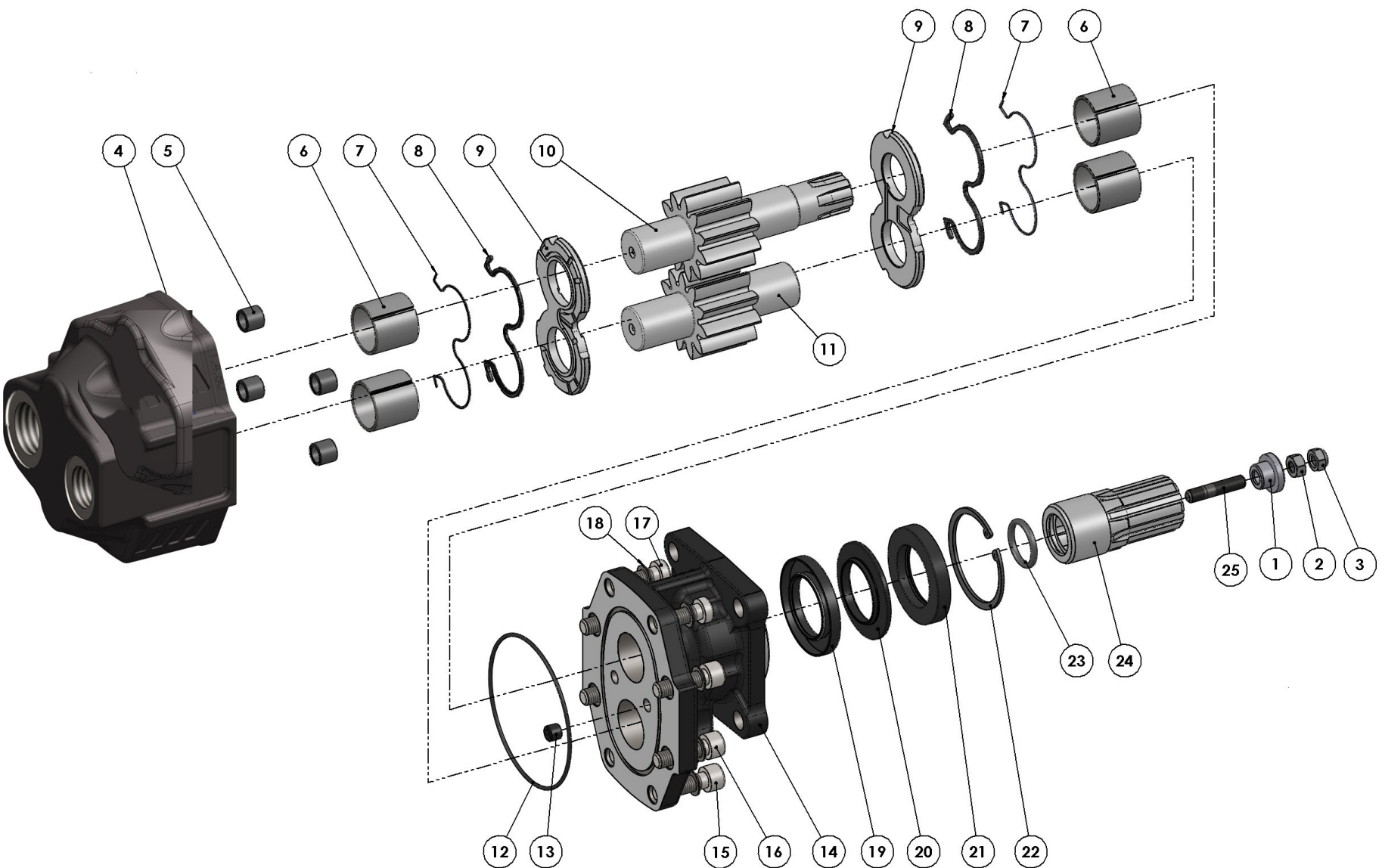
Tipo pompa <i>Pump type</i>	Cilindrata <i>Displacement</i> <i>cm<sup>3</sup>/rev</i>	Pressione/Pressure			Velocità max. continua <i>Max. continuous speed</i> <i>rpm</i>	Velocità max. intermittente <i>Max. intermittent speed</i> <i>rpm</i>	Velocità min. <i>Min. speed</i> <i>rpm</i>
		P1 <i>bar</i>	P2 <i>bar</i>	P3 <i>bar</i>			
<b>NPH-51</b>	50.82	240	260	280	2000	2500	300
<b>NPH-61</b>	60.06	220	240	250	1800	2000	
<b>NPH-82</b>	81.08	190	210	220	1500	1800	

P1=Pressione max.continua  
P2=Pressione max. intermittente  
P3=Pressione max. di punta

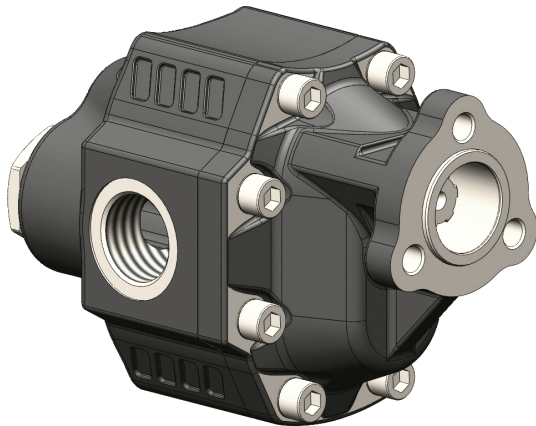
Max. continuous pressure (100%)  
Max. Intermittent pressure (20 sec.max.)  
Max. peak pressure (6 sec.max.)



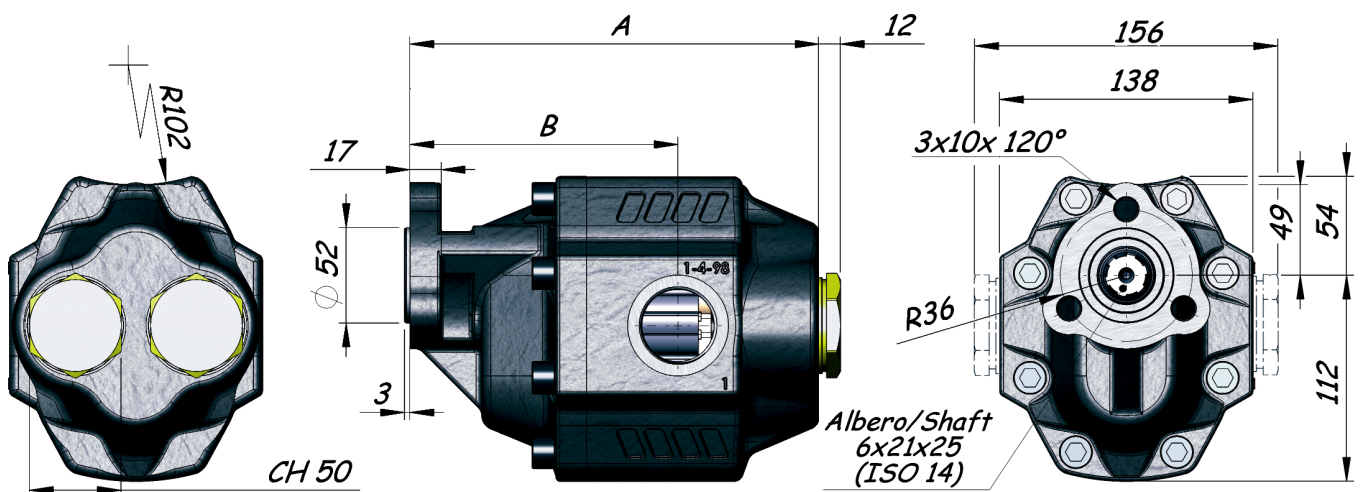
**POMPE DA NON UTILIZZARE CON CARICHI ASSIALI E RADIALI SULL'ALBERO**  
**NO AXIAL AND RADIAL LOADS ALLOWED ON PUMP SHAFT**



N°	51	61	82	Codice/Code	Descrizione / Description		Q.
1	.	.	.	53000500127	Distanziale	Spacer	1
2	.	.	.	50500300033	Dado M8 UNI 5588	Nut M8 UNI 5588	1
3	.	.	.	50501000089	Dado atb M8	Nut M8	1
4	.			51701800514	Corpo pompa	Gear housing	1
		.		51701800612			
			.	51701800828			
5	.	.	.	50100300282	Spine forate di centraggio 14x12.5	Pins 14x12.5	4
6	.	.	.	53300400033	Boccole autolub. 28x32x30	Bushing 28x32x30	4
7	.	.	.	50600001097	Guarnizione antiestrusione	Back-up ring	2
8	.	.	.	50600001088	Guarnizione per rasamento	Thrust plate seal	2
9	.	.	.	51001000293	Rasamento a occhiale	Thrust plate	2
10	.			52302700519	Albero dentato conduttore	Drive shaft	1
		.		52302700617			
			.	52302700822			
11	.			52302100515	Albero dentato condotto	Driven shaft	1
		.		52302100613			
			.	52302100828			
12	.	.	.	50600001579	Guarnizione OR 95x99x2	O-Ring 95x99x2	1
13	.	.	.	50401000063	Grano conico 1/8"	Plug 1/8"	1
14	.	.	.	51800300225	Coperchio anteriore	Mounting cover	1
15	.	.	.	50200400574	Vite TCE M10x40 UNI 5931	Screw M10x40 UNI 5931	2
16	.	.	.	50200400565	Vite TCE M10x35 UNI 5931	Screw M10x35 UNI 5931	4
17	.	.	.	50200000514	Vite TCE M10x35 DIN 7984	Screw M10x35 DIN 7984	2
18	.	.	.	50102000101	Rondella elastica Schnorr tipo S	Washer Schnorr S type	8
19	.	.	.	50602138624	Paraolio alta pressione 38x62x9	Oil seal high pressure 38x62x9	1
20	.	.	.	50602238623	Anello paraolio alta pressione	Oil seal ring high pressure	1
21	.	.	.	50600738627	Guarnizione paraolio 38x62x7	Oil seal 38x62x7	1
22	.	.	.	50100100588	Anello seeger 62 I	Seeger ring 62 I	1
23	.	.	.	50600300059	Guarnizione OR 4100	O-Ring 4100	1
24	.	.	.	11400500209	Manicotto	Coupling	1
25	.	.	.	50300300171	Prigioniero M8x35 UNI 5911	Stud bolt M8x28 UNI 5911	1



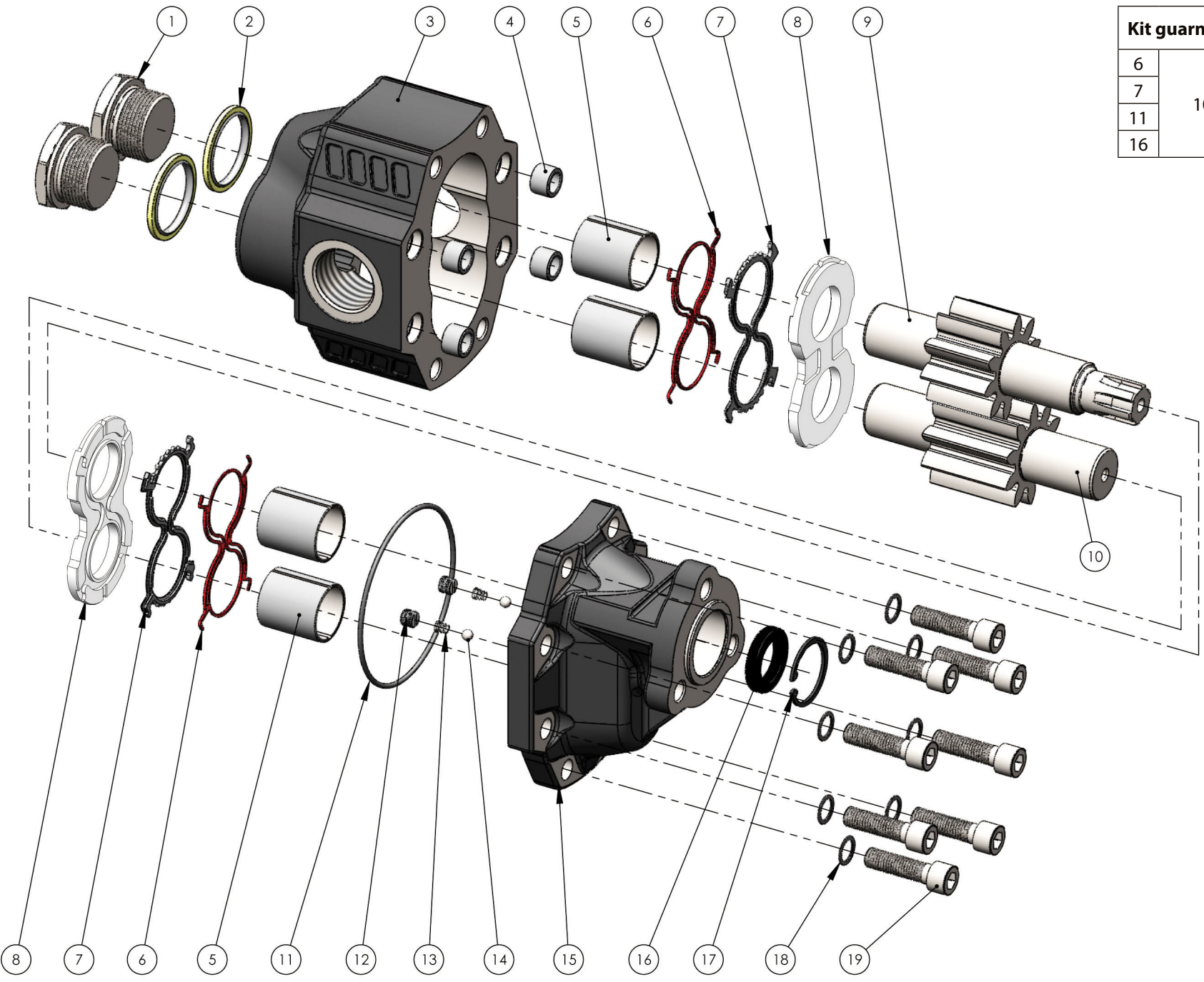
Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>	VI > 100		Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione / Inlet pressure			-0,3 ÷ 2 bar		
Senso di rotazione / Pump rotation			Bidirezionale/Bidirectional		

**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Codice ordinazione <i>Order code</i>	IN	OUT	A	B	Peso <i>Weight</i>
		ISO 228	ISO 228	mm	mm	Kg
LTMH-90	10503300900	G 1 1/4	G 1 1/4	213	136	18
LTMH-100	10503301007			217	140	18.2
LTMH-112	10503301123			223	146	18.5
LTMH-120	10503301203			227	150	18.7

**Kit guarnizioni / Seal Kit**

6	10590000455
7	
11	
16	



N°	90	100	112	120	Codice/Code	Descrizione / Description	Q.
1	.	.	.	.	54000200165	Tappo acciaio 1"1/4 <i>Steel plug 1"1/4</i>	2
2	.	.	.	.	11600911137	Rondella acciaio-gomma 1"1/4 <i>Steel-rubber washer 1"1/4</i>	2
3	.				51701700907	Corpo pompa <i>Gear housing</i>	1
		.			51701701004		
			.		51701701120		
				.	51701701200		
4	.	.	.	.	50100300291	Spine forate di centraggio 18x12.5 <i>Pins 18x12.5</i>	4
5	.	.	.	.	53300400220	Boccole autolub. 38x42x38 <i>Bushing 38x42x38</i>	4
6	.	.	.	.	50600002014	Guarnizione antiestrusione <i>Back-up ring</i>	2
7	.	.	.	.	50600002005	Guarnizione per rasamento <i>Thrust plate seal</i>	2
8	.	.	.	.	51001000364	Rasamento ad occhiale <i>Thrust plate</i>	2
9	.				52303600901	Albero dentato conduttore <i>Drive shaft</i>	1
		.			52303601008		
			.		52303601124		
				.	52303601204		
10	.				52303500902	Albero dentato condotto <i>Driven shaft</i>	1
		.			52303501009		
			.		52303501125		
				.	52303501205		
11	.	.	.	.	50600002023	Guarnizione OR <i>O-Ring</i>	1
12	.	.	.	.	50400000412	Grano valvola lubrificazione <i>Lube valve screw</i>	2
13	.	.	.	.	51200400206	Molla conica <i>Tapered spring</i>	2
14	.	.	.	.	51000900054	Sfera 1/4" <i>Ball 1/4"</i>	2
15	.	.	.	.	51800300410	Coperchio anteriore <i>Mounting cover</i>	1
16	.	.	.	.	50602425401	Guarnizione paraolio <i>Oil seal</i>	1
17	.	.	.	.	50100100373	Anello elastico <i>Circlip</i>	1
18	.	.	.	.	50102000129	Rondella elastica <i>Washer</i>	8
19	.	.	.	.	50200500573	Vite TCE M12x45 <i>Screw M12x45</i>	8

**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed  rpm	Velocità max. intermittente Max. intermittent speed  rpm	Velocità min. Min. speed  rpm
		P1	P2	P3			
		bar	bar	bar			
<b>LTMH-90</b>	91,45	230	250	265	1800	2700	300
<b>LTMH-100</b>	99,77	220	240	255			
<b>LTMH-112</b>	112,24	205	225	240			
<b>LTMH-120</b>	122,45	195	215	230	1500	2500	300

P1=Pressione max.continua  
 P2=Pressione max. intermittente  
 P3=Pressione max. di punta

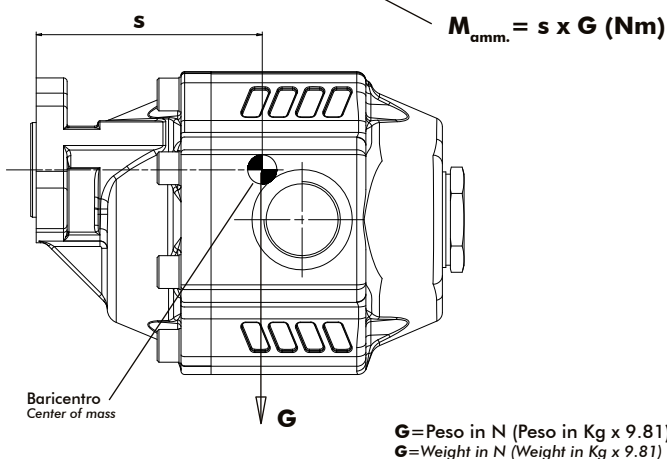
Max. continuous pressure  
 Max. Intermittent pressure  
 Max. peak pressure

(100%)  
 (20 sec.max.)  
 (6 sec.max)

**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

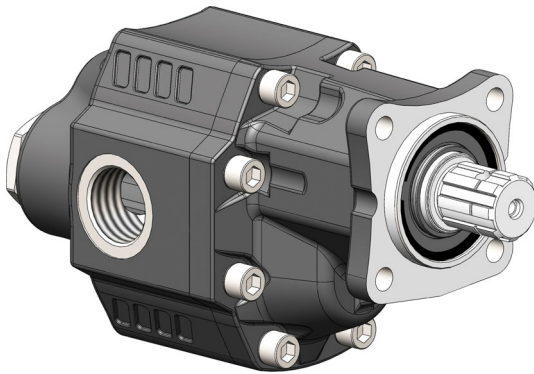
Rotazione antioraria, pompa sinistra Anti-clockwise rotation, left pump	Rotazione oraria, pompa destra Clockwise rotation, right pump
<p>Vista FRONTALE FRONT</p>	<p>Vista FRONTALE FRONT</p>

**MOMENTO PESO / MASS MOMENT**

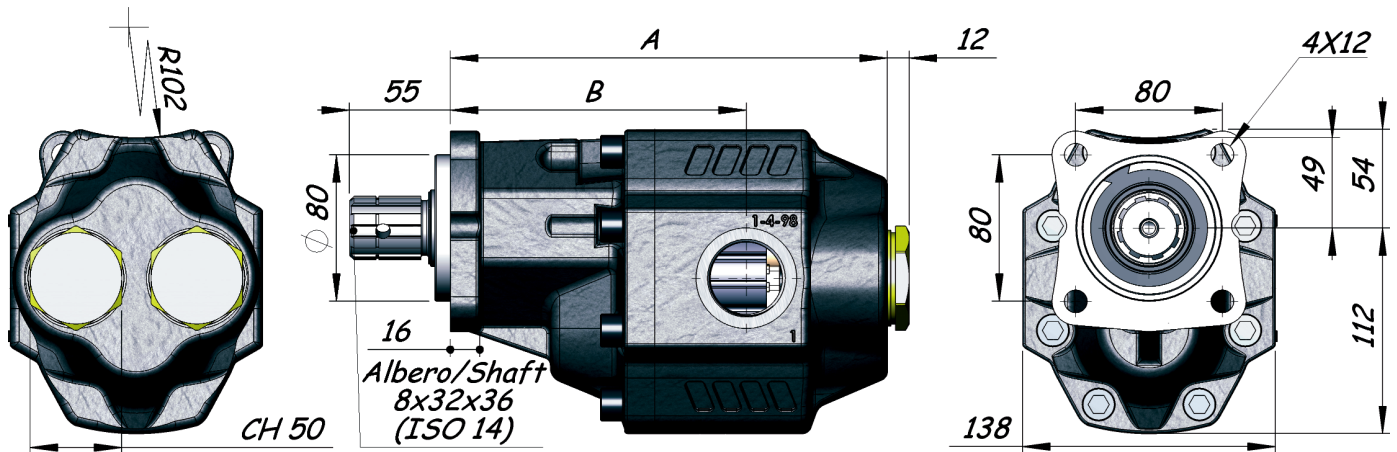


Tipo pompa - Pump type	<b>S</b>
<b>LTMH-90</b>	126
<b>LTMH-100</b>	127
<b>LTMH-112</b>	127.5
<b>LTMH-120</b>	128



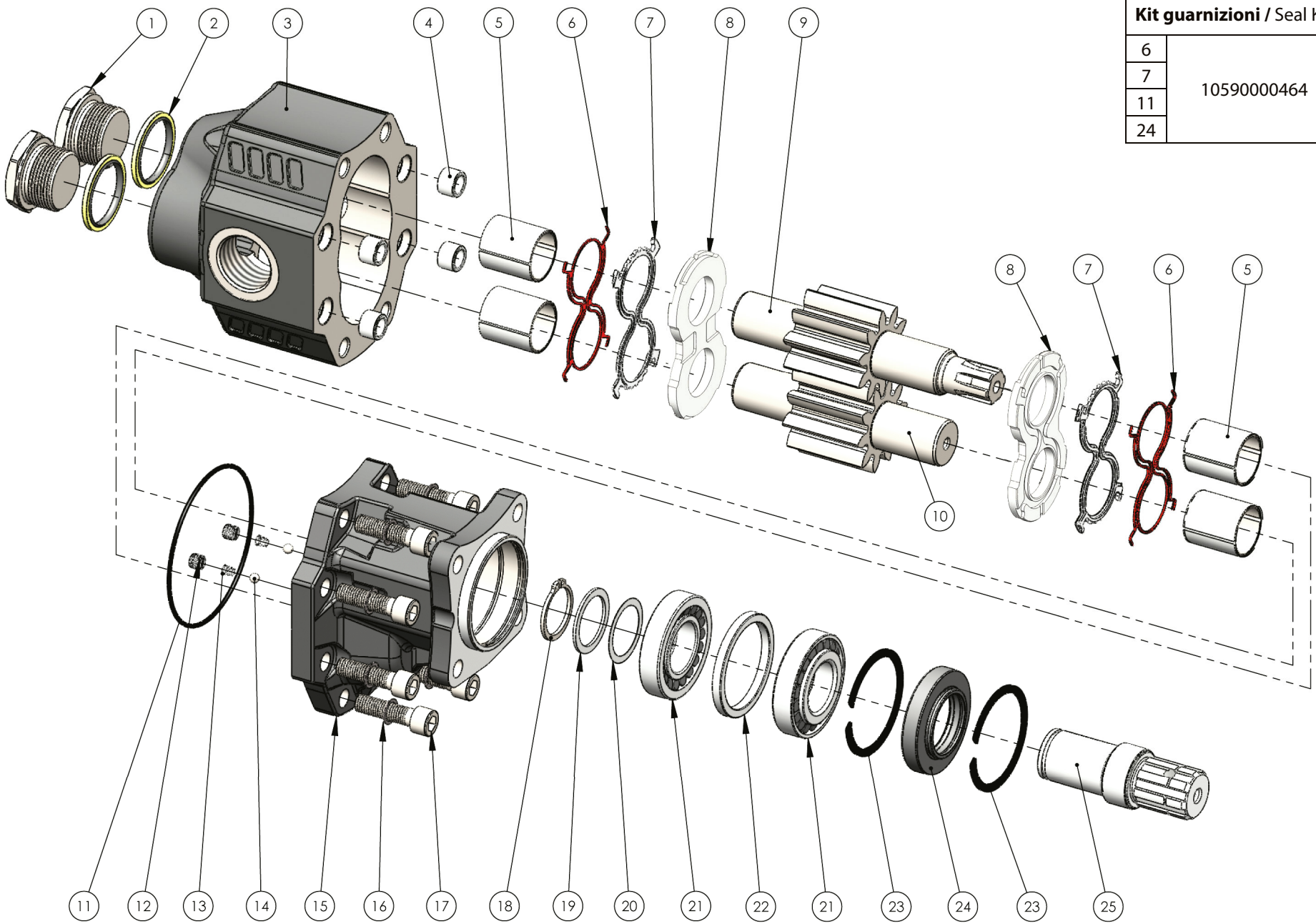


Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>	VI > 100	Temperatura di esercizio <i>Working temperature</i> -15°C +100°C			
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione / <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione / <i>Pump rotation</i>			Bidirezionale/ <i>Bidirectional</i>		

**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Codice ordinazione <i>Order code</i>	IN	OUT	A	B	Peso <i>Weight</i>
		ISO 228	ISO 228	mm	mm	Kg
LTMH-90	10503310908	G 1 1/4	G 1 1/4	228,5	151,5	19,5
LTMH-100	10503311005			232,5	155,5	18,7
LTMH-112	10503311121			238,5	161,5	20
LTMH-120	10503311201			242,5	165,5	20,2

Kit guarnizioni / Seal Kit	
6	10590000464
7	
11	
24	



N°	90	100	112	120	Codice/Code	Descrizione / Description	Q.
1	.	.	.	.	54000200165	Tappo Acciaio 1"1/4 <i>Steel plug 1"1/4</i>	2
2	.	.	.	.	11600911137	Rondella acciaio-gomma 1"1/4 <i>Steel-rubber washer 1"1/4</i>	2
3	.				51701700907	Corpo pompa <i>Gear housing</i>	1
		.			51701701004		
			.		51701701120		
				.	51701701200		
4	.	.	.	.	50100300291	Spine forate di centraggio 18x12.5 <i>Pins 18x12.5</i>	4
5	.	.	.	.	53300400220	Boccola autolub. 32x36x40 <i>Bushing 32x36x40</i>	4
6	.	.	.	.	50600002014	Guarnizione antiestrusione <i>Back-up ring</i>	2
7	.	.	.	.	50600002005	Guarnizione per rasamento <i>Thrust plate seal</i>	2
8	.	.	.	.	51001000364	Rasamento ad occhiale <i>Thrust plate</i>	2
9	.				52303600901	Albero dentato conduttore <i>Drive shaft</i>	1
		.			52303601008		
			.		52303601124		
				.	52303601204		
10	.				52303500902	Albero dentato condotto <i>Driven shaft</i>	1
		.			52303501009		
			.		52303501125		
				.	52303501205		
11	.	.	.	.	50600002023	Guarnizione OR <i>O-ring</i>	1
12	.	.	.	.	50400000412	Grano valvola lubrificazione <i>Lube valve screw</i>	2
13	.	.	.	.	51200400206	Molla conica <i>Tapered spring</i>	2
14	.	.	.	.	51000900054	Sfera 1/4" <i>Ball 1/4"</i>	2
15	.	.	.	.	51800300385	Coperchio anteriore <i>Mounting cover</i>	1
16	.	.	.	.	50102000129	Rondella elastica <i>Washer</i>	8
17	.	.	.	.	50200500573	Vite TCE M12x45 <i>Screw M12x45</i>	8
18	.	.	.	.	50100001355	Anello seeger <i>Seeger ring</i>	1
19	.	.	.	.	52900700208	Rondella speciale 45x35x2 <i>Special washer 45x35x2</i>	1
20	.	.	.	.	52900700226	Rondella speciale 45x35x0,,2 <i>Special washer 45x35x0,2</i>	1
21	.	.	.	.	51000200211	Cuscinetto a rulli conici 35x72x18,25 <i>Tapered roller bearing 35x72x18,,25</i>	2
22	.	.	.	.	53000100783	Distanziale 60x72x6,75 <i>Spacer 60x72x6,75</i>	1
23	.	.	.	.	50100002729	Anello elastico <i>Circlip</i>	2
24	.	.	.	.	50600842723	Guarnizione paraolio <i>Oil seal</i>	1
25	.	.	.	.	11400500147	Manicotto <i>Coupling</i>	1

**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed  rpm	Velocità max. intermittente Max. intermittent speed  rpm	Velocità min. Min. speed  rpm
		P1	P2	P3			
<b>LTMH-90</b>	91,45	230	250	265	1800	2700	300
<b>LTMH-100</b>	99,77	220	240	255			
<b>LTMH-112</b>	112,24	205	225	240			
<b>LTMH-120</b>	122,45	195	215	230	1500	2500	300

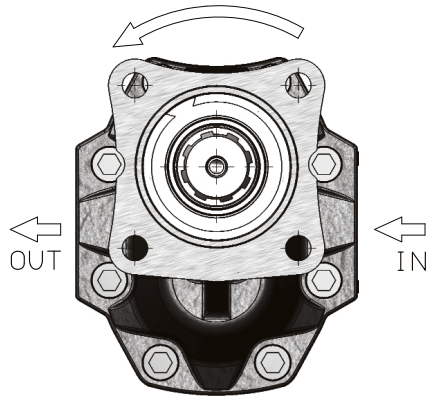
P1=Pressione max.continua  
 P2=Pressione max. intermittente  
 P3=Pressione max. di punta

Max. continuous pressure  
 Max. intermittent pressure  
 Max. peak pressure

(100%)  
 (20 sec.max.)  
 (6 sec.max)

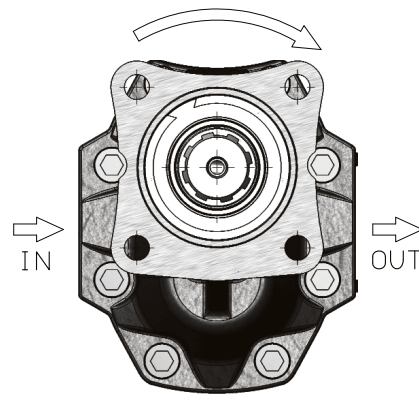
**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

**Rotazione antioraria, pompa sinistra**  
 Anti-clockwise rotation, left pump



Vista FRONTALE  
 FRONT

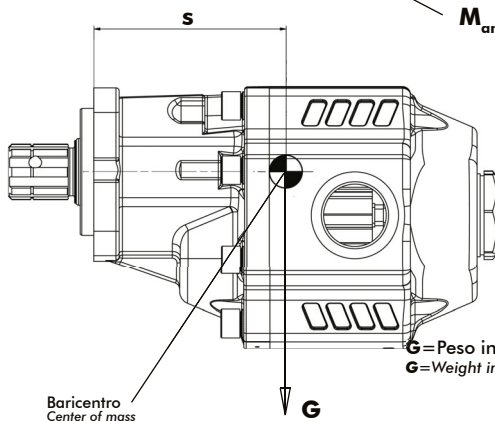
**Rotazione oraria, pompa destra**  
 Clockwise rotation, right pump



Vista FRONTALE  
 FRONT

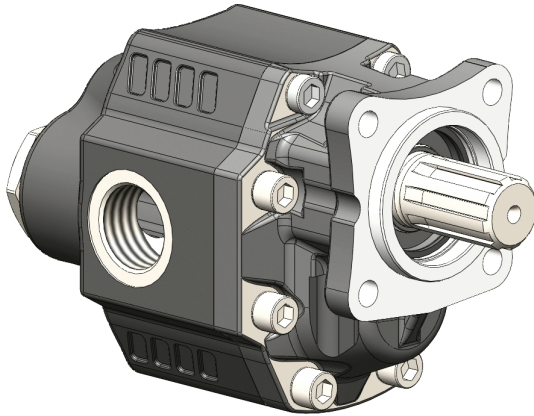
**MOMENTO PESO / MASS MOMENT**

$$M_{amm.} = s \times G \text{ (Nm)}$$

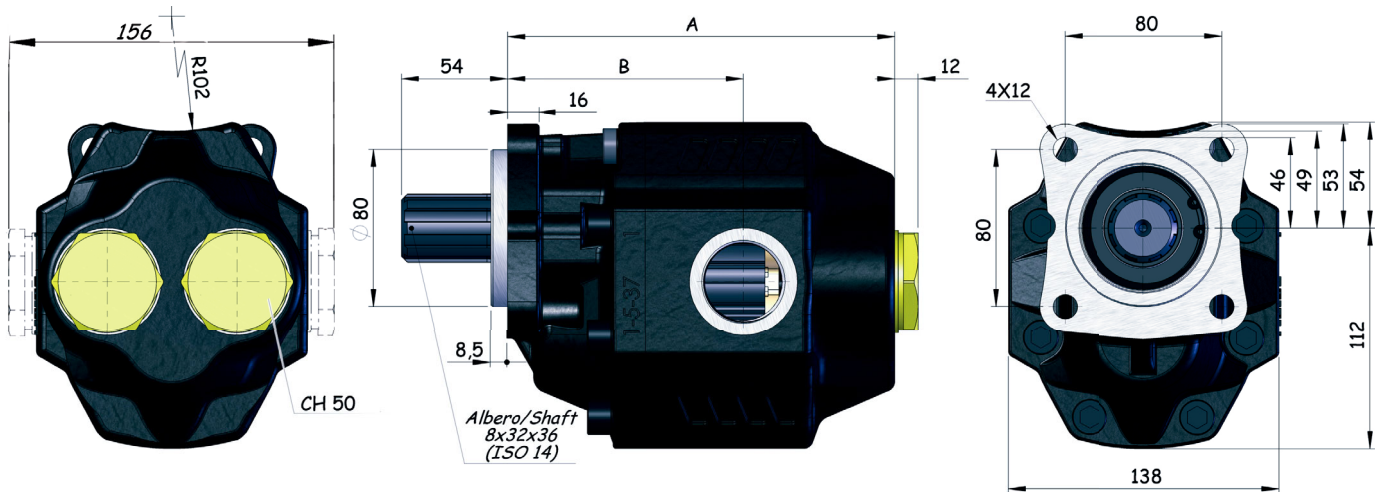


G=Peso in N (Peso in Kg x 9.81)  
 G=Weight in N (Weight in Kg x 9.81)

Tipo pompa - Pump type	S
<b>LTMH-90</b>	123
<b>LTMH-100</b>	126
<b>LTMH-112</b>	129
<b>LTMH-120</b>	132



Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>	VI > 100		Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione / Inlet pressure			-0,3 ÷ 2 bar		
Senso di rotazione / Pump rotation			Bidirezionale/Bidirectional		

**Ingombro / Dimensions**

**Dati tecnici / Technical data**

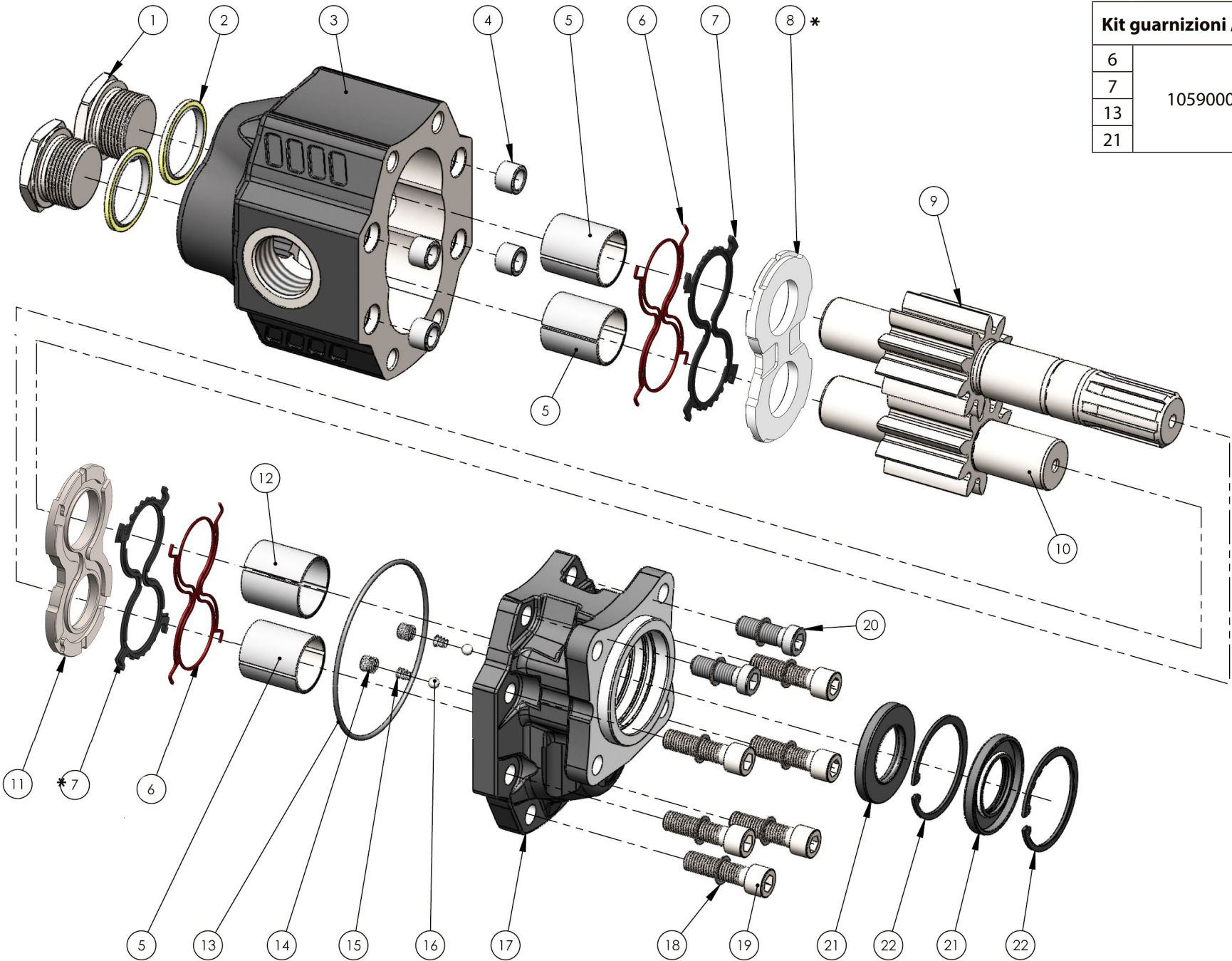
Tipo pompa <i>Pump type</i>	Codice ordinazione <i>Order code</i>	IN	OUT	A	B	Peso <i>Weight</i>
		ISO 228	ISO 228	mm	mm	Kg
LTMH-90	10503320906	G 1 1/4	G 1 1/4	187,5	110,5	18
LTMH-100	10503321003			191,5	114,5	17,2
LTMH-112	10503321129			197,5	120,5	18,5
LTMH-120	10503321209			201,5	124,5	18,7



**POMPE DA NON UTILIZZARE CON CARICHI ASSIALI E RADIALI SULL'ALBERO**  
 NO AXIAL AND RADIAL LOADS ALLOWED ON PUMP SHAFT

**Kit guarnizioni / Seal Kit**

6	10590000491
7	
13	
21	



N°	90	100	112	120	Codice/Code	Descrizione / Description	Q.
1	.	.	.	.	54000200165	Tappo acciaio 1"1/4 <i>Steel plug 1"1/4</i>	2
2	.	.	.	.	11600901137	Rondella acciaio-gomma 1"1/4 <i>Steel-rubber washer 1"1/4</i>	2
3	.				51701700907	Corpo pompa <i>Gear housing</i>	1
		.			51701701004		
			.		51701701120		
				.	51701701200		
4	.	.	.	.	50100300291	Spine forate di centraggio 18x12.5 <i>Pins 18x12.5</i>	4
5	.	.	.	.	53300400220	Boccola autolub. 32x36x40 <i>Bushing 32x36x40</i>	3
6	.	.	.	.	50600002014	Guarnizione antiestrusione <i>Back-up ring</i>	2
7	.	.	.	.	50600002005	Guarnizione per rasamento <i>Thrust plate seal</i>	2
8	.	.	.	.	51001000364	Rasamento ad occhiale ALU <i>ALU thrust plate</i>	1
9	*				52303700900	Albero dentato conduttore <i>Drive shaft</i>	1
		.			52303701007		
			.		52303701123		
				.	52303701203		
10	.				52303500902	Albero dentato condotto <i>Driven shaft</i>	1
		.			52303501009		
			.		52303501125		
				.	52303501205		
11	.	.	.	.	51001000499A	Rasamento ad occhiale BIMETAL <i>BIMETAL thrust plate</i>	1
12	*	.	.	.	53300400248	Boccola autolub. 35x39x40 <i>Bushing 35x39x40</i>	1
13	.	.	.	.	50600002023	Guarnizione OR <i>O-ring</i>	1
14	.	.	.	.	50400000412	Grano valvola lubrificazione <i>Lube valve screw</i>	2
15	.	.	.	.	51200400206	Molla conica <i>Tapered spring</i>	2
16	.	.	.	.	51000900054	Sfera 1/4" <i>Ball 1/4"</i>	2
17	.	.	.	.	51800300429	Coperchio anteriore <i>Mounting cover</i>	1
18	.	.	.	.	50102000129	Rondella elastica <i>Washer</i>	8
19	.	.	.	.	50200500573	Vite TCE M12x45 <i>Screw M12x45</i>	6
20	.	.	.	.	50200000265	Vite TCE M12x35 <i>Screw M12x35</i>	2
21	.	.	.	.	50602462354	Guarnizione paraolio <i>Oil seal</i>	2
22	.	.	.	.	50100100588	Anello seeger <i>Seeger ring</i>	2

\* In caso di necessità di sostituzione dei rasamenti, se nella pompa sono presenti due rasamenti di alluminio è necessario sostituirli entrambi utilizzando i codici indicati nella lista dei ricambi. In questo caso è necessario sostituire anche le guarnizioni.

\* If there are two aluminium thrust plates in the pump, it is necessary to replace both. Please use the indicated spare parts codes. In this case, the seals must also be replaced.

**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  <i>cm<sup>3</sup>/rev</i>	Pressione Pressure			Velocità max. continua Max. continuous speed  <i>rpm</i>	Velocità max. intermittente Max. intermittent speed  <i>rpm</i>	Velocità min. Min. speed  <i>rpm</i>
		P1	P2	P3			
		<i>bar</i>	<i>bar</i>	<i>bar</i>			
<b>LTMH-90</b>	91,45	230	250	265	1800	2700	300
<b>LTMH-100</b>	99,77	220	240	255			
<b>LTMH-112</b>	112,24	205	225	240			
<b>LTMH-120</b>	122,45	195	215	230	1500	2500	300

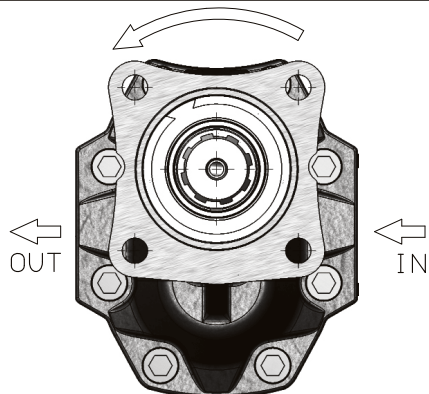
P1=Pressione max.continua  
P2=Pressione max. intermittente  
P3=Pressione max. di punta

Max. continuous pressure  
Max. Intermittent pressure  
Max. peak pressure

(100%)  
(20 sec.max.)  
(6 sec.max)

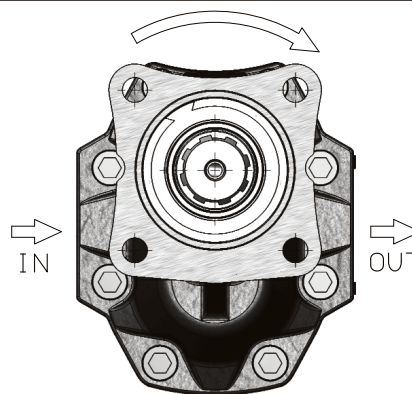
**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

**Rotazione antioraria, pompa sinistra**  
*Anti-clockwise rotation, left pump*



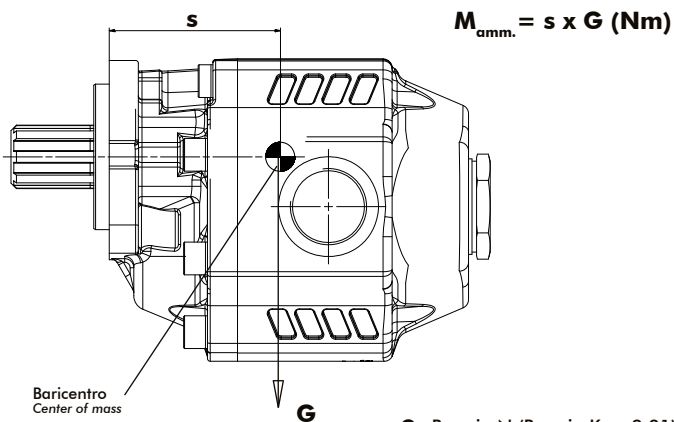
Vista FRONTALE  
FRONT

**Rotazione oraria, pompa destra**  
*Clockwise rotation, right pump*



Vista FRONTALE  
FRONT

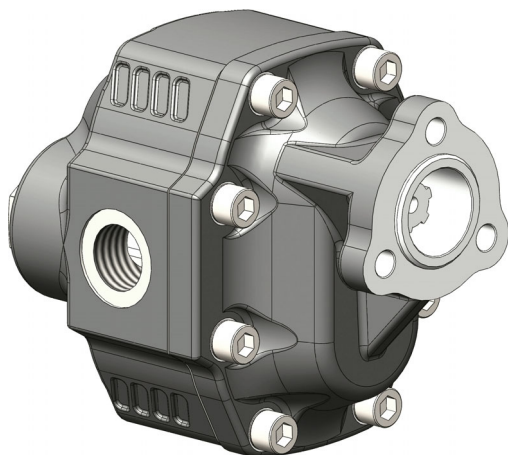
**MOMENTO PESO / MASS MOMENT**



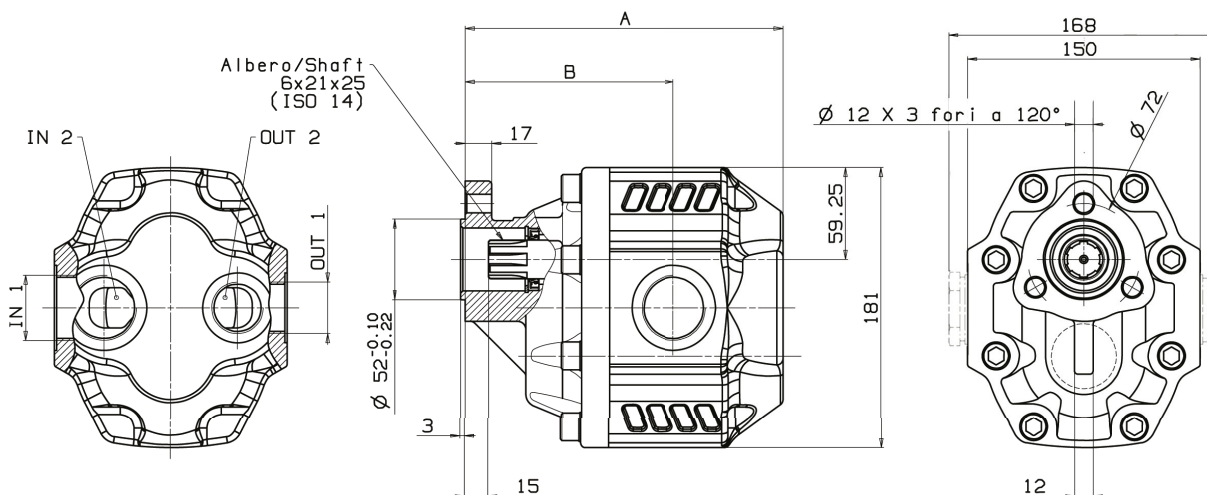
G=Peso in N (Peso in Kg x 9.81)  
G=Weight in N (Weight in Kg x 9.81)

Tipo pompa - Pump type	S
<b>LTMH-90</b>	97
<b>LTMH-100</b>	101
<b>LTMH-112</b>	104
<b>LTMH-120</b>	107



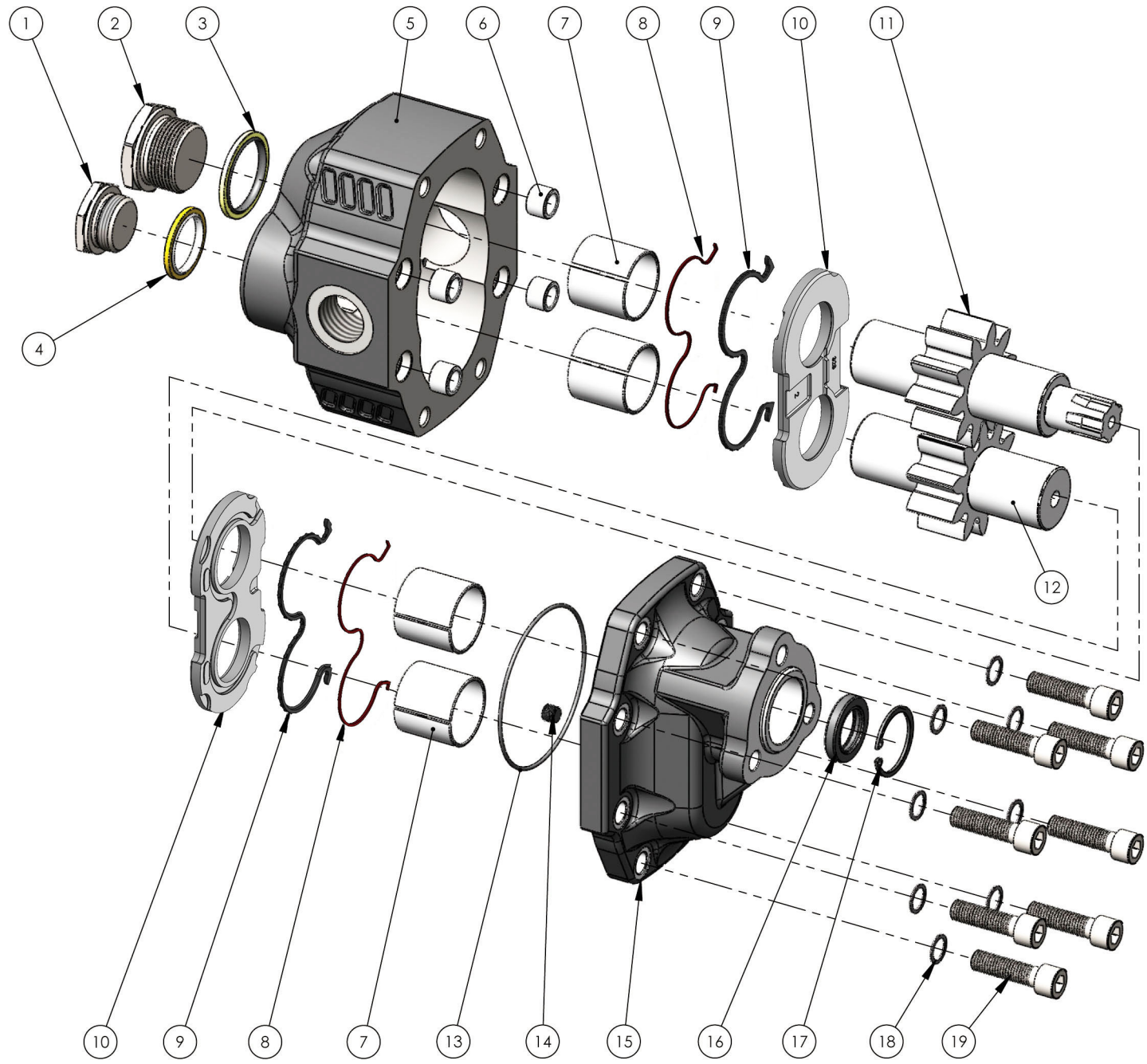


Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>		VI > 100	Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Rotazione <i>Rotation</i>		IN 1 IN 2	OUT 1 OUT 2	A	B	Peso <i>Weight</i>
	Destra / Right	Sinistra / Left					
<b>NPGH-63</b>	10501200638	10501200647	G 1	G 3/4	186	121	17.5
<b>NPGH-73</b>	10501200736	10501200745			190	125	18.5
<b>NPGH-84</b>	10501200843	10501200852	G 1 1/4	G 1	194	125.5	19
<b>NPGH-100</b>	10501201002	10501201011			200	129	19.5
<b>NPGH-116</b>	10501201164	10501201173			206	135	20
<b>NPGH-133</b>	10501201333	10501201342	G 1 1/2		216	137	21
<b>NPGH-150</b>	10501201502	10501201511			221	142	21.5

Kit guarnizioni / Seal Kit	
8	10590000204
9	
13	
16	



N°	63	73	84	100	116	133	150	Codice/Code	Descrizione / Description	Q.	
1	•	•						54000200129	Tappo acciaio 3/4"	Steel plug 3/4"	1
			•	•	•	•	•	54000200138	Tappo acciaio 1"	Steel plug 1"	
2	•	•						54000200138	Tappo acciaio 1"	Steel plug 1"	1
			•	•	•			54000200165	Tappo acciaio 1"1/4	Steel plug 1"1/4	
						•	•	54000200174	Tappo acciaio 1"1/2	Steel plug 1"1/2	
3	•	•						11600911002	Rondella acciaio-gomma 1"	Steel-rubber washer 3/4"	1
			•	•	•			11600911137	Rondella acciaio-gomma 1"1/4	Steel-rubber washer 1"1/4	
						•	•	11600911208	Rondella acciaio-gomma 1"1/2	Steel-rubber washer 1"1/2	
4	•	•						11600910343	Rondella acciaio-gomma 3/4"	Steel-rubber washer 3/4"	1
			•	•	•	•	•	11600901102	Rondella acciaio-gomma 1"	Steel-rubber washer 1"	
5	•							51701000637	Corpo pompa	Gear housing	1
		•						51701000726			
			•					51701000842			
				•				51701001001			
					•			51701001163			
						•		51701001323			
						•	51701001501				
6	•	•	•	•	•	•	•	50100300291	Spine forate di centraggio 18x12.5	Pins 18x12.5	4
7	•	•	•	•	•	•	•	53300400088	Boccole autolub. 38x42x38	Bushing 38x42x38	4
8	•	•	•	•	•	•	•	50600001195	Guarnizione antiestrusione	Back-up ring	2
9	•	•	•	•	•	•	•	50600001186	Guarnizione per rasamento	Thrust plate seal	2
10	•	•	•	•	•	•	•	51001000328	Rasamento ad occhiale	Thrust plate	2
11	•							52302100631	Albero dentato conduttore	Drive shaft	1
		•						52302100720			
			•					52302100846			
				•				52302101005			
					•			52302101167			
						•		52302101327			
						•	52302101505				
12	•							52302000632	Albero dentato condotto	Driven shaft	1
		•						52302000721			
			•					52302000847			
				•				52302001006			
					•			52302001168			
						•		52302001328			
						•	52302001506				
13	•	•	•	•	•	•	•	50600001337	Guarnizione OR	O-Ring	1
14	•	•	•	•	•	•	•	50401000063	Grano conico 1/8"	Plug 1/8"	1
15	•	•	•	•	•	•	•	51800300143	Coperchio anteriore	Mounting cover	1
16	•	•	•	•	•	•	•	50602425401	Guarnizione paraolio	Oil seal	1
17	•	•	•	•	•	•	•	50100100373	Anello elastico	Circlip	1
18	•	•	•	•	•	•	•	50102000129	Rondella elastica	Washer	8
19	•	•	•	•	•	•	•	50200500573	Vite TCE M12x45	Screw M12x45	8

**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed  rpm	Velocità max. intermittente Max. intermittent speed  rpm	Velocità min. Min. speed  rpm
		P1	P2	P3			
		bar	bar	bar			
<b>NPGH-63</b>	63.70	290	315	325	1800	300	
<b>NPGH-73</b>	74.87	280	300	315			
<b>NPGH-84</b>	85.96	260	280	290			
<b>NPGH-100</b>	102.60	250	270	280	1500	2500	
<b>NPGH-116</b>	119.24	240	260	270			
<b>NPGH-133</b>	135.88	220	250	260			
<b>NPGH-150</b>	149.75	180	210	220			

P1=Pressione max.continua  
P2=Pressione max. intermittente  
P3=Pressione max. di punta

Max. continuous pressure  
Max. Intermittent pressure  
Max. peak pressure

(100%)  
(20 sec.max.)  
(6 sec.max)

**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

Rotazione antioraria, pompa sinistra Anti-clockwise rotation, left pump	Rotazione oraria, pompa destra Clockwise rotation, right pump
<p>Vista FRONTALE FRONT</p>	<p>Vista FRONTALE FRONT</p>

**MOMENTO PESO / MASS MOMENT**

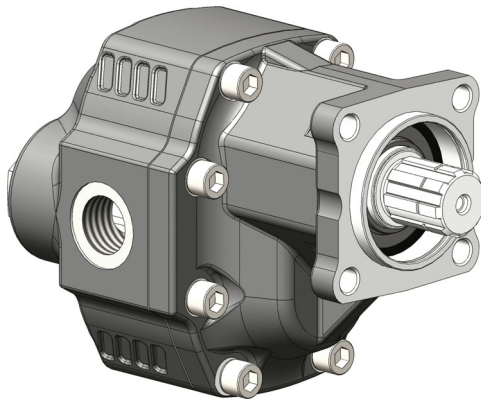
$M_{amm.} = s \times G \text{ (Nm)}$

Baricentro  
Center of mass

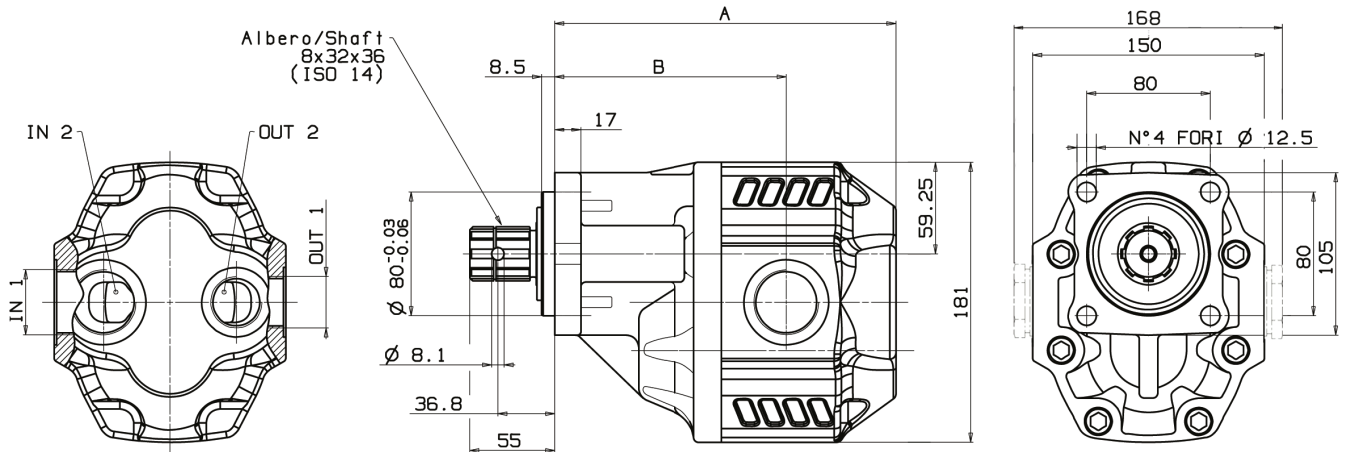
**G** = Peso in N (Peso in Kg x 9.81)  
**G** = Weight in N (Weight in Kg x 9.81)

Tipo pompa - Pump type	<b>S</b>
<b>NPGH-63</b>	112
<b>NPGH-73</b>	115
<b>NPGH-84</b>	116
<b>NPGH-100</b>	120
<b>NPGH-116</b>	121
<b>NPGH-133</b>	128
<b>NPGH-150</b>	131

**PER MODIFICARE IL SENSO DI ROTAZIONE VEDERE ISTRUZ. 99700200042**
**TO CHANGE THE DIRECTION OF ROTATION SEE INSTRUCTION 99700200042**

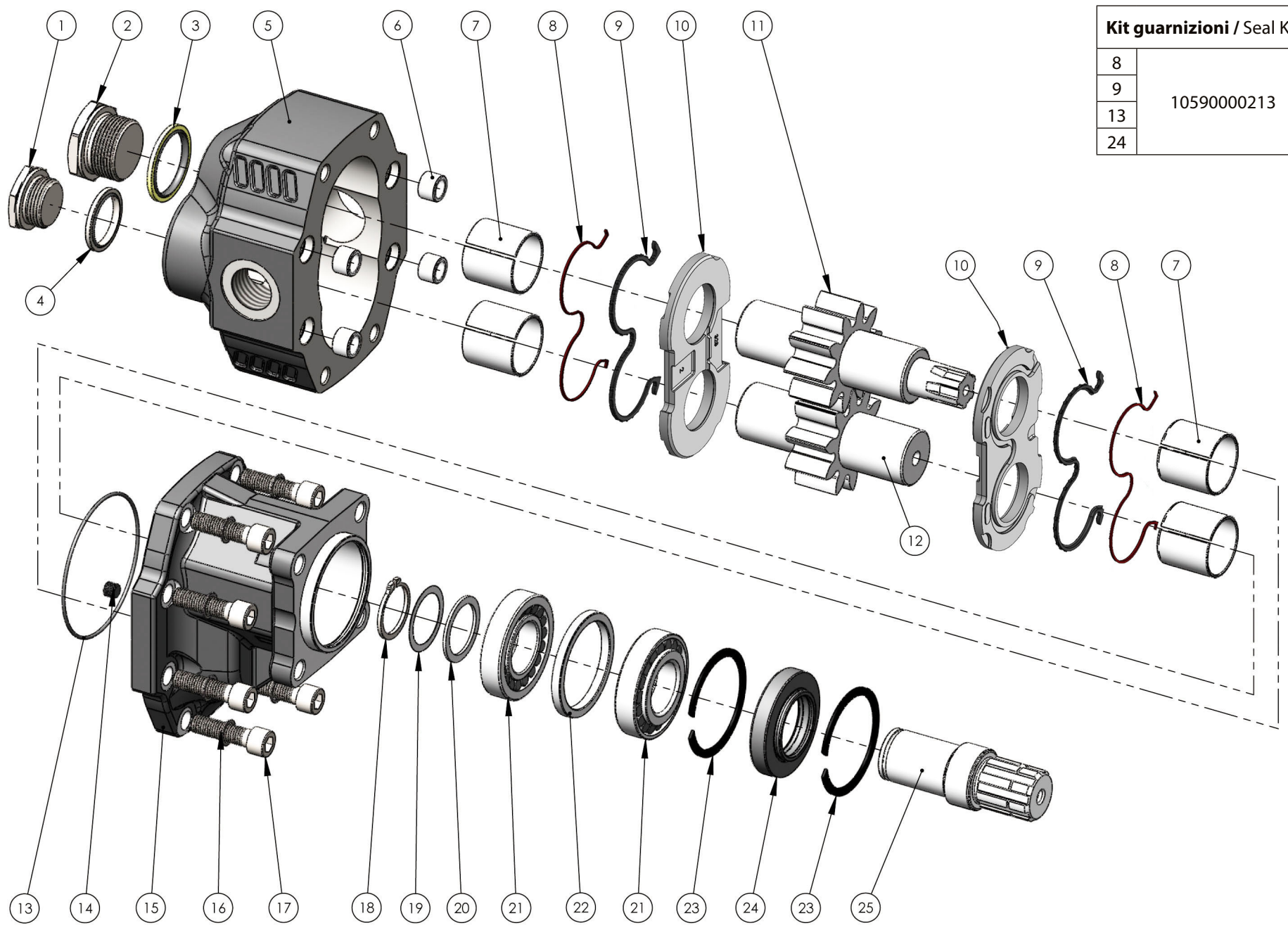


Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>		VI > 100	Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Rotazione <i>Rotation</i>		IN 1 IN 2	OUT 1 OUT 2	A	B	Peso <i>Weight</i>
	Destra / Right	Sinistra / Left					
<b>NPGH-63</b>	10501210636	10501210645	ISO 228	ISO 228	mm	mm	Kg
<b>NPGH-73</b>	10501210734	10501210743	G 1	G 3/4	201.5	136.5	19
<b>NPGH-84</b>	10501210841	10501210850			205.5	140.5	21
<b>NPGH-100</b>	10501211000	10501211019	G 1 1/4	G 1	209.5	141	21.5
<b>NPGH-116</b>	10501211162	10501211171			215.5	144.5	22
<b>NPGH-133</b>	10501211331	10501211340			221.5	150.5	22.5
<b>NPGH-150</b>	10501211500	10501211519	G 1 1/2		231.5	152.5	23.5
					236.5	157.5	24

Kit guarnizioni / Seal Kit	
8	10590000213
9	
13	
24	



N°	63	73	84	100	116	133	150	Codice/Code	Descrizione / Description	Q.	
1	•	•						54000200129	Tappo acciaio 3/4"	Steel plug 3/4"	1
								54000200138	Tappo acciaio 1"	Steel plug 1"	
2	•	•	•	•	•	•	•	54000200138	Tappo acciaio 1"	Steel plug 1"	1
								54000200165	Tappo acciaio 1"1/4	Steel plug 1"1/4	
								54000200174	Tappo acciaio 1"1/2	Steel plug 1"1/2	
3	•	•	•	•	•	•	•	11600911002	Rondella acciaio-gomma 1"	Steel-rubber washer 1"	1
								11600911137	Rondella acciaio-gomma 1"1/4	Steel-rubber washer 1"1/4	
								11600911208	Rondella acciaio-gomma 1"1/2	Steel-rubber washer 1"1/2	
4	•	•	•	•	•	•	•	11600910343	Rondella acciaio-gomma 3/4"	Steel-rubber washer 3/4"	1
								11600901102	Rondella acciaio-gomma 1"	Steel-rubber washer 1"	
5	•	•	•	•	•	•	•	51701000637	Corpo pompa	Gear housing	1
								51701000726			
								51701000842			
								51701001001			
								51701001163			
								51701001323			
51701001501											
6	•	•	•	•	•	•	•	50100300291	Spine forate di centraggio 18x12.5	Pins 18x12.5	4
7	•	•	•	•	•	•	•	53300400088	Boccole autolub. 38x42x38	Bushing 38x42x38	4
8	•	•	•	•	•	•	•	50600001195	Guarnizione antiestrusione	Back-up ring	2
9	•	•	•	•	•	•	•	50600001186	Guarnizione per rasamento	Thrust plate seal	2
10	•	•	•	•	•	•	•	51001000328	Rasamento ad occhiale	Thrust plate	2
11	•	•	•	•	•	•	•	52302100631	Albero dentato conduttore	Drive shaft	1
								52302100720			
								52302100846			
								52302101005			
								52302101167			
								52302101327			
52302101505											
12	•	•	•	•	•	•	•	52302000632	Albero dentato condotto	Driven shaft	1
								52302000721			
								52302000847			
								52302001006			
								52302001168			
								52302001328			
52302001506											
13	•	•	•	•	•	•	•	50600001337	Guarnizione OR	O-Ring	1
14	•	•	•	•	•	•	•	50401000063	Grano conico 1/8"	Plug 1/8"	1
15	•	•	•	•	•	•	•	51800300161	Coperchio anteriore	Mounting cover	1
16	•	•	•	•	•	•	•	50102000129	Rondella elastica	Washer	8
17	•	•	•	•	•	•	•	50200500573	Vite TCE M12x45	Screw M12x45	8
18	•	•	•	•	•	•	•	50100001355	Anello seeger	Seeger ring	1
19	•	•	•	•	•	•	•	52900700226	Rondella speciale 45x30x0,2	Special washer 45x30x0,2	1
20	•	•	•	•	•	•	•	52900700208	Rondella speciale 45x35x2	Special washer 45x35x2	1
21	•	•	•	•	•	•	•	51000200211	Cuscinetto rulli conici 35x72x18.25	Tapered roller bearing 35x72x18,25	2
22	•	•	•	•	•	•	•	53000100783	Distanziale 60x72x6,75	Spacer 60x72x6,75	1
23	•	•	•	•	•	•	•	50100002729	Anello elastico	Circlip	2
24	•	•	•	•	•	•	•	50600842723	Guarnizione paraolio	Oil seal	1

**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed  rpm	Velocità max. intermittente Max. intermittent speed  rpm	Velocità min. Min. speed  rpm
		P1	P2	P3			
		bar	bar	bar			
<b>NPGH-63</b>	63.70	290	315	325	1800	2700	300
<b>NPGH-73</b>	74.87	280	300	315			
<b>NPGH-84</b>	85.96	260	280	290			
<b>NPGH-100</b>	102.60	250	270	280			
<b>NPGH-116</b>	119.24	240	260	270	1500	2500	300
<b>NPGH-133</b>	135.88	220	250	260			
<b>NPGH-150</b>	149.75	180	210	220			

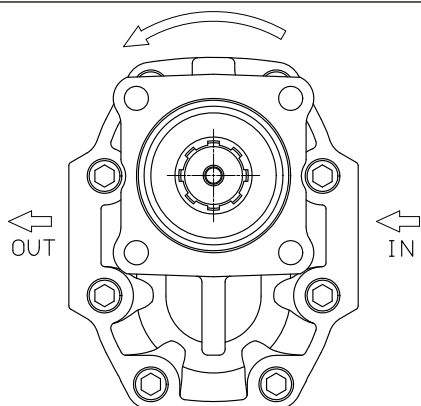
P1=Pressione max.continua  
 P2=Pressione max. intermittente  
 P3=Pressione max. di punta

Max. continuous pressure  
 Max. Intermittent pressure  
 Max. peak pressure

(100%)  
 (20 sec.max.)  
 (6 sec.max)

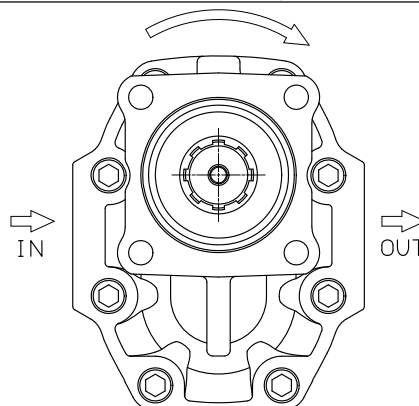
**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

**Rotazione antioraria, pompa sinistra**  
 Anti-clockwise rotation, left pump

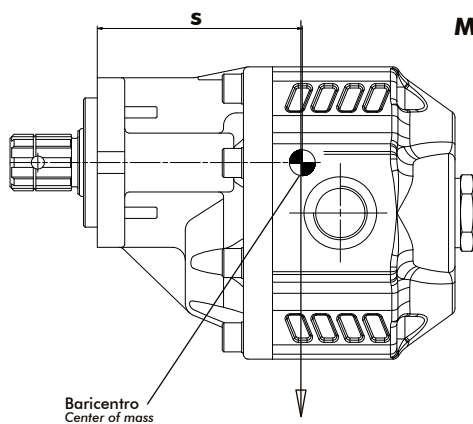


Vista FRONTALE  
 FRONT

**Rotazione oraria, pompa destra**  
 Clockwise rotation, right pump



Vista FRONTALE  
 FRONT

**MOMENTO PESO / MASS MOMENT**


$$M_{amm.} = s \times G \text{ (Nm)}$$

**G**

**G**=Peso in N (Peso in Kg x 9.81)  
**G**=Weight in N (Weight in Kg x 9.81)

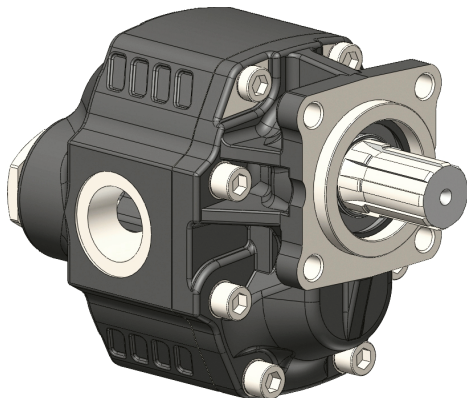
Tipo pompa - Pump type	<b>S</b>
<b>NPGH-63</b>	116
<b>NPGH-73</b>	119
<b>NPGH-84</b>	122
<b>NPGH-100</b>	126
<b>NPGH-116</b>	129
<b>NPGH-133</b>	133
<b>NPGH-150</b>	138

**PER MODIFICARE IL SENSO DI ROTAZIONE VEDERE ISTRUZ. 99700200042**

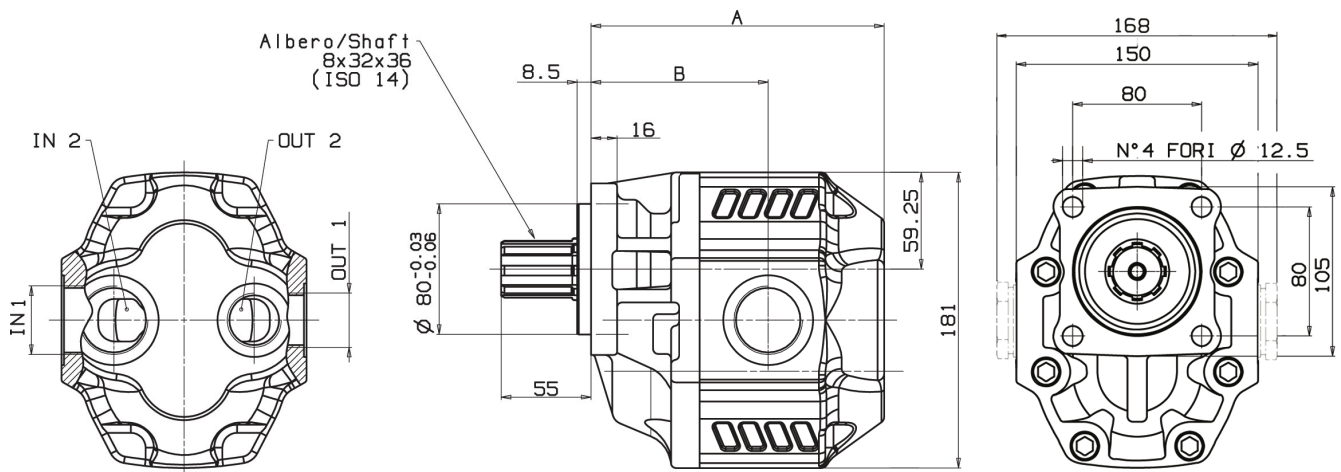
TO CHANGE THE DIRECTION OF ROTATION SEE INSTRUCTION 99700200042

**LA POMPA E' MUNITA DI PARAOLIO BIDIREZIONALE E DI CUSCINETTI A RULLI CONICI SULL'ALBERO DI USCITA**  
 THE PUMP IS COMPLETE WITH DOUBLE OIL-SEAL AND TAPERED ROLLER BEARING ON THE OUTPUT SHAFT





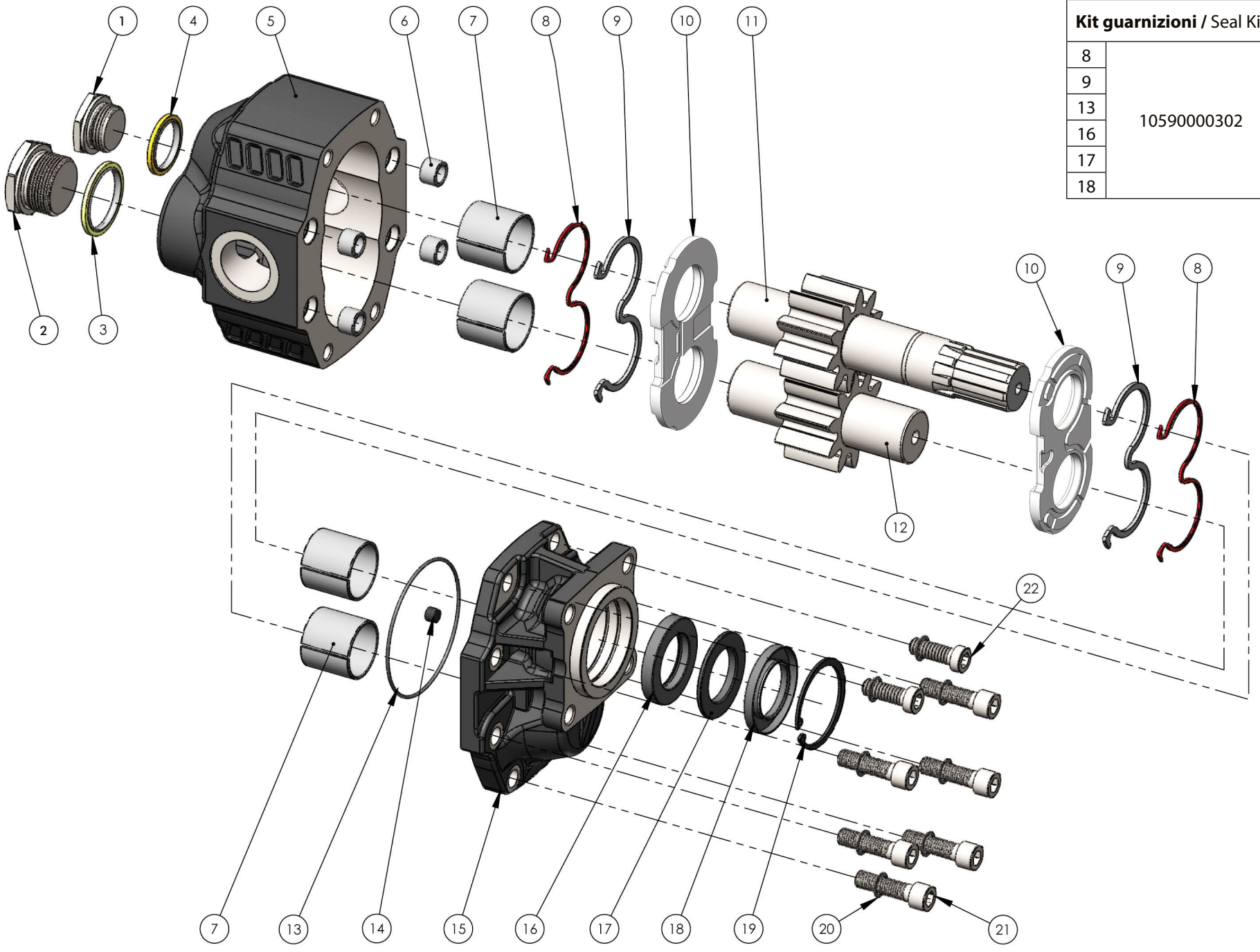
Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>		VI > 100	Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Rotazione <i>Rotation</i>		IN 1 IN 2	OUT 1 OUT 2	A	B	Peso <i>Weight</i>
	<i>Destra / Right</i>	<i>Sinistra / Left</i>					
			ISO 228	ISO 228	mm	mm	Kg
<b>NPGH-63</b>	10504000634	10504000643	G 1	G 3/4	160	95	18
<b>NPGH-73</b>	10504000723	10504000732			164	99	20
<b>NPGH-84</b>	10504000849	10504000858	G 1 1/4	G 1	168	99.5	20.4
<b>NPGH-100</b>	10504001008	10504001017			174	103	20.8
<b>NPGH-116</b>	10504001160	10504001179			180	109	21.3
<b>NPGH-133</b>	10504001320	10504001339	G 1 1/2		190	111	22.3
<b>NPGH-150</b>	10504001508	10504001517			195	116	22.7


**POMPE DA NON UTILIZZARE CON CARICHI ASSIALI E RADIALI SULL'ALBERO**  
**NO AXIAL AND RADIAL LOADS ALLOWED ON PUMP SHAFT**

Kit guarnizioni / Seal Kit	
8	10590000302
9	
13	
16	
17	
18	



N°	63	73	84	100	116	133	150	Codice/Code	Descrizione / Description	Q.	
1	.	.	.	.	.	.	.	54000200129	Tappo acciaio 3/4"	Steel plug 3/4"	1
								54000200138	Tappo acciaio 1"	Steel plug 1"	
2	.	.	.	.	.	.	.	54000200138	Tappo acciaio 1"	Steel plug 1"	1
								54000200165	Tappo acciaio 1"1/4	Steel plug 1"1/4	
								54000200174	Tappo acciaio 1"1/2	Steel plug 1"1/2	
3	.	.	.	.	.	.	.	11600911002	Rondella acciaio-gomma 1"	Steel-rubber washer 1"	1
								11600911137	Rondella acciaio-gomma 1"1/4	Steel-rubber washer 1"1/4	
								11600911208	Rondella acciaio-gomma 1"1/2	Steel-rubber washer 1"1/2	
4	.	.	.	.	.	.	.	11600910343	Rondella acciaio-gomma 3/4"	Steel-rubber washer 3/4"	1
								11600911002	Rondella acciaio-gomma 1"	Steel-rubber washer 1"	
5	.	.	.	.	.	.	.	51701000637	Corpo pompa	Gear housing	1
								51701000726			
								51701000842			
								51701001001			
								51701001163			
								51701001323			
6	.	.	.	.	.	.	.	50100300291	Spine forate di centraggio 18x12.5	Pins 18x12.5	4
								53300400088	Boccole autolub. 38x42x38	Bushing 38x42x38	4
7	.	.	.	.	.	.	.	50600001195	Guarnizione antiestrusione	Back-up ring	2
8	.	.	.	.	.	.	.	50600001186	Guarnizione per rasamento	Thrust plate seal	2
9	.	.	.	.	.	.	.	51001000328	Rasamento ad occhiale	Thrust plate	2
11	.	.	.	.	.	.	.	52302800063	Albero dentato conduttore	Drive shaft	1
								52302800072			
								52302800084			
								52302800100			
								52302800116			
								52302800132			
								52302800150			
12	.	.	.	.	.	.	.	52302000632	Albero dentato condotto	Driven shaft	1
								52302000721			
								52302000847			
								52302001006			
								52302001168			
								52302001328			
13	.	.	.	.	.	.	.	50600001337	Guarnizione OR	O-Ring	1
14	.	.	.	.	.	.	.	50401000063	Grano conico 1/8"	Plug 1/8"	1
15	.	.	.	.	.	.	.	51800300216	Coperchio anteriore	Mounting cover	1
16	.	.	.	.	.	.	.	50602138624	Guarnizione paraolio	Oil seal	1
17	.	.	.	.	.	.	.	50602238623	Anello schermo paraolio	Oil seal guard ring	1
18	.	.	.	.	.	.	.	50600738627	Guarnizione paraolio	Oil seal	1
19	.	.	.	.	.	.	.	50100100588	Anello seeger	Seeger ring	1
20	.	.	.	.	.	.	.	50102000129	Rondella elastica	Washer	8
21	.	.	.	.	.	.	.	50200500573	Vite TCE M12x45	Screw M12x45	6
22	.	.	.	.	.	.	.	50200000265	Vite TCE M12x35	Screw M12x35	2

**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed  rpm	Velocità max. intermittente Max. intermittent speed  rpm	Velocità min. Min. speed  rpm
		P1	P2	P3			
		bar	bar	bar			
<b>NPGH-63</b>	63.70	290	315	325	1800	300	
<b>NPGH-73</b>	74.87	280	300	315			
<b>NPGH-84</b>	85.96	260	280	290			
<b>NPGH-100</b>	102.60	250	270	280			
<b>NPGH-116</b>	119.24	240	260	270	1500	2500	
<b>NPGH-133</b>	135.88	220	250	260			
<b>NPGH-150</b>	149.75	180	210	220			

P1=Pressione max.continua  
P2=Pressione max. intermittente  
P3=Pressione max. di punta

Max. continuous pressure  
Max. Intermittent pressure  
Max. peak pressure

(100%)  
(20 sec.max.)  
(6 sec.max)

**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

Rotazione antioraria, pompa sinistra Anti-clockwise rotation, left pump	Rotazione oraria, pompa destra Clockwise rotation, right pump
<p>Vista FRONTALE FRONT</p>	<p>Vista FRONTALE FRONT</p>

**MOMENTO PESO / MASS MOMENT**

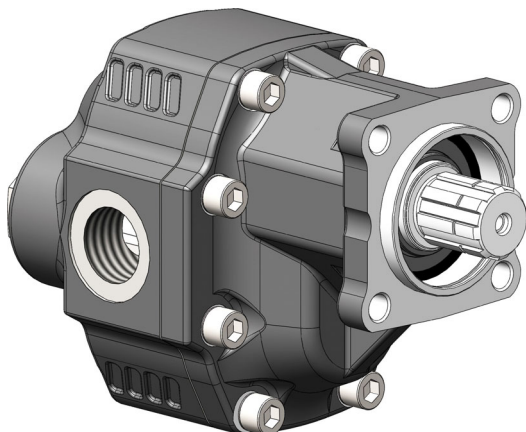
$M_{amm.} = s \times G \text{ (Nm)}$

Baricentro  
Center of mass

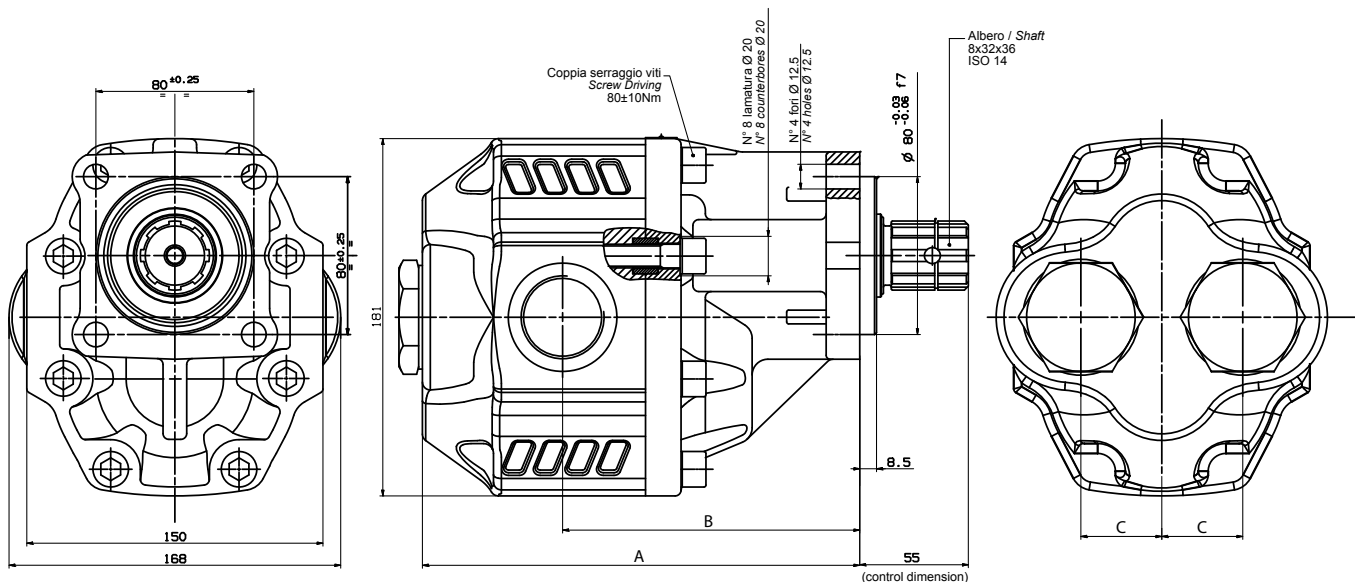
**G** = Peso in N (Peso in Kg x 9.81)  
**G** = Weight in N (Weight in Kg x 9.81)

Tipo pompa - Pump type	<b>S</b>
<b>NPGH-63</b>	87
<b>NPGH-73</b>	89
<b>NPGH-84</b>	91
<b>NPGH-100</b>	94
<b>NPGH-116</b>	97
<b>NPGH-133</b>	101
<b>NPGH-150</b>	104

**PER MODIFICARE IL SENSO DI ROTAZIONE VEDERE ISTRUZ. 99700200042**  
TO CHANGE THE DIRECTION OF ROTATION SEE INSTRUCTION 99700200042

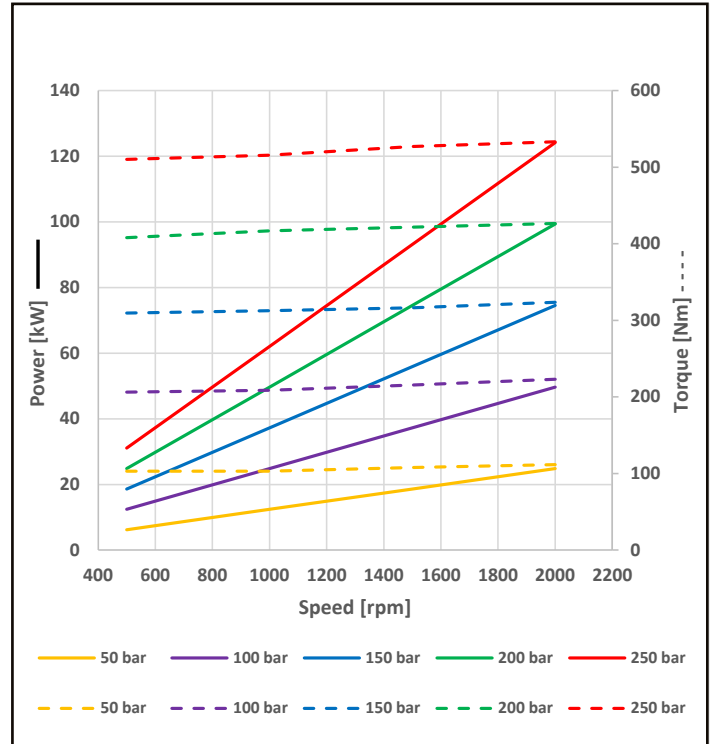


Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>	VI > 100	Temperatura di esercizio <i>Working temperature</i> -15°C +100°C			
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione / <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione / <i>Pump rotation</i>			Bidirezionale/ <i>Bidirectional</i>		

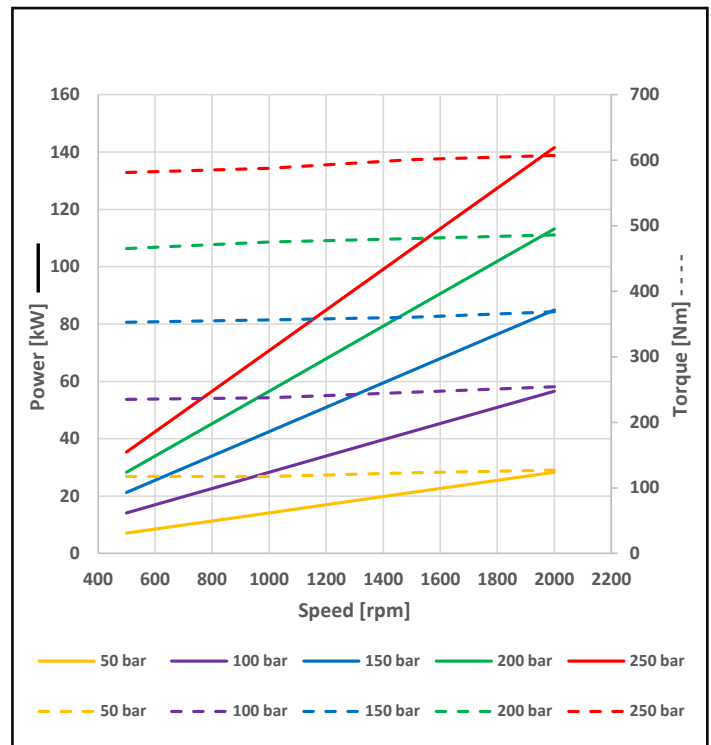
**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Codice ordinazione <i>Order code</i>	IN 1	OUT 1	A	B	C	Peso <i>Weight</i>
		IN 2	OUT 2				
		ISO 228	ISO 228	mm	mm	mm	Kg
<b>LTGH-116</b>	10507111161	G 1 1/4	G 1 1/4	224,5	145,5	39	22,5
<b>LTGH-133</b>	10507111330	G 1 1/2	G 1 1/2	230,5	151,5	37	24,5

Potenza e coppia / Power and Torque LTGH 116					
Pressione Pressure [bar]	50	100	150	200	250
Coppia / Torque [Nm]					
Velocità / Speed [rpm]					
500	103	206	309	408	510
1000	103	209	313	417	516
1500	108	216	316	422	527
2000	112	223	323	426	533
Potenza / Power [kW]					
Velocità / Speed [rpm]					
500	6	12	19	25	31
1000	12	25	37	50	62
1500	19	37	56	75	93
2000	25	50	75	99	124
Flusso / Flow [l/min]					
Velocità / Speed [rpm]					
500	59	58	57	55	54
1000	117	117	116	114	113
1500	177	177	175	173	172
2000	236	236	234	234	231



Potenza e coppia / Power and Torque LTGH 133					
Pressione Pressure [bar]	50	100	150	200	250
Coppia / Torque [Nm]					
Velocità / Speed [rpm]					
500	118	235	353	465	581
1000	118	238	356	475	588
1500	123	246	360	481	601
2000	127	254	369	486	607
Potenza / Power [kW]					
Velocità / Speed [rpm]					
500	7	14	21	28	35
1000	14	28	42	57	71
1500	21	42	64	85	106
2000	28	57	85	113	142
Flusso / Flow [l/min]					
Velocità / Speed [rpm]					
500	67	66	65	63	62
1000	133	133	132	130	129
1500	202	202	200	198	196
2000	269	269	266	266	264



**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO / TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  <i>cm<sup>3</sup>/rev</i>	Pressione Pressure			Velocità max. continua Max. continuous speed  <i>rpm</i>	Velocità max. intermittente Max. intermittent speed  <i>rpm</i>	Velocità max. senza carico Max. without load speed  <i>rpm</i>	Velocità min. Min. speed  <i>rpm</i>
		P1	P2	P3				
		<i>bar</i>	<i>bar</i>	<i>bar</i>				
<b>LTGH-116</b>	119.24	240	260	270	1900	2500	4000	300
<b>LTGH-133</b>	135.88	220	250	260				

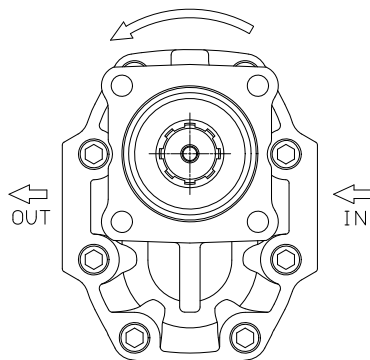
P1=Pressione max.continua  
 P2=Pressione max. intermittente  
 P3=Pressione max. di punta

Max. continuous pressure  
 Max. Intermittent pressure  
 Max. peak pressure

(100%)  
 (20 sec.max.)  
 (6 sec.max)

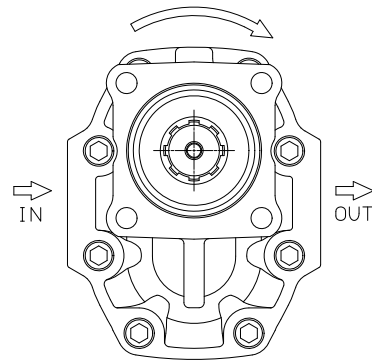
**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

**Rotazione antioraria, pompa sinistra**  
*Anti-clockwise rotation, left pump*



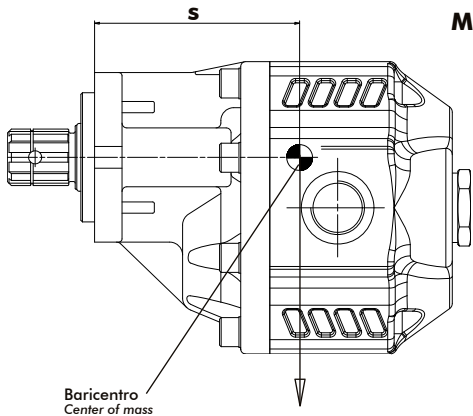
Vista FRONTALE  
FRONT

**Rotazione oraria, pompa destra**  
*Clockwise rotation, right pump*



Vista FRONTALE  
FRONT











**MOMENTO PESO / MASS MOMENT**



$M_{amm.} = s \times G \text{ (Nm)}$

**G** = Peso in N (Peso in Kg x 9.81)  
**G** = Weight in N (Weight in Kg x 9.81)

Tipo pompa - Pump type	<b>S</b>
<b>LTGH-116</b>	129
<b>LTGH-133</b>	133

		2 <sup>A</sup> POMPA 2nd PUMP						
1 <sup>A</sup> POMPA/INTERMEDIA FIRST/INTERMEDIATE PUMP		<b>1P</b> 149200	<b>2PØ52</b> 149200	<b>NPLH UNI</b> 105004	<b>NPH UNI</b> 105011	<b>NPGH UNI</b> 105012	<b>DARK UNI</b> 108005	
	NPLH UNI TANDEM 10500420XXX	<b>X</b>						
	NPH UNI TANDEM 10502300XXX	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>			
	NPH ISO TANDEM 10502310XXX	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>			
	NPGH UNI TANDEM 10502200XXX	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>D</b>	<b>D</b>	
	NPGH ISO TANDEM 10502210XXX	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>D</b>	<b>D</b>	
	NPGH ISO SHORT TANDEM 10507000XXX	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>D</b>	<b>D</b>	

CODICE APPLICAZIONE PER 2<sup>A</sup> POMPA (DA ORDINARE SEPARATAMENTE)  
 ASSEMBLY KIT FOR SECOND PUMP (TO BE ORDERED SEPARATELY)

X= Nessuna applicazione aggiuntiva necessaria  
 No assembly kit required

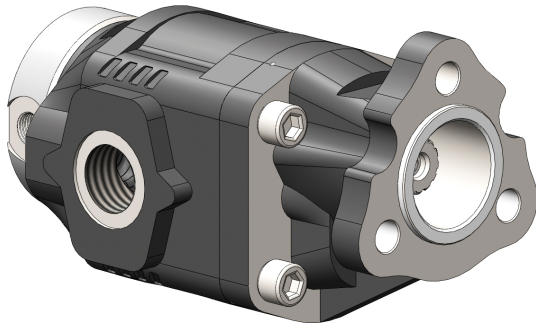
A = 10502000101

B= 10502000209

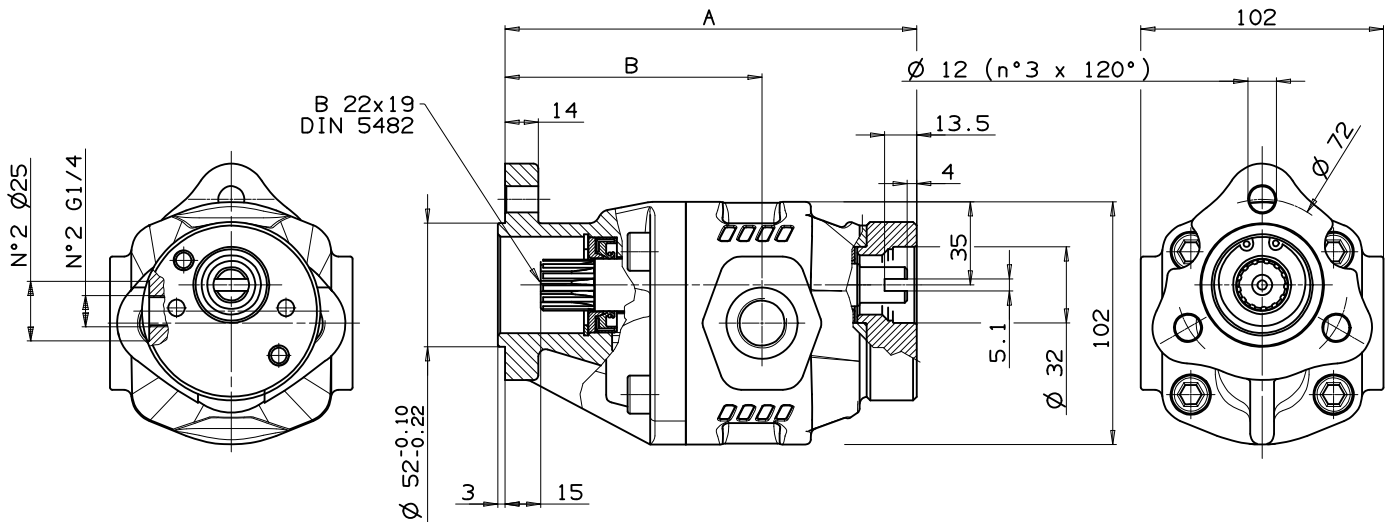
C= 11400000115

D= 11400000106





Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>		VI > 100	Temperatura di esercizio <i>Working temperature</i> -15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione / <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione / <i>Pump rotation</i>			Bidirezionale/Bidirectional		

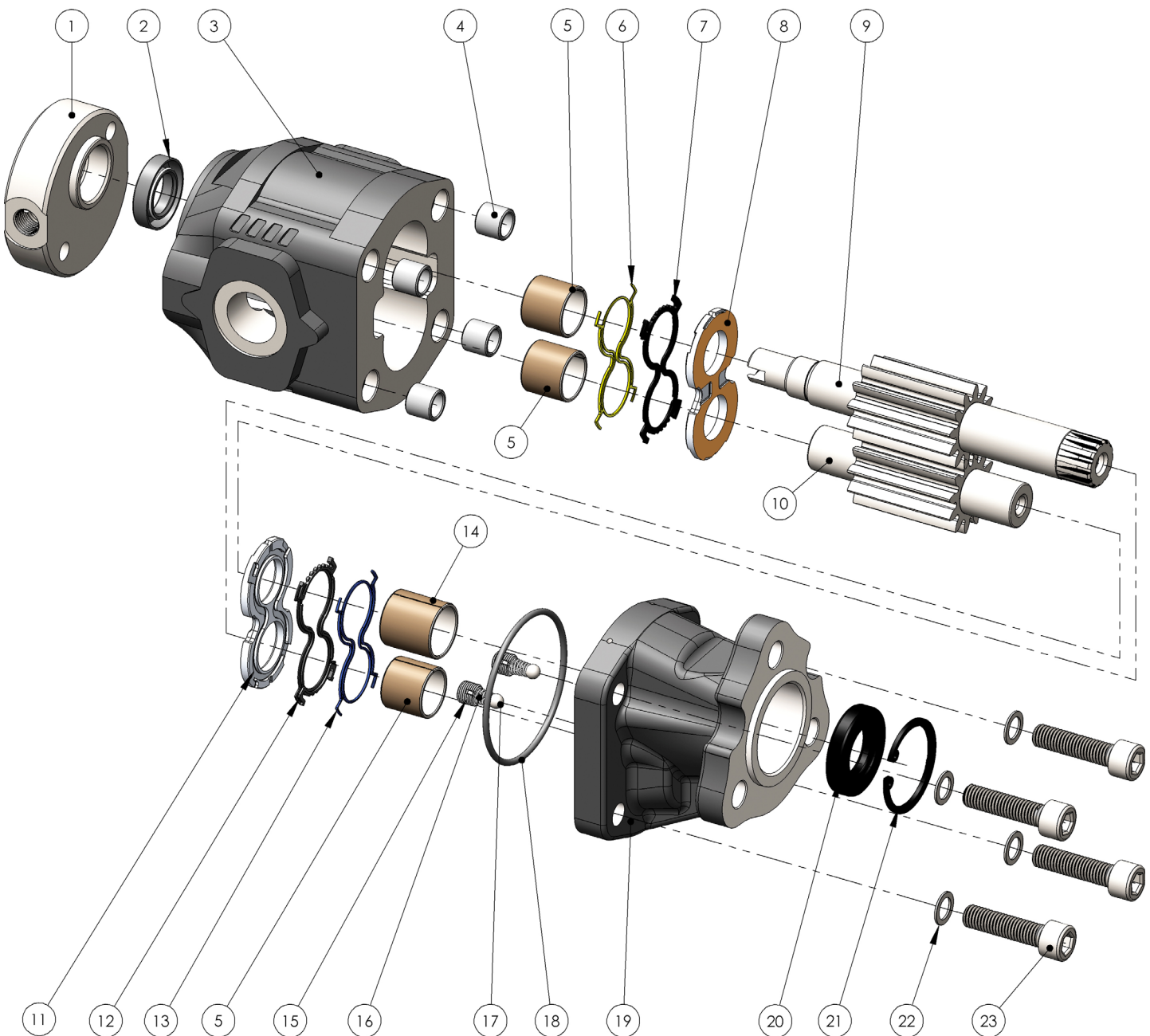
**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Codice ordinazione <i>Order code</i>	IN	OUT	A	B	Peso <i>Weight</i>
		ISO 228	ISO 228	mm	mm	Kg
<b>NPLH-6</b>	10500420063	G 1/2	G 1/2	151	98.5	5
<b>NPLH-10</b>	10500420107			157	104.5	5.3
<b>NPLH-16</b>	10500420161			166.5	101.5	5.4
<b>NPLH-20</b>	10500420205			173	108	5.7
<b>NPLH-25</b>	10500420250	G 3/4	G 3/4	181	113	6
<b>NPLH-32</b>	10500420321			192	124	6.2

**PREDISPOSTA PER 2<sup>A</sup> POMPA GRUPPO 1 CON CODOLO FRESATO**  
 READY FOR 2<sup>ND</sup> PUMP - GROUP 1 WITH MILLED SHANK

**Kit guarnizioni / Seal Kit**

2	10590000277
6	
7	
12	
13	
18	
20	



N°	6	10	16	20	25	32	Codice/Code	Descrizione / Description		Q.
1	.	.	.	.	.	.	52800700835	Flangia	Flange	1
2	.	.	.	.	.	.	50600700180	Guarnizione Paraolio	Oil seal	1
3	.						51703200060	Corpo pompa	Gear housing	1
		.					51703200104			
			.				51703200168			
				.			51703200202			
					.		51703200257			
					.	51703200328				
4	.	.	.	.	.	.	50100300282	Spine forate di centraggio 14x10.5	Pins 14x10.5	4
5	.	.	.	.	.	.	53300400122	Boccole autolub. 20x23x20	Bushing 20x23x20	3
6	.	.	.	.	.	.	50600002390	Guarnizione antiestrusione	Back-up ring	1
7	.	.	.	.	.	.	50600002381	Guarnizione per rasamento	Thrust plate seal	1
8	.	.	.	.	.	.	51001000257A	Rasamento	Thrust plate	1
9	.						52301600067	Albero dentato conduttore	Drive shaft	1
		.					52301600101			
			.				52301600165			
				.			52301600209			
					.		52301600254			
					.	52301600325				
10	.						52301500077	Albero dentato condotto	Driven shaft	1
		.					52301500111			
			.				52301500175			
				.			52301500219			
					.		52301500264			
					.	52301500335				
11	.	.	.	.	.	.	51001000239A	Rasamento	Thrust plate	1
12	.	.	.	.	.	.	50600002336	Guarnizione per rasamento	Thrust plate seal	1
13	.	.	.	.	.	.	50600002345	Guarnizione antiestrusione	Back-up ring	1
14	.	.	.	.	.	.	53300400113	Boccole autolub. 22x25x25	Bushing 22x25x25	1
15	.	.	.	.	.	.	50400000412	Grano valvola lubrificazione	Lube valve screw	2
16	.	.	.	.	.	.	51200400251	Molla conica	Tapered spring	2
17	.	.	.	.	.	.	51000900054	Sfera 1/4"	Ball 1/4"	2
18	.	.	.	.	.	.	50600200701	Guarnizione OR	O-Ring	1
19	.	.	.	.	.	.	51800300250	Coperchio anteriore	Mounting cover	1
20	.	.	.	.	.	.	50602422405	Guarnizione paraolio	Oil seal	1
21	.	.	.	.	.	.	50100100373	Anello seeger	Seeger ring	1
22	.	.	.	.	.	.	50102000101	Rondella elastica	Washer	4
23	.	.					50200400565	Vite TCE M10x35	Screw M10x35	4
24			.	.	.	.	50200400574	Vite TCE M10x40	Screw M10x40	4

**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed  rpm	Velocità max. intermittente Max. intermittent speed  rpm	Velocità min. Min. speed  rpm
		P1	P2	P3			
		bar	bar	bar			
<b>NPLH-6</b>	6,288	280	310	325	2200	3000	300
<b>NPLH-10</b>	10,062						
<b>NPLH-16</b>	16.035						
<b>NPLH-20</b>	20.123	260	280	290			
<b>NPLH-25</b>	25.154	220	250	260			
<b>NPLH-32</b>	32.042	190	210	220	2000	2800	

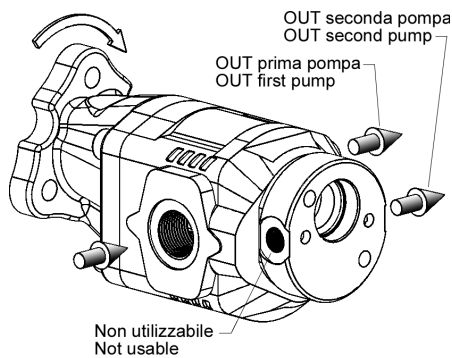
P1=Pressione max.continua  
 P2=Pressione max. intermittente  
 P3=Pressione max. di punta

Max. continuous pressure  
 Max. Intermittent pressure  
 Max. peak pressure

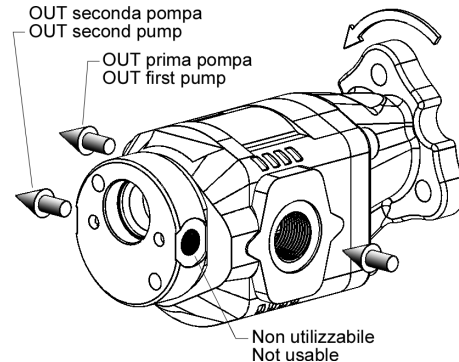
(100%)  
 (20 sec.max.)  
 (6 sec.max)

**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

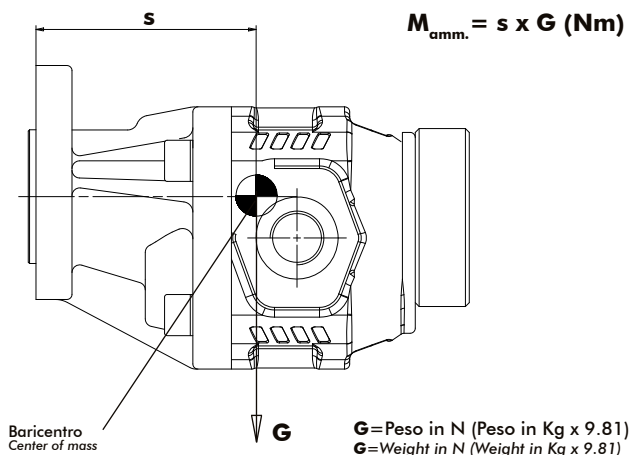
**Rotazione antioraria, pompa sinistra**  
 Anti-clockwise rotation, left pump



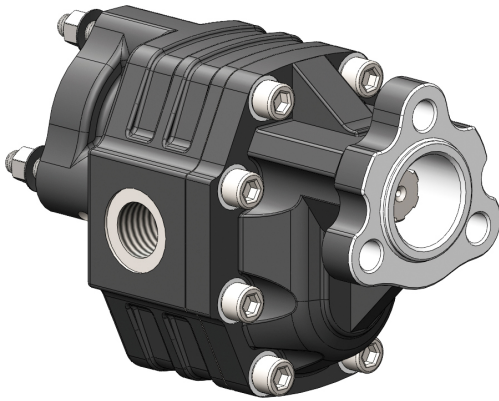
**Rotazione oraria, pompa destra**  
 Clockwise rotation, right pump



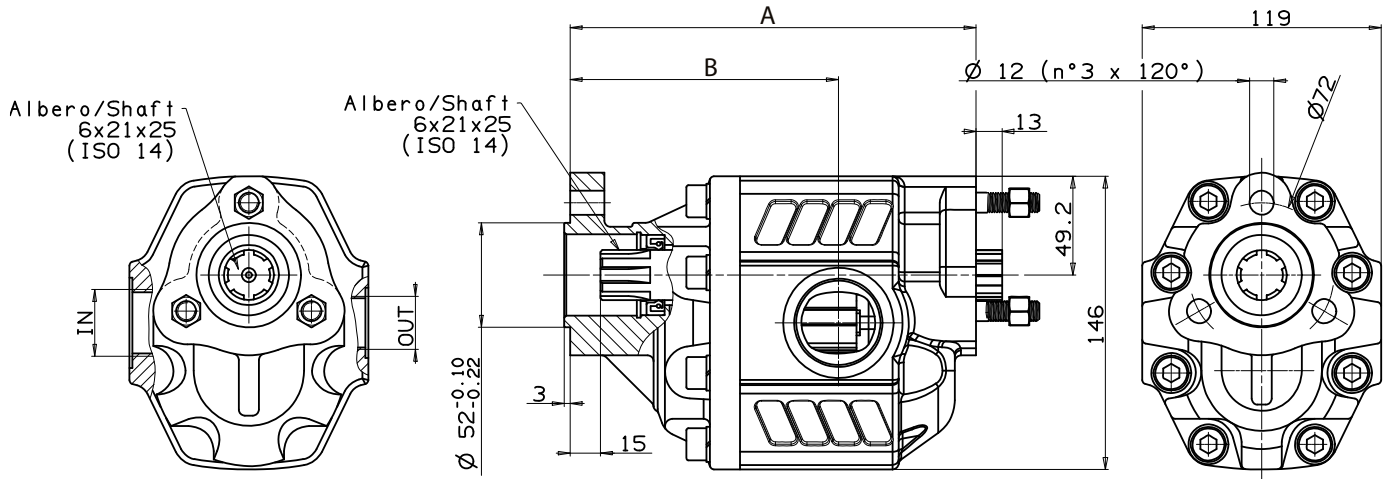
**MOMENTO PESO / MASS MOMENT**



Tipo pompa - Pump type	S
<b>NPLH-6</b>	85
<b>NPLH-10</b>	89
<b>NPLH-16</b>	94
<b>NPLH-20</b>	98
<b>NPLH-25</b>	103
<b>NPLH-32</b>	109



Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>		VI > 100	Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

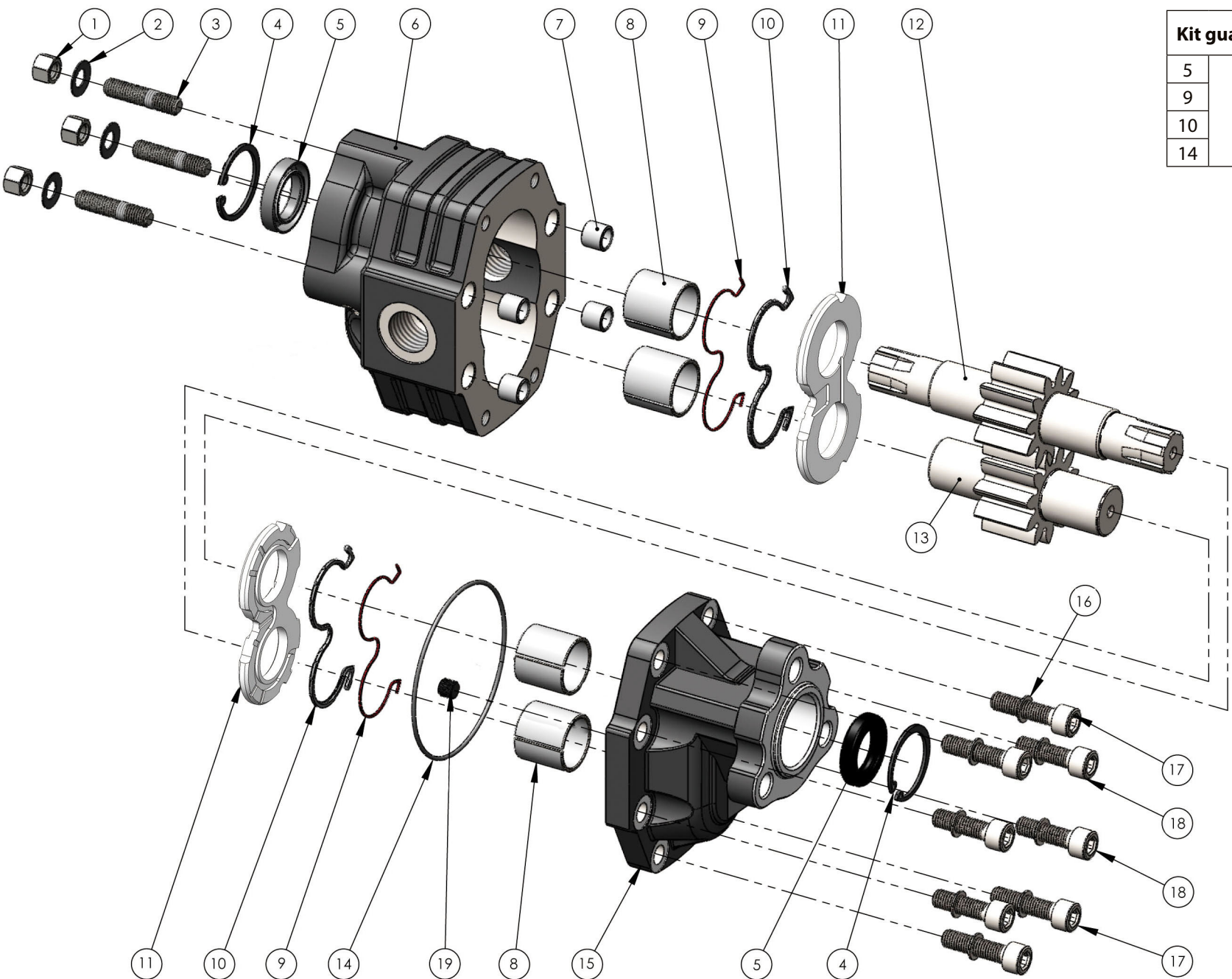
**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Rotazione <i>Rotation</i>		IN <i>ISO 228</i>	OUT <i>ISO 228</i>	A <i>mm</i>	B <i>mm</i>	Peso <i>Weight</i> <i>Kg</i>
	<i>Destra / Right</i>	<i>Sinistra / Left</i>					
<b>NPH-17</b>	10502300171	10502300180	G 1/2		164	103	9.6
<b>NPH-22</b>	10502300224	10502300233			167.5	105.5	9.8
<b>NPH-27</b>	10502300279	10502300288			170	108	10.1
<b>NPH-34</b>	10502300340	10502300359	G 3/4		175	108	10.5
<b>NPH-43</b>	10502300439	10502300448			181	114	11.02
<b>NPH-51</b>	10502300519	10502300528	G 1		186	114.5	11.3
<b>NPH-61</b>	10502300617	10502300626			192	120.5	11.8
<b>NPH-73</b>	10502300733	10502300742			200	119.5	12.4
<b>NPH-82</b>	10502300822	10502300831	G 1 1/4		205	126.5	12.6

**PREDISPOSTA PER 2<sup>A</sup> POMPA CON FLANGIA UNI**  
**READY FOR 2<sup>ND</sup> PUMP WITH UNI FLANGE**

**Kit guarnizioni / Seal Kit**

5	10590000259
9	
10	
14	



N°	17	22	27	34	43	51	61	73	82	Codice/Code	Descrizione / Description	Q.
1	.	.	.	.	.	.	.	.	.	50500400014	Dado M10 CH14 H10 Nut M10 CH14 H10	3
2	.	.	.	.	.	.	.	.	.	50101800105	Rondella elastica Washer	3
3	.	.	.	.	.	.	.	.	.	50300400198	Prigioniero M10x30 Stud bolt M10x30	3
4	.	.	.	.	.	.	.	.	.	50100100373	Anello seeger Seeger ring	2
5	.	.	.	.	.	.	.	.	.	50602425401	Guarnizione paraolio Oil seal	2
6	.									51700900175	Corpo pompa Gear housing	1
		.								51700900228		
			.							51700900273		
				.						51700900344		
					.					51700900433		
						.				51700900513		
							.			51700900611		
							.		51700900737			
								.	51700900826			
7	.	.	.	.	.	.	.	.	.	50100300282	Spine forate di centraggio 14x12.5 Pins 14x12.5	4
8	.	.	.	.	.	.	.	.	.	53300400033	Boccola autolub. 28x32x30 Bushing 28x32x30	4
9	.	.	.	.	.	.	.	.	.	50600001097	Guarnizione antiestrusione Back-up ring	2
10	.	.	.	.	.	.	.	.	.	50600001088	Guarnizione per rasamento Thrust plate seal	2
11	.	.	.	.	.	.	.	.	.	51001000293	Rasamento ad occhiale Thrust plate	2
12	.									52302200176	Albero dentato conduttore Drive shaft	1
		.								52302200229		
			.							52302200274		
				.						52302200345		
					.					52302200434		
						.				52302200514		
							.			52302200612		
								.		52302200710		
								.	52302200827			
13	.									52302400174	Albero dentato condotto Driven shaft	1
		.								52302400227		
			.							52302400272		
				.						52302400343		
					.					52302400432		
						.				52302400512		
							.			52302400610		
							.		52302400736			
								.	52302400825			
14	.	.	.	.	.	.	.	.	.	50600001579	Guarnizione OR O-ring	1
15	.	.	.	.	.	.	.	.	.	51800300107	Coperchio anteriore Mounting cover	1
16	.	.	.	.	.	.	.	.	.	50102000101	Rondella elastica Washer	8
17	.	.	.	.	.	.	.	.	.	50200400574	Vite TCE M10x40 Screw M10x40	8
							.	.	.			4
18							.	.	.	50200400565	Vite TCE M10x35 Screw M10x35	4
19	.	.	.	.	.	.	.	.	.	50401000063	Grano conico 1/8" Plug 1/8"	1

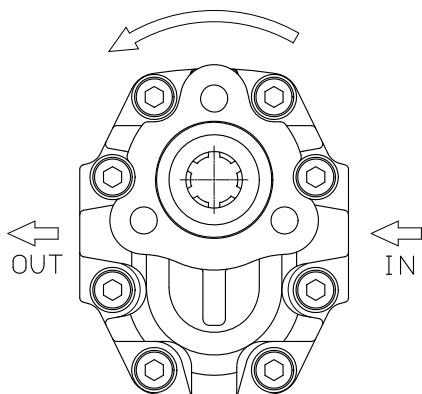
**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

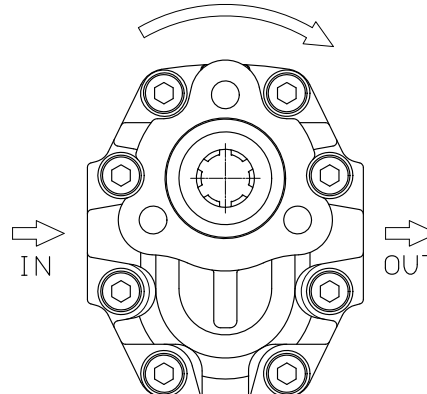
Tipo pompa Pump type	Cilindrata Displacement  cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed  rpm	Velocità max. intermittente Max. intermittent speed  rpm	Velocità min. Min. speed  rpm
		P1	P2	P3			
		bar	bar	bar			
<b>NPH-17</b>	17.04	290	315	325	2500	3000	300
<b>NPH-22</b>	22.15						
<b>NPH-27</b>	26.18						
<b>NPH-34</b>	33.88	280	300	310	2200	2800	
<b>NPH-43</b>	43.12	270	290	300	2000	2500	
<b>NPH-51</b>	50.82	240	260	280			
<b>NPH-61</b>	60.06	220	240	250	1800	2000	
<b>NPH-73</b>	72.88	200	220	230	1600	1800	
<b>NPH-82</b>	81.08	190	210	220	1500		

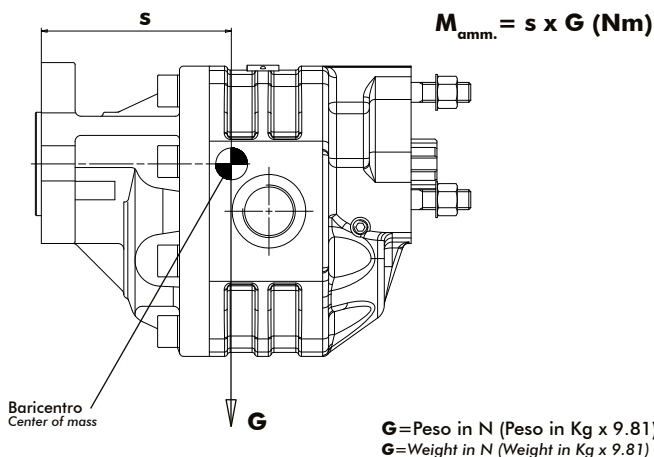
 P1=Pressione max.continua  
 P2=Pressione max. intermittente  
 P3=Pressione max. di punta

 Max. continuous pressure  
 Max. Intermittent pressure  
 Max. peak pressure

 (100%)  
 (20 sec.max.)  
 (6 sec.max)

**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**
**Rotazione antioraria, pompa sinistra**  
 Anti-clockwise rotation, left pump

 Vista FRONTALE  
 FRONT

**Rotazione oraria, pompa destra**  
 Clockwise rotation, right pump

 Vista FRONTALE  
 FRONT

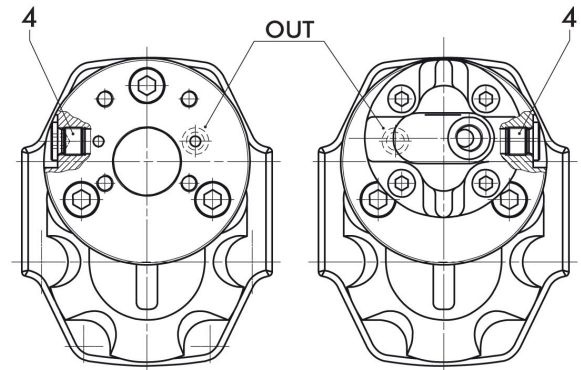
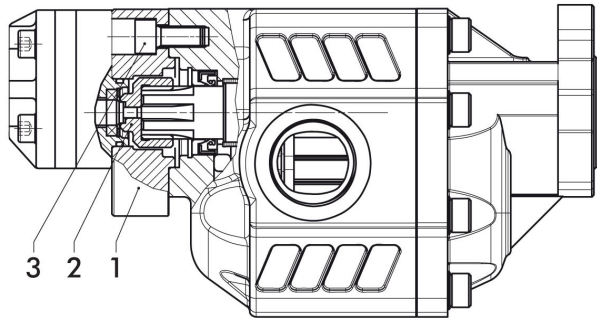
**MOMENTO PESO / MASS MOMENT**


Tipo pompa - Pump type	S
<b>NPH-17</b>	95
<b>NPH-22</b>	97
<b>NPH-27</b>	99
<b>NPH-34</b>	101
<b>NPH-43</b>	104
<b>NPH-51</b>	107
<b>NPH-61</b>	111
<b>NPH-73</b>	115
<b>NPH-82</b>	119

**PER MODIFICARE IL SENSO DI ROTAZIONE VEDERE ISTRUZ. 99700200060**

TO CHANGE THE DIRECTION OF ROTATION SEE INSTRUCTION 99700200060



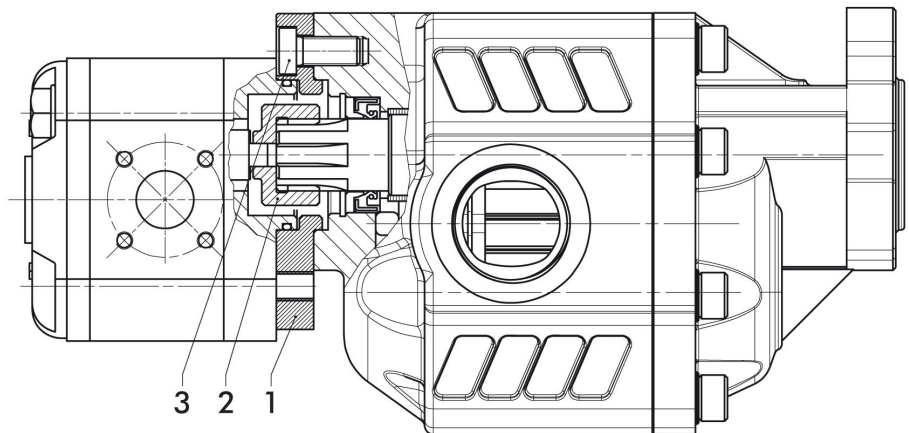
**Pompe 1P**  
**1P pumps**

 Montaggio pompa 1P Dx  
 Mounting pump 1P R

 Montaggio pompa 1P Sx  
 Mounting pump 1P L

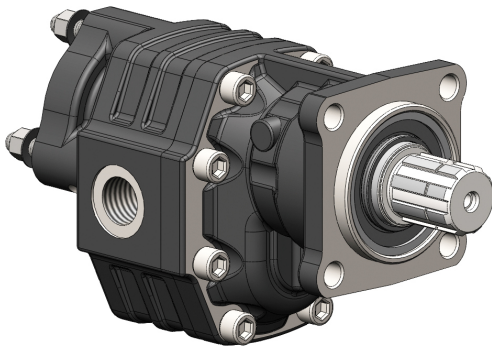
**Kit montaggio codice: 10502000101**  
**Mounting kit:**
**Coppia max.**  
**Max. torque 21,5 Nm**

Pos.	Codice Code	Descrizione Description	Q.
1	52800700817	Flangia per montaggio pompe 1P Destra/Sinistra Mounting flange for pumps 1P Left/Right	1
2	11400400853	Manicotto Coupling	1
3	50200400538	Vite TCE M10x22 UNI 5931 CL 12.9 Hex head screw M10x22 UNI 5931 CL 12.9	3
4	11500600117	Tappo TCE 1/4" DIN 908 Hex head plug 1/4" DIN 908	1

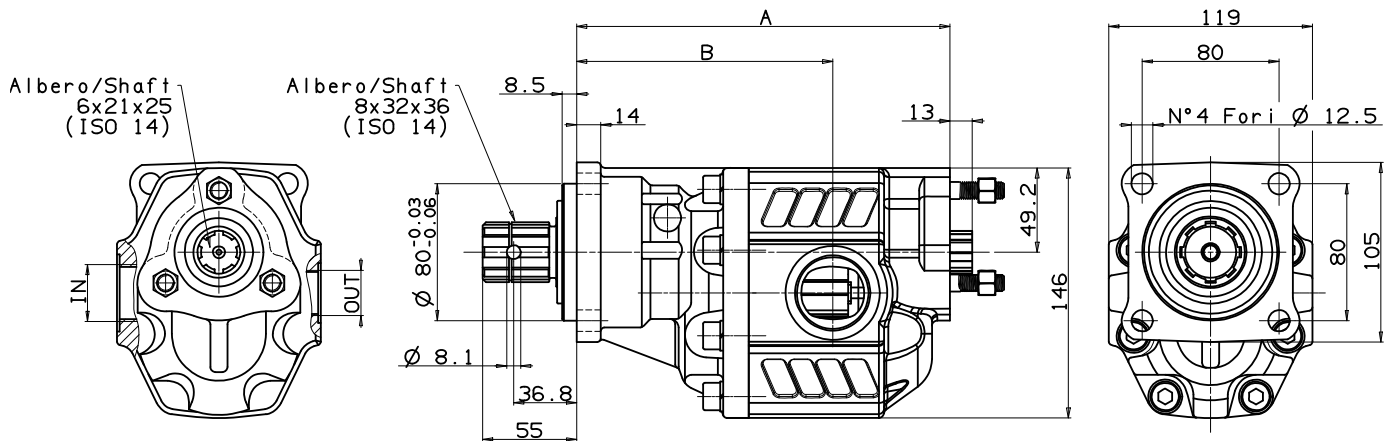
**Pompe 2P**  
**2P pumps**

**L'applicazione è da utilizzare solo con le pompe:**  
**The assembly should be used only with the following pumps:**
**14920009433 4cc destra/right**  
**14920009442 4cc sinistra/left**  
**14920009451 6cc destra/right**  
**14920009460 6cc sinistra/left**

**Kit montaggio codice: 10502000209**  
**Mounting kit:**
**Coppia max.**  
**Max. torque 70 Nm**

Pos.	Codice Code	Descrizione Description	Q.tà Q.ty
1	52800700808	Flangia per montaggio pompe 2P Mounting flange for pumps 2P	1
2	11400400844	Manicotto Coupling	1
3	50200000149	Vite TCE M10x22 DIN 7984 CL 10.9 Hex head screw M10x22 DIN 7984 CL 10.9	3



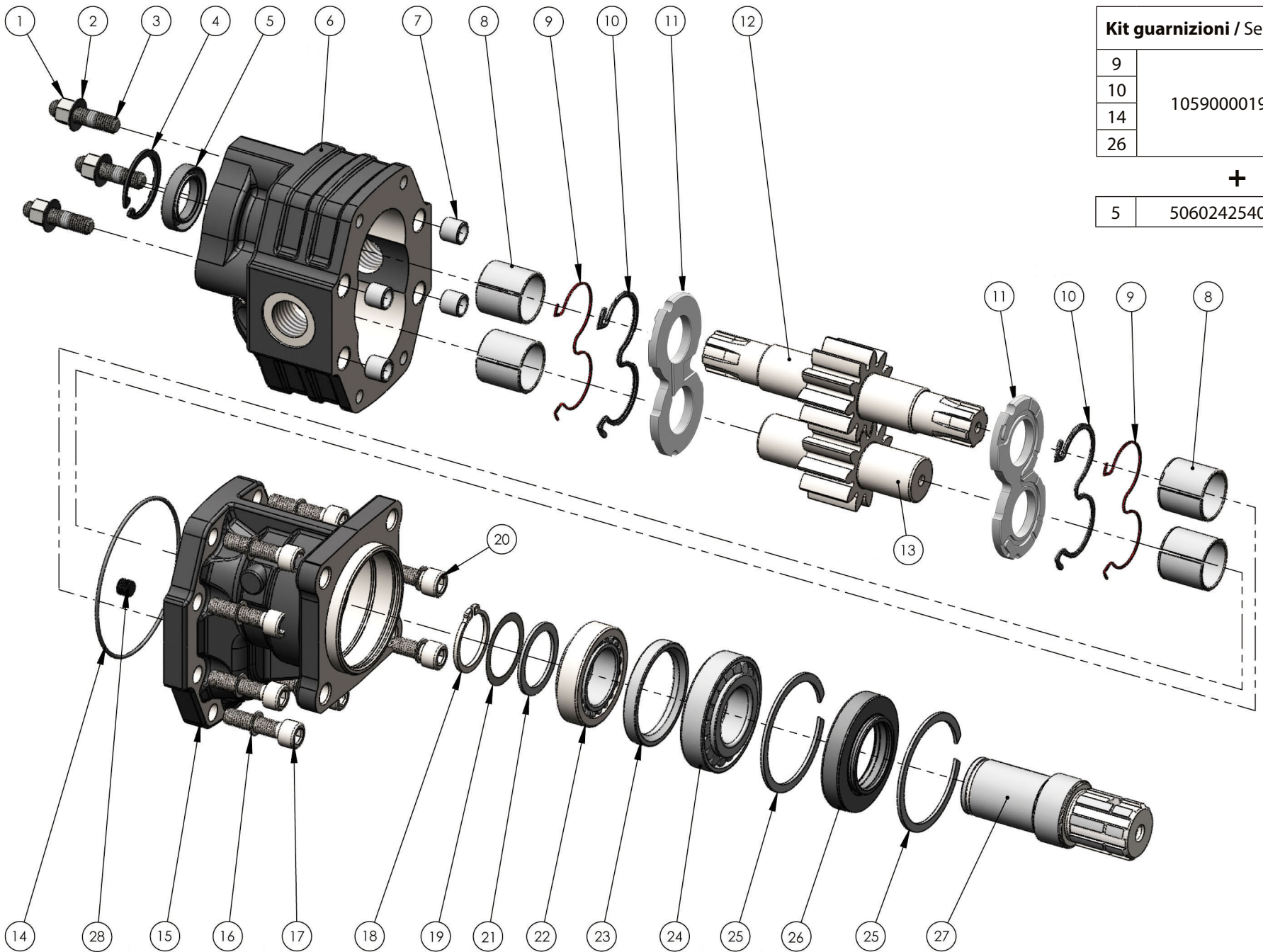
Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>		VI > 100	Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Rotazione <i>Rotation</i>		IN <i>ISO 228</i>	OUT <i>ISO 228</i>	A <i>mm</i>	B <i>mm</i>	Peso <i>Weight</i> <i>Kg</i>
	<i>Destra / Right</i>	<i>Sinistra / Left</i>					
<b>NPH-17</b>	10502310179	10502310188	G 1/2		180	119	10.6
<b>NPH-22</b>	10502310222	10502310231			183.5	121.5	11
<b>NPH-27</b>	10502310277	10502310286			186	124	11.5
<b>NPH-34</b>	10502310348	10502310357	G 3/4		191	124	12.5
<b>NPH-43</b>	10502310437	10502310446			197	130	13
<b>NPH-51</b>	10502310517	10502310526			202	130.5	13.5
<b>NPH-61</b>	10502310615	10502310624	G 1		208	136.5	14
<b>NPH-73</b>	10502310731	10502310740			216	135.5	14.5
<b>NPH-82</b>	10502310820	10502310839			G 1 1/4	221	142.5

**PREDISPOSTA PER 2<sup>A</sup> POMPA CON FLANGIA UNI**
**READY FOR 2<sup>ND</sup> PUMP WITH UNI FLANGE**

Kit guarnizioni / Seal Kit	
9	10590000197
10	
14	
26	
+	
5	50602425401



N°	17	22	27	34	43	51	61	73	82	Codice/Code	Descrizione / Description	Q.
1	.	.	.	.	.	.	.	.	.	50500400014	Dado M10 CH14 H10 Nut M10 CH14 H10	3
2	.	.	.	.	.	.	.	.	.	50101800105	Rondella elastica Washer	3
3	.	.	.	.	.	.	.	.	.	50300400198	Prigioniero M10x30 Stud bolt M10x30	3
4	.	.	.	.	.	.	.	.	.	50100100373	Anello elastico Circlip	1
5	.	.	.	.	.	.	.	.	.	50602425401	Guarnizione paraolio Oil seal	1
6	.									51700900175	Corpo pompa Gear housing	1
		.								51700900228		
			.							51700900273		
				.						51700900344		
					.					51700900433		
						.				51700900513		
							.			51700900611		
							.		51700900737			
								.	51700900826			
7	.	.	.	.	.	.	.	.	.	50100300282	Spine forate di centraggio 14x12,5 Pins 14x12,5	4
8	.	.	.	.	.	.	.	.	.	53300400033	Boccola autolub. 28x32x30 Bushing 28x32x30	4
9	.	.	.	.	.	.	.	.	.	50600001097	Guarnizione antiestrusione Back-up ring	2
10	.	.	.	.	.	.	.	.	.	50600001088	Guarnizione per rasamento Thrust plate seal	2
11	.	.	.	.	.	.	.	.	.	51001000293	Rasamento ad occhiale Thrust plate	2
12	.									52302200176	Albero dentato conduttore Drive shaft	1
		.								52302200229		
			.							52302200274		
				.						52302200345		
					.					52302200434		
						.				52302200514		
							.			52302200612		
							.		52302200710			
								.	52302200827			
13	.									52302400174	Albero dentato condotto Albero dentato condotto	1
		.								52302400227		
			.							52302400272		
				.						52302400343		
					.					52302400432		
						.				52302400512		
							.			52302400610		
							.		52302400736			
								.	52302400825			
14	.	.	.	.	.	.	.	.	.	50600001579	Guarnizione OR O-Ring	1
15	.	.	.	.	.	.	.	.	.	51800300116	Coperchio anteriore Mounting cover	1
16	.	.	.	.	.	.	.	.	.	50102000101	Rondella elastica Washer	8
17	.	.	.	.	.	.	.	.	.	50200400574	Vite TCE M10x40 Screw M10x40	8
												4
18	.	.	.	.	.	.	.	.	.	50100001355	Anello seeger Seeger ring	1
19	.	.	.	.	.	.	.	.	.	52900700226	Rondella speciale 45x32x0,2 Special washer 45x35x0,2	1
20	.	.	.	.	.	.	.	.	.	50200400565	Vite TCE M10x35 Screw M10x35	4
21	.	.	.	.	.	.	.	.	.	52900700208	Rondella speciale 45x35x2 Special washer 45x35x2	1
22	.	.	.	.	.	.	.	.	.	51000200202	Cuscinetto a rulli conici 35x62x18 Tapered roller bearing 35x62x18	1
23	.	.	.	.	.	.	.	.	.	53000400164	Distanziale 52x64,2x8,25 Spacer 52x64,2x8,25	1
24	.	.	.	.	.	.	.	.	.	51000200211	Cuscinetto a rulli conici 35x72x18,25 Tapered roller bearing 35x72x18,25	1
25	.	.	.	.	.	.	.	.	.	50100002729	Anello elastico Circlip	2
26	.	.	.	.	.	.	.	.	.	50600842723	Guarnizione paraolio Oil seal	1
27	.	.	.	.	.	.	.	.	.	11400500147	Manicotto Coupling	1
28	.	.	.	.	.	.	.	.	.	50401000063	Grano conico 1/8" Plug 1/8"	1

**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed  rpm	Velocità max. intermittente Max. intermittent speed  rpm	Velocità min. Min. speed  rpm
		P1	P2	P3			
		bar	bar	bar			
<b>NPH-17</b>	17.04	290	315	325	2500	3000	300
<b>NPH-22</b>	22.15						
<b>NPH-27</b>	26.18						
<b>NPH-34</b>	33.88	280	300	310	2200	2800	
<b>NPH-43</b>	43.12	270	290	300	2000	2500	
<b>NPH-51</b>	50.82	240	260	280			
<b>NPH-61</b>	60.06	220	240	250	1800	2000	
<b>NPH-73</b>	72.88	200	220	230	1600	1800	
<b>NPH-82</b>	81.08	190	210	220	1500		

P1=Pressione max.continua  
P2=Pressione max. intermittente  
P3=Pressione max. di punta

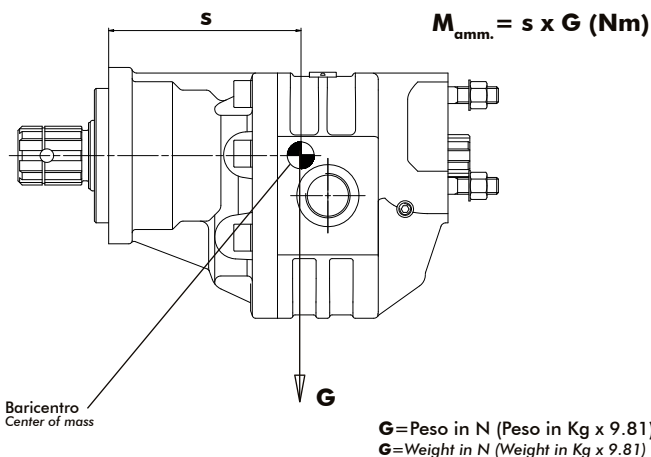
Max. continuous pressure  
Max. Intermittent pressure  
Max. peak pressure

(100%)  
(20 sec.max.)  
(6 sec.max)

**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

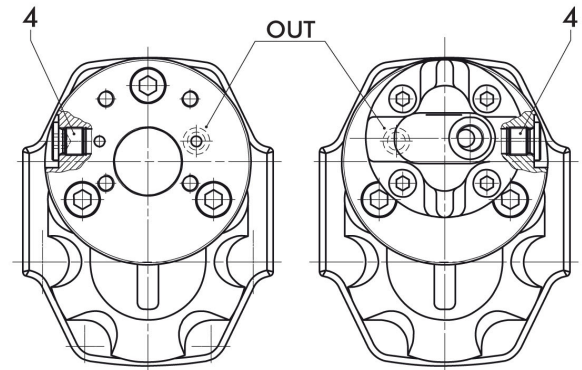
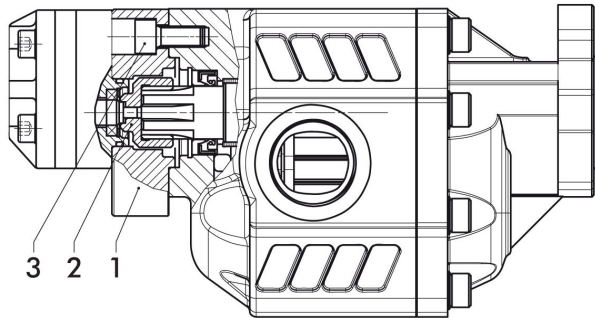
Rotazione antioraria, pompa sinistra Anti-clockwise rotation, left pump	Rotazione oraria, pompa destra Clockwise rotation, right pump
<p>Vista FRONTALE FRONT</p>	<p>Vista FRONTALE FRONT</p>

**MOMENTO PESO / MASS MOMENT**



Tipo pompa - Pump type	S
<b>NPH-17</b>	92
<b>NPH-22</b>	94
<b>NPH-27</b>	98
<b>NPH-34</b>	100
<b>NPH-43</b>	103
<b>NPH-51</b>	105
<b>NPH-61</b>	108
<b>NPH-73</b>	112
<b>NPH-82</b>	115

**PER MODIFICARE IL SENSO DI ROTAZIONE VEDERE ISTRUZ. 99700200060**  
TO CHANGE THE DIRECTION OF ROTATION SEE INSTRUCTION 99700200060

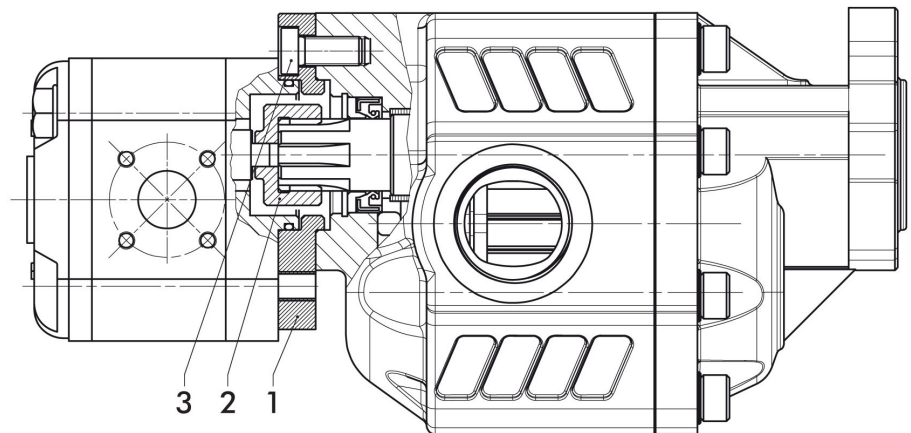
**Pompe 1P**  
**1P pumps**

 Montaggio pompa 1P Dx  
 Mounting pump 1P R

 Montaggio pompa 1P Sx  
 Mounting pump 1P L

**Kit montaggio codice: 10502000101**  
**Mounting kit:**
**Coppia max.**  
**Max. torque 21,5 Nm**

Pos.	Codice Code	Descrizione Description	Q.
1	52800700817	Flangia per montaggio pompe 1P Destra/Sinistra Mounting flange for pumps 1P Left/Right	1
2	11400400853	Manicotto Coupling	1
3	50200400538	Vite TCE M10x22 UNI 5931 CL 12.9 Hex head screw M10x22 UNI 5931 CL 12.9	3
4	11500600117	Tappo TCE 1/4" DIN 908 Hex head plug 1/4" DIN 908	1

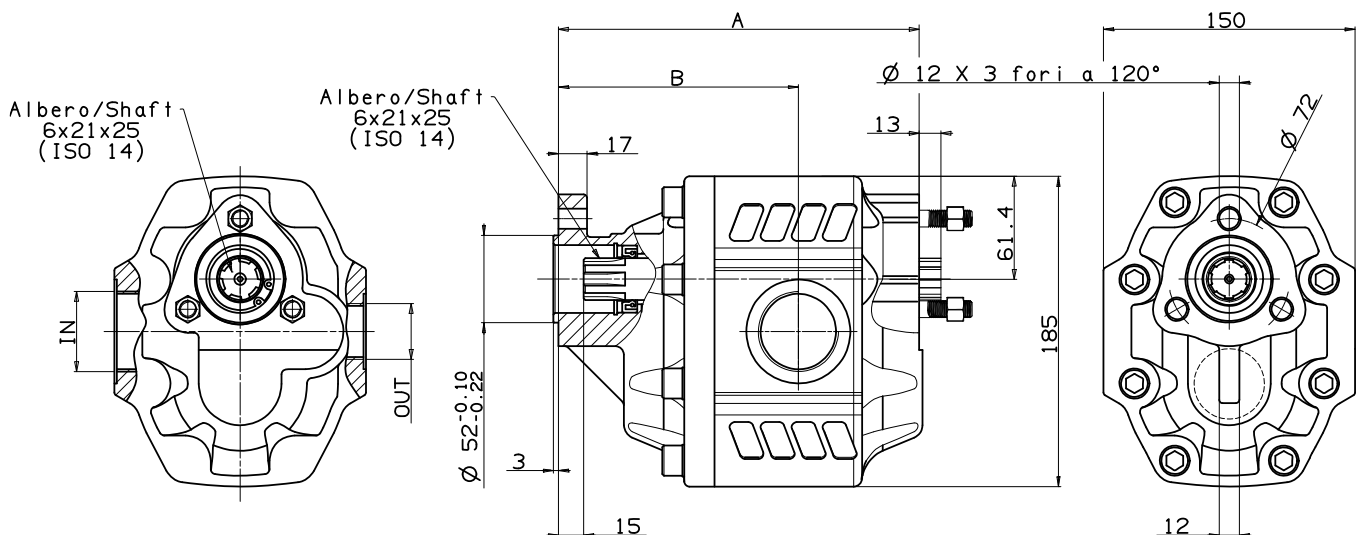
**Pompe 2P**  
**2P pumps**

**L'applicazione è da utilizzare solo con le pompe:**  
**The assembly should be used only with the following pumps:**
**14920009433 4cc destra/right**  
**14920009442 4cc sinistra/left**  
**14920009451 6cc destra/right**  
**14920009460 6cc sinistra/left**

**Kit montaggio codice: 10502000209**  
**Mounting kit:**
**Coppia max.**  
**Max. torque 70 Nm**

Pos.	Codice Code	Descrizione Description	Q.tà Q.ty
1	52800700808	Flangia per montaggio pompe 2P Mounting flange for pumps 2P	1
2	11400400844	Manicotto Coupling	1
3	50200000149	Vite TCE M10x22 DIN 7984 CL 10.9 Hex head screw M10x22 DIN 7984 CL 10.9	3



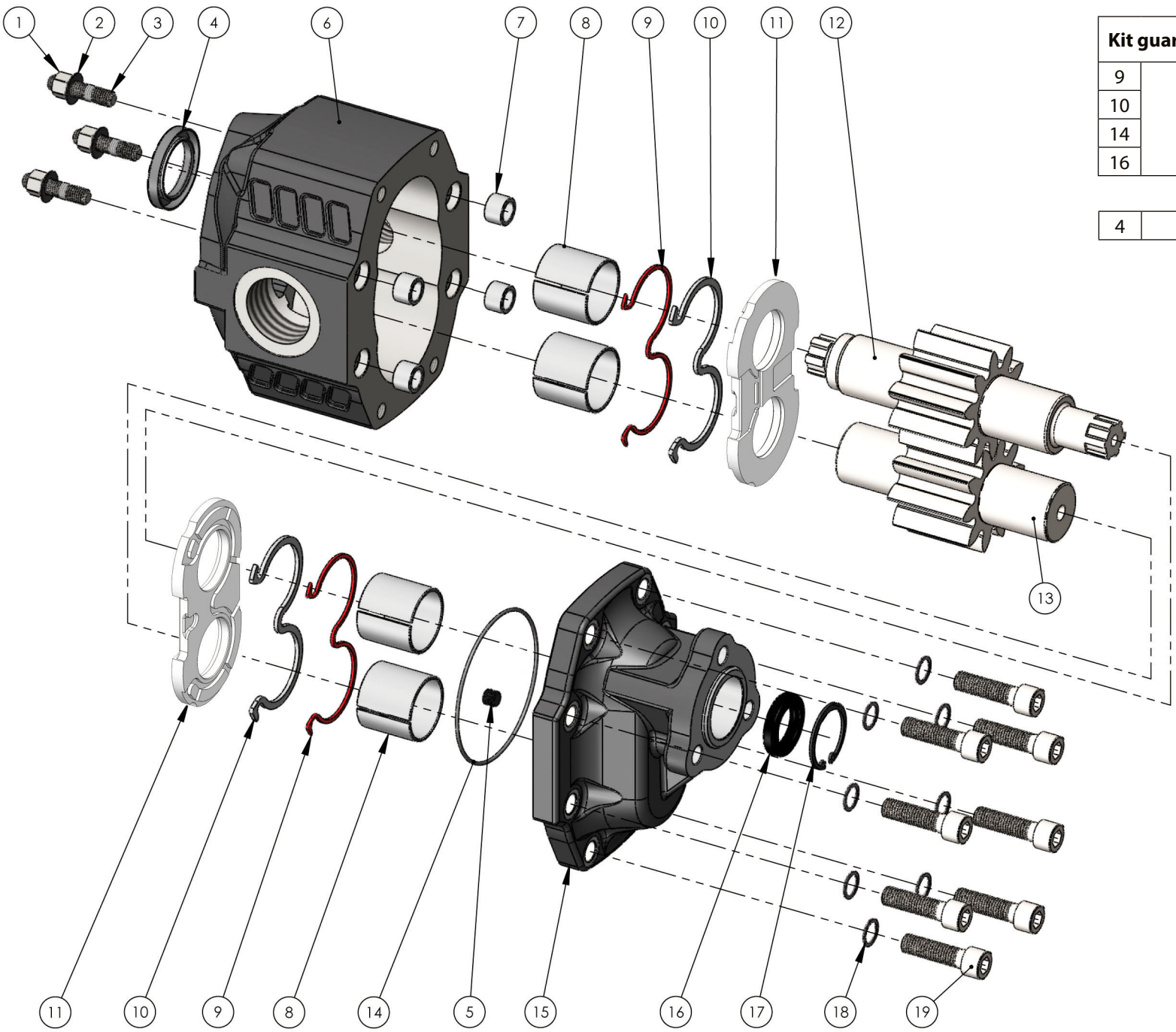
Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>		VI > 100	Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Rotazione <i>Rotation</i>		IN	OUT	A	B	Peso <i>Weight</i>
	<i>Destra / Right</i>	<i>Sinistra / Left</i>					
<b>NPGH-63</b>	10502200636	10502200645	ISO 228	ISO 228	mm	mm	Kg
<b>NPGH-73</b>	10502200734	10502200743	G 1	G 3/4	184	121	17
<b>NPGH-84</b>	10502200841	10502200850	G 1 1/4	G 1	188	125	18
<b>NPGH-100</b>	10502201000	10502201019			192	125.5	18.5
<b>NPGH-116</b>	10502201162	10502201171			198	129	19
<b>NPGH-133</b>	10502201331	10502201340	G 1 1/2		204	135	19.5
<b>NPGH-150</b>	10502201500	10502201519			210	138	20.5
					215	143	21

**PREDISPOSTA PER 2<sup>A</sup> POMPA CON FLANGIA UNI**  
**READY FOR 2<sup>ND</sup> PUMP WITH UNI FLANGE**

Kit guarnizioni / Seal Kit	
9	10590000204
10	
14	
16	
+	
4	50602335527





N°	63	73	84	100	116	133	150	Codice/Code	Descrizione / Description		Q.
1	.	.	.	.	.	.	.	50500400014	Dado M10 CH14 H10	Nut M10 CH14 H10	3
2	.	.	.	.	.	.	.	50101800105	Rondella elastica	Washer	3
3	.	.	.	.	.	.	.	50300400198	Prigioniero M10x30	Stud bolt M10x30	3
4	.	.	.	.	.	.	.	50602335527	Guarnizione paraolio	Oil seal	1
5	.	.	.	.	.	.	.	50401000063	Grano conico 1/8"	Plug 1/8"	1
6	.							51702000635 Dx/Right	Corpo pompa	Gear housing	1
	.							51702010633 Sx/Left			
		.						51702000724 Dx/Right			
		.						51702010722 Sx/Left			
			.					51702000840 Dx/Right			
			.					51702010848 Sx/Left			
				.				51702001009 Dx/Right			
				.				51702011007 Sx/Left			
					.			51702001161 Dx/Right			
					.			51702011169 Sx/Left			
						.		51702001321 Dx/Right			
					.		51702011329 Sx/Left				
						.	51702001509 Dx/Right				
						.	51702011507 Sx/Left				
7	.	.	.	.	.	.	.	50100300291	Spine forate di centraggio 18x12.5	Pins 18x12.5	4
8	.	.	.	.	.	.	.	53300400088	Boccole autolub. 38x42x38	Bushing 38x42x38	4
9	.	.	.	.	.	.	.	50600001195	Guarnizione antiestrusione	Back-up ring	2
10	.	.	.	.	.	.	.	50600001186	Guarnizione per rasamento	Thrust plate seal	2
11	.	.	.	.	.	.	.	51001000328	Rasamento ad occhiale	Thrust plate	2
12	.							52302200630	Albero dentato conduttore	Drive shaft	1
		.						52302200729			
			.					52302200845			
				.				52302201004			
					.			52302201166			
						.		52302201326			
13	.							52302201504	Albero dentato condotto	Driven shaft	1
		.						52302000632			
			.					52302000721			
				.				52302000847			
					.			52302001006			
						.		52302001168			
						.	52302001328				
						.	52302001506				
14	.	.	.	.	.	.	.	50600001337	Guarnizione OR	O-ring	1
15	.	.	.	.	.	.	.	51800300143	Coperchio anteriore	Mounting cover	1
16	.	.	.	.	.	.	.	50602425401	Guarnizione paraolio	Oil seal	1
17	.	.	.	.	.	.	.	50100100373	Anello elastico	Circlip	1
18	.	.	.	.	.	.	.	50102000129	Rondella elastica	Washer	8
19	.	.	.	.	.	.	.	50200500573	Vite TCE M12x45	Screw M12x45	8

**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed  rpm	Velocità max. intermittente Max. intermittent speed  rpm	Velocità min. Min. speed  rpm
		P1	P2	P3			
		bar	bar	bar			
<b>NPGH-63</b>	63.70	290	315	325	1800	2700	300
<b>NPGH-73</b>	74.87	280	300	315			
<b>NPGH-84</b>	85.96	260	280	290			
<b>NPGH-100</b>	102.60	250	270	280	1500	2500	300
<b>NPGH-116</b>	119.24	240	260	270			
<b>NPGH-133</b>	135.88	220	250	260			
<b>NPGH-150</b>	149.75	180	210	220			

P1=Pressione max.continua  
 P2=Pressione max. intermittente  
 P3=Pressione max. di punta

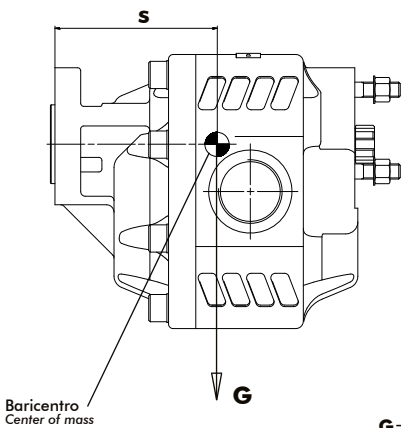
Max. continuous pressure  
 Max. Intermittent pressure  
 Max. peak pressure

(100%)  
 (20 sec.max.)  
 (6 sec.max)

**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

Rotazione antioraria, pompa sinistra Anti-clockwise rotation, left pump	Rotazione oraria, pompa destra Clockwise rotation, right pump
<p>Vista FRONTALE FRONT</p>	<p>Vista FRONTALE FRONT</p>

**MOMENTO PESO / MASS MOMENT**

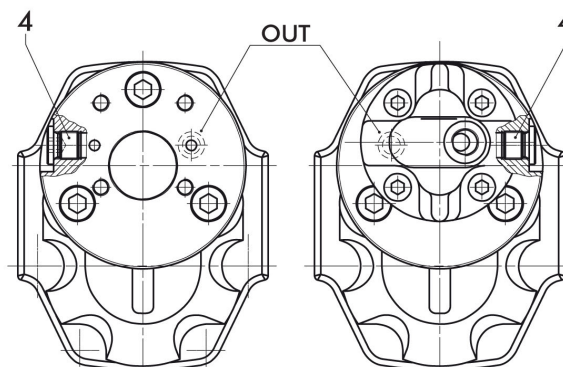
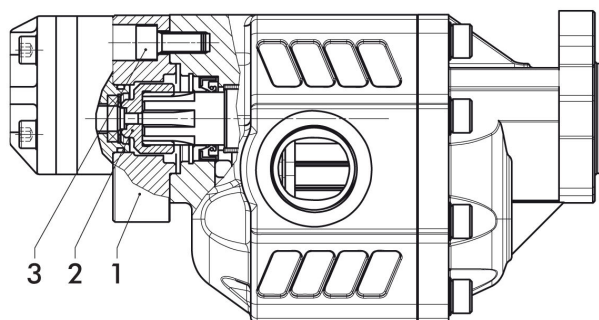


$M_{amm.} = s \times G \text{ (Nm)}$

Baricentro  
Center of mass

G=Peso in N (Peso in Kg x 9.81)  
 G=Weight in N (Weight in Kg x 9.81)

Tipo pompa - Pump type	S
<b>NPGH-63</b>	111
<b>NPGH-73</b>	113
<b>NPGH-84</b>	115
<b>NPGH-100</b>	118
<b>NPGH-116</b>	122
<b>NPGH-133</b>	124
<b>NPGH-150</b>	127

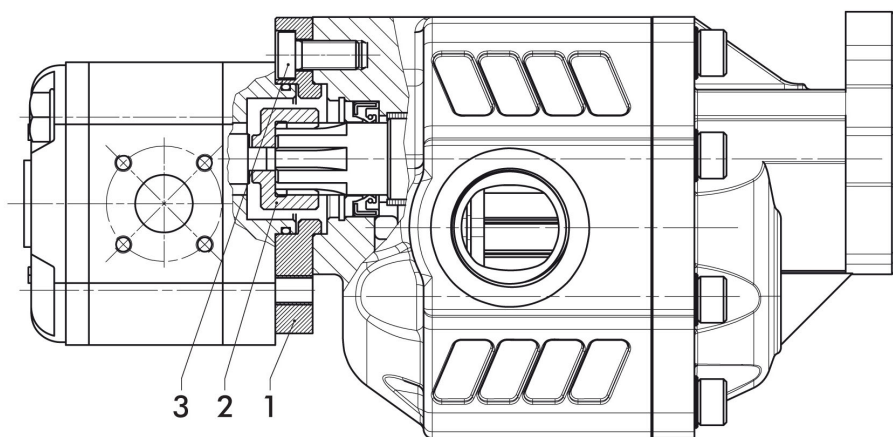
**Pompe 1P**  
**1P pumps**

 Montaggio pompa 1P Dx  
 Mounting pump 1P R

 Montaggio pompa 1P Sx  
 Mounting pump 1P L

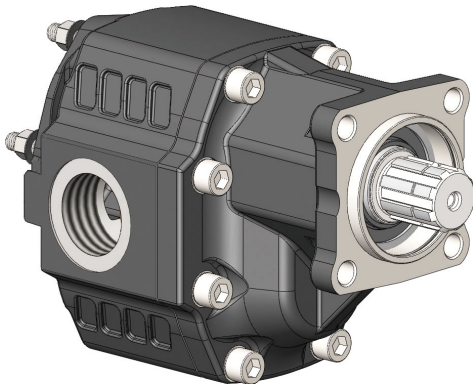
**Kit montaggio codice: 10502000101**  
**Mounting kit:**
**Coppia max.**  
**Max. torque 21,5 Nm**

Pos.	Codice Code	Descrizione Description	Q.
1	52800700817	Flangia per montaggio pompe 1P Destra/Sinistra Mounting flange for pumps 1P Left/Right	1
2	11400400853	Manicotto Coupling	1
3	50200400538	Vite TCE M10x22 UNI 5931 CL 12.9 Hex head screw M10x22 UNI 5931 CL 12.9	3
4	11500600117	Tappo TCE 1/4" DIN 908 Hex head plug 1/4" DIN 908	1

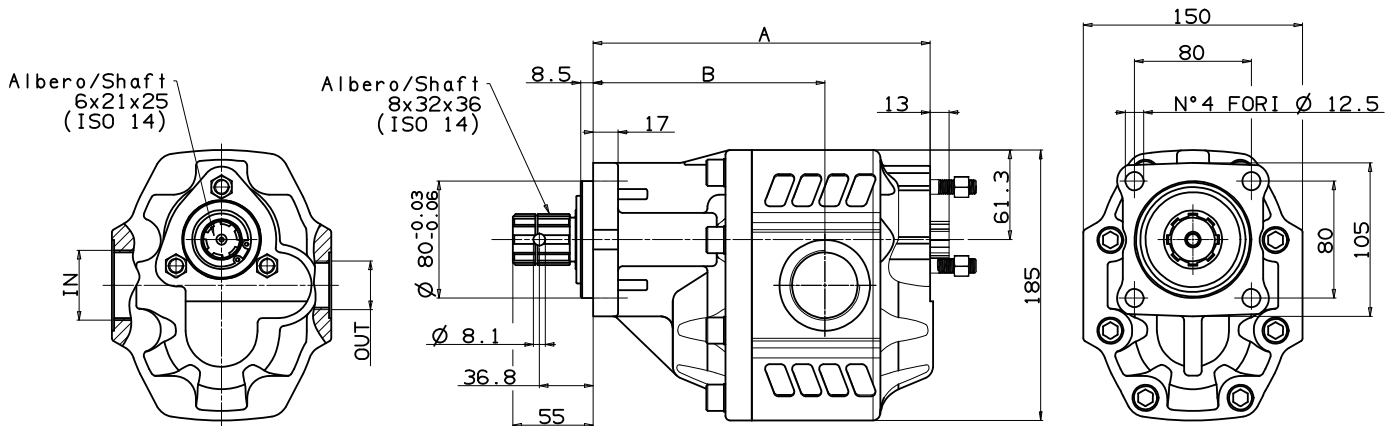
**Pompe 2P**  
**2P pumps**

**L'applicazione è da utilizzare solo con le pompe:**  
**The assembly should be used only with the following pumps:**
**14920009433 4cc destra/right**  
**14920009442 4cc sinistra/left**  
**14920009451 6cc destra/right**  
**14920009460 6cc sinistra/left**

**Kit montaggio codice: 10502000209**  
**Mounting kit:**
**Coppia max.**  
**Max. torque 70 Nm**

Pos.	Codice Code	Descrizione Description	Q.tà Q.ty
1	52800700808	Flangia per montaggio pompe 2P Mounting flange for pumps 2P	1
2	11400400844	Manicotto Coupling	1
3	50200000149	Vite TCE M10x22 DIN 7984 CL 10.9 Hex head screw M10x22 DIN 7984 CL 10.9	3



Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>	VI > 100	Temperatura di esercizio <i>Working temperature</i> -15°C +100°C			
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

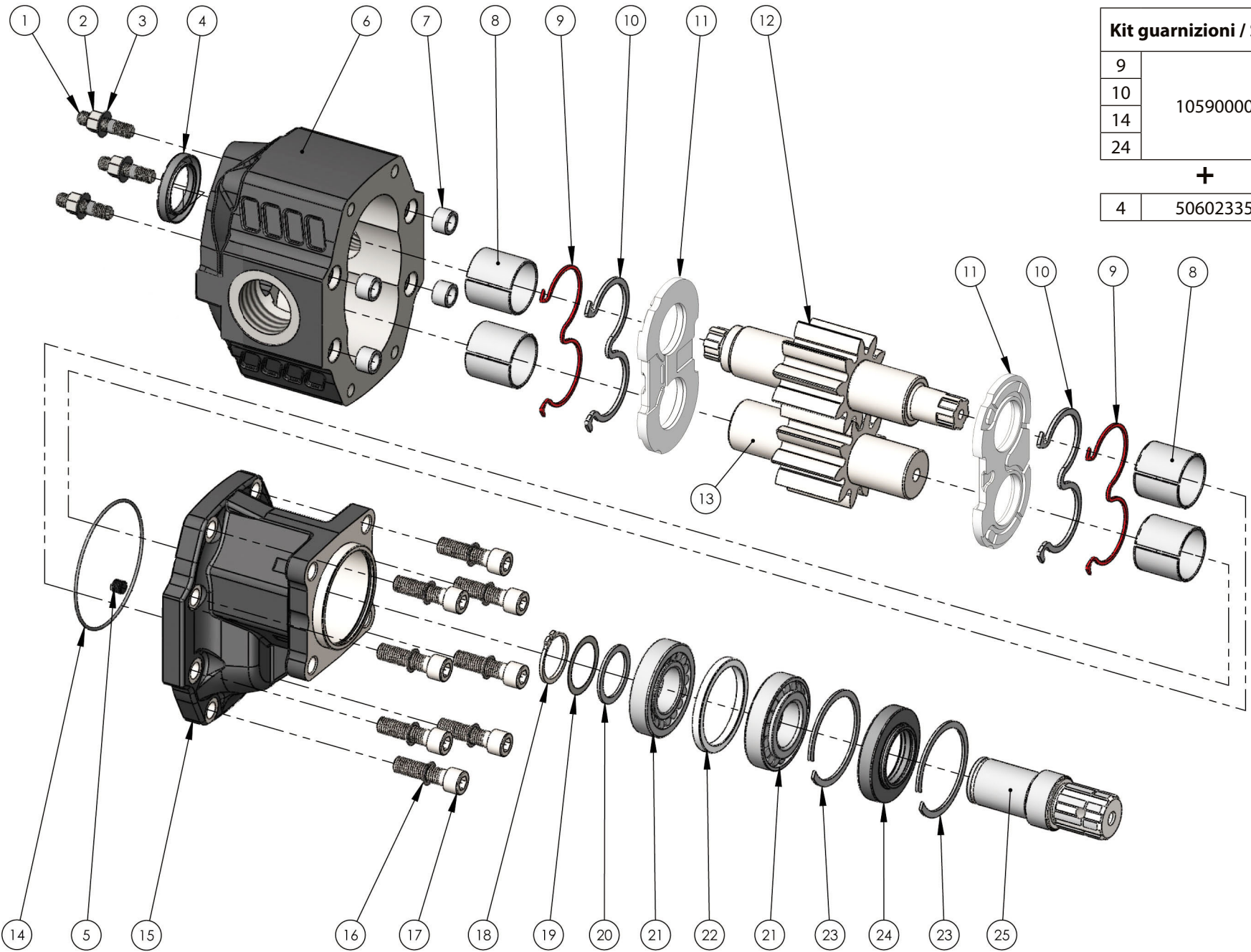
**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Rotazione <i>Rotation</i>		IN	OUT	A	B	Peso <i>Weight</i>
	Destra / Right	Sinistra / Left					
<b>NPGH-63</b>	10502210634	10502210643	G 1	G 3/4	199.5	136.5	20.1
<b>NPGH-73</b>	10502210732	10502210741			203.5	140.5	20.7
<b>NPGH-84</b>	10502210849	10502210858	G 1 1/4	G 1	207.5	141	20.9
<b>NPGH-100</b>	10502211008	10502211017			213.5	144.5	21.5
<b>NPGH-116</b>	10502211160	10502211179			219.5	150.5	22
<b>NPGH-133</b>	10502211339	10502211348	G 1 1/2		225.5	153.5	22.8
<b>NPGH-150</b>	10502211508	10502211517			230.5	158.8	24.1

**PREDISPOSTA PER 2<sup>A</sup> POMPA CON FLANGIA UNI**  
**READY FOR 2<sup>ND</sup> PUMP WITH UNI FLANGE**

**Kit guarnizioni / Seal Kit**

9	10590000213
10	
14	
24	
+	
4	5060233527



N°	63	73	84	100	116	133	150	Codice/Code	Descrizione / Description	Q.
1	.	.	.	.	.	.	.	50300400198	Dado M10 CH14 H10 Nut M10 CH14 H10	3
2	.	.	.	.	.	.	.	50500400014	Rondella elastica Washer	3
3	.	.	.	.	.	.	.	50101800105	Prigioniero M10x30 Stud bolt M10x30	3
4	.	.	.	.	.	.	.	50602335527	Guarnizione paraolio Oil seal	1
5	.	.	.	.	.	.	.	50401000063	Grano conico 1/8" Plug 1/8"	1
6	.							51702000635 Dx/Right	Corpo pompa Gear housing	1
	.							51702010633 Sx/Left		
		.						51702000724 Dx/Right		
		.						51702010722 Sx/Left		
			.					51702000840 Dx/Right		
			.					51702010848 Sx/Left		
				.				51702001009 Dx/Right		
				.				51702011007 Sx/Left		
					.			51702001161 Dx/Right		
					.			51702011169 Sx/Left		
					.		51702001321 Dx/Right			
					.		51702011329 Sx/Left			
						.	51702001509 Dx/Right			
						.	51702011507 Sx/Left			
7	.	.	.	.	.	.	.	50100300291	Spine forate di centraggio 18x12.5 Pins 18x12.5	4
8	.	.	.	.	.	.	.	53300400088	Boccole autolub. 38x42x38 Bushing 38x42x38	4
9	.	.	.	.	.	.	.	50600001195	Guarnizione antiestrusione Back-up ring	2
10	.	.	.	.	.	.	.	50600001186	Guarnizione per rasamento Thrust plate seal	2
11	.	.	.	.	.	.	.	51001000328	Rasamento ad occhiale Thrust plate	2
12	.							52302200630	Albero dentato conduttore Drive shaft	1
		.						52302200729		
			.					52302200845		
				.				52302201004		
					.			52302201166		
						.		52302201326		
13	.							52302201504	Albero dentato condotto Driven shaft	1
		.						52302000632		
			.					52302000721		
				.				52302000847		
					.			52302001006		
					.			52302001168		
					.		52302001328			
						.	52302001506			
14	.	.	.	.	.	.	.	50600001337	Guarnizione OR O-Ring	1
15	.	.	.	.	.	.	.	51800300161	Coperchio anteriore Mounting cover	1
16	.	.	.	.	.	.	.	50102000129	Rondella elastica Washer	8
17	.	.	.	.	.	.	.	50200500573	Vite TCE M12x45 Screw M12x45	8
18	.	.	.	.	.	.	.	50100001355	Anello seeger Seeger ring	1
19	.	.	.	.	.	.	.	52900700226	Rondella speciale 45x30x0,2 Special washer 45x30x0,2	1
20	.	.	.	.	.	.	.	52900700208	Rondella speciale 45x35x2 Special washer 45x35x2	1
21	.	.	.	.	.	.	.	51000200211	Cuscinetto rulli conici 35x72x18,25 Tapered roller bearing 35x72x18,25	2
22	.	.	.	.	.	.	.	53000100783	Distanziale 60x72x6,75 Spacer 60x72x6,75	1
23	.	.	.	.	.	.	.	50100002729	Anello elastico Circlip	2
24	.	.	.	.	.	.	.	50600842723	Guarnizione paraolio Oil seal	1
25	.	.	.	.	.	.	.	11400500147	Manicotto Coupling	1

**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed  rpm	Velocità max. intermittente Max. intermittent speed  rpm	Velocità min. Min. speed  rpm
		P1	P2	P3			
<b>NPGH-63</b>	63.70	290	315	325	1800	2700	300
<b>NPGH-73</b>	74.87	280	300	315			
<b>NPGH-84</b>	85.96	260	280	290			
<b>NPGH-100</b>	102.60	250	270	280			
<b>NPGH-116</b>	119.24	240	260	270	1500	2500	300
<b>NPGH-133</b>	135.88	220	250	260			
<b>NPGH-150</b>	149.75	180	210	220			

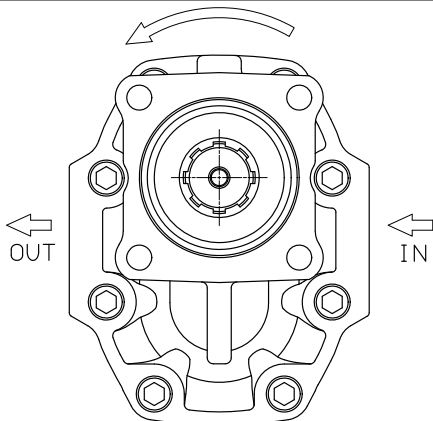
P1=Pressione max.continua  
P2=Pressione max. intermittente  
P3=Pressione max. di punta

Max. continuous pressure  
Max. Intermittent pressure  
Max. peak pressure

(100%)  
(20 sec.max.)  
(6 sec.max)

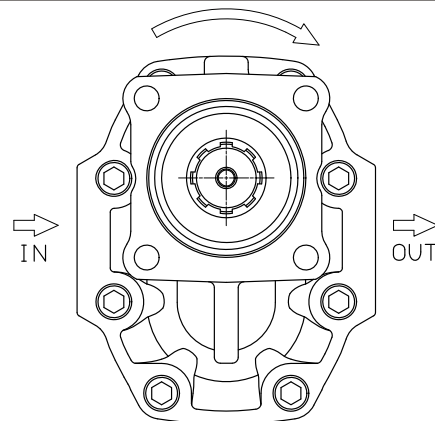
**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

**Rotazione antioraria, pompa sinistra**  
Anti-clockwise rotation, left pump



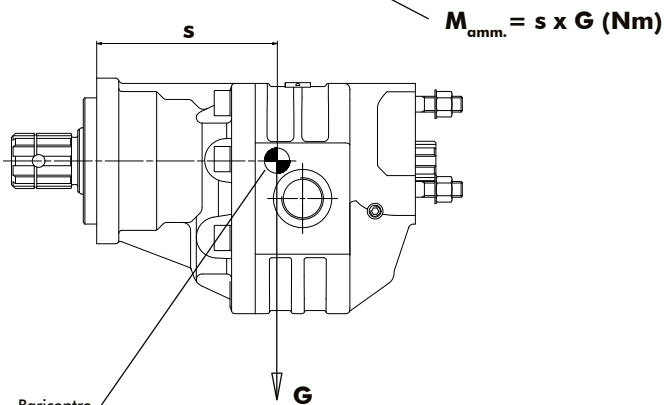
Vista FRONTALE  
FRONT

**Rotazione oraria, pompa destra**  
Clockwise rotation, right pump



Vista FRONTALE  
FRONT

**MOMENTO PESO / MASS MOMENT**

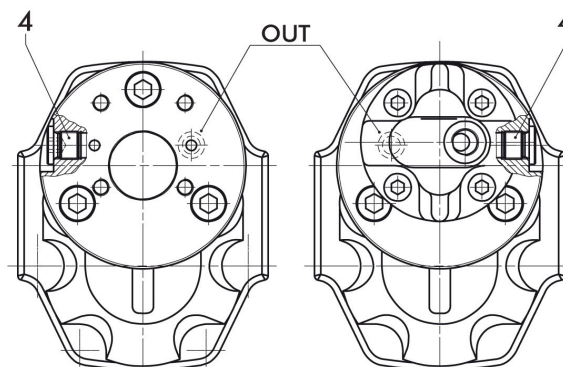
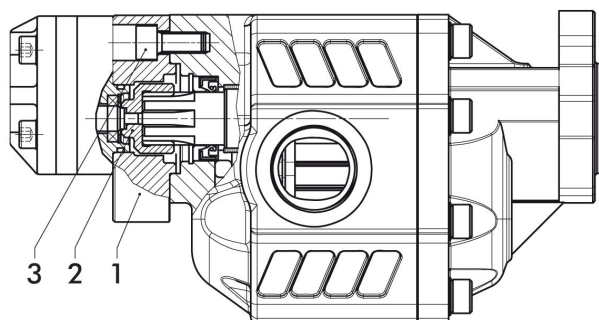


Baricentro  
Center of mass

G=Peso in N (Peso in Kg x 9.81)  
G=Weight in N (Weight in Kg x 9.81)

Tipo pompa - Pump type	S
<b>NPGH-63</b>	111
<b>NPGH-73</b>	114
<b>NPGH-84</b>	117
<b>NPGH-100</b>	121
<b>NPGH-116</b>	124
<b>NPGH-133</b>	128
<b>NPGH-150</b>	132

**LA POMPA E' MUNITA DI PARAOLIO BIDIREZIONALE E DI CUSCINETTI A RULLI CONICI SULL'ALBERO DI USCITA**  
THE PUMP IS COMPLETE WITH DOUBLE OIL-SEAL AND TAPERED ROLLER BEARING ON THE OUTPUT SHAFT

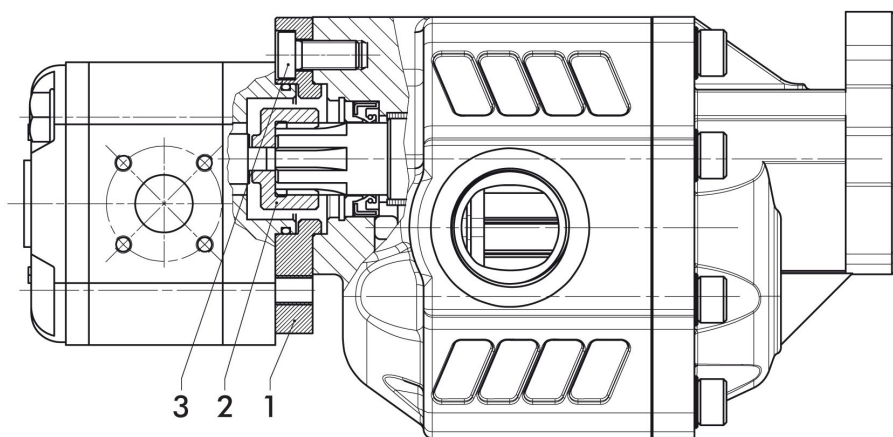
**Pompe 1P**  
**1P pumps**

 Montaggio pompa 1P Dx  
 Mounting pump 1P R

 Montaggio pompa 1P Sx  
 Mounting pump 1P L

**Kit montaggio codice: 10502000101**  
**Mounting kit:**
**Coppia max.**  
**Max. torque 21,5 Nm**

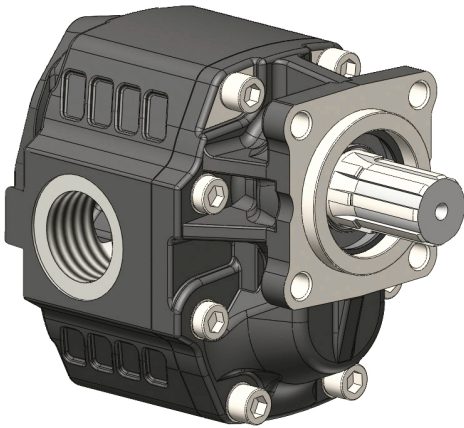
Pos.	Codice Code	Descrizione Description	Q.
1	52800700817	Flangia per montaggio pompe 1P Destra/Sinistra Mounting flange for pumps 1P Left/Right	1
2	11400400853	Manicotto Coupling	1
3	50200400538	Vite TCE M10x22 UNI 5931 CL 12.9 Hex head screw M10x22 UNI 5931 CL 12.9	3
4	11500600117	Tappo TCE 1/4" DIN 908 Hex head plug 1/4" DIN 908	1

**Pompe 2P**  
**2P pumps**

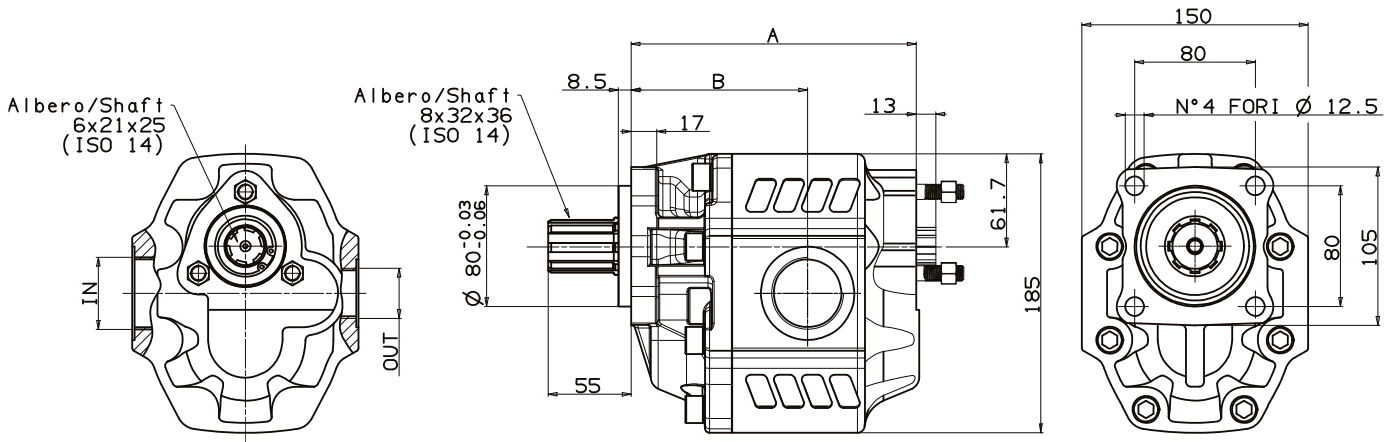
**L'applicazione è da utilizzare solo con le pompe:**  
**The assembly should be used only with the following pumps:**
**14920009433 4cc destra/right**  
**14920009442 4cc sinistra/left**  
**14920009451 6cc destra/right**  
**14920009460 6cc sinistra/left**

**Kit montaggio codice: 10502000209**  
**Mounting kit:**
**Coppia max.**  
**Max. torque 70 Nm**

Pos.	Codice Code	Descrizione Description	Q.tà Q.ty
1	52800700808	Flangia per montaggio pompe 2P Mounting flange for pumps 2P	1
2	11400400844	Manicotto Coupling	1
3	50200000149	Vite TCE M10x22 DIN 7984 CL 10.9 Hex head screw M10x22 DIN 7984 CL 10.9	3





Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>		VI > 100	Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

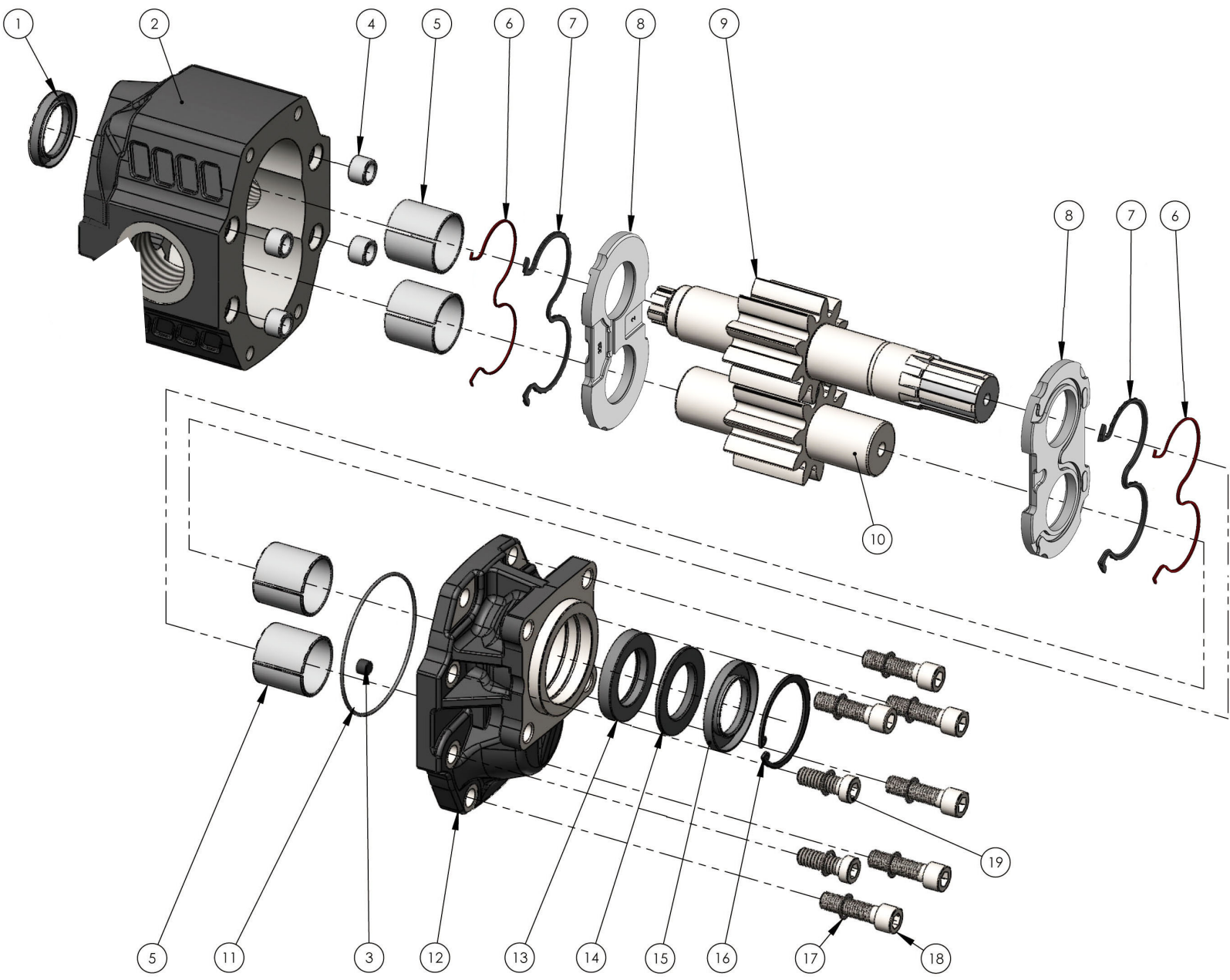
**Ingombro / Dimensions**

**Dati tecnici / Technical data**

Tipo pompa <i>Pump type</i>	Rotazione <i>Rotation</i>		IN	OUT	A	B	Peso <i>Weight</i>
	<i>Destra / Right</i>	<i>Sinistra / Left</i>					
<b>NPGH-63</b>	10507000638	10507000647	ISO 228	ISO 228	mm	mm	Kg
<b>NPGH-73</b>	10507000736	10507000745	G 1	G 3/4	158	95	18
<b>NPGH-84</b>	10507000843	10507000852			162	99	18.1
<b>NPGH-100</b>	10507001002	10507001011	G 1 1/4	G 1	166	99.5	18.8
<b>NPGH-116</b>	10507001164	10507001173			172	103	19.5
<b>NPGH-133</b>	10507001333	10507001342	G 1 1/2		178	109	20.1
<b>NPGH-150</b>	10507001502	10507001511			184	112	21
					189	117	21.5


**POMPE DA NON UTILIZZARE CON CARICHI ASSIALI E RADIALI SULL'ALBERO**  
 NO AXIAL AND RADIAL LOADS ALLOWED ON PUMP SHAFT

**PREDISPOSTA PER 2<sup>A</sup> POMPA CON FLANGIA UNI**  
 READY FOR 2<sup>ND</sup> PUMP WITH UNI FLANGE

Kit guarnizioni / Seal Kit	
6	10590000302
7	
11	
13	
14	
15	
+	
1	50602335527



N°	63	73	84	100	116	133	150	Codice/Code	Descrizione / Description		Q.
1	.	.	.	.	.	.	.	50602335527	Guarnizione paraolio	Oil seal	1
2	.							51702000635 Dx/Right	Corpo pompa	Gear housing	1
	.							51702010633 Sx/Left			
		.						51702000724 Dx/Right			
		.						51702010722 Sx/Left			
			.					51702000840 Dx/Right			
			.					51702010848 Sx/Left			
				.				51702001009 Dx/Right			
				.				51702011007 Sx/Left			
					.			51702001161 Dx/Right			
					.			51702011169 Sx/Left			
						.		51702001321 Dx/Right			
						.		51702011329 Sx/Left			
						.	51702001509 Dx/Right				
						.	51702011507 Sx/Left				
3	.	.	.	.	.	.	.	50401000063	Grano conico 1/8"	Plug 1/8"	1
4	.	.	.	.	.	.	.	50100300291	Spine forate di centraggio 18x12.5	Bushing 18x12.5	4
5	.	.	.	.	.	.	.	53300400088	Boccole autolub. 38x42x38	Bushing 38x42x38	4
6	.	.	.	.	.	.	.	50600001195	Guarnizione antiestrusione	Back-up ring	2
7	.	.	.	.	.	.	.	50600001186	Guarnizione per rasamento	Thrust plate seal	2
8	.	.	.	.	.	.	.	51001000328	Rasamento ad occhiale	Thrust plate	2
9	.							52302900633	Albero dentato conduttore	Drive shaft	1
		.						52302900722			
			.					52302900848			
				.				52302901007			
					.			52302901169			
						.		52302901329			
10	.							52302000632	Albero dentato condotto	Driven shaft	1
		.						52302000721			
			.					52302000847			
				.				52302001006			
					.			52302001168			
						.		52302001328			
						.	52302001506				
11	.	.	.	.	.	.	.	50600001337	Guarnizione OR	O-Ring	1
12	.	.	.	.	.	.	.	51800300216	Coperchio anteriore	Mounting cover	1
13	.	.	.	.	.	.	.	50602138624	Guarnizione paraolio	Oil seal	1
14	.	.	.	.	.	.	.	50602238623	Anello schermo paraolio	Oil seal guard ring	1
15	.	.	.	.	.	.	.	50600738627	Guarnizione paraolio	Oil seal	1
16	.	.	.	.	.	.	.	50100100588	Anello seeger	Seeger ring	1
17	.	.	.	.	.	.	.	50102000129	Rondella elastica	Washer	8
18	.							50200500573	Vite TCE M12x45	Screw M12x45	6
		.	.	.	.	.	.				8
19	.							50200000265	Vite TCE M12x35	Screw M12x35	2

**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement  cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed  rpm	Velocità max. intermittente Max. intermittent speed  rpm	Velocità min. Min. speed  rpm
		P1	P2	P3			
		bar	bar	bar			
<b>NPGH-63</b>	63.70	290	315	325	1800	2700	300
<b>NPGH-73</b>	74.87	280	300	315			
<b>NPGH-84</b>	85.96	260	280	290			
<b>NPGH-100</b>	102.60	250	270	280			
<b>NPGH-116</b>	119.24	240	260	270	1500	2500	300
<b>NPGH-133</b>	135.88	220	250	260			
<b>NPGH-150</b>	149.75	180	210	220			

P1=Pressione max.continua  
 P2=Pressione max. intermittente  
 P3=Pressione max. di punta

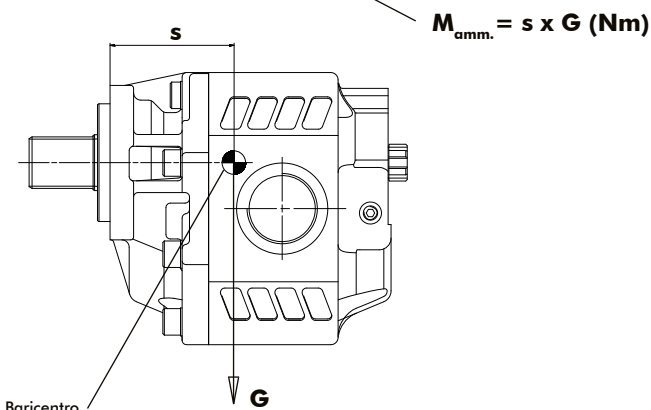
Max. continuous pressure  
 Max. Intermittent pressure  
 Max. peak pressure

(100%)  
 (20 sec.max.)  
 (6 sec.max)

**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

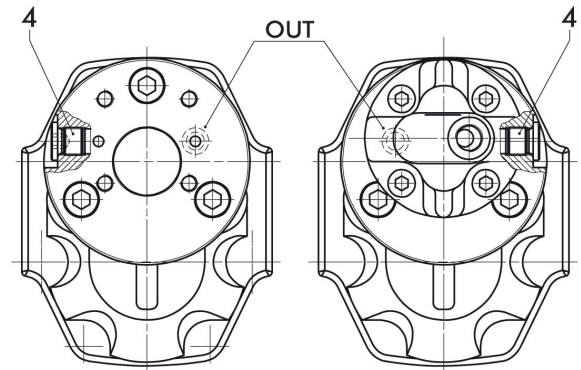
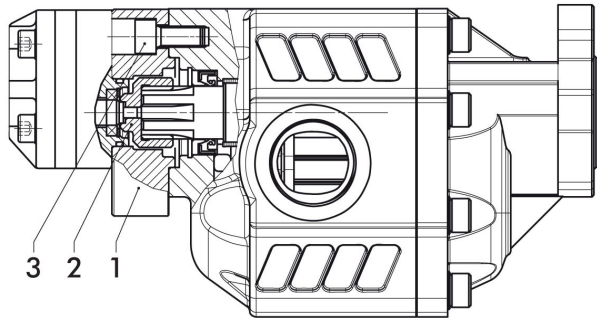
Rotazione antioraria, pompa sinistra Anti-clockwise rotation, left pump	Rotazione oraria, pompa destra Clockwise rotation, right pump
<p>Vista FRONTALE FRONT</p>	<p>Vista FRONTALE FRONT</p>

**MOMENTO PESO / MASS MOMENT**



G=Peso in N (Peso in Kg x 9.81)  
 G=Weight in N (Weight in Kg x 9.81)

Tipo pompa - Pump type	S
<b>NPGH-63</b>	84
<b>NPGH-73</b>	86
<b>NPGH-84</b>	89
<b>NPGH-100</b>	91
<b>NPGH-116</b>	94
<b>NPGH-133</b>	97
<b>NPGH-150</b>	100

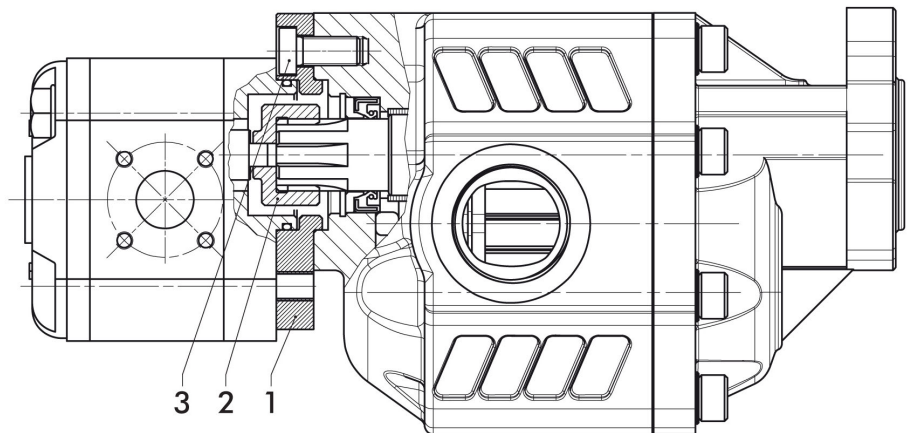
**Pompe 1P**  
**1P pumps**

 Montaggio pompa 1P Dx  
 Mounting pump 1P R

 Montaggio pompa 1P Sx  
 Mounting pump 1P L

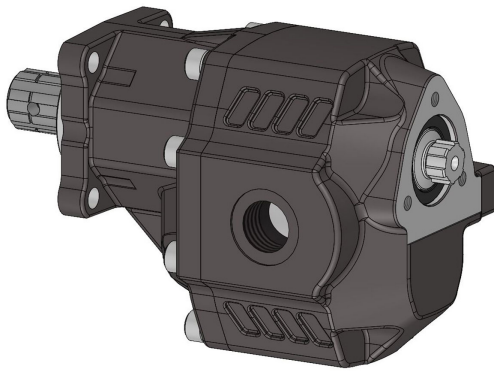
**Kit montaggio codice: 10502000101**  
**Mounting kit:**
**Coppia max.**  
**Max. torque 21,5 Nm**

Pos.	Codice Code	Descrizione Description	Q.
1	52800700817	Flangia per montaggio pompe 1P Destra/Sinistra Mounting flange for pumps 1P Left/Right	1
2	11400400853	Manicotto Coupling	1
3	50200400538	Vite TCE M10x22 UNI 5931 CL 12.9 Hex head screw M10x22 UNI 5931 CL 12.9	3
4	11500600117	Tappo TCE 1/4" DIN 908 Hex head plug 1/4" DIN 908	1

**Pompe 2P**  
**2P pumps**

**L'applicazione è da utilizzare solo con le pompe:**  
**The assembly should be used only with the following pumps:**
**14920009433 4cc destra/right**  
**14920009442 4cc sinistra/left**  
**14920009451 6cc destra/right**  
**14920009460 6cc sinistra/left**

**Kit montaggio codice: 10502000209**  
**Mounting kit:**
**Coppia max.**  
**Max. torque 70 Nm**

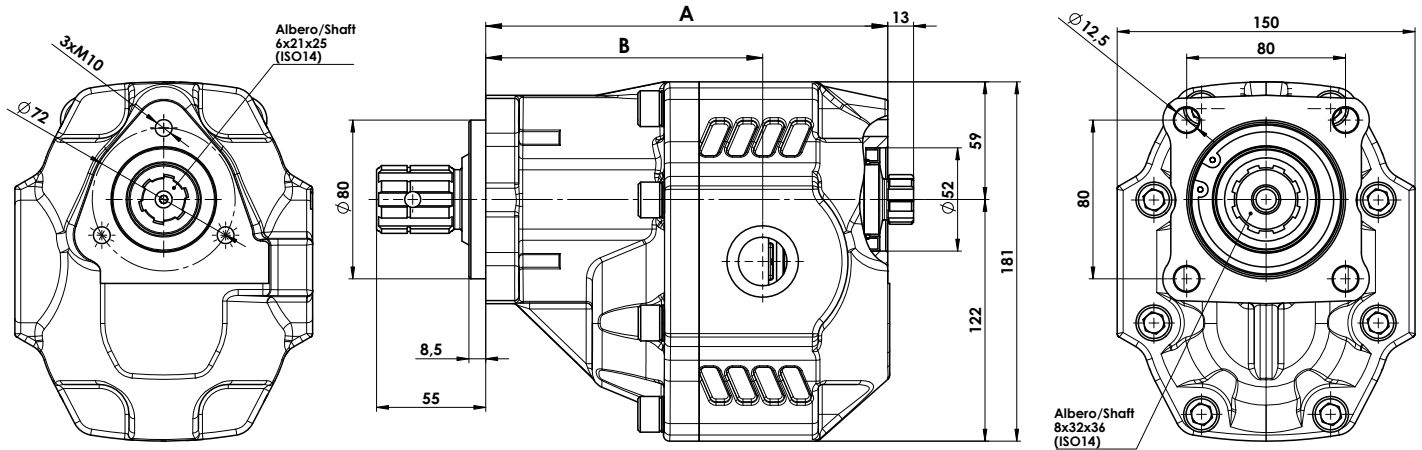
Pos.	Codice Code	Descrizione Description	Q.tà Q.ty
1	52800700808	Flangia per montaggio pompe 2P Mounting flange for pumps 2P	1
2	11400400844	Manicotto Coupling	1
3	50200000149	Vite TCE M10x22 DIN 7984 CL 10.9 Hex head screw M10x22 DIN 7984 CL 10.9	3



**HEAVY DUTY APPLICATIONS**

Fluido idraulico <i>Fluid</i>	Minerale o sintetico compatibile con guarnizioni: <i>Mineral or synthetic compatible with the following seals:</i> NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata <i>Kinematic viscosity suggested</i>	T media ambiente (°C) <i>Average ambient temp. (°C)</i>	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm <sup>2</sup> /s)	22	32	46	68
Viscosità cinematica ottimale di esercizio <i>Optimale kinematic viscosity</i>			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento <i>Max kinematic viscosity suggested at the start-up</i>			VG= 750 cSt		
Indice di viscosità consigliato <i>Viscosity index suggested</i>		VI > 100	Temperatura di esercizio <i>Working temperature</i>		
			-15°C +100°C		
Grado di filtrazione <i>Oil filtering</i>			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione <i>Inlet pressure</i>			-0,3 ÷ 2 bar		
Senso di rotazione <i>Pump rotation</i>			Unidirezionale <i>Unidirectional</i>		

**Ingombro / Dimensions**



**Dati tecnici / Technical data**

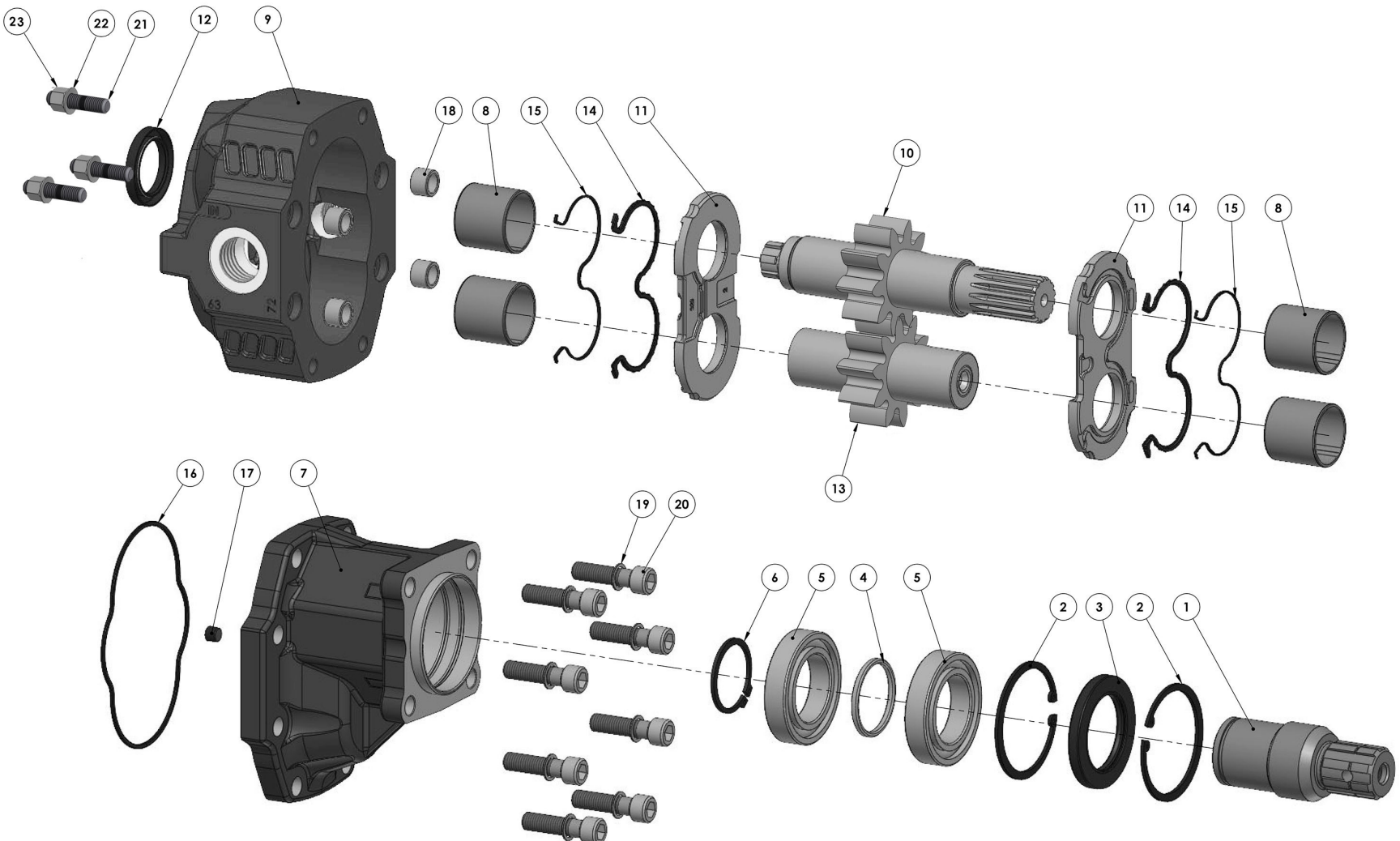
Tipo pompa <i>Pump type</i>	Cilindrata <i>Displacement</i>	Codice <i>Code</i>		IN <i>ISO 228</i>	OUT <i>ISO 228</i>	Pressione <i>Pressure</i>			A <i>mm</i>	B <i>mm</i>	Velocità max. continua <i>Max. continuous speed</i>	Velocità max. intermitt. <i>Max. intermittent speed</i>	Velocità min. <i>Min. speed</i>	Peso <i>Weight</i>
						P1	P2	P3						
						bar	bar	bar						
NPGH-73	74.87	10592900738	10592900747	G 1	G 3/4	280	300	315	202.5	139.5	1800	2700	300	17
NPGH-84	85.96	10592900845	10592900854	G 1-1/4	G 1	260	280	290	206.5	140				17.5
NPGH-100	102.60	10592901004	10592901013			250	270	280	212.5	143.5	18			
NPGH-116	119.24	10592901166	10592901175			240	260	270	218.5	149.5	1500	18.5		

P1=Pressione max.continua  
P2=Pressione max. intermittente  
P3=Pressione max. di punta

Max. continuous pressure  
Max. Intermittent pressure  
Max. peak pressure

(100%)  
(20 sec.max.)  
(6 sec.max.)

Esploso ricambi / Spare parts

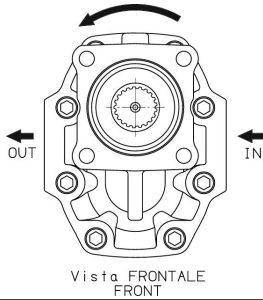


N°	73	84	100	116	Codice/Code	Descrizione / Description		Q.
1	.	.	.	.	11400500147	Manicotto	Coupling	1
2	.	.	.	.	50100100695	Anello seeger 75l	Seeger ring l 75	2
3	.	.	.	.	50602350751	Guarnizione paraolio AS 50x75x8	Oil seal AS 50x75x8	1
4	.	.	.	.	53000100498	Distanziale 16,2x20x6,8	Spacer 16,2x20x6,8	1
5	.	.	.	.	51000145755	Cuscinetto a sfere 45x75x16	Ball bearing 45x75x16	2
6	.	.	.	.	50100001453	Anello elastico	Circlip	1
7	.	.	.	.	51800300681	Coperchio anteriore	Mounting cover	1
8	.	.	.	.	53300400088	Boccole autolub. 38x42x38	Bushing 38x42x38	4
9	.				51702000724 Dx/Right	Corpo pompa	Gear housing	1
	.				51702010722 Sx/Left			
		.			51702000840 Dx/Right			
		.			51702010848 Sx/Left			
			.		51702001009 Dx/Right			
			.		51702011007 Sx/Left			
				.	51702001161 Dx/Right			
10	.				52304500722	Albero dentato conduttore	Drive shaft	1
		.			52304500848			
			.		52304501007			
				.	52304501169			
11	.	.	.	.	51001000328	Rasamento ad occhiale	Thrust plate	2
12	.	.	.	.	50602335527	Guarnizione paraolio AS 35x52x7	Oil seal AS 35x52x7	1
13	.				52302000721	Albero dentato condotto	Driven shaft	1
		.			52302000847			
			.		52302001006			
				.	52302001168			
14	.	.	.	.	50600001186	Guarnizione per rasamento	Thrust plate seal	2
15	.	.	.	.	50600001195	Guarnizione antiestrusione	Back-up ring	2
16	.	.	.	.	50600001337	Guarnizione OR	O-Ring	1
17	.	.	.	.	50401000063	Grano conico 1/8"	Plug 1/8"	1
18	.	.	.	.	50100300291	Spine forate di centraggio 18x12.5	Pins 18x12.5	4
19	.	.	.	.	50102000129	Rondella elastica	Washer	8
20	.	.	.	.	50200501451	Vite TCE M12x45	Screw M12x45	8
21	.	.	.	.	50300400198	Prigioniero M10x30 UNI 5911	Stud M10x30 UNI 5911	3
22	.	.	.	.	50101800105	Rosetta elastica	Washer	3
23	.	.	.	.	50500400014	Dado M10	Nut M10	3

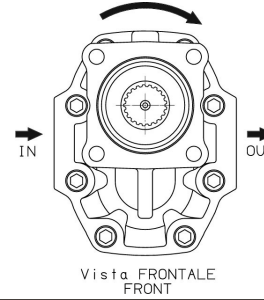


**IDENTIFICAZIONE ASPIRAZIONE/MANDATA / SUCTION/DELIVERY IDENTIFICATION:**

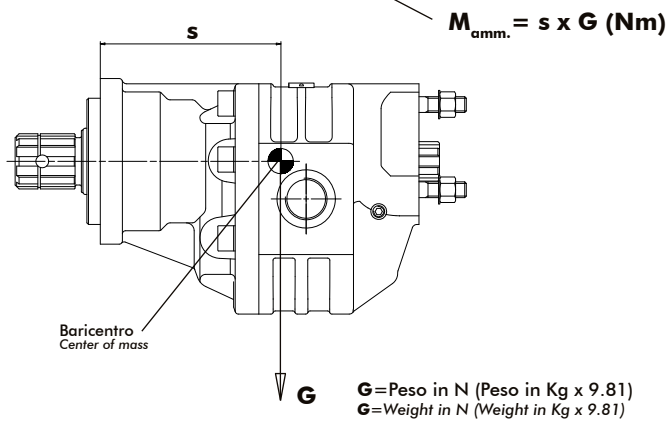
**Rotazione antioraria, pompa sinistra**  
*Anti-clockwise rotation, left pump*





**Rotazione oraria, pompa destra**  
*Clockwise rotation, right pump*





**MOMENTO PESO / MASS MOMENT**



Tipo pompa - Pump type	S
<b>NPGH-73</b>	113
<b>NPGH-84</b>	115
<b>NPGH-100</b>	117
<b>NPGH-116</b>	121

	FILETTO THREAD ISO 228	Diametro interno tubo Internal pipe diameter mm	Diametro esterno tubo External pipe diameter		CH mm	CODICE CODE		
			MIN	MAX				
"GOLD" 45° 45° "GOLD" 	G 1	38	48	51	41	15509000460		
		40				52	55	15509000488
								15509000479
	G 1 1/4	50	60	63	50	15509000497		
		60	68	73		15509000504		
		63	74	79		15509000522		
	G 1 1/2	50	60	63	55	15509000531		
		60	64	67		15509000540		
		63	68	73		15509000559		
	"GOLD" 90° 90° "GOLD" 	G 1/2	40	48	51	28	15510000083	
					52		55	15510000092
			25	32	35		15510000118	
				36	39		15510000127	
			32	40	43		15510000145	
				44	47		15510000154	
		G 3/4	19	29	31	34	15510000172	
			25	32	35		15510000181	
				36	39		15510000190	
			32	40	43		15510000207	
				44	47		15510000216	
			38	48	51		15510000252	
	G 1	40	52	55	41	15510000270		
						15510000289		
		32	40	43		15510000323		
		44	47	15510000332				
38		48	51	15510000350				
40				15510000378				
		52	55	15510000387				
45		56	59	15510000396				
G 1 1/4	50	60	63	50	15510000403			
		64	67		15510000412			
	60	68	73		15510000421			
		68	73		15510000430			
	38	48	51		15510000458			
	40	52	55		15510000467			
					15510000476			
45	56	59	15510000485					
G 1 1/2	50	60	63	55	15510000494			
		64	67		15510000501			
	60	68	73		15510000510			
		68	73		15510000529			
	63	74	79		15510000538			
G 1	45	52	55	55	15510000547			
		56	59		15510000556			
	50	60	63		15510000592			
		64	67		15510000609			
	60	68	73		15510000654			
	68	73	15510000663					

		FILETTO THREAD	Diametro interno tubo Internal pipe diameter		Diametro esterno tubo External pipe diameter		CH mm	CODICE CODE
			MIN	MAX	MIN	MAX		
ASPIRAZIONE / SUCTION	 <p><b>"GOLD" 90° FILETTO FILETTO 90° "GOLD" ON BOYH SIDES</b></p>	<b>G 3/4 x G 3/4</b>					34	15511000107
		<b>G 1 x G 1</b>					41	15511000125
		<b>G 1 1/4 x G 1 1/4</b>					50	15511000143
		<b>G 1 1/2 x G 1 1/2</b>					55	15511000161

		FILETTO THREAD	Diametro interno tubo Internal pipe diameter	CH mm	CODICE CODE
MANDATA / DELIVERY	 <p><b>RACCORDO AD ALTA PRESSIONE 90° HIGH PRESSURE FITTING 90°</b></p>	<b>G 1/2 x 1/2</b>		27	15520000126
		<b>G 3/4 x 3/4</b>		32	15520000340
		<b>G 3/4 x 1</b>			15520034100
		<b>G 1 x 1</b>		38	15520001009

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