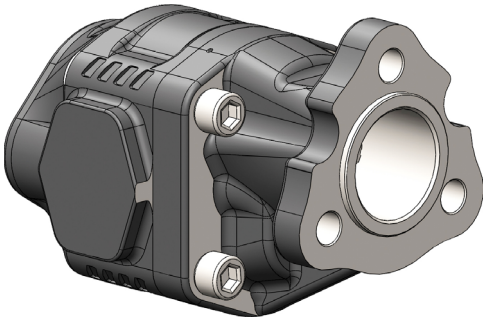
OMFB
HYDRAULIC COMPONENTS

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

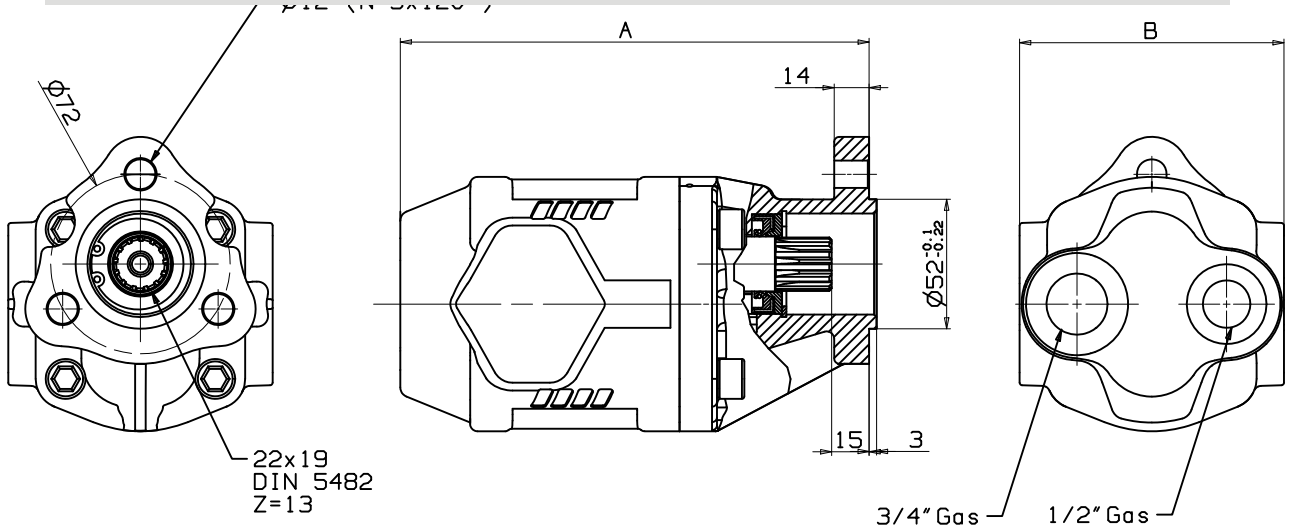
NPLA 13 DIN

Fam. **105003**



Fluido idraulico *Fluid*	Minerale o sintetico compatibile con guarnizioni: *Mineral or synthetic compatible with the following seals:* NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata *Kinematic viscosity suggested*	T media ambiente (°C) *Average ambient temp. (°C)*	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm²/s)	22	32	46	68
Viscosità cinematica ottimale di esercizio *Optimale kinematic viscosity*			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento *Max kinematic viscosity suggested at the start-up*			VG= 750 cSt		
Indice di viscosità consigliato *Viscosity index suggested* VI > 100			Temperatura di esercizio *Working temperature* -15°C +100°C		
Grado di filtrazione *Oil filtering*			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione *Inlet pressure*			-0,3 ÷ 2 bar		
Senso di rotazione *Pump rotation*			Unidirezionale *Unidirectional*		

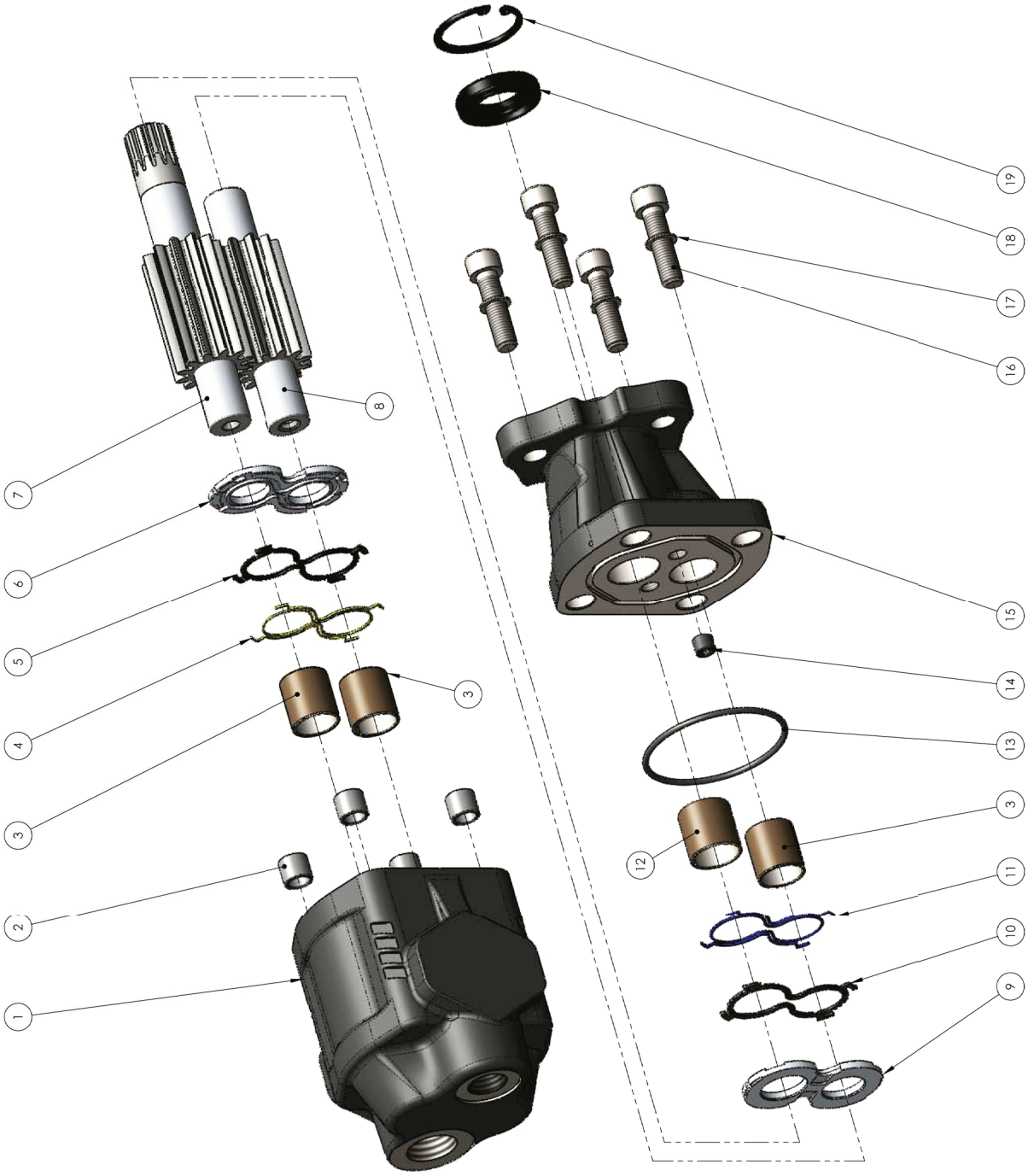
Ingombro / *Dimensions*



Dati tecnici / *Technical data*

Tipo pompa *Pump type*	Rotazione *Rotation*		IN	OUT	A	B	Peso *Weight*
	Destra / Right	*Sinistra / Left*	*ISO 228*	*ISO 228*	*mm*	*mm*	*Kg*
NPLA-06	10500300078	10500300069	G 3/4	G 1/2	132	98	5
NPLA-10	10500300111	10500300102			138		5.2
NPLA-12	10500300139	10500300120					5.2
NPLA-14	10500300157	10500300148			144	102	5.4
NPLA-16	10500300175	10500300166			147,5		5.6
NPLA-20	10500300219	10500300200			154		5.9
NPLA-25	10500300264	10500300255			162		6.5
NPLA-32	10500300335	10500300326			173		7
NPLA-40	10500300415	10500300406			188	106	7.5

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



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

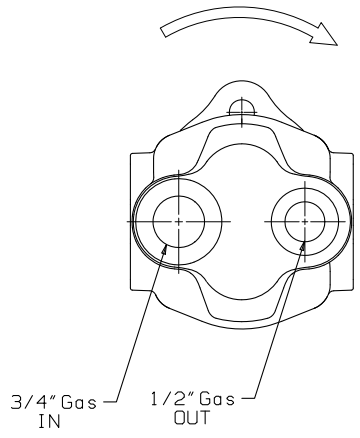
CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - *TECHNICAL FEATURES*

Tipo pompa *Pump type*	**Cilindrata** *Displacement*	**Pressione** *Pressure*			**Velocità max. continua** *Max. continuous speed*	**Velocità max. intermittente** *Max. intermittent speed*	**Velocità min.** *Min. speed*
		P1	P2	P3			
	cm³/rev	*bar*	*bar*	*bar*	*rpm*	*rpm*	*rpm*
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						
NPLA-32	32,042	180	200	220	2000	2800	
NPLA-40	39,933	150	170	190	1800	2500	

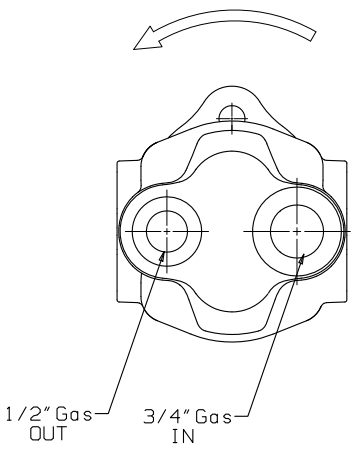
P1=Pressione max.continua — *Max. continuous pressure* (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* (6 sec.max)

IDENTIFICAZIONE ASPIRAZIONE/MANDATA:
SUCTION/DELIVERY IDENTIFICATION:

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

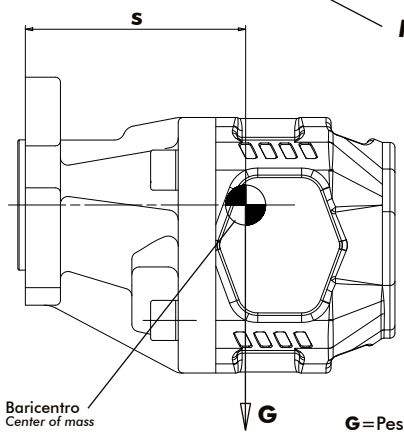


Rotazione oraria, pompa destra
Clockwise rotation, right pump



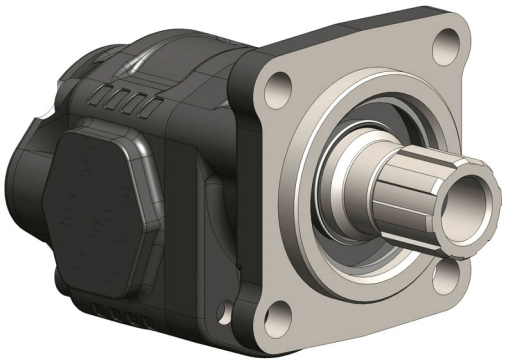
MOMENTO PESO / *MASS MOMENT*

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



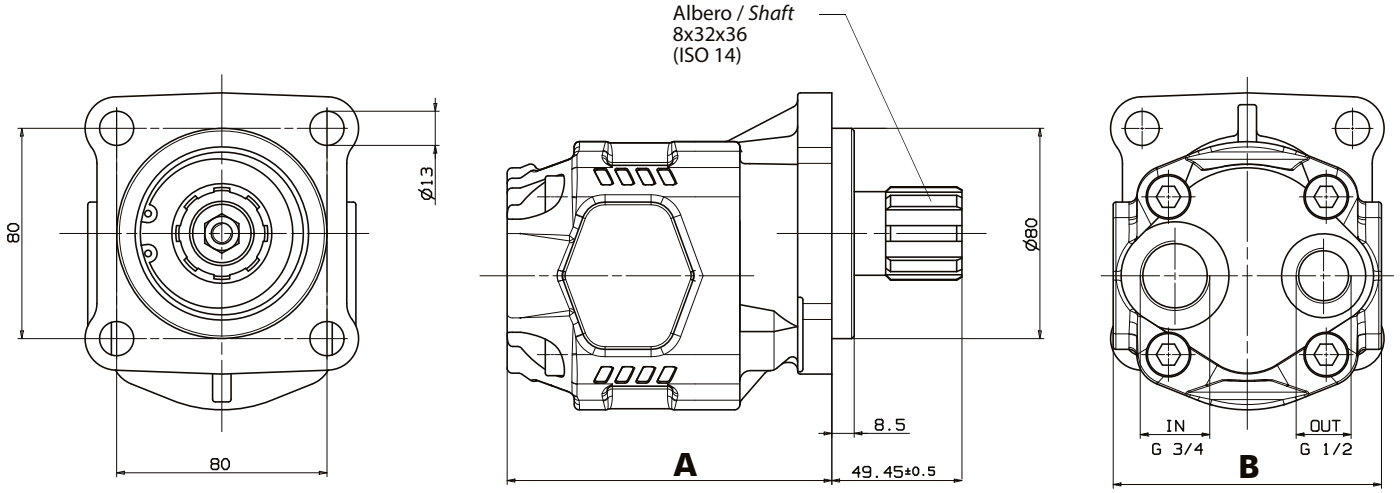
G=Peso in N (Peso in Kg x 9.81)
G=*Weight in N (Weight in Kg x 9.81)*

Tipo pompa - *Pump type*	**s**
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 *Fluid*	Minerale o sintetico compatibile con guarnizioni: *Mineral or synthetic compatible with the following seals:* NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata *Kinematic viscosity suggested*	T media ambiente (°C) *Average ambient temp. (°C)*	< -10	-10÷10	10÷35	> 35
	VG (cSt = mm²/s)	22	32	46	68
Viscosità cinematica ottimale di esercizio *Optimale kinematic viscosity*			VG= 10 cSt ÷ 100 cSt		
Viscosità cinematica max consentita all'avviamento *Max kinematic viscosity suggested at the start-up*			VG= 750 cSt		
Indice di viscosità consigliato *Viscosity index suggested* VI > 100			Temperatura di esercizio *Working temperature* -15°C +100°C		
Grado di filtrazione *Oil filtering*			> 200 bar: 10 µm < 200 bar: 25 µm		
Pressione di aspirazione *Inlet pressure*			-0,3 ÷ 2 bar		
Senso di rotazione *Pump rotation*			Unidirezionale *Unidirectional*		

Ingombro / *Dimensions*

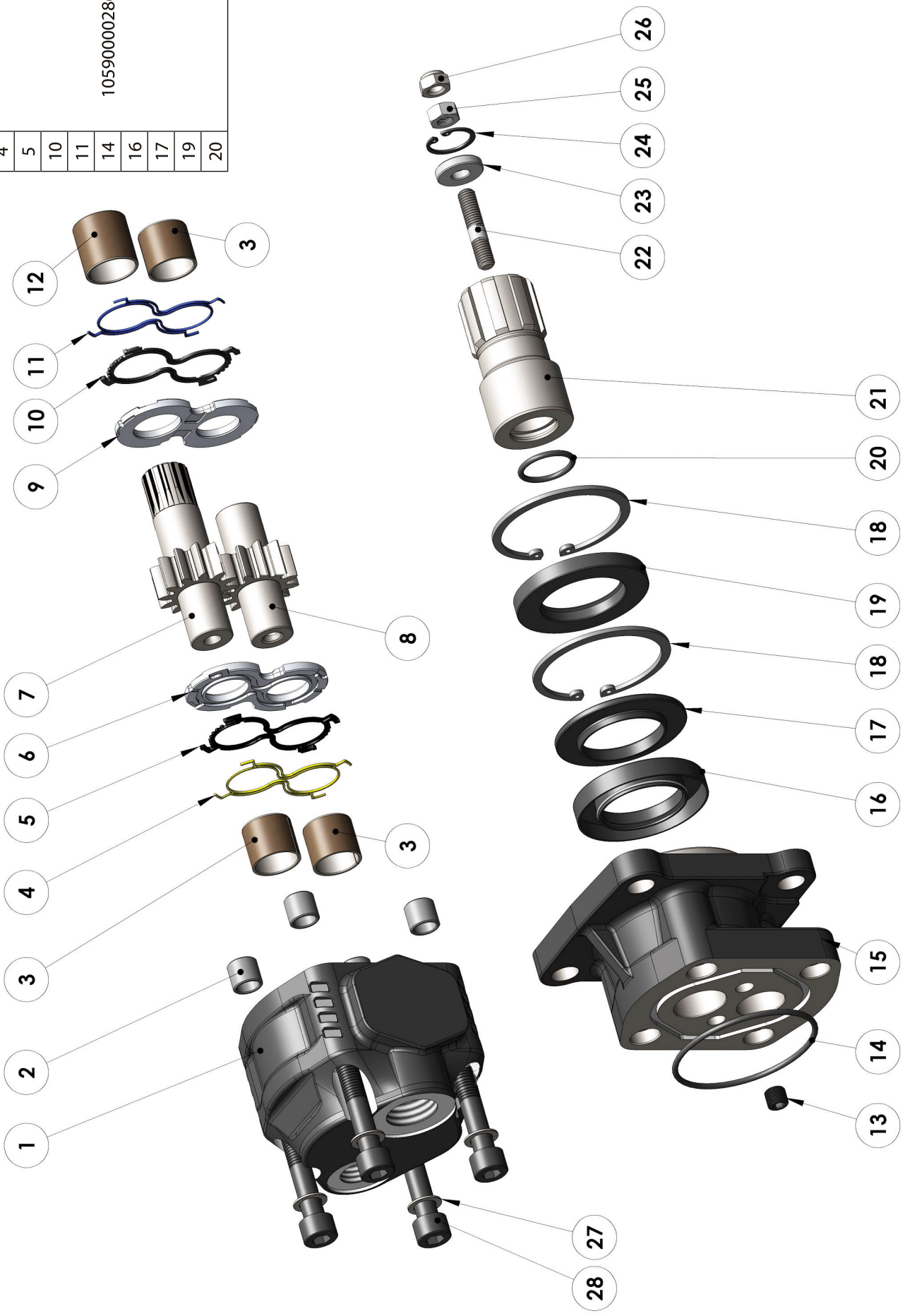


Dati tecnici / *Technical data*

Tipo pompa *Pump type*	**Rotazione** *Rotation*		**IN**	**OUT**	**A**	**B**	**Peso** *Weight*
	Sinistra / Left	*Destra / Right*	*ISO 228*	*ISO 228*	*mm*	*mm*	*Kg*
NPLA-06	10500330062	10500330071	G 3/4	G 1/2	108	98	5.2
NPLA-10	10500330106	10500330115			114		5.8
NPLA-12	10500330124	10500330133					6
NPLA-14	10500330142	10500330151			120	102	6.7
NPLA-16	10500330160	10500330179			123.5		7
NPLA-20	10500330204	10500330213			130		7.6
NPLA-25	10500330259	10500330268			138		8.2
NPLA-32	10500330320	10500330339			149		9
NPLA-40	10500330400	10500330419			164	106	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

OMFB
HYDRAULIC COMPONENTS

Pompe ad ingranaggi 4 fori - ISO con utilizzi posteriori
4 holes - ISO gear pumps with rear ports
NPLA ISO

Fam. **105003**

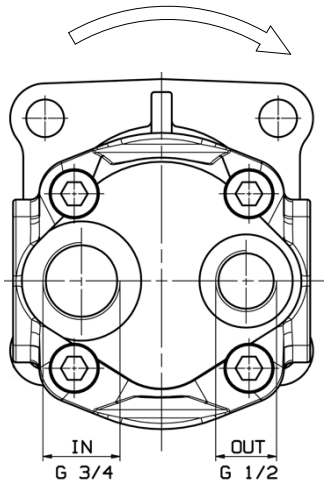
CARATTERISTICHE TECNICHE DI FUNZIONAMENTO - *TECHNICAL FEATURES*

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			
	cm³/rev	*bar*	*bar*	*bar*	*rpm*	*rpm*	*rpm*
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						
NPLA-32	32,042	180	200	220	2000	2800	
NPLA-40	39,933	150	170	190	1800	2500	

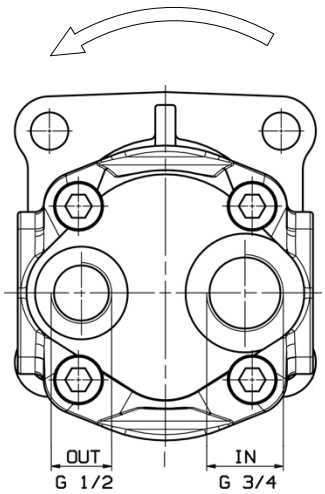
P1=Pressione max.continua — *Max. continuous pressure* (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* (6 sec.max)

IDENTIFICAZIONE ASPIRAZIONE/MANDATA:
SUCTION/DELIVERY IDENTIFICATION:

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

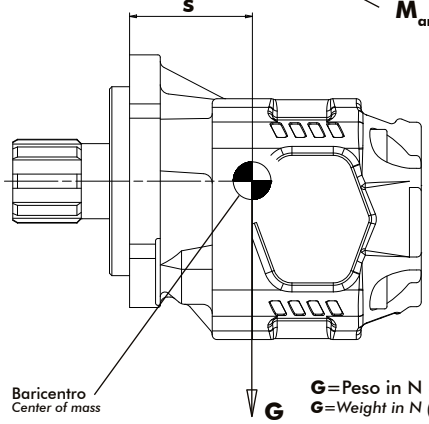


Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*

$M_{amm.} = s \times G$ (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**
NPLH-06	50
NPLH-10	52
NPLH-12	54
NPLH-14	56
NPLH-16	58
NPLH-20	60
NPLH-25	66
NPLH-32	72
NPLH-40	79