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Gruppo 2 / *Group 2*

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4 fori ISO attacchi posteriori / *4 holes ISO rear ports* ..... pag. 05

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4 fori ISO attacchi posteriori e laterali / *4 holes ISO rear and side ports* ..... pag. 09

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ACCESSORIES

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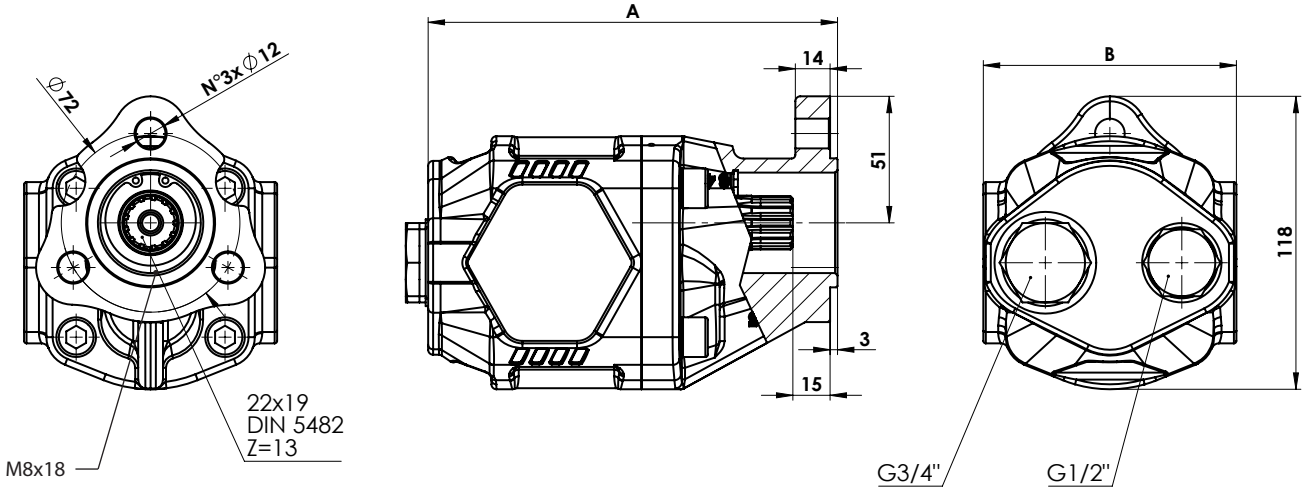
Pompe ad ingranaggi 3 fori - 13 DIN con utilizzi posteriori
3 holes - 13 DIN gear pumps with rear ports
NPLA 13 DIN

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 = mm^2/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

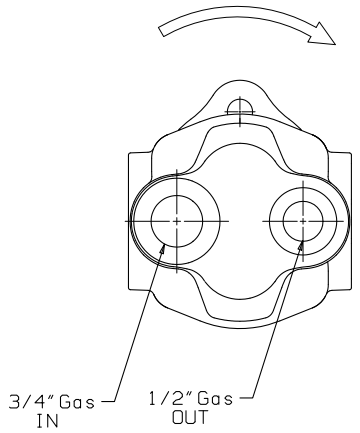
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* 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	

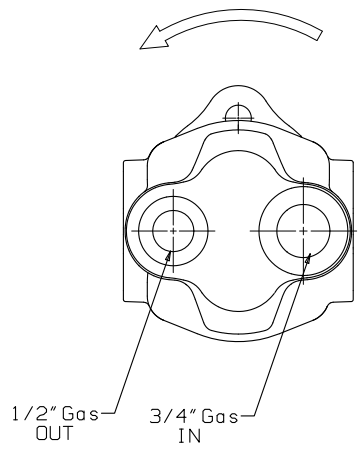
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

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

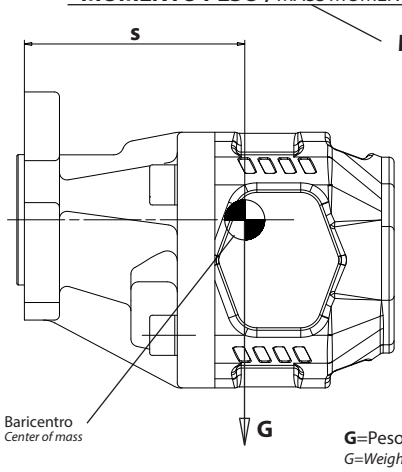


Rotazione oraria, pompa destra
Clockwise rotation, right pump



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)

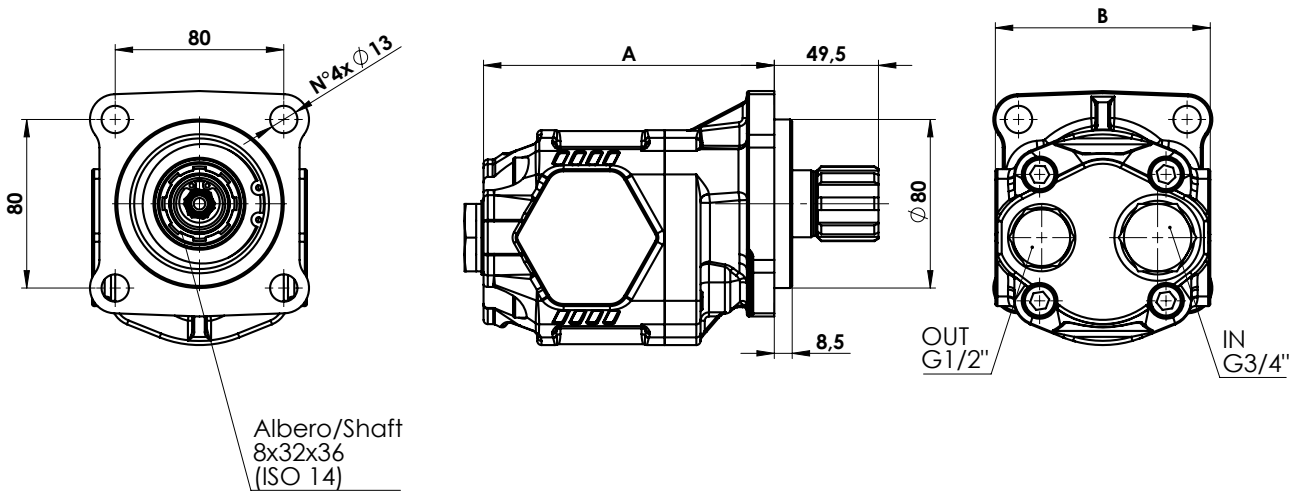
Tipo pompa - *Pump type*	S
NPLA-06	82.5
NPLA-10	83
NPLA-12	84
NPLA-14	85.5
NPLA-16	87
NPLA-20	91
NPLA-25	93
NPLA-32	102
NPLA-40	108

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*



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 = mm^2/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

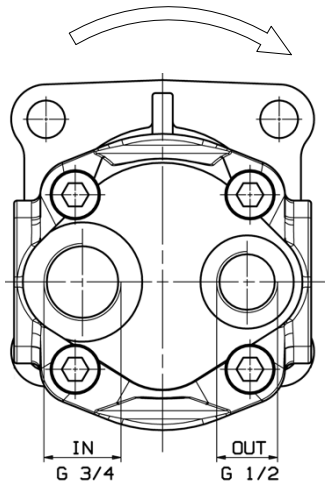
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* 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	

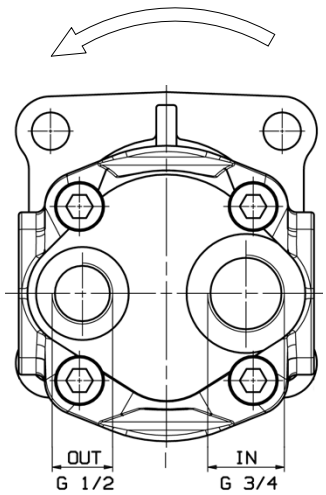
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

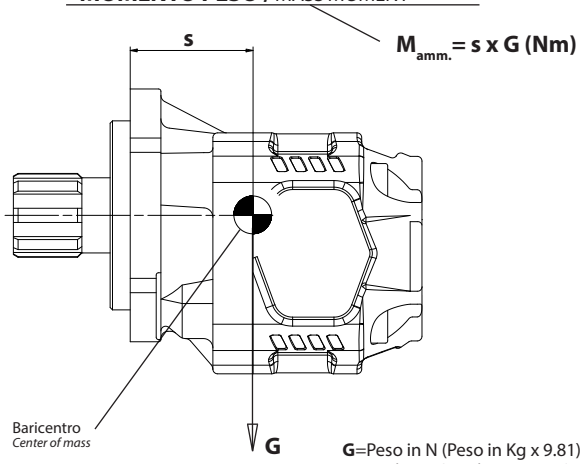
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*



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

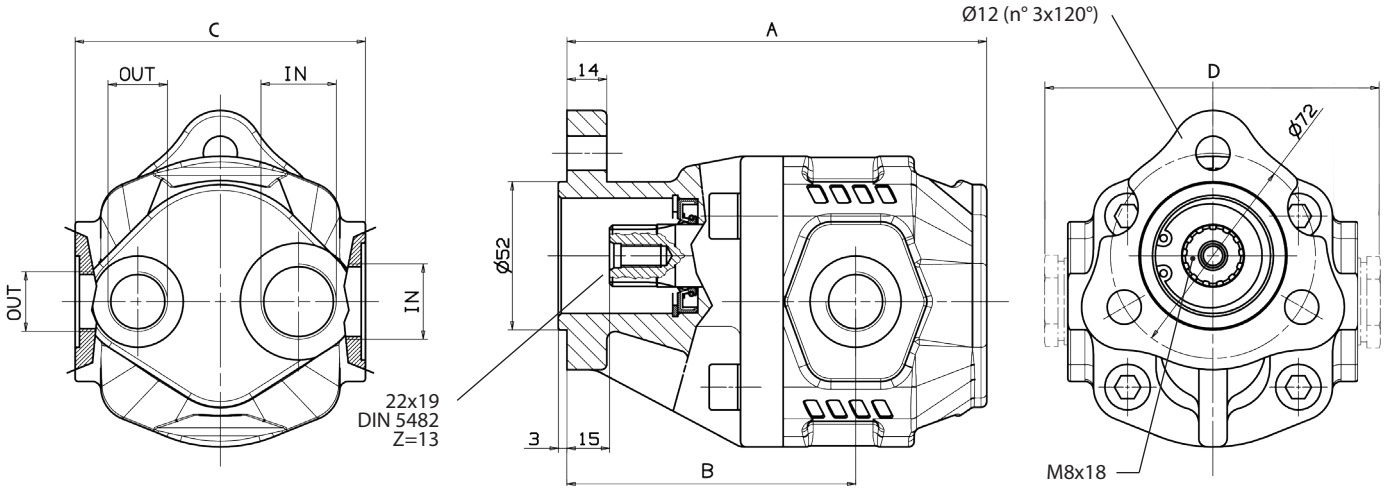
Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

Pompe ad ingranaggi 3 fori - 13 DIN
con utilizzi posteriori e laterali
3 holes - 13 DIN gear pumps with rear and side ports
NPLU 13 DIN



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

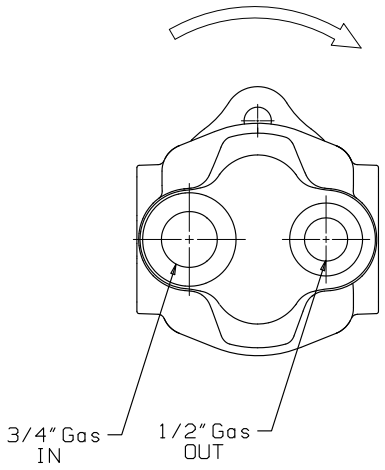
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* rpm
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			
NPLU-25	25,15	220	250	260			
NPLU-32	32,04	190	210	220	2000	2800	
NPLU-40	39,93	160	180	190	1800	2500	

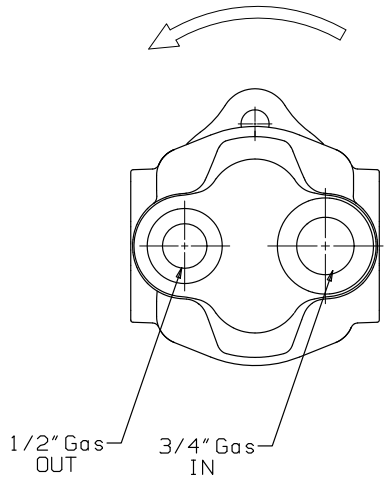
P1=Pressione max.continua — *Max. continuous pressure* (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

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

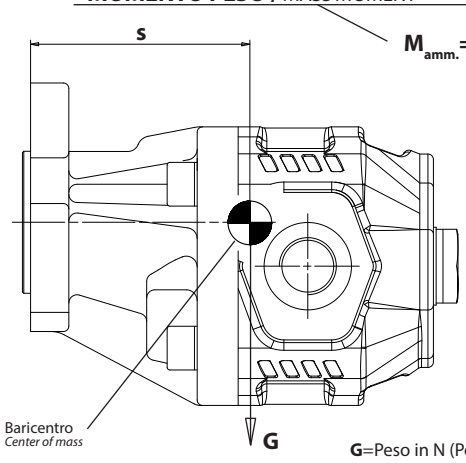


Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*

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



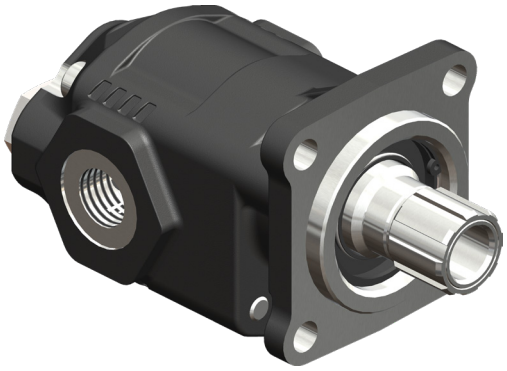
G=Peso in N (Peso in Kg x 9.81)
G=Weight in N (Weight in Kg x 9.81)

Tipo pompa - *Pump type*	S
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

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

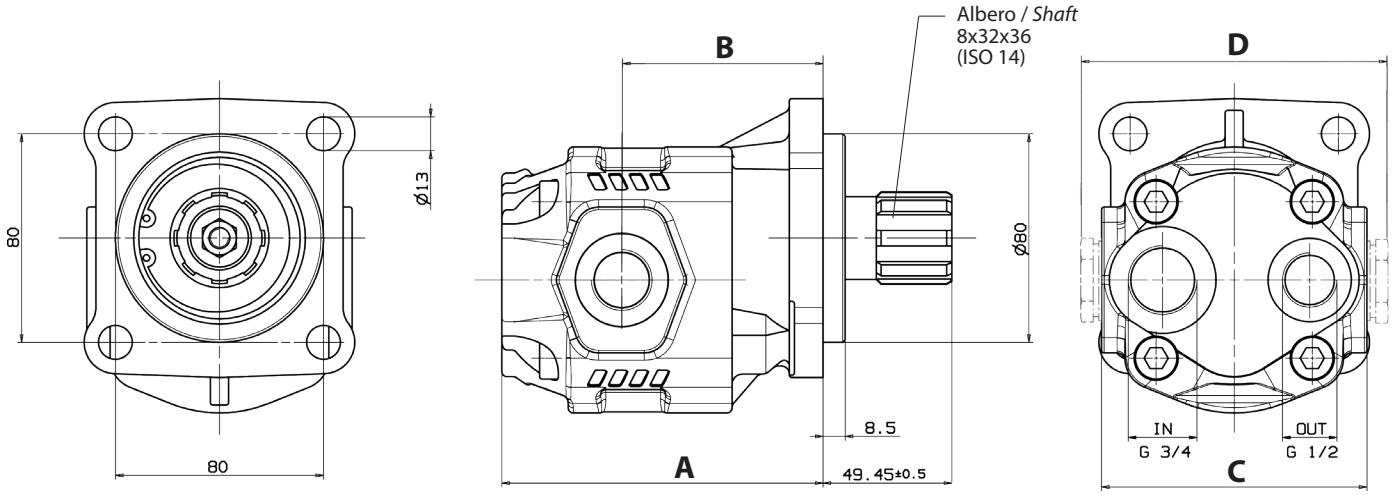
Pompe ad ingranaggi 4 fori - ISO con utilizzi posteriori e laterali
4 holes - ISO gear pumps with rear and side ports
NPLU ISO

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	C	D	Peso *Weight*
	Sinistra / *Left*	Destra / *Right*	ISO 228	ISO 228	mm	mm	mm	mm	Kg
NPLU-10	**10500340104**	**10500340113**	G 3/4	G 1/2	114	80	98	116	6
NPLU-12	**10500340122**	**10500340131**							6.2
NPLU-14	**10500340140**	**10500340159**			120	74	102	120	6.9
NPLU-16	**10500340168**	**10500340177**			123.5	77.5			7.2
NPLU-20	**10500340202**	**10500340211**			130	84			7.8
NPLU-25	**10500340257**	**10500340266**			138	89			8.4
NPLU-32	**10500340328**	**10500340337**			149	100			9.2
NPLU-40	**10500340408**	**10500340417**			164	111	106	124	10.2

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

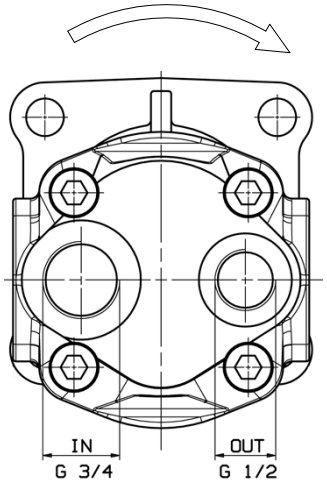
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* rpm
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			
NPLU-25	25,15	220	250	260			
NPLU-32	32,04	190	210	220	2000	2800	
NPLU-40	39,93	160	180	190	1800	2500	

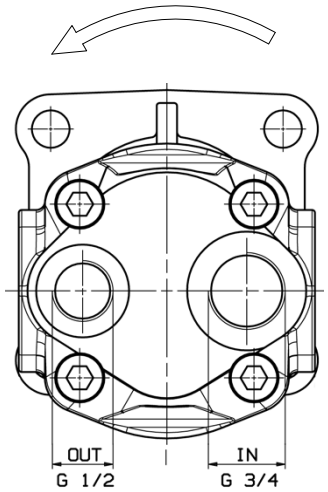
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

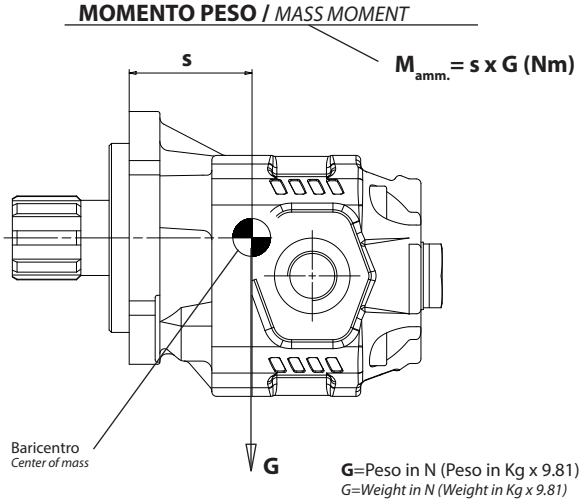
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*



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	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

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

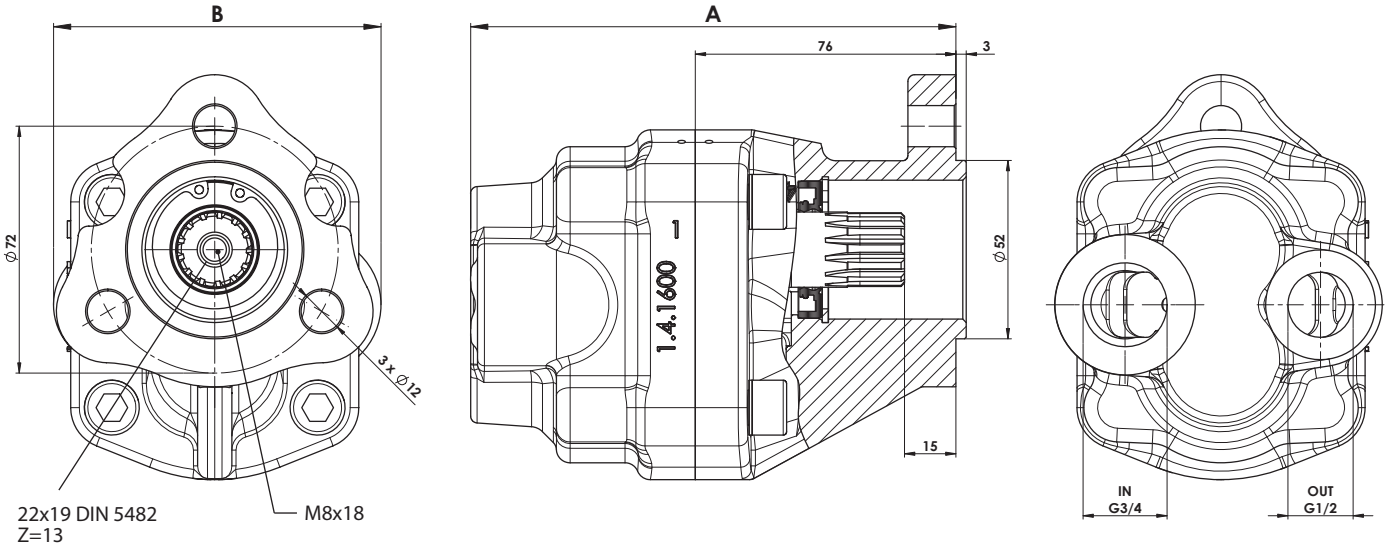
Pompe ad ingranaggi 3 fori - 13 DIN con utilizzi posteriori
3 holes - 13 DIN gear pumps with rear ports
KIPP

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 = mm^2/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*



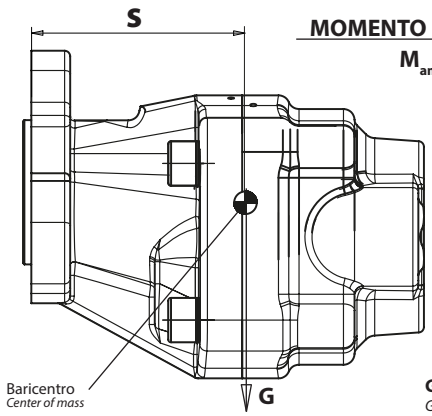
Dati tecnici / *Technical data*

Tipo pompa *Pump type*	Rotazione *Rotation*		IN	OUT	A	B	Peso *Weight*
	Sinistra / *Left*	Destra / *Right*	ISO 228	ISO 228	mm	mm	Kg
KIPP 16	**10500350166**	**10500350175**	G 3/4	G 1/2	141,5	95,5	4,4
KIPP 20	**10500350200**	**10500350219**			148		4,7

Caratteristiche tecniche di funzionamento / *Technical features*

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

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)



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**
KIPP 16	76,6
KIPP 20	80

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

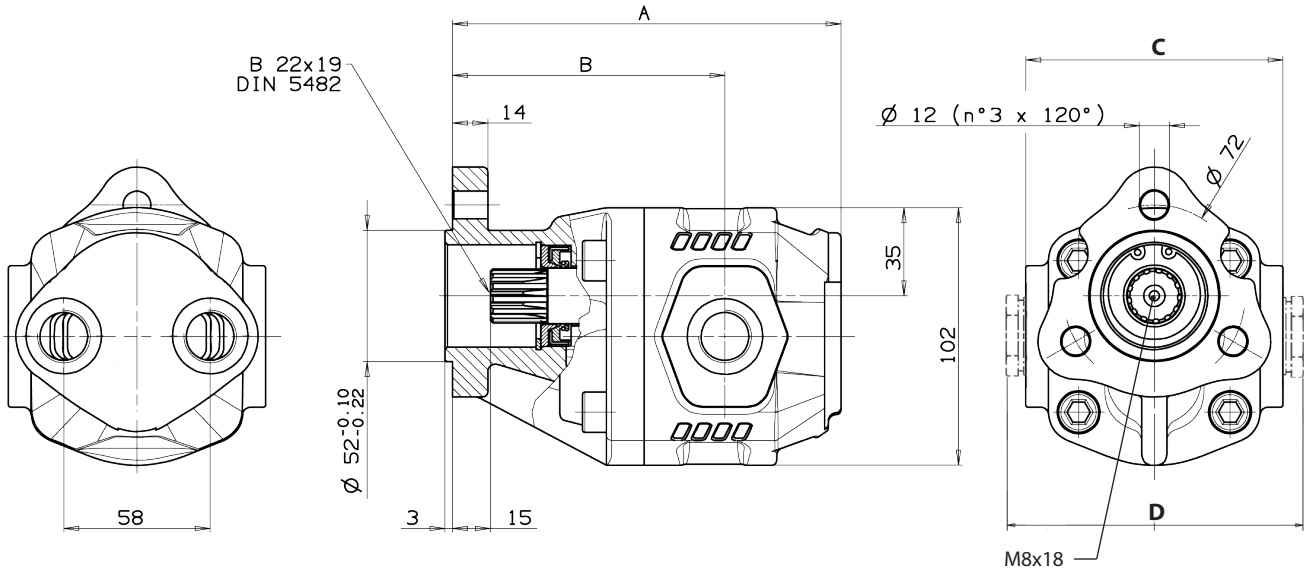
Pompe ad ingranaggi reversibili 3 fori 13 DIN con utilizzi posteriori e laterali
3 holes - 13 DIN reversible gear pumps with rear and side ports

105004
NPLH 13 DIN



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*			Bidirezionale/*Bidirectional*		

Ingombro / *Dimensions*



Dati tecnici / *Technical data*

Tipo pompa *Pump type*	Codice *Code*	IN ISO 228	OUT ISO 228	A mm	B mm	C mm	D mm	Peso *Weight* Kg
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**							5,1
NPLH-14	**10500410145**			144	98	102	120	5,2
NPLH-16	**10500410163**			147,5	101.5			5,3
NPLH-20	**10500410207**			154	108			5,7
NPLH-25	**10500410252**	G 3/4	G 3/4	162	113			5,9
NPLH-32	**10500410323**			173	124			6,3
NPLH-40	**10500410403**			188	135	106	124	7,6

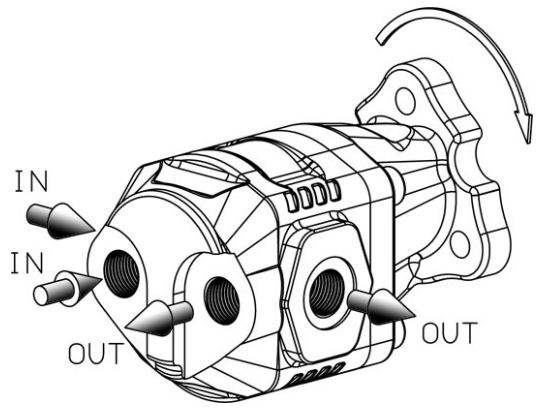
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* rpm
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			
NPLH-25	25.1	220	250	260			
NPLH-32	32.04	190	210	220	2000	2800	
NPLH-40	39,9	160	180	190	1800	2500	

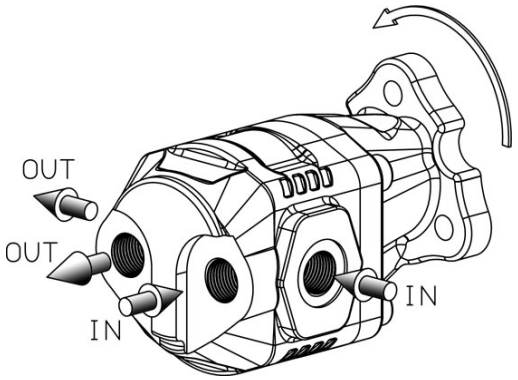
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

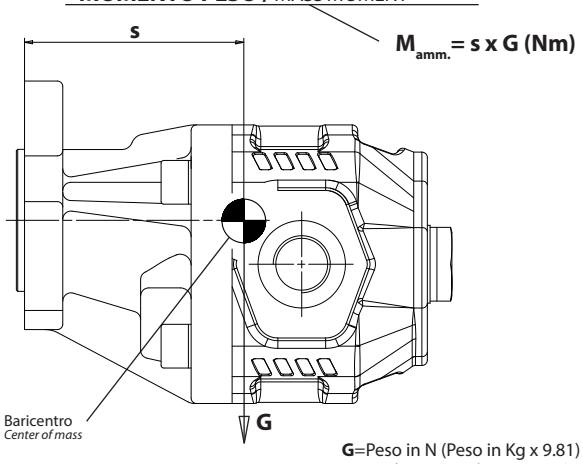
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*



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-6	80
NPLH-10	83
NPLH-12	84
NPLH-14	86
NPLH-16	91
NPLH-20	92
NPLH-25	97
NPLH-32	102
NPLH-40	107

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

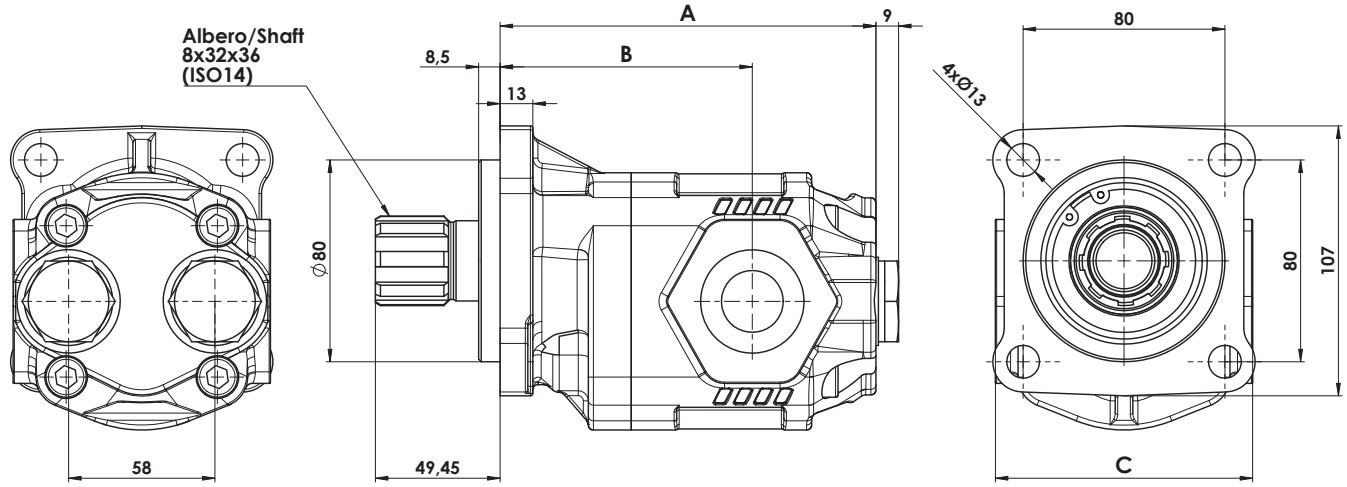
Pompe ad ingranaggi reversibili 4 fori ISO con utilizzi posteriori e laterali
4 holes - ISO reversible gear pumps with rear and side ports

105004
NPLH ISO



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*			Bidirezionale/*Bidirectional*		

Ingombro / *Dimensions*



Dati tecnici / *Technical data*

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

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

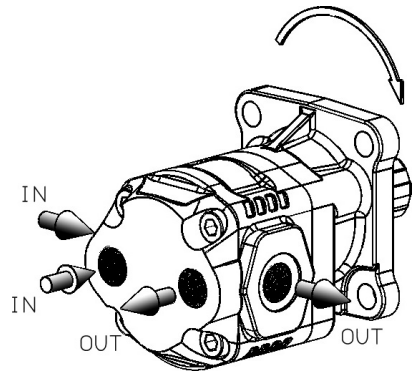
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* rpm
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			
NPLH-25	25,1	220	250	260			
NPLH-32	32,04	190	210	220	2000	2800	
NPLH-40	39,9	160	180	190	1800	2500	

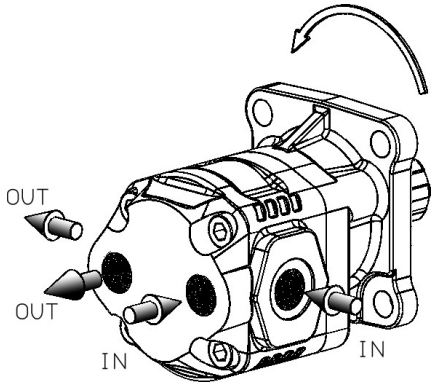
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

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

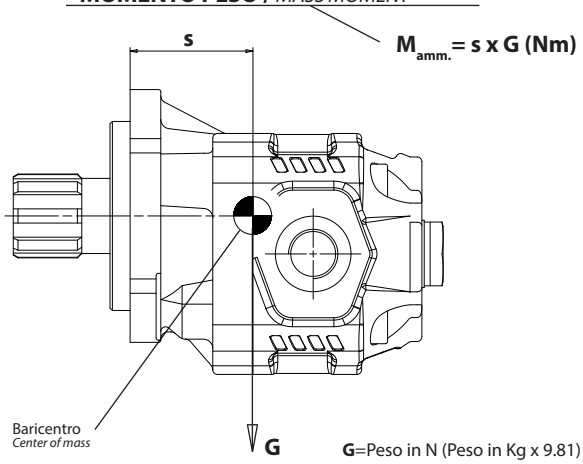


Rotazione oraria, pompa destra
Clockwise rotation, right pump



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)

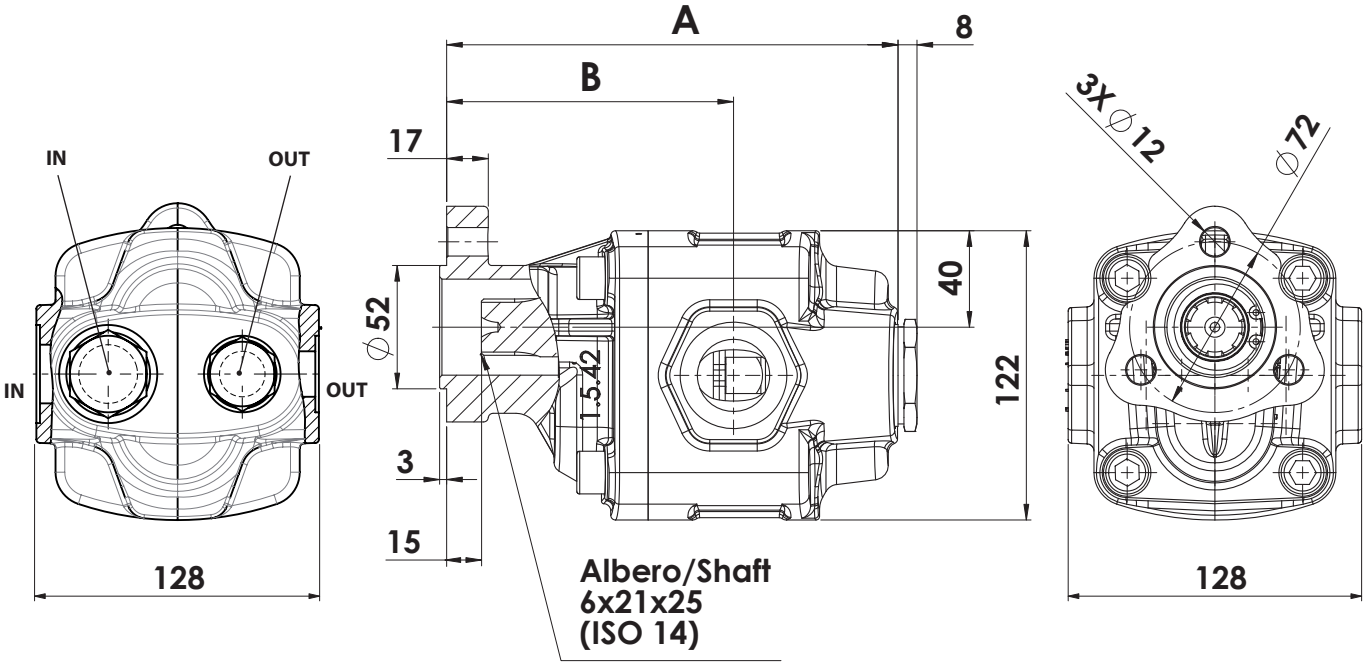
Tipo pompa - *Pump type*	S
NPLH-6	53
NPLH-10	55
NPLH-12	56
NPLH-14	57
NPLH-16	58
NPLH-20	61
NPLH-25	64
NPLH-32	69
NPLH-40	77

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*



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 = mm^2/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*		A	B	IN	OUT	Peso *Weight*
	Destra / *Right*	Sinistra / *Left*	mm	mm	ISO 228	ISO 228	Kg
NPK-10	**10505000105**	**10505000114**	150,9	112	G 1/2	G 1/2	7,5
NPK-16	**10505000169**	**10505000178**	156,7	110,5	G 3/4	G 1/2	7,8
NPK-20	**10505000203**	**10505000212**	161,2	115			8
NPK-25	**10505000258**	**10505000267**	167,2	115,5	G 1	G 3/4	8,5
NPK-32	**10505000329**	**10505000338**	175,2	123,5			9
NPK-40	**10505000409**	**10505000418**	184,2	115			9,5
NPK-46	**10505000463**	**10505000472**	190,2	121			10

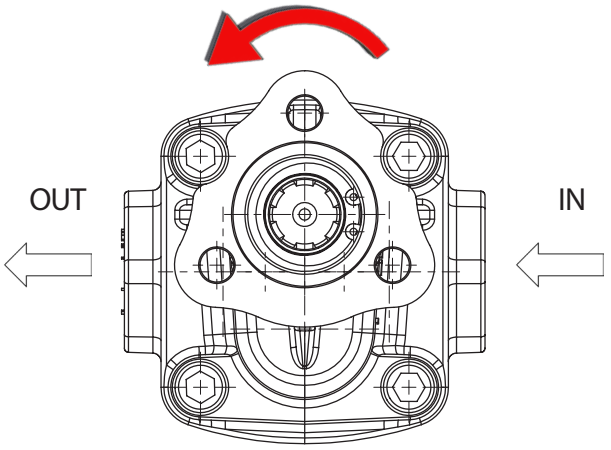
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* rpm
NPK-10	10,5	290	320	330	2200	3000	300
NPK-16	15,8						
NPK-20	19,8	280	290	300			
NPK-25	25						
NPK-32	32	275	280	290			
NPK-40	40	230	250	260			
NPK-46	45,2	200	230	250			

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)

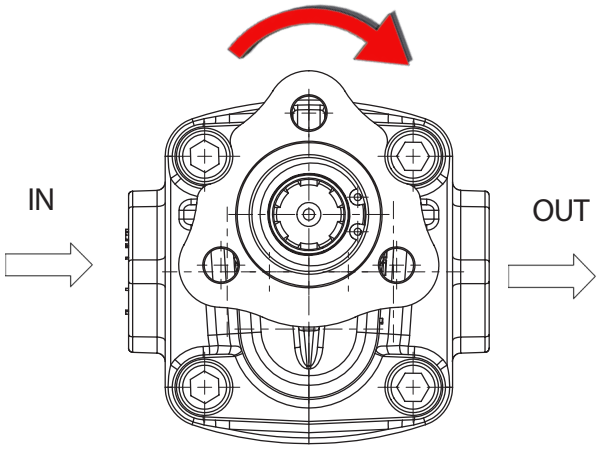
Identificazione aspirazione/mandata / *Suction/delivery identification*

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



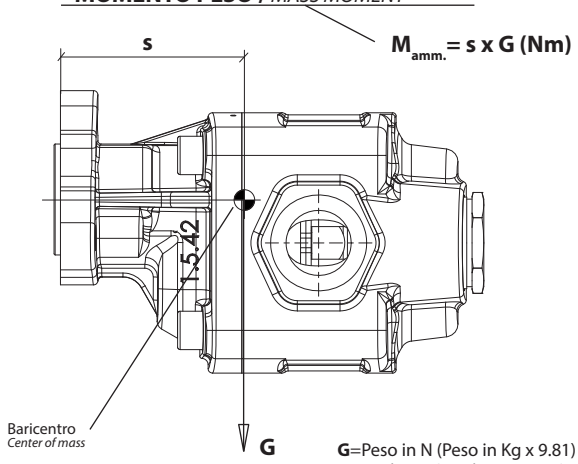
VISTA FRONTALE - *FRONT*

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)

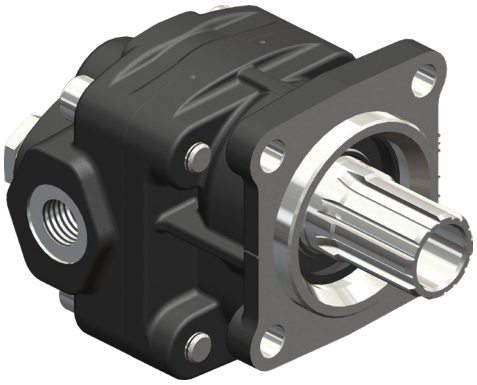
Tipo pompa - *Pump type*	S
NPK-10	87
NPK-16	91
NPK-20	94
NPK-25	98
NPK-32	102
NPK-40	106
NPK-46	110

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

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

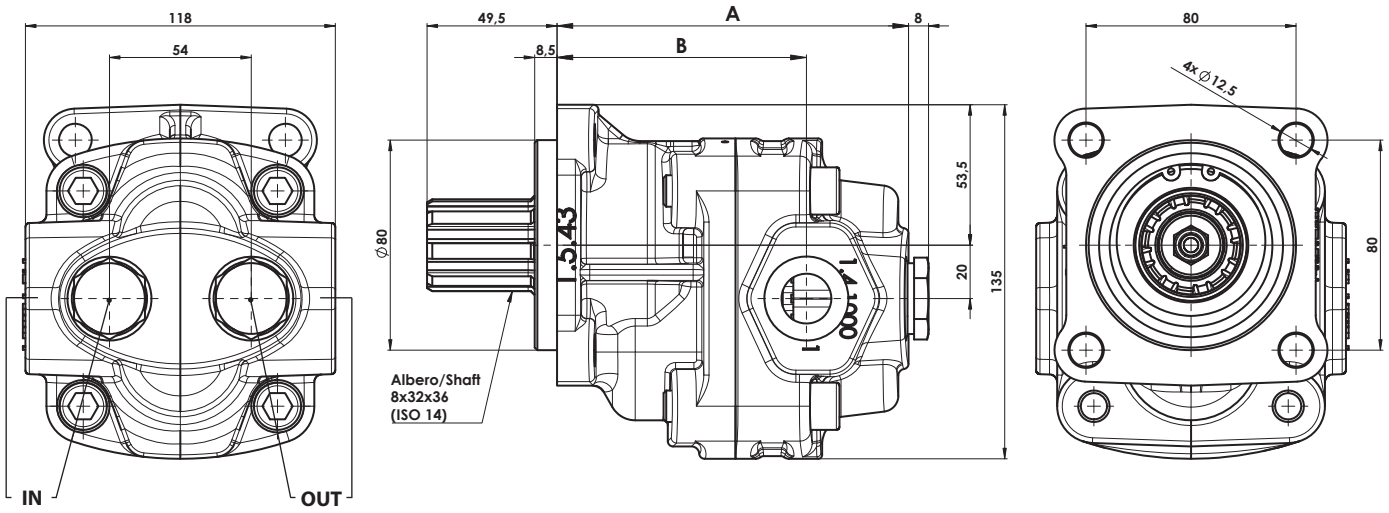
Pompe ad ingranaggi fissaggio 4 fori - ISO
4 holes - ISO hydraulic gear pumps
NPK ISO

1050501



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 = mm^2/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*		A	B	IN	OUT	Peso *Weight*
	Destra / *Right*	Sinistra / *Left*	mm	mm	ISO 228	ISO 228	Kg
NPK-10	**10505010103**	**10505010112**	134	95	G 1/2	G 1/2	7,7
NPK-16	**10505010167**	**10505010176**	140	93,5	G 3/4	G 1/2	8,3
NPK-20	**10505010201**	**10505010210**	144	98			8,6
NPK-25	**10505010256**	**10505010265**	150	98,5	G 1	G 3/4	9,3
NPK-32	**10505010327**	**10505010336**	158	106,5			9,9
NPK-40	**10505010407**	**10505010416**	167	98			10,6
NPK-46	**10505010461**	**10505010470**	173	104			11,2

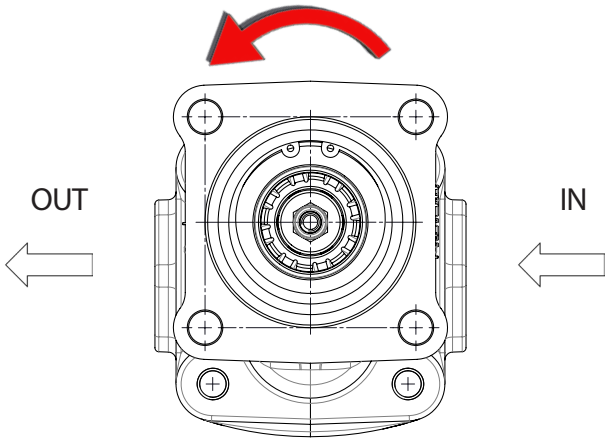
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* rpm
NPK-10	10,5	290	320	330	2200	3000	300
NPK-16	15,8						
NPK-20	19,8	280	290	300			
NPK-25	25						
NPK-32	32	275	280	290			
NPK-40	40	230	250	260			
NPK-46	45,2	200	230	250			

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)

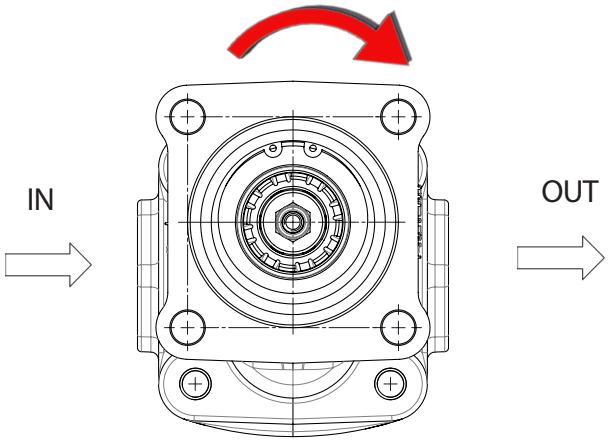
Identificazione aspirazione/mandata / *Suction/delivery identification*

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



VISTA FRONTALE - *FRONT*

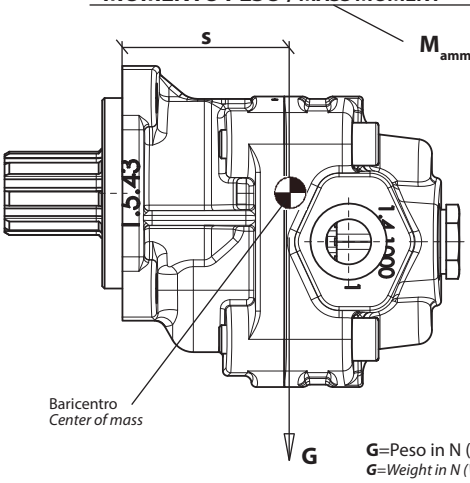
Rotazione oraria, pompa destra
Clockwise rotation, right pump



VISTA FRONTALE - *FRONT*

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
NPK-10	64
NPK-16	68
NPK-20	71
NPK-25	75
NPK-32	79
NPK-40	83
NPK-46	87

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

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

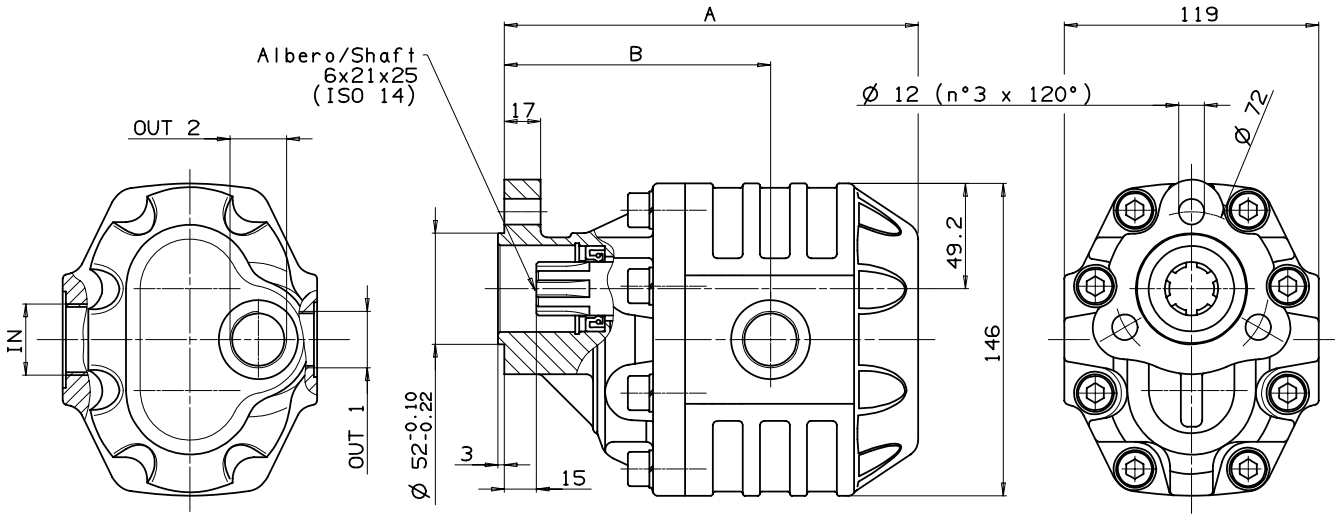
Pompe ad ingranaggi fissaggio 3 fori - UNI
3 holes - UNI hydraulic gear pumps
NPH UNI

105011



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 = mm^2/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 1	OUT 2	A	B	Peso *Weight*
	Destra / *Right*	Sinistra / *Left*	ISO 228	ISO 228	ISO 228	mm	mm	Kg
NPH-17	**10501100175**	**10501100184**	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			158.5	108	9.5
NPH-34	**10501100344**	**10501100353**		G 3/4		163.5	109	10.5
NPH-43	**10501100433**	**10501100442**				169.5	114	11
NPH-51	**10501100513**	**10501100522**	G1			174.5	114.5	11.5
NPH-61	**10501100611**	**10501100620**				180.5	120.5	12
NPH-73	**10501100737**	**10501100746**				188.5	119.5	12.5
NPH-82	**10501100826**	**10501100835**	G1 1/4			193.5	124.5	13
NPH-90	**10501100906**	**10501100915**		G 1	G 3/4	204.5	132.5	13.5
NPH-100	**10501101003**	**10501101012**				210.5	138.5	14
NPH-125	**10501101254**	**10501101263**				226.5	142.5	16

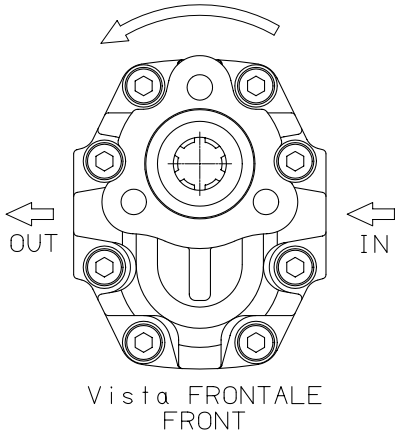
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* rpm
NPH-17	17.04	290	315	325	2500	3000	300
NPH-22	22.15						
NPH-27	26.18						
NPH-34	33.88	280	300	310	2200	2800	
NPH-43	43.12	270	290	300	2000	2500	
NPH-51	50.82	240	260	280			
NPH-61	60.06	220	240	250	1900	2500	
NPH-73	72.88	205	225	230	1900	2500	
NPH-82	81.08	205	225	230	1900	2500	
NPH-90	90.43	180	200	220	1900	2500	
NPH-100	98.18	180	200	220	1500	1800	
NPH-125	122.72	160	180	200	1500	1800	

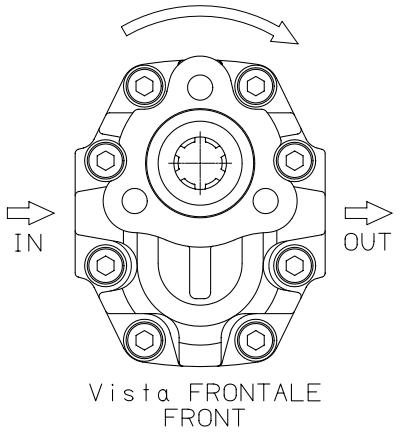
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

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

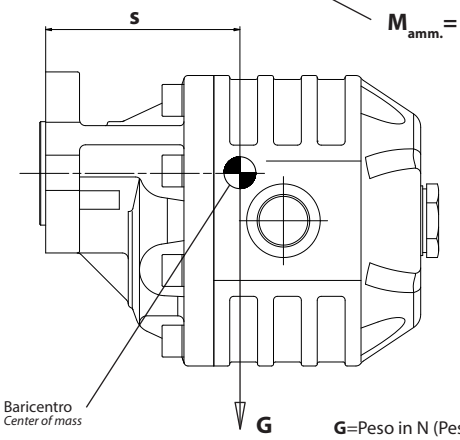


Rotazione oraria, pompa destra
Clockwise rotation, right pump



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)

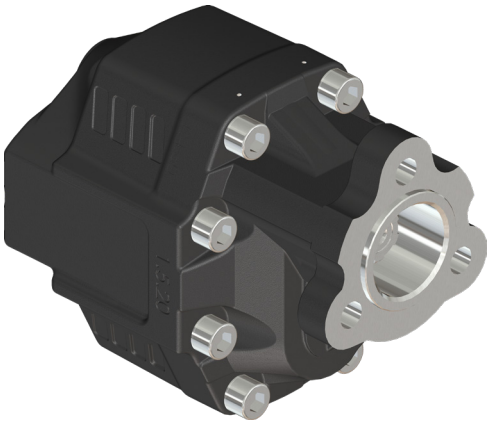
PER MODIFICARE IL SENSO DI ROTAZIONE VEDERE ISTRUZ. 99700200042
TO CHANGE THE DIRECTION OF ROTATION SEE INSTRUCTION 99700200042

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

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

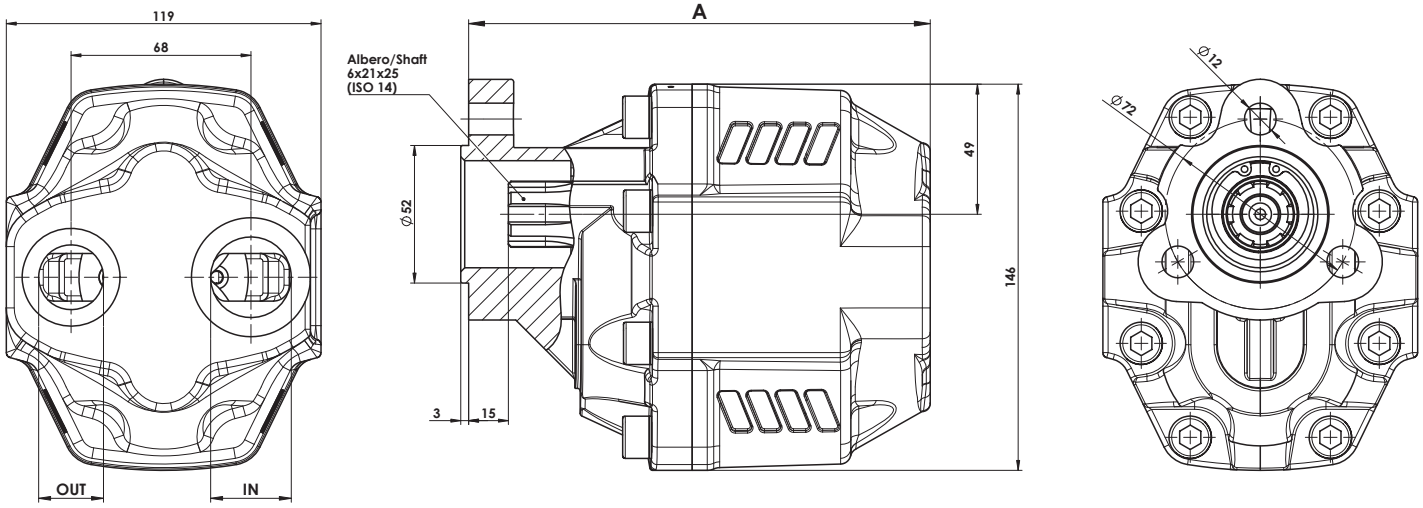
Pompe ad ingranaggi fissaggio 3 fori
3 holes hydraulic gear pumps
NPH UNI THIN

105036



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*



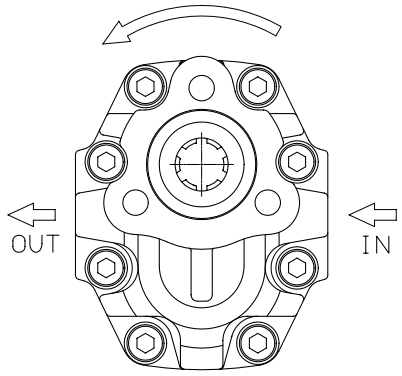
Dati tecnici / *Technical data*

Tipo pompa *Pump type*	Cilindrata *Displacement*	Codice *Code* Destra / *Right*	Codice *Code* Sinistra / *Left*	IN ISO 228	OUT ISO 228	Pressione *Pressure* P1 bar	P2 bar	P3 bar	A mm	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* rpm	Peso *Weight* kg
NPH-51	50,82	**10503600514**	**10503600523**	G 1	G 3/4	240	260	280	174,5	2000	2500	300	11,5
NPH-61	60,06	**10503600612**	**10503600621**			220	240	250	180,5	1800	2000		12
NPH-82	81,08	**10503600827**	**10503600836**			190	210	220	193,5	1500	1800		13

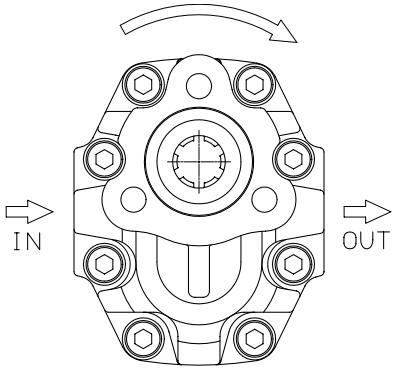
P1=Pressione max.continua *Max. continuous pressure* (100%)
P2=Pressione max. intermittente *Max. Intermittent pressure* (20 sec.max.)
P3=Pressione max. di punta *Max. peak pressure* (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

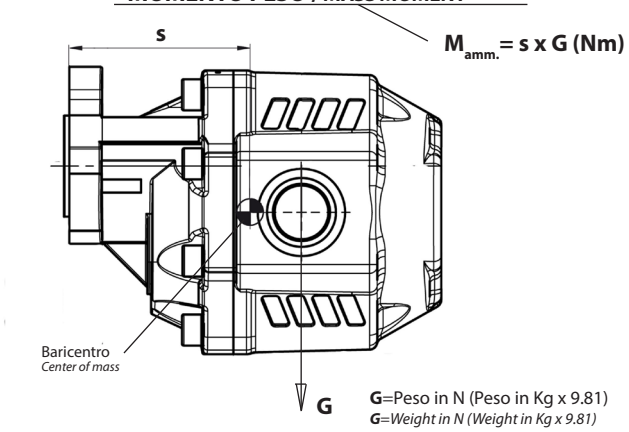
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



Rotazione oraria, pompa destra
Clockwise rotation, right pump



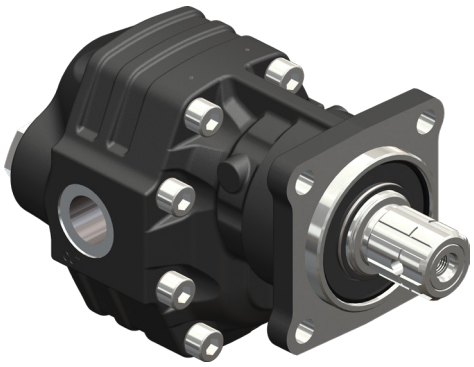
MOMENTO PESO / *MASS MOMENT*



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

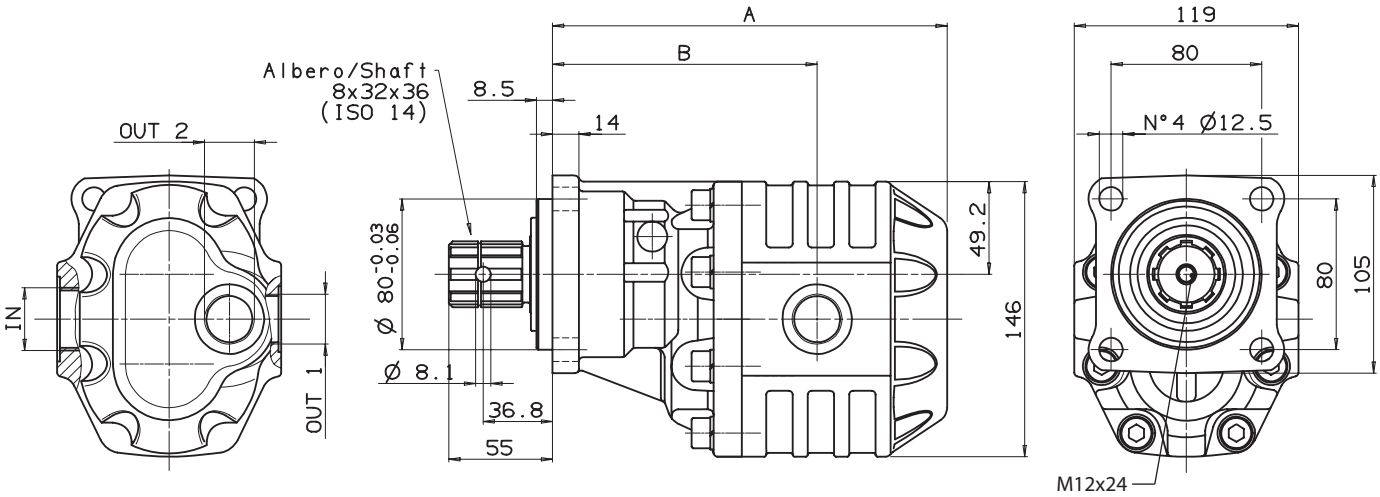
Tipo pompa - *Pump type*	**s**
NPH-51	100
NPH-61	103
NPH-82	110

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*



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

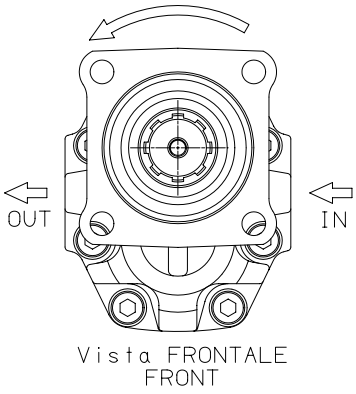
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* rpm
NPH-17	17.04	290	315	325	2500	3000	300
NPH-22	22.15						
NPH-27	26.18						
NPH-34	33.88	280	300	310	2200	2800	
NPH-43	43.12	270	290	300	2000	2500	
NPH-51	50.82	240	260	280			
NPH-61	60.06	220	240	250	1900	2500	
NPH-73	72.88	205	225	230	1900	2500	
NPH-82	81.08	205	225	230	1900	2500	
NPH-90	90.43	180	200	220	1900	2500	
NPH-100	98.18	180	200	220	1500	1800	
NPH-125	122.72	160	180	200	1500	1800	

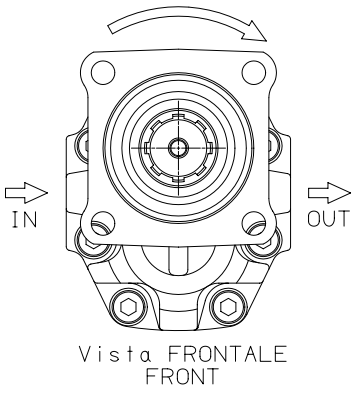
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

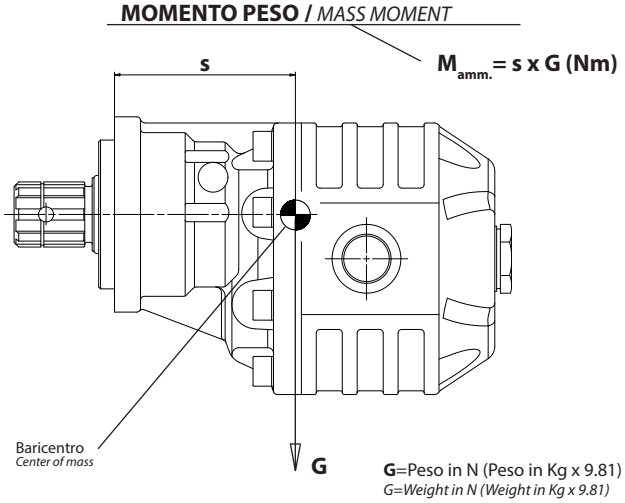
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*



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
NPH-17	93
NPH-22	94
NPH-27	96
NPH-34	99
NPH-43	101
NPH-51	103
NPH-61	106
NPH-73	110
NPH-82	113
NPH-90	120
NPH-100	121
NPH-125	130

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

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

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

Pompe ad ingranaggi reversibili fissaggio 3 fori
3 holes hydraulic gear pumps
LTH UNI

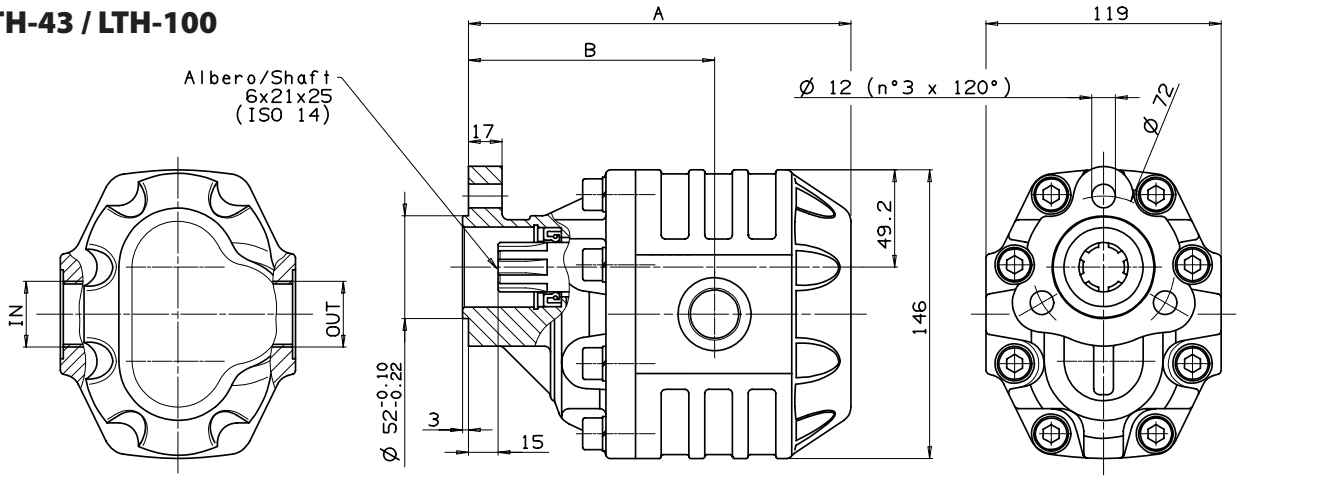
105028



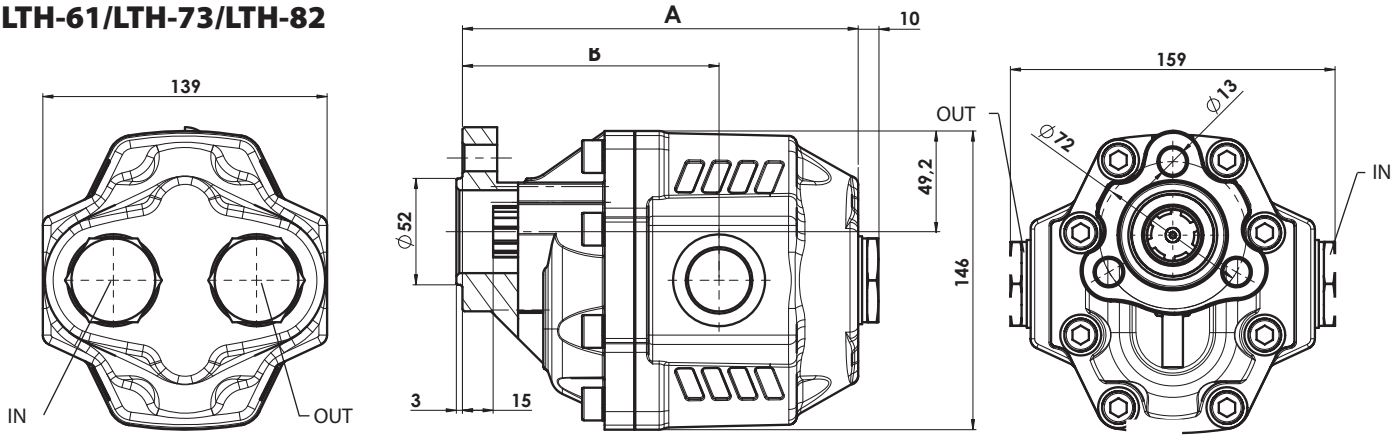
Fluido idraulico *Fluid*	Minerale o sintetico compatibile con guarnizioni: *Mineral or synthetic compatible with the following seals:* NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata *Kinematic viscosity suggested*	T media ambiente (°C) *Average ambient temp. (°C)*	< -10	-10÷10	10÷35	> 35
	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*	Bidirezionale/*Bidirectional*				

Ingombro / *Dimensions*

LTH-43 / LTH-100



LTH-61/LTH-73/LTH-82



Dati tecnici / *Technical data*

Tipo pompa *Pump type*	Codice *Code*	IN ISO 228	OUT ISO 228	A mm	B mm	Peso *Weight* Kg
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

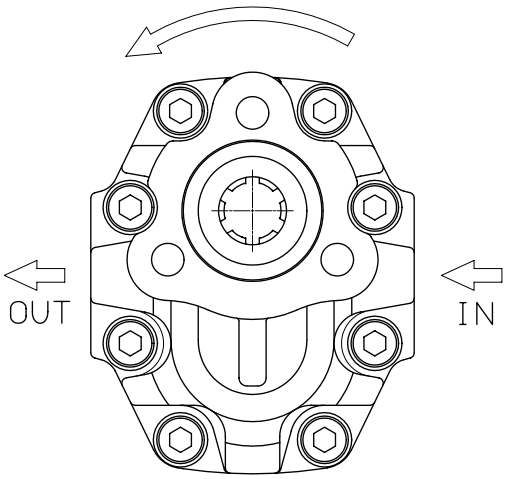
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	**Cilindrata** *Displacement* cm³/rev	**Pressione** *Pressure* P1 bar	P2 bar	P3 bar	**Velocità max. continua** *Max. continuous speed* rpm	**Velocità max. intermittente** *Max. intermittent speed* rpm	**Velocità min.** *Min. speed* rpm
LTH-43	43,12	230	240	250	1700	2250	300
LTH-61	60,06	205	225	230	1900	2500	
LTH-73	72.88	170	180	190	1500	1800	
LTH-82	81,08	205	225	230	1900	2500	
LTH-100	98,18	160	180	190	1400	1700	

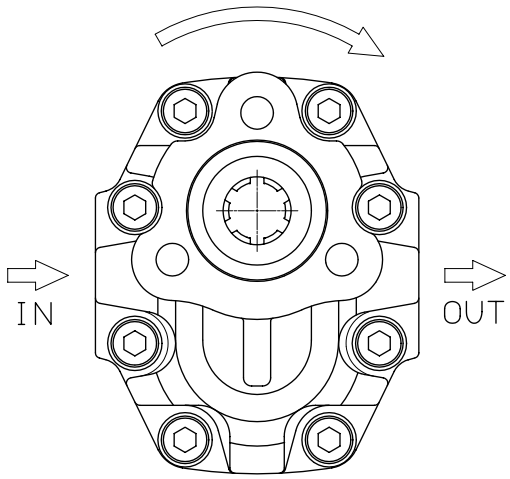
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

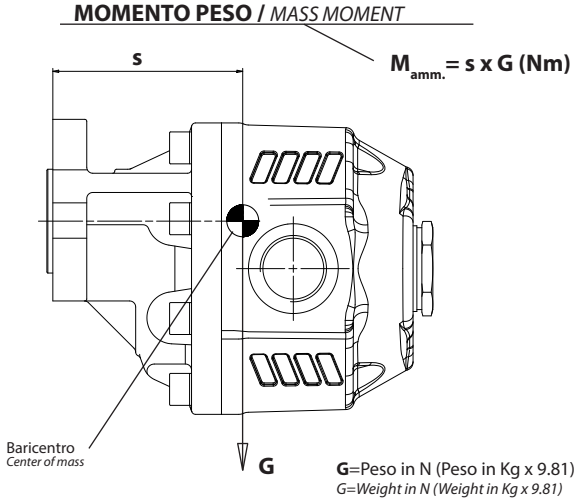
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*



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**
LTH-43	103
LTH-61	108
LTH-73	111
LTH-82	114
LTH-100	125

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

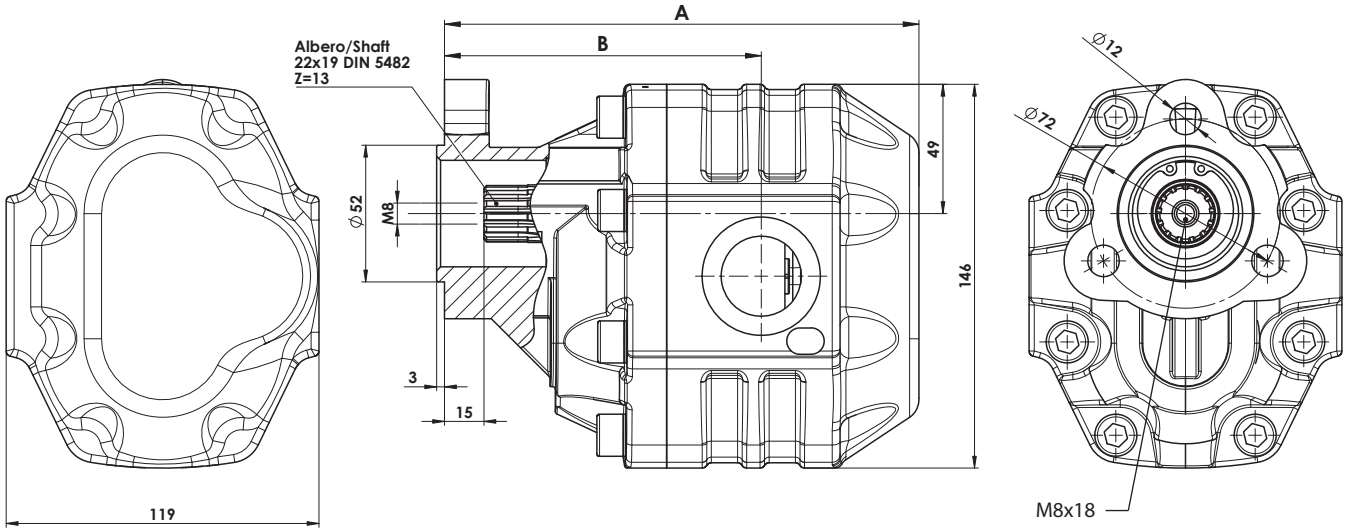
Pompe ad ingranaggi 3 fori
3 holes hydraulic gear pumps
LTH UNI DIN 5482 Z13

1050013



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*			Bidirezionale/*Bidirectional*		

Ingombro / *Dimensions*



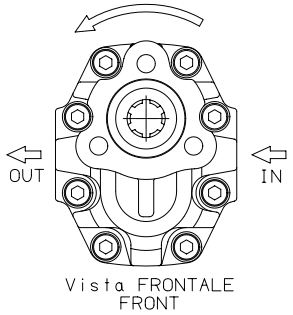
Dati tecnici / *Technical data*

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

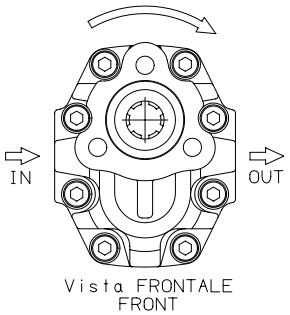
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

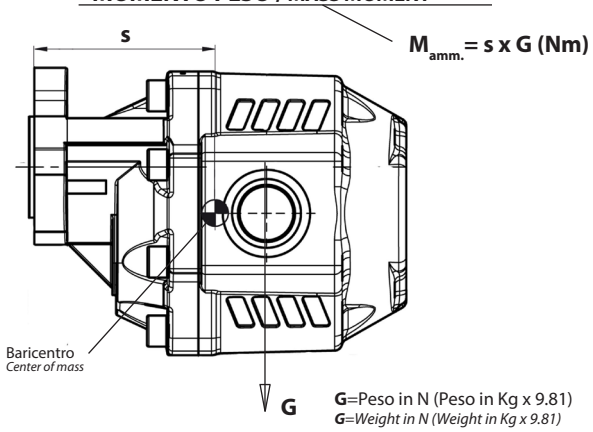
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*



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

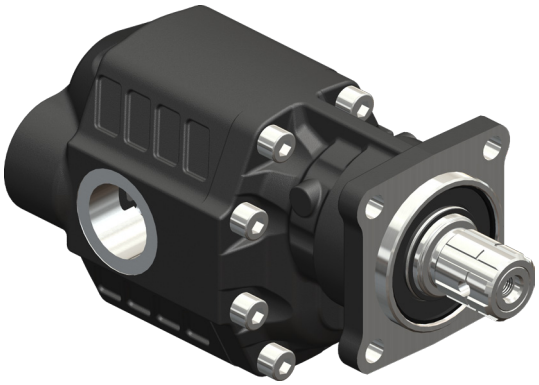
G=Peso in N (Peso in Kg x 9.81)
G=*Weight in N (Weight in Kg x 9.81)*

Tipo pompa - *Pump type*	**s**
LTH-61	105
LTH-82	111

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

Pompe ad ingranaggi reversibili fissaggio 4 fori
4 holes reversible hydraulic gear pumps
LTH ISO

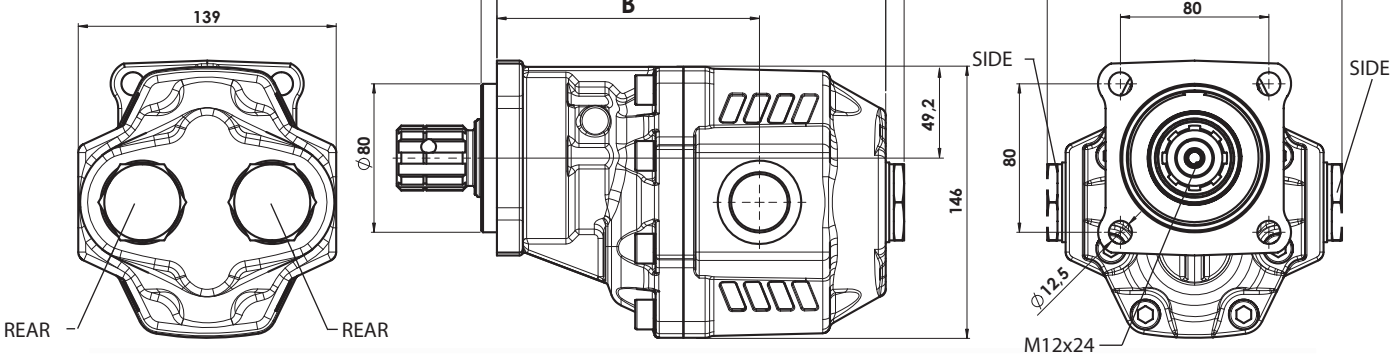
105028



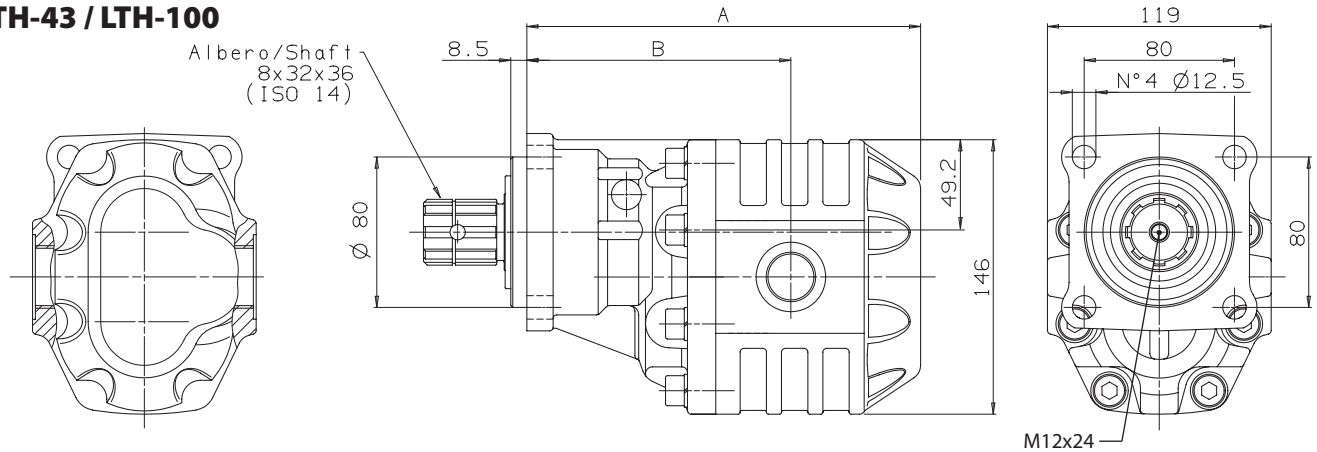
Fluido idraulico *Fluid*	Minerale o sintetico compatibile con guarnizioni: *Mineral or synthetic compatible with the following seals:* NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata *Kinematic viscosity suggested*	T media ambiente (°C) *Average ambient temp. (°C)*	< -10	-10÷10	10÷35	> 35
	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*			Bidirezionale/*Bidirectional*		

Ingombro / *Dimensions*

LTH-61/LTH-82/LTH-90



LTH-43 / LTH-100



Dati tecnici / *Technical data*

Tipo pompa *Pump type*	Codice *Code*	SIDE ISO 228	REAR ISO 228	A mm	B mm	Peso *Weight* Kg
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

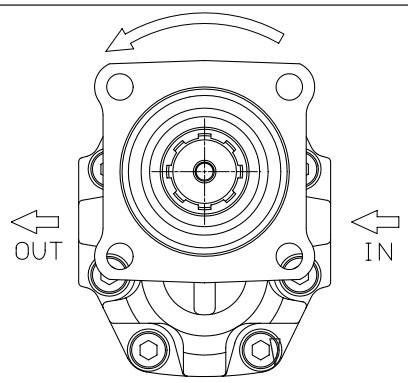
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* rpm
LTH-43	43,12	230	240	250	1700	2250	300
LTH-61	60,06	205	225	230	1900	2500	
LTH-82	81,08	205	225	230	1900	2500	
LTH-90	90,43	160	180	190	1400	1700	
LTH-100	98,18	160	180	190	1400	1700	

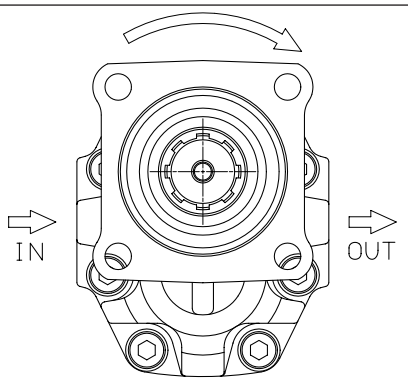
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

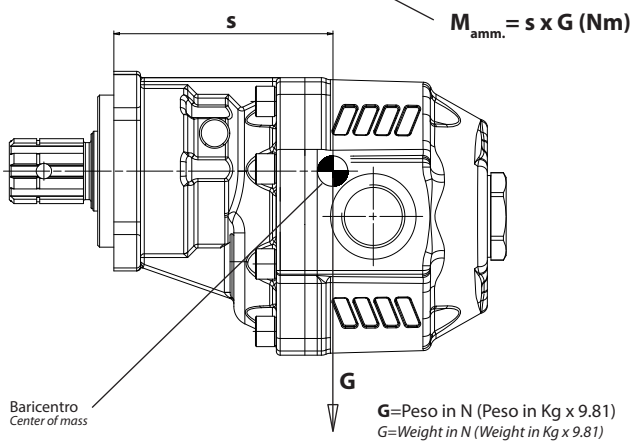
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



Rotazione oraria, pompa destra
Clockwise rotation, right pump



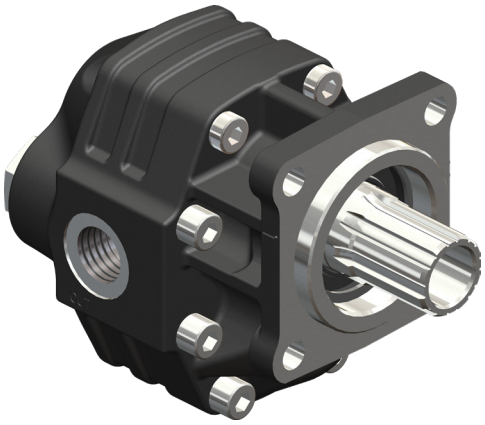
MOMENTO PESO / *MASS MOMENT*



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

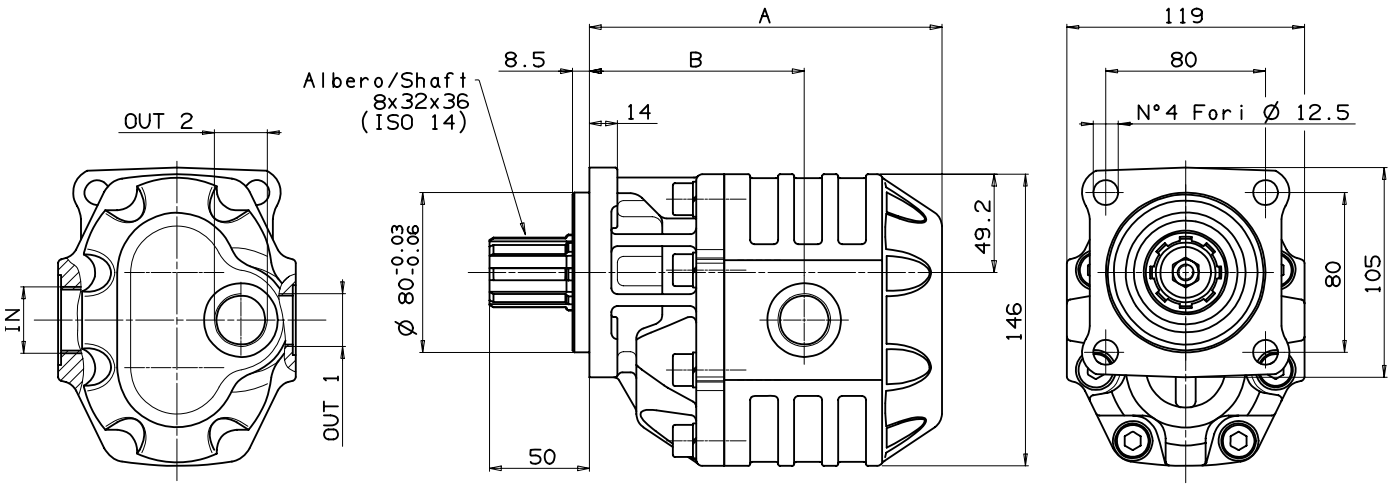
Tipo pompa - *Pump type*	S
LTH-43	105
LTH-61	109
LTH-82	117
LTH-90	120
LTH-100	125

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*



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

POMPE DA NON UTILIZZARE CON CARICHI ASSIALI E RADIALI SULL'ALBERO
(ES.PTO SENZA CUSCINETTI, COMPRESE 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)

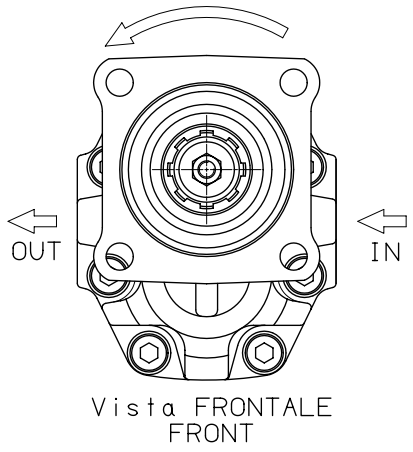
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	**Cilindrata** *Displacement* cm³/rev	**Pressione** *Pressure* P1 bar	P2 bar	P3 bar	**Velocità max. continua** *Max. continuous speed* rpm	**Velocità max. intermittente** *Max. intermittent speed* rpm	**Velocità min.** *Min. speed* rpm
NPH-17	17.04	290	315	325	2500	3000	300
NPH-22	22.15						
NPH-27	26.18						
NPH-34	33.88	280	300	310	2200	2800	
NPH-43	43.12	270	290	300	2000	2500	
NPH-51	50.82	240	260	280			
NPH-61	60.06	220	240	250	1800	2000	
NPH-73	72.88	200	220	230	1600	1800	
NPH-82	81.08	190	210	220	1500		
NPH-90	90,43	180	200	220			

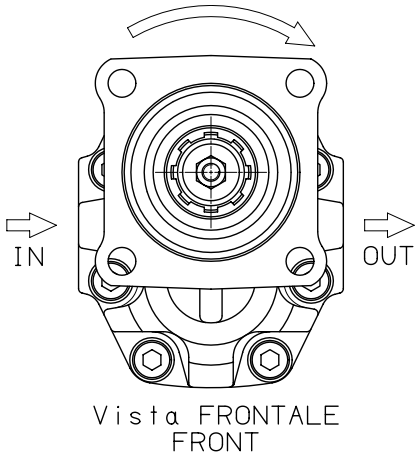
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

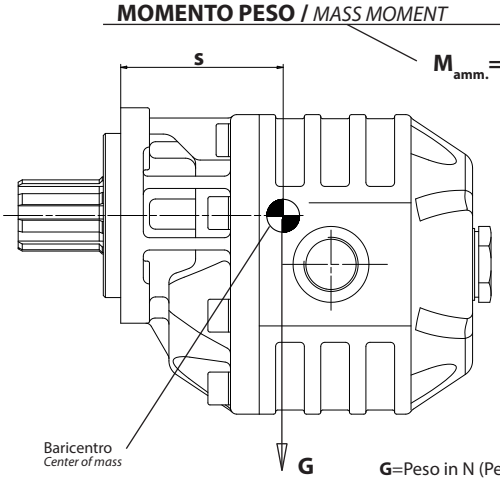
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*



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

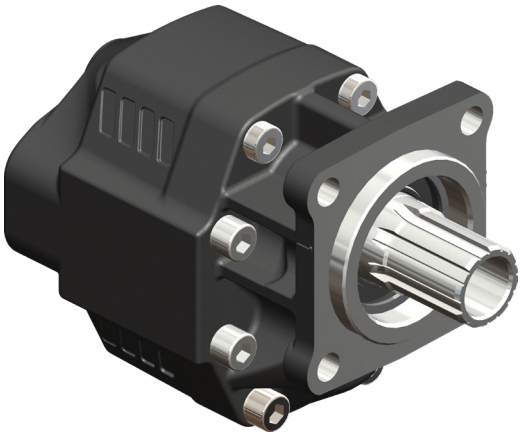
Tipo pompa - *Pump type*	**S**
NPH-17	76
NPH-22	77
NPH-27	78
NPH-34	79
NPH-43	81
NPH-51	84
NPH-61	87
NPH-73	91
NPH-82	95
NPH-90	99

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

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

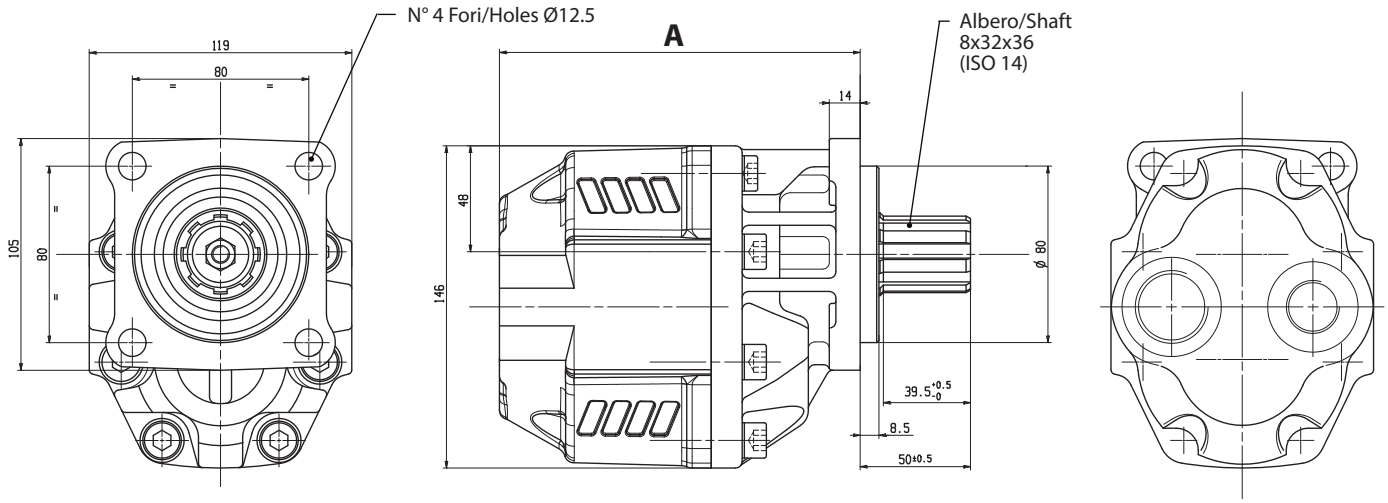
Pompe ad ingranaggi fissaggio 4 fori
4 holes hydraulic gear pumps
NPH THIN ISO SHORT

105037



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 = mm^2/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**	**Peso** *Weight*
	Destra / *Right*	Sinistra / *Left*	*ISO 228*	*ISO 228*	*mm*	*Kg*
NPH-51	**10503700513**	**10503700504**	G 1	G 3/4	157,5	12
NPH-61	**10503700611**	**10503700602**			163,5	12,4
NPH-82	**10503700835**	**10503700823**			176,5	13,2

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

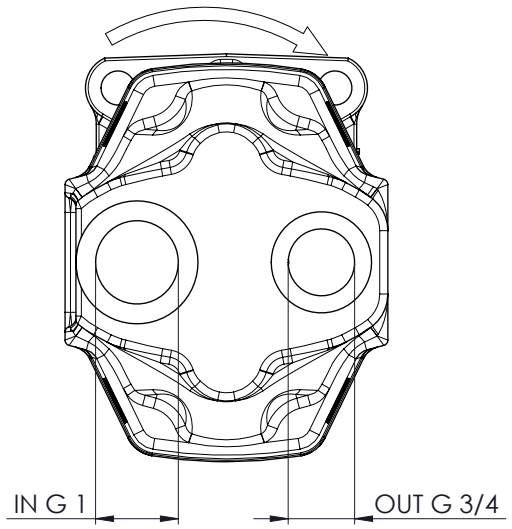
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* rpm
NPH-51	50.82	240	260	280	2000	2500	300
NPH-61	60.06	220	240	250	1800	2000	
NPH-82	81.08	190	210	220	1500	1800	

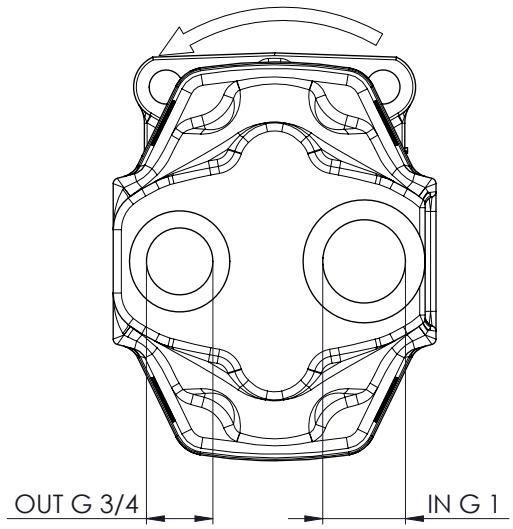
P1=Pressione max.continua — *Max. continuous pressure* (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

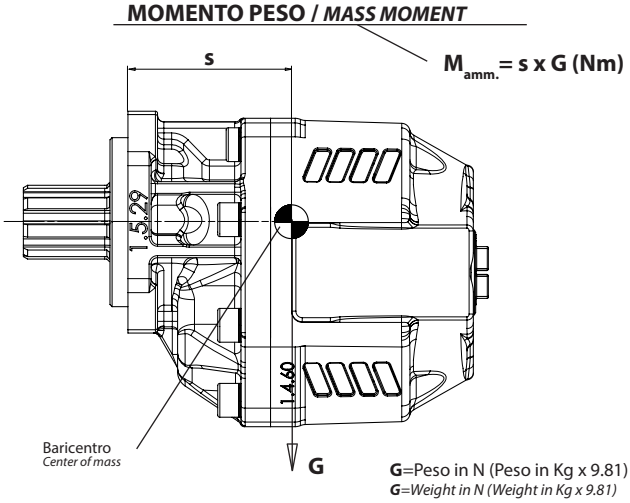
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*



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
NPH-51	84
NPH-61	87
NPH-82	95

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

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

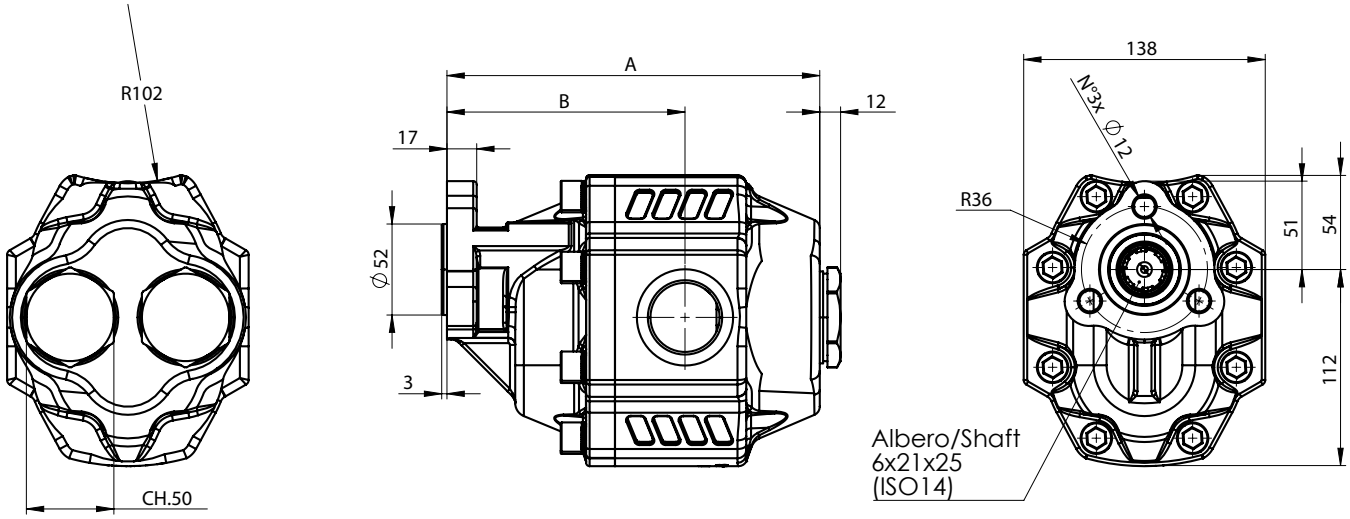
Pompe ad ingranaggi reversibili fissaggio 3 fori
3 holes reversible hydraulic gear pumps
LTMH UNI

105033



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*			Bidirezionale/*Bidirectional*		

Ingombro / *Dimensions*



Dati tecnici / *Technical data*

Tipo pompa *Pump type*	**Codice** Code	**IN** ISO 228	**OUT** ISO 228	**A** mm	**B** mm	**Peso** *Weight* 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

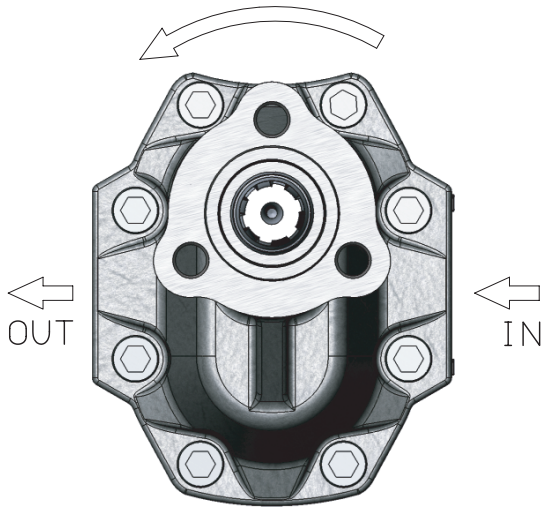
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	**Cilindrata** *Displacement* cm³/rev	**Pressione** *Pressure* P1 bar	P2 bar	P3 bar	**Velocità max. continua** *Max. continuous speed* rpm	**Velocità max. intermittente** *Max. intermittent speed* rpm	**Velocità min.** *Min. speed* rpm
LTMH-90	91,45	230	250	265	1800	2700	300
LTMH-100	99,77	220	240	255			
LTMH-112	112,24	205	225	240			
LTMH-120	122,45	195	215	230	1500	2500	300

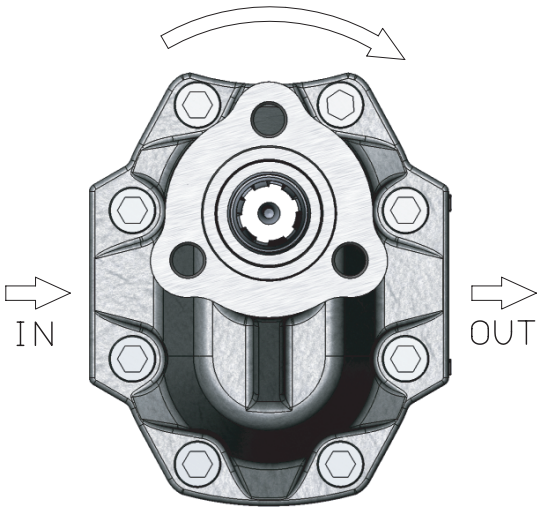
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

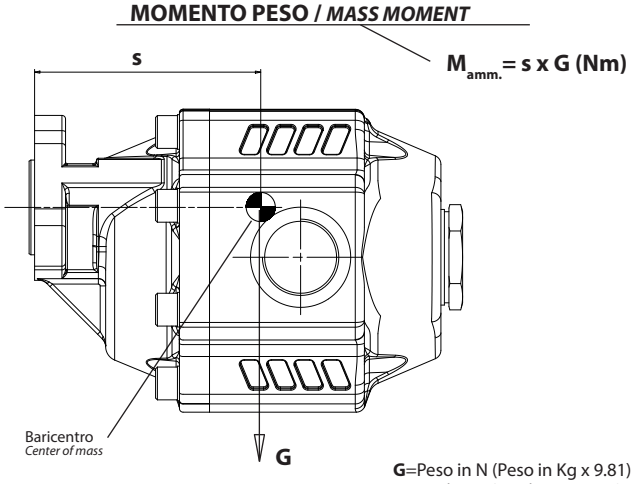
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*



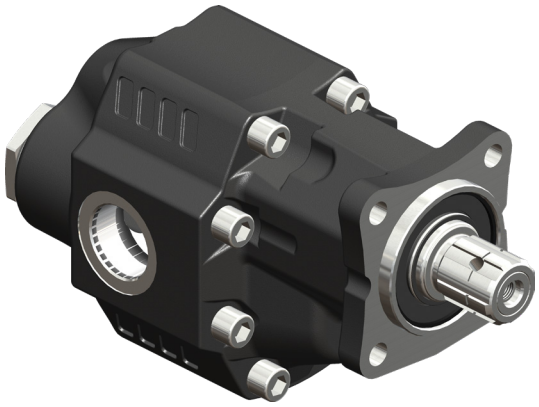
G=Peso in N (Peso in Kg x 9.81)
G=*Weight in N (Weight in Kg x 9.81)*

Tipo pompa - *Pump type*	**S**
LTMH-90	126
LTMH-100	127
LTMH-112	127.5
LTMH-120	128

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

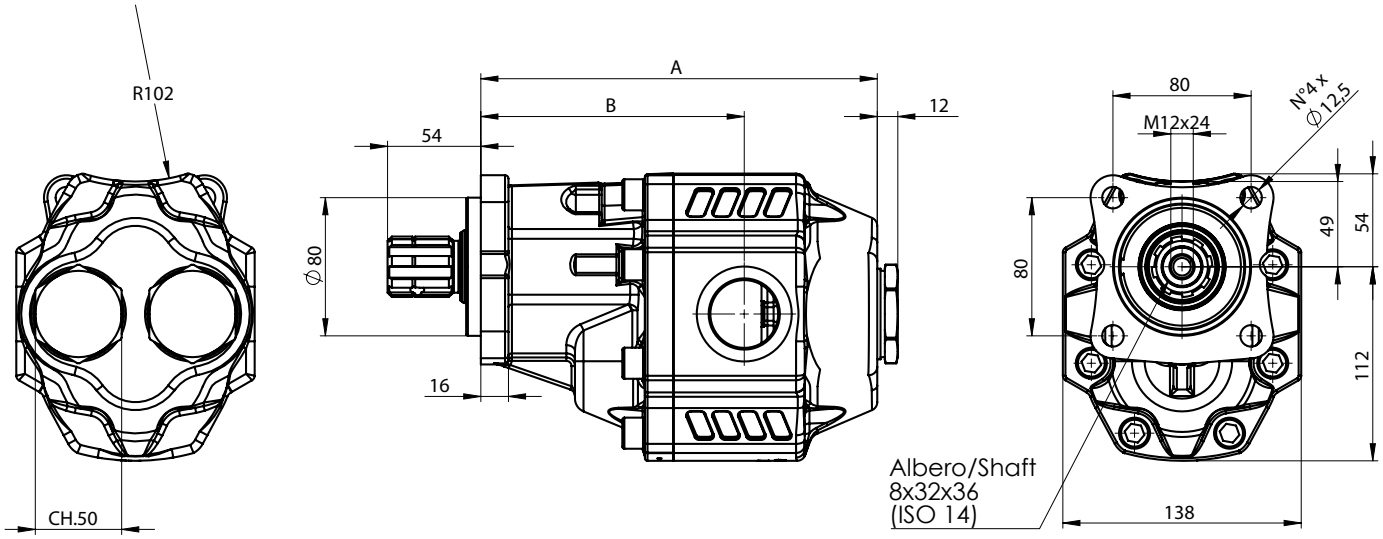
Pompe ad ingranaggi reversibili fissaggio 4 fori
4 holes reversible hydraulic gear pumps
LTMH ISO

105033



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*			Bidirezionale/*Bidirectional*		

Ingombro / *Dimensions*



Dati tecnici / *Technical data*

Tipo pompa *Pump type*	**Codice** *Code*	**IN** ISO 228	**OUT** ISO 228	**A** mm	**B** mm	**Peso** *Weight* 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

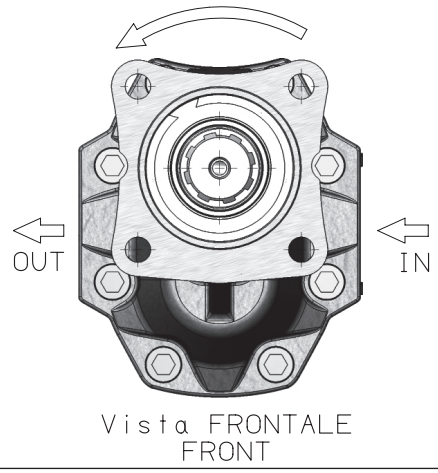
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* rpm
LTMH-90	91,45	230	250	265	1800	2700	300
LTMH-100	99,77	220	240	255			
LTMH-112	112,24	205	225	240			
LTMH-120	122,45	195	215	230	1500	2500	300

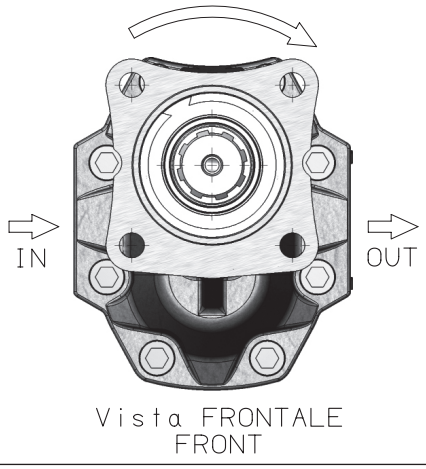
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

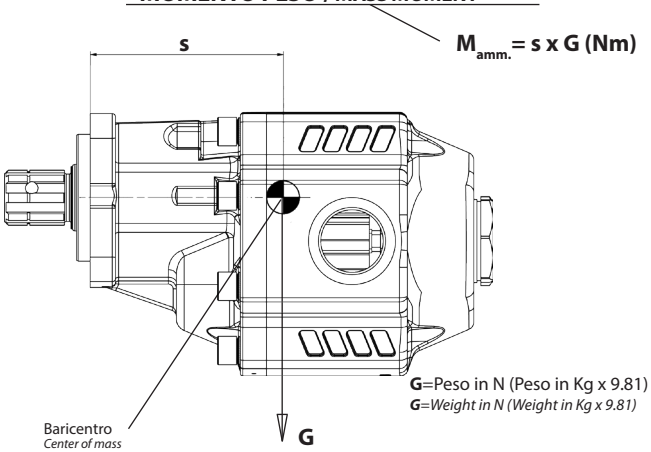
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*

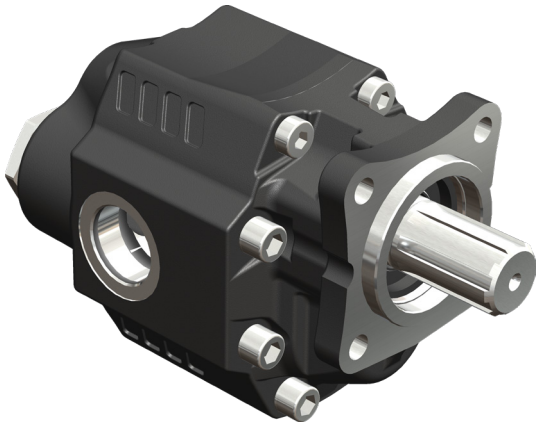


Tipo pompa - *Pump type*	S
LTMH-90	123
LTMH-100	126
LTMH-112	129
LTMH-120	132

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

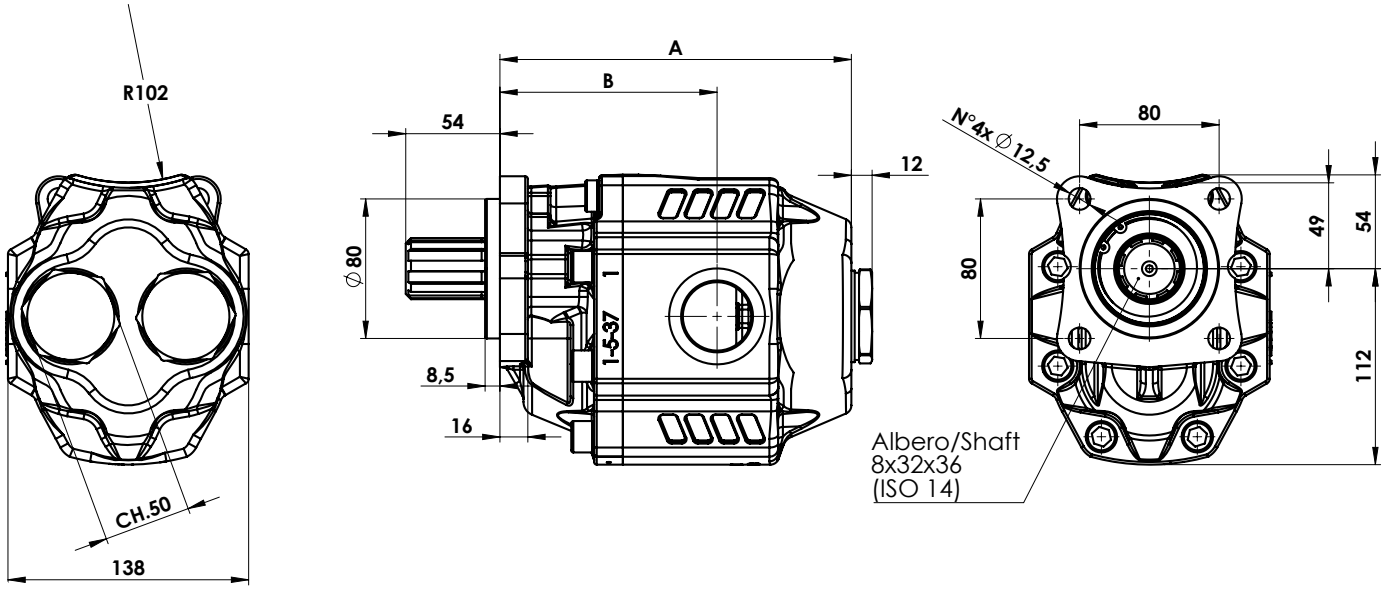
Pompe ad ingranaggi reversibili fissaggio 4 fori
4 holes reversible hydraulic gear pumps
LTMH ISO SHORT

105033



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*			Bidirezionale/*Bidirectional*		

Ingombro / *Dimensions*



Dati tecnici / *Technical data*

Tipo pompa *Pump type*	**Codice** *Code*	**IN** ISO 228	**OUT** ISO 228	**A** mm	**B** mm	**Peso** *Weight* 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

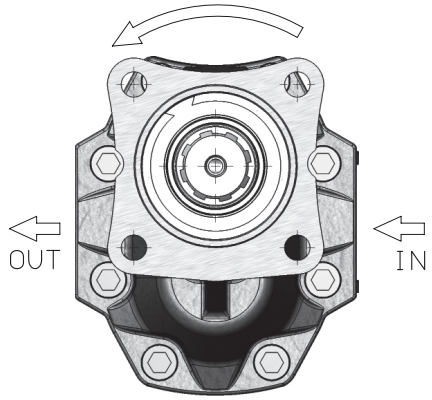
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* rpm
LTMH-90	91,45	230	250	265	1800	2700	300
LTMH-100	99,77	220	240	255			
LTMH-112	112,24	205	225	240			
LTMH-120	122,45	195	215	230	1500	2500	300

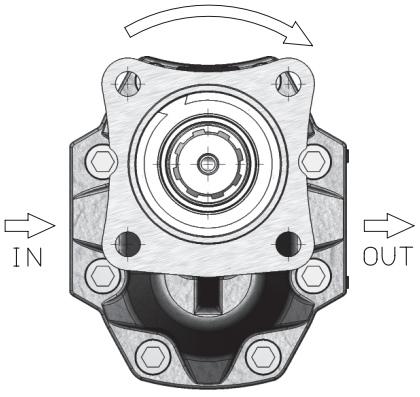
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

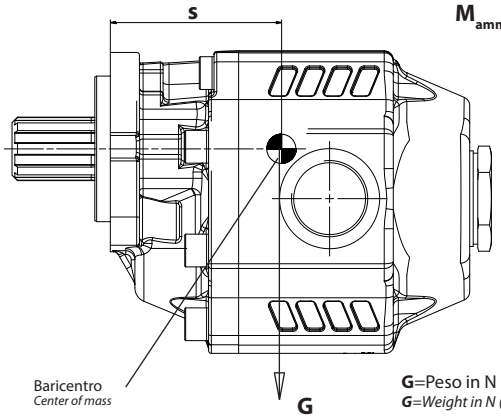
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*

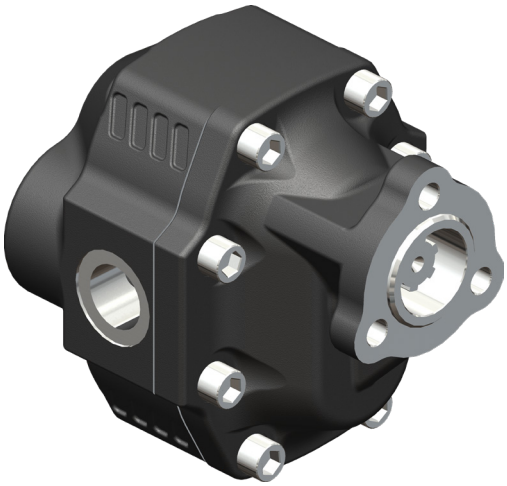


$M_{amm.} = s \times G$ (Nm)

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

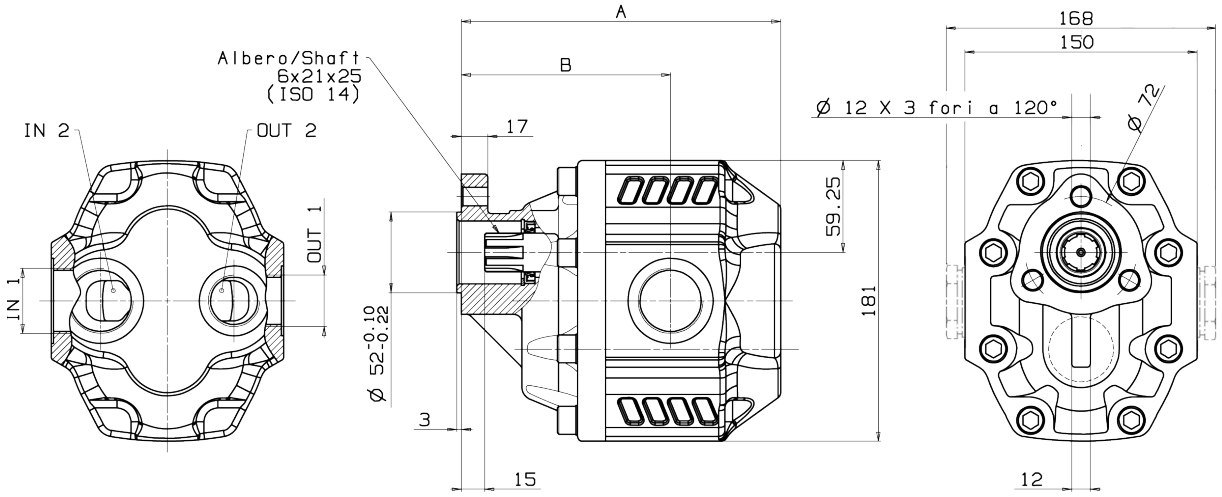
Tipo pompa - *Pump type*	S
LTMH-90	97
LTMH-100	101
LTMH-112	104
LTMH-120	107

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*



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 = mm^2/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 1 IN 2**	**OUT 1 OUT 2**	**A**	**B**	**Peso** *Weight*
	Destra / *Right*	Sinistra / *Left*	ISO 228	ISO 228	mm	mm	Kg
NPGH-63	**10501200638**	**10501200647**	G 1	G 3/4	186	121	17.5
NPGH-73	**10501200736**	**10501200745**			190	125	18.5
NPGH-84	**10501200843**	**10501200852**	G 1 1/4	G 1	194	125.5	19
NPGH-100	**10501201002**	**10501201011**			200	129	19.5
NPGH-116	**10501201164**	**10501201173**			206	135	20
NPGH-133	**10501201333**	**10501201342**	G 1 1/2		216	137	21
NPGH-150	**10501201502**	**10501201511**			221	142	21.5

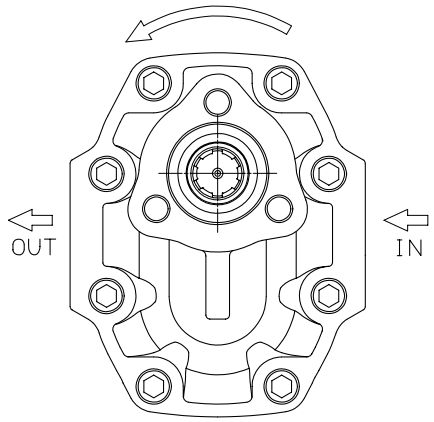
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* rpm
NPGH-63	63.70	290	315	325	1800	2700	300
NPGH-73	74.87	280	300	315			
NPGH-84	85.96	260	280	290			
NPGH-100	102.60	250	270	280			
NPGH-116	119.24	240	260	270	1500	2500	
NPGH-133	135.88	220	250	260			
NPGH-150	149.75	180	210	220			

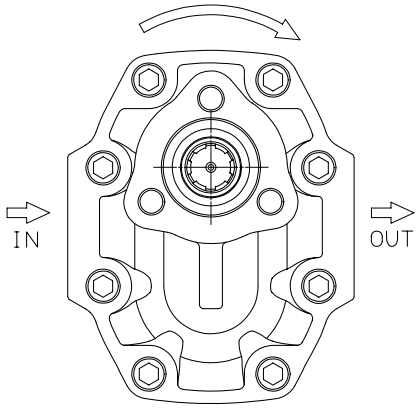
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

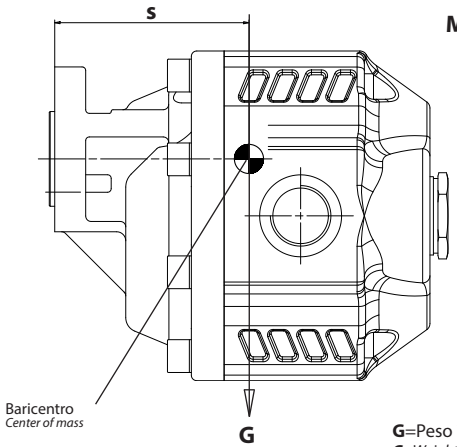
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



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)*

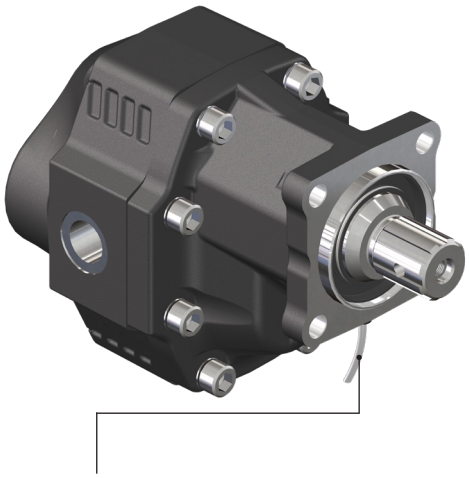
Tipo pompa - *Pump type*	S
NPGH-63	112
NPGH-73	115
NPGH-84	116
NPGH-100	120
NPGH-116	121
NPGH-133	128
NPGH-150	131

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

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

Pompe ad ingranaggi fissaggio 4 fori con drenaggio
4 holes hydraulic gear pumps with drain
NPGH ISO H-D

1050122

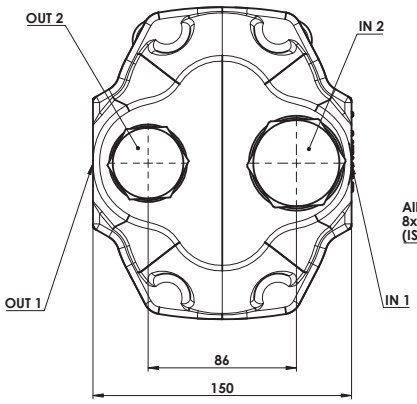


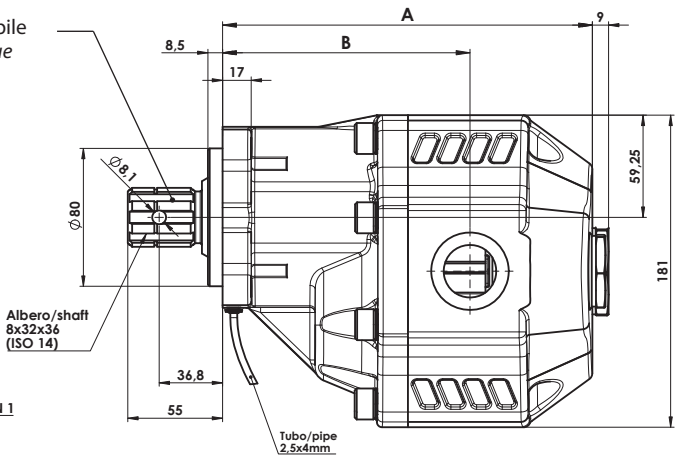
Fluido idraulico *Fluid*	Minerale o sintetico compatibile con guarnizioni: *Mineral or synthetic compatible with the following seals:* NBR, FKM, FPM, Nylon				
Viscosità cinematica consigliata *Kinematic viscosity suggested*	T media ambiente (°C) *Average ambient temp. (°C)*	< -10	-10÷10	10÷35	> 35
	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*		

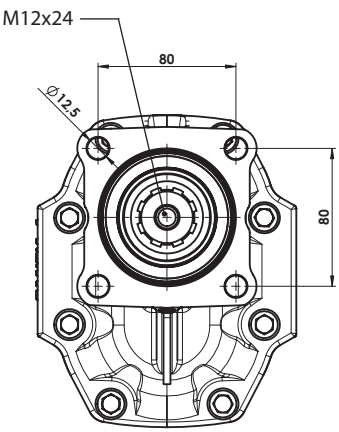
ATTENZIONE: se l'olio passa attraverso il tubo trasparente, la pompa deve essere sostituita immediatamente per evitare danni al cambio.
WARNING: *if oil leacks through the transparent tube the pump should be replaced immediatelyto avoid gearbox damage.*

Ingombro / *Dimensions*

Coppia trasmissibile
Trasmissible torque
900Nm







Dati tecnici / *Technical data*

Tipo pompa *Pump type*	**Rotazione** *Rotation*		**IN 1 IN 2** *ISO 228*	**OUT 1 OUT 2** *ISO 228*	**A** *mm*	**B** *mm*	**Peso** *Weight* *Kg*
	Destra / Right	Sinistra / Left					
NPGH-63	**10501220063**	**10501220064**	G 1	G 3/4	200.5	135.5	19
NPGH-73	**10501220073**	**10501220074**			204.5	139.5	21
NPGH-84	**10501220084**	**10501220085**	G 1 1/4	G 1	208.5	140	21.5
NPGH-100	**10501220100**	**10501220101**			214.5	143.5	22
NPGH-116	**10501220116**	**10501220117**			220.5	149.5	22.5
NPGH-133	**10501220133**	**10501220134**	G 1 1/2		230.5	151.5	23.5
NPGH-150	**10501220150**	**10501220151**			235.5	156.5	24

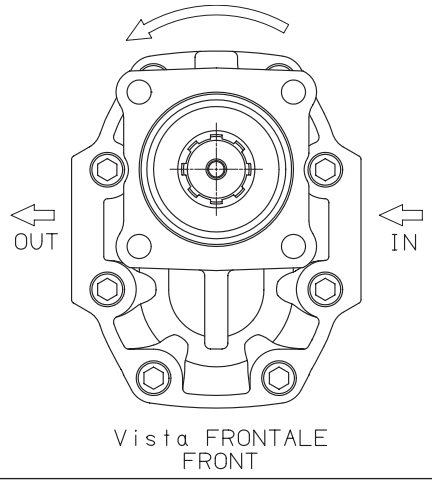
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* rpm
NPGH-63	63.70	290	315	325	1800	2700	300
NPGH-73	74.87	280	300	315			
NPGH-84	85.96	260	280	290			
NPGH-100	102.60	250	270	280			
NPGH-116	119.24	240	260	270	1500	2500	
NPGH-133	135.88	220	250	260			
NPGH-150	149.75	180	210	220			

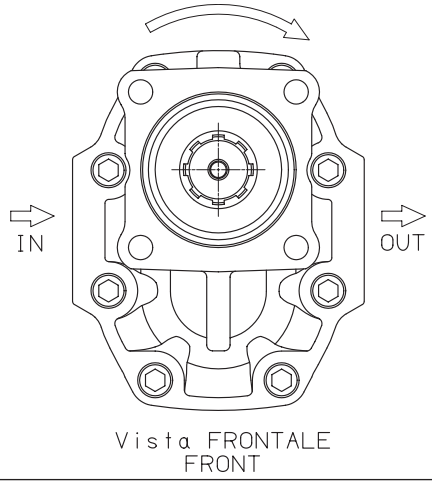
P1=Pressione max.continua — *Max. continuous pressure* (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

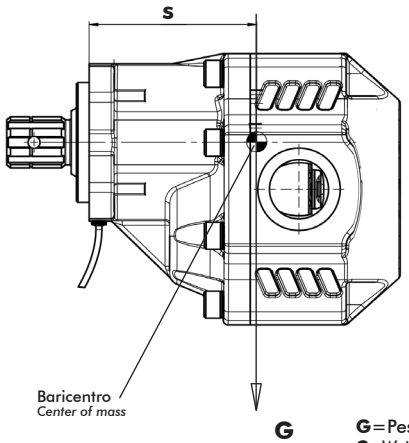
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*



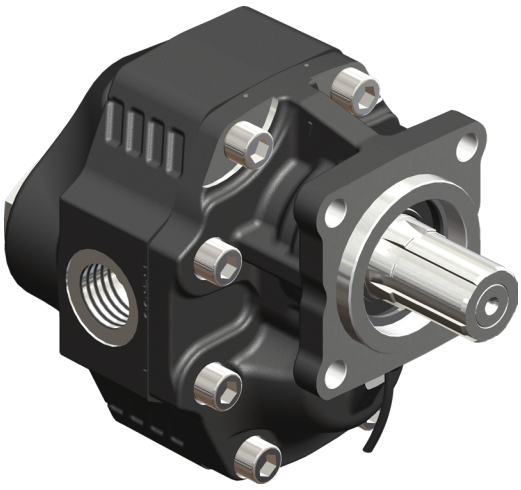
$M_{amm.} = s \times G$ (Nm)

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
NPGH-63	120
NPGH-73	123
NPGH-84	126
NPGH-100	130
NPGH-116	133
NPGH-133	137
NPGH-150	142

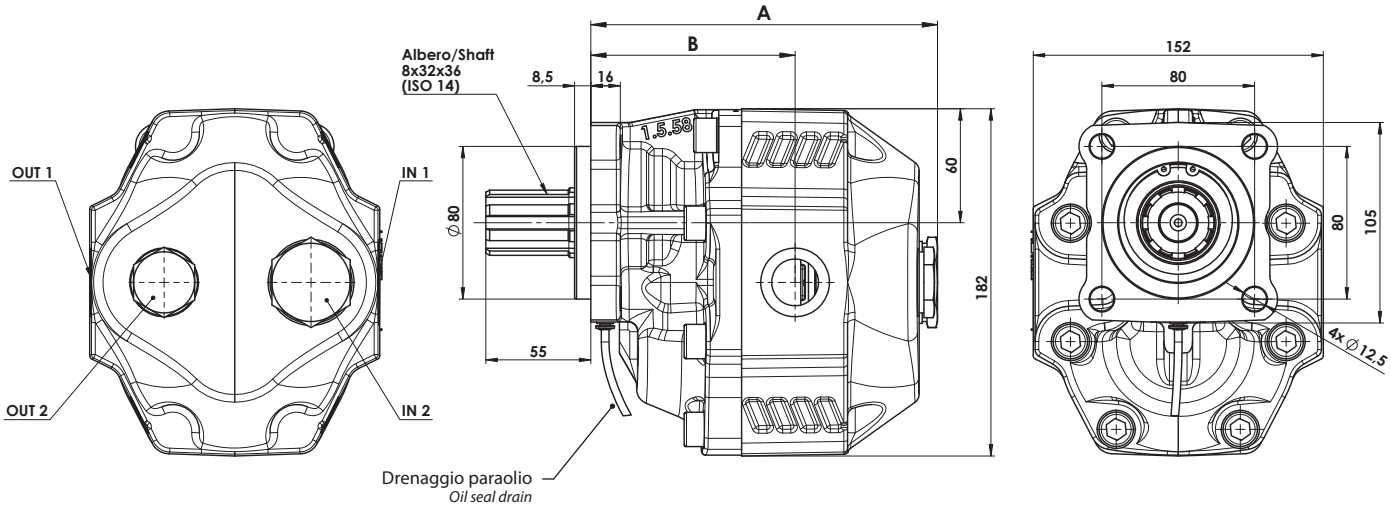
PER MODIFICARE IL SENSO DI ROTAZIONE VEDERE ISTRUZ. 99700200042
TO CHANGE THE DIRECTION OF ROTATION SEE INSTRUCTION 99700200042

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*



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 1 IN 2	OUT 1 OUT 2	A	B	Peso *Weight*
	Destra / *Right*	Sinistra / *Left*	ISO 228	ISO 228	mm	mm	Kg
NPGH-63	**10504020630**	**10504020649**	G 1	G 3/4	181,6	107	18,5
NPGH-73	**10504020729**	**10504020738**			185,6	111	20,5
NPGH-84	**10504020845**	**10504020854**	G 1 1/4	G 1	191,6	111,5	21
NPGH-100	**10504021004**	**10504021013**			195,4	115	21,5
NPGH-116	**10504021166**	**10504021175**			201,9	121	22
NPGH-133	**10504021326**	**10504021335**	G 1 1/2		213,9	123	23
NPGH-150	**10504021504**	**10504021513**			218,9	128	24

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

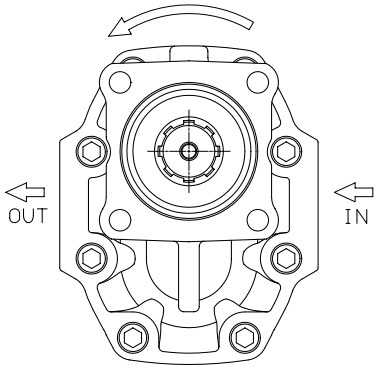
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	**Cilindrata** *Displacement* cm³/rev	**Pressione** *Pressure* P1 bar	P2 bar	P3 bar	**Velocità max. continua** *Max. continuous speed* rpm	**Velocità max. intermittente** *Max. intermittent speed* rpm	**Velocità min.** *Min. speed* rpm
NPGH-63	63.70	290	315	325	1800	2700	300
NPGH-73	74.87	280	300	315			
NPGH-84	85.96	260	280	290			
NPGH-100	102.60	250	270	280			
NPGH-116	119.24	240	260	270	1500	2500	
NPGH-133	135.88	220	250	260			
NPGH-150	149.75	180	210	220			

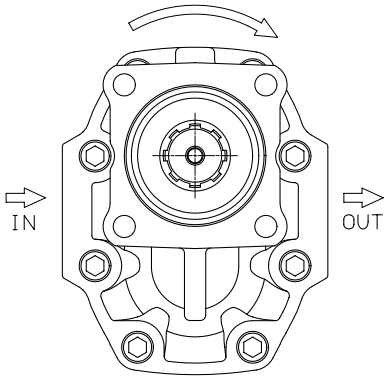
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

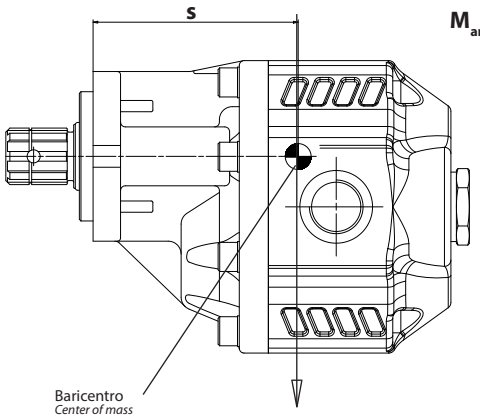
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



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)*

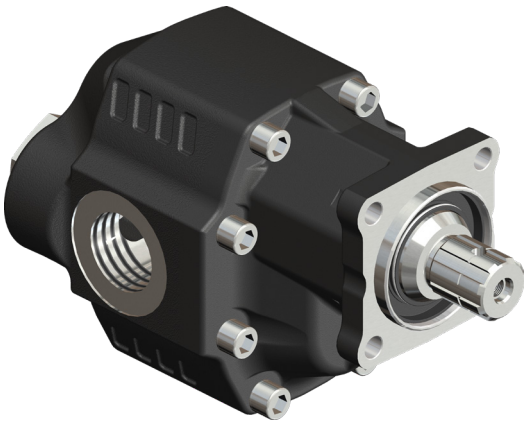
Tipo pompa - *Pump type*	**S**
NPGH-63	94
NPGH-73	98
NPGH-84	99
NPGH-100	103
NPGH-116	106
NPGH-133	112
NPGH-150	114

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

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

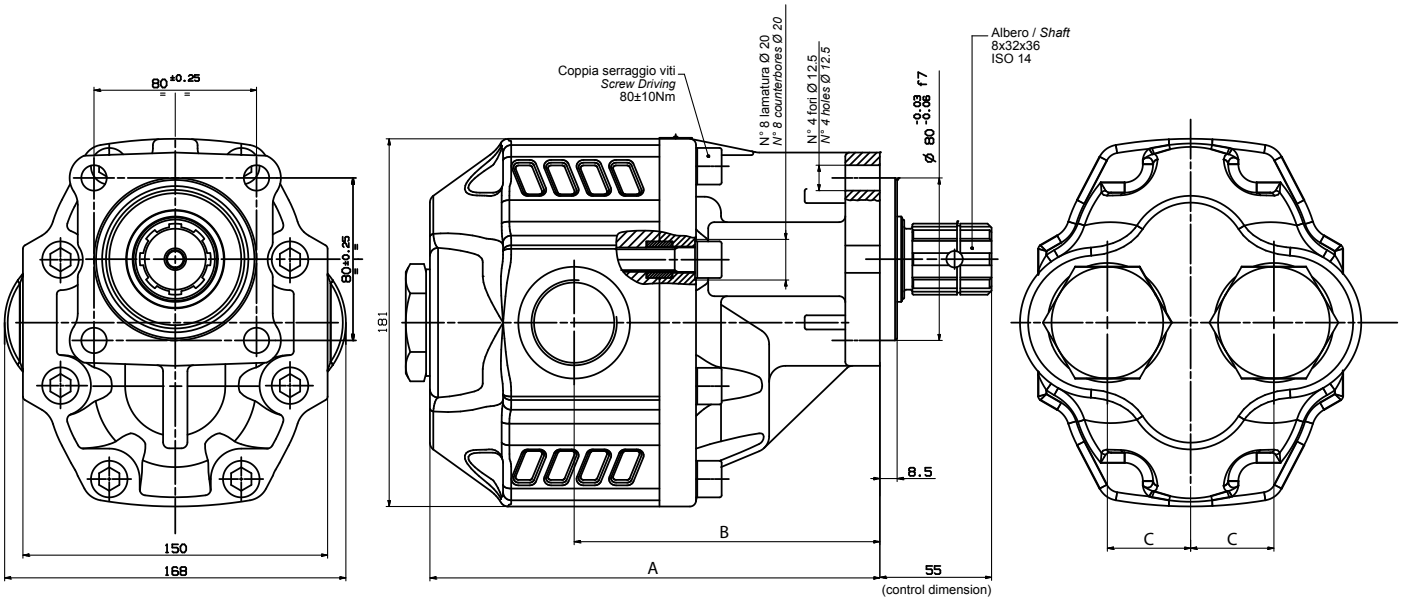
Pompe ad ingranaggi reversibili fissaggio 4 fori
4 holes reversible hydraulic gear pumps
LTGH HD ISO

105071



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*			Bidirezionale/*Bidirectional*		

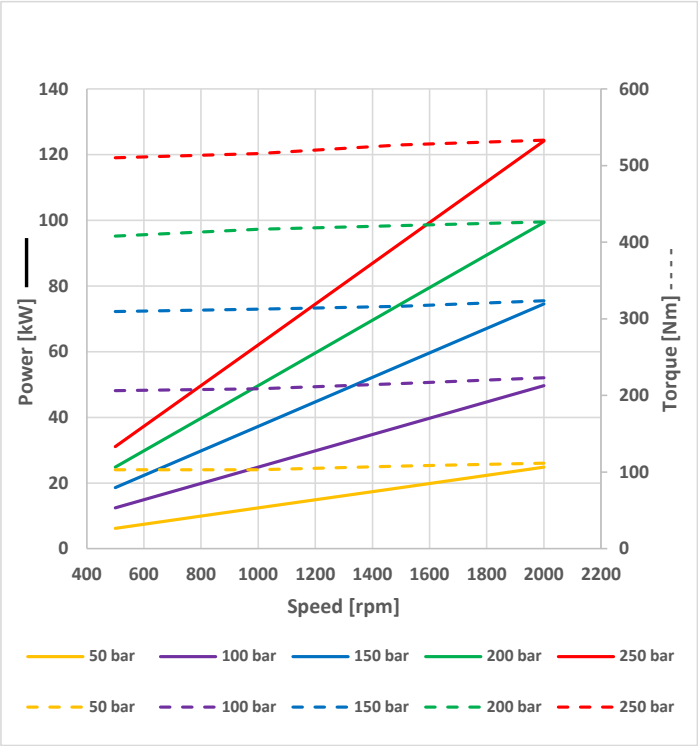
Ingombro / *Dimensions*



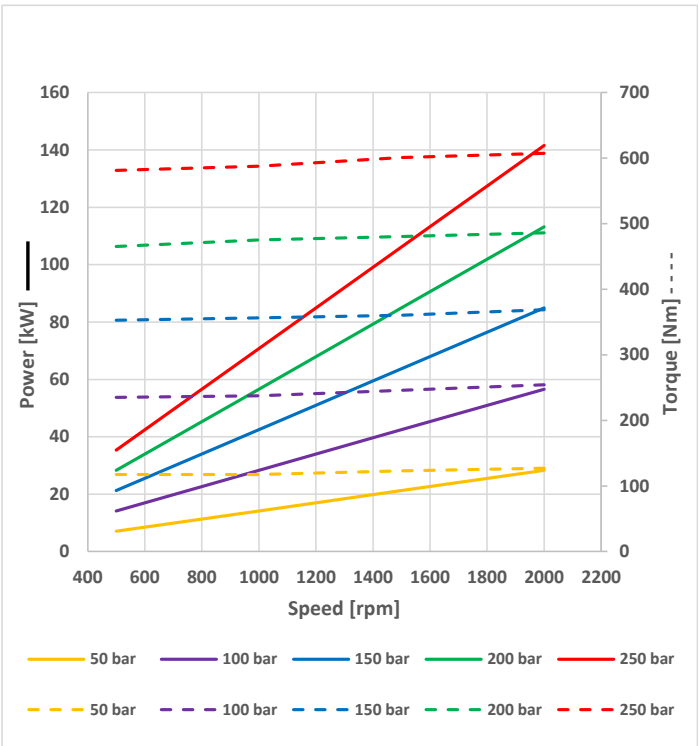
Dati tecnici / *Technical data*

Tipo pompa *Pump type*	**Codice** *Code*	**IN 1 IN 2** ISO 228	**OUT 1 OUT 2** ISO 228	**A** mm	**B** mm	**C** mm	**Peso** *Weight* Kg
LTGH-116	**10507111161**	G 1 1/4	G 1 1/4	224,5	145,5	39	22,5
LTGH-133	**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



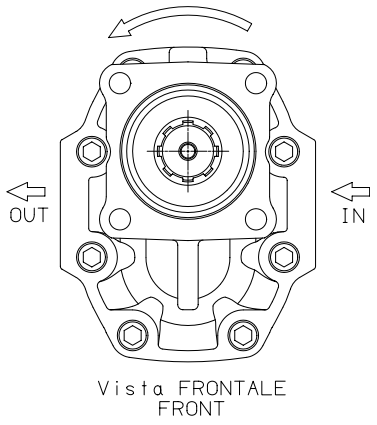
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa Pump type	**Cilindrata** Displacement *cm³/rev*	**Pressione** Pressure P1 *bar*	P2 *bar*	P3 *bar*	**Velocità max. continua** Max. continuous speed *rpm*	**Velocità max. intermittente** Max. intermittent speed *rpm*	**Velocità max. senza carico** Max. without load speed *rpm*	**Velocità min.** Min. speed *rpm*
LTGH-116	119.24	240	260	270	1900	2500	4000	300
LTGH-133	135.88	220	250	260				

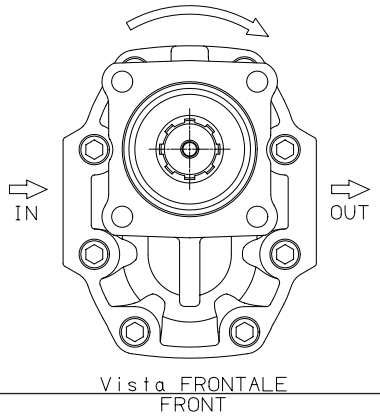
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

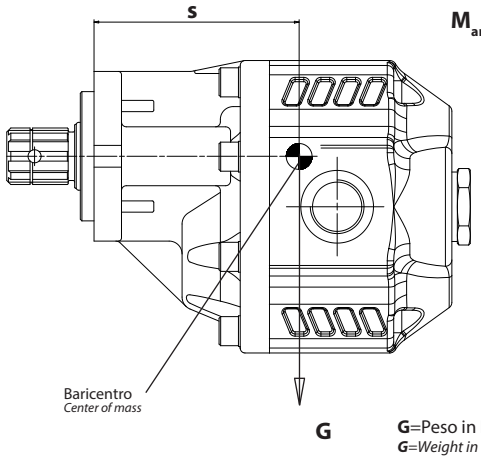
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*

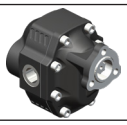
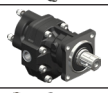
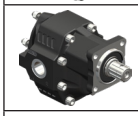


$M_{amm.} = s \times G$ (Nm)

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**
LTGH-116	129
LTGH-133	133

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

2ª POMPA 2nd PUMP						
1ª POMPA/INTERMEDIA *FIRST/INTERMEDIATE PUMP*	**1P** 149200	**2Pø52** 149200	**NPLH UNI** 105004	**NPH UNI** 105011	**NPGH UNI** 105012	**DARK UNI** 108005
 NPLH UNI TANDEM 10500420XXX	**X**					
 NPH UNI TANDEM 10502300XXX	**A**	**B**	**C**	**D**		
 NPH ISO TANDEM 10502310XXX	**A**	**B**	**C**	**D**		
 NPGH UNI TANDEM 10502200XXX	**A**	**B**	**C**	**D**	**D**	**D**
 NPGH ISO TANDEM 10502210XXX	**A**	**B**	**C**	**D**	**D**	**D**
 NPGH ISO SHORT TANDEM 10507000XXX	**A**	**B**	**C**	**D**	**D**	**D**

CODICE APPLICAZIONE PER 2ª 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

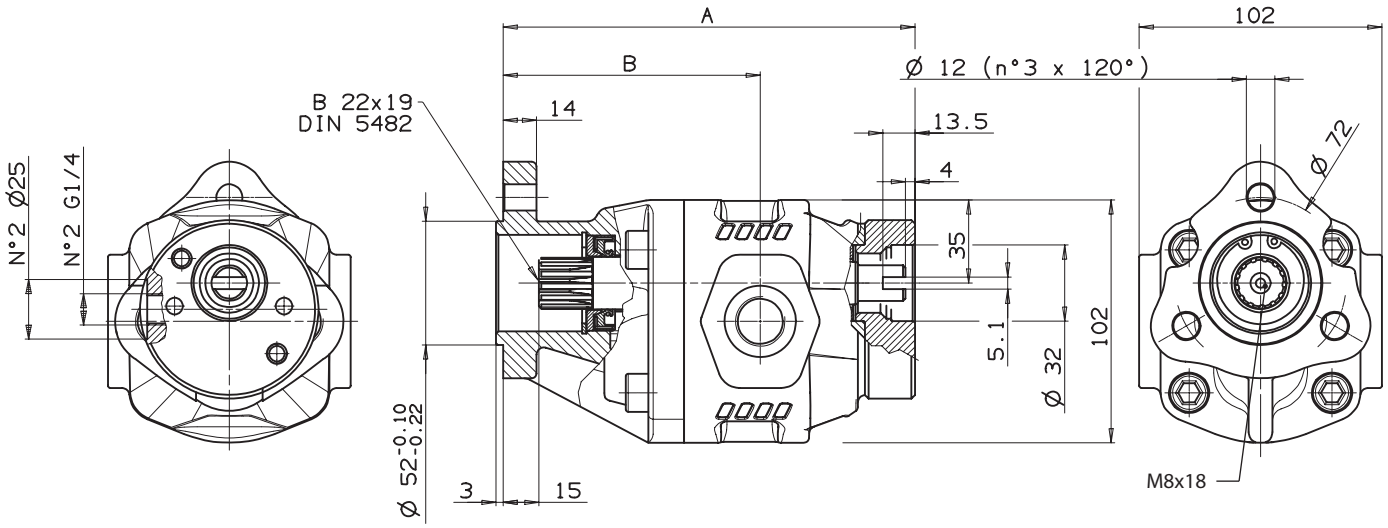
Pompe ad ingranaggi fissaggio 3 fori 13 DIN 1° pompa
3 holes 13 DIN reversible gear pumps
TANDEM NPLH 13 DIN

105004



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*			Bidirezionale/*Bidirectional*		

Ingombro / *Dimensions*



Dati tecnici / *Technical data*

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

PREDISPOSTA PER 2ª POMPA GRUPPO 1 CON CODOLO FRESATO
READY FOR 2ND PUMP - GROUP 1 WITH MILLED SHANK

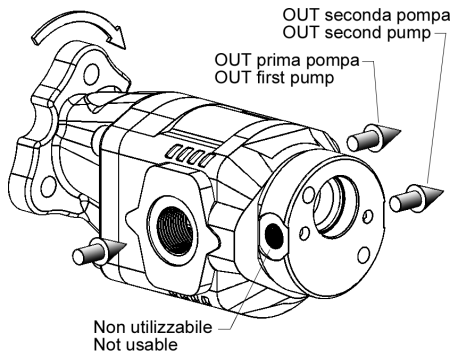
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* rpm
NPLH-6	6,288	280	310	325	2200	3000	300
NPLH-10	10,062						
NPLH-16	16.035						
NPLH-20	20.123	260	280	290			
NPLH-25	25.154	220	250	260			
NPLH-32	32.042	190	210	220	2000	2800	

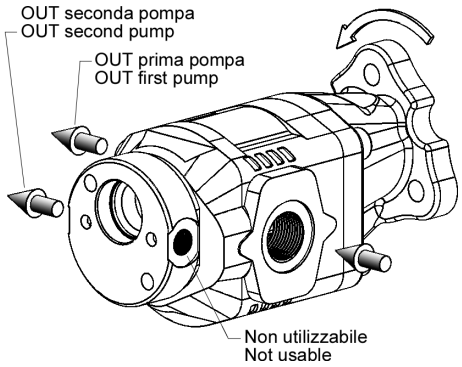
P1=Pressione max.continua — *Max. continuous pressure* (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

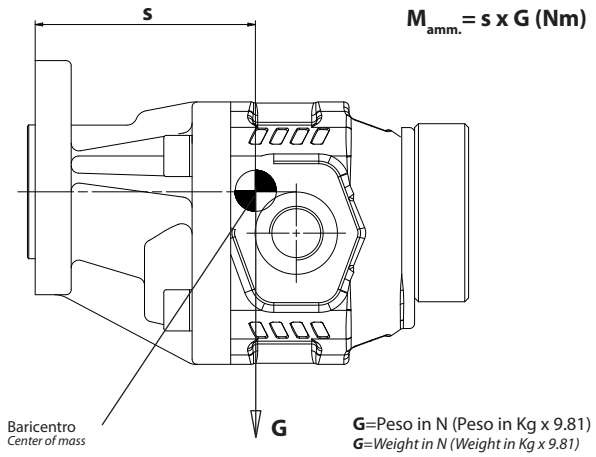
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



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-6	85
NPLH-10	89
NPLH-16	94
NPLH-20	98
NPLH-25	103
NPLH-32	109

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

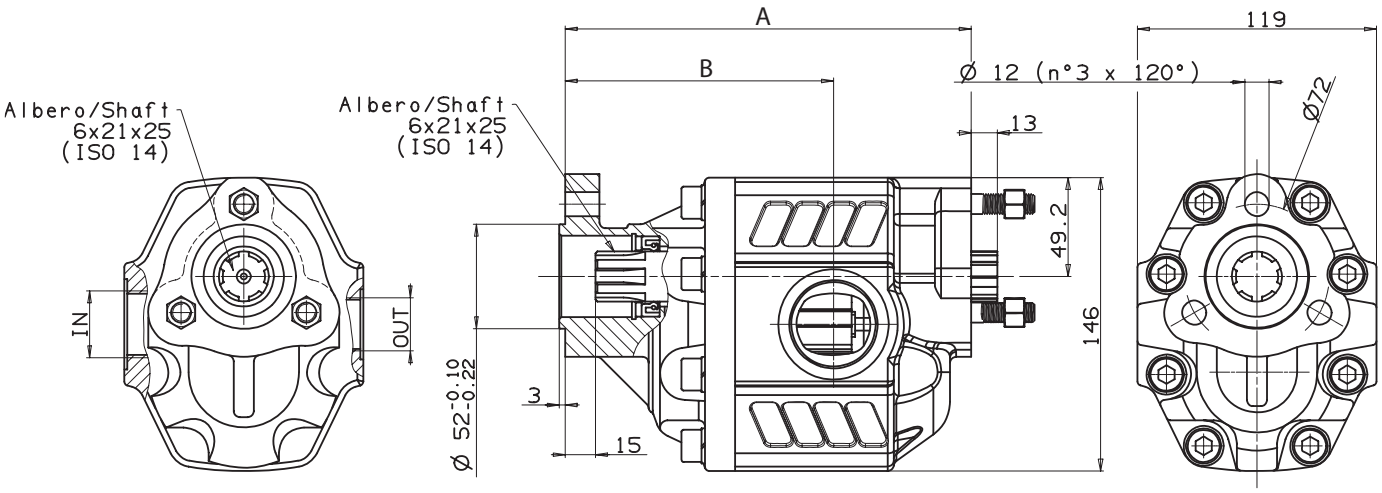
Pompe ad ingranaggi 3 fori UNI 1° pompa
3 holes UNI hydraulic gear pumps
TANDEM NPH UNI

105023



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 = mm^2/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
NPH-17	**10502300171**	**10502300180**	G 1/2		164	103	9.6
NPH-22	**10502300224**	**10502300233**			167.5	105.5	9.8
NPH-27	**10502300279**	**10502300288**			170	108	10.1
NPH-34	**10502300340**	**10502300359**	G 3/4		175	108	10.5
NPH-43	**10502300439**	**10502300448**			181	114	11.02
NPH-51	**10502300519**	**10502300528**			186	114.5	11.3
NPH-61	**10502300617**	**10502300626**	G 1		192	120.5	11.8
NPH-73	**10502300733**	**10502300742**			200	119.5	12.4
NPH-82	**10502300822**	**10502300831**	G 1 1/4		205	126.5	12.6

PREDISPOSTA PER 2A POMPA CON FLANGIA UNI
READY FOR 2ND PUMP WITH UNI FLANGE

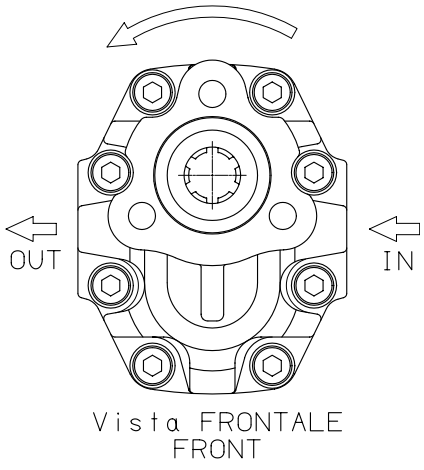
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	**Cilindrata** *Displacement* cm³/rev	**Pressione** *Pressure* P1 bar	P2 bar	P3 bar	**Velocità max. continua** *Max. continuous speed* rpm	**Velocità max. intermittente** *Max. intermittent speed* rpm	**Velocità min.** *Min. speed* rpm
NPH-17	17.04	290	315	325	2500	3000	300
NPH-22	22.15						
NPH-27	26.18						
NPH-34	33.88	280	300	310	2200	2800	
NPH-43	43.12	270	290	300	2000	2500	
NPH-51	50.82	240	260	280			
NPH-61	60.06	220	240	250	1800	2000	
NPH-73	72.88	200	220	230	1600	1800	
NPH-82	81.08	190	210	220	1500		

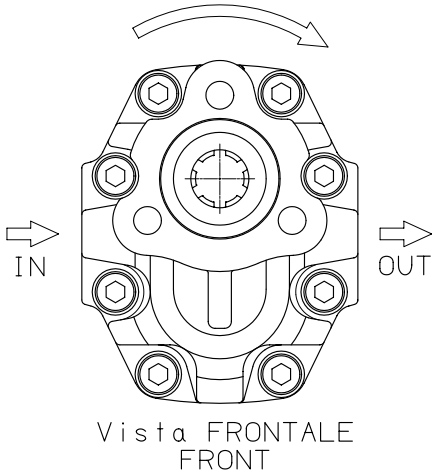
P1=Pressione max.continua — *Max. continuous pressure* (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

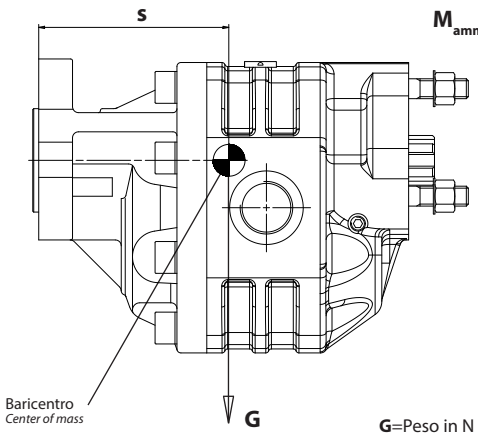
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*



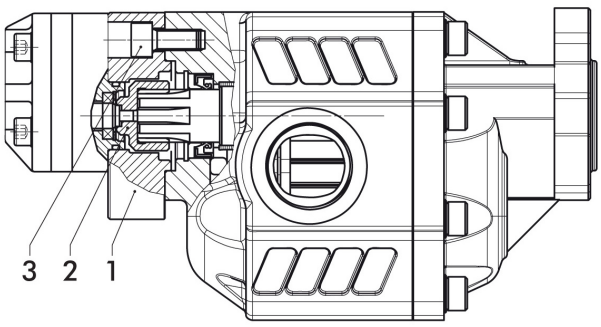
$M_{amm.} = s \times G$ (Nm)

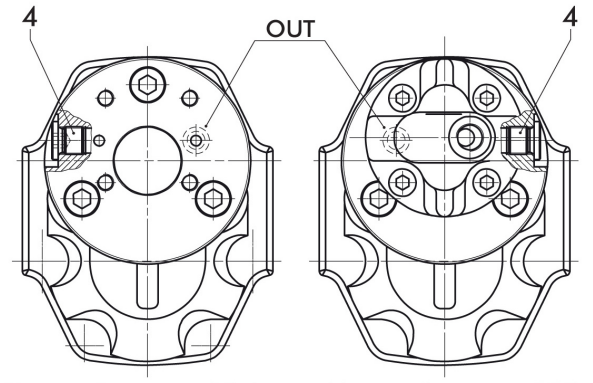
G=Peso in N (Peso in Kg x 9.81)
***G**=Weight in N (Weight in Kg x 9.81)*

Tipo pompa - *Pump type*	**s**
NPH-17	95
NPH-22	97
NPH-27	99
NPH-34	101
NPH-43	104
NPH-51	107
NPH-61	111
NPH-73	115
NPH-82	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:

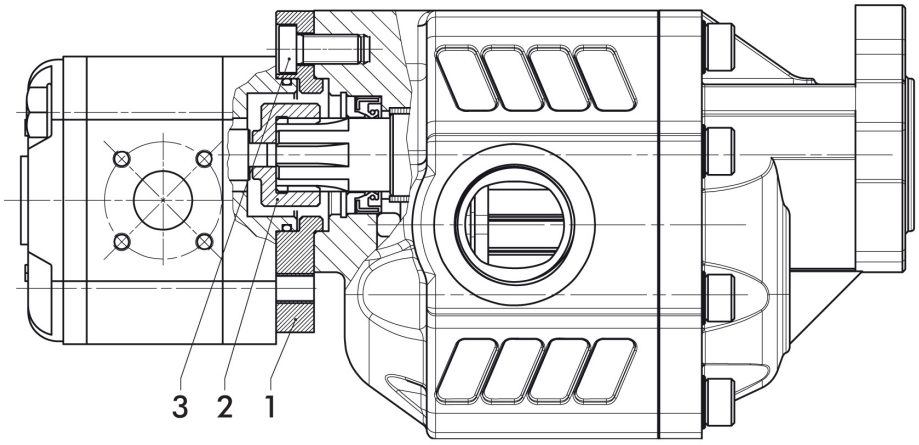
Coppia max.
Max. torque 21,5 Nm

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:

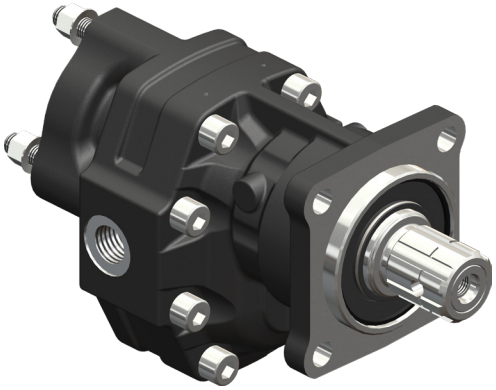
Coppia max.
Max. torque 70 Nm

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

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

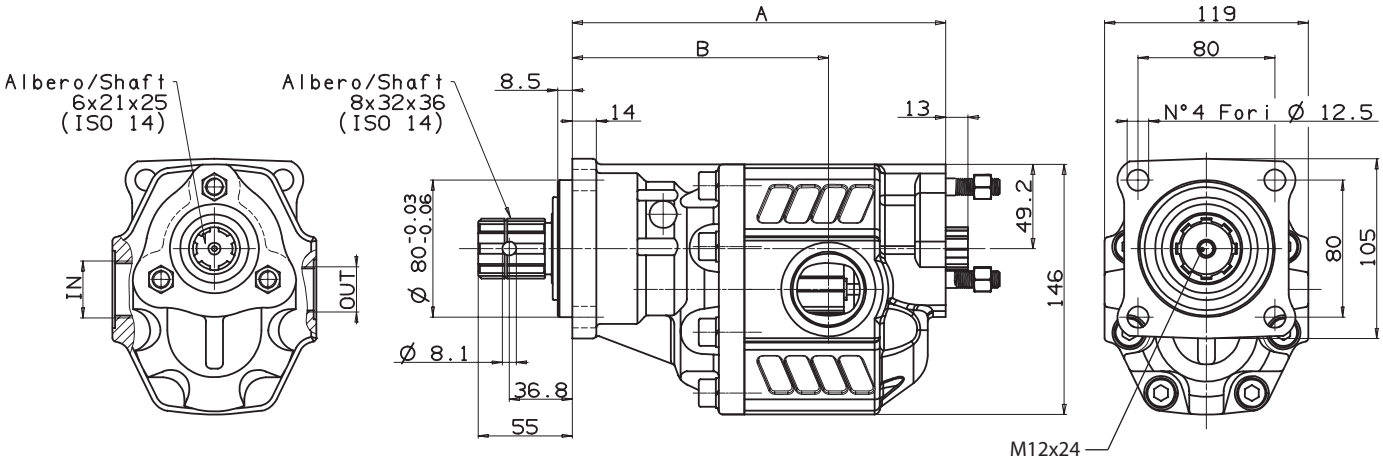
Pompe ad ingranaggi 4 fori ISO 1° pompa
4 holes ISO hydraulic gear pumps
TANDEM NPH ISO

105023



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
NPH-17	**10502310179**	**10502310188**	G 1/2		180	119	10.6
NPH-22	**10502310222**	**10502310231**			183.5	121.5	11
NPH-27	**10502310277**	**10502310286**			186	124	11.5
NPH-34	**10502310348**	**10502310357**	G 3/4		191	124	12.5
NPH-43	**10502310437**	**10502310446**			197	130	13
NPH-51	**10502310517**	**10502310526**			202	130.5	13.5
NPH-61	**10502310615**	**10502310624**	G 1		208	136.5	14
NPH-73	**10502310731**	**10502310740**			216	135.5	14.5
NPH-82	**10502310820**	**10502310839**	G 1 1/4		221	142.5	14.9

PREDISPOSTA PER 2ª POMPA CON FLANGIA UNI
READY FOR 2ND PUMP WITH UNI FLANGE

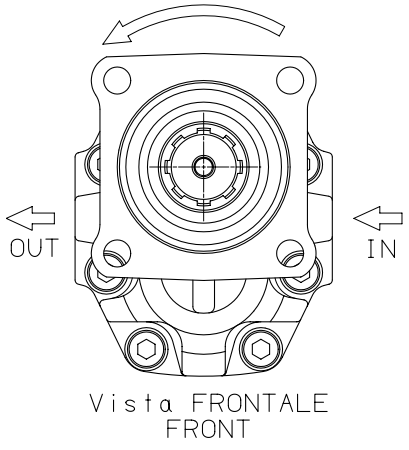
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* rpm
NPH-17	17.04	290	315	325	2500	3000	300
NPH-22	22.15						
NPH-27	26.18						
NPH-34	33.88	280	300	310	2200	2800	
NPH-43	43.12	270	290	300	2000	2500	
NPH-51	50.82	240	260	280			
NPH-61	60.06	220	240	250	1800	2000	
NPH-73	72.88	200	220	230	1600	1800	
NPH-82	81.08	190	210	220	1500		

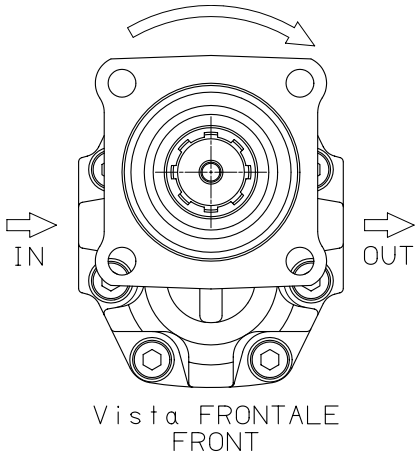
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

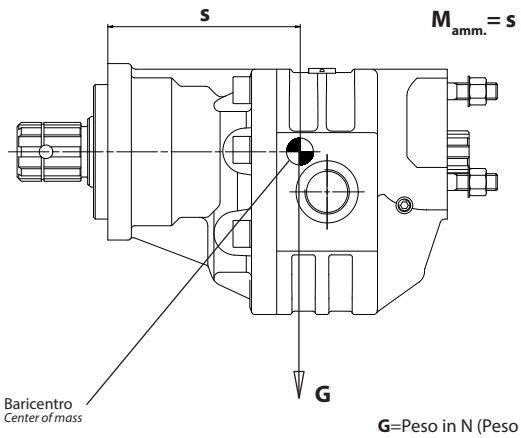
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*



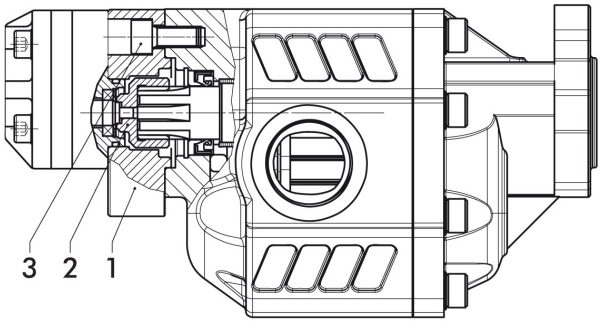
$M_{amm.} = s \times G$ (Nm)

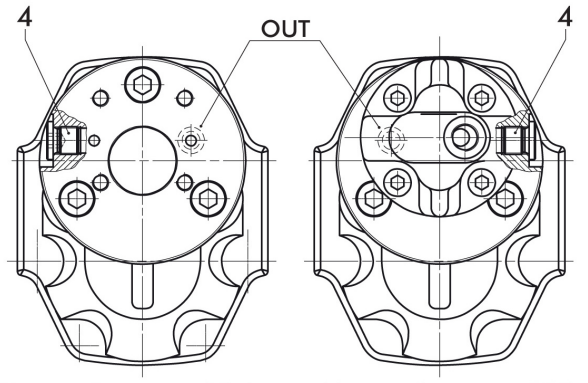
G=Peso in N (Peso in Kg x 9.81)
G=*Weight in N (Weight in Kg x 9.81)*

Tipo pompa - *Pump type*	s
NPH-17	92
NPH-22	94
NPH-27	98
NPH-34	100
NPH-43	103
NPH-51	105
NPH-61	108
NPH-73	112
NPH-82	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:

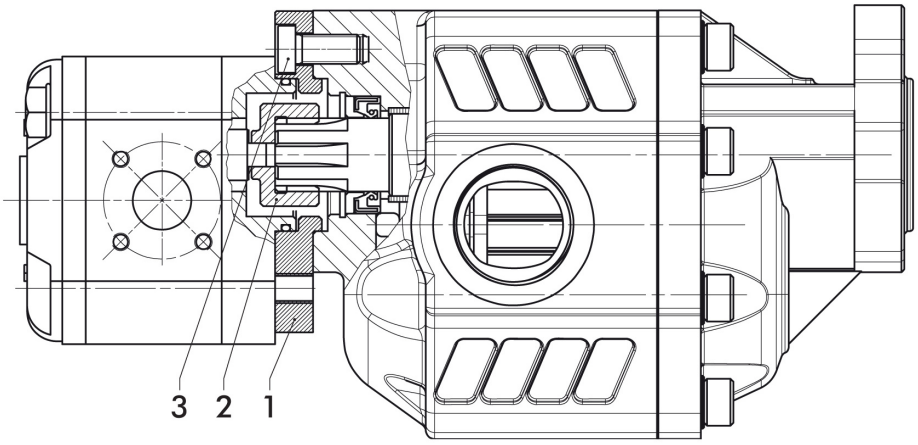
Coppia max.
Max. torque 21,5 Nm

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

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

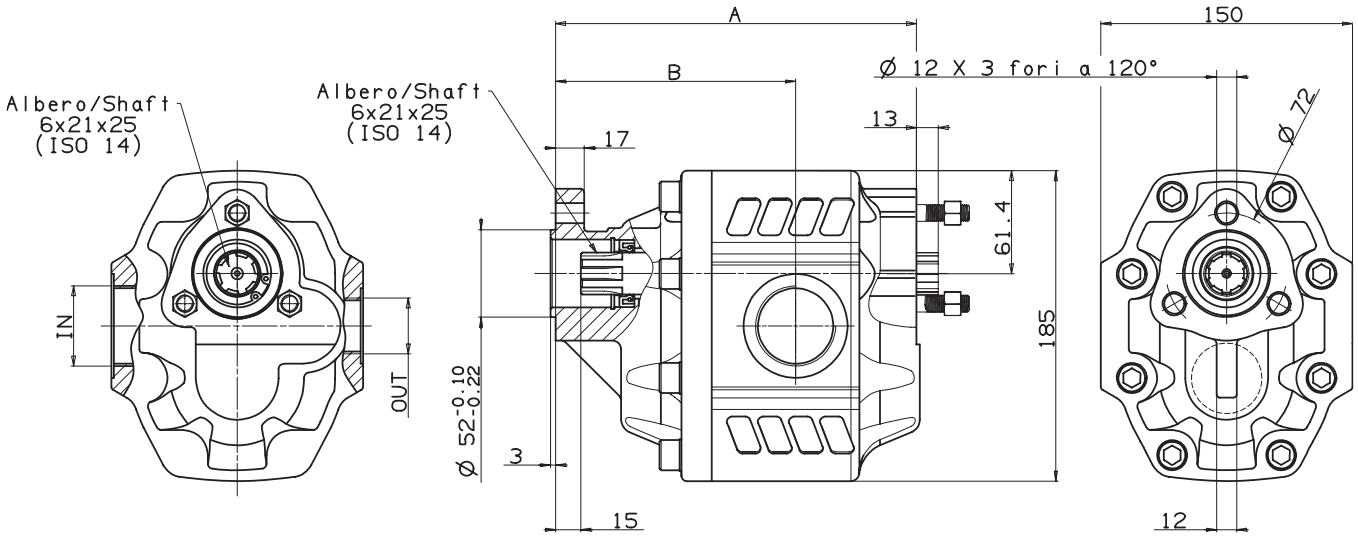
Pompe ad ingranaggi 3 fori UNI 1° pompa
3 holes UNI hydraulic gear pumps
TANDEM NPGH UNI

105022



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 = mm^2/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
NPGH-63	**10502200636**	**10502200645**	G 1	G 3/4	184	121	17
NPGH-73	**10502200734**	**10502200743**			188	125	18
NPGH-84	**10502200841**	**10502200850**	G 1 1/4	G 1	192	125.5	18.5
NPGH-100	**10502201000**	**10502201019**			198	129	19
NPGH-116	**10502201162**	**10502201171**			204	135	19.5
NPGH-133	**10502201331**	**10502201340**	G 1 1/2		210	138	20.5
NPGH-150	**10502201500**	**10502201519**			215	143	21

PREDISPOSTA PER 2A POMPA CON FLANGIA UNI
READY FOR 2ND PUMP WITH UNI FLANGE

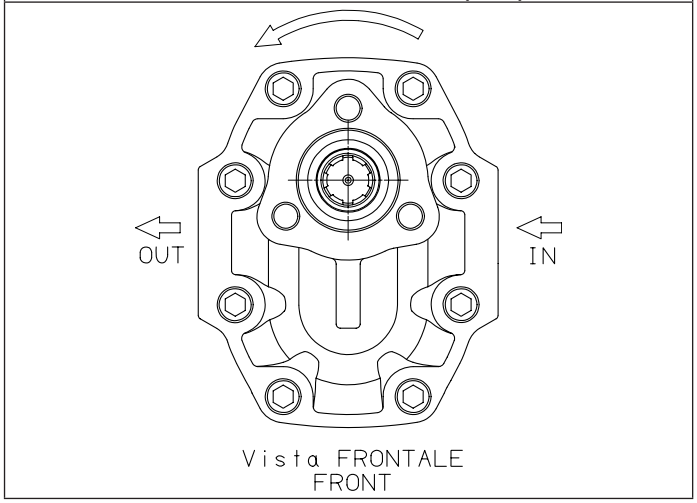
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* rpm
NPGH-63	63.70	290	315	325	1800	2700	300
NPGH-73	74.87	280	300	315			
NPGH-84	85.96	260	280	290			
NPGH-100	102.60	250	270	280			
NPGH-116	119.24	240	260	270	1500	2500	
NPGH-133	135.88	220	250	260			
NPGH-150	149.75	180	210	220			

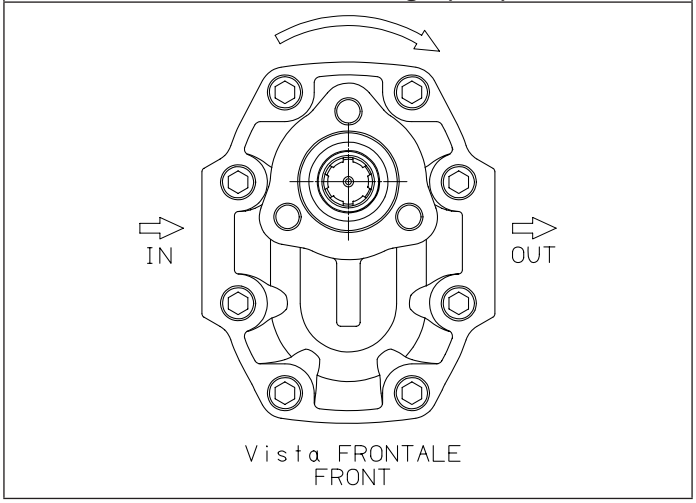
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

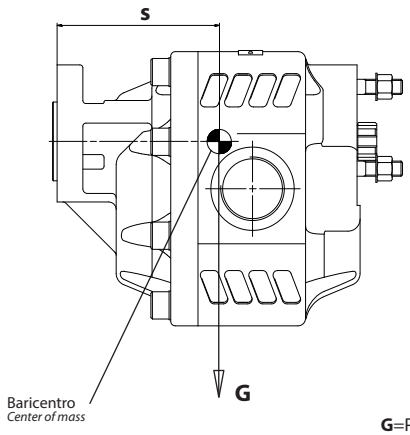
Rotazione antioraria, pompa sinistra
Anti-clockwise rotation, left pump



Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*

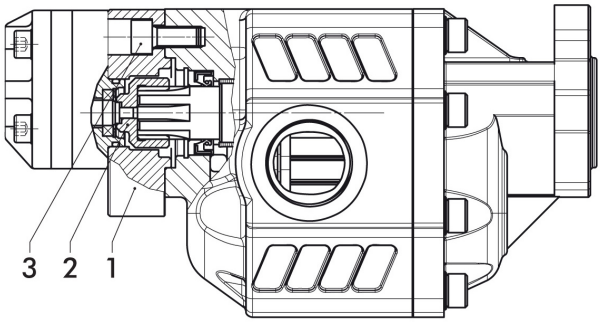


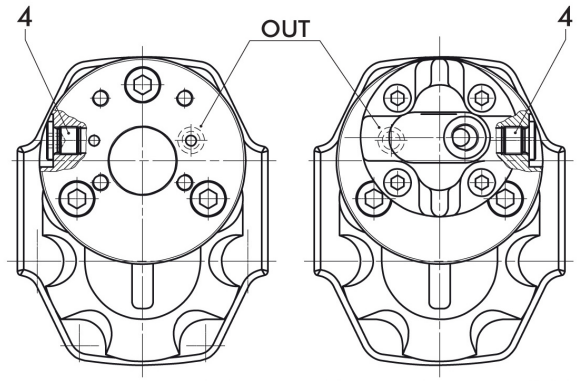
$M_{amm.} = s \times G$ (Nm)

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
NPGH-63	111
NPGH-73	113
NPGH-84	115
NPGH-100	118
NPGH-116	122
NPGH-133	124
NPGH-150	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:

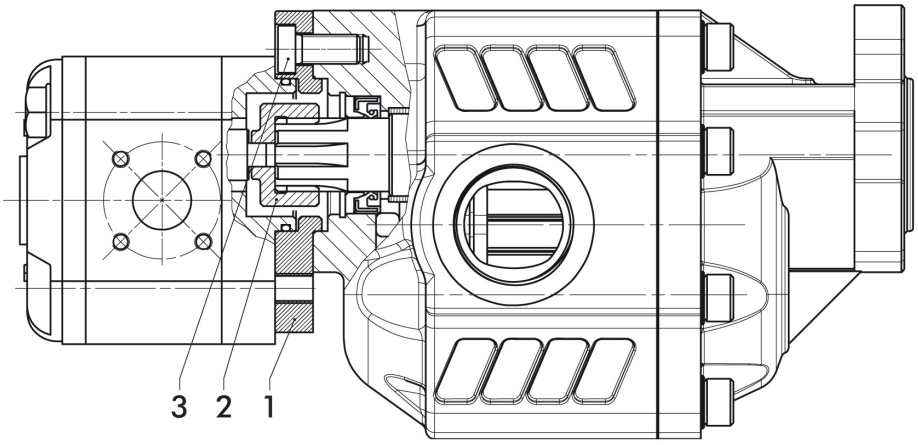
Coppia max.
Max. torque 21,5 Nm

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:

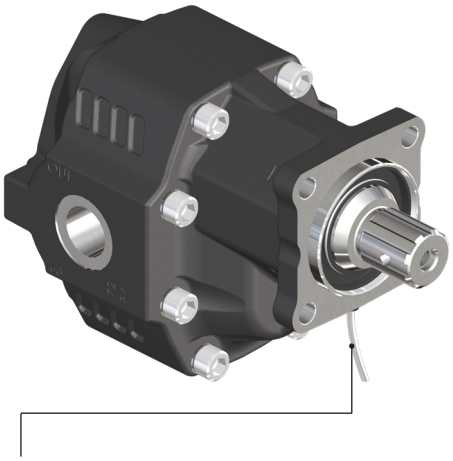
Coppia max.
Max. torque 70 Nm

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

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

Pompe ad ingranaggi fissaggio 4 fori con drenaggio
4 holes hydraulic gear pumps with drain
NPGH ISO H-D - TANDEM

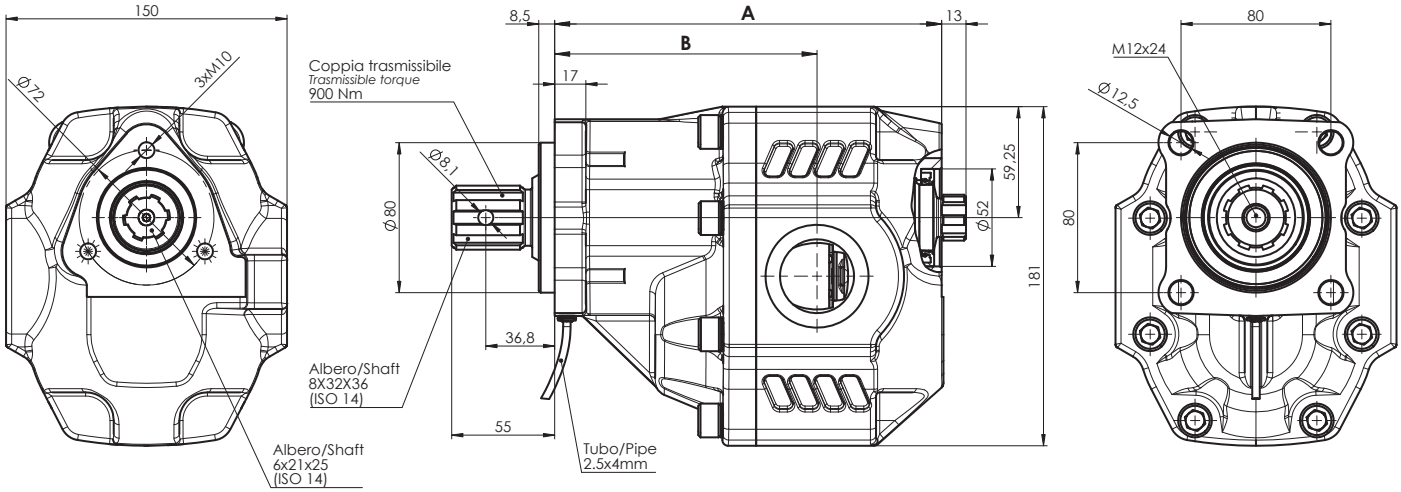
1050222



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*				

ATTENZIONE: se l'olio passa attraverso il tubo trasparente, la pompa deve essere sostituita immediatamente per evitare danni al cambio.
WARNING: *if oil leacks through the transparent tube the pump should be replaced immediatelyto avoid gearbox damage.*

Ingombro / *Dimensions*



Dati tecnici / *Technical data*

Tipo pompa *Pump type*	**Rotazione** *Rotation*		**IN 1 IN 2** *ISO 228*	**OUT 1 OUT 2** *ISO 228*	**A** *mm*	**B** *mm*	**Peso** *Weight* *Kg*
	Destra / *Right*	Sinistra / *Left*					
NPGH-63	**10502220632**	**10502220641**	G 1	G 3/4	206.5	140	18
NPGH-73	**10502220730**	**10502220749**			210.5	144	20
NPGH-84	**10502220847**	**10502220856**	G 1 1/4	G 1	214.5	145	20.5
NPGH-100	**10502221006**	**10502221015**			220.5	148	21
NPGH-116	**10502221168**	**10502221177**			226.5	154	21.5
NPGH-133	**10502221337**	**10502221346**	G 1 1/2		236.5	156	22.5
NPGH-150	**10502221506**	**10502221515**			241.5	161	23

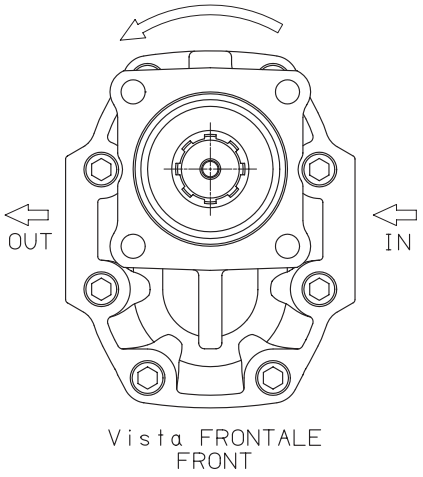
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P2 bar	P3 bar	Velocità max. continua *Max. continuous speed* rpm	Velocità max. intermittente *Max. intermittent speed* rpm	Velocità min. *Min. speed* rpm
NPGH-63	63.70	290	315	325	1800	2700	300
NPGH-73	74.87	280	300	315			
NPGH-84	85.96	260	280	290			
NPGH-100	102.60	250	270	280			
NPGH-116	119.24	240	260	270	1500	2500	
NPGH-133	135.88	220	250	260			
NPGH-150	149.75	180	210	220			

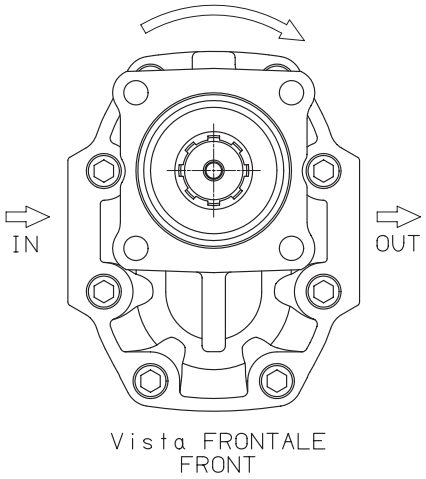
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

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

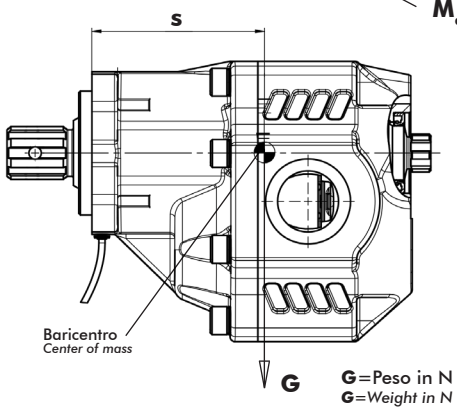


Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*

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

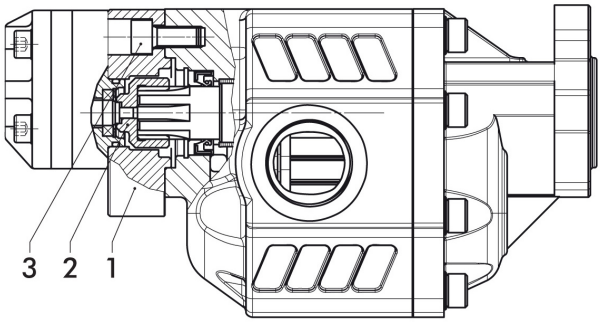


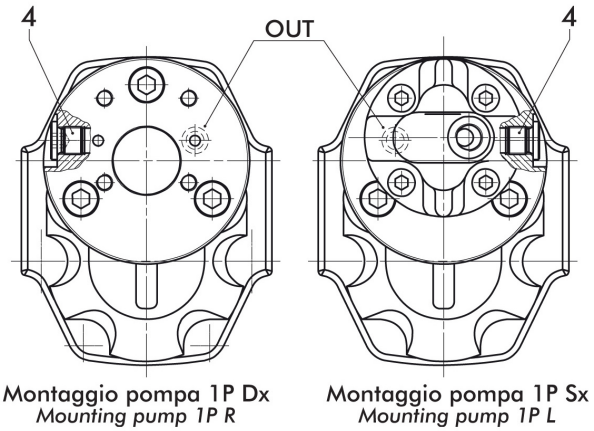
G=Peso in N (Peso in Kg x 9.81)
G=*Weight in N (Weight in Kg x 9.81)*

Tipo pompa - *Pump type*	S
NPGH-63	120
NPGH-73	123
NPGH-84	126
NPGH-100	130
NPGH-116	133
NPGH-133	137
NPGH-150	142

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

Pompe 1P
1P pumps





Kit montaggio codice: 10502000101
Mounting kit:

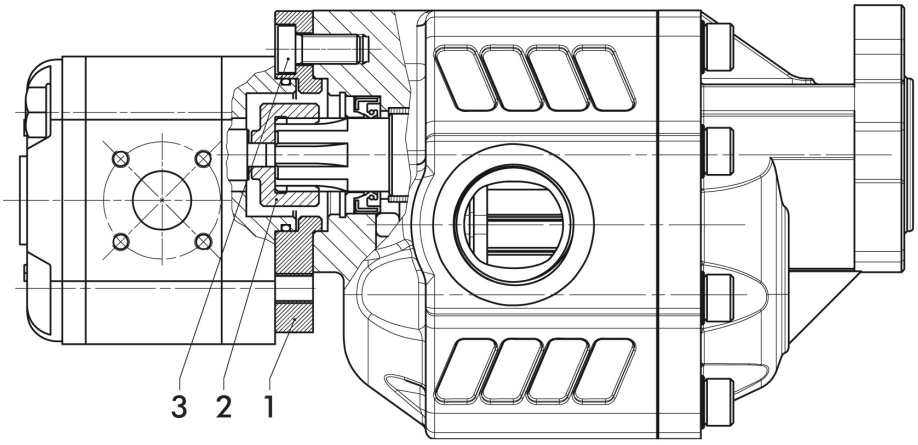
Coppia max.
Max. torque 21,5 Nm

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:

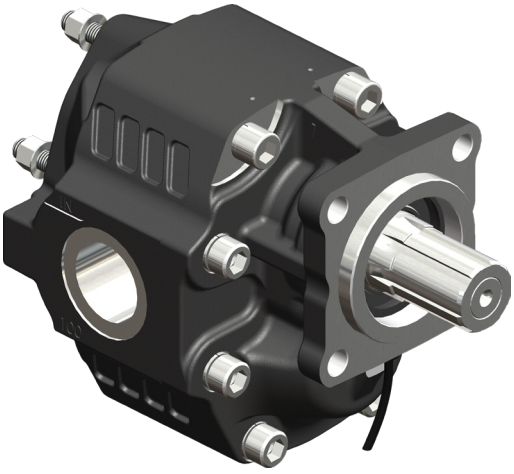
Coppia max.
Max. torque 70 Nm

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

Link:
Ricambi/*SpareParts*
Istruzione/*Instruction*

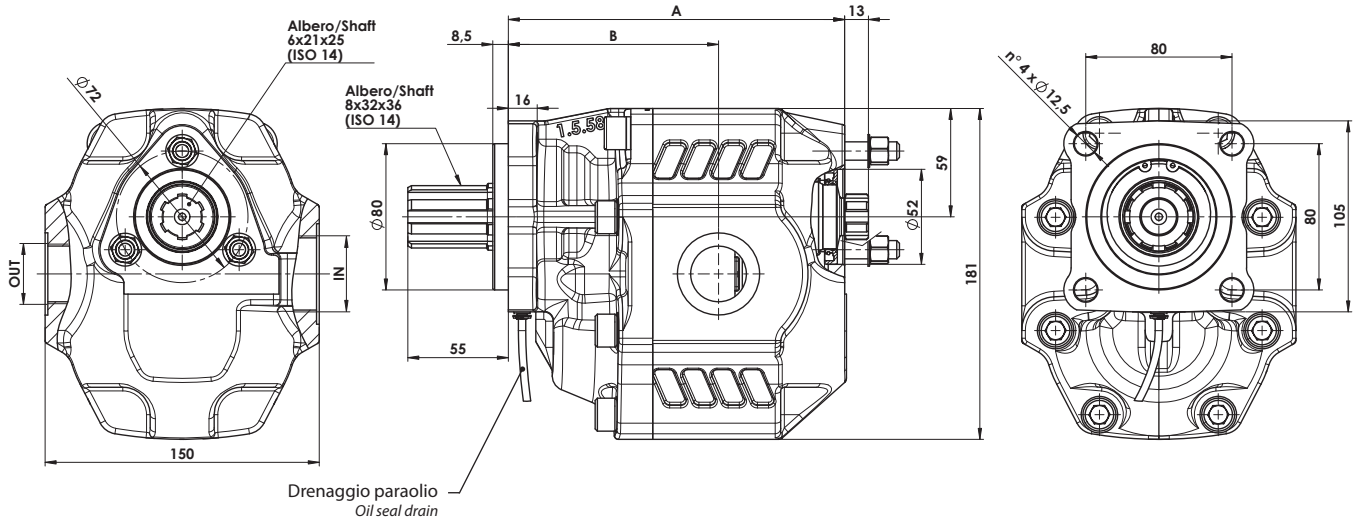
Pompe ad ingranaggi 4 fori ISO SHORT 1° pompa
4 holes ISO SHORT hydraulic gear pumps
TANDEM NPGH ISO SHORT 2^ serie

1050702



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
NPGH-63	**10507020634**	**10507020643**	G 1	G 3/4	170	107	15
NPGH-73	**10507020732**	**10507020741**			174	111	15,2
NPGH-84	**10507020849**	**10507020858**	G 1 1/4	G 1	178	111,5	15,5
NPGH-100	**10507021008**	**10507021017**			184	115	16
NPGH-116	**10507021160**	**10507021179**			190	121	16,8
NPGH-133	**10507021339**	**10507021348**	G 1 1/2		197	124	17,5
NPGH-150	**10507021508**	**10507021517**			202	129	18

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

PREDISPOSTA PER 2ª POMPA CON FLANGIA UNI
READY FOR 2ND PUMP WITH UNI FLANGE

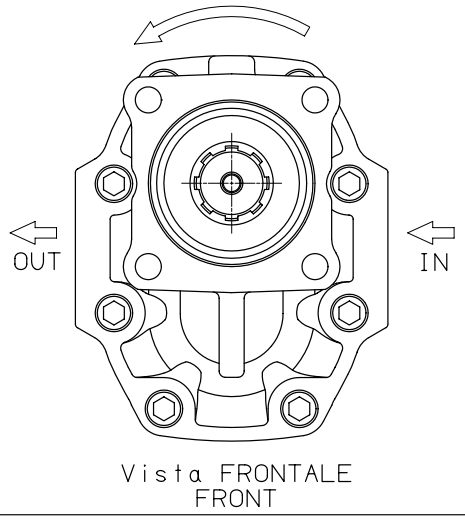
Caratteristiche tecniche di funzionamento / *Technical features*

Tipo pompa *Pump type*	**Cilindrata** *Displacement* cm³/rev	**Pressione** *Pressure* P1 bar	P2 bar	P3 bar	**Velocità max. continua** *Max. continuous speed* rpm	**Velocità max. intermittente** *Max. intermittent speed* rpm	**Velocità min.** *Min. speed* rpm
NPGH-63	63.70	290	315	325	1800	2700	300
NPGH-73	74.87	280	300	315			
NPGH-84	85.96	260	280	290			
NPGH-100	102.60	250	270	280			
NPGH-116	119.24	240	260	270	1500	2500	
NPGH-133	135.88	220	250	260			
NPGH-150	149.75	180	210	220			

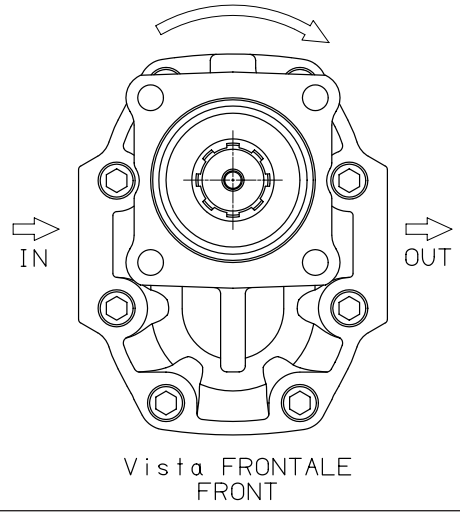
P1=Pressione max.continua — *Max. continuous pressure* (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

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

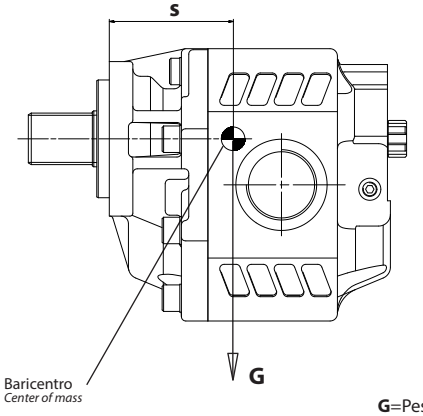


Rotazione oraria, pompa destra
Clockwise rotation, right pump



MOMENTO PESO / *MASS MOMENT*

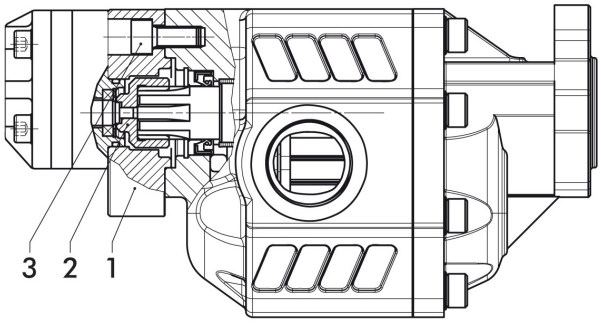
$M_{amm.} = s \times G$ (Nm)

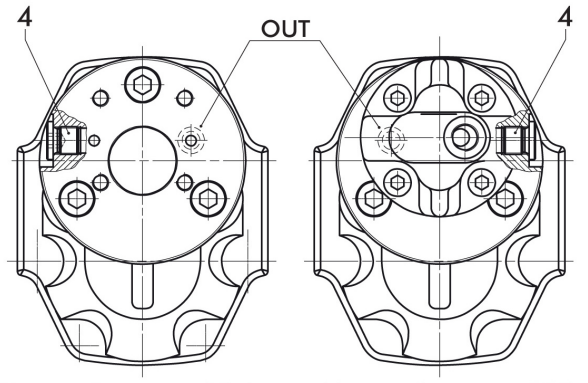


G=Peso in N (Peso in Kg x 9.81)
G=*Weight in N (Weight in Kg x 9.81)*

Tipo pompa - *Pump type*	**S**
NPGH-63	95
NPGH-73	98
NPGH-84	100
NPGH-100	103
NPGH-116	106
NPGH-133	109
NPGH-150	112

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:

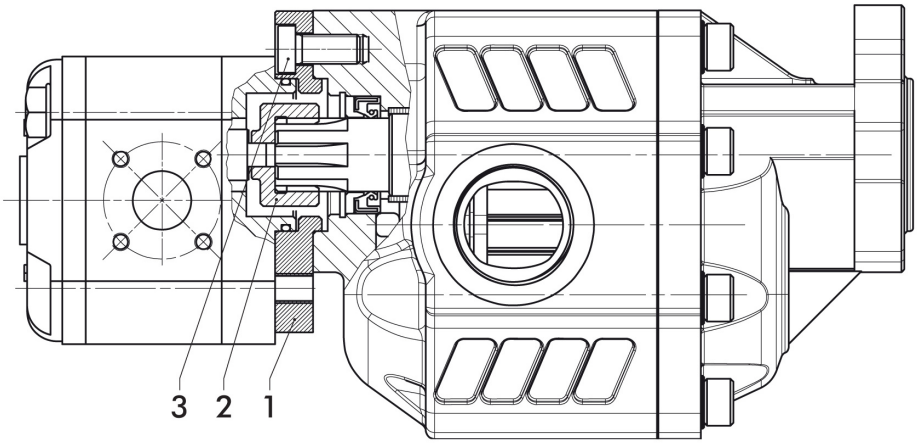
Coppia max.
Max. torque 21,5 Nm

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

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

Pompe ad ingranaggi 4 fori
4 holes hydraulic gear pumps
NPGH ISO TANDEM H-D

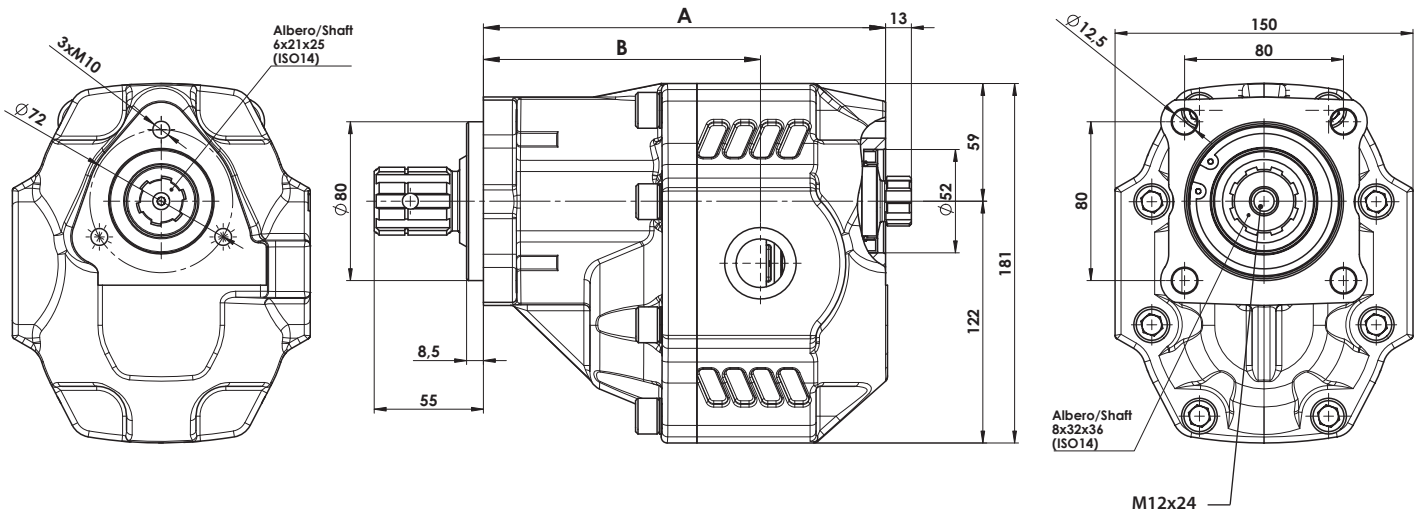
105929



HEAVY DUTY APPLICATIONS

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*



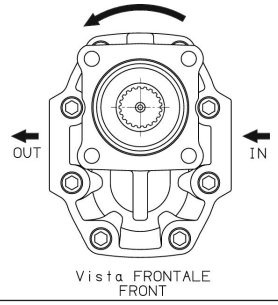
Dati tecnici / *Technical data*

Tipo pompa *Pump type*	Cilindrata *Displacement*	Codice *Code*		IN ISO 228	OUT ISO 228	Pressione *Pressure*			A mm	B mm	Velocità max. continua *Max. continuous speed*	Velocità max. intermitt. *Max. intermittent speed*	Velocità min. *Min. speed*	Peso *Weight*
		Destra / *Right*	Sinistra / *Left*	ISO 228	ISO 228	P1 bar	P2 bar	P3 bar	mm	mm	rpm	rpm	rpm	Kg
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

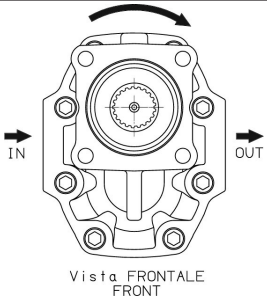
P1=Pressione max.continua — *Max. continuous pressure* — (100%)
P2=Pressione max. intermittente — *Max. Intermittent pressure* — (20 sec.max.)
P3=Pressione max. di punta — *Max. peak pressure* — (6 sec.max)

Identificazione aspirazione/mandata / *Suction/delivery identification*

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

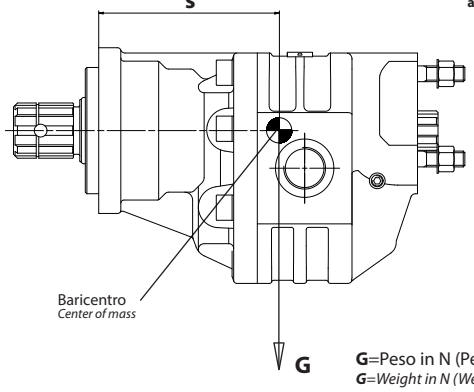


Rotazione oraria, pompa destra
Clockwise rotation, right pump



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**
NPGH-73	113
NPGH-84	115
NPGH-100	117
NPGH-116	121

Link:
Ricambi/*Spare parts*
Istruzione/*Instruction*

ASPIRAZIONE / SUCTION

"GOLD" 45°
45° "GOLD"



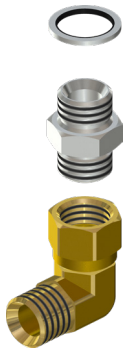
Filetto Thread ISO 228	Diametro interno tubo Internal pipe diameter mm	Diametro esterno tubo External pipe diameter MIN	Diametro esterno tubo External pipe diameter MAX	CH mm	Codice Code
G 1	38	48	51	41	15509000460
	40				15509000488
		52	55		15509000479
G 1 1/4	50	60	63	50	15509000497
		64	67		15509000504
	60	68	73		15509000522
	63	74	79		15509000531
G 1 1/2	50	60	63	55	15509000540
		64	67		15509000559
	60	68	73		15509000611
	63	74	79		15509000620

"GOLD" 90°
90° "GOLD"



Filetto Thread ISO 228	Diametro interno tubo Internal pipe diameter mm	Diametro esterno tubo External pipe diameter MIN	Diametro esterno tubo External pipe diameter MAX	CH mm	Codice Code
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
	40				15510000270
		52	55		15510000289
G 1	32	40	43	41	15510000323
		44	47		15510000332
	38	48	51		15510000350
	40				15510000378
		52	55		15510000387
	45				15510000396
		56	59		15510000403
	50	60	63		15510000412
		64	67		15510000421
	60	68	73		15510000430
G 1 1/4	38	48	51	50	15510000458
	40				15510000467
		52	55		15510000476
	45				15510000485
		56	59		15510000494
	50	60	63		15510000501
		64	67		15510000510
	60	68	73		15510000529
	63	74	79		15510000538
G 1 1/2	45	52	55	55	15510000547
		56	59		15510000556
	50	60	63		15510000592
		64	67		15510000609
	60	68	73		15510000654
	63	74	79		15510000663

		Filetto Thread ISO 228	Diametro interno tubo Internal pipe diameter mm	Diametro esterno tubo External pipe diameter MIN	Diametro esterno tubo External pipe diameter MAX	CH mm	Codice Code
ASPIRAZIONE / SUCTION	**"GOLD" 90° FILETTO FILETTO** ***90° "GOLD" ON BOYH SIDES*** 	**G 3/4 x G 3/4**				34	**15511000107**
		G 1 x G 1				41	**15511000125**
		G 1 1/4 x G 1 1/4				50	**15511000143**
		G 1 1/2 x G 1 1/2				55	**15511000161**

		Filetto Thread ISO 228	Diametro interno tubo Internal pipe diameter mm	CH mm	Codice Code
MANDATA / DELIVERY	 **RACCORDO AD ALTA PRESSIONE 90°** ***HIGH PRESSURE FITTING 90°***	**G 1/2 x 1/2**		27	**15520000126**
		G 3/4 x 3/4		32	**15520000340**
		G 3/4 x 1			**15520034100**
		G 1 x 1		38	**15520001009**