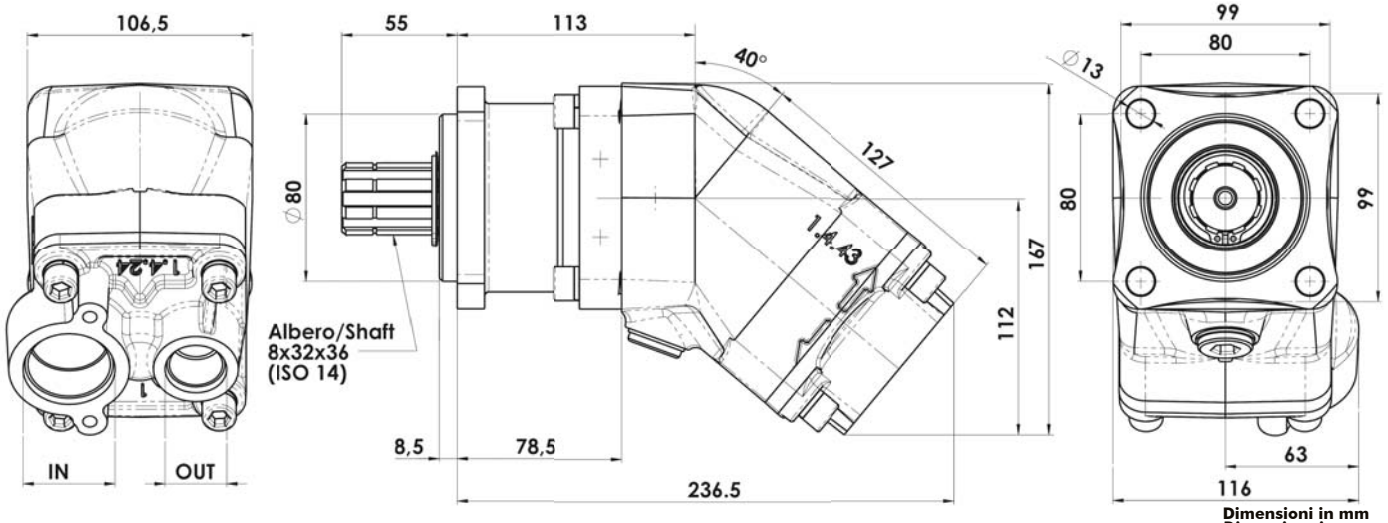
POMPE A PISTONI AD ASSE INCLINATO
BENT AXIS PISTON PUMPS

CODICE FAMIGLIA / *FAMILY CODE*: **108-015 108-016 108-907**

"HDS" "MDS" **40-47-55-64 80**

Fluido idraulico *Fluid*	Minerale o sintetico compatibile con guarnizioni: *Mineral or synthetic compatible with the following seals:* FKM, FPM, HNBR				
Viscosità cinematica consigliata *Kinematic viscosity suggested*	T media ambiente (°C) *Average ambient temp. (°C)*	< -40	-40÷10	10÷35	> 35
	VG (cSt = mm²/s)	16	22	32	46
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* -40°C ÷ 140°C				
Grado di filtrazione *Oil filtering*	> 200 bar: 10 µm < 200 bar: 25 µm				
Pres. di aspirazione *Inlet pressure*	0,85 ÷ 2 bar assoluti/absolut				
Senso di rotazione *Pump rotation*	Unidirezionale (Dx o Sx) *Unidirectional (Right or Left)*				

Verificare che la pompa sia posizionata almeno 100 mm sotto il livello minimo del serbatoio olio. Prima di avviare la pompa effettuare spurgo aria.
Verify that pump is, at least, 100 mm under the minimum level of the tank. Before starting the pump bleed the air.



Dimensioni in mm
Dimensions in mm

Tipo pompa *Pump type*	**Rotazione** *Rotation* Destra *Right*	Sinistra *Left*	**IN** ISO 228	**OUT** ISO 228	**IN** SAE 20	**OUT** SAE 12
HDS-40	**108-015-04037**	**108-015-04046**	G 1 1/4"	G 3/4"		
	108-907-00407	108-907-00416			1 5/8-12	1 1/16-12
HDS-47	**108-015-04733**	**108-015-04742**	G 1 1/4"	G 3/4"		
	108-907-00470	108-907-00489			1 5/8-12	1 1/16-12
HDS-55	**108-015-05536**	**108-015-05545**	G 1 1/4"	G 3/4"		
	108-907-00550	108-907-00569			1 5/8-12	1 1/16-12
HDS-64	**108-015-06035**	**108-015-06044**	G 1 1/4"	G 3/4"		
	108-907-00649	108-907-00658			1 5/8-12	1 1/16-12
MDS-80	**108-016-00807**	**108-016-00816**	G 1 1/4"	G 3/4"		
	108-907-00809	108-907-00818			1 5/8-12	1 1/16-12

Codice fascicolo:997-400-10810
Data: Giovedì 12 febbraio 2015
Codice foglio:997-108-01515 Rev:AS

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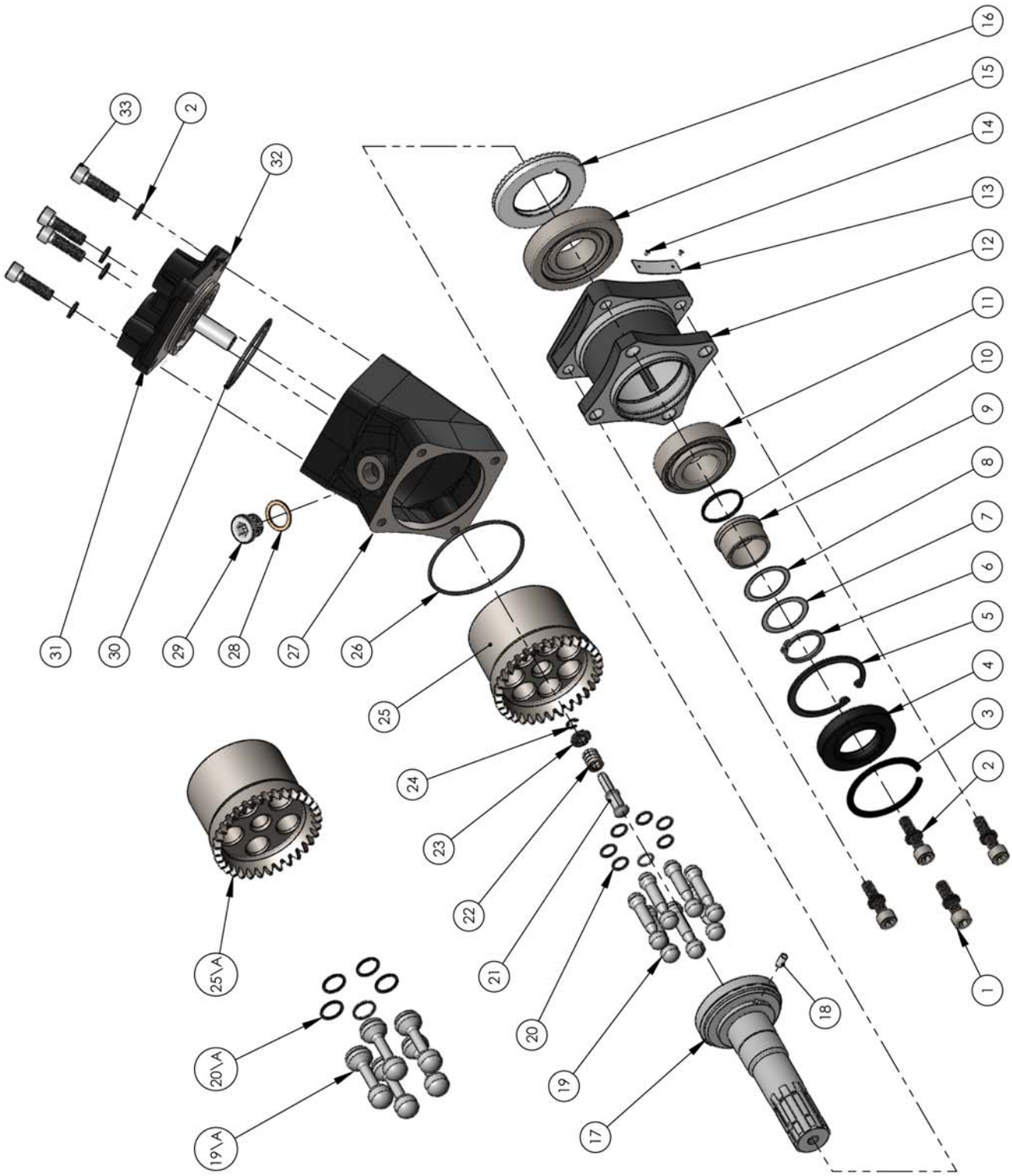

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HYDRAULIC COMPONENTS

N°	HDS 40		HDS 47		HDS 55		HDS 64		MDS 80		Codice *P. Number*	Descrizione *Description*		Q.tà *Q.ty*
	GAS	SAE	GAS	SAE	GAS	SAE	GAS	SAE	GAS	SAE				
1	•	•	•	•	•	•	•	•	•	•	502-004-00574	Vite TCE M 10x40 UNI 5931	*Socket head capscrew M 10x40 UNI 5931*	4
2	•	•	•	•	•	•	•	•	•	•	501-008-00054	Rosetta elastica x M10 DIN 7980	*Washer x M10 DIN 7980*	4
3	•	•	•	•	•	•	•	•	•	•	501-000-02729	Anello elastico E-SB 72x2	*Circlip E-SB 72x2*	1
4	•	•	•	•	•	•	•	•	•	•	506-000-24272	Paraolio HNBR	*Oil seal HNBR*	1
5	•	•	•	•	•	•	•	•	•	•	501-001-00677	Anello elastico Ø72 I	*Circlip Ø72 I*	1
6	•	•	•	•	•	•	•	•	•	•	501-000-01355	Anello seeger rinforzato AS UNI 7436	*Retaining ring AS UNI 7436*	1
7	•	•	•	•	•	•	•	•	•	•	529-007-01127	Rondella 44x35x0.2	*Washer 44x35x0.2*	1
8	•	•	•	•	•	•	•	•	•	•	529-007-00226	Rondella 44x35x0.1	*Washer 44x35x0.1*	1
9	•	•	•	•	•	•	•	•	•	•	511-002-00200	Bussola	*Bushing*	1
10	•	•	•	•	•	•	•	•	•	•	506-000-13137	Guarnizione OR 3137 HNBR	*O-ring 3137 HNBR*	1
11	•	•	•	•	•	•	•	•	•	•	510-002-00220	Cuscinetto a rulli conici	*Tapered roller bearing*	1
12	•	•	•	•	•	•	•	•	•	•	517-002-01163	Corpo anteriore	*Front housing*	1
13	•	•	•	•	•	•	•	•	•	•	513	Targhetta completa	*Plate*	1
14	•	•	•	•	•	•	•	•	•	•	513-000-00011	Chiodino fissaggio targhetta	*Plate nail*	2
15	•	•	•	•	•	•	•	•	•	•	510-002-00275	Cuscinetto a rulli conici	*Tapered roller bearing*	1
16	•	•	•	•	•	•	•	•	•	•	525-011-00139	Corona dentata	*Crown*	1
17	•	•	•	•	•	•	•	•			522-005-00231	Albero	*Shaft*	1
									•	•	522-005-00204			
18	•	•	•	•	•	•	•	•	•	•	501-003-06142	Spina UNI 6364-A Ø6x14	*Pin UNI 6364-A Ø6x14*	1
19	•	•									532-005-00285	Pistone sferico	*Piston*	7
			•	•							532-005-00025			
					•	•					532-005-00114			
							•	•			532-005-00016			
19a									•	•	532-005-00043			5
20	•	•									501-023-00064	Fasce elastiche	*Spring rings*	21
			•	•							501-023-00046			
					•	•					501-023-00126			
							•	•			501-023-00019			
20a									•	•	501-023-00082			15
21	•	•	•	•	•	•	•	•	•	•	542-001-00162	Perno sferico con guida albero	*Shaft guide pin*	1
22	•	•	•	•	•	•	•	•	•	•	512-005-00812	Molla di carico corpo cilindri	*Spring*	1
23	•	•	•	•	•	•	•	•	•	•	542-001-00171	Anello guida molla	*Spring guide ring*	1
24	•	•	•	•	•	•	•	•	•	•	501-015-00028	Anello seeger RS 6 DIN 6799	*Retaining ring RS 6 DIN 6799*	1
25	•	•									500-029-15040	Gruppo corpo cilindri sede pistoni	*Piston barrel assembly*	1
			•	•							500-029-15047			
					•	•					500-029-15055			
							•	•			500-029-15064			
25a									•	•	500-029-15080			
26	•	•	•	•	•	•	•	•	•	•	506-000-13350	Guarnizione OR 3350 HNBR	*O-Ring 3350 HNBR*	1
27	•	•	•	•	•	•	•	•	•	•	517-002-01421	Corpo intermedio	*Interm. housing*	1
28	•	•	•	•	•	•	•	•	•	•	116-009-10129	Rondella acciao/gomma 1/2"	*Washer 1/2"*	1
29	•	•	•	•	•	•	•	•	•	•	115-006-00135	Tappo cieco 1/2" DIN 908	*Blank plug 1/2" DIN 908*	1
30	•	•	•	•	•	•	•	•	•	•	506-000-13275	Guarnizione OR 3275 HNBR	*O-ring OR 3275 HNBR*	1
31	•										500-029-90400	Gruppo corpo posteriore	*Rear cover assembly*	1
		•									500-029-90419			
			•								500-029-90473			
				•							500-029-90482			
					•						500-029-90553			
						•					500-029-90562			
							•				500-029-90642			
								•			500-029-90651			
									•		500-029-90802			
										•	500-029-90811			
32	•	•	•	•	•	•	•	•	•	•	501-008-00054	Rosetta elastica x M10 DIN 7980	*Washer x M10 DIN 7980*	4
33	•	•	•	•	•	•	•	•	•	•	502-004-00565	Vite TCE M10x35 UNI 5931	*Socket head capscrew M10x30 UNI 5931*	4

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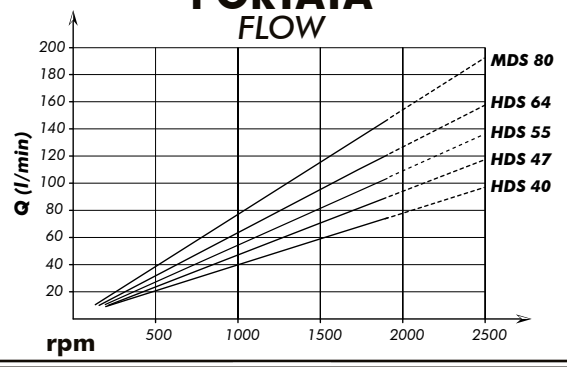
CARATTERISTICHE TECNICHE DI FUNZIONAMENTO / *TECHNICAL FEATURES*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm^3/rev	Pressione *Pressure* P1 bar	Pressione *Pressure* P3 bar	Velocità / *Speed* V0 rpm	Velocità / *Speed* V1 rpm	Velocità / *Speed* V2 rpm	Velocità min. *Min. speed* rpm	Peso *Weight* kg
HDS-40	41.25	350	400	2700	1900	2500	300	13,2
HDS-47	47.13							
HDS-55	56.70							
HDS-64	63.56							
MDS-80	77.25	250	300	2300	1800	2100		

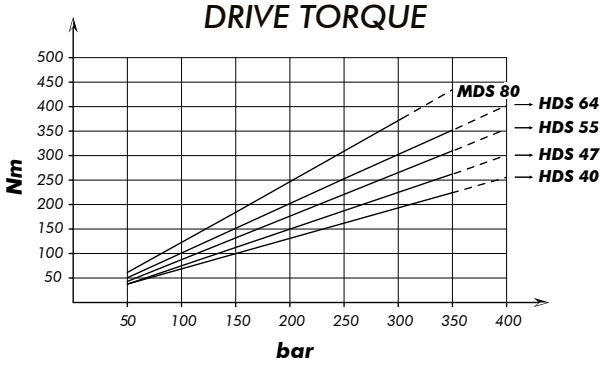
P1=Pressione max.continua *Max. continuous pressure* (100%)
P3=Pressione max. di punta *Max. peak pressure* (6 sec.max)

V0=Max. continua vuoto *Max. continuous speed without load*
V1=Max. continua *Max. continuous speed*
V2=Max. intermittente *Max. intermittent speed*

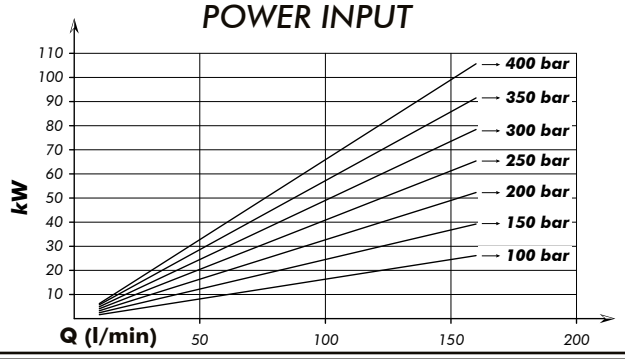
PORTATA
FLOW



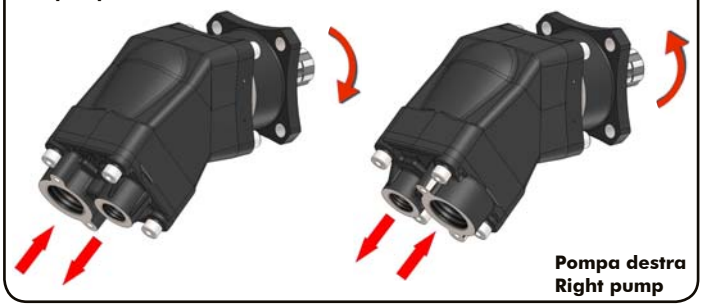
COPPIA ASSORBITA
DRIVE TORQUE



POTENZA ASSORBITA
POWER INPUT



Pompa sinistra
Left pump



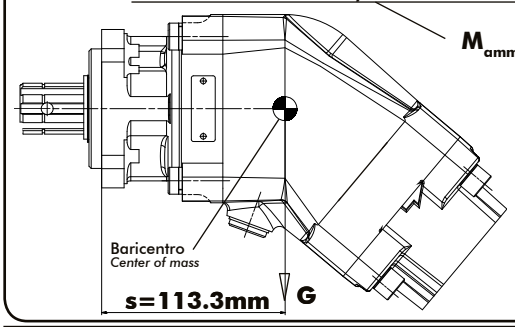
Pompa destra
Right pump

SCELTA DEL TUBO DI ASPIRAZIONE
HOW TO CHOOSE THE SUCTION PIPE SIZE

Q Portata *Flow* l/min	∅ interno min. tubo *Min pipe diam.* mm	inch	Velocità flusso *Flow speed* (m/s)
20	25	1"	0,68
30	32	1" 1/4	0,62
40	32		0,83
50	38	1" 1/2	0,74
60	38		0,88
70	40	1" 9/16	0,93
80	45	1" 3/4	0,84
90	45		0,94
100	50	2"	0,85
110	50		0,93
120	60	2" 3/8	0,71
130	60		0,77
140	60		0,83
150	60		0,88
160	63	2" 1/2	0,86
170	63		0,91
180	63		0,96

Per garantire corrette condizioni di aspirazione la velocità del flusso non deve superare 1 m/sec.
To ensure the proper suction pipe size the flow speed should not exceed 1mt/sec.

MOMENTO PESO / *MASS MOMENT*



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

Kit guarnizioni / *Seal Kit*
108-903-47648

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