POMPE A PISTONI AD ASSE INCLINATO
BENT AXIS PISTON PUMPS

CODICE FAMIGLIA *FAMILY CODE* **601-001 603-001**

"HDS" "MDS"

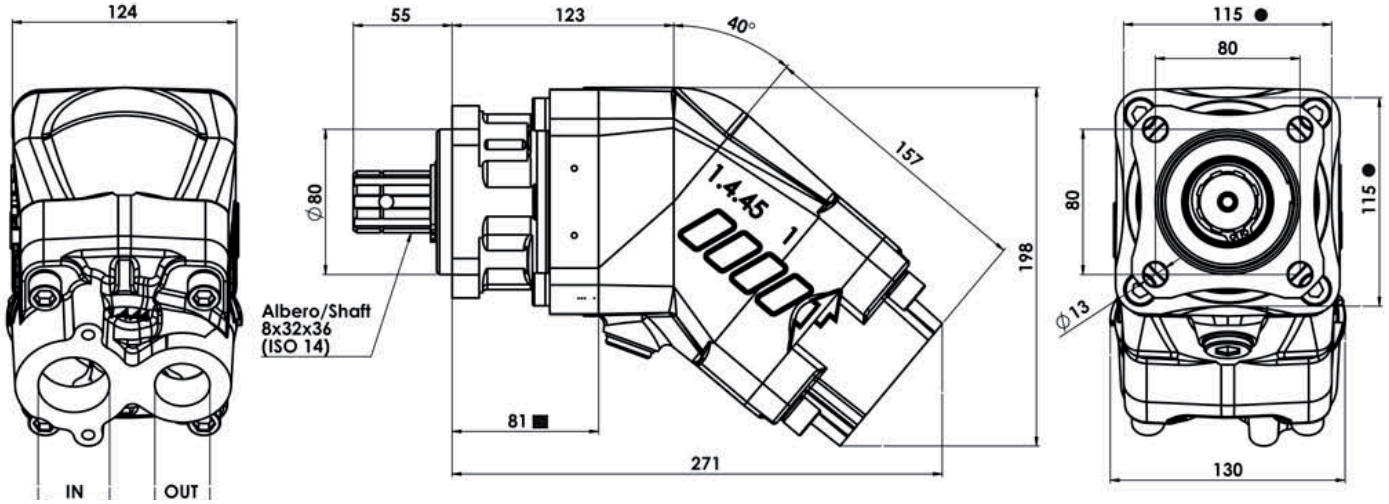
Flangia/*Flange* **ISO**
Albero/*Shaft* **ISO14 8x32x36**
Cilin./*Displ.* **84-108-130**

Codice fascicolo:997-400-60010 Rev: //
Data: Mercoledì 30 marzo 2016
Codice foglio:997-601-01520 Rev: //

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.

Dimensions in mm



● Larghezza minima corpo a quota indicata ■
Minimum bodywidth at indicated measurement

Tipo pompa *Pump type*	Rotazione *Rotation* Destra *Right*	Rotazione *Rotation* Sinistra *Left*	IN ISO 228	OUT ISO 228	IN SAE 24	OUT SAE 16
HDS-84	**601-001-10843**	**601-001-10849**	G 1 1/4	G 1		
	601-001-50843	601-001-50849			1 7/8-12	1 5/16-12
HDS-108	**601-001-11083**	**601-001-11089**	G 1 1/2	G 1		
	601-001-51083	601-001-51089			1 7/8-12	1 5/16-12
MDS-130	**603-001-11303**	**603-001-11309**	G 1 1/2	G 1		
	603-001-51303	603-001-51309			1 7/8-12	1 5/16-12

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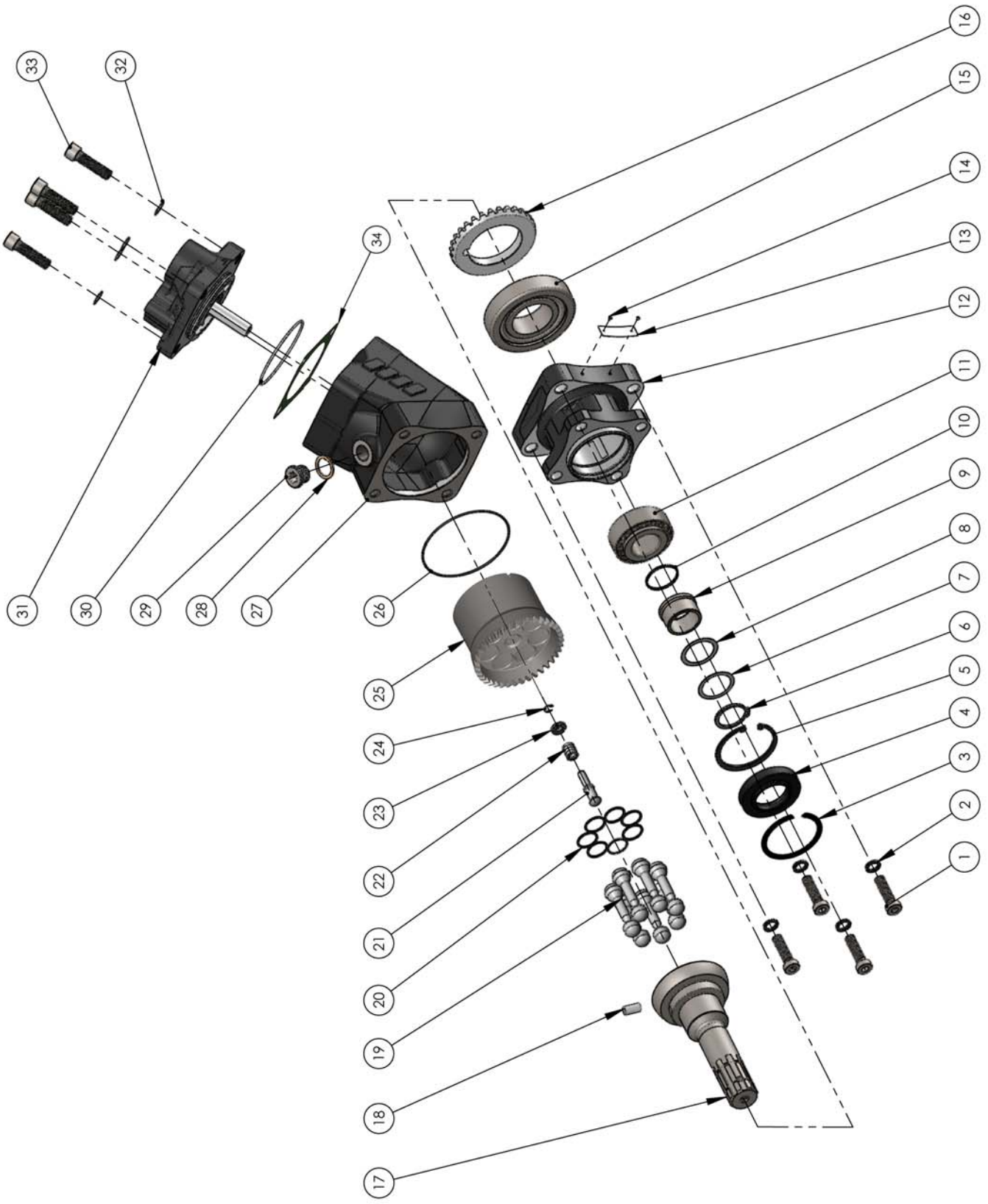
OMFB HYDRAULIC COMPONENTS

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV GL = ISO 9001 =



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OMFB HYDRAULIC COMPONENTS

N° / N°	HDS 84		HDS 108		MDS 130		Codice / P. Number	Descrizione / Description		Quantità / Quantity
	GAS	SAE	GAS	SAE	GAS	SAE				
1	•	•	•	•	•	•	502-000-00318	Vite TCE M 12x45	*Socket head capscrew*	4
2	•	•	•	•	•	•	501-020-00129	Rosetta elastica	*Washer*	4
3	•	•	•	•	•	•	501-000-02729	Anello elastico	*Circlip*	1
4	•	•	•	•	•	•	506-000-24272	Paraolio	*Oil seal*	1
5	•	•	•	•	•	•	501-001-00677	Anello elastico	*Circlip*	1
6	•	•	•	•	•	•	501-000-01355	Anello seeger rinforzato	*Retaining ring*	1
7	•	•	•	•	•	•	529-007-01127	Rondella	*Spacers*	2
8	•	•	•	•	•	•	529-007-00226	Rondella	*Spacers*	2
9	•	•	•	•	•	•	511-002-00200	Bussola	*Bushing*	1
10	•	•	•	•	•	•	506-000-13137	Guarnizione OR	*O-ring*	1
11	•	•	•	•	•	•	510-002-00364	Cuscinetto a rulli conici	*Tapered roller bearing*	1
12	•	•	•	•	•	•	517-002-01172	Corpo anteriore	*Front housing*	1
13	•	•	•	•	•	•	513	Targhetta completa	*Plate*	1
14	•	•	•	•	•	•	513-000-00011	Chiodino fissaggio targhetta	*Plate nail*	2
15	•	•	•	•	•	•	510-002-00355	Cuscinetto a rulli conici	*Tapered roller bearing*	1
16	•	•	•	•	•	•	525-011-00273	Corona dentata	*Crown*	1
17	•	•	•	•	•	•	522-005-00562	Albero	*Shaft*	1
18	•	•	•	•	•	•	501-003-06142	Spina UNI 6364	*Pin UNI 6364*	1
19	•	•					532-005-00034	Pistone sferico	*Piston*	7
			•	•			532-005-00070			
					•	•	532-005-00105			
20	•	•					501-023-00037	Fasce elastiche	*Spring rings*	21
			•	•			501-023-00055			
					•	•	501-023-00117			
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	*Retaining ring*	1
25	•	•					500-029-16084	Gruppo corpo cilindri sede pistoni	*Piston barrel assembly*	1
			•	•			500-029-16108			
					•	•	500-029-16130			
26	•	•	•	•	•	•	506-000-12412	Guarnizione OR	*O-Ring*	1
27	•	•	•	•	•	•	517-002-01412	Corpo intermedio	*Int. housing*	1
28	•	•	•	•	•	•	115-006-00135	Tappo cieco	*Blank plug*	1
29	•	•	•	•	•	•	116-009-10129	Rondella rame	*Copper washer*	1
30	•	•	•	•	•	•	506-000-18520	Guarnizione OR	*O-ring*	1
31	•						500-029-90848	Gruppo corpo posteriore	*Rear cover assembly*	1
		•					500-029-90857			
			•				500-029-91089			
				•			500-029-91098			
					•		500-029-91301			
						•	500-029-91310			
32	•	•	•	•	•	•	501-020-00129	Rosetta elastica	*Washer*	4
33	•	•	•	•	•	•	502-005-00573	Vite TCE M12x45	*Socket head capscrew*	4
34	A	A	A	A	A	A	507-000-00247	Guarnizione piatta	*Gasket*	1
	A	A	A	A	A	A	507-000-00541			

A = alternative

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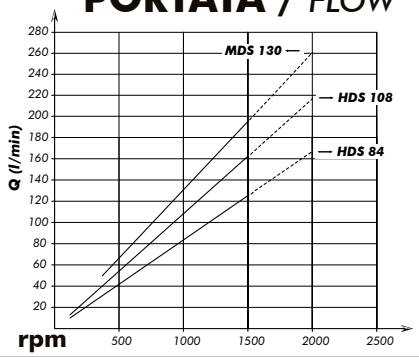
CARATTERISTICHE TECNICHE DI FUNZIONAMENTO / *TECHNICAL FEATURES*

Tipo pompa *Pump type*	Cilindrata *Displacement* cm³/rev	Pressione *Pressure* P1 bar	P3 bar	Velocità / *Speed* V0 rpm	V1 rpm	V2 rpm	Velocità min. *Min. speed* rpm	Peso *Weight* kg
HDS-84	84.33	350	400	2300	1500	2000	300	18,2
HDS-108	107							
MDS-130	131.62	250	270					

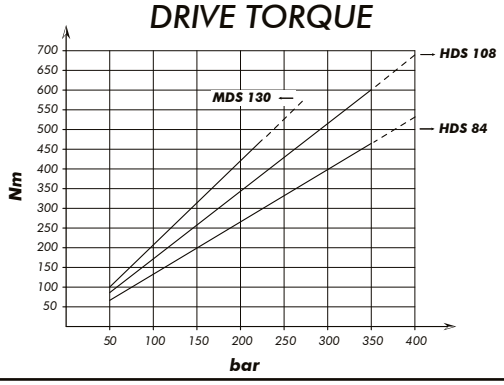
P1 = Pressione massima continua *Max. continuous pressure* (100%)
P3 = Pressione massima di punta *Max. peak pressure* (6 sec.max)

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

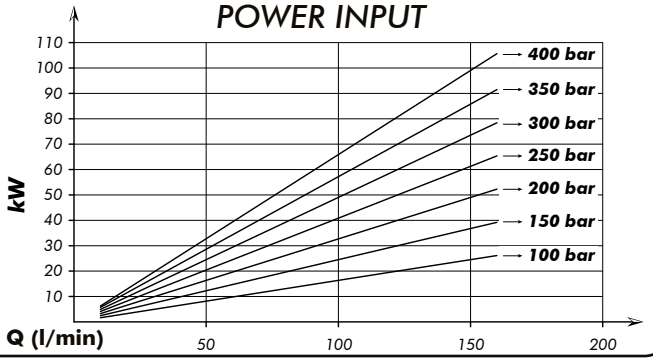
PORTATA / *FLOW*

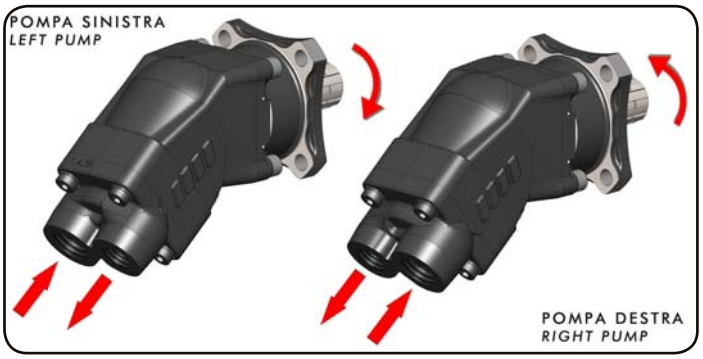


COPPIA ASSORBITA
DRIVE TORQUE

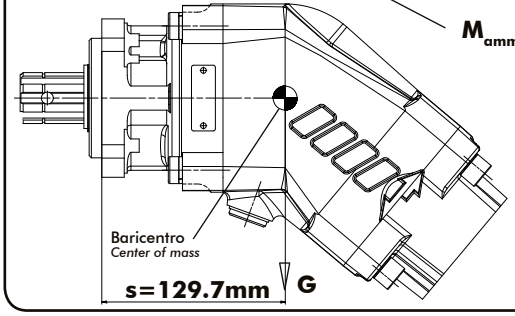


POTENZA ASSORBITA
POWER INPUT





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)

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.

Kit guarnizioni / *Seal Kit*
108-903-84009

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