

# POMPE A PISTONI AD ASSE INCLINATO BENT AXIS PISTON PUMPS

**CODICE FAMIGLIA**  
FAMILY CODE

**601001**  
**603001**

**"HDS"**  
**"MDS"**

Flangia/Flange  
Albero/Shaft  
Cilin./Displ.

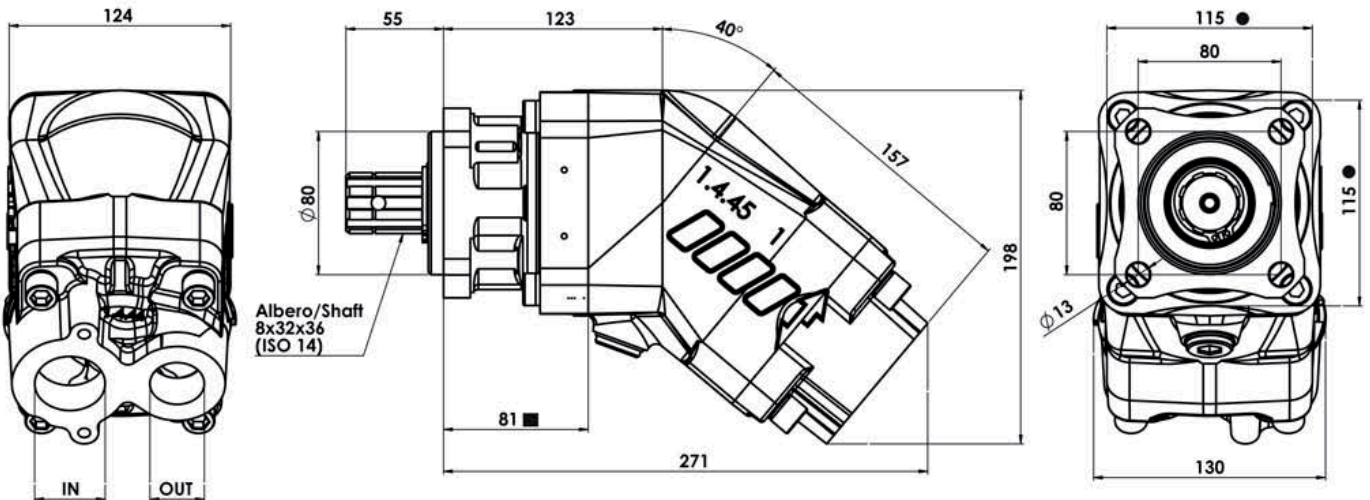
**ISO**  
**ISO14 8x32x36**  
**84-108-120-130**



99740060010

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 = mm <sup>2</sup> /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



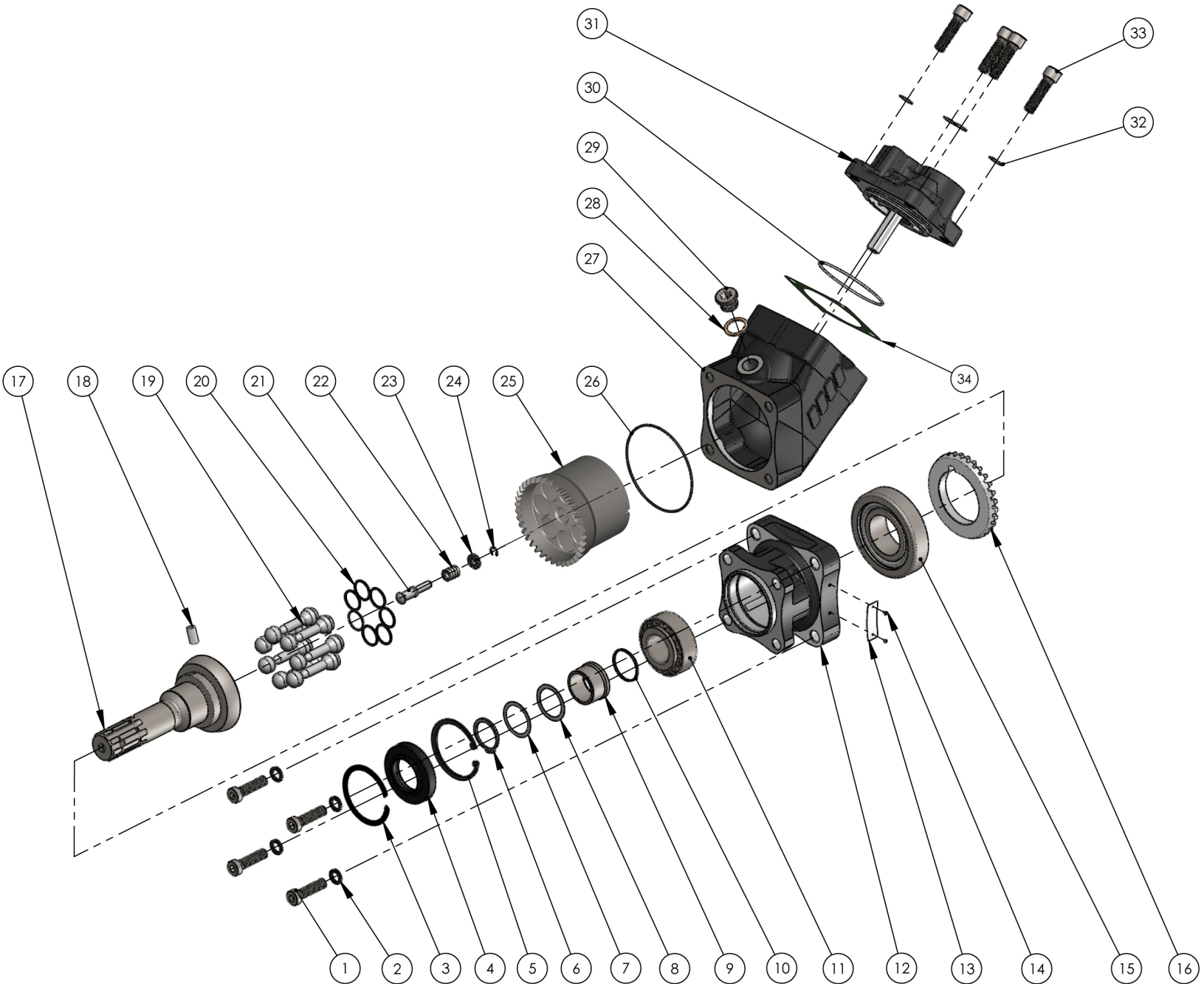
● Larghezza minima corpo a quota indicata ■  
Minimum bodywidth at indicated measurement

Tipo pompa Pump type	Rotazione / Rotation		IN ISO 228 G 1 1/4"	OUT ISO 228 G 1"
	Destra / Right	Sinistra / Left		
<b>HDS-84</b>	60100110843	60100110849	G 1 1/2"	G 1"
<b>HDS-108</b>	60100111083	60100111089		
<b>HDS-130</b>	60100111303	60100111309		
<b>MDS-120</b>	60300111203	60300111209		
<b>MDS-130</b>	60300111303	60300111309		
			ISO 725	ISO 725
<b>HDS-84</b>	60100150843	60100150849	1 7/8-12 UN-2B SAE 24	1 5/16-12 UN-2B SAE 16
<b>HDS-108</b>	60100151083	60100151089		
<b>HDS-130</b>	60100151303	60100151309		
<b>MDS-120</b>	60300151203	60300151209		
<b>MDS-130</b>	60300151303	60300151309		

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COMPANY WITH  
 QUALITY SYSTEM  
 CERTIFIED BY DNV GL  
 = IATF-16949 =

N°	HDS 84		HDS 108		HDS 130		MDS 120		MDS 130		Codice/Code	Descrizione / Description		Q.tà/Q.ty
	GAS	SAE	GAS	SAE	GAS	SAE	GAS	SAE	GAS	SAE				
1	•	•	•	•	•	•	•	•	•	•	50200500573	Vite TCE M12x45	Socket head capscrew	4
2	•	•	•	•	•	•	•	•	•	•	50102000129	Rosetta elastica	Washer	4
3	•	•	•	•	•	•	•	•	•	•	50100002729	Anello elastico	Circlip	1
4	•	•	•	•	•	•	•	•	•	•	50600024272	Paraolio	Oil seal	1
5	•	•	•	•	•	•	•	•	•	•	50100100677	Anello elastico	Circlip	1
6	•	•	•	•	•	•	•	•	•	•	50100001355	Anello seeger rinforzato	Retaining ring	1
7	•	•	•	•	•	•	•	•	•	•	52900701127	Rondella	Spacers	2
8	•	•	•	•	•	•	•	•	•	•	52900700226	Rondella	Spacers	2
9	•	•	•	•	•	•	•	•	•	•	51100200200	Bussola	Bushing	1
10	•	•	•	•	•	•	•	•	•	•	50600013137	Guarnizione OR	O-ring	1
11	•	•	•	•	•	•	•	•	•	•	51000200364	Cuscinetto a rulli conici	Tapered roller bearing	1
12	•	•	•	•	•	•	•	•	•	•	51700201172	Corpo anteriore	Front housing	1
13	•	•	•	•	•	•	•	•	•	•	513	Targhetta completa	Plate	1
14	•	•	•	•	•	•	•	•	•	•	51300000011	Chiodino fissaggio targhetta	Plate nail	2
15	•	•	•	•	•	•	•	•	•	•	51000200355	Cuscinetto a rulli conici	Tapered roller bearing	1
16	•	•	•	•	•	•	•	•	•	•	51000200357	Cuscinetto a rulli conici	Tapered roller bearing	1
17	•	•	•	•	•	•	•	•	•	•	52501100273	Corona dentata	Crown	1
18	•	•	•	•	•	•	•	•	•	•	52200500562	Albero	Shaft	1
19	•	•	•	•	•	•	•	•	•	•	52200500955	Albero	Shaft	1
20	•	•	•	•	•	•	•	•	•	•	50100306142	Spina UNI 6364	Pin UNI 6364	1
21	•	•	•	•	•	•	•	•	•	•	53200500034	Pistone sferico	Piston	7
22	•	•	•	•	•	•	•	•	•	•	53200500070	Pistone sferico	Piston	7
23	•	•	•	•	•	•	•	•	•	•	53200500105	Pistone sferico	Piston	7
24	•	•	•	•	•	•	•	•	•	•	50102300037	Fasce elastiche	Spring rings	21
25	•	•	•	•	•	•	•	•	•	•	50102300055	Fasce elastiche	Spring rings	21
26	•	•	•	•	•	•	•	•	•	•	50102300117	Fasce elastiche	Spring rings	21
27	•	•	•	•	•	•	•	•	•	•	54200100162	Perno sferico con guida albero	Shaft guide pin	1
28	•	•	•	•	•	•	•	•	•	•	51200500812	Molla di carico corpo cilindri	Spring	1
29	•	•	•	•	•	•	•	•	•	•	54200100171	Anello guida molla	Spring guide ring	1
30	•	•	•	•	•	•	•	•	•	•	50101500028	Anello seeger	Retaining ring	1
31	•	•	•	•	•	•	•	•	•	•	50002916084	Gruppo corpo cilindri sede pistoni	Piston barrel assembly	1
32	•	•	•	•	•	•	•	•	•	•	50002916108	Gruppo corpo cilindri sede pistoni	Piston barrel assembly	1
33	•	•	•	•	•	•	•	•	•	•	50002916130	Gruppo corpo cilindri sede pistoni	Piston barrel assembly	1
34	•	•	•	•	•	•	•	•	•	•	50600012412	Guarnizione OR	O-Ring	1
35	•	•	•	•	•	•	•	•	•	•	51700201412	Corpo intermedio	Int. housing	1
36	•	•	•	•	•	•	•	•	•	•	11500600135	Tappo cieco	Blank plug	1
37	•	•	•	•	•	•	•	•	•	•	11600910129	Rondella rame	Copper washer	1
38	•	•	•	•	•	•	•	•	•	•	50600018520	Guarnizione OR	O-ring	1
39	•	•	•	•	•	•	•	•	•	•	50002990848	Gruppo corpo posteriore	Rear cover assembly	1
40	•	•	•	•	•	•	•	•	•	•	50002990857	Gruppo corpo posteriore	Rear cover assembly	1
41	•	•	•	•	•	•	•	•	•	•	50002991089	Gruppo corpo posteriore	Rear cover assembly	1
42	•	•	•	•	•	•	•	•	•	•	50002991098	Gruppo corpo posteriore	Rear cover assembly	1
43	•	•	•	•	•	•	•	•	•	•	50002991301	Gruppo corpo posteriore	Rear cover assembly	1
44	•	•	•	•	•	•	•	•	•	•	50002991310	Gruppo corpo posteriore	Rear cover assembly	1
45	•	•	•	•	•	•	•	•	•	•	50102000129	Rosetta elastica	Washer	4
46	•	•	•	•	•	•	•	•	•	•	50200500573	Vite TCE M12x45	Socket head capscrew	4

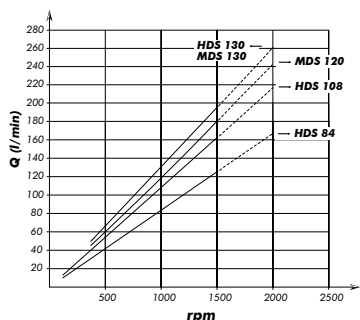
**CARATTERISTICHE TECNICHE DI FUNZIONAMENTO / TECHNICAL FEATURES**

Tipo pompa Pump type	Cilindrata Displacement cm <sup>3</sup> /rev	Pressione Pressure		Velocità / Speed			Velocità min. Min. speed rpm	Peso Weight kg
		P1 bar	P3 bar	V0 rpm	V1 rpm	V2 rpm		
<b>HDS-84</b>	84.33	350	400	2300	1500	2000	300	19.2
<b>HDS-108</b>	107				1500			18.6
<b>HDS-130</b>	131.62				1750			18.3
<b>MDS-120</b>	122.1	260	280		1500			18.4
<b>MDS-130</b>	131.62	250	270		1500			18.7

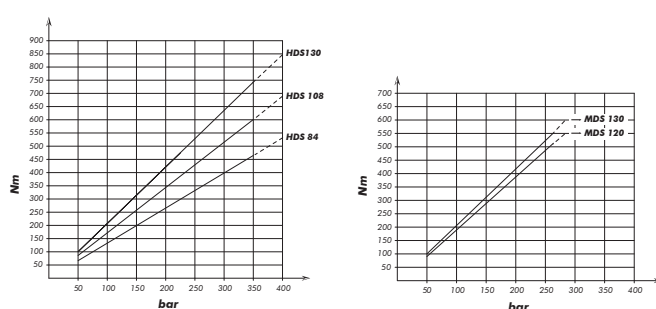
P1=Pressione massima continua Max. continuous pressure (100%)  
P3=Pressione massima di punta Max. peak pressure (6 sec.max)

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

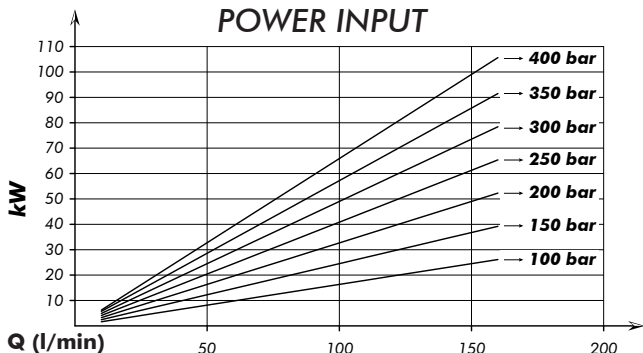
**PORTATA / FLOW**



**COPPIA ASSORBITA / DRIVE TORQUE**



**POTENZA ASSORBITA  
POWER INPUT**

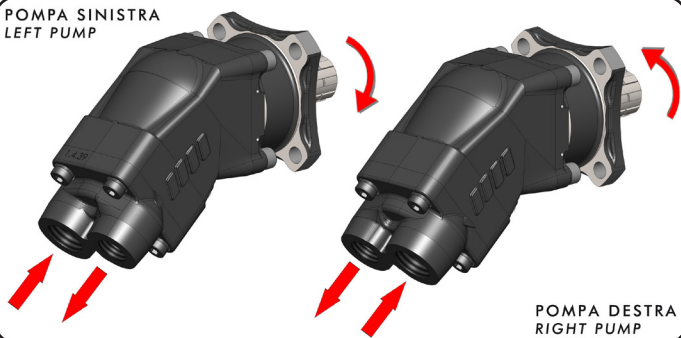


**SCELTA DEL TUBO DI ASPIRAZIONE  
HOW TO CHOOSE THE SUCTION PIPE SIZE**

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	2" 1/2	0,88
160	63		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.

POMPA SINISTRA  
LEFT PUMP



POMPA DESTRA  
RIGHT PUMP

**Kit guarnizioni / Seal Kit**  
10890384009

**MOMENTO PESO / MASS MOMENT**

