

# POMPE A PISTONI AD ASSE INCLINATO

## BENT AXIS PISTON PUMPS

**CODICE FAMIGLIA**  
FAMILY CODE

**108-015**  
**108-016**  
**108-907**

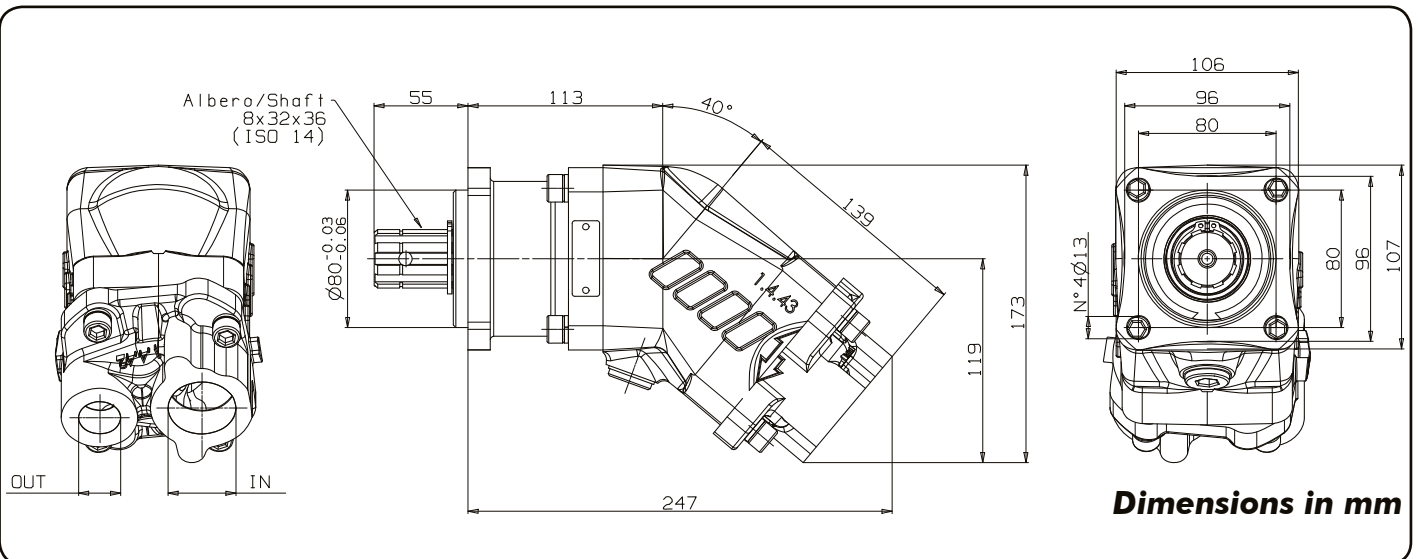
**"HDS" 47-55-64**  
**"MDS" 80**

Codice foglio: 997-108-01515 Rev: AM



Fluido idraulico Fluid	Minerale o sintetico compatibile con guarnizioni: Mineral or synthetic compatible with the following seals: HNBR				
Temp. consentita Allowed temperature	-40 +140 °C				
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				
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.					

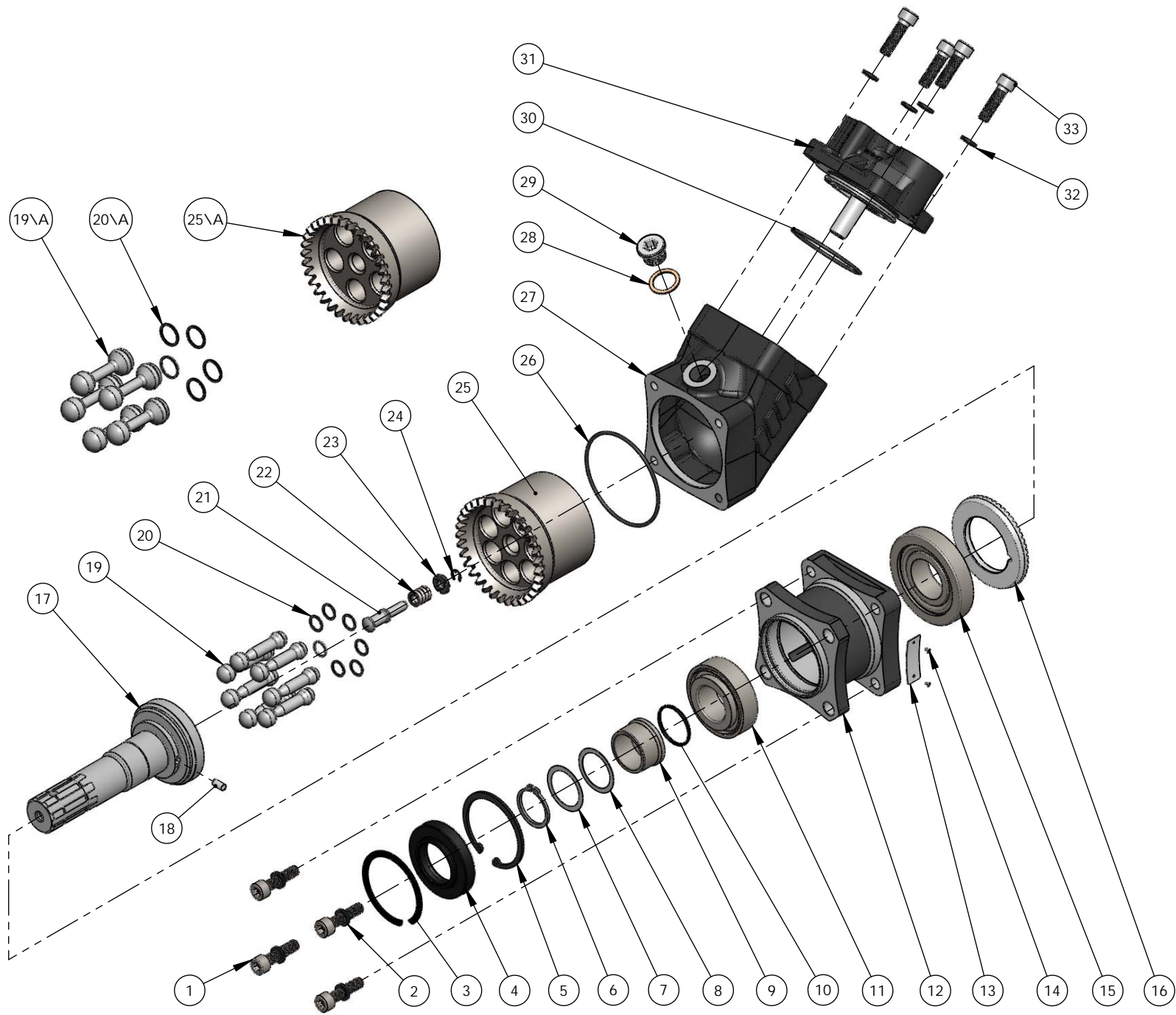
Codice fascicolo: 997-400-10810 Rev: BA



Data: Lunedì 07 giugno 2010

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

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COMPANY  
WITH QUALITY SYSTEM  
CERTIFIED BY DNV  
= ISO 9001/2000 =

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COMPANY  
 WITH QUALITY SYSTEM  
 CERTIFIED BY DNV  
 ISO 9001/2000

N° N°	HDS 47		HDS 55		HDS 64		MDS 80		Codice P. Number	Descrizione Description		Quantità Quantity
	GAS	SAE	GAS	SAE	GAS	SAE	GAS	SAE				
1	•	•	•	•	•	•	•	•	502-004-00574	Vite TCE M 10x40	Socket head capscrew	4
2	•	•	•	•	•	•	•	•	501-008-00054	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	Washer	1
8	•	•	•	•	•	•	•	•	529-007-00226	Rondella	Washer	1
9	•	•	•	•	•	•	•	•	511-002-00200	Bussola	Bushing	1
10	•	•	•	•	•	•	•	•	506-000-13137	Guarnizione OR	O-ring	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
18	•	•	•	•	•	•	•	•	522-005-00204			
18	•	•	•	•	•	•	•	•	501-003-06142	Spina UNI 6364	Pin UNI 6364	1
19	•	•	•	•	•	•	•	•	532-005-00025			
19	•	•	•	•	•	•	•	•	532-005-00114	Pistone sferico	Piston	7
19a	•	•	•	•	•	•	•	•	532-005-00016			
19a	•	•	•	•	•	•	•	•	532-005-00141			5
20	•	•	•	•	•	•	•	•	501-023-00046			
20	•	•	•	•	•	•	•	•	501-023-00126	Fasce elastiche	Spring rings	21
20a	•	•	•	•	•	•	•	•	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	Retaining ring	1
25	•	•	•	•	•	•	•	•	500-029-15047			
25	•	•	•	•	•	•	•	•	500-029-15055	Gruppo corpo cilindri sede pistoni	Piston barrel assembly	1
25a	•	•	•	•	•	•	•	•	500-029-15064			
25a	•	•	•	•	•	•	•	•	500-029-15080			
26	•	•	•	•	•	•	•	•	506-000-13350	Guarnizione OR	O-Ring	1
27	•	•	•	•	•	•	•	•	517-002-01403	Corpo intermedio	Int. housing	1
28	•	•	•	•	•	•	•	•	116-009-01200	Rondella rame	Copper washer	1
29	•	•	•	•	•	•	•	•	115-006-00135	Tappo cieco	Blank plug	1
30	•	•	•	•	•	•	•	•	506-000-13275	Guarnizione OR	O-ring	1
31	•	•	•	•	•	•	•	•	500-029-90473			
31	•	•	•	•	•	•	•	•	500-029-90482			
31	•	•	•	•	•	•	•	•	500-029-90553	Gruppo corpo posteriore	Rear cover assembly	1
31	•	•	•	•	•	•	•	•	500-029-90562			
31	•	•	•	•	•	•	•	•	500-029-90642			
31	•	•	•	•	•	•	•	•	500-029-90651			
31	•	•	•	•	•	•	•	•	500-029-90802			
31	•	•	•	•	•	•	•	•	500-029-90811			
32	•	•	•	•	•	•	•	•	501-008-00054	Rosetta elastica	Washer	4
33	•	•	•	•	•	•	•	•	502-004-00565	Vite TCE M10x35	Socket head capscrew M10x35	4

## CARATTERISTICHE TECNICHE DI FUNZIONAMENTO

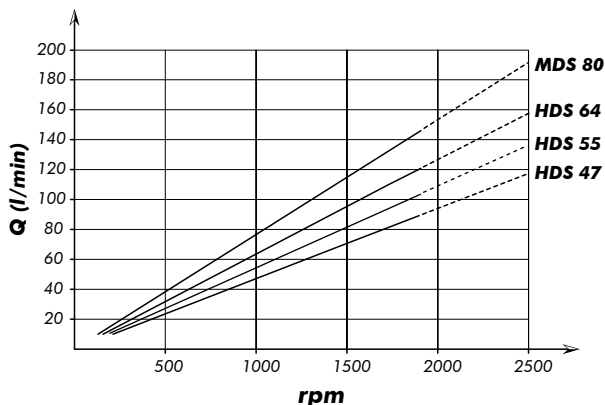
### TECHNICAL FEATURES

Tipo pompa Pump type	Cilindrata Displacement cm <sup>3</sup> /rev	Pressione Pressure			Velocità max. continua Max. continuous speed rpm	Velocità max. intermittente Max. intermittent speed rpm	Velocità min. Min. speed rpm	Peso Weight kg
		P1 bar	P2 bar	P3 bar				
<b>HDS-47</b>	47,13	350	370	400	1900	2500	300	
<b>HDS-55</b>	56,7							
<b>HDS-64</b>	63,56							
<b>MDS-80</b>	77,25	315	330	350	1900	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.)

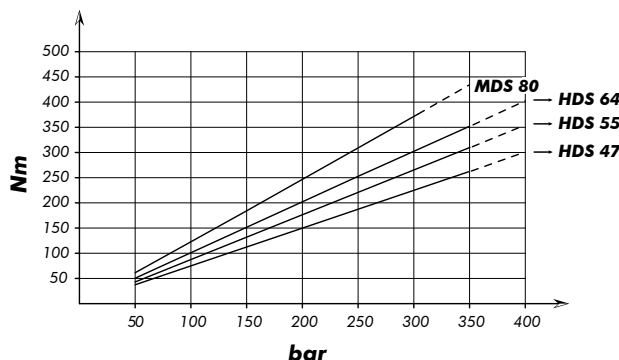
### PORTATA FLOW

#### FLOW



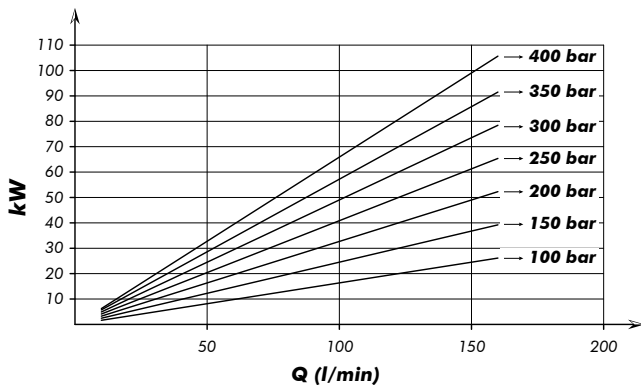
### COPPIA ASSORBITA DRIVE TORQUE

#### DRIVE TORQUE



### POTENZA ASSORBITA POWER INPUT

#### POWER INPUT



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

#### HOW TO CHOOSE THE SUCTION PIPE SIZE

Q Portata Flow l/min	Ø 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

Seal Kit

108-903-47648