

POMPE A PISTONI AD ASSE INCLINATO BENT AXIS PISTON PUMPS

CODICE FAMIGLIA
FAMILY CODE

601-001
603-001

"HDS"
"MDS"

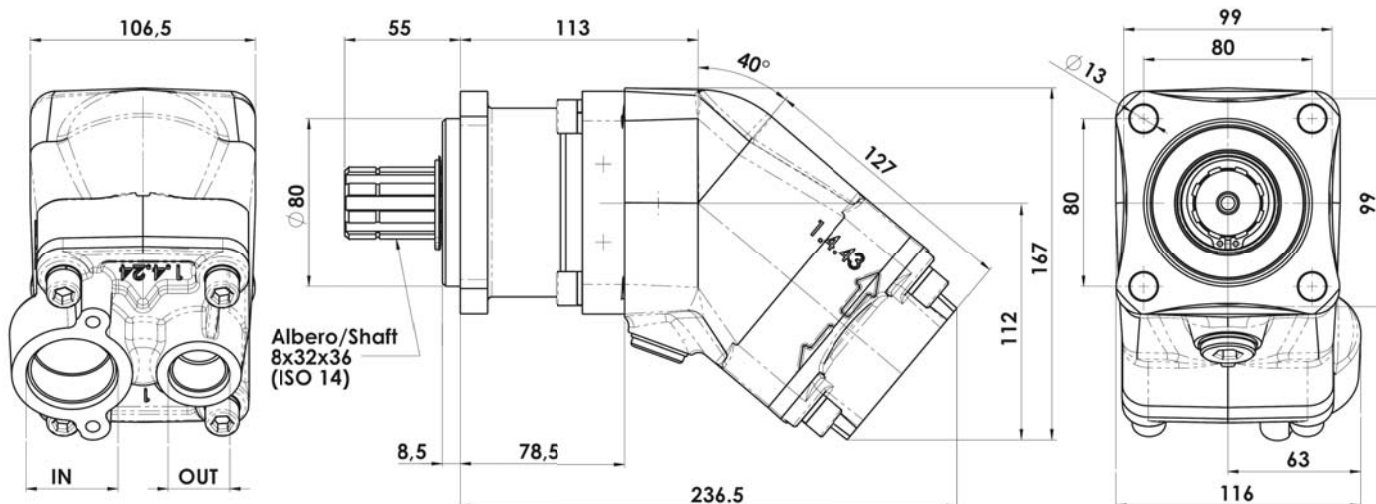
Flangia/Flange
Albero/Shaft
Cilin./Displ.

ISO
ISO14 8x32x36
40-47-55-64-80



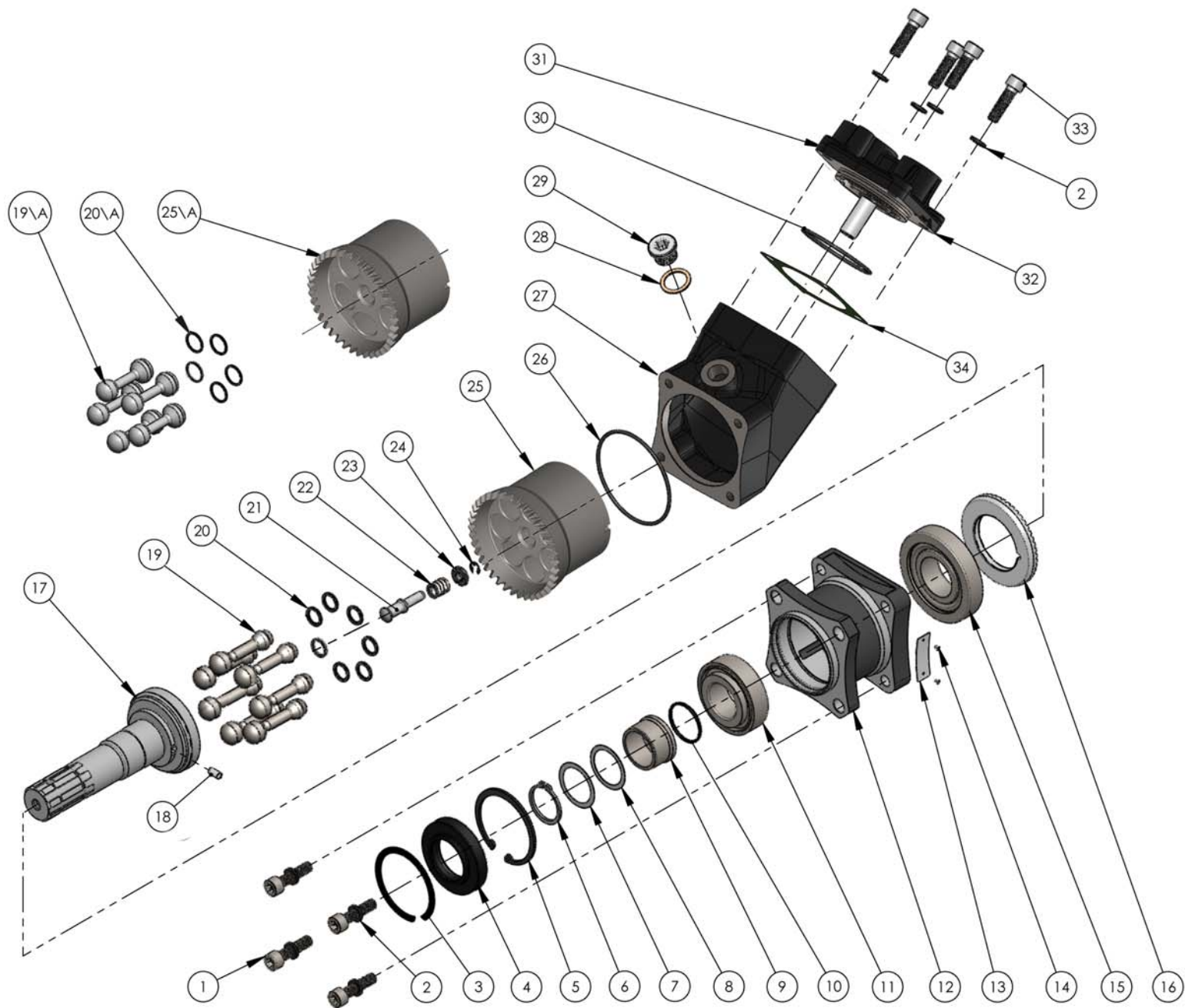
Fluido idraulico Fluid	Minerale o sintetico compatibile con guarnizioni: Mineral or synthetic compatible with the following seals: FKM, FPM, HNBR				
Viscosità cinematica consigliata Kinematic viscosity suggested	T media ambiente (°C) Average ambient temp. (°C)	< -40	-40÷10	10÷35	> 35
	VG (cSt = mm²/s)	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.					

Dimensions in mm



Tipo pompa Pump type	Rotazione Rotation		IN	OUT
	Destra Right	Sinistra Left		
HDS-40	601-001-10403	601-001-10409	G 1 1/4"	G 3/4"
HDS-47	601-001-10473	601-001-10479		
HDS-55	601-001-10553	601-001-10559		
HDS-64	601-001-10643	601-001-10649		
MDS-80	603-001-10803	603-001-10809		
HDS-40	601-001-50403	601-001-50409	1 5/8-12 UN-2B SAE 20	1 1/16-12 UN-2B SAE 12
HDS-47	601-001-50473	601-001-50479		
HDS-55	601-001-50553	601-001-50559		
HDS-64	601-001-50643	601-001-50649		
MDS-80	603-001-50803	603-001-50809		

pag.31





O.M.F.B. S.p.A. Hydraulic Components
We reserve the right to make any changes without notice.
Edizione 2016.06 No reproduction, however partial, is permitted.
Via Cave, 7/9 25050 Povoletto di Isèo (Brescia) Italy Tel.: +39 030 9830611
Fax: +39 030 9839207-208 Internet: www.omfb.it e-mail: info@omfb.it

pag. 33

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

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	•	•	•	•	•	•	•	•	•	•	525-011-00255	Corona dentata	Crown	1
17	•	•	•	•	•	•	•	•	•	•	522-005-00231	Albero	Shaft	1
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	Fasce elastiche	Spring rings	5
20	•	•	•	•	•	•	•	•	•	•	501-023-00064			21
	•	•	•	•	•	•	•	•	•	•	501-023-00046			
	•	•	•	•	•	•	•	•	•	•	501-023-00126			
	•	•	•	•	•	•	•	•	•	•	501-023-00019			
20a	•	•	•	•	•	•	•	•	•	•	501-023-00082	Perno sferico con guida albero	Shaft guide pin	15
21	•	•	•	•	•	•	•	•	•	•	542-001-00162			1
22	•	•	•	•	•	•	•	•	•	•	512-005-00812	Molla di carico corpo cilindri	Spring	
23	•	•	•	•	•	•	•	•	•	•	542-001-00171	Anello guida molla	Spring guide ring	
24	•	•	•	•	•	•	•	•	•	•	501-015-00028	Anello seeger RS 6 DIN 6799	Retaining ring RS 6 DIN 6799	
25	•	•	•	•	•	•	•	•	•	•	500-029-16040	Gruppo corpo cilindri sede pistoni	Piston barrel assembly	1
	•	•	•	•	•	•	•	•	•	•	500-029-16047			
	•	•	•	•	•	•	•	•	•	•	500-029-16055			
	•	•	•	•	•	•	•	•	•	•	500-029-16064			
25a	•	•	•	•	•	•	•	•	•	•	500-029-16080	Guarnizione OR 3350 HNBR	O-Ring 3350 HNBR	1
26	•	•	•	•	•	•	•	•	•	•	506-000-13350			
27	•	•	•	•	•	•	•	•	•	•	517-002-01421	Corpo intermedio	Interm. housing	1
28	•	•	•	•	•	•	•	•	•	•	116-009-10129	Rondella acciaio/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 M10x35 UNI 5931	4
34	A	A	A	A	A	A	A	A	A	A	507-000-00229	Guarnizione piatta	Gasket	1
	A	A	A	A	A	A	A	A	A	A	507-000-00532			

A = alternative

601-001
603-001SCHEMA RICAMBI POMPE A PISTONI HDS 40-47-55-64 E MDS 80
HDS PISTON PUMP 40-47-55-64 AND MDS 80 SERIES SPARE PARTS"HDS"
"MDS"

CARATTERISTICHE TECNICHE DI FUNZIONAMENTO / TECHNICAL FEATURES

Tipo pompa Pump type	Cilindrata Displacement cm ³ /rev	Pressione Pressure		Velocità / Speed			Velocità min. Min. speed rpm	Peso Weight kg
		P1 bar	P3 bar	V0 rpm	V1 rpm	V2 rpm		
HDS-40	41.25	350	400	2700	1900	2500	300	12,3
HDS-47	47.13							12,4
HDS-55	56.70							12,2
HDS-64	63.56							12,2
MDS-80	77.25	350	400	2300	1800	2100		12

P1=Pressione max.continua
P3=Pressione max. di punta

Max. continuous pressure (100%)
Max. peak pressure (6 sec.max)

V0=Max. continua vuoto

V1=Max. continua

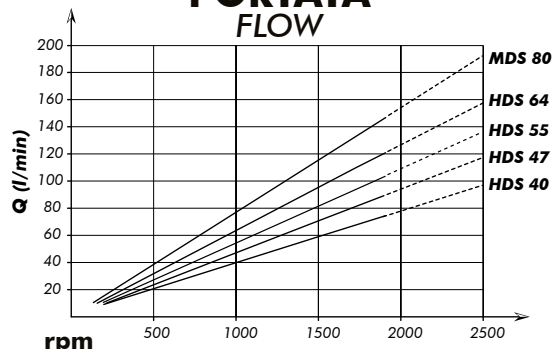
V2=Max. intermittente

Max. continuous speed without load

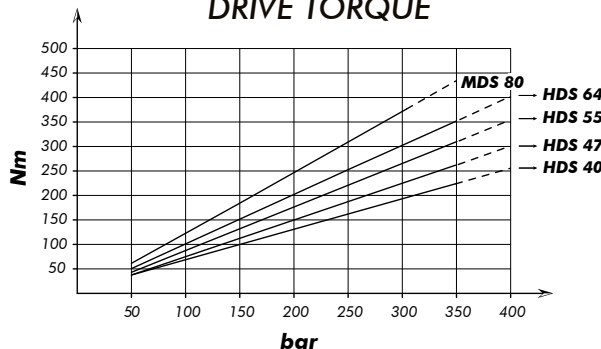
Max. continuous speed

Max. intermittent speed

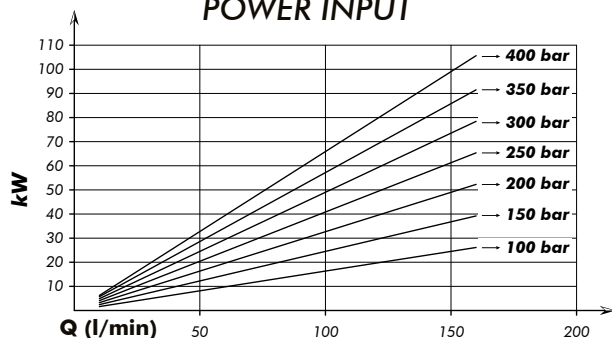
PORTATA FLOW



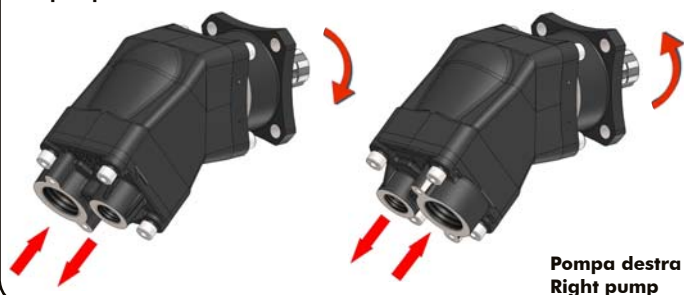
COPPIA ASSORBITA DRIVE TORQUE



POTENZA ASSORBITA POWER INPUT

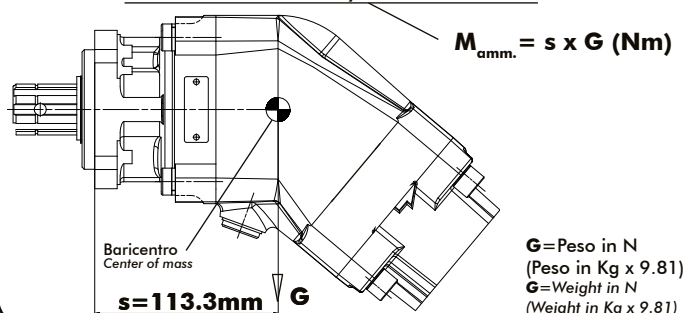


Pompa sinistra
Left pump



Pompa destra
Right pump

MOMENTO PESO / MASS MOMENT



SCELTA DEL TUBO DI ASPIRAZIONE 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 1m/sec.

Kit guarnizioni / Seal Kit
108-903-47648