



BENT-AXIS PISTON PUMPS

A complete range of pumps to meet any requirements of high performances and reliability.



OMFB
HYDRAULIC COMPONENTS

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COMPANY WITH QUALITY MANAGEMENT
SYSTEM CERTIFIED BY DNV
= ISO 9001:2008 =

A very unique pump

Compact size cast iron body.

Overall dimensions reduced and high resistance to pressure peaks (up to 400 Bar) to match higher working pressure of the latest machines.

Hardened splined output shaft.

Better resistance to the torque driven by the PTO.

FKM and reinforced oil-seals.

This solution allows the pump to bear back pressures.

Operating temperature.

Special gaskets allow the pump to operate at a temperature ranging from -40°C and $+140^{\circ}\text{C}$.

Seven pistons.

The optimal solution to allow a more constant load on bearing and, consequently, a more fluent delivery and less pulsation.

Improved suction port.

Optimised in order to achieve lower noise level.

Pistons' barrel driven by the shaft.

The already proven tapered toothing allows the pistons to work without radial load resulting in a longer resistance to fatigue.

Choice of compatible materials for sliding surfaces.

Sliding surfaces made of aluminum and nitrated cast iron to guarantee a longer life against contaminated fluid.

Tapered roller bearings.

The tapered roller bearings can offer bigger load capacity against high working pressure.

3-piece body.

This solution allows constant lubrication of the bearings.

By-pass valve option.

The by-pass valve is mainly used in applications where the pump is permanently driven.

Special versions available:

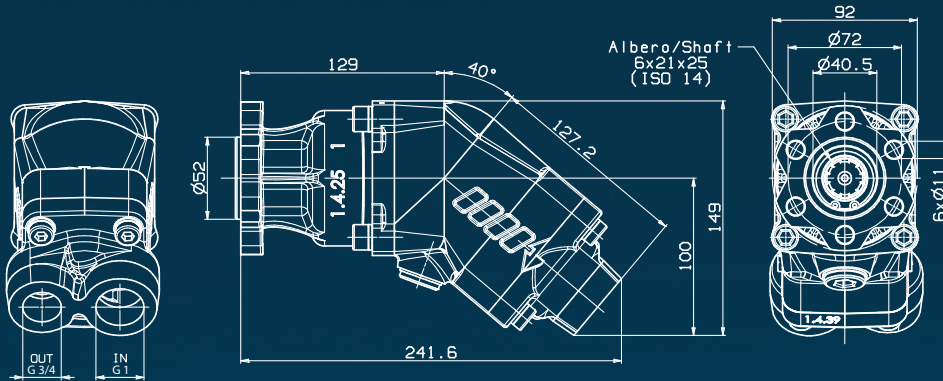
Versions with SAE shafts and UNF ports.



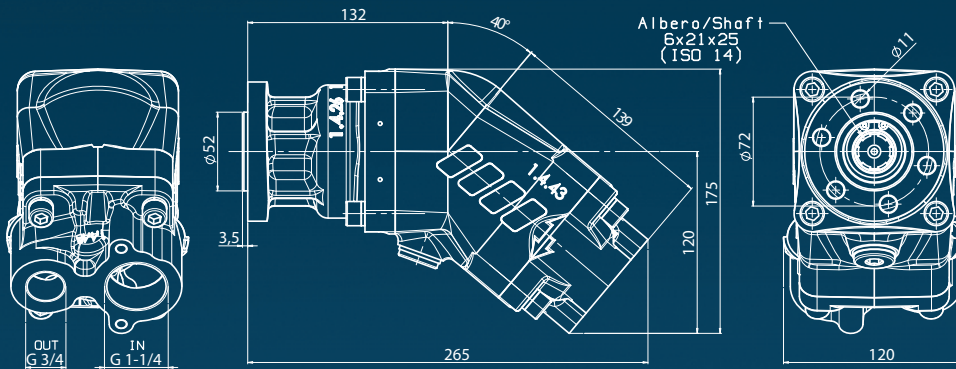
HDS UNI

Unidirectional bent axis piston pumps with displacement from 12 to 55 cm³.

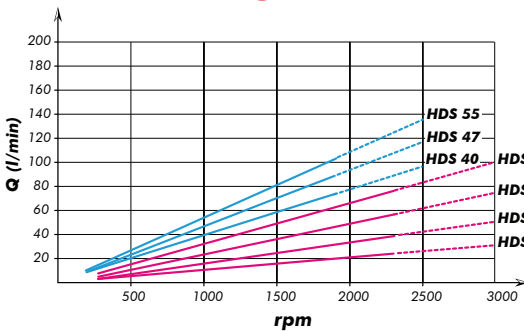
HDS 12-17-25-34 UNI



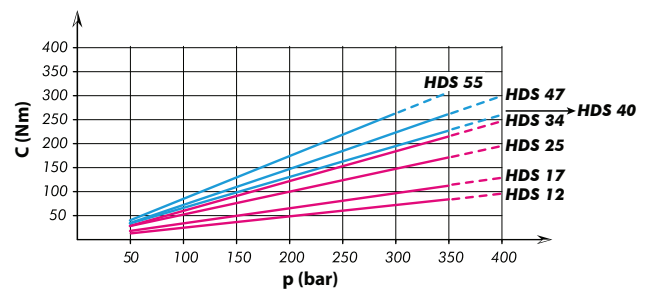
HDS 40-47-55 UNI



FLOW



DRIVE TORQUE



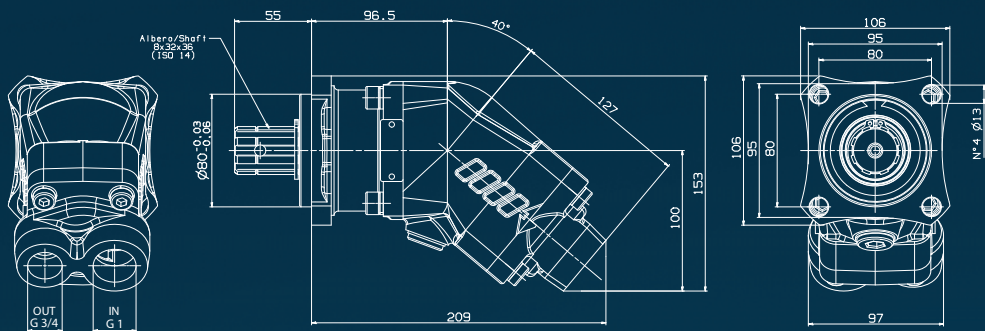
TECHNICAL FEATURES

Pump type	Rotation		Displac. cm ³	Pressure bar		Max speed			Min speed rpm	Weight kg
	right	left		P1	P3	rpm without load	rpm continuous	rpm intermittent		
HDS-12 UNI	108-014-01237	108-014-01246	12,62	350	400	3000	2300	3000	300	8,3
HDS-17 UNI	108-014-01737	108-014-01746	16,98	350	400	3000	2300	3000	300	8,3
HDS-25 UNI	108-014-02530	108-014-02549	25,12	350	400	3000	2300	3000	300	8,3
HDS-34 UNI	108-014-03431	108-014-03440	33,80	350	400	3000	2300	3000	300	8,3
HDS-40 UNI	108-014-04038	108-014-04047	41,25	350	400	2700	1900	2500	300	13
HDS-47 UNI	108-014-04734	108-014-04743	47,13	350	400	2700	1900	2500	300	13
HDS-55 UNI	108-014-05537	108-014-05546	56,70	300	350	2700	1900	2500	300	13

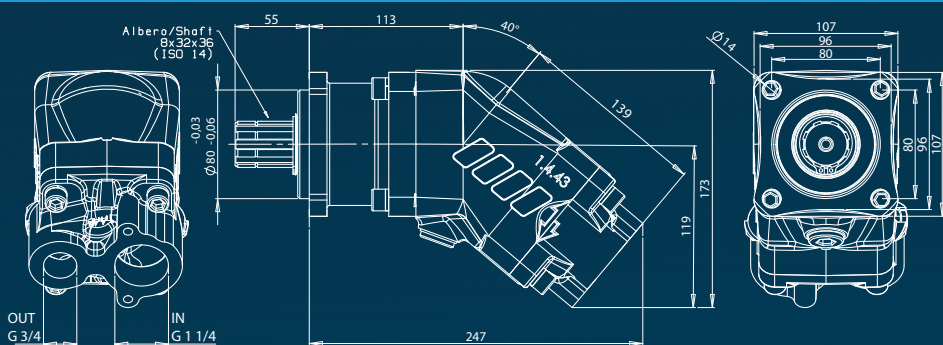
HDS ISO

Unidirectional bent axis piston pumps with displacement from 12 to 108 cm³.

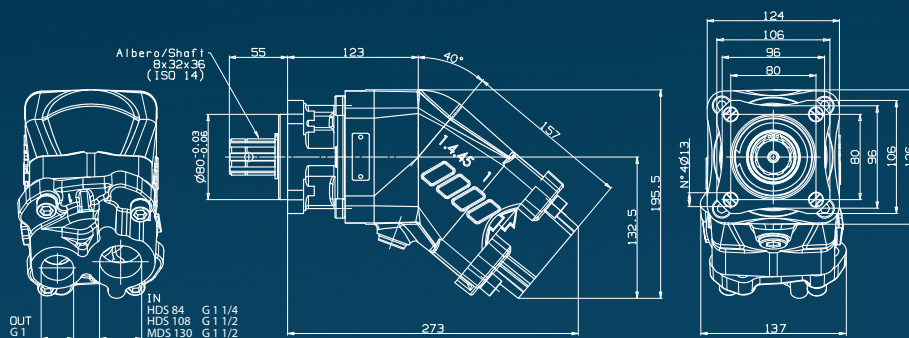
HDS 12-17-25-34 ISO



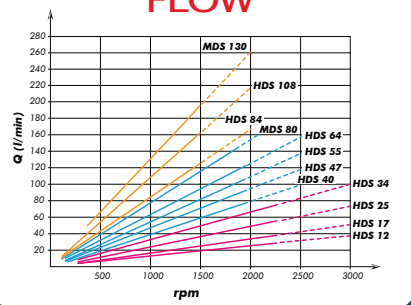
HDS 40-47-55-64 - MDS 80 ISO



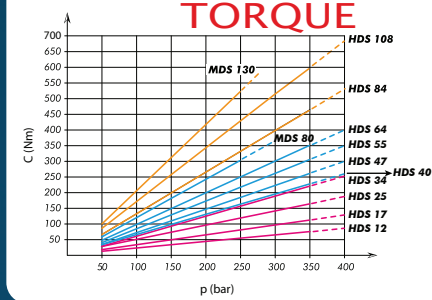
HDS 84-108 - MDS 130 ISO



FLOW



DRIVE TORQUE



TECHNICAL FEATURES

Pump type	Rotation		Displac. cm ³	Pressure bar		Max speed rpm			Min speed rpm	Weight kg
	right	left		P1	P3	without load	continuous	intermittent		
HDS-12 ISO	108-015-01236	108-015-01245	12,62	350	400	3000	2300	3000	300	8,7
HDS-17 ISO	108-015-01736	108-015-01745	16,98	350	400	3000	2300	3000	300	8,7
HDS-25 ISO	108-015-02539	108-015-02548	25,12	350	400	3000	2300	3000	300	8,7
HDS-34 ISO	108-015-03430	108-015-03449	33,80	350	400	3000	2300	3000	300	8,7
HDS-40 ISO	108-015-04037	108-015-04046	41,25	350	400	2700	1900	2500	300	13,2
HDS-47 ISO	108-015-04733	108-015-04742	47,13	350	400	2700	1900	2500	300	13,2
HDS-55 ISO	108-015-05536	108-015-05545	56,70	350	400	2700	1900	2500	300	13,2
HDS-64 ISO	108-015-06035	108-015-06044	63,56	350	400	2700	1900	2500	300	13,2
MDS-80 ISO	108-016-00807	108-016-00816	77,25	250	300	2300	1800	2100	300	13,2
HDS-84 ISO	108-015-08033	108-015-08042	84,33	350	400	2300	1500	2000	300	18,2
HDS-108 ISO	108-015-10833	108-015-10842	107	350	400	2300	1500	2000	300	18,2
MDS-130 ISO	108-016-01306	108-016-01315	131,62	250	270	2300	1500	2000	300	18,2