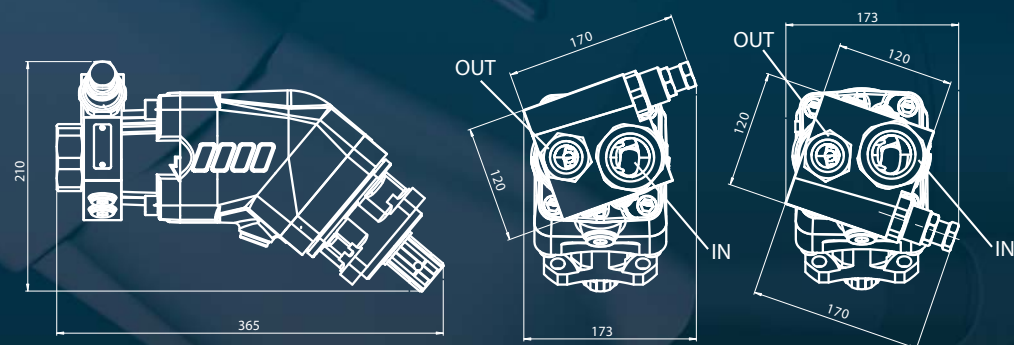


Relief valve assembly

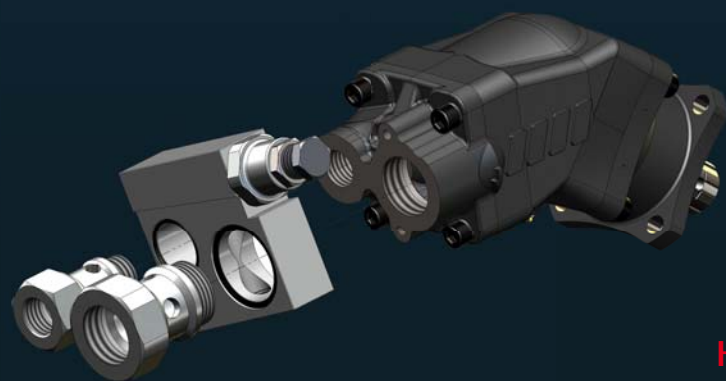
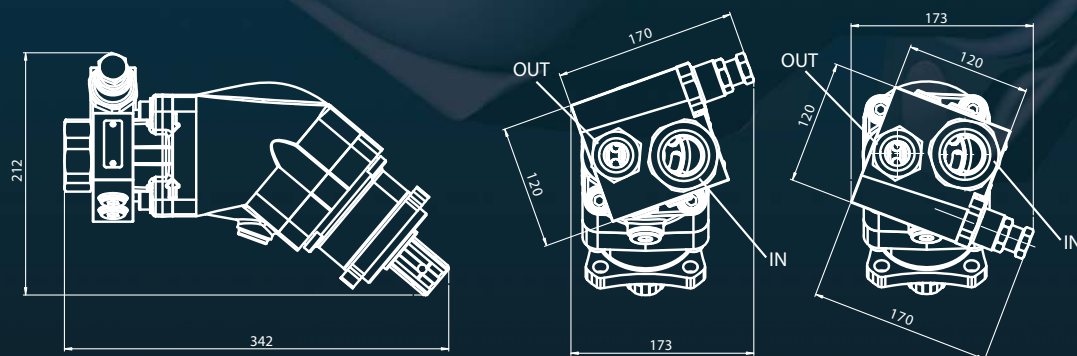
Relief valve assembly for "HDS-MDS-HDT" bent axis piston pumps

This valve can be directly fitted on the rear cover of the pump in such a way that the return flow goes back to tank through the pump itself saving one hose. The valve protects the pump from peak pressure due to any wrong operations such as closed circuit or coupling not connected. The fitment of the relief valve assembly onto the pump is symmetric, thus it is possible to rotate it by 180° just to avoid any interferences.

HDS-MDS

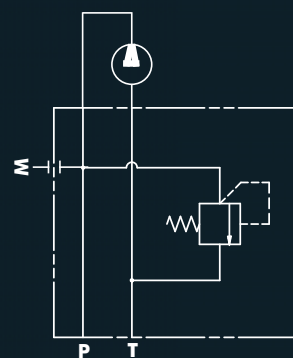


HDT



TECHNICAL FEATURES

HYDRAULIC SCHEME



Pump type	Order code	Setting pressure		IN	OUT
		min.	max.		
HDS-40 ISO HDS-47 ISO HDS-55 ISO HDS-64 ISO MDS-80 ISO	108-205-00479	45 ± 5	360 ± 5	G 1 1/4	G 3/4
HDS-84 ISO	108-205-00844	45 ± 5	360 ± 5	G 1 1/4	G 1
HDS-108 ISO	108-205-01085			G 1 1/2	G 1
MDS-130 ISO					
HDT-75 HDT-84 HDT-96 HDT-108	108-205-50843	45 ± 5	360 ± 5	G 1 1/4	G 1



BENT-AXIS PISTON PUMPS

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



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COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
= ISO/TS 16949 =

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°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:

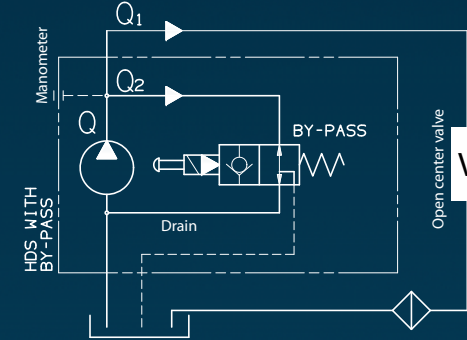
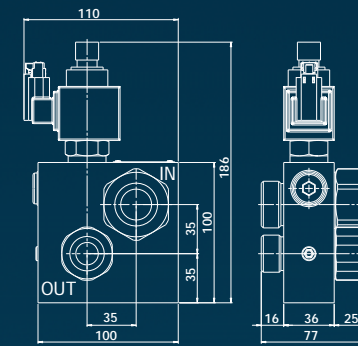
Versions with SAE shafts and UNF ports.



By-pass valves

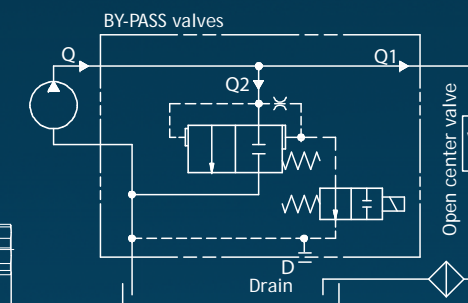
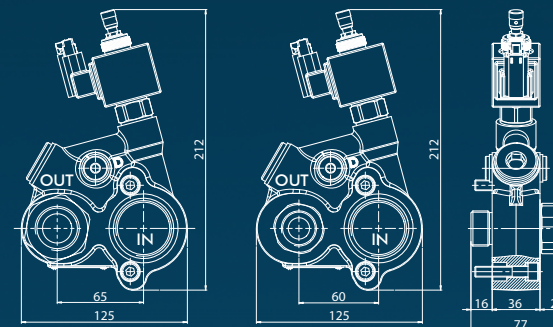
By-pass valve is used together with Bent Axis HDS-HDT piston pumps in case the pump is always in rotation while the vehicle is turned on (mounting with PTO without engagement or directly on motor).

HDS 12-17-25-34

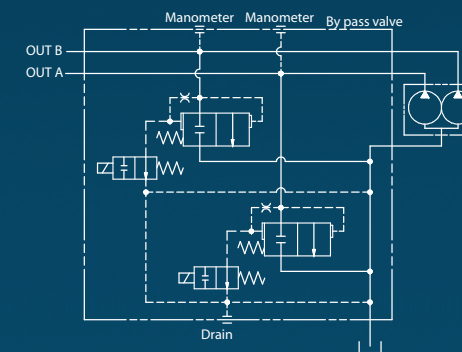
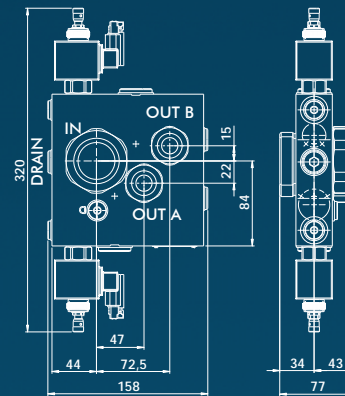


HDS - MDS - HDT

HDT HDS-MDS



TWIN FLOW



TECHNICAL FEATURES

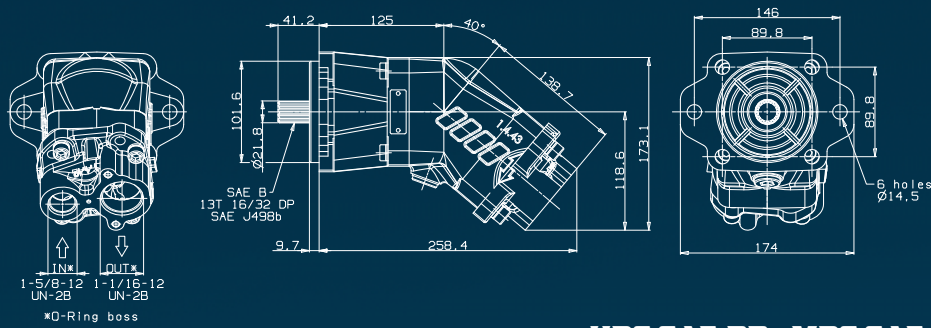
Pump type	Order code		Pressure max bar	IN	OUT	Manometer	Drain-line	Enclosure	Coil power W
	12 V	24 V							
HDS-12 ISO HDS-17 ISO HDS-25 ISO HDS-34 ISO	108-200-12345	108-200-24341	400*	G 1	G 3/4	G 1/8	G 3/8	IP 66	22
HDS-40 ISO HDS-47 ISO HDS-55 ISO HDS-64 ISO MDS-80 ISO HDS-84 ISO HDS-108 ISO MDS-130 ISO	108-200-12498	108-200-24494	400*	G 1 1/4	G 3/4	G 3/4	G 1/4	IP 66	22
HDT-75 HDT-84 HDT-96 HDT-108	108-200-12881	108-200-24887	400*	G 1 1/4	G 1	G 3/4	G 1/4	IP 66	22
TWIN-FLOW 53+53 TWIN-FLOW 70+35 TWIN-FLOW 70+70	108-200-12541 108-200-12710	108-200-24547 108-200-24716	400*	G 1 1/4 G 1 1/2	G 3/4	G 3/8	G 1/4	IP 66	22

* See pumps catalogue for related pressure values.

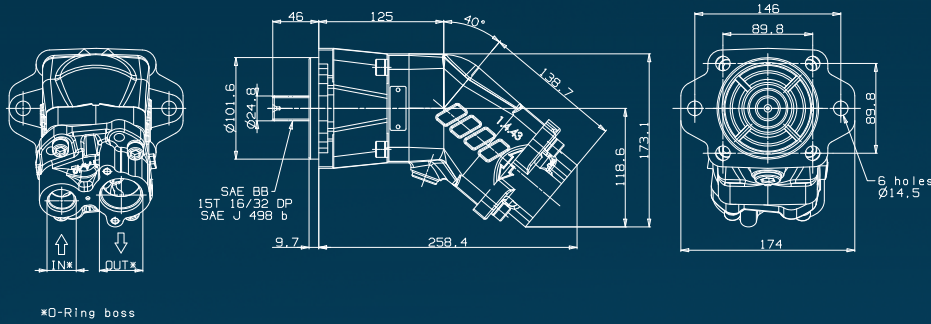
HDS-MDS SAE

Unidirectional bent axis piston pumps, displacements from 47 to 130 cm³, available with shaft and flange SAE-B, SAE-BB and SAE-C.

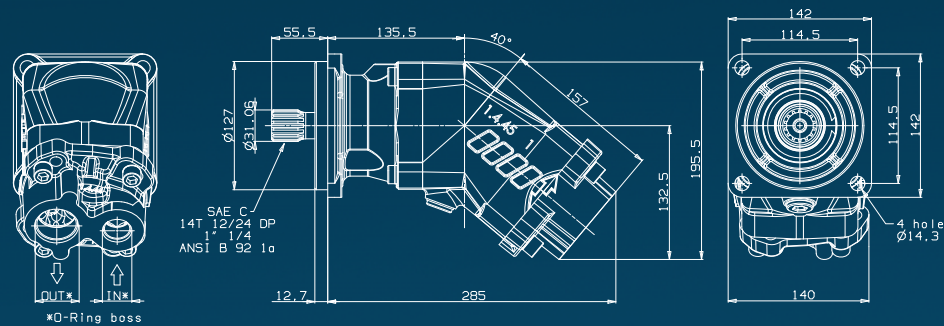
HDS SAE-B - MDS SAE-B



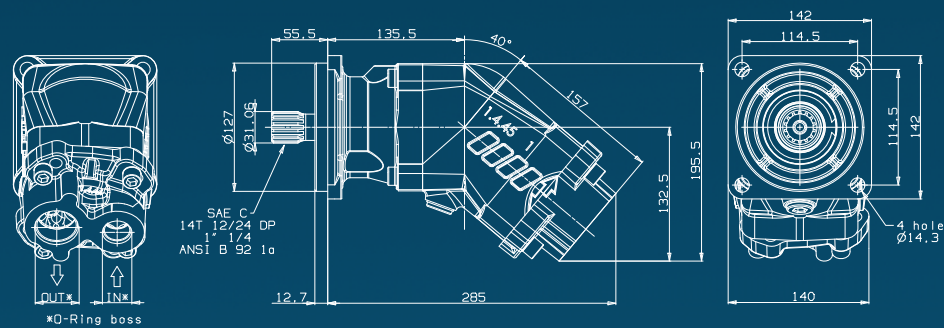
HDS SAE-BB - MDS SAE-BB



HDS 47/55/64 SAE-C - MDS 80 SAE-C



HDS 84/108 SAE-C - MDS 130 SAE-C



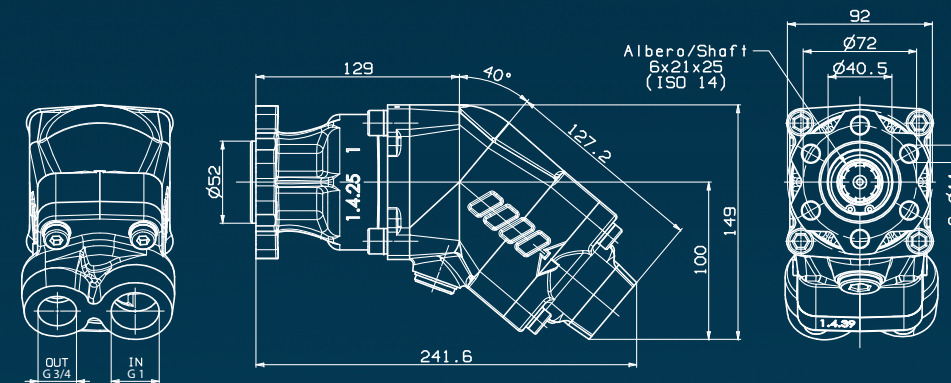
TECHNICAL FEATURES

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-47 SAE-B	108-017-00477	108-017-00486	47,13	350	400	2700	1900	2500	300	14
HDS-55 SAE-B	108-017-00557	108-017-00566	56,70	350	400	2700	1900	2500	300	14
HDS-64 SAE-B	108-017-00646	108-017-00655	63,56	350	400	2700	1900	2500	300	14
HDS-47 SAE-BB	108-018-00476	108-018-00485	47,13	350	400	2700	1900	2500	300	14
HDS-55 SAE-BB	108-018-00556	108-018-00565	56,70	350	400	2700	1900	2500	300	14
HDS-64 SAE-BB	108-018-00645	108-018-00654	63,56	350	400	2700	1900	2500	300	14
MDS-80 SAE-BB	108-018-10803	108-018-10812	77,25	250	300	2300	1800	2100	300	14
HDS-47 SAE-C	108-020-00472	108-020-00481	47,13	350	400	2700	1900	2500	300	14
HDS-55 SAE-C	108-020-00552	108-020-00561	56,70	350	400	2700	1900	2500	300	14
HDS-64 SAE-C	108-020-00641	108-020-00650	63,56	350	400	2700	1900	2500	300	14
MDS-80 SAE-C	108-020-10809	108-020-10818	77,25	250	300	2300	1800	2100	300	14
HDS-84 SAE-C	108-020-00847	108-020-00856	84,33	350	400	2300	1500	2000	300	17,8
HDS-108 SAE-C	108-020-01088	108-020-01097	107	350	400	2300	1500	2000	300	17,8
MDS-130 SAE-C	108-020-11308	108-020-11317	131,62	250	270	2300	1500	2000	300	17,8

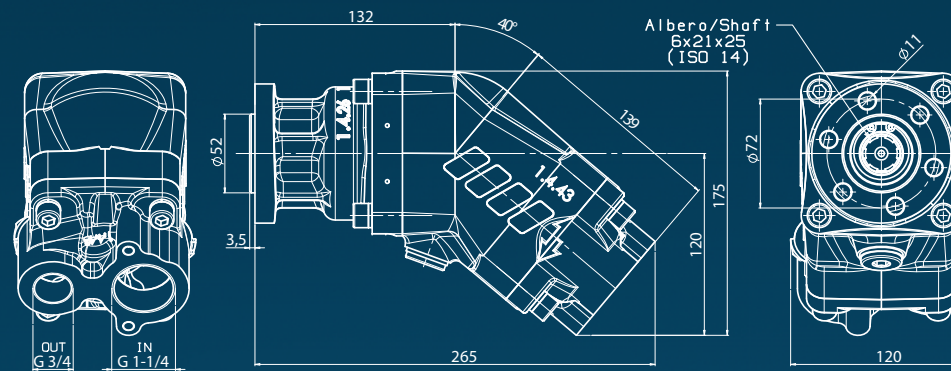
HDS UNI

Unidirectional bent axis piston pumps with displacement from 12 to 64 cm³.

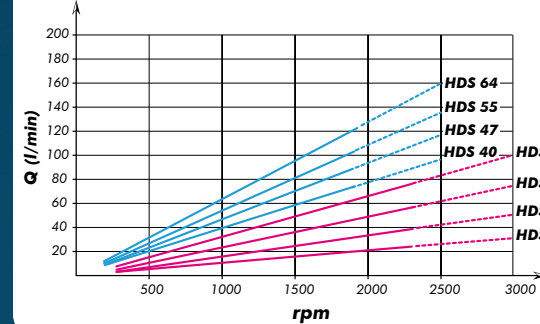
HDS 12-17-25-34 UNI



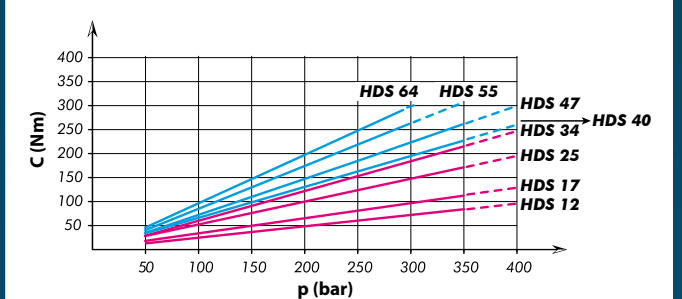
HDS 40-47-55-64 UNI



FLOW



DRIVE TORQUE



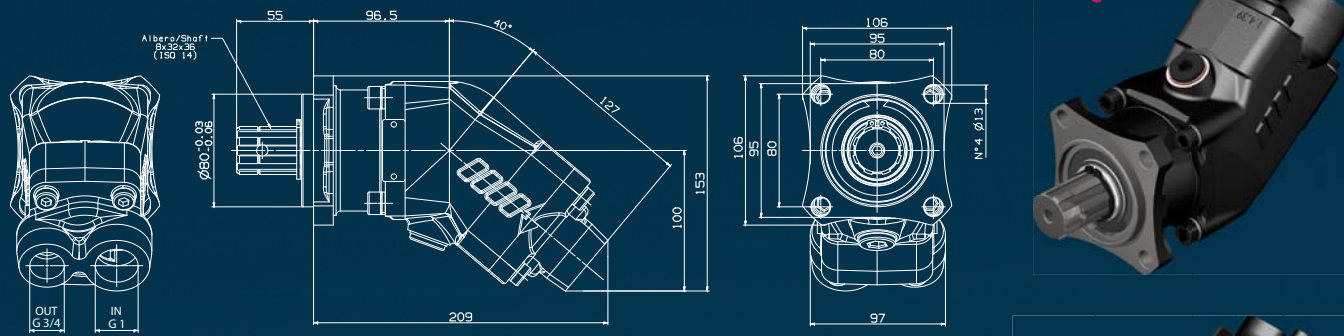
TECHNICAL FEATURES

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 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-64 UNI	108-014-06438	108-014-06447	63,56	280	300	2700	1900	2500	300	13

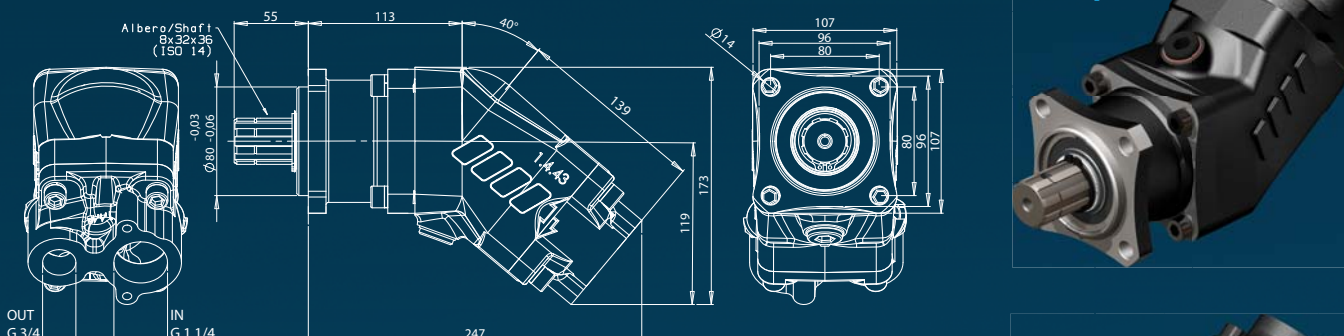
HDS ISO

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

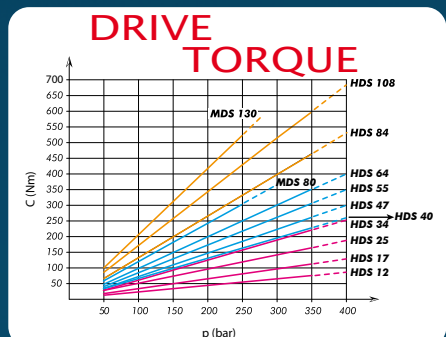
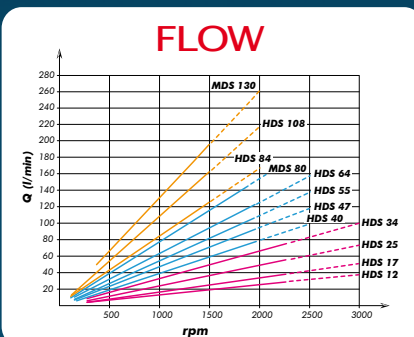
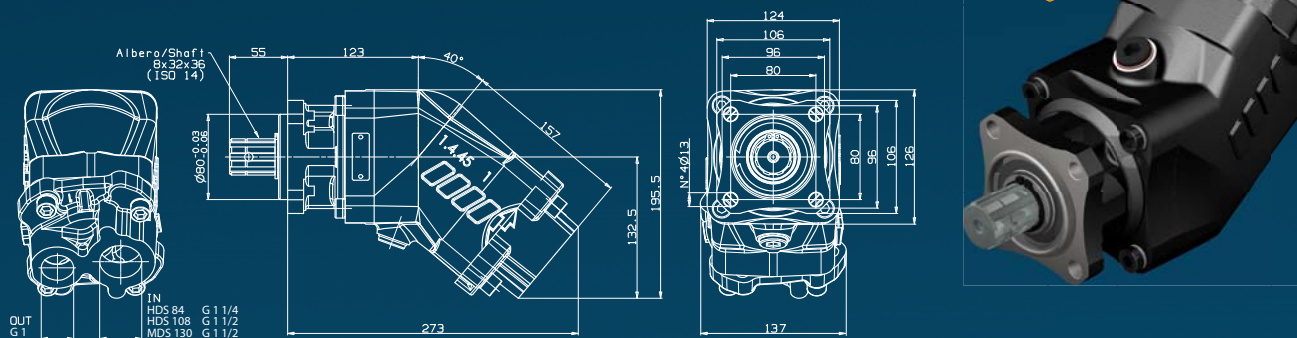
HDS 12-17-25-34 ISO



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



HDS 84-108 - MDS 130 ISO



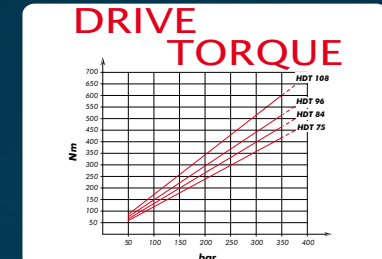
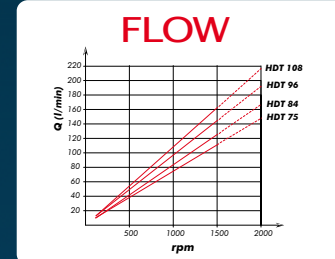
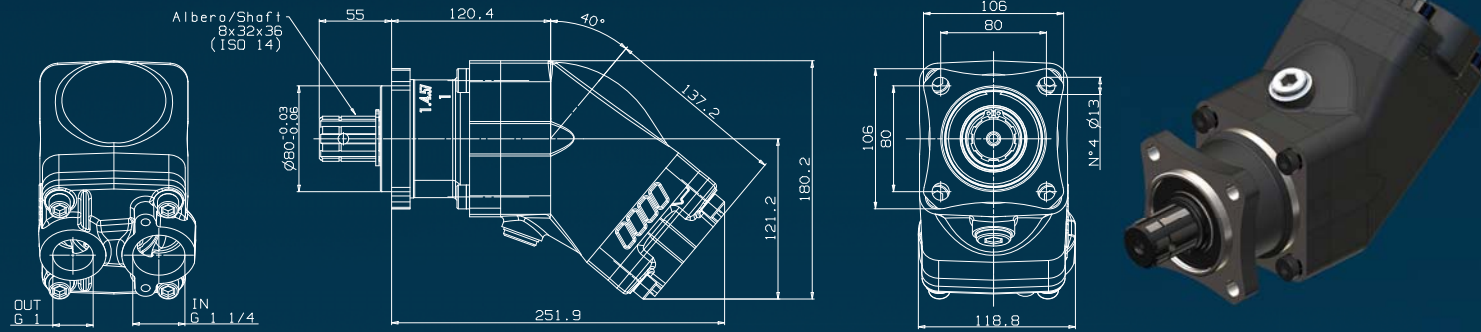
TECHNICAL FEATURES

Pump type	Rotation		Displac. cm ³	Pressure bar		Max speed rpm			Min speed Weight	
	right	left		P1	P3	without load	continuous	intermittent	rpm	kg
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

HDT

Unidirectional bent axis piston pumps with displacement from 75 to 108 cm³.

HDT 75-84-96-108



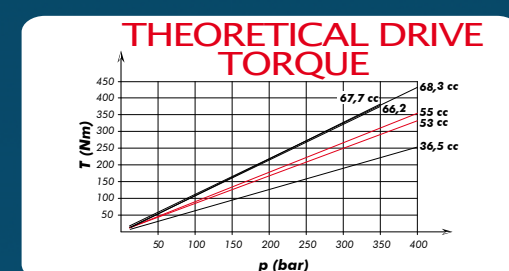
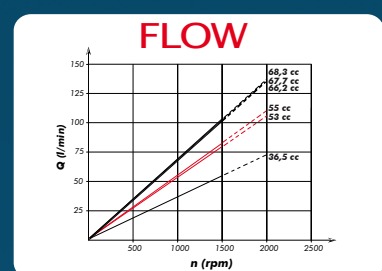
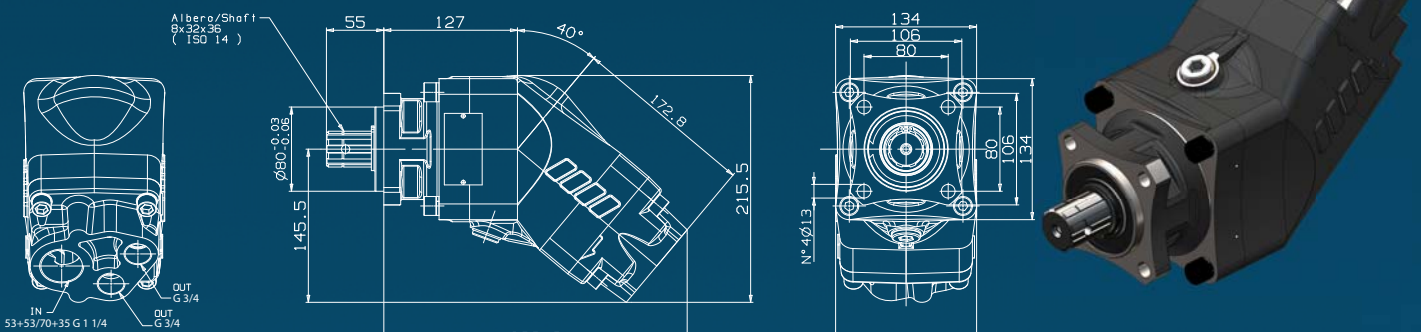
TECHNICAL FEATURES

Pump type	Rotation		Displac. cm ³	Pressure bar		Max speed rpm			Min speed Weight	
	right	left		P1	P3	without load	continuous	intermittent	rpm	kg
HDT-75	108-013-07509	108-013-07518	75,5	350	370	2300	1500	2000	300	15
HDT-84	108-013-08400	108-013-08419	84,2	350	370	2300	1500	2000	300	15
HDT-96	108-013-09605	108-013-09614	95,5	350	370	2300	1500	2000	300	15
HDT-108	108-013-10808	108-013-10817	107	350	370	2300	1500	2000	300	15

TWIN-FLOW

Unidirectional bent axis piston pumps with double output.

TWIN FLOW 53+53/70+70/70+35



TECHNICAL FEATURES

Pump type	Rotation		Rear cover	Pressure bar		Max speed rpm			Max power kW	
	right	left		P1	P2	without load	with load on A and B outputs	with load on 1 output only	continuous	intermit.
TWIN-FLOW 53+53	108-030-00505	108-030-00514	500-029-95307	350	400	2550	1800	2100	111	127
TWIN-FLOW 70+70	108-030-00685	108-030-00694	500-029-95405	350	400	2550	1800	2100	111	127
TWIN-FLOW 70+70	108-030-00685	108-030-00694	500-029-96806	300	350	2550	1400	1400	108	123
TWIN-FLOW 70+70	108-030-00685	108-030-00694	500-029-96904	300	350	2550	1400	1400	108	123
TWIN-FLOW 70+35	108-030-00701	108-030-00710	500-029-97001	350	400	2550	1800	2100	108	123
TWIN-FLOW 70+35	108-030-00701	108-030-00710	500-029-97109	350	400	2550	1800	2100	108	123