



CRYOGENIC CENTRIFUGAL PUMPS

DSM SERIES

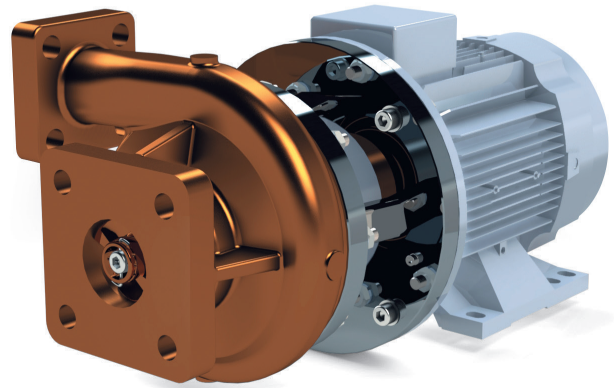
FOR LIQUEFIED NATURAL GAS (LNG)

TECHNICAL FEATURES

- Electric motor and direct transmission
- Mechanical seal in rulon
- Inducer to minimize required NPSH
- Low noise emission (< 80 dB)

APPLICATIONS

- Road trailers unloading, storage/iso-containers loading/unloading
- Bunkering
- Process and back-up operations, petrochemical industry applications



TRANSFERRED FLUIDS

- LNG

PERFORMANCES

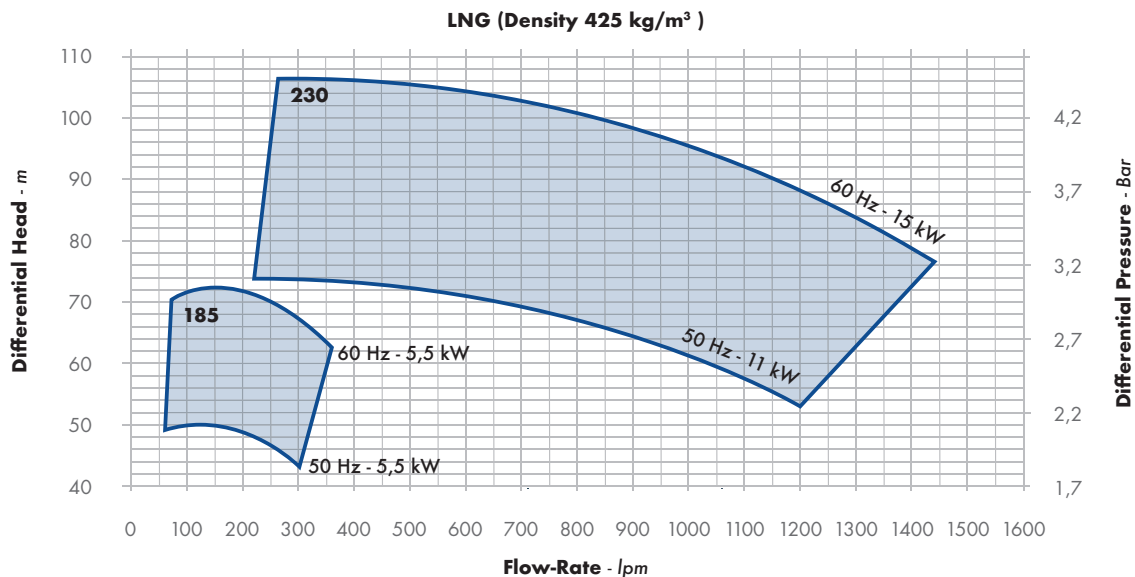
DSM SERIES**

Model		DSM 185	DSM 230
Power installed (Motor frame)	P_m [kW]	5,5 - 7,5 (132)	11 - 15 - 18,5 (160)
Max operating speed (50 Hz/60 Hz)	RPM	2950/3540	2950/3540
Max suction pressure	P [Bar]	6	6
Max allowable working pressure	MAWP [Bar]	23/33*	26
Max Head (50 Hz/60 Hz)	DH [m]	50/72	73/105
Max flow-rate (50 Hz/60 Hz)	Q [lpm]	300/360	1250/1500
Weight (Motor Frame)	W [Kg]	120 (132)/170 (160)	270

* Aluminium pump casing (23 bar) and bronze pump casing (33 bar)

** Special versions with high frequency VFD controlled motors are available

Data can be subjected to change



OPTIONAL ACCESSORIES

- Counter flanges
- Filter
- Flexible hoses for suction and discharge lines
- Leakage detection by temperature sensor
- Flushing system with nitrogen gas
- Temperature sensor for cooling down
- Electrical control panel
- Motor suitable for VFD
- Completely automated systems available on demand
- Mobile skid available on demand

TEST AND CHECKS

- Dimensional control of each mechanical component before assembly
- Running test of each pump with LIN before delivery

STANDARDS

Designed according to:

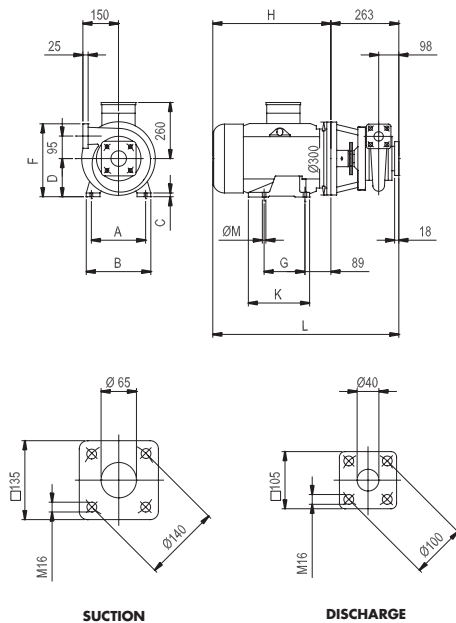
- European Directive Machinery
- European Directive ATEX*
- EIGA/IGC/CGA guidelines

*DSM Centrifugal Pumps are ATEX certified.

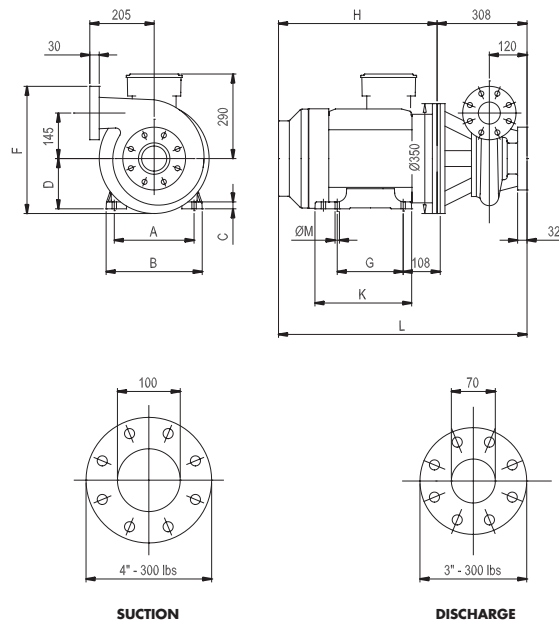
 II 2G h IIB T4 Gb

GENERAL DIMENSIONS

DSM 185



DSM 230



DSM 185

Available motor power [kW]	Motor size	A	B	C	D	F	G	H	K	L	M	Weight [Kg]
5.5 / 7.5	132	216	272	13	132	280	140	425	222	688	12	120

DSM 230

Available motor power [kW]	Motor size	A	B	C	D	F	G	H	K	L	M	Weight [Kg]
11 / 15 / 18.5	160	254	318	15	160	425	210	583	305	891	14	220

Data can be subjected to change



Certified quality management system





CENTRIFUGAL PUMPS

DSM SERIES

FOR INDUSTRIAL GASES

TECHNICAL FEATURES

- Electric motor and direct transmission
- Mechanical seal in rulon
- Inducer to minimize required NPSH
- Low noise emission (< 80 dB)

APPLICATIONS

- Liquid transfer between storage tanks
- Process and backup pumps operations

TRANSFERRED FLUIDS

- LIN, LOX, LAR, LCO₂, LN₂O



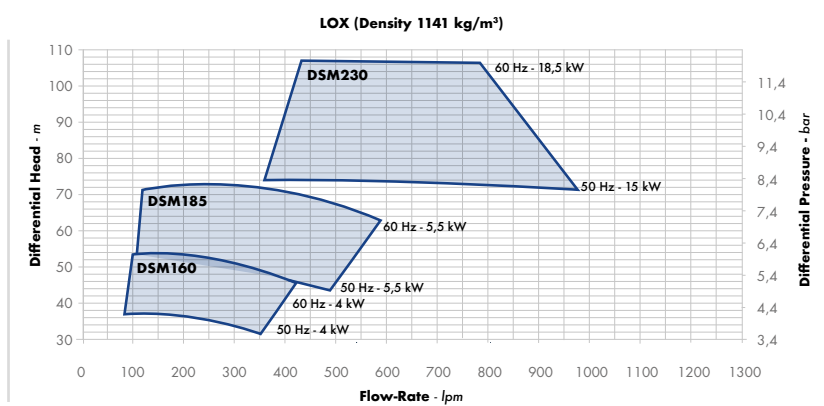
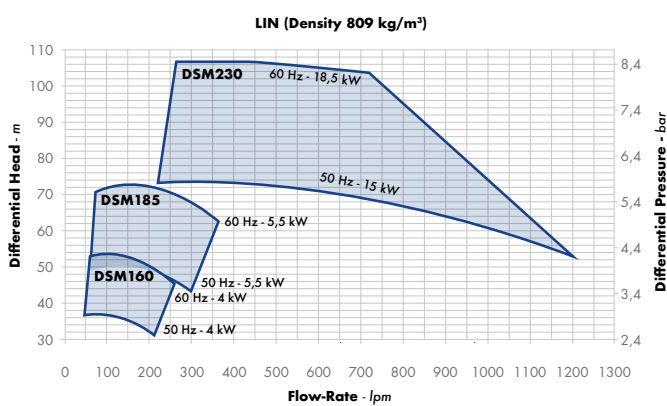
PERFORMANCES

DSM SERIES*

Model		DSM 160	DSM 185	DSM 230
Power installed (Motor frame)	P _m [kW]	4 (112)	5,5 - 7,5 (132)	11 - 15 - 18,5 (160)
Max operating speed (50Hz/60Hz)	rpm	2950/3540	2950/3540	2950/3540
Max suction pressure	P [bar]	6 - (25 LCO ₂ & LN ₂ O)	6 - (25 LCO ₂ & LN ₂ O)	6 - (25 LCO ₂ & LN ₂ O)
Max allowable working pressure	MAWP [bar]	30	33	26
Max Head (50Hz/60Hz)	DH [m]	37/53	50/72	73/105
Max flow-rate (50Hz/60Hz)	Q [lpm]	210/250	300/360	800/1200
Weight (Motor frame)	W [kg]	70	120 (132)/170 (160)	120 (132)/170 (160)

* Special versions with high frequency VFD controlled motors are available

Data can be subjected to change



OPTIONAL ACCESSORIES

- Counter flanges
- Filter
- Flexible hose for suction and discharge lines
- Leakage detection by temperature sensor
- Flushing system with nitrogen gas
- Temperature sensor for cooling down
- Electrical control panel
- Motor suitable for VFD
- Complete automatic system available on demand
- Mobile skid available on demand
- Temperature sensor of bearing casing

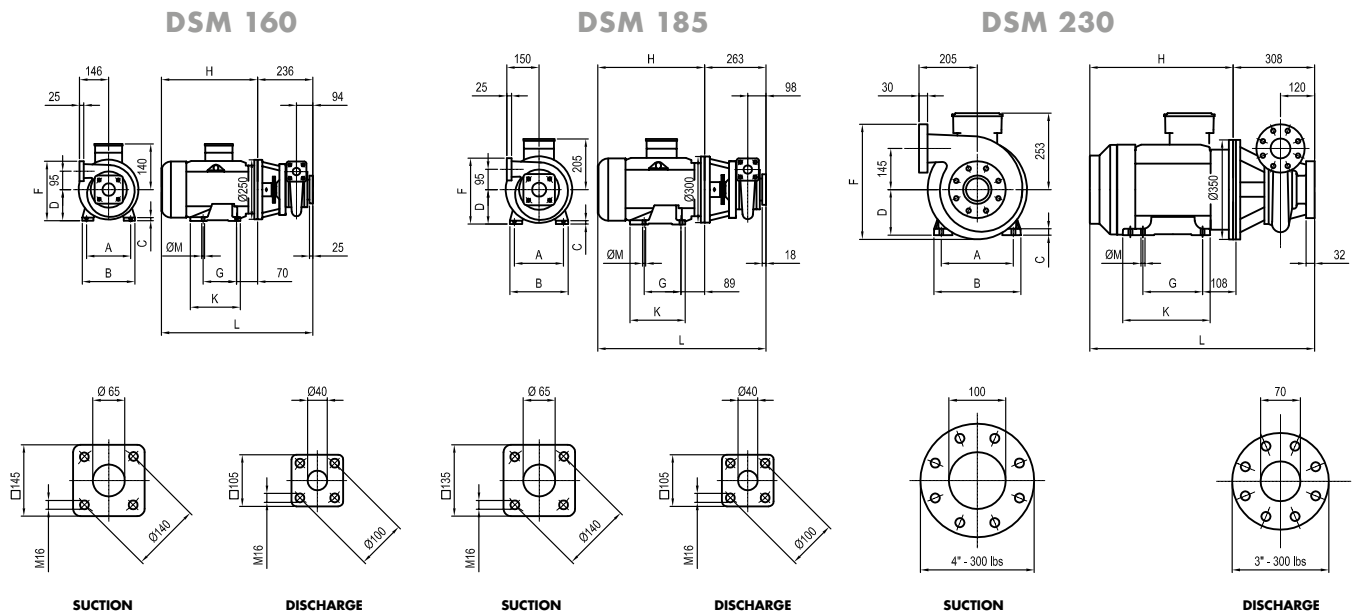
TEST AND CHECKS

- Dimensional control of each mechanical component before assembly
- Running test of each pump with LIN before delivery

STANDARDS

- Designed according to:
- European Directive
 - EIGA/IGC/CGA guidelines

GENERAL DIMENSIONS



DSM 160

Available motor power [kW]	Motor size	A	B	C	D	F	G	H	K	L	M	Weight [kg]
4	112	190	228	13	112	258	140	350	222	586	12	70

DSM 185

Available motor power [kW]	Motor size	A	B	C	D	F	G	H	K	L	M	Weight [kg]
5,5	132	216	272	13	132	280	140	425	222	688	12	120
7,5												

DSM 230

Available motor power [kW]	Motor size	A	B	C	D	F	G	H	K	L	M	Weight [kg]
11	160	254	310	23	160	425	210	529	295	839	14	220
15								586		894		230
18,5												



Certified quality management system

Data can be subjected to change