



CRYOGENIC CENTRIFUGAL PUMPS

DSM L SERIES

for LIQUEFIED NATURAL GAS (LNG)



Technical features

- ▶ Direct power transmission
- ▶ Mechanical seal in rulon
- ▶ Inducer to minimize required NPSH
- ▶ Low noise emission (< 80 dB)

Applications

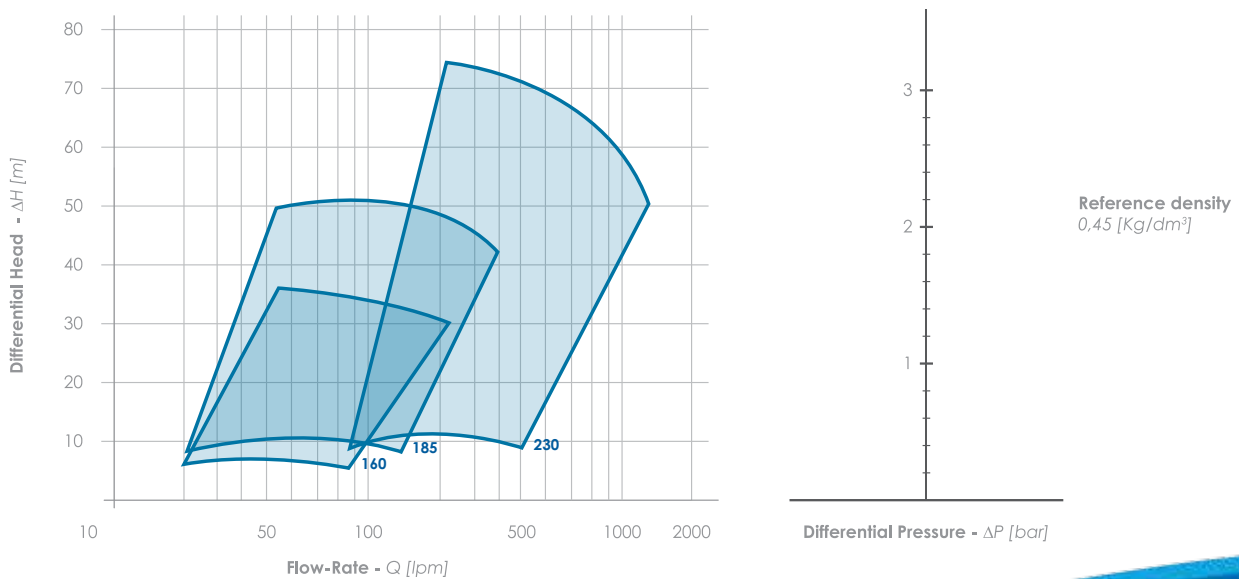
- ▶ Road trailers unloading, storage/iso-containers loading/unloading
- ▶ Bunkering
- ▶ Process and back-up operations, petrochemical industry applications

Transferred fluids

- ▶ LNG

PERFORMANCE

| Model | DSM 160 | DSM 185 | DSM 230 |
|----------------------------------|----------|----------|-----------|
| Transmission | | Direct | |
| Min - max flow rate [lpm] | 20 - 215 | 25 - 315 | 85 - 1250 |
| Min - max differential head [m] | 5,4 - 37 | 7,6 - 50 | 8,5 - 74 |
| Max suction pressure [bar] | | 5 | |
| Maximum allowable pressure [bar] | 30 | 35 | 28 |



Optional

- ▶ Filter
- ▶ Flexible hose for suction, return and by-pass lines
- ▶ Leakage detection by temperature sensor
- ▶ Flushing system with nitrogen gas
- ▶ Temperature sensor for cooling down
- ▶ Electrical control panel
- ▶ Motor suitable for VFD
- ▶ Customized electrical control panel available on demand
- ▶ Completely automated systems available on demand
- ▶ Mobile skid available on demand

Test and controls

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

Standards

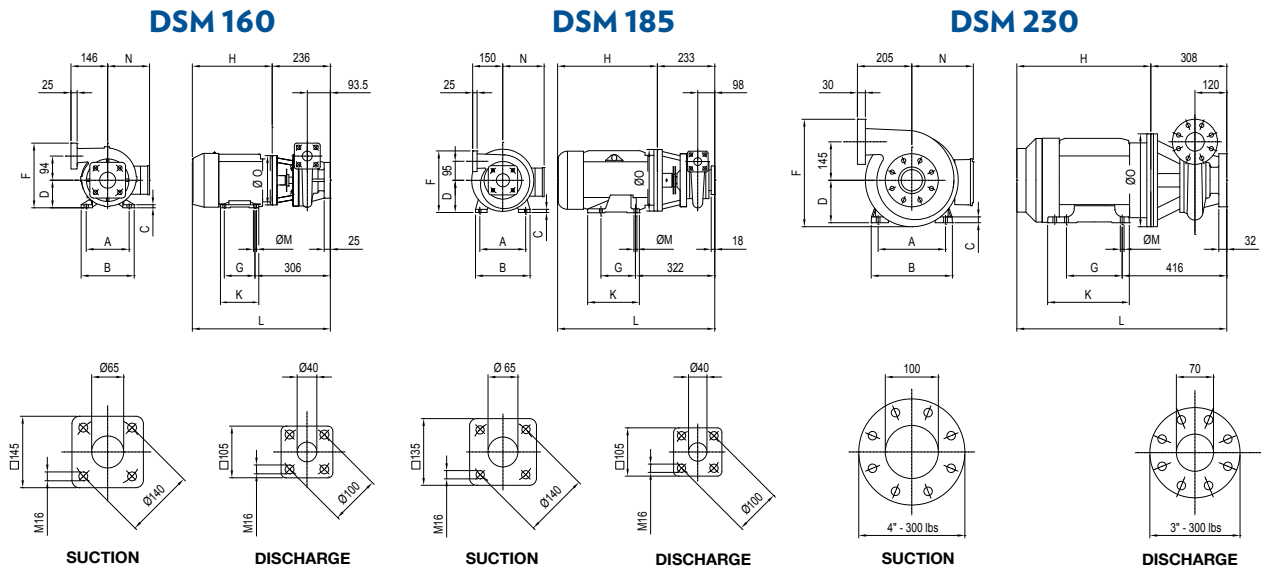
Designed according to:

- ▶ European Directive 2006/42/CE Machinery
- ▶ European Directive PED 97/23/CE
- ▶ European Directive 94/9/CE ATEX*
- ▶ EIGA/IGC/CGA guidelines

*DSM Centrifugal Pumps are ATEX certified for "zone 1".



GENERAL DIMENSIONS



DSM 160 L

| Available motor power [kW] | Motor size | A | B | C | D | F | G | H | K | L | M | O | Weight [Kg] |
|----------------------------|------------|-----|-----|----|-----|-----|-----|-----|-----|-----|----|-----|-------------|
| 4 | 112M | 190 | 235 | 12 | 112 | 259 | 140 | 415 | 175 | 648 | 12 | 250 | 70 |

DSM 185 L

| Available motor power [kW] | Motor size | A | B | C | D | F | G | H | K | L | M | O | Weight [Kg] |
|----------------------------|------------|-----|-----|----|-----|-----|-----|-----|-----|-----|----|-----|-------------|
| 5.5 | 132S | 216 | 272 | 13 | 132 | 280 | 140 | 425 | 222 | 658 | 12 | 300 | 120 |
| 11 | 160M | 254 | 318 | 15 | 160 | 308 | 210 | 583 | 305 | 816 | 14 | 350 | 170 |
| 15 | | | | | | | | | | | | | 170 |

DSM 230 L

| Available motor power [kW] | Motor size | A | B | C | D | F | G | H | K | L | M | O | Weight [Kg] |
|----------------------------|------------|-----|-----|----|-----|-----|-----|-----|-----|-----|----|-----|-------------|
| 11 | 160M | 254 | 318 | 15 | 160 | 425 | 210 | 583 | 305 | 891 | 14 | 350 | 220 |
| 15 | | | | | | | | | | | | | 270 |
| 18.5 | 160L | 254 | 318 | 15 | 160 | 425 | 254 | 583 | 305 | 891 | 14 | 350 | 270 |

Data can be subjected to change



Certified quality management system

Vanzetti Engineering s.r.l.

Via dei Mestieri, 3 - 12030 Cavallerleone (CN) ITALY
Tel. (+39) 0172 915811 - Fax (+39) 0172 915822

www.vanzettiengineering.com