



INDUSTRY PRODUCT OVERVIEW

Value-added Liquid Transport Solutions

DESMI Gear Pumps



ROTAN® GP



ROTAN® HD



ROTAN® PD



ROTAN® CD



ROTAN® ED



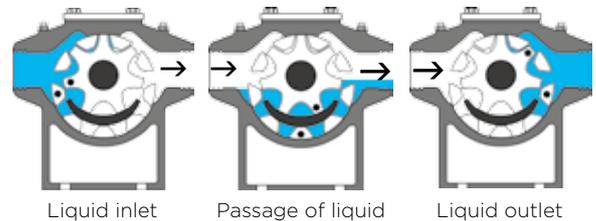
ROTAN® HD 202

DESMI has worked with customers to develop new innovations in pump technology. Whether it is solving individual application problems or developing new industry leading ideas, we are always looking for ways of doing things better.

It is DESMI's policy to offer solutions developed in co-operation with worldwide leading companies and to follow-up with after-sales-service.

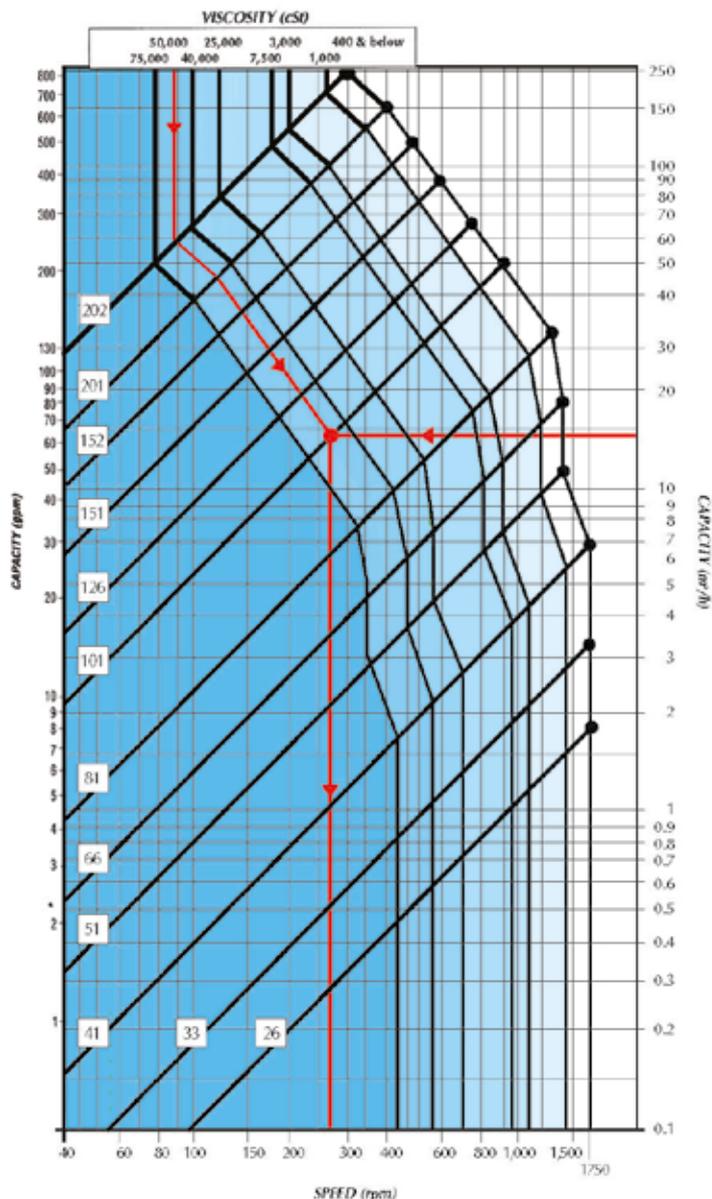
ROTAN® pumps can be supplied in accordance with the ATEX Directive for use in potentially explosive environments.

Method of operation



Performance overview

	ROTAN® GP - General Purpose	ROTAN® HD - Heavy Duty	ROTAN® PD - Petrochemical Duty	ROTAN® CD - Chemical Duty	ROTAN® ED - Environmental Duty
Capacity Range	Up to 50 m ³ /h / 220 gpm	Up to 250 m ³ /h / 1100 gpm	Up to 170 m ³ /h / 748 gpm	Up to 170 m ³ /h / 748 gpm	Up to 90 m ³ /h / 396 gpm
Speed	Up to 1750 rpm	Up to 1750 rpm	Up to 1750 rpm	Up to 1750 rpm	Up to 1750 rpm
Differential Pressure	Up to 16 bar / 232 psi	Up to 16 bar / 232 psi	Up to 16 bar / 232 psi	Up to 16 bar / 232 psi	Up to 16 bar / 232 psi
Suction Lift	Up to 0.5 / 7.25 psi bar vacuum while priming Up to 0.8 bar / 11.6 psi vacuum while pumping	Up to 0.5 bar / 7.25 psi vacuum while priming Up to 0.8 bar / 11.6 psi vacuum while pumping	Up to 0.5 bar / 7.25 psi vacuum while priming Up to 0.8 bar / 11.6 psi vacuum while pumping	Up to 0.5 bar / 7.25 psi vacuum while priming Up to 0.8 bar / 11.6 psi vacuum while pumping	Up to 0.5 bar / 7.25 psi vacuum while priming Up to 0.8 bar / 11.6 psi vacuum while pumping
Viscosity Range	Up to 7,500 cSt	Up to 250,000 cSt	Up to 250,000 cSt	Up to 250,000 cSt	Up to 10,000 cSt
Temperature	Up to 150°C / 302°F	Up to 250°C / 482°F	Up to 250°C / 482°F	Up to 250°C / 482°F	Up to 250°C / 482°F
Pumping medium:	Clean oil, glycol, vegetable oil, solvents, lube oil, waste oil, fish oil, also for marine fuel- diesel- gas- and lube oil.	Oil, asphalt, chocolate, paint/lacquer, molasses, soap, additive, polyol, viscose, sulphate soap, maltose, grease, pitch, base oil, bitumen, polyester, also for marine fuel- diesel- gas- and lube oil.	Fuel, oil, gasoline, lube oil, grease, other hydrocarbon based fluids, additives, bitumen, polystyrene, wax	Organic acid, fatty acid, alkali, caustic soda, polymer solutions, soap, shampoo, animal fat, vegetable fat, chocolate, other special fluids, resin, paint, rosin	Isocyanate, solvents hazardous organic liquids, printing ink, resin, pitch, alkyd resin, soyabean oil, linseed oil, monomers, polyol, corn syrup, also for marine fuel- diesel- gas- and lube oil.

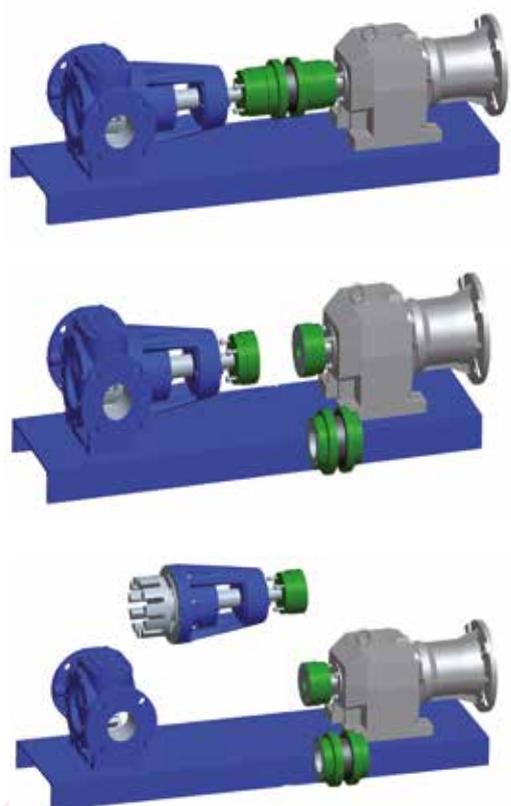


Service on pumps without braking any pipe connections - saving both time and money...

True back-pull-out feature allow inspection/repair of the rotating cartridge without disturbing the piping or coupling alignment

Benefits

- Reduced downtime costs
- Reduced labor costs
- Spares optimization

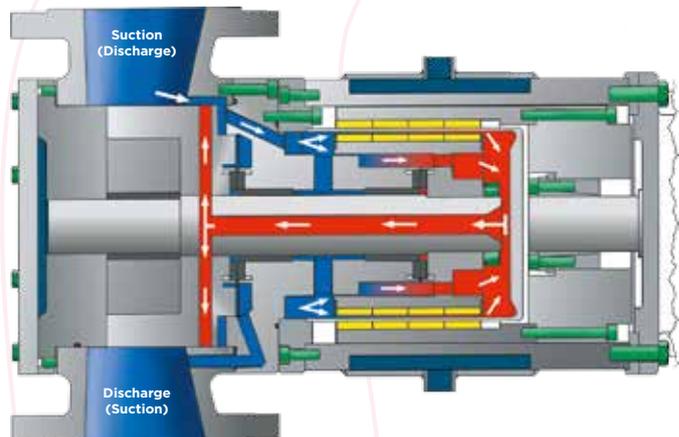


Environmental Duty Pumps

Magnetically coupled pumps for ultimate protection against leakage.

ED pumps will be a very economical solution compared with traditionally sealed pumps, especially where the application requires the use of double mechanical shaft seals.

Often these applications are very different, resulting in the seals and support system requiring regular attention and/or replacement. Thus, the life cycle cost for ED pumps are generally much lower than for pumps using two seals.



DESMI Centrifugal Pumps

DESMI's programme within vertical in-line centrifugal pumps represents the latest developments, based on more than 150 years of experience in the pump industry.

The pumps are characterised by high levels of efficiency and low NPSH values.

DESMI centrifugal pumps are a service friendly alternative to submersible pumps.

Both NSL and DSL require minimal space, and there is easy access for maintenance of the pump's rotating parts, with replaceable wear ring in the pump housing,

Vertical In-line Double Suction Centrifugal Pump DSL	
50 Hz:	60 Hz:
Pressure range: 2-30 mLC - 6-100 ft	Pressure range: 4-45 mLC - 12-150 ft
Capacity range: 300-3500 m ³ /h 1300-15000 US gpm	Capacity range: 350-4400 m ³ /h 1500-19000 US gpm
Temperature range: With standard mech. shaft seal max. 80°C - 176°F. With special mech. shaft seal max. 120°C - 248°F.	
Applications: Various industry water applications such as feeding cooling towers and industry water circulation. But also district heating and power plants together with many other industries will profit from using DSL pumps.	

Vertical In-line Centrifugal Pump NSL	
50 Hz:	60 Hz:
Capacity range: 10-1500 m ³ /h - 50-6600 US gpm	Capacity range: 10-1800 m ³ /h - 50-7900 US gpm
Pressure range: 5-150 mLC - 15-500 ft	Pressure range: 5-220 mLC - 15-720 ft
Temperature range: With standard mech. shaft seal max. 80°C - 176°F With special mech. shaft seal max. 140°C - 284°F	
Applications: Various industry water applications such as feeding cooling towers and industry water circulation back flush, booster pumps, fresh and seawater cooling pumps and bilge pumps.	

Vertical In-line Centrifugal Pump ESL	
50 Hz:	60 Hz:
Capacity range: 2-135m ³ /h 9 - 600 US gallon/minute	Capacity range: 2-160m ³ /h 9 - 660 US gallon/minute
Pressure range: 2-45 mLC 6,5 - 150 ft	Pressure range: 3-65 mLC s 10 - 210 ft
Liquid temperature range: With standard mech. shaft seal max. 80 °C - 176 °F. With special mech. shaft seal max. 140 °C - 284 °F.	
Applications: Various industry water applications such as feeding cooling towers and industry water circulation back flush, booster pumps, fresh and seawater cooling pumps and bilge pumps.	



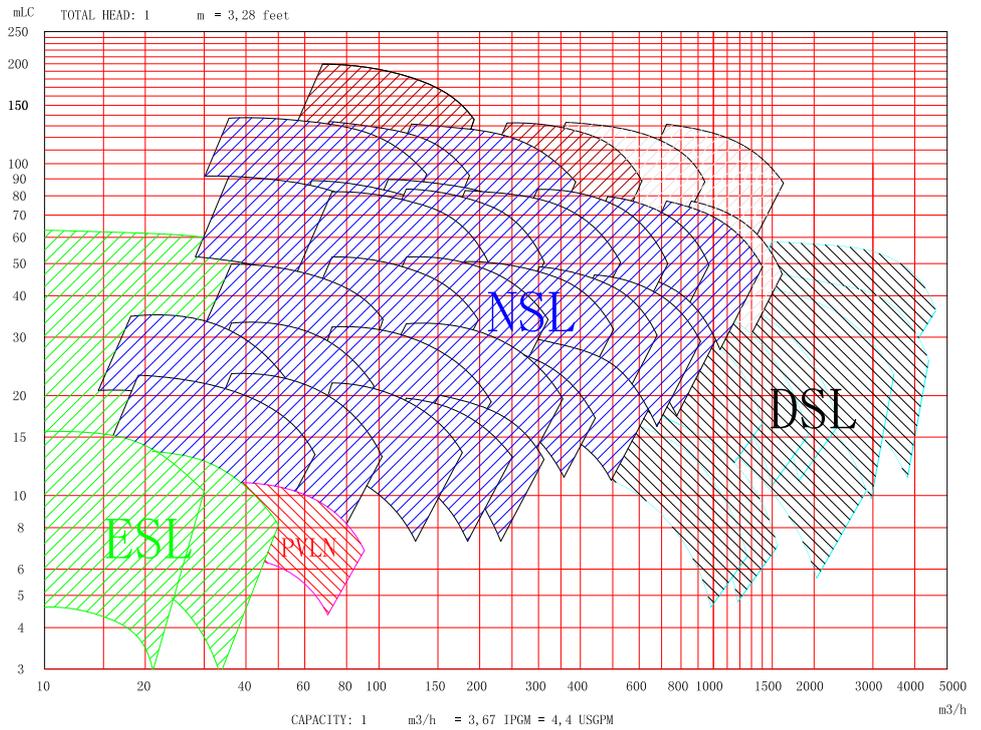
DESMI DSL



DESMI NSL



DESMI ESL



DESMI Modular S

Self-priming Centrifugal Pump Modular S

Capacity range:
 1-350 m³/h - 5-1500 US gpm at 50 Hz
 2-400 m³/h - 10-1760 US gpm at 60 Hz

Pressure range:
 1-100 mLC- 3-330 ft at 50 Hz
 2-150 mLC - 6-490 ft at 60 Hz

Temperature range:
 With standard mech. shaft seal max. 80°C - 176°F, with special mech. shaft seal max. 120°C - 248°F.

Applications:
 Ground water pumps, fire pumps, wash-down pumps, cooling-water pumps, circulation pumps, fuel pumps, filling of tanks and wagons. Also suitable for construction and agricultural applications

Horizontal Self-priming Centrifugal Pump SA / SAEN

Capacity range: Up to 650 m³/h - 2.900 US gpm

Pressure range: 0-110 mLC - 10 - 360 ft

Temperature range:
 With standard mech. shaft seal max. 80°C/176°F, with special mech. shaft seal max. 120°C./248°F

Applications:
 Bilge pumps, ballast pumps, fire pumps, cooling water pumps, wash-deck pumps, fuel pumps, wellpoint pumps, irrigation pumps, circulation pumps



DESMI SA

DESMI Vertical Centrifugal Pumps

Water, Sprinkler, Industry Applications, Cleaning Systems and Boiler Feeds



DESMI Vertical Pumps DP

50 Hz					
Model	DPV 2	DPV 4	DPV 6	DPV 10 2P	DPV 10 4P
Capacity					
Capacity range (m ³ /h)/(gpm)	0.2-3.3/0.9-15	0.4-6.5/1.8-29	0.6-9/2.6-40	1.0-13.2/4-58	0.5-6.6/2-29
Nominal capacity at Qopt. (m ³ /h)/(gpm)	1.9/8.4	4/18	6.3/28	10/44	5/22
Pressure					
Norm pressure	PN16-25-40				
Maximum pump pressure (m)/(ft)	229/751	234/768	256/840	239/784	58/190
Maximum pressure at Qopt. (m)/(ft)	187/614	193/633	200/654	179/587	43/141
NPSH at Qopt. (m)/(ft)	2.2/7.2	1.2/4	1.2/4	1.2/4	0.9/3
Hydraulic assembly					
Temperature range medium	-20 - +140° C / -4 - 284° F				

50 Hz					
Model	DPV 15 2P	DPV 15 4P	DPV 25 2P	DPV 25 4P	DPV 85
Capacity					
Capacity range (m ³ /h)/(gpm)	1.8-22.5/8-99	0.98-11.3/4.3-50	2.8-35/12-154	1.4-17.5/6-77	8.5-112.8/37-497
Nominal capacity at Qopt. (m ³ /h)/(gpm)	18/79	9.8/43	28/123	14/62	85.7/377
Pressure					
Norm pressure	PN16-25-40				
Maximum pump pressure (m)/(ft)	248/814	59/194	246/807		176/577
Maximum pressure at Qopt. (m)/(ft)	193/633	44/144	185/607	45/148	132/433
NPSH at Qopt. (m)/(ft)	1.2/4	0.6/2	3.0/10	0.8/3	2.2/7
Hydraulic assembly					
Temperature range medium	-20 up to + 140° C / -4 - 284° F				

60 Hz					
Model	DPV 2	DPV 4	DPV 6	DPV 10 2P	DPV 10 4P
Capacity					
Capacity range (m ³ /h)/(gpm)	0.24-4/1-18	0.48-7.8/2-34	0.72-10.8/3.2-48	1.3-15.8/6-70	0.6-7.9/3-35
Nominal capacity at Qopt. (m ³ /h)/(gpm)	2.3/10	4.8/21	7.6/33	13.3/59	6.3/28
Pressure					
Norm pressure	PN16-25-40				
Maximum pump pressure (m)/(gpm)	246/807	238/781	255/837	246/807	61/200
Maximum pressure at Qopt. (m)/(gpm)	201/659	195/640	199/653	173/568	44/144
NPSH at Qopt. (m)	3/10	1.8/6	2/7	2/7	1.3/4
Hydraulic assembly					
Temperature range medium	-20 - +140° C / -4 - 284° F				

60 Hz					
Model	DPV 15 2P	DPV 15 4P	DPV 25 2P	DPV 25 4P	DPV 85
Capacity					
Capacity range (m ³ /h)/(gpm)	2.2-27/10-119	1.1-13.8/5-41	3.4-42/15-185	1.7-21/7-92	10-132/44-551
Nominal capacity at Qopt. (m ³ /h)/(gpm)	21.7/96	10.9/48	34/150	17/75	100/440
Pressure					
Norm pressure	PN16-25-40				
Maximum pump pressure (m)/(ft)	233/764	57/187	210/689	87/285	151/495
Maximum pressure at Qopt. (m)/(ft)	177/551	43/141	157/515	65/213	108/354
NPSH at Qopt. (m)/(ft)	1.5/6	1.3/4	4.6/15	1.1/3.6	3.8/12
Hydraulic assembly					
Temperature range medium	-20 up to + 140° C / -4 - 284° F				



DPV Pumps

Air valve technology is the heart of the air-powered double diaphragm pump and determines reliability. The DESMI diaphragm pumps hold three patents on its field proven valve and enjoys a superior reputation throughout the industry.



DDS 25 Aluminium

Air valve technology is the heart of the air-powered double diaphragm pump and determines reliability.

Diaphragm materials

Rubber compounds	
Nitrile (NBR)	Temperature range: 0°C to 70°C / 32°F to 158°F Estimated 10 million strokes Excellent for oil/petroleum based fluid
Neoprene (CR)	Temperature range: 0°C to 70°C / 32°F to 158°F Estimated 10 million strokes Excellent elastomer for use in non-aggressive applications Good for abrasive material
Nordel® (EPDM)	Temperature range: -20°C to +80°C / -4°F to 176°F Estimated 10 million strokes Great for extremely cold applications Good resistance to acids and caustics
Viton® (FPM)	Temperature range: -10°C to +120°C / 14°F to 248°F Estimated 3 million strokes Excellent for aggressive fluids such as aromatic or chlorinated hydrocarbons and acids. Good for high temperature applications
Thermoplastic compounds	
Hytrel® (TPEE)	Temperature range: 0°C to 80°C / 32°F to 176°F Estimated 15 million strokes Excellent general purpose/durable diaphragm Longest life in non-aggressive applications
Santoprene® (TPO)	Temperature range: 0°C to 100°C / 32°F to 212°F Estimated 15 million strokes Excellent general purpose/durable diaphragm
Teflon® (PTFE)	Temperature range: 0°C to 100°C / 32°F to 212°F Estimated 30 million strokes for 1/4" pumps Estimated 10 million strokes for 3/8" to 1/2" pumps Estimated 3 million strokes for 3/4" to 3" pumps Excellent choice for pumping highly aggressive fluids Homogeneous PTFE



DDS 25 Polypropylene

Performance overview

	Max capacity l / min / gpm	Max pressure MPa	Max size solids mm / inch
DDS-05	10 / 2	0.7 / 102 psi	0.2 / 0.01
DDS-10	20 / 5	0.7 / 102 psi	1 / 0.04
DDS-15	45 / 12	0.7 / 102 psi	1 / 0.04
DDS-20	100 / 26	0.7 / 102 psi	2 / 0.1
DDS-25	160 / 42	0.7 / 102 psi	3 / 0.12
DDS-40	450 / 119	0.7 / 102 psi	7 / 0.28
DDS-50	650 / 172	0.7 / 102 psi	8 / 0.31
DDS-80	800 / 211	0.7 / 102 psi	10 / 0.39

Applications:
Ceramics, chemical Industry, construction, electronic industry, environmental protection, machine industry, mining, paint and lacquer industry, petrochemical industry, pharmaceutical industry, plating, power stations, waste water

Materials of wetted parts

Plastic pumps in general are recommended for strong acids and caustics but not recommended for high temperatures or slurries.
Metal pumps in general are good for abrasion resistance, solvents, hydrocarbons, and high temperature applications.

Polypropylene (PPG)	Temperature range: 0°C to 60°C / 32°F to 140°F Good chemical resistance Light weight Not resistant to petroleum based solvents Glass filled
Kynar® (PVDF)	Temperature range: 0° to 80° / 32°F to 176°F High chemical resistance Carbon filled
Poly Vinyl Chloride (PVC)	Temperature range: 0°C to 60°C / 32°F to 140°F Very good resistance to acids and alkalis
Aluminium (ADC-12/AC2A-F)	Used in many non corrosive, non-abrasive applications Light weight
Stainless Steel (SCS14/SUS316)	Used in chemically active fluids High abrasion resistance
Cast Iron (FC)	Used in a variety of non-corrosive and slurry applications
Teflon® (PTFE)	Temperature range: 0°C to 80° / 32°F to 176°F Inert to most chemicals 100% Virgin PTFE

Your DESMI contact for Industry

Denmark

DESMI A/S - Group Head Quarter
Tagholm 1
DK-9400 Nørresundby
Tel.: +45 96 32 81 11
Fax: +45 98 17 54 99

DESMI Pumping Technology A/S
Tel.: +45 96 32 81 11
Fax: +45 98 17 54 99

DESMI Danmark A/S
Tel.: +45 72 44 02 50
Fax: +45 98 17 54 99

DESMI Contracting A/S
Tel.: +45 96 32 81 11
Fax: +45 98 17 54 99

DESMI Ro-Clean A/S
Tel.: +45 65 48 16 10
Fax: +45 65 48 16 15

DESMI Ocean Guard A/S
Tel.: +45 96 32 81 99
Fax: +45 98 17 54 99

Germany

DESMI GmbH
Tel.: +49 407 519847
Fax: +49 407 522040

Netherlands

DESMI B.V.
Tel.: +31 30 261 00 24
Fax: +31 30 262 33 14

Norway

DESMI AS
Tel.: +47 38 12 21 80
Fax: +47 38 12 21 81

U.K.

DESMI Ltd.
Tel.: +44 1782 566900
Fax: +44 1782 563666

DESMI Ltd. - Southampton Office
Tel.: +44 2380 018289
Fax: +44 2380 339190

DESMI FHS Ltd.
Tel.: +44 1782 566900
Fax: +44 1782 563666

Singapore

DESMI Pte. Ltd.
Tel.: +65 6748 2481
Fax: +65 6747 6172

USA

DESMI Inc.
Tel.: +1 757 857 7041
Fax: +1 757 857 6989

DESMI-AFTI, Inc.
Tel.: +1 716 662 0632
Fax: +1 716 662 0636

Indonesia

DESMI Ro-Clean Asia
Tel.: +62 21 570 7577
Fax: +62 21 574 1707

China

DESMI Pumping Technology (Suzhou) Co., Ltd.
Tel.: +86 512 6274 0400
Fax: +86 512 6274 0418

DESMI Pumping Technology (Suzhou) Co., Ltd.
Shanghai Liaison Office
Tel.: +86 21 6071 06 00-05, 6071 06 07-13
Fax: +86 21 60710614

DESMI Pumping Technology (Suzhou) Co., Ltd.
Tianjin Liaison Office
Tel.: +86 22 8371 3731/83713732
Fax: +86 22 8371 3739

DESMI Pumping Technology (Suzhou) Co., Ltd.
Guangzhou Liaison Office
Tel.: +86 20 3826 4197
Fax: +86 20 3826 4186

DESMI Pumping Technology (Suzhou) Co., Ltd.
Chongqing Liaison Office
Tel.: +86 23 6704 3809
Fax: +86 23 6704 3908

DESMI Pumping Technology (Xuancheng)
Co., Ltd.
Tel.: +86 563 2612 570
Fax: +86 563 2613 191

Korea

DESMI Korea
Phone: +82 51 723 8801
Fax: +82 51 723 8803

Ecuador

DESMI Latinoamerica S.A.
Tel.: +593 2 326 1939
Fax: +593 2 326 4844

France

DESMI SARL
Tel.: +33 130 439 710
Fax: +33 130 439 711

UAE

DESMI Pumping Technology A/S (Br.)
Dubai Office
Tel.: +971-56-300 3422

Abu Dhabi Office
Tel.: +971 50-821 4979

India

DESMI India
Tel.: +91-99 4933 9054

Africa

DESMI Africa (Tanzania)
Tel.: +255 757597827

Poland

DESMI Pumping Technology A/S Spółka Akcyjna
Tel.: +48 22 676 91 16
Fax: +48 22 618 19 53

- DESMI companies
- DESMI dealers/agents

You can read more about industry solutions at www.desmi.com or send your email to desmi@desmi.com

MARINE & OFFSHORE

INDUSTRY

OIL SPILL RESPONSE

DEFENCE & FUEL

UTILITY