



Vertical Multistage Pumps Series 4700

SOLUTION OUTLINE

FILE NO: 47.10
DATE: DECEMBER 2019

SUPERSEDES: 47.10
DATE: SEPTEMBER 2015

**HIGH-EFFICIENCY
RELIABLE PERFORMANCE**

VERTICAL MULTISTAGE PUMPS

EFFICIENT
DURABLE
PERFORMANT

With higher pressure capabilities, one pump can serve multiple floors

300+PSI

Armstrong's Vertical Multistage pumps deliver optimum hydraulic efficiency and significantly reduce axial thrust loads for leading performance and longevity. The pumps feature cartridge type mechanical seals and hydraulic coverage to 390 GPM and 930 feet TDH, making them ideal for a range of industrial and building services applications.



INNOVATIVE HYDRAULIC DESIGN

Motor flexibility

Compatible with standard NEMA motor sizes

Easy maintenance

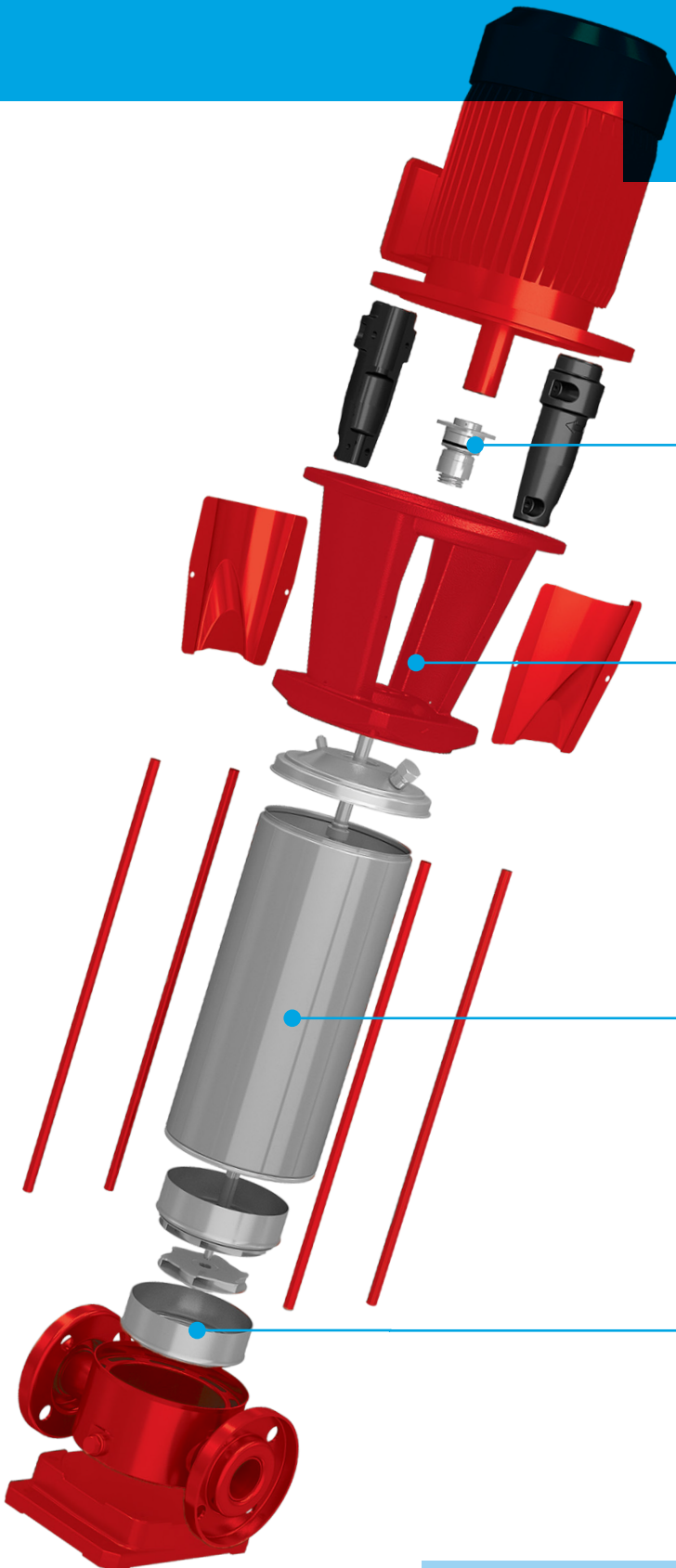
Innovative design allows replacement of the cartridge shaft seal without disassembling the motor bracket. The spacer coupling allows maintenance without having to remove heavy motors over 7 ½ HP.

Diverse shaft seal materials

- Resin impregnated carbon graphite
- Sintered silicon carbide
- Silicon carbide with carbon graphite
- Conforms with EN12756

Smart plug solutions

- Air ventilation plug
- Water filling & sensor plug
- Drain plug



KEY BENEFITS

Reduce operating costs

Integrated base simplifies installation to reduce labor time and cost.

Save floor space

Vertical design minimizes footprint.

Application configurable

10 different pump sizes and expanded pressure performance opens opportunities for wide range of applications.

Extend system lifetime

Innovative impeller design reduces axial thrust load for longer operating life of the motor bearing. Durable mechanical seals last 25+ years.

NSF Certification

All impellers and components are NSF 61 certified for clean water applications.

Lower project costs

Inverter-ready motor can accept operating instructions from industry-standard controllers.

KEY FEATURES

Innovative hydraulics

Stainless steel impellers

Extends life of motor bearing

Durable, mechanical seal design

Tungsten carbide bearings & sleeves

Versatile, reliable design

Multiple stages boost to beyond 300psi

Serves lower flows and higher heads

Vertical design with integrated base

Inverter-ready motor

TYPICAL APPLICATIONS

Armstrong's Vertical Multistage pumps are a versatile, flexible and durable solution for a wide range of applications including industrial, building service, and water supply. With superior performance in lower flow ranges at higher pressures the VMS is ideal as a pressure maintenance (jockey) pump in a fire system.

FEATURED APPLICATION



Water Supply
water treatment, pressure boosting
irrigation, agriculture

TRUST ARMSTRONG PUMPS FOR
CLEAN WATER APPLICATIONS

INDUSTRIAL APPLICATIONS

Condensate and steam boiler

feed systems

Wash and clean systems

Chilling

Machine tool

Pressure boosting

Food and beverage

Pharmaceutical industries

Marine applications

BUILDING SERVICES

Pressure boosting

Sprinkler systems

Firefighting systems

District heating

Heat exchangers/fan heaters

Air conditioning systems

Heating systems

PUMP

VERSION		VMS B						VMS		
Performance Range	Nominal size	1	3	5	10	15	20	32	45	64
	Motor Power	1/2 to 25 HP (0.37 to 18.5 kW)						5 to 50 HP (4 to 37 kW)		
	Capacity	3 to 132 US gpm (0.19 to 8.33 l/s)						66 to 390 US gpm (4.16 to 24.61 l/s)		
	Total Head	24 to 860 ft (7 to 262 m)						44 to 930 ft (13 to 284 m)		
Liquid Handling	Type of liquid	Clean water (for other clean liquids, consult factory)								
	Maximum working pressure	230 / 375 PSI (16/26 Bar) max. (depending on model)						up to 440 PSI (up to 30 Bar) max. (depending on model)		
	Liquid temperature	-22°F to 248°F (-30°C to 120°C)						5°F to 248°F (-15°C to 120°C)		
Size	Suction	1 1/4" (32 mm)		2" (50 mm)		2 1/2" (65 mm)		3" (80 mm)	4" (100 mm)	
	Discharge	1 1/4" (32 mm)		2" (50 mm)		2 1/2" (65 mm)		3" (80 mm)	4" (100 mm)	
Key Component Materials	Impeller	SS 304								
	Intermediate casing	SS 304								
	Liner ring	SS 304						SS 316		
	Bottom casing	SS 304						Cast iron		
	Casing cover	SS 304						Cast iron		
	Shaft	SS 304 (depending on model)						SS 316		
		SS 329A (depending on model)								
	Shaft sleeve bearing	Tungsten carbide								
	Shaft Seal	Silicon Carbide/Carbon/FPM								
	O-ring	FPM								
	Outer casing	SS 304								
	Motor bracket	Cast iron								
Base	Die cast aluminium						Cast iron			
Motor	Type	NEMA C/TC/TSC frame						NEMA TC/TSC frame		
	Speed	50-60 hz, 3000-3600 RPM								
	Direction of Rotation	Clockwise when viewed from motor end								



OUR SUSTAINABILITY VISION



PLANET PROPOSITION

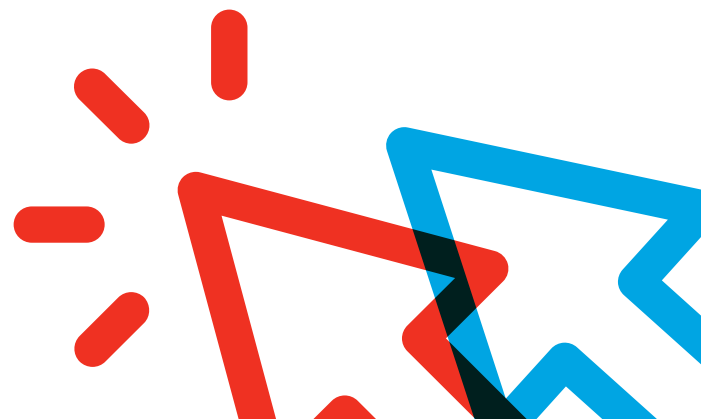
Through our Planet Proposition charter, Armstrong has committed to minimizing our impact on the environment. Around the world, Armstrong's Planet Proposition teams have taken on projects that are helping us meet our targets. Two examples of ongoing projects are:

2 BY 22

Armstrong is committed to helping existing customers reduce GHG emissions of installed equipment by two million tons by the year 2022. Under this initiative, Armstrong works with customers to upgrade existing installations and continues to develop new energy-savings solutions.

NET ZERO CARBON BUILDINGS COMMITMENT

The Net Zero Commitment positions energy efficiency as a central component to achieving decarbonization globally. In signing the Net Zero Carbon Buildings Commitment, Armstrong has pledged to ensure our entire portfolio of buildings operates at net zero carbon by the year 2030.



TORONTO

23 BERTRAND AVENUE
TORONTO, ONTARIO
CANADA, M1L 2P3
+1 416 755 2291

BUFFALO

93 EAST AVENUE
NORTH TONAWANDA, NEW YORK
U.S.A., 14120-6594
+1 716 693 8813

BIRMINGHAM

HEYWOOD WHARF, MUCKLOW HILL
HALESOWEN, WEST MIDLANDS
UNITED KINGDOM, B62 8DJ
+44 (0) 8444 145 145

MANCHESTER

WOLVERTON STREET
MANCHESTER
UNITED KINGDOM, M11 2ET
+44 (0) 8444 145 145

BANGALORE

#59, FIRST FLOOR, 3RD MAIN
MARGOSA ROAD, MALLESWARAM
BANGALORE, INDIA, 560 003
+91 (0) 80 4906 3555

SHANGHAI

UNIT 903, 888 NORTH SICHUAN RD.
HONGKOU DISTRICT, SHANGHAI
CHINA, 200085
+86 (0) 21 5237 0909

SÃO PAULO

RUA JOSÉ SEMIÃO RODRIGUES AGOSTINHO,
1370 GALPÃO 6 EMBU DAS ARTES
SAO PAULO, BRAZIL
+55 11 4785 1330

LYON

93 RUE DE LA VILLETTE
LYON, 69003 FRANCE
+33 (0) 420 102 625

DUBAI

JAFZA VIEW 19, OFFICE 402
P.O.BOX 18226 JAFZA,
DUBAI - UNITED ARAB EMIRATES
+971 4 887 6775

MANNHEIM

DYNAMOSTRASSE 13
68165 MANNHEIM
GERMANY
+49 (0) 621 3999 9858

.....

For more information, contact your
Armstrong representative or visit us at
ArmstrongFluidTechnology.com/ContactUs