

CR, CRN 95-155

Vertical, multistage centrifugal pumps

60 Hz
(NEMA)



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1. Product introduction

This data booklet covers Grundfos CR and CRN pumps with these nominal flow sizes:

- CR, CRN 95
- CR, CRN 125
- CR, CRN 155.



TM06 9062 1617

Fig. 1 CR, CRN 95-155

CR, CRN pumps are vertical multistage, centrifugal pumps. The in-line design of the pumps enables installation in a horizontal one-pipe system where the inlet and outlet ports are in the same horizontal level and have the same pipe dimensions. This design provides a more compact pump design.

The pumps are available in various sizes and various numbers of stages to deliver the flow and pressure required.

CR, CRN pumps are designed for a variety of applications ranging from the pumping of potable water to the pumping of chemicals. The pumps are therefore suitable for a wide diversity of pumping systems where the performance and material of the pump meet specific demands.

A CR, CRN pump consists of two main components: the motor and the pump unit.

The pump unit consists of optimized hydraulics, various types of connections, a sleeve, a pump head and various other parts. See *Construction*, page 8.

CR, CRN pumps are available in various material versions according to the pumped liquid.

CR pumps with ANSI/NSF 61 and ANSI/NSF 372 listing are available. FKM variants are only available with ANSI/NSF 372 listing. See UL file MH24600 or contact Grundfos.

Applications

The new CR, CRN range is suitable for numerous applications identical to the applications which the current CR, CRN pumps handle today. The following applications are some typical examples.

Water supply:

- Filtration and transport water works
- Distribution from water works
- Pressure boosting of mains.

Industrial:

- Pressure boosting
- Process water transfer
- Boiler feed
- Cooling and air conditioning
- Firefighting systems
- District energy systems
- Special liquids transfer.

Water treatment:

- Filtration
- Brackish water reverse osmosis.

Pumped liquids

Thin, non-explosive liquids, not containing solid particles or fibers. The liquid must not attack the pump materials.

CR pumps are suitable for non-corrosive liquids and are to be used for liquid transfer, circulation and pressure boosting of cold or hot clean water.

CRN pumps are suitable for industrial liquids and are to be used in systems where all parts in contact with the liquid must be made of high-grade stainless steel.

For further details see *List of pumped liquids*, page 31.

Performance range

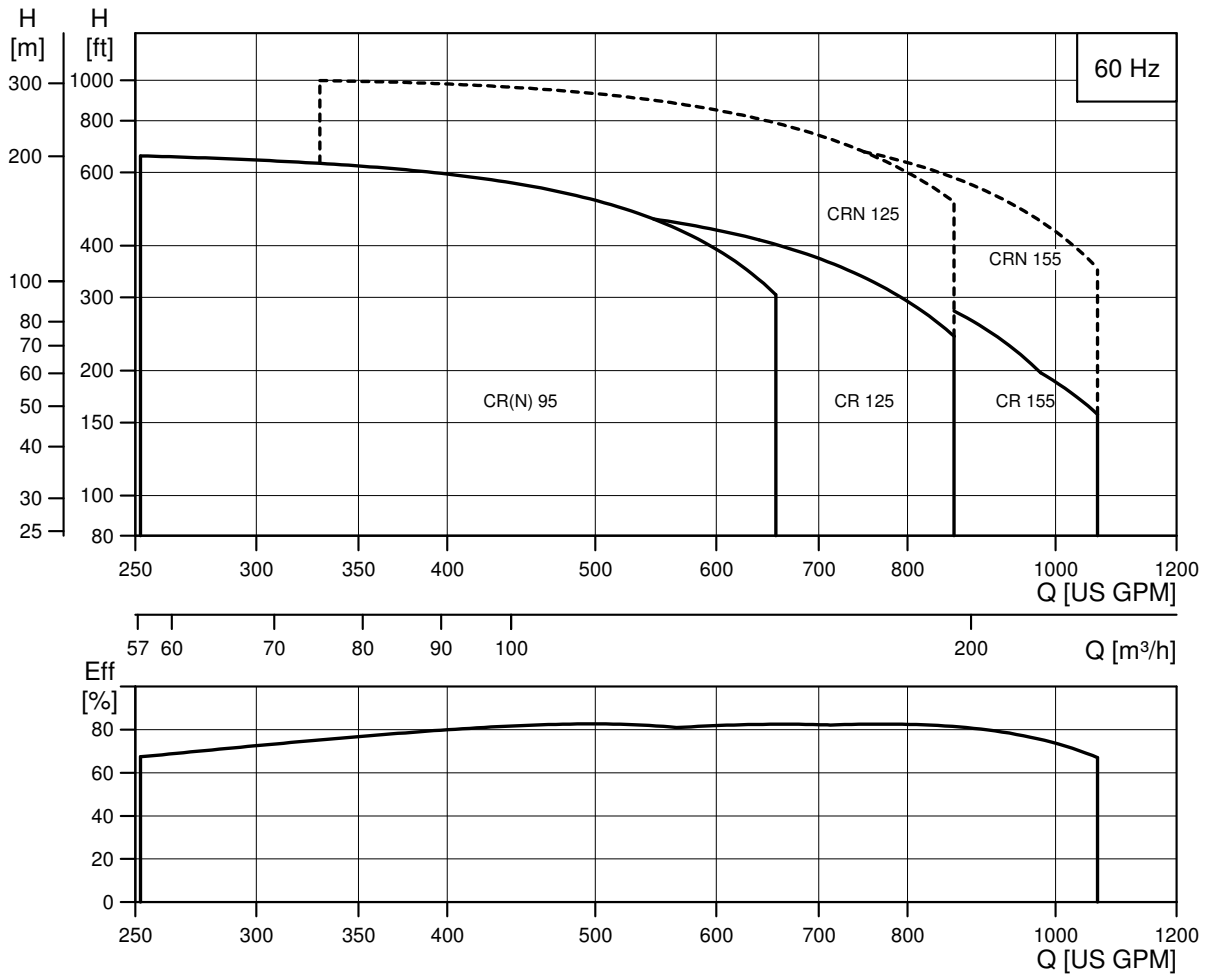


Fig. 2 Performance range, CR, CRN

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Applications

Application	CR	CRN
Water supply		
Filtration and transfer at waterworks	●	○
Distribution from waterworks	●	○
Pressure boosting in mains	●	○
Pressure boosting in high-rise buildings, hotels, etc.	●	○
Pressure boosting for industrial water supply	●	○
Industry		
Pressure boosting		
Process-water systems	●	●
Washing and cleaning systems*	●	●
Vehicle-washing tunnels	●	○
Firefighting systems	●	-
Liquid transfer		
Cooling and air-conditioning systems (refrigerants)	●	○
Boiler feed and condensate systems	●	○
Machine tools (cooling lubricants)	●	●
Aquafarming	●	○
Special transfer duties		
Oils and alcohols	●	●
Acids and alkalis	-	●
Glycol and coolants	●	-
Water treatment		
Ultra-filtration systems	-	●
Reverse osmosis systems	-	●
Softening, ionizing, demineralizing systems	-	●
Distillation systems	-	●
Separators	●	●
Swimming pools	-	●
Irrigation		
Field irrigation (flooding)	●	○
Sprinkler irrigation	●	○
Drip-feed irrigation	●	○

● Recommended version.

○ Alternative version.

* For applications involving CIP (cleaning-in-place) and motors above 75 Hp (55 kW,) a bearing flange must be used and a base without thrust handling device or blind flange.

Product range

Range	CR, CRN 95	CR, CRN 125	CR, CRN 155
Rated flow rate [US gpm (m ³ /h)]	500 (114)	660 (150)	820 (186)
Liquid temperature [°F (°C)]	-22 to +248 ¹⁾ (-30 to +120)		
Maximum pump efficiency [%]	82.5	82.5	82.5
CR, CRN pumps			
Flow rate [US gpm]	255-660	330-860	410-1060
Maximum pressure [psi (bar)]	537 ²⁾ (37)	566 ²⁾ (39)	580 ²⁾ (40)
Motor power [Hp (kW)]	20-75 (15-55)	20-150 (15-111)	25-150 (18-111)
Version			
CR:			
Cast iron and stainless steel EN 1.4301/AISI 304	•	•	•
CRN:			
Stainless steel EN 1.4401/AISI 316	•	•	•
CR pipe connection			
Flange	4" ANSI	6" ANSI	
CRN pipe connection			
Flange	4" ANSI	6" ANSI	
PJE coupling (Victaulic type)	4"	6"	

¹⁾ CRN 95 to 155 with HQQE shaft seal: -40 to +248 °F (-40 to +120 °C).

²⁾ CR pumps: Maximum operating pressure is 363 psi (25 bar).

Pump

The CR pumps are non-self-priming, vertical multistage centrifugal pumps.

The pumps are available with a Grundfos or Baldor standard motor.

The pump consists of a base and a pump head. The chamber stack and the sleeve are secured between the base and the pump head by means of staybolts. The base has inlet and outlet ports on the same level (in line). All pumps are fitted with a maintenance-free mechanical shaft seal of the cartridge type.

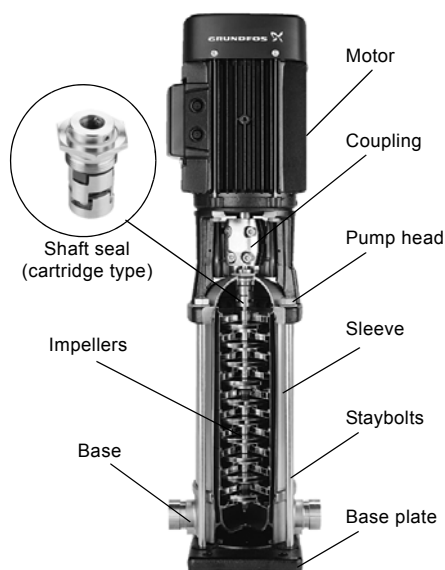


Fig. 3 CR pump

GR5357 - GR3395

Motor

Grundfos ML standard and Baldor motors

CR, CRN pumps are fitted with a totally enclosed, fan-cooled, 2-pole Grundfos or Baldor standard motor. Angular contact bearings are fitted to the drive end on motors up to 75 Hp (56 kW). This ensures that the motor bearing life (L10) is extended to match that of the pump.

Electrical data

Efficiency class	NEMA Premium
Insulation class	F/B
Enclosure type*	TEFC
Rated voltage**	3 x 208-230 VΔ / 3 x 380-480 V Y 3 x 575 VΔ (only Canada)
Number of poles	2
Frequency, standard motors	60 Hz

* A different enclosure type is available on request.

** Different voltages are available on request.

Grundfos E-motors

We also offer frequency-controlled CRE, CRNE pumps which are the ideal choice for a number of applications characterized by a demand for variable flow at constant pressure. These pumps are suited for water supply systems and pressure boosting as well as for industrial applications. Depending on the application, the pumps offer energy savings, increased comfort and improved processing.

Optional motors

The Grundfos standard range of motors covers a wide variety of application demands. However, for special applications or operating conditions, custom-built motor solutions can be provided.

For special applications or operating conditions, we offer custom-built motors such as

- Explosion-proof motors
- Motors with anti-condensation heating unit
- motors with thermal protection.

Motor protection

Single-phase Grundfos motors have a built-in thermal overload switch (TP 211 according to IEC 34-11).

Three-phase motors must be connected to a motor-protective circuit breaker according to local regulations.

Three-phase Grundfos ML motors 5 Hp (5 kW) and larger have a built-in thermistor (PTC) according to DIN 44082 (TP 211 according to IEC 34-11).

Terminal box positions

As standard, the terminal box is fitted on the inlet side of the pump.

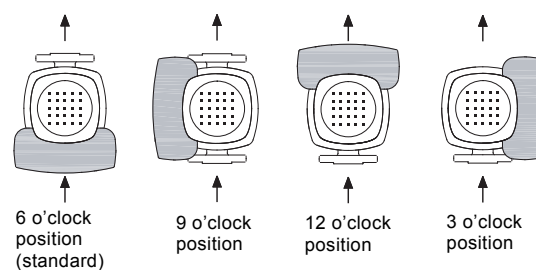


Fig. 4 Terminal box positions

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Viscosity

The pumping of liquids with densities or kinematic viscosities higher than those of water will cause a considerable pressure drop, a drop in the hydraulic performance and a rise in the power consumption. In such situations, the pump must be fitted with a larger motor. If in doubt, contact Grundfos.

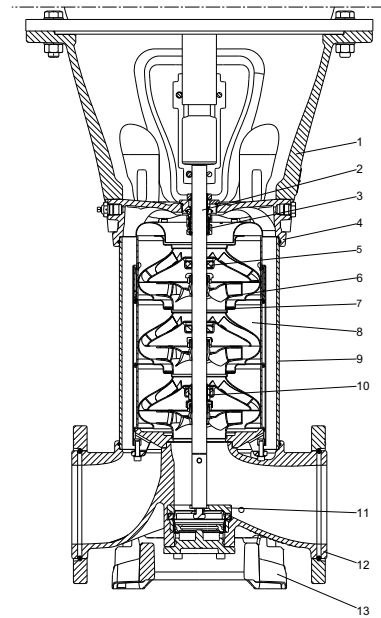
2. Construction

CR 95, 125 and 155



ANSI flange

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Materials, CR

Pos.	Designation	Materials	DIN/EN	≈ AISI/ASTM
1	Motor stool	Ductile cast iron	EN-GJS-500-7	ASTM A536-84 70-50-05
2	Shaft	Stainless steel	EN10088 1.4057 ¹⁾ EN10088 1.4462 ²⁾	EN10088 1.4057=431 EN10088 1.4462=318 LN
3	Shaft seal (seal faces)	Silicon carbide/Silicon carbide	-	-
4	Pump head	Ductile cast iron	EN-GJS-500-7	ASTM A536-84 70-50-05
5	Support bearing (bush)	Carbon-graphite filled PTFE	-	-
6	Impeller	Stainless steel	EN10088 1.4301	AISI 304
7	Neck ring	PEEK	-	-
8	Chamber	Stainless steel	EN10088 1.4301	AISI 304
9	Sleeve	Stainless steel	EN10088 1.4301 ¹⁾ EN10088 1.4404 ²⁾	AISI 304 ¹⁾ AISI 316 L ²⁾
10	Bearing ring	Tungsten carbide/Tungsten carbide	-	-
11	Thrust handling device ³⁾	Stainless steel	EN10088 1.4401 EN10283 1.4408	AISI 316/CF 8M
		Silicon carbide/Tungsten carbide	-	-
12	Base	Ductile cast iron	EN-GJS-500-7	ASTM A536-84 70-50-05
13	Base plate	Ductile cast iron	EN-GJS-500-7	ASTM A536-84 70-50-05
	Rubber parts	EPDM or FKM	-	-

¹⁾ Applies to CR 95.

²⁾ Applies to CR 125 to CR 155.

³⁾ Only fitted on pumps with 100 Hp (75 kW) motors or larger.

CRN 95, 125 and 155

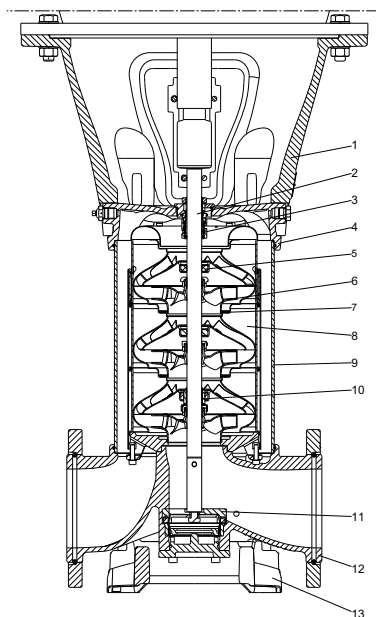


ANSI flange



PJE (Victaulic type)

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TM06 5161 1917

Materials, CRN

Pos.	Designation	Materials	DIN/EN	≈ AISI/ASTM
1	Motor stool	Ductile cast iron	EN-GJS-500-7	ASTM A536-84 70-50-05
2	Shaft	Stainless steel	EN10088 1.4462	318 LN
3	Shaft seal (seal faces)	Silicon carbide/Silicon carbide	-	-
4	Pump head	Stainless steel	EN10283 1.4408	CF 8M
5	Support bearing (bush)	Carbon-graphite filled PTFE	-	-
6	Impeller	Stainless steel	EN10088 1.4401	AISI 316
7	Neck ring	PEEK	-	-
8	Chamber	Stainless steel	EN10088 1.4401	AISI 316
9	Sleeve	Stainless steel	EN10088 1.4404	AISI 316 L
10	Bearing ring	Tungsten carbide/Tungsten carbide	-	-
11	Thrust handling device ¹⁾	Stainless steel	EN10088 1.4401 EN10283 1.4408	AISI 316/CF 8M
		Silicon carbide/Tungsten carbide	-	-
12	Base	Stainless steel	EN10283 1.4408	CF 8M
13	Base plate	Ductile cast iron	EN-GJS-500-7	ASTM A536-84 70-50-05
		Rubber parts	EPDM or FKM	-

¹⁾ Only fitted on pumps with 100 Hp (75 kW) motors or larger.

Type keys

CR, CRN 95-155

Example	CR	E	95	-4	-2	-A	-F	-H	-E	-HQQE
Type range: CR, CRI, CRN, CRT										
Pump with integrated frequency converter										
Flow rate [gpm (m ³ /h)]										
Number of impellers										
Number of reduced-diameter impellers CR, CRE, CRN, CRNE 95, 125, 155										
Code for pump version										
Code for pipe connection										
Code for materials										
Code for rubber parts										
Code for shaft seal										

Key to codes

Code	Description
Pump version	
A	Basic version
B	Oversized motor
E	Pump with certificate
G	E-pump without control panel
J	E-pump with a different maximum speed
N	E-pump with sensor
P	Undersized motor
V	Cascade function
X	Special version
Pipe connection	
F	DIN flange
FC	DIN 11853-2 flange (collar flange)
G	ANSI flange
J	JIS flange
P	PJE coupling (Victaulic type)
X	Special version
Materials	
A	Basic version
H	All parts stainless steel, wetted parts EN10088 1.4401 ≈ AISI 316/ASTM 351 - CF8M
R	Silicon carbide/Silicon carbide bearing
X	Special version
Code for rubber parts in pump	
E	EPDM
V	FKM (Viton®)
Shaft seal type designation	
H	Balanced cartridge seal with O-ring
X	Special version*
Seal face material	
B	Carbon, synthetic resin-impregnated
U	Cemented tungsten carbide
Q	Silicon carbide
X	Other ceramics*
Secondary seal material (rubber parts)	
E	EPDM
V	FKM (Viton®)

* Option. See the CR "Custom-built pumps" data booklet available on Grundfos Product Center. See QR code or link below.



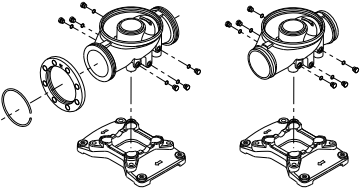
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Shaft seal

Example	-H	-Q	-Q	-E
Shaft seal type designation				
Material of rotating seal face				
Material of stationary seal face				
Material of secondary seal (rubber parts)				

3. Operating and inlet pressures

Max. operating pressure and liquid temperature

Pump type	ANSI, PJE (Victaulic type)		
			
	Pressure class	Maximum permissible operating pressure in standard configuration [psi (bar)]	Liquid temperature [°F (°C)]
CR 95-1-1 → 95-4-1	150	363 (25) Note: CRN models may be configured for up to 580 psi (40 bar) (depending on model). Please contact Grundfos.	-22 to 248 (-30 to 120)
CR 95-4 → 95-5-1	300		
CR 125-1-1 → 125-3	150		
CR 125-4-2	300		
CR 155-1-1 → 155-3-2	150		
CRN 95-1-1 → 95-4-1	150		
CRN 95-5-2 → 95-5-1	300		-40 to 248 (-40 to 120)*
CRN 125-1-1 → 125-3	150		
CRN 125-4-2 → 125-7-2	300		
CRN 155-1-1 → 155-3-2	150		
CRN 155-3-1 → 155-5-1	300		

* For operating pressures above 435 psi (30 bar) the liquid temperature limits are -40 to 176 °F (-40 to 80 °C).

Operating range of the shaft seal

All pumps will be delivered with a HQQE/V cartridge shaft seal as standard.

The operating range of the shaft seal depends on operating pressure, pump type, type of shaft seal and liquid temperature. The range shown in figs 5 and 6 applies to clean water and water with anti-freeze liquids. For selection of the right shaft seal, see *List of pumped liquids*, page 31. If the operating range is exceeded, the life of the shaft seal may be reduced.

CR, CRN 95-155

Shaft seals for Ø22 mm shafts (15 to 75 Hp (55 kW))

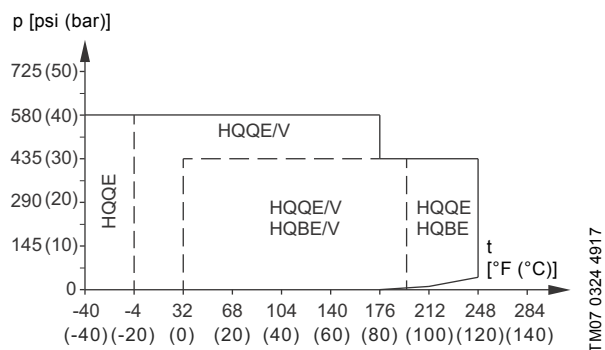


Fig. 5 Operating range of standard shaft seals for CR, CRN 95-155

Standard shaft seal	Motor size [Hp (kW)]	Description	Liquid temperature [°F (°C)]
HQQE		O-ring (cartridge) (balanced seal), Silicon carbide/Silicon carbide, EPDM	-40 - +248 (-40 - +120)
HQQV	15-75 (11-55)	O-ring (cartridge) (balanced seal), Silicon carbide/Silicon carbide, FKM	-4 - +194 (-20 - +90)
HQBE		O-ring (cartridge) (balanced seal), Silicon carbide/carbon, EPDM	32 - +248 (0 - +120)
HQBV		O-ring (cartridge) (balanced seal), Silicon carbide/carbon, FKM	32 - +194 (0 - +90)

Shaft seals for Ø28 mm (100-150 Hp (75-110 kW)) and Ø36 mm (200-300 Hp (132-200 kW)) shaft ends

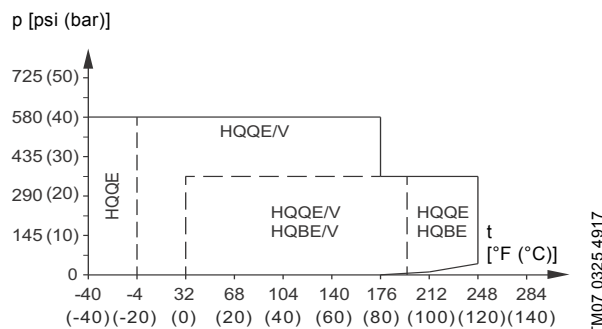


Fig. 6 Operating range of standard shaft seals for Ø28 mm shaft ends (100-150 Hp (75-110 kW)) and Ø36 mm shaft ends (200-300 Hp (132-200 kW))

Standard shaft seal	Motor size [Hp (kW)]	Description	Liquid temperature [°F (°C)]
HQQE		O-ring (cartridge) (balanced seal), Silicon carbide/Silicon carbide, EPDM	-40 - +248 (-40 - +120)
HQQV	100-300 (75-200)	O-ring (cartridge) (balanced seal), Silicon carbide/Silicon carbide, FKM	-4 - +194 (-20 - +90)
HQBE		O-ring (cartridge) (balanced seal), Silicon carbide/carbon, EPDM	32 - +248 (0 - +120)
HQBV		O-ring (cartridge) (balanced seal), Silicon carbide/carbon, FKM	32 - +194 (0 - +90)

Maximum inlet pressure

The following table shows the maximum permissible inlet pressure. However, the actual inlet pressure plus the pressure against a closed valve must always be lower than the maximum permissible operating pressure.

If the maximum permissible operating pressure is exceeded, the angular contact bearing in the motor may be damaged and the life of the shaft seal reduced.

Pump type	Maximum inlet pressure [psi (bar)]
CR, CRN 95	
CR, CRN 95-1-1 → CR, CRN 95-2-2	145 (10)
CR, CRN 95-2-1 → CR, CRN 95-4-2	218 (15)
CR, CRN 95-4 → CR, CRN 95-8	290 (20)
CR, CRN 125	
CR, CRN 125-1-1 → CR, CRN 125-1	145 (10)
CR, CRN 125-2-2 → CR, CRN 125-3-1	218 (15)
CR, CRN 125-3 → CR, CRN 125-9-3	290 (20)
CR, CRN 155	
CR, CRN 155-1-1	145 (10)
CR, CRN 155-1 → CR, CRN 155-2	218 (15)
CR, CRN 155-3 → CR, CRN 155-8-3	290 (20)

Examples of operating and inlet pressures

The values for operating and inlet pressures shown in the table must not be considered individually and must comply with the below statement.

The outlet pressure must be equal to or lower than the maximum operating pressure.

See the following definitions and examples.

Definitions

Pressure type	Definition
Maximum operating pressure	The maximum pressure is stated on the nameplate.
Pump differential pressure	The difference between the outlet pressure and inlet pressure.
Inlet pressure	The pressure measured at the pump inlet.
Outlet pressure	The inlet pressure added to the pump differential pressure.

Example

The following pump type has been selected: CR 95-3.

Maximum operating pressure: 363 psi (25 bar).

Maximum inlet pressure: 218 psi (15 bar).

Pump differential pressure when operating against a closed outlet valve (flow = 0 GPM (0 m³/h)): 436 ft head = 190 psi (133 m head = 13.07 bar). See page 18.

This pump is **not** allowed to start at an inlet pressure of 218 psi (15 bar), but at an inlet pressure of 363 - 190 = 173 psi (25 - 13.07 = 11.93 bar)

4. Selection and sizing

Selection of pumps

Selection of pumps must be based on these parameters:

- the duty point of the pump (see below)
- sizing data such as pressure loss as a result of height differences, friction loss in the pipes, pump efficiency (see below)
- pump materials (see page 15)
- pump connections (see page 15)
- shaft seal (see page 15).

Duty point of the pump

From a duty point, you can select a pump on the basis of the curve charts in section *Performance curves and technical data*, page 22.

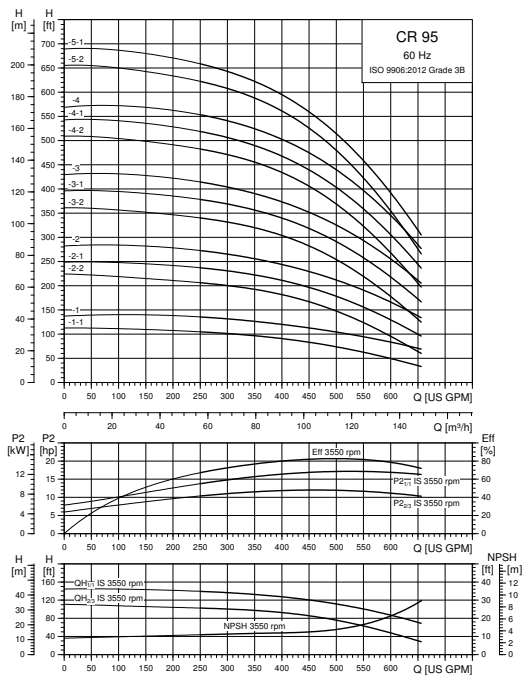


Fig. 7 Example of a curve chart

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Sizing data

When sizing a pump, take these parameters into account:

- Required flow and pressure at the draw-off point.
 - Pressure loss as a result of height differences (H_{geo}).
 - Friction loss in the pipes (H_f).
- It may be necessary to account for pressure loss in connection with long pipes, bends or valves, etc.
- Best efficiency at the estimated duty point.
 - NPSH value.

For calculation of the NPSH value, see *Minimum inlet pressure, NPSH*, page 16.

Pump efficiency

Before determining the best efficiency point, identify the operation pattern of the pump. If the pump is expected to operate at the same duty point, select a CR pump which is operating at a duty point corresponding to the best efficiency of the pump.

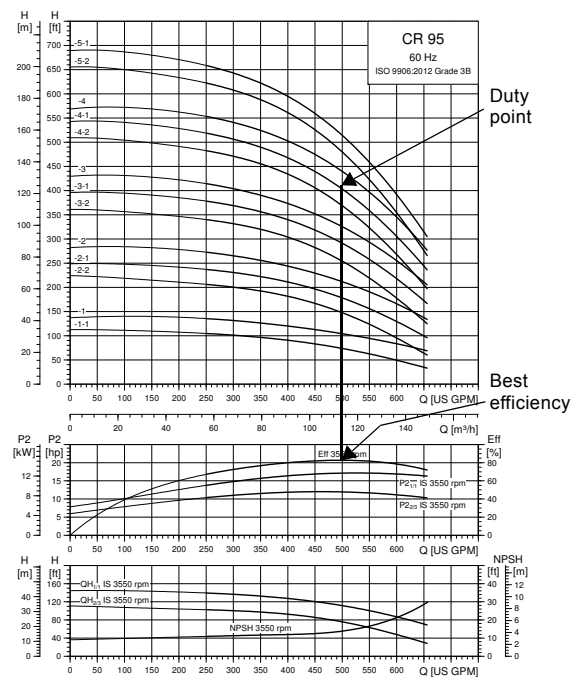


Fig. 8 Example of a CR pump's duty point

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As the pump is sized on the basis of the highest possible flow rate, it is important always to have the duty point to the right on the efficiency curve (η) in order to keep the efficiency high when the flow rate drops.

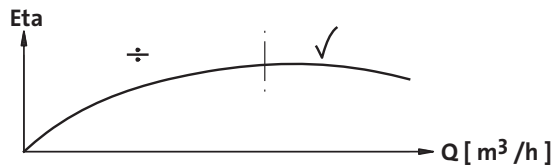


Fig. 9 Best efficiency

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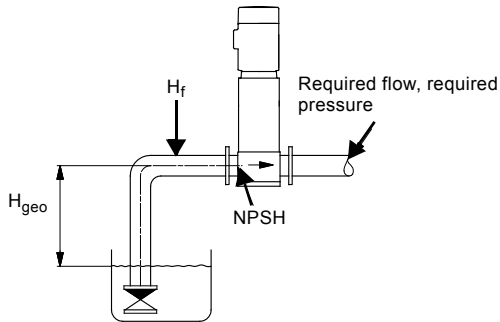


Fig. 10 Sizing data

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Pump material

Select the material variant on the basis of the liquid to be pumped.

The product range covers the following three basic types.

- CR
Use CR, CRI pumps for clean, non-aggressive liquids, such as potable water and oils.
- CRN
Use CRN pumps for industrial liquids and acids.
See *List of pumped liquids* on page 31, or contact Grundfos.

Pump connections

Selection of pump connection depends on the rated pressure and the pipes. To meet any requirement, the CR, CRN pumps offer a wide range of flexible connections, such as:

- ANSI flange
- DIN flange
- PJE coupling (Victaulic type)
- other connections on request.

Shaft seal



Fig. 11 Shaft seal (cartridge type)

GR7386

As standard, the CR range is fitted with a Grundfos shaft seal (cartridge type) suitable for the most common applications.

These key parameters must be taken into account when selecting the shaft seal:

- type of pumped liquid
- liquid temperature
- maximum pressure.

We offer a wide range of shaft seal variants to meet specific demands. See *List of pumped liquids*, page 31.

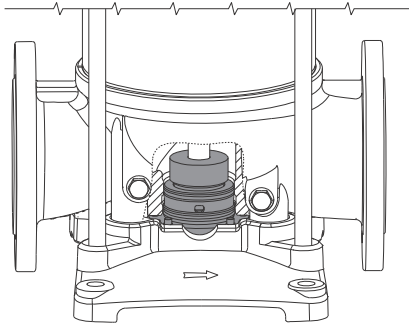
Servicing shaft seals

Replacement shaft seals are available as complete service kits*.

Shaft seals fitted on CR, CRN 95-155 pumps with $\varnothing 28$ mm or $\varnothing 36$ mm shaft ends are serviceable. This means that the wear parts in these shaft seals are available as service kits* and can be replaced without having to renew the complete shaft seal.

* All service kits include detailed instructions on how to carry out the replacement.

Thrust handling device

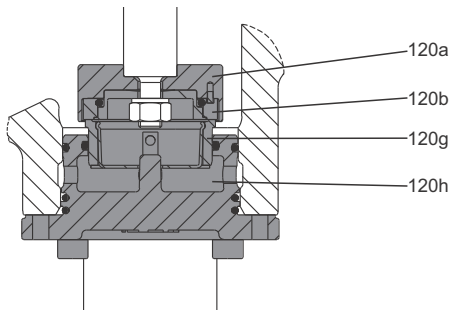


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Fig. 12 Thrust handling device

A thrust handling device (THD) is factory-fitted on pumps with 100 Hp (75 kW) motors or larger. The system consists of two parts. A rotating part mounted on the shaft end below the first impeller as well as a non-rotating part mounted in or on the pump base. The THD absorbs the main part of the thrust force generated by the impellers and thereby reduces the resulting axial force the motor bearings must absorb. This enables the use of standard ball bearings in the motor instead of special angular contact ball bearings.

Note: For applications involving CIP (cleaning-in-place) and motors above 75 Hp (55 kW), use a bearing flange and a base without THD.



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Fig. 13 Position numbers for THD parts

Pos.	Description	Material
120a	Thrust disc	Stainless steel
120b	Rotating ring	Silicon carbide
120g	Stationary ring	Silicon carbide* Tungsten carbide
120h	Lifting plate	Stainless steel
-	O-rings	EPDM FKM

* On request for CRN.

Operating pressure and inlet pressure

Do not exceed the limit values for these pressures:

- maximum operating pressure
- maximum inlet pressure.

Minimum inlet pressure, NPSH

We recommend that you calculate the inlet pressure "H" in these situations:

- The liquid temperature is high.
- The flow rate is significantly higher than the rated flow rate.
- Water is drawn from depths.
- Water is drawn through long pipes.
- Inlet conditions are poor.

To avoid cavitation, make sure that there is a minimum pressure on the inlet side of the pump.

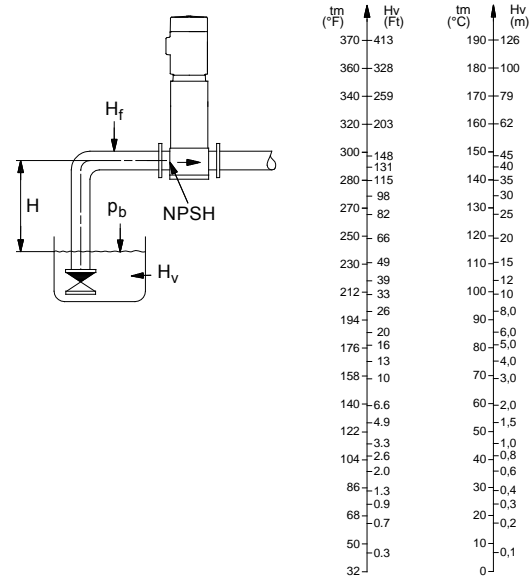
Calculate the maximum suction lift "H" in m head as follows:

$$H = p_b \times 10.2 - NPSH - H_f - H_v$$

p_b	= Barometric pressure in ft (bar). Barometric pressure can be set to 39.9 ft (1 bar). In closed systems, p_b indicates the system pressure in feet (bar).
NPSH	= Net Positive Suction Head in ft (m) head, to be read from the NPSH curve at the highest flow the pump will be delivering.
H_f	= Friction loss in inlet pipe in ft (m) head at the highest flow the pump will be delivering.
H_v	= Vapor pressure in ft (m) head, to be read from the vapor pressure scale. H_v depends on the liquid temperature t_m .

If the calculated "H" is positive, the pump can operate at a suction lift of maximum "H" ft (m) head.

If the calculated "H" is negative, an inlet pressure of minimum "H" ft (m) head is required.



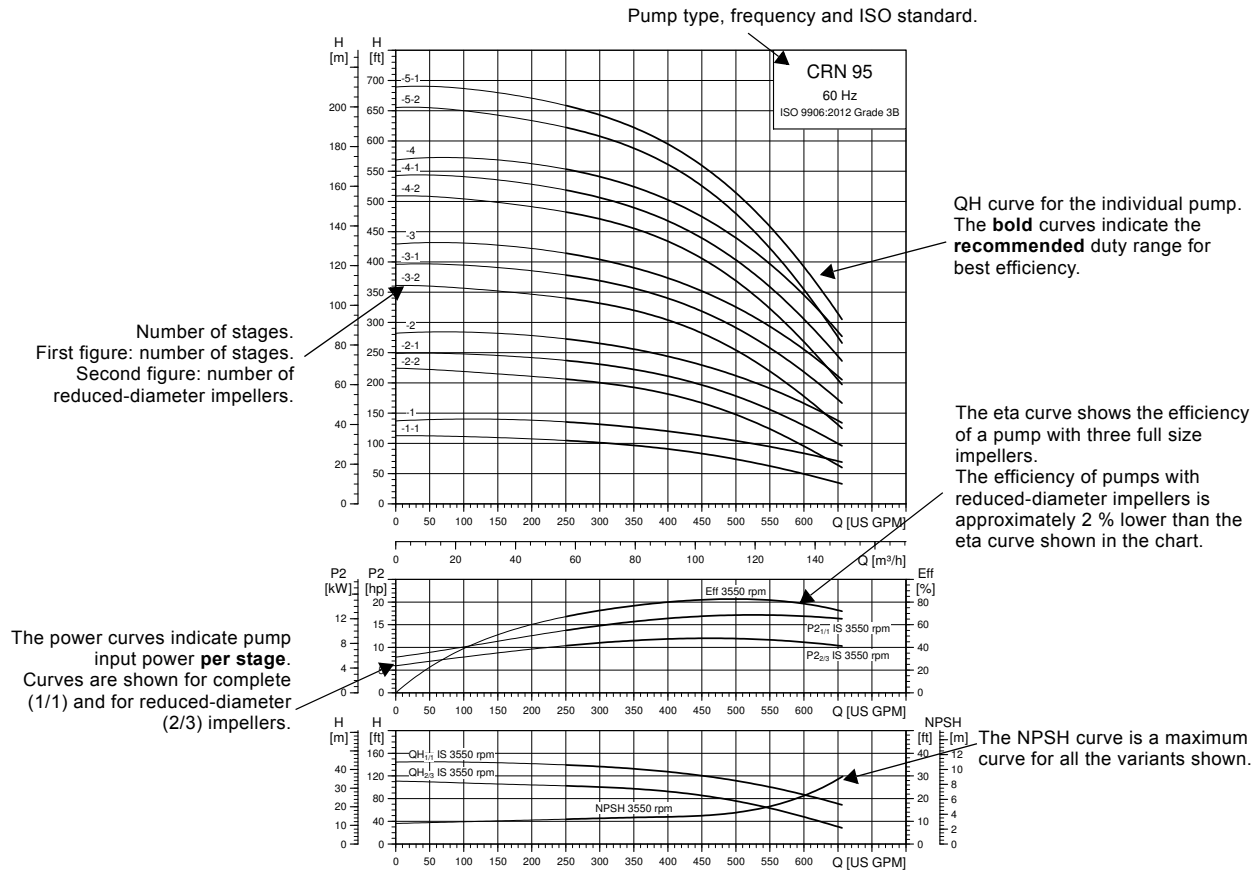
TM02 7439 3403 - TM02 7445 9503

Fig. 14 Minimum inlet pressure, NPSH

Note: To avoid cavitation, do not select a pump with a duty point too far to the right on the NPSH curve.

Always check the NPSH value of the pump at the highest possible flow rate.

How to read the curve charts



TM06 5538 3718

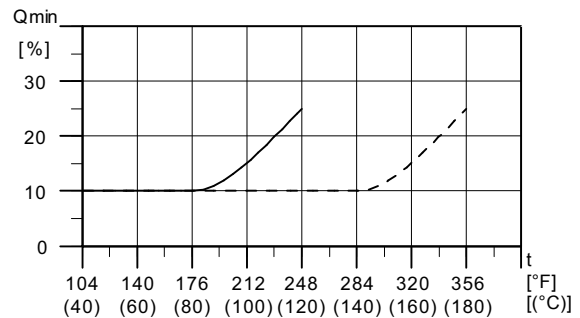
Fig. 15 How to read the curve charts

Guidelines to performance curves

The guidelines below apply to the curves shown on the following pages:

- Tolerances to ISO 9906:2012, Grade 3B, if indicated.
- The motors used for the measurements are standard Grundfos motors.
- Measurements have been made with airless water at a temperature of 68 °F (20 °C).
- The curves apply to the following kinematic viscosity: $\nu = 1 \text{ mm}^2/\text{s}$ (1 cSt).
- Due to the risk of overheating, the pumps must not be used at a flow rate below the minimum flow rate.
- The QH curves apply to a rated motor speed of a three-phase mains-operated motor. For realistic curves, go to Grundfos Product Center (<http://product-selection.grundfos.com/>) and insert data.

The curve below shows the minimum flow rate as a percentage of the rated flow rate in relation to the liquid temperature. The dotted line shows a CR pump fitted with an air-cooled top assembly.

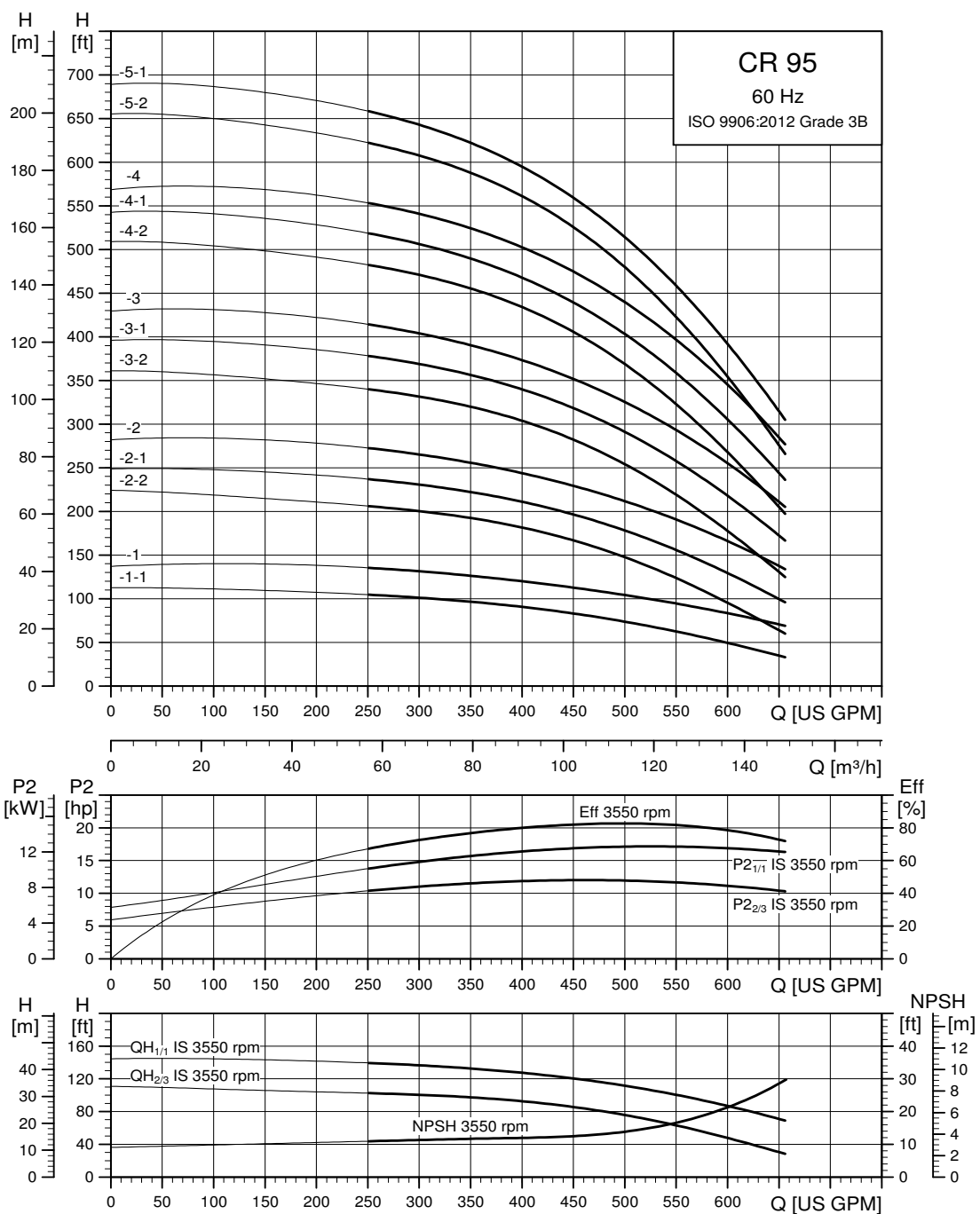


TM07 0517 0118

Fig. 16 Minimum flow rate

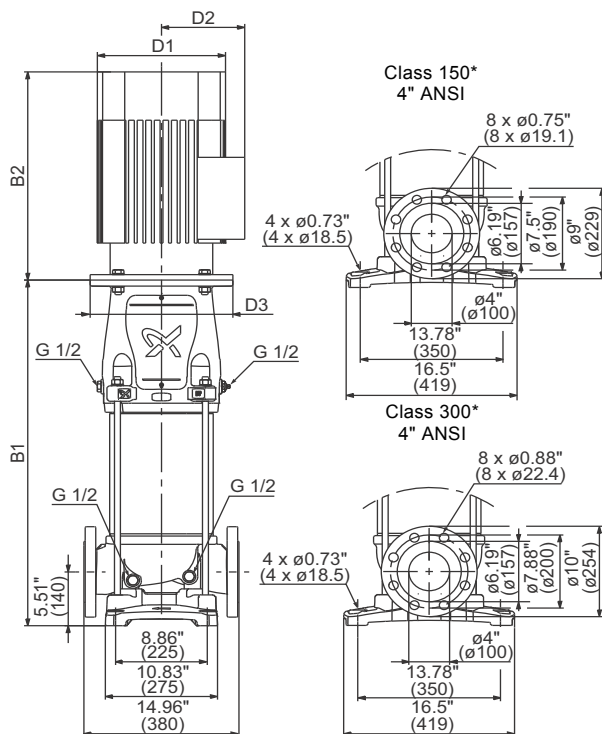
5. Performance curves and technical data

CR 95



The maximum pump efficiency (Eta) is based on a three-stage pump.

TM06 5537 3718



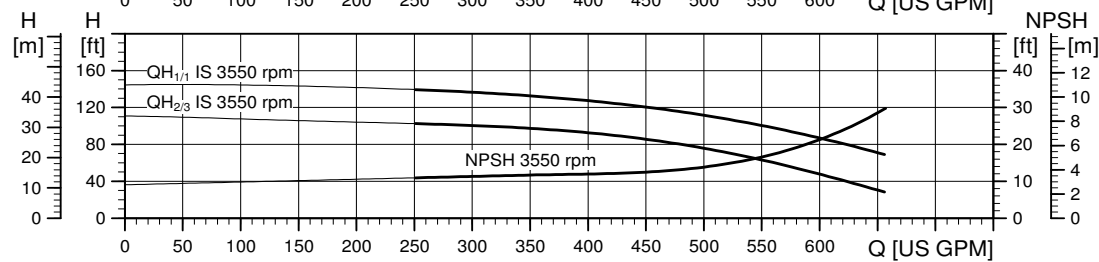
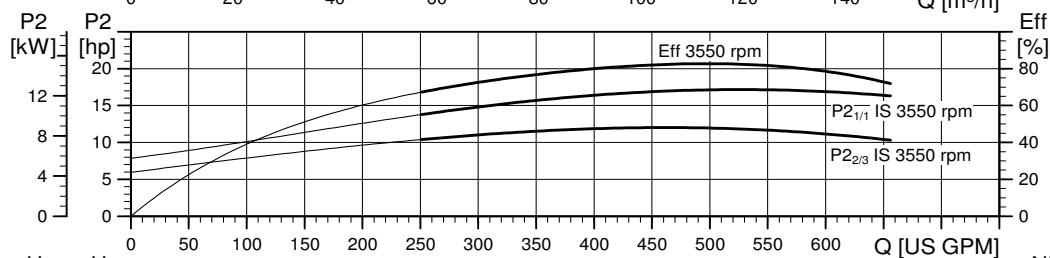
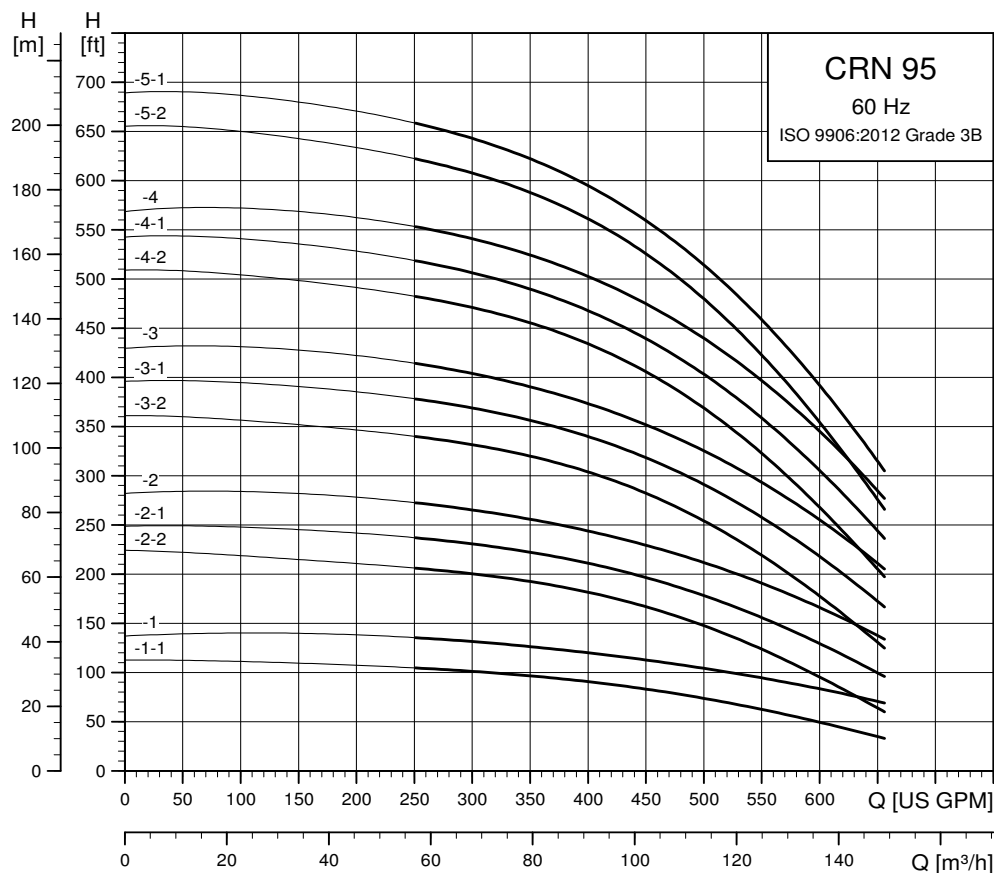
TM06 6059 0218

* CR, CRN 95 pumps with 1 to 4 stages (with 1 reduced diameter impeller) are fitted with 150 lb. (68 kg) flanges as standard. 300 lb. (136 kg) flanges are available on request.
CR, CRN 95 pumps with 4 or more full diameter impellers are fitted with 300 lb. (136 kg) flanges as standard.

Dimensions and weights

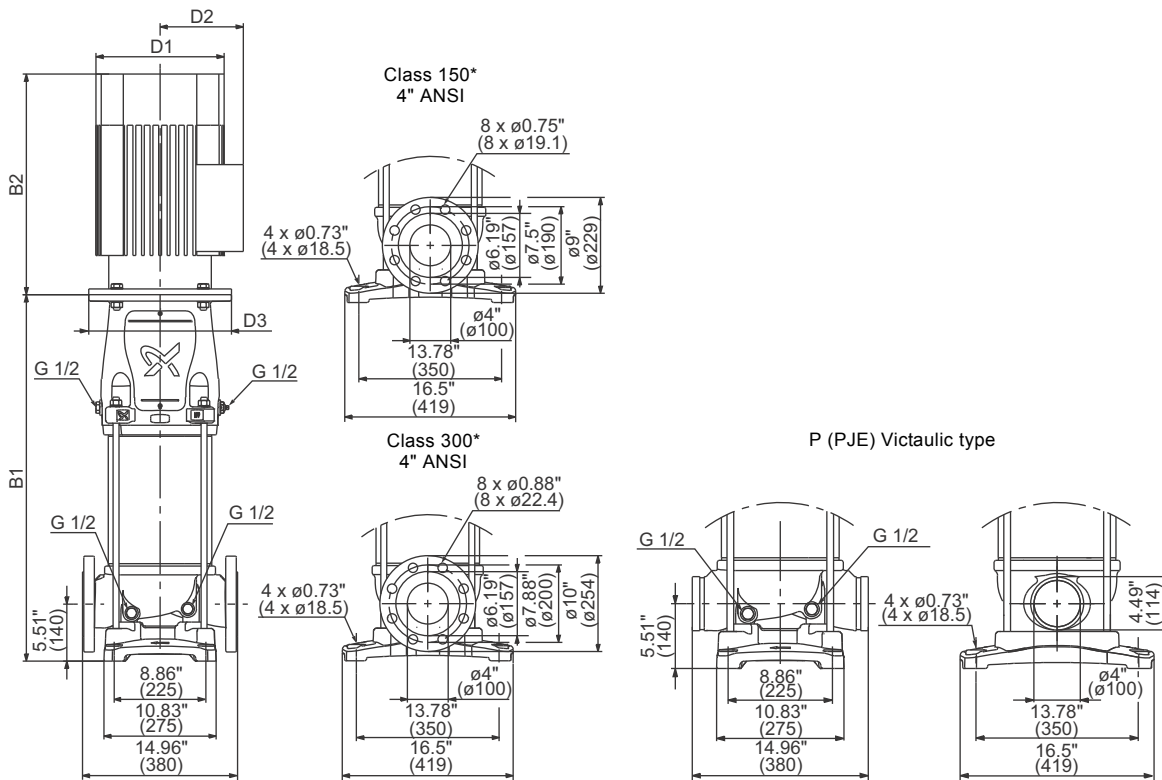
Pump type	Motor P ₂ [Hp (kW)]	Dimension [inch (mm)]					Net weight [lbs (kg)]
		B1	B1+B2	D1	D2	D3	
CR 95-1-1	15 (11)	27.4 (696)	46.2 (1174)	12.4 (314)	8 (204)	8.5 (216)	412 (187)
CR 95-1	20 (15)	27.4 (696)	46.2 (1174)	12.4 (314)	8 (204)	8.5 (216)	412 (187)
CR 95-2-2	25 (18)	31.5 (800)	54.3 (1378)	12.4 (314)	8 (204)	10.5 (267)	452 (205)
CR 95-2-1	30 (22)	31.5 (800)	54.3 (1378)	12.4 (314)	8 (204)	10.5 (267)	478 (217)
CR 95-2	30 (22)	31.5 (800)	54.3 (1378)	12.4 (314)	8 (204)	10.5 (267)	478 (217)
CR 95-3-2	40 (30)	36.4 (925)	64 (1625)	16.9 (429)	14.1 (359)	12.5 (318)	739 (335)
CR 95-3-1	50 (37)	36.4 (925)	64 (1625)	16.9 (429)	14.1 (359)	12.5 (318)	807 (366)
CR 95-3	50 (37)	36.4 (925)	64 (1625)	16.9 (429)	14.1 (359)	12.5 (318)	807 (366)
CR 95-4-2	60 (45)	40.5 (1029)	67.6 (1716)	16.9 (429)	14.1 (359)	12.5 (318)	871 (395)
CR 95-4-1	60 (45)	40.5 (1029)	67.6 (1716)	16.9 (429)	14.1 (359)	12.5 (318)	871 (395)
CR 95-4	75 (56)	40.5 (1029)	68.1 (1729)	19.7 (500)	18.1 (460)	12.5 (318)	1190 (540)
CR 95-5-2	75 (56)	44.6 (1134)	72.2 (1834)	19.7 (500)	18.1 (460)	12.5 (318)	1204 (546)
CR 95-5-1	75 (56)	44.6 (1134)	72.2 (1834)	19.7 (500)	18.1 (460)	12.5 (318)	1204 (546)

CRN 95



The maximum pump efficiency (Eta) is based on a three-stage pump.

TM06 5538 3718



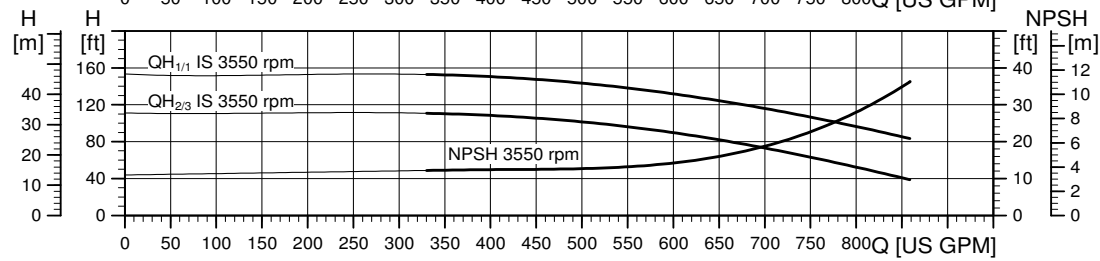
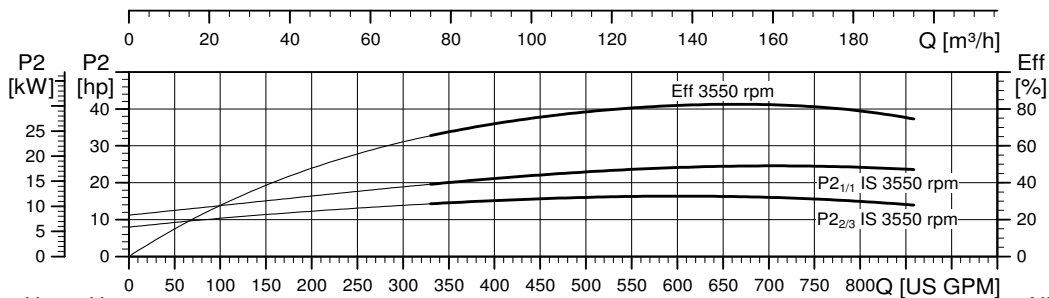
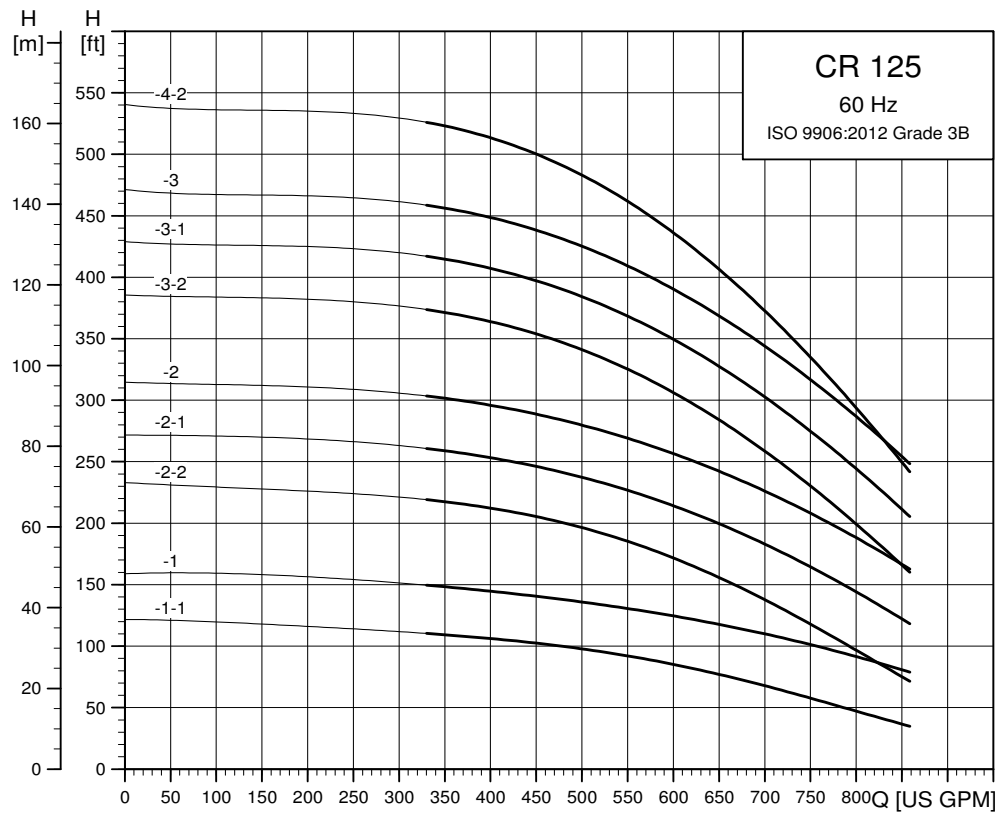
TM06 6060 0319

* CR, CRN 95 pumps with 1 to 4 stages (with 1 reduced diameter impeller) are fitted with 150 lb. (68 kg) flanges as standard. 300 lb. (136 kg) flanges are available on request.
CR, CRN 95 pumps with 4 or more full diameter impellers are fitted with 300 lb. (136 kg) flanges as standard.

Dimensions and weights

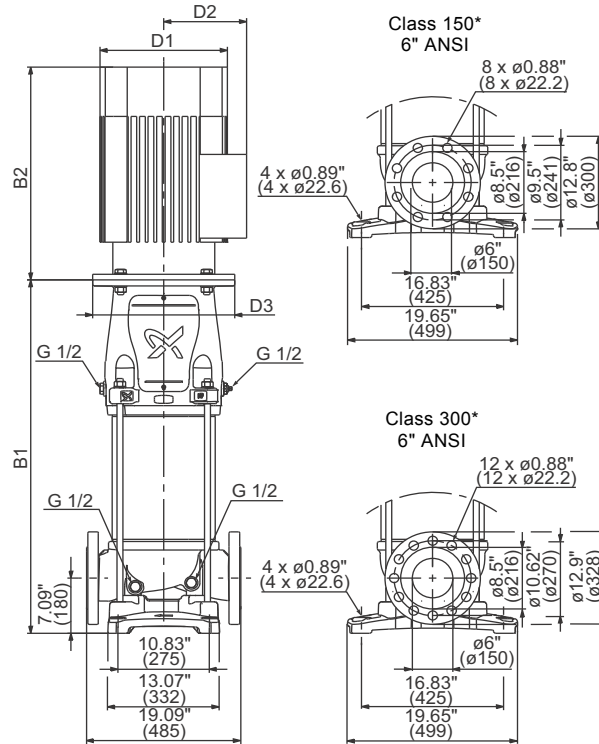
Pump type	Motor P ₂ [Hp (kW)]	Dimension [inch (mm)]					Net weight [lbs (kg)]
		B1	B1+B2	D1	D2	D3	
CRN 95-1-1	15 (11)	27.4 (696)	46.2 (1174)	12.4 (314)	8 (204)	8.5 (216)	412 (187)
CRN 95-1	20 (15)	27.4 (696)	46.2 (1174)	12.4 (314)	8 (204)	8.5 (216)	412 (187)
CRN 95-2-2	25 (18)	31.5 (800)	54.3 (1378)	12.4 (314)	8 (204)	10.5 (267)	452 (205)
CRN 95-2-1	30 (22)	31.5 (800)	54.3 (1378)	12.4 (314)	8 (204)	10.5 (267)	478 (217)
CRN 95-2	30 (22)	31.5 (800)	54.3 (1378)	12.4 (314)	8 (204)	10.5 (267)	478 (217)
CRN 95-3-2	40 (30)	36.4 (925)	64 (1625)	16.9 (429)	14.1 (359)	12.5 (318)	739 (335)
CRN 95-3-1	50 (37)	36.4 (925)	64 (1625)	16.9 (429)	14.1 (359)	12.5 (318)	807 (366)
CRN 95-3	50 (37)	36.4 (925)	64 (1625)	16.9 (429)	14.1 (359)	12.5 (318)	807 (366)
CRN 95-4-2	60 (45)	40.5 (1029)	67.6 (1716)	16.9 (429)	14.1 (359)	12.5 (318)	871 (395)
CRN 95-4-1	60 (45)	40.5 (1029)	67.6 (1716)	16.9 (429)	14.1 (359)	12.5 (318)	871 (395)
CRN 95-4	75 (56)	40.5 (1029)	68.1 (1729)	19.7 (500)	18.1 (460)	12.5 (318)	1190 (540)
CRN 95-5-2	75 (56)	44.6 (1134)	72.2 (1834)	19.7 (500)	18.1 (460)	12.5 (318)	1204 (546)
CRN 95-5-1	75 (56)	44.6 (1134)	72.2 (1834)	19.7 (500)	18.1 (460)	12.5 (318)	1204 (546)

CR 125



The maximum pump efficiency (Eta) is based on a three-stage pump.

TM06 5539 3718



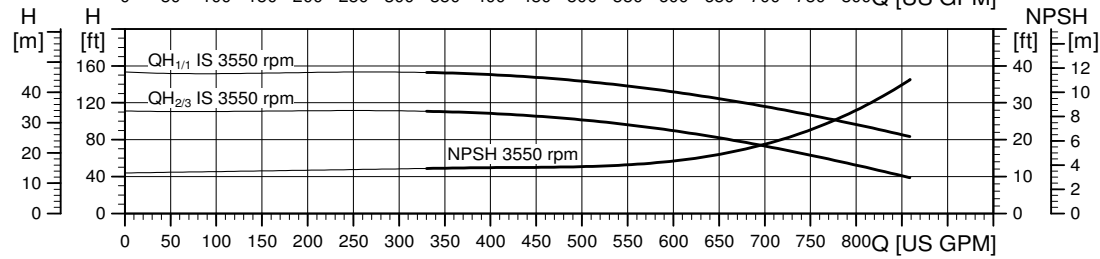
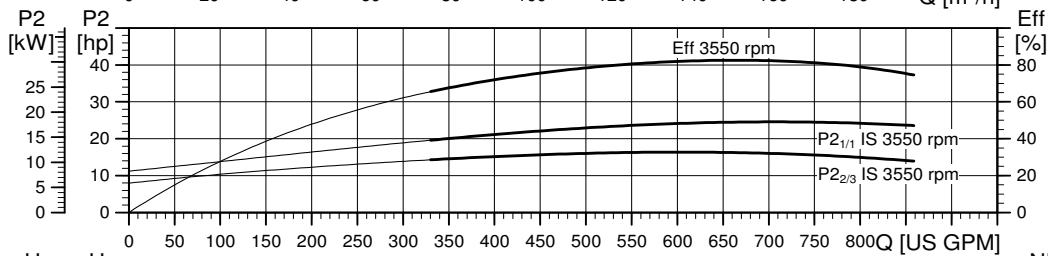
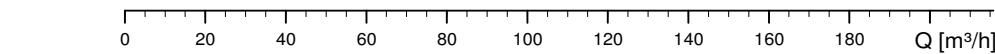
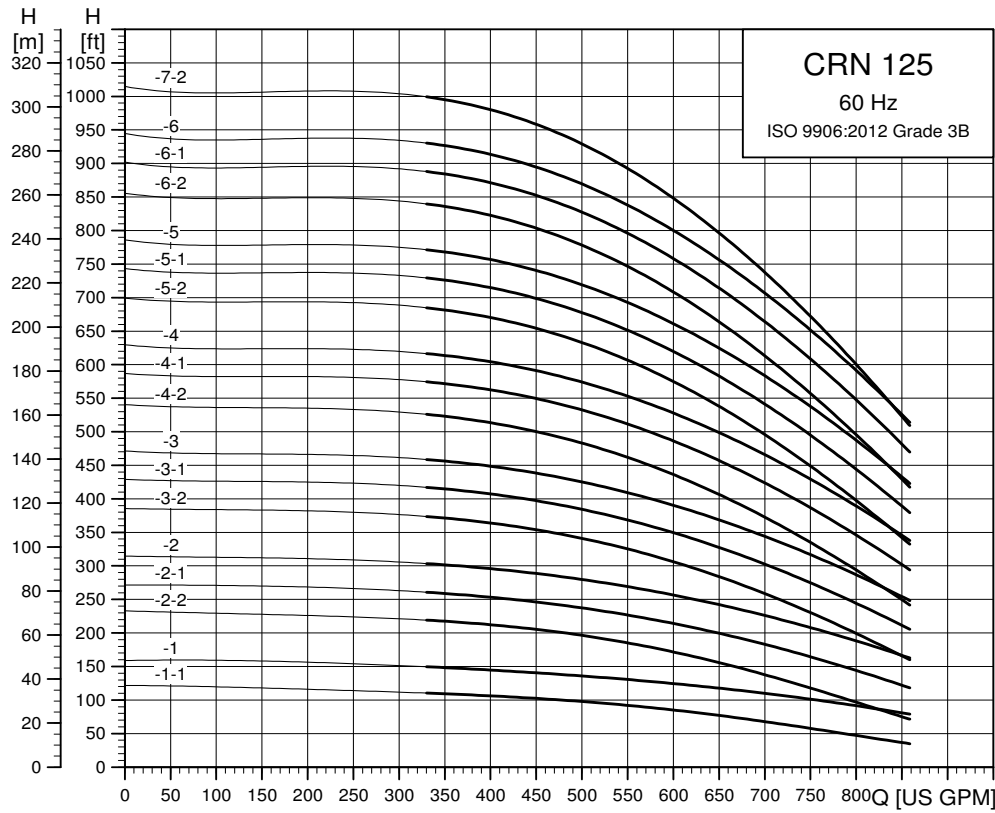
TM06 6061 0218

* CR, CRN 125 pumps with 1 to 3 stages are fitted with 150 lb. (68 kg) flanges as standard. 300 lb. (136 kg) flanges are available on request.
CR, CRN 125 pumps with 4 or more stages are fitted with 300 lb. (136 kg) flanges as standard.

Dimensions and weights

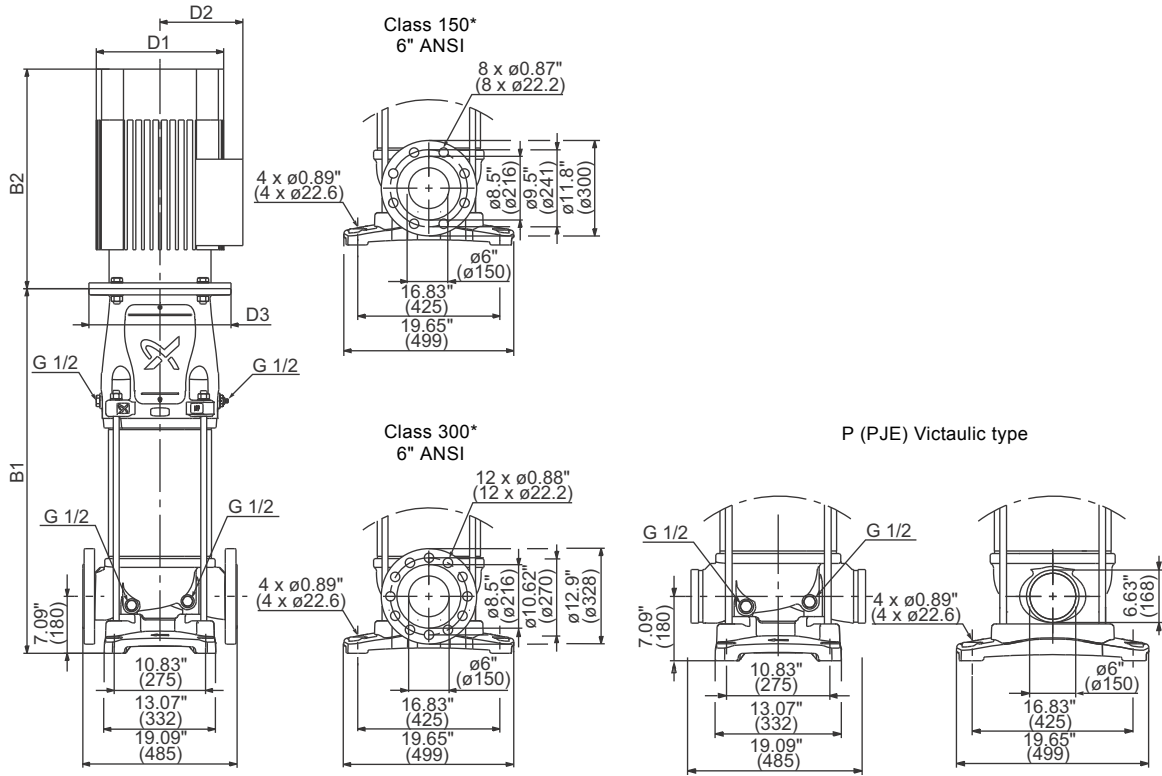
Pump type	Motor P ₂ [Hp (kw)]	Dimension [inch (mm)]					Net weight [lbs (kg)]
		B1	B1+B2	D1	D2	D3	
CR 125-1-1	20 (15)	30.8 (783)	49.6 (1261)	12.4 (314)	8 (204)	8.5 (216)	478 (217)
CR 125-1	25 (18)	30.9 (785)	53.7 (1363)	12.4 (314)	8 (204)	10.5 (267)	518 (235)
CR 125-2-2	30 (22)	35.7 (907)	58.5 (1485)	12.4 (314)	8 (204)	10.5 (267)	569 (258)
CR 125-2-1	40 (30)	36.6 (930)	64.2 (1630)	16.9 (429)	14.1 (359)	12.5 (318)	820 (372)
CR 125-2	50 (37)	36.6 (930)	64.2 (1630)	16.9 (429)	14.1 (359)	12.5 (318)	888 (403)
CR 125-3-2	60 (45)	41.4 (1052)	68.5 (1739)	16.9 (429)	14.1 (359)	12.5 (318)	961 (436)
CR 125-3-1	75 (56)	41.4 (1052)	69 (1752)	19.7 (500)	18.1 (460)	12.5 (318)	1281 (581)
CR 125-3	75 (56)	41.4 (1052)	69 (1752)	19.7 (500)	18.1 (460)	12.5 (318)	1281 (581)
CR 125-4-2	75 (56)	46.2 (1174)	73.8 (1874)	19.7 (500)	18.1 (460)	12.5 (318)	1303 (591)

CRN 125



The maximum pump efficiency (Eta) is based on a three-stage pump.

TM06 5540 3718



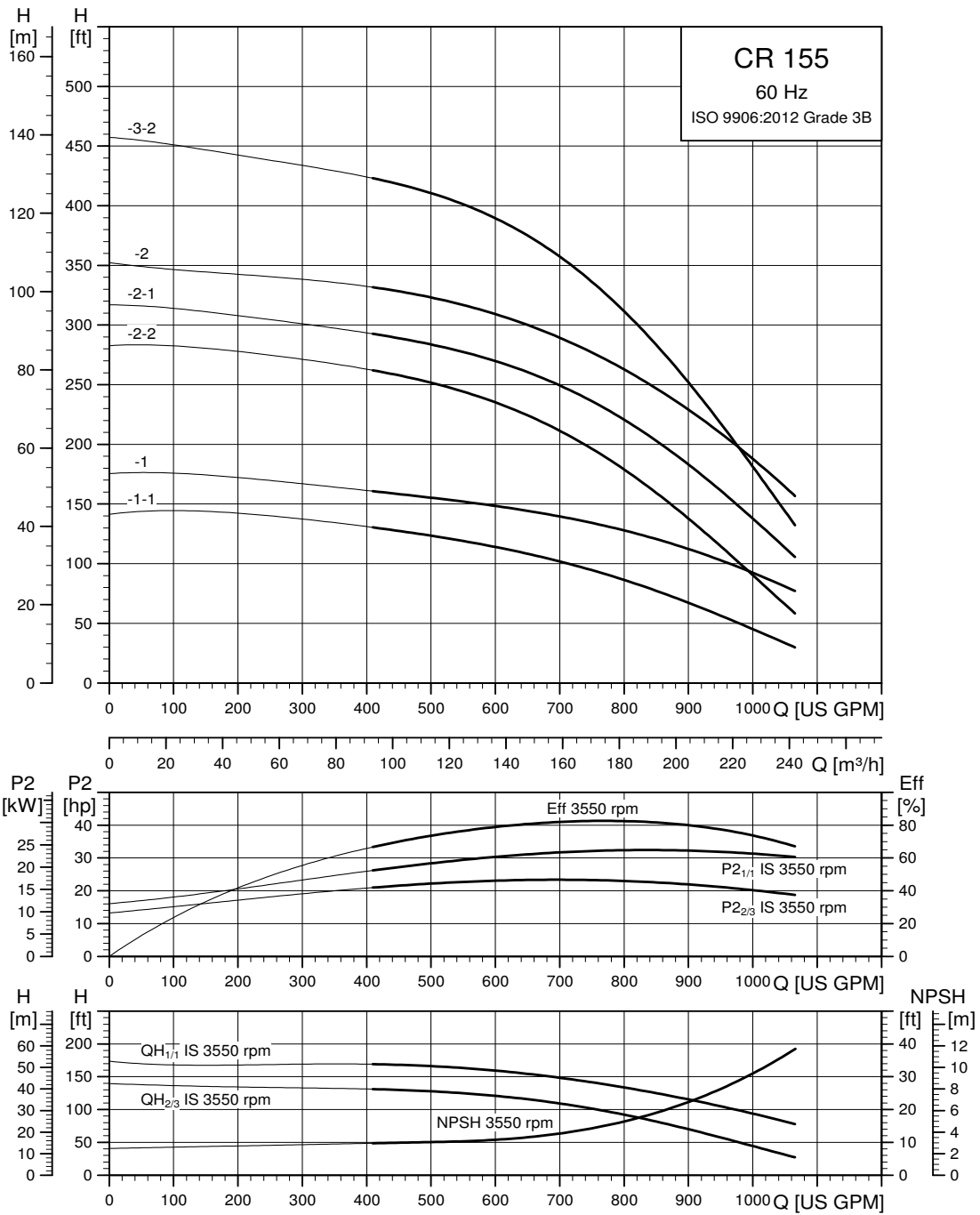
TM06 6062 0218

* CR, CRN 125 pumps with 1 to 3 stages are fitted with 150 lb. (68 kg) flanges as standard. 300 lb. (136 kg) flanges are available on request. CR, CRN 125 pumps with 4 or more stages are fitted with 300 lb. (136 kg) flanges as standard.

Dimensions and weights

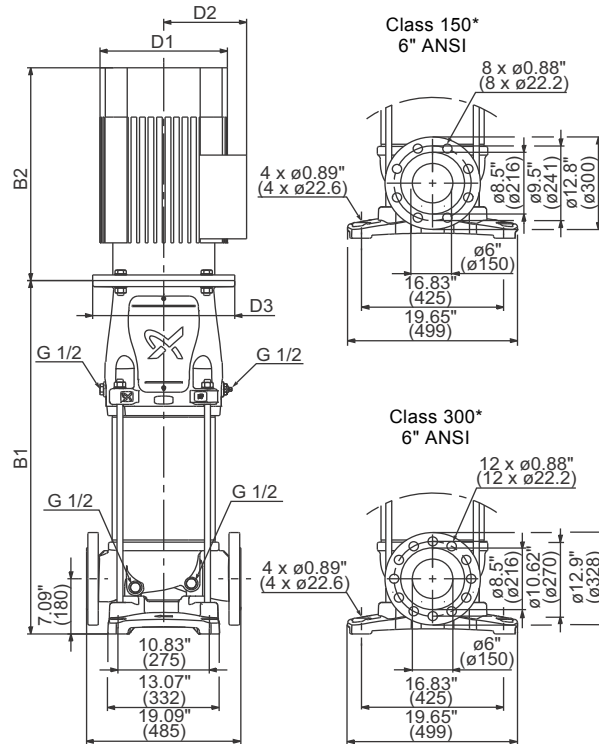
Pump type	Motor P ₂ [Hp (kW)]	Dimension [inch (mm)]					Net weight [lbs (kg)]
		B1	B1+B2	D1	D2	D3	
CRN 125-1-1	20 (15)	30.8 (783)	49.6 (1261)	12.4 (314)	8 (204)	8.5 (216)	478 (217)
CRN 125-1	25 (18)	30.9 (785)	53.7 (1363)	12.4 (314)	8 (204)	10.5 (267)	518 (235)
CRN 125-2-2	30 (22)	35.7 (907)	58.5 (1485)	12.4 (314)	8 (204)	10.5 (267)	569 (258)
CRN 125-2-1	40 (30)	36.6 (930)	64.2 (1630)	16.9 (429)	14.1 (359)	12.5 (318)	820 (372)
CRN 125-2	50 (37)	36.6 (930)	64.2 (1630)	16.9 (429)	14.1 (359)	12.5 (318)	888 (403)
CRN 125-3-2	60 (45)	41.4 (1052)	68.5 (1739)	16.9 (429)	14.1 (359)	12.5 (318)	961 (436)
CRN 125-3-1	75 (56)	41.4 (1052)	69 (1752)	19.7 (500)	18.1 (460)	12.5 (318)	1281 (581)
CRN 125-3	75 (56)	41.4 (1052)	69 (1752)	19.7 (500)	18.1 (460)	12.5 (318)	1281 (581)
CRN 125-4-2	75 (56)	46.2 (1174)	73.8 (1874)	19.7 (500)	18.1 (460)	12.5 (318)	1303 (591)
CRN 125-4-1	100 (75)	46.1 (1172)	82.2 (2087)	22.2 (565)	19.2 (488)	18 (457)	1781 (808)
CRN 125-4	100 (75)	46.1 (1172)	82.2 (2087)	22.2 (565)	19.2 (488)	18 (457)	1781 (808)
CRN 125-5-2	100 (75)	50.9 (1294)	87 (2209)	22.2 (565)	19.2 (488)	18 (457)	1803 (818)
CRN 125-5-1	125 (93)	50.9 (1294)	90.6 (2300)	26.5 (673)	22.7 (576)	18 (457)	2255 (1023)
CRN 125-5	125 (93)	50.9 (1294)	90.6 (2300)	26.5 (673)	22.7 (576)	18 (457)	2255 (1023)
CRN 125-6-2	125 (93)	55.7 (1416)	95.4 (2422)	26.5 (673)	22.7 (576)	18 (457)	2280 (1034)
CRN 125-6-1	150 (112)	55.7 (1416)	95.4 (2422)	26.5 (673)	22.7 (576)	18 (457)	2511 (1139)
CRN 125-6	150 (112)	55.7 (1416)	95.4 (2422)	26.5 (673)	22.7 (576)	18 (457)	2511 (1139)
CRN 125-7-2	150 (112)	60.6 (1538)	100.2 (2544)	26.5 (673)	22.7 (576)	18 (457)	2533 (1149)

CR 155



The maximum pump efficiency (Eta) is based on a three-stage pump.

TM06 5541 3718



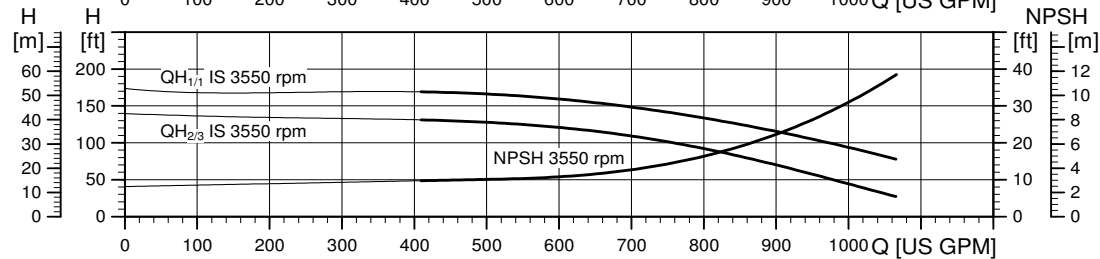
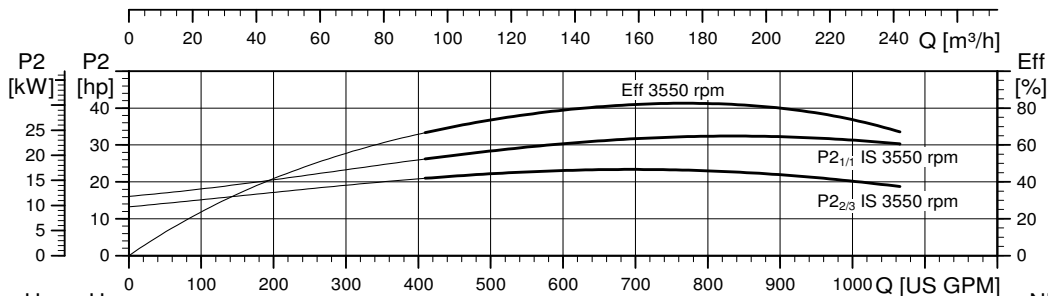
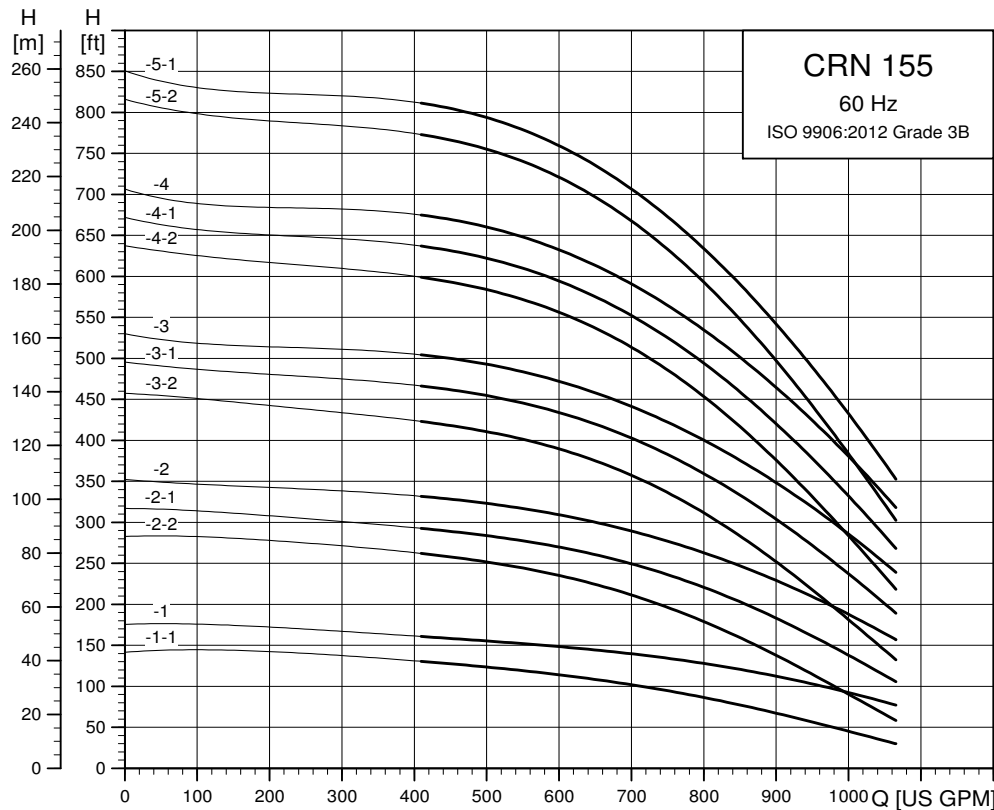
TM06 6061 0218

* CR, CRN 155 pumps with 1 to 3 stages (with 1 reduced diameter impeller) are fitted with 150 lb. (68 kg) flanges as standard. 300 lb. (136 kg) flanges are available on request.
CR, CRN 155 pumps with 3 or more full diameter impellers are fitted with 300 lb. (136 kg) flanges as standard.

Dimensions and weights

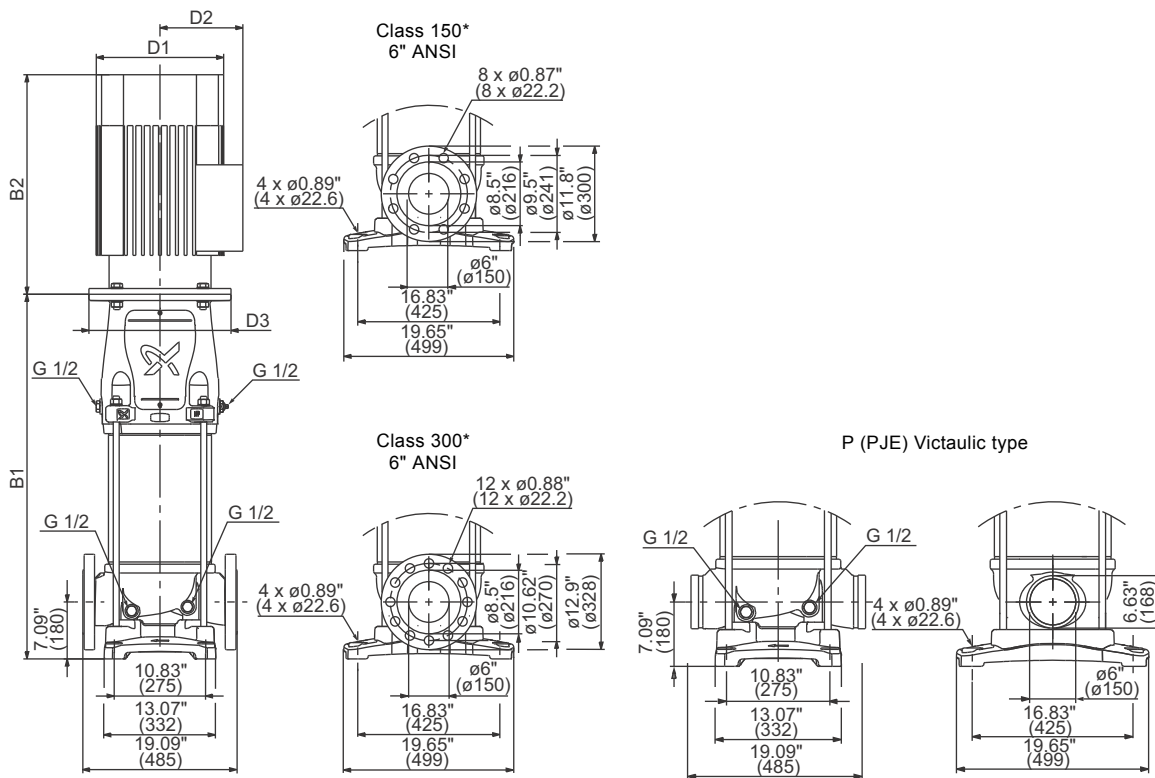
Pump type	Motor P ₂ [Hp (kW)]	Dimension [inch (mm)]					Net weight [lbs (kg)]
		B1	B1+B2	D1	D2	D3	
CR 155-1-1	25 (18)	30.9 (785)	53.7 (1363)	12.4 (314)	8 (204)	10.5 (267)	520 (236)
CR 155-1	40 (30)	31.8 (808)	59.4 (1508)	16.9 (429)	14.1 (359)	12.5 (318)	798 (362)
CR 155-2-2	50 (37)	36.6 (930)	64.2 (1630)	16.9 (429)	14.1 (359)	12.5 (318)	888 (403)
CR 155-2-1	60 (45)	36.6 (930)	63.7 (1617)	16.9 (429)	14.1 (359)	12.5 (318)	939 (426)
CR 155-2	75 (56)	36.6 (930)	64.2 (1630)	19.7 (500)	18.1 (460)	12.5 (318)	1259 (571)
CR 155-3-2	75 (56)	41.4 (1052)	69 (1752)	19.7 (500)	18.1 (460)	12.5 (318)	1283 (582)

CRN 155



The maximum pump efficiency (Eta) is based on a three-stage pump.

TM06 5542 3718



TM06 6062 0218

* CR, CRN 155 pumps with 1 to 3 stages (with 1 reduced diameter impeller) are fitted with 150 lb. (68 kg) flanges as standard. 300 lb. (136 kg) flanges are available on request.
CR, CRN 155 pumps with 3 or more full diameter impellers are fitted with 300 lb. (136 kg) flanges as standard.

Dimensions and weights

Pump type	Motor P ₂ [Hp (kW)]	Dimension [inch (mm)]					Net weight [lbs (kg)]
		B1	B1+B2	D1	D2	D3	
CRN 155-1-1	25 (18)	30.9 (785)	53.7 (1363)	12.4 (314)	8 (204)	10.5 (267)	520 (236)
CRN 155-1	40 (30)	31.8 (808)	59.4 (1508)	16.9 (429)	14.1 (359)	12.5 (318)	798 (362)
CRN 155-2-2	50 (37)	36.6 (930)	64.2 (1630)	16.9 (429)	14.1 (359)	12.5 (318)	888 (403)
CRN 155-2-1	60 (45)	36.6 (930)	63.7 (1617)	16.9 (429)	14.1 (359)	12.5 (318)	939 (426)
CRN 155-2	75 (56)	36.6 (930)	64.2 (1630)	19.7 (500)	18.1 (460)	12.5 (318)	1259 (571)
CRN 155-3-2	75 (56)	41.4 (1052)	69 (1752)	19.7 (500)	18.1 (460)	12.5 (318)	1283 (582)
CRN 155-3-1	100 (75)	41.3 (1050)	77.4 (1965)	22.2 (565)	19.2 (488)	18 (457)	1761 (799)
CRN 155-3	100 (75)	41.3 (1050)	77.4 (1965)	22.2 (565)	19.2 (488)	18 (457)	1761 (799)
CRN 155-4-2	125 (93)	46.1 (1172)	85.7 (2178)	26.5 (673)	22.7 (576)	18 (457)	2238 (1015)
CRN 155-4-1	125 (93)	46.1 (1172)	85.7 (2178)	26.5 (673)	22.7 (576)	18 (457)	2238 (1015)
CRN 155-4	125 (93)	46.1 (1172)	85.7 (2178)	26.5 (673)	22.7 (576)	18 (457)	2238 (1015)
CRN 155-5-2	150 (112)	50.9 (1294)	90.6 (2300)	26.5 (673)	22.7 (576)	18 (457)	2493 (1131)
CRN 155-5-1	150 (112)	50.9 (1294)	90.6 (2300)	26.5 (673)	22.7 (576)	18 (457)	2493 (1131)

6. Motor data

Standard motors, 60 Hz



Baldor motor



Grundfos motor

TM06 6898 2616 - GR7845

Motor P2 [Hp (kW)]	Frame size	Standard voltage [V]	$I_{1/1}$ [A]	Service factor	$\text{Cos } \Phi_{1/1}$	Efficiency class	η [%]	I_{start} [A]	Speed [rpm]	Motor brand
15 (11)	254TC	208-230DD/460D	37.5-34/17	1.15	0.91-0.89	NEMA Premium / IE3 60Hz	IE3 91.0%	255-306/153	3490-3530	Grundfos
20 (15)	254TC	208-230DD/460D	50.5-46/23	1.15	0.92-0.90	NEMA Premium / IE3 60Hz	IE3 91.0%	308-373/186	3490-3530	
25 (19)	284TSC	208-230DD/460D	62-56/28	1.15	0.92-0.91	NEMA Premium / IE3 60Hz	IE3 91.7%	341-420/210	3490-3530	
30 (22)	286TSC	208-230DD/460D	74-67/33.5	1.15	0.92-0.91	NEMA Premium / IE3 60Hz	IE3 91.7%	400-489/245	3490-3530	
40 (30)	324TSC	230/460	90/45	1.15	0.86	NEMA Premium / IE3 60Hz	IE3 92.4%	564/326	3540	Baldor
50 (37)	326TSC	230/460	112/56	1.15	0.87	NEMA Premium / IE3 60Hz	IE3 93.0%	688/398	3540	
60 (45)	364TSC	230/460	132/66	1.15	0.87	NEMA Premium / IE3 60Hz	IE3 93.6%	989/572	3550	
75 (56)	365TSC	230/460	166/83	1.15	0.87	NEMA Premium / IE3 60Hz	IE3 93.6%	1210/700	3550	
100 (75)	405TSD	460	110	1.15	0.90	NEMA Premium / IE3 60Hz	IE3 94.1%	695	3565	
125 (93)	444TSD	460	137	1.15	0.90	NEMA Premium / IE3 60Hz	IE3 95.0%	848	3565	
150 (112)	445TSD	460	166	1.15	0.89	NEMA Premium / IE3 60Hz	IE3 95.0%	978	3575	

7. List of pumped liquids

A number of typical liquids are listed below.

Other pump versions may be applicable, but those stated in the list are considered to be the best choices.

The table is intended as a general guide only and cannot replace actual testing of the pumped liquids and pump materials under specific working conditions.

Therefore, use the list with some caution. Factors such as those mentioned below may affect the chemical resistance of a specific pump version:

- concentration of the pumped liquid
- liquid temperature
- pressure.

Take safety precautions when pumping dangerous liquids.

Notes

D	Often with additives.
E	The density and/or viscosity differ from that/those of water. Take this factor into account when calculating motor output and pump performance.
F	Pump selection depends on many factors. Contact Grundfos.
H	Risk of crystallization/precipitation in shaft seal.
1	Highly flammable liquid.
2	Combustible liquid.
3	Insoluble in water.
4	Low self-ignition point.

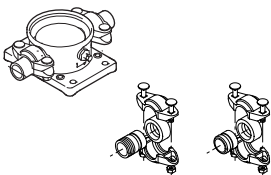
Pumped liquid	Chemical formula	Note	Liquid concentration, liquid temperature	CR	CRN
Acetic acid	CH ₃ COOH	-	5 %, 68 °F (20 °C)	-	HQQE
Acetone	CH ₃ COCH ₃	1, F	100 %, 68 °F (20 °C)	-	HQQE
Alkaline degreasing agent		D, F	-	HQQE	-
Ammonium bicarbonate	NH ₄ HCO ₃	E	20 %, 86 °F (30 °C))	-	HQQE
Ammonium hydroxide	NH ₄ OH	-	20 %, 104 °F (40 °C)	HQQE	-
Aviation fuel		1, 3, 4, F	100 %, 68 °F (20 °C)	HQBV	-
Benzoic acid	C ₆ H ₅ COOH	H	0.5 %, 68 °F (20 °C)	-	HQQV
Boiler water		-	< 248 °F (120 °C)	HQQE	-
Calcareous water		F	248-356 °F (120-180 °C)	-	-
Calcareous water		-	< 194 °F (90 °C)	HQQE	-
Calcium acetate (as coolant with inhibitor)	Ca(CH ₃ COO) ₂	D, E	30 %, 122 °F (50 °C)	HQQE	-
Calcium hydroxide	Ca (OH) ₂	E	Saturated solution, 122 °F (50 °C)	HQQE	-
Chloride-containing water		F	< 86 °F (30 °C), maximum 500 ppm	-	HQQE
Chromic acid	H ₂ CrO ₄	H	1 %, 68 °F (20 °C)	-	HQQV
Citric acid	HOC(CH ₂ CO ₂ H) ₂ COOH	H	5 %, 104 °F (40 °C)	-	HQQE
Completely desalinated water (demineralized water)		-	248 °F (120 °C)	-	HQQE
Condensate		-	248 °F (120 °C)	HQQE	-
Copper sulphate	CuSO ₄	E	10 %, 122 °F (50 °C)	-	HQQE
Corn oil		D, E, 3	100 %, 176 °F (80 °C)	HQQV	-
Diesel oil		2, 3, 4, F	100 %, 68 °F (20 °C)	HQBV	-
Domestic hot water (potable water)		-	< 248 °F (120 °C)	HQQE	-
Ethanol (ethyl alcohol)	C ₂ H ₅ OH	1, F	100 %, 68 °F (20 °C)	HQQE	-
Ethylene glycol	HOCH ₂ CH ₂ OH	D, E	50 %, 122 °F (50 °C)	HQQE	-
Formic acid	HCOOH	-	5 %, 68 °F (20 °C)	-	HQQE
Glycerine (glycerol)	OHCH ₂ CH(OH)CH ₂ OH	D, E	50 %, 122 °F (50 °C)	HQQE	-
Hydraulic oil (mineral)		E, 2, 3	100 %, 212 °F (100 °C)	HQQV	-
Hydraulic oil (synthetic)		E, 2, 3	100 %, 212 °F (100 °C)	HQQV	-
Isopropyl alcohol	CH ₃ CHOHCH ₃	1, F	100 %, 68 °F (20 °C)	HQQE	-
Lactic acid	CH ₃ CH(OH)COOH	E, H	10 %, 68 °F (20 °C)	-	HQQV
Linoleic acid	C ₁₇ H ₃₁ COOH	E, 3	100 %, 68 °F (20 °C)	HQQV	-
Methanol (methyl alcohol)	CH ₃ OH	1, F	100 %, 68 °F (20 °C)	HQQE	-
Motor oil		E, 2, 3	100 %, 176 °F (80 °C)	HQQV	-
Naphthalene	C ₁₀ H ₈	E, H	100 %, 176 °F (80 °C)	HQQV	-
Nitric acid	HNO ₃	F	1 %, 68 °F (20 °C)	-	HQQE
Oil-containing water		-	< 212 °F (100 °C)	HQQV	-
Olive oil		D, E, 3	100 %, 176 °F (80 °C)	HQQV	-
Oxalic acid	(COOH) ₂	H	1 %, 68 °F (20 °C)	-	HQQE
Ozone-containing water	(O ₃)	-	< 212 °F (100 °C)	-	HQQE
Peanut oil		D, E, 3	100 %, 176 °F (80 °C)	HQQV	-
Petrol		1, 3, 4, F	100 %, 68 °F (20 °C)	HQBV	-
Phosphoric acid	H ₃ PO ₄	E	20 %, 68 °F (20 °C)	-	HQQE
Propanol	C ₃ H ₇ OH	1, F	100 %, 68 °F (20 °C)	HQQE	-
Propylene glycol	CH ₃ CH(OH)CH ₂ OH	D, E	50 %, 194 °F (90 °C)	HQQE	-
Potassium carbonate	K ₂ CO ₃	E	20 %, 122 °F (50 °C)	HQQE	-
Potassium formate (as coolant with inhibitor)	KOOCH	D, E	30 %, 122 °F (50 °C)	HQQE	-
Potassium hydroxide	KOH	E	20 %, 122 °F (50 °C)	-	HQQE
Potassium permanganate	KMnO ₄	-	5 %, 68 °F (20 °C)	-	HQQE
Rape seed oil		D, E, 3	100 %, 176 °F (80 °C)	HQQV	-
Salicylic acid	C ₆ H ₄ (OH)COOH	H	0.1 %, 68 °F (20 °C)	-	HQQE
Silicone oil		E, 3	100 %	HQQV	-
Sodium bicarbonate	NaHCO ₃	E	10 %, 140 °F (60 °C)	-	HQQE
Sodium chloride (as coolant)	NaCl	D, E	30 %, < 41 °F (5 °C), pH > 8	HQQE	-
Sodium hydroxide	NaOH	E	20 %, 122 °F (50 °C)	-	HQQE
Sodium hypochlorite	NaOCl	F	0.1 %, 68 °F (20 °C)	-	HQQV
Sodium nitrate	NaNO ₃	E	10 %, 140 °F (60 °C)	-	HQQE
Sodium phosphate	Na ₃ PO ₄	E, H	10 %, 140 °F (60 °C)	-	HQQE
Sodium sulphate	Na ₂ SO ₄	E, H	10 %, 140 °F (60 °C)	-	HQQE
Softened water		-	< 248 °F (120 °C)	-	HQQE
Soya oil		D, E, 3	100 %, 176 °F (80 °C)	HQQV	-
Sulphuric acid	H ₂ SO ₄	F	1 %, 68 °F (20 °C)	-	HQQV
Sulphurous acid	H ₂ SO ₃	-	1 %, 68 °F (20 °C)	-	HQQE
Unsalted swimming-pool water		-	Approx. 2 ppm free chlorine (Cl ₂)	HQQE	-

8. Accessories

PJE couplings for CRN

Materials in contact with the pumped liquid are made of stainless steel AISI 316 and rubber.

A set consists of two coupling halves (Victaulic® type 77), one gasket, one pipe stub (for welding or threaded), bolts and nuts.

Coupling	Pump type	Pipe stub	Max. pressure [psi (bar)]	Pipe connection	Rubber parts	Number of coupling sets required
	CRN 95	For welding	800 (55)	4"	EPDM FKM	2
	CRN 125 CRN 155	For welding	800 (55)	6"	EPDM FKM	2

9. Grundfos Product Center

Online search and sizing tool to help you make the right choice.

<http://product-selection.grundfos.com>



This drop-down menu enables you to set the search function to "Products" or "Literature".

"SIZING" enables you to size a pump based on entered data and selection choices.

"REPLACEMENT" enables you to find a replacement product. Search results will include information on the following:

- the lowest purchase price
- the lowest energy consumption
- the lowest total life cycle cost.

The screenshot shows the Grundfos Product Center website. At the top, there is a navigation bar with the Grundfos logo and 'PRODUCT CENTER'. Below this is a search bar with a dropdown menu for 'Products' and 'Literature'. The main content area features four large buttons: 'Sizing', 'Catalog', 'Replacement', and 'Liquids'. Below these buttons is a 'Quick sizing' section with input fields for 'Flow (Q)' and 'Head (H)', and a 'Select what to size by' section with radio buttons for 'Size by application', 'Size by pump design', and 'Size by pump family'. A 'START SIZING' button is located at the bottom right of the quick sizing section.

"CATALOGUE" gives you access to the Grundfos product catalogue.

"LIQUIDS" enables you to find pumps designed for aggressive, flammable or other special liquids.

All the information you need in one place

Performance curves, technical specifications, pictures, dimensional drawings, motor curves, wiring diagrams, spare parts, service kits, 3D drawings, documents, system parts. The Product Center displays any recent and saved items - including complete projects - right on the main page.

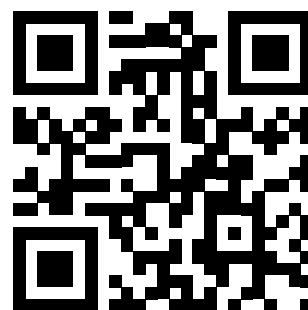
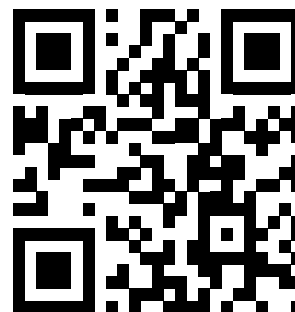
Downloads

On the product pages, you can download installation and operating instructions, data booklets, service instructions, etc. in PDF format.

Grundfos GO

Mobile solution for professionals on the GO!

Grundfos GO is the mobile tool box for professional users on the go. It is the most comprehensive platform for mobile pump control and pump selection including sizing, replacement and documentation. It offers intuitive, handheld assistance and access to Grundfos online tools, and it saves valuable time for reporting and data collection.



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