

1. Product introduction

This data booklet deals with Grundfos CR, CRI and CRN pumps with these nominal flow sizes:

- CR, CRN, CRI 1s, 1, 3, 5, 10, 15, 20
- CR, CRN 32, 45, 64.

Options for larger flow sizes are described in the data booklet for CR, CRN 95-155, 60 Hz available on Grundfos Product Center at <http://net.grundfos.com/qr/i/99407996>.



TM02 7698 3803

Fig. 1 CR, CRI and CRN pumps

Pump Energy Index

Pump Energy Index (PEI) was established by the U.S. Department of Energy (DOE) and adopted by Canada as the standard metric used to evaluate pump efficiency. The value is the ratio of the pump efficiency rating (PER) divided by the calculated minimally compliant PER (PER_{STD}) for the pump type. This provides a representation of a pump's actual performance compared to the minimal standard performance required by regulation. The lower the PEI value, the more efficient a pump is at the tested operating points.

PER is determined by defined testing parameters required by the DOE. This includes testing a particular pump model at its best efficiency point (BEP).

For PEI values there are two different versions:

- PEI_{CL} (constant load): Applies to a bare-shaft pump and a pump sold with a motor
- PEI_{VL} (variable load): Applies to pumps sold with a motor and controller (such as VFD, VSD)

The DOE has set the maximum PEI value as 1.00. Any pump, pump and motor, or pump, motor and controller that exceeds a PEI value of 1.00 can no longer be manufactured after January 26, 2020.

PEI is a generalized efficiency value. PEI cannot be used to determine the efficiency of a pump in a specific application.

Product type	Poles	PEI_{CL} bare-shaft pump	PEI_{CL} pump with motor	PEI_{VL} pump with motor plus controller*	Impeller diameter [in (mm)]
CR, CRN, CRI 10	2	0.87	0.87	0.48	3.66 (92.90)
CR, CRN, CRI 15	2	0.91	0.91	0.48	4.13 (104.80)
CR, CRN, CRI 20	2	0.91	0.91	0.47	4.13 (104.80)
CR, CRN 32	2	0.87	0.87	0.45	4.66
	4	0.90	0.91	0.50	(118.40)
CR, CRN 45	2	0.89	0.89	0.46	5.34 (136)
	4	0.91	0.91	0.47	
CR, CRN 64	2	0.93	0.93	0.46	5.59 (142)
	4	0.94	0.94	0.48	

* Grundfos CUE continuous controls.

Features and benefits

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

Grundfos CR pumps are available in various sizes and various numbers of stages to provide the flow rate and the pressure required.

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

A CR 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.

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

CR pumps fitted with EPDM elastomers are compliant with ANSI/NSF 61 and ANSI/NSF 372. See UL file MH26400 or contact Grundfos.

Pump

The CR pumps are non-self-priming, vertical multistage centrifugal pumps. The pumps are supplied with WEG motors as standard. Grundfos ML motors are available on request.

The pump consists of a base and a pump head. Staybolts secure the chamber stack and sleeve between the pump head and base. 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.

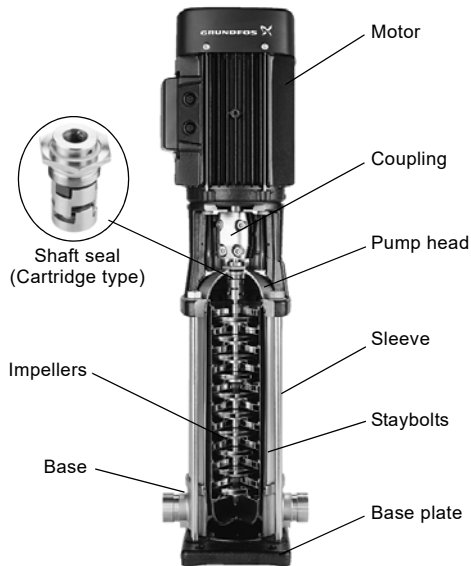


Fig. 2 CR pump

GR5357 - GR3395

Motor

CR, CRI and CRN pumps are fitted with a Grundfos specified motor. The motors are all heavy-duty 2-pole, NEMA C-face motors. The pumps are supplied with WEG motors as standard. Grundfos ML motors (0.33 to 30 HP, TEFC three-phase) are available on request.

Electrical data

Mounting designation	NEMA
Insulation class	F
Efficiency	Premium efficiency - EISA compliant
Enclosure	IP55 TEFC - Totally Enclosed Fan Cooled (Grundfos standard). ODP - Open Drip Proof (on request).
60 Hz standard voltages	1 x 115/208-230 V 3 x 208-230/460 V 3 x 575 V
Number of poles	2

Approvals, WEG



Approvals, Grundfos ML



WEG motors 0.25 to 20 HP

- rolled steel construction
- service factor 1.15
- suitable for VFD operation per NEMA MG 1 part 31.4.4.2
- certified Class I Division 2, Groups A, B, C, D
- certified Class II, Division 2, Groups F, G (three phase only).

WEG motors 25 to 300 HP

- cast iron frame
- rated for severe duty
- service factor 1.25 (25 to 100 HP)
- service factor 1.15 (125 to 300 HP)
- Inverter rated per NEMA MG 1 part 31
- certified Class I Division 2, Groups A, B, C, D
- certified Class II, Division 2, Groups F, G (three phase only).

Grundfos E-motors

We also offer frequency-controlled CRE and 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, Grundfos offers custom-built motors such as:

- explosion proof motors
- motors with anti-condensation heating unit
- low-noise motors
- motors with thermal protection.

Motor protection

Single-phase Grundfos specified motors up to 7.5 HP have a built-in thermal overload switch.

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

Three-phase Grundfos ML motors 5 HP (4 kW) and larger have a built-in thermistor (PTC) according to DIN 44082 (TP 211 according to IEC 34-11).

2. Applications

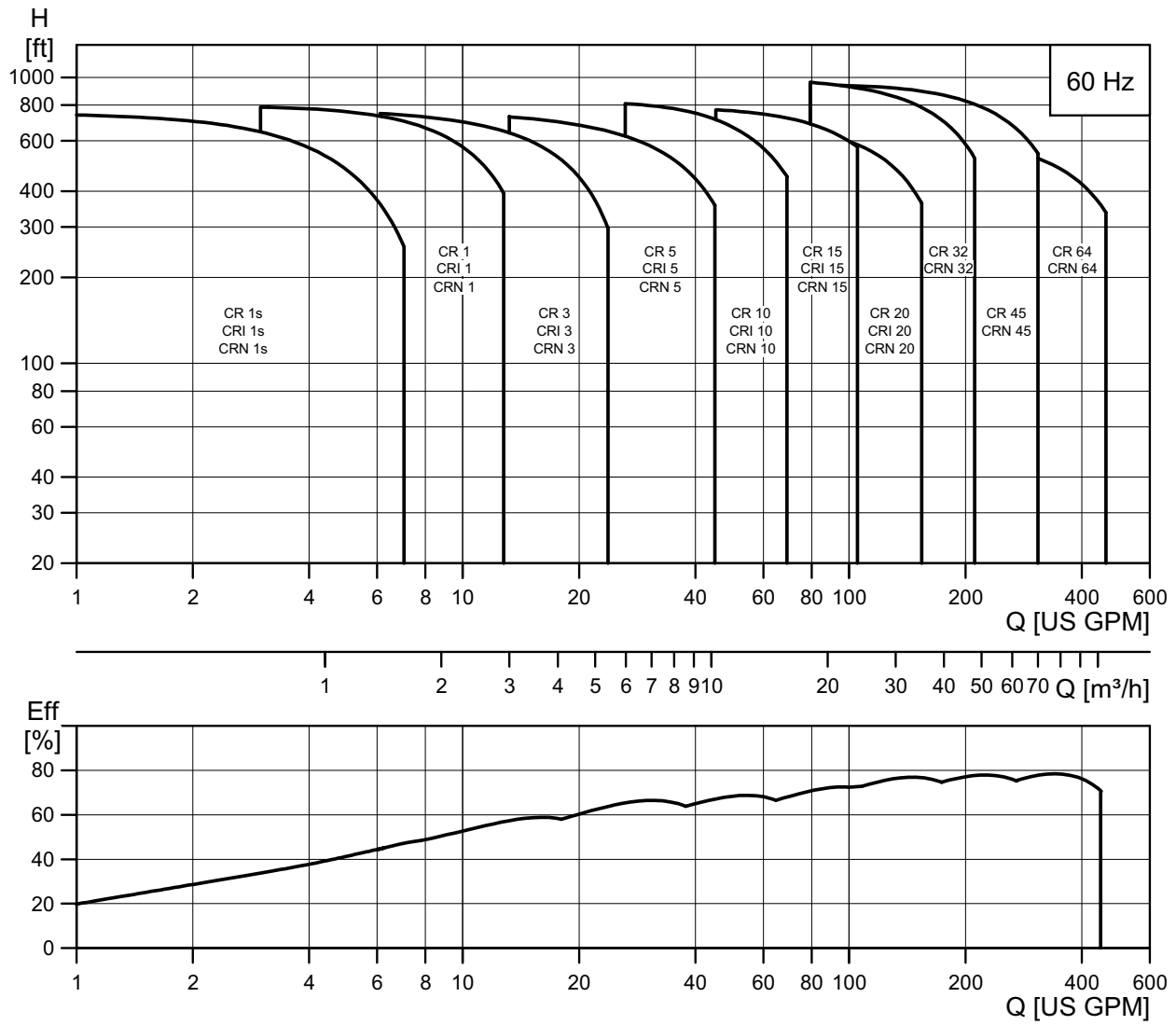
Application	CR, CRI	CRN
Water supply		
Filtration and transfer at waterworks	•	○
Distribution from waterworks	•	○
Pressure boosting in mains	•	○
Pressure boosting in high-rise buildings, hotels, etc.	•	○
Pressure boosting for industrial water supply	•	○
Industry		
Pressure boosting		
Process water systems	•	•
Washing and cleaning systems	•	•
Vehicle washing tunnels	•	○
Fire fighting 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, ion exchange, demineralizing systems		•
Distillation systems		•
Separators	•	•
Swimming pools ★		•
Irrigation		
Field irrigation (flooding)	•	○
Sprinkler irrigation	•	○
Drip-feed irrigation	•	○

• Recommended version.

○ Alternative version.

★ CRT, CRTE version available. For further information about CRT, CRTE pumps, see [Pumped liquids](#) on page 14 or the related CRT, CRTE product guide.

3. Performance range



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4. Product range

Range	CR 1s	CR 1	CR 3	CR 5	CR 10	CR 15	CR 20	CR 32	CR 45	CR 64	
Nominal flow rate [US gpm]	4.5	8.5	15	30	55	95	110	140	220	340	
Temperature range [°F]								-22 to +250 ¹⁾			
Temperature range [°F] - on request								-40 to +356			
Max. working pressure [psi]★	362	362	362	362	362	362	362	435	435	435	
Max. working pressure [psi] - on request	-	725	725	725	725	725	725	580	580	580	
Max. pump efficiency [%]	35	49	59	67	70	72	72	76	78	79	
CR pumps											
CR: Flow range [US gpm]	0.5 - 5.7	1 - 12.8	1.5 - 23.8	3 - 45	5.5 - 70	9.5 - 125	11-155	14-210	22 -310	34-450	
CR: Max. pump pressure (H [ft])	760	790	790	780	820	800	700	995	940	565	
CR: Motor power [HP]	0.33 - 2	0.33 - 3	0.33 - 5	0.75 - 7.5	0.75 - 15	2-25	3-25	5-50	7.5 - 60	10-60	
Version											
CR: Cast iron and stainless steel AISI 304	•	•	•	•	•	•	•	•	•	•	
CRI: Stainless steel AISI 304	•	•	•	•	•	•	•	-	-	-	
CRN: Stainless steel AISI 316	•	•	•	•	•	•	•	•	•	•	
CRT, CRTE: Titanium	-	See CRT, CRTE product guide					-	-	-	-	-
CR pipe connection											
Oval flange (NPT)	1"	1"	1"	1.25"	2"	2"	2"	-	-	-	
Oval flange (NPT) - on request	1.25"	1.25"	1.25"	1"	1.5"	-	-	-	-	-	
ANSI flange size	1.25"	1.25"	1.25"	1.25"	2"	2"	2"	2.5"	3"	4"	
ANSI flange size - on request	-	-	-	-	-	-	-	3"	4"	5 ²⁾	
ANSI flange class	250 lb.	250 lb.	250 lb.	250 lb.	250 lb.	250 lb.	250 lb.	125/ 250 lb.	125/ 250 lb.	125/ 250 lb.	
CRI pipe connection											
Oval flange (NPT)	1"	1"	1"	1.25"	2"	2"	2"	-	-	-	
Oval flange (NPT) - on request	1.25"	1.25"	1.25"	1"	1.5"	-	-	-	-	-	
ANSI flange size	1.25"	1.25"	1.25"	1.25"	2"	2"	2"	-	-	-	
ANSI flange class	300 lb.	300 lb.	300 lb.	300 lb.	300 lb.	300 lb.	300 lb.	-	-	-	
Clamp coupling (NPT) - on request	1", 1.25"	1", 1.25"	1", 1.25"	1", 1.25"	1.5", 2"	1.5", 2"	1.5", 2"	-	-	-	
Union (NPT ext. Thread) - on request	2"	2"	2"	2"	-	-	-	-	-	-	
CRN pipe connection											
PJE (Vitaallic)	1.25"	1.25"	1.25"	1.25"	2"	2"	2"	-	-	-	
PJE (Vitaallic) - on request	-	-	-	-	-	-	-	3"	4"	4"	
ANSI flange size	1.25"	1.25"	1.25"	1.25"	2"	2"	2"	2.5"	3"	4"	
ANSI flange size - on request	-	-	-	-	-	-	-	3"	-	-	
ANSI flange class	300 lb.	300 lb.	300 lb.	300 lb.	300 lb.	300 lb.	300 lb.	150/ 300 lb.	150/ 300 lb.	150/ 300 lb.	
Clamp coupling (NPT) - on request	1", 1.25"	1", 1.25"	1", 1.25"	1", 1.25"	1.5", 2"	1.5", 2"	1.5", 2"	-	-	-	
Union (NPT ext. Thread) - on request	2"	2"	2"	2"	-	-	-	-	-	-	
CRT pipe connection											
PJE coupling (Vitaallic)	-	1.25"	1.25"	1.25"	2"	2"	-	-	-	-	
ANSI flange size - on request	-	-	-	-	2"	2"	-	-	-	-	

• Available.

★ See section 7. *Operating conditions* on page 14 for specific working pressures.

¹⁾ CRN 32 to CRN 64 with HQQE shaft seal: -40 °F to +250 °F.

²⁾ CR 5" flange is not manufactured to ANSI specification. Gasket contact surface is approximately 0.25".

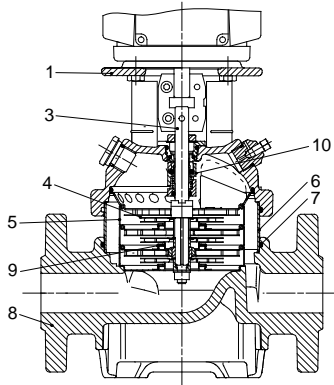
6. Construction

CR 1s, 1, 3, 5, 10, 15 and 20



TM02 1198 0601 - GR7377 - GR7379

Sectional drawing



TM02 1194 1403

Materials: CR

Pos.	Designation	Materials	AISI/ASTM
1	Pump head	Cast iron	A 48-30 B
3	Shaft	Stainless steel	AISI 316 ¹⁾ AISI 431 ²⁾
4	Impeller	Stainless steel	AISI 304
5	Chamber	Stainless steel	AISI 304
6	Sleeve	Stainless steel	AISI 304
7	O-ring for outer sleeve	EPDM or FKM	
8	Base	Cast iron	A 48-30 B
9	Neck ring	PTFE	
10	Shaft seal	Cartridge type	
	Bearing rings	Silicon carbide	
	Rubber parts	EPDM or FKM	
12	FGJ flange	Cast iron	A 48-30 B

1) CR 1s, 1, 3, 5

2) CR 10, 15, 20

3) Stainless steel available on request.

4) CF 8M is cast equivalent of AISI 316 stainless steel.

5) CRI/CRN 1s, 1, 3, 5

6) CRN 10, 15, 20

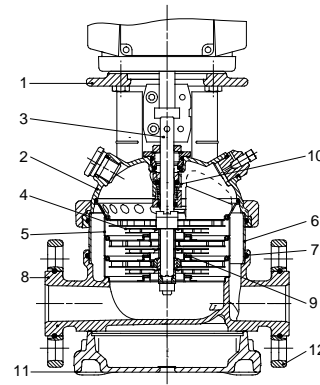
7) CRI 10, 15, 20

CRI, CRN 1s, 1, 3, 5, 10, 15 and 20



TM02 1808 2001 - GR7373 - GR7375

Sectional drawing



TM03 2156 3805

Materials: CRI, CRN

Pos.	Designation	Materials	AISI/ASTM
1	Pump head	Cast iron ³⁾	A 48-30 B
2	Pump head cover	Stainless steel	CF 8M ⁴⁾
3	Shaft	Stainless steel	AISI 316 ⁵⁾ AISI 329 ⁶⁾ AISI 431 ⁷⁾
8	Base	Stainless steel	CF 8M ⁴⁾
9	Neck ring	PTFE	
10	Shaft seal	Cartridge type	
11	Base plate	Cast iron ³⁾	A 48-30 B
	Bearing rings	Silicon carbide	
	Rubber parts	EPDM or FKM	
CRI			
4	Impeller	Stainless steel	AISI 304
5	Chamber	Stainless steel	AISI 304
6	Sleeve	Stainless steel	AISI 304
7	O-ring for outer sleeve	EPDM or FKM	
12	FGJ flange ring	Ductile iron ³⁾	A 65-45-12
	Oval flange	Stainless steel	AISI 316
CRN			
4	Impeller	Stainless steel	AISI 316
5	Chamber	Stainless steel	AISI 316
6	Sleeve	Stainless steel	AISI 316
7	O-ring for outer sleeve	EPDM or FKM	
12	FGJ flange ring	Ductile iron ³⁾	A 65-45-12

Pumped liquid	Note	Liquid concentration, liquid temperature	CR		CRN	
			1s, 1, 3, 5, 10, 15, 20	32, 45, 64	1s, 1, 3, 5, 10, 15, 20	32, 45, 64
Acetic acid CH ₃ COOH		5 %, 68 °F			HQQE	HQQE/HBQE
Acetone CH ₃ COCH ₃	1, F	100 %, 68 °F			HBQE	HQQE/HBQE
Alkaline degreasing agent	D, F		HQQE	HQQE/HBQE		
Ammonium bicarbonate NH ₄ HCO ₃	E	20 %, 86 °F			HQQE	HQQE/HBQE
Ammonium hydroxide NH ₄ OH		20 %, 104 °F	HQQE	HQQE/HBQE		
Aviation fuel	1, 3, 4, F	100 %, 68 °F	HQBv	HQQV/HBQV		
Benzoic acid C ₆ H ₅ COOH	H	0,5 %, 68 °F			HQQV	HQQV/HBQV
Boiler water		< 248 °F	HQQE	HQQE/HBQE		
	F	248 °F - 356 °F	-	-		
Calcareous water		< 194 °F	HQQE	HQQE		
Calcium acetate (as coolant with inhibitor) Ca(CH ₃ COO) ₂	D, E	30 %, 122 °F	HQQE	HQQE		
Calcium hydroxide Ca(OH) ₂	E	Saturated solution, 122 °F	HQQE	HQQE		
Chloride-containing water	F	< 86 °F, max. 500 ppm			HQQE	HQQE
Chromic acid H ₂ CrO ₄	H	1 %, 68 °F			HQQV	HQQV/HBQV
Citric acid HOC(CH ₂ CO ₂ H) ₂ COOH	H	5 %, 104 °F			HQQE	HQQE/HBQE
Completely desalinated water (demineralized water)		< 248 °F			HQQE	HQQE/HBQE
Condensate		< 194 °F	HQQE	HQQE/HBQE		
Copper sulfate CuSO ₄	E	10 %, 122 °F			HQQE	HQQE
Corn oil	D, E, 3	100 %, 176 °F	HQQV	HQQV/HBQV		
Diesel oil	2, 3, 4, F	100 %, 68 °F	HQBv	HQQV/HBQV		
Domestic hot water (potable water)		< 248 °F	HQQE	HQQE/HBQE		
Ethanol (ethyl alcohol) C ₂ H ₅ OH	1, F	100 %, 68 °F	HQQE	HQQE/HBQE		
Ethylene glycol HOCH ₂ CH ₂ OH	D, E	50 %, 122 °F	HQQE	HQQE		
Formic acid HCOOH		5 %, 68 °F			HQQE	HQQE/HBQE
Glycerine (glycerol) OHCH ₂ CH(OH)CH ₂ OH	D, E	50 %, 122 °F	HQQE	HQQE/HBQE		
Hydraulic oil (mineral)	E, 2, 3	100 %, 212 °F	HQQV	HQQV/HBQE		
Hydraulic oil (synthetic)	E, 2, 3	100 %, 212 °F	HQQV	HQQV/HBQE		
Isopropyl alcohol CH ₃ CHOHCH ₃	1, F	100 %, 68 °F	HQBv	HQQV/HBQV		
Lactic acid CH ₃ CH(OH)COOH	E, H	10 %, 68 °F			HQQE	HQQE/HBQE
Linoleic acid C ₁₇ H ₃₁ COOH	E, 3	100 %, 68 °F	HQQV	HQQV/HBQV		
Methanol (methyl alcohol) CH ₃ OH	1, F	100 %, 68 °F	HQQE	HQQE/HBQE		
Motor oil	E, 2, 3	100 %, 176 °F	HQQV	HQQV/HBQV		
Naphthalene C ₁₀ H ₈	E, H	100 %, 176 °F	HQQV	HQQV/HBQV		
Nitric acid HNO ₃	F	1 %, 68 °F			HQQE	HQQE/HBQE
Oil-containing water		< 212 °F	HQQV	HQQV/HBQV		
Olive oil	D, E, 3	100 %, 176 °F	HQQV	HQQV/HBQV		
Oxalic acid (COOH) ₂	H	1 %, 68 °F			HQQE	HQQE/HBQE
Ozone-containing water (O ₃)		1 PPM, < 105 °F			HQQE	HQQE/HBQE
Peanut oil	D, E, 3	100 %, 194 °F	HQQV	HQQV/HBQV		
Petrol/gasoline	1, 3, 4, F	100 %, 68 °F	HQBv	HQQV/HBQV		
Phosphoric acid H ₃ PO ₄	E	20 %, 68 °F			HQQV	HQQV/HBQV
Propanol C ₃ H ₇ OH	1, F	100 %, 68 °F	HQQV	HQQV/HBQV		
Propylene glycol CH ₃ CH(OH)CH ₂ OH	D, E	50 %, 194 °F	HQQE	HQQE		
Potassium carbonate K ₂ CO ₃	E	20 %, 122 °F	HQQE	HQQE		
Potassium formate (as coolant with inhibitor) KOOCH	D, E	30 %, 122 °F	HQQE	HQQE		
Potassium hydroxide KOH	E	20 %, 122 °F			HQQE	HQQE
Potassium permanganate KmnO ₄		5 %, 68 °F			HQQE	HQQE/HBQE
Rape seed oil	D, E, 3	100 %, 176 °F	HQQV	HQQV/HBQV		
Salicylic acid C ₆ H ₄ (OH)COOH	H	0,1 %, 68 °F			HQQE	HQQE/HBQE
Silicone oil	E, 3	100 %	HQQV	HQQV/HBQV		

Pumped liquid	Note	Liquid concentration, liquid temperature	CR		CRN	
			1s, 1, 3, 5, 10, 15, 20	32, 45, 64	1s, 1, 3, 5, 10, 15, 20	32, 45, 64
Sodium bicarbonate NaHCO ₃	E	10 %, 140 °F			HQQE	HQQE/HBQE
Sodium chloride (as coolant) NaCl	D, E	30 %, < 41 °F, pH > 8	HQQE	HQQE		
Sodium hydroxide NaOH	E	20 %, 122 °F			HQQE	HQQE
Sodium hypochlorite NaOCl	F	0,1 %, 68 °F			HQQE	HQQE
Sodium nitrate NaNO ₃	E	10 %, 140 °F			HQQE	HQQE/HBQE
Sodium phosphate Na ₃ PO ₄	E, H	10 %, 140 °F			HQQE	HQQE
Sodium sulfate Na ₂ SO ₄	E, H	10 %, 140 °F			HQQE	HQQE/HBQE
Softened water		< 248 °F			HQQE	HQQE/HBQE
Soybean oil	D, E, 3	100 %, 176 °F	HQQV	HQQV/HBQV		
Sulfuric acid H ₂ SO ₄	F	1 %, 68 °F			HQQV	HQQV/HQQV
Sulfurous acid H ₂ SO ₃		1 %, 68 °F			HQQE	HQQE/HBQE
Swimming pool water (low chloride)		Max. 5 ppm free chlorine (Cl ₂)	HQQE	HQQE/HBQE		

How to read the curve charts

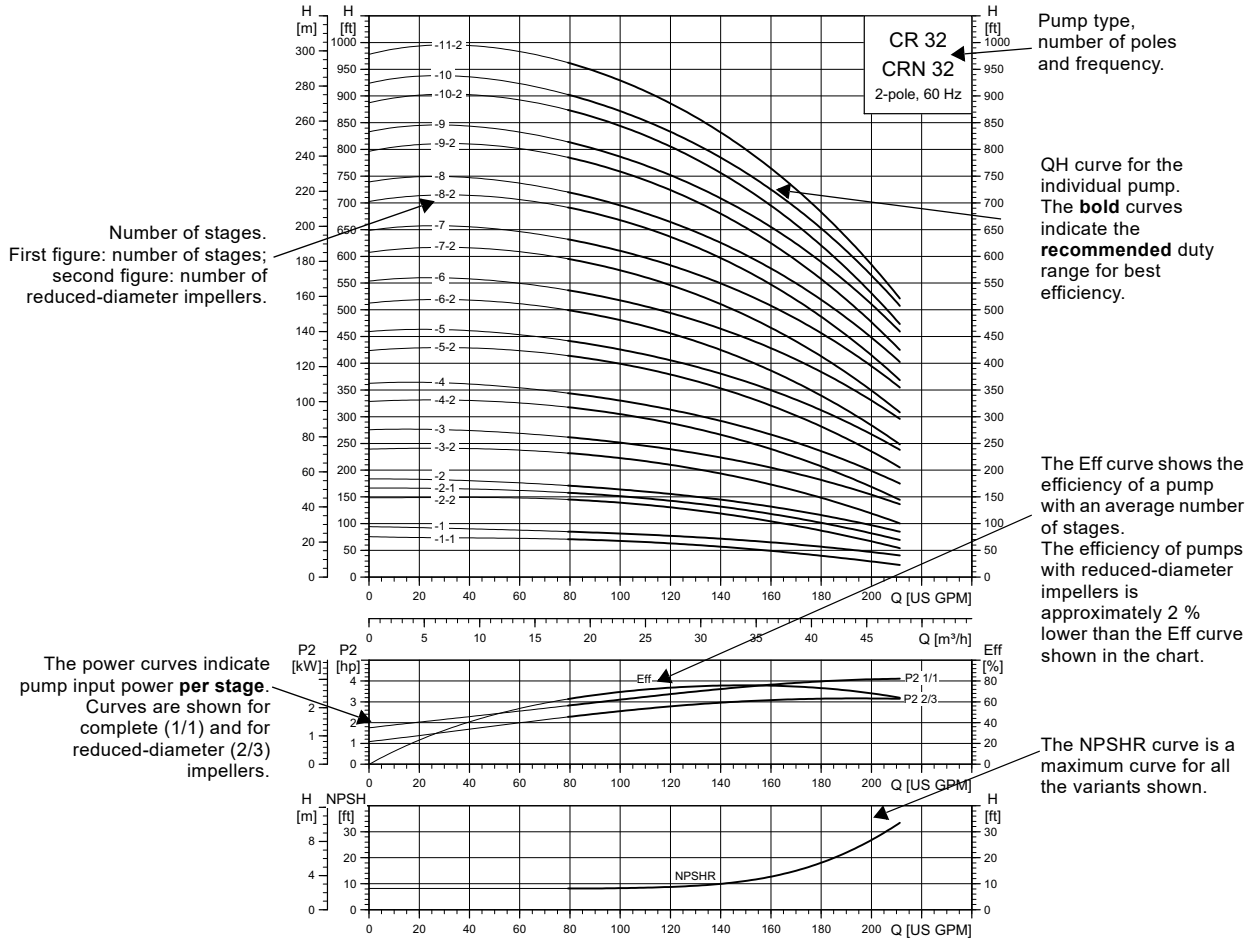


Fig. 16 How to read the curve charts

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Guidelines to performance curves

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

- Tolerances to ANSI or ISO standards, if indicated on the curve chart.
- The motors used for the measurements are standard motors (ODP, TEFC).
- 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 actual speed with the motor types mentioned at 60 Hz.

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

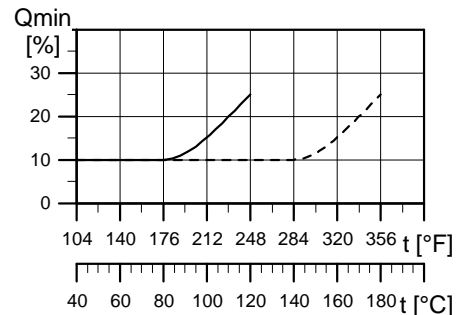
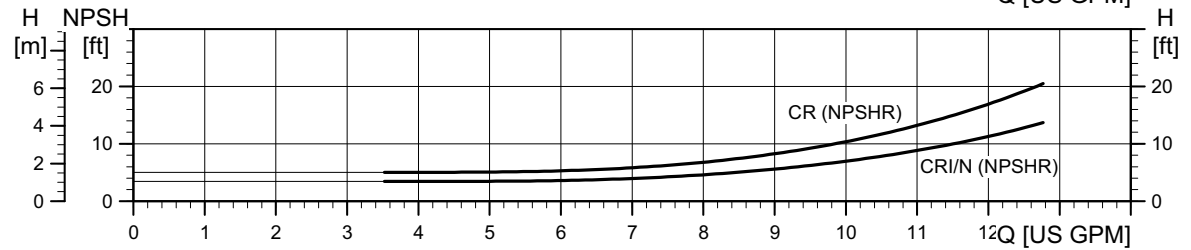
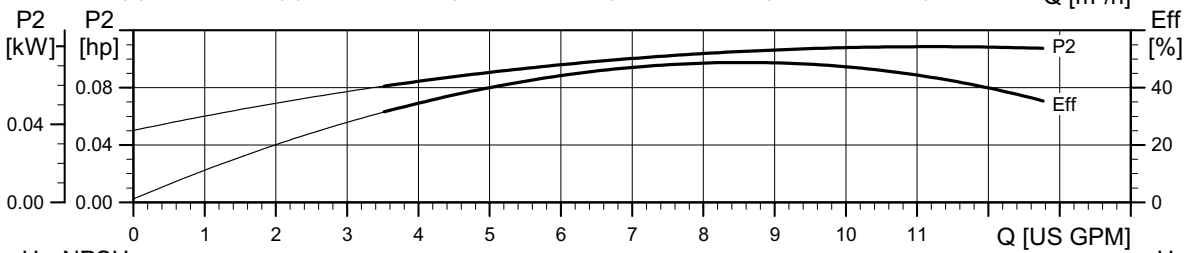
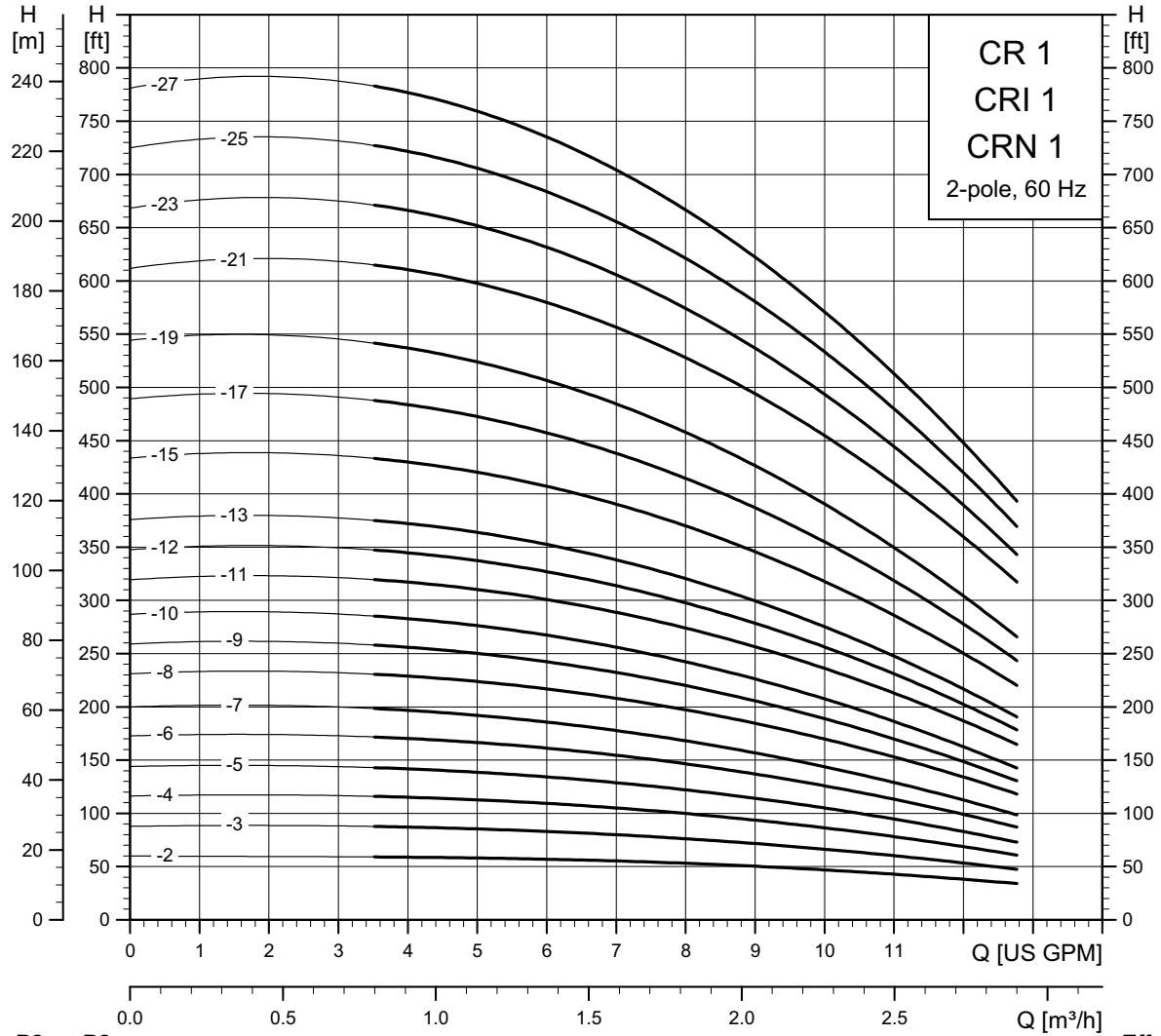


Fig. 17 Minimum flow rate

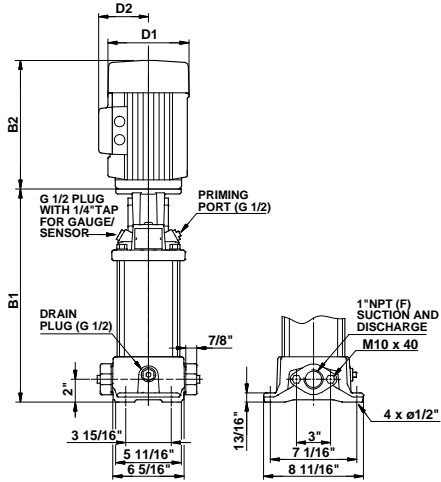
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CR, CRI, CRN 1

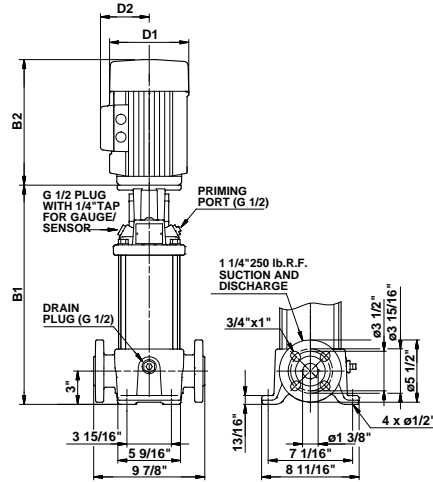


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CR 1



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TM03 1451 2205

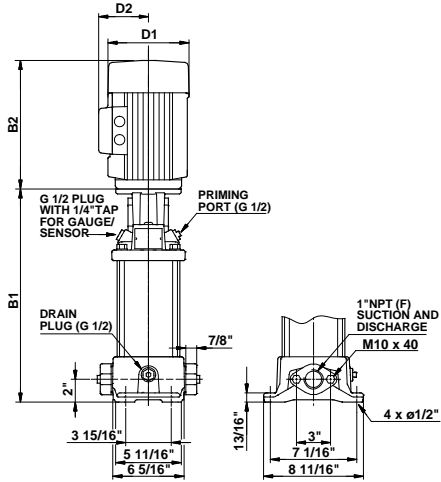
Pump type	P2 [HP]	Ph.	Oval*	ANSI dimensions [inch (mm)]				Net wt. [lb (kg)]
				B1	TEFC			
					D1	D2	B1+B2	
CR 1-2	1/3	1	•	11.97 (304)	6.64 (169)	5.52 (140)	21.01 (534)	58.20 (26)
		3	•	11.97 (304)	6.69 (170)	5.52 (140)	20.23 (514)	54.45 (25)
CR 1-3	1/3	1	•	11.97 (304)	6.64 (169)	5.52 (140)	21.01 (534)	58.64 (27)
		3	•	11.97 (304)	6.69 (170)	5.52 (140)	20.23 (514)	54.90 (25)
CR 1-4	1/2	1	•	12.68 (322)	6.64 (169)	5.52 (140)	22.11 (562)	61.29 (28)
		3	•	12.68 (322)	6.69 (170)	5.52 (140)	21.33 (542)	58.20 (26)
CR 1-5	1/2	1	•	13.39 (340)	6.64 (169)	5.52 (140)	22.82 (580)	62.39 (28)
		3	•	13.39 (340)	6.69 (170)	5.52 (140)	22.04 (560)	59.30 (27)
CR 1-6	3/4	1	•	14.09 (358)	7.64 (194)	5.88 (149)	25.38 (645)	69.23 (31)
		3	•	14.09 (358)	6.69 (170)	5.52 (140)	22.75 (578)	61.07 (28)
CR 1-7	3/4	1	•	14.80 (376)	7.64 (194)	5.88 (149)	26.09 (663)	70.11 (32)
		3	•	14.80 (376)	6.69 (170)	5.52 (140)	23.45 (596)	61.95 (28)
CR 1-8	1	1	•	15.51 (394)	7.64 (194)	5.88 (149)	27.19 (691)	73.19 (33)
		3	•	15.51 (394)	6.69 (170)	5.52 (140)	24.56 (624)	66.14 (30)
CR 1-9	1	1	•	16.22 (412)	7.64 (194)	5.88 (149)	27.90 (709)	74.30 (34)
		3	•	16.22 (412)	6.69 (170)	5.52 (140)	25.26 (642)	67.24 (31)
CR 1-10	1 1/2	1	•	16.93 (430)	7.64 (194)	5.88 (149)	29.38 (747)	78.48 (36)
		3	•	16.93 (430)	7.64 (194)	5.88 (149)	28.61 (727)	80.69 (37)
CR 1-11	1 1/2	1	•	17.64 (448)	7.64 (194)	5.88 (149)	30.10 (765)	79.15 (36)
		3	•	17.64 (448)	7.64 (194)	5.88 (149)	29.31 (745)	81.35 (37)
CR 1-12	1 1/2	1	•	18.35 (466)	7.64 (194)	5.88 (149)	30.81 (783)	80.25 (36)
		3	•	18.35 (466)	7.64 (194)	5.88 (149)	30.02 (763)	82.45 (37)
CR 1-13	1 1/2	1	•	19.06 (484)	7.64 (194)	5.88 (149)	31.52 (801)	81.13 (37)
		3	•	19.06 (484)	7.64 (194)	5.88 (149)	30.73 (781)	83.33 (38)
CR 1-15	2	1	•	20.47 (520)	7.64 (194)	5.88 (149)	33.33 (847)	85.98 (39)
		3	•	20.47 (520)	7.64 (194)	5.88 (149)	32.94 (837)	91.49 (42)
CR 1-17	2	1	•	21.89 (556)	7.64 (194)	5.88 (149)	34.75 (883)	87.96 (40)
		3	•	21.89 (556)	7.64 (194)	5.88 (149)	34.35 (873)	93.48 (42)
CR 1-19	3	1	-	24.41 (620)	9.45 (240)	8.06 (205)	40.88 (1038)	125.8 (57)
		3	-	24.41 (620)	9.45 (240)	6.69 (170)	38.13 (968)	126.7 (58)
CR 1-21	3	1	-	25.83 (656)	9.45 (240)	8.06 (205)	42.30 (1074)	127.6 (58)
		3	-	25.83 (656)	9.45 (240)	6.69 (170)	39.54 (1004)	128.5 (58)
CR 1-23	3	1	-	27.24 (692)	9.45 (240)	8.06 (205)	43.72 (1110)	129.4 (59)
		3	-	27.24 (692)	9.45 (240)	6.69 (170)	40.96 (1040)	130.2 (59)
CR 1-25	3	1	-	28.66 (728)	9.45 (240)	8.06 (205)	45.14 (1146)	131.1 (60)
		3	-	28.66 (728)	9.45 (240)	6.69 (170)	42.38 (1076)	132.0 (60)
CR 1-27	3	1	-	30.08 (764)	9.45 (240)	8.06 (205)	46.55 (1182)	133.1 (60)
		3	-	30.08 (764)	9.45 (240)	6.69 (170)	43.80 (1112)	134.0 (61)

All dimensions in inches unless otherwise noted.

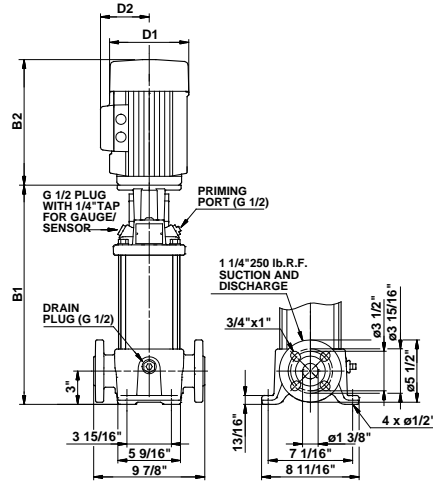
* Oval flanged pump B1 and B1+B2 dimensions are one inch less than ANSI flanged pump and the weight is approximately 9 lb less.

- Available.

CRI 1



TM03 1450 2205



TM03 1451 2205

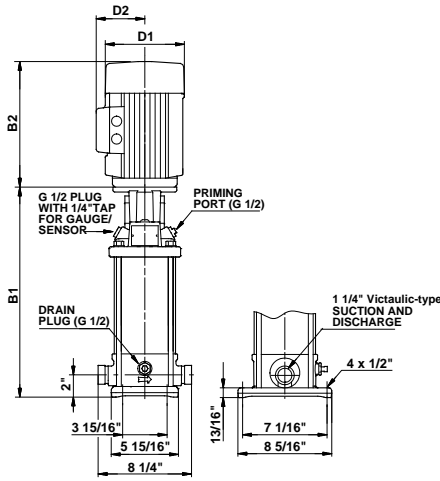
Pump type	P2 [HP]	Ph.	Oval*	ANSI dimensions [inch (mm)]				Net wt. [lb (kg)]
				B1	TEFC			
					D1	D2	B1+B2	
CRI 1-2	1/3	1	•	12.09 (307)	6.64 (169)	5.52 (140)	21.13 (537)	52.91 (24)
CRI 1-2	1/3	3	•	12.09 (307)	6.69 (170)	5.52 (140)	20.34 (517)	49.16 (22)
CRI 1-3	1/3	1	•	12.09 (307)	6.64 (169)	5.52 (140)	21.13 (537)	53.35 (24)
CRI 1-3	1/3	3	•	12.09 (307)	6.69 (170)	5.52 (140)	20.34 (517)	49.60 (23)
CRI 1-4	1/2	1	•	12.80 (325)	6.64 (169)	5.52 (140)	22.23 (565)	56.00 (25)
CRI 1-4	1/2	3	•	12.80 (325)	6.69 (170)	5.52 (140)	21.45 (545)	52.91 (24)
CRI 1-5	1/2	1	•	13.50 (343)	6.64 (169)	5.52 (140)	22.94 (583)	57.10 (26)
CRI 1-5	1/2	3	•	13.50 (343)	6.69 (170)	5.52 (140)	22.16 (563)	54.01 (25)
CRI 1-6	3/4	1	•	14.21 (361)	7.64 (194)	5.88 (149)	25.50 (648)	63.93 (29)
CRI 1-6	3/4	3	•	14.21 (361)	6.69 (170)	5.52 (140)	22.86 (581)	55.78 (25)
CRI 1-7	3/4	1	•	14.92 (379)	7.64 (194)	5.88 (149)	26.20 (666)	64.82 (29)
CRI 1-7	3/4	3	•	14.92 (379)	6.69 (170)	5.52 (140)	23.57 (599)	56.66 (26)
CRI 1-8	1	1	•	15.63 (397)	7.64 (194)	5.88 (149)	27.31 (694)	67.90 (31)
CRI 1-8	1	3	•	15.63 (397)	6.69 (170)	5.52 (140)	24.67 (627)	60.85 (28)
CRI 1-9	1	1	•	16.34 (415)	7.64 (194)	5.88 (149)	28.01 (712)	69.00 (31)
CRI 1-9	1	3	•	16.34 (415)	6.69 (170)	5.52 (140)	25.38 (645)	61.95 (28)
CRI 1-10	1 1/2	1	•	17.05 (433)	7.64 (194)	5.88 (149)	29.51 (750)	73.19 (33)
CRI 1-10	1 1/2	3	•	17.05 (433)	7.64 (194)	5.88 (149)	28.72 (730)	75.40 (34)
CRI 1-11	1 1/2	1	•	17.76 (451)	7.64 (194)	5.88 (149)	30.22 (768)	73.85 (34)
CRI 1-11	1 1/2	3	•	17.76 (451)	7.64 (194)	5.88 (149)	29.43 (748)	76.06 (35)
CRI 1-12	1 1/2	1	•	18.46 (469)	7.64 (194)	5.88 (149)	30.93 (786)	74.96 (34)
CRI 1-12	1 1/2	3	•	18.46 (469)	7.64 (194)	5.88 (149)	30.14 (766)	77.16 (35)
CRI 1-13	1 1/2	1	•	19.17 (487)	7.64 (194)	5.88 (149)	31.64 (804)	75.62 (34)
CRI 1-13	1 1/2	3	•	19.17 (487)	7.64 (194)	5.88 (149)	30.85 (784)	77.82 (35)
CRI 1-15	2	1	•	20.59 (523)	7.64 (194)	5.88 (149)	33.45 (850)	80.91 (37)
CRI 1-15	2	3	•	20.59 (523)	7.64 (194)	5.88 (149)	33.05 (840)	86.42 (39)
CRI 1-17	2	1	•	22.01 (559)	7.64 (194)	5.88 (149)	34.86 (886)	82.67 (38)
CRI 1-17	2	3	•	22.01 (559)	7.64 (194)	5.88 (149)	34.47 (876)	88.18 (40)
CRI 1-19	3	1	-	24.53 (623)	9.45 (240)	8.06 (205)	41.00 (1041)	118.8 (54)
CRI 1-19	3	3	-	24.53 (623)	9.45 (240)	6.69 (170)	38.25 (971)	119.7 (54)
CRI 1-21	3	1	-	25.94 (659)	9.45 (240)	8.06 (205)	42.42 (1077)	120.5 (55)
CRI 1-21	3	3	-	25.94 (659)	9.45 (240)	6.69 (170)	39.66 (1007)	121.4 (55)
CRI 1-23	3	1	-	27.36 (695)	9.45 (240)	8.06 (205)	43.84 (1113)	122.3 (56)
CRI 1-23	3	3	-	27.36 (695)	9.45 (240)	6.69 (170)	41.08 (1043)	123.2 (56)
CRI 1-25	3	1	-	28.78 (731)	9.45 (240)	8.06 (205)	45.25 (1149)	124.1 (56)
CRI 1-25	3	3	-	28.78 (731)	9.45 (240)	6.69 (170)	42.50 (1079)	125.0 (57)
CRI 1-27	3	1	-	30.20 (767)	9.45 (240)	8.06 (205)	46.67 (1185)	126.1 (57)
CRI 1-27	3	3	-	30.20 (767)	9.45 (240)	6.69 (170)	43.91 (1115)	126.9 (58)

All dimensions in inches unless otherwise noted.

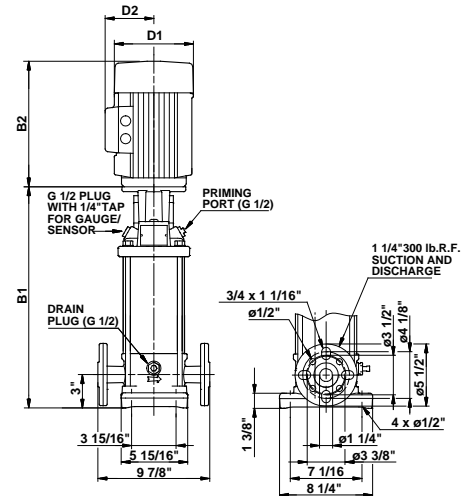
* Oval flanged pump B1 and B1+B2 dimensions are one inch less than ANSI flanged pump and the weight is approximately 9 lb less.

- Available.

CRN 1



TM03 1454 2205



TM03 1453 2205

Pump type	P2 [HP]	Ph.	PJE*	ANSI dimensions [inch (mm)]				Net wt. [lb (kg)]
				B1	TEFC			
					D1	D2	B1+B2	
CRN 1-2	1/3	1	●	12.09 (307)	6.64 (169)	5.52 (140)	21.13 (537)	52.91 (24)
		3	●	12.09 (307)	6.69 (170)	5.52 (140)	20.34 (517)	49.16 (22)
CRN 1-3	1/3	1	●	12.09 (307)	6.64 (169)	5.52 (140)	21.13 (537)	53.35 (24)
		3	●	12.09 (307)	6.69 (170)	5.52 (140)	20.34 (517)	49.60 (23)
CRN 1-4	1/2	1	●	12.80 (325)	6.64 (169)	5.52 (140)	22.23 (565)	56.00 (25)
		3	●	12.80 (325)	6.69 (170)	5.52 (140)	21.45 (545)	52.91 (24)
CRN 1-5	1/2	1	●	13.50 (343)	6.64 (169)	5.52 (140)	22.94 (583)	56.88 (26)
		3	●	13.50 (343)	6.69 (170)	5.52 (140)	22.16 (563)	53.79 (24)
CRN 1-6	3/4	1	●	14.21 (361)	7.64 (194)	5.88 (149)	25.50 (648)	63.71 (29)
		3	●	14.21 (361)	6.69 (170)	5.52 (140)	22.86 (581)	55.56 (25)
CRN 1-7	3/4	1	●	14.92 (379)	7.64 (194)	5.88 (149)	26.20 (666)	64.82 (29)
		3	●	14.92 (379)	6.69 (170)	5.52 (140)	23.57 (599)	56.66 (26)
CRN 1-8	1	1	●	15.63 (397)	7.64 (194)	5.88 (149)	27.31 (694)	67.90 (31)
		3	●	15.63 (397)	6.69 (170)	5.52 (140)	24.67 (627)	60.85 (28)
CRN 1-9	1	1	●	16.34 (415)	7.64 (194)	5.88 (149)	28.01 (712)	68.78 (31)
		3	●	16.34 (415)	6.69 (170)	5.52 (140)	25.38 (645)	61.73 (28)
CRN 1-10	1 1/2	1	●	17.05 (433)	7.64 (194)	5.88 (149)	29.51 (750)	72.97 (33)
		3	●	17.05 (433)	7.64 (194)	5.88 (149)	28.72 (730)	75.18 (34)
CRN 1-11	1 1/2	1	●	17.76 (451)	7.64 (194)	5.88 (149)	30.22 (768)	73.63 (33)
		3	●	17.76 (451)	7.64 (194)	5.88 (149)	29.43 (748)	75.84 (34)
CRN 1-12	1 1/2	1	●	18.46 (469)	7.64 (194)	5.88 (149)	30.93 (786)	74.74 (34)
		3	●	18.46 (469)	7.64 (194)	5.88 (149)	30.14 (766)	76.94 (35)
CRN 1-13	1 1/2	1	●	19.17 (487)	7.64 (194)	5.88 (149)	31.64 (804)	75.62 (34)
		3	●	19.17 (487)	7.64 (194)	5.88 (149)	30.85 (784)	77.82 (35)
CRN 1-15	2	1	●	20.59 (523)	7.64 (194)	5.88 (149)	33.45 (850)	80.47 (37)
		3	●	20.59 (523)	7.64 (194)	5.88 (149)	33.05 (840)	85.98 (39)
CRN 1-17	2	1	●	22.01 (559)	7.64 (194)	5.88 (149)	34.86 (886)	82.45 (37)
		3	●	22.01 (559)	7.64 (194)	5.88 (149)	34.47 (876)	87.96 (40)
CRN 1-19	3	1	●	24.53 (623)	9.45 (240)	8.06 (205)	41.00 (1041)	118.3 (54)
		3	●	24.53 (623)	9.45 (240)	6.69 (170)	38.25 (971)	119.2 (54)
CRN 1-21	3	1	●	25.94 (659)	9.45 (240)	8.06 (205)	42.42 (1077)	120.1 (55)
		3	●	25.94 (659)	9.45 (240)	6.69 (170)	39.66 (1007)	121.0 (55)
CRN 1-23	3	1	●	27.36 (695)	9.45 (240)	8.06 (205)	43.84 (1113)	121.9 (55)
		3	●	27.36 (695)	9.45 (240)	6.69 (170)	41.08 (1043)	122.8 (56)
CRN 1-25	3	1	●	28.78 (731)	9.45 (240)	8.06 (205)	45.25 (1149)	123.6 (56)
		3	●	28.78 (731)	9.45 (240)	6.69 (170)	42.50 (1079)	124.5 (57)
CRN 1-27	3	1	●	30.20 (767)	9.45 (240)	8.06 (205)	46.67 (1185)	125.6 (57)
		3	●	30.20 (767)	9.45 (240)	6.69 (170)	43.91 (1115)	126.5 (57)

All dimensions in inches unless otherwise noted.

* PJE flanged pump B1 and B1+B2 dimensions are one inch less than ANSI flanged pump and the weight is approximately 9 lb less.

● Available.

11. Motor data

Standard motors in the CR range

Motors used in the CR pump range are:

- Grundfos-specified WEG motors
- Grundfos ML motors.

The information in the tables below applies to the following motor types and sizes:

Type	Phase	Motor range [HP]	Cooling method
WEG	1	1/3 - 10	TEFC
	3	1/3 - 300	TEFC
	3	15 - 300	ODP
ML	3	1/3 - 30	TEFC

WEG motors 0.25 to 20 HP

- rolled steel construction
- service factor 1.15
- suitable for VFD operation per NEMA MG 1 part 31.4.4.2
- certified Class I Division 2, Groups A, B, C, D
- certified Class II, Division 2, Groups F, G (three phase only).

WEG motors 25 to 300 HP

- cast iron frame
- rated for severe duty
- service factor 1.25 (25 to 100 HP)
- service factor 1.15 (125 to 300 HP)
- Inverter rated per NEMA MG 1 part 31
- certified Class I Division 2, Groups A, B, C, D
- certified Class II, Division 2, Groups F, G (three phase only).

Grundfos CR pumps are supplied with heavy-duty 2-pole, NEMA energy-efficient C-frame motors built or selected according to rigid Grundfos specifications. All CR pump motors have heavy-duty bearings for maximum thrust requirements.

It is not recommended that an off-the-shelf standard WEG motor be used on a Grundfos pump. Ideally, the best motor choice would be the Grundfos-specified motor.

Three-phase Grundfos-specified motors are NEMA Premium Efficiency (EISA compliant).

Single-phase Grundfos-specified motors up to 7.5 HP have a built-in thermal overload switch.

Other motor types are available, such as Explosion-proof, inverter-duty, IEEE 841 etc.

Contact your local Grundfos company for more information.

Motor dimensions and data on pumps supplied by Grundfos Canada may vary. Contact your local Grundfos company for more information.

All values are subject to change without notice.

ODP motors**Open Drip Proof, constant speed****WEG motors**

HP (kW)	Ph	Frame	Service factor	Voltage [V]	Motoreff. η [%]	Full-load current $I_{1/1}$ [A]	Service-factor current [A]	Starting current I_{start} [A]	Power factor $\cos \phi_{1/1}$	Speed [rpm]
15 (11)	3	254TC	1.15	208-230/460	90.2	38.0-34.4 / 17.2	38.0-39.6 / 19.8	258-234 / 117	0.89	3545
	3	254TC	1.15	575	90.2	14.1	16.2	106	0.87	3545
20 (15)	3	256TC	1.15	208-230/460	91.0	52.6-47.6 / 23.8	52.6-54.7 / 27.4	316-286 / 143	0.87	3525
	3	256TC	1.15	575	91.0	19	21.9	114	0.87	3525
25 (18.5)	3	284TSC	1.25	208-230/460	91.7	63.7-57.6 / 28.8	63.7-72 / 36	414-374 / 187	0.88	3535
	3	284TSC	1.25	575	91.7	23.3	29.1	154	0.87	3544
30 (22)	3	284TSC	1.25	208-230/460	91.7	77.4-70.0 / 35	77.4-87.5 / 43.8	488-441 / 221	0.86	3545
	3	284TSC	1.25	575	91.7	28	35.0	176	0.86	3550
40 (30)	3	324TSC	1.25	208-230/460	92.4	104-93.6 / 46.8	104-117 / 58.5	655-590 / 295	0.86	3545
	3	324TSC	1.25	575	92.4	37.5	46.9	229	0.87	3557
50 (37)	3	324TSC	1.25	208-230/460	93.0	130-117 / 58.7	130-146 / 73.4	819-737 / 370	0.85	3560
	3	324TSC	1.25	575	93.0	47.5	59.4	299	0.85	3560
60 (45)	3	326TSC	1.25	208-230/460	93.6	157-142 / 71	157-178 / 88.8	989-895 / 447	0.85	3560
	3	326TSC	1.25	575	93.6	56.8	71.0	358	0.85	3560
75 (55)	3	365TSC	1.25	208-230/460	93.6	188-170 / 84.8	188-213 / 106	1241-1122 / 560	0.87	3555
	3	365TSC	1.25	575	93.6	67.8	84.8	447	0.87	3555

Note: Motors with a nameplate stating 230/460 V are suitable for operation at 208 V.

TEFC motors

Totally Enclosed Fan Cooled, constant speed

WEG motors



TM07 7440 3820

HP (kW)	Ph	Frame	Service factor	Voltage [V]	Motor eff. η [%]	Full-load current $I_{1/1}$ [A]	Service-factor current [A]	Starting current I_{start} [A]	Power factor $\cos \phi_{1/1}$	Speed [rpm]
1/3 (0.25)	1	56C	1.15	115/208-230	54.0	5.2 / 2.87-2.6	5.98 / 2.87-2.99	36.4 / 20.1-18.2	0.76	3490
	3	56C	1.15	208-230/460	72.0	1.31-1.15 / 0.57	1.31-1.32 / 0.66	9.30-8.17 / 4.05	0.70	3450
	3	56C	1.15	575	72.0	0.458	0.53	3.25	0.76	3450
1/2 (0.37)	1	56C	1.15	115/208-230	60.0	7 / 3.87-3.5	8.05 / 3.87-4.03	56 / 31.0-28	0.76	3490
	3	56C	1.15	208-230/460	74.0	1.73-1.57 / 0.78	1.73-1.81 / 0.9	13.3-12.1 / 6.01	0.80	3435
	3	56C	1.15	575	74.0	0.627	0.72	4.83	0.80	3435
3/4 (0.55)	1	56C	1.15	115/208-230	66.0	8 / 4.42-4	9.2 / 4.42-4.6	64 / 35.4-32	0.91	3500
	3	56C	1.15	208-230/460	77.0	2.48-2.24 / 1.12	2.48-2.58 / 1.29	20.1-18.1 / 9.07	0.80	3440
	3	56C	1.15	575	77.0	0.896	1.03	7.26	0.80	3440
1 (0.75)	1	56C	1.15	115/208-230	70.0	10.1 / 5.64-5.06	11.6 / 5.64-5.82	84.8 / 47.4-42.5	0.92	3500
	3	56C	1.15	208-230/460	78.5	3.32-3.0 / 1.5	3.32-3.45 / 1.73	29.2-26.4 / 13.2	0.80	3435
	3	56C	1.15	575	78.5	1.2	1.38	10.6	0.80	3435
1 1/2 (1.1)	1	56C	1.15	115/208-230	75.0	13.2 / 7.3-6.6	15.2 / 7.3-7.59	106 / 58.4-52.8	0.97	3500
	3	56C	1.15	208-230/460	84.0	4.14-3.74 / 1.87	4.14-4.3 / 2.15	37.7-34.0 / 17.0	0.88	3520
	3	56C	1.15	575	84.0	1.5	1.73	13.7	0.88	3520
2 (1.5)	1	56C	1.15	115/208-230	77.0	17.5 / 9.62-8.73	20.1 / 9.62-10	137 / 75.0-68.1	0.97	3495
	3	56C	1.15	208-230/460	85.5	5.46-4.94 / 2.47	5.46-5.68 / 2.84	54.1-48.9 / 24.5	0.89	3520
	3	56C	1.15	575	85.5	1.98	2.28	19.6	0.89	3520
3 (2.2)	1	182TC	1.15	115/208-230	80.0	24.2 / 19.7-12.1	27.8 / 19.7-13.9	169 / 138-84.7	0.99	3510
	3	182TC	1.15	208-230/460	86.5	8.12-7.34 / 3.67	8.12-8.44 / 4.22	71.5-64.6 / 32.3	0.87	3515
	3	182TC	1.15	575	86.5	2.94	3.38	25.9	0.87	3515
5 (4)	1	184TC	1.15	208-230	84.0	31.7-19.5	31.7-22.4	254-156	0.98	3515
	3	184TC	1.15	208-230/460	88.5	13.1-11.8 / 5.9	13.1-13.6 / 6.79	102-92.0 / 46.0	0.89	3500
	3	184TC	1.15	575	88.5	4.72	5.43	36.8	0.89	3500
7 1/2 (5.5)	1	213TC	1.15	208-230	84.0	31.7-38.8	31.7-44.6	225-275	0.99	3515
	3	213TC	1.15	208-230/460	89.5	19.2-17.3 / 8.67	19.2-19.9 / 9.97	33.3-131 / 65.9	0.89	3530
	3	213TC	1.15	575	89.5	6.94	7.98	52.7	0.89	3530
10 (7.5)	1	215TC	1.15	208-230	86.5	42.5-38.1	42.5-43.8	306-274	0.99	3510
	3	215TC	1.15	208-230/460	90.2	25.4-23.0 / 11.5	25.4-26.5 / 13.2	191-173 / 86.3	0.91	3530
	3	215TC	1.15	575	90.2	9.2	10.6	69	0.91	3530
15 (11)	3	254TC	1.15	208-230/460	91.0	37.6-34.0 / 17	37.6-39.1 / 19.6	308-279 / 139	0.89	3520
	3	254TC	1.15	575	91.0	13.9	16.0	114	0.89	3520
20 (15)	3	256TC	1.15	208-230/460	91.0	50.2-45.4 / 22.7	50.2-52.2 / 26.1	331-300 / 150	0.91	3515
	3	256TC	1.15	575	91.0	18.2	20.9	120	0.91	3515
25 (18.5)	3	284TSC	1.25	208-230/460	91.7	63-57.0 / 28.5	63-71.3 / 35.6	397-359 / 180	0.89	3535
	3	284TSC	1.25	575	91.7	23	28.8	145	0.88	3545
30 (22)	3	286TSC	1.25	208-230/460	91.7	73.8-67.6 / 33.8	73.8-84.5 / 42.3	465-426 / 213	0.89	3535
	3	286TSC	1.25	575	91.7	27	33.8	170	0.89	3540
40 (30)	3	324TSC	1.25	208-230/460	92.4	101-91.6 / 45.8	101-115 / 57.3	636-577 / 289	0.89	3555
	3	324TSC	1.25	575	92.4	37	46.3	233	0.88	3560
50 (37)	3	326TSC	1.25	208-230/460	93.0	124-112 / 56.1	124-140 / 70.1	769-694 / 348	0.89	3550
	3	326TSC	1.25	575	93.0	44.9	56.1	278	0.89	3550
60 (45)	3	364TSC	1.25	208-230/460	93.6	148-134 / 67	148-168 / 83.8	977-884 / 442	0.90	3560
	3	364TSC	1.25	575	93.6	53.6	67.0	354	0.90	3560
75 (55)	3	365TSC	1.25	208-230/460	93.6	181-164 / 81.9	181-205 / 102	1213-1099 / 549	0.90	3555
	3	365TSC	1.25	575	93.6	65.6	82.0	440	0.90	3555

Note: Motors with a nameplate stating 230/460 V are suitable for operation at 208 V.

TEFC

Totally Enclosed Fan Cooled, constant speed

Grundfos ML motors



Gr7848sh



GR 7845



TM04 2512 2708

HP (kW)	Ph	Frame	Service factor	Voltage [V]	Motor eff. η [%]	Full-load current $I_{1/1}$ [A]	Service-factor current [A]	Starting current I_{start} [A]
1/3 (0.25)	3	56C	1.15	208-230/460	78.5	1.12 - 1.1 / 0.55	1.5 - 1.45 / 0.75	7.1 - 7.7 / 3.9
1/2 (0.37)	3	56C	1.15	208-230/460	78.5	1.64 - 1.55 / 0.78	2.0 - 1.9 / 0.95	9.7 - 10.1 / 5.1
3/4 (0.55)	3	56C	1.15	208-230/460	79.0	2.4 - 2.3 / 1.2	2.9 - 2.75 / 1.4	14.2 - 15 / 7.8
1 (0.75)	3	56C	1.15	208-230/460	80.0	3.25 - 3.35 / 1.68	4.0 - 3.9 / 1.95	19.2 - 21.8 / 10.9
1 1/2 (1.1)	3	56C	1.15	208-230/460	84.0	4.7 - 4.6 / 2.3	5.2 - 5.1 / 2.55	33.8 - 36.8 / 18.4
2 (1.5)	3	56C	1.15	208-230/460	85.5	6.0 - 5.8 / 2.9	6.8 - 6.6 / 3.3	48.0 - 52.8 / 26.4
3 (2.2)	3	182TC	1.15	208-230/460	86.5	8.5 - 8.2 / 4.1	9.6 - 9.2 / 4.6	79.9 - 79.5 / 39.8
5 (4)	3	182TC	1.15	208-230/460	88.5	14.1 - 13.1 / 7.29	16.2 - 15.0 / 8.4	207-193 / 107
7 1/2 (5.5)	3	213TC	1.15	208-230/460	89.5	19.5 - 18.1 / 9.09	22.4 - 20.8 / 10.4	289-267 / 135
10 (7.5)	3	215TC	1.15	208-230/460	90.2	26.5 - 24.6 / 12.4	29.0 - 27.0 / 13.6	261-243 / 123
15 (11)	3	254TC	1.15	208-230/460	91.0	37.5 - 34 / 17	41.0 - 37.5 / 18.6	369-338 / 168
20 (15)	3	256TC	1.15	208-230/460	91.0	50.5 - 46 / 23	55.5 - 50.5 / 25.5	450-410 / 207
25 (18.5)	3	284TSC	1.25	208-230/460	91.7	62.0 - 56 / 28	68.0 - 61.5 / 31.0	510-462 / 233
30 (22)	3	286TSC	1.25	208-230/460	91.7	74.0 - 67.0 / 33.5	81.5 - 73.5 / 37.0	595-537 / 271

Note: Motors with a nameplate stating 230/460 V are suitable for operation at 208 V.