

GRUNDFOS **HYDRO MULTI-E**

# HYDRO MULTI-E

PRESSURE BOOSTER SYSTEMS



BE > THINK > INNOVATE >

GRUNDFOS® 



# INNOVATIVE SOLUTIONS FOR PRESSURE BOOSTING APPLICATIONS







### GRUNDFOS HYDRO MULTI-E

The Hydro Multi-E pressure booster system from Grundfos is an innovative boosting solution for residential/commercial building, municipal, and irrigation applications.

### ENERGY SAVINGS AND COMFORT

The Hydro Multi-E system uses parallel mounted Grundfos CRE variable-speed pumps that have a reputation for providing the ultimate in efficiency and reliability.

### BENEFITS OF THE HYDRO MULTI-E

- › Thoroughly tested systems that arrive ready to install
- › Simple installation and operation
- › Integrated variable frequency drive motors that allow unique control functionality for increased comfort for the user and decreased operating costs
- › Effective communication between pumps and control via GENIbus/RS485 interface
- › High quality material construction that ensures durability and long life
- › An affordable option for your pressure boosting applications



## 4 • PERFORMANCE RANGE

### POWER RANGE

**Single Phase** 208-230V/60 Hz/0.5 - 1.5 hp

**Three Phase** 208-230V/60 Hz/0.5 - 7.5 hp  
460-480V/60 Hz/1.0 - 10 hp

### CONTROL FEATURES

- › Variable-speed pumps (CRE)
- › Constant pressure
- › Automatic pump changeover
- › Low-flow shutdown
- › Redundancy

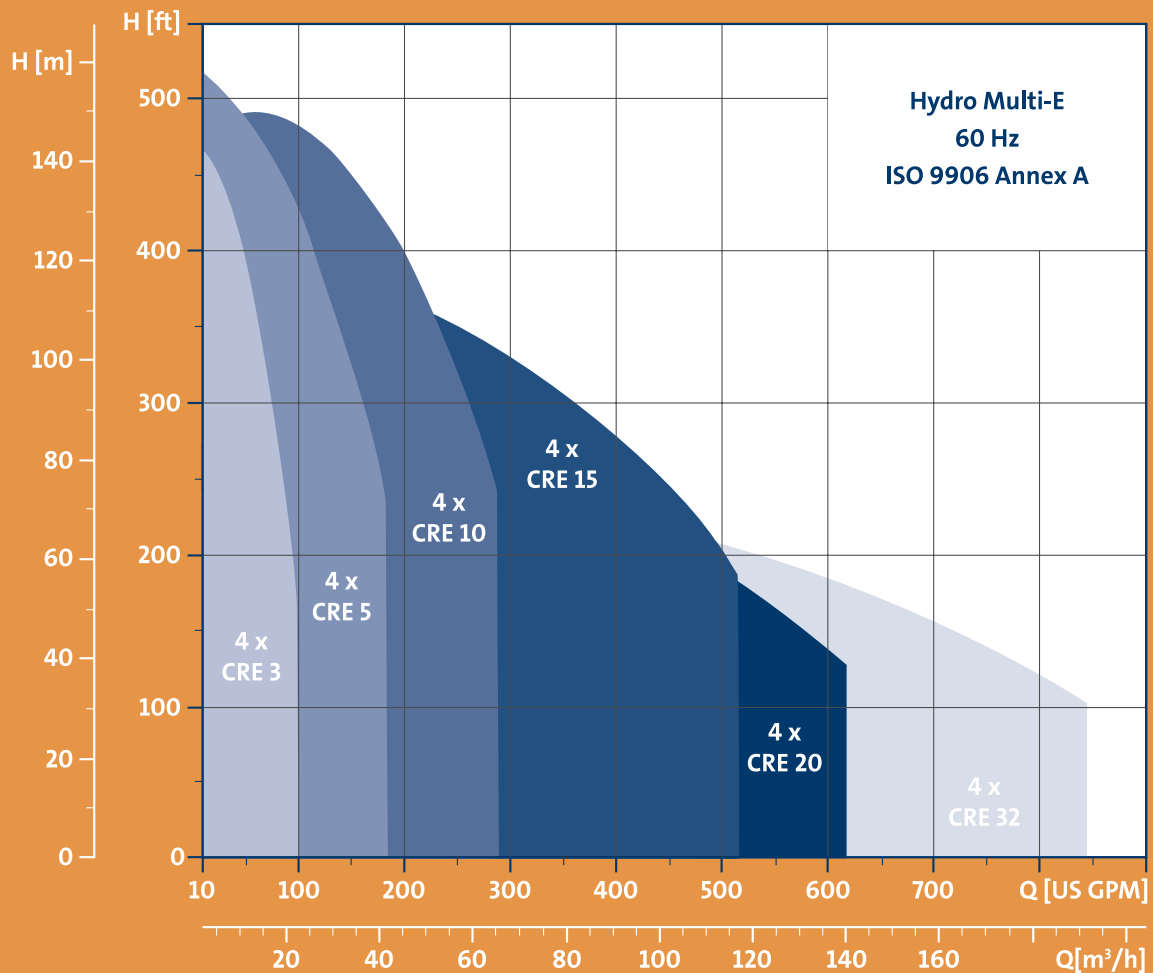
### MATERIALS

- › Stainless steel manifolds (316)
- › Stainless steel baseframe (304)
- › Stainless steel/iron pumps (ANSI/NSF 61 approved)

### ACCESSORIES

- › Diaphragm tank (required for low-flow shutdown)
- › R100 Infrared remote control (for advanced settings and status information)
- › G10 - LON Interface
- › G100 - Modbus or Profibus Interface

### PERFORMANCE RANGE





## GENERAL INFORMATION

**Liquid Temperature** 32° - 158° F (0° - 70° C)

**Max. Operating Pressure** 232 psi

## OTHER GRUNDFOS PACKAGED SYSTEMS

In addition to the Hydro Multi-E, Grundfos offers other packaged systems, including:

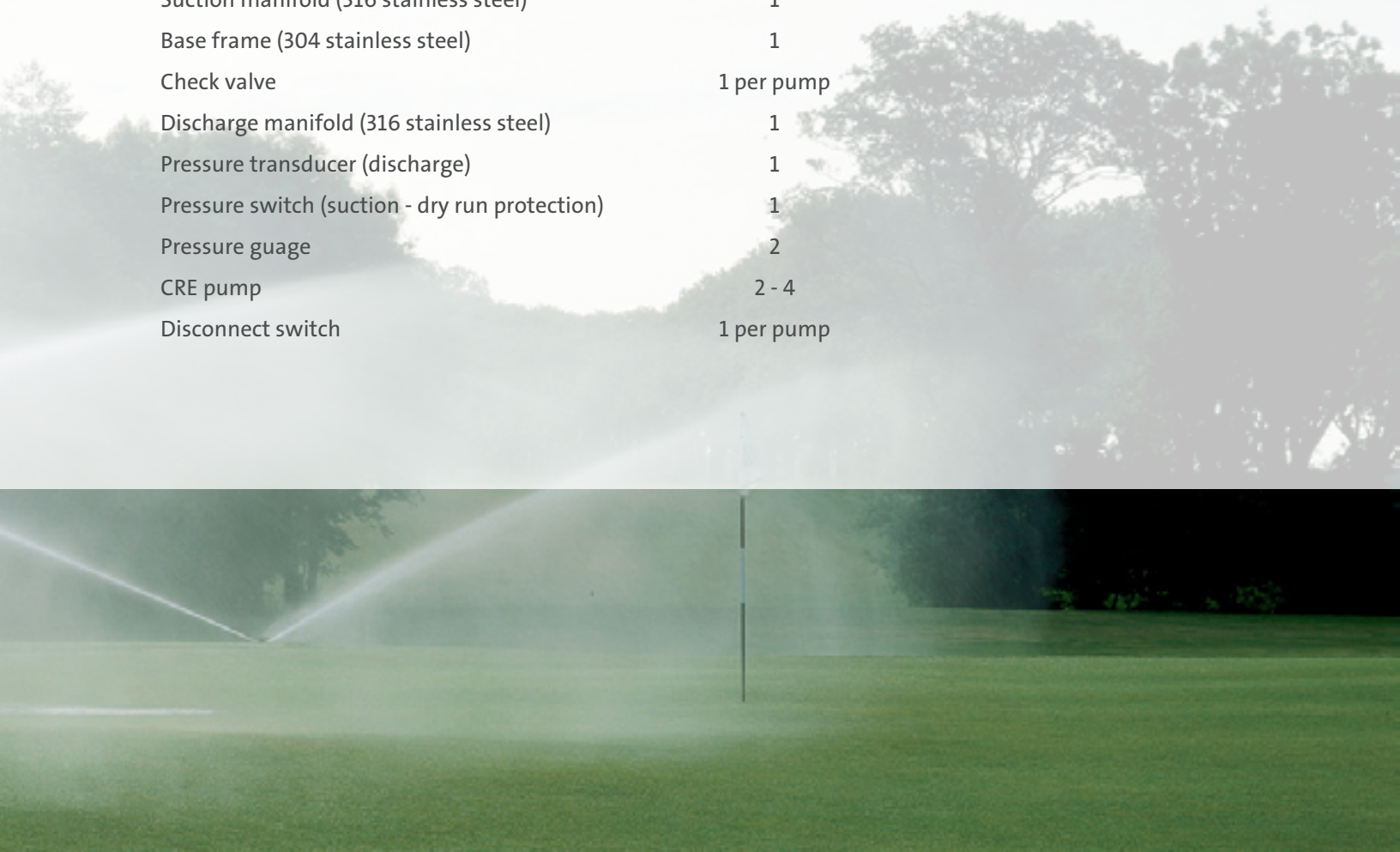
- **BoosterpaQ®** – packaged systems with Hydro MPC advanced pump controller to control from two to six pumps up to 60 hp per pump
- **CRE Plus** – single pump variable-speed systems with CRE pumps up to 10 hp
- **CHIE Plus** – compact, single-pump, variable-speed systems with CHIE pumps up to 1.5 hp

You can find more information about these systems at [www.BoosterpaQ.com](http://www.BoosterpaQ.com) or by contacting your local Grundfos representative.



## HYDRO MULTI-E STANDARD COMPONENTS

Description	Quantity
Isolating valve	2 per pump
Suction manifold (316 stainless steel)	1
Base frame (304 stainless steel)	1
Check valve	1 per pump
Discharge manifold (316 stainless steel)	1
Pressure transducer (discharge)	1
Pressure switch (suction - dry run protection)	1
Pressure guage	2
CRE pump	2 - 4
Disconnect switch	1 per pump



## 6 • CRE 3 SCHEDULES

No. of Pumps	Pump Type	Motor [hp]	Max. System Amperage	Connection Size [in]	A [in]	B [in]	C [in]	H [in]	L [in]	Net wt. [lb]	Part Number
<b>Hydro Multi-E with CRE 3 Pumps (1x208-230V)*</b>											
2	CRE 3-6	1	10.4	2" NPT	23.1	25.5	4.8	27.4	41.3	226	91124452
	CRE 3-9	1.5	15					29.5	41.3	238	91124453
3	CRE 3-6	1	15.6	2" NPT	23.1	25.5	4.8	27.4	53.9	335	91124457
	CRE 3-9	1.5	22.5					29.5	53.9	353	91124458
4	CRE 3-6	1	20.8	2½" NPT	24.1	27.0	4.8	27.4	74.4	435	91124545
	CRE 3-9	1.5	30					29.5	74.4	459	91124646
<b>Hydro Multi-E with CRE 3 Pumps (3x208-230V)*</b>											
2	CRE 3-6	1.5	8.4	2" NPT	23.1	25.5	4.8	27.5	41.3	256	91138800
	CRE 3-9	1.5	8.4					29.5	41.3	278	91138801
	CRE 3-12	2	11.2					31.6	41.3	282	91138802
	CRE 3-15	3	16.2					36.8	41.3	316	91138803
3	CRE 3-6	1.5	12.6	2" NPT	23.1	25.5	4.8	27.4	53.9	380	91138809
	CRE 3-9	1.5	12.6					29.5	53.9	413	91138810
	CRE 3-12	2	16.8					31.6	53.9	419	91138811
	CRE 3-15	3	24.3					36.8	53.9	471	91138812
4	CRE 3-6	1.5	16.8	2½" NPT	24.1	27.0	4.8	27.4	74.4	495	91138818
	CRE 3-9	1.5	16.8					29.5	74.4	540	91138819
	CRE 3-12	2	22.4					31.6	74.4	548	91138820
	CRE 3-15	3	32.4					36.8	74.4	616	91138821
<b>Hydro Multi-E with CRE 3 Pumps (3x460V)*</b>											
2	CRE 3-9	1.5	5	2" NPT	23.1	25.5	4.8	29.5	41.3	262	91124464
	CRE 3-12	2	6.2					31.6	41.3	274	91124465
	CRE 3-15	3	8.6					36.8	41.3	298	91124466
3	CRE 3-9	1.5	7.5	2" NPT	23.1	25.5	4.8	29.5	53.9	389	91124473
	CRE 3-12	2	9.3					31.6	53.9	407	91124474
	CRE 3-15	3	12.9					36.8	53.9	443	91124475
4	CRE 3-9	1.5	10	2½" NPT	24.1	27.0	4.8	29.5	74.4	507	91125906
	CRE 3-12	2	12.4					31.6	74.4	531	91125907
	CRE 3-15	3	17.2					36.8	74.4	579	91125908

See Page 12 for Dimensional Drawings.

\*NOTE: Not for construction use. All dimensions subject to change without notice. Please contact Grundfos for a certified drawing for construction purposes.



No. of Pumps	Pump Type	Motor [hp]	Max. System Amperage	Connection Size [in]	A [in]	B [in]	C [in]	H [in]	L [in]	Net wt. [lb]	Part Number
<b>Hydro Multi-E with CRE 5 Pumps (1x208-230V)*</b>											
2	CRE 5-5	1.5	15	2" NPT	23.1	25.5	4.8	28.5	41.3	211	91124455
3	CRE 5-5	1.5	22.5	2½" NPT	24.1	27.0	4.8	28.5	53.9	306	91124460
4	CRE 5-5	1.5	30	3" NPT	24.1	27.6	4.8	28.5	74.4	405	91124548
<b>Hydro Multi-E with CRE 5 Pumps (3x208-230V)*</b>											
2	CRE 5-4	1.5	8.4	2" NPT	23.1	25.5	4.8	28.5	41.3	251	91138804
	CRE 5-6	2	11.2					30.6	41.3	256	91138805
	CRE 5-9	3	16.2					36.8	41.3	292	91138806
	CRE 5-13	5	26.8					42.0	41.3	353	91138807
	CRE 5-15	5	26.8					45.3	41.3	358	91138808
3	CRE 5-4	1.5	12.6	2½" NPT	24.1	27.0	4.8	28.5	53.9	366	91138813
	CRE 5-6	2	16.8					30.6	53.9	374	91138814
	CRE 5-9	3	24.3					36.8	53.9	428	91138815
	CRE 5-13	5	40.2					42.0	53.9	519	91138816
	CRE 5-15	5	40.2					45.3	53.9	527	91138817
4	CRE 5-4	1.5	16.8	3" NPT	24.1	27.6	4.8	28.5	74.4	486	91138822
	CRE 5-6	2	22.4					30.6	74.4	496	91138823
	CRE 5-9	3	32.4					36.8	74.4	568	91138824
	CRE 5-13	5	53.6					42.0	74.4	689	91138825
	CRE 5-15	5	53.6					45.3	74.4	700	91138826
<b>Hydro Multi-E with CRE 5 Pumps (3x460V)*</b>											
2	CRE 5-4	1.5	5	2" NPT	23.1	25.5	4.8	28.5	41.3	257	91124467
	CRE 5-5	1.5	5					28.5	41.3	257	91124468
	CRE 5-7	2	6.2					30.6	41.3	270	91124469
	CRE 5-10	3	8.6					36.8	41.3	296	91124470
	CRE 3-13	5	14					42.0	41.3	386	91124471
	CRE 3-16	5	14					45.3	41.3	394	91124472
3	CRE 5-4	1.5	7.5	2½" NPT	24.1	27.0	4.8	28.5	53.9	376	91124476
	CRE 5-5	1.5	7.5					28.5	53.9	376	91124477
	CRE 5-7	2	9.3					30.6	53.9	395	91124478
	CRE 5-10	3	12.9					36.8	53.9	434	91124479
	CRE 3-13	5	21					42.0	53.9	569	91124480
	CRE 3-16	5	21					45.3	53.9	581	91124481
4	CRE 5-4	1.5	10	3" NPT	24.1	27.6	4.8	28.5	74.4	498	91125909
	CRE 5-5	1.5	10					28.5	74.4	498	91125910
	CRE 5-7	2	12.4					30.6	74.4	524	91125911
	CRE 5-10	3	17.2					36.8	74.4	576	91125912
	CRE 3-13	5	28					42.0	74.4	756	91125913
	CRE 3-16	5	28					45.3	74.4	771	91125914

See Page 12 for Dimensional Drawings.

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# 8 • CRE 10 SCHEDULES

No. of Pumps	Pump Type	Motor [hp]	Max. System Amperage	Connection Size [in] 150 lb FLGS	A [in]	B [in]	C [in]	H [in]	L [in]	Net wt. [lb]	Part Number
<b>Hydro MPC-E with CRE 10 Pumps (1x208-230V)*</b>											
2	CRE 10-2	1.5	15	2½" NPT	32.4	35.3	6.3	29.6	42.5	337	91124456
3	CRE 10-2	1.5	22.5	3" NPT	32.4	35.9	6.3	29.6	55.1	497	91124461
4	CRE 10-2	1.5	30	4" ANSI	32.4	41.4	6.3	29.6	76.8	699	91125936
<b>Hydro MPC-E with CRE 10 Pumps (3x208-230V)*</b>											
2	CRE 10-2	1.5	8.4	2½" NPT	32.4	35.3	6.3	29.6	42.5	377	91138827
	CRE 10-3	3	16.2					33.4	42.5	426	91138828
	CRE 10-4	3	16.2					34.6	42.5	430	91138829
	CRE 10-6	5	26.8					39.0	42.5	489	91138831
	CRE 10-8	7.5	39.4					41.8	42.5	513	91138832
	CRE 10-10	7.5	39.4					46.5	42.5	530	91138833
3	CRE 10-2	1.5	12.6	3" NPT	32.4	35.9	6.3	29.6	55.1	557	91138844
	CRE 10-3	3	24.3					33.4	55.1	631	91138845
	CRE 10-4	3	24.3					34.6	55.1	638	91138846
	CRE 10-6	5	40.2					39.0	55.1	726	91138848
	CRE 10-8	7.5	59.1					41.8	55.1	761	91138849
	CRE 10-10	7.5	59.1					46.5	55.1	788	91138850
4	CRE 10-2	1.5	16.8	4" ANSI	32.4	41.4	6.3	29.6	76.8	780	91138861
	CRE 10-3	3	32.4					33.4	76.8	878	91138862
	CRE 10-4	3	32.4					34.6	76.8	887	91138863
	CRE 10-6	5	53.6					39.0	76.8	1005	91138865
	CRE 10-8	7.5	78.8					41.8	76.8	1052	91138866
	CRE 10-10	7.5	78.8					46.5	76.8	1087	91138867
<b>Hydro MPC-E with CRE 10 Pumps (3x460V)*</b>											
2	CRE 10-2	1.5	5	2½" NPT	32.4	35.3	6.3	29.6	42.5	361	91124482
	CRE 10-3	3	8.6					33.4	42.5	407	91125915
	CRE 10-4	3	8.6					34.6	42.5	412	91124483
	CRE 10-6	5	14					39.0	42.5	503	91124484
	CRE 10-8	7.5	20.6					41.8	42.5	527	91124485
	CRE 10-10	7.5	20.6					46.5	42.5	545	91124486
3	CRE 10-2	1.5	7.5	3" NPT	32.4	35.9	6.3	29.6	55.1	533	91125800
	CRE 10-3	3	12.9					33.4	55.1	603	91125916
	CRE 10-4	3	12.9					34.6	55.1	610	91125801
	CRE 10-6	5	21					39.0	55.1	746	91125802
	CRE 10-8	7.5	30.9					41.8	55.1	782	91125803
	CRE 10-10	7.5	30.9					46.5	55.1	809	91125804
4	CRE 10-2	1.5	10	4" ANSI	32.4	41.4	6.3	29.6	76.8	747	91125818
	CRE 10-3	3	17.2					33.4	76.8	841	91125917
	CRE 10-4	3	17.2					34.6	76.8	850	91125819
	CRE 10-6	5	28					39.0	76.8	1031	91125820
	CRE 10-8	7.5	41.2					41.8	76.8	1080	91125821
	CRE 10-10	7.5	41.2					46.5	76.8	1115	91125822

See Page 12 for Dimensional Drawings.  
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No. of Pumps	Pump Type	Motor [hp]	Max. System Amperage	Connection Size [in] 150 lb FLGS	A [in]	B [in]	C [in]	H [in]	L [in]	Net wt. [lb]	Part Number
<b>Hydro Multi-E with CRE 15 Pumps (3x208-230V)*</b>											
2	CRE 15-1	2	11.2	4" ANSI	37.0	46.0	6.3	35.4	43.7	412	91138834
	CRE 15-2	5	26.8					35.4	43.7	507	91138835
	CRE 15-3	7.5	39.4					37.3	43.7	535	91138836
	CRE 15-4	7.5	39.4					39.4	43.7	548	91138837
3	CRE 15-1	2	16.8	4" ANSI	37.0	46.0	6.3	35.4	56.3	600	91138851
	CRE 15-2	5	40.2					35.4	56.3	742	91138852
	CRE 15-3	7.5	59.1					37.3	56.3	784	91138853
	CRE 15-4	7.5	59.1					39.4	56.3	804	91138854
4	CRE 15-1	2	22.4	6" ANSI	37.0	48.0	6.3	35.4	76.8	815	91138868
	CRE 15-2	5	53.6					35.4	76.8	1004	91138869
	CRE 15-3	7.5	78.8					37.3	76.8	1060	91138870
	CRE 15-4	7.5	78.8					39.4	76.8	1086	91138871
<b>Hydro Multi-E with CRE 15 Pumps (3x460V)*</b>											
2	CRE 15-1	2	6.2	4" ANSI	37.0	46.0	6.3	35.4	43.7	404	91124487
	CRE 15-2	5	14					35.4	43.7	520	91137769
	CRE 15-3	5	14					37.3	43.7	529	91124488
	CRE 15-4	7.5	20.6					39.4	43.7	562	91124489
	CRE 15-6	10	27.6					42.9	43.7	594	91124490
3	CRE 15-1	2	9.3	4" ANSI	37.0	46.0	6.3	35.4	56.3	587	91125805
	CRE 15-2	5	21					35.4	56.3	762	91137770
	CRE 15-3	5	21					37.3	56.3	775	91125806
	CRE 15-4	7.5	30.9					39.4	56.3	825	91125807
	CRE 15-6	10	41.4					42.9	56.3	872	91125808
4	CRE 15-1	2	12.4	6" ANSI	37.0	48.0	6.3	35.4	76.8	798	91125823
	CRE 15-2	5	28					35.4	76.8	1031	91137771
	CRE 15-3	5	28					37.3	76.8	1048	91125824
	CRE 15-4	7.5	41.2					39.4	76.8	1115	91125825
	CRE 15-6	10	55.2					42.9	76.8	1177	91125826

See Page 13 for Dimensional Drawings.

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# 10 • CRE 20 SCHEDULES

No. of Pumps	Pump Type	Motor [hp]	Max. System Amperage	Connection Size [in] 150 lb FLGS	A [in]	B [in]	C [in]	H [in]	L [in]	Net wt. [lb]	Part Number
<b>Hydro MPC-E with CRE 20 Pumps (3x208-230V)*</b>											
2	CRE 20-1	3	16.2	4" ANSI	37.0	46.0	6.3	33.4	43.7	457	91138838
	CRE 20-2	5	26.8					35.5	43.7	507	91138839
	CRE 20-3	7.5	39.4					37.6	43.7	539	91138840
3	CRE 20-1	3	24.3	4" ANSI	37.0	46.0	6.3	33.4	56.3	667	91138855
	CRE 20-2	5	40.2					35.5	56.3	742	91138856
	CRE 20-3	7.5	59.1					37.6	56.3	791	91138857
4	CRE 20-1	3	32.4	6" ANSI	37.0	48.0	6.3	33.4	76.8	904	91138872
	CRE 20-2	5	53.6					35.5	76.8	1004	91138873
	CRE 20-3	7.5	78.8					37.6	76.8	1069	91138874
<b>Hydro MPC-E with CRE 20 Pumps (3x460V)*</b>											
2	CRE 20-1	3	8.6	4" ANSI	37.0	46.0	6.3	33.4	43.7	438	91124491
	CRE 20-2	5	14					35.5	43.7	520	91124492
	CRE 20-3	7.5	20.6					37.6	43.7	554	91124493
	CRE 20-4	10	27.6					39.4	43.7	580	91124494
3	CRE 20-1	3	12.9	4" ANSI	37.0	46.0	6.3	33.4	56.3	639	91125809
	CRE 20-2	5	21					35.5	56.3	762	91125810
	CRE 20-3	7.5	30.9					37.6	56.3	812	91125811
	CRE 20-4	10	41.4					39.4	56.3	852	91125812
4	CRE 20-1	3	17.2	4" ANSI	37.0	48.0	6.3	33.4	76.8	867	91125827
	CRE 20-2	5	28					35.5	76.8	1031	91135828
	CRE 20-3	7.5	41.2					37.6	76.8	1097	91125829
	CRE 20-4	10	55.2					39.4	76.8	1151	91125830

See Page 13 for Dimensional Drawings.

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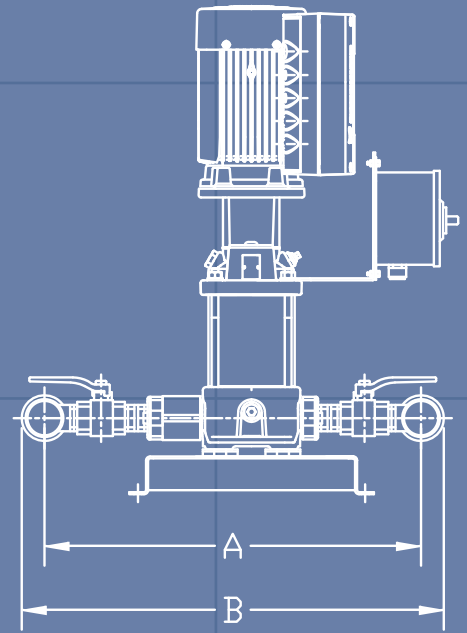
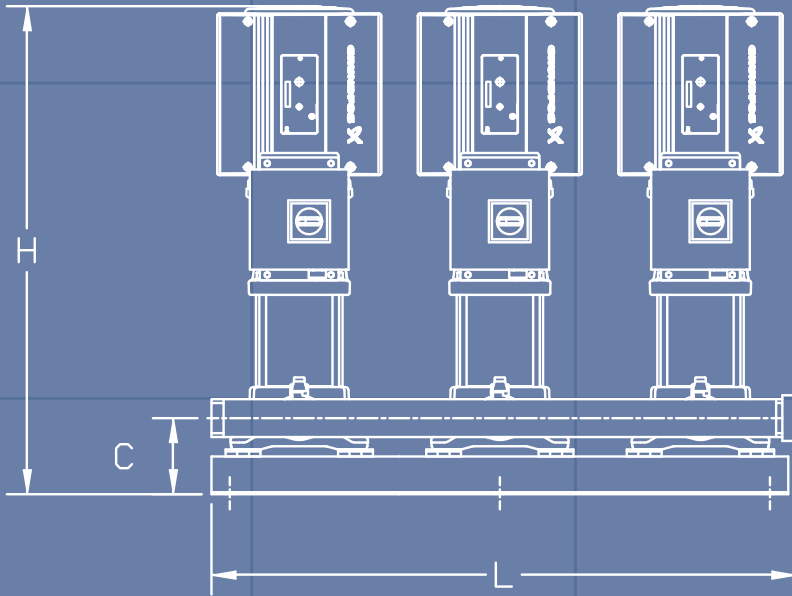
No. of Pumps	Pump Type	Motor [hp]	Max. System Amperage	Connection Size [in] 150 lb FLGS	A [in]	B [in]	C [in]	H [in]	L [in]	Net wt. [lb]	Part Number
<b>Hydro MPC-E with CRE 32 Pumps (3x208-230V)*</b>											
2	CRE 32-1	5	26.8	4" ANSI	38.5	47.5	6.9	37.4	40.3	638	91138841
	CRE 32-2-1	7.5	39.4					40.9	40.3	669	91138842
3	CRE 32-1	5	40.2	6" ANSI	38.5	49.5	6.9	37.4	60.1	942	91138858
	CRE 32-2-1	7.5	59.1					40.9	60.1	989	91138859
4	CRE 32-1	5	53.6	6" ANSI	38.5	49.5	6.9	37.4	79.7	1286	91138900
	CRE 32-2-1	7.5	78.8					40.9	79.7	1348	91138901
<b>Hydro MPC-E with CRE 32 Pumps (3x460V)*</b>											
2	CRE 32-1	5	14	4" ANSI	38.5	47.5	6.9	37.4	40.3	651	91124495
	CRE 32-2	7.5	20.6					40.9	40.3	683	91124496
	CRE 32-3-2	10	27.6					43.7	40.3	716	91124497
3	CRE 32-1	5	21	6" ANSI	38.5	49.5	6.9	37.4	60.1	962	91125813
	CRE 32-2	7.5	30.9					40.9	60.1	1010	91125814
	CRE 32-3-2	10	41.4					43.7	60.1	1058	91125815
4	CRE 32-1	5	28	6" ANSI	38.5	49.5	6.9	37.4	79.7	1312	91125831
	CRE 32-2	7.5	41.2					40.9	79.7	1377	91135832
	CRE 32-3-2	10	55.2					43.7	79.7	1441	91125833

See Page 13 for Dimensional Drawings.

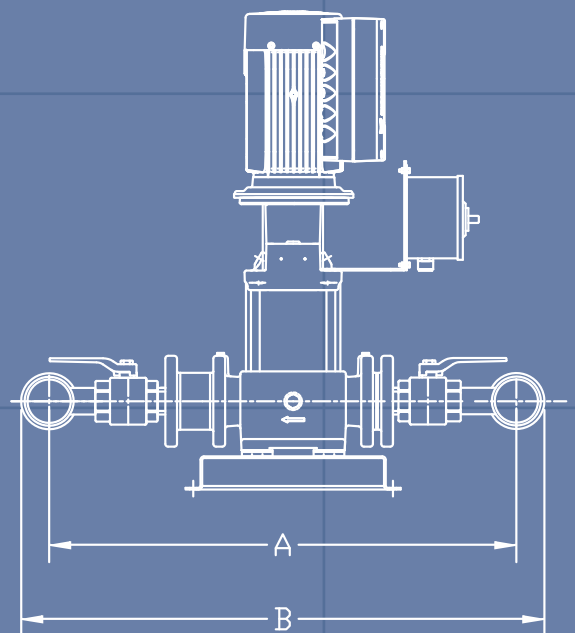
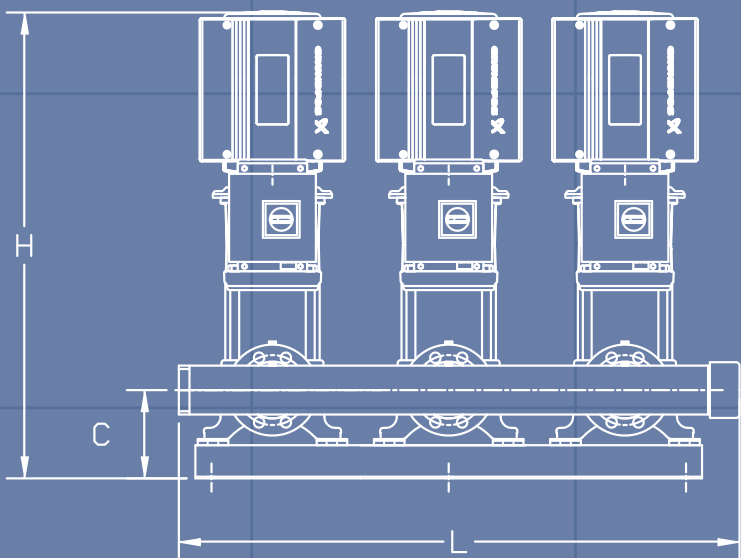
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Minimum Recommended Diaphragm Tank Size for All Pumps		
Pump Type	Diaphragm Tank Size	Part Number
CRE 3	4.4 gal. (non-code)	91121888
CRE 5	4.4 gal. (non-code)	91121888
CRE 10	10.3 gal. (non-code)	91121890
CRE 15	34 gal. (non-code)	91121893
CRE 20	44 gal. (non-code)	91121894
CRE 32	44 gal. (non-code)	91121894
Pre-charge pressure = 0.7 * setpoint		

**DIMENSION DRAWINGS FOR CRE 3 AND CRE 5 PUMPS\***  
(See Pages 6-7 for Schedules)



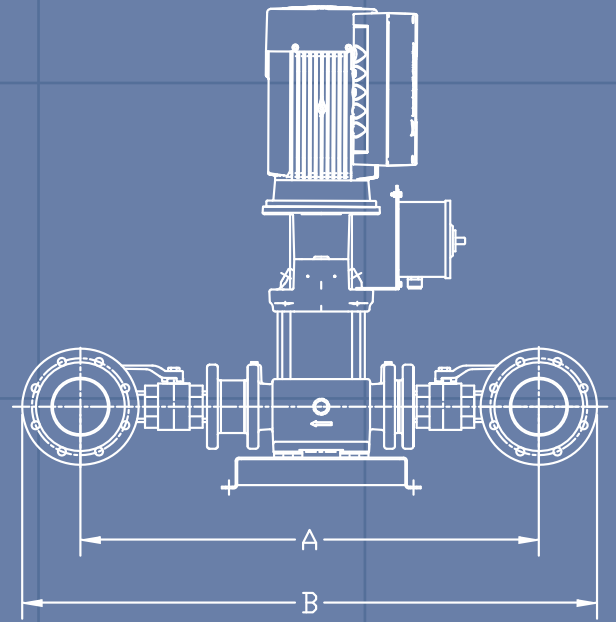
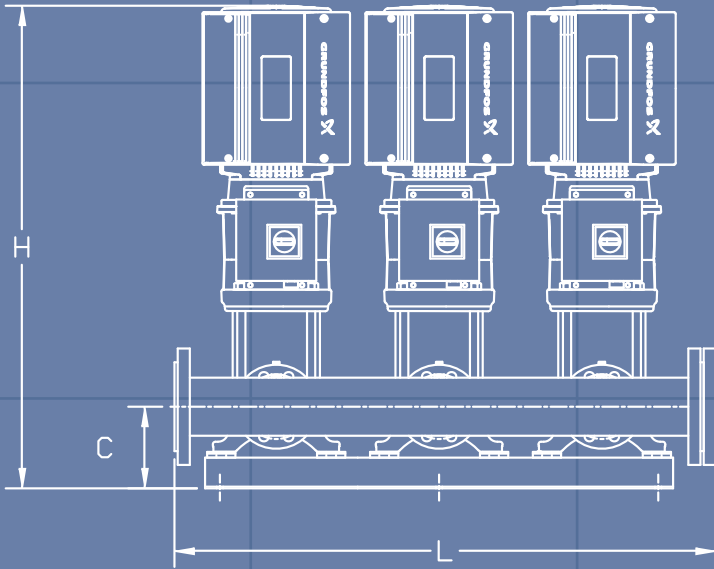
**DIMENSION DRAWINGS FOR CRE 10 PUMPS\***  
(See Page 8 for Schedules)



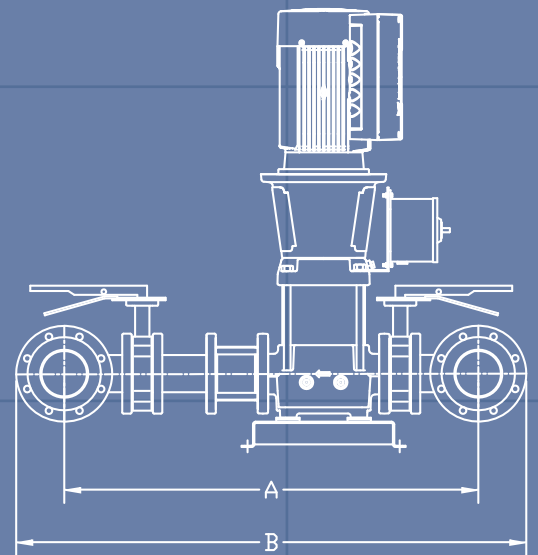
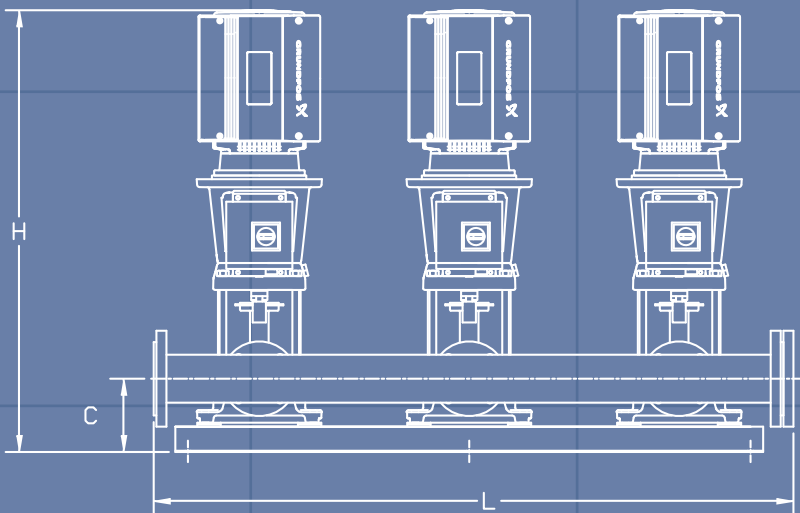
*\*NOTE: Not for construction use. All dimensions subject to change without notice. Please contact Grundfos for a certified drawing for construction purposes.*



**DIMENSION DRAWINGS FOR CRE 15 AND CRE 20 PUMPS\***  
 (See Pages 9-10 for Schedules)



**DIMENSION DRAWINGS FOR CRE 32 PUMPS\***  
 (See Page 11 for Schedules)



\*NOTE: Not for construction use. All dimensions subject to change without notice. Please contact Grundfos for a certified drawing for construction purposes.

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