



EBARA *Hydro* Booster System

Uniquely EBARA Hydro-Pneumatic Booster System
Type HP

Custom built for ideal water supply system...

APPLICATIONS

EBARA Hydro-pneumatic booster system uses EBARA stainless steel pumps with one or more pressure tanks mounted on a common baseplate skid consisting of valves and manifolds.

Custom designed electrical control panel is utilised and built to highest standard, interconnected with pump motor and control devices to ensure automatic trouble-free booster operation.

FEATURES

- **Pumps**

Vertical multi-stage stainless steel pump, all wetted parts in contact with liquid are stainless steel for robust operation.

- **Tank**

Local JKPP approved tanks with imported supreme quality diaphragm to ensure long operating life.

- **Control Panel**

Corrosion-resistance epoxy coated control panel incorporated with quality electrical / electronic components built to EBARA's quality standard.

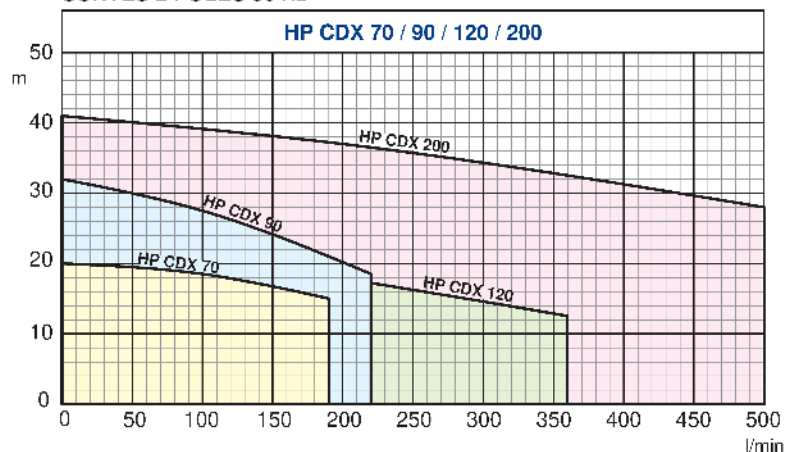
- **Accessories**

Approved pressure switches, valves and fittings are selected and used to enhance operating efficiency and assure durability.

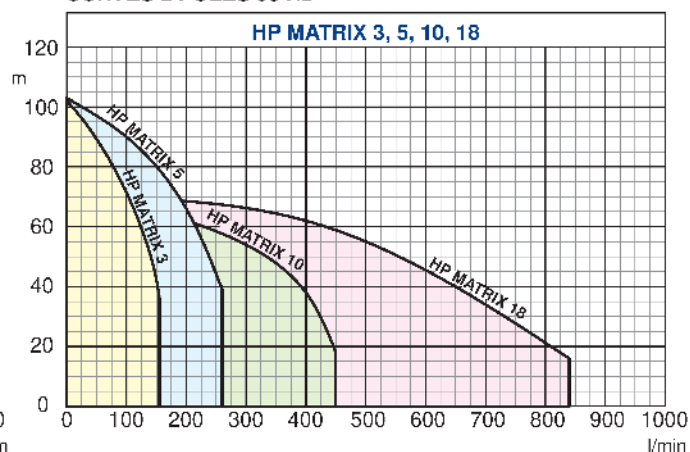


PERFORMANCE CURVE

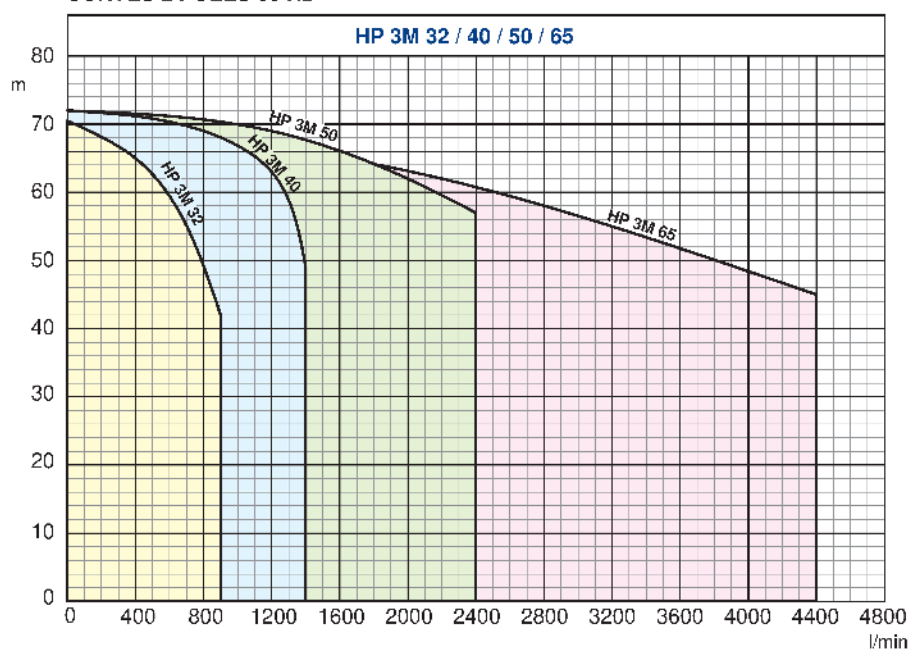
HP CDX 70 / 90 / 120 / 200
CURVES 2 POLES 50 Hz



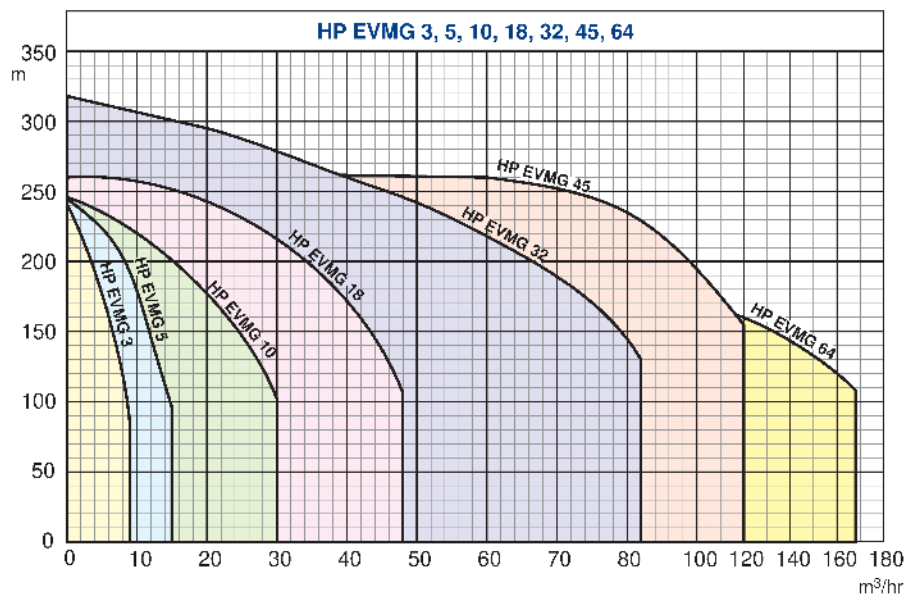
HP MATRIX 3, 5, 10, 18
CURVES 2 POLES 50 Hz



HP 3M 32 / 40 / 50 / 65
CURVES 2 POLES 50 Hz



HP EVMG 3, 5, 10, 18, 32, 45, 64
CURVES 2 POLES 50 Hz

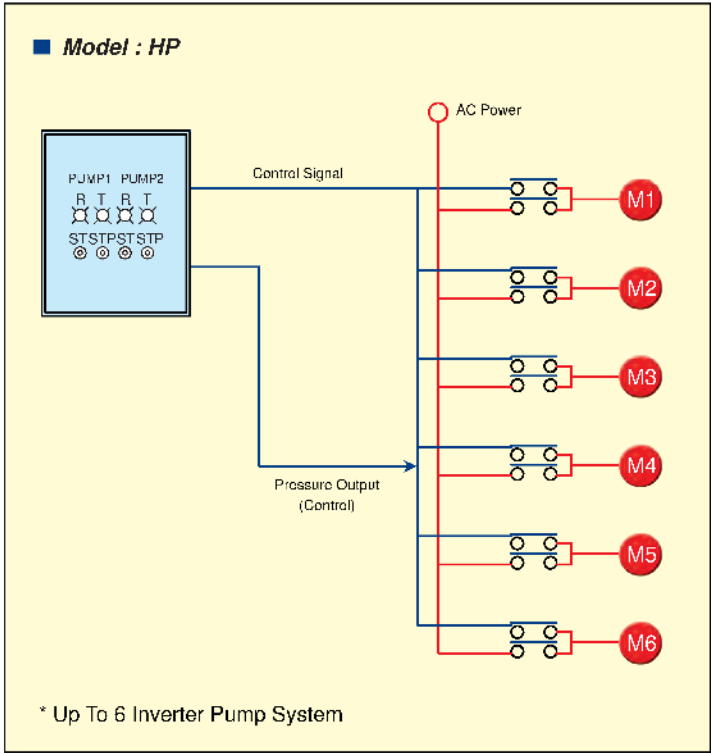


SELECTION GUIDE

PERFORMANCE TABLE															
Pump Type EVM 3-5-10-18	kW / Motor	Q = Capacity													
		l/min 0	20	40	60	75	100	130	150	200	250	300	350	400	
		m³/h 0	1.2	2.4	3.6	4.5	6.0	7.8	9.0	12	15	18	21	24	
		H = Total manometric head in meters													
EVM 3 2N5/0.37	0.37	18.6	16.7	14.0	10.3	6.6	-	-	-	-	-	-	-	-	
EVM 3 3N5/0.37	0.37	27.9	25.1	20.9	15.5	9.9	-	-	-	-	-	-	-	-	
EVM 3 4N5/0.55	0.55	37.2	33.4	27.9	20.6	13.2	-	-	-	-	-	-	-	-	
EVM 3 5N5/0.55	0.55	46.5	42.0	34.9	25.8	16.5	-	-	-	-	-	-	-	-	
EVM 3 6N5/0.75	0.75	56.0	50.0	42.0	30.9	19.8	-	-	-	-	-	-	-	-	
EVM 3 7N5/0.75	0.75	65.0	58.5	49.0	36.1	23.1	-	-	-	-	-	-	-	-	
EVM 3 9N5/1.1	1.1	84.0	75.0	63.0	46.5	29.7	-	-	-	-	-	-	-	-	
EVM 3 11N5/1.1	1.1	-	92.7	77.0	56.5	36.3	-	-	-	-	-	-	-	-	
EVM 3 13N5/1.5	1.5	-	-	90.5	67.0	43.0	-	-	-	-	-	-	-	-	
EVM 3 15N5/1.5	1.5	-	-	-	77.5	49.5	-	-	-	-	-	-	-	-	
EVM 3 18F5/2.2	2.2	-	-	-	92.5	59.5	-	-	-	-	-	-	-	-	
EVM 3 22F5/2.2	2.2	-	-	-	-	72.5	-	-	-	-	-	-	-	-	
EVM 3 26F5/3.0	3	-	-	-	-	86.0	-	-	-	-	-	-	-	-	
EVM 5 2N5/0.37	0.37	20.2	-	18.4	16.9	15.4	12.2	6.9	-	-	-	-	-	-	
EVM 5 3N5/0.55	0.55	30.2	-	27.6	25.3	23.1	18.4	10.3	-	-	-	-	-	-	
EVM 5 4N5/0.75	0.75	40.5	-	36.8	33.8	30.8	24.5	13.8	-	-	-	-	-	-	
EVM 5 5N5/1.1	1.1	50.5	-	46.0	42.0	38.6	30.6	17.2	-	-	-	-	-	-	
EVM 5 6N5/1.1	1.1	60.5	-	55.0	50.5	46.5	36.7	20.6	-	-	-	-	-	-	
EVM 5 7N5/1.5	1.5	70.5	-	64.5	59.0	54.0	43.0	24.1	-	-	-	-	-	-	
EVM 5 8N5/1.5	1.5	80.5	-	73.5	67.5	61.5	49.0	27.5	-	-	-	-	-	-	
EVM 5 10N5/2.2	2.2	-	-	93.5	86.0	79.0	63.0	36.6	-	-	-	-	-	-	
EVM 5 11N5/2.2	2.2	-	-	-	94.5	86.5	69.5	40.5	-	-	-	-	-	-	
EVM 5 12N5/2.2	2.2	-	-	-	-	94.5	75.5	44.0	-	-	-	-	-	-	
EVM 5 14N5/3.0	3	-	-	-	-	-	88.0	51.0	-	-	-	-	-	-	
EVM 5 16N5/3.0	3	-	-	-	-	-	-	58.5	-	-	-	-	-	-	
EVM 5 18F5/4.0	4	-	-	-	-	-	-	66.0	-	-	-	-	-	-	
EVM 5 19F5/4.0	4	-	-	-	-	-	-	69.5	-	-	-	-	-	-	
EVM 5 22F5/4.0	4	225.0	-	206.0	189.0	173.0	139.0	80.5	-	-	-	-	-	-	
EVM 5 24F5/5.5	5.5	-	-	-	-	-	-	88.0	-	-	-	-	-	-	
EVM 10 2N5/0.75	0.75	22.0	-	-	-	21.0	20.4	18.9	17.6	13.2	7.8	-	-	-	
EVM 10 3N5/1.1	1.1	33.0	-	-	-	31.6	30.5	28.4	26.4	19.8	11.7	-	-	-	
EVM 10 4N5/1.5	1.5	44.0	-	-	-	42.0	40.5	37.8	35.2	26.4	15.6	-	-	-	
EVM 10 5N5/2.2	2.2	55.0	-	-	-	52.5	51.0	47.5	44.0	33.0	19.5	-	-	-	
EVM 10 6N5/2.2	2.2	66.0	-	-	-	63.0	61.0	57.0	53.0	39.5	23.4	-	-	-	
EVM 10 8N5/3.0	3	88.0	-	-	-	84.0	81.5	75.5	70.5	52.5	31.2	-	-	-	
EVM 10 10N5/4.0	4	-	-	-	-	-	-	94.5	88.0	66.0	39.0	-	-	-	
EVM 10 11N5/4.0	4	-	-	-	-	-	-	-	97.0	72.5	43.0	-	-	-	
EVM 10 12N5/5.5	5.5	-	-	-	-	-	-	-	-	86.5	55.0	-	-	-	
EVM 10 14N5/5.5	5.5	-	-	-	-	-	-	-	-	-	64.5	-	-	-	
EVM 10 15F5/5.5	5.5	-	-	-	-	-	-	-	-	-	69.0	-	-	-	
EVM 10 16F5/7.5	7.5	-	-	-	-	-	-	-	-	-	73.5	-	-	-	
EVM 10 18F5/7.5	7.5	-	-	-	-	-	-	-	-	-	83.0	-	-	-	
EVM 10 20F5/7.5	7.5	-	-	-	-	-	-	-	-	-	92.0	-	-	-	
EVM 18 2F5/2.2	2.2	32.0	-	-	-	-	-	31.0	30.3	28.5	25.7	21.9	17.2	11.6	
EVM 18 3F5/3.0	3	48.0	-	-	-	-	-	46.0	45.5	43.0	38.6	32.8	25.7	17.4	
EVM 18 4F5/4.0	4	64.0	-	-	-	-	-	61.5	60.5	57.0	51.5	44.0	34.3	23.2	
EVM 18 5F5/5.5	5.5	80.0	-	-	-	-	-	77.0	75.5	71.5	64.5	54.5	43.0	29.0	
EVM 18 6F5/5.5	5.5	96.0	-	-	-	-	-	92.0	91.0	85.5	77.0	65.5	51.5	34.8	
EVM 18 7F5/7.5	7.5	-	-	-	-	-	-	-	-	100.0	90.0	76.5	60.0	40.5	
EVM 18 8F5/7.5	7.5	-	-	-	-	-	-	-	-	-	-	87.5	68.5	46.5	
EVM 18 10F5/11	11	-	-	-	-	-	-	-	-	-	-	-	93.5	69.0	
EVM 18 12F5/11	11	-	-	-	-	-	-	-	-	-	-	-	-	83.0	
EVM 18 14F5/15	15	-	-	-	-	-	-	-	-	-	-	-	-	96.5	
EVM 18 15F5/15	15	-	-	-	-	-	-	-	-	-	-	-	-	104.0	
EVM 18 16F5/15	15	-	-	-	-	-	-	-	-	-	-	-	-	110.0	

PERFORMANCE TABLE													
Pump Type EVM 32-64	kW / Motor	Q = Capacity											
		l/min 0	200	350	500	600	700	900	1000	1200	1400		
		m³/h 0	12	21	30	36	42	54	60	72	84		
H = Total manometric head in meters													
EVM 32 1-0F5/2.2	2.2	22.6	20.2	17.5	13.9	10.3	5.7	-	-	-	-	-	-
EVM 32 2-2F5/3.0	3	39.0	34.6	29.7	21.2	14.2	-	-	-	-	-	-	-
EVM 32 2-0F5/4.0	4	45.0	40.5	36.0	29.5	23.2	14.9	-	-	-	-	-	-
EVM 32 3-3F5/5.5	5.5	55.0	52.0	45.0	32.8	22.7	-	-	-	-	-	-	-
EVM 32 3-0F5/5.5	5.5	68.0	61.0	54.5	45.0	36.1	24.1	-	-	-	-	-	-
EVM 32 4-3F5/7.5	7.5	81.0	72.5	63.5	48.5	35.6	-	-	-	-	-	-	-
EVM 32 4-0F5/7.5	7.5	90.	81.5	73.0	61.0	49.0	33.3	-	-	-	-	-	-
EVM 32 5-3F5/11	11	-	93.0	82.0	64.0	48.5	30.5	-	-	-	-	-	-
EVM 32 5-0F5/11	11	-	-	91.5	76.5	62.0	42.5	-	-	-	-	-	-
EVM 32 6-3F5/11	11	-	-	100.0	79.5	61.5	39.7	-	-	-	-	-	-
EVM 32 6-0F5/11	11	-	-	-	92.0	75.0	51.5	-	-	-	-	-	-
EVM 32 7-3F5/15	15	-	-	-	95.5	74.5	49.0	-	-	-	-	-	-
EVM 32 7-0F5/15	15	-	-	-	108.0	87.5	61.0	-	-	-	-	-	-
EVM 32 8-3F5/15	15	-	-	-	-	87.0	58.0	-	-	-	-	-	-
EVM 32 8-0F5/15	15	-	-	-	-	101.0	70.0	-	-	-	-	-	-
EVM 32 9-3F5/18.5	18.5	-	-	-	-	100.0	67.5	-	-	-	-	-	-
EVM 32 9-0F5/18.5	18.5	-	-	-	-	-	79.5	-	-	-	-	-	-
EVM 32 10-3F5/18.5	18.5	-	-	-	-	-	76.5	-	-	-	-	-	-
EVM 32 10-1F5/18.5	18.5	-	-	-	-	-	84.5	-	-	-	-	-	-
EVM 45 1-1F5/3.0	3	21.0	-	18.9	17.6	16.3	14.3	8.3	-	-	-	-	-
EVM 45 1-0F5/4.0	4	27.0	-	25.6	24.6	23.5	21.8	16.7	13.3	-	-	-	-
EVM 45 2-2F5/5.5	5.5	42.0	-	38.1	35.8	33.4	29.8	18.6	-	-	-	-	-
EVM 45 2-0F5/7.5	7.5	54.0	-	51.5	50.0	48.0	45.0	35.4	29.1	-	-	-	-
EVM 45 3-2F5/11	11	69.0	-	64.0	61.0	58.0	53.0	37.3	-	-	-	-	-
EVM 45 3-0F5/11	11	81.0	-	77.5	75.0	72.5	68.0	54.0	45.0	-	-	-	-
EVM 45 4-2F5/15	15	96.0	-	90.0	86.0	82.0	76.0	56.0	43.0	-	-	-	-
EVM 45 4-0F5/15	15	-	-	103.0	100.0	96.5	91.0	73.0	60.5	-	-	-	-
EVM 45 5-2F5/18.5	18.5	-	-	-	-	107.0	99.0	74.5	58.5	-	-	-	-
EVM 45 5-0F5/18.5	18.5	-	-	-	-	-	114.0	91.5	76.5	-	-	-	-
EVM 45 6-2F5/22	22	-	-	-	-	-	-	93.5	74.5	-	-	-	-
EVM 45 6-0F5/22	22	-	-	-	-	-	-	110.0	92.5	-	-	-	-
EVM 45 7-2F5/30	30	-	-	-	-	-	-	112.0	90.5	-	-	-	-
EVM 45 7-0F5/30	30	-	-	-	-	-	-	-	108.0	-	-	-	-
EVM 45 8-2F5/30	30	-	-	-	-	-	-	-	106.0	-	-	-	-
EVM 45 8-0F5/30	30	-	-	-	-	-	-	-	-	124.0	-	-	-
EVM 45 9-2F5/30	30	-	-	-	-	-	-	-	122.0	-	-	-	-
EVM 64 1-1F5/4.0	4	23.7	-	-	21.0	20.4	19.7	17.5	15.9	11.4	-	-	-
EVM 64 1-0F5/5.5	5.5	29.3	-	-	26.6	26.1	25.4	23.7	22.3	18.5	13.5	-	-
EVM 64 2-2F5/7.5	7.5	47.5	-	-	42.5	41.5	40.5	36.5	33.5	25.3	-	-	-
EVM 64 2-1F5/11	11	53.0	-	-	48.0	47.0	46.0	42.5	40.0	32.4	23.0	-	-
EVM 64 2-0F5/11	11	58.5	-	-	53.5	53.0	52.0	49.0	46.5	39.5	30.6	-	-
EVM 64 3-3F5/15	15	71.0	-	-	64.0	62.5	61.0	55.5	51.0	39.3	-	-	-
EVM 64 3-2F5/15	15	76.5	-	-	69.5	68.0	66.5	61.5	57.5	46.5	32.5	-	-
EVM 64 3-1F5/15	15	82.5	-	-	75.0	74.0	72.5	68.0	64.0	53.5	40.0	-	-
EVM 64 3-0F5/18.5	18.5	88.0	-	-	80.5	79.5	78.0	74.0	70.5	60.5	47.5	-	-
EVM 64 4-3F5/18.5	18.5	-	-	-	91.0	89.0	87.0	80.5	75.5	60.5	42.0	-	-
EVM 64 4-2F5/18.5	18.5	-	-	-	96.5	95.0	93.0	87.0	81.5	67.5	49.5	-	-
EVM 64 4-1F5/22	22	-	-	-	-	101.0	98.5	93.0	88.0	74.5	57.0	-	-
EVM 64 4-0F5/22	22	-	-	-	-	-	-	99.0	94.5	81.5	64.5	-	-
EVM 64 5-3F5/30	30	-	-	-	-	-	-	106.0	99.5	85.5	59.0	-	-
EVM 64 5-2F5/30	30	-	-	-	-	-	-	-	106.0	88.5	66.5	-	-
EVM 64 5-1F5/30	30	-	-	-	-	-	-	-	-	95.5	74.0	-	-
EVM 64 5-0F5/30	30	-	-	-	-	-	-	-	-	103.0	81.5	-	-
EVM 64 6-3F5/30	30	-	-	-	-	-	-	-	-	103.0	76.0	-	-
EVM 64 6-2F5/30	30	-	-	-	-	-	-	-	-	110.0	83.5	-	-
EVM 64 6-1F5/37	37	-	-	-	-	-	-	-	-	117.0	91.0	-	-
EVM 64 6-0F5/37	37	-	-	-	-	-	-	-	-	-	99.0	-	-
EVM 64 7-3F5/37	37	-	-	-	-	-	-	-	-	-	93.0	-	-
EVM 64 7-2F5/37	37	-	-	-	-	-	-	-	-	-	101.0	-	-
EVM 64 7-1F5/37	37	-	-	-	-	-	-	-	-	-	108.0	-	-

SYSTEM OPERATION DIAGRAM



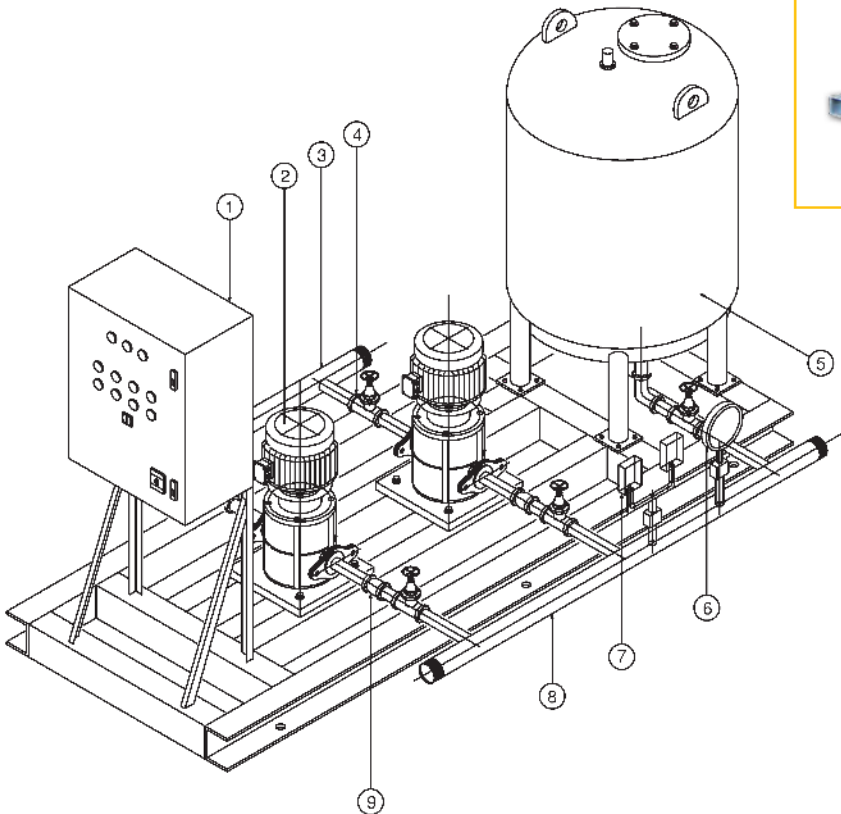
Input Signal & Type of Sensor

- Booster unit incorporated with 1 to 6 fix speed pumps in parallel operation and capable to meets actual system discharge pressure demand at all time.
- Unique pump start & stop timer control and pressure switch activation, dry running prevention, high & low pressure limit protection, automatically pump switch over during emergency operation function.

Input Signal & Type of Sensor

- **Pressure Discharge control installation:**
 - Industrial pressure switch with dry contact point (1ph/240V supply voltage) input signal.
- **Option:**
 - Float less Relay control for Tank to Tank pumping application

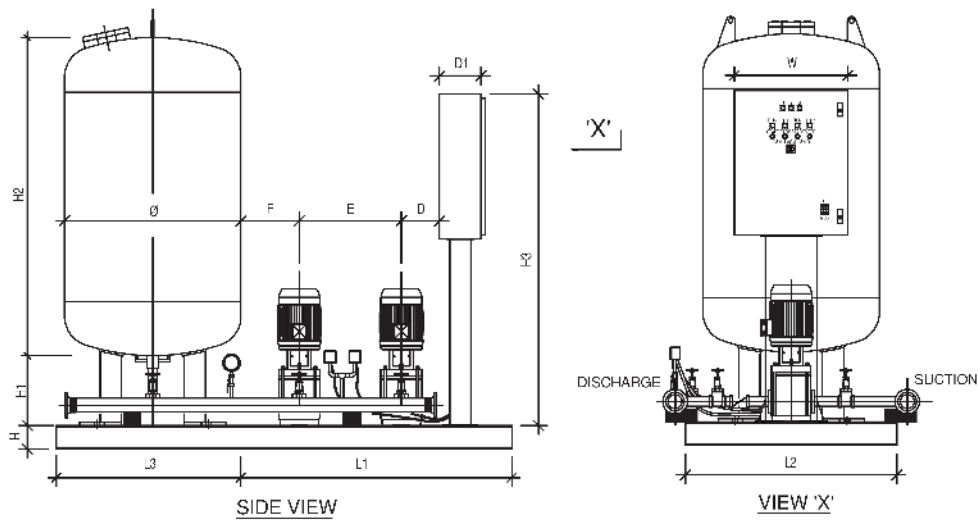
ISOMETRIC DRAWING



No.	Part Name
1	Control Panel
2	Pump
3	Suction Manifold
4	Gate Valve
5	JKKP Approved Tank
6	Pressure Gauge
7	Pressure Switch
8	Discharge Manifold
9	Check Valve

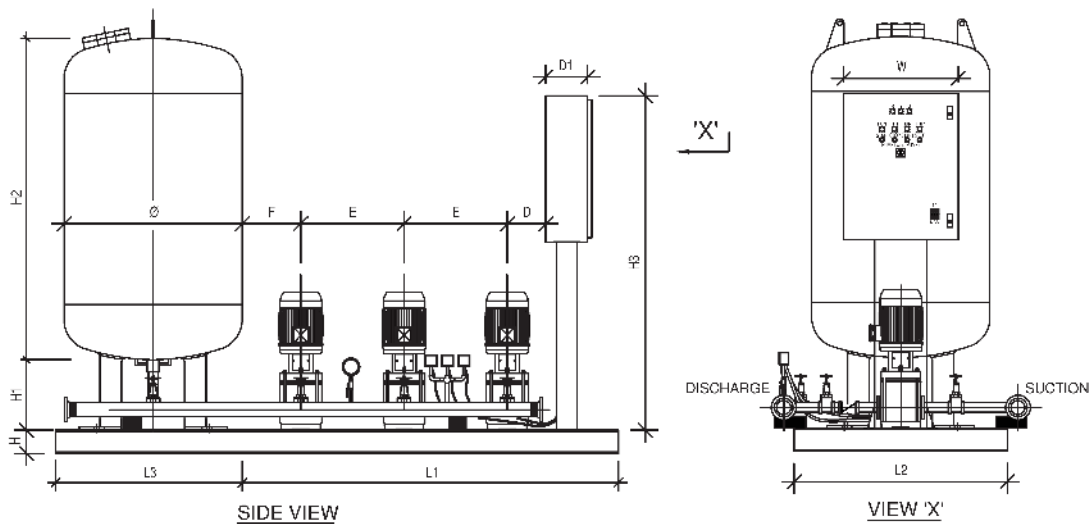
DIMENSION

2HP-EVM



DIMENSION MODEL	L1 mm	D mm	E mm	F mm	H3 mm	D1 mm	W mm	TANK LITER	H mm	H1 mm	H2 mm	Ø mm	L2 mm	L3 mm	SUCTION MANIFOLD mm	DISCHARGE MANIFOLD mm
2HP-EVM 3	1030	180	350	250	1450	180	400	300L	100	300	1085	610	780	710	50	50
2HP-EVM 5	1030	180	350	250	1450	180	400	500L	100	300	1370	760	910	860	50	50
2HP-EVM 10	1200	210	390	250	1450	250	400	1000L	100	300	1850	760	910	860	65	65
2HP-EVM 18	1345	305	440	250	1450	250	600	1500L	100	300	1750	1000	1100	1100	80	80
2HP-EVM 32	1400	305	440	305	1450	250	600	2000L	100	300	1985	1100	1200	1200	100	100
2HP-EVM 45	1520	360	550	360	1450	500	600	2000L	100	300	1985	1100	1200	1200	150	150
2HP-EVM 64	1520	360	550	360	1450	500	600	2000L	100	300	1985	1100	1200	1200	150	150

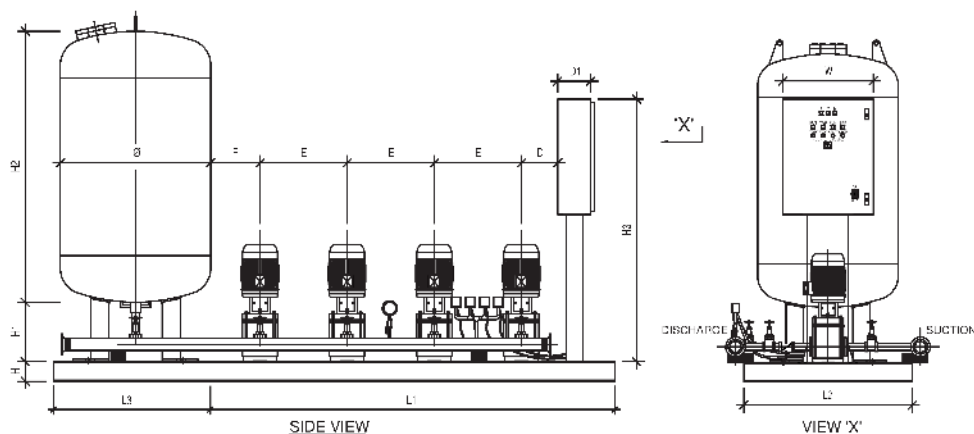
3HP-EVM



DIMENSION MODEL	L1 mm	D mm	E mm	F mm	H3 mm	D1 mm	W mm	TANK LITER	H mm	H1 mm	H2 mm	Ø mm	L2 mm	L3 mm	SUCTION MANIFOLD mm	DISCHARGE MANIFOLD mm
3HP-EVM 3	1380	180	350	250	1450	200	600	300L	100	300	1085	610	780	710	50	50
3HP-EVM 5	1380	180	350	250	1450	200	600	500L	100	300	1370	760	910	860	50	50
3HP-EVM 10	1590	210	390	250	1450	250	600	1000L	100	300	1850	760	910	860	65	65
3HP-EVM 18	1785	305	440	250	1450	250	600	1500L	100	300	1750	1000	1100	1100	100	100
3HP-EVM 32	1840	305	440	305	1450	250	600	2000L	100	300	1985	1100	1200	1200	150	150
3HP-EVM 45	2070	360	550	360	1450	500	850	2000L	125	300	1985	1100	1200	1200	200	200
3HP-EVM 64	2070	360	550	360	1450	500	850	2000L	125	300	1985	1100	1200	1200	200	200

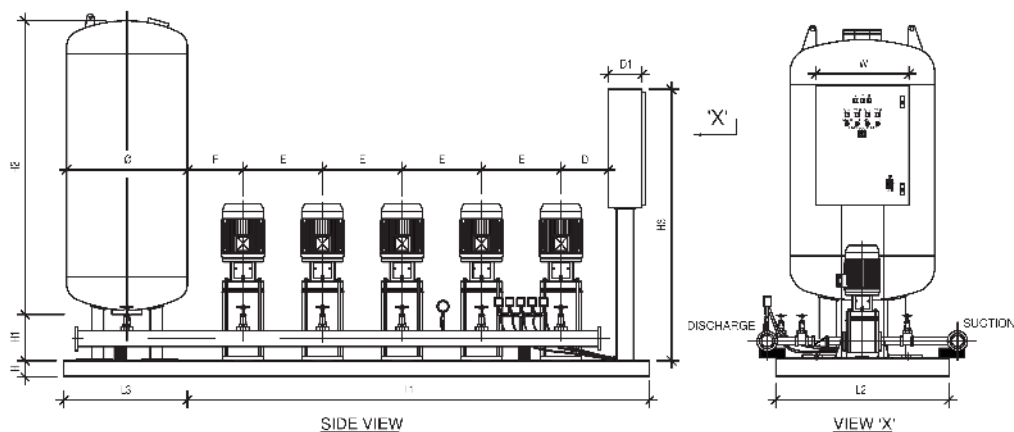
DIMENSION

4HP-EVM



DIMENSION MODEL	L1 mm	D mm	E mm	F mm	H3 mm	D1 mm	W mm	TANK LITER	H mm	H1 mm	H2 mm	Ø mm	L2 mm	L3 mm	SUCTION MANIFOLD mm	DISCHARGE MANIFOLD mm
4HP-EVM 3	1730	180	350	250	1450	200	600	300L	100	300	1085	610	910	710	65	65
4HP-EVM 5	1730	180	350	250	1450	200	600	500L	100	300	1370	760	910	860	65	65
4HP-EVM 10	1980	210	390	250	1450	250	600	1000L	100	300	1850	760	910	860	80	80
4HP-EVM 18	2225	305	440	250	1450	250	650	1500L	100	300	1750	1000	1100	1100	100	100
4HP-EVM 32	2280	305	440	305	1450	250	650	2000L	125	300	1985	1100	1200	1200	150	150
4HP-EVM 45	2620	360	550	360	1450	500	850	2000L	125	300	1985	1100	1200	1200	200	200
4HP-EVM 64	2620	360	550	360	1450	500	850	2000L	125	300	1985	1100	1200	1200	200	200

5HP-EVM



DIMENSION MODEL	L1 mm	D mm	E mm	F mm	H3 mm	D1 mm	W mm	TANK LITER	H mm	H1 mm	H2 mm	Ø mm	L2 mm	L3 mm	SUCTION MANIFOLD mm	DISCHARGE MANIFOLD mm
5HP-EVM 3	2080	180	350	250	1450	200	650	300L	100	300	1085	610	910	710	80	80
5HP-EVM 5	2080	180	350	250	1450	200	650	500L	100	300	1370	760	910	860	80	80
5HP-EVM 10	2370	210	390	250	1450	250	650	1000L	100	300	1850	760	910	860	100	100
5HP-EVM 18	2665	305	440	250	1450	250	650	1500L	100	300	1750	1000	1100	1100	150	150
5HP-EVM 32	2720	305	440	305	1450	250	650	2000L	125	300	1985	1100	1200	1200	200	200
5HP-EVM 45	3170	360	550	360	1450	500	1000	2000L	125	300	1985	1100	1200	1200	200	200
5HP-EVM 64	3170	360	550	360	1450	500	1000	2000L	125	300	1985	1100	1200	1200	250	250

* Dimensional details are provided for reference only.

* All specifications are subject to change without prior notice.



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