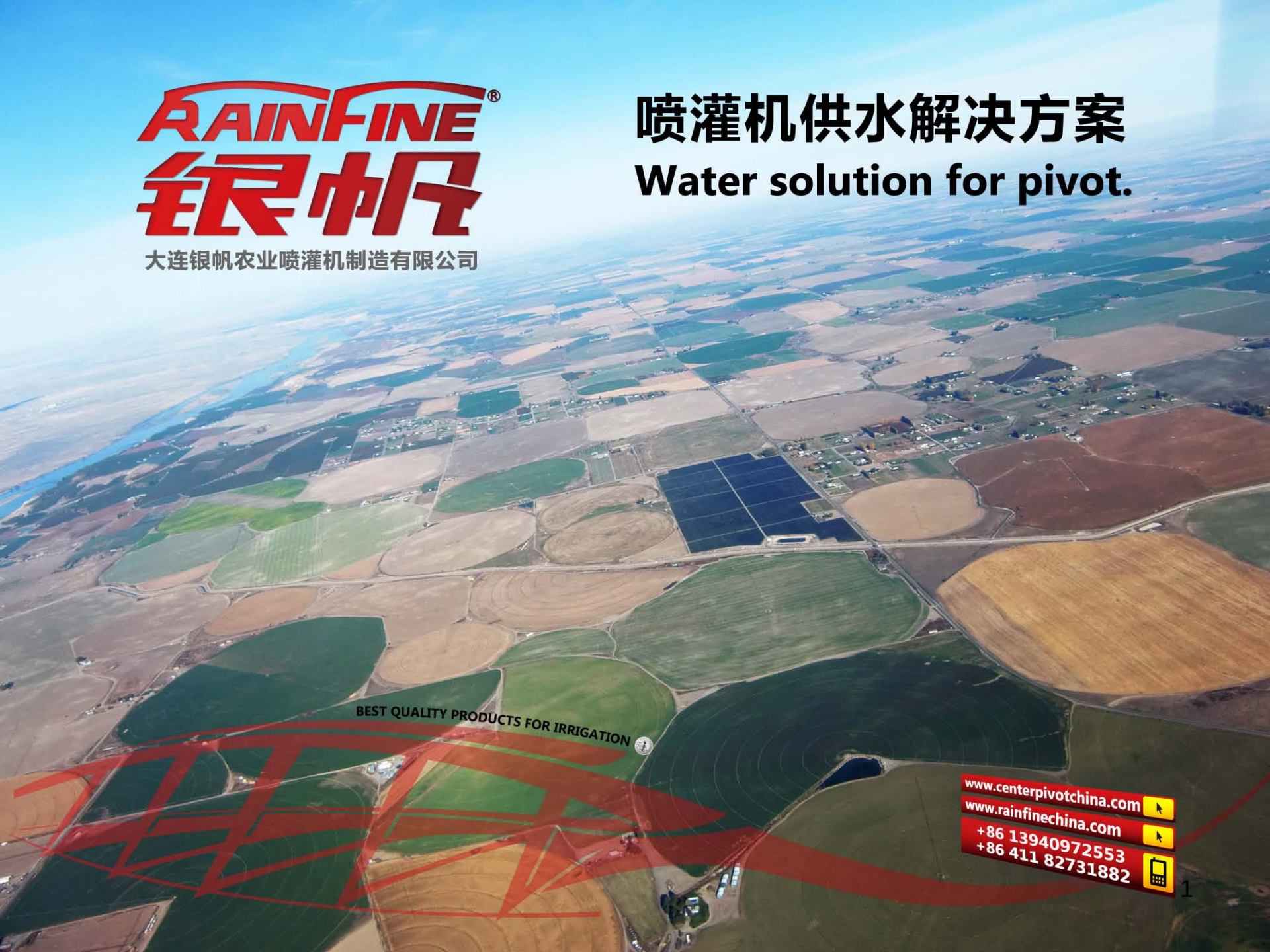
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Catalog 目录

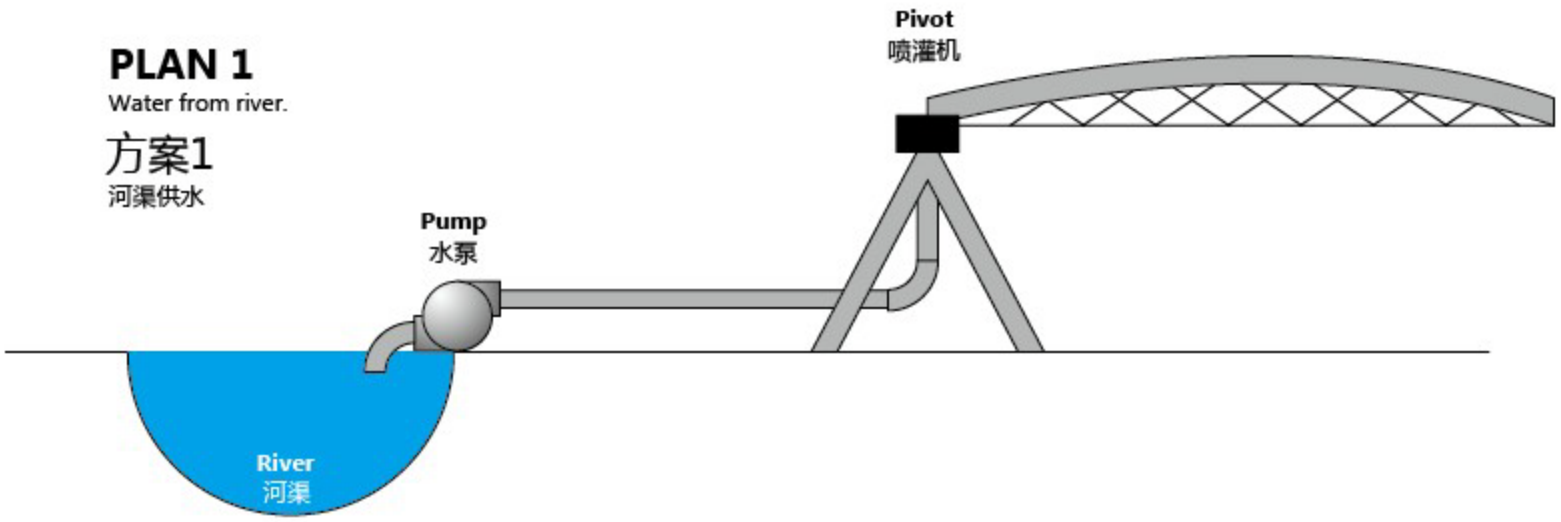
1. PUMP 水泵

PLAN 1

Water from river.

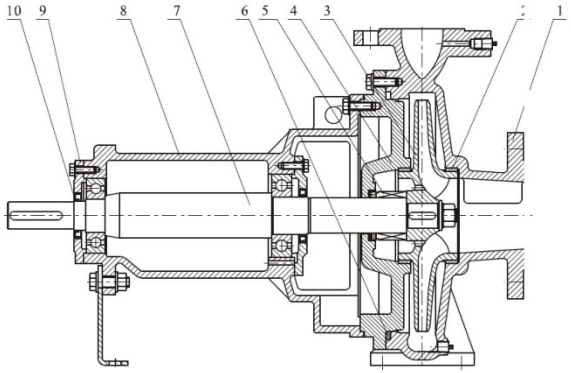
方案1

河渠供水

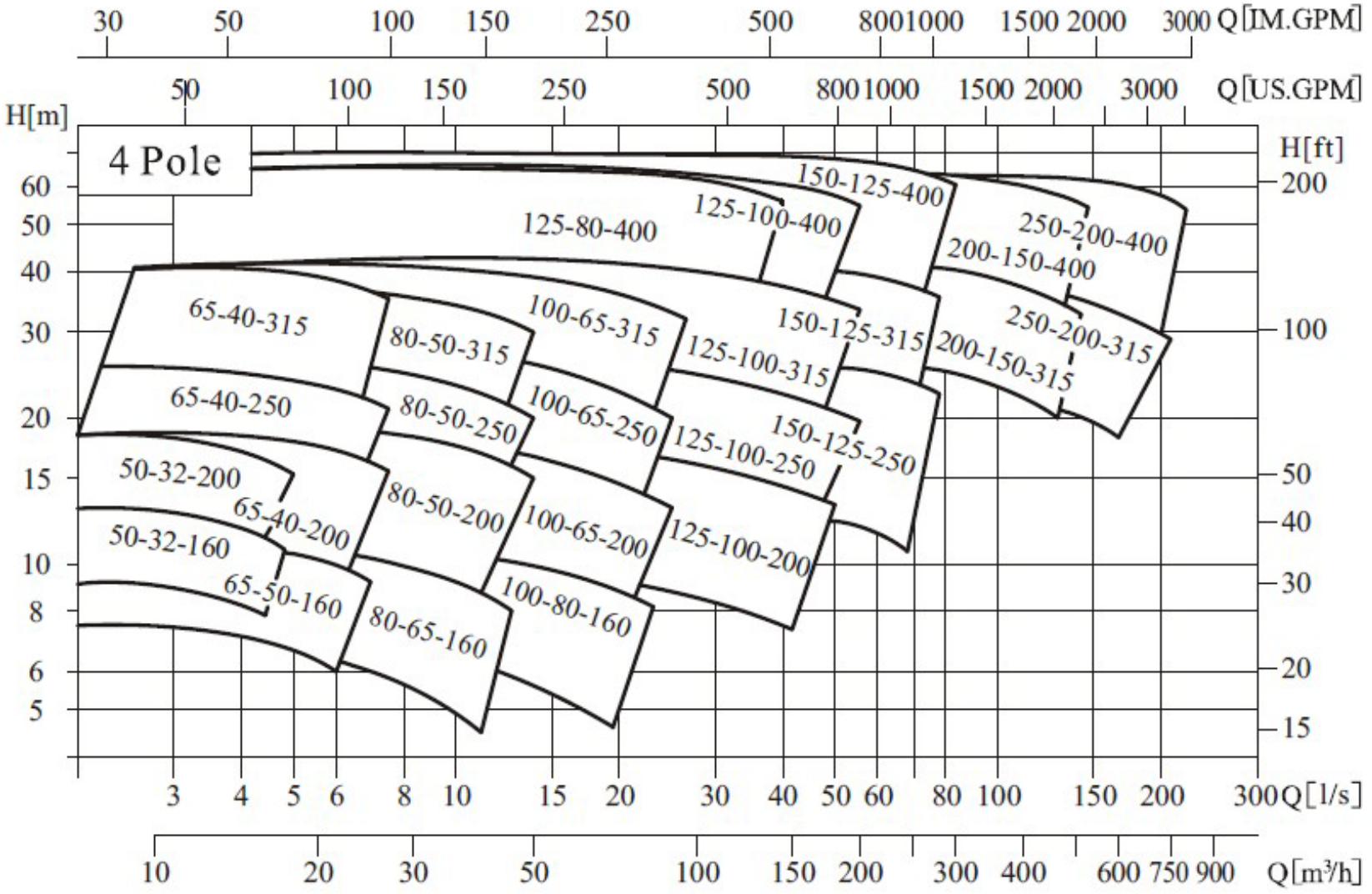


End Suction Centrifugal Pump

PUMP + ENGINE



No.	Name	Material	Code/AISI/ASTM
1	Casing	Cast Iron HT200	ASTM25B
2	Wear ring	Cast Iron HT200	ASTM25B
3	Impeller	Cast Iron HT200/SS OCr18Ni9	ASTM25B/AISI304
4	Casing cover	Cast Iron HT200	ASTM25B
5	Mechanical seal	Carbon/Silicon Carbide	
6	O ring	NBR	
7	Shaft	SS 2Cr13	AISI420
8	Bearing housing	Cast Iron HT200	ASTM25B
9	Bearing cover	Cast Iron HT200	ASTM25B
10	Seal	NBR	


4 Pole
Q[IM.GPM]
Q[US.GPM]
H[m]
H[ft]
Q[l/s]
Q[m³/h]
150-125-400
125-80-400
125-100-400
250-200-400
200-150-400
65-40-315
80-50-315
100-65-315
125-100-315
150-125-315
250-200-315
200-150-315
65-40-250
80-50-250
100-65-250
125-100-250
150-125-250
50-32-200
65-40-200
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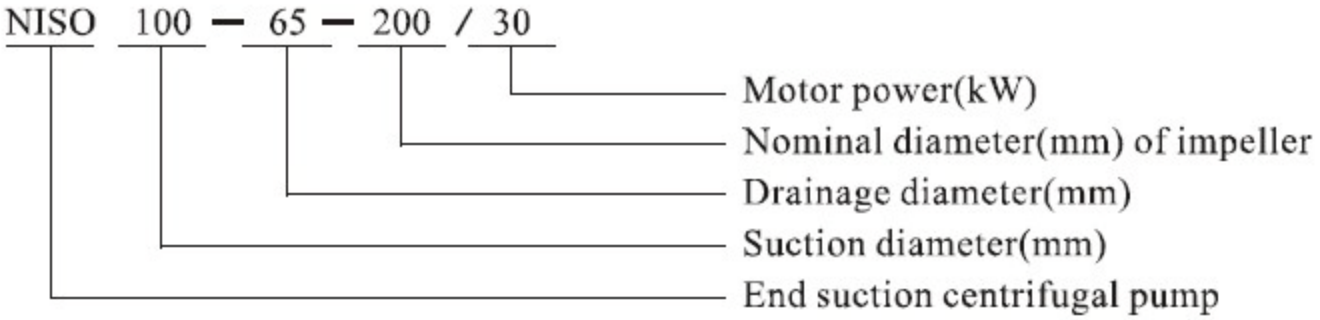
125-100-200
50-32-160
65-50-160
80-65-160
100-80-160

NISO100-65-200/30



水泵电机功率(kW)=0.00436*流量(m^3/hr)*扬程(m)

Pump motor(kW)=0.00436*Flow(m^3/hr)*Charge head(m)

No.	Model	Q [m³/h]	H [m]	Motor [kW]	n [r/min]
29	NISO 80-65-160/5.5	50	22	5.5	2900
30	NISO 80-65-160/7.5		29	7.5	
31	NISO 80-65-160/11		38	11	2950
32	NISO 80-65-160/15		44	15	
33	NISO 100-65-200/18.5	100	36	18.5	2950
34	NISO 100-65-200/22		43	22	
35	NISO 100-65-200/30		56	30	
36	NISO 100-65-200/37		67	37	
37	NISO 100-65-250/45		80	45	
38	NISO 100-65-250/55		88	55	
39	NISO 100-65-250/75		108	75	
40	NISO 100-65-315/90		128	90	
41	NISO 100-65-315/110		148	110	
42	NISO 100-80-160/11		23	11	
43	NISO 100-80-160/15		30	15	
44	NISO 100-80-160/18.5		35	18.5	
45	NISO 100-80-160/22		40	22	
46	NISO 125-100-200/30	200	34	30	
47	NISO 125-100-200/37		41	37	
48	NISO 125-100-200/45		48	45	
49	NISO 125-100-200/55		55	55	
50	NISO 125-100-200/75		66	75	
51	NISO 125-100-250/75		75	75	
52	NISO 125-100-250/90		86	90	
53	NISO 125-100-250/110		100	110	
54	NISO 125-100-315/90		93	90	
55	NISO 125-100-315/110		108	110	
56	NISO 125-100-315/132		124	132	
57	NISO 125-100-315/160		144	160	

RAINFINE Irrigation Solution.

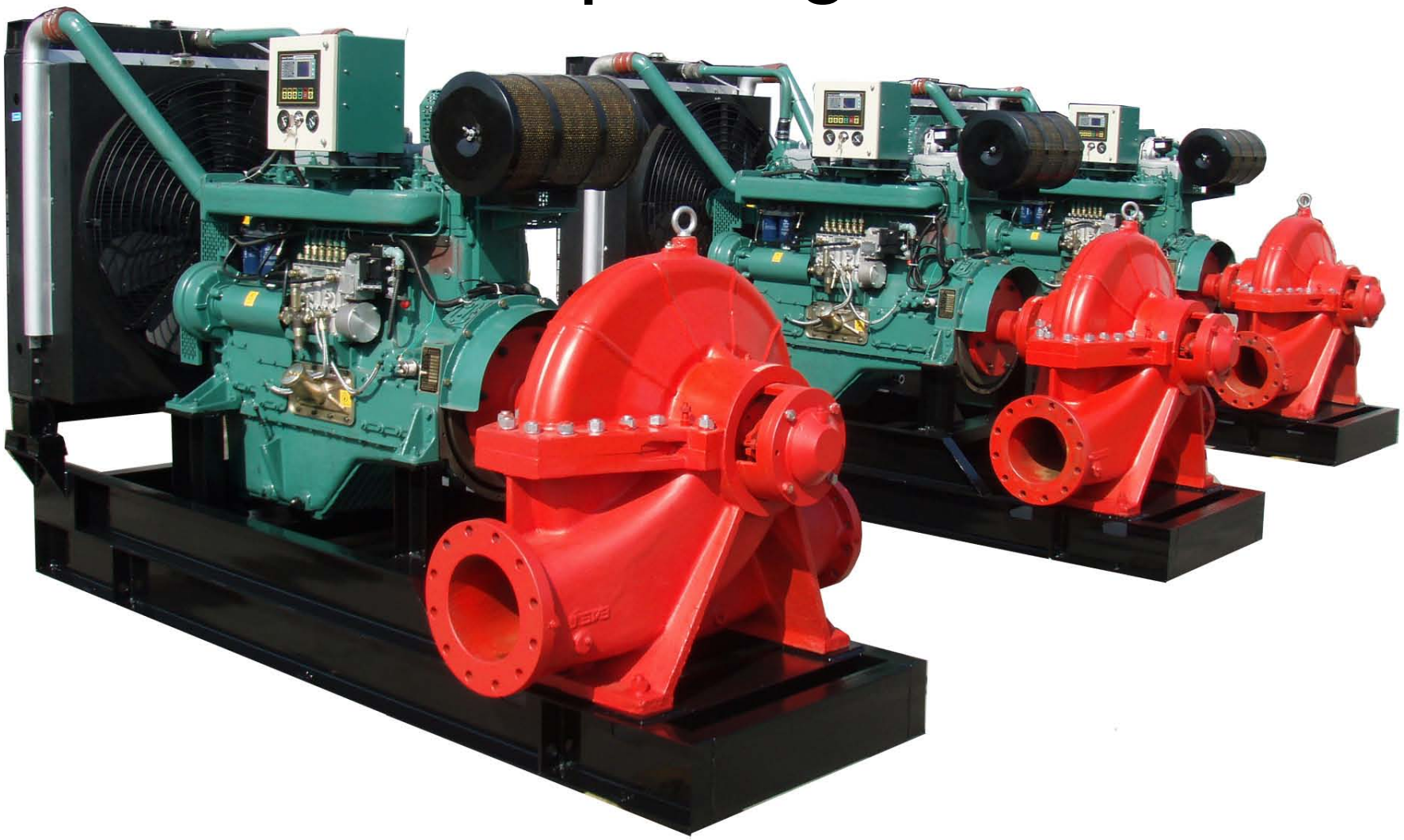
No.	Model	Q [m³/h]	H [m]	Motor [kW]	n [r/min]
34	NISO 125-80-400/15	50	39	15	1480
35	NISO 125-80-400/18.5		45	18.5	
36	NISO 125-80-400/22		50	22	
37	NISO 125-80-400/30		60	30	
38	NISO 125-80-400/37		67	37	
39	NISO 125-100-200/4	100	9	4	1450
40	NISO 125-100-200/5.5		11.5	5.5	
41	NISO 125-100-200/7.5		14	7.5	
42	NISO 125-100-200/11		16.5	11	1480
43	NISO 125-100-250/15		25	15	
44	NISO 125-100-315/11		23	11	
45	NISO 125-100-315/18.5		32	18.5	
46	NISO 125-100-315/22		36	22	
47	NISO 125-100-315/30		40	30	
48	NISO 125-100-400/30		50	30	
49	NISO 125-100-400/37		58	37	
50	NISO 125-100-400/45		65	45	
51	NISO150-125-250/11	200	12.5	11	
52	NISO150-125-250/15		16	15	
53	NISO150-125-250/18.5		20	18.5	
54	NISO150-125-250/22		24	22	
55	NISO150-125-315/30		32	30	
56	NISO150-125-315/37		39	37	
57	NISO150-125-400/45		50	45	
58	NISO150-125-400/55		57	55	
59	NISO150-125-400/75		68	75	
60	NISO200-150-315/37	400	23	37	
61	NISO200-150-315/45		27	45	
62	NISO200-150-315/55		32	55	
63	NISO200-150-315/75		38	75	
64	NISO200-150-400/75		43	75	
65	NISO200-150-400/90		50	90	
66	NISO200-150-400/110		62	110	
67	NISO250-200-315/37	500	20	37	
68	NISO250-200-315/45		23	45	
69	NISO250-200-315/55	630	24	55	
70	NISO250-200-315/75		32	75	
71	NISO250-200-400/90		37	90	
72	NISO250-200-400/110		44	110	
73	NISO250-200-400/132		53	132	
74	NISO250-200-400/160		60	160	

Single Stage Double Suction Split Casing Centrifugal Pumps

50Hz/60Hz

RAINFINE Irrigation Solution.

Pump+Engine



Application

Process Quench water, stripper bottoms, water circulation, cooling tower

Pulp & Paper Primary and secondary cleaner, filtrate, mill water supply, fan pump, shower

Primary Metals Cooling water, quench and leaching

Municipal High lift, low lift, wash water, waste water, raw water

Power Generation Cooling tower, component cooling, service water

Marine Bilge and ballast, cargo, cooling water, fire pump

General River water, brine, sea water, fire–fighting system, water and sewage works.

Pump can be design according to API610 BB1 type service for petroleum, petrochemical and natural gas industries

Materials of Construction

Volute casing

Cast iron
Ni–resist cast iron
Ductile cast iron
Carbon steel
Stainless steel
Duplex stainless steel

Impeller

Cast iron
Ni–resist cast iron
Ductile cast iron
Bronze
Stainless steel
Duplex stainless steel

Shaft

Cr–steel
Stainless steel

Wear ring

Cast iron
Ni–resist cast iron
Ductile cast iron
Bronze
Stainless steel

Operating Data

Pumps Sizes to	DN	1400mm
Capacities to	Q	20000m³/h
Heads to	H	230m
Temperatures to	T	+105℃
Operating Pressure to	P	30bar

Model Code

NSC **200** – **125** – **290** **V**

- Series
- Suction (mm)
- Discharge (mm)
- Nominal Impeller Diameter (mm)
- Vertical Type

RAINFINE Irrigation Solution.

水泵电机功率(kW)=0.00384*流量(m^3/hr)*扬程(m)

Pump motor(kW)=0.00384*Flow(m^3/hr)*Charge head(m)

General Data

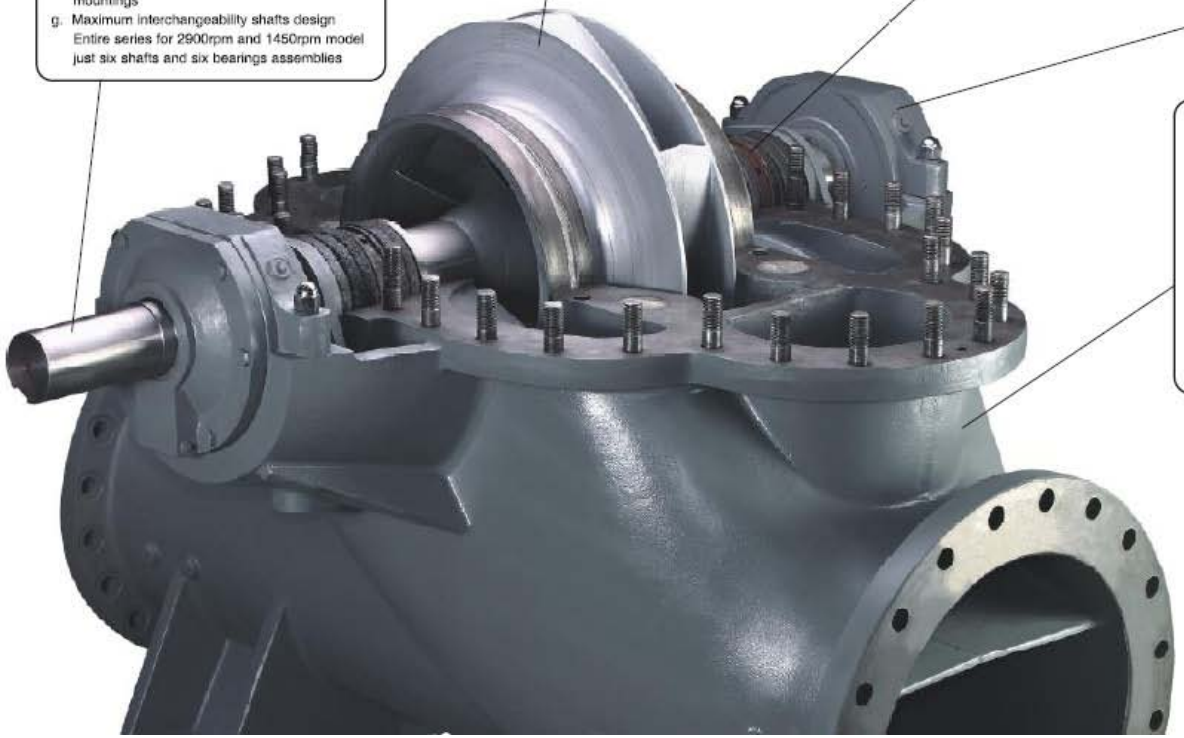
Design Features and Advantages

5.Shaft
a. Heavy duty shaft completely sealed and dry for zero corrosion
b. Short and rigid with negligible vibrations
c. Replaceable shaft protecting sleeves
d. No threads exposed to pumped medium, long operating life and no corrosion
e. Adjustment–free assembly
f. Quick and easy assembly/dismantling of the rotor components due to elastically prestressed mountings
g. Maximum interchangeability shafts design Entire series for 2900rpm and 1450rpm model just six shafts and six bearings assemblies

4.Impeller
a. Computer–optimized double entry impellers
b. Minimal axial thrust due to double–entry impeller
c. Impeller is statically and dynamically balanced according to ISO1940
d. Optional impeller wear rings
e. New vane passage with excellent hydraulic characteristics high–performance

3.Seal
a. Asbestos–free, potable water quality soft–packed stuffing boxes
b. Unbalanced mechanical seal, according to DIN24960.
Balance mechanical seal for operating pressure >16 bar on required
c. Cartridge–type mechanical seal on required

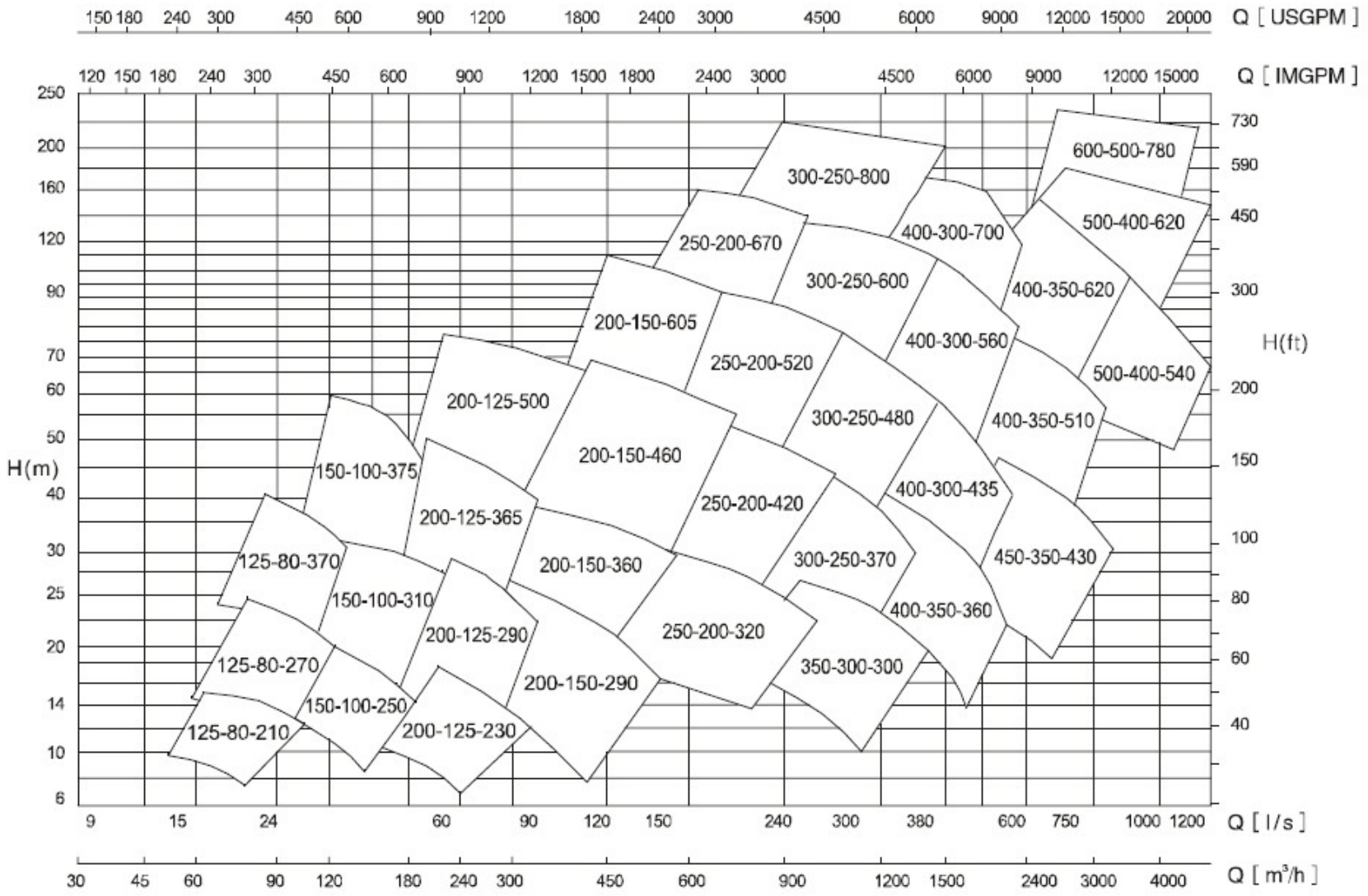
2. Bearing
a. SKF covered, sealed for life grease lubricated antifriction bearings for long service life
b. Open gland, enough space for service activities
c. Optional: oil lubrication with constant level oiler



1. Casing
a. In–line axially split design which permits removal of the complete rotor without moving the pipe and motor
b. Short distance between bearings
c. Leak–tight due to compact joint flange with long, Prestressed bolts
d. Counter–rotation possible with similar parts
e. Double volute casing reduces radial forces on the impeller and consequently the bearing loads
f. Easy mounting self–aligning upper casing
g. Flange drilled to ISO, DIN, BS or ANSI
h. Smooth surface inside and epoxy coating as required
i. Replaceable wear rings protect the casing at the impeller running clearances.
j. Excellent efficiencies and outstanding NPSH
k. Heavy duty casing design for high working pressure

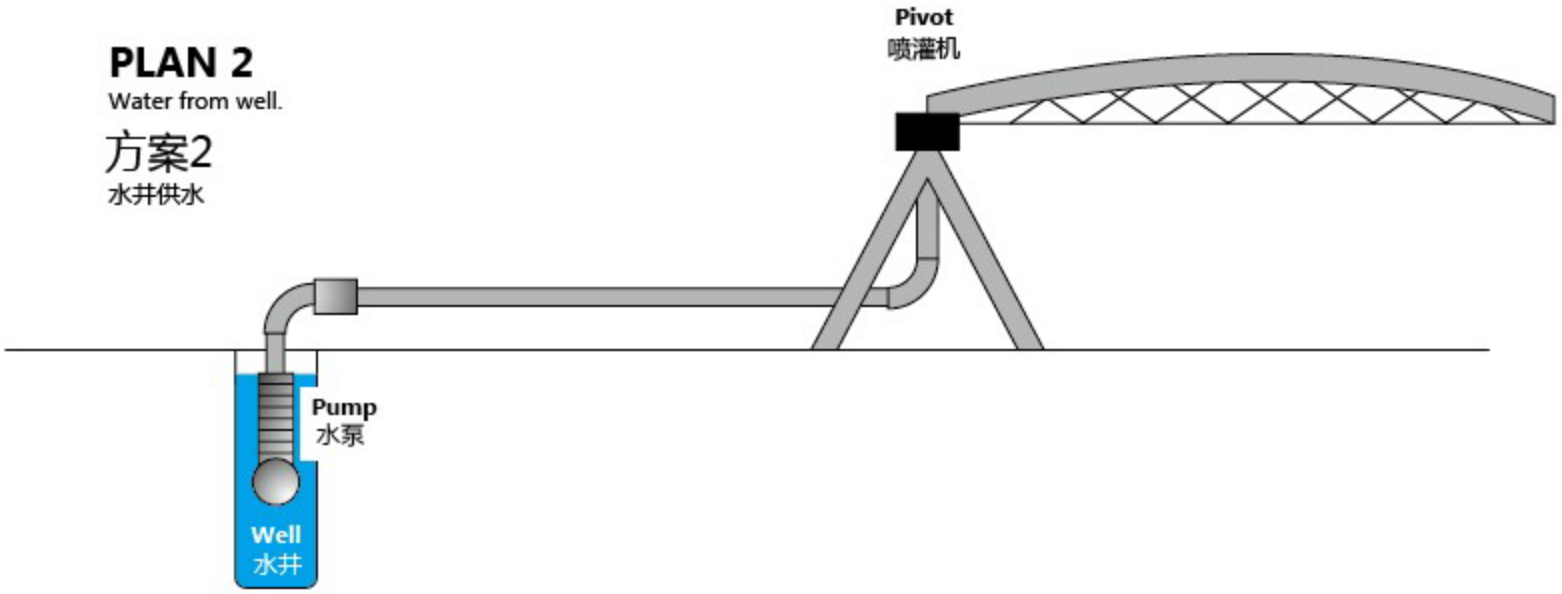
n= 1450 rpm

50Hz



PLAN 2
Water from well.

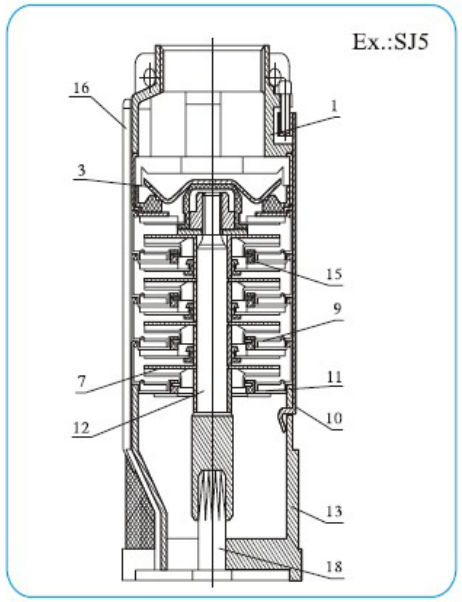
方案2
水井供水

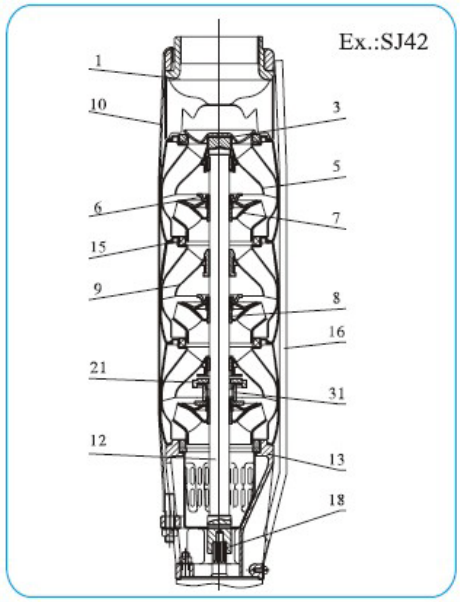


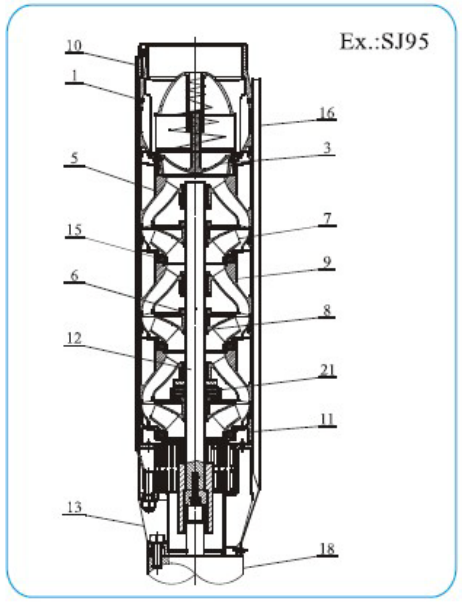
Stainless Steel Multistage Deep-Well Submersible Pump

SJ 17 — 25
- Stage
- Rated flow [m³/h]
- Stainless Steel Multistage Deep-Well Submersible Pump

SJ 60 — 9 — 2
- Number of small impeller
- Stage
- Rated flow [m³/h]
- Stainless Steel Multistage Deep-Well Submersible Pump



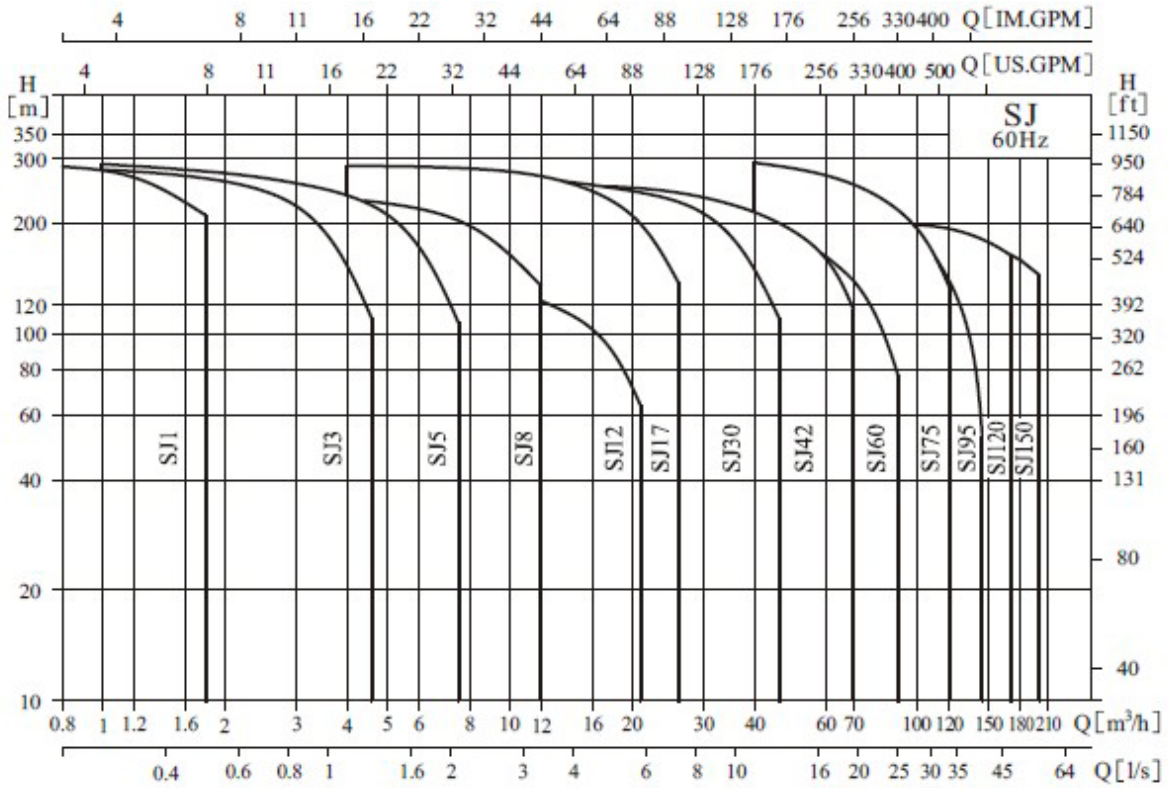




Material

NO.	Name	Material	AISI
1	Discharge head	SS304	AISI304
3	Valve cap	SS304	AISI304
5	Discharge diffuser	SS304	AISI304
6	Impeller nut	SS304	AISI304
7	Impeller	SS304	AISI304
8	Impeller cone	SS304	AISI304
9	Diffuser	SS304	AISI304
10	Straps	SS304	AISI304
11	Inducer	SS304	AISI304
12	Pump shaft	SS304/420/431	AISI304/420/431
13	Suction Interconnector	SS304	AISI304
15	Neck ring	PBT/NBR	
16	Cable guard	SS304	AISI304
18	Submersible motor		
21	Inlet spacer	Carbon	
31	Connecting sleeve	SS304	AISI304

RAINFINE Irrigation Solution.



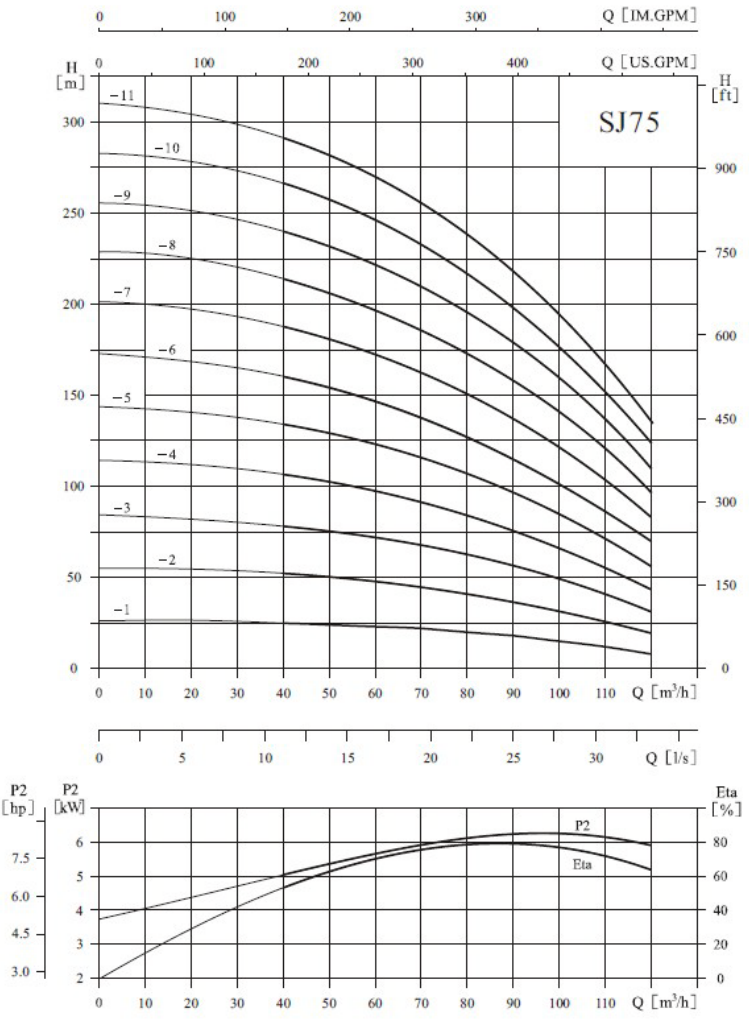
60Hz

Rated flow [m³/h]	1	3	5	8	12	17	30	42	60	75	95	120	150
Rated flow [l/s]	0.28	0.83	1.39	2.22	3.33	4.72	8.33	11.7	16.7	20.8	26.4	33.3	41.6
Flow range [m³/h]	0.2~1.8	0.6~4.6	1.0~7.5	2~12	4~21	4~26	8~46	10~70	10~90	40~120	50~145	70~170	90~200
Flow range [l/s]	0.06~0.5	0.17~1.3	0.28~2.1	0.56~3.3	1.1~5.8	1.1~7.2	2.2~12.8	2.8~19.4	2.8~25	11.1~33.3	13.9~40.3	19.4~47.2	25~55.5
Max pressure [bar]	30	29	28	22	13	27	28	26	24	30	27	21	18
Motor power [kW]	0.37~3	0.37~4	0.55~5.5	0.75~7.5	1.5~7.5	1.1~15	1.5~22	3~37	3~37	13~75	15~75	15~110	15~110
Max efficiency [%]	45	58	59	60	61	74	75	75	79	79	80	77	77
Pipe screw joint	Rp1 1/4	Rp1 1/4	Rp1 1/2	Rp2	Rp2	Rp2 1/2	Rp3	Rp3	Rp4	Rp5	Rp5	Rp6	Rp6

RAINFINE Irrigation Solution.

Performance curve

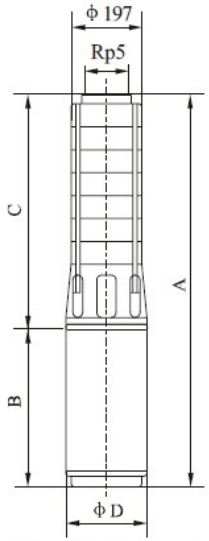
ISO9906 Annex A 3500rpm



Performance table

Model	Driving motor (kW)	Driving motor (hp)	Q (m³/h)	40	50	60	70	75	80	90	100	110	120
SJ75-1	7.5	10	H (m)	25	24	23	22	21	20	18	15	12	8
SJ75-2	13	17.5		52	50	47	44	42.5	40.5	36.5	32	26.5	19.5
SJ75-3	22	30		78.5	75.5	71.5	67	65	62	56	49	41	31.5
SJ75-4	30	40		107	103	98	91	88	84	77	68	57	44
SJ75-5	37	50		134	129	122	114	110	106	96	84	72	57
SJ75-6	45	60		160	154	146	137	132	126	115	102	87	70
SJ75-7	45	60		188	181	173	161	155	149	136	121	104	83
SJ75-8	55	75		214	207	197	184	178	171	156	140	121	97
SJ75-9	63	85		240	232	221	208	201	194	177	158	136	110
SJ75-10	75	100		267	258	247	232	224	217	198	177	152	123
SJ75-11	75	100		292	283	270	255	246	238	217	194	168	135

Installation sketch



Size and weight

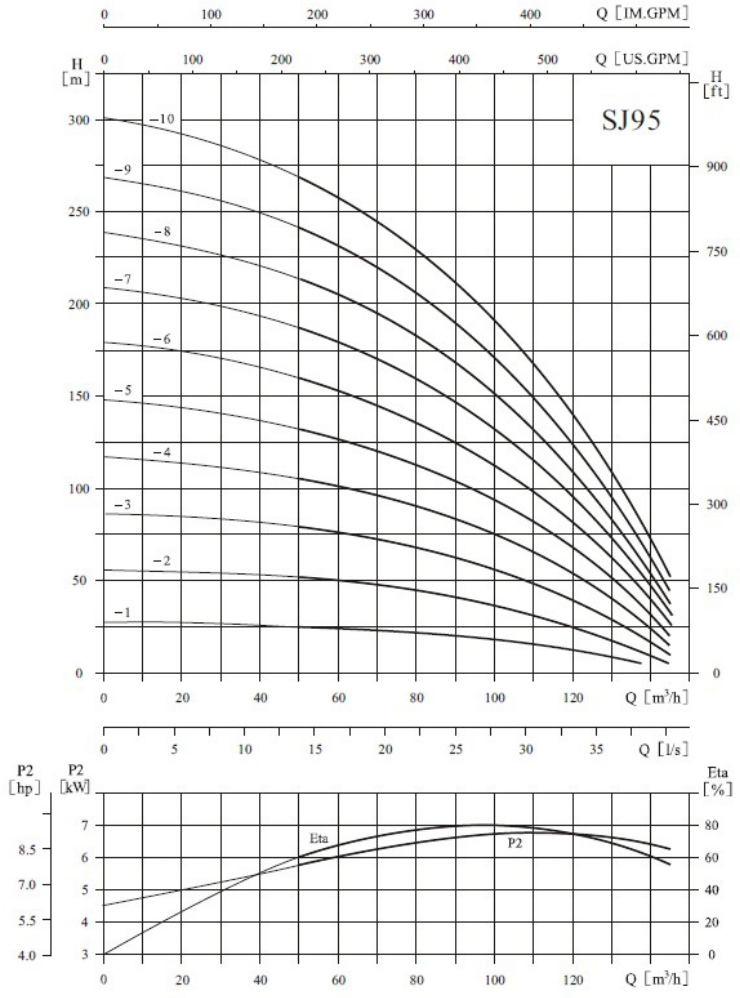
Model	Size(mm)(Coupled to 6'/8' motor) A	B	C	ϕ D	Weight (kg)
SJ75-1	1298/1285	810/780	488/505	143/184	70/79
SJ75-2	1594/1491	980/860	614/631	143/184	94/123
SJ75-3	1900/1697	1160/940	740/757	143/184	126/162
SJ75-4	2196/1933	1330/1050	866/883	143/184	156/195
SJ75-5	2562/2159	1570/1150	992/1009	143/184	184/212
SJ75-6	2375	1240	1135	184	229
SJ75-7	2501	1240	1261	184	235
SJ75-8	2757	1370	1387	184	253
SJ75-9	3003	1490	1513	192	272
SJ75-10	3179	1540	1639	192	298
SJ75-11	3305	1540	1765	192	304

Note: The size B is varied with the motors of different manufacturers.

RAINFINE Irrigation Solution.

Performance curve

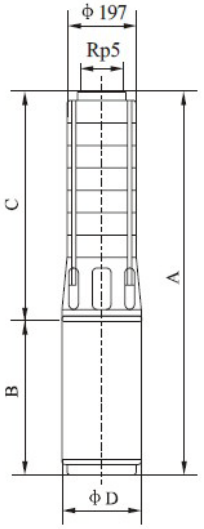
ISO9906 Annex A 3500rpm



Performance table

Model	Driving motor (kW)	Driving motor (hp)	Q (m³/h)	50	60	70	80	90	95	100	110	120	130	145
SJ95-1	7.5	10	H (m)	25	24	23	21.5	20	18.5	17	15	12	8.5	—
SJ95-2	15	20		52	50.5	48	44.5	40.5	38	36	31	25.5	19.5	5
SJ95-3	22	30		78.5	75.5	72	67	62	59	55.5	47.5	39	30	9
SJ95-4	30	40		105	102	96	90	83	79	75	65	53	41	15
SJ95-5	37	50		133	127	121	113	104	99	94	81	67	51	20
SJ95-6	45	60		160	153	145	136	125	119	113	98	82	63	26
SJ95-7	55	75		187	179	170	173	146	140	132	116	96	73	32
SJ95-8	63	85		214	205	194	182	167	159	151	132	110	84	37
SJ95-9	63	85		242	232	219	204	188	180	171	150	125	95	45
SJ95-10	75	100		269	258	244	228	210	201	191	168	140	107	52

Installation sketch



Size and weight

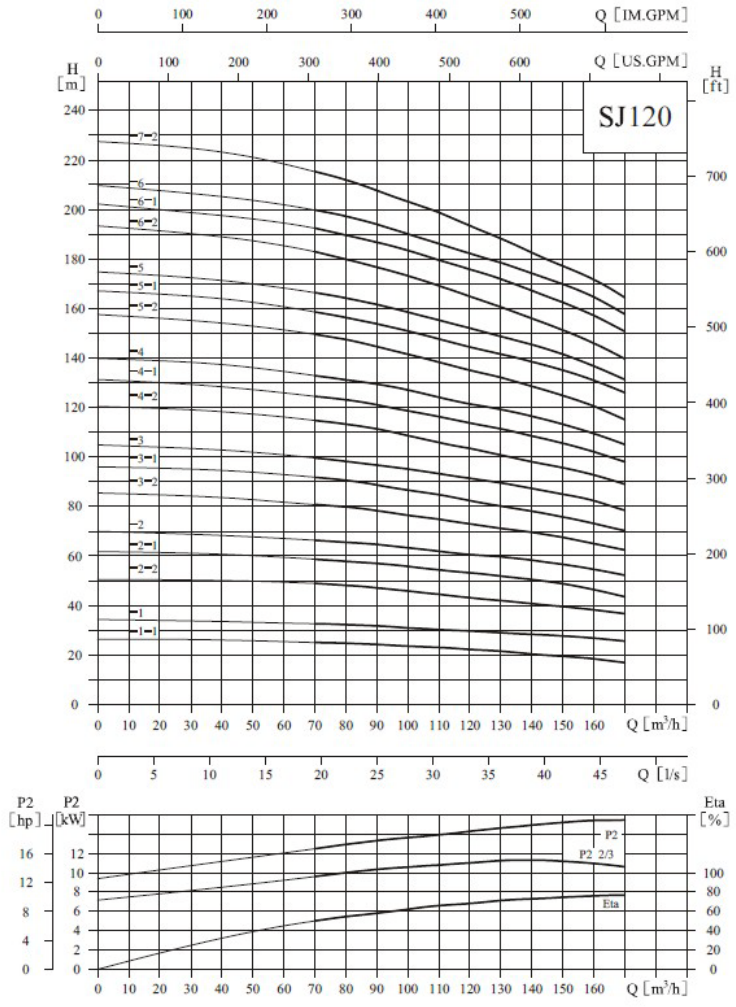
Model	Size(mm)(Coupled to 6'/8' motor) A	B	C	Φ D	Weight (kg)
SJ95-1	1298/1285	810/780	488/505	143/184	71/80
SJ95-2	1644/1491	1030/860	614/631	143/184	101/124
SJ95-3	1900/1697	1160/940	740/757	143/184	127/163
SJ95-4	2196/1933	1330/1050	866/883	143/184	158/196
SJ95-5	2562/2159	1570/1150	992/1009	143/184	186/214
SJ95-6	2375	1240	1135	184	232
SJ95-7	2631	1370	1261	184	250
SJ95-8	2877	1490	1387	192	270
SJ95-9	3003	1490	1513	192	276
SJ95-10	3179	1540	1639	192	302

Note: The size B is varied with the motors of different manufacturers.

RAINFINE Irrigation Solution.

Performance curve

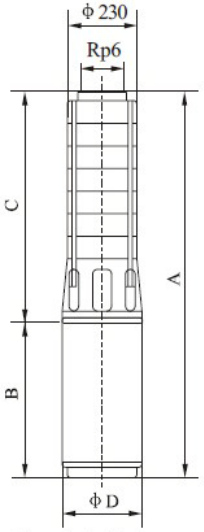
ISO9906 Annex A 3500rpm



Performance table

Model	Driving motor (kW)	Driving motor (hp)	Q (m^3/h)	70	80	90	100	110	120	130	140	150	160	170
SJ120-1-1	15	20	H (m)	25	24.5	24	23.5	23	22	21.5	20.5	19.5	18.5	16.5
SJ120-1	18.5	25		32.5	32	31.5	31	30	29.5	29	28	27.5	26.5	25.5
SJ120-2-2	25	30		48.5	48	47	45.5	44.5	43	42	40.5	39.5	38	36.5
SJ120-2-1	30	40		58.5	57.5	57	55.5	54	53	51.5	50.5	48.9	46.5	43.5
SJ120-2	37	50		66	65.5	64.5	63	61.5	60.5	59.5	58	56.5	54.5	52
SJ120-3-2	45	60		80.5	79.5	78	76.5	74.5	73	71	69.5	67.5	65	62.5
SJ120-3-1	45	60		91.5	90.5	88.5	86.5	84.5	82	80	78	75.5	73	70
SJ120-3	55	75		99.5	98	96.5	95	93	91	89.5	87	85	82	78.5
SJ120-4-2	63	85		114.5	113	111	108.5	105.5	103	100.5	98	95.5	92.5	89
SJ120-4-1	63	85		124.5	123	121	118.5	116	113.5	111	108.5	105.5	102	98
SJ120-4	75	100		132.5	131	129	127	124	121.5	119	116.5	113	109.5	105
SJ120-5-2	75	100		149.5	147	144.5	141.5	138	135	132	128.5	124.5	120.5	115
SJ120-5-1	90	120		158.5	156	153	150.5	147.5	144.5	141.5	138.5	135	131	126
SJ120-5	90	120		166	164	161.5	158.5	155	152	148.5	145	141.5	136.5	131
SJ120-6-2	90	120		182.5	179.5	176.5	173	169	164.5	160.5	156	151	146	139.5
SJ120-6-1	110	150		192.5	189.5	186.5	183.5	179.5	175.5	171.5	167	162	157	150.5
SJ120-6	110	150		199.5	197	193.5	190	186	182	178	174	169.5	164.5	159.5
SJ120-7-2	110	150		215	211.5	207.5	203	198.5	193.5	188	182.5	177	171.5	164

Installation sketch



Size and weight

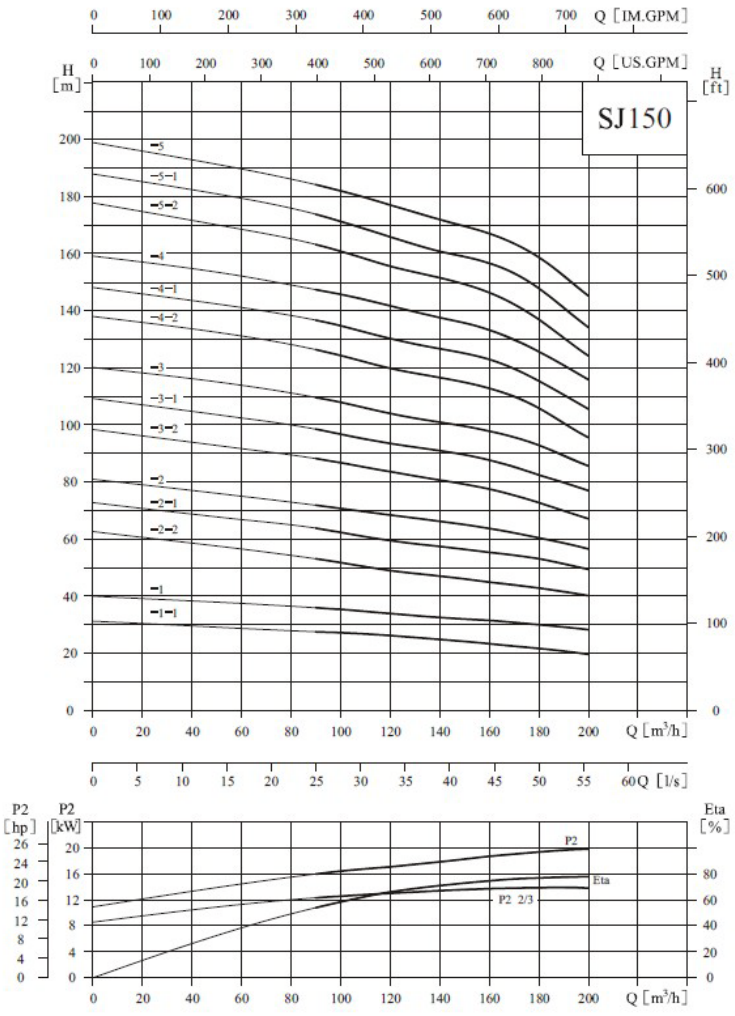
Model	Size(mm) A	Size(mm) B	Size(mm) C	Size(mm) ϕD	Weight (kg)
SJ120-1-1	1420	860	560	184	127
SJ120-1	1450	890	560	184	132
SJ120-2-2	1710	990	720	184	165
SJ120-2-1	1770	1050	720	184	179
SJ120-2	1870	1150	720	184	193
SJ120-3-2	2120	1240	880	184	216
SJ120-3-1	2120	1240	880	184	216
SJ120-3	2250	1370	880	184	236
SJ120-4-2	2530	1490	1040	192	272
SJ120-4-1	2530	1490	1040	192	272
SJ120-4	2580	1540	1040	192	282
SJ120-5-2	2740	1540	1200	192	290
SJ120-5-1	2844	1644	1200	192	310
SJ120-5	2844	1644	1200	192	310
SJ120-6-2	3004	1644	1360	192	318
SJ120-6-1	3124	1764	1360	192	344
SJ120-6	3124	1764	1360	192	344
SJ120-7-2	3284	1764	1520	192	352

Note: The size B is varied with the motors of different manufacturers.

RAINFINE Irrigation Solution.

Performance curve

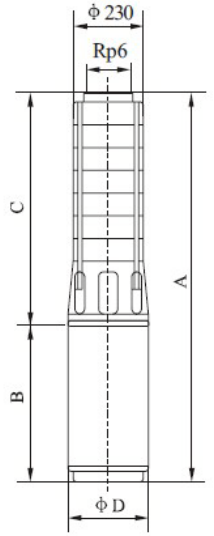
ISO9906 Annex A 3500rpm



Performance table

Model	Driving motor (kW)	Driving motor (hp)	Q (m³/h)	90	100	120	140	150	160	180	200
SJ150-1-1	15	20	H (m)	27.5	27	26	24.5	24	23	21.5	19.5
SJ150-1	22	30		36	35	33.5	32.5	32	31.5	30	28
SJ150-2-2	30	40		53	51.5	49	47	46	45	42.5	40
SJ150-2-1	37	50		63.5	62	59.5	57	56	55	53	49
SJ150-2	45	60		71.5	70.5	68	66	65	63.5	60	56.5
SJ150-3-2	55	75		88	86.5	83.5	80.5	79	77.5	72.5	67
SJ150-3-1	63	85		98.5	96.5	93.5	91	89.5	87.5	82.5	76.5
SJ150-3	63	85		109.5	107.5	104	101	99.5	97.5	92.5	85.5
SJ150-4-2	75	100		126	124	119.5	116.5	114.5	112.5	105.5	95.5
SJ150-4-1	90	120		136.5	134.5	130	126.5	125	122.5	115	105.5
SJ150-4	90	120		147	145.5	141.5	137.5	135.5	133	125.5	115.5
SJ150-5-2	110	150		163	160.5	155.5	151.5	149	146	136.5	124
SJ150-5-1	110	150		173.5	171	165.5	160.5	158.5	156.5	147.5	134
SJ150-5	110	150		184	182	177	171.5	169.5	167	158.5	145

Installation sketch



Size and weight

Model	Size(mm) A	B	C	ϕ D	Weight (kg)
SJ150-1-1	1420	860	560	184	127
SJ150-1	1500	940	560	184	147
SJ150-2-2	1770	1050	720	184	180
SJ150-2-1	1870	1150	720	184	194
SJ150-2	1960	1240	720	184	209
SJ150-3-2	2250	1370	880	184	237
SJ150-3-1	2370	1490	880	184	264
SJ150-3	2370	1490	880	184	264
SJ150-4-2	2580	1540	1040	192	282
SJ150-4-1	2684	1644	1040	192	302
SJ150-4	2684	1644	1040	192	302
SJ150-5-2	2964	1764	1200	192	336
SJ150-5-1	2964	1764	1200	192	336
SJ150-5	2964	1764	1200	192	336

Note: The size B is varied with the motors of different manufacturers.

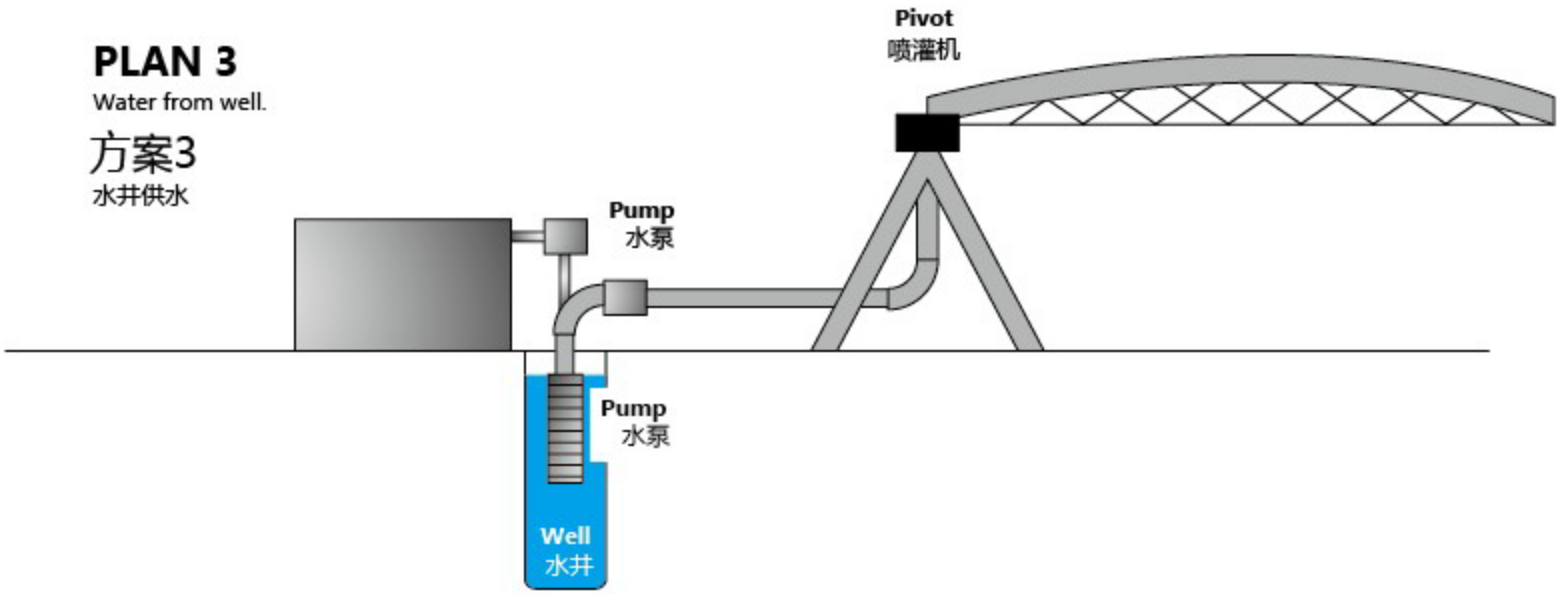
RAINFINE Irrigation Solution.

PLAN 3

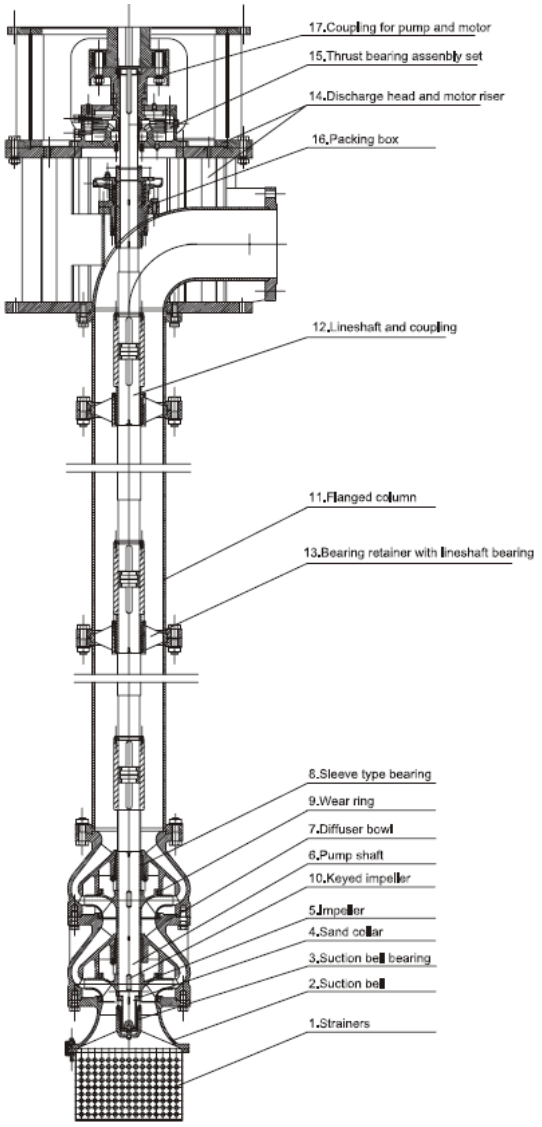
Water from well.

方案3

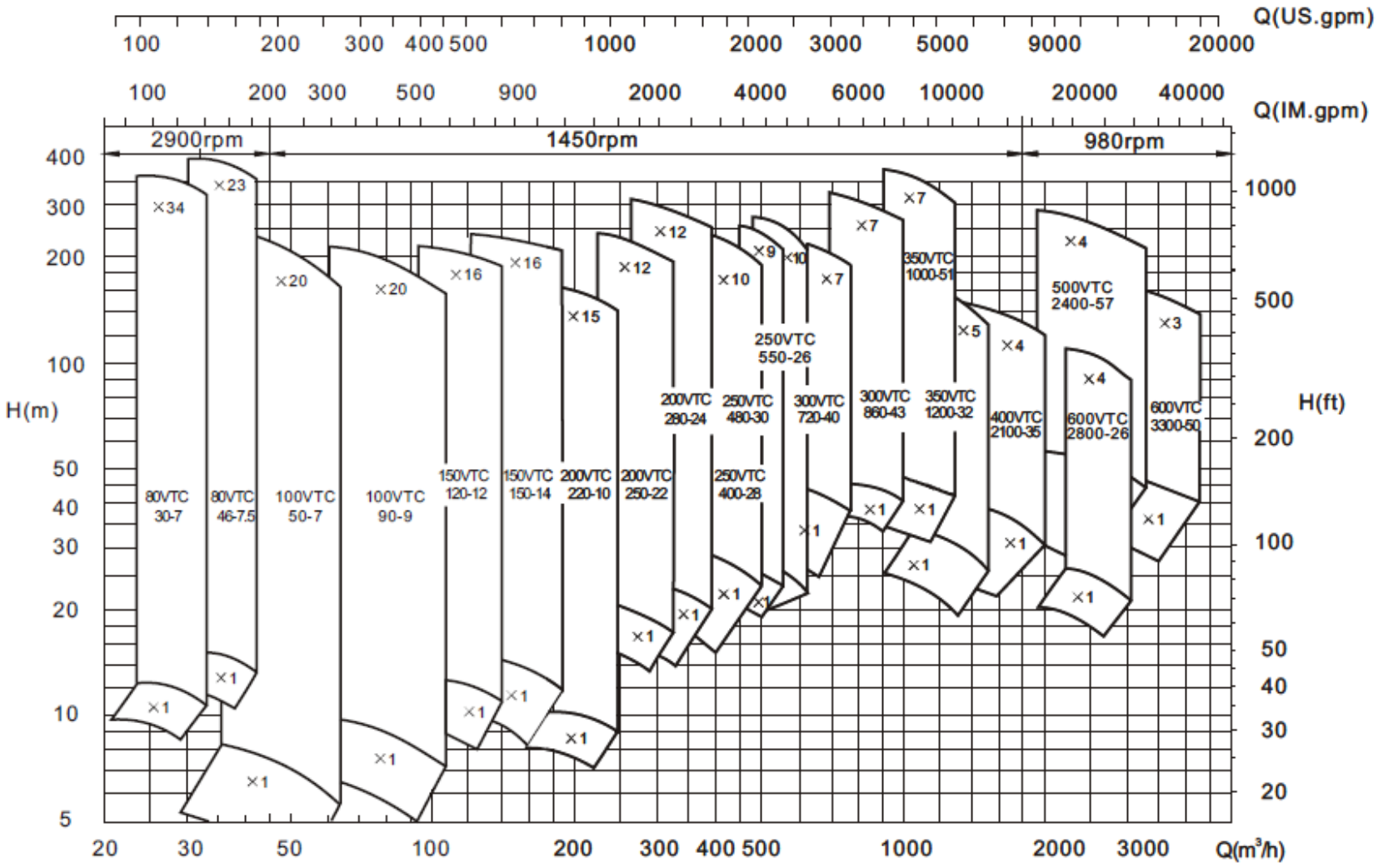
水井供水

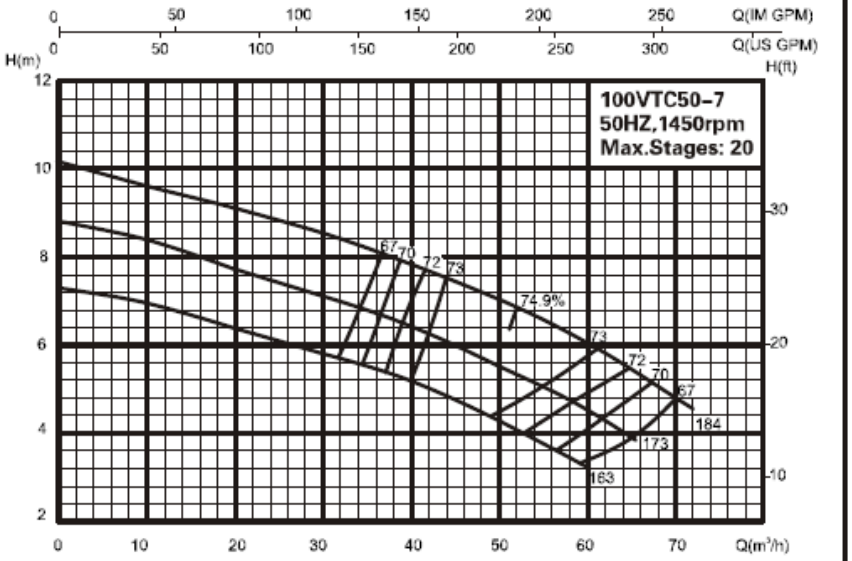


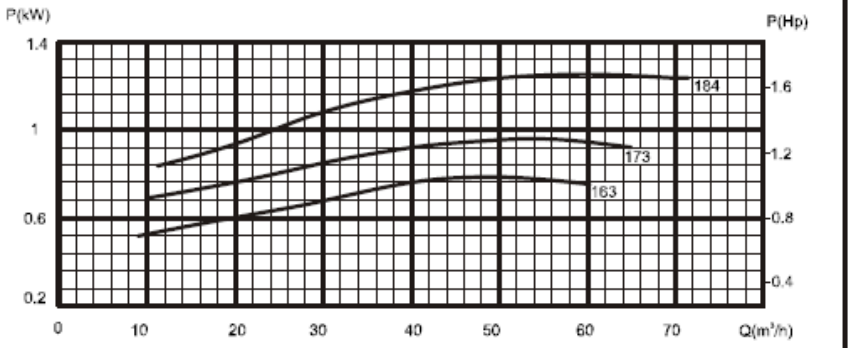
Vertical Turbine Pumps

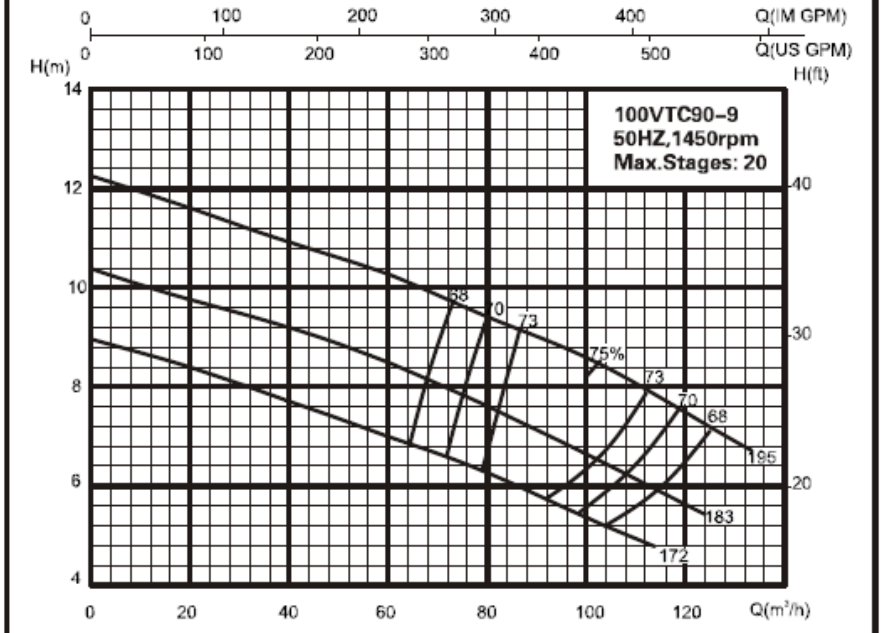

17.Coupling for pump and motor
15.Thrust bearing assenbly set
14.Discharge head and motor riser
16.Packing box
12.Lineshaft and coupling
11.Flanged column
13.Bearing retainer with lineshaft bearing
8.Sleeve type bearing
9.Wear ring
7.Diffuser bowl
6.Pump shaft
10.Keyed impeller
5.Impeller
4.Sand collar
3.Suction bell bearing
2.Suction bell
1.Strainers

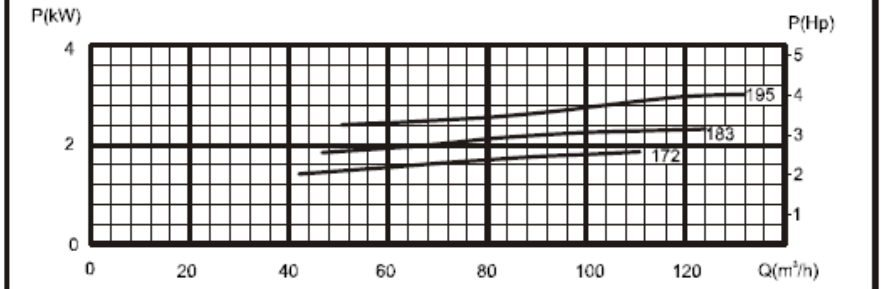

离合器
(clutch)
发电机

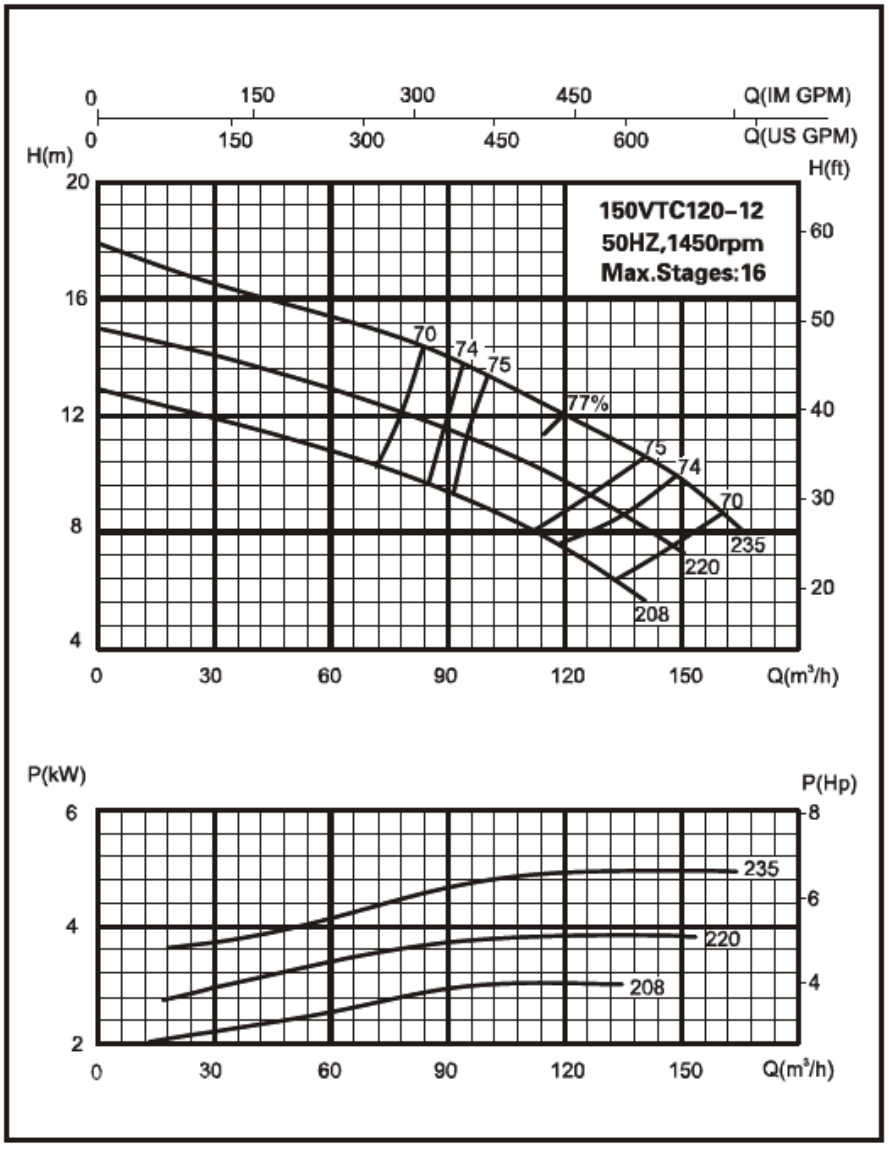

Q(US.gpm)
100 200 300 400 500 1000 2000 3000 5000 9000 20000
Q(IM.gpm)
100 200 300 500 900 2000 4000 6000 10000 20000 40000
2900rpm
1450rpm
980rpm
H(m)
H(ft)
400 300 200 100 50 40 30 20 10 5
1000 500 200 100 50 40 30 20
80VTC 30-7
80VTC 46-7.5
100VTC 50-7
100VTC 90-9
150VTC 120-12
150VTC 150-14
200VTC 220-10
200VTC 250-22
200VTC 280-24
250VTC 400-28
250VTC 480-30
250VTC 550-26
300VTC 720-40
300VTC 860-43
350VTC 1200-32
350VTC 1000-51
400VTC 2100-35
500VTC 2400-57
600VTC 2800-26
600VTC 3300-50
×34 ×23 ×20 ×20 ×16 ×16 ×15 ×12 ×12 ×10 ×9 ×10 ×7 ×7 ×7 ×5 ×4 ×4 ×4 ×3
×1
20 30 50 100 200 300 400 500 1000 2000 3000
Q(m³/h)

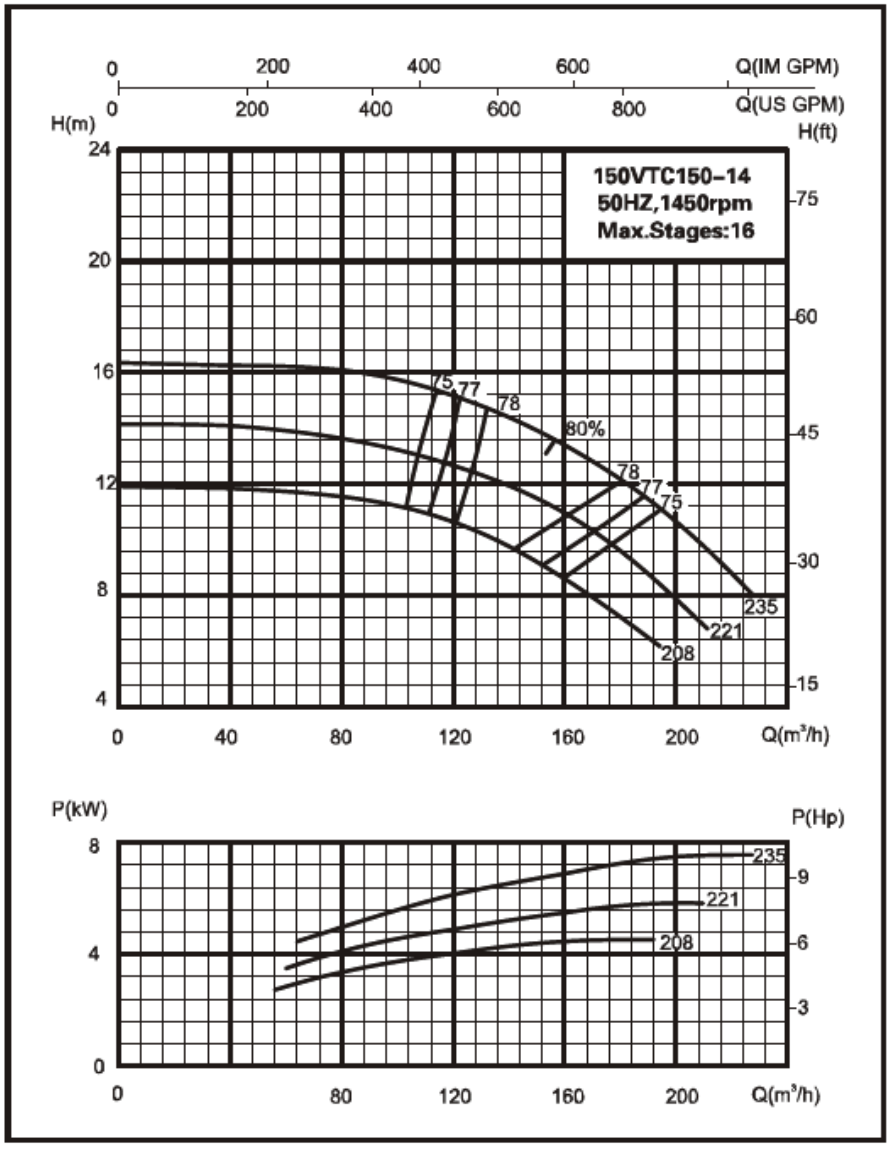

Q(IM GPM)
Q(US GPM)
H(m)
H(ft)
100VTC50-7
50HZ,1450rpm
Max.Stages: 20
74.9%
Q(m³/h)

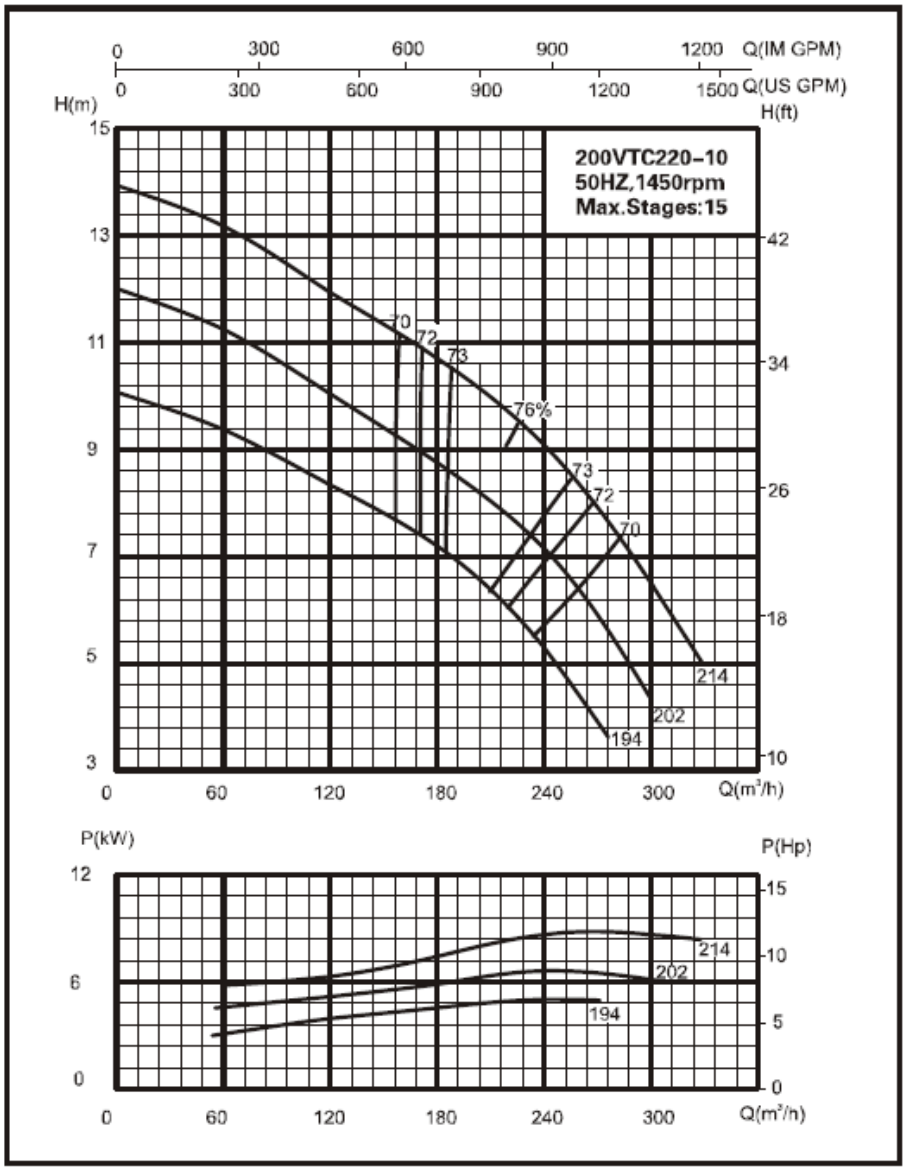

P(kW)
P(Hp)
Q(m³/h)

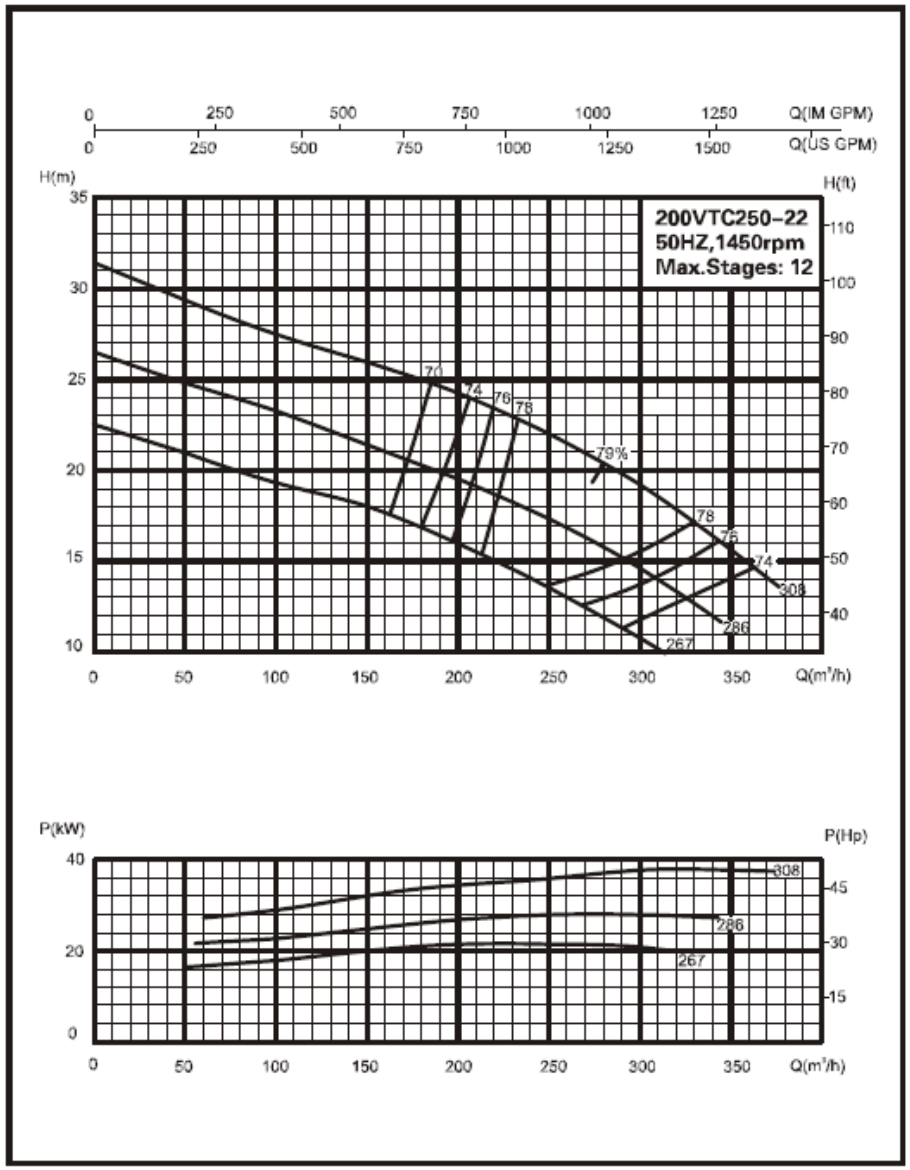

Q(IM GPM)
Q(US GPM)
H(m)
H(ft)
100VTC90-9
50HZ,1450rpm
Max.Stages: 20
75%
Q(m³/h)

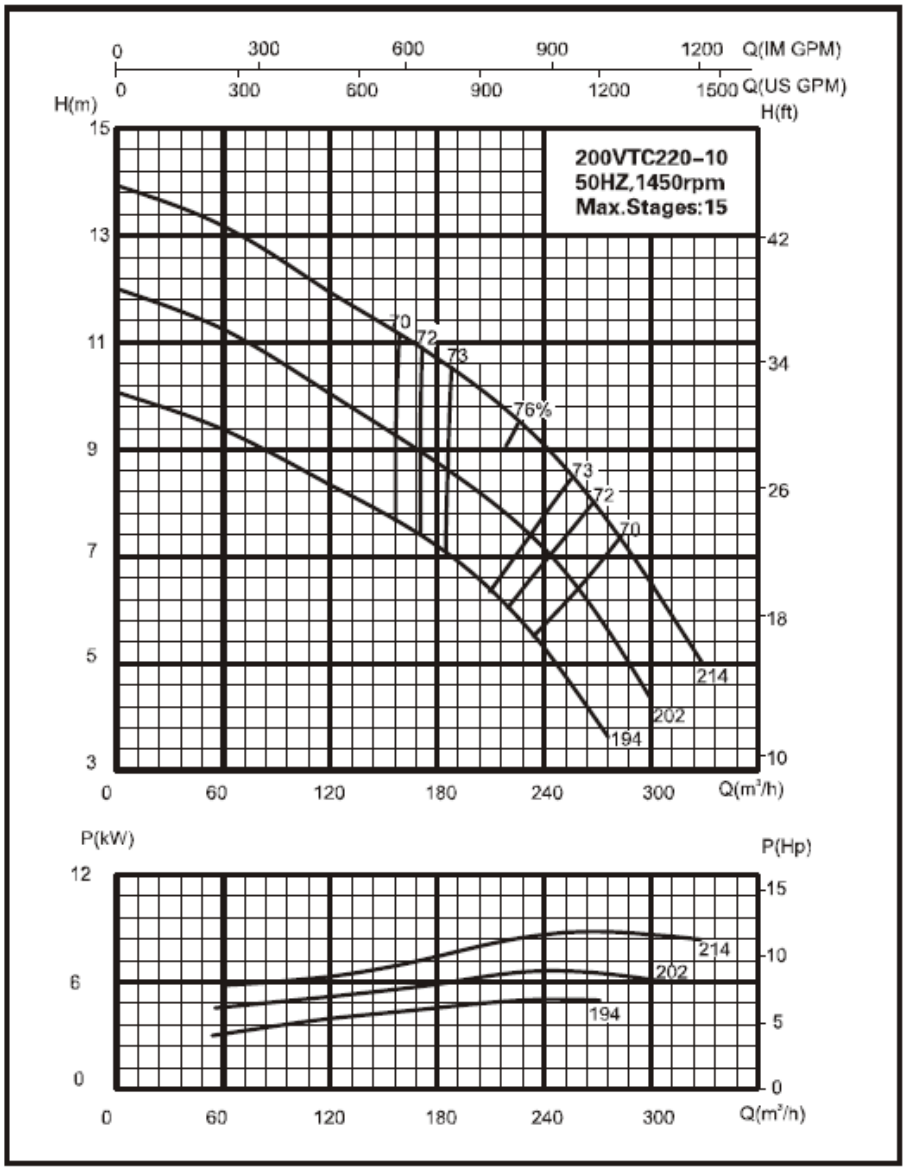

P(kW)
P(Hp)
Q(m³/h)

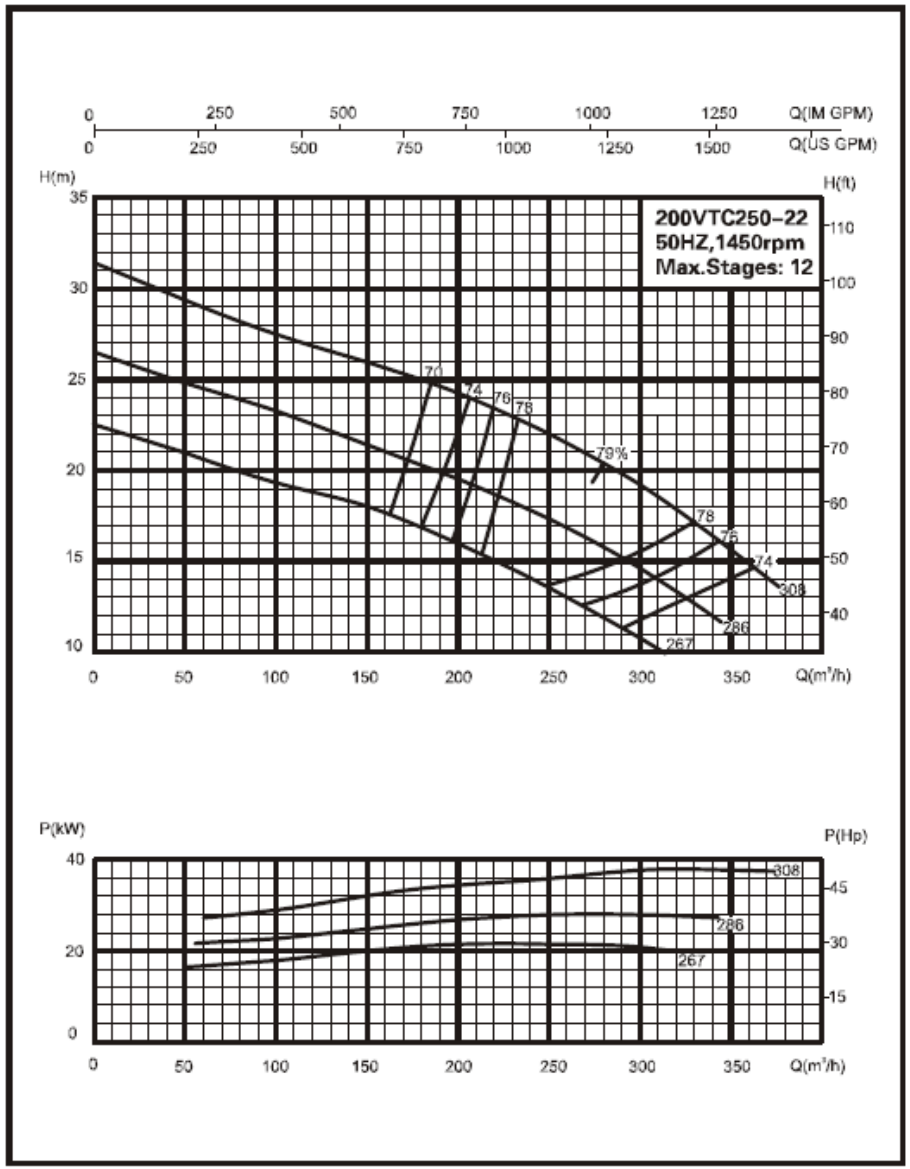

0 150 300 450 Q(IM GPM)
0 150 300 450 600 Q(US GPM)
H(m)
H(ft)
150VTC120-12
50HZ,1450rpm
Max.Stages:16
70
74
75
77%
75
74
70
235
220
208
0 30 60 90 120 150 Q(m³/h)
P(kW)
P(Hp)
235
220
208
0 30 60 90 120 150 Q(m³/h)

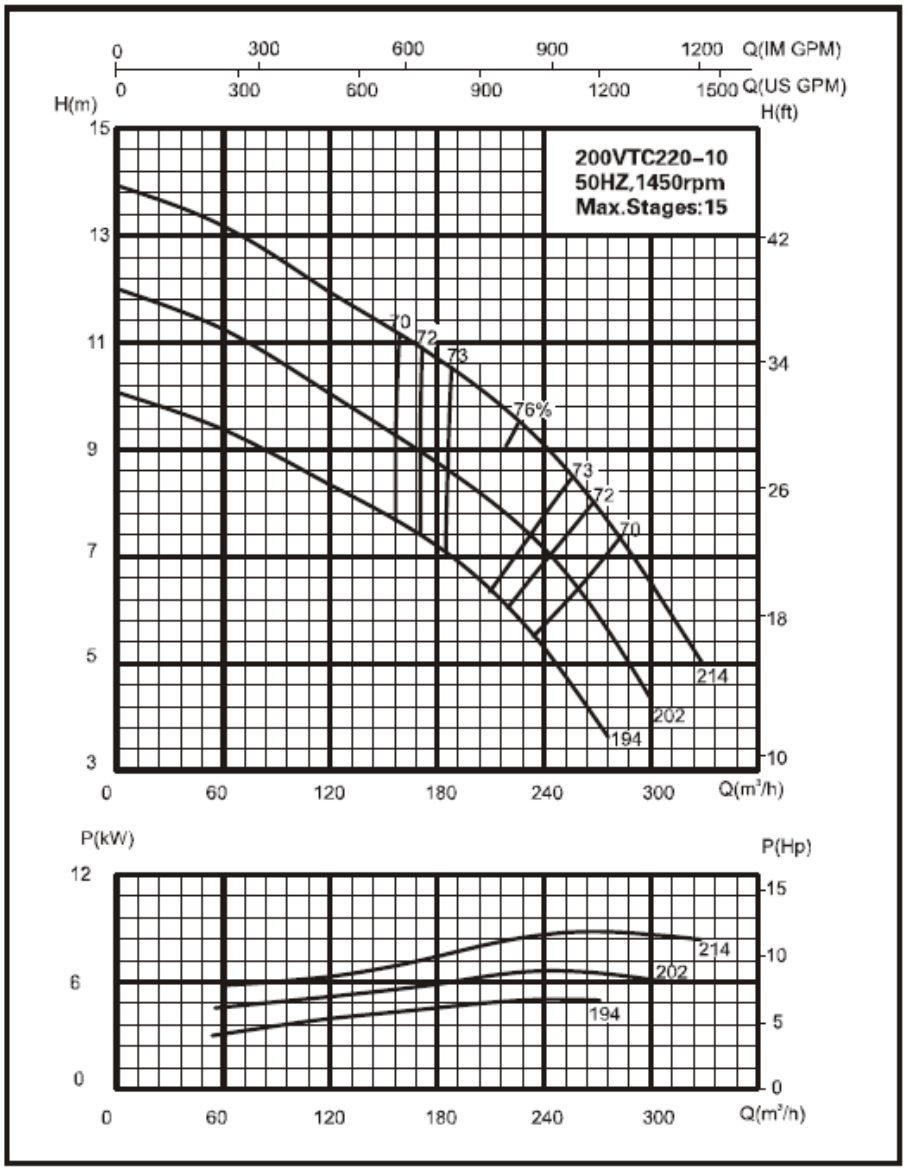

0 200 400 600 Q(IM GPM)
0 200 400 600 800 Q(US GPM)
H(m)
H(ft)
150VTC150-14
50HZ,1450rpm
Max.Stages:16
75
77
78
80%
78
77
75
235
221
208
0 40 80 120 160 200 Q(m³/h)
P(kW)
P(Hp)
235
221
208
0 80 120 160 200 Q(m³/h)

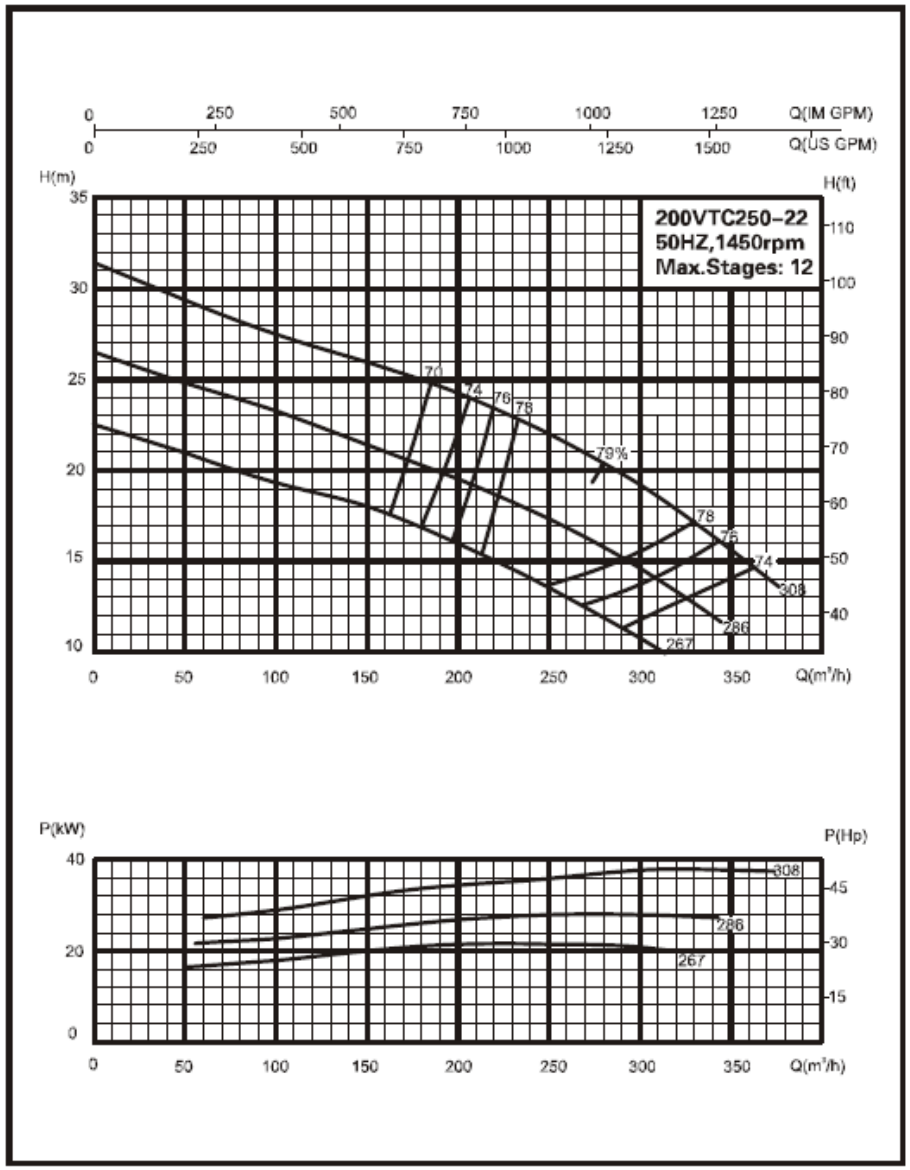

0 300 600 900 1200 Q(IM GPM)
0 300 600 900 1200 1500 Q(US GPM)
H(m)
H(ft)
200VTC220-10
50HZ,1450rpm
Max.Stages:15
70
72
73
76%
73
72
70
214
202
194
15 13 11 9 7 5 3
42 34 26 18 10
0 60 120 180 240 300 Q(m³/h)
P(kW)
P(Hp)
12 6 0
15 10 5 0
214
202
194
0 60 120 180 240 300 Q(m³/h)

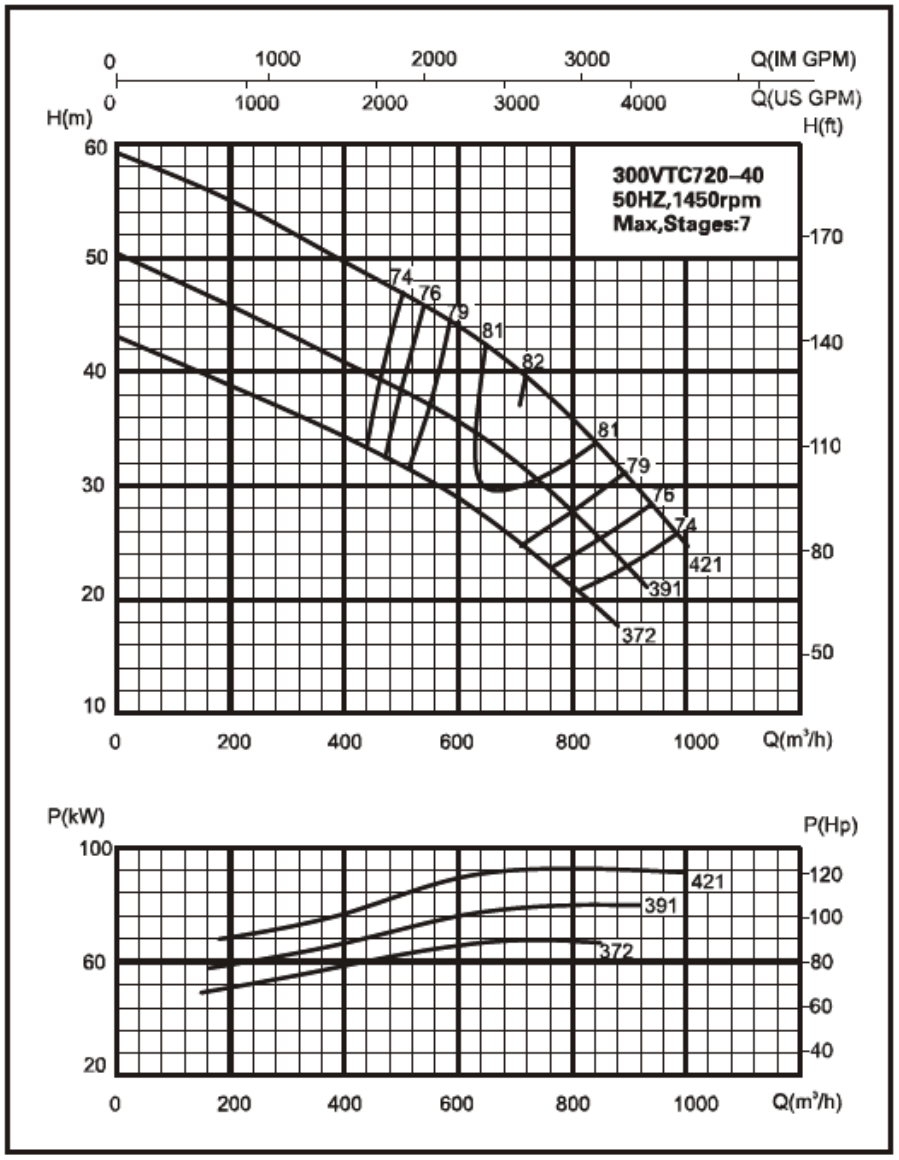

0 250 500 750 1000 1250 Q(IM GPM)
0 250 500 750 1000 1250 1500 Q(US GPM)
H(m)
H(ft)
200VTC250-22
50HZ,1450rpm
Max.Stages: 12
70
74
76
78
79%
78
76
74
308
286
267
35 30 25 20 15 10
110 100 90 80 70 60 50 40
0 50 100 150 200 250 300 350 Q(m³/h)
P(kW)
P(Hp)
40 20 0
45 30 15
308
286
267
0 50 100 150 200 250 300 350 Q(m³/h)

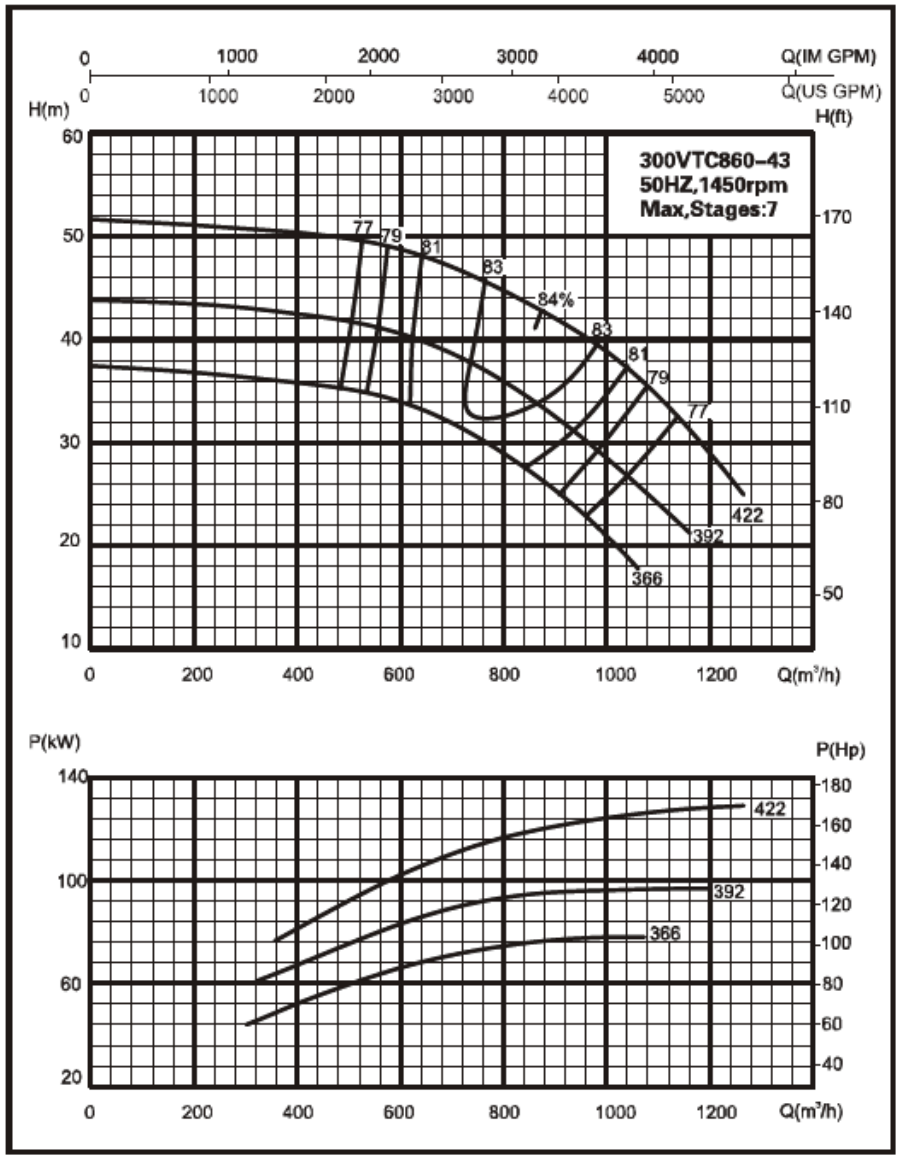

0 300 600 900 1200 Q(IM GPM)
0 300 600 900 1200 1500 Q(US GPM)
H(m)
H(ft)
200VTC220-10
50HZ,1450rpm
Max.Stages:15
70
72
73
76%
73
72
70
214
202
194
Q(m³/h)
P(kW)
P(Hp)
214
202
194
Q(m³/h)

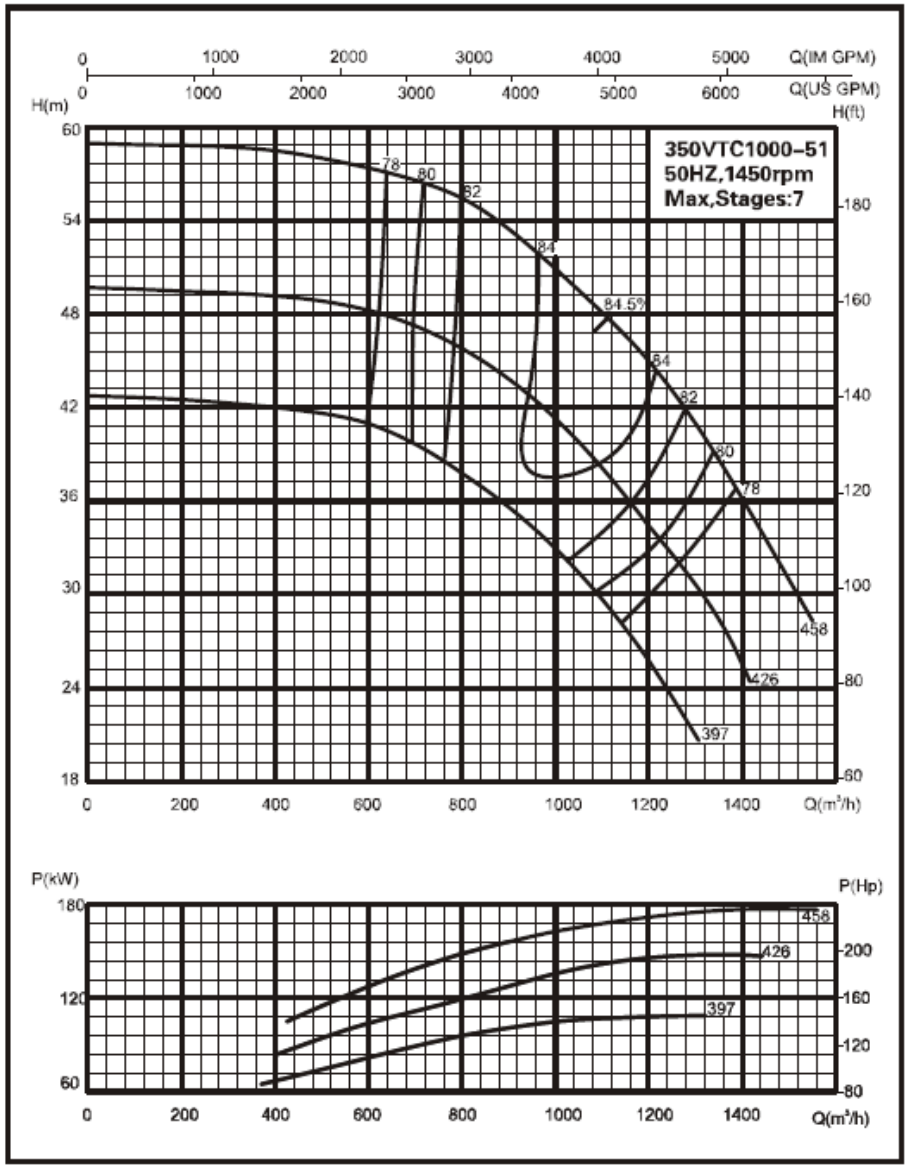

0 250 500 750 1000 1250 Q(IM GPM)
0 250 500 750 1000 1250 1500 Q(US GPM)
H(m)
H(ft)
200VTC250-22
50HZ,1450rpm
Max.Stages: 12
70
74
76
78
79%
78
76
74
308
286
267
Q(m³/h)
P(kW)
P(Hp)
308
286
267
Q(m³/h)

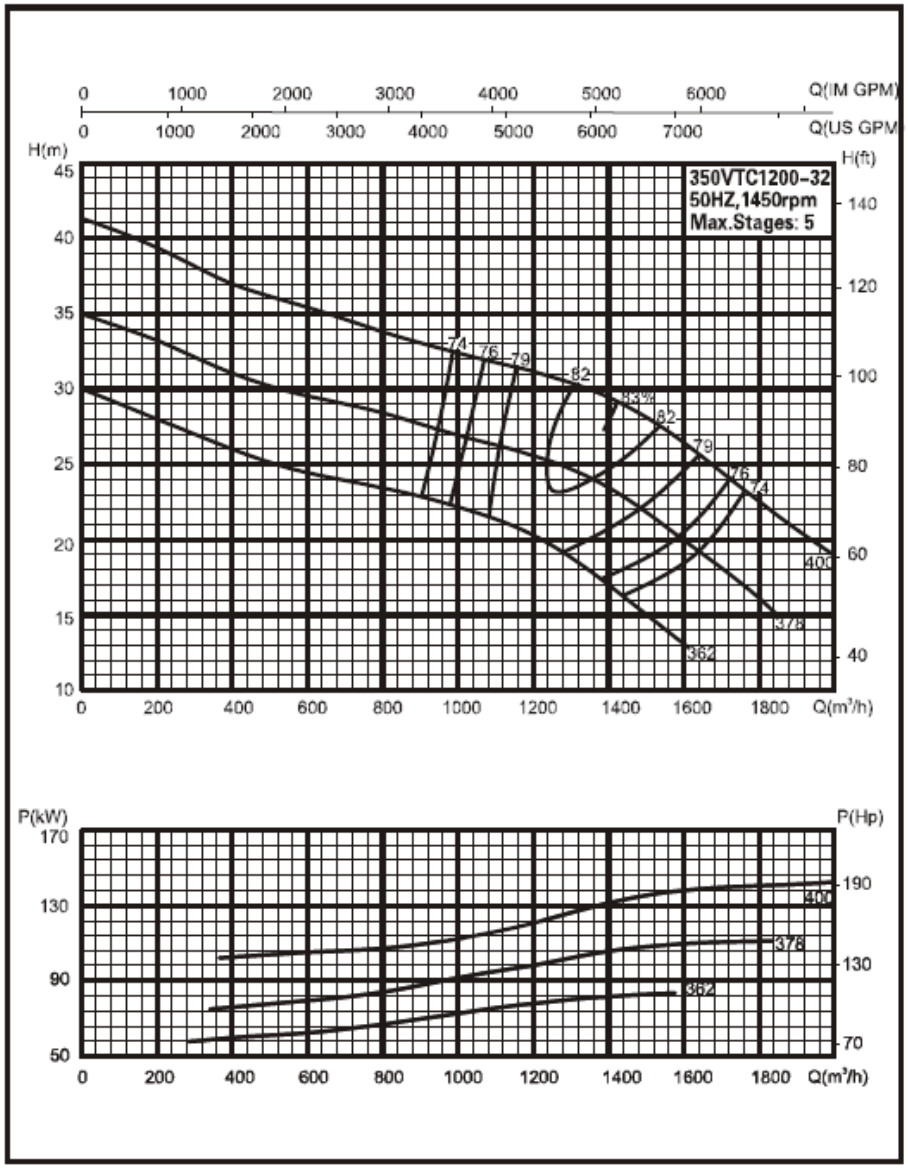

0 300 600 900 1200 Q(IM GPM)
0 300 600 900 1200 1500 Q(US GPM)
H(m)
H(ft)
200VTC220-10
50HZ,1450rpm
Max.Stages:15
70
72
73
76%
73
72
70
214
202
194
Q(m³/h)
P(kW)
P(Hp)
214
202
194
Q(m³/h)


0 250 500 750 1000 1250 Q(IM GPM)
0 250 500 750 1000 1250 1500 Q(US GPM)
H(m)
H(ft)
200VTC250-22
50HZ,1450rpm
Max.Stages: 12
70
74
76
78
79%
78
76
74
308
286
267
Q(m³/h)
P(kW)
P(Hp)
308
286
267
Q(m³/h)


300VTC720–40
50HZ,1450rpm
Max,Stages:7
Q(IM GPM)
Q(US GPM)
H(m)
H(ft)
Q(m³/h)
P(kW)
P(Hp)
74
76
79
81
82
81
79
76
74
421
391
372


300VTC860–43
50HZ,1450rpm
Max,Stages:7
Q(IM GPM)
Q(US GPM)
H(m)
H(ft)
Q(m³/h)
P(kW)
P(Hp)
77
79
81
83
84%
83
81
79
77
422
392
366


Q(IM GPM)
Q(US GPM)
H(m)
H(ft)
350VTC1000-51
50HZ,1450rpm
Max,Stages:7
78
80
82
84
84.5%
84
82
80
78
458
426
397
Q(m³/h)
P(kW)
P(Hp)
458
426
397
Q(m³/h)


Q(IM GPM)
Q(US GPM)
H(m)
H(ft)
350VTC1200-32
50HZ,1450rpm
Max.Stages: 5
74
76
79
82
83%
82
79
76
74
400
376
362
Q(m³/h)
P(kW)
P(Hp)
400
376
362
Q(m³/h)

GEAR BOX 齿轮箱

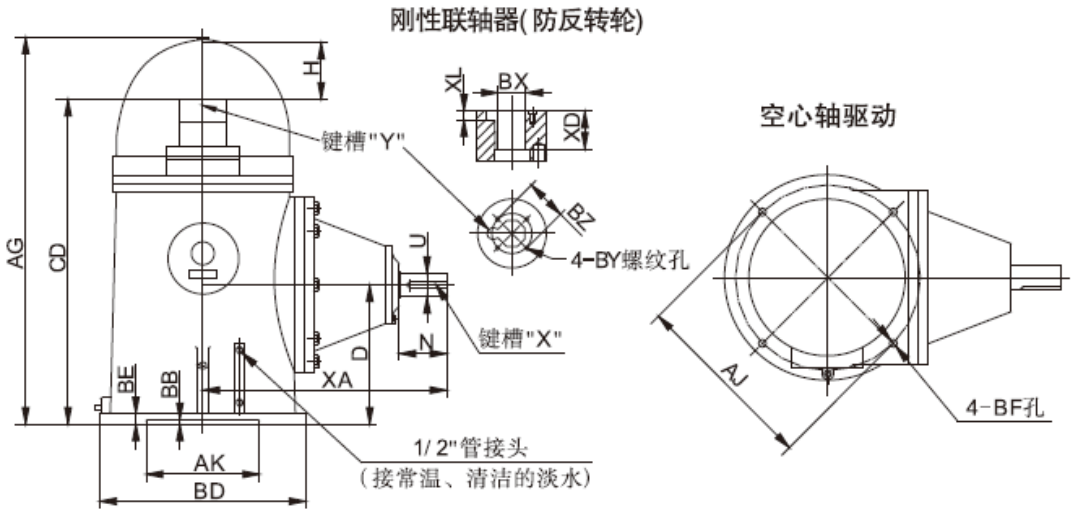
RAINFINE
Irrigation Solution.

型号	立轴转速（r/min）	功率 HP/kW	标准		重型		双向
			单一向下推力（N）				向下或向上推力最大（N）
			最小	最大	最小	最大	
H20	1160 1460 1760 3460	15/11 17/12.5 20/15 30/22		6230 5785 5340 4450	3337	10200 9800 8900 7100	6230 5785 5340 4450
H40	1160 1460 1760	30/22 35/26 40/30	4000 3780 3560	19580 18690 17800			11500 11100 10700
H60	860 960 1160 1460 1760	34/25 38/28 43/32 52/38 60/44	6450 6100 5780 5560 5340	26700 25580 24500 23100 22200			16000 15200 14700 13800 13350
H80	860 960 1160 1460 1760	46/34 50/37 58/43 69/51 80/60	9120 8980 8680 8000 7560	32900 31540 30700 28500 26700	6675	43200 42100 40500 36900 35600	19600 19100 18250 16910 13350
H110	860 960 1160 1460 1760	63/46 69/51 80/60 95/70 110/81	10450 9920 9790 9120 8450	32900 31540 30700 28500 26700	8000	43200 42100 40500 37800 35600	19600 19100 18250 16910 13350

RAINFINE Irrigation Solution.

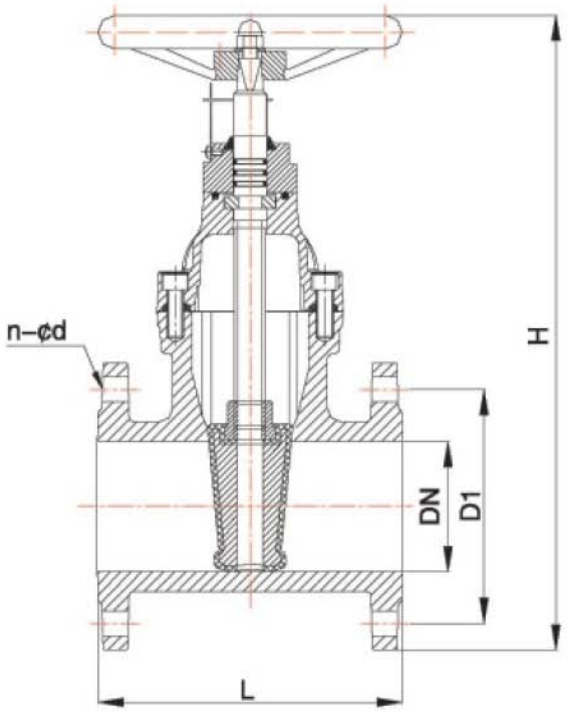
型号	立轴转速（r/min）	功率 HP/kW	标准		重型		双向
			单一向下推力（N）				向下或向上推力最大（N）
			最小	最大	最小	最大	
H125	720	63/46	12900	37800	12460	54300	22700
	860	72/53	12000	35600	11800	51600	21400
	960	79/58	11780	34790	11560	50400	21000
	1160	90/66	11350	33400	11100	48000	20000
	1460	108/79	10680	31150	10200	44900	18700
	1760	125/92	9790	28900	9800	42300	17400
H150	720	75/55	13570	43600	14000	66750	26250
	860	87/64	13130	41830	13350	63630	24900
	960	95/70	12890	40120	13000	62120	24100
	1160	108/79	12240	39160	12460	59180	23600
	1460	129/95	11570	36930	11570	55620	22250
	1760	150/110	11120	35600	11120	53400	21360
H200	720	100/73.5	16000	53400	15130	72085	30000
	860	116/85	14680	48950	14240	68080	28000
	960	126/93	14100	47680	13920	65610	27000
	1160	144/106	13570	45400	13350	63630	25360
	1460	172/126.5	12680	42270	12680	60000	23580
	1760	200/147	12000	40000	12000	57850	22690
H300	720	150/110	16700	60700	16700	83660	36500
	860	174/128	15800	57850	16000	79650	34700
	960	189/139	15500	56100	15600	77210	33200
	1160	216/159	14900	54300	14900	74310	32500
	1460	258/190	14000	51200	14000	69860	30700
	1760	300/220	13350	48950	13350	66750	29400

外形尺寸（依据NEMA标准）



型号	CD	D	U	XA	N	AG	H	BE	BD	AJ	AK	BB	BF	键槽 X	Max.BX		XD
															FIG.1,4	FIG.2,3	
H20	368	162	28	330	70	457	76	16	254	232	210	5	11.5	8X3.5X57	25	无	32
H40	514	228.5	38	406	90	629	102	19	419	375	343	5	18	10X4X70	38	38	45
H60	514	228.5	38	406	90	629	102	19	419	375	343	5	18	10X4X70	40	42	45
H80	514	228.5	48	419	90	629	102	19	419	375	343	5	18	14X4.5X70	40	无	45
H110	635	289	50	445	90	749	102	25	419	375	343	5	18	14X4.5X70	50	50	54
H125	635	289	50	445	90	749	102	25	419	375	343	5	18	14X4.5X70	50	50	54
H150	762	336.5	60	521	120	876	102	25	508	375	343	5	18	18X5.5X95	55	55	60
H200	762	336.5	60	521	120	876	102	25	508	375	343	5	18	18X5.5X95	55	55	60
H300	870	381	70	610	140	1016	133	29	508	375	343	5	18	20X6X121	60	60	66

2. VALVE 阀门



Technical Parameters	
Pressure Rating	1.6MPa
Pressure in the Valve	2.4MPa
Seal Test	1.76MPa
Working Temperature	≤80℃
Applicable Medium	Water

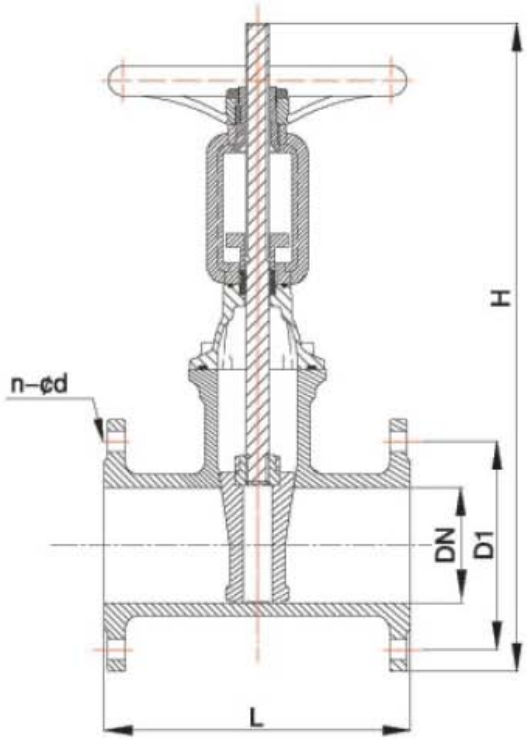
Characteristic

1. The gate is packed with glue wholly. Excellent tightness and reliable. Long service time.
2. Light weight, easy installation.
3. Flat base. The bottom of the valve was designed flat. It won't produce sundries or sludge. Excellent tightness and reliable.
4. Corrosion resistance. Use non–toxic epoxy resin on the inner wall to prevent from corrosion and rustiness. It can be used in portable water supply system, and also can be used in sewage treatment system.

Z45X-16Q (Product Code:1051)

Unit:mm

DN	L	D1	H	n-¢d	Quantity (set/box)	Notes
50	180	125	340	4-19	2	
65	190	145	370	4-19	2	
80	205	160	410	8-19	1	
100	230	180	450	8-19	1	
125	255	210	480	8-19	1	
150	267	240	550	8-23	1	
200	295	295	630	12-23	1	
250	335	355	750	12-28	1	
300	360	410	820	12-28	1	



Technical Parameters	
Working Pressure	1.6MPa
Working Temperature	≤80℃
Seal Test	1.76MPa
Intensity Test	2.4MPa
Applicable Medium	Water

Characteristic

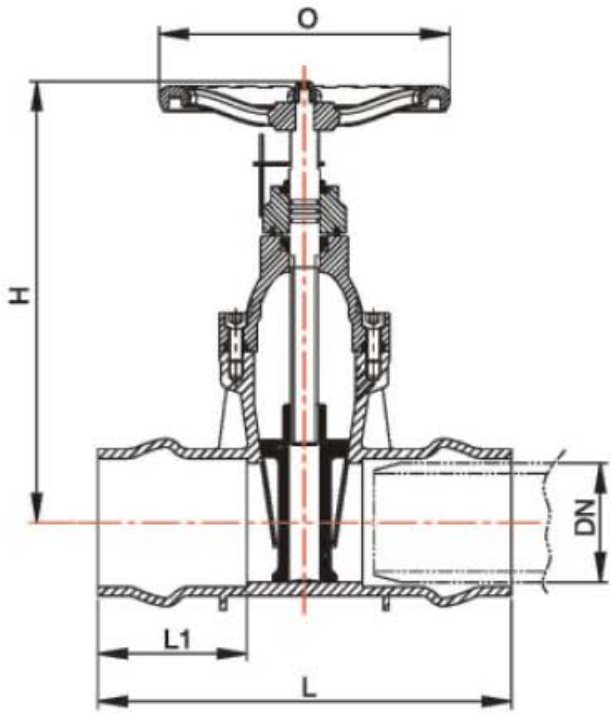
1. The gate is packed with glue wholly. The good cover performance of glue and accurate geometric dimensioning ensures excellent tightness and reliability.
2. Light weight. The body of the valve is produced from ironball. Easy installation.
3. Flat base. The bottom of the valve was designed flat. Won't produce sundries or sludge. Excellent tightness and reliable.
4. Corrosion resistance. Use non–toxic epoxy resin on the inner wall to prevent from corrosion and rustiness. It can be used in portable water supply system, and also can be used in sewage treatment system.

Z41X-16Q (Product Code:1061)

Unit:mm

DN	L	D1	H	n-¢d	Quantity (set/box)	Notes
★ 50	180	125	340	4-19		
★ 65	190	145	370	4-19		
★ 80	205	160	410	8-19	1	
★ 100	230	180	450	8-19	1	
★ 125	255	210	480	8-19	1	
★ 150	267	240	550	8-23	1	
★ 200	295	295	630	12-23	1	
★ 250	335	355	750	12-28	1	
★ 300	360	410	820	12-28	1	

Note:"★"Indicates that the mold is not available temporarily.



Technical Parameters	
Normal Pressure	1.6MPa
Intensity Test	2.4MPa
Seal Test	1.76MPa
Working Temperature	≤80℃
Applicable Medium	Water

Applications

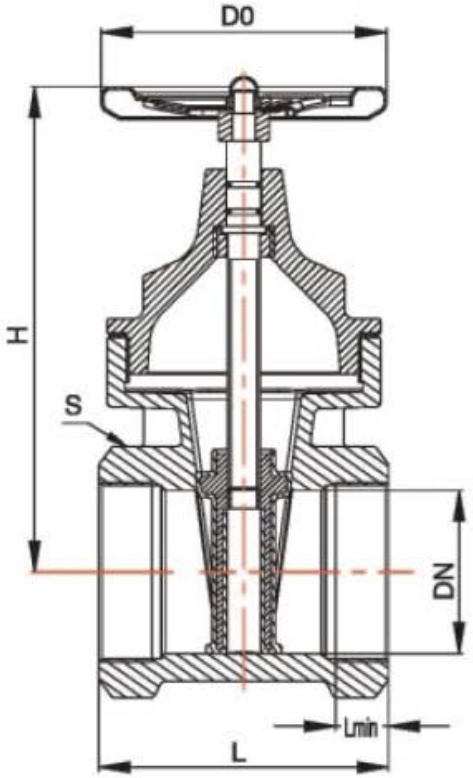
This valve is seal up with rubber ring. Both ends use socket and spigot joint. The product possesses the characteristics like safe,fast and easy installation etc.

RAINFINE Irrigation Solution.

YQZ95X-16Q (Product Code:1101)

Unit:mm

DN	OD of the Pipe(de)	L	L1	H	O	Quantity (set/box)	Notes
63	63	250	77	311	200	2	
90	90	280	84	379	240	1	
110	110	300	88	406	280	1	
160	160	350	94	504	280	1	
200	200	400	100	592	360	1	



Technical Parameters	
Normal Pressure	1.6MPa
Seal Test	1.76MPa
Intensity Test	2.4MPa
Applicable Temperature	≤80℃
Applicable Medium	Water

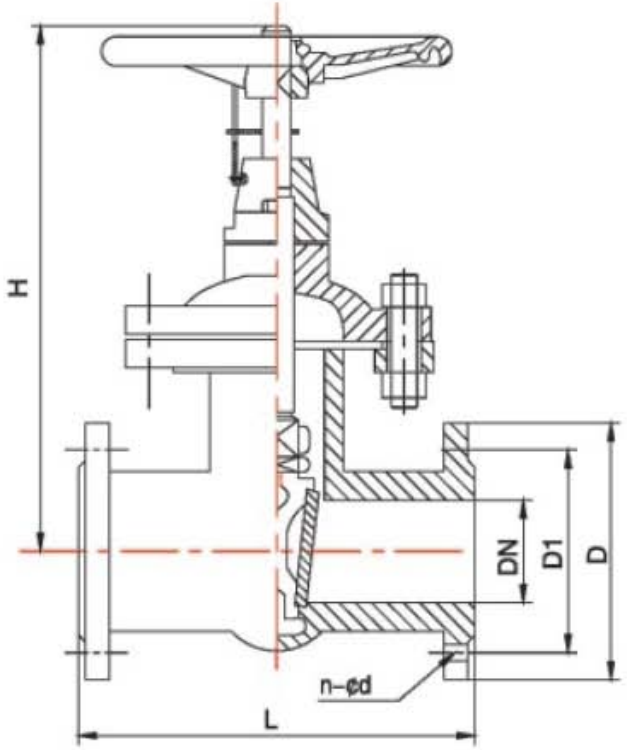
Applications
This valve is suitable to connect galvanized pipe, iron pipe etc.

RAINFINE Irrigation Solution.

Z15X-16Q (Product Code:1071)

Unit:mm

DN	L	Lmin	S	H	D0	Quantity (set/box)	Notes
15	67	11	32	118	65	48	
20	70	13	38	123	65	36	
25	82	15	46	143	80	24	
32	85	17	52	144	80	16	
40	96	18	62	174	105	12	
50	110	20	75	186	105	8	
65	120	24	92	217	120	6	
80	145	30	110	265	160	4	
100	165	33	134	284	160	4	



Technical Parameters	
Working Pressure	1.6MPa
Working Temperature	≤80℃
Seal Test	1.76MPa
Intensity Test	2.4MPa
Applicable Medium	Water

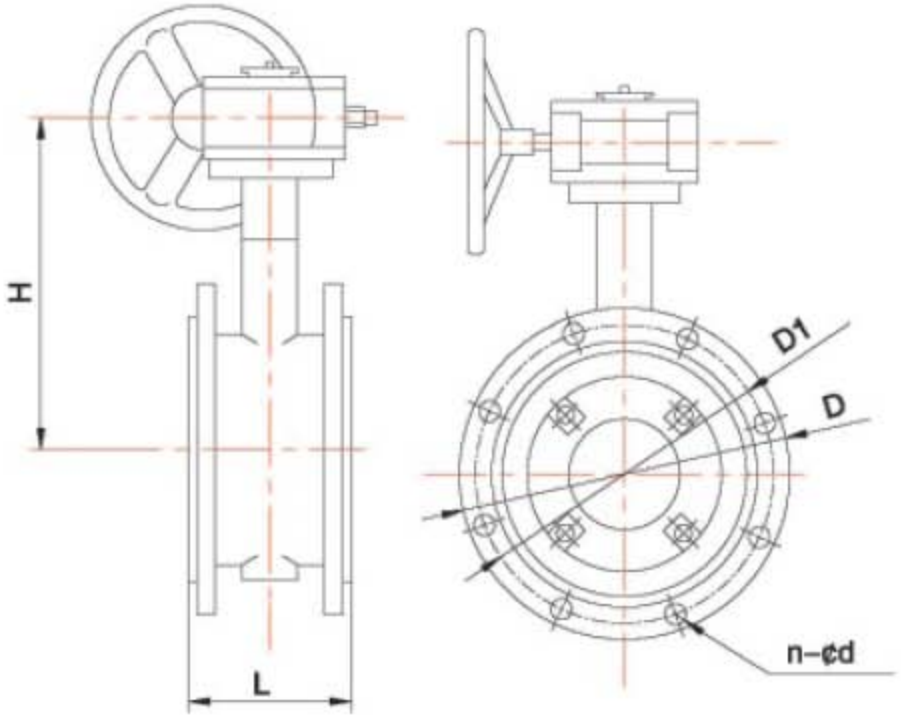
Applications

This valve is seal up with rubber ring. Both ends use socket and spigot joint. The product possesses the characteristics like safe,fast and easy installation etc.

Z45T-16Q (Product Code:1081)

Unit:mm

DN	L	D1	H	D	n-¢d	Quantity (set/box)	Notes
50	178	125	270	165	4-19	2	
65	190	145	305	185	4-19	2	
80	203	160	335	200	8-19	1	
100	229	180	410	220	8-19	1	
125	254	210	470	250	8-19	1	
150	267	240	550	285	8-23	1	
200	292	295	685	340	12-23	1	



Characteristic		
Working Pressure	1.6MPa	1.0MPa
Working Temperature	≤80℃	≤80℃
Seal Test	1.76MPa	1.1MPa
Intensity Test	2.4MPa	1.5MPa
Applicable Medium	Water	Water

Material

Material of the Valve: cast iron, ductile cast iron, stainless steel
Material of the Rubber Ring:

natural rubber (NR) –20~+85°C
ethylene propylene rubber (EPDM) –40~+125°C
acrylonitrile–butadiene rubber (NBR) –20~+82°C
silicon rubber (SI) –70~+150°C
fluororubber (VITOH) –23~+150°C
chloroprene rubber (CR) 0~+80°C
butyl rubber (IIR) –40~+100°C
plastic of poly tetra fluoroethylen (PTFE) +10~+150°C

D341X–16 (Product Code:2031)

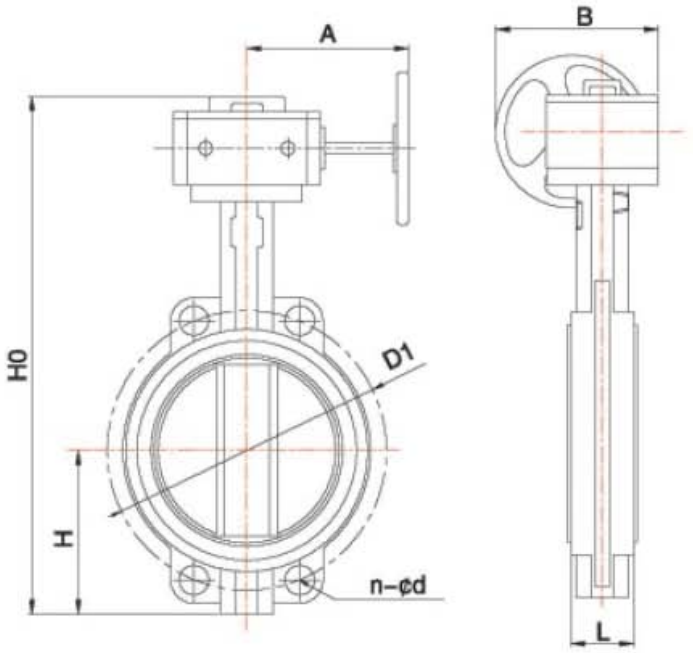
Unit:mm

DN	L		D1	H	D	n–¢d	Quantity (set/box)	Notes
	Long type	Short type						
50	150	108	125	165	165	4–19	4	1.6MPa
65	170	112	145	180	185	4–19	4	
80	180	114	160	190	195	8–19	2	
100	190	127	180	205	215	8–19	2	
125	200	140	210	290	245	8–19	2	
150	210	140	240	300	280	8–23	1	

D341X–10 (Product Code:2032)

Unit:mm

DN	L		D1	H	D	n–¢d	Quantity (set/box)	Notes
	Long type	Short type						
200	230	152	295	345	335	8–23	1	1.0MPa
250	250	165	350	400	390	12–23	1	
300	270	178	400	445	440	12–23	1	
350	290	190	460	475	500	16–23	1	
400	310	220	515	400	560	16–28	1	



Technical Parameters	
Normal Pressure	1.6MPa
Seal Test	1.76MPa
Intensity Test	2.4MPa
Applicable Temperature	≤80℃
Applicable Medium	Water

Characteristic

1. Unique structure, lightweight,fast speed of open and close.
2. Easy to manipulate, can be installed in any location, easy to maintain.
3. The seal ring has reliable performance with ageing resistance, weak corrosion resistance , longevity of the material. And the seal ring can be changed.

Applications

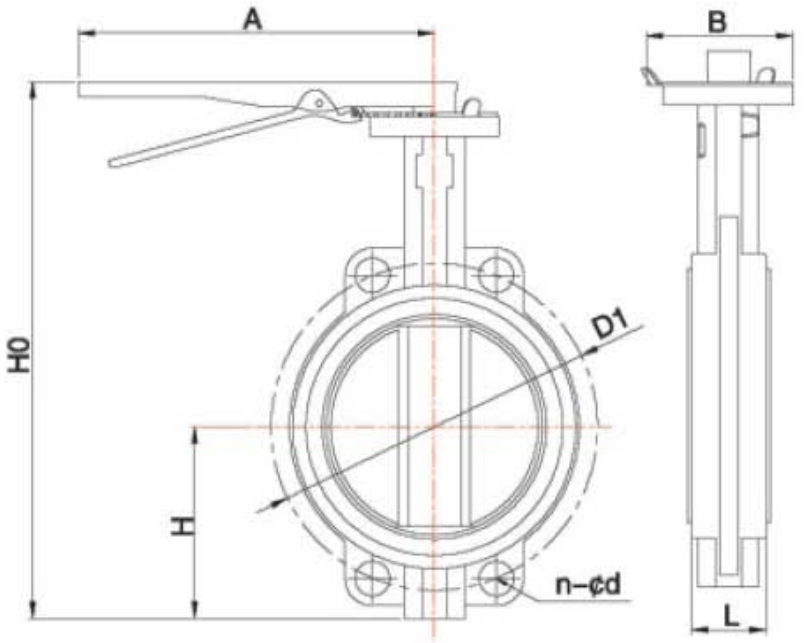
The product is suitable to be used in water supply and discharge systems in many areas such as food, medicine, electricity, light textile,papermaking etc. It can be used for flow adjusting and medium closuring in pipelines.

RAINFINE
Irrigation Solution.

D371X-16 (Product Code:2021)

Unit:mm

DN	L	D1	A	B	H	H0	n-¢d	Quantity (set/box)	Notes
50	43	120	146	155	70	350	4-23	5	
65	45	136	140	155	80	355	4-26.5	4	
80	46	160	134	155	90	380	8-18	3	
100	52	185	142	155	110	420	4-24.5	2	
125	54	215	138	155	125	430	4-23	2	
150	56	238	152	155	140	460	4-25	2	
200	60	295	196	275	175	620	4-25	2	
250	68	350	231	275	200	675	4-28	2	
300	78	400	256	275	250	760	4-28	1	



Technical Parameters	
Normal Pressure	1.6MPa
Pressure in the Valve	2.4MPa
Seal Test	1.76MPa
Applicable Temperature	≤80℃
Applicable Medium	Water

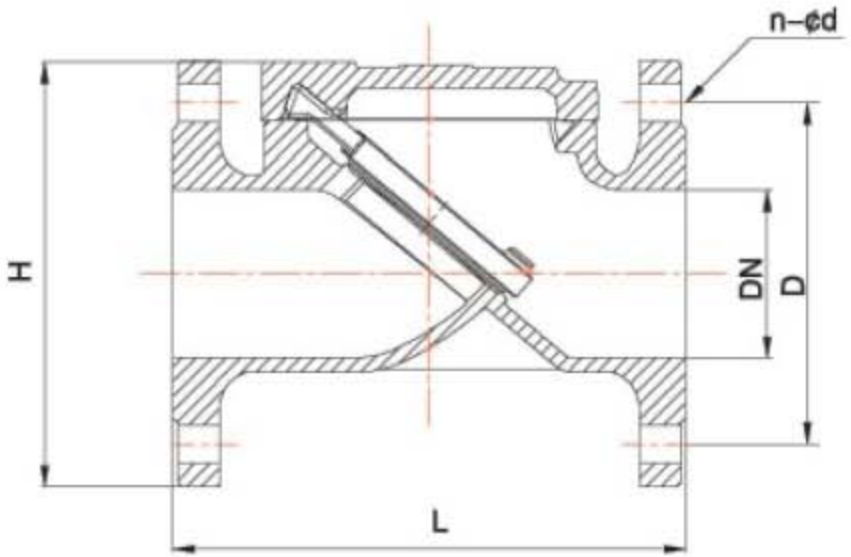
Applications

Be widely used for closuring and adjusting of pipelines in water supply and discharge, construction, waste water discharge, chemical industry, food, medicine and light textile.

D71X–16 (Product Code:2011)

Unit:mm

DN	L	D1	A	B	H	H0	n–¢d	Quantity (set/box)	Notes
50	43	120	236	120	70	265	4–23	8	
65	45	136	230	120	80	280	4–26.5	6	
80	46	160	234	120	90	300	8–18	6	
100	52	185	252	120	110	335	4–24.5	4	
125	54	215	263	120	125	365	4–23	3	
150	56	238	257	120	140	395	4–25	2	
200	60	295	356	170	175	470	4–25	2	



Technical Parameters	
Normal Pressure	1.6MPa
Seal Test Pressure	1.76MPa
Applicable Temperature	≤80℃
Applicable Medium	Water

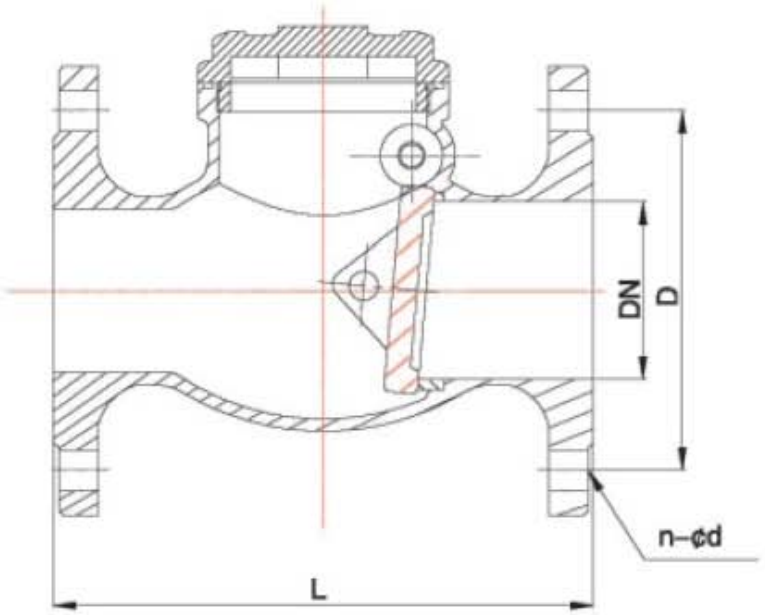
Performance and Application

This product is mainly used in water supply and discharge systems,and the exit of pump in the area of oil and chemical industry. It's used to prevent back flow of medium. The seal ring is slant designed with short time of close, and reduces the pressure of water hammer. The valve plate is pressed by chemigum and steel plate under high temperature. It is scouring resistance, good seal–up performance, simple structure, easy to maintain and transport.

H44X–16Q (Product Code:3011)

Unit:mm

DN	L	D	H	n–¢d	Quantity (set/box)	Notes
50	200	125	190	4–19	4	
65	215	145	210	4–19	3	
80	240	160	230	8–19	2	
100	290	180	250	8–19	2	
125	330	210	280	8–19	1	
150	355	240	315	8–23	1	
200	500	295	370	12–23	1	



Technical Parameters	
Normal Pressure	1.6MPa
Intensity Test	2.4MPa
Seal Test	1.76MPa
Applicable Temperature	≤80℃
Applicable Medium	Water

Applications

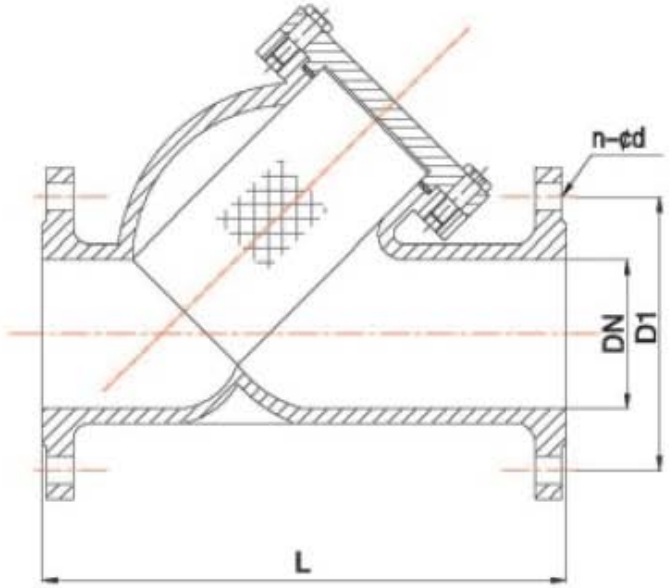
It's single-track start and stop. Can prevent back flow of medium.

H44T–16Q (Product Code:3031)

Unit:mm

DN	L	D	n–¢d	Quantity (set/box)	Notes
★ 50	230	165	4–19	4	
★ 65	290	185	4–19	3	
80	310	200	8–19	2	
100	350	200	8–19	2	
★ 125	400	250	8–19	1	
150	480	285	8–23	1	
200	600	340	12–23	1	
★ 250	730	405	12–28	1	
★ 300	850	460	12–28	1	
★ 350	980	520	16–28	1	

Note:"★" Indicates that the mold is not available temporarily.



Technical Parameters	
Strainer	18~30Mesh
Normal Pressure	1.6MPa
Seal Test	1.76MPa
Medium's Temperature	≤80℃
Applicable Medium	Water
Intensity Test	2.4MPa

Applications

Y strainer is a device of the pipeline system used to transport medium which installed in the entrance of reducing valve, positioning valve or other equipments. It can clear away the impurity of the medium and ensure the normal use of the valve and the equipments. The strainer possesses the characteristics of advanced structure, low flow resistance and easy sewage discharge etc.

GL41-16Q (Product Code:5011)

Unit:mm

DN	L	D1	n-¢d	Quantity (set/box)	Notes
50	230	125	4-18	3	
65	280	145	4-18	2	
80	310	160	8-18	2	
100	350	180	8-18	2	
125	381	210	8-18	1	
150	450	240	8-23	1	
200	550	295	12-28	1	

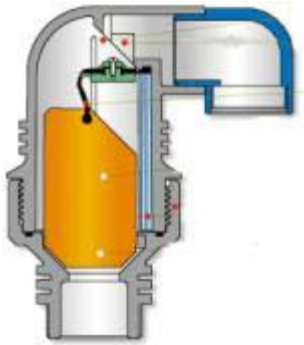
RAINFINE Irrigation Solution.

AIR VALVE
VACCUM VALVE

放气阀
真空阀

Air valves

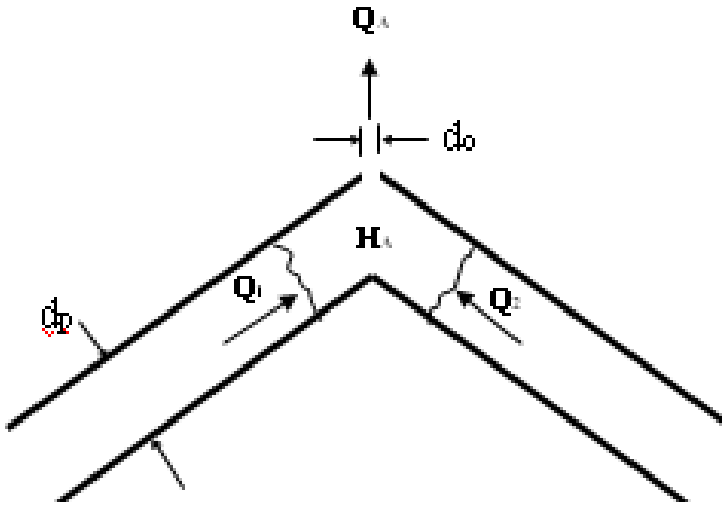
- Air release valves
- Vacuum valves
- Generic air release/vacuum valves
- Surge suppressing non-slam air release/vacuum valves



Air release valves

- Filling operation
- Generally do not offer any surge protection
- Mandatory on most transmission mains
- AWWA recommends at every 500m and all peak points

Surge suppressing non-slam air release/vacuum valves

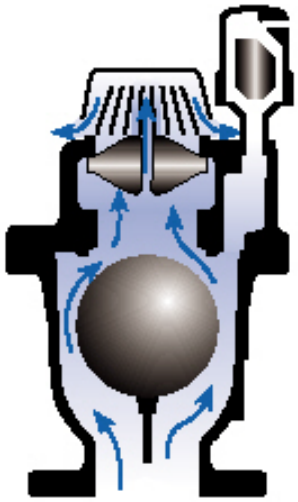


Surge suppression air valves (3 stage valves)

Pressure drops below zero	Pressure rises above zero	Pressure rises over switching value

Air inflow through large orifice

Air outflow through large orifice

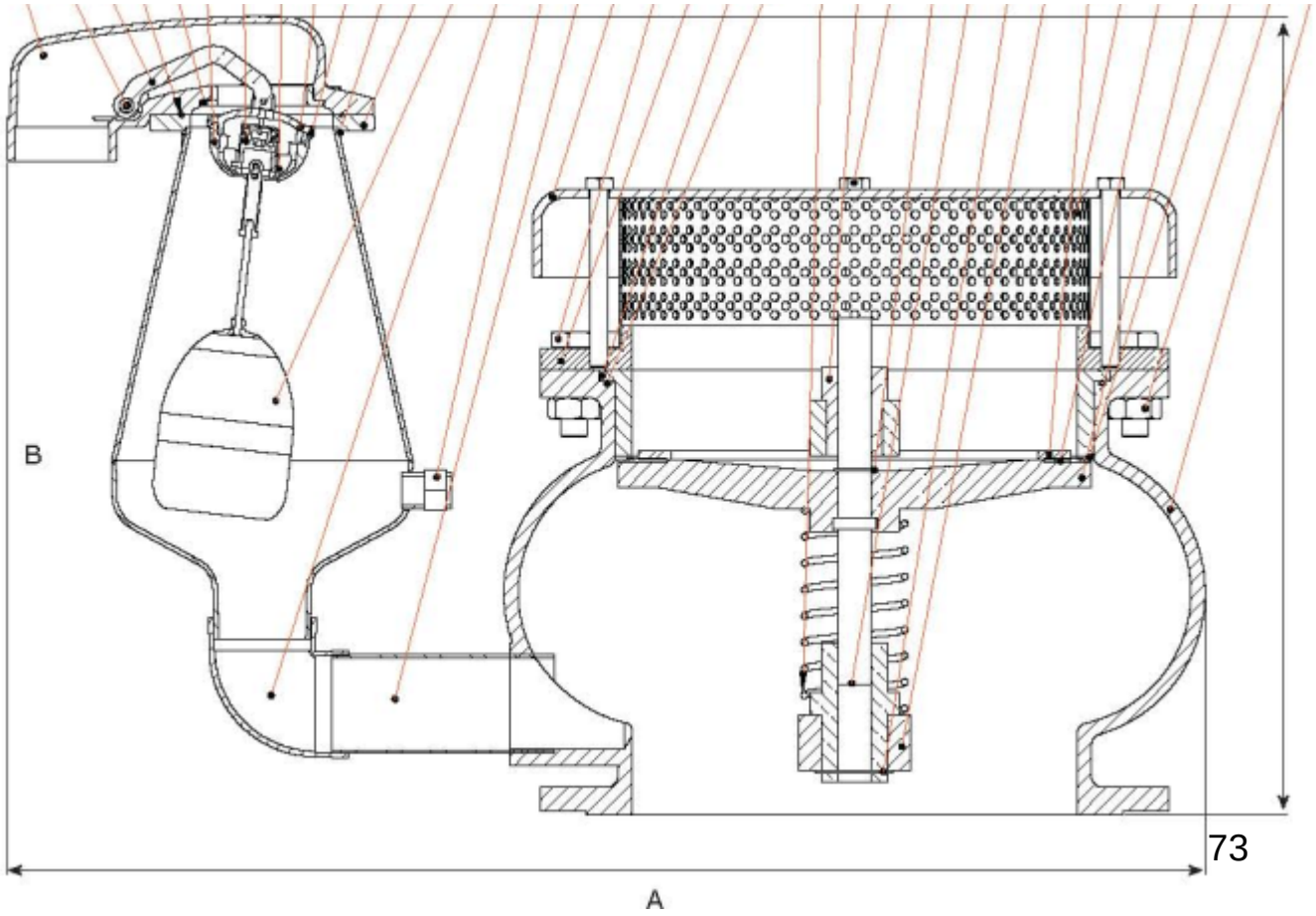


Air outflow through reduced orifice

Outflow of residual air through small orifice

Vacuum valves

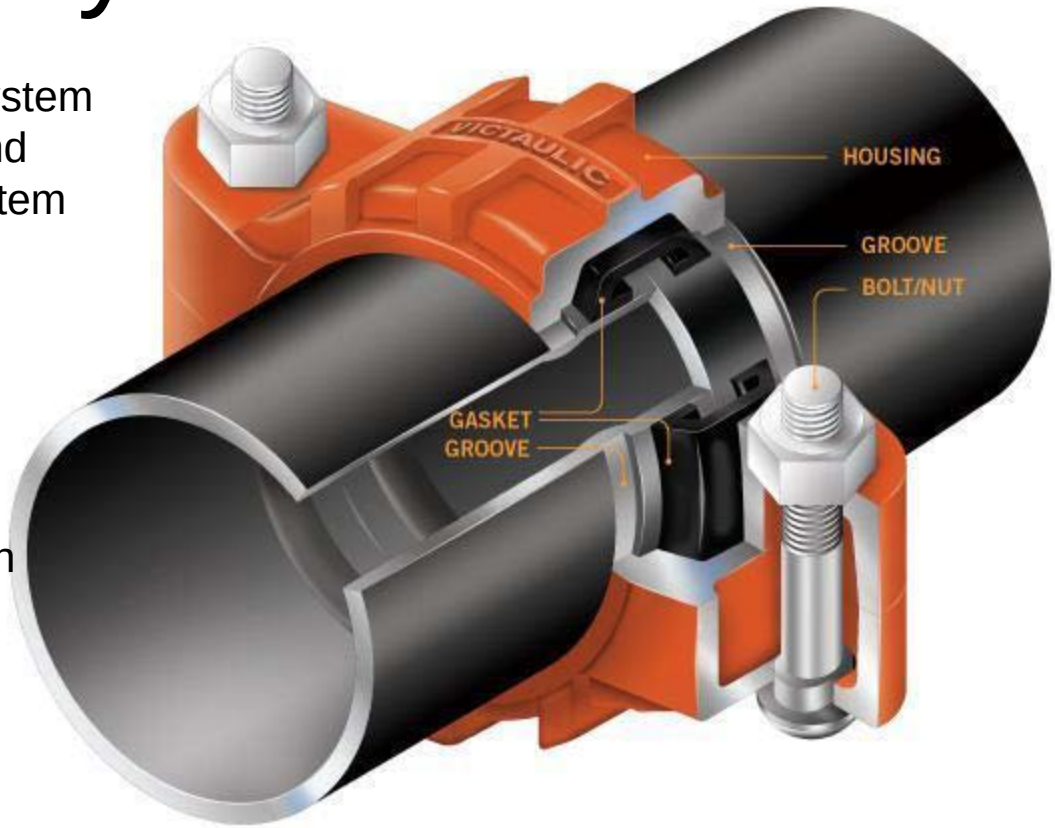
Vacuum valves



Grooved(Flexible Couplings)

The Victaulic grooved end piping system

- The Victaulic grooved end piping system is the most versatile, economical and reliable mechanical pipe joining system available.
-
- **Benefits of the grooved systems:**
- Rigidity
- Noise and vibration attenuation
- System maintenance and expansion
- Flexibility
- Seismic stress absorption
- Alignment ease



RAINFINE Irrigation Solution.

900 mm CWP

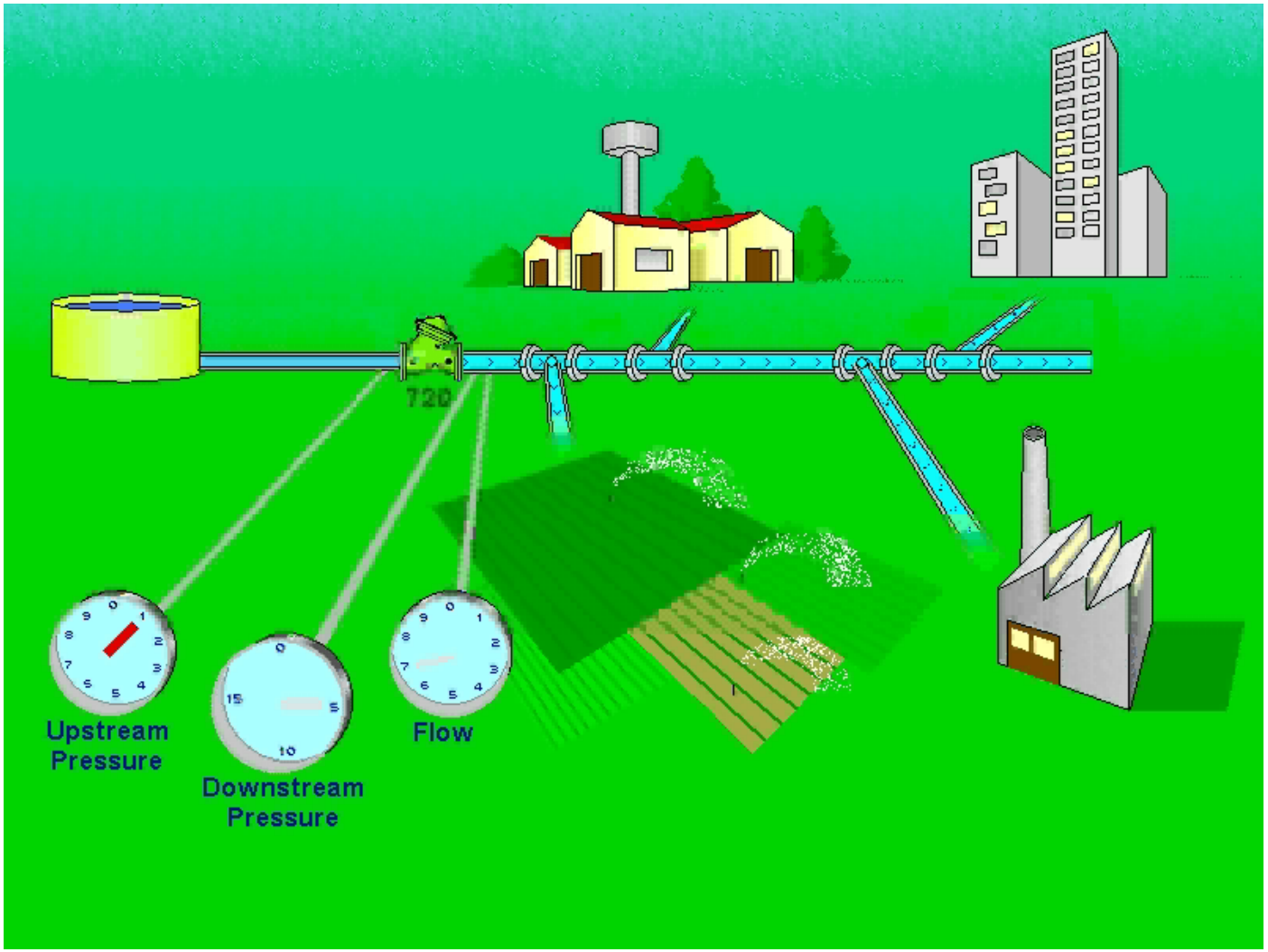
The Groove

- **Grooves are formed primarily by roll grooving (or cold forming) a groove into the pipe**

RAINFINE
Irrigation Solution.

Roll Grooving Tools

Pressure reducing valve


T20
Upstream Pressure
Downstream Pressure
Flow

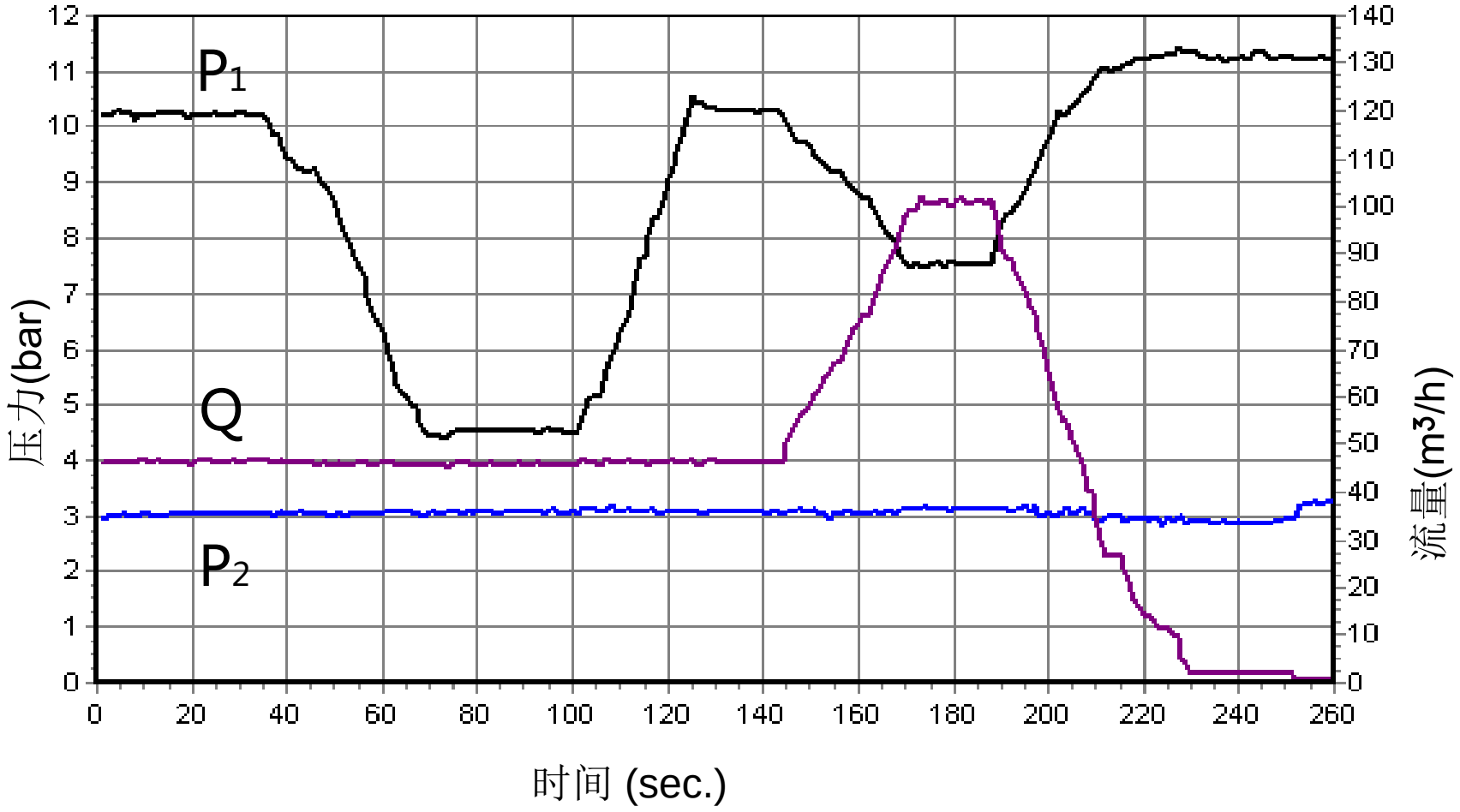
Bermad Model 720

Bermad Model 920-MO

Definitions

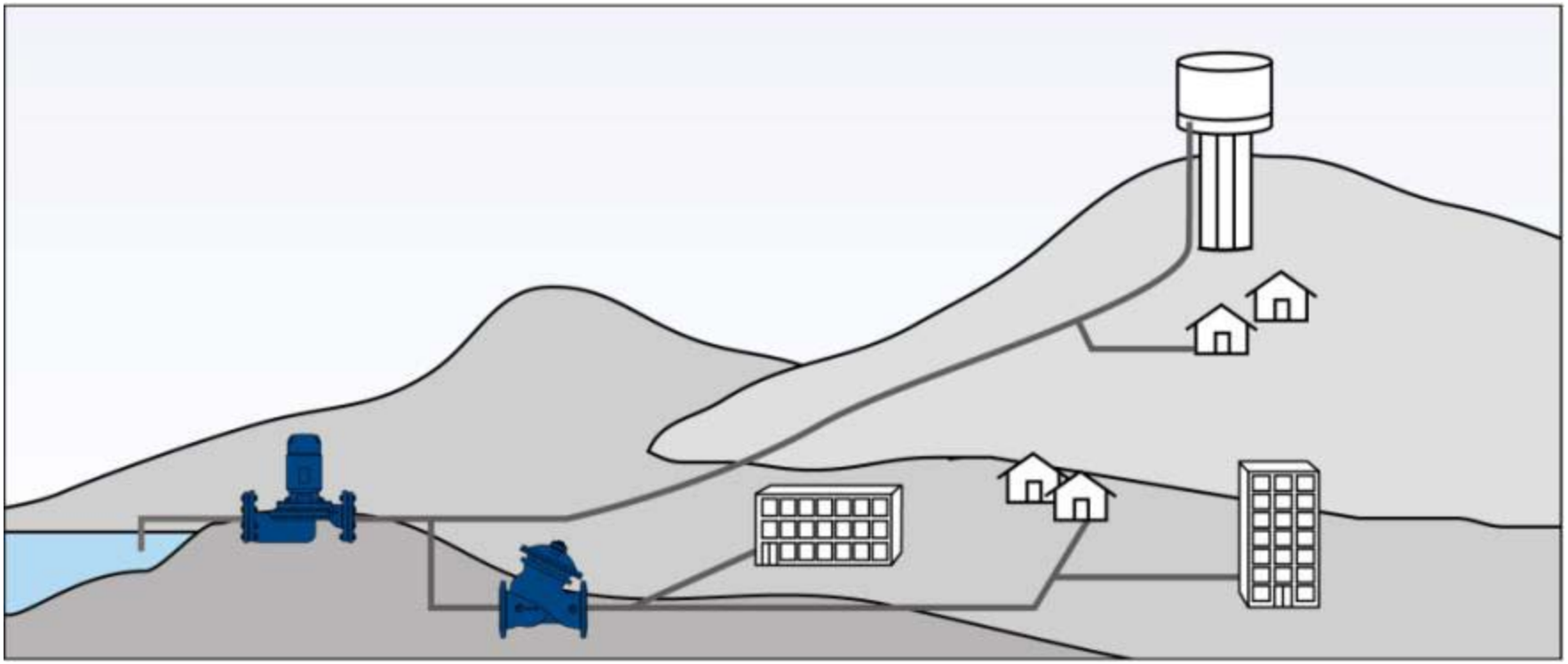
Pressure Reducing Control Valves (P.R.V.s) are automatic control valves which reduce a higher inlet pressure into a lower constant outlet pressure regardless of fluctuating flow and varying inlet pressure.

Definitions

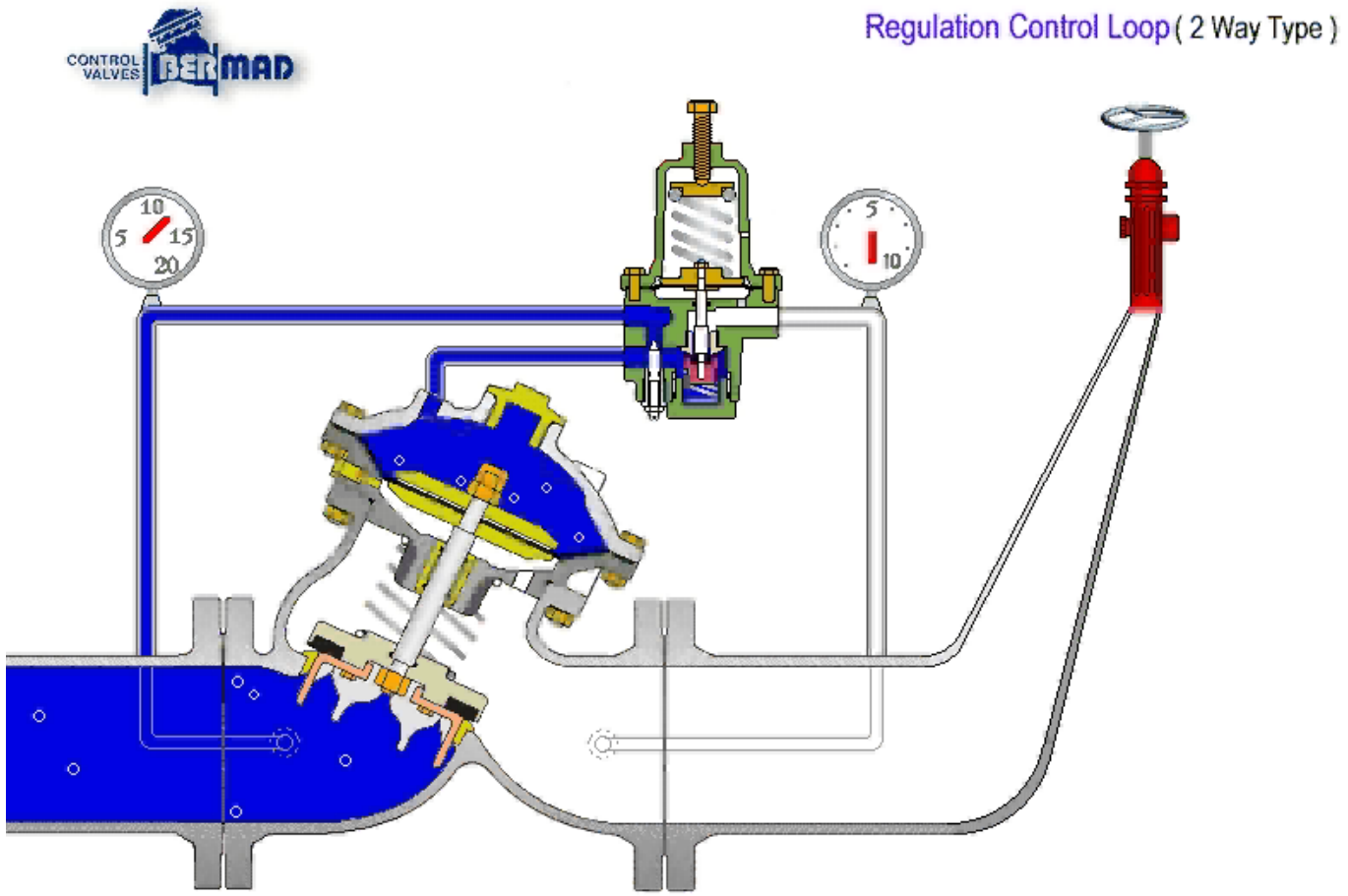


Typical Applications

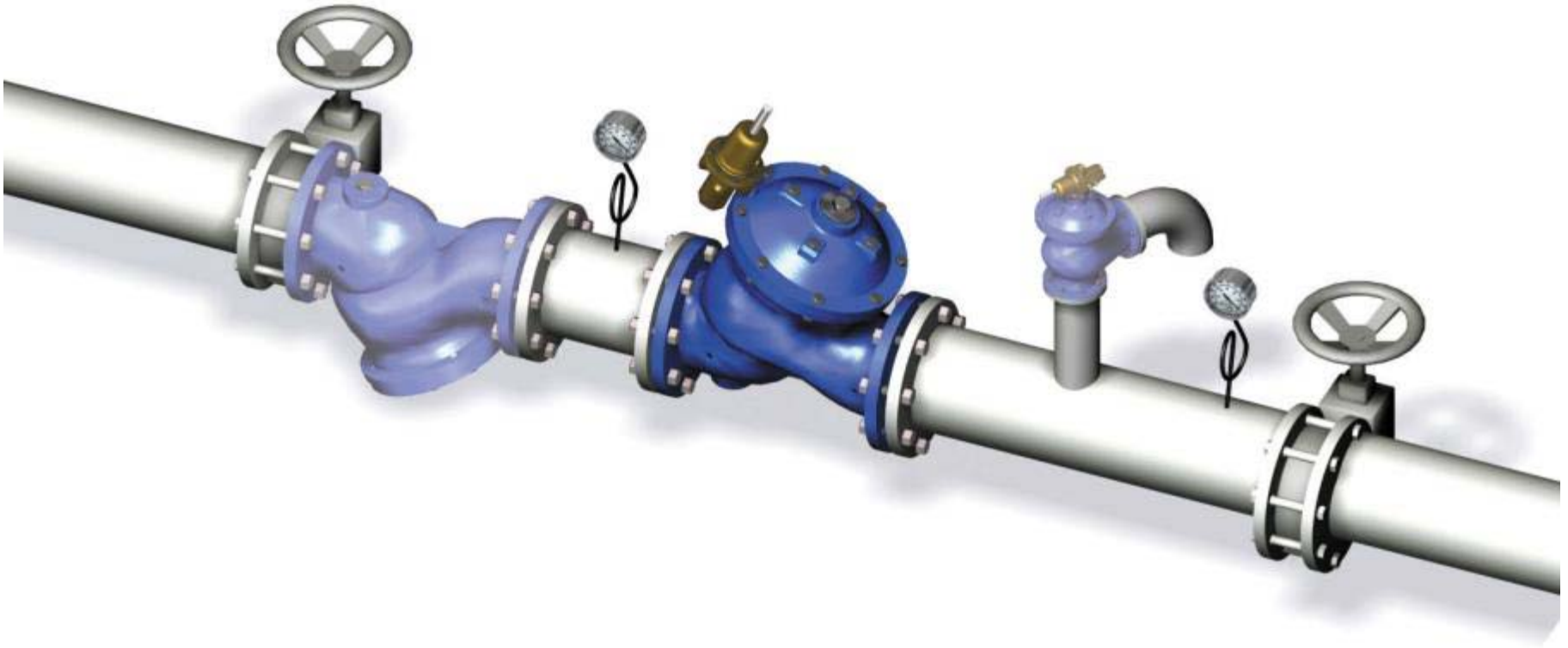
Reducing pressure for lower distribution zone



How Does a P.R.V. Work?



Typical Installation

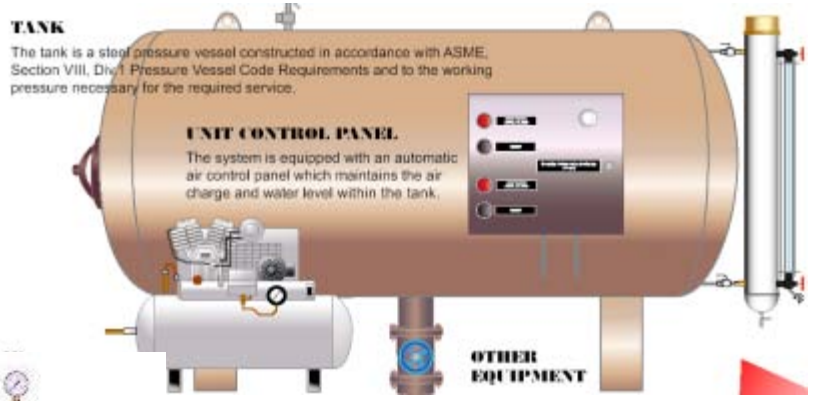


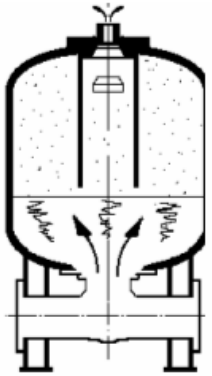
3. WATER HUMMER PROTECTION

水锤防护

Closed surge tanks or air vessels

- Compressor vessels
- Bladder vessels
- Hybrid surge tanks

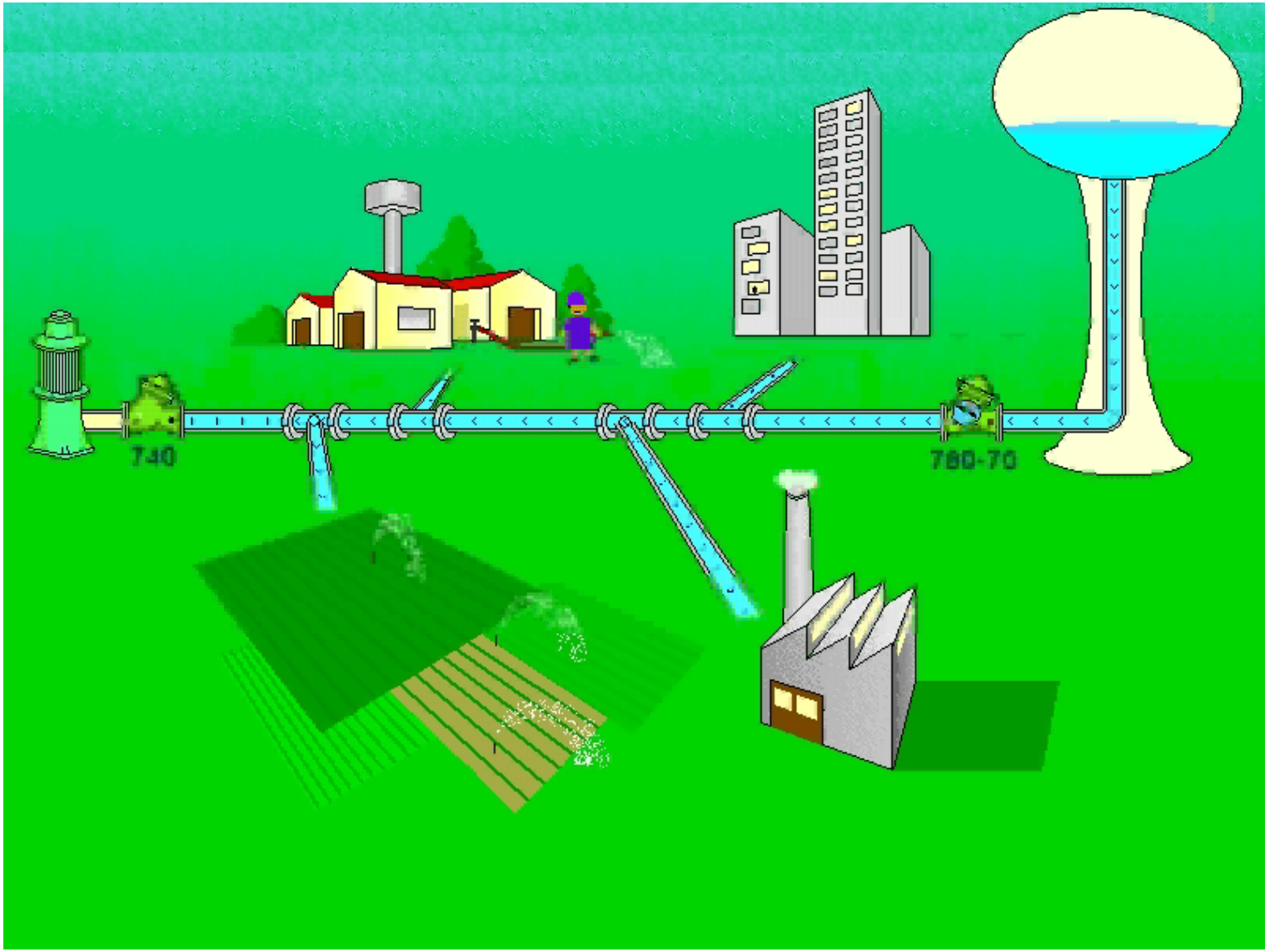




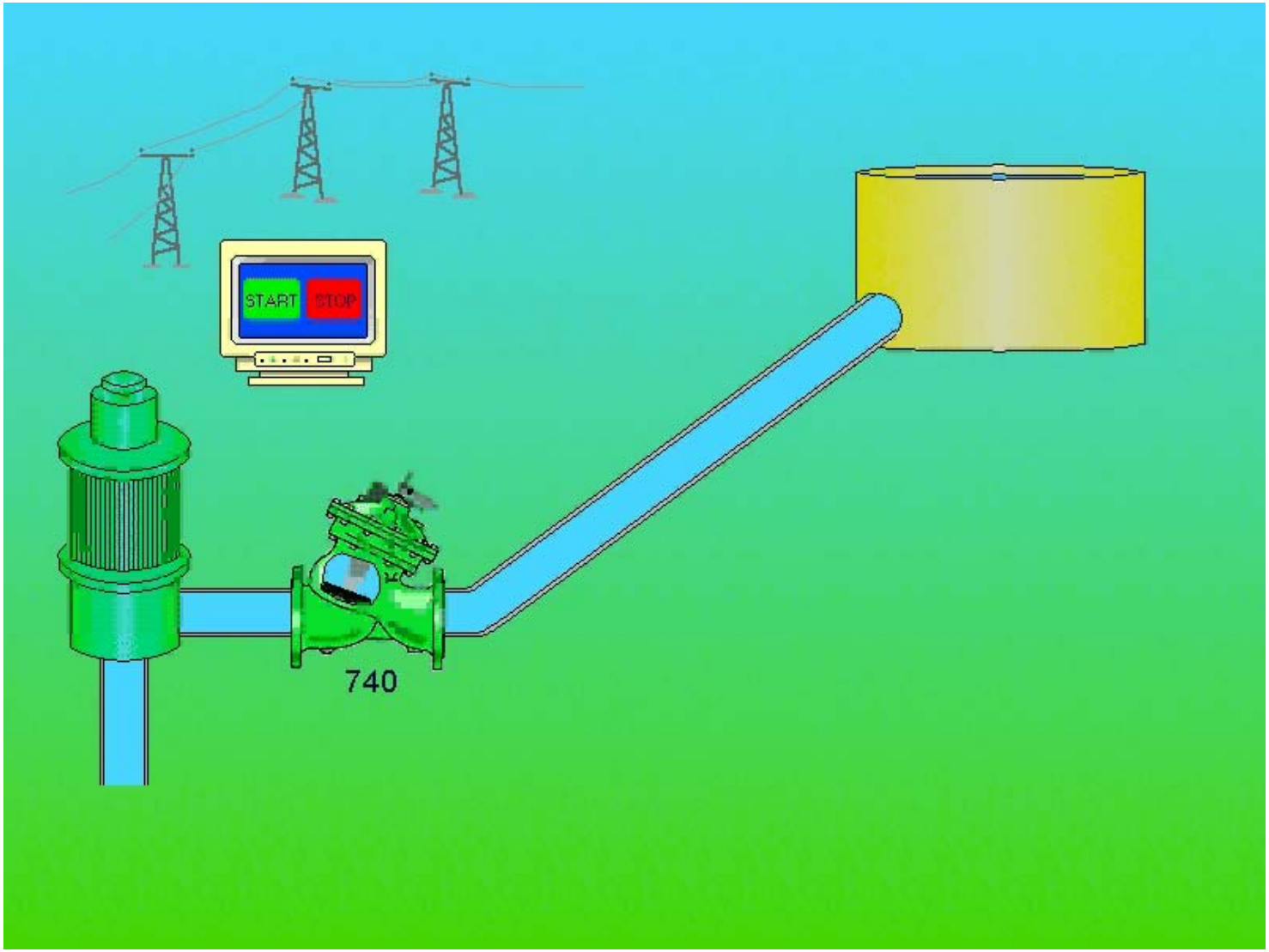
Pressure Tanks

Pump control valve

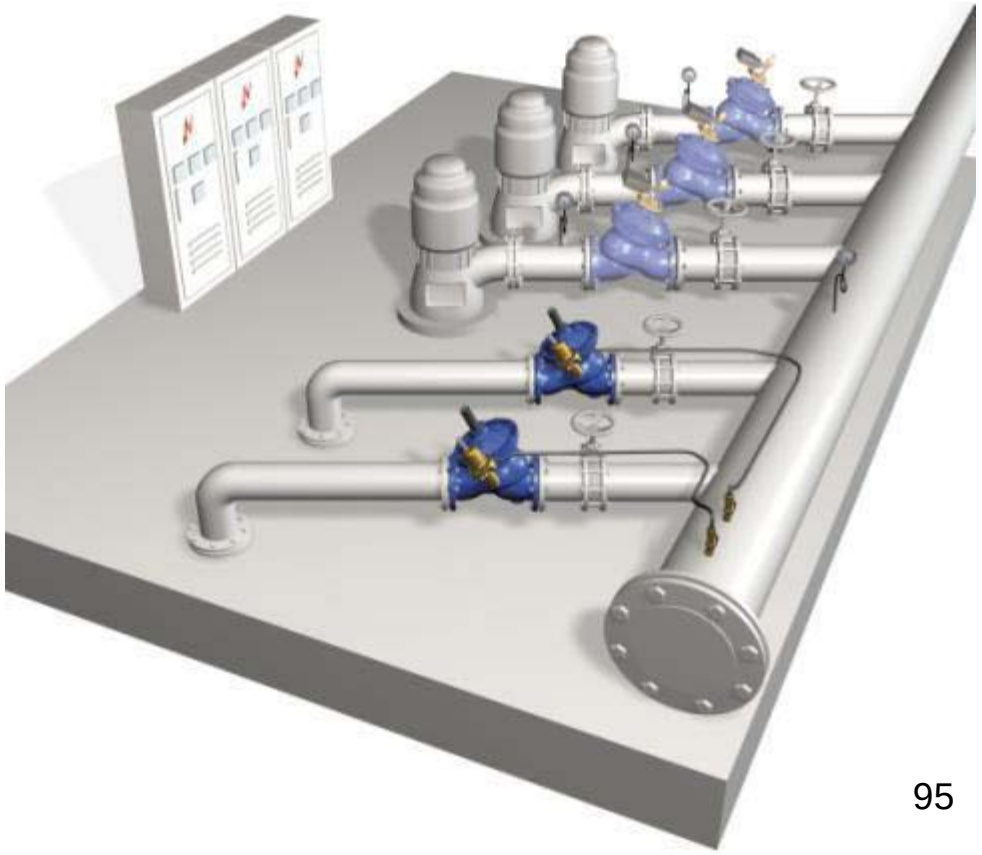
Surge Anticipating Control Valve



RAINFINE
Irrigation Solution.

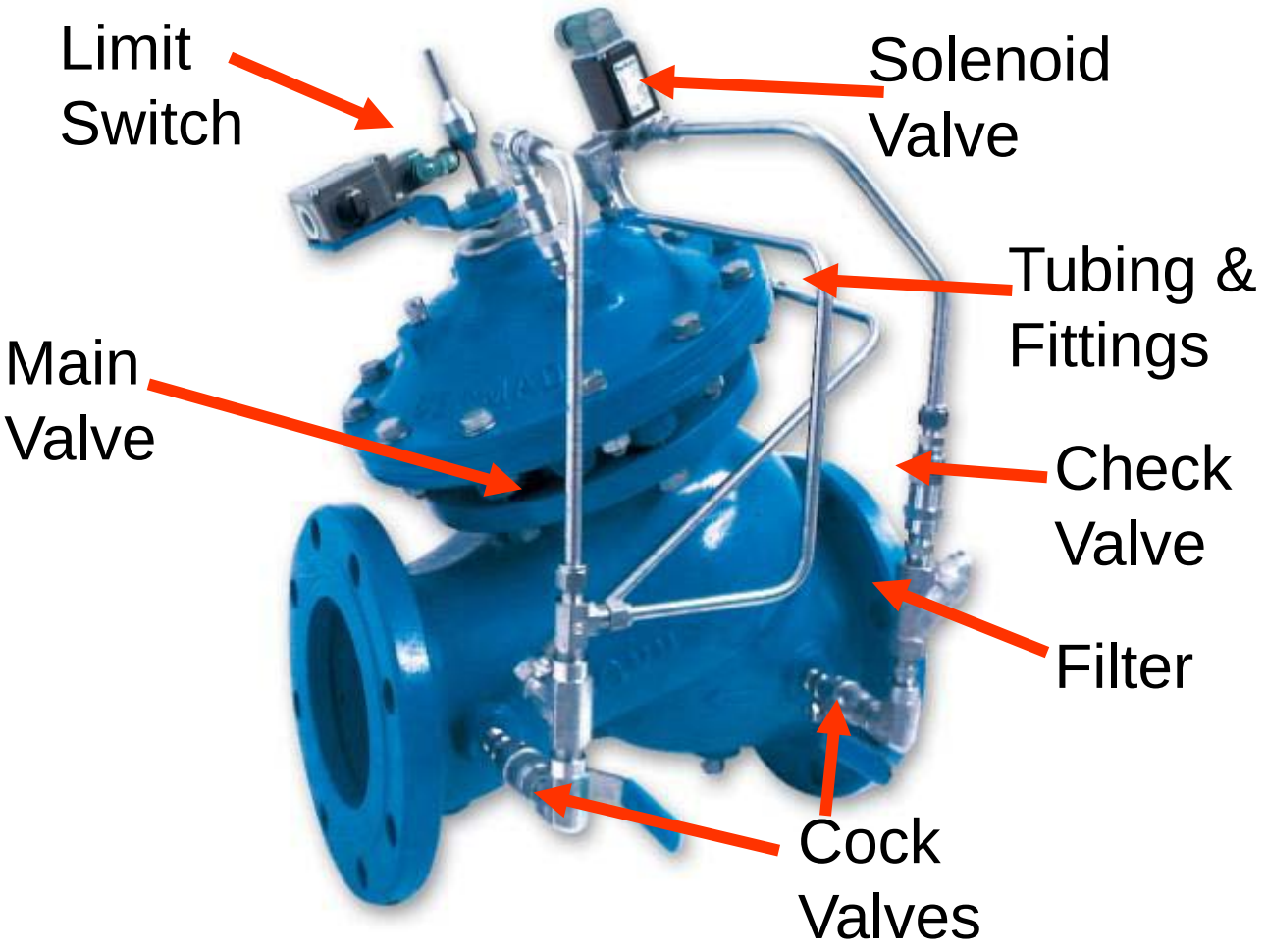

START
STOP
740

Typical Layout for 740 Pump Control Valves 740 x 3 Units, 735 x 2 Units

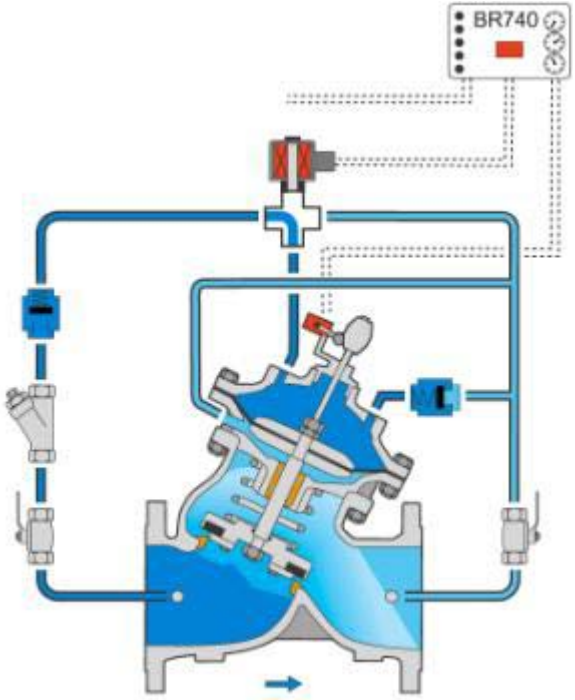


RAINFINE Irrigation Solution.

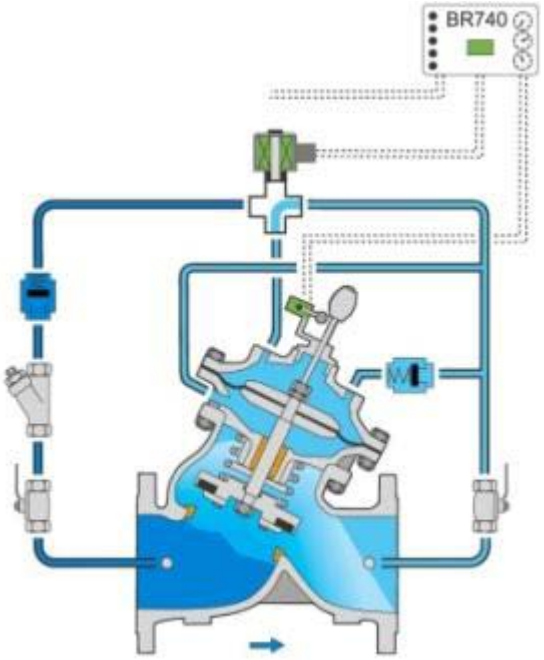
Pump Control Valve – Body & Components



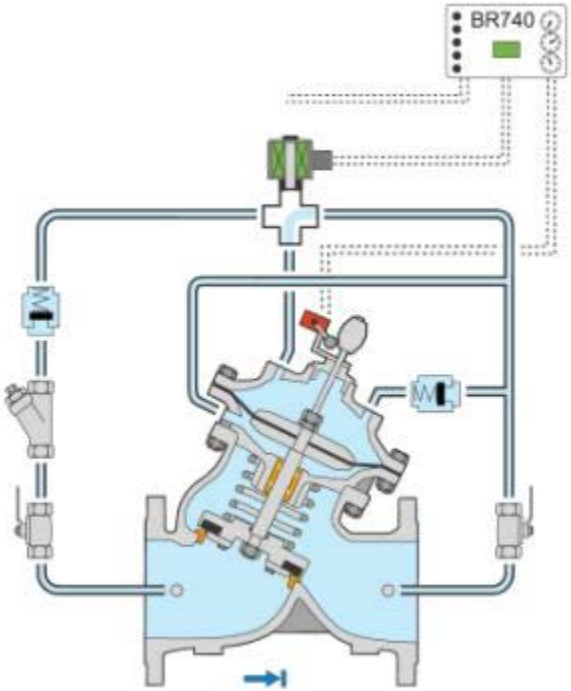
Pump Control Valve – Operation



Valve is Closing



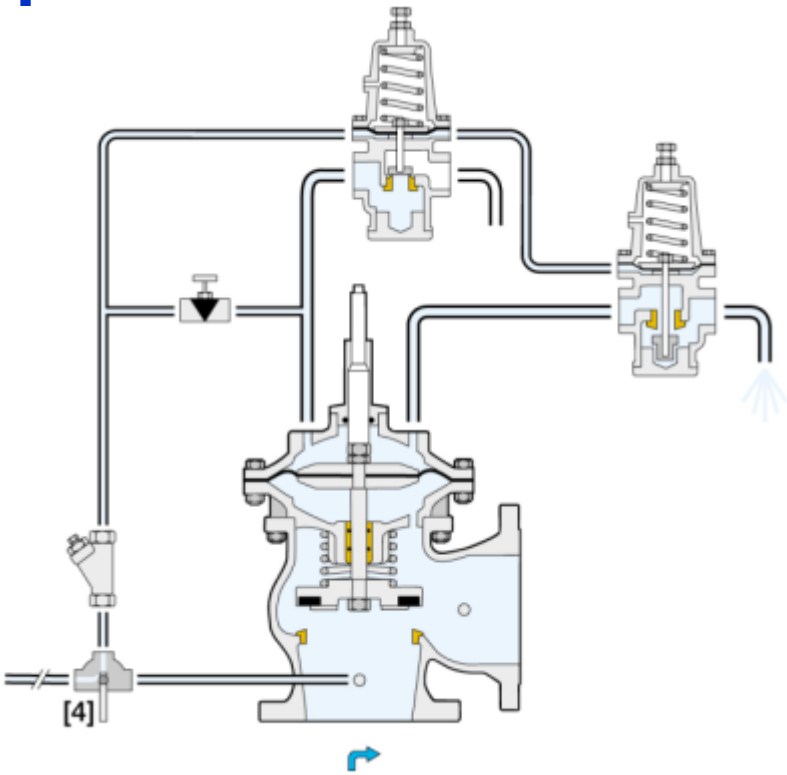
Valve is Opening



Valve is Closing as a Check Valve

RAINFINE Irrigation Solution.

Surge anticipation valves

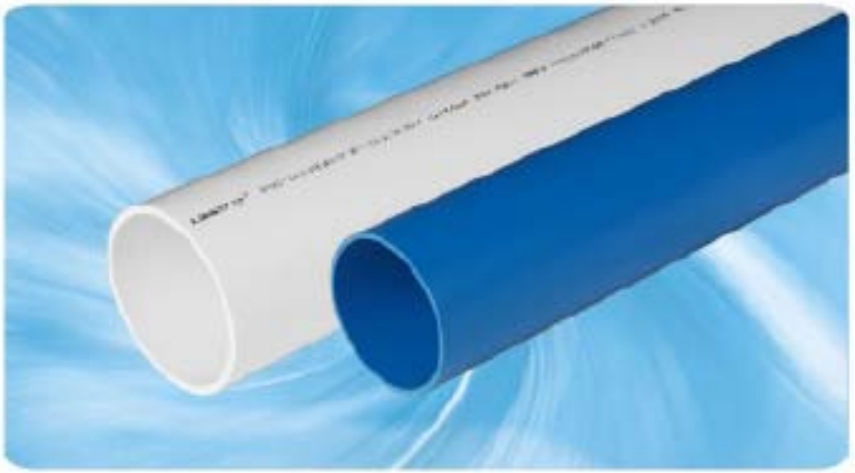


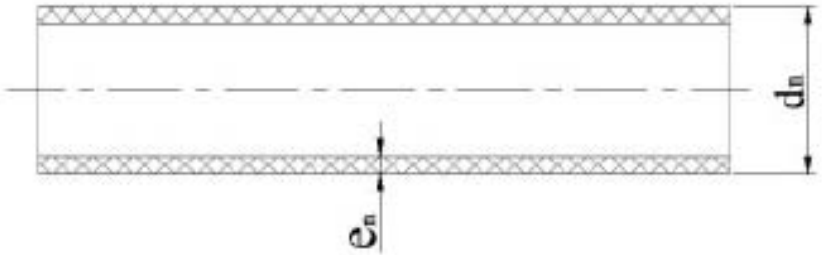
4. UPVC PIPE
UPVC管

RAINFINE
Irrigation Solution.

Properties		Typical Value
Specific Gravity, g/cm^3 (20℃)		1.35~1.46
Vicat Softening Temperature, ℃		≥80
Longitudinal Reversion, % (150℃)		≤5
Dichloromethane Resistance Test, (15℃, 15min)		No Change
Falling Weight Impact Test,TIR, % (0℃)		≤5
Hydraulic Pressure Test	20℃, 1h, Hoop Stress is 36MPa (d_n <40mm)	No Failure
	20℃, 1h, Hoop Stress is 38MPa (d_n ≥40mm)	No Failure
	20℃, 100h, Hoop Stress is 30MPa (All Size)	No Failure
	60℃, 1000h, Hoop Stress is 10MPa (All Size)	No Failure
Fitness Test for Purpose of the System	Leaktightness Test	No Failure
	Negative Pressure Test for Leaktightness*	No Failure
	Angular Deflection Test for Leaktightness*	No Failure
	*for gasketed joint	

RAINFINE Irrigation Solution.





d_n: Nominal Outside Diameter

e_n: Nominal Wall Thickness

PN: Nominal Pressure (unit: MPa)

S: Pipe Series

SDR: Standard Dimension Rate

d_n: Nominal Outside Diameter

e_n: Nominal Wall Thickness

PN: Nominal Pressure (unit: MPa)

S: Pipe Series

SDR: Standard Dimension Rate

RAINFINE Irrigation Solution.

PN 0.63

Part Number	S	SDR	d_n (mm)	e_n(mm)
31107	16	33	63	2.0
31108	16	33	75	2.3
31109	16	33	90	2.8
31110	20	41	110	2.7
31111	20	41	125	3.1
31112	20	41	140	3.5
31113	20	41	160	4.0
31114	20	41	180	4.4
31115	20	41	200	4.9
31116	20	41	225	5.5
31117	20	41	250	6.2
31118	20	41	280	6.9
31119	20	41	315	7.7
31120	20	41	355	8.7
31121	20	41	400	9.8
31123	20	41	500	12.3
31125	20	41	630	15.4

PN 0.8

Part Number	S	SDR	d_n (mm)	e_n(mm)
31206	12.5	26	50	2.0
31207	12.5	26	63	2.5
31208	12.5	26	75	2.9
31209	12.5	26	90	3.5
31210	16	33	110	3.4
31211	16	33	125	3.9
31212	16	33	140	4.3
31213	16	33	160	4.9
31214	16	33	180	5.5
31215	16	33	200	6.2
31216	16	33	225	6.9
31217	16	33	250	7.7
31218	16	33	280	8.6
31219	16	33	315	9.7
31220	16	33	355	10.9
31221	16	33	400	12.3
31223	16	33	500	15.3
31225	16	33	630	19.3

PN 1.0

Part Number	S	SDR	d_n (mm)	e_n(mm)
31305	10	21	40	2.0
31306	10	21	50	2.4
31307	10	21	63	3.0
31308	10	21	75	3.6
31309	10	21	90	4.3
31310	12.5	26	110	4.2
31311	12.5	26	125	4.8
31312	12.5	26	140	5.4
31313	12.5	26	160	6.2
31314	12.5	26	180	6.9
31315	12.5	26	200	7.7
31316	12.5	26	225	8.6
31317	12.5	26	250	9.6
31318	12.5	26	280	10.7
31319	12.5	26	315	12.1
31320	12.5	26	355	13.6
31321	12.5	26	400	15.3
31323	12.5	26	500	19.1
31325	12.5	26	630	24.1

PN 1.25

Part Number	S	SDR	d_n (mm)	e_n(mm)
31404	8	17	32	2.0
31405	8	17	40	2.4
31406	8	17	50	3.0
31407	8	17	63	3.8
31408	8	17	75	4.5
31409	8	17	90	5.4
31410	10	21	110	5.3
31411	10	21	125	6.0
31412	10	21	140	6.7
31413	10	21	160	7.7
31414	10	21	180	8.6
31415	10	21	200	9.6
31416	10	21	225	10.8
31417	10	21	250	11.9
31418	10	21	280	13.4
31419	10	21	315	15.0
31420	10	21	355	16.9
31421	10	21	400	19.1
31423	10	21	500	23.9
31425	10	21	630	30.0

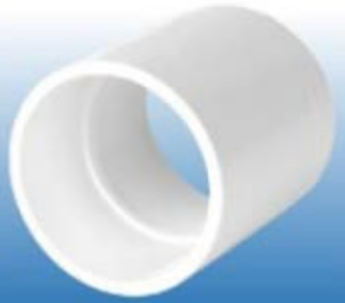
PN 1.6

Part Number	S	SDR	d_n (mm)	e_n(mm)
31503	6.3	13.6	25	2.0
31504	6.3	13.6	32	2.4
31505	6.3	13.6	40	3.0
31506	6.3	13.6	50	3.7
31507	6.3	13.6	63	4.7
31508	6.3	13.6	75	5.6
31509	6.3	13.6	90	6.7
31510	8	17	110	6.6
31511	8	17	125	7.4
31512	8	17	140	8.3
31513	8	17	160	9.5
31514	8	17	180	10.7
31515	8	17	200	11.9
31516	8	17	225	13.4
31517	8	17	250	14.8
31518	8	17	280	16.6
31519	8	17	315	18.7
31520	8	17	355	21.1
31521	8	17	400	23.7
31523	8	17	500	29.7

PN 2.5

Part Number	S	SDR	d_n (mm)	e_n(mm)
31702	4	9	20	2.3
31703	4	9	25	2.8
31704	4	9	32	3.6
31705	4	9	40	4.5
31706	4	9	50	5.6
31707	4	9	63	7.1
31708	4	9	75	8.4
31709	4	9	90	10.1
31710	5	11	110	10.0
31711	5	11	125	11.4
31712	5	11	140	12.7
31713	5	11	160	14.6
31714	5	11	180	16.4
31715	5	11	200	18.2

Coupling
(Soc x Soc)



Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3010002	20	410 x 280 x 330	1000
3010003	25	410 x 280 x 330	660
3010004	32	410 x 280 x 330	400
3010005	40	410 x 280 x 330	210
3010006	50	560 x 420 x 330	260
3010007	63	560 x 420 x 330	160
3010008	75	560 x 420 x 330	90
3010009	90	560 x 420 x 330	50
3010010	110	560 x 420 x 330	24
3010011	125	560 x 420 x 330	22
3010012	140	560 x 420 x 330	14
3010013	160	560 x 420 x 330	10
3010015	200	560 x 420 x 330	4
3010016	225		
3010017	250	560 x 420 x 330	2

Reducer
(Soc x Soc)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3010095	25 x 20	410 x 280 x 330	650
3010126	32 x 20	410 x 280 x 330	640
3010127	32 x 25	410 x 280 x 330	640
3010157	40 x 20	410 x 280 x 330	336
3010158	40 x 25	410 x 280 x 330	336
3010159	40 x 32	410 x 280 x 330	288
3010188	50 x 20	410 x 280 x 330	210
3010189	50 x 25	410 x 280 x 330	210
3010190	50 x 32	410 x 280 x 330	175
3010191	50 x 40	410 x 280 x 330	175
3010220	63 x 25	560 x 420 x 330	240
3010221	63 x 32	560 x 420 x 330	240
3010222	63 x 40	560 x 420 x 330	240
3010223	63 x 50	560 x 420 x 330	200
3010252	75 x 32	560 x 420 x 330	150
3010253	75 x 40	560 x 420 x 330	150
3010254	75 x 50	560 x 420 x 330	150
3010255	75 x 63	560 x 420 x 330	150
3010284	90 x 40	560 x 420 x 330	96

RAINFINE Irrigation Solution.

Reducer

(Soc x Soc)

Continued

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3010285	90 x 50	560 x 420 x 330	96
3010286	90 x 63	560 x 420 x 330	96
3010287	90 x 75	560 x 420 x 330	80
3010316	110 x 50	560 x 420 x 330	50
3010317	110 x 63	560 x 420 x 330	50
3010318	110 x 75	560 x 420 x 330	50
3010319	110 x 90	560 x 420 x 330	48
3010348	125 x 63	560 x 420 x 330	36
3010349	125 x 75	560 x 420 x 330	
3010350	125 x 90	560 x 420 x 330	24
3010351	125 x 110	560 x 420 x 330	24
3010380	140 x 75	560 x 420 x 330	
3010381	140 x 90	560 x 420 x 330	21
3010382	140 x 110	560 x 420 x 330	
3010383	140 x 125	560 x 420 x 330	15
3010413	160 x 125	560 x 420 x 330	15
3010382	140 x 110	560 x 420 x 330	
3010383	140 x 125	560 x 420 x 330	15
3010413	160 x 125	560 x 420 x 330	15
3010414	160 x 110	560 x 420 x 330	
3010415	160 x 140	560 x 420 x 330	
3010475	200 x 110	560 x 420 x 330	6
3010476	200 x 125	560 x 420 x 330	
3010477	220 x 140	560 x 420 x 330	
3010478	200 x 160	560 x 420 x 330	6
3010506	225 x 110	560 x 420 x 330	
3010508	225 x 140	560 x 420 x 330	
3010509	225 x 160	560 x 420 x 330	
3010511	225 x 200	560 x 420 x 330	
3010540	250 x 160	560 x 420 x 330	3
3010542	250 x 200	560 x 420 x 330	3

RAINFINE Irrigation Solution.

90° Elbow
(Soc x Soc)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3020002	20	410 x 280 x 330	480
3020003	25	410 x 280 x 330	340
3020004	32	410 x 280 x 330	180
3020005	40	410 x 280 x 330	112
3020006	50	560 x 420 x 330	144
3020007	63	560 x 420 x 330	72
3020008	75	560 x 420 x 330	40
3020009	90	560 x 420 x 330	25
3020010	110	560 x 420 x 330	16
3020011	125		
3020012	140		
3020013	160	560 x 420 x 330	5
3020015	200	560 x 420 x 330	3
3020016	225		
3020017	250	560 x 420 x 330	1

45° Elbow
(Soc x Soc)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3030002	20	410 x 280 x 330	490
3030003	25	410 x 280 x 330	400
3030004	32	410 x 280 x 330	224
3030005	40	410 x 280 x 330	130
3030006	50	560 x 420 x 330	160
3030007	63	560 x 420 x 330	90
3030008	75	560 x 420 x 330	55
3030009	90	560 x 420 x 330	30
3030010	110	560 x 420 x 330	20
3030011	125	560 x 420 x 330	15
3030012	140		
3030013	160	560 x 420 x 330	5
3030015	200	560 x 420 x 330	3
3030016	225		
3030017	250	560 x 420 x 330	2

Reducing Tee
(Soc x Soc x Soc)
Continued

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3040287	90 x 75	560 x 420 x 330	25
3040316	110 x 50	560 x 420 x 330	20
3040317	110 x 63	560 x 420 x 330	16
3040318	110 x 75	560 x 420 x 330	15
3040319	110 x 90	560 x 420 x 330	13
3040347	125 x 50		
3040413	160 x 110	560 x 420 x 330	5
3040414	160 x 125		
3040475	200 x 110	560 x 420 x 330	3
3040478	200 x 160	560 x 420 x 330	2
3040506	225 x 110		
3040509	225 x 160		
3040511	225 x 200		
3040540	250 x 160	560 x 420 x 330	1
3040542	250 x 200	560 x 420 x 330	1

Reducing Tee
(Soc x Soc x Soc)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3040095	25 x 20	410 x 280 x 330	290
3040126	32 x 20	410 x 280 x 330	168
3040127	32 x 25	410 x 280 x 330	152
3040157	40 x 20	410 x 280 x 330	128
3040158	40 x 25	410 x 280 x 330	112
3040159	40 x 32	410 x 280 x 330	112
3040188	50 x 20	560 x 420 x 330	150
3040189	50 x 25	560 x 420 x 330	150
3040190	50 x 32	560 x 420 x 330	135
3040191	50 x 40	560 x 420 x 330	108
3040220	63 x 25	560 x 420 x 330	90
3040221	63 x 32	560 x 420 x 330	90
3040222	63 x 40	560 x 420 x 330	75
3040223	63 x 50	560 x 420 x 330	65
3040252	75 x 32	560 x 420 x 330	50
3040253	75 x 40	560 x 420 x 330	50
3040254	75 x 50	560 x 420 x 330	46
3040255	75 x 63	560 x 420 x 330	40
3040284	90 x 40	560 x 420 x 330	36
3040285	90 x 50	560 x 420 x 330	35
3040286	90 x 63	560 x 420 x 330	30

RAINFINE Irrigation Solution.

Tee
(Soc x Soc x Soc)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3040002	20	410 x 280 x 330	438
3040003	25	410 x 280 x 330	260
3040004	32	410 x 280 x 330	140
3040005	40	410 x 280 x 330	72
3040006	50	560 x 420 x 330	100
3040007	63	560 x 420 x 330	50
3040008	75	560 x 420 x 330	35
3040009	90	560 x 420 x 330	20
3040010	110	560 x 420 x 330	10
3040013	160	560 x 420 x 330	3
3040015	200	560 x 420 x 330	2
3040016	225		
3040017	250	560 x 420 x 330	1

Cap
(Soc)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3060002	20	410 x 280 x 330	1260
3060003	25	410 x 280 x 330	870
3060004	32	410 x 280 x 330	480
3060005	40	410 x 280 x 330	360
3060006	50	410 x 280 x 330	200
3060007	63	410 x 280 x 330	100
3060008	75	560 x 420 x 330	80
3060009	90	560 x 420 x 330	52
3060010	110	560 x 420 x 330	60
3060011	125	560 x 420 x 330	48
3060012	140	560 x 420 x 330	30
3060013	160		
3060015	200		
3060016	225		

RAINFINE Irrigation Solution.

Blind Flange

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3240010	110	410 x 280 x 330	22
3240013	160	410 x 280 x 330	12
3240015	200	410 x 280 x 330	7

Flexible Flange

(Soc X Flange)
(1.0Mpa)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3233007	63	560 x 420 x 330	55
3233008	75	560 x 420 x 330	44
3233009	90	560 x 420 x 330	30
3233010	110	560 x 420 x 330	20
3233013	160	560 x 420 x 330	8
3233015	200	560 x 420 x 330	4
3233017	250	560 x 420 x 330	2

Butterfly Valve
(Lever Handle Style)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3320010	110	560 x 420 x 330	8
3320013	160	560 x 420 x 330	4
3320015	200		

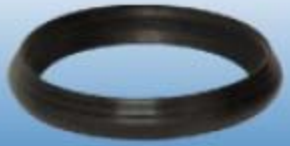
Butterfly Valve
(Gear Operator Style)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3330010	110		
3330013	160		
3330015	200		

Solvent Cement

Part Number	Volume (ml)	Carton Size (mm x mm x mm)	Qty/Ctn
3360001	100	270 x 200 x180	24
3360002	500	270 x 200 x180	12

Rubber Gasket



Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3680007	63		
3680008	75		
3680009	90		
3680010	110		
3680012	140		
3680013	160		
3680015	200		
3680016	225		
3680017	250		
3680018	280		
3680019	315		
3680020	355		
3680021	400		
3680023	500		
3680025	630		
3680026	710		

Coupling
(Gasket x Gasket)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3390007	63 x 63		
3390008	75 x 75		
3390009	90 x 90		
3390010	110 x 110		
3390013	160 x 160		
3390015	200 x 200		
3390017	250 x 250		

Reducer
(Gasket x Gasket)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3390317	110 x 63		
3390413	160 x 110		
3390475	200 x 110		
3390478	200 x 160		
3390540	250 x 160		
3390542	250 x 200		

RAINFINE Irrigation Solution.

90° Elbow
(Gasket x Gasket)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3400007	63 x 63		
3400008	75 x 75		
3400009	90 x 90		
3400010	110 x 110		
3400013	160 x 160		
3400015	200 x 200		

45° Elbow
(Gasket x Gasket)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3410007	63 x 63		
3410008	75 x 75		
3410009	90 x 90		
3410010	110 x 110		
3410013	160 x 160		
3410015	200 x 200		
3410017	250 x 250		

22-1/2° Elbow
(Gasket x Gasket)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3420010	110 x 110		
3420013	160 x 160		
3420015	200 x 200		
3420017	250 x 250		

RAINFINE Irrigation Solution.

Tee
(Gasket x Gasket x Gasket)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3440007	63 x 63 x 63		
3440008	75 x 75 x 75		
3440009	90 x 90 x 90		
3440010	110 x 110 x 110		
3440013	160 x 160 x 160		
3440015	200 x 200 x 200		

Reducing Tee
(Gasket x Gasket x Gasket)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3440413	160 x 110 x 160		
3440475	200 x 110 x 200		
3440478	200 x 160 x 200		

Tee
(Gasket x Gasket x Spig)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3460010	110 x 110 x 110		
3460013	160 x 160 x 160		
3460015	200 x 200 x 200		
3460017	250 x 250 x 250		

RAINFINE Irrigation Solution.

Tee
(Gasket x Gasket x Flange)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3450010	110 x 110 x 110		
3450013	160 x 160 x 160		
3450015	200 x 200 x 200		

Reducing Tee
(Gasket x Gasket x Spig)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3460317	110 x 63 x 110		
3460319	110 x 90 x 110		
3460413	160 x 110 x 160		
3460475	200 x 110 x 200		
3460478	200 x 160 x 200		
3460542	250 x 200 x 250		

RAINFINE Irrigation Solution.

Reducing Tee
(Gasket x Gasket x Flange)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3450413	160 x 110 x 160		
3450475	200 x 110 x 200		
3450478	200 x 160 x 200		

Tee
(Gasket x Flange x Spig)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3470010	110 x 110 x 110		
3470013	160 x 160 x 160		
3470015	200 x 200 x 200		
3470017	250 x 250 x 250		

RAINFINE Irrigation Solution.

Reducing Tee
(Gasket x Flange x Spig)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3470413	160 x 110 x 160		
3470475	200 x 110 x 200		
3470478	200 x 160 x 200		
3470542	250 x 200 x 250		

Coupling
(Flange x Spig)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3510010	110		
3510013	160		
3510015	200		
3510017	250		

Hot-Tap Saddle

Part Number	Size (mm x inch)	Carton Size (mm x mm x mm)	Qty/Ctn
3520314	110 x 1"		
3520317	110 x 2"		
3520410	160 x 2"		
3520472	200 x 2"		
3520534	250 x 2"		
3520596	315 x 2"		

RAINFINE Irrigation Solution.

Coupling
(Flange x Gasket)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3500009	90		
3500010	110		
3500013	160		
3500015	200		
3500017	250		

Repaired Coupling

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3530010	110		
3530013	160		
3530015	200		

No-Stop Water Repaired Coupling

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3540010	110		
3540013	160		
3540015	200		
3540017	250		
3540019	315		
3540021	400		

RAINFINE Irrigation Solution.

Coupling
(Gasket x Gasket)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3550009	90 x 90		
3550010	110 x 110		
3550013	160 x 160		
3550015	200 x 200		
3550016	225 x 225		
3550017	250 x 250		
3550019	315 x 315		
3550020	355 x 355		
3550021	400 x 400		
3550023	500 x 500		
3550025	630 x 630		

Reducer
(Gasket x Gasket)
Continued

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3550633	355 x 160		
3550635	355 x 200		
3550636	355 x 225		
3550637	355 x 250		
3550639	355 x 315		
3550661	400 x 110		
3550664	400 x 160		
3550666	400 x 200		
3550667	400 x 225		
3550668	400 x 250		
3550670	400 x 315		
3550671	400 x 355		
3550726	500 x 160		
3550728	500 x 200		
3550729	500 x 225		
3550730	500 x 250		
3550732	500 x 315		
3550733	500 x 355		
3550734	500 x 400		
3550794	630 x 315		
3550796	630 x 400		
3550798	630 x 500		

RAINFINE Irrigation Solution.

90° Elbow
(Gasket x Gasket)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3560009	90 x 90		
3560010	110 x 110		
3560013	160 x 160		
3560015	200 x 200		
3560016	225 x 225		
3560017	250 x 250		
3560019	315 x 315		
3560020	355 x 355		
3560021	400 x 400		
3560023	500 x 500		
3560025	630 x 630		

Reducer
(Gasket x Gasket)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3550319	110 x 90		
3550410	160 x 63		
3550412	160 x 90		
3550413	160 x 110		
3550472	200 x 63		
3550475	200 x 110		
3550478	200 x 160		
3550505	225 x 90		
3550506	225 x 110		
3550509	225 x 160		
3550511	225 x 200		
3550534	250 x 63		
3550537	250 x 110		
3550540	250 x 160		
3550542	250 x 200		
3550543	250 x 225		
3550599	315 x 110		
3550602	315 x 160		
3550604	315 x 200		
3550605	315 x 225		
3550606	315 x 250		
3550629	355 x 90		
3550630	355 x 110		

RAINFINE Irrigation Solution.

45° Elbow /
30° Elbow /
22-1/2° Elbow /
11-1/4° Elbow
(Gasket x Gasket)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3570010	110 x 110		
3570013	160 x 160		
3570015	200 x 200		
3570016	225 x 225		
3570017	250 x 250		
3570019	315 x 315		
3570020	355 x 355		
3570021	400 x 400		
3570023	500 x 500		
3570025	630 x 630		

Tee
(Gasket x Gasket x Gasket)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3580009	90 x 90 x 90		
3580010	110 x 110 x 110		
3580013	160 x 160 x 160		
3580015	200 x 200 x 200		
3580016	225 x 225 x 225		
3580017	250 x 250 x 250		
3580019	315 x 315 x 315		
3580020	355 x 355 x 355		
3580021	400 x 400 x 400		
3580023	500 x 500 x 500		
3580025	630 x 630 x 630		

Reducing Tee
(Gasket x Gasket x Gasket)

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3580410	160 x 63 x 160		
3580472	200 x 63 x 200		
3580473	200 x 75 x 200		
3580474	200 x 90 x 200		
3580475	200 x 110 x 200		
3580478	200 x 160 x 200		

RAINFINE Irrigation Solution.

Reducing Tee

(Gasket x Gasket x Gasket)

Continued

Part Number	Size (mm)	Carton Size (mm x mm x mm)	Qty/Ctn
3580503	225 x 63 x 225		
3580505	225 x 90 x 225		
3580506	225 x 110 x 225		
3580509	225 x 160 x 225		
3580511	225 x 200 x 225		
3580534	250 x 63 x 250		
3580535	250 x 75 x 250		
3580536	250 x 90 x 250		
3580537	250 x 110 x 250		
3580540	250 x 160 x 250		
3580542	250 x 200 x 250		
3580543	250 x 225 x 250		
3580596	315 x 63 x 315		
3580598	315 x 90 x 315		
3580599	315 x 110 x 315		
3580602	315 x 160 x 315		
3580604	315 x 200 x 315		
3580605	315 x 225 x 315		
3580606	315 x 250 x 315		
3580627	355 x 63 x 355		
3580628	355 x 75 x 355		
3580629	355 x 90 x 355		
3580630	355 x 110 x 355		
3580633	355 x 160 x 355		
3580635	355 x 200 x 355		
3580636	355 x 225 x 355		
3580637	355 x 250 x 355		
3580639	355 x 315 x 355		
3580658	400 x 63 x 400		
3580659	400 x 75 x 400		
3580660	400 x 90 x 400		
3580661	400 x 110 x 400		
3580664	400 x 160 x 400		
3580666	400 x 200 x 400		
3580667	400 x 225 x 400		
3580668	400 x 250 x 400		
3580670	400 x 315 x 400		
3580720	500 x 63 x 500		
3580722	500 x 90 x 500		
3580723	500 x 110 x 500		
3580726	500 x 160 x 500		
3580728	500 x 200 x 500		
3580729	500 x 225 x 500		
3580730	500 x 250 x 500		
3580732	500 x 315 x 500		
3580733	500 x 355 x 500		
3580734	500 x 400 x 500		
3580792	630 x 250 x 630		
3580794	630 x 315 x 630		
3580798	630 x 500 x 630		

Solvent Weld Joint

1. If it is necessary, cut the pipe to the desired length with pipe cutters, hacksaw or cross cut saw, make sure the cut is square.

2. Chamfer the cut ends and remove the all burrs from inside and outside diameter of pipe with a knife-edge, file, or deburring tool. Make sure all joining surfaces are free from dirt, dust, water and oil.
Mark the pipe end with a socket depth line.

3. Coat the inside of the fittings socket with a medium layer of cement. Immediately apply a full even layer of cement on the pipe for a distance slightly greater than the depth of the fitting socket. If cement dries on either surface before joining, apply another coat.

RAINFINE Irrigation Solution.

4. While the cement is still wet, immediately insert the pipe into the fitting with a steady even motion until it bottoms in the socket, and turn pipe 1/4 turn in the socket to ensure an even spread of cement. Hold the pipe and fitting together firmly in position for 30 seconds ($d_n \leqslant 63$mm) or 60 seconds (d_n75mm - d_n250mm).
Wipe the excessive cement from joint after assembly.

5. Do not take the next step until the joint is cured.
The hydrostatic pressure test shall be made only after 24 hours.

Gasketed Joint

1. Clean and dry the inside of bell and the outside of spigo end of the pipe.
Mark the spigot end with a socket depth line.
Chamfer the spigot end of the pipe.

Note: LIANSU pipe spigot has been marked with a socket depth line and chamfered.

2. Clean and dry the gasket.
Put the gasket into the bell groove.

3. Apply lubricant on the spigot end of the pipe and the surface of gasket. The lubricant shall be nontoxic and shall have no deteriorating effects on the gasket and pipe materials.

4. Insert the beveled spigot end into the bell with pull tool until it contact with the gasket. Push the spigot end in until the reference mark on the spigot end is flush with the end of the bell. If undue resistance to insertion of the beveled end is encountered or the reference mark does not reach the flush position, disassemble the joint, and check the position of the gasket, and remove any debris.

Tensioner

Part Number	Size	Carton Size (mm x mm x mm)	Qty/Ctn
3690001	2T		
3690002	3T		

5. HDPE PIPE
HDPE管

Pipe Type	Percentage of damage Piece/km
Ductile Cast Iron Pipe	0.488
Cast Iron Pipe	1.508
PVC Pipe	1.430
Steel Pipe	0.437
Asbestos Steel Pipe	1.782
PE Pipe	0

Properties		Typical Value
Specific Gravity, g/cm^3 (20℃)		0.941~0.965
Longitudinal Reversion, % (110℃)		≤3
Oxidation Induction Time, min (200℃)		≥20
Extension Rate at Break, %		≥350
Hydraulic Pressure Test	20℃, 100h, Hoop Stress is 12.4MPa	No Failure
	80℃, 165h, Hoop Stress is 5.5MPa	No Failure
	80℃, 1000h, Hoop Stress is 5.0MPa	No Failure

RAINFINE Irrigation Solution.

PE Water Pipe: PE 80 Pipe

PE Water Pipe: PE 80 Pipe

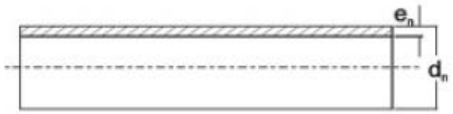
SDR: Standard Dimension
PN: Rate
d_n: Nominal Outside Diameter
Nominal Pressure (unit: MPa)
e_n: Nominal Wall Thickness

SDR 33 (PN 0.4)			SDR 21 (PN 0.6)			SDR 17 (PN 0.8)		
Part Number	d_n (mm)	e_n (mm)	Part Number	d_n (mm)	e_n (mm)	Part Number	d_n (mm)	e_n (mm)
11113	160	4.9	11309	90	4.3	11408	75	4.5
11114	180	5.5	11310	110	5.3	11409	90	5.4
11115	200	6.2	11311	125	6.0	11410	110	6.6
11116	225	6.9	11313	160	7.7	11411	125	7.4
11117	250	7.7	11314	180	8.6	11413	160	9.5
11118	280	8.6	11315	200	9.6	11414	180	10.7
11119	315	9.7	11316	225	10.8	11415	200	11.9
11120	355	10.9	11317	250	11.9	11416	225	13.4
11121	400	12.5	11318	280	13.4	11417	250	14.8
11122	450	13.8	11319	315	15.0	11418	280	16.6
11123	500	15.3	11320	355	16.9	11419	315	18.7
11124	560	17.2	11321	400	19.1	11420	355	21.1
11125	630	19.3	11322	450	21.5	11421	400	23.7
11126	710	21.8	11323	500	23.9	11422	450	26.7
11127	800	24.5	11324	560	26.7	11423	500	29.7
			11325	630	30.0	11424	560	33.2
			11326	710	33.9	11425	630	37.4
			11327	800	38.1	11426	710	42.1
						11427	800	47.4

RAINFINE Irrigation Solution.

PE Water Pipe: PE 80 Pipe

SDR: Standard Dimension
PN: Rate
d_n: Nominal Outside Diameter
Nominal Pressure (unit: MPa)
e_n: Nominal Wall Thickness



SDR 13.6 (PN 1.0)			SDR 11 (PN 1.25)		
Part Number	d_n (mm)	e_n (mm)	Part Number	d_n (mm)	e_n (mm)
11507	63	4.7	11603	25	2.3
11508	75	5.6	11604	32	3.0
11509	90	6.7	11605	40	3.7
11510	110	8.1	11606	50	4.6
11511	125	9.2	11607	63	5.8
11513	160	11.8	11608	75	6.8
11514	180	13.3	11609	90	8.2
11515	200	14.7	11610	110	10.0
11516	225	16.6	11611	125	11.4
11517	250	18.4	11613	160	14.6
11518	280	20.6	11614	180	16.4
11519	315	23.2	11615	200	18.2
11520	355	26.1	11616	225	20.5
11521	400	29.4	11617	250	22.7
11522	450	33.1	11618	280	25.4
11523	500	36.8	11619	315	28.6
11524	560	41.2	11620	355	32.2
11525	630	46.3	11621	400	36.3
11526	710	52.2	11622	450	40.9
11527	800	58.8	11623	500	45.4
			11624	560	50.8
			11625	630	57.2

RAINFINE Irrigation Solution.

PE Water Pipe: PE 100 Pipe

PE Water Pipe: PE 100 Pipe

Technical Specifications	PE 100	Unit	Test Mechod
Density at 23° C	0.955	g/cm^3	ISO 1183
MFR 190° /5 kg	0.23	g/10 min	ISO 1133
Mechanical Properties			
Yield Stress	23	MPa	ISO 527
Tensile Modulus	>1000	MPa	ISO 527
Notched Impact Strength			
+23° C			
-20° C			
Notched Impact Strength			
Oxidation-Induction Time at 210° C	⩾20	min	ISO TR 10837
Carbon Black Content	⩾2	%	ISO 6964
Resistance to S.C.P (slow crack propagation = 4.6 Mpa, 80° C Notched)	>1000	h	ISO 13479
Resistance to R.C.P (Rapid Crack Propagation S4-test 110/10 mm, ° C)	>10	bar	ISO DIS 13477
Elongation at break	⩾500	%	ISO 6259
Linear Thermal Expansion	1.5×10^{-4}	$^{\circ}C^{-1}$	ASTM D696(20-60°C)
Electrical Properties			
Electric Strength	>20	kV/mm	ASTM D149
Volume Resistivity	$>10^{19}$	Ω M	ASTM D257

RAINFINE Irrigation Solution.

PE Water Pipe: PE 100 Pipe

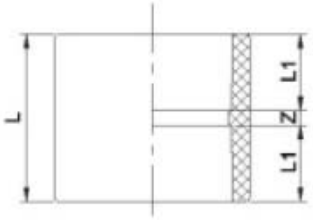
SDR 26 (PN 0.6)			SDR 21 (PN 0.8)			SDR 17 (PN1.0)		
Part Number	d_n (mm)	e_n (mm)	Part Number	d_n (mm)	e_n (mm)	Part Number	d_n (mm)	e_n (mm)
13210	110	4.2	13309	90	4.3	13408	75	4.5
13211	125	4.8	13310	110	5.3	13409	90	5.4
13213	160	6.2	13311	125	6.0	13410	110	6.6
13214	180	6.9	13313	160	7.7	13411	125	7.4
13215	200	7.7	13314	180	8.6	13413	160	9.5
13216	225	8.6	13315	200	9.6	13414	180	10.7
13217	250	9.6	13316	225	10.8	13415	200	11.9
13218	280	10.7	13317	250	11.9	13416	225	13.4
13219	315	12.1	13318	280	13.4	13417	250	14.8
13220	355	13.6	13319	315	15.0	13418	280	16.6
13221	400	15.3	13320	355	16.9	13419	315	18.7
13222	450	17.2	13321	400	19.1	13420	355	21.1
13223	500	19.1	13322	450	21.5	13421	400	23.7
13224	560	21.4	13323	500	23.9	13422	450	26.7
13225	630	24.1	13324	560	26.7	13423	500	29.7
13226	710	27.2	13325	630	30.0	13424	560	33.2
13227	800	30.6	13326	710	33.9	13425	630	37.4
13228	900	34.4	13327	800	38.1	13426	710	42.1
13229	1000	38.2	13328	900	42.9	13427	800	47.4
13230	1200	46.3	13329	1000	47.7	13428	900	53.3
13231	1400	53.9	13330	1200	57.2	13429	1000	59.3
13232	1600	61.6	13331	1400	66.8			

PE Water Pipe: PE 100 Pipe

SDR 13.6 (PN 1.25)			SDR 11 (PN 1.6)		
Part Number	d_n (mm)	e_n (mm)	Part Number	d_n (mm)	e_n (mm)
13507	63	4.7	13602	20	2.3
13508	75	5.6	13603	25	2.3
13509	90	6.7	13604	32	3.0
13510	110	8.1	13605	40	3.7
13511	125	9.2	13606	50	4.6
13513	160	11.8	13607	63	5.8
13514	180	13.3	13608	75	6.8
13515	200	14.7	13609	90	8.2
13516	225	16.6	13610	110	10.0
13517	250	18.4	13611	125	11.4
13518	280	20.6	13613	160	14.6
13519	315	23.2	13614	180	16.4
13520	355	26.1	13615	200	18.2
13521	400	29.4	13616	225	20.5
13522	450	33.1	13617	250	22.7
13523	500	36.8	13618	280	25.4
13525	630	46.3	13619	315	28.6
			13620	355	32.2
			13621	400	36.3
			13622	450	40.9
			13623	500	45.4
			13624	560	50.8
			13625	630	57.2

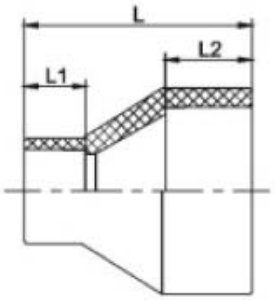
RAINFINE Irrigation Solution.

Coupling
(Soc×Soc)



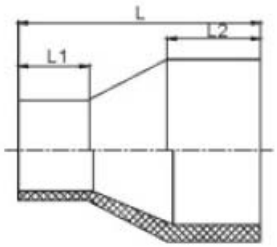
Part Number	Size (mm)	L1	L	Z	Qty/Ctn
1010002	20	16.5	37	4	810
1010003	25	18	40	4	600
1010004	32	20.5	45	4	460
1010005	40	22.5	50	5	240
1010006	50	25.5	56	5	260
1010007	63	29.5	65	6	160
1010008	75	33	72	6	100
1010009	90	36	78	6	50
1010010	110	42	90	6	36

Reducer
(Soc×Soc)

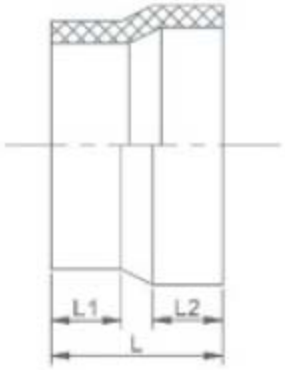


Part Number	Size (mm)	L1	L2	L	Qty/Ctn
1010095	25x20	16.5	18	45	600
1010126	32x20	16.5	20.5	56	320
1010127	32x25	18	20.5	52	300
1010157	40x20	16.5	22.5	63	320
1010158	40x25	18	22.5	61	240
1010159	40x32	20.5	22.5	54	240
1010188	50x20	16.5	25.5	68	160
1010189	50x25	18	25.5	67	160
1010190	50x32	20.5	25.5	67	160
1010191	50x40	22.5	25.5	62	120
1010220	63x25	18	29.5	82	160
1010221	63x32	20.5	29.5	84	150
1010222	63x40	22.5	29.5	82	150
1010223	63x50	25.5	29.5	71	135
1010255	75x63	29.5	33	80	90
1010286	90x63	29.5	38.5	100	72
1010287	90x75				55
1010317	110x63	29.5	41.5	112	50

Reducer

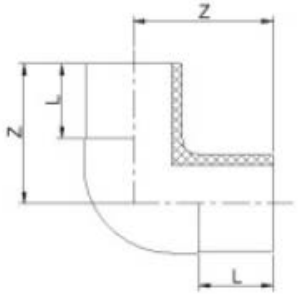


Part Number	SDR	Size (mm)	L1	L2	L	Qty/Ctn
1236255	11	75×63	70	75	156	60
1236286	11	90×63	65	79	172	40
1236287	11	90×75	70	80	164	40
1236316	11	110×50	70	83	196	36
1236317	11	110×63	70	80	196	36
1236318	11	110×75	70	80	184	32
1236319	11	110×90	70	80	169	30
1236348	11	125×63	70	80	200	24
1236350	11	125×90	84	98	242	24
1236351	11	125×110	80	80	178	20
1236412	11	160×90	80	90	242	12
1236413	11	160×110	80	100	228	12
1236414	11	160×125	80	80	195	12
1236441	11	180×63	78	100	266	14
1236444	11	180×110	100	100	239	12
1236447	11	180×160	90	90	230	10
1236475	11	200×110	80	100	226	6
1236478	11	200×160	100	100	239	6
1236479	11	200×180				6
1236509	11	225×160	90	90	230	6
1236511	11	225×200	90	90	206	4



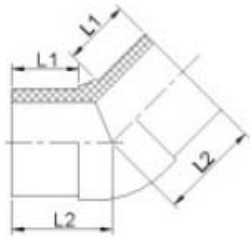
Part Number	SDR	Size(mm)	L1	L2	L	Qty/Ctn
1236537	11	250×110	80	90	210	5
1236540	11	250×160	80	90	283	3
1236542	11	250×200	90	90	246	4
1236543	11	250×225	90	90	206	3
1235568	13.6	280×110				3
1235571	13.6	280×160				4
1235573	13.6	280×200	85	85	250	4
1235599	13.6	315×110	90	85	225	2
1235602	13.6	315×160	90	90	225	2
1235604	13.6	315×200	100	100	286	2
1235605	13.6	315×225	90	90	222	2
1235606	13.6	315×250	90	90	240	
1235607	13.6	315×280	85	85	201	
1234635	17	355×200	80	80	287	
1234637	17	355×250	77	77	242	
1234639	17	355×315	90	90	220	
1234666	17	400×200	70	70	260	
1234668	17	400×250	80	80	248	
1234670	17	400×315	80	85	215	
1234697	17	450×200	70	70	254	
1234699	17	450×250	85	85	248	
1234701	17	450×315	30	55	120	
1234732	17	500×315				
1234734	17	500×400	20	40	90	
1234735	17	500×450				
1234765	17	560×400				
1234767	17	560×500				
1234794	17	630×315				
1234796	17	630×400				
1234798	17	630×500	20	40	105	

90° Elbow



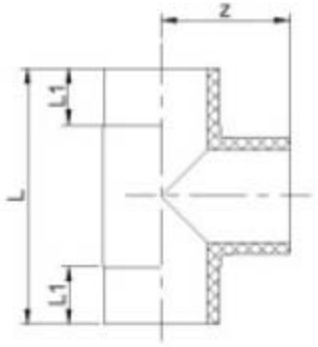
Part Number	SDR	Size (mm)	Z	L	Qty/Ctn
1246008	11	75	132	75	30
1246009	11	90	150	85	20
1246010	11	110	163	87	12
1246011	11	125	170.5	87	8
1246013	11	160	200	100	5
1246014	11	180	210	95	4
1246015	11	200	225	100	3
1244016	17	225	265	120	
1246016	11	225	265	120	
1244017	17	250	292	130	
1246017	11	250	292	130	
1244018	17	280	316	138	
1246018	11	280	316	138	

45° Elbow



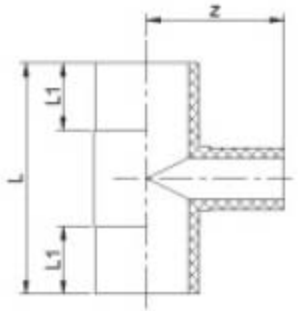
Part Number	SDR	Size (mm)	L1	L2	Qty/Ctn
1256008	11	75	80	124	30
1256009	11	90	85	136	18
1256010	11	110			12
1256011	11	125			10
1254013	17	160			
1256013	11	160			
1254014	17	180			
1256014	11	180			
1254015	17	200			
1256015	11	200			
1254016	17	225			
1256016	11	225			
1254017	17	250			
1256017	11	250			
1254018	17	280			
1256018	11	280			

Tee



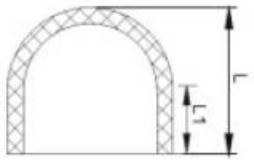
Part Number	SDR	Size (mm)	L1	L	Z	Qty/Ctn
1266008	11	75	75	264	132	18
1266009	11	90	85	300	150	14
1266010	11	110	87	326	163	8
1266011	11	125	87	341	170.5	6
1266013	11	160	100	400	210	3
1266014	11	180	95	420	420	3
1266015	11	200	100	450	225	2
1264016	17	225	120	530	265	
1266016	11	225	120	530	265	
1266017	11	250	130	600	300	
1264017	17	250	130	600	300	
1266018	11	280	138	632	316	
1264018	17	280	138	632	316	
1264019	17	315	150	710	355	
1264020	17	355	110	660	330	

Reducing Tee



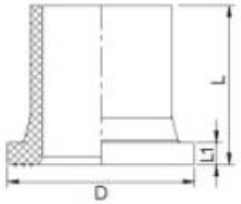
Part Number	SDR	Size(mm)	L1	L2	L	Z	Qty/Ctn
1266317	11	110×63	85	85	300	160	10
1266318	11	110×75	85	85	300	160	10
1266319	11	110×90	85	85	300	160	9
1266410	11	160×63	90	90	330	188	6
1266411	11	160×75	90	90	330	188	5
1266412	11	160×90	90	90	330	188	5
1266413	11	160×110	90	90	330	188	5
1264537	17	250×110	130	130	510	270	
1266537	11	250×110	130	130	510	270	
1264540	17	250×160	130	130	510	270	
1266540	11	250×160	130	130	510	270	

Cap



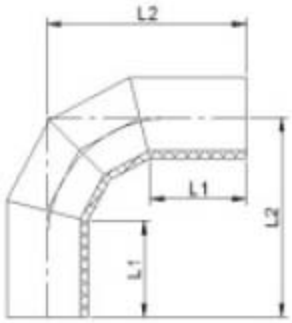
Part Number	SDR	Size(mm)	L1	L	Qty/Ctn
1276008	11	75	75	113	100
1276009	11	90	75	120	60
1276010	11	110	74	130	40
1276011	11	125	80	143.5	24
1276013	11	160	98	179	15
1276014	11	180	88	180	12
1276015	11	200	98	199	8
1276016	11	225	90	204	5
1276017	11	250	97	224	4
1275018	13.6	280	78	220	4
1276019	11	315	74	140	
1274020	17	355	74	120	
1276021	11	400	74	160	

Stub Flange



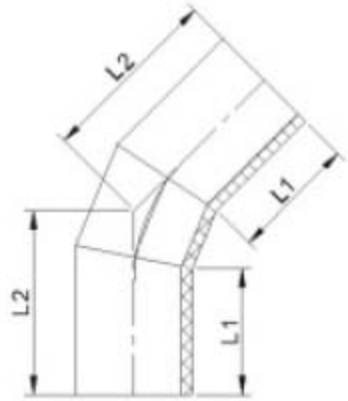
Part Number	Size(mm)	L1	L	D	Qty/Ctn
		1.6 MPa			
1286008	75	16	125	122	48
1286009	90	17	140	138	24
1286010	110	18	160	158	18
1286011	125	18	160	163	16
1286013	160	28	180	212	6
1286014	180	30	184	212	6
1286015	200	32	200	268	4
1286017	250	35	150	320	4
1286018	280	38	152	324	3
1286019	315	35	150	370	
1286020	355	31	120	435	
1286021	400	33	157	482	
1286022	450	45	280	537	
		1.0 MPa			
1284019	315	33	145	370	
1284020	355	31	120	432	
1284021	400	33	140	482	
1284022	450				
1284023	500	46	170	585	
1284024	560	50	195	685	
1284025	630	50	160	685	
1284026	710				
1284027	800				

Fabricated 90° Elbow



Part Number		Size (mm)	L1	L2	Qty/Ctn
0.6, 1.0 MPa	1.6MPa				
1404019	1406019	315	374	773	
1404020	1406020	355	374	833	
1404021	1406021	400	374	900	
1404022	1406022	450	410	975	
1404023	1406023	500	405	1100	
1404024	1406024	560			
1404025	1406025	630	526	1295	
1404026		710			
1404027		800			

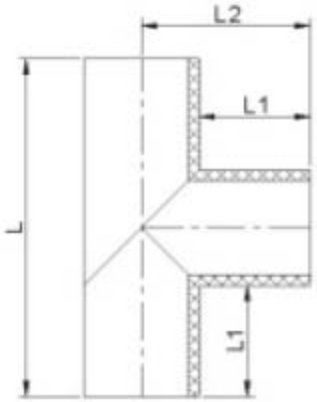
Fabricated 45° Elbow



Part Number		Size (mm)	L1	L2	Qty/Ctn
0.6, 1.0 MPa	1.6MPa				
1414018	1416018	280	340	498	
1414019	1416019	315	340	520	
1414020	1416020	355	363	548	
1414021	1416021	400	363	580	
1414022	1416022	450	400	950	
1414023	1416023	500			
1414024	1416024	560	500	1180	
1414025	1416025	630			

RAINFINE Irrigation Solution.

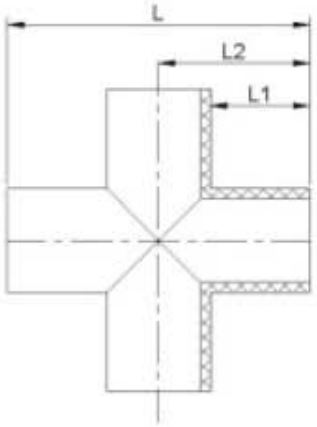
Fabricated Tee



Part Number	Size (mm)	L1	L2	L	Qty/Ctn
1420019	315	300	460	920	
1420020	355	300	480	960	
1420021	400	300	500	1000	
1420022	450	305	530	1060	
1420023	500	350	600	1200	
1420024	560				
1420025	630	350	665	1330	

Nominal Pressure is available in 0.6MPa, 1.0MPa and 1.6MPa.

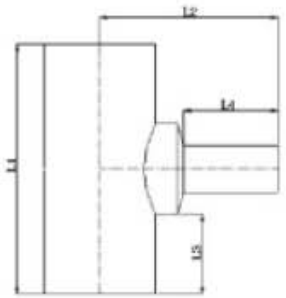
Fabricated Cross



Part Number	Size (mm)	L1	L2	L	Qty/Ctn
1430010	110	150	205	410	
1430011	125	150	215	430	
1430013	160	150	230	460	
1430015	200				
1430016	225	150	250	500	
1430017	250	150	265	530	
1430018	280	250	350	750	
1430019	315				
1430020	355	300	460	920	
1430021	400	300	480	960	
1430022	450	300	500	1000	
1430023	500				
1430024	560				
1430025	630				

Nominal Pressure is available in 0.6MPa, 1.0MPa and 1.6MPa.

Fabricated Reducing Tee

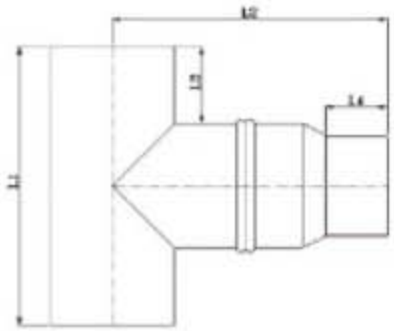


Part Number	Size (mm)	L1	L2	L3	L4	Qty/Ctn
1420472	200×63	600	275	235	145	
1420473	200×75	600	285	223	155	
1420474	200×90	600	290	213	155	
1420503	225×63	600	288	235	145	
1420504	225×75	600	298	223	155	
1420505	225×90	600	303	213	155	
1420506	225×110	600	308	203	160	
1420534	250×63	630	300	250	145	
1420535	250×75	630	310	238	155	
1420536	250×90	630	315	228	155	
1420537	250×110	630	320	218	160	
1420538	250×125	630	325	203	160	
1420565	280×63	670	315	270	145	
1420566	280×75	670	335	258	155	
1420567	280×90	670	340	248	155	
1420568	280×110	670	345	238	160	
1420569	280×125	670	335	223	160	
1420596	315×63	670	343	270	145	
1420597	315×75	670	353	258	155	
1420598	315×90	670	358	248	155	
1420599	315×110	670	363	238	160	

Part Number	Size (mm)	L1	L2	L3	L4	Qty/Ctn
1420600	315×125	670	368	223	160	
1420602	315×160	670	363	203	160	
1420627	355×63	670	358	270	145	
1420628	355×75	670	373	258	155	
1420629	355×90	670	378	248	155	
1420630	355×110	670	393	238	160	
1420631	355×125	670	393	223	160	
1420633	355×160	670	382	203	160	
1420658	400×63	720	380	295	145	
1420659	400×75	720	395	283	155	
1420660	400×90	720	400	273	155	
1420661	400×110	720	415	263	160	
1420662	400×125	720	425	248	160	
1420664	400×160	720	405	228	160	
1420689	450×63	720	400	295	145	
1420690	450×75	720	410	283	155	
1420691	450×90	720	425	273	155	
1420692	450×110	720	430	263	160	
1420693	450×125	720	440	248	160	
1420695	450×160	720	430	228	160	
1420720	500×63	760	430	315	145	
1420721	500×75	760	440	303	155	
1420722	500×90	760	455	293	155	
1420723	500×110	760	460	283	160	
1420724	500×125	760	470	268	160	
1420726	500×160	760	460	248	160	
1420754	560×110	760	485	283	160	
1420757	560×160	760	490	248	160	
1420782	630×63	760	500	315	145	
1420783	630×75	760	510	303	155	
1420784	630×90	760	530	393	155	
1420785	630×110	760	535	283	160	
1420786	630×125	760	540	268	160	
1420788	630×160	760	530	248	160	

Nominal Pressure is available in 0.6MPa, 1.0MPa and 1.6MPa.

Fabricated Reducing Tee Assembly



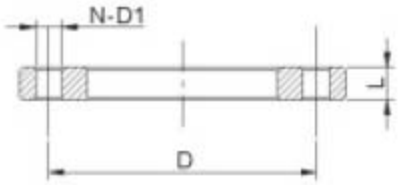
Part Number	Size (mm)	L1	L2	L3	L4	Qty/Ctn
1440626	355×50	670	398	270	30	2
1440634	355×180	960	1050	302.5	80	4
1440635	355×200	960	850	302.5	100	3
1440636	355×225	960	800	302.5	90	3
1440637	355×250	960	820	302.5	88	3
1440638	355×280	960	785	302.5	85	3
1440639	355×315	960	590	302.5	90	2
1440657	400×50	720	420	295	30	3
1440666	400×200	1000	850	300	100	3
1440667	400×225	1000	820	300	90	3
1440668	400×250	1000	841	300	88	3
1440669	400×280	1000	800	300	85	3
1440670	400×315	1000	610	300	77	2
1440671	400×355	1000	600	300	30	2
1440696	450×180	1060	1300	305	80	4
1440697	450×200	1060	1173	305	100	3
1440698	450×225	1060	1100	305	90	3
1440699	450×250	1060	1126	305	88	3
1440700	450×280	1060	1085	305	77	3
1440701	450×315	1060	895	305	30	2
1440702	450×355	1060	895	305	90	2

Part Number	Size (mm)	L1	L2	L3	L4	Qty/Ctn
1440471	200×50	600	315	235	30	2
1440475	200×110	440	500	120	78	2
1440476	200×125	440	650	120	70	3
1440478	200×160	440	450	120	100	2
1440502	225×50	600	328	235	30	2
1440507	225×125	530	705	152.5	80	3
1440509	225×160	530	485	152.5	90	2
1440511	225×200	530	400	152.5	90	2
1440533	250×50	630	340	250	30	2
1440540	250×160	600	570	165	90	2
1440542	250×200	600	500	165	100	2
1440543	250×225	600	450	165	90	2
1440571	280×160	632	588	176	100	2
1440573	280×200	632	550	176	90	2
1440595	315×50	670	383	270	30	3
1440603	315×180	920	800	302.5	80	3
1440604	315×200	920	638	302.5	100	2
1440605	315×225	920	575	302.5	90	2
1440606	315×250	920	590	302.5	88	2
1440607	315×280	920	550	302.5	85	2
1440703	450×400	1060	895	305	130	2
1440727	500×180	1200	1390	350	80	5
1440728	500×200	1200	1196	350	100	4
1440729	500×225	1200	1194	350	90	4
1440730	500×250	1200	1150	350	88	4
1440731	500×280	1200	1110	350	85	4
1440732	500×315	1200	920	350	85	3
1440733	500×355	1200		350		3
1440734	500×400	1200	710	350	110	2
1440735	500×450	1200		350		2
1440760	560×225	1260	1421	350	90	4
1440762	560×280	1260	1400	350	80	4
1440763	560×315	1260	1200	350	85	3
1440789	630×180	1330	1800	350	80	6
1440790	630×200	1330	1610	350	100	5
1440791	630×225	1330	1546	350	90	5
1440792	630×250	1330	1564	350	88	5
1440793	630×280	1330	1300	350	85	5
1440794	630×315	1330	1285	350	85	4
1440795	630×355	1330		350		4
1440796	630×400	1330	1080	350	120	3
1440797	630×450	1330	1335	350	80	3
1440798	630×500	1330	1055	350	60	2

Nominal Pressure is available in 0.6MPa, 1.0MPa and 1.6MPa.

RAINFINE Irrigation Solution.

Flange（Steel Tray）



Part Number	Size(mm)	D	D1	N	L	Qty/Ctn
		1.6MPa				
1296008	75	145	18	4	18	48
1296009	90	160	18	8	20	36
1296010	110	180	18	8	22	32
1296011	125	180	18	8	22	32
1296013	160	240	22	8	24	15
1296014	180	240	22	8	24	15
1296015	200	295	22	12	26	8
1296017	250	355	26	12	29	4
1296019	315	410	26	12	32	3

Note: Sizes of 400, 450, 500, 630 and 800 are available upon request.

		1.0MPa				
1294015	200	295	22	8	24	
1294016	225	295	22	8	24	
1294017	250	350	22	12	26	
1294018	280	350	22	12	26	
1294019	315	400	22	12	28	
1294020	355	460	22	16	30	
1294021	400	515	26	16	32	
1294022	450	565	26	20	32	
1294023	500	620	26	20	32	
1294024	560	725	30	20	36	
1294025	630	725	30	20	36	
1294026	710	840	30	24	36	
1294027	800	950	33	24	36	

(4) Transition Joint

Join the PE pipe and the iron pipe by Flange Joint

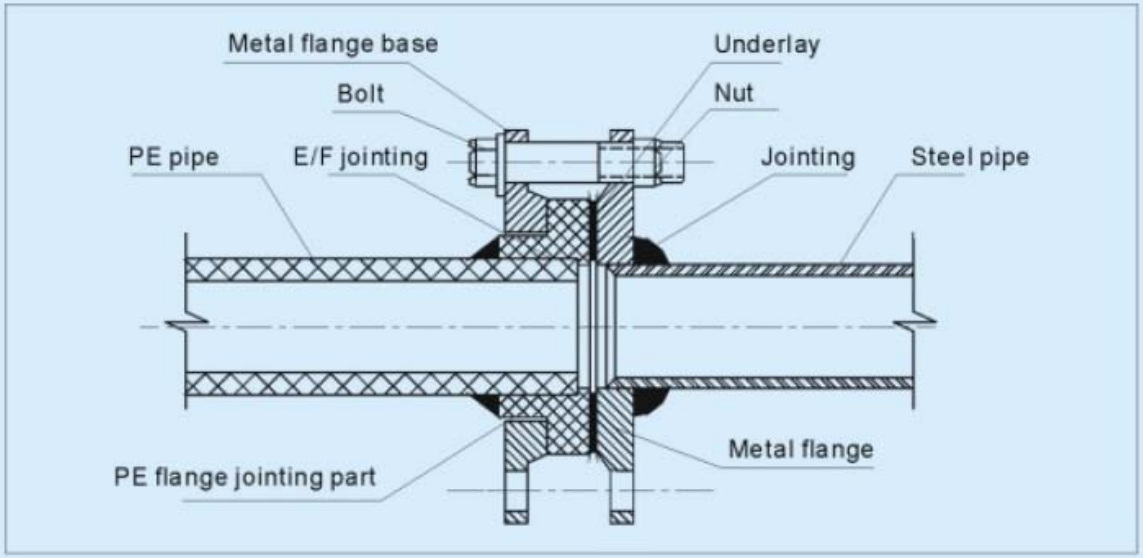
① **Preparation**

- Prepare the necessary tools and accessories.
- Check and clean the accessories.

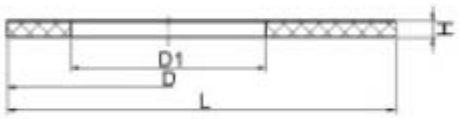
② Put the pipe in the flange tray.

③ Use socket fusion joint or butt fusion joint on the pipe and the flange stub.

④ Put the rubber ring between the two flange stubs, and then tighten the bolts.


Metal flange base
Underlay
Bolt
Nut
PE pipe
E/F jointing
Jointing
Steel pipe
Metal flange
PE flange jointing part

Rubber Gasket



Part Number	Size (mm)	D1	D	L	H	Qty/Ctn
1300008	75					
1300009	90					
1300010	110					
1300011	125	102	162	188	3.5	
1300013	160					
1300014	180	148	212	238.5	3.5	
1300015	200					
1300016	225	184	273	299.5	3.5	
1300017	250					
1300018	280	229	320	348.5	3.5	
1300019	315					
1300020	355					
1300021	400					
1300022	450					
1300023	500					
1300024	560	516	690	716	5	
1300025	630					
1300026	710	630	810	837	5	
1300027	800	738	915	942.5	5	

Pipe Cutter

Part Number	Model	Application Range
1450001	TU 140	50~140
1450002	T3	100~160
1450003	T4	180~315

Rotation Pipe Cutter

Part Number	Model	Application Range
1460001	Pcu90~315	90~315

Blade Scraper

Part Number	Model	Application Range
1470001	Small Scraper	1.5"
1470002	Big Scraper	2.0"

Rotation Scraper

Part Number	Model	Application Range
1480001	RTC160	50~160
1480002	RTC315	75~315

Socket Fusion Welding Machine

Part Number	Model	Application Range
1490001	1000w	20~63
1490002	1600w	75~110
1490003	2500w	160

Melting Socket

Part Number	Model	Application Range
1500002		20
1500003		25
1500004		32
1500005		40
1500006		50
1500007		63
1500008		75
1500009		90
1500010		110
1500013		160

Butt Fusion Welding Machine

Part Number	Model	Application Range
1510001	160	75~160
1510002	250	110~250
1510003	315	160~315
1510004	450	280~450
1510005	630	400~630
1510006	800	630~800

Electro Fusion Welding Machine

Part Number	Model	Application Range
1520001	DRJ-III	
1520002	DRJ- I	

It can save the data and the data can be printed when connecting to the computer.

(1) Socket Fusion Joint

Step:（Use Socket Fusion Welding Machine）

① **Check and measure**

- Check the pipe and fittings to see whether they are damaged, and make the incision smooth.
- Measure the depth of socket, mark on the pipe surface.

② **Chamfer**

- Chamfer the nozzle, the angle should be 30° , the length of surface groove should not exceed 2.0mm.

③ **Clean and dry**

- Clean and dry the pipe's spigot and the fittings' socket.

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④ **Heat**

- Push the end of the pipe and fittings, without turning, up to the welding depth into the welding machine, heat up the end of the pipe and fittings.

⑤ **Join and cool**

- Pull out the pipe and fittings from the welding machine when the scheduled heating is over, insert the pipe's spigot into the fittings' socket evenly and swiftly.
- Not continue the next step until the scheduled cooling is over.

Recommended technical parameter for Socket Fusion Joint

(Thermal temperature is 260℃±℃)

Outer Diameter (mm)	Heating Time(s)	Maximum Transit Time (s)	Minimum Cooling Time (s)
20	5	4	2
25	7	4	2
32	8	6	4
40	12	6	4
50	18	6	4
63	24	8	6

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(2) Butt Fusion Joint

Step: (Use Butt Fusion Welding Machine)

① **Prepare**

- Prepare the necessary tools.

② **Clamp and clean**

- Clamp down the pipe on the jig, clean up the joint parts, mill the joint sides, and then adjust the joint parts to make the misplacement less than 10% of the wall thickness.

③ **Heat**

- Put the heating panel.

④ **Join**

- Remove the heating panel after finishing heating, join the two heating parts swiftly, increase pressure up to the fusion-joint pressure and keep until it cools down.

⑤ **Complete**

- Butt Fusion Joint is completed.

Recommended welding parameter, which should be followed by the welders

Wall Thickness (mm)	Preheating Curling Height (mm) (Preheating Temperature is 210 ± 10℃)	Preheating Time(s) (Temperature is 210 ± 10℃)	Allowed Maximum Transit Time(s)	Cooling Time for the Weld Seam under Pressure-reserving State (min)
2.0 - 3.9	0.5	30 - 40	4	4 - 5
4.3 - 6.9	0.5	40 - 70	5	6 - 10
7.0 - 11.4	1.0	70 - 120	6	10 - 16
12.2 - 18.2	1.0	120 - 170	8	17 - 24
20.1 - 25.5	1.5	210 - 250	10	25 - 32
28.3 - 32.2	1.5	280 - 320	12	33 - 40

Application of Butt Fusion Joint at Sites

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THANK YOU

Rainfine Irrigation Co.,Ltd

www.centerpivotchina.com

www.rainfinechina.com

+86-139-4097-2553