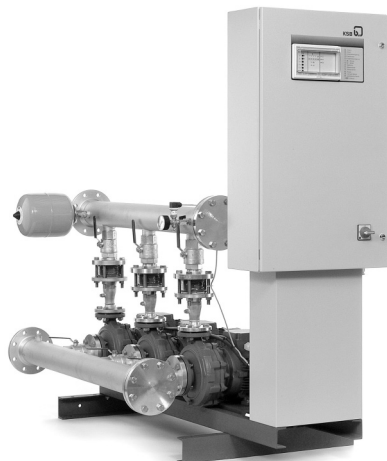


Interference suppression class B

Pressure boosting units / Fire-fighting systems
to DIN 1988
for industrial applications with pump types
Multitec, Etanorm, Etabloc



EMC-tested

DIN EN ISO 9001



Fields of Application

- Industry
- and other applications

Fluid Handled

Service water, fire-fighting water, cooling water, where there is no chemical and mechanical corrosive action on the system materials.

Operating Data (standard model)

Capacity Q	up to 640 m ³ /h, 178 l/s with max. 4 pumps *) **)
Heads H	up to 160 m **)
Fluid temperature	up to 70 °C
Ambient temperature	up to 40 °C
System discharge pressure p _d	up to 16 bar
Inlet pressure p _{inl}	up to 10 bar
Permissible inlet pressure fluctuation	+0.3/-0.2 bar
For higher pressure fluctuations, a pressure reducer or controller will be required.	
Supply voltage	3/PE, AC 400 V, 50 Hz

- *) with stand-by pump as peak load pump
**) Higher capacities and heads on request

Materials

Pumps

See documentation of pump types used: Multitec, Etanorm, Etabloc

Hydraulic Design:

Distributor pipe Galvanized steel
Stainless steel pipework on request

Designation

Hyamat IV 3 / MTC V 32 / 8E-2.1 10.61 / 1,2 -2,8

Type series	_____
IK, IV, IVP	_____
Number of pumps	_____
Pump type as per type series booklet	_____
EN = Etanorm, EB = Etabloc, MTC = Multitec	_____
Minimum inlet pressure in bar	_____
Maximum usable inlet pressure (IV and IVP only) bar	_____

Drive

Depends on pump type used.

Up to and including 4 kW: d.o.l. starting,
from 5.5 kW: star/delta starting.

Design

Fully automatic pressure boosting package unit, with 2 to 4 high-pressure pumps, with fully electronic control to ensure the required supply pressure, with standard volt-free contact for general fault indication and live-zero monitoring of the connected sensors.

Design and functions as per DIN 1988, Part 5.

Hyamat IK, IV, IVP system equipment

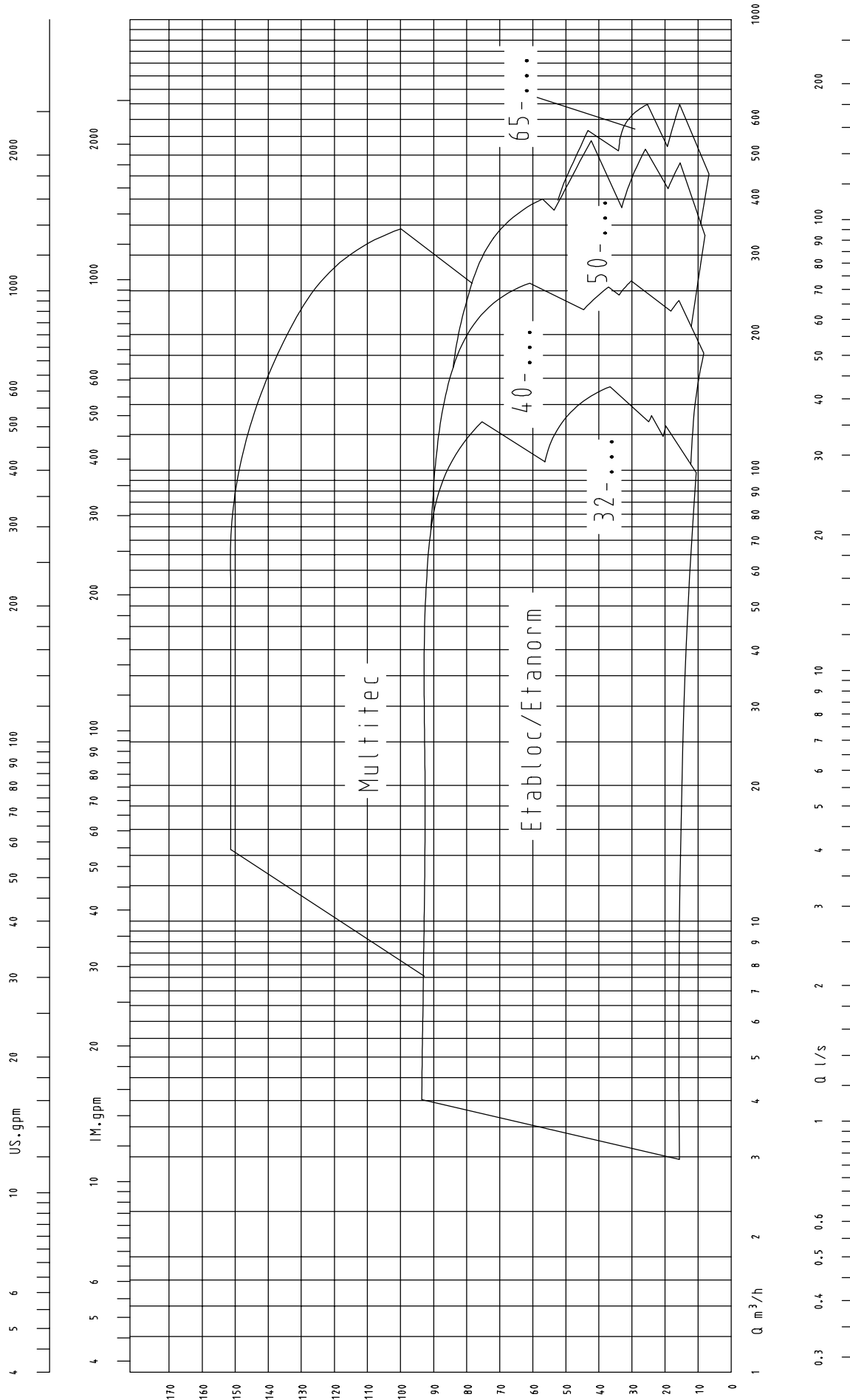
- 2-4 high-pressure centrifugal pumps (standard pumps) Multitec, Etanorm, Etabloc
- 1 check valve and shut-off elements for each pump
- Membrane-type accumulator on the discharge side as control tank
- Pressure transmitter on the discharge pressure side
- Pressure indication via pressure gauge
- Steel baseplate, painted
- Control cabinet IP 54, EMC interference suppression class B
- CE certificate

Control cabinet equipment (Standard)

- Hyamat IK:** Demand-dependent cascade control (see Hyamat K equipment)
- Hyamat IV:** Demand-dependent speed control (see Hyamat V equipment)
- Hyamat IVP:** Demand-dependent speed control with frequency inverter on each pump (see Hyamat VP equipment)

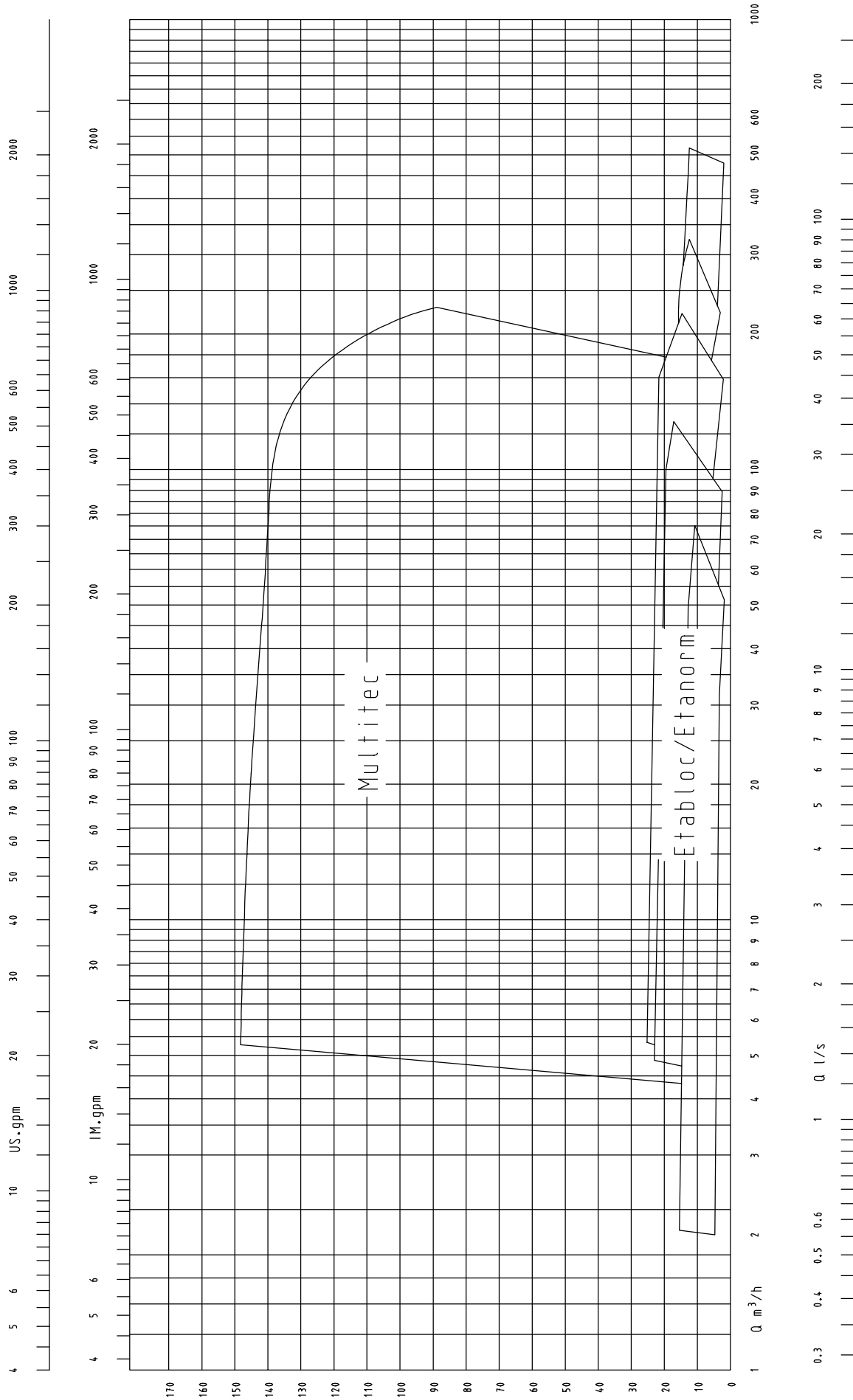
Systems available on request

Selection Chart 2900 1/min



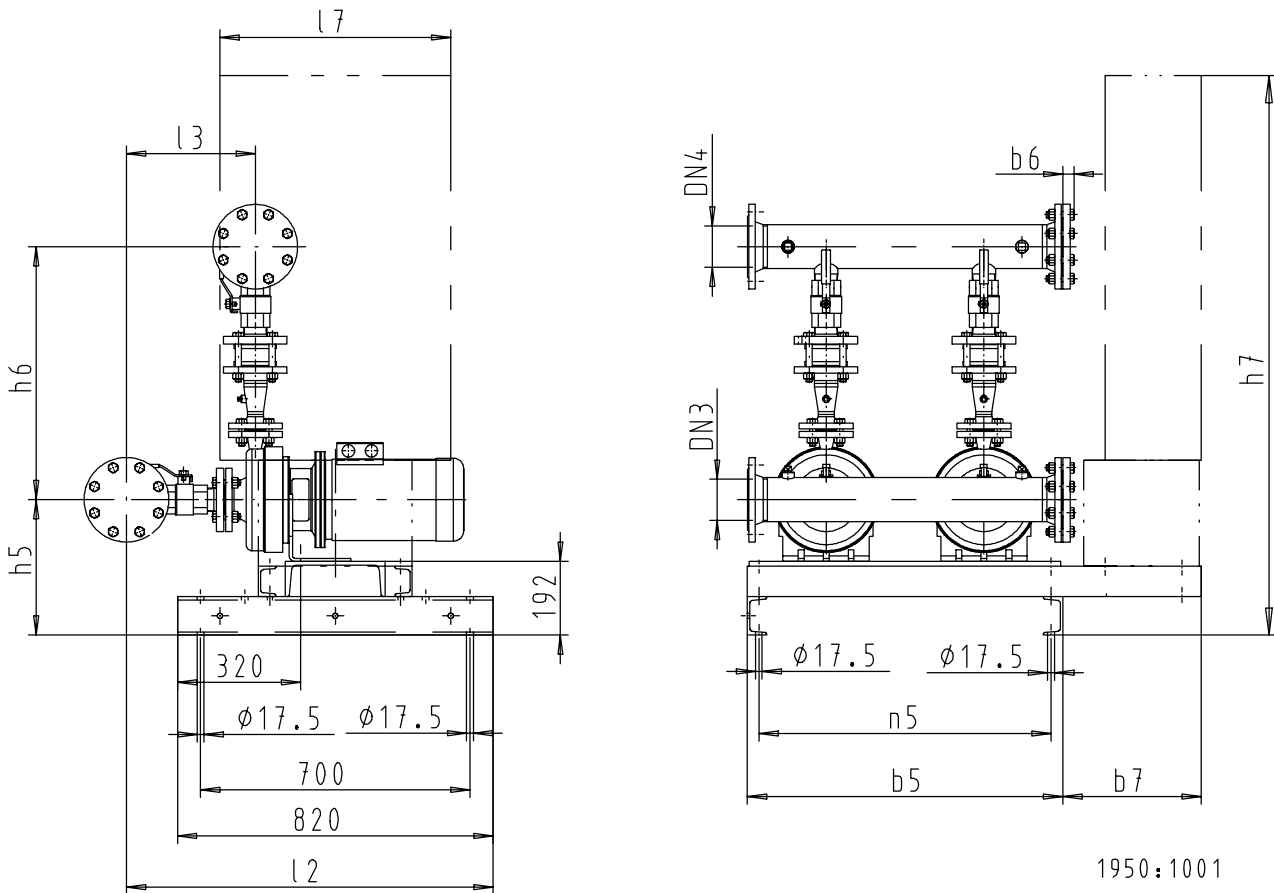
To select a system, use the individual characteristic curves of the respective pump type

Selection Chart 1450 1/min

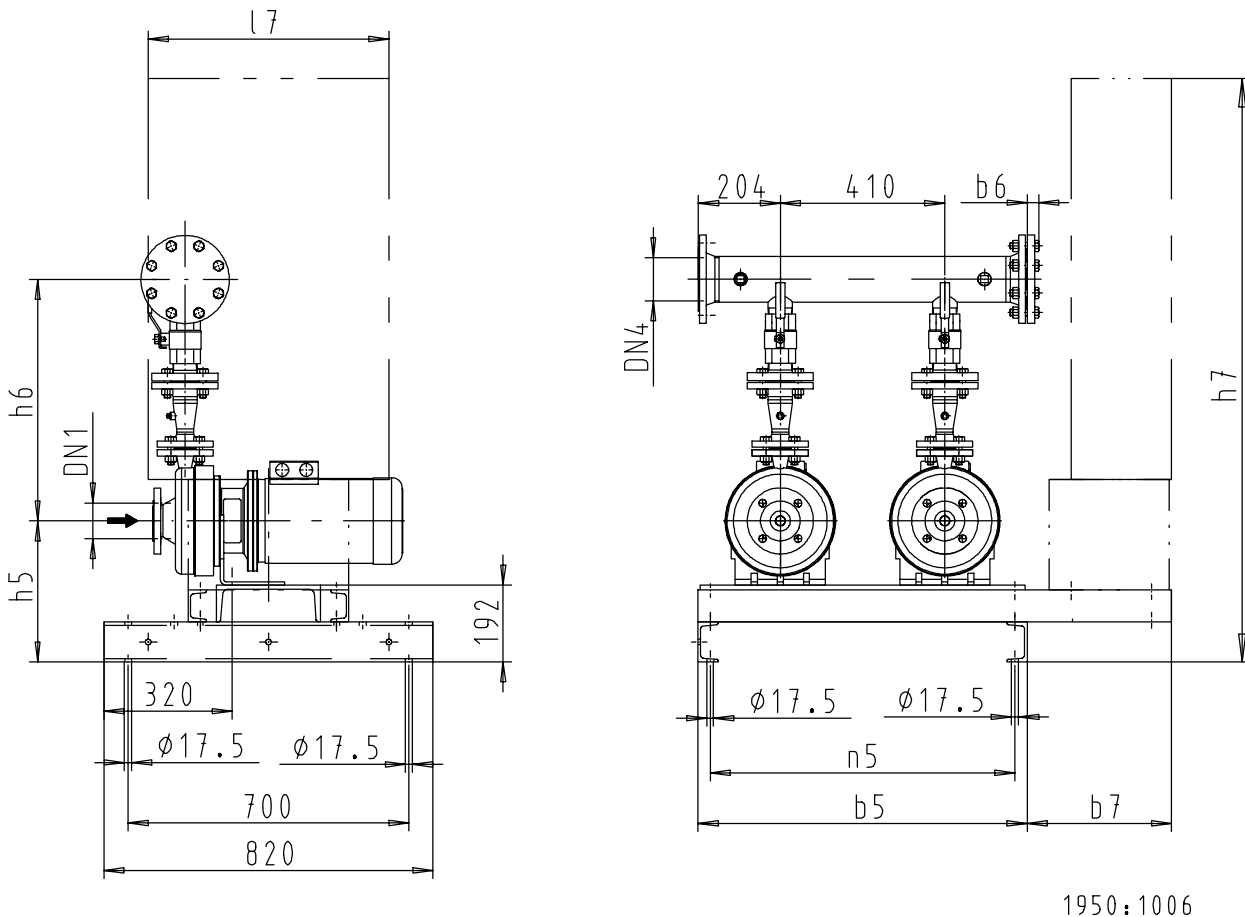


To select a system, use the individual characteristic curves of the respective pump type

Hyamat IK, IV, IVP dimensions with Etabloc up to 7.5 kW, 2900 1/min



**Version for suction lift operation;
no swing check valves available, one foot valve to be provided per pump on site**



Pump	DN1	DN3	DN4	l2	l3	h5	h6	b6
32-125.1/072	50	100	100	966	348	352	630	30
32-125.1/112	50	100	100	966	348	352	630	30
32-125.1/152	50	100	100	966	348	352	630	30
32-125.1/222	50	100	100	966	348	352	630	30
32-160.1/222	50	100	100	966	348	352	650	30
32-160.1/302	50	100	100	966	348	352	650	30
32-160.1/402	50	100	100	966	348	352	650	30
32-200.1/302	50	100	100	966	348	352	670	30
32-200.1/402	50	100	100	966	348	352	670	30
32-200.1/552	50	100	100	1040	422	324	652	30
32-200.1/752	50	100	100	1130	512	324	652	30
32-125/112	50	100	100	966	348	352	630	30
32-125/152	50	100	100	966	348	352	630	30
32-125/222	50	100	100	966	348	352	630	30
32-125/302	50	100	100	966	348	352	630	30
32-160/302	50	100	100	966	348	352	650	30

Pump	DN1	DN3	DN 4	l2	l3	h5	h6	b6
40-125/152	65	150	150	1033	415	352	658	32
40-125/222	65	150	150	1033	415	352	658	32
40-125/302	65	150	150	1033	415	352	658	32
40-125/402	65	150	150	1033	415	352	658	32
40-160/402	65	150	150	1033	415	352	678	32
40-160/552	65	150	150	1197	415	324	650	32
40-160/752	65	150	150	1197	415	324	650	32
40-200/752	65	150	150	1197	415	324	670	32
50-125/302	65	150	150	1053	435	352	706	32
50-125/402	65	150	150	1053	435	352	706	32
50-125/552	65	150	150	1217	435	324	706	32
50-125/752	65	150	150	1217	435	324	706	32
50-160/752	65	150	150	1217	435	324	726	32
65-125/402	80	200	200	1082	464	352	797	37
65-125/552	80	200	200	1246	464	324	797	37
65-125/752	80	200	200	1246	464	324	797	37

System dimensions

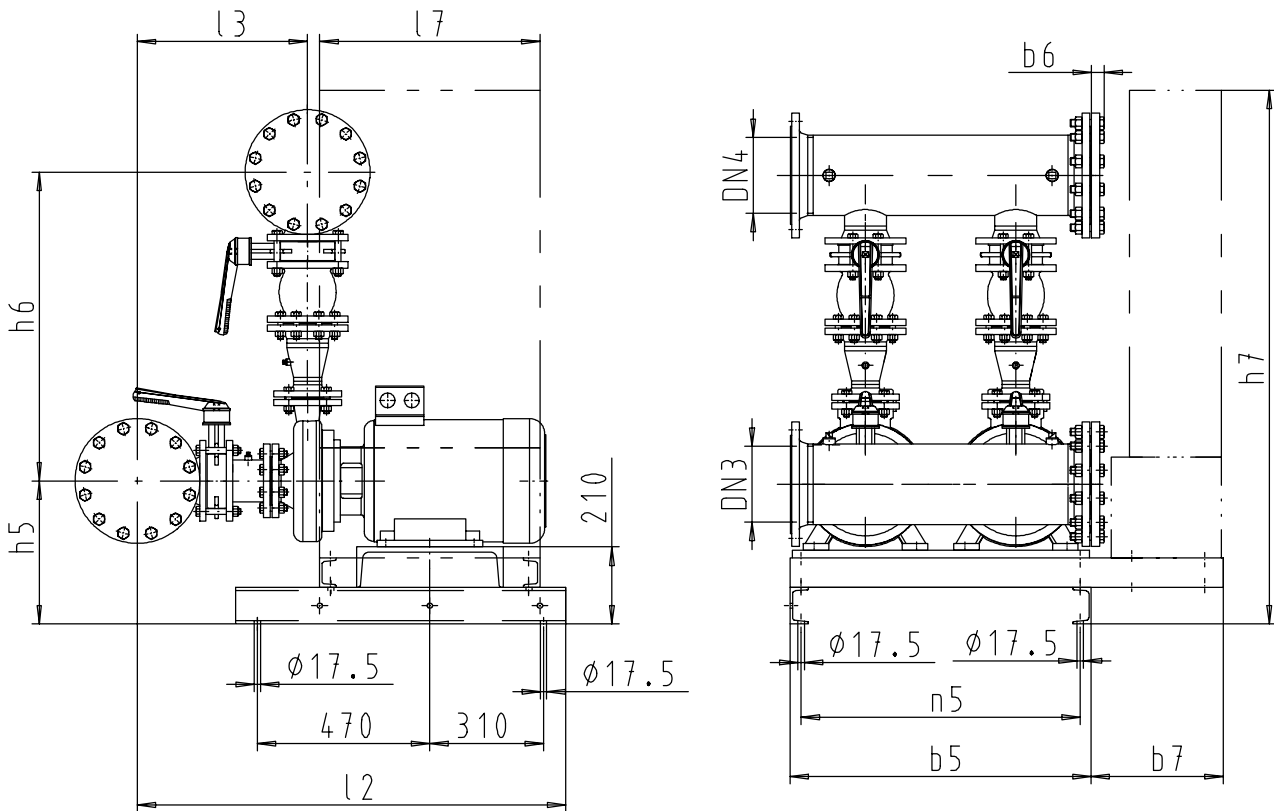
Number of pumps	2	3	4
b5	820	1230	1640
n5	760	1170	2x 760

Control cabinet dimensions

Hyamat IK	Cascade control	
	up to 4 kW	up to 7.5 kW
b7	360	360
h7	1480	1480
l7	600	600

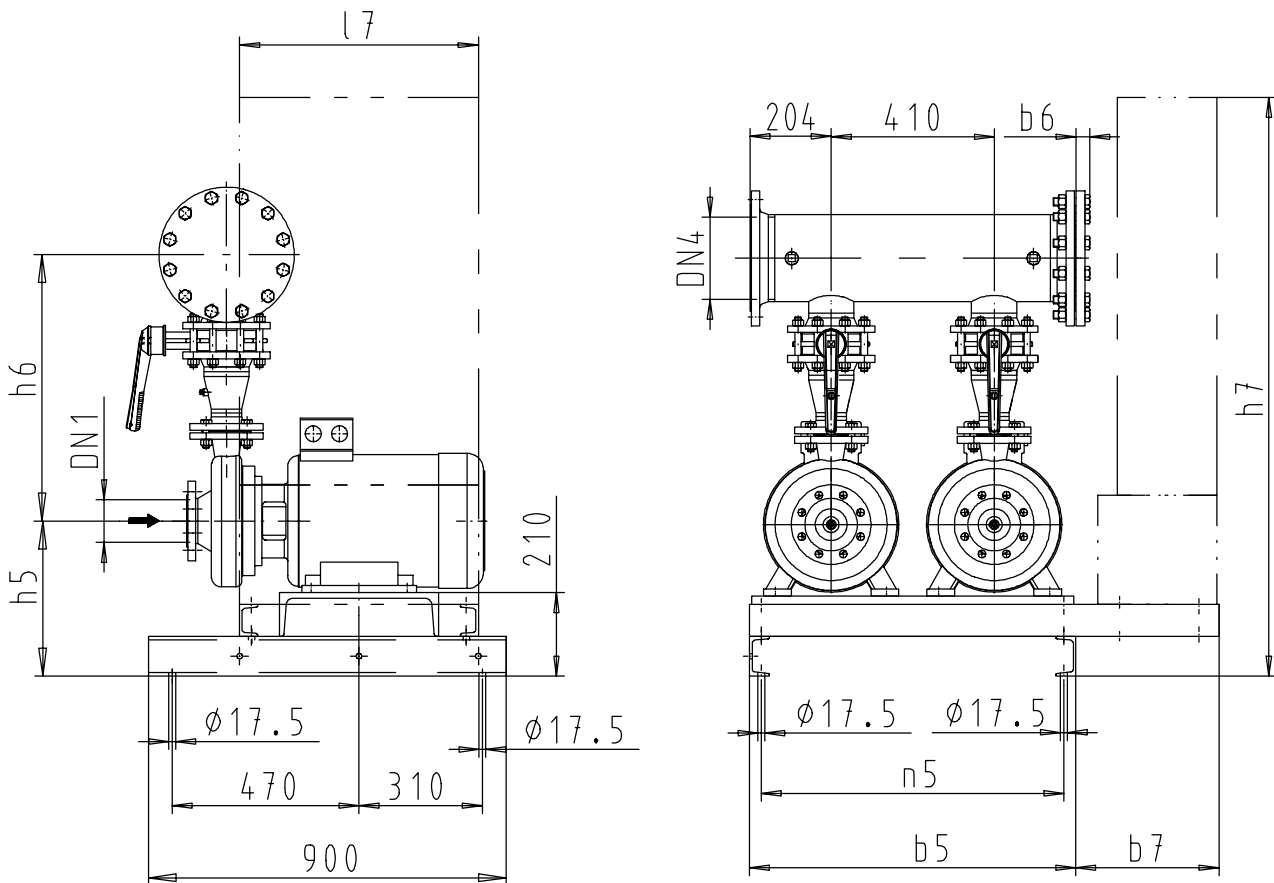
Hyamat IV, IVP	Speed control		
	up to 4 kW	up to 7.5 kW	from 7.5 kW
b7	360	385	Floor-mounted cabinet
h7	1480	1680	separate control cabinet
l7	600	800	separate control cabinet

Hyamat IK, IV, IVP dimensions with Etabloc up to 22 kW, 2900 1/min



Version for suction lift operation;
no swing check valves available, one foot valve to be provided per pump on site

1950:1002



1950:1007

Pump	DN 1	DN 3	DN 4	l2	l3	h5	h6	b6
32-250/1102	50	100	100	1192	348	352	630	30
32-250/1502	50	100	100	1192	348	352	630	30
40-200/1102	65	150	150	1207	435	342	698	32
40-250/1102	65	150	150	1259	435	370	743	32
40-250/1502	65	150	150	1259	435	370	743	32
40-250/1852	65	150	150	1259	435	370	743	32
40-250/2202	65	150	150	1272	435	390	743	32
50-160/1102	65	150	150	1259	435	370	726	32
50-200/1502	65	150	150	1259	435	370	746	32
50-200/1852	65	150	150	1259	435	370	746	32
50-200/2202	65	150	150	1272	435	390	746	32
50-250/1852	65	150	150	1259	435	370	771	32
50-250/2202	65	150	150	1272	435	390	771	32
65-160/1102	80	200	200	1288	464	370	817	37
65-160/1502	80	200	200	1288	464	370	817	37
65-200/1852	80	200	200	1288	464	370	842	37
65-200/2202	80	200	200	1301	464	390	842	37
80-160/1102	100	200	200	1317	493	370	911	37
80-160/1502	100	200	200	1317	493	370	911	37
80-160/1852	100	200	200	1317	493	370	911	37
80-160/2202	100	200	200	1330	493	390	911	37

System dimensions

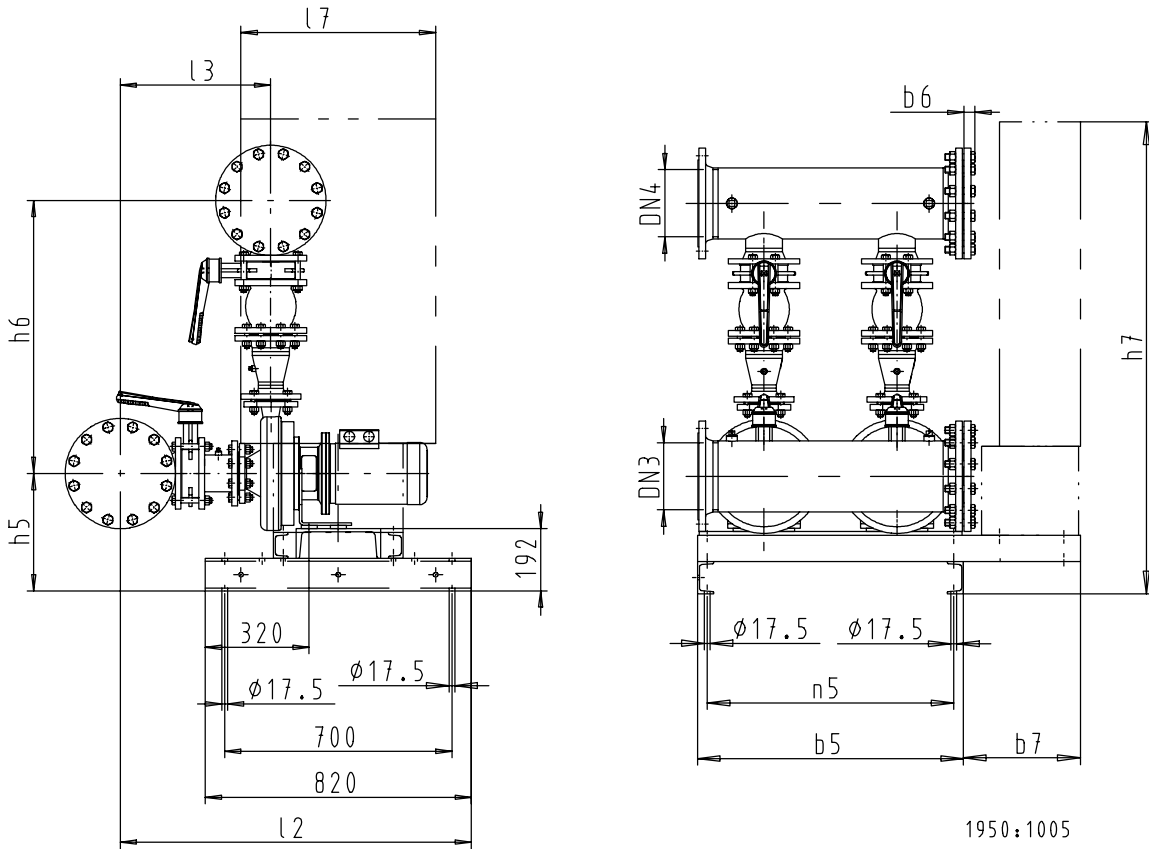
Number of pumps	2	3	4
b5	820	1230	1640
n5	760	1170	2x 760

Control cabinet dimensions

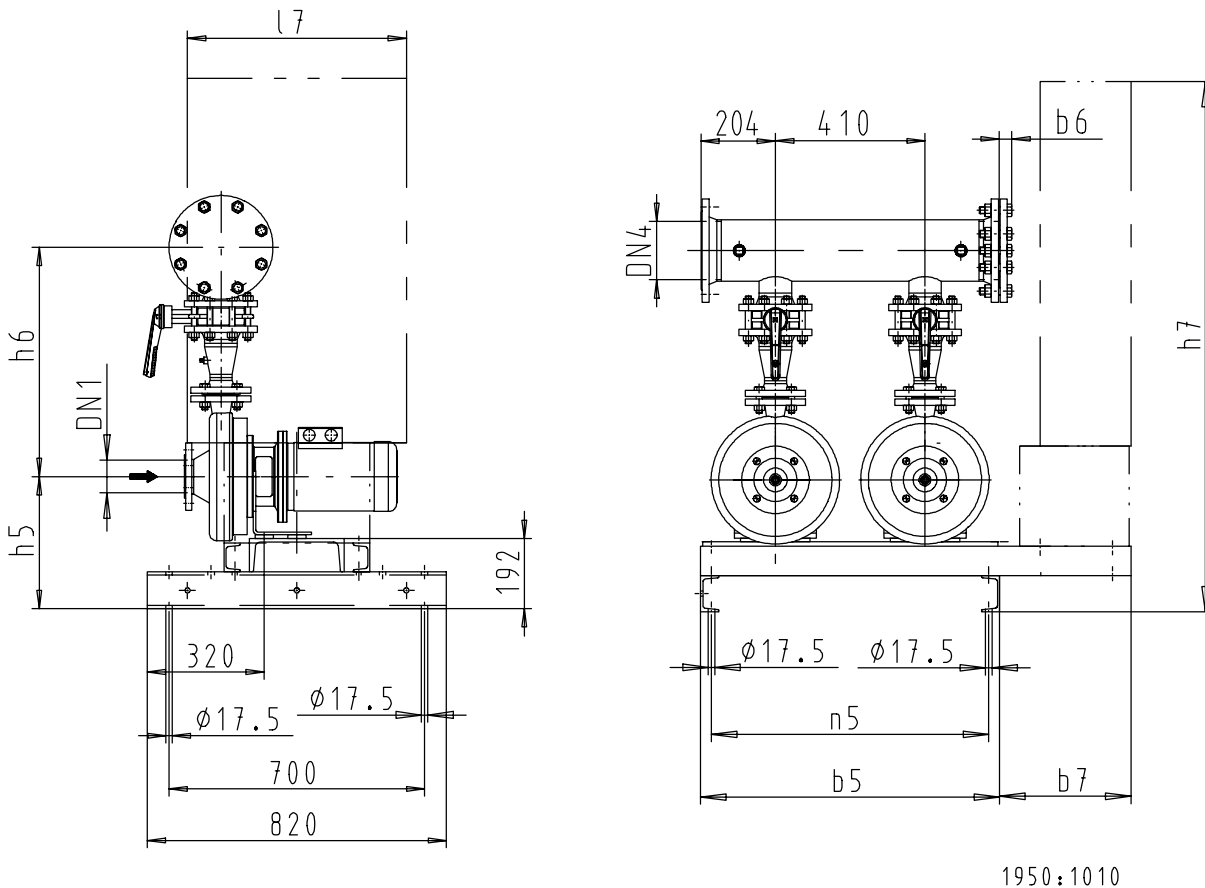
Hyamat IK	Cascade control	
	up to 11 kW	from 15 kW
b7	360	385
h7	1480	1680
l7	600	800

Hyamat IV, IVP	Speed control		
	up to 4 kW	up to 11 kW	up to 22 kW
b7	360	385	Separate, floor-mounted control cabinet
h7	1480	1680	
l7	600	800	

Hyamat IK, IV, IVP dimensions with Etabloc, 1450 1/min



**Version for suction lift operation;
no swing check valves available, one foot valve to be provided per pump on site**



Pump	DN1	DN3	DN4	I2	I3	h5	h6	b6
32-125.1/024	50	100	100	1066	325	362	618	30
32-160.1/034	50	100	100	1066	325	362	638	30
32-200.1/054	50	100	100	1066	325	362	658	30
32-250.1/114	50	100	100	1086	345	362	703	30
32-250/154	50	100	100	1086	345	362	703	30
32-125/034	50	100	100	1066	325	362	618	30
32-160/054	50	100	100	1066	325	362	638	30
32-200/074	50	100	100	1066	325	362	658	30
32-200/114	50	100	100	1066	325	362	658	30
32-250/154	50	100	100	1086	345	362	703	30
32-250/224	50	100	100	1086	345	362	703	30
40-125/024	65	150	150	1133	415	362	668	32
40-125/034	65	150	150	1133	415	362	668	32
40-125/054	65	150	150	1133	415	362	668	32
40-160/054	65	150	150	1133	415	362	660	32
40-160/074	65	150	150	1133	415	362	660	32
40-200/114	65	150	150	1153	435	362	708	32
40-200/154	65	150	150	1153	435	362	708	32
40-250/224	65	150	150	1153	435	362	753	32
40-250/304	65	150	150	1153	435	362	753	32

Pump	DN1	DN3	DN4	I2	I3	h5	h6	b6
50-125/054	65	150	150	1153	435	362	716	32
50-125/074	65	150	150	1153	435	362	716	32
50-160/114	65	150	150	1153	435	362	736	32
50-160/154	65	150	150	1153	435	362	736	32
50-200/224	65	150	150	1153	435	352	756	32
50-200/304	65	150	150	1153	435	362	756	32
50-250/304	65	150	150	1153	435	372	781	32
50-250/404	65	150	150	1153	435	362	781	32
65-125/074	80	200	200	1153	464	362	807	37
65-125/114	80	200	200	1153	464	362	807	37
65-160/114	80	200	200	1153	464	362	827	37
65-160/154	80	200	200	1153	464	362	827	37
65-160/224	80	200	200	1153	464	362	827	37
65-200/304	80	200	200	1153	464	362	852	37
65-200/404	80	200	200	1153	464	362	852	37
65-250/554	80	200	200	1256	464	334	877	37
80-160/154	100	200	200	1211	493	362	921	37
80-160/224	100	200	200	1211	493	362	921	37
80-160/304	100	200	200	1211	493	362	921	37
80-200/404	100	200	200	1207	493	382	946	37
80-200/554	100	200	200	1314	493	334	946	37
80-250/754	100	200	200	1314	493	334	976	37
80-250/1104	100	200	200	1321	493	362	976	37

System dimensions

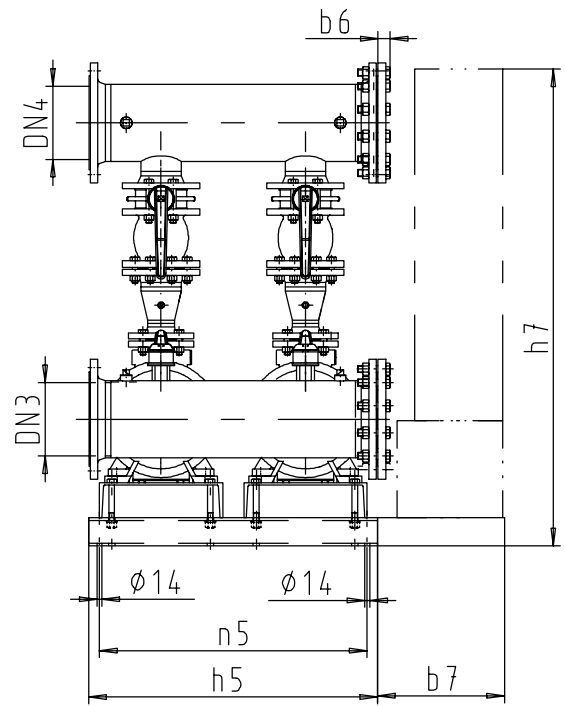
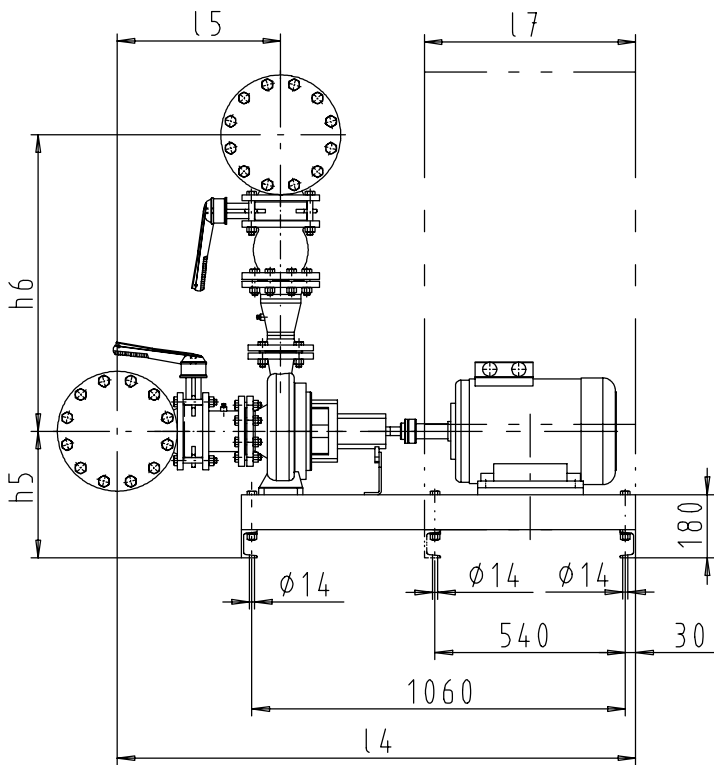
Number of pumps	2	3	4
b5	820	1230	1640
n5	760	1170	2x 760

Control cabinet dimensions

Hyamat IK	Cascade control		
	up to 4 kW	up to 11 kW	from 15 kW
b7	360	360	385
h7	1480	1480	1680
I7	600	600	800

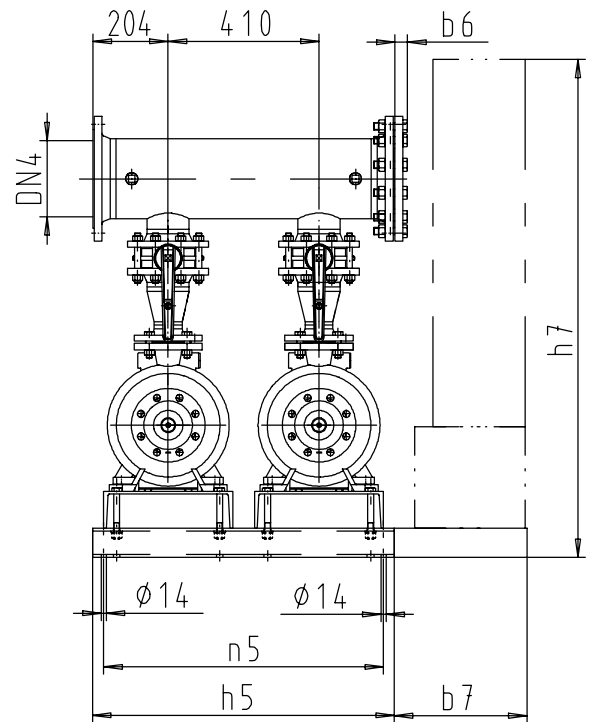
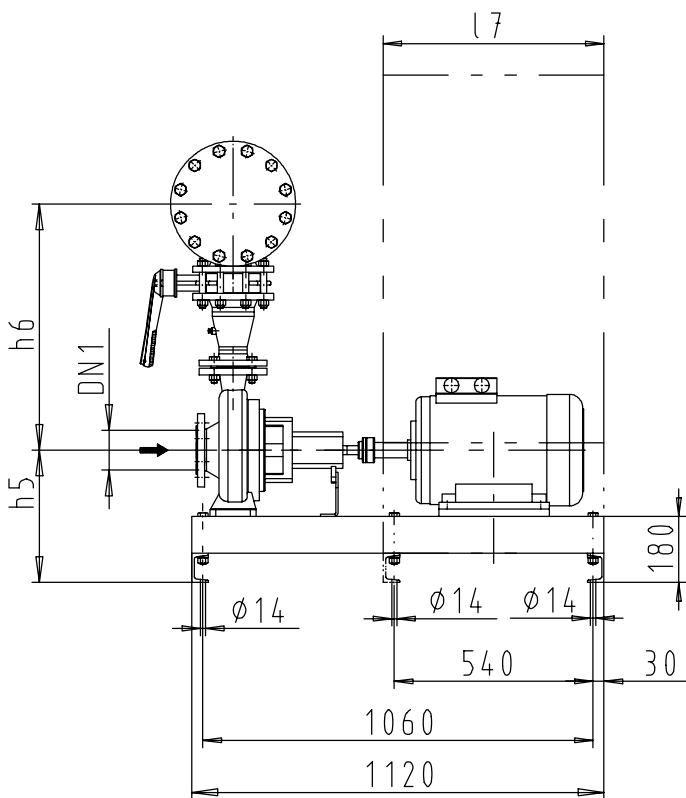
Hyamat IV, IVP	Speed control		
	up to 4 kW	up to 11 kW	
b7	360	385	
h7	1480	1680	
I7	600	800	

Hyamat IK, IV, IVP dimensions with Etanorm



1950:1003

**Version for suction lift operation;
no swing check valves available, one foot valve to be provided per pump on site**



1950:1008

Pump	Power kW		DN 1	DN 3/ DN 4	l4	l5	h5	h6	b6	
	2900	1450								
32-125.1	0.55		50	100	935	325	292	443	30	
	0.75	0.55	50	100	935	325	292	443	30	
	1.1		50	100	935	325	292	443	30	
	1.5		50	100	935	325	292	443	30	
	2.2		50	100	1025	325	292	443	30	
32-160		0.55	50	100	935	325	312	463	30	
	1.5		50	100	935	325	312	463	30	
	2.2		50	100	1025	325	312	463	30	
32-200.1		0.55	50	100	935	325	340	483	30	
		0.75	50	100	935	325	340	483	30	
	3		50	100	1125	325	340	483	30	
32-250.1		0.75	50	100	1377	345	360	528	30	
		1.1	50	100	1377	345	360	528	30	
		1.5	50	100	1377	345	360	528	30	
	5.5		50	100	1377	345	360	528	30	
	7.5		50	100	1377	345	360	528	30	
32-125		0.55	50	100	935	325	292	443	30	
	1.1		50	100	935	325	292	443	30	
	1.5		50	100	935	325	292	443	30	
	2.2		50	100	1025	325	292	443	30	
	3		50	100	1125	325	292	443	30	
32-160		0.55	50	100	935	325	312	463	30	
	2.2		50	100	1025	325	312	463	30	
	3		50	100	1125	325	312	463	30	
	4		50	100	1125	325	312	463	30	
32-200		0.55	50	100	935	325	340	483	30	
		0.75	50	100	935	325	340	483	30	
		1.1	50	100	935	325	340	483	30	
	4		50	100	1125	325	340	483	30	
	5.5		50	100	1125	325	340	483	30	
32-250		1.1	50	100	1377	345	360	528	30	
		1.5	50	100	1377	345	360	528	30	
		2.2	50	100	1377	345	360	528	30	
	7.5		50	100	1377	345	360	528	30	
	11		50	100	1377	345	360	528	30	
40-125		0.55	65	150	1025	415	292	658	32	
	1.5	1.1	65	150	1025	415	292	658	32	
	2.2		65	150	1115	415	292	658	32	
	3		65	150	1215	415	292	658	32	
	4		65	150	1215	415	292	658	32	
40-160		0.55	65	150	1025	415	312	678	32	
		0.75	65	150	1025	415	312	678	32	
		1.1	65	150	1025	415	312	678	32	
	3		65	150	1215	415	312	678	32	
	4		65	150	1215	415	312	678	32	
	5.5		65	150	1215	415	312	678	32	
40-200		0.75	65	150	1045	435	340	698	32	
		1.1	65	150	1045	435	340	698	32	
		1.5	65	150	1135	435	340	698	32	
	5.5		65	150	1235	435	340	698	32	
	7.5		65	150	1235	435	340	698	32	
	11		65	150	1455	435	340	698	32	
	40-250		1.1	65	150	1223	435	360	743	32
			1.5	65	150	1223	435	360	743	32
			2.2	65	150	1223	435	360	743	32
			3	65	150	1223	435	360	743	32
		11		65	150	1443	435	360	743	32
		15		65	150	1443	435	360	743	32
40-315		2.2	65	150	1223	460	405	768	32	
		3	65	150	1223	460	405	768	32	
		4	65	150	1323	460	405	768	32	
		5.5	65	150	1323	460	405	768	32	
	5.5		65	150	1323	460	405	768	32	
50-125		0.55	65	150	1045	435	312	706	32	
		0.75	65	150	1045	435	312	706	32	
		1.1	65	150	1045	435	312	706	32	
	3		65	150	1235	435	312	706	32	
	4		65	150	1235	435	312	706	32	
	5.5		65	150	1235	435	312	706	32	
	7.5		65	150	1235	435	312	706	32	
50-160		0.75	65	150	1045	435	340	726	32	
		1.1	65	150	1045	435	340	726	32	
		1.5	65	150	1135	435	340	726	32	
	5.5		65	150	1235	435	340	726	32	
	7.5		65	150	1235	435	340	726	32	
50-200		1.1	65	150	1455	435	340	726	32	
		1.5	65	150	1135	435	340	746	32	
		2.2	65	150	1235	435	340	746	32	
		3	65	150	1235	435	340	746	32	
	11		65	150	1455	435	340	746	32	
50-250		2.2	65	150	1223	435	360	771	32	
		3	65	150	1223	435	360	771	32	
		4	65	150	1223	435	360	771	32	
	15		65	150	1443	435	360	771	32	
	18.5		65	150	1443	435	360	771	32	
50-315		3	65	150	1248	460	405	826	32	
		4	65	150	1348	460	405	826	32	
		5.5	65	150	1348	460	405	826	32	
		7.5	65	150	1468	460	405	826	32	

Pump	Power kW		DN 1	DN 3/ DN 4	l4	l5	h5	h6	b6
	2900	1450							
65-125		0.55	80	200	1062	464	340	797	37
		0.75	80	200	1062	464	340	797	37
		1.1	80	200	1062	464	340	797	37
	4		80	200	1252	464	340	797	37
	5.5		80	200	1252	464	340	797	37
	7.5		80	200	1252	464	340	797	37
	11		80	200	1472	464	340	797	37
65-160		1.1	80	200	1062	464	340	817	37
		1.5	80	200	1152	464	340	817	37
		2.2	80	200	1252	464	340	817	37
	7.5		80	200	1252	464	340	817	37
	11		80	200	1472	464	340	817	37
	15		80	200	1472	464	340	817	37
65-200		2.2	80	200	1252	464	360	842	37
		3	80	200	1252	464	360	842	37
		4	80	200	1252	464	360	842	37
	15		80	200	1472	464	360	842	37
	18.5		80	200	1472	464	360	842	37
80-160		1.5	100	200	1534	493	360	911	37
		2.2	100	200	1534	493	360	911	37
		3	100	200	1534	493	360	911	37
	15		100	200	1754	493	360	911	37
	18.5		100	200	1754	493	360	911	37
80-200		2.2	100	200	1634	493	360	936	37
		3	100	200	1634	493	360	936	37
		4	100	200	1634	493	360	936	37
		5.5	100	200	1634	493	360	936	37

System dimensions

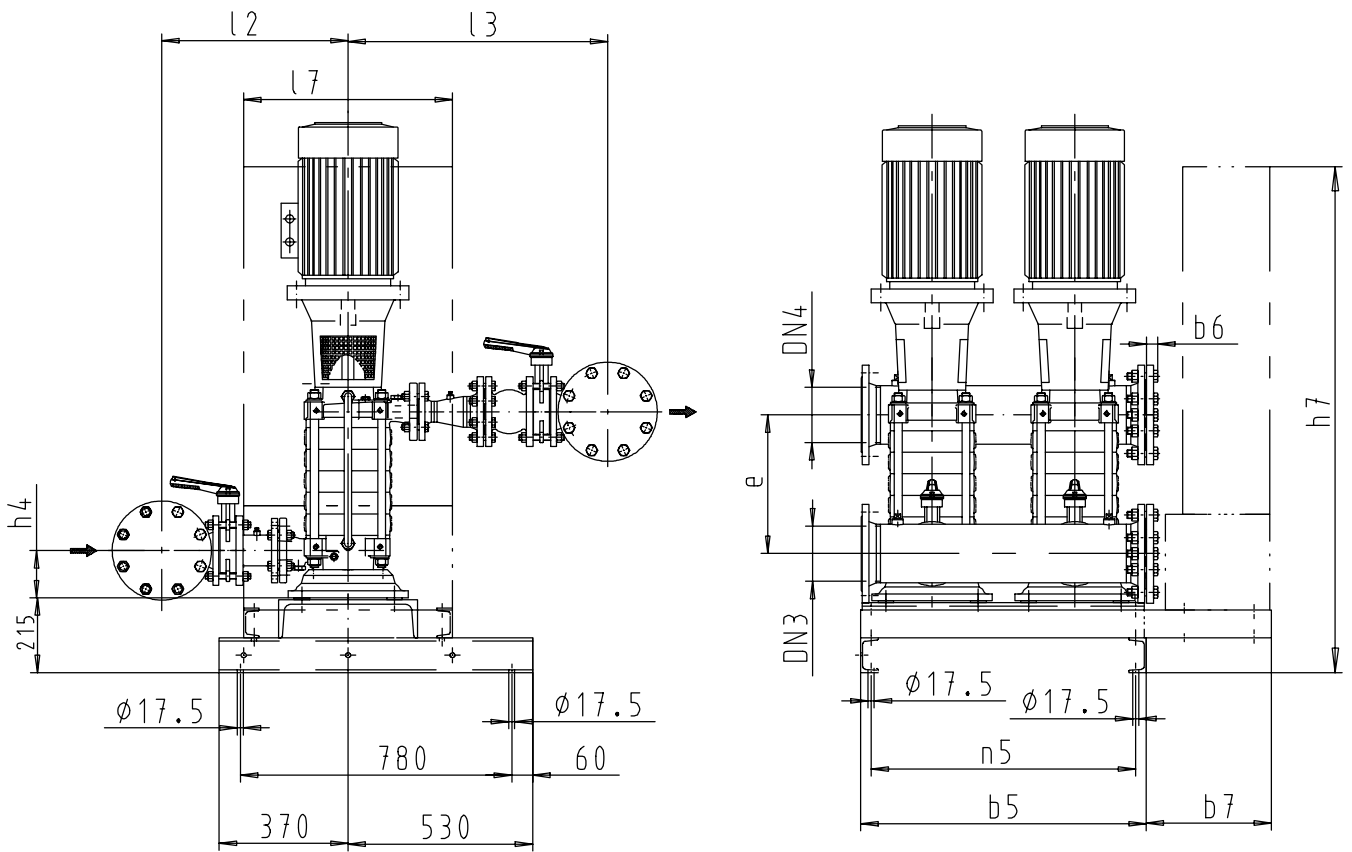
Number of pumps	2	3	4
b5	820	1230	1640
n5	760	1170	1580

Control cabinet dimensions

Hyamat IK	Cascade control		
b7	360	360	360
h7	1480	1480	1480
l7	600	600	600

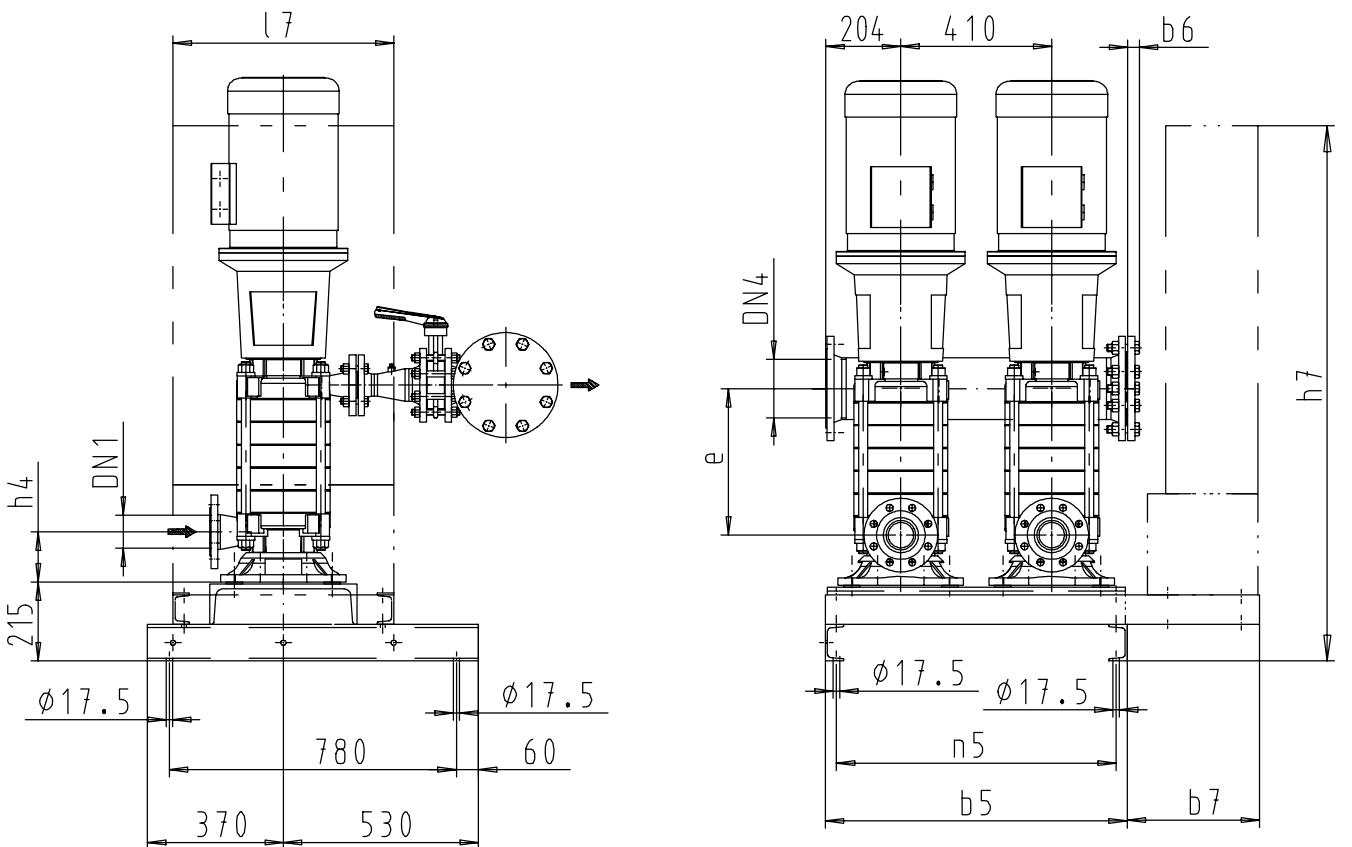
Hyamat IV, IVP	Speed control		
	up to 4 kW	up to 7.5 kW	from 7.5 kW
b7	360	360	Separate, floor- mounted control cabinet
h7	1480	1680	
l7	600	800	

Hyamat IK, IV, IVP dimensions with Multitec



1950:1004

Version for suction lift operation;
no swing check valves available, one foot valve to be provided per pump on site



1950:1009

Pump	DN 1	DN 3	DN 4	l2	l3	b6	h4
32 max. 22 kW	50	100	100	430	653	30/30	129
50 max. 22 kW	65	200	150	413	746	37/32	136
65 max. 22 kW	80	200	200	467	842	37/37	170

System dimensions

Number of pumps	2	3	4
b5	820	1230	1640
n5	760	1170	2x 760

e	Sizes	32	50	65
Number of stages				
2		121	151	189
3		176	213	-
4		231	275	-
5		286	-	-
6		341	-	-

Control cabinet dimensions

Hyamat IK	Cascade control	
	up to 11 kW	from 15 kW
b7	360	385
h7	1480	1680
l7	600	800

Hyamat IV, IVP	Speed control		
	up to 4 kW	up to 11 kW	up to 22 kW
b7	360	385	Separate, floor-mounted control cabinet
h7	1480	1680	
l7	600	800	

