

Summary

December 20, 2023

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0.1 Flow Solutions, id 15

0.1.1 Solution 0

Overall Data

Objective value (integral): -30

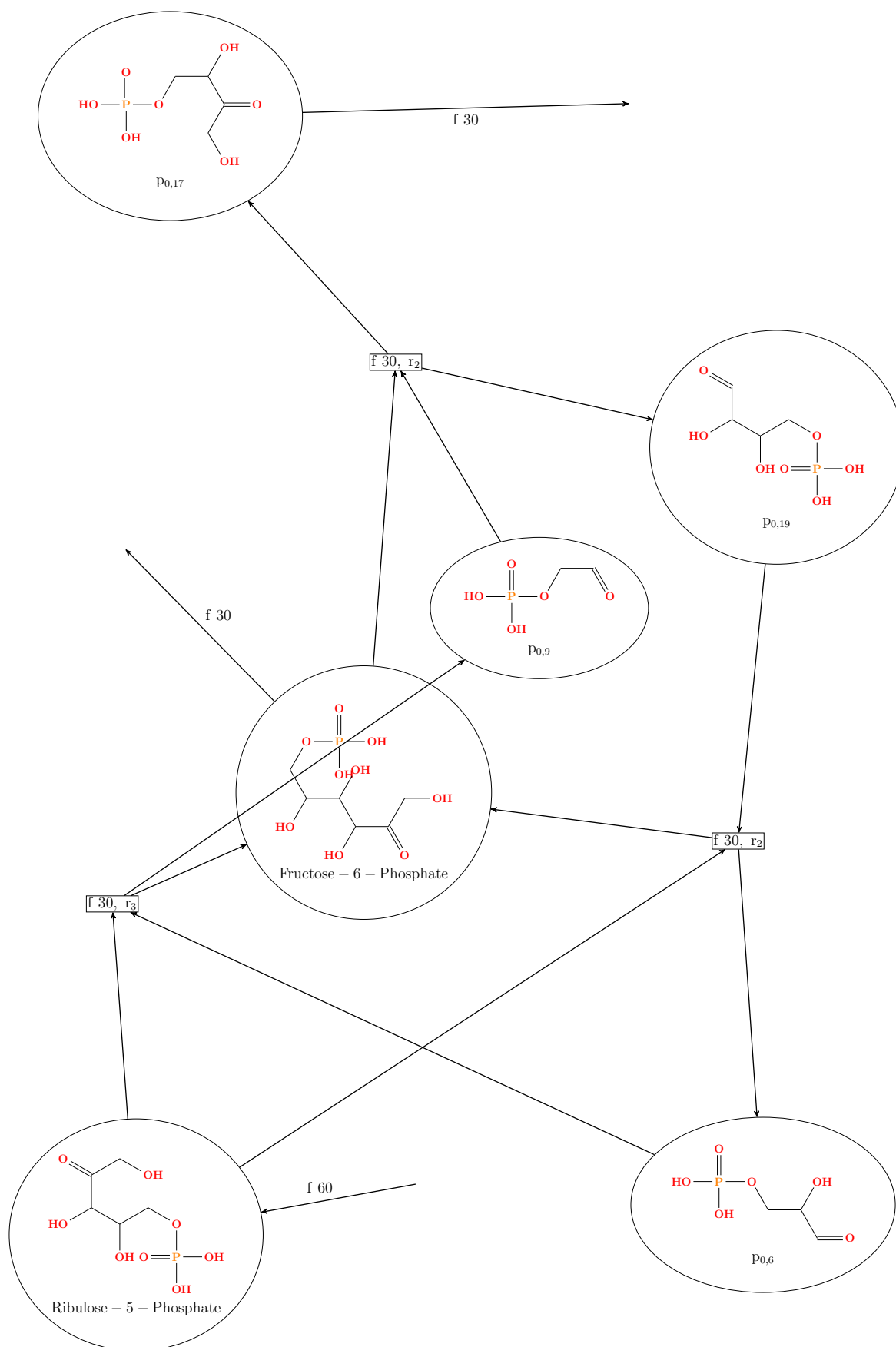
Vertex/Graph	In	Out
--------------	----	-----

Fructose-6-Phosphate	0	30
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Ribulose-5-Phosphate	60	0
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p_{0,17}	0	30
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Filtered Graph



File: out/030_dg_0_11100_f_15_0_filt

0.3 Flow Solutions, id 31

0.3.1 Solution 0

Overall Data

Objective value (integral): -30

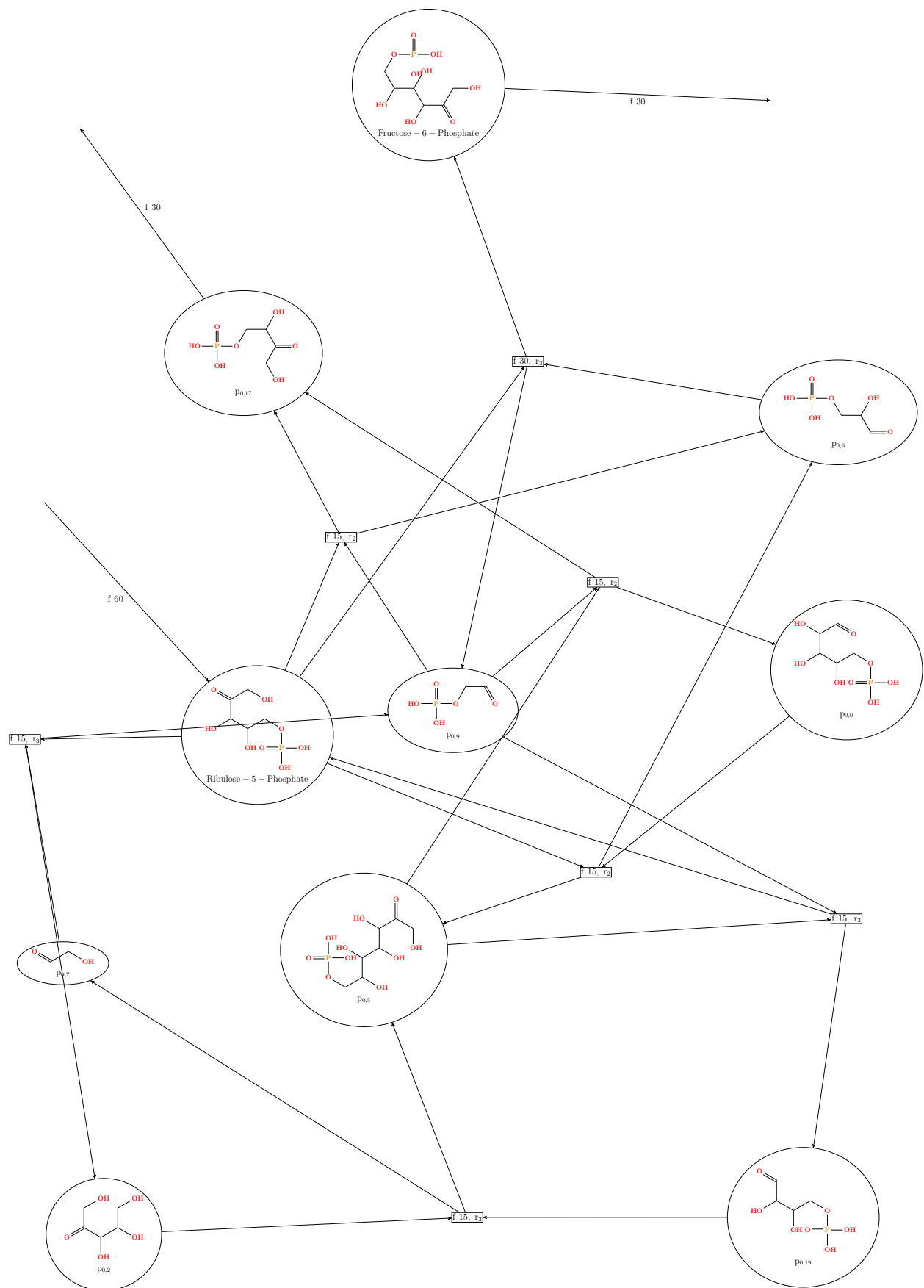
Vertex/Graph	In	Out
--------------	----	-----

Fructose-6-Phosphate	0	30
----------------------	---	----

Ribulose-5-Phosphate	60	0
----------------------	----	---

p_{0,17}	0	30
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Filtered Graph



File: out/068_dg_0_11100_f_31_0_filt

0.4 Flow Solutions, id 37

0.4.1 Solution 0

Overall Data

Objective value (integral): -30

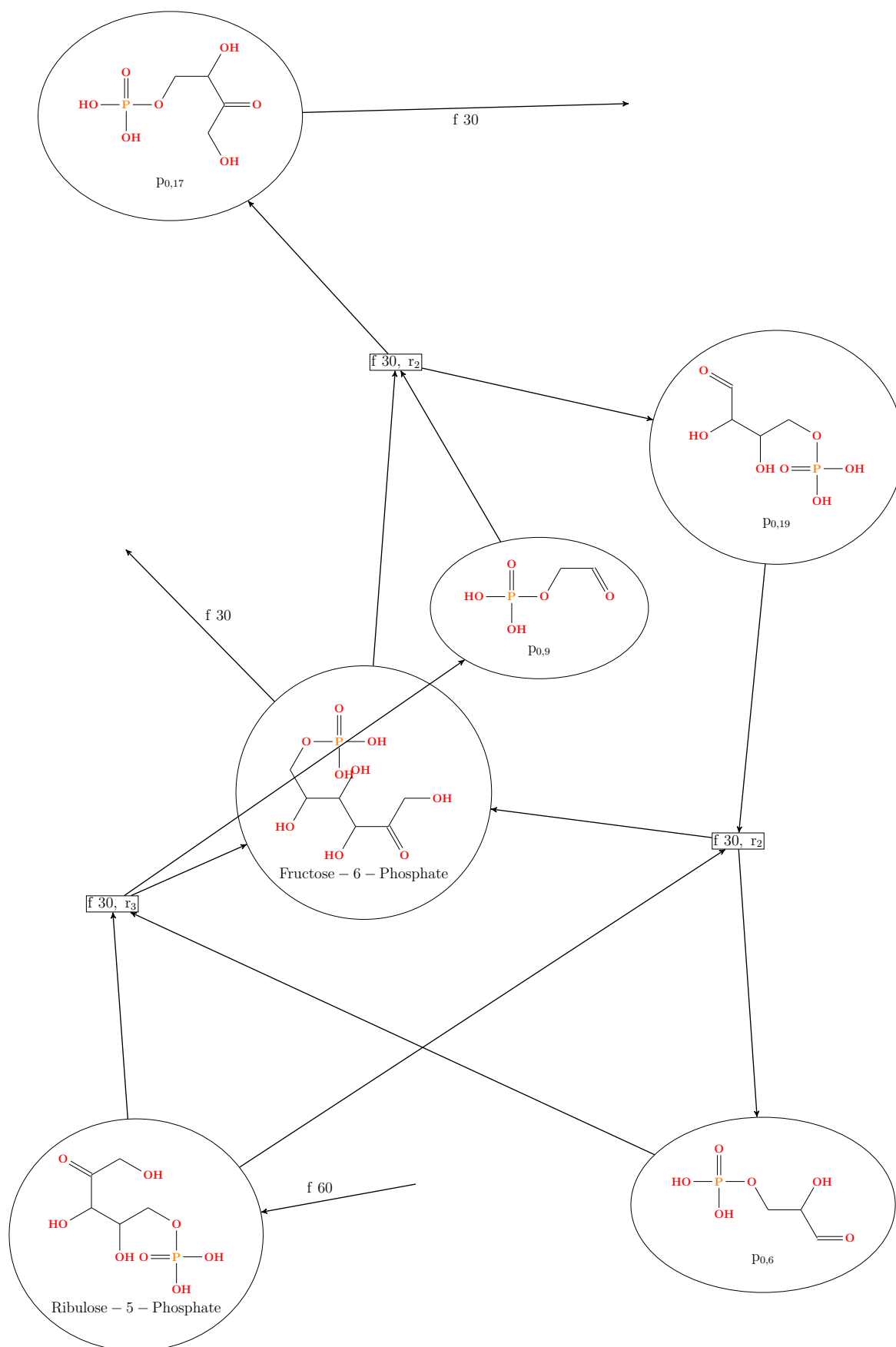
Vertex/Graph	In	Out
--------------	----	-----

Fructose-6-Phosphate	0	30
----------------------	---	----

Ribulose-5-Phosphate	60	0
----------------------	----	---

p_{0,17}	0	30
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Filtered Graph



File: out/077_dg_0_11100_f_37_0_filt

0.5 Flow Solutions, id 38

0.5.1 Solution 0

Overall Data

Objective value (integral): -40

Vertex/Graph In Out

Fructose-6-Phosphate 0 40

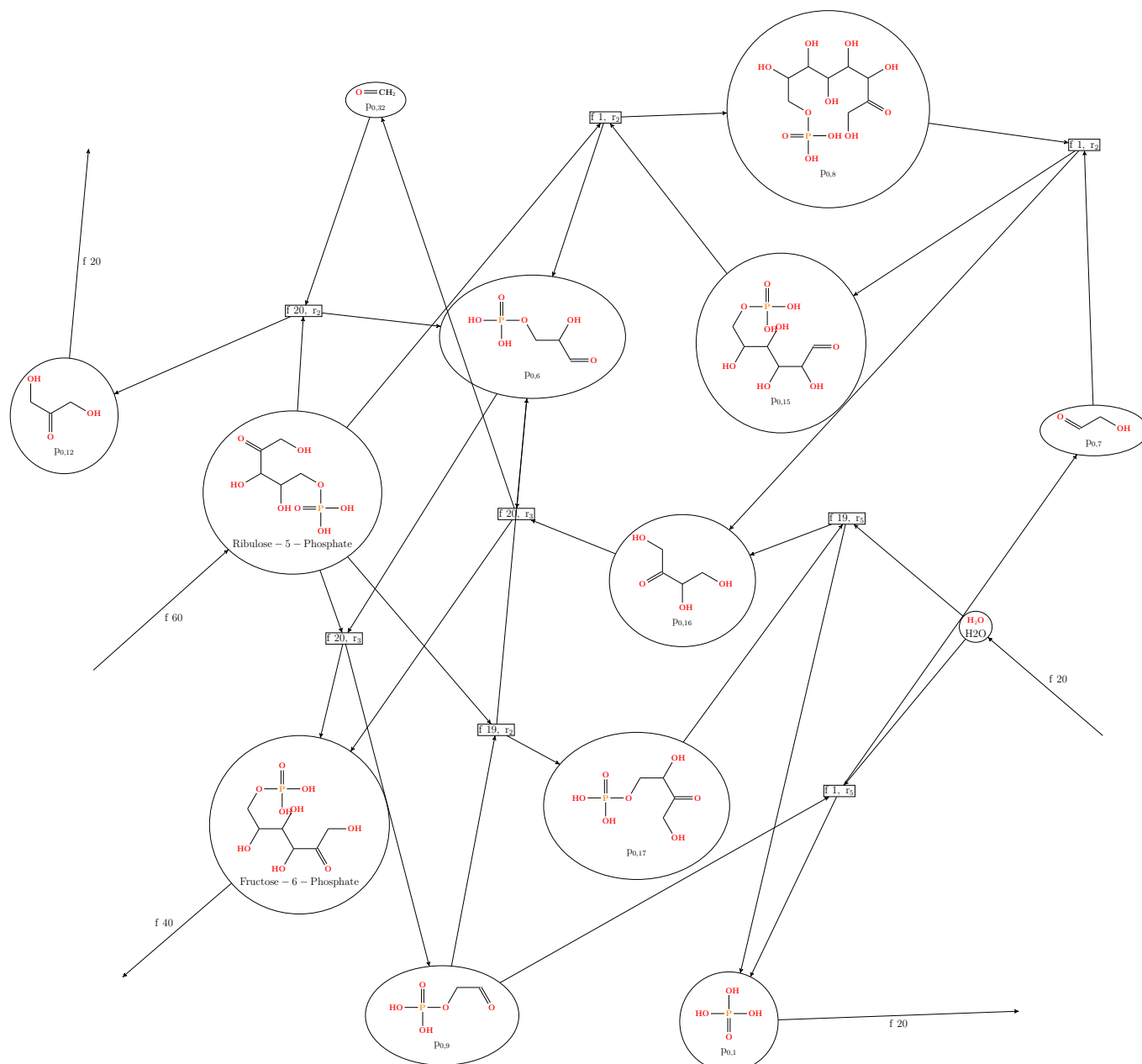
H2O 20 0

Ribulose-5-Phosphate 60 0

p_{0,12} 0 20

p_{0,1} 0 20

Filtered Graph



File: out/093_dg_0_11100_f_38_0_filt

0.6 Flow Solutions, id 41

0.6.1 Solution 0

Overall Data

Objective value (integral): -45

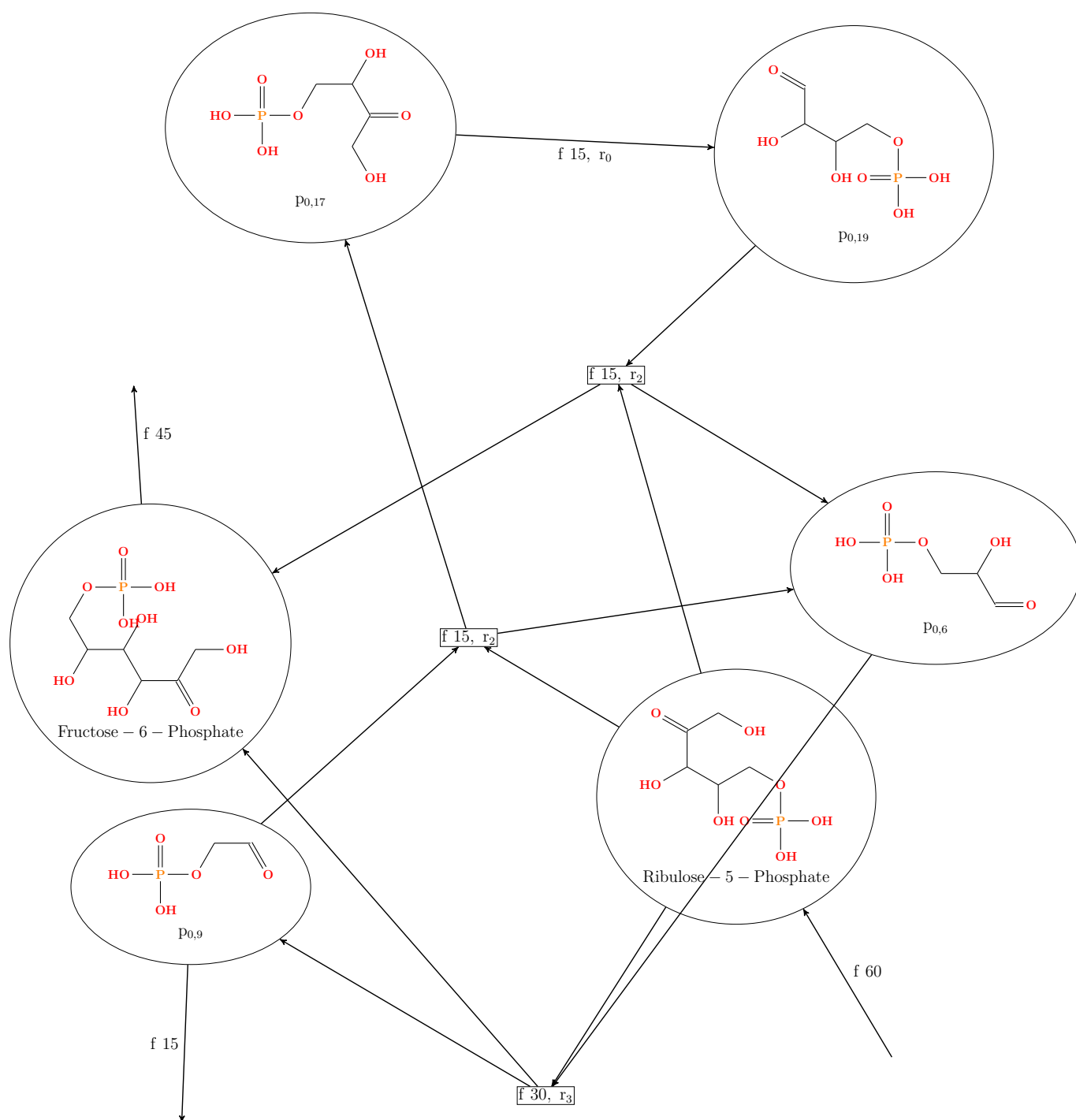
Vertex/Graph	In	Out
--------------	----	-----

Fructose-6-Phosphate	0	45
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Ribulose-5-Phosphate	60	0
----------------------	----	---

p_{0,9}	0	15
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Filtered Graph



File: out/099_dg_0_11100_f_41_0_filt

0.7 Flow Solutions, id 47

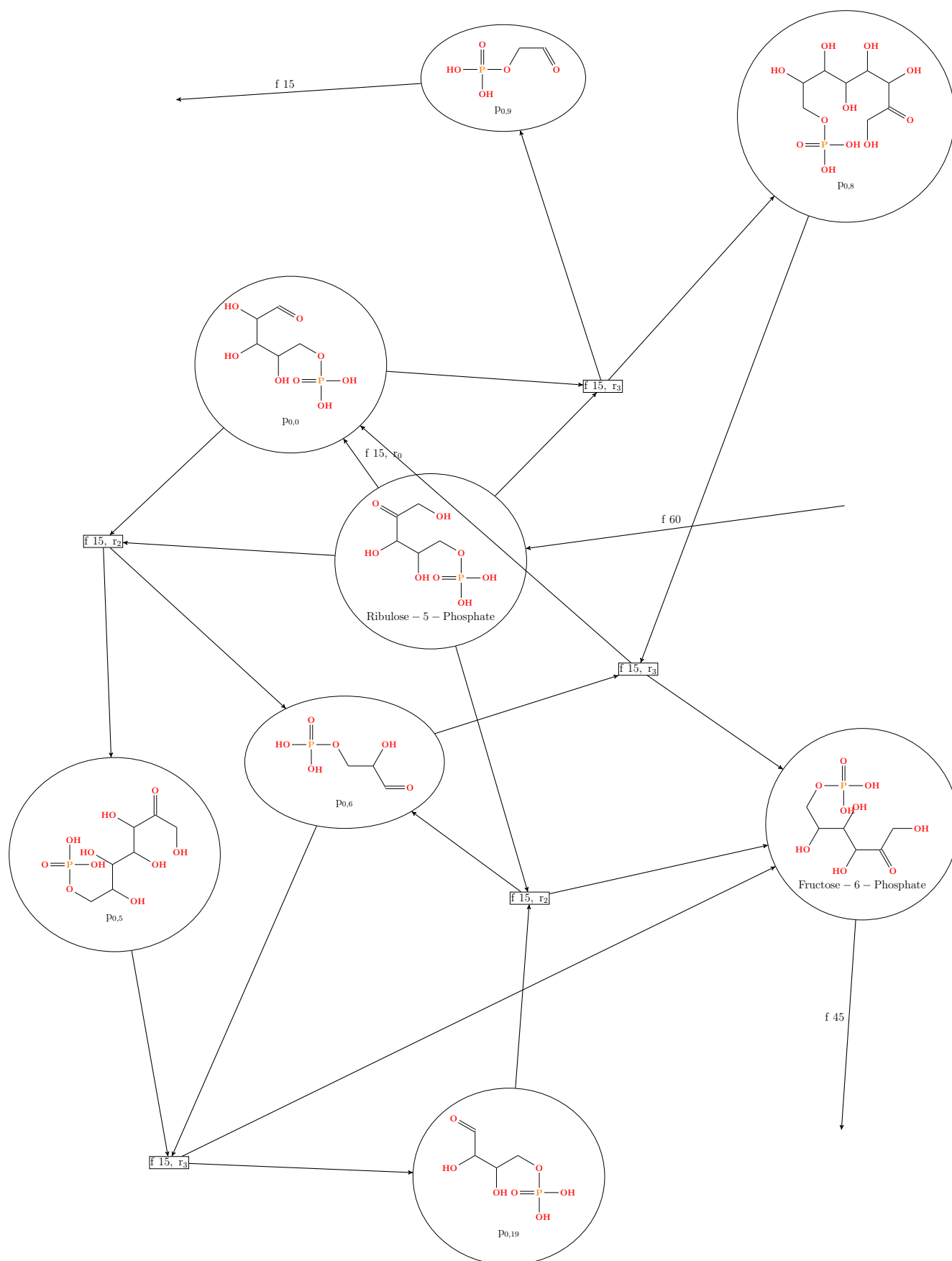
0.7.1 Solution 0

Overall Data

Objective value (integral): -45

Vertex/Graph	In	Out
Fructose-6-Phosphate	0	45
Ribulose-5-Phosphate	60	0
p_{0,9}	0	15

Filtered Graph



File: out/108_dg_0_11100_f_47_0_filt

0.8 Flow Solutions, id 48

0.8.1 Solution 0

Overall Data

Objective value (integral): -48

Vertex/Graph	In	Out
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Fructose-6-Phosphate	0	48
----------------------	---	----

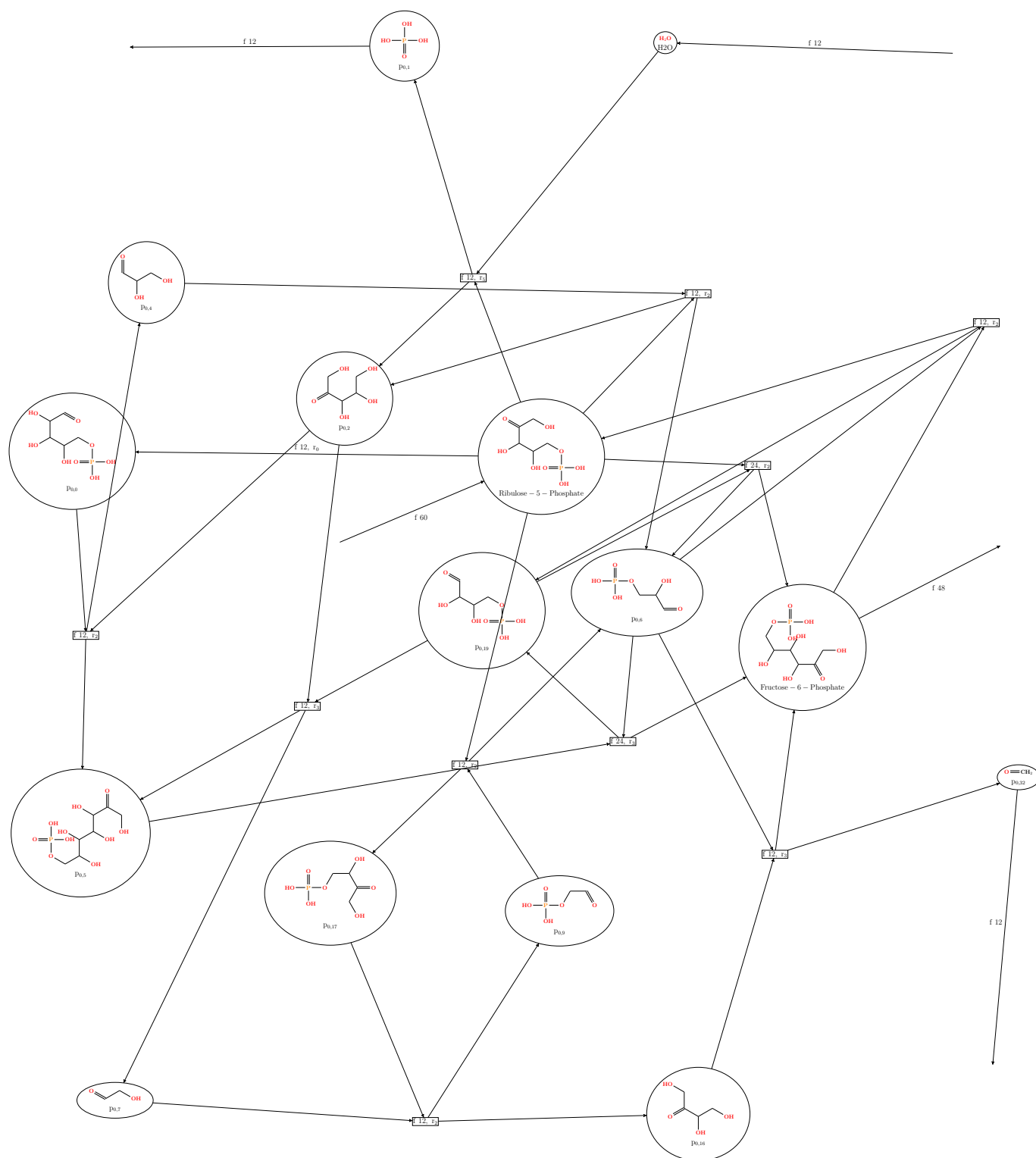
H2O	12	0
-----	----	---

Ribulose-5-Phosphate	60	0
----------------------	----	---

p_{0,1}	0	12
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p_{0,32}	0	12
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Filtered Graph



File: out/112_dg_0_11100_f_48_0_filt

0.9 Flow Solutions, id 51

0.9.1 Solution 0

Overall Data

Objective value (integral): -30

0.11 Flow Solutions, id 55

0.11.1 Solution 0

Overall Data

Objective value (integral): -40

Vertex/Graph	In	Out
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Fructose-6-Phosphate	0	40
----------------------	---	----

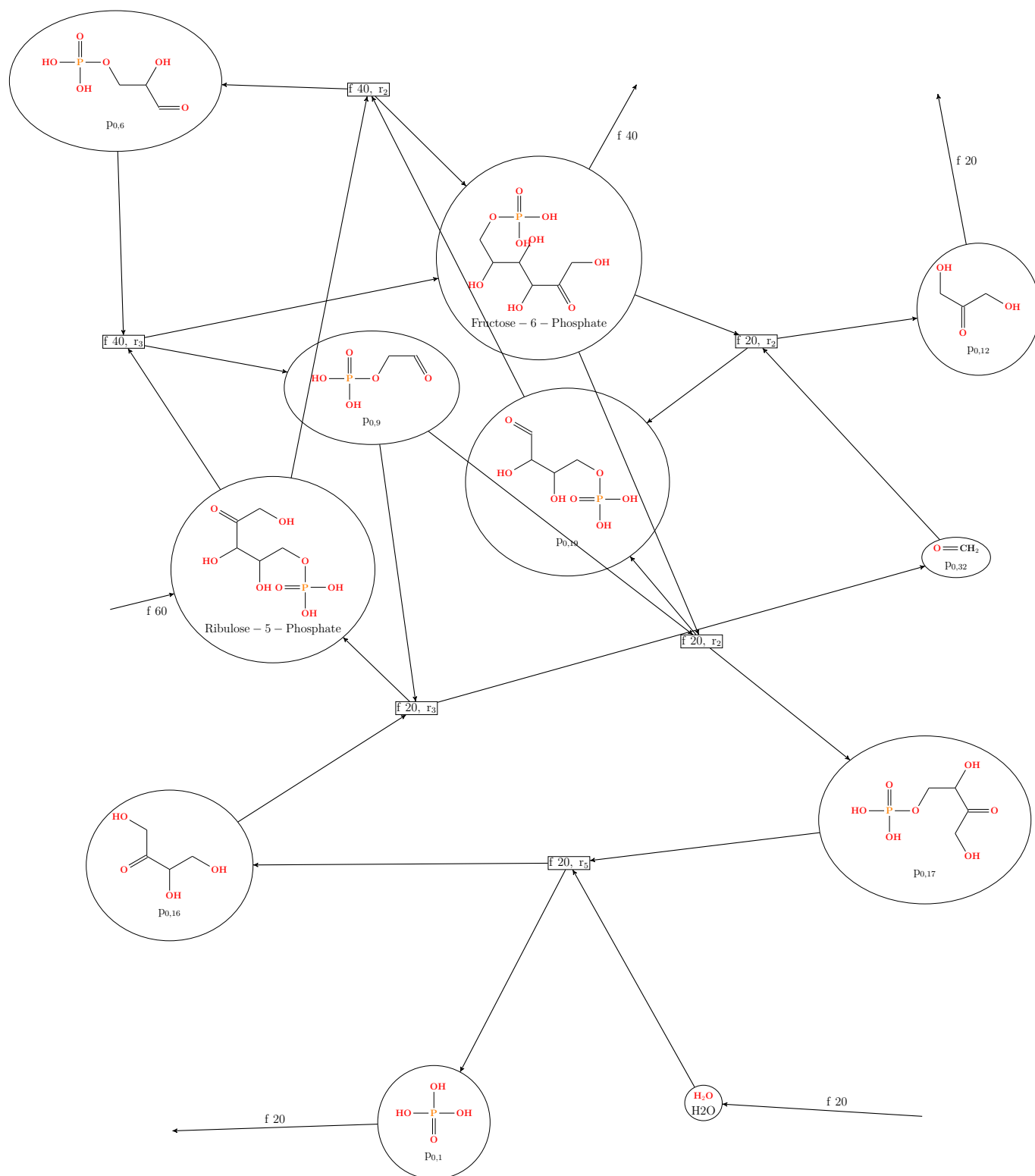
H2O	20	0
-----	----	---

Ribulose-5-Phosphate	60	0
----------------------	----	---

p_{0,12}	0	20
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p_{0,1}	0	20
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Filtered Graph



File: out/130_dg_0_11100_f_55_0_filt

0.12 Flow Solutions, id 56

0.12.1 Solution 0

Overall Data

Objective value (integral): -45

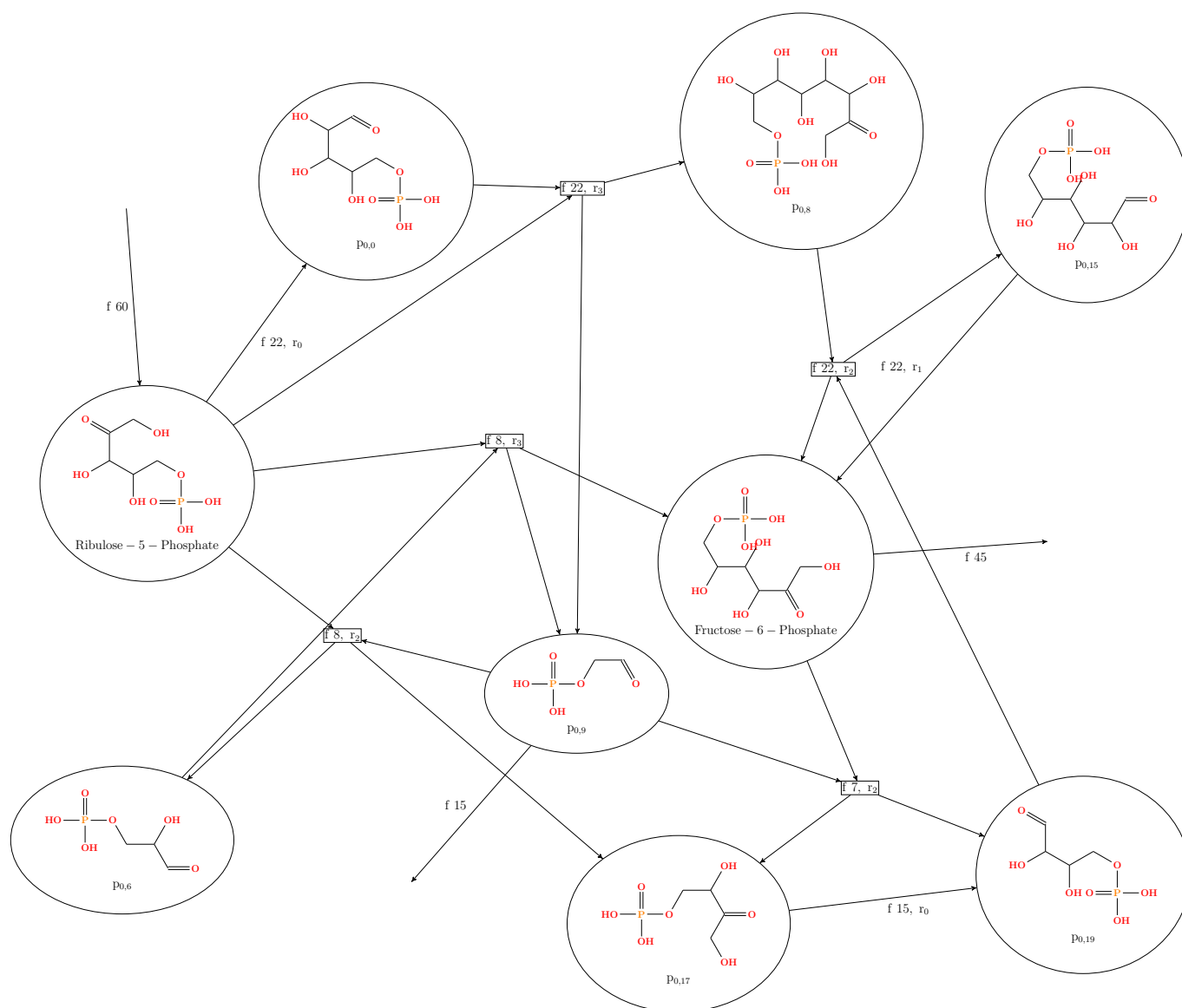
Vertex/Graph	In	Out
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Fructose-6-Phosphate 0 45

Ribulose-5-Phosphate 60 0

$p_{\{0,9\}}$ 0 15

Filtered Graph



File: out/134_dg_0_11100_f_56_0_filt

0.13 Flow Solutions, id 57

0.13.1 Solution 0

Overall Data

Objective value (integral): -48

Vertex/Graph	In	Out
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Fructose-6-Phosphate 0 48

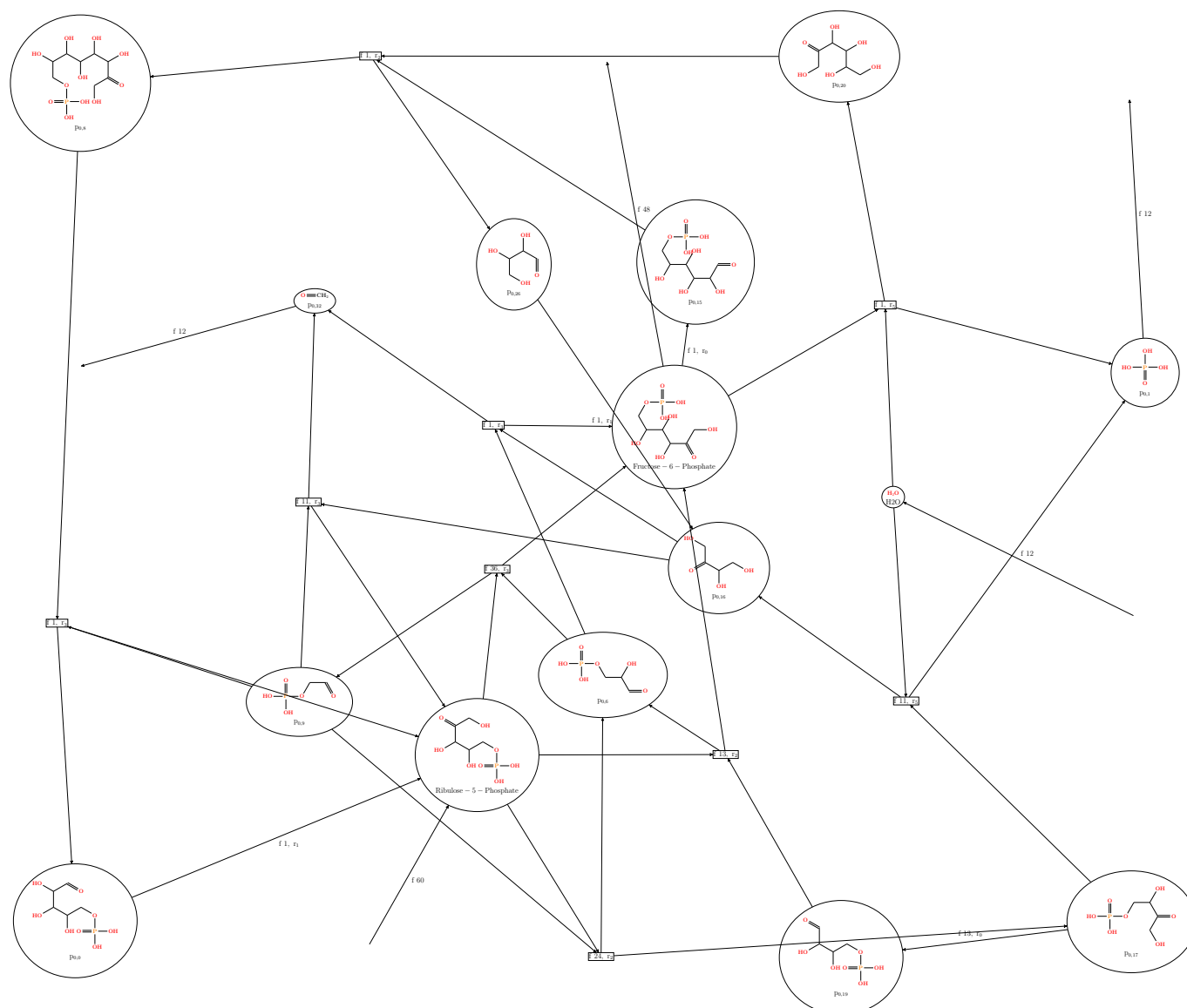
H2O	12 0
-----	------

Ribulose-5-Phosphate 60 0

$p_{\{0,1\}}$ 0 12

p_{0,32} 0 12

Filtered Graph



File: out/138_dg_0_11100_f_57_0_filt

0.14 Flow Solutions, id 58

0.14.1 Solution 0

Overall Data

Objective value (integral): -15

Vertex/Graph	In	Out
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Fructose-6-Phosphate 0 15

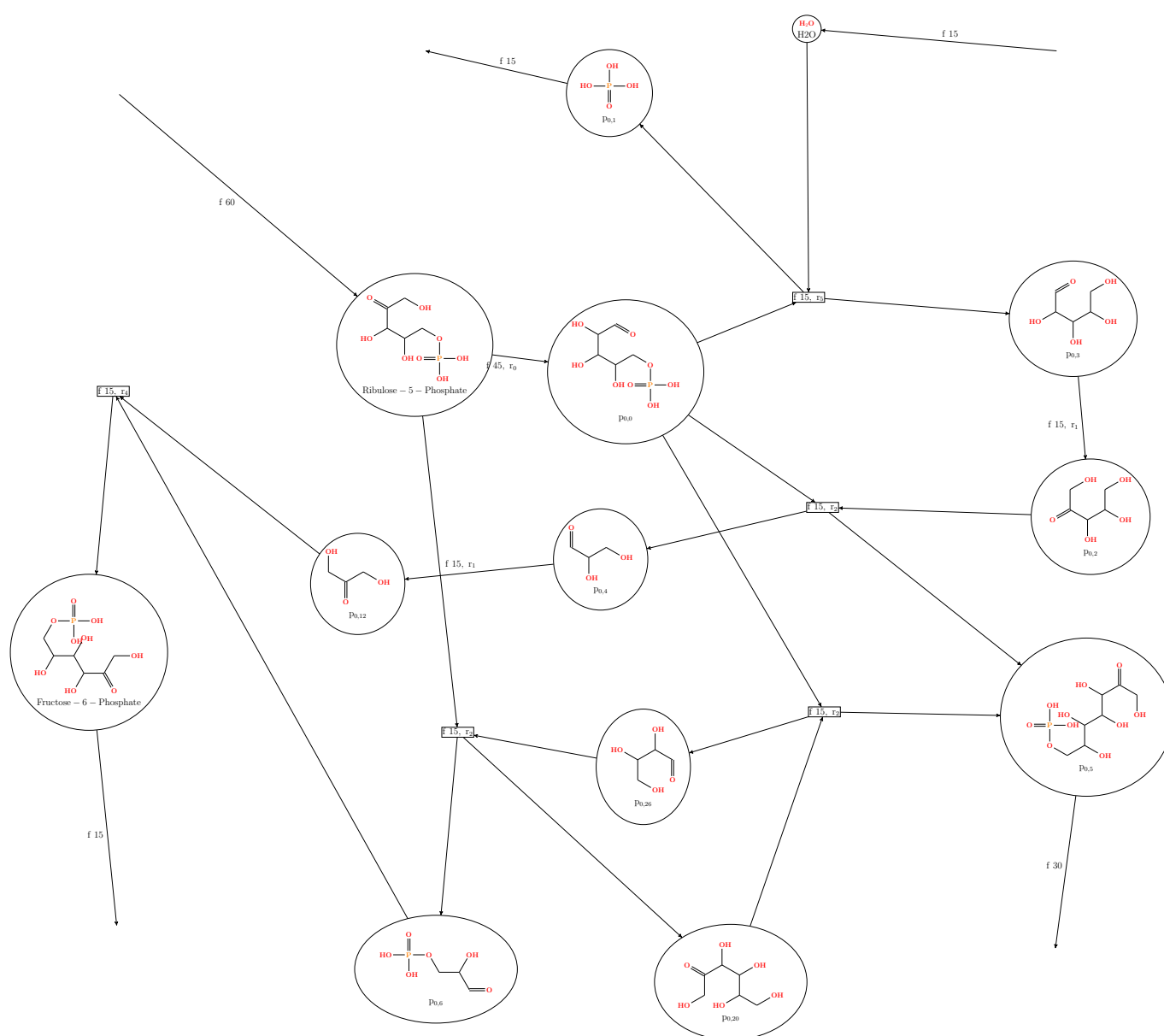
H2O	15 0
-----	------

Ribulose-5-Phosphate 60 0

$p_{\{0,1\}}$ 0 15

$p_{\{0,5\}}$ 0 30

Filtered Graph



File: out/144_dg_0_11100_f_58_0_filt

0.15 Flow Solutions, id 59

0.15.1 Solution 0

Overall Data

Objective value (integral): -10

Vertex/Graph In Out

Fructose-6-Phosphate 0 10

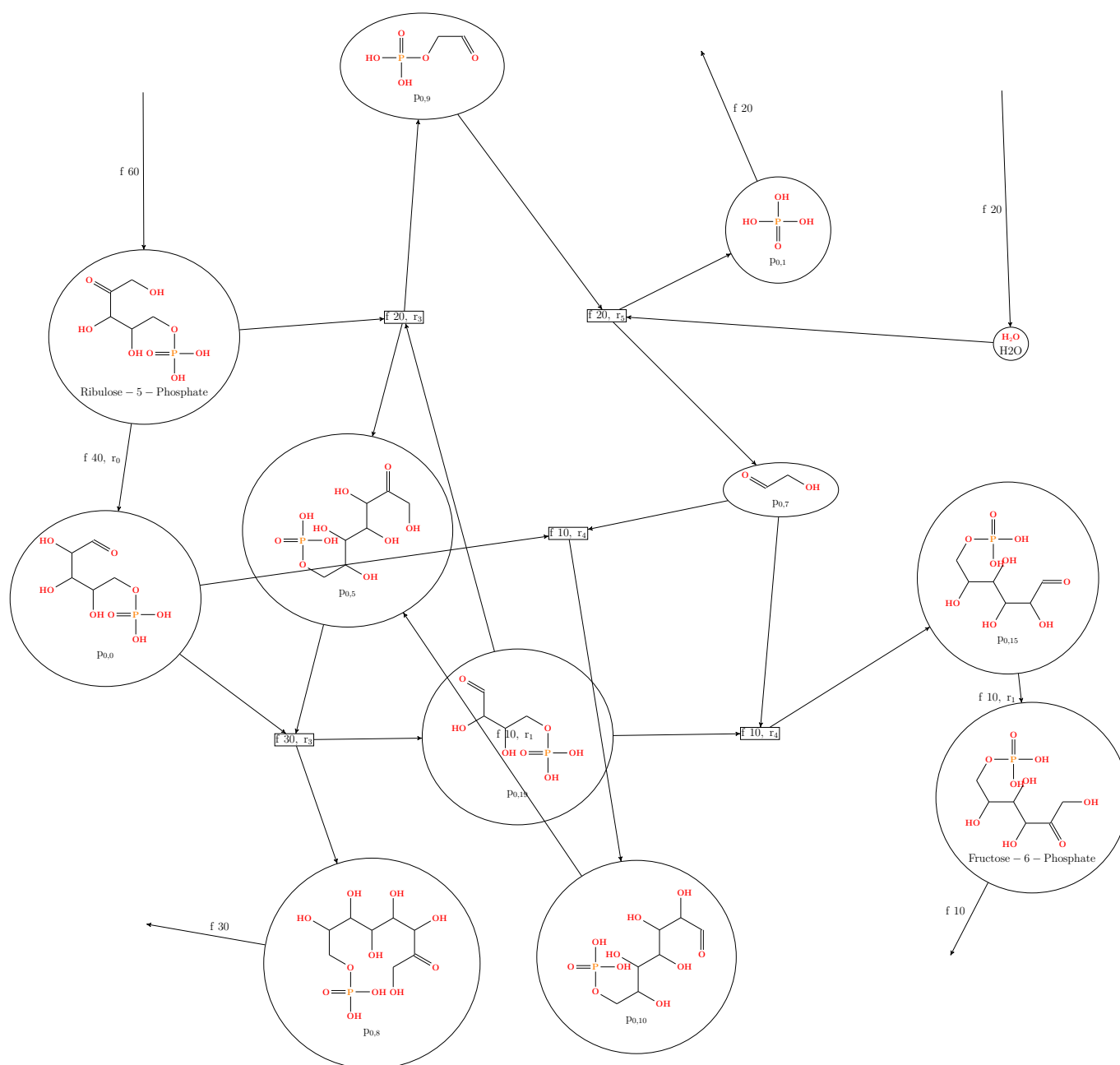
H2O 20 0

Ribulose-5-Phosphate 60 0

p_{0,1} 0 20

p_{0,8} 0 30

Filtered Graph



File: out/150_dg_0_11100_f_59_0_filt

0.16 Flow Solutions, id 60

0.16.1 Solution 0

Overall Data

Objective value (integral): -50

Vertex/Graph In Out

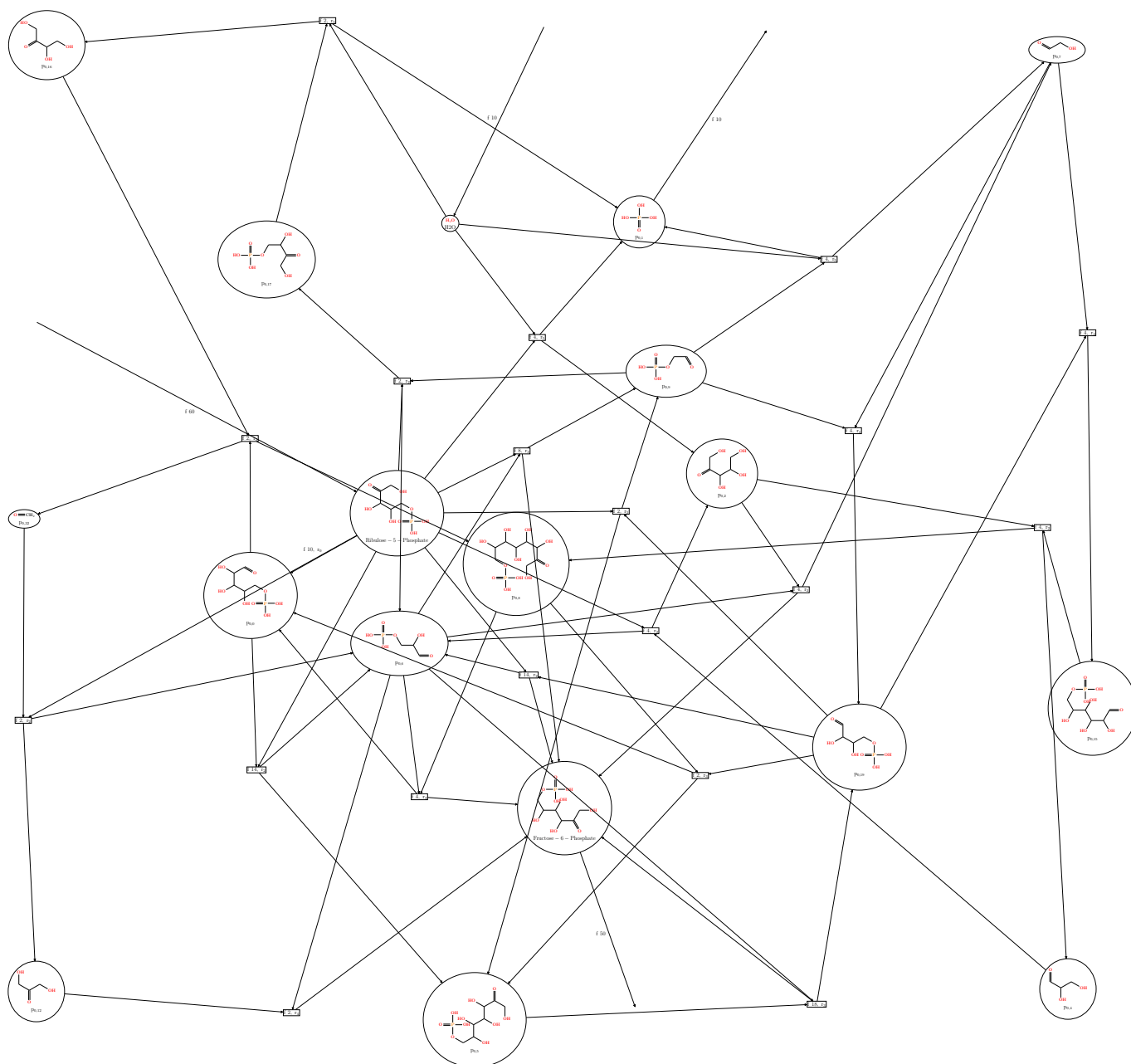
Fructose-6-Phosphate 0 50

H2O 10 0

Ribulose-5-Phosphate 60 0

p_{0,1} 0 10

Filtered Graph



File: out/154_dg_0_11100_f_60_0_filt

0.17 Flow Solutions, id 61

0.17.1 Solution 0

Overall Data

Objective value (integral): -40

Vertex/Graph	In	Out
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Fructose-6-Phosphate	0	40
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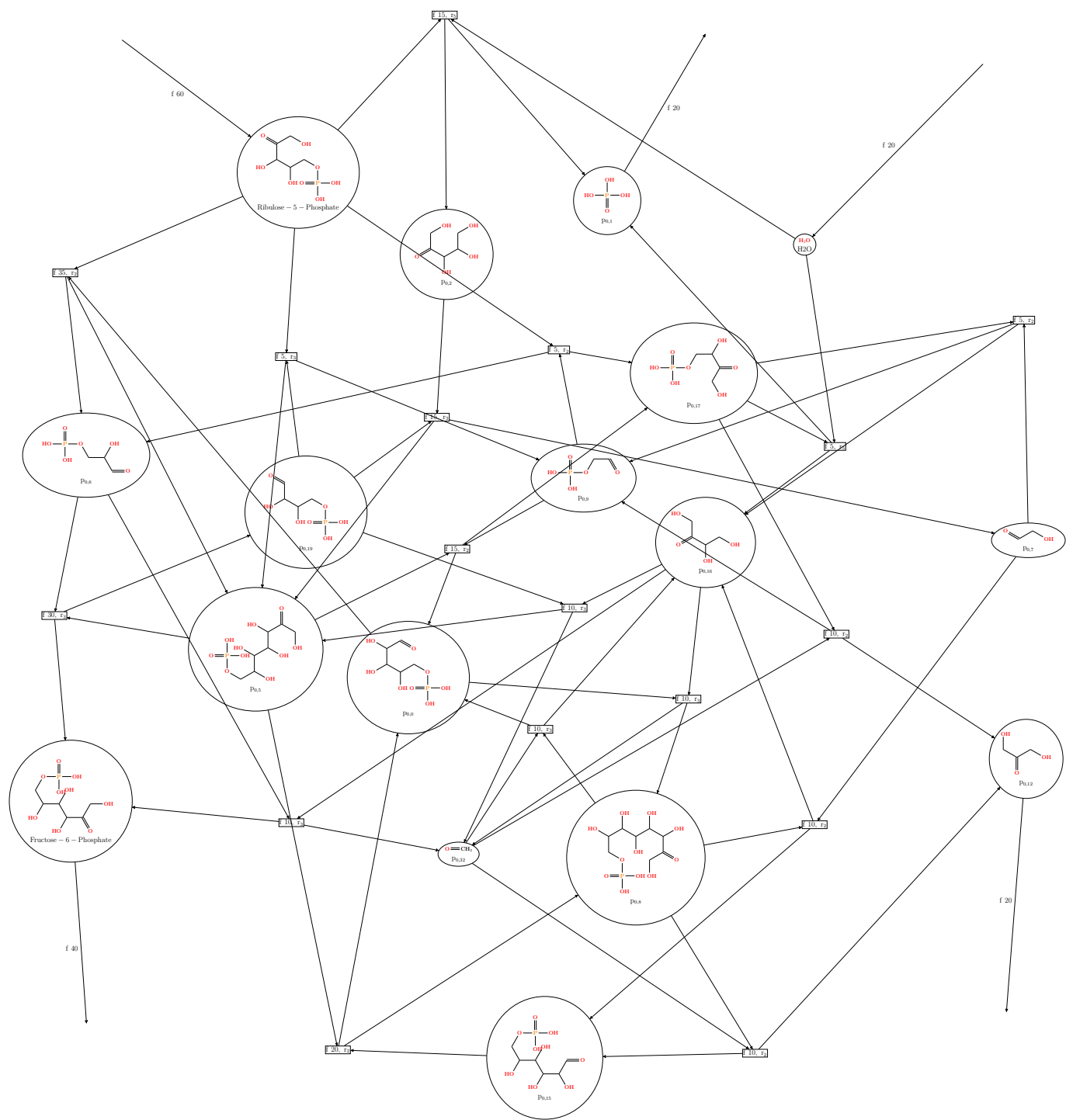
H2O	20	0
-----	----	---

Ribulose-5-Phosphate	60	0
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p_{0,12}	0	20
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p_{0,1}	0	20
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Filtered Graph



File: out/158_dg_0_11100_f_61_0_filt

0.18 Flow Solutions, id 62

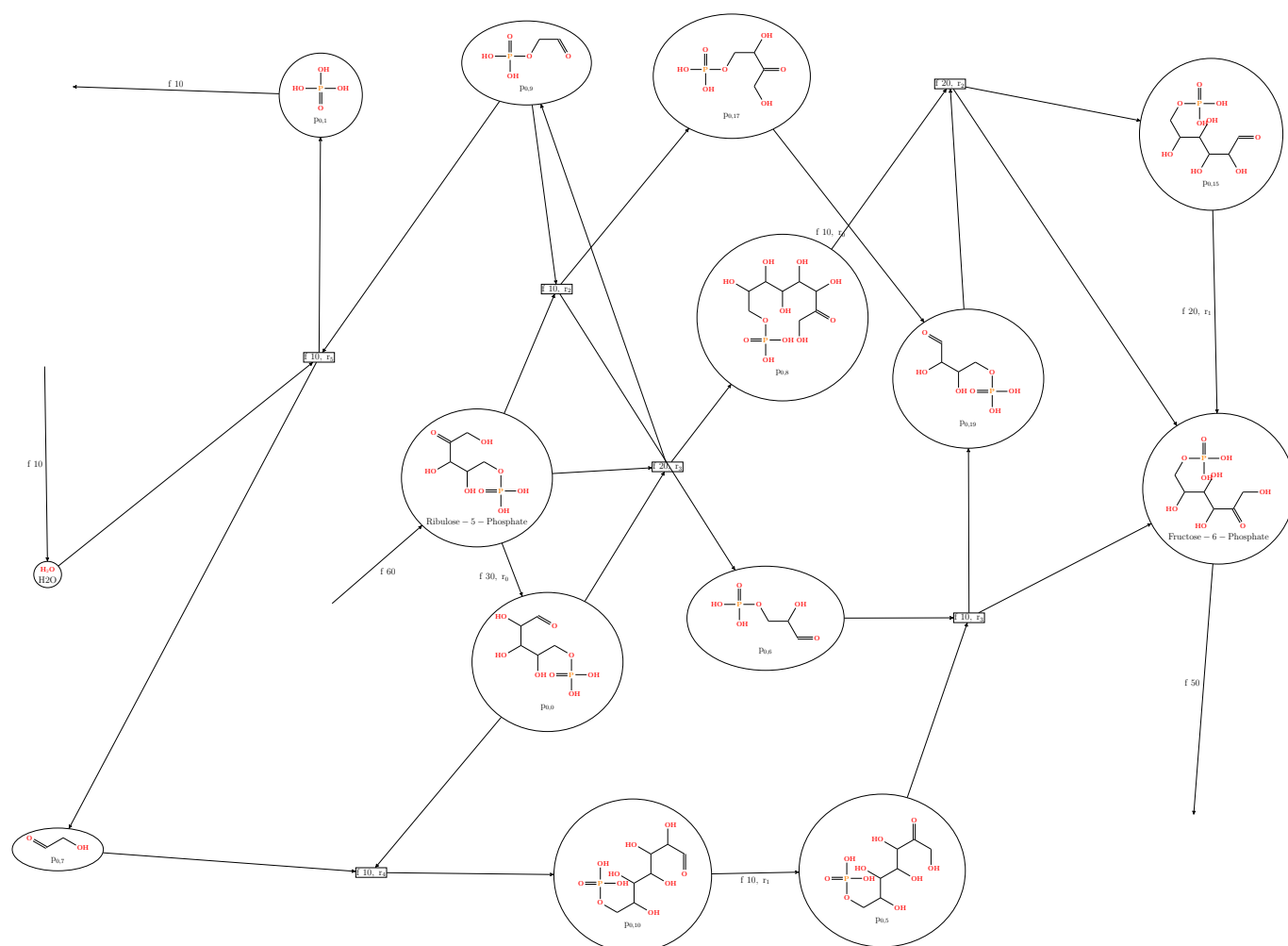
0.18.1 Solution 0

Overall Data

Objective value (integral): -50
Vertex/Graph In Out
Fructose-6-Phosphate 0 50

H2O	10	0
Ribulose-5-Phosphate	60	0
p_{0,1}	0	10

Filtered Graph



File: out/162_dg_0_11100_f_62_0_filt

0.19 Result

#enzymes	enzymes	#Fructose-6-Phosphate	#waste	#reactions
2	'Transketolase' 'Transaldolase'	30	30	3
3	'Aldose-Ketose <-' 'Transketolase' 'Transaldolase'	45	15	13
3	'Aldose-Ketose ->' 'Transketolase' 'Transaldolase'	30	30	7
3	'Transketolase' 'Transaldolase' 'Aldolase'	30	30	3
3	'Transketolase' 'Transaldolase' 'Phosphohydrolase'	40	40	8
4	'Aldose-Ketose <-' 'Aldose-Ketose ->' 'Transketolase' 'Transaldolase'	45	15	4
4	'Aldose-Ketose <-' 'Transketolase' 'Transaldolase' 'Aldolase'	45	15	6
4	'Aldose-Ketose <-' 'Transketolase' 'Transaldolase' 'Phosphohydrolase'	48	24	11
4	'Aldose-Ketose ->' 'Transketolase' 'Transaldolase' 'Aldolase'	30	30	4
4	'Aldose-Ketose ->' 'Transketolase' 'Transaldolase' 'Phosphohydrolase'	40	40	11
4	'Transketolase' 'Transaldolase' 'Aldolase' 'Phosphohydrolase'	40	40	6
5	'Aldose-Ketose <-' 'Aldose-Ketose ->' 'Transketolase' 'Transaldolase' 'Aldolase'	45	15	8
	'Aldose-Ketose <-' 'Aldose-Ketose ->' 'Transketolase' 'Transaldolase'			

5	'Phophohydrolase'	48	24	13
5	'Aldose-Ketose <-' 'Aldose-Ketose ->' 'Transketolase' 'Aldolase' 'Phophohydrolase'	15	45	8
5	'Aldose-Ketose <-' 'Aldose-Ketose ->' 'Transaldolase' 'Aldolase' 'Phophohydrolase'	10	50	8
5	'Aldose-Ketose <-' 'Transketolase' 'Transaldolase' 'Aldolase' 'Phophohydrolase'	50	10	20
5	'Aldose-Ketose ->' 'Transketolase' 'Transaldolase' 'Aldolase' 'Phophohydrolase'	40	40	17
6	'Aldose-Ketose <-' 'Aldose-Ketose ->' 'Transketolase' 'Transaldolase' 'Aldolase' 'Phophohydrolase'	50	10	10