

Pump Performance Datasheet

Customer :	Quote Number / ID :	596697
Customer ref. / PO :	Model :	NBS 015-095-2P
Tag Number : 001	Stages :	1
Service :	Based on curve number :	015-095-2P_Std
Quantity : 1	Basic model number :	-
	Date last saved :	05/31/2022 1:41 PM

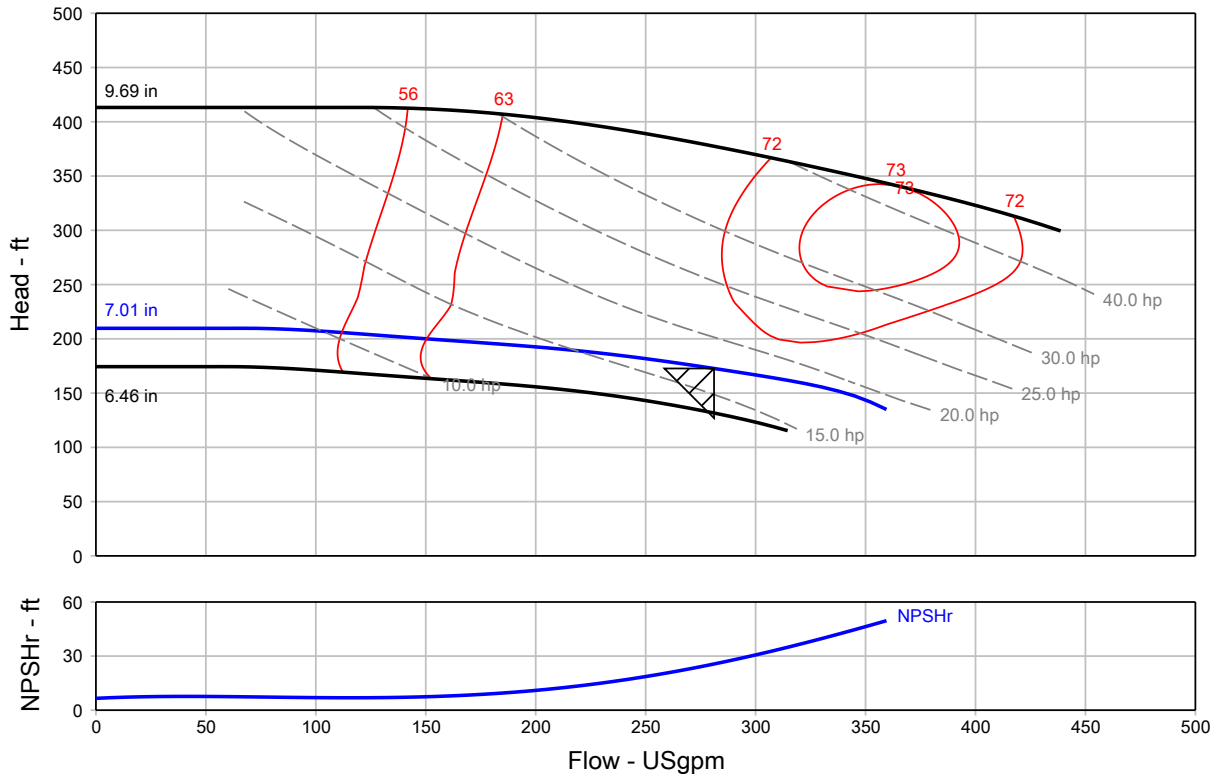
Operating Conditions	Liquid
Flow, rated : 281.1 USgpm	Liquid type : Cold Water
Differential head / pressure, rated (requested) : 172.7 ft	Additional liquid description :
Differential head / pressure, rated (actual) : 172.7 ft	Solids diameter, max : 0.00 in
Suction pressure, rated / max : 0.00 / 0.00 psi.g	Solids concentration, by volume : 0.00 %
NPSH available, rated : Ample	Temperature, max : 68.00 deg F
Site Supply Frequency : 60 Hz	Fluid density, rated / max : 1.000 / 1.000 SG
	Viscosity, rated : 1.00 cP
	Vapor pressure, rated : 0.34 psi.a

Performance	Material
Speed, rated : 3500 rpm	Material selected : Cast iron / 125 Class
Impeller diameter, rated : 7.01 in	
Impeller diameter, maximum : 9.69 in	
Impeller diameter, minimum : 6.46 in	
Efficiency : 71.68 %	
NPSH required / margin required : 25.61 / 0.00 ft	
nq (imp. eye flow) / S (imp. eye flow) : 16 / 84 Metric units	
MCSF : 26.34 USgpm	
Head, maximum, rated diameter : 209.7 ft	
Head rise to shutoff : 21.43 %	
Flow, best eff. point : 281.1 USgpm	
Flow ratio, rated / BEP : 100.00 %	
Diameter ratio (rated / max) : 72.34 %	
Head ratio (rated dia / max dia) : 45.75 %	
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010] : 1.00 / 1.00 / 1.00 / 1.00	
Selection status : Acceptable	

Pressure Data
Maximum working pressure : 90.76 psi.g
Maximum allowable working pressure : 175.0 psi.g
Maximum allowable suction pressure : 130.0 psi.g
Hydrostatic test pressure : 263.0 psi.g

Driver & Power Data (@Max density)
Motor sizing specification : Max power (non-overloading)
Margin over specification : 0.00 %
Service factor : 1.15 (used)
Power, hydraulic : 12.25 hp
Rated power (based on duty point) : 17.10 hp
Max power (non-overloading) : 18.99 hp
Nameplate motor rating : 20.00 hp / 14.91 kW

Energy Indexes
PEI (CL) : 0.87
ER (CL) : 13



Construction Datasheet

Project name	Default	Tag Number	001
Consulting engineer		Service	
Customer		Model	NBS 015-095-2P
Customer ref. / PO		Quantity	1
Quote Number / ID	596697	Quoted By (Sales Office)	PFC EQUIPMENT INC
Date last saved	05/31/2022 1:41 PM	Quoted By (Sales Engineer)	Kelly Kresa

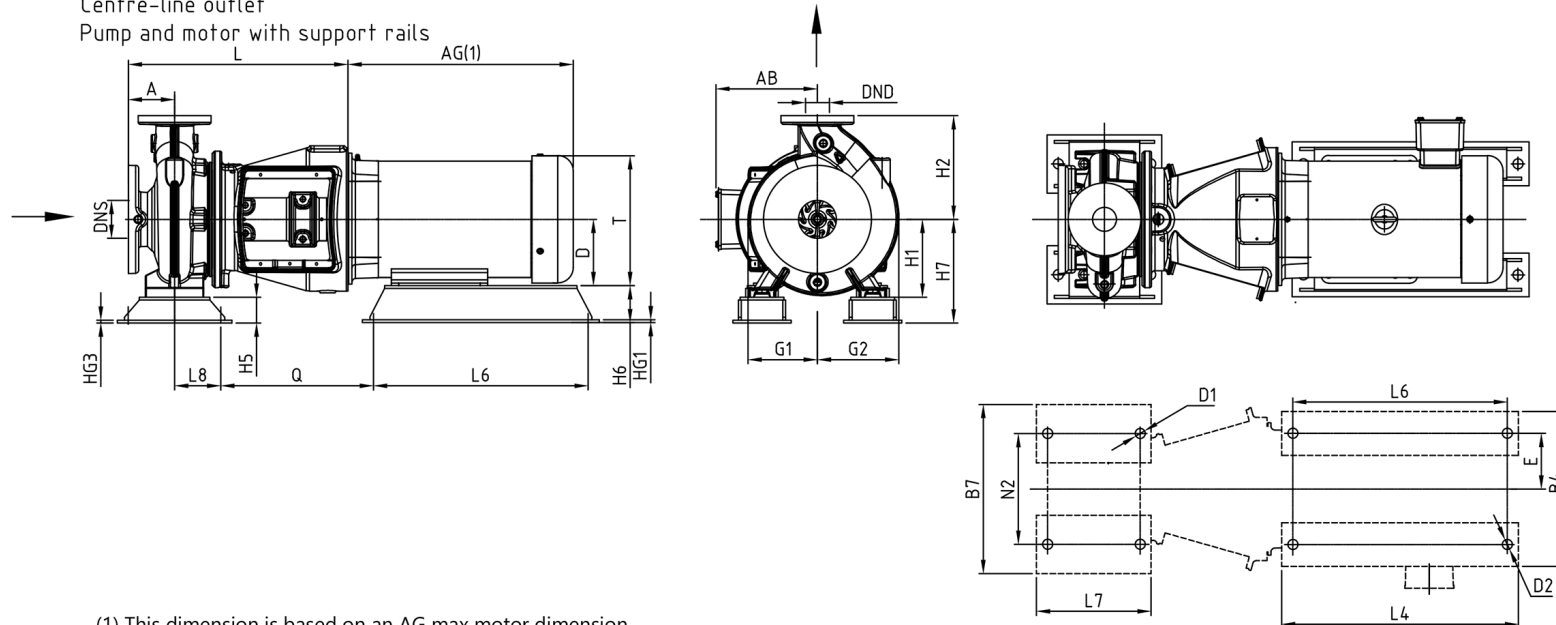
Construction Code : NBS 015-095/7.01AASG6S2ESBQQEOX2

Construction		Motor Information	
Product Family	NBS_Std	Manufacturer	Baldor
Suction Size	2.5 in.	Frame Size	256TC
Discharge Size	1.5 in.	Power	20 HP
Flange Rating	Class 125	RPM	3600
Orientation	Horizontal	Enclosure	TEFC
Rotation	Clockwise	Operating Power Supply	230/460/3/60
Pump Housing	Cast Iron, ASTM A48 - Class 35	Efficiency	Premium
O-Ring	EPDM	Service Factor	1.15
Plug	Galvanized	Motor Application	General Purpose
		Weight (Approx.)	
Impeller	Stainless Steel, AISI-304 / EN 1.430	Pump	216.0 lb
Impeller Nut	Stainless Steel, AISI-304	Support Rail	30.00 lb
Shaft	Stainless Steel, AISI 420	Base Plate	-
Cover	Ductile Cast Iron, ASTM 70-50-05	Driver	229.0 lb
Seal Type	Rubber bellows seal	Estimated Shipping Gross Weight	475.0 lb
Shaft Seal	BQQE - Silicon carbide / Silicon carbide / EPDM		
Seal Cap	Ductile Cast Iron, ASTM 70-50-05		
Motor Stool	Gray Cast Iron, ASTM Class 30		
Recirculation Line	None		
Coupling	Rigid, Axial Split Coupling (aluminum)		
Support Rail	Support Rail		

General Arrangement

Project name	: Default	Tag Number	: 001
Consulting engineer	:	Service	:
Customer	:	Model	: NBS 015-095-2P
Customer ref. / PO	:	Quantity of pumps	: 1
Quote Number / ID	: 596697	Quoted By (Sales Office)	: PFC EQUIPMENT INC
Date last saved	: 05/31/2022 1:41 PM	Quoted By (Sales Engineer)	: Kelly Kresa

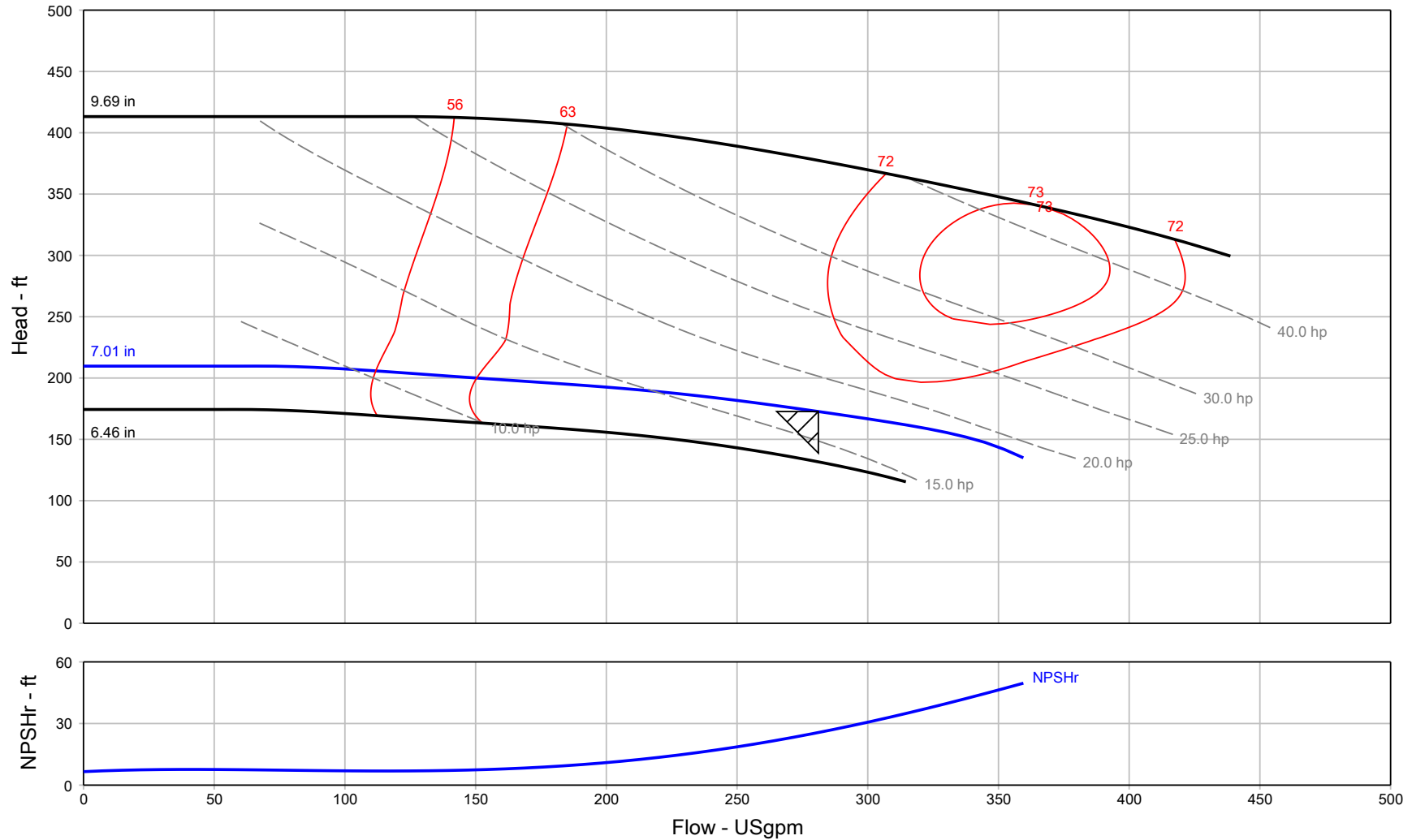
Mounting design C
Centre-line outlet
Pump and motor with support rails



NOT FOR CONSTRUCTION, UNLESS CERTIFIED AND REFERENCED ON ORDER

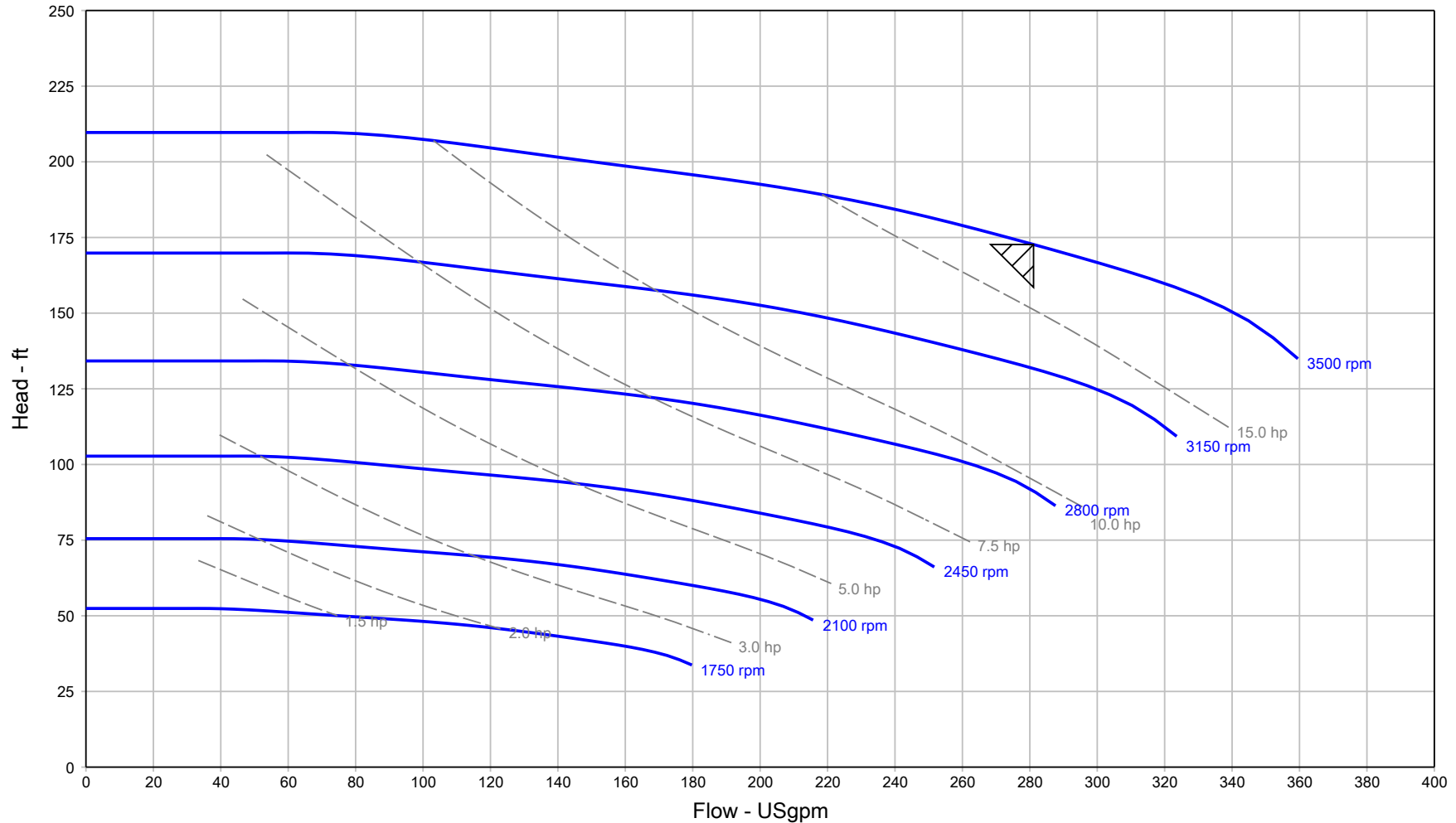
Units	Frame	DNS	DND	Class	A	AB	AG	B4	B7	D	D1	D2	E	G1	G2	H1	H2	H5	H6	H7	HG1	HG3	L	L4	L6	L7	L8	N2	Q	T	Weight
inches	256TC	2.5	1.5	125	4.00	9.63	21.53	12.95	12.80	6.25	0.69	0.69	5.00	5.94	6.69	7.00	9.00	1.00	1.75	8.00	0.20	0.50	17.13	20.00	18.50	8.75	3.63	9.84	12.11	12.88	475.0
Conditions of Service													Motor Data																		
Flow: 281.1 USgpm			Fluid: Cold Water			HP: 20			Encl: TEFC			Phase: 3			Efficiency: Premium																
TDH: 172.7 ft			Temp.: 68.00 deg F			RPM: 3500 rpm			Hz: 60			Voltage: 230/460			S.F.: 1.15																

Pump Performance Curve



Project name	: Default	Tag Number	: 001	Flow, rated	: 281.1 USgpm
Consulting engineer	:	Service	:	Differential head / pressure, rated	: 172.7 ft
Customer	:	Model	: NBS 015-095-2P	Rated power (based on duty point)	: 17.10 hp
Customer ref. / PO	:	Quantity	: 1	Max power (non-overloading)	: 18.99 hp
Quote Number / ID	: 596697	Quoted By (Sales Office)	: PFC EQUIPMENT INC	Efficiency	: 71.68 %
Date last saved	: 05/31/2022 1:41 PM	Quoted By (Sales Engineer)	: Kelly Kresa	Impeller diameter, rated	: 7.01 in
Based on curve number	: 015-095-2P_Std	Stages	: 1	PEI (CL)	: 0.87
		Speed, rated	: 3500 rpm	ER (CL)	: 13

Multi-Speed Performance Curve



Project name	: Default	Tag Number	: 001	Speed, rated	: 3500 rpm
Consulting engineer	:	Service	:	Flow, rated	: 281.1 USgpm
Customer	:	Model	: NBS 015-095-2P	Differential head / pressure, rated	: 172.7 ft
Customer ref. / PO	:	Quantity	: 1	Fluid density, rated / max	: 1.000 / 1.000 SG
Quote Number / ID	: 596697	Quoted By (Sales Office)	: PFC EQUIPMENT INC	Viscosity	: 1.00 cP
Date last saved	: 05/31/2022 1:41 PM	Quoted By (Sales Engineer)	: Kelly Kresa	Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]	: 1.00 / 1.00 / 1.00 / 1.00
		Stages	: 1	Based on curve number	: 015-095-2P_Std